Sampling Results Technical Memorandum
Basewide Range Assessment Investigation
Site 39 Unit 31 Phase 1
Former Fort Ord
Monterey County, California

November 2018
Draft

Worldwide Environmental Remediation Services Contract
Contract No. W912DY-10-D-0027
Task Order No. CM01

Submitted to:

US Army Corps of Engineers Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Submitted by:

KEMRON Environmental Services, Inc.
1359A Ellsworth Industrial Blvd
Atlanta, GA 30318

Table of Contents

1.0 INTRODUCTION 1
2.0 BACKGROUND 3
3.0 FIELD ACTIVITIES 6
3.1 Sample Locating 6
3.2 Sampling 6
3.3 Equipment Decontamination 7
3.4 Sample Documentation, Handling, and Shipping 7
4.0 SAMPLE ANALYSES 8
4.1 Data Validation 8
5.0 ANALYTICAL RESULTS 9
6.0 RECOMMENDATIONS 10
7.0 REFERENCES 12

List of Tables

Table 1 Analytical Results

List of Figures

Figure 1 Location Map
Figure 2 Unit 31 Soil Analytical Results
Figure 3 Unit 31 Estimated Extent of Lead Greater than 225 mg/kg in Soil

List of Appendices

Appendix A Chemical Quality Assurance Report

Acronyms and Abbreviations

bgs	below ground surface
BRA	Basewide Range Assessment
CQAR	Chemical Quality Assurance Report
COC	chemicals of concern
ELAP	Environmental Laboratory Accreditation Program
Gilbane	Gilbane Federal
GPS	global positioning system
HMX	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
KEMRON	KEMRON Environmental Services, Inc.
MD	munitions debris
MEC	munitions and explosives of concern
mg/kg	milligrams per kilogram
MRA	Munitions Response Area
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
Site 39 ROD Amendment	*Final Record of Decision Amendment, Site 39, Former Fort Ord, California*
QAPP	Quality Assurance Project Plan
TNT	2,4,6-trinitrotoluene: Military TNT may include multiple isomers but typically comprises over 95 percent 2,4,6-trinitrotoluene, which is the isomer used for analysis at former Fort Ord to identify the presence of TNT residues.
Unit 31 Work Plan	*Final Site Evaluation Results and Work Plan for Additional Investigation, Basewide Range Assessment Investigation Unit 31, Former Fort Ord, California*
USACE	United States Army Corps of Engineers

1.0 INTRODUCTION

This report presents a summary of soil sampling and analyses performed in Site 39 Unit 31 as part of the ongoing Basewide Range Assessment (BRA) investigation activities at the former Fort Ord in Monterey County, California. Unit 31 is a subarea of Site 39, which encompasses the Impact Area Munitions Response Area (MRA; Figure 1) of the former munitions practice ranges within the former Fort Ord. The work described herein was performed by Gilbane Federal (Gilbane) as a subcontractor to KEMRON Environmental Services, Inc. (KEMRON) on behalf of the U.S. Army Corps of Engineers (USACE) under the Worldwide Environmental Remediation Services contract number W912DY-10-D-0027, Task Order CM01. The investigation was performed in accordance with the *Final Site Reconnaissance Results and Work Plan for Additional Investigation Basewide Range Assessment Investigation Unit 31 Former Fort Ord Monterey County, California* (Unit 31 Work Plan; KEMRON, 2017).

The BRA investigation is being conducted throughout Site 39 to evaluate the potential presence of chemicals of concern (COCs) at known or suspected small arms ranges, multi-use ranges, and military munitions training areas in accordance with the requirements of the:

- *Final Record of Decision Amendment Site 39 Former Fort Ord, California* (Site 39 ROD Amendment; Department of the Army [Army], 2009), which specifies the threshold concentrations for applicable remediation.
- *Draft Final Basewide Range Assessment Work Plan and Contractor Quality Control Plan Small Arms and Multi-Use Ranges Former Fort Ord, California* (IT Corporation/Harding Lawson Associates, 2001), which established the BRA program objectives, evaluation processes, and decision criteria to be used for determination of site status regarding soil potentially contaminated with COCs in former firing range areas.
- *Quality Assurance Project Plan Former Fort Ord, California, Volume I, Appendix B Soil Sampling, Basewide Range Assessment* (Site 39 QAPP; KEMRON, 2016), which establishes the sampling and analytical plan to evaluate the potential presence of COCs at known or suspected small arms ranges, multi-use ranges, and military munitions training

areas within Site 39 in accordance with the requirements of the Site 39 ROD Amendment (Army, 2009).

The objective of the BRA program is to evaluate whether COCs – specifically lead, antimony, copper, and the explosive compounds 2,4,6-trinitrotoluene (TNT), hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), and octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) – are present in site soil at concentrations requiring additional characterization and/or remediation in order to meet thresholds specified in the Site 39 ROD Amendment (Army, 2009) for protection of human health and the environment. Previous evaluations at Fort Ord have indicated that lead is the most commonly encountered metal COC and elevated concentrations of antimony and copper are only found in the presence of elevated lead. Therefore, lead is used at Fort Ord as the indicator compound for elevated concentrations of metals COCs. Lead is the only metal analyzed during initial site investigation. For explosives evaluation, TNT, RDX and HMX were all analyzed.

2.0 BACKGROUND

Unit 31 is located within Site 39, which consists of approximately 8,000 acres in the southwest corner of the former Fort Ord that was originally designated as the Inland Ranges. Site 39 is collocated with the former Impact Area MRA. Removal of munitions and explosives of concern (MEC) is on-going in portions of Site 39. Upon completion of MEC removal in each range area or unit, the BRA evaluation is implemented to identify whether elevated concentrations of COCs (metals and explosives residues) are present.

Unit 31 comprises an area of approximately 103 acres of rolling terrain with a primary central drainage directed to the southeast. Elevation ranges from approximately 960 feet in the northwest portion of Unit 31 to approximately 630 feet in the southeast. Currently, a fuel-break area of masticated vegetation approximately 300 to 400 feet wide (approximately 56 total acres) is present around the perimeter of Unit 31 adjacent to access roads for the purpose of fire suppression. MEC removal operations have been completed in the 56 acre perimeter area, but not in the 63 acre central area of Unit 31, which is still densely vegetated. MEC removal operations in the central area will be performed pending vegetation reduction via prescribed burning or mastication. Most BRA site investigations at former Fort Ord are performed following the completion of MEC removal operations. The BRA investigation in Unit 31 was initiated before MEC removal operations in the site interior were completed due to the presence of areas suspected to contain elevated concentrations of COCs that could, if confirmed, affect subsequent site management decisions regarding potential vegetation reduction processes and MEC removal logistics. It should be noted that although the BRA reconnaissance effort in Unit 31 was able to access a significant proportion of the central 63 acre vegetated area, not all areas were accessible and additional BRA reconnaissance should be subsequently performed in the currently inaccessible areas upon completion of vegetation reduction and MEC removal to evaluate whether additional areas of concern are present.

Former Range Uses

Historical activity within Unit 31 includes training uses associated with former Ranges 31, 31A and 68 (Figure 2). Former site use is summarized in the Unit 31 Work Plan (KEMRON, 2017), and additional detail is presented in the *Final Comprehensive Basewide Range Assessment Report Former Fort Ord, California Revision 2* (CBRAR; Shaw Environmental Inc., 2012). According to historical documents and MEC and munitions debris (MD) removal data generated to date, range uses within Unit 31 included use of small arms, automatic weapons, and 37mm, 40,mm, 60mm and 81mm projectiles. Site observations included evidence of heavily used targets, impact berms, MD and lead accumulations, sandbag debris and accumulations of brass casings indicating firing points, soil mounds, craters and other debris typically associated with elevated concentrations of COCs.

Sampling Plan Development

Background data for Unit 31 were compiled to provide the historical context of site use and to identify areas of potential concern to be examined further. Compiled data included historical documentation, data generated during MEC removal operations in site perimeter areas, and results of previous field reconnaissance and investigations within Unit 31 or in adjacent areas where applicable. Additional field reconnaissance was performed to examine suspect areas identified from existing data and other areas not previously examined. All of the acquired data were used to identify historical use patterns and pertinent site features where potentially elevated concentrations of COCs were most likely to be present. Based on evaluation of the available data and site observations, locations representing potential worst-case scenarios were identified for sampling in Unit 31. Sample location selection criteria included, but were not limited to, nature of range use, types and density of MEC and MD found, locations of former known or suspected targets or firing points, structures, impact berms, accumulations of lead such as bullets or other lead shrapnel, and other physical evidence found. Additional detail regarding sample location selection is described in the Unit 31 Work Plan (KEMRON, 2017). The analytical results for samples from these suspect locations, which are discussed in Section 5.0, were then used to evaluate whether elevated COCs were present at concentrations above the protectiveness thresholds identified in the Site 39 ROD Amendment (Army, 2009)

(225 milligrams per kilogram [mg/kg] for lead, 2.7 mg/kg for HMX, 3.1 mg/kg for RDX, and 5.9 mg/kg for TNT) and whether additional site characterization or potential remediation may be necessary.

3.0 FIELD ACTIVITIES

Site reconnaissance and field evaluation of site conditions in Unit 31 was performed on January 25, 2017 and February 22-23, 2017. Sampling was conducted April 17 through 26, 2018. Field work was performed in accordance with the specifications in the approved Unit 31 Work Plan (KEMRON, 2017) and Site 39 QAPP (KEMRON, 2016).

3.1 Sample Locating

Locations representing potential worst-case scenarios were identified in the Unit 31 Work Plan (KEMRON, 2017) as those most likely to contain elevated concentrations of COCs. To reacquire the selected locations to perform sampling, a global positioning system (GPS) was used to navigate to the specified coordinates for each sample location. Upon completion of sampling, each location was resurveyed using the GPS to confirm the final location coordinates of the sample.

3.2 Sampling

To obtain representative results from each identified suspect location, samples were collected using seven-point incremental sampling as described in (1) *Special Report (SR) 96-15*, *Assessment of Sampling Error Associated with Collection and Analysis of Soil Samples at Explosives-Contaminated Sites* (U.S. Army Cold Regions Research and Engineering Laboratory, 1996) and (2) *Technical Update, Munitions Constituent Sampling* (Military Munitions Center of Expertise, 2005). Each location was sampled using the seven-point wheel pattern where six soil increments were collected from a circular area approximately 4 feet in diameter and one soil increment was collected from the center. These seven increments were combined into a single bulk sample for later processing and analysis by the laboratory. Additional details regarding implementation of this sampling methodology are provided in the Unit 31 Work Plan (KEMRON, 2017) and Site 39 QAPP (KEMRON, 2016).

Soil samples were collected from the surface (0-6 inches below ground surface [bgs]), 1 foot bgs, and 2 feet bgs, except at locations 31-22 and 31-26 (Figure 2) where auger refusal occurred due to sandstone bedrock that was encountered at a depth of approximately 1.5 feet. Samples were

collected at the surface and 1 foot bgs at 31-22 and at the surface at 31-26. Field duplicate samples were collected at a 10% frequency to document the precision of the sampling process and MS/MSD samples were analyzed at a frequency of 5% (from each depth) to establish the applicability of the overall analytical approach to the specific sample matrix. Field duplicate samples included each depth sampled. Laboratory processing and analysis was initially performed on the surface samples only. If COCs were not detected in surface samples or were detected at concentrations below thresholds specified in the Site 39 ROD Amendment (Army, 2009), no additional analyses were performed corresponding to that sample location. If concentrations of COCs were found to exceed the concentration thresholds specified in the Site 39 ROD Amendment (Army, 2009), then the corresponding deeper samples from both 1 foot bgs and 2 feet bgs were also analyzed. Analytical results for Unit 31 samples are discussed in Section 5.0.

3.3 Equipment Decontamination

All down-hole sampling equipment was decontaminated before collection of each depth interval at each sample location in accordance with the Site 39 QAPP (KEMRON, 2016) to minimize the potential for cross-contamination of samples. An equipment rinsate sample (equipment blank) was collected during each day of sampling to evaluate the effectiveness of the decontamination process. Equipment blanks were collected by pouring laboratory-supplied water over the decontaminated equipment and collecting the water into sample containers supplied by the laboratory. Equipment blanks were submitted for laboratory analyses of each COC along with soil samples.

3.4 Sample Documentation, Handling, and Shipping

Sample information was recorded on Chain of Custody forms. The Chain of Custody was kept with the samples and custody control procedures and documentation were maintained at all times. Samples were packaged and shipped in accordance with handling, preservation specifications and holding times as described in the Site 39 QAPP (KEMRON, 2016). Samples were shipped to Accutest Laboratories, Orlando, Florida for analyses as described in Section 4.0. Note that Accutest Laboratories was acquired by SGS in April 2016.

4.0 SAMPLE ANALYSES

Sample analyses for lead and explosives were performed in accordance with the Site 39 QAPP (KEMRON, 2016) by Accutest Laboratories at 4405 Vineland Road, Orlando, Florida (Section 4.0. Note that Accutest Laboratories was acquired by SGS in April 2016), using method:

- SW6010C/3050B modified for lead soil samples
- SW6010C/3010A for equipment rinsate samples associated with lead sampling
- SW8330B for explosives soil samples
- SW8330B/3535A for equipment rinsate samples associated with explosives sampling

The laboratory is accredited under the Department of Defense Environmental Laboratory Accreditation Program (ELAP) for the analyses requested (certification number L2229).

Samples were prepared for analyses in accordance with specifications described in the Site 39 QAPP (KEMRON, 2016). Preparation included air drying, sieving to segregate fine and coarse fractions, and slab cake subsampling. All sample fractions were retained for potential further evaluation pending completion of analyses and data quality evaluation. Results of analyses are summarized in Section 5.0 and Table 1. Copies of laboratory reports are presented in the *Chemical Quality Assurance Report* (CQAR; Appendix A).

4.1 Data Validation

The resulting laboratory data were validated in accordance with criteria described in the Site 39 QAPP (KEMRON, 2016) to verify that project data comply with specifications regarding precision, accuracy, representativeness, comparability, completeness, and sensitivity. The data validation summary is included in the CQAR (Appendix A). Validation identified 17 samples from Unit 31 for which lead reanalysis was required due to insufficient soil volumes used for the initial analyses. Results shown on Table 1 include the reanalyzed samples. Results of the final data validation indicate that the data are usable for the intended purpose.

5.0 ANALYTICAL RESULTS

Sampling and laboratory analytical data were evaluated and compared to the concentration thresholds specified in the Site 39 ROD Amendment (Army, 2009) for protection of human health and the environment. Results of sample analyses are provided in Table 1 and summarized below. Sample locations and corresponding analytical results are illustrated on Figure 2. Copies of the laboratory analytical reports are presented in Appendix A.

Samples were collected from 43 locations in Unit 31. Laboratory analyses included evaluation of lead in samples from 37 locations and evaluation of explosive residues (HMX, RDX and TNT) in samples from 18 locations. Explosives were not detected in any samples. Lead was detected in samples from all analyzed locations at concentrations ranging from 1.6 mg/kg to 6,690 mg/kg, of which 9 locations exceed the threshold criterion of 225 mg/kg for lead specified in the Site 39 ROD Amendment (Figure 3). The deeper samples corresponding to the 9 locations with elevated lead concentrations were all analyzed. All results for deeper samples were less than the 225 mg/kg threshold except at location 31-13 (Figure 3) for which results were 2,670 mg/kg and 552 mg/kg, for the 1-foot and 2-foot samples, respectively (Table 1).

An equipment rinsate sample (equipment blank) was collected during each day of sampling to evaluate the effectiveness of the decontamination process. Rinsate samples were collected for analyses of both explosives and lead.

A trace amount of lead (0.25 micrograms per liter) was detected in the equipment blank sample corresponding to sample collection at location 31-28 (Figure 2). The reported detection is less than the quantitation limit of 2.0 micrograms per liter. The cause of the trace detection is unknown. The equipment decontamination procedures specified in the Site 39 QAPP (KEMRON, 2016) were rigorously followed. The trace detections do not significantly alter the interpretation of site data. Additional detail is presented in the CQAR (Appendix A).

6.0 RECOMMENDATIONS

Evaluation of analytical results for soil samples from Unit 31 indicates that no explosive residues were detected in any of the samples analyzed. Therefore, elevated concentrations of explosive residues do not appear to be present within the 53 acre perimeter fuel break of Unit 31, or in the immediate vicinity of the suspect locations sampled within the central heavily vegetated area. However, additional suspect locations may be present in densely vegetated areas that were not previously accessible. Subsequent additional BRA evaluation should be performed in the currently inaccessible areas following vegetation reduction and MEC removal operations to identify whether additional suspect locations are present.

Sample analyses detected the presence of lead exceeding the protectiveness thresholds specified in the Site 39 ROD Amendment (Army, 2009) in samples from 9 locations, one of which (location 31-13) included lead concentrations in excess of the 225 mg/kg threshold at all three depths sampled. All of the locations at which elevated lead concentrations were detected (Figure 3) were associated with impact berms and/or heavily used target locations. It is uncertain whether the elevated concentration at depth (2 feet bgs) at location 31-13 is associated with progressive downslope soil migration and accumulation over time, or with past physical modification of the berm for some purpose. The lead concentrations appear to be decreasing with depth, but the total depth of elevated lead concentrations at that location has not been identified.

The distribution of elevated lead concentrations appears to be associated with three general areas at the site that correspond with historical activity at both former Range 31 and Range 31A; a target in the vicinity of location 31-22, a target in the vicinity of location 31-31, and an area of 2.5 to 3 acres surrounding locations 31-04, 31-11 and 31-13 (Figure 3) that includes impact berms and multiple targets. It should be reiterated that in much of the interior of Unit 31 dense vegetation limits access and obscures views of the ground surface such that additional areas of elevated lead concentrations may also be present that have not yet been observed or sampled, and the areas of known elevated concentration may extend further laterally than currently observed.

Based on evaluation of site data and results of sample analyses, no further action is recommended regarding explosive residues in soil within the 53 acre perimeter fuel break at Unit

31 and the immediate vicinity of locations already analyzed for explosives residues. However, additional BRA evaluation of densely vegetated areas should be performed following vegetation reduction and MEC removal.

Based on the high concentrations of lead in multiple locations within Unit 31 and the known extent of the affected areas, limited remediation is recommended in order to meet the protectiveness criteria specified in the Site 39 ROD Amendment. Excavation of soil containing elevated concentrations of lead is recommended in the vicinity of locations 31-22 and 31-31, and more extensive excavation of approximately 3 acres of soil comprising impact berms and adjacent areas in the vicinity of locations 31-04, 31-11 and 31-13 (Figure 3) is recommended to comply with the specified protectiveness criteria. The recommended 3 acres is based on data available to date, but may be greater if additional areas of concern are subsequently identified or if the known affected areas extend further into densely vegetated areas than currently estimated.

Based on analysis of samples collected to date, elevated concentrations of lead do not appear to extend much below surface and shallow soil in most locations at the site. The anticipated depth of excavation will be less than 1 foot over most of the areas. However, the extent of deeper excavation necessary in selected locations to achieve compliance with protectiveness criteria is currently unknown. At least a portion of the berm area in the vicinity of location 31-13 contains elevated concentrations of lead to a depth of at least 2 feet and may extend deeper.

Confirmation soil sampling both vertically and laterally will be needed during excavation operations to verify that sufficient soil containing elevated lead concentrations has been removed. Depending on conditions encountered, confirmation sampling may extend into areas that are currently densely vegetated and have not yet been examined in detail.

The elevated lead concentrations at locations 31-22 and 31-31 should be further characterized by performing step out sampling in accordance with the Unit 31 Work Plan (KEMRON, 2017) and Site 39 QAPP (KEMRON, 2016) to identify the lateral extent of the elevated concentrations. Additional sampling may be needed elsewhere at the site based on the findings of subsequent BRA site evaluation following vegetation reduction and MEC removal.

7.0 REFERENCES

Department of the Army, 2009. *Final Record of Decision Amendment Site 39 Inland Ranges Former Fort Ord, California.* [Administrative Record (AR) # RI-041E]

IT Corporation/Harding Lawson Associates, 2001. *Draft Final Basewide Range Assessment Work Plan and Contractor Quality Control Plan Small Arms and Multi-Use Ranges Former Fort Ord, California.* [AR# BW-2085A]

KEMRON Environmental Services Inc. (KEMRON), 2016. *Quality Assurance Project Plan Former Fort Ord, California, Volume I, Appendix B Soil Sampling, Basewide Range Assessment.* [AR# BW-2767B]

KEMRON, 2017. *Final Site Reconnaissance Results and Work Plan for Additional Investigation Basewide Range Assessment Investigation Unit 31 Former Fort Ord Monterey County, California*. [AR# BW-2836B]

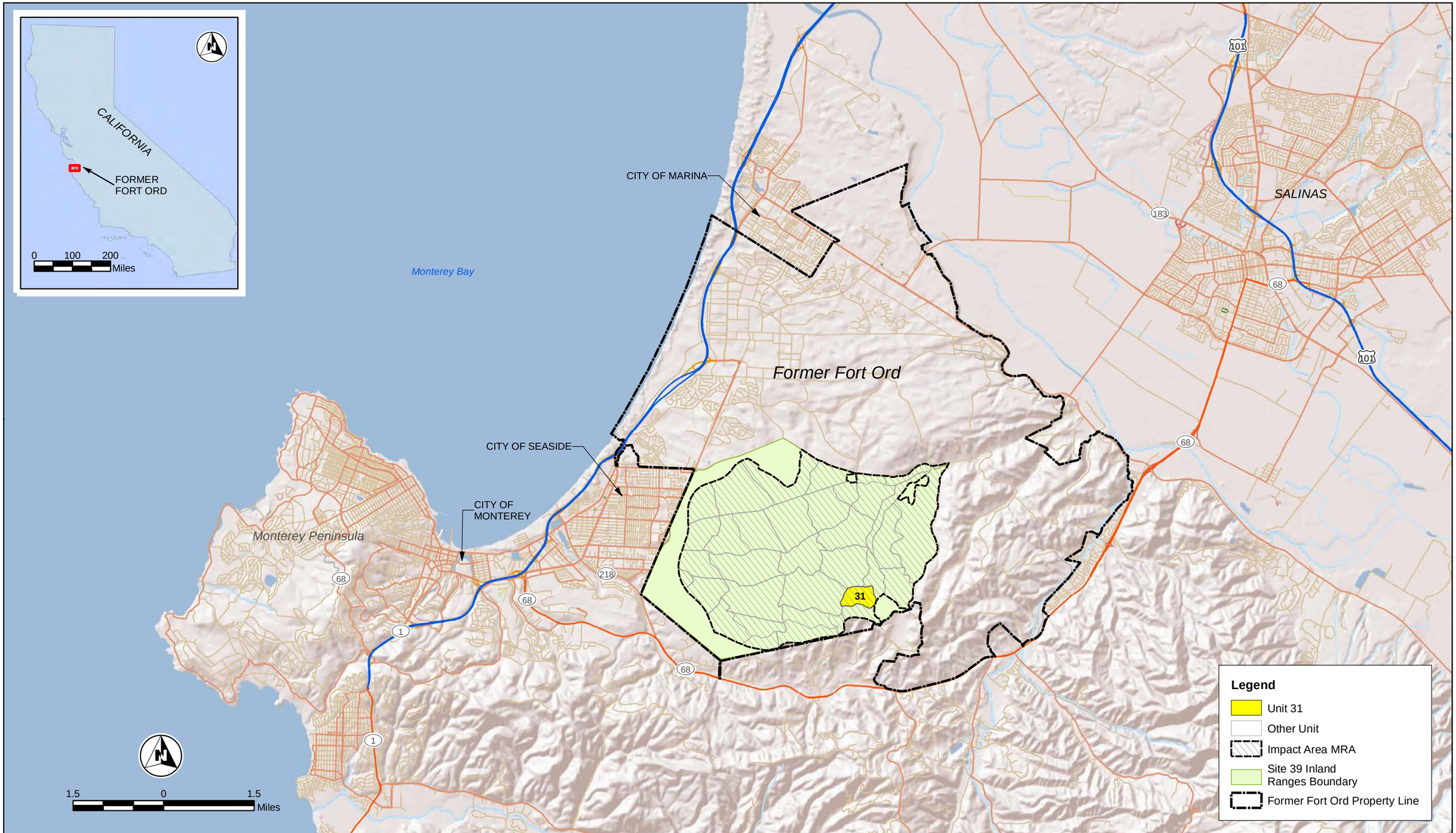
Military Munitions Center of Expertise, 2005. *Technical Update, Munitions Constituent (MC) Sampling.*

Shaw Environmental Inc., 2012. *Final Comprehensive Basewide Range Assessment Report Former Fort Ord, California Revision 2* [AR# BW-2300L]

U.S. Army Cold Regions Research and Engineering Laboratory, 1996. *Special Report (SR) 96-l5, Assessment of Sampling Error Associated with Collection and Analysis of Soil Samples at Explosives-Contaminated Sites*.

Note: Applicable Administrative Record document numbers are listed in brackets. The Administrative Record can be found at http://fortordcleanup.com/documents/search/.

Figures

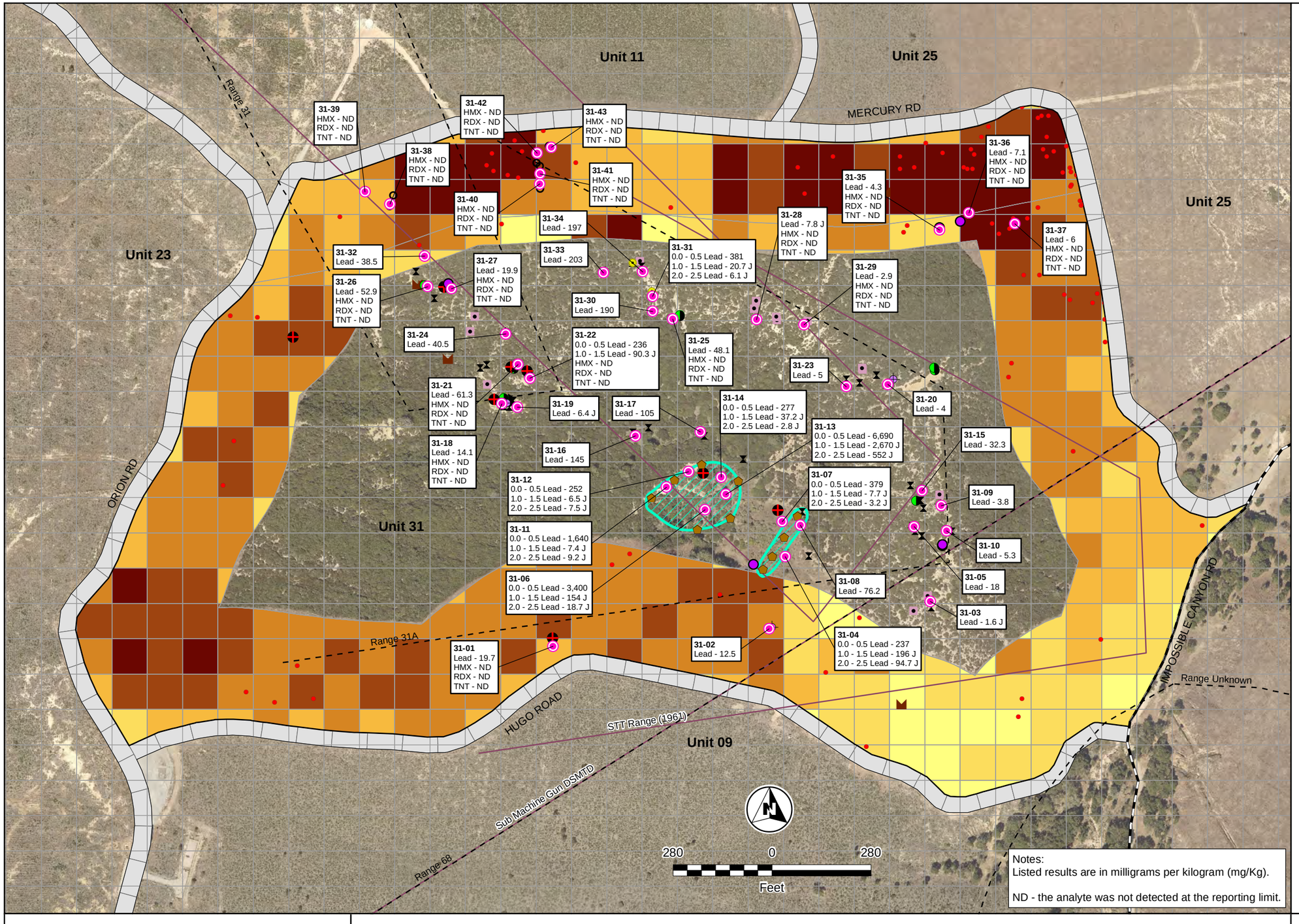


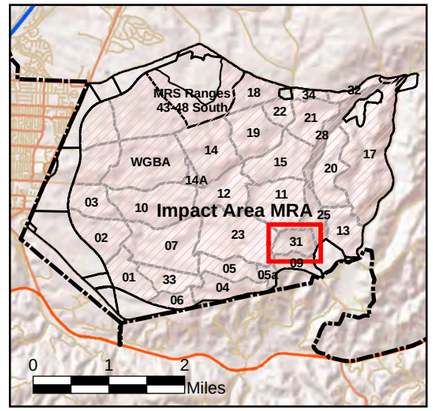
Sampling Results Technical Memoradum
Basewide Range Assessment Investigation
Unit 31
Former Fort Ord, California

Figure 1

Location Map

G:\ArcGIS\USACE\Fort_Ord\PROJECTS\Basewide_Range_Assessment\U31\Map_docs\TechMemo\Fig1_Overview.mxd 7/25/2018 [12:46 PM] KCHOLAK, Gilbane





Legend

- Sample Location and Results for Surface Samples

GPS Features

- Berm
- Crater
- Firing Point
- Lead Accumulation
- MD
- Mound
- Small Arms Casing or Bullets
- Target
- Trench
- Wood Debris
- Prior Location of UXO with Sensitive Fuze
- Other MEC
- Historical Range Fan/Area
- Historical Area (HA)
- Berm
- Fuel Break
- Impact Area MRA

Weight of MD/Grid

- 0 - 5 lbs MD
- 5 - 25 lbs MD
- 25 - 50 lbs MD
- 50 - 100 lbs MD
- 100 - 150 lbs MD
- 150 - 340 lbs MD

Notes:
Listed results are in milligrams per kilogram (mg/Kg).

ND - the analyte was not detected at the reporting limit.

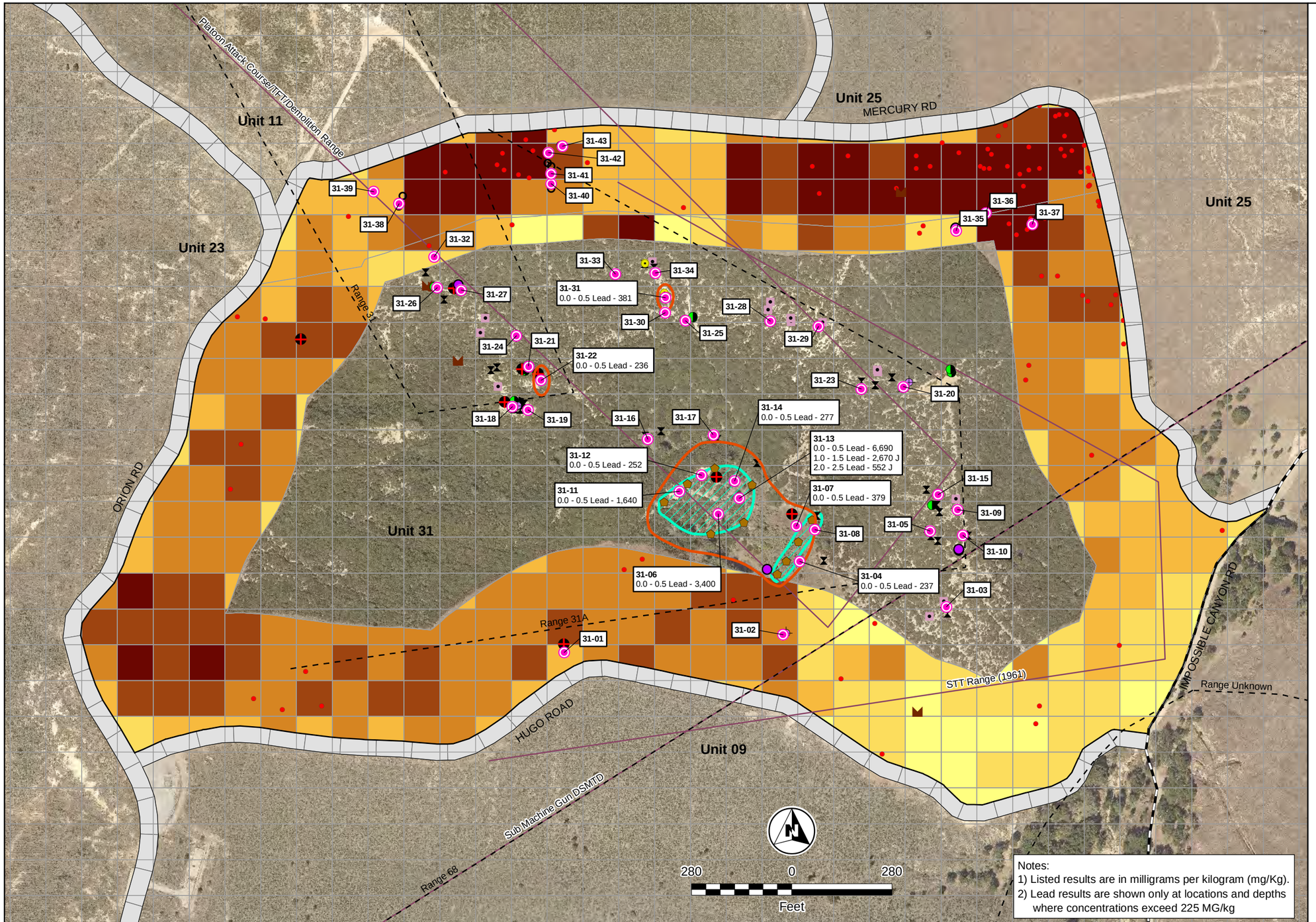
KEMRON ENVIRONMENTAL SERVICES

Gilbane

Sampling Results Technical Memorandum
Basewide Range Assessment Investigation
Unit 31
Former Fort Ord, California

Figure 2
Unit 31 Soil Analytical Results

G:\ArcGIS\USACE\Fort_Ord\PROJECTS\Basewide_Range_Assessment\U31\Map_docs\TechMemo\Unit_31_Results.mxd 8/3/2018 [10:44 AM] lcarr, Gilbane



Sampling Results Technical Memorandum
Basewide Range Assessment Investigation
Unit 31
Former Fort Ord, California

Figure 3
Unit 31 Estimated Extent of
Lead Greater than 225 mg/Kg in Soil

G:\ArcGIS\USACE\Fort_Ord\PROJECTS\Basewide_Range_Assessment\U31\Map_docs\TechMemo\Unit31_LeadExtent.mxd 10/11/2018 [15:08 PM] kcholak, Gilbane

Tables

Table 1. Analytical Results
Sampling Results Technical Memorandum
Basewide Range Assessment
Site 39 Unit 31
Former Fort Ord, California

Unit	Location	Former Range[1]	Depth (ft)	Date	Sample ID	Analyte	Result	Units of Measure	Qualifier
31	31-01	31A	0	4/24/2018	31-01SC0000	Lead	19.7	mg/kg	
31	31-01	31A	0	4/24/2018	31-01SC0000	TNT	ND	ug/kg	U
31	31-01	31A	0	4/24/2018	31-01SC0000	RDX	ND	ug/kg	U
31	31-01	31A	0	4/24/2018	31-01SC0000	HMX	ND	ug/kg	U
31	31-02	31	0	4/24/2018	31-02SC0000	Lead	12.5	mg/kg	
31	31-03	31, 31A	0	4/18/2018	31-03SC0000	Lead	1.6	mg/kg	J
31	31-04	31, 31A	0	4/18/2018	31-04SC0000	Lead	237	mg/kg	
31	31-04	31, 31A	1	4/18/2018	31-04SC0001	Lead	196	mg/kg	J
31	31-04	31, 31A	2	4/18/2018	31-04SC0002	Lead	94.7	mg/kg	J
31	31-05	31, 31A	0	4/19/2018	31-05SC0000	Lead	18	mg/kg	
31	31-06	31, 31A	0	4/17/2018	31-06SC0000	Lead	3400	mg/kg	
31	31-06	31, 31A	1	4/17/2018	31-06SC0001	Lead	154	mg/kg	J
31	31-06	31, 31A	2	4/17/2018	31-06SC0002	Lead	18.7	mg/kg	J
31	31-07	31, 31A	0	4/17/2018	31-07SC0000	Lead	379	mg/kg	
31	31-07	31, 31A	1	4/17/2018	31-07SC0001	Lead	7.7	mg/kg	J
31	31-07	31, 31A	2	4/17/2018	31-07SC0002	Lead	3.2	mg/kg	J
31	31-08	31, 31A	0	4/18/2018	31-08SC0000	Lead	76.2	mg/kg	
31	31-09	31, 31A	0	4/19/2018	31-09SC0000	Lead	3.8	mg/kg	
31	31-09	31, 31A	0	4/19/2018	31-09SC0000Q	Lead	3.4	mg/kg	
31	31-10	31, 31A	0	4/18/2018	31-10SC0000	Lead	5.3	mg/kg	
31	31-11	31, 31A	0	4/17/2018	31-11SC0000	Lead	1640	mg/kg	
31	31-11	31, 31A	0	4/17/2018	31-11SC0001	Lead	7.4	mg/kg	J
31	31-11	31, 31A	0	4/17/2018	31-11SC0002	Lead	9.2	mg/kg	J
31	31-12	31, 31A	0	4/17/2018	31-12SC0000	Lead	252	mg/kg	
31	31-12	31, 31A	1	4/17/2018	31-12SC0001	Lead	6.5	mg/kg	J
31	31-12	31, 31A	2	4/17/2018	31-12SC0002	Lead	7.5	mg/kg	J
31	31-13	31, 31A	0	4/17/2018	31-13SC0000	Lead	6690	mg/kg	
31	31-13	31, 31A	1	4/17/2018	31-13SC0001	Lead	2670	mg/kg	J
31	31-13	31, 31A	2	4/17/2018	31-13SC0002	Lead	552	mg/kg	J
31	31-14	31, 31A	0	4/17/2018	31-14SC0000	Lead	277	mg/kg	
31	31-14	31, 31A	1	4/17/2018	31-14SC0001	Lead	37.2	mg/kg	J
31	31-14	31, 31A	2	4/17/2018	31-14SC0002	Lead	2.8	mg/kg	J
31	31-15	31, 31A	0	4/19/2018	31-15SC0000	Lead	32.3	mg/kg	
31	31-16	31, 31A	0	4/17/2018	31-16SC0000	Lead	145	mg/kg	
31	31-17	31, 31A	0	4/17/2018	31-17SC0000	Lead	105	mg/kg	
31	31-18	31, 31A	0	4/23/2018	31-18SC0000	Lead	14.1	mg/kg	
31	31-18	31, 31A	0	4/23/2018	31-18SC0000	TNT	ND	ug/kg	U
31	31-18	31, 31A	0	4/23/2018	31-18SC0000	RDX	ND	ug/kg	U
31	31-18	31, 31A	0	4/23/2018	31-18SC0000	HMX	ND	ug/kg	U
31	31-19	31, 31A	0	4/23/2018	31-19SC0000	Lead	6.4	mg/kg	J
31	31-20	31, 31A	0	4/19/2018	31-20SC0000	Lead	4	mg/kg	
31	31-21	31, 31A	0	4/23/2018	31-21SC0000	Lead	61.3	mg/kg	
31	31-21	31, 31A	0	4/23/2018	31-21SC0000	TNT	ND	ug/kg	U
31	31-21	31, 31A	0	4/23/2018	31-21SC0000	RDX	ND	ug/kg	U

Table 1. Analytical Results
Sampling Results Technical Memorandum
Basewide Range Assessment
Site 39 Unit 31
Former Fort Ord, California

Unit	Location	Former Range[1]	Depth (ft)	Date	Sample ID	Analyte	Result	Units of Measure	Qualifier
31	31-21	31, 31A	0	4/23/2018	31-21SC0000	HMX	ND	ug/kg	U
31	31-22	31, 31A	0	4/23/2018	31-22SC0000	Lead	236	mg/kg	
31	31-22	31, 31A	1	4/23/2018	31-22SC0001	Lead	90.3	mg/kg	J
31	31-22	31, 31A	0	4/23/2018	31-22SC0000	TNT	ND	ug/kg	U
31	31-22	31, 31A	0	4/23/2018	31-22SC0000	RDX	ND	ug/kg	U
31	31-22	31, 31A	0	4/23/2018	31-22SC0000	HMX	ND	ug/kg	U
31	31-23	31, 31A	0	4/19/2018	31-23SC0000	Lead	5	mg/kg	
31	31-24	31, 31A	0	4/23/2018	31-24SC0000	Lead	40.5	mg/kg	
31	31-25	31, 31A	0	4/23/2018	31-25SC0000	Lead	48.1	mg/kg	
31	31-25	31, 31A	0	4/23/2018	31-25SC0000	TNT	ND	ug/kg	U
31	31-25	31, 31A	0	4/23/2018	31-25SC0000	RDX	ND	ug/kg	U
31	31-25	31, 31A	0	4/23/2018	31-25SC0000	HMX	ND	ug/kg	U
31	31-26	31, 31A	0	4/23/2018	31-26SC0000	Lead	52.9	mg/kg	
31	31-26	31, 31A	0	4/23/2018	31-26SC0000	TNT	ND	ug/kg	U
31	31-26	31, 31A	0	4/23/2018	31-26SC0000	RDX	ND	ug/kg	U
31	31-26	31, 31A	0	4/23/2018	31-26SC0000	HMX	ND	ug/kg	U
31	31-27	31, 31A	0	4/23/2018	31-27SC0000	Lead	19.9	mg/kg	
31	31-27	31, 31A	0	4/23/2018	31-27SC0000	TNT	ND	ug/kg	U
31	31-27	31, 31A	0	4/23/2018	31-27SC0000	RDX	ND	ug/kg	U
31	31-27	31, 31A	0	4/23/2018	31-27SC0000	HMX	ND	ug/kg	U
31	31-28	31, 31A	0	4/26/2018	31-28SC0000A	Lead	5.4	mg/kg	J
31	31-28	31, 31A	0	4/26/2018	31-28SC0000AQ	Lead	7.8	mg/kg	J
31	31-28	31, 31A	0	4/23/2018	31-28SC0000	TNT	ND	ug/kg	U
31	31-28	31, 31A	0	4/23/2018	31-28SC0000Q	TNT	ND	ug/kg	U
31	31-28	31, 31A	0	4/23/2018	31-28SC0000	RDX	ND	ug/kg	U
31	31-28	31, 31A	0	4/23/2018	31-28SC0000Q	RDX	ND	ug/kg	U
31	31-28	31, 31A	0	4/23/2018	31-28SC0000	HMX	ND	ug/kg	U
31	31-28	31, 31A	0	4/23/2018	31-28SC0000Q	HMX	ND	ug/kg	U
31	31-29	31, 31A	0	4/23/2018	31-29SC0000	Lead	2.9	mg/kg	
31	31-29	31, 31A	0	4/23/2018	31-29SC0000	TNT	ND	ug/kg	U
31	31-29	31, 31A	0	4/23/2018	31-29SC0000	RDX	ND	ug/kg	U
31	31-29	31, 31A	0	4/23/2018	31-29SC0000	HMX	ND	ug/kg	U
31	31-30	31, 31A	0	4/19/2018	31-30SC0000Q	Lead	190	mg/kg	
31	31-30	31, 31A	0	4/19/2018	31-30SC0000	Lead	180	mg/kg	J
31	31-31	31, 31A	0	4/19/2018	31-31SC0000	Lead	381	mg/kg	
31	31-31	31, 31A	1	4/19/2018	31-31SC0001	Lead	20.7	mg/kg	J
31	31-31	31, 31A	2	4/19/2018	31-31SC0002	Lead	6.1	mg/kg	J
31	31-32	31, 31A	0	4/24/2018	31-32SC0000	Lead	38.5	mg/kg	
31	31-33	31, 31A	0	4/23/2018	31-33SC0000	Lead	203	mg/kg	
31	31-34	31, 31A	0	4/19/2018	31-34SC0000	Lead	172	mg/kg	
31	31-34	31, 31A	0	4/19/2018	31-34SC0000Q	Lead	197	mg/kg	
31	31-35	31A	0	4/24/2018	31-35SC0000	Lead	4.3	mg/kg	
31	31-35	31A	0	4/24/2018	31-35SC0000	TNT	ND	ug/kg	U
31	31-35	31A	0	4/24/2018	31-35SC0000	RDX	ND	ug/kg	U

Table 1. Analytical Results
Sampling Results Technical Memorandum
Basewide Range Assessment
Site 39 Unit 31
Former Fort Ord, California

Unit	Location	Former Range[1]	Depth (ft)	Date	Sample ID	Analyte	Result	Units of Measure	Qualifier
31	31-35	31A	0	4/24/2018	31-35SC0000	HMX	ND	ug/kg	U
31	31-36	31A	0	4/24/2018	31-36SC0000	Lead	7.1	mg/kg	
31	31-36	31A	0	4/24/2018	31-36SC0000	TNT	ND	ug/kg	U
31	31-36	31A	0	4/24/2018	31-36SC0000	RDX	ND	ug/kg	U
31	31-36	31A	0	4/24/2018	31-36SC0000	HMX	ND	ug/kg	U
31	31-37	31A	0	4/24/2018	31-37SC0000Q	Lead	5.7	mg/kg	
31	31-37	31A	0	4/24/2018	31-37SC0000	Lead	6	mg/kg	
31	31-37	31A	0	4/24/2018	31-37SC0000Q	TNT	ND	ug/kg	U
31	31-37	31A	0	4/24/2018	31-37SC0000	TNT	ND	ug/kg	U
31	31-37	31A	0	4/24/2018	31-37SC0000Q	RDX	ND	ug/kg	U
31	31-37	31A	0	4/24/2018	31-37SC0000	RDX	ND	ug/kg	U
31	31-37	31A	0	4/24/2018	31-37SC0000Q	HMX	ND	ug/kg	U
31	31-37	31A	0	4/24/2018	31-37SC0000	HMX	ND	ug/kg	U
31	31-38	31, 31A	0	4/24/2018	31-38SC0000	TNT	ND	ug/kg	U
31	31-38	31, 31A	0	4/24/2018	31-38SC0000	RDX	ND	ug/kg	U
31	31-38	31, 31A	0	4/24/2018	31-38SC0000	HMX	ND	ug/kg	U
31	31-39	31, 31A	0	4/24/2018	31-39SC0000	TNT	ND	ug/kg	U
31	31-39	31, 31A	0	4/24/2018	31-39SC0000	RDX	ND	ug/kg	U
31	31-39	31, 31A	0	4/24/2018	31-39SC0000	HMX	ND	ug/kg	UJ
31	31-40	31, 31A	0	4/24/2018	31-40SC0000	TNT	ND	ug/kg	U
31	31-40	31, 31A	0	4/24/2018	31-40SC0000	RDX	ND	ug/kg	U
31	31-40	31, 31A	0	4/24/2018	31-40SC0000	HMX	ND	ug/kg	U
31	31-41	31, 31A	0	4/24/2018	31-41SC0000	TNT	ND	ug/kg	U
31	31-41	31, 31A	0	4/24/2018	31-41SC0000	RDX	ND	ug/kg	U
31	31-41	31, 31A	0	4/24/2018	31-41SC0000	HMX	ND	ug/kg	U
31	31-42	31, 31A	0	4/24/2018	31-42SC0000	TNT	ND	ug/kg	U
31	31-42	31, 31A	0	4/24/2018	31-42SC0000Q	TNT	ND	ug/kg	U
31	31-42	31, 31A	0	4/24/2018	31-42SC0000	RDX	ND	ug/kg	U
31	31-42	31, 31A	0	4/24/2018	31-42SC0000Q	RDX	ND	ug/kg	U
31	31-42	31, 31A	0	4/24/2018	31-42SC0000	HMX	ND	ug/kg	U
31	31-42	31, 31A	0	4/24/2018	31-42SC0000Q	HMX	ND	ug/kg	U
31	31-43	31, 31A	0	4/24/2018	31-43SC0000	TNT	ND	ug/kg	U
31	31-43	31, 31A	0	4/24/2018	31-43SC0000	RDX	ND	ug/kg	U
31	31-43	31, 31A	0	4/24/2018	31-43SC0000	HMX	ND	ug/kg	U
Equipment Rinsate									
				4/17/2018	31-ER01SC	Lead	ND	ug/L	U
				4/19/2018	31-ER02SC	Lead	ND	ug/L	UJ
				4/23/2018	31-ER03SC	Lead	ND	ug/L	UJ
				4/23/2018	31-ER04SC	Lead	ND	ug/L	UJ
				4/23/2018	31-ER04SC	HMX	ND	ug/L	U
				4/23/2018	31-ER04SC	TNT	ND	ug/L	U
				4/23/2018	31-ER04SC	RDX	ND	ug/L	U
				4/24/2018	31-ER05SC	Lead	ND	ug/L	U
				4/24/2018	31-ER05SC	HMX	ND	ug/L	U

Table 1. Analytical Results
Sampling Results Technical Memorandum
Basewide Range Assessment
Site 39 Unit 31
Former Fort Ord, California

Unit	Location	Former Range[1]	Depth (ft)	Date	Sample ID	Analyte	Result	Units of Measure	Qualifier
				4/24/2018	31-ER05SC	TNT	ND	ug/L	U
				4/24/2018	31-ER05SC	RDX	ND	ug/L	U
				4/26/2018	28-ER01SC	Lead	0.25	ug/L	J

Notes:
381 =Detected concentration exceeds 225 mg/kg threshold for lead
ug/L = micrograms per liter
ug/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
ND = Not detected at laboratory limit of of quantitation
J = The result in an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was not detected above the level of the reported sample quantitation limit.
UJ = The analyte was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
HMX= octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine
TNT = 2,4,6-trinitrotoluene
[1] = Former range(s) likely associated with the presence of the suspect feature at the sampled location.

Appendix A

Chemical Quality Assurance Report

Appendix A
Chemical Quality Assurance Report

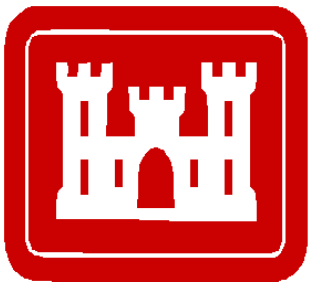
CHEMICAL QUALITY ASSURANCE REPORT

BASEWIDE RANGE ASSESSMENT
BURN UNITS 25, 28, AND 31
APRIL 2018 SAMPLING EVENT

FORMER FORT ORD, CALIFORNIA

REVISION 0

Prepared for:



U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, California 95814

Prepared by:

Gilbane Federal
1655 Grant Street, Suite 1200
Concord, CA 94520

In accordance with:

Worldwide Environmental Remediation Services Contract
Contract No. W912DY-10-D-0027
Task Order No. CM01

November 2018

TABLE OF CONTENTS

Section **Page**

1.0 INTRODUCTION 1-1
2.0 ANALYTICAL PROGRAM 2-1
2.1 QUALIFIED RESULTS 2-3
2.2 ESTIMATED LOW CONCENTRATION 2-4
2.3 HOLDING TIME AND PRESERVATION 2-5
2.4 CALIBRATION 2-5
2.5 BLANK CONTAMINATION 2-5
2.6 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE 2-5
2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND REPLICATES 2-5
2.8 POST DIGESTION SPIKE 2-6
2.9 SERIAL DILUTION 2-6
2.10 INTERNAL AND SURROGATE STANDARD RECOVERIES 2-6
2.11 INSTRUMENT PERFORMANCE 2-6
2.12 ANALYTE IDENTIFICATION AND QUANTITATION 2-7
3.0 FIELD PROCEDURES 3-1
3.1 SAMPLE SHIPMENT AND STORAGE 3-1
3.2 FIELD DUPLICATES 3-2
4.0 CONCLUSIONS AND DATA USABILITY 4-1
4.1 QUALITY CONTROL SAMPLES 4-1
4.2 CONCLUSION 4-2
5.0 REFERENCES 5-1

LIST OF TABLES

Table 2-1 Summary of Sample Delivery Groups and Collection Dates

LIST OF ATTACHMENTS

Attachment 1 Automated Data Review Summary Reports
Attachment 2 Laboratory Reports
Attachment 3 Laboratory Corrective Action Summary Form

LIST OF ACRONYMS AND ABBREVIATIONS

ADR	Automated Data Review
BRA	Basewide Range Assessment
CCV	continuing calibration verification
CQAR	Chemical Quality Assurance Report
DL	detection limit
DoD	Department of Defense
DQ	data qualifier
DQO	data quality objective
EB	equipment blank
eDMS	[Gilbane] Environmental Data Management System
EPA	U.S. Environmental Protection Agency
Fort Ord	Fort Ord Air Force Range
Gilbane	Gilbane Federal
HMX	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
ICS	interference check sample
ICV	initial calibration verification
ISM	Incremental Sampling Methodology
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LOD	limit of detection
LOQ	limit of quantitation
LR	laboratory replicate
mm	millimeter
MS	matrix spike
MSD	matrix spike duplicate
PARCCS	precision, accuracy, representativeness, comparability, completeness, and sensitivity
QAPP	Quality Assurance Project Plan
QC	quality control
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RF	response factor
ROD	Record of Decision
RPD	relative percent difference

RSD	relative standard deviation
S2BVEM	stage 2B validation, electronic and manual
S4VEM	stage 4 validation, electronic and manual
SDG	sample delivery group
SGS	SGS North America Inc.
TNT	2,4,6-trinitrotoluene

This page was intentionally left blank

1.0 INTRODUCTION

This Chemical Quality Assurance Report (CQAR) was prepared by Gilbane Federal (Gilbane) for the 2018 Basewide Range Assessment (BRA) soil sampling event performed in April 2018 at Burn Units 25, 28, and 31, located in the former Fort Ord Air Force Range (Fort Ord), California, using the Incremental Sampling Methodology (ISM). The collection dates are listed in **Table 2-1** of this CQAR.

This CQAR summarizes the overall quality, and establishes and documents the usability of the data collected in support of the April 2018 BRA incremental soil sampling event. Samples were collected in accordance with the *Quality Assurance Project Plan, Former Fort Ord, California, Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment* (QAPP), KEMRON, June 2016. The collected data were validated and reconciled with the project procedures and data quality objectives (DQOs) listed in the QAPP.

This page was intentionally left blank

2.0 ANALYTICAL PROGRAM

SGS North America, Inc. (SGS) in Orlando, Florida, was the primary laboratory for the April 2018 BRA incremental soil sampling event at Fort Ord. The laboratory participates in and is certified by the state of California and the Department of Defense Environmental Laboratory Accreditation Program.

Soil sample collection and analyses were conducted in accordance with the requirements specified in the following guidance documents:

- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (U.S. Environmental Protection Agency [EPA], 2007);
- QAPP, Basewide Range Assessment, 2016

Soil samples were collected from a small area employing a seven-point incremental wheel approach as described in Worksheet #17 of the QAPP. The composite incremental samples were analyzed for one or both of the following analytes and methods.

- EPA Method 6010C for lead
- EPA Method 8330B explosives for 2,4,6-trinitrotoluene (TNT), hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)

Before analysis for the above methods, the soil samples were air dried and sieved down to 0.25 millimeters (mm) for lead analysis, and sieved to 2 mm for explosives residues analysis. Samples for explosives residues analysis were then ground in a puck mill for digestion and analysis. The grinding step was not performed for the lead sample aliquot to prevent potential cross-contamination from lead smearing, per the QAPP (KEMRON, 2016), A 5-gram soil sample was digested for lead using EPA Method 3050B.

Stage 2B validation, electronic and manual (S2BVEM), as defined in *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (EPA, 2009), was performed on the data from the April 2018 BRA incremental soil sampling event and a Stage 4, validation, electronic and manual (S4VEM) was performed on 10% of the data as required by the QAPP. The S2BVEM data validation included reviewing reports from the laboratory data deliverable that met Stage 3 data packages of the *Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories* Version 5.1. A Stage 3 data package includes the sample results and chain-of-custody forms along with basic quality control (QC) summaries including surrogate recoveries, method blank results, and precision and accuracy data summaries for the sample preparation batch. The deliverable also includes summaries for instrument performances and for the initial and continuing calibration. The laboratory report also includes a case narrative describing any analytical problems and any potential impact on data quality. The S4VEM portion of the data validation was performed on a Stage 4 data package from the laboratory. The Stage 4 data package contains the same items as the Stage 3 package along with the raw data from the instrument analysis. For the 10% S4VEM review the final reported sample results and QC results from the initial calibration, calibration verifications, laboratory

spikes/replicates and instrument performance checks were re-calculated from the raw data for verification.

The DQOs for the April 2018 incremental soil sampling event are described in Work Sheet #11 of the QAPP. Procedures are specified in the QAPP to meet the DQOs. The specific data verification and validation procedures are outlined in Worksheet #35 and Worksheet #36 of the QAPP. Worksheet #34 outlines the verification and validation inputs that are used as the basis for qualifying data. These include the information listed below which applies to both S2BVEM and S4VEM unless indicated otherwise.

- Technical holding time and temperature compliance
- Initial calibration response factors (RFs) and relative standard deviations (RSDs)
- Initial calibration verification (ICV)
- Continuing calibration verification (CCV)
- Method, equipment and calibration blank contamination
- Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) accuracy and precision
- Matrix spike/matrix spike duplicate (MS/MSD) accuracy and precision
- Post digestion spike accuracy
- Surrogate accuracy
- Serial dilution percent difference
- Laboratory replicate (LR) precision
- Instrument performance
- Internal standard
- Field duplicate precision
- Analyte limit of quantitation (LOQ) and quantitation results
- Re-calculation of quantitative results for calibrations, QC samples and project samples. (S4VEM)
- Review of quantitative reports and chromatography (S4VEM)

The electronic portion of the review, which is performed by the Gilbane Environmental Data Management System (eDMS), addresses QC parameters such as MS/MSDs, LCS/LCSDs, surrogates, method blanks, and holding times. The Gilbane eDMS produces an Automated Data Review (ADR) summary noting any anomalies and subsequent data qualifiers resulting from the anomalies. The Gilbane Project Chemist reviewed the ADR and performs the manual portion of the data review that addresses QC parameters such as custody trail, initial and continuing calibration, and instrument performance. The electronic validation and the results of the manual validation are contained in the "Narrative Comments" and/or "QC Outlier Report" sections of the ADR and are reflected in the "Qualified Results" and "All Qualified Results Table" of the

ADR. **Attachment 1** of this CQAR presents the ADRs reviewed for the April 2018 BRA incremental soil sampling event.

Table 2-1 provides a summary of the laboratory sample delivery groups (SDGs), collection dates and analyte groups for the incremental soil event discussed in this CQAR. The laboratory reports for each SDG are presented in **Attachment 2**.

Table 2-1
Summary of Sample Delivery Groups and Collection Dates

SDG	Analytes	2018 Collection Date
FA53517	Lead	April 17
FA53517R	Lead	April 17
FA53518	Explosives	April 16, 18
FA53725	Lead, explosives	April 18, 19, 23, 24, 25
FA53725A	Lead	April 26
FA53725R	Lead	April 18, 19, 23
FA53800	Lead, explosives	April 25, 26
FA53801	Lead, explosives	April 25, 26
FA53896	Lead, explosives	April 30

The lead and explosives data from all SDGs underwent S2BVEM. The lead and/or explosives data in SDG FA53801 associated with samples 28-03SC0000, 28-05SC0000, 28-07SC0000, 28-08SC0000, and 28-09SC0000, underwent S4VEM.

2.1 QUALIFIED RESULTS

Data qualifiers are defined in Worksheet #36 of the QAPP. The following qualifiers have been applied as appropriate to the data reviewed for this CQAR.

Data Qualifiers

- "J" indicates that the analyte was detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific QC criteria and/or the analyte was detected at a concentration between the detection limit (DL) and LOQ.
- "UJ" indicates the analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
- "X" indicates that the result is affected by serious deficiencies in the ability to meet the QAPP representativeness criteria. The presence of the analyte cannot be substantiated by the sample custody or analytical data provided. Acceptance or rejection of the data should be decided by the project team, including the project chemists, but exclusion of the data is recommended.

The data qualifier reasons (DQ reasons) listed below are the codes used to define the anomalies and the basis for qualification.

DQ Reasons

- "D2" indicates that the MS/MSD precision was outside of criteria.
- "D5" indicates that the field duplicate precision was outside criteria.
- "M" indicates that the MS and/or MSD recovery was outside of criteria.
- "O" indicates that an interference check sample (ICS) recovery was outside criteria.
- "TR" indicates that the result was reported between the DL and the LOQ.
- "V" indicates a sample receipt condition anomaly.

Bias

- "-" indicates a low or negative bias on the concentration reported.

A "-" symbol after a qualifier indicates the result was biased low ("-"). The bias assigned to a result depends on the number and types of QC anomalies associated with the result and the professional judgment of the validator. For the discussion below, the bias is indicated separately for each anomaly. Refer to "Table of All Qualified Results" in the ADR for each SDG in **Attachment 1** of this CQAR for the DQ reason and final bias applied to qualified results.

The following subsections discuss the quality of the data and reasons for qualifications.

Estimated Results ("J" or "UJ")
Out of 248 total results reported for the April 2018 BRA incremental soil sampling event, 38 results were qualified as "J" for an estimated value or "UJ" for an estimated limit of detection (LOD) for one or more QC issues.

Qualified Results Due to Blank Contamination ("U")
Out of 248 total results reported for the April 2018 BRA incremental soil sampling event, no results were qualified as "U" for non-detect at the LOQ or observed value due to blank contamination.

Excluded ("X") or Rejected Results ("R")
Out of 248 total results reported for the April 2018 BRA incremental soil sampling event, two results were excluded ("X") or rejected ("R") for QC anomalies.

2.2 ESTIMATED LOW CONCENTRATION

The laboratory reports analyte concentrations between the DL and LOQ. If any concentrations are detected between the DL and LOQ they are qualified as estimated by the laboratory because of the increased quantitative uncertainty in the result as the concentration of the analyte approached the DL.

Qualification of results as estimated due to low concentrations of analytes is expected due to the sensitivity of the analytical methodology used and the low concentrations of many analytes. Qualification for low concentrations is not due to method performance or analytical program

issues. Results remain usable with qualification, and so data usability is not affected. Results qualified for trace values are not reported in the individual ADRs by SDG in Attachment 1, unless otherwise qualified for other QC reasons.

Out of 248 total results reported for the April 2018 BRA incremental soil event, there were three lead results (one soil result and two equipment rinsate results) qualified as estimated "J" for values reported between the DL and LOQ (DQ reason "TR").

2.3 HOLDING TIME AND PRESERVATION

Extraction and analysis holding-time limits and sample preservation are used to ensure that samples are representative of the site at the time of their collection. Out of 248 total results, there were no results qualified for holding time exceedances.

2.4 CALIBRATION

The initial calibrations were evaluated for proper curve fit and analyte responses. The ICV and CCV summaries were evaluated for instrument drift from the last initial calibration. For the S4VEM, the ICVs, CCVs and/or the initial calibration RFs and RSDs were re-calculated and verified from the raw data. Out of 248 total results in the dataset, there were no results qualified for calibration anomalies.

2.5 BLANK CONTAMINATION

Method, calibration and equipment blanks (EBs) were analyzed to measure laboratory and field contamination. Out of 248 total results in the dataset, there were no results qualified due to blank contamination anomalies.

2.6 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

LCS/LCSDs are synthetic samples spiked with the compounds of concern and prepared and analyzed using the same procedure used for the primary project samples. LCSs and/or LCSDs are analyzed at the frequency specified in the methods and are used to further monitor the analytical process and provide a measurement of accuracy and precision. An LCSD is not required if another measurement of precision is provided such as an MSD or LR. A single LCS was reported for each method, per SDG for the event. For the S4VEM, the LCS results were re-calculated and verified from the raw data. No results were qualified due to LCS recovery anomalies.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND REPLICATES

MS/MSDs are project samples spiked with the compounds of concern, prepared, and analyzed using the same procedures as those used for the primary project samples to monitor the analytical process. An LR is a primary project sample that is prepared and analyzed twice to monitor the analytical process. The MS/MSD percent recoveries and the MS/MSD and LR relative percent differences (RPDs) were reviewed. For the S4VEM, the MS/MSD and LR results were re-calculated and verified from the raw data.

The QAPP stipulates that one in 20 primary project samples should be analyzed for MS/MSD or replicate analysis, representing a 5% frequency. This goal was exceeded for the methods associated with this CQAR. The following results were qualified due to MS/MSD accuracy or precision anomalies.

- Three HMX results were qualified "UJ" due to the recovery of the MS or MSD less than the lower control limit (DQ reason "M").

The three results qualified due to MS/MSD anomalies (DQ reason "M") represent 1.2% of the 248 total results in the dataset.

2.8 POST DIGESTION SPIKE

For EPA Method 6010C analysis, a post-digestion spike is prepared from the same sample used as the MS/MSD to determine if matrix interferences are present. The compounds of concern are added to the sample after digestion and then analyzed using the same procedures as those used for the primary project samples. Acceptable recovery for the post-digestion spike is 80% to 120% of the true value. There were no results qualified for post digestion spike anomalies.

2.9 SERIAL DILUTION

For EPA Method 6010C analyses, serial dilutions are prepared from project samples with sufficiently high concentrations of target metals and analyzed at five times (5x) dilution to monitor matrix interference. If the percent difference between the original determination and the serial dilution analysis is greater than 10%, some type of matrix interference is indicated. For the S4VEM, the serial dilution results were re-calculated and verified from the raw data. There were no results qualified for serial dilution anomalies.

2.10 INTERNAL AND SURROGATE STANDARD RECOVERIES

Internal standards were added to the lead samples prior to analysis and surrogate standards were added to the explosives samples before extraction. The recoveries of the internal standards and surrogates were reviewed. For the S4VEM, the surrogate results were re-calculated and verified from the raw data. There were no anomalies that required qualification of the data due to internal standards or surrogate recovery.

2.11 INSTRUMENT PERFORMANCE

Interference check samples (ICS) were analyzed for EPA Method 6010C to verify the instrument's ability to overcome other metals interferences typical of those found in soil samples. For the S4VEM, the ICS results were recalculated and verified from the raw data. A total of 32 lead results were qualified as "UJ" or "J-" due to ICS recovery below the lower control limit. The 32 results qualified for ICS sample recovery (DQ reason "O") represent 12.9% of the 248 total results in the dataset.

2.12 ANALYTE IDENTIFICATION AND QUANTITATION

Lead by EPA Method 6010C and TNT, RDX, and HMX by EPA Method 8330B were the compounds of concern for the April 2018 BRA incremental soil sampling event at Fort Ord. The DL, LOD, and LOQ for lead, TNT, RDX, and HMX in soil for a 1x analysis met the decision limits as defined in Worksheet #15 of the QAPP. The DL is the minimum quantity of an analyte that can be reliably distinguished from background noise or from zero for a specific analytical method at a 99 percent confidence level. The DL protects against false positives. The LOD is the minimum quantity of an analyte that can be reliably detected for a specific analytical method at a 99 percent confidence level that the value is not a false negative. The LOD should be equivalent to the concentration of the DL verification standard. The LOQ represents the smallest quantity of an analyte that can be accurately and reproducibly quantified in a given sample matrix (e.g., three to five times the LOD). The laboratory reported non-detects at the LOD and positive results down to the DL. All 168 explosives residue results by EPA Method 8330B were non-detects at the LOD, with one times (1x) dilutions. All lead results in soil were reported with dilutions of 5x to 125x, and no detection limits were raised without just cause.

For the S4VEM, quantitative results for the selected samples were calculated from the instrument values and preparation logs from the raw data. All recalculated sample and QC sample quantitative results were verified.

3.0 FIELD PROCEDURES

The BRA incremental soil sampling event at Fort Ord was performed in April, 2018. The collection dates for each SDG are specified in **Table 2-1**.

Each sample collected consists of seven soil increments collected from a small area (approximately 4 feet in diameter) that are combined to form a single composite incremental sample for processing and analysis by the laboratory. Incremental samples were collected at the surface; and at 1 and 2 feet below the surface (step down samples). The laboratory processed (air dried and sieved down to 0.25 mm for lead, and 2 mm for explosives residues) and analyzed the surface samples first. Samples for explosives residues analysis were then ground in a puck mill for digestion and analysis. The grinding step was not performed for the lead sample aliquot to prevent potential cross-contamination from lead smearing, per the QAPP (KEMRON, 2016). For lead analysis, a 5-gram sample was extracted and analyzed. Step down incremental samples from below the surface were processed and analyzed if elevated concentrations of lead or explosives were reported in the surface samples. Where lead concentrations exceeded the decision criteria in several associated surface samples, step down samples were analyzed and reported in SDGs FA53517R and FA53725R. If concentrations of lead or explosives were found to exceed the decision criteria in the step-down samples, then collection of step-out or horizontal incremental samples in the four cardinal directions from the original location is recommended.

All samples were collected per the QAPP with no external problems that prohibited collecting or shipping the samples to the laboratory. However, samples for lead analysis at locations 31-18 and 31-28 were collected and submitted in a separate shipment than the samples for explosives residues analysis.

3.1 SAMPLE SHIPMENT AND STORAGE

Samples were properly stored after collection by the sampling team until relinquished under proper custody to FedEx for delivery to the primary laboratory (a secure facility). The explosives in soil and water blank samples were received within the QAPP criteria of 6 degrees Celsius or less. There is no QAPP temperature storage requirement for samples analyzed for lead in soil.

Upon receipt by the laboratory, samples were cross-checked with the chain-of-custody for completeness, entered into the laboratory's data system and securely stored at the proper temperature. Chain-of-custody could not be confirmed for the lead results in the primary sample 31-18SC0000, and the field duplicate sample 31-28SC0000Q, as described in the laboratory corrective action summary report in **Attachment 3**. The lead results for these two samples were qualified "X" due to deficiencies in the ability to establish complete chain-of-custody, and the representativeness of the results cannot be substantiated due to external and internal laboratory sample tracking discrepancies (DQ reason "V"). The project chemist revised the sampling dates in the database to reflect the dates in the laboratory reports and as described in **Attachment 3**.

3.2 FIELD DUPLICATES

For this project, the QAPP requires that one field duplicate will be collected for each 10 primary samples collected at a 10% frequency to measure precision and evaluate the laboratory sample processing method.

- Out of 64 primary samples analyzed for lead, 8 field duplicate sets were collected for a frequency of 12.5%.
- Out of 43 primary samples collected for explosives, six field duplicate sets were collected for a frequency of 14%.

The field duplicate frequency was met for lead and explosives samples.

For field duplicate pair results greater than 5x the LOQ, the RPDs were calculated, and for field duplicate pair results less than 5x the LOQ, the absolute differences were calculated to provide measurements of precision. Out of 248 total results in the dataset, there is one duplicate pair of lead results (0.8%) qualified as estimated "J" due to field duplicate imprecision (DQ reason "D5").

This page was intentionally left blank

4.0 CONCLUSIONS AND DATA USABILITY

The analytical methods used for this project were selected to provide quality data sufficient to meet DQOs and project sensitivity requirements. DQOs were reviewed in terms of the indicator parameters precision, accuracy, representativeness, completeness, comparability (PARCCS). The PARCCS parameters are discussed in the subsections below.

4.1 QUALITY CONTROL SAMPLES

Field QC samples for this project included field duplicates and EB samples. One EB was collected for each day of sampling. The field duplicate frequency of 10% was met for lead and explosives.

Laboratory QC included precision and accuracy in the form of MS/MSD pairs, laboratory replicates, serial dilutions, post digestion spikes, LCSs, surrogates, ICVs, and CCVs analyzed at the frequency indicated in the discussion of the methods in **Section 2.0**. For S4VEM, a portion of the reported results and percent recoveries, drifts, differences or RPDs from the above laboratory QC samples were calculated and verified from the raw data.

Precision: Precision is a measure of the repeatability of a single measurement. The precision of the dataset was assessed by evaluating the RPDs or absolute differences between primary and duplicate samples (e.g., field duplicates, MS/MSDs and laboratory replicates). Out of 248 total results in the dataset, there were three results qualified "J" or "UJ" due to precision anomalies.

Accuracy: Accuracy is a measure of recovery of the actual concentration of a compound. The accuracy of the dataset was assessed by the MS/MSD, laboratory replicates, serial dilution, post digestion spike, LCS, surrogate, ICV, and CCV percent recoveries, differences, or drifts. A total of 32 results for ICS recovery anomalies and three results for MS and/or MSD recovery anomalies were qualified as "J" or "UJ" for an estimated value or LOD. The 35 results qualified for one or more accuracy anomalies represent 14.1% of the 248 results comprising the entire dataset.

Representativeness: Representativeness of the dataset is determined by the degree to which the data represent the samples submitted to the laboratory. Holding times, preservation, and percent moisture in soil and blank results affect the representativeness of a sample. Out of 248 total results reported, two lead results were qualified "X" due to representativeness anomalies.

Comparability: The analytical methods used for analysis affect the comparability of the dataset. The methods used for this project are listed in **Section 2.2** and are standard, peer-reviewed methods as determined by the QAPP. The analytical methods provided units of measure and reporting limits similar to past soil data.

Completeness: The completeness of the dataset is determined by the number of acceptable primary results after data review.

Only the results for primary or normal project samples were used in the calculation to determine the completeness of the data. Out of 193 primary sample results, 31 results or 16.1% of the

primary results were qualified as an estimated value, "J," or an estimated LOD, "UJ," for one or more QC reasons. Out of 193 primary results, one primary result for lead in sample 31-18SC0000 was excluded "X" and no results were rejected. Therefore, the completeness of the analytical dataset is 99.5%, which exceeds the QAPP goal of 95% for primary samples. The results can be used for their intended purpose as qualified. Two 2-foot step-down samples at locations 31-22 and 31-26 were unable to be collected because of auger refusal due to shallow bedrock. The surface soil result at location 31-22 of 236 mg/kg exceeded the 2009 Record of Decision (ROD) Amendment ecological range-wide weighted average of 225 mg/kg, but the 1-foot step down result is 90.3 mg/kg so the 2-foot sample is not required. The surface sample result at location 31-26 of 52.9 mg/kg does not require further step-down analyses. The field sampling completeness is therefore 62 of 64 lead samples planned (97%) and 43 of 45 explosives samples planned (96%), which exceed the sampling completeness goal of 95%.

Sensitivity: The DL, LOD, and LOQ were evaluated to determine if the laboratory was able to attain the required sensitivity for the project.

The DL, LOD, and LOQ for lead in soil for a 1x analysis met the decision limits as defined in Worksheet #15 of the QAPP. For TNT, RDX, and HMX in soil, the 1x analysis also meet the decision limits in Worksheet #15. All non-detect results were reported to the LOD per Worksheet #15. All lead in soil samples were analyzed with at least 5x dilution, all results were detected except where qualified for blank contamination, and all raised detection limits were adjusted appropriately.

4.2 CONCLUSION

The majority of qualifiers applied for the April 2018 BRA sampling event were for poor ICS recoveries for lead, that are indicative of some general interference from other metals in the soil matrix. Chain-of-custody could not be established for the lead results in samples 31-18SC0000 and 31-28SC0000Q. These lead results were qualified as excluded "X" due to representativeness deficiencies and their acceptance or rejection should be decided by the project team, but exclusion of the data is recommended.

The data generated for the April 2018 BRA incremental soil sampling event met the project objective of providing a statistically representative sample of the worst-case locations within the decision units for comparison with the 2009 ROD Amendment. This data is usable to evaluate the protectiveness statements made in the ROD Amendment and to evaluate potential risks to ecological receptors as indicated in the DQOs in the QAPP. Overall, as shown in the attached ADR, the seven-point incremental approach and the step-down sampling, generated sufficient data to evaluate the characteristics of the chemicals of concern. The two lead results with chain-of-custody anomalies should be excluded for decision-making purposes. All other data as qualified are of acceptable quality, and should be considered usable for their intended purposes.

5.0 REFERENCES

KEMRON, 2016. *Quality Assurance Project Plan, Former Fort Ord, California, Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment* (QAPP), June.

U.S. Department of Defense (DoD), 2017. *Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories*, Version 5.1. January.

U.S. Environmental Protection Agency (EPA), 2007. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. EPA publication SW-846, most current version available on line at http://www.epa.gov/osw/hazard/testmethods/sw846/online/index.htm#table. Revision 6, February.

EPA, 2009. *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use.* 540-R-08-005. Prepared by the Office of Solid Waste and Emergency Response. January.

This page was intentionally left blank

ATTACHMENT 1

AUTOMATED DATA REVIEW SUMMARY REPORTS

(PROVIDED ON CD)

Data Validation Report for FA53517

Facility:	Fort Ord
Event:	Basewide Range Assessment April 2018
SDG:	FA53517
Guidance Document:	QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016
Prime Contractor:	Gilbane Company, Walnut Creek, CA
Project Manager:	Erin Caruso
Contract Laboratory:	SGS NORTH AMERICA, INC., ORLANDO, FL
Data Review Contractor:	Gilbane Federal
Data Review Level:	S2BVEM
Primary Data Reviewer:	Thomas Beer, Project Chemist
Second Reviewer:	Kristen Carlyon, Senior Chemist
Date Submitted:	June 20, 2018

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW6010C	SW6020A
31-ER01SC	FA53517-25	Water	Equipment Blank/EB		X
31-06SC0000	FA53517-1	Solid	Field Sample/N	X	
31-07SC0000	FA53517-4	Solid	Field Sample/N	X	
31-11SC0000	FA53517-7	Solid	Field Sample/N	X	
31-12SC0000	FA53517-10	Solid	Field Sample/N	X	
31-13SC0000	FA53517-13	Solid	Field Sample/N	X	
31-14SC0000	FA53517-16	Solid	Field Sample/N	X	
31-16SC0000	FA53517-19	Solid	Field Sample/N	X	
31-17SC0000	FA53517-22	Solid	Field Sample/N	X	

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Gilbane Company, Walnut Creek, CA; analyses were performed by SGS NORTH AMERICA, INC., ORLANDO, FL and were reported under sample delivery group (SDG) FA53517. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank
- Blank - Negative
- Equipment Blank
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 0 results (0.00%) out of the 9 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected. Trace values, defined as results that are qualified as estimated because they fall between the limit of detection and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Reviewer checked SGS Lab Report, case narrative, and COC as received.

Analytical Method	Data Reviewer Comment
SW6010C	No additional comments; see Checklist for detail.

J. Beer

Digitally signed by Tom Beer
DN: C=US, E=tbeer@gilbaneco.com, OU="", O="", CN=Tom Beer
Date: 2018.06.20 10:46:50-07'00'

June 05, 2018

Reviewed by Thomas Beer, Project Chemist, Gilbane Federal

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.

Digitally signed by Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3
DN: CN=Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3, OU=GILBANE FEDERAL, OU=IdenTrust, OU=ECA, O=U.S. Government, C=US
Date: 2018.06.25 11:17:49-07'00'

June 20, 2018

Reviewed by Kristen Carlyon, Senior Scientist, Gilbane Federal

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method SW6010C, Blank

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
MP33698-MB1 (LB)/ MP33698-MB1	Lead	0.9200	< 0.1	< 2	mg/kg	U/None	B1	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW6010C, MS Recovery

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
31-11SC0000 (MS)/ MP33698-S1	Lead	200.4	81 - 112	50 - 122	percent	J/None	M	Spike amount Insignificant
31-11SC0000 (SD)/ MP33698-S2	Lead	1006	81 - 112	50 - 122	percent	J/None	M	Spike amount Insignificant

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Qualified Results

No results associated with this sample delivery group required qualification.

Reason Code Definitions

Code	Definition
B1	The analyte was found in an associated method blank.
M	Matrix spike recovery was outside established criteria.
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.

Review Questions

Method: SW6010C (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			COC signed and complete
Stage 2 Review: COC - Temperature/Condition?	•			Received at ambient temp. OK
Stage 2 Review: COC - Receipt anomalies?	•			None noted
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			31-11SC0000 (FA53517-7) MS/MSD recovery for Pb out. Matrix spike insignificant. High conc. in sample (1,640 mg/kg) greater than 4x spike conc..
Stage 2 Review: Samples - Collection date?	•			4/17/2018
Stage 2 Review: Samples - Digestion date?	•			Soil 5/4/2018. AQ 4/28/2018
Stage 2 Review: Samples - Analysis date?	•			Soil 5/4, 5/7/2018. AQ 4/30/2018
Stage 2 Review: Samples - Holding time?	•			
Stage 2 Review: Samples - Batching?	•			Soil MP33698, MP33665
Stage 2 Review: Samples - Lab qualifiers?	•			None
Stage 2 Review: Calibration - ICAL?	•			5/4/2018, OK
Stage 2 Review: Calibration - ICV?	•			%R good
Stage 2 Review: Calibration - CCV?	•			%Rs 97-102, all good
Stage 2 Review: Calibration - CCB?	•			
Stage 2 Review: Calibration - ICSA?	•			
Stage 2 Review: Calibration - ICSAB?	•			
Stage 2 Review: Blank - Method blank?	•			MB 33698 0.92 mg/kg, no quals. Sample conc's > 10x MB result.
Stage 2 Review: Blank - Equipment blank?	•			ND
Stage 2 Review: Samples - Internal Standards?	•			All %R OK
Stage 2 Review: Precision/Accuracy - Lab Replicate?	•			
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			Soil in 31-11SC0000 (FA53517-7) MS/MSD 200.4/1006 %R out high; but sample conc. >> 4x spike conc; no quals.
Stage 2 Review: Precision/Accuracy - LCS/LCSD?			•	
Stage 2 Review: Precision/Accuracy - Serial Dilution?	•			
Stage 2 Review: Quantitation - PQLs?	•			All soil reported > LOQ at 5x to 125x dilution. LOD 0.4, LOQ 2 mg/kg << PAL [225 mg/kg]
Stage 2 Review: Quantitation - Dilution Factor?	•			
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?			•	
Stage 2 Review: Precision/Accuracy - Post Digestion Spike?	•			MS/MSD out, post digest spike 1,695 %R out due to high lead conc in sample (> 4x) versus spike. No quals required.

Data Validation Report for FA53517R

Facility:	Fort Ord
Event:	Basewide Range Assessment April 2018
SDG:	FA53517R
Guidance Document:	QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016
Prime Contractor:	Gilbane Company, Walnut Creek, CA
Project Manager:	Erin Caruso
Contract Laboratory:	SGS NORTH AMERICA, INC., ORLANDO, FL
Data Review Contractor:	Gilbane Federal
Data Review Level:	S2BVEM
Primary Data Reviewer:	Thomas Beer, Project Chemist
Second Reviewer:	Kristen Carlyon, Senior Chemist
Date Submitted:	July 05, 2018

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW6010C
31-06SC0001	FA53517-2R	Solid	Field Sample/N	X
31-06SC0002	FA53517-3R	Solid	Field Sample/N	X
31-07SC0001	FA53517-5R	Solid	Field Sample/N	X
31-07SC0002	FA53517-6R	Solid	Field Sample/N	X
31-11SC0001	FA53517-8R	Solid	Field Sample/N	X
31-11SC0002	FA53517-9R	Solid	Field Sample/N	X
31-12SC0001	FA53517-11R	Solid	Field Sample/N	X
31-12SC0002	FA53517-12R	Solid	Field Sample/N	X
31-13SC0001	FA53517-14R	Solid	Field Sample/N	X
31-13SC0002	FA53517-15R	Solid	Field Sample/N	X
31-14SC0001	FA53517-17R	Solid	Field Sample/N	X
31-14SC0002	FA53517-18R	Solid	Field Sample/N	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Gilbane Company, Walnut Creek, CA; analyses were performed by SGS NORTH AMERICA, INC., ORLANDO, FL and were reported under sample delivery group (SDG) FA53517R. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank
- Blank - Negative
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 12 results (100.00%) out of the 12 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected. Trace values, defined as results that are qualified as estimated because they fall between the limit of detection and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

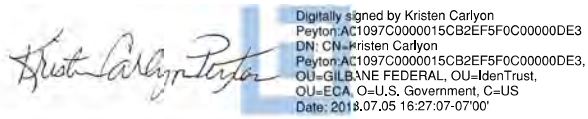
Reviewer checked SGS Lab Report, case narrative, and COC as received. SDG was re-issued to present data for 5-gram sample digestions.

Analytical Method	Data Reviewer Comment
SW6010C	Analysis for lead only of 1- and 2-foot samples at 6 locations based on exceedance of the ROD ecological range weighted average value of 225 mg/kg in the surface sample. Twelve lead in soil results were qualified as estimated (J-) for low interference check sample recovery (QC reason 'O').

July 05, 2018

Reviewed by Thomas Beer, Project Chemist, Gilbane Federal

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.



July 05, 2018

Reviewed by Kristen Carlyon, Senior Chemist, Gilbane Federal

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method SW6010C, MS Recovery

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
31-06SC0001 (SD)/ MP33943-S2	Lead	141.4	81 - 112	50 - 122	percent	J/None	M	Spike amount Insignificant

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Qualified Results

No results associated with this sample delivery group required qualification.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6010C

FieldSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
31-06SC0001	N	Lead	4.00	154	154	154 J	O
31-06SC0002	N	Lead	4.00	18.7	18.7	18.7 J	O
31-07SC0001	N	Lead	4.00	7.70	7.70	7.70 J	O
31-07SC0002	N	Lead	2.00	3.20	3.20	3.20 J	O
31-11SC0001	N	Lead	4.00	7.40	7.40	7.40 J	O
31-11SC0002	N	Lead	3.90	9.20	9.20	9.20 J	O
31-12SC0001	N	Lead	4.00	6.50	6.50	6.50 J	O
31-12SC0002	N	Lead	4.00	7.50	7.50	7.50 J	O
31-13SC0001	N	Lead	40.0	2670	2670	2670 J	O
31-13SC0002	N	Lead	3.90	552	552	552 J	O
31-14SC0001	N	Lead	4.00	37.2	37.2	37.2 J	O
31-14SC0002	N	Lead	2.00	2.80	2.80	2.80 J	O

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
M	Matrix spike recovery was outside established criteria.
O	Interference check sample

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.

Review Questions

Method: SW6010C (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			COC signed and complete
Stage 2 Review: COC - Temperature/Condition?	•			Received at ambient temp. OK
Stage 2 Review: COC - Receipt anomalies?	•			none noted
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			MS/MSD recoveries outside limits and post spike out high, but spikes low (< 4x) versus sample concentration.
Stage 2 Review: Samples - Collection date?	•			4/17/2018
Stage 2 Review: Samples - Digestion date?	•			6/26/2018
Stage 2 Review: Samples - Analysis date?	•			6/27/2018
Stage 2 Review: Samples - Holding time?	•			samples analyzed < 180-day hold time
Stage 2 Review: Samples - Batching?	•			MP33943, MA15007
Stage 2 Review: Samples - Lab qualifiers?	•			none
Stage 2 Review: Calibration - ICAL?	•			MA15007 6/27/2018 OK
Stage 2 Review: Calibration - ICV?	•			6/27/18, %R good
Stage 2 Review: Calibration - CCV?	•			6/27/18, %Rs good
Stage 2 Review: Calibration - CCB?	•			all < RL, good
Stage 2 Review: Calibration - ICSA?	•			run MA15007 ICSA2 lead result -2.4, absolute value is > raw LOD of 0.2. 12x Pb in soil qual J- for low interference check (O).
Stage 2 Review: Calibration - ICSAB?	•			all %R 90 - 110, good
Stage 2 Review: Blank - Method blank?	•			ND
Stage 2 Review: Blank - Equipment blank?	•			ND
Stage 2 Review: Samples - Internal Standards?	•			all %R 60-125, good
Stage 2 Review: Precision/Accuracy - Lab Replicate?	•			RPDs 1.3, 6.3, < 20 good
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			sample 31-06SC0001, high %R but sample conc. > 4x spike conc. No quals.
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCS only, soil in 81-112%R, good
Stage 2 Review: Precision/Accuracy - Serial Dilution?	•			%D good (< 10%)
Stage 2 Review: Quantitation - PQLs?	•			All soil reported > LOQ at 5x to 100x dilution. 10x LOD 0.8, LOQ 4 mg/kg << PAL [225 mg/kg]
Stage 2 Review: Quantitation - Dilution Factor?	•			most 10x, with one 5x and one 100x dilution
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?			•	
Stage 2 Review: Precision/Accuracy - Post Digestion Spike?	•			run on 6/26/18, %R high due to matrix and/or high sample conc. >> 4x spike amount. No quals.

Facility:	Fort Ord
Event:	Basewide Range Assessment April 2018
SDG:	FA53518
Guidance Document:	QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016
Prime Contractor:	Gilbane Company, Walnut Creek, CA
Project Manager:	Erin Caruso
Contract Laboratory:	SGS NORTH AMERICA, INC., ORLANDO, FL
Data Review Contractor:	Gilbane Federal
Data Review Level:	S2BVEM
Primary Data Reviewer:	Thomas Beer, Project Chemist
Second Reviewer:	Kristen Carlyon, Senior Chemist
Date Submitted:	June 22, 2018

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW8330B
25-ER01SC	FA53518-13	Water	Equipment Blank/EB	X
25-ER02SC	FA53518-14	Water	Equipment Blank/EB	X
25-07SC0000	FA53518-1	Solid	Field Sample/N	X
25-08SC0000	FA53518-4	Solid	Field Sample/N	X
25-09SC0000	FA53518-7	Solid	Field Sample/N	X
25-10SC0000	FA53518-10	Solid	Field Sample/N	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Gilbane Company, Walnut Creek, CA; analyses were performed by SGS NORTH AMERICA, INC., ORLANDO, FL and were reported under sample delivery group (SDG) FA53518. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank
- Blank - Negative
- Equipment Blank
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time

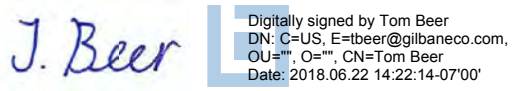
Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 0 results (0.00%) out of the 18 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected. Trace values, defined as results that are qualified as estimated because they fall between the limit of detection and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Reviewer checked SGS Lab Report, case narrative, and COC as received.

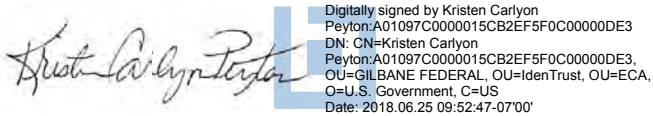
Analytical Method	Data Reviewer Comment
SW8330B	No additional comments; see Checklist for detail.



June 05, 2018

Reviewed by Thomas Beer, Project Chemist, Gilbane Federal

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.



June 22, 2018

Reviewed by Kristen Carlyon, Senior Scientist, Gilbane Federal

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Qualified Results

No results associated with this sample delivery group required qualification.

Reason Code Definitions

Code	Definition

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.

Review Questions

Method: SW8330B (Nitroaromatics and Nitramines by HPLC)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			COC signed and complete.
Stage 2 Review: COC - Temperature/Condition?	•			coolers received at 3.8 and 2.2 deg. C
Stage 2 Review: COC - Receipt anomalies?	•			none noted
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			none
Stage 2 Review: Samples - Collection date?	•			soil and Aq 4/16, 4/18/2018
Stage 2 Review: Samples - Extraction date?	•			4/29/2018
Stage 2 Review: Samples - Analysis date?	•			5/3/2018
Stage 2 Review: Samples - Holding time?	•			all prepped within 14-days and analyzed in 40 days hold times
Stage 2 Review: Samples - Batching?	•			soil OP69838; Aq OP69713
Stage 2 Review: Samples - Surrogate recoveries?	•			all soil surrog. in 69-134%R, all water in 70 - 136%R; OK
Stage 2 Review: Samples - Lab qualifiers?	•			none, all ND
Stage 2 Review: Calibration - ICAL?	•			
Stage 2 Review: Calibration - ICV?	•			
Stage 2 Review: Calibration - CCV?	•			
Stage 2 Review: Blank - Method blank?	•			NDs
Stage 2 Review: Blank - Equipment blank?	•			NDs
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			all soil and Aq %R in QAPP limits, all RPDs < 20; good
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCS only, soil and Aq BS %Rs good
Stage 2 Review: Quantitation - PQLs?	•			Lab met PQLs, all 1x dil and NDs at LOD 0.07 mg/kg
Stage 2 Review: Quantitation - Dilution Factor?	•			
Stage 2 Review: Quantitation - Confirmation RPD<40?			•	results all ND
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?			•	

Facility:	Fort Ord
Event:	Basewide Range Assessment April 2018
SDG:	FA53725
Guidance Document:	QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016
Prime Contractor:	Gilbane Company, Walnut Creek, CA
Project Manager:	Erin Caruso
Contract Laboratory:	SGS NORTH AMERICA, INC., ORLANDO, FL
Data Review Contractor:	Gilbane Federal
Data Review Level:	S2BVEM
Primary Data Reviewer:	Thomas Beer, Project Chemist
Second Reviewer:	Kristen Carlyon, Senior Chemist
Date Submitted:	June 26, 2018

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW6010C	SW8330B
31-ER02SC	FA53725-122	Water	Equipment Blank/EB	X	
31-ER03SC	FA53725-123	Water	Equipment Blank/EB	X	
31-ER04SC	FA53725-124	Water	Equipment Blank/EB	X	X
31-ER05SC	FA53725-125	Water	Equipment Blank/EB	X	X
31-09SC0000Q	FA53725-20	Solid	Field Duplicate/FD	X	
31-28SC0000Q	FA53725-60A	Solid	Field Duplicate/FD	X	X
31-30SC0000Q	FA53725-69	Solid	Field Duplicate/FD	X	
31-34SC0000Q	FA53725-84	Solid	Field Duplicate/FD	X	
31-37SC0000Q	FA53725-96A	Solid	Field Duplicate/FD	X	X
31-42SC0000Q	FA53725-114	Solid	Field Duplicate/FD		X
31-01SC0000	FA53725-1A	Solid	Field Sample/N	X	X
31-02SC0000	FA53725-4	Solid	Field Sample/N	X	
31-03SC0000	FA53725-7	Solid	Field Sample/N	X	
31-04SC0000	FA53725-10	Solid	Field Sample/N	X	
31-05SC0000	FA53725-13	Solid	Field Sample/N	X	
31-08SC0000	FA53725-16	Solid	Field Sample/N	X	
31-09SC0000	FA53725-19	Solid	Field Sample/N	X	
31-10SC0000	FA53725-25	Solid	Field Sample/N	X	
31-15SC0000	FA53725-28	Solid	Field Sample/N	X	
31-18SC0000	FA53725-31A	Solid	Field Sample/N	X	X

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW6010C	SW8330B
31-19SC0000	FA53725-34	Solid	Field Sample/N	X	
31-20SC0000	FA53725-37	Solid	Field Sample/N	X	
31-21SC0000	FA53725-40A	Solid	Field Sample/N	X	X
31-22SC0000	FA53725-43A	Solid	Field Sample/N	X	X
31-23SC0000	FA53725-45	Solid	Field Sample/N	X	
31-24SC0000	FA53725-48	Solid	Field Sample/N	X	
31-25SC0000	FA53725-51A	Solid	Field Sample/N	X	X
31-26SC0000	FA53725-54A	Solid	Field Sample/N	X	X
31-27SC0000	FA53725-56A	Solid	Field Sample/N	X	X
31-28SC0000	FA53725-59	Solid	Field Sample/N		X
31-29SC0000	FA53725-65A	Solid	Field Sample/N	X	X
31-30SC0000	FA53725-68	Solid	Field Sample/N	X	
31-31SC0000	FA53725-74	Solid	Field Sample/N	X	
31-32SC0000	FA53725-77	Solid	Field Sample/N	X	
31-33SC0000	FA53725-80	Solid	Field Sample/N	X	
31-34SC0000	FA53725-83	Solid	Field Sample/N	X	
31-35SC0000	FA53725-89A	Solid	Field Sample/N	X	X
31-36SC0000	FA53725-92A	Solid	Field Sample/N	X	X
31-37SC0000	FA53725-95A	Solid	Field Sample/N	X	X
31-38SC0000	FA53725-101	Solid	Field Sample/N		X
31-39SC0000	FA53725-104	Solid	Field Sample/N		X
31-40SC0000	FA53725-107	Solid	Field Sample/N		X
31-41SC0000	FA53725-110	Solid	Field Sample/N		X
31-42SC0000	FA53725-113	Solid	Field Sample/N		X
31-43SC0000	FA53725-119	Solid	Field Sample/N		X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Gilbane Company, Walnut Creek, CA; analyses were performed by SGS NORTH AMERICA, INC., ORLANDO, FL and were reported under sample delivery group (SDG) FA53725. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank
- Blank - Negative
- Equipment Blank
- Field Duplicate
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 9 results (8.49%) out of the 106 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected. Trace values, defined as results that are qualified as estimated because they fall between the limit of detection and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Reviewer checked SGS Lab Report, case narrative, and COC as received.

Analytical Method	Data Reviewer Comment
SW6010C	Qualifiers added to two soil results (J-) and four equipment blank non-detects (UJ) for poor interference check recovery (reason code 'O')
SW8330B	One parent sample qualified (UJ) due to matrix spike duplicate recovery exceedance (reason code M) and imprecision (D2).

J. Beer

Digitally signed by Tom Beer
DN: C=US, E=tbeer@gilbaneco.com, OU="", O="", CN=Tom Beer
Date: 2018.06.26 10:07:26-07'00'

June 07, 2018

Reviewed by Thomas Beer, Project Chemist, Gilbane Federal

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.

Digitally signed by Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3
DN: CN=Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3, OU=GILBANE FEDERAL, OU=IdenTrust, OU=ECA, O=U.S. Government, C=US
Date: 2018.06.26 12:30:14-07'00'

June 26, 2018

Reviewed by Kristen Carlyon, Senior Scientist, Gilbane Federal

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method SW6010C, Interference check sample

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
ICSA2	Lead	-30.10	-2 - 2		ug/l	J/UJ	O	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Interference check sample for SW6010C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
31-19SC0000	N	Lead	2.00	6.40	6.40 J	-	mg/kg	O
31-30SC0000	N	Lead	2.00	180	180 J	-	mg/kg	O

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).

Quality Control Outliers for test method SW6010C, Interference check sample

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
ICSA2	Lead	-3.600	-2 - 2		ug/l	J/UJ	O	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Interference check sample for SW6010C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
31-ER02SC	EB	Lead	5.00	2.00	2.00 UJ		ug/l	O
31-ER03SC	EB	Lead	5.00	2.00	2.00 UJ		ug/l	O
31-ER04SC	EB	Lead	5.00	2.00	2.00 UJ		ug/l	O
31-ER05SC	EB	Lead	5.00	2.00	2.00 UJ		ug/l	O

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).

Quality Control Outliers for test method SW6010C, MS Recovery

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
31-19SC0000 (SD)/ MP33746-S2	Lead	114.5	81 - 112	50 - 122	percent	J/None	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8330B, MS Recovery

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
31-35SC0000 (MS)/ OP69921-MS	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	70.97	74 - 124	10 - 134	percent	J/UJ	M	
31-35SC0000 (SD)/ OP69921-MSD	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	65.18	74 - 124	10 - 134	percent	J/UJ	M	
31-39SC0000 (SD)/ OP69945-MSD	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	151.2	74 - 124	10 - 134	percent	J/None	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW8330B

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
31-35SC0000	N	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	100	75.0	75.0 UJ		ug/kg	M
31-39SC0000	N	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	99.0	74.0	74.0 UJ		ug/kg	M/D2

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).

Quality Control Outliers for test method SW8330B, MS RPD

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
31-39SC0000 (SD)/ OP69945-MSD	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	22.42	< 20	< 40	rpd	J/UJ	D2	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS RPD for SW8330B

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
31-39SC0000	N	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	99.0	74.0	74.0 UJ		ug/kg	M/D2

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).

Table of All Qualified Results

Test Method: SW6010C	Extraction Method: SW3010A							
FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
31-ER02SC	EB	Lead	5.00	2.00	2.00 UJ		ug/l	O
31-ER03SC	EB	Lead	5.00	2.00	2.00 UJ		ug/l	O
31-ER04SC	EB	Lead	5.00	2.00	2.00 UJ		ug/l	O
31-ER05SC	EB	Lead	5.00	2.00	2.00 UJ		ug/l	O

Test Method: SW6010C	Extraction Method: SW3050B							
FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
31-19SC0000	N	Lead	2.00	6.40	6.40 J	-	mg/kg	O
31-30SC0000	N	Lead	2.00	180	180 J	-	mg/kg	O

Test Method: SW8330B	Extraction Method: METHOD							
FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
31-35SC0000	N	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	100	75.0	75.0 UJ		ug/kg	M
31-39SC0000	N	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	99.0	74.0	74.0 UJ		ug/kg	M/D2

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6010C							
FieldSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
31-ER02SC	EB	Lead	5.00	2.00	2.00 U	2.00 UJ	O
31-ER03SC	EB	Lead	5.00	2.00	2.00 U	2.00 UJ	O
31-ER04SC	EB	Lead	5.00	2.00	2.00 U	2.00 UJ	O
31-ER05SC	EB	Lead	5.00	2.00	2.00 U	2.00 UJ	O

Modified Qualifiers for test method SW6010C							
FieldSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
31-19SC0000	N	Lead	2.00	6.40	6.40	6.40 J	O
31-28SC0000Q	FD	Lead	2.00	5.40	5.40	5.40 J	D5
31-30SC0000	N	Lead	2.00	180	180	180 J	O

Modified Qualifiers for test method SW8330B							
FieldSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
31-39SC0000	N	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	99.0	74.0	74.0 UJ	74.0 UJ	M/D2

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
D2	MS RPD exceeded established criteria.
D5	Field duplicate precision
M	Matrix spike recovery was outside established criteria.
O	Interference check sample
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.

Review Questions

Method: SW6010C (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			signed, complete
Stage 2 Review: COC - Temperature/Condition?	•			coolers received at 4.0, 4.2, 4.0, 3.8 deg. C, for explosives and ERs; and 20.2 deg. C (Pb in soil)
Stage 2 Review: COC - Receipt anomalies?	•			Lead aliquots for locations 31-18 and 31-28 were not submitted per job Change Order. Samples were collected and submitted at a later date.
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			no lead analysis anomalies noted
Stage 2 Review: Samples - Collection date?	•			soils 4/18,19,23,24/2018; EBs 4/19,23,25/2018
Stage 2 Review: Samples - Digestion date?	•			soils 5/14,15,16/2018; EBs 5/2/2018
Stage 2 Review: Samples - Analysis date?	•			soils 5/15,17/2018; EBs 5/2/2018
Stage 2 Review: Samples - Holding time?	•			all soils and EBs analyzed < 30 days (hold is < 180 days)
Stage 2 Review: Samples - Batching?	•			Aq MP33680; soils MP33734, MP33740, MP33746
Stage 2 Review: Samples - Lab qualifiers?	•			1x J trace only
Stage 2 Review: Calibration - ICAL?	•			ICALs on 5/2, 5/15, 5/17/2018, all OK
Stage 2 Review: Calibration - ICV?	•			%Rs good
Stage 2 Review: Calibration - CCV?	•			all %Rs good
Stage 2 Review: Calibration - CCB?	•			all ND
Stage 2 Review: Calibration - ICSA?	•			ICSA2 in MA14869 (-3.6 ug/L) and MA14907 (-30.1 ug/L) outside +- LOD of 2 ug/L. Qual J-/UJ samples FA53725-34, -68; and ERs -122, -123, -124, -125, DQ reason code (O).
Stage 2 Review: Calibration - ICSAB?	•			all %Rs good
Stage 2 Review: Blank - Method blank?	•			all MBs are ND
Stage 2 Review: Blank - Equipment blank?	•			all ERs are ND at LOD of 2 ug/L
Stage 2 Review: Samples - Internal Standards?	•			all ISs good
Stage 2 Review: Precision/Accuracy - Lab Replicate?	•			3x lab rep RPDs good
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			all soil MS/MSD in 81-112%R, Aq in 86 - 113%R; RPDs < 20; good
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCSs only, all %Rs good
Stage 2 Review: Precision/Accuracy - Serial Dilution?	•			AQs are ND, soil %Ds good
Stage 2 Review: Quantitation - PQLs?	•			all soil reported > LOD at 5x to 10x dilution. LOD 0.4-0.8, LOQ 2-4 mg/kg << PQL [225 mg/kg]
Stage 2 Review: Quantitation - Dilution Factor?	•			
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?	•			4 FDs collected; duplicate pair 31-28SC0000/Q RPD 36 is greater than limit < 30. qualify duplicate and primary sample in SDG FA53725A estimated J, for duplicate imprecision reason D5.
Stage 2 Review: Precision/Accuracy - Post Digestion Spike?	•			batch MP33740 sample FA53725-31A spike 157.1 %R above limit 80-120, due to high level in sample (> 4x) vs. spike. No quals required

Review Questions

Method: SW8330B (Nitroaromatics and Nitramines by HPLC)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			signed, complete
Stage 2 Review: COC - Temperature/Condition?	•			coolers received at 4.0, 4.2, 4.0, 3.8 deg. C, for explosives and ERs
Stage 2 Review: COC - Receipt anomalies?	•			none
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			MS/MSD %R for HMX in batches OP69921 and OP69945 out. Batch OP69837 MS/MSD on non-project sample, no quals.
Stage 2 Review: Samples - Collection date?	•			soils 4/23,24/2018; 2x EBs 4/23,25/2018
Stage 2 Review: Samples - Extraction date?	•			soils 5/4,7/2018; EBs 4/29/2018
Stage 2 Review: Samples - Analysis date?	•			soils 5/7,8,9/2018; EBs 4/30/2018
Stage 2 Review: Samples - Holding time?	•			all samples prepped less than 14-day hold time; analyzed within 5 days.
Stage 2 Review: Samples - Batching?	•			Aq OP69837; soils 5 batches OP69919, -20, -21, -45, -46.
Stage 2 Review: Samples - Surrogate recoveries?	•			all surrogate %Rs in Aq 70-136 and soil 69-134 limits. No sample quals.
Stage 2 Review: Samples - Lab qualifiers?	•			1x J trace only
Stage 2 Review: Calibration - ICAL?	•			run 4/19/2018, Avg RRF, %RSDs good
Stage 2 Review: Calibration - ICV?	•			4/19/2018, %drift, area% good
Stage 2 Review: Calibration - CCV?	•			CCVs 4/30, 5/8/2018 %drift, area% good
Stage 2 Review: Blank - Method blank?	•			Aq (4/29/18) and soil (5/4,5/7/2018) MBs all ND at LOD.
Stage 2 Review: Blank - Equipment blank?	•			EBs on 4/23 and 4/25/2018 all NDs
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			Batch OP69921 HMX MS/MSDs %R 71/65 below soil QAPP limits of 74-124, qualify parent sample 31-35SC0000 (UJ, reason M); batch OP69945 HMX MSD %R 151 out and RPD of 22 > 20 QAPP limit, qualify parent sample 31-39SC0000 (UJ, reason M/D2).
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCSs only %Rs good
Stage 2 Review: Quantitation - PQLs?	•			Lab met PQLs, all 1x dil and NDs at LOD 0.075 mg/kg
Stage 2 Review: Quantitation - Dilution Factor?	•			
Stage 2 Review: Quantitation - Confirmation RPD<40?	•			All NDs
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?	•			3 FDs, all ND

Basewide Range Assessment April 2018
Field Duplicate Report By SDG
BRA Kemron Soil Sampling
QAPP Vol 1,App B,BRA,Jun 2016
Field Duplicates for SDG: FA53725

Location	Analysis
31-09	SW6010C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
31-09SC0000 / 31-09SC0000Q	FA53725-19 / FA53725-20	Lead	3.80	3.40	2.00	11.1	OK	NA

Location	Analysis
31-28	SW8330B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
31-28SC0000 / 31-28SC0000Q	FA53725-59 / FA53725-60	2,4,6-Trinitrotoluene	ND	ND	99.0	NA	NA	OK
31-28SC0000 / 31-28SC0000Q	FA53725-59 / FA53725-60	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	ND	ND	99.0	NA	NA	OK
31-28SC0000 / 31-28SC0000Q	FA53725-59 / FA53725-60	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	ND	ND	99.0	NA	NA	OK

Location	Analysis
31-30	SW6010C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
31-30SC0000 / 31-30SC0000Q	FA53725-68 / FA53725-69	Lead	180	190	2.00	5.41	OK	NA

Location	Analysis
31-34	SW6010C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
31-34SC0000 / 31-34SC0000Q	FA53725-83 / FA53725-84	Lead	172	197	3.90	13.6	OK	NA

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 1 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil

The RPD criteria used for organic analysis is: 30
The RPD criteria used for non-organic analysis is: 30

Basewide Range Assessment April 2018
Field Duplicate Report By SDG
BRA Kemron Soil Sampling
QAPP Vol 1,App B,BRA,Jun 2016
Field Duplicates for SDG: FA53725

Location	Analysis
31-37	SW6010C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
31-37SC0000 / 31-37SC0000Q	FA53725-95A / FA53725-96A	Lead	6.00	5.70	2.00	5.13	OK	NA

Location	Analysis
31-37	SW8330B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
31-37SC0000 / 31-37SC0000Q	FA53725-95 / FA53725-96	2,4,6-Trinitrotoluene	ND	ND	99.0	NA	NA	OK
31-37SC0000 / 31-37SC0000Q	FA53725-95 / FA53725-96	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	ND	ND	99.0	NA	NA	OK
31-37SC0000 / 31-37SC0000Q	FA53725-95 / FA53725-96	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	ND	ND	99.0	NA	NA	OK

Location	Analysis
31-42	SW8330B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
31-42SC0000 / 31-42SC0000Q	FA53725-113 / FA53725-114	2,4,6-Trinitrotoluene	ND	ND	99.0	NA	NA	OK
31-42SC0000 / 31-42SC0000Q	FA53725-113 / FA53725-114	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	ND	ND	99.0	NA	NA	OK
31-42SC0000 / 31-42SC0000Q	FA53725-113 / FA53725-114	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	ND	ND	99.0	NA	NA	OK

Location	Analysis
31-28	SW6010C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
31-28SC0000 / 31-28SC0000Q	FA53725A-59A / FA53725-60A	Lead	7.80	5.40	2.00	36.4	Out	NA

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 1 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil

The RPD criteria used for organic analysis is: 30
The RPD criteria used for non-organic analysis is: 30

Facility:	Fort Ord
Event:	Basewide Range Assessment April 2018
SDG:	FA53725A
Guidance Document:	QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016
Prime Contractor:	Gilbane Company, Walnut Creek, CA
Project Manager:	Erin Caruso
Contract Laboratory:	SGS NORTH AMERICA, INC., ORLANDO, FL
Data Review Contractor:	Gilbane Federal
Data Review Level:	S2BVEM
Primary Data Reviewer:	Thomas Beer, Project Chemist
Second Reviewer:	Kristen Carlyon, Senior Chemist
Date Submitted:	June 27, 2018

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW6010C
31-28SC0000	FA53725-59A	Solid	Field Sample/N	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Gilbane Company, Walnut Creek, CA; analyses were performed by SGS NORTH AMERICA, INC., ORLANDO, FL and were reported under sample delivery group (SDG) FA53725A. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 1 results (100.00%) out of the 1 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected. Trace values, defined as results that are qualified as estimated because they fall between the limit of detection and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Reviewer checked SGS Lab Report, case narrative, and COC as received.

Analytical Method	Data Reviewer Comment
SW6010C	Qualifier added for ICSA recovery low (J-, DQ reason 'O') and field duplicate imprecision (D5).

Digitally signed by Tom Beer
DN: C=US,
E=tbeer@gilbaneco.com,
OU="", O="", CN=Tom Beer
Date: 2018.06.26
15:32:10-07'00'

June 05, 2018

Reviewed by Thomas Beer, Project Chemist, Gilbane Federal

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.

Digitally signed by Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3
DN: CN=Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3,
OU=GILBANE FEDERAL, OU=IdenTrust,
OU=ECA, O=U.S. Government, C=US
Date: 2018.06.28 09:54:32-07'00'

June 26, 2018

Reviewed by Kristen Carlyon, Senior Chemist, Gilbane Federal

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Qualified Results

No results associated with this sample delivery group required qualification.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6010C

FieldSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
31-28SC0000	N	Lead	2.00	7.80	7.80	7.80 J	O/D5

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
D5	Field duplicate precision
O	Interference check sample

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.

Review Questions

Method: SW6010C (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			lead aliquots for samples from location 31-28 were collected and shipped on 4/26/18 and only the shallow soil sample 31-28SC0000 is reported in SDG FA53725A.
Stage 2 Review: COC - Temperature/Condition?	•			
Stage 2 Review: COC - Receipt anomalies?	•			none
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			5x dilution due to difficult matrix
Stage 2 Review: Samples - Collection date?	•			4/26/18
Stage 2 Review: Samples - Digestion date?	•			5/24/18
Stage 2 Review: Samples - Analysis date?	•			5/24/18
Stage 2 Review: Samples - Holding time?	•			Analyzed 31 days after collection but well within 180 day hold time
Stage 2 Review: Samples - Batching?	•			MP33784
Stage 2 Review: Samples - Lab qualifiers?	•			
Stage 2 Review: Calibration - ICAL?	•			
Stage 2 Review: Calibration - ICV?	•			
Stage 2 Review: Calibration - CCV?	•			
Stage 2 Review: Calibration - CCB?	•			
Stage 2 Review: Calibration - ICSA?	•			5/24/18 19:39 ICSA2 -11.1 out of QC limits. Flag sample J- (DQ reason O).
Stage 2 Review: Calibration - ICSAB?	•			
Stage 2 Review: Blank - Method blank?	•			ND
Stage 2 Review: Blank - Equipment blank?	•			Sample 28-ER01SC on 4/26/18 is ND
Stage 2 Review: Samples - Internal Standards?	•			
Stage 2 Review: Precision/Accuracy - Lab Replicate?	•			5x dil for 'difficult matrix'
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			soil MS/MSD in 81-112%R; RPD < 20; good
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCS only, %R good
Stage 2 Review: Precision/Accuracy - Serial Dilution?	•			
Stage 2 Review: Quantitation - PQLs?	•			Soil reported > LOQ at 5x dilution. LOD 0.4, LOQ 2 mg/kg << PAL [225 mg/kg]
Stage 2 Review: Quantitation - Dilution Factor?	•			
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?	•			Duplicate pair 31-28SC0000/Q in SDGs FA53725 and FA53725A RPD is 36, greater than the QAPP limit of 30; qualify primary and duplicate J for FD imprecision (reason D5)
Stage 2 Review: Precision/Accuracy - Post Digestion Spike?	•			%R good

Basewide Range Assessment, April 2018
Field Duplicate Report By SDG
BRA Kemron Soil Sampling
QAPP Vol 1,App B,BRA,Jun 2016
Field Duplicates for SDG: FA53725A

Location	Analysis
31-28	SW6010C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
31-28SC0000 / 31-28SC0000Q	FA53725A-59A / FA53725-60A	Lead	7.80	5.40	2.00	36.4	Out	NA

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than +/-

The RPD criteria used for organic analysis is: 30
The RPD criteria used for non-organic analysis is: 30

Facility:	Fort Ord
Event:	Basewide Range Assessment April 2018
SDG:	FA53725R
Guidance Document:	QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016
Prime Contractor:	Gilbane Company, Walnut Creek, CA
Project Manager:	Erin Caruso
Contract Laboratory:	SGS NORTH AMERICA, INC., ORLANDO, FL
Data Review Contractor:	Gilbane Federal
Data Review Level:	S2BVEM
Primary Data Reviewer:	Thomas Beer, Project Chemist
Second Reviewer:	Kristen Carlyon, Senior Chemist
Date Submitted:	July 05, 2018

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW6010C
31-04SC0001	FA53725-11R	Solid	Field Sample/N	X
31-04SC0002	FA53725-12R	Solid	Field Sample/N	X
31-22SC0001	FA53725-44AR	Solid	Field Sample/N	X
31-31SC0001	FA53725-75R	Solid	Field Sample/N	X
31-31SC0002	FA53725-76R	Solid	Field Sample/N	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Gilbane Company, Walnut Creek, CA; analyses were performed by SGS NORTH AMERICA, INC., ORLANDO, FL and were reported under sample delivery group (SDG) FA53725R. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank
- Blank - Negative
- LCS Recovery
- Prep Hold Time
- Test Hold Time

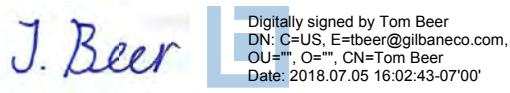
Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 5 results (100.00%) out of the 5 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected. Trace values, defined as results that are qualified as estimated because they fall between the limit of detection and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Reviewer checked SGS Lab Report, case narrative, and COC as received. SDG was re-issued to present data for 5-gram sample digestions.

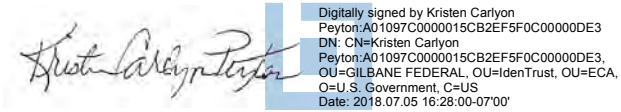
Analytical Method	Data Reviewer Comment
SW6010C	Analysis for lead only of 1- and 2-foot samples at 3 locations based on exceedance of the ROD ecological range weighted average value of 225 mg/kg in the surface sample. The five lead in soil results were qualified as estimated (J-) for low interference check sample recovery (QC reason 'O').



July 05, 2018

Reviewed by Thomas Beer, Project Chemist, Gilbane Federal

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.



July 05, 2018

Reviewed by Kristen Carlyon, Senior Chemist, Gilbane Federal

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Qualified Results

No results associated with this sample delivery group required qualification.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6010C

FieldSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
31-04SC0001	N	Lead	4.00	196	196	196 J	O
31-04SC0002	N	Lead	3.90	94.7	94.7	94.7 J	O
31-22SC0001	N	Lead	4.00	90.3	90.3	90.3 J	O
31-31SC0001	N	Lead	3.90	20.7	20.7	20.7 J	O
31-31SC0002	N	Lead	3.90	6.10	6.10	6.10 J	O

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
O	Interference check sample

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.

Review Questions

Method: SW6010C (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			
Stage 2 Review: COC - Temperature/Condition?	•			ambient temp. OK
Stage 2 Review: COC - Receipt anomalies?	•			none noted
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			MS/MSD run on non-SDG FA53517 sample; recoveries out low and post spike out high, but spikes low versus high sample concentration.
Stage 2 Review: Samples - Collection date?	•			4/18,19, 23/2018
Stage 2 Review: Samples - Digestion date?	•			6/26/2018
Stage 2 Review: Samples - Analysis date?	•			6/27/2018
Stage 2 Review: Samples - Holding time?	•			all analyses run within 180 day hold
Stage 2 Review: Samples - Batching?	•			MP33943, MA15007 (same QC batches as SDG FA53517R)
Stage 2 Review: Samples - Lab qualifiers?	•			none
Stage 2 Review: Calibration - ICAL?	•			6/27/18, OK
Stage 2 Review: Calibration - ICV?	•			6/27/18, %R good
Stage 2 Review: Calibration - CCV?	•			6/27/18, %R good
Stage 2 Review: Calibration - CCB?	•			NDs
Stage 2 Review: Calibration - ICSA?	•			run MA15007 ICSA2 result -2.4 %R, absolute value is > raw LOD of 0.2. Five Pb in soil results qual J- for low interference check (O)
Stage 2 Review: Calibration - ICSAB?	•			
Stage 2 Review: Blank - Method blank?	•			ND
Stage 2 Review: Blank - Equipment blank?	•			ND
Stage 2 Review: Samples - Internal Standards?	•			stds %Rs good
Stage 2 Review: Precision/Accuracy - Lab Replicate?	•			OK (see SDG FA53517R)
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			run on non-SDG sample 31-06SC0001, low %R and sample conc. > 4x spike conc. No quals. (see SDG FA53517R)
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCS only, soil in 81-112%R, good
Stage 2 Review: Precision/Accuracy - Serial Dilution?	•			%D < 10, good
Stage 2 Review: Quantitation - PQLs?	•			All soil reported > LOQ at 10x dilution. LOD 0.8, LOQ 4 mg/kg << PAL [225 mg/kg]
Stage 2 Review: Quantitation - Dilution Factor?	•			all 10x dil.
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?			•	
Stage 2 Review: Precision/Accuracy - Post Digestion Spike?	•			run on SDG FA53517R sample on 6/26/18, %R high due to high sample conc. >> 4x spike amount. No quals.

Data Validation Report for FA53800

Facility:	Fort Ord
Event:	Basewide Range Assessment April 2018
SDG:	FA53800
Guidance Document:	QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016
Prime Contractor:	Gilbane Company, Walnut Creek, CA
Project Manager:	Erin Caruso
Contract Laboratory:	SGS NORTH AMERICA, INC., ORLANDO, FL
Data Review Contractor:	Gilbane Federal
Data Review Level:	S2BVEM
Primary Data Reviewer:	Thomas Beer, Project Chemist
Second Reviewer:	Kristen Carlyon, Senior Chemist
Date Submitted:	June 26, 2018

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW6010C	SW8330B
25-03SC0000Q	FA53800-8A	Solid	Field Duplicate/FD	X	X
25-11SC0000Q	FA53800-17A	Solid	Field Duplicate/FD	X	X
25-01SC0000	FA53800-1	Solid	Field Sample/N		X
25-02SC0000	FA53800-4A	Solid	Field Sample/N	X	X
25-03SC0000	FA53800-7A	Solid	Field Sample/N	X	X
25-06SC0000	FA53800-13	Solid	Field Sample/N		X
25-11SC0000	FA53800-16A	Solid	Field Sample/N	X	X
25-12SC0000	FA53800-22	Solid	Field Sample/N		X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Gilbane Company, Walnut Creek, CA; analyses were performed by SGS NORTH AMERICA, INC., ORLANDO, FL and were reported under sample delivery group (SDG) FA53800. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank
- Blank - Negative
- Field Duplicate
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 0 results (0.00%) out of the 29 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected. Trace values, defined as results that are qualified as estimated because they fall between the limit of detection and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Reviewer checked SGS Lab Report, case narrative, and COC as received.

Analytical Method	Data Reviewer Comment
SW6010C	No additional comments; see Checklist for detail.
SW8330B	No additional comments; see Checklist for detail.

J. Beer

Digitally signed by Tom Beer
DN: C=US, E=tbeer@gilbaneco.com, OU="", O="", CN=Tom Beer
Date: 2018.06.26 13:54:30-07'00'

June 06, 2018

Reviewed by Thomas Beer, Project Chemist, Gilbane Federal

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.

Digitally signed by Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3
DN: CN=Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3, OU=GILBANE FEDERAL, OU=IdenTrust, OU=ECA, O=U.S. Government, C=US
Date: 2018.06.26 14:00:45-07'00'

June 26, 2018

Reviewed by Kristen Carlyon, Senior Chemist, Gilbane Federal

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Qualified Results

No results associated with this sample delivery group required qualification.

Reason Code Definitions

Code	Definition

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.

Review Questions

Method: SW6010C (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			signed, complete
Stage 2 Review: COC - Temperature/Condition?	•			coolers received at 3.8, 4.2, 3.0, 15.8 deg. C (Pb in soil)
Stage 2 Review: COC - Receipt anomalies?	•			none noted
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			none noted. MS/MSD on SDG FA53725-31 sample
Stage 2 Review: Samples - Collection date?	•			4/25/2018
Stage 2 Review: Samples - Digestion date?	•			5/15/2018
Stage 2 Review: Samples - Analysis date?	•			5/15/2018
Stage 2 Review: Samples - Holding time?	•			all prep and analyzed < 20 days, HT - 180 days
Stage 2 Review: Samples - Batching?	•			MP33740
Stage 2 Review: Samples - Lab qualifiers?	•			none
Stage 2 Review: Calibration - ICAL?	•			MA14898 on 5/15/18, OK
Stage 2 Review: Calibration - ICV?	•			
Stage 2 Review: Calibration - CCV?	•			
Stage 2 Review: Calibration - CCB?	•			
Stage 2 Review: Calibration - ICSA?	•			5/15/18 good
Stage 2 Review: Calibration - ICSAB?	•			
Stage 2 Review: Blank - Method blank?	•			
Stage 2 Review: Blank - Equipment blank?	•			non-SDG EBs all ND
Stage 2 Review: Samples - Internal Standards?	•			
Stage 2 Review: Precision/Accuracy - Lab Replicate?	•			non-SDG LRs all RPDs <10
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			from SDG sample FA53725-31, soil MS/MSD in 81-112%R; RPD < 20; good
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCS %R good
Stage 2 Review: Precision/Accuracy - Serial Dilution?	•			%D good
Stage 2 Review: Quantitation - PQLs?	•			All soil reported > LOQ at 5x dilution. LOD 0.4, LOQ 2 mg/kg << PAL [225 mg/kg]
Stage 2 Review: Quantitation - Dilution Factor?	•			
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?	•			2 FD samples. RPDs good, see FD report
Stage 2 Review: Precision/Accuracy - Post Digestion Spike?	•			5/15/18, 157.1 %R out of 80-120% criteria due to high lead in sample (> 4x) relative to spike. MS/MSD %Rs good. No quals required.

Review Questions

Method: SW8330B (Nitroaromatics and Nitramines by HPLC)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			signed, complete
Stage 2 Review: COC - Temperature/Condition?	•			coolers received at 3.8, 4.2, 3.0, 15.8 (Pb in soil) deg. C.
Stage 2 Review: COC - Receipt anomalies?	•			none
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			
Stage 2 Review: Samples - Collection date?	•			4/25-26/2018
Stage 2 Review: Samples - Extraction date?	•			5/7-8/2018
Stage 2 Review: Samples - Analysis date?	•			5/9-10/2018
Stage 2 Review: Samples - Holding time?	•			all prepped < 14-day hold and analyzed < 3 days, OK
Stage 2 Review: Samples - Batching?	•			OP69946, OP69960
Stage 2 Review: Samples - Surrogate recoveries?	•			all soil surrogates within 69-134 %R, OK
Stage 2 Review: Samples - Lab qualifiers?	•			none
Stage 2 Review: Calibration - ICAL?	•			4/19/2018
Stage 2 Review: Calibration - ICV?	•			
Stage 2 Review: Calibration - CCV?	•			
Stage 2 Review: Blank - Method blank?	•			5/9-10-11/2018 all ND
Stage 2 Review: Blank - Equipment blank?	•			all non-SDG ERs ND
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			on sample FA53800-16, %R and RPD good
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCSs only %R all >71, good
Stage 2 Review: Quantitation - PQLs?	•			Lab met PQLs, all 1x dil and NDs at LOD <0.075 mg/kg
Stage 2 Review: Quantitation - Dilution Factor?	•			all 1x
Stage 2 Review: Quantitation - Confirmation RPD<40?			•	all ND
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?	•			2x FD, all ND

Basewide Range Assessment, April 2018
Field Duplicate Report By SDG
BRA Kemron Soil Sampling
QAPP Vol 1,App B,BRA,Jun 2016
Field Duplicates for SDG: FA53800

Location	Analysis
25-03	SW6010C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
25-03SC0000 / 25-03SC0000Q	FA53800-7A / FA53800-8A	Lead	12.7	12.9	2.00	1.56	OK	NA

Location	Analysis
25-03	SW8330B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
25-03SC0000 / 25-03SC0000Q	FA53800-7 / FA53800-8	2,4,6-Trinitrotoluene	ND	ND	99.0	NA	NA	OK
25-03SC0000 / 25-03SC0000Q	FA53800-7 / FA53800-8	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	ND	ND	99.0	NA	NA	OK
25-03SC0000 / 25-03SC0000Q	FA53800-7 / FA53800-8	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	ND	ND	99.0	NA	NA	OK

Location	Analysis
25-11	SW6010C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
25-11SC0000 / 25-11SC0000Q	FA53800-16A / FA53800-17A	Lead	7.00	8.10	2.00	14.6	OK	NA

Location	Analysis
25-11	SW8330B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
25-11SC0000 / 25-11SC0000Q	FA53800-16 / FA53800-17	2,4,6-Trinitrotoluene	ND	ND	99.0	NA	NA	OK
25-11SC0000 / 25-11SC0000Q	FA53800-16 / FA53800-17	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	ND	ND	99.0	NA	NA	OK
25-11SC0000 / 25-11SC0000Q	FA53800-16 / FA53800-17	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	ND	ND	99.0	NA	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 1 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil

The RPD criteria used for organic analysis is: 30
The RPD criteria used for non-organic analysis is: 30

Facility:	Fort Ord
Event:	Basewide Range Assessment April 2018
SDG:	FA53801
Guidance Document:	QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016
Prime Contractor:	Gilbane Company, Walnut Creek, CA
Project Manager:	Erin Caruso
Contract Laboratory:	SGS NORTH AMERICA, INC., ORLANDO, FL
Data Review Contractor:	Gilbane Federal
Data Review Level:	S2B/S4VEM
Primary Data Reviewer:	Thomas Beer, Project Chemist
Second Reviewer:	Kristen Carlyon, Senior Chemist
Date Submitted:	June 26, 2018

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW6010C	SW6020A	SW8330B
28-ER01SC	FA53801-22	Water	Equipment Blank/EB		X	X
28-03SC0000Q	FA53801-23A	Solid	Field Duplicate/FD	X		X
28-01SC0000	FA53801-1	Solid	Field Sample/N			X
28-01SC0001	FA53801-2	Solid	Field Sample/N			X
28-01SC0002	FA53801-3	Solid	Field Sample/N			X
28-02SC0000	FA53801-4	Solid	Field Sample/N			X
28-02SC0001	FA53801-5	Solid	Field Sample/N			X
28-02SC0002	FA53801-6	Solid	Field Sample/N			X
28-03SC0000	FA53801-7A	Solid	Field Sample/N	X		X
28-05SC0000	FA53801-10A	Solid	Field Sample/N	X		X
28-07SC0000	FA53801-13A	Solid	Field Sample/N	X		X
28-08SC0000	FA53801-16A	Solid	Field Sample/N	X		X
28-09SC0000	FA53801-19A	Solid	Field Sample/N	X		X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Gilbane Company, Walnut Creek, CA; analyses were performed by SGS NORTH AMERICA, INC., ORLANDO, FL and were reported under sample delivery group (SDG) FA53801. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank
- Blank - Negative
- Equipment Blank
- Field Duplicate
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 7 results (15.22%) out of the 46 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected. Trace values, defined as results that are qualified as estimated because they fall between the limit of detection and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Reviewer checked SGS Lab Report, case narrative, and COC as received. Reviewer performed S4VEM re-calculations on at least 10% of site soil samples (5 lead by SW6010C and 5 explosives by SW8330B).

Analytical Method	Data Reviewer Comment
SW6010C	The six lead in soil results were qualified as estimated (J-) for low interference check sample recovery (QC reason 'O'). No additional qualifiers added based on S4VEM review and re-calculations.
SW8330B	No additional qualifiers added based on S4VEM review and re-calculations.

J. Beer

Digitally signed by Tom Beer
DN: C=US, E=tbeer@gilbaneco.com, OU="", O="", CN=Tom Beer
Date: 2018.06.26 13:57:01-07'00'

June 12, 2018

Reviewed by Thomas Beer, Project Chemist, Gilbane Federal

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.

Digitally signed by Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3
DN: CN=Kristen Carlyon Peyton:A01097C0000015CB2EF5F0C00000DE3, OU=GILBANE FEDERAL, OU=IdenTrust, OU=ECA, O=U.S. Government, C=US
Date: 2018.06.26 14:02:10-07'00'

June 26, 2018

Reviewed by Kristen Carlyon, Senior Chemist, Gilbane Federal

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method SW6020A, Equipment Blank

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
28-ER01SC (EB)/ FA53801-22	Lead	0.2500	< 0.2	< 2	ug/l	U/None	K1	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8330B, MS Recovery

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
28-01SC0000 (MS)/ OP69973-MS	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	70.56	74 - 124	10 - 134	percent	J/UJ	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW8330B

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
28-01SC0000	N	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	99.0	74.0	74.0 UJ		ug/kg	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).

Table of All Qualified Results

Test Method: SW8330B	Extraction Method: METHOD							
FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
28-01SC0000	N	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	99.0	74.0	74.0 UJ		ug/kg	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6010C							
FieldSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
28-03SC0000	N	Lead	2.00	21.1	21.1	21.1 J	O
28-03SC0000Q	FD	Lead	2.00	20.0	20.0	20.0 J	O
28-05SC0000	N	Lead	2.00	8.70	8.70	8.70 J	O
28-07SC0000	N	Lead	2.00	65.5	65.5	65.5 J	O
28-08SC0000	N	Lead	2.00	74.4	74.4	74.4 J	O
28-09SC0000	N	Lead	2.00	128	128	128 J	O

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
K1	Detected in the associated equipment rinsate blank.
M	Matrix spike recovery was outside established criteria.
O	Interference check sample
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.

Review Questions

Method: SW6010C (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			signed, complete
Stage 2 Review: COC - Temperature/Condition?	•			coolers received at 3.8, 4.2, 3.0, 15.8 (Pb in soil only) deg. C.
Stage 2 Review: COC - Receipt anomalies?	•			none
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			
Stage 2 Review: Samples - Collection date?	•			4/25, 26/2018
Stage 2 Review: Samples - Digestion date?	•			5/16/2018
Stage 2 Review: Samples - Analysis date?	•			5/17/2018
Stage 2 Review: Samples - Holding time?	•			all analyses within 180-day hold
Stage 2 Review: Samples - Batching?	•			MP33746, MA14907
Stage 2 Review: Samples - Lab qualifiers?	•			none
Stage 2 Review: Calibration - ICAL?	•			5/17/18, OK
Stage 2 Review: Calibration - ICV?	•			%R good
Stage 2 Review: Calibration - CCV?	•			%Rs good
Stage 2 Review: Calibration - CCB?	•			all NDs
Stage 2 Review: Calibration - ICSA?	•			run MA14907 ICSA2 out low, possible baseline drift. 6x Pb in soil qual J- for low interference check (O).
Stage 2 Review: Calibration - ICSAB?	•			%Rs good
Stage 2 Review: Blank - Method blank?	•			MBs are ND for Pb
Stage 2 Review: Blank - Equipment blank?	•			0.25 ug/L (~ 5 ug/kg) in 28-ER01 on 4/26/18 at 7am. All associated soil results > 10x ER conc. No quals required
Stage 2 Review: Samples - Internal Standards?	•			all sample stds within 60-125 %R limits
Stage 2 Review: Precision/Accuracy - Lab Replicate?	•			LR run on non-project sample.
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			MS/MSD run on non-SDG sample FA53725-34. MSD %R 114.5 out of 81-112% soil limits. No quals this SDG.
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCS only, %R good
Stage 2 Review: Precision/Accuracy - Serial Dilution?	•			Solid %D good; Aq out but ND, no quals.
Stage 2 Review: Quantitation - PQLs?	•			soil reported > LOQ at 5x dilution. LOD 0.4, LOQ 2 mg/kg << PAL [225 mg/kg]
Stage 2 Review: Quantitation - Dilution Factor?	•			
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?	•			sample 28-03SC0000 RPD 5.3%, good
Stage 4 Review: Precision/Accuracy - Post Digestion Spike?	•			Post Spike run on non-SDG sample FA53725-34. %R 90.2 within 80-120 limits; good. No quals this SDG
Stage 4 Review: Quantitation - ICV, CCV %D verification?	•			Verified ICV and CCV calculatations from analytical batch MA14907
Stage 4 Review: Quantitation - LCS, MS sample re-calculations?	•			Verified calculated lead results for LCS, MS, MSD and project samples from extraction batch MP33746, and analytical batch MA14907.

Review Questions

Method: SW8330B (Nitroaromatics and Nitramines by HPLC)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			signed, complete
Stage 2 Review: COC - Temperature/Condition?	•			coolers received at 3.8, 4.2, 3.0, 15.8 (Pb in soil only) deg. C.
Stage 2 Review: COC - Receipt anomalies?	•			none noted
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			FA53801-1MS %R out, probable matrix effect.
Stage 2 Review: Samples - Collection date?	•			4/25,26/2018
Stage 2 Review: Samples - Extraction date?	•			Aq 5/3/2018; soil 5/8,9/2018
Stage 2 Review: Samples - Analysis date?	•			Aq 5/4/2018; soil 5/10,11/2018
Stage 2 Review: Samples - Holding time?	•			soils extracted < 14 days, analyzed < 40 days; Aq analyzed < 7 days
Stage 2 Review: Samples - Batching?	•			soil OP69973, OP69989; Aq OP69897
Stage 2 Review: Samples - Surrogate recoveries?	•			all %Rs within Aq 70-136 and soil 69-134.
Stage 2 Review: Samples - Lab qualifiers?	•			all NDs
Stage 2 Review: Calibration - ICAL?	•			ICAL 4/19/2018
Stage 2 Review: Calibration - ICV?	•			ICV 14/11/2017 %RSDs good; 4/19,23/2018 %RSDs good;
Stage 2 Review: Calibration - CCV?	•			5/10/2018, 5/11/2018 all %Ds good
Stage 2 Review: Blank - Method blank?	•			MBs 5/10,11/2018 all ND
Stage 2 Review: Blank - Equipment blank?	•			ER on 4/26/2018 all NDs
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			batch OP69973 HMX MS %R 71 below soil QAPP limits of 74-124, qualify parent sample 28 -01SC0000 (UJ, reason M).
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCSs %Rs good
Stage 2 Review: Quantitation - PQLs?	•			Lab met PQLs, all 1x dil and NDs at LOD 0.075 mg/kg
Stage 2 Review: Quantitation - Dilution Factor?	•			none
Stage 2 Review: Quantitation - Confirmation RPD<40?			•	all NDs
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?	•			all NDs
Stage 4 Review: Quantitation - ICAL RF RSD verification?	•			Verified HMX and surrog. on ICAL performed 4/19/2018.
Stage 4 Review: Quantitation - LCS, MS surrogate re-calculations?	•			Verified HMX in BSs and MS, and surrogate recoveries from extract batches OP69973 and OP69989 (field sample IDs 28-03SC0000, 28-05.., 28-07.., 28-08.., 28-09..). Sample results all ND at the LOD for 8330B.
Stage 4 Review: Quantitation reports - ICAL, CCV, site samples and QC samples?	•			Reviewed quant report for analytical batches GBB1730 and GGG2627. Manual integrate on non-target analytes and lab QC only. MI review acceptable.

Basewide Range Assessment, April 2018
Field Duplicate Report By SDG
BRA Kemron Soil Sampling
QAPP Vol 1,App B,BRA,Jun 2016
Field Duplicates for SDG: FA53801

Location	Analysis
28-03	SW6010C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
28-03SC0000 / 28-03SC0000Q	FA53801-7A / FA53801-23A	Lead	21.1	20.0	2.00	5.35	OK	NA

Location	Analysis
28-03	SW8330B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Check	RL Check
28-03SC0000 / 28-03SC0000Q	FA53801-7 / FA53801-23	2,4,6-Trinitrotoluene	ND	ND	100	NA	NA	OK
28-03SC0000 / 28-03SC0000Q	FA53801-7 / FA53801-23	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	ND	ND	100	NA	NA	OK
28-03SC0000 / 28-03SC0000Q	FA53801-7 / FA53801-23	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	ND	ND	100	NA	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 1 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil

The RPD criteria used for organic analysis is: 30
The RPD criteria used for non-organic analysis is: 30

Data Validation Report for FA53896

Facility:	Fort Ord
Event:	Basewide Range Assessment April 2018
SDG:	FA53896
Guidance Document:	QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016
Prime Contractor:	Gilbane Company, Walnut Creek, CA
Project Manager:	Erin Caruso
Contract Laboratory:	SGS NORTH AMERICA, INC., ORLANDO, FL
Data Review Contractor:	Gilbane Federal
Data Review Level:	S2BVEM
Primary Data Reviewer:	Thomas Beer, Project Chemist
Second Reviewer:	Kristen Carlyon, Senior Chemist
Date Submitted:	June 26, 2018

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW6010C	SW6020A	SW8330B
28-ER02SC	FA53896-13	Water	Equipment Blank/EB		X	X
28-ER03SC	FA53896-14	Water	Equipment Blank/EB		X	X
25-04SC0000	FA53896-1A	Solid	Field Sample/N	X		X
25-05SC0000	FA53896-4A	Solid	Field Sample/N	X		X
28-04SC0000	FA53896-7	Solid	Field Sample/N			X
28-06SC0000	FA53896-10	Solid	Field Sample/N			X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the QAPP Volume 1, Appendix B, Soil Sampling, Basewide Range Assessment, June 2016 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Gilbane Company, Walnut Creek, CA; analyses were performed by SGS NORTH AMERICA, INC., ORLANDO, FL and were reported under sample delivery group (SDG) FA53896. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank
- Blank - Negative
- Equipment Blank
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time

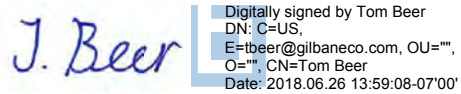
Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 2 results (9.09%) out of the 22 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected. Trace values, defined as results that are qualified as estimated because they fall between the limit of detection and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Reviewer checked SGS Lab Report, case narrative, and COC as received.

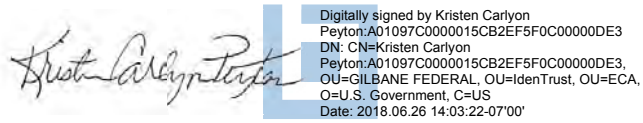
Analytical Method	Data Reviewer Comment
SW6010C	The two lead in soil results were qualified as estimated (J-) for low interference check sample recovery (QC reason 'O').
SW8330B	No additional comments; see Checklist for detail.



June 06, 2018

Reviewed by Thomas Beer, Project Chemist, Gilbane Federal

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.



June 26, 2018

Reviewed by Kristen Carlyon, Senior Chemist, Gilbane Federal

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method SW6020A, Equipment Blank

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
28-ER02SC (EB)/ FA53896-13	Lead	0.2800	< 0.2	< 2	ug/l	U/None	K1	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Qualified Results

No results associated with this sample delivery group required qualification.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6010C

FieldSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
25-04SC0000	N	Lead	2.00	12.5	12.5	12.5 J	O
25-05SC0000	N	Lead	2.00	10.0	10.0	10.0 J	O

Analytes not found in project samples are reported as not detected at the limit of detection (LOD).
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
K1	Detected in the associated equipment rinsate blank.
O	Interference check sample
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.

Review Questions

Method: SW6010C (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			signed, complete
Stage 2 Review: COC - Temperature/Condition?	•			cooler received at 4.2 deg. C
Stage 2 Review: COC - Receipt anomalies?	•			none noted
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			RPDs for serial dilution of Pb in ERs by 6020A out. RPDs OK due to low initial sample conc < 50x IDL [no quals twb]
Stage 2 Review: Samples - Collection date?	•			4/30/2018
Stage 2 Review: Samples - Digestion date?	•			5/16/2018
Stage 2 Review: Samples - Analysis date?	•			5/17/2018
Stage 2 Review: Samples - Holding time?	•			all prep and analysis met 180 day hold time
Stage 2 Review: Samples - Batching?	•			soil MP33746, Aq MP33699
Stage 2 Review: Samples - Lab qualifiers?	•			none
Stage 2 Review: Calibration - ICAL?	•			5/17/2018, OK
Stage 2 Review: Calibration - ICV?	•			
Stage 2 Review: Calibration - CCV?	•			%Rs good
Stage 2 Review: Calibration - CCB?	•			
Stage 2 Review: Calibration - ICSA?	•			ICSA2 out low -30.1; absolute value is > LOD of 1. 2x Pb in soil qual J- for low interference check (O).
Stage 2 Review: Calibration - ICSAB?	•			good
Stage 2 Review: Blank - Method blank?	•			MBs are ND
Stage 2 Review: Blank - Equipment blank?	•			0.28 ug/L (~5.6 ug/kg) in 28-ER02 on 4/30/18 at 7am. All associated soil results >> 10x ER conc. No quals required
Stage 2 Review: Samples - Internal Standards?	•			acceptable
Stage 2 Review: Precision/Accuracy - Lab Replicate?	•			LR run on non-SDG sample FA53725-18.
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			Soil MS/MSD run on non-SDG sample; Aq MS/MSD run on non-project sample FA53625-18F. MSD %R 114.5 out of soil 81-112% limits. No quals this SDG.
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			within soil and Aq limits
Stage 2 Review: Precision/Accuracy - Serial Dilution?	•			soil - good, Aq out due to low initial sample conc. No quals
Stage 2 Review: Quantitation - PQLs?	•			soil reported > LOQ at 5x dilution. LOD 0.4, LOQ 2 mg/kg << PAL [225 mg/kg]
Stage 2 Review: Quantitation - Dilution Factor?	•			
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?			•	
Stage 2 Review: Precision/Accuracy - Post Digestion Spike?	•			%R good

Review Questions

Method: SW8330B (Nitroaromatics and Nitramines by HPLC)				
Review Questions	Yes	No	NA	Comment
Stage 2 Review: COC - Custody Trail?	•			
Stage 2 Review: COC - Temperature/Condition?	•			cooler recvd. at 4.2 deg. C
Stage 2 Review: COC - Receipt anomalies?	•			none
Stage 2 Review: COC - Sample/Methods checked?	•			
Stage 2 Review: Case Narrative - Anomalies?	•			none noted
Stage 2 Review: Samples - Collection date?	•			4/30/2018
Stage 2 Review: Samples - Extraction date?	•			5/14/2018
Stage 2 Review: Samples - Analysis date?	•			5/16/2018
Stage 2 Review: Samples - Holding time?	•			all extracted < 14 days from day of sampling, analyzed < 3 days later. No quals.
Stage 2 Review: Samples - Batching?	•			Aq - OP69897; soil - OP70034
Stage 2 Review: Samples - Surrogate recoveries?	•			all surrogates 78-108 %R, good
Stage 2 Review: Samples - Lab qualifiers?	•			no quals, all ND
Stage 2 Review: Calibration - ICAL?	•			on 5/16/2018
Stage 2 Review: Calibration - ICV?	•			
Stage 2 Review: Calibration - CCV?	•			
Stage 2 Review: Blank - Method blank?	•			all ND
Stage 2 Review: Blank - Equipment blank?	•			2 EBs on 4/30/18, all ND
Stage 2 Review: Precision/Accuracy - MS/MSD?	•			on sample FA53896-1. All %R and RPDs good
Stage 2 Review: Precision/Accuracy - LCS/LCSD?	•			LCS only %Rs good
Stage 2 Review: Quantitation - PQLs?	•			Lab met PQLs, all 1x dil and NDs at LOD 0.074 mg/kg
Stage 2 Review: Quantitation - Dilution Factor?	•			
Stage 2 Review: Quantitation - Confirmation RPD<40?	•			all ND
Stage 2 Review: Quantitation - Results (i.e. correct analytes)?	•			
Stage 2 Review: Field Duplicates - RPD within limits?			•	

This page was intentionally left blank

This page was intentionally left blank

ATTACHMENT 2

LABORATORY REPORTS

(PROVIDED ON CD)

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kemron Environmental Services, Inc

Ft Ord; CA

07202.2001

SGS Job Number: FA53517

Sampling Date: 04/17/18

Report to:

Kemron Environmental Services, Inc
4522 Joe Lloyd Way
Monterey, CA 93944
EDawson@GilbaneCo.com; PCota@GilbaneCo.com;
TBeer@GilbaneCo.com
ATTN: Evenlyn Dawson

Total number of pages in report: 449

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **6**
Section 4: Sample Results **7**
4.1: FA53517-1: 31-06SC0000 8
4.2: FA53517-4: 31-07SC0000 9
4.3: FA53517-7: 31-11SC0000 10
4.4: FA53517-10: 31-12SC0000 11
4.5: FA53517-13: 31-13SC0000 12
4.6: FA53517-16: 31-14SC0000 13
4.7: FA53517-19: 31-16SC0000 14
4.8: FA53517-22: 31-17SC0000 15
4.9: FA53517-25: 31-ER01SC 16
Section 5: Misc. Forms **17**
5.1: Chain of Custody 18
5.2: QC Evaluation: DOD QSM5 Limits 38
Section 6: Metals Analysis - QC Data Summaries **39**
6.1: Inst QC MA14858: Pb 40
6.2: Inst QC MA14873: Pb 61
6.3: Inst QC MA14876: Pb 79
6.4: Prep QC MP33665: Pb 96
6.5: Prep QC MP33698: Pb 101
6.6: IDL and Linear Range Summaries 108
Section 7: Metals Analysis - Raw Data **112**
7.1: Raw Data MA14858 113
7.2: Raw Data MA14873 358
7.3: Raw Data MA14876 402
7.4: Prep Logs 445

Sample Summary

Kemron Environmental Services, Inc

Job No: FA53517

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53517-1	04/17/18	14:36	RPLF	04/19/18	SO	Soil	31-06SC0000
FA53517-2	04/17/18	14:51	RPLF	04/19/18	SO	Soil	31-06SC0001
FA53517-3	04/17/18	15:13	RPLF	04/19/18	SO	Soil	31-06SC0002
FA53517-4	04/17/18	15:28	RPLF	04/19/18	SO	Soil	31-07SC0000
FA53517-5	04/17/18	15:39	RPLF	04/19/18	SO	Soil	31-07SC0001
FA53517-6	04/17/18	15:56	RPLF	04/19/18	SO	Soil	31-07SC0002
FA53517-7	04/17/18	12:58	RPLF	04/19/18	SO	Soil	31-11SC0000
FA53517-8	04/17/18	13:27	RPLF	04/19/18	SO	Soil	31-11SC0001
FA53517-9	04/17/18	14:05	RPLF	04/19/18	SO	Soil	31-11SC0002
FA53517-10	04/17/18	13:11	RPLF	04/19/18	SO	Soil	31-12SC0000
FA53517-11	04/17/18	13:43	RPLF	04/19/18	SO	Soil	31-12SC0001
FA53517-12	04/17/18	14:19	RPLF	04/19/18	SO	Soil	31-12SC0002
FA53517-13	04/17/18	14:20	RPLF	04/19/18	SO	Soil	31-13SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53517

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53517-14	04/17/18	14:38	RPLF	04/19/18	SO	Soil	31-13SC0001
FA53517-15	04/17/18	15:00	RPLF	04/19/18	SO	Soil	31-13SC0002
FA53517-16	04/17/18	15:20	RPLF	04/19/18	SO	Soil	31-14SC0000
FA53517-17	04/17/18	15:37	RPLF	04/19/18	SO	Soil	31-14SC0001
FA53517-18	04/17/18	15:54	RPLF	04/19/18	SO	Soil	31-14SC0002
FA53517-19	04/17/18	09:48	RPLF	04/19/18	SO	Soil	31-16SC0000
FA53517-20	04/17/18	10:07	RPLF	04/19/18	SO	Soil	31-16SC0001
FA53517-21	04/17/18	10:28	RPLF	04/19/18	SO	Soil	31-16SC0002
FA53517-22	04/17/18	10:06	RPLF	04/19/18	SO	Soil	31-17SC0000
FA53517-23	04/17/18	10:22	RPLF	04/19/18	SO	Soil	31-17SC0001
FA53517-24	04/17/18	11:12	RPLF	04/19/18	SO	Soil	31-17SC0002
FA53517-25	04/17/18	16:30	RPLF	04/19/18	AQ	Equipment Blank	31-ER01SC

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Kemron Environmental Services, Inc **Job No:** FA53517

Site: Ft Ord; CA **Report Date:** 5/8/2018 12:02:53

9 Sample(s) were collected on 04/17/2018 and were received at SGS North America Inc - Orlando on 04/19/2018 properly preserved, at 24.8 Deg. C and intact. These Samples received an SGS Orlando job number of FA53517. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals Analysis By Method SW846 6010C

Matrix: SO **Batch ID:** MP33698

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53517-7DUP, FA53517-7MSD, FA53517-7SDL, FA53517-7PS were used as the QC samples for metals.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Lead are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MP33698-PS1 for Lead: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Metals Analysis By Method SW846 6020A

Matrix: AQ **Batch ID:** MP33665

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53456-6DUP, FA53456-6MS, FA53456-6MSD, FA53456-6SDL were used as the QC samples for metals.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA53517
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/17/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53517-1	**31-06SC0000**					
Lead		3400	40	7.9	mg/kg	SW846 6010C
FA53517-4	**31-07SC0000**					
Lead		379	2.0	0.40	mg/kg	SW846 6010C
FA53517-7	**31-11SC0000**					
Lead		1640	10	2.0	mg/kg	SW846 6010C
FA53517-10	**31-12SC0000**					
Lead		252	2.0	0.40	mg/kg	SW846 6010C
FA53517-13	**31-13SC0000**					
Lead		6690	50	10	mg/kg	SW846 6010C
FA53517-16	**31-14SC0000**					
Lead		277	2.0	0.40	mg/kg	SW846 6010C
FA53517-19	**31-16SC0000**					
Lead		145	2.0	0.40	mg/kg	SW846 6010C
FA53517-22	**31-17SC0000**					
Lead		105	2.0	0.40	mg/kg	SW846 6010C
FA53517-25	**31-ER01SC**					

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	31-06SC0000		
Lab Sample ID:	FA53517-1	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	3400	40	7.9	2.0	mg/kg	100	05/04/18	05/07/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14876
(2) Prep QC Batch: MP33698

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-07SC0000		
Lab Sample ID:	FA53517-4	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	379	2.0	0.40	0.099	mg/kg	5	05/04/18	05/04/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14873
(2) Prep QC Batch: MP33698

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-11SC0000		
Lab Sample ID:	FA53517-7	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	1640	10	2.0	0.50	mg/kg	25	05/04/18	05/07/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14876
(2) Prep QC Batch: MP33698

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-12SC0000		
Lab Sample ID:	FA53517-10	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	252	2.0	0.40	0.10	mg/kg	5	05/04/18	05/04/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14873
(2) Prep QC Batch: MP33698

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-13SC0000		
Lab Sample ID:	FA53517-13	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	6690	50	10	2.5	mg/kg	125	05/04/18	05/07/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14876
(2) Prep QC Batch: MP33698

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-14SC0000		
Lab Sample ID:	FA53517-16	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	277	2.0	0.40	0.10	mg/kg	5	05/04/18	05/04/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14873
(2) Prep QC Batch: MP33698

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-16SC0000		
Lab Sample ID:	FA53517-19	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	145	2.0	0.40	0.10	mg/kg	5	05/04/18	05/04/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14873
(2) Prep QC Batch: MP33698

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-17SC0000		
Lab Sample ID:	FA53517-22	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	105	2.0	0.40	0.10	mg/kg	5	05/04/18	05/04/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14873
(2) Prep QC Batch: MP33698

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-ER01SC		
Lab Sample ID:	FA53517-25	**Date Sampled:**	04/17/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/19/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	1.0 U	2.0	1.0	0.20	ug/l	2	04/28/18	04/30/18	DM	SW846 6020A [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14858
(2) Prep QC Batch: MP33665

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04(17)18-01

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:
Unit 31

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
							11	13	8	13				
1	31-01SC0000	SO						X		X	31-01	N1	0.00	0.00
2	31-01SC0001	SO						X		X	31-01	N1	0.00	0.00
3	31-01SC0002	SO						X		X	31-01	N1	0.00	0.00
4	31-02SC0000	SO						X			31-02	N1	0.00	0.00
5	31-02SC0001	SO		J.Beer 4-18-18				X			31-02	N1	0.00	0.00
6	31-02SC0002	SO						X			31-02	N1	0.00	0.00
7	31-03SC0000	SO						X			31-03	N1	0.00	0.00
8	31-03SC0001	SO						X			31-03	N1	0.00	0.00
9	31-03SC0002	SO						X			31-03	N1	0.00	0.00

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J.Beer	4/18/18	1200 1145 JB
FX		

Received by: *(Signature)*	Date	Time
FedEx	4/18/18	1200
J. Cooper	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

N/A

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC #041718-02 JB

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2" 1-L Amber, Less than or equal to 6 degrees C
11	1", 250mL poly with HNO3
13	1" Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
10	~~31-04SC0000~~	SO					X			~~31-04~~	N1	0.00	0.00	
11	31-04SC0001	SO					X			31-04	N1	0.00	0.00	
12	31-04SC0002	SO			J.Beer 4-18-18		X			31-04	N1	0.00	0.00	
13	31-05SC0000	SO					X			31-05	N1	0.00	0.00	
14	31-05SC0001	SO					X			31-05	N1	0.00	0.00	
15	~~31-05SC0002~~	SO					X			~~31-05~~	N1	0.00	0.00	
1	16	31-06SC0000	SO	4-17-18	14:36	RP/LF		X			31-06	N1	0.00	0.00	
2	17	31-06SC0001	SO	4-17-18	14:51	1		X			31-06	N1	0.00	0.00	HOLD
3	18	31-06SC0002	SO	4-17-18	15:13	1		X			31-06	N1	0.00	0.00	HOLD
	Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time
J.Beer	4-18-18	1200
FX		

Received by: *(Signature)*	Date	Time
FedEx	4-18-18	1200
Cerone	04/19/18	09:30

Shipping Date / Carrier / Airbill Number

8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

3.8.2.2, N/A

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC #04178-03
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
19	31-07SC0000	SO	4-17-18	15:28	RP/LF		X			31-07	N1	0.00	0.00	
20	31-07SC0001	SO	4-17-18	15:39	1		X			31-07	N1	0.00	0.00	HOLD
21	31-07SC0002	SO	4-17-18	15:56	1		X			31-07	N1	0.00	0.00	HOLD
~~22~~	~~31-08SC0000~~	~~SO~~					~~X~~			~~31-08~~	~~N1~~	~~0.00~~	~~0.00~~	
23	31-08SC0001	SO					X			31-08	N1	0.00	0.00	
24	31-08SC0002	SO					X			~~31-08~~	N1	0.00	0.00	
25	31-09SC0000	SO		J.Beer 4-18-18			~~X~~			31-09	N1	0.00	0.00	
26	31-09SC0000Q	SO					X			31-09	FD1	0.00	0.00	
27	~~31-09SC0001~~	SO					~~X~~			~~31-09~~	N1	0.00	0.00	

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4/18/18	1200
FX			J. Connie	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 3 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-04

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	Explosives by ISM SW8330B (8)	Explosives by ISM SW8330B (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
28	~~31-09SC0001Q~~	SO					~~X~~			~~31-09~~	~~FD1~~	~~0.00~~	~~0.00~~	
29	31-09SC0002	SO					X			31-09	N1	0.00	0.00	
30	31-09SC0002Q	SO		J Beer 4-18-18			X			31-09	FD1	0.00	0.00	
31	31-10SC0000	SO					X			31-10	N1	0.00	0.00	
32	31-10SC0001	SO					X			31-10	N1	0.00	0.00	
33	~~31-10SC0002~~	~~SO~~					~~X~~			~~31-10~~	~~N1~~	~~0.00~~	~~0.00~~	
34	31-11SC0000	SO	4-17-18	12:58	RP/LF		X			31-11	N1	0.00	0.00	
35	31-11SC0001	SO	4-17-18	13:27	"		X			31-11	N1	0.00	0.00	HOLD
36	31-11SC0002	SO	4-17-18	14:05	"		X			31-11	N1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Corne	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 4 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC #041718-05

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
37	31-12SC0000	SO	4-17-18	13:11	RP/LF		X			31-12	N1	0.00	0.00	
38	31-12SC0001	SO	4-17-18	13:43			X			31-12	N1	0.00	0.00	HOLD
39	31-12SC0002	SO	4-17-18	14:19			X			31-12	N1	0.00	0.00	HOLD
40	31-13SC0000	SO	4-17-18	14:20			X			31-13	N1	0.00	0.00	
41	31-13SC0001	SO	4-17-18	14:38			X			31-13	N1	0.00	0.00	HOLD
42	31-13SC0002	SO	4-17-18	15:00			X			31-13	N1	0.00	0.00	HOLD
43	31-14SC0000	SO	4-17-18	15:20			X			31-14	N1	0.00	0.00	
44	31-14SC0001	SO	4-17-18	15:37			X			31-14	N1	0.00	0.00	HOLD
45	31-14SC0002	SO	4-17-18	15:54			X			31-14	N1	0.00	0.00	HOLD
Cooler #		Turnaround Time: 14 Days												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Copse	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 5 of 18

5.1 5

FA53517: Chain of Custody
Page 5 of 20

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-06
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
6	2" 1-L Amber, Less than or equal to 6 degrees C
11	1", 250mL poly with HNO3
13	1" Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
46	~~31-15SC0000~~	~~SO~~					~~X~~			31-15	N1	0.00	0.00	
47	31-15SC0001	SO	J.Beer	4-18-18			X			31-15	N1	0.00	0.00	
48	~~31-15SC0002~~	~~SO~~					~~X~~			~~31-15~~	N1	0.00	0.00	
49	31-16SC0000	SO	4-17-18	9:48	RP/LF		X			31-16	N1	0.00	0.00	
50	31-16SC0001	SO	4-17-18	10:07			X			31-16	N1	0.00	0.00	HOLD
51	31-16SC0002	SO	4-17-18	10:28			X			31-16	N1	0.00	0.00	HOLD
52	31-17SC0000	SO	4-17-18	10:06			X			31-17	N1	0.00	0.00	
53	31-17SC0001	SO	4-17-18	10:22			X			31-17	N1	0.00	0.00	HOLD
54	31-17SC0002	SO	4-17-18	11:12			X			31-17	N1	0.00	0.00	HOLD

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J. Beer	4/18/18	1200
FX		

Received by: *(Signature)*	Date	Time
Fed Ex	4-18-18	1200
J. Copse	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 6 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-06, 07, 18

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
55	31-18SC0000	SO					X		X	31-18	N1	0.00	0.00
56	31-18SC0001	SO					X		X	31-18	N1	0.00	0.00
57	31-18SC0002	SO					X		X	31-18	N1	0.00	0.00
58	31-19SC0000	SO					X			31-19	N1	0.00	0.00
59	31-19SC0001	SO					X			31-19	N1	0.00	0.00
60	31-19SC0002	SO					X			31-19	N1	0.00	0.00
61	31-20SC0000	SO					X			31-20	N1	0.00	0.00
62	31-20SC0001	SO					X			31-20	N1	0.00	0.00
63	31-20SC0002	SO					X			31-20	N1	0.00	0.00

J. Beer 4-18-18

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200
FX		

Received by: *(Signature)*	Date	Time
Fed Ex	4-18-18	1200
[illegible]	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 7 of 18

FA53517: Chain of Custody
Page 7 of 20

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-08
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
64	31-21SC0000	SO					X		X	31-21	N1	0.00	0.00
65	31-21SC0001	SO					X		X	31-21	N1	0.00	0.00
66	31-21SC0002	SO					X		X	31-21	N1	0.00	0.00
67	31-22SC0000	SO		J. Beer 4-18-18			X		X	31-22	N1	0.00	0.00
68	31-22SC0001	SO					X		X	31-22	N1	0.00	0.00
69	31-22SC0002	SO					X		X	31-22	N1	0.00	0.00
70	31-23SC0000	SO					X			31-23	N1	0.00	0.00
71	31-23SC0001	SO					X			31-23	N1	0.00	0.00
72	31-23SC0002	SO					X			31-23	N1	0.00	0.00
Cooler #		Turnaround Time: 14 Days											

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200
FX		

Received by: *(Signature)*	Date	Time
FedEx	4-18-18	1200
J. Comer	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 8 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04718-09
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM					Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
							11	13	8	13								
73	~~31-24SC0000~~	~~SO~~						~~X~~							~~31-24~~	~~N1~~	~~0.00~~	~~0.00~~
74	31-24SC0001	SO						X							31-24	N1	0.00	0.00
75	31-24SC0002	SO						X							31-24	N1	0.00	0.00
76	31-25SC0000	SO		J. Bell 4-18-18				X		X					31-25	N1	0.00	0.00
77	31-25SC0001	SO						X		X					31-25	N1	0.00	0.00
78	31-25SC0002	SO						X		X					31-25	N1	0.00	0.00
79	31-26SC0000	SO						X		X					31-26	N1	0.00	0.00
80	31-26SC0001	SO						X		X					31-26	N1	0.00	0.00
81	~~31-26SC0002~~	~~SO~~						~~X~~		~~X~~					~~31-26~~	~~N1~~	~~0.00~~	~~0.00~~
Cooler #		**Turnaround Time: 14 Days**																

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Bell	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Cope	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 9 of 18

FA53517: Chain of Custody
Page 9 of 20

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/18-10

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
82	~~31-27SG0000~~	~~SO~~					X		X	~~31-27~~	~~N1~~	~~0.00~~	~~0.00~~
83	31-27SC0001	SO					X		X	31-27	N1	0.00	0.00
84	31-27SC0002	SO					X		X	31-27	N1	0.00	0.00
85	31-28SC0000	SO	J.Beer	4-18-18			X		X	31-28	N1	0.00	0.00
86	31-28SC0000Q	SO					X		X	31-28	FD1	0.00	0.00
87	31-28SC0001	SO					X		X	31-28	N1	0.00	0.00
88	31-28SC0001Q	SO					X		X	31-28	FD1	0.00	0.00
89	31-28SC0002	SO					X		X	31-28	N1	0.00	0.00
90	~~31-28SC0002Q~~	~~SO~~					X		X	31-28	FD1	~~0.00~~	~~0.00~~
Cooler #		**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J.Beer	4-18-18	1200	Fed Ex	4/18/18	1200
FX			J. Comel	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 10 of 18

5.1 5

FA53517: Chain of Custody
Page 10 of 20

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/718-11
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
91	~~31-29SC0000~~	SO					X		X	~~31-29~~	N1	~~0.00~~	~~0.00~~
92	31-29SC0001	SO					X		X	31-29	N1	0.00	0.00
93	31-29SC0002	SO					X		X	31-29	N1	0.00	0.00
94	31-30SC0000	SO		J Beer 4-18-18			X			31-30	N1	0.00	0.00
95	31-30SC0000Q	SO					X			31-30	FD1	0.00	0.00
96	31-30SC0001	SO					X			31-30	N1	0.00	0.00
97	31-30SC0001Q	SO					X			31-30	FD1	0.00	0.00
98	31-30SC0002	SO					X			31-30	N1	0.00	0.00
99	~~31-30SC0002Q~~	SO					X			~~31-30~~	FD1	0.00	0.00
Cooler #		**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Cooper	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 11 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/8-12
FA 53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

						Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM							
	Event ID: Basewide Range Assessment April 2018						11	13	8	13							
	Sample ID	Matrix	Date	Time	Samp Init.										Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
100	~~31-31SC0000~~	~~SO~~						X							~~31-31~~	~~N1~~	~~0.00~~	~~0.00~~
101	31-31SC0001	SO						X							31-31	N1	0.00	0.00
102	31-31SC0002	SO						X							31-31	N1	0.00	0.00
103	31-32SC0000	SO						X							31-32	N1	0.00	0.00
104	31-32SC0001	SO						X							31-32	N1	0.00	0.00
105	31-32SC0002	SO						X							31-32	N1	0.00	0.00
106	31-33SC0000	SO						X							31-33	N1	0.00	0.00
107	31-33SC0001	SO						X							31-33	N1	0.00	0.00
108	~~31-33SC0002~~	~~SO~~						X							~~31-33~~	~~N1~~	~~0.00~~	~~0.00~~
Cooler #		**Turnaround Time: 14 Days**																

J. Beer 4-18-18

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-18-18	
FX		

Received by: *(Signature)*	Date	Time
FedEx	4/18/18	1200
J. Corral	04-19-18	0930

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 12 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-13
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
	Event ID: Basewide Range Assessment April 2018					11	13	8	13				
109	~~31-34SC0000~~	~~SO~~					~~X~~			~~31-34~~	~~N1~~	~~0.00~~	~~0.00~~
110	31-34SC0000Q	SO					X			31-34	FD1	0.00	0.00
111	31-34SC0001	SO					X			31-34	N1	0.00	0.00
112	31-34SC0001Q	SO					X			31-34	FD1	0.00	0.00
113	31-34SC0002	SO	J.Beer	4-18-18			X			31-34	N1	0.00	0.00
114	31-34SC0002Q	SO					X			31-34	FD1	0.00	0.00
115	31-35SC0000	SO					X		X	31-35	N1	0.00	0.00
116	31-35SC0001	SO					X		X	31-35	N1	0.00	0.00
117	~~31-35SC0002~~	~~SO~~					~~X~~		~~X~~	31-35	N1	0.00	0.00
	Cooler #	**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Cerrol	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 13 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-14
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250ml, poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
	Analytical Test Method					11	13	8	13				
118	31-36SC0000	SO					X		X	31-36	N1	0.00	0.00
119	31-36SC0001	SO					X		X	31-36	N1	0.00	0.00
120	31-36SC0002	SO	J.Beer	4-18-18			X		X	31-36	N1	0.00	0.00
121	31-37SC0000	SO					X		X	31-37	N1	0.00	0.00
122	31-37SC0000Q	SO					X		X	31-37	FD1	0.00	0.00
123	31-37SC0001	SO					X		X	31-37	N1	0.00	0.00
124	31-37SC0001Q	SO					X		X	31-37	FD1	0.00	0.00
125	31-37SC0002	SO					X		X	31-37	N1	0.00	0.00
126	31-37SC0002Q	SO					X		X	31-37	FD1	0.00	0.00
Cooler #		Turnaround Time: 14 Days											

Relinquished by: *(Signature)*	Date	Time
J.Beer	4-18-18	1200
FX		

Received by: *(Signature)*	Date	Time
FedEx	4-18-18	1200
J. Correa	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 14 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/18-15
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
127	31-38SC0000	SO							X	31-38	N1	0.00	0.00
128	31-38SC0001	SO							X	31-38	N1	0.00	0.00
129	31-38SC0002	SO							X	31-38	N1	0.00	0.00
130	31-39SC0000	SO	J. Beer 4-18-18						X	31-39	N1	0.00	0.00
131	31-39SC0001	SO							X	31-39	N1	0.00	0.00
132	31-39SC0002	SO							X	31-39	N1	0.00	0.00
133	31-40SC0000	SO							X	31-40	N1	0.00	0.00
134	31-40SC0001	SO							X	31-40	N1	0.00	0.00
135	31-40SC0002	SO							X	31-40	N1	0.00	0.00
Cooler #		**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	
FX			J. Conroe	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 15 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-16

FA 53517

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM					Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
	Event ID: Basewide Range Assessment April 2018						11	13	8	13								
136	~~31-41SC0000~~	~~SO~~								X					~~31-41~~	N1	0.00	~~0.00~~
137	31-41SC0001	SO								X					31-41	N1	0.00	0.00
138	31-41SC0002	SO								X					31-41	N1	0.00	0.00
139	31-42SC0000	SO	J.Beer	4-18-18						X					31-42	N1	0.00	0.00
140	31-42SC0000Q	SO								X					31-42	FD1	0.00	0.00
141	31-42SC0001	SO								X					31-42	N1	0.00	0.00
142	31-42SC0001Q	SO								X					31-42	FD1	0.00	0.00
143	31-42SC0002	SO								X					31-42	N1	0.00	0.00
144	~~31-42SC0002Q~~	~~SO~~								X					~~31-42~~	FD1	0.00	~~0.00~~
Cooler #		**Turnaround Time: 14 Days**																

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J.Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Cesare	04-19-18	09:30

Shipping Date / Carrier / Airbill Number

8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 16 of 18

5.1 5

FA53517: Chain of Custody
Page 16 of 20

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/18-17
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top - Bottom	
						11	13	8	13				
145	~~31-43SC0000~~	~~SO~~	J.Beer 4-18-18					X		~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
146	~~31-43SC0001~~	~~SO~~						X		~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
147	~~31-43SC0002~~	~~SO~~						X		~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
148	31-ER01SC	WQ	4-17-18	16:30	RP/LF	X				FIELDQC	EB1	0.00	0.00
149	~~31-ER02SC~~	~~WQ~~				X				~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
150	~~31-ER03SC~~	~~WQ~~				X				~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
151	31-ER04SC	WQ	J.Beer 4-18-18			X		X		FIELDQC	EB1	0.00	0.00
152	~~31-ER05SC~~	~~WQ~~				X		X		~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
153	~~31-ER06SC~~	~~WQ~~				X		X		~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~

Cooler # | Turnaround Time: 14 Days

lined out JB

√ Analyte JB

lined out JB

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Conac	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 17 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/18-17 FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
145	~~31-43SC0000~~	~~SO~~	J. Beer 4-18-18						X	~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
146	~~31-43SC0001~~	~~SO~~							X	~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
147	~~31-43SC0002~~	~~SO~~							X	~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
148	31-ER01SC	WQ	4-17-18	16:30	RP/LF	X				FIELDQC	EB1	0.00	0.00
149	~~31-ER02SC~~	~~WQ~~				X				~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
150	~~31-ER03SC~~	~~WQ~~				X				~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
151	31-ER04SC	WQ	J. Beer 4-18-18			X		X		FIELDQC	EB1	0.00	0.00
152	~~31-ER05SC~~	~~WQ~~				X		X		~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
153	~~31-ER06SC~~	~~WQ~~				X		X		~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
	Cooler #	**Turnaround Time: 14 Days**											

29

Analyze JB

Analyze JB

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			Carrie	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 17 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-18
FA 53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

						Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM							
Event ID: Basewide Range Assessment April 2018							11	13	8	13							
	Sample ID	Matrix	Date	Time	Samp Init.									Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
154																	
155																	
156																	
157																	
158																	
159			J.Beer	4-18-18													
160																	
161																	
162																	
Cooler #		Turnaround Time: 14 Days															

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-18-18	
FX		

Received by: *(Signature)*	Date	Time
FedEx	4-18-18	1200
J. Cone	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* & condition

ENV.COC_Record
April 13, 2018

Page 18 of 18

FA53517: Chain of Custody
Page 19 of 20

SGS Sample Receipt Summary

Job Number: FA53517 **Client:** GILBANE **Project:** BRA KEMRON

Date / Time Received: 4/19/2018 9:30:00 AM **Delivery Method:** FX **Airbill #'s:** 1002826072710003281100780581127816

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (24.4);

Cooler Temps (Corrected) °C: Cooler 1: (24.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☐		☑
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments SAMPLES RECEIVED AT AMBIENT TEMP, NO ICE

SM001
Rev. Date 05/24/17

Technician: JORGEC Date: 4/19/2018 9:30:00 AM Reviewer: HW Date: 4/19/2018

QC Evaluation: DOD QSM5 Limits

Job Number: FA53517
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/17/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP33665	SW846 6020A						
MP33665-B1	7439-92-1	Lead	BSP	REC	107.5	%	88-115
MP33665-S1*	7439-92-1	Lead	MS	REC	94	%	88-115
MP33665-S2*	7439-92-1	Lead	MSD	REC	94.5	%	88-115
MP33665-S2*	7439-92-1	Lead	MSD	RPD	.5	%	20
MP33665-D1*	7439-92-1	Lead	DUP	RPD	0	%	20
MP33698	SW846 6010C						
MP33698-B1	7439-92-1	Lead	BSP	REC	106	%	81-112
MP33698-S1	7439-92-1	Lead	MS	REC	200.4 [a]	%	81-112
MP33698-S2	7439-92-1	Lead	MSD	REC	1006 [a]	%	81-112
MP33698-S2	7439-92-1	Lead	MSD	RPD	2.4	%	20
MP33698-D1	7439-92-1	Lead	DUP	RPD	.6	%	20
MP33698-D2	7439-92-1	Lead	DUP	RPD	1.8	%	20

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

* Sample used for QC is not from job FA53517

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:37	MA14858-STD1	1		STDA
08:41	MA14858-STD2	1		STDB
08:45	MA14858-STD3	1		STDC
08:48	MA14858-STD4	1		STDD
08:52	MA14858-STD5	1		STDE
08:56	MA14858-STD6	1		STDF
09:00	MA14858-STD7	1		STDG
09:04	MA14858-HSTD1	1		
09:07	MA14858-HSTD2	1		
09:11	MA14858-ICV1	1		
09:15	MA14858-ICB1	1		
09:18	MA14858-CRIA1	1		
09:22	MA14858-ICSA1	1		
09:26	MA14858-ICSAB1	1		
09:29	MA14858-CCV1	1		
09:33	MA14858-CCV2	1		
09:37	MA14858-CCB1	1		
09:40	MP33666-MB1	2		
09:44	MP33666-B1	2		
09:48	FA53574-4F	2		(sample used for QC only; not part of login FA53517)
09:51	MP33666-D1	2		
09:55	MP33666-SD1	10		
09:58	MP33666-S1	2		
10:02	MP33666-S2	2		
10:06	MP33666-PS1	2		
10:09	ZZZZZZ	2		
10:13	ZZZZZZ	2		
10:17	MA14858-CCV3	1		
10:20	MA14858-CCV4	1		
10:24	MA14858-CCB2	1		
10:28	ZZZZZZ	2		
10:31	ZZZZZZ	2		
10:35	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:38	ZZZZZZ	2		
10:42	ZZZZZZ	2		
10:46	ZZZZZZ	2		
10:49	ZZZZZZ	2		
10:53	ZZZZZZ	2		
10:57	ZZZZZZ	2		
11:00	ZZZZZZ	2		
11:04	MA14858-CCV5	1		
11:07	MA14858-CCV6	1		
11:11	MA14858-CCB3	1		
11:15	ZZZZZZ	2		
11:18	ZZZZZZ	2		
11:22	ZZZZZZ	2		
11:26	ZZZZZZ	2		
11:29	ZZZZZZ	2		
11:33	ZZZZZZ	2		
11:36	ZZZZZZ	2		
11:40	MP33666-MB2A	2		
11:51	MA14858-CCV7	1		
11:55	MA14858-CCV8	1		
11:58	MA14858-CCB4	1		
12:49	MA14858-CCV9	1		
12:53	MA14858-CCV10	1		
12:57	MA14858-CCB5	1		
13:11	MP33665-MB1	2		
13:15	MP33665-B1	2		
13:18	FA53517-25	2		
13:22	ZZZZZZ	2		
13:26	ZZZZZZ	2		
13:29	ZZZZZZ	2		
13:33	ZZZZZZ	2		
13:36	MA14858-CCV11	1		
13:40	MA14858-CCV12	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:44	MA14858-CCB6	1		
13:47	ZZZZZZ	2		
13:51	ZZZZZZ	2		
13:55	ZZZZZZ	2		
13:58	ZZZZZZ	2		
14:02	ZZZZZZ	2		
14:05	ZZZZZZ	2		
14:09	MP33665-MB2	2		
14:13	FA53456-6	20		(sample used for QC only; not part of login FA53517)
14:16	MP33665-D1	20		
14:20	MP33665-SD1	100		
14:24	MA14858-CCV13	1		
14:27	MA14858-CCV14	1		
14:31	MA14858-CCB7	1		
14:35	MP33665-S1	20		
14:38	MP33665-S2	20		
---------->	Last reportable sample/prep for job FA53517			
14:42	MP33665-PS1	20		
14:46	ZZZZZZ	20		
14:49	ZZZZZZ	20		
14:53	ZZZZZZ	20		
14:56	ZZZZZZ	20		
15:00	ZZZZZZ	20		
15:04	ZZZZZZ	20		
15:07	ZZZZZZ	20		
15:11	MA14858-CCV15	1		
15:15	MA14858-CCV16	1		
15:18	MA14858-CCB8	1		
15:22	ZZZZZZ	20		
15:36	MA14858-CRIA2	1		
15:40	MA14858-ICSA2	1		
15:44	MA14858-ICSAB2	1		
15:47	MA14858-CCV17	1		
15:51	MA14858-CCV18	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:55	MA14858-CCB9	1		
---------->	Last reportable CCB for job FA53517			
	Refer to raw data for calibration curve and standards.			

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
08:37	MA14858-STD1	100	100	100	100	100	100	100	100
08:41	MA14858-STD2	97.8	100.5	99.1	99.8	99.9	101.3	100.6	101.1
08:45	MA14858-STD3	94.5	99.6	99.8	99.5	99.8	100.5	100	97.8
08:48	MA14858-STD4	96.6	97.3	97.6	97.7	97.9	99.3	99.3	98.4
08:52	MA14858-STD5	90.2	95.8	95.4	96.4	95.8	98.5	96.3	93
08:56	MA14858-STD6	82.3	96	96	96.2	94.9	98.8	93.6	89.1
09:00	MA14858-STD7	86.7	96.1	93.9	94.1	93.2	97.2	90.1	83.2
09:04	MA14858-HSTD1	82.1	97.6	96	96	95.3	99.2	94.6	89.5
09:07	MA14858-HSTD2	84.4	97.6	95.8	95.7	94	98.9	91.4	84.5
09:11	MA14858-ICV1	91.2	97.8	96.2	96.4	95.8	100.1	94.9	89.5
09:15	MA14858-ICB1	89.9	98.1	100	99.9	98.6	101.9	101.5	99.8
09:18	MA14858-CRIA1	96	100.3	100.9	100.5	100	102.3	102.5	99.2
09:22	MA14858-ICSA1	80.8	103.2	94.5	92.1	90.1	92.4	80.3	78.6
09:26	MA14858-ICSAB1	79.2	103.4	93.6	92.5	90.2	93.8	80.6	79.7
09:29	MA14858-CCV1	88.3	96.3	97.6	97.4	95.7	101	98.5	92.9
09:33	MA14858-CCV2	91.1	97.4	97.6	97.2	95	101.1	96.1	89.1
09:37	MA14858-CCB1	100.4	97.8	99.8	99.5	98.6	101.6	102.5	96.2
09:40	MP33666-MB1	86.9	92.4	92.1	92.4	93.6	100	100.2	75.7
09:44	MP33666-B1	87.3	92.5	90.6	90.3	90.2	99.3	93.2	73.9
09:48	FA53574-4F	93.8	94.4	92.2	92.2	91.7	99.2	93.5	71.6
09:51	MP33666-D1	90.9	95.4	92.9	93.3	92.6	100.6	93.3	72
09:55	MP33666-SD1	104.1	100.2	100.4	100.3	97.7	102.1	100.5	90.1
09:58	MP33666-S1	84.7	92.9	89.2	89.7	89.4	97.7	89.6	68.3 !
10:02	MP33666-S2	86.8	94.8	90.9	90.7	89.9	98.2	90	70.5
10:06	MP33666-PS1	No results reported for the elements associated with this internal standard.							
10:09	ZZZZZZ	92.8	93.8	93.3	92.8	92.7	101.5	98	72
10:13	ZZZZZZ	96.2	93.1	91.2	91.1	90	99.8	96.1	70.6
10:17	MA14858-CCV3	95.6	101.2	101.1	100	97	102	98.9	92.2
10:20	MA14858-CCV4	99.8	103.1	101.4	100.2	97	102.5	97	89.5
10:24	MA14858-CCB2	102.2	98.4	99.8	99.9	96.6	99.9	100.2	95
10:28	ZZZZZZ	87.1	87.9	86.6	86.6	85.1	94.1	90.4	66.4 !
10:31	ZZZZZZ	88.1	88.8	88	88	86.7	95.8	92.2	68.3 !
10:35	ZZZZZZ	89.8	90.4	87.4	87.9	86.4	95.6	89.3	66.4 !

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:38	ZZZZZZ	87.7	88.3	86.4	86.6	85.3	94.3	90.3	66.5 !
10:42	ZZZZZZ	92.7	90	88.5	88.6	87	95.2	92.6	69.3 !
10:46	ZZZZZZ	88.5	88	86.3	86.9	85.7	94.9	92.4	67.6 !
10:49	ZZZZZZ	85	89.5	85.6	85.8	83.1	93.4	88.2	65 !
10:53	ZZZZZZ	88	86.7	85.4	85.7	84.2	93.9	90.2	66 !
10:57	ZZZZZZ	84.3	88	85.9	86.2	84.4	93.5	88.2	66.2 !
11:00	ZZZZZZ	86.5	87.4	85.7	85.7	84.3	94.1	90.1	66.6 !
11:04	MA14858-CCV5	98	93.1	93.4	93.1	88.9	95.7	92.7	86
11:07	MA14858-CCV6	91.9	94.2	92.4	92.2	88.1	93.8	90.5	82.3
11:11	MA14858-CCB3	96	90.2	91.2	91.2	87.6	90.8	92	86
11:15	ZZZZZZ	87	86.6	85.6	85.5	84.2	93.5	90.1	67.1 !
11:18	ZZZZZZ	89.9	86.3	85.6	84.7	84	93.4	89.1	65.8 !
11:22	ZZZZZZ	102.9	92.4	82.8	82.6	81.8	88.2	76	61.2 !
11:26	ZZZZZZ	87.8	86.4	86.2	85.3	83.6	93.7	89.6	65.7 !
11:29	ZZZZZZ	88	87	86	85.7	84.7	94	90.7	66.3 !
11:33	ZZZZZZ	95.1	86.4	85.1	85.7	84.1	93.8	88.9	65.8 !
11:36	ZZZZZZ	114.9	86.8	86	85.3	83.8	94.4	89.6	65.1 !
11:40	MP33666-MB2A	85.8	86.1	85	85.5	83.6	92.4	91	66.6 !
11:51	MA14858-CCV7	99.8	99.9	99.2	98.2	94.6	102.1	98.6	90.2
11:55	MA14858-CCV8	96.9	100.1	99.2	98.8	94.1	101.2	96.2	87.2
11:58	MA14858-CCB4	101.1	100.7	101.1	100.8	97.1	102.8	101.8	95.5
12:49	MA14858-CCV9	110.7	109.6	107.6	107.2	100.4	105.6	101.7	93
12:53	MA14858-CCV10	110.5	110.6	106.4	105.8	98.3	105.7	99.3	89.4
12:57	MA14858-CCB5	112.6	109.5	108.6	109.2	101.5	107	105.5	97.7
13:11	MP33665-MB1	106.8	106.3	103	102.2	99.4	110.1	106.5	77.7
13:15	MP33665-B1	102.6	97.6	94.2	93.5	90.7	104.1	96.4	70
13:18	FA53517-25	106.9	102.6	99.3	98.6	94.6	106.4	99.7	73.9
13:22	ZZZZZZ	109.6	102.9	99.8	99.2	93.9	105.7	100.1	73.9
13:26	ZZZZZZ	102.9	100.6	98.1	97.8	92.7	104.4	99.7	73.6
13:29	ZZZZZZ	101.6	97.6	94.6	94.5	90.1	98.2	95	69 !
13:33	ZZZZZZ	103.8	93.2	90.4	90.1	85.3	96.9	93	66.3 !
13:36	MA14858-CCV11	108.9	102.8	101	100.6	92.7	101.1	96	87.7
13:40	MA14858-CCV12	106.8	104.4	100.3	99.7	91.9	100	94.3	86.7

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:44	MA14858-CCB6	104.1	98.2	98.3	98.2	90.7	96.7	95.8	87.8
13:47	ZZZZZZ	95.8	92.6	90.3	90.2	85.4	97.4	92.7	66.7 !
13:51	ZZZZZZ	100.4	93.4	90.7	90.9	86.4	97.8	94.5	67.8 !
13:55	ZZZZZZ	97	91.9	89.4	89.2	84.1	96.4	92	66.1 !
13:58	ZZZZZZ	100.6	93.3	91.2	90.8	86.5	98.6	95.7	67.6 !
14:02	ZZZZZZ	93.7	94.6	88.8	88.4	84.1	96.5	91.3	64.3 !
14:05	ZZZZZZ	97.7	90	88.8	87.8	83.8	95.6	93	65.1 !
14:09	MP33665-MB2	100.1	91.1	88.3	88.9	84.6	94.7	92.8	65.6 !
14:13	FA53456-6	101.5	112.6	100.5	99.7	91.8	97.8	84.6	73.2
14:16	MP33665-D1	110.8	116	102.8	102.4	95.2	100.6	86.6	75.5
14:20	MP33665-SD1	119	112.4	106.5	105.8	98.9	107.3	98.8	89.7
14:24	MA14858-CCV13	109.1	103.5	101.7	101.5	95.4	105.5	101.8	89.3
14:27	MA14858-CCV14	111	104.5	101.2	102.1	95.6	104.9	99.5	87.7
14:31	MA14858-CCB7	113.6	103.5	103.4	103.1	97.2	105.3	105.6	95.3
14:35	MP33665-S1	107.4	116.4	102.8	102.8	94.4	100.8	86.2	75.3
14:38	MP33665-S2	108.3	117.9	103.5	102.6	95	102	87.4	75.9
14:42	MP33665-PS1	No results reported for the elements associated with this internal standard.							
14:46	ZZZZZZ	115.6	106.5	104.4	103.4	99.5	108.3	106.2	95.4
14:49	ZZZZZZ	114.2	107.4	103.5	103.7	98.4	108	103.2	91.5
14:53	ZZZZZZ	116.2	108.2	104.1	103.4	97.7	107.9	102.5	88.8
14:56	ZZZZZZ	118.6	107.3	104.4	104.7	98.4	108.1	104.7	90.2
15:00	ZZZZZZ	121.1	109.3	104.8	104.4	99	108.7	105.4	92.5
15:04	ZZZZZZ	110.5	111.4	105.3	104.3	97.5	107.7	99.1	87.5
15:07	ZZZZZZ	111.2	105.7	101	100.3	93.5	102	93.8	84
15:11	MA14858-CCV15	113	99.4	97.4	97.8	91.2	100.2	97.1	85.8
15:15	MA14858-CCV16	108.8	102.9	98	98.4	92	101.3	96.1	85.2
15:18	MA14858-CCB8	108.8	97.6	96.7	96.9	90.5	98.7	98.9	89
15:22	ZZZZZZ	106.7	105.6	101.6	100.7	93.2	101.9	94.5	83.5
15:36	MA14858-CRIA2	104.1	101.3	99.1	98.5	91.9	99.4	99.1	89.2
15:40	MA14858-ICSA2	88.6	100.9	91.7	89.1	84	92.4	79.7	73
15:44	MA14858-ICSAB2	86.5	103.1	93.1	91.1	86.3	96.1	82.8	75.1
15:47	MA14858-CCV17	102.6	100	98.1	98	93.5	105.9	102.9	86.5
15:51	MA14858-CCV18	96.3	100.9	98.9	98.6	92.7	105.5	100.2	84.9

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:55	MA14858-CCB9	104.4	100.4	100.3	99.8	95	106.3	105.9	92.5

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium	70-130 %	70-130 %
Istd#3	Germanium (72-2)	70-130 %	70-130 %
Istd#4	Germanium (74-2)	70-130 %	70-130 %
Istd#5	Indium	70-130 %	70-130 %
Istd#6	Terbium	70-130 %	70-130 %
Istd#7	Bismuth	70-130 %	70-130 %
Istd#8	Tellurium	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14858 Units: ug/l

Time: / Sample ID:			09:15 ICB1		09:37 CCB1		10:24 CCB2		11:11 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	100	4.4	anr							
Antimony	1.0	.1	anr							
Arsenic	1.0	.1	anr							
Barium	1.0	.1	anr							
Beryllium	1.0	.1	anr							
Cadmium	1.0	.1	anr							
Calcium	100	7.2	anr							
Chromium	1.0	.1	anr							
Cobalt	1.0	.1	anr							
Copper	1.0	.1	anr							
Iron	100	7.9	anr							
Lead	1.0	.1	-0.00353	<1.0	-0.00895	<1.0	-0.0129	<1.0	-0.0161	<1.0
Magnesium	100	5.2	anr							
Manganese	1.0	.1	anr							
Molybdenum	1.0	.1								
Nickel	1.0	.1	anr							
Potassium	100	6.6	anr							
Selenium	1.0	.11	anr							
Silver	1.0	.1	anr							
Sodium	100	4.8	anr							
Strontium	1.0	.1								
Thallium	1.0	.1	anr							
Tin	1.0	.1								
Titanium	1.0	.3								
Vanadium	1.0	.1	anr							
Zinc	2.0	.29	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14858 Units: ug/l

Time: / Sample ID:			11:58 CCB4		12:57 CCB5		13:44 CCB6		14:31 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	100	4.4	anr							
Antimony	1.0	.1	anr							
Arsenic	1.0	.1	anr							
Barium	1.0	.1	anr							
Beryllium	1.0	.1	anr							
Cadmium	1.0	.1	anr							
Calcium	100	7.2	anr							
Chromium	1.0	.1	anr							
Cobalt	1.0	.1	anr							
Copper	1.0	.1	anr							
Iron	100	7.9	anr							
Lead	1.0	.1	-0.0164	<1.0	-0.00817	<1.0	-0.0130	<1.0	-0.0173	<1.0
Magnesium	100	5.2	anr							
Manganese	1.0	.1	anr							
Molybdenum	1.0	.1								
Nickel	1.0	.1	anr							
Potassium	100	6.6	anr							
Selenium	1.0	.11	anr							
Silver	1.0	.1	anr							
Sodium	100	4.8	anr							
Strontium	1.0	.1								
Thallium	1.0	.1	anr							
Tin	1.0	.1								
Titanium	1.0	.3								
Vanadium	1.0	.1	anr							
Zinc	2.0	.29	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14858 Units: ug/l

Time: / Sample ID:			15:18 CCB8		15:55 CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	100	4.4	anr			
Antimony	1.0	.1	anr			
Arsenic	1.0	.1	anr			
Barium	1.0	.1	anr			
Beryllium	1.0	.1	anr			
Cadmium	1.0	.1	anr			
Calcium	100	7.2	anr			
Chromium	1.0	.1	anr			
Cobalt	1.0	.1	anr			
Copper	1.0	.1	anr			
Iron	100	7.9	anr			
Lead	1.0	.1	-0.0225	<1.0	-0.0206	<1.0
Magnesium	100	5.2	anr			
Manganese	1.0	.1	anr			
Molybdenum	1.0	.1				
Nickel	1.0	.1	anr			
Potassium	100	6.6	anr			
Selenium	1.0	.11	anr			
Silver	1.0	.1	anr			
Sodium	100	4.8	anr			
Strontium	1.0	.1				
Thallium	1.0	.1	anr			
Tin	1.0	.1				
Titanium	1.0	.3				
Vanadium	1.0	.1	anr			
Zinc	2.0	.29	anr			

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	ICV True	09:11 ICV1 Results	% Rec	CCV True	09:29 CCV1 Results	% Rec	CCV True	09:33 CCV2 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	100	99.0	99.0				100	98.9	98.9
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time:		10:17			10:20			11:04	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				100	97.5	97.5			
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	CCV True	11:07 CCV6 Results	% Rec	CCV True	11:51 CCV7 Results	% Rec	CCV True	11:55 CCV8 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	100	97.1	97.1				100	96.7	96.7
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time:		12:49			12:53			13:36	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				100	96.7	96.7			
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	CCV True	13:40 CCV12 Results	% Rec	CCV True	14:24 CCV13 Results	% Rec	CCV True	14:27 CCV14 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	100	97.1	97.1				100	97.2	97.2
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	CCV True	15:11 CCV15 Results	% Rec	CCV True	15:15 CCV16 Results	% Rec	CCV True	15:47 CCV17 Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				100	96.8	96.8			
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time:		15:51	
Sample ID:	CCV	CCV18	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	100	96.6	96.6
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver			
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time:		09:04			09:07	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead				200	200	100.0
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: CRI 70-130% CRIA 80-120% Run ID: MA14858 Units: ug/l

Time:			09:18		15:36	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100	100	anr			
Antimony	1.0	1.0	anr			
Arsenic	1.0	1.0	anr			
Barium	1.0	1.0	anr			
Beryllium	1.0	1.0	anr			
Cadmium	1.0	1.0	anr			
Calcium	100	100	anr			
Chromium	1.0	1.0	anr			
Cobalt	1.0	1.0	anr			
Copper	1.0	1.0	anr			
Iron	100	100	anr			
Lead	1.0	1.0	0.874	87.4	0.766	76.6
Magnesium	100	100	anr			
Manganese	1.0	1.0	anr			
Molybdenum	1.0	1.0				
Nickel	1.0	1.0	anr			
Potassium	100	100	anr			
Selenium	1.0	1.0	anr			
Silver	1.0	1.0	anr			
Sodium	100	100	anr			
Strontium	1.0	1.0				
Thallium	1.0	1.0	anr			
Tin	1.0	1.0				
Titanium	1.0	1.0				
Vanadium	1.0	1.0	anr			
Zinc	1.0	1.0	anr			

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	09:22 ICSA1 Results	% Rec	09:26 ICSAB1 Results	% Rec	15:40 ICSA2 Results	% Rec	15:44 ICSAB2 Results	% Rec
Aluminum	100000	100000	96500	96.5	95800	95.8	97900	97.9	98200	98.2
Antimony			0.0321		0.0207		0.00740		0.0100	
Arsenic		20	0.0859		19.8	99.0	0.0799		19.3	96.5
Barium			0.0801		0.0750		0.0827		0.0759	
Beryllium			0.0123		0.0151		0.0184		0.0137	
Cadmium		20	0.369		18.3	91.5	0.387		17.9	89.5
Calcium	100000	100000	94900	94.9	93800	93.8	91700	91.7	92100	92.1
Chromium		20	1.30 (a)		21.4	107.0	1.29		21.6	108.0
Cobalt		20	0.0108		19.3	96.5	0.00647		19.1	95.5
Copper		20	-1.73		17.0	85.0	-1.98		16.6	83.0
Iron	100000	100000	101000	101.0	102000	102.0	104000	104.0	105000	105.0
Lead			0.00557		0.0207		-0.0154		0.00125	
Magnesium	100000	100000	99100	99.1	98500	98.5	103000	103.0	103000	103.0
Manganese		20	0.294		20.5	102.5	0.284		20.2	101.0
Molybdenum	2000	2000	2040	102.0	2050	102.5	2110	105.5	2130	106.5
Nickel		20	0.125		18.8	94.0	0.123		18.6	93.0
Potassium	100000	100000	103000	103.0	103000	103.0	103000	103.0	103000	103.0
Selenium			0.0742		0.0495		0.0544		0.0483	
Silver		20	0.0359		17.3	86.5	0.0206		17.0	85.0
Sodium	100000	100000	99400	99.4	99300	99.3	104000	104.0	104000	104.0
Strontium			0.981		0.983		0.980		0.968	
Thallium			0.0114		0.00831		0.00448		0.00348	
Tin			0.124		0.113		0.0939		0.0901	
Titanium	2000	2000	1990	99.5	1980	99.0	1970	98.5	1960	98.0
Vanadium			0.0115		0.00722		0.00862		0.0121	
Zinc		20	-0.562		17.7	88.5	-0.571		17.6	88.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) Possible trace level contamination.

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14873
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:51	MA14873-STD1	1		STDA
09:55	MA14873-STD2	1		STDB
09:59	MA14873-STD3	1		STDC
10:02	MA14873-STD4	1		STDD
10:06	MA14873-HSTD1	1		
10:14	MA14873-ICV1	1		
10:24	MA14873-ICB1	1		
10:27	MA14873-CRIA1	1		
10:31	MA14873-CRIA2	1		
10:39	MA14873-ICSA1	1		
10:51	MA14873-ICSAB1	1		
11:00	MA14873-CCV1	1		
11:07	MA14873-CCB1	1		
11:22	ZZZZZZ	10		
11:26	ZZZZZZ	200		
11:30	ZZZZZZ	1		
11:35	MP33693-MB1	1		
11:39	MP33693-B1	1		
11:43	FA53831-1L	1		(sample used for QC only; not part of login FA53517)
11:47	MP33693-D1	1		
11:52	MP33693-SD1	5		
11:56	MP33693-S1	1		
12:00	MA14873-CCV2	1		
12:04	MA14873-CCB2	1		
12:08	MP33693-S2	1		
12:12	ZZZZZZ	1		
12:17	MP33693-D2	1		
12:21	MP33693-MB2	1		
12:25	MP33693-B2	1		
12:29	MP33693-MB3	1		
12:34	MP33693-B3	1		
12:38	MA14873-CCV3	1		
12:44	MA14873-CCB3	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14873
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:56	MP33696-MB1	1		
13:00	MP33696-B1	1		
13:04	FA53802-14	1		(sample used for QC only; not part of login FA53517)
13:08	MP33696-D1	1		
13:12	MP33696-SD1	5		
13:21	MP33696-S1	1		
13:30	MP33696-S2	1		
13:33	MP33696-PS1	1		
13:38	ZZZZZZ	1		
13:42	MA14873-CCV4	1		
13:46	MA14873-CCB4	1		
13:50	MA14873-CCV5	1		
13:57	MA14873-CCB5	1		
14:02	ZZZZZZ	1		
14:06	ZZZZZZ	1		
14:10	ZZZZZZ	1		
14:14	ZZZZZZ	1		
14:19	ZZZZZZ	1		
14:23	ZZZZZZ	1		
14:27	ZZZZZZ	1		
14:31	ZZZZZZ	1		
14:36	ZZZZZZ	1		
14:40	ZZZZZZ	1		
14:44	MA14873-CCV6	1		
14:48	MA14873-CCB6	1		
14:52	ZZZZZZ	1		
14:52	ZZZZZZ	1		
14:57	ZZZZZZ	1		
14:57	ZZZZZZ	1		
15:01	MP33695-MB1	1		
15:05	MP33695-B1	1		
15:09	FA53703-1	1		(sample used for QC only; not part of login FA53517)
15:13	MP33695-D1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14873
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:18	MP33695-SD1	5		
15:22	MP33695-PS1	1		
15:26	MP33695-S1	1		
15:30	MP33695-S2	1		
15:34	MA14873-CCV7	1		
15:38	MA14873-CCB7	1		
15:47	ZZZZZZ	1		
15:51	ZZZZZZ	1		
15:55	ZZZZZZ	1		
16:00	ZZZZZZ	1		
16:04	ZZZZZZ	1		
16:08	ZZZZZZ	1		
16:13	ZZZZZZ	1		
16:17	ZZZZZZ	1		
16:21	ZZZZZZ	1		
16:26	MA14873-CCV8	1		
16:30	MA14873-CCB8	1		
16:34	ZZZZZZ	1		
16:38	ZZZZZZ	1		
16:42	ZZZZZZ	1		
16:47	ZZZZZZ	1		
16:51	ZZZZZZ	1		
16:55	ZZZZZZ	1		
17:00	ZZZZZZ	1		
17:04	ZZZZZZ	1		
17:08	ZZZZZZ	1		
17:12	MP33695-MB2A	1		
17:17	MA14873-CCV9	1		
17:21	MA14873-CCB9	1		
17:25	MP33698-MB1	5		
17:29	MP33698-B1	5		
18:06	MA14873-CCV10	1		
18:10	MA14873-CCB10	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14873
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:15	FA53517-4	5		
18:19	FA53517-10	5		
18:27	FA53517-16	5		
18:31	FA53517-19	5		
18:35	FA53517-22	5		
---------->	Last reportable sample/prep for job FA53517			
18:39	MA14873-CRIA3	1		
18:44	MA14873-ICSA2	1		
18:48	MA14873-ICSAB2	1		
18:52	MA14873-CCV11	1		
18:56	MA14873-CCB11	1		
---------->	Last reportable CCB for job FA53517			
	Refer to raw data for calibration curve and standards.			

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14873
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:51	MA14873-STD1	3342	26552	2180	1189
09:55	MA14873-STD2	3345	26290	2208	1128
09:59	MA14873-STD3	3154	24764	2118	1009
10:02	MA14873-STD4	3084	24451	2154	952
10:06	MA14873-HSTD1	3091	24678	2144	955
10:14	MA14873-ICV1	3181	25063	2180	1022
10:24	MA14873-ICB1	3298 R	26005 R	2167 R	1164 R
10:27	MA14873-CRIA1	3299	25946	2154	1133
10:31	MA14873-CRIA2	3280			
10:39	MA14873-ICSA1	2942	22726	2094	902
10:51	MA14873-ICSAB1	2904	22773	2085	885
11:00	MA14873-CCV1	3119	25065	2164	1006
11:07	MA14873-CCB1	3264	25854	2196	1160
11:22	ZZZZZZ	3257	26178	2240	1150
11:26	ZZZZZZ	3225	25714	2183	1139
11:30	ZZZZZZ	3189	25046	2099	1107
11:35	MP33693-MB1	3273	26110	2175	1156
11:39	MP33693-B1	3137	24534	2114	1042
11:43	FA53831-1L	3051	24001	2131	1009
11:47	MP33693-D1	3026	23747	2071	1004
11:52	MP33693-SD1	3137	24789	2124	1077
11:56	MP33693-S1	2985	23602	2068	959
12:00	MA14873-CCV2	3104	24531	2136	996
12:04	MA14873-CCB2	3216	25487	2171	1144
12:08	MP33693-S2	3010	23955	2138	972
12:12	ZZZZZZ	2922	23768	2119	981
12:17	MP33693-D2	3003	24057	2107	1001
12:21	MP33693-MB2	3077	24345	2134	1028
12:25	MP33693-B2	3040	23866	2112	980
12:29	MP33693-MB3	3240	25873	2187	1150
12:34	MP33693-B3	3157	25014	2141	1051
12:38	MA14873-CCV3	3094	24055	2078	984
12:44	MA14873-CCB3	3226	25589	2180	1144

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14873
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:56	MP33696-MB1	3224	25814	2183	1142
13:00	MP33696-B1	3118	25003	2164	1043
13:04	FA53802-14	3101	25174	2169	1075
13:08	MP33696-D1	3086	24891	2128	1070
13:12	MP33696-SD1	3198	25773	2213	1131
13:21	MP33696-S1	3057	24570	2144	1005
13:30	MP33696-S2	3062	24108	2122	997
13:33	MP33696-PS1	3103	24545	2129	1051
13:38	ZZZZZZ	3015	23986	2093	1023
13:42	MA14873-CCV4	3065	24357	2139	988
13:46	MA14873-CCB4	3191	25373	2172	1132
13:50	MA14873-CCV5	3072	24600	2181	990
13:57	MA14873-CCB5	3190	25478	2207	1136
14:02	ZZZZZZ	2975	24162	2142	1000
14:06	ZZZZZZ	2922	23217	2059	977
14:10	ZZZZZZ	3027	24261	2125	1026
14:14	ZZZZZZ	3116	25126	2182	1070
14:19	ZZZZZZ	3115	25028	2167	1081
14:23	ZZZZZZ	3214	25450	2213	1032
14:27	ZZZZZZ	3110	24865	2166	1066
14:31	ZZZZZZ	3044	24677	2148	1068
14:36	ZZZZZZ	3197	25999	2302	1043
14:40	ZZZZZZ	2974	24506	2152	1035
14:44	MA14873-CCV6	3024	24767	2172	985
14:48	MA14873-CCB6	3160	25749	2212	1138
14:52	ZZZZZZ	No results reported for the elements associated with this internal standard.			
14:52	ZZZZZZ	2993	24610	2218	1003
14:57	ZZZZZZ	No results reported for the elements associated with this internal standard.			
14:57	ZZZZZZ	2936	24008	2146	969
15:01	MP33695-MB1	3136	26120	2197	1133
15:05	MP33695-B1	3055	25029	2174	1039
15:09	FA53703-1	3111	25517	2196	1103
15:13	MP33695-D1	3114	25559	2196	1108

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14873
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:18	MP33695-SD1	3135	25512	2166	1119
15:22	MP33695-PS1	3108	25163	2188	1075
15:26	MP33695-S1	3070	24862	2169	1023
15:30	MP33695-S2	3066	24877	2167	1020
15:34	MA14873-CCV7	3044	24493	2158	987
15:38	MA14873-CCB7	3171	25451	2177	1133
15:47	ZZZZZZ	3083	25059	2153	1078
15:51	ZZZZZZ	3012	24358	2129	1032
15:55	ZZZZZZ	3068	25007	2170	1072
16:00	ZZZZZZ	3061	24947	2144	1065
16:04	ZZZZZZ	3066	24783	2142	1065
16:08	ZZZZZZ	2961	23842	2088	1008
16:13	ZZZZZZ	3053	24665	2136	1050
16:17	ZZZZZZ	2846	22479	2086	910
16:21	ZZZZZZ	3105	24908	2118	1083
16:26	MA14873-CCV8	3043	24357	2152	984
16:30	MA14873-CCB8	3185	25504	2143	1133
16:34	ZZZZZZ	3131	25042	2144	1098
16:38	ZZZZZZ	3095	25017	2141	1085
16:42	ZZZZZZ	3065	24654	2126	1060
16:47	ZZZZZZ	3064	24528	2116	1054
16:51	ZZZZZZ	3148	25200	2155	1091
16:55	ZZZZZZ	3071	24660	2124	1064
17:00	ZZZZZZ	3128	24966	2134	1094
17:04	ZZZZZZ	3139	25161	2155	1097
17:08	ZZZZZZ	3182	25532	2160	1133
17:12	MP33695-MB2A	3100	24821	2082	1106
17:17	MA14873-CCV9	3058	24458	2141	987
17:21	MA14873-CCB9	3170	24996	2115	1123
17:25	MP33698-MB1	3177	25149	2108	1121
17:29	MP33698-B1	3152	25045	2119	1093
18:06	MA14873-CCV10	3078	23983	2095	984
18:10	MA14873-CCB10	3154	24799	2087	1118

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14873
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:15	FA53517-4	3245	25257	2143	1060
18:19	FA53517-10	3393	26206	2248	1070
18:27	FA53517-16	3295	25734	2198	1077
18:31	FA53517-19	3383	26325	2247	1052
18:35	FA53517-22	3237	25061	2146	1063
18:39	MA14873-CRIA3	3154	24631	2086	1085
18:44	MA14873-ICSA2	2866	22037	2028	878
18:48	MA14873-ICSAB2	2851	21983	2005	866
18:52	MA14873-CCV11	3068	24114	2079	980
18:56	MA14873-CCB11	3201	24993	2087	1132

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14873 Units: ug/l

Time: / Sample ID:			10:24 ICB1		11:07 CCB1		12:04 CCB2		12:44 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	4.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.100	<20	0.900	<20	0.400	<5.0	0.800	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5	anr							
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5	anr							
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14873 Units: ug/l

Time: / Sample ID:			13:46 CCB4		13:57 CCB5		14:48 CCB6		15:38 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	4.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	1.10	<5.0	0.500	<5.0	0.200	<5.0	0.200	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14873 Units: ug/l

Time: / Sample ID:			16:30 CCB8		17:21 CCB9		18:10 CCB10		18:56 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	4.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.900	<5.0	0.400	<5.0	0.600	<5.0	0.800	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14873 Units: ug/l

Time:		10:14			11:00			12:00	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1950	97.5	2000	1980	99.0	2000	2000	100.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14873 Units: ug/l

Time:		12:38			13:42			13:50	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2050	102.5	2000	2020	101.0	2000	2000	100.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14873 Units: ug/l

Time:		14:44			15:34			16:26	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1990	99.5	2000	1990	99.5	2000	2000	100.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14873 Units: ug/l

Time:		17:17			18:06			18:52	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2010	100.5	2000	2030	101.5	2000	2030	101.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14873 Units: ug/l

Time:		10:06	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	3970	99.3
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium	anr		
Thallium	anr		
Tin	anr		
Titanium	anr		
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14873 Units: ug/l

Time: / Sample ID: / Metal	CRI True	CRIA True	10:27 CRIA1 Results	% Rec	10:31 CRIA2 Results	% Rec	18:39 CRIA3 Results	% Rec
Aluminum	400	200	anr					
Antimony	10	5.0	anr					
Arsenic	20	10	anr					
Barium	400	200	anr					
Beryllium	10	5.0	anr					
Cadmium	10	5.0	anr					
Calcium	2000	1000	anr					
Chromium	20	10	anr					
Cobalt	100	50	anr					
Copper	50	25	anr					
Iron	600	300	anr					
Lead	10	5.0	4.80	96.0			5.50	110.0
Magnesium	10000	5000	anr					
Manganese	30	15	anr					
Molybdenum	100	50	anr					
Nickel	80	40	anr					
Potassium	20000	10000	anr					
Selenium	20	10						
Silver	20	10	anr					
Sodium	20000	10000	anr					
Strontium	20	10	anr					
Thallium	20	10	anr					
Tin	100	50	anr					
Titanium	20	10	anr					
Vanadium	100	50	anr					
Zinc	40	20	anr					

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050418M1.ICP Date Analyzed: 05/04/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14873 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:39 ICSA1 Results	% Rec	10:51 ICSAB1 Results	% Rec	18:44 ICSA2 Results	% Rec	18:48 ICSAB2 Results	% Rec
Aluminum	500000	500000	512000	102.4	511000	102.2	521000	104.2	521000	104.2
Antimony		1000	0.00		961	96.1	2.60		971	97.1
Arsenic		1000	0.00		1030	103.0	0.700		1030	103.0
Barium		500	0.600		513	102.6	0.800		518	103.6
Beryllium		500	0.00		505	101.0	0.00		513	102.6
Cadmium		1000	0.00		932	93.2	-0.100		946	94.6
Calcium	500000	500000	470000	94.0	466000	93.2	480000	96.0	477000	95.4
Chromium		500	0.00		484	96.8	-0.300		498	99.6
Cobalt		500	-0.300		475	95.0	-0.200		484	96.8
Copper		500	0.00		538	107.6	-0.400		548	109.6
Iron	200000	200000	184000	92.0	178000	89.0	189000	94.5	182000	91.0
Lead		1000	-0.200		951	95.1	0.400		966	96.6
Magnesium	500000	500000	492000	98.4	498000	99.6	504000	100.8	508000	101.6
Manganese		500	0.00		489	97.8	0.00		502	100.4
Molybdenum		1000	0.100		863	86.3	0.100		878	87.8
Nickel		1000	0.00		952	95.2	-0.300		965	96.5
Potassium			32.8		-3.40		49.4		70.5	
Selenium		1000	0.00		934	93.4	3.10		934	93.4
Silver		1000	-0.200		1020	102.0	0.300		1040	104.0
Sodium			141		130		138		142	
Strontium		1000	0.300		948	94.8	0.200		965	96.5
Thallium		1000	-1.20		897	89.7	0.900		913	91.3
Tin		1000	0.300		884	88.4	0.400		892	89.2
Titanium		1000	0.200		937	93.7	0.500		960	96.0
Vanadium		500	0.900		472	94.4	0.800		482	96.4
Zinc		1000	-1.90		927	92.7	-2.40		943	94.3

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14876
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:14	MA14876-STD1	1		STDA
09:18	MA14876-STD2	1		STDB
09:21	MA14876-STD3	1		STDC
09:25	MA14876-STD4	1		STDD
09:28	MA14876-HSTD1	1		
09:35	MA14876-ICV1	1		
09:48	MA14876-ICB1	1		
09:56	MA14876-CRIA1	1		
10:10	MA14876-ICSA1	1		
10:16	MA14876-ICSAB1	1		
10:23	MA14876-CCV1	1		
10:31	MA14876-CCB1	1		
11:18	MA14876-CCV2	1		
11:22	MA14876-CCB2	1		
11:56	MP33701-MB1	1		
12:01	MP33701-B1	1		
12:05	FA53803-15	1		(sample used for QC only; not part of login FA53517)
12:09	MA14876-CCV3	1		
12:13	MA14876-CCB3	1		
12:17	MP33701-D1	1		
12:21	MP33701-SD1	5		
12:26	MP33701-PS1	1		
12:30	MP33701-S1	1		
12:34	MP33701-S2	1		
12:38	ZZZZZZ	20		
12:42	FA53517-7	25		
12:46	MP33698-D1	25		
12:50	MP33698-D2	25		
12:55	MP33698-S1	25		
12:59	MA14876-CCV4	1		
13:03	MA14876-CCB4	1		
13:07	MP33698-S2	25		
13:11	MP33698-PS1	25		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14876
Parameters: Pb

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	13:15	MP33698-SD1	125		
	13:20	FA53517-1	100		
	13:24	FA53517-13	125		
---------->		Last reportable sample/prep for job FA53517			
	13:37	ZZZZZZ	1		
	13:41	ZZZZZZ	1		
	13:45	ZZZZZZ	1		
	13:50	MA14876-CCV5	1		
	13:54	MA14876-CCB5	1		
	14:24	MA14876-CCV6	1		
	14:34	MA14876-CCB6	1		
	14:38	ZZZZZZ	1		
	14:42	ZZZZZZ	1		
	14:46	ZZZZZZ	1		
	14:51	ZZZZZZ	1		
	14:55	ZZZZZZ	1		
	14:59	ZZZZZZ	1		
	15:03	ZZZZZZ	1		
	15:08	ZZZZZZ	1		
	15:12	ZZZZZZ	1		
	15:16	ZZZZZZ	1		
	15:21	MA14876-CCV7	1		
	15:25	MA14876-CCB7	1		
	15:29	MP33701-MB2A	1		
	15:33	MP33704-MB1	1		
	15:38	MP33704-B1	1		
	15:42	ZZZZZZ	1		
	15:46	MP33704-D1	1		
	15:50	MP33704-SD1	5		
	15:54	MP33704-PS1	1		
	15:59	MP33704-S1	1		
	16:03	MP33704-S2	1		
	16:07	FA53920-2	1		(sample used for QC only; not part of login FA53517)
	16:11	MA14876-CCV8	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14876
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:15	MA14876-CCB8	1		
16:19	ZZZZZZ	1		
16:24	ZZZZZZ	1		
16:28	ZZZZZZ	1		
16:32	ZZZZZZ	1		
16:36	ZZZZZZ	1		
16:41	ZZZZZZ	1		
16:45	ZZZZZZ	1		
16:49	ZZZZZZ	1		
16:53	MP33705-MB1	1		
16:58	MP33705-B1	1		
17:02	MA14876-CCV9	1		
17:06	MA14876-CCB9	1		
17:10	FA53967-2	5		(sample used for QC only; not part of login FA53517)
17:15	MP33705-D1	5		
17:19	MP33705-SD1	25		
17:23	MP33705-PS1	5		
17:28	MP33705-S1	5		
17:32	MP33705-S2	5		
17:37	ZZZZZZ	5		
17:41	ZZZZZZ	5		
17:46	ZZZZZZ	5		
17:50	ZZZZZZ	5		
17:55	MA14876-CCV10	1		
17:59	MA14876-CCB10	1		
18:03	ZZZZZZ	5		
18:07	ZZZZZZ	5		
18:12	ZZZZZZ	1		
18:16	MA14876-CRIA2	1		
18:20	MA14876-ICSA2	1		
18:25	MA14876-ICSAB2	1		
18:29	MA14876-CCV11	1		
18:33	MA14876-CCB11	1		

----------> Last reportable CCB for job FA53517
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14876
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:14	MA14876-STD1	2231	21484	1966	865
09:18	MA14876-STD2	2212	21188	1966	824
09:21	MA14876-STD3	2125	20537	1942	753
09:25	MA14876-STD4	2047	20089	1934	700
09:28	MA14876-HSTD1	2046	20127	1920	702
09:35	MA14876-ICV1	2105	20426	1939	751
09:48	MA14876-ICB1	2206 R	21410 R	1952 R	858 R
09:56	MA14876-CRIA1	2173	21040	1966	831
10:10	MA14876-ICSA1	1900	18670	1915	656
10:16	MA14876-ICSAB1	1915	18509	1903	649
10:23	MA14876-CCV1	2082	20306	1952	744
10:31	MA14876-CCB1	2176	21237	1979	851
11:18	MA14876-CCV2	2115	20139	1930	743
11:22	MA14876-CCB2	2197	20762	1929	846
11:56	MP33701-MB1	2168	20790	1946	839
12:01	MP33701-B1	2127	20287	1920	777
12:05	FA53803-15	2124	20403	1924	803
12:09	MA14876-CCV3	2099	19942	1925	739
12:13	MA14876-CCB3	2187	20870	1924	844
12:17	MP33701-D1	2102	20261	1933	799
12:21	MP33701-SD1	2175	20806	1952	836
12:26	MP33701-PS1	2100	20191	1958	784
12:30	MP33701-S1	2069	19735	1910	753
12:34	MP33701-S2	2064	19986	1956	751
12:38	ZZZZZZ	2076	20287	1989	786
12:42	FA53517-7	2193	21672	2090	815
12:46	MP33698-D1	2198	21559	2085	810
12:50	MP33698-D2	2209	21422	2066	810
12:55	MP33698-S1	2218	21322	2059	811
12:59	MA14876-CCV4	2073	20238	1987	740
13:03	MA14876-CCB4	2147	20639	1967	833
13:07	MP33698-S2	2218	21271	2049	810
13:11	MP33698-PS1	2224	21342	2058	813

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14876
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:15	MP33698-SD1	2181	21068	2017	838
13:20	FA53517-1	2164	21116	1998	840
13:24	FA53517-13	2150	20854	1991	834
13:37	ZZZZZZ	2075	20307	1967	795
13:41	ZZZZZZ	2067	20411	1961	795
13:45	ZZZZZZ	2085	20633	1975	803
13:50	MA14876-CCV5	2046	19986	1968	731
13:54	MA14876-CCB5	2149	20978	1971	840
14:24	MA14876-CCV6	2053	19841	1924	729
14:34	MA14876-CCB6	2165	20661	1938	839
14:38	ZZZZZZ	1951	18809	1852	712
14:42	ZZZZZZ	2134	20239	1928	802
14:46	ZZZZZZ	2164	20584	1959	819
14:51	ZZZZZZ	2057	19761	1910	767
14:55	ZZZZZZ	2075	19683	1881	768
14:59	ZZZZZZ	2183	20346	1910	830
15:03	ZZZZZZ	2172	20425	1928	818
15:08	ZZZZZZ	2181	20603	1946	823
15:12	ZZZZZZ	2231	20868	1980	825
15:16	ZZZZZZ	2193	20588	1935	827
15:21	MA14876-CCV7	2114	19614	1888	736
15:25	MA14876-CCB7	2207	20430	1918	843
15:29	MP33701-MB2A	2206	20701	1926	848
15:33	MP33704-MB1	2200	20562	1912	844
15:38	MP33704-B1	2147	19845	1912	773
15:42	ZZZZZZ	2210	20600	1974	806
15:46	MP33704-D1	2206	20703	1972	810
15:50	MP33704-SD1	2215	20654	1943	840
15:54	MP33704-PS1	2203	20610	1977	793
15:59	MP33704-S1	2173	20068	1961	759
16:03	MP33704-S2	2168	19972	1935	756
16:07	FA53920-2	2176	20255	1929	815
16:11	MA14876-CCV8	2123	19884	1928	742

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14876
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:15	MA14876-CCB8	2199	20481	1904	837
16:19	ZZZZZZ	2156	20149	1923	814
16:24	ZZZZZZ	2161	20301	1938	811
16:28	ZZZZZZ	2161	20480	1942	814
16:32	ZZZZZZ	2199	20660	1955	826
16:36	ZZZZZZ	2190	20703	1981	821
16:41	ZZZZZZ	2204	20848	1994	812
16:45	ZZZZZZ	2158	20217	1915	818
16:49	ZZZZZZ	2162	20457	1958	817
16:53	MP33705-MB1	2186	21074	1980	854
16:58	MP33705-B1	2124	20102	1962	779
17:02	MA14876-CCV9	2098	19926	1955	739
17:06	MA14876-CCB9	2198	20678	1951	846
17:10	FA53967-2	2003	19223	1968	652
17:15	MP33705-D1	2047	19595	2012	656
17:19	MP33705-SD1	2095	20029	1953	758
17:23	MP33705-PS1	2005	19242	1967	647
17:28	MP33705-S1	2023	19360	1967	651
17:32	MP33705-S2	2002	19347	1966	648
17:37	ZZZZZZ	1949	18814	1923	648
17:41	ZZZZZZ	1995	19362	1968	648
17:46	ZZZZZZ	1983	19213	1945	663
17:50	ZZZZZZ	1922	18710	1893	647
17:55	MA14876-CCV10	2047	19686	1913	724
17:59	MA14876-CCB10	2186	20983	1970	848
18:03	ZZZZZZ	1854	18113	1862	637
18:07	ZZZZZZ	1937	18685	1930	639
18:12	ZZZZZZ	2304	22005	2125	780
18:16	MA14876-CRIA2	2161	20441	1936	817
18:20	MA14876-ICSA2	1908	18033	1861	647
18:25	MA14876-ICSAB2	1874	17571	1820	632
18:29	MA14876-CCV11	2072	19798	1915	732
18:33	MA14876-CCB11	2179	20641	1942	841

R = Reference for ISTD limits. ! = Outside limits.

INTERNAL STANDARD SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14876
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14876 Units: ug/l

Time: / Sample ID:			09:48 ICB1		10:31 CCB1		11:22 CCB2		12:13 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	4.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.200	<20	0.300	<20	0.300	<5.0	0.200	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5	anr							
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5	anr							
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14876 Units: ug/l

Time: / Sample ID:			13:03 CCB4		13:54 CCB5		14:34 CCB6		15:25 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	4.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.900	<5.0	0.200	<5.0	1.00	<5.0	0.200	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14876 Units: ug/l

Time: / Sample ID:			16:15 CCB8		17:06 CCB9		17:59 CCB10		18:33 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	4.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	1.00	<5.0	0.500	<5.0	0.100	<5.0	0.100	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14876 Units: ug/l

Time:		09:35			10:23			11:18	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1950	97.5	2000	1980	99.0	2000	2030	101.5
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14876 Units: ug/l

Time:		12:09			12:59			13:50	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	2000	2030	101.5	2000	1990	99.5	2000	2020	101.0
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14876 Units: ug/l

Time: / Sample ID: / Metal	CCV True	14:24 CCV6 Results	% Rec	CCV True	15:21 CCV7 Results	% Rec	CCV True	16:11 CCV8 Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	2000	1980	99.0	2000	2020	101.0	2000	2010	100.5
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14876 Units: ug/l

Time:		17:02			17:55			18:29	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	2000	2010	100.5	2000	2030	101.5	2000	2020	101.0
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14876 Units: ug/l

Time:		09:28	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	4020	100.5
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium	anr		
Thallium	anr		
Tin	anr		
Titanium	anr		
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14876 Units: ug/l

Time:			09:56		18:16	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	anr			
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	anr			
Cobalt	100	50	anr			
Copper	50	25	anr			
Iron	600	300	anr			
Lead	10	5.0	4.70	94.0	4.90	98.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10	anr			
Thallium	20	10	anr			
Tin	100	50	anr			
Titanium	20	10	anr			
Vanadium	100	50	anr			
Zinc	40	20	anr			

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB050718M1.ICP Date Analyzed: 05/07/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14876 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:10 ICSA1 Results	% Rec	10:16 ICSAB1 Results	% Rec	18:20 ICSA2 Results	% Rec	18:25 ICSAB2 Results	% Rec
Aluminum	500000	500000	496000	99.2	503000	100.6	505000	101.0	519000	103.8
Antimony		1000	-0.500		977	97.7	1.30		973	97.3
Arsenic		1000	-1.30		1040	104.0	-0.200		1050	105.0
Barium		500	0.500		503	100.6	0.800		515	103.0
Beryllium		500	-0.100		495	99.0	0.00		507	101.4
Cadmium		1000	0.00		931	93.1	-1.10		941	94.1
Calcium	500000	500000	450000	90.0	454000	90.8	462000	92.4	473000	94.6
Chromium		500	-0.600		482	96.4	0.100		496	99.2
Cobalt		500	0.00		477	95.4	0.100		480	96.0
Copper		500	0.00		550	110.0	0.00		555	111.0
Iron	200000	200000	177000	88.5	174000	87.0	176000	88.0	179000	89.5
Lead		1000	-0.200		944	94.4	-1.20		959	95.9
Magnesium	500000	500000	506000	101.2	507000	101.4	513000	102.6	523000	104.6
Manganese		500	0.100		498	99.6	0.100		506	101.2
Molybdenum		1000	0.400		873	87.3	1.30		877	87.7
Nickel		1000	0.00		957	95.7	-0.700		966	96.6
Potassium			16.0		-0.600		52.0		82.7	
Selenium		1000	0.100		937	93.7	-0.600		941	94.1
Silver		1000	0.800		1040	104.0	0.700		1050	105.0
Sodium			131		124		163		158	
Strontium		1000	0.800		934	93.4	0.100		953	95.3
Thallium		1000	-0.100		895	89.5	0.400		902	90.2
Tin		1000	0.700		896	89.6	1.10		910	91.0
Titanium		1000	1.70		951	95.1	1.80		965	96.5
Vanadium		500	0.500		474	94.8	1.50		487	97.4
Zinc		1000	-2.00		927	92.7	-1.40		946	94.6

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date:				04/28/18		04/28/18	
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	8.7	22				
Antimony	2.0	.2	.2				
Arsenic	2.0	.2	.21				
Barium	2.0	.2	.2				
Beryllium	2.0	.2	.2				
Cadmium	2.0	.2	.2				
Calcium	200	14	36				
Chromium	2.0	.2	.2				
Cobalt	2.0	.2	.2				
Copper	2.0	.2	.2				
Iron	200	16	23				
Lead	2.0	.2	.2	-0.10	<2.0		
Magnesium	200	10	19				
Manganese	2.0	.2	.2				
Molybdenum	2.0	.2	.39				
Nickel	2.0	.2	.2				
Potassium	200	13	75				
Selenium	2.0	.22	.22				
Silver	2.0	.2	.2				
Sodium	200	9.6	24				
Strontium	2.0	.2	.2				
Thallium	2.0	.2	.2				
Tin	2.0	.2	.2				
Titanium	2.0	.61	.88				
Vanadium	2.0	.2	.24				
Zinc	4.0	.58	1.7				

Associated samples MP33665: FA53517-25

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 04/28/18 04/28/18

Metal	FA53456-6 Original	DUP	RPD	QC Limits	FA53456-6 Original	MS	Spikelot MPICPMS1	% Rec	QC Limits
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	0.0	0.0 (a)	NC	0-20	0.0	188 (a)	200	94.0	80-120
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

Associated samples MP33665: FA53517-25

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 04/28/18

Metal	FA53456-6 Original	MSD	Spikelot MPICPMS1	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	0.0	189 (a)	200	94.5	0.5	20
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP33665: FA53517-25

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 04/28/18

Metal	BSP Result	Spikelot MPICPMS1	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	215	200	107.5	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP33665: FA53517-25

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 04/28/18

Metal	FA53456-6 Original	SDL 20:100	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	0.00	0.00	NC	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP33665: FA53517-25

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33698
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/04/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	3.5		
Antimony	2.0	.1	.13		
Arsenic	1.0	.13	.2		
Barium	20	.1	.1		
Beryllium	0.50	.02	.05		
Cadmium	0.40	.02	.05		
Calcium	500	5	5		
Chromium	1.0	.1	.1		
Cobalt	5.0	.02	.05		
Copper	2.5	.1	.1		
Iron	30	1.7	1.7		
Lead	2.0	.1	.1	0.92	<2.0
Magnesium	500	3.5	3.6		
Manganese	1.5	.05	.05		
Molybdenum	5.0	.03	.05		
Nickel	4.0	.04	.05		
Potassium	1000	20	20		
Selenium	2.0	.24	.24		
Silver	1.0	.07	.082		
Sodium	1000	50	50		
Strontium	1.0	.05	.05		
Thallium	1.0	.11	.11		
Tin	5.0	.09	.09		
Titanium	1.0	.05	.05		
Vanadium	5.0	.05	.05		
Zinc	2.0	.3	.3		

Associated samples MP33698: FA53517-1, FA53517-4, FA53517-7, FA53517-10, FA53517-13, FA53517-16, FA53517-19, FA53517-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33698
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/04/18				05/04/18	
Metal	FA53517-7 Original	DUP	RPD	QC Limits	FA53517-7 Original	DUP	RPD	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	1640	1650	0.6	0-20	1640	1670	1.8	0-20
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33698: FA53517-1, FA53517-4, FA53517-7, FA53517-10, FA53517-13, FA53517-16, FA53517-19, FA53517-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33698 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/04/18

Metal	FA53517-7 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	1640	1650	4.99	200.4(a)	80-120
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP33698: FA53517-1, FA53517-4, FA53517-7, FA53517-10, FA53517-13, FA53517-16, FA53517-19, FA53517-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33698
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/04/18

Metal	FA53517-7 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	1640	1690	4.97	1006.0(a	2.4	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP33698: FA53517-1, FA53517-4, FA53517-7, FA53517-10, FA53517-13, FA53517-16, FA53517-19, FA53517-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33698
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/04/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	10.6	10	106.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33698: FA53517-1, FA53517-4, FA53517-7, FA53517-10, FA53517-13, FA53517-16, FA53517-19, FA53517-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33698 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 05/04/18

Metal	FA53517-7 Original	SDL 25:125%DIF		QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	81900	85600	4.6	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33698: FA53517-1, FA53517-4, FA53517-7, FA53517-10, FA53517-13, FA53517-16, FA53517-19, FA53517-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53517
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33698 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 05/04/18

Metal	Sample ml	Final ml	FA53517-7 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	81870	80232.6	81080	0.2	2.5	50	1694.8*a	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33698: FA53517-1, FA53517-4, FA53517-7, FA53517-10, FA53517-13, FA53517-16, FA53517-19, FA53517-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Instrument Detection Limits

Job Number: FA53517
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: AGICPMS1 **Effective Date:** 05/21/16

Analyte	IDL ug/l
Aluminum	4.35
Antimony	.1
Arsenic	.1
Arsenic	.1
Barium	.1
Beryllium	.1
Boron	.5
Cadmium	.1
Cadmium	.1
Calcium	7.2
Calcium	7.2
Chromium	.1
Chromium	.1
Cobalt	.1
Cobalt	.1
Copper	.1
Copper	.1
Iron	7.9
Iron	7.9
Lead	.1
Magnesium	5.2
Manganese	.1
Manganese	.1
Molybdenum	.1
Nickel	.1
Nickel	.1
Potassium	6.57
Selenium	.11
Selenium	.11
Silver	.1
Sodium	4.8
Strontium	.1
Thallium	.1
Tin	.1
Tin	.1
Titanium	.303
Vanadium	.1
Vanadium	.1
Zinc	.29
Zinc	.29

The above applies to the following instrument runs:
MA14858

Instrument Detection Limits

Job Number: FA53517
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14873,MA14876

Instrument Linear Ranges

Job Number: FA53517
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: AGICPMS1 **Effective Date:** 05/21/16

Analyte	Linear Range ug/l
Aluminum	100000
Antimony	1000
Arsenic	1000
Arsenic	1000
Barium	1000
Beryllium	1000
Cadmium	1000
Cadmium	1000
Calcium	100000
Calcium	100000
Chromium	1000
Chromium	1000
Cobalt	1000
Cobalt	1000
Copper	1000
Copper	1000
Iron	100000
Iron	100000
Lead	1000
Magnesium	100000
Manganese	1000
Manganese	1000
Molybdenum	1000
Nickel	1000
Nickel	1000
Potassium	100000
Selenium	1000
Selenium	1000
Silver	100
Sodium	100000
Strontium	1000
Thallium	1000
Tin	1000
Tin	1000
Titanium	1000
Vanadium	1000
Vanadium	1000
Zinc	1000
Zinc	1000

The above applies to the following instrument runs:
MA14858

Instrument Linear Ranges

Job Number: FA53517
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14873,MA14876

Metals Analysis

Raw Data

Quantitation Report

File Name	001CALB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:29
Sample Name	Blank
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	-908.49	771.35	2.218E-03	Pulse	0.50	3
As			1	-0.002	ug/l	-68.35	23.33	6.708E-05	Pulse	1.00	3
Mo			1	0.000	ug/l	-571.19	23.33	4.392E-05	Pulse	0.50	3
Pb			1	0.089	ug/l	18.41	21,627.02	2.059E-03	Pulse	1.00	3
Be			1	-0.001	ug/l	-172.09	0.17	3.903E-07	Pulse	2.00	3
Ag			1	0.001	ug/l	13.78	191.33	3.600E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	374.14	35.33	9.805E-06	Pulse	0.50	3
Tl			1	0.001	ug/l	13.36	261.33	2.488E-05	Pulse	0.50	3
Sn			1	0.021	ug/l	29.14	970.03	2.690E-04	Pulse	0.30	3
Sr			1	0.008	ug/l	175.90	1,380.06	3.828E-04	Pulse	0.50	3
[Pb]			1	0.089	ug/l	20.38	10,255.11	9.760E-04	Pulse	0.50	3
Ca			1	0.622	ug/l	68.02	148.67	3.504E-04	Pulse	0.50	3
Ti			1	-0.002	ug/l	-311.45	2.00	4.728E-06	Pulse	0.50	3
Na			1	0.458	ug/l	22.19	24,203.89	5.701E-02	Pulse	1.00	3
Mg			1	0.020	ug/l	107.40	178.33	4.201E-04	Pulse	1.00	3
K			1	-0.046	ug/l	-464.91	14,105.37	3.323E-02	Pulse	1.00	3
V			1	0.005	ug/l	59.67	659.35	1.553E-03	Pulse	0.50	3
Mn			1	0.001	ug/l	420.56	126.67	3.642E-04	Pulse	0.50	3
Fe			1	0.271	ug/l	140.02	10,484.57	3.018E-02	Pulse	0.50	3
Co			1	0.001	ug/l	42.30	324.67	9.335E-04	Pulse	0.50	3
Ni			1	0.017	ug/l	19.08	429.34	1.234E-03	Pulse	0.50	3
Cu			1	0.979	ug/l	20.73	110,442.75	3.176E-01	Pulse	0.50	3
Zn			1	1.620	ug/l	20.61	14,856.76	2.796E-02	Pulse	1.00	3
Cd			1	-0.001	ug/l	-99.69	4.00	7.557E-06	Pulse	0.50	3
Al			1	0.284	ug/l	41.06	454.68	1.071E-03	Pulse	1.00	3
Se			1	-0.008	ug/l	-43.31	23.22	6.440E-06	Pulse	3.00	3
Sb			1	0.016	ug/l	26.12	1,075.70	2.024E-03	Pulse	1.00	3
Se			1	-0.019	ug/l	-94.44	35.55	1.133E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,508,839.33	0.93	100.0	Analog	0.50	3
1	Sc		424,539.18	0.73	100.0	Pulse	0.30	3
1	Ge		347,809.38	0.29	100.0	Pulse	0.30	3
1	In		3,605,687.78	0.52	100.0	Pulse	0.30	3
1	Tb		14,535,780.00	0.68	100.0	Analog	0.50	3
1	Lu		8,664,215.00	0.70	100.0	Analog	0.50	3
1	Ge		531,511.78	0.81	100.0	Pulse	0.30	3
1	Te		31,381.52	0.46	100.0	Pulse	0.50	3
1	Li		2,254.59	4.80	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:33
Sample Name	Blank
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.001	ug/l	190.86	789.35	2.281E-03	Pulse	0.50	3
As			1	0.000	ug/l	-204.93	27.00	7.802E-05	Pulse	1.00	3
Mo			1	0.000	ug/l	-151.67	19.33	3.655E-05	Pulse	0.50	3
Pb			1	0.002	ug/l	166.16	13,653.79	1.294E-03	Pulse	1.00	3
Be			1	0.001	ug/l	304.94	0.50	1.164E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	-138.32	124.67	2.360E-04	Pulse	0.50	3
Ba			1	-0.002	ug/l	-80.98	20.00	5.533E-06	Pulse	0.50	3
Tl			1	0.000	ug/l	94.29	98.67	9.351E-06	Pulse	0.50	3
Sn			1	-0.002	ug/l	-405.94	660.02	1.829E-04	Pulse	0.30	3
Sr			1	-0.005	ug/l	-133.98	1,216.71	3.372E-04	Pulse	0.50	3
[Pb]			1	0.001	ug/l	540.03	6,469.91	6.133E-04	Pulse	0.50	3
Ca			1	-0.360	ug/l	-123.24	100.67	2.361E-04	Pulse	0.50	3
Ti			1	0.000	ug/l	-45744.15	2.67	6.229E-06	Pulse	0.50	3
Na			1	0.293	ug/l	33.19	23,912.55	5.601E-02	Pulse	1.00	3
Mg			1	0.011	ug/l	151.63	170.00	3.981E-04	Pulse	1.00	3
K			1	0.239	ug/l	171.20	14,441.27	3.383E-02	Pulse	1.00	3
V			1	0.002	ug/l	23.13	618.01	1.448E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	-1595.24	117.33	3.390E-04	Pulse	0.50	3
Fe			1	0.006	ug/l	212.73	5,602.17	1.619E-02	Pulse	0.50	3
Co			1	0.000	ug/l	63.70	315.33	9.110E-04	Pulse	0.50	3
Ni			1	0.001	ug/l	636.34	241.33	6.971E-04	Pulse	0.50	3
Cu			1	0.082	ug/l	21.33	81,466.71	2.354E-01	Pulse	0.50	3
Zn			1	0.285	ug/l	30.94	9,626.08	1.823E-02	Pulse	1.00	3
Cd			1	-0.001	ug/l	-189.59	5.33	1.006E-05	Pulse	0.50	3
Al			1	-0.001	ug/l	-5354.55	367.33	8.603E-04	Pulse	1.00	3
Se			1	0.026	ug/l	139.81	28.89	8.001E-06	Pulse	3.00	3
Sb			1	0.010	ug/l	6.50	982.36	1.861E-03	Pulse	1.00	3
Se			1	-0.037	ug/l	-162.06	33.89	1.082E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,549,910.67	0.15	100.0	Analog	0.50	3
1	Sc		426,912.46	0.90	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		346,118.75	0.43	100.0	Pulse	0.30	3
1	In		3,608,037.08	0.53	100.0	Pulse	0.30	3
1	Tb		14,587,467.33	0.28	100.0	Analog	0.50	3
1	Lu		8,574,224.33	0.55	100.0	Analog	0.50	3
1	Ge		527,903.12	0.81	100.0	Pulse	0.30	3
1	Te		31,357.50	1.31	100.0	Pulse	0.50	3
1	Li		2,124.57	1.37	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:37
Sample Name	CALSTD-1
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	---	775.35	2.230E-03	Pulse	0.50	3
As			1	0.000	ug/l	---	28.00	8.054E-05	Pulse	1.00	3
Mo			1	0.000	ug/l	---	25.33	4.769E-05	Pulse	0.50	3
Pb			1	0.000	ug/l	---	13,418.27	1.279E-03	Pulse	1.00	3
Be			1	0.000	ug/l	---	0.33	7.832E-07	Pulse	2.00	3
Ag			1	0.000	ug/l	---	142.00	2.671E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	---	32.67	9.111E-06	Pulse	0.50	3
Tl			1	0.000	ug/l	---	82.00	7.802E-06	Pulse	0.50	3
Sn			1	0.000	ug/l	---	678.91	1.889E-04	Pulse	0.30	3
Sr			1	0.000	ug/l	---	1,276.05	3.551E-04	Pulse	0.50	3
[Pb]			1	0.000	ug/l	---	6,411.89	6.112E-04	Pulse	0.50	3
Ca			1	0.000	ug/l	---	118.67	2.780E-04	Pulse	0.50	3
Ti			1	0.000	ug/l	---	2.67	6.253E-06	Pulse	0.50	3
Na			1	0.000	ug/l	---	23,159.00	5.424E-02	Pulse	1.00	3
Mg			1	0.000	ug/l	---	157.67	3.694E-04	Pulse	1.00	3
K			1	0.000	ug/l	---	14,227.12	3.333E-02	Pulse	1.00	3
V			1	0.000	ug/l	---	579.34	1.356E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	---	118.67	3.416E-04	Pulse	0.50	3
Fe			1	0.000	ug/l	---	5,524.80	1.590E-02	Pulse	0.50	3
Co			1	0.000	ug/l	---	298.00	8.573E-04	Pulse	0.50	3
Ni			1	0.000	ug/l	---	234.00	6.731E-04	Pulse	0.50	3
Cu			1	0.000	ug/l	---	79,200.10	2.279E-01	Pulse	0.50	3
Zn			1	0.000	ug/l	---	8,589.58	1.616E-02	Pulse	1.00	3
Cd			1	0.000	ug/l	---	9.33	1.758E-05	Pulse	0.50	3
Al			1	0.000	ug/l	---	367.67	8.613E-04	Pulse	1.00	3
Se			1	0.000	ug/l	---	24.44	6.806E-06	Pulse	3.00	3
Sb			1	0.000	ug/l	---	832.02	1.565E-03	Pulse	1.00	3
Se			1	0.000	ug/l	---	37.11	1.190E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,491,739.67	0.85	100.0	Analog	0.50	3
1	Sc		426,910.51	0.61	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		347,584.07	0.53	100.0	Pulse	0.30	3
1	In		3,594,424.99	0.85	100.0	Pulse	0.30	3
1	Tb		14,536,210.33	0.39	100.0	Analog	0.50	3
1	Lu		8,639,808.33	0.87	100.0	Analog	0.50	3
1	Ge		531,604.19	0.27	100.0	Pulse	0.30	3
1	Te		31,191.22	0.13	100.0	Pulse	0.50	3
1	Li		2,295.70	3.50	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:41
Sample Name	CALSTD-2
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.101	ug/l	2.06	3,096.92	8.992E-03	Pulse	0.50	3
As			1	0.106	ug/l	1.58	280.00	8.129E-04	Pulse	1.00	3
Mo			1	0.101	ug/l	7.63	1,672.08	3.152E-03	Pulse	0.50	3
Pb			1	0.033	ug/l	5.16	16,504.63	1.564E-03	Pulse	1.00	3
Be			1	0.079	ug/l	36.00	9.67	2.250E-05	Pulse	2.00	3
Ag			1	0.104	ug/l	4.47	6,342.44	1.196E-02	Pulse	0.50	3
Ba			1	0.110	ug/l	2.15	677.35	1.886E-04	Pulse	0.50	3
Tl			1	0.100	ug/l	1.77	13,900.35	1.317E-03	Pulse	0.50	3
Sn			1	0.126	ug/l	5.00	2,426.84	6.758E-04	Pulse	0.30	3
Sr			1	0.104	ug/l	9.02	2,493.51	6.943E-04	Pulse	0.50	3
[Pb]			1	0.029	ug/l	11.11	7,683.09	7.280E-04	Pulse	0.50	3
Ca			1	12.311	ug/l	10.68	734.68	1.712E-03	Pulse	0.50	3
Ti			1	0.124	ug/l	38.28	54.67	1.272E-04	Pulse	0.50	3
Na			1	9.325	ug/l	2.94	47,475.21	1.106E-01	Pulse	1.00	3
Mg			1	10.514	ug/l	0.33	11,847.50	2.760E-02	Pulse	1.00	3
K			1	10.665	ug/l	4.57	24,004.21	5.592E-02	Pulse	1.00	3
V			1	0.101	ug/l	3.54	2,304.15	5.368E-03	Pulse	0.50	3
Mn			1	0.119	ug/l	4.23	1,320.05	3.833E-03	Pulse	0.50	3
Fe			1	10.308	ug/l	1.59	192,340.09	5.585E-01	Pulse	0.50	3
Co			1	0.100	ug/l	2.78	4,549.22	1.321E-02	Pulse	0.50	3
Ni			1	0.115	ug/l	2.54	1,562.74	4.538E-03	Pulse	0.50	3
Cu			1	-1.519	ug/l	-0.77	30,541.45	8.868E-02	Pulse	0.50	3
Zn			1	-1.190	ug/l	-2.16	3,970.75	7.488E-03	Pulse	1.00	3
Cd			1	0.102	ug/l	3.95	763.35	1.439E-03	Pulse	0.50	3
Al			1	13.734	ug/l	2.93	4,729.90	1.102E-02	Pulse	1.00	3
Se			1	0.106	ug/l	37.24	41.67	1.161E-05	Pulse	3.00	3
Sb			1	0.093	ug/l	2.38	2,259.48	4.260E-03	Pulse	1.00	3
Se			1	-0.047	ug/l	-120.04	33.22	1.054E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,554,187.33	0.30	100.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		429,245.82	0.44	100.5	Pulse	0.30	3
1	Ge		344,425.45	1.00	99.1	Pulse	0.30	3
1	In		3,590,829.30	1.02	99.9	Pulse	0.30	3
1	Tb		14,730,359.00	0.61	101.3	Analog	0.50	3
1	Lu		8,702,400.33	0.28	100.7	Analog	0.50	3
1	Ge		530,336.86	0.88	99.8	Pulse	0.30	3
1	Te		31,530.46	0.92	101.1	Pulse	0.50	3
1	Li		2,244.59	3.67	97.8	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:45
Sample Name	CALSTD-3
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.999	ug/l	0.61	23,936.69	6.903E-02	Pulse	0.50	3
As			1	0.962	ug/l	3.93	2,330.81	6.722E-03	Pulse	1.00	3
Mo			1	0.981	ug/l	0.26	16,014.86	3.026E-02	Pulse	0.50	3
Pb			1	0.904	ug/l	0.43	96,169.13	9.167E-03	Pulse	1.00	3
Be			1	1.053	ug/l	4.88	123.17	2.897E-04	Pulse	2.00	3
Ag			1	1.032	ug/l	1.25	61,557.53	1.163E-01	Pulse	0.50	3
Ba			1	0.999	ug/l	2.20	5,883.64	1.640E-03	Pulse	0.50	3
Tl			1	0.986	ug/l	0.98	135,119.97	1.288E-02	Pulse	0.50	3
Sn			1	1.088	ug/l	1.92	15,789.06	4.400E-03	Pulse	0.30	3
Sr			1	0.997	ug/l	0.18	12,959.13	3.611E-03	Pulse	0.50	3
[Pb]			1	0.920	ug/l	1.25	45,850.50	4.371E-03	Pulse	0.50	3
Ca			1	106.877	ug/l	0.62	5,410.77	1.272E-02	Pulse	0.50	3
Ti			1	1.036	ug/l	8.81	432.01	1.015E-03	Pulse	0.50	3
Na			1	101.604	ug/l	0.21	284,187.08	6.683E-01	Pulse	1.00	3
Mg			1	102.763	ug/l	0.78	113,331.95	2.665E-01	Pulse	1.00	3
K			1	99.691	ug/l	1.14	103,988.87	2.446E-01	Pulse	1.00	3
V			1	0.989	ug/l	1.90	17,231.64	4.052E-02	Pulse	0.50	3
Mn			1	1.041	ug/l	1.44	10,750.34	3.100E-02	Pulse	0.50	3
Fe			1	101.452	ug/l	0.49	1,857,166.84	5.356E+00	Pulse	0.50	3
Co			1	1.007	ug/l	1.08	43,419.11	1.252E-01	Pulse	0.50	3
Ni			1	1.043	ug/l	2.23	12,388.00	3.573E-02	Pulse	0.50	3
Cu			1	-0.618	ug/l	-2.44	59,368.19	1.712E-01	Pulse	0.50	3
Zn			1	0.080	ug/l	19.89	8,860.04	1.674E-02	Pulse	1.00	3
Cd			1	1.044	ug/l	1.74	7,726.30	1.460E-02	Pulse	0.50	3
Al			1	103.406	ug/l	2.19	32,887.97	7.735E-02	Pulse	1.00	3
Se			1	1.058	ug/l	2.68	196.11	5.465E-05	Pulse	3.00	3
Sb			1	0.980	ug/l	0.96	15,810.13	2.988E-02	Pulse	1.00	3
Se			1	0.861	ug/l	12.77	112.67	3.694E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,490,705.33	0.46	100.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		425,232.61	0.93	99.6	Pulse	0.30	3
1	Ge		346,738.20	0.69	99.8	Pulse	0.30	3
1	In		3,588,319.58	0.51	99.8	Pulse	0.30	3
1	Tb		14,613,295.67	1.05	100.5	Analog	0.50	3
1	Lu		8,647,989.67	1.40	100.1	Analog	0.50	3
1	Ge		529,159.16	0.31	99.5	Pulse	0.30	3
1	Te		30,512.77	1.47	97.8	Pulse	0.50	3
1	Li		2,169.02	6.33	94.5	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:48
Sample Name	CALSTD-4
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	10.396	ug/l	1.06	236,593.71	6.976E-01	Pulse	0.50	3
As			1	10.409	ug/l	1.03	24,407.54	7.197E-02	Pulse	1.00	3
Mo			1	10.255	ug/l	0.56	163,987.18	3.158E-01	Pulse	0.50	3
Pb			1	9.999	ug/l	1.83	922,855.62	8.856E-02	Pulse	1.00	3
Be			1	10.641	ug/l	3.70	1,213.54	2.921E-03	Pulse	2.00	3
Ag			1	10.791	ug/l	0.31	630,344.50	1.214E+00	Pulse	0.50	3
Ba			1	10.236	ug/l	2.28	58,813.08	1.672E-02	Pulse	0.50	3
Tl			1	10.048	ug/l	1.73	1,367,500.58	1.312E-01	Pulse	0.50	3
Sn			1	10.305	ug/l	1.27	141,004.73	4.008E-02	Pulse	0.30	3
Sr			1	9.929	ug/l	0.48	115,363.53	3.279E-02	Pulse	0.50	3
[Pb]			1	10.084	ug/l	1.07	435,979.06	4.183E-02	Pulse	0.50	3
Ca			1	1041.361	ug/l	0.46	50,507.42	1.215E-01	Pulse	0.50	3
Ti			1	10.075	ug/l	0.10	4,080.44	9.819E-03	Pulse	0.50	3
Na			1	1029.347	ug/l	0.74	2,607,620.17	6.275E+00	Pulse	1.00	3
Mg			1	1061.494	ug/l	1.43	1,142,498.42	2.750E+00	Pulse	1.00	3
K			1	1034.324	ug/l	1.05	924,507.81	2.225E+00	Pulse	1.00	3
V			1	10.332	ug/l	1.62	170,509.33	4.104E-01	Pulse	0.50	3
Mn			1	10.497	ug/l	0.73	104,935.70	3.094E-01	Pulse	0.50	3
Fe			1	1035.952	ug/l	0.61	18,498,267.33	5.455E+01	Analog	0.50	3
Co			1	10.483	ug/l	0.75	439,432.17	1.296E+00	Pulse	0.50	3
Ni			1	10.748	ug/l	0.38	122,787.50	3.621E-01	Pulse	0.50	3
Cu			1	9.285	ug/l	0.82	365,863.80	1.079E+00	Pulse	0.50	3
Zn			1	10.082	ug/l	1.04	46,514.85	8.958E-02	Pulse	1.00	3
Cd			1	10.698	ug/l	1.19	77,605.11	1.495E-01	Pulse	0.50	3
Al			1	1058.063	ug/l	1.01	325,567.30	7.835E-01	Pulse	1.00	3
Se			1	10.613	ug/l	1.60	1,712.19	4.866E-04	Pulse	3.00	3
Sb			1	10.364	ug/l	0.43	156,354.41	3.011E-01	Pulse	1.00	3
Se			1	9.410	ug/l	4.16	876.91	2.857E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,423,294.67	2.32	99.3	Analog	0.50	3
1	Sc		415,568.34	1.82	97.3	Pulse	0.30	3
1	Ge		339,128.38	0.63	97.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,518,706.87	1.80	97.9	Pulse	0.30	3
1	Tb		14,437,250.33	1.70	99.3	Analog	0.50	3
1	Lu		8,557,350.00	1.67	99.0	Analog	0.50	3
1	Ge		519,262.43	1.18	97.7	Pulse	0.30	3
1	Te		30,693.06	0.59	98.4	Pulse	0.50	3
1	Li		2,217.92	8.53	96.6	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:52
Sample Name	CALSTD-5
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.310	ug/l	0.40	1,094,682.79	3.301E+00	Pulse	0.50	3
As			1	49.810	ug/l	0.35	114,126.12	3.441E-01	Pulse	1.00	3
Mo			1	48.561	ug/l	0.11	766,595.58	1.495E+00	Pulse	0.50	3
Pb			1	48.473	ug/l	0.93	4,286,601.50	4.244E-01	Pulse	1.00	3
Be			1	50.726	ug/l	1.34	5,696.96	1.392E-02	Pulse	2.00	3
Ag			1	50.453	ug/l	0.19	2,909,227.58	5.675E+00	Pulse	0.50	3
Ba			1	49.132	ug/l	1.21	276,246.95	8.021E-02	Pulse	0.50	3
Tl			1	48.683	ug/l	0.81	6,421,379.17	6.358E-01	Mix	0.50	3
Sn			1	49.521	ug/l	1.32	660,840.49	1.919E-01	Pulse	0.30	3
Sr			1	48.644	ug/l	0.79	548,431.54	1.592E-01	Pulse	0.50	3
[Pb]			1	48.998	ug/l	1.39	2,029,094.62	2.009E-01	Pulse	0.50	3
Ca			1	4955.198	ug/l	0.60	236,215.57	5.773E-01	Pulse	0.50	3
Ti			1	49.604	ug/l	0.56	19,771.29	4.832E-02	Pulse	0.50	3
Na			1	4948.226	ug/l	0.60	12,258,670.67	2.996E+01	Analog	1.00	3
Mg			1	5012.422	ug/l	0.96	5,312,034.50	1.298E+01	Analog	1.00	3
K			1	4922.603	ug/l	0.61	4,281,517.67	1.046E+01	Pulse	1.00	3
V			1	49.739	ug/l	0.60	806,181.92	1.970E+00	Pulse	0.50	3
Mn			1	49.581	ug/l	0.35	484,344.02	1.460E+00	Pulse	0.50	3
Fe			1	4916.687	ug/l	1.02	85,840,698.67	2.588E+02	Analog	0.50	3
Co			1	49.266	ug/l	0.64	2,018,638.42	6.086E+00	Pulse	0.50	3
Ni			1	50.928	ug/l	0.12	568,154.75	1.713E+00	Pulse	0.50	3
Cu			1	49.706	ug/l	0.72	1,586,466.21	4.783E+00	Pulse	0.50	3
Zn			1	50.834	ug/l	0.57	198,080.24	3.864E-01	Pulse	1.00	3
Cd			1	50.802	ug/l	0.63	363,815.85	7.096E-01	Pulse	0.50	3
Al			1	4949.464	ug/l	0.70	1,498,352.16	3.662E+00	Pulse	1.00	3
Se			1	50.243	ug/l	0.24	7,846.94	2.278E-03	Pulse	3.00	3
Sb			1	49.681	ug/l	0.34	736,980.60	1.438E+00	Pulse	1.00	3
Se			1	46.553	ug/l	0.59	3,962.52	1.366E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,100,632.67	0.69	96.3	Analog	0.50	3
1	Sc		409,178.53	0.82	95.8	Pulse	0.30	3
1	Ge		331,669.09	0.53	95.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,444,110.90	0.78	95.8	Pulse	0.30	3
1	Tb		14,320,283.67	1.03	98.5	Analog	0.50	3
1	Lu		8,461,713.33	0.45	97.9	Analog	0.50	3
1	Ge		512,671.12	0.10	96.4	Pulse	0.30	3
1	Te		28,998.29	0.48	93.0	Pulse	0.50	3
1	Li		2,071.23	3.24	90.2	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:56
Sample Name	CALSTD-6
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.502	ug/l	0.91	2,199,879.42	6.591E+00	Pulse	0.50	3
As			1	99.861	ug/l	0.57	230,236.28	6.898E-01	Pulse	1.00	3
Mo			1	98.963	ug/l	0.84	1,558,576.13	3.047E+00	Pulse	0.50	3
Pb			1	98.529	ug/l	1.51	8,460,048.33	8.614E-01	Analog	1.00	3
Be			1	101.834	ug/l	2.47	11,454.89	2.795E-02	Pulse	2.00	3
Ag			1	99.694	ug/l	0.94	5,734,861.83	1.121E+01	Pulse	0.50	3
Ba			1	99.613	ug/l	1.30	554,815.23	1.626E-01	Pulse	0.50	3
Tl			1	99.465	ug/l	1.31	12,758,050.67	1.299E+00	Analog	0.50	3
Sn			1	100.603	ug/l	2.32	1,329,100.92	3.896E-01	Pulse	0.30	3
Sr			1	99.490	ug/l	1.24	1,109,874.54	3.253E-01	Pulse	0.50	3
[Pb]			1	98.757	ug/l	0.83	3,971,070.83	4.043E-01	Pulse	0.50	3
Ca			1	10021.215	ug/l	1.56	478,428.16	1.167E+00	Pulse	0.50	3
Ti			1	98.502	ug/l	2.58	39,322.03	9.595E-02	Pulse	0.50	3
Na			1	9971.596	ug/l	1.73	24,723,437.33	6.032E+01	Analog	1.00	3
Mg			1	10031.737	ug/l	1.63	10,649,891.00	2.598E+01	Analog	1.00	3
K			1	9955.574	ug/l	1.74	8,659,840.33	2.113E+01	Analog	1.00	3
V			1	99.547	ug/l	2.45	1,615,580.71	3.942E+00	Pulse	0.50	3
Mn			1	98.626	ug/l	0.37	969,489.81	2.905E+00	Pulse	0.50	3
Fe			1	9802.418	ug/l	0.89	172,228,522.67	5.160E+02	Analog	0.50	3
Co			1	97.788	ug/l	1.10	4,031,970.92	1.208E+01	Pulse	0.50	3
Ni			1	99.512	ug/l	1.08	1,116,998.54	3.347E+00	Pulse	0.50	3
Cu			1	99.391	ug/l	0.79	3,116,471.75	9.337E+00	Pulse	0.50	3
Zn			1	100.350	ug/l	0.78	382,058.88	7.470E-01	Pulse	1.00	3
Cd			1	100.206	ug/l	0.96	715,917.77	1.400E+00	Pulse	0.50	3
Al			1	9976.799	ug/l	1.34	3,025,273.25	7.381E+00	Pulse	1.00	3
Se			1	100.650	ug/l	2.27	15,546.53	4.557E-03	Pulse	3.00	3
Sb			1	99.573	ug/l	0.63	1,472,836.25	2.880E+00	Pulse	1.00	3
Se			1	97.010	ug/l	1.99	7,873.96	2.835E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,822,467.67	0.81	93.6	Analog	0.50	3
1	Sc		409,952.15	1.76	96.0	Pulse	0.30	3
1	Ge		333,786.69	0.65	96.0	Pulse	0.30	3
1	In		3,412,184.03	1.82	94.9	Pulse	0.30	3
1	Tb		14,359,915.67	1.25	98.8	Analog	0.50	3
1	Lu		8,456,681.33	1.52	97.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		511,490.55	0.87	96.2	Pulse	0.30	3
1	Te		27,784.43	2.49	89.1	Pulse	0.50	3
1	Li		1,890.10	12.27	82.3	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:00
Sample Name	CALSTD-7
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	200.902	ug/l	1.66	4,387,840.67	1.344E+01	Pulse	0.50	3
As			1	200.097	ug/l	0.92	451,220.73	1.382E+00	Pulse	1.00	3
Mo			1	200.866	ug/l	0.98	3,093,292.58	6.185E+00	Pulse	0.50	3
Pb			1	201.118	ug/l	1.24	16,612,445.33	1.757E+00	Analog	1.00	3
Be			1	198.869	ug/l	1.60	22,401.64	5.458E-02	Pulse	2.00	3
Ag			1	155.843	ug/l	0.38	8,766,098.33	1.753E+01	Analog	0.50	3
Ba			1	200.399	ug/l	0.23	1,095,745.50	3.271E-01	Pulse	0.50	3
Tl			1	200.595	ug/l	0.94	24,770,891.33	2.620E+00	Analog	0.50	3
Sn			1	199.803	ug/l	0.80	2,591,190.45	7.736E-01	Pulse	0.30	3
Sr			1	200.598	ug/l	0.55	2,195,754.67	6.556E-01	Pulse	0.50	3
[Pb]			1	200.868	ug/l	2.09	7,769,036.33	8.217E-01	Analog	0.50	3
Ca			1	19998.489	ug/l	1.00	955,934.83	2.329E+00	Pulse	0.50	3
Ti			1	200.844	ug/l	2.01	80,283.47	1.956E-01	Pulse	0.50	3
Na			1	20025.671	ug/l	1.43	49,695,028.00	1.211E+02	Analog	1.00	3
Mg			1	19977.937	ug/l	1.49	21,236,509.33	5.174E+01	Analog	1.00	3
K			1	20039.847	ug/l	1.89	17,440,119.33	4.250E+01	Analog	1.00	3
V			1	200.275	ug/l	1.58	3,254,296.42	7.929E+00	Pulse	0.50	3
Mn			1	200.767	ug/l	1.09	1,930,237.08	5.912E+00	Pulse	0.50	3
Fe			1	20117.814	ug/l	1.24	345,736,832.00	1.059E+03	Analog	0.50	3
Co			1	201.265	ug/l	0.76	8,116,962.00	2.486E+01	Analog	0.50	3
Ni			1	199.974	ug/l	0.20	2,195,453.75	6.724E+00	Pulse	0.50	3
Cu			1	200.422	ug/l	0.55	6,071,413.83	1.860E+01	Analog	0.50	3
Zn			1	199.618	ug/l	0.68	735,159.10	1.470E+00	Pulse	1.00	3
Cd			1	199.662	ug/l	0.64	1,394,868.16	2.789E+00	Pulse	0.50	3
Al			1	20021.313	ug/l	1.51	6,078,463.83	1.481E+01	Analog	1.00	3
Se			1	199.583	ug/l	0.54	30,245.84	9.030E-03	Pulse	3.00	3
Sb			1	200.275	ug/l	0.12	2,895,903.83	5.790E+00	Pulse	1.00	3
Se			1	202.387	ug/l	3.89	15,298.13	5.901E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,456,969.33	1.73	90.1	Analog	0.50	3
1	Sc		410,471.96	1.48	96.1	Pulse	0.30	3
1	Ge		326,491.91	0.65	93.9	Pulse	0.30	3
1	In		3,349,458.97	0.41	93.2	Pulse	0.30	3
1	Tb		14,123,174.67	0.58	97.2	Analog	0.50	3
1	Lu		8,418,570.50	1.11	97.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		500,135.85	0.26	94.1	Pulse	0.30	3
1	Te		25,945.10	3.12	83.2	Pulse	0.50	3
1	Li		1,990.11	5.45	86.7	Pulse	0.30	3

Quantitation Report

File Name	010HSAG.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:04
Sample Name	HSTD (Ag)
Sample Type	HSTD _Ag
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.705	ug/l	0.87	2,204,817.08	6.605E+00	Pulse	0.50	3
As			1	99.746	ug/l	0.83	230,009.66	6.890E-01	Pulse	1.00	3
Mo			1	99.417	ug/l	0.70	1,562,315.29	3.061E+00	Pulse	0.50	3
Pb			1	98.080	ug/l	0.33	8,510,674.67	8.574E-01	Analog	1.00	3
Be			1	99.043	ug/l	2.29	11,321.31	2.718E-02	Pulse	2.00	3
Ag			1	99.475	ug/l	1.89	5,709,542.00	1.119E+01	Pulse	0.50	3
Ba			1	98.562	ug/l	0.34	551,199.44	1.609E-01	Pulse	0.50	3
Tl			1	98.400	ug/l	0.98	12,754,682.67	1.285E+00	Analog	0.50	3
Sn			1	99.860	ug/l	1.13	1,324,835.43	3.867E-01	Pulse	0.30	3
Sr			1	98.977	ug/l	0.07	1,108,698.71	3.236E-01	Pulse	0.50	3
[Pb]			1	97.933	ug/l	1.18	3,979,571.83	4.009E-01	Pulse	0.50	3
Ca			1	9948.056	ug/l	0.89	482,600.65	1.159E+00	Pulse	0.50	3
Ti			1	98.905	ug/l	1.22	40,123.62	9.634E-02	Pulse	0.50	3
Na			1	9863.081	ug/l	0.74	24,849,995.33	5.966E+01	Analog	1.00	3
Mg			1	9911.763	ug/l	0.47	10,692,642.33	2.567E+01	Analog	1.00	3
K			1	9850.565	ug/l	0.49	8,707,284.67	2.091E+01	Analog	1.00	3
V			1	98.786	ug/l	0.90	1,629,310.21	3.912E+00	Pulse	0.50	3
Mn			1	98.576	ug/l	1.41	969,112.33	2.903E+00	Pulse	0.50	3
Fe			1	9923.883	ug/l	1.62	174,388,138.67	5.224E+02	Analog	0.50	3
Co			1	98.000	ug/l	1.11	4,041,389.25	1.211E+01	Pulse	0.50	3
Ni			1	100.530	ug/l	1.48	1,128,586.25	3.381E+00	Pulse	0.50	3
Cu			1	100.132	ug/l	0.95	3,139,640.58	9.405E+00	Pulse	0.50	3
Zn			1	101.256	ug/l	0.51	384,596.36	7.536E-01	Pulse	1.00	3
Cd			1	100.454	ug/l	0.46	716,142.58	1.403E+00	Pulse	0.50	3
Al			1	9773.317	ug/l	0.93	3,011,318.50	7.230E+00	Pulse	1.00	3
Se			1	100.737	ug/l	0.23	15,625.26	4.561E-03	Pulse	3.00	3
Sb			1	99.503	ug/l	1.09	1,468,538.92	2.878E+00	Pulse	1.00	3
Se			1	96.727	ug/l	0.17	7,889.30	2.826E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,925,655.00	0.27	94.6	Analog	0.50	3
1	Sc		416,513.06	0.85	97.6	Pulse	0.30	3
1	Ge		333,846.96	0.75	96.0	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,425,680.01	0.47	95.3	Pulse	0.30	3
1	Tb		14,412,880.33	0.62	99.2	Analog	0.50	3
1	Lu		8,561,161.67	0.50	99.1	Analog	0.50	3
1	Ge		510,366.23	0.64	96.0	Pulse	0.30	3
1	Te		27,912.59	0.81	89.5	Pulse	0.50	3
1	Li		1,885.66	2.87	82.1	Pulse	0.30	3

Quantitation Report

File Name 011HSTD.d
File Path D:\2018\04-April\xa043018m1.b
Method File
Method Path
Acq Time 4/30/2018 9:07
Sample Name HSTD
Sample Type HSTD
Comment =std 6
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/30/2018 14:30
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	199.435	ug/l	1.38	4,440,330.33	1.334E+01	Pulse	0.50	3
As			1	198.882	ug/l	1.51	457,156.75	1.374E+00	Pulse	1.00	3
Mo			1	199.813	ug/l	0.63	3,129,368.58	6.153E+00	Pulse	0.50	3
Pb			1	199.722	ug/l	0.79	16,725,787.33	1.745E+00	Analog	1.00	3
Be			1	197.446	ug/l	1.10	22,575.15	5.419E-02	Pulse	2.00	3
Ag			1	152.091	ug/l	1.13	8,700,306.00	1.711E+01	Analog	0.50	3
Ba			1	201.430	ug/l	0.43	1,110,591.58	3.288E-01	Pulse	0.50	3
Tl			1	200.230	ug/l	0.41	25,067,876.00	2.615E+00	Analog	0.50	3
Sn			1	201.974	ug/l	0.99	2,641,238.16	7.820E-01	Pulse	0.30	3
Sr			1	201.916	ug/l	0.84	2,228,647.08	6.599E-01	Pulse	0.50	3
[Pb]			1	198.958	ug/l	1.64	7,802,201.33	8.139E-01	Analog	0.50	3
Ca			1	19993.640	ug/l	0.89	970,029.02	2.329E+00	Pulse	0.50	3
Ti			1	200.187	ug/l	0.68	81,231.37	1.950E-01	Pulse	0.50	3
Na			1	20071.366	ug/l	1.07	50,556,438.67	1.214E+02	Analog	1.00	3
Mg			1	20004.655	ug/l	0.96	21,584,579.33	5.181E+01	Analog	1.00	3
K			1	20167.257	ug/l	1.68	17,814,583.33	4.277E+01	Analog	1.00	3
V			1	199.439	ug/l	0.61	3,289,618.33	7.896E+00	Pulse	0.50	3
Mn			1	200.448	ug/l	1.21	1,964,494.21	5.903E+00	Pulse	0.50	3
Fe			1	19985.332	ug/l	1.95	350,093,354.67	1.052E+03	Analog	0.50	3
Co			1	200.171	ug/l	1.96	8,228,639.00	2.473E+01	Analog	0.50	3
Ni			1	197.213	ug/l	2.15	2,206,834.50	6.632E+00	Pulse	0.50	3
Cu			1	199.642	ug/l	0.93	6,165,314.67	1.852E+01	Analog	0.50	3
Zn			1	199.579	ug/l	0.38	747,501.06	1.470E+00	Pulse	1.00	3
Cd			1	197.691	ug/l	0.79	1,404,561.17	2.761E+00	Pulse	0.50	3
Al			1	19937.415	ug/l	1.75	6,143,636.83	1.475E+01	Analog	1.00	3
Se			1	199.716	ug/l	0.60	30,519.15	9.036E-03	Pulse	3.00	3
Sb			1	199.922	ug/l	0.72	2,939,863.17	5.780E+00	Pulse	1.00	3
Se			1	200.390	ug/l	0.96	15,405.99	5.843E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,586,967.00	0.63	91.4	Analog	0.50	3
1	Sc		416,612.21	1.14	97.6	Pulse	0.30	3
1	Ge		332,838.74	1.31	95.8	Pulse	0.30	3
1	In		3,377,493.69	0.50	94.0	Pulse	0.30	3
1	Tb		14,371,221.33	1.28	98.9	Analog	0.50	3
1	Lu		8,499,100.67	1.33	98.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		508,628.96	0.26	95.7	Pulse	0.30	3
1	Te		26,370.98	2.03	84.5	Pulse	0.50	3
1	Li		1,937.88	5.74	84.4	Pulse	0.30	3

Quantitation Report

File Name 012_ICV.d
File Path D:\2018\04-April\xa043018m1.b
Method File
Method Path
Acq Time 4/30/2018 9:11
Sample Name ICV
Sample Type ICV
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/30/2018 14:30
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	102.299	ug/l	0.91	2,289,234.42	6.845E+00	Pulse	0.50	3
As			1	103.669	ug/l	0.82	239,497.53	7.161E-01	Pulse	1.00	3
Mo			1	103.582	ug/l	0.47	1,633,872.96	3.189E+00	Pulse	0.50	3
Pb			1	98.984	ug/l	0.20	8,611,766.00	8.653E-01	Analog	1.00	3
Be			1	99.321	ug/l	1.42	11,384.51	2.726E-02	Pulse	2.00	3
Ag			1	49.957	ug/l	0.63	2,878,423.92	5.619E+00	Pulse	0.50	3
Ba			1	103.021	ug/l	0.35	579,059.85	1.682E-01	Pulse	0.50	3
Tl			1	99.164	ug/l	1.03	12,887,463.67	1.295E+00	Analog	0.50	3
Sn			1	106.984	ug/l	0.81	1,426,539.32	4.143E-01	Pulse	0.30	3
Sr			1	100.603	ug/l	0.98	1,132,586.50	3.290E-01	Pulse	0.50	3
[Pb]			1	97.906	ug/l	1.32	3,988,759.08	4.008E-01	Pulse	0.50	3
Ca			1	10010.688	ug/l	0.57	486,983.88	1.166E+00	Pulse	0.50	3
Ti			1	104.064	ug/l	0.41	42,334.87	1.014E-01	Pulse	0.50	3
Na			1	9854.478	ug/l	0.71	24,896,605.33	5.961E+01	Analog	1.00	3
Mg			1	10329.585	ug/l	1.41	11,173,309.33	2.675E+01	Analog	1.00	3
K			1	9924.724	ug/l	1.62	8,796,101.33	2.106E+01	Analog	1.00	3
V			1	103.882	ug/l	0.52	1,718,049.75	4.114E+00	Pulse	0.50	3
Mn			1	98.607	ug/l	1.59	971,205.58	2.904E+00	Pulse	0.50	3
Fe			1	10098.779	ug/l	0.65	177,794,640.00	5.316E+02	Analog	0.50	3
Co			1	99.839	ug/l	1.07	4,124,801.67	1.233E+01	Pulse	0.50	3
Ni			1	100.550	ug/l	1.47	1,130,889.46	3.381E+00	Pulse	0.50	3
Cu			1	101.904	ug/l	0.99	3,199,718.58	9.567E+00	Pulse	0.50	3
Zn			1	103.234	ug/l	1.13	393,400.78	7.680E-01	Pulse	1.00	3
Cd			1	101.231	ug/l	1.58	724,337.69	1.414E+00	Pulse	0.50	3
Al			1	9882.057	ug/l	1.05	3,053,209.42	7.311E+00	Pulse	1.00	3
Se			1	105.218	ug/l	1.13	16,401.35	4.764E-03	Pulse	3.00	3
Sb			1	102.826	ug/l	0.72	1,523,254.21	2.974E+00	Pulse	1.00	3
Se			1	101.044	ug/l	0.87	8,244.45	2.952E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,952,038.67	0.68	94.9	Analog	0.50	3
1	Sc		417,663.61	1.17	97.8	Pulse	0.30	3
1	Ge		334,461.92	0.80	96.2	Pulse	0.30	3
1	In		3,443,070.42	0.65	95.8	Pulse	0.30	3
1	Tb		14,547,057.33	0.95	100.1	Analog	0.50	3
1	Lu		8,578,600.67	1.23	99.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		512,280.69	0.92	96.4	Pulse	0.30	3
1	Te		27,930.62	1.93	89.5	Pulse	0.50	3
1	Li		2,094.56	6.86	91.2	Pulse	0.30	3

Quantitation Report

File Name	013_ICB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:15
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.003	ug/l	23.26	840.02	2.417E-03	Pulse	0.50	3
As			1	0.008	ug/l	40.80	46.67	1.342E-04	Pulse	1.00	3
Mo			1	0.032	ug/l	15.51	550.01	1.036E-03	Pulse	0.50	3
Pb			1	-0.004	ug/l	-84.50	13,290.83	1.248E-03	Pulse	1.00	3
Be			1	0.000	ug/l	5807.66	0.33	8.072E-07	Pulse	2.00	3
Ag			1	0.007	ug/l	18.93	568.01	1.070E-03	Pulse	0.50	3
Ba			1	0.002	ug/l	69.59	44.00	1.242E-05	Pulse	0.50	3
Tl			1	0.028	ug/l	17.34	4,016.50	3.769E-04	Pulse	0.50	3
Sn			1	0.065	ug/l	32.07	1,564.54	4.411E-04	Pulse	0.30	3
Sr			1	0.003	ug/l	210.04	1,291.38	3.644E-04	Pulse	0.50	3
[Pb]			1	-0.004	ug/l	-86.94	6,342.54	5.956E-04	Pulse	0.50	3
Ca			1	-0.377	ug/l	-20.56	98.00	2.341E-04	Pulse	0.50	3
Ti			1	-0.003	ug/l	-88.71	1.33	3.164E-06	Pulse	0.50	3
Na			1	-0.890	ug/l	-14.10	20,454.74	4.887E-02	Pulse	1.00	3
Mg			1	0.326	ug/l	20.67	508.01	1.214E-03	Pulse	1.00	3
K			1	0.472	ug/l	45.14	14,367.55	3.433E-02	Pulse	1.00	3
V			1	-0.007	ug/l	-30.44	446.68	1.067E-03	Pulse	0.50	3
Mn			1	-0.001	ug/l	-235.72	113.33	3.261E-04	Pulse	0.50	3
Fe			1	0.381	ug/l	17.60	12,498.11	3.596E-02	Pulse	0.50	3
Co			1	0.000	ug/l	-316.59	281.33	8.093E-04	Pulse	0.50	3
Ni			1	-0.002	ug/l	-52.71	213.33	6.139E-04	Pulse	0.50	3
Cu			1	-0.275	ug/l	-5.93	70,423.68	2.026E-01	Pulse	0.50	3
Zn			1	-0.211	ug/l	-8.57	7,763.57	1.462E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	14.56	30.67	5.776E-05	Pulse	0.50	3
Al			1	0.108	ug/l	106.20	393.67	9.411E-04	Pulse	1.00	3
Se			1	0.003	ug/l	318.33	24.67	6.958E-06	Pulse	3.00	3
Sb			1	-0.005	ug/l	-24.66	748.69	1.410E-03	Pulse	1.00	3
Se			1	0.000	ug/l	-14609.57	37.00	1.189E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,649,547.00	0.91	101.5	Analog	0.50	3
1	Sc		418,614.97	1.40	98.1	Pulse	0.30	3

Quantitation Report

1	Ge		347,522.19	0.36	100.0	Pulse	0.30	3
1	In		3,544,854.30	0.50	98.6	Pulse	0.30	3
1	Tb		14,807,395.67	0.58	101.9	Analog	0.50	3
1	Lu		8,703,087.00	0.60	100.7	Analog	0.50	3
1	Ge		530,963.11	0.40	99.9	Pulse	0.30	3
1	Te		31,124.47	1.50	99.8	Pulse	0.50	3
1	Li		2,063.45	7.19	89.9	Pulse	0.30	3

Quantitation Report

File Name	014LCCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:18
Sample Name	CRIA
Sample Type	CRIA
Comment	=std 2
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.994	ug/l	1.97	24,102.90	6.870E-02	Pulse	0.50	3
As			1	0.991	ug/l	4.40	2,427.83	6.922E-03	Pulse	1.00	3
Mo			1	0.985	ug/l	1.26	16,237.05	3.039E-02	Pulse	0.50	3
Pb			1	0.874	ug/l	1.97	95,819.11	8.912E-03	Pulse	1.00	3
Be			1	0.975	ug/l	10.71	114.83	2.683E-04	Pulse	2.00	3
Ag			1	1.037	ug/l	0.95	62,471.27	1.169E-01	Pulse	0.50	3
Ba			1	0.998	ug/l	3.00	5,888.98	1.639E-03	Pulse	0.50	3
Tl			1	0.961	ug/l	0.75	134,988.76	1.255E-02	Pulse	0.50	3
Sn			1	1.156	ug/l	0.96	16,761.06	4.664E-03	Pulse	0.30	3
Sr			1	1.005	ug/l	0.59	13,069.21	3.637E-03	Pulse	0.50	3
[Pb]			1	0.872	ug/l	1.31	44,880.09	4.174E-03	Pulse	0.50	3
Ca			1	106.899	ug/l	1.58	5,447.44	1.273E-02	Pulse	0.50	3
Ti			1	0.974	ug/l	4.26	408.68	9.548E-04	Pulse	0.50	3
Na			1	96.777	ug/l	0.90	273,555.09	6.391E-01	Pulse	1.00	3
Mg			1	100.079	ug/l	0.92	111,101.36	2.596E-01	Pulse	1.00	3
K			1	98.820	ug/l	0.70	103,885.39	2.427E-01	Pulse	1.00	3
V			1	0.988	ug/l	0.40	17,325.08	4.048E-02	Pulse	0.50	3
Mn			1	1.027	ug/l	0.60	10,727.66	3.058E-02	Pulse	0.50	3
Fe			1	99.970	ug/l	1.20	1,851,649.75	5.278E+00	Pulse	0.50	3
Co			1	0.999	ug/l	0.58	43,613.56	1.243E-01	Pulse	0.50	3
Ni			1	1.014	ug/l	1.23	12,200.55	3.478E-02	Pulse	0.50	3
Cu			1	-0.775	ug/l	-1.44	55,018.02	1.568E-01	Pulse	0.50	3
Zn			1	-0.183	ug/l	-10.96	7,921.97	1.483E-02	Pulse	1.00	3
Cd			1	1.027	ug/l	2.06	7,676.95	1.437E-02	Pulse	0.50	3
Al			1	99.015	ug/l	1.13	31,716.08	7.410E-02	Pulse	1.00	3
Se			1	0.998	ug/l	9.01	186.66	5.193E-05	Pulse	3.00	3
Sb			1	0.965	ug/l	1.13	15,732.41	2.945E-02	Pulse	1.00	3
Se			1	0.826	ug/l	15.83	111.22	3.594E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,752,916.00	1.32	102.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		428,020.51	0.67	100.3	Pulse	0.30	3
1	Ge		350,838.01	0.96	100.9	Pulse	0.30	3
1	In		3,593,916.25	0.32	100.0	Pulse	0.30	3
1	Tb		14,871,800.00	0.47	102.3	Analog	0.50	3
1	Lu		8,705,236.33	0.37	100.8	Analog	0.50	3
1	Ge		534,294.34	0.74	100.5	Pulse	0.30	3
1	Te		30,955.47	1.05	99.2	Pulse	0.50	3
1	Li		2,203.47	6.84	96.0	Pulse	0.30	3

Quantitation Report

File Name	015ICSA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:22
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.298	ug/l	0.65	29,256.56	8.903E-02	Pulse	0.50	3
As			1	0.086	ug/l	16.45	221.33	6.739E-04	Pulse	1.00	3
Mo			1	2038.061	ug/l	0.40	30,734,936.00	6.275E+01	Analog	0.50	3
Pb			1	0.006	ug/l	5.66	11,189.66	1.328E-03	Pulse	1.00	3
Be			1	0.012	ug/l	19.00	1.83	4.160E-06	Pulse	2.00	3
Ag			1	0.036	ug/l	1.88	2,107.46	4.303E-03	Pulse	0.50	3
Ba			1	0.080	ug/l	4.90	452.68	1.398E-04	Pulse	0.50	3
Tl			1	0.011	ug/l	15.71	1,314.73	1.560E-04	Pulse	0.50	3
Sn			1	0.124	ug/l	6.73	2,162.37	6.681E-04	Pulse	0.30	3
Sr			1	0.981	ug/l	0.50	11,518.86	3.559E-03	Pulse	0.50	3
[Pb]			1	0.002	ug/l	291.38	5,234.17	6.210E-04	Pulse	0.50	3
Ca			1	94919.591	ug/l	1.98	4,869,982.67	1.105E+01	Pulse	0.50	3
Ti			1	1985.993	ug/l	1.24	852,235.31	1.934E+00	Pulse	0.50	3
Na			1	99383.101	ug/l	1.52	264,659,728.00	6.007E+02	Analog	1.00	3
Mg			1	99145.937	ug/l	1.89	113,139,920.00	2.568E+02	Analog	1.00	3
K			1	102712.196	ug/l	1.98	95,901,405.33	2.177E+02	Analog	1.00	3
V			1	0.011	ug/l	7.62	797.35	1.810E-03	Pulse	0.50	3
Mn			1	0.294	ug/l	6.83	2,960.23	9.011E-03	Pulse	0.50	3
Fe			1	100800.785	ug/l	1.11	1,743,658,069.33	5.306E+03	Analog	0.50	3
Co			1	0.011	ug/l	4.23	720.02	2.191E-03	Pulse	0.50	3
Ni			1	0.125	ug/l	3.62	1,604.08	4.880E-03	Pulse	0.50	3
Cu			1	-1.729	ug/l	-1.10	22,794.78	6.937E-02	Pulse	0.50	3
Zn			1	-0.562	ug/l	-5.92	5,907.91	1.206E-02	Pulse	1.00	3
Cd			1	0.369	ug/l	0.86	2,534.85	5.176E-03	Pulse	0.50	3
Al			1	96457.030	ug/l	1.72	31,435,344.00	7.135E+01	Analog	1.00	3
Se			1	0.074	ug/l	15.80	32.89	1.016E-05	Pulse	3.00	3
Sb			1	0.032	ug/l	12.19	1,220.38	2.492E-03	Pulse	1.00	3
Se			1	-0.013	ug/l	-304.68	28.22	1.152E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,428,786.00	0.36	80.3	Analog	0.50	3
1	Sc		440,592.71	0.38	103.2	Pulse	0.30	3
1	Ge		328,621.78	0.80	94.5	Pulse	0.30	3
1	In		3,236,908.27	0.42	90.1	Pulse	0.30	3
1	Tb		13,428,325.33	0.64	92.4	Analog	0.50	3
1	Lu		8,020,040.00	0.78	92.8	Analog	0.50	3
1	Ge		489,751.32	0.87	92.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		24,509.09	1.02	78.6	Pulse	0.50	3
1	Li		1,855.65	5.66	80.8	Pulse	0.30	3

Quantitation Report

File Name	016ICSB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:26
Sample Name	ICSAB
Sample Type	ICSAB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	21.443	ug/l	0.59	467,400.97	1.437E+00	Pulse	0.50	3
As			1	19.773	ug/l	0.91	44,460.07	1.366E-01	Pulse	1.00	3
Mo			1	2053.009	ug/l	0.31	31,084,472.00	6.322E+01	Analog	0.50	3
Pb			1	0.021	ug/l	7.27	12,349.47	1.460E-03	Pulse	1.00	3
Be			1	0.015	ug/l	57.35	2.17	4.916E-06	Pulse	2.00	3
Ag			1	17.298	ug/l	0.22	956,722.63	1.946E+00	Pulse	0.50	3
Ba			1	0.075	ug/l	5.46	426.01	1.315E-04	Pulse	0.50	3
Tl			1	0.008	ug/l	13.35	984.04	1.163E-04	Pulse	0.50	3
Sn			1	0.113	ug/l	14.08	2,033.47	6.272E-04	Pulse	0.30	3
Sr			1	0.983	ug/l	0.69	11,560.22	3.567E-03	Pulse	0.50	3
[Pb]			1	0.015	ug/l	36.31	5,682.97	6.718E-04	Pulse	0.50	3
Ca			1	93808.660	ug/l	0.08	4,821,609.67	1.092E+01	Pulse	0.50	3
Ti			1	1980.884	ug/l	0.50	851,579.55	1.929E+00	Pulse	0.50	3
Na			1	99340.021	ug/l	1.00	265,028,037.33	6.004E+02	Analog	1.00	3
Mg			1	98511.199	ug/l	0.95	112,620,650.67	2.551E+02	Analog	1.00	3
K			1	102937.705	ug/l	1.13	96,289,733.33	2.181E+02	Analog	1.00	3
V			1	0.007	ug/l	29.14	725.02	1.642E-03	Pulse	0.50	3
Mn			1	20.548	ug/l	0.82	196,980.36	6.054E-01	Pulse	0.50	3
Fe			1	101863.021	ug/l	1.05	1,744,645,120.00	5.362E+03	Analog	0.50	3
Co			1	19.272	ug/l	1.08	774,860.37	2.381E+00	Pulse	0.50	3
Ni			1	18.837	ug/l	0.64	206,290.36	6.340E-01	Pulse	0.50	3
Cu			1	16.963	ug/l	0.44	579,950.04	1.782E+00	Pulse	0.50	3
Zn			1	17.663	ug/l	1.07	71,198.98	1.448E-01	Pulse	1.00	3
Cd			1	18.268	ug/l	1.06	125,480.78	2.552E-01	Pulse	0.50	3
Al			1	95826.669	ug/l	0.59	31,286,854.00	7.088E+01	Analog	1.00	3
Se			1	0.050	ug/l	99.48	29.33	9.044E-06	Pulse	3.00	3
Sb			1	0.021	ug/l	19.97	1,064.03	2.163E-03	Pulse	1.00	3
Se			1	15.137	ug/l	173.96	1,130.76	4.524E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,458,628.33	0.13	80.6	Analog	0.50	3
1	Sc		441,367.53	0.82	103.4	Pulse	0.30	3
1	Ge		325,361.22	0.62	93.6	Pulse	0.30	3
1	In		3,240,959.11	0.57	90.2	Pulse	0.30	3
1	Tb		13,638,864.00	0.34	93.8	Analog	0.50	3
1	Lu		8,206,078.00	1.04	95.0	Analog	0.50	3
1	Ge		491,720.26	0.56	92.5	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		24,874.92	1.31	79.7	Pulse	0.50	3
1	Li		1,817.87	5.49	79.2	Pulse	0.30	3

Quantitation Report

File Name	017CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:29
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	48.782	ug/l	0.74	1,108,062.91	3.265E+00	Pulse	0.50	3
As			1	50.068	ug/l	0.48	117,381.24	3.459E-01	Pulse	1.00	3
Mo			1	49.430	ug/l	0.77	788,046.39	1.522E+00	Pulse	0.50	3
Pb			1	47.255	ug/l	1.70	4,273,697.17	4.138E-01	Pulse	1.00	3
Be			1	48.878	ug/l	1.20	5,516.92	1.342E-02	Pulse	2.00	3
Ag			1	50.817	ug/l	0.80	2,959,247.83	5.716E+00	Pulse	0.50	3
Ba			1	49.119	ug/l	0.46	275,932.41	8.019E-02	Pulse	0.50	3
Tl			1	48.302	ug/l	1.22	6,515,610.33	6.308E-01	Mix	0.50	3
Sn			1	49.529	ug/l	0.72	660,366.27	1.919E-01	Pulse	0.30	3
Sr			1	48.685	ug/l	0.77	548,386.00	1.594E-01	Pulse	0.50	3
[Pb]			1	47.714	ug/l	0.56	2,020,990.25	1.957E-01	Pulse	0.50	3
Ca			1	4921.654	ug/l	0.59	235,773.84	5.734E-01	Pulse	0.50	3
Ti			1	49.318	ug/l	2.31	19,751.97	4.804E-02	Pulse	0.50	3
Na			1	4940.945	ug/l	0.10	12,301,311.67	2.992E+01	Analog	1.00	3
Mg			1	4978.471	ug/l	0.16	5,302,283.67	1.289E+01	Analog	1.00	3
K			1	4853.951	ug/l	0.40	4,242,786.17	1.032E+01	Pulse	1.00	3
V			1	49.729	ug/l	1.17	809,963.09	1.970E+00	Pulse	0.50	3
Mn			1	48.646	ug/l	1.04	486,216.78	1.433E+00	Pulse	0.50	3
Fe			1	5007.202	ug/l	0.84	89,448,162.67	2.636E+02	Analog	0.50	3
Co			1	49.080	ug/l	1.12	2,057,604.71	6.063E+00	Pulse	0.50	3
Ni			1	50.221	ug/l	1.06	573,257.65	1.689E+00	Pulse	0.50	3
Cu			1	49.576	ug/l	0.59	1,619,199.08	4.771E+00	Pulse	0.50	3
Zn			1	50.337	ug/l	0.66	198,169.29	3.828E-01	Pulse	1.00	3
Cd			1	51.063	ug/l	0.36	369,314.11	7.133E-01	Pulse	0.50	3
Al			1	4750.410	ug/l	0.79	1,445,171.83	3.515E+00	Pulse	1.00	3
Se			1	50.417	ug/l	0.19	7,866.73	2.286E-03	Pulse	3.00	3
Sb			1	49.487	ug/l	0.90	741,370.77	1.432E+00	Pulse	1.00	3
Se			1	46.104	ug/l	2.14	3,922.74	1.353E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,329,972.67	1.45	98.5	Analog	0.50	3
1	Sc		411,195.11	0.98	96.3	Pulse	0.30	3
1	Ge		339,366.58	0.98	97.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,440,955.35	0.58	95.7	Pulse	0.30	3
1	Tb		14,681,607.33	1.42	101.0	Analog	0.50	3
1	Lu		8,557,145.67	1.26	99.0	Analog	0.50	3
1	Ge		517,758.05	0.36	97.4	Pulse	0.30	3
1	Te		28,990.96	1.70	92.9	Pulse	0.50	3
1	Li		2,027.89	8.93	88.3	Pulse	0.30	3

Quantitation Report

File Name	018_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:33
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.697	ug/l	0.34	2,241,273.92	6.604E+00	Pulse	0.50	3
As			1	99.314	ug/l	1.04	232,817.82	6.860E-01	Pulse	1.00	3
Mo			1	99.571	ug/l	0.74	1,584,774.21	3.066E+00	Pulse	0.50	3
Pb			1	98.891	ug/l	1.12	8,714,070.00	8.645E-01	Analog	1.00	3
Be			1	99.044	ug/l	2.30	11,302.14	2.718E-02	Pulse	2.00	3
Ag			1	99.499	ug/l	0.28	5,784,388.17	1.119E+01	Pulse	0.50	3
Ba			1	98.748	ug/l	0.43	550,357.54	1.612E-01	Pulse	0.50	3
Tl			1	97.956	ug/l	0.29	12,894,806.67	1.279E+00	Analog	0.50	3
Sn			1	100.254	ug/l	0.53	1,325,548.21	3.883E-01	Pulse	0.30	3
Sr			1	100.465	ug/l	0.58	1,121,495.58	3.285E-01	Pulse	0.50	3
[Pb]			1	95.786	ug/l	1.04	3,952,791.58	3.922E-01	Pulse	0.50	3
Ca			1	9913.830	ug/l	0.75	480,134.09	1.155E+00	Pulse	0.50	3
Ti			1	98.869	ug/l	1.74	40,040.74	9.630E-02	Pulse	0.50	3
Na			1	9974.470	ug/l	1.30	25,087,192.67	6.034E+01	Analog	1.00	3
Mg			1	9969.358	ug/l	1.91	10,735,692.00	2.582E+01	Analog	1.00	3
K			1	10077.995	ug/l	0.72	8,892,876.67	2.139E+01	Analog	1.00	3
V			1	99.967	ug/l	1.13	1,645,942.42	3.959E+00	Pulse	0.50	3
Mn			1	97.158	ug/l	0.14	971,077.86	2.861E+00	Pulse	0.50	3
Fe			1	10004.020	ug/l	1.01	178,720,560.00	5.266E+02	Analog	0.50	3
Co			1	98.116	ug/l	0.93	4,113,460.50	1.212E+01	Pulse	0.50	3
Ni			1	99.658	ug/l	0.12	1,137,438.67	3.351E+00	Pulse	0.50	3
Cu			1	99.561	ug/l	0.29	3,174,091.83	9.353E+00	Pulse	0.50	3
Zn			1	100.922	ug/l	0.30	388,262.19	7.511E-01	Pulse	1.00	3
Cd			1	100.716	ug/l	0.41	727,202.52	1.407E+00	Pulse	0.50	3
Al			1	9667.246	ug/l	1.26	2,973,557.25	7.152E+00	Pulse	1.00	3
Se			1	100.859	ug/l	0.61	15,590.68	4.567E-03	Pulse	3.00	3
Sb			1	98.818	ug/l	0.63	1,477,155.83	2.858E+00	Pulse	1.00	3
Se			1	96.945	ug/l	0.53	7,872.85	2.833E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,080,036.33	0.57	96.1	Analog	0.50	3
1	Sc		415,811.21	0.87	97.4	Pulse	0.30	3
1	Ge		339,383.48	0.33	97.6	Pulse	0.30	3
1	In		3,413,974.44	0.16	95.0	Pulse	0.30	3
1	Tb		14,693,736.33	0.87	101.1	Analog	0.50	3
1	Lu		8,605,918.33	1.03	99.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		516,893.71	0.23	97.2	Pulse	0.30	3
1	Te		27,792.43	0.88	89.1	Pulse	0.50	3
1	Li		2,092.34	4.50	91.1	Pulse	0.30	3

Quantitation Report

File Name	019_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:37
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	-840.49	764.68	2.205E-03	Pulse	0.50	3
As			1	0.006	ug/l	73.54	41.33	1.193E-04	Pulse	1.00	3
Mo			1	0.053	ug/l	6.32	886.02	1.676E-03	Pulse	0.50	3
Pb			1	-0.009	ug/l	-29.91	12,918.89	1.201E-03	Pulse	1.00	3
Be			1	0.013	ug/l	116.56	1.83	4.405E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	18.22	750.02	1.418E-03	Pulse	0.50	3
Ba			1	0.004	ug/l	194.79	56.00	1.582E-05	Pulse	0.50	3
Tl			1	0.020	ug/l	9.01	2,918.93	2.713E-04	Pulse	0.50	3
Sn			1	0.058	ug/l	58.63	1,465.97	4.137E-04	Pulse	0.30	3
Sr			1	-0.002	ug/l	-333.12	1,239.38	3.496E-04	Pulse	0.50	3
[Pb]			1	-0.013	ug/l	-6.73	6,018.41	5.595E-04	Pulse	0.50	3
Ca			1	0.026	ug/l	1320.11	117.33	2.810E-04	Pulse	0.50	3
Ti			1	0.013	ug/l	64.15	8.00	1.915E-05	Pulse	0.50	3
Na			1	-0.643	ug/l	-53.61	21,021.99	5.036E-02	Pulse	1.00	3
Mg			1	0.775	ug/l	14.01	992.02	2.377E-03	Pulse	1.00	3
K			1	1.738	ug/l	20.39	15,449.70	3.701E-02	Pulse	1.00	3
V			1	-0.011	ug/l	-15.36	378.01	9.054E-04	Pulse	0.50	3
Mn			1	-0.004	ug/l	-49.69	72.67	2.095E-04	Pulse	0.50	3
Fe			1	0.772	ug/l	16.23	19,602.67	5.653E-02	Pulse	0.50	3
Co			1	-0.002	ug/l	-22.11	212.67	6.128E-04	Pulse	0.50	3
Ni			1	-0.008	ug/l	-29.51	142.00	4.097E-04	Pulse	0.50	3
Cu			1	-0.336	ug/l	-2.35	68,366.31	1.971E-01	Pulse	0.50	3
Zn			1	-0.272	ug/l	-14.80	7,497.47	1.418E-02	Pulse	1.00	3
Cd			1	0.004	ug/l	21.49	37.33	7.060E-05	Pulse	0.50	3
Al			1	0.284	ug/l	10.92	447.34	1.072E-03	Pulse	1.00	3
Se			1	0.010	ug/l	103.98	25.78	7.272E-06	Pulse	3.00	3
Sb			1	-0.019	ug/l	-9.22	531.34	1.005E-03	Pulse	1.00	3
Se			1	-0.019	ug/l	-127.74	34.00	1.134E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,757,821.67	0.29	102.5	Analog	0.50	3
1	Sc		417,502.75	0.49	97.8	Pulse	0.30	3

Quantitation Report

1	Ge		346,907.18	0.71	99.8	Pulse	0.30	3
1	In		3,545,253.19	0.27	98.6	Pulse	0.30	3
1	Tb		14,770,895.00	0.16	101.6	Analog	0.50	3
1	Lu		8,624,383.33	0.49	99.8	Analog	0.50	3
1	Ge		528,770.72	0.96	99.5	Pulse	0.30	3
1	Te		29,992.56	1.87	96.2	Pulse	0.50	3
1	Li		2,305.70	0.22	100.4	Pulse	0.30	3

Quantitation Report

File Name	020_MB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:40
Sample Name	MP33666-MB1
Sample Type	MB
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.203	ug/l	7.61	2,891.56	9.036E-03	Pulse	0.50	3
As			1	0.062	ug/l	23.40	94.67	2.957E-04	Pulse	1.00	3
Mo			1	0.217	ug/l	13.72	1,666.75	3.390E-03	Pulse	0.50	3
Pb			1	0.070	ug/l	5.10	16,635.42	1.583E-03	Pulse	1.00	3
Be			1	0.016	ug/l	121.07	1.17	2.971E-06	Pulse	2.00	3
Ag			1	0.040	ug/l	16.17	1,233.38	2.512E-03	Pulse	0.50	3
Ba			1	0.061	ug/l	4.83	198.00	5.883E-05	Pulse	0.50	3
Tl			1	0.025	ug/l	4.24	1,785.43	1.699E-04	Pulse	0.50	3
Sn			1	0.600	ug/l	8.46	4,542.82	1.350E-03	Pulse	0.30	3
Sr			1	0.112	ug/l	11.15	1,811.43	5.383E-04	Pulse	0.50	3
[Pb]			1	0.066	ug/l	15.62	7,834.48	7.457E-04	Pulse	0.50	3
Ca			1	26.621	ug/l	3.46	720.69	1.828E-03	Pulse	0.50	3
Ti			1	0.147	ug/l	21.98	30.67	7.771E-05	Pulse	0.50	3
Na			1	28.079	ug/l	3.67	54,841.28	1.391E-01	Pulse	1.00	3
Mg			1	10.597	ug/l	8.11	5,557.45	1.409E-02	Pulse	1.00	3
K			1	5.367	ug/l	9.11	15,380.66	3.901E-02	Pulse	1.00	3
V			1	0.169	ug/l	5.91	1,857.43	4.710E-03	Pulse	0.50	3
Mn			1	0.180	ug/l	8.80	959.36	2.997E-03	Pulse	0.50	3
Fe			1	8.082	ug/l	8.41	73,171.70	2.286E-01	Pulse	0.50	3
Co			1	0.004	ug/l	65.55	350.67	1.097E-03	Pulse	0.50	3
Ni			1	0.158	ug/l	12.98	1,065.37	3.329E-03	Pulse	0.50	3
Cu			1	-2.164	ug/l	-1.24	41,191.77	1.287E-01	Pulse	0.50	3
Zn			1	0.317	ug/l	7.46	8,505.88	1.731E-02	Pulse	1.00	3
Cd			1	0.013	ug/l	34.24	52.67	1.071E-04	Pulse	0.50	3
Al			1	9.887	ug/l	7.26	1,781.75	4.518E-03	Pulse	1.00	3
Se			1	0.067	ug/l	92.13	28.00	8.328E-06	Pulse	3.00	3
Sb			1	0.130	ug/l	4.36	1,691.08	3.443E-03	Pulse	1.00	3
Se			1	0.272	ug/l	33.60	37.44	1.586E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,507,726.67	0.75	100.2	Analog	0.50	3
1	Sc		394,285.01	0.75	92.4	Pulse	0.30	3
1	Ge		320,087.06	1.31	92.1	Pulse	0.30	3
1	In		3,365,564.03	0.93	93.6	Pulse	0.30	3
1	Tb		14,532,255.00	0.86	100.0	Analog	0.50	3
1	Lu		8,509,183.67	1.60	98.5	Analog	0.50	3
1	Ge		491,290.03	1.31	92.4	Pulse	0.30	3
1	Te		23,600.62	0.78	75.7	Pulse	0.50	3
1	Li		1,995.66	3.01	86.9	Pulse	0.30	3

Quantitation Report

File Name	021_BSP.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:44
Sample Name	MP33666-B1
Sample Type	BSP
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	208.479	ug/l	1.90	2,195,693.58	6.975E+00	Pulse	0.50	3
As			1	195.963	ug/l	0.61	213,079.01	6.768E-01	Pulse	1.00	3
Mo			1	210.037	ug/l	0.62	1,551,829.54	3.234E+00	Pulse	0.50	3
Pb			1	203.800	ug/l	1.57	8,708,744.67	8.908E-01	Analog	1.00	3
Be			1	207.097	ug/l	0.25	11,225.59	2.842E-02	Pulse	2.00	3
Ag			1	99.946	ug/l	1.09	2,697,208.25	5.621E+00	Pulse	0.50	3
Ba			1	201.311	ug/l	0.60	532,665.21	1.643E-01	Pulse	0.50	3
Tl			1	196.048	ug/l	1.69	12,514,886.67	1.280E+00	Analog	0.50	3
Sn			1	204.370	ug/l	0.74	1,282,864.78	3.958E-01	Pulse	0.30	3
Sr			1	200.691	ug/l	1.76	1,063,554.29	3.281E-01	Pulse	0.50	3
[Pb]			1	189.274	ug/l	1.22	3,788,065.42	3.875E-01	Pulse	0.50	3
Ca			1	18859.468	ug/l	0.67	433,836.85	1.098E+00	Pulse	0.50	3
Ti			1	203.448	ug/l	0.94	39,135.65	9.908E-02	Pulse	0.50	3
Na			1	19415.858	ug/l	1.05	23,195,128.67	5.873E+01	Analog	1.00	3
Mg			1	19295.831	ug/l	0.89	9,869,853.00	2.499E+01	Analog	1.00	3
K			1	19015.749	ug/l	0.60	7,970,363.00	2.018E+01	Analog	1.00	3
V			1	205.498	ug/l	0.59	1,607,070.59	4.069E+00	Pulse	0.50	3
Mn			1	198.487	ug/l	0.91	920,151.87	2.923E+00	Pulse	0.50	3
Fe			1	19812.195	ug/l	0.93	164,168,133.33	5.215E+02	Analog	0.50	3
Co			1	206.537	ug/l	1.05	4,016,171.33	1.276E+01	Pulse	0.50	3
Ni			1	212.295	ug/l	0.15	1,123,854.96	3.570E+00	Pulse	0.50	3
Cu			1	207.158	ug/l	0.77	3,060,423.08	9.721E+00	Pulse	0.50	3
Zn			1	191.102	ug/l	0.66	341,696.19	7.120E-01	Pulse	1.00	3
Cd			1	203.071	ug/l	0.76	680,632.08	1.418E+00	Pulse	0.50	3
Al			1	17481.590	ug/l	0.61	2,554,072.83	6.466E+00	Pulse	1.00	3
Se			1	172.881	ug/l	0.92	12,690.31	3.915E-03	Pulse	3.00	3
Sb			1	197.207	ug/l	0.94	1,368,420.46	2.852E+00	Pulse	1.00	3
Se			1	191.182	ug/l	1.21	6,438.53	2.793E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,777,140.67	0.72	93.2	Analog	0.50	3
1	Sc		394,976.63	0.39	92.5	Pulse	0.30	3
1	Ge		314,835.01	0.66	90.6	Pulse	0.30	3
1	In		3,241,715.57	0.76	90.2	Pulse	0.30	3
1	Tb		14,436,834.33	0.38	99.3	Analog	0.50	3
1	Lu		8,479,226.33	0.49	98.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		479,899.01	0.55	90.3	Pulse	0.30	3
1	Te		23,050.53	0.71	73.9	Pulse	0.50	3
1	Li		2,004.56	3.66	87.3	Pulse	0.30	3

Quantitation Report

File Name	022SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:48
Sample Name	FA53574-4F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	42.461	ug/l	0.06	455,627.25	1.422E+00	Pulse	0.50	3
As			1	0.962	ug/l	5.17	1,090.70	3.404E-03	Pulse	1.00	3
Mo			1	13.819	ug/l	0.98	104,292.43	2.128E-01	Pulse	0.50	3
Pb			1	-0.089	ug/l	-7.21	8,720.23	8.888E-04	Pulse	1.00	3
Be			1	0.009	ug/l	146.44	0.83	2.080E-06	Pulse	2.00	3
Ag			1	0.025	ug/l	11.54	819.35	1.673E-03	Pulse	0.50	3
Ba			1	44.416	ug/l	1.23	119,520.46	3.626E-02	Pulse	0.50	3
Tl			1	0.051	ug/l	12.37	3,371.02	3.436E-04	Pulse	0.50	3
Sn			1	0.476	ug/l	8.46	3,660.40	1.111E-03	Pulse	0.30	3
Sr			1	532.658	ug/l	0.76	2,868,530.58	8.703E-01	Pulse	0.50	3
[Pb]			1	-0.094	ug/l	-15.10	4,108.51	4.188E-04	Pulse	0.50	3
Ca			1	74961.769	ug/l	1.35	1,758,331.87	4.365E+00	Pulse	0.50	3
Ti			1	0.259	ug/l	39.53	53.33	1.325E-04	Pulse	0.50	3
Na			1	48107.993	ug/l	1.46	58,582,562.67	1.454E+02	Analog	1.00	3
Mg			1	59.129	ug/l	2.13	30,995.57	7.694E-02	Pulse	1.00	3
K			1	11848.795	ug/l	1.70	5,070,692.83	1.259E+01	Mix	1.00	3
V			1	10.167	ug/l	1.76	81,608.84	2.026E-01	Pulse	0.50	3
Mn			1	1.203	ug/l	0.75	5,783.55	1.805E-02	Pulse	0.50	3
Fe			1	13.322	ug/l	2.49	117,429.66	3.665E-01	Pulse	0.50	3
Co			1	1.239	ug/l	1.14	24,795.18	7.740E-02	Pulse	0.50	3
Ni			1	2.206	ug/l	2.43	12,099.15	3.777E-02	Pulse	0.50	3
Cu			1	5.303	ug/l	2.93	150,848.53	4.709E-01	Pulse	0.50	3
Zn			1	-1.223	ug/l	-3.56	5,737.53	1.171E-02	Pulse	1.00	3
Cd			1	0.014	ug/l	20.60	55.33	1.127E-04	Pulse	0.50	3
Al			1	2124.959	ug/l	1.26	316,931.57	7.868E-01	Pulse	1.00	3
Se			1	0.519	ug/l	18.93	61.11	1.855E-05	Pulse	3.00	3
Sb			1	3.347	ug/l	1.19	24,472.25	4.994E-02	Pulse	1.00	3
Se			1	0.889	ug/l	18.10	55.45	2.483E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,811,613.67	0.51	93.5	Analog	0.50	3
1	Sc		402,849.41	1.41	94.4	Pulse	0.30	3
1	Ge		320,340.64	0.81	92.2	Pulse	0.30	3
1	In		3,296,153.83	0.42	91.7	Pulse	0.30	3
1	Tb		14,417,764.00	0.37	99.2	Analog	0.50	3
1	Lu		8,475,956.00	1.59	98.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		490,122.97	1.34	92.2	Pulse	0.30	3
1	Te		22,341.67	0.96	71.6	Pulse	0.50	3
1	Li		2,152.35	13.42	93.8	Pulse	0.30	3

Quantitation Report

File Name	023SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:51
Sample Name	MP33666-D1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	42.484	ug/l	0.89	459,665.88	1.423E+00	Pulse	0.50	3
As			1	0.916	ug/l	3.34	1,047.36	3.242E-03	Pulse	1.00	3
Mo			1	13.503	ug/l	0.66	103,105.22	2.079E-01	Pulse	0.50	3
Pb			1	-0.059	ug/l	-7.42	10,019.95	1.023E-03	Pulse	1.00	3
Be			1	0.033	ug/l	63.33	2.17	5.332E-06	Pulse	2.00	3
Ag			1	0.019	ug/l	10.06	654.68	1.320E-03	Pulse	0.50	3
Ba			1	44.104	ug/l	0.86	119,801.94	3.601E-02	Pulse	0.50	3
Tl			1	0.018	ug/l	10.48	1,222.05	1.248E-04	Pulse	0.50	3
Sn			1	0.393	ug/l	5.54	3,162.52	9.505E-04	Pulse	0.30	3
Sr			1	530.464	ug/l	0.28	2,883,587.50	8.667E-01	Pulse	0.50	3
[Pb]			1	-0.068	ug/l	-4.64	4,620.65	4.719E-04	Pulse	0.50	3
Ca			1	74080.623	ug/l	0.94	1,757,053.87	4.314E+00	Pulse	0.50	3
Ti			1	0.266	ug/l	56.67	55.33	1.359E-04	Pulse	0.50	3
Na			1	47737.083	ug/l	0.70	58,779,021.33	1.443E+02	Analog	1.00	3
Mg			1	58.376	ug/l	0.16	30,943.49	7.597E-02	Pulse	1.00	3
K			1	11662.410	ug/l	1.93	5,046,326.50	1.239E+01	Mix	1.00	3
V			1	10.057	ug/l	1.09	81,628.29	2.004E-01	Pulse	0.50	3
Mn			1	1.282	ug/l	1.72	6,206.35	1.921E-02	Pulse	0.50	3
Fe			1	15.227	ug/l	2.80	134,585.22	4.167E-01	Pulse	0.50	3
Co			1	1.237	ug/l	0.09	24,953.40	7.725E-02	Pulse	0.50	3
Ni			1	2.179	ug/l	1.92	12,049.79	3.730E-02	Pulse	0.50	3
Cu			1	5.285	ug/l	0.58	151,826.00	4.700E-01	Pulse	0.50	3
Zn			1	0.449	ug/l	20.58	8,822.36	1.779E-02	Pulse	1.00	3
Cd			1	0.005	ug/l	71.33	27.33	5.509E-05	Pulse	0.50	3
Al			1	2124.063	ug/l	0.36	320,335.38	7.864E-01	Pulse	1.00	3
Se			1	0.449	ug/l	9.32	56.44	1.697E-05	Pulse	3.00	3
Sb			1	3.229	ug/l	1.76	23,915.85	4.823E-02	Pulse	1.00	3
Se			1	1.057	ug/l	8.46	61.33	2.727E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,792,578.67	0.48	93.3	Analog	0.50	3
1	Sc		407,321.69	0.66	95.4	Pulse	0.30	3
1	Ge		323,010.66	0.31	92.9	Pulse	0.30	3
1	In		3,327,152.65	0.32	92.6	Pulse	0.30	3
1	Tb		14,618,821.67	1.55	100.6	Analog	0.50	3
1	Lu		8,523,974.67	0.54	98.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		495,851.72	0.26	93.3	Pulse	0.30	3
1	Te		22,472.51	2.37	72.0	Pulse	0.50	3
1	Li		2,085.67	7.11	90.9	Pulse	0.30	3

Quantitation Report

File Name 024SMPL.d
File Path D:\2018\04-April\xa043018m1.b
Method File
Method Path
Acq Time 4/30/2018 9:55
Sample Name MP33666-SD1
Sample Type Sample
Comment
Prep Dilution 10.000
Auto Dilution N/A
Total Dilution 10.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/30/2018 14:30
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	45.239	ug/l	0.22	106,337.02	3.048E-01	Pulse	0.50	3
As			1	1.040	ug/l	4.50	278.67	7.988E-04	Pulse	1.00	3
Mo			1	14.272	ug/l	1.18	23,459.99	4.399E-02	Pulse	0.50	3
Pb			1	-0.258	ug/l	-7.82	11,110.95	1.054E-03	Pulse	1.00	3
Be			1	0.128	ug/l	51.62	1.83	4.295E-06	Pulse	2.00	3
Ag			1	0.041	ug/l	34.75	386.01	7.237E-04	Pulse	0.50	3
Ba			1	48.244	ug/l	1.65	27,693.18	7.885E-03	Pulse	0.50	3
Tl			1	0.037	ug/l	10.45	591.35	5.609E-05	Pulse	0.50	3
Sn			1	0.244	ug/l	22.06	995.59	2.833E-04	Pulse	0.30	3
Sr			1	571.489	ug/l	1.05	656,894.02	1.870E-01	Pulse	0.50	3
[Pb]			1	-0.302	ug/l	-8.94	5,142.13	4.877E-04	Pulse	0.50	3
Ca			1	80772.058	ug/l	0.27	402,582.13	9.409E-01	Pulse	0.50	3
Ti			1	0.369	ug/l	81.74	18.00	4.224E-05	Pulse	0.50	3
Na			1	52298.338	ug/l	0.90	13,547,130.33	3.166E+01	Analog	1.00	3
Mg			1	69.263	ug/l	1.47	7,834.54	1.831E-02	Pulse	1.00	3
K			1	12748.394	ug/l	0.60	1,170,054.96	2.735E+00	Pulse	1.00	3
V			1	10.826	ug/l	2.10	18,915.87	4.421E-02	Pulse	0.50	3
Mn			1	1.330	ug/l	1.41	1,485.40	4.258E-03	Pulse	0.50	3
Fe			1	14.122	ug/l	1.82	31,476.17	9.023E-02	Pulse	0.50	3
Co			1	1.286	ug/l	3.60	5,840.23	1.674E-02	Pulse	0.50	3
Ni			1	2.337	ug/l	2.04	2,975.57	8.530E-03	Pulse	0.50	3
Cu			1	1.272	ug/l	19.31	83,555.61	2.395E-01	Pulse	0.50	3
Zn			1	-2.909	ug/l	-5.65	7,486.80	1.404E-02	Pulse	1.00	3
Cd			1	0.006	ug/l	263.17	14.00	2.621E-05	Pulse	0.50	3
Al			1	2348.162	ug/l	0.98	74,685.71	1.746E-01	Pulse	1.00	3
Se			1	1.193	ug/l	71.51	42.78	1.220E-05	Pulse	3.00	3
Sb			1	3.323	ug/l	1.05	5,957.31	1.117E-02	Pulse	1.00	3
Se			1	0.630	ug/l	65.59	38.56	1.373E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,542,573.00	0.24	100.5	Analog	0.50	3
1	Sc		427,886.82	0.90	100.2	Pulse	0.30	3
1	Ge		348,841.46	0.17	100.4	Pulse	0.30	3
1	In		3,512,628.54	0.91	97.7	Pulse	0.30	3
1	Tb		14,837,849.67	1.26	102.1	Analog	0.50	3
1	Lu		8,697,394.33	0.30	100.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		533,273.16	0.44	100.3	Pulse	0.30	3
1	Te		28,088.86	0.72	90.1	Pulse	0.50	3
1	Li		2,389.05	5.86	104.1	Pulse	0.30	3

Quantitation Report

File Name	025SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:58
Sample Name	MP33666-S1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	253.648	ug/l	0.49	2,632,248.75	8.485E+00	Pulse	0.50	3
As			1	199.850	ug/l	0.56	214,111.39	6.902E-01	Pulse	1.00	3
Mo			1	225.828	ug/l	1.30	1,657,218.92	3.477E+00	Pulse	0.50	3
Pb			1	206.820	ug/l	0.43	8,496,125.33	9.040E-01	Analog	1.00	3
Be			1	204.686	ug/l	0.41	11,138.37	2.809E-02	Pulse	2.00	3
Ag			1	102.619	ug/l	1.35	2,750,748.92	5.771E+00	Pulse	0.50	3
Ba			1	241.920	ug/l	1.14	634,682.23	1.975E-01	Pulse	0.50	3
Tl			1	200.078	ug/l	1.47	12,277,948.33	1.306E+00	Analog	0.50	3
Sn			1	203.362	ug/l	0.51	1,265,729.33	3.938E-01	Pulse	0.30	3
Sr			1	721.791	ug/l	1.19	3,789,919.08	1.179E+00	Pulse	0.50	3
[Pb]			1	191.482	ug/l	1.32	3,683,740.58	3.920E-01	Pulse	0.50	3
Ca			1	91243.208	ug/l	1.07	2,106,682.33	5.313E+00	Pulse	0.50	3
Ti			1	205.220	ug/l	0.36	39,631.99	9.995E-02	Pulse	0.50	3
Na			1	66410.416	ug/l	1.12	79,596,669.33	2.007E+02	Analog	1.00	3
Mg			1	19523.803	ug/l	1.14	10,025,711.00	2.528E+01	Analog	1.00	3
K			1	30939.459	ug/l	1.00	13,010,896.67	3.281E+01	Analog	1.00	3
V			1	217.493	ug/l	1.33	1,707,471.96	4.306E+00	Pulse	0.50	3
Mn			1	202.473	ug/l	0.85	924,826.08	2.981E+00	Pulse	0.50	3
Fe			1	20203.203	ug/l	0.49	164,949,317.33	5.318E+02	Analog	0.50	3
Co			1	210.154	ug/l	0.64	4,026,746.75	1.298E+01	Pulse	0.50	3
Ni			1	212.114	ug/l	0.29	1,106,407.67	3.567E+00	Pulse	0.50	3
Cu			1	211.087	ug/l	0.39	3,071,239.92	9.901E+00	Pulse	0.50	3
Zn			1	184.650	ug/l	0.83	328,192.64	6.885E-01	Pulse	1.00	3
Cd			1	199.863	ug/l	0.84	665,362.23	1.396E+00	Pulse	0.50	3
Al			1	19607.995	ug/l	1.36	2,875,859.00	7.253E+00	Pulse	1.00	3
Se			1	174.049	ug/l	1.47	12,667.75	3.941E-03	Pulse	3.00	3
Sb			1	198.003	ug/l	1.22	1,364,664.37	2.863E+00	Pulse	1.00	3
Se			1	204.413	ug/l	0.70	6,356.95	2.986E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,399,010.33	1.24	89.6	Analog	0.50	3
1	Sc		396,533.08	0.61	92.9	Pulse	0.30	3
1	Ge		310,206.45	0.81	89.2	Pulse	0.30	3
1	In		3,214,154.80	0.09	89.4	Pulse	0.30	3
1	Tb		14,205,005.33	0.38	97.7	Analog	0.50	3
1	Lu		8,355,872.67	0.51	96.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		476,662.71	0.52	89.7	Pulse	0.30	3
1	Te		21,291.08	1.18	68.3	Pulse	0.50	3
1	Li		1,943.44	6.65	84.7	Pulse	0.30	3

Quantitation Report

File Name	026SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:02
Sample Name	MP33666-S2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	252.316	ug/l	0.50	2,667,427.92	8.441E+00	Pulse	0.50	3
As			1	196.897	ug/l	0.41	214,902.88	6.800E-01	Pulse	1.00	3
Mo			1	224.451	ug/l	0.50	1,666,164.33	3.456E+00	Pulse	0.50	3
Pb			1	206.332	ug/l	1.25	8,512,366.33	9.018E-01	Analog	1.00	3
Be			1	202.586	ug/l	0.74	11,255.11	2.780E-02	Pulse	2.00	3
Ag			1	102.311	ug/l	0.89	2,774,070.58	5.754E+00	Pulse	0.50	3
Ba			1	244.775	ug/l	0.54	645,547.23	1.998E-01	Pulse	0.50	3
Tl			1	200.012	ug/l	0.56	12,327,784.00	1.306E+00	Analog	0.50	3
Sn			1	204.068	ug/l	0.73	1,276,779.81	3.952E-01	Pulse	0.30	3
Sr			1	723.969	ug/l	1.03	3,821,226.67	1.183E+00	Pulse	0.50	3
[Pb]			1	191.346	ug/l	0.74	3,697,316.33	3.917E-01	Pulse	0.50	3
Ca			1	89946.197	ug/l	0.67	2,120,287.92	5.237E+00	Pulse	0.50	3
Ti			1	200.930	ug/l	1.09	39,615.92	9.786E-02	Pulse	0.50	3
Na			1	65804.355	ug/l	0.65	80,527,274.67	1.989E+02	Analog	1.00	3
Mg			1	19162.326	ug/l	0.58	10,046,528.33	2.482E+01	Analog	1.00	3
K			1	30519.784	ug/l	0.99	13,103,430.33	3.237E+01	Analog	1.00	3
V			1	214.476	ug/l	0.41	1,719,167.08	4.246E+00	Pulse	0.50	3
Mn			1	201.460	ug/l	1.00	937,462.79	2.967E+00	Pulse	0.50	3
Fe			1	19812.435	ug/l	0.70	164,791,845.33	5.215E+02	Analog	0.50	3
Co			1	206.125	ug/l	0.28	4,023,402.83	1.273E+01	Pulse	0.50	3
Ni			1	208.480	ug/l	0.97	1,107,832.25	3.506E+00	Pulse	0.50	3
Cu			1	210.547	ug/l	0.49	3,121,019.92	9.876E+00	Pulse	0.50	3
Zn			1	187.727	ug/l	0.36	337,385.28	6.997E-01	Pulse	1.00	3
Cd			1	198.011	ug/l	0.32	666,811.94	1.383E+00	Pulse	0.50	3
Al			1	19186.078	ug/l	0.35	2,873,207.08	7.097E+00	Pulse	1.00	3
Se			1	171.451	ug/l	0.86	12,544.55	3.883E-03	Pulse	3.00	3
Sb			1	197.988	ug/l	0.64	1,380,321.83	2.863E+00	Pulse	1.00	3
Se			1	198.729	ug/l	1.12	6,383.96	2.903E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,439,559.33	0.85	90.0	Analog	0.50	3
1	Sc		404,850.23	0.71	94.8	Pulse	0.30	3
1	Ge		316,020.21	0.30	90.9	Pulse	0.30	3
1	In		3,231,115.98	0.81	89.9	Pulse	0.30	3
1	Tb		14,267,944.67	0.53	98.2	Analog	0.50	3
1	Lu		8,442,697.67	0.81	97.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		482,159.18	0.54	90.7	Pulse	0.30	3
1	Te		21,989.90	0.53	70.5	Pulse	0.50	3
1	Li		1,992.33	2.56	86.8	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:06
Sample Name	MP33666-PS1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	62.736	ug/l	0.86	681,867.81	2.100E+00	Pulse	0.50	3
As			1	19.817	ug/l	0.81	22,244.90	6.852E-02	Pulse	1.00	3
Mo			1	33.569	ug/l	1.50	256,484.38	5.169E-01	Pulse	0.50	3
Pb			1	18.784	ug/l	1.71	810,125.48	8.326E-02	Pulse	1.00	3
Be			1	20.137	ug/l	1.19	1,130.53	2.764E-03	Pulse	2.00	3
Ag			1	4.462	ug/l	0.92	124,650.09	2.512E-01	Pulse	0.50	3
Ba			1	64.347	ug/l	1.50	173,076.05	5.253E-02	Pulse	0.50	3
Tl			1	18.286	ug/l	0.72	1,161,890.58	1.194E-01	Pulse	0.50	3
Sn			1	20.092	ug/l	1.90	128,749.29	3.908E-02	Pulse	0.30	3
Sr			1	559.640	ug/l	0.84	3,012,591.00	9.143E-01	Pulse	0.50	3
[Pb]			1	18.135	ug/l	0.53	366,622.82	3.768E-02	Pulse	0.50	3
Ca			1	76477.954	ug/l	0.67	1,821,315.79	4.453E+00	Pulse	0.50	3
Ti			1	19.042	ug/l	4.50	3,795.05	9.280E-03	Pulse	0.50	3
Na			1	50722.518	ug/l	1.03	62,711,301.33	1.533E+02	Analog	1.00	3
Mg			1	1949.595	ug/l	0.35	1,032,782.46	2.525E+00	Pulse	1.00	3
K			1	13924.541	ug/l	0.65	6,047,252.83	1.479E+01	Analog	1.00	3
V			1	29.972	ug/l	1.07	243,181.96	5.946E-01	Pulse	0.50	3
Mn			1	20.969	ug/l	1.97	100,338.36	3.091E-01	Pulse	0.50	3
Fe			1	1958.827	ug/l	1.33	16,741,497.00	5.157E+01	Analog	0.50	3
Co			1	21.073	ug/l	1.46	422,793.29	1.302E+00	Pulse	0.50	3
Ni			1	22.153	ug/l	0.82	121,123.71	3.731E-01	Pulse	0.50	3
Cu			1	25.297	ug/l	1.65	450,296.58	1.387E+00	Pulse	0.50	3
Zn			1	16.452	ug/l	1.31	37,747.44	7.607E-02	Pulse	1.00	3
Cd			1	18.402	ug/l	0.31	63,791.39	1.285E-01	Pulse	0.50	3
Al			1	3880.092	ug/l	0.71	587,277.11	1.436E+00	Pulse	1.00	3
Se			1	17.165	ug/l	0.76	1,300.94	3.948E-04	Pulse	3.00	3
Sb			1	20.515	ug/l	0.51	147,910.39	2.980E-01	Pulse	1.00	3
Se			1	19.901	ug/l	3.89	673.46	3.014E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,730,973.33	1.04	92.7	Analog	0.50	3
1	Sc		408,998.73	0.45	95.8	Pulse	0.30	3
1	Ge		324,655.59	0.92	93.4	Pulse	0.30	3
1	In		3,294,969.80	0.58	91.7	Pulse	0.30	3
1	Tb		14,631,605.00	0.63	100.7	Analog	0.50	3
1	Lu		8,584,725.67	1.21	99.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		496,280.34	1.20	93.4	Pulse	0.30	3
1	Te		22,347.66	1.15	71.6	Pulse	0.50	3
1	Li		2,141.24	6.00	93.3	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:09
Sample Name	FA53574-6F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.849	ug/l	2.21	9,938.56	3.064E-02	Pulse	0.50	3
As			1	0.273	ug/l	9.83	332.00	1.023E-03	Pulse	1.00	3
Mo			1	0.174	ug/l	8.86	1,346.05	2.729E-03	Pulse	0.50	3
Pb			1	-0.062	ug/l	-6.82	10,355.14	1.007E-03	Pulse	1.00	3
Be			1	0.028	ug/l	95.67	1.83	4.596E-06	Pulse	2.00	3
Ag			1	0.019	ug/l	0.83	668.68	1.356E-03	Pulse	0.50	3
Ba			1	4.416	ug/l	1.71	12,042.70	3.613E-03	Pulse	0.50	3
Tl			1	0.022	ug/l	10.87	1,544.08	1.501E-04	Pulse	0.50	3
Sn			1	0.421	ug/l	4.06	3,348.21	1.005E-03	Pulse	0.30	3
Sr			1	45.835	ug/l	0.11	250,676.34	7.521E-02	Pulse	0.50	3
[Pb]			1	-0.070	ug/l	-2.89	4,812.03	4.678E-04	Pulse	0.50	3
Ca			1	7844.363	ug/l	1.93	182,893.56	4.570E-01	Pulse	0.50	3
Ti			1	0.254	ug/l	2.11	52.00	1.299E-04	Pulse	0.50	3
Na			1	12766.222	ug/l	2.76	15,458,287.33	3.863E+01	Analog	1.00	3
Mg			1	3145.716	ug/l	2.21	1,630,368.21	4.074E+00	Pulse	1.00	3
K			1	2284.582	ug/l	2.27	981,899.54	2.454E+00	Pulse	1.00	3
V			1	2.735	ug/l	2.00	22,208.65	5.550E-02	Pulse	0.50	3
Mn			1	0.658	ug/l	3.37	3,255.62	1.004E-02	Pulse	0.50	3
Fe			1	8.419	ug/l	0.56	77,035.71	2.375E-01	Pulse	0.50	3
Co			1	0.080	ug/l	4.65	1,881.43	5.800E-03	Pulse	0.50	3
Ni			1	0.874	ug/l	1.15	4,983.99	1.536E-02	Pulse	0.50	3
Cu			1	-2.079	ug/l	-1.76	43,013.13	1.326E-01	Pulse	0.50	3
Zn			1	0.200	ug/l	61.77	8,326.14	1.688E-02	Pulse	1.00	3
Cd			1	0.010	ug/l	27.49	44.67	9.051E-05	Pulse	0.50	3
Al			1	9.736	ug/l	1.53	1,786.08	4.462E-03	Pulse	1.00	3
Se			1	0.173	ug/l	46.15	35.67	1.071E-05	Pulse	3.00	3
Sb			1	0.063	ug/l	24.09	1,222.71	2.480E-03	Pulse	1.00	3
Se			1	0.510	ug/l	40.69	43.33	1.932E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,286,389.33	0.18	98.0	Analog	0.50	3
1	Sc		400,287.12	2.05	93.8	Pulse	0.30	3
1	Ge		324,380.09	0.21	93.3	Pulse	0.30	3
1	In		3,333,009.94	0.76	92.7	Pulse	0.30	3
1	Tb		14,755,881.33	0.19	101.5	Analog	0.50	3
1	Lu		8,605,457.67	0.82	99.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		493,162.98	0.54	92.8	Pulse	0.30	3
1	Te		22,448.46	0.95	72.0	Pulse	0.50	3
1	Li		2,130.13	2.36	92.8	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:13
Sample Name	FA53574-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.175	ug/l	0.68	13,173.14	4.154E-02	Pulse	0.50	3
As			1	1.091	ug/l	5.02	1,219.71	3.847E-03	Pulse	1.00	3
Mo			1	0.170	ug/l	1.87	1,292.72	2.668E-03	Pulse	0.50	3
Pb			1	-0.107	ug/l	-3.09	8,163.63	8.101E-04	Pulse	1.00	3
Be			1	0.010	ug/l	111.39	0.83	2.102E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	8.28	460.01	9.494E-04	Pulse	0.50	3
Ba			1	11.081	ug/l	1.12	29,302.33	9.054E-03	Pulse	0.50	3
Tl			1	0.011	ug/l	20.36	770.69	7.645E-05	Pulse	0.50	3
Sn			1	0.500	ug/l	29.29	3,742.29	1.156E-03	Pulse	0.30	3
Sr			1	98.649	ug/l	0.89	522,585.74	1.615E-01	Pulse	0.50	3
[Pb]			1	-0.109	ug/l	-5.37	3,906.46	3.877E-04	Pulse	0.50	3
Ca			1	21541.357	ug/l	1.08	498,616.36	1.255E+00	Pulse	0.50	3
Ti			1	0.962	ug/l	9.58	188.67	4.750E-04	Pulse	0.50	3
Na			1	10677.102	ug/l	1.70	12,844,860.33	3.232E+01	Analog	1.00	3
Mg			1	12486.435	ug/l	1.22	6,427,013.17	1.617E+01	Analog	1.00	3
K			1	2709.140	ug/l	1.17	1,154,023.04	2.904E+00	Pulse	1.00	3
V			1	2.560	ug/l	2.14	20,681.65	5.204E-02	Pulse	0.50	3
Mn			1	351.453	ug/l	0.39	1,641,180.25	5.175E+00	Pulse	0.50	3
Fe			1	10565.433	ug/l	1.49	88,188,709.33	2.781E+02	Analog	0.50	3
Co			1	0.176	ug/l	2.79	3,716.37	1.172E-02	Pulse	0.50	3
Ni			1	0.672	ug/l	5.81	3,795.05	1.197E-02	Pulse	0.50	3
Cu			1	-2.785	ug/l	-0.91	31,796.14	1.003E-01	Pulse	0.50	3
Zn			1	0.144	ug/l	55.48	8,081.70	1.668E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	68.03	15.33	3.166E-05	Pulse	0.50	3
Al			1	30.061	ug/l	1.17	4,761.24	1.198E-02	Pulse	1.00	3
Se			1	0.101	ug/l	67.88	29.44	9.099E-06	Pulse	3.00	3
Sb			1	0.021	ug/l	36.73	907.36	1.873E-03	Pulse	1.00	3
Se			1	0.766	ug/l	30.82	50.78	2.305E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,077,551.33	1.02	96.1	Analog	0.50	3
1	Sc		397,484.51	1.09	93.1	Pulse	0.30	3
1	Ge		317,150.11	0.90	91.2	Pulse	0.30	3
1	In		3,236,580.15	0.22	90.0	Pulse	0.30	3
1	Tb		14,503,175.33	0.68	99.8	Analog	0.50	3
1	Lu		8,533,883.00	0.88	98.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		484,434.60	0.47	91.1	Pulse	0.30	3
1	Te		22,005.90	1.23	70.6	Pulse	0.50	3
1	Li		2,207.91	2.20	96.2	Pulse	0.30	3

Quantitation Report

File Name	030CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:17
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.674	ug/l	0.15	1,167,990.13	3.325E+00	Pulse	0.50	3
As			1	49.649	ug/l	1.64	120,475.30	3.430E-01	Pulse	1.00	3
Mo			1	49.641	ug/l	0.69	812,909.71	1.529E+00	Pulse	0.50	3
Pb			1	47.110	ug/l	0.59	4,279,502.83	4.125E-01	Pulse	1.00	3
Be			1	52.579	ug/l	0.60	6,233.12	1.443E-02	Pulse	2.00	3
Ag			1	50.517	ug/l	1.25	3,021,594.75	5.682E+00	Pulse	0.50	3
Ba			1	48.494	ug/l	1.55	276,123.68	7.917E-02	Pulse	0.50	3
Tl			1	49.004	ug/l	0.21	6,639,178.83	6.400E-01	Analog	0.50	3
Sn			1	49.241	ug/l	0.48	665,484.23	1.908E-01	Pulse	0.30	3
Sr			1	48.492	ug/l	0.92	553,667.25	1.587E-01	Pulse	0.50	3
[Pb]			1	47.080	ug/l	0.91	2,002,814.71	1.931E-01	Pulse	0.50	3
Ca			1	4912.441	ug/l	1.25	247,181.09	5.723E-01	Pulse	0.50	3
Ti			1	49.706	ug/l	1.04	20,913.16	4.842E-02	Pulse	0.50	3
Na			1	5109.953	ug/l	0.84	13,361,718.33	3.094E+01	Analog	1.00	3
Mg			1	5054.113	ug/l	0.06	5,653,952.17	1.309E+01	Analog	1.00	3
K			1	4898.422	ug/l	0.66	4,497,141.50	1.041E+01	Pulse	1.00	3
V			1	49.761	ug/l	0.20	851,363.36	1.971E+00	Pulse	0.50	3
Mn			1	48.636	ug/l	1.56	503,176.75	1.433E+00	Pulse	0.50	3
Fe			1	5030.405	ug/l	0.85	93,019,808.00	2.648E+02	Analog	0.50	3
Co			1	49.672	ug/l	0.89	2,155,615.58	6.137E+00	Pulse	0.50	3
Ni			1	50.544	ug/l	1.46	597,179.62	1.700E+00	Pulse	0.50	3
Cu			1	49.645	ug/l	1.12	1,678,250.37	4.778E+00	Pulse	0.50	3
Zn			1	50.324	ug/l	0.76	203,499.59	3.827E-01	Pulse	1.00	3
Cd			1	50.271	ug/l	0.19	373,459.26	7.022E-01	Pulse	0.50	3
Al			1	4732.532	ug/l	0.94	1,512,280.00	3.502E+00	Pulse	1.00	3
Se			1	50.627	ug/l	1.34	8,006.90	2.296E-03	Pulse	3.00	3
Sb			1	48.205	ug/l	0.96	741,802.90	1.395E+00	Pulse	1.00	3
Se			1	48.140	ug/l	1.70	4,060.32	1.413E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,374,571.67	0.81	98.9	Analog	0.50	3
1	Sc		431,902.78	0.61	101.2	Pulse	0.30	3
1	Ge		351,291.56	1.12	101.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,487,883.89	0.51	97.0	Pulse	0.30	3
1	Tb		14,832,578.00	0.41	102.0	Analog	0.50	3
1	Lu		8,614,663.33	0.52	99.7	Analog	0.50	3
1	Ge		531,822.93	0.50	100.0	Pulse	0.30	3
1	Te		28,745.24	1.28	92.2	Pulse	0.50	3
1	Li		2,194.58	8.64	95.6	Pulse	0.30	3

Quantitation Report

File Name	031_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:20
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.843	ug/l	0.76	2,331,107.08	6.614E+00	Pulse	0.50	3
As			1	98.633	ug/l	0.25	240,140.45	6.813E-01	Pulse	1.00	3
Mo			1	98.878	ug/l	1.02	1,622,074.46	3.045E+00	Pulse	0.50	3
Pb			1	97.499	ug/l	0.39	8,675,243.67	8.524E-01	Analog	1.00	3
Be			1	102.336	ug/l	0.94	12,363.75	2.809E-02	Pulse	2.00	3
Ag			1	102.250	ug/l	0.56	6,127,042.67	1.150E+01	Analog	0.50	3
Ba			1	96.639	ug/l	0.55	550,092.58	1.578E-01	Pulse	0.50	3
Tl			1	98.050	ug/l	0.67	13,031,799.67	1.280E+00	Analog	0.50	3
Sn			1	98.724	ug/l	0.46	1,333,188.14	3.824E-01	Pulse	0.30	3
Sr			1	98.408	ug/l	0.77	1,121,994.67	3.218E-01	Pulse	0.50	3
[Pb]			1	93.761	ug/l	1.14	3,906,864.42	3.839E-01	Pulse	0.50	3
Ca			1	9771.929	ug/l	0.49	501,028.33	1.138E+00	Pulse	0.50	3
Ti			1	96.393	ug/l	0.14	41,330.76	9.389E-02	Pulse	0.50	3
Na			1	10134.797	ug/l	1.17	26,985,100.67	6.131E+01	Analog	1.00	3
Mg			1	10029.885	ug/l	0.84	11,434,972.00	2.598E+01	Analog	1.00	3
K			1	10057.312	ug/l	1.33	9,394,745.33	2.134E+01	Analog	1.00	3
V			1	98.782	ug/l	1.20	1,721,799.09	3.912E+00	Pulse	0.50	3
Mn			1	97.037	ug/l	0.15	1,007,266.04	2.858E+00	Pulse	0.50	3
Fe			1	9963.492	ug/l	1.06	184,861,152.00	5.245E+02	Analog	0.50	3
Co			1	98.014	ug/l	0.56	4,267,668.33	1.211E+01	Pulse	0.50	3
Ni			1	99.657	ug/l	0.36	1,181,281.00	3.351E+00	Pulse	0.50	3
Cu			1	99.609	ug/l	0.22	3,298,029.58	9.357E+00	Pulse	0.50	3
Zn			1	100.604	ug/l	0.58	398,956.28	7.488E-01	Pulse	1.00	3
Cd			1	98.933	ug/l	0.94	736,287.64	1.382E+00	Pulse	0.50	3
Al			1	9526.807	ug/l	0.84	3,102,279.42	7.048E+00	Pulse	1.00	3
Se			1	100.716	ug/l	0.12	15,901.04	4.560E-03	Pulse	3.00	3
Sb			1	96.015	ug/l	0.60	1,479,373.59	2.777E+00	Pulse	1.00	3
Se			1	97.966	ug/l	1.54	7,991.79	2.862E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,177,691.33	0.54	97.0	Analog	0.50	3
1	Sc		440,194.19	0.83	103.1	Pulse	0.30	3
1	Ge		352,469.06	0.23	101.4	Pulse	0.30	3
1	In		3,486,852.92	0.52	97.0	Pulse	0.30	3
1	Tb		14,896,800.67	0.38	102.5	Analog	0.50	3
1	Lu		8,619,853.67	0.63	99.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		532,780.64	0.45	100.2	Pulse	0.30	3
1	Te		27,921.98	1.04	89.5	Pulse	0.50	3
1	Li		2,291.25	5.17	99.8	Pulse	0.30	3

Quantitation Report

File Name	032_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:24
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.002	ug/l	79.45	812.69	2.345E-03	Pulse	0.50	3
As			1	0.005	ug/l	103.51	40.00	1.158E-04	Pulse	1.00	3
Mo			1	0.028	ug/l	9.37	488.68	9.190E-04	Pulse	0.50	3
Pb			1	-0.013	ug/l	-12.52	12,255.08	1.166E-03	Pulse	1.00	3
Be			1	-0.001	ug/l	-167.23	0.17	3.847E-07	Pulse	2.00	3
Ag			1	0.005	ug/l	9.29	451.34	8.486E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	-181.78	30.67	8.824E-06	Pulse	0.50	3
Tl			1	0.022	ug/l	10.41	3,131.63	2.989E-04	Pulse	0.50	3
Sn			1	0.026	ug/l	35.44	1,012.26	2.906E-04	Pulse	0.30	3
Sr			1	0.005	ug/l	65.51	1,291.38	3.719E-04	Pulse	0.50	3
[Pb]			1	-0.016	ug/l	-23.63	5,728.98	5.457E-04	Pulse	0.50	3
Ca			1	-0.171	ug/l	-321.39	107.33	2.580E-04	Pulse	0.50	3
Ti			1	0.007	ug/l	219.79	5.33	1.260E-05	Pulse	0.50	3
Na			1	-3.353	ug/l	-4.88	14,256.74	3.398E-02	Pulse	1.00	3
Mg			1	0.405	ug/l	19.87	596.68	1.417E-03	Pulse	1.00	3
K			1	1.558	ug/l	43.53	15,359.97	3.663E-02	Pulse	1.00	3
V			1	-0.010	ug/l	-18.25	411.34	9.795E-04	Pulse	0.50	3
Mn			1	-0.004	ug/l	-37.68	77.33	2.220E-04	Pulse	0.50	3
Fe			1	0.430	ug/l	18.61	13,400.05	3.854E-02	Pulse	0.50	3
Co			1	-0.002	ug/l	-40.55	210.00	6.032E-04	Pulse	0.50	3
Ni			1	-0.005	ug/l	-46.83	169.33	4.886E-04	Pulse	0.50	3
Cu			1	-0.398	ug/l	-8.31	66,356.29	1.914E-01	Pulse	0.50	3
Zn			1	-0.266	ug/l	-6.63	7,552.16	1.422E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	38.09	20.00	3.774E-05	Pulse	0.50	3
Al			1	-0.008	ug/l	-785.89	359.67	8.551E-04	Pulse	1.00	3
Se			1	0.004	ug/l	468.63	24.34	7.001E-06	Pulse	3.00	3
Sb			1	-0.026	ug/l	-16.23	429.01	8.105E-04	Pulse	1.00	3
Se			1	0.006	ug/l	810.72	35.89	1.209E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,511,398.00	6.35	100.2	Analog	0.50	3
1	Sc		420,001.50	5.82	98.4	Pulse	0.30	3

Quantitation Report

1	Ge		346,763.88	4.47	99.8	Pulse	0.30	3
1	In		3,472,274.51	6.06	96.6	Pulse	0.30	3
1	Tb		14,523,515.33	5.66	99.9	Analog	0.50	3
1	Lu		8,406,966.50	5.68	97.3	Analog	0.50	3
1	Ge		531,006.38	4.62	99.9	Pulse	0.30	3
1	Te		29,646.72	5.11	95.0	Pulse	0.50	3
1	Li		2,346.82	10.62	102.2	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:28
Sample Name	FA53574-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	5.893	ug/l	2.83	59,980.35	1.993E-01	Pulse	0.50	3
As			1	7.018	ug/l	1.56	7,319.41	2.432E-02	Pulse	1.00	3
Mo			1	2.952	ug/l	2.79	20,947.71	4.550E-02	Pulse	0.50	3
Pb			1	0.363	ug/l	6.58	27,140.79	2.863E-03	Pulse	1.00	3
Be			1	0.072	ug/l	74.13	4.00	1.068E-05	Pulse	2.00	3
Ag			1	0.051	ug/l	8.74	1,432.06	3.113E-03	Pulse	0.50	3
Ba			1	8.516	ug/l	3.50	21,279.18	6.960E-03	Pulse	0.50	3
Tl			1	0.033	ug/l	9.79	2,088.14	2.204E-04	Pulse	0.50	3
Sn			1	0.577	ug/l	9.12	3,993.81	1.305E-03	Pulse	0.30	3
Sr			1	133.817	ug/l	1.73	669,442.02	2.189E-01	Pulse	0.50	3
[Pb]			1	0.367	ug/l	1.29	12,916.92	1.362E-03	Pulse	0.50	3
Ca			1	25935.848	ug/l	2.26	566,233.46	1.510E+00	Pulse	0.50	3
Ti			1	45.353	ug/l	0.71	8,287.11	2.209E-02	Pulse	0.50	3
Na			1	19533.332	ug/l	3.33	22,144,322.00	5.908E+01	Analog	1.00	3
Mg			1	10610.984	ug/l	2.48	5,151,436.33	1.374E+01	Analog	1.00	3
K			1	3861.144	ug/l	2.89	1,545,878.83	4.124E+00	Pulse	1.00	3
V			1	31.250	ug/l	3.98	232,311.86	6.199E-01	Pulse	0.50	3
Mn			1	2292.599	ug/l	3.23	10,156,933.33	3.376E+01	Analog	0.50	3
Fe			1	15413.736	ug/l	3.28	122,071,978.67	4.057E+02	Analog	0.50	3
Co			1	0.437	ug/l	4.28	8,387.17	2.788E-02	Pulse	0.50	3
Ni			1	16.100	ug/l	6.47	81,594.80	2.713E-01	Pulse	0.50	3
Cu			1	7.176	ug/l	6.42	167,499.31	5.567E-01	Pulse	0.50	3
Zn			1	0.339	ug/l	67.64	8,004.00	1.739E-02	Pulse	1.00	3
Cd			1	0.021	ug/l	24.93	74.00	1.609E-04	Pulse	0.50	3
Al			1	112.722	ug/l	3.95	15,947.36	4.255E-02	Pulse	1.00	3
Se			1	0.534	ug/l	14.69	57.78	1.887E-05	Pulse	3.00	3
Sb			1	0.094	ug/l	19.37	1,347.72	2.927E-03	Pulse	1.00	3
Se			1	2.121	ug/l	14.19	88.33	4.276E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,486,302.00	2.38	90.4	Analog	0.50	3
1	Sc		375,057.99	3.02	87.9	Pulse	0.30	3
1	Ge		301,091.37	2.97	86.6	Pulse	0.30	3
1	In		3,058,924.11	1.95	85.1	Pulse	0.30	3
1	Tb		13,683,637.67	1.94	94.1	Analog	0.50	3
1	Lu		7,976,538.83	2.01	92.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		460,522.32	2.08	86.6	Pulse	0.30	3
1	Te		20,702.42	2.99	66.4	Pulse	0.50	3
1	Li		2,000.11	2.57	87.1	Pulse	0.30	3

Quantitation Report

File Name	034SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:31
Sample Name	FA53574-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.852	ug/l	2.76	9,397.62	3.074E-02	Pulse	0.50	3
As			1	2.251	ug/l	1.40	2,401.15	7.853E-03	Pulse	1.00	3
Mo			1	0.375	ug/l	3.15	2,720.21	5.816E-03	Pulse	0.50	3
Pb			1	-0.044	ug/l	-4.88	10,500.90	1.086E-03	Pulse	1.00	3
Be			1	0.023	ug/l	83.14	1.50	3.954E-06	Pulse	2.00	3
Ag			1	0.014	ug/l	8.62	506.01	1.082E-03	Pulse	0.50	3
Ba			1	5.678	ug/l	2.56	14,467.82	4.643E-03	Pulse	0.50	3
Tl			1	0.013	ug/l	19.50	917.37	9.487E-05	Pulse	0.50	3
Sn			1	0.498	ug/l	3.20	3,592.60	1.153E-03	Pulse	0.30	3
Sr			1	67.528	ug/l	0.35	344,756.77	1.106E-01	Pulse	0.50	3
[Pb]			1	-0.051	ug/l	-13.48	4,906.06	5.072E-04	Pulse	0.50	3
Ca			1	11629.038	ug/l	1.16	256,747.56	6.774E-01	Pulse	0.50	3
Ti			1	3.913	ug/l	3.46	724.68	1.912E-03	Pulse	0.50	3
Na			1	11190.249	ug/l	0.36	12,838,072.33	3.387E+01	Analog	1.00	3
Mg			1	5515.041	ug/l	0.77	2,707,243.00	7.142E+00	Pulse	1.00	3
K			1	2697.108	ug/l	0.49	1,095,711.08	2.891E+00	Pulse	1.00	3
V			1	3.048	ug/l	0.97	23,379.34	6.168E-02	Pulse	0.50	3
Mn			1	281.081	ug/l	1.23	1,265,526.00	4.139E+00	Pulse	0.50	3
Fe			1	9146.877	ug/l	0.42	73,617,210.67	2.408E+02	Analog	0.50	3
Co			1	0.157	ug/l	0.60	3,219.61	1.053E-02	Pulse	0.50	3
Ni			1	0.384	ug/l	4.40	2,182.13	7.137E-03	Pulse	0.50	3
Cu			1	-2.558	ug/l	-0.91	33,836.90	1.107E-01	Pulse	0.50	3
Zn			1	1.644	ug/l	1.83	10,355.79	2.214E-02	Pulse	1.00	3
Cd			1	0.004	ug/l	24.87	22.00	4.703E-05	Pulse	0.50	3
Al			1	54.826	ug/l	3.41	8,012.29	2.114E-02	Pulse	1.00	3
Se			1	0.202	ug/l	17.73	35.44	1.138E-05	Pulse	3.00	3
Sb			1	0.027	ug/l	52.23	917.02	1.960E-03	Pulse	1.00	3
Se			1	0.534	ug/l	22.11	41.89	1.967E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,672,874.67	0.25	92.2	Analog	0.50	3
1	Sc		379,041.21	0.46	88.8	Pulse	0.30	3
1	Ge		305,779.50	0.44	88.0	Pulse	0.30	3
1	In		3,116,114.11	0.54	86.7	Pulse	0.30	3
1	Tb		13,932,217.67	0.70	95.8	Analog	0.50	3
1	Lu		8,053,399.33	0.55	93.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		467,651.58	0.33	88.0	Pulse	0.30	3
1	Te		21,307.77	1.73	68.3	Pulse	0.50	3
1	Li		2,022.33	9.12	88.1	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:35
Sample Name	FA53574-4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	44.031	ug/l	0.43	447,844.14	1.475E+00	Pulse	0.50	3
As			1	1.043	ug/l	5.62	1,118.37	3.683E-03	Pulse	1.00	3
Mo			1	14.004	ug/l	0.88	100,808.97	2.156E-01	Pulse	0.50	3
Pb			1	-0.065	ug/l	-4.24	9,328.88	9.960E-04	Pulse	1.00	3
Be			1	-0.006	ug/l	0.00	0.00	0.000E+00	Pulse	2.00	3
Ag			1	0.012	ug/l	13.71	447.34	9.571E-04	Pulse	0.50	3
Ba			1	46.519	ug/l	1.00	118,009.28	3.798E-02	Pulse	0.50	3
Tl			1	0.010	ug/l	27.06	695.35	7.416E-05	Pulse	0.50	3
Sn			1	0.380	ug/l	2.80	2,869.14	9.234E-04	Pulse	0.30	3
Sr			1	550.760	ug/l	0.48	2,795,957.75	8.998E-01	Pulse	0.50	3
[Pb]			1	-0.066	ug/l	-13.06	4,456.60	4.758E-04	Pulse	0.50	3
Ca			1	76325.629	ug/l	0.65	1,714,477.29	4.444E+00	Pulse	0.50	3
Ti			1	0.686	ug/l	7.27	131.33	3.404E-04	Pulse	0.50	3
Na			1	49528.033	ug/l	0.70	57,757,261.33	1.497E+02	Analog	1.00	3
Mg			1	254.201	ug/l	0.38	127,135.28	3.296E-01	Pulse	1.00	3
K			1	12073.515	ug/l	1.99	4,946,968.00	1.282E+01	Mix	1.00	3
V			1	10.415	ug/l	1.07	80,046.54	2.075E-01	Pulse	0.50	3
Mn			1	4.512	ug/l	1.01	20,274.58	6.677E-02	Pulse	0.50	3
Fe			1	32.684	ug/l	0.51	266,045.08	8.761E-01	Pulse	0.50	3
Co			1	1.287	ug/l	1.30	24,392.00	8.033E-02	Pulse	0.50	3
Ni			1	2.360	ug/l	0.94	12,254.57	4.036E-02	Pulse	0.50	3
Cu			1	5.683	ug/l	3.88	148,272.50	4.883E-01	Pulse	0.50	3
Zn			1	1.430	ug/l	3.31	9,987.59	2.136E-02	Pulse	1.00	3
Cd			1	0.006	ug/l	29.66	29.33	6.269E-05	Pulse	0.50	3
Al			1	2261.623	ug/l	0.63	323,015.00	8.373E-01	Pulse	1.00	3
Se			1	0.539	ug/l	18.95	59.00	1.899E-05	Pulse	3.00	3
Sb			1	3.278	ug/l	1.63	22,874.21	4.893E-02	Pulse	1.00	3
Se			1	0.848	ug/l	26.78	50.22	2.424E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,366,400.33	0.75	89.3	Analog	0.50	3
1	Sc		385,771.23	0.65	90.4	Pulse	0.30	3
1	Ge		303,661.03	0.15	87.4	Pulse	0.30	3
1	In		3,107,235.29	0.30	86.4	Pulse	0.30	3
1	Tb		13,902,151.67	0.30	95.6	Analog	0.50	3
1	Lu		8,087,090.33	0.44	93.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		467,478.58	0.70	87.9	Pulse	0.30	3
1	Te		20,717.77	0.82	66.4	Pulse	0.50	3
1	Li		2,061.23	6.09	89.8	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:38
Sample Name	FA53574-5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.839	ug/l	1.71	19,144.09	6.372E-02	Pulse	0.50	3
As			1	19.744	ug/l	0.55	20,509.97	6.826E-02	Pulse	1.00	3
Mo			1	0.890	ug/l	2.08	6,328.43	1.374E-02	Pulse	0.50	3
Pb			1	-0.097	ug/l	-1.28	8,089.92	8.542E-04	Pulse	1.00	3
Be			1	0.020	ug/l	100.44	1.33	3.545E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	11.77	285.33	6.196E-04	Pulse	0.50	3
Ba			1	12.197	ug/l	0.81	30,537.05	9.965E-03	Pulse	0.50	3
Tl			1	0.006	ug/l	16.27	444.01	4.688E-05	Pulse	0.50	3
Sn			1	0.401	ug/l	6.79	2,958.04	9.652E-04	Pulse	0.30	3
Sr			1	188.633	ug/l	1.15	945,168.77	3.084E-01	Pulse	0.50	3
[Pb]			1	-0.107	ug/l	-3.41	3,724.42	3.933E-04	Pulse	0.50	3
Ca			1	34215.614	ug/l	0.82	751,297.65	1.992E+00	Pulse	0.50	3
Ti			1	2.591	ug/l	10.38	478.01	1.268E-03	Pulse	0.50	3
Na			1	16058.468	ug/l	1.29	18,317,860.67	4.858E+01	Analog	1.00	3
Mg			1	12338.759	ug/l	1.26	6,025,119.33	1.598E+01	Analog	1.00	3
K			1	1561.849	ug/l	0.75	636,502.17	1.688E+00	Pulse	1.00	3
V			1	7.050	ug/l	1.34	53,124.68	1.409E-01	Pulse	0.50	3
Mn			1	1666.198	ug/l	1.11	7,370,770.33	2.453E+01	Analog	0.50	3
Fe			1	52252.578	ug/l	1.04	413,202,496.00	1.375E+03	Analog	0.50	3
Co			1	6.600	ug/l	0.21	122,731.38	4.085E-01	Pulse	0.50	3
Ni			1	2.453	ug/l	3.27	12,592.79	4.192E-02	Pulse	0.50	3
Cu			1	-2.427	ug/l	-1.79	35,052.39	1.167E-01	Pulse	0.50	3
Zn			1	-0.773	ug/l	-8.16	6,143.99	1.334E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	184.36	12.00	2.607E-05	Pulse	0.50	3
Al			1	32.627	ug/l	3.01	4,874.60	1.293E-02	Pulse	1.00	3
Se			1	0.552	ug/l	14.01	59.11	1.929E-05	Pulse	3.00	3
Sb			1	0.059	ug/l	1.85	1,112.37	2.416E-03	Pulse	1.00	3
Se			1	1.886	ug/l	8.26	81.56	3.934E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,470,384.00	0.87	90.3	Analog	0.50	3
1	Sc		377,084.77	0.93	88.3	Pulse	0.30	3
1	Ge		300,460.18	0.40	86.4	Pulse	0.30	3
1	In		3,064,572.93	0.08	85.3	Pulse	0.30	3
1	Tb		13,712,377.67	0.80	94.3	Analog	0.50	3
1	Lu		7,975,728.17	0.81	92.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		460,463.42	0.61	86.6	Pulse	0.30	3
1	Te		20,741.77	1.46	66.5	Pulse	0.50	3
1	Li		2,013.45	4.07	87.7	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:42
Sample Name	FA53574-6
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.036	ug/l	3.05	11,340.65	3.686E-02	Pulse	0.50	3
As			1	0.277	ug/l	3.49	319.00	1.037E-03	Pulse	1.00	3
Mo			1	0.142	ug/l	6.97	1,052.70	2.234E-03	Pulse	0.50	3
Pb			1	-0.081	ug/l	-3.98	8,969.02	9.237E-04	Pulse	1.00	3
Be			1	0.026	ug/l	42.44	1.67	4.342E-06	Pulse	2.00	3
Ag			1	0.008	ug/l	8.29	334.67	7.103E-04	Pulse	0.50	3
Ba			1	4.415	ug/l	2.86	11,295.55	3.613E-03	Pulse	0.50	3
Tl			1	0.010	ug/l	7.48	728.69	7.506E-05	Pulse	0.50	3
Sn			1	0.443	ug/l	2.85	3,271.43	1.046E-03	Pulse	0.30	3
Sr			1	45.698	ug/l	0.62	234,442.72	7.499E-02	Pulse	0.50	3
[Pb]			1	-0.089	ug/l	-3.71	4,171.19	4.296E-04	Pulse	0.50	3
Ca			1	7563.681	ug/l	1.03	169,223.12	4.407E-01	Pulse	0.50	3
Ti			1	0.479	ug/l	8.13	92.00	2.396E-04	Pulse	0.50	3
Na			1	12172.999	ug/l	0.74	14,146,966.00	3.684E+01	Analog	1.00	3
Mg			1	3030.381	ug/l	0.59	1,507,183.29	3.925E+00	Pulse	1.00	3
K			1	2126.685	ug/l	0.63	878,030.79	2.286E+00	Pulse	1.00	3
V			1	2.684	ug/l	1.35	20,922.56	5.448E-02	Pulse	0.50	3
Mn			1	1.240	ug/l	2.47	5,722.86	1.860E-02	Pulse	0.50	3
Fe			1	30.690	ug/l	1.72	253,434.56	8.236E-01	Pulse	0.50	3
Co			1	0.077	ug/l	4.57	1,724.75	5.607E-03	Pulse	0.50	3
Ni			1	0.879	ug/l	2.94	4,751.94	1.545E-02	Pulse	0.50	3
Cu			1	-2.197	ug/l	-2.34	39,133.54	1.272E-01	Pulse	0.50	3
Zn			1	0.922	ug/l	6.65	9,196.54	1.952E-02	Pulse	1.00	3
Cd			1	0.009	ug/l	38.73	37.33	7.918E-05	Pulse	0.50	3
Al			1	50.942	ug/l	1.58	7,566.44	1.970E-02	Pulse	1.00	3
Se			1	0.155	ug/l	46.72	32.22	1.031E-05	Pulse	3.00	3
Sb			1	0.012	ug/l	97.05	816.69	1.734E-03	Pulse	1.00	3
Se			1	0.583	ug/l	35.89	44.00	2.038E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,710,453.33	0.62	92.6	Analog	0.50	3
1	Sc		384,021.49	0.41	90.0	Pulse	0.30	3
1	Ge		307,682.10	0.76	88.5	Pulse	0.30	3
1	In		3,126,501.41	0.34	87.0	Pulse	0.30	3
1	Tb		13,842,264.67	0.47	95.2	Analog	0.50	3
1	Lu		8,058,508.83	0.16	93.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		471,202.55	0.33	88.6	Pulse	0.30	3
1	Te		21,612.11	1.26	69.3	Pulse	0.50	3
1	Li		2,127.90	5.56	92.7	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:46
Sample Name	FA53574-7
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.566	ug/l	3.71	6,345.72	2.115E-02	Pulse	0.50	3
As			1	1.167	ug/l	4.50	1,233.38	4.111E-03	Pulse	1.00	3
Mo			1	0.795	ug/l	1.86	5,677.54	1.228E-02	Pulse	0.50	3
Pb			1	-0.062	ug/l	-2.61	9,761.45	1.007E-03	Pulse	1.00	3
Be			1	0.004	ug/l	243.26	0.50	1.333E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	17.73	381.34	8.247E-04	Pulse	0.50	3
Ba			1	6.736	ug/l	1.29	16,969.95	5.507E-03	Pulse	0.50	3
Tl			1	0.012	ug/l	15.65	833.36	8.598E-05	Pulse	0.50	3
Sn			1	0.377	ug/l	2.60	2,833.57	9.195E-04	Pulse	0.30	3
Sr			1	83.680	ug/l	0.38	422,215.87	1.370E-01	Pulse	0.50	3
[Pb]			1	-0.071	ug/l	-11.43	4,506.61	4.652E-04	Pulse	0.50	3
Ca			1	14396.548	ug/l	0.41	315,170.51	8.385E-01	Pulse	0.50	3
Ti			1	0.443	ug/l	28.30	83.33	2.218E-04	Pulse	0.50	3
Na			1	8941.520	ug/l	0.37	10,176,437.00	2.707E+01	Analog	1.00	3
Mg			1	6707.729	ug/l	0.69	3,265,152.25	8.687E+00	Pulse	1.00	3
K			1	2254.832	ug/l	0.30	910,437.15	2.422E+00	Pulse	1.00	3
V			1	14.782	ug/l	1.31	110,482.41	2.939E-01	Pulse	0.50	3
Mn			1	19.102	ug/l	0.99	84,473.15	2.816E-01	Pulse	0.50	3
Fe			1	24.270	ug/l	2.12	196,378.46	6.547E-01	Pulse	0.50	3
Co			1	1.209	ug/l	0.53	22,651.90	7.551E-02	Pulse	0.50	3
Ni			1	3.339	ug/l	0.98	17,040.19	5.680E-02	Pulse	0.50	3
Cu			1	-0.722	ug/l	-3.08	58,438.61	1.948E-01	Pulse	0.50	3
Zn			1	0.317	ug/l	22.31	8,001.00	1.731E-02	Pulse	1.00	3
Cd			1	0.019	ug/l	8.70	68.67	1.486E-04	Pulse	0.50	3
Al			1	90.034	ug/l	0.21	12,839.80	3.416E-02	Pulse	1.00	3
Se			1	1.967	ug/l	12.91	158.00	5.128E-05	Pulse	3.00	3
Sb			1	0.065	ug/l	8.65	1,154.71	2.499E-03	Pulse	1.00	3
Se			1	2.801	ug/l	15.77	111.00	5.265E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,689,266.67	0.51	92.4	Analog	0.50	3
1	Sc		375,872.17	0.48	88.0	Pulse	0.30	3
1	Ge		299,994.08	0.57	86.3	Pulse	0.30	3
1	In		3,081,525.64	0.40	85.7	Pulse	0.30	3
1	Tb		13,789,423.00	0.49	94.9	Analog	0.50	3
1	Lu		8,042,058.50	0.33	93.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		462,214.55	0.93	86.9	Pulse	0.30	3
1	Te		21,090.84	1.39	67.6	Pulse	0.50	3
1	Li		2,031.23	1.90	88.5	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:49
Sample Name	FA53574-8
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.897	ug/l	2.38	9,591.06	3.223E-02	Pulse	0.50	3
As			1	0.751	ug/l	4.52	795.69	2.676E-03	Pulse	1.00	3
Mo			1	1.062	ug/l	2.19	7,482.19	1.639E-02	Pulse	0.50	3
Pb			1	-0.069	ug/l	-3.30	9,058.40	9.790E-04	Pulse	1.00	3
Be			1	0.013	ug/l	0.57	1.00	2.616E-06	Pulse	2.00	3
Ag			1	0.024	ug/l	12.20	733.35	1.608E-03	Pulse	0.50	3
Ba			1	13.661	ug/l	1.65	33,340.03	1.116E-02	Pulse	0.50	3
Tl			1	0.032	ug/l	8.00	1,976.12	2.135E-04	Pulse	0.50	3
Sn			1	0.562	ug/l	2.56	3,812.66	1.276E-03	Pulse	0.30	3
Sr			1	254.514	ug/l	0.35	1,242,862.33	4.160E-01	Pulse	0.50	3
[Pb]			1	-0.076	ug/l	-10.02	4,211.87	4.552E-04	Pulse	0.50	3
Ca			1	48801.123	ug/l	0.75	1,086,323.67	2.842E+00	Pulse	0.50	3
Ti			1	0.797	ug/l	19.57	150.67	3.943E-04	Pulse	0.50	3
Na			1	16869.776	ug/l	0.63	19,508,591.33	5.103E+01	Analog	1.00	3
Mg			1	25093.868	ug/l	0.49	12,423,275.67	3.250E+01	Analog	1.00	3
K			1	4722.674	ug/l	0.49	1,925,445.37	5.037E+00	Pulse	1.00	3
V			1	14.834	ug/l	0.90	112,759.91	2.950E-01	Pulse	0.50	3
Mn			1	3125.755	ug/l	0.94	13,690,659.33	4.602E+01	Analog	0.50	3
Fe			1	888.873	ug/l	1.58	6,963,823.17	2.341E+01	Analog	0.50	3
Co			1	21.723	ug/l	1.64	399,344.04	1.343E+00	Pulse	0.50	3
Ni			1	147.284	ug/l	1.83	736,730.90	2.477E+00	Pulse	0.50	3
Cu			1	76.910	ug/l	1.19	1,116,196.33	3.752E+00	Pulse	0.50	3
Zn			1	2.433	ug/l	3.45	11,416.72	2.502E-02	Pulse	1.00	3
Cd			1	0.341	ug/l	1.04	1,093.37	2.396E-03	Pulse	0.50	3
Al			1	62.203	ug/l	1.27	9,123.76	2.387E-02	Pulse	1.00	3
Se			1	0.667	ug/l	15.11	65.33	2.188E-05	Pulse	3.00	3
Sb			1	0.030	ug/l	11.74	913.69	2.002E-03	Pulse	1.00	3
Se			1	5.241	ug/l	5.69	178.78	8.815E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,252,719.00	0.34	88.2	Analog	0.50	3
1	Sc		382,281.88	0.40	89.5	Pulse	0.30	3
1	Ge		297,508.45	1.44	85.6	Pulse	0.30	3
1	In		2,987,593.21	0.63	83.1	Pulse	0.30	3
1	Tb		13,583,328.00	0.38	93.4	Analog	0.50	3
1	Lu		8,023,308.50	0.82	92.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		456,375.92	1.09	85.8	Pulse	0.30	3
1	Te		20,281.25	0.92	65.0	Pulse	0.50	3
1	Li		1,951.21	2.29	85.0	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:53
Sample Name	FA53574-9
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.844	ug/l	3.44	9,040.80	3.045E-02	Pulse	0.50	3
As			1	0.270	ug/l	6.38	300.67	1.012E-03	Pulse	1.00	3
Mo			1	0.380	ug/l	3.98	2,682.87	5.892E-03	Pulse	0.50	3
Pb			1	-0.027	ug/l	-7.31	10,990.21	1.161E-03	Pulse	1.00	3
Be			1	0.011	ug/l	140.60	0.83	2.248E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	4.66	386.68	8.493E-04	Pulse	0.50	3
Ba			1	7.213	ug/l	0.82	17,837.48	5.897E-03	Pulse	0.50	3
Tl			1	0.017	ug/l	6.00	1,110.04	1.172E-04	Pulse	0.50	3
Sn			1	0.411	ug/l	3.33	2,978.04	9.844E-04	Pulse	0.30	3
Sr			1	114.851	ug/l	0.44	568,475.48	1.879E-01	Pulse	0.50	3
[Pb]			1	-0.031	ug/l	-7.94	5,188.14	5.480E-04	Pulse	0.50	3
Ca			1	27968.234	ug/l	0.71	602,754.96	1.629E+00	Pulse	0.50	3
Ti			1	5.152	ug/l	3.67	930.69	2.515E-03	Pulse	0.50	3
Na			1	10212.963	ug/l	0.94	11,441,503.00	3.092E+01	Analog	1.00	3
Mg			1	10468.004	ug/l	0.24	5,017,088.83	1.356E+01	Analog	1.00	3
K			1	3408.407	ug/l	0.43	1,348,718.92	3.644E+00	Pulse	1.00	3
V			1	13.693	ug/l	1.55	100,800.37	2.724E-01	Pulse	0.50	3
Mn			1	2.968	ug/l	2.24	13,080.43	4.405E-02	Pulse	0.50	3
Fe			1	91.525	ug/l	1.08	720,065.71	2.425E+00	Pulse	0.50	3
Co			1	1.289	ug/l	1.15	23,900.74	8.048E-02	Pulse	0.50	3
Ni			1	8.980	ug/l	1.18	45,033.52	1.516E-01	Pulse	0.50	3
Cu			1	-0.630	ug/l	-14.59	59,089.29	1.990E-01	Pulse	0.50	3
Zn			1	5.861	ug/l	4.17	17,072.88	3.750E-02	Pulse	1.00	3
Cd			1	0.023	ug/l	25.70	81.33	1.787E-04	Pulse	0.50	3
Al			1	106.810	ug/l	1.84	14,937.92	4.037E-02	Pulse	1.00	3
Se			1	0.378	ug/l	16.52	46.44	1.536E-05	Pulse	3.00	3
Sb			1	0.027	ug/l	8.76	889.35	1.953E-03	Pulse	1.00	3
Se			1	1.094	ug/l	13.39	57.22	2.781E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,467,961.67	0.38	90.2	Analog	0.50	3
1	Sc		370,082.36	0.30	86.7	Pulse	0.30	3
1	Ge		296,988.81	1.32	85.4	Pulse	0.30	3
1	In		3,025,031.90	0.38	84.2	Pulse	0.30	3
1	Tb		13,652,965.67	0.41	93.9	Analog	0.50	3
1	Lu		7,848,323.33	0.57	90.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		455,331.89	0.62	85.7	Pulse	0.30	3
1	Te		20,577.59	0.97	66.0	Pulse	0.50	3
1	Li		2,020.11	5.16	88.0	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:57
Sample Name	FA53625-1F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.915	ug/l	1.96	9,803.16	3.282E-02	Pulse	0.50	3
As			1	0.118	ug/l	8.00	145.33	4.866E-04	Pulse	1.00	3
Mo			1	0.164	ug/l	0.45	1,180.04	2.576E-03	Pulse	0.50	3
Pb			1	-0.060	ug/l	-4.89	9,397.92	1.015E-03	Pulse	1.00	3
Be			1	0.004	ug/l	422.48	0.50	1.327E-06	Pulse	2.00	3
Ag			1	0.005	ug/l	32.81	252.67	5.511E-04	Pulse	0.50	3
Ba			1	7.078	ug/l	3.30	17,550.52	5.786E-03	Pulse	0.50	3
Tl			1	0.005	ug/l	9.91	388.68	4.199E-05	Pulse	0.50	3
Sn			1	0.318	ug/l	6.23	2,441.29	8.049E-04	Pulse	0.30	3
Sr			1	63.194	ug/l	1.18	314,152.39	1.036E-01	Pulse	0.50	3
[Pb]			1	-0.073	ug/l	-9.30	4,274.55	4.618E-04	Pulse	0.50	3
Ca			1	16360.560	ug/l	1.38	358,075.45	9.529E-01	Pulse	0.50	3
Ti			1	1.481	ug/l	5.94	273.33	7.275E-04	Pulse	0.50	3
Na			1	47826.642	ug/l	0.71	54,333,361.33	1.446E+02	Analog	1.00	3
Mg			1	5393.874	ug/l	1.09	2,625,113.50	6.986E+00	Pulse	1.00	3
K			1	1003.180	ug/l	0.15	411,940.52	1.096E+00	Pulse	1.00	3
V			1	0.303	ug/l	3.99	2,760.21	7.344E-03	Pulse	0.50	3
Mn			1	1.189	ug/l	2.40	5,328.75	1.784E-02	Pulse	0.50	3
Fe			1	111.337	ug/l	0.51	879,929.50	2.946E+00	Pulse	0.50	3
Co			1	0.080	ug/l	5.97	1,733.42	5.803E-03	Pulse	0.50	3
Ni			1	0.252	ug/l	3.77	1,467.40	4.912E-03	Pulse	0.50	3
Cu			1	-1.945	ug/l	-2.73	41,436.98	1.387E-01	Pulse	0.50	3
Zn			1	1.053	ug/l	3.96	9,159.85	1.999E-02	Pulse	1.00	3
Cd			1	0.073	ug/l	1.14	242.67	5.297E-04	Pulse	0.50	3
Al			1	42.986	ug/l	0.67	6,298.34	1.676E-02	Pulse	1.00	3
Se			1	0.467	ug/l	17.51	52.67	1.736E-05	Pulse	3.00	3
Sb			1	0.065	ug/l	12.97	1,147.71	2.504E-03	Pulse	1.00	3
Se			1	1.229	ug/l	24.84	61.44	2.978E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,255,463.67	0.69	88.2	Analog	0.50	3
1	Sc		375,809.87	0.75	88.0	Pulse	0.30	3
1	Ge		298,672.14	0.70	85.9	Pulse	0.30	3
1	In		3,033,725.92	1.00	84.4	Pulse	0.30	3
1	Tb		13,586,969.00	0.91	93.5	Analog	0.50	3
1	Lu		7,907,392.83	0.36	91.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		458,169.01	0.87	86.2	Pulse	0.30	3
1	Te		20,651.01	1.30	66.2	Pulse	0.50	3
1	Li		1,934.55	1.84	84.3	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:00
Sample Name	FA53625-2F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.385	ug/l	1.17	14,460.73	4.854E-02	Pulse	0.50	3
As			1	0.151	ug/l	11.24	179.33	6.025E-04	Pulse	1.00	3
Mo			1	0.223	ug/l	2.95	1,583.41	3.473E-03	Pulse	0.50	3
Pb			1	-0.013	ug/l	-26.99	11,558.91	1.223E-03	Pulse	1.00	3
Be			1	0.033	ug/l	127.87	2.00	5.366E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	26.89	390.01	8.554E-04	Pulse	0.50	3
Ba			1	3.984	ug/l	0.94	9,882.73	3.261E-03	Pulse	0.50	3
Tl			1	0.005	ug/l	5.35	402.01	4.253E-05	Pulse	0.50	3
Sn			1	0.337	ug/l	4.01	2,551.31	8.418E-04	Pulse	0.30	3
Sr			1	35.669	ug/l	0.41	177,613.42	5.861E-02	Pulse	0.50	3
[Pb]			1	-0.017	ug/l	-23.20	5,448.22	5.763E-04	Pulse	0.50	3
Ca			1	8848.192	ug/l	0.71	192,227.24	5.155E-01	Pulse	0.50	3
Ti			1	3.432	ug/l	8.52	625.35	1.678E-03	Pulse	0.50	3
Na			1	27691.586	ug/l	1.06	31,226,471.33	8.374E+01	Analog	1.00	3
Mg			1	2527.230	ug/l	0.42	1,220,660.83	3.273E+00	Pulse	1.00	3
K			1	804.722	ug/l	0.55	330,371.18	8.859E-01	Pulse	1.00	3
V			1	0.458	ug/l	6.27	3,886.40	1.042E-02	Pulse	0.50	3
Mn			1	1.783	ug/l	4.40	7,919.63	2.659E-02	Pulse	0.50	3
Fe			1	122.660	ug/l	2.13	966,397.50	3.244E+00	Pulse	0.50	3
Co			1	0.066	ug/l	8.24	1,461.39	4.907E-03	Pulse	0.50	3
Ni			1	0.284	ug/l	4.44	1,625.41	5.454E-03	Pulse	0.50	3
Cu			1	-2.275	ug/l	-0.66	36,835.67	1.236E-01	Pulse	0.50	3
Zn			1	4.074	ug/l	4.02	14,128.52	3.099E-02	Pulse	1.00	3
Cd			1	0.023	ug/l	10.38	80.67	1.769E-04	Pulse	0.50	3
Al			1	77.315	ug/l	0.44	10,985.02	2.946E-02	Pulse	1.00	3
Se			1	0.366	ug/l	18.14	45.67	1.507E-05	Pulse	3.00	3
Sb			1	-0.006	ug/l	-27.79	670.68	1.471E-03	Pulse	1.00	3
Se			1	1.461	ug/l	5.68	68.89	3.316E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,452,987.00	0.19	90.1	Analog	0.50	3
1	Sc		372,934.01	0.82	87.4	Pulse	0.30	3
1	Ge		297,947.75	1.63	85.7	Pulse	0.30	3
1	In		3,030,539.18	0.76	84.3	Pulse	0.30	3
1	Tb		13,674,619.67	0.55	94.1	Analog	0.50	3
1	Lu		7,955,928.67	0.35	92.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		455,839.97	0.81	85.7	Pulse	0.30	3
1	Te		20,773.80	0.29	66.6	Pulse	0.50	3
1	Li		1,986.78	6.57	86.5	Pulse	0.30	3

Quantitation Report

File Name	043CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:04
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.387	ug/l	1.01	1,073,419.29	3.306E+00	Pulse	0.50	3
As			1	49.632	ug/l	0.97	111,336.18	3.429E-01	Pulse	1.00	3
Mo			1	49.184	ug/l	1.60	749,709.29	1.515E+00	Pulse	0.50	3
Pb			1	45.863	ug/l	1.21	3,905,831.75	4.016E-01	Pulse	1.00	3
Be			1	54.641	ug/l	1.08	5,958.54	1.500E-02	Pulse	2.00	3
Ag			1	49.425	ug/l	1.23	2,751,896.50	5.559E+00	Pulse	0.50	3
Ba			1	48.838	ug/l	0.68	254,894.05	7.973E-02	Pulse	0.50	3
Tl			1	46.416	ug/l	0.88	5,894,909.67	6.062E-01	Pulse	0.50	3
Sn			1	49.376	ug/l	0.80	611,647.09	1.913E-01	Pulse	0.30	3
Sr			1	48.478	ug/l	0.78	507,336.80	1.587E-01	Pulse	0.50	3
[Pb]			1	46.392	ug/l	0.37	1,850,221.75	1.902E-01	Pulse	0.50	3
Ca			1	4896.407	ug/l	1.52	226,653.99	5.705E-01	Pulse	0.50	3
Ti			1	48.765	ug/l	0.98	18,873.10	4.750E-02	Pulse	0.50	3
Na			1	5165.744	ug/l	0.92	12,425,463.00	3.127E+01	Analog	1.00	3
Mg			1	5083.160	ug/l	1.04	5,230,823.33	1.317E+01	Analog	1.00	3
K			1	4882.513	ug/l	0.38	4,123,728.67	1.038E+01	Pulse	1.00	3
V			1	50.009	ug/l	0.73	787,059.27	1.981E+00	Pulse	0.50	3
Mn			1	48.217	ug/l	0.65	461,167.99	1.420E+00	Pulse	0.50	3
Fe			1	4983.802	ug/l	0.90	85,193,264.00	2.624E+02	Analog	0.50	3
Co			1	49.195	ug/l	1.24	1,973,485.83	6.078E+00	Pulse	0.50	3
Ni			1	50.169	ug/l	1.00	547,972.94	1.688E+00	Pulse	0.50	3
Cu			1	49.372	ug/l	0.22	1,543,361.83	4.753E+00	Pulse	0.50	3
Zn			1	50.119	ug/l	1.35	188,687.74	3.812E-01	Pulse	1.00	3
Cd			1	49.432	ug/l	0.66	341,840.28	6.905E-01	Pulse	0.50	3
Al			1	4725.818	ug/l	0.90	1,389,183.92	3.497E+00	Pulse	1.00	3
Se			1	50.471	ug/l	1.44	7,316.40	2.289E-03	Pulse	3.00	3
Sb			1	47.751	ug/l	1.02	684,015.13	1.382E+00	Pulse	1.00	3
Se			1	47.333	ug/l	1.32	3,724.14	1.389E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,725,242.33	0.40	92.7	Analog	0.50	3
1	Sc		397,317.53	0.77	93.1	Pulse	0.30	3
1	Ge		324,733.14	0.67	93.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,196,927.16	0.65	88.9	Pulse	0.30	3
1	Tb		13,907,129.67	0.57	95.7	Analog	0.50	3
1	Lu		7,939,552.33	0.67	91.9	Analog	0.50	3
1	Ge		495,066.40	0.91	93.1	Pulse	0.30	3
1	Te		26,812.29	1.72	86.0	Pulse	0.50	3
1	Li		2,250.14	1.71	98.0	Pulse	0.30	3

Quantitation Report

File Name	044_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:07
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.984	ug/l	0.12	2,127,944.50	6.623E+00	Pulse	0.50	3
As			1	99.889	ug/l	0.70	221,680.76	6.900E-01	Pulse	1.00	3
Mo			1	98.811	ug/l	0.76	1,490,744.75	3.043E+00	Pulse	0.50	3
Pb			1	97.115	ug/l	0.84	8,057,278.83	8.490E-01	Analog	1.00	3
Be			1	104.294	ug/l	0.55	11,512.59	2.863E-02	Pulse	2.00	3
Ag			1	96.975	ug/l	0.62	5,343,881.83	1.091E+01	Pulse	0.50	3
Ba			1	98.110	ug/l	1.23	507,438.83	1.602E-01	Pulse	0.50	3
Tl			1	97.052	ug/l	0.79	12,027,923.67	1.267E+00	Analog	0.50	3
Sn			1	99.753	ug/l	0.63	1,223,995.02	3.863E-01	Pulse	0.30	3
Sr			1	98.979	ug/l	0.50	1,025,395.23	3.236E-01	Pulse	0.50	3
[Pb]			1	92.351	ug/l	1.06	3,588,373.92	3.781E-01	Pulse	0.50	3
Ca			1	9773.411	ug/l	1.11	457,817.41	1.138E+00	Pulse	0.50	3
Ti			1	97.319	ug/l	0.93	38,126.96	9.479E-02	Pulse	0.50	3
Na			1	10172.792	ug/l	1.05	24,747,710.67	6.154E+01	Analog	1.00	3
Mg			1	10051.128	ug/l	0.86	10,469,687.00	2.603E+01	Analog	1.00	3
K			1	10035.832	ug/l	0.93	8,565,402.67	2.130E+01	Analog	1.00	3
V			1	98.880	ug/l	0.98	1,574,713.25	3.916E+00	Pulse	0.50	3
Mn			1	97.097	ug/l	0.53	918,736.29	2.860E+00	Pulse	0.50	3
Fe			1	10009.333	ug/l	0.64	169,285,520.00	5.269E+02	Analog	0.50	3
Co			1	97.935	ug/l	0.11	3,887,008.92	1.210E+01	Pulse	0.50	3
Ni			1	99.274	ug/l	0.19	1,072,644.87	3.339E+00	Pulse	0.50	3
Cu			1	99.495	ug/l	1.05	3,002,884.08	9.346E+00	Pulse	0.50	3
Zn			1	100.288	ug/l	0.88	365,764.82	7.465E-01	Pulse	1.00	3
Cd			1	97.501	ug/l	0.65	667,299.08	1.362E+00	Pulse	0.50	3
Al			1	9423.638	ug/l	1.07	2,803,704.17	6.972E+00	Pulse	1.00	3
Se			1	101.009	ug/l	0.52	14,489.92	4.574E-03	Pulse	3.00	3
Sb			1	95.996	ug/l	0.47	1,360,228.17	2.776E+00	Pulse	1.00	3
Se			1	96.362	ug/l	2.05	7,230.15	2.816E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,490,432.33	0.69	90.5	Analog	0.50	3
1	Sc		402,185.36	0.90	94.2	Pulse	0.30	3
1	Ge		321,289.92	0.33	92.4	Pulse	0.30	3
1	In		3,168,253.21	0.33	88.1	Pulse	0.30	3
1	Tb		13,635,793.00	0.26	93.8	Analog	0.50	3
1	Lu		7,981,255.67	0.22	92.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		489,961.34	0.44	92.2	Pulse	0.30	3
1	Te		25,680.71	1.09	82.3	Pulse	0.50	3
1	Li		2,110.12	2.95	91.9	Pulse	0.30	3

Quantitation Report

File Name	045_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:11
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	2684.50	708.02	2.234E-03	Pulse	0.50	3
As			1	0.003	ug/l	80.63	32.67	1.031E-04	Pulse	1.00	3
Mo			1	0.025	ug/l	3.02	392.01	8.083E-04	Pulse	0.50	3
Pb			1	-0.016	ug/l	-18.39	10,990.54	1.139E-03	Pulse	1.00	3
Be			1	0.010	ug/l	27.80	1.33	3.461E-06	Pulse	2.00	3
Ag			1	0.005	ug/l	29.32	375.34	7.748E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	-281.95	28.00	8.894E-06	Pulse	0.50	3
Tl			1	0.021	ug/l	11.86	2,730.90	2.829E-04	Pulse	0.50	3
Sn			1	0.018	ug/l	37.06	817.80	2.598E-04	Pulse	0.30	3
Sr			1	0.002	ug/l	362.30	1,134.04	3.602E-04	Pulse	0.50	3
[Pb]			1	-0.018	ug/l	-29.83	5,192.14	5.380E-04	Pulse	0.50	3
Ca			1	-0.843	ug/l	-94.37	69.33	1.798E-04	Pulse	0.50	3
Ti			1	-0.003	ug/l	-213.31	1.33	3.451E-06	Pulse	0.50	3
Na			1	-3.688	ug/l	-2.71	12,309.11	3.196E-02	Pulse	1.00	3
Mg			1	0.278	ug/l	22.17	419.34	1.089E-03	Pulse	1.00	3
K			1	2.095	ug/l	11.56	14,546.35	3.777E-02	Pulse	1.00	3
V			1	-0.008	ug/l	-15.27	403.34	1.047E-03	Pulse	0.50	3
Mn			1	0.001	ug/l	72.10	114.00	3.597E-04	Pulse	0.50	3
Fe			1	0.313	ug/l	24.67	10,254.10	3.236E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-15.25	150.00	4.734E-04	Pulse	0.50	3
Ni			1	-0.005	ug/l	-58.60	155.33	4.902E-04	Pulse	0.50	3
Cu			1	-0.453	ug/l	-1.26	59,049.88	1.863E-01	Pulse	0.50	3
Zn			1	-0.328	ug/l	-19.31	6,676.83	1.377E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	101.79	21.33	4.410E-05	Pulse	0.50	3
Al			1	-0.234	ug/l	-65.36	265.00	6.881E-04	Pulse	1.00	3
Se			1	0.061	ug/l	14.33	30.11	9.566E-06	Pulse	3.00	3
Sb			1	-0.030	ug/l	-8.10	341.67	7.049E-04	Pulse	1.00	3
Se			1	0.032	ug/l	292.42	34.44	1.283E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,653,093.00	1.29	92.0	Analog	0.50	3
1	Sc		385,186.56	0.27	90.2	Pulse	0.30	3

Quantitation Report

1	Ge		316,925.53	0.24	91.2	Pulse	0.30	3
1	In		3,147,793.14	0.28	87.6	Pulse	0.30	3
1	Tb		13,191,616.00	0.57	90.8	Analog	0.50	3
1	Lu		7,649,786.00	0.36	88.5	Analog	0.50	3
1	Ge		484,932.67	0.81	91.2	Pulse	0.30	3
1	Te		26,822.35	0.51	86.0	Pulse	0.50	3
1	Li		2,204.58	4.43	96.0	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:15
Sample Name	FA53625-3F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.524	ug/l	2.08	15,825.78	5.321E-02	Pulse	0.50	3
As			1	0.182	ug/l	8.21	211.33	7.107E-04	Pulse	1.00	3
Mo			1	0.271	ug/l	4.53	1,920.11	4.222E-03	Pulse	0.50	3
Pb			1	-0.049	ug/l	-0.30	10,076.31	1.066E-03	Pulse	1.00	3
Be			1	0.027	ug/l	84.47	1.67	4.522E-06	Pulse	2.00	3
Ag			1	0.018	ug/l	16.99	572.01	1.258E-03	Pulse	0.50	3
Ba			1	4.426	ug/l	1.45	10,962.67	3.621E-03	Pulse	0.50	3
Tl			1	0.024	ug/l	10.10	1,543.41	1.633E-04	Pulse	0.50	3
Sn			1	0.454	ug/l	8.46	3,233.64	1.068E-03	Pulse	0.30	3
Sr			1	34.949	ug/l	1.11	173,861.21	5.743E-02	Pulse	0.50	3
[Pb]			1	-0.049	ug/l	-31.20	4,830.03	5.112E-04	Pulse	0.50	3
Ca			1	9202.782	ug/l	0.38	198,086.95	5.361E-01	Pulse	0.50	3
Ti			1	4.222	ug/l	8.79	762.02	2.063E-03	Pulse	0.50	3
Na			1	28139.468	ug/l	0.49	31,439,680.00	8.509E+01	Analog	1.00	3
Mg			1	2602.761	ug/l	0.66	1,245,539.00	3.371E+00	Pulse	1.00	3
K			1	829.399	ug/l	0.71	336,981.29	9.120E-01	Pulse	1.00	3
V			1	0.478	ug/l	2.84	3,997.09	1.082E-02	Pulse	0.50	3
Mn			1	1.002	ug/l	2.03	4,490.54	1.510E-02	Pulse	0.50	3
Fe			1	162.865	ug/l	1.63	1,279,745.21	4.302E+00	Pulse	0.50	3
Co			1	0.075	ug/l	5.70	1,627.41	5.472E-03	Pulse	0.50	3
Ni			1	0.189	ug/l	9.19	1,142.70	3.843E-03	Pulse	0.50	3
Cu			1	-2.245	ug/l	-1.61	37,174.36	1.250E-01	Pulse	0.50	3
Zn			1	3.179	ug/l	5.04	12,612.79	2.773E-02	Pulse	1.00	3
Cd			1	0.034	ug/l	10.24	116.67	2.565E-04	Pulse	0.50	3
Al			1	99.514	ug/l	1.45	13,917.18	3.767E-02	Pulse	1.00	3
Se			1	0.428	ug/l	13.88	49.89	1.648E-05	Pulse	3.00	3
Sb			1	0.051	ug/l	18.06	1,049.37	2.307E-03	Pulse	1.00	3
Se			1	1.431	ug/l	5.90	68.44	3.271E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,449,183.00	0.79	90.1	Analog	0.50	3
1	Sc		369,494.93	0.71	86.6	Pulse	0.30	3
1	Ge		297,483.37	1.17	85.6	Pulse	0.30	3
1	In		3,027,334.19	0.38	84.2	Pulse	0.30	3
1	Tb		13,590,577.67	0.61	93.5	Analog	0.50	3
1	Lu		7,932,946.50	1.63	91.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		454,786.01	0.15	85.5	Pulse	0.30	3
1	Te		20,923.33	1.42	67.1	Pulse	0.50	3
1	Li		1,996.78	1.77	87.0	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:18
Sample Name	FA53625-4F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	11.414	ug/l	1.01	114,183.00	3.840E-01	Pulse	0.50	3
As			1	1.361	ug/l	3.29	1,421.72	4.781E-03	Pulse	1.00	3
Mo			1	2.297	ug/l	1.69	15,945.46	3.541E-02	Pulse	0.50	3
Pb			1	-0.108	ug/l	-7.51	7,551.01	8.076E-04	Pulse	1.00	3
Be			1	0.004	ug/l	235.86	0.50	1.358E-06	Pulse	2.00	3
Ag			1	0.007	ug/l	7.48	299.33	6.646E-04	Pulse	0.50	3
Ba			1	10.528	ug/l	1.17	25,961.93	8.602E-03	Pulse	0.50	3
Tl			1	0.012	ug/l	15.56	820.69	8.774E-05	Pulse	0.50	3
Sn			1	0.464	ug/l	31.99	3,278.03	1.088E-03	Pulse	0.30	3
Sr			1	377.774	ug/l	1.62	1,862,923.50	6.173E-01	Pulse	0.50	3
[Pb]			1	-0.114	ug/l	-5.72	3,529.71	3.774E-04	Pulse	0.50	3
Ca			1	47763.640	ug/l	0.37	1,024,351.11	2.781E+00	Pulse	0.50	3
Ti			1	0.537	ug/l	22.82	98.67	2.679E-04	Pulse	0.50	3
Na			1	25915.295	ug/l	0.69	28,862,131.33	7.837E+01	Analog	1.00	3
Mg			1	7331.828	ug/l	0.96	3,497,031.58	9.495E+00	Pulse	1.00	3
K			1	2347.246	ug/l	0.12	928,160.36	2.520E+00	Pulse	1.00	3
V			1	0.296	ug/l	2.74	2,660.19	7.223E-03	Pulse	0.50	3
Mn			1	1258.437	ug/l	0.74	5,510,049.50	1.853E+01	Analog	0.50	3
Fe			1	580.023	ug/l	0.95	4,544,412.00	1.528E+01	Pulse	0.50	3
Co			1	1.974	ug/l	0.95	36,505.62	1.228E-01	Pulse	0.50	3
Ni			1	65.974	ug/l	0.80	330,029.79	1.110E+00	Pulse	0.50	3
Cu			1	-2.477	ug/l	-1.07	34,008.52	1.144E-01	Pulse	0.50	3
Zn			1	2.579	ug/l	3.95	11,505.77	2.555E-02	Pulse	1.00	3
Cd			1	0.048	ug/l	7.09	157.33	3.495E-04	Pulse	0.50	3
Al			1	14.188	ug/l	1.16	2,249.80	6.109E-03	Pulse	1.00	3
Se			1	0.198	ug/l	44.67	34.00	1.127E-05	Pulse	3.00	3
Sb			1	0.056	ug/l	16.89	1,071.03	2.378E-03	Pulse	1.00	3
Se			1	0.499	ug/l	13.47	39.33	1.915E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,352,205.67	0.78	89.1	Analog	0.50	3
1	Sc		368,298.45	0.33	86.3	Pulse	0.30	3
1	Ge		297,387.22	0.59	85.6	Pulse	0.30	3
1	In		3,018,133.98	1.06	84.0	Pulse	0.30	3
1	Tb		13,575,785.33	0.72	93.4	Analog	0.50	3
1	Lu		7,921,166.33	0.91	91.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		450,326.16	0.83	84.7	Pulse	0.30	3
1	Te		20,534.89	0.58	65.8	Pulse	0.50	3
1	Li		2,063.45	2.99	89.9	Pulse	0.30	3

Quantitation Report

File Name 048SMPL.d
File Path D:\2018\04-April\xa043018m1.b
Method File
Method Path
Acq Time 4/30/2018 11:22
Sample Name FA53625-5F
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/30/2018 14:30
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	18.138	ug/l	1.26	175,140.37	6.088E-01	Pulse	0.50	3
As			1	0.357	ug/l	3.51	378.00	1.314E-03	Pulse	1.00	3
Mo			1	8.263	ug/l	0.50	55,899.55	1.273E-01	Pulse	0.50	3
Pb			1	0.477	ug/l	1.69	26,777.55	3.361E-03	Pulse	1.00	3
Be			1	0.013	ug/l	72.38	1.00	2.536E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	10.89	415.34	9.455E-04	Pulse	0.50	3
Ba			1	855.153	ug/l	0.65	2,052,920.50	6.980E-01	Pulse	0.50	3
Tl			1	0.050	ug/l	1.94	2,687.56	3.373E-04	Pulse	0.50	3
Sn			1	0.493	ug/l	6.64	3,362.55	1.143E-03	Pulse	0.30	3
Sr			1	16725.513	ug/l	0.81	80,340,202.67	2.732E+01	Analog	0.50	3
[Pb]			1	0.492	ug/l	4.85	12,873.54	1.616E-03	Pulse	0.50	3
Ca			1	481269.485	ug/l	0.08	11,056,080.00	2.802E+01	Analog	0.50	3
Ti			1	0.143	ug/l	14.71	30.00	7.605E-05	Pulse	0.50	3
Na			1	167169.133	ug/l	0.80	199,328,912.00	5.052E+02	Analog	1.00	3
Mg			1	30.976	ug/l	0.27	15,973.03	4.048E-02	Pulse	1.00	3
K			1	310892.489	ug/l	0.47	129,967,474.67	3.294E+02	Analog	1.00	3
V			1	1.060	ug/l	1.01	8,810.01	2.233E-02	Pulse	0.50	3
Mn			1	0.616	ug/l	3.19	2,707.53	9.411E-03	Pulse	0.50	3
Fe			1	27.916	ug/l	16.35	216,039.44	7.506E-01	Pulse	0.50	3
Co			1	0.230	ug/l	1.28	4,324.50	1.503E-02	Pulse	0.50	3
Ni			1	3.478	ug/l	1.67	17,014.83	5.915E-02	Pulse	0.50	3
Cu			1	3.643	ug/l	1.80	113,571.91	3.948E-01	Pulse	0.50	3
Zn			1	6.508	ug/l	2.79	17,506.94	3.986E-02	Pulse	1.00	3
Cd			1	0.009	ug/l	31.46	34.67	7.898E-05	Pulse	0.50	3
Al			1	981.822	ug/l	0.52	143,611.77	3.640E-01	Pulse	1.00	3
Se			1	0.598	ug/l	16.44	59.78	2.033E-05	Pulse	3.00	3
Sb			1	0.151	ug/l	3.76	1,646.08	3.747E-03	Pulse	1.00	3
Se			1	1.408	ug/l	22.31	61.89	3.238E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		7,968,558.17	0.81	76.0	Analog	0.50	3
1	Sc		394,549.23	0.52	92.4	Pulse	0.30	3
1	Ge		287,675.62	0.56	82.8	Pulse	0.30	3
1	In		2,941,265.86	0.66	81.8	Pulse	0.30	3
1	Tb		12,827,213.67	0.88	88.2	Analog	0.50	3
1	Lu		7,633,579.67	0.92	88.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		439,271.44	0.54	82.6	Pulse	0.30	3
1	Te		19,093.32	1.16	61.2	Pulse	0.50	3
1	Li		2,362.38	1.92	102.9	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:26
Sample Name	FA53625-6F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	10.838	ug/l	4.81	109,270.02	3.647E-01	Pulse	0.50	3
As			1	0.110	ug/l	2.95	138.33	4.616E-04	Pulse	1.00	3
Mo			1	4.709	ug/l	7.85	32,902.27	7.255E-02	Pulse	0.50	3
Pb			1	-0.082	ug/l	-13.96	8,669.54	9.226E-04	Pulse	1.00	3
Be			1	0.030	ug/l	122.00	1.83	4.949E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	18.54	282.67	6.234E-04	Pulse	0.50	3
Ba			1	7.436	ug/l	1.10	18,266.56	6.078E-03	Pulse	0.50	3
Tl			1	0.009	ug/l	9.73	611.34	6.507E-05	Pulse	0.50	3
Sn			1	0.558	ug/l	61.86	3,804.94	1.269E-03	Pulse	0.30	3
Sr			1	60.082	ug/l	0.16	295,960.93	9.848E-02	Pulse	0.50	3
[Pb]			1	-0.077	ug/l	-13.55	4,264.55	4.538E-04	Pulse	0.50	3
Ca			1	25863.404	ug/l	0.69	555,647.69	1.506E+00	Pulse	0.50	3
Ti			1	0.069	ug/l	64.87	14.67	3.967E-05	Pulse	0.50	3
Na			1	23446.182	ug/l	0.58	26,158,556.67	7.091E+01	Analog	1.00	3
Mg			1	8235.010	ug/l	0.64	3,934,500.08	1.066E+01	Pulse	1.00	3
K			1	2048.891	ug/l	0.76	813,099.08	2.204E+00	Pulse	1.00	3
V			1	0.595	ug/l	14.73	4,843.96	1.313E-02	Pulse	0.50	3
Mn			1	29.557	ug/l	1.11	130,528.44	4.355E-01	Pulse	0.50	3
Fe			1	88.434	ug/l	7.72	701,974.04	2.343E+00	Pulse	0.50	3
Co			1	3.198	ug/l	9.71	59,411.76	1.984E-01	Pulse	0.50	3
Ni			1	52.622	ug/l	2.30	265,308.46	8.853E-01	Pulse	0.50	3
Cu			1	-1.376	ug/l	-9.13	49,388.88	1.648E-01	Pulse	0.50	3
Zn			1	1.859	ug/l	5.33	10,398.81	2.293E-02	Pulse	1.00	3
Cd			1	0.049	ug/l	21.69	164.67	3.629E-04	Pulse	0.50	3
Al			1	7.321	ug/l	4.78	1,316.71	3.569E-03	Pulse	1.00	3
Se			1	0.209	ug/l	31.05	34.67	1.153E-05	Pulse	3.00	3
Sb			1	0.004	ug/l	187.63	735.02	1.620E-03	Pulse	1.00	3
Se			1	0.471	ug/l	33.01	38.44	1.876E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,397,896.00	0.46	89.6	Analog	0.50	3
1	Sc		368,925.04	0.65	86.4	Pulse	0.30	3
1	Ge		299,747.08	1.65	86.2	Pulse	0.30	3
1	In		3,005,353.49	0.89	83.6	Pulse	0.30	3
1	Tb		13,623,248.00	1.09	93.7	Analog	0.50	3
1	Lu		7,960,048.33	0.55	92.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		453,563.37	0.34	85.3	Pulse	0.30	3
1	Te		20,503.51	1.05	65.7	Pulse	0.50	3
1	Li		2,014.56	2.53	87.8	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:29
Sample Name	FA53625-7F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	13.893	ug/l	0.43	139,626.08	4.669E-01	Pulse	0.50	3
As			1	0.099	ug/l	14.05	126.33	4.222E-04	Pulse	1.00	3
Mo			1	0.270	ug/l	9.53	1,916.77	4.208E-03	Pulse	0.50	3
Pb			1	-0.046	ug/l	-8.99	10,277.10	1.080E-03	Pulse	1.00	3
Be			1	0.027	ug/l	127.83	1.67	4.516E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	37.55	268.00	5.879E-04	Pulse	0.50	3
Ba			1	7.719	ug/l	2.01	19,206.21	6.310E-03	Pulse	0.50	3
Tl			1	0.004	ug/l	44.29	334.67	3.521E-05	Pulse	0.50	3
Sn			1	0.312	ug/l	11.14	2,413.51	7.930E-04	Pulse	0.30	3
Sr			1	62.858	ug/l	1.45	313,571.48	1.030E-01	Pulse	0.50	3
[Pb]			1	-0.029	ug/l	-187.47	5,252.33	5.516E-04	Pulse	0.50	3
Ca			1	13495.711	ug/l	0.82	291,893.88	7.861E-01	Pulse	0.50	3
Ti			1	0.920	ug/l	16.70	168.67	4.545E-04	Pulse	0.50	3
Na			1	23591.769	ug/l	0.99	26,493,454.00	7.135E+01	Analog	1.00	3
Mg			1	4281.651	ug/l	0.91	2,059,129.83	5.545E+00	Pulse	1.00	3
K			1	904.075	ug/l	0.52	368,059.69	9.912E-01	Pulse	1.00	3
V			1	0.332	ug/l	5.07	2,941.57	7.922E-03	Pulse	0.50	3
Mn			1	1.051	ug/l	2.73	4,729.93	1.582E-02	Pulse	0.50	3
Fe			1	70.617	ug/l	1.31	560,594.57	1.874E+00	Pulse	0.50	3
Co			1	0.080	ug/l	2.83	1,733.42	5.796E-03	Pulse	0.50	3
Ni			1	0.471	ug/l	3.28	2,567.51	8.584E-03	Pulse	0.50	3
Cu			1	-2.223	ug/l	-2.36	37,685.96	1.260E-01	Pulse	0.50	3
Zn			1	1.325	ug/l	6.73	9,561.04	2.098E-02	Pulse	1.00	3
Cd			1	0.024	ug/l	25.45	84.67	1.858E-04	Pulse	0.50	3
Al			1	18.693	ug/l	9.75	2,886.59	7.775E-03	Pulse	1.00	3
Se			1	0.540	ug/l	6.99	57.89	1.902E-05	Pulse	3.00	3
Sb			1	-0.015	ug/l	-28.84	616.68	1.353E-03	Pulse	1.00	3
Se			1	1.716	ug/l	11.34	76.22	3.686E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,515,909.33	0.51	90.7	Analog	0.50	3
1	Sc		371,353.87	0.89	87.0	Pulse	0.30	3
1	Ge		299,077.99	0.71	86.0	Pulse	0.30	3
1	In		3,044,088.21	0.28	84.7	Pulse	0.30	3
1	Tb		13,659,915.33	0.44	94.0	Analog	0.50	3
1	Lu		7,984,146.83	0.66	92.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		455,657.33	0.56	85.7	Pulse	0.30	3
1	Te		20,691.04	1.14	66.3	Pulse	0.50	3
1	Li		2,020.11	1.31	88.0	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:33
Sample Name	FA53625-8F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	6.059	ug/l	2.18	60,557.59	2.049E-01	Pulse	0.50	3
As			1	0.273	ug/l	5.66	302.67	1.024E-03	Pulse	1.00	3
Mo			1	2.528	ug/l	0.97	17,743.07	3.896E-02	Pulse	0.50	3
Pb			1	-0.104	ug/l	-4.12	7,681.74	8.236E-04	Pulse	1.00	3
Be			1	0.008	ug/l	151.62	0.67	1.826E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	19.07	210.67	4.626E-04	Pulse	0.50	3
Ba			1	8.672	ug/l	1.78	21,414.00	7.087E-03	Pulse	0.50	3
Tl			1	0.011	ug/l	12.89	765.35	8.209E-05	Pulse	0.50	3
Sn			1	0.368	ug/l	5.30	2,721.33	9.009E-04	Pulse	0.30	3
Sr			1	142.866	ug/l	1.00	705,968.15	2.337E-01	Pulse	0.50	3
[Pb]			1	-0.109	ug/l	-7.73	3,629.73	3.892E-04	Pulse	0.50	3
Ca			1	31719.132	ug/l	1.09	681,051.81	1.847E+00	Pulse	0.50	3
Ti			1	0.129	ug/l	37.52	25.33	6.897E-05	Pulse	0.50	3
Na			1	25445.816	ug/l	1.19	28,371,563.33	7.695E+01	Analog	1.00	3
Mg			1	6483.991	ug/l	0.88	3,096,250.17	8.397E+00	Pulse	1.00	3
K			1	25989.299	ug/l	0.87	10,164,768.00	2.757E+01	Analog	1.00	3
V			1	0.584	ug/l	0.91	4,761.27	1.291E-02	Pulse	0.50	3
Mn			1	10.052	ug/l	1.53	43,851.90	1.483E-01	Pulse	0.50	3
Fe			1	36.874	ug/l	0.27	291,615.79	9.864E-01	Pulse	0.50	3
Co			1	0.261	ug/l	1.31	5,014.67	1.696E-02	Pulse	0.50	3
Ni			1	30.238	ug/l	0.90	150,478.25	5.090E-01	Pulse	0.50	3
Cu			1	-1.976	ug/l	-2.70	40,589.83	1.373E-01	Pulse	0.50	3
Zn			1	1.385	ug/l	5.74	9,656.43	2.120E-02	Pulse	1.00	3
Cd			1	0.021	ug/l	41.06	74.00	1.622E-04	Pulse	0.50	3
Al			1	7.774	ug/l	2.26	1,377.72	3.737E-03	Pulse	1.00	3
Se			1	0.265	ug/l	17.09	38.66	1.280E-05	Pulse	3.00	3
Sb			1	0.115	ug/l	9.80	1,468.73	3.226E-03	Pulse	1.00	3
Se			1	0.756	ug/l	0.85	47.00	2.289E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,328,250.00	0.75	88.9	Analog	0.50	3
1	Sc		368,756.13	1.76	86.4	Pulse	0.30	3
1	Ge		295,634.73	1.07	85.1	Pulse	0.30	3
1	In		3,021,332.73	0.94	84.1	Pulse	0.30	3
1	Tb		13,627,779.00	0.15	93.8	Analog	0.50	3
1	Lu		7,918,045.50	0.99	91.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		455,438.61	1.05	85.7	Pulse	0.30	3
1	Te		20,529.51	2.06	65.8	Pulse	0.50	3
1	Li		2,183.46	1.86	95.1	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:36
Sample Name	FA53625-9F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	5.562	ug/l	1.86	56,266.82	1.883E-01	Pulse	0.50	3
As			1	0.175	ug/l	15.84	204.67	6.850E-04	Pulse	1.00	3
Mo			1	1.692	ug/l	1.28	11,831.09	2.610E-02	Pulse	0.50	3
Pb			1	-0.128	ug/l	-0.44	6,793.36	7.223E-04	Pulse	1.00	3
Be			1	0.014	ug/l	243.39	1.00	2.716E-06	Pulse	2.00	3
Ag			1	0.002	ug/l	38.05	173.33	3.825E-04	Pulse	0.50	3
Ba			1	8.275	ug/l	0.66	20,374.83	6.763E-03	Pulse	0.50	3
Tl			1	0.010	ug/l	15.03	717.35	7.627E-05	Pulse	0.50	3
Sn			1	0.342	ug/l	4.08	2,562.42	8.505E-04	Pulse	0.30	3
Sr			1	149.953	ug/l	0.51	738,875.21	2.453E-01	Pulse	0.50	3
[Pb]			1	-0.138	ug/l	-0.88	3,098.30	3.294E-04	Pulse	0.50	3
Ca			1	41579.845	ug/l	0.10	897,482.25	2.421E+00	Pulse	0.50	3
Ti			1	0.109	ug/l	46.16	22.00	5.927E-05	Pulse	0.50	3
Na			1	18691.996	ug/l	0.62	20,957,654.00	5.654E+01	Analog	1.00	3
Mg			1	7029.298	ug/l	0.96	3,374,432.08	9.104E+00	Pulse	1.00	3
K			1	14082.011	ug/l	1.00	5,542,550.17	1.495E+01	Analog	1.00	3
V			1	0.420	ug/l	3.24	3,581.68	9.662E-03	Pulse	0.50	3
Mn			1	13.690	ug/l	1.56	60,343.94	2.019E-01	Pulse	0.50	3
Fe			1	22.410	ug/l	1.01	181,019.17	6.057E-01	Pulse	0.50	3
Co			1	0.355	ug/l	3.66	6,811.22	2.279E-02	Pulse	0.50	3
Ni			1	42.539	ug/l	1.18	213,940.08	7.158E-01	Pulse	0.50	3
Cu			1	-2.386	ug/l	-0.55	35,421.89	1.185E-01	Pulse	0.50	3
Zn			1	3.156	ug/l	2.75	12,531.42	2.765E-02	Pulse	1.00	3
Cd			1	0.020	ug/l	33.30	72.67	1.604E-04	Pulse	0.50	3
Al			1	7.089	ug/l	6.84	1,291.04	3.483E-03	Pulse	1.00	3
Se			1	0.178	ug/l	19.78	32.67	1.084E-05	Pulse	3.00	3
Sb			1	0.053	ug/l	15.94	1,056.70	2.332E-03	Pulse	1.00	3
Se			1	0.806	ug/l	64.73	47.89	2.362E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,405,314.67	0.39	89.6	Analog	0.50	3
1	Sc		370,668.72	0.57	86.8	Pulse	0.30	3
1	Ge		298,866.52	0.54	86.0	Pulse	0.30	3
1	In		3,012,655.30	0.83	83.8	Pulse	0.30	3
1	Tb		13,725,927.33	0.55	94.4	Analog	0.50	3
1	Lu		7,954,789.83	1.22	92.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		453,234.03	0.49	85.3	Pulse	0.30	3
1	Te		20,299.27	1.99	65.1	Pulse	0.50	3
1	Li		2,636.97	38.33	114.9	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:40
Sample Name	MP33666-MB2A
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.231	ug/l	5.42	2,944.90	9.968E-03	Pulse	0.50	3
As			1	0.058	ug/l	18.41	82.67	2.798E-04	Pulse	1.00	3
Mo			1	0.012	ug/l	19.56	107.33	2.360E-04	Pulse	0.50	3
Pb			1	0.243	ug/l	1.20	22,354.25	2.341E-03	Pulse	1.00	3
Be			1	0.011	ug/l	105.91	0.83	2.268E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	24.04	194.00	4.267E-04	Pulse	0.50	3
Ba			1	0.273	ug/l	6.77	697.35	2.319E-04	Pulse	0.50	3
Tl			1	0.002	ug/l	17.47	197.33	2.067E-05	Pulse	0.50	3
Sn			1	0.379	ug/l	15.16	2,776.99	9.232E-04	Pulse	0.30	3
Sr			1	0.555	ug/l	4.06	3,793.06	1.262E-03	Pulse	0.50	3
[Pb]			1	0.252	ug/l	3.84	10,748.74	1.126E-03	Pulse	0.50	3
Ca			1	33.749	ug/l	15.37	824.69	2.243E-03	Pulse	0.50	3
Ti			1	0.147	ug/l	26.91	28.67	7.805E-05	Pulse	0.50	3
Na			1	53.098	ug/l	0.23	78,901.51	2.147E-01	Pulse	1.00	3
Mg			1	11.811	ug/l	0.35	5,756.84	1.567E-02	Pulse	1.00	3
K			1	29.117	ug/l	0.93	23,583.70	6.417E-02	Pulse	1.00	3
V			1	0.229	ug/l	1.80	2,160.80	5.880E-03	Pulse	0.50	3
Mn			1	1.281	ug/l	1.05	5,671.51	1.920E-02	Pulse	0.50	3
Fe			1	66.679	ug/l	0.09	523,175.18	1.771E+00	Pulse	0.50	3
Co			1	0.005	ug/l	20.41	336.67	1.140E-03	Pulse	0.50	3
Ni			1	0.123	ug/l	14.98	812.02	2.749E-03	Pulse	0.50	3
Cu			1	-2.424	ug/l	-0.64	34,504.09	1.168E-01	Pulse	0.50	3
Zn			1	0.812	ug/l	13.36	8,693.30	1.912E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	152.85	14.00	3.079E-05	Pulse	0.50	3
Al			1	10.616	ug/l	1.33	1,759.41	4.788E-03	Pulse	1.00	3
Se			1	0.089	ug/l	98.53	26.56	8.823E-06	Pulse	3.00	3
Sb			1	-0.031	ug/l	-14.15	509.68	1.121E-03	Pulse	1.00	3
Se			1	0.287	ug/l	27.98	33.44	1.607E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,547,509.33	0.41	91.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		367,495.85	0.64	86.1	Pulse	0.30	3
1	Ge		295,439.76	0.57	85.0	Pulse	0.30	3
1	In		3,006,538.49	0.79	83.6	Pulse	0.30	3
1	Tb		13,433,309.00	0.57	92.4	Analog	0.50	3
1	Lu		7,808,214.33	0.81	90.4	Analog	0.50	3
1	Ge		454,758.37	0.23	85.5	Pulse	0.30	3
1	Te		20,776.50	3.34	66.6	Pulse	0.50	3
1	Li		1,970.11	3.96	85.8	Pulse	0.30	3

Quantitation Report

File Name	054_MB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:44
Sample Name	MP33667-MB1
Sample Type	MB
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.174	ug/l	1.69	2,402.16	8.053E-03	Pulse	0.50	3
As			1	0.056	ug/l	20.65	81.67	2.739E-04	Pulse	1.00	3
Mo			1	0.007	ug/l	10.53	69.33	1.513E-04	Pulse	0.50	3
Pb			1	-0.085	ug/l	-4.04	8,704.22	9.073E-04	Pulse	1.00	3
Be			1	-0.002	ug/l	-229.22	0.17	4.461E-07	Pulse	2.00	3
Ag			1	0.002	ug/l	52.29	174.67	3.812E-04	Pulse	0.50	3
Ba			1	0.096	ug/l	14.82	264.00	8.769E-05	Pulse	0.50	3
Tl			1	0.002	ug/l	32.32	194.00	2.021E-05	Pulse	0.50	3
Sn			1	0.284	ug/l	3.36	2,225.71	7.392E-04	Pulse	0.30	3
Sr			1	0.150	ug/l	5.07	1,808.76	6.007E-04	Pulse	0.50	3
[Pb]			1	-0.091	ug/l	-13.47	4,082.50	4.256E-04	Pulse	0.50	3
Ca			1	21.329	ug/l	8.97	564.01	1.520E-03	Pulse	0.50	3
Ti			1	0.146	ug/l	37.86	28.67	7.721E-05	Pulse	0.50	3
Na			1	4.655	ug/l	4.24	25,350.30	6.831E-02	Pulse	1.00	3
Mg			1	7.746	ug/l	2.87	3,859.37	1.040E-02	Pulse	1.00	3
K			1	5.318	ug/l	4.50	14,457.96	3.896E-02	Pulse	1.00	3
V			1	0.190	ug/l	3.44	1,898.10	5.115E-03	Pulse	0.50	3
Mn			1	0.189	ug/l	10.28	933.36	3.130E-03	Pulse	0.50	3
Fe			1	3.975	ug/l	5.45	35,948.18	1.205E-01	Pulse	0.50	3
Co			1	0.001	ug/l	28.18	276.00	9.252E-04	Pulse	0.50	3
Ni			1	0.028	ug/l	120.67	340.05	1.138E-03	Pulse	0.50	3
Cu			1	-2.529	ug/l	-1.05	33,405.49	1.120E-01	Pulse	0.50	3
Zn			1	-0.899	ug/l	-14.56	5,904.25	1.289E-02	Pulse	1.00	3
Cd			1	-0.001	ug/l	-97.26	6.00	1.309E-05	Pulse	0.50	3
Al			1	5.842	ug/l	7.94	1,121.70	3.022E-03	Pulse	1.00	3
Se			1	0.071	ug/l	29.72	25.33	8.414E-06	Pulse	3.00	3
Sb			1	-0.035	ug/l	-16.38	483.34	1.055E-03	Pulse	1.00	3
Se			1	0.470	ug/l	9.34	39.33	1.873E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,594,122.33	0.62	91.4	Analog	0.50	3
1	Sc		371,096.84	0.71	86.9	Pulse	0.30	3
1	Ge		298,305.25	0.55	85.8	Pulse	0.30	3
1	In		3,010,863.21	0.21	83.8	Pulse	0.30	3
1	Tb		13,379,439.67	0.75	92.0	Analog	0.50	3
1	Lu		7,716,564.50	0.87	89.3	Analog	0.50	3
1	Ge		458,196.79	0.14	86.2	Pulse	0.30	3
1	Te		20,994.72	0.51	67.3	Pulse	0.50	3
1	Li		2,089.01	3.41	91.0	Pulse	0.30	3

Quantitation Report

File Name	055_BSP.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:47
Sample Name	MP33667-B1
Sample Type	BSP
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	212.550	ug/l	0.62	2,148,851.92	7.111E+00	Pulse	0.50	3
As			1	196.288	ug/l	0.68	204,863.10	6.779E-01	Pulse	1.00	3
Mo			1	213.374	ug/l	1.07	1,525,920.34	3.285E+00	Pulse	0.50	3
Pb			1	207.140	ug/l	0.31	8,745,001.33	9.054E-01	Analog	1.00	3
Be			1	218.840	ug/l	0.97	11,504.41	3.003E-02	Pulse	2.00	3
Ag			1	107.338	ug/l	0.94	2,803,842.25	6.036E+00	Pulse	0.50	3
Ba			1	204.081	ug/l	1.02	516,312.03	1.666E-01	Pulse	0.50	3
Tl			1	199.646	ug/l	0.55	12,592,114.00	1.304E+00	Analog	0.50	3
Sn			1	206.384	ug/l	0.80	1,238,733.18	3.996E-01	Pulse	0.30	3
Sr			1	201.445	ug/l	0.38	1,020,838.98	3.293E-01	Pulse	0.50	3
[Pb]			1	187.759	ug/l	0.50	3,712,655.50	3.844E-01	Pulse	0.50	3
Ca			1	18813.488	ug/l	1.25	419,714.15	1.096E+00	Pulse	0.50	3
Ti			1	201.697	ug/l	2.08	37,627.38	9.823E-02	Pulse	0.50	3
Na			1	19846.649	ug/l	1.18	22,994,195.33	6.003E+01	Analog	1.00	3
Mg			1	19628.457	ug/l	0.96	9,737,183.00	2.542E+01	Analog	1.00	3
K			1	19240.956	ug/l	0.36	7,821,440.33	2.042E+01	Analog	1.00	3
V			1	207.872	ug/l	1.10	1,576,560.21	4.116E+00	Pulse	0.50	3
Mn			1	202.318	ug/l	1.17	900,251.29	2.979E+00	Pulse	0.50	3
Fe			1	20340.062	ug/l	0.48	161,778,736.00	5.354E+02	Analog	0.50	3
Co			1	210.638	ug/l	0.38	3,931,652.17	1.301E+01	Pulse	0.50	3
Ni			1	212.933	ug/l	0.21	1,081,975.92	3.580E+00	Pulse	0.50	3
Cu			1	208.555	ug/l	1.10	2,956,927.33	9.785E+00	Pulse	0.50	3
Zn			1	189.301	ug/l	0.40	327,684.64	7.055E-01	Pulse	1.00	3
Cd			1	203.121	ug/l	0.67	658,947.06	1.419E+00	Pulse	0.50	3
Al			1	17278.665	ug/l	0.64	2,448,273.17	6.391E+00	Pulse	1.00	3
Se			1	172.734	ug/l	1.03	12,123.95	3.912E-03	Pulse	3.00	3
Sb			1	195.420	ug/l	0.46	1,312,514.71	2.826E+00	Pulse	1.00	3
Se			1	200.209	ug/l	1.89	6,137.88	2.925E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,659,262.67	0.89	92.1	Analog	0.50	3
1	Sc		383,062.55	0.28	89.7	Pulse	0.30	3
1	Ge		302,194.50	0.43	86.9	Pulse	0.30	3
1	In		3,099,582.31	0.72	86.2	Pulse	0.30	3
1	Tb		14,346,651.33	1.15	98.7	Analog	0.50	3
1	Lu		8,375,772.00	0.68	96.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		464,488.87	0.40	87.4	Pulse	0.30	3
1	Te		20,990.06	1.43	67.3	Pulse	0.50	3
1	Li		1,980.11	1.21	86.3	Pulse	0.30	3

Quantitation Report

File Name	056CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:51
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.666	ug/l	0.61	1,146,300.25	3.324E+00	Pulse	0.50	3
As			1	49.553	ug/l	0.99	118,038.23	3.423E-01	Pulse	1.00	3
Mo			1	49.306	ug/l	1.05	792,449.54	1.518E+00	Pulse	0.50	3
Pb			1	45.435	ug/l	0.90	4,115,451.42	3.979E-01	Pulse	1.00	3
Be			1	53.558	ug/l	1.69	6,268.30	1.470E-02	Pulse	2.00	3
Ag			1	50.297	ug/l	1.27	2,952,683.25	5.657E+00	Pulse	0.50	3
Ba			1	48.839	ug/l	1.69	270,975.04	7.974E-02	Pulse	0.50	3
Tl			1	48.354	ug/l	0.80	6,531,550.50	6.315E-01	Analog	0.50	3
Sn			1	49.221	ug/l	0.81	648,209.09	1.907E-01	Pulse	0.30	3
Sr			1	49.121	ug/l	1.34	546,482.11	1.608E-01	Pulse	0.50	3
[Pb]			1	46.296	ug/l	0.44	1,963,764.71	1.899E-01	Pulse	0.50	3
Ca			1	4897.185	ug/l	0.38	243,293.00	5.706E-01	Pulse	0.50	3
Ti			1	48.916	ug/l	1.84	20,317.90	4.765E-02	Pulse	0.50	3
Na			1	5135.974	ug/l	0.40	13,259,330.33	3.109E+01	Analog	1.00	3
Mg			1	5088.503	ug/l	0.43	5,620,084.00	1.318E+01	Analog	1.00	3
K			1	4898.397	ug/l	0.50	4,440,103.00	1.041E+01	Pulse	1.00	3
V			1	49.264	ug/l	0.45	832,146.64	1.951E+00	Pulse	0.50	3
Mn			1	48.250	ug/l	0.62	490,040.00	1.421E+00	Pulse	0.50	3
Fe			1	5068.523	ug/l	1.02	92,003,581.33	2.668E+02	Analog	0.50	3
Co			1	49.087	ug/l	0.21	2,091,111.13	6.064E+00	Pulse	0.50	3
Ni			1	50.405	ug/l	0.44	584,624.89	1.695E+00	Pulse	0.50	3
Cu			1	49.316	ug/l	0.66	1,637,066.92	4.748E+00	Pulse	0.50	3
Zn			1	50.361	ug/l	0.24	199,867.13	3.829E-01	Pulse	1.00	3
Cd			1	49.835	ug/l	0.65	363,351.07	6.961E-01	Pulse	0.50	3
Al			1	4701.263	ug/l	0.62	1,483,248.67	3.478E+00	Pulse	1.00	3
Se			1	50.230	ug/l	0.84	7,741.23	2.278E-03	Pulse	3.00	3
Sb			1	48.070	ug/l	0.83	726,014.92	1.391E+00	Pulse	1.00	3
Se			1	47.470	ug/l	2.39	3,917.63	1.393E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,343,658.33	0.76	98.6	Analog	0.50	3
1	Sc		426,418.38	0.35	99.9	Pulse	0.30	3
1	Ge		344,822.21	0.32	99.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,398,828.41	1.02	94.6	Pulse	0.30	3
1	Tb		14,842,704.00	0.46	102.1	Analog	0.50	3
1	Lu		8,606,117.33	0.47	99.6	Analog	0.50	3
1	Ge		521,948.63	0.04	98.2	Pulse	0.30	3
1	Te		28,124.91	1.05	90.2	Pulse	0.50	3
1	Li		2,290.14	2.81	99.8	Pulse	0.30	3

Quantitation Report

File Name	057_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:55
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.946	ug/l	0.67	2,282,169.17	6.621E+00	Pulse	0.50	3
As			1	98.479	ug/l	1.35	234,477.92	6.802E-01	Pulse	1.00	3
Mo			1	98.012	ug/l	0.51	1,585,308.04	3.018E+00	Pulse	0.50	3
Pb			1	96.747	ug/l	0.38	8,539,431.67	8.458E-01	Analog	1.00	3
Be			1	105.495	ug/l	1.65	12,370.25	2.895E-02	Pulse	2.00	3
Ag			1	98.968	ug/l	4.34	5,846,510.33	1.113E+01	Mix	0.50	3
Ba			1	97.227	ug/l	0.60	536,850.21	1.587E-01	Pulse	0.50	3
Tl			1	98.323	ug/l	0.14	12,963,698.33	1.284E+00	Analog	0.50	3
Sn			1	98.952	ug/l	0.26	1,296,227.48	3.832E-01	Pulse	0.30	3
Sr			1	98.862	ug/l	0.07	1,093,394.17	3.233E-01	Pulse	0.50	3
[Pb]			1	91.669	ug/l	0.63	3,789,337.33	3.753E-01	Pulse	0.50	3
Ca			1	9799.927	ug/l	0.76	487,699.23	1.141E+00	Pulse	0.50	3
Ti			1	97.238	ug/l	0.49	40,467.69	9.471E-02	Pulse	0.50	3
Na			1	10318.905	ug/l	0.99	26,667,639.33	6.242E+01	Analog	1.00	3
Mg			1	10146.159	ug/l	0.96	11,227,454.33	2.628E+01	Analog	1.00	3
K			1	10183.451	ug/l	0.48	9,233,184.67	2.161E+01	Analog	1.00	3
V			1	98.891	ug/l	0.61	1,673,113.41	3.916E+00	Pulse	0.50	3
Mn			1	97.141	ug/l	0.91	986,125.23	2.861E+00	Pulse	0.50	3
Fe			1	10055.720	ug/l	1.29	182,461,637.33	5.293E+02	Analog	0.50	3
Co			1	97.195	ug/l	0.42	4,138,911.08	1.201E+01	Pulse	0.50	3
Ni			1	99.005	ug/l	0.14	1,147,738.58	3.330E+00	Pulse	0.50	3
Cu			1	98.277	ug/l	0.55	3,183,327.33	9.235E+00	Pulse	0.50	3
Zn			1	98.745	ug/l	0.55	386,239.27	7.353E-01	Pulse	1.00	3
Cd			1	96.481	ug/l	1.17	707,938.06	1.348E+00	Pulse	0.50	3
Al			1	9506.234	ug/l	0.73	3,004,618.92	7.033E+00	Pulse	1.00	3
Se			1	99.903	ug/l	1.17	15,300.34	4.524E-03	Pulse	3.00	3
Sb			1	94.656	ug/l	0.41	1,437,961.92	2.737E+00	Pulse	1.00	3
Se			1	97.968	ug/l	0.69	7,789.48	2.863E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,096,181.33	0.27	96.2	Analog	0.50	3
1	Sc		427,251.54	0.71	100.1	Pulse	0.30	3
1	Ge		344,719.08	0.86	99.2	Pulse	0.30	3
1	In		3,382,320.84	0.32	94.1	Pulse	0.30	3
1	Tb		14,709,346.67	0.85	101.2	Analog	0.50	3
1	Lu		8,486,204.67	0.56	98.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		525,291.84	0.29	98.8	Pulse	0.30	3
1	Te		27,212.89	1.56	87.2	Pulse	0.50	3
1	Li		2,224.58	5.34	96.9	Pulse	0.30	3

Quantitation Report

File Name	058_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:58
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	-0.001	ug/l	-46.69	749.35	2.133E-03	Pulse	0.50	3
As			1	0.003	ug/l	114.03	34.67	9.855E-05	Pulse	1.00	3
Mo			1	0.026	ug/l	4.63	448.68	8.378E-04	Pulse	0.50	3
Pb			1	-0.016	ug/l	-6.66	12,126.63	1.136E-03	Pulse	1.00	3
Be			1	0.017	ug/l	94.70	2.33	5.426E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	33.21	496.01	9.264E-04	Pulse	0.50	3
Ba			1	0.002	ug/l	115.40	42.00	1.201E-05	Pulse	0.50	3
Tl			1	0.024	ug/l	11.80	3,408.36	3.193E-04	Pulse	0.50	3
Sn			1	0.029	ug/l	10.94	1,053.37	3.017E-04	Pulse	0.30	3
Sr			1	0.010	ug/l	124.63	1,352.72	3.875E-04	Pulse	0.50	3
[Pb]			1	-0.020	ug/l	-5.60	5,667.63	5.308E-04	Pulse	0.50	3
Ca			1	-0.429	ug/l	-52.02	98.00	2.281E-04	Pulse	0.50	3
Ti			1	0.002	ug/l	640.11	3.33	7.771E-06	Pulse	0.50	3
Na			1	-4.123	ug/l	-2.33	12,602.63	2.933E-02	Pulse	1.00	3
Mg			1	0.238	ug/l	34.43	423.67	9.857E-04	Pulse	1.00	3
K			1	1.060	ug/l	41.98	15,286.25	3.557E-02	Pulse	1.00	3
V			1	-0.010	ug/l	-35.54	416.01	9.683E-04	Pulse	0.50	3
Mn			1	-0.004	ug/l	-44.77	82.67	2.353E-04	Pulse	0.50	3
Fe			1	0.310	ug/l	29.46	11,331.40	3.223E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-9.72	161.33	4.591E-04	Pulse	0.50	3
Ni			1	-0.004	ug/l	-54.30	185.33	5.270E-04	Pulse	0.50	3
Cu			1	-0.467	ug/l	-5.83	65,026.28	1.851E-01	Pulse	0.50	3
Zn			1	-0.322	ug/l	-9.14	7,399.43	1.382E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	23.18	24.00	4.479E-05	Pulse	0.50	3
Al			1	-0.161	ug/l	-39.54	319.00	7.423E-04	Pulse	1.00	3
Se			1	0.018	ug/l	29.32	26.66	7.641E-06	Pulse	3.00	3
Sb			1	-0.029	ug/l	-15.88	395.01	7.380E-04	Pulse	1.00	3
Se			1	-0.001	ug/l	-2589.48	35.33	1.186E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,677,740.33	1.55	101.8	Analog	0.50	3
1	Sc		429,718.99	0.22	100.7	Pulse	0.30	3

Quantitation Report

1	Ge		351,337.58	0.94	101.1	Pulse	0.30	3
1	In		3,490,763.75	1.15	97.1	Pulse	0.30	3
1	Tb		14,950,438.00	1.38	102.8	Analog	0.50	3
1	Lu		8,584,462.00	1.39	99.4	Analog	0.50	3
1	Ge		535,618.61	0.61	100.8	Pulse	0.30	3
1	Te		29,784.22	1.04	95.5	Pulse	0.50	3
1	Li		2,320.15	1.87	101.1	Pulse	0.30	3

Quantitation Report

File Name	059SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:02
Sample Name	FA53465-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.408	ug/l	1.27	26,172.89	8.278E-02	Pulse	0.50	3
As			1	0.924	ug/l	4.20	1,034.70	3.272E-03	Pulse	1.00	3
Mo			1	0.185	ug/l	4.66	1,394.72	2.900E-03	Pulse	0.50	3
Pb			1	3.886	ug/l	1.13	186,047.71	1.824E-02	Pulse	1.00	3
Be			1	0.161	ug/l	14.98	9.00	2.287E-05	Pulse	2.00	3
Ag			1	0.080	ug/l	2.98	2,302.82	4.787E-03	Pulse	0.50	3
Ba			1	66.167	ug/l	0.09	173,306.12	5.401E-02	Pulse	0.50	3
Tl			1	0.035	ug/l	5.40	2,388.84	2.342E-04	Pulse	0.50	3
Sn			1	0.636	ug/l	7.13	4,552.82	1.419E-03	Pulse	0.30	3
Sr			1	83.210	ug/l	1.24	437,137.49	1.362E-01	Pulse	0.50	3
[Pb]			1	4.015	ug/l	0.59	89,931.95	8.817E-03	Pulse	0.50	3
Ca			1	13107.412	ug/l	1.02	300,313.60	7.635E-01	Pulse	0.50	3
Ti			1	22.712	ug/l	1.53	4,353.17	1.107E-02	Pulse	0.50	3
Na			1	5525.063	ug/l	0.97	6,588,962.83	1.675E+01	Analog	1.00	3
Mg			1	4409.890	ug/l	0.18	2,246,690.92	5.711E+00	Pulse	1.00	3
K			1	930.065	ug/l	0.37	400,732.02	1.019E+00	Pulse	1.00	3
V			1	9.870	ug/l	1.14	77,381.75	1.967E-01	Pulse	0.50	3
Mn			1	267.787	ug/l	0.51	1,246,775.00	3.943E+00	Pulse	0.50	3
Fe			1	4199.375	ug/l	0.41	34,952,466.67	1.105E+02	Analog	0.50	3
Co			1	1.425	ug/l	1.17	28,106.37	8.889E-02	Pulse	0.50	3
Ni			1	3.281	ug/l	1.83	17,652.73	5.583E-02	Pulse	0.50	3
Cu			1	11.372	ug/l	0.99	236,822.40	7.490E-01	Pulse	0.50	3
Zn			1	6.501	ug/l	1.26	19,159.84	3.983E-02	Pulse	1.00	3
Cd			1	0.083	ug/l	5.44	286.67	5.961E-04	Pulse	0.50	3
Al			1	730.365	ug/l	0.86	106,596.90	2.710E-01	Pulse	1.00	3
Se			1	1.212	ug/l	2.61	109.78	3.422E-05	Pulse	3.00	3
Sb			1	0.094	ug/l	25.18	1,407.06	2.924E-03	Pulse	1.00	3
Se			1	4.726	ug/l	6.14	175.22	8.066E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,200,218.33	0.38	97.2	Analog	0.50	3
1	Sc		393,379.88	0.72	92.1	Pulse	0.30	3
1	Ge		316,198.64	0.37	91.0	Pulse	0.30	3
1	In		3,208,488.34	0.50	89.3	Pulse	0.30	3
1	Tb		14,540,547.67	0.58	100.0	Analog	0.50	3
1	Lu		8,424,084.33	0.37	97.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		481,035.16	0.66	90.5	Pulse	0.30	3
1	Te		21,722.91	0.31	69.6	Pulse	0.50	3
1	Li		2,160.13	3.99	94.1	Pulse	0.30	3

Quantitation Report

File Name	060SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:05
Sample Name	MP33667-D1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.637	ug/l	3.03	28,430.04	9.042E-02	Pulse	0.50	3
As			1	0.919	ug/l	2.83	1,022.70	3.253E-03	Pulse	1.00	3
Mo			1	0.166	ug/l	9.46	1,250.05	2.600E-03	Pulse	0.50	3
Pb			1	4.051	ug/l	1.06	192,669.10	1.896E-02	Pulse	1.00	3
Be			1	0.153	ug/l	40.32	8.50	2.174E-05	Pulse	2.00	3
Ag			1	0.073	ug/l	6.21	2,099.46	4.365E-03	Pulse	0.50	3
Ba			1	68.964	ug/l	0.39	178,880.77	5.630E-02	Pulse	0.50	3
Tl			1	0.023	ug/l	6.76	1,585.41	1.560E-04	Pulse	0.50	3
Sn			1	0.615	ug/l	17.84	4,379.95	1.379E-03	Pulse	0.30	3
Sr			1	86.809	ug/l	0.28	451,591.96	1.421E-01	Pulse	0.50	3
[Pb]			1	4.121	ug/l	2.17	91,791.11	9.034E-03	Pulse	0.50	3
Ca			1	13567.967	ug/l	0.89	309,274.46	7.903E-01	Pulse	0.50	3
Ti			1	25.000	ug/l	4.16	4,767.26	1.218E-02	Pulse	0.50	3
Na			1	5751.025	ug/l	0.74	6,822,489.83	1.743E+01	Analog	1.00	3
Mg			1	4602.367	ug/l	0.83	2,332,642.83	5.961E+00	Pulse	1.00	3
K			1	966.796	ug/l	0.72	413,884.76	1.058E+00	Pulse	1.00	3
V			1	10.500	ug/l	0.69	81,864.48	2.092E-01	Pulse	0.50	3
Mn			1	277.864	ug/l	1.87	1,286,565.71	4.091E+00	Pulse	0.50	3
Fe			1	4530.714	ug/l	1.89	37,501,716.00	1.193E+02	Analog	0.50	3
Co			1	1.493	ug/l	1.38	29,264.06	9.306E-02	Pulse	0.50	3
Ni			1	3.487	ug/l	1.34	18,646.99	5.930E-02	Pulse	0.50	3
Cu			1	11.341	ug/l	1.22	235,090.10	7.476E-01	Pulse	0.50	3
Zn			1	5.791	ug/l	0.94	17,917.65	3.725E-02	Pulse	1.00	3
Cd			1	0.085	ug/l	12.73	294.67	6.124E-04	Pulse	0.50	3
Al			1	828.179	ug/l	0.33	120,207.77	3.072E-01	Pulse	1.00	3
Se			1	1.246	ug/l	7.79	111.11	3.497E-05	Pulse	3.00	3
Sb			1	0.056	ug/l	6.27	1,140.37	2.371E-03	Pulse	1.00	3
Se			1	4.156	ug/l	2.94	158.89	7.236E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,160,926.00	0.37	96.8	Analog	0.50	3
1	Sc		391,347.66	0.30	91.7	Pulse	0.30	3
1	Ge		314,486.43	0.95	90.5	Pulse	0.30	3
1	In		3,177,380.15	0.39	88.4	Pulse	0.30	3
1	Tb		14,614,403.00	0.71	100.5	Analog	0.50	3
1	Lu		8,459,218.00	0.40	97.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		481,073.71	0.89	90.5	Pulse	0.30	3
1	Te		21,955.19	1.39	70.4	Pulse	0.50	3
1	Li		2,115.68	1.41	92.2	Pulse	0.30	3

Quantitation Report

File Name	061SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:09
Sample Name	MP33667-SD1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.369	ug/l	2.03	6,042.29	1.807E-02	Pulse	0.50	3
As			1	0.947	ug/l	15.48	245.33	7.344E-04	Pulse	1.00	3
Mo			1	0.194	ug/l	5.65	329.33	6.450E-04	Pulse	0.50	3
Pb			1	3.561	ug/l	2.17	46,180.72	4.387E-03	Pulse	1.00	3
Be			1	0.175	ug/l	57.31	2.33	5.589E-06	Pulse	2.00	3
Ag			1	0.072	ug/l	20.12	548.01	1.073E-03	Pulse	0.50	3
Ba			1	64.887	ug/l	1.50	35,633.02	1.060E-02	Pulse	0.50	3
Tl			1	0.030	ug/l	7.52	489.34	4.647E-05	Pulse	0.50	3
Sn			1	0.403	ug/l	9.92	1,158.94	3.448E-04	Pulse	0.30	3
Sr			1	82.631	ug/l	0.93	91,914.00	2.734E-02	Pulse	0.50	3
[Pb]			1	3.731	ug/l	1.21	22,492.80	2.136E-03	Pulse	0.50	3
Ca			1	12992.589	ug/l	0.49	63,207.20	1.516E-01	Pulse	0.50	3
Ti			1	21.700	ug/l	2.24	884.02	2.120E-03	Pulse	0.50	3
Na			1	5315.795	ug/l	0.92	1,362,281.95	3.267E+00	Pulse	1.00	3
Mg			1	4469.727	ug/l	1.12	482,890.71	1.158E+00	Pulse	1.00	3
K			1	1035.122	ug/l	1.36	105,353.38	2.527E-01	Pulse	1.00	3
V			1	9.665	ug/l	1.67	16,520.35	3.962E-02	Pulse	0.50	3
Mn			1	262.104	ug/l	0.49	258,133.19	7.722E-01	Pulse	0.50	3
Fe			1	4189.839	ug/l	1.58	7,377,712.33	2.207E+01	Analog	0.50	3
Co			1	1.360	ug/l	1.88	5,900.92	1.765E-02	Pulse	0.50	3
Ni			1	3.268	ug/l	1.76	3,897.74	1.166E-02	Pulse	0.50	3
Cu			1	6.177	ug/l	7.07	95,097.16	2.845E-01	Pulse	0.50	3
Zn			1	2.377	ug/l	26.78	9,135.50	1.789E-02	Pulse	1.00	3
Cd			1	0.077	ug/l	35.07	64.00	1.254E-04	Pulse	0.50	3
Al			1	738.503	ug/l	0.55	23,138.05	5.549E-02	Pulse	1.00	3
Se			1	1.159	ug/l	42.77	40.44	1.204E-05	Pulse	3.00	3
Sb			1	-0.250	ug/l	-9.43	430.68	8.435E-04	Pulse	1.00	3
Se			1	3.500	ug/l	10.99	59.22	2.208E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,527,849.00	1.16	100.3	Analog	0.50	3
1	Sc		416,994.79	0.51	97.7	Pulse	0.30	3
1	Ge		334,307.12	0.86	96.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,361,486.53	0.92	93.5	Pulse	0.30	3
1	Tb		14,772,919.67	0.46	101.6	Analog	0.50	3
1	Lu		8,505,044.83	1.62	98.4	Analog	0.50	3
1	Ge		510,652.20	0.34	96.1	Pulse	0.30	3
1	Te		26,822.31	0.48	86.0	Pulse	0.50	3
1	Li		2,284.59	3.62	99.5	Pulse	0.30	3

Quantitation Report

File Name	062SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:13
Sample Name	MP33667-S1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	208.475	ug/l	1.27	2,141,690.08	6.975E+00	Pulse	0.50	3
As			1	191.303	ug/l	0.71	202,890.57	6.607E-01	Pulse	1.00	3
Mo			1	207.648	ug/l	1.68	1,501,014.67	3.197E+00	Pulse	0.50	3
Pb			1	208.778	ug/l	0.53	8,689,561.00	9.125E-01	Analog	1.00	3
Be			1	210.476	ug/l	0.90	11,190.41	2.888E-02	Pulse	2.00	3
Ag			1	98.262	ug/l	1.70	2,594,513.83	5.526E+00	Pulse	0.50	3
Ba			1	263.948	ug/l	1.03	668,796.19	2.154E-01	Pulse	0.50	3
Tl			1	197.408	ug/l	0.40	12,274,642.67	1.289E+00	Analog	0.50	3
Sn			1	202.247	ug/l	0.45	1,215,754.40	3.916E-01	Pulse	0.30	3
Sr			1	281.227	ug/l	0.99	1,426,816.42	4.596E-01	Pulse	0.50	3
[Pb]			1	187.411	ug/l	0.75	3,653,355.92	3.837E-01	Pulse	0.50	3
Ca			1	31249.311	ug/l	0.41	705,020.42	1.820E+00	Pulse	0.50	3
Ti			1	213.646	ug/l	1.42	40,310.69	1.041E-01	Pulse	0.50	3
Na			1	25047.379	ug/l	0.26	29,345,174.67	7.574E+01	Analog	1.00	3
Mg			1	23768.004	ug/l	0.25	11,925,184.33	3.078E+01	Analog	1.00	3
K			1	19847.686	ug/l	0.19	8,159,547.17	2.106E+01	Analog	1.00	3
V			1	211.013	ug/l	0.58	1,618,614.33	4.178E+00	Pulse	0.50	3
Mn			1	458.257	ug/l	0.43	2,071,985.96	6.747E+00	Pulse	0.50	3
Fe			1	23983.152	ug/l	0.24	193,840,122.67	6.312E+02	Analog	0.50	3
Co			1	202.842	ug/l	0.67	3,847,293.33	1.253E+01	Pulse	0.50	3
Ni			1	209.355	ug/l	0.22	1,081,006.96	3.520E+00	Pulse	0.50	3
Cu			1	212.810	ug/l	0.89	3,064,528.33	9.980E+00	Pulse	0.50	3
Zn			1	188.722	ug/l	1.05	330,258.08	7.034E-01	Pulse	1.00	3
Cd			1	194.802	ug/l	0.60	638,856.19	1.361E+00	Pulse	0.50	3
Al			1	17744.041	ug/l	0.39	2,542,843.42	6.564E+00	Pulse	1.00	3
Se			1	169.523	ug/l	0.99	11,916.93	3.839E-03	Pulse	3.00	3
Sb			1	188.066	ug/l	0.83	1,276,907.58	2.719E+00	Pulse	1.00	3
Se			1	200.921	ug/l	0.74	6,158.77	2.935E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,522,556.33	0.39	90.8	Analog	0.50	3
1	Sc		387,423.94	0.28	90.8	Pulse	0.30	3
1	Ge		307,081.85	0.41	88.3	Pulse	0.30	3
1	In		3,104,312.65	0.58	86.4	Pulse	0.30	3
1	Tb		14,274,076.67	0.71	98.2	Analog	0.50	3
1	Lu		8,231,147.67	0.33	95.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		469,569.18	1.01	88.3	Pulse	0.30	3
1	Te		20,983.39	0.98	67.3	Pulse	0.50	3
1	Li		1,962.33	4.64	85.5	Pulse	0.30	3

Quantitation Report

File Name 063SMPL.d
File Path D:\2018\04-April\xa043018m1.b
Method File
Method Path
Acq Time 4/30/2018 12:16
Sample Name MP33667-S2
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/30/2018 14:30
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	215.334	ug/l	0.65	2,229,714.33	7.204E+00	Pulse	0.50	3
As			1	195.932	ug/l	0.36	209,449.78	6.767E-01	Pulse	1.00	3
Mo			1	212.024	ug/l	0.83	1,538,054.46	3.264E+00	Pulse	0.50	3
Pb			1	212.648	ug/l	0.94	8,873,523.00	9.294E-01	Analog	1.00	3
Be			1	213.915	ug/l	0.65	11,532.26	2.936E-02	Pulse	2.00	3
Ag			1	105.310	ug/l	0.44	2,790,398.50	5.922E+00	Pulse	0.50	3
Ba			1	269.249	ug/l	0.86	685,021.23	2.198E-01	Pulse	0.50	3
Tl			1	201.425	ug/l	0.93	12,557,483.67	1.315E+00	Analog	0.50	3
Sn			1	206.913	ug/l	1.28	1,248,865.33	4.007E-01	Pulse	0.30	3
Sr			1	286.027	ug/l	0.44	1,457,141.67	4.675E-01	Pulse	0.50	3
[Pb]			1	192.212	ug/l	1.12	3,756,594.00	3.935E-01	Pulse	0.50	3
Ca			1	31802.173	ug/l	0.53	727,502.25	1.852E+00	Pulse	0.50	3
Ti			1	219.792	ug/l	1.35	42,048.99	1.070E-01	Pulse	0.50	3
Na			1	25225.366	ug/l	0.92	29,965,466.67	7.628E+01	Analog	1.00	3
Mg			1	24034.842	ug/l	0.54	12,227,211.67	3.113E+01	Analog	1.00	3
K			1	20140.819	ug/l	0.83	8,395,266.33	2.137E+01	Analog	1.00	3
V			1	214.662	ug/l	1.05	1,669,549.37	4.250E+00	Pulse	0.50	3
Mn			1	466.650	ug/l	0.41	2,126,708.92	6.871E+00	Pulse	0.50	3
Fe			1	24309.202	ug/l	0.69	198,031,600.00	6.398E+02	Analog	0.50	3
Co			1	208.092	ug/l	0.71	3,978,185.83	1.285E+01	Pulse	0.50	3
Ni			1	212.172	ug/l	0.94	1,104,225.37	3.568E+00	Pulse	0.50	3
Cu			1	218.519	ug/l	0.99	3,169,806.75	1.024E+01	Pulse	0.50	3
Zn			1	193.985	ug/l	0.42	340,440.91	7.225E-01	Pulse	1.00	3
Cd			1	199.655	ug/l	0.17	657,036.40	1.394E+00	Pulse	0.50	3
Al			1	18111.112	ug/l	0.69	2,631,655.50	6.699E+00	Pulse	1.00	3
Se			1	173.765	ug/l	0.93	12,264.70	3.935E-03	Pulse	3.00	3
Sb			1	192.334	ug/l	0.21	1,310,397.37	2.781E+00	Pulse	1.00	3
Se			1	202.844	ug/l	1.41	6,270.26	2.963E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,548,118.67	0.98	91.0	Analog	0.50	3
1	Sc		392,833.05	0.44	92.0	Pulse	0.30	3
1	Ge		309,523.20	0.76	89.0	Pulse	0.30	3
1	In		3,117,076.96	0.66	86.7	Pulse	0.30	3
1	Tb		14,311,072.00	0.87	98.5	Analog	0.50	3
1	Lu		8,401,244.17	0.92	97.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		471,175.43	0.31	88.6	Pulse	0.30	3
1	Te		21,164.92	1.71	67.9	Pulse	0.50	3
1	Li		2,124.57	6.12	92.5	Pulse	0.30	3

Quantitation Report

File Name	064SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:20
Sample Name	MP33667-PS1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	22.035	ug/l	0.87	233,321.25	7.392E-01	Pulse	0.50	3
As			1	19.641	ug/l	0.09	21,435.64	6.791E-02	Pulse	1.00	3
Mo			1	19.818	ug/l	1.36	147,187.98	3.052E-01	Pulse	0.50	3
Pb			1	21.806	ug/l	1.02	969,096.29	9.645E-02	Pulse	1.00	3
Be			1	20.434	ug/l	6.11	1,113.20	2.805E-03	Pulse	2.00	3
Ag			1	4.706	ug/l	1.78	127,774.56	2.649E-01	Pulse	0.50	3
Ba			1	85.202	ug/l	1.63	221,354.24	6.955E-02	Pulse	0.50	3
Tl			1	17.575	ug/l	1.35	1,153,064.29	1.148E-01	Pulse	0.50	3
Sn			1	20.430	ug/l	1.35	126,453.49	3.973E-02	Pulse	0.30	3
Sr			1	102.243	ug/l	0.87	532,576.67	1.673E-01	Pulse	0.50	3
[Pb]			1	21.329	ug/l	1.95	444,093.93	4.420E-02	Pulse	0.50	3
Ca			1	14760.429	ug/l	0.80	341,139.73	8.597E-01	Pulse	0.50	3
Ti			1	40.446	ug/l	2.08	7,818.27	1.970E-02	Pulse	0.50	3
Na			1	7378.854	ug/l	1.10	8,869,214.00	2.235E+01	Analog	1.00	3
Mg			1	6224.634	ug/l	0.77	3,198,764.50	8.061E+00	Pulse	1.00	3
K			1	2731.533	ug/l	0.52	1,161,555.00	2.927E+00	Pulse	1.00	3
V			1	28.989	ug/l	0.67	228,218.53	5.751E-01	Pulse	0.50	3
Mn			1	280.600	ug/l	0.54	1,304,202.08	4.132E+00	Pulse	0.50	3
Fe			1	6105.727	ug/l	0.61	50,729,933.33	1.607E+02	Analog	0.50	3
Co			1	21.232	ug/l	0.39	414,195.13	1.312E+00	Pulse	0.50	3
Ni			1	23.301	ug/l	1.37	123,855.88	3.924E-01	Pulse	0.50	3
Cu			1	31.855	ug/l	1.34	532,683.09	1.688E+00	Pulse	0.50	3
Zn			1	23.342	ug/l	0.82	48,791.04	1.012E-01	Pulse	1.00	3
Cd			1	18.834	ug/l	1.39	63,452.83	1.316E-01	Pulse	0.50	3
Al			1	2422.762	ug/l	0.63	355,902.54	8.969E-01	Pulse	1.00	3
Se			1	17.658	ug/l	1.97	1,292.04	4.060E-04	Pulse	3.00	3
Sb			1	17.447	ug/l	0.58	122,372.68	2.537E-01	Pulse	1.00	3
Se			1	22.902	ug/l	0.65	752.46	3.451E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,048,112.67	1.23	95.8	Analog	0.50	3
1	Sc		396,813.59	0.81	93.0	Pulse	0.30	3
1	Ge		315,662.25	0.76	90.8	Pulse	0.30	3
1	In		3,182,907.65	0.96	88.6	Pulse	0.30	3
1	Tb		14,603,660.67	0.23	100.5	Analog	0.50	3
1	Lu		8,448,955.17	0.96	97.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		482,345.78	0.59	90.7	Pulse	0.30	3
1	Te		21,803.68	1.00	69.9	Pulse	0.50	3
1	Li		2,243.47	2.34	97.7	Pulse	0.30	3

Quantitation Report

File Name	065SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:24
Sample Name	FA53465-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.265	ug/l	2.79	23,699.15	7.799E-02	Pulse	0.50	3
As			1	0.220	ug/l	4.83	255.67	8.416E-04	Pulse	1.00	3
Mo			1	0.149	ug/l	4.84	1,084.70	2.340E-03	Pulse	0.50	3
Pb			1	-0.104	ug/l	-6.29	7,530.67	8.241E-04	Pulse	1.00	3
Be			1	0.057	ug/l	162.92	3.33	8.542E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	19.83	384.67	8.304E-04	Pulse	0.50	3
Ba			1	24.083	ug/l	1.01	60,058.53	1.967E-02	Pulse	0.50	3
Tl			1	0.021	ug/l	5.91	1,344.72	1.471E-04	Pulse	0.50	3
Sn			1	0.492	ug/l	2.64	3,487.02	1.142E-03	Pulse	0.30	3
Sr			1	208.261	ug/l	1.76	1,039,773.56	3.405E-01	Pulse	0.50	3
[Pb]			1	-0.113	ug/l	-2.69	3,471.70	3.799E-04	Pulse	0.50	3
Ca			1	45889.355	ug/l	1.49	1,042,780.12	2.672E+00	Pulse	0.50	3
Ti			1	0.208	ug/l	15.20	42.00	1.076E-04	Pulse	0.50	3
Na			1	138719.947	ug/l	1.29	163,606,506.67	4.193E+02	Analog	1.00	3
Mg			1	49380.629	ug/l	1.38	24,955,434.67	6.395E+01	Analog	1.00	3
K			1	364.032	ug/l	0.81	163,509.35	4.190E-01	Pulse	1.00	3
V			1	0.378	ug/l	12.40	3,448.32	8.837E-03	Pulse	0.50	3
Mn			1	71.399	ug/l	0.61	319,493.76	1.052E+00	Pulse	0.50	3
Fe			1	52.341	ug/l	2.40	423,412.96	1.393E+00	Pulse	0.50	3
Co			1	0.290	ug/l	3.43	5,702.85	1.877E-02	Pulse	0.50	3
Ni			1	1.411	ug/l	0.88	7,409.44	2.439E-02	Pulse	0.50	3
Cu			1	-2.629	ug/l	-1.11	32,630.19	1.074E-01	Pulse	0.50	3
Zn			1	1.488	ug/l	0.82	9,999.60	2.158E-02	Pulse	1.00	3
Cd			1	0.022	ug/l	46.86	80.00	1.725E-04	Pulse	0.50	3
Al			1	7.148	ug/l	8.23	1,367.71	3.505E-03	Pulse	1.00	3
Se			1	0.798	ug/l	18.43	75.89	2.485E-05	Pulse	3.00	3
Sb			1	0.009	ug/l	141.86	783.02	1.690E-03	Pulse	1.00	3
Se			1	1.436	ug/l	9.30	66.33	3.280E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,139,938.33	0.94	87.1	Analog	0.50	3
1	Sc		390,236.19	0.03	91.4	Pulse	0.30	3
1	Ge		303,821.51	0.83	87.4	Pulse	0.30	3
1	In		3,054,039.53	0.80	85.0	Pulse	0.30	3
1	Tb		14,066,552.00	0.74	96.8	Analog	0.50	3
1	Lu		8,243,128.67	0.78	95.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		463,467.15	0.98	87.2	Pulse	0.30	3
1	Te		20,231.19	0.77	64.9	Pulse	0.50	3
1	Li		1,981.22	7.91	86.3	Pulse	0.30	3

Quantitation Report

File Name	066SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:27
Sample Name	FA53465-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.459	ug/l	0.52	15,875.17	5.103E-02	Pulse	0.50	3
As			1	1.411	ug/l	3.19	1,540.73	4.953E-03	Pulse	1.00	3
Mo			1	0.557	ug/l	7.73	4,067.79	8.620E-03	Pulse	0.50	3
Pb			1	-0.081	ug/l	-2.11	9,111.77	9.269E-04	Pulse	1.00	3
Be			1	0.041	ug/l	127.40	2.50	6.427E-06	Pulse	2.00	3
Ag			1	0.016	ug/l	15.02	549.34	1.164E-03	Pulse	0.50	3
Ba			1	101.807	ug/l	0.25	260,459.88	8.310E-02	Pulse	0.50	3
Tl			1	0.012	ug/l	13.24	838.69	8.529E-05	Pulse	0.50	3
Sn			1	0.643	ug/l	73.34	4,493.04	1.434E-03	Pulse	0.30	3
Sr			1	282.788	ug/l	1.07	1,448,516.83	4.622E-01	Pulse	0.50	3
[Pb]			1	-0.086	ug/l	-6.58	4,276.55	4.351E-04	Pulse	0.50	3
Ca			1	64971.566	ug/l	0.60	1,473,031.67	3.783E+00	Pulse	0.50	3
Ti			1	1.894	ug/l	15.81	361.34	9.285E-04	Pulse	0.50	3
Na			1	10531.109	ug/l	0.59	12,412,122.00	3.188E+01	Analog	1.00	3
Mg			1	16508.988	ug/l	1.09	8,324,230.00	2.138E+01	Analog	1.00	3
K			1	6733.066	ug/l	0.59	2,790,438.83	7.167E+00	Pulse	1.00	3
V			1	7.572	ug/l	1.22	58,881.01	1.512E-01	Pulse	0.50	3
Mn			1	6962.579	ug/l	0.88	31,890,676.00	1.025E+02	Analog	0.50	3
Fe			1	13709.977	ug/l	1.14	112,257,040.00	3.609E+02	Analog	0.50	3
Co			1	19.651	ug/l	0.42	377,836.35	1.215E+00	Pulse	0.50	3
Ni			1	29.978	ug/l	3.12	156,982.87	5.047E-01	Pulse	0.50	3
Cu			1	-2.410	ug/l	-1.16	36,525.79	1.174E-01	Pulse	0.50	3
Zn			1	2.340	ug/l	3.86	11,647.52	2.468E-02	Pulse	1.00	3
Cd			1	0.018	ug/l	17.31	68.67	1.455E-04	Pulse	0.50	3
Al			1	44.301	ug/l	2.74	6,714.48	1.725E-02	Pulse	1.00	3
Se			1	0.457	ug/l	33.63	53.67	1.713E-05	Pulse	3.00	3
Sb			1	0.006	ug/l	26.36	779.02	1.651E-03	Pulse	1.00	3
Se			1	1.362	ug/l	18.35	67.89	3.171E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,830,698.67	0.40	93.7	Analog	0.50	3
1	Sc		389,369.91	0.81	91.2	Pulse	0.30	3
1	Ge		311,097.57	0.43	89.5	Pulse	0.30	3
1	In		3,134,118.90	0.40	87.2	Pulse	0.30	3
1	Tb		14,423,021.67	0.66	99.2	Analog	0.50	3
1	Lu		8,401,261.33	0.36	97.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		471,957.95	0.34	88.8	Pulse	0.30	3
1	Te		21,412.50	0.12	68.6	Pulse	0.50	3
1	Li		1,989.00	6.38	86.6	Pulse	0.30	3

Quantitation Report

File Name	068CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:49
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	50.807	ug/l	1.48	1,272,287.84	3.401E+00	Pulse	0.50	3
As			1	49.278	ug/l	1.04	127,365.82	3.404E-01	Pulse	1.00	3
Mo			1	48.772	ug/l	1.22	856,163.04	1.502E+00	Pulse	0.50	3
Pb			1	44.925	ug/l	1.31	4,195,977.42	3.934E-01	Pulse	1.00	3
Be			1	53.729	ug/l	1.42	6,900.84	1.475E-02	Pulse	2.00	3
Ag			1	49.247	ug/l	0.87	3,157,705.83	5.539E+00	Pulse	0.50	3
Ba			1	46.683	ug/l	0.50	275,120.17	7.621E-02	Pulse	0.50	3
Tl			1	48.386	ug/l	0.64	6,739,200.67	6.319E-01	Analog	0.50	3
Sn			1	48.555	ug/l	0.95	679,162.91	1.881E-01	Pulse	0.30	3
Sr			1	48.102	ug/l	0.89	568,427.08	1.575E-01	Pulse	0.50	3
[Pb]			1	45.123	ug/l	0.86	1,973,718.88	1.851E-01	Pulse	0.50	3
Ca			1	4834.507	ug/l	0.89	263,561.42	5.633E-01	Pulse	0.50	3
Ti			1	48.380	ug/l	1.25	22,053.07	4.713E-02	Pulse	0.50	3
Na			1	5177.729	ug/l	0.17	14,668,286.67	3.135E+01	Analog	1.00	3
Mg			1	5169.456	ug/l	0.69	6,265,214.00	1.339E+01	Analog	1.00	3
K			1	4789.772	ug/l	0.44	4,764,572.00	1.018E+01	Pulse	1.00	3
V			1	49.893	ug/l	0.73	924,811.46	1.976E+00	Pulse	0.50	3
Mn			1	48.801	ug/l	1.04	537,772.04	1.437E+00	Pulse	0.50	3
Fe			1	5128.772	ug/l	0.29	101,017,072.00	2.700E+02	Analog	0.50	3
Co			1	50.826	ug/l	0.96	2,349,225.33	6.279E+00	Pulse	0.50	3
Ni			1	52.062	ug/l	0.53	655,182.17	1.751E+00	Pulse	0.50	3
Cu			1	51.149	ug/l	1.19	1,839,107.67	4.916E+00	Pulse	0.50	3
Zn			1	49.645	ug/l	0.98	215,330.55	3.777E-01	Pulse	1.00	3
Cd			1	47.738	ug/l	1.74	380,160.04	6.668E-01	Pulse	0.50	3
Al			1	4771.065	ug/l	0.49	1,651,774.50	3.530E+00	Pulse	1.00	3
Se			1	50.150	ug/l	1.29	8,208.87	2.274E-03	Pulse	3.00	3
Sb			1	45.978	ug/l	1.41	758,481.58	1.330E+00	Pulse	1.00	3
Se			1	49.071	ug/l	0.58	4,176.90	1.440E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,665,351.00	0.42	101.7	Analog	0.50	3
1	Sc		467,927.46	0.44	109.6	Pulse	0.30	3
1	Ge		374,152.74	0.73	107.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,609,868.19	0.68	100.4	Pulse	0.30	3
1	Tb		15,345,755.67	1.47	105.6	Analog	0.50	3
1	Lu		8,880,138.67	0.50	102.8	Analog	0.50	3
1	Ge		570,131.07	1.11	107.2	Pulse	0.30	3
1	Te		29,010.34	0.67	93.0	Pulse	0.50	3
1	Li		2,542.40	4.15	110.7	Pulse	0.30	3

Quantitation Report

File Name	069_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:53
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	102.087	ug/l	0.61	2,526,670.58	6.831E+00	Pulse	0.50	3
As			1	99.236	ug/l	0.40	253,562.14	6.855E-01	Pulse	1.00	3
Mo			1	98.132	ug/l	0.58	1,699,974.75	3.022E+00	Pulse	0.50	3
Pb			1	96.693	ug/l	1.07	8,809,501.67	8.453E-01	Analog	1.00	3
Be			1	104.713	ug/l	0.85	13,570.85	2.874E-02	Pulse	2.00	3
Ag			1	103.447	ug/l	0.64	6,545,466.83	1.163E+01	Analog	0.50	3
Ba			1	95.233	ug/l	0.28	549,288.79	1.555E-01	Pulse	0.50	3
Tl			1	97.274	ug/l	1.05	13,238,994.00	1.270E+00	Analog	0.50	3
Sn			1	99.565	ug/l	0.64	1,362,400.54	3.856E-01	Pulse	0.30	3
Sr			1	99.226	ug/l	0.90	1,146,339.50	3.245E-01	Pulse	0.50	3
[Pb]			1	90.709	ug/l	0.66	3,870,512.00	3.714E-01	Pulse	0.50	3
Ca			1	9643.975	ug/l	0.54	530,376.15	1.123E+00	Pulse	0.50	3
Ti			1	96.716	ug/l	1.38	44,479.62	9.421E-02	Pulse	0.50	3
Na			1	10275.236	ug/l	0.98	29,346,103.33	6.216E+01	Analog	1.00	3
Mg			1	10200.610	ug/l	0.73	12,474,341.33	2.642E+01	Analog	1.00	3
K			1	9926.525	ug/l	1.01	9,946,380.33	2.107E+01	Analog	1.00	3
V			1	98.841	ug/l	0.93	1,847,988.04	3.914E+00	Pulse	0.50	3
Mn			1	97.913	ug/l	0.68	1,066,617.67	2.884E+00	Pulse	0.50	3
Fe			1	10301.789	ug/l	1.68	200,584,453.33	5.423E+02	Analog	0.50	3
Co			1	100.432	ug/l	1.03	4,589,059.33	1.241E+01	Pulse	0.50	3
Ni			1	103.283	ug/l	0.28	1,284,853.83	3.473E+00	Pulse	0.50	3
Cu			1	101.521	ug/l	0.55	3,525,948.58	9.532E+00	Pulse	0.50	3
Zn			1	99.911	ug/l	0.31	418,449.44	7.438E-01	Pulse	1.00	3
Cd			1	94.996	ug/l	0.49	746,548.00	1.327E+00	Pulse	0.50	3
Al			1	9573.701	ug/l	0.54	3,344,055.00	7.083E+00	Pulse	1.00	3
Se			1	100.852	ug/l	0.54	16,133.67	4.566E-03	Pulse	3.00	3
Sb			1	92.617	ug/l	0.41	1,506,905.38	2.679E+00	Pulse	1.00	3
Se			1	102.037	ug/l	1.90	8,306.48	2.981E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,421,564.00	0.46	99.3	Analog	0.50	3
1	Sc		472,169.15	1.01	110.6	Pulse	0.30	3
1	Ge		369,913.58	0.95	106.4	Pulse	0.30	3
1	In		3,533,147.08	0.29	98.3	Pulse	0.30	3
1	Tb		15,364,697.00	0.52	105.7	Analog	0.50	3
1	Lu		8,823,921.00	0.83	102.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		562,592.76	0.50	105.8	Pulse	0.30	3
1	Te		27,870.51	1.59	89.4	Pulse	0.50	3
1	Li		2,536.84	3.88	110.5	Pulse	0.30	3

Quantitation Report

File Name	070_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:57
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.008	ug/l	31.02	1,040.03	2.757E-03	Pulse	0.50	3
As			1	0.007	ug/l	31.76	48.33	1.282E-04	Pulse	1.00	3
Mo			1	0.025	ug/l	6.20	483.34	8.325E-04	Pulse	0.50	3
Pb			1	-0.008	ug/l	-19.39	13,367.90	1.208E-03	Pulse	1.00	3
Be			1	0.005	ug/l	136.57	1.00	2.141E-06	Pulse	2.00	3
Ag			1	0.002	ug/l	54.37	272.00	4.681E-04	Pulse	0.50	3
Ba			1	0.005	ug/l	13.08	62.00	1.700E-05	Pulse	0.50	3
Tl			1	0.025	ug/l	12.97	3,710.42	3.356E-04	Pulse	0.50	3
Sn			1	0.038	ug/l	31.58	1,220.05	3.345E-04	Pulse	0.30	3
Sr			1	0.010	ug/l	53.00	1,417.40	3.886E-04	Pulse	0.50	3
[Pb]			1	-0.013	ug/l	-32.76	6,195.81	5.597E-04	Pulse	0.50	3
Ca			1	-0.403	ug/l	-77.49	108.00	2.310E-04	Pulse	0.50	3
Ti			1	-0.002	ug/l	-215.22	2.00	4.270E-06	Pulse	0.50	3
Na			1	-4.159	ug/l	-4.10	13,602.95	2.911E-02	Pulse	1.00	3
Mg			1	0.224	ug/l	36.37	443.34	9.487E-04	Pulse	1.00	3
K			1	0.123	ug/l	142.42	15,695.91	3.359E-02	Pulse	1.00	3
V			1	-0.011	ug/l	-18.84	430.01	9.202E-04	Pulse	0.50	3
Mn			1	0.002	ug/l	189.83	152.67	4.035E-04	Pulse	0.50	3
Fe			1	0.320	ug/l	27.97	12,365.38	3.274E-02	Pulse	0.50	3
Co			1	-0.002	ug/l	-23.00	208.00	5.512E-04	Pulse	0.50	3
Ni			1	0.009	ug/l	36.25	370.67	9.812E-04	Pulse	0.50	3
Cu			1	-0.416	ug/l	-11.57	71,598.69	1.897E-01	Pulse	0.50	3
Zn			1	-0.330	ug/l	-7.07	7,987.99	1.376E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	33.22	27.33	4.706E-05	Pulse	0.50	3
Al			1	-0.193	ug/l	-17.70	335.67	7.182E-04	Pulse	1.00	3
Se			1	0.007	ug/l	303.00	26.00	7.131E-06	Pulse	3.00	3
Sb			1	-0.018	ug/l	-12.47	609.34	1.049E-03	Pulse	1.00	3
Se			1	0.057	ug/l	179.83	41.33	1.356E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,068,844.67	1.32	105.5	Analog	0.50	3
1	Sc		467,338.70	0.34	109.5	Pulse	0.30	3

Quantitation Report

1	Ge		377,445.25	1.30	108.6	Pulse	0.30	3
1	In		3,647,446.66	0.51	101.5	Pulse	0.30	3
1	Tb		15,552,647.00	0.45	107.0	Analog	0.50	3
1	Lu		8,935,426.00	0.41	103.4	Analog	0.50	3
1	Ge		580,586.44	0.65	109.2	Pulse	0.30	3
1	Te		30,480.72	0.69	97.7	Pulse	0.50	3
1	Li		2,584.62	6.78	112.6	Pulse	0.30	3

Quantitation Report

File Name	071SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:00
Sample Name	FA53465-4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	3.516	ug/l	0.78	38,474.54	1.198E-01	Pulse	0.50	3
As			1	0.303	ug/l	8.88	361.67	1.126E-03	Pulse	1.00	3
Mo			1	0.205	ug/l	8.14	1,578.07	3.202E-03	Pulse	0.50	3
Pb			1	0.001	ug/l	523.09	11,361.45	1.284E-03	Pulse	1.00	3
Be			1	0.038	ug/l	44.50	2.67	6.064E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	8.50	394.01	7.994E-04	Pulse	0.50	3
Ba			1	614.033	ug/l	1.45	1,589,709.00	5.012E-01	Pulse	0.50	3
Tl			1	0.024	ug/l	9.32	1,440.74	1.628E-04	Pulse	0.50	3
Sn			1	0.490	ug/l	14.02	3,609.28	1.138E-03	Pulse	0.30	3
Sr			1	1528.882	ug/l	1.39	7,920,997.00	2.497E+00	Analog	0.50	3
[Pb]			1	-0.006	ug/l	-76.09	5,302.17	5.993E-04	Pulse	0.50	3
Ca			1	208599.342	ug/l	0.43	5,337,045.83	1.215E+01	Analog	0.50	3
Ti			1	3.433	ug/l	6.43	737.35	1.678E-03	Pulse	0.50	3
Na			1	384612.896	ug/l	0.75	510,728,320.00	1.162E+03	Analog	1.00	3
Mg			1	72983.523	ug/l	0.33	41,531,517.33	9.452E+01	Analog	1.00	3
K			1	64242.499	ug/l	1.01	29,921,052.00	6.810E+01	Analog	1.00	3
V			1	191.771	ug/l	0.98	1,668,438.92	3.797E+00	Pulse	0.50	3
Mn			1	1247.256	ug/l	0.84	5,896,656.33	1.836E+01	Analog	0.50	3
Fe			1	200.617	ug/l	1.21	1,700,496.63	5.296E+00	Pulse	0.50	3
Co			1	0.577	ug/l	0.51	11,714.23	3.648E-02	Pulse	0.50	3
Ni			1	2.261	ug/l	2.23	12,418.01	3.868E-02	Pulse	0.50	3
Cu			1	-2.599	ug/l	-0.31	34,932.20	1.088E-01	Pulse	0.50	3
Zn			1	1.891	ug/l	1.91	11,359.34	2.305E-02	Pulse	1.00	3
Cd			1	0.079	ug/l	9.49	280.00	5.680E-04	Pulse	0.50	3
Al			1	51.596	ug/l	1.65	8,763.93	1.994E-02	Pulse	1.00	3
Se			1	0.245	ug/l	39.62	39.11	1.233E-05	Pulse	3.00	3
Sb			1	0.146	ug/l	20.34	1,808.43	3.668E-03	Pulse	1.00	3
Se			1	1.434	ug/l	9.10	67.22	3.276E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,847,517.00	0.67	84.3	Analog	0.50	3
1	Sc		439,412.19	0.45	102.9	Pulse	0.30	3
1	Ge		321,106.48	0.62	92.4	Pulse	0.30	3
1	In		3,172,054.32	0.55	88.2	Pulse	0.30	3
1	Tb		14,267,520.33	1.95	98.2	Analog	0.50	3
1	Lu		8,445,427.17	2.61	97.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		492,906.94	0.31	92.7	Pulse	0.30	3
1	Te		20,506.18	2.43	65.7	Pulse	0.50	3
1	Li		2,467.94	3.14	107.5	Pulse	0.30	3

Quantitation Report

File Name	072SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:04
Sample Name	FA53465-5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.891	ug/l	2.69	10,558.22	3.204E-02	Pulse	0.50	3
As			1	0.302	ug/l	5.83	370.33	1.124E-03	Pulse	1.00	3
Mo			1	0.437	ug/l	4.31	3,392.98	6.779E-03	Pulse	0.50	3
Pb			1	-0.084	ug/l	-2.00	8,442.09	9.116E-04	Pulse	1.00	3
Be			1	0.028	ug/l	61.23	2.00	4.586E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	17.64	222.67	4.448E-04	Pulse	0.50	3
Ba			1	111.238	ug/l	0.58	294,386.39	9.080E-02	Pulse	0.50	3
Tl			1	0.014	ug/l	11.82	914.03	9.864E-05	Pulse	0.50	3
Sn			1	0.362	ug/l	3.66	2,883.57	8.895E-04	Pulse	0.30	3
Sr			1	867.564	ug/l	0.90	4,594,598.33	1.417E+00	Pulse	0.50	3
[Pb]			1	-0.091	ug/l	-3.21	3,933.80	4.248E-04	Pulse	0.50	3
Ca			1	130681.743	ug/l	0.94	3,330,904.58	7.609E+00	Pulse	0.50	3
Ti			1	0.185	ug/l	39.41	42.00	9.621E-05	Pulse	0.50	3
Na			1	289897.314	ug/l	1.09	383,495,008.00	8.761E+02	Analog	1.00	3
Mg			1	69546.762	ug/l	1.10	39,424,630.67	9.007E+01	Analog	1.00	3
K			1	8321.440	ug/l	1.23	3,873,715.17	8.850E+00	Pulse	1.00	3
V			1	0.507	ug/l	2.26	4,985.99	1.139E-02	Pulse	0.50	3
Mn			1	202.696	ug/l	0.59	983,598.93	2.985E+00	Pulse	0.50	3
Fe			1	313.603	ug/l	0.69	2,725,245.75	8.270E+00	Pulse	0.50	3
Co			1	1.422	ug/l	2.10	29,220.68	8.867E-02	Pulse	0.50	3
Ni			1	2.894	ug/l	1.97	16,257.54	4.933E-02	Pulse	0.50	3
Cu			1	-2.307	ug/l	-1.24	40,253.84	1.221E-01	Pulse	0.50	3
Zn			1	0.979	ug/l	12.22	9,873.20	1.972E-02	Pulse	1.00	3
Cd			1	0.082	ug/l	4.06	296.00	5.913E-04	Pulse	0.50	3
Al			1	7.187	ug/l	5.42	1,540.40	3.519E-03	Pulse	1.00	3
Se			1	7.436	ug/l	4.79	566.90	1.749E-04	Pulse	3.00	3
Sb			1	0.078	ug/l	14.71	1,349.72	2.696E-03	Pulse	1.00	3
Se			1	9.854	ug/l	2.00	332.67	1.553E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,261,070.33	1.00	88.3	Analog	0.50	3
1	Sc		437,772.47	1.21	102.5	Pulse	0.30	3
1	Ge		329,553.95	0.58	94.8	Pulse	0.30	3
1	In		3,242,131.40	0.74	90.2	Pulse	0.30	3
1	Tb		14,666,958.67	0.17	100.9	Analog	0.50	3
1	Lu		8,656,765.00	0.32	100.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		500,602.29	0.46	94.2	Pulse	0.30	3
1	Te		21,428.56	0.83	68.7	Pulse	0.50	3
1	Li		2,355.71	7.30	102.6	Pulse	0.30	3

Quantitation Report

File Name	073SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:07
Sample Name	FA53465-6
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	3.412	ug/l	0.06	37,242.79	1.163E-01	Pulse	0.50	3
As			1	0.291	ug/l	2.78	347.67	1.086E-03	Pulse	1.00	3
Mo			1	0.153	ug/l	7.73	1,168.04	2.403E-03	Pulse	0.50	3
Pb			1	0.020	ug/l	17.21	12,204.70	1.368E-03	Pulse	1.00	3
Be			1	0.037	ug/l	45.43	2.50	5.816E-06	Pulse	2.00	3
Ag			1	0.005	ug/l	25.73	256.67	5.269E-04	Pulse	0.50	3
Ba			1	584.334	ug/l	0.27	1,514,338.04	4.769E-01	Pulse	0.50	3
Tl			1	0.007	ug/l	24.55	494.68	5.545E-05	Pulse	0.50	3
Sn			1	0.326	ug/l	4.55	2,605.76	8.208E-04	Pulse	0.30	3
Sr			1	1451.780	ug/l	0.42	7,529,077.00	2.371E+00	Analog	0.50	3
[Pb]			1	0.016	ug/l	11.03	5,738.98	6.433E-04	Pulse	0.50	3
Ca			1	199243.352	ug/l	1.10	4,980,597.50	1.160E+01	Mix	0.50	3
Ti			1	3.156	ug/l	7.84	662.68	1.543E-03	Pulse	0.50	3
Na			1	372931.331	ug/l	1.01	483,774,837.33	1.127E+03	Analog	1.00	3
Mg			1	71018.005	ug/l	0.47	39,480,525.33	9.197E+01	Analog	1.00	3
K			1	61965.838	ug/l	1.05	28,194,905.33	6.568E+01	Analog	1.00	3
V			1	184.735	ug/l	0.32	1,570,203.92	3.658E+00	Pulse	0.50	3
Mn			1	1180.755	ug/l	0.68	5,565,619.50	1.738E+01	Analog	0.50	3
Fe			1	176.436	ug/l	0.14	1,491,702.12	4.660E+00	Pulse	0.50	3
Co			1	0.547	ug/l	3.12	11,095.21	3.466E-02	Pulse	0.50	3
Ni			1	2.066	ug/l	2.72	11,334.68	3.540E-02	Pulse	0.50	3
Cu			1	-2.712	ug/l	-1.62	33,163.10	1.036E-01	Pulse	0.50	3
Zn			1	1.212	ug/l	6.90	10,006.93	2.057E-02	Pulse	1.00	3
Cd			1	0.083	ug/l	8.85	288.67	5.938E-04	Pulse	0.50	3
Al			1	48.125	ug/l	1.78	8,010.61	1.866E-02	Pulse	1.00	3
Se			1	0.194	ug/l	36.01	35.56	1.119E-05	Pulse	3.00	3
Sb			1	0.048	ug/l	17.93	1,098.04	2.256E-03	Pulse	1.00	3
Se			1	1.316	ug/l	5.50	63.00	3.105E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,921,539.67	0.32	85.0	Analog	0.50	3
1	Sc		429,285.65	1.07	100.6	Pulse	0.30	3
1	Ge		320,135.69	0.25	92.1	Pulse	0.30	3
1	In		3,175,094.73	0.57	88.3	Pulse	0.30	3
1	Tb		14,277,388.67	0.42	98.2	Analog	0.50	3
1	Lu		8,542,440.33	0.31	98.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		486,526.92	1.65	91.5	Pulse	0.30	3
1	Te		20,299.95	1.62	65.1	Pulse	0.50	3
1	Li		2,435.72	5.63	106.1	Pulse	0.30	3

Quantitation Report

File Name	074_MB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:11
Sample Name	MP33665-MB1
Sample Type	MB
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.172	ug/l	10.05	2,860.89	7.991E-03	Pulse	0.50	3
As			1	0.069	ug/l	16.15	113.67	3.174E-04	Pulse	1.00	3
Mo			1	0.017	ug/l	14.00	166.00	3.055E-04	Pulse	0.50	3
Pb			1	-0.100	ug/l	-1.04	9,419.60	8.432E-04	Pulse	1.00	3
Be			1	0.037	ug/l	66.27	2.67	5.857E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	2738.11	146.00	2.689E-04	Pulse	0.50	3
Ba			1	0.045	ug/l	22.21	164.67	4.616E-05	Pulse	0.50	3
Tl			1	0.004	ug/l	33.93	386.01	3.454E-05	Pulse	0.50	3
Sn			1	0.295	ug/l	5.96	2,713.55	7.600E-04	Pulse	0.30	3
Sr			1	0.142	ug/l	13.84	2,098.13	5.877E-04	Pulse	0.50	3
[Pb]			1	-0.103	ug/l	-2.10	4,475.94	4.007E-04	Pulse	0.50	3
Ca			1	23.699	ug/l	4.34	752.69	1.658E-03	Pulse	0.50	3
Ti			1	0.050	ug/l	17.85	14.00	3.084E-05	Pulse	0.50	3
Na			1	41.135	ug/l	15.37	80,940.92	1.786E-01	Pulse	1.00	3
Mg			1	10.607	ug/l	8.35	6,396.70	1.411E-02	Pulse	1.00	3
K			1	3.628	ug/l	2.36	16,873.87	3.717E-02	Pulse	1.00	3
V			1	0.267	ug/l	3.38	3,010.24	6.633E-03	Pulse	0.50	3
Mn			1	0.121	ug/l	3.01	760.02	2.123E-03	Pulse	0.50	3
Fe			1	3.317	ug/l	5.25	36,961.08	1.032E-01	Pulse	0.50	3
Co			1	-0.004	ug/l	-35.23	229.33	6.400E-04	Pulse	0.50	3
Ni			1	0.078	ug/l	7.51	708.02	1.977E-03	Pulse	0.50	3
Cu			1	-2.463	ug/l	-1.44	41,183.80	1.150E-01	Pulse	0.50	3
Zn			1	-0.753	ug/l	-10.56	7,287.05	1.342E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	161.63	14.00	2.570E-05	Pulse	0.50	3
Al			1	5.130	ug/l	11.48	1,251.71	2.758E-03	Pulse	1.00	3
Se			1	0.047	ug/l	22.85	28.11	7.869E-06	Pulse	3.00	3
Sb			1	-0.012	ug/l	-33.48	752.02	1.385E-03	Pulse	1.00	3
Se			1	0.480	ug/l	29.60	45.78	1.888E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,171,191.33	0.21	106.5	Analog	0.50	3
1	Sc		453,995.45	2.24	106.3	Pulse	0.30	3
1	Ge		358,073.92	1.17	103.0	Pulse	0.30	3
1	In		3,571,525.83	1.07	99.4	Pulse	0.30	3
1	Tb		15,997,720.67	0.81	110.1	Analog	0.50	3
1	Lu		9,226,676.33	1.05	106.8	Analog	0.50	3
1	Ge		543,162.10	1.00	102.2	Pulse	0.30	3
1	Te		24,250.05	1.38	77.7	Pulse	0.50	3
1	Li		2,451.27	3.27	106.8	Pulse	0.30	3

Quantitation Report

File Name	075_BSP.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:15
Sample Name	MP33665-B1
Sample Type	BSP
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	223.434	ug/l	0.99	2,447,100.17	7.475E+00	Pulse	0.50	3
As			1	200.941	ug/l	0.61	227,200.37	6.940E-01	Pulse	1.00	3
Mo			1	219.601	ug/l	1.50	1,679,990.17	3.381E+00	Pulse	0.50	3
Pb			1	214.772	ug/l	1.49	9,493,968.00	9.387E-01	Analog	1.00	3
Be			1	234.705	ug/l	0.34	13,426.75	3.221E-02	Pulse	2.00	3
Ag			1	109.808	ug/l	0.82	3,068,477.33	6.175E+00	Pulse	0.50	3
Ba			1	205.631	ug/l	2.40	546,961.13	1.678E-01	Pulse	0.50	3
Tl			1	206.924	ug/l	1.14	13,665,824.00	1.351E+00	Analog	0.50	3
Sn			1	212.822	ug/l	0.80	1,343,038.11	4.121E-01	Pulse	0.30	3
Sr			1	207.052	ug/l	0.63	1,103,140.83	3.385E-01	Pulse	0.50	3
[Pb]			1	191.493	ug/l	2.68	3,964,385.42	3.920E-01	Pulse	0.50	3
Ca			1	19509.932	ug/l	0.37	473,653.41	1.136E+00	Pulse	0.50	3
Ti			1	209.738	ug/l	1.00	42,580.80	1.021E-01	Pulse	0.50	3
Na			1	21077.833	ug/l	1.37	26,574,138.00	6.375E+01	Analog	1.00	3
Mg			1	21050.871	ug/l	0.57	11,364,300.00	2.726E+01	Analog	1.00	3
K			1	19776.146	ug/l	0.84	8,747,835.00	2.099E+01	Analog	1.00	3
V			1	216.210	ug/l	1.44	1,784,472.25	4.281E+00	Pulse	0.50	3
Mn			1	208.155	ug/l	0.79	1,003,456.00	3.065E+00	Pulse	0.50	3
Fe			1	21403.926	ug/l	1.53	184,432,922.67	5.634E+02	Analog	0.50	3
Co			1	218.808	ug/l	1.23	4,424,534.50	1.351E+01	Pulse	0.50	3
Ni			1	222.753	ug/l	1.33	1,226,212.00	3.745E+00	Pulse	0.50	3
Cu			1	218.428	ug/l	1.30	3,351,487.25	1.024E+01	Pulse	0.50	3
Zn			1	199.446	ug/l	1.26	368,904.09	7.424E-01	Pulse	1.00	3
Cd			1	206.467	ug/l	0.91	716,548.08	1.442E+00	Pulse	0.50	3
Al			1	18269.921	ug/l	0.65	2,817,124.17	6.758E+00	Pulse	1.00	3
Se			1	181.444	ug/l	2.21	13,389.24	4.108E-03	Pulse	3.00	3
Sb			1	199.071	ug/l	1.28	1,430,328.83	2.879E+00	Pulse	1.00	3
Se			1	211.738	ug/l	2.21	6,746.64	3.092E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,115,236.67	1.13	96.4	Analog	0.50	3
1	Sc		416,860.24	0.16	97.6	Pulse	0.30	3
1	Ge		327,380.89	0.18	94.2	Pulse	0.30	3
1	In		3,258,963.06	0.54	90.7	Pulse	0.30	3
1	Tb		15,137,558.00	1.21	104.1	Analog	0.50	3
1	Lu		8,744,217.33	0.22	101.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		496,915.52	0.68	93.5	Pulse	0.30	3
1	Te		21,819.69	1.02	70.0	Pulse	0.50	3
1	Li		2,354.59	3.78	102.6	Pulse	0.30	3

Quantitation Report

File Name	076SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:18
Sample Name	FA53517-25
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.265	ug/l	3.95	3,825.72	1.109E-02	Pulse	0.50	3
As			1	0.544	ug/l	1.83	676.01	1.959E-03	Pulse	1.00	3
Mo			1	0.091	ug/l	2.90	755.35	1.441E-03	Pulse	0.50	3
Pb			1	0.157	ug/l	6.06	20,523.63	1.962E-03	Pulse	1.00	3
Be			1	0.030	ug/l	88.73	2.17	4.961E-06	Pulse	2.00	3
Ag			1	0.004	ug/l	32.23	258.67	4.937E-04	Pulse	0.50	3
Ba			1	33.587	ug/l	0.48	93,200.78	2.742E-02	Pulse	0.50	3
Tl			1	0.044	ug/l	10.10	3,119.63	2.981E-04	Pulse	0.50	3
Sn			1	0.417	ug/l	11.16	3,381.46	9.950E-04	Pulse	0.30	3
Sr			1	588.130	ug/l	1.00	3,265,557.58	9.609E-01	Pulse	0.50	3
[Pb]			1	0.155	ug/l	3.57	9,700.11	9.273E-04	Pulse	0.50	3
Ca			1	36431.982	ug/l	0.91	929,655.67	2.122E+00	Pulse	0.50	3
Ti			1	0.206	ug/l	27.22	46.67	1.066E-04	Pulse	0.50	3
Na			1	10735.304	ug/l	1.20	14,239,145.67	3.250E+01	Analog	1.00	3
Mg			1	9116.930	ug/l	1.14	5,173,746.33	1.181E+01	Analog	1.00	3
K			1	883.976	ug/l	1.42	424,971.75	9.699E-01	Pulse	1.00	3
V			1	0.368	ug/l	4.49	3,783.05	8.633E-03	Pulse	0.50	3
Mn			1	10.493	ug/l	1.07	53,433.06	1.548E-01	Pulse	0.50	3
Fe			1	12.967	ug/l	0.25	123,268.74	3.572E-01	Pulse	0.50	3
Co			1	0.040	ug/l	6.46	1,152.04	3.338E-03	Pulse	0.50	3
Ni			1	0.545	ug/l	2.00	3,394.31	9.836E-03	Pulse	0.50	3
Cu			1	3.709	ug/l	2.03	137,289.80	3.978E-01	Pulse	0.50	3
Zn			1	1.272	ug/l	5.39	10,898.75	2.079E-02	Pulse	1.00	3
Cd			1	0.006	ug/l	40.61	29.33	5.600E-05	Pulse	0.50	3
Al			1	16.064	ug/l	1.15	2,980.89	6.803E-03	Pulse	1.00	3
Se			1	0.017	ug/l	383.03	24.44	7.194E-06	Pulse	3.00	3
Sb			1	0.023	ug/l	30.97	997.70	1.903E-03	Pulse	1.00	3
Se			1	0.707	ug/l	38.93	51.00	2.219E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,460,834.67	0.80	99.7	Analog	0.50	3
1	Sc		438,216.07	0.94	102.6	Pulse	0.30	3
1	Ge		345,104.84	0.68	99.3	Pulse	0.30	3
1	In		3,398,726.18	0.70	94.6	Pulse	0.30	3
1	Tb		15,461,552.00	0.36	106.4	Analog	0.50	3
1	Lu		8,900,585.33	1.33	103.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		524,212.79	0.56	98.6	Pulse	0.30	3
1	Te		23,047.85	2.32	73.9	Pulse	0.50	3
1	Li		2,453.50	7.51	106.9	Pulse	0.30	3

Quantitation Report

File Name	077SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:22
Sample Name	FA53518-13
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.263	ug/l	3.75	3,825.72	1.103E-02	Pulse	0.50	3
As			1	0.566	ug/l	5.96	705.68	2.034E-03	Pulse	1.00	3
Mo			1	0.081	ug/l	11.30	682.01	1.294E-03	Pulse	0.50	3
Pb			1	-0.117	ug/l	-0.76	8,063.91	7.682E-04	Pulse	1.00	3
Be			1	-0.006	ug/l	0.00	0.00	0.000E+00	Pulse	2.00	3
Ag			1	0.000	ug/l	-150.30	136.00	2.580E-04	Pulse	0.50	3
Ba			1	34.963	ug/l	0.62	96,390.73	2.855E-02	Pulse	0.50	3
Tl			1	0.012	ug/l	12.86	913.36	8.703E-05	Pulse	0.50	3
Sn			1	0.349	ug/l	11.47	2,915.86	8.635E-04	Pulse	0.30	3
Sr			1	614.306	ug/l	0.40	3,388,867.75	1.004E+00	Pulse	0.50	3
[Pb]			1	-0.128	ug/l	-3.98	3,677.07	3.503E-04	Pulse	0.50	3
Ca			1	37661.894	ug/l	1.06	963,751.42	2.193E+00	Pulse	0.50	3
Ti			1	0.105	ug/l	42.60	25.33	5.745E-05	Pulse	0.50	3
Na			1	11431.404	ug/l	1.38	15,203,468.33	3.460E+01	Analog	1.00	3
Mg			1	9490.271	ug/l	1.76	5,400,535.83	1.229E+01	Analog	1.00	3
K			1	918.682	ug/l	1.24	442,342.52	1.007E+00	Pulse	1.00	3
V			1	0.439	ug/l	1.30	4,415.85	1.005E-02	Pulse	0.50	3
Mn			1	10.302	ug/l	0.75	52,723.17	1.520E-01	Pulse	0.50	3
Fe			1	3.206	ug/l	2.95	34,781.04	1.003E-01	Pulse	0.50	3
Co			1	0.027	ug/l	18.06	872.03	2.516E-03	Pulse	0.50	3
Ni			1	0.216	ug/l	3.21	1,491.40	4.300E-03	Pulse	0.50	3
Cu			1	3.385	ug/l	3.48	132,812.13	3.830E-01	Pulse	0.50	3
Zn			1	-0.849	ug/l	-6.52	6,887.90	1.307E-02	Pulse	1.00	3
Cd			1	0.005	ug/l	35.11	29.33	5.565E-05	Pulse	0.50	3
Al			1	9.513	ug/l	9.29	1,925.45	4.380E-03	Pulse	1.00	3
Se			1	0.010	ug/l	288.15	23.78	7.042E-06	Pulse	3.00	3
Sb			1	0.005	ug/l	307.27	862.36	1.636E-03	Pulse	1.00	3
Se			1	0.421	ug/l	24.34	41.56	1.802E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,497,418.33	0.39	100.1	Analog	0.50	3
1	Sc		439,483.46	1.50	102.9	Pulse	0.30	3
1	Ge		346,814.50	0.62	99.8	Pulse	0.30	3
1	In		3,376,718.55	0.24	93.9	Pulse	0.30	3
1	Tb		15,369,255.67	0.44	105.7	Analog	0.50	3
1	Lu		8,896,736.67	0.59	103.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		527,159.27	0.09	99.2	Pulse	0.30	3
1	Te		23,059.18	0.42	73.9	Pulse	0.50	3
1	Li		2,516.84	3.00	109.6	Pulse	0.30	3

Quantitation Report

File Name	078SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:26
Sample Name	FA53518-14
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.733	ug/l	25.91	9,092.88	2.675E-02	Pulse	0.50	3
As			1	0.136	ug/l	7.80	188.00	5.516E-04	Pulse	1.00	3
Mo			1	0.127	ug/l	4.97	1,044.03	2.009E-03	Pulse	0.50	3
Pb			1	-0.057	ug/l	-6.33	10,757.39	1.029E-03	Pulse	1.00	3
Be			1	0.008	ug/l	58.30	0.83	1.941E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	10.45	312.00	6.003E-04	Pulse	0.50	3
Ba			1	14.671	ug/l	1.48	39,921.86	1.198E-02	Pulse	0.50	3
Tl			1	0.007	ug/l	18.62	545.34	5.223E-05	Pulse	0.50	3
Sn			1	0.354	ug/l	5.03	2,911.36	8.736E-04	Pulse	0.30	3
Sr			1	678.719	ug/l	0.38	3,693,966.92	1.109E+00	Pulse	0.50	3
[Pb]			1	-0.065	ug/l	-9.19	5,011.43	4.791E-04	Pulse	0.50	3
Ca			1	38979.399	ug/l	0.53	975,095.79	2.270E+00	Pulse	0.50	3
Ti			1	0.242	ug/l	46.04	53.33	1.240E-04	Pulse	0.50	3
Na			1	10414.309	ug/l	0.54	13,542,772.67	3.153E+01	Analog	1.00	3
Mg			1	10017.717	ug/l	0.90	5,573,104.83	1.297E+01	Analog	1.00	3
K			1	931.015	ug/l	0.96	438,031.99	1.020E+00	Pulse	1.00	3
V			1	0.311	ug/l	5.87	3,230.95	7.521E-03	Pulse	0.50	3
Mn			1	5.036	ug/l	1.47	25,387.25	7.448E-02	Pulse	0.50	3
Fe			1	7.082	ug/l	17.27	68,823.60	2.023E-01	Pulse	0.50	3
Co			1	0.028	ug/l	13.89	881.36	2.587E-03	Pulse	0.50	3
Ni			1	0.489	ug/l	21.40	3,023.59	8.892E-03	Pulse	0.50	3
Cu			1	1.052	ug/l	6.87	94,108.38	2.761E-01	Pulse	0.50	3
Zn			1	-0.248	ug/l	-13.07	7,928.64	1.526E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	244.06	13.33	2.571E-05	Pulse	0.50	3
Al			1	5.064	ug/l	5.46	1,174.37	2.734E-03	Pulse	1.00	3
Se			1	0.000	ug/l	-36212.63	22.67	6.804E-06	Pulse	3.00	3
Sb			1	-0.018	ug/l	-16.75	679.34	1.307E-03	Pulse	1.00	3
Se			1	0.344	ug/l	51.74	38.89	1.690E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,459,042.67	1.57	99.7	Analog	0.50	3
1	Sc		429,604.85	1.22	100.6	Pulse	0.30	3
1	Ge		340,896.98	1.91	98.1	Pulse	0.30	3
1	In		3,331,531.40	1.08	92.7	Pulse	0.30	3
1	Tb		15,177,989.33	1.03	104.4	Analog	0.50	3
1	Lu		8,814,884.67	1.35	102.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		519,694.49	0.48	97.8	Pulse	0.30	3
1	Te		22,962.41	3.03	73.6	Pulse	0.50	3
1	Li		2,361.26	1.42	102.9	Pulse	0.30	3

Quantitation Report

File Name	079SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:29
Sample Name	FA53716-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.192	ug/l	9.14	2,848.89	8.664E-03	Pulse	0.50	3
As			1	0.052	ug/l	5.80	85.33	2.595E-04	Pulse	1.00	3
Mo			1	0.010	ug/l	11.47	100.67	2.004E-04	Pulse	0.50	3
Pb			1	-0.118	ug/l	-2.42	7,597.38	7.620E-04	Pulse	1.00	3
Be			1	0.023	ug/l	42.75	1.67	3.998E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	-86.39	126.67	2.522E-04	Pulse	0.50	3
Ba			1	0.060	ug/l	10.82	188.67	5.823E-05	Pulse	0.50	3
Tl			1	0.005	ug/l	16.02	409.34	4.105E-05	Pulse	0.50	3
Sn			1	0.326	ug/l	9.00	2,659.10	8.208E-04	Pulse	0.30	3
Sr			1	0.378	ug/l	6.38	3,152.27	9.731E-04	Pulse	0.50	3
[Pb]			1	-0.128	ug/l	-1.18	3,485.71	3.496E-04	Pulse	0.50	3
Ca			1	32.778	ug/l	6.26	910.69	2.186E-03	Pulse	0.50	3
Ti			1	0.033	ug/l	61.65	9.33	2.240E-05	Pulse	0.50	3
Na			1	12.416	ug/l	2.15	38,216.24	9.176E-02	Pulse	1.00	3
Mg			1	12.014	ug/l	1.19	6,633.44	1.593E-02	Pulse	1.00	3
K			1	4.066	ug/l	11.06	15,672.88	3.763E-02	Pulse	1.00	3
V			1	0.240	ug/l	2.81	2,540.84	6.101E-03	Pulse	0.50	3
Mn			1	0.068	ug/l	8.59	441.34	1.342E-03	Pulse	0.50	3
Fe			1	3.134	ug/l	3.96	32,348.92	9.837E-02	Pulse	0.50	3
Co			1	-0.005	ug/l	-15.88	180.67	5.493E-04	Pulse	0.50	3
Ni			1	0.037	ug/l	11.05	428.01	1.301E-03	Pulse	0.50	3
Cu			1	-2.578	ug/l	-1.86	36,092.98	1.098E-01	Pulse	0.50	3
Zn			1	-1.252	ug/l	-4.09	5,825.55	1.160E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	76.73	14.00	2.787E-05	Pulse	0.50	3
Al			1	4.479	ug/l	5.45	1,048.70	2.518E-03	Pulse	1.00	3
Se			1	0.024	ug/l	51.14	23.78	7.341E-06	Pulse	3.00	3
Sb			1	-0.024	ug/l	-21.47	609.01	1.213E-03	Pulse	1.00	3
Se			1	0.591	ug/l	48.90	44.11	2.050E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,970,853.67	0.09	95.0	Analog	0.50	3
1	Sc		416,473.93	0.37	97.6	Pulse	0.30	3
1	Ge		328,886.15	0.49	94.6	Pulse	0.30	3
1	In		3,239,086.40	0.54	90.1	Pulse	0.30	3
1	Tb		14,274,074.00	0.65	98.2	Analog	0.50	3
1	Lu		8,226,160.00	0.74	95.2	Analog	0.50	3
1	Ge		502,203.68	0.52	94.5	Pulse	0.30	3
1	Te		21,517.98	0.23	69.0	Pulse	0.50	3
1	Li		2,332.37	5.52	101.6	Pulse	0.30	3

Quantitation Report

File Name	080SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:33
Sample Name	FA53574-1F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.968	ug/l	3.44	10,870.39	3.460E-02	Pulse	0.50	3
As			1	1.000	ug/l	3.25	1,110.37	3.534E-03	Pulse	1.00	3
Mo			1	0.149	ug/l	3.72	1,119.37	2.337E-03	Pulse	0.50	3
Pb			1	-0.144	ug/l	-1.03	6,342.85	6.501E-04	Pulse	1.00	3
Be			1	0.019	ug/l	57.06	1.33	3.356E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	-298.54	125.33	2.617E-04	Pulse	0.50	3
Ba			1	10.658	ug/l	0.35	26,692.99	8.708E-03	Pulse	0.50	3
Tl			1	0.003	ug/l	22.87	295.34	3.026E-05	Pulse	0.50	3
Sn			1	0.330	ug/l	1.17	2,536.86	8.276E-04	Pulse	0.30	3
Sr			1	96.482	ug/l	0.86	484,057.44	1.579E-01	Pulse	0.50	3
[Pb]			1	-0.150	ug/l	-2.24	2,970.27	3.045E-04	Pulse	0.50	3
Ca			1	20625.413	ug/l	0.28	477,815.45	1.201E+00	Pulse	0.50	3
Ti			1	0.796	ug/l	7.12	156.67	3.940E-04	Pulse	0.50	3
Na			1	10937.970	ug/l	0.96	13,168,760.33	3.311E+01	Analog	1.00	3
Mg			1	12731.223	ug/l	1.16	6,557,987.00	1.649E+01	Analog	1.00	3
K			1	2634.601	ug/l	0.64	1,123,520.62	2.825E+00	Pulse	1.00	3
V			1	2.515	ug/l	0.55	20,342.62	5.114E-02	Pulse	0.50	3
Mn			1	341.429	ug/l	0.89	1,579,452.67	5.027E+00	Pulse	0.50	3
Fe			1	10591.100	ug/l	0.76	87,580,384.00	2.788E+02	Analog	0.50	3
Co			1	0.187	ug/l	3.23	3,891.07	1.238E-02	Pulse	0.50	3
Ni			1	0.707	ug/l	3.43	3,947.75	1.257E-02	Pulse	0.50	3
Cu			1	-2.958	ug/l	-0.97	29,004.42	9.232E-02	Pulse	0.50	3
Zn			1	-0.083	ug/l	-93.47	7,592.50	1.586E-02	Pulse	1.00	3
Cd			1	0.000	ug/l	-276.32	7.33	1.530E-05	Pulse	0.50	3
Al			1	8.044	ug/l	0.68	1,526.06	3.836E-03	Pulse	1.00	3
Se			1	0.121	ug/l	58.57	29.22	9.539E-06	Pulse	3.00	3
Sb			1	-0.014	ug/l	-121.05	652.01	1.362E-03	Pulse	1.00	3
Se			1	0.831	ug/l	25.07	49.56	2.399E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,756,225.67	0.57	93.0	Analog	0.50	3
1	Sc		397,781.60	0.98	93.2	Pulse	0.30	3
1	Ge		314,169.58	0.28	90.4	Pulse	0.30	3
1	In		3,065,234.32	0.51	85.3	Pulse	0.30	3
1	Tb		14,081,246.33	0.85	96.9	Analog	0.50	3
1	Lu		8,222,841.00	1.13	95.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		478,908.16	0.75	90.1	Pulse	0.30	3
1	Te		20,667.01	0.57	66.3	Pulse	0.50	3
1	Li		2,382.38	7.66	103.8	Pulse	0.30	3

Quantitation Report

File Name	081CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:36
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	50.194	ug/l	0.37	1,179,746.83	3.360E+00	Pulse	0.50	3
As			1	49.017	ug/l	0.38	118,908.90	3.386E-01	Pulse	1.00	3
Mo			1	48.183	ug/l	0.78	793,420.42	1.484E+00	Pulse	0.50	3
Pb			1	44.927	ug/l	0.40	3,964,206.75	3.935E-01	Pulse	1.00	3
Be			1	55.210	ug/l	1.30	6,652.76	1.515E-02	Pulse	2.00	3
Ag			1	48.730	ug/l	0.91	2,930,967.00	5.481E+00	Pulse	0.50	3
Ba			1	47.758	ug/l	0.27	259,742.18	7.797E-02	Pulse	0.50	3
Tl			1	44.958	ug/l	0.88	5,915,466.17	5.871E-01	Pulse	0.50	3
Sn			1	49.393	ug/l	0.06	637,583.36	1.914E-01	Pulse	0.30	3
Sr			1	48.674	ug/l	0.26	530,802.25	1.593E-01	Pulse	0.50	3
[Pb]			1	45.464	ug/l	2.03	1,878,380.21	1.865E-01	Pulse	0.50	3
Ca			1	4850.282	ug/l	0.83	248,084.08	5.651E-01	Pulse	0.50	3
Ti			1	48.301	ug/l	1.46	20,656.92	4.705E-02	Pulse	0.50	3
Na			1	5289.359	ug/l	0.58	14,058,044.00	3.202E+01	Analog	1.00	3
Mg			1	5232.421	ug/l	0.26	5,949,886.33	1.355E+01	Analog	1.00	3
K			1	4816.339	ug/l	0.79	4,494,900.00	1.024E+01	Pulse	1.00	3
V			1	49.770	ug/l	0.37	865,556.77	1.972E+00	Pulse	0.50	3
Mn			1	48.414	ug/l	0.43	500,735.85	1.426E+00	Pulse	0.50	3
Fe			1	5125.338	ug/l	0.96	94,741,181.33	2.698E+02	Analog	0.50	3
Co			1	49.780	ug/l	0.46	2,159,508.50	6.150E+00	Pulse	0.50	3
Ni			1	50.657	ug/l	1.24	598,327.60	1.704E+00	Pulse	0.50	3
Cu			1	50.021	ug/l	0.49	1,689,800.08	4.812E+00	Pulse	0.50	3
Zn			1	49.752	ug/l	1.20	202,402.30	3.785E-01	Pulse	1.00	3
Cd			1	47.945	ug/l	0.95	358,149.34	6.697E-01	Pulse	0.50	3
Al			1	4781.988	ug/l	0.29	1,553,296.83	3.538E+00	Pulse	1.00	3
Se			1	50.689	ug/l	0.56	7,657.09	2.298E-03	Pulse	3.00	3
Sb			1	46.074	ug/l	0.94	712,991.33	1.333E+00	Pulse	1.00	3
Se			1	48.519	ug/l	2.66	3,891.29	1.424E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,075,566.00	1.09	96.0	Analog	0.50	3
1	Sc		439,018.82	0.38	102.8	Pulse	0.30	3
1	Ge		351,152.94	0.43	101.0	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,331,338.06	0.43	92.7	Pulse	0.30	3
1	Tb		14,697,520.67	0.66	101.1	Analog	0.50	3
1	Lu		8,486,065.33	0.76	98.2	Analog	0.50	3
1	Ge		534,785.69	0.68	100.6	Pulse	0.30	3
1	Te		27,340.41	1.80	87.7	Pulse	0.50	3
1	Li		2,500.17	4.74	108.9	Pulse	0.30	3

Quantitation Report

File Name	082_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:40
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	101.512	ug/l	1.26	2,368,036.58	6.792E+00	Pulse	0.50	3
As			1	98.662	ug/l	1.54	237,590.80	6.815E-01	Pulse	1.00	3
Mo			1	97.641	ug/l	0.24	1,593,133.25	3.007E+00	Pulse	0.50	3
Pb			1	97.097	ug/l	1.06	8,394,835.67	8.489E-01	Analog	1.00	3
Be			1	107.816	ug/l	1.41	13,181.59	2.959E-02	Pulse	2.00	3
Ag			1	97.515	ug/l	4.21	5,812,139.50	1.097E+01	Mix	0.50	3
Ba			1	95.927	ug/l	0.70	517,207.56	1.566E-01	Pulse	0.50	3
Tl			1	97.429	ug/l	0.61	12,583,030.33	1.272E+00	Analog	0.50	3
Sn			1	100.049	ug/l	1.13	1,279,709.74	3.875E-01	Pulse	0.30	3
Sr			1	99.706	ug/l	1.51	1,076,733.16	3.260E-01	Pulse	0.50	3
[Pb]			1	89.718	ug/l	0.31	3,633,066.25	3.674E-01	Pulse	0.50	3
Ca			1	9619.211	ug/l	1.00	499,100.84	1.120E+00	Pulse	0.50	3
Ti			1	98.125	ug/l	1.00	42,577.50	9.558E-02	Pulse	0.50	3
Na			1	10496.577	ug/l	0.78	28,283,874.00	6.349E+01	Analog	1.00	3
Mg			1	10374.867	ug/l	1.11	11,970,076.00	2.687E+01	Analog	1.00	3
K			1	10044.193	ug/l	0.92	9,495,365.00	2.132E+01	Analog	1.00	3
V			1	98.971	ug/l	0.85	1,745,858.00	3.919E+00	Pulse	0.50	3
Mn			1	97.575	ug/l	1.87	1,001,777.17	2.874E+00	Pulse	0.50	3
Fe			1	10384.093	ug/l	0.98	190,578,005.33	5.466E+02	Analog	0.50	3
Co			1	99.111	ug/l	0.99	4,268,672.00	1.224E+01	Pulse	0.50	3
Ni			1	100.768	ug/l	2.03	1,181,374.33	3.389E+00	Pulse	0.50	3
Cu			1	100.141	ug/l	1.04	3,279,268.92	9.406E+00	Pulse	0.50	3
Zn			1	100.299	ug/l	1.04	395,620.00	7.466E-01	Pulse	1.00	3
Cd			1	95.472	ug/l	1.09	706,641.37	1.334E+00	Pulse	0.50	3
Al			1	9671.346	ug/l	0.94	3,187,141.67	7.155E+00	Pulse	1.00	3
Se			1	102.366	ug/l	0.57	15,307.56	4.635E-03	Pulse	3.00	3
Sb			1	92.974	ug/l	0.27	1,424,788.13	2.689E+00	Pulse	1.00	3
Se			1	97.473	ug/l	2.56	7,701.55	2.848E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,889,823.67	0.42	94.3	Analog	0.50	3
1	Sc		445,490.16	1.25	104.4	Pulse	0.30	3
1	Ge		348,685.84	1.68	100.3	Pulse	0.30	3
1	In		3,302,788.96	0.72	91.9	Pulse	0.30	3
1	Tb		14,539,839.00	0.22	100.0	Analog	0.50	3
1	Lu		8,387,918.17	0.94	97.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		529,889.48	0.64	99.7	Pulse	0.30	3
1	Te		27,049.34	1.90	86.7	Pulse	0.50	3
1	Li		2,451.28	4.97	106.8	Pulse	0.30	3

Quantitation Report

File Name	083_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:44
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.001	ug/l	239.61	790.02	2.311E-03	Pulse	0.50	3
As			1	0.002	ug/l	155.32	33.33	9.735E-05	Pulse	1.00	3
Mo			1	0.023	ug/l	12.73	396.67	7.600E-04	Pulse	0.50	3
Pb			1	-0.013	ug/l	-20.99	11,711.68	1.165E-03	Pulse	1.00	3
Be			1	0.004	ug/l	57.68	0.83	1.990E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	13.02	340.00	6.518E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	-203.11	28.67	8.787E-06	Pulse	0.50	3
Tl			1	0.024	ug/l	12.49	3,194.32	3.180E-04	Pulse	0.50	3
Sn			1	0.035	ug/l	3.42	1,054.48	3.233E-04	Pulse	0.30	3
Sr			1	0.010	ug/l	51.84	1,261.38	3.867E-04	Pulse	0.50	3
[Pb]			1	-0.014	ug/l	-38.08	5,556.26	5.528E-04	Pulse	0.50	3
Ca			1	0.249	ug/l	50.24	128.67	3.069E-04	Pulse	0.50	3
Ti			1	0.005	ug/l	58.56	4.67	1.115E-05	Pulse	0.50	3
Na			1	-3.307	ug/l	-4.68	14,363.48	3.426E-02	Pulse	1.00	3
Mg			1	0.512	ug/l	17.86	710.01	1.694E-03	Pulse	1.00	3
K			1	1.987	ug/l	11.41	15,738.60	3.754E-02	Pulse	1.00	3
V			1	-0.005	ug/l	-22.55	479.34	1.143E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	405.70	121.33	3.555E-04	Pulse	0.50	3
Fe			1	0.344	ug/l	27.42	11,615.56	3.403E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-46.64	186.67	5.469E-04	Pulse	0.50	3
Ni			1	0.004	ug/l	53.72	281.33	8.236E-04	Pulse	0.50	3
Cu			1	-0.487	ug/l	-10.03	62,580.95	1.832E-01	Pulse	0.50	3
Zn			1	-0.321	ug/l	-16.18	7,213.02	1.382E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	60.71	30.00	5.757E-05	Pulse	0.50	3
Al			1	-0.181	ug/l	-48.43	305.00	7.273E-04	Pulse	1.00	3
Se			1	0.035	ug/l	85.53	27.33	8.382E-06	Pulse	3.00	3
Sb			1	-0.026	ug/l	-5.61	429.68	8.236E-04	Pulse	1.00	3
Se			1	0.040	ug/l	387.99	35.78	1.307E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,050,113.00	0.47	95.8	Analog	0.50	3
1	Sc		419,319.87	0.87	98.2	Pulse	0.30	3

Quantitation Report

1	Ge		341,677.36	1.29	98.3	Pulse	0.30	3
1	In		3,261,571.47	0.74	90.7	Pulse	0.30	3
1	Tb		14,055,384.00	0.45	96.7	Analog	0.50	3
1	Lu		8,084,035.33	1.21	93.6	Analog	0.50	3
1	Ge		521,803.21	0.60	98.2	Pulse	0.30	3
1	Te		27,390.47	0.57	87.8	Pulse	0.50	3
1	Li		2,389.04	2.23	104.1	Pulse	0.30	3

Quantitation Report

File Name	084SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:47
Sample Name	FA53574-2F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	5.490	ug/l	1.62	58,354.33	1.859E-01	Pulse	0.50	3
As			1	6.723	ug/l	2.97	7,314.07	2.330E-02	Pulse	1.00	3
Mo			1	2.925	ug/l	0.76	21,618.45	4.508E-02	Pulse	0.50	3
Pb			1	0.286	ug/l	1.74	24,587.29	2.528E-03	Pulse	1.00	3
Be			1	0.074	ug/l	35.65	4.33	1.096E-05	Pulse	2.00	3
Ag			1	0.036	ug/l	4.30	1,092.70	2.278E-03	Pulse	0.50	3
Ba			1	7.863	ug/l	1.38	19,731.43	6.427E-03	Pulse	0.50	3
Tl			1	0.030	ug/l	13.15	1,990.79	2.048E-04	Pulse	0.50	3
Sn			1	0.543	ug/l	22.33	3,801.34	1.239E-03	Pulse	0.30	3
Sr			1	130.132	ug/l	1.64	653,513.69	2.129E-01	Pulse	0.50	3
[Pb]			1	0.281	ug/l	0.99	11,524.57	1.185E-03	Pulse	0.50	3
Ca			1	25016.284	ug/l	0.79	575,665.46	1.457E+00	Pulse	0.50	3
Ti			1	39.467	ug/l	1.55	7,596.83	1.923E-02	Pulse	0.50	3
Na			1	20058.000	ug/l	0.92	23,972,111.33	6.067E+01	Analog	1.00	3
Mg			1	10777.688	ug/l	1.13	5,515,198.33	1.396E+01	Analog	1.00	3
K			1	3719.795	ug/l	1.29	1,570,352.92	3.974E+00	Pulse	1.00	3
V			1	29.913	ug/l	1.76	234,469.48	5.934E-01	Pulse	0.50	3
Mn			1	2280.040	ug/l	1.32	10,540,179.33	3.357E+01	Analog	0.50	3
Fe			1	15227.835	ug/l	1.97	125,837,141.33	4.008E+02	Analog	0.50	3
Co			1	0.432	ug/l	3.11	8,647.97	2.754E-02	Pulse	0.50	3
Ni			1	15.619	ug/l	1.12	82,657.44	2.633E-01	Pulse	0.50	3
Cu			1	6.141	ug/l	2.46	159,902.20	5.093E-01	Pulse	0.50	3
Zn			1	0.268	ug/l	11.47	8,215.76	1.713E-02	Pulse	1.00	3
Cd			1	0.015	ug/l	21.46	57.33	1.196E-04	Pulse	0.50	3
Al			1	63.384	ug/l	2.12	9,602.65	2.430E-02	Pulse	1.00	3
Se			1	0.623	ug/l	8.38	64.11	2.089E-05	Pulse	3.00	3
Sb			1	0.100	ug/l	25.36	1,445.73	3.014E-03	Pulse	1.00	3
Se			1	2.072	ug/l	12.52	87.55	4.204E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,726,899.67	1.12	92.7	Analog	0.50	3
1	Sc		395,169.47	1.19	92.6	Pulse	0.30	3
1	Ge		314,002.95	1.02	90.3	Pulse	0.30	3
1	In		3,070,102.93	0.82	85.4	Pulse	0.30	3
1	Tb		14,156,361.67	1.06	97.4	Analog	0.50	3
1	Lu		8,156,091.83	1.29	94.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		479,517.08	0.62	90.2	Pulse	0.30	3
1	Te		20,812.52	1.14	66.7	Pulse	0.50	3
1	Li		2,199.03	2.18	95.8	Pulse	0.30	3

Quantitation Report

File Name	085SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:51
Sample Name	FA53574-3F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.571	ug/l	2.29	6,720.51	2.132E-02	Pulse	0.50	3
As			1	2.119	ug/l	0.49	2,332.15	7.397E-03	Pulse	1.00	3
Mo			1	0.344	ug/l	0.88	2,580.19	5.339E-03	Pulse	0.50	3
Pb			1	-0.115	ug/l	-2.20	7,703.75	7.770E-04	Pulse	1.00	3
Be			1	0.049	ug/l	66.53	3.00	7.501E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	7.94	367.34	7.600E-04	Pulse	0.50	3
Ba			1	5.014	ug/l	1.95	12,739.20	4.102E-03	Pulse	0.50	3
Tl			1	0.011	ug/l	24.31	775.36	7.820E-05	Pulse	0.50	3
Sn			1	0.444	ug/l	59.93	3,251.97	1.049E-03	Pulse	0.30	3
Sr			1	64.037	ug/l	1.34	325,886.17	1.049E-01	Pulse	0.50	3
[Pb]			1	-0.119	ug/l	-5.03	3,650.40	3.681E-04	Pulse	0.50	3
Ca			1	10903.621	ug/l	0.88	253,220.18	6.351E-01	Pulse	0.50	3
Ti			1	2.322	ug/l	1.10	453.34	1.137E-03	Pulse	0.50	3
Na			1	11065.812	ug/l	0.91	13,353,624.00	3.349E+01	Analog	1.00	3
Mg			1	5389.522	ug/l	0.99	2,782,802.25	6.980E+00	Pulse	1.00	3
K			1	2533.938	ug/l	0.88	1,083,602.37	2.718E+00	Pulse	1.00	3
V			1	2.776	ug/l	2.08	22,448.92	5.631E-02	Pulse	0.50	3
Mn			1	264.320	ug/l	0.52	1,227,023.54	3.892E+00	Pulse	0.50	3
Fe			1	8829.891	ug/l	0.79	73,270,717.33	2.324E+02	Analog	0.50	3
Co			1	0.143	ug/l	5.63	3,064.25	9.718E-03	Pulse	0.50	3
Ni			1	0.344	ug/l	6.45	2,036.12	6.459E-03	Pulse	0.50	3
Cu			1	-2.676	ug/l	-1.31	33,182.44	1.053E-01	Pulse	0.50	3
Zn			1	-1.013	ug/l	-2.96	6,025.61	1.247E-02	Pulse	1.00	3
Cd			1	0.005	ug/l	50.60	26.00	5.386E-05	Pulse	0.50	3
Al			1	13.651	ug/l	2.25	2,356.14	5.910E-03	Pulse	1.00	3
Se			1	0.112	ug/l	40.41	29.00	9.342E-06	Pulse	3.00	3
Sb			1	0.024	ug/l	43.88	924.36	1.912E-03	Pulse	1.00	3
Se			1	0.777	ug/l	29.65	49.11	2.320E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,914,735.00	0.45	94.5	Analog	0.50	3
1	Sc		398,715.27	1.34	93.4	Pulse	0.30	3
1	Ge		315,268.02	0.54	90.7	Pulse	0.30	3
1	In		3,105,739.46	0.63	86.4	Pulse	0.30	3
1	Tb		14,223,163.33	0.19	97.8	Analog	0.50	3
1	Lu		8,176,755.50	0.66	94.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		483,288.49	0.52	90.9	Pulse	0.30	3
1	Te		21,146.23	1.64	67.8	Pulse	0.50	3
1	Li		2,305.70	3.91	100.4	Pulse	0.30	3

Quantitation Report

File Name	086SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:55
Sample Name	FA53574-5F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.052	ug/l	2.88	11,636.17	3.742E-02	Pulse	0.50	3
As			1	5.887	ug/l	1.16	6,345.73	2.041E-02	Pulse	1.00	3
Mo			1	0.759	ug/l	0.98	5,562.18	1.173E-02	Pulse	0.50	3
Pb			1	-0.115	ug/l	-1.50	7,497.32	7.766E-04	Pulse	1.00	3
Be			1	0.035	ug/l	16.50	2.17	5.526E-06	Pulse	2.00	3
Ag			1	0.001	ug/l	95.27	154.00	3.249E-04	Pulse	0.50	3
Ba			1	5.231	ug/l	0.67	12,929.98	4.279E-03	Pulse	0.50	3
Tl			1	0.007	ug/l	24.19	518.68	5.371E-05	Pulse	0.50	3
Sn			1	0.327	ug/l	7.59	2,482.41	8.216E-04	Pulse	0.30	3
Sr			1	189.813	ug/l	0.35	937,794.71	3.103E-01	Pulse	0.50	3
[Pb]			1	-0.122	ug/l	-7.36	3,492.37	3.617E-04	Pulse	0.50	3
Ca			1	34416.123	ug/l	0.80	786,319.73	2.004E+00	Pulse	0.50	3
Ti			1	0.799	ug/l	16.53	155.33	3.955E-04	Pulse	0.50	3
Na			1	17406.507	ug/l	1.04	20,658,304.00	5.265E+01	Analog	1.00	3
Mg			1	13378.766	ug/l	1.20	6,797,613.00	1.733E+01	Analog	1.00	3
K			1	1605.937	ug/l	0.15	680,633.79	1.735E+00	Pulse	1.00	3
V			1	1.917	ug/l	0.84	15,419.44	3.930E-02	Pulse	0.50	3
Mn			1	1731.262	ug/l	0.58	7,925,019.33	2.549E+01	Analog	0.50	3
Fe			1	26977.827	ug/l	0.52	220,760,960.00	7.101E+02	Analog	0.50	3
Co			1	6.485	ug/l	1.07	124,792.52	4.014E-01	Pulse	0.50	3
Ni			1	2.457	ug/l	1.43	13,051.09	4.198E-02	Pulse	0.50	3
Cu			1	-2.509	ug/l	-0.84	35,097.16	1.129E-01	Pulse	0.50	3
Zn			1	0.033	ug/l	172.92	7,717.55	1.628E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	261.88	10.67	2.250E-05	Pulse	0.50	3
Al			1	12.184	ug/l	5.37	2,105.45	5.368E-03	Pulse	1.00	3
Se			1	0.237	ug/l	8.37	36.78	1.217E-05	Pulse	3.00	3
Sb			1	0.047	ug/l	15.24	1,066.37	2.249E-03	Pulse	1.00	3
Se			1	1.275	ug/l	5.75	62.78	3.045E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,654,648.67	0.17	92.0	Analog	0.50	3
1	Sc		392,358.20	0.91	91.9	Pulse	0.30	3
1	Ge		310,907.80	0.52	89.4	Pulse	0.30	3
1	In		3,021,789.46	0.63	84.1	Pulse	0.30	3
1	Tb		14,012,716.33	1.05	96.4	Analog	0.50	3
1	Lu		8,124,821.83	0.56	94.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		474,082.88	0.10	89.2	Pulse	0.30	3
1	Te		20,615.63	0.37	66.1	Pulse	0.50	3
1	Li		2,227.91	4.13	97.0	Pulse	0.30	3

Quantitation Report

File Name	087SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:58
Sample Name	FA53574-7F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.338	ug/l	2.45	4,292.49	1.354E-02	Pulse	0.50	3
As			1	1.112	ug/l	1.78	1,242.37	3.920E-03	Pulse	1.00	3
Mo			1	0.993	ug/l	2.94	7,400.16	1.534E-02	Pulse	0.50	3
Pb			1	-0.125	ug/l	-2.29	7,359.59	7.331E-04	Pulse	1.00	3
Be			1	0.019	ug/l	76.46	1.33	3.373E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	11.13	205.33	4.257E-04	Pulse	0.50	3
Ba			1	6.562	ug/l	0.59	16,673.71	5.365E-03	Pulse	0.50	3
Tl			1	0.012	ug/l	8.68	834.02	8.308E-05	Pulse	0.50	3
Sn			1	0.332	ug/l	4.55	2,583.53	8.313E-04	Pulse	0.30	3
Sr			1	84.153	ug/l	0.47	428,259.16	1.378E-01	Pulse	0.50	3
[Pb]			1	-0.126	ug/l	-1.66	3,552.38	3.539E-04	Pulse	0.50	3
Ca			1	14391.497	ug/l	1.31	333,779.23	8.382E-01	Pulse	0.50	3
Ti			1	0.208	ug/l	23.11	42.67	1.075E-04	Pulse	0.50	3
Na			1	9427.751	ug/l	1.13	11,366,396.33	2.854E+01	Analog	1.00	3
Mg			1	7022.568	ug/l	0.88	3,621,808.67	9.095E+00	Pulse	1.00	3
K			1	2258.169	ug/l	0.43	966,050.46	2.426E+00	Pulse	1.00	3
V			1	14.613	ug/l	1.88	115,706.06	2.906E-01	Pulse	0.50	3
Mn			1	21.753	ug/l	0.51	101,614.09	3.206E-01	Pulse	0.50	3
Fe			1	65.574	ug/l	0.37	552,028.42	1.742E+00	Pulse	0.50	3
Co			1	1.225	ug/l	1.45	24,247.90	7.651E-02	Pulse	0.50	3
Ni			1	3.385	ug/l	2.09	18,251.99	5.759E-02	Pulse	0.50	3
Cu			1	-0.788	ug/l	-3.13	60,775.92	1.918E-01	Pulse	0.50	3
Zn			1	0.188	ug/l	68.80	8,125.39	1.684E-02	Pulse	1.00	3
Cd			1	0.013	ug/l	54.82	52.67	1.093E-04	Pulse	0.50	3
Al			1	9.972	ug/l	10.25	1,809.75	4.549E-03	Pulse	1.00	3
Se			1	1.945	ug/l	6.54	157.78	5.078E-05	Pulse	3.00	3
Sb			1	0.082	ug/l	11.25	1,326.05	2.748E-03	Pulse	1.00	3
Se			1	2.907	ug/l	7.40	114.22	5.419E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,038,741.67	0.20	95.7	Analog	0.50	3
1	Sc		398,271.07	2.11	93.3	Pulse	0.30	3
1	Ge		316,934.00	0.51	91.2	Pulse	0.30	3
1	In		3,107,991.96	0.91	86.5	Pulse	0.30	3
1	Tb		14,338,641.67	0.79	98.6	Analog	0.50	3
1	Lu		8,280,002.67	0.31	95.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		482,462.84	0.45	90.8	Pulse	0.30	3
1	Te		21,080.17	0.84	67.6	Pulse	0.50	3
1	Li		2,309.04	2.02	100.6	Pulse	0.30	3

Quantitation Report

File Name	088SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:02
Sample Name	FA53574-8F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.638	ug/l	1.41	7,272.71	2.358E-02	Pulse	0.50	3
As			1	0.693	ug/l	2.83	763.02	2.473E-03	Pulse	1.00	3
Mo			1	1.045	ug/l	2.09	7,582.89	1.613E-02	Pulse	0.50	3
Pb			1	-0.126	ug/l	-0.24	6,967.76	7.272E-04	Pulse	1.00	3
Be			1	0.018	ug/l	185.60	1.33	3.299E-06	Pulse	2.00	3
Ag			1	0.007	ug/l	11.77	298.67	6.352E-04	Pulse	0.50	3
Ba			1	12.849	ug/l	2.05	31,745.09	1.050E-02	Pulse	0.50	3
Tl			1	0.030	ug/l	2.40	1,974.79	2.061E-04	Pulse	0.50	3
Sn			1	0.266	ug/l	3.16	2,127.92	7.036E-04	Pulse	0.30	3
Sr			1	251.497	ug/l	0.69	1,243,302.29	4.111E-01	Pulse	0.50	3
[Pb]			1	-0.127	ug/l	-3.50	3,365.68	3.512E-04	Pulse	0.50	3
Ca			1	47511.265	ug/l	0.95	1,116,745.71	2.767E+00	Pulse	0.50	3
Ti			1	0.390	ug/l	12.46	79.33	1.964E-04	Pulse	0.50	3
Na			1	17256.061	ug/l	0.90	21,070,522.00	5.220E+01	Analog	1.00	3
Mg			1	25629.564	ug/l	0.67	13,397,938.67	3.319E+01	Analog	1.00	3
K			1	4572.584	ug/l	0.38	1,969,016.21	4.878E+00	Pulse	1.00	3
V			1	14.509	ug/l	0.93	116,469.99	2.885E-01	Pulse	0.50	3
Mn			1	3130.867	ug/l	0.22	14,220,912.67	4.610E+01	Analog	0.50	3
Fe			1	891.881	ug/l	0.32	7,246,445.50	2.349E+01	Analog	0.50	3
Co			1	21.595	ug/l	1.33	411,707.46	1.335E+00	Pulse	0.50	3
Ni			1	146.276	ug/l	0.93	758,828.88	2.460E+00	Pulse	0.50	3
Cu			1	77.022	ug/l	0.74	1,159,111.67	3.757E+00	Pulse	0.50	3
Zn			1	1.753	ug/l	1.60	10,597.91	2.254E-02	Pulse	1.00	3
Cd			1	0.351	ug/l	0.98	1,159.37	2.466E-03	Pulse	0.50	3
Al			1	8.736	ug/l	4.82	1,652.07	4.092E-03	Pulse	1.00	3
Se			1	0.451	ug/l	6.64	51.44	1.701E-05	Pulse	3.00	3
Sb			1	0.026	ug/l	30.34	914.36	1.944E-03	Pulse	1.00	3
Se			1	6.036	ug/l	2.07	200.00	9.972E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,581,561.67	1.03	91.3	Analog	0.50	3
1	Sc		403,676.49	1.18	94.6	Pulse	0.30	3
1	Ge		308,501.28	0.86	88.8	Pulse	0.30	3
1	In		3,024,559.95	0.87	84.1	Pulse	0.30	3
1	Tb		14,021,800.00	1.26	96.5	Analog	0.50	3
1	Lu		8,170,690.67	0.90	94.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		470,165.47	0.77	88.4	Pulse	0.30	3
1	Te		20,059.00	1.27	64.3	Pulse	0.50	3
1	Li		2,150.13	6.71	93.7	Pulse	0.30	3

Quantitation Report

File Name	089SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:05
Sample Name	FA53574-9F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.498	ug/l	1.69	5,826.89	1.889E-02	Pulse	0.50	3
As			1	0.232	ug/l	9.95	272.33	8.831E-04	Pulse	1.00	3
Mo			1	0.464	ug/l	2.71	3,356.31	7.188E-03	Pulse	0.50	3
Pb			1	-0.110	ug/l	-1.27	7,789.45	7.980E-04	Pulse	1.00	3
Be			1	0.042	ug/l	159.57	2.50	6.499E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	65.22	129.33	2.771E-04	Pulse	0.50	3
Ba			1	6.728	ug/l	1.59	16,558.26	5.501E-03	Pulse	0.50	3
Tl			1	0.014	ug/l	7.60	968.03	9.915E-05	Pulse	0.50	3
Sn			1	0.604	ug/l	68.38	4,104.74	1.359E-03	Pulse	0.30	3
Sr			1	111.473	ug/l	1.13	549,112.50	1.824E-01	Pulse	0.50	3
[Pb]			1	-0.121	ug/l	-7.16	3,547.72	3.635E-04	Pulse	0.50	3
Ca			1	27224.582	ug/l	1.45	608,979.08	1.585E+00	Pulse	0.50	3
Ti			1	0.714	ug/l	2.38	136.00	3.541E-04	Pulse	0.50	3
Na			1	10404.116	ug/l	1.75	12,096,954.33	3.149E+01	Analog	1.00	3
Mg			1	10698.428	ug/l	1.37	5,321,962.67	1.386E+01	Analog	1.00	3
K			1	3312.106	ug/l	1.10	1,360,691.50	3.542E+00	Pulse	1.00	3
V			1	13.208	ug/l	2.14	100,930.98	2.628E-01	Pulse	0.50	3
Mn			1	3.566	ug/l	1.05	16,302.19	5.284E-02	Pulse	0.50	3
Fe			1	51.341	ug/l	0.84	421,796.27	1.367E+00	Pulse	0.50	3
Co			1	0.868	ug/l	0.88	16,810.64	5.449E-02	Pulse	0.50	3
Ni			1	8.665	ug/l	1.35	45,145.76	1.463E-01	Pulse	0.50	3
Cu			1	-0.800	ug/l	-10.15	58,994.34	1.912E-01	Pulse	0.50	3
Zn			1	6.094	ug/l	2.17	17,903.30	3.835E-02	Pulse	1.00	3
Cd			1	0.019	ug/l	25.67	69.33	1.486E-04	Pulse	0.50	3
Al			1	14.467	ug/l	1.28	2,386.48	6.212E-03	Pulse	1.00	3
Se			1	0.609	ug/l	71.65	61.89	2.057E-05	Pulse	3.00	3
Sb			1	0.030	ug/l	32.45	934.36	2.001E-03	Pulse	1.00	3
Se			1	1.109	ug/l	19.37	57.00	2.804E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,761,664.00	0.52	93.0	Analog	0.50	3
1	Sc		384,154.49	1.22	90.0	Pulse	0.30	3
1	Ge		308,521.98	0.69	88.8	Pulse	0.30	3
1	In		3,010,556.61	0.93	83.8	Pulse	0.30	3
1	Tb		13,899,750.00	0.47	95.6	Analog	0.50	3
1	Lu		8,116,931.50	1.68	93.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		466,865.23	0.59	87.8	Pulse	0.30	3
1	Te		20,313.30	1.86	65.1	Pulse	0.50	3
1	Li		2,243.48	5.80	97.7	Pulse	0.30	3

Quantitation Report

File Name	090SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:09
Sample Name	MP33665-MB2A
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.489	ug/l	2.61	5,702.19	1.857E-02	Pulse	0.50	3
As			1	0.072	ug/l	18.19	101.00	3.290E-04	Pulse	1.00	3
Mo			1	0.018	ug/l	28.11	154.00	3.259E-04	Pulse	0.50	3
Pb			1	-0.065	ug/l	-1.48	9,706.43	9.971E-04	Pulse	1.00	3
Be			1	-0.003	ug/l	-206.69	0.17	4.261E-07	Pulse	2.00	3
Ag			1	-0.001	ug/l	-51.77	98.67	2.089E-04	Pulse	0.50	3
Ba			1	0.053	ug/l	13.07	159.33	5.238E-05	Pulse	0.50	3
Tl			1	0.002	ug/l	37.75	217.33	2.234E-05	Pulse	0.50	3
Sn			1	0.320	ug/l	5.31	2,457.96	8.081E-04	Pulse	0.30	3
Sr			1	0.210	ug/l	11.88	2,122.79	6.978E-04	Pulse	0.50	3
[Pb]			1	-0.071	ug/l	-7.73	4,535.28	4.658E-04	Pulse	0.50	3
Ca			1	22.751	ug/l	4.68	623.34	1.603E-03	Pulse	0.50	3
Ti			1	0.071	ug/l	50.12	16.00	4.105E-05	Pulse	0.50	3
Na			1	325.992	ug/l	1.12	404,309.51	1.039E+00	Pulse	1.00	3
Mg			1	11.291	ug/l	2.34	5,831.86	1.499E-02	Pulse	1.00	3
K			1	16.496	ug/l	1.09	19,763.53	5.080E-02	Pulse	1.00	3
V			1	0.260	ug/l	1.37	2,528.84	6.500E-03	Pulse	0.50	3
Mn			1	0.134	ug/l	3.84	712.35	2.320E-03	Pulse	0.50	3
Fe			1	6.444	ug/l	2.90	56,943.92	1.855E-01	Pulse	0.50	3
Co			1	-0.003	ug/l	-30.54	206.67	6.732E-04	Pulse	0.50	3
Ni			1	0.149	ug/l	5.30	976.03	3.179E-03	Pulse	0.50	3
Cu			1	-2.657	ug/l	-0.46	32,579.44	1.061E-01	Pulse	0.50	3
Zn			1	-1.196	ug/l	-0.88	5,576.15	1.180E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	80.40	18.67	3.952E-05	Pulse	0.50	3
Al			1	7.012	ug/l	3.07	1,343.72	3.455E-03	Pulse	1.00	3
Se			1	0.048	ug/l	212.13	24.00	7.889E-06	Pulse	3.00	3
Sb			1	-0.020	ug/l	-27.43	600.68	1.271E-03	Pulse	1.00	3
Se			1	0.417	ug/l	34.30	36.78	1.797E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,734,553.33	0.75	92.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		389,032.10	1.21	91.1	Pulse	0.30	3
1	Ge		307,005.59	0.12	88.3	Pulse	0.30	3
1	In		3,042,085.09	0.39	84.6	Pulse	0.30	3
1	Tb		13,766,974.67	0.66	94.7	Analog	0.50	3
1	Lu		8,001,689.00	0.38	92.6	Analog	0.50	3
1	Ge		472,433.19	0.17	88.9	Pulse	0.30	3
1	Te		20,476.80	1.32	65.6	Pulse	0.50	3
1	Li		2,297.92	2.82	100.1	Pulse	0.30	3

Quantitation Report

File Name	091SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:13
Sample Name	FA53456-6
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.699	ug/l	4.82	1,596.07	4.567E-03	Pulse	0.50	3
As			1	1.081	ug/l	15.06	158.67	4.539E-04	Pulse	1.00	3
Mo			1	3.539	ug/l	5.29	2,912.23	5.496E-03	Pulse	0.50	3
Pb			1	-0.069	ug/l	-67.89	11,080.93	1.249E-03	Pulse	1.00	3
Be			1	0.069	ug/l	126.82	0.83	1.736E-06	Pulse	2.00	3
Ag			1	-0.007	ug/l	-101.13	120.67	2.275E-04	Pulse	0.50	3
Ba			1	39.060	ug/l	2.25	10,543.11	3.197E-03	Pulse	0.50	3
Tl			1	0.019	ug/l	24.78	178.67	2.013E-05	Pulse	0.50	3
Sn			1	0.354	ug/l	48.01	847.82	2.574E-04	Pulse	0.30	3
Sr			1	6048.602	ug/l	0.85	3,259,334.58	9.882E-01	Pulse	0.50	3
[Pb]			1	0.072	ug/l	311.56	5,551.08	6.259E-04	Pulse	0.50	3
Ca			1	359942.430	ug/l	0.42	1,007,842.69	2.096E+00	Pulse	0.50	3
Ti			1	0.751	ug/l	45.56	20.67	4.284E-05	Pulse	0.50	3
Na			1	7101955.560	ug/l	1.29	1,032,050,090.67	2.146E+03	Analog	1.00	3
Mg			1	914056.138	ug/l	1.45	56,924,817.33	1.184E+02	Analog	1.00	3
K			1	238123.505	ug/l	1.49	12,147,606.33	2.526E+01	Analog	1.00	3
V			1	0.635	ug/l	12.01	1,256.71	2.614E-03	Pulse	0.50	3
Mn			1	52.154	ug/l	1.63	26,952.69	7.713E-02	Pulse	0.50	3
Fe			1	16231.625	ug/l	1.26	14,934,153.67	4.274E+01	Analog	0.50	3
Co			1	0.280	ug/l	9.55	904.02	2.586E-03	Pulse	0.50	3
Ni			1	1.306	ug/l	15.53	1,002.03	2.870E-03	Pulse	0.50	3
Cu			1	-18.620	ug/l	-0.83	49,807.40	1.425E-01	Pulse	0.50	3
Zn			1	63.557	ug/l	1.85	20,831.23	3.930E-02	Pulse	1.00	3
Cd			1	0.018	ug/l	1.74	16.00	3.019E-05	Pulse	0.50	3
Al			1	22.613	ug/l	13.12	816.35	1.698E-03	Pulse	1.00	3
Se			1	0.907	ug/l	21.30	29.22	8.856E-06	Pulse	3.00	3
Sb			1	-0.657	ug/l	-3.91	326.33	6.156E-04	Pulse	1.00	3
Se			1	60.266	ug/l	3.98	227.45	9.958E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,872,620.00	0.99	84.6	Analog	0.50	3
1	Sc		480,838.30	1.31	112.6	Pulse	0.30	3
1	Ge		349,423.34	0.84	100.5	Pulse	0.30	3
1	In		3,298,251.54	1.43	91.8	Pulse	0.30	3
1	Tb		14,219,424.00	1.77	97.8	Analog	0.50	3
1	Lu		8,390,619.83	0.76	97.1	Analog	0.50	3
1	Ge		530,060.79	0.73	99.7	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		22,834.93	1.16	73.2	Pulse	0.50	3
1	Li		2,330.15	3.28	101.5	Pulse	0.30	3

Quantitation Report

File Name	092SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:16
Sample Name	MP33665-D1
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.336	ug/l	8.18	1,198.71	3.355E-03	Pulse	0.50	3
As			1	1.044	ug/l	7.26	157.67	4.412E-04	Pulse	1.00	3
Mo			1	3.360	ug/l	2.31	2,841.56	5.221E-03	Pulse	0.50	3
Pb			1	-0.032	ug/l	-150.31	11,495.87	1.265E-03	Pulse	1.00	3
Be			1	0.162	ug/l	135.95	1.50	3.006E-06	Pulse	2.00	3
Ag			1	0.065	ug/l	4.89	344.67	6.336E-04	Pulse	0.50	3
Ba			1	38.521	ug/l	1.78	10,792.58	3.153E-03	Pulse	0.50	3
Tl			1	0.009	ug/l	1.30	124.00	1.365E-05	Pulse	0.50	3
Sn			1	0.121	ug/l	87.66	726.68	2.122E-04	Pulse	0.30	3
Sr			1	5943.092	ug/l	1.63	3,323,726.75	9.709E-01	Pulse	0.50	3
[Pb]			1	-0.086	ug/l	-55.56	5,394.20	5.936E-04	Pulse	0.50	3
Ca			1	352852.710	ug/l	1.45	1,018,001.27	2.055E+00	Pulse	0.50	3
Ti			1	0.699	ug/l	57.86	20.00	4.028E-05	Pulse	0.50	3
Na			1	6905757.204	ug/l	1.04	1,033,849,429.33	2.087E+03	Analog	1.00	3
Mg			1	894066.060	ug/l	1.54	57,364,266.67	1.158E+02	Analog	1.00	3
K			1	233315.231	ug/l	1.49	12,263,021.33	2.475E+01	Analog	1.00	3
V			1	0.573	ug/l	5.48	1,234.04	2.492E-03	Pulse	0.50	3
Mn			1	51.258	ug/l	0.34	27,078.18	7.581E-02	Pulse	0.50	3
Fe			1	15969.314	ug/l	1.58	15,018,930.33	4.205E+01	Analog	0.50	3
Co			1	0.249	ug/l	6.47	856.02	2.398E-03	Pulse	0.50	3
Ni			1	0.872	ug/l	18.59	763.35	2.139E-03	Pulse	0.50	3
Cu			1	-18.605	ug/l	-0.39	50,935.57	1.426E-01	Pulse	0.50	3
Zn			1	59.054	ug/l	3.83	20,489.53	3.766E-02	Pulse	1.00	3
Cd			1	0.008	ug/l	241.34	12.67	2.344E-05	Pulse	0.50	3
Al			1	28.465	ug/l	39.92	950.70	1.914E-03	Pulse	1.00	3
Se			1	1.400	ug/l	33.49	34.11	9.970E-06	Pulse	3.00	3
Sb			1	-0.663	ug/l	-3.71	330.33	6.072E-04	Pulse	1.00	3
Se			1	59.866	ug/l	5.37	233.22	9.900E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,087,086.67	0.56	86.6	Analog	0.50	3
1	Sc		495,346.49	1.94	116.0	Pulse	0.30	3
1	Ge		357,172.51	1.52	102.8	Pulse	0.30	3
1	In		3,422,819.58	1.21	95.2	Pulse	0.30	3
1	Tb		14,622,290.67	1.57	100.6	Analog	0.50	3
1	Lu		8,714,995.67	0.27	100.9	Analog	0.50	3
1	Ge		544,143.16	2.20	102.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		23,562.51	0.82	75.5	Pulse	0.50	3
1	Li		2,543.51	4.44	110.8	Pulse	0.30	3

Quantitation Report

File Name	093SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:20
Sample Name	MP33665-SD1
Sample Type	Sample
Comment	
Prep Dilution	100.000
Auto Dilution	N/A
Total Dilution	100.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.267	ug/l	14.87	1,138.71	3.077E-03	Pulse	0.50	3
As			1	1.364	ug/l	5.58	64.67	1.747E-04	Pulse	1.00	3
Mo			1	3.232	ug/l	3.86	586.68	1.043E-03	Pulse	0.50	3
Pb			1	-2.546	ug/l	-8.15	10,954.18	1.057E-03	Pulse	1.00	3
Be			1	0.352	ug/l	227.78	0.83	1.749E-06	Pulse	2.00	3
Ag			1	-0.106	ug/l	-16.79	83.33	1.481E-04	Pulse	0.50	3
Ba			1	37.748	ug/l	1.37	2,223.48	6.253E-04	Pulse	0.50	3
Tl			1	0.047	ug/l	49.87	144.67	1.394E-05	Pulse	0.50	3
Sn			1	-0.528	ug/l	-52.17	598.90	1.684E-04	Pulse	0.30	3
Sr			1	5286.017	ug/l	0.83	615,207.17	1.730E-01	Pulse	0.50	3
[Pb]			1	-2.690	ug/l	-15.32	5,195.47	5.012E-04	Pulse	0.50	3
Ca			1	331385.326	ug/l	0.69	185,278.03	3.862E-01	Pulse	0.50	3
Ti			1	1.653	ug/l	98.85	10.67	2.235E-05	Pulse	0.50	3
Na			1	6404775.362	ug/l	1.33	185,732,944.00	3.871E+02	Analog	1.00	3
Mg			1	838992.692	ug/l	1.31	10,425,354.67	2.173E+01	Analog	1.00	3
K			1	200959.829	ug/l	1.01	2,058,895.79	4.291E+00	Pulse	1.00	3
V			1	1.743	ug/l	30.50	982.03	2.046E-03	Pulse	0.50	3
Mn			1	51.252	ug/l	3.92	5,711.52	1.543E-02	Pulse	0.50	3
Fe			1	13726.980	ug/l	1.53	2,680,065.67	7.242E+00	Pulse	0.50	3
Co			1	-0.182	ug/l	-31.69	234.00	6.328E-04	Pulse	0.50	3
Ni			1	1.170	ug/l	19.96	394.68	1.066E-03	Pulse	0.50	3
Cu			1	-78.391	ug/l	-1.48	57,747.29	1.560E-01	Pulse	0.50	3
Zn			1	15.627	ug/l	32.88	9,727.13	1.730E-02	Pulse	1.00	3
Cd			1	-0.016	ug/l	-731.40	8.67	1.540E-05	Pulse	0.50	3
Al			1	21.073	ug/l	21.16	488.01	1.017E-03	Pulse	1.00	3
Se			1	3.060	ug/l	64.58	29.11	8.190E-06	Pulse	3.00	3
Sb			1	-3.875	ug/l	-2.56	250.33	4.450E-04	Pulse	1.00	3
Se			1	51.966	ug/l	8.12	75.56	2.702E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,366,156.00	0.70	98.8	Analog	0.50	3
1	Sc		479,804.44	1.28	112.4	Pulse	0.30	3
1	Ge		370,139.59	1.23	106.5	Pulse	0.30	3
1	In		3,555,970.83	0.51	98.9	Pulse	0.30	3
1	Tb		15,593,638.33	1.11	107.3	Analog	0.50	3
1	Lu		9,108,609.67	0.23	105.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		562,438.33	0.65	105.8	Pulse	0.30	3
1	Te		27,967.39	1.69	89.7	Pulse	0.50	3
1	Li		2,731.31	1.65	119.0	Pulse	0.30	3

Quantitation Report

File Name	094CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:24
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	50.232	ug/l	2.53	1,187,844.29	3.362E+00	Pulse	0.50	3
As			1	49.112	ug/l	2.34	119,869.84	3.393E-01	Pulse	1.00	3
Mo			1	48.809	ug/l	4.13	810,517.33	1.503E+00	Pulse	0.50	3
Pb			1	44.252	ug/l	2.28	4,139,014.42	3.876E-01	Pulse	1.00	3
Be			1	55.616	ug/l	2.01	6,741.12	1.527E-02	Pulse	2.00	3
Ag			1	49.499	ug/l	2.93	3,003,154.75	5.567E+00	Pulse	0.50	3
Ba			1	47.814	ug/l	3.48	267,373.00	7.806E-02	Pulse	0.50	3
Tl			1	48.886	ug/l	1.82	6,818,454.17	6.384E-01	Analog	0.50	3
Sn			1	49.667	ug/l	3.83	659,120.96	1.924E-01	Pulse	0.30	3
Sr			1	48.996	ug/l	3.33	549,374.56	1.604E-01	Pulse	0.50	3
[Pb]			1	44.499	ug/l	2.72	1,948,987.87	1.825E-01	Pulse	0.50	3
Ca			1	4866.111	ug/l	3.39	250,272.16	5.669E-01	Pulse	0.50	3
Ti			1	48.852	ug/l	1.93	21,013.95	4.759E-02	Pulse	0.50	3
Na			1	5321.834	ug/l	2.68	14,224,428.67	3.222E+01	Analog	1.00	3
Mg			1	5313.189	ug/l	1.80	6,076,703.00	1.376E+01	Analog	1.00	3
K			1	4826.852	ug/l	2.42	4,530,441.83	1.026E+01	Pulse	1.00	3
V			1	49.705	ug/l	2.86	869,272.89	1.969E+00	Pulse	0.50	3
Mn			1	49.270	ug/l	1.68	512,761.25	1.451E+00	Pulse	0.50	3
Fe			1	5217.026	ug/l	2.64	97,024,781.33	2.746E+02	Analog	0.50	3
Co			1	49.796	ug/l	2.03	2,173,605.50	6.152E+00	Pulse	0.50	3
Ni			1	50.777	ug/l	2.16	603,445.98	1.708E+00	Pulse	0.50	3
Cu			1	49.765	ug/l	2.56	1,691,856.21	4.789E+00	Pulse	0.50	3
Zn			1	50.252	ug/l	3.37	206,116.60	3.821E-01	Pulse	1.00	3
Cd			1	48.631	ug/l	3.44	366,401.07	6.793E-01	Pulse	0.50	3
Al			1	4907.681	ug/l	2.61	1,603,135.50	3.631E+00	Pulse	1.00	3
Se			1	51.821	ug/l	3.62	8,048.37	2.350E-03	Pulse	3.00	3
Sb			1	47.398	ug/l	3.86	739,686.52	1.372E+00	Pulse	1.00	3
Se			1	48.859	ug/l	0.42	3,993.64	1.434E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,683,363.67	2.31	101.8	Analog	0.50	3
1	Sc		441,692.80	2.46	103.5	Pulse	0.30	3
1	Ge		353,433.26	2.33	101.7	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,427,757.09	3.29	95.4	Pulse	0.30	3
1	Tb		15,338,792.33	2.76	105.5	Analog	0.50	3
1	Lu		8,934,348.00	2.60	103.4	Analog	0.50	3
1	Ge		539,767.67	3.26	101.5	Pulse	0.30	3
1	Te		27,857.87	0.23	89.3	Pulse	0.50	3
1	Li		2,505.73	4.14	109.1	Pulse	0.30	3

Quantitation Report

File Name	095_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:27
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	100.783	ug/l	1.53	2,372,260.17	6.743E+00	Pulse	0.50	3
As			1	98.336	ug/l	0.75	238,961.00	6.793E-01	Pulse	1.00	3
Mo			1	97.371	ug/l	0.68	1,626,921.17	2.998E+00	Pulse	0.50	3
Pb			1	97.238	ug/l	0.81	8,873,338.00	8.501E-01	Analog	1.00	3
Be			1	108.188	ug/l	0.98	13,241.63	2.969E-02	Pulse	2.00	3
Ag			1	103.580	ug/l	0.71	6,321,586.17	1.165E+01	Analog	0.50	3
Ba			1	94.555	ug/l	2.15	530,589.32	1.544E-01	Pulse	0.50	3
Tl			1	97.849	ug/l	1.28	13,338,388.33	1.278E+00	Analog	0.50	3
Sn			1	99.051	ug/l	0.21	1,318,782.38	3.836E-01	Pulse	0.30	3
Sr			1	98.206	ug/l	1.08	1,103,864.54	3.211E-01	Pulse	0.50	3
[Pb]			1	88.499	ug/l	1.19	3,782,459.25	3.624E-01	Pulse	0.50	3
Ca			1	9713.800	ug/l	0.77	504,578.47	1.131E+00	Pulse	0.50	3
Ti			1	98.098	ug/l	1.00	42,611.51	9.555E-02	Pulse	0.50	3
Na			1	10570.548	ug/l	1.06	28,513,019.33	6.394E+01	Analog	1.00	3
Mg			1	10495.855	ug/l	1.44	12,122,401.00	2.719E+01	Analog	1.00	3
K			1	10151.573	ug/l	1.54	9,606,614.00	2.154E+01	Analog	1.00	3
V			1	98.662	ug/l	1.34	1,742,213.84	3.907E+00	Pulse	0.50	3
Mn			1	98.239	ug/l	0.24	1,017,845.54	2.893E+00	Pulse	0.50	3
Fe			1	10430.764	ug/l	0.49	193,166,880.00	5.491E+02	Analog	0.50	3
Co			1	98.807	ug/l	1.32	4,293,886.33	1.221E+01	Pulse	0.50	3
Ni			1	101.067	ug/l	0.87	1,195,709.13	3.399E+00	Pulse	0.50	3
Cu			1	99.742	ug/l	0.33	3,296,112.33	9.369E+00	Pulse	0.50	3
Zn			1	98.819	ug/l	1.00	399,272.74	7.358E-01	Pulse	1.00	3
Cd			1	95.567	ug/l	0.39	724,388.19	1.335E+00	Pulse	0.50	3
Al			1	9817.455	ug/l	1.53	3,238,616.75	7.263E+00	Pulse	1.00	3
Se			1	101.484	ug/l	1.23	15,795.07	4.595E-03	Pulse	3.00	3
Sb			1	92.786	ug/l	1.11	1,456,051.25	2.683E+00	Pulse	1.00	3
Se			1	99.743	ug/l	2.14	7,973.56	2.914E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,438,410.67	0.52	99.5	Analog	0.50	3
1	Sc		445,969.81	1.19	104.5	Pulse	0.30	3
1	Ge		351,810.32	0.74	101.2	Pulse	0.30	3
1	In		3,437,754.31	1.08	95.6	Pulse	0.30	3
1	Tb		15,245,377.33	0.48	104.9	Analog	0.50	3
1	Lu		8,864,514.33	0.14	102.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		542,642.84	0.81	102.1	Pulse	0.30	3
1	Te		27,365.79	1.34	87.7	Pulse	0.50	3
1	Li		2,549.06	5.08	111.0	Pulse	0.30	3

Quantitation Report

File Name	096_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:31
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.002	ug/l	173.71	858.02	2.389E-03	Pulse	0.50	3
As			1	0.006	ug/l	42.53	43.67	1.214E-04	Pulse	1.00	3
Mo			1	0.022	ug/l	14.45	394.67	7.205E-04	Pulse	0.50	3
Pb			1	-0.017	ug/l	-14.54	12,495.23	1.128E-03	Pulse	1.00	3
Be			1	0.007	ug/l	93.41	1.17	2.644E-06	Pulse	2.00	3
Ag			1	0.004	ug/l	20.10	408.68	7.462E-04	Pulse	0.50	3
Ba			1	0.005	ug/l	143.09	62.00	1.775E-05	Pulse	0.50	3
Tl			1	0.022	ug/l	19.77	3,218.99	2.909E-04	Pulse	0.50	3
Sn			1	0.033	ug/l	27.63	1,105.60	3.165E-04	Pulse	0.30	3
Sr			1	0.011	ug/l	44.33	1,370.72	3.922E-04	Pulse	0.50	3
[Pb]			1	-0.022	ug/l	-9.79	5,768.99	5.209E-04	Pulse	0.50	3
Ca			1	0.231	ug/l	112.14	134.67	3.048E-04	Pulse	0.50	3
Ti			1	0.054	ug/l	127.29	26.00	5.885E-05	Pulse	0.50	3
Na			1	4.929	ug/l	7.98	37,126.54	8.404E-02	Pulse	1.00	3
Mg			1	0.601	ug/l	10.90	851.35	1.927E-03	Pulse	1.00	3
K			1	0.500	ug/l	40.05	15,191.84	3.439E-02	Pulse	1.00	3
V			1	-0.008	ug/l	-11.56	451.34	1.022E-03	Pulse	0.50	3
Mn			1	0.006	ug/l	36.74	188.00	5.230E-04	Pulse	0.50	3
Fe			1	0.360	ug/l	30.25	12,509.45	3.485E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-19.87	163.33	4.550E-04	Pulse	0.50	3
Ni			1	0.000	ug/l	2789.71	244.00	6.798E-04	Pulse	0.50	3
Cu			1	-0.473	ug/l	-3.23	66,301.88	1.845E-01	Pulse	0.50	3
Zn			1	-0.299	ug/l	-4.21	7,658.86	1.398E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	61.42	26.00	4.749E-05	Pulse	0.50	3
Al			1	-0.098	ug/l	-121.91	348.67	7.890E-04	Pulse	1.00	3
Se			1	0.087	ug/l	179.09	37.67	1.075E-05	Pulse	3.00	3
Sb			1	-0.027	ug/l	-7.52	429.34	7.838E-04	Pulse	1.00	3
Se			1	-0.020	ug/l	-269.96	33.66	1.133E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,075,769.33	0.66	105.6	Analog	0.50	3
1	Sc		441,816.25	0.31	103.5	Pulse	0.30	3

Quantitation Report

1	Ge		359,412.81	1.20	103.4	Pulse	0.30	3
1	In		3,494,281.74	0.67	97.2	Pulse	0.30	3
1	Tb		15,310,330.67	1.44	105.3	Analog	0.50	3
1	Lu		8,885,556.67	1.24	102.8	Analog	0.50	3
1	Ge		547,937.25	0.56	103.1	Pulse	0.30	3
1	Te		29,716.80	0.13	95.3	Pulse	0.50	3
1	Li		2,606.85	4.86	113.6	Pulse	0.30	3

Quantitation Report

File Name	097SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:35
Sample Name	MP33665-S1
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	214.053	ug/l	0.66	256,643.24	7.181E-01	Pulse	0.50	3
As			1	205.301	ug/l	0.83	25,364.76	7.098E-02	Pulse	1.00	3
Mo			1	203.098	ug/l	0.60	170,847.18	3.127E-01	Pulse	0.50	3
Pb			1	188.032	ug/l	0.17	753,755.21	8.335E-02	Pulse	1.00	3
Be			1	191.829	ug/l	3.77	1,308.38	2.633E-03	Pulse	2.00	3
Ag			1	88.472	ug/l	0.29	271,937.58	4.978E-01	Pulse	0.50	3
Ba			1	230.156	ug/l	0.57	63,755.59	1.879E-02	Pulse	0.50	3
Tl			1	180.620	ug/l	1.02	1,066,561.08	1.179E-01	Pulse	0.50	3
Sn			1	202.228	ug/l	0.90	133,417.71	3.933E-02	Pulse	0.30	3
Sr			1	6175.593	ug/l	0.74	3,422,577.08	1.009E+00	Pulse	0.50	3
[Pb]			1	180.361	ug/l	0.46	338,888.67	3.747E-02	Pulse	0.50	3
Ca			1	373408.939	ug/l	0.37	1,080,115.08	2.174E+00	Pulse	0.50	3
Ti			1	203.950	ug/l	4.19	4,935.31	9.939E-03	Pulse	0.50	3
Na			1	6953248.284	ug/l	0.97	1,043,819,968.00	2.101E+03	Analog	1.00	3
Mg			1	912748.388	ug/l	0.78	58,719,253.33	1.182E+02	Analog	1.00	3
K			1	255170.556	ug/l	0.83	13,446,415.00	2.707E+01	Analog	1.00	3
V			1	199.784	ug/l	0.70	197,070.54	3.968E-01	Pulse	0.50	3
Mn			1	253.726	ug/l	0.21	133,640.07	3.739E-01	Pulse	0.50	3
Fe			1	36358.587	ug/l	0.76	34,208,232.00	9.571E+01	Analog	0.50	3
Co			1	200.707	ug/l	0.66	443,348.80	1.240E+00	Pulse	0.50	3
Ni			1	198.419	ug/l	0.71	119,462.48	3.342E-01	Pulse	0.50	3
Cu			1	175.484	ug/l	0.16	368,842.57	1.032E+00	Pulse	0.50	3
Zn			1	244.321	ug/l	0.87	57,433.05	1.051E-01	Pulse	1.00	3
Cd			1	176.675	ug/l	0.90	67,415.37	1.234E-01	Pulse	0.50	3
Al			1	18295.950	ug/l	1.11	336,581.62	6.775E-01	Pulse	1.00	3
Se			1	206.587	ug/l	3.32	1,607.51	4.738E-04	Pulse	3.00	3
Sb			1	186.432	ug/l	1.08	148,050.97	2.710E-01	Pulse	1.00	3
Se			1	286.221	ug/l	3.99	1,005.47	4.283E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,043,596.33	1.21	86.2	Analog	0.50	3
1	Sc		496,713.38	2.20	116.4	Pulse	0.30	3
1	Ge		357,403.84	2.37	102.8	Pulse	0.30	3
1	In		3,392,151.74	1.15	94.4	Pulse	0.30	3
1	Tb		14,646,262.00	0.85	100.8	Analog	0.50	3
1	Lu		8,672,449.00	1.01	100.4	Analog	0.50	3
1	Ge		546,307.50	1.46	102.8	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		23,471.72	1.88	75.3	Pulse	0.50	3
1	Li		2,464.61	5.14	107.4	Pulse	0.30	3

Quantitation Report

File Name	098SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:38
Sample Name	MP33665-S2
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	216.314	ug/l	1.02	261,102.74	7.257E-01	Pulse	0.50	3
As			1	211.136	ug/l	1.55	26,260.64	7.299E-02	Pulse	1.00	3
Mo			1	209.331	ug/l	1.85	175,683.66	3.223E-01	Pulse	0.50	3
Pb			1	188.668	ug/l	0.24	766,623.54	8.363E-02	Pulse	1.00	3
Be			1	193.700	ug/l	0.45	1,338.38	2.659E-03	Pulse	2.00	3
Ag			1	88.553	ug/l	1.97	271,556.91	4.982E-01	Pulse	0.50	3
Ba			1	236.080	ug/l	0.57	65,833.93	1.928E-02	Pulse	0.50	3
Tl			1	183.014	ug/l	0.81	1,095,544.63	1.195E-01	Pulse	0.50	3
Sn			1	208.057	ug/l	3.09	138,125.65	4.046E-02	Pulse	0.30	3
Sr			1	6356.146	ug/l	0.86	3,545,894.00	1.038E+00	Pulse	0.50	3
[Pb]			1	181.770	ug/l	0.90	346,170.49	3.776E-02	Pulse	0.50	3
Ca			1	378049.367	ug/l	0.48	1,108,175.83	2.201E+00	Pulse	0.50	3
Ti			1	202.085	ug/l	2.48	4,955.31	9.848E-03	Pulse	0.50	3
Na			1	7120437.720	ug/l	0.25	1,083,122,858.67	2.152E+03	Analog	1.00	3
Mg			1	927454.216	ug/l	0.84	60,459,808.00	1.201E+02	Analog	1.00	3
K			1	257339.449	ug/l	0.74	13,740,948.00	2.730E+01	Analog	1.00	3
V			1	200.595	ug/l	0.40	200,535.31	3.984E-01	Pulse	0.50	3
Mn			1	259.228	ug/l	1.86	137,432.02	3.820E-01	Pulse	0.50	3
Fe			1	34180.591	ug/l	1.27	32,373,550.00	8.998E+01	Analog	0.50	3
Co			1	204.026	ug/l	1.51	453,663.76	1.261E+00	Pulse	0.50	3
Ni			1	201.103	ug/l	0.65	121,887.68	3.388E-01	Pulse	0.50	3
Cu			1	178.705	ug/l	0.72	376,649.10	1.047E+00	Pulse	0.50	3
Zn			1	249.632	ug/l	1.22	58,358.22	1.071E-01	Pulse	1.00	3
Cd			1	181.368	ug/l	1.23	69,059.51	1.267E-01	Pulse	0.50	3
Al			1	15874.039	ug/l	0.86	295,951.40	5.880E-01	Pulse	1.00	3
Se			1	209.038	ug/l	2.82	1,637.18	4.793E-04	Pulse	3.00	3
Sb			1	190.075	ug/l	1.49	150,584.43	2.763E-01	Pulse	1.00	3
Se			1	292.847	ug/l	0.59	1,037.59	4.380E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,167,463.00	0.85	87.4	Analog	0.50	3
1	Sc		503,364.14	2.20	117.9	Pulse	0.30	3
1	Ge		359,833.64	1.92	103.5	Pulse	0.30	3
1	In		3,414,816.81	1.18	95.0	Pulse	0.30	3
1	Tb		14,823,736.33	1.08	102.0	Analog	0.50	3
1	Lu		8,688,958.67	1.01	100.6	Analog	0.50	3
1	Ge		545,183.99	2.07	102.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		23,688.69	3.11	75.9	Pulse	0.50	3
1	Li		2,485.72	5.66	108.3	Pulse	0.30	3

Quantitation Report

File Name	099SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:42
Sample Name	MP33665-PS1
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	13.445	ug/l	1.93	17,384.42	4.720E-02	Pulse	0.50	3
As			1	13.276	ug/l	2.46	1,718.41	4.665E-03	Pulse	1.00	3
Mo			1	15.384	ug/l	3.46	13,164.64	2.373E-02	Pulse	0.50	3
Pb			1	11.281	ug/l	1.93	57,311.79	6.203E-03	Pulse	1.00	3
Be			1	12.619	ug/l	21.73	88.33	1.739E-04	Pulse	2.00	3
Ag			1	2.178	ug/l	4.10	6,943.36	1.252E-02	Pulse	0.50	3
Ba			1	49.795	ug/l	1.86	14,264.32	4.073E-03	Pulse	0.50	3
Tl			1	10.987	ug/l	1.21	66,365.25	7.182E-03	Pulse	0.50	3
Sn			1	12.460	ug/l	2.45	9,105.64	2.600E-03	Pulse	0.30	3
Sr			1	6053.919	ug/l	2.53	3,463,196.08	9.890E-01	Pulse	0.50	3
[Pb]			1	10.899	ug/l	0.80	26,232.74	2.839E-03	Pulse	0.50	3
Ca			1	361218.036	ug/l	3.13	1,070,598.37	2.103E+00	Pulse	0.50	3
Ti			1	12.784	ug/l	7.78	320.00	6.288E-04	Pulse	0.50	3
Na			1	7012299.371	ug/l	2.44	1,078,626,410.67	2.119E+03	Analog	1.00	3
Mg			1	907871.576	ug/l	3.05	59,839,478.67	1.176E+02	Analog	1.00	3
K			1	238543.783	ug/l	2.60	12,879,774.00	2.531E+01	Analog	1.00	3
V			1	12.599	ug/l	4.88	13,381.28	2.629E-02	Pulse	0.50	3
Mn			1	65.213	ug/l	1.87	35,492.33	9.636E-02	Pulse	0.50	3
Fe			1	17328.760	ug/l	2.24	16,805,397.00	4.562E+01	Analog	0.50	3
Co			1	12.488	ug/l	3.68	28,725.26	7.798E-02	Pulse	0.50	3
Ni			1	13.251	ug/l	3.76	8,453.88	2.295E-02	Pulse	0.50	3
Cu			1	-6.380	ug/l	-10.80	73,165.20	1.986E-01	Pulse	0.50	3
Zn			1	73.335	ug/l	1.00	23,774.95	4.286E-02	Pulse	1.00	3
Cd			1	10.865	ug/l	1.64	4,218.50	7.606E-03	Pulse	0.50	3
Al			1	1218.804	ug/l	3.45	23,384.32	4.594E-02	Pulse	1.00	3
Se			1	13.098	ug/l	4.64	127.56	3.642E-05	Pulse	3.00	3
Sb			1	10.224	ug/l	0.54	9,062.91	1.634E-02	Pulse	1.00	3
Se			1	75.204	ug/l	3.02	298.11	1.213E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,240,605.00	0.77	88.1	Analog	0.50	3
1	Sc		509,022.20	1.76	119.2	Pulse	0.30	3
1	Ge		368,344.75	0.04	106.0	Pulse	0.30	3
1	In		3,501,933.13	1.04	97.4	Pulse	0.30	3
1	Tb		15,016,447.67	0.68	103.3	Analog	0.50	3
1	Lu		8,860,927.00	1.36	102.6	Analog	0.50	3
1	Ge		554,663.31	1.05	104.3	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		24,575.84	0.85	78.8	Pulse	0.50	3
1	Li		2,572.40	6.81	112.1	Pulse	0.30	3

Quantitation Report

File Name	100SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:46
Sample Name	FA53456-1
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.833	ug/l	6.74	1,819.42	5.015E-03	Pulse	0.50	3
As			1	3.822	ug/l	10.75	507.68	1.400E-03	Pulse	1.00	3
Mo			1	3.600	ug/l	3.32	3,071.59	5.591E-03	Pulse	0.50	3
Pb			1	-0.204	ug/l	-28.43	13,260.48	1.190E-03	Pulse	1.00	3
Be			1	0.236	ug/l	96.59	1.83	4.016E-06	Pulse	2.00	3
Ag			1	0.005	ug/l	212.26	164.00	2.976E-04	Pulse	0.50	3
Ba			1	69.737	ug/l	1.22	20,386.86	5.701E-03	Pulse	0.50	3
Tl			1	0.066	ug/l	13.04	570.01	5.117E-05	Pulse	0.50	3
Sn			1	0.356	ug/l	17.39	921.14	2.577E-04	Pulse	0.30	3
Sr			1	708.987	ug/l	0.81	415,268.24	1.161E-01	Pulse	0.50	3
[Pb]			1	-0.251	ug/l	-18.66	6,240.49	5.599E-04	Pulse	0.50	3
Ca			1	118444.038	ug/l	1.91	313,428.18	6.899E-01	Pulse	0.50	3
Ti			1	2.476	ug/l	35.78	58.00	1.268E-04	Pulse	0.50	3
Na			1	113475.677	ug/l	2.35	15,601,706.00	3.435E+01	Analog	1.00	3
Mg			1	19081.996	ug/l	2.05	1,122,782.50	2.472E+00	Pulse	1.00	3
K			1	6984.830	ug/l	2.30	351,317.29	7.733E-01	Pulse	1.00	3
V			1	3.846	ug/l	3.49	4,078.44	8.969E-03	Pulse	0.50	3
Mn			1	522.613	ug/l	1.78	279,361.11	7.698E-01	Pulse	0.50	3
Fe			1	7242.677	ug/l	1.43	6,924,098.00	1.908E+01	Analog	0.50	3
Co			1	0.217	ug/l	8.26	798.02	2.198E-03	Pulse	0.50	3
Ni			1	2.025	ug/l	1.04	1,480.06	4.077E-03	Pulse	0.50	3
Cu			1	-11.225	ug/l	-7.40	64,022.26	1.764E-01	Pulse	0.50	3
Zn			1	299.333	ug/l	1.02	68,765.88	1.252E-01	Pulse	1.00	3
Cd			1	0.006	ug/l	313.69	12.00	2.169E-05	Pulse	0.50	3
Al			1	307.613	ug/l	10.55	5,551.45	1.224E-02	Pulse	1.00	3
Se			1	0.019	ug/l	4117.02	24.44	6.850E-06	Pulse	3.00	3
Sb			1	0.135	ug/l	35.23	967.03	1.761E-03	Pulse	1.00	3
Se			1	2.053	ug/l	76.44	44.22	1.488E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,146,948.00	1.56	106.2	Analog	0.50	3
1	Sc		454,458.71	2.89	106.5	Pulse	0.30	3
1	Ge		362,989.33	2.36	104.4	Pulse	0.30	3
1	In		3,575,644.58	1.34	99.5	Pulse	0.30	3
1	Tb		15,745,865.00	1.39	108.3	Analog	0.50	3
1	Lu		9,294,305.33	1.57	107.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		549,499.96	2.06	103.4	Pulse	0.30	3
1	Te		29,750.19	1.54	95.4	Pulse	0.50	3
1	Li		2,654.64	3.88	115.6	Pulse	0.30	3

Quantitation Report

File Name	101SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:49
Sample Name	FA53456-2
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.490	ug/l	14.63	1,392.06	3.868E-03	Pulse	0.50	3
As			1	22.844	ug/l	1.41	2,867.89	7.969E-03	Pulse	1.00	3
Mo			1	1.303	ug/l	9.40	1,132.70	2.054E-03	Pulse	0.50	3
Pb			1	-0.529	ug/l	-5.70	11,350.44	1.048E-03	Pulse	1.00	3
Be			1	0.048	ug/l	249.62	0.67	1.443E-06	Pulse	2.00	3
Ag			1	-0.016	ug/l	-27.34	96.67	1.754E-04	Pulse	0.50	3
Ba			1	75.120	ug/l	0.32	21,715.71	6.140E-03	Pulse	0.50	3
Tl			1	0.054	ug/l	24.29	464.01	4.280E-05	Pulse	0.50	3
Sn			1	0.237	ug/l	19.89	830.02	2.347E-04	Pulse	0.30	3
Sr			1	4168.564	ug/l	0.42	2,408,856.00	6.811E-01	Pulse	0.50	3
[Pb]			1	-0.595	ug/l	-5.07	5,303.51	4.896E-04	Pulse	0.50	3
Ca			1	552821.049	ug/l	1.54	1,475,883.13	3.219E+00	Pulse	0.50	3
Ti			1	0.646	ug/l	47.58	17.33	3.771E-05	Pulse	0.50	3
Na			1	243782.702	ug/l	1.06	33,801,462.67	7.372E+01	Analog	1.00	3
Mg			1	89081.402	ug/l	1.41	5,289,386.67	1.154E+01	Analog	1.00	3
K			1	5742.345	ug/l	1.20	294,217.73	6.417E-01	Pulse	1.00	3
V			1	0.704	ug/l	8.57	1,261.38	2.751E-03	Pulse	0.50	3
Mn			1	1749.225	ug/l	1.47	926,915.56	2.576E+00	Pulse	0.50	3
Fe			1	20966.191	ug/l	1.23	19,863,445.33	5.520E+01	Analog	0.50	3
Co			1	0.851	ug/l	6.69	2,200.80	6.115E-03	Pulse	0.50	3
Ni			1	0.682	ug/l	2.16	654.68	1.819E-03	Pulse	0.50	3
Cu			1	-16.729	ug/l	-1.50	54,414.97	1.512E-01	Pulse	0.50	3
Zn			1	-5.128	ug/l	-1.47	7,881.62	1.429E-02	Pulse	1.00	3
Cd			1	0.011	ug/l	283.21	14.00	2.526E-05	Pulse	0.50	3
Al			1	12.622	ug/l	5.28	609.01	1.328E-03	Pulse	1.00	3
Se			1	0.116	ug/l	558.36	25.00	7.068E-06	Pulse	3.00	3
Sb			1	-0.582	ug/l	-2.67	399.01	7.234E-04	Pulse	1.00	3
Se			1	4.041	ug/l	44.34	50.67	1.778E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,831,496.33	0.72	103.2	Analog	0.50	3
1	Sc		458,526.16	0.97	107.4	Pulse	0.30	3
1	Ge		359,881.19	0.67	103.5	Pulse	0.30	3
1	In		3,536,538.89	0.37	98.4	Pulse	0.30	3
1	Tb		15,692,959.00	0.52	108.0	Analog	0.50	3
1	Lu		9,175,067.67	1.20	106.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		551,525.57	0.96	103.7	Pulse	0.30	3
1	Te		28,540.89	1.53	91.5	Pulse	0.50	3
1	Li		2,622.41	2.35	114.2	Pulse	0.30	3

Quantitation Report

File Name	102SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:53
Sample Name	FA53456-3
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.051	ug/l	4.16	2,079.45	5.746E-03	Pulse	0.50	3
As			1	2.682	ug/l	3.16	364.33	1.007E-03	Pulse	1.00	3
Mo			1	0.636	ug/l	6.91	564.01	1.026E-03	Pulse	0.50	3
Pb			1	1.854	ug/l	5.04	22,452.04	2.088E-03	Pulse	1.00	3
Be			1	0.049	ug/l	249.39	0.67	1.453E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	2181.22	148.00	2.696E-04	Pulse	0.50	3
Ba			1	131.674	ug/l	2.08	37,785.28	1.076E-02	Pulse	0.50	3
Tl			1	0.048	ug/l	13.06	418.01	3.889E-05	Pulse	0.50	3
Sn			1	0.202	ug/l	42.93	801.13	2.280E-04	Pulse	0.30	3
Sr			1	1168.800	ug/l	1.09	671,827.63	1.912E-01	Pulse	0.50	3
[Pb]			1	1.836	ug/l	6.47	10,607.32	9.864E-04	Pulse	0.50	3
Ca			1	144198.488	ug/l	1.34	388,054.23	8.399E-01	Pulse	0.50	3
Ti			1	2.565	ug/l	18.79	60.67	1.311E-04	Pulse	0.50	3
Na			1	687880.327	ug/l	0.83	96,072,077.33	2.079E+02	Analog	1.00	3
Mg			1	81707.894	ug/l	1.45	4,889,163.00	1.058E+01	Analog	1.00	3
K			1	21288.956	ug/l	1.71	1,057,494.17	2.289E+00	Pulse	1.00	3
V			1	1.801	ug/l	6.79	2,274.14	4.921E-03	Pulse	0.50	3
Mn			1	266.915	ug/l	1.52	142,334.38	3.933E-01	Pulse	0.50	3
Fe			1	3563.824	ug/l	1.82	3,399,938.00	9.396E+00	Pulse	0.50	3
Co			1	0.269	ug/l	14.10	912.02	2.522E-03	Pulse	0.50	3
Ni			1	1.183	ug/l	7.02	963.36	2.662E-03	Pulse	0.50	3
Cu			1	-15.309	ug/l	-0.13	57,077.96	1.577E-01	Pulse	0.50	3
Zn			1	296.084	ug/l	1.62	68,143.67	1.240E-01	Pulse	1.00	3
Cd			1	0.065	ug/l	37.44	34.67	6.312E-05	Pulse	0.50	3
Al			1	176.719	ug/l	1.85	3,417.97	7.397E-03	Pulse	1.00	3
Se			1	0.287	ug/l	234.21	26.22	7.454E-06	Pulse	3.00	3
Sb			1	-0.582	ug/l	-14.44	397.67	7.232E-04	Pulse	1.00	3
Se			1	5.774	ug/l	28.62	56.22	2.030E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,753,619.00	0.83	102.5	Analog	0.50	3
1	Sc		462,077.86	0.94	108.2	Pulse	0.30	3
1	Ge		361,902.79	0.97	104.1	Pulse	0.30	3
1	In		3,513,348.33	1.11	97.7	Pulse	0.30	3
1	Tb		15,685,041.33	0.45	107.9	Analog	0.50	3
1	Lu		9,196,176.00	0.75	106.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		549,718.21	1.07	103.4	Pulse	0.30	3
1	Te		27,694.27	0.45	88.8	Pulse	0.50	3
1	Li		2,666.86	4.35	116.2	Pulse	0.30	3

Quantitation Report

File Name	103SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:56
Sample Name	FA53456-4
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.335	ug/l	32.08	1,216.04	3.351E-03	Pulse	0.50	3
As			1	1.584	ug/l	7.69	227.67	6.275E-04	Pulse	1.00	3
Mo			1	0.397	ug/l	5.53	366.67	6.588E-04	Pulse	0.50	3
Pb			1	-0.682	ug/l	-3.37	10,778.07	9.814E-04	Pulse	1.00	3
Be			1	-0.030	ug/l	-151.43	0.17	3.653E-07	Pulse	2.00	3
Ag			1	-0.017	ug/l	-45.65	94.67	1.702E-04	Pulse	0.50	3
Ba			1	95.063	ug/l	1.29	27,484.85	7.768E-03	Pulse	0.50	3
Tl			1	0.023	ug/l	20.96	250.00	2.277E-05	Pulse	0.50	3
Sn			1	0.271	ug/l	26.74	853.36	2.413E-04	Pulse	0.30	3
Sr			1	1513.783	ug/l	1.39	875,946.29	2.476E-01	Pulse	0.50	3
[Pb]			1	-0.733	ug/l	-8.69	5,066.77	4.614E-04	Pulse	0.50	3
Ca			1	189708.995	ug/l	0.77	506,232.93	1.105E+00	Pulse	0.50	3
Ti			1	0.379	ug/l	35.22	11.33	2.471E-05	Pulse	0.50	3
Na			1	291749.269	ug/l	0.94	40,419,802.67	8.822E+01	Analog	1.00	3
Mg			1	39589.220	ug/l	0.75	2,349,270.58	5.127E+00	Pulse	1.00	3
K			1	18236.676	ug/l	0.81	900,551.63	1.965E+00	Pulse	1.00	3
V			1	0.504	ug/l	8.72	1,078.03	2.353E-03	Pulse	0.50	3
Mn			1	991.452	ug/l	0.82	529,866.06	1.460E+00	Pulse	0.50	3
Fe			1	1912.006	ug/l	0.81	1,831,993.00	5.048E+00	Pulse	0.50	3
Co			1	0.011	ug/l	56.12	334.67	9.223E-04	Pulse	0.50	3
Ni			1	0.454	ug/l	20.60	521.34	1.436E-03	Pulse	0.50	3
Cu			1	-16.440	ug/l	-0.15	55,354.90	1.525E-01	Pulse	0.50	3
Zn			1	1.606	ug/l	60.76	9,316.92	1.674E-02	Pulse	1.00	3
Cd			1	0.004	ug/l	324.86	11.33	2.039E-05	Pulse	0.50	3
Al			1	8.375	ug/l	39.50	536.34	1.171E-03	Pulse	1.00	3
Se			1	-0.179	ug/l	-362.11	22.67	6.401E-06	Pulse	3.00	3
Sb			1	-0.638	ug/l	-1.99	357.67	6.427E-04	Pulse	1.00	3
Se			1	1.294	ug/l	25.00	38.78	1.378E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,982,012.67	0.45	104.7	Analog	0.50	3
1	Sc		458,211.35	0.99	107.3	Pulse	0.30	3
1	Ge		362,905.59	0.37	104.4	Pulse	0.30	3
1	In		3,538,372.08	0.93	98.4	Pulse	0.30	3
1	Tb		15,709,706.00	0.91	108.1	Analog	0.50	3
1	Lu		9,197,405.00	0.37	106.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		556,511.54	0.40	104.7	Pulse	0.30	3
1	Te		28,132.31	1.10	90.2	Pulse	0.50	3
1	Li		2,722.42	6.07	118.6	Pulse	0.30	3

Quantitation Report

File Name	104SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:00
Sample Name	FA53456-5
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.914	ug/l	6.56	1,926.77	5.288E-03	Pulse	0.50	3
As			1	0.731	ug/l	41.04	121.34	3.329E-04	Pulse	1.00	3
Mo			1	0.164	ug/l	2.62	166.67	3.004E-04	Pulse	0.50	3
Pb			1	-0.463	ug/l	-11.70	11,912.49	1.077E-03	Pulse	1.00	3
Be			1	-0.005	ug/l	-873.14	0.33	7.125E-07	Pulse	2.00	3
Ag			1	-0.011	ug/l	-50.29	114.67	2.067E-04	Pulse	0.50	3
Ba			1	37.650	ug/l	2.45	10,967.36	3.082E-03	Pulse	0.50	3
Tl			1	0.041	ug/l	10.37	384.01	3.473E-05	Pulse	0.50	3
Sn			1	0.123	ug/l	77.61	756.69	2.127E-04	Pulse	0.30	3
Sr			1	685.509	ug/l	0.80	399,628.87	1.123E-01	Pulse	0.50	3
[Pb]			1	-0.452	ug/l	-6.97	5,740.32	5.189E-04	Pulse	0.50	3
Ca			1	133036.620	ug/l	1.05	361,690.22	7.749E-01	Pulse	0.50	3
Ti			1	0.106	ug/l	208.87	5.33	1.139E-05	Pulse	0.50	3
Na			1	260170.711	ug/l	0.33	36,723,480.00	7.867E+01	Analog	1.00	3
Mg			1	35328.260	ug/l	1.11	2,135,663.33	4.575E+00	Pulse	1.00	3
K			1	11211.595	ug/l	1.45	569,982.79	1.221E+00	Pulse	1.00	3
V			1	0.982	ug/l	59.66	1,540.34	3.300E-03	Pulse	0.50	3
Mn			1	1578.494	ug/l	0.42	846,863.48	2.324E+00	Pulse	0.50	3
Fe			1	72.081	ug/l	0.75	74,910.20	2.056E-01	Pulse	0.50	3
Co			1	0.814	ug/l	4.06	2,144.79	5.887E-03	Pulse	0.50	3
Ni			1	2.148	ug/l	8.23	1,560.74	4.284E-03	Pulse	0.50	3
Cu			1	-15.987	ug/l	-1.55	56,329.07	1.546E-01	Pulse	0.50	3
Zn			1	-6.515	ug/l	-13.36	7,647.20	1.379E-02	Pulse	1.00	3
Cd			1	0.047	ug/l	0.56	28.00	5.047E-05	Pulse	0.50	3
Al			1	55.172	ug/l	9.26	1,354.38	2.902E-03	Pulse	1.00	3
Se			1	0.486	ug/l	89.88	28.11	7.904E-06	Pulse	3.00	3
Sb			1	-0.646	ug/l	-2.13	350.67	6.321E-04	Pulse	1.00	3
Se			1	2.005	ug/l	55.55	42.78	1.482E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,063,324.00	1.00	105.4	Analog	0.50	3
1	Sc		466,778.52	0.47	109.3	Pulse	0.30	3
1	Ge		364,335.13	0.27	104.8	Pulse	0.30	3
1	In		3,558,462.64	1.06	99.0	Pulse	0.30	3
1	Tb		15,800,141.00	0.39	108.7	Analog	0.50	3
1	Lu		9,230,669.33	0.62	106.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		554,748.78	0.37	104.4	Pulse	0.30	3
1	Te		28,858.09	1.05	92.5	Pulse	0.50	3
1	Li		2,779.10	2.23	121.1	Pulse	0.30	3

Quantitation Report

File Name	105SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:04
Sample Name	FA53456-7
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.594	ug/l	18.32	1,542.73	4.218E-03	Pulse	0.50	3
As			1	0.611	ug/l	15.84	106.67	2.916E-04	Pulse	1.00	3
Mo			1	1.988	ug/l	4.80	1,722.75	3.109E-03	Pulse	0.50	3
Pb			1	-0.325	ug/l	-8.62	11,823.75	1.137E-03	Pulse	1.00	3
Be			1	0.019	ug/l	684.39	0.50	1.049E-06	Pulse	2.00	3
Ag			1	-0.017	ug/l	-21.52	94.00	1.697E-04	Pulse	0.50	3
Ba			1	9.400	ug/l	5.01	2,719.55	7.763E-04	Pulse	0.50	3
Tl			1	0.017	ug/l	29.74	197.33	1.898E-05	Pulse	0.50	3
Sn			1	0.101	ug/l	21.59	730.02	2.084E-04	Pulse	0.30	3
Sr			1	1121.710	ug/l	0.44	642,996.65	1.835E-01	Pulse	0.50	3
[Pb]			1	-0.433	ug/l	-21.63	5,434.89	5.227E-04	Pulse	0.50	3
Ca			1	70844.056	ug/l	2.45	196,304.14	4.128E-01	Pulse	0.50	3
Ti			1	0.676	ug/l	31.33	18.67	3.919E-05	Pulse	0.50	3
Na			1	1411868.338	ug/l	1.86	202,947,861.33	4.267E+02	Analog	1.00	3
Mg			1	186670.794	ug/l	1.16	11,498,716.00	2.417E+01	Analog	1.00	3
K			1	51423.318	ug/l	1.84	2,607,026.25	5.481E+00	Pulse	1.00	3
V			1	1.241	ug/l	13.74	1,814.76	3.813E-03	Pulse	0.50	3
Mn			1	24.861	ug/l	1.31	13,516.73	3.695E-02	Pulse	0.50	3
Fe			1	143.093	ug/l	1.83	143,590.46	3.925E-01	Pulse	0.50	3
Co			1	0.047	ug/l	46.70	418.68	1.145E-03	Pulse	0.50	3
Ni			1	0.873	ug/l	15.56	783.35	2.141E-03	Pulse	0.50	3
Cu			1	-16.807	ug/l	-3.21	55,185.15	1.508E-01	Pulse	0.50	3
Zn			1	-8.732	ug/l	-5.55	7,193.35	1.298E-02	Pulse	1.00	3
Cd			1	-0.003	ug/l	-212.61	8.67	1.563E-05	Pulse	0.50	3
Al			1	22.573	ug/l	4.02	807.02	1.696E-03	Pulse	1.00	3
Se			1	0.271	ug/l	250.50	26.00	7.419E-06	Pulse	3.00	3
Sb			1	-0.705	ug/l	-4.99	302.33	5.457E-04	Pulse	1.00	3
Se			1	9.099	ug/l	48.71	68.56	2.514E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,397,358.67	0.24	99.1	Analog	0.50	3
1	Sc		475,709.95	1.68	111.4	Pulse	0.30	3
1	Ge		365,846.58	0.44	105.3	Pulse	0.30	3
1	In		3,503,230.35	0.45	97.5	Pulse	0.30	3
1	Tb		15,659,474.67	1.06	107.7	Analog	0.50	3
1	Lu		9,214,811.33	1.41	106.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		554,262.93	0.95	104.3	Pulse	0.30	3
1	Te		27,289.67	2.07	87.5	Pulse	0.50	3
1	Li		2,536.84	5.56	110.5	Pulse	0.30	3

Quantitation Report

File Name	106SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:07
Sample Name	FA53456-8
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.335	ug/l	14.50	1,174.71	3.349E-03	Pulse	0.50	3
As			1	0.533	ug/l	26.57	92.67	2.645E-04	Pulse	1.00	3
Mo			1	1.891	ug/l	8.49	1,575.41	2.959E-03	Pulse	0.50	3
Pb			1	-0.439	ug/l	-14.10	10,693.01	1.087E-03	Pulse	1.00	3
Be			1	0.183	ug/l	114.77	1.50	3.290E-06	Pulse	2.00	3
Ag			1	-0.023	ug/l	-20.33	73.33	1.378E-04	Pulse	0.50	3
Ba			1	14.694	ug/l	3.22	4,063.81	1.208E-03	Pulse	0.50	3
Tl			1	0.011	ug/l	20.62	149.33	1.519E-05	Pulse	0.50	3
Sn			1	0.279	ug/l	28.09	815.58	2.428E-04	Pulse	0.30	3
Sr			1	1122.982	ug/l	1.80	617,495.40	1.838E-01	Pulse	0.50	3
[Pb]			1	-0.533	ug/l	-7.47	4,941.40	5.022E-04	Pulse	0.50	3
Ca			1	73521.803	ug/l	0.92	193,265.44	4.284E-01	Pulse	0.50	3
Ti			1	0.973	ug/l	43.74	24.00	5.364E-05	Pulse	0.50	3
Na			1	1699006.234	ug/l	1.17	231,655,290.67	5.135E+02	Analog	1.00	3
Mg			1	181213.326	ug/l	1.59	10,587,501.33	2.347E+01	Analog	1.00	3
K			1	52716.133	ug/l	1.44	2,534,591.75	5.618E+00	Pulse	1.00	3
V			1	1.310	ug/l	7.40	1,782.76	3.949E-03	Pulse	0.50	3
Mn			1	11.547	ug/l	5.90	6,091.07	1.734E-02	Pulse	0.50	3
Fe			1	263.564	ug/l	0.69	249,032.99	7.096E-01	Pulse	0.50	3
Co			1	-0.057	ug/l	-26.12	178.67	5.081E-04	Pulse	0.50	3
Ni			1	0.267	ug/l	18.17	393.34	1.122E-03	Pulse	0.50	3
Cu			1	-16.795	ug/l	-2.67	52,970.40	1.509E-01	Pulse	0.50	3
Zn			1	-12.101	ug/l	-2.97	6,263.36	1.175E-02	Pulse	1.00	3
Cd			1	0.004	ug/l	381.63	10.67	2.017E-05	Pulse	0.50	3
Al			1	30.428	ug/l	10.93	895.35	1.987E-03	Pulse	1.00	3
Se			1	0.710	ug/l	47.25	28.22	8.411E-06	Pulse	3.00	3
Sb			1	-0.689	ug/l	-5.52	303.67	5.700E-04	Pulse	1.00	3
Se			1	10.013	ug/l	34.17	69.56	2.647E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,838,627.00	2.45	93.8	Analog	0.50	3
1	Sc		451,267.17	3.33	105.7	Pulse	0.30	3
1	Ge		350,945.49	2.20	101.0	Pulse	0.30	3
1	In		3,361,573.69	3.18	93.5	Pulse	0.30	3
1	Tb		14,820,890.67	3.49	102.0	Analog	0.50	3
1	Lu		8,655,659.33	2.62	100.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		533,079.56	2.92	100.3	Pulse	0.30	3
1	Te		26,193.45	3.04	84.0	Pulse	0.50	3
1	Li		2,553.51	1.29	111.2	Pulse	0.30	3

Quantitation Report

File Name	107CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:11
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.962	ug/l	0.20	1,132,371.50	3.344E+00	Pulse	0.50	3
As			1	49.204	ug/l	0.83	115,098.47	3.399E-01	Pulse	1.00	3
Mo			1	47.978	ug/l	0.49	767,878.02	1.477E+00	Pulse	0.50	3
Pb			1	43.430	ug/l	0.48	3,876,962.42	3.804E-01	Pulse	1.00	3
Be			1	54.894	ug/l	0.65	6,395.68	1.507E-02	Pulse	2.00	3
Ag			1	48.386	ug/l	1.27	2,828,549.17	5.442E+00	Pulse	0.50	3
Ba			1	47.383	ug/l	1.11	253,601.80	7.736E-02	Pulse	0.50	3
Tl			1	46.394	ug/l	5.18	6,175,748.33	6.059E-01	Mix	0.50	3
Sn			1	48.904	ug/l	1.68	621,208.40	1.895E-01	Pulse	0.30	3
Sr			1	48.717	ug/l	0.83	522,823.16	1.595E-01	Pulse	0.50	3
[Pb]			1	43.607	ug/l	1.16	1,822,926.50	1.789E-01	Pulse	0.50	3
Ca			1	4869.994	ug/l	1.26	240,831.68	5.674E-01	Pulse	0.50	3
Ti			1	48.628	ug/l	0.86	20,106.98	4.737E-02	Pulse	0.50	3
Na			1	5308.030	ug/l	0.19	13,640,812.67	3.213E+01	Analog	1.00	3
Mg			1	5294.685	ug/l	0.54	5,821,191.00	1.371E+01	Analog	1.00	3
K			1	4847.821	ug/l	0.76	4,374,321.50	1.031E+01	Pulse	1.00	3
V			1	49.433	ug/l	1.16	831,180.54	1.958E+00	Pulse	0.50	3
Mn			1	49.061	ug/l	0.27	489,297.93	1.445E+00	Pulse	0.50	3
Fe			1	5156.175	ug/l	0.48	91,909,682.67	2.714E+02	Analog	0.50	3
Co			1	49.504	ug/l	0.54	2,070,906.38	6.116E+00	Pulse	0.50	3
Ni			1	50.336	ug/l	0.77	573,309.83	1.693E+00	Pulse	0.50	3
Cu			1	49.355	ug/l	1.04	1,608,786.63	4.751E+00	Pulse	0.50	3
Zn			1	49.703	ug/l	1.16	196,530.21	3.781E-01	Pulse	1.00	3
Cd			1	48.105	ug/l	1.87	349,241.06	6.720E-01	Pulse	0.50	3
Al			1	4895.150	ug/l	0.78	1,537,360.34	3.622E+00	Pulse	1.00	3
Se			1	51.004	ug/l	1.43	7,581.95	2.313E-03	Pulse	3.00	3
Sb			1	46.480	ug/l	1.12	699,056.31	1.345E+00	Pulse	1.00	3
Se			1	49.223	ug/l	3.64	3,865.73	1.444E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,192,359.00	0.71	97.1	Analog	0.50	3
1	Sc		424,489.50	1.03	99.4	Pulse	0.30	3
1	Ge		338,612.96	0.22	97.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,278,369.31	0.57	91.2	Pulse	0.30	3
1	Tb		14,571,837.00	0.40	100.2	Analog	0.50	3
1	Lu		8,456,862.33	0.86	97.9	Analog	0.50	3
1	Ge		519,768.90	0.76	97.8	Pulse	0.30	3
1	Te		26,775.57	1.79	85.8	Pulse	0.50	3
1	Li		2,593.51	3.62	113.0	Pulse	0.30	3

Quantitation Report

File Name	108_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:15
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	100.893	ug/l	0.53	2,300,663.08	6.751E+00	Pulse	0.50	3
As			1	99.003	ug/l	1.22	233,031.98	6.839E-01	Pulse	1.00	3
Mo			1	96.843	ug/l	0.86	1,559,435.75	2.982E+00	Pulse	0.50	3
Pb			1	96.762	ug/l	2.02	8,531,125.00	8.459E-01	Analog	1.00	3
Be			1	107.077	ug/l	2.13	12,902.75	2.939E-02	Pulse	2.00	3
Ag			1	101.165	ug/l	3.95	5,953,415.17	1.138E+01	Mix	0.50	3
Ba			1	94.260	ug/l	1.27	508,972.71	1.539E-01	Pulse	0.50	3
Tl			1	97.499	ug/l	1.75	12,841,377.67	1.273E+00	Analog	0.50	3
Sn			1	99.180	ug/l	1.61	1,270,439.81	3.841E-01	Pulse	0.30	3
Sr			1	99.152	ug/l	1.51	1,072,371.54	3.242E-01	Pulse	0.50	3
[Pb]			1	88.769	ug/l	0.70	3,666,168.75	3.635E-01	Pulse	0.50	3
Ca			1	9646.357	ug/l	1.73	493,308.18	1.124E+00	Pulse	0.50	3
Ti			1	97.909	ug/l	1.99	41,868.59	9.537E-02	Pulse	0.50	3
Na			1	10492.562	ug/l	2.68	27,860,437.33	6.347E+01	Analog	1.00	3
Mg			1	10392.949	ug/l	2.48	11,816,703.33	2.692E+01	Analog	1.00	3
K			1	10111.377	ug/l	2.27	9,420,437.33	2.146E+01	Analog	1.00	3
V			1	97.723	ug/l	1.90	1,698,949.79	3.870E+00	Pulse	0.50	3
Mn			1	98.770	ug/l	0.83	991,276.79	2.909E+00	Pulse	0.50	3
Fe			1	10538.597	ug/l	1.00	189,043,408.00	5.548E+02	Analog	0.50	3
Co			1	99.552	ug/l	1.22	4,190,629.58	1.230E+01	Pulse	0.50	3
Ni			1	101.216	ug/l	1.33	1,159,886.17	3.404E+00	Pulse	0.50	3
Cu			1	99.575	ug/l	0.32	3,187,759.42	9.354E+00	Pulse	0.50	3
Zn			1	100.253	ug/l	0.91	390,298.48	7.463E-01	Pulse	1.00	3
Cd			1	96.246	ug/l	0.96	703,077.09	1.344E+00	Pulse	0.50	3
Al			1	9709.567	ug/l	2.05	3,153,461.25	7.183E+00	Pulse	1.00	3
Se			1	102.732	ug/l	1.95	15,384.30	4.651E-03	Pulse	3.00	3
Sb			1	93.486	ug/l	1.57	1,413,780.37	2.704E+00	Pulse	1.00	3
Se			1	99.039	ug/l	1.03	7,691.11	2.894E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,087,398.00	2.01	96.1	Analog	0.50	3
1	Sc		439,181.70	2.81	102.9	Pulse	0.30	3
1	Ge		340,798.47	1.48	98.0	Pulse	0.30	3
1	In		3,308,178.97	2.17	92.0	Pulse	0.30	3
1	Tb		14,722,336.67	2.60	101.3	Analog	0.50	3
1	Lu		8,594,586.67	1.15	99.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		523,004.60	1.69	98.4	Pulse	0.30	3
1	Te		26,582.00	2.15	85.2	Pulse	0.50	3
1	Li		2,497.95	3.55	108.8	Pulse	0.30	3

Quantitation Report

File Name	109_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:18
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.003	ug/l	131.47	811.35	2.414E-03	Pulse	0.50	3
As			1	0.003	ug/l	185.98	33.33	9.912E-05	Pulse	1.00	3
Mo			1	0.023	ug/l	4.17	384.68	7.465E-04	Pulse	0.50	3
Pb			1	-0.022	ug/l	-17.34	11,232.03	1.083E-03	Pulse	1.00	3
Be			1	0.013	ug/l	18.79	1.83	4.398E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	11.36	486.68	9.443E-04	Pulse	0.50	3
Ba			1	0.001	ug/l	288.28	36.00	1.108E-05	Pulse	0.50	3
Tl			1	0.023	ug/l	17.21	3,196.98	3.084E-04	Pulse	0.50	3
Sn			1	0.038	ug/l	19.58	1,090.04	3.349E-04	Pulse	0.30	3
Sr			1	0.013	ug/l	29.41	1,298.05	3.989E-04	Pulse	0.50	3
[Pb]			1	-0.026	ug/l	-3.74	5,232.15	5.043E-04	Pulse	0.50	3
Ca			1	0.882	ug/l	43.76	158.67	3.806E-04	Pulse	0.50	3
Ti			1	0.010	ug/l	57.40	6.67	1.602E-05	Pulse	0.50	3
Na			1	5.589	ug/l	7.73	36,685.39	8.802E-02	Pulse	1.00	3
Mg			1	0.527	ug/l	14.11	723.01	1.734E-03	Pulse	1.00	3
K			1	1.678	ug/l	9.64	15,369.31	3.688E-02	Pulse	1.00	3
V			1	-0.004	ug/l	-97.65	496.68	1.192E-03	Pulse	0.50	3
Mn			1	0.005	ug/l	57.44	162.67	4.839E-04	Pulse	0.50	3
Fe			1	0.353	ug/l	25.72	11,590.87	3.449E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-4.92	180.00	5.357E-04	Pulse	0.50	3
Ni			1	0.000	ug/l	902.19	230.00	6.843E-04	Pulse	0.50	3
Cu			1	-0.492	ug/l	-4.32	61,420.54	1.828E-01	Pulse	0.50	3
Zn			1	-0.256	ug/l	-11.02	7,365.42	1.429E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	34.13	30.00	5.820E-05	Pulse	0.50	3
Al			1	0.045	ug/l	279.76	373.00	8.948E-04	Pulse	1.00	3
Se			1	0.022	ug/l	140.92	25.45	7.817E-06	Pulse	3.00	3
Sb			1	-0.027	ug/l	-7.07	407.01	7.898E-04	Pulse	1.00	3
Se			1	-0.093	ug/l	-9.86	25.56	9.206E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,374,008.67	0.89	98.9	Analog	0.50	3
1	Sc		416,748.08	0.50	97.6	Pulse	0.30	3

Quantitation Report

1	Ge		335,990.06	0.39	96.7	Pulse	0.30	3
1	In		3,254,242.65	0.40	90.5	Pulse	0.30	3
1	Tb		14,345,513.00	0.55	98.7	Analog	0.50	3
1	Lu		8,289,317.33	0.02	95.9	Analog	0.50	3
1	Ge		515,279.37	0.33	96.9	Pulse	0.30	3
1	Te		27,757.06	0.95	89.0	Pulse	0.50	3
1	Li		2,497.95	5.00	108.8	Pulse	0.30	3

Quantitation Report

File Name	110SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:22
Sample Name	FA53456-9
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.455	ug/l	17.47	1,324.71	3.753E-03	Pulse	0.50	3
As			1	0.663	ug/l	20.94	109.33	3.095E-04	Pulse	1.00	3
Mo			1	2.095	ug/l	3.56	1,752.75	3.274E-03	Pulse	0.50	3
Pb			1	-0.462	ug/l	-8.25	10,677.35	1.077E-03	Pulse	1.00	3
Be			1	0.104	ug/l	134.20	1.00	2.209E-06	Pulse	2.00	3
Ag			1	0.065	ug/l	3.65	338.67	6.326E-04	Pulse	0.50	3
Ba			1	8.904	ug/l	2.17	2,465.51	7.359E-04	Pulse	0.50	3
Tl			1	0.126	ug/l	17.78	896.03	9.033E-05	Pulse	0.50	3
Sn			1	0.530	ug/l	23.40	976.70	2.915E-04	Pulse	0.30	3
Sr			1	1095.815	ug/l	1.41	600,740.46	1.793E-01	Pulse	0.50	3
[Pb]			1	-0.533	ug/l	-16.59	4,976.74	5.022E-04	Pulse	0.50	3
Ca			1	69371.303	ug/l	1.01	182,189.76	4.042E-01	Pulse	0.50	3
Ti			1	0.844	ug/l	23.26	21.33	4.736E-05	Pulse	0.50	3
Na			1	1409693.146	ug/l	0.87	192,044,624.00	4.260E+02	Analog	1.00	3
Mg			1	184218.927	ug/l	0.91	10,753,718.33	2.386E+01	Analog	1.00	3
K			1	51140.029	ug/l	1.02	2,457,214.33	5.451E+00	Pulse	1.00	3
V			1	1.030	ug/l	9.41	1,530.06	3.395E-03	Pulse	0.50	3
Mn			1	19.319	ug/l	0.41	10,162.01	2.879E-02	Pulse	0.50	3
Fe			1	216.068	ug/l	0.98	206,363.33	5.846E-01	Pulse	0.50	3
Co			1	0.069	ug/l	28.34	452.01	1.280E-03	Pulse	0.50	3
Ni			1	0.320	ug/l	15.44	427.34	1.211E-03	Pulse	0.50	3
Cu			1	-17.376	ug/l	-2.95	52,331.23	1.482E-01	Pulse	0.50	3
Zn			1	-6.308	ug/l	-6.00	7,420.44	1.386E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	183.39	10.67	1.992E-05	Pulse	0.50	3
Al			1	16.852	ug/l	22.04	669.68	1.485E-03	Pulse	1.00	3
Se			1	0.011	ug/l	1446.11	22.89	6.832E-06	Pulse	3.00	3
Sb			1	-0.532	ug/l	-6.47	426.01	7.956E-04	Pulse	1.00	3
Se			1	10.156	ug/l	15.16	69.44	2.667E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,911,272.67	1.22	94.5	Analog	0.50	3
1	Sc		450,784.60	1.16	105.6	Pulse	0.30	3
1	Ge		353,024.70	0.59	101.6	Pulse	0.30	3
1	In		3,350,243.83	0.29	93.2	Pulse	0.30	3
1	Tb		14,812,266.33	0.60	101.9	Analog	0.50	3
1	Lu		8,652,406.33	1.63	100.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		535,350.99	0.42	100.7	Pulse	0.30	3
1	Te		26,044.54	1.02	83.5	Pulse	0.50	3
1	Li		2,450.16	0.68	106.7	Pulse	0.30	3

Quantitation Report

File Name	111SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:25
Sample Name	FA53465-3
Sample Type	Sample
Comment	
Prep Dilution	100.000
Auto Dilution	N/A
Total Dilution	100.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.270	ug/l	18.56	1,062.04	3.080E-03	Pulse	0.50	3
As			1	1.074	ug/l	26.56	53.33	1.547E-04	Pulse	1.00	3
Mo			1	0.873	ug/l	21.07	166.67	3.166E-04	Pulse	0.50	3
Pb			1	-3.574	ug/l	-5.85	10,167.36	9.670E-04	Pulse	1.00	3
Be			1	0.136	ug/l	310.72	0.50	1.157E-06	Pulse	2.00	3
Ag			1	0.063	ug/l	46.09	178.00	3.380E-04	Pulse	0.50	3
Ba			1	83.640	ug/l	4.24	4,593.93	1.374E-03	Pulse	0.50	3
Tl			1	0.300	ug/l	31.32	493.34	4.703E-05	Pulse	0.50	3
Sn			1	0.521	ug/l	9.90	698.91	2.090E-04	Pulse	0.30	3
Sr			1	243.765	ug/l	1.16	27,811.17	8.317E-03	Pulse	0.50	3
[Pb]			1	-4.037	ug/l	-4.82	4,692.00	4.462E-04	Pulse	0.50	3
Ca			1	56778.630	ug/l	1.45	28,595.48	6.640E-02	Pulse	0.50	3
Ti			1	1.586	ug/l	97.16	9.33	2.170E-05	Pulse	0.50	3
Na			1	10124.309	ug/l	0.78	286,888.99	6.661E-01	Pulse	1.00	3
Mg			1	14827.334	ug/l	0.46	165,541.98	3.844E-01	Pulse	1.00	3
K			1	6165.647	ug/l	0.34	70,613.30	1.640E-01	Pulse	1.00	3
V			1	7.151	ug/l	2.27	1,803.43	4.187E-03	Pulse	0.50	3
Mn			1	5860.615	ug/l	0.55	595,082.90	1.726E+00	Pulse	0.50	3
Fe			1	11421.554	ug/l	0.41	2,078,207.04	6.028E+00	Pulse	0.50	3
Co			1	17.104	ug/l	1.45	7,578.84	2.198E-02	Pulse	0.50	3
Ni			1	23.151	ug/l	3.53	2,916.23	8.457E-03	Pulse	0.50	3
Cu			1	-72.469	ug/l	-1.70	55,661.15	1.615E-01	Pulse	0.50	3
Zn			1	-60.325	ug/l	-2.80	6,199.01	1.176E-02	Pulse	1.00	3
Cd			1	0.046	ug/l	90.70	12.67	2.404E-05	Pulse	0.50	3
Al			1	31.781	ug/l	21.24	472.01	1.096E-03	Pulse	1.00	3
Se			1	65.141	ug/l	161.91	121.14	3.626E-05	Pulse	3.00	3
Sb			1	-3.360	ug/l	-4.81	313.00	5.939E-04	Pulse	1.00	3
Se			1	1.619	ug/l	294.76	35.67	1.237E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,516,204.33	1.46	100.2	Analog	0.50	3
1	Sc		430,656.78	1.05	100.9	Pulse	0.30	3
1	Ge		344,760.33	0.80	99.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,343,704.38	1.43	93.0	Pulse	0.30	3
1	Tb		14,498,217.00	1.30	99.7	Analog	0.50	3
1	Lu		8,402,987.83	1.29	97.3	Analog	0.50	3
1	Ge		526,956.02	0.95	99.1	Pulse	0.30	3
1	Te		28,828.07	0.34	92.4	Pulse	0.50	3
1	Li		2,480.17	5.21	108.0	Pulse	0.30	3

Quantitation Report

File Name	112SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:29
Sample Name	FA53465-4
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	3.584	ug/l	0.81	8,758.00	2.621E-02	Pulse	0.50	3
As			1	0.320	ug/l	18.28	100.67	3.015E-04	Pulse	1.00	3
Mo			1	0.199	ug/l	4.37	337.33	6.611E-04	Pulse	0.50	3
Pb			1	-0.303	ug/l	-6.40	9,987.26	1.015E-03	Pulse	1.00	3
Be			1	0.113	ug/l	42.75	1.67	3.884E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	42.69	190.00	3.723E-04	Pulse	0.50	3
Ba			1	608.755	ug/l	1.30	319,946.61	9.938E-02	Pulse	0.50	3
Tl			1	0.020	ug/l	15.15	332.67	3.382E-05	Pulse	0.50	3
Sn			1	0.381	ug/l	27.94	1,082.26	3.365E-04	Pulse	0.30	3
Sr			1	1444.111	ug/l	1.26	1,519,664.00	4.720E-01	Pulse	0.50	3
[Pb]			1	-0.378	ug/l	-8.61	4,495.27	4.568E-04	Pulse	0.50	3
Ca			1	206226.202	ug/l	1.40	1,028,946.29	2.402E+00	Pulse	0.50	3
Ti			1	3.317	ug/l	29.96	141.33	3.293E-04	Pulse	0.50	3
Na			1	402461.051	ug/l	0.79	104,233,413.33	2.433E+02	Analog	1.00	3
Mg			1	77972.996	ug/l	0.77	8,652,474.33	2.020E+01	Analog	1.00	3
K			1	66286.645	ug/l	0.91	6,031,698.67	1.408E+01	Analog	1.00	3
V			1	196.057	ug/l	0.81	333,088.00	7.775E-01	Pulse	0.50	3
Mn			1	1169.368	ug/l	1.36	1,150,844.13	3.444E+00	Pulse	0.50	3
Fe			1	294.297	ug/l	0.84	523,059.55	1.565E+00	Pulse	0.50	3
Co			1	0.481	ug/l	2.01	2,273.48	6.803E-03	Pulse	0.50	3
Ni			1	2.186	ug/l	4.52	2,680.86	8.023E-03	Pulse	0.50	3
Cu			1	-9.125	ug/l	-1.44	48,206.63	1.442E-01	Pulse	0.50	3
Zn			1	-3.483	ug/l	-19.10	6,948.93	1.362E-02	Pulse	1.00	3
Cd			1	0.114	ug/l	22.14	90.00	1.765E-04	Pulse	0.50	3
Al			1	57.671	ug/l	3.81	2,196.79	5.127E-03	Pulse	1.00	3
Se			1	0.351	ug/l	46.25	27.00	8.391E-06	Pulse	3.00	3
Sb			1	-0.209	ug/l	-8.83	490.68	9.618E-04	Pulse	1.00	3
Se			1	1.750	ug/l	21.06	41.56	1.699E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,842,677.33	1.09	93.8	Analog	0.50	3
1	Sc		428,444.92	0.86	100.4	Pulse	0.30	3
1	Ge		334,219.87	1.21	96.2	Pulse	0.30	3
1	In		3,219,668.42	1.27	89.6	Pulse	0.30	3
1	Tb		14,522,375.00	0.92	99.9	Analog	0.50	3
1	Lu		8,409,750.50	0.66	97.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		510,290.21	1.12	96.0	Pulse	0.30	3
1	Te		24,457.68	0.47	78.4	Pulse	0.50	3
1	Li		2,532.40	7.89	110.3	Pulse	0.30	3

Quantitation Report

File Name	113SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:33
Sample Name	FA53465-6
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	3.505	ug/l	1.76	8,633.94	2.567E-02	Pulse	0.50	3
As			1	0.333	ug/l	22.86	104.33	3.103E-04	Pulse	1.00	3
Mo			1	0.190	ug/l	3.35	326.00	6.336E-04	Pulse	0.50	3
Pb			1	-0.215	ug/l	-10.97	10,797.77	1.092E-03	Pulse	1.00	3
Be			1	0.070	ug/l	92.38	1.17	2.695E-06	Pulse	2.00	3
Ag			1	0.004	ug/l	64.18	161.33	3.139E-04	Pulse	0.50	3
Ba			1	609.745	ug/l	0.36	322,197.55	9.954E-02	Pulse	0.50	3
Tl			1	0.021	ug/l	26.32	351.34	3.549E-05	Pulse	0.50	3
Sn			1	0.282	ug/l	8.66	964.47	2.979E-04	Pulse	0.30	3
Sr			1	1444.039	ug/l	0.44	1,527,760.88	4.720E-01	Pulse	0.50	3
[Pb]			1	-0.255	ug/l	-19.48	5,014.09	5.069E-04	Pulse	0.50	3
Ca			1	207668.645	ug/l	1.84	1,044,826.88	2.419E+00	Pulse	0.50	3
Ti			1	3.901	ug/l	12.40	166.67	3.863E-04	Pulse	0.50	3
Na			1	402325.971	ug/l	1.25	105,074,858.67	2.432E+02	Analog	1.00	3
Mg			1	77581.393	ug/l	1.89	8,680,713.67	2.009E+01	Analog	1.00	3
K			1	66216.941	ug/l	1.19	6,076,159.83	1.406E+01	Analog	1.00	3
V			1	196.277	ug/l	1.22	336,268.03	7.783E-01	Pulse	0.50	3
Mn			1	1167.826	ug/l	0.95	1,156,525.75	3.439E+00	Pulse	0.50	3
Fe			1	189.415	ug/l	0.56	340,641.17	1.013E+00	Pulse	0.50	3
Co			1	0.453	ug/l	9.21	2,170.13	6.454E-03	Pulse	0.50	3
Ni			1	9.826	ug/l	1.34	11,336.09	3.371E-02	Pulse	0.50	3
Cu			1	-8.547	ug/l	-3.19	50,289.25	1.495E-01	Pulse	0.50	3
Zn			1	-4.185	ug/l	-9.71	6,742.85	1.311E-02	Pulse	1.00	3
Cd			1	0.077	ug/l	18.87	64.67	1.258E-04	Pulse	0.50	3
Al			1	69.347	ug/l	5.24	2,589.17	5.991E-03	Pulse	1.00	3
Se			1	0.287	ug/l	39.52	26.22	8.105E-06	Pulse	3.00	3
Sb			1	-0.218	ug/l	-9.40	481.01	9.355E-04	Pulse	1.00	3
Se			1	1.441	ug/l	63.87	40.33	1.609E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,893,842.67	1.12	94.3	Analog	0.50	3
1	Sc		432,092.14	1.74	101.2	Pulse	0.30	3
1	Ge		336,285.17	0.47	96.7	Pulse	0.30	3
1	In		3,236,724.94	1.21	90.0	Pulse	0.30	3
1	Tb		14,513,543.00	1.32	99.8	Analog	0.50	3
1	Lu		8,524,648.33	1.16	98.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		514,389.65	1.20	96.8	Pulse	0.30	3
1	Te		25,070.53	1.37	80.4	Pulse	0.50	3
1	Li		2,475.72	1.03	107.8	Pulse	0.30	3

Quantitation Report

File Name	114SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:36
Sample Name	CRIA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.016	ug/l	0.61	24,183.69	7.017E-02	Pulse	0.50	3
As			1	0.968	ug/l	1.68	2,331.48	6.766E-03	Pulse	1.00	3
Mo			1	0.953	ug/l	0.68	15,391.69	2.938E-02	Pulse	0.50	3
Pb			1	0.766	ug/l	0.94	82,809.71	7.964E-03	Pulse	1.00	3
Be			1	1.095	ug/l	9.09	130.33	3.013E-04	Pulse	2.00	3
Ag			1	0.980	ug/l	0.42	57,879.38	1.105E-01	Pulse	0.50	3
Ba			1	0.951	ug/l	0.29	5,159.42	1.562E-03	Pulse	0.50	3
Tl			1	0.860	ug/l	0.70	116,858.23	1.124E-02	Pulse	0.50	3
Sn			1	1.125	ug/l	0.40	15,011.74	4.545E-03	Pulse	0.30	3
Sr			1	0.991	ug/l	3.34	11,867.76	3.594E-03	Pulse	0.50	3
[Pb]			1	0.769	ug/l	1.56	39,047.22	3.755E-03	Pulse	0.50	3
Ca			1	100.907	ug/l	1.03	5,199.37	1.203E-02	Pulse	0.50	3
Ti			1	0.947	ug/l	11.25	402.01	9.290E-04	Pulse	0.50	3
Na			1	109.252	ug/l	0.83	308,873.48	7.145E-01	Pulse	1.00	3
Mg			1	104.648	ug/l	0.66	117,323.45	2.714E-01	Pulse	1.00	3
K			1	99.060	ug/l	1.49	105,131.36	2.432E-01	Pulse	1.00	3
V			1	1.013	ug/l	0.75	17,923.58	4.146E-02	Pulse	0.50	3
Mn			1	1.019	ug/l	1.21	10,461.52	3.036E-02	Pulse	0.50	3
Fe			1	99.285	ug/l	1.02	1,806,471.58	5.242E+00	Pulse	0.50	3
Co			1	0.996	ug/l	0.81	42,698.98	1.239E-01	Pulse	0.50	3
Ni			1	1.029	ug/l	3.18	12,160.51	3.529E-02	Pulse	0.50	3
Cu			1	-0.993	ug/l	-0.78	47,170.82	1.369E-01	Pulse	0.50	3
Zn			1	-0.183	ug/l	-31.90	7,767.24	1.483E-02	Pulse	1.00	3
Cd			1	0.959	ug/l	0.78	7,028.02	1.342E-02	Pulse	0.50	3
Al			1	99.202	ug/l	0.81	32,093.74	7.424E-02	Pulse	1.00	3
Se			1	1.071	ug/l	8.94	182.44	5.523E-05	Pulse	3.00	3
Sb			1	0.879	ug/l	3.27	14,125.43	2.697E-02	Pulse	1.00	3
Se			1	0.821	ug/l	8.96	99.45	3.578E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,398,494.00	1.40	99.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		432,301.68	1.68	101.3	Pulse	0.30	3
1	Ge		344,628.82	1.11	99.1	Pulse	0.30	3
1	In		3,302,798.48	1.87	91.9	Pulse	0.30	3
1	Tb		14,455,446.33	1.08	99.4	Analog	0.50	3
1	Lu		8,281,365.33	1.99	95.9	Analog	0.50	3
1	Ge		523,893.80	1.62	98.5	Pulse	0.30	3
1	Te		27,813.83	2.08	89.2	Pulse	0.50	3
1	Li		2,389.04	4.54	104.1	Pulse	0.30	3

Quantitation Report

File Name	115SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:40
Sample Name	ICSA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.291	ug/l	0.86	28,231.06	8.859E-02	Pulse	0.50	3
As			1	0.080	ug/l	13.82	201.67	6.321E-04	Pulse	1.00	3
Mo			1	2109.313	ug/l	0.19	30,772,448.00	6.495E+01	Analog	0.50	3
Pb			1	-0.015	ug/l	-13.42	9,573.02	1.145E-03	Pulse	1.00	3
Be			1	0.018	ug/l	81.18	2.50	5.831E-06	Pulse	2.00	3
Ag			1	0.021	ug/l	2.19	1,221.38	2.578E-03	Pulse	0.50	3
Ba			1	0.083	ug/l	8.24	435.34	1.440E-04	Pulse	0.50	3
Tl			1	0.004	ug/l	8.48	554.68	6.631E-05	Pulse	0.50	3
Sn			1	0.094	ug/l	5.11	1,666.76	5.523E-04	Pulse	0.30	3
Sr			1	0.980	ug/l	3.01	10,740.42	3.558E-03	Pulse	0.50	3
[Pb]			1	-0.017	ug/l	-12.87	4,545.29	5.436E-04	Pulse	0.50	3
Ca			1	91658.872	ug/l	1.07	4,596,355.17	1.067E+01	Pulse	0.50	3
Ti			1	1966.951	ug/l	0.76	824,893.58	1.916E+00	Pulse	0.50	3
Na			1	104356.906	ug/l	0.21	271,603,706.67	6.308E+02	Analog	1.00	3
Mg			1	103251.114	ug/l	0.01	115,150,765.33	2.674E+02	Analog	1.00	3
K			1	103036.780	ug/l	1.07	94,019,312.00	2.184E+02	Analog	1.00	3
V			1	0.009	ug/l	30.71	731.35	1.698E-03	Pulse	0.50	3
Mn			1	0.284	ug/l	1.01	2,773.54	8.702E-03	Pulse	0.50	3
Fe			1	104333.210	ug/l	0.61	1,750,320,256.00	5.492E+03	Analog	0.50	3
Co			1	0.006	ug/l	30.76	528.68	1.657E-03	Pulse	0.50	3
Ni			1	0.123	ug/l	4.06	1,528.07	4.796E-03	Pulse	0.50	3
Cu			1	-1.975	ug/l	-0.80	14,923.78	4.683E-02	Pulse	0.50	3
Zn			1	-0.571	ug/l	-0.70	5,683.85	1.200E-02	Pulse	1.00	3
Cd			1	0.387	ug/l	5.12	2,570.19	5.423E-03	Pulse	0.50	3
Al			1	97850.902	ug/l	0.70	31,166,984.00	7.238E+01	Analog	1.00	3
Se			1	0.054	ug/l	22.01	28.00	9.267E-06	Pulse	3.00	3
Sb			1	0.007	ug/l	15.86	842.69	1.779E-03	Pulse	1.00	3
Se			1	0.036	ug/l	158.17	29.44	1.294E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,360,324.67	1.25	79.7	Analog	0.50	3
1	Sc		430,588.72	1.17	100.9	Pulse	0.30	3
1	Ge		318,693.43	1.36	91.7	Pulse	0.30	3
1	In		3,019,163.98	2.18	84.0	Pulse	0.30	3
1	Tb		13,432,319.33	2.00	92.4	Analog	0.50	3
1	Lu		7,945,111.17	2.48	92.0	Analog	0.50	3
1	Ge		473,793.21	1.22	89.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		22,774.86	1.52	73.0	Pulse	0.50	3
1	Li		2,033.45	1.02	88.6	Pulse	0.30	3

Quantitation Report

File Name	116SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:44
Sample Name	ICSAB
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	21.557	ug/l	0.44	467,413.91	1.444E+00	Pulse	0.50	3
As			1	19.334	ug/l	0.61	43,244.62	1.336E-01	Pulse	1.00	3
Mo			1	2128.987	ug/l	1.01	31,747,684.00	6.555E+01	Analog	0.50	3
Pb			1	0.001	ug/l	153.28	11,205.34	1.290E-03	Pulse	1.00	3
Be			1	0.014	ug/l	1.05	2.00	4.545E-06	Pulse	2.00	3
Ag			1	17.021	ug/l	1.03	927,218.92	1.915E+00	Pulse	0.50	3
Ba			1	0.076	ug/l	12.69	412.01	1.330E-04	Pulse	0.50	3
Tl			1	0.003	ug/l	6.27	462.01	5.319E-05	Pulse	0.50	3
Sn			1	0.090	ug/l	5.50	1,666.76	5.376E-04	Pulse	0.30	3
Sr			1	0.968	ug/l	3.73	10,904.53	3.517E-03	Pulse	0.50	3
[Pb]			1	0.003	ug/l	365.97	5,403.54	6.221E-04	Pulse	0.50	3
Ca			1	92141.573	ug/l	1.66	4,721,566.17	1.073E+01	Pulse	0.50	3
Ti			1	1956.237	ug/l	1.45	838,402.54	1.905E+00	Pulse	0.50	3
Na			1	103903.178	ug/l	1.35	276,346,293.33	6.280E+02	Analog	1.00	3
Mg			1	102535.926	ug/l	1.27	116,862,357.33	2.656E+02	Analog	1.00	3
K			1	103146.941	ug/l	0.77	96,189,704.00	2.186E+02	Analog	1.00	3
V			1	0.012	ug/l	8.32	806.69	1.833E-03	Pulse	0.50	3
Mn			1	20.221	ug/l	1.04	192,825.59	5.958E-01	Pulse	0.50	3
Fe			1	105422.536	ug/l	0.64	1,796,046,165.33	5.549E+03	Analog	0.50	3
Co			1	19.118	ug/l	0.19	764,622.17	2.362E+00	Pulse	0.50	3
Ni			1	18.570	ug/l	0.78	202,302.04	6.251E-01	Pulse	0.50	3
Cu			1	16.586	ug/l	1.02	565,736.38	1.748E+00	Pulse	0.50	3
Zn			1	17.566	ug/l	0.66	69,782.44	1.441E-01	Pulse	1.00	3
Cd			1	17.947	ug/l	0.86	121,422.32	2.507E-01	Pulse	0.50	3
Al			1	98217.283	ug/l	1.41	31,969,111.33	7.265E+01	Analog	1.00	3
Se			1	0.048	ug/l	61.72	27.89	8.990E-06	Pulse	3.00	3
Sb			1	0.010	ug/l	24.82	898.36	1.854E-03	Pulse	1.00	3
Se			1	0.044	ug/l	156.02	30.89	1.319E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,688,099.33	0.94	82.8	Analog	0.50	3
1	Sc		440,059.99	0.87	103.1	Pulse	0.30	3
1	Ge		323,659.98	0.59	93.1	Pulse	0.30	3
1	In		3,100,590.23	0.94	86.3	Pulse	0.30	3
1	Tb		13,969,747.67	1.40	96.1	Analog	0.50	3
1	Lu		8,241,572.83	0.87	95.4	Analog	0.50	3
1	Ge		484,321.51	0.88	91.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		23,429.66	1.07	75.1	Pulse	0.50	3
1	Li		1,986.78	4.41	86.5	Pulse	0.30	3

Quantitation Report

File Name	117CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:47
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.784	ug/l	0.75	1,136,241.08	3.332E+00	Pulse	0.50	3
As			1	49.118	ug/l	0.67	115,705.41	3.393E-01	Pulse	1.00	3
Mo			1	49.362	ug/l	0.62	791,682.23	1.520E+00	Pulse	0.50	3
Pb			1	43.376	ug/l	0.27	4,102,290.92	3.799E-01	Pulse	1.00	3
Be			1	52.789	ug/l	0.87	6,183.11	1.449E-02	Pulse	2.00	3
Ag			1	50.023	ug/l	1.39	2,930,326.75	5.626E+00	Pulse	0.50	3
Ba			1	47.860	ug/l	1.15	262,728.66	7.814E-02	Pulse	0.50	3
Tl			1	48.168	ug/l	0.75	6,792,198.17	6.290E-01	Analog	0.50	3
Sn			1	49.170	ug/l	0.45	640,631.23	1.905E-01	Pulse	0.30	3
Sr			1	48.222	ug/l	0.36	530,798.21	1.579E-01	Pulse	0.50	3
[Pb]			1	43.685	ug/l	0.59	1,934,769.21	1.792E-01	Pulse	0.50	3
Ca			1	4799.795	ug/l	0.41	238,641.88	5.592E-01	Pulse	0.50	3
Ti			1	47.928	ug/l	1.55	19,924.16	4.669E-02	Pulse	0.50	3
Na			1	5153.477	ug/l	0.61	13,314,792.33	3.120E+01	Analog	1.00	3
Mg			1	5135.593	ug/l	0.55	5,676,407.17	1.330E+01	Analog	1.00	3
K			1	4706.247	ug/l	0.45	4,269,715.17	1.001E+01	Pulse	1.00	3
V			1	49.160	ug/l	0.24	831,037.48	1.947E+00	Pulse	0.50	3
Mn			1	48.427	ug/l	0.41	486,362.66	1.426E+00	Pulse	0.50	3
Fe			1	5199.318	ug/l	0.83	93,328,968.00	2.737E+02	Analog	0.50	3
Co			1	49.577	ug/l	0.61	2,088,489.71	6.125E+00	Pulse	0.50	3
Ni			1	50.177	ug/l	0.30	575,506.25	1.688E+00	Pulse	0.50	3
Cu			1	49.132	ug/l	0.71	1,613,116.33	4.731E+00	Pulse	0.50	3
Zn			1	50.061	ug/l	1.14	198,306.78	3.807E-01	Pulse	1.00	3
Cd			1	49.145	ug/l	0.90	357,558.99	6.865E-01	Pulse	0.50	3
Al			1	4709.131	ug/l	0.60	1,486,857.37	3.484E+00	Pulse	1.00	3
Se			1	50.910	ug/l	1.00	7,762.14	2.308E-03	Pulse	3.00	3
Sb			1	47.710	ug/l	0.53	719,067.25	1.381E+00	Pulse	1.00	3
Se			1	48.633	ug/l	1.96	3,850.95	1.427E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,797,837.67	0.03	102.9	Analog	0.50	3
1	Sc		426,745.72	0.46	100.0	Pulse	0.30	3
1	Ge		340,987.77	0.25	98.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,362,427.16	0.11	93.5	Pulse	0.30	3
1	Tb		15,391,025.67	0.66	105.9	Analog	0.50	3
1	Lu		9,018,462.33	0.12	104.4	Analog	0.50	3
1	Ge		520,854.30	0.36	98.0	Pulse	0.30	3
1	Te		26,991.93	1.77	86.5	Pulse	0.50	3
1	Li		2,354.60	2.48	102.6	Pulse	0.30	3

Quantitation Report

File Name	118_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:51
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	99.235	ug/l	0.31	2,283,102.50	6.640E+00	Pulse	0.50	3
As			1	97.474	ug/l	0.67	231,506.40	6.733E-01	Pulse	1.00	3
Mo			1	98.166	ug/l	1.15	1,584,473.96	3.023E+00	Pulse	0.50	3
Pb			1	96.583	ug/l	0.92	8,873,014.00	8.444E-01	Analog	1.00	3
Be			1	106.347	ug/l	1.18	12,566.38	2.919E-02	Pulse	2.00	3
Ag			1	105.953	ug/l	0.76	6,246,528.50	1.192E+01	Analog	0.50	3
Ba			1	95.606	ug/l	0.61	520,313.66	1.561E-01	Pulse	0.50	3
Tl			1	97.450	ug/l	1.38	13,373,301.00	1.273E+00	Analog	0.50	3
Sn			1	99.427	ug/l	0.66	1,283,717.86	3.851E-01	Pulse	0.30	3
Sr			1	98.072	ug/l	1.31	1,069,061.54	3.207E-01	Pulse	0.50	3
[Pb]			1	87.427	ug/l	0.85	3,761,829.33	3.580E-01	Pulse	0.50	3
Ca			1	9638.328	ug/l	1.19	483,337.42	1.123E+00	Pulse	0.50	3
Ti			1	96.236	ug/l	1.41	40,356.14	9.374E-02	Pulse	0.50	3
Na			1	10446.153	ug/l	0.37	27,205,230.67	6.319E+01	Analog	1.00	3
Mg			1	10346.246	ug/l	0.22	11,537,520.67	2.680E+01	Analog	1.00	3
K			1	10039.027	ug/l	0.56	9,172,486.33	2.131E+01	Analog	1.00	3
V			1	98.242	ug/l	0.95	1,674,891.50	3.890E+00	Pulse	0.50	3
Mn			1	97.028	ug/l	0.27	982,522.54	2.857E+00	Pulse	0.50	3
Fe			1	10365.988	ug/l	1.00	187,620,890.67	5.457E+02	Analog	0.50	3
Co			1	97.577	ug/l	0.20	4,144,636.25	1.205E+01	Pulse	0.50	3
Ni			1	99.552	ug/l	0.37	1,151,154.71	3.348E+00	Pulse	0.50	3
Cu			1	98.439	ug/l	0.40	3,180,451.42	9.250E+00	Pulse	0.50	3
Zn			1	99.700	ug/l	1.47	389,062.55	7.423E-01	Pulse	1.00	3
Cd			1	97.001	ug/l	0.29	710,286.54	1.355E+00	Pulse	0.50	3
Al			1	9521.338	ug/l	0.43	3,032,610.58	7.044E+00	Pulse	1.00	3
Se			1	100.951	ug/l	1.02	15,237.84	4.571E-03	Pulse	3.00	3
Sb			1	94.282	ug/l	0.53	1,429,296.33	2.727E+00	Pulse	1.00	3
Se			1	100.209	ug/l	1.25	7,753.57	2.928E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,508,561.00	0.52	100.2	Analog	0.50	3
1	Sc		430,540.07	0.63	100.9	Pulse	0.30	3
1	Ge		343,842.95	0.29	98.9	Pulse	0.30	3
1	In		3,333,729.87	0.39	92.7	Pulse	0.30	3
1	Tb		15,330,530.67	0.52	105.5	Analog	0.50	3
1	Lu		8,842,843.00	0.56	102.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		524,209.75	0.87	98.6	Pulse	0.30	3
1	Te		26,483.15	0.11	84.9	Pulse	0.50	3
1	Li		2,211.25	4.62	96.3	Pulse	0.30	3

Quantitation Report

File Name	119_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:55
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.001	ug/l	112.60	808.02	2.318E-03	Pulse	0.50	3
As			1	0.000	ug/l	-705.80	27.33	7.836E-05	Pulse	1.00	3
Mo			1	0.055	ug/l	6.65	926.69	1.747E-03	Pulse	0.50	3
Pb			1	-0.021	ug/l	-13.26	12,211.69	1.099E-03	Pulse	1.00	3
Be			1	0.006	ug/l	130.85	1.00	2.338E-06	Pulse	2.00	3
Ag			1	0.007	ug/l	20.75	566.68	1.068E-03	Pulse	0.50	3
Ba			1	0.003	ug/l	86.41	46.00	1.349E-05	Pulse	0.50	3
Tl			1	0.024	ug/l	12.62	3,609.07	3.251E-04	Pulse	0.50	3
Sn			1	0.031	ug/l	2.75	1,051.15	3.078E-04	Pulse	0.30	3
Sr			1	0.009	ug/l	58.68	1,314.05	3.849E-04	Pulse	0.50	3
[Pb]			1	-0.024	ug/l	-17.92	5,708.31	5.138E-04	Pulse	0.50	3
Ca			1	1.525	ug/l	8.67	195.33	4.556E-04	Pulse	0.50	3
Ti			1	0.025	ug/l	10.36	13.33	3.109E-05	Pulse	0.50	3
Na			1	2.510	ug/l	13.47	29,766.02	6.941E-02	Pulse	1.00	3
Mg			1	1.167	ug/l	11.31	1,455.06	3.392E-03	Pulse	1.00	3
K			1	2.207	ug/l	4.16	16,294.71	3.800E-02	Pulse	1.00	3
V			1	-0.006	ug/l	-105.80	480.01	1.119E-03	Pulse	0.50	3
Mn			1	0.031	ug/l	3.61	436.01	1.251E-03	Pulse	0.50	3
Fe			1	0.954	ug/l	14.96	23,058.55	6.611E-02	Pulse	0.50	3
Co			1	-0.002	ug/l	-103.08	220.00	6.301E-04	Pulse	0.50	3
Ni			1	-0.002	ug/l	-185.02	212.67	6.096E-04	Pulse	0.50	3
Cu			1	-0.482	ug/l	-1.92	64,039.63	1.837E-01	Pulse	0.50	3
Zn			1	-0.260	ug/l	-8.93	7,568.49	1.427E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	83.07	28.00	5.270E-05	Pulse	0.50	3
Al			1	0.690	ug/l	25.74	588.34	1.372E-03	Pulse	1.00	3
Se			1	-0.005	ug/l	-200.79	22.44	6.569E-06	Pulse	3.00	3
Sb			1	-0.028	ug/l	-11.51	407.00	7.669E-04	Pulse	1.00	3
Se			1	-0.095	ug/l	-130.65	26.44	9.125E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,107,920.67	0.54	105.9	Analog	0.50	3
1	Sc		428,787.74	0.45	100.4	Pulse	0.30	3

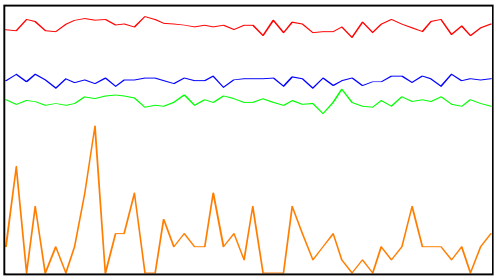
Quantitation Report

1	Ge		348,601.58	0.63	100.3	Pulse	0.30	3
1	In		3,415,327.64	1.16	95.0	Pulse	0.30	3
1	Tb		15,449,222.33	0.51	106.3	Analog	0.50	3
1	Lu		8,896,271.67	1.33	103.0	Analog	0.50	3
1	Ge		530,533.64	0.49	99.8	Pulse	0.30	3
1	Te		28,845.42	1.81	92.5	Pulse	0.50	3
1	Li		2,396.82	1.96	104.4	Pulse	0.30	3

Tune Report

Batch Folder	D:\2018\04-April\xa043018m1.b
Acq. Date-Time	4/30/2018 8:19
Report Comment	043018TUNE
Instrument Name	G3281A JP12151709

[2]



Mass	Range	Count (Actual)	Response (Actual) [cps/ug/l]	Response (Required) [cps/ug/l]	Response (Flag)
59	5000	4629	46287.61	5000.00	
89	5000	3213	32126.33	5000.00	
205	20000	14454	144537.28	5000.00	
78	20	2			

Mass	Resp Ratio (Actual)	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
205		-	
78		-	

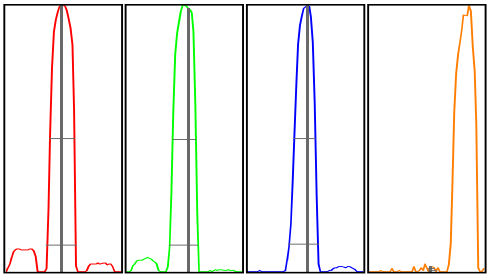
Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	2.05	8.00	
89	2.53	8.00	
205	1.85	8.00	
78	97.52		

Mass	Background (Actual)	Background (Required)	Background (Flag)
59	0.10	2	
89	0.10	2	
205	0.30	2	
78	0.00	5	

Ratio	156/140	0.298 %	
Ratio	70/140	1.694 %	

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.412

Tune Report



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	W-50%	W-10% (Actual)	W-10% (Required)	W-10% (Flag)
59	4736.01	59.00	58.9 - 59.1		0.61	0.723	0.900	
89	3219.15	89.10	88.9 - 89.1		0.58	0.725	0.900	
205	14737.46	205.05	204.9 - 205.1		0.53	0.731	0.900	
78	4.00	78.10	-		0.14	0.188		

Integration Time [sec] 0.1 **Acquisition Time [sec]** 29.92 **Y Axis** Linear

Tune Parameters
Plasma Paramters

RF Power	1600 W	Nebulizer Pump	0.10 rps
RF Matching	1.70 V	S/C Temp	2 ℃
Smpl Depth	9.0 mm	Gas Switch	Dilution Gas
Carrier Gas	0.80 L/min	Makeup/Dilution Gas	0.35 L/min
Option Gas	0.0 %		

Lenses Parameters

Extract 1	0.0 V	Cell Entrance	-36 V
Extract 2	-135.0 V	Cell Exit	-70 V
Omega Bias	-70 V	Deflect	2.2 V
Omega Lens	7.8 V	Plate Bias	-60 V

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V
He Flow	5.0 mL/min	OctP RF	200 V
H2 Flow	0.0 mL/min	Energy Discrimination	3.0 V
3rd Gas Flow	0 %		

History

	Sensitivity										
Created Date	Channel 1 Count	Channel 1 Mass	Channel 1 RSD%	Channel 2 Count	Channel 2 Mass	Channel 2 RSD%	Channel 3 Count	Integration Time	Channel 3 Mass	Channel 3 RSD%	Oxide Mass
4/30/2018 8:10 AM	6074.4869	7	2.7382235	28317.748	89	1.7157445	21916.631	0.100 sec	205	1.8401479	156/140

History

				Background							
Oxide Ratio	Doubly Charged Mass	Doubly Charged Ratio	Sampling Period	Channel 1 Count	Channel 1 Mass	Channel 2 Count	Channel 2 Mass	Channel 3 Count	Channel 3 Mass	Acquisition Time	Channel 1 Axis
1.21 %	70/140	10.48 %	0.311 sec	4.000003	7	4.1000008	89	17.600009	205	00:00:23	6.95

History

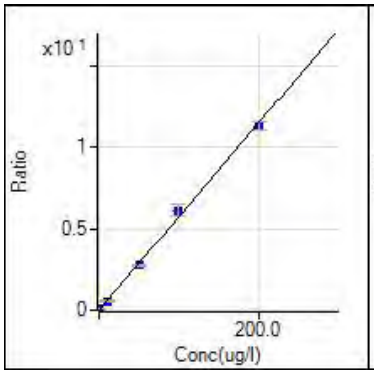
Resolution/Axis

Channel 1 Height	Integration Time	Channel 1 Mass	Channel 1 W-10%	Channel 1 W-50%	Channel 2 Axis	Channel 2 Height	Channel 2 Mass	Channel 2 W-10%	Channel 2 W-50%	Channel 3 Axis	Channel 3 Height	Channel 3 Mass
5979.2194	0.100 sec	7	0.7685376	0.6595335	89	28614.251	89	0.7617241	0.5971795	205.05	22200.01	205

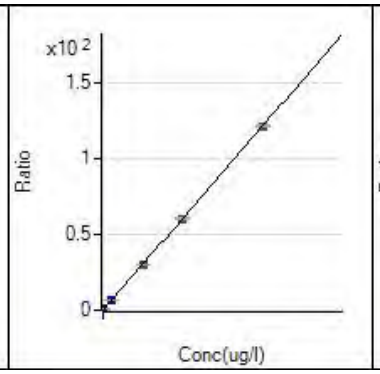
History

		Standard Tune Parameters Ion Lenses		
Channel 3 W-10%	Channel 3 W-50%	Extract 1	Extract 2	Omega Bias
0.7599828	0.5201241	0.0 V	-185.0 V	-80 V

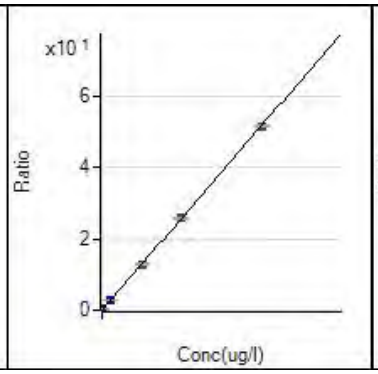
Calibration for D:\2018\04-April\xa043018m1.b\083_CCB.d



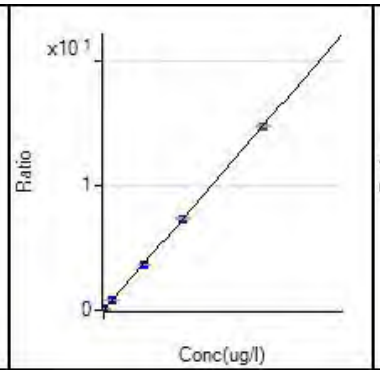
9 Be [2] / ISTD: 6 Li
y = 5.724E-2 x + 1.510E-4
R 0.9991
DL 0.01371
BEC 0.002639



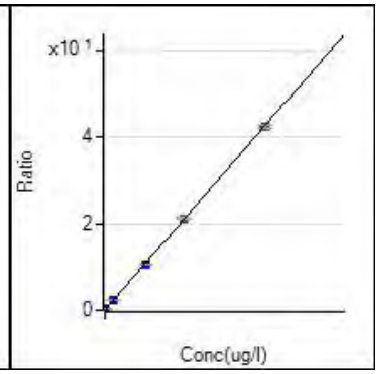
23 Na [2] / ISTD: 45 Sc
y = 6.044E-3 x + 5.424E-2
R 1.0000
DL 0.3628
BEC 8.975



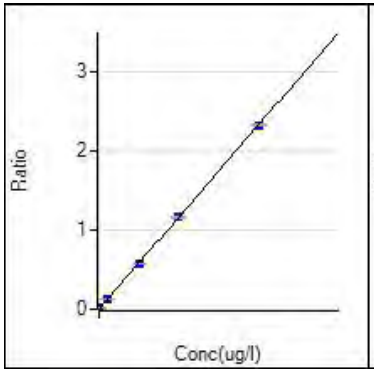
24 Mg [2] / ISTD: 45 Sc
y = 2.590E-3 x + 3.694E-4
R 1.0000
DL 0.06841
BEC 0.1426



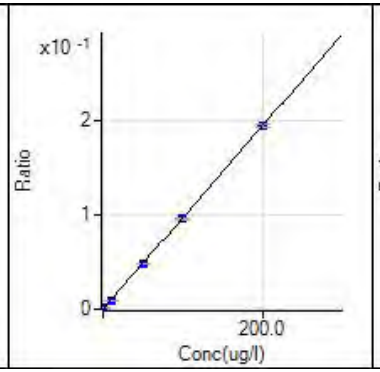
27 Al [2] / ISTD: 45 Sc
y = 7.397E-4 x + 8.613E-4
R 1.0000
DL 0.05171
BEC 1.164



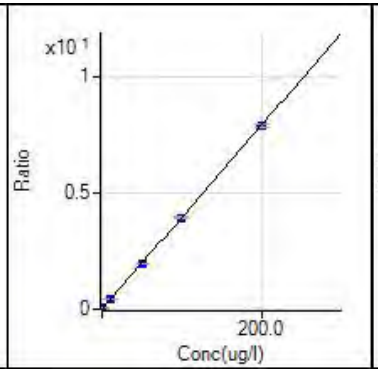
39 K [2] / ISTD: 45 Sc
y = 2.119E-3 x + 3.333E-2
R 1.0000
DL 0.3112
BEC 15.73



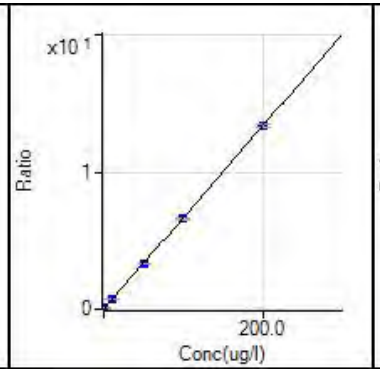
44 Ca [2] / ISTD: 45 Sc
y = 1.164E-4 x + 2.780E-4
R 1.0000
DL 0.5543
BEC 2.387



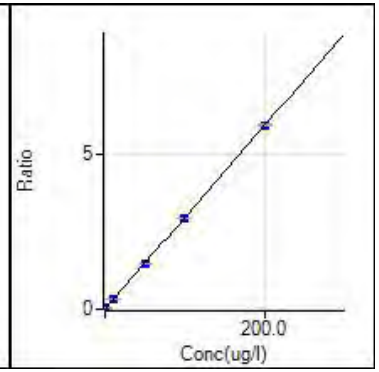
47 Ti [2] / ISTD: 45 Sc
y = 9.740E-4 x + 6.253E-6
R 1.0000
DL 0.008415
BEC 0.00642



51 V [2] / ISTD: 45 Sc
y = 3.959E-2 x + 1.356E-3
R 1.0000
DL 0.01184
BEC 0.03427

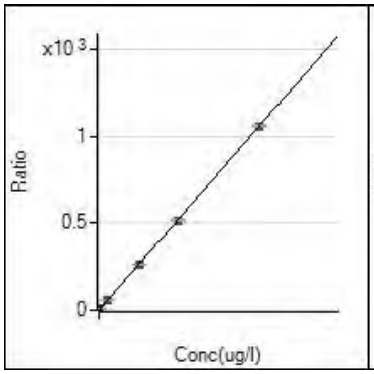


52 Cr [2] / ISTD: 72 Ge
y = 6.689E-2 x + 2.230E-3
R 0.9999
DL 0.007702
BEC 0.03334

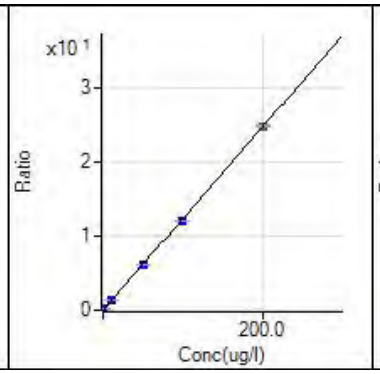


55 Mn [2] / ISTD: 72 Ge
y = 2.945E-2 x + 3.416E-4
R 1.0000
DL 0.005184
BEC 0.0116

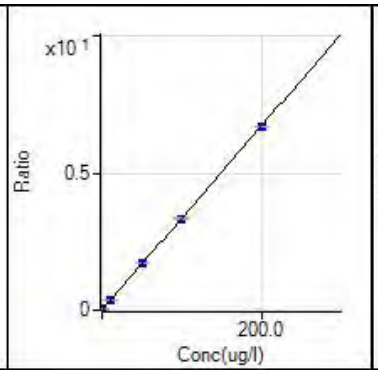
Calibration for D:\2018\04-April\xa043018m1.b\083_CCB.d



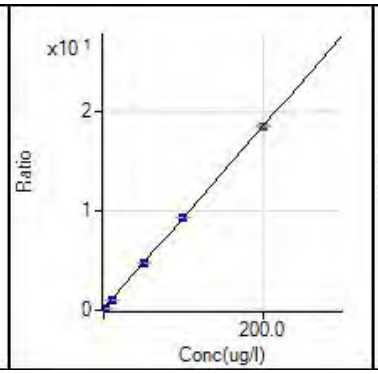
56 Fe [2] / ISTD: 72 Ge
y = 5.264E-2 x + 1.590E-2
R 0.9999
DL 0.02014
BEC 0.302



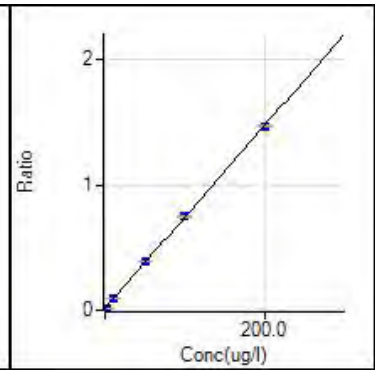
59 Co [2] / ISTD: 72 Ge
y = 1.235E-1 x + 8.573E-4
R 0.9999
DL 0.0009303
BEC 0.00694



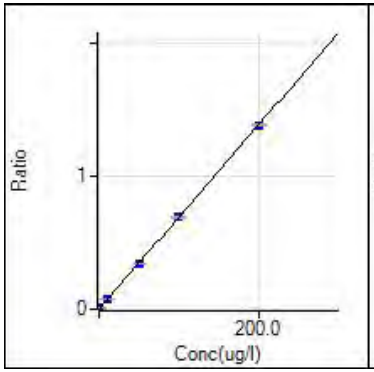
60 Ni [2] / ISTD: 72 Ge
y = 3.362E-2 x + 6.731E-4
R 1.0000
DL 0.003121
BEC 0.02002



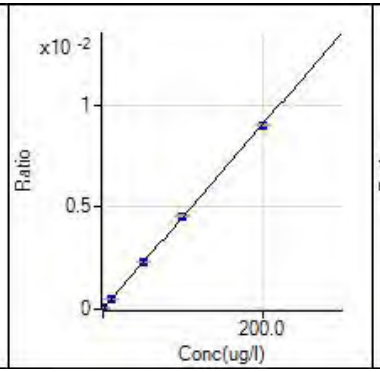
63 Cu [2] / ISTD: 72 Ge
y = 9.165E-2 x + 2.279E-1
R 1.0000
DL 0.123
BEC 2.486



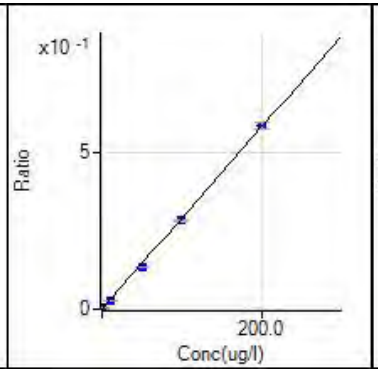
66 Zn [2] / ISTD: 74 Ge
y = 7.283E-3 x + 1.616E-2
R 1.0000
DL 0.01737
BEC 2.219



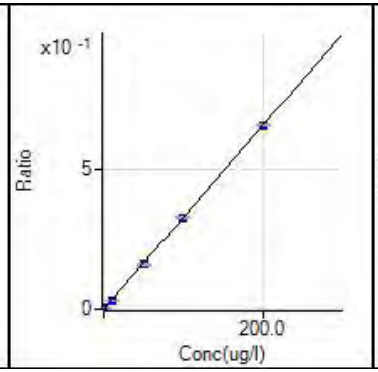
75 As [2] / ISTD: 72 Ge
y = 6.907E-3 x + 8.054E-5
R 1.0000
DL 0.007734
BEC 0.01166



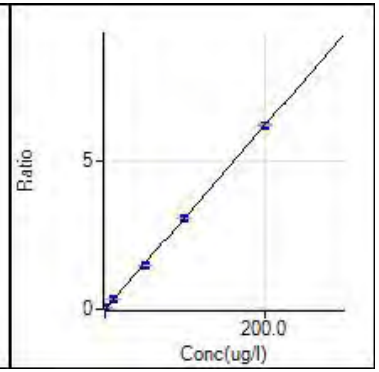
78 Se [2] / ISTD: 115 In
y = 4.521E-5 x + 6.806E-6
R 1.0000
DL 0.06806
BEC 0.1505



82 Se [2] / ISTD: 125 Te
y = 2.910E-3 x + 1.190E-3
R 0.9997
DL 0.1147
BEC 0.4089

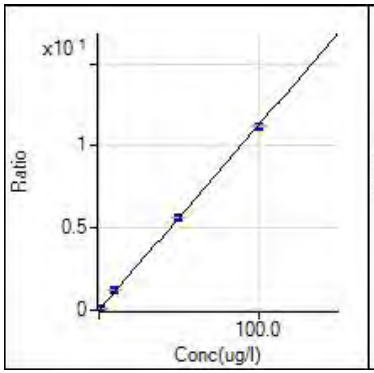


88 Sr [2] / ISTD: 115 In
y = 3.266E-3 x + 3.551E-4
R 1.0000
DL 0.01421
BEC 0.1087

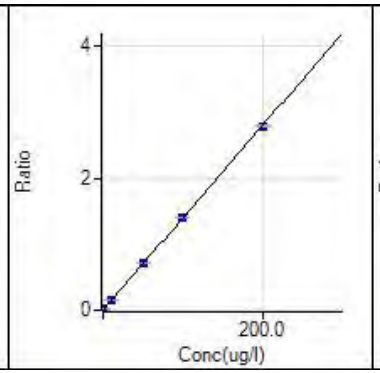


95 Mo [2] / ISTD: 74 Ge
y = 3.079E-2 x + 4.769E-5
R 0.9999
DL 0.002034
BEC 0.001549

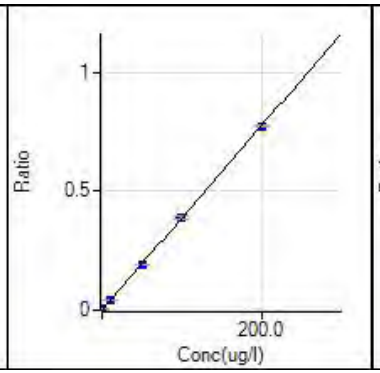
Calibration for D:\2018\04-April\xa043018m1.b\083_CCB.d



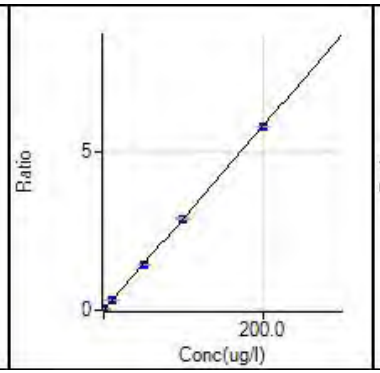
107 Ag [2] / ISTD: 74 Ge
y = 1.125E-1 x + 2.671E-4
R 1.0000
DL 0.001764
BEC 0.002375



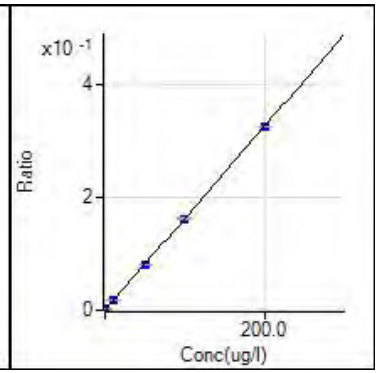
111 Cd [2] / ISTD: 74 Ge
y = 1.397E-2 x + 1.758E-5
R 1.0000
DL 0.002848
BEC 0.001259



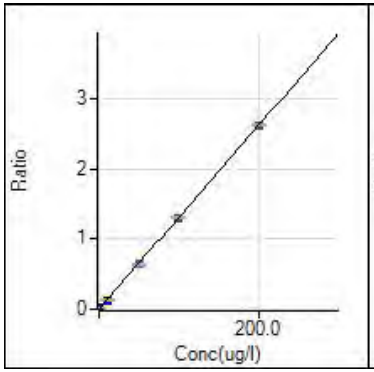
118 Sn [2] / ISTD: 115 In
y = 3.871E-3 x + 1.889E-4
R 1.0000
DL 0.01704
BEC 0.04879



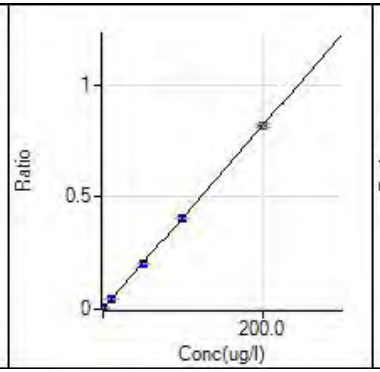
121 Sb [2] / ISTD: 74 Ge
y = 2.890E-2 x + 1.565E-3
R 1.0000
DL 0.008129
BEC 0.05415



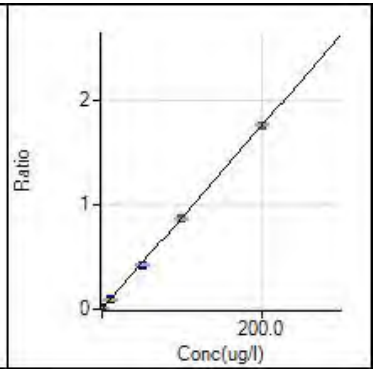
137 Ba [2] / ISTD: 115 In
y = 1.632E-3 x + 9.111E-6
R 1.0000
DL 0.007825
BEC 0.005581



205 Tl [2] / ISTD: 209 Bi
y = 1.306E-2 x + 7.802E-6
R 1.0000
DL 0.0006732
BEC 0.0005974



206 [Pb] [2] / ISTD: 209 Bi
y = 4.088E-3 x + 6.112E-4
R 1.0000
DL 0.01363
BEC 0.1495



208 Pb [2] / ISTD: 209 Bi
y = 8.729E-3 x + 1.279E-3
R 0.9999
DL 0.00623
BEC 0.1465

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/4/2018 9:51:03 Type: Cal
Method: 60102007_041712(v194) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	-.0032	-.0006	.0409	-.0009	.0078	-.0004	.0005	.0001
Stddev	.0002	.0008	.0000	.0001	.0008	.0009	.0004	.0001	.0001
%RSD	166.3	24.99	4.865	.2170	87.48	12.06	108.3	22.98	42.70
#1	-.0001	-.0023	-.0006	.0408	-.0009	.0072	.0000	.0006	.0002
#2	.0002	-.0035	-.0005	.0410	-.0016	.0073	-.0008	.0005	.0001
#3	.0004	-.0037	-.0006	.0410	-.0001	.0088	-.0003	.0004	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0027	.0026	.0121	-.0005	.0001	.0028	-.0212	.0000	.0011
Stddev	.0002	.0009	.0084	.0005	.0001	.0005	.0058	.000	.0009
%RSD	6.990	35.41	69.07	110.8	148.3	16.94	27.41	508.6	84.54
#1	.0026	.0037	.0088	-.0005	.0002	.0032	-.0251	-.0002	.0016
#2	.0026	.0021	.0217	-.0010	.0000	.0029	-.0240	-.0001	.0000
#3	.0029	.0021	.0060	.0001	.0001	.0023	-.0145	.0002	.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0001	-.0004	.0039	.0003	.0009	.0026	-.0030	-.0002	.0018
Stddev	.0002	.0000	.0001	.0001	.0025	.0001	.0006	.0001	.0000
%RSD	276.8	6.985	2.502	33.27	275.1	4.294	20.59	41.65	1.865
#1	-.0002	-.0004	.0039	.0005	.0037	.0027	-.0029	-.0002	.0017
#2	-.0002	-.0004	.0040	.0003	-.0012	.0025	-.0025	-.0002	.0018
#3	.0002	-.0003	.0038	.0002	.0003	.0027	-.0037	-.0001	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1189.1	3341.6	26552.	2180.4
Stddev	2.4	5.4	86.	7.8
%RSD	.20062	.16119	.32239	.35676
#1	1191.4	3341.0	26456.	2178.3
#2	1186.7	3336.5	26580.	2189.0
#3	1189.3	3347.3	26620.	2173.8

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/4/2018 9:55:03 Type: Cal
Method: 60102007_041712(v194) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0308	1.693	.0890	5.883	4.233	2.700	2.339	1.184	.2034	.3843
Stddev	.0005	.008	.0002	.009	.009	.003	.005	.002	.0008	.0013
%RSD	1.522	.4867	.1706	.1576	.2022	.1134	.2174	.1526	.4009	.3459
#1	.0312	1.686	.0890	5.873	4.235	2.700	2.336	1.183	.2037	.3856
#2	.0309	1.692	.0889	5.886	4.223	2.697	2.336	1.184	.2025	.3841
#3	.0303	1.702	.0892	5.890	4.239	2.703	2.345	1.187	.2041	.3830

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.102	2.665	.2779	1.163	.5137	7.678	.6863	.6466	.1141	.0633
Stddev	.011	.010	.0006	.004	.0013	.024	.0005	.0016	.0003	.0003
%RSD	.5205	.3677	.2046	.3041	.2444	.3116	.0778	.2424	.2905	.4868
#1	2.097	2.666	.2772	1.164	.5133	7.668	.6857	.6452	.1141	.0629
#2	2.095	2.655	.2783	1.167	.5126	7.662	.6864	.6465	.1138	.0635
#3	2.115	2.675	.2782	1.160	.5150	7.706	.6868	.6483	.1144	.0634

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2129	.2083	8.754	.9104	.2724	.3135	1.337
Stddev	.0002	.0003	.032	.0027	.0014	.0006	.004
%RSD	.0765	.1676	.3601	.2952	.5224	.2049	.3216
#1	.2128	.2079	8.754	.9118	.2708	.3139	1.333
#2	.2129	.2085	8.722	.9121	.2730	.3128	1.336
#3	.2131	.2085	8.785	.9073	.2734	.3139	1.342

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1127.9	3345.2	26290.	2207.9
Stddev	3.2	6.2	73.	2.7
%RSD	.28508	.18417	.27581	.12447
#1	1131.2	3349.6	26341.	2205.6
#2	1127.5	3347.9	26323.	2211.0
#3	1124.8	3338.2	26207.	2207.2

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/4/2018 9:59:33 Type: Cal
Method: 60102007_041712(v194) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1221	7.013	.3717	23.70	17.29	10.99	9.456	4.765	.8282	1.566
Stddev	.0002	.049	.0017	.20	.10	.09	.007	.006	.0055	.008
%RSD	.2017	.6927	.4553	.8505	.5835	.8214	.0761	.1263	.6611	.5180
#1	.1223	7.012	.3724	23.72	17.30	10.98	9.461	4.768	.8297	1.572
#2	.1219	7.062	.3729	23.90	17.38	11.09	9.460	4.769	.8221	1.556
#3	.1223	6.965	.3697	23.50	17.18	10.91	9.448	4.758	.8328	1.569

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8.324	10.88	1.131	4.763	2.212	31.52	2.746	2.711	.4721	.2635
Stddev	.028	.08	.011	.009	.001	.17	.004	.002	.0011	.0012
%RSD	.3357	.7125	1.008	.1927	.0579	.5233	.1506	.0678	.2375	.4500
#1	8.307	10.87	1.130	4.773	2.211	31.50	2.745	2.712	.4734	.2649
#2	8.357	10.96	1.143	4.762	2.214	31.70	2.750	2.709	.4718	.2629
#3	8.310	10.80	1.120	4.755	2.212	31.37	2.742	2.711	.4713	.2628

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.6637	.8866	37.28	3.901	1.138	1.354	5.390
Stddev	.0017	.0021	.20	.004	.005	.002	.006
%RSD	.2512	.2364	.5499	.0962	.4149	.1324	.1128
#1	.6638	.8861	37.27	3.903	1.143	1.356	5.385
#2	.6653	.8889	37.49	3.897	1.133	1.352	5.397
#3	.6619	.8848	37.08	3.904	1.139	1.354	5.388

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1008.5	3153.6	24764.	2117.7
Stddev	1.3	3.3	16.	15.9
%RSD	.12910	.10568	.06407	.75048
#1	1008.9	3156.5	24780.	2118.5
#2	1009.5	3150.0	24763.	2101.4
#3	1007.0	3154.4	24749.	2133.1

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/4/2018 10:02:46 Type: Cal
Method: 60102007_041712(v194) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2485	13.47	.7335	45.85	32.86	20.85	18.17	9.181	1.585	3.057
Stddev	.0003	.11	.0012	.32	.18	.17	.02	.005	.003	.007
%RSD	.1295	.8286	.1572	.7001	.5355	.8023	.0912	.0573	.1939	.2421
#1	.2481	13.34	.7323	45.53	32.66	20.66	18.18	9.175	1.588	3.056
#2	.2486	13.53	.7346	46.17	32.99	20.93	18.15	9.183	1.582	3.064
#3	.2488	13.55	.7335	45.85	32.94	20.97	18.17	9.185	1.585	3.050

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	15.72	20.94	2.177	9.160	4.228	60.56	5.305	5.363	.9325	.5194
Stddev	.05	.15	.012	.021	.006	.37	.005	.019	.0023	.0003
%RSD	.3251	.7258	.5410	.2312	.1370	.6172	.0963	.3467	.2452	.0554
#1	15.66	20.77	2.163	9.164	4.227	60.14	5.300	5.382	.9305	.5192
#2	15.74	21.06	2.183	9.137	4.223	60.67	5.304	5.345	.9320	.5192
#3	15.76	21.00	2.185	9.178	4.234	60.86	5.311	5.364	.9350	.5197

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.507	1.677	71.44	7.535	2.235	2.587	10.35
Stddev	.003	.003	.19	.009	.006	.002	.01
%RSD	.1837	.1873	.2640	.1219	.2578	.0918	.1370
#1	1.504	1.674	71.23	7.533	2.240	2.587	10.36
#2	1.507	1.680	71.49	7.526	2.229	2.589	10.35
#3	1.510	1.678	71.60	7.544	2.237	2.584	10.33

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	952.46	3084.2	24451.	2153.7
Stddev	3.20	4.5	92.	20.0
%RSD	.33631	.14608	.37545	.92927
#1	950.21	3084.5	24361.	2176.9
#2	956.13	3088.6	24544.	2141.7
#3	951.05	3079.6	24447.	2142.7

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/4/2018 10:06:36 Type: QC
Method: 60102007_041712(v194) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4960	78.96	3.970	3.964	3.919	78.36	3.917	3.919	3.903	3.928
Stddev	.0037	.04	.002	.024	.008	.11	.004	.003	.015	.012
%RSD	.7461	.0539	.0460	.6150	.1973	.1427	.1106	.0720	.3893	.3013
#1	.4919	78.95	3.970	3.992	3.927	78.23	3.920	3.922	3.901	3.916
#2	.4990	78.92	3.969	3.950	3.913	78.44	3.918	3.921	3.919	3.940
#3	.4971	79.00	3.972	3.950	3.915	78.41	3.912	3.916	3.889	3.929
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.75	78.96	78.76	3.890	3.936	78.41	3.921	3.972	3.968	3.960
Stddev	.28	.34	.14	.023	.003	.07	.006	.007	.005	.011
%RSD	.3588	.4332	.1826	.5976	.0699	.0944	.1648	.1840	.1340	.2834
#1	77.45	79.35	78.68	3.870	3.938	78.34	3.924	3.979	3.968	3.956
#2	77.81	78.70	78.67	3.916	3.938	78.40	3.914	3.973	3.963	3.952
#3	78.00	78.84	78.93	3.884	3.933	78.49	3.926	3.965	3.974	3.973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.101	3.908	3.937	3.915	3.957	3.921	3.910
Stddev	.002	.009	.006	.023	.006	.004	.004
%RSD	.0509	.2309	.1617	.5782	.1470	.0995	.1013
#1	4.104	3.907	3.944	3.894	3.953	3.925	3.915
#2	4.100	3.900	3.935	3.939	3.963	3.919	3.909
#3	4.100	3.918	3.931	3.912	3.953	3.918	3.907
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/4/2018 10:06:36 Type: QC
Method: 60102007_041712(v194) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	954.85	3091.2	24678.	2144.0
Stddev	.85	3.8	129.	13.4
%RSD	.08877	.12438	.52231	.62601
#1	953.94	3087.4	24641.	2157.0
#2	955.62	3095.1	24572.	2144.7
#3	954.98	3091.0	24822.	2130.2

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/4/2018 10:14:06 Type: QC
Method: 60102007_041712(v194) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2305	40.76	1.965	2.007	2.022	39.75	1.987	2.010	1.978	1.992
Stddev	.0007	.22	.007	.012	.013	.25	.004	.005	.009	.003
%RSD	.3139	.5517	.3493	.6123	.6422	.6213	.2200	.2691	.4377	.1391
#1	.2312	40.56	1.959	1.994	2.010	39.50	1.983	2.006	1.968	1.994
#2	.2304	41.00	1.965	2.018	2.036	39.99	1.991	2.016	1.983	1.992
#3	.2298	40.72	1.972	2.008	2.022	39.76	1.987	2.008	1.984	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.80	39.45	39.84	1.945	1.857	39.03	2.003	1.952	1.981	1.975
Stddev	.17	.19	.12	.002	.005	.22	.005	.003	.004	.005
%RSD	.4299	.4861	.2996	.1053	.2752	.5731	.2400	.1345	.1888	.2713
#1	38.69	39.25	39.70	1.947	1.852	38.88	1.997	1.955	1.977	1.977
#2	38.99	39.63	39.89	1.945	1.862	39.28	2.006	1.950	1.984	1.979
#3	38.73	39.46	39.92	1.943	1.858	38.92	2.005	1.951	1.982	1.969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0622	1.992	1.943	1.950	2.023	1.886	1.988
Stddev	.0016	.009	.013	.002	.003	.002	.007
%RSD	2.530	.4364	.6468	.0882	.1617	.0944	.3498
#1	.0612	1.982	1.932	1.952	2.023	1.887	1.981
#2	.0640	1.998	1.957	1.948	2.019	1.884	1.995
#3	.0614	1.996	1.942	1.949	2.026	1.887	1.989
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/4/2018 10:14:06 Type: QC
Method: 60102007_041712(v194) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1021.8	3181.2	25063.	2180.1
Stddev	2.1	12.1	81.	4.8
%RSD	.20631	.38058	.32222	.22219
#1	1022.8	3195.1	25138.	2185.0
#2	1023.2	3175.2	25075.	2175.3
#3	1019.4	3173.3	24977.	2180.1

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/4/2018 10:24:02 Type: QC
Method: 60102007_041712(v194) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0131	.0002	.0001	.0000	.0076	.0000	.0000	-.0001	.0000
Stddev	.0003	.0051	.0007	.0004	.0002	.0039	.0000	.0001	.0004	.0003
%RSD	277.1	39.02	305.8	779.5	363.8	51.02	60.04	433.9	846.9	773.0
#1	.0001	.0102	-.0005	-.0004	.0003	.0037	.0001	.0001	.0003	.0000
#2	-.0004	.0190	.0008	.0003	-.0001	.0075	.0000	.0000	.0001	-.0003
#3	-.0001	.0101	.0004	.0002	.0000	.0115	.0000	.0000	-.0005	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0071	-.0111	-.0149	.0001	-.0009	-.0032	.0001	.0001	.0011	.0003
Stddev	.0035	.0042	.0100	.0000	.0001	.0059	.0001	.0012	.0004	.0015
%RSD	48.69	37.77	66.77	9.522	16.14	185.8	147.2	876.2	38.31	448.7
#1	-.0110	-.0096	-.0158	.0001	-.0010	-.0079	.0002	-.0006	.0008	.0020
#2	-.0056	-.0159	-.0045	.0001	-.0008	.0034	.0000	-.0006	.0016	-.0004
#3	-.0046	-.0079	-.0244	.0001	-.0011	-.0050	.0000	.0016	.0010	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0004	.0001	-.0002	-.0004	.0002	.0003
Stddev	.0005	.0004	.0001	.0003	.0008	.0002	.0000
%RSD	156.4	113.7	120.0	125.2	226.1	71.87	1.162
#1	.0008	.0007	.0000	-.0003	-.0013	.0004	.0003
#2	.0003	-.0001	.0000	-.0004	.0000	.0001	.0004
#3	-.0002	.0005	.0001	.0001	.0002	.0001	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/4/2018 10:24:02 Type: QC
Method: 60102007_041712(v194) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1164.0	3297.9	26005.	2167.4
Stddev	2.2	2.7	73.	15.3
%RSD	.18978	.08228	.28082	.70652
#1	1163.2	3296.8	26080.	2175.3
#2	1162.3	3301.0	25934.	2177.1
#3	1166.5	3296.0	26001.	2149.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/4/2018 10:27:40 Type: QC
Method: 60102007_041712(v194) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0085	.2025	.0094	.1991	.0052	1.007	.0051	.0507	.0097	.0248
Stddev	.0002	.0056	.0009	.0010	.0001	.010	.0000	.0001	.0002	.0003
%RSD	2.270	2.769	9.347	.4984	1.436	1.012	.9004	.2331	2.432	1.288
#1	.0084	.1962	.0084	.1991	.0051	1.000	.0051	.0507	.0097	.0252
#2	.0087	.2067	.0095	.2001	.0052	1.018	.0050	.0508	.0099	.0246
#3	.0085	.2047	.0102	.1982	.0052	1.002	.0051	.0506	.0095	.0247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2938	9.884	5.017	.0148	.0445	9.833	.0409	.0048	.0050	.0087
Stddev	.0077	.049	.013	.0001	.0000	.033	.0003	.0007	.0009	.0002
%RSD	2.624	.4923	.2553	.8481	.1117	.3307	.6329	14.40	18.42	1.898
#1	.2860	9.861	5.031	.0148	.0445	9.796	.0409	.0048	.0055	.0087
#2	.2939	9.940	5.006	.0147	.0445	9.854	.0412	.0055	.0055	.0085
#3	.3015	9.851	5.014	.0150	.0445	9.850	.0407	.0041	.0039	.0088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value										
Range										

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0493	.0097	.0091	.0092	.0467	.0205
Stddev	.0005	.0000	.0001	.0002	.0003	.0000
%RSD	1.070	.2603	1.093	2.478	.6862	.1015
#1	.0487	.0097	.0090	.0093	.0471	.0205
#2	.0494	.0097	.0092	.0094	.0466	.0205
#3	.0498	.0097	.0090	.0089	.0465	.0205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/4/2018 10:27:40 Type: QC
Method: 60102007_041712(v194) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1132.5	3299.2	25946.	2154.2
Stddev	4.3	6.4	195.	9.9
%RSD	.37955	.19315	.75200	.45908
#1	1129.1	3298.2	26011.	2165.0
#2	1131.0	3293.3	26100.	2152.1
#3	1137.3	3306.0	25726.	2145.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/4/2018 10:31:37 Type: QC
Method: 60102007_041712(v194) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Se1960
Units	ppm
Avg	.0088
Stddev	.0021
%RSD	23.75
#1	.0112
#2	.0072
#3	.0081
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243
Units	Cts/S
Avg	3279.6
Stddev	5.0
%RSD	.15209
#1	3274.1
#2	3280.9
#3	3283.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/4/2018 10:39:12 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	511.9	.0000	.0006	.0000	470.1	.0000	-.0003	.0000	.0000
Stddev	.0002	1.9	.0012	.0003	.0001	2.3	.0001	.0002	.0001	.000
%RSD	130.3	.3683	4185.	51.60	792.5	.4937	1513.	94.24	504.6	1282.
#1	.0000	512.8	.0014	.0004	.0001	470.5	-.0001	-.0004	.0000	-.0001
#2	-.0004	513.2	-.0007	.0009	-.0001	472.2	.0000	-.0004	.0001	.0001
#3	-.0002	509.8	-.0006	.0004	.0001	467.7	.0001	.0000	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	183.8	.0328	491.8	.0000	.0001	.1410	.0000	-.0002	.0000	.0000
Stddev	.6	.0106	2.7	.000	.0003	.0034	.000	.0013	.0012	.0025
%RSD	.3079	32.47	.5545	460.7	340.5	2.414	470.1	589.2	5052.	13590.
#1	184.2	.0444	493.3	.0001	-.0003	.1427	-.0001	.0002	.0006	-.0022
#2	183.9	.0235	493.4	-.0001	.0002	.1433	.0002	.0009	-.0014	.0027
#3	183.1	.0304	488.6	.0000	.0003	.1371	-.0002	-.0017	.0009	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0130	.0003	.0003	.0002	-.0012	.0009	-.0019
Stddev	.0015	.0005	.0000	.0001	.0007	.0002	.0002
%RSD	11.19	166.6	13.85	23.52	54.17	27.56	9.013
#1	.0114	-.0003	.0004	.0002	-.0007	.0009	-.0020
#2	.0140	.0007	.0004	.0003	-.0010	.0006	-.0020
#3	.0138	.0005	.0003	.0003	-.0020	.0011	-.0017
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/4/2018 10:39:12 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	902.21	2941.9	22726.	2093.9
Stddev	2.20	4.1	177.	13.6
%RSD	.24371	.13923	.77837	.64951
#1	900.20	2939.6	22573.	2102.4
#2	901.87	2939.5	22684.	2078.2
#3	904.56	2946.7	22920.	2101.1

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/4/2018 10:51:59 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.018	510.7	1.027	.5130	.5046	466.4	.9317	.4754	.4835	.5376
Stddev	.006	3.1	.004	.0023	.0035	3.1	.0017	.0007	.0060	.0024
%RSD	.6409	.6068	.3540	.4396	.6956	.6603	.1822	.1418	1.233	.4451
#1	1.022	507.2	1.024	.5105	.5006	462.9	.9336	.4752	.4903	.5401
#2	1.010	512.0	1.031	.5146	.5062	467.6	.9307	.4762	.4795	.5353
#3	1.021	512.9	1.027	.5140	.5071	468.7	.9307	.4749	.4806	.5375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	177.7	-.0034	498.3	.4886	.8633	.1304	.9520	.9506	.9612	.9337
Stddev	1.0	.0103	3.4	.0039	.0011	.0078	.0002	.0013	.0027	.0021
%RSD	.5451	304.2	.6728	.7946	.1327	6.007	.0201	.1373	.2796	.2203
#1	176.6	-.0002	494.4	.4921	.8621	.1355	.9519	.9521	.9641	.9319
#2	178.3	-.0149	499.9	.4844	.8644	.1214	.9519	.9496	.9588	.9360
#3	178.2	.0049	500.5	.4891	.8633	.1343	.9522	.9502	.9608	.9334
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1093	.8844	.9475	.9367	.8974	.4717	.9270
Stddev	.0013	.0020	.0043	.0070	.0019	.0023	.0011
%RSD	1.160	.2220	.4546	.7422	.2145	.4797	.1232
#1	.1107	.8842	.9425	.9429	.8983	.4743	.9283
#2	.1082	.8865	.9503	.9292	.8951	.4700	.9268
#3	.1091	.8825	.9496	.9381	.8986	.4710	.9260
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/4/2018 10:51:59 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	884.69	2904.0	22773.	2085.2
Stddev	1.21	2.5	213.	12.0
%RSD	.13709	.08651	.93733	.57484
#1	885.18	2902.4	22562.	2098.7
#2	883.31	2902.7	22989.	2075.8
#3	885.58	2906.9	22767.	2081.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 11:00:42 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2449	39.52	2.026	2.023	2.005	39.64	2.027	2.027	1.976	1.994
Stddev	.0003	.26	.005	.011	.013	.27	.003	.003	.001	.006
%RSD	.1365	.6593	.2366	.5631	.6503	.6910	.1694	.1604	.0727	.2784
#1	.2452	39.76	2.027	2.033	2.017	39.88	2.026	2.024	1.974	1.997
#2	.2445	39.24	2.031	2.011	1.991	39.34	2.031	2.030	1.976	1.998
#3	.2449	39.55	2.022	2.025	2.008	39.68	2.025	2.027	1.977	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.11	40.17	39.91	2.006	2.055	39.71	2.043	1.984	2.029	2.035
Stddev	.15	.21	.29	.005	.004	.23	.002	.004	.002	.005
%RSD	.3748	.5262	.7273	.2513	.1708	.5748	.0837	.1917	.0980	.2474
#1	40.25	40.33	40.20	2.000	2.051	39.91	2.042	1.981	2.031	2.038
#2	39.95	39.93	39.62	2.007	2.058	39.46	2.045	1.988	2.027	2.029
#3	40.12	40.26	39.90	2.010	2.056	39.76	2.043	1.983	2.029	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.819	2.081	2.012	2.003	2.004	2.036	2.025
Stddev	.004	.002	.011	.002	.004	.004	.006
%RSD	.1902	.1086	.5653	.0779	.1764	.2231	.2973
#1	1.821	2.079	2.022	2.003	2.007	2.039	2.020
#2	1.821	2.083	2.000	2.004	2.005	2.031	2.031
#3	1.815	2.080	2.013	2.001	2.000	2.039	2.023
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 11:00:42 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1005.8	3119.3	25065.	2164.0
Stddev	2.0	8.5	56.	17.2
%RSD	.19747	.27347	.22454	.79531
#1	1005.7	3123.1	25085.	2153.8
#2	1003.8	3109.5	25109.	2183.9
#3	1007.8	3125.2	25002.	2154.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 11:07:19 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0140	-.0002	.0001	.0001	.0076	.0001	.0000	.0001	.0002
Stddev	.0002	.0101	.0009	.0001	.0001	.0062	.0000	.000	.0001	.0001
%RSD	74.75	72.16	409.5	60.17	139.5	82.56	55.12	241.5	78.24	62.88
#1	-.0005	.0032	-.0008	.0002	.0000	.0100	.0001	.0000	.0000	.0001
#2	-.0001	.0155	-.0007	.0000	.0002	.0122	.0000	.0000	.0002	.0003
#3	-.0002	.0232	.0008	.0001	.0001	.0005	.0001	-.0001	.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0076	.0060	.0002	-.0010	.0016	.0001	.0009	.0011	.0007
Stddev	.0020	.0056	.0275	.0000	.0003	.0068	.0001	.0005	.0004	.0008
%RSD	309.0	73.90	460.0	23.29	28.47	413.2	78.25	55.71	38.63	113.8
#1	.0029	-.0092	-.0049	.0002	-.0007	-.0061	.0001	.0015	.0016	.0001
#2	-.0002	-.0013	.0372	.0002	-.0011	.0043	.0002	.0006	.0007	.0016
#3	-.0008	-.0122	-.0144	.0001	-.0011	.0068	.0000	.0007	.0010	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0003	.0001	-.0001	-.0003	.0002	.0004
Stddev	.0003	.0005	.0001	.0001	.0009	.0001	.0001
%RSD	69.53	169.2	68.64	88.82	297.3	48.49	16.47
#1	.0001	.0002	.0000	-.0002	.0007	.0002	.0004
#2	.0006	-.0001	.0001	.0000	-.0010	.0003	.0003
#3	.0006	.0008	.0002	-.0002	-.0006	.0001	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 11:07:19 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1159.7	3264.0	25854.	2195.5
Stddev	3.5	6.0	196.	12.6
%RSD	.30451	.18410	.75745	.57261
#1	1157.0	3257.3	25664.	2186.1
#2	1158.4	3265.6	26055.	2209.7
#3	1163.7	3269.0	25842.	2190.6

Zoom In Zoom Out

Sample Name: FA53682-3 Acquired: 5/4/2018 11:17:59 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0561	-.0001	.0780	.0000	15.92	.0000	.0028	.0004	.0025
Stddev	.0001	.0109	.0003	.0001	.0001	.10	.0001	.0001	.0003	.0000
%RSD	35.40	19.49	380.0	.1880	294.8	.6539	210.1	2.404	77.61	.4040
#1	.0003	.0437	.0000	.0780	-.0001	16.04	.0001	.0027	.0000	.0025
#2	.0005	.0643	.0002	.0779	.0002	15.90	.0001	.0028	.0006	.0025
#3	.0002	.0603	-.0004	.0782	.0000	15.83	.0000	.0028	.0005	.0025

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7468	2.022	3.637	.8997	-.0021	11.32	.0011	.0019	-.0004	.0007
Stddev	.0011	.019	.022	.0077	.0002	.03	.0002	.0007	.0006	.0019
%RSD	.1419	.9237	.6129	.8560	7.195	.2432	14.04	36.74	141.1	292.7
#1	.7467	2.009	3.662	.8982	-.0020	11.33	.0009	.0019	.0001	.0028
#2	.7480	2.014	3.628	.9080	-.0023	11.34	.0012	.0027	-.0010	.0000
#3	.7459	2.043	3.619	.8928	-.0021	11.29	.0011	.0012	-.0002	-.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.908	-.0008	.0881	.0002	.0018	.0017	.0135
Stddev	.003	.0003	.0005	.0001	.0007	.0003	.0001
%RSD	.1078	33.38	.5424	27.16	38.09	17.55	.3960
#1	2.910	-.0010	.0886	.0002	.0012	.0017	.0134
#2	2.909	-.0010	.0878	.0003	.0025	.0019	.0134
#3	2.904	-.0005	.0878	.0002	.0016	.0014	.0135

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1079.2	3068.6	24385.	2112.2
Stddev	2.7	4.4	108.	21.7
%RSD	.24709	.14262	.44135	1.0278
#1	1080.5	3069.8	24446.	2091.2
#2	1080.9	3063.7	24261.	2134.6
#3	1076.1	3072.2	24449.	2110.8

Zoom In Zoom Out

Sample Name: FA53633-3L Acquired: 5/4/2018 11:22:14 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0022	.3234	-.0035	F89.24	.0003	49.43	-.0002	-.0015	1.010
Stddev	.0047	.0084	.0105	.90	.0011	.31	.0003	.0011	.007
%RSD	214.4	2.588	304.1	1.008	423.8	.6359	176.9	76.89	.7026
#1	.0018	.3259	.0074	89.08	.0009	49.18	-.0005	-.0002	1.018
#2	-.0010	.3303	-.0136	88.44	-.0010	49.32	-.0002	-.0022	1.006
#3	-.0074	.3141	-.0042	90.22	.0008	49.78	.0001	-.0021	1.005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0238	.6104	.2765	.5180	1.564	.0108	18.24	.0714	.0096
Stddev	.0024	.0987	.1899	.2851	.002	.0023	.08	.0023	.0036
%RSD	10.13	16.16	68.68	55.04	.1491	20.84	.4261	3.224	37.58
#1	.0243	.7208	.3164	.4710	1.562	.0128	18.33	.0693	.0136
#2	.0259	.5795	.4432	.8238	1.563	.0083	18.20	.0738	.0084
#3	.0212	.5309	.0698	.2593	1.566	.0114	18.19	.0711	.0067

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0123	.0202	3.428	.0313	1.038	.0348	.0037	.1552	F44.50
Stddev	.0139	.0140	.013	.0025	.003	.0003	.0042	.0011	.08
%RSD	112.8	69.32	.3869	8.096	.3035	.9431	115.9	.7303	.1726
#1	.0252	.0231	3.418	.0286	1.035	.0350	.0064	.1553	44.41
#2	-.0024	.0050	3.443	.0315	1.039	.0350	-.0012	.1541	44.55
#3	.0142	.0325	3.423	.0337	1.041	.0345	.0058	.1563	44.54

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1150.4	3256.5	26178.	2239.7
Stddev	1.8	9.6	123.	4.4
%RSD	.15545	.29551	.46906	.19465
#1	1150.2	3263.4	26063.	2241.6
#2	1148.7	3245.5	26162.	2242.7
#3	1152.2	3260.7	26307.	2234.7

Zoom In Zoom Out

Sample Name: FA53831-1 Acquired: 5/4/2018 11:26:36 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 200.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0719	24.64	-.0018	1.809	-.0074	434.3	-.0319	.0785	253.6	535.8
Stddev	.0608	.68	.1096	.024	.0192	2.6	.0011	.0039	.5	1.1
%RSD	84.60	2.776	5975.	1.341	260.3	.6035	3.588	4.958	.1789	.2068
#1	-.0834	24.01	.0866	1.830	.0096	431.7	-.0306	.0741	253.7	534.7
#2	-.0061	24.53	.0323	1.815	-.0282	436.9	-.0324	.0799	253.2	535.8
#3	-.1261	25.37	-.1244	1.782	-.0035	434.2	-.0328	.0815	254.1	536.9

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.92	-1.053	1297.	2.796	-.4149	22.09	638.0	.6012	-.1398	-.2497
Stddev	1.08	4.451	4.	.028	.0237	1.32	.3	.2560	.3207	.2090
%RSD	3.996	422.7	.2841	1.010	5.714	5.968	.0503	42.59	229.4	83.71
#1	26.05	-1.487	1294.	2.790	-.3891	21.43	638.1	.8725	-.4430	-.4900
#2	26.58	-5.272	1301.	2.826	-.4357	21.23	637.6	.3639	.1959	-.1497
#3	28.12	3.599	1297.	2.771	-.4200	23.61	638.2	.5671	-.1723	-.1095

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.069	67.26	.2373	.9519	-.2096	-.0580	.6712
Stddev	.118	.16	.0211	.0221	.1049	.0371	.0116
%RSD	1.941	.2450	8.908	2.321	50.05	64.01	1.724
#1	6.108	67.23	.2587	.9766	-.3182	-.0188	.6766
#2	5.936	67.11	.2165	.9451	-.2017	-.0627	.6579
#3	6.162	67.44	.2367	.9340	-.1088	-.0926	.6791

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1138.6	3224.8	25714.	2182.7
Stddev	2.1	.6	59.	9.5
%RSD	.18083	.01763	.23113	.43618
#1	1137.6	3225.1	25674.	2175.0
#2	1141.0	3224.1	25687.	2193.3
#3	1137.3	3225.1	25782.	2179.6

◀ Zoom In ▶ Zoom Out

Sample Name: FA53633-4 Acquired: 5/4/2018 11:30:51 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0074	-.0009	.0106	.0000	2.755	.0000	-.0002	.0002	.0064
Stddev	.0002	.0105	.0010	.0004	.0001	.026	.000	.0001	.0001	.0001
%RSD	125.5	141.5	106.1	3.455	290.6	.9574	34.40	30.44	31.39	1.514
#1	-.0002	.0194	-.0006	.0103	.0001	2.765	.0000	-.0003	.0003	.0064
#2	.0000	.0023	-.0001	.0106	-.0001	2.725	.0000	-.0002	.0003	.0065
#3	-.0003	.0004	-.0020	.0110	.0001	2.776	-.0001	-.0003	.0002	.0063

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0014	2.415	.8597	.0029	-.0012	12.54	.0010	.0009	.0015	.0025
Stddev	.0024	.027	.0147	.0000	.0001	.11	.0002	.0006	.0009	.0008
%RSD	172.1	1.126	1.715	1.133	4.187	.8753	24.22	62.34	58.95	31.96
#1	.0042	2.447	.8541	.0030	-.0012	12.63	.0012	.0003	.0013	.0028
#2	.0006	2.400	.8485	.0029	-.0012	12.42	.0011	.0013	.0007	.0016
#3	-.0005	2.399	.8764	.0029	-.0013	12.57	.0007	.0012	.0025	.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7822	.0003	.0188	-.0001	-.0027	.0001	.0184
Stddev	.0008	.0001	.0004	.0001	.0008	.0002	.0001
%RSD	.1011	20.82	2.051	76.74	29.62	277.3	.3799
#1	.7817	.0004	.0191	-.0001	-.0021	-.0001	.0184
#2	.7831	.0003	.0184	.0000	-.0036	.0002	.0185
#3	.7818	.0003	.0191	-.0003	-.0024	.0001	.0184

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1107.2	3189.1	25046.	2098.5
Stddev	4.9	9.4	188.	11.4
%RSD	.44452	.29410	.75029	.54341
#1	1101.5	3178.4	24866.	2098.2
#2	1110.2	3193.2	25032.	2110.0
#3	1109.8	3195.7	25241.	2087.2

◀ Zoom In ▶ Zoom Out

Sample Name: MP33693-MB1 Acquired: 5/4/2018 11:35:08 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0082	-.0019	-.0001	-.0001	.0055	-.0001	-.0002	-.0002	-.0005
Stddev	.0002	.0093	.0013	.0001	.0001	.0013	.0000	.0000	.0005	.0001
%RSD	61.28	113.6	66.73	74.69	126.5	24.14	46.59	4.450	290.4	27.16
#1	-.0005	.0077	-.0021	-.0002	.0000	.0044	-.0001	-.0002	.0003	-.0004
#2	-.0002	.0178	-.0031	.0000	-.0001	.0050	-.0001	-.0002	-.0002	-.0004
#3	-.0002	-.0009	-.0006	-.0002	.0000	.0069	-.0001	-.0002	-.0006	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0075	-.0192	.0112	.0000	-.0022	.0020	-.0002	.0007	.0009	.0015
Stddev	.0026	.0255	.0088	.000	.0001	.0031	.0002	.0007	.0002	.0015
%RSD	33.86	132.6	78.87	754.7	3.057	152.8	98.78	99.11	27.06	100.1
#1	-.0105	-.0376	.0019	.0000	-.0022	.0045	-.0004	.0004	.0007	.0003
#2	-.0063	.0099	.0195	.0000	-.0023	-.0014	-.0001	.0015	.0008	.0031
#3	-.0059	-.0299	.0121	.0000	-.0021	.0030	.0000	.0002	.0011	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0327	-.0001	-.0001	-.0007	-.0016	.0000	.0009
Stddev	.0010	.0002	.0002	.0000	.0005	.000	.0000
%RSD	3.176	429.3	251.0	3.261	28.16	308.7	1.682
#1	.0337	.0001	.0000	-.0007	-.0012	.0001	.0010
#2	.0329	-.0003	.0001	-.0007	-.0015	-.0002	.0009
#3	.0316	.0001	-.0003	-.0007	-.0021	-.0001	.0009
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

◀ Zoom In ▶ Zoom Out

Sample Name: MP33693-MB1 Acquired: 5/4/2018 11:35:08 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1156.3	3272.6	26110.	2175.2
Stddev	3.9	10.4	107.	10.7
%RSD	.33939	.31819	.40839	.49172
#1	1154.7	3265.5	26222.	2175.5
#2	1160.7	3284.6	26010.	2185.8
#3	1153.4	3267.8	26096.	2164.4

◀ Zoom In ▶ Zoom Out

Sample Name: MP33693-B1 Acquired: 5/4/2018 11:39:26 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0515	26.99	1.995	2.096	.0531	25.34	.0511	.5173	.2122	.2627
Stddev	.0002	.05	.010	.007	.0001	.03	.0002	.0020	.0013	.0014
%RSD	.3665	.1763	.5043	.3195	.2652	.1322	.3977	.3774	.6210	.5314
#1	.0517	26.96	2.003	2.100	.0531	25.33	.0513	.5195	.2135	.2634
#2	.0515	26.97	1.997	2.089	.0530	25.31	.0510	.5167	.2124	.2635
#3	.0513	27.05	1.984	2.100	.0533	25.38	.0509	.5157	.2109	.2611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.32	25.10	24.93	.5207	.4936	25.18	.5312	.4917	.5102	1.976
Stddev	.05	.02	.15	.0018	.0015	.06	.0026	.0026	.0036	.007
%RSD	.1848	.0891	.6080	.3537	.2961	.2272	.4846	.5197	.7050	.3689
#1	26.31	25.12	24.82	.5221	.4949	25.19	.5338	.4944	.5114	1.980
#2	26.27	25.07	24.86	.5186	.4940	25.12	.5311	.4893	.5130	1.980
#3	26.37	25.10	25.10	.5213	.4920	25.23	.5286	.4914	.5061	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5178	.5172	.5290	.5258	1.951	.4932	.5091
Stddev	.0022	.0011	.0009	.0006	.003	.0024	.0021
%RSD	.4283	.2045	.1739	.1168	.1469	.4824	.4124
#1	.5192	.5177	.5292	.5263	1.954	.4959	.5110
#2	.5189	.5178	.5280	.5251	1.952	.4915	.5093
#3	.5152	.5159	.5299	.5260	1.948	.4922	.5068
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33693-B1 Acquired: 5/4/2018 11:39:26 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1041.7	3137.4	24534.	2114.4
Stddev	2.9	10.3	140.	3.7
%RSD	.27900	.32979	.56869	.17505
#1	1038.3	3128.0	24397.	2116.1
#2	1043.6	3135.6	24676.	2110.1
#3	1043.1	3148.5	24531.	2116.9

Zoom In Zoom Out

Sample Name: FA53831-1L Acquired: 5/4/2018 11:43:23 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	-.0045	-.0006	.0339	.0001	37.68	.0000	-.0003	.0007
Stddev	.0003	.0037	.0005	.0003	.0000	.10	.000	.0002	.0002
%RSD	812.2	83.16	82.66	.8912	32.01	.2685	300.7	56.92	27.18
#1	.0000	-.0088	-.0003	.0338	.0001	37.71	.0000	-.0004	.0009
#2	-.0002	-.0019	-.0011	.0343	.0001	37.77	.0000	-.0002	.0006
#3	.0003	-.0028	-.0003	.0337	.0001	37.57	-.0001	-.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0013	.0009	.3698	24.91	-.0001	-.0021	F182.9	.0099	.0014
Stddev	.0000	.0011	.0053	.07	.0000	.0001	1.0	.0002	.0008
%RSD	1.969	129.0	1.444	.2763	43.32	4.836	.5501	1.990	59.21
#1	.0013	.0016	.3638	24.98	.0000	-.0020	184.1	.0101	.0020
#2	.0013	-.0004	.3716	24.85	-.0001	-.0021	182.5	.0097	.0004
#3	.0013	.0015	.3741	24.90	.0000	-.0021	182.3	.0098	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	.0013	.0570	-.0002	.0233	.0008	-.0008	-.0002	.0013
Stddev	.0006	.0011	.0004	.0002	.0001	.0001	.0007	.0003	.0001
%RSD	46.26	88.28	.6462	96.50	.2602	7.951	91.10	135.3	8.097
#1	.0017	.0026	.0567	-.0002	.0232	.0008	-.0006	-.0004	.0013
#2	.0014	.0009	.0574	.0000	.0233	.0008	-.0016	-.0004	.0014
#3	.0006	.0004	.0568	-.0003	.0233	.0009	-.0002	.0001	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1008.9	3051.1	24001.	2131.1
Stddev	1.1	2.1	103.	19.9
%RSD	.10694	.06939	.42779	.93269
#1	1010.1	3048.8	23889.	2109.7
#2	1008.1	3051.6	24022.	2149.0
#3	1008.5	3053.0	24091.	2134.6

Zoom In Zoom Out

Sample Name: MP33693-D1 Acquired: 5/4/2018 11:47:45 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0128	-.0016	.0340	-.0001	38.31	-.0001	-.0004	.0010
Stddev	.0004	.0204	.0003	.0004	.0001	.15	.0000	.0001	.0001
%RSD	207.5	159.2	16.64	1.114	139.6	.4009	15.53	18.31	14.90
#1	.0002	.0354	-.0017	.0338	.0000	38.48	-.0001	-.0004	.0011
#2	-.0002	-.0040	-.0013	.0344	.0000	38.28	-.0001	-.0003	.0009
#3	.0005	.0070	-.0018	.0337	-.0002	38.17	-.0001	-.0003	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0014	-.0077	.3515	25.18	-.0001	-.0026	F184.0	.0100	.0014
Stddev	.0003	.0025	.0076	.16	.0000	.0001	2.1	.0001	.0007
%RSD	20.72	32.45	2.161	.6476	35.22	3.483	1.150	.8991	51.40
#1	.0015	-.0048	.3429	25.33	-.0001	-.0027	183.8	.0099	.0010
#2	.0011	-.0094	.3545	25.22	.0000	-.0025	186.2	.0100	.0010
#3	.0016	-.0088	.3572	25.01	-.0001	-.0026	182.0	.0101	.0022

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0016	.0026	.0558	-.0002	.0235	.0008	-.0020	.0002	.0014
Stddev	.0016	.0029	.0004	.0002	.0002	.0002	.0003	.0003	.0000
%RSD	103.3	111.6	.7884	118.6	.7065	23.06	14.89	196.0	2.849
#1	.0026	.0057	.0561	.0000	.0236	.0008	-.0019	-.0001	.0014
#2	.0024	.0019	.0553	-.0002	.0236	.0010	-.0019	.0000	.0015
#3	-.0003	.0001	.0560	-.0004	.0233	.0006	-.0024	.0005	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1003.5	3025.6	23747.	2071.0
Stddev	5.5	12.9	186.	15.1
%RSD	.54995	.42479	.78264	.72914
#1	997.49	3014.0	23631.	2053.5
#2	1004.7	3023.3	23649.	2079.7
#3	1008.3	3039.4	23962.	2079.6

Zoom In Zoom Out

Sample Name: MP33693-SD1 Acquired: 5/4/2018 11:52:05 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	-.0164	-.0049	.0351	.0002	40.99	-.0003	-.0011	.0007	.0033
Stddev	.0021	.0525	.0019	.0003	.0011	.48	.0001	.0002	.0019	.0010
%RSD	698.5	320.3	38.21	.8404	730.9	1.183	45.97	16.26	257.0	29.59
#1	.0019	.0282	-.0061	.0349	.0000	41.31	-.0001	-.0009	.0020	.0042
#2	-.0023	-.0742	-.0057	.0354	-.0009	40.43	-.0002	-.0013	.0016	.0023
#3	-.0005	-.0031	-.0027	.0351	.0013	41.22	-.0004	-.0012	-.0014	.0035

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0410	.3464	27.43	-.0002	-.0128	198.6	.0108	.0050	.0036	-.0012
Stddev	.0150	.0804	.23	.0002	.0002	2.1	.0014	.0008	.0020	.0078
%RSD	36.59	23.22	.8423	117.6	1.408	1.072	12.71	15.89	54.58	675.1
#1	-.0422	.2576	27.70	-.0003	-.0130	200.3	.0104	.0041	.0048	.0067
#2	-.0254	.3672	27.31	-.0003	-.0127	196.2	.0097	.0056	.0047	-.0013
#3	-.0553	.4144	27.28	.0001	-.0126	199.2	.0123	.0053	.0013	-.0090

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0743	-.0009	.0244	-.0008	-.0032	-.0003	.0024
Stddev	.0148	.0004	.0003	.0006	.0021	.0005	.0006
%RSD	19.98	46.77	1.201	75.77	64.56	151.0	23.88
#1	.0670	-.0007	.0248	-.0002	-.0046	-.0007	.0028
#2	.0644	-.0015	.0243	-.0007	-.0043	-.0005	.0026
#3	.0913	-.0007	.0243	-.0014	-.0008	.0002	.0017

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1076.5	3136.7	24789.	2123.9
Stddev	2.2	11.3	86.	34.2
%RSD	.20156	.35947	.34692	1.6112
#1	1077.7	3148.4	24858.	2085.3
#2	1077.9	3135.9	24818.	2135.9
#3	1074.0	3125.9	24693.	2150.6

Zoom In Zoom Out

Sample Name: MP33693-S1 Acquired: 5/4/2018 11:56:22 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0528	26.96	2.068	2.130	.0531	63.76	.0507	.5096	.2067
Stddev	.0003	.20	.008	.025	.0003	.57	.0000	.0015	.0010
%RSD	.6495	.7595	.4074	1.174	.5079	.9000	.0860	.2853	.4806
#1	.0526	27.19	2.078	2.159	.0533	64.43	.0507	.5111	.2076
#2	.0527	26.84	2.063	2.120	.0530	63.43	.0506	.5095	.2070
#3	.0532	26.84	2.063	2.112	.0528	63.43	.0507	.5082	.2056

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2636	26.23	25.55	50.89	.5126	.4982	F208.6	.5343	.4970
Stddev	.0009	.21	.26	.53	.0004	.0012	1.4	.0017	.0001
%RSD	.3447	.7910	1.030	1.046	.0829	.2504	.6487	.3191	.0264
#1	.2646	26.47	25.85	51.51	.5126	.4996	209.9	.5359	.4971
#2	.2628	26.15	25.44	50.54	.5121	.4972	207.2	.5345	.4969
#3	.2634	26.08	25.36	50.64	.5130	.4977	208.8	.5325	.4968

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5216	2.054	.5614	.5180	.5549	.5264	1.932	.4928	.5083
Stddev	.0023	.010	.0004	.0016	.0062	.0007	.002	.0033	.0007
%RSD	.4353	.4898	.0643	.3101	1.109	.1272	.0956	.6666	.1423
#1	.5213	2.065	.5618	.5198	.5619	.5272	1.933	.4965	.5091
#2	.5241	2.051	.5613	.5173	.5504	.5259	1.930	.4917	.5078
#3	.5196	2.046	.5610	.5168	.5523	.5262	1.933	.4902	.5079

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	958.54	2985.3	23602.	2068.3
Stddev	1.71	9.5	146.	11.8
%RSD	.17872	.31742	.62055	.57268
#1	956.62	2974.7	23434.	2054.9
#2	959.93	2988.3	23702.	2077.5
#3	959.07	2993.0	23671.	2072.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 12:00:27 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2496	40.16	2.021	2.018	2.032	40.34	2.040	2.040	2.036	2.028
Stddev	.0008	.22	.003	.014	.010	.12	.004	.004	.006	.001
%RSD	.3237	.5472	.1472	.7102	.5115	.2990	.2078	.1893	.2896	.0612
#1	.2500	40.39	2.024	2.034	2.043	40.44	2.044	2.044	2.040	2.029
#2	.2500	39.95	2.020	2.009	2.023	40.21	2.039	2.039	2.030	2.026
#3	.2486	40.16	2.019	2.010	2.028	40.38	2.036	2.036	2.040	2.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.68	40.33	40.39	2.059	2.069	39.78	2.052	2.003	2.030	2.027
Stddev	.17	.19	.13	.005	.001	.14	.004	.007	.004	.013
%RSD	.4133	.4760	.3216	.2229	.0236	.3433	.1753	.3623	.1720	.6452
#1	40.84	40.54	40.52	2.055	2.070	39.94	2.056	2.002	2.034	2.037
#2	40.51	40.17	40.26	2.057	2.069	39.68	2.051	1.996	2.028	2.013
#3	40.70	40.27	40.39	2.064	2.069	39.73	2.049	2.011	2.028	2.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.822	2.077	2.030	2.054	2.027	2.066	2.039
Stddev	.007	.003	.011	.003	.007	.002	.003
%RSD	.3847	.1180	.5488	.1670	.3429	.0739	.1242
#1	1.830	2.080	2.042	2.054	2.026	2.067	2.041
#2	1.817	2.075	2.020	2.051	2.021	2.066	2.039
#3	1.819	2.078	2.029	2.058	2.035	2.064	2.036
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 12:00:27 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	996.22	3103.9	24531.	2136.4
Stddev	.87	7.2	73.	10.3
%RSD	.08687	.23040	.29907	.48395
#1	996.24	3096.3	24591.	2147.1
#2	997.07	3105.0	24552.	2135.6
#3	995.34	3110.5	24449.	2126.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 12:04:23 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0029	.0001	.0006	.0002	.0092	.0001	.0000	.0001
Stddev	.0002	.0073	.0003	.0002	.0001	.0042	.0000	.0000	.0004
%RSD	151.2	251.9	454.6	32.64	59.44	45.13	53.20	3518.	636.0
#1	.0003	.0004	-.0002	.0007	.0001	.0044	.0001	.0000	.0002
#2	.0002	-.0113	.0001	.0004	.0001	.0112	.0001	.0000	.0003
#3	-.0001	.0021	.0003	.0007	.0003	.0120	.0000	.0000	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0094	.0028	-.0043	.0002	F.0013	.0281	.0001	.0004
Stddev	.0002	.0007	.0269	.0092	.0000	.0008	.0039	.0001	.0004
%RSD	1025.	7.478	954.8	212.9	6.732	63.68	14.04	70.21	98.37
#1	.0000	.0099	.0339	-.0088	.0002	.0022	.0243	.0001	.0002
#2	-.0002	.0086	-.0129	-.0104	.0002	.0011	.0321	.0001	.0009
#3	.0002	.0096	-.0125	.0063	.0002	.0006	.0279	.0003	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0002	.0017	.0004	.0001	.0009	.0003	.0001	.0004
Stddev	.0013	.0019	.0007	.0001	.0001	.0002	.0006	.0001	.0000
%RSD	113.7	901.0	42.75	35.00	53.15	23.06	193.1	191.6	7.063
#1	.0014	.0022	.0014	.0002	.0001	.0011	.0005	.0001	.0004
#2	-.0003	.0000	.0013	.0004	.0001	.0007	.0008	.0001	.0004
#3	.0022	-.0016	.0026	.0005	.0002	.0009	-.0004	-.0001	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 12:04:23 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1143.6	3216.4	25487.	2171.3
Stddev	1.9	4.9	105.	14.9
%RSD	.16327	.15107	.41351	.68514
#1	1145.7	3212.5	25455.	2157.0
#2	1142.3	3214.8	25401.	2186.7
#3	1142.8	3221.8	25604.	2170.3

Zoom In Zoom Out

Sample Name: MP33693-S2 Acquired: 5/4/2018 12:08:41 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0517	25.67	2.040	2.041	.0508	60.34	.0496	.4987	.2000
Stddev	.0004	.11	.004	.004	.0001	.23	.0001	.0011	.0015
%RSD	.8148	.4352	.1751	.2095	.2285	.3788	.2640	.2252	.7391
#1	.0516	25.76	2.041	2.044	.0508	60.53	.0495	.4980	.1985
#2	.0522	25.55	2.037	2.036	.0506	60.08	.0496	.4981	.1999
#3	.0514	25.71	2.044	2.043	.0509	60.40	.0497	.5000	.2015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2569	25.26	24.64	48.72	.5046	.4892	F198.9	.5282	.4827
Stddev	.0003	.04	.08	.09	.0021	.0006	4.6	.0008	.0009
%RSD	.1025	.1548	.3242	.1795	.4232	.1299	2.338	.1452	.1845
#1	.2567	25.30	24.73	48.82	.5022	.4885	203.4	.5290	.4819
#2	.2568	25.25	24.57	48.64	.5058	.4895	199.1	.5281	.4826
#3	.2572	25.22	24.63	48.71	.5059	.4896	194.1	.5274	.4836

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5156	2.032	.5494	.5103	.5271	.5130	1.890	.4816	.4973
Stddev	.0003	.002	.0006	.0005	.0017	.0011	.006	.0008	.0015
%RSD	.0525	.1064	.1146	.1061	.3315	.2235	.3249	.1646	.3026
#1	.5155	2.034	.5501	.5100	.5267	.5117	1.886	.4816	.4956
#2	.5159	2.030	.5488	.5109	.5257	.5135	1.887	.4824	.4980
#3	.5154	2.032	.5493	.5100	.5291	.5138	1.897	.4808	.4984

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	972.28	3009.8	23955.	2138.2
Stddev	1.37	5.4	77.	30.9
%RSD	.14053	.18023	.32239	1.4443
#1	972.03	3005.7	24027.	2105.9
#2	971.05	3007.6	23873.	2141.0
#3	973.75	3015.9	23964.	2167.5

Zoom In Zoom Out

Sample Name: FA53731-1 Acquired: 5/4/2018 12:12:48 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0192	-.0022	2.120	.0001	296.7	-.0001	-.0003	.0046	.0001
Stddev	.0003	.0059	.0012	.009	.0002	1.3	.0001	.0001	.0004	.0001
%RSD	162.4	30.59	56.18	.4173	204.6	.4516	74.73	25.41	8.606	105.9
#1	-.0001	.0146	-.0028	2.112	-.0001	295.2	-.0001	-.0003	.0050	.0000
#2	.0000	.0258	-.0008	2.129	.0002	297.8	-.0001	-.0004	.0044	.0001
#3	-.0005	.0171	-.0030	2.118	.0001	297.1	.0000	-.0003	.0043	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0058	20.74	.0060	.0000	.0001	43.54	-.0001	.0059	.0008	.0020
Stddev	.0036	.08	.0193	.0000	.0002	.17	.0001	.0007	.0002	.0012
%RSD	61.08	.3898	322.4	116.3	398.8	.3883	93.56	12.59	24.57	59.47
#1	.0099	20.65	-.0025	.0000	.0003	43.35	.0000	.0067	.0009	.0014
#2	.0033	20.81	.0281	.0000	.0000	43.67	-.0003	.0055	.0008	.0012
#3	.0043	20.74	-.0076	.0001	-.0001	43.60	-.0001	.0054	.0006	.0034

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0857	-.0001	1.012	.0011	-.0019	.0002	.0032
Stddev	.0006	.0003	.002	.0001	.0009	.0001	.0000
%RSD	.7398	414.7	.1761	6.063	47.36	37.34	.9622
#1	.0850	.0002	1.010	.0011	-.0012	.0001	.0032
#2	.0859	-.0004	1.013	.0011	-.0029	.0002	.0032
#3	.0862	-.0001	1.013	.0010	-.0016	.0002	.0032

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	981.46	2921.9	23768.	2119.2
Stddev	2.20	2.9	164.	1.9
%RSD	.22465	.10011	.69115	.09075
#1	983.93	2919.6	23612.	2120.6
#2	980.76	2920.9	23753.	2120.1
#3	979.69	2925.2	23939.	2117.0

Zoom In Zoom Out

Sample Name: MP33693-D2 Acquired: 5/4/2018 12:17:04 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0016	-.0022	.0269	-.0001	38.17	-.0001	-.0003	.0011
Stddev	.000	.0187	.0002	.0003	.0001	.25	.0000	.0000	.0001
%RSD	1287.	1150.	9.301	1.125	151.4	.6597	21.68	3.841	11.89
#1	-.0002	-.0075	-.0021	.0271	-.0001	38.40	-.0001	-.0003	.0010
#2	.0004	.0231	-.0024	.0271	.0000	38.22	-.0001	-.0003	.0010
#3	-.0003	-.0108	-.0021	.0266	-.0001	37.90	-.0001	-.0003	.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0020	-.0091	.3784	25.71	-.0001	-.0022	F182.1	.0104	.0008
Stddev	.0002	.0028	.0212	.25	.0000	.0001	.8	.0001	.0007
%RSD	12.37	30.84	5.598	.9742	19.83	3.619	.4288	1.012	83.84
#1	.0020	-.0095	.3945	26.00	-.0001	-.0022	181.8	.0105	.0014
#2	.0017	-.0061	.3863	25.57	-.0001	-.0021	183.0	.0103	.0001
#3	.0022	-.0116	.3544	25.57	-.0001	-.0023	181.6	.0103	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0012	.0016	.0502	-.0001	.0234	.0009	-.0010	.0000	.0015
Stddev	.0017	.0029	.0015	.0006	.0001	.0001	.0008	.000	.0000
%RSD	137.2	176.7	2.978	431.6	.2998	13.93	85.23	1748.	2.070
#1	.0005	-.0001	.0507	-.0008	.0234	.0010	-.0012	.0003	.0014
#2	.0032	.0001	.0513	.0003	.0234	.0008	-.0001	-.0002	.0015
#3	.0001	.0049	.0485	.0001	.0233	.0008	-.0017	-.0002	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1001.1	3002.6	24057.	2107.0
Stddev	1.6	6.6	56.	24.1
%RSD	.15801	.21874	.23277	1.1452
#1	999.31	2996.1	24099.	2082.1
#2	1002.3	3002.4	23994.	2108.5
#3	1001.6	3009.2	24079.	2130.3

Zoom In Zoom Out

Sample Name: MP33693-MB2 Acquired: 5/4/2018 12:21:27 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0034	-.0022	-.0001	.0000	.0417	-.0001	-.0003	.0004
Stddev	.0008	.0112	.0008	.0000	.0001	.0048	.0000	.0000	.0003
%RSD	432.8	334.0	36.60	46.82	263.6	11.50	79.39	5.024	73.62
#1	.0006	.0051	-.0013	.0000	.0002	.0419	.0000	-.0002	.0003
#2	-.0001	.0136	-.0024	-.0001	.0000	.0464	.0000	-.0003	.0001
#3	-.0011	-.0086	-.0030	-.0001	-.0001	.0368	-.0001	-.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0076	.2895	-.0047	.0001	-.0022	F178.9	.0008	.0006
Stddev	.0002	.0025	.0252	.0017	.0000	.0002	1.1	.0001	.0005
%RSD	121.5	32.87	8.690	35.53	34.95	9.287	.6094	17.89	90.39
#1	-.0001	-.0093	.2605	-.0056	.0001	-.0023	178.7	.0006	.0007
#2	.0004	-.0048	.3034	-.0028	.0002	-.0020	180.1	.0008	.0000
#3	.0002	-.0089	.3047	-.0057	.0001	-.0023	178.0	.0009	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0001	.0507	-.0001	.0016	-.0007	-.0029	-.0002	.0008
Stddev	.0009	.0003	.0006	.0002	.0001	.0002	.0015	.0002	.0001
%RSD	365.0	220.3	1.280	160.4	5.859	24.86	50.09	110.3	10.21
#1	-.0006	.0000	.0514	-.0002	.0017	-.0005	-.0028	-.0003	.0007
#2	-.0010	-.0001	.0502	-.0002	.0016	-.0008	-.0016	.0001	.0009
#3	.0008	.0004	.0504	.0001	.0015	-.0006	-.0045	-.0003	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP33693-MB2 Acquired: 5/4/2018 12:21:27 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1028.4	3076.6	24345.	2133.9
Stddev	3.2	4.7	92.	2.8
%RSD	.31326	.15120	.37683	.13034
#1	1029.8	3081.2	24250.	2131.3
#2	1030.8	3076.8	24351.	2136.8
#3	1024.8	3071.9	24434.	2133.7

Zoom In Zoom Out

Sample Name: MP33693-B2 Acquired: 5/4/2018 12:25:51 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0512	26.32	2.018	2.041	.0518	24.74	.0503	.5049	.2061
Stddev	.0004	.06	.007	.006	.0004	.07	.0002	.0012	.0017
%RSD	.7231	.2197	.3326	.2887	.7993	.2795	.3117	.2353	.8044
#1	.0510	26.34	2.025	2.045	.0522	24.79	.0505	.5063	.2047
#2	.0509	26.37	2.017	2.043	.0518	24.77	.0503	.5046	.2079
#3	.0516	26.26	2.012	2.034	.0514	24.66	.0502	.5039	.2056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2568	25.71	24.88	24.44	.5050	.4886	F199.9	.5193	.4910
Stddev	.0016	.04	.12	.11	.0025	.0009	2.4	.0013	.0039
%RSD	.6184	.1566	.4708	.4646	.4970	.1867	1.197	.2460	.7971
#1	.2586	25.75	24.92	24.48	.5021	.4895	201.0	.5201	.4955
#2	.2558	25.67	24.98	24.54	.5063	.4885	201.6	.5199	.4887
#3	.2560	25.71	24.76	24.32	.5067	.4877	197.2	.5178	.4888
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5082	2.009	.5345	.5073	.5179	.5145	1.910	.4855	.5077
Stddev	.0004	.014	.0025	.0017	.0018	.0016	.012	.0008	.0020
%RSD	.0766	.7109	.4600	.3340	.3379	.3085	.6336	.1716	.3939
#1	.5078	2.020	.5364	.5077	.5196	.5126	1.923	.4855	.5098
#2	.5082	2.015	.5354	.5087	.5180	.5151	1.905	.4864	.5073
#3	.5086	1.993	.5317	.5054	.5161	.5156	1.901	.4847	.5059
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33693-B2 Acquired: 5/4/2018 12:25:51 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	980.31	3040.2	23866.	2112.3
Stddev	5.17	11.4	117.	14.6
%RSD	.52689	.37351	.49195	.69064
#1	974.49	3027.5	24002.	2109.6
#2	982.09	3043.6	23792.	2099.3
#3	984.35	3049.4	23806.	2128.1

Zoom In Zoom Out

Sample Name: MP33693-MB3 Acquired: 5/4/2018 12:29:58 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0017	-.0012	.0000	-.0001	.0113	.0000	-.0002	-.0002	.0000
Stddev	.0007	.0102	.0002	.0003	.0000	.0056	.000	.0001	.0002	.000
%RSD	206.8	590.8	17.96	709.7	59.22	49.35	553.7	47.49	140.9	4175.
#1	-.0010	-.0068	-.0015	.0002	-.0001	.0058	.0000	-.0002	.0001	.0001
#2	.0004	-.0011	-.0011	.0001	.0000	.0113	.0000	-.0002	-.0002	-.0003
#3	-.0004	.0130	-.0011	-.0003	-.0001	.0170	.0000	-.0001	-.0004	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	.0031	-.0054	.0000	-.0020	.0775	.0000	.0002	.0011	.0009
Stddev	.0037	.0049	.0127	.0000	.0002	.0004	.000	.0002	.0002	.0007
%RSD	318.0	154.9	234.7	89.04	10.01	.4862	3339.	87.28	16.32	76.65
#1	.0037	-.0007	-.0200	.0000	-.0018	.0776	.0003	.0002	.0012	.0018
#2	.0029	.0015	.0005	.0000	-.0022	.0772	-.0004	.0004	.0009	.0007
#3	-.0031	.0086	.0033	.0000	-.0019	.0779	.0000	.0001	.0012	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0308	-.0002	.0000	-.0005	-.0016	-.0001	.0013
Stddev	.0006	.0002	.000	.0001	.0007	.0001	.0000
%RSD	1.791	96.40	304.9	18.87	44.68	72.06	3.043
#1	.0302	.0000	.0000	-.0004	-.0016	-.0001	.0013
#2	.0308	-.0003	-.0001	-.0005	-.0024	-.0002	.0013
#3	.0313	-.0003	.0000	-.0006	-.0009	-.0001	.0012
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33693-MB3 Acquired: 5/4/2018 12:29:58 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1150.4	3239.5	25873.	2186.5
Stddev	3.9	6.2	133.	18.1
%RSD	.34135	.18997	.51567	.82939
#1	1146.6	3233.9	25899.	2195.2
#2	1150.2	3246.1	25992.	2165.6
#3	1154.5	3238.5	25729.	2198.6

Zoom In Zoom Out

Sample Name: MP33693-B3 Acquired: 5/4/2018 12:34:17 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0494	26.18	1.936	2.013	.0513	24.58	.0495	.5017	.2032	.2529
Stddev	.0008	.03	.001	.011	.0003	.07	.0001	.0003	.0008	.0001
%RSD	1.525	.1109	.0711	.5540	.5156	.2853	.1441	.0541	.3925	.0264
#1	.0502	26.18	1.937	2.009	.0512	24.52	.0495	.5017	.2038	.2529
#2	.0494	26.21	1.934	2.025	.0516	24.65	.0495	.5019	.2034	.2530
#3	.0486	26.15	1.937	2.004	.0511	24.56	.0494	.5014	.2023	.2528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.42	24.29	24.21	.4944	.4816	24.28	.5131	.4735	.4917	1.928
Stddev	.11	.11	.20	.0019	.0002	.04	.0018	.0023	.0016	.005
%RSD	.4501	.4352	.8256	.3750	.0396	.1545	.3546	.4954	.3213	.2440
#1	25.43	24.25	24.23	.4963	.4817	24.28	.5137	.4745	.4935	1.932
#2	25.53	24.41	24.39	.4926	.4816	24.32	.5145	.4752	.4912	1.928
#3	25.31	24.21	24.00	.4943	.4814	24.24	.5110	.4709	.4904	1.923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4992	.5032	.5139	.5054	1.885	.4731	.4920
Stddev	.0005	.0023	.0016	.0015	.002	.0012	.0006
%RSD	.0977	.4541	.3171	.2906	.1013	.2579	.1216
#1	.4994	.5052	.5128	.5068	1.883	.4745	.4924
#2	.4996	.5038	.5157	.5039	1.886	.4726	.4922
#3	.4987	.5007	.5131	.5055	1.886	.4722	.4913
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33693-B3 Acquired: 5/4/2018 12:34:17 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1050.8	3156.6	25014.	2140.6
Stddev	3.5	4.8	96.	17.9
%RSD	.33132	.15361	.38427	.83725
#1	1048.6	3152.2	24923.	2150.6
#2	1048.9	3155.7	25114.	2119.9
#3	1054.8	3161.8	25004.	2151.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 12:38:58 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2540	41.57	2.034	2.075	2.090	41.79	2.066	2.066	2.089	2.068
Stddev	.0004	.31	.004	.015	.012	.31	.005	.005	.008	.006
%RSD	.1549	.7463	.1781	.7036	.5702	.7399	.2685	.2516	.3811	.2856
#1	.2536	41.93	2.033	2.084	2.102	42.14	2.070	2.069	2.085	2.074
#2	.2539	41.36	2.038	2.082	2.091	41.69	2.069	2.069	2.098	2.064
#3	.2544	41.43	2.032	2.058	2.078	41.54	2.060	2.060	2.084	2.064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.83	41.60	41.31	2.098	2.092	41.37	2.067	2.048	2.054	2.049
Stddev	.19	.31	.40	.008	.003	.25	.002	.003	.005	.003
%RSD	.4551	.7550	.9572	.3818	.1641	.6133	.0894	.1528	.2501	.1266
#1	42.02	41.88	41.54	2.089	2.089	41.65	2.065	2.048	2.053	2.047
#2	41.81	41.65	41.53	2.104	2.096	41.17	2.069	2.052	2.059	2.052
#3	41.64	41.26	40.85	2.102	2.090	41.28	2.067	2.045	2.049	2.047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.838	2.082	2.095	2.096	2.067	2.102	2.060
Stddev	.001	.001	.009	.005	.003	.003	.005
%RSD	.0723	.0660	.4344	.2552	.1542	.1576	.2527
#1	1.839	2.081	2.105	2.091	2.063	2.098	2.063
#2	1.839	2.084	2.093	2.101	2.069	2.103	2.063
#3	1.837	2.083	2.087	2.097	2.068	2.104	2.054
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 12:38:58 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	983.91	3094.2	24055.	2077.8
Stddev	1.97	5.5	131.	18.8
%RSD	.19982	.17822	.54460	.90494
#1	985.40	3093.2	24206.	2062.1
#2	981.68	3089.2	23987.	2072.6
#3	984.64	3100.1	23972.	2098.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 12:44:56 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0073	.0009	.0001	.0002	.0109	.0001	.0000
Stddev	.0002	.0068	.0008	.0000	.0001	.0016	.0000	.0000
%RSD	120.9	92.97	86.27	24.89	48.10	14.49	14.32	145.9
#1	.0004	.0110	.0012	.0001	.0001	.0123	.0001	.0000
#2	.0000	.0115	.0000	.0001	.0002	.0112	.0001	.0000
#3	.0001	-.0005	.0015	.0001	.0001	.0092	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0003	.0011	-.0123	.0032	.0003	-.0002	.0171
Stddev	.0004	.0003	.0020	.0246	.0257	.0000	.0004	.0053
%RSD	861.0	92.06	180.2	199.2	795.5	9.247	243.9	31.11
#1	-.0004	.0006	-.0006	-.0158	.0326	.0002	.0003	.0135
#2	.0001	.0000	.0032	-.0350	-.0074	.0003	-.0002	.0146
#3	.0004	.0004	.0006	.0138	-.0155	.0003	-.0006	.0232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0008	.0005	F-.0026	.0012	.0003	.0001	.0003
Stddev	.0001	.0001	.0010	.0007	.0005	.0003	.0001	.0001
%RSD	39.78	13.25	181.5	25.10	41.99	112.9	132.2	35.72
#1	.0003	.0009	.0016	-.0034	.0007	.0006	.0002	.0004
#2	.0003	.0007	.0004	-.0023	.0017	.0001	-.0001	.0003
#3	.0001	.0008	-.0004	-.0022	.0012	.0001	.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit				.0020				
Low Limit				-.0020				

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 12:44:56 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0000	.0003	.0005
Stddev	.000	.0003	.0000
%RSD	4943.	107.7	7.643
#1	-.0004	.0006	.0004
#2	.0004	.0003	.0005
#3	.0000	.0000	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1144.2	3225.7	25589.	2180.0
Stddev	2.7	1.7	61.	18.7
%RSD	.23396	.05358	.23861	.86000
#1	1141.2	3223.8	25597.	2176.4
#2	1146.2	3226.0	25646.	2200.3
#3	1145.2	3227.2	25524.	2163.3

Zoom In Zoom Out

Sample Name: MP33696-MB1 Acquired: 5/4/2018 12:56:05 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0132	-.0011	.0000	.0000	.0040	.0000	-.0002	.0002	-.0001
Stddev	.0001	.0086	.0008	.000	.000	.0051	.000	.0001	.0002	.0005
%RSD	18.27	64.98	72.74	4050.	204.6	127.7	137.1	35.40	132.6	367.6
#1	-.0005	.0083	-.0008	-.0001	-.0001	.0035	.0000	-.0002	.0000	.0002
#2	-.0007	.0230	-.0005	.0003	.0000	.0093	.0000	-.0002	.0004	.0001
#3	-.0006	.0081	-.0019	-.0002	.0000	-.0008	-.0001	-.0003	.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0018	.0083	.0366	.0000	-.0019	.0186	.0001	.0002	.0002	-.0010
Stddev	.0010	.0202	.0104	.0000	.0001	.0070	.0001	.0008	.0009	.0011
%RSD	55.84	243.1	28.28	44.75	6.442	37.52	64.92	379.3	380.1	115.2
#1	-.0010	.0248	.0247	.0000	-.0019	.0166	.0000	-.0004	.0012	-.0013
#2	-.0029	-.0142	.0433	.0000	-.0018	.0264	.0002	.0011	.0002	-.0019
#3	-.0015	.0144	.0419	.0000	-.0021	.0128	.0001	-.0001	-.0006	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0283	-.0001	.0000	-.0006	-.0010	.0000	.0014
Stddev	.0003	.0005	.000	.0001	.0006	.0002	.0001
%RSD	1.217	496.5	603.4	14.40	55.98	2362.	4.320
#1	.0283	-.0006	-.0001	-.0005	-.0008	.0001	.0014
#2	.0280	.0000	-.0001	-.0006	-.0006	.0002	.0013
#3	.0287	.0003	.0001	-.0007	-.0016	-.0003	.0014
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33696-MB1 Acquired: 5/4/2018 12:56:05 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1142.3	3224.0	25814.	2182.6
Stddev	3.0	8.4	42.	11.5
%RSD	.26326	.26164	.16216	.52728
#1	1143.2	3229.3	25796.	2182.0
#2	1138.9	3214.3	25862.	2171.4
#3	1144.7	3228.5	25784.	2194.3

Zoom In Zoom Out

Sample Name: MP33696-B1 Acquired: 5/4/2018 13:00:24 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0505	25.68	1.985	2.020	.0507	24.14	.0502	.5087	.2018	.2549
Stddev	.0005	.05	.001	.017	.0004	.06	.0000	.0003	.0016	.0004
%RSD	.9887	.1963	.0723	.8380	.8399	.2486	.0870	.0511	.7792	.1473
#1	.0510	25.65	1.985	2.018	.0506	24.08	.0502	.5090	.2001	.2545
#2	.0503	25.74	1.983	2.038	.0512	24.20	.0502	.5087	.2022	.2553
#3	.0501	25.66	1.986	2.004	.0503	24.12	.0501	.5085	.2031	.2548
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.35	24.21	24.21	.5038	.4901	24.02	.5291	.4796	.5050	1.968
Stddev	.04	.11	.05	.0017	.0006	.06	.0003	.0011	.0014	.003
%RSD	.1660	.4418	.1982	.3297	.1162	.2344	.0625	.2340	.2685	.1570
#1	25.33	24.22	24.15	.5031	.4897	23.99	.5295	.4809	.5037	1.967
#2	25.39	24.32	24.23	.5027	.4908	24.09	.5290	.4792	.5049	1.966
#3	25.31	24.11	24.23	.5057	.4899	23.98	.5289	.4788	.5065	1.971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5145	.5201	.5083	.5091	1.915	.4802	.4993
Stddev	.0001	.0013	.0017	.0021	.004	.0001	.0006
%RSD	.0203	.2495	.3267	.4131	.2210	.0189	.1298
#1	.5146	.5213	.5075	.5066	1.917	.4802	.4988
#2	.5145	.5187	.5102	.5100	1.917	.4803	.5000
#3	.5144	.5202	.5072	.5105	1.910	.4801	.4992
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33696-B1 Acquired: 5/4/2018 13:00:24 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1043.0	3117.6	25003.	2163.6
Stddev	2.3	4.1	139.	3.1
%RSD	.21673	.13028	.55594	.14449
#1	1041.6	3116.7	25104.	2162.2
#2	1041.8	3114.1	25061.	2161.4
#3	1045.6	3122.0	24845.	2167.2

◀ Zoom In ▶
Zoom Out

Sample Name: FA53802-14 Acquired: 5/4/2018 13:04:22 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0611	-.0011	.0038	.0001	66.56	.0000	-.0001	.0055	.0002
Stddev	.0006	.0030	.0005	.0002	.0000	.35	.000	.0001	.0005	.0003
%RSD	431.9	4.970	46.00	5.844	37.16	.5214	130.6	67.92	9.335	123.6
#1	.0002	.0641	-.0006	.0040	.0001	66.61	.0000	-.0002	.0053	.0004
#2	.0007	.0613	-.0011	.0036	.0002	66.19	-.0001	-.0001	.0061	.0005
#3	-.0005	.0580	-.0017	.0039	.0001	66.87	.0000	-.0001	.0051	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0190	6.715	2.360	.0165	-.0014	9.181	.0018	.0012	.0011	.0009
Stddev	.0013	.050	.048	.0001	.0001	.051	.0001	.0004	.0019	.0007
%RSD	6.846	.7470	2.014	.4906	7.323	.5538	5.979	33.44	177.1	79.32
#1	.0199	6.719	2.377	.0165	-.0014	9.217	.0019	.0010	-.0010	.0004
#2	.0175	6.663	2.306	.0165	-.0013	9.123	.0017	.0009	.0027	.0006
#3	.0197	6.763	2.397	.0164	-.0015	9.204	.0017	.0016	.0014	.0017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.421	.0001	.1188	.0018	.0001	.0003	.0005
Stddev	.002	.0003	.0004	.0001	.0008	.0002	.0001
%RSD	.1674	439.9	.3689	5.351	1075.	52.51	13.08
#1	1.424	-.0003	.1189	.0019	-.0002	.0005	.0005
#2	1.420	.0003	.1183	.0018	-.0005	.0001	.0006
#3	1.420	.0002	.1192	.0017	.0009	.0003	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1075.3	3101.4	25174.	2169.2
Stddev	.2	3.6	60.	10.8
%RSD	.01822	.11732	.23746	.49901
#1	1075.2	3103.1	25109.	2175.9
#2	1075.6	3097.2	25225.	2175.0
#3	1075.3	3103.9	25189.	2156.7

◀ Zoom In ▶
Zoom Out

Sample Name: MP33696-D1 Acquired: 5/4/2018 13:08:39 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0672	-.0016	.0040	.0001	66.56	.0000	-.0003	.0056	-.0001
Stddev	.0001	.0091	.0009	.0002	.0002	.26	.000	.0001	.0004	.0001
%RSD	50.79	13.60	58.42	3.751	188.2	.3955	113.2	45.02	7.120	72.61
#1	-.0001	.0567	-.0017	.0039	-.0001	66.27	-.0001	-.0002	.0055	-.0001
#2	-.0003	.0723	-.0006	.0041	.0001	66.63	-.0001	-.0002	.0060	-.0001
#3	-.0004	.0728	-.0024	.0042	.0002	66.79	.0000	-.0004	.0052	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0085	6.703	2.339	.0164	-.0016	9.150	.0014	.0014	.0012	.0005
Stddev	.0045	.016	.058	.0001	.0001	.045	.0002	.0006	.0014	.0017
%RSD	52.58	.2342	2.495	.6415	6.459	.4921	17.48	42.08	116.2	318.9
#1	.0095	6.688	2.279	.0165	-.0017	9.115	.0016	.0020	.0001	.0016
#2	.0123	6.703	2.396	.0164	-.0015	9.134	.0014	.0015	.0007	.0014
#3	.0036	6.719	2.342	.0163	-.0015	9.201	.0012	.0008	.0027	-.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.394	-.0007	.1187	.0014	-.0013	.0004	.0007
Stddev	.005	.0001	.0004	.0003	.0005	.0002	.0001
%RSD	.3529	18.03	.3580	24.41	35.69	51.99	8.868
#1	1.400	-.0005	.1185	.0012	-.0018	.0005	.0006
#2	1.392	-.0008	.1183	.0018	-.0012	.0002	.0007
#3	1.390	-.0007	.1191	.0013	-.0008	.0005	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1070.4	3086.4	24891.	2127.8
Stddev	2.1	4.7	35.	14.6
%RSD	.19491	.15207	.14175	.68802
#1	1071.2	3082.9	24851.	2142.8
#2	1068.0	3084.5	24913.	2113.5
#3	1072.0	3091.7	24911.	2127.0

◀ Zoom In ▶
Zoom Out

Sample Name: MP33696-SD1 Acquired: 5/4/2018 13:12:55 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.1548	-.0004	.0030	.0001	72.76	-.0003	-.0005	.0041	.0001
Stddev	.002	.0232	.0063	.0002	.0005	.32	.0001	.0003	.0009	.0003
%RSD	34590.	14.97	1605.	5.460	498.2	.4344	48.89	53.46	21.08	241.9
#1	-.0019	.1280	.0015	.0030	.0000	72.43	-.0004	-.0004	.0044	.0003
#2	-.0005	.1673	.0047	.0032	.0006	72.77	-.0003	-.0008	.0048	-.0002
#3	.0024	.1690	-.0074	.0029	-.0003	73.06	-.0001	-.0003	.0032	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0311	7.225	2.732	.0182	-.0118	9.987	.0014	.0051	.0023	.0000
Stddev	.0263	.066	.126	.0004	.0004	.033	.0011	.0021	.0069	.010
%RSD	84.71	.9159	4.628	2.188	3.613	.3268	79.87	40.67	295.5	230600.
#1	-.0571	7.159	2.599	.0177	-.0116	9.952	.0003	.0075	.0079	.0039
#2	-.0316	7.292	2.746	.0182	-.0122	10.02	.0013	.0043	.0044	.0073
#3	-.0045	7.225	2.851	.0185	-.0114	9.992	.0025	.0036	-.0054	-.0113

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.542	-.0027	.1282	.0016	-.0017	.0000	.0006
Stddev	.003	.0013	.0011	.0002	.0018	.0004	.0004
%RSD	.1662	47.27	.8362	10.92	103.0	1084.	63.13
#1	1.540	-.0041	.1275	.0014	-.0014	.0002	.0002
#2	1.545	-.0023	.1276	.0017	-.0036	.0004	.0009
#3	1.541	-.0016	.1294	.0017	-.0001	-.0004	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1131.1	3197.5	25773.	2212.7
Stddev	.7	5.7	82.	9.7
%RSD	.06398	.17851	.31838	.44004
#1	1131.2	3194.1	25853.	2211.8
#2	1130.3	3204.0	25777.	2222.8
#3	1131.7	3194.2	25689.	2203.4

◀ Zoom In ▶
Zoom Out

Sample Name: MP33696-S1 Acquired: 5/4/2018 13:21:29 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.1023	27.83	F4.069	F4.141	.1035	88.82	.1007	1.017	.4085
Stddev	.0010	.05	.021	.032	.0004	.23	.0003	.003	.0023
%RSD	.9808	.1715	.5119	.7634	.3534	.2641	.2777	.2485	.5691
#1	.1031	27.80	4.083	4.122	.1031	88.66	.1008	1.019	.4103
#2	.1026	27.81	4.079	4.124	.1035	88.72	.1008	1.018	.4058
#3	.1012	27.89	4.045	4.178	.1038	89.09	.1003	1.014	.4092

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5177	26.18	31.09	26.25	1.026	.4862	33.05	1.054	.9737
Stddev	.0015	.12	.20	.10	.001	.0008	.12	.003	.0014
%RSD	.2958	.4596	.6393	.3871	.1254	.1645	.3732	.2499	.1456
#1	.5175	26.04	30.96	26.17	1.026	.4868	32.94	1.056	.9721
#2	.5194	26.27	31.00	26.22	1.025	.4864	33.02	1.054	.9745
#3	.5163	26.24	31.32	26.37	1.028	.4853	33.18	1.051	.9745

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.029	F4.006	1.917	.5123	.6217	.5064	3.859	.9717	.9931
Stddev	.006	.012	.007	.0035	.0023	.0000	.003	.0005	.0020
%RSD	.6291	.2872	.3934	.6928	.3635	.0090	.0696	.0527	.1988
#1	1.036	4.019	1.926	.5153	.6198	.5064	3.859	.9711	.9921
#2	1.028	3.998	1.916	.5132	.6210	.5064	3.862	.9721	.9954
#3	1.023	4.000	1.911	.5083	.6242	.5064	3.856	.9719	.9918

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1005.3	3057.2	24570.	2144.4
Stddev	2.4	13.8	82.	6.1
%RSD	.24365	.45131	.33471	.28277
#1	1003.6	3045.2	24511.	2142.6
#2	1004.2	3054.1	24664.	2139.5
#3	1008.1	3072.2	24534.	2151.2

◄ Zoom In ►
Zoom Out

Sample Name: MP33696-S2 Acquired: 5/4/2018 13:30:01 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.1051	28.87	F4.095	F4.215	.1068	92.30	.1022	1.031	.4228
Stddev	.0014	.12	.011	.010	.0004	.33	.0001	.001	.0021
%RSD	1.335	.4091	.2610	.2325	.3951	.3565	.1160	.1236	.5000
#1	.1041	28.89	4.098	4.222	.1071	92.17	.1023	1.033	.4204
#2	.1067	28.98	4.083	4.218	.1070	92.68	.1021	1.030	.4241
#3	.1045	28.75	4.104	4.204	.1064	92.06	.1022	1.031	.4239

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5320	27.06	31.72	26.86	1.060	.4963	34.19	1.066	.9952
Stddev	.0019	.08	.04	.23	.011	.0001	.08	.003	.0019
%RSD	.3651	.2961	.1122	.8522	1.048	.0263	.2396	.2440	.1867
#1	.5312	27.03	31.75	26.74	1.053	.4962	34.20	1.068	.9966
#2	.5342	27.15	31.72	27.12	1.073	.4964	34.26	1.063	.9960
#3	.5306	26.99	31.68	26.71	1.055	.4964	34.10	1.066	.9931

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.043	F4.056	1.945	.5159	.6463	.5260	3.956	.9929	1.007
Stddev	.005	.009	.004	.0026	.0014	.0041	.007	.0032	.002
%RSD	.4697	.2228	.1972	.5018	.2123	.7761	.1777	.3177	.1797
#1	1.037	4.046	1.947	.5177	.6467	.5235	3.955	.9917	1.007
#2	1.047	4.058	1.947	.5129	.6474	.5307	3.963	.9965	1.005
#3	1.044	4.064	1.940	.5170	.6447	.5237	3.949	.9905	1.008

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	996.57	3061.7	24108.	2121.8
Stddev	2.03	7.3	128.	21.0
%RSD	.20372	.23778	.53297	.99045
#1	994.60	3055.7	24195.	2138.6
#2	996.45	3069.8	23961.	2098.2
#3	998.66	3059.6	24169.	2128.5

◄ Zoom In ►
Zoom Out

Sample Name: MP33696-PS1 Acquired: 5/4/2018 13:33:58 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0475	2.543	.1036	.2629	.0516	72.01	.0499	.0511	.0561	.1043
Stddev	.0004	.016	.0013	.0017	.0002	.34	.0001	.0003	.0001	.0003
%RSD	.7616	.6203	1.248	.6443	.3331	.4675	.1148	.5577	.1620	.2766
#1	.0473	2.542	.1047	.2645	.0515	71.81	.0500	.0512	.0560	.1046
#2	.0479	2.559	.1022	.2630	.0518	72.40	.0498	.0512	.0562	.1040
#3	.0473	2.527	.1040	.2612	.0515	71.82	.0499	.0507	.0561	.1043

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.024	16.75	7.402	.0679	.0948	19.08	.1059	.0481	.1022	.0997
Stddev	.023	.08	.075	.0004	.0004	.05	.0004	.0006	.0017	.0029
%RSD	.7686	.4948	1.018	.5612	.4356	.2807	.3867	1.232	1.658	2.881
#1	3.027	16.80	7.433	.0683	.0953	19.04	.1063	.0485	.1041	.1025
#2	3.045	16.79	7.457	.0680	.0945	19.14	.1058	.0483	.1014	.0968
#3	2.999	16.65	7.316	.0675	.0946	19.06	.1055	.0474	.1010	.0997

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.438	.0499	.1709	.1049	.0975	.0497	.2485
Stddev	.010	.0002	.0009	.0005	.0013	.0004	.0006
%RSD	.7095	.4419	.5294	.4466	1.373	.7925	.2334
#1	1.449	.0501	.1704	.1054	.0985	.0501	.2491
#2	1.430	.0500	.1719	.1046	.0979	.0498	.2483
#3	1.435	.0497	.1703	.1047	.0960	.0493	.2480

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1050.5	3102.5	24545.	2128.7
Stddev	2.3	6.2	49.	17.3
%RSD	.21745	.19995	.19997	.81411
#1	1053.1	3096.2	24591.	2130.2
#2	1049.3	3108.6	24552.	2110.7
#3	1049.1	3102.6	24493.	2145.3

◄ Zoom In ►
Zoom Out

Sample Name: FA53852-1 Acquired: 5/4/2018 13:38:06 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_2243)
Avg	-.0001	.0167	-.0013	.4154	.0000	79.62	.0000	.0003	.0129	.0011
Stddev	.0003	.0124	.0001	.0033	.000	.52	.000	.0002	.0000	.0000
%RSD	232.0	74.08	11.21	.7940	155.0	.6504	84.07	81.62	.1480	3.962
#1	.0000	.0059	-.0012	.4187	.0000	80.18	-.0001	.0006	.0129	.0012
#2	.0001	.0140	-.0014	.4153	.0000	79.17	.0000	.0003	.0129	.0011
#3	-.0005	.0302	-.0014	.4121	-.0001	79.51	.0000	.0001	.0130	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5155	1.742	43.41	.1879	.0119	11.57	.0418	.0011	.0013	.0015
Stddev	.0128	.034	.32	.0010	.0002	.08	.0006	.0001	.0013	.0023
%RSD	2.492	1.928	.7319	.5477	1.412	.6506	1.400	5.280	99.95	150.6
#1	.5265	1.763	43.71	.1868	.0120	11.65	.0421	.0012	.0000	.0042
#2	.5014	1.758	43.43	.1887	.0119	11.50	.0411	.0011	.0026	.0007
#3	.5185	1.703	43.08	.1883	.0117	11.56	.0421	.0011	.0013	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.849	-.0005	1.823	.0014	-.0012	.0004	.0054
Stddev	.015	.0002	.014	.0001	.0004	.0003	.0001
%RSD	.2505	43.09	.7418	8.934	35.22	71.03	1.119
#1	5.866	-.0007	1.839	.0013	-.0009	.0002	.0053
#2	5.842	-.0004	1.813	.0015	-.0017	.0003	.0054
#3	5.839	-.0004	1.819	.0015	-.0010	.0007	.0053

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1023.3	3014.5	23986.	2092.7
Stddev	3.5	7.5	51.	29.9
%RSD	.34476	.24860	.21168	1.4279
#1	1019.4	3005.9	24003.	2059.5
#2	1024.3	3020.0	23929.	2101.1
#3	1026.2	3017.4	24026.	2117.4

◄ Zoom In ►
Zoom Out

Sample Name: CCV Acquired: 5/4/2018 13:42:18 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2538	40.33	2.064	2.055	2.050	40.47	2.062	2.066	2.045	2.058
Stddev	.0004	.14	.004	.009	.006	.16	.003	.001	.007	.005
%RSD	.1561	.3417	.1988	.4620	.2985	.3915	.1289	.0643	.3585	.2504
#1	.2535	40.18	2.068	2.053	2.047	40.29	2.065	2.068	2.049	2.063
#2	.2535	40.44	2.064	2.065	2.057	40.59	2.060	2.065	2.050	2.058
#3	.2542	40.38	2.059	2.046	2.046	40.53	2.062	2.066	2.037	2.053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.12	40.86	40.80	2.081	2.101	40.51	2.093	2.018	2.073	2.080
Stddev	.12	.12	.24	.003	.001	.11	.002	.005	.005	.010
%RSD	.2802	.2988	.5800	.1640	.0334	.2679	.1133	.2396	.2570	.4985
#1	41.08	40.81	40.91	2.080	2.100	40.40	2.093	2.021	2.079	2.092
#2	41.24	41.00	40.96	2.085	2.101	40.61	2.095	2.012	2.068	2.075
#3	41.02	40.78	40.53	2.078	2.102	40.52	2.090	2.021	2.072	2.074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.862	2.120	2.059	2.076	2.042	2.092	2.057
Stddev	.001	.006	.006	.008	.008	.005	.002
%RSD	.0249	.2662	.2724	.3637	.3997	.2205	.1047
#1	1.862	2.126	2.055	2.073	2.051	2.097	2.060
#2	1.862	2.121	2.065	2.085	2.034	2.087	2.056
#3	1.863	2.115	2.056	2.071	2.042	2.092	2.056
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 13:42:18 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	988.17	3064.8	24357.	2138.5
Stddev	2.29	6.2	50.	8.8
%RSD	.23218	.20069	.20338	.41250
#1	985.57	3057.9	24329.	2134.5
#2	989.93	3066.6	24327.	2132.4
#3	989.01	3069.8	24414.	2148.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 13:46:15 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0198	.0006	.0000	.0002	.0080	.0002	.0000	.0001
Stddev	.0002	.0109	.0002	.0002	.0001	.0038	.0001	.0001	.0003
%RSD	45.04	54.90	30.75	605.7	42.22	47.85	25.99	300.7	216.0
#1	-.0007	.0192	.0008	.0002	.0004	.0054	.0002	.0001	.0001
#2	-.0004	.0310	.0004	.0000	.0002	.0123	.0002	-.0001	-.0001
#3	-.0003	.0093	.0007	-.0001	.0002	.0062	.0003	.0002	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0114	.0131	-.0160	.0003	F.0011	.0139	.0003	F.0011
Stddev	.0001	.0034	.0250	.0330	.0001	.0009	.0132	.0001	.0004
%RSD	37.50	29.59	191.8	205.6	28.49	78.06	94.49	34.38	33.82
#1	.0003	.0142	.0386	.0054	.0002	.0021	.0051	.0002	.0008
#2	.0005	.0124	.0120	.0005	.0004	.0008	.0290	.0003	.0015
#3	.0004	.0077	-.0114	-.0540	.0003	.0005	.0077	.0005	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0014	.0013	.0005	.0002	.0010	.0004	.0001	.0005
Stddev	.0013	.0026	.0001	.0001	.0001	.0001	.0015	.0001	.0000
%RSD	135.2	186.2	10.18	21.99	53.03	12.76	378.6	94.72	6.180
#1	.0022	.0006	.0013	.0005	.0001	.0012	.0022	.0001	.0005
#2	.0010	-.0007	.0014	.0005	.0002	.0010	-.0004	.0003	.0005
#3	-.0004	.0043	.0011	.0007	.0002	.0009	-.0005	.0000	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 13:46:15 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1132.0	3191.1	25373.	2172.1
Stddev	1.3	10.2	163.	21.9
%RSD	.11219	.32094	.64239	1.0070
#1	1131.2	3190.0	25233.	2161.4
#2	1133.5	3201.9	25552.	2157.7
#3	1131.4	3181.5	25334.	2197.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 13:50:42 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2503	39.33	2.050	2.018	2.007	39.44	2.042	2.047	2.005	2.025
Stddev	.0012	.21	.007	.011	.011	.28	.002	.002	.009	.003
%RSD	.4672	.5335	.3391	.5243	.5674	.7176	.0992	.0976	.4748	.1697
#1	.2515	39.53	2.055	2.030	2.019	39.73	2.042	2.048	2.013	2.027
#2	.2492	39.35	2.053	2.014	2.006	39.42	2.044	2.049	1.995	2.021
#3	.2503	39.11	2.042	2.009	1.996	39.17	2.040	2.045	2.009	2.027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.31	40.07	39.91	2.056	2.085	39.58	2.075	2.000	2.062	2.066
Stddev	.18	.26	.33	.010	.002	.19	.004	.005	.003	.006
%RSD	.4353	.6464	.8196	.4800	.1060	.4866	.1735	.2650	.1559	.3070
#1	40.46	40.36	40.26	2.065	2.082	39.80	2.079	1.997	2.063	2.072
#2	40.37	40.00	39.87	2.045	2.086	39.53	2.073	1.997	2.064	2.059
#3	40.12	39.86	39.61	2.058	2.086	39.42	2.073	2.006	2.058	2.068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.850	2.106	2.016	2.048	2.029	2.065	2.036
Stddev	.001	.006	.007	.009	.005	.003	.002
%RSD	.0620	.2687	.3504	.4645	.2591	.1314	.0780
#1	1.850	2.112	2.024	2.054	2.027	2.066	2.038
#2	1.848	2.105	2.013	2.037	2.024	2.062	2.036
#3	1.850	2.101	2.011	2.052	2.035	2.067	2.035
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 13:50:42 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	990.11	3072.2	24600.	2181.1
Stddev	3.31	4.9	68.	18.1
%RSD	.33409	.15891	.27783	.82990
#1	989.43	3067.2	24547.	2161.5
#2	993.70	3072.5	24677.	2184.6
#3	987.19	3076.9	24577.	2197.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 13:57:42 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0067	.0003	-.0003	.0002	.0051	.0001	-.0001
Stddev	.0005	.0034	.0009	.0001	.0000	.0025	.0000	.0000
%RSD	227.1	50.00	311.4	28.59	25.41	48.53	45.59	32.36
#1	.0002	.0084	-.0003	-.0004	.0001	.0054	.0002	-.0001
#2	-.0001	.0089	.0014	-.0003	.0002	.0075	.0001	-.0001
#3	-.0007	.0029	-.0001	-.0002	.0002	.0025	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0002	-.0042	-.0149	-.0005	.0001	F-.0012	.0069
Stddev	.0002	.0001	.0024	.0122	.0134	.0000	.0001	.0072
%RSD	89.08	81.26	57.87	81.72	2685.	29.89	9.265	104.7
#1	.0003	.0003	-.0064	-.0009	.0140	.0002	-.0012	.0066
#2	.0000	.0000	-.0046	-.0210	-.0124	.0001	-.0013	-.0002
#3	.0003	.0002	-.0016	-.0227	-.0031	.0001	-.0011	.0143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0005	.0011	-.0002	.0004	-.0002	.0001	-.0002
Stddev	.0001	.0005	.0013	.0016	.0003	.0001	.0001	.0000
%RSD	82.31	88.19	116.2	1036.	69.41	42.19	67.00	1.998
#1	.0000	.0010	.0000	.0012	.0003	-.0003	.0002	-.0002
#2	.0002	.0000	.0026	.0003	.0002	-.0002	.0000	-.0002
#3	.0001	.0006	.0008	-.0019	.0008	-.0001	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 13:57:42 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0008	.0001	.0002
Stddev	.0013	.0001	.0001
%RSD	156.9	97.04	44.26
#1	-.0006	.0001	.0001
#2	.0010	.0001	.0002
#3	.0020	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1135.6	3189.7	25478.	2206.5
Stddev	4.3	3.7	77.	13.7
%RSD	.37893	.11682	.30413	.62238
#1	1135.6	3185.5	25400.	2220.0
#2	1139.9	3192.6	25555.	2192.5
#3	1131.3	3191.1	25478.	2206.9

Zoom In Zoom Out

Sample Name: FA53852-2 Acquired: 5/4/2018 14:02:02 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0095	-.0026	.1340	.0001	123.3	.0000	-.0002	.0007	.0006
Stddev	.0004	.0025	.0004	.0002	.0000	.1	.0000	.0001	.0003	.0003
%RSD	109.0	26.31	15.66	.1672	34.57	.0638	398.5	67.13	42.27	52.17
#1	-.0004	.0094	-.0026	.1341	.0001	123.2	.0000	-.0003	.0005	.0003
#2	-.0008	.0071	-.0030	.1342	.0002	123.2	.0001	-.0001	.0010	.0009
#3	.0000	.0121	-.0022	.1338	.0002	123.3	.0000	-.0002	.0005	.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0016	2.177	47.67	.1231	.0011	42.05	.0030	.0025	.0015	.0030
Stddev	.0016	.034	.11	.0004	.0003	.10	.0001	.0009	.0011	.0023
%RSD	97.18	1.565	.2223	.3640	23.42	.2303	2.452	38.50	74.11	75.90
#1	.0002	2.137	47.66	.1236	.0014	42.10	.0030	.0028	.0002	.0052
#2	.0013	2.197	47.57	.1228	.0012	41.94	.0031	.0014	.0023	.0032
#3	.0034	2.195	47.78	.1228	.0008	42.11	.0030	.0032	.0020	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.990	-.0006	.2783	.0014	-.0021	.0001	.0030
Stddev	.009	.0002	.0006	.0001	.0008	.0001	.0001
%RSD	.1533	36.61	.2222	5.648	37.82	77.15	2.826
#1	5.992	-.0007	.2789	.0014	-.0027	.0002	.0031
#2	5.980	-.0008	.2777	.0015	-.0024	.0002	.0029
#3	5.998	-.0004	.2783	.0013	-.0012	.0000	.0031

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1000.2	2974.7	24162.	2141.5
Stddev	2.5	3.3	82.	5.0
%RSD	.24866	.11224	.33850	.23273
#1	1002.7	2976.5	24123.	2145.2
#2	997.69	2976.8	24107.	2135.8
#3	1000.4	2970.9	24256.	2143.5

◀ Zoom In ▶
Zoom Out

Sample Name: FA53852-3 Acquired: 5/4/2018 14:06:15 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0069	-.0029	.1443	.0000	133.3	.0000	-.0003	.0005	.0010
Stddev	.0003	.0103	.0010	.0011	.0001	.7	.0000	.0000	.0003	.0003
%RSD	195.7	148.7	34.95	.7446	1233.	.5205	185.9	15.92	56.47	30.56
#1	-.0004	.0115	-.0041	.1452	-.0002	133.3	.0000	-.0003	.0002	.0010
#2	-.0002	-.0049	-.0022	.1446	.0001	134.0	.0000	-.0002	.0007	.0014
#3	.0002	.0142	-.0024	.1431	.0001	132.6	.0000	-.0003	.0007	.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0046	2.351	50.83	.1248	.0008	45.76	.0026	.0015	.0018	.0008
Stddev	.0029	.018	.29	.0004	.0001	.20	.0004	.0009	.0017	.0016
%RSD	63.50	.7422	.5742	.2857	15.51	.4311	13.56	59.05	95.38	205.2
#1	.0072	2.361	50.95	.1246	.0010	45.71	.0030	.0005	.0014	.0016
#2	.0050	2.331	51.04	.1245	.0008	45.97	.0023	.0018	.0036	.0018
#3	.0015	2.362	50.49	.1252	.0007	45.58	.0025	.0021	.0003	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.259	-.0004	.3007	.0012	-.0015	.0001	.0061
Stddev	.017	.0002	.0018	.0001	.0014	.0001	.0000
%RSD	.2761	45.37	.5904	7.027	89.93	108.7	.6447
#1	6.278	-.0005	.3017	.0011	-.0023	.0002	.0062
#2	6.255	-.0002	.3018	.0012	.0001	.0001	.0062
#3	6.244	-.0004	.2987	.0013	-.0023	.0000	.0061

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	977.02	2921.5	23217.	2058.7
Stddev	7.73	12.6	111.	16.4
%RSD	.79098	.43087	.48000	.79574
#1	968.14	2907.0	23328.	2054.0
#2	980.72	2929.3	23218.	2045.2
#3	982.20	2928.2	23105.	2077.0

◀ Zoom In ▶
Zoom Out

Sample Name: FA53852-4 Acquired: 5/4/2018 14:10:30 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0080	-.0015	.1434	.0002	85.65	.0000	-.0003	.0093	.0000
Stddev	.001	.0187	.0004	.0007	.0001	.24	.000	.0000	.0001	.0002
%RSD	3389.	234.0	26.70	.4744	36.65	.2811	170.0	4.289	1.130	469.8
#1	-.0001	-.0107	-.0019	.1432	.0001	85.91	-.0001	-.0003	.0092	.0003
#2	.0005	.0267	-.0013	.1429	.0001	85.45	.0000	-.0003	.0094	.0000
#3	-.0004	.0080	-.0012	.1442	.0002	85.58	.0000	-.0003	.0093	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0063	1.723	41.27	.0033	.0082	12.03	.0008	.0018	.0006	.0007
Stddev	.0020	.036	.14	.0000	.0000	.07	.0001	.0004	.0002	.0009
%RSD	31.52	2.120	.3483	.9650	.3343	.6170	13.59	21.95	35.40	131.8
#1	-.0046	1.721	41.36	.0033	.0083	12.08	.0007	.0022	.0007	.0015
#2	-.0059	1.687	41.10	.0033	.0083	11.95	.0009	.0014	.0008	-.0003
#3	-.0085	1.760	41.35	.0032	.0082	12.07	.0009	.0017	.0004	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.592	-.0003	1.511	.0009	-.0010	.0004	.0048
Stddev	.028	.0005	.007	.0001	.0014	.0003	.0001
%RSD	.4260	131.9	.4797	12.28	133.2	86.64	1.317
#1	6.588	-.0009	1.512	.0009	.0006	.0008	.0047
#2	6.622	-.0001	1.503	.0008	-.0019	.0001	.0049
#3	6.567	.0000	1.517	.0010	-.0018	.0003	.0048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1025.7	3027.1	24261.	2124.7
Stddev	3.3	11.0	72.	25.6
%RSD	.32116	.36285	.29698	1.2025
#1	1027.0	3027.3	24338.	2098.5
#2	1021.9	3016.1	24195.	2126.3
#3	1028.1	3038.0	24250.	2149.5

◀ Zoom In ▶
Zoom Out

Sample Name: FA53857-1 Acquired: 5/4/2018 14:14:46 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.2676	.0003	.0411	.0000	29.96	-.0001	-.0004	.0038	.0002
Stddev	.0002	.0055	.0007	.0005	.0001	.23	.0000	.0001	.0001	.0004
%RSD	39.02	2.044	226.0	1.122	252.4	.7518	18.13	38.40	3.768	184.0
#1	-.0006	.2626	.0007	.0408	.0000	30.11	-.0001	-.0002	.0036	.0004
#2	-.0003	.2735	-.0005	.0408	.0002	30.06	-.0001	-.0004	.0039	.0005
#3	-.0007	.2667	.0007	.0416	.0000	29.70	-.0001	-.0005	.0039	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	15.53	4.266	7.611	.0115	-.0022	21.89	-.0001	.0033	-.0003	.0009
Stddev	.11	.044	.039	.0001	.0001	.14	.0003	.0007	.0004	.0023
%RSD	.7166	1.036	.5143	1.153	3.664	.6329	272.0	20.19	156.3	258.6
#1	15.58	4.314	7.634	.0114	-.0022	22.01	.0002	.0026	-.0006	.0014
#2	15.62	4.258	7.634	.0116	-.0021	21.93	-.0004	.0039	-.0005	.0029
#3	15.41	4.227	7.566	.0114	-.0023	21.74	-.0001	.0033	.0002	-.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.855	-.0002	.1664	.0048	-.0009	.0010	.0008
Stddev	.003	.0001	.0015	.0000	.0007	.0003	.0000
%RSD	.0503	54.32	.9066	.6871	77.80	28.46	3.398
#1	6.857	-.0003	.1675	.0048	-.0001	.0008	.0008
#2	6.851	-.0001	.1670	.0048	-.0014	.0013	.0008
#3	6.856	-.0003	.1647	.0048	-.0013	.0009	.0008

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1069.8	3115.5	25126.	2181.9
Stddev	1.0	2.3	101.	12.8
%RSD	.09745	.07481	.40337	.58835
#1	1069.9	3118.0	25189.	2177.1
#2	1068.7	3113.4	25009.	2172.2
#3	1070.7	3115.2	25180.	2196.5

◀ Zoom In ▶
Zoom Out

Sample Name: FA53857-3 Acquired: 5/4/2018 14:19:00 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0722	.0056	.0086	.0000	54.58	-.0001	-.0003	.0007	.0005
Stddev	.0001	.0037	.0003	.0001	.0001	.23	.0001	.0001	.0001	.0003
%RSD	430.9	5.088	6.185	1.493	490.7	.4296	57.49	19.50	14.11	55.80
#1	.0000	.0723	.0053	.0085	-.0001	54.55	-.0002	-.0003	.0007	.0005
#2	.0000	.0758	.0056	.0088	.0001	54.82	-.0001	-.0004	.0006	.0008
#3	.0002	.0684	.0060	.0086	.0001	54.35	-.0001	-.0002	.0008	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.8678	1.967	.8130	.0012	-.0010	2.367	.0003	.0015	.0021	.0006
Stddev	.0108	.019	.0089	.0000	.0000	.017	.0003	.0007	.0007	.0010
%RSD	1.243	.9678	1.094	1.656	3.651	.7030	85.05	46.35	33.13	172.6
#1	.8739	1.948	.8166	.0012	-.0010	2.375	.0001	.0023	.0022	-.0004
#2	.8741	1.987	.8195	.0012	-.0010	2.377	.0006	.0012	.0014	.0017
#3	.8553	1.967	.8028	.0011	-.0010	2.347	.0002	.0010	.0027	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.389	-.0004	.0781	.0025	.0005	.0005	.0029
Stddev	.001	.0003	.0002	.0003	.0017	.0002	.0001
%RSD	.0332	83.72	.3105	10.58	348.9	35.96	1.838
#1	3.389	-.0002	.0780	.0024	-.0015	.0003	.0029
#2	3.390	-.0007	.0784	.0029	.0016	.0006	.0030
#3	3.387	-.0002	.0780	.0024	.0014	.0004	.0029

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1080.8	3114.5	25028.	2166.7
Stddev	2.0	3.4	65.	13.4
%RSD	.18650	.10903	.25918	.62050
#1	1080.0	3110.6	24982.	2160.8
#2	1083.1	3117.0	25102.	2157.1
#3	1079.2	3115.9	24999.	2182.0

Zoom In Zoom Out

Sample Name: FA53857-7 Acquired: 5/4/2018 14:23:17 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	1.311	.0055	.1081	.0002	26.87	-.0001	.0001	.0077	.0015
Stddev	.0002	.015	.0010	.0008	.0001	.12	.0001	.0002	.0006	.0004
%RSD	71.96	1.129	18.24	.7240	41.00	.4527	108.2	122.2	7.534	26.01
#1	-.0005	1.296	.0061	.1084	.0003	26.89	.0000	.0002	.0070	.0011
#2	-.0001	1.326	.0061	.1087	.0002	26.97	-.0001	.0002	.0079	.0018
#3	-.0003	1.312	.0043	.1072	.0001	26.73	.0000	-.0001	.0080	.0015

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.9734	7.971	10.05	.0064	-.0018	55.30	.0007	.0015	.0004	.0017
Stddev	.0033	.050	.05	.0001	.0000	.29	.0002	.0001	.0000	.0003
%RSD	.3382	.6299	.5069	1.141	2.458	.5194	22.66	7.789	10.59	18.18
#1	.9751	7.987	10.03	.0064	-.0018	55.43	.0008	.0014	.0004	.0019
#2	.9755	8.011	10.11	.0065	-.0018	55.50	.0005	.0016	.0004	.0020
#3	.9696	7.915	10.01	.0064	-.0018	54.97	.0007	.0016	.0003	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.311	-.0002	.0980	.0267	-.0014	.0078	.0018
Stddev	.007	.0003	.0006	.0001	.0003	.0001	.0001
%RSD	.2126	159.1	.6492	.4498	21.38	1.771	4.473
#1	3.316	.0001	.0982	.0265	-.0017	.0077	.0018
#2	3.303	-.0001	.0985	.0267	-.0016	.0077	.0018
#3	3.315	-.0005	.0973	.0267	-.0011	.0079	.0019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1031.7	3213.8	25450.	2213.2
Stddev	3.8	9.2	72.	12.9
%RSD	.36570	.28763	.28174	.58507
#1	1028.6	3203.3	25407.	2205.5
#2	1030.6	3217.6	25410.	2205.9
#3	1035.9	3220.6	25533.	2228.1

Zoom In Zoom Out

Sample Name: FA53857-2F Acquired: 5/4/2018 14:27:33 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.1395	.0000	.0405	.0000	29.88	-.0001	-.0004	.0038	.0004
Stddev	.0001	.0109	.0010	.0001	.000	.21	.0000	.0001	.0002	.0003
%RSD	23.17	7.803	3377.	.2906	360.4	.7069	64.79	22.82	4.725	76.47
#1	-.0006	.1520	.0007	.0404	-.0001	29.83	-.0001	-.0004	.0040	.0007
#2	-.0006	.1338	.0005	.0406	.0000	30.12	-.0001	-.0005	.0036	.0001
#3	-.0004	.1326	-.0011	.0405	.0000	29.71	.0000	-.0003	.0037	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	15.36	4.213	7.436	.0114	-.0023	22.36	-.0004	.0042	.0011	.0011
Stddev	.07	.012	.024	.0001	.0000	.08	.0004	.0005	.0007	.0014
%RSD	.4611	.2900	.3210	.5775	1.866	.3734	102.8	13.00	64.80	128.9
#1	15.33	4.217	7.463	.0114	-.0022	22.29	-.0005	.0043	.0004	-.0004
#2	15.44	4.223	7.418	.0114	-.0023	22.45	-.0007	.0047	.0018	.0013
#3	15.31	4.200	7.427	.0115	-.0023	22.32	.0001	.0036	.0012	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.739	-.0002	.1658	.0013	-.0004	.0008	.0008
Stddev	.012	.0000	.0006	.0001	.0002	.0001	.0001
%RSD	.1734	9.944	.3332	5.778	48.77	16.44	13.25
#1	6.740	-.0002	.1659	.0012	-.0002	.0007	.0009
#2	6.727	-.0002	.1663	.0013	-.0004	.0010	.0008
#3	6.750	-.0003	.1652	.0014	-.0005	.0008	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1066.0	3109.6	24865.	2165.8
Stddev	3.9	5.4	97.	9.9
%RSD	.36196	.17216	.39129	.45761
#1	1065.8	3108.7	24888.	2163.8
#2	1062.3	3104.8	24758.	2157.1
#3	1070.0	3115.3	24949.	2176.6

Zoom In Zoom Out

Sample Name: FA53857-4F Acquired: 5/4/2018 14:31:48 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	.0151	.0073	.0084	-.0001	55.08	-.0001	-.0002	.0006	.0008
Stddev	.0002	.0112	.0003	.0001	.0000	.22	.0000	.0001	.0007	.0002
%RSD	37.51	73.93	4.266	.9186	82.15	.4045	34.74	43.32	113.0	21.33
#1	-.0005	.0074	.0076	.0083	.0000	54.99	-.0001	-.0001	.0001	.0010
#2	-.0008	.0280	.0073	.0085	-.0001	54.92	-.0002	-.0002	.0014	.0006
#3	-.0004	.0101	.0070	.0084	-.0001	55.34	-.0001	-.0003	.0003	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7084	1.988	.8565	.0012	.0013	2.399	.0007	.0016	.0011	.0002
Stddev	.0068	.016	.0206	.0001	.0001	.016	.0002	.0001	.0013	.0014
%RSD	.9665	.7895	2.408	4.457	10.64	.6702	30.82	9.256	117.8	753.6
#1	.7014	2.005	.8354	.0012	.0011	2.401	.0006	.0017	.0019	.0017
#2	.7086	1.974	.8767	.0013	.0013	2.382	.0006	.0017	-.0004	-.0007
#3	.7151	1.986	.8573	.0012	.0014	2.414	.0010	.0014	.0018	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.432	-.0003	.0782	.0009	-.0009	.0004	.0043
Stddev	.003	.0003	.0001	.0001	.0021	.0005	.0001
%RSD	.0988	89.63	.1388	8.004	238.5	129.9	1.187
#1	3.429	.0000	.0782	.0008	-.0025	.0008	.0043
#2	3.436	-.0005	.0781	.0009	-.0017	.0004	.0042
#3	3.431	-.0005	.0783	.0010	.0015	-.0001	.0043

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1068.0	3043.8	24677.	2147.9
Stddev	4.6	2.6	48.	10.2
%RSD	.42690	.08542	.19557	.47499
#1	1063.1	3043.6	24726.	2153.6
#2	1068.7	3046.5	24676.	2153.9
#3	1072.1	3041.4	24629.	2136.1

Zoom In Zoom Out

Sample Name: FA53857-8F Acquired: 5/4/2018 14:36:05 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.3091	.0052	.0982	.0001	24.81	-.0001	.0001	.0065	.0003
Stddev	.0003	.0019	.0007	.0006	.0000	.08	.0000	.0000	.0002	.0002
%RSD	81.63	.6013	13.62	.5833	52.46	.3212	39.24	27.41	2.845	67.03
#1	-.0006	.3070	.0053	.0988	.0001	24.89	-.0001	.0001	.0064	.0001
#2	-.0001	.3103	.0044	.0977	.0000	24.73	-.0002	.0001	.0067	.0004
#3	-.0003	.3100	.0058	.0982	.0001	24.81	-.0001	.0001	.0064	.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.8193	7.640	9.356	.0058	-.0018	52.84	.0003	.0014	.0005	.0005
Stddev	.0076	.049	.083	.0001	.0000	.08	.0001	.0003	.0012	.0031
%RSD	.9323	.6362	.8858	1.084	2.200	.1572	16.16	22.46	252.8	617.3
#1	.8238	7.648	9.368	.0058	-.0018	52.93	.0004	.0016	.0005	.0004
#2	.8105	7.588	9.269	.0059	-.0017	52.76	.0003	.0015	-.0008	.0036
#3	.8237	7.684	9.433	.0058	-.0018	52.83	.0003	.0010	.0017	-.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.532	-.0004	.0887	.0010	-.0016	.0068	.0024
Stddev	.001	.0002	.0004	.0000	.0006	.0002	.0001
%RSD	.0425	48.64	.4041	4.860	38.46	2.821	3.919
#1	2.532	-.0004	.0890	.0010	-.0023	.0067	.0025
#2	2.533	-.0002	.0883	.0010	-.0012	.0070	.0024
#3	2.531	-.0006	.0887	.0011	-.0013	.0068	.0023

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1043.3	3197.3	25999.	2302.3
Stddev	2.1	2.6	133.	22.7
%RSD	.20275	.08046	.51179	.98567
#1	1042.1	3198.0	25908.	2295.0
#2	1042.1	3194.4	25937.	2327.7
#3	1045.8	3199.4	26152.	2284.1

Zoom In Zoom Out

Sample Name: FA53877-1 Acquired: 5/4/2018 14:40:21 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0634	.0000	.4068	.0000	54.38	-.0001	-.0002	.0020	.0017
Stddev	.0004	.0008	.001	.0018	.000	.10	.0000	.0001	.0002	.0002
%RSD	156.1	1.318	1909.	.4493	681.9	.1779	74.84	43.36	8.969	10.63
#1	-.0001	.0642	.0004	.4085	-.0001	54.28	-.0001	-.0001	.0018	.0016
#2	.0002	.0626	-.0007	.4049	.0001	54.48	-.0001	-.0003	.0021	.0017
#3	.0006	.0635	.0002	.4071	.0000	54.37	.0000	-.0002	.0021	.0020

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.240	10.53	19.13	.0795	-.0017	2.881	.0019	.0035	-.0007	.0015
Stddev	.019	.04	.03	.0001	.0002	.002	.0002	.0006	.0006	.0027
%RSD	.5763	.3336	.1369	.1480	9.004	.0615	8.638	17.08	88.35	185.6
#1	3.223	10.55	19.16	.0796	-.0015	2.883	.0017	.0041	-.0005	.0023
#2	3.260	10.55	19.11	.0795	-.0017	2.880	.0019	.0034	-.0013	.0036
#3	3.236	10.49	19.12	.0794	-.0018	2.879	.0020	.0030	-.0001	-.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.734	-.0004	.6767	.0027	-.0017	.0003	.0762
Stddev	.018	.0003	.0008	.0005	.0003	.0002	.0001
%RSD	.4759	71.68	.1250	17.42	20.03	56.61	.1535
#1	3.754	-.0008	.6758	.0026	-.0018	.0005	.0761
#2	3.730	-.0004	.6773	.0023	-.0020	.0001	.0761
#3	3.719	-.0002	.6772	.0032	-.0013	.0004	.0763

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1034.7	2973.9	24506.	2152.0
Stddev	2.5	4.5	182.	5.3
%RSD	.24531	.15057	.74205	.24568
#1	1032.6	2968.8	24296.	2148.8
#2	1037.5	2977.3	24602.	2158.1
#3	1034.0	2975.6	24620.	2149.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 14:44:35 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2496	39.08	2.076	2.028	2.001	39.20	2.048	2.057	1.967	2.015
Stddev	.0017	.31	.002	.018	.013	.25	.001	.001	.004	.008
%RSD	.6712	.7842	.0772	.9047	.6480	.6370	.0562	.0628	.1897	.4109
#1	.2501	38.97	2.074	2.021	1.997	39.11	2.050	2.059	1.966	2.021
#2	.2478	38.85	2.077	2.014	1.990	39.01	2.048	2.057	1.971	2.006
#3	.2510	39.43	2.076	2.048	2.015	39.48	2.048	2.057	1.963	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.13	40.23	40.04	2.038	2.101	39.26	2.107	1.987	2.078	2.081
Stddev	.24	.33	.29	.007	.001	.36	.001	.007	.007	.002
%RSD	.5896	.8078	.7340	.3534	.0322	.9156	.0620	.3569	.3312	.0863
#1	40.12	40.13	40.05	2.043	2.100	39.13	2.106	1.992	2.079	2.082
#2	39.90	39.97	39.74	2.030	2.101	38.99	2.105	1.979	2.085	2.079
#3	40.38	40.60	40.33	2.041	2.101	39.67	2.108	1.989	2.071	2.081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.873	2.153	2.006	2.026	2.013	2.065	2.051
Stddev	.001	.005	.016	.007	.007	.004	.001
%RSD	.0638	.2180	.7793	.3376	.3596	.1793	.0648
#1	1.872	2.148	2.001	2.030	2.021	2.069	2.052
#2	1.874	2.158	1.993	2.018	2.013	2.064	2.050
#3	1.874	2.154	2.023	2.030	2.006	2.062	2.050
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 14:44:35 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	985.47	3023.9	24767.	2172.3
Stddev	3.02	5.2	17.	4.6
%RSD	.30609	.17134	.07038	.21193
#1	981.99	3020.1	24779.	2170.8
#2	987.12	3021.8	24747.	2168.7
#3	987.30	3029.8	24775.	2177.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 14:48:31 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0020	.0008	-.0001	.0002	.0061	.0001	-.0001	.0001	.0003
Stddev	.0002	.0052	.0008	.0003	.0001	.0009	.0000	.0001	.0004	.0002
%RSD	145.6	264.2	98.67	380.4	44.37	14.03	71.32	78.24	620.5	85.56
#1	.0001	.0012	.0003	.0000	.0003	.0066	.0001	-.0001	-.0001	.0000
#2	-.0002	.0075	.0016	.0002	.0002	.0066	.0001	-.0001	-.0002	.0004
#3	-.0001	-.0028	.0004	-.0005	.0001	.0051	.0000	.0000	.0005	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061	-.0245	.0055	.0002	.0010	.0130	.0003	.0002	.0002	.0001
Stddev	.0056	.0036	.0310	.0000	.0007	.0016	.0002	.0008	.0006	.0019
%RSD	91.97	14.78	560.3	21.57	74.37	12.17	78.42	331.1	342.3	2010.
#1	.0125	-.0205	-.0127	.0002	.0017	.0117	.0001	.0011	.0005	.0010
#2	.0037	-.0253	-.0121	.0001	.0009	.0147	.0003	.0003	.0005	-.0021
#3	.0021	-.0277	.0413	.0002	.0003	.0125	.0005	-.0006	-.0005	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0002	.0000	.0008	-.0004	.0000	.0002
Stddev	.0002	.0003	.0000	.0002	.0004	.000	.0001
%RSD	11.65	169.8	163.4	28.91	96.98	4667.	57.07
#1	.0017	.0005	.0001	.0011	-.0007	.0003	.0001
#2	.0014	.0000	.0000	.0007	-.0006	-.0002	.0001
#3	.0014	.0000	.0000	.0007	.0000	-.0001	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 14:48:31 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1138.3	3159.6	25749.	2211.8
Stddev	2.4	8.8	51.	12.3
%RSD	.21495	.27802	.19960	.55466
#1	1135.6	3156.1	25772.	2197.9
#2	1140.3	3169.6	25690.	2216.8
#3	1139.0	3153.0	25784.	2220.9

Zoom In Zoom Out

Sample Name: FA53857-3 Acquired: 5/4/2018 14:52:50 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.8422	.6704	.7936	.0004	126.7	.0015	.0000	.0044	.0358
Stddev	.0003	.0061	.0033	.0029	.0002	.6	.0001	.0001	.0004	.0004
%RSD	133.8	.7235	.4919	.3680	44.34	.4347	7.445	177.5	8.824	1.150
#1	.0001	.8486	.6740	.7923	.0003	126.9	.0016	.0000	.0040	.0362
#2	.0000	.8365	.6676	.7916	.0006	126.1	.0016	.0001	.0047	.0354
#3	.0006	.8414	.6695	.7970	.0003	127.1	.0014	.0000	.0046	.0359

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	122.1	1.766	57.66	.1318	.0218	20.02	.0067	.0252	.0029	.0029
Stddev	.4	.016	.16	.0004	.0001	.06	.0001	.0008	.0005	.0030
%RSD	.3458	.8926	.2713	.3267	.4961	.3069	.8303	3.321	18.24	103.3
#1	122.3	1.782	57.63	.1320	.0220	20.03	.0068	.0255	.0027	.0001
#2	121.6	1.750	57.52	.1320	.0218	19.95	.0067	.0243	.0026	.0061
#3	122.4	1.766	57.83	.1313	.0218	20.07	.0067	.0259	.0035	.0026

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	18.93	.0005	.2469	.0163	.0010	.0058	.0296
Stddev	.06	.0002	.0015	.0010	.0008	.0003	.0001
%RSD	.3303	46.71	.5968	5.866	81.54	5.351	.5012
#1	18.98	.0004	.2469	.0174	.0001	.0058	.0295
#2	18.96	.0007	.2454	.0160	.0016	.0055	.0295
#3	18.86	.0003	.2483	.0157	.0014	.0062	.0297

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1002.8	2992.9	24610.	2217.8
Stddev	3.0	4.4	125.	8.3
%RSD	.29851	.14682	.50776	.37306
#1	1000.3	2988.0	24471.	2209.1
#2	1006.1	2994.3	24713.	2225.5
#3	1002.1	2996.5	24644.	2218.8

Zoom In Zoom Out

Sample Name: FA53857-4 Acquired: 5/4/2018 14:57:01 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	5.596	.0373	.6535	.0003	159.9	.0001	.0035	.0117	.0150
Stddev	.0004	.045	.0007	.0048	.0001	1.0	.0000	.0002	.0011	.0002
%RSD	381.8	.8134	1.917	.7338	31.93	.6554	27.82	5.201	9.532	1.565
#1	-.0003	5.643	.0373	.6573	.0002	161.0	.0002	.0033	.0110	.0153
#2	.0003	5.595	.0379	.6552	.0003	159.8	.0001	.0037	.0110	.0148
#3	.0003	5.552	.0365	.6481	.0003	159.0	.0001	.0035	.0129	.0150

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	16.90	3.841	79.65	.1674	.0159	51.61	.0208	.0146	.0018	.0008
Stddev	.07	.037	.19	.0012	.0001	.31	.0003	.0010	.0021	.0015
%RSD	.4082	.9709	.2342	.6920	.8814	.5989	1.682	7.101	121.0	192.0
#1	16.97	3.872	79.74	.1661	.0160	51.94	.0208	.0144	-.0006	.0002
#2	16.90	3.851	79.76	.1679	.0157	51.56	.0204	.0157	.0035	.0025
#3	16.83	3.800	79.43	.1682	.0159	51.33	.0211	.0137	.0024	-.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	17.91	-.0002	.2514	.2238	-.0010	.0116	.0331
Stddev	.11	.0003	.0013	.0036	.0002	.0002	.0000
%RSD	.6219	164.7	.5197	1.604	20.04	2.096	.1208
#1	17.78	.0002	.2525	.2218	-.0010	.0116	.0331
#2	17.97	-.0003	.2517	.2217	-.0009	.0113	.0331
#3	17.98	-.0004	.2499	.2279	-.0013	.0118	.0331

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	968.69	2936.0	24008.	2146.1
Stddev	3.35	4.4	177.	11.0
%RSD	.34619	.14995	.73633	.51302
#1	964.82	2931.1	24172.	2137.8
#2	970.52	2937.2	24031.	2142.0
#3	970.73	2939.7	23821.	2158.6

Zoom In Zoom Out

Sample Name: MP33695-MB1 Acquired: 5/4/2018 15:01:13 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0017	-.0012	-.0003	.0000	.0103	.0000	-.0002	.0000	.0004
Stddev	.0004	.0124	.0005	.0001	.000	.0033	.000	.0000	.0003	.0004
%RSD	339.0	716.4	42.88	50.17	612.9	32.02	49.00	20.94	1931.	100.6
#1	.0000	.0028	-.0006	-.0003	-.0001	.0124	-.0001	-.0001	.0004	.0008
#2	.0006	.0136	-.0014	-.0004	.0000	.0121	-.0001	-.0002	-.0001	.0004
#3	-.0002	-.0112	-.0015	-.0001	.0000	.0065	.0000	-.0002	-.0002	.0000

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	-.0323	.0150	.0000	-.0023	.0202	.0001	.0003	.0012	.0018
Stddev	.0044	.0298	.0092	.0000	.0001	.0029	.0000	.0008	.0012	.0041
%RSD	322.6	92.20	61.59	539.3	2.551	14.48	28.01	288.3	98.54	227.2
#1	.0063	.0013	.0143	.0000	-.0023	.0231	.0001	.0012	.0023	-.0025
#2	-.0005	-.0554	.0245	.0000	-.0024	.0203	.0001	.0001	-.0001	.0057
#3	-.0018	-.0429	.0061	.0000	-.0022	.0173	.0002	-.0004	.0014	.0023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0328	-.0003	.0000	-.0006	-.0024	-.0001	.0009
Stddev	.0009	.0004	.0000	.0001	.0008	.0002	.0001
%RSD	2.860	115.3	162.1	24.23	32.85	173.2	7.834
#1	.0339	-.0005	.0001	-.0007	-.0016	-.0004	.0009
#2	.0324	.0001	.0000	-.0004	-.0024	.0000	.0008
#3	.0322	-.0007	.0000	-.0007	-.0032	.0000	.0008

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33695-MB1 Acquired: 5/4/2018 15:01:13 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1133.0	3136.2	26120.	2196.8
Stddev	2.1	1.5	56.	6.7
%RSD	.18180	.04936	.21525	.30635
#1	1131.0	3135.6	26075.	2189.3
#2	1132.8	3138.0	26183.	2202.3
#3	1135.1	3135.0	26104.	2198.7

Zoom In Zoom Out

Sample Name: MP33695-B1 Acquired: 5/4/2018 15:05:32 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0507	25.11	2.031	2.030	.0505	23.58	.0506	.5132	.1975	.2529
Stddev	.0003	.03	.002	.007	.0002	.01	.0001	.0008	.0013	.0003
%RSD	.5558	.1040	.0861	.3540	.4760	.0323	.1702	.1472	.6373	.1018
#1	.0507	25.08	2.032	2.037	.0506	23.57	.0507	.5124	.1967	.2532
#2	.0505	25.12	2.032	2.031	.0506	23.58	.0505	.5133	.1968	.2527
#3	.0510	25.13	2.029	2.023	.0502	23.58	.0506	.5139	.1989	.2528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.10	24.20	24.13	.5037	.4963	23.57	.5407	.4761	.5159	2.009
Stddev	.03	.06	.09	.0021	.0003	.04	.0004	.0008	.0016	.001
%RSD	.1281	.2419	.3908	.4114	.0652	.1487	.0727	.1741	.3189	.0474
#1	25.13	24.13	24.07	.5046	.4960	23.57	.5402	.4752	.5146	2.010
#2	25.10	24.21	24.24	.5013	.4964	23.53	.5409	.4766	.5178	2.008
#3	25.07	24.25	24.08	.5051	.4966	23.60	.5409	.4767	.5153	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5234	.5338	.5010	.5037	1.911	.4823	.5023
Stddev	.0006	.0002	.0008	.0016	.012	.0010	.0014
%RSD	.1197	.0328	.1618	.3209	.6345	.2160	.2827
#1	.5232	.5339	.5011	.5045	1.904	.4834	.5014
#2	.5229	.5336	.5017	.5018	1.904	.4813	.5016
#3	.5241	.5340	.5001	.5047	1.925	.4822	.5040
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33695-B1 Acquired: 5/4/2018 15:05:32 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1039.2	3054.9	25029.	2173.6
Stddev	2.3	1.7	49.	11.4
%RSD	.21751	.05492	.19519	.52357
#1	1040.3	3056.5	24998.	2185.7
#2	1040.7	3053.1	25085.	2172.0
#3	1036.6	3055.2	25004.	2163.1

Zoom In Zoom Out

Sample Name: FA53703-1 Acquired: 5/4/2018 15:09:31 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.5419	.0363	.0032	.0000	13.10	.0000	-.0004	.0010	.0009
Stddev	.0003	.0065	.0008	.0001	.000	.04	.0000	.0001	.0002	.0003
%RSD	994.5	1.190	2.277	3.702	510.8	.3326	89.69	16.41	16.01	28.39
#1	.0002	.5370	.0354	.0032	.0000	13.08	.0001	-.0004	.0011	.0009
#2	.0002	.5492	.0369	.0031	-.0001	13.08	.0000	-.0003	.0012	.0007
#3	-.0003	.5394	.0366	.0034	.0001	13.15	.0001	-.0005	.0009	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.9940	3.591	.4968	.0087	-.0014	3.493	.0003	.0016	.0006	.0013
Stddev	.0064	.026	.0186	.0001	.0003	.015	.0003	.0007	.0008	.0026
%RSD	.6438	.7237	3.743	1.273	20.46	.4190	83.47	44.60	125.3	203.1
#1	.9882	3.586	.4970	.0086	-.0012	3.483	.0003	.0019	.0014	.0016
#2	1.001	3.618	.4781	.0088	-.0012	3.486	.0006	.0008	-.0002	.0037
#3	.9928	3.567	.5153	.0086	-.0017	3.510	.0001	.0022	.0008	-.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.754	-.0003	.0238	.0169	-.0009	.0012	.0050
Stddev	.005	.0001	.0001	.0005	.0021	.0005	.0001
%RSD	.1235	26.58	.5755	3.070	221.3	39.06	1.835
#1	3.755	-.0002	.0239	.0163	.0014	.0017	.0051
#2	3.759	-.0004	.0237	.0173	-.0016	.0009	.0050
#3	3.749	-.0004	.0237	.0171	-.0027	.0009	.0049

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1103.2	3110.6	25517.	2196.1
Stddev	3.0	8.9	231.	9.3
%RSD	.27625	.28502	.90373	.42121
#1	1102.7	3106.7	25264.	2192.0
#2	1100.3	3104.3	25571.	2206.6
#3	1106.4	3120.7	25716.	2189.5

Zoom In Zoom Out

Sample Name: MP33695-D1 Acquired: 5/4/2018 15:13:51 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.5257	.0347	.0030	.0000	12.65	.0000	-.0003	.0012	.0009
Stddev	.0002	.0066	.0006	.0002	.000	.13	.000	.0001	.0003	.0003
%RSD	198.3	1.255	1.793	7.132	3678.	1.006	418.4	22.85	21.39	35.80
#1	.0000	.5269	.0354	.0032	.0001	12.55	.0000	-.0003	.0011	.0009
#2	.0000	.5317	.0344	.0028	-.0001	12.61	.0000	-.0003	.0015	.0012
#3	-.0004	.5186	.0343	.0030	.0000	12.80	.0000	-.0002	.0010	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.9545	3.446	.4986	.0086	-.0017	3.359	.0006	.0009	.0009	.0019
Stddev	.0186	.036	.0348	.0001	.0002	.024	.0003	.0008	.0014	.0007
%RSD	1.953	1.039	6.979	.8159	9.855	.7174	43.41	93.97	160.5	34.50
#1	.9403	3.408	.5372	.0086	-.0017	3.339	.0009	.0015	.0025	.0026
#2	.9474	3.452	.4698	.0086	-.0015	3.352	.0005	.0000	-.0001	.0019
#3	.9756	3.479	.4886	.0087	-.0018	3.386	.0004	.0011	.0002	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.611	.0002	.0229	.0153	-.0007	.0010	.0045
Stddev	.012	.0002	.0002	.0005	.0004	.0001	.0001
%RSD	.3321	77.88	.8071	3.157	60.31	13.09	1.825
#1	3.624	.0004	.0227	.0149	-.0006	.0011	.0045
#2	3.609	.0003	.0230	.0152	-.0012	.0012	.0045
#3	3.600	.0001	.0231	.0159	-.0004	.0009	.0046

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1107.8	3113.7	25559.	2196.3
Stddev	2.2	7.2	125.	10.5
%RSD	.19604	.22982	.48795	.47879
#1	1106.7	3106.3	25597.	2208.1
#2	1110.3	3114.2	25660.	2187.8
#3	1106.4	3120.6	25419.	2193.1

Zoom In Zoom Out

Sample Name: MP33695-SD1 Acquired: 5/4/2018 15:18:09 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	.5893	.0361	.0038	.0000	13.59	.0000	-.0007	.0008	.0157
Stddev	.0003	.0197	.0025	.0011	.0004	.16	.0001	.0006	.0010	.0017
%RSD	37.42	3.349	6.834	29.37	1507.	1.205	417.8	86.66	137.2	10.67
#1	-.0010	.5687	.0352	.0026	-.0002	13.49	.0000	-.0005	-.0002	.0139
#2	-.0010	.6081	.0343	.0048	.0005	13.51	.0000	-.0015	.0007	.0172
#3	-.0005	.5910	.0389	.0038	-.0002	13.78	.0002	-.0002	.0018	.0160

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.9402	3.604	.5933	.0090	-.0115	3.574	.0009	.0051	-.0036	.0044
Stddev	.0333	.105	.1301	.0002	.0008	.072	.0005	.0025	.0023	.0122
%RSD	3.541	2.909	21.93	2.178	7.256	2.004	57.49	49.31	65.30	277.1
#1	.9018	3.531	.6178	.0093	-.0109	3.503	.0010	.0030	-.0060	-.0032
#2	.9585	3.556	.7093	.0089	-.0125	3.573	.0013	.0043	-.0035	-.0021
#3	.9603	3.724	.4526	.0090	-.0112	3.646	.0003	.0078	-.0013	.0185

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.824	-.0014	.0242	.0133	-.0021	.0010	.0073
Stddev	.008	.0015	.0003	.0011	.0037	.0008	.0002
%RSD	.2069	105.8	1.169	8.382	176.9	78.76	3.316
#1	3.821	-.0016	.0240	.0123	-.0031	.0001	.0076
#2	3.833	-.0027	.0245	.0145	.0020	.0013	.0072
#3	3.818	.0002	.0240	.0131	-.0053	.0017	.0072

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1119.2	3134.5	25512.	2166.4
Stddev	1.2	5.1	116.	14.6
%RSD	.11162	.16342	.45467	.67424
#1	1117.7	3128.7	25594.	2162.5
#2	1119.9	3136.7	25379.	2182.5
#3	1119.9	3138.3	25562.	2154.1

Zoom In Zoom Out

Sample Name: MP33695-PS1 Acquired: 5/4/2018 15:22:26 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0473	2.943	.1422	.2598	.0507	17.69	.0503	.0518	.0512	.1042
Stddev	.0002	.050	.0014	.0028	.0006	.18	.0001	.0001	.0006	.0009
%RSD	.4132	1.696	.9504	1.078	1.224	.9978	.2107	.2752	1.174	.8224
#1	.0472	2.907	.1424	.2614	.0507	17.68	.0502	.0517	.0518	.1052
#2	.0475	3.000	.1407	.2613	.0513	17.87	.0503	.0519	.0507	.1036
#3	.0472	2.921	.1433	.2565	.0501	17.52	.0504	.0516	.0509	.1038

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.920	13.34	5.534	.0596	.0958	12.97	.1076	.0480	.1016	.0977
Stddev	.020	.14	.042	.0005	.0003	.11	.0001	.0007	.0006	.0011
%RSD	.5209	1.058	.7658	.7691	.2791	.8352	.1349	1.376	.6270	1.083
#1	3.919	13.36	5.575	.0601	.0955	13.00	.1075	.0473	.1020	.0972
#2	3.940	13.48	5.490	.0592	.0960	13.06	.1075	.0479	.1020	.0970
#3	3.899	13.20	5.538	.0595	.0960	12.85	.1078	.0486	.1009	.0989

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.688	.0513	.0733	.1174	.0952	.0499	.2559
Stddev	.008	.0004	.0006	.0007	.0011	.0004	.0007
%RSD	.2063	.7235	.8268	.6061	1.114	.7332	.2695
#1	3.684	.0515	.0736	.1172	.0965	.0503	.2552
#2	3.683	.0509	.0736	.1168	.0947	.0496	.2559
#3	3.697	.0516	.0726	.1182	.0945	.0499	.2565

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1074.8	3107.6	25163.	2187.7
Stddev	.4	3.9	78.	25.6
%RSD	.03625	.12466	.30935	1.1707
#1	1074.6	3107.1	25088.	2204.5
#2	1075.2	3111.7	25243.	2158.3
#3	1074.5	3103.9	25157.	2200.5

Zoom In Zoom Out

Sample Name: MP33695-S1 Acquired: 5/4/2018 15:26:35 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.1052	28.55	F4.165	F4.203	.1049	36.82	.1028	1.044	.4086
Stddev	.0010	.13	.013	.024	.0005	.22	.0002	.002	.0014
%RSD	.9888	.4558	.3055	.5769	.5164	.5983	.1997	.1972	.3304
#1	.1040	28.44	4.168	4.214	.1050	36.75	.1029	1.045	.4101
#2	.1057	28.69	4.151	4.221	.1053	37.07	.1026	1.041	.4083
#3	.1059	28.51	4.176	4.176	.1043	36.65	.1030	1.045	.4075

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5295	27.68	28.16	25.02	1.048	.5012	27.65	1.093	.9847
Stddev	.0018	.10	.15	.17	.004	.0010	.14	.003	.0017
%RSD	.3380	.3773	.5418	.6652	.3449	.1935	.5014	.2581	.1684
#1	.5302	27.60	28.19	24.98	1.044	.5018	27.59	1.091	.9835
#2	.5308	27.80	28.29	25.21	1.050	.5001	27.81	1.092	.9866
#3	.5274	27.65	27.99	24.88	1.050	.5017	27.55	1.096	.9841

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.052	F4.064	4.165	.5320	.5372	.5355	3.948	.9904	1.019
Stddev	.002	.004	.013	.0016	.0023	.0018	.009	.0007	.001
%RSD	.2285	.0936	.3159	.2941	.4356	.3355	.2389	.0735	.1066
#1	1.050	4.061	4.165	.5310	.5370	.5335	3.954	.9906	1.018
#2	1.052	4.068	4.152	.5311	.5396	.5370	3.953	.9896	1.018
#3	1.055	4.064	4.178	.5338	.5350	.5360	3.937	.9910	1.020

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1022.8	3070.2	24862.	2169.2
Stddev	2.2	4.1	54.	24.0
%RSD	.21770	.13362	.21833	1.1080
#1	1022.3	3067.5	24871.	2179.7
#2	1020.9	3075.0	24911.	2141.7
#3	1025.2	3068.2	24804.	2186.1

◀ Zoom In ▶ Zoom Out

Sample Name: MP33695-S2 Acquired: 5/4/2018 15:30:33 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.1034	28.54	F4.140	F4.203	.1045	36.83	.1027	1.042	.4067
Stddev	.0005	.27	.001	.036	.0010	.34	.0002	.001	.0007
%RSD	.4850	.9559	.0262	.8537	.9980	.9305	.1477	.0696	.1715
#1	.1030	28.80	4.141	4.244	.1056	37.19	.1026	1.042	.4063
#2	.1040	28.56	4.140	4.184	.1043	36.78	.1027	1.043	.4075
#3	.1033	28.26	4.139	4.180	.1036	36.51	.1029	1.043	.4064

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5239	27.61	28.21	25.02	1.033	.5090	27.57	1.086	.9804
Stddev	.0018	.16	.22	.30	.002	.0003	.25	.001	.0031
%RSD	.3473	.5948	.7733	1.197	.1983	.0501	.9170	.0540	.3152
#1	.5231	27.79	28.45	25.27	1.032	.5087	27.84	1.085	.9775
#2	.5226	27.57	28.14	25.10	1.036	.5092	27.53	1.086	.9799
#3	.5260	27.47	28.03	24.69	1.033	.5092	27.34	1.086	.9837

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.042	F4.049	4.146	.5384	.5458	.5379	3.941	.9848	1.018
Stddev	.001	.009	.007	.0009	.0050	.0006	.021	.0024	.002
%RSD	.1368	.2300	.1654	.1587	.9158	.1100	.5244	.2469	.1531
#1	1.040	4.059	4.154	.5392	.5515	.5378	3.927	.9828	1.016
#2	1.043	4.046	4.143	.5375	.5437	.5385	3.932	.9875	1.019
#3	1.042	4.041	4.142	.5386	.5422	.5373	3.965	.9842	1.019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1020.4	3065.5	24877.	2166.5
Stddev	2.3	3.7	76.	24.6
%RSD	.22567	.12076	.30682	1.1370
#1	1022.2	3061.3	24946.	2138.3
#2	1021.3	3067.2	24795.	2177.5
#3	1017.8	3068.1	24890.	2183.7

◀ Zoom In ▶ Zoom Out

Sample Name: CCV Acquired: 5/4/2018 15:34:32 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2513	39.14	2.051	2.015	1.999	39.28	2.044	2.050	1.999	2.019
Stddev	.0020	.13	.002	.006	.005	.15	.002	.000	.008	.011
%RSD	.7916	.3387	.0779	.3097	.2532	.3717	.1036	.0193	.4027	.5495
#1	.2506	39.05	2.052	2.017	1.998	39.23	2.042	2.050	2.005	2.020
#2	.2536	39.29	2.050	2.020	2.004	39.44	2.045	2.050	2.001	2.029
#3	.2498	39.07	2.053	2.008	1.994	39.16	2.046	2.051	1.990	2.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.09	40.10	40.04	2.055	2.091	39.36	2.089	1.991	2.058	2.060
Stddev	.07	.17	.17	.013	.002	.07	.003	.005	.004	.002
%RSD	.1707	.4192	.4202	.6409	.0812	.1681	.1423	.2573	.1710	.0754
#1	40.14	40.09	39.92	2.058	2.090	39.32	2.090	1.988	2.062	2.058
#2	40.12	40.27	40.24	2.067	2.089	39.43	2.086	1.988	2.055	2.061
#3	40.01	39.94	39.97	2.041	2.093	39.31	2.091	1.997	2.056	2.061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.854	2.129	2.001	2.039	2.023	2.069	2.045
Stddev	.001	.001	.005	.013	.003	.003	.003
%RSD	.0395	.0504	.2297	.6219	.1525	.1659	.1544
#1	1.854	2.130	2.000	2.038	2.027	2.072	2.042
#2	1.853	2.128	2.006	2.052	2.021	2.070	2.045
#3	1.855	2.130	1.997	2.027	2.022	2.065	2.049
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

◀ Zoom In ▶ Zoom Out

Sample Name: CCV Acquired: 5/4/2018 15:34:32 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	987.46	3043.6	24493.	2158.2
Stddev	2.76	3.3	79.	17.3
%RSD	.27983	.10885	.32273	.79979
#1	987.18	3044.9	24408.	2163.9
#2	990.36	3046.0	24509.	2138.8
#3	984.85	3039.8	24563.	2171.9

◀ Zoom In ▶ Zoom Out

Sample Name: CCB Acquired: 5/4/2018 15:38:28 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0122	.0004	.0000	.0002	.0035	.0001	.0001	.0000
Stddev	.0003	.0041	.0005	.0002	.0000	.0029	.0001	.0001	.0004
%RSD	196.2	33.53	124.7	884.4	6.292	82.70	71.19	61.77	1606.
#1	.0001	.0164	.0008	.0001	.0002	.0003	.0002	.0000	.0001
#2	-.0001	.0120	-.0002	.0001	.0002	.0060	.0000	.0001	.0003
#3	.0004	.0082	.0006	-.0002	.0002	.0041	.0001	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0105	.0042	.0214	.0001	F.0012	.0092	.0003	.0002
Stddev	.0001	.0016	.0188	.0298	.0001	.0006	.0056	.0002	.0002
%RSD	32.29	14.73	448.7	139.4	42.22	54.29	61.15	68.63	93.78
#1	.0005	.0115	.0075	.0487	.0002	.0018	.0036	.0002	.0003
#2	.0003	.0113	.0212	.0260	.0001	.0011	.0148	.0006	.0004
#3	.0003	.0088	-.0160	-.0105	.0002	.0006	.0093	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	.0004	.0011	.0005	.0002	.0009	.0011	.0001	.0002
Stddev	.0007	.0001	.0004	.0001	.0001	.0001	.0003	.0002	.0000
%RSD	70.27	27.89	35.43	30.09	56.20	15.07	27.48	216.4	25.65
#1	.0008	.0003	.0007	.0005	.0001	.0011	.0014	.0001	.0002
#2	.0004	.0005	.0011	.0006	.0001	.0008	.0008	-.0001	.0001
#3	.0018	.0003	.0014	.0003	.0003	.0008	.0011	.0004	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 15:38:28 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1132.5	3171.0	25451.	2177.2
Stddev	2.8	9.0	101.	20.7
%RSD	.24833	.28445	.39761	.95263
#1	1130.8	3175.4	25499.	2157.8
#2	1135.7	3177.0	25519.	2199.1
#3	1130.9	3160.6	25335.	2174.8

Zoom In Zoom Out

Sample Name: FA53894-1 Acquired: 5/4/2018 15:42:47 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0141	-.0046	.2250	.0000	F596.2	.0000	-.0005	-.0015
Stddev	.0003	.0261	.0008	.0004	.0000	4.9	.000	.0001	.0003
%RSD	60.27	185.3	17.86	.1892	82.43	.8149	40.44	22.64	22.90
#1	-.0007	.0378	-.0041	.2246	.0000	601.6	.0000	-.0005	-.0014
#2	-.0005	-.0138	-.0056	.2253	.0000	594.7	.0000	-.0005	-.0018
#3	-.0002	.0181	-.0042	.2252	.0000	592.3	-.0001	-.0003	-.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0007	1.155	16.04	122.1	.0637	-.0020	F711.9	-.0002	.0019
Stddev	.0002	.005	.06	.5	.0003	.0002	14.1	.0000	.0010
%RSD	25.50	.4312	.3880	.4420	.5194	9.624	1.979	12.75	50.27
#1	-.0009	1.151	15.97	121.5	.0640	-.0018	727.3	-.0002	.0011
#2	-.0005	1.160	16.06	122.3	.0637	-.0021	708.7	-.0002	.0016
#3	-.0006	1.153	16.09	122.4	.0633	-.0020	699.7	-.0003	.0030

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0025	.0018	14.02	-.0002	F8.832	-.0006	-.0033	.0001	.0001
Stddev	.0014	.0013	.01	.0005	.130	.0001	.0018	.0001	.0000
%RSD	58.29	71.37	.0967	286.0	1.475	19.54	53.38	132.6	36.07
#1	.0024	.0008	14.02	-.0006	8.699	-.0007	-.0051	.0000	.0001
#2	.0011	.0014	14.03	-.0002	8.959	-.0005	-.0016	.0002	.0001
#3	.0040	.0032	14.00	.0003	8.840	-.0007	-.0032	.0001	.0001

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	819.78	2594.8	21218.	2030.2
Stddev	.61	6.0	116.	3.4
%RSD	.07464	.23174	.54899	.16901
#1	819.64	2598.8	21105.	2033.9
#2	819.25	2587.9	21212.	2027.1
#3	820.45	2597.8	21337.	2029.7

Zoom In Zoom Out

Sample Name: FA53899-1 Acquired: 5/4/2018 15:47:28 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.4739	.0046	.0187	.0001	42.24	-.0001	.0008	.0019	.0014
Stddev	.0007	.0121	.0003	.0002	.0001	.27	.0001	.0000	.0004	.0003
%RSD	427.7	2.558	5.766	.9362	116.7	.6381	99.92	5.142	18.89	23.95
#1	.0009	.4739	.0045	.0188	.0001	41.94	-.0001	.0008	.0017	.0016
#2	.0001	.4861	.0045	.0188	.0000	42.35	.0000	.0008	.0024	.0010
#3	-.0005	.4618	.0049	.0185	.0002	42.45	-.0001	.0007	.0017	.0016

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.051	1.862	3.927	.0908	-.0017	5.337	.0030	.0021	.0006	.0021
Stddev	.007	.015	.012	.0003	.0001	.042	.0001	.0003	.0007	.0017
%RSD	.6896	.7931	.3094	.3148	7.322	.7864	2.503	13.78	115.6	80.15
#1	1.043	1.861	3.939	.0905	-.0016	5.290	.0031	.0019	.0005	.0040
#2	1.056	1.848	3.926	.0909	-.0017	5.372	.0030	.0019	.0000	.0009
#3	1.055	1.877	3.915	.0911	-.0018	5.349	.0030	.0024	.0013	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.045	.0003	.0623	.0093	-.0017	.0011	.0401
Stddev	.002	.0006	.0006	.0002	.0008	.0004	.0000
%RSD	.0366	235.1	1.000	1.631	50.82	32.82	.0974
#1	5.043	.0002	.0616	.0091	-.0014	.0016	.0401
#2	5.047	.0009	.0628	.0094	-.0026	.0008	.0401
#3	5.046	-.0003	.0624	.0092	-.0010	.0010	.0400

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1078.0	3083.0	25059.	2153.3
Stddev	4.5	6.0	68.	13.2
%RSD	.41513	.19463	.26975	.61360
#1	1073.1	3084.6	25136.	2156.8
#2	1078.9	3076.4	25030.	2164.5
#3	1081.9	3088.0	25010.	2138.7

Zoom In Zoom Out

Sample Name: FA53899-2 Acquired: 5/4/2018 15:51:43 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0428	-.0006	.0095	.0000	121.5	-.0001	-.0002	.0009	.0002
Stddev	.0003	.0135	.0005	.0001	.000	.2	.0000	.0001	.0002	.0002
%RSD	462.2	31.61	82.11	1.228	282.1	.1817	62.17	64.96	22.26	113.2
#1	.0003	.0403	-.0003	.0096	.0000	121.7	-.0001	-.0002	.0010	.0000
#2	-.0003	.0573	-.0003	.0094	.0001	121.3	.0000	.0000	.0007	.0002
#3	.0002	.0306	-.0012	.0095	-.0001	121.6	-.0001	-.0002	.0011	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5818	3.236	9.439	.0308	.0000	17.33	.0006	.0029	.0017	.0015
Stddev	.0091	.029	.096	.0002	.0001	.02	.0001	.0002	.0006	.0009
%RSD	1.565	.9118	1.013	.7911	359.7	.1060	21.75	8.364	35.94	57.19
#1	.5745	3.250	9.386	.0305	-.0001	17.32	.0004	.0032	.0012	.0006
#2	.5920	3.202	9.549	.0308	.0001	17.31	.0007	.0029	.0024	.0024
#3	.5790	3.256	9.382	.0310	.0000	17.35	.0006	.0027	.0015	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.497	-.0001	.4245	.0013	-.0021	.0013	.0013
Stddev	.019	.0001	.0012	.0001	.0010	.0002	.0001
%RSD	.2885	45.70	.2743	8.400	47.39	16.34	4.216
#1	6.518	-.0001	.4256	.0014	-.0013	.0015	.0013
#2	6.483	-.0002	.4232	.0013	-.0018	.0013	.0012
#3	6.489	-.0002	.4246	.0012	-.0032	.0011	.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1032.1	3011.5	24358.	2128.7
Stddev	3.7	14.6	25.	9.7
%RSD	.36162	.48548	.10459	.45334
#1	1030.2	2996.7	24347.	2125.0
#2	1029.8	3011.8	24387.	2121.4
#3	1036.4	3026.0	24339.	2139.6

Zoom In Zoom Out

Sample Name: FA53899-3 Acquired: 5/4/2018 15:55:59 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.2755	.0005	.0180	.0000	47.22	-.0001	.0004	.0011	.0005
Stddev	.0004	.0136	.0010	.0001	.000	.05	.0000	.0000	.0004	.0002
%RSD	119.3	4.938	193.7	.7453	652.2	.0961	77.84	7.611	33.71	35.66
#1	-.0009	.2818	.0017	.0178	.0000	47.19	.0000	.0004	.0008	.0003
#2	-.0002	.2599	-.0002	.0181	-.0002	47.27	-.0001	.0004	.0015	.0006
#3	.0000	.2848	.0001	.0179	.0001	47.19	-.0001	.0004	.0009	.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.402	3.979	4.241	.0299	-.0016	8.182	.0012	.0025	.0007	.0029
Stddev	.013	.036	.078	.0001	.0000	.006	.0002	.0012	.0017	.0008
%RSD	.8950	.9105	1.846	.3092	2.790	.0687	16.17	48.44	251.3	27.98
#1	1.388	3.947	4.242	.0301	-.0016	8.179	.0010	.0039	.0016	.0033
#2	1.410	3.972	4.319	.0299	-.0017	8.189	.0012	.0017	-.0013	.0034
#3	1.409	4.019	4.162	.0299	-.0016	8.179	.0014	.0018	.0017	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.626	.0002	.0877	.0074	-.0014	.0040	.0059
Stddev	.037	.0006	.0004	.0004	.0006	.0003	.0001
%RSD	.4304	366.7	.4182	5.367	42.04	7.502	1.677
#1	8.628	-.0001	.0873	.0070	-.0008	.0042	.0059
#2	8.588	.0008	.0878	.0075	-.0019	.0037	.0059
#3	8.662	-.0002	.0880	.0078	-.0014	.0041	.0057

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1071.5	3068.0	25007.	2169.7
Stddev	2.0	10.3	113.	2.7
%RSD	.18375	.33508	.45198	.12387
#1	1073.8	3070.5	25134.	2167.0
#2	1070.4	3076.9	24970.	2172.4
#3	1070.3	3056.8	24917.	2169.6

Zoom In Zoom Out

Sample Name: FA53899-4 Acquired: 5/4/2018 16:00:16 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0849	.0001	.0087	.0001	48.33	-.0001	-.0001	.0009	.0011
Stddev	.0007	.0120	.0005	.0001	.0001	.18	.0000	.0001	.0004	.0002
%RSD	165.2	14.11	365.7	1.699	99.39	.3807	18.32	190.8	46.22	18.10
#1	.0003	.0794	.0005	.0088	.0001	48.16	.0000	-.0001	.0013	.0013
#2	-.0007	.0986	-.0004	.0089	.0000	48.52	-.0001	.0001	.0007	.0009
#3	-.0009	.0766	.0002	.0086	.0001	48.30	-.0001	-.0002	.0006	.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.8956	1.505	11.63	.0289	.0061	13.43	.0013	.0016	.0028	.0015
Stddev	.0008	.005	.04	.0001	.0003	.04	.0000	.0004	.0012	.0024
%RSD	.0893	.3463	.3535	.4636	4.363	.2957	2.890	23.24	44.54	156.2
#1	.8964	1.511	11.61	.0288	.0059	13.46	.0013	.0012	.0016	.0042
#2	.8948	1.505	11.68	.0290	.0059	13.46	.0013	.0018	.0026	.0000
#3	.8956	1.500	11.61	.0290	.0064	13.39	.0013	.0019	.0041	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.676	.0001	.0766	.0025	-.0012	.0074	.0062
Stddev	.011	.0004	.0001	.0001	.0010	.0001	.0000
%RSD	.1706	708.2	.0927	3.057	81.82	1.269	.6566
#1	6.689	-.0003	.0766	.0024	-.0013	.0075	.0062
#2	6.669	-.0001	.0767	.0026	-.0022	.0073	.0061
#3	6.670	.0006	.0766	.0025	-.0002	.0075	.0062

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1065.3	3060.8	24947.	2144.4
Stddev	3.5	.9	71.	8.2
%RSD	.33227	.03072	.28398	.38378
#1	1069.1	3061.2	25023.	2153.3
#2	1064.5	3059.7	24883.	2142.6
#3	1062.2	3061.5	24936.	2137.2

Zoom In Zoom Out

Sample Name: FA53899-5 Acquired: 5/4/2018 16:04:34 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2563	.0003	.0135	.0000	47.48	.0000	.0001	.0013	.0009
Stddev	.0001	.0048	.0011	.0002	.0002	.22	.000	.0002	.0001	.0001
%RSD	107.0	1.858	377.2	1.219	432.2	.4560	1038.	179.1	5.618	7.786
#1	.0001	.2590	.0008	.0134	.0002	47.59	.0000	-.0001	.0012	.0009
#2	.0001	.2508	-.0010	.0134	.0001	47.23	-.0001	.0001	.0012	.0008
#3	.0003	.2591	.0011	.0137	-.0002	47.62	.0000	.0002	.0013	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.337	2.789	6.645	.0657	-.0004	10.06	.0014	.0029	.0023	.0015
Stddev	.007	.027	.011	.0003	.0001	.07	.0001	.0005	.0003	.0006
%RSD	.5146	.9751	.1710	.3918	22.66	.6618	4.505	18.03	13.94	43.01
#1	1.337	2.816	6.643	.0660	-.0004	10.08	.0013	.0024	.0022	.0008
#2	1.330	2.762	6.657	.0655	-.0004	9.980	.0014	.0027	.0020	.0021
#3	1.344	2.791	6.635	.0656	-.0003	10.10	.0013	.0034	.0026	.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.243	-.0003	.0751	.0082	-.0012	.0041	.0083
Stddev	.004	.0001	.0003	.0006	.0011	.0003	.0000
%RSD	.0576	27.47	.4516	7.211	95.04	6.440	.5147
#1	7.246	-.0002	.0752	.0079	-.0001	.0044	.0083
#2	7.238	-.0004	.0747	.0079	-.0023	.0039	.0083
#3	7.245	-.0004	.0753	.0089	-.0012	.0039	.0083

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1064.7	3066.3	24783.	2142.4
Stddev	.9	.9	50.	18.1
%RSD	.08013	.02963	.20073	.84278
#1	1064.0	3066.8	24764.	2145.3
#2	1064.5	3065.3	24839.	2158.8
#3	1065.7	3066.9	24745.	2123.1

Zoom In Zoom Out

Sample Name: FA53899-6 Acquired: 5/4/2018 16:08:52 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0318	-.0016	.0111	-.0001	141.7	-.0001	-.0002	.0008	-.0001
Stddev	.0002	.0047	.0008	.0003	.0001	.3	.0000	.0001	.0001	.0001
%RSD	85.74	14.69	48.15	2.553	215.1	.2044	49.16	51.03	13.87	104.3
#1	.0003	.0279	-.0024	.0111	.0000	141.8	-.0001	-.0002	.0006	.0000
#2	.0001	.0306	-.0014	.0114	-.0002	142.0	.0000	-.0002	.0008	-.0003
#3	.0001	.0370	-.0009	.0108	.0000	141.4	-.0001	-.0001	.0008	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2210	2.889	10.61	.0330	-.0011	20.80	.0005	.0021	.0018	.0006
Stddev	.0038	.025	.02	.0001	.0001	.04	.0002	.0003	.0011	.0009
%RSD	1.720	.8633	.2311	.4157	9.648	.1734	32.45	12.33	58.38	148.6
#1	.2205	2.917	10.59	.0332	-.0010	20.79	.0006	.0023	.0009	.0016
#2	.2250	2.871	10.64	.0329	-.0012	20.84	.0003	.0021	.0030	.0003
#3	.2175	2.878	10.60	.0330	-.0010	20.78	.0007	.0018	.0016	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.881	.0001	.5223	.0013	-.0012	.0023	.0007
Stddev	.017	.0003	.0021	.0001	.0007	.0001	.0001
%RSD	.2411	261.9	.4077	7.351	59.20	5.958	7.834
#1	6.892	-.0002	.5241	.0012	-.0004	.0022	.0007
#2	6.889	.0005	.5228	.0014	-.0017	.0024	.0006
#3	6.862	.0001	.5199	.0013	-.0015	.0023	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1007.7	2961.3	23842.	2088.4
Stddev	3.5	5.8	105.	3.5
%RSD	.34948	.19438	.44173	.16774
#1	1003.9	2960.6	23780.	2086.8
#2	1010.9	2955.9	23783.	2092.4
#3	1008.2	2967.4	23964.	2085.9

◀ Zoom In ▶
Zoom Out

Sample Name: FA53899-7 Acquired: 5/4/2018 16:13:10 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0352	-.0006	.0090	.0000	78.47	-.0001	-.0002	.0008	.0001
Stddev	.0002	.0034	.0006	.0001	.000	.30	.0000	.0001	.0002	.0003
%RSD	142.5	9.609	87.61	1.033	148.2	.3782	18.66	68.94	24.68	264.0
#1	.0003	.0316	-.0001	.0091	-.0001	78.30	-.0001	-.0003	.0006	.0000
#2	.0003	.0383	-.0012	.0090	.0000	78.81	-.0001	-.0003	.0008	-.0001
#3	-.0001	.0357	-.0007	.0089	.0000	78.29	-.0001	.0000	.0009	.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.123	1.806	6.522	.0607	-.0019	19.54	.0002	.0033	.0003	.0002
Stddev	.014	.011	.035	.0003	.0000	.06	.0001	.0005	.0018	.0026
%RSD	.3366	.6035	.5423	.4504	2.191	.2871	36.68	14.33	550.5	1447.
#1	4.109	1.813	6.502	.0609	-.0020	19.48	.0002	.0033	.0024	-.0024
#2	4.137	1.793	6.563	.0608	-.0020	19.59	.0002	.0038	-.0011	.0028
#3	4.121	1.811	6.501	.0604	-.0019	19.55	.0003	.0029	-.0003	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.507	-.0004	.2716	.0012	-.0013	.0017	.0008
Stddev	.012	.0003	.0006	.0001	.0015	.0000	.0000
%RSD	.2081	77.94	.2171	7.320	112.6	2.155	5.540
#1	5.519	-.0001	.2709	.0012	-.0028	.0017	.0008
#2	5.497	-.0004	.2721	.0013	-.0013	.0017	.0007
#3	5.504	-.0007	.2717	.0012	.0001	.0016	.0008

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1049.7	3052.9	24665.	2136.3
Stddev	3.0	12.0	111.	18.1
%RSD	.28325	.39214	.44928	.84690
#1	1046.4	3039.3	24684.	2138.0
#2	1052.1	3061.8	24546.	2117.4
#3	1050.7	3057.7	24766.	2153.5

◀ Zoom In ▶
Zoom Out

Sample Name: FA53808-1 Acquired: 5/4/2018 16:17:26 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.3973	.0002	.0426	.0000	61.79	.0004	.0034	.0038
Stddev	.0005	.0069	.0006	.0003	.0001	.04	.0000	.0001	.0005
%RSD	415.6	1.728	244.5	.6961	245.9	.0667	11.04	1.731	12.99
#1	-.0005	.3935	.0002	.0425	.0002	61.74	.0004	.0035	.0032
#2	.0006	.4052	.0008	.0430	.0000	61.82	.0004	.0034	.0041
#3	.0002	.3931	-.0004	.0425	.0000	61.80	.0005	.0035	.0040

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0139	45.47	27.58	77.24	1.902	-.0008	F524.6	.0239	.0106
Stddev	.0003	.06	.11	.41	.008	.0004	7.5	.0004	.0009
%RSD	2.232	.1346	.4096	.5353	.4348	48.36	1.434	1.656	8.183
#1	.0137	45.40	27.71	76.80	1.892	-.0006	531.4	.0236	.0096
#2	.0143	45.49	27.53	77.62	1.906	-.0012	516.5	.0244	.0110
#3	.0138	45.52	27.50	77.31	1.908	-.0005	525.8	.0238	.0112

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0032	.0027	4.518	.0002	.5464	.0168	-.0010	.0025	.0803
Stddev	.0010	.0039	.004	.0002	.0028	.0004	.0012	.0004	.0001
%RSD	31.93	144.0	.0828	139.4	.5053	2.279	128.9	14.41	.1586
#1	.0040	.0000	4.514	.0000	.5492	.0164	-.0014	.0025	.0804
#2	.0034	.0071	4.521	.0001	.5437	.0172	-.0019	.0029	.0802
#3	.0020	.0010	4.519	.0004	.5465	.0167	.0004	.0022	.0802

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	910.16	2846.4	22479.	2085.7
Stddev	1.08	3.4	86.	16.5
%RSD	.11861	.12060	.38427	.79044
#1	911.20	2846.1	22579.	2100.0
#2	909.05	2843.2	22427.	2067.7
#3	910.24	2850.0	22431.	2089.4

◀ Zoom In ▶
Zoom Out

Sample Name: FA53802-3F Acquired: 5/4/2018 16:21:49 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.1679	-.0013	.0073	-.0001	3.837	-.0001	-.0002	.0008	-.0001
Stddev	.0007	.0044	.0006	.0002	.0000	.029	.0000	.0001	.0003	.0003
%RSD	391.5	2.638	45.51	2.531	40.96	.7453	37.93	44.02	37.20	304.1
#1	.0003	.1655	-.0012	.0072	-.0001	3.827	.0000	-.0002	.0009	-.0003
#2	.0002	.1651	-.0020	.0072	.0000	3.816	-.0001	-.0003	.0005	.0003
#3	-.0010	.1730	-.0008	.0075	-.0001	3.870	.0000	-.0001	.0011	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0808	16.29	.9023	.0015	-.0023	9.696	.0001	.0004	.0006	.0014
Stddev	.0018	.09	.0187	.0000	.0002	.071	.0001	.0004	.0010	.0011
%RSD	2.223	.5225	2.075	1.344	8.790	.7285	90.02	107.0	168.6	79.40
#1	.0828	16.26	.8810	.0015	-.0024	9.648	.0001	.0002	.0016	.0003
#2	.0803	16.22	.9096	.0015	-.0021	9.663	.0002	.0001	-.0003	.0026
#3	.0793	16.38	.9162	.0015	-.0024	9.777	.0000	.0009	.0005	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9999	-.0003	.0167	.0013	-.0027	.0008	.0025
Stddev	.0011	.0004	.0001	.0001	.0007	.0001	.0001
%RSD	.1106	134.5	.5047	10.93	26.57	15.31	2.598
#1	1.001	-.0005	.0166	.0011	-.0035	.0006	.0026
#2	1.000	.0001	.0167	.0014	-.0021	.0009	.0025
#3	.9988	-.0004	.0168	.0013	-.0024	.0008	.0025

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1083.4	3104.8	24908.	2118.2
Stddev	3.8	7.5	180.	23.2
%RSD	.34992	.24237	.72123	1.0949
#1	1079.0	3097.9	24784.	2104.5
#2	1084.9	3103.7	24825.	2145.0
#3	1086.1	3112.9	25114.	2105.2

◀ Zoom In ▶
Zoom Out

Sample Name: CCV Acquired: 5/4/2018 16:26:07 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2511	39.52	2.052	2.016	2.014	39.68	2.051	2.058	2.009	2.026
Stddev	.0008	.06	.003	.006	.005	.09	.000	.000	.004	.002
%RSD	.3154	.1447	.1453	.3248	.2278	.2332	.0080	.0091	.2238	.0878
#1	.2502	39.59	2.055	2.017	2.018	39.72	2.051	2.058	2.010	2.024
#2	.2518	39.50	2.051	2.022	2.016	39.75	2.050	2.058	2.004	2.026
#3	.2513	39.48	2.049	2.009	2.009	39.58	2.050	2.058	2.013	2.027

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.46	40.34	40.09	2.066	2.096	39.26	2.092	2.002	2.063	2.069
Stddev	.04	.09	.02	.007	.004	.15	.003	.005	.002	.004
%RSD	.0991	.2207	.0533	.3382	.1826	.3775	.1280	.2643	.0968	.2112
#1	40.51	40.38	40.11	2.060	2.093	39.43	2.092	1.996	2.065	2.071
#2	40.45	40.41	40.09	2.066	2.094	39.21	2.094	2.003	2.061	2.064
#3	40.43	40.24	40.06	2.074	2.100	39.15	2.089	2.007	2.064	2.071

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.856	2.125	2.016	2.054	2.029	2.078	2.052
Stddev	.004	.003	.004	.005	.006	.002	.003
%RSD	.2131	.1534	.2002	.2441	.3188	.0774	.1546
#1	1.859	2.122	2.019	2.049	2.024	2.077	2.052
#2	1.852	2.128	2.018	2.055	2.027	2.077	2.056
#3	1.856	2.124	2.012	2.059	2.037	2.080	2.049

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 16:26:07 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	983.86	3043.1	24357.	2151.9
Stddev	2.85	3.8	25.	2.7
%RSD	.28987	.12573	.10085	.12768
#1	987.03	3045.1	24330.	2150.6
#2	983.03	3038.7	24378.	2150.1
#3	981.51	3045.5	24363.	2155.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 16:30:03 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0033	.0000	.0001	.0003	.0057	.0002	.0000	.0002
Stddev	.0002	.0109	.001	.0001	.0001	.0034	.0000	.0001	.0004
%RSD	321.5	328.6	11880.	65.41	39.33	60.13	15.77	241.3	176.9
#1	-.0001	-.0016	.0000	.0001	.0003	.0081	.0002	.0001	.0002
#2	.0003	-.0042	-.0006	.0001	.0002	.0018	.0002	-.0001	.0007
#3	.0000	.0158	.0006	.0002	.0004	.0072	.0002	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0153	.0121	.0216	.0002	F.0012	.0374	.0003	.0009
Stddev	.0002	.0061	.0086	.0499	.0000	.0009	.0089	.0001	.0003
%RSD	77.69	40.08	71.18	231.3	23.02	74.87	23.87	41.11	29.67
#1	.0004	.0222	.0128	-.0311	.0003	.0021	.0275	.0003	.0009
#2	.0003	.0105	.0203	.0278	.0002	.0010	.0397	.0004	.0006
#3	.0000	.0132	.0032	.0680	.0002	.0004	.0449	.0002	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0009	.0014	.0002	.0001	.0010	.0000	.0001	.0002
Stddev	.0001	.0010	.0002	.0004	.0000	.0002	.0007	.0003	.0000
%RSD	30.84	104.5	13.12	253.8	53.96	16.27	2186.	214.8	14.50
#1	-.0002	-.0004	.0016	.0006	.0000	.0012	-.0001	.0002	.0002
#2	-.0003	-.0003	.0015	.0000	.0001	.0009	.0008	-.0002	.0002
#3	-.0002	-.0021	.0012	-.0001	.0000	.0009	-.0006	.0004	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 16:30:03 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1133.1	3184.8	25504.	2142.9
Stddev	1.6	9.5	59.	12.7
%RSD	.14109	.29709	.23256	.59224
#1	1134.5	3195.7	25440.	2145.0
#2	1133.3	3179.3	25557.	2154.5
#3	1131.4	3179.3	25515.	2129.4

Zoom In Zoom Out

Sample Name: FA53802-5F Acquired: 5/4/2018 16:34:22 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.1394	-.0009	.0227	.0001	5.887	.0000	-.0003	.0007	.0004
Stddev	.0002	.0124	.0005	.0002	.0001	.014	.000	.0001	.0001	.0002
%RSD	119.6	8.895	60.46	.9318	77.66	.2327	418.0	21.08	19.91	55.36
#1	.0001	.1469	-.0003	.0225	.0001	5.872	.0000	-.0003	.0008	.0002
#2	-.0003	.1462	-.0011	.0226	.0000	5.891	-.0001	-.0003	.0006	.0004
#3	-.0003	.1251	-.0013	.0229	.0002	5.899	.0000	-.0002	.0008	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7984	2.905	2.228	.0030	-.0009	13.26	.0005	.0007	-.0001	.0024
Stddev	.0080	.029	.077	.0001	.0000	.03	.0002	.0010	.0005	.0005
%RSD	.9965	1.010	3.447	2.551	3.189	.2165	40.53	130.9	469.7	21.98
#1	.8069	2.938	2.149	.0030	-.0009	13.25	.0008	.0000	-.0007	.0029
#2	.7912	2.894	2.233	.0031	-.0010	13.23	.0004	.0018	.0003	.0018
#3	.7971	2.883	2.303	.0030	-.0010	13.29	.0004	.0003	.0001	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.778	.0000	.0217	.0015	-.0011	.0026	.0059
Stddev	.001	.0003	.0001	.0001	.0019	.0003	.0001
%RSD	.0630	952.1	.2685	8.771	162.0	11.46	1.490
#1	1.779	-.0003	.0218	.0014	-.0031	.0026	.0059
#2	1.777	.0001	.0217	.0016	-.0009	.0029	.0060
#3	1.777	.0003	.0217	.0014	.0005	.0023	.0059

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1098.2	3131.1	25042.	2144.4
Stddev	1.0	5.1	78.	5.2
%RSD	.08729	.16149	.31114	.24384
#1	1099.1	3126.3	25019.	2139.5
#2	1097.2	3130.7	24979.	2143.8
#3	1098.4	3136.4	25129.	2149.9

Zoom In Zoom Out

Sample Name: FA53798-4 Acquired: 5/4/2018 16:38:40 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0225	-.0009	.0016	-.0001	49.90	.0000	-.0003	.0006	.0007
Stddev	.0005	.0060	.0007	.0004	.0001	.35	.000	.0002	.0003	.0003
%RSD	210.9	26.84	71.49	23.94	85.24	.7034	58.79	51.19	51.96	39.80
#1	-.0002	.0294	-.0012	.0018	-.0001	49.53	.0000	-.0004	.0010	.0006
#2	-.0008	.0191	-.0002	.0020	-.0001	50.22	-.0001	-.0003	.0004	.0010
#3	.0003	.0189	-.0015	.0012	.0000	49.97	.0000	-.0001	.0005	.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0029	1.367	1.502	.0005	-.0009	4.758	.0000	.0036	.0004	.0031
Stddev	.0028	.006	.019	.0000	.0004	.019	.0002	.0007	.0014	.0012
%RSD	99.32	.4528	1.291	3.011	40.19	.3911	442.8	18.73	352.2	38.34
#1	-.0046	1.364	1.524	.0005	-.0013	4.737	-.0001	.0028	.0009	.0036
#2	-.0044	1.363	1.487	.0005	-.0005	4.774	.0000	.0039	.0014	.0017
#3	.0004	1.374	1.495	.0005	-.0009	4.763	.0002	.0041	-.0012	.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.135	-.0002	.5594	.0009	.0000	.0011	.0019
Stddev	.003	.0002	.0019	.0000	.002	.0003	.0001
%RSD	.2367	123.3	.3346	4.318	5609.	25.22	3.903
#1	1.134	-.0005	.5573	.0010	.0002	.0008	.0020
#2	1.133	-.0001	.5610	.0009	-.0016	.0010	.0019
#3	1.138	.0000	.5598	.0009	.0013	.0014	.0019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1085.1	3094.5	25017.	2141.1
Stddev	3.6	8.0	77.	26.5
%RSD	.33013	.25743	.30663	1.2371
#1	1088.8	3096.5	24949.	2165.6
#2	1081.6	3101.2	25100.	2113.0
#3	1084.9	3085.7	25001.	2144.8

Zoom In Zoom Out

Sample Name: FA53798-6 Acquired: 5/4/2018 16:42:58 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0185	-.0008	.0039	.0000	56.59	-.0001	-.0001	.0003	.0001
Stddev	.0002	.0027	.0004	.0002	.000	.10	.0000	.0000	.0004	.0003
%RSD	192.1	14.84	53.40	6.305	275.4	.1748	31.62	14.59	128.6	359.9
#1	-.0001	.0176	-.0007	.0042	.0001	56.67	-.0001	-.0001	.0007	.0004
#2	.0001	.0163	-.0012	.0039	.0000	56.48	-.0001	-.0001	.0004	-.0003
#3	.0003	.0216	-.0004	.0037	-.0001	56.61	-.0001	-.0001	-.0001	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1828	8.524	1.837	.0012	.0006	19.40	.0003	.0027	.0014	.0006
Stddev	.0055	.033	.037	.0000	.0002	.04	.0002	.0006	.0006	.0031
%RSD	2.988	.3907	2.043	2.215	29.26	.2188	56.62	21.60	42.98	480.9
#1	.1765	8.559	1.880	.0012	.0006	19.38	.0002	.0034	.0012	.0007
#2	.1850	8.493	1.816	.0012	.0007	19.45	.0005	.0023	.0020	-.0025
#3	.1868	8.521	1.814	.0012	.0004	19.38	.0003	.0024	.0009	.0037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.845	-.0004	.9866	.0009	-.0013	.0013	.0019
Stddev	.003	.0002	.0032	.0001	.0007	.0001	.0000
%RSD	.1032	48.67	.3282	5.656	54.25	9.286	1.948
#1	2.845	-.0004	.9902	.0009	-.0021	.0012	.0019
#2	2.848	-.0003	.9855	.0009	-.0009	.0013	.0020
#3	2.842	-.0007	.9840	.0008	-.0009	.0015	.0019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1060.2	3065.4	24654.	2125.6
Stddev	1.6	5.4	61.	8.6
%RSD	.15213	.17544	.24887	.40393
#1	1058.5	3066.9	24698.	2118.2
#2	1061.7	3059.4	24681.	2135.0
#3	1060.3	3069.9	24584.	2123.5

Zoom In Zoom Out

Sample Name: FA53798-7 Acquired: 5/4/2018 16:47:17 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0527	-.0010	.0048	-.0001	37.86	-.0001	.0000	.0008	.0015
Stddev	.0001	.0100	.0007	.0002	.0001	.18	.0000	.0001	.0005	.0002
%RSD	45.67	18.98	72.85	3.498	185.7	.4682	79.16	915.2	68.00	13.70
#1	.0004	.0633	-.0003	.0048	.0000	37.97	-.0001	-.0001	.0003	.0016
#2	.0002	.0434	-.0017	.0047	.0000	37.95	-.0001	.0001	.0007	.0017
#3	.0002	.0514	-.0009	.0050	-.0002	37.65	.0000	.0000	.0013	.0013

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0562	3.315	.5522	.0048	.0108	37.36	.0003	.0034	.0021	.0009
Stddev	.0017	.012	.0341	.0001	.0000	.16	.0002	.0010	.0005	.0023
%RSD	3.063	.3714	6.174	1.135	.2735	.4263	58.28	30.49	24.75	255.7
#1	.0545	3.330	.5133	.0048	.0108	37.47	.0004	.0046	.0022	.0036
#2	.0580	3.307	.5772	.0047	.0108	37.44	.0005	.0029	.0025	-.0003
#3	.0561	3.309	.5659	.0049	.0108	37.18	.0001	.0027	.0015	-.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.376	-.0005	.6154	.0031	-.0014	.0018	.0164
Stddev	.003	.0001	.0020	.0003	.0004	.0003	.0001
%RSD	.1353	18.18	.3190	8.396	26.25	14.27	.3900
#1	2.374	-.0005	.6164	.0028	-.0017	.0019	.0163
#2	2.380	-.0005	.6167	.0033	-.0010	.0021	.0164
#3	2.374	-.0004	.6132	.0032	-.0015	.0016	.0163

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1054.1	3064.2	24528.	2116.3
Stddev	.3	6.5	158.	6.7
%RSD	.02660	.21148	.64350	.31572
#1	1053.8	3063.8	24535.	2113.7
#2	1054.4	3057.9	24682.	2111.4
#3	1054.0	3070.9	24366.	2123.9

Zoom In Zoom Out

Sample Name: FA53802-2 Acquired: 5/4/2018 16:51:34 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	1.662	-.0009	.0134	.0001	3.838	.0000	-.0002	.0038	.0008
Stddev	.0002	.018	.0009	.0002	.0000	.010	.000	.0001	.0002	.0002
%RSD	61.44	1.052	100.9	1.493	55.63	.2501	51.94	33.92	4.726	21.18
#1	-.0005	1.680	-.0019	.0132	.0001	3.847	-.0001	-.0002	.0040	.0007
#2	-.0001	1.662	-.0002	.0136	.0000	3.838	.0000	-.0002	.0036	.0010
#3	-.0005	1.645	-.0006	.0134	.0001	3.828	.0000	-.0001	.0039	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1255	16.03	.9083	.0016	-.0019	9.640	.0004	.0006	.0000	.0005
Stddev	.0011	.01	.0295	.0000	.0002	.013	.0002	.0006	.0004	.0012
%RSD	.8744	.0843	3.250	1.545	9.924	.1372	67.03	105.3	1096.	241.5
#1	.1245	16.02	.9334	.0016	-.0020	9.655	.0004	.0012	.0005	.0009
#2	.1252	16.03	.9157	.0016	-.0017	9.635	.0006	.0001	-.0002	.0014
#3	.1267	16.04	.8758	.0016	-.0020	9.630	.0001	.0004	-.0002	-.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.524	-.0001	.0281	.0450	-.0024	.0022	.0023
Stddev	.006	.0002	.0002	.0019	.0007	.0002	.0000
%RSD	.4236	155.7	.8512	4.130	29.22	8.527	.2960
#1	1.519	-.0001	.0284	.0429	-.0031	.0020	.0023
#2	1.531	.0000	.0282	.0455	-.0018	.0021	.0023
#3	1.520	-.0003	.0279	.0466	-.0022	.0024	.0023

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1091.3	3148.2	25200.	2154.5
Stddev	2.4	10.7	89.	9.2
%RSD	.21657	.34131	.35462	.42706
#1	1092.3	3141.0	25152.	2148.6
#2	1088.7	3143.1	25303.	2149.9
#3	1093.1	3160.6	25146.	2165.1

Zoom In Zoom Out

Sample Name: FA53802-15 Acquired: 5/4/2018 16:55:50 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0719	-.0018	.0038	.0000	67.38	-.0001	-.0002	.0058	.0002
Stddev	.0002	.0069	.0003	.0002	.000	.11	.0000	.0002	.0002	.0004
%RSD	5038.	9.643	15.65	4.179	110.2	.1614	30.68	95.22	2.840	169.6
#1	-.0001	.0647	-.0015	.0039	.0000	67.48	-.0001	-.0002	.0056	-.0001
#2	.0003	.0786	-.0018	.0037	-.0001	67.27	-.0002	-.0004	.0059	.0006
#3	-.0001	.0722	-.0020	.0036	.0000	67.40	-.0001	.0000	.0059	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0104	6.740	2.376	.0173	-.0016	9.223	.0018	.0015	.0016	-.0011
Stddev	.0015	.022	.023	.0000	.0001	.025	.0002	.0005	.0008	.0027
%RSD	14.67	.3295	.9836	.2028	7.128	.2704	12.75	36.17	52.67	239.9
#1	.0086	6.758	2.399	.0173	-.0017	9.212	.0016	.0014	.0006	.0012
#2	.0109	6.715	2.378	.0173	-.0015	9.206	.0020	.0010	.0019	-.0040
#3	.0115	6.746	2.352	.0173	-.0015	9.252	.0017	.0020	.0022	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.406	-.0004	.1199	.0014	-.0009	.0005	.0015
Stddev	.003	.0002	.0002	.0001	.0013	.0001	.0001
%RSD	.2265	54.85	.1442	4.967	138.6	24.62	5.219
#1	1.406	-.0004	.1198	.0013	-.0010	.0004	.0014
#2	1.409	-.0002	.1201	.0014	-.0021	.0006	.0016
#3	1.403	-.0007	.1198	.0014	.0004	.0007	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1063.8	3071.4	24660.	2124.4
Stddev	2.2	3.3	77.	25.7
%RSD	.20433	.10658	.31111	1.2102
#1	1065.5	3075.0	24610.	2097.0
#2	1064.5	3068.6	24748.	2128.3
#3	1061.3	3070.5	24622.	2147.9

Zoom In Zoom Out

Sample Name: FA53802-21 Acquired: 5/4/2018 17:00:06 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.1570	-.0010	.0088	.0000	7.056	-.0001	-.0001	.0005	.0193
Stddev	.0006	.0100	.0011	.0000	.0002	.039	.0001	.0001	.0003	.0003
%RSD	256.5	6.377	111.9	.5520	1879.	.5504	127.7	57.80	58.03	1.324
#1	-.0003	.1545	-.0001	.0088	.0000	7.077	-.0002	-.0002	.0006	.0196
#2	.0004	.1680	-.0007	.0088	.0002	7.012	-.0002	-.0001	.0006	.0191
#3	-.0008	.1484	-.0023	.0088	-.0002	7.081	.0000	-.0001	.0002	.0192

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3102	8.069	1.380	.0801	-.0024	9.754	.0079	.0020	.0009	.0021
Stddev	.0074	.035	.049	.0001	.0002	.045	.0001	.0004	.0008	.0013
%RSD	2.393	.4397	3.534	.1701	7.514	.4643	.8461	22.59	89.93	61.84
#1	.3029	8.089	1.341	.0802	-.0026	9.791	.0080	.0019	.0008	.0030
#2	.3100	8.028	1.364	.0800	-.0024	9.703	.0079	.0025	.0002	.0027
#3	.3177	8.090	1.435	.0801	-.0022	9.766	.0079	.0016	.0018	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.236	.0001	.0168	.0002	-.0028	.0010	.1165
Stddev	.001	.0002	.0001	.0001	.0012	.0003	.0005
%RSD	.1035	254.1	.4745	62.77	43.56	30.65	.4051
#1	1.237	-.0001	.0168	.0002	-.0014	.0014	.1170
#2	1.235	.0002	.0168	.0003	-.0036	.0008	.1164
#3	1.234	.0002	.0167	.0001	-.0033	.0010	.1161

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1093.6	3128.2	24966.	2133.7
Stddev	2.2	12.6	77.	11.7
%RSD	.20561	.40432	.31011	.54810
#1	1091.0	3115.6	24878.	2140.3
#2	1095.1	3128.3	24993.	2140.5
#3	1094.7	3140.9	25026.	2120.2

Zoom In Zoom Out

Sample Name: FA53802-22 Acquired: 5/4/2018 17:04:22 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.5746	.0000	.0105	.0000	7.297	-.0001	-.0001	.0008	.0038
Stddev	.0004	.0160	.000	.0004	.0001	.014	.0000	.0002	.0002	.0002
%RSD	104.1	2.779	45310.	3.521	189.7	.1886	50.46	162.9	19.99	5.033
#1	.0006	.5886	.0002	.0101	.0001	7.281	.0000	-.0003	.0009	.0036
#2	.0005	.5782	.0001	.0108	.0000	7.306	-.0001	-.0001	.0009	.0040
#3	-.0001	.5572	-.0003	.0105	.0000	7.304	-.0001	.0001	.0006	.0038

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.557	8.088	1.341	.1525	-.0023	9.699	.0012	.0011	.0012	.0000
Stddev	.012	.059	.026	.0001	.0002	.051	.0000	.0004	.0012	.003
%RSD	.7952	.7292	1.964	.0583	6.916	.5237	.5292	32.71	97.91	9316.
#1	1.544	8.044	1.347	.1525	-.0022	9.648	.0012	.0015	.0022	-.0001
#2	1.557	8.155	1.312	.1524	-.0025	9.749	.0013	.0008	-.0001	.0025
#3	1.569	8.065	1.364	.1526	-.0022	9.698	.0012	.0011	.0015	-.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.263	.0000	.0181	.0008	-.0015	.0016	.0257
Stddev	.003	.0005	.0002	.0002	.0008	.0003	.0001
%RSD	.1977	1169.	.9314	19.45	50.38	18.59	.3174
#1	1.266	.0002	.0179	.0009	-.0019	.0019	.0256
#2	1.262	-.0005	.0183	.0008	-.0020	.0013	.0257
#3	1.261	.0004	.0182	.0006	-.0006	.0015	.0258

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1096.7	3138.8	25161.	2154.5
Stddev	.6	8.5	12.	16.6
%RSD	.05888	.26957	.04706	.76877
#1	1097.0	3130.0	25148.	2169.4
#2	1096.0	3146.9	25165.	2136.7
#3	1097.2	3139.6	25171.	2157.3

Zoom In Zoom Out

Sample Name: FA53802-23 Acquired: 5/4/2018 17:08:38 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0165	-.0013	-.0003	.0000	.0162	-.0001	-.0002	-.0002	.0003
Stddev	.001	.0049	.0007	.0002	.0001	.0010	.0001	.0001	.0002	.0001
%RSD	1394.	29.62	53.23	64.81	554.6	6.014	113.4	42.54	77.00	25.62
#1	-.0004	.0165	-.0016	-.0004	.0002	.0157	-.0002	-.0001	-.0002	.0003
#2	-.0004	.0213	-.0005	-.0001	-.0001	.0173	.0000	-.0002	-.0004	.0003
#3	.0006	.0116	-.0019	-.0003	.0000	.0156	.0000	-.0002	.0000	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0096	-.0256	.0186	.0001	-.0024	.0497	-.0002	.0004	.0005	-.0007
Stddev	.0019	.0214	.0142	.0000	.0001	.0043	.0003	.0003	.0006	.0007
%RSD	20.29	83.37	76.07	24.29	3.164	8.630	123.5	73.46	116.8	87.89
#1	-.0084	-.0394	.0066	.0001	-.0023	.0473	-.0004	.0001	.0002	-.0001
#2	-.0119	-.0010	.0342	.0001	-.0024	.0546	-.0004	.0004	.0012	-.0014
#3	-.0086	-.0365	.0151	.0001	-.0023	.0471	.0001	.0007	.0001	-.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0427	.0001	.0000	-.0008	-.0023	.0000	.0014
Stddev	.0003	.0002	.0001	.0001	.0006	.000	.0000
%RSD	.6060	179.0	1064.	9.461	24.35	481.7	3.022
#1	.0424	.0000	-.0001	-.0007	-.0017	.0002	.0013
#2	.0428	.0000	.0001	-.0008	-.0028	-.0002	.0014
#3	.0428	.0003	.0000	-.0009	-.0024	-.0001	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1132.6	3181.9	25532.	2160.1
Stddev	1.0	5.9	68.	4.7
%RSD	.09229	.18497	.26724	.21755
#1	1133.1	3176.8	25611.	2155.6
#2	1133.3	3180.6	25494.	2164.9
#3	1131.4	3188.4	25491.	2159.8

Zoom In Zoom Out

Sample Name: MP33695-MB2A Acquired: 5/4/2018 17:12:58 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0053	-.0010	.0000	.0000	.0179	.0000	-.0002	.0003	.0001
Stddev	.0003	.0081	.0011	.0002	.000	.0042	.000	.0001	.0001	.0001
%RSD	141.9	152.5	101.2	678.3	821.8	23.58	1566.	53.26	41.60	61.09
#1	.0001	-.0008	-.0019	-.0001	.0000	.0140	.0000	-.0004	.0005	.0001
#2	-.0004	.0022	-.0014	-.0001	-.0001	.0224	.0001	-.0001	.0002	.0002
#3	-.0004	.0145	.0001	.0002	.0001	.0173	-.0001	-.0002	.0004	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0064	-.0187	.0075	.0003	-.0025	.0293	-.0002	-.0003	-.0006	-.0004
Stddev	.0034	.0250	.0404	.0000	.0000	.0039	.0002	.0006	.0010	.0006
%RSD	52.97	133.8	540.9	5.409	1.517	13.16	116.3	237.0	178.7	167.4
#1	-.0047	-.0431	.0143	.0003	-.0025	.0309	-.0003	.0004	.0006	-.0002
#2	-.0103	.0068	.0439	.0004	-.0024	.0249	.0000	-.0002	-.0011	.0001
#3	-.0042	-.0198	-.0359	.0003	-.0025	.0322	-.0002	-.0009	-.0013	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0290	-.0004	.0003	-.0007	-.0012	-.0001	.0031
Stddev	.0007	.0002	.0001	.0002	.0011	.0004	.0001
%RSD	2.244	52.69	31.59	28.82	92.73	270.7	1.773
#1	.0297	-.0003	.0004	-.0005	.0001	-.0006	.0031
#2	.0287	-.0003	.0004	-.0009	-.0019	.0001	.0031
#3	.0285	-.0007	.0002	-.0006	-.0019	.0000	.0032
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33695-MB2A Acquired: 5/4/2018 17:12:58 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1106.1	3099.5	24821.	2081.6
Stddev	2.9	7.8	16.	14.9
%RSD	.26458	.25011	.06414	.71553
#1	1102.8	3094.6	24840.	2067.6
#2	1108.6	3108.5	24811.	2097.3
#3	1106.8	3095.6	24813.	2080.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 17:17:15 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2497	39.68	2.044	2.034	2.022	39.86	2.053	2.056	2.010	2.025
Stddev	.0016	.12	.005	.009	.006	.14	.003	.003	.005	.003
%RSD	.6479	.3014	.2285	.4235	.2901	.3486	.1536	.1470	.2317	.1672
#1	.2493	39.66	2.049	2.044	2.026	39.84	2.056	2.058	2.015	2.028
#2	.2483	39.57	2.043	2.030	2.015	39.74	2.050	2.052	2.008	2.021
#3	.2515	39.81	2.039	2.028	2.024	40.01	2.052	2.057	2.006	2.026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.41	40.63	40.39	2.058	2.090	39.79	2.081	2.008	2.055	2.053
Stddev	.12	.13	.17	.008	.003	.13	.002	.008	.002	.003
%RSD	.2972	.3145	.4318	.3924	.1601	.3234	.0859	.3945	.0937	.1337
#1	40.37	40.78	40.45	2.052	2.086	39.81	2.082	2.014	2.053	2.050
#2	40.32	40.54	40.20	2.055	2.090	39.65	2.081	1.999	2.056	2.055
#3	40.55	40.57	40.54	2.067	2.093	39.91	2.079	2.012	2.056	2.054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.844	2.115	2.023	2.049	2.029	2.077	2.053
Stddev	.002	.004	.007	.005	.006	.004	.004
%RSD	.0870	.1863	.3279	.2373	.2974	.1800	.1988
#1	1.844	2.120	2.027	2.045	2.027	2.078	2.058
#2	1.846	2.113	2.016	2.047	2.025	2.073	2.051
#3	1.843	2.113	2.027	2.054	2.036	2.081	2.051
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 17:17:15 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	987.11	3058.2	24458.	2141.3
Stddev	1.31	2.3	48.	10.0
%RSD	.13229	.07452	.19425	.46758
#1	986.04	3056.3	24513.	2133.6
#2	988.56	3057.6	24428.	2152.6
#3	986.72	3060.7	24433.	2137.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 17:21:11 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0073	.0000	.0004	.0002	.0025	.0002	.0002	.0002
Stddev	.000	.0055	.001	.0001	.0001	.0038	.0001	.0001	.0001
%RSD	14790.	74.68	5413.	33.14	28.30	155.9	35.11	71.85	41.41
#1	-.0001	.0079	-.0002	.0006	.0002	.0064	.0003	.0003	.0001
#2	.0003	.0124	-.0009	.0003	.0003	.0023	.0001	.0001	.0003
#3	-.0002	.0016	.0011	.0003	.0002	-.0013	.0003	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0137	.0177	.0070	.0003	F.0014	.0105	.0006	.0004
Stddev	.0002	.0070	.0301	.0227	.0001	.0007	.0047	.0001	.0004
%RSD	59.98	51.14	169.9	324.9	22.07	49.77	44.51	20.84	91.60
#1	.0002	.0183	.0447	-.0040	.0002	.0020	.0096	.0007	.0001
#2	.0003	.0056	-.0147	-.0082	.0003	.0014	.0155	.0006	.0008
#3	.0005	.0171	.0232	.0331	.0003	.0007	.0063	.0005	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	F.0022	.0005	.0003	.0002	.0011	-.0003	.0000	.0002
Stddev	.0007	.0007	.0011	.0002	.0001	.0002	.0006	.0002	.0001
%RSD	240.2	32.95	222.5	60.10	23.67	22.99	236.3	1247.	28.16
#1	-.0001	.0019	.0018	.0005	.0003	.0013	-.0001	.0002	.0003
#2	-.0002	.0030	-.0004	.0004	.0002	.0010	-.0010	-.0001	.0003
#3	.0012	.0017	.0001	.0001	.0002	.0008	.0002	.0000	.0002
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 17:21:11 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1123.0	3170.3	24996.	2115.1
Stddev	3.2	7.5	23.	13.9
%RSD	.28085	.23653	.09243	.65699
#1	1120.2	3161.7	24977.	2115.7
#2	1122.5	3173.8	25022.	2101.0
#3	1126.4	3175.4	24990.	2128.8

Zoom In Zoom Out

Sample Name: MP33698-MB1 Acquired: 5/4/2018 17:25:30 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F.2200	-.0018	.0026	-.0002	.1741	-.0001	-.0007
Stddev	.0015	.0602	.0012	.0001	.0002	.0177	.0003	.0006
%RSD	753.4	27.34	65.40	4.696	74.60	10.16	258.7	81.35
#1	-.0005	.2027	-.0029	.0026	-.0003	.1566	-.0004	-.0002
#2	-.0016	.1704	-.0020	.0028	.0000	.1735	.0000	-.0006
#3	.0014	.2869	-.0006	.0026	-.0003	.1920	.0001	-.0013
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.1000						
Low Limit		-.1000						

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023	.0087	F.2815	-.0231	.1514	.0045	-.0070	.1040
Stddev	.0020	.0002	.0084	.1688	.1387	.0002	.0007	.0398
%RSD	87.36	2.744	3.000	731.7	91.64	4.473	10.63	38.25
#1	.0011	.0087	.2902	-.0521	.2889	.0047	-.0079	.1489
#2	.0011	.0085	.2812	.1584	.1536	.0043	-.0066	.0901
#3	.0046	.0090	.2733	-.1755	.0115	.0046	-.0066	.0730
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.1500					
Low Limit			-.1500					

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	F.0459	.0022	.0006	.0274	F.0604	.0023	F.0057
Stddev	.0006	.0019	.0037	.0086	.0041	.0010	.0002	.0005
%RSD	68.80	4.217	172.5	1523.	15.05	1.673	10.22	8.053
#1	.0002	.0473	.0053	.0104	.0247	.0606	.0022	.0055
#2	.0011	.0437	.0032	-.0031	.0253	.0613	.0025	.0062
#3	.0014	.0468	-.0020	-.0056	.0322	.0593	.0021	.0054
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail
High Limit		.0025				.0250		.0050
Low Limit		-.0025				-.0250		-.0050

Zoom In Zoom Out

Sample Name: MP33698-MB1 Acquired: 5/4/2018 17:25:30 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F-.0126	.0001	F.0100
Stddev	.0074	.0002	.0004
%RSD	58.99	287.6	3.766
#1	-.0050	.0004	.0105
#2	-.0198	-.0001	.0098
#3	-.0128	.0000	.0098
Check ?	Chk Fail	Chk Pass	Chk Fail
High Limit	.0050		.0100
Low Limit	-.0050		-.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1121.0	3177.2	25149.	2108.2
Stddev	2.5	4.3	111.	20.5
%RSD	.22485	.13651	.44143	.97058
#1	1123.9	3181.8	25258.	2101.5
#2	1119.3	3176.7	25036.	2092.0
#3	1119.7	3173.1	25151.	2131.2

◀ Zoom In ▶
Zoom Out

Sample Name: MP33698-B1 Acquired: 5/4/2018 17:29:49 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0471	26.70	1.947	2.037	.0516	25.28	.0508	.5181	.2081
Stddev	.0023	.14	.008	.014	.0003	.20	.0002	.0013	.0032
%RSD	4.832	.5135	.3901	.6960	.5061	.7959	.3998	.2466	1.521
#1	.0497	26.81	1.955	2.046	.0513	25.09	.0509	.5189	.2106
#2	.0459	26.55	1.942	2.021	.0518	25.27	.0506	.5166	.2092
#3	.0457	26.75	1.942	2.045	.0517	25.49	.0509	.5189	.2045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2643	26.56	25.15	24.99	F.6023	.4862	25.08	.5362	.5315
Stddev	.0009	.17	.26	.07	.0038	.0017	.18	.0013	.0024
%RSD	.3464	.6317	1.021	.2959	.6295	.3406	.7119	.2339	.4435
#1	.2646	26.43	25.43	24.92	.6019	.4876	25.02	.5373	.5311
#2	.2633	26.50	25.11	25.07	.6063	.4844	24.94	.5348	.5294
#3	.2651	26.75	24.92	24.97	.5987	.4867	25.28	.5364	.5341
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					.5000				
Range					20.00%				

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5063	1.934	.4604	.5781	.5236	.5258	1.915	.4807	.5093
Stddev	.0128	.009	.0025	.0051	.0033	.0026	.004	.0017	.0005
%RSD	2.538	.4535	.5342	.8858	.6395	.4902	.2202	.3608	.0998
#1	.5082	1.929	.4597	.5837	.5236	.5272	1.916	.4827	.5088
#2	.5181	1.944	.4632	.5770	.5202	.5273	1.910	.4795	.5098
#3	.4926	1.930	.4584	.5736	.5269	.5228	1.918	.4800	.5092
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

◀ Zoom In ▶
Zoom Out

Sample Name: MP33698-B1 Acquired: 5/4/2018 17:29:49 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1092.9	3151.5	25045.	2119.1
Stddev	2.9	5.2	143.	19.2
%RSD	.26129	.16570	.57177	.90721
#1	1096.1	3148.1	25077.	2117.2
#2	1090.6	3148.9	24889.	2139.2
#3	1092.0	3157.5	25170.	2100.9

◀ Zoom In ▶
Zoom Out

Sample Name: FA53517-7 Acquired: 5/4/2018 17:33:59 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0084	438.2	.1421	2.086	.0178	36.33	.0001	.1078	.9186
Stddev	.0015	2.0	.0074	.003	.0007	.09	.0003	.0005	.0030
%RSD	17.33	.4468	5.189	.1328	3.695	.2445	343.9	.4615	.3263
#1	.0093	439.6	.1378	2.085	.0179	36.39	-.0002	.1084	.9199
#2	.0092	439.1	.1379	2.090	.0184	36.37	.0004	.1078	.9152
#3	.0067	436.0	.1507	2.085	.0171	36.23	.0000	.1074	.9207

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	7.617	529.7	147.5	148.0	4.310	.0047	13.27	.4397	F76.24
Stddev	.046	1.4	.4	.4	.025	.0009	.06	.0006	.20
%RSD	.6028	.2578	.2527	.2400	.5879	19.75	.4373	.1343	.2565
#1	7.659	530.0	147.8	148.3	4.340	.0051	13.27	.4404	76.46
#2	7.624	530.9	147.6	147.6	4.295	.0055	13.32	.4392	76.16
#3	7.568	528.2	147.1	148.0	4.296	.0037	13.21	.4396	76.09

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9121	.0066	20.99	.1287	1.123	16.63	-.0004	.9326	3.114
Stddev	.0041	.0175	.55	.0009	.002	.07	.0069	.0019	.007
%RSD	.4508	265.0	2.634	.6713	.1294	.4139	1845.	.2069	.2164
#1	.9103	.0143	21.57	.1293	1.124	16.71	.0051	.9347	3.118
#2	.9168	-.0134	20.47	.1277	1.124	16.59	-.0082	.9309	3.117
#3	.9092	.0188	20.92	.1291	1.122	16.59	.0020	.9322	3.106

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1036.9	3616.3	28081.	2447.3
Stddev	3.0	13.3	181.	13.4
%RSD	.29161	.36827	.64451	.54796
#1	1034.7	3616.3	27988.	2445.9
#2	1035.6	3602.9	28289.	2434.6
#3	1040.3	3629.6	27965.	2461.3

◀ Zoom In ▶
Zoom Out

Sample Name: MP33698-D1 Acquired: 5/4/2018 17:38:04 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0099	525.1	.1639	2.507	.0211	41.94	.0015	.1288	1.089
Stddev	.0018	2.0	.0056	.012	.0006	.10	.0002	.0020	.004
%RSD	18.74	.3850	3.413	.4783	2.911	.2278	15.24	1.559	.3883
#1	.0092	526.9	.1605	2.521	.0213	41.97	.0016	.1278	1.088
#2	.0119	525.4	.1608	2.504	.0216	42.03	.0017	.1276	1.094
#3	.0084	522.9	.1703	2.497	.0204	41.84	.0013	.1311	1.086

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	8.703	624.5	172.3	172.3	5.018	.0075	15.40	.5297	F90.14
Stddev	.039	1.6	.5	.2	.012	.0001	.07	.0018	.34
%RSD	.4446	.2634	.3162	.0950	.2465	1.670	.4326	.3317	.3739
#1	8.720	624.8	172.6	172.1	5.029	.0075	15.46	.5294	89.91
#2	8.658	626.0	172.5	172.4	5.021	.0073	15.42	.5316	89.99
#3	8.729	622.8	171.6	172.4	5.005	.0076	15.33	.5281	90.53

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.109	.0143	30.41	.1474	1.305	F20.06	-.0065	1.101	3.637
Stddev	.011	.0035	.15	.0016	.004	.03	.0058	.004	.015
%RSD	1.012	24.40	.5040	1.112	.2985	.1702	89.21	.3961	.3994
#1	1.117	.0146	30.55	.1489	1.305	20.09	-.0126	1.098	3.631
#2	1.096	.0176	30.44	.1476	1.308	20.02	-.0009	1.106	3.627
#3	1.113	.0107	30.24	.1456	1.300	20.08	-.0061	1.099	3.654

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	999.66	3600.5	27942.	2446.4
Stddev	2.87	9.4	159.	5.4
%RSD	.28749	.26153	.56729	.22035
#1	1000.6	3600.3	27959.	2452.6
#2	1001.9	3610.0	27776.	2442.9
#3	996.43	3591.2	28091.	2443.8

Zoom In Zoom Out

Sample Name: MP33698-D2 Acquired: 5/4/2018 17:42:08 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0084	453.5	.1506	2.154	.0182	37.28	.0018	.1140	.9450
Stddev	.0010	1.9	.0033	.012	.0003	.15	.0008	.0005	.0082
%RSD	12.44	.4288	2.184	.5320	1.641	.4087	46.61	.4141	.8650
#1	.0076	454.3	.1498	2.155	.0185	37.40	.0008	.1144	.9473
#2	.0095	454.8	.1543	2.165	.0179	37.33	.0020	.1135	.9517
#3	.0079	451.3	.1479	2.142	.0183	37.11	.0024	.1143	.9359

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	7.740	545.4	152.4	152.3	4.448	.0048	13.55	.4574	F78.99
Stddev	.026	2.0	.8	.8	.022	.0005	.05	.0009	.03
%RSD	.3385	.3707	.5172	.5109	.4889	11.15	.3903	.1870	.0382
#1	7.744	546.3	152.6	152.9	4.473	.0053	13.60	.4565	78.97
#2	7.763	546.9	153.0	152.6	4.441	.0049	13.56	.4576	78.98
#3	7.711	543.1	151.5	151.4	4.431	.0042	13.49	.4582	79.02

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8784	-.0064	24.79	.1300	1.157	16.69	-.0008	.9596	3.245
Stddev	.0076	.0064	.28	.0020	.006	.10	.0023	.0017	.002
%RSD	.8612	99.00	1.110	1.513	.5145	.6134	288.8	.1785	.0687
#1	.8710	-.0135	25.03	.1321	1.159	16.79	-.0027	.9602	3.246
#2	.8781	-.0046	24.85	.1282	1.161	16.70	-.0014	.9577	3.242
#3	.8861	-.0012	24.49	.1297	1.150	16.58	.0017	.9609	3.247

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1031.0	3622.5	28314.	2475.7
Stddev	1.4	8.5	59.	6.6
%RSD	.13488	.23432	.20783	.26711
#1	1029.6	3613.1	28261.	2468.3
#2	1031.0	3625.0	28377.	2477.6
#3	1032.4	3629.5	28302.	2481.1

Zoom In Zoom Out

Sample Name: MP33698-SD1 Acquired: 5/4/2018 17:46:12 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0022	331.5	.0862	1.577	.0124	27.71	-.0005	.0841	.6935	5.683
Stddev	.0022	.7	.0217	.003	.0015	.07	.0011	.0016	.0053	.010
%RSD	101.4	.2017	25.15	.2067	12.24	.2622	217.2	1.920	.7703	.1827
#1	-.0001	330.7	.1109	1.579	.0132	27.70	-.0010	.0822	.6961	5.681
#2	.0024	331.9	.0702	1.573	.0133	27.79	-.0012	.0850	.6970	5.674
#3	.0043	331.9	.0774	1.579	.0106	27.65	.0007	.0850	.6873	5.694

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	409.0	111.8	113.3	3.300	-.0510	9.767	.3455	51.40	.7342	-.0705
Stddev	1.7	.8	1.3	.003	.0008	.140	.0008	.11	.0334	.0703
%RSD	.4210	.7072	1.138	.1009	1.576	1.435	.2328	.2080	4.547	99.78
#1	407.1	111.8	111.9	3.303	-.0502	9.889	.3446	51.42	.7146	.0017
#2	409.8	112.6	114.5	3.300	-.0518	9.614	.3456	51.50	.7153	-.0742
#3	410.2	111.0	113.4	3.297	-.0510	9.799	.3463	51.29	.7728	-.1388

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	20.27	.0931	.8379	12.57	-.0111	.7088	2.449
Stddev	.79	.0150	.0023	.05	.0029	.0033	.005
%RSD	3.880	16.12	.2742	.4144	25.91	.4672	.2170
#1	21.16	.0773	.8372	12.52	-.0117	.7106	2.446
#2	20.01	.0947	.8405	12.62	-.0136	.7109	2.455
#3	19.65	.1072	.8361	12.58	-.0079	.7050	2.446

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1086.5	3196.4	25163.	2136.7
Stddev	1.1	4.3	85.	14.2
%RSD	.09960	.13416	.33788	.66255
#1	1085.2	3192.9	25074.	2131.4
#2	1086.9	3195.1	25243.	2152.8
#3	1087.3	3201.2	25171.	2126.0

Zoom In Zoom Out

Sample Name: MP33698-PS1 Acquired: 5/4/2018 17:50:25 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0467	447.4	.2354	2.334	.0600	41.16	.0415	.1539	.9815
Stddev	.0014	.8	.0006	.010	.0003	.11	.0005	.0001	.0035
%RSD	2.944	.1861	.2436	.4457	.4860	.2760	1.306	.0506	.3579
#1	.0483	448.3	.2350	2.333	.0603	41.25	.0411	.1539	.9800
#2	.0457	447.4	.2361	2.346	.0599	41.21	.0412	.1539	.9855
#3	.0462	446.7	.2352	2.325	.0598	41.04	.0421	.1540	.9789

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	7.911	543.4	159.0	155.8	4.459	.0810	21.42	.5381	F79.45
Stddev	.015	1.1	.3	.9	.021	.0013	.08	.0006	.24
%RSD	.1910	.2055	.1794	.6035	.4661	1.564	.3906	.1059	.2999
#1	7.925	544.3	159.1	156.8	4.444	.0824	21.52	.5382	79.63
#2	7.895	542.1	159.2	155.6	4.483	.0801	21.39	.5374	79.53
#3	7.913	543.6	158.7	154.9	4.450	.0804	21.37	.5386	79.18

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.022	.0762	21.40	.1747	1.189	17.09	.0835	1.001	3.420
Stddev	.003	.0142	.16	.0019	.002	.07	.0033	.003	.008
%RSD	.3285	18.60	.7566	1.101	.1806	.4193	3.927	.3043	.2386
#1	1.018	.0598	21.52	.1757	1.192	17.03	.0855	.9994	3.427
#2	1.025	.0854	21.21	.1759	1.189	17.17	.0798	.9991	3.424
#3	1.023	.0832	21.45	.1725	1.187	17.07	.0854	1.005	3.411

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1028.1	3621.3	28207.	2470.9
Stddev	4.2	8.3	206.	16.9
%RSD	.41250	.23030	.73191	.68223
#1	1025.1	3614.0	28260.	2456.0
#2	1026.3	3619.7	27980.	2489.2
#3	1033.0	3630.4	28382.	2467.4

Zoom In Zoom Out

Sample Name: MP33698-S1 Acquired: 5/4/2018 17:54:30 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0504	553.0	1.664	3.823	.0622	57.56	.0428	.5374	1.158
Stddev	.0018	1.8	.005	.019	.0003	.22	.0002	.0002	.003
%RSD	3.489	.3226	.3221	.4941	.4066	.3775	.4702	.0389	.2204
#1	.0500	551.2	1.670	3.809	.0625	57.47	.0430	.5373	1.155
#2	.0488	554.8	1.662	3.844	.0622	57.81	.0426	.5374	1.160
#3	.0523	552.9	1.661	3.815	.0620	57.40	.0429	.5377	1.158

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	7.928	611.2	172.8	174.1	4.851	.3126	34.09	.9265	F78.82
Stddev	.006	.5	1.1	.7	.028	.0011	.09	.0027	.35
%RSD	.0744	.0761	.6332	.4245	.5665	.3559	.2697	.2898	.4496
#1	7.934	610.8	172.0	174.2	4.848	.3115	34.03	.9259	78.46
#2	7.922	611.7	174.0	174.9	4.826	.3125	34.20	.9242	78.82
#3	7.926	611.2	172.3	173.4	4.881	.3137	34.05	.9295	79.17

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.047	1.516	24.26	.5345	1.585	F20.12	1.826	1.408	3.655
Stddev	.008	.004	.30	.0018	.005	.07	.003	.002	.006
%RSD	.7829	.2833	1.251	.3329	.3486	.3489	.1504	.1525	.1698
#1	1.042	1.521	24.56	.5349	1.580	20.15	1.829	1.407	3.648
#2	1.057	1.515	24.27	.5326	1.591	20.04	1.824	1.407	3.656
#3	1.043	1.513	23.95	.5361	1.584	20.17	1.825	1.411	3.660

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1019.8	3616.7	28225.	2452.8
Stddev	3.9	1.8	143.	15.9
%RSD	.37991	.05024	.50642	.65022
#1	1024.1	3617.6	28164.	2447.6
#2	1018.5	3614.7	28388.	2440.0
#3	1016.7	3618.0	28122.	2470.6

Zoom In Zoom Out

Sample Name: MP33698-S2 Acquired: 5/4/2018 17:58:34 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0522	566.9	1.683	3.930	.0634	59.04	.0431	.5453	1.188
Stddev	.0029	2.6	.002	.013	.0007	.35	.0005	.0007	.004
%RSD	5.558	.4621	.1281	.3369	1.121	.5908	1.202	.1304	.3381
#1	.0538	563.9	1.684	3.919	.0627	58.70	.0437	.5457	1.192
#2	.0540	567.9	1.680	3.926	.0641	59.02	.0428	.5445	1.186
#3	.0489	568.9	1.684	3.944	.0632	59.39	.0428	.5458	1.184

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	8.288	624.7	176.9	177.5	4.982	.3158	34.95	.9413	F80.05
Stddev	.022	2.6	.8	.7	.025	.0011	.15	.0002	.10
%RSD	.2673	.4183	.4601	.4096	.5064	.3391	.4205	.0247	.1217
#1	8.295	621.9	176.1	177.0	4.955	.3155	34.83	.9415	80.15
#2	8.305	625.2	177.1	177.3	5.005	.3150	34.90	.9413	80.04
#3	8.263	627.0	177.7	178.4	4.987	.3171	35.12	.9410	79.96

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.017	1.566	22.93	.5390	1.624	F20.16	1.875	1.436	3.706
Stddev	.007	.014	.06	.0011	.008	.11	.020	.006	.003
%RSD	.6661	.9186	.2544	.2011	.4906	.5665	1.057	.4159	.0733
#1	1.025	1.551	22.91	.5387	1.616	20.08	1.860	1.443	3.709
#2	1.012	1.580	22.89	.5402	1.625	20.29	1.898	1.433	3.704
#3	1.015	1.568	23.00	.5382	1.632	20.12	1.868	1.433	3.705

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1020.2	3627.8	28104.	2476.8
Stddev	.5	2.8	83.	9.4
%RSD	.04585	.07834	.29553	.38102
#1	1019.7	3626.4	28200.	2479.7
#2	1020.7	3631.1	28054.	2484.4
#3	1020.2	3625.9	28059.	2466.2

Zoom In Zoom Out

Sample Name: FA53517-1 Acquired: 5/4/2018 18:02:37 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0092	135.6	.0693	1.369	.0050	24.59	.0041	.0355	.2978
Stddev	.0027	.7	.0082	.005	.0007	.16	.0003	.0014	.0034
%RSD	29.26	.5005	11.82	.3331	13.23	.6531	6.135	3.906	1.147
#1	.0067	136.3	.0735	1.370	.0048	24.74	.0040	.0368	.2947
#2	.0089	135.5	.0599	1.373	.0058	24.60	.0044	.0354	.3015
#3	.0121	135.0	.0745	1.364	.0045	24.42	.0040	.0341	.2971

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F35.79	154.5	19.73	17.71	2.770	-.0026	2.277	.2398	F172.2
Stddev	.17	1.0	.20	.21	.010	.0002	.059	.0014	.7
%RSD	.4803	.6401	1.037	1.208	.3712	8.382	2.600	.5650	.3860
#1	35.99	155.5	19.92	17.90	2.782	-.0027	2.345	.2407	172.7
#2	35.73	154.5	19.75	17.76	2.765	-.0023	2.235	.2383	172.4
#3	35.66	153.5	19.51	17.48	2.763	-.0027	2.252	.2405	171.4

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4952	-.0036	5.225	.0748	7.059	3.312	-.0013	.4690	4.659
Stddev	.0057	.0100	.033	.0004	.037	.017	.0007	.0016	.023
%RSD	1.145	280.0	.6268	.5783	.5276	.5236	57.30	.3426	.4895
#1	.4987	.0069	5.262	.0752	7.099	3.331	-.0016	.4692	4.685
#2	.4983	-.0046	5.213	.0744	7.054	3.307	-.0005	.4673	4.651
#3	.4887	-.0131	5.200	.0747	7.025	3.297	-.0018	.4705	4.642

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1095.1	3272.3	25690.	2159.4
Stddev	2.1	9.9	36.	11.9
%RSD	.18829	.30233	.14128	.55339
#1	1093.8	3261.4	25725.	2164.4
#2	1094.0	3274.8	25652.	2145.8
#3	1097.5	3280.7	25693.	2168.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 18:06:46 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2539	40.90	2.025	2.044	2.064	41.19	2.064	2.063	2.084	2.060
Stddev	.0008	.13	.001	.013	.004	.15	.002	.001	.008	.001
%RSD	.3027	.3095	.0556	.6099	.1776	.3750	.0950	.0227	.3688	.0227
#1	.2532	40.85	2.024	2.058	2.066	41.14	2.065	2.063	2.079	2.060
#2	.2547	40.81	2.027	2.035	2.059	41.07	2.064	2.063	2.093	2.060
#3	.2540	41.04	2.025	2.038	2.066	41.36	2.061	2.062	2.081	2.059

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.40	41.33	41.01	2.095	2.086	41.08	2.066	2.029	2.040	2.033
Stddev	.13	.12	.13	.015	.004	.11	.002	.002	.004	.005
%RSD	.3137	.2978	.3154	.6916	.1913	.2686	.0875	.0912	.1743	.2374
#1	41.36	41.46	41.05	2.081	2.081	41.17	2.064	2.030	2.041	2.027
#2	41.30	41.22	40.87	2.110	2.089	40.96	2.068	2.027	2.043	2.036
#3	41.55	41.32	41.12	2.094	2.086	41.12	2.067	2.030	2.036	2.036

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.828	2.080	2.063	2.093	2.051	2.093	2.062
Stddev	.004	.006	.005	.009	.003	.005	.002
%RSD	.2421	.2724	.2601	.4403	.1611	.2633	.0984
#1	1.826	2.075	2.066	2.084	2.049	2.090	2.063
#2	1.833	2.081	2.057	2.103	2.055	2.100	2.063
#3	1.825	2.086	2.066	2.093	2.050	2.091	2.060

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 18:06:46 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	984.07	3078.2	23983.	2095.1
Stddev	1.15	1.6	239.	10.5
%RSD	.11684	.05066	.99541	.50139
#1	984.32	3080.0	24107.	2094.9
#2	985.07	3077.0	23708.	2105.7
#3	982.81	3077.7	24134.	2084.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 18:10:43 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0026	.0005	.0002	.0000	-.0013	.0000	-.0001	.0001	.0002
Stddev	.0003	.0094	.0012	.0003	.000	.0035	.000	.0000	.0003	.0003
%RSD	195.0	358.7	263.6	175.8	282.0	274.6	256.5	77.44	422.3	174.3
#1	-.0003	.0122	.0014	.0000	.0000	.0022	.0000	.0000	.0003	-.0002
#2	.0002	-.0066	.0009	.0000	-.0001	-.0049	.0000	-.0001	.0001	.0005
#3	-.0003	.0023	-.0009	.0005	.0001	-.0011	.0000	-.0001	-.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079	.0286	.0047	.0000	.0009	.0024	.0000	.0006	.0013	.0009
Stddev	.0012	.0127	.0094	.000	.0010	.0030	.0001	.0010	.0010	.0015
%RSD	15.24	44.26	201.5	338.7	110.6	126.5	1655.	174.4	80.15	160.7
#1	.0092	.0166	-.0005	.0000	.0019	.0032	.0001	.0006	.0003	.0012
#2	.0071	.0419	.0155	-.0001	.0006	-.0010	-.0001	-.0005	.0024	.0023
#3	.0072	.0274	-.0011	.0000	.0000	.0049	.0000	.0016	.0011	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0006	.0000	.0004	-.0006	.0002	-.0001
Stddev	.0005	.0005	.000	.0001	.0003	.0002	.0000
%RSD	117.1	77.20	149.2	18.70	45.99	97.07	35.48
#1	.0004	.0003	-.0001	.0005	-.0003	.0004	-.0001
#2	.0011	.0011	-.0001	.0004	-.0008	.0000	-.0002
#3	.0000	.0004	.0000	.0004	-.0006	.0002	-.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 18:10:43 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1117.8	3154.3	24799.	2086.9
Stddev	3.4	9.7	163.	7.3
%RSD	.30575	.30736	.65751	.34917
#1	1121.5	3156.5	24616.	2091.7
#2	1114.8	3143.6	24927.	2090.4
#3	1117.2	3162.6	24855.	2078.5

Zoom In Zoom Out

Sample Name: FA53517-4 Acquired: 5/4/2018 18:15:02 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0083	247.6	.1785	3.342	.0113	99.46	.0056	.0943	.4821	1.936
Stddev	.0033	1.0	.0077	.012	.0001	.33	.0003	.0009	.0016	.012
%RSD	39.52	.3965	4.340	.3664	.7476	.3325	5.359	.9244	.3288	.6023
#1	.0069	248.0	.1852	3.352	.0114	99.67	.0052	.0952	.4815	1.944
#2	.0059	248.2	.1803	3.346	.0113	99.63	.0057	.0941	.4810	1.941
#3	.0120	246.4	.1701	3.329	.0112	99.08	.0058	.0935	.4839	1.922

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	264.0	30.88	28.53	12.82	.0073	2.895	.2529	19.14	.0464	.0089
Stddev	1.1	.01	.39	.06	.0003	.042	.0001	.04	.0065	.0154
%RSD	.4293	.0297	1.370	.5011	4.101	1.451	.0360	.2189	13.92	173.1
#1	265.0	30.87	28.98	12.90	.0077	2.934	.2530	19.18	.0412	.0066
#2	264.1	30.89	28.24	12.79	.0071	2.901	.2530	19.13	.0537	-.0052
#3	262.8	30.87	28.39	12.78	.0072	2.851	.2528	19.10	.0445	.0254

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.308	.0608	1.567	5.290	.0039	.5169	.9689
Stddev	.029	.0006	.003	.019	.0053	.0017	.0033
%RSD	.4666	1.048	.1866	.3518	134.0	.3236	.3375
#1	6.342	.0604	1.570	5.310	.0070	.5185	.9724
#2	6.298	.0615	1.567	5.284	-.0021	.5170	.9685
#3	6.285	.0604	1.564	5.274	.0069	.5152	.9659

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1059.8	3244.8	25257.	2143.2
Stddev	2.8	10.5	97.	8.5
%RSD	.26435	.32442	.38347	.39576
#1	1056.6	3232.7	25155.	2133.4
#2	1061.5	3251.3	25347.	2148.8
#3	1061.4	3250.4	25270.	2147.4

Zoom In Zoom Out

Sample Name: FA53517-10 Acquired: 5/4/2018 18:19:10 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0047	343.2	.1511	2.818	.0145	16.96	-.0005	.0765	.5429	1.558
Stddev	.0008	1.3	.0012	.008	.0004	.13	.0002	.0004	.0023	.009
%RSD	16.67	.3818	.7986	.2728	2.497	.7476	45.88	.5868	.4215	.6059
#1	.0055	342.5	.1524	2.816	.0140	16.85	-.0006	.0770	.5447	1.569
#2	.0040	344.7	.1505	2.812	.0146	17.10	-.0007	.0764	.5403	1.551
#3	.0045	342.4	.1502	2.827	.0147	16.94	-.0002	.0761	.5437	1.554

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	349.1	29.17	36.62	2.513	.0031	6.538	.3164	12.66	.0933	.0075
Stddev	1.1	.11	.11	.015	.0006	.051	.0012	.03	.0045	.0080
%RSD	.3281	.3638	.3037	.5825	18.12	.7816	.3731	.2098	4.849	106.7
#1	349.4	29.23	36.57	2.527	.0037	6.531	.3153	12.65	.0918	.0163
#2	350.0	29.22	36.54	2.514	.0027	6.592	.3176	12.69	.0984	.0007
#3	347.8	29.04	36.74	2.498	.0029	6.491	.3164	12.64	.0897	.0054

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.347	.0497	1.170	4.968	-.0009	.6814	.9755
Stddev	.009	.0017	.003	.029	.0045	.0021	.0024
%RSD	.1380	3.392	.2715	.5879	474.5	.3101	.2429
#1	6.350	.0478	1.171	5.001	.0022	.6829	.9780
#2	6.337	.0504	1.173	4.955	.0010	.6823	.9753
#3	6.354	.0510	1.166	4.947	-.0061	.6789	.9732

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1069.5	3392.6	26206.	2247.9
Stddev	3.1	10.7	126.	7.2
%RSD	.28794	.31485	.47962	.32027
#1	1068.5	3382.4	26096.	2244.0
#2	1067.0	3391.8	26179.	2243.5
#3	1072.9	3403.8	26343.	2256.2

◀ Zoom In ▶
Zoom Out

Sample Name: FA53517-13 Acquired: 5/4/2018 18:23:20 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0145	152.5	.1351	1.400	.0089	20.58	.0034	.0679	.3842
Stddev	.0014	.1	.0053	.005	.0003	.09	.0002	.0002	.0005
%RSD	9.539	.0893	3.957	.3861	2.830	.4601	4.924	.2756	.1285
#1	.0134	152.6	.1353	1.397	.0090	20.68	.0034	.0681	.3848
#2	.0142	152.6	.1403	1.396	.0090	20.50	.0036	.0678	.3838
#3	.0161	152.4	.1296	1.406	.0086	20.56	.0033	.0678	.3842

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F61.92	208.0	23.49	22.85	3.270	-.0017	2.340	.2290	F325.7
Stddev	.17	.6	.07	.07	.009	.0004	.031	.0005	.5
%RSD	.2683	.2808	.3034	.3164	.2602	22.54	1.326	.2398	.1612
#1	62.09	208.7	23.43	22.93	3.270	-.0014	2.325	.2287	326.3
#2	61.92	207.8	23.48	22.78	3.261	-.0021	2.376	.2287	325.5
#3	61.75	207.6	23.57	22.84	3.278	-.0015	2.320	.2296	325.4

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.821	-.0021	5.735	.1056	19.92	3.217	-.0038	.4331	10.31
Stddev	.006	.0080	.016	.0012	.04	.008	.0090	.0017	.01
%RSD	.3399	378.0	.2810	1.178	.1900	.2554	240.9	.3938	.0532
#1	1.817	-.0111	5.716	.1055	19.95	3.221	-.0127	.4339	10.31
#2	1.817	.0005	5.743	.1069	19.88	3.208	.0054	.4312	10.31
#3	1.828	.0042	5.745	.1044	19.93	3.222	-.0040	.4343	10.30

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1085.3	3296.3	25829.	2198.7
Stddev	2.0	5.8	43.	10.5
%RSD	.18188	.17484	.16717	.47771
#1	1083.5	3296.1	25779.	2186.7
#2	1085.0	3290.7	25850.	2203.2
#3	1087.4	3302.2	25857.	2206.2

◀ Zoom In ▶
Zoom Out

Sample Name: FA53517-16 Acquired: 5/4/2018 18:27:29 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0038	225.7	.0727	2.846	.0106	87.64	.0051	.0959	.4708	1.305
Stddev	.0009	1.0	.0057	.028	.0003	.41	.0005	.0004	.0027	.005
%RSD	23.16	.4444	7.875	.9839	2.503	.4656	9.791	.4243	.5828	.3996
#1	.0043	226.8	.0729	2.875	.0108	88.03	.0049	.0955	.4731	1.308
#2	.0042	225.4	.0669	2.843	.0103	87.69	.0047	.0963	.4678	1.299
#3	.0028	224.8	.0783	2.819	.0107	87.22	.0057	.0959	.4714	1.309

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	240.8	25.79	26.14	11.18	.0017	2.523	.2609	13.91	.0467	-.0017
Stddev	1.3	.27	.12	.04	.0010	.040	.0007	.04	.0057	.0021
%RSD	.5277	1.054	.4705	.3510	56.98	1.593	.2564	.2586	12.19	127.2
#1	242.0	26.09	26.21	11.16	.0013	2.549	.2601	13.89	.0489	-.0031
#2	240.8	25.71	26.00	11.15	.0028	2.544	.2613	13.95	.0402	-.0026
#3	239.5	25.57	26.22	11.22	.0010	2.477	.2612	13.89	.0510	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.934	.0535	1.335	4.986	-.0011	.4737	.5517
Stddev	.010	.0005	.011	.011	.0011	.0015	.0018
%RSD	.1735	.9062	.8476	.2186	108.9	.3126	.3312
#1	5.940	.0530	1.348	4.985	-.0020	.4739	.5496
#2	5.922	.0535	1.333	4.975	-.0014	.4722	.5526
#3	5.940	.0540	1.325	4.997	.0002	.4751	.5529

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1077.2	3295.4	25734.	2198.1
Stddev	2.8	7.4	26.	11.2
%RSD	.25778	.22587	.10113	.51008
#1	1080.3	3301.1	25718.	2185.2
#2	1074.9	3298.1	25764.	2205.9
#3	1076.4	3287.0	25721.	2203.1

◀ Zoom In ▶
Zoom Out

Sample Name: FA53517-19 Acquired: 5/4/2018 18:31:37 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0066	341.3	.0839	6.289	.0148	138.5	.0042	.1119	.5978	1.677
Stddev	.0006	2.7	.0035	.036	.0004	1.1	.0003	.0014	.0032	.008
%RSD	9.285	.8013	4.141	.5745	2.411	.8035	6.221	1.290	.5367	.4600
#1	.0061	344.4	.0845	6.324	.0151	139.6	.0045	.1117	.5992	1.686
#2	.0064	339.2	.0870	6.252	.0149	137.4	.0042	.1135	.5941	1.674
#3	.0073	340.3	.0801	6.291	.0144	138.5	.0040	.1106	.6001	1.672

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	350.2	30.84	32.39	13.67	.0061	3.403	.3433	7.273	.0234	.0016
Stddev	2.6	.23	.22	.11	.0003	.055	.0035	.025	.0014	.0107
%RSD	.7306	.7329	.6855	.8089	4.626	1.605	1.034	.3435	6.084	651.4
#1	352.7	31.07	32.64	13.80	.0063	3.422	.3465	7.301	.0231	.0136
#2	347.6	30.62	32.26	13.59	.0058	3.342	.3439	7.261	.0222	-.0070
#3	350.2	30.82	32.26	13.63	.0061	3.446	.3395	7.255	.0250	-.0017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.155	.0523	2.391	5.720	.0104	.7634	.8115
Stddev	.034	.0007	.014	.036	.0039	.0009	.0016
%RSD	.4723	1.376	.5926	.6277	37.82	.1193	.1979
#1	7.194	.0529	2.407	5.761	.0095	.7641	.8122
#2	7.136	.0515	2.379	5.692	.0148	.7637	.8127
#3	7.135	.0524	2.387	5.708	.0070	.7624	.8097

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1052.4	3382.5	26325.	2246.6
Stddev	1.6	3.4	126.	21.2
%RSD	.14977	.10167	.47692	.94314
#1	1052.0	3380.5	26224.	2231.4
#2	1051.0	3380.4	26466.	2270.8
#3	1054.1	3386.4	26286.	2237.7

◀ Zoom In ▶
Zoom Out

Sample Name: FA53517-22 Acquired: 5/4/2018 18:35:43 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0048	227.2	.0447	4.228	.0079	110.9	.0049	.0653	.3943	2.090
Stddev	.0019	1.0	.0009	.003	.0002	.5	.0002	.0006	.0025	.003
%RSD	39.26	.4192	1.956	.0607	2.982	.4831	4.573	.9565	.6276	.1454
#1	.0027	226.6	.0449	4.231	.0082	110.3	.0052	.0646	.3946	2.092
#2	.0062	228.3	.0438	4.227	.0079	111.4	.0049	.0659	.3917	2.091
#3	.0057	226.8	.0455	4.226	.0078	110.9	.0048	.0653	.3967	2.086

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	251.8	19.25	20.89	10.52	.0037	2.439	.2337	5.287	.0236	-.0022
Stddev	.7	.08	.06	.03	.0005	.014	.0014	.007	.0049	.0064
%RSD	.2892	.4058	.2805	.2514	12.56	.5827	.6094	.1310	20.84	294.9
#1	251.3	19.18	20.82	10.51	.0033	2.452	.2321	5.281	.0290	-.0094
#2	252.6	19.33	20.93	10.50	.0042	2.424	.2343	5.286	.0224	.0005
#3	251.6	19.23	20.92	10.55	.0037	2.442	.2348	5.295	.0194	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.190	.0493	1.775	5.221	.0007	.5576	.6520
Stddev	.003	.0003	.002	.005	.0069	.0029	.0004
%RSD	.0475	.5374	.1312	.0888	957.2	.5205	.0541
#1	6.193	.0495	1.778	5.221	-.0032	.5606	.6516
#2	6.190	.0490	1.774	5.216	-.0033	.5574	.6522
#3	6.187	.0495	1.774	5.226	.0087	.5548	.6521

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1062.7	3237.2	25061.	2146.2
Stddev	.2	3.2	74.	9.5
%RSD	.02044	.09927	.29559	.44216
#1	1062.6	3234.3	24996.	2153.9
#2	1062.9	3236.7	25142.	2135.6
#3	1062.5	3240.7	25045.	2149.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/4/2018 18:39:52 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0092	.2088	.0099	.2038	.0052	1.026	.0053	.0531	.0104	.0265
Stddev	.0005	.0089	.0009	.0012	.0001	.009	.0000	.0001	.0002	.0002
%RSD	5.035	4.255	9.278	.5715	1.747	.8621	.3932	.2074	2.253	.7174
#1	.0087	.2190	.0089	.2048	.0051	1.035	.0053	.0530	.0104	.0263
#2	.0095	.2050	.0100	.2025	.0052	1.018	.0053	.0531	.0107	.0266
#3	.0095	.2025	.0108	.2041	.0053	1.026	.0053	.0532	.0102	.0265

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3175	10.23	5.117	.0160	.0460	10.12	.0430	.0055	.0051	.0092
Stddev	.0031	.04	.030	.0002	.0001	.03	.0003	.0006	.0014	.0013
%RSD	.9608	.3905	.5846	1.238	.2768	.3359	.7431	10.09	27.20	14.60
#1	.3140	10.27	5.144	.0160	.0461	10.16	.0427	.0062	.0046	.0103
#2	.3184	10.22	5.121	.0161	.0461	10.11	.0431	.0052	.0066	.0077
#3	.3199	10.19	5.085	.0157	.0459	10.10	.0433	.0052	.0039	.0096

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0100	.0516	.0100	.0097	.0095	.0494	.0222
Stddev	.0004	.0005	.0000	.0001	.0010	.0004	.0000
%RSD	4.493	.9000	.4666	.5843	10.43	.7194	.1669
#1	.0105	.0511	.0100	.0097	.0090	.0493	.0222
#2	.0096	.0520	.0100	.0096	.0089	.0492	.0221
#3	.0099	.0517	.0101	.0097	.0107	.0498	.0222

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1084.5	3154.3	24631.	2086.3
Stddev	2.6	2.5	45.	9.4
%RSD	.24330	.07923	.18366	.44864
#1	1086.1	3151.6	24621.	2082.2
#2	1085.9	3154.8	24592.	2097.0
#3	1081.5	3156.5	24680.	2079.7

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/4/2018 18:44:10 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	F520.9	.0007	.0008	.0000	480.0	-.0001	-.0002	-.0003
Stddev	.0003	3.3	.0005	.0002	.000	3.0	.0000	.0001	.0003
%RSD	100.4	.6303	62.41	26.52	313.2	.6156	33.23	44.37	90.20
#1	.0002	524.6	.0004	.0010	.0001	483.2	-.0001	-.0001	-.0006
#2	.0006	519.8	.0006	.0006	.0000	479.2	-.0002	-.0002	-.0001
#3	.0001	518.3	.0013	.0009	-.0001	477.5	-.0001	-.0002	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0004	188.7	.0494	F504.3	.0000	.0001	.1383	-.0003	.0004
Stddev	.0003	.9	.0190	1.6	.0001	.0002	.0027	.0002	.0007
%RSD	69.33	.4906	38.34	.3212	707.3	256.5	1.934	54.99	187.1
#1	-.0005	189.8	.0287	506.1	.0000	-.0001	.1411	-.0004	-.0005
#2	-.0001	188.4	.0659	503.6	.0001	.0003	.1358	-.0001	.0008
#3	-.0006	188.0	.0537	503.1	-.0001	.0001	.1380	-.0005	.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0026	.0031	.0141	.0004	.0002	.0005	.0009	.0008	-.0024
Stddev	.0008	.0028	.0006	.0011	.0002	.0001	.0035	.0002	.0001
%RSD	30.30	90.51	4.440	311.0	134.0	26.19	399.7	30.06	3.733
#1	.0029	.0034	.0136	.0016	.0002	.0004	-.0024	.0008	-.0023
#2	.0031	.0002	.0139	-.0006	-.0001	.0004	.0004	.0006	-.0024
#3	.0017	.0058	.0148	.0001	.0003	.0006	.0046	.0010	-.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	878.13	2866.0	22037.	2027.8
Stddev	2.57	1.3	64.	12.3
%RSD	.29237	.04691	.29156	.60671
#1	880.40	2866.4	22071.	2014.2
#2	878.65	2864.5	21963.	2031.2
#3	875.35	2867.1	22078.	2038.1

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/4/2018 18:48:21 Type: Unk
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.036	F520.9	1.034	.5176	.5134	476.8	.9464	.4836	.4978
Stddev	.004	3.4	.004	.0015	.0020	2.7	.0016	.0005	.0012
%RSD	.3935	.6622	.3591	.2897	.3898	.5641	.1733	.0973	.2345
#1	1.041	524.8	1.032	.5189	.5156	479.9	.9449	.4831	.4977
#2	1.033	518.3	1.033	.5178	.5118	475.1	.9460	.4839	.4990
#3	1.034	519.5	1.039	.5160	.5128	475.5	.9482	.4838	.4967

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5476	181.6	.0705	F508.1	.5018	.8779	.1417	.9653	.9662
Stddev	.0010	.5	.0160	2.4	.0016	.0019	.0075	.0018	.0061
%RSD	.1830	.2701	22.76	.4695	.3120	.2198	5.327	.1827	.6264
#1	.5487	182.2	.0844	510.7	.5035	.8783	.1503	.9637	.9722
#2	.5468	181.5	.0529	507.7	.5016	.8758	.1366	.9650	.9663
#3	.5472	181.2	.0742	506.0	.5004	.8796	.1380	.9672	.9601

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9710	.9344	.1107	.8922	.9646	.9604	.9125	.4817	.9429
Stddev	.0029	.0061	.0008	.0025	.0042	.0029	.0030	.0009	.0011
%RSD	.2955	.6576	.6937	.2804	.4313	.3055	.3301	.1938	.1147
#1	.9712	.9275	.1116	.8922	.9694	.9638	.9159	.4827	.9417
#2	.9681	.9361	.1103	.8898	.9620	.9586	.9113	.4817	.9436
#3	.9738	.9395	.1101	.8948	.9625	.9588	.9103	.4808	.9435

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	865.72	2851.1	21983.	2004.6
Stddev	3.42	5.9	40.	14.6
%RSD	.39518	.20590	.18409	.72916
#1	861.79	2851.9	21998.	1990.3
#2	868.04	2856.5	21938.	2004.0
#3	867.34	2844.8	22015.	2019.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 18:52:19 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2539	40.86	2.034	2.052	2.064	41.10	2.067	2.068	2.063	2.063
Stddev	.0009	.19	.004	.009	.005	.14	.004	.004	.005	.006
%RSD	.3710	.4698	.1824	.4312	.2524	.3510	.2042	.1765	.2408	.2958
#1	.2546	41.09	2.030	2.062	2.070	41.27	2.065	2.066	2.064	2.070
#2	.2544	40.73	2.038	2.047	2.060	41.01	2.072	2.072	2.057	2.058
#3	.2528	40.78	2.035	2.047	2.062	41.03	2.065	2.065	2.067	2.061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.49	41.45	40.99	2.087	2.093	41.18	2.073	2.034	2.049	2.048
Stddev	.08	.17	.10	.001	.005	.18	.003	.007	.003	.008
%RSD	.1879	.4174	.2532	.0233	.2492	.4345	.1551	.3695	.1619	.3769
#1	41.58	41.62	41.09	2.087	2.087	41.38	2.070	2.032	2.050	2.046
#2	41.45	41.43	40.99	2.087	2.097	41.11	2.076	2.042	2.051	2.057
#3	41.43	41.28	40.88	2.086	2.095	41.05	2.073	2.027	2.045	2.042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.832	2.092	2.068	2.085	2.055	2.098	2.065
Stddev	.001	.003	.005	.004	.006	.002	.004
%RSD	.0708	.1205	.2527	.1823	.3091	.0882	.1714
#1	1.831	2.090	2.074	2.088	2.062	2.097	2.064
#2	1.832	2.095	2.066	2.081	2.054	2.100	2.069
#3	1.834	2.093	2.064	2.087	2.049	2.097	2.062
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/4/2018 18:52:19 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	980.44	3067.5	24114.	2079.1
Stddev	2.01	3.5	91.	7.2
%RSD	.20461	.11293	.37664	.34776
#1	980.40	3071.1	24036.	2071.6
#2	978.45	3064.2	24092.	2079.6
#3	982.46	3067.2	24213.	2086.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 18:56:17 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0055	.0000	.0002	.0001	.0048	.0000	-.0001	-.0002	.0001
Stddev	.0000	.0023	.000	.0001	.0002	.0027	.000	.0001	.0004	.0000
%RSD	8.366	42.50	3937.	59.69	127.5	56.33	42.26	189.3	272.1	37.31
#1	.0001	.0061	.0001	.0001	.0002	.0074	.0000	-.0002	.0003	.0000
#2	.0002	.0030	-.0004	.0003	.0002	.0049	-.0001	-.0001	-.0005	.0001
#3	.0002	.0076	.0003	.0001	-.0001	.0020	.0000	.0001	-.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098	.0167	.0042	.0000	.0010	.0045	.0001	.0008	.0013	.0009
Stddev	.0052	.0295	.0194	.0000	.0008	.0083	.0003	.0006	.0007	.0019
%RSD	53.46	177.1	465.2	182.9	80.31	186.6	244.8	70.76	50.56	207.5
#1	.0140	.0413	.0263	.0001	.0018	-.0046	.0004	.0001	.0013	.0030
#2	.0114	.0248	-.0038	.0000	.0009	.0062	.0000	.0012	.0007	.0006
#3	.0039	-.0160	-.0100	.0000	.0002	.0118	-.0001	.0010	.0020	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0003	.0000	.0005	.0003	.0004	-.0001
Stddev	.0009	.0004	.000	.0001	.0000	.0004	.0001
%RSD	186.4	138.6	322.3	14.88	12.95	118.5	127.4
#1	-.0002	.0006	.0000	.0005	.0003	-.0001	.0000
#2	.0014	.0003	-.0001	.0004	.0003	.0004	.0000
#3	.0002	-.0001	.0000	.0004	.0004	.0007	-.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/4/2018 18:56:17 Type: QC
Method: 60102007_041712(v195) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1132.0	3201.0	24993.	2087.4
Stddev	3.5	1.9	135.	30.2
%RSD	.30825	.05832	.54213	1.4490
#1	1129.6	3200.4	24934.	2064.9
#2	1130.4	3199.5	24896.	2075.5
#3	1136.0	3203.1	25148.	2121.8

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	V	-0.009834	0.000000	No
			Fe	0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.035224	0.000000	No
As 189.042 {478}	☒	5	Fe	-0.000108	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000003	0.000000	No
Be 313.042 {108}	☒	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000101	0.000000	No
			Ca	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Ti	0.000000	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000008	0.000000	No
Cr 267.716 {126}	☒	3	Al	0.000007	0.000000	No
			Fe	-0.000018	0.000000	No
			Ca	0.000004	0.000000	No
Cu 324.754 {104}	☒	10	Fe	-0.000155	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000006	0.000000	No
			Mg	0.000005	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000023	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000026	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	☒	9	Al	0.000292	0.000000	No
			Fe	-0.000140	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000038	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000002	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000010	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000033	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000055	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000008	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000016	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000010	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000024	0.000000	No
			As	0.001128	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.000142	0.535445	0.000000	1.000000
Al 396.152 { 85}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.003159	0.170369	0.000000	1.000000
As 189.042 {478}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.000554	0.184400	0.000000	1.000000
Ba 455.403 { 74}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.041047	11.585763	0.000000	1.000000
Be 313.042 {108}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.000768	8.366501	0.000000	1.000000
Ca 317.933 {106}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.007839	0.265571	0.000000	1.000000
Cd 226.502 {449}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.000329	4.600473	0.000000	1.000000
Co 228.616 {447}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.000492	2.322954	0.000000	1.000000
Cr 267.716 {126}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.000130	0.402572	0.000000	1.000000
Cu 324.754 {104}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.002722	0.771594	0.000000	1.000000
Fe 259.940 {130}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.002756	0.201058	0.000000	1.000000
In 230.606 {446}*	5/4/2018 10:51:31	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.012183	0.264980	0.000000	1.000000
Mg 279.079 {121}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.000449	0.027593	0.000000	1.000000
Mn 257.610 {131}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.000091	2.320931	0.000000	1.000000
Mo 202.030 {467}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.002788	1.069042	0.000000	1.000000
Na 589.592 { 57}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.021067	0.767846	0.000000	1.000000
Ni 231.604 {445}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.000018	1.344804	0.000000	1.000000
Pb 220.353 {453}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.001075	1.336629	0.000000	1.000000
Sb 206.833 {463}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.000085	0.234374	0.000000	1.000000
Se 196.090 {472}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.000360	0.130329	0.000000	1.000000
Si 212.412 {459}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.003893	0.358032	0.000000	1.000000
Sn 189.989 {477}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.000340	0.426332	0.000000	1.000000
Sr 407.771 { 83}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.000819	18.052435	0.000000	1.000000
Ti 334.941 {101}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.002623	1.898479	0.000000	1.000000
Tl 190.856 {477}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.003002	0.585536	0.000000	1.000000
V 292.402 {115}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	-0.000188	0.660233	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/4/2018 10:51:31	5/4/2018 10:05:40	Linear	1/Conc	0.001808	2.623653	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999967	0.000041	0.000537	0.001790	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999828	0.005107	0.013528	0.045093	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999951	0.000147	0.001055	0.003518	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999887	0.014028	0.000283	0.000942	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999725	0.015798	0.000122	0.000406	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999703	0.010427	0.004528	0.015093	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999823	0.006986	0.000065	0.000215	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999844	0.003316	0.000139	0.000462	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999796	0.000656	0.000409	0.001365	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999942	0.000669	0.000337	0.001122	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999579	0.009405	0.003385	0.011284	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999855	0.007273	0.024859	0.082863	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999843	0.000787	0.029587	0.098624	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999840	0.003345	0.000061	0.000202	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999710	0.002073	0.000180	0.000601	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999828	0.022919	0.007832	0.026106	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999858	0.001827	0.000234	0.000781	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999930	0.001274	0.000687	0.002290	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999962	0.000165	0.001320	0.004399	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999952	0.000103	0.002214	0.007381	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.997503	0.002081	0.000622	0.002073	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999654	0.000904	0.000389	0.001296	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999768	0.031353	0.000108	0.000361	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999796	0.003088	0.000141	0.000470	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999942	0.000486	0.000997	0.003323	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999708	0.001275	0.000335	0.001117	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999813	0.004088	0.000083	0.000277	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/7/2018 9:14:53 Type: Cal
Method: 60102007_041712(v200) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0002	-.0029	-.0006	.0298	.0002	.0078	-.0005	-.0001	.0001
Stddev	.0001	.0014	.0001	.0006	.0006	.0007	.0002	.0002	.0001
%RSD	74.71	46.68	19.08	1.864	386.9	8.640	40.61	180.8	34.99
#1	.0000	-.0015	-.0005	.0301	.0002	.0082	-.0007	-.0001	.0002
#2	-.0002	-.0042	-.0006	.0303	-.0005	.0071	-.0004	-.0003	.0002
#3	-.0003	-.0031	-.0007	.0292	.0008	.0082	-.0003	.0001	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0030	.0016	.0041	.0000	.0002	.0015	.0007	-.0004	.0012
Stddev	.0001	.0006	.0051	.001	.0001	.0002	.0059	.0001	.0005
%RSD	4.290	35.29	122.9	2668.	47.22	16.94	875.5	36.55	44.74
#1	.0030	.0021	.0051	-.0001	.0004	.0015	.0074	-.0005	.0006
#2	.0028	.0017	.0087	.0009	.0002	.0017	-.0020	-.0004	.0014
#3	.0031	.0010	-.0014	-.0009	.0002	.0012	-.0033	-.0002	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	-.0004	.0043	.0004	.0009	.0015	-.0038	-.0001	.0013
Stddev	.0004	.0001	.0001	.0001	.0017	.0003	.0004	.0001	.0003
%RSD	300.8	20.18	1.529	28.09	185.1	17.51	10.11	80.64	24.65
#1	.0002	-.0005	.0043	.0003	.0026	.0017	-.0042	.0000	.0014
#2	.0005	-.0005	.0044	.0004	-.0008	.0014	-.0037	-.0001	.0017
#3	-.0003	-.0003	.0043	.0005	.0010	.0012	-.0034	-.0002	.0010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	865.30	2230.7	21484.	1965.7
Stddev	1.99	2.7	88.	10.4
%RSD	.23036	.11987	.41020	.52709
#1	865.81	2228.5	21387.	1975.7
#2	867.00	2230.0	21560.	1966.3
#3	863.11	2233.7	21504.	1955.0

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/7/2018 9:18:26 Type: Cal
Method: 60102007_041712(v200) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0312	1.695	.0895	6.401	4.454	2.363	2.261	1.240	.1819	.4236
Stddev	.0004	.009	.0004	.033	.021	.012	.001	.001	.0005	.0013
%RSD	1.122	.5458	.4267	.5140	.4808	.4881	.0310	.1035	.2950	.3076
#1	.0310	1.691	.0893	6.390	4.456	2.354	2.261	1.239	.1823	.4221
#2	.0310	1.688	.0899	6.375	4.432	2.359	2.261	1.240	.1813	.4247
#3	.0316	1.706	.0891	6.438	4.475	2.376	2.262	1.241	.1821	.4239

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.016	2.783	.2314	1.068	.5534	8.162	.7021	.5581	.1288	.0644
Stddev	.008	.013	.0011	.006	.0010	.040	.0022	.0010	.0002	.0002
%RSD	.3761	.4521	.4559	.5705	.1863	.4917	.3106	.1767	.1709	.3705
#1	2.018	2.774	.2303	1.068	.5523	8.145	.7025	.5579	.1286	.0642
#2	2.008	2.777	.2323	1.062	.5541	8.134	.7040	.5572	.1287	.0645
#3	2.022	2.797	.2316	1.074	.5539	8.208	.6997	.5592	.1290	.0647

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2474	.1964	9.564	.9318	.2521	.3013	1.118
Stddev	.0010	.0006	.050	.0026	.0013	.0008	.001
%RSD	.3949	.3250	.5258	.2797	.5315	.2727	.0760
#1	.2478	.1958	9.579	.9315	.2511	.3006	1.118
#2	.2481	.1971	9.508	.9294	.2516	.3012	1.119
#3	.2463	.1962	9.604	.9346	.2536	.3022	1.117

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	824.21	2211.7	21188.	1965.6
Stddev	2.36	4.0	88.	9.5
%RSD	.28622	.17946	.41769	.48470
#1	826.87	2214.6	21150.	1973.7
#2	823.41	2207.1	21289.	1968.0
#3	822.36	2213.3	21124.	1955.1

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/7/2018 9:21:49 Type: Cal
Method: 60102007_041712(v200) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1195	6.731	.3639	25.25	17.48	9.187	8.754	4.795	.7048	1.670
Stddev	.0018	.036	.0003	.12	.07	.068	.009	.009	.0048	.013
%RSD	1.493	.5335	.0769	.4743	.3779	.7360	.1037	.1901	.6814	.7986
#1	.1196	6.759	.3640	25.34	17.52	9.229	8.751	4.797	.7054	1.672
#2	.1213	6.690	.3635	25.11	17.40	9.109	8.747	4.785	.7094	1.682
#3	.1177	6.743	.3641	25.28	17.51	9.222	8.764	4.802	.6998	1.656

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.580	11.12	.9127	4.148	2.297	32.56	2.713	2.256	.5181	.2592
Stddev	.029	.06	.0027	.047	.004	.11	.004	.010	.0004	.0003
%RSD	.3853	.5659	.2977	1.136	.1518	.3394	.1442	.4399	.0813	.1253
#1	7.581	11.18	.9136	4.166	2.294	32.64	2.718	2.265	.5179	.2590
#2	7.550	11.06	.9097	4.184	2.297	32.43	2.712	2.259	.5178	.2590
#3	7.609	11.12	.9149	4.095	2.301	32.61	2.710	2.245	.5186	.2596

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.7519	.8064	39.11	3.797	1.016	1.251	4.309
Stddev	.0011	.0013	.11	.040	.006	.004	.001
%RSD	.1473	.1573	.2934	1.046	.5723	.3045	.0198
#1	.7517	.8071	39.18	3.806	1.022	1.253	4.309
#2	.7508	.8049	38.98	3.831	1.013	1.254	4.309
#3	.7530	.8071	39.18	3.753	1.011	1.247	4.310

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	753.28	2125.4	20537.	1941.6
Stddev	1.10	2.9	130.	9.3
%RSD	.14668	.13567	.63258	.48053
#1	752.60	2126.9	20520.	1933.9
#2	752.68	2127.1	20416.	1952.0
#3	754.56	2122.0	20674.	1939.0

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/7/2018 9:25:06 Type: Cal
Method: 60102007_041712(v200) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2457	13.36	.7323	50.28	34.03	17.88	17.14	9.409	1.369	3.313
Stddev	.0020	.03	.0012	.06	.08	.07	.02	.012	.003	.014
%RSD	.8028	.2393	.1601	.1268	.2304	.3747	.1087	.1292	.1952	.4213
#1	.2472	13.40	.7310	50.24	34.12	17.96	17.16	9.416	1.370	3.324
#2	.2434	13.35	.7326	50.36	33.98	17.84	17.15	9.416	1.366	3.297
#3	.2464	13.34	.7333	50.26	33.99	17.84	17.12	9.395	1.371	3.316

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	14.67	22.34	1.814	8.067	4.476	65.06	5.314	4.551	1.046	.5195
Stddev	.01	.01	.013	.046	.002	.17	.005	.015	.003	.0010
%RSD	.0626	.0311	.6903	.5712	.0370	.2682	.0923	.3210	.2905	.1872
#1	14.68	22.34	1.829	8.108	4.476	65.26	5.319	4.535	1.049	.5204
#2	14.66	22.35	1.807	8.017	4.478	64.98	5.313	4.558	1.044	.5185
#3	14.67	22.34	1.807	8.076	4.475	64.94	5.309	4.562	1.044	.5196

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.738	1.559	76.73	7.426	2.028	2.433	8.425
Stddev	.002	.003	.03	.051	.002	.000	.007
%RSD	.1214	.1834	.0383	.6860	.0782	.0127	.0878
#1	1.740	1.561	76.70	7.466	2.026	2.433	8.420
#2	1.739	1.560	76.76	7.369	2.029	2.433	8.433
#3	1.736	1.555	76.73	7.445	2.029	2.433	8.422

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	700.34	2047.3	20089.	1934.0
Stddev	.47	2.9	48.	3.4
%RSD	.06680	.13928	.23791	.17537
#1	700.83	2045.6	20037.	1930.1
#2	699.91	2045.8	20131.	1936.2
#3	700.28	2050.6	20098.	1935.6

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/7/2018 9:28:56 Type: QC
Method: 60102007_041712(v200) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5043	80.07	4.008	3.979	3.963	79.57	3.966	3.968	3.952	3.996
Stddev	.0026	.34	.003	.012	.003	.28	.002	.004	.017	.007
%RSD	.5119	.4260	.0777	.3122	.0827	.3491	.0528	.0939	.4350	.1793
#1	.5045	79.70	4.010	3.986	3.959	79.25	3.968	3.972	3.952	3.995
#2	.5068	80.38	4.005	3.965	3.963	79.75	3.964	3.968	3.970	4.004
#3	.5016	80.13	4.010	3.987	3.966	79.71	3.965	3.965	3.936	3.990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	79.14	80.30	80.06	3.964	3.991	80.27	3.972	4.021	4.014	4.003
Stddev	.09	.14	.23	.026	.004	.39	.005	.013	.004	.008
%RSD	.1167	.1691	.2863	.6668	.1120	.4797	.1168	.3285	.1061	.1908
#1	79.03	80.32	80.26	3.974	3.994	79.87	3.972	4.033	4.019	4.007
#2	79.19	80.16	79.81	3.984	3.993	80.64	3.977	4.007	4.010	4.007
#3	79.19	80.43	80.11	3.934	3.986	80.30	3.968	4.022	4.013	3.994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.145	3.973	3.985	3.992	3.999	3.977	3.968
Stddev	.008	.005	.006	.023	.018	.005	.005
%RSD	.1979	.1287	.1476	.5676	.4557	.1226	.1249
#1	4.152	3.968	3.979	4.001	4.019	3.980	3.963
#2	4.148	3.978	3.990	4.008	3.984	3.979	3.970
#3	4.136	3.973	3.986	3.966	3.993	3.971	3.972
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/7/2018 9:28:56 Type: QC
Method: 60102007_041712(v200) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	701.84	2046.1	20127.	1919.7
Stddev	1.37	.6	80.	5.1
%RSD	.19549	.03051	.39859	.26712
#1	700.27	2045.4	20117.	1918.3
#2	702.82	2046.2	20053.	1925.4
#3	702.43	2046.6	20212.	1915.5

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/7/2018 9:35:49 Type: QC
Method: 60102007_041712(v200) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2323	40.64	1.962	1.990	2.020	39.71	1.994	2.017	1.995	1.992
Stddev	.0006	.24	.001	.004	.005	.19	.004	.004	.007	.004
%RSD	.2481	.5786	.0493	.2214	.2341	.4829	.2057	.2129	.3714	.2026
#1	.2324	40.89	1.961	1.995	2.025	39.92	1.996	2.021	1.995	1.996
#2	.2316	40.62	1.962	1.986	2.016	39.67	1.989	2.012	1.987	1.992
#3	.2327	40.42	1.963	1.989	2.018	39.55	1.996	2.019	2.002	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.11	39.11	40.06	1.979	1.869	38.89	2.016	1.954	1.977	1.975
Stddev	.11	.14	.09	.006	.005	.17	.003	.004	.005	.010
%RSD	.2921	.3706	.2302	.2856	.2749	.4432	.1557	.2311	.2339	.5145
#1	39.23	39.27	40.16	1.979	1.868	39.09	2.018	1.959	1.975	1.969
#2	39.01	38.99	39.99	1.974	1.864	38.81	2.012	1.951	1.973	1.969
#3	39.08	39.07	40.02	1.985	1.874	38.78	2.017	1.952	1.982	1.987
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0537	2.004	1.945	1.974	2.029	1.896	2.001
Stddev	.0004	.003	.006	.002	.005	.003	.007
%RSD	.7743	.1655	.2897	.0963	.2346	.1785	.3376
#1	.0540	2.008	1.952	1.975	2.032	1.896	2.007
#2	.0532	2.001	1.941	1.972	2.023	1.893	1.994
#3	.0539	2.003	1.943	1.976	2.031	1.900	2.002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/7/2018 9:35:49 Type: QC
Method: 60102007_041712(v200) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	750.94	2105.3	20426.	1939.1
Stddev	1.63	3.6	64.	5.2
%RSD	.21727	.16994	.31382	.26972
#1	750.16	2104.4	20403.	1935.8
#2	752.82	2109.3	20499.	1936.3
#3	749.85	2102.3	20377.	1945.1

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/7/2018 9:48:55 Type: QC
Method: 60102007_041712(v200) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0063	-.0010	.0003	.0000	-.0016	.0001	.0001	.0000	.0004
Stddev	.0004	.0034	.0007	.0001	.000	.0028	.0000	.0001	.000	.0001
%RSD	237.8	54.55	67.59	25.79	178.3	180.5	45.99	67.51	201.8	30.18
#1	.0001	.0033	-.0002	.0003	-.0001	.0016	.0000	.0003	-.0001	.0003
#2	-.0002	.0056	-.0015	.0003	.0000	-.0026	.0001	.0001	-.0001	.0005
#3	.0007	.0100	-.0012	.0002	.0000	-.0037	.0001	.0001	.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	-.0007	.0113	.0001	-.0002	-.0012	.0002	.0002	.0009	.0012
Stddev	.0021	.0096	.0232	.0000	.0001	.0048	.0002	.0003	.0012	.0010
%RSD	156.2	1328.	204.6	18.86	47.33	404.1	128.1	170.2	131.9	83.07
#1	.0026	-.0103	.0379	.0001	-.0002	.0020	.0004	-.0001	.0018	.0009
#2	.0026	.0089	.0013	.0001	-.0001	-.0067	.0002	.0005	.0015	.0023
#3	-.0011	-.0008	-.0052	.0001	-.0002	.0011	.0000	.0001	-.0005	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	-.0001	.0001	.0001	.0003	-.0001	.0004
Stddev	.0010	.0002	.0001	.0001	.0010	.0002	.0001
%RSD	146.1	142.6	56.86	127.7	329.3	124.1	24.03
#1	.0006	.0000	.0000	.0000	.0005	.0000	.0003
#2	.0017	-.0001	.0002	.0000	-.0008	-.0001	.0004
#3	-.0003	-.0003	.0002	.0003	.0012	-.0003	.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/7/2018 9:48:55 Type: QC
Method: 60102007_041712(v200) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	858.36	2205.9	21410.	1952.3
Stddev	.94	1.4	86.	10.7
%RSD	.10909	.06488	.40198	.54816
#1	857.36	2204.4	21356.	1950.8
#2	859.22	2205.9	21364.	1942.5
#3	858.51	2207.3	21509.	1963.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/7/2018 9:56:54 Type: QC
Method: 60102007_041712(v200) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0086	.2019	.0085	.1967	.0049	.9916	.0052	.0512	.0100	.0251
Stddev	.0003	.0048	.0011	.0015	.0000	.0049	.0001	.0002	.0005	.0001
%RSD	3.796	2.376	12.73	.7625	.7685	.4963	1.274	.3798	4.710	.5554
#1	.0090	.2060	.0096	.1960	.0049	.9859	.0052	.0513	.0105	.0251
#2	.0085	.2032	.0074	.1984	.0049	.9944	.0052	.0512	.0095	.0252
#3	.0084	.1966	.0084	.1957	.0048	.9945	.0051	.0510	.0101	.0249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2989	9.486	4.832	.0154	.0464	9.451	.0420	.0047	.0043	.0118
Stddev	.0052	.029	.008	.0001	.0000	.022	.0001	.0005	.0011	.0017
%RSD	1.750	.3108	.1693	.7088	.0753	.2383	.3044	9.605	24.87	14.77
#1	.3049	9.485	4.841	.0154	.0463	9.463	.0419	.0052	.0056	.0118
#2	.2955	9.516	4.824	.0155	.0463	9.464	.0421	.0045	.0040	.0135
#3	.2963	9.457	4.830	.0153	.0464	9.425	.0419	.0044	.0035	.0100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078	.0512	.0097	.0095	.0106	.0474	.0205
Stddev	.0003	.0002	.0001	.0001	.0012	.0004	.0001
%RSD	3.825	.4510	.5711	.6448	11.66	.8075	.4316
#1	.0080	.0513	.0097	.0095	.0119	.0472	.0204
#2	.0074	.0514	.0096	.0095	.0094	.0479	.0206
#3	.0079	.0509	.0097	.0094	.0104	.0472	.0205
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/7/2018 9:56:54 Type: QC
Method: 60102007_041712(v200) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	831.42	2173.4	21040.	1966.2
Stddev	1.15	2.6	72.	6.9
%RSD	.13781	.12078	.34319	.35239
#1	830.21	2174.8	21053.	1968.8
#2	831.58	2170.4	20963.	1971.4
#3	832.48	2175.0	21105.	1958.3

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/7/2018 10:10:23 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	496.4	-.0013	.0005	-.0001	450.3	.0000	.0000	-.0006	.0000
Stddev	.0001	.8	.0020	.0002	.0000	.8	.0001	.0002	.0003	.0001
%RSD	18.50	.1558	155.4	45.12	36.49	.1859	684.4	641.6	48.25	351.0
#1	.0008	497.3	-.0035	.0003	-.0001	450.7	-.0001	-.0001	-.0003	.0001
#2	.0009	495.7	-.0005	.0004	-.0001	449.4	.0000	.0002	-.0006	-.0001
#3	.0006	496.3	.0002	.0007	-.0001	450.9	.0001	.0000	-.0009	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	176.8	.0160	506.0	.0001	.0004	.1306	.0000	-.0002	-.0005	.0001
Stddev	.1	.0124	.3	.0001	.0002	.0059	.0004	.0011	.0035	.0049
%RSD	.0728	78.00	.0566	137.3	50.31	4.489	2643.	465.4	696.5	8735.
#1	176.9	.0061	506.3	.0000	.0002	.1281	.0005	.0006	-.0041	.0053
#2	176.7	.0299	505.8	.0002	.0003	.1373	-.0004	-.0015	-.0004	-.0044
#3	176.8	.0118	505.9	.0000	.0006	.1264	-.0001	.0002	.0030	-.0007
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0172	.0007	.0008	.0017	-.0001	.0005	-.0020
Stddev	.0007	.0007	.0000	.0000	.0027	.0004	.0002
%RSD	4.247	106.2	.9938	1.692	1950.	70.30	9.877
#1	.0177	.0009	.0008	.0017	.0028	.0008	-.0022
#2	.0174	-.0001	.0008	.0017	-.0006	.0001	-.0018
#3	.0163	.0012	.0008	.0016	-.0026	.0005	-.0020
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/7/2018 10:10:23 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	655.65	1900.1	18670.	1914.8
Stddev	1.67	1.7	41.	5.9
%RSD	.25472	.08836	.21904	.31002
#1	655.15	1901.4	18686.	1921.1
#2	654.29	1900.7	18701.	1913.9
#3	657.51	1898.2	18624.	1909.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/7/2018 10:16:48 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.039	503.0	1.038	.5033	.4950	454.2	.9306	.4771	.4818	.5504
Stddev	.004	1.1	.004	.0020	.0011	2.2	.0002	.0007	.0018	.0020
%RSD	.4064	.2134	.4183	.4024	.2291	.4758	.0211	.1465	.3640	.3724
#1	1.034	503.3	1.037	.5055	.4963	454.5	.9308	.4771	.4823	.5527
#2	1.041	503.9	1.034	.5016	.4945	456.2	.9306	.4765	.4799	.5489
#3	1.042	501.8	1.042	.5027	.4942	451.9	.9305	.4779	.4833	.5496
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	174.2	-.0006	506.5	.4976	.8727	.1238	.9573	.9444	.9774	.9374
Stddev	.7	.0235	2.7	.0007	.0003	.0110	.0022	.0019	.0031	.0091
%RSD	.3786	4148.	.5264	.1360	.0378	8.866	.2293	.1964	.3149	.9700
#1	174.4	-.0159	507.6	.4974	.8724	.1280	.9598	.9433	.9809	.9369
#2	174.7	-.0122	508.4	.4971	.8731	.1114	.9565	.9465	.9761	.9285
#3	173.4	.0265	503.4	.4984	.8726	.1321	.9557	.9434	.9752	.9467
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1045	.8961	.9335	.9512	.8946	.4738	.9273
Stddev	.0015	.0034	.0009	.0018	.0019	.0008	.0008
%RSD	1.435	.3780	.1006	.1899	.2161	.1673	.0892
#1	.1062	.8997	.9344	.9507	.8925	.4736	.9280
#2	.1034	.8958	.9325	.9497	.8962	.4747	.9264
#3	.1039	.8930	.9335	.9532	.8952	.4732	.9276
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/7/2018 10:16:48 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	648.99	1915.3	18509.	1903.2
Stddev	.46	4.4	7.	15.3
%RSD	.07016	.22719	.03600	.80249
#1	649.48	1910.7	18514.	1900.0
#2	648.92	1919.3	18501.	1889.9
#3	648.57	1916.1	18512.	1919.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 10:23:26 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2526	39.10	2.013	1.975	1.996	39.44	2.025	2.030	2.007	2.022
Stddev	.0018	.15	.001	.005	.006	.17	.002	.003	.008	.004
%RSD	.6990	.3778	.0511	.2609	.3167	.4227	.0805	.1467	.3850	.1903
#1	.2507	39.03	2.012	1.977	1.999	39.51	2.023	2.027	1.998	2.020
#2	.2530	39.27	2.013	1.978	2.000	39.56	2.026	2.030	2.010	2.020
#3	.2542	39.00	2.014	1.969	1.989	39.25	2.026	2.032	2.012	2.027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.39	39.26	39.77	2.081	2.076	39.31	2.067	1.983	2.024	2.035
Stddev	.14	.12	.30	.012	.003	.09	.003	.004	.005	.001
%RSD	.3372	.2987	.7476	.5944	.1251	.2375	.1532	.1813	.2619	.0577
#1	40.46	39.30	40.09	2.068	2.075	39.32	2.068	1.981	2.030	2.033
#2	40.48	39.35	39.72	2.082	2.075	39.40	2.064	1.981	2.022	2.036
#3	40.24	39.13	39.50	2.092	2.079	39.21	2.070	1.987	2.020	2.034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.807	2.097	2.006	2.066	2.014	2.061	2.032
Stddev	.002	.004	.002	.010	.006	.001	.003
%RSD	.1048	.1793	.1213	.5044	.3140	.0679	.1500
#1	1.809	2.095	2.007	2.057	2.007	2.060	2.029
#2	1.807	2.095	2.008	2.065	2.019	2.062	2.032
#3	1.806	2.102	2.003	2.077	2.016	2.060	2.035
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 10:23:26 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	743.65	2081.7	20306.	1951.8
Stddev	1.32	.7	75.	6.3
%RSD	.17747	.03399	.36835	.32108
#1	745.04	2082.5	20385.	1948.7
#2	743.49	2081.4	20299.	1947.6
#3	742.41	2081.1	20235.	1959.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 10:31:52 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0161	-.0012	-.0001	.0001	.0054	.0001	.0000	-.0001
Stddev	.0002	.0133	.0009	.0001	.0000	.0014	.0000	.0001	.0002
%RSD	116.0	82.87	72.80	119.2	19.12	25.09	37.76	857.7	277.2
#1	-.0001	.0270	-.0022	-.0002	.0001	.0042	.0001	.0001	-.0001
#2	.0000	.0199	-.0004	.0000	.0001	.0052	.0001	-.0001	.0002
#3	-.0003	.0013	-.0011	-.0001	.0001	.0068	.0001	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0064	.0006	-.0499	.0001	.0007	.0079	.0001	.0003
Stddev	.0001	.0011	.0291	.0171	.0000	.0003	.0019	.0001	.0002
%RSD	78.46	16.40	5248.	34.23	57.65	46.26	23.97	117.3	74.51
#1	.0001	.0074	.0238	-.0438	.0000	.0010	.0078	.0000	.0001
#2	.0003	.0053	-.0320	-.0367	.0001	.0007	.0061	.0002	.0005
#3	.0001	.0065	.0099	-.0692	.0001	.0004	.0099	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F.0023	.0006	.0002	.0002	.0004	.0005	-.0003	.0003
Stddev	.0011	.0024	.0007	.0001	.0001	.0000	.0009	.0002	.0001
%RSD	556.1	103.7	120.5	65.79	57.53	8.457	194.6	47.41	47.06
#1	-.0008	.0010	.0014	.0002	.0001	.0003	.0006	-.0005	.0002
#2	.0014	.0051	.0006	.0004	.0001	.0004	.0014	-.0002	.0003
#3	.0000	.0008	-.0001	.0001	.0003	.0003	-.0005	-.0003	.0004
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 10:31:52 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	850.87	2175.7	21237.	1979.3
Stddev	2.60	3.6	41.	3.6
%RSD	.30511	.16776	.19282	.18302
#1	849.48	2177.1	21283.	1983.4
#2	849.26	2171.5	21219.	1976.9
#3	853.86	2178.3	21208.	1977.5

Zoom In Zoom Out

Sample Name: MP33700-MB1 Acquired: 5/7/2018 10:36:59 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0391	-.0022	.0002	-.0001	.0341	.0000	-.0002	-.0001	.0000
Stddev	.0006	.0061	.0008	.0002	.0000	.0033	.000	.0001	.0002	.000
%RSD	998.3	15.69	36.36	110.4	60.34	9.587	314.4	52.17	198.4	841.3
#1	-.0002	.0400	-.0027	.0000	-.0001	.0363	-.0001	-.0003	.0001	-.0001
#2	-.0003	.0326	-.0013	.0002	-.0001	.0357	.0000	-.0001	-.0004	.0001
#3	.0007	.0447	-.0028	.0003	.0000	.0303	.0000	-.0001	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0077	.0087	.0191	.0000	.0001	.0105	-.0001	.0005	.0005	.0037
Stddev	.0025	.0106	.0176	.0001	.0001	.0030	.0003	.0010	.0002	.0028
%RSD	32.11	121.6	92.41	198.6	144.7	28.85	459.1	179.3	36.82	75.75
#1	.0105	.0210	.0375	.0000	.0001	.0112	-.0002	.0004	.0006	.0055
#2	.0069	.0034	.0173	.0000	.0002	.0072	.0003	.0016	.0007	.0051
#3	.0058	.0018	.0024	.0001	-.0001	.0131	-.0003	-.0004	.0003	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0316	.0003	.0001	.0001	-.0001	-.0002	.0014
Stddev	.0007	.0001	.0001	.0001	.0008	.0002	.0000
%RSD	2.281	43.22	80.52	127.1	575.7	66.85	1.223
#1	.0317	.0004	.0001	.0001	.0008	-.0001	.0014
#2	.0323	.0002	.0001	.0000	-.0005	-.0003	.0014
#3	.0309	.0005	.0000	.0001	-.0006	-.0004	.0014
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33700-MB1 Acquired: 5/7/2018 10:36:59 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	856.87	2181.4	21390.	1976.9
Stddev	.50	4.8	78.	10.9
%RSD	.05878	.21966	.36489	.55032
#1	857.03	2178.2	21475.	1974.1
#2	856.31	2179.2	21374.	1988.9
#3	857.28	2186.9	21321.	1967.7

Zoom In Zoom Out

Sample Name: MP33700-B1 Acquired: 5/7/2018 10:41:18 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0510	25.78	1.941	1.985	.0506	24.17	.0495	.5071	.2038	.2541
Stddev	.0003	.05	.006	.009	.0001	.09	.0002	.0002	.0017	.0012
%RSD	.6068	.2088	.2993	.4728	.1139	.3915	.3037	.0382	.8261	.4703
#1	.0513	25.77	1.948	1.995	.0506	24.15	.0493	.5073	.2033	.2553
#2	.0510	25.74	1.939	1.982	.0506	24.09	.0495	.5070	.2057	.2539
#3	.0506	25.84	1.937	1.977	.0505	24.28	.0496	.5069	.2025	.2529
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.62	23.64	23.84	.5168	.4775	23.80	.5242	.4739	.4967	1.922
Stddev	.09	.06	.07	.0020	.0007	.04	.0006	.0008	.0019	.007
%RSD	.3515	.2413	.2860	.3889	.1462	.1763	.1239	.1715	.3751	.3716
#1	25.55	23.70	23.76	.5168	.4774	23.85	.5248	.4734	.4965	1.928
#2	25.59	23.64	23.87	.5188	.4768	23.76	.5235	.4749	.4950	1.914
#3	25.73	23.58	23.89	.5148	.4782	23.81	.5244	.4736	.4987	1.924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1671	.4921	.4908	.5010	1.882	.4814	.4959
Stddev	.0006	.0015	.0021	.0022	.007	.0010	.0008
%RSD	.3797	.2948	.4262	.4445	.3767	.2072	.1609
#1	.1678	.4932	.4928	.5021	1.889	.4816	.4968
#2	.1666	.4905	.4886	.5025	1.875	.4823	.4952
#3	.1669	.4927	.4909	.4984	1.881	.4803	.4958
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33700-B1 Acquired: 5/7/2018 10:41:18 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	784.06	2108.8	20542.	1962.2
Stddev	1.65	4.3	48.	3.9
%RSD	.21075	.20514	.23170	.20020
#1	782.64	2105.6	20518.	1963.5
#2	785.87	2113.7	20512.	1965.3
#3	783.68	2107.1	20597.	1957.8

◀ Zoom In ▶
Zoom Out

Sample Name: FA53992-1 Acquired: 5/7/2018 10:45:18 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	5.006	-.0026	.0127	-.0001	28.91	-.0001	.0018	.0051	.0150
Stddev	.0001	.043	.0028	.0001	.0001	.22	.0000	.0001	.0004	.0001
%RSD	22.00	.8603	104.1	1.115	92.64	.7557	13.64	4.673	7.714	.7034
#1	-.0002	4.997	.0003	.0127	-.0001	28.74	-.0001	.0018	.0049	.0149
#2	-.0003	4.968	-.0030	.0126	-.0002	28.84	-.0001	.0017	.0056	.0151
#3	-.0003	5.053	-.0052	.0129	.0000	29.16	-.0001	.0018	.0049	.0152

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.853	4.954	10.72	.0935	-.0004	28.48	.0022	.0030	.0009	.0054
Stddev	.021	.035	.09	.0004	.0002	.08	.0003	.0003	.0008	.0032
%RSD	.3625	.7100	.8353	.4638	45.77	.2956	14.81	10.48	87.54	59.93
#1	5.851	4.917	10.63	.0933	-.0003	28.48	.0019	.0027	.0009	.0064
#2	5.833	4.959	10.71	.0931	-.0006	28.39	.0023	.0031	.0001	.0018
#3	5.875	4.987	10.81	.0940	-.0003	28.56	.0026	.0033	.0018	.0080

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.727	.0004	.0673	.1299	.0003	.0128	.0111
Stddev	.021	.0003	.0003	.0005	.0014	.0002	.0001
%RSD	.3140	62.19	.3948	.3765	434.0	1.570	.8824
#1	6.742	.0001	.0672	.1295	.0019	.0128	.0112
#2	6.735	.0006	.0672	.1296	-.0007	.0126	.0112
#3	6.703	.0004	.0677	.1304	-.0003	.0130	.0110

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	800.43	2151.1	20864.	1983.8
Stddev	1.06	8.3	20.	12.9
%RSD	.13248	.38651	.09792	.65188
#1	801.53	2143.5	20880.	1992.3
#2	799.42	2149.8	20871.	1990.3
#3	800.33	2159.9	20841.	1969.0

◀ Zoom In ▶
Zoom Out

Sample Name: MP33700-D1 Acquired: 5/7/2018 10:49:30 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	5.121	-.0027	.0131	-.0001	29.32	-.0002	.0017	.0048	.0151
Stddev	.0003	.017	.0003	.0000	.0000	.09	.0001	.0001	.0005	.0004
%RSD	408.7	.3236	10.95	.2980	44.21	.2984	51.64	5.308	11.09	2.368
#1	.0000	5.116	-.0029	.0132	.0000	29.40	-.0001	.0016	.0050	.0147
#2	-.0004	5.140	-.0029	.0131	-.0001	29.34	-.0003	.0018	.0052	.0154
#3	.0002	5.108	-.0024	.0131	-.0001	29.23	-.0001	.0017	.0042	.0152

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.925	5.000	10.84	.0946	-.0008	28.78	.0023	.0031	.0011	.0047
Stddev	.035	.009	.04	.0011	.0001	.15	.0002	.0003	.0004	.0012
%RSD	.5981	.1731	.3443	1.112	7.605	.5305	6.920	10.57	41.11	24.82
#1	5.931	4.991	10.80	.0938	-.0008	28.86	.0022	.0028	.0015	.0061
#2	5.957	5.001	10.84	.0958	-.0007	28.87	.0025	.0031	.0006	.0039
#3	5.887	5.008	10.88	.0942	-.0008	28.60	.0022	.0035	.0011	.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.830	.0001	.0680	.1307	-.0006	.0129	.0116
Stddev	.001	.0002	.0003	.0005	.0003	.0002	.0001
%RSD	.0163	351.0	.4232	.3881	53.27	1.911	.5064
#1	6.829	-.0001	.0683	.1303	-.0004	.0128	.0116
#2	6.831	.0000	.0680	.1313	-.0010	.0127	.0116
#3	6.830	.0003	.0678	.1306	-.0004	.0131	.0117

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	803.23	2151.6	20802.	1974.5
Stddev	2.70	2.7	104.	1.3
%RSD	.33615	.12375	.49957	.06823
#1	802.18	2149.5	20896.	1975.8
#2	801.21	2150.6	20690.	1974.6
#3	806.30	2154.6	20820.	1973.1

◀ Zoom In ▶
Zoom Out

Sample Name: MP33700-SD1 Acquired: 5/7/2018 10:53:44 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	5.103	-.0068	.0128	-.0008	29.76	-.0004	.0015	.0041	.0158
Stddev	.0030	.042	.0098	.0015	.0004	.22	.0001	.0006	.0018	.0011
%RSD	1021.	.8238	145.1	11.45	52.39	.7474	13.14	39.08	44.16	7.112
#1	-.0036	5.120	-.0038	.0133	-.0012	29.76	-.0005	.0017	.0031	.0145
#2	.0020	5.055	.0012	.0112	-.0005	29.54	-.0004	.0019	.0061	.0166
#3	.0008	5.134	-.0178	.0140	-.0006	29.98	-.0004	.0008	.0030	.0162

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.942	5.045	10.77	.0956	-.0050	28.78	.0041	.0039	-.0033	.0070
Stddev	.058	.036	.18	.0011	.0007	.26	.0015	.0065	.0007	.0120
%RSD	.9717	.7228	1.674	1.132	13.48	.9185	37.09	164.4	21.72	171.5
#1	5.956	5.012	10.63	.0947	-.0053	28.83	.0058	-.0023	-.0026	-.0068
#2	5.879	5.084	10.72	.0968	-.0055	28.49	.0031	.0034	-.0040	.0155
#3	5.993	5.039	10.97	.0954	-.0042	29.02	.0034	.0107	-.0034	.0124

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.833	-.0021	.0678	.1292	-.0001	.0128	.0121
Stddev	.019	.0019	.0005	.0023	.0037	.0015	.0009
%RSD	.2809	90.48	.7444	1.748	3835.	11.59	7.663
#1	6.852	-.0014	.0684	.1266	-.0021	.0135	.0122
#2	6.814	-.0007	.0674	.1308	.0042	.0112	.0111
#3	6.833	-.0043	.0676	.1303	-.0024	.0139	.0130

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	840.62	2196.9	21170.	1972.7
Stddev	.38	1.9	53.	4.6
%RSD	.04463	.08554	.25057	.23105
#1	840.25	2194.8	21220.	1968.6
#2	840.61	2198.1	21114.	1977.6
#3	841.00	2197.9	21176.	1971.9

◀ Zoom In ▶
Zoom Out

Sample Name: MP33700-PS1 Acquired: 5/7/2018 10:58:00 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0461	7.427	.1001	.2599	.0504	33.67	.0487	.0515	.0556	.1160
Stddev	.0002	.032	.0014	.0013	.0002	.16	.0001	.0003	.0001	.0006
%RSD	.4315	.4283	1.376	.5134	.4857	.4857	.2046	.5027	.2107	.4795
#1	.0463	7.462	.0993	.2612	.0505	33.75	.0487	.0517	.0555	.1166
#2	.0459	7.418	.0993	.2600	.0506	33.78	.0488	.0515	.0557	.1158
#3	.0461	7.401	.1017	.2585	.0501	33.48	.0486	.0512	.0557	.1155

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.701	14.42	15.50	.1430	.0936	37.71	.1035	.0499	.0989	.0977
Stddev	.038	.08	.08	.0006	.0003	.19	.0005	.0004	.0016	.0004
%RSD	.4376	.5747	.4845	.4193	.3067	.4978	.4632	.7515	1.610	.3841
#1	8.738	14.46	15.54	.1436	.0940	37.76	.1037	.0502	.1004	.0973
#2	8.702	14.48	15.54	.1431	.0935	37.87	.1038	.0501	.0972	.0978
#3	8.662	14.33	15.41	.1424	.0935	37.50	.1029	.0495	.0992	.0980

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.669	.0483	.1164	.2310	.0936	.0607	.2542
Stddev	.012	.0006	.0008	.0015	.0011	.0004	.0002
%RSD	.1806	1.289	.7264	.6706	1.203	.6964	.0826
#1	6.677	.0486	.1168	.2325	.0923	.0612	.2543
#2	6.675	.0476	.1170	.2312	.0942	.0606	.2539
#3	6.655	.0487	.1154	.2294	.0944	.0604	.2542

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	786.69	2138.4	20614.	1958.1
Stddev	2.63	4.6	90.	14.9
%RSD	.33482	.21366	.43866	.76310
#1	784.22	2134.4	20530.	1940.8
#2	786.38	2137.3	20602.	1965.9
#3	789.46	2143.4	20709.	1967.5

◄ Zoom In ►
Zoom Out

Sample Name: MP33700-S1 Acquired: 5/7/2018 11:02:07 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0501	34.33	1.902	1.978	.0504	52.67	.0479	.4937	.2091	.2695
Stddev	.0001	.12	.002	.002	.0001	.13	.0002	.0005	.0009	.0009
%RSD	.2438	.3543	.1014	.1176	.2495	.2443	.3351	.0956	.4078	.3260
#1	.0502	34.42	1.901	1.978	.0505	52.80	.0478	.4941	.2100	.2689
#2	.0500	34.38	1.904	1.975	.0504	52.54	.0478	.4938	.2088	.2705
#3	.0502	34.19	1.901	1.980	.0503	52.68	.0481	.4932	.2083	.2692

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	31.38	28.61	34.45	.6026	.4623	52.40	.5060	.4756	.4844	1.876
Stddev	.04	.09	.01	.0029	.0006	.25	.0008	.0015	.0043	.007
%RSD	.1260	.3160	.0201	.4832	.1331	.4812	.1578	.3206	.8863	.3952
#1	31.39	28.70	34.46	.6037	.4621	52.69	.5051	.4768	.4795	1.876
#2	31.34	28.52	34.45	.6048	.4619	52.31	.5063	.4762	.4876	1.884
#3	31.42	28.61	34.46	.5993	.4630	52.21	.5066	.4739	.4860	1.869

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.890	.4680	.5561	.6292	1.863	.4863	.4931
Stddev	.012	.0010	.0019	.0027	.003	.0013	.0010
%RSD	.1173	.2144	.3370	.4227	.1377	.2750	.2026
#1	9.876	.4668	.5583	.6291	1.860	.4873	.4923
#2	9.898	.4686	.5548	.6319	1.862	.4848	.4942
#3	9.895	.4685	.5553	.6266	1.865	.4867	.4927

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	760.79	2118.8	20232.	1959.7
Stddev	1.46	.7	56.	7.3
%RSD	.19162	.03451	.27604	.37319
#1	759.12	2119.0	20173.	1951.3
#2	761.81	2118.0	20237.	1963.1
#3	761.43	2119.4	20284.	1964.7

◄ Zoom In ►
Zoom Out

Sample Name: MP33700-S2 Acquired: 5/7/2018 11:06:06 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0511	34.19	1.916	1.964	.0503	52.82	.0480	.4963	.2063	.2691
Stddev	.0004	.06	.005	.008	.0001	.18	.0001	.0015	.0001	.0004
%RSD	.8222	.1854	.2492	.3880	.1457	.3345	.1507	.3059	.0456	.1478
#1	.0512	34.18	1.921	1.966	.0503	52.62	.0480	.4968	.2063	.2687
#2	.0506	34.26	1.912	1.970	.0503	52.95	.0480	.4946	.2065	.2694
#3	.0514	34.13	1.914	1.956	.0502	52.89	.0481	.4976	.2063	.2693

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	31.40	28.52	34.43	.6036	.4664	52.42	.5117	.4755	.4845	1.893
Stddev	.11	.10	.15	.0022	.0011	.17	.0014	.0024	.0025	.003
%RSD	.3517	.3371	.4264	.3621	.2283	.3202	.2690	.5087	.5112	.1455
#1	31.27	28.47	34.28	.6039	.4665	52.37	.5102	.4738	.4827	1.890
#2	31.49	28.63	34.45	.6013	.4654	52.61	.5119	.4782	.4834	1.893
#3	31.43	28.45	34.57	.6056	.4675	52.29	.5129	.4743	.4873	1.896

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.10	.4740	.5545	.6316	1.868	.4891	.4952
Stddev	.03	.0018	.0018	.0016	.003	.0004	.0008
%RSD	.2845	.3782	.3257	.2489	.1643	.0729	.1612
#1	10.10	.4723	.5538	.6305	1.865	.4889	.4944
#2	10.08	.4739	.5565	.6308	1.868	.4888	.4953
#3	10.13	.4759	.5531	.6334	1.871	.4895	.4960

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	760.90	2112.9	20449.	1969.6
Stddev	.91	4.6	84.	12.0
%RSD	.11958	.21731	.41224	.60813
#1	761.40	2109.4	20493.	1977.6
#2	759.85	2118.1	20501.	1975.4
#3	761.45	2111.2	20352.	1955.8

◄ Zoom In ►
Zoom Out

Sample Name: FA53992-2 Acquired: 5/7/2018 11:10:05 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.6812	-.0013	.0125	-.0001	24.87	-.0001	.0008	.0004	.0234
Stddev	.0003	.0120	.0013	.0001	.0001	.10	.0001	.0001	.0005	.0002
%RSD	2255.	1.768	101.6	.5818	59.90	.3829	135.3	14.17	117.1	.6668
#1	-.0003	.6746	-.0004	.0124	-.0001	24.97	.0000	.0007	.0007	.0233
#2	.0002	.6951	-.0006	.0125	-.0002	24.84	.0000	.0009	.0007	.0236
#3	.0002	.6740	-.0028	.0125	-.0001	24.79	-.0002	.0009	-.0001	.0234

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5032	3.609	6.653	.0783	-.0005	10.37	.0003	.0008	.0016	.0060
Stddev	.0056	.018	.054	.0001	.0001	.07	.0001	.0005	.0011	.0022
%RSD	1.103	.4930	.8064	.1826	13.61	.6617	46.37	62.00	71.46	36.93
#1	.5096	3.630	6.593	.0782	-.0004	10.44	.0003	.0013	.0029	.0044
#2	.5001	3.603	6.671	.0784	-.0005	10.35	.0003	.0008	.0010	.0085
#3	.5000	3.596	6.696	.0783	-.0005	10.31	.0001	.0003	.0008	.0050

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.707	-.0003	.0461	.0081	.0013	.0014	.0048
Stddev	.004	.0003	.0004	.0001	.0008	.0001	.0001
%RSD	.2497	104.7	.8803	1.734	58.88	6.025	1.897
#1	1.712	-.0005	.0465	.0080	.0017	.0014	.0048
#2	1.703	.0001	.0460	.0083	.0018	.0013	.0049
#3	1.706	-.0005	.0457	.0081	.0004	.0015	.0048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	822.49	2150.9	21162.	1972.8
Stddev	.52	9.2	45.	10.7
%RSD	.06331	.42574	.21436	.54329
#1	822.89	2140.8	21175.	1960.4
#2	821.90	2153.0	21112.	1978.7
#3	822.68	2158.8	21200.	1979.3

◄ Zoom In ►
Zoom Out

Sample Name: FA53992-3 Acquired: 5/7/2018 11:14:19 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.4830	-.0017	.0049	-.0001	27.02	.0000	-.0001	.0007	.0023
Stddev	.0005	.0091	.0016	.0002	.0001	.16	.0001	.0001	.0002	.0001
%RSD	1714.	1.889	92.48	4.421	77.15	.6080	3438.	63.08	34.52	5.229
#1	.0007	.4925	-.0035	.0047	-.0001	26.85	.0000	.0000	.0008	.0022
#2	-.0003	.4822	-.0004	.0048	.0000	27.03	.0002	-.0001	.0008	.0024
#3	-.0003	.4743	-.0013	.0051	-.0002	27.17	-.0001	-.0002	.0004	.0022

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.4103	1.240	2.313	.0075	-.0007	3.049	.0003	.0015	.0043	.0045
Stddev	.0084	.002	.051	.0001	.0001	.020	.0001	.0012	.0008	.0014
%RSD	2.053	.1774	2.190	.7393	16.90	.6398	23.18	77.98	19.75	32.05
#1	.4097	1.238	2.257	.0075	-.0006	3.027	.0003	.0008	.0034	.0037
#2	.4191	1.242	2.355	.0074	-.0006	3.065	.0004	.0028	.0051	.0035
#3	.4023	1.241	2.328	.0074	-.0008	3.054	.0003	.0008	.0043	.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.266	-.0003	.0507	.0101	.0006	.0009	.0055
Stddev	.004	.0002	.0005	.0001	.0009	.0003	.0000
%RSD	.3137	67.65	.9885	1.359	155.5	34.30	.7703
#1	1.269	-.0005	.0502	.0103	.0012	.0006	.0054
#2	1.261	-.0001	.0512	.0100	.0009	.0012	.0055
#3	1.267	-.0004	.0506	.0100	-.0004	.0010	.0055

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	830.36	2159.6	20971.	1957.3
Stddev	.22	4.1	153.	6.1
%RSD	.02590	.18828	.72987	.30964
#1	830.18	2155.6	20815.	1963.4
#2	830.31	2163.7	20976.	1957.3
#3	830.60	2159.6	21121.	1951.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 11:18:35 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2545	40.61	1.995	1.991	2.047	41.06	2.042	2.039	2.076	2.043
Stddev	.0004	.14	.001	.001	.003	.05	.004	.003	.006	.010
%RSD	.1656	.3367	.0727	.0372	.1255	.1272	.1971	.1635	.3023	.4809
#1	.2545	40.48	1.993	1.990	2.045	41.07	2.039	2.037	2.083	2.046
#2	.2548	40.59	1.996	1.992	2.046	41.01	2.040	2.038	2.075	2.050
#3	.2540	40.75	1.996	1.991	2.050	41.11	2.047	2.043	2.070	2.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.34	39.98	40.59	2.116	2.073	40.48	2.047	2.026	2.009	2.012
Stddev	.01	.03	.09	.004	.004	.10	.005	.004	.002	.006
%RSD	.0247	.0730	.2208	.2012	.2107	.2546	.2265	.1780	.1190	.3075
#1	41.33	39.97	40.66	2.113	2.069	40.36	2.046	2.029	2.006	2.007
#2	41.35	39.95	40.49	2.113	2.073	40.51	2.043	2.022	2.011	2.010
#3	41.35	40.01	40.61	2.121	2.078	40.56	2.052	2.027	2.010	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.795	2.061	2.052	2.104	2.042	2.082	2.051
Stddev	.003	.005	.004	.003	.005	.005	.004
%RSD	.1734	.2352	.2104	.1172	.2599	.2188	.2143
#1	1.796	2.060	2.047	2.102	2.038	2.085	2.050
#2	1.791	2.056	2.055	2.104	2.039	2.077	2.047
#3	1.797	2.066	2.055	2.107	2.048	2.083	2.056
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 11:18:35 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	743.37	2114.7	20139.	1929.9
Stddev	1.22	5.3	31.	10.3
%RSD	.16366	.25198	.15564	.53278
#1	742.62	2118.6	20104.	1919.3
#2	744.77	2116.8	20164.	1939.8
#3	742.71	2108.6	20150.	1930.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 11:22:32 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0148	-.0004	.0005	.0001	.0048	.0002	.0002	.0000
Stddev	.000	.0129	.0003	.0001	.0001	.0055	.0001	.0001	.000
%RSD	911.3	87.16	72.95	15.69	67.71	115.5	20.58	32.85	5673.
#1	-.0006	.0286	-.0006	.0006	.0002	.0027	.0003	.0002	-.0002
#2	.0002	.0126	-.0005	.0004	.0001	.0006	.0002	.0002	.0003
#3	.0002	.0031	-.0001	.0005	.0001	.0111	.0002	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0156	.0060	-.0085	.0001	F.0025	.0255	.0003	.0003
Stddev	.000	.0048	.0069	.0412	.0000	.0008	.0067	.0001	.0005
%RSD	828.5	30.69	114.5	487.1	16.24	31.64	26.23	39.31	154.8
#1	.0001	.0206	.0116	-.0096	.0001	.0034	.0308	.0003	-.0002
#2	-.0002	.0152	-.0017	.0333	.0001	.0022	.0276	.0004	.0006
#3	.0000	.0110	.0080	-.0491	.0002	.0019	.0180	.0002	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	F.0020	.0024	.0004	.0002	.0013	.0010	.0001	.0005
Stddev	.0002	.0024	.0005	.0001	.0001	.0001	.0003	.0001	.0001
%RSD	56.05	118.9	20.88	20.46	30.97	9.637	33.79	96.75	17.67
#1	-.0004	.0045	.0030	.0003	.0002	.0014	.0007	.0002	.0005
#2	-.0004	-.0003	.0024	.0004	.0001	.0013	.0013	.0002	.0004
#3	-.0001	.0019	.0019	.0005	.0002	.0011	.0010	.0000	.0006
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 11:22:32 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	845.50	2197.2	20762.	1929.3
Stddev	1.07	8.4	68.	4.8
%RSD	.12672	.38291	.32951	.24795
#1	844.53	2192.1	20831.	1931.7
#2	845.32	2207.0	20694.	1923.8
#3	846.65	2192.7	20759.	1932.4

Zoom In Zoom Out

Sample Name: FA53992-4 Acquired: 5/7/2018 11:26:51 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.3111	-.0032	.0060	.0000	22.75	.0000	-.0001	.0008	.0019
Stddev	.0002	.0079	.0014	.0002	.000	.07	.000	.0001	.0003	.0004
%RSD	249.4	2.548	42.86	2.887	149.1	.3166	310.5	152.1	34.30	18.56
#1	-.0002	.3063	-.0044	.0059	.0000	22.67	.0000	.0000	.0011	.0022
#2	.0002	.3202	-.0017	.0062	.0000	22.79	.0001	-.0002	.0006	.0021
#3	.0003	.3066	-.0036	.0059	-.0001	22.80	-.0001	.0000	.0007	.0015

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2250	1.839	1.909	.0043	.0000	3.342	.0001	.0009	-.0006	.0050
Stddev	.0018	.008	.037	.0001	.0000	.009	.0002	.0001	.0007	.0019
%RSD	.8183	.4479	1.921	1.834	92.77	.2663	146.6	8.818	114.1	38.77
#1	.2253	1.848	1.875	.0042	.0001	3.332	.0003	.0009	-.0013	.0058
#2	.2267	1.832	1.904	.0043	.0000	3.349	-.0001	.0009	.0000	.0028
#3	.2231	1.838	1.948	.0042	.0000	3.346	.0001	.0010	-.0005	.0064

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.374	.0002	.0364	.0062	.0000	.0011	.0036
Stddev	.001	.0001	.0002	.0003	.0010	.0001	.0001
%RSD	.0687	27.27	.5273	4.587	2833.	7.417	3.435
#1	1.374	.0003	.0362	.0062	-.0010	.0012	.0036
#2	1.375	.0003	.0364	.0065	.0009	.0010	.0037
#3	1.374	.0002	.0365	.0060	.0002	.0010	.0034

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	828.60	2152.4	20623.	1932.4
Stddev	.49	2.8	82.	7.1
%RSD	.05953	.12890	.39918	.36710
#1	829.11	2154.9	20594.	1935.3
#2	828.57	2149.4	20558.	1937.6
#3	828.13	2152.9	20715.	1924.3

Zoom In Zoom Out

Sample Name: FA53992-5 Acquired: 5/7/2018 11:31:07 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.4841	-.0017	.0129	-.0001	16.99	-.0001	.0000	.0007	.0031
Stddev	.0001	.0097	.0008	.0002	.0000	.17	.0001	.000	.0001	.0003
%RSD	109.4	2.004	46.36	1.259	5.967	.9799	83.84	209.0	9.057	9.937
#1	.0000	.4843	-.0011	.0130	-.0001	17.16	-.0001	.0001	.0008	.0029
#2	.0001	.4742	-.0025	.0127	-.0001	16.82	-.0001	-.0001	.0008	.0029
#3	.0002	.4936	-.0014	.0130	-.0001	16.98	.0000	-.0001	.0007	.0034

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.4124	7.380	2.911	.0086	-.0006	3.137	.0002	.0016	.0007	.0041
Stddev	.0017	.049	.050	.0000	.0000	.040	.0001	.0003	.0018	.0024
%RSD	.4024	.6625	1.721	.4172	8.269	1.283	66.62	16.42	272.5	58.53
#1	.4132	7.435	2.870	.0086	-.0006	3.174	.0001	.0019	.0021	.0036
#2	.4136	7.341	2.967	.0085	-.0005	3.094	.0003	.0015	.0012	.0067
#3	.4105	7.365	2.895	.0086	-.0005	3.142	.0001	.0014	-.0013	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.029	.0000	.0266	.0087	-.0002	.0012	.0044
Stddev	.007	.0002	.0004	.0002	.0010	.0001	.0000
%RSD	.1778	476.1	1.333	2.520	527.5	8.633	1.014
#1	4.036	-.0001	.0268	.0090	.0000	.0011	.0045
#2	4.029	.0003	.0262	.0085	-.0013	.0013	.0045
#3	4.022	-.0001	.0268	.0088	.0007	.0011	.0044

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	829.08	2169.0	20777.	1940.9
Stddev	1.42	6.3	43.	19.3
%RSD	.17095	.28927	.20771	.99549
#1	827.49	2163.2	20745.	1919.0
#2	830.20	2168.1	20759.	1955.6
#3	829.56	2175.6	20826.	1948.1

Zoom In Zoom Out

Sample Name: FA53992-6 Acquired: 5/7/2018 11:35:24 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	4.982	-.0027	.0144	-.0001	26.13	-.0002	.0013	.0038	.0140
Stddev	.0002	.032	.0001	.0001	.0001	.05	.0001	.0001	.0003	.0003
%RSD	238.3	.6507	5.534	.5711	111.1	.1912	54.60	7.651	8.863	1.934
#1	-.0001	5.019	-.0026	.0145	-.0002	26.17	-.0003	.0014	.0037	.0138
#2	.0001	4.962	-.0026	.0143	.0000	26.15	-.0003	.0013	.0042	.0138
#3	-.0003	4.964	-.0029	.0145	-.0001	26.07	-.0001	.0012	.0035	.0143

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.773	3.836	7.164	.1017	-.0009	10.85	.0013	.0032	.0008	.0036
Stddev	.033	.017	.077	.0001	.0002	.05	.0001	.0007	.0013	.0018
%RSD	.5735	.4509	1.077	.1265	19.80	.4238	3.969	22.61	163.5	50.22
#1	5.738	3.855	7.212	.1017	-.0007	10.90	.0013	.0024	.0017	.0029
#2	5.777	3.832	7.205	.1015	-.0010	10.82	.0014	.0034	-.0007	.0057
#3	5.804	3.821	7.075	.1018	-.0008	10.83	.0014	.0037	.0015	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.623	-.0001	.0495	.1293	-.0011	.0116	.0097
Stddev	.010	.0003	.0003	.0006	.0002	.0002	.0002
%RSD	.1478	638.7	.5962	.4686	18.88	1.405	1.844
#1	6.612	.0002	.0495	.1297	-.0009	.0117	.0097
#2	6.629	.0001	.0498	.1286	-.0011	.0115	.0096
#3	6.629	-.0004	.0492	.1296	-.0014	.0115	.0099

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	810.48	2178.2	20825.	1975.4
Stddev	1.37	2.1	51.	10.6
%RSD	.16936	.09712	.24292	.53705
#1	809.33	2177.0	20814.	1980.2
#2	810.11	2176.9	20781.	1963.2
#3	812.00	2180.6	20880.	1982.7

Zoom In Zoom Out

Sample Name: FA53848-1 Acquired: 5/7/2018 11:39:37 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0889	-.0030	.0072	-.0001	34.88	-.0001	-.0002	.0096	.0112
Stddev	.0003	.0122	.0015	.0002	.0002	.04	.0001	.0001	.0003	.0003
%RSD	103.5	13.67	48.80	3.050	119.8	.1267	87.55	47.87	3.056	2.839
#1	.0000	.0940	-.0013	.0074	-.0003	34.92	.0000	-.0002	.0098	.0109
#2	-.0006	.0750	-.0036	.0071	-.0001	34.88	-.0001	-.0001	.0098	.0111
#3	-.0002	.0976	-.0040	.0070	.0000	34.83	-.0001	-.0003	.0093	.0115

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.4071	1.050	8.833	.0032	-.0011	4.504	.0063	.0022	.0004	.0039
Stddev	.0029	.020	.106	.0001	.0003	.016	.0001	.0008	.0004	.0023
%RSD	.7050	1.917	1.197	2.808	24.95	.3459	.8129	36.50	94.69	58.36
#1	.4038	1.053	8.955	.0033	-.0008	4.499	.0064	.0013	.0008	.0033
#2	.4091	1.069	8.781	.0032	-.0013	4.521	.0063	.0027	.0002	.0019
#3	.4084	1.029	8.763	.0031	-.0012	4.491	.0063	.0027	.0001	.0063

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.661	.0011	.0973	.0012	.0003	-.0003	.2902
Stddev	.004	.0005	.0001	.0000	.0003	.0000	.0004
%RSD	.1138	45.28	.1381	.8613	105.5	17.62	.1269
#1	3.665	.0008	.0972	.0012	-.0001	-.0003	.2900
#2	3.660	.0016	.0975	.0012	.0005	-.0003	.2900
#3	3.657	.0008	.0973	.0012	.0005	-.0002	.2906

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	818.55	2145.3	20570.	1933.8
Stddev	1.00	1.2	161.	8.4
%RSD	.12274	.05554	.78128	.43289
#1	819.70	2144.6	20411.	1924.3
#2	817.82	2144.6	20565.	1940.0
#3	818.13	2146.7	20733.	1937.1

◀ Zoom In ▶
Zoom Out

Sample Name: FA53848-2 Acquired: 5/7/2018 11:43:51 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0153	-.0033	.0072	-.0002	35.13	.0000	-.0002	.0096	.0278
Stddev	.0004	.0057	.0004	.0003	.0001	.08	.000	.0002	.0004	.0004
%RSD	260.1	37.46	13.26	4.368	52.59	.2157	56.95	65.08	3.880	1.326
#1	-.0001	.0100	-.0038	.0070	-.0002	35.11	.0000	-.0001	.0098	.0283
#2	.0002	.0213	-.0029	.0071	-.0002	35.07	.0000	-.0004	.0092	.0277
#3	-.0006	.0144	-.0032	.0076	-.0001	35.22	-.0001	-.0002	.0099	.0276

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0062	.9919	8.793	.0040	-.0008	4.457	.0007	.0049	-.0003	.0035
Stddev	.0012	.0339	.093	.0000	.0000	.029	.0001	.0010	.0008	.0007
%RSD	19.08	3.417	1.055	.2969	4.137	.6418	18.43	20.58	270.7	18.91
#1	.0057	1.029	8.768	.0039	-.0008	4.490	.0009	.0060	.0003	.0037
#2	.0075	.9630	8.715	.0040	-.0009	4.444	.0007	.0048	.0000	.0027
#3	.0053	.9834	8.896	.0040	-.0009	4.438	.0006	.0040	-.0012	.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.611	.0000	.0982	.0012	-.0008	-.0002	.0996
Stddev	.006	.0005	.0007	.0002	.0005	.0003	.0004
%RSD	.1553	2174.	.7027	18.76	69.85	150.0	.3714
#1	3.605	-.0002	.0990	.0013	-.0007	-.0004	.0998
#2	3.615	-.0003	.0978	.0013	-.0003	.0001	.0992
#3	3.615	.0005	.0978	.0009	-.0014	-.0003	.0998

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	812.60	2139.3	20429.	1925.6
Stddev	2.18	3.5	104.	9.5
%RSD	.26838	.16225	.50795	.49507
#1	810.22	2138.8	20324.	1929.5
#2	813.05	2136.0	20532.	1932.5
#3	814.51	2142.9	20431.	1914.7

◀ Zoom In ▶
Zoom Out

Sample Name: FA53731-2 Acquired: 5/7/2018 11:48:06 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0767	.0300	.0006	.0019	-.0001	.4358	-.0029	.0015	.0145
Stddev	.0006	.0167	.0002	.0002	.0000	.0064	.0001	.0001	.0004
%RSD	.7984	55.71	41.34	12.83	48.44	1.472	3.691	4.777	2.850
#1	.0774	.0436	.0007	.0017	-.0001	.4382	-.0029	.0014	.0149
#2	.0766	.0113	.0003	.0018	-.0001	.4407	-.0028	.0015	.0145
#3	.0762	.0351	.0007	.0022	.0000	.4285	-.0030	.0014	.0141

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0487	107.1	41.30	.1238	.3923	.0042	F130.1	.0257	.0307
Stddev	.0001	.5	.28	.0265	.0024	.0001	.7	.0001	.0001
%RSD	.1535	.4238	.6735	21.41	.6233	2.441	.5017	.2786	.3070
#1	.0488	107.4	41.45	.1531	.3951	.0043	130.7	.0256	.0307
#2	.0487	106.6	40.98	.1170	.3911	.0043	129.4	.0256	.0309
#3	.0487	107.3	41.48	.1014	.3907	.0041	130.2	.0257	.0307

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0004	.0015	.1671	.0013	.0013	.0038	-.0004	.0181	.0635
Stddev	.0006	.0014	.0010	.0003	.0001	.0001	.0009	.0002	.0001
%RSD	153.5	96.27	.5730	21.85	6.836	3.922	236.5	.9109	.1756
#1	-.0009	.0028	.1673	.0012	.0013	.0038	.0005	.0182	.0634
#2	-.0005	.0000	.1660	.0011	.0013	.0039	-.0014	.0182	.0634
#3	.0003	.0017	.1679	.0016	.0012	.0036	-.0004	.0179	.0636

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	762.69	2068.6	19403.	1883.0
Stddev	4.02	6.7	99.	8.2
%RSD	.52735	.32566	.51052	.43636
#1	759.07	2062.2	19311.	1881.1
#2	761.99	2068.0	19389.	1892.0
#3	767.02	2075.6	19508.	1875.9

◀ Zoom In ▶
Zoom Out

Sample Name: FA53839-2 Acquired: 5/7/2018 11:52:24 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0353	.0390	.0027	.0020	-.0001	1.724	-.0037	.0015	.0173
Stddev	.0004	.0036	.0011	.0002	.0001	.020	.0002	.0000	.0003
%RSD	1.145	9.237	42.17	9.622	158.1	1.160	6.052	3.259	1.907
#1	.0356	.0391	.0015	.0021	-.0001	1.701	-.0035	.0014	.0175
#2	.0349	.0353	.0037	.0018	.0000	1.730	-.0040	.0015	.0170
#3	.0356	.0425	.0029	.0021	.0000	1.739	-.0037	.0015	.0175

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0293	152.1	F133.7	.2039	.5648	.0054	F294.8	.0561	.0438
Stddev	.0004	1.3	1.1	.0455	.0040	.0003	1.3	.0002	.0012
%RSD	1.530	.8860	.8224	22.31	.7063	5.607	.4429	.3985	2.671
#1	.0288	150.6	132.5	.2369	.5607	.0050	293.7	.0561	.0429
#2	.0297	153.2	134.7	.2229	.5649	.0055	296.2	.0563	.0451
#3	.0293	152.3	133.9	.1520	.5687	.0055	294.4	.0559	.0433

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0018	.0020	.3212	.0026	.0039	.0020	.0018	.0075	.0599
Stddev	.0005	.0026	.0006	.0003	.0001	.0000	.0021	.0002	.0003
%RSD	26.62	128.7	.1891	10.79	2.159	1.577	118.7	2.098	.4612
#1	-.0020	.0036	.3218	.0027	.0038	.0020	.0006	.0074	.0602
#2	-.0013	.0034	.3206	.0022	.0038	.0020	.0005	.0074	.0597
#3	-.0023	-.0010	.3212	.0028	.0039	.0021	.0042	.0077	.0597

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	727.09	2007.9	18677.	1882.8
Stddev	2.08	3.2	53.	16.7
%RSD	.28590	.16170	.28145	.88677
#1	724.87	2004.2	18689.	1899.0
#2	728.98	2010.1	18722.	1865.7
#3	727.44	2009.5	18619.	1883.6

◀ Zoom In ▶
Zoom Out

Sample Name: MP33701-MB1 Acquired: 5/7/2018 11:56:50 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0136	-.0023	-.0001	-.0001	.0011	.0000	-.0001	-.0005	-.0002
Stddev	.0004	.0144	.0011	.0000	.0001	.0098	.000	.0002	.0002	.0001
%RSD	75.38	106.2	48.76	23.79	54.86	863.0	217.9	147.0	29.83	61.98
#1	-.0008	.0046	-.0010	-.0001	-.0002	.0082	.0000	.0000	-.0007	-.0002
#2	-.0008	.0302	-.0031	-.0001	-.0001	-.0100	-.0001	-.0004	-.0006	-.0004
#3	-.0001	.0059	-.0028	-.0001	-.0002	.0052	-.0001	.0000	-.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0205	.0611	-.0314	.0000	-.0010	.0954	-.0001	.0009	-.0008	.0023
Stddev	.0044	.0064	.0371	.000	.0000	.0097	.0002	.0005	.0008	.0006
%RSD	21.51	10.46	118.1	173.9	2.845	10.17	225.6	48.31	99.65	25.01
#1	.0247	.0587	-.0160	-.0001	-.0010	.1059	.0002	.0011	-.0011	.0025
#2	.0159	.0562	-.0045	.0000	-.0010	.0869	-.0002	.0004	.0001	.0027
#3	.0210	.0683	-.0738	.0000	-.0010	.0934	-.0003	.0013	-.0013	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0272	-.0002	.0000	-.0003	-.0008	-.0002	.0013
Stddev	.0006	.0002	.000	.0001	.0015	.0003	.0001
%RSD	2.255	99.95	55.56	38.36	198.2	154.3	5.190
#1	.0265	.0000	.0000	-.0004	-.0024	-.0003	.0013
#2	.0277	-.0005	.0000	-.0002	.0006	.0001	.0014
#3	.0274	-.0002	-.0001	-.0004	-.0006	-.0004	.0012
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33701-MB1 Acquired: 5/7/2018 11:56:50 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	838.76	2167.7	20790.	1945.7
Stddev	1.19	3.2	67.	11.8
%RSD	.14188	.14657	.32438	.60840
#1	837.57	2170.6	20712.	1959.1
#2	838.76	2164.3	20827.	1936.9
#3	839.95	2168.2	20830.	1940.9

Zoom In Zoom Out

Sample Name: MP33701-B1 Acquired: 5/7/2018 12:01:08 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0511	26.17	1.935	1.985	.0512	24.70	.0497	.5082	.2080	.2546
Stddev	.0002	.08	.005	.008	.0000	.07	.0001	.0007	.0007	.0011
%RSD	.4815	.3157	.2536	.3932	.0665	.2734	.2969	.1410	.3548	.4199
#1	.0508	26.26	1.932	1.993	.0513	24.69	.0496	.5080	.2088	.2549
#2	.0511	26.11	1.932	1.977	.0512	24.77	.0495	.5076	.2077	.2534
#3	.0513	26.13	1.940	1.983	.0513	24.63	.0498	.5090	.2075	.2555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.89	23.81	24.21	.5214	.4717	24.04	.5208	.4843	.4953	1.915
Stddev	.04	.10	.14	.0030	.0007	.10	.0011	.0028	.0024	.005
%RSD	.1429	.4076	.5716	.5847	.1450	.4223	.2044	.5796	.4835	.2781
#1	25.85	23.91	24.05	.5247	.4720	24.16	.5212	.4839	.4977	1.921
#2	25.93	23.72	24.32	.5209	.4709	24.00	.5195	.4818	.4929	1.911
#3	25.89	23.78	24.24	.5186	.4721	23.97	.5215	.4873	.4953	1.913
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1631	.4838	.4953	.5034	1.915	.4833	.5019
Stddev	.0010	.0007	.0012	.0019	.011	.0009	.0010
%RSD	.5865	.1486	.2506	.3834	.5513	.1777	.1943
#1	.1640	.4832	.4965	.5056	1.919	.4833	.5009
#2	.1633	.4846	.4940	.5024	1.903	.4824	.5021
#3	.1621	.4837	.4953	.5021	1.923	.4842	.5028
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33701-B1 Acquired: 5/7/2018 12:01:08 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	777.24	2126.7	20287.	1920.4
Stddev	2.35	4.2	86.	5.4
%RSD	.30294	.19537	.42278	.28128
#1	774.86	2121.9	20204.	1923.1
#2	779.56	2128.8	20284.	1914.2
#3	777.31	2129.4	20375.	1924.0

Zoom In Zoom Out

Sample Name: FA53803-15 Acquired: 5/7/2018 12:05:08 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0224	-.0020	.0103	-.0001	59.87	-.0001	-.0001	.0005	.0007
Stddev	.0000	.0117	.0010	.0002	.0002	.23	.0000	.0002	.0002	.0002
%RSD	19.81	52.14	52.49	2.113	166.7	.3857	81.27	121.4	39.58	29.42
#1	.0003	.0355	-.0010	.0101	.0000	60.13	.0000	.0000	.0007	.0008
#2	.0003	.0129	-.0031	.0105	.0000	59.77	.0000	.0000	.0003	.0005
#3	.0002	.0189	-.0018	.0104	-.0003	59.71	-.0001	-.0003	.0004	.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0897	2.602	3.143	.0024	.0043	8.538	.0000	.0020	.0014	.0053
Stddev	.0018	.008	.035	.0000	.0002	.046	.0001	.0008	.0004	.0014
%RSD	1.992	.3115	1.103	.9881	5.150	.5393	23810.	37.24	26.40	25.96
#1	.0888	2.600	3.172	.0024	.0045	8.486	.0000	.0016	.0011	.0049
#2	.0886	2.611	3.104	.0023	.0042	8.572	-.0001	.0029	.0018	.0042
#3	.0918	2.595	3.152	.0023	.0041	8.556	.0001	.0016	.0013	.0069

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.828	-.0004	.0952	.0017	.0026	.0078	.0014
Stddev	.002	.0003	.0006	.0001	.0012	.0005	.0000
%RSD	.1159	62.09	.5886	6.267	47.92	5.919	3.354
#1	1.828	-.0001	.0947	.0017	.0021	.0076	.0014
#2	1.826	-.0007	.0958	.0016	.0040	.0084	.0015
#3	1.830	-.0004	.0951	.0018	.0017	.0075	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	802.63	2123.6	20403.	1924.0
Stddev	1.30	4.5	89.	16.4
%RSD	.16220	.21141	.43694	.85111
#1	802.93	2124.2	20311.	1908.3
#2	803.75	2127.8	20488.	1941.0
#3	801.20	2118.9	20411.	1922.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 12:09:24 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2571	40.72	2.008	1.997	2.053	41.12	2.058	2.054	2.098	2.060
Stddev	.0002	.11	.005	.005	.006	.07	.002	.002	.010	.008
%RSD	.0929	.2763	.2704	.2494	.2963	.1674	.1097	.0733	.4726	.3955
#1	.2571	40.59	2.009	2.003	2.046	41.04	2.057	2.055	2.094	2.069
#2	.2569	40.80	2.003	1.996	2.058	41.17	2.056	2.052	2.091	2.055
#3	.2574	40.76	2.013	1.993	2.055	41.16	2.061	2.055	2.109	2.055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.62	40.09	40.83	2.137	2.088	40.53	2.062	2.033	2.023	2.027
Stddev	.12	.04	.04	.011	.006	.10	.002	.006	.005	.007
%RSD	.2806	.1085	.0977	.5233	.2725	.2525	.0801	.3001	.2718	.3677
#1	41.50	40.14	40.79	2.128	2.085	40.45	2.064	2.028	2.025	2.030
#2	41.73	40.05	40.87	2.133	2.085	40.64	2.061	2.040	2.017	2.018
#3	41.62	40.07	40.82	2.149	2.095	40.49	2.062	2.033	2.027	2.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.805	2.075	2.063	2.128	2.056	2.094	2.067
Stddev	.006	.005	.006	.005	.005	.003	.002
%RSD	.3141	.2645	.2756	.2371	.2367	.1197	.0832
#1	1.812	2.076	2.057	2.124	2.053	2.094	2.066
#2	1.801	2.069	2.067	2.126	2.054	2.091	2.065
#3	1.803	2.080	2.067	2.133	2.062	2.096	2.069
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 12:09:24 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	739.17	2098.9	19942.	1925.4
Stddev	.63	4.3	61.	3.0
%RSD	.08542	.20266	.30434	.15807
#1	739.50	2097.2	19980.	1928.3
#2	739.58	2103.8	19975.	1925.6
#3	738.45	2095.8	19872.	1922.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 12:13:21 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0095	-.0007	.0003	.0001	.0026	.0002	.0002	-.0002
Stddev	.0005	.0098	.0005	.0002	.0001	.0025	.0000	.0001	.0001
%RSD	273.9	103.4	76.85	71.59	110.7	96.07	7.783	30.41	88.97
#1	.0001	.0013	-.0002	.0005	.0001	.0055	.0002	.0001	-.0002
#2	-.0007	.0068	-.0007	.0002	.0003	.0015	.0002	.0003	-.0003
#3	.0001	.0203	-.0012	.0001	.0000	.0009	.0002	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0214	.0197	-.0202	.0002	F.0024	.0341	.0003	.0002
Stddev	.0002	.0077	.0061	.0030	.0001	.0009	.0065	.0003	.0002
%RSD	165.8	35.87	30.95	14.98	38.34	38.13	19.17	90.81	155.3
#1	-.0001	.0281	.0127	-.0236	.0001	.0033	.0343	.0006	.0000
#2	.0001	.0231	.0230	-.0176	.0002	.0023	.0406	.0001	.0004
#3	.0004	.0130	.0235	-.0195	.0001	.0015	.0275	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	F.0037	.0019	.0002	.0002	.0012	F.0020	-.0001	.0003
Stddev	.0003	.0016	.0000	.0000	.0000	.0001	.0016	.0003	.0001
%RSD	38.45	41.95	1.915	23.12	19.31	10.89	80.53	510.6	28.33
#1	-.0008	.0037	.0019	.0002	.0002	.0012	.0021	-.0002	.0004
#2	-.0005	.0022	.0019	.0002	.0003	.0013	.0036	-.0003	.0004
#3	-.0012	.0053	.0019	.0003	.0003	.0010	.0003	.0003	.0002
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.0020					.0020		
Low Limit		-.0020					-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 12:13:21 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	844.26	2187.2	20870.	1924.3
Stddev	.53	1.4	59.	10.4
%RSD	.06256	.06185	.28147	.54250
#1	844.72	2187.6	20855.	1915.2
#2	844.36	2188.3	20820.	1922.0
#3	843.68	2185.7	20934.	1935.7

Zoom In Zoom Out

Sample Name: MP33701-D1 Acquired: 5/7/2018 12:17:39 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0271	-.0023	.0101	-.0001	58.45	.0000	-.0002	.0004	.0011
Stddev	.0003	.0049	.0014	.0003	.0000	.51	.000	.0000	.0001	.0001
%RSD	644.8	18.00	63.68	2.693	25.46	.8763	10.27	14.32	27.35	7.519
#1	.0004	.0232	-.0039	.0102	-.0001	58.93	.0000	-.0002	.0003	.0012
#2	.0000	.0326	-.0013	.0098	.0000	57.91	.0000	-.0002	.0004	.0010
#3	-.0002	.0254	-.0015	.0103	-.0001	58.51	.0000	-.0003	.0006	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0307	2.550	3.107	.0021	.0048	8.352	.0003	.0018	.0003	.0045
Stddev	.0015	.024	.036	.0000	.0000	.060	.0002	.0007	.0005	.0043
%RSD	4.946	.9221	1.157	.8926	.8221	.7136	61.23	39.76	186.6	94.68
#1	.0292	2.568	3.148	.0021	.0048	8.420	.0004	.0010	.0008	.0039
#2	.0305	2.524	3.081	.0021	.0048	8.321	.0001	.0023	-.0001	.0092
#3	.0322	2.560	3.092	.0021	.0048	8.313	.0003	.0020	.0000	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.824	-.0002	.0935	.0019	.0012	.0079	.0021
Stddev	.009	.0003	.0006	.0001	.0015	.0002	.0001
%RSD	.5086	131.5	.6873	3.506	132.8	2.147	2.685
#1	1.835	.0001	.0942	.0019	.0001	.0079	.0021
#2	1.820	-.0003	.0929	.0019	.0005	.0077	.0022
#3	1.818	-.0006	.0933	.0018	.0029	.0081	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	798.54	2102.2	20261.	1932.8
Stddev	1.13	8.3	31.	24.3
%RSD	.14147	.39527	.15379	1.2574
#1	797.61	2092.6	20295.	1911.9
#2	798.20	2107.2	20233.	1959.5
#3	799.79	2106.8	20254.	1927.1

Zoom In Zoom Out

Sample Name: MP33701-SD1 Acquired: 5/7/2018 12:21:55 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0518	-.0010	.0105	-.0005	63.12	-.0003	-.0003	.0002	.0007
Stddev	.0024	.0821	.0027	.0006	.0001	.44	.0003	.0005	.0008	.0005
%RSD	526.4	158.5	287.3	5.472	26.91	.6950	95.45	163.7	510.9	68.21
#1	.0032	.1337	.0005	.0099	-.0005	63.34	.0000	-.0007	.0005	.0009
#2	-.0012	.0523	.0008	.0106	-.0004	62.62	-.0005	-.0005	-.0008	.0011
#3	-.0006	-.0306	-.0041	.0110	-.0007	63.41	-.0004	.0003	.0008	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0709	2.708	3.314	.0024	.0013	8.897	.0003	.0029	-.0009	.0111
Stddev	.0252	.017	.154	.0001	.0006	.060	.0007	.0014	.0054	.0045
%RSD	35.55	.6293	4.632	3.310	44.80	.6796	299.0	47.74	604.2	40.32
#1	.0992	2.715	3.140	.0024	.0006	8.857	-.0003	.0042	-.0062	.0129
#2	.0507	2.688	3.429	.0023	.0017	8.868	.0011	.0029	.0046	.0143
#3	.0629	2.720	3.374	.0024	.0016	8.967	.0000	.0015	-.0010	.0060

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.933	-.0009	.0986	.0029	-.0025	.0081	.0012
Stddev	.007	.0011	.0005	.0008	.0045	.0015	.0005
%RSD	.3836	120.8	.5435	28.09	177.4	18.10	43.87
#1	1.932	.0002	.0982	.0038	.0009	.0084	.0013
#2	1.927	-.0009	.0985	.0022	-.0076	.0093	.0017
#3	1.941	-.0021	.0992	.0026	-.0008	.0065	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	836.37	2174.8	20806.	1952.2
Stddev	.46	5.3	41.	11.7
%RSD	.05525	.24294	.19667	.60022
#1	836.32	2179.8	20769.	1952.6
#2	836.85	2175.3	20800.	1963.7
#3	835.93	2169.3	20850.	1940.3

Zoom In Zoom Out

Sample Name: MP33701-PS1 Acquired: 5/7/2018 12:26:12 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0470	2.446	.1017	.2548	.0495	62.46	.0490	.0501	.0502	.1024
Stddev	.0004	.012	.0010	.0009	.0003	.22	.0001	.0001	.0005	.0006
%RSD	.7938	.4878	1.024	.3492	.6667	.3477	.1049	.2781	.9222	.5585
#1	.0466	2.438	.1014	.2558	.0499	62.51	.0490	.0502	.0508	.1030
#2	.0473	2.439	.1008	.2542	.0493	62.23	.0490	.0501	.0500	.1019
#3	.0472	2.459	.1028	.2543	.0493	62.65	.0491	.0500	.0499	.1022

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.000	11.96	7.872	.0544	.0988	17.74	.1026	.0486	.0997	.0987
Stddev	.012	.01	.085	.0004	.0002	.09	.0003	.0006	.0013	.0010
%RSD	.4126	.1039	1.074	.7342	.1776	.5087	.2675	1.293	1.312	1.018
#1	2.987	11.97	7.936	.0548	.0986	17.77	.1029	.0489	.1006	.0986
#2	3.001	11.95	7.776	.0541	.0989	17.63	.1024	.0479	.0982	.0998
#3	3.012	11.97	7.904	.0541	.0988	17.81	.1025	.0490	.1003	.0978

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.866	.0487	.1420	.1043	.0931	.0561	.2460
Stddev	.003	.0005	.0003	.0008	.0018	.0002	.0006
%RSD	.1464	1.064	.2182	.8029	1.962	.3486	.2562
#1	1.867	.0489	.1422	.1050	.0924	.0563	.2457
#2	1.862	.0481	.1417	.1034	.0917	.0560	.2456
#3	1.867	.0491	.1422	.1045	.0951	.0560	.2467

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	784.48	2099.8	20191.	1957.6
Stddev	1.76	5.9	90.	3.4
%RSD	.22468	.28232	.44682	.17523
#1	783.12	2093.6	20105.	1959.8
#2	786.47	2105.4	20285.	1953.7
#3	783.85	2100.5	20183.	1959.4

Zoom In Zoom Out

Sample Name: MP33701-S1 Acquired: 5/7/2018 12:30:20 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0524	25.70	1.949	1.971	.0508	80.86	.0485	.4964	.2047	.2572
Stddev	.0003	.21	.004	.008	.0002	.91	.0001	.0014	.0024	.0023
%RSD	.5983	.8038	.2072	.4153	.3719	1.129	.2891	.2866	1.192	.8778
#1	.0526	25.46	1.945	1.972	.0506	79.81	.0485	.4978	.2070	.2596
#2	.0525	25.80	1.949	1.978	.0508	81.26	.0487	.4962	.2050	.2567
#3	.0520	25.84	1.953	1.962	.0510	81.50	.0484	.4950	.2021	.2552

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	25.42	26.15	26.70	.5217	.4743	32.03	.5138	.4776	.4981	1.938
Stddev	.28	.11	.27	.0020	.0015	.23	.0014	.0010	.0020	.013
%RSD	1.104	.4131	1.014	.3816	.3062	.7069	.2764	.2016	.3944	.6891
#1	25.13	26.05	26.41	.5240	.4759	31.77	.5149	.4787	.4985	1.943
#2	25.45	26.26	26.77	.5210	.4737	32.19	.5143	.4771	.4999	1.948
#3	25.69	26.15	26.94	.5202	.4732	32.13	.5122	.4770	.4960	1.923

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.960	.4823	.5781	.5049	1.895	.4894	.4887
Stddev	.004	.0012	.0029	.0029	.005	.0028	.0003
%RSD	.2208	.2430	.5026	.5826	.2794	.5693	.0586
#1	1.964	.4826	.5748	.5082	1.900	.4925	.4890
#2	1.961	.4833	.5791	.5037	1.894	.4884	.4887
#3	1.956	.4810	.5803	.5027	1.889	.4873	.4885

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	752.52	2068.9	19735.	1909.8
Stddev	3.67	6.1	117.	14.9
%RSD	.48747	.29437	.59437	.77936
#1	748.49	2061.9	19600.	1926.7
#2	755.66	2072.7	19809.	1904.2
#3	753.42	2072.2	19796.	1898.6

Zoom In Zoom Out

Sample Name: MP33701-S2 Acquired: 5/7/2018 12:34:20 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0516	25.16	1.946	1.934	.0495	78.86	.0483	.4922	.1980	.2517
Stddev	.0008	.07	.003	.002	.0002	.44	.0002	.0003	.0011	.0011
%RSD	1.514	.2869	.1366	.1134	.3381	.5606	.5155	.0710	.5345	.4239
#1	.0507	25.24	1.948	1.935	.0496	79.19	.0485	.4918	.1973	.2516
#2	.0517	25.14	1.946	1.932	.0496	79.03	.0482	.4925	.1992	.2529
#3	.0522	25.10	1.943	1.935	.0493	78.35	.0480	.4921	.1974	.2508

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	24.91	25.66	26.11	.5138	.4718	31.43	.5141	.4727	.4983	1.943
Stddev	.01	.09	.04	.0019	.0007	.13	.0013	.0005	.0025	.009
%RSD	.0260	.3357	.1637	.3725	.1378	.3985	.2503	.0972	.5096	.4637
#1	24.92	25.75	26.13	.5117	.4719	31.58	.5128	.4723	.4959	1.939
#2	24.91	25.58	26.14	.5154	.4725	31.38	.5142	.4732	.4979	1.937
#3	24.90	25.65	26.06	.5145	.4712	31.34	.5154	.4726	.5009	1.953

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.969	.4840	.5674	.4956	1.886	.4799	.4845
Stddev	.004	.0014	.0011	.0016	.003	.0003	.0009
%RSD	.2000	.2911	.1952	.3135	.1817	.0542	.1770
#1	1.965	.4824	.5685	.4941	1.883	.4799	.4851
#2	1.969	.4845	.5663	.4972	1.890	.4802	.4848
#3	1.973	.4851	.5674	.4955	1.884	.4797	.4835

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	751.22	2063.5	19986.	1956.2
Stddev	1.34	3.0	40.	8.9
%RSD	.17880	.14576	.19809	.45751
#1	752.04	2062.9	20020.	1951.4
#2	749.67	2060.9	19942.	1950.7
#3	751.95	2066.8	19995.	1966.5

Zoom In Zoom Out

Sample Name: FA53894-1 Acquired: 5/7/2018 12:38:20 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0016	.1633	-.0383	.2109	-.0011	621.9	-.0017	-.0016	.0034	.0049
Stddev	.0038	.1285	.0164	.0055	.0012	3.2	.0011	.0010	.0103	.0074
%RSD	230.7	78.68	42.91	2.587	105.1	.5116	64.78	61.95	303.8	151.3
#1	.0048	.2816	-.0200	.2114	.0000	625.0	-.0008	-.0005	.0074	.0119
#2	.0026	.0266	-.0430	.2161	-.0024	618.6	-.0029	-.0022	.0111	-.0029
#3	-.0025	.1817	-.0519	.2052	-.0011	622.1	-.0013	-.0020	-.0083	.0058

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.266	14.70	121.1	.0679	-.0231	817.3	-.0037	.0439	-.0134	.0749
Stddev	.075	.28	.6	.0008	.0022	.3	.0079	.0050	.0180	.0135
%RSD	5.920	1.913	.5257	1.221	9.431	.0412	215.4	11.41	134.5	17.99
#1	1.245	14.43	121.6	.0669	-.0253	817.7	-.0118	.0417	-.0131	.0630
#2	1.203	14.68	120.4	.0683	-.0210	817.2	.0039	.0496	-.0314	.0723
#3	1.349	14.99	121.3	.0683	-.0231	817.1	-.0031	.0403	.0045	.0896

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.03	-.0147	8.810	.0259	.0462	-.0064	.0032
Stddev	.03	.0079	.018	.0005	.0315	.0023	.0027
%RSD	.2078	54.20	.1999	1.967	68.17	36.18	83.17
#1	13.05	-.0101	8.823	.0256	.0783	-.0041	.0045
#2	13.00	-.0101	8.790	.0255	.0154	-.0064	.0051
#3	13.05	-.0238	8.816	.0264	.0449	-.0087	.0001

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	786.15	2076.0	20287.	1988.6
Stddev	1.84	2.5	26.	13.1
%RSD	.23438	.12225	.13030	.65669
#1	787.66	2073.1	20293.	1977.0
#2	784.10	2076.9	20258.	2002.8
#3	786.69	2077.9	20310.	1986.1

Zoom In Zoom Out

Sample Name: FA53517-7 Acquired: 5/7/2018 12:42:37 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0084	489.8	.1753	2.384	.0188	41.17	-.0065	.1348	1.064	8.979
Stddev	.0084	1.9	.0282	.006	.0036	.08	.0017	.0050	.012	.046
%RSD	99.86	.3822	16.07	.2547	19.33	.1825	25.72	3.745	1.130	.5090
#1	.0133	491.5	.1948	2.382	.0229	41.23	-.0046	.1405	1.077	8.958
#2	.0133	490.3	.1881	2.390	.0172	41.08	-.0070	.1311	1.062	8.948
#3	-.0013	487.8	.1430	2.379	.0162	41.19	-.0078	.1327	1.053	9.032

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	642.1	163.2	172.7	5.434	-.0028	14.61	.5636	81.87	1.138	.0296
Stddev	1.6	.1	.8	.034	.0050	.07	.0051	.33	.010	.0562
%RSD	.2568	.0532	.4781	.6233	181.6	.4704	.8962	.3983	.8528	190.0
#1	644.0	163.1	173.6	5.451	.0023	14.67	.5581	82.07	1.135	-.0349
#2	641.0	163.1	172.1	5.395	-.0028	14.64	.5680	81.50	1.130	.0556
#3	641.3	163.3	172.3	5.456	-.0078	14.54	.5647	82.05	1.149	.0680

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.638	.1706	1.288	22.03	.0498	1.141	3.917
Stddev	.064	.0151	.007	.13	.0160	.010	.007
%RSD	.7420	8.871	.5309	.5868	32.10	.9104	.1919
#1	8.571	.1837	1.296	22.08	.0482	1.152	3.923
#2	8.644	.1740	1.285	21.89	.0666	1.139	3.919
#3	8.699	.1540	1.283	22.13	.0347	1.131	3.908

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	814.96	2192.9	21672.	2090.0
Stddev	1.68	3.4	89.	9.5
%RSD	.20588	.15355	.40982	.45232
#1	813.05	2194.3	21593.	2083.2
#2	815.65	2189.1	21768.	2100.8
#3	816.18	2195.4	21655.	2085.9

Zoom In Zoom Out

Sample Name: MP33698-D1 Acquired: 5/7/2018 12:46:48 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0138	534.9	.1594	2.565	.0183	41.76	-.0089	.1434	1.137	8.974
Stddev	.0039	2.7	.0277	.023	.0025	.24	.0011	.0060	.016	.027
%RSD	28.36	.5020	17.35	.8905	13.69	.5633	11.93	4.156	1.361	.3035
#1	.0098	534.8	.1442	2.582	.0192	41.52	-.0077	.1499	1.123	8.943
#2	.0176	537.6	.1427	2.575	.0155	41.77	-.0091	.1381	1.154	8.984
#3	.0141	532.2	.1913	2.539	.0202	41.99	-.0098	.1423	1.135	8.994

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	681.0	167.8	177.6	5.543	-.0003	14.78	.6042	82.57	1.250	.0517
Stddev	2.8	1.2	2.5	.006	.0029	.05	.0081	.16	.029	.0359
%RSD	.4106	.6947	1.403	.1162	1030.	.3331	1.336	.1968	2.318	69.44
#1	681.8	169.0	177.8	5.536	.0021	14.74	.6050	82.41	1.270	.0798
#2	683.3	167.8	180.0	5.547	-.0035	14.84	.5958	82.74	1.217	.0639
#3	677.9	166.6	175.1	5.548	.0005	14.77	.6119	82.56	1.263	.0113

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.534	.1684	1.326	25.02	.0357	1.187	4.007
Stddev	.117	.0129	.005	.05	.0305	.012	.009
%RSD	1.231	7.668	.3988	.1972	85.26	.9739	.2168
#1	9.500	.1684	1.328	25.00	.0404	1.174	4.017
#2	9.437	.1813	1.330	24.99	.0032	1.193	4.004
#3	9.664	.1555	1.320	25.08	.0636	1.195	4.001

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	809.82	2198.1	21559.	2084.7
Stddev	.57	6.6	24.	13.2
%RSD	.07047	.30019	.11138	.63461
#1	809.18	2191.3	21570.	2078.2
#2	810.00	2204.5	21575.	2076.0
#3	810.28	2198.5	21531.	2099.9

Sample Name: MP33698-D2 Acquired: 5/7/2018 12:50:56 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0019	522.2	.1755	2.473	.0193	42.83	-.0121	.1404	1.129	9.088
Stddev	.0147	1.1	.0307	.022	.0005	.08	.0014	.0040	.003	.028
%RSD	760.1	.2033	17.48	.8975	2.609	.1902	11.36	2.855	.2487	.3116
#1	.0044	522.1	.2088	2.481	.0189	42.88	-.0122	.1445	1.131	9.121
#2	-.0187	523.3	.1484	2.491	.0199	42.87	-.0107	.1365	1.126	9.073
#3	.0085	521.2	.1692	2.448	.0193	42.74	-.0134	.1402	1.131	9.071

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	672.1	169.2	178.3	5.613	-.0088	14.87	.5838	83.98	1.121	-.0008
Stddev	2.6	1.8	1.3	.012	.0014	.12	.0074	.04	.031	.0085
%RSD	.3841	1.039	.7138	.2216	15.30	.8183	1.260	.0513	2.742	1070.
#1	671.5	170.3	179.1	5.603	-.0081	14.80	.5916	84.00	1.133	.0084
#2	675.0	170.1	176.9	5.608	-.0104	15.01	.5770	83.93	1.143	-.0024
#3	670.0	167.2	179.1	5.627	-.0080	14.80	.5827	84.01	1.085	-.0083

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.474	.1707	1.339	23.42	.0327	1.181	4.027
Stddev	.065	.0015	.007	.02	.0280	.003	.005
%RSD	.7706	.8732	.5384	.0744	85.78	.2813	.1351
#1	8.548	.1699	1.342	23.42	.0582	1.185	4.025
#2	8.423	.1724	1.345	23.41	.0027	1.178	4.022
#3	8.452	.1698	1.331	23.44	.0370	1.181	4.032

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	810.20	2209.2	21422.	2066.0
Stddev	2.42	2.6	82.	8.3
%RSD	.29864	.11937	.38305	.40114
#1	807.62	2206.8	21517.	2064.4
#2	812.42	2212.0	21383.	2058.6
#3	810.54	2208.6	21368.	2074.9

Sample Name: MP33698-S1 Acquired: 5/7/2018 12:55:08 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0662	635.6	1.971	4.341	.0681	66.12	.0376	.6525	1.367	9.216
Stddev	.0136	5.0	.029	.020	.0008	.59	.0007	.0038	.016	.053
%RSD	20.51	.7793	1.478	.4664	1.228	.8854	1.917	.5851	1.194	.5764
#1	.0782	641.2	1.955	4.364	.0687	66.78	.0382	.6568	1.364	9.275
#2	.0690	631.7	1.953	4.333	.0671	65.65	.0368	.6508	1.352	9.173
#3	.0515	634.0	2.004	4.325	.0684	65.94	.0378	.6498	1.384	9.199

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	743.6	190.2	199.2	6.066	.3643	38.11	1.149	82.55	1.246	1.860
Stddev	4.5	1.3	.7	.033	.0042	.53	.006	.25	.019	.043
%RSD	.6002	.7040	.3655	.5405	1.165	1.403	.5286	.3062	1.520	2.294
#1	748.8	191.7	198.6	6.082	.3633	38.72	1.154	82.55	1.230	1.895
#2	740.8	189.5	199.0	6.029	.3689	37.76	1.142	82.80	1.240	1.872
#3	741.3	189.4	200.0	6.089	.3606	37.84	1.151	82.29	1.267	1.812

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.117	.6630	1.840	25.91	2.033	1.685	4.497
Stddev	.063	.0136	.010	.14	.019	.012	.014
%RSD	.6913	2.044	.5379	.5288	.9553	.7049	.3121
#1	9.189	.6545	1.852	26.05	2.031	1.697	4.506
#2	9.074	.6559	1.835	25.77	2.015	1.673	4.480
#3	9.088	.6786	1.834	25.90	2.053	1.685	4.503

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	811.19	2218.3	21322.	2058.5
Stddev	1.28	5.2	88.	21.1
%RSD	.15827	.23593	.41152	1.0230
#1	810.58	2212.3	21245.	2035.5
#2	810.31	2222.0	21418.	2076.8
#3	812.66	2220.5	21302.	2063.3

Sample Name: CCV Acquired: 5/7/2018 12:59:19 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2547	38.45	2.036	1.950	1.970	38.67	2.028	2.034	2.000	2.032
Stddev	.0008	.13	.005	.004	.004	.15	.004	.003	.004	.006
%RSD	.3081	.3433	.2407	.1983	.1920	.3821	.2045	.1237	.2143	.2757
#1	.2556	38.36	2.040	1.954	1.973	38.70	2.027	2.034	2.005	2.029
#2	.2544	38.60	2.031	1.950	1.973	38.80	2.025	2.031	1.996	2.038
#3	.2541	38.38	2.037	1.946	1.966	38.51	2.033	2.036	1.998	2.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.06	38.66	39.08	2.100	2.089	38.75	2.085	1.988	2.048	2.062
Stddev	.08	.05	.10	.004	.005	.10	.004	.002	.004	.005
%RSD	.2054	.1288	.2610	.1811	.2532	.2491	.1991	.0891	.2065	.2551
#1	39.98	38.69	39.07	2.104	2.083	38.67	2.088	1.986	2.051	2.066
#2	40.15	38.68	39.19	2.101	2.089	38.86	2.081	1.987	2.043	2.065
#3	40.06	38.60	38.99	2.096	2.094	38.73	2.088	1.990	2.050	2.056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.825	2.113	1.985	2.083	2.030	2.068	2.034
Stddev	.003	.006	.004	.003	.001	.002	.004
%RSD	.1480	.3046	.2119	.1655	.0687	.0930	.2112
#1	1.827	2.113	1.980	2.084	2.032	2.068	2.031
#2	1.822	2.106	1.987	2.086	2.030	2.071	2.031
#3	1.826	2.119	1.988	2.079	2.029	2.067	2.039
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV Acquired: 5/7/2018 12:59:19 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	739.51	2072.7	20238.	1987.0
Stddev	1.36	3.0	71.	8.6
%RSD	.18412	.14273	.35146	.43310
#1	741.03	2072.9	20159.	1981.6
#2	739.10	2075.5	20259.	1982.4
#3	738.40	2069.6	20297.	1996.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 13:03:15 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0098	-.0001	.0003	.0002	.0059	.0003	.0002	-.0002
Stddev	.0002	.0135	.0015	.0002	.0000	.0014	.0001	.0001	.0002
%RSD	152.0	138.6	1232.	90.67	5.469	24.42	19.29	31.24	113.2
#1	.0001	-.0033	-.0017	.0004	.0002	.0045	.0003	.0002	-.0002
#2	-.0001	.0088	-.0001	.0004	.0002	.0074	.0002	.0001	.0000
#3	-.0004	.0237	.0014	.0000	.0002	.0057	.0002	.0002	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0183	.0104	-.0401	.0002	F.0023	.0215	.0005	.0009
Stddev	.0001	.0031	.0182	.0320	.0001	.0007	.0065	.0002	.0001
%RSD	23.16	17.04	174.7	79.59	29.69	29.31	30.38	35.53	7.361
#1	.0006	.0198	.0290	-.0530	.0002	.0031	.0234	.0006	.0009
#2	.0004	.0203	-.0072	-.0636	.0002	.0022	.0268	.0004	.0008
#3	.0004	.0147	.0094	-.0038	.0003	.0017	.0142	.0003	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	F.0027	.0017	.0004	.0003	.0010	F.0023	-.0001	.0005
Stddev	.0005	.0003	.0009	.0002	.0001	.0001	.0004	.0002	.0001
%RSD	67.02	10.32	54.58	53.68	43.94	9.954	19.61	279.9	14.70
#1	-.0002	.0030	.0011	.0006	.0004	.0011	.0020	-.0003	.0005
#2	-.0012	.0025	.0012	.0005	.0001	.0011	.0020	.0000	.0004
#3	-.0008	.0025	.0027	.0002	.0003	.0009	.0028	.0001	.0004
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.0020					.0020		
Low Limit		-.0020					-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 13:03:15 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	833.39	2146.9	20639.	1967.1
Stddev	2.03	1.0	105.	8.5
%RSD	.24393	.04579	.50759	.43301
#1	832.48	2147.1	20538.	1958.9
#2	835.72	2147.7	20747.	1966.6
#3	831.97	2145.8	20632.	1975.9

Zoom In Zoom Out

Sample Name: MP33698-S2 Acquired: 5/7/2018 13:07:34 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0620	664.9	2.001	4.509	.0712	68.52	.0391	.6716	1.432	9.723
Stddev	.0017	1.6	.024	.005	.0024	.26	.0018	.0023	.006	.023
%RSD	2.776	.2390	1.213	.1033	3.423	.3766	4.715	.3457	.4029	.2408
#1	.0619	663.4	1.981	4.506	.0698	68.35	.0374	.6691	1.426	9.746
#2	.0603	666.6	2.028	4.506	.0698	68.82	.0387	.6737	1.436	9.699
#3	.0638	664.6	1.994	4.514	.0740	68.40	.0411	.6719	1.435	9.724

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	770.3	197.0	206.6	6.223	.3863	39.73	1.185	85.22	1.252	1.947
Stddev	2.0	.7	1.6	.035	.0108	.15	.003	.13	.006	.057
%RSD	.2653	.3730	.7692	.5559	2.800	.3703	.2442	.1553	.5064	2.938
#1	768.1	196.3	204.9	6.248	.3964	39.56	1.186	85.33	1.245	1.954
#2	772.1	197.8	208.1	6.238	.3749	39.81	1.187	85.07	1.256	1.886
#3	770.8	196.9	206.7	6.184	.3876	39.82	1.182	85.26	1.256	2.000

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.070	.6856	1.904	26.75	2.057	1.722	4.598
Stddev	.002	.0082	.008	.09	.027	.016	.005
%RSD	.0231	1.199	.4059	.3237	1.308	.9044	.1094
#1	9.070	.6833	1.896	26.84	2.032	1.740	4.595
#2	9.069	.6787	1.911	26.73	2.086	1.717	4.596
#3	9.073	.6947	1.905	26.67	2.053	1.710	4.604

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	809.73	2218.2	21271.	2049.1
Stddev	2.06	5.7	95.	10.0
%RSD	.25485	.25864	.44616	.48627
#1	811.15	2220.6	21209.	2048.2
#2	810.68	2222.3	21225.	2039.6
#3	807.36	2211.6	21381.	2059.4

Zoom In Zoom Out

Sample Name: MP33698-PS1 Acquired: 5/7/2018 13:11:45 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0490	499.1	.2685	2.603	.0732	46.71	.0417	.1861	1.130	8.944
Stddev	.0029	1.4	.0127	.029	.0022	.35	.0039	.0018	.008	.023
%RSD	5.989	.2707	4.725	1.104	2.943	.7514	9.279	.9682	.6972	.2589
#1	.0495	498.8	.2792	2.587	.0707	46.30	.0460	.1871	1.121	8.922
#2	.0517	500.6	.2718	2.637	.0740	46.90	.0385	.1840	1.136	8.943
#3	.0459	497.9	.2545	2.587	.0748	46.92	.0405	.1872	1.134	8.968

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	639.8	171.9	174.1	5.361	.0996	24.38	.6587	81.08	1.218	.1201
Stddev	4.4	1.1	2.8	.031	.0043	.21	.0038	.18	.032	.0134
%RSD	.6941	.6195	1.619	.5707	4.284	.8733	.5760	.2230	2.645	11.12
#1	635.1	171.1	171.0	5.343	.1045	24.58	.6570	80.95	1.195	.1185
#2	644.0	173.1	175.1	5.396	.0977	24.42	.6561	81.28	1.255	.1342
#3	640.1	171.6	176.3	5.344	.0966	24.16	.6631	80.99	1.205	.1077

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.263	.2129	1.346	21.81	.1380	1.159	4.066
Stddev	.017	.0178	.005	.08	.0207	.005	.002
%RSD	.2060	8.380	.3538	.3634	14.97	.4439	.0363
#1	8.267	.2216	1.346	21.72	.1368	1.153	4.068
#2	8.244	.1924	1.350	21.88	.1180	1.164	4.065
#3	8.278	.2248	1.341	21.84	.1593	1.160	4.065

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	813.02	2224.3	21342.	2058.2
Stddev	.97	5.1	34.	17.6
%RSD	.11891	.22870	.15890	.85711
#1	814.12	2226.9	21341.	2078.2
#2	812.63	2227.5	21308.	2044.8
#3	812.31	2218.4	21376.	2051.5

Zoom In Zoom Out

Sample Name: MP33698-SD1 Acquired: 5/7/2018 13:15:58 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 125.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0022	548.9	.0974	2.572	.0083	46.20	-.0065	.1470	1.127	9.630
Stddev	.0101	2.0	.1038	.030	.0132	.77	.0135	.0161	.058	.040
%RSD	455.9	.3654	106.5	1.172	158.7	1.673	208.3	10.94	5.168	.4193
#1	.0075	547.4	.1430	2.551	.0156	45.35	.0076	.1656	1.070	9.634
#2	.0087	551.2	-.0213	2.606	.0163	46.85	-.0192	.1375	1.186	9.667
#3	-.0095	548.1	.1705	2.558	-.0069	46.42	-.0078	.1381	1.124	9.587

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	710.4	175.0	189.6	5.885	-.0968	15.82	.6109	85.63	1.183	.2731
Stddev	1.5	1.2	7.2	.063	.0073	.42	.0311	.19	.121	.2726
%RSD	.2089	.7029	3.789	1.063	7.584	2.631	5.098	.2258	10.20	99.82
#1	709.7	173.6	187.8	5.913	-.1051	15.97	.5842	85.83	1.045	.5834
#2	712.1	175.8	197.5	5.930	-.0944	16.14	.6035	85.44	1.236	.1643
#3	709.5	175.6	183.4	5.814	-.0910	15.35	.6451	85.63	1.268	.0717

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.299	.1518	1.411	24.94	.0998	1.197	4.213
Stddev	.122	.0474	.004	.15	.1237	.015	.006
%RSD	1.313	31.21	.2751	.6183	124.0	1.238	.1545
#1	9.424	.1530	1.413	24.94	.2243	1.202	4.205
#2	9.293	.1039	1.406	25.10	-.0232	1.180	4.215
#3	9.180	.1986	1.413	24.79	.0983	1.208	4.218

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	837.66	2180.8	21068.	2017.4
Stddev	1.35	4.1	90.	11.0
%RSD	.16087	.18608	.42771	.54321
#1	837.66	2184.8	21064.	2023.9
#2	839.01	2180.9	20979.	2004.7
#3	836.31	2176.7	21159.	2023.5

Zoom In Zoom Out

Sample Name: FA53517-1 Acquired: 5/7/2018 13:20:13 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0163	135.4	-.0110	1.350	-.0064	23.21	.0015	.0205	.2283	35.60
Stddev	.0222	.7	.1085	.009	.0081	.11	.0026	.0123	.0164	.23
%RSD	136.4	.4876	990.9	.6814	126.8	.4550	171.1	60.02	7.178	.6370
#1	-.0093	134.7	-.0870	1.339	.0029	23.13	.0014	.0132	.2215	35.65
#2	.0307	135.7	-.0592	1.356	-.0114	23.17	-.0010	.0137	.2164	35.35
#3	.0274	135.9	.1133	1.354	-.0106	23.33	.0042	.0348	.2470	35.79

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	154.1	18.90	14.27	2.913	-.0788	2.163	.2699	171.5	.4631	.1581
Stddev	.6	.96	5.16	.038	.0081	.722	.0130	.2	.0398	.1206
%RSD	.3923	5.064	36.13	1.294	10.23	33.36	4.809	.1031	8.584	76.26
#1	154.7	18.33	19.32	2.904	-.0860	2.487	.2694	171.6	.4269	.2809
#2	153.5	18.37	9.010	2.880	-.0701	1.336	.2572	171.3	.4567	.1537
#3	154.0	20.01	14.49	2.954	-.0803	2.666	.2831	171.6	.5056	.0398

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.410	.0709	6.871	3.820	.0293	.4359	4.859
Stddev	.038	.0352	.027	.033	.0640	.0123	.022
%RSD	.5071	49.68	.3929	.8528	218.5	2.822	.4602
#1	7.378	.0430	6.850	3.827	.0932	.4246	4.833
#2	7.400	.1105	6.860	3.784	-.0348	.4340	4.872
#3	7.451	.0592	6.901	3.848	.0294	.4490	4.872

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	840.16	2163.6	21116.	1998.1
Stddev	.72	4.8	238.	10.7
%RSD	.08593	.22307	1.1253	.53599
#1	840.98	2165.3	21133.	1990.5
#2	839.89	2167.3	21346.	2010.3
#3	839.62	2158.1	20871.	1993.4

Zoom In Zoom Out

Sample Name: FA53517-13 Acquired: 5/7/2018 13:24:30 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 125.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0837	167.8	-.0091	1.479	-.0139	21.42	-.0075	.0852	.3846	65.47
Stddev	.0259	1.9	.1710	.012	.0080	.22	.0115	.0113	.0369	.42
%RSD	30.93	1.105	1883.	.8244	57.82	1.004	154.2	13.30	9.587	.6485
#1	.0854	167.4	-.0167	1.493	-.0154	21.19	-.0077	.0900	.3732	65.07
#2	.0570	169.9	-.1762	1.474	-.0210	21.45	.0042	.0723	.4258	65.43
#3	.1087	166.2	.1656	1.469	-.0052	21.62	-.0189	.0933	.3548	65.91

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	225.8	24.29	20.49	3.669	-.1157	2.868	.2458	335.8	2.393	.2091
Stddev	.9	1.12	3.62	.024	.0173	.612	.0337	.6	.051	.2165
%RSD	.3823	4.588	17.66	.6504	14.92	21.35	13.70	.1870	2.130	103.6
#1	226.0	24.74	16.34	3.642	-.1309	3.455	.2802	335.7	2.336	.4566
#2	226.5	23.02	22.12	3.682	-.1192	2.233	.2445	336.5	2.434	.0549
#3	224.8	25.11	23.00	3.684	-.0969	2.914	.2128	335.2	2.410	.1157

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.888	.1313	20.97	4.148	.0790	.4416	11.28
Stddev	.162	.0488	.04	.040	.3122	.0258	.02
%RSD	1.827	37.13	.1894	.9518	395.3	5.835	.2147
#1	8.734	.0845	21.01	4.130	.3357	.4243	11.28
#2	8.874	.1277	20.97	4.194	.1699	.4712	11.25
#3	9.058	.1818	20.93	4.122	-.2686	.4292	11.30

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	834.02	2150.3	20854.	1990.5
Stddev	.41	8.5	90.	4.7
%RSD	.04889	.39395	.42967	.23494
#1	834.47	2152.5	20827.	1985.1
#2	833.92	2157.4	20780.	1993.1
#3	833.68	2140.9	20953.	1993.2

Zoom In Zoom Out

Sample Name: FA53803-4 Acquired: 5/7/2018 13:28:46 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0168	-.0038	.1706	-.0001	385.6	-.0001	-.0005	-.0010
Stddev	.0005	.0099	.0009	.0007	.0001	2.8	.0001	.0002	.0002
%RSD	203.2	58.87	23.47	.4173	66.24	.7379	107.4	31.82	21.02
#1	.0007	.0098	-.0040	.1712	-.0001	385.6	-.0001	-.0005	-.0008
#2	.0002	.0125	-.0046	.1698	-.0001	382.8	.0000	-.0006	-.0009
#3	-.0002	.0282	-.0028	.1707	.0000	388.5	.0000	-.0003	-.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	1.304	2.960	32.44	.1064	-.0016	F168.5	-.0003	.0031
Stddev	.0001	.012	.006	.28	.0005	.0002	.6	.0002	.0018
%RSD	88.66	.8813	.1927	.8495	.4969	10.94	.3321	77.83	59.09
#1	.0000	1.297	2.964	32.41	.1067	-.0018	168.5	-.0003	.0038
#2	-.0002	1.297	2.954	32.18	.1058	-.0014	167.9	.0000	.0010
#3	-.0003	1.317	2.963	32.73	.1066	-.0015	169.0	-.0004	.0045

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0013	.0057	8.339	-.0008	1.658	.0014	-.0021	.0003	.0002
Stddev	.0018	.0037	.019	.0004	.005	.0002	.0013	.0002	.0000
%RSD	138.0	64.55	.2314	57.15	.2819	15.08	64.00	79.97	16.85
#1	-.0026	.0043	8.359	-.0013	1.658	.0013	-.0033	.0004	.0002
#2	-.0019	.0030	8.321	-.0005	1.654	.0017	-.0024	.0005	.0001
#3	.0007	.0099	8.337	-.0005	1.663	.0013	-.0006	.0000	.0002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	682.99	1886.0	18768.	1921.9
Stddev	.94	6.1	50.	15.4
%RSD	.13712	.32332	.26510	.80017
#1	681.93	1879.0	18719.	1919.5
#2	683.68	1889.5	18819.	1938.3
#3	683.38	1889.5	18766.	1907.8

Zoom In Zoom Out

Sample Name: FA53803-10 Acquired: 5/7/2018 13:33:01 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0155	-.0039	.0516	-.0002	188.3	-.0001	-.0004	-.0004
Stddev	.0004	.0147	.0005	.0003	.0000	1.0	.0000	.0001	.0004
%RSD	503.0	94.70	13.85	.5833	22.74	.5550	23.62	15.31	98.67
#1	.0004	-.0013	-.0040	.0516	-.0002	188.7	-.0001	-.0004	-.0004
#2	-.0002	.0219	-.0044	.0514	-.0002	187.1	-.0001	-.0005	.0000
#3	-.0004	.0259	-.0033	.0520	-.0001	189.1	.0000	-.0005	-.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	.0632	2.698	12.37	.0363	-.0012	F101.3	.0000	.0033
Stddev	.0001	.0025	.038	.07	.0002	.0000	.1	.0001	.0010
%RSD	456.7	3.884	1.402	.5723	.5170	.7241	.0781	152.8	32.11
#1	.0000	.0649	2.676	12.32	.0361	-.0012	101.3	.0000	.0021
#2	-.0001	.0604	2.676	12.45	.0363	-.0012	101.2	.0001	.0042
#3	.0002	.0643	2.741	12.33	.0365	-.0012	101.4	.0001	.0035

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0012	.0046	7.348	-.0001	.8557	.0015	-.0016	.0003	.0005
Stddev	.0009	.0022	.015	.0001	.0011	.0000	.0004	.0002	.0001
%RSD	79.10	47.36	.2009	138.6	.1286	2.733	26.35	94.69	27.05
#1	-.0012	.0042	7.362	-.0001	.8546	.0015	-.0019	.0002	.0003
#2	-.0021	.0070	7.350	.0000	.8558	.0015	-.0011	.0005	.0006
#3	-.0002	.0027	7.333	.0000	.8568	.0016	-.0017	.0000	.0005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	724.25	1959.8	19428.	1939.5
Stddev	1.38	4.4	40.	10.4
%RSD	.18998	.22599	.20626	.53431
#1	724.03	1956.3	19469.	1935.3
#2	722.99	1958.4	19428.	1951.2
#3	725.72	1964.8	19388.	1931.8

Zoom In Zoom Out

Sample Name: FA53803-13 Acquired: 5/7/2018 13:37:17 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0232	-.0020	.0190	-.0001	56.75	.0000	.0001	.0007	.0009
Stddev	.0002	.0013	.0007	.0002	.0001	.11	.000	.0002	.0002	.0001
%RSD	64.44	5.729	34.83	.7904	54.95	.1889	87.23	221.1	30.47	5.472
#1	.0001	.0226	-.0016	.0189	.0000	56.85	.0000	.0001	.0006	.0009
#2	.0004	.0247	-.0028	.0189	-.0002	56.64	.0000	.0003	.0009	.0009
#3	.0002	.0223	-.0015	.0192	-.0001	56.75	-.0001	-.0001	.0005	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0255	1.804	3.531	.0003	.0016	6.716	.0013	.0021	.0012	.0047
Stddev	.0020	.012	.039	.0000	.0000	.042	.0001	.0005	.0010	.0020
%RSD	7.667	.6880	1.112	4.367	2.429	.6293	10.95	21.41	86.92	42.33
#1	.0243	1.801	3.548	.0003	.0016	6.744	.0013	.0016	.0023	.0059
#2	.0244	1.793	3.486	.0003	.0016	6.668	.0012	.0022	.0009	.0059
#3	.0277	1.817	3.559	.0003	.0015	6.738	.0015	.0025	.0003	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.449	-.0005	.0581	.0017	.0006	.0007	.0047
Stddev	.004	.0008	.0005	.0002	.0012	.0002	.0001
%RSD	.2622	167.8	.8034	12.21	196.4	29.32	1.976
#1	1.452	-.0014	.0582	.0019	.0017	.0006	.0047
#2	1.450	-.0001	.0576	.0015	.0009	.0006	.0047
#3	1.444	.0001	.0585	.0017	-.0007	.0009	.0048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	795.43	2075.0	20307.	1966.9
Stddev	3.16	1.1	30.	7.4
%RSD	.39716	.05223	.15013	.37440
#1	793.53	2074.0	20284.	1966.0
#2	799.08	2074.8	20342.	1960.0
#3	793.68	2076.2	20296.	1974.7

Zoom In Zoom Out

Sample Name: FA53803-14 Acquired: 5/7/2018 13:41:34 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0244	-.0017	.0115	-.0001	58.83	-.0001	-.0002	.0004	.0011
Stddev	.0002	.0060	.0010	.0003	.0001	.39	.0001	.0001	.0002	.0004
%RSD	45.72	24.70	61.63	2.704	114.6	.6713	106.6	46.47	52.92	32.30
#1	.0005	.0309	-.0005	.0111	.0000	58.40	-.0001	-.0002	.0005	.0015
#2	.0006	.0230	-.0024	.0118	-.0001	58.90	.0000	-.0001	.0002	.0010
#3	.0002	.0191	-.0021	.0116	-.0002	59.18	-.0001	-.0003	.0006	.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0237	2.591	3.144	.0030	.0039	8.543	.0000	.0018	.0009	.0074
Stddev	.0033	.029	.049	.0000	.0001	.034	.000	.0009	.0001	.0009
%RSD	13.78	1.102	1.560	.0870	1.935	.4018	710.1	50.63	15.23	12.65
#1	.0272	2.562	3.091	.0030	.0039	8.504	.0002	.0008	.0008	.0069
#2	.0231	2.619	3.153	.0030	.0040	8.556	-.0001	.0021	.0010	.0068
#3	.0207	2.593	3.188	.0030	.0038	8.568	-.0002	.0025	.0010	.0085

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.010	-.0006	.0969	.0016	.0012	.0075	.0024
Stddev	.003	.0002	.0005	.0001	.0014	.0002	.0001
%RSD	.1593	27.63	.4873	3.466	109.3	3.237	4.372
#1	2.012	-.0004	.0965	.0015	.0024	.0075	.0023
#2	2.011	-.0005	.0974	.0015	-.0002	.0078	.0023
#3	2.006	-.0007	.0967	.0016	.0016	.0073	.0025

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	794.89	2067.1	20411.	1961.3
Stddev	1.97	3.6	68.	7.0
%RSD	.24807	.17452	.33498	.35614
#1	792.64	2064.6	20338.	1969.0
#2	796.31	2065.5	20474.	1959.3
#3	795.72	2071.3	20420.	1955.5

Zoom In Zoom Out

Sample Name: FA53803-16 Acquired: 5/7/2018 13:45:50 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0330	-.0006	.0007	-.0001	40.13	-.0001	-.0002	.0004	.0009
Stddev	.0000	.0119	.0004	.0001	.0000	.18	.0001	.0001	.0006	.0002
%RSD	20.64	35.90	71.25	11.52	24.49	.4529	78.05	72.34	160.3	19.45
#1	.0001	.0467	-.0011	.0008	-.0001	40.03	-.0001	.0000	.0003	.0007
#2	.0001	.0257	-.0003	.0007	-.0001	40.33	.0000	-.0003	-.0002	.0008
#3	.0001	.0267	-.0004	.0006	-.0001	40.01	-.0001	-.0002	.0011	.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0188	2.143	3.431	.0006	.0031	9.304	.0000	.0018	.0136	.0029
Stddev	.0023	.009	.076	.0000	.0001	.040	.0002	.0008	.0007	.0019
%RSD	12.25	.4352	2.204	.4754	2.925	.4285	666.4	43.71	5.287	65.12
#1	.0194	2.132	3.351	.0006	.0032	9.311	-.0002	.0026	.0134	.0049
#2	.0162	2.148	3.501	.0006	.0031	9.340	.0001	.0011	.0144	.0027
#3	.0207	2.149	3.442	.0006	.0031	9.262	.0002	.0017	.0130	.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.130	.0000	.0470	.0019	-.0001	.0086	.0025
Stddev	.003	.0004	.0002	.0001	.0011	.0003	.0000
%RSD	.2777	868.9	.4801	2.852	882.8	3.878	1.459
#1	1.133	-.0001	.0469	.0019	.0003	.0087	.0025
#2	1.128	.0005	.0473	.0019	-.0014	.0082	.0025
#3	1.128	-.0003	.0469	.0018	.0007	.0088	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	803.46	2084.6	20633.	1974.9
Stddev	1.53	4.9	32.	9.9
%RSD	.19074	.23575	.15647	.49986
#1	803.60	2079.1	20600.	1981.9
#2	801.86	2088.6	20635.	1963.6
#3	804.92	2086.1	20665.	1979.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 13:50:05 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2596	39.02	2.073	1.969	1.995	39.27	2.060	2.066	2.031	2.051
Stddev	.0009	.12	.005	.012	.007	.03	.003	.003	.006	.001
%RSD	.3289	.3116	.2550	.6169	.3319	.0727	.1196	.1227	.2919	.0524
#1	.2597	39.12	2.078	1.974	1.995	39.29	2.060	2.068	2.038	2.052
#2	.2587	39.06	2.071	1.977	2.001	39.23	2.057	2.063	2.029	2.052
#3	.2604	38.89	2.068	1.955	1.988	39.28	2.062	2.066	2.027	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.66	39.14	39.80	2.141	2.121	39.19	2.123	2.015	2.085	2.099
Stddev	.04	.16	.03	.004	.005	.07	.003	.001	.004	.004
%RSD	.0935	.4131	.0849	.1895	.2209	.1878	.1229	.0674	.2102	.1968
#1	40.63	39.24	39.84	2.145	2.118	39.27	2.124	2.013	2.088	2.096
#2	40.66	39.23	39.79	2.137	2.119	39.17	2.121	2.014	2.080	2.097
#3	40.70	38.96	39.78	2.142	2.127	39.12	2.126	2.016	2.086	2.103
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.853	2.154	2.010	2.115	2.061	2.099	2.071
Stddev	.005	.002	.008	.002	.005	.004	.002
%RSD	.2523	.1021	.3945	.1123	.2623	.2148	.1145
#1	1.857	2.156	2.014	2.114	2.067	2.104	2.071
#2	1.848	2.152	2.015	2.113	2.057	2.095	2.068
#3	1.855	2.155	2.001	2.117	2.060	2.098	2.073
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 13:50:05 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	731.12	2045.7	19986.	1968.0
Stddev	.81	4.3	51.	10.6
%RSD	.11093	.20827	.25460	.53696
#1	731.61	2045.5	19940.	1979.8
#2	731.58	2050.1	20041.	1959.4
#3	730.19	2041.6	19978.	1964.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 13:54:02 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0107	-.0009	.0002	.0003	.0048	.0003	.0002	-.0001
Stddev	.0002	.0079	.0009	.0001	.0002	.0035	.0000	.0001	.0005
%RSD	89.95	73.57	96.21	76.05	69.42	72.09	17.01	36.74	591.0
#1	.0005	.0177	.0001	.0003	.0001	.0015	.0003	.0001	.0000
#2	.0001	.0122	-.0013	.0002	.0002	.0046	.0003	.0002	.0003
#3	.0001	.0022	-.0016	.0001	.0005	.0084	.0002	.0002	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0189	-.0003	.0019	.0003	F.0024	.0282	.0003	.0002
Stddev	.0002	.0062	.0210	.0236	.0000	.0009	.0057	.0001	.0003
%RSD	34.48	33.08	7063.	1275.	13.40	36.61	20.16	18.91	165.0
#1	.0008	.0259	-.0141	-.0249	.0002	.0033	.0342	.0004	.0000
#2	.0005	.0167	.0238	.0198	.0003	.0023	.0230	.0002	.0005
#3	.0004	.0140	-.0107	.0107	.0003	.0016	.0274	.0003	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F.0035	.0010	.0002	.0002	.0011	F.0021	.0000	.0005
Stddev	.0006	.0022	.0003	.0005	.0001	.0001	.0004	.0002	.0001
%RSD	283.1	62.39	25.53	205.4	26.32	7.079	20.02	858.2	19.36
#1	-.0008	.0061	.0010	.0007	.0002	.0012	.0018	.0003	.0006
#2	.0004	.0023	.0008	.0001	.0002	.0011	.0026	.0000	.0004
#3	-.0002	.0022	.0013	-.0002	.0003	.0011	.0019	-.0002	.0004
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.0020					.0020		
Low Limit		-.0020					-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 13:54:02 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	839.92	2148.7	20978.	1971.4
Stddev	3.73	1.4	11.	9.2
%RSD	.44420	.06476	.05304	.46657
#1	837.21	2147.1	20990.	1964.9
#2	838.37	2149.6	20976.	1967.2
#3	844.17	2149.4	20968.	1981.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 14:24:17 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2435	39.46	2.009	1.995	2.002	39.81	2.017	2.016	1.991	1.989
Stddev	.0016	.15	.003	.011	.012	.23	.002	.002	.010	.002
%RSD	.6390	.3733	.1268	.5500	.5872	.5736	.0929	.1001	.5109	.0766
#1	.2448	39.63	2.007	2.006	2.014	40.08	2.019	2.018	1.999	1.990
#2	.2418	39.37	2.007	1.996	2.001	39.70	2.017	2.014	1.979	1.987
#3	.2439	39.38	2.011	1.984	1.991	39.67	2.016	2.016	1.995	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.12	39.62	39.64	2.003	2.046	39.40	2.035	1.983	2.000	2.009
Stddev	.21	.25	.36	.012	.002	.15	.002	.002	.005	.002
%RSD	.5144	.6424	.9039	.5733	.0870	.3689	.0716	.0859	.2588	.1125
#1	40.35	39.88	40.02	2.016	2.046	39.57	2.037	1.983	2.006	2.010
#2	40.04	39.59	39.58	1.995	2.045	39.33	2.035	1.984	1.998	2.011
#3	39.97	39.38	39.31	1.998	2.048	39.30	2.034	1.981	1.996	2.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.790	2.069	2.004	2.004	2.000	2.026	2.026
Stddev	.004	.005	.012	.010	.002	.002	.002
%RSD	.2249	.2356	.6158	.4922	.1133	.0916	.1000
#1	1.795	2.075	2.017	2.015	2.001	2.027	2.027
#2	1.787	2.067	2.003	1.996	2.003	2.024	2.027
#3	1.789	2.066	1.992	2.001	1.998	2.028	2.023
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 14:24:17 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	729.41	2052.5	19841.	1923.6
Stddev	.79	1.6	86.	16.0
%RSD	.10840	.07565	.43131	.83301
#1	729.96	2051.6	19758.	1905.8
#2	728.50	2054.3	19929.	1928.1
#3	729.76	2051.6	19835.	1936.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 14:34:36 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0044	-.0001	.0000	.0001	.0027	.0000	.0000	.0003
Stddev	.0004	.0045	.0007	.0002	.0000	.0024	.0001	.0001	.0002
%RSD	278.3	100.7	487.7	1297.	78.96	90.13	165.2	494.8	64.01
#1	-.0003	-.0024	.0004	.0002	.0001	.0047	.0000	-.0001	.0003
#2	.0003	-.0013	-.0009	-.0001	.0001	.0034	.0000	.0000	.0005
#3	-.0005	-.0095	.0001	-.0001	.0000	.0000	.0001	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0039	.0297	-.0265	.0000	F.0011	.0095	-.0001	.0010
Stddev	.0005	.0014	.0312	.0329	.0000	.0000	.0014	.0001	.0008
%RSD	417.0	36.99	105.1	123.9	329.8	3.052	14.50	108.4	81.23
#1	.0004	.0035	.0577	.0016	.0000	.0011	.0109	-.0001	.0002
#2	-.0002	.0055	-.0039	-.0627	.0000	.0011	.0082	.0000	.0010
#3	-.0006	.0027	.0353	-.0186	.0000	.0011	.0095	-.0002	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	-.0016	.0011	.0006	.0000	.0006	.0011	.0004	.0001
Stddev	.0002	.0007	.0005	.0004	.0000	.0001	.0008	.0002	.0001
%RSD	12.50	42.13	43.36	66.01	98.95	16.24	67.34	52.19	149.3
#1	.0013	-.0023	.0016	.0005	.0000	.0008	.0003	.0003	.0002
#2	.0010	-.0016	.0006	.0003	.0001	.0006	.0016	.0003	.0000
#3	.0013	-.0009	.0011	.0011	.0001	.0006	.0016	.0007	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 14:34:36 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	838.67	2164.7	20661.	1938.0
Stddev	.69	8.8	83.	5.7
%RSD	.08256	.40455	.40092	.29327
#1	839.43	2171.0	20753.	1943.0
#2	838.08	2168.3	20592.	1931.8
#3	838.51	2154.7	20639.	1939.2

Zoom In Zoom Out

Sample Name: FA53803-19 Acquired: 5/7/2018 14:38:16 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0138	-.0036	.1239	.0001	312.7	-.0001	-.0002	-.0004	-.0004
Stddev	.0001	.0097	.0003	.0007	.0000	1.6	.0001	.0001	.0001	.0003
%RSD	85.37	70.39	8.205	.5257	12.38	.5245	88.82	41.54	27.32	81.22
#1	.0000	.0089	-.0033	.1243	.0001	313.4	-.0001	-.0001	-.0005	-.0006
#2	-.0002	.0076	-.0036	.1231	.0001	310.8	-.0001	-.0003	-.0005	.0000
#3	-.0003	.0251	-.0039	.1241	.0001	313.8	.0000	-.0003	-.0003	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.9096	2.945	12.62	.0436	.0006	41.40	-.0002	.0022	.0023	.0013
Stddev	.0081	.021	.10	.0003	.0002	.14	.0004	.0006	.0010	.0017
%RSD	.8952	.7155	.8173	.7290	34.47	.3502	167.8	28.88	44.62	123.9
#1	.9088	2.939	12.73	.0433	.0008	41.37	.0001	.0026	.0034	.0025
#2	.9019	2.927	12.62	.0439	.0006	41.27	-.0001	.0015	.0013	.0020
#3	.9181	2.968	12.52	.0435	.0004	41.56	-.0007	.0025	.0022	-.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.492	.0000	1.250	.0024	-.0008	-.0001	.0103
Stddev	.012	.0002	.003	.0001	.0013	.0001	.0001
%RSD	.2093	827.4	.2139	5.956	159.0	182.6	.6245
#1	5.499	-.0002	1.251	.0025	-.0016	-.0002	.0103
#2	5.497	.0001	1.248	.0026	.0007	.0000	.0104
#3	5.478	.0002	1.253	.0023	-.0016	.0000	.0103

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	711.84	1950.7	18809.	1851.5
Stddev	2.11	6.6	93.	10.0
%RSD	.29635	.34069	.49611	.54168
#1	709.60	1943.3	18853.	1840.7
#2	713.78	1952.9	18701.	1860.5
#3	712.14	1956.1	18871.	1853.3

Zoom In Zoom Out

Sample Name: FA53906-1 Acquired: 5/7/2018 14:42:31 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0120	-.0009	.0025	-.0001	7.797	.0000	-.0003	.0017	.0069
Stddev	.0002	.0011	.0005	.0001	.0001	.047	.000	.0001	.0002	.0001
%RSD	58.61	8.788	51.61	4.417	98.42	.6000	75.56	19.82	11.95	.7520
#1	.0004	.0128	-.0014	.0023	-.0001	7.824	-.0001	-.0003	.0017	.0069
#2	.0006	.0108	-.0005	.0025	.0000	7.825	.0000	-.0004	.0015	.0069
#3	.0002	.0124	-.0008	.0025	-.0001	7.743	.0000	-.0003	.0019	.0070

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1178	1.496	6.953	.0028	.0001	24.70	-.0002	.0037	.0009	.0021
Stddev	.0046	.002	.042	.0001	.0002	.09	.0000	.0002	.0014	.0028
%RSD	3.914	.1460	.6061	1.980	139.1	.3648	5.470	4.236	168.4	130.3
#1	.1146	1.496	6.918	.0029	.0001	24.76	-.0002	.0035	.0008	-.0010
#2	.1156	1.499	7.000	.0028	.0003	24.76	-.0002	.0037	.0023	.0045
#3	.1231	1.495	6.942	.0028	.0000	24.60	-.0002	.0039	-.0006	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.42	.0002	.0429	.0008	-.0006	.0320	.0057
Stddev	.03	.0006	.0003	.0000	.0012	.0001	.0001
%RSD	.1338	336.0	.6987	2.216	197.7	.4591	2.126
#1	19.45	-.0005	.0432	.0008	-.0019	.0319	.0058
#2	19.40	.0004	.0429	.0008	.0004	.0322	.0056
#3	19.43	.0006	.0426	.0008	-.0002	.0319	.0057

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	801.70	2134.1	20239.	1928.3
Stddev	1.04	4.9	39.	21.2
%RSD	.12946	.23094	.19102	1.0981
#1	800.51	2129.3	20230.	1917.1
#2	802.44	2139.1	20206.	1915.2
#3	802.14	2133.9	20282.	1952.8

Zoom In Zoom Out

Sample Name: FA53920-9F Acquired: 5/7/2018 14:46:48 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.3322	-.0006	.0117	.0000	1.306	.0000	.0000	.0012	.0000
Stddev	.0004	.0061	.0002	.0003	.000	.006	.000	.000	.0002	.0001
%RSD	132.1	1.838	28.98	2.888	192.5	.4334	297.4	285.9	13.62	12040.
#1	.0008	.3370	-.0005	.0114	-.0001	1.300	.0000	-.0001	.0013	-.0001
#2	.0000	.3254	-.0004	.0120	.0000	1.310	.0000	.0001	.0010	.0001
#3	.0001	.3343	-.0007	.0118	.0000	1.309	.0000	-.0002	.0014	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3411	.7415	.7330	.0017	.0001	17.28	-.0001	.0006	-.0007	.0011
Stddev	.0064	.0280	.0205	.0000	.0001	.07	.0001	.0007	.0009	.0001
%RSD	1.885	3.776	2.803	1.404	73.80	.3962	83.89	118.6	119.3	9.593
#1	.3448	.7549	.7093	.0018	.0001	17.36	-.0002	-.0001	-.0001	.0011
#2	.3337	.7603	.7451	.0017	.0001	17.25	-.0002	.0006	-.0018	.0012
#3	.3448	.7093	.7446	.0017	.0002	17.23	.0000	.0013	-.0004	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.175	.0002	.0163	.0053	-.0007	.0034	.0021
Stddev	.011	.0004	.0003	.0002	.0002	.0001	.0001
%RSD	.3308	248.0	1.585	3.662	29.33	2.394	4.616
#1	3.171	.0002	.0161	.0051	-.0009	.0033	.0020
#2	3.168	.0005	.0166	.0054	-.0005	.0035	.0022
#3	3.187	-.0003	.0162	.0054	-.0007	.0034	.0020

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	819.40	2163.5	20584.	1958.8
Stddev	1.55	4.8	121.	5.3
%RSD	.18952	.22041	.58739	.27234
#1	820.04	2161.6	20446.	1954.7
#2	820.54	2168.9	20672.	1964.8
#3	817.63	2160.0	20635.	1956.8

Zoom In Zoom Out

Sample Name: FA53905-1 Acquired: 5/7/2018 14:51:07 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0106	.0022	.0950	.0000	77.71	-.0001	-.0003	.0139	-.0004
Stddev	.0006	.0096	.0004	.0005	.000	.36	.0000	.0001	.0003	.0001
%RSD	193.5	90.89	18.74	.5038	583.8	.4569	27.52	26.77	2.452	32.59
#1	.0006	.0046	.0019	.0945	.0000	77.33	-.0001	-.0003	.0141	-.0005
#2	.0006	.0055	.0027	.0951	.0000	78.03	-.0001	-.0002	.0140	-.0003
#3	-.0004	.0217	.0020	.0954	-.0001	77.78	-.0001	-.0004	.0135	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0076	2.399	15.76	.0058	.0263	46.49	-.0006	.0030	.0006	.0017
Stddev	.0047	.035	.06	.0001	.0002	.21	.0002	.0010	.0001	.0018
%RSD	61.91	1.445	.3593	1.973	.8942	.4450	39.90	32.39	22.11	102.8
#1	.0027	2.359	15.76	.0056	.0265	46.45	-.0009	.0020	.0006	.0031
#2	.0120	2.422	15.82	.0058	.0260	46.71	-.0004	.0039	.0007	.0024
#3	.0080	2.416	15.70	.0059	.0264	46.30	-.0005	.0032	.0005	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.41	-.0003	1.029	.0017	.0004	.0061	.0452
Stddev	.01	.0003	.004	.0001	.0012	.0001	.0001
%RSD	.1005	96.33	.3698	4.304	263.5	2.395	.1562
#1	11.43	-.0005	1.027	.0017	-.0005	.0059	.0452
#2	11.40	-.0004	1.033	.0018	.0017	.0062	.0451
#3	11.41	.0000	1.026	.0017	.0001	.0060	.0452

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	766.66	2057.1	19761.	1909.6
Stddev	.49	2.3	10.	3.9
%RSD	.06447	.11208	.05064	.20301
#1	767.23	2054.8	19753.	1913.9
#2	766.32	2059.4	19760.	1908.4
#3	766.44	2057.1	19772.	1906.4

Zoom In Zoom Out

Sample Name: FA53905-2 Acquired: 5/7/2018 14:55:24 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0051	.0019	.0979	-.0001	79.35	-.0001	-.0004	.0152	-.0003
Stddev	.000	.0028	.0006	.0009	.0001	.73	.0000	.0001	.0005	.0001
%RSD	433.4	54.78	33.10	.9422	172.3	.9151	37.78	15.81	3.180	45.44
#1	.0000	.0024	.0018	.0977	.0000	79.19	-.0001	-.0004	.0157	-.0001
#2	-.0002	.0048	.0026	.0971	-.0002	78.72	-.0001	-.0003	.0150	-.0004
#3	.0001	.0079	.0014	.0990	-.0001	80.15	-.0001	-.0004	.0148	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0001	2.434	15.80	.0001	.0264	47.19	-.0008	.0025	.0008	-.0001
Stddev	.0017	.016	.22	.0000	.0003	.22	.0001	.0003	.0003	.0032
%RSD	1638.	.6461	1.380	67.26	1.061	.4590	14.94	13.21	40.10	3224.
#1	-.0016	2.450	15.58	.0001	.0265	47.15	-.0007	.0021	.0006	-.0008
#2	.0018	2.419	15.80	.0000	.0261	47.00	-.0009	.0028	.0012	-.0030
#3	-.0005	2.432	16.02	.0001	.0266	47.43	-.0009	.0025	.0006	.0034

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.34	.0001	1.043	.0017	-.0009	.0060	.0100
Stddev	.03	.0006	.005	.0002	.0010	.0002	.0001
%RSD	.2235	653.9	.5090	10.20	101.9	3.119	1.390
#1	11.36	.0000	1.041	.0018	-.0020	.0058	.0099
#2	11.31	-.0004	1.038	.0018	-.0003	.0060	.0100
#3	11.36	.0007	1.048	.0015	-.0005	.0062	.0102

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	767.93	2074.8	19683.	1880.9
Stddev	1.70	4.3	41.	18.2
%RSD	.22107	.20898	.20622	.96954
#1	766.07	2070.3	19636.	1889.6
#2	769.39	2078.9	19699.	1893.2
#3	768.34	2075.2	19712.	1860.0

Zoom In Zoom Out

Sample Name: FA53919-1 Acquired: 5/7/2018 14:59:40 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.1920	.0002	.0208	.0000	3.801	-.0002	.0000	.0009	.0003
Stddev	.0001	.0027	.0001	.0002	.0001	.029	.0000	.000	.0003	.0003
%RSD	114.6	1.400	82.28	1.110	239.6	.7727	17.15	363.8	31.33	77.31
#1	.0000	.1926	.0003	.0210	.0000	3.819	-.0002	.0001	.0010	.0001
#2	.0002	.1890	.0001	.0205	.0001	3.767	-.0002	-.0001	.0011	.0002
#3	.0000	.1943	.0001	.0208	.0001	3.817	-.0002	-.0001	.0006	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.305	.5932	2.291	.0369	.0002	3.155	.0015	.0022	.0020	-.0005
Stddev	.019	.0228	.020	.0002	.0001	.024	.0001	.0004	.0012	.0014
%RSD	.3576	3.851	.8587	.5617	32.24	.7573	8.719	16.21	57.51	299.0
#1	5.309	.5849	2.313	.0368	.0002	3.147	.0015	.0019	.0032	-.0019
#2	5.285	.5757	2.275	.0368	.0001	3.135	.0016	.0026	.0008	-.0003
#3	5.322	.6191	2.284	.0372	.0002	3.181	.0013	.0022	.0021	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.345	.0003	.0284	.0005	-.0014	.0008	.0080
Stddev	.002	.0002	.0001	.0001	.0010	.0004	.0001
%RSD	.1817	70.76	.1992	11.88	73.35	43.01	.7249
#1	1.347	.0005	.0284	.0005	-.0020	.0008	.0079
#2	1.346	.0002	.0284	.0006	-.0002	.0012	.0080
#3	1.342	.0001	.0285	.0005	-.0018	.0005	.0080

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	829.76	2182.5	20346.	1910.0
Stddev	.47	2.1	71.	17.2
%RSD	.05675	.09753	.35054	.89935
#1	829.62	2180.5	20321.	1894.6
#2	829.37	2182.1	20426.	1928.5
#3	830.28	2184.8	20290.	1906.9

Zoom In Zoom Out

Sample Name: FA53919-2 Acquired: 5/7/2018 15:03:57 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2304	-.0002	.0209	.0000	12.68	-.0003	-.0002	.0025	.0000
Stddev	.0002	.0107	.0008	.0001	.0001	.05	.0001	.0001	.0001	.0002
%RSD	403.4	4.653	508.2	.3586	239.6	.4043	25.72	62.33	2.445	413.6
#1	.0003	.2316	.0003	.0209	.0000	12.63	-.0003	-.0003	.0024	.0003
#2	.0001	.2405	.0003	.0210	.0000	12.68	-.0004	-.0001	.0025	.0000
#3	-.0002	.2192	-.0011	.0208	.0001	12.74	-.0002	-.0003	.0024	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.443	1.121	3.006	.0385	.0011	8.832	.0000	.0031	.0003	.0014
Stddev	.029	.002	.040	.0002	.0002	.026	.000	.0002	.0016	.0020
%RSD	.3949	.2096	1.336	.5627	21.37	.3001	51.54	7.579	589.8	139.3
#1	7.414	1.122	3.043	.0387	.0012	8.813	.0000	.0033	.0006	.0032
#2	7.444	1.118	3.012	.0385	.0012	8.820	.0000	.0029	-.0015	.0019
#3	7.472	1.123	2.964	.0383	.0008	8.862	-.0001	.0031	.0017	-.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.992	.0014	.0522	.0009	-.0001	.0019	.0014
Stddev	.005	.0002	.0002	.0000	.0017	.0001	.0001
%RSD	.1256	12.75	.4460	4.202	1447.	3.850	6.251
#1	3.995	.0012	.0522	.0009	-.0021	.0019	.0015
#2	3.986	.0014	.0525	.0008	.0006	.0018	.0013
#3	3.995	.0016	.0521	.0009	.0011	.0020	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	817.91	2172.0	20425.	1927.8
Stddev	1.54	1.9	82.	8.6
%RSD	.18779	.08708	.40356	.44856
#1	817.67	2174.0	20383.	1936.1
#2	816.50	2171.7	20520.	1928.3
#3	819.55	2170.3	20372.	1918.8

Zoom In Zoom Out

Sample Name: FA53919-3 Acquired: 5/7/2018 15:08:12 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.2178	-.0014	.0173	.0001	13.21	-.0001	-.0003	.0023	-.0002
Stddev	.0001	.0067	.0013	.0001	.0001	.08	.0000	.0001	.0003	.0002
%RSD	59.34	3.095	91.45	.7736	50.13	.5687	34.10	40.62	13.72	80.75
#1	-.0003	.2245	.0001	.0171	.0001	13.20	-.0001	-.0004	.0024	-.0004
#2	-.0001	.2181	-.0021	.0174	.0002	13.15	-.0001	-.0003	.0019	-.0002
#3	-.0003	.2110	-.0023	.0174	.0001	13.30	-.0002	-.0002	.0025	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.012	1.969	2.707	.0260	-.0003	6.577	-.0004	.0020	.0011	-.0008
Stddev	.019	.018	.055	.0001	.0002	.026	.0002	.0004	.0011	.0006
%RSD	.6341	.9265	2.032	.4262	57.11	.3919	69.89	18.17	102.3	75.06
#1	2.996	1.957	2.715	.0260	-.0001	6.559	-.0005	.0021	.0024	-.0007
#2	3.008	1.961	2.649	.0261	-.0004	6.565	-.0005	.0016	.0003	-.0002
#3	3.033	1.990	2.758	.0258	-.0005	6.606	-.0001	.0023	.0007	-.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.772	.0005	.0577	.0015	-.0012	.0015	.0011
Stddev	.005	.0001	.0002	.0001	.0013	.0002	.0000
%RSD	.1066	14.51	.2721	5.142	109.8	10.11	1.938
#1	4.769	.0005	.0577	.0014	.0003	.0013	.0011
#2	4.770	.0005	.0576	.0016	-.0017	.0016	.0011
#3	4.778	.0004	.0579	.0016	-.0022	.0016	.0011

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	823.29	2180.6	20603.	1946.1
Stddev	1.43	4.0	67.	12.3
%RSD	.17363	.18434	.32632	.63117
#1	822.08	2181.3	20652.	1947.3
#2	824.87	2184.3	20526.	1957.8
#3	822.93	2176.3	20630.	1933.3

Zoom In Zoom Out

Sample Name: FA53919-4 Acquired: 5/7/2018 15:12:29 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.3434	.0000	.0195	.0004	8.448	-.0001	-.0002	.0020	.0004
Stddev	.0003	.0067	.0013	.0000	.0000	.058	.0000	.0000	.0004	.0002
%RSD	417.7	1.950	2695.	.1894	3.755	.6863	38.56	18.56	18.63	55.64
#1	.0003	.3380	-.0001	.0195	.0004	8.467	.0000	-.0003	.0024	.0003
#2	-.0003	.3414	-.0011	.0194	.0004	8.494	-.0001	-.0002	.0018	.0006
#3	-.0003	.3509	.0014	.0195	.0004	8.383	.0000	-.0002	.0018	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.625	1.475	1.990	.0109	-.0002	8.481	-.0001	.0015	.0005	-.0027
Stddev	.008	.008	.029	.0001	.0001	.046	.0001	.0007	.0013	.0025
%RSD	.4897	.5198	1.458	.6373	64.28	.5378	71.55	46.89	244.3	91.73
#1	1.632	1.484	2.004	.0108	-.0001	8.474	-.0001	.0012	.0004	-.0010
#2	1.626	1.473	1.957	.0109	-.0001	8.530	-.0003	.0022	-.0007	-.0016
#3	1.616	1.469	2.010	.0109	-.0004	8.440	-.0001	.0009	.0019	-.0056

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.607	.0005	.0502	.0019	-.0001	.0017	.0029
Stddev	.011	.0001	.0002	.0002	.0006	.0002	.0001
%RSD	.3018	13.83	.4939	8.417	613.0	9.728	2.390
#1	3.595	.0005	.0504	.0019	-.0006	.0018	.0030
#2	3.617	.0005	.0502	.0021	-.0003	.0018	.0030
#3	3.609	.0004	.0499	.0018	.0006	.0015	.0029

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	825.48	2230.7	20868.	1980.1
Stddev	2.39	4.6	60.	11.5
%RSD	.28920	.20680	.28960	.58101
#1	822.74	2228.2	20918.	1967.1
#2	827.15	2227.9	20801.	1984.3
#3	826.54	2236.0	20885.	1988.9

Zoom In Zoom Out

Sample Name: FA53919-5 Acquired: 5/7/2018 15:16:47 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.2498	-.0013	.0164	.0001	8.223	-.0001	.0000	.0010	-.0001
Stddev	.0003	.0130	.0008	.0001	.0000	.036	.0000	.000	.0005	.0005
%RSD	98.69	5.193	62.45	.4149	26.10	.4438	34.83	424.9	46.77	747.2
#1	.0004	.2646	-.0008	.0164	.0002	8.182	.0000	-.0001	.0009	.0005
#2	.0000	.2405	-.0022	.0163	.0001	8.236	-.0001	.0001	.0015	-.0003
#3	.0004	.2443	-.0008	.0164	.0001	8.251	-.0001	-.0001	.0006	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7648	1.682	2.226	.0083	-.0006	7.430	-.0001	.0015	.0001	-.0009
Stddev	.0048	.020	.071	.0000	.0002	.019	.0002	.0002	.0014	.0009
%RSD	.6274	1.163	3.197	.3909	28.16	.2580	146.6	12.14	1395.	101.1
#1	.7593	1.701	2.179	.0083	-.0005	7.414	-.0003	.0015	-.0001	-.0018
#2	.7668	1.662	2.191	.0083	-.0006	7.425	.0001	.0013	-.0012	-.0002
#3	.7682	1.682	2.308	.0083	-.0008	7.451	-.0002	.0017	.0016	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.339	.0003	.0408	.0012	-.0016	.0012	.0032
Stddev	.002	.0003	.0001	.0001	.0012	.0005	.0001
%RSD	.0477	120.8	.2336	7.299	77.20	38.72	4.284
#1	3.338	.0001	.0408	.0012	-.0008	.0007	.0034
#2	3.338	.0000	.0408	.0012	-.0010	.0013	.0031
#3	3.341	.0007	.0406	.0011	-.0030	.0017	.0032

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	827.15	2192.6	20588.	1935.0
Stddev	1.29	2.2	67.	7.8
%RSD	.15565	.10072	.32542	.40284
#1	826.19	2195.1	20511.	1939.9
#2	826.64	2192.0	20631.	1926.0
#3	828.61	2190.8	20623.	1939.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 15:21:04 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2444	41.36	1.946	2.017	2.070	42.10	2.024	2.013	2.087	2.002
Stddev	.0017	.13	.002	.004	.001	.04	.003	.002	.006	.003
%RSD	.6869	.3249	.1206	.1714	.0264	.0941	.1550	.1034	.2719	.1596
#1	.2426	41.25	1.945	2.017	2.069	42.11	2.023	2.013	2.086	1.999
#2	.2459	41.32	1.949	2.021	2.070	42.05	2.028	2.015	2.093	2.006
#3	.2447	41.51	1.945	2.014	2.070	42.13	2.022	2.011	2.082	2.001

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.29	40.48	41.03	2.042	2.021	40.98	1.984	2.019	1.946	1.943
Stddev	.10	.09	.07	.013	.006	.13	.000	.004	.003	.006
%RSD	.2399	.2190	.1616	.6362	.2881	.3080	.0222	.2073	.1567	.3153
#1	41.32	40.52	41.10	2.031	2.014	40.92	1.984	2.016	1.948	1.950
#2	41.18	40.55	41.03	2.057	2.025	40.89	1.984	2.018	1.948	1.941
#3	41.38	40.38	40.96	2.040	2.023	41.12	1.984	2.024	1.943	1.938

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.741	1.990	2.057	2.043	2.018	2.043	2.033
Stddev	.002	.005	.005	.009	.003	.001	.003
%RSD	.1395	.2530	.2347	.4612	.1247	.0519	.1503
#1	1.739	1.990	2.053	2.034	2.019	2.043	2.031
#2	1.743	1.995	2.056	2.052	2.015	2.044	2.037
#3	1.740	1.985	2.062	2.042	2.020	2.042	2.032

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 15:21:04 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	735.52	2113.6	19614.	1887.8
Stddev	.57	5.1	92.	5.1
%RSD	.07750	.24044	.47149	.27138
#1	736.17	2114.5	19688.	1882.4
#2	735.12	2108.1	19510.	1888.4
#3	735.26	2118.2	19643.	1892.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 15:25:02 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0042	-.0006	.0003	.0001	.0020	.0001	.0002	.0003
Stddev	.0003	.0107	.0011	.0002	.0001	.0064	.0000	.0001	.0002
%RSD	105.1	255.9	181.5	77.01	72.89	325.4	55.55	55.53	86.24
#1	-.0001	-.0150	-.0006	.0005	.0001	.0015	.0001	.0002	.0000
#2	-.0006	-.0039	-.0016	.0001	.0000	.0086	.0001	.0001	.0003
#3	-.0001	.0064	.0005	.0003	.0001	-.0042	.0001	.0003	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0202	.0340	-.0203	.0002	F .0026	.0082	-.0002	.0002
Stddev	.0002	.0023	.0177	.0284	.0000	.0006	.0025	.0001	.0004
%RSD	235.6	11.40	51.90	139.8	2.561	21.55	30.27	47.07	178.8
#1	-.0001	.0225	.0378	.0123	.0002	.0029	.0092	-.0003	-.0002
#2	-.0003	.0202	.0495	-.0398	.0002	.0029	.0054	-.0001	.0004
#3	.0001	.0179	.0148	-.0334	.0002	.0019	.0100	-.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	.0008	.0021	.0006	.0001	.0013	.0014	.0003	.0003
Stddev	.0005	.0007	.0008	.0004	.0001	.0001	.0008	.0003	.0000
%RSD	39.76	90.36	39.22	74.91	46.85	3.907	56.28	86.72	13.77
#1	.0017	.0009	.0028	.0008	.0001	.0013	.0023	.0002	.0003
#2	.0014	.0000	.0012	.0008	.0001	.0013	.0010	.0002	.0003
#3	.0007	.0015	.0023	.0001	.0002	.0012	.0009	.0006	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 15:25:02 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	842.67	2206.8	20430.	1917.7
Stddev	2.85	4.2	65.	24.2
%RSD	.33862	.19215	.31897	1.2628
#1	845.96	2211.5	20361.	1902.2
#2	841.15	2205.7	20491.	1905.4
#3	840.90	2203.3	20439.	1945.6

Zoom In Zoom Out

Sample Name: MP33701-MB2A Acquired: 5/7/2018 15:29:20 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0148	-.0009	.0004	.0002	.0474	-.0001	-.0001	.0002	.0002
Stddev	.0001	.0080	.0002	.0001	.0002	.0065	.0000	.0001	.0004	.0002
%RSD	80.85	54.47	21.64	29.42	103.7	13.68	76.24	77.55	244.8	109.7
#1	.0000	.0207	-.0007	.0004	.0003	.0495	.0000	-.0002	-.0002	-.0001
#2	-.0001	.0180	-.0010	.0005	.0001	.0525	-.0001	.0000	.0005	.0003
#3	-.0003	.0056	-.0009	.0003	.0000	.0401	-.0001	-.0001	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0363	.0149	-.0236	.0004	.0004	.0270	-.0002	-.0004	.0010	.0006
Stddev	.0002	.0260	.0229	.0000	.0000	.0050	.0002	.0004	.0016	.0013
%RSD	.5360	174.1	97.12	1.328	8.600	18.42	99.53	87.02	160.1	210.7
#1	.0363	.0058	-.0450	.0004	.0004	.0312	.0000	-.0001	-.0008	-.0008
#2	.0365	.0443	-.0262	.0004	.0004	.0215	-.0002	-.0008	.0020	.0017
#3	.0361	-.0053	.0005	.0004	.0004	.0284	-.0004	-.0004	.0018	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0290	.0005	.0005	.0003	-.0013	.0000	.0041
Stddev	.0005	.0003	.0000	.0001	.0008	.0001	.0002
%RSD	1.784	54.89	9.408	15.90	64.47	852.4	3.957
#1	.0296	.0007	.0005	.0004	-.0004	.0002	.0042
#2	.0288	.0005	.0006	.0003	-.0021	.0000	.0041
#3	.0287	.0002	.0005	.0003	-.0013	-.0001	.0039
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33701-MB2A Acquired: 5/7/2018 15:29:20 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	848.00	2206.1	20701.	1925.7
Stddev	1.31	2.4	74.	9.9
%RSD	.15463	.10656	.35723	.51481
#1	847.85	2203.4	20767.	1936.9
#2	846.77	2207.6	20715.	1922.2
#3	849.38	2207.4	20621.	1918.1

Zoom In Zoom Out

Sample Name: MP33704-MB1 Acquired: 5/7/2018 15:33:41 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0089	-.0014	.0000	.0000	.0052	.0000	-.0001	.0001	-.0002
Stddev	.0002	.0084	.0002	.0003	.000	.0058	.000	.0000	.0003	.0001
%RSD	178.5	93.90	16.16	2802.	325.9	111.5	196.2	42.15	246.6	30.04
#1	-.0003	.0007	-.0014	-.0002	-.0001	.0108	-.0001	-.0001	.0000	-.0002
#2	-.0003	.0087	-.0017	-.0001	.0001	-.0007	-.0001	-.0001	-.0001	-.0002
#3	.0001	.0174	-.0013	.0003	-.0001	.0054	.0001	-.0001	.0004	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0192	.0201	.0000	-.0003	-.0018	-.0004	-.0002	.0016	-.0007
Stddev	.0026	.0078	.0186	.0000	.0001	.0047	.0002	.0002	.0009	.0009
%RSD	237.3	40.59	92.31	182.6	46.39	259.2	63.69	108.0	58.83	127.8
#1	.0038	.0115	.0330	.0000	-.0002	.0017	-.0001	-.0003	.0006	-.0014
#2	-.0015	.0192	-.0012	.0000	-.0002	.0000	-.0005	-.0003	.0018	-.0011
#3	.0010	.0271	.0285	.0001	-.0004	-.0071	-.0005	.0000	.0024	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0268	.0001	.0000	.0001	-.0017	.0002	.0009
Stddev	.0004	.0002	.000	.0001	.0006	.0002	.0000
%RSD	1.397	186.8	410.9	121.2	37.71	100.6	2.502
#1	.0268	.0001	.0000	.0002	-.0010	.0003	.0009
#2	.0264	.0003	.0001	.0000	-.0016	.0003	.0009
#3	.0271	-.0001	.0000	.0000	-.0023	.0000	.0008
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33704-MB1 Acquired: 5/7/2018 15:33:41 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	843.57	2199.6	20562.	1911.5
Stddev	1.78	1.7	31.	19.6
%RSD	.21110	.07658	.15209	1.0253
#1	844.72	2198.9	20526.	1891.8
#2	841.52	2198.3	20580.	1931.0
#3	844.48	2201.5	20580.	1911.9

Zoom In Zoom Out

Sample Name: MP33704-B1 Acquired: 5/7/2018 15:38:02 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0497	27.09	1.893	2.006	.0523	25.75	.0494	.5037	.2112	.2525
Stddev	.0004	.16	.004	.014	.0000	.06	.0002	.0007	.0011	.0009
%RSD	.8774	.5944	.2320	.6718	.0241	.2150	.4484	.1446	.5050	.3427
#1	.0494	27.04	1.896	1.996	.0523	25.71	.0495	.5036	.2113	.2517
#2	.0502	27.26	1.888	2.021	.0523	25.81	.0492	.5030	.2122	.2534
#3	.0495	26.95	1.895	2.000	.0523	25.72	.0496	.5045	.2101	.2525
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.20	24.37	24.65	.5080	.4703	24.85	.5058	.4890	.4831	1.869
Stddev	.17	.13	.17	.0043	.0002	.15	.0001	.0014	.0008	.003
%RSD	.6561	.5134	.7048	.8501	.0508	.5880	.0185	.2912	.1691	.1495
#1	26.09	24.28	24.48	.5085	.4701	24.84	.5058	.4874	.4840	1.870
#2	26.39	24.51	24.83	.5120	.4705	25.00	.5057	.4902	.4823	1.871
#3	26.10	24.31	24.64	.5035	.4701	24.71	.5058	.4894	.4831	1.866
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2620	.4770	.5084	.5031	1.911	.4761	.4995
Stddev	.0003	.0009	.0029	.0026	.004	.0011	.0010
%RSD	.1082	.1814	.5615	.5187	.2277	.2375	.2079
#1	.2620	.4771	.5073	.5026	1.906	.4757	.4994
#2	.2623	.4761	.5116	.5060	1.915	.4774	.4985
#3	.2618	.4778	.5062	.5009	1.913	.4753	.5006
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33704-B1 Acquired: 5/7/2018 15:38:02 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	773.44	2147.0	19845.	1911.8
Stddev	1.41	4.2	153.	9.1
%RSD	.18169	.19384	.77245	.47461
#1	774.98	2142.3	19795.	1913.8
#2	772.22	2148.2	19723.	1901.8
#3	773.12	2150.4	20017.	1919.7

Zoom In Zoom Out

Sample Name: FA53920-1 Acquired: 5/7/2018 15:42:05 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	6.988	.0012	.0858	.0002	21.11	.0004	-.0001	.0085	.0033
Stddev	.0003	.046	.0006	.0010	.0001	.05	.0000	.0002	.0003	.0003
%RSD	647.7	.6603	49.19	1.213	30.92	.2228	9.119	275.9	3.317	8.281
#1	-.0003	7.018	.0018	.0870	.0003	21.10	.0005	.0000	.0088	.0036
#2	.0002	7.010	.0007	.0855	.0001	21.07	.0004	.0001	.0082	.0033
#3	.0003	6.935	.0010	.0849	.0002	21.16	.0004	-.0003	.0086	.0031

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.438	2.638	2.531	.0220	.0040	12.07	.0011	.0092	.0015	.0024
Stddev	.005	.015	.030	.0001	.0001	.02	.0001	.0012	.0008	.0013
%RSD	.1917	.5841	1.196	.5219	2.531	.1466	5.395	13.42	51.34	54.83
#1	2.437	2.642	2.511	.0221	.0041	12.09	.0010	.0105	.0018	.0033
#2	2.442	2.652	2.566	.0220	.0039	12.07	.0011	.0089	.0021	.0030
#3	2.433	2.621	2.517	.0219	.0040	12.05	.0010	.0081	.0006	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.883	.0008	.3298	.1439	.0014	.0151	.0090
Stddev	.011	.0006	.0011	.0013	.0005	.0001	.0001
%RSD	.2184	73.32	.3265	.9347	32.97	.9346	.8588
#1	4.886	.0015	.3298	.1437	.0012	.0153	.0089
#2	4.893	.0006	.3309	.1453	.0020	.0151	.0091
#3	4.872	.0004	.3287	.1427	.0011	.0150	.0090

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	805.57	2209.9	20600.	1974.1
Stddev	1.25	2.5	61.	11.3
%RSD	.15483	.11230	.29768	.57464
#1	804.17	2209.0	20534.	1974.6
#2	806.56	2212.8	20611.	1962.5
#3	805.97	2208.1	20655.	1985.2

Zoom In Zoom Out

Sample Name: MP33704-D1 Acquired: 5/7/2018 15:46:21 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	5.597	.0013	.0783	.0002	20.19	.0003	.0002	.0076	.0032
Stddev	.0004	.048	.0007	.0004	.0000	.08	.0001	.0002	.0006	.0003
%RSD	318.1	.8616	57.69	.4567	14.94	.3845	15.55	140.5	7.501	8.082
#1	.0001	5.637	.0012	.0785	.0002	20.14	.0004	.0004	.0073	.0030
#2	-.0003	5.543	.0006	.0778	.0002	20.14	.0003	.0001	.0073	.0031
#3	.0005	5.609	.0021	.0785	.0002	20.28	.0003	.0000	.0082	.0035

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.191	2.493	2.471	.0209	.0034	11.51	.0010	.0079	.0026	.0006
Stddev	.013	.004	.064	.0002	.0003	.05	.0002	.0010	.0009	.0005
%RSD	.6127	.1469	2.583	1.116	7.435	.4665	22.96	12.78	35.17	97.15
#1	2.187	2.496	2.402	.0206	.0031	11.48	.0008	.0083	.0035	.0010
#2	2.179	2.489	2.528	.0211	.0036	11.47	.0013	.0087	.0026	.0007
#3	2.205	2.495	2.482	.0208	.0035	11.57	.0010	.0068	.0017	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.721	.0006	.3022	.0785	-.0005	.0137	.0087
Stddev	.017	.0001	.0003	.0030	.0019	.0002	.0001
%RSD	.4687	16.59	.1047	3.815	384.3	1.401	.7005
#1	3.726	.0005	.3024	.0780	.0012	.0135	.0087
#2	3.735	.0006	.3018	.0757	-.0001	.0139	.0087
#3	3.701	.0007	.3023	.0816	-.0025	.0136	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	809.63	2205.8	20703.	1972.4
Stddev	1.49	5.2	95.	7.2
%RSD	.18396	.23559	.45767	.36664
#1	808.01	2200.8	20720.	1974.3
#2	810.94	2205.3	20600.	1978.5
#3	809.95	2211.2	20787.	1964.4

Zoom In Zoom Out

Sample Name: MP33704-SD1 Acquired: 5/7/2018 15:50:37 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0014	7.235	-.0041	.0888	-.0001	21.93	-.0001	.0001	.0083	.0020
Stddev	.0004	.039	.0046	.0015	.0002	.09	.0002	.0005	.0027	.0005
%RSD	30.48	.5355	112.6	1.680	130.6	.4011	178.7	940.0	33.07	26.87
#1	-.0019	7.247	-.0078	.0905	-.0003	22.00	.0001	-.0003	.0084	.0020
#2	-.0010	7.191	.0010	.0881	.0000	21.83	-.0001	.0006	.0055	.0026
#3	-.0015	7.266	-.0054	.0877	-.0001	21.96	-.0004	-.0002	.0109	.0015

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.548	2.772	2.455	.0233	.0011	12.36	-.0001	.0112	.0091	-.0029
Stddev	.007	.061	.143	.0005	.0004	.10	.0008	.0013	.0037	.0095
%RSD	.2776	2.194	5.808	2.338	36.30	.7744	586.8	11.65	40.35	328.3
#1	2.554	2.761	2.549	.0230	.0011	12.42	.0003	.0122	.0110	.0078
#2	2.540	2.717	2.291	.0240	.0015	12.25	-.0010	.0097	.0049	-.0104
#3	2.549	2.838	2.524	.0231	.0007	12.40	.0003	.0116	.0115	-.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.037	.0025	.3382	.1619	.0047	.0184	.0099
Stddev	.078	.0026	.0023	.0122	.0055	.0003	.0006
%RSD	1.547	106.6	.6818	7.529	117.6	1.449	6.515
#1	5.125	.0049	.3398	.1541	.0083	.0185	.0098
#2	5.006	-.0003	.3356	.1556	-.0016	.0181	.0106
#3	4.979	.0028	.3394	.1759	.0073	.0187	.0093

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	839.81	2215.1	20654.	1942.7
Stddev	.93	3.5	50.	4.2
%RSD	.11118	.15657	.24438	.21692
#1	840.85	2213.3	20679.	1939.0
#2	839.52	2212.9	20688.	1941.7
#3	839.05	2219.1	20596.	1947.3

Zoom In Zoom Out

Sample Name: MP33704-PS1 Acquired: 5/7/2018 15:54:56 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0436	9.112	.0986	.3232	.0494	25.32	.0479	.0482	.0573	.1009
Stddev	.0001	.033	.0010	.0012	.0004	.16	.0001	.0001	.0004	.0007
%RSD	.3251	.3645	.9875	.3567	.7517	.6482	.2099	.2434	.6255	.6516
#1	.0435	9.074	.0987	.3227	.0492	25.16	.0478	.0483	.0575	.1006
#2	.0436	9.134	.0976	.3245	.0498	25.49	.0478	.0482	.0574	.1006
#3	.0438	9.128	.0996	.3224	.0491	25.31	.0480	.0481	.0569	.1017

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.244	11.79	7.253	.0703	.0931	20.96	.0982	.0547	.0942	.0859
Stddev	.038	.06	.043	.0004	.0005	.08	.0002	.0002	.0006	.0015
%RSD	.7198	.4699	.5910	.5317	.5556	.3663	.2098	.2902	.6871	1.708
#1	5.218	11.80	7.268	.0702	.0928	20.88	.0981	.0548	.0948	.0876
#2	5.288	11.85	7.287	.0707	.0937	21.03	.0985	.0545	.0943	.0853
#3	5.227	11.74	7.205	.0699	.0927	20.99	.0981	.0548	.0935	.0849

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.792	.0467	.3670	.2504	.0914	.0610	.2459
Stddev	.018	.0001	.0011	.0033	.0007	.0001	.0003
%RSD	.3834	.2982	.2931	1.302	.7897	.1949	.1141
#1	4.789	.0468	.3661	.2468	.0908	.0611	.2461
#2	4.811	.0467	.3682	.2511	.0922	.0609	.2455
#3	4.775	.0465	.3668	.2532	.0913	.0610	.2459

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	792.90	2203.1	20610.	1976.7
Stddev	2.34	5.4	31.	16.7
%RSD	.29463	.24527	.14899	.84245
#1	793.37	2209.3	20577.	1980.0
#2	794.96	2200.8	20616.	1958.6
#3	790.36	2199.2	20637.	1991.4

◀ Zoom In ▶
Zoom Out

Sample Name: MP33704-S1 Acquired: 5/7/2018 15:59:06 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0492	32.34	1.871	2.064	.0515	43.72	.0486	.4926	.2162	.2543
Stddev	.0003	.08	.003	.002	.0001	.18	.0000	.0004	.0010	.0007
%RSD	.5759	.2446	.1587	.1156	.1297	.4094	.0962	.0844	.4462	.2570
#1	.0494	32.29	1.874	2.061	.0515	43.59	.0487	.4927	.2168	.2540
#2	.0489	32.29	1.871	2.065	.0514	43.64	.0486	.4930	.2167	.2551
#3	.0494	32.43	1.868	2.065	.0516	43.92	.0486	.4922	.2151	.2539

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.15	24.75	24.76	.5228	.4632	34.38	.4967	.4987	.4688	1.849
Stddev	.11	.16	.07	.0016	.0012	.15	.0008	.0017	.0021	.007
%RSD	.4173	.6375	.2693	.3046	.2552	.4360	.1550	.3355	.4469	.3815
#1	26.10	24.57	24.74	.5220	.4624	34.25	.4975	.5006	.4710	1.855
#2	26.07	24.78	24.71	.5246	.4645	34.34	.4966	.4979	.4686	1.851
#3	26.27	24.88	24.84	.5218	.4627	34.55	.4960	.4975	.4669	1.841

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.784	.4611	.8281	.5955	1.920	.4854	.4939
Stddev	.026	.0021	.0022	.0046	.010	.0016	.0009
%RSD	.4454	.4542	.2664	.7688	.5116	.3304	.1766
#1	5.784	.4621	.8264	.5972	1.909	.4855	.4929
#2	5.809	.4624	.8274	.5991	1.922	.4870	.4945
#3	5.758	.4586	.8306	.5904	1.928	.4838	.4944

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	759.06	2173.4	20068.	1960.9
Stddev	1.91	4.6	42.	12.7
%RSD	.25183	.21050	.20894	.64834
#1	761.17	2172.0	20033.	1961.5
#2	758.59	2169.7	20056.	1973.3
#3	757.44	2178.5	20114.	1947.9

◀ Zoom In ▶
Zoom Out

Sample Name: MP33704-S2 Acquired: 5/7/2018 16:03:08 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0495	34.64	1.865	2.061	.0516	45.66	.0483	.4903	.2160	.2540
Stddev	.0004	.13	.005	.010	.0002	.26	.0001	.0002	.0009	.0004
%RSD	.8194	.3851	.2855	.5069	.4116	.5704	.1652	.0379	.3956	.1494
#1	.0494	34.49	1.864	2.052	.0514	45.36	.0482	.4904	.2166	.2544
#2	.0491	34.68	1.860	2.073	.0518	45.77	.0482	.4901	.2163	.2536
#3	.0499	34.75	1.870	2.058	.0517	45.84	.0484	.4904	.2150	.2541

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	28.21	26.79	26.77	.5213	.4644	36.29	.4949	.4972	.4648	1.846
Stddev	.11	.02	.12	.0018	.0006	.10	.0003	.0009	.0017	.005
%RSD	.3818	.0590	.4452	.3459	.1248	.2624	.0669	.1847	.3613	.2558
#1	28.10	26.77	26.64	.5225	.4637	36.19	.4951	.4965	.4636	1.846
#2	28.32	26.80	26.87	.5192	.4644	36.37	.4950	.4983	.4640	1.841
#3	28.21	26.79	26.80	.5220	.4649	36.31	.4945	.4970	.4667	1.850

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.797	.4614	.8197	.6071	1.914	.4835	.4929
Stddev	.007	.0006	.0031	.0111	.008	.0014	.0012
%RSD	.1279	.1302	.3788	1.836	.4194	.2969	.2375
#1	5.789	.4608	.8168	.6023	1.907	.4850	.4928
#2	5.800	.4615	.8229	.6199	1.923	.4821	.4941
#3	5.803	.4620	.8193	.5992	1.913	.4834	.4917

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	755.68	2167.9	19972.	1935.4
Stddev	3.44	2.7	62.	11.9
%RSD	.45470	.12532	.30805	.61338
#1	757.67	2166.7	19901.	1946.4
#2	751.71	2166.0	20000.	1937.0
#3	757.66	2171.0	20015.	1922.8

◀ Zoom In ▶
Zoom Out

Sample Name: FA53920-2 Acquired: 5/7/2018 16:07:10 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	1.302	.0013	.0232	.0001	16.17	-.0001	.0004	.0026	.0010
Stddev	.0003	.002	.0004	.0002	.0001	.04	.0000	.0001	.0003	.0002
%RSD	1900.	.1851	31.98	.8968	50.04	.2714	33.00	34.66	9.767	15.84
#1	.0003	1.300	.0013	.0233	.0002	16.13	-.0001	.0003	.0027	.0010
#2	-.0003	1.301	.0009	.0229	.0001	16.21	-.0001	.0005	.0023	.0009
#3	.0001	1.305	.0017	.0232	.0001	16.16	-.0002	.0003	.0028	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.856	1.349	2.119	.0201	.0007	9.638	.0005	.0036	.0010	.0022
Stddev	.016	.007	.061	.0001	.0001	.052	.0002	.0008	.0013	.0018
%RSD	.5565	.4937	2.862	.5665	16.79	.5401	40.69	22.59	128.0	82.86
#1	2.867	1.355	2.187	.0202	.0008	9.581	.0003	.0046	.0025	.0011
#2	2.863	1.350	2.101	.0201	.0008	9.651	.0005	.0033	.0000	.0042
#3	2.838	1.341	2.070	.0200	.0006	9.683	.0007	.0030	.0005	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.063	.0003	.0914	.0232	.0005	.0062	.0083
Stddev	.003	.0005	.0003	.0028	.0010	.0005	.0000
%RSD	.0945	148.6	.3205	12.28	192.3	7.563	.3947
#1	3.060	-.0002	.0910	.0222	-.0002	.0060	.0083
#2	3.066	.0004	.0915	.0209	.0001	.0059	.0083
#3	3.062	.0008	.0916	.0264	.0016	.0068	.0083

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	815.00	2176.2	20255.	1929.1
Stddev	1.55	3.0	83.	7.5
%RSD	.19007	.13974	.41114	.38845
#1	813.21	2172.7	20169.	1920.5
#2	815.78	2177.7	20260.	1932.4
#3	816.00	2178.2	20335.	1934.4

◀ Zoom In ▶
Zoom Out

Sample Name: CCV Acquired: 5/7/2018 16:11:27 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2438	40.64	1.953	1.995	2.040	41.31	2.019	2.006	2.052	1.987
Stddev	.0009	.36	.001	.019	.011	.29	.004	.002	.007	.008
%RSD	.3679	.8837	.0259	.9435	.5359	.7100	.1833	.0893	.3640	.4051
#1	.2447	40.81	1.953	2.013	2.048	41.53	2.021	2.007	2.052	1.989
#2	.2437	40.88	1.954	1.997	2.045	41.41	2.015	2.004	2.059	1.994
#3	.2429	40.23	1.953	1.976	2.028	40.97	2.022	2.006	2.044	1.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.80	39.98	40.46	2.027	2.016	40.19	1.988	2.011	1.947	1.952
Stddev	.21	.30	.41	.014	.005	.24	.004	.003	.004	.007
%RSD	.5153	.7551	1.011	.6823	.2561	.6086	.2160	.1689	.2254	.3594
#1	40.91	40.23	40.85	2.028	2.011	40.34	1.992	2.007	1.947	1.959
#2	40.92	40.06	40.50	2.040	2.015	40.33	1.984	2.012	1.942	1.945
#3	40.56	39.65	40.03	2.012	2.021	39.91	1.987	2.014	1.951	1.951
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.741	2.005	2.029	2.021	2.004	2.036	2.036
Stddev	.005	.009	.013	.012	.005	.005	.005
%RSD	.3038	.4517	.6185	.5903	.2695	.2493	.2558
#1	1.747	2.014	2.037	2.024	1.998	2.038	2.040
#2	1.739	1.996	2.036	2.031	2.004	2.039	2.030
#3	1.738	2.004	2.015	2.008	2.009	2.030	2.039
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 16:11:27 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	741.83	2123.3	19884.	1927.5
Stddev	1.61	3.8	80.	16.1
%RSD	.21711	.18080	.40112	.83596
#1	743.53	2120.3	19874.	1909.4
#2	741.65	2127.6	19810.	1932.7
#3	740.33	2122.0	19969.	1940.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 16:15:26 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0042	.0000	.0002	.0001	-.0003	.0001	.0000	.0004
Stddev	.0003	.0169	.001	.0002	.0000	.0003	.0001	.0001	.0001
%RSD	232.5	399.7	3967.	89.82	13.09	82.61	60.41	172.8	36.94
#1	-.0004	-.0144	.0004	.0000	.0001	-.0001	.0002	.0001	.0005
#2	.0000	.0087	-.0007	.0004	.0001	-.0003	.0001	.0000	.0003
#3	.0001	.0184	.0003	.0002	.0000	-.0006	.0001	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0154	.0453	-.0089	.0002	F.0026	.0126	-.0001	.0010
Stddev	.0001	.0037	.0161	.0251	.0000	.0008	.0011	.0001	.0007
%RSD	152.2	24.04	35.67	282.9	18.00	31.25	8.500	87.29	70.52
#1	.0001	.0194	.0437	-.0341	.0002	.0035	.0121	-.0001	.0013
#2	.0000	.0144	.0300	-.0086	.0002	.0024	.0119	-.0002	.0002
#3	.0001	.0123	.0621	.0161	.0002	.0019	.0138	.0000	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	.0002	.0018	.0004	.0001	.0013	F.0020	.0004	.0001
Stddev	.0009	.0013	.0013	.0007	.0000	.0001	.0006	.0001	.0001
%RSD	74.37	521.8	67.71	170.6	9.106	8.392	30.46	38.82	48.17
#1	.0002	.0009	.0013	.0004	.0001	.0012	.0024	.0005	.0002
#2	.0016	.0011	.0009	.0012	.0001	.0014	.0013	.0004	.0002
#3	.0018	-.0012	.0033	-.0003	.0001	.0013	.0024	.0002	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 16:15:26 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	837.47	2199.4	20481.	1903.7
Stddev	.36	5.8	48.	4.5
%RSD	.04254	.26370	.23631	.23866
#1	837.88	2193.9	20529.	1907.5
#2	837.34	2205.4	20432.	1898.6
#3	837.20	2199.0	20482.	1904.8

Zoom In Zoom Out

Sample Name: FA53920-3 Acquired: 5/7/2018 16:19:44 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0995	-.0002	.0239	.0001	27.55	.0000	.0000	.0010	.0003
Stddev	.0003	.0066	.0012	.0002	.0001	.21	.000	.0001	.0002	.0000
%RSD	132.8	6.685	601.8	.9925	43.99	.7535	374.0	309.4	20.98	3.102
#1	.0001	.1061	.0002	.0240	.0001	27.39	.0000	.0002	.0008	.0003
#2	.0000	.0929	-.0015	.0236	.0002	27.79	.0000	.0000	.0009	.0004
#3	.0006	.0994	.0007	.0240	.0001	27.47	-.0001	.0000	.0012	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2521	1.272	3.404	.0044	.0024	9.958	.0001	.0014	.0020	.0031
Stddev	.0030	.008	.011	.0001	.0002	.066	.0001	.0007	.0015	.0022
%RSD	1.201	.6415	.3082	1.594	8.081	.6587	251.2	46.93	76.27	70.66
#1	.2526	1.280	3.393	.0044	.0026	9.982	-.0001	.0021	.0035	.0008
#2	.2549	1.272	3.414	.0044	.0024	10.01	.0000	.0014	.0004	.0032
#3	.2489	1.264	3.406	.0043	.0023	9.884	.0002	.0008	.0021	.0052

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.636	.0006	.2246	.0036	-.0002	.0019	.0031
Stddev	.005	.0003	.0012	.0002	.0010	.0002	.0001
%RSD	.3228	57.34	.5544	4.605	613.6	8.108	2.812
#1	1.641	.0002	.2249	.0035	.0001	.0019	.0031
#2	1.631	.0008	.2257	.0038	.0007	.0018	.0032
#3	1.635	.0007	.2232	.0035	-.0013	.0021	.0030

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	813.52	2156.4	20149.	1923.4
Stddev	.55	3.2	121.	12.1
%RSD	.06750	.14733	.60102	.62890
#1	813.16	2152.8	20023.	1930.8
#2	814.16	2158.4	20161.	1909.5
#3	813.26	2158.2	20264.	1930.0

Zoom In Zoom Out

Sample Name: FA53920-4 Acquired: 5/7/2018 16:24:01 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	1.410	.0013	.0343	.0002	23.43	.0000	.0006	.0028	.0023
Stddev	.0002	.011	.0015	.0001	.0001	.15	.000	.0001	.0003	.0003
%RSD	402.6	.7419	113.3	.4279	39.52	.6539	1427.	25.50	11.98	11.74
#1	.0000	1.419	.0008	.0344	.0001	23.57	.0000	.0005	.0030	.0025
#2	-.0001	1.399	.0002	.0344	.0002	23.27	.0000	.0007	.0029	.0020
#3	.0003	1.412	.0030	.0341	.0002	23.44	.0000	.0005	.0024	.0025

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.130	1.815	3.486	.0131	.0018	11.10	.0008	.0040	.0019	.0007
Stddev	.019	.021	.017	.0001	.0002	.07	.0000	.0002	.0006	.0013
%RSD	.9016	1.150	.4812	1.052	9.756	.5978	5.945	4.509	32.63	176.4
#1	2.144	1.833	3.477	.0131	.0019	11.16	.0008	.0042	.0014	.0014
#2	2.108	1.819	3.476	.0133	.0018	11.03	.0009	.0040	.0017	-.0008
#3	2.137	1.792	3.506	.0130	.0016	11.11	.0008	.0038	.0026	.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.108	.0009	.2021	.0151	-.0004	.0078	.0116
Stddev	.003	.0002	.0019	.0011	.0011	.0000	.0001
%RSD	.1244	20.60	.9411	7.075	303.2	.4288	.6037
#1	2.110	.0009	.2034	.0142	.0008	.0077	.0117
#2	2.108	.0008	.1999	.0163	-.0005	.0078	.0116
#3	2.105	.0011	.2030	.0148	-.0014	.0078	.0116

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	810.81	2161.1	20301.	1937.6
Stddev	1.71	4.8	96.	1.2
%RSD	.21096	.21997	.47194	.06068
#1	812.54	2155.8	20366.	1936.9
#2	809.12	2162.6	20191.	1939.0
#3	810.77	2165.0	20347.	1937.0

Zoom In Zoom Out

Sample Name: FA53920-5 Acquired: 5/7/2018 16:28:17 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.5344	-.0005	.0802	.0000	11.69	-.0001	.0005	.0011	.0000
Stddev	.0002	.0045	.0012	.0005	.000	.02	.0000	.0000	.0003	.000
%RSD	109.2	.8468	228.3	.6737	299.6	.1887	76.89	6.545	24.14	675.4
#1	.0000	.5292	-.0011	.0808	.0000	11.67	.0000	.0006	.0008	-.0001
#2	-.0002	.5362	-.0014	.0802	-.0001	11.71	.0000	.0005	.0013	-.0002
#3	-.0003	.5377	.0009	.0797	.0000	11.68	-.0001	.0005	.0011	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.751	.6777	4.639	.0154	-.0002	18.08	.0010	.0019	.0006	-.0029
Stddev	.007	.0231	.049	.0001	.0002	.07	.0001	.0007	.0003	.0030
%RSD	.2705	3.415	1.056	.8340	86.17	.4040	14.11	34.43	48.20	101.8
#1	2.743	.6815	4.586	.0155	-.0004	18.12	.0010	.0026	.0006	-.0059
#2	2.758	.6986	4.651	.0153	.0000	17.99	.0009	.0020	.0008	-.0031
#3	2.754	.6528	4.682	.0155	-.0003	18.12	.0012	.0013	.0003	.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.912	.0004	.0723	.0037	.0000	.0028	.0229
Stddev	.004	.0003	.0004	.0002	.0010	.0002	.0000
%RSD	.2171	77.86	.5085	5.294	2655.	5.803	.2139
#1	1.916	.0006	.0726	.0037	-.0005	.0027	.0229
#2	1.914	.0006	.0719	.0038	-.0005	.0027	.0228
#3	1.908	.0000	.0723	.0035	.0012	.0030	.0229

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	814.08	2161.2	20480.	1941.8
Stddev	1.24	5.9	79.	7.7
%RSD	.15220	.27204	.38359	.39553
#1	814.61	2155.3	20487.	1950.5
#2	812.67	2167.1	20556.	1935.8
#3	814.97	2161.2	20399.	1939.2

Zoom In Zoom Out

Sample Name: FA53920-6 Acquired: 5/7/2018 16:32:33 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.3008	-.0004	.0298	.0002	11.37	.0000	.0002	.0018	-.0001
Stddev	.0003	.0088	.0000	.0005	.0000	.06	.000	.0002	.0000	.0004
%RSD	218.5	2.921	6.400	1.760	21.18	.5332	120.0	123.2	2.145	412.6
#1	-.0001	.3103	-.0004	.0304	.0002	11.42	-.0001	.0000	.0018	.0003
#2	.0005	.2990	-.0004	.0297	.0002	11.30	.0000	.0002	.0019	-.0005
#3	.0001	.2930	-.0003	.0294	.0001	11.40	.0000	.0004	.0019	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.087	1.702	2.998	.0062	-.0002	6.582	.0003	.0014	.0012	-.0005
Stddev	.006	.036	.038	.0000	.0002	.033	.0002	.0011	.0008	.0027
%RSD	.5155	2.098	1.267	.6933	72.64	.4955	65.17	76.49	64.42	558.6
#1	1.092	1.729	2.955	.0062	-.0003	6.618	.0005	.0002	.0019	.0026
#2	1.081	1.661	3.028	.0062	-.0004	6.554	.0002	.0023	.0012	-.0025
#3	1.089	1.715	3.010	.0063	.0000	6.575	.0002	.0017	.0004	-.0017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.223	.0004	.0558	.0038	-.0006	.0015	.0019
Stddev	.002	.0001	.0001	.0001	.0019	.0002	.0001
%RSD	.0400	32.58	.0954	1.431	319.7	13.00	7.485
#1	4.222	.0005	.0559	.0038	-.0027	.0014	.0019
#2	4.222	.0004	.0558	.0038	-.0003	.0017	.0018
#3	4.225	.0003	.0558	.0039	.0011	.0014	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	825.58	2198.9	20660.	1955.3
Stddev	1.52	2.8	35.	14.9
%RSD	.18372	.12741	.16752	.76005
#1	826.97	2197.3	20641.	1954.6
#2	823.96	2202.1	20700.	1970.4
#3	825.80	2197.2	20638.	1940.7

Zoom In Zoom Out

Sample Name: FA53920-7 Acquired: 5/7/2018 16:36:50 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.5282	-.0008	.0167	.0002	8.101	.0001	-.0001	.0015	.0001
Stddev	.000	.0169	.0014	.0001	.0001	.047	.0001	.0001	.0001	.0001
%RSD	414.6	3.198	171.2	.3299	36.80	.5830	63.20	166.4	8.403	195.6
#1	.0000	.5334	-.0006	.0168	.0002	8.129	.0001	-.0002	.0016	.0000
#2	.0000	.5418	-.0023	.0167	.0001	8.046	.0001	.0001	.0016	.0002
#3	.0000	.5093	.0005	.0167	.0003	8.126	.0002	-.0001	.0014	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.8616	1.479	1.418	.0081	-.0001	12.48	.0001	.0012	.0023	.0020
Stddev	.0066	.005	.020	.0001	.0002	.03	.0003	.0005	.0004	.0007
%RSD	.7683	.3248	1.392	.8691	172.9	.2605	301.1	44.43	15.87	34.80
#1	.8661	1.475	1.397	.0082	-.0002	12.49	.0005	.0006	.0026	.0025
#2	.8540	1.484	1.423	.0081	.0001	12.45	-.0001	.0016	.0019	.0012
#3	.8647	1.477	1.436	.0081	-.0002	12.51	-.0001	.0014	.0025	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.525	.0003	.0481	.0052	-.0005	.0021	.0091
Stddev	.005	.0002	.0002	.0003	.0007	.0003	.0001
%RSD	.1430	57.14	.4121	5.447	135.5	16.59	1.236
#1	3.520	.0005	.0482	.0052	-.0005	.0017	.0091
#2	3.524	.0001	.0479	.0055	.0002	.0020	.0092
#3	3.530	.0003	.0482	.0050	-.0012	.0024	.0090

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	821.49	2189.8	20703.	1981.1
Stddev	1.47	2.1	160.	19.3
%RSD	.17933	.09669	.77113	.97238
#1	823.04	2190.6	20519.	1963.8
#2	820.10	2191.4	20802.	2001.9
#3	821.34	2187.4	20787.	1977.6

◀ Zoom In ▶
Zoom Out

Sample Name: FA53920-8 Acquired: 5/7/2018 16:41:06 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	4.396	.0008	.0761	.0003	1.832	.0002	.0001	.0056	.0092
Stddev	.0003	.043	.0007	.0002	.0001	.016	.0000	.0001	.0001	.0002
%RSD	1817.	.9708	88.34	.2977	27.70	.8476	3.746	73.77	2.209	2.082
#1	.0000	4.377	.0005	.0763	.0002	1.841	.0002	.0001	.0057	.0090
#2	.0003	4.366	.0017	.0759	.0002	1.814	.0002	.0002	.0054	.0093
#3	-.0003	4.445	.0003	.0762	.0003	1.841	.0002	.0000	.0056	.0093

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.6271	.8092	.9046	.0025	.0035	17.27	.0012	.0078	.0009	-.0005
Stddev	.0032	.0130	.0182	.0000	.0002	.11	.0001	.0007	.0013	.0020
%RSD	.5087	1.603	2.010	1.878	5.451	.6568	8.840	8.818	138.8	436.5
#1	.6259	.7966	.8972	.0025	.0033	17.29	.0011	.0085	-.0006	.0015
#2	.6246	.8083	.8912	.0025	.0037	17.15	.0013	.0077	.0016	-.0025
#3	.6306	.8225	.9253	.0026	.0035	17.38	.0013	.0071	.0017	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.589	.0008	.1593	.0118	-.0008	.0090	.0086
Stddev	.020	.0006	.0010	.0001	.0007	.0002	.0002
%RSD	.3650	79.50	.6425	.4936	77.59	2.068	2.076
#1	5.612	.0013	.1591	.0118	-.0007	.0092	.0087
#2	5.584	.0001	.1584	.0117	-.0016	.0088	.0088
#3	5.572	.0010	.1604	.0118	-.0003	.0090	.0084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	812.31	2203.5	20848.	1994.2
Stddev	4.55	6.5	63.	18.4
%RSD	.56052	.29366	.30008	.92141
#1	810.55	2196.4	20918.	1977.6
#2	817.48	2205.2	20828.	2014.0
#3	808.90	2209.0	20798.	1990.9

◀ Zoom In ▶
Zoom Out

Sample Name: FA53920-10 Acquired: 5/7/2018 16:45:22 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.3532	.0003	.0069	.0000	15.15	-.0001	-.0002	.0019	.0002
Stddev	.000	.0062	.0007	.0001	.0001	.07	.0000	.0001	.0002	.0002
%RSD	529.7	1.747	247.4	1.830	545.6	.4339	51.88	28.34	7.891	78.98
#1	-.0003	.3603	.0007	.0070	.0001	15.08	-.0001	-.0002	.0019	.0003
#2	.0002	.3493	.0006	.0068	.0000	15.20	-.0001	-.0003	.0018	.0004
#3	.0000	.3500	-.0005	.0069	-.0001	15.18	.0000	-.0002	.0021	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.241	1.953	1.671	.0103	-.0004	5.611	-.0005	.0021	.0003	.0009
Stddev	.006	.007	.035	.0000	.0002	.013	.0002	.0007	.0015	.0042
%RSD	.4711	.3402	2.065	.3611	42.30	.2280	36.93	33.15	546.2	493.6
#1	1.235	1.960	1.671	.0103	-.0004	5.624	-.0005	.0023	.0020	.0036
#2	1.242	1.948	1.636	.0104	-.0005	5.599	-.0003	.0026	-.0004	.0030
#3	1.247	1.949	1.705	.0104	-.0002	5.611	-.0006	.0013	-.0008	-.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.059	.0008	.0515	.0053	-.0009	.0016	.0017
Stddev	.009	.0005	.0001	.0003	.0007	.0002	.0001
%RSD	.1697	66.80	.1716	5.078	71.72	11.06	5.841
#1	5.069	.0013	.0514	.0054	-.0006	.0018	.0017
#2	5.052	.0008	.0516	.0054	-.0005	.0015	.0017
#3	5.057	.0003	.0514	.0050	-.0017	.0016	.0019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	817.71	2157.9	20217.	1914.7
Stddev	2.47	5.7	100.	11.0
%RSD	.30247	.26205	.49300	.57275
#1	814.86	2151.4	20173.	1926.6
#2	819.02	2160.8	20146.	1912.4
#3	819.25	2161.6	20331.	1905.0

◀ Zoom In ▶
Zoom Out

Sample Name: FA53920-11 Acquired: 5/7/2018 16:49:39 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.3219	-.0005	.0211	.0001	11.62	-.0001	-.0002	.0052	.0001
Stddev	.0002	.0015	.0018	.0003	.0001	.07	.0000	.0001	.0002	.0002
%RSD	536.2	.4612	345.9	1.534	150.7	.6418	7.320	33.21	4.279	128.3
#1	.0003	.3222	-.0003	.0212	.0001	11.55	-.0001	-.0003	.0050	.0000
#2	.0001	.3232	.0012	.0214	.0002	11.70	-.0001	-.0003	.0054	.0004
#3	-.0002	.3203	-.0024	.0208	-.0001	11.61	-.0001	-.0001	.0051	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.785	1.715	2.643	.0261	.0001	13.44	-.0004	.0021	.0005	-.0006
Stddev	.021	.011	.004	.0001	.0002	.09	.0001	.0006	.0005	.0011
%RSD	.7428	.6162	.1532	.3015	162.8	.6419	30.47	26.62	108.5	188.4
#1	2.761	1.703	2.639	.0261	-.0001	13.37	-.0003	.0018	.0000	.0003
#2	2.795	1.724	2.647	.0261	.0002	13.54	-.0005	.0018	.0003	-.0018
#3	2.798	1.717	2.644	.0260	.0003	13.41	-.0004	.0028	.0010	-.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.644	.0004	.0599	.0047	-.0013	.0013	.0014
Stddev	.001	.0003	.0004	.0003	.0008	.0001	.0002
%RSD	.0226	70.29	.6416	6.103	64.45	10.80	12.03
#1	4.644	.0007	.0597	.0045	-.0022	.0013	.0012
#2	4.645	.0003	.0603	.0051	-.0010	.0014	.0014
#3	4.643	.0002	.0596	.0046	-.0007	.0012	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	816.53	2161.5	20457.	1957.6
Stddev	3.59	4.7	92.	3.7
%RSD	.43911	.21746	.44859	.18700
#1	812.80	2156.1	20393.	1961.8
#2	816.82	2164.2	20416.	1955.7
#3	819.95	2164.2	20562.	1955.2

◀ Zoom In ▶
Zoom Out

Sample Name: MP33705-MB1 Acquired: 5/7/2018 16:53:56 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0168	-.0013	.0001	.0000	.0563	-.0001	-.0001	.0004	.0000
Stddev	.0003	.0124	.0004	.0002	.000	.0019	.0000	.0002	.0003	.0001
%RSD	218.8	73.87	34.05	127.4	1244.	3.462	36.70	316.0	68.59	697.9
#1	.0002	.0261	-.0015	.0003	.0001	.0581	-.0001	-.0002	.0007	.0001
#2	-.0002	.0214	-.0016	.0000	.0000	.0542	-.0001	-.0001	.0002	.0001
#3	.0003	.0027	-.0008	.0001	-.0001	.0566	-.0001	.0001	.0003	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0308	.0167	.0137	.0005	-.0003	.0114	.0000	.0001	.0015	-.0005
Stddev	.0041	.0130	.0218	.0001	.0001	.0040	.000	.0012	.0004	.0018
%RSD	13.29	77.67	159.5	15.03	27.47	34.81	452.6	1002.	29.59	345.5
#1	.0315	.0036	.0099	.0004	-.0003	.0091	.0001	.0007	.0015	.0015
#2	.0345	.0296	.0371	.0006	-.0003	.0091	-.0003	.0009	.0019	-.0019
#3	.0264	.0170	-.0060	.0005	-.0002	.0159	.0001	-.0012	.0010	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0206	.0187	.0004	.0004	-.0018	.0000	.0023
Stddev	.0005	.0005	.0001	.0001	.0008	.0002	.0000
%RSD	2.421	2.545	30.27	22.68	42.81	3211.	1.193
#1	.0201	.0184	.0004	.0003	-.0010	-.0002	.0023
#2	.0211	.0193	.0003	.0004	-.0025	.0000	.0023
#3	.0207	.0186	.0005	.0004	-.0019	.0002	.0023
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33705-MB1 Acquired: 5/7/2018 16:53:56 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	854.33	2185.5	21074.	1980.4
Stddev	.26	5.5	57.	7.8
%RSD	.03062	.25207	.27151	.39222
#1	854.19	2179.3	21010.	1986.1
#2	854.63	2189.7	21121.	1983.4
#3	854.16	2187.6	21090.	1971.5

Zoom In Zoom Out

Sample Name: MP33705-B1 Acquired: 5/7/2018 16:58:16 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0488	25.65	1.903	1.969	.0503	24.41	.0485	.4976	.2026	.2479
Stddev	.0004	.15	.005	.013	.0005	.14	.0002	.0015	.0013	.0002
%RSD	.7545	.5779	.2813	.6471	.8948	.5743	.4000	.3033	.6198	.0784
#1	.0488	25.70	1.905	1.980	.0508	24.47	.0484	.4977	.2035	.2477
#2	.0485	25.77	1.897	1.973	.0503	24.50	.0485	.4961	.2012	.2479
#3	.0492	25.49	1.908	1.955	.0499	24.24	.0487	.4991	.2031	.2481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.34	23.56	24.02	.5045	.4682	23.60	.5114	.4750	.4762	1.878
Stddev	.17	.18	.17	.0022	.0006	.16	.0005	.0023	.0010	.001
%RSD	.6636	.7661	.7251	.4449	.1336	.6569	.1038	.4903	.2061	.0717
#1	25.40	23.72	24.13	.5057	.4675	23.66	.5120	.4734	.4750	1.877
#2	25.48	23.60	24.11	.5019	.4686	23.72	.5112	.4740	.4767	1.880
#3	25.16	23.36	23.82	.5059	.4686	23.43	.5110	.4777	.4768	1.878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2362	.5029	.4857	.4908	1.862	.4730	.4935
Stddev	.0005	.0009	.0032	.0014	.005	.0008	.0012
%RSD	.2061	.1870	.6624	.2763	.2581	.1654	.2351
#1	.2362	.5039	.4876	.4916	1.856	.4728	.4931
#2	.2366	.5021	.4875	.4892	1.863	.4723	.4926
#3	.2356	.5025	.4820	.4916	1.865	.4738	.4948
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33705-B1 Acquired: 5/7/2018 16:58:16 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	778.92	2124.0	20102.	1962.3
Stddev	.89	2.0	68.	15.1
%RSD	.11416	.09650	.33979	.76916
#1	779.73	2121.7	20079.	1945.1
#2	777.97	2125.7	20179.	1968.7
#3	779.07	2124.5	20049.	1973.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 17:02:17 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2448	39.86	1.990	2.002	2.020	40.48	2.034	2.023	2.033	1.976
Stddev	.0019	.29	.004	.009	.009	.15	.003	.002	.004	.005
%RSD	.7728	.7303	.1951	.4455	.4537	.3665	.1311	.0857	.2217	.2561
#1	.2435	39.95	1.994	2.002	2.029	40.65	2.031	2.021	2.028	1.970
#2	.2438	39.54	1.988	1.993	2.011	40.36	2.034	2.023	2.035	1.978
#3	.2469	40.10	1.987	2.011	2.018	40.44	2.036	2.025	2.036	1.979
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.53	39.77	40.53	2.045	2.046	39.60	2.034	2.013	1.981	1.992
Stddev	.14	.22	.13	.008	.003	.25	.003	.003	.004	.006
%RSD	.3438	.5450	.3316	.4092	.1509	.6212	.1668	.1547	.2053	.2825
#1	40.66	39.85	40.55	2.035	2.043	39.72	2.038	2.009	1.982	1.994
#2	40.38	39.53	40.65	2.047	2.045	39.31	2.031	2.014	1.976	1.997
#3	40.54	39.93	40.39	2.051	2.049	39.76	2.034	2.015	1.984	1.986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.773	2.065	2.005	2.021	2.018	2.052	2.060
Stddev	.001	.002	.008	.008	.001	.002	.004
%RSD	.0654	.0728	.3878	.3748	.0625	.0912	.1980
#1	1.775	2.066	2.012	2.013	2.017	2.053	2.058
#2	1.773	2.064	1.997	2.021	2.019	2.052	2.057
#3	1.773	2.063	2.007	2.028	2.019	2.050	2.065
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 17:02:17 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	738.51	2097.9	19926.	1955.1
Stddev	1.15	2.7	95.	14.4
%RSD	.15505	.12757	.47673	.73621
#1	737.19	2095.6	20014.	1939.5
#2	739.09	2100.8	19938.	1957.8
#3	739.25	2097.2	19825.	1968.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 17:06:14 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0123	.0014	.0002	.0001	.0012	.0001	.0001	.0003
Stddev	.0002	.0076	.0014	.0001	.0000	.0030	.0001	.0000	.0002
%RSD	279.0	62.32	102.5	61.24	60.35	248.2	172.8	31.44	78.37
#1	.0000	.0136	.0021	.0001	.0001	.0042	.0002	.0001	.0005
#2	-.0001	.0041	.0023	.0004	.0000	-.0019	.0001	.0001	.0000
#3	.0003	.0192	-.0003	.0002	.0001	.0014	-.0001	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0168	.0500	-.0349	.0002	F.0025	.0113	.0002	.0005
Stddev	.0002	.0022	.0361	.0423	.0000	.0008	.0069	.0002	.0001
%RSD	114.9	13.17	72.18	121.1	1.670	32.47	60.55	87.23	26.05
#1	.0005	.0193	.0426	.0109	.0002	.0033	.0190	.0003	.0006
#2	.0001	.0156	.0182	-.0723	.0002	.0025	.0058	.0003	.0006
#3	.0000	.0155	.0892	-.0434	.0002	.0017	.0092	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	-.0014	.0010	.0006	.0001	.0013	.0014	.0002	.0001
Stddev	.0007	.0028	.0004	.0001	.0001	.0001	.0006	.0002	.0002
%RSD	41.52	200.8	41.62	21.56	78.47	10.25	43.06	104.8	148.8
#1	.0025	-.0042	.0007	.0007	.0000	.0014	.0010	.0000	.0003
#2	.0015	-.0013	.0015	.0007	.0002	.0015	.0021	.0001	.0000
#3	.0011	.0014	.0008	.0005	.0002	.0012	.0012	.0004	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 17:06:14 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	846.36	2197.9	20678.	1950.5
Stddev	2.78	5.3	25.	8.9
%RSD	.32796	.24035	.12159	.45846
#1	843.17	2202.3	20651.	1940.5
#2	847.67	2199.5	20701.	1957.9
#3	848.23	2192.1	20682.	1953.0

Zoom In Zoom Out

Sample Name: FA53967-2 Acquired: 5/7/2018 17:10:35 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0009	96.20	.3707	.3218	.0038	F5131.	.0069	.0049	.6222
Stddev	.0024	.59	.0028	.0009	.0007	12.	.0003	.0006	.0029
%RSD	282.5	.6129	.7496	.2740	18.41	.2404	4.967	12.90	.4601
#1	-.0019	96.70	.3719	.3223	.0031	5129.	.0072	.0055	.6189
#2	.0027	96.36	.3727	.3223	.0045	5144.	.0066	.0051	.6235
#3	.0017	95.55	.3675	.3208	.0038	5119.	.0070	.0042	.6241

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6112	60.10	1.448	16.15	3.298	.0013	16.42	.0511	1.278
Stddev	.0021	.14	.063	.05	.010	.0005	.04	.0002	.005
%RSD	.3501	.2378	4.334	.3263	.3129	43.00	.2217	.4695	.4051
#1	.6136	60.16	1.409	16.10	3.291	.0010	16.46	.0510	1.284
#2	.6101	60.20	1.415	16.21	3.310	.0019	16.39	.0510	1.274
#3	.6098	59.94	1.520	16.13	3.293	.0009	16.40	.0514	1.277

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0260	-.0155	3.034	.0248	F56.10	1.392	-.0194	.1155	.1574
Stddev	.0058	.0024	.025	.0047	.18	.009	.0062	.0016	.0013
%RSD	22.24	15.28	.8110	19.06	.3219	.6478	31.97	1.417	.7944
#1	.0311	-.0172	3.024	.0242	56.29	1.399	-.0254	.1140	.1584
#2	.0197	-.0165	3.016	.0298	56.09	1.381	-.0130	.1172	.1560
#3	.0271	-.0128	3.062	.0204	55.93	1.395	-.0198	.1152	.1577

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	651.80	2003.1	19223.	1968.1
Stddev	.66	3.0	14.	11.5
%RSD	.10079	.14841	.07072	.58461
#1	652.51	1999.7	19237.	1960.6
#2	651.69	2005.1	19210.	1962.4
#3	651.21	2004.4	19223.	1981.4

Zoom In Zoom Out

Sample Name: MP33705-D1 Acquired: 5/7/2018 17:15:04 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0010	112.0	.4170	.3308	.0042	F4918.	.0078	.0057	.6784
Stddev	.0007	.2	.0073	.0008	.0006	37.	.0005	.0008	.0047
%RSD	73.35	.1446	1.761	.2512	13.75	.7622	6.015	14.32	.6996
#1	.0018	112.1	.4112	.3318	.0046	4955.	.0083	.0048	.6759
#2	.0003	111.8	.4253	.3305	.0035	4917.	.0077	.0065	.6839
#3	.0010	111.9	.4147	.3303	.0045	4880.	.0073	.0059	.6754

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7108	68.96	1.428	15.88	2.958	.0013	15.32	.0610	1.432
Stddev	.0014	.29	.056	.26	.020	.0006	.04	.0005	.006
%RSD	.1980	.4144	3.924	1.648	.6896	46.95	.2489	.7870	.4252
#1	.7105	69.08	1.444	15.61	2.958	.0007	15.34	.0614	1.435
#2	.7123	68.63	1.366	15.88	2.978	.0020	15.27	.0612	1.436
#3	.7095	69.16	1.475	16.14	2.938	.0013	15.34	.0605	1.425

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0181	-.0083	4.154	.0241	F54.54	1.685	-.0211	.1245	.1840
Stddev	.0043	.0022	.057	.0030	.08	.036	.0039	.0011	.0001
%RSD	23.79	26.76	1.372	12.45	.1510	2.144	18.51	.8810	.0531
#1	.0230	-.0059	4.205	.0208	54.50	1.690	-.0254	.1238	.1840
#2	.0149	-.0090	4.092	.0267	54.63	1.718	-.0179	.1240	.1839
#3	.0163	-.0102	4.164	.0246	54.49	1.647	-.0199	.1258	.1841

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	656.47	2047.4	19595.	2011.7
Stddev	.41	2.4	93.	1.2
%RSD	.06319	.11516	.47206	.06172
#1	656.15	2048.9	19630.	2011.4
#2	656.31	2048.5	19490.	2010.7
#3	656.94	2044.7	19665.	2013.1

Zoom In Zoom Out

Sample Name: MP33705-SD1 Acquired: 5/7/2018 17:19:33 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0065	98.07	.3723	.3297	.0025	5774.	.0064	.0011	.6811	.6229
Stddev	.0121	.97	.0157	.0020	.0015	55.	.0004	.0032	.0049	.0019
%RSD	185.6	.9939	4.205	.6134	58.46	.9558	6.936	290.0	.7259	.3034
#1	.0189	97.31	.3687	.3293	.0040	5722.	.0062	.0027	.6866	.6214
#2	.0059	99.17	.3588	.3319	.0011	5832.	.0062	.0032	.6771	.6250
#3	-.0052	97.74	.3894	.3279	.0025	5768.	.0069	-.0026	.6797	.6222

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	64.15	2.003	17.11	3.406	-.0177	16.24	.0495	1.315	.0493	.0104
Stddev	.68	.084	1.16	.012	.0037	.23	.0031	.006	.0089	.0427
%RSD	1.063	4.193	6.750	.3585	21.05	1.410	6.184	.4822	17.98	411.8
#1	63.47	2.022	18.27	3.420	-.0187	15.98	.0499	1.309	.0402	.0589
#2	64.83	1.911	15.96	3.400	-.0208	16.39	.0463	1.322	.0579	-.0060
#3	64.15	2.075	17.09	3.397	-.0136	16.37	.0524	1.316	.0499	-.0217

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.136	.0209	59.59	1.569	.0026	.1244	.1705
Stddev	.024	.0021	.29	.102	.0276	.0043	.0045
%RSD	.7773	10.05	.4946	6.525	1054.	3.486	2.650
#1	3.144	.0223	59.27	1.506	.0074	.1215	.1756
#2	3.155	.0218	59.84	1.687	-.0271	.1223	.1690
#3	3.108	.0185	59.67	1.513	.0276	.1294	.1669

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	757.82	2095.3	20029.	1952.7
Stddev	1.00	4.3	16.	17.3
%RSD	.13177	.20654	.07902	.88546
#1	757.92	2094.7	20013.	1968.6
#2	758.77	2091.3	20045.	1934.3
#3	756.78	2099.9	20028.	1955.2

Zoom In Zoom Out

Sample Name: MP33705-PS1 Acquired: 5/7/2018 17:23:49 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0485	101.9	.5021	.5789	.0518	F5309.	.0539	.0520	.6887
Stddev	.0009	.4	.0046	.0029	.0005	52.	.0004	.0009	.0037
%RSD	1.839	.3581	.9129	.4953	.9277	.9767	.7210	1.791	.5337
#1	.0476	101.8	.4975	.5821	.0513	5349.	.0542	.0525	.6889
#2	.0494	102.2	.5022	.5765	.0519	5326.	.0535	.0509	.6923
#3	.0485	101.5	.5066	.5783	.0522	5250.	.0541	.0526	.6850

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7361	64.73	11.79	21.05	3.425	.0875	27.06	.1459	1.369
Stddev	.0022	.14	.09	.06	.008	.0003	.03	.0006	.008
%RSD	.3009	.2139	.7342	.3027	.2310	.3625	.1288	.3969	.5782
#1	.7353	64.59	11.83	20.99	3.419	.0878	27.06	.1465	1.371
#2	.7344	64.75	11.85	21.12	3.434	.0873	27.09	.1454	1.361
#3	.7386	64.86	11.69	21.05	3.423	.0873	27.02	.1457	1.376

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1117	.0848	3.218	.0695	F57.80	1.532	.0797	.1659	.3950
Stddev	.0073	.0121	.010	.0032	.62	.011	.0089	.0021	.0004
%RSD	6.511	14.28	.3018	4.584	1.069	.7123	11.22	1.256	.0988
#1	.1163	.0820	3.211	.0696	58.30	1.525	.0900	.1682	.3953
#2	.1155	.0743	3.230	.0662	57.10	1.527	.0753	.1641	.3945
#3	.1033	.0981	3.215	.0726	57.99	1.545	.0738	.1655	.3951

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	647.21	2005.1	19242.	1967.3
Stddev	1.22	.7	55.	6.0
%RSD	.18899	.03454	.28769	.30482
#1	648.46	2004.9	19291.	1960.4
#2	647.17	2005.8	19182.	1971.1
#3	646.01	2004.5	19253.	1970.4

Zoom In Zoom Out

Sample Name: MP33705-S1 Acquired: 5/7/2018 17:28:18 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0422	107.6	2.204	2.127	.0493	F4940.	.0513	.4413	.7700
Stddev	.0021	.5	.008	.004	.0003	24.	.0005	.0011	.0024
%RSD	4.897	.4989	.3577	.1872	.6425	.4952	.9223	.2432	.3109
#1	.0433	107.0	2.213	2.130	.0491	4912.	.0510	.4420	.7727
#2	.0435	108.0	2.198	2.129	.0491	4957.	.0510	.4417	.7682
#3	.0398	107.8	2.201	2.122	.0497	4952.	.0518	.4400	.7690

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.8758	74.47	24.66	35.43	2.930	.3834	37.68	.4920	1.791
Stddev	.0030	.25	.12	.20	.013	.0010	.20	.0004	.006
%RSD	.3398	.3333	.4967	.5565	.4348	.2498	.5175	.0891	.3514
#1	.8782	74.19	24.57	35.60	2.930	.3840	37.48	.4922	1.791
#2	.8725	74.64	24.61	35.49	2.943	.3838	37.87	.4924	1.797
#3	.8768	74.59	24.80	35.22	2.918	.3823	37.69	.4915	1.785

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4142	1.758	14.27	.4234	F55.62	1.737	1.758	.5303	.6293
Stddev	.0072	.003	.08	.0023	.41	.056	.009	.0024	.0007
%RSD	1.738	.1457	.5721	.5321	.7351	3.220	.5325	.4560	.1037
#1	.4107	1.761	14.31	.4209	56.08	1.698	1.767	.5283	.6298
#2	.4095	1.756	14.32	.4253	55.30	1.712	1.759	.5297	.6286
#3	.4225	1.758	14.18	.4240	55.47	1.801	1.748	.5330	.6296

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	650.66	2022.7	19360.	1966.7
Stddev	.47	.8	61.	9.6
%RSD	.07284	.04043	.31572	.48685
#1	650.32	2022.7	19343.	1965.1
#2	651.20	2021.8	19309.	1958.0
#3	650.46	2023.5	19428.	1977.0

Zoom In Zoom Out

Sample Name: MP33705-S2 Acquired: 5/7/2018 17:32:43 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0290	92.35	1.902	1.907	.0426	F5337.	.0446	.3903	.6361
Stddev	.0009	.26	.014	.003	.0003	36.	.0004	.0006	.0013
%RSD	2.975	.2844	.7308	.1597	.7858	.6658	.8504	.1577	.2087
#1	.0300	92.25	1.886	1.903	.0423	5360.	.0447	.3904	.6367
#2	.0287	92.65	1.912	1.909	.0425	5354.	.0449	.3908	.6346
#3	.0283	92.16	1.909	1.908	.0429	5296.	.0442	.3896	.6371

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7835	60.97	21.59	33.04	2.917	.2973	35.52	.4341	1.612
Stddev	.0039	.14	.05	.17	.019	.0010	.14	.0004	.013
%RSD	.4917	.2264	.2251	.5169	.6392	.3466	.3997	.0857	.8061
#1	.7879	60.98	21.62	32.87	2.913	.2985	35.44	.4345	1.627
#2	.7808	61.10	21.54	33.21	2.901	.2967	35.69	.4339	1.605
#3	.7818	60.83	21.63	33.03	2.938	.2967	35.44	.4339	1.605

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3270	1.471	5.781	.3624	F59.13	1.360	1.528	.4477	.5327
Stddev	.0078	.006	.024	.0014	.29	.007	.011	.0030	.0017
%RSD	2.400	.3925	.4106	.3966	.4879	.5518	.7447	.6599	.3196
#1	.3207	1.477	5.754	.3611	59.39	1.351	1.526	.4478	.5324
#2	.3245	1.470	5.800	.3640	59.18	1.366	1.518	.4447	.5346
#3	.3358	1.465	5.788	.3622	58.82	1.363	1.541	.4506	.5312

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	648.02	2002.0	19347.	1966.1
Stddev	.88	3.0	80.	10.1
%RSD	.13632	.15148	.41278	.51158
#1	648.16	2004.6	19335.	1957.2
#2	648.82	1998.7	19433.	1964.1
#3	647.07	2002.7	19275.	1977.0

Zoom In Zoom Out

Sample Name: FA53967-1 Acquired: 5/7/2018 17:37:10 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0170	69.58	.1070	.3805	.0018	F5454.	.0327	.0304	.3819
Stddev	.0008	.55	.0049	.0018	.0004	43.	.0002	.0004	.0006
%RSD	4.608	.7928	4.585	.4790	21.28	.7887	.5211	1.439	.1611
#1	.0176	69.73	.1017	.3811	.0014	5460.	.0327	.0308	.3818
#2	.0174	70.04	.1082	.3819	.0021	5493.	.0326	.0299	.3814
#3	.0161	68.97	.1113	.3785	.0020	5408.	.0329	.0304	.3826

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2186	43.14	1.462	17.07	1.610	.2061	18.41	.2828	.9732
Stddev	.0026	.39	.027	.14	.009	.0021	.17	.0006	.0011
%RSD	1.185	.9050	1.819	.7963	.5598	1.034	.9275	.2190	.1099
#1	.2161	43.32	1.435	17.17	1.602	.2078	18.51	.2835	.9725
#2	.2213	43.41	1.462	16.92	1.620	.2037	18.51	.2828	.9744
#3	.2185	42.70	1.489	17.14	1.607	.2067	18.21	.2822	.9726

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0225	-.0152	2.891	.0269	F53.70	1.833	-.0228	.1107	1.211
Stddev	.0020	.0161	.014	.0021	.51	.016	.0030	.0011	.004
%RSD	8.895	106.4	.4711	7.907	.9547	.8638	13.11	.9540	.3448
#1	.0212	-.0073	2.889	.0293	53.57	1.824	-.0201	.1117	1.215
#2	.0248	-.0337	2.878	.0253	54.26	1.851	-.0224	.1096	1.211
#3	.0216	-.0045	2.905	.0260	53.26	1.823	-.0260	.1107	1.207

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	648.32	1949.0	18814.	1922.6
Stddev	1.66	1.7	26.	10.9
%RSD	.25660	.08835	.13554	.56628
#1	650.17	1948.2	18841.	1923.2
#2	646.95	1947.8	18790.	1911.4
#3	647.83	1951.0	18812.	1933.2

Zoom In Zoom Out

Sample Name: FA53967-3 Acquired: 5/7/2018 17:41:38 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	97.43	.1356	.3313	.0037	F5391.	.0263	.0068	.3761
Stddev	.0017	.89	.0093	.0010	.0004	31.	.0004	.0006	.0038
%RSD	1689.	.9130	6.880	.2876	11.64	.5762	1.639	9.400	1.012
#1	-.0013	97.29	.1397	.3314	.0035	5356.	.0264	.0074	.3804
#2	-.0004	98.38	.1422	.3322	.0041	5413.	.0258	.0068	.3745
#3	.0020	96.62	.1249	.3303	.0034	5405.	.0267	.0061	.3733

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2825	58.76	1.654	19.42	2.450	-.0014	13.59	.0537	.5067
Stddev	.0007	.20	.057	.18	.007	.0005	.09	.0014	.0095
%RSD	.2379	.3349	3.419	.9275	.2972	36.94	.6775	2.552	1.866
#1	.2819	58.90	1.603	19.22	2.443	-.0009	13.59	.0535	.5016
#2	.2832	58.85	1.645	19.52	2.457	-.0012	13.68	.0524	.5010
#3	.2824	58.54	1.715	19.54	2.451	-.0019	13.49	.0551	.5176

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0173	-.0097	5.362	.0202	F49.93	1.364	-.0161	.1231	.1387
Stddev	.0052	.0096	.058	.0047	.42	.013	.0063	.0006	.0002
%RSD	29.71	98.77	1.078	23.26	.8382	.9742	39.11	.4564	.1722
#1	.0213	-.0156	5.403	.0248	49.46	1.375	-.0181	.1232	.1385
#2	.0193	-.0148	5.388	.0154	50.24	1.349	-.0090	.1225	.1386
#3	.0115	.0013	5.296	.0205	50.10	1.367	-.0211	.1236	.1390

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	647.56	1994.8	19362.	1968.3
Stddev	1.49	1.9	47.	3.5
%RSD	.23064	.09437	.24155	.17810
#1	646.64	1996.6	19407.	1968.4
#2	649.28	1992.9	19365.	1964.8
#3	646.75	1995.0	19313.	1971.8

Zoom In Zoom Out

Sample Name: FA53967-4 Acquired: 5/7/2018 17:46:09 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0009	73.47	.0506	.2137	.0022	F4581.	.0095	.0066	.2464
Stddev	.0017	.07	.0066	.0010	.0005	30.	.0002	.0005	.0033
%RSD	183.0	.1014	13.02	.4538	20.96	.6440	1.625	7.836	1.328
#1	.0021	73.55	.0565	.2137	.0027	4601.	.0096	.0070	.2438
#2	.0018	73.43	.0435	.2127	.0020	4595.	.0094	.0060	.2501
#3	-.0011	73.42	.0519	.2146	.0018	4547.	.0093	.0068	.2453

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2002	43.36	1.841	14.78	1.530	-.0008	8.331	.0454	.7398
Stddev	.0012	.08	.011	.14	.009	.0005	.046	.0017	.0023
%RSD	.6039	.1779	.5871	.9335	.5615	69.45	.5520	3.679	.3138
#1	.1990	43.29	1.829	14.93	1.526	-.0002	8.346	.0451	.7399
#2	.2014	43.44	1.851	14.74	1.540	-.0009	8.367	.0472	.7421
#3	.2000	43.33	1.844	14.67	1.524	-.0012	8.279	.0439	.7374

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0117	-.0047	9.281	.0179	F31.82	1.090	-.0135	.1127	.1835
Stddev	.0023	.0083	.078	.0017	.05	.030	.0098	.0008	.0014
%RSD	19.98	176.7	.8431	9.642	.1712	2.800	72.13	.6714	.7380
#1	.0093	.0004	9.282	.0172	31.88	1.063	-.0023	.1125	.1842
#2	.0120	-.0002	9.358	.0199	31.78	1.083	-.0186	.1135	.1819
#3	.0140	-.0143	9.202	.0167	31.79	1.123	-.0198	.1120	.1844

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	662.90	1982.5	19213.	1944.9
Stddev	1.16	4.9	95.	9.6
%RSD	.17491	.24903	.49409	.49158
#1	661.58	1978.0	19247.	1934.0
#2	663.77	1987.8	19106.	1949.2
#3	663.34	1981.7	19286.	1951.6

Zoom In Zoom Out

Sample Name: FA53967-5 Acquired: 5/7/2018 17:50:32 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0019	46.09	.0445	.2233	.0015	F5682.	.0332	.0035	.1956
Stddev	.0033	.26	.0061	.0007	.0006	39.	.0004	.0003	.0022
%RSD	173.0	.5588	13.64	.3177	40.21	.6926	1.258	9.953	1.134
#1	.0018	46.14	.0384	.2227	.0014	5713.	.0337	.0033	.1957
#2	-.0029	45.82	.0445	.2230	.0009	5638.	.0332	.0033	.1933
#3	-.0045	46.32	.0506	.2241	.0021	5696.	.0328	.0039	.1977

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1405	27.33	1.262	15.04	1.013	-.0022	19.82	.0322	.2888
Stddev	.0012	.13	.045	.23	.003	.0001	.13	.0008	.0123
%RSD	.8661	.4663	3.531	1.539	.3405	6.269	.6583	2.577	4.247
#1	.1415	27.45	1.249	14.94	1.011	-.0024	19.83	.0315	.3025
#2	.1409	27.19	1.312	14.88	1.011	-.0021	19.68	.0331	.2787
#3	.1391	27.35	1.226	15.30	1.017	-.0022	19.94	.0320	.2853

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0100	-.0192	16.02	.0183	F61.39	.9842	-.0109	.0771	.1784
Stddev	.0047	.0081	.05	.0018	.85	.0224	.0072	.0008	.0008
%RSD	47.19	42.49	.3173	10.12	1.392	2.277	66.12	1.101	.4384
#1	.0073	-.0099	16.07	.0179	61.23	.9584	-.0146	.0774	.1775
#2	.0072	-.0224	16.04	.0166	60.63	.9956	-.0154	.0761	.1788
#3	.0154	-.0252	15.97	.0203	62.32	.9986	-.0026	.0777	.1789

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	647.35	1921.8	18710.	1893.4
Stddev	1.40	.5	24.	10.7
%RSD	.21561	.02648	.12992	.56257
#1	648.80	1922.0	18718.	1887.5
#2	647.24	1922.2	18730.	1905.7
#3	646.01	1921.2	18683.	1887.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 17:55:04 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2496	39.88	2.042	2.021	2.028	40.63	2.063	2.055	2.035	2.009
Stddev	.0009	.07	.005	.009	.003	.03	.004	.005	.003	.004
%RSD	.3519	.1778	.2508	.4660	.1306	.0809	.1739	.2356	.1267	.1730
#1	.2506	39.93	2.037	2.024	2.030	40.59	2.060	2.050	2.033	2.013
#2	.2492	39.80	2.047	2.011	2.025	40.64	2.067	2.058	2.037	2.006
#3	.2490	39.92	2.044	2.029	2.028	40.65	2.063	2.058	2.037	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.82	40.13	40.72	2.062	2.085	39.75	2.081	2.034	2.029	2.053
Stddev	.03	.11	.08	.001	.005	.19	.006	.008	.004	.003
%RSD	.0711	.2684	.1905	.0505	.2636	.4689	.2936	.3787	.1971	.1557
#1	40.78	40.13	40.65	2.062	2.079	39.86	2.076	2.026	2.025	2.055
#2	40.83	40.03	40.80	2.061	2.088	39.54	2.088	2.036	2.029	2.050
#3	40.83	40.24	40.72	2.063	2.089	39.86	2.081	2.041	2.033	2.055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.818	2.127	2.021	2.045	2.045	2.079	2.088
Stddev	.005	.004	.005	.004	.017	.006	.004
%RSD	.2561	.1915	.2689	.1791	.8506	.2956	.1839
#1	1.813	2.125	2.023	2.049	2.027	2.079	2.086
#2	1.818	2.132	2.015	2.046	2.047	2.073	2.093
#3	1.823	2.125	2.026	2.042	2.061	2.085	2.086
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 17:55:04 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	724.12	2046.7	19686.	1913.3
Stddev	2.22	4.0	56.	6.7
%RSD	.30708	.19448	.28485	.35039
#1	726.66	2050.5	19740.	1919.7
#2	723.13	2042.6	19689.	1906.3
#3	722.56	2047.0	19628.	1913.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 17:59:02 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0171	.0001	.0003	.0001	.0288	.0001	.0001	.0002
Stddev	.000	.0029	.0015	.0001	.0000	.0038	.0000	.0001	.0005
%RSD	1006.	17.18	1053.	42.23	22.45	13.19	38.22	175.3	330.2
#1	-.0003	.0164	-.0006	.0005	.0001	.0250	.0000	.0000	-.0002
#2	.0003	.0146	.0019	.0003	.0001	.0288	.0001	.0002	-.0001
#3	-.0002	.0203	-.0009	.0002	.0001	.0326	.0000	.0001	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0174	.0337	-.0179	.0002	F.0023	.0198	.0001	.0001
Stddev	.0002	.0037	.0286	.0029	.0000	.0007	.0038	.0004	.0003
%RSD	54.94	21.59	84.77	15.92	5.087	29.48	18.97	538.6	251.6
#1	.0005	.0202	.0032	-.0162	.0002	.0029	.0216	.0005	.0002
#2	.0003	.0131	.0381	-.0212	.0002	.0023	.0155	-.0002	-.0002
#3	.0002	.0188	.0598	-.0163	.0002	.0016	.0223	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	-.0008	.0006	.0005	.0004	.0012	.0001	.0002	.0001
Stddev	.0005	.0038	.0003	.0006	.0002	.0001	.0012	.0002	.0000
%RSD	27.95	471.4	45.89	117.8	44.79	5.841	787.8	123.1	33.81
#1	.0025	.0032	.0008	.0003	.0002	.0013	.0010	-.0001	.0001
#2	.0014	-.0011	.0007	.0000	.0005	.0012	-.0012	.0003	.0001
#3	.0018	-.0045	.0003	.0012	.0005	.0012	.0006	.0003	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 17:59:02 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	848.04	2186.4	20983.	1969.6
Stddev	1.42	3.7	77.	7.8
%RSD	.16803	.17071	.36458	.39813
#1	849.16	2190.2	20950.	1977.8
#2	848.52	2186.2	20928.	1962.2
#3	846.44	2182.8	21071.	1968.9

Zoom In Zoom Out

Sample Name: FA53967-6 Acquired: 5/7/2018 18:03:21 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0040	3.696	-.0138	.1622	.0002	F6605.	-.0002	.0032	.0562
Stddev	.0013	.100	.0077	.0005	.0004	44.	.0001	.0010	.0007
%RSD	32.53	2.704	55.77	.2919	215.6	.6678	41.33	31.36	1.275
#1	-.0047	3.667	-.0227	.1626	.0004	6636.	-.0003	.0027	.0554
#2	-.0048	3.808	-.0100	.1617	.0004	6555.	-.0003	.0025	.0566
#3	-.0025	3.615	-.0087	.1624	-.0003	6625.	-.0001	.0044	.0567

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0013	2.175	.5193	12.10	.0400	-.0018	29.53	.0112	.0038
Stddev	.0011	.005	.0681	.32	.0005	.0007	.17	.0012	.0044
%RSD	88.91	.2197	13.10	2.632	1.253	39.13	.5920	11.15	115.9
#1	.0007	2.175	.5424	12.25	.0398	-.0012	29.46	.0125	.0012
#2	.0005	2.170	.4427	12.31	.0397	-.0015	29.41	.0110	.0013
#3	.0025	2.179	.5728	11.73	.0406	-.0025	29.74	.0101	.0089

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0100	-.0129	.6873	.0147	F103.5	.1796	-.0264	.0444	-.0105
Stddev	.0075	.0132	.0166	.0007	1.0	.0255	.0153	.0010	.0009
%RSD	75.19	102.4	2.419	4.572	.9589	14.17	58.00	2.210	8.804
#1	.0177	-.0222	.6934	.0139	104.5	.1564	-.0090	.0450	-.0104
#2	.0027	.0022	.6685	.0151	102.6	.2068	-.0323	.0433	-.0097
#3	.0095	-.0186	.7000	.0151	103.4	.1756	-.0378	.0450	-.0115

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	636.62	1853.5	18113.	1861.9
Stddev	1.23	3.9	41.	10.2
%RSD	.19259	.20816	.22486	.54998
#1	638.03	1849.2	18158.	1852.9
#2	635.95	1856.5	18079.	1873.0
#3	635.87	1854.9	18101.	1859.8

Zoom In Zoom Out

Sample Name: FA53967-7 Acquired: 5/7/2018 18:07:55 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0366	70.56	.1079	.4097	.0025	F5782.	.0419	.0361	.4294
Stddev	.0025	.16	.0032	.0018	.0006	26.	.0002	.0009	.0054
%RSD	6.824	.2214	2.954	.4296	23.99	.4513	.4215	2.364	1.247
#1	.0388	70.62	.1046	.4117	.0019	5759.	.0418	.0365	.4296
#2	.0339	70.38	.1110	.4085	.0026	5778.	.0418	.0367	.4239
#3	.0372	70.68	.1080	.4088	.0030	5810.	.0421	.0351	.4346

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2399	44.00	1.642	19.46	1.639	.2777	19.20	.2868	1.124
Stddev	.0031	.16	.055	.22	.013	.0002	.08	.0014	.007
%RSD	1.294	.3624	3.361	1.140	.8119	.0673	.3934	.5004	.5941
#1	.2410	44.13	1.598	19.22	1.647	.2777	19.13	.2884	1.121
#2	.2423	43.82	1.624	19.65	1.624	.2776	19.20	.2862	1.131
#3	.2364	44.04	1.704	19.50	1.646	.2780	19.28	.2857	1.118

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0235	-.0158	2.965	.0335	F54.05	1.099	-.0291	.1483	.7518
Stddev	.0066	.0182	.027	.0039	.34	.005	.0110	.0001	.0005
%RSD	27.94	115.4	.9008	11.53	.6253	.4923	37.69	.0741	.0723
#1	.0172	.0045	2.968	.0363	53.67	1.095	-.0313	.1484	.7520
#2	.0230	-.0309	2.989	.0291	54.30	1.098	-.0172	.1484	.7522
#3	.0303	-.0210	2.936	.0350	54.18	1.105	-.0389	.1482	.7512

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	639.19	1937.3	18685.	1929.5
Stddev	.08	7.2	66.	2.8
%RSD	.01259	.37021	.35497	.14612
#1	639.25	1930.4	18624.	1930.8
#2	639.10	1944.7	18756.	1931.4
#3	639.21	1936.6	18676.	1926.2

Zoom In Zoom Out

Sample Name: FA53935-1 Acquired: 5/7/2018 18:12:24 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0006	58.33	.0091	.2869	.0014	70.93	.0002	.0039	.0696	.0422
Stddev	.0003	.26	.0007	.0011	.0001	.45	.0000	.0000	.0006	.0002
%RSD	55.72	.4456	7.820	.3735	3.946	.6297	13.43	.8336	.8522	.5737
#1	.0009	58.05	.0087	.2858	.0014	70.42	.0002	.0039	.0694	.0422
#2	.0006	58.55	.0100	.2878	.0015	71.27	.0002	.0039	.0703	.0424
#3	.0002	58.40	.0087	.2872	.0015	71.10	.0001	.0039	.0692	.0420

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	15.91	1.276	2.423	.5192	.0033	.4560	.0186	.1100	.0013	.0054
Stddev	.11	.009	.039	.0029	.0001	.0057	.0001	.0014	.0007	.0006
%RSD	.6889	.6889	1.592	.5599	4.139	1.241	.4471	1.295	53.82	11.86
#1	15.78	1.269	2.380	.5224	.0034	.4538	.0186	.1085	.0010	.0047
#2	15.98	1.286	2.455	.5168	.0034	.4517	.0186	.1113	.0009	.0058
#3	15.97	1.274	2.433	.5183	.0032	.4624	.0187	.1103	.0022	.0057

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.477	.0153	.9634	.1888	.0004	.0531	.1823
Stddev	.002	.0005	.0028	.0006	.0011	.0003	.0003
%RSD	.0618	3.434	.2925	.3396	294.0	.5087	.1490
#1	2.477	.0159	.9620	.1896	-.0005	.0529	.1822
#2	2.475	.0152	.9666	.1884	.0015	.0534	.1821
#3	2.478	.0148	.9615	.1886	.0001	.0531	.1827

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	779.89	2303.7	22005.	2124.6
Stddev	.62	3.5	94.	19.3
%RSD	.07915	.15287	.42616	.90816
#1	780.45	2300.9	21898.	2146.6
#2	779.97	2307.7	22076.	2110.9
#3	779.23	2302.5	22039.	2116.1

◀ Zoom In ▶
Zoom Out

Sample Name: CRIA Acquired: 5/7/2018 18:16:36 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0089	.2015	.0097	.1976	.0052	1.038	.0052	.0512	.0102	.0252
Stddev	.0002	.0056	.0006	.0009	.0001	.005	.0001	.0001	.0004	.0004
%RSD	2.426	2.754	6.015	.4610	1.853	.4524	2.220	.2006	3.766	1.679
#1	.0091	.1965	.0094	.1982	.0053	1.042	.0051	.0512	.0106	.0250
#2	.0089	.2005	.0104	.1965	.0052	1.033	.0052	.0511	.0099	.0249
#3	.0087	.2075	.0094	.1981	.0051	1.039	.0053	.0513	.0100	.0257

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3119	9.614	4.960	.0154	.0462	9.481	.0415	.0049	.0062	.0096
Stddev	.0034	.017	.033	.0002	.0003	.052	.0003	.0002	.0006	.0003
%RSD	1.100	.1765	.6585	1.190	.5561	.5506	.7716	3.377	9.238	3.608
#1	.3154	9.633	4.981	.0153	.0460	9.506	.0414	.0048	.0057	.0096
#2	.3086	9.607	4.923	.0153	.0461	9.517	.0411	.0048	.0062	.0092
#3	.3116	9.601	4.978	.0156	.0465	9.421	.0418	.0051	.0068	.0099

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0087	.0503	.0100	.0097	.0100	.0479	.0215
Stddev	.0006	.0003	.0001	.0000	.0015	.0003	.0002
%RSD	6.534	.5208	.7951	.4914	15.07	.7141	1.102
#1	.0094	.0502	.0099	.0097	.0113	.0475	.0215
#2	.0084	.0506	.0101	.0096	.0103	.0480	.0218
#3	.0084	.0502	.0101	.0097	.0084	.0481	.0213

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	817.44	2160.9	20441.	1936.2
Stddev	1.36	5.6	78.	14.5
%RSD	.16648	.25997	.38241	.74874
#1	817.98	2167.2	20454.	1920.0
#2	815.90	2156.5	20513.	1948.0
#3	818.46	2158.9	20358.	1940.5

◀ Zoom In ▶
Zoom Out

Sample Name: ICSA Acquired: 5/7/2018 18:20:55 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	F504.9	-.0002	.0008	.0000	462.4	-.0011	.0001	.0001
Stddev	.0006	2.8	.0021	.0002	.000	3.4	.0001	.0002	.0003
%RSD	82.71	.5522	1319.	28.57	257.1	.7294	9.253	229.8	226.6
#1	.0014	507.7	.0021	.0008	.0001	464.6	-.0012	.0003	-.0002
#2	.0003	504.8	-.0005	.0010	-.0001	463.9	-.0010	-.0002	.0004
#3	.0005	502.1	-.0020	.0006	-.0001	458.5	-.0010	.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	175.6	.0520	F513.4	.0001	.0013	.1628	-.0007	-.0012
Stddev	.0003	.7	.0273	1.9	.0001	.0006	.0097	.0006	.0028
%RSD	1579.	.3869	52.53	.3775	99.71	47.33	5.960	87.22	236.8
#1	-.0003	176.1	.0826	514.8	.0001	.0006	.1699	-.0012	-.0021
#2	.0002	175.9	.0302	514.1	.0001	.0014	.1517	-.0001	-.0035
#3	.0001	174.8	.0431	511.2	.0000	.0018	.1667	-.0007	.0020

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	-.0006	.0207	.0011	.0001	.0018	.0004	.0015	-.0014
Stddev	.0017	.0022	.0014	.0001	.0002	.0001	.0035	.0002	.0001
%RSD	130.0	364.4	6.992	7.620	266.3	2.707	867.3	15.19	3.480
#1	-.0004	.0004	.0191	.0010	.0000	.0018	-.0004	.0014	-.0015
#2	.0031	-.0031	.0218	.0011	-.0001	.0019	-.0026	.0014	-.0014
#3	.0013	.0009	.0213	.0012	.0004	.0018	.0042	.0018	-.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	646.55	1907.7	18033.	1861.1
Stddev	1.65	4.2	23.	12.0
%RSD	.25460	.22170	.12887	.64705
#1	645.13	1908.2	18058.	1852.2
#2	646.17	1903.2	18029.	1856.1
#3	648.35	1911.7	18012.	1874.8

◀ Zoom In ▶
Zoom Out

Sample Name: ICSAB Acquired: 5/7/2018 18:25:10 Type: Unk
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.049	F518.7	1.048	.5152	.5067	473.2	.9409	.4797	.4956
Stddev	.009	1.5	.015	.0037	.0024	1.0	.0119	.0059	.0025
%RSD	.8123	.2816	1.392	.7171	.4707	.2066	1.266	1.235	.5109
#1	1.058	520.0	1.061	.5193	.5094	474.3	.9532	.4859	.4971
#2	1.048	517.1	1.051	.5121	.5049	472.6	.9401	.4793	.4969
#3	1.041	519.0	1.032	.5144	.5057	472.6	.9294	.4741	.4926

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5552	178.8	.0827	F523.3	.5062	.8773	.1579	.9663	.9585
Stddev	.0034	.5	.0096	2.4	.0048	.0078	.0059	.0105	.0134
%RSD	.6175	.2882	11.58	.4532	.9507	.8885	3.751	1.087	1.395
#1	.5579	179.4	.0930	525.5	.5113	.8851	.1622	.9763	.9725
#2	.5564	178.6	.0741	523.6	.5057	.8772	.1512	.9673	.9570
#3	.5513	178.4	.0810	520.8	.5017	.8695	.1605	.9553	.9459

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9729	.9412	.1066	.9096	.9531	.9648	.9018	.4872	.9456
Stddev	.0119	.0112	.0005	.0112	.0042	.0085	.0153	.0016	.0119
%RSD	1.221	1.193	.5063	1.231	.4455	.8772	1.694	.3295	1.258
#1	.9857	.9535	.1071	.9203	.9580	.9739	.9193	.4868	.9574
#2	.9710	.9385	.1066	.9106	.9509	.9635	.8943	.4890	.9458
#3	.9622	.9316	.1061	.8979	.9503	.9571	.8916	.4859	.9336

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	631.79	1874.2	17571.	1820.2
Stddev	6.54	18.3	80.	10.2
%RSD	1.0354	.97695	.45620	.56001
#1	624.85	1856.1	17497.	1811.8
#2	632.67	1874.0	17560.	1817.1
#3	637.84	1892.7	17656.	1831.5

◀ Zoom In ▶
Zoom Out

Sample Name: CCV Acquired: 5/7/2018 18:29:09 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2457	39.98	2.016	2.024	2.016	40.45	2.044	2.035	2.032	1.994
Stddev	.0017	.07	.014	.014	.009	.09	.005	.005	.006	.006
%RSD	.6832	.1857	.6932	.6717	.4413	.2124	.2243	.2434	.2785	.2797
#1	.2459	40.06	2.032	2.039	2.024	40.47	2.048	2.040	2.038	1.996
#2	.2472	39.92	2.005	2.013	2.006	40.35	2.039	2.030	2.027	1.988
#3	.2439	39.95	2.011	2.019	2.019	40.52	2.045	2.036	2.031	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.47	40.20	40.38	2.040	2.060	39.83	2.051	2.017	2.008	2.011
Stddev	.12	.22	.21	.009	.006	.12	.007	.010	.009	.009
%RSD	.2927	.5526	.5237	.4268	.2938	.3061	.3325	.5106	.4230	.4494
#1	40.56	40.43	40.58	2.038	2.066	39.92	2.059	2.006	2.016	2.021
#2	40.33	39.99	40.16	2.050	2.054	39.69	2.046	2.019	1.999	2.007
#3	40.51	40.19	40.40	2.033	2.062	39.87	2.047	2.026	2.009	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.789	2.085	2.017	2.028	2.025	2.059	2.067
Stddev	.006	.005	.005	.002	.014	.003	.002
%RSD	.3188	.2431	.2543	.1059	.6813	.1204	.1142
#1	1.795	2.090	2.022	2.026	2.009	2.061	2.066
#2	1.785	2.080	2.012	2.031	2.030	2.056	2.064
#3	1.786	2.085	2.018	2.027	2.036	2.059	2.069
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/7/2018 18:29:09 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	732.18	2071.9	19798.	1914.5
Stddev	1.87	6.7	99.	14.0
%RSD	.25535	.32250	.50040	.73275
#1	734.32	2064.2	19756.	1910.3
#2	730.86	2075.5	19727.	1930.1
#3	731.37	2076.1	19911.	1903.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 18:33:07 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0202	-.0003	.0001	.0001	.0082	.0000	.0001	.0000
Stddev	.0001	.0087	.0006	.0000	.0000	.0047	.0001	.0000	.0002
%RSD	181.5	43.12	188.8	23.50	65.62	57.57	278.0	33.38	603.2
#1	.0001	.0180	-.0001	.0002	.0000	.0030	.0000	.0001	-.0001
#2	.0000	.0297	-.0010	.0001	.0001	.0094	-.0001	.0002	.0003
#3	.0000	.0127	.0002	.0001	.0000	.0122	.0001	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0201	.0394	-.0236	.0001	F.0025	.0090	-.0001	.0001
Stddev	.0002	.0012	.0108	.0198	.0000	.0007	.0073	.0002	.0005
%RSD	112.2	6.017	27.51	83.92	16.94	26.99	81.61	154.2	431.7
#1	.0004	.0214	.0296	-.0059	.0001	.0032	.0127	-.0002	.0004
#2	.0001	.0199	.0376	-.0450	.0001	.0024	.0005	-.0003	.0004
#3	.0000	.0190	.0511	-.0200	.0001	.0019	.0138	.0001	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0016	.0008	.0009	.0001	.0012	F.0021	.0003	.0001
Stddev	.0008	.0019	.0007	.0006	.0000	.0002	.0018	.0002	.0000
%RSD	52.40	124.4	89.12	66.93	31.27	13.57	89.45	52.79	30.78
#1	.0006	-.0001	.0003	.0010	.0001	.0013	.0024	.0003	.0001
#2	.0018	.0011	.0017	.0002	.0001	.0013	.0037	.0002	.0001
#3	.0022	.0037	.0005	.0014	.0002	.0010	.0001	.0006	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/7/2018 18:33:07 Type: QC
Method: 60102007_041712(v201) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	841.27	2178.6	20641.	1941.9
Stddev	1.42	1.9	58.	9.7
%RSD	.16839	.08841	.27910	.50044
#1	840.05	2180.2	20632.	1939.8
#2	840.92	2179.0	20703.	1933.4
#3	842.82	2176.5	20589.	1952.5

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	V	-0.009834	0.000000	No
			Fe	0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.035224	0.000000	No
As 189.042 {478}	☒	5	Fe	-0.000108	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000003	0.000000	No
Be 313.042 {108}	☒	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000145	0.000000	No
			Ca	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Ti	0.000000	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000008	0.000000	No
Cr 267.716 {126}	☒	3	Al	0.000007	0.000000	No
			Fe	-0.000018	0.000000	No
			Ca	0.000004	0.000000	No
Cu 324.754 {104}	☒	10	Fe	-0.000121	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000006	0.000000	No
			Mg	0.000005	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000023	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000019	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	☒	9	Al	0.000292	0.000000	No
			Fe	-0.000254	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000038	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000002	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	0.000016	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000033	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000055	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000008	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000016	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000010	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000024	0.000000	No
			As	0.001128	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.000199	0.530074	0.000000	1.000000
Al 396.152 { 85}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.002899	0.167355	0.000000	1.000000
As 189.042 {478}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.000620	0.183115	0.000000	1.000000
Ba 455.403 { 74}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.029919	12.590300	0.000000	1.000000
Be 313.042 {108}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.000325	8.608529	0.000000	1.000000
Ca 317.933 {106}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.007941	0.226216	0.000000	1.000000
Cd 226.502 {449}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.000365	4.319649	0.000000	1.000000
Co 228.616 {447}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.000056	2.371302	0.000000	1.000000
Cr 267.716 {126}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.000152	0.346954	0.000000	1.000000
Cu 324.754 {104}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.002969	0.832643	0.000000	1.000000
Fe 259.940 {130}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.001726	0.186602	0.000000	1.000000
In 230.606 {446}*	5/7/2018 10:16:28	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.004122	0.278710	0.000000	1.000000
Mg 279.079 {121}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.000030	0.022756	0.000000	1.000000
Mn 257.610 {131}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.000276	2.043528	0.000000	1.000000
Mo 202.030 {467}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.001460	1.127084	0.000000	1.000000
Na 589.592 { 57}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.000692	0.813655	0.000000	1.000000
Ni 231.604 {445}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.000330	1.343467	0.000000	1.000000
Pb 220.353 {453}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.001178	1.131410	0.000000	1.000000
Sb 206.833 {463}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.000144	0.261106	0.000000	1.000000
Se 196.090 {472}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.000435	0.129832	0.000000	1.000000
Si 212.412 {459}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.004363	0.411274	0.000000	1.000000
Sn 189.989 {477}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.000370	0.393892	0.000000	1.000000
Sr 407.771 { 83}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.000918	19.271916	0.000000	1.000000
Ti 334.941 {101}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.001454	1.869646	0.000000	1.000000
Tl 190.856 {477}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.003764	0.529761	0.000000	1.000000
V 292.402 {115}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	-0.000104	0.618451	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/7/2018 10:16:28	5/7/2018 9:28:00	Linear	1/Conc	0.001400	2.128776	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999897	0.000071	0.000499	0.001664	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999987	0.001375	0.012580	0.041934	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999989	0.000069	0.001225	0.004083	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999993	0.003879	0.000236	0.000785	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999875	0.010953	0.000112	0.000372	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999857	0.006168	0.004923	0.016410	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999873	0.005562	0.000076	0.000254	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999884	0.002918	0.000149	0.000497	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999816	0.000536	0.000432	0.001441	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999987	0.000338	0.000285	0.000951	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999626	0.008226	0.003515	0.011717	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999997	0.001038	0.021429	0.071429	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999984	0.000208	0.033703	0.112344	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999835	0.002994	0.000064	0.000212	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999914	0.001193	0.000192	0.000641	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	1.000000	0.001275	0.006706	0.022353	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999866	0.001769	0.000259	0.000863	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999980	0.000570	0.000862	0.002875	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999985	0.000113	0.001316	0.004388	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	1.000000	0.000007	0.002505	0.008350	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.996868	0.002678	0.000608	0.002026	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999880	0.000492	0.000484	0.001615	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999958	0.014198	0.000093	0.000311	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999949	0.001526	0.000132	0.000439	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999997	0.000092	0.001237	0.004122	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999906	0.000677	0.000325	0.001083	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999850	0.002971	0.000114	0.000381	OK.	1.000000	0.000000	1	0

DOD

SGS Accutest - Orlando **Metals Digestion Log Water**

Method of digestion(circle one): SW846-3010A / SW846-3005A / EPA 200.7 / EPA 200.8 / SM3030C

MP #: 33665

Prep Date/Time (mm/dd/yy 24:00): 04/28/18 0755

HotBlock I.D. 9

Thermometer I.D. 6071

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 93, 92

pH paper lot# 230315

Volume

Spk. Sol. [A]	Used(ml)	Pipette #
ACC 1074	0.05	MU 45274
ACC 1051	0.2	METALS #19
MET 5963	1.0	METALS #18

Dig. Tube Lot#: MP3088

Added [B]:

Lot# HNO_3 0000187388 HCL 0000189306

Sample #		Initial Volume(ml)	pH<2	Final Volume(ml)	Comments
Method Blank(MB)		50.0	N/A	50.0	
Spike Blank(SB)			N/A		
Matrix Spike(MS)			✓		
Matrix Spike Dup(MSD)			✓		
Duplicate(DUP)			✓		
1 QC [C] FA 53456-6	D 18		✓		
2 -1	1		✓		
3 -2			✓		
4 -3			✓		
5 -4	↓		✓		
6 -5	5		✓		
7 -7	6		✓		
8 -8			✓		
9 -9	↓		✓		
10 FA 53517-25	1		✓		
11 FA 53518-13	2		✓		① Sample received ① improperly preserved, pH >2 ✓
12 ↓ -14	2		✓		
13 FA 53716-1	5		✓		
14 FA 53574-1F	2		✓		
15 -2F			✓		
16 -3F			✓		
17 -5F			✓		
18 -7F			✓		
19 -8F			✓		
20 -9F	↓		✓		
21 [E] NB2A 04/20/18	NA	↓		↓	
22 [E]					
23 [E] 04-28-18 1T					
24 [E]					

Analyst: Date: 04-28-18

QC Review: Date: 4.30.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 103, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E. Additional matrix QC

Prep QC: MP33698

5g dry sieve DOD

SGS Accutest - Orlando Metals Digestion Log Soil

MP #: 33698 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 05/04/18 08:30

HotBlock I.D. 9

Thermometer I.D. 213

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 95 / 1.84

Balance I.D. ADVPR03

Spk. Sol. [A]	Volume Used(ml)	Pipette #
ACU1062	1.0 1.25	KU15244
ACU851	0.5 0.625	↓
MET5979	0.5 0.625	↓

Filter Lot#: 170112102

Dig. Tube Lot# MP3088

Added [B]:	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	172493	0000187388	0000189306	23430173

Sample #	D	Wt., g	Final Volume(ml)	Comments
Method Blank(MB)		5.0	100.0	5x reagents used for digestion.
Spike Blank(SB)		↓		
Matrix Spike(MS)		5.01		
Matrix Spike Dup(MSD)		5.03		
Duplicate(DUP)		5.01		
1 ~~QC FA55519-7~~ *	1	5.03		D2 - FA53517 - 7
2 QC FA53517 - 7		5.00		
3 - 1		5.04		
4 - 4		5.05		
5 - 10		5.02		
6 -13		5.02		
7 -16		5.02		
8 -19		5.00		
9 -22		5.02		
~~10~~				
11				
12				
13				
14				
15		Je		
16			05/04/18	
17				
18				
19				
20				
21 [E]				
22 [E]				
23 [E]				
24 [E]				

Analyst: Jordan Culver Date: 05/04/18

QC Review: Date: 5.4.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

lopsolidgestionlog 0316.xls Rev 03/04/16 DM

24 of 100

* JC 05/04/18

SGS ACCUTEST - ORLANDO

8330B Weight Log

BALANCE ID: METTLER 1

DATE: 04/25/18

Sample ID	Total Weight (grams)	Weight Remaining in #10 Sieve (grams)	Sieve ID	Comments: Weight Remaining in Sieve #60	Description: Weight thru Sieve #60
FA53517-1	809.19	84.67	10B, 60B	~~382.71~~ ①	116.81
-2	958.07	50.73	10C, 60C	775.37	129.50
-3	936.25	406.26	10F, 60A	343.70	128.63
-4	827.98	37.27	10A, 60F	681.87	101.65
-5	890.50	78.86	10A, 60F	618.53	93.20
-6	909.57	81.05	10F, 60A	711.73	102.99
-7	956.63	590.77	10G, 60C	266.64	82.91
-8	593.59	309.51	10C, 60C	319.89	97.99
-9	740.26	306.57	10B, 60B	362.57	66.79
-10	875.68	422.22	10D, 60E	332.89	112.98
-11	864.75	307.96	10B, 60B	453.95	99.02
-12	758.28	245.82	10D, 60E	396.60	116.84
-13	823.17	198.89	10C, 60C	519.36	105.54
-14	750.04	136.79	10C, 60C	478.93	124.27
-15	828.24	290.96	10G, 60C	369.01	90.96
-16	862.01	95.29	10F, 60A	707.92	102.92
-17	577.69	33.77	10D, 60E	410.95	121.34
-18	710.93	43.12	10G, 60C	527.95	125.93
-19	815.27	102.65	10E, 60D	598.14	106.77
-20	697.79	209.37	10E, 60D	365.35	111.37
-21	708.96	338.98	10C, 60C	270.84	102.78
-22	861.91	80.44	10A, 60F	665.42	109.96
-23	868.36	287.70	10E, 60D	432.98	137.98
-24	~~990.33~~ 0	333.89	10A, 60F	519.63	121.22

① 601.97

② 790.23

Analyst's Signature:

SGS ACCUTEST - ORLANDO — 8330B Air Drying Log

BALANCE ID: METTLER 1

Sample ID	Date/Time Started 04/24/18 ~~1430~~ 1200 First Weighing (grams)*	Date/Time Started 04/24/18 1430 Second Weighing (grams)*	Date/Time Started Third Weighing (grams)* If Needed
FA53517-1	10.12	10.12	
-2	10.05	10.05	
-3	10.03	10.03	
-4	10.10	10.10	
-5	10.00	10.00	
-6	10.11	10.11	
-7	10.13	10.13	
-8	10.07	10.07	
-9	10.04	10.04	
-10	10.15	10.15	
-11	10.08	10.08	
-12	10.17	10.17	
-13	10.11	10.11	
-14	10.01	10.01	
-15	10.10	10.10	
-16	10.14	10.14	
-17	10.05	10.05	
-18	10.15	10.15	
-19	10.08	10.08	
-20	10.10	10.10	
-21	10.03	10.03	
-22	10.13	10.13	
-23	10.15	10.15	

04/24/18 MB

* Includes weight of the aluminum dish.

Allow at least two hours between First and Second Weighing and between Second and Third Weighing

Sample is considered dry if the difference between consecutive weighings is less that 0.1 gram

Analyst's Signature:

NF 02/16

8330b drying log 020116.xls

DATE REVIEWED 04.30.18
BY

SGS ACCUTEST - ORLANDO

8330B Air Drying Log

BALANCE ID: METTLER 1

Sample ID	Date/Time Started 04/17/18 0800 First Weighing (grams)*	Date/Time Started 04/17/18 1100 Second Weighing (grams)*	Date/Time Started Third Weighing (grams) (grams)* If Needed
FA53033-1	10.10	10.10	
—	04/24/18 1200	04/24/18 1430	—
FA53518-1	10.07	10.07	
-2	10.10	10.10	
-3	10.03	10.03	
-4	10.04	10.04	
-5	10.15	10.15	
-6	10.04	10.04	
-7	10.12	10.12	
-8	10.02	10.02	
-9	10.08	10.08	
-10	10.13	10.13	
-11	10.10	10.10	
-12	10.18	10.18	
FA53517-24	10.06	10.04	

* Includes weight of the aluminum dish.

Allow at least two hours between First and Second Weighing and between Second and Third Weighing

Sample is considered dry if the difference between consecutive weighings is less that 0.1 gram

Analyst's Signature:

NF 02/16

8330b drying log 020116 xls

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kemron Environmental Services, Inc

Ft Ord; CA

07202.2001

SGS Job Number: FA53517R

Sampling Date: 04/17/18

Report to:

Kemron Environmental Services, Inc
4522 Joe Lloyd Way
Monterey, CA 93944
EDawson@GilbaneCo.com; TBeer@GilbaneCo.com

ATTN: Evenlyn Dawson

Total number of pages in report: 133

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **5**
Section 4: Sample Results **7**
4.1: FA53517-2R: 31-06SC0001 8
4.2: FA53517-3R: 31-06SC0002 9
4.3: FA53517-5R: 31-07SC0001 10
4.4: FA53517-6R: 31-07SC0002 11
4.5: FA53517-8R: 31-11SC0001 12
4.6: FA53517-9R: 31-11SC0002 13
4.7: FA53517-11R: 31-12SC0001 14
4.8: FA53517-12R: 31-12SC0002 15
4.9: FA53517-14R: 31-13SC0001 16
4.10: FA53517-15R: 31-13SC0002 17
4.11: FA53517-17R: 31-14SC0001 18
4.12: FA53517-18R: 31-14SC0002 19
Section 5: Misc. Forms **20**
5.1: Chain of Custody 21
5.2: QC Evaluation: DOD QSM5 Limits 42
Section 6: Metals Analysis - QC Data Summaries **43**
6.1: Inst QC MA14941: Pb 44
6.2: Inst QC MA14948: Pb 56
6.3: Prep QC MP33823: Pb 71
6.4: IDL and Linear Range Summaries 77
Section 7: Metals Analysis - Raw Data **79**
7.1: Raw Data MA14941 80
7.2: Raw Data MA14948 104
7.3: Prep Logs 133

SGS North America Inc.

Sample Summary

Kemron Environmental Services, Inc

Job No: FA53517R

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53517-2R	04/17/18	14:51	RPLF	04/19/18	SO	Soil	31-06SC0001
FA53517-3R	04/17/18	15:13	RPLF	04/19/18	SO	Soil	31-06SC0002
FA53517-5R	04/17/18	15:39	RPLF	04/19/18	SO	Soil	31-07SC0001
FA53517-6R	04/17/18	15:56	RPLF	04/19/18	SO	Soil	31-07SC0002
FA53517-8R	04/17/18	13:27	RPLF	04/19/18	SO	Soil	31-11SC0001
FA53517-9R	04/17/18	14:05	RPLF	04/19/18	SO	Soil	31-11SC0002
FA53517-11R	04/17/18	13:43	RPLF	04/19/18	SO	Soil	31-12SC0001
FA53517-12R	04/17/18	14:19	RPLF	04/19/18	SO	Soil	31-12SC0002
FA53517-14R	04/17/18	14:38	RPLF	04/19/18	SO	Soil	31-13SC0001
FA53517-15R	04/17/18	15:00	RPLF	04/19/18	SO	Soil	31-13SC0002
FA53517-17R	04/17/18	15:37	RPLF	04/19/18	SO	Soil	31-14SC0001
FA53517-18R	04/17/18	15:54	RPLF	04/19/18	SO	Soil	31-14SC0002

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Kemron Environmental Services, Inc **Job No:** FA53517R

Site: Ft Ord; CA **Report Date:** 6/5/2018 5:28:38 PM

12 Sample(s) were collected on 04/17/2018 and were received at SGS North America Inc - Orlando on 04/19/2018 properly preserved, at 24.8 Deg. C and intact. These Samples received an SGS Orlando job number of FA53517R. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals Analysis By Method SW846 6010C

Matrix: SO **Batch ID:** MP33823

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53517-2RDUP, FA53517-2RMSD, FA53517-2RSDL, FA53517-2RPS were used as the QC samples.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Lead are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MP33823-PS1 for Lead: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA53517-2R for Lead: Sample dilution required due to difficult matrix.

FA53517-3R for Lead: Sample dilution required due to difficult matrix.

FA53517-5R for Lead: Sample dilution required due to difficult matrix.

FA53517-6R for Lead: Sample dilution required due to difficult matrix.

FA53517-8R for Lead: Sample dilution required due to difficult matrix.

FA53517-9R for Lead: Sample dilution required due to difficult matrix.

FA53517-11R for Lead: Sample dilution required due to difficult matrix.

FA53517-12R for Lead: Sample dilution required due to difficult matrix.

FA53517-15R for Lead: Sample dilution required due to difficult matrix.

FA53517-17R for Lead: Sample dilution required due to difficult matrix.

FA53517-18R for Lead: Sample dilution required due to difficult matrix.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA53517R
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/17/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53517-2R	**31-06SC0001**					
Lead [a]		160	3.9	0.78	mg/kg	SW846 6010C
FA53517-3R	**31-06SC0002**					
Lead [a]		18.4	4.0	0.79	mg/kg	SW846 6010C
FA53517-5R	**31-07SC0001**					
Lead [a]		13.8	4.2	0.84	mg/kg	SW846 6010C
FA53517-6R	**31-07SC0002**					
Lead [a]		3.8 J	4.7	0.94	mg/kg	SW846 6010C
FA53517-8R	**31-11SC0001**					
Lead [a]		7.3	4.2	0.83	mg/kg	SW846 6010C
FA53517-9R	**31-11SC0002**					
Lead [a]		8.4	4.4	0.88	mg/kg	SW846 6010C
FA53517-11R	**31-12SC0001**					
Lead [a]		6.9	4.8	0.96	mg/kg	SW846 6010C
FA53517-12R	**31-12SC0002**					
Lead [a]		7.1	4.3	0.85	mg/kg	SW846 6010C
FA53517-14R	**31-13SC0001**					
Lead		2960	45	8.9	mg/kg	SW846 6010C
FA53517-15R	**31-13SC0002**					
Lead [a]		621	4.0	0.80	mg/kg	SW846 6010C
FA53517-17R	**31-14SC0001**					
Lead [a]		38.2	4.1	0.82	mg/kg	SW846 6010C

Summary of Hits

Job Number: FA53517R
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/17/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53517-18R	**31-14SC0002**					
Lead [a]		2.9 J	3.6	0.72	mg/kg	SW846 6010C

(a) Sample dilution required due to difficult matrix.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	31-06SC0001		
Lab Sample ID:	FA53517-2R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	160	3.9	0.78	0.19	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-06SC0002		
Lab Sample ID:	FA53517-3R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	18.4	4.0	0.79	0.20	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-07SC0001		
Lab Sample ID:	FA53517-5R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	13.8	4.2	0.84	0.21	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-07SC0002		
Lab Sample ID:	FA53517-6R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	3.8 J	4.7	0.94	0.24	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-11SC0001		
Lab Sample ID:	FA53517-8R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	7.3	4.2	0.83	0.21	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-11SC0002		
Lab Sample ID:	FA53517-9R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	8.4	4.4	0.88	0.22	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-12SC0001		
Lab Sample ID:	FA53517-11R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	6.9	4.8	0.96	0.24	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-12SC0002		
Lab Sample ID:	FA53517-12R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	7.1	4.3	0.85	0.21	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-13SC0001		
Lab Sample ID:	FA53517-14R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	2960	45	8.9	2.2	mg/kg	50	06/01/18	06/04/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14948
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-13SC0002		
Lab Sample ID:	FA53517-15R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	621	4.0	0.80	0.20	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-14SC0001		
Lab Sample ID:	FA53517-17R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	38.2	4.1	0.82	0.20	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-14SC0002		
Lab Sample ID:	FA53517-18R	**Date Sampled:**	04/17/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	2.9 J	3.6	0.72	0.18	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) All results reported on a wet weight basis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-01

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:
Unit 31

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
1	31-01SC0000	SO					X		X	31-01	N1	0.00	0.00
2	31-01SC0001	SO					X		X	31-01	N1	0.00	0.00
3	31-01SC0002	SO					X		X	31-01	N1	0.00	0.00
4	31-02SC0000	SO					X			31-02	N1	0.00	0.00
5	31-02SC0001	SO		J.Beer 4-18-18			X			31-02	N1	0.00	0.00
6	31-02SC0002	SO					X			31-02	N1	0.00	0.00
7	31-03SC0000	SO					X			31-03	N1	0.00	0.00
8	31-03SC0001	SO					X			31-03	N1	0.00	0.00
9	31-03SC0002	SO					X			31-03	N1	0.00	0.00

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J.Beer	4/18/18	1200 1145 JB	FedEx	4/18/18	1200
FX			J. Cooper	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

N/A

Page 1 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC #041718-02 JB

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2" 1-L Amber, Less than or equal to 6 degrees C
11	1", 250mL poly with HNO3
13	1" Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
10	~~31-04SC0000~~	SO					X			~~31-04~~	N1	0.00	0.00	
11	31-04SC0001	SO					X			31-04	N1	0.00	0.00	
12	31-04SC0002	SO			J.Beer 4-18-18		X			31-04	N1	0.00	0.00	
13	31-05SC0000	SO					X			31-05	N1	0.00	0.00	
14	31-05SC0001	SO					X			31-05	N1	0.00	0.00	
15	~~31-05SC0002~~	SO					X			~~31-05~~	N1	0.00	0.00	
1	16	31-06SC0000	SO	4-17-18	14:36	RP/LF		X			31-06	N1	0.00	0.00	
2	17	31-06SC0001	SO	4-17-18	14:51	1		X			31-06	N1	0.00	0.00	HOLD
3	18	31-06SC0002	SO	4-17-18	15:13	1		X			31-06	N1	0.00	0.00	HOLD
	Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time
J.Beer	4-18-18	1200
FX		

Received by: *(Signature)*	Date	Time
FedEx	4-18-18	1200
Cerone	0419-18	09:30

Shipping Date / Carrier / Airbill Number

8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

3.8.2.2, N/A

Page 2 of 18

FA53517R: Chain of Custody
Page 2 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC #04178-03

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
	Analytical Test Method					11	13	8	13					
19	31-07SC0000	SO	4-17-18	15:28	RP/LF		X			31-07	N1	0.00	0.00	
20	31-07SC0001	SO	4-17-18	15:39	1		X			31-07	N1	0.00	0.00	HOLD
21	31-07SC0002	SO	4-17-18	15:56	1		X			31-07	N1	0.00	0.00	HOLD
~~22~~	~~31-08SC0000~~	~~SO~~					~~X~~			~~31-08~~	~~N1~~	~~0.00~~	~~0.00~~	
23	31-08SC0001	SO					X			31-08	N1	0.00	0.00	
24	31-08SC0002	SO					X			~~31-08~~	N1	0.00	0.00	
25	31-09SC0000	SO		J.Beer	4-18-18		~~X~~			31-09	N1	0.00	0.00	
26	31-09SC0000Q	SO					X			31-09	FD1	0.00	0.00	
~~27~~	~~31-09SC0001~~	~~SO~~					~~X~~			~~31-09~~	N1	0.00	0.00	

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4/18/18	1200
FX			J. Connor	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 3 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-04

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
28	~~31-09SC0001Q~~	SO					X			31-09	FD1	0.00	0.00	
29	31-09SC0002	SO					X			31-09	N1	0.00	0.00	
30	31-09SC0002Q	SO		J Beer 4-18-18			X			31-09	FD1	0.00	0.00	
31	31-10SC0000	SO					X			31-10	N1	0.00	0.00	
32	31-10SC0001	SO					X			31-10	N1	0.00	0.00	
33	~~31-10SC0002~~	SO					X			31-10	N1	0.00	0.00	
34	31-11SC0000	SO	4-17-18	12:58	RP/LF		X			31-11	N1	0.00	0.00	
35	31-11SC0001	SO	4-17-18	13:27	"		X			31-11	N1	0.00	0.00	HOLD
36	31-11SC0002	SO	4-17-18	14:05	"		X			31-11	N1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Corne	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 4 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC #041718-05

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
37	31-12SC0000	SO	4-17-18	13:11	RP/LF		X			31-12	N1	0.00	0.00	
38	31-12SC0001	SO	4-17-18	13:43			X			31-12	N1	0.00	0.00	HOLD
39	31-12SC0002	SO	4-17-18	14:19			X			31-12	N1	0.00	0.00	HOLD
40	31-13SC0000	SO	4-17-18	14:20			X			31-13	N1	0.00	0.00	
41	31-13SC0001	SO	4-17-18	14:38			X			31-13	N1	0.00	0.00	HOLD
42	31-13SC0002	SO	4-17-18	15:00			X			31-13	N1	0.00	0.00	HOLD
43	31-14SC0000	SO	4-17-18	15:20			X			31-14	N1	0.00	0.00	
44	31-14SC0001	SO	4-17-18	15:37			X			31-14	N1	0.00	0.00	HOLD
45	31-14SC0002	SO	4-17-18	15:54			X			31-14	N1	0.00	0.00	HOLD
Cooler #		Turnaround Time: 14 Days												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Cope	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 5 of 18

5.1 5

FA53517R: Chain of Custody
Page 5 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-06
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
6	2" 1-L Amber, Less than or equal to 6 degrees C
11	1", 250mL poly with HNO3
13	1" Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
46	~~31-15SC0000~~	~~SO~~					~~X~~			~~31-15~~	~~N1~~	~~0.00~~	~~0.00~~	
47	31-15SC0001	SO	J.Beer	4-18-18			X			31-15	N1	0.00	0.00	
48	~~31-15SC0002~~	~~SO~~					~~X~~			~~31-15~~	~~N1~~	~~0.00~~	~~0.00~~	
49	31-16SC0000	SO	4-17-18	9:48	RP/LF		X			31-16	N1	0.00	0.00	
50	31-16SC0001	SO	4-17-18	10:07			X			31-16	N1	0.00	0.00	HOLD
51	31-16SC0002	SO	4-17-18	10:28			X			31-16	N1	0.00	0.00	HOLD
52	31-17SC0000	SO	4-17-18	10:06			X			31-17	N1	0.00	0.00	
53	31-17SC0001	SO	4-17-18	10:22			X			31-17	N1	0.00	0.00	HOLD
54	31-17SC0002	SO	4-17-18	11:12			X			31-17	N1	0.00	0.00	HOLD

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4/18/18	1200	Fed Ex	4-18-18	1200
FX			J. Copse	04-19-18	0930

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 6 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-06, 07, 18

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
55	31-18SC0000	SO					X		X	31-18	N1	0.00	0.00
56	31-18SC0001	SO					X		X	31-18	N1	0.00	0.00
57	31-18SC0002	SO					X		X	31-18	N1	0.00	0.00
58	31-19SC0000	SO					X			31-19	N1	0.00	0.00
59	31-19SC0001	SO					X			31-19	N1	0.00	0.00
60	31-19SC0002	SO					X			31-19	N1	0.00	0.00
61	31-20SC0000	SO					X			31-20	N1	0.00	0.00
62	31-20SC0001	SO					X			31-20	N1	0.00	0.00
63	31-20SC0002	SO					X			31-20	N1	0.00	0.00

J. Beer 4-18-18

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	Fed Ex	4-18-18	1200
FX			[illegible]	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 7 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-08
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
64	31-21SC0000	SO					X		X	31-21	N1	0.00	0.00
65	31-21SC0001	SO					X		X	31-21	N1	0.00	0.00
66	31-21SC0002	SO					X		X	31-21	N1	0.00	0.00
67	31-22SC0000	SO		J. Beer 4-18-18			X		X	31-22	N1	0.00	0.00
68	31-22SC0001	SO					X		X	31-22	N1	0.00	0.00
69	31-22SC0002	SO					X		X	31-22	N1	0.00	0.00
70	31-23SC0000	SO					X			31-23	N1	0.00	0.00
71	31-23SC0001	SO					X			31-23	N1	0.00	0.00
72	31-23SC0002	SO					X			31-23	N1	0.00	0.00
Cooler #		**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200
FX		

Received by: *(Signature)*	Date	Time
FedEx	4-18-18	1200
J. Comer	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 8 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04718-09
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
73	~~31-24SC0000~~	~~SO~~					~~X~~			~~31-24~~	~~N1~~	~~0.00~~	~~0.00~~
74	31-24SC0001	SO					X			31-24	N1	0.00	0.00
75	31-24SC0002	SO					X			31-24	N1	0.00	0.00
76	31-25SC0000	SO		J. Bell 4-18-18			X		X	31-25	N1	0.00	0.00
77	31-25SC0001	SO					X		X	31-25	N1	0.00	0.00
78	31-25SC0002	SO					X		X	31-25	N1	0.00	0.00
79	31-26SC0000	SO					X		X	31-26	N1	0.00	0.00
80	31-26SC0001	SO					X		X	31-26	N1	0.00	0.00
81	~~31-26SC0002~~	~~SO~~					~~X~~		~~X~~	~~31-26~~	~~N1~~	~~0.00~~	~~0.00~~
Cooler #		**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Bell	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Cope	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 9 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/18-10

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
82	~~31-27SG0000~~	~~SO~~					X		X	~~31-27~~	~~N1~~	~~0.00~~	~~0.00~~
83	31-27SC0001	SO					X		X	31-27	N1	0.00	0.00
84	31-27SC0002	SO					X		X	31-27	N1	0.00	0.00
85	31-28SC0000	SO	J.Beer	4-18-18			X		X	31-28	N1	0.00	0.00
86	31-28SC0000Q	SO					X		X	31-28	FD1	0.00	0.00
87	31-28SC0001	SO					X		X	31-28	N1	0.00	0.00
88	31-28SC0001Q	SO					X		X	31-28	FD1	0.00	0.00
89	31-28SC0002	SO					X		X	31-28	N1	0.00	0.00
90	~~31-28SC0002Q~~	~~SO~~					X		X	~~31-28~~	~~FD1~~	~~0.00~~	~~0.00~~
Cooler #		**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J.Beer	4-18-18	1200	Fed Ex	4/18/18	1200
FX			J. Comel	04-19-18	09:30

Shipping Date / Carrier / Airbill Number

8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 10 of 18

5.1 5

FA53517R: Chain of Custody
Page 10 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/718-11
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
91	~~31-29SC0000~~	SO					X		X	~~31-29~~	N1	~~0.00~~	~~0.00~~
92	31-29SC0001	SO					X		X	31-29	N1	0.00	0.00
93	31-29SC0002	SO					X		X	31-29	N1	0.00	0.00
94	31-30SC0000	SO					X			31-30	N1	0.00	0.00
95	31-30SC0000Q	SO					X			31-30	FD1	0.00	0.00
96	31-30SC0001	SO					X			31-30	N1	0.00	0.00
97	31-30SC0001Q	SO					X			31-30	FD1	0.00	0.00
98	31-30SC0002	SO					X			31-30	N1	0.00	0.00
99	~~31-30SC0002Q~~	SO					X			~~31-30~~	FD1	0.00	0.00
Cooler #		**Turnaround Time: 14 Days**											

J Beer 4-18-18

Relinquished by: *(Signature)*	**Date**	**Time**
J Beer	4-18-18	1200
FX		

Received by: *(Signature)*	**Date**	**Time**
FedEx	4-18-18	1200
J. Cooper	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* & condition

ENV.COC_Record
April 13, 2018

Page 11 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/8-12
FA 53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

						Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM							
	Event ID: Basewide Range Assessment April 2018						11	13	8	13							
	Sample ID	Matrix	Date	Time	Samp Init.										Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
100	~~31-31SC0000~~	~~SO~~						X							~~31-31~~	~~N1~~	~~0.00~~	~~0.00~~
101	31-31SC0001	SO						X							31-31	N1	0.00	0.00
102	31-31SC0002	SO						X							31-31	N1	0.00	0.00
103	31-32SC0000	SO						X							31-32	N1	0.00	0.00
104	31-32SC0001	SO						X							31-32	N1	0.00	0.00
105	31-32SC0002	SO						X							31-32	N1	0.00	0.00
106	31-33SC0000	SO						X							31-33	N1	0.00	0.00
107	31-33SC0001	SO						X							31-33	N1	0.00	0.00
108	~~31-33SC0002~~	~~SO~~						X							~~31-33~~	~~N1~~	~~0.00~~	~~0.00~~
Cooler #		**Turnaround Time: 14 Days**																

J. Beer 4-18-18

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-18-18	
FX		

Received by: *(Signature)*	Date	Time
FedEx	4/18/18	1200
J. Corral	04-19-18	0930

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 12 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-13
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM					Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
							11	13	8	13								
109	31-34SC0000	SO						X							31-34	N1	0.00	0.00
110	31-34SC0000Q	SO						X							31-34	FD1	0.00	0.00
111	31-34SC0001	SO						X							31-34	N1	0.00	0.00
112	31-34SC0001Q	SO						X							31-34	FD1	0.00	0.00
113	31-34SC0002	SO	J.Beer	4-18-18				X							31-34	N1	0.00	0.00
114	31-34SC0002Q	SO						X							31-34	FD1	0.00	0.00
115	31-35SC0000	SO						X		X					31-35	N1	0.00	0.00
116	31-35SC0001	SO						X		X					31-35	N1	0.00	0.00
117	31-35SC0002	SO						X		X					31-35	N1	0.00	0.00
Cooler #		**Turnaround Time: 14 Days**																

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J.Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J-Cornel	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 13 of 18

FA53517R: Chain of Custody
Page 13 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-14
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250ml, poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
118	31-36SC0000	SO					X		X	31-36	N1	0.00	0.00
119	31-36SC0001	SO					X		X	31-36	N1	0.00	0.00
120	31-36SC0002	SO	J.Beer	4-18-18			X		X	31-36	N1	0.00	0.00
121	31-37SC0000	SO					X		X	31-37	N1	0.00	0.00
122	31-37SC0000Q	SO					X		X	31-37	FD1	0.00	0.00
123	31-37SC0001	SO					X		X	31-37	N1	0.00	0.00
124	31-37SC0001Q	SO					X		X	31-37	FD1	0.00	0.00
125	31-37SC0002	SO					X		X	31-37	N1	0.00	0.00
126	31-37SC0002Q	SO					X		X	31-37	FD1	0.00	0.00
Cooler #		Turnaround Time: 14 Days											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J.Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Conroe	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 14 of 18

FA53517R: Chain of Custody
Page 14 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/18-15
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
127	31-38SC0000	SO							X	31-38	N1	0.00	0.00
128	31-38SC0001	SO							X	31-38	N1	0.00	0.00
129	31-38SC0002	SO							X	31-38	N1	0.00	0.00
130	31-39SC0000	SO	J. Beer 4-18-18						X	31-39	N1	0.00	0.00
131	31-39SC0001	SO							X	31-39	N1	0.00	0.00
132	31-39SC0002	SO							X	31-39	N1	0.00	0.00
133	31-40SC0000	SO							X	31-40	N1	0.00	0.00
134	31-40SC0001	SO							X	31-40	N1	0.00	0.00
135	31-40SC0002	SO							X	31-40	N1	0.00	0.00
Cooler #		**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	
FX			J. Conroe	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 15 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-16
FA53517

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
136	31-41SC0000	SO							X	31-41	N1	0.00	0.00
137	31-41SC0001	SO							X	31-41	N1	0.00	0.00
138	31-41SC0002	SO							X	31-41	N1	0.00	0.00
139	31-42SC0000	SO	J.Beer	4-18-18					X	31-42	N1	0.00	0.00
140	31-42SC0000Q	SO							X	31-42	FD1	0.00	0.00
141	31-42SC0001	SO							X	31-42	N1	0.00	0.00
142	31-42SC0001Q	SO							X	31-42	FD1	0.00	0.00
143	31-42SC0002	SO							X	31-42	N1	0.00	0.00
144	31-42SC0002Q	SO							X	31-42	FD1	0.00	0.00

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J.Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Cesare	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 16 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/18-17
FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top - Bottom	
						11	13	8	13				
145	~~31-43SC0000~~	~~SO~~	J.Beer	4-18-18				X		~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
146	~~31-43SC0001~~	~~SO~~						X		~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
147	~~31-43SC0002~~	~~SO~~						X		~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
148	31-ER01SC	WQ	4-17-18	16:30	RP/LF	X				FIELDQC	EB1	0.00	0.00
149	~~31-ER02SC~~	~~WQ~~				X				~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
150	~~31-ER03SC~~	~~WQ~~				X				~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
151	31-ER04SC	WQ	J.Beer	4-18-18		X		X		FIELDQC	EB1	0.00	0.00
152	~~31-ER05SC~~	~~WQ~~				X		X		~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
153	~~31-ER06SC~~	~~WQ~~				X		X		~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~

Cooler # | Turnaround Time: 14 Days

lined out JB

√ ← Analyte JB

lined out JB

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Conac	04-19-18	09:30

Shipping Date / Carrier / Airbill Number: 8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 17 of 18

FA53517R: Chain of Custody
Page 17 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/7/18-17

FA53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
145	~~31-43SC0000~~	~~SO~~	J. Beer 4-18-18						X	~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
146	~~31-43SC0001~~	~~SO~~							X	~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
147	~~31-43SC0002~~	~~SO~~							X	~~31-43~~	~~N1~~	~~0.00~~	~~0.00~~
148	31-ER01SC	WQ	4-17-18	16:30	RP/LF	X				FIELDQC	EB1	0.00	0.00
149	~~31-ER02SC~~	~~WQ~~				X				~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
150	~~31-ER03SC~~	~~WQ~~				X				~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
151	31-ER04SC	WQ	J. Beer 4-18-18			X		X		FIELDQC	EB1	0.00	0.00
152	~~31-ER05SC~~	~~WQ~~				X		X		~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
153	~~31-ER06SC~~	~~WQ~~				X		X		~~FIELDQC~~	~~EB1~~	~~0.00~~	~~0.00~~
	Cooler #	**Turnaround Time: 14 Days**											

29

Analysis JB

Analysis JB

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			Carrie	04-19-18	09:30

Shipping Date / Carrier / Airbill Number

8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 17 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041718-18

FA 53517

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

						Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM							
Event ID: Basewide Range Assessment April 2018							11	13	8	13							
	Sample ID	Matrix	Date	Time	Samp Init.										Location ID	Sample Type	Depth (ft bgs) Top - Bottom
154																	
155																	
156																	
157																	
158																	
159			J.Beer	4-18-18													
160																	
161																	
162																	
Cooler #		Turnaround Time: 14 Days															

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-18-18	
FX		

Received by: *(Signature)*	Date	Time
FedEx	4-18-18	1200
J. Cone	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* & condition

ENV.COC_Record
April 13, 2018

Page 18 of 18

5.1 5

FA53517R: Chain of Custody
Page 19 of 21

SGS Sample Receipt Summary

Job Number: FA53517 **Client:** GILBANE **Project:** BRA KEMRON

Date / Time Received: 4/19/2018 9:30:00 AM **Delivery Method:** FX **Airbill #'s:** 1002826072710003281100780581127816

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (24.4);

Cooler Temps (Corrected) °C: Cooler 1: (24.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☐		☑
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments SAMPLES RECEIVED AT AMBIENT TEMP, NO ICE

SM001
Rev. Date 05/24/17

Technician: JORGEC Date: 4/19/2018 9:30:00 AM Reviewer: HW Date: 4/19/2018

Job Change Order: FA53517

Requested Date:	5/30/2018	**Received Date:**	4/19/2018
Account Name:	Kemron Environmental Services, I	**Due Date:**	5/9/2018
Project Description:	Ft Ord; CA	**Deliverable:**	FULT1
CSR:	jeans	**TAT (Days):**	5

==========

Sample #: FA53517-2,3,5,6,8,9,11,12,14,15,17,18

Dept:

TAT: 5

Change:

Per client please log and analyze for Pb. Thank you.

==========

Above Changes Per: client, Thomas Beer, via e-mail re **Date/Time:** 5/30/2018 1:53:11 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

QC Evaluation: DOD QSM5 Limits

Job Number: FA53517R
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/17/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP33823	SW846 6010C						
MP33823-B1	7439-92-1	Lead	BSP	REC	93.2	%	81-112
MP33823-S1	7439-92-1	Lead	MS	REC	10.3 [a]	%	81-112
MP33823-S2	7439-92-1	Lead	MSD	REC	25.4 [a]	%	81-112
MP33823-S2	7439-92-1	Lead	MSD	RPD	2.4	%	20
MP33823-D1	7439-92-1	Lead	DUP	RPD	10.5	%	20
MP33823-D2	7439-92-1	Lead	DUP	RPD	14.8	%	20

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

* Sample used for QC is not from job FA53517R

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14941
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:42	MA14941-STD1	1		STDA
09:46	MA14941-STD2	1		STDB
09:50	MA14941-STD3	1		STDC
09:53	MA14941-STD4	1		STDD
09:56	MA14941-HSTD1	1		
10:02	MA14941-ICV1	1		
10:09	MA14941-ICB1	1		
10:13	MA14941-CRIA1	1		
10:25	MA14941-ICSA1	1		
10:34	MA14941-ICSAB1	1		
10:41	MA14941-CCV1	1		
11:06	MA14941-CCB1	1		
11:11	ZZZZZZ	10		
11:15	MP33817-S1	2		
11:19	MP33817-S2	2		
11:23	ZZZZZZ	2		
11:27	MA14941-CCV2	1		
11:31	MA14941-CCB2	1		
11:58	MA14941-CCV3	1		
12:05	MA14941-CCB3	1		
13:32	MA14941-CCV4	1		
13:36	MA14941-CCB4	1		
13:50	MP33823-MB1	1		
13:54	MP33823-B1	1		
13:58	FA53517-2R	5		
14:02	MP33823-D1	5		
14:07	MP33823-SD1	25		
14:11	MP33823-PS1	5		
14:15	MP33823-S1	5		
14:19	MP33823-S2	5		
14:23	FA53517-3R	5		
14:27	FA53517-5R	5		
14:32	MA14941-CCV5	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14941
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:35	MA14941-CCB5	1		
14:40	FA53517-6R	5		
14:44	FA53517-8R	5		
14:48	FA53517-9R	5		
14:52	FA53517-11R	5		
14:56	FA53517-12R	5		
15:05	FA53517-15R	5		
15:09	FA53517-17R	5		
15:13	FA53517-18R	5		
15:17	ZZZZZZ	5		
15:21	MA14941-CCV6	1		
15:25	MA14941-CCB6	1		
15:30	ZZZZZZ	5		
15:34	ZZZZZZ	5		
15:38	ZZZZZZ	5		
15:42	ZZZZZZ	5		
15:46	MP33823-D2	5		
---------->	Last reportable sample/prep for job FA53517R			
15:51	MA14941-CRIA2	1		
15:55	MA14941-ICSA2	1		
15:59	MA14941-ICSAB2	1		
16:03	MA14941-CCV7	1		
16:07	MA14941-CCB7	1		
---------->	Last reportable CCB for job FA53517R			
	Refer to raw data for calibration curve and standards.			

INTERNAL STANDARD SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14941
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:42	MA14941-STD1	11907 !	43031 !	2034	4913 !
09:46	MA14941-STD2	3667	25726	2024	1390
09:50	MA14941-STD3	3536	24846	1997	1266
09:53	MA14941-STD4	3391	24171	2003	1180
09:56	MA14941-HSTD1	3390	24124	1995	1178
10:02	MA14941-ICV1	3481	24845	2041	1261
10:09	MA14941-ICB1	3615 R	26151 R	2096 R	1483 R
10:13	MA14941-CRIA1	3566	26028	2084	1413
10:25	MA14941-ICSA1	3137	22558	1985	1093
10:34	MA14941-ICSAB1	3144	22867	2015	1087
10:41	MA14941-CCV1	3405	25169	2082	1253
11:06	MA14941-CCB1	3516	26338	2103	1465
11:11	ZZZZZZ	3829	29141	2363	1408
11:15	MP33817-S1	3340	25021	2086	1259
11:19	MP33817-S2	3322	25067	2110	1257
11:23	ZZZZZZ	3304	25217	2107	1303
11:27	MA14941-CCV2	3360	25320	2117	1247
11:31	MA14941-CCB2	3522	26478	2117	1460
11:58	MA14941-CCV3	3342	25240	2100	1238
12:05	MA14941-CCB3	3460	26154	2110	1436
13:32	MA14941-CCV4	3366	25258	2128	1235
13:36	MA14941-CCB4	3487	25793	2084	1427
13:50	MP33823-MB1	3455	26717	2158	1446
13:54	MP33823-B1	3340	25656	2116	1291
13:58	FA53517-2R	3593	27136	2246	1410
14:02	MP33823-D1	3585	26880	2244	1414
14:07	MP33823-SD1	3536	26263	2172	1432
14:11	MP33823-PS1	3565	26952	2242	1389
14:15	MP33823-S1	3539	26635	2205	1361
14:19	MP33823-S2	3542	26470	2228	1369
14:23	FA53517-3R	3601	26898	2241	1393
14:27	FA53517-5R	3549	26746	2228	1392
14:32	MA14941-CCV5	3290	25043	2122	1224

INTERNAL STANDARD SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14941
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:35	MA14941-CCB5	3403	26178	2144	1418
14:40	FA53517-6R	3539	26611	2225	1399
14:44	FA53517-8R	3707	28189	2381	1326
14:48	FA53517-9R	3666	27832	2354	1328
14:52	FA53517-11R	3602	26654	2286	1334
14:56	FA53517-12R	3626	26860	2302	1328
15:05	FA53517-15R	3618	27499	2284	1383
15:09	FA53517-17R	3519	26738	2235	1382
15:13	FA53517-18R	3489	26442	2214	1366
15:17	ZZZZZZ	3535	26485	2238	1320
15:21	MA14941-CCV6	3288	25304	2113	1227
15:25	MA14941-CCB6	3422	25859	2113	1418
15:30	ZZZZZZ	3540	26612	2208	1371
15:34	ZZZZZZ	3506	26291	2169	1370
15:38	ZZZZZZ	3553	26493	2220	1382
15:42	ZZZZZZ	3525	26558	2206	1370
15:46	MP33823-D2	3531	26511	2185	1387
15:51	MA14941-CRIA2	3405	25829	2134	1369
15:55	MA14941-ICSA2	3021	22430	2019	1064
15:59	MA14941-ICSAB2	3031	22504	2041	1060
16:03	MA14941-CCV7	3295	24961	2125	1223
16:07	MA14941-CCB7	3398	25852	2129	1416

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14941 Units: ug/l

Time: / Sample ID:			10:09 ICB1		11:06 CCB1		11:31 CCB2		12:05 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2								
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	1.40	<20	0.800	<20	1.10	<20	-0.400	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14941 Units: ug/l

Time: / Sample ID:			13:36 CCB4		14:35 CCB5		15:25 CCB6		16:07 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2								
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	-0.100	<20	0.600	<20	0.300	<20	0.500	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14941 Units: ug/l

Time:		10:02			10:41			11:27	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	2000	1920	96.0	2000	1970	98.5	2000	1950	97.5
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14941 Units: ug/l

Time:		11:58			13:32			14:32	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	2000	1990	99.5	2000	2020	101.0	2000	2000	100.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14941 Units: ug/l

Time:		15:21			16:03	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic	anr					
Barium	anr					
Beryllium						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	2000	1990	99.5	2000	2000	100.0
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14941 Units: ug/l

Time:		09:56	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic	anr		
Barium	anr		
Beryllium			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper			
Iron			
Lead	4000	4000	100.0
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14941 Units: ug/l

Time:			10:13		15:51	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0				
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	anr			
Cobalt	100	50				
Copper	50	25				
Iron	600	300				
Lead	10	5.0	5.10	102.0	4.80	96.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14941 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:25 ICSA1 Results	% Rec	10:34 ICSAB1 Results	% Rec	15:55 ICSA2 Results	% Rec	15:59 ICSAB2 Results	% Rec
Aluminum	500000	500000	504000	100.8	499000	99.8	521000	104.2	517000	103.4
Antimony		1000	0.00		969	96.9	-0.700		957	95.7
Arsenic		1000	0.00		1050	105.0	3.20		1030	103.0
Barium		500	0.00		515	103.0	0.500		523	104.6
Beryllium		500	0.00		496	99.2	-0.100		506	101.2
Cadmium		1000	0.00		941	94.1	0.500		943	94.3
Calcium	500000	500000	461000	92.2	456000	91.2	478000	95.6	475000	95.0
Chromium		500	-0.300		472	94.4	0.200		494	98.8
Cobalt		500	-0.100		482	96.4	-0.400		481	96.2
Copper		500	-0.500		528	105.6	-0.800		538	107.6
Iron	200000	200000	187000	93.5	185000	92.5	192000	96.0	191000	95.5
Lead		1000	0.00		952	95.2	-2.50		963	96.3
Magnesium	500000	500000	508000	101.6	499000	99.8	520000	104.0	510000	102.0
Manganese		500	-0.100		489	97.8	0.200		504	100.8
Molybdenum		1000	0.00		851	85.1	-0.500		846	84.6
Nickel		1000	0.00		983	98.3	0.400		972	97.2
Potassium			64.4		2.80		230		36.8	
Selenium		1000	0.00		939	93.9	4.20		933	93.3
Silver		1000	0.00		1020	102.0	-0.300		1050	105.0
Sodium			191		161		164		125	
Strontium		1000	-0.100		926	92.6	-0.200		951	95.1
Thallium		1000	-0.700		884	88.4	3.30		897	89.7
Tin		1000	2.10		922	92.2	1.60		896	89.6
Titanium		1000	-1.50		911	91.1	-1.40		940	94.0
Vanadium		500	-0.700		482	96.4	-0.800		487	97.4
Zinc		1000	0.600		944	94.4	2.30		945	94.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14948
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:02	MA14948-STD1	1		STDA
10:06	MA14948-STD2	1		STDB
10:10	MA14948-STD3	1		STDC
10:14	MA14948-STD4	1		STDD
10:18	MA14948-HSTD1	1		
10:24	MA14948-ICV1	1		
10:34	MA14948-ICB1	1		
10:38	MA14948-CRIA1	1		
10:46	MA14948-ICSA1	1		
10:55	MA14948-ICSAB1	1		
11:05	MA14948-CCV1	1		
11:16	MA14948-CCB1	1		
12:44	MA14948-CCV2	1		
12:48	MA14948-CCB2	1		
13:21	MA14948-CCV3	1		
13:29	MA14948-CCB3	1		
13:36	MP33833-MB1	1		
13:40	MP33833-B1	1		
13:44	FA54562-1L	1		(sample used for QC only; not part of login FA53517R)
13:48	MP33833-D1	1		
13:52	MP33833-SD1	5		
13:57	MP33833-S1	1		
14:01	MP33833-S2	1		
14:05	ZZZZZZ	1		
14:09	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:17	MA14948-CCV4	1		
14:21	MA14948-CCB4	1		
14:26	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:34	ZZZZZZ	1		
14:38	MP33833-MB2	1		
14:43	MP33833-B2	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14948
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:47	FA53517-14R	50		
---------->	Last reportable sample/prep for job FA53517R			
14:51	MP33835-MB1	1		
14:55	MP33835-B1	1		
14:59	FA54605-1	5		(sample used for QC only; not part of login FA53517R)
15:04	MP33835-D1	5		
15:08	MA14948-CCV5	1		
15:12	MA14948-CCB5	1		
15:17	MP33835-SD1	25		
15:21	MP33835-PS1	5		
15:25	MP33835-S1	5		
15:30	MP33835-S2	5		
15:34	ZZZZZZ	5		
15:39	ZZZZZZ	5		
15:43	ZZZZZZ	5		
15:48	ZZZZZZ	5		
15:53	ZZZZZZ	5		
15:57	ZZZZZZ	5		
16:02	MA14948-CCV6	1		
16:05	MA14948-CCB6	1		
16:10	ZZZZZZ	5		
16:14	ZZZZZZ	5		
16:19	ZZZZZZ	5		
16:23	ZZZZZZ	5		
16:28	ZZZZZZ	5		
16:32	ZZZZZZ	5		
16:36	ZZZZZZ	5		
16:41	ZZZZZZ	5		
16:46	ZZZZZZ	5		
16:50	ZZZZZZ	5		
16:55	MA14948-CCV7	1		
16:59	MA14948-CCB7	1		
17:07	ZZZZZZ	1		
17:11	MA14948-CRIA2	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14948
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:16	MA14948-ICSA2	1		
17:20	MA14948-ICSAB2	1		
17:24	MA14948-CCV8	1		
17:28	MA14948-CCB8	1		

----------> Last reportable CCB for job FA53517R
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14948
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:02	MA14948-STD1	3023	25273	2292	1289
10:06	MA14948-STD2	2925	24395	2236	1179
10:10	MA14948-STD3	2838	23909	2258	1082
10:14	MA14948-STD4	2812	23737	2302	1035
10:18	MA14948-HSTD1	2817	23702	2301	1033
10:24	MA14948-ICV1	2907	23981	2255	1101
10:34	MA14948-ICB1	3047 R	25067 R	2275 R	1281 R
10:38	MA14948-CRIA1	3034	24690	2227	1241
10:46	MA14948-ICSA1	2658	21365	2194	955
10:55	MA14948-ICSAB1	2649	21630	2207	949
11:05	MA14948-CCV1	2897	24056	2296	1100
11:16	MA14948-CCB1	2974	24733	2265	1259
12:44	MA14948-CCV2	2888	23313	2249	1078
12:48	MA14948-CCB2	2969	24202	2239	1238
13:21	MA14948-CCV3	2892	23161	2255	1078
13:29	MA14948-CCB3	2957	24111	2229	1240
13:36	MP33833-MB1	2990	24453	2281	1247
13:40	MP33833-B1	2921	23296	2231	1129
13:44	FA54562-1L	2769	22185	2211	1071
13:48	MP33833-D1	2769	22313	2197	1073
13:52	MP33833-SD1	2785	22217	2103	1112
13:57	MP33833-S1	2820	22417	2222	1031
14:01	MP33833-S2	2804	22421	2223	1031
14:05	ZZZZZZ	2823	22671	2236	1093
14:09	ZZZZZZ	2823	22474	2229	1089
14:13	ZZZZZZ	2816	22597	2229	1087
14:17	MA14948-CCV4	2891	23013	2216	1074
14:21	MA14948-CCB4	2981	23840	2222	1236
14:26	ZZZZZZ	2859	22677	2227	1106
14:30	ZZZZZZ	2829	22584	2234	1112
14:34	ZZZZZZ	2797	22072	2157	1085
14:38	MP33833-MB2	2698	21407	2108	1057
14:43	MP33833-B2	2712	21650	2128	1019

INTERNAL STANDARD SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14948
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:47	FA53517-14R	2939	23828	2236	1212
14:51	MP33835-MB1	2939	24178	2239	1236
14:55	MP33835-B1	2874	23069	2219	1117
14:59	FA54605-1	2472	19736	2045	889
15:04	MP33835-D1	2546	20305	2123	911
15:08	MA14948-CCV5	2883	22750	2231	1068
15:12	MA14948-CCB5	2930	23100	2168	1212
15:17	MP33835-SD1	2635	21030	2049	1011
15:21	MP33835-PS1	2488	19809	2080	892
15:25	MP33835-S1	2498	20056	2074	899
15:30	MP33835-S2	2453	19718	2053	878
15:34	ZZZZZZ	2453	19329	2053	869
15:39	ZZZZZZ	2603	20415	2154	917
15:43	ZZZZZZ	2579	20283	2139	921
15:48	ZZZZZZ	2609	20609	2166	933
15:53	ZZZZZZ	2732	21594	2244	931
15:57	ZZZZZZ	2648	20897	2198	921
16:02	MA14948-CCV6	2747	21289	2124	1014
16:05	MA14948-CCB6	2984	23404	2254	1226
16:10	ZZZZZZ	2573	20153	2165	922
16:14	ZZZZZZ	2797	21584	2228	952
16:19	ZZZZZZ	2739	21173	2242	942
16:23	ZZZZZZ	2611	20191	2143	909
16:28	ZZZZZZ	2598	19942	2101	911
16:32	ZZZZZZ	2555	19804	2074	865
16:36	ZZZZZZ	3247	25199	2644	951
16:41	ZZZZZZ	2496	19579	2062	899
16:46	ZZZZZZ	2504	19635	2092	890
16:50	ZZZZZZ	2568	20055	2115	902
16:55	MA14948-CCV7	2911	22602	2235	1071
16:59	MA14948-CCB7	2996	23279	2219	1229
17:07	ZZZZZZ	3005	24111	2299	1219
17:11	MA14948-CRIA2	2815	22027	2126	1128

INTERNAL STANDARD SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14948
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
17:16	MA14948-ICSA2	2647	20350	2156	930
17:20	MA14948-ICSAB2	2560	19595	2085	889
17:24	MA14948-CCV8	2826	22133	2165	1042
17:28	MA14948-CCB8	2998	23651	2233	1234

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14948 Units: ug/l

Time: / Sample ID:			10:34 ICB1		11:16 CCB1		12:48 CCB2		13:29 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2								
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	anr							
Iron	300	17								
Lead	20	1	0.300	<20	0.100	<20	0.500	<20	-0.300	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14948 Units: ug/l

Time: / Sample ID:			14:21 CCB4		15:12 CCB5		16:05 CCB6		16:59 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2								
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	anr							
Iron	300	17								
Lead	20	1	0.800	<20	0.00	<20	0.00	<20	0.100	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14948 Units: ug/l

Time: / Sample ID:			17:28 CCB8	
Metal	RL	IDL	raw	final
Aluminum	200	14		
Antimony	20	1		
Arsenic	10	1.3	anr	
Barium	200	1	anr	
Beryllium	5.0	.2		
Cadmium	4.0	.2	anr	
Calcium	5000	50		
Chromium	10	1	anr	
Cobalt	50	.2		
Copper	25	1	anr	
Iron	300	17		
Lead	20	1	0.00	<20
Magnesium	5000	35		
Manganese	15	.5		
Molybdenum	50	.3		
Nickel	40	.4	anr	
Potassium	10000	200		
Selenium	20	2.4	anr	
Silver	10	.7	anr	
Sodium	10000	500		
Strontium	10	.5		
Thallium	10	1.1		
Tin	50	.9		
Titanium	10	.5		
Vanadium	50	.5		
Zinc	20	3		

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14948 Units: ug/l

Time:		10:24			11:05			12:44	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron									
Lead	2000	1950	97.5	2000	1970	98.5	2000	2040	102.0
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14948 Units: ug/l

Time: / Sample ID: / Metal	CCV True	13:21 CCV3 Results	% Rec	CCV True	14:17 CCV4 Results	% Rec	CCV True	15:08 CCV5 Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron									
Lead	2000	1970	98.5	2000	1990	99.5	2000	2010	100.5
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14948 Units: ug/l

Time:		16:02			16:55			17:24	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron									
Lead	2000	2130	106.5	2000	2010	100.5	2000	2070	103.5
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14948 Units: ug/l

Time:		10:18	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic	anr		
Barium	anr		
Beryllium			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper	anr		
Iron			
Lead	4000	3990	99.8
Magnesium			
Manganese			
Molybdenum			
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14948 Units: ug/l

Time:			10:38		17:11	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0				
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	anr			
Cobalt	100	50				
Copper	50	25	anr			
Iron	600	300				
Lead	10	5.0	5.60	112.0	5.30	106.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40	anr			
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000				
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060418M1.ICP Date Analyzed: 06/04/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14948 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:46 ICSA1 Results	% Rec	10:55 ICSAB1 Results	% Rec	17:16 ICSA2 Results	% Rec	17:20 ICSAB2 Results	% Rec
Aluminum	500000	500000	541000	108.2	530000	106.0	549000	109.8	577000	115.4
Antimony		1000	0.00		959	95.9	3.10		980	98.0
Arsenic		1000	0.00		1030	103.0	-0.100		1050	105.0
Barium		500	0.600		519	103.8	0.300		543	108.6
Beryllium		500	0.00		512	102.4	-0.100		540	108.0
Cadmium		1000	0.100		943	94.3	-0.800		986	98.6
Calcium	500000	500000	491000	98.2	481000	96.2	489000	97.8	514000	102.8
Chromium		500	-0.300		502	100.4	-0.100		540	108.0
Cobalt		500	-0.400		479	95.8	-0.100		501	100.2
Copper		500	0.00		550	110.0	0.400		577	115.4
Iron	200000	200000	194000	97.0	191000	95.5	190000	95.0	200000	100.0
Lead		1000	-0.300		970	97.0	-8.40		1020	102.0
Magnesium	500000	500000	527000	105.4	516000	103.2	519000	103.8	538000	107.6
Manganese		500	0.300		505	101.0	0.00		523	104.6
Molybdenum		1000	-0.100		842	84.2	0.500		872	87.2
Nickel		1000	0.00		956	95.6	0.200		976	97.6
Potassium			25.6		-66.6		-44.0		-51.3	
Selenium		1000	0.00		916	91.6	-2.50		935	93.5
Silver		1000	-1.00		1060	106.0	-1.20		1080	108.0
Sodium			140		120		80.9		77.8	
Strontium		1000	-0.700		962	96.2	-0.400		1030	103.0
Thallium		1000	1.00		899	89.9	-1.50		943	94.3
Tin		1000	0.300		886	88.6	0.800		897	89.7
Titanium		1000	-1.70		953	95.3	-1.30		994	99.4
Vanadium		500	-0.200		488	97.6	-0.700		509	101.8
Zinc		1000	1.10		940	94.0	0.100		987	98.7

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/01/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8		
Antimony	1.0	.05	.065		
Arsenic	0.50	.065	.1		
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05		
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05		
Iron	15	.85	.85		
Lead	1.0	.05	.05	0.035	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15		

Associated samples MP33823: FA53517-2R, FA53517-3R, FA53517-5R, FA53517-6R, FA53517-8R, FA53517-9R, FA53517-11R, FA53517-12R, FA53517-14R, FA53517-15R, FA53517-17R, FA53517-18R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			06/01/18					06/01/18	
Metal	FA53517-2R Original	DUP	RPD	QC Limits	FA53517-2R Original	MS	Spikelot MPFLICP2 % Rec		QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	160	144 (a)	10.5	0-20	160	162 (a)	19.4	10.3 (b)	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP33823: FA53517-2R, FA53517-3R, FA53517-5R, FA53517-6R, FA53517-8R, FA53517-9R, FA53517-11R, FA53517-12R, FA53517-14R, FA53517-15R, FA53517-17R, FA53517-18R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/01/18 06/01/18

Metal	FA53517-2R Original MSD		Spikelot MPFLICP2 % Rec		MSD RPD	QC Limit	FA53517-2R Original DUP		RPD	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	160	166 (a)	23.6	25.4 (b)	2.4	20	160	138 (a)	14.8	0-20
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33823: FA53517-2R, FA53517-3R, FA53517-5R, FA53517-6R, FA53517-8R, FA53517-9R, FA53517-11R, FA53517-12R, FA53517-14R, FA53517-15R, FA53517-17R, FA53517-18R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 06/01/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	23.3	25	93.2	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33823: FA53517-2R, FA53517-3R, FA53517-5R, FA53517-6R, FA53517-8R, FA53517-9R, FA53517-11R, FA53517-12R, FA53517-14R, FA53517-15R, FA53517-17R, FA53517-18R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 06/01/18

Metal	FA53517-2R Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	4130	3800	8.1	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33823: FA53517-2R, FA53517-3R, FA53517-5R, FA53517-6R, FA53517-8R, FA53517-9R, FA53517-11R, FA53517-12R, FA53517-14R, FA53517-15R, FA53517-17R, FA53517-18R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53517R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 06/01/18

Metal	Sample ml	Final ml	FA53517-2R Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	4130	4047.4	4147	0.2	2.5	50	199.2*(a	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33823: FA53517-2R, FA53517-3R, FA53517-5R, FA53517-6R, FA53517-8R, FA53517-9R, FA53517-11R, FA53517-12R, FA53517-14R, FA53517-15R, FA53517-17R, FA53517-18R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Instrument Detection Limits

Job Number: FA53517R
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14941,MA14948

Instrument Linear Ranges

Job Number: FA53517R
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14941,MA14948

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 6/1/2018 9:42:57 Type: Cal
Method: 60102007_041712(v244) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0005	-.0028	-.0002	.0488	-.0010	.0071	-.0001	.0002	.0002
Stddev	.0004	.0005	.0000	.0018	.0011	.0014	.0002	.0001	.0000
%RSD	75.89	18.93	10.33	3.661	111.5	18.97	138.7	48.65	21.09
#1	-.0004	-.0035	-.0002	.0502	-.0019	.0056	-.0003	.0002	.0002
#2	-.0002	-.0025	-.0002	.0468	.0002	.0077	.0000	.0001	.0002
#3	-.0009	-.0026	-.0002	.0493	-.0013	.0081	.0000	.0002	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0021	.0009	.0096	-.0010	.0001	-.0001	-.0431	.0000	.0009
Stddev	.0011	.0008	.0027	.0004	.0002	.0000	.0041	.0000	.0004
%RSD	52.77	85.63	28.46	43.12	177.2	56.57	9.539	64.12	40.02
#1	.0029	.0003	.0100	-.0008	.0003	-.0001	-.0476	.0001	.0013
#2	.0026	.0018	.0120	-.0007	.0001	-.0001	-.0396	.0001	.0006
#3	.0008	.0007	.0066	-.0015	.0000	-.0001	-.0422	.0000	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	-.0003	.0014	.0001	.0023	.0015	-.0014	-.0002	.0003
Stddev	.0001	.0001	.0000	.0000	.0010	.0006	.0001	.0000	.0000
%RSD	564.0	29.65	2.374	43.57	42.56	42.83	8.498	21.23	6.346
#1	.0000	-.0002	.0014	.0002	.0018	.0019	-.0015	-.0001	.0003
#2	-.0001	-.0004	.0014	.0001	.0034	.0017	-.0014	-.0002	.0003
#3	.0001	-.0004	.0014	.0001	.0017	.0008	-.0013	-.0002	.0003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4912.5	11907.	43031.	2034.4
Stddev	14.7	18.	25870.	13.2
%RSD	.29834	.15446	60.119	.64673
#1	4897.1	11886.	25766.	2049.5
#2	4914.1	11920.	30553.	2027.3
#3	4926.3	11916.	72775.	2026.2

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 6/1/2018 9:46:47 Type: Cal
Method: 60102007_041712(v244) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0325	1.735	.0974	5.398	4.262	2.920	2.377	1.167	.2194	.3921
Stddev	.0003	.005	.0001	.019	.026	.018	.003	.002	.0010	.0004
%RSD	1.074	.2881	.0937	.3563	.6089	.6353	.1290	.1354	.4639	.0980
#1	.0328	1.741	.0975	5.401	4.277	2.930	2.379	1.167	.2206	.3922
#2	.0326	1.731	.0973	5.378	4.232	2.898	2.378	1.166	.2192	.3924
#3	.0321	1.735	.0975	5.416	4.277	2.931	2.373	1.169	.2186	.3916

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.202	2.593	.2968	1.233	.5593	7.590	.6663	.5962	.1190	.0723
Stddev	.003	.015	.0020	.008	.0010	.044	.0005	.0020	.0003	.0003
%RSD	.1498	.5906	.6655	.6702	.1785	.5845	.0779	.3417	.2860	.3801
#1	2.205	2.610	.2958	1.240	.5591	7.611	.6658	.5983	.1193	.0722
#2	2.198	2.583	.2991	1.235	.5584	7.539	.6662	.5942	.1187	.0726
#3	2.203	2.585	.2955	1.224	.5604	7.620	.6669	.5961	.1191	.0721

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2105	.2313	8.603	.9328	.2904	.3151	1.468
Stddev	.0009	.0006	.028	.0030	.0027	.0012	.001
%RSD	.4239	.2684	.3196	.3262	.9215	.3904	.0733
#1	.2114	.2320	8.633	.9343	.2935	.3160	1.468
#2	.2103	.2309	8.578	.9348	.2894	.3156	1.467
#3	.2096	.2309	8.599	.9293	.2884	.3137	1.469

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1390.0	3667.1	25726.	2023.9
Stddev	5.0	2.3	104.	6.6
%RSD	.36249	.06320	.40406	.32802
#1	1385.5	3667.3	25615.	2030.1
#2	1395.4	3669.4	25743.	2024.6
#3	1389.0	3664.8	25821.	2016.9

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 6/1/2018 9:50:11 Type: Cal
Method: 60102007_041712(v244) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1256	6.936	.4008	21.92	17.15	11.47	9.471	4.610	.8766	1.564
Stddev	.0004	.043	.0011	.14	.13	.09	.013	.004	.0018	.001
%RSD	.3357	.6204	.2713	.6569	.7569	.7855	.1413	.0820	.2063	.0742
#1	.1256	6.985	.3998	22.07	17.29	11.57	9.477	4.613	.8781	1.565
#2	.1252	6.917	.4007	21.78	17.12	11.44	9.480	4.611	.8771	1.563
#3	.1261	6.906	.4019	21.91	17.04	11.40	9.455	4.606	.8746	1.564

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8.464	10.34	1.174	4.942	2.359	30.15	2.624	2.463	.4803	.2961
Stddev	.041	.07	.014	.013	.004	.20	.005	.004	.0015	.0012
%RSD	.4806	.6985	1.180	.2529	.1491	.6528	.1806	.1847	.3046	.3886
#1	8.511	10.41	1.190	4.956	2.358	30.35	2.625	2.466	.4798	.2968
#2	8.439	10.33	1.167	4.931	2.357	30.14	2.619	2.465	.4791	.2948
#3	8.441	10.27	1.165	4.940	2.363	29.96	2.629	2.458	.4819	.2968

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.7858	.9581	36.43	3.965	1.184	1.318	5.841
Stddev	.0022	.0020	.23	.012	.001	.002	.009
%RSD	.2847	.2047	.6261	.3077	.0884	.1549	.1600
#1	.7844	.9567	36.65	3.977	1.185	1.320	5.849
#2	.7845	.9572	36.44	3.953	1.185	1.317	5.844
#3	.7884	.9603	36.20	3.965	1.183	1.316	5.831

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1265.6	3536.1	24846.	1997.0
Stddev	1.6	3.2	60.	26.3
%RSD	.12569	.09188	.24341	1.3172
#1	1264.5	3532.4	24787.	1972.1
#2	1264.9	3537.4	24841.	2024.5
#3	1267.4	3538.5	24908.	1994.3

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 6/1/2018 9:53:25 Type: Cal
Method: 60102007_041712(v244) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2531	13.47	.8075	43.07	32.96	22.00	18.46	9.007	1.697	3.066
Stddev	.0010	.04	.0022	.11	.07	.08	.02	.007	.005	.007
%RSD	.4123	.3123	.2758	.2524	.2248	.3579	.1108	.0782	.2893	.2179
#1	.2519	13.51	.8054	43.16	33.05	22.08	18.46	9.011	1.694	3.059
#2	.2538	13.47	.8098	42.95	32.92	22.00	18.48	9.010	1.696	3.066
#3	.2536	13.43	.8072	43.10	32.92	21.92	18.44	8.998	1.703	3.073

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	16.12	20.09	2.272	9.606	4.581	58.35	5.162	4.908	.9628	.5916
Stddev	.03	.06	.010	.054	.009	.20	.007	.022	.0021	.0007
%RSD	.2138	.2987	.4432	.5657	.1990	.3502	.1424	.4530	.2150	.1195
#1	16.16	20.16	2.283	9.547	4.572	58.56	5.160	4.913	.9627	.5911
#2	16.09	20.04	2.263	9.617	4.590	58.32	5.170	4.927	.9649	.5924
#3	16.11	20.08	2.270	9.654	4.580	58.16	5.156	4.883	.9608	.5913

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.423	1.838	69.12	7.525	2.343	2.550	11.39
Stddev	.003	.005	.17	.035	.012	.006	.02
%RSD	.1971	.2664	.2428	.4718	.4993	.2406	.2019
#1	1.421	1.834	69.31	7.485	2.344	2.550	11.41
#2	1.426	1.844	69.04	7.535	2.354	2.543	11.40
#3	1.423	1.837	69.01	7.554	2.331	2.555	11.37

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1179.6	3390.6	24171.	2003.4
Stddev	4.5	5.6	121.	9.3
%RSD	.38539	.16421	.49990	.46256
#1	1177.6	3387.5	24249.	1996.3
#2	1176.4	3387.2	24231.	2013.9
#3	1184.8	3397.0	24031.	2000.1

Zoom In Zoom Out

Sample Name: HSTD Acquired: 6/1/2018 9:56:54 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4989	79.05	4.009	3.982	3.938	78.53	3.958	3.962	3.950	3.972
Stddev	.0024	.15	.005	.014	.012	.04	.003	.001	.005	.012
%RSD	.4847	.1909	.1270	.3574	.3089	.0512	.0633	.0351	.1404	.3062
#1	.5010	79.00	4.003	3.998	3.924	78.53	3.961	3.961	3.950	3.984
#2	.4963	78.92	4.011	3.973	3.948	78.50	3.956	3.962	3.945	3.972
#3	.4994	79.21	4.013	3.974	3.940	78.57	3.957	3.963	3.956	3.959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.09	78.97	79.06	3.962	3.977	78.48	3.962	4.002	4.000	3.996
Stddev	.11	.36	.34	.018	.003	.10	.004	.006	.005	.008
%RSD	.1450	.4529	.4285	.4461	.0671	.1310	.0910	.1403	.1355	.1953
#1	78.22	78.67	78.78	3.978	3.978	78.41	3.960	4.006	3.999	3.989
#2	78.01	79.37	79.43	3.943	3.979	78.44	3.966	3.995	4.006	4.005
#3	78.05	78.89	78.96	3.965	3.974	78.60	3.959	4.005	3.996	3.994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.819	3.936	3.931	3.939	3.985	3.958	3.958
Stddev	.002	.004	.007	.013	.007	.010	.003
%RSD	.0562	.1047	.1854	.3220	.1787	.2540	.0679
#1	3.818	3.934	3.924	3.953	3.988	3.957	3.960
#2	3.817	3.941	3.938	3.929	3.977	3.949	3.957
#3	3.821	3.934	3.932	3.935	3.990	3.969	3.955
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 6/1/2018 9:56:54 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1178.1	3390.1	24124.	1995.4
Stddev	2.0	3.5	161.	3.2
%RSD	.17351	.10359	.66732	.16094
#1	1177.4	3386.8	24174.	1997.6
#2	1180.4	3389.8	24254.	1991.7
#3	1176.5	3393.8	23944.	1997.0

Zoom In Zoom Out

Sample Name: ICV Acquired: 6/1/2018 10:02:54 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2331	40.22	1.963	1.974	1.976	39.24	1.962	1.987	1.932	1.969
Stddev	.0005	.10	.005	.003	.004	.08	.001	.001	.006	.007
%RSD	.2247	.2442	.2425	.1707	.1847	.2023	.0625	.0625	.3102	.3525
#1	.2328	40.25	1.957	1.972	1.980	39.23	1.964	1.987	1.935	1.969
#2	.2327	40.11	1.967	1.971	1.972	39.17	1.962	1.989	1.925	1.963
#3	.2337	40.30	1.964	1.978	1.976	39.32	1.961	1.987	1.935	1.977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.69	38.98	39.86	1.945	1.862	38.50	2.002	1.923	1.973	1.978
Stddev	.10	.11	.13	.004	.004	.13	.004	.004	.001	.009
%RSD	.2526	.2793	.3263	.2071	.2105	.3372	.1727	.1854	.0510	.4626
#1	38.60	39.10	39.77	1.949	1.858	38.61	1.998	1.926	1.972	1.968
#2	38.67	38.93	40.01	1.944	1.862	38.35	2.004	1.923	1.974	1.986
#3	38.79	38.90	39.81	1.941	1.866	38.53	2.004	1.919	1.973	1.980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0646	2.016	1.902	1.945	1.995	1.893	1.967
Stddev	.0008	.005	.001	.004	.000	.002	.001
%RSD	1.285	.2427	.0677	.1824	.0128	.0874	.0502
#1	.0655	2.011	1.903	1.949	1.996	1.894	1.968
#2	.0644	2.017	1.901	1.943	1.995	1.894	1.966
#3	.0639	2.021	1.903	1.943	1.995	1.891	1.966
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 6/1/2018 10:02:54 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1261.4	3480.9	24845.	2040.6
Stddev	1.1	7.5	110.	13.5
%RSD	.09116	.21405	.44442	.66317
#1	1262.4	3486.9	24722.	2046.8
#2	1261.6	3483.1	24876.	2025.1
#3	1260.1	3472.5	24936.	2049.9

Zoom In Zoom Out

Sample Name: ICB Acquired: 6/1/2018 10:09:50 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0011	-.0015	-.0018	-.0001	.0001	.0017	.0000	.0001	-.0002
Stddev	.0004	.0056	.0007	.0001	.0001	.0037	.0000	.0001	.0000
%RSD	32.71	371.6	37.21	282.6	156.4	217.8	416.9	103.0	24.97
#1	.0015	.0049	-.0023	.0000	.0002	-.0026	.0001	.0002	-.0002
#2	.0007	-.0039	-.0010	-.0002	.0000	.0035	.0000	.0000	-.0001
#3	.0011	-.0055	-.0020	.0000	.0001	.0042	.0000	.0001	-.0002
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0010								
Low Limit	-.0010								

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0016	-.0415	.0372	.0000	F.0017	.0200	.0001	F.0014
Stddev	.0003	.0047	.0100	.0229	.0000	.0001	.0019	.0002	.0002
%RSD	16.53	291.4	24.02	61.59	259.8	5.808	9.529	224.3	14.00
#1	.0013	.0061	-.0378	.0109	.0000	.0019	.0210	.0003	.0012
#2	.0018	.0021	-.0528	.0478	.0001	.0017	.0178	.0002	.0013
#3	.0017	-.0033	-.0339	.0530	.0000	.0017	.0213	-.0002	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0011	.0058	.0007	.0000	.0004	-.0011	-.0002	.0002
Stddev	.0010	.0004	.0004	.0003	.000	.0001	.0012	.0001	.0000
%RSD	902.7	36.99	7.600	41.99	607.6	25.56	106.6	48.62	18.27
#1	.0011	-.0007	.0063	.0010	.0001	.0004	-.0017	-.0001	.0002
#2	.0002	-.0010	.0058	.0006	-.0001	.0004	.0003	-.0002	.0002
#3	-.0009	-.0015	.0054	.0005	.0000	.0003	-.0020	-.0003	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 6/1/2018 10:09:50 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1482.5	3614.5	26151.	2095.9
Stddev	.3	8.3	103.	11.3
%RSD	.02359	.22912	.39258	.53696
#1	1482.8	3622.8	26212.	2082.9
#2	1482.7	3614.6	26207.	2102.0
#3	1482.1	3606.2	26032.	2102.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 6/1/2018 10:13:29 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0102	.1943	.0081	.1945	.0048	.9564	.0050	.0505	.0096
Stddev	.0006	.0054	.0001	.0009	.0000	.0034	.0001	.0001	.0003
%RSD	5.411	2.756	.8232	.4405	.1145	.3559	1.560	.1120	3.349
#1	.0098	.1905	.0080	.1939	.0048	.9588	.0050	.0506	.0098
#2	.0106	.1981	.0081	.1951	.0048	.9540	.0049	.0505	.0093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0255	.2927	9.549	4.853	.0146	.0479	9.395	.0417	.0051
Stddev	.0004	.0015	.041	.010	.0000	.0002	.032	.0000	.0003
%RSD	1.384	.5277	.4294	.2089	.0958	.3700	.3380	.0944	6.319
#1	.0257	.2938	9.578	4.860	.0146	.0481	9.417	.0418	.0053
#2	.0252	.2916	9.520	4.845	.0146	.0478	9.372	.0417	.0049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050	.0084	.0349	.0534	.0093	.0097	F.0074	.0467	.0211
Stddev	.0006	.0002	.0003	.0003	.0000	.0000	.0007	.0000	.0001
%RSD	12.29	2.534	.8976	.5255	.2472	.3883	9.212	.1049	.3526
#1	.0054	.0085	.0346	.0536	.0092	.0097	.0078	.0468	.0211
#2	.0046	.0082	.0351	.0532	.0093	.0097	.0069	.0467	.0210
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.0100		
Range							-20.00%		

Zoom In Zoom Out

Sample Name: CRIA Acquired: 6/1/2018 10:13:29 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1412.7	3566.4	26028.	2084.2
Stddev	4.5	7.3	17.	11.0
%RSD	.32151	.20498	.06398	.52764
#1	1415.9	3561.3	26040.	2076.4
#2	1409.5	3571.6	26016.	2091.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 6/1/2018 10:25:24 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	504.3	.0000	.0000	.0000	460.7	.0000	-.0001	-.0003
Stddev	.001	.5	.0013	.0003	.000	.7	.0001	.0001	.0004
%RSD	9721.	.1065	2658.	799.0	760.7	.1525	579.3	40.72	132.1
#1	-.0007	503.7	-.0012	.0004	.0001	460.6	.0000	-.0002	.0001
#2	.0000	504.7	.0013	-.0001	.0000	461.4	-.0001	-.0001	-.0008
#3	.0008	504.5	.0000	-.0002	-.0001	460.0	.0002	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	186.5	.0644	508.3	-.0001	.0000	.1911	.0000	.0000
Stddev	.0001	.3	.0298	1.7	.0001	.000	.0125	.0007	.0021
%RSD	16.12	.1639	46.32	.3251	101.5	784.8	6.545	1663.	6991.
#1	-.0004	186.6	.0769	508.6	-.0001	-.0004	.1784	.0004	.0013
#2	-.0006	186.7	.0303	509.8	.0000	.0001	.1915	.0005	.0011
#3	-.0005	186.1	.0859	506.6	-.0001	.0002	.2035	-.0007	-.0023
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	.0203	F.0021	-.0001	-.0015	-.0007	-.0007	.0006
Stddev	.001	.001	.0015	.0003	.0001	.0003	.0021	.0000	.0001
%RSD	5295.	20760.	7.348	13.55	74.74	18.43	321.9	6.546	14.37
#1	-.0002	.0007	.0215	.0021	.0000	-.0013	.0014	-.0007	.0005
#2	-.0006	-.0009	.0207	.0024	-.0001	-.0018	-.0006	-.0008	.0006
#3	.0008	.0002	.0186	.0018	-.0001	-.0014	-.0028	-.0007	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 6/1/2018 10:25:24 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1092.8	3137.0	22558.	1985.4
Stddev	1.2	7.0	70.	11.7
%RSD	.10984	.22431	.31090	.58696
#1	1093.9	3136.4	22542.	1978.4
#2	1092.9	3144.3	22635.	1979.0
#3	1091.5	3130.3	22497.	1998.9

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 6/1/2018 10:34:31 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.022	499.1	1.051	.5149	.4957	456.0	.9407	.4816	.4717	.5277
Stddev	.003	1.1	.003	.0011	.0026	1.3	.0012	.0008	.0021	.0003
%RSD	.3014	.2285	.3035	.2219	.5266	.2826	.1282	.1691	.4509	.0655
#1	1.019	500.4	1.055	.5148	.4983	457.3	.9421	.4825	.4734	.5281
#2	1.023	498.2	1.050	.5138	.4931	454.7	.9403	.4811	.4723	.5276
#3	1.025	498.8	1.049	.5161	.4957	456.0	.9398	.4812	.4693	.5274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	184.8	.0028	499.3	.4888	.8507	.1610	.9826	.9522	.9690	.9390
Stddev	.6	.0469	2.0	.0011	.0010	.0073	.0026	.0036	.0031	.0057
%RSD	.3209	1649.	.4009	.2192	.1200	4.513	.2691	.3820	.3208	.6044
#1	185.3	.0510	501.6	.4875	.8515	.1673	.9857	.9564	.9682	.9445
#2	184.1	.0002	497.9	.4895	.8495	.1530	.9813	.9508	.9725	.9394
#3	184.9	-.0427	498.4	.4892	.8510	.1627	.9810	.9496	.9664	.9331
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0423	.9215	.9255	.9105	.8839	.4823	.9442
Stddev	.0007	.0015	.0042	.0023	.0055	.0004	.0027
%RSD	1.639	.1622	.4587	.2564	.6191	.0801	.2895
#1	.0422	.9227	.9299	.9084	.8900	.4822	.9472
#2	.0416	.9198	.9215	.9130	.8793	.4827	.9419
#3	.0430	.9218	.9252	.9101	.8823	.4819	.9434
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 6/1/2018 10:34:31 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1087.3	3143.5	22867.	2014.6
Stddev	4.5	7.1	52.	8.0
%RSD	.41540	.22734	.22619	.39873
#1	1082.2	3135.3	22807.	2005.5
#2	1089.0	3146.9	22894.	2020.8
#3	1090.8	3148.3	22899.	2017.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 10:41:21 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2493	38.38	2.086	2.046	1.972	38.54	2.032	2.045	1.942	1.998
Stddev	.0004	.09	.006	.005	.003	.12	.002	.004	.006	.005
%RSD	.1648	.2431	.2763	.2242	.1261	.3160	.1024	.2029	.3316	.2350
#1	.2492	38.30	2.092	2.044	1.970	38.43	2.032	2.048	1.948	2.002
#2	.2498	38.36	2.081	2.043	1.973	38.52	2.029	2.040	1.935	1.993
#3	.2490	38.48	2.083	2.051	1.974	38.67	2.033	2.046	1.944	1.998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.88	39.47	39.81	2.024	2.097	38.65	2.105	1.966	2.073	2.089
Stddev	.16	.03	.13	.003	.006	.12	.006	.003	.003	.001
%RSD	.3905	.0856	.3369	.1585	.3005	.3132	.2834	.1577	.1627	.0665
#1	39.76	39.43	39.94	2.026	2.096	38.52	2.111	1.967	2.077	2.087
#2	39.82	39.47	39.67	2.024	2.091	38.69	2.100	1.962	2.071	2.089
#3	40.05	39.50	39.81	2.020	2.104	38.75	2.103	1.968	2.072	2.090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.206	2.180	1.996	2.045	1.998	2.057	2.036
Stddev	.007	.004	.002	.002	.004	.006	.003
%RSD	.3219	.1796	.1109	.0808	.2059	.2732	.1411
#1	2.208	2.184	1.994	2.046	2.003	2.064	2.039
#2	2.199	2.177	1.996	2.044	1.995	2.056	2.033
#3	2.213	2.180	1.999	2.043	1.997	2.053	2.035
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 10:41:21 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1253.0	3404.6	25169.	2082.2
Stddev	.6	2.9	80.	22.1
%RSD	.04812	.08488	.31807	1.0607
#1	1253.3	3404.9	25083.	2078.4
#2	1253.4	3407.3	25185.	2106.0
#3	1252.3	3401.5	25240.	2062.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 11:06:26 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0057	F-.0026	-.0003	.0000	.0015	-.0001	.0000
Stddev	.0001	.0032	.0004	.0003	.000	.0006	.0000	.000
%RSD	6.016	56.06	13.55	100.1	3930.	37.25	41.06	301.3
#1	.0008	-.0040	-.0024	-.0004	.0001	.0022	-.0001	-.0001
#2	.0009	-.0037	-.0030	-.0004	.0002	.0013	-.0001	.0000
#3	.0009	-.0094	-.0025	.0000	-.0002	.0011	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.0020					
Low Limit			-.0020					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0015	-.0040	-.0561	.0154	-.0001	.0003	.0169
Stddev	.0003	.0001	.0021	.0200	.0370	.0000	.0001	.0091
%RSD	159.3	5.705	51.95	35.64	239.7	70.65	34.57	54.23
#1	.0004	.0016	-.0034	-.0775	.0447	-.0001	.0003	.0266
#2	.0002	.0014	-.0024	-.0529	.0277	-.0001	.0003	.0085
#3	-.0001	.0016	-.0064	-.0379	-.0261	.0000	.0002	.0155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0008	-.0002	-.0016	.0053	.0003	-.0002	-.0002
Stddev	.000	.0006	.0010	.0010	.0002	.0002	.0001	.0000
%RSD	208.8	73.73	661.6	61.49	3.846	84.96	34.84	25.43
#1	-.0001	.0012	-.0011	-.0023	.0056	.0002	-.0001	-.0002
#2	-.0001	.0012	.0009	-.0022	.0053	.0005	-.0002	-.0002
#3	.0000	.0001	-.0002	-.0005	.0052	.0001	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 11:06:26 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F-.0032	-.0002	.0002
Stddev	.0003	.0001	.0000
%RSD	10.54	31.26	17.74
#1	-.0034	-.0002	.0002
#2	-.0028	-.0003	.0002
#3	-.0033	-.0001	.0002
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1465.2	3516.2	26338.	2103.4
Stddev	1.7	5.9	197.	.7
%RSD	.11334	.16705	.74797	.03250
#1	1467.1	3521.5	26318.	2102.6
#2	1464.5	3517.0	26152.	2103.6
#3	1464.0	3509.9	26544.	2103.9

Zoom In Zoom Out

Sample Name: FA54391-3 Acquired: 6/1/2018 11:11:26 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0124	-.1081	-.0134	.1073	.0003	6.702	-.0006	.0008	-.0027	.0128
Stddev	.0023	.0751	.0075	.0031	.0007	.034	.0002	.0009	.0023	.0019
%RSD	18.12	69.49	56.29	2.925	231.3	.5035	41.12	104.6	87.64	14.65
#1	.0117	-.1826	-.0162	.1109	-.0005	6.664	-.0004	.0016	-.0054	.0128
#2	.0150	-.0324	-.0191	.1061	.0006	6.717	-.0009	-.0001	-.0015	.0146
#3	.0106	-.1091	-.0049	.1050	.0007	6.726	-.0005	.0010	-.0012	.0109

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1658	.0651	.3491	.0043	.0021	141.3	.0285	.0130	.0054	-.0128
Stddev	.0311	.2491	.1475	.0001	.0006	.2	.0024	.0033	.0045	.0176
%RSD	18.77	382.7	42.25	3.077	28.12	.1533	8.533	25.79	83.68	137.0
#1	.1299	.3287	.5135	.0044	.0023	141.2	.0282	.0142	.0002	-.0197
#2	.1819	-.1664	.3057	.0042	.0026	141.3	.0262	.0156	.0080	.0071
#3	.1855	.0329	.2282	.0042	.0014	141.6	.0311	.0092	.0080	-.0259

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2109	.0021	.0499	-.0005	-.0308	.0011	.0110
Stddev	.0072	.0008	.0014	.0004	.0047	.0028	.0005
%RSD	3.402	38.75	2.881	81.99	15.18	244.4	4.873
#1	.2055	.0017	.0488	.0000	-.0320	.0039	.0105
#2	.2190	.0030	.0515	-.0008	-.0257	-.0016	.0115
#3	.2081	.0015	.0493	-.0007	-.0348	.0011	.0111

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1408.1	3828.5	29141.	2362.6
Stddev	4.6	7.9	105.	10.8
%RSD	.32936	.20553	.36130	.45563
#1	1412.1	3833.5	29056.	2362.8
#2	1403.0	3819.4	29259.	2373.2
#3	1409.2	3832.6	29109.	2351.7

Zoom In Zoom Out

Sample Name: MP33817-S1 Acquired: 6/1/2018 11:15:44 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0535	24.89	2.078	2.112	.0489	193.1	.0498	.5012	.1892	.2525
Stddev	.0007	.09	.003	.003	.0002	.9	.0002	.0007	.0007	.0008
%RSD	1.286	.3418	.1180	.1297	.4583	.4421	.4947	.1374	.3436	.3041
#1	.0543	24.92	2.075	2.113	.0489	193.3	.0497	.5005	.1900	.2533
#2	.0531	24.95	2.080	2.114	.0491	193.9	.0496	.5016	.1888	.2525
#3	.0531	24.79	2.078	2.109	.0487	192.2	.0501	.5017	.1889	.2517

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	24.87	31.60	85.83	.5382	.4880	83.12	.5323	.4779	.5226	2.071
Stddev	.12	.07	.31	.0033	.0007	.30	.0007	.0015	.0035	.007
%RSD	.4714	.2325	.3643	.6141	.1397	.3553	.1262	.3127	.6657	.3494
#1	24.98	31.57	86.04	.5417	.4872	83.20	.5316	.4797	.5240	2.074
#2	24.89	31.69	85.98	.5376	.4884	83.37	.5325	.4773	.5187	2.063
#3	24.75	31.56	85.47	.5352	.4884	82.80	.5329	.4769	.5252	2.076

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	17.15	.5273	.9441	.4879	1.883	.4825	.5043
Stddev	.02	.0019	.0016	.0033	.008	.0022	.0010
%RSD	.1003	.3608	.1676	.6768	.4084	.4551	.1956
#1	17.13	.5293	.9437	.4916	1.888	.4851	.5040
#2	17.16	.5256	.9459	.4864	1.874	.4814	.5035
#3	17.15	.5270	.9428	.4855	1.886	.4811	.5054

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1259.2	3340.3	25021.	2086.0
Stddev	3.2	4.3	51.	16.9
%RSD	.25473	.12781	.20474	.81042
#1	1257.3	3340.0	24963.	2079.7
#2	1262.9	3344.7	25038.	2073.2
#3	1257.5	3336.1	25061.	2105.2

Zoom In Zoom Out

Sample Name: MP33817-S2 Acquired: 6/1/2018 11:19:43 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0539	25.00	2.107	2.135	.0488	193.3	.0499	.5045	.1905	.2528
Stddev	.0007	.04	.006	.007	.0002	.6	.0002	.0017	.0004	.0007
%RSD	1.247	.1646	.2688	.3174	.3184	.3211	.4130	.3407	.1868	.2930
#1	.0538	25.04	2.111	2.137	.0488	193.6	.0498	.5047	.1909	.2529
#2	.0546	24.96	2.101	2.141	.0487	192.6	.0502	.5061	.1903	.2520
#3	.0532	25.01	2.110	2.127	.0490	193.7	.0498	.5027	.1903	.2534

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	25.08	31.78	85.96	.5388	.4909	83.21	.5385	.4778	.5267	2.092
Stddev	.05	.14	.36	.0006	.0009	.23	.0006	.0004	.0001	.002
%RSD	.2102	.4451	.4227	.1083	.1769	.2749	.1061	.0884	.0135	.1110
#1	25.14	31.90	86.16	.5395	.4909	83.47	.5387	.4773	.5266	2.089
#2	25.03	31.62	85.54	.5385	.4918	83.04	.5379	.4781	.5267	2.094
#3	25.08	31.83	86.18	.5385	.4901	83.11	.5390	.4779	.5268	2.092

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	17.30	.5322	.9473	.4870	1.889	.4882	.5078
Stddev	.03	.0019	.0014	.0008	.006	.0009	.0009
%RSD	.1478	.3556	.1494	.1631	.3458	.1865	.1765
#1	17.29	.5314	.9463	.4879	1.897	.4891	.5079
#2	17.33	.5343	.9489	.4869	1.887	.4884	.5086
#3	17.28	.5308	.9467	.4863	1.884	.4873	.5068

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1256.8	3321.7	25067.	2109.9
Stddev	3.4	11.1	95.	17.0
%RSD	.26957	.33289	.37906	.80691
#1	1257.3	3324.7	24970.	2102.0
#2	1253.2	3309.5	25070.	2129.4
#3	1259.9	3331.1	25160.	2098.2

Zoom In Zoom Out

Sample Name: FA54483-1 Acquired: 6/1/2018 11:23:41 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0029	.4821	-.0074	.0412	-.0002	173.5	-.0001	.0006	.0081	.0590
Stddev	.0007	.0365	.0022	.0004	.0002	.6	.0001	.0003	.0008	.0004
%RSD	23.37	7.566	30.49	1.011	86.75	.3330	116.6	52.00	9.814	.7042
#1	.0034	.4802	-.0083	.0417	-.0001	174.2	-.0001	.0003	.0089	.0587
#2	.0031	.4466	-.0048	.0411	-.0001	173.1	-.0001	.0009	.0080	.0588
#3	.0021	.5194	-.0090	.0408	-.0003	173.2	.0000	.0005	.0073	.0595

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.388	3.892	4.149	.0327	.0013	127.5	.0057	.0098	.0008	.0123
Stddev	.001	.042	.050	.0002	.0002	.6	.0004	.0017	.0018	.0031
%RSD	.0328	1.066	1.192	.7368	18.88	.4520	7.921	17.28	230.6	25.30
#1	4.387	3.934	4.207	.0326	.0015	128.2	.0057	.0113	.0022	.0116
#2	4.390	3.851	4.123	.0325	.0014	127.2	.0052	.0100	-.0012	.0157
#3	4.388	3.891	4.119	.0329	.0010	127.2	.0061	.0080	.0013	.0095

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.209	.0070	.2896	.0243	-.0062	.0055	.0635
Stddev	.007	.0006	.0009	.0012	.0017	.0006	.0003
%RSD	.1403	9.126	.3235	4.986	26.97	11.80	.4298
#1	5.210	.0064	.2889	.0233	-.0054	.0058	.0636
#2	5.215	.0069	.2892	.0240	-.0051	.0059	.0632
#3	5.201	.0076	.2906	.0257	-.0081	.0047	.0637

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1303.1	3303.5	25217.	2106.9
Stddev	3.5	6.9	124.	8.7
%RSD	.26856	.21015	.49139	.41198
#1	1299.2	3296.8	25316.	2105.6
#2	1305.8	3310.7	25258.	2099.0
#3	1304.5	3303.1	25078.	2116.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 11:27:55 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2479	37.67	2.109	2.040	1.952	37.75	2.032	2.048	1.897
Stddev	.0018	.06	.004	.015	.005	.12	.004	.001	.011
%RSD	.7355	.1571	.1784	.7549	.2446	.3058	.1725	.0443	.5801
#1	.2482	37.73	2.113	2.053	1.957	37.88	2.032	2.049	1.890
#2	.2459	37.61	2.106	2.044	1.950	37.66	2.028	2.047	1.891
#3	.2495	37.68	2.107	2.023	1.948	37.71	2.035	2.049	1.909
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.980	39.29	39.22	39.47	2.000	2.106	37.74	2.123	1.953
Stddev	.002	.07	.05	.25	.011	.006	.16	.002	.003
%RSD	.0798	.1822	.1223	.6208	.5505	.2877	.4206	.1096	.1396
#1	1.982	39.37	39.25	39.74	1.998	2.102	37.91	2.126	1.950
#2	1.979	39.26	39.16	39.26	1.991	2.104	37.60	2.121	1.955
#3	1.981	39.24	39.24	39.42	2.012	2.113	37.70	2.123	1.955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.093	2.109	2.232	F2.211	1.974	2.020	1.987	2.052	2.036
Stddev	.005	.004	.003	.005	.005	.010	.004	.002	.002
%RSD	.2249	.1791	.1285	.2265	.2568	.4770	.2092	.0736	.0894
#1	2.088	2.105	2.232	2.216	1.978	2.017	1.982	2.050	2.038
#2	2.094	2.111	2.229	2.206	1.976	2.012	1.990	2.052	2.034
#3	2.098	2.112	2.234	2.211	1.969	2.030	1.989	2.053	2.036
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				2.000					
Range				10.00%					

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 11:27:55 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1247.3	3359.6	25320.	2116.5
Stddev	2.2	2.1	102.	15.6
%RSD	.17260	.06207	.40256	.73532
#1	1249.0	3360.9	25388.	2100.2
#2	1244.9	3360.7	25370.	2118.0
#3	1248.0	3357.2	25203.	2131.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 11:31:51 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0015	.0014	F-.0020	.0000	.0002	.0104	.0002	.0002
Stddev	.0001	.0112	.0008	.0004	.0001	.0020	.0001	.0000
%RSD	9.505	775.1	40.45	4160.	54.91	19.23	33.46	20.22
#1	.0016	.0129	-.0026	-.0001	.0002	.0126	.0002	.0003
#2	.0015	-.0095	-.0011	.0004	.0001	.0087	.0002	.0002
#3	.0013	.0009	-.0024	-.0003	.0003	.0099	.0001	.0002
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0010		.0020					
Low Limit	-.0010		-.0020					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F.0021	.0107	.0042	.0012	.0004	F.0032	.0451
Stddev	.0002	.0003	.0031	.0267	.0115	.0001	.0007	.0078
%RSD	80.56	14.42	28.83	639.2	993.7	27.48	22.45	17.35
#1	.0000	.0018	.0120	.0298	-.0087	.0003	.0040	.0540
#2	-.0004	.0024	.0128	-.0236	-.0017	.0004	.0031	.0414
#3	-.0003	.0020	.0071	.0063	.0138	.0004	.0026	.0398
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.0020					.0010	
Low Limit		-.0020					-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	F.0011	-.0004	-.0018	.0064	.0006	.0001	.0011
Stddev	.0002	.0001	.0005	.0011	.0006	.0004	.0002	.0001
%RSD	68.96	4.453	121.7	62.59	9.258	62.23	221.9	5.327
#1	.0001	.0012	-.0008	-.0012	.0058	.0007	.0003	.0011
#2	.0004	.0011	-.0004	-.0031	.0063	.0009	.0001	.0010
#3	.0005	.0012	.0001	-.0011	.0070	.0002	-.0001	.0011
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 11:31:51 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F-.0030	.0004	.0005
Stddev	.0006	.0002	.0001
%RSD	21.38	48.74	12.10
#1	-.0022	.0006	.0005
#2	-.0032	.0004	.0006
#3	-.0034	.0002	.0005
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1460.0	3521.5	26478.	2117.2
Stddev	1.9	12.1	125.	19.4
%RSD	.13282	.34497	.47336	.91774
#1	1462.3	3535.3	26340.	2121.1
#2	1458.7	3512.5	26586.	2134.4
#3	1459.1	3516.8	26509.	2096.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 11:58:28 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2492	40.20	2.011	2.026	2.028	40.52	2.027	2.026	2.020	2.010
Stddev	.0004	.27	.001	.005	.007	.19	.000	.002	.006	.005
%RSD	.1726	.6755	.0440	.2307	.3311	.4776	.0137	.0806	.3181	.2465
#1	.2490	40.45	2.011	2.031	2.031	40.70	2.027	2.027	2.015	2.010
#2	.2488	39.91	2.011	2.023	2.020	40.31	2.027	2.025	2.027	2.015
#3	.2496	40.23	2.012	2.023	2.032	40.54	2.027	2.024	2.018	2.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.94	40.17	40.68	2.042	2.054	40.27	2.039	1.992	2.011	2.014
Stddev	.12	.12	.19	.005	.002	.13	.003	.003	.006	.001
%RSD	.2834	.2925	.4779	.2443	.1036	.3149	.1411	.1426	.3256	.0542
#1	41.00	40.15	40.86	2.041	2.052	40.38	2.042	1.989	2.018	2.013
#2	40.81	40.07	40.47	2.047	2.053	40.13	2.037	1.995	2.004	2.015
#3	41.02	40.30	40.71	2.037	2.056	40.29	2.038	1.993	2.010	2.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.127	2.084	2.051	2.075	2.009	2.056	2.031
Stddev	.001	.002	.005	.005	.005	.004	.000
%RSD	.0601	.0955	.2617	.2491	.2530	.1776	.0148
#1	2.128	2.082	2.053	2.075	2.010	2.058	2.031
#2	2.128	2.086	2.045	2.080	2.013	2.057	2.031
#3	2.126	2.084	2.054	2.070	2.003	2.051	2.031
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 11:58:28 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1237.9	3341.9	25240.	2100.4
Stddev	3.6	5.9	36.	4.6
%RSD	.29260	.17797	.14415	.21747
#1	1242.0	3347.3	25204.	2097.1
#2	1236.3	3342.9	25238.	2105.6
#3	1235.3	3335.6	25277.	2098.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 12:05:02 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0060	.0001	.0000	.0000	.0028	.0000	-.0001	.0000
Stddev	.0002	.0133	.0003	.000	.000	.0057	.000	.0000	.000
%RSD	736.0	222.0	216.0	265.4	534.7	205.0	212.4	35.26	936.9
#1	-.0002	-.0047	-.0001	.0000	.0000	.0092	-.0001	-.0001	.0002
#2	.0002	-.0199	.0005	.0000	.0000	-.0019	.0000	-.0001	-.0002
#3	.0001	.0066	.0000	-.0002	-.0001	.0011	.0000	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0070	.0403	-.0488	.0000	F.0017	.0001	.0001	-.0004
Stddev	.0002	.0022	.0228	.0260	.0000	.0003	.0089	.0001	.0004
%RSD	34.33	31.65	56.71	53.35	55.52	18.07	6347.	67.11	96.06
#1	-.0007	.0068	.0645	-.0727	.0000	.0018	.0074	.0001	-.0007
#2	-.0004	.0049	.0192	-.0527	.0000	.0019	-.0098	.0001	.0000
#3	-.0009	.0093	.0371	-.0211	.0000	.0014	.0028	.0002	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	.0014	.0020	F.0010	.0000	.0007	.0010	-.0002	-.0001
Stddev	.0012	.0006	.0003	.0002	.0001	.0001	.0002	.0003	.0001
%RSD	117.8	43.09	15.17	16.92	248.5	11.89	19.79	116.5	136.4
#1	.0007	.0010	.0024	.0012	.0001	.0006	.0012	.0000	.0000
#2	.0023	.0012	.0019	.0008	-.0001	.0007	.0009	-.0002	-.0001
#3	.0000	.0021	.0018	.0010	.0001	.0008	.0009	-.0005	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 12:05:02 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1435.7	3459.6	26154.	2110.3
Stddev	3.1	12.9	240.	13.5
%RSD	.21688	.37310	.91833	.64070
#1	1436.2	3459.4	25994.	2124.7
#2	1432.4	3446.8	26430.	2108.2
#3	1438.6	3472.6	26037.	2097.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 13:32:12 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2511	40.70	2.003	2.031	2.047	40.93	2.036	2.034	2.046	2.029
Stddev	.0024	.18	.000	.004	.006	.17	.003	.001	.004	.008
%RSD	.9397	.4400	.0008	.2223	.3181	.4122	.1347	.0647	.1840	.3794
#1	.2538	40.58	2.003	2.029	2.048	40.88	2.033	2.032	2.043	2.034
#2	.2497	40.91	2.003	2.036	2.053	41.12	2.035	2.034	2.045	2.032
#3	.2498	40.63	2.003	2.027	2.040	40.79	2.039	2.035	2.050	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.16	40.64	40.60	2.050	2.053	41.00	2.030	2.017	2.008	2.007
Stddev	.09	.16	.15	.011	.005	.12	.001	.001	.005	.004
%RSD	.2168	.3841	.3643	.5207	.2561	.3015	.0522	.0715	.2678	.2206
#1	41.10	40.78	40.72	2.062	2.047	40.99	2.029	2.018	2.002	2.008
#2	41.26	40.66	40.64	2.040	2.055	41.13	2.030	2.018	2.013	2.002
#3	41.11	40.47	40.43	2.049	2.057	40.89	2.031	2.015	2.010	2.011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.120	2.061	2.077	2.091	2.028	2.062	2.035
Stddev	.004	.003	.008	.009	.002	.003	.004
%RSD	.1693	.1502	.4037	.4268	.1094	.1431	.1794
#1	2.117	2.060	2.079	2.101	2.027	2.065	2.031
#2	2.124	2.065	2.084	2.084	2.031	2.059	2.035
#3	2.119	2.059	2.068	2.089	2.028	2.062	2.038
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 13:32:12 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1235.4	3365.8	25258.	2128.1
Stddev	2.3	10.3	74.	19.3
%RSD	.18478	.30631	.29254	.90471
#1	1238.0	3377.7	25201.	2146.3
#2	1234.0	3360.3	25342.	2108.0
#3	1234.1	3359.3	25232.	2130.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 13:36:09 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0077	-.0004	.0005	.0001	.0112	.0002	.0000	.0004
Stddev	.0004	.0151	.0008	.0001	.0000	.0012	.0000	.000	.0001
%RSD	238.5	195.2	184.3	13.66	24.73	10.47	14.08	72.20	25.65
#1	-.0007	.0071	-.0012	.0004	.0001	.0100	.0002	.0000	.0005
#2	.0001	-.0073	.0004	.0006	.0001	.0124	.0002	.0000	.0003
#3	.0001	-.0231	-.0006	.0005	.0001	.0113	.0001	-.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0183	.0125	-.0114	.0001	F.0029	.0055	.0003	-.0001
Stddev	.0001	.0059	.0142	.0233	.0000	.0007	.0102	.0002	.0005
%RSD	14.69	32.39	113.5	205.2	17.06	26.19	186.2	61.69	519.1
#1	-.0006	.0233	-.0014	-.0014	.0002	.0036	.0171	.0004	-.0004
#2	-.0005	.0199	.0271	-.0381	.0001	.0029	-.0023	.0003	.0005
#3	-.0006	.0117	.0119	.0053	.0001	.0021	.0017	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	F.0020	.0026	F.0014	.0002	.0015	.0016	.0001	.0001
Stddev	.0012	.0006	.0003	.0002	.0001	.0002	.0005	.0006	.0001
%RSD	365.3	29.54	12.69	15.21	56.03	11.20	29.96	530.2	108.8
#1	.0006	.0014	.0028	.0011	.0001	.0017	.0021	-.0005	.0002
#2	.0014	.0025	.0022	.0015	.0002	.0015	.0012	.0001	.0001
#3	-.0010	.0022	.0028	.0015	.0003	.0014	.0014	.0007	.0000
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020		.0010					
Low Limit		-.0020		-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 13:36:09 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1426.9	3486.6	25793.	2083.7
Stddev	5.9	11.5	179.	9.6
%RSD	.41185	.33063	.69503	.46196
#1	1420.7	3473.6	25968.	2083.0
#2	1432.4	3490.8	25803.	2074.4
#3	1427.7	3495.5	25609.	2093.6

Zoom In Zoom Out

Sample Name: MP33823-MB1 Acquired: 6/1/2018 13:50:33 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0254	-.0010	-.0001	-.0001	.0277	.0000	-.0001	.0008	.0007
Stddev	.0001	.0118	.0006	.0003	.0002	.0023	.0000	.0002	.0003	.0001
%RSD	109.2	46.60	63.87	292.0	160.3	8.357	1790.	176.5	31.46	19.98
#1	.0000	.0359	-.0015	.0000	-.0003	.0280	.0000	-.0001	.0011	.0007
#2	-.0002	.0126	-.0003	-.0005	.0000	.0253	.0000	.0001	.0008	.0008
#3	-.0002	.0277	-.0012	.0001	.0000	.0299	.0000	-.0004	.0006	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0159	-.0046	.0198	.0004	.0001	.0112	.0004	.0007	.0010	.0020
Stddev	.0010	.0131	.0216	.0000	.0002	.0101	.0002	.0002	.0006	.0013
%RSD	6.381	283.6	108.9	10.53	116.9	90.43	42.47	36.21	56.36	67.50
#1	.0158	-.0129	.0124	.0003	.0001	.0013	.0003	.0005	.0005	.0033
#2	.0149	.0105	.0029	.0004	.0003	.0108	.0005	.0006	.0011	.0006
#3	.0169	-.0114	.0442	.0004	.0000	.0215	.0003	.0009	.0016	.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0159	.0230	.0001	.0006	-.0014	-.0001	.0044
Stddev	.0006	.0001	.0001	.0002	.0012	.0003	.0001
%RSD	3.998	.2965	44.26	42.74	86.65	210.8	1.268
#1	.0157	.0230	.0001	.0003	-.0008	.0000	.0045
#2	.0166	.0230	.0001	.0008	-.0006	.0000	.0044
#3	.0153	.0231	.0002	.0006	-.0027	-.0004	.0044
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33823-MB1 Acquired: 6/1/2018 13:50:33 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1445.6	3454.9	26717.	2157.9
Stddev	5.2	6.9	77.	7.0
%RSD	.36202	.19974	.28903	.32424
#1	1441.9	3450.6	26789.	2152.8
#2	1443.4	3451.2	26727.	2154.9
#3	1451.6	3462.8	26636.	2165.9

Zoom In Zoom Out

Sample Name: MP33823-B1 Acquired: 6/1/2018 13:54:51 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0497	25.93	1.934	1.999	.0502	24.56	.0490	.4959	.1970	.2494
Stddev	.0002	.17	.005	.007	.0001	.22	.0001	.0002	.0013	.0005
%RSD	.3099	.6411	.2633	.3717	.2786	.9012	.2997	.0313	.6422	.2023
#1	.0495	25.98	1.940	2.001	.0502	24.54	.0488	.4959	.1966	.2491
#2	.0498	26.06	1.930	2.005	.0503	24.79	.0490	.4958	.1960	.2492
#3	.0497	25.74	1.932	1.991	.0500	24.35	.0491	.4961	.1984	.2500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.70	24.44	24.59	.4917	.4758	24.37	.5158	.4660	.4844	1.904
Stddev	.25	.15	.17	.0006	.0008	.19	.0012	.0022	.0013	.004
%RSD	.9546	.6135	.7105	.1285	.1580	.7927	.2287	.4631	.2686	.1943
#1	25.76	24.46	24.57	.4916	.4757	24.37	.5171	.4635	.4829	1.902
#2	25.91	24.58	24.78	.4923	.4751	24.57	.5153	.4670	.4848	1.902
#3	25.43	24.28	24.43	.4911	.4766	24.18	.5149	.4675	.4854	1.908
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3556	.5216	.4859	.4883	1.862	.4759	.4895
Stddev	.0023	.0014	.0026	.0008	.004	.0004	.0000
%RSD	.6487	.2701	.5261	.1592	.2284	.0878	.0051
#1	.3556	.5229	.4856	.4886	1.858	.4763	.4895
#2	.3580	.5218	.4886	.4888	1.861	.4755	.4895
#3	.3533	.5201	.4836	.4874	1.867	.4760	.4895
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33823-B1 Acquired: 6/1/2018 13:54:51 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1291.1	3339.9	25656.	2116.4
Stddev	.9	6.9	83.	31.5
%RSD	.07019	.20676	.32534	1.4895
#1	1291.9	3332.0	25752.	2105.9
#2	1290.1	3343.1	25617.	2091.4
#3	1291.2	3344.7	25600.	2151.8

Zoom In Zoom Out

Sample Name: FA53517-2R Acquired: 6/1/2018 13:58:48 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0023	101.4	.0500	.3909	.0038	6.895	.0000	.0382	.2276	.6111
Stddev	.0019	.2	.0051	.0018	.0009	.055	.0003	.0013	.0017	.0052
%RSD	82.38	.1756	10.14	.4728	23.30	.7997	1850.	3.295	.7317	.8455
#1	.0044	101.5	.0499	.3930	.0040	6.949	.0004	.0396	.2292	.6170
#2	.0016	101.2	.0551	.3896	.0029	6.899	-.0003	.0379	.2279	.6079
#3	.0009	101.5	.0449	.3901	.0047	6.839	.0000	.0371	.2259	.6083

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	121.4	12.62	11.79	.6614	.0037	1.531	.0988	4.130	.0981	.0072
Stddev	.4	.04	.14	.0054	.0005	.009	.0027	.081	.0036	.0062
%RSD	.3059	.3425	1.173	.8208	13.23	.6103	2.740	1.968	3.646	86.02
#1	121.8	12.65	11.92	.6674	.0043	1.537	.1013	4.215	.0985	.0034
#2	121.2	12.63	11.64	.6568	.0033	1.536	.0993	4.121	.0944	.0038
#3	121.1	12.57	11.81	.6599	.0036	1.520	.0959	4.053	.1015	.0143

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.148	.0307	.4272	2.718	.0097	.2742	.2399
Stddev	.068	.0014	.0016	.019	.0031	.0031	.0042
%RSD	1.629	4.444	.3753	.6905	32.06	1.142	1.733
#1	4.212	.0312	.4288	2.739	.0133	.2772	.2444
#2	4.156	.0318	.4256	2.704	.0079	.2746	.2391
#3	4.077	.0292	.4273	2.712	.0079	.2709	.2361

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1409.5	3592.7	27136.	2245.8
Stddev	4.0	4.3	235.	12.1
%RSD	.28456	.12106	.86544	.53755
#1	1405.5	3596.4	26974.	2252.2
#2	1409.4	3587.9	27405.	2253.3
#3	1413.5	3593.7	27028.	2231.9

Zoom In Zoom Out

Sample Name: MP33823-D1 Acquired: 6/1/2018 14:02:57 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0028	86.52	.0369	.3654	.0034	4.945	.0004	.0295	.1790	.4896
Stddev	.0010	.49	.0086	.0033	.0006	.026	.0003	.0004	.0019	.0044
%RSD	34.40	.5638	23.32	.9074	17.73	.5267	81.11	1.511	1.038	.8989
#1	.0017	86.48	.0467	.3672	.0027	4.975	.0004	.0292	.1791	.4881
#2	.0030	86.05	.0303	.3674	.0039	4.930	.0007	.0300	.1808	.4946
#3	.0036	87.02	.0339	.3615	.0036	4.931	.0001	.0292	.1771	.4862

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	95.77	11.98	9.157	.5155	.0026	2.121	.0796	3.119	.0839	.0050
Stddev	.50	.09	.152	.0029	.0003	.027	.0012	.013	.0049	.0111
%RSD	.5225	.7473	1.663	.5682	10.46	1.271	1.520	.4032	5.787	219.5
#1	96.03	12.07	9.310	.5146	.0025	2.140	.0784	3.113	.0871	.0163
#2	95.19	11.90	9.156	.5131	.0024	2.134	.0798	3.111	.0783	.0047
#3	96.09	11.95	9.006	.5187	.0029	2.090	.0808	3.133	.0863	-.0059

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	24.74	.0297	.3408	2.708	.0072	.2181	.1849
Stddev	.43	.0010	.0011	.064	.0044	.0005	.0005
%RSD	1.750	3.503	.3206	2.357	60.84	.2225	.2974
#1	25.22	.0297	.3408	2.775	.0022	.2184	.1843
#2	24.64	.0308	.3397	2.648	.0102	.2175	.1854
#3	24.37	.0287	.3419	2.700	.0093	.2183	.1849

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1414.3	3584.8	26880.	2243.6
Stddev	3.9	14.2	134.	21.3
%RSD	.27580	.39630	.49912	.95152
#1	1418.7	3587.0	26982.	2228.6
#2	1413.0	3569.7	26929.	2268.0
#3	1411.2	3597.8	26728.	2234.1

Zoom In Zoom Out

Sample Name: MP33823-SD1 Acquired: 6/1/2018 14:07:08 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0087	118.1	.0413	.5551	.0038	6.673	.0005	.0329	.2314	.5603
Stddev	.0103	1.4	.0193	.0049	.0037	.169	.0006	.0010	.0044	.0039
%RSD	119.0	1.201	46.84	.8801	97.61	2.528	139.8	3.051	1.882	.6943
#1	.0130	119.7	.0374	.5596	.0003	6.480	.0004	.0321	.2361	.5562
#2	.0162	117.5	.0623	.5559	.0076	6.787	-.0002	.0325	.2306	.5610
#3	-.0031	117.1	.0242	.5499	.0034	6.753	.0011	.0340	.2275	.5639

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	113.5	17.66	11.02	.6454	-.0014	4.591	.1038	3.796	.1121	.0263
Stddev	.8	.90	.20	.0443	.0055	.387	.0017	.033	.0053	.0322
%RSD	.7385	5.109	1.852	6.872	400.9	8.421	1.593	.8594	4.737	122.6
#1	113.3	18.06	10.79	.6211	.0028	4.834	.1019	3.768	.1180	.0603
#2	114.4	16.62	11.20	.6184	.0008	4.794	.1048	3.832	.1078	-.0037
#3	112.8	18.29	11.06	.6965	-.0077	4.145	.1048	3.789	.1105	.0223

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	62.59	.0298	.4193	4.085	.0268	.2568	.2203
Stddev	1.72	.0074	.0023	.051	.0384	.0045	.0036
%RSD	2.748	24.67	.5524	1.254	143.2	1.756	1.613
#1	60.71	.0289	.4171	4.114	-.0116	.2610	.2238
#2	64.08	.0229	.4189	4.026	.0268	.2520	.2204
#3	62.98	.0375	.4217	4.114	.0652	.2573	.2167

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1431.8	3536.1	26263.	2172.2
Stddev	3.9	8.9	158.	33.9
%RSD	.27118	.25075	.60283	1.5589
#1	1435.5	3545.9	26085.	2185.0
#2	1427.7	3533.7	26317.	2133.7
#3	1432.1	3528.7	26388.	2197.7

Zoom In Zoom Out

Sample Name: MP33823-PS1 Acquired: 6/1/2018 14:11:23 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0473	100.3	.1487	.6261	.0529	11.10	.0501	.0884	.2695	.6896
Stddev	.0005	.4	.0066	.0052	.0002	.09	.0002	.0008	.0008	.0036
%RSD	1.153	.4284	4.441	.8295	.3163	.8049	.3245	.8498	.2889	.5163
#1	.0473	100.1	.1508	.6235	.0528	11.06	.0499	.0889	.2691	.6895
#2	.0479	99.97	.1539	.6227	.0531	11.03	.0502	.0876	.2704	.6861
#3	.0468	100.8	.1413	.6321	.0528	11.20	.0502	.0889	.2690	.6932

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	120.2	21.78	16.40	.6861	.0945	10.64	.2027	4.147	.1849	.0964
Stddev	.7	.02	.19	.0030	.0007	.04	.0004	.023	.0012	.0073
%RSD	.5763	.0891	1.143	.4359	.6946	.3342	.2212	.5525	.6393	7.590
#1	120.2	21.77	16.36	.6892	.0941	10.67	.2032	4.171	.1836	.0957
#2	119.5	21.76	16.23	.6860	.0941	10.60	.2025	4.125	.1854	.0894
#3	120.9	21.80	16.60	.6832	.0952	10.67	.2025	4.146	.1858	.1040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.050	.0799	.4592	2.706	.1087	.3131	.4739
Stddev	.016	.0007	.0023	.007	.0017	.0017	.0018
%RSD	.4043	.9373	.5093	.2638	1.587	.5391	.3883
#1	4.046	.0797	.4590	2.714	.1106	.3134	.4721
#2	4.036	.0807	.4569	2.700	.1072	.3147	.4737
#3	4.068	.0793	.4616	2.704	.1083	.3113	.4758

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1388.9	3564.7	26952.	2241.7
Stddev	4.4	4.2	98.	15.4
%RSD	.32028	.11686	.36482	.68553
#1	1387.3	3567.5	26902.	2246.1
#2	1393.9	3566.6	26889.	2254.4
#3	1385.5	3559.9	27065.	2224.6

Zoom In Zoom Out

Sample Name: MP33823-S1 Acquired: 6/1/2018 14:15:29 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0499	166.2	1.858	2.371	.0528	30.17	.0484	.5228	.4357	.8003
Stddev	.0020	.8	.003	.008	.0006	.09	.0003	.0011	.0095	.0030
%RSD	4.005	.4792	.1603	.3304	1.189	.3035	.6847	.2098	2.169	.3725
#1	.0496	166.5	1.858	2.370	.0535	30.20	.0485	.5215	.4339	.8032
#2	.0521	166.8	1.860	2.380	.0526	30.25	.0486	.5234	.4459	.8005
#3	.0481	165.3	1.854	2.365	.0524	30.07	.0480	.5234	.4273	.7973

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	142.6	37.36	35.53	1.100	.4185	26.42	.6253	4.182	.2654	1.837
Stddev	.2	.21	.07	.004	.0018	.16	.0013	.008	.0048	.002
%RSD	.1560	.5687	.1920	.4125	.4186	.5985	.2071	.1984	1.821	.1274
#1	142.7	37.56	35.53	1.097	.4167	26.54	.6266	4.173	.2638	1.837
#2	142.8	37.39	35.46	1.106	.4202	26.49	.6253	4.190	.2708	1.834
#3	142.4	37.14	35.59	1.098	.4188	26.24	.6241	4.184	.2615	1.838

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	27.32	.4947	.8694	3.552	1.885	.7199	.6938
Stddev	.42	.0007	.0027	.063	.015	.0025	.0015
%RSD	1.533	.1429	.3094	1.769	.8081	.3509	.2091
#1	27.76	.4952	.8688	3.583	1.870	.7196	.6949
#2	27.26	.4951	.8723	3.594	1.884	.7226	.6942
#3	26.93	.4939	.8671	3.480	1.901	.7176	.6921

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1361.3	3539.3	26635.	2204.5
Stddev	2.8	7.0	54.	16.0
%RSD	.20293	.19689	.20272	.72448
#1	1364.5	3547.2	26660.	2186.1
#2	1359.3	3536.6	26573.	2213.0
#3	1360.1	3534.1	26672.	2214.5

Zoom In Zoom Out

Sample Name: MP33823-S2 Acquired: 6/1/2018 14:19:33 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0480	138.9	1.780	2.213	.0497	27.91	.0465	.5002	.3780	.6832
Stddev	.0014	1.0	.009	.008	.0002	.10	.0004	.0019	.0019	.0044
%RSD	2.834	.6855	.5049	.3755	.4719	.3605	.8131	.3865	.4982	.6474
#1	.0465	137.8	1.773	2.207	.0495	27.83	.0461	.4986	.3795	.6883
#2	.0489	139.1	1.791	2.223	.0500	27.89	.0468	.4997	.3759	.6815
#3	.0488	139.7	1.777	2.210	.0496	28.02	.0467	.5024	.3786	.6799

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	119.3	33.82	32.29	.9571	.4093	24.84	.5863	3.529	.2485	1.783
Stddev	.6	.19	.20	.0015	.0013	.19	.0016	.006	.0022	.007
%RSD	.4696	.5672	.6290	.1561	.3139	.7727	.2681	.1852	.8929	.3903
#1	118.7	33.60	32.42	.9588	.4078	24.62	.5881	3.536	.2508	1.783
#2	119.3	33.97	32.40	.9560	.4099	24.93	.5855	3.528	.2464	1.776
#3	119.9	33.88	32.06	.9566	.4101	24.97	.5852	3.523	.2484	1.790

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	24.91	.4850	.7778	2.983	1.825	.6528	.6427
Stddev	.33	.0024	.0050	.029	.003	.0026	.0006
%RSD	1.330	.5008	.6370	.9897	.1509	.3946	.0971
#1	25.15	.4873	.7726	2.991	1.826	.6510	.6429
#2	24.53	.4825	.7783	3.008	1.827	.6517	.6421
#3	25.04	.4853	.7824	2.951	1.822	.6557	.6433

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1368.8	3542.4	26470.	2228.1
Stddev	1.5	3.5	97.	14.8
%RSD	.11109	.09928	.36665	.66512
#1	1367.7	3539.1	26456.	2245.2
#2	1370.5	3546.1	26573.	2218.4
#3	1368.3	3541.9	26380.	2220.8

Zoom In Zoom Out

Sample Name: FA53517-3R Acquired: 6/1/2018 14:23:36 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0030	135.8	.0494	.3868	.0039	3.322	.0005	.0293	.2493	.1678
Stddev	.0006	.2	.0065	.0010	.0002	.007	.0000	.0003	.0012	.0014
%RSD	21.42	.1171	13.09	.2676	5.685	.2169	3.796	.9402	.4638	.8639
#1	.0027	135.6	.0472	.3858	.0039	3.322	.0005	.0296	.2492	.1671
#2	.0038	136.0	.0567	.3867	.0040	3.329	.0005	.0294	.2483	.1695
#3	.0026	135.9	.0443	.3879	.0036	3.314	.0005	.0290	.2506	.1668

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	137.0	16.75	15.71	.5413	.0035	2.071	.1156	.4631	.0236	.0085
Stddev	.2	.04	.07	.0028	.0007	.016	.0002	.0040	.0073	.0076
%RSD	.1688	.2660	.4575	.5162	20.82	.7688	.1491	.8608	30.80	89.89
#1	137.1	16.72	15.74	.5444	.0034	2.053	.1154	.4677	.0307	.0163
#2	137.1	16.73	15.76	.5389	.0027	2.079	.1155	.4612	.0240	.0011
#3	136.7	16.80	15.63	.5407	.0042	2.082	.1158	.4604	.0162	.0080

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	21.54	.0262	.1338	3.795	.0129	.3054	.5065
Stddev	.18	.0013	.0005	.068	.0042	.0025	.0009
%RSD	.8530	5.110	.3785	1.777	32.99	.8169	.1861
#1	21.75	.0253	.1335	3.733	.0084	.3025	.5076
#2	21.47	.0277	.1344	3.787	.0134	.3063	.5060
#3	21.41	.0256	.1335	3.867	.0169	.3072	.5059

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1392.7	3601.3	26898.	2241.3
Stddev	5.2	4.2	102.	5.1
%RSD	.37092	.11752	.37887	.22807
#1	1387.4	3596.7	26790.	2246.7
#2	1397.7	3605.1	26909.	2240.5
#3	1393.0	3602.0	26993.	2236.6

Zoom In Zoom Out

Sample Name: FA53517-5R Acquired: 6/1/2018 14:27:49 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0027	152.2	.0450	1.251	.0045	19.21	.0018	.0459	.2452	.1191
Stddev	.0021	.7	.0020	.009	.0004	.10	.0003	.0008	.0034	.0017
%RSD	77.05	.4614	4.344	.7176	8.334	.5366	15.82	1.701	1.391	1.389
#1	.0037	152.8	.0469	1.248	.0040	19.29	.0022	.0468	.2443	.1186
#2	.0041	151.4	.0449	1.262	.0046	19.09	.0016	.0455	.2423	.1177
#3	.0003	152.5	.0430	1.245	.0047	19.24	.0018	.0453	.2490	.1209

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	124.4	14.81	12.75	5.720	.0026	2.091	.1276	.3291	.0142	.0098
Stddev	.4	.09	.15	.006	.0002	.050	.0003	.0016	.0018	.0045
%RSD	.2935	.5774	1.168	.1137	6.036	2.385	.2567	.4983	12.79	46.12
#1	124.5	14.75	12.84	5.725	.0024	2.132	.1280	.3307	.0140	.0149
#2	124.0	14.91	12.83	5.712	.0027	2.036	.1275	.3274	.0161	.0085
#3	124.7	14.78	12.58	5.722	.0027	2.107	.1274	.3291	.0125	.0062

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.16	.0283	.3330	3.342	.0084	.2449	.1371
Stddev	1.28	.0018	.0001	.031	.0048	.0001	.0007
%RSD	6.665	6.209	.0242	.9217	57.70	.0462	.5228
#1	20.29	.0270	.3331	3.378	.0050	.2450	.1379
#2	19.41	.0275	.3330	3.327	.0062	.2448	.1366
#3	17.77	.0303	.3330	3.322	.0139	.2448	.1367

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1391.5	3549.1	26746.	2227.7
Stddev	3.2	8.4	38.	10.2
%RSD	.22910	.23712	.14288	.45824
#1	1392.6	3552.2	26708.	2224.6
#2	1394.0	3555.5	26785.	2239.1
#3	1387.9	3539.5	26744.	2219.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 14:32:00 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2525	39.84	2.038	2.049	2.025	40.14	2.033	2.038	2.009	2.023
Stddev	.0009	.10	.006	.007	.004	.07	.003	.003	.004	.004
%RSD	.3750	.2614	.2736	.3230	.2091	.1868	.1679	.1685	.2222	.1855
#1	.2529	39.74	2.043	2.051	2.020	40.09	2.035	2.039	2.010	2.026
#2	.2532	39.95	2.037	2.054	2.026	40.23	2.035	2.040	2.012	2.025
#3	.2514	39.83	2.032	2.041	2.029	40.11	2.029	2.034	2.004	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.91	40.30	40.51	2.065	2.075	40.36	2.072	1.995	2.045	2.047
Stddev	.12	.05	.16	.006	.002	.04	.002	.008	.004	.005
%RSD	.2918	.1340	.4065	.2952	.1032	.0919	.0731	.3933	.2002	.2558
#1	40.83	40.28	40.46	2.065	2.073	40.35	2.070	1.986	2.047	2.051
#2	41.05	40.26	40.37	2.071	2.077	40.40	2.073	2.001	2.048	2.048
#3	40.86	40.36	40.69	2.059	2.075	40.33	2.072	1.997	2.040	2.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.160	2.118	2.052	2.092	2.019	2.073	2.037
Stddev	.001	.002	.005	.008	.003	.005	.001
%RSD	.0303	.0971	.2309	.3789	.1587	.2346	.0574
#1	2.161	2.119	2.047	2.091	2.016	2.078	2.038
#2	2.160	2.116	2.054	2.101	2.022	2.069	2.038
#3	2.159	2.119	2.055	2.085	2.018	2.073	2.036
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 14:32:00 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1224.1	3289.6	25043.	2122.2
Stddev	1.3	1.9	43.	17.4
%RSD	.10844	.05634	.17157	.82218
#1	1225.6	3288.0	25003.	2112.3
#2	1223.4	3291.6	25037.	2112.0
#3	1223.2	3289.2	25089.	2142.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 14:35:56 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0038	.0005	.0000	.0001	.0081	.0001	.0000	.0000
Stddev	.0004	.0053	.0003	.000	.0000	.0050	.0000	.000	.0002
%RSD	157.0	141.4	64.21	363.7	32.93	61.29	14.02	288.5	1093.
#1	.0002	-.0042	.0008	-.0001	.0001	.0125	.0001	.0000	.0000
#2	.0006	.0018	.0006	-.0002	.0002	.0027	.0001	-.0002	.0002
#3	-.0001	-.0088	.0001	.0002	.0001	.0093	.0001	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0197	.0165	-.0096	.0001	F.0027	-.0042	.0003	.0006
Stddev	.0003	.0037	.0304	.0257	.0001	.0008	.0068	.0000	.0004
%RSD	45.79	18.83	184.0	267.4	48.64	29.60	161.7	13.19	71.06
#1	-.0010	.0229	.0362	-.0015	.0002	.0036	.0030	.0003	.0003
#2	-.0004	.0206	.0319	-.0384	.0001	.0026	-.0052	.0003	.0011
#3	-.0007	.0157	-.0185	.0111	.0001	.0020	-.0104	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0007	.0023	F.0012	.0002	.0012	.0015	.0000	.0001
Stddev	.0002	.0009	.0008	.0003	.0001	.0002	.0008	.0004	.0000
%RSD	107.4	129.4	32.53	21.20	49.25	13.77	54.16	919.1	36.64
#1	-.0004	.0018	.0017	.0009	.0002	.0014	.0024	.0002	.0001
#2	.0000	.0003	.0032	.0013	.0001	.0013	.0013	-.0004	.0001
#3	-.0002	.0001	.0022	.0013	.0002	.0011	.0008	.0004	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 14:35:56 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1417.6	3402.6	26178.	2143.7
Stddev	4.3	8.2	79.	10.1
%RSD	.30493	.24243	.30277	.47060
#1	1415.7	3402.7	26127.	2154.8
#2	1414.5	3394.3	26138.	2135.2
#3	1422.5	3410.8	26270.	2140.9

Zoom In Zoom Out

Sample Name: FA53517-6R Acquired: 6/1/2018 14:40:14 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0024	125.0	.0427	.9168	.0043	12.03	.0015	.0368	.2275	.0811
Stddev	.0003	.4	.0042	.0058	.0004	.08	.0003	.0006	.0025	.0018
%RSD	10.55	.3162	9.858	.6343	9.425	.6812	20.88	1.524	1.095	2.207
#1	.0025	125.4	.0435	.9104	.0041	12.09	.0012	.0364	.2284	.0828
#2	.0021	125.1	.0381	.9218	.0047	12.08	.0018	.0375	.2293	.0792
#3	.0025	124.6	.0464	.9183	.0039	11.94	.0016	.0367	.2246	.0814

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	107.6	11.99	10.70	3.474	.0062	1.776	.1146	.0805	.0001	.0085
Stddev	.2	.23	.12	.016	.0006	.067	.0009	.0030	.0031	.0076
%RSD	.2324	1.892	1.092	.4616	9.279	3.787	.8093	3.689	5198.	89.97
#1	107.4	11.73	10.57	3.479	.0066	1.854	.1156	.0775	-.0026	.0020
#2	107.8	12.16	10.80	3.456	.0055	1.734	.1137	.0805	.0035	.0168
#3	107.4	12.07	10.73	3.487	.0065	1.740	.1144	.0835	-.0008	.0066

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.32	.0293	.2127	2.945	.0103	.2180	.1103
Stddev	.21	.0009	.0012	.013	.0014	.0015	.0002
%RSD	1.448	3.020	.5608	.4300	13.80	.7015	.2000
#1	14.55	.0299	.2128	2.959	.0116	.2165	.1105
#2	14.22	.0297	.2139	2.941	.0088	.2178	.1100
#3	14.17	.0283	.2115	2.934	.0104	.2195	.1103

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1398.5	3539.3	26611.	2225.1
Stddev	1.6	7.8	144.	7.4
%RSD	.11398	.22083	.54081	.33177
#1	1397.9	3540.1	26666.	2233.3
#2	1400.3	3546.7	26720.	2219.0
#3	1397.2	3531.1	26448.	2223.0

Zoom In Zoom Out

Sample Name: FA53517-8R Acquired: 6/1/2018 14:44:26 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0018	323.4	.0810	.9257	.0098	19.86	.0027	.0726	.5886	.1865
Stddev	.0011	2.1	.0054	.0039	.0004	.11	.0004	.0005	.0020	.0005
%RSD	64.01	.6428	6.678	.4177	4.125	.5525	16.33	.6364	.3369	.2609
#1	.0008	321.8	.0797	.9247	.0096	19.77	.0029	.0722	.5908	.1871
#2	.0030	322.7	.0869	.9224	.0103	19.84	.0029	.0725	.5869	.1862
#3	.0015	325.8	.0763	.9299	.0096	19.99	.0022	.0731	.5880	.1863

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	367.1	104.2	98.99	2.827	.0023	18.58	.3062	.1750	-.0047	.0003
Stddev	1.9	.5	.33	.001	.0002	.12	.0006	.0045	.0060	.0040
%RSD	.5154	.4980	.3335	.0366	9.963	.6297	.2089	2.554	126.6	1349.
#1	365.5	103.7	98.81	2.828	.0026	18.49	.3061	.1801	-.0063	.0024
#2	366.6	104.0	98.80	2.826	.0023	18.53	.3056	.1722	.0019	.0028
#3	369.2	104.7	99.37	2.826	.0021	18.71	.3068	.1726	-.0097	-.0043

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.034	.0461	.3924	15.40	.0144	.6434	.8426
Stddev	.106	.0019	.0037	.02	.0056	.0020	.0006
%RSD	1.321	4.212	.9500	.1410	38.91	.3111	.0726
#1	8.027	.0466	.3885	15.39	.0207	.6419	.8432
#2	8.143	.0440	.3926	15.39	.0099	.6426	.8428
#3	7.931	.0477	.3960	15.43	.0127	.6456	.8420

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1325.5	3707.1	28189.	2380.5
Stddev	2.2	8.5	26.	7.5
%RSD	.16279	.23046	.09242	.31581
#1	1324.6	3714.7	28172.	2384.1
#2	1328.0	3708.7	28176.	2385.5
#3	1323.9	3697.9	28219.	2371.8

Zoom In Zoom Out

Sample Name: FA53517-9R Acquired: 6/1/2018 14:48:34 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0006	251.3	.0811	.8188	.0087	30.14	.0025	.0618	.7610	.1601
Stddev	.0012	.8	.0041	.0053	.0004	.14	.0002	.0008	.0056	.0008
%RSD	196.4	.3290	5.058	.6522	4.274	.4634	8.810	1.259	.7367	.4753
#1	.0018	252.1	.0856	.8126	.0091	30.26	.0023	.0612	.7657	.1592
#2	.0006	251.4	.0801	.8221	.0087	30.16	.0025	.0627	.7625	.1605
#3	-.0006	250.5	.0776	.8216	.0084	29.99	.0028	.0615	.7548	.1605

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	310.5	92.83	85.50	2.565	.0036	15.55	.3798	.1897	-.0014	.0029
Stddev	.7	.27	.26	.030	.0011	.08	.0009	.0032	.0133	.0125
%RSD	.2379	.2936	.3065	1.161	28.98	.4993	.2338	1.682	955.6	433.4
#1	310.3	93.07	85.76	2.596	.0040	15.61	.3804	.1861	-.0010	.0162
#2	311.3	92.87	85.49	2.562	.0045	15.46	.3787	.1923	-.0149	-.0085
#3	309.9	92.53	85.24	2.536	.0024	15.56	.3802	.1908	.0117	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.074	.0398	.2719	14.66	.0155	.5621	.7370
Stddev	.049	.0017	.0012	.12	.0041	.0025	.0011
%RSD	.8008	4.195	.4473	.7886	26.28	.4415	.1539
#1	6.021	.0379	.2728	14.77	.0149	.5645	.7380
#2	6.115	.0409	.2706	14.67	.0198	.5595	.7358
#3	6.087	.0407	.2725	14.54	.0117	.5622	.7372

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1328.4	3665.5	27832.	2354.0
Stddev	4.0	13.5	85.	14.3
%RSD	.30121	.36771	.30537	.60779
#1	1325.6	3652.1	27788.	2340.4
#2	1333.0	3679.1	27778.	2352.8
#3	1326.6	3665.4	27930.	2368.9

Zoom In Zoom Out

Sample Name: FA53517-11R Acquired: 6/1/2018 14:52:40 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0030	581.6	.1381	.2949	.0115	6.991	.0002	.0533	.5502	.0776
Stddev	.0023	1.4	.0014	.0028	.0009	.055	.0003	.0004	.0057	.0003
%RSD	76.93	.2370	1.007	.9328	7.600	.7907	128.2	.7888	1.044	.4476
#1	.0055	580.1	.1392	.2933	.0104	6.940	.0000	.0538	.5492	.0772
#2	.0027	582.7	.1387	.2981	.0119	6.982	.0001	.0531	.5564	.0778
#3	.0009	582.1	.1366	.2934	.0120	7.050	.0005	.0530	.5450	.0778

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	279.2	21.37	30.42	.5353	.0040	17.61	.4193	.1432	-.0075	.0016
Stddev	.4	.15	.36	.0008	.0010	.06	.0022	.0042	.0006	.0059
%RSD	.1504	.7083	1.182	.1583	26.28	.3143	.5317	2.943	8.212	371.4
#1	279.0	21.20	30.02	.5345	.0036	17.55	.4213	.1445	-.0078	-.0051
#2	279.7	21.49	30.73	.5351	.0051	17.61	.4198	.1465	-.0068	.0042
#3	279.0	21.41	30.51	.5362	.0032	17.66	.4169	.1384	-.0080	.0057

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.753	.0317	.1672	5.071	.0081	.5505	.2188
Stddev	.036	.0006	.0006	.002	.0063	.0007	.0004
%RSD	.4089	1.898	.3714	.0342	78.07	.1271	.2052
#1	8.736	.0314	.1665	5.072	.0069	.5513	.2192
#2	8.728	.0314	.1673	5.073	.0024	.5501	.2187
#3	8.794	.0324	.1678	5.070	.0148	.5500	.2183

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1333.9	3601.7	26654.	2285.8
Stddev	4.0	11.5	43.	12.7
%RSD	.29812	.32027	.16208	.55498
#1	1329.6	3590.4	26661.	2300.0
#2	1337.4	3613.5	26694.	2281.9
#3	1334.6	3601.3	26608.	2275.6

Zoom In Zoom Out

Sample Name: FA53517-12R Acquired: 6/1/2018 14:56:52 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0030	609.6	.1500	.4153	.0152	7.245	.0001	.0728	.5874	.0849
Stddev	.0016	4.5	.0086	.0004	.0005	.060	.0003	.0004	.0020	.0011
%RSD	55.23	.7403	5.706	.1045	3.590	.8342	273.2	.5437	.3327	1.319
#1	.0031	614.8	.1403	.4158	.0154	7.310	.0003	.0725	.5884	.0862
#2	.0045	607.1	.1531	.4153	.0146	7.190	.0002	.0733	.5852	.0843
#3	.0013	606.9	.1565	.4149	.0156	7.236	-.0002	.0726	.5887	.0843

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	308.3	23.54	33.95	.7071	.0039	24.02	.4583	.1669	-.0053	.0141
Stddev	1.7	.09	.25	.0036	.0001	.23	.0019	.0035	.0022	.0123
%RSD	.5558	.3987	.7453	.5089	3.705	.9593	.4144	2.100	42.29	87.37
#1	310.3	23.64	34.24	.7092	.0041	24.26	.4588	.1656	-.0075	.0003
#2	307.7	23.54	33.87	.7029	.0038	23.99	.4562	.1709	-.0031	.0240
#3	307.0	23.45	33.75	.7090	.0040	23.80	.4599	.1643	-.0051	.0181

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.523	.0316	.1416	6.038	.0076	.6000	.2593
Stddev	.046	.0017	.0013	.021	.0011	.0009	.0011
%RSD	.6151	5.517	.9458	.3440	13.96	.1452	.4433
#1	7.539	.0333	.1430	6.055	.0077	.5993	.2588
#2	7.560	.0298	.1404	6.015	.0086	.5997	.2584
#3	7.471	.0318	.1413	6.044	.0065	.6010	.2606

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1327.9	3625.5	26860.	2302.0
Stddev	1.6	9.6	123.	15.7
%RSD	.12030	.26519	.45821	.68082
#1	1329.8	3634.4	26832.	2305.5
#2	1326.8	3626.8	26995.	2284.9
#3	1327.3	3615.3	26753.	2315.6

Zoom In Zoom Out

Sample Name: FA53517-14R Acquired: 6/1/2018 15:01:02 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0080	102.2	.0755	.9639	.0037	16.69	.0028	.0312	.1843
Stddev	.0004	.3	.0040	.0007	.0005	.04	.0002	.0000	.0009
%RSD	5.044	.2579	5.284	.0740	13.48	.2602	6.279	.1526	.4934
#1	.0082	101.9	.0781	.9647	.0043	16.73	.0028	.0312	.1834
#2	.0076	102.4	.0709	.9633	.0033	16.64	.0026	.0313	.1852
#3	.0083	102.4	.0775	.9638	.0035	16.69	.0029	.0312	.1844

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	16.10	93.84	12.03	12.62	1.998	.0008	1.800	.1204	F68.93
Stddev	.01	.37	.05	.11	.005	.0004	.068	.0000	.05
%RSD	.0813	.3965	.3947	.9025	.2592	48.18	3.753	.0322	.0764
#1	16.11	93.44	11.99	12.75	1.994	.0009	1.791	.1203	68.87
#2	16.08	94.18	12.08	12.55	1.997	.0011	1.738	.1203	68.97
#3	16.11	93.91	12.02	12.56	2.004	.0004	1.872	.1204	68.96

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.348	.0048	21.45	.0743	6.902	2.374	.0065	.1942	3.997
Stddev	.002	.0053	.31	.0006	.019	.022	.0041	.0006	.004
%RSD	.1221	111.1	1.439	.8174	.2723	.9189	63.16	.3113	.1028
#1	1.346	.0053	21.68	.0750	6.884	2.360	.0112	.1949	3.996
#2	1.349	-.0008	21.10	.0741	6.921	2.363	.0045	.1940	4.002
#3	1.348	.0098	21.58	.0739	6.902	2.399	.0037	.1937	3.994

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1398.9	3523.7	26999.	2266.2
Stddev	1.5	4.0	126.	5.1
%RSD	.10701	.11421	.46781	.22453
#1	1400.6	3528.3	27140.	2272.1
#2	1398.5	3520.6	26961.	2263.8
#3	1397.7	3522.3	26896.	2262.8

Zoom In Zoom Out

Sample Name: FA53517-15R Acquired: 6/1/2018 15:05:13 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0020	172.1	.0772	.6358	.0064	7.255	.0012	.0784	.3560	2.155
Stddev	.0010	.8	.0019	.0068	.0009	.078	.0002	.0005	.0036	.003
%RSD	47.54	.4651	2.488	1.069	13.35	1.075	16.46	.6484	1.007	.1529
#1	.0027	171.3	.0751	.6331	.0057	7.207	.0014	.0790	.3593	2.157
#2	.0024	172.2	.0776	.6308	.0073	7.213	.0010	.0781	.3522	2.151
#3	.0009	172.9	.0789	.6436	.0061	7.345	.0013	.0781	.3565	2.157

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	158.3	19.38	23.50	1.106	.0073	1.991	.2487	15.52	.4136	.0107
Stddev	.8	.10	.24	.003	.0003	.039	.0008	.03	.0038	.0068
%RSD	.4865	.5004	1.020	.2409	3.972	1.953	.3404	.2133	.9252	63.22
#1	157.8	19.41	23.24	1.107	.0069	2.033	.2494	15.48	.4179	.0122
#2	157.8	19.28	23.55	1.108	.0073	1.985	.2477	15.55	.4123	.0033
#3	159.2	19.46	23.72	1.103	.0075	1.956	.2490	15.52	.4106	.0165

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.11	.0352	1.075	3.691	.0064	.3055	.9087
Stddev	.23	.0019	.006	.007	.0016	.0028	.0013
%RSD	1.614	5.462	.6005	.1947	25.08	.9214	.1390
#1	14.37	.0332	1.069	3.697	.0047	.3070	.9094
#2	14.02	.0355	1.073	3.683	.0079	.3022	.9072
#3	13.95	.0370	1.082	3.692	.0064	.3072	.9095

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1383.3	3617.6	27499.	2283.5
Stddev	.7	9.7	63.	27.2
%RSD	.04875	.26734	.22841	1.1923
#1	1384.0	3610.4	27485.	2296.3
#2	1382.7	3628.6	27567.	2301.9
#3	1383.1	3613.8	27444.	2252.2

Zoom In Zoom Out

Sample Name: FA53517-17R Acquired: 6/1/2018 15:09:22 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	161.6	.0410	1.627	.0061	44.72	.0030	.0540	.2718	.2148
Stddev	.0006	1.1	.0033	.006	.0007	.13	.0002	.0002	.0057	.0026
%RSD	47.19	.6965	7.974	.3439	11.22	.2972	5.715	.4519	2.111	1.196
#1	.0018	162.6	.0426	1.631	.0053	44.84	.0028	.0543	.2723	.2169
#2	.0007	161.8	.0372	1.621	.0062	44.75	.0030	.0541	.2658	.2119
#3	.0010	160.4	.0432	1.630	.0067	44.58	.0031	.0538	.2773	.2156

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	130.0	15.93	14.20	5.868	.0021	2.323	.1582	.9329	.0271	.0069
Stddev	.5	.06	.08	.009	.0003	.156	.0001	.0052	.0051	.0085
%RSD	.3799	.3553	.5661	.1543	15.77	6.705	.0524	.5548	18.81	123.6
#1	130.5	15.88	14.11	5.878	.0020	2.497	.1582	.9383	.0284	.0061
#2	130.1	15.99	14.25	5.865	.0018	2.276	.1583	.9279	.0314	.0158
#3	129.5	15.91	14.25	5.861	.0024	2.197	.1582	.9324	.0215	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	27.29	.0264	.6911	3.780	.0073	.2538	.1399
Stddev	2.07	.0013	.0053	.013	.0021	.0004	.0006
%RSD	7.602	4.903	.7619	.3316	29.35	.1750	.4514
#1	29.45	.0251	.6960	3.786	.0092	.2535	.1404
#2	27.08	.0262	.6918	3.765	.0077	.2543	.1401
#3	25.32	.0277	.6855	3.788	.0050	.2536	.1392

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1381.8	3518.5	26738.	2235.1
Stddev	1.7	11.7	36.	4.2
%RSD	.12292	.33177	.13292	.18817
#1	1381.8	3529.7	26707.	2230.3
#2	1380.1	3519.3	26730.	2236.7
#3	1383.5	3506.4	26777.	2238.2

Zoom In Zoom Out

Sample Name: FA53517-18R Acquired: 6/1/2018 15:13:33 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0015	164.4	.0444	1.612	.0058	38.28	.0025	.0588	.2679	.1255
Stddev	.0020	1.3	.0024	.004	.0006	.18	.0003	.0007	.0012	.0023
%RSD	129.9	.7922	5.489	.2446	10.32	.4828	12.51	1.272	.4624	1.834
#1	.0023	164.5	.0418	1.616	.0052	38.30	.0023	.0588	.2687	.1281
#2	-.0007	165.7	.0449	1.612	.0064	38.46	.0024	.0595	.2664	.1244
#3	.0030	163.1	.0466	1.609	.0060	38.09	.0029	.0580	.2685	.1239

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	139.1	16.59	13.95	6.115	.0028	2.184	.1655	.0811	.0058	-.0019
Stddev	.6	.17	.17	.020	.0006	.097	.0017	.0021	.0043	.0092
%RSD	.3992	1.011	1.228	.3332	22.76	4.423	1.008	2.531	75.06	480.3
#1	138.8	16.76	13.89	6.133	.0021	2.267	.1674	.0818	.0034	-.0067
#2	139.7	16.58	14.14	6.093	.0028	2.207	.1648	.0828	.0107	-.0077
#3	138.7	16.42	13.81	6.119	.0034	2.078	.1643	.0789	.0031	.0087

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	24.55	.0289	.5751	3.628	.0084	.2807	.1370
Stddev	.27	.0007	.0029	.025	.0024	.0005	.0005
%RSD	1.097	2.581	.5062	.6904	28.11	.1867	.3717
#1	24.73	.0285	.5753	3.640	.0101	.2813	.1369
#2	24.67	.0298	.5778	3.599	.0057	.2804	.1366
#3	24.24	.0285	.5720	3.644	.0094	.2804	.1376

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1366.3	3488.9	26442.	2214.2
Stddev	3.2	6.2	145.	17.5
%RSD	.23238	.17748	.54889	.78834
#1	1363.3	3485.9	26295.	2224.5
#2	1366.1	3484.8	26585.	2194.1
#3	1369.7	3496.0	26447.	2224.1

Zoom In Zoom Out

Sample Name: FA53725-11R Acquired: 6/1/2018 15:17:44 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0057	324.1	.0612	3.979	.0095	121.9	.0058	.0932	.4428	1.048
Stddev	.0012	1.2	.0054	.008	.0002	.5	.0003	.0003	.0016	.003
%RSD	21.16	.3616	8.795	.1910	1.699	.4111	4.789	.3333	.3614	.2493
#1	.0065	324.6	.0645	3.973	.0095	122.1	.0060	.0934	.4433	1.047
#2	.0043	322.8	.0550	3.976	.0093	121.3	.0059	.0933	.4410	1.051
#3	.0064	325.0	.0642	3.987	.0096	122.3	.0055	.0928	.4441	1.046

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	244.4	31.18	34.64	10.06	.0040	6.092	.3245	6.090	.0393	.0109
Stddev	.7	.22	.36	.04	.0013	.053	.0013	.021	.0016	.0144
%RSD	.2692	.6899	1.040	.3475	32.66	.8697	.4087	.3437	4.162	132.6
#1	244.2	31.20	34.56	10.05	.0054	6.033	.3244	6.092	.0385	-.0058
#2	243.8	30.96	34.32	10.10	.0037	6.109	.3258	6.068	.0382	.0192
#3	245.1	31.39	35.03	10.03	.0029	6.135	.3232	6.110	.0412	.0192

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	59.15	.0376	1.661	6.776	.0096	.5455	.6361
Stddev	1.29	.0021	.004	.036	.0026	.0027	.0005
%RSD	2.175	5.476	.2400	.5377	26.91	.4991	.0769
#1	60.21	.0370	1.661	6.787	.0066	.5478	.6358
#2	59.52	.0360	1.657	6.805	.0112	.5425	.6367
#3	57.72	.0400	1.665	6.735	.0109	.5461	.6358

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1320.2	3534.5	26485.	2238.1
Stddev	1.2	7.5	72.	11.5
%RSD	.09162	.21107	.27335	.51455
#1	1321.3	3539.5	26426.	2239.1
#2	1320.3	3525.9	26566.	2249.2
#3	1318.9	3538.0	26463.	2226.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 15:21:50 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2500	39.37	2.042	2.042	2.010	39.89	2.037	2.040	1.992	2.010
Stddev	.0010	.20	.006	.002	.005	.24	.003	.001	.006	.009
%RSD	.4195	.5012	.2859	.0734	.2736	.6114	.1279	.0443	.3282	.4253
#1	.2512	39.59	2.046	2.042	2.016	40.11	2.033	2.039	2.000	2.019
#2	.2492	39.33	2.045	2.044	2.009	39.94	2.038	2.041	1.989	2.002
#3	.2496	39.20	2.036	2.041	2.005	39.63	2.038	2.039	1.988	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.73	40.19	40.48	2.039	2.075	40.07	2.070	1.991	2.042	2.047
Stddev	.15	.14	.19	.016	.003	.20	.003	.003	.006	.009
%RSD	.3624	.3571	.4745	.7740	.1603	.5068	.1267	.1393	.3003	.4339
#1	40.75	40.35	40.61	2.057	2.071	40.30	2.072	1.993	2.049	2.054
#2	40.87	40.12	40.58	2.032	2.078	40.02	2.071	1.988	2.040	2.050
#3	40.57	40.09	40.26	2.027	2.075	39.90	2.067	1.992	2.038	2.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.165	2.120	2.036	2.068	2.015	2.063	2.041
Stddev	.009	.005	.005	.014	.006	.006	.002
%RSD	.3950	.2548	.2425	.6645	.2756	.2913	.1096
#1	2.175	2.125	2.042	2.084	2.021	2.070	2.038
#2	2.160	2.122	2.034	2.061	2.011	2.060	2.042
#3	2.160	2.114	2.033	2.059	2.013	2.060	2.042
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 15:21:50 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1226.8	3287.9	25304.	2113.3
Stddev	1.8	2.3	123.	13.5
%RSD	.14910	.06920	.48512	.63949
#1	1226.3	3289.3	25163.	2105.4
#2	1228.8	3285.3	25384.	2105.5
#3	1225.2	3289.2	25366.	2128.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 15:25:46 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0060	.0005	.0003	.0002	.0121	.0002	.0000	.0003
Stddev	.0005	.0171	.0005	.0002	.0000	.0017	.0000	.000	.0003
%RSD	379.5	283.9	83.77	61.09	19.34	13.74	6.765	1927.	122.4
#1	-.0004	.0258	.0010	.0004	.0002	.0122	.0002	.0000	.0002
#2	-.0004	-.0046	.0001	.0002	.0002	.0138	.0003	-.0001	.0000
#3	.0004	-.0031	.0005	.0001	.0002	.0104	.0002	.0001	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0218	.0436	.0001	.0002	F.0026	-.0089	.0004	.0003
Stddev	.0003	.0022	.0092	.0154	.0000	.0007	.0021	.0001	.0002
%RSD	87.24	9.927	21.09	17930.	18.44	27.83	23.36	38.72	67.06
#1	-.0007	.0243	.0376	.0068	.0003	.0034	-.0113	.0005	.0001
#2	-.0001	.0201	.0542	-.0175	.0002	.0025	-.0076	.0002	.0003
#3	-.0002	.0211	.0389	.0110	.0002	.0019	-.0078	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0015	.0022	F.0012	.0004	.0014	.0009	.0001	.0001
Stddev	.0011	.0017	.0001	.0007	.0001	.0000	.0010	.0005	.0001
%RSD	241.6	118.0	4.415	53.90	22.63	1.539	104.5	429.2	91.00
#1	.0007	.0003	.0023	.0006	.0005	.0013	.0005	.0002	.0001
#2	-.0005	.0006	.0022	.0011	.0004	.0014	.0020	-.0004	.0002
#3	-.0015	.0034	.0021	.0019	.0003	.0014	.0002	.0006	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 15:25:46 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1417.7	3421.7	25859.	2112.7
Stddev	3.0	4.2	44.	12.1
%RSD	.21026	.12404	.16950	.57277
#1	1418.6	3417.7	25832.	2102.3
#2	1414.4	3421.4	25909.	2126.0
#3	1420.2	3426.1	25834.	2109.9

Zoom In Zoom Out

Sample Name: FA53725-12R Acquired: 6/1/2018 15:30:05 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0026	183.6	.0393	1.802	.0050	60.12	.0031	.0522	.2676	.3252
Stddev	.0029	.7	.0017	.009	.0005	.22	.0002	.0005	.0016	.0013
%RSD	113.5	.4019	4.326	.5125	9.346	.3608	8.038	.9758	.5807	.3994
#1	.0012	183.1	.0393	1.796	.0047	60.21	.0033	.0516	.2675	.3254
#2	.0006	183.2	.0376	1.798	.0048	59.88	.0030	.0526	.2692	.3264
#3	.0060	184.4	.0410	1.812	.0056	60.28	.0029	.0523	.2661	.3239

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	138.5	16.99	17.43	4.612	.0031	2.869	.1950	2.087	.0201	.0054
Stddev	.2	.04	.26	.011	.0007	.072	.0012	.007	.0088	.0146
%RSD	.1569	.2594	1.496	.2299	23.14	2.497	.5986	.3457	44.05	270.0
#1	138.2	16.99	17.56	4.619	.0025	2.787	.1963	2.095	.0275	-.0108
#2	138.6	16.95	17.13	4.616	.0039	2.900	.1940	2.086	.0103	.0096
#3	138.6	17.04	17.60	4.600	.0029	2.919	.1948	2.080	.0224	.0174

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	30.02	.0279	.8104	4.094	.0114	.2984	.2516
Stddev	.37	.0016	.0031	.003	.0068	.0027	.0014
%RSD	1.239	5.615	.3818	.0800	60.02	.9158	.5445
#1	30.00	.0277	.8074	4.092	.0101	.2956	.2523
#2	29.66	.0296	.8136	4.098	.0053	.3010	.2500
#3	30.41	.0265	.8101	4.094	.0188	.2985	.2524

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1371.4	3539.9	26612.	2208.3
Stddev	2.0	4.4	104.	20.5
%RSD	.14582	.12382	.39023	.92854
#1	1369.2	3543.0	26598.	2194.9
#2	1372.0	3541.7	26515.	2231.9
#3	1373.0	3534.9	26721.	2198.1

Zoom In Zoom Out

Sample Name: FA53725-75R Acquired: 6/1/2018 15:34:13 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	205.3	.0495	.4985	.0049	3.129	.0003	.0289	.2696	.2369
Stddev	.0022	.1	.0013	.0042	.0002	.023	.0003	.0001	.0023	.0008
%RSD	296.7	.0506	2.622	.8339	3.309	.7407	103.2	.4473	.8714	.3203
#1	-.0014	205.3	.0500	.5011	.0049	3.121	-.0001	.0289	.2724	.2373
#2	.0006	205.3	.0505	.5007	.0047	3.155	.0005	.0291	.2685	.2361
#3	.0030	205.2	.0480	.4937	.0050	3.111	.0004	.0288	.2681	.2374

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	126.8	14.73	14.75	.3110	.0048	2.122	.1551	.4721	.0143	.0045
Stddev	.5	.18	.16	.0028	.0005	.045	.0007	.0015	.0010	.0040
%RSD	.3549	1.254	1.102	.9131	9.615	2.129	.4699	.3157	7.254	89.11
#1	126.7	14.93	14.65	.3142	.0044	2.155	.1560	.4704	.0140	.0003
#2	127.3	14.70	14.94	.3088	.0049	2.140	.1547	.4725	.0155	.0048
#3	126.4	14.57	14.67	.3099	.0053	2.070	.1548	.4733	.0135	.0083

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	17.58	.0314	.1346	3.918	.0064	.2525	.1686
Stddev	.30	.0007	.0002	.055	.0035	.0025	.0015
%RSD	1.730	2.086	.1625	1.402	55.12	.9703	.9170
#1	17.87	.0322	.1348	3.965	.0099	.2554	.1671
#2	17.26	.0311	.1344	3.858	.0066	.2510	.1702
#3	17.60	.0310	.1345	3.930	.0028	.2513	.1685

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1370.4	3506.1	26291.	2169.1
Stddev	.9	3.3	182.	4.4
%RSD	.06393	.09330	.69072	.20242
#1	1370.2	3509.2	26085.	2173.3
#2	1371.3	3506.5	26430.	2169.5
#3	1369.6	3502.7	26358.	2164.5

◄ Zoom In ►
Zoom Out

Sample Name: FA53517-76R Acquired: 6/1/2018 15:38:24 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0013	260.9	.0611	.6134	.0061	2.290	-.0001	.0414	.3171	.0900
Stddev	.0013	2.0	.0021	.0052	.0006	.014	.0003	.0009	.0038	.0011
%RSD	106.3	.7732	3.460	.8440	9.120	.6270	590.8	2.091	1.211	1.257
#1	.0014	263.1	.0597	.6155	.0061	2.282	-.0004	.0424	.3214	.0913
#2	.0025	260.6	.0636	.6172	.0055	2.306	.0001	.0409	.3141	.0893
#3	-.0002	259.1	.0601	.6075	.0066	2.280	.0001	.0410	.3157	.0894

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	150.8	14.03	16.29	.3411	.0033	2.186	.1973	.1076	.0024	.0015
Stddev	1.0	.10	.29	.0030	.0005	.037	.0005	.0052	.0039	.0096
%RSD	.6948	.7399	1.807	.8672	14.25	1.685	.2747	4.877	165.7	633.6
#1	151.9	14.13	16.61	.3443	.0034	2.187	.1967	.1099	.0052	.0125
#2	150.8	14.03	16.23	.3406	.0028	2.149	.1978	.1016	.0039	-.0028
#3	149.8	13.92	16.03	.3384	.0038	2.222	.1973	.1114	-.0021	-.0051

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.482	.0264	.1177	4.471	.0073	.3038	.1131
Stddev	.546	.0011	.0005	.041	.0048	.0039	.0014
%RSD	6.439	4.056	.4236	.9172	66.55	1.286	1.235
#1	9.092	.0275	.1179	4.513	.0093	.3079	.1143
#2	8.314	.0264	.1171	4.468	.0107	.3033	.1116
#3	8.039	.0253	.1181	4.431	.0017	.3001	.1134

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1381.7	3553.0	26493.	2220.1
Stddev	5.1	10.7	229.	14.7
%RSD	.37063	.30136	.86273	.66174
#1	1377.3	3550.1	26314.	2207.3
#2	1387.3	3564.8	26414.	2236.1
#3	1380.5	3544.0	26750.	2216.9

Raw Data MA14941 page 69 of 78

◄ Zoom In ►
Zoom Out

Sample Name: FA53517-44AR Acquired: 6/1/2018 15:42:36 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0038	185.7	.0490	.3685	.0033	5.388	.0005	.0228	.3296	.3088
Stddev	.0022	.7	.0047	.0025	.0003	.017	.0003	.0006	.0031	.0028
%RSD	59.10	.3959	9.633	.6688	9.082	.3176	64.78	2.768	.9299	.9156
#1	.0017	186.3	.0534	.3684	.0030	5.400	.0009	.0226	.3330	.3089
#2	.0035	184.9	.0440	.3710	.0036	5.368	.0003	.0235	.3286	.3116
#3	.0061	185.9	.0497	.3661	.0033	5.396	.0003	.0223	.3272	.3060

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	187.1	9.920	10.72	.3601	.0048	3.124	.1207	2.145	.0090	.0084
Stddev	.6	.123	.10	.0018	.0006	.023	.0006	.004	.0029	.0052
%RSD	.3130	1.244	.8957	.5118	11.82	.7471	.5169	.1905	32.01	62.10
#1	187.2	9.788	10.62	.3622	.0052	3.119	.1211	2.140	.0116	.0059
#2	186.5	10.03	10.75	.3594	.0041	3.104	.1200	2.147	.0097	.0050
#3	187.7	9.940	10.80	.3588	.0050	3.150	.1211	2.148	.0059	.0145

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.68	.0314	.1778	2.744	.0084	.3968	.0936
Stddev	.27	.0017	.0006	.030	.0035	.0034	.0002
%RSD	1.366	5.352	.3335	1.109	42.26	.8462	.2205
#1	19.91	.0299	.1777	2.774	.0055	.3981	.0938
#2	19.39	.0332	.1773	2.744	.0123	.3993	.0934
#3	19.76	.0310	.1784	2.713	.0073	.3929	.0937

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1370.2	3525.1	26558.	2205.5
Stddev	.7	12.1	84.	1.7
%RSD	.05360	.34445	.31584	.07788
#1	1370.4	3511.6	26469.	2206.6
#2	1369.4	3535.2	26635.	2203.5
#3	1370.9	3528.6	26569.	2206.3

Raw Data MA14941 page 70 of 78

◄ Zoom In ►
Zoom Out

Sample Name: MP33823-D2 Acquired: 6/1/2018 15:46:49 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	85.21	.0368	.3607	.0031	5.093	.0005	.0327	.1845	.5128
Stddev	.0023	.09	.0072	.0021	.0005	.030	.0004	.0010	.0026	.0007
%RSD	2365.	.1095	19.62	.5707	16.76	.5904	67.86	3.157	1.426	.1293
#1	.0027	85.28	.0373	.3631	.0028	5.063	.0003	.0328	.1831	.5132
#2	-.0015	85.10	.0293	.3595	.0029	5.093	.0010	.0336	.1875	.5132
#3	-.0009	85.25	.0437	.3594	.0037	5.123	.0004	.0316	.1828	.5120

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	98.75	11.80	9.317	.5468	.0010	1.803	.0809	3.314	.0850	-.0013
Stddev	.04	.28	.318	.0020	.0004	.032	.0007	.009	.0072	.0041
%RSD	.0421	2.403	3.410	.3590	42.54	1.762	.8269	.2817	8.456	310.8
#1	98.79	11.48	9.648	.5448	.0012	1.812	.0805	3.304	.0864	.0013
#2	98.71	11.91	9.014	.5487	.0014	1.768	.0817	3.322	.0772	-.0060
#3	98.74	12.02	9.288	.5470	.0006	1.830	.0806	3.316	.0913	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	21.19	.0257	.3519	2.552	.0047	.2252	.1891
Stddev	.33	.0013	.0021	.018	.0090	.0017	.0006
%RSD	1.557	5.009	.5828	.6914	192.3	.7608	.2948
#1	21.56	.0270	.3543	2.560	-.0057	.2270	.1893
#2	21.07	.0245	.3511	2.564	.0108	.2236	.1895
#3	20.94	.0256	.3504	2.532	.0090	.2250	.1884

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1387.2	3531.3	26511.	2185.0
Stddev	1.3	6.2	87.	6.4
%RSD	.09728	.17418	.32720	.29404
#1	1388.7	3524.3	26549.	2178.1
#2	1386.1	3533.8	26412.	2186.1
#3	1386.7	3535.8	26572.	2190.8

Raw Data MA14941 page 71 of 78

◄ Zoom In ►
Zoom Out

Sample Name: CRIA Acquired: 6/1/2018 15:51:01 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0093	.2059	.0097	.1963	.0050	.9882	.0051	.0504	.0101	.0245
Stddev	.0004	.0101	.0008	.0009	.0001	.0010	.0000	.0002	.0000	.0002
%RSD	4.406	4.902	7.814	.4793	1.527	.1014	.0847	.3228	.4718	.7558
#1	.0093	.1958	.0089	.1956	.0050	.9882	.0051	.0506	.0102	.0247
#2	.0097	.2057	.0103	.1960	.0051	.9891	.0051	.0503	.0101	.0244
#3	.0089	.2160	.0098	.1974	.0049	.9871	.0051	.0503	.0102	.0244

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3070	9.702	4.891	.0150	.0465	9.681	.0416	.0048	.0062	.0103
Stddev	.0028	.037	.044	.0000	.0002	.015	.0003	.0002	.0018	.0025
%RSD	.9124	.3855	.9067	.3114	.5172	.1522	.7960	3.563	29.63	24.41
#1	.3043	9.673	4.857	.0149	.0467	9.673	.0414	.0049	.0044	.0115
#2	.3099	9.744	4.874	.0150	.0463	9.698	.0420	.0046	.0063	.0074
#3	.3070	9.689	4.941	.0150	.0467	9.672	.0415	.0049	.0081	.0119

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0344	.0520	.0096	.0101	.0096	.0473	.0205
Stddev	.0017	.0000	.0001	.0002	.0008	.0004	.0001
%RSD	4.852	.0783	.6604	2.303	8.042	.7930	.5187
#1	.0358	.0520	.0096	.0098	.0105	.0473	.0204
#2	.0326	.0520	.0097	.0100	.0093	.0477	.0204
#3	.0347	.0519	.0096	.0103	.0090	.0470	.0206

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1369.4	3405.1	25829.	2133.7
Stddev	.2	5.4	113.	8.1
%RSD	.01252	.15737	.43687	.38177
#1	1369.5	3410.7	25791.	2142.7
#2	1369.6	3404.5	25955.	2126.8
#3	1369.2	3400.0	25739.	2131.7

Raw Data MA14941 page 72 of 78

Zoom In Zoom Out

Sample Name: ICSA Acquired: 6/1/2018 15:55:19 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	F521.4	.0032	.0005	-.0001	478.0	.0005	-.0004	.0002
Stddev	.0003	5.2	.0011	.0003	.0001	4.1	.0000	.0002	.0003
%RSD	81.61	1.003	34.02	68.65	57.30	.8671	6.827	48.13	170.4
#1	-.0003	526.7	.0041	.0008	.0000	482.3	.0005	-.0006	-.0002
#2	-.0006	516.2	.0034	.0004	-.0002	474.1	.0005	-.0003	.0003
#3	-.0001	521.4	.0020	.0002	-.0001	477.6	.0005	-.0003	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0008	191.7	.2300	F519.7	.0002	-.0005	.1641	.0004	-.0025
Stddev	.0000	1.3	.0225	2.8	.0000	.0003	.0023	.0003	.0029
%RSD	2.632	.6792	9.783	.5407	19.87	71.93	1.385	75.03	115.9
#1	-.0008	193.0	.2537	522.7	.0002	-.0006	.1660	.0003	-.0058
#2	-.0008	190.4	.2273	517.2	.0002	-.0001	.1647	.0007	-.0002
#3	-.0008	191.5	.2089	519.3	.0002	-.0007	.1616	.0001	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0042	.0178	.0016	-.0002	-.0014	.0033	-.0008	.0023
Stddev	.0018	.0008	.0010	.0007	.0001	.0001	.0024	.0002	.0001
%RSD	267.3	19.41	5.468	45.82	43.06	7.358	72.58	22.03	3.967
#1	.0009	.0049	.0169	.0010	-.0001	-.0013	.0046	-.0008	.0022
#2	-.0027	.0044	.0188	.0024	-.0003	-.0015	.0048	-.0006	.0023
#3	-.0003	.0033	.0177	.0014	-.0003	-.0014	.0005	-.0009	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1064.0	3020.9	22430.	2019.4
Stddev	.9	4.2	81.	14.1
%RSD	.08894	.13787	.36048	.69584
#1	1063.4	3016.6	22518.	2005.0
#2	1065.1	3025.0	22359.	2020.0
#3	1063.6	3021.1	22412.	2033.1

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 6/1/2018 15:59:29 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.047	F517.3	1.032	.5230	.5060	474.8	.9426	.4806	.4941
Stddev	.004	3.9	.003	.0020	.0026	3.9	.0016	.0004	.0015
%RSD	.4081	.7516	.2376	.3827	.5063	.8253	.1725	.0828	.3019
#1	1.048	519.9	1.029	.5220	.5080	477.6	.9429	.4809	.4956
#2	1.051	512.8	1.033	.5253	.5031	470.4	.9408	.4801	.4940
#3	1.043	519.1	1.033	.5216	.5068	476.6	.9440	.4808	.4926

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5378	190.5	.0368	F509.5	.5041	.8456	.1252	.9721	.9633
Stddev	.0004	1.0	.0304	2.8	.0041	.0014	.0066	.0019	.0022
%RSD	.0674	.5200	82.57	.5470	.8142	.1643	5.263	.1920	.2332
#1	.5374	191.2	.0298	512.1	.5059	.8453	.1319	.9713	.9625
#2	.5381	189.3	.0105	506.6	.5071	.8444	.1251	.9708	.9659
#3	.5379	190.9	.0701	509.8	.4994	.8471	.1187	.9743	.9617

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9567	.9328	.0363	.8957	.9506	.9400	.8973	.4870	.9451
Stddev	.0015	.0041	.0008	.0017	.0042	.0049	.0021	.0015	.0010
%RSD	.1557	.4391	2.164	.1910	.4457	.5162	.2353	.3024	.1022
#1	.9584	.9293	.0354	.8939	.9549	.9379	.8975	.4874	.9442
#2	.9557	.9318	.0365	.8962	.9465	.9455	.8993	.4882	.9450
#3	.9560	.9373	.0369	.8972	.9503	.9365	.8951	.4853	.9461

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1059.8	3030.8	22504.	2041.3
Stddev	2.1	7.5	114.	18.0
%RSD	.20178	.24703	.50587	.88234
#1	1061.3	3037.5	22432.	2024.6
#2	1057.4	3032.0	22445.	2060.3
#3	1060.7	3022.7	22636.	2038.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 16:03:25 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2534	39.76	2.041	2.064	2.017	40.09	2.039	2.042	2.018	2.025
Stddev	.0016	.16	.009	.001	.009	.19	.006	.006	.013	.009
%RSD	.6125	.4100	.4171	.0698	.4380	.4653	.2743	.2910	.6590	.4566
#1	.2537	39.90	2.036	2.065	2.025	40.23	2.033	2.037	2.025	2.031
#2	.2548	39.58	2.035	2.062	2.007	39.88	2.040	2.041	2.028	2.030
#3	.2517	39.81	2.051	2.064	2.017	40.15	2.045	2.049	2.003	2.014

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.06	40.18	40.38	2.075	2.084	40.34	2.077	2.001	2.046	2.055
Stddev	.19	.14	.35	.012	.009	.12	.005	.003	.011	.013
%RSD	.4633	.3459	.8713	.5744	.4566	.3079	.2293	.1588	.5513	.6514
#1	41.18	40.30	40.63	2.083	2.076	40.44	2.073	2.001	2.037	2.047
#2	40.84	40.03	39.97	2.081	2.081	40.20	2.075	2.004	2.042	2.048
#3	41.16	40.22	40.53	2.062	2.094	40.39	2.082	1.998	2.058	2.071

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.164	2.113	2.050	2.103	2.030	2.075	2.041
Stddev	.010	.012	.006	.012	.001	.003	.005
%RSD	.4569	.5621	.3087	.5603	.0284	.1505	.2657
#1	2.162	2.104	2.056	2.109	2.030	2.077	2.035
#2	2.156	2.108	2.044	2.111	2.030	2.077	2.042
#3	2.175	2.127	2.050	2.090	2.031	2.072	2.046

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 16:03:25 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1223.2	3295.0	24961.	2124.7
Stddev	2.3	9.9	52.	20.7
%RSD	.19169	.29909	.20764	.97324
#1	1223.9	3305.2	24985.	2105.3
#2	1220.6	3294.2	24902.	2146.5
#3	1225.2	3285.5	24998.	2122.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 16:07:21 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0043	.0002	.0005	.0004	.0125	.0002	.0000	.0002
Stddev	.0005	.0084	.0004	.0001	.0001	.0058	.0001	.0002	.0003
%RSD	140.4	195.6	225.5	21.93	36.83	46.28	34.14	5887.	122.3
#1	-.0002	.0054	.0006	.0006	.0005	.0174	.0003	.0000	.0004
#2	.0005	-.0094	.0000	.0004	.0002	.0061	.0002	.0002	.0003
#3	.0008	-.0089	-.0001	.0004	.0004	.0141	.0002	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0236	.0127	-.0060	.0002	F.0031	.0120	.0005	.0005
Stddev	.0001	.0073	.0082	.0173	.0001	.0007	.0064	.0001	.0005
%RSD	163.4	31.06	64.44	288.4	32.39	23.99	53.82	24.01	88.33
#1	-.0002	.0321	.0037	.0027	.0003	.0038	.0190	.0005	.0009
#2	-.0001	.0193	.0146	.0052	.0003	.0029	.0064	.0004	.0000
#3	.0001	.0195	.0197	-.0259	.0002	.0024	.0105	.0007	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0009	.0042	F.0013	.0004	.0014	F.0020	.0001	.0001
Stddev	.0006	.0017	.0031	.0001	.0001	.0002	.0009	.0001	.0001
%RSD	46.04	188.2	74.44	9.242	13.18	10.93	43.68	77.37	68.53
#1	.0006	-.0001	.0077	.0014	.0005	.0016	.0010	.0001	.0002
#2	.0018	-.0001	.0018	.0011	.0004	.0014	.0026	.0002	.0001
#3	.0016	.0029	.0031	.0013	.0004	.0013	.0025	.0000	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.0010			.0020		
Low Limit				-.0010			-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 16:07:21 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1415.6	3398.3	25852.	2129.4
Stddev	3.3	3.5	60.	10.5
%RSD	.23643	.10380	.23160	.49543
#1	1419.4	3394.7	25839.	2137.8
#2	1414.2	3398.2	25917.	2132.9
#3	1413.1	3401.8	25799.	2117.5

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	V	-0.009834	0.000000	No
			Fe	0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.035224	0.000000	No
As 189.042 {478}	☒	5	Fe	-0.000108	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000010	0.000000	No
Be 313.042 {108}	☒	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000108	0.000000	No
			Ca	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Ti	0.000000	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000008	0.000000	No
Cr 267.716 {126}	☒	3	Al	0.000007	0.000000	No
			Fe	-0.000017	0.000000	No
			Ca	0.000004	0.000000	No
Cu 324.754 {104}	☒	10	Fe	-0.000152	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000006	0.000000	No
			Mg	0.000005	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000016	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000026	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	☒	9	Al	0.000292	0.000000	No
			Fe	-0.000088	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000027	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000002	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	0.000019	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000033	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000059	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000003	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000018	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000016	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000016	0.000000	No
			As	0.001128	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000495	0.551079	0.000000	1.000000
Al 396.152 { 85}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.002793	0.170071	0.000000	1.000000
As 189.042 {478}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000192	0.201424	0.000000	1.000000
Ba 455.403 { 74}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.048774	10.805071	0.000000	1.000000
Be 313.042 {108}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000843	8.365310	0.000000	1.000000
Ca 317.933 {106}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.007279	0.279780	0.000000	1.000000
Cd 226.502 {449}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000050	4.652161	0.000000	1.000000
Co 228.616 {447}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000190	2.269888	0.000000	1.000000
Cr 267.716 {126}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000198	0.429711	0.000000	1.000000
Cu 324.754 {104}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.002124	0.774209	0.000000	1.000000
Fe 259.940 {130}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.001084	0.206019	0.000000	1.000000
In 230.606 {446}*	6/1/2018 9:36:18	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.009615	0.253782	0.000000	1.000000
Mg 279.079 {121}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000998	0.028814	0.000000	1.000000
Mn 257.610 {131}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000113	2.427873	0.000000	1.000000
Mo 202.030 {467}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000091	1.154200	0.000000	1.000000
Na 589.592 { 57}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.042844	0.740122	0.000000	1.000000
Ni 231.604 {445}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000066	1.300976	0.000000	1.000000
Pb 220.353 {453}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000888	1.219829	0.000000	1.000000
Sb 206.833 {463}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000017	0.241071	0.000000	1.000000
Se 196.090 {472}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000328	0.147751	0.000000	1.000000
Si 212.412 {459}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.001444	0.364617	0.000000	1.000000
Sn 189.989 {477}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000114	0.465754	0.000000	1.000000
Sr 407.771 { 83}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.002299	17.539990	0.000000	1.000000
Ti 334.941 {101}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.001472	1.910661	0.000000	1.000000
Tl 190.856 {477}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.001388	0.612297	0.000000	1.000000
V 292.402 {115}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000170	0.648932	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000330	2.875172	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999935	0.000058	0.000399	0.001329	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999892	0.004036	0.015089	0.050297	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999961	0.000143	0.000385	0.001282	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999967	0.007026	0.000327	0.001091	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999820	0.012785	0.000135	0.000451	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999753	0.010021	0.004811	0.016035	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999915	0.004907	0.000026	0.000085	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999915	0.002392	0.000057	0.000190	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999875	0.000546	0.000286	0.000953	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999957	0.000578	0.000249	0.000831	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999560	0.009850	0.003655	0.012183	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999906	0.005610	0.028227	0.094091	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999837	0.000838	0.031555	0.105182	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999906	0.002686	0.000044	0.000146	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999870	0.001500	0.000069	0.000230	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999842	0.021197	0.008931	0.029771	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999946	0.001087	0.000097	0.000322	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999966	0.000819	0.000282	0.000942	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999996	0.000058	0.000526	0.001753	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999987	0.000060	0.000810	0.002699	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.998352	0.001720	0.000246	0.000821	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999820	0.000712	0.000142	0.000473	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999692	0.035092	0.000124	0.000412	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999687	0.003850	0.000105	0.000351	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999984	0.000267	0.000363	0.001209	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999869	0.000838	0.000253	0.000842	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999917	0.002977	0.000031	0.000102	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 6/4/2018 10:02:47 Type: Cal
Method: 60102007_041712(v247) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	-.0022	-.0008	.0363	-.0001	.0078	-.0002	.0004	.0001
Stddev	.0000	.0022	.0001	.0009	.0003	.0004	.0003	.0004	.0001
%RSD	36.53	99.25	9.384	2.457	246.5	4.973	135.9	102.3	80.58
#1	.0001	-.0046	-.0007	.0353	-.0005	.0082	.0001	.0007	.0001
#2	.0001	-.0011	-.0008	.0367	.0002	.0074	-.0003	-.0001	.0000
#3	.0001	-.0008	-.0009	.0369	-.0001	.0078	-.0005	.0005	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0033	.0014	.0141	-.0001	.0001	.0013	-.0128	.0001	.0015
Stddev	.0002	.0004	.0026	.0006	.0001	.0001	.0036	.0004	.0012
%RSD	5.826	24.64	18.52	625.6	69.81	6.905	28.23	810.0	76.54
#1	.0035	.0018	.0141	-.0004	.0001	.0014	-.0098	.0004	.0020
#2	.0034	.0013	.0114	-.0005	.0000	.0012	-.0168	.0001	.0002
#3	.0031	.0012	.0167	.0006	.0002	.0012	-.0118	-.0004	.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0003	-.0002	.0043	.0006	.0010	.0017	-.0033	-.0003	.0009
Stddev	.0001	.0003	.0001	.0001	.0014	.0001	.0004	.0001	.0002
%RSD	15.41	140.1	2.011	15.63	136.3	8.662	12.77	20.59	20.65
#1	.0003	-.0002	.0043	.0005	.0026	.0015	-.0035	-.0004	.0010
#2	.0003	-.0005	.0042	.0006	-.0001	.0017	-.0028	-.0003	.0010
#3	.0004	.0001	.0043	.0007	.0006	.0018	-.0035	-.0002	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1288.7	3023.3	25273.	2292.2
Stddev	2.4	3.0	214.	6.2
%RSD	.18645	.09891	.84760	.26991
#1	1290.4	3021.5	25028.	2286.4
#2	1285.9	3026.8	25425.	2298.7
#3	1289.7	3021.7	25366.	2291.4

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 6/4/2018 10:06:46 Type: Cal
Method: 60102007_041712(v247) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0335	1.687	.1097	5.873	4.400	2.748	2.470	1.262	.2022	.4081
Stddev	.0001	.005	.0004	.009	.013	.004	.004	.002	.0010	.0016
%RSD	.4037	.2995	.3496	.1606	.2917	.1462	.1638	.1883	.4984	.3824
#1	.0334	1.689	.1098	5.864	4.406	2.753	2.473	1.263	.2034	.4072
#2	.0335	1.681	.1093	5.883	4.385	2.748	2.466	1.259	.2018	.4072
#3	.0337	1.691	.1101	5.872	4.408	2.745	2.472	1.263	.2015	.4099

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.149	2.531	.2853	1.209	.6197	7.298	.7482	.5780	.1355	.0800
Stddev	.004	.010	.0013	.000	.0004	.033	.0019	.0003	.0008	.0006
%RSD	.2089	.3848	.4561	.0296	.0649	.4556	.2565	.0602	.5985	.7198
#1	2.150	2.542	.2861	1.210	.6193	7.333	.7504	.5781	.1362	.0802
#2	2.144	2.525	.2838	1.209	.6197	7.292	.7474	.5783	.1356	.0805
#3	2.153	2.525	.2859	1.209	.6201	7.268	.7468	.5776	.1346	.0794

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2444	.2572	8.805	.9463	.2903	.3251	1.470
Stddev	.0005	.0002	.015	.0028	.0031	.0007	.002
%RSD	.1846	.0747	.1699	.2965	1.072	.2195	.1274
#1	.2449	.2570	8.820	.9445	.2894	.3259	1.467
#2	.2442	.2574	8.790	.9449	.2876	.3251	1.471
#3	.2440	.2573	8.805	.9495	.2937	.3244	1.471

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1179.1	2925.2	24395.	2236.2
Stddev	2.9	5.0	147.	4.3
%RSD	.24744	.16954	.60196	.19071
#1	1181.9	2930.9	24230.	2239.8
#2	1179.4	2922.3	24447.	2237.3
#3	1176.1	2922.3	24509.	2231.5

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 6/4/2018 10:10:22 Type: Cal
Method: 60102007_041712(v247) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1252	6.454	.4409	22.93	17.00	10.35	9.537	4.840	.7732	1.582
Stddev	.0002	.026	.0005	.12	.05	.04	.024	.010	.0038	.001
%RSD	.1849	.4086	.1188	.5443	.2796	.3740	.2521	.2131	.4967	.0586
#1	.1254	6.427	.4403	22.79	16.95	10.31	9.512	4.829	.7733	1.581
#2	.1250	6.456	.4414	22.96	17.04	10.39	9.539	4.845	.7694	1.582
#3	.1251	6.479	.4410	23.04	17.01	10.36	9.560	4.848	.7771	1.583

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.925	9.674	1.091	4.666	2.526	27.82	2.872	2.322	.5354	.3203
Stddev	.039	.026	.005	.027	.007	.13	.007	.002	.0002	.0012
%RSD	.4968	.2647	.4629	.5795	.2846	.4781	.2595	.0828	.0392	.3676
#1	7.883	9.648	1.086	4.660	2.519	27.66	2.865	2.322	.5352	.3191
#2	7.960	9.699	1.096	4.643	2.527	27.89	2.873	2.324	.5355	.3203
#3	7.932	9.676	1.090	4.696	2.533	27.90	2.880	2.320	.5356	.3214

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.8637	1.040	35.46	3.816	1.153	1.317	5.665
Stddev	.0011	.005	.17	.017	.003	.001	.018
%RSD	.1289	.4457	.4699	.4377	.2863	.0393	.3125
#1	.8624	1.035	35.27	3.810	1.156	1.317	5.646
#2	.8646	1.040	35.58	3.804	1.152	1.317	5.668
#3	.8640	1.044	35.54	3.835	1.150	1.318	5.681

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1081.8	2838.3	23909.	2258.4
Stddev	.7	9.6	127.	7.6
%RSD	.06776	.33809	.53245	.33771
#1	1082.3	2848.9	23856.	2266.6
#2	1082.1	2836.0	24054.	2251.6
#3	1080.9	2830.1	23816.	2257.0

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 6/4/2018 10:14:53 Type: Cal
Method: 60102007_041712(v247) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2489	12.54	.8694	44.70	32.57	19.82	18.37	9.334	1.493	3.066
Stddev	.0019	.02	.0028	.14	.07	.03	.01	.002	.009	.011
%RSD	.7588	.1538	.3260	.3036	.2064	.1692	.0548	.0171	.5891	.3436
#1	.2510	12.55	.8720	44.56	32.56	19.83	18.37	9.336	1.502	3.078
#2	.2483	12.56	.8699	44.71	32.64	19.86	18.39	9.333	1.485	3.061
#3	.2474	12.52	.8664	44.83	32.51	19.79	18.37	9.333	1.490	3.058

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	14.98	18.74	2.106	8.942	4.839	53.70	5.510	4.598	1.056	.6250
Stddev	.03	.02	.006	.103	.004	.06	.004	.004	.001	.0012
%RSD	.1913	.0831	.2823	1.149	.0740	.1206	.0678	.0909	.1236	.1862
#1	14.95	18.74	2.105	9.059	4.841	53.63	5.513	4.601	1.057	.6262
#2	15.00	18.76	2.112	8.897	4.835	53.76	5.511	4.598	1.055	.6239
#3	14.98	18.73	2.101	8.869	4.841	53.72	5.506	4.593	1.057	.6251

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.586	1.954	67.65	7.253	2.254	2.518	10.90
Stddev	.001	.003	.08	.067	.002	.007	.00
%RSD	.0517	.1349	.1124	.9197	.0894	.2824	.0447
#1	1.586	1.956	67.61	7.329	2.256	2.526	10.90
#2	1.585	1.955	67.73	7.221	2.254	2.513	10.90
#3	1.586	1.951	67.60	7.207	2.252	2.515	10.89

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1035.2	2811.9	23737.	2302.0
Stddev	1.0	1.2	154.	9.1
%RSD	.10068	.04260	.64941	.39729
#1	1034.2	2810.7	23561.	2310.9
#2	1036.3	2813.1	23849.	2302.5
#3	1035.2	2811.7	23801.	2292.6

Zoom In Zoom Out

Sample Name: HSTD Acquired: 6/4/2018 10:18:50 Type: QC
Method: 60102007_041712(v247) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4974	79.22	3.949	3.960	3.936	78.71	3.926	3.918	3.961	3.963
Stddev	.0005	.06	.007	.004	.005	.02	.004	.003	.004	.007
%RSD	.1085	.0724	.1818	.1014	.1372	.0306	.0995	.0649	.1019	.1751
#1	.4980	79.28	3.950	3.965	3.941	78.71	3.929	3.921	3.956	3.971
#2	.4969	79.17	3.955	3.958	3.935	78.74	3.922	3.916	3.963	3.959
#3	.4974	79.22	3.941	3.958	3.931	78.69	3.926	3.918	3.964	3.959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.90	78.83	78.65	3.926	3.935	78.83	3.895	3.994	3.950	3.940
Stddev	.08	.09	.38	.016	.008	.09	.005	.005	.012	.014
%RSD	.1019	.1192	.4799	.3937	.2135	.1109	.1390	.1300	.2979	.3492
#1	77.81	78.94	78.40	3.927	3.943	78.89	3.901	3.999	3.962	3.950
#2	77.97	78.80	79.08	3.940	3.934	78.73	3.891	3.992	3.949	3.946
#3	77.93	78.76	78.47	3.910	3.926	78.86	3.893	3.989	3.938	3.925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.815	3.870	3.948	3.937	3.962	3.933	3.915
Stddev	.008	.004	.010	.012	.006	.007	.006
%RSD	.2155	.1056	.2522	.3033	.1429	.1870	.1574
#1	3.821	3.874	3.959	3.941	3.968	3.925	3.920
#2	3.819	3.866	3.943	3.946	3.961	3.940	3.908
#3	3.806	3.870	3.941	3.923	3.957	3.934	3.917
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 6/4/2018 10:18:50 Type: QC
Method: 60102007_041712(v247) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1033.0	2817.1	23702.	2300.5
Stddev	1.4	3.0	92.	21.9
%RSD	.13841	.10819	.39016	.94993
#1	1033.2	2816.1	23747.	2323.7
#2	1034.3	2820.5	23595.	2280.3
#3	1031.5	2814.6	23763.	2297.5

Zoom In Zoom Out

Sample Name: ICV Acquired: 6/4/2018 10:24:05 Type: QC
Method: 60102007_041712(v247) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2331	41.90	1.920	1.979	2.037	41.04	1.967	1.985	2.007	1.996
Stddev	.0021	.12	.001	.009	.004	.08	.003	.002	.008	.009
%RSD	.8892	.2939	.0644	.4617	.1881	.2023	.1598	.1204	.3948	.4656
#1	.2339	42.04	1.918	1.989	2.041	41.13	1.966	1.984	1.999	2.003
#2	.2347	41.80	1.920	1.977	2.034	40.97	1.965	1.983	2.015	1.999
#3	.2308	41.85	1.921	1.971	2.036	41.03	1.971	1.988	2.006	1.985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.85	40.07	40.78	1.963	1.852	40.03	1.965	1.951	1.942	1.934
Stddev	.14	.10	.14	.011	.004	.10	.000	.003	.004	.002
%RSD	.3633	.2584	.3438	.5622	.1993	.2529	.0153	.1721	.1915	.1260
#1	40.00	40.18	40.84	1.960	1.850	40.10	1.965	1.947	1.938	1.933
#2	39.71	39.98	40.61	1.976	1.849	39.91	1.965	1.952	1.942	1.932
#3	39.84	40.05	40.87	1.954	1.856	40.08	1.964	1.954	1.945	1.937
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0541	1.959	1.968	1.986	2.014	1.902	1.967
Stddev	.0008	.006	.004	.011	.005	.001	.002
%RSD	1.481	.2850	.1921	.5638	.2706	.0622	.1157
#1	.0550	1.963	1.972	1.984	2.009	1.901	1.967
#2	.0539	1.961	1.965	1.998	2.015	1.903	1.964
#3	.0534	1.953	1.966	1.975	2.019	1.901	1.969
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 6/4/2018 10:24:05 Type: QC
Method: 60102007_041712(v247) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1101.1	2907.1	23981.	2254.5
Stddev	1.3	2.2	73.	11.0
%RSD	.11665	.07455	.30261	.48970
#1	1102.6	2905.8	24064.	2247.1
#2	1100.2	2909.6	23938.	2267.2
#3	1100.5	2906.0	23939.	2249.2

Zoom In Zoom Out

Sample Name: ICB Acquired: 6/4/2018 10:34:33 Type: QC
Method: 60102007_041712(v247) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0113	.0006	-.0001	.0000	-.0056	.0000	-.0001
Stddev	.0001	.0150	.0009	.0003	.000	.0012	.000	.0001
%RSD	125.0	132.9	157.7	281.4	142.9	20.51	70.35	93.39
#1	-.0001	.0038	-.0004	-.0002	-.0001	-.0070	.0000	.0000
#2	-.0003	-.0262	.0014	.0002	-.0001	-.0050	.0000	-.0002
#3	.0000	-.0116	.0008	-.0003	.0000	-.0050	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0002	-.0047	-.0693	-.0039	.0000	.0001	.0044
Stddev	.0005	.0003	.0026	.0400	.0264	.000	.0001	.0018
%RSD	674.0	125.1	55.45	57.66	684.7	202.1	211.4	41.42
#1	-.0005	-.0001	-.0033	-.0309	-.0187	-.0001	.0002	.0033
#2	.0003	.0004	-.0031	-.0663	.0266	.0000	.0000	.0034
#3	.0005	.0003	-.0077	-.1107	-.0195	.0000	.0000	.0065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0003	.0004	F-.0029	.0005	.0000	.0000	.0001
Stddev	.0001	.0002	.0002	.0011	.0001	.000	.000	.0001
%RSD	105.5	87.87	51.08	37.00	19.20	2588.	406.1	83.40
#1	.0000	.0000	.0002	-.0017	.0004	-.0001	.0000	.0000
#2	.0002	.0004	.0005	-.0034	.0006	.0002	-.0001	.0001
#3	.0001	.0004	.0005	-.0037	.0006	-.0001	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit				.0020				
Low Limit				-.0020				

Zoom In Zoom Out

Sample Name: ICB Acquired: 6/4/2018 10:34:33 Type: QC
Method: 60102007_041712(v247) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0006	.0002	.0000
Stddev	.0001	.0003	.000
%RSD	16.93	146.9	234.7
#1	.0006	.0001	.0000
#2	.0007	.0005	.0000
#3	.0006	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1281.1	3047.3	25067.	2274.8
Stddev	3.2	7.5	157.	19.7
%RSD	.24614	.24728	.62721	.86470
#1	1282.5	3046.1	25244.	2258.9
#2	1283.4	3040.4	24944.	2296.8
#3	1277.5	3055.3	25013.	2268.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 6/4/2018 10:38:37 Type: QC
Method: 60102007_041712(v247) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0094	.2170	.0102	.2018	.0053	1.067	.0050	.0502	.0107	.0253
Stddev	.0002	.0032	.0014	.0024	.0001	.019	.0000	.0000	.0001	.0003
%RSD	2.375	1.497	13.80	1.195	1.738	1.822	.7311	.0877	.8034	1.012
#1	.0096	.2193	.0112	.2045	.0054	1.090	.0050	.0502	.0107	.0256
#2	.0095	.2133	.0108	.2007	.0052	1.057	.0050	.0501	.0106	.0251
#3	.0092	.2186	.0086	.2001	.0053	1.054	.0050	.0502	.0108	.0253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3161	10.30	5.150	.0152	.0461	10.39	.0404	.0056	.0056	.0102
Stddev	.0031	.11	.095	.0002	.0002	.11	.0002	.0010	.0005	.0007
%RSD	.9908	1.107	1.836	1.619	.4821	1.031	.5932	17.90	9.034	6.461
#1	.3191	10.43	5.258	.0154	.0462	10.52	.0406	.0060	.0061	.0109
#2	.3163	10.27	5.087	.0149	.0463	10.33	.0403	.0045	.0052	.0101
#3	.3129	10.21	5.103	.0152	.0458	10.33	.0401	.0064	.0053	.0096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0372	.0496	.0102	.0099	.0103	.0480	.0207
Stddev	.0004	.0002	.0001	.0001	.0003	.0007	.0000
%RSD	1.164	.3138	.9926	1.425	3.320	1.439	.1015
#1	.0367	.0496	.0103	.0100	.0100	.0487	.0206
#2	.0375	.0494	.0102	.0097	.0102	.0474	.0207
#3	.0374	.0497	.0101	.0099	.0106	.0477	.0207
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 6/4/2018 10:38:37 Type: QC
Method: 60102007_041712(v247) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1241.0	3033.9	24690.	2227.4
Stddev	.8	2.5	140.	31.4
%RSD	.06429	.08274	.56753	1.4082
#1	1241.9	3036.1	24555.	2193.8
#2	1240.6	3034.4	24679.	2256.0
#3	1240.4	3031.1	24835.	2232.3

Zoom In Zoom Out

Sample Name: ICSA Acquired: 6/4/2018 10:46:52 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	540.9	.0000	.0006	.0000	491.0	.0001	-.0004	-.0003	.0000
Stddev	.0005	1.3	.0014	.0001	.000	1.3	.0001	.0001	.0002	.0003
%RSD	56.62	.2316	4106.	23.63	90.80	.2651	209.2	33.83	51.12	6270.
#1	-.0005	541.3	-.0014	.0007	-.0001	492.3	.0000	-.0003	-.0001	.0003
#2	-.0016	541.9	.0015	.0006	.0000	490.8	.0000	-.0005	-.0004	-.0003
#3	-.0009	539.5	.0000	.0004	-.0001	489.7	.0002	-.0003	-.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	193.6	.0256	527.4	.0003	-.0001	.1399	.0000	-.0003	.0000	.0000
Stddev	.4	.0168	3.0	.0001	.0001	.0071	.0003	.0017	.0028	.0026
%RSD	.1827	65.72	.5696	21.52	112.5	5.090	1253.	583.4	19060.	8076.
#1	194.0	.0077	530.7	.0003	.0000	.1317	.0001	.0003	.0025	.0031
#2	193.5	.0279	524.8	.0003	-.0001	.1435	.0002	-.0022	.0005	-.0013
#3	193.4	.0411	526.7	.0002	.0000	.1445	-.0003	.0010	-.0030	-.0017
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0151	.0003	-.0007	-.0017	.0010	-.0002	.0011
Stddev	.0017	.0004	.0001	.0002	.0015	.0004	.0003
%RSD	11.28	125.0	9.416	10.96	160.7	170.4	26.25
#1	.0132	.0001	-.0007	-.0015	.0027	-.0007	.0010
#2	.0160	.0001	-.0007	-.0018	-.0001	.0001	.0009
#3	.0163	.0007	-.0006	-.0017	.0002	-.0001	.0014
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Raw Data MA14948 page 13 of 100

Zoom In Zoom Out

Sample Name: ICSA Acquired: 6/4/2018 10:46:52 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	954.59	2657.5	21365.	2194.1
Stddev	.96	4.5	69.	24.5
%RSD	.10051	.17100	.32268	1.1158
#1	955.58	2662.3	21411.	2166.5
#2	953.67	2657.0	21398.	2213.2
#3	954.51	2653.2	21286.	2202.5

Raw Data MA14948 page 14 of 100

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 6/4/2018 10:55:47 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.059	529.6	1.026	.5191	.5123	481.3	.9426	.4791	.5021	.5504
Stddev	.005	2.7	.006	.0037	.0022	1.9	.0015	.0003	.0032	.0019
%RSD	.5195	.5082	.6001	.7164	.4276	.3945	.1573	.0682	.6414	.3396
#1	1.065	531.7	1.024	.5215	.5146	482.7	.9435	.4794	.5002	.5506
#2	1.059	526.5	1.021	.5148	.5103	479.2	.9409	.4787	.5002	.5521
#3	1.054	530.5	1.033	.5209	.5118	482.1	.9434	.4792	.5058	.5484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	190.7	-.0666	516.0	.5051	.8422	.1195	.9556	.9701	.9589	.9164
Stddev	.7	.0268	1.0	.0035	.0022	.0040	.0010	.0029	.0034	.0008
%RSD	.3527	40.22	.1895	.6896	.2562	3.379	.1017	.2977	.3596	.0826
#1	191.2	-.0789	516.6	.5083	.8425	.1206	.9545	.9701	.9607	.9160
#2	190.0	-.0850	514.9	.5014	.8398	.1150	.9564	.9730	.9549	.9172
#3	191.0	-.0359	516.5	.5055	.8441	.1228	.9557	.9672	.9611	.9159
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0328	.8855	.9617	.9534	.8985	.4876	.9402
Stddev	.0009	.0018	.0040	.0041	.0044	.0010	.0011
%RSD	2.613	.2030	.4115	.4347	.4910	.1955	.1127
#1	.0335	.8851	.9655	.9572	.8949	.4876	.9412
#2	.0319	.8875	.9576	.9490	.9034	.4866	.9404
#3	.0330	.8840	.9621	.9539	.8971	.4885	.9391
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Raw Data MA14948 page 15 of 100

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 6/4/2018 10:55:47 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	948.73	2649.4	21630.	2206.8
Stddev	2.20	1.4	130.	6.3
%RSD	.23225	.05131	.59893	.28663
#1	948.90	2647.9	21604.	2209.8
#2	946.45	2650.1	21770.	2199.5
#3	950.85	2650.3	21515.	2211.1

Raw Data MA14948 page 16 of 100

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 11:05:43 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2481	39.74	1.957	2.005	2.004	40.11	1.990	1.987	2.019	2.002
Stddev	.0017	.25	.003	.009	.008	.19	.002	.001	.017	.012
%RSD	.7048	.6229	.1642	.4744	.4037	.4747	.0988	.0490	.8151	.6092
#1	.2496	39.46	1.955	1.994	1.995	39.89	1.989	1.988	2.031	2.015
#2	.2486	39.89	1.954	2.010	2.004	40.21	1.993	1.987	2.026	2.001
#3	.2462	39.88	1.960	2.010	2.011	40.23	1.990	1.986	2.000	1.990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.43	40.14	39.76	2.043	2.012	40.10	1.994	1.967	1.969	1.974
Stddev	.09	.19	.15	.020	.002	.25	.001	.003	.004	.005
%RSD	.2271	.4688	.3880	.9929	.0992	.6280	.0276	.1705	.2164	.2537
#1	40.34	39.94	39.59	2.057	2.010	39.82	1.994	1.971	1.970	1.978
#2	40.43	40.17	39.88	2.053	2.013	40.16	1.995	1.964	1.972	1.969
#3	40.52	40.31	39.81	2.020	2.012	40.31	1.994	1.967	1.964	1.976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.028	2.013	2.023	2.059	1.989	2.023	1.988
Stddev	.002	.001	.010	.017	.008	.007	.001
%RSD	.0752	.0715	.4761	.8321	.4124	.3453	.0332
#1	2.027	2.013	2.013	2.072	1.997	2.030	1.989
#2	2.030	2.014	2.025	2.066	1.981	2.024	1.988
#3	2.028	2.011	2.032	2.040	1.989	2.016	1.987
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 11:05:43 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1099.9	2897.4	24056.	2295.5
Stddev	1.4	5.0	161.	9.6
%RSD	.12334	.17192	.66848	.41764
#1	1098.3	2901.7	23979.	2305.5
#2	1100.5	2891.9	23948.	2294.7
#3	1100.8	2898.7	24241.	2286.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 11:16:40 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0033	.0010	.0004	.0001	.0015	.0001	.0002	.0003	.0002
Stddev	.0005	.0064	.0002	.0001	.0000	.0017	.0000	.0002	.0006	.0001
%RSD	162.6	191.6	22.67	19.99	39.01	112.0	34.25	104.9	209.6	49.89
#1	-.0003	-.0095	.0009	.0003	.0001	.0033	.0001	.0001	.0000	.0002
#2	.0002	-.0038	.0013	.0005	.0001	.0014	.0001	.0001	-.0001	.0003
#3	-.0008	.0033	.0008	.0005	.0000	-.0001	.0001	.0004	.0010	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0015	-.0844	-.0173	.0002	-.0001	.0119	.0003	.0001	-.0004	-.0004
Stddev	.0026	.0327	.0135	.0001	.0001	.0072	.0002	.0005	.0012	.0003
%RSD	175.4	38.77	78.07	31.27	140.9	60.31	92.40	530.7	342.6	76.08
#1	.0003	-.0466	-.0180	.0002	.0000	.0196	.0003	.0000	.0006	-.0004
#2	-.0003	-.1022	-.0034	.0002	-.0001	.0054	.0004	-.0003	.0001	-.0007
#3	-.0045	-.1043	-.0304	.0001	-.0002	.0108	.0000	.0006	-.0018	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0002	.0000	.0000	.0000	.0001	.0001
Stddev	.0003	.0002	.0000	.0001	.0007	.0002	.0001
%RSD	103.7	98.08	111.2	1204.	7407.	412.1	119.9
#1	-.0001	.0002	.0001	.0000	.0004	-.0001	.0000
#2	.0005	.0000	.0000	-.0001	.0004	.0003	.0001
#3	.0004	.0004	.0000	.0001	-.0008	-.0001	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 11:16:40 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1258.8	2973.6	24733.	2265.3
Stddev	2.5	9.8	68.	16.8
%RSD	.19506	.32854	.27456	.74255
#1	1257.1	2963.1	24716.	2278.9
#2	1257.8	2975.4	24808.	2270.4
#3	1261.7	2982.3	24676.	2246.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 12:44:25 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2540	42.24	1.963	2.038	2.096	42.49	2.040	2.033	2.140	2.077
Stddev	.0005	.44	.003	.010	.017	.41	.002	.002	.011	.001
%RSD	.2058	1.031	.1261	.4931	.7952	.9582	.1009	.0814	.5105	.0601
#1	.2544	41.96	1.965	2.042	2.085	42.20	2.040	2.032	2.135	2.076
#2	.2542	42.74	1.960	2.046	2.116	42.95	2.042	2.035	2.153	2.078
#3	.2534	42.02	1.962	2.027	2.089	42.31	2.038	2.033	2.132	2.077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.18	41.17	40.90	2.102	2.043	39.47	1.990	2.040	1.986	1.982
Stddev	.32	.25	.29	.008	.002	.43	.002	.007	.004	.006
%RSD	.7534	.5978	.7082	.3773	.0966	1.082	.0946	.3643	.1872	.2918
#1	41.99	40.94	40.70	2.099	2.040	39.10	1.990	2.032	1.982	1.975
#2	42.55	41.43	41.23	2.111	2.044	39.94	1.992	2.047	1.989	1.983
#3	42.01	41.14	40.76	2.096	2.043	39.37	1.988	2.040	1.988	1.986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.047	1.986	2.116	2.141	2.054	2.068	2.023
Stddev	.002	.000	.014	.004	.010	.005	.003
%RSD	.0823	.0137	.6556	.1676	.4704	.2539	.1472
#1	2.048	1.986	2.108	2.137	2.043	2.071	2.024
#2	2.046	1.986	2.132	2.144	2.061	2.071	2.025
#3	2.049	1.986	2.109	2.141	2.057	2.062	2.020
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 12:44:25 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1078.3	2887.7	23313.	2248.5
Stddev	2.2	5.8	35.	14.0
%RSD	.20580	.20243	.15173	.62088
#1	1078.3	2881.4	23310.	2262.0
#2	1076.0	2888.9	23279.	2234.1
#3	1080.5	2892.9	23349.	2249.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 12:48:22 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0043	.0008	.0003	.0003	.0069	.0002	.0001	.0004
Stddev	.0003	.0201	.0006	.0003	.0001	.0033	.0000	.0001	.0005
%RSD	351.3	464.4	77.58	94.73	17.17	46.97	22.87	84.25	147.6
#1	-.0003	-.0174	.0012	.0007	.0003	.0106	.0002	.0002	-.0002
#2	.0003	.0083	.0001	.0001	.0003	.0059	.0002	.0002	.0007
#3	.0002	.0222	.0012	.0002	.0004	.0043	.0002	.0000	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0171	-.0278	-.0110	.0002	F.0022	.0881	.0000	.0005
Stddev	.0003	.0060	.0179	.0286	.0000	.0008	.0043	.0002	.0002
%RSD	144.3	35.22	64.28	260.1	9.460	35.72	4.859	967.0	49.89
#1	.0006	.0240	-.0162	-.0317	.0002	.0029	.0928	.0001	.0006
#2	.0000	.0133	-.0484	-.0229	.0003	.0022	.0844	-.0002	.0002
#3	.0001	.0139	-.0189	.0216	.0002	.0014	.0871	.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	-.0012	.0032	.0004	.0003	.0014	.0006	.0004	.0001
Stddev	.0007	.0012	.0010	.0003	.0002	.0002	.0013	.0002	.0001
%RSD	50.98	95.65	30.97	75.97	60.55	12.32	205.7	49.95	55.30
#1	.0014	-.0007	.0042	.0007	.0004	.0015	.0012	.0005	.0001
#2	.0007	-.0026	.0022	.0001	.0002	.0016	.0016	.0002	.0002
#3	.0022	-.0004	.0034	.0004	.0002	.0012	-.0009	.0005	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 12:48:22 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1237.6	2968.7	24202.	2239.3
Stddev	1.0	1.4	73.	14.4
%RSD	.07822	.04564	.30083	.64115
#1	1236.5	2970.3	24119.	2223.6
#2	1238.4	2968.0	24229.	2251.8
#3	1237.9	2967.9	24257.	2242.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 13:21:34 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2409	40.07	1.953	1.976	2.018	40.32	1.993	1.988	2.011	1.979
Stddev	.0002	.24	.003	.010	.007	.17	.004	.002	.005	.006
%RSD	.0754	.5936	.1427	.4960	.3601	.4164	.2041	.0839	.2638	.2845
#1	.2407	40.32	1.955	1.987	2.026	40.50	1.994	1.988	2.007	1.972
#2	.2410	40.03	1.954	1.968	2.014	40.30	1.989	1.986	2.017	1.983
#3	.2408	39.85	1.950	1.974	2.014	40.17	1.997	1.989	2.010	1.981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.31	39.93	39.79	1.986	1.999	40.26	1.975	1.968	1.952	1.959
Stddev	.34	.15	.33	.006	.002	.25	.002	.009	.004	.008
%RSD	.8412	.3653	.8376	.3045	.1130	.6304	.0764	.4554	.2178	.4036
#1	40.71	40.10	40.15	1.980	2.000	40.53	1.976	1.960	1.953	1.952
#2	40.15	39.88	39.74	1.992	1.997	40.23	1.975	1.965	1.956	1.967
#3	40.09	39.82	39.49	1.986	2.001	40.02	1.973	1.978	1.948	1.958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.016	2.004	2.027	2.012	1.978	2.007	1.991
Stddev	.002	.002	.010	.007	.007	.002	.004
%RSD	.0989	.0971	.5040	.3405	.3778	.1136	.2128
#1	2.019	2.006	2.039	2.005	1.971	2.005	1.992
#2	2.015	2.002	2.022	2.019	1.978	2.007	1.986
#3	2.016	2.004	2.021	2.012	1.986	2.009	1.994
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 13:21:34 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1078.3	2892.0	23161.	2255.1
Stddev	3.8	3.9	9.	10.9
%RSD	.35588	.13408	.03870	.48196
#1	1080.9	2890.2	23171.	2242.5
#2	1080.1	2896.5	23155.	2261.3
#3	1073.9	2889.4	23156.	2261.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 13:29:16 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0056	.0004	.0001	.0001	.0032	.0002	.0002	.0001
Stddev	.0003	.0061	.0003	.0001	.0000	.0033	.0000	.0001	.0002
%RSD	210.8	109.6	81.18	127.0	60.89	103.4	22.95	41.86	349.3
#1	-.0001	-.0091	.0001	.0000	.0001	.0019	.0002	.0001	-.0001
#2	.0005	.0015	.0004	.0001	.0001	.0007	.0002	.0002	-.0001
#3	.0000	-.0090	.0008	.0002	.0000	.0070	.0003	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0124	-.0230	.0225	.0001	F.0013	-.0331	.0004	-.0003
Stddev	.0003	.0008	.0051	.0042	.0000	.0002	.0049	.0001	.0003
%RSD	127.8	6.521	22.26	18.84	8.412	13.31	14.75	30.75	103.3
#1	.0002	.0120	-.0196	.0262	.0001	.0014	-.0367	.0005	-.0001
#2	.0000	.0119	-.0289	.0179	.0001	.0011	-.0350	.0003	-.0002
#3	.0005	.0134	-.0206	.0234	.0001	.0015	-.0275	.0005	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0012	-.0008	.0006	.0001	.0009	.0006	-.0001	.0001
Stddev	.0012	.0015	.0007	.0001	.0001	.0001	.0014	.0002	.0002
%RSD	802.4	121.2	86.16	12.25	138.3	16.38	229.1	152.6	131.4
#1	.0003	.0005	-.0011	.0005	.0002	.0008	.0013	-.0004	.0001
#2	.0008	-.0023	.0000	.0006	.0001	.0010	-.0010	.0000	.0000
#3	-.0016	-.0018	-.0012	.0006	.0000	.0008	.0016	-.0001	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 13:29:16 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1239.5	2956.9	24111.	2229.3
Stddev	2.8	4.4	99.	20.9
%RSD	.22686	.14876	.41230	.93951
#1	1236.4	2955.5	24047.	2221.7
#2	1240.2	2953.3	24225.	2213.2
#3	1241.9	2961.8	24060.	2253.0

Zoom In Zoom Out

Sample Name: MP33833-MB1 Acquired: 6/4/2018 13:36:07 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0066	.0002	-.0003	-.0001	.0107	.0000	.0000	.0002	.0002
Stddev	.0001	.0068	.0012	.0002	.0002	.0032	.000	.0001	.0002	.0002
%RSD	39.79	103.2	788.0	47.15	165.5	29.48	226.7	1111.	92.46	96.02
#1	.0001	.0057	.0013	-.0002	.0001	.0079	.0000	.0000	.0000	.0004
#2	.0002	.0138	.0003	-.0004	-.0001	.0101	.0000	-.0001	.0003	.0001
#3	.0001	.0003	-.0011	-.0005	-.0003	.0142	-.0001	.0001	.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	-.0263	.0180	.0000	.0004	-.0326	.0002	.0002	.0003	.0007
Stddev	.0012	.0277	.0347	.0001	.0002	.0010	.0001	.0007	.0006	.0011
%RSD	28.22	105.5	193.4	221.0	45.46	2.952	45.14	385.5	185.6	160.3
#1	.0030	-.0117	.0147	.0001	.0005	-.0323	.0002	.0006	.0008	-.0005
#2	.0041	-.0089	-.0151	.0000	.0002	-.0337	.0003	-.0006	.0006	.0017
#3	.0054	-.0583	.0542	.0000	.0005	-.0319	.0001	.0006	-.0004	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0251	.0001	-.0001	.0002	-.0006	.0000	.0013
Stddev	.0006	.0001	.0001	.0001	.0011	.000	.0001
%RSD	2.264	121.2	138.2	20.63	176.7	404.3	5.453
#1	.0249	.0002	.0000	.0002	.0006	-.0001	.0014
#2	.0246	.0001	-.0001	.0003	-.0015	-.0001	.0012
#3	.0257	.0000	-.0001	.0003	-.0009	.0001	.0012
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33833-MB1 Acquired: 6/4/2018 13:36:07 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1247.4	2990.0	24453.	2280.6
Stddev	2.5	12.0	16.	10.9
%RSD	.20115	.40270	.06617	.47779
#1	1244.7	2976.1	24454.	2285.1
#2	1249.6	2997.0	24469.	2268.1
#3	1248.0	2996.9	24437.	2288.4

Zoom In Zoom Out

Sample Name: MP33833-B1 Acquired: 6/4/2018 13:40:25 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0494	26.98	1.910	1.979	.0511	25.47	.0493	.4977	.2033	.2512
Stddev	.0009	.03	.006	.002	.0001	.02	.0001	.0001	.0014	.0007
%RSD	1.816	.1024	.3130	.0791	.2769	.0885	.2605	.0175	.6979	.2904
#1	.0497	26.99	1.912	1.981	.0511	25.48	.0492	.4977	.2044	.2520
#2	.0484	26.95	1.915	1.979	.0512	25.44	.0494	.4978	.2017	.2510
#3	.0501	27.01	1.903	1.978	.0509	25.48	.0494	.4976	.2038	.2506
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.16	24.95	25.03	.4920	.4722	25.42	.5056	.4781	.4851	1.887
Stddev	.08	.06	.00	.0051	.0010	.01	.0007	.0017	.0029	.003
%RSD	.3104	.2429	.0124	1.043	.2018	.0438	.1362	.3638	.6043	.1420
#1	26.25	25.00	25.02	.4950	.4714	25.43	.5055	.4780	.4823	1.884
#2	26.11	24.89	25.03	.4861	.4718	25.43	.5064	.4765	.4848	1.889
#3	26.11	24.98	25.02	.4949	.4733	25.41	.5051	.4799	.4882	1.887
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4207	.4869	.4994	.4937	1.886	.4773	.4910
Stddev	.0009	.0011	.0010	.0045	.003	.0013	.0011
%RSD	.2155	.2209	.1949	.9204	.1524	.2792	.2296
#1	.4197	.4857	.5005	.4980	1.884	.4782	.4901
#2	.4215	.4874	.4991	.4890	1.886	.4758	.4907
#3	.4209	.4876	.4987	.4941	1.889	.4779	.4923
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33833-B1 Acquired: 6/4/2018 13:40:25 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1128.7	2920.9	23296.	2231.1
Stddev	.9	2.6	216.	11.0
%RSD	.08095	.08894	.92542	.49126
#1	1129.7	2923.4	23128.	2228.9
#2	1128.4	2918.2	23539.	2243.0
#3	1127.9	2921.2	23221.	2221.4

◄ Zoom In ►
Zoom Out

Sample Name: FA54562-1L Acquired: 6/4/2018 13:44:23 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.0069	-.0010	.0167	-.0001	113.1	-.0001	-.0002	.0036
Stddev	.0002	.0040	.0013	.0003	.0002	.3	.0000	.0000	.0002
%RSD	51.17	58.04	128.1	1.947	298.9	.2623	88.74	24.85	4.189
#1	.0005	.0072	.0000	.0166	.0001	113.4	.0000	-.0001	.0038
#2	.0002	.0027	-.0024	.0171	-.0001	113.0	-.0001	-.0002	.0037
#3	.0005	.0107	-.0006	.0165	-.0002	112.8	-.0001	-.0002	.0035

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0129	.0075	.3163	23.13	.0003	.0001	F145.2	.0128	.0016
Stddev	.0004	.0033	.0198	.05	.0000	.0001	.2	.0003	.0000
%RSD	3.031	43.37	6.271	.2364	9.661	95.89	.1675	2.009	1.883
#1	.0133	.0109	.2946	23.07	.0003	.0001	145.4	.0126	.0015
#2	.0125	.0073	.3334	23.18	.0003	.0001	144.9	.0131	.0016
#3	.0130	.0044	.3210	23.13	.0004	.0003	145.2	.0128	.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0021	.0543	.0001	.0316	.0015	.0018	-.0005	.0007
Stddev	.0007	.0005	.0002	.0002	.0002	.0002	.0021	.0002	.0001
%RSD	117.0	25.41	.3007	302.0	.5950	11.89	118.5	31.32	15.44
#1	.0012	.0020	.0543	.0000	.0314	.0016	-.0007	-.0004	.0008
#2	.0006	.0027	.0541	-.0001	.0317	.0013	.0031	-.0007	.0006
#3	-.0001	.0016	.0544	.0003	.0316	.0016	.0029	-.0006	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1070.8	2769.4	22185.	2211.2
Stddev	1.0	6.1	86.	13.2
%RSD	.09242	.21891	.38932	.59799
#1	1070.8	2767.2	22116.	2203.4
#2	1069.8	2764.8	22159.	2203.8
#3	1071.8	2776.3	22282.	2226.5

◄ Zoom In ►
Zoom Out

Sample Name: MP33833-D1 Acquired: 6/4/2018 13:48:41 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0045	-.0007	.0170	-.0001	113.0	.0000	.0181	.0036
Stddev	.0001	.0140	.0013	.0001	.0000	.2	.000	.0001	.0005
%RSD	17.39	313.8	170.6	.6852	20.03	.1367	96.08	.7835	13.47
#1	.0006	.0007	-.0022	.0169	-.0001	112.8	.0000	.0181	.0037
#2	.0006	-.0073	.0001	.0170	-.0001	113.1	-.0001	.0179	.0031
#3	.0004	.0200	-.0001	.0171	-.0002	113.0	.0000	.0182	.0040

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0126	.0033	.3040	23.19	.0004	-.0002	F144.0	.0130	.0008
Stddev	.0002	.0048	.0160	.08	.0001	.0002	.3	.0004	.0005
%RSD	1.412	145.7	5.274	.3641	23.79	122.0	.1984	3.160	57.17
#1	.0126	-.0023	.3056	23.19	.0004	-.0001	143.7	.0134	.0006
#2	.0128	.0060	.3191	23.28	.0003	-.0005	144.2	.0126	.0013
#3	.0125	.0062	.2872	23.11	.0004	.0000	144.2	.0131	.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	-.0007	.0559	-.0002	.0320	.0013	-.0003	-.0001	.0016
Stddev	.0007	.0005	.0010	.0003	.0001	.0001	.0005	.0000	.0001
%RSD	52.70	72.11	1.715	171.5	.2126	10.05	152.7	38.60	5.261
#1	.0020	-.0007	.0550	-.0005	.0320	.0012	-.0008	-.0001	.0017
#2	.0011	-.0002	.0558	.0000	.0319	.0012	.0002	-.0001	.0015
#3	.0007	-.0012	.0569	.0000	.0319	.0014	-.0005	-.0001	.0017

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1073.2	2769.3	22313.	2196.9
Stddev	1.6	3.3	61.	6.7
%RSD	.14910	.11865	.27154	.30519
#1	1071.3	2769.1	22243.	2201.9
#2	1074.4	2772.7	22347.	2189.3
#3	1073.8	2766.1	22350.	2199.6

◄ Zoom In ►
Zoom Out

Sample Name: MP33833-SD1 Acquired: 6/4/2018 13:52:57 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0015	-.0082	-.0018	.0177	-.0009	122.9	-.0003	-.0005	.0048	.0138
Stddev	.0013	.0663	.0051	.0007	.0003	.9	.0002	.0006	.0016	.0008
%RSD	86.21	808.9	289.6	4.174	32.55	.7668	78.50	137.5	34.13	5.638
#1	.0012	-.0137	-.0076	.0170	-.0008	121.8	-.0001	.0000	.0058	.0147
#2	.0029	.0606	.0019	.0185	-.0006	123.3	-.0003	-.0012	.0029	.0132
#3	.0004	-.0716	.0004	.0178	-.0012	123.5	-.0005	-.0002	.0056	.0135

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0247	.2069	25.05	.0001	-.0019	156.5	.0136	.0053	.0012	-.0033
Stddev	.0186	.0655	.15	.0002	.0012	1.0	.0013	.0054	.0013	.0061
%RSD	75.15	31.68	.6064	132.9	62.32	.6587	9.378	101.8	106.4	181.8
#1	.0449	.1424	24.94	.0001	-.0014	155.4	.0143	.0104	.0025	-.0076
#2	.0085	.2048	25.22	.0000	-.0011	156.9	.0121	.0058	.0012	.0036
#3	.0207	.2734	24.99	.0003	-.0033	157.3	.0143	-.0003	-.0001	-.0060

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0602	-.0015	.0331	.0060	-.0055	-.0019	.0012
Stddev	.0036	.0016	.0005	.0003	.0019	.0010	.0003
%RSD	6.014	105.1	1.634	5.456	35.12	56.17	28.30
#1	.0637	-.0021	.0325	.0064	-.0075	-.0028	.0011
#2	.0604	.0003	.0336	.0057	-.0036	-.0020	.0009
#3	.0564	-.0026	.0332	.0060	-.0054	-.0007	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1112.2	2784.7	22217.	2103.0
Stddev	2.5	4.6	143.	13.5
%RSD	.22337	.16454	.64337	.64131
#1	1109.3	2779.5	22084.	2116.3
#2	1113.7	2787.9	22368.	2089.3
#3	1113.5	2786.7	22199.	2103.4

◄ Zoom In ►
Zoom Out

Sample Name: MP33833-S1 Acquired: 6/4/2018 13:57:14 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0499	27.18	1.963	1.979	.0513	137.0	.0485	.4836	.2056
Stddev	.0005	.12	.006	.006	.0002	.7	.0002	.0009	.0005
%RSD	1.028	.4408	.2856	.3009	.4561	.4778	.3457	.1950	.2475
#1	.0498	27.08	1.958	1.985	.0511	136.7	.0484	.4829	.2051
#2	.0505	27.16	1.969	1.979	.0512	136.6	.0483	.4833	.2061
#3	.0495	27.32	1.961	1.973	.0516	137.8	.0486	.4847	.2055

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2642	25.80	25.27	47.30	.4849	.4667	F168.3	.4991	.4855
Stddev	.0013	.06	.05	.21	.0016	.0011	.3	.0007	.0020
%RSD	.4895	.2166	.2148	.4510	.3218	.2344	.1500	.1454	.4129
#1	.2650	25.74	25.21	47.10	.4831	.4655	168.6	.4984	.4847
#2	.2627	25.84	25.28	47.27	.4860	.4671	168.2	.4991	.4840
#3	.2649	25.83	25.32	47.52	.4856	.4676	168.1	.4999	.4878

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4928	1.932	.4595	.4694	.5294	.4941	1.872	.4752	.4827
Stddev	.0017	.006	.0007	.0010	.0014	.0006	.004	.0013	.0010
%RSD	.3539	.2882	.1598	.2105	.2573	.1136	.1999	.2683	.2098
#1	.4908	1.926	.4593	.4682	.5279	.4936	1.872	.4757	.4817
#2	.4933	1.935	.4590	.4700	.5298	.4940	1.868	.4762	.4837
#3	.4941	1.936	.4604	.4698	.5305	.4947	1.876	.4738	.4825

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1031.4	2820.3	22417.	2222.2
Stddev	1.1	3.3	90.	11.6
%RSD	.10817	.11669	.40129	.52003
#1	1032.3	2824.0	22480.	2228.6
#2	1031.8	2818.8	22314.	2229.2
#3	1030.2	2817.9	22457.	2208.9

Zoom In Zoom Out

Sample Name: MP33833-S2 Acquired: 6/4/2018 14:01:12 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0502	27.26	1.997	2.013	.0513	137.4	.0488	.4892	.2055
Stddev	.0001	.01	.001	.006	.0001	.3	.0002	.0005	.0005
%RSD	.1763	.0551	.0531	.2973	.1730	.2534	.3229	.0922	.2322
#1	.0502	27.27	1.996	2.019	.0513	137.1	.0489	.4896	.2059
#2	.0503	27.27	1.997	2.007	.0515	137.4	.0488	.4887	.2056
#3	.0502	27.24	1.998	2.014	.0513	137.8	.0486	.4892	.2050

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2661	26.04	25.55	47.78	.4915	.4752	F168.0	.5071	.4863
Stddev	.0004	.03	.04	.17	.0019	.0008	.6	.0003	.0011
%RSD	.1414	.1252	.1754	.3640	.3836	.1675	.3634	.0654	.2245
#1	.2660	26.03	25.60	47.62	.4933	.4751	168.5	.5068	.4853
#2	.2665	26.02	25.51	47.96	.4917	.4761	168.2	.5074	.4875
#3	.2658	26.08	25.54	47.76	.4895	.4745	167.3	.5070	.4861

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5008	1.970	.4690	.4816	.5364	.4999	1.882	.4817	.4882
Stddev	.0025	.001	.0009	.0010	.0009	.0027	.004	.0011	.0010
%RSD	.4939	.0307	.1957	.2106	.1734	.5391	.2158	.2317	.2064
#1	.4980	1.970	.4681	.4818	.5374	.5029	1.884	.4828	.4894
#2	.5027	1.970	.4700	.4806	.5362	.4991	1.885	.4818	.4875
#3	.5018	1.971	.4691	.4826	.5356	.4976	1.878	.4805	.4878

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1031.3	2804.0	22421.	2222.9
Stddev	2.1	5.2	37.	6.0
%RSD	.20140	.18566	.16453	.26859
#1	1029.8	2800.0	22390.	2229.3
#2	1030.5	2802.0	22411.	2222.0
#3	1033.7	2809.9	22462.	2217.4

Zoom In Zoom Out

Sample Name: FA54626-1L Acquired: 6/4/2018 14:05:10 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0161	-.0003	.0544	-.0001	54.45	.0212	.0116	.0009
Stddev	.0001	.0087	.0004	.0004	.0000	.15	.0001	.0003	.0003
%RSD	30.68	53.82	121.3	.6885	23.48	.2778	.6624	2.257	37.22
#1	-.0004	.0214	-.0006	.0541	-.0002	54.44	.0213	.0115	.0006
#2	-.0002	.0209	.0001	.0548	-.0001	54.30	.0210	.0118	.0008
#3	-.0003	.0061	-.0005	.0542	-.0001	54.61	.0212	.0113	.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0008	2.294	1.596	2.893	.9093	.0013	F141.2	.0607	.0024
Stddev	.0003	.004	.015	.053	.0054	.0000	.3	.0001	.0003
%RSD	42.75	.1974	.9182	1.850	.5966	3.189	.2296	.1643	12.09
#1	.0006	2.299	1.579	2.890	.9154	.0012	141.3	.0605	.0023
#2	.0011	2.291	1.605	2.842	.9049	.0012	140.9	.0607	.0021
#3	.0005	2.292	1.604	2.949	.9077	.0013	141.5	.0607	.0026

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0031	.7238	.0001	.1929	.0016	.0012	.0002	F21.23
Stddev	.0010	.0009	.0005	.0002	.0004	.0001	.0011	.0000	.04
%RSD	54.05	30.07	.0725	364.5	.2092	7.009	91.25	7.030	.2084
#1	.0028	.0033	.7239	.0003	.1930	.0017	.0025	.0002	21.26
#2	.0008	.0021	.7243	-.0001	.1925	.0016	.0007	.0002	21.18
#3	.0021	.0040	.7233	.0000	.1933	.0015	.0004	.0002	21.24

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1093.4	2822.8	22671.	2236.0
Stddev	1.9	4.2	83.	6.4
%RSD	.17333	.14737	.36685	.28723
#1	1091.6	2818.0	22585.	2241.5
#2	1095.4	2825.4	22677.	2237.5
#3	1093.1	2824.9	22751.	2228.9

Zoom In Zoom Out

Sample Name: FA54510-1L Acquired: 6/4/2018 14:09:22 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0226	-.0004	.0869	-.0002	58.27	.0000	.0002	.0006
Stddev	.0004	.0073	.0008	.0007	.0001	.04	.0000	.0001	.0004
%RSD	151.1	32.22	181.8	.7608	36.44	.0649	167.5	31.41	64.90
#1	.0000	.0216	.0005	.0865	-.0001	58.27	.0000	.0001	.0002
#2	.0001	.0159	-.0010	.0866	-.0002	58.23	.0001	.0002	.0010
#3	.0008	.0303	-.0007	.0877	-.0002	58.30	.0000	.0002	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0136	.3801	3.444	.2365	-.0003	F140.8	.0010	.0015
Stddev	.0002	.0019	.0140	.067	.0009	.0002	.5	.0002	.0006
%RSD	62.19	14.05	3.684	1.933	.3756	61.47	.3658	18.63	40.08
#1	.0004	.0138	.3838	3.488	.2355	-.0001	141.4	.0010	.0013
#2	.0001	.0154	.3646	3.368	.2368	-.0003	140.4	.0012	.0010
#3	.0006	.0116	.3919	3.478	.2371	-.0006	140.7	.0008	.0022

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	.0002	.5942	-.0002	.1504	.0016	.0004	.0000	.0039
Stddev	.0004	.0025	.0014	.0002	.0002	.0001	.0013	.0003	.0001
%RSD	147.9	1436.	.2278	101.1	.1585	6.264	306.3	1563.	2.640
#1	-.0006	.0025	.5938	-.0003	.1506	.0017	.0016	.0000	.0039
#2	-.0003	-.0024	.5930	.0000	.1501	.0015	-.0010	.0004	.0039
#3	.0002	.0005	.5956	-.0002	.1504	.0016	.0007	-.0003	.0037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1089.1	2823.1	22474.	2229.1
Stddev	2.7	6.6	34.	13.8
%RSD	.24880	.23411	.15224	.61853
#1	1087.1	2816.0	22462.	2226.0
#2	1092.2	2829.0	22512.	2244.1
#3	1088.2	2824.1	22447.	2217.0

Zoom In Zoom Out

Sample Name: FA54510-2L Acquired: 6/4/2018 14:13:36 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0180	-.0005	.0663	-.0001	61.55	.0000	-.0001	.0007
Stddev	.0002	.0235	.0007	.0003	.0000	.21	.000	.0001	.0003
%RSD	118.6	130.9	123.5	.4544	20.80	.3439	207.4	35.41	40.16
#1	.0000	-.0036	.0000	.0660	-.0001	61.66	-.0001	-.0001	.0005
#2	.0004	.0431	-.0013	.0663	-.0001	61.30	.0000	-.0001	.0006
#3	.0001	.0145	-.0003	.0666	-.0001	61.68	.0000	-.0002	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0002	.0099	.4458	3.253	.0983	-.0005	F142.0	.0008	.0012
Stddev	.0002	.0029	.0219	.052	.0002	.0001	1.1	.0002	.0011
%RSD	130.4	29.28	4.907	1.604	.2503	15.83	.7978	23.34	93.15
#1	.0000	.0118	.4689	3.196	.0980	-.0004	142.7	.0006	-.0001
#2	.0001	.0065	.4254	3.263	.0985	-.0006	140.7	.0010	.0017
#3	.0004	.0113	.4430	3.299	.0983	-.0004	142.7	.0009	.0019

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0011	.2671	-.0001	.0943	.0015	.0006	-.0001	.0058
Stddev	.0015	.0009	.0008	.0005	.0002	.0001	.0008	.0003	.0001
%RSD	196.7	82.60	.2987	763.5	.2219	4.076	129.0	428.4	.8660
#1	.0004	.0014	.2672	-.0004	.0944	.0015	.0006	.0000	.0059
#2	-.0005	.0019	.2679	.0005	.0941	.0015	-.0002	-.0004	.0058
#3	.0025	.0001	.2663	-.0003	.0945	.0014	.0014	.0002	.0058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1087.1	2816.4	22597.	2228.6
Stddev	3.3	4.8	26.	14.0
%RSD	.30417	.17049	.11372	.62995
#1	1083.6	2812.8	22626.	2232.5
#2	1090.2	2814.5	22587.	2240.3
#3	1087.6	2821.8	22578.	2213.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 14:17:50 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2416	40.67	1.955	1.979	2.039	41.07	2.011	2.000	2.039	1.988
Stddev	.0001	.18	.007	.016	.006	.16	.002	.003	.017	.003
%RSD	.0594	.4464	.3404	.8109	.2816	.3997	.1110	.1408	.8126	.1400
#1	.2418	40.52	1.960	1.965	2.035	40.93	2.012	2.002	2.058	1.990
#2	.2415	40.87	1.948	1.996	2.045	41.25	2.009	1.997	2.034	1.985
#3	.2416	40.61	1.958	1.974	2.037	41.03	2.012	2.001	2.026	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.81	40.30	40.30	2.002	2.006	40.62	1.975	1.989	1.949	1.959
Stddev	.16	.08	.16	.009	.004	.35	.002	.007	.005	.005
%RSD	.4005	.2041	.3910	.4673	.1725	.8695	.0999	.3375	.2451	.2469
#1	40.68	40.20	40.21	2.012	2.005	40.21	1.977	1.996	1.952	1.964
#2	40.99	40.35	40.48	2.001	2.003	40.84	1.975	1.983	1.944	1.959
#3	40.75	40.34	40.21	1.994	2.010	40.80	1.973	1.989	1.952	1.954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.012	1.996	2.048	2.029	1.997	2.019	2.009
Stddev	.004	.002	.009	.006	.003	.010	.002
%RSD	.2165	.1202	.4171	.2912	.1496	.5132	.0973
#1	2.015	1.999	2.040	2.035	2.000	2.030	2.011
#2	2.007	1.994	2.057	2.029	1.994	2.016	2.007
#3	2.015	1.997	2.046	2.023	1.997	2.010	2.008
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 14:17:50 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1073.5	2891.1	23013.	2216.1
Stddev	2.2	5.4	140.	9.7
%RSD	.20776	.18725	.60932	.43566
#1	1071.7	2888.2	22859.	2224.8
#2	1076.0	2897.3	23044.	2217.8
#3	1072.9	2887.7	23134.	2205.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 14:21:46 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0059	.0009	.0001	.0001	.0039	.0002	.0001	.0003
Stddev	.0004	.0091	.0007	.0002	.0000	.0027	.0000	.0001	.0003
%RSD	116.2	154.1	83.54	117.8	49.10	68.62	21.29	98.21	101.0
#1	.0005	.0154	.0017	.0001	.0001	.0053	.0002	.0000	.0000
#2	.0006	.0050	.0005	.0003	.0000	.0057	.0002	.0001	.0003
#3	-.0001	-.0027	.0004	.0000	.0001	.0008	.0001	.0003	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0228	-.0147	.0114	.0002	F.0026	-.0216	.0004	.0008
Stddev	.0001	.0045	.0214	.0190	.0000	.0006	.0090	.0002	.0011
%RSD	122.8	19.67	145.2	166.5	3.011	24.37	41.57	65.64	150.8
#1	.0001	.0277	.0022	.0292	.0002	.0032	-.0267	.0006	.0009
#2	.0001	.0215	-.0388	.0136	.0002	.0024	-.0269	.0001	-.0005
#3	.0000	.0190	-.0076	-.0086	.0002	.0020	-.0112	.0004	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0001	-.0002	.0007	.0002	.0017	.0018	.0001	.0001
Stddev	.0004	.0013	.0002	.0000	.0001	.0001	.0007	.0001	.0000
%RSD	57.52	1385.	101.2	4.234	59.85	6.190	36.46	73.36	17.56
#1	.0003	.0014	-.0003	.0007	.0001	.0018	.0011	.0001	.0001
#2	.0009	-.0011	-.0003	.0007	.0003	.0016	.0023	.0001	.0001
#3	.0011	-.0001	.0000	.0007	.0003	.0016	.0020	.0003	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 14:21:46 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1236.3	2980.8	23840.	2221.8
Stddev	4.6	7.0	96.	15.2
%RSD	.36926	.23324	.40410	.68264
#1	1231.6	2979.2	23839.	2222.3
#2	1236.4	2988.4	23745.	2206.4
#3	1240.8	2974.7	23937.	2236.7

Zoom In Zoom Out

Sample Name: FA54510-3L Acquired: 6/4/2018 14:26:05 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0290	.0004	.0582	.0000	8.273	.0001	.0003	.0005
Stddev	.001	.0069	.0008	.0005	.0000	.074	.0000	.0002	.0004
%RSD	5932.	23.95	213.2	.9439	77.88	.8970	27.20	57.48	83.28
#1	-.0005	.0299	.0010	.0584	.0000	8.347	.0002	.0003	.0000
#2	.0000	.0355	.0006	.0586	.0000	8.273	.0001	.0001	.0006
#3	.0005	.0217	-.0005	.0576	.0000	8.199	.0001	.0005	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0008	.0170	.3152	1.261	.2358	.0003	F143.1	.0029	.0002
Stddev	.0001	.0012	.0285	.037	.0011	.0002	.9	.0003	.0005
%RSD	16.85	6.934	9.039	2.933	.4742	47.89	.6154	9.010	273.6
#1	.0009	.0163	.3481	1.275	.2349	.0004	144.0	.0028	.0008
#2	.0007	.0164	.2990	1.290	.2371	.0004	143.1	.0032	-.0001
#3	.0006	.0184	.2984	1.220	.2356	.0001	142.2	.0027	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0013	.2644	.0003	.0211	.0013	-.0005	-.0001	.0082
Stddev	.0008	.0006	.0007	.0001	.0001	.0003	.0004	.0003	.0001
%RSD	177.7	43.98	.2623	32.91	.3630	22.35	94.26	362.3	1.289
#1	-.0004	.0019	.2636	.0002	.0210	.0012	-.0009	-.0004	.0082
#2	.0006	.0009	.2648	.0002	.0212	.0010	.0000	.0000	.0081
#3	.0011	.0010	.2648	.0004	.0210	.0016	-.0005	.0001	.0084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1106.4	2858.5	22677.	2227.2
Stddev	4.2	2.9	55.	19.2
%RSD	.38253	.10175	.24135	.85985
#1	1102.2	2856.4	22738.	2208.4
#2	1110.6	2857.2	22660.	2226.6
#3	1106.4	2861.8	22633.	2246.7

Zoom In Zoom Out

Sample Name: FA54517-1L Acquired: 6/4/2018 14:30:21 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.2211	.0004	.0156	-.0002	14.31	.0052	F5.418	.0532
Stddev	.0005	.0098	.0017	.0002	.0000	.13	.0000	.006	.0005
%RSD	457.7	4.447	456.0	.9779	24.60	.8853	.0062	.1179	.9507
#1	.0006	.2170	-.0010	.0158	-.0002	14.45	.0052	5.413	.0527
#2	-.0003	.2323	-.0002	.0156	-.0002	14.28	.0052	5.415	.0537
#3	.0000	.2139	.0023	.0156	-.0001	14.20	.0052	5.425	.0534

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0110	.2143	.8958	.4598	.0215	.0021	F145.2	.0960	.0018
Stddev	.0003	.0040	.0163	.0203	.0001	.0002	2.0	.0004	.0006
%RSD	2.318	1.869	1.816	4.409	.4698	10.45	1.352	.4207	31.89
#1	.0110	.2177	.8865	.4513	.0216	.0018	147.4	.0963	.0014
#2	.0108	.2153	.9146	.4451	.0214	.0022	144.9	.0962	.0024
#3	.0113	.2099	.8863	.4829	.0215	.0022	143.5	.0956	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0010	.0950	.0006	.1403	.0011	.0021	-.0002	.2435
Stddev	.0003	.0011	.0008	.0005	.0012	.0002	.0010	.0001	.0001
%RSD	36.19	110.2	.8036	77.55	.8698	15.60	48.64	47.18	.0432
#1	.0010	-.0002	.0957	.0006	.1417	.0009	.0015	-.0003	.2435
#2	.0005	.0011	.0942	.0001	.1401	.0012	.0015	-.0003	.2437
#3	.0011	.0020	.0952	.0011	.1393	.0011	.0033	-.0001	.2435

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1111.7	2828.6	22584.	2234.2
Stddev	2.3	4.6	51.	16.1
%RSD	.20781	.16295	.22613	.71947
#1	1109.2	2824.8	22537.	2219.6
#2	1113.7	2827.3	22576.	2231.7
#3	1112.2	2833.7	22639.	2251.4

Zoom In Zoom Out

Sample Name: FA54517-2L Acquired: 6/4/2018 14:34:35 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0373	-.0005	.0214	-.0001	11.67	.0001	.0001	.0011
Stddev	.0004	.0058	.0009	.0003	.0001	.03	.0000	.0001	.0000
%RSD	131.3	15.42	202.8	1.561	159.7	.2252	21.02	97.09	4.032
#1	-.0002	.0439	.0001	.0210	-.0002	11.65	.0001	.0000	.0011
#2	.0000	.0344	-.0015	.0214	.0000	11.70	.0001	.0001	.0010
#3	-.0007	.0335	.0001	.0217	.0000	11.66	.0001	.0000	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0763	.0210	.7151	.9582	.0052	.0000	F164.2	.0295	.0021
Stddev	.0002	.0024	.0111	.0350	.0001	.0001	1.3	.0003	.0002
%RSD	.2677	11.52	1.556	3.649	1.878	469.3	.8024	1.103	8.018
#1	.0762	.0182	.7271	.9766	.0051	.0000	165.5	.0295	.0019
#2	.0761	.0225	.7051	.9800	.0052	-.0001	164.2	.0299	.0023
#3	.0765	.0224	.7131	.9179	.0053	.0001	162.8	.0292	.0022

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0015	-.0014	.0739	.0009	.0170	.0008	-.0010	-.0002	1.856
Stddev	.0009	.0017	.0015	.0003	.0000	.0000	.0004	.0003	.010
%RSD	62.35	124.1	1.996	32.92	.0581	4.935	40.08	140.2	.5152
#1	.0009	-.0004	.0722	.0011	.0170	.0008	-.0007	-.0003	1.863
#2	.0010	-.0034	.0749	.0006	.0170	.0008	-.0008	-.0004	1.860
#3	.0025	-.0004	.0746	.0012	.0170	.0008	-.0014	.0001	1.845

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1085.3	2797.2	22072.	2156.8
Stddev	1.7	17.1	81.	8.5
%RSD	.15932	.61268	.36760	.39556
#1	1084.5	2787.4	22007.	2152.6
#2	1084.2	2787.3	22163.	2151.2
#3	1087.3	2817.0	22046.	2166.6

Zoom In Zoom Out

Sample Name: MP33833-MB2 Acquired: 6/4/2018 14:38:51 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0138	-.0015	.0002	-.0001	.0262	.0000	.0000	.0002
Stddev	.0003	.0023	.0006	.0004	.0001	.0030	.000	.000	.0000
%RSD	173.6	16.31	40.37	196.8	51.56	11.56	65.60	338.9	19.96
#1	-.0001	.0151	-.0011	.0006	-.0001	.0227	.0000	.0001	.0001
#2	.0004	.0151	-.0022	.0000	-.0002	.0284	-.0001	-.0002	.0002
#3	.0001	.0112	-.0013	-.0001	-.0001	.0273	-.0001	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0031	.2395	.0462	.0001	.0000	F187.8	.0003	.0003
Stddev	.0004	.0032	.0266	.0222	.0000	.000	.6	.0003	.0009
%RSD	100.0	104.1	11.13	48.13	45.14	152.6	.3348	86.00	267.6
#1	.0000	.0038	.2702	.0672	.0001	.0000	188.2	.0003	.0014
#2	.0005	.0059	.2258	.0483	.0001	-.0001	188.1	.0001	.0000
#3	.0008	-.0004	.2226	.0229	.0002	.0000	187.1	.0006	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0011	.0501	.0004	.0019	.0002	-.0012	-.0005	.0021
Stddev	.0008	.0011	.0006	.0004	.0001	.0001	.0004	.0002	.0001
%RSD	69.55	97.63	1.196	114.3	3.663	33.75	35.89	35.99	4.981
#1	.0006	.0022	.0507	.0000	.0019	.0001	-.0007	-.0005	.0021
#2	.0020	.0000	.0502	.0008	.0018	.0002	-.0015	-.0003	.0021
#3	.0007	.0012	.0495	.0003	.0018	.0002	-.0012	-.0007	.0020
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP33833-MB2 Acquired: 6/4/2018 14:38:51 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1056.7	2697.8	21407.	2108.0
Stddev	6.4	15.9	79.	12.4
%RSD	.60393	.58827	.37014	.58780
#1	1051.3	2682.4	21316.	2097.3
#2	1054.9	2696.9	21445.	2121.6
#3	1063.7	2714.1	21459.	2105.3

Zoom In Zoom Out

Sample Name: MP33833-B2 Acquired: 6/4/2018 14:43:10 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0530	28.22	2.059	2.103	.0539	26.58	.0516	.5171	.2123
Stddev	.0000	.26	.003	.007	.0007	.28	.0001	.0004	.0008
%RSD	.0510	.9292	.1192	.3262	1.297	1.057	.1893	.0788	.3858
#1	.0530	28.51	2.060	2.109	.0547	26.90	.0517	.5168	.2120
#2	.0530	28.14	2.061	2.103	.0533	26.50	.0515	.5176	.2116
#3	.0530	28.00	2.056	2.096	.0538	26.36	.0515	.5169	.2132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2626	27.46	26.37	26.04	.5172	.4966	F206.6	.5284	.5035
Stddev	.0008	.18	.17	.13	.0041	.0008	2.2	.0016	.0026
%RSD	.3166	.6713	.6354	.5174	.7918	.1563	1.067	.3102	.5258
#1	.2618	27.66	26.56	26.19	.5126	.4970	209.2	.5291	.5041
#2	.2625	27.41	26.24	25.99	.5203	.4970	205.5	.5297	.5058
#3	.2635	27.30	26.31	25.94	.5186	.4957	205.2	.5266	.5006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5156	2.056	.4672	.5097	.5272	.5186	1.946	.5046	.5226
Stddev	.0022	.006	.0009	.0006	.0025	.0036	.006	.0012	.0005
%RSD	.4193	.2931	.1935	.1183	.4678	.6857	.2938	.2307	.0924
#1	.5139	2.059	.4682	.5104	.5300	.5145	1.950	.5036	.5221
#2	.5180	2.060	.4664	.5094	.5255	.5205	1.949	.5059	.5230
#3	.5148	2.049	.4670	.5093	.5260	.5207	1.940	.5044	.5227
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33833-B2 Acquired: 6/4/2018 14:43:10 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1018.6	2712.2	21650.	2127.9
Stddev	3.8	3.1	117.	19.0
%RSD	.37172	.11535	.53975	.89279
#1	1015.0	2708.6	21754.	2110.5
#2	1018.3	2713.8	21523.	2124.9
#3	1022.5	2714.2	21672.	2148.2

Zoom In Zoom Out

Sample Name: FA54517-14R Acquired: 6/4/2018 14:47:15 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0056	93.50	.1175	.8613	-.0052	16.91	-.0010	.0290	.1744	15.73
Stddev	.0132	.41	.0168	.0049	.0040	.24	.0023	.0047	.0090	.04
%RSD	234.9	.4407	14.29	.5725	77.80	1.428	226.3	16.22	5.134	.2306
#1	.0209	93.76	.1367	.8644	-.0060	16.67	.0007	.0241	.1641	15.70
#2	-.0019	93.72	.1059	.8639	-.0008	17.15	-.0002	.0335	.1807	15.72
#3	-.0021	93.02	.1099	.8556	-.0087	16.91	-.0037	.0294	.1783	15.77

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	93.11	8.899	13.56	1.944	.0023	.6577	.1151	66.38	1.185	-.0699
Stddev	.49	.291	1.09	.008	.0057	.3452	.0064	.20	.008	.0940
%RSD	.5247	3.272	8.010	.4094	250.1	52.49	5.592	.2980	.6833	134.3
#1	93.12	8.834	14.75	1.951	.0083	.2616	.1177	66.51	1.177	.0370
#2	93.60	8.645	12.62	1.935	-.0031	.8949	.1198	66.15	1.193	-.1076
#3	92.62	9.217	13.31	1.947	.0016	.8165	.1078	66.47	1.184	-.1392

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.272	.0754	6.907	1.982	.0635	.1748	3.937
Stddev	.040	.0089	.032	.008	.0417	.0106	.003
%RSD	.7487	11.78	.4637	.4107	65.62	6.043	.0819
#1	5.316	.0843	6.892	1.990	.0158	.1865	3.940
#2	5.260	.0754	6.944	1.974	.0930	.1660	3.939
#3	5.240	.0665	6.885	1.981	.0816	.1721	3.934

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1211.9	2939.3	23828.	2235.6
Stddev	1.5	3.3	70.	19.9
%RSD	.12087	.11306	.29299	.88788
#1	1210.9	2942.1	23748.	2228.1
#2	1213.5	2940.1	23868.	2220.6
#3	1211.1	2935.6	23870.	2258.1

Zoom In Zoom Out

Sample Name: MP33835-MB1 Acquired: 6/4/2018 14:51:29 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0145	-.0009	.0000	.0000	.1571	.0000	-.0002	.0016
Stddev	.0004	.0033	.0002	.000	.000	.0016	.000	.0001	.0003
%RSD	257.4	22.90	22.23	361.9	119.3	1.017	76.06	26.88	17.06
#1	-.0002	.0137	-.0012	.0000	-.0001	.1561	.0000	-.0002	.0014
#2	-.0005	.0181	-.0008	.0000	.0000	.1589	.0000	-.0003	.0019
#3	.0002	.0116	-.0008	-.0002	.0000	.1562	-.0001	-.0002	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0705	-.0113	.0341	.0006	.0003	.0007	.0004	.0001
Stddev	.0001	.0043	.0175	.0272	.0001	.0001	.0042	.0001	.0003
%RSD	209.3	6.099	154.8	79.70	8.966	25.07	610.6	15.02	242.4
#1	.0001	.0754	-.0178	.0411	.0007	.0003	-.0012	.0005	.0004
#2	.0001	.0673	.0085	.0571	.0006	.0002	.0055	.0003	-.0002
#3	-.0001	.0688	-.0248	.0041	.0006	.0003	-.0022	.0004	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0021	.0215	F.0273	.0017	.0008	-.0032	-.0004	.0025
Stddev	.0018	.0020	.0003	.0002	.0001	.0001	.0008	.0003	.0001
%RSD	98.88	92.36	1.294	.5972	8.412	11.80	26.61	71.56	2.308
#1	.0026	.0014	.0217	.0272	.0018	.0009	-.0032	-.0003	.0026
#2	-.0002	.0044	.0212	.0273	.0015	.0007	-.0040	-.0002	.0025
#3	.0031	.0006	.0215	.0275	.0017	.0008	-.0023	-.0007	.0025
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Zoom In Zoom Out

Sample Name: MP33835-MB1 Acquired: 6/4/2018 14:51:29 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1235.5	2939.2	24178.	2239.1
Stddev	3.7	12.4	93.	17.9
%RSD	.29874	.42209	.38667	.79995
#1	1231.9	2925.8	24071.	2259.7
#2	1239.2	2950.3	24244.	2229.4
#3	1235.5	2941.5	24219.	2228.1

Zoom In Zoom Out

Sample Name: MP33835-B1 Acquired: 6/4/2018 14:55:48 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0482	26.97	1.900	1.993	.0514	25.74	.0493	.5012	.2061	.2537
Stddev	.0001	.19	.003	.001	.0002	.12	.0001	.0006	.0004	.0008
%RSD	.1146	.7218	.1745	.0655	.3716	.4734	.3007	.1236	.1766	.2983
#1	.0482	26.74	1.901	1.995	.0512	25.60	.0493	.5015	.2058	.2530
#2	.0483	27.09	1.896	1.992	.0513	25.81	.0494	.5016	.2059	.2545
#3	.0482	27.06	1.903	1.993	.0516	25.81	.0491	.5005	.2065	.2536
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.20	24.99	24.94	.4939	.4829	25.31	.5073	.4705	.4790	1.863
Stddev	.05	.10	.15	.0035	.0007	.13	.0010	.0022	.0010	.002
%RSD	.2048	.3802	.6082	.7033	.1459	.5193	.1896	.4724	.2072	.0829
#1	26.17	24.88	24.86	.4922	.4837	25.16	.5070	.4717	.4779	1.865
#2	26.17	25.02	24.85	.4979	.4823	25.39	.5084	.4719	.4792	1.862
#3	26.26	25.06	25.12	.4917	.4827	25.39	.5066	.4680	.4798	1.863
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4010	.5116	.5073	.5030	1.858	.4822	.4947
Stddev	.0013	.0015	.0028	.0029	.000	.0003	.0011
%RSD	.3335	.2837	.5580	.5828	.0150	.0541	.2224
#1	.3997	.5129	.5041	.5013	1.858	.4819	.4947
#2	.4010	.5117	.5092	.5064	1.858	.4824	.4958
#3	.4024	.5101	.5087	.5014	1.859	.4823	.4936
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33835-B1 Acquired: 6/4/2018 14:55:48 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1116.9	2873.8	23069.	2218.7
Stddev	3.2	.4	129.	20.2
%RSD	.28321	.01466	.56018	.90974
#1	1114.7	2873.3	23173.	2197.2
#2	1115.6	2873.8	22924.	2237.2
#3	1120.6	2874.2	23109.	2221.6

Zoom In Zoom Out

Sample Name: FA54605-1 Acquired: 6/4/2018 14:59:48 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0047	3.496	.0024	.1213	-.0010	F7481.	-.0007	-.0013	.0516
Stddev	.0050	.066	.0009	.0020	.0002	99.	.0004	.0007	.0016
%RSD	106.6	1.895	36.87	1.664	22.29	1.321	61.14	55.56	3.177
#1	-.0080	3.557	.0030	.1197	-.0008	7406.	-.0006	-.0005	.0513
#2	-.0070	3.505	.0029	.1206	-.0011	7444.	-.0003	-.0018	.0502
#3	.0011	3.425	.0014	.1236	-.0012	7593.	-.0011	-.0016	.0534

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0056	1.604	.4845	13.21	.0565	-.0029	22.45	.0174	-.0066
Stddev	.0011	.063	.1499	.05	.0002	.0006	.14	.0012	.0035
%RSD	19.63	3.895	30.93	.3684	.3108	19.13	.6128	6.844	52.68
#1	-.0069	1.579	.3210	13.22	.0565	-.0031	22.50	.0178	-.0026
#2	-.0049	1.675	.6154	13.25	.0567	-.0023	22.30	.0160	-.0090
#3	-.0050	1.558	.5172	13.15	.0564	-.0034	22.56	.0183	-.0082

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0232	-.0156	1.449	.0233	F114.5	.0780	-.0257	.0306	-.0159
Stddev	.0122	.0053	.001	.0011	2.1	.0312	.0072	.0025	.0004
%RSD	52.69	34.07	.0592	4.576	1.803	39.97	28.02	8.316	2.208
#1	.0189	-.0101	1.450	.0221	114.6	.0577	-.0212	.0316	-.0156
#2	.0137	-.0160	1.449	.0240	112.4	.0624	-.0219	.0277	-.0158
#3	.0370	-.0207	1.449	.0239	116.5	.1139	-.0340	.0325	-.0163

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	889.23	2472.0	19736.	2045.2
Stddev	1.05	3.9	18.	15.8
%RSD	.11755	.15918	.09254	.77117
#1	888.02	2467.9	19721.	2056.9
#2	889.81	2472.4	19730.	2051.5
#3	889.86	2475.8	19756.	2027.3

Zoom In Zoom Out

Sample Name: MP33835-D1 Acquired: 6/4/2018 15:04:21 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0038	3.456	.0057	.1143	-.0006	F7093.	-.0004	-.0007	.0513
Stddev	.0003	.105	.0024	.0016	.0003	26.	.0004	.0005	.0012
%RSD	8.469	3.028	42.64	1.379	44.78	.3606	85.98	65.73	2.336
#1	-.0041	3.336	.0065	.1159	-.0004	7067.	.0000	-.0011	.0527
#2	-.0038	3.507	.0075	.1144	-.0005	7119.	-.0005	-.0002	.0507
#3	-.0035	3.526	.0029	.1127	-.0009	7093.	-.0008	-.0009	.0505

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0044	1.627	.5643	13.64	.0636	-.0037	21.23	.0153	-.0130
Stddev	.0019	.036	.0991	.15	.0001	.0002	.06	.0014	.0130
%RSD	43.84	2.187	17.56	1.125	.1517	4.507	.3018	8.860	100.5
#1	-.0066	1.626	.4951	13.55	.0635	-.0036	21.28	.0165	-.0003
#2	-.0037	1.662	.5200	13.54	.0637	-.0036	21.25	.0138	-.0123
#3	-.0029	1.591	.6778	13.81	.0635	-.0039	21.16	.0156	-.0264

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0121	-.0182	1.430	.0230	F106.7	.0671	-.0180	.0307	-.0153
Stddev	.0074	.0088	.007	.0029	1.7	.0220	.0079	.0011	.0004
%RSD	61.11	48.24	.4609	12.63	1.629	32.73	43.99	3.532	2.916
#1	.0167	-.0087	1.432	.0206	104.8	.0554	-.0099	.0313	-.0157
#2	.0161	-.0260	1.423	.0222	108.2	.0534	-.0184	.0314	-.0149
#3	.0036	-.0198	1.436	.0262	107.2	.0924	-.0256	.0295	-.0152

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	910.81	2545.8	20305.	2122.9
Stddev	2.50	.6	65.	10.4
%RSD	.27493	.02338	.32236	.49062
#1	909.83	2545.3	20314.	2134.2
#2	908.95	2545.7	20236.	2120.6
#3	913.66	2546.5	20366.	2113.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 15:08:53 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2443	41.39	1.962	1.978	2.061	41.63	2.024	2.015	2.073	2.013
Stddev	.0020	.16	.003	.006	.006	.18	.002	.003	.004	.007
%RSD	.8000	.3873	.1502	.3247	.3072	.4308	.1125	.1573	.2175	.3750
#1	.2465	41.48	1.959	1.982	2.061	41.79	2.022	2.011	2.076	2.021
#2	.2429	41.20	1.963	1.971	2.054	41.44	2.026	2.016	2.076	2.012
#3	.2435	41.48	1.965	1.981	2.067	41.66	2.023	2.017	2.068	2.006

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.00	40.61	40.39	2.025	2.012	41.24	1.977	2.009	1.965	1.961
Stddev	.12	.11	.24	.004	.005	.14	.003	.001	.006	.004
%RSD	.2834	.2753	.5863	.1907	.2421	.3286	.1557	.0638	.2986	.1999
#1	41.09	40.65	40.62	2.029	2.006	41.38	1.974	2.010	1.960	1.957
#2	40.87	40.49	40.15	2.023	2.014	41.11	1.980	2.009	1.971	1.961
#3	41.04	40.70	40.41	2.022	2.015	41.25	1.977	2.008	1.965	1.965

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.020	2.002	2.072	2.054	2.004	2.034	2.021
Stddev	.004	.005	.007	.003	.003	.003	.001
%RSD	.2079	.2284	.3184	.1270	.1478	.1582	.0688
#1	2.016	1.997	2.072	2.056	2.004	2.037	2.019
#2	2.024	2.006	2.066	2.053	2.001	2.035	2.022
#3	2.019	2.002	2.079	2.051	2.007	2.031	2.021

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 15:08:53 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1068.2	2883.2	22750.	2230.7
Stddev	.4	4.7	29.	26.9
%RSD	.03611	.16449	.12808	1.2070
#1	1068.6	2887.8	22781.	2200.8
#2	1067.8	2878.3	22723.	2253.0
#3	1068.3	2883.6	22745.	2238.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 15:12:50 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0023	.0016	.0003	.0001	.0083	.0002	.0002	.0006
Stddev	.0003	.0118	.0002	.0003	.0001	.0011	.0000	.0000	.0002
%RSD	168.6	515.8	14.79	103.2	55.72	12.69	12.11	17.69	34.28
#1	-.0006	-.0015	.0013	.0001	.0002	.0093	.0001	.0002	.0007
#2	.0000	-.0072	.0016	.0006	.0002	.0072	.0002	.0002	.0007
#3	.0000	.0156	.0018	.0001	.0001	.0084	.0001	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0277	.0041	.0250	.0003	F.0030	-.0273	.0006	.0000
Stddev	.0001	.0057	.0252	.0159	.0001	.0008	.0048	.0002	.0004
%RSD	51.53	20.55	610.5	63.57	21.18	25.89	17.66	34.64	2087.
#1	.0002	.0325	-.0180	.0136	.0003	.0038	-.0310	.0007	-.0003
#2	.0003	.0293	.0316	.0183	.0002	.0027	-.0289	.0007	-.0001
#3	.0001	.0214	-.0013	.0432	.0003	.0023	-.0218	.0004	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0006	-.0004	.0004	.0003	.0019	.0013	.0001	.0002
Stddev	.0008	.0015	.0005	.0003	.0000	.0001	.0008	.0002	.0001
%RSD	94.94	239.1	119.4	86.63	16.40	7.241	61.42	317.8	31.28
#1	.0017	-.0007	-.0001	.0004	.0003	.0020	.0021	.0000	.0002
#2	.0010	-.0020	-.0001	.0000	.0003	.0018	.0005	-.0001	.0001
#3	.0000	.0009	-.0009	.0006	.0002	.0018	.0012	.0003	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 15:12:50 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1212.2	2930.1	23100.	2167.6
Stddev	9.1	11.2	102.	22.7
%RSD	.75003	.38162	.44275	1.0455
#1	1202.4	2920.5	22989.	2157.6
#2	1213.8	2927.5	23121.	2151.7
#3	1220.4	2942.4	23191.	2193.5

Zoom In Zoom Out

Sample Name: MP33835-SD1 Acquired: 6/4/2018 15:17:08 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0028	3.882	.0180	.1221	-.0051	8362.	-.0008	-.0024	.0690
Stddev	.0071	.129	.0227	.0034	.0032	66.	.0008	.0052	.0149
%RSD	252.2	3.320	125.7	2.768	62.45	.7942	98.10	219.0	21.63
#1	.0074	3.754	-.0034	.1193	-.0083	8436.	-.0015	-.0084	.0735
#2	-.0054	4.012	.0417	.1259	-.0019	8307.	-.0010	.0003	.0811
#3	.0063	3.880	.0158	.1211	-.0051	8343.	.0001	.0010	.0523

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0028	1.675	.0867	14.43	.0580	-.0021	21.99	.0188	.0248
Stddev	.0079	.048	.4645	.41	.0008	.0033	.19	.0022	.0337
%RSD	278.4	2.876	535.6	2.827	1.392	159.5	.8860	11.73	135.7
#1	.0102	1.699	.6208	14.31	.0572	.0015	22.14	.0213	.0190
#2	-.0054	1.707	-.1376	14.89	.0580	-.0051	21.77	.0172	.0611
#3	.0036	1.620	-.2230	14.10	.0588	-.0026	22.06	.0179	-.0056

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0405	-.0011	1.347	.0139	F121.9	.1601	.0033	.0236	-.0154
Stddev	.0387	.0475	.040	.0059	1.1	.0434	.0381	.0071	.0016
%RSD	95.75	4343.	2.974	42.20	.9026	27.11	1171.	30.01	10.08
#1	.0454	.0514	1.379	.0130	123.0	.2083	.0399	.0155	-.0172
#2	.0765	-.0136	1.360	.0202	120.9	.1479	.0061	.0265	-.0143
#3	-.0005	-.0411	1.302	.0086	121.7	.1241	-.0362	.0287	-.0147

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1011.2	2635.4	21030.	2049.3
Stddev	2.4	1.1	19.	13.5
%RSD	.23960	.04342	.09040	.65932
#1	1008.4	2635.7	21037.	2033.7
#2	1012.7	2636.5	21045.	2056.9
#3	1012.6	2634.2	21009.	2057.3

Zoom In Zoom Out

Sample Name: MP33835-PS1 Acquired: 6/4/2018 15:21:26 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0496	6.179	.1221	.3803	.0509	F7289.	.0497	.0490	.1030
Stddev	.0014	.175	.0078	.0020	.0010	80.	.0001	.0006	.0005
%RSD	2.864	2.826	6.373	.5170	1.988	1.092	.2514	1.187	.4845
#1	.0493	6.065	.1279	.3822	.0502	7381.	.0499	.0496	.1024
#2	.0484	6.091	.1133	.3783	.0504	7240.	.0496	.0490	.1031
#3	.0512	6.380	.1252	.3804	.0521	7247.	.0497	.0484	.1034

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1046	4.552	11.73	17.95	.1060	.0950	33.27	.1155	.0382
Stddev	.0024	.049	.13	.08	.0005	.0009	.13	.0003	.0026
%RSD	2.340	1.077	1.104	.4679	.4991	.9131	.3805	.2326	6.678
#1	.1069	4.559	11.70	18.00	.1057	.0951	33.40	.1152	.0359
#2	.1020	4.500	11.88	17.99	.1066	.0958	33.14	.1157	.0379
#3	.1047	4.597	11.62	17.85	.1058	.0941	33.26	.1156	.0410

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1144	.0809	1.434	.0697	F112.1	.2036	.0706	.0782	.2341
Stddev	.0112	.0069	.013	.0014	.8	.0535	.0039	.0021	.0006
%RSD	9.819	8.541	.8867	2.012	.6749	26.29	5.597	2.651	.2770
#1	.1045	.0858	1.430	.0707	111.5	.2651	.0679	.0778	.2337
#2	.1120	.0839	1.424	.0681	112.9	.1672	.0751	.0764	.2338
#3	.1266	.0730	1.448	.0704	111.9	.1786	.0687	.0805	.2349

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	891.56	2487.9	19809.	2079.9
Stddev	.63	2.7	78.	3.3
%RSD	.07061	.10665	.39496	.15798
#1	892.26	2484.9	19856.	2081.4
#2	891.37	2489.9	19719.	2076.1
#3	891.05	2488.9	19853.	2082.2

◀ Zoom In ▶
Zoom Out

Sample Name: MP33835-S1 Acquired: 6/4/2018 15:25:58 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0543	32.34	2.233	2.252	.0532	F6479.	.0519	.5184	.2547
Stddev	.0041	.24	.002	.004	.0013	123.	.0004	.0010	.0027
%RSD	7.563	.7489	.0877	.2005	2.396	1.896	.8551	.1942	1.070
#1	.0588	32.11	2.231	2.257	.0525	6349.	.0514	.5185	.2558
#2	.0533	32.59	2.234	2.248	.0524	6495.	.0522	.5173	.2516
#3	.0507	32.31	2.234	2.252	.0547	6593.	.0520	.5193	.2568

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2734	28.30	28.93	36.66	.5583	.5054	50.62	.5354	.5239
Stddev	.0009	.05	.19	.07	.0030	.0005	.22	.0013	.0032
%RSD	.3457	.1834	.6425	.2008	.5342	.1028	.4264	.2455	.6106
#1	.2739	28.24	28.76	36.59	.5550	.5056	50.38	.5345	.5202
#2	.2723	28.34	28.92	36.66	.5592	.5048	50.70	.5369	.5251
#3	.2740	28.31	29.13	36.74	.5607	.5058	50.79	.5347	.5262

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5518	2.148	1.826	.5311	F106.4	.5262	1.971	.5430	.5039
Stddev	.0052	.023	.008	.0029	1.9	.0038	.017	.0021	.0024
%RSD	.9481	1.051	.4294	.5392	1.774	.7286	.8566	.3780	.4703
#1	.5554	2.125	1.825	.5340	105.3	.5280	1.964	.5440	.5048
#2	.5458	2.147	1.835	.5312	105.3	.5218	1.990	.5444	.5013
#3	.5541	2.170	1.819	.5283	108.6	.5289	1.959	.5407	.5057

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	898.72	2497.9	20056.	2074.4
Stddev	1.38	4.5	40.	17.0
%RSD	.15314	.17860	.19792	.81985
#1	897.97	2493.6	20092.	2091.8
#2	897.88	2502.5	20063.	2073.4
#3	900.31	2497.6	20013.	2057.9

◀ Zoom In ▶
Zoom Out

Sample Name: MP33835-S2 Acquired: 6/4/2018 15:30:23 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0574	34.96	2.396	2.418	.0577	F6910.	.0558	.5546	.2789
Stddev	.0035	.16	.007	.004	.0004	58.	.0002	.0010	.0052
%RSD	6.082	.4449	.2936	.1819	.7083	.8420	.3305	.1871	1.849
#1	.0539	34.88	2.397	2.417	.0580	6965.	.0556	.5536	.2757
#2	.0608	35.14	2.389	2.414	.0572	6849.	.0558	.5557	.2762
#3	.0576	34.86	2.403	2.423	.0579	6918.	.0559	.5546	.2848

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2940	30.45	31.30	39.75	.6065	.5397	52.96	.5704	.5465
Stddev	.0014	.12	.31	.13	.0053	.0015	.19	.0013	.0072
%RSD	.4683	.3858	.9817	.3393	.8701	.2773	.3534	.2358	1.327
#1	.2924	30.47	31.06	39.78	.6005	.5380	53.04	.5706	.5453
#2	.2946	30.56	31.65	39.87	.6083	.5407	53.10	.5690	.5543
#3	.2950	30.32	31.19	39.60	.6105	.5404	52.75	.5717	.5399

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5914	2.324	2.126	.5629	F112.1	.5666	2.114	.5792	.5402
Stddev	.0013	.025	.002	.0015	.6	.0072	.017	.0024	.0007
%RSD	.2163	1.083	.1117	.2744	.5526	1.279	.7975	.4126	.1369
#1	.5928	2.314	2.127	.5612	111.4	.5582	2.122	.5815	.5395
#2	.5903	2.305	2.127	.5641	112.7	.5703	2.125	.5796	.5402
#3	.5911	2.352	2.123	.5635	112.0	.5713	2.094	.5767	.5410

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	877.84	2452.7	19718.	2052.8
Stddev	1.97	3.7	89.	21.4
%RSD	.22393	.15127	.44907	1.0406
#1	875.62	2449.2	19788.	2028.7
#2	878.53	2452.2	19747.	2060.0
#3	879.36	2456.6	19618.	2069.5

◀ Zoom In ▶
Zoom Out

Sample Name: FA54605-2 Acquired: 6/4/2018 15:34:48 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0048	3.390	.0100	.1329	-.0005	F8147.	-.0004	-.0011	.0706
Stddev	.0035	.082	.0065	.0017	.0004	103.	.0006	.0011	.0017
%RSD	72.00	2.410	64.95	1.274	78.84	1.259	150.9	96.65	2.413
#1	-.0083	3.469	.0131	.1332	-.0005	8137.	-.0007	.0000	.0725
#2	-.0047	3.306	.0025	.1344	-.0001	8254.	-.0008	-.0012	.0692
#3	-.0014	3.395	.0144	.1310	-.0008	8050.	.0003	-.0022	.0701

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0058	1.125	.6056	15.34	.0384	-.0032	23.86	.0110	-.0158
Stddev	.0007	.014	.0018	.32	.0009	.0010	.06	.0019	.0075
%RSD	12.07	1.243	.2977	2.067	2.401	30.48	.2579	16.86	47.04
#1	-.0051	1.109	.6043	15.00	.0374	-.0021	23.81	.0089	-.0086
#2	-.0057	1.136	.6077	15.42	.0384	-.0035	23.93	.0120	-.0235
#3	-.0065	1.129	.6048	15.62	.0393	-.0040	23.85	.0122	-.0155

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0181	-.0216	.7934	.0235	F119.9	.0821	-.0292	.0336	-.0188
Stddev	.0069	.0093	.0022	.0020	2.1	.0118	.0028	.0010	.0008
%RSD	38.21	42.97	.2805	8.495	1.717	14.38	9.437	2.868	4.205
#1	.0169	-.0112	.7960	.0258	118.4	.0712	-.0324	.0334	-.0188
#2	.0256	-.0246	.7923	.0227	122.2	.0804	-.0281	.0347	-.0195
#3	.0119	-.0289	.7921	.0220	119.1	.0946	-.0272	.0328	-.0179

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	869.36	2453.3	19329.	2053.2
Stddev	1.91	5.0	73.	22.0
%RSD	.21993	.20222	.38009	1.0699
#1	871.37	2454.7	19349.	2059.8
#2	867.57	2457.4	19390.	2028.7
#3	869.14	2447.8	19247.	2071.2

◀ Zoom In ▶
Zoom Out

Sample Name: FA54605-6 Acquired: 6/4/2018 15:39:22 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0057	11.37	-.0105	.1064	-.0002	F6927.	-.0001	.0072	.0730
Stddev	.0020	.09	.0058	.0009	.0007	61.	.0006	.0003	.0035
%RSD	35.43	.8091	55.50	.8426	409.7	.8798	468.0	4.603	4.833
#1	-.0053	11.42	-.0172	.1056	-.0006	6873.	.0004	.0075	.0697
#2	-.0080	11.42	-.0076	.1074	.0007	6993.	.0000	.0069	.0767
#3	-.0039	11.26	-.0067	.1064	-.0006	6915.	-.0008	.0070	.0725

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0064	9.682	.4613	14.76	.4686	-.0031	10.65	.0130	-.0098
Stddev	.0006	.036	.1637	.07	.0027	.0011	.07	.0011	.0068
%RSD	9.145	.3708	35.50	.4582	.5866	35.66	.6370	8.564	69.94
#1	-.0060	9.642	.3932	14.81	.4698	-.0030	10.58	.0123	-.0146
#2	-.0071	9.711	.3426	14.68	.4705	-.0021	10.71	.0143	-.0128
#3	-.0063	9.693	.6481	14.78	.4654	-.0043	10.68	.0125	-.0020

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0123	-.0104	2.417	.0219	F61.62	.1465	-.0340	.0328	-.0153
Stddev	.0101	.0108	.015	.0016	.43	.0183	.0093	.0009	.0003
%RSD	81.91	103.9	.6056	7.251	.6995	12.50	27.22	2.832	2.034
#1	.0222	-.0031	2.412	.0233	62.10	.1579	-.0444	.0321	-.0152
#2	.0020	-.0228	2.433	.0222	61.27	.1563	-.0313	.0324	-.0156
#3	.0127	-.0053	2.405	.0202	61.48	.1254	-.0264	.0338	-.0151

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	917.28	2602.7	20415.	2154.4
Stddev	1.47	3.3	87.	5.8
%RSD	.16001	.12643	.42486	.27094
#1	918.26	2599.4	20395.	2154.9
#2	917.99	2605.9	20341.	2148.4
#3	915.59	2602.7	20510.	2160.0

Zoom In Zoom Out

Sample Name: FA54605-10 Acquired: 6/4/2018 15:43:54 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0024	2.400	-.0120	.0993	-.0008	F6583.	-.0004	-.0003	.0381
Stddev	.0017	.074	.0057	.0009	.0006	121.	.0005	.0004	.0004
%RSD	69.52	3.095	47.23	.9545	77.75	1.831	113.4	158.4	.9419
#1	-.0011	2.389	-.0066	.1002	-.0012	6445.	-.0010	-.0002	.0380
#2	-.0018	2.479	-.0115	.0983	-.0010	6634.	-.0002	-.0007	.0385
#3	-.0042	2.332	-.0179	.0994	-.0001	6670.	-.0001	.0001	.0377

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0058	1.468	.4921	14.73	.1347	-.0038	19.02	.0090	-.0055
Stddev	.0013	.035	.0805	.15	.0010	.0011	.13	.0014	.0017
%RSD	21.76	2.375	16.37	1.014	.7660	29.76	.6642	16.04	30.85
#1	-.0072	1.438	.5138	14.61	.1342	-.0037	18.88	.0078	-.0074
#2	-.0054	1.461	.4029	14.90	.1359	-.0027	19.12	.0085	-.0049
#3	-.0048	1.506	.5595	14.68	.1340	-.0049	19.06	.0106	-.0041

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0096	-.0216	.7936	.0231	F91.25	.0407	-.0262	.0178	-.0140
Stddev	.0017	.0027	.0075	.0002	1.26	.0117	.0044	.0021	.0003
%RSD	17.80	12.70	.9407	1.031	1.381	28.84	16.69	11.98	2.133
#1	.0116	-.0218	.7893	.0228	90.17	.0497	-.0310	.0172	-.0137
#2	.0085	-.0242	.7892	.0232	90.94	.0274	-.0251	.0161	-.0143
#3	.0087	-.0188	.8022	.0232	92.63	.0451	-.0225	.0202	-.0141

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	921.39	2579.4	20283.	2138.7
Stddev	2.03	6.2	79.	11.1
%RSD	.22085	.24176	.39117	.51799
#1	919.11	2576.6	20242.	2151.5
#2	922.03	2586.5	20232.	2131.9
#3	923.03	2575.0	20374.	2132.7

Zoom In Zoom Out

Sample Name: FA54605-12 Acquired: 6/4/2018 15:48:28 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0010	11.55	.0010	.1152	-.0008	F5842.	-.0005	.0012	.0752
Stddev	.0010	.10	.0033	.0017	.0007	36.	.0001	.0007	.0017
%RSD	105.2	.8313	328.8	1.509	93.06	.6081	17.79	58.39	2.203
#1	.0000	11.58	-.0018	.1168	-.0010	5850.	-.0004	.0014	.0751
#2	-.0020	11.44	.0002	.1155	.0000	5803.	-.0005	.0004	.0768
#3	-.0008	11.63	.0046	.1133	-.0013	5873.	-.0004	.0017	.0735

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0045	11.29	.4697	12.82	.5844	-.0028	15.03	.0119	-.0069
Stddev	.0017	.03	.0502	.11	.0027	.0006	.17	.0007	.0027
%RSD	36.75	.2700	10.69	.8537	.4626	20.90	1.148	5.733	39.67
#1	-.0042	11.26	.4592	12.87	.5849	-.0029	15.04	.0126	-.0048
#2	-.0030	11.32	.5243	12.90	.5815	-.0033	14.84	.0112	-.0099
#3	-.0063	11.30	.4255	12.69	.5868	-.0022	15.19	.0119	-.0058

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0084	-.0146	3.759	.0219	F68.85	.3555	-.0200	.0243	-.0114
Stddev	.0080	.0170	.020	.0010	1.07	.0188	.0019	.0013	.0002
%RSD	94.97	115.8	.5198	4.432	1.559	5.288	9.507	5.177	1.988
#1	.0175	.0044	3.776	.0227	69.43	.3491	-.0182	.0258	-.0115
#2	.0021	-.0283	3.763	.0208	67.61	.3407	-.0220	.0237	-.0111
#3	.0057	-.0200	3.738	.0223	69.51	.3766	-.0197	.0236	-.0116

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	933.16	2608.9	20609.	2165.7
Stddev	2.11	7.1	47.	9.0
%RSD	.22644	.27181	.22809	.41671
#1	931.40	2614.3	20555.	2162.0
#2	932.59	2611.6	20635.	2175.9
#3	935.50	2600.9	20638.	2159.0

Zoom In Zoom Out

Sample Name: FA54605-14 Acquired: 6/4/2018 15:53:01 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0034	90.39	.0851	.1055	.0014	F5187.	-.0008	.0071	.3120
Stddev	.0019	.26	.0064	.0013	.0008	76.	.0001	.0002	.0014
%RSD	55.40	.2850	7.580	1.209	54.09	1.465	7.434	2.963	.4599
#1	-.0018	90.62	.0888	.1065	.0006	5222.	-.0008	.0069	.3111
#2	-.0055	90.11	.0776	.1060	.0016	5100.	-.0007	.0070	.3113
#3	-.0029	90.46	.0888	.1041	.0021	5240.	-.0008	.0073	.3137

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0049	54.33	.8921	14.10	.3545	.0080	12.16	.0512	.0292
Stddev	.0018	.16	.0337	.10	.0011	.0006	.04	.0005	.0082
%RSD	36.85	.2949	3.774	.7236	.3009	8.029	.3195	.9613	28.07
#1	.0063	54.50	.8568	14.04	.3557	.0087	12.17	.0516	.0386
#2	.0055	54.18	.9238	14.22	.3540	.0075	12.19	.0513	.0249
#3	.0028	54.32	.8956	14.04	.3537	.0077	12.12	.0506	.0240

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0076	-.0049	8.102	.0245	F61.86	.9532	-.0182	.0836	.0029
Stddev	.0031	.0076	.059	.0020	.86	.0100	.0051	.0022	.0001
%RSD	41.09	156.0	.7307	8.329	1.397	1.052	27.93	2.665	2.631
#1	.0055	.0039	8.165	.0267	62.67	.9591	-.0201	.0813	.0030
#2	.0061	-.0086	8.093	.0240	60.95	.9588	-.0124	.0837	.0029
#3	.0112	-.0098	8.048	.0227	61.97	.9416	-.0220	.0858	.0029

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	931.38	2732.1	21594.	2244.4
Stddev	1.37	3.4	13.	16.3
%RSD	.14679	.12616	.05902	.72663
#1	929.80	2729.0	21602.	2235.5
#2	932.10	2735.8	21579.	2263.2
#3	932.24	2731.4	21599.	2234.5

Zoom In Zoom Out

Sample Name: FA54605-15 Acquired: 6/4/2018 15:57:32 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0032	36.32	-.0020	.0964	.0000	F6424.	-.0004	.0015	.1297
Stddev	.0034	.03	.0054	.0005	.0002	26.	.0002	.0006	.0020
%RSD	106.4	.0798	267.9	.5375	820.4	.4007	43.40	37.84	1.564
#1	-.0049	36.29	.0038	.0963	.0001	6394.	-.0004	.0020	.1299
#2	.0007	36.33	-.0069	.0970	-.0002	6442.	-.0006	.0009	.1275
#3	-.0054	36.34	-.0030	.0960	.0002	6435.	-.0003	.0016	.1315

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0019	10.46	.6866	13.23	.1319	-.0033	16.44	.0175	.0028
Stddev	.0009	.04	.0618	.10	.0005	.0012	.06	.0002	.0022
%RSD	46.37	.4023	9.004	.7266	.3546	35.16	.3709	1.425	78.03
#1	-.0009	10.49	.7195	13.17	.1315	-.0025	16.40	.0178	.0051
#2	-.0021	10.42	.7249	13.18	.1318	-.0046	16.41	.0174	.0008
#3	-.0027	10.49	.6152	13.34	.1325	-.0028	16.51	.0173	.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0083	-.0107	7.450	.0221	F86.28	.6373	-.0270	.0384	-.0001
Stddev	.0065	.0105	.048	.0013	.76	.0503	.0086	.0010	.0004
%RSD	78.20	97.87	.6374	5.757	.8753	7.891	32.04	2.494	286.9
#1	.0110	.0013	7.438	.0233	85.49	.6241	-.0220	.0373	.0003
#2	.0009	-.0181	7.503	.0221	86.99	.5949	-.0369	.0391	-.0005
#3	.0130	-.0154	7.410	.0208	86.36	.6929	-.0219	.0387	-.0002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	921.22	2647.8	20897.	2198.2
Stddev	1.03	4.8	47.	6.3
%RSD	.11231	.18126	.22678	.28584
#1	921.21	2642.4	20950.	2201.5
#2	920.19	2651.3	20858.	2190.9
#3	922.26	2649.8	20883.	2202.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 16:02:03 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2629	F44.97	2.066	2.137	F2.208	F44.86	2.148	2.137	F2.244
Stddev	.0024	.20	.006	.007	.010	.32	.007	.004	.006
%RSD	.9016	.4362	.2852	.3469	.4396	.7184	.3306	.2108	.2694
#1	.2656	45.16	2.069	2.143	2.219	45.21	2.155	2.142	2.250
#2	.2622	44.77	2.071	2.139	2.204	44.57	2.146	2.137	2.244
#3	.2610	44.99	2.060	2.129	2.200	44.82	2.141	2.133	2.238
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value		40.00			2.000	40.00			2.000
Range		10.00%			10.00%	10.00%			10.00%

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.161	43.75	43.25	43.08	2.184	2.135	F44.89	2.091	2.133
Stddev	.003	.15	.21	.10	.011	.004	.27	.005	.008
%RSD	.1174	.3501	.4911	.2212	.5152	.2023	.5972	.2654	.3890
#1	2.159	43.93	43.48	43.19	2.196	2.139	45.10	2.096	2.142
#2	2.164	43.65	43.20	43.02	2.180	2.137	44.59	2.092	2.127
#3	2.160	43.68	43.07	43.03	2.175	2.130	44.98	2.085	2.129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							40.00		
Range							10.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.076	2.073	2.132	2.105	F2.246	F2.218	2.138	2.177	2.144
Stddev	.002	.002	.004	.008	.008	.009	.010	.005	.008
%RSD	.1174	.0782	.2001	.3795	.3708	.4031	.4828	.2542	.3795
#1	2.078	2.071	2.135	2.113	2.255	2.228	2.147	2.178	2.153
#2	2.075	2.075	2.133	2.105	2.242	2.218	2.140	2.181	2.140
#3	2.073	2.072	2.127	2.097	2.240	2.210	2.127	2.171	2.138
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value					2.000	2.000			
Range					10.00%	10.00%			

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 16:02:03 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1014.2	2746.8	21289.	2123.5
Stddev	4.7	9.5	62.	20.9
%RSD	.45939	.34436	.29322	.98298
#1	1008.8	2736.0	21217.	2101.9
#2	1017.1	2751.2	21330.	2143.6
#3	1016.7	2753.4	21319.	2125.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 16:05:59 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0139	.0006	.0002	.0001	.0140	.0002	.0002	.0007
Stddev	.0003	.0077	.0009	.0002	.0001	.0065	.0000	.0001	.0003
%RSD	164.6	55.24	172.0	111.0	76.33	46.22	8.433	65.84	39.74
#1	.0000	.0202	.0016	.0004	.0001	.0080	.0002	.0003	.0005
#2	.0000	.0053	.0003	.0002	.0001	.0132	.0002	.0002	.0006
#3	-.0005	.0163	-.0003	.0000	.0003	.0208	.0002	.0001	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0248	-.0483	.0160	.0003	F.0030	-.0280	.0006	.0000
Stddev	.0002	.0028	.0210	.0329	.0000	.0008	.0121	.0002	.001
%RSD	1478.	11.34	43.49	206.3	6.294	27.33	43.16	31.61	1527.
#1	.0000	.0280	-.0721	.0466	.0003	.0039	-.0343	.0006	-.0003
#2	.0002	.0237	-.0401	.0202	.0003	.0030	-.0357	.0004	.0005
#3	-.0002	.0228	-.0326	-.0189	.0003	.0022	-.0141	.0008	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0005	-.0004	.0007	.0004	.0018	.0007	.0001	.0002
Stddev	.0007	.0018	.0004	.0004	.0001	.0001	.0005	.0001	.0001
%RSD	79.69	391.6	93.98	52.43	22.45	7.482	69.42	122.9	29.47
#1	.0001	.0005	-.0005	.0007	.0004	.0020	.0008	.0001	.0003
#2	.0014	-.0014	.0000	.0011	.0003	.0018	.0002	.0001	.0002
#3	.0012	.0023	-.0008	.0003	.0004	.0017	.0012	.0000	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 16:05:59 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1225.6	2984.4	23404.	2253.6
Stddev	2.3	6.4	65.	38.5
%RSD	.18655	.21480	.27842	1.7089
#1	1224.4	2982.9	23330.	2275.6
#2	1224.1	2978.9	23451.	2209.1
#3	1228.2	2991.4	23431.	2276.1

◄ Zoom In ►
Zoom Out

Sample Name: FA54605-19 Acquired: 6/4/2018 16:10:17 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0050	1.252	-.0147	.1050	-.0003	F6534.	-.0005	-.0006	.0364
Stddev	.0005	.025	.0037	.0010	.0004	25.	.0002	.0002	.0023
%RSD	10.75	2.030	24.95	.9602	153.6	.3788	45.14	24.89	6.253
#1	-.0056	1.277	-.0112	.1045	-.0008	6547.	-.0008	-.0007	.0376
#2	-.0046	1.253	-.0185	.1061	-.0001	6549.	-.0004	-.0004	.0337
#3	-.0047	1.226	-.0144	.1043	.0000	6505.	-.0004	-.0007	.0378

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0042	.6919	.3280	10.89	.0311	-.0009	23.19	.0094	-.0147
Stddev	.0024	.0109	.0384	.23	.0003	.0015	.06	.0013	.0044
%RSD	57.57	1.571	11.71	2.100	.8815	171.6	.2735	13.59	30.03
#1	-.0067	.6794	.3385	10.71	.0310	.0008	23.20	.0093	-.0096
#2	-.0019	.6967	.3601	10.82	.0314	-.0014	23.25	.0107	-.0175
#3	-.0040	.6995	.2855	11.15	.0309	-.0021	23.12	.0082	-.0170

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0085	-.0210	.7433	.0228	F112.4	-.0148	-.0283	.0117	-.0147
Stddev	.0072	.0057	.0043	.0029	1.0	.0064	.0060	.0011	.0003
%RSD	84.81	27.10	.5801	12.73	.8702	43.44	21.19	9.211	2.088
#1	.0061	-.0257	.7425	.0259	113.4	-.0192	-.0333	.0106	-.0148
#2	.0166	-.0147	.7395	.0223	112.3	-.0178	-.0216	.0116	-.0150
#3	.0028	-.0226	.7480	.0201	111.5	-.0074	-.0300	.0128	-.0144

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	921.66	2573.2	20153.	2165.1
Stddev	.14	4.4	105.	5.1
%RSD	.01473	.16924	.52178	.23723
#1	921.68	2568.5	20135.	2160.3
#2	921.79	2577.1	20059.	2170.5
#3	921.52	2574.1	20267.	2164.6

◄ Zoom In ►
Zoom Out

Sample Name: FA54605-23 Acquired: 6/4/2018 16:14:53 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0025	114.4	1.687	.5876	.0032	F4825.	.0010	.0069	.3273
Stddev	.0010	.2	.005	.0032	.0002	53.	.0005	.0007	.0008
%RSD	41.88	.1707	.2777	.5373	6.391	1.107	52.40	10.04	.2359
#1	-.0015	114.4	1.692	.5841	.0030	4819.	.0013	.0061	.3281
#2	-.0036	114.6	1.683	.5903	.0034	4881.	.0013	.0072	.3270
#3	-.0023	114.2	1.685	.5884	.0033	4775.	.0004	.0073	.3267

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3052	73.62	1.814	21.79	2.337	.0033	2.707	.0705	.1746
Stddev	.0011	.10	.028	.25	.011	.0006	.006	.0007	.0075
%RSD	.3628	.1355	1.551	1.166	.4594	17.70	.2275	.9875	4.311
#1	.3044	73.53	1.788	21.73	2.331	.0039	2.713	.0700	.1783
#2	.3048	73.73	1.844	22.07	2.330	.0027	2.707	.0713	.1659
#3	.3065	73.61	1.811	21.57	2.349	.0033	2.701	.0701	.1795

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0070	-.0112	28.24	.0236	18.85	1.239	-.0188	.1337	.1451
Stddev	.0026	.0049	.11	.0023	.04	.020	.0054	.0012	.0006
%RSD	36.58	43.62	.3827	9.607	.2201	1.584	28.86	.9277	.3902
#1	.0048	-.0146	28.37	.0235	18.82	1.238	-.0244	.1348	.1449
#2	.0064	-.0134	28.19	.0259	18.89	1.260	-.0185	.1324	.1446
#3	.0099	-.0056	28.17	.0213	18.83	1.220	-.0136	.1339	.1457

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	951.89	2796.9	21584.	2228.1
Stddev	2.48	6.2	57.	9.6
%RSD	.26062	.22233	.26330	.42909
#1	950.89	2798.4	21573.	2232.4
#2	954.71	2802.2	21646.	2217.2
#3	950.06	2790.0	21534.	2234.8

◄ Zoom In ►
Zoom Out

Sample Name: FA54693-17 Acquired: 6/4/2018 16:19:14 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0041	77.99	.0632	.1787	.0017	F5581.	.0022	.0029	.2173
Stddev	.0009	.44	.0061	.0021	.0002	31.	.0001	.0009	.0023
%RSD	21.50	.5590	9.654	1.174	14.49	.5636	3.760	30.05	1.052
#1	-.0043	77.62	.0601	.1778	.0017	5545.	.0023	.0037	.2199
#2	-.0048	78.47	.0703	.1810	.0014	5597.	.0021	.0030	.2162
#3	-.0031	77.87	.0593	.1771	.0019	5601.	.0022	.0020	.2158

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0439	40.15	.9401	13.28	.9841	-.0032	21.31	.0348	.0510
Stddev	.0007	.11	.0765	.18	.0109	.0010	.10	.0012	.0021
%RSD	1.615	.2844	8.141	1.385	1.107	33.12	.4690	3.461	4.063
#1	.0446	40.22	.8795	13.09	.9922	-.0029	21.20	.0340	.0531
#2	.0440	40.20	1.026	13.45	.9883	-.0043	21.40	.0362	.0510
#3	.0432	40.01	.9148	13.30	.9717	-.0023	21.31	.0342	.0490

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0036	-.0120	2.772	.0206	F64.97	1.076	-.0223	.0909	.0037
Stddev	.0046	.0074	.010	.0002	.69	.011	.0057	.0010	.0004
%RSD	127.5	61.91	.3690	.7610	1.064	1.031	25.62	1.124	12.02
#1	-.0011	-.0034	2.770	.0208	64.43	1.088	-.0236	.0911	.0042
#2	.0080	-.0158	2.783	.0206	65.75	1.074	-.0272	.0918	.0036
#3	.0039	-.0168	2.763	.0205	64.74	1.066	-.0160	.0897	.0033

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	941.73	2738.5	21173.	2241.5
Stddev	1.98	3.4	155.	11.3
%RSD	.20977	.12456	.73371	.50626
#1	939.68	2740.0	21088.	2253.3
#2	943.62	2740.9	21079.	2230.7
#3	941.88	2734.6	21352.	2240.7

◄ Zoom In ►
Zoom Out

Sample Name: FA54693-20 Acquired: 6/4/2018 16:23:45 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0026	53.62	.0690	.5135	.0030	F6868.	.0459	.0147	.2273
Stddev	.0005	.10	.0016	.0035	.0005	37.	.0001	.0008	.0039
%RSD	17.84	.1941	2.349	.6754	17.17	.5415	.2865	5.195	1.711
#1	-.0030	53.67	.0682	.5147	.0032	6880.	.0459	.0153	.2238
#2	-.0028	53.69	.0679	.5161	.0024	6827.	.0457	.0139	.2266
#3	-.0021	53.50	.0708	.5095	.0035	6898.	.0460	.0149	.2315

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1635	58.17	3.002	38.14	.8818	.0098	10.77	.0741	1.664
Stddev	.0029	.30	.097	.13	.0020	.0010	.04	.0006	.003
%RSD	1.761	.5106	3.218	.3481	.2226	9.758	.3796	.8086	.2069
#1	.1646	58.49	3.098	38.21	.8809	.0089	10.73	.0735	1.661
#2	.1603	58.12	3.004	37.99	.8805	.0108	10.77	.0747	1.667
#3	.1657	57.90	2.904	38.23	.8841	.0097	10.81	.0741	1.664

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0137	-.0154	3.746	.0253	F35.87	2.013	-.0242	.1858	3.095
Stddev	.0041	.0044	.038	.0010	.21	.007	.0106	.0032	.006
%RSD	30.28	28.35	1.009	4.048	.5828	.3502	43.91	1.718	.1970
#1	.0112	-.0203	3.719	.0242	35.99	2.013	-.0119	.1893	3.091
#2	.0185	-.0138	3.789	.0262	35.98	2.005	-.0302	.1830	3.092
#3	.0114	-.0120	3.730	.0254	35.62	2.019	-.0305	.1851	3.102

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	909.25	2610.9	20191.	2142.6
Stddev	.64	3.0	84.	3.8
%RSD	.07032	.11563	.41387	.17890
#1	909.92	2611.1	20222.	2140.8
#2	908.64	2613.8	20255.	2147.0
#3	909.19	2607.8	20097.	2139.9

Zoom In Zoom Out

Sample Name: FA54693-24 Acquired: 6/4/2018 16:28:06 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	32.02	.0192	.5094	.0020	F5858.	.1954	.0070	.2154
Stddev	.0014	.23	.0050	.0030	.0001	37.	.0006	.0005	.0074
%RSD	193.5	.7107	25.80	.5952	5.125	.6365	.2928	7.254	3.439
#1	.0018	31.78	.0249	.5128	.0019	5858.	.1957	.0064	.2132
#2	-.0008	32.04	.0164	.5069	.0021	5821.	.1947	.0073	.2237
#3	.0012	32.23	.0163	.5087	.0020	5896.	.1957	.0072	.2094

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0655	29.23	1.174	22.20	.3220	.0033	7.998	.0385	.7243
Stddev	.0012	.14	.051	.14	.0031	.0009	.054	.0008	.0056
%RSD	1.872	.4649	4.340	.6382	.9645	26.51	.6777	2.063	.7669
#1	.0667	29.17	1.128	22.37	.3232	.0042	7.956	.0375	.7307
#2	.0642	29.14	1.228	22.15	.3243	.0024	7.978	.0390	.7209
#3	.0656	29.39	1.165	22.10	.3185	.0033	8.059	.0389	.7212

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0128	-.0055	3.654	.0241	F39.43	1.394	-.0212	.1000	1.152
Stddev	.0060	.0030	.078	.0012	.12	.006	.0015	.0009	.002
%RSD	46.59	55.05	2.125	5.101	.2965	.4697	7.154	.9021	.1501
#1	.0070	-.0059	3.691	.0247	39.37	1.392	-.0228	.1009	1.153
#2	.0125	-.0084	3.707	.0227	39.35	1.401	-.0210	.1000	1.150
#3	.0189	-.0023	3.565	.0250	39.56	1.388	-.0198	.0991	1.154

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	911.09	2598.4	19942.	2100.7
Stddev	2.83	4.1	76.	13.8
%RSD	.31116	.15830	.38106	.65459
#1	908.32	2594.3	19858.	2104.5
#2	913.98	2602.5	19962.	2112.2
#3	910.96	2598.4	20006.	2085.5

Zoom In Zoom Out

Sample Name: FA54693-25 Acquired: 6/4/2018 16:32:28 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0043	52.37	.2266	.2316	.0005	F9551.	.0025	.0031	.3454
Stddev	.0026	1.71	.0051	.0067	.0006	363.	.0007	.0011	.0008
%RSD	60.22	3.272	2.243	2.890	134.1	3.797	29.91	35.10	.2322
#1	-.0035	52.04	.2288	.2291	-.0002	9385.	.0030	.0030	.3447
#2	-.0023	54.23	.2208	.2392	.0008	9967.	.0016	.0020	.3463
#3	-.0073	50.85	.2302	.2265	.0009	9300.	.0027	.0042	.3453

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3687	36.44	.6850	22.67	1.396	-.0017	17.34	.0344	.7241
Stddev	.0034	1.27	.1211	.66	.003	.0010	.63	.0009	.0080
%RSD	.9164	3.480	17.68	2.931	.2290	54.84	3.646	2.500	1.104
#1	.3678	36.34	.5892	22.53	1.399	-.0023	17.30	.0353	.7239
#2	.3659	37.76	.6447	23.40	1.394	-.0006	17.99	.0341	.7162
#3	.3724	35.23	.8212	22.09	1.393	-.0023	16.72	.0337	.7322

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0170	-.0172	3.462	.0251	F91.67	.6885	-.0382	.0770	.2319
Stddev	.0069	.0096	.034	.0011	2.85	.0180	.0076	.0020	.0013
%RSD	40.47	55.59	.9883	4.223	3.109	2.607	19.91	2.597	.5590
#1	.0100	-.0080	3.423	.0246	89.58	.7023	-.0437	.0770	.2313
#2	.0238	-.0271	3.481	.0264	94.91	.6951	-.0414	.0750	.2310
#3	.0173	-.0166	3.483	.0244	90.51	.6682	-.0295	.0790	.2334

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	865.28	2554.8	19804.	2073.6
Stddev	2.39	6.4	40.	64.7
%RSD	.27597	.24877	.20112	3.1206
#1	862.53	2558.3	19758.	2089.5
#2	866.47	2558.5	19822.	2002.5
#3	866.84	2547.4	19831.	2128.9

Zoom In Zoom Out

Sample Name: FA54693-29 Acquired: 6/4/2018 16:36:56 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0028	258.0	.6219	.2675	.0088	F4404.	.0027	.0042	.9854
Stddev	.0024	2.0	.0047	.0013	.0002	14.	.0006	.0004	.0028
%RSD	85.82	.7635	.7523	.5008	2.508	.3130	23.36	9.854	.2823
#1	-.0001	257.7	.6188	.2688	.0088	4415.	.0034	.0044	.9870
#2	-.0038	256.2	.6273	.2661	.0091	4389.	.0023	.0044	.9822
#3	-.0046	260.1	.6196	.2677	.0086	4410.	.0024	.0037	.9870

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6775	153.6	2.126	19.66	2.472	.0000	13.32	.0847	1.394
Stddev	.0015	1.0	.104	.18	.009	.0007	.14	.0006	.007
%RSD	.2161	.6758	4.894	.9372	.3754	6485.	1.042	.7014	.5014
#1	.6784	153.3	2.083	19.57	2.461	.0005	13.31	.0853	1.387
#2	.6783	152.8	2.050	19.55	2.476	-.0008	13.18	.0841	1.396
#3	.6758	154.8	2.244	19.88	2.478	.0004	13.46	.0846	1.400

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0128	-.0050	14.18	.0254	F54.45	3.985	-.0193	.2220	.0818
Stddev	.0030	.0061	.06	.0011	.93	.049	.0128	.0019	.0004
%RSD	23.19	122.4	.3993	4.470	1.708	1.223	66.58	.8602	.5259
#1	.0156	-.0064	14.22	.0267	54.22	4.038	-.0089	.2232	.0814
#2	.0097	-.0104	14.12	.0252	53.67	3.975	-.0153	.2198	.0817
#3	.0130	.0017	14.20	.0244	55.48	3.942	-.0336	.2231	.0822

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	951.04	3246.6	25199.	2643.9
Stddev	1.32	3.8	193.	19.9
%RSD	.13854	.11740	.76697	.75263
#1	951.48	3244.5	25409.	2660.8
#2	952.09	3244.2	25161.	2648.8
#3	949.56	3250.9	25029.	2622.0

Zoom In Zoom Out

Sample Name: FA54655-1 Acquired: 6/4/2018 16:41:26 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0040	3.402	.0099	.1378	-.0006	F6153.	-.0007	.0012	.0532
Stddev	.0030	.046	.0025	.0009	.0005	24.	.0001	.0004	.0020
%RSD	75.86	1.348	25.49	.6776	79.88	.3951	20.41	32.52	3.681
#1	-.0046	3.452	.0098	.1375	-.0004	6131.	-.0006	.0009	.0533
#2	-.0067	3.393	.0075	.1389	-.0003	6179.	-.0008	.0016	.0512
#3	-.0007	3.362	.0126	.1371	-.0012	6148.	-.0008	.0010	.0551

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0026	3.308	.2487	12.54	.0897	-.0029	16.13	.0094	-.0073
Stddev	.0026	.023	.1178	.20	.0008	.0006	.02	.0011	.0027
%RSD	99.26	.7065	47.36	1.633	.9332	21.09	.1537	12.01	36.94
#1	.0017	3.295	.3702	12.34	.0892	-.0027	16.14	.0098	-.0084
#2	.0006	3.335	.2409	12.55	.0907	-.0036	16.15	.0081	-.0093
#3	.0055	3.294	.1350	12.75	.0893	-.0024	16.11	.0102	-.0042

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0101	-.0235	.6053	.0222	F86.41	.0618	-.0284	.0237	-.0129
Stddev	.0023	.0221	.0085	.0019	1.13	.0032	.0034	.0009	.0007
%RSD	22.95	94.01	1.412	8.696	1.302	5.221	11.81	3.897	5.584
#1	.0097	-.0436	.6016	.0228	85.30	.0582	-.0272	.0241	-.0129
#2	.0125	-.0271	.6150	.0200	87.55	.0644	-.0321	.0244	-.0137
#3	.0080	.0002	.5992	.0238	86.37	.0627	-.0257	.0227	-.0122

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	899.27	2496.3	19579.	2061.8
Stddev	1.00	4.7	93.	8.4
%RSD	.11069	.18761	.47642	.40822
#1	898.29	2499.1	19553.	2052.1
#2	899.24	2499.0	19501.	2066.6
#3	900.28	2490.9	19682.	2066.7

Zoom In Zoom Out

Sample Name: FA54655-2 Acquired: 6/4/2018 16:46:01 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0028	2.888	.0723	.1091	-.0005	F7253.	-.0004	-.0009	.0418
Stddev	.0023	.031	.0044	.0028	.0005	69.	.0003	.0007	.0011
%RSD	81.84	1.073	6.039	2.561	88.77	.9574	57.22	79.80	2.532
#1	-.0052	2.888	.0689	.1122	-.0006	7315.	-.0006	-.0003	.0425
#2	-.0008	2.919	.0707	.1083	-.0001	7268.	-.0002	-.0007	.0422
#3	-.0022	2.857	.0772	.1067	-.0010	7178.	-.0006	-.0017	.0406

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0062	1.220	.3544	12.71	.0597	-.0049	21.82	.0130	-.0135
Stddev	.0015	.022	.1121	.17	.0005	.0005	.05	.0004	.0020
%RSD	23.45	1.846	31.62	1.304	.8373	11.12	.2272	3.058	14.96
#1	-.0064	1.246	.3006	12.71	.0601	-.0055	21.88	.0130	-.0128
#2	-.0076	1.208	.4832	12.55	.0598	-.0044	21.79	.0134	-.0119
#3	-.0047	1.206	.2793	12.88	.0592	-.0047	21.79	.0126	-.0157

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0077	-.0256	1.246	.0220	F107.9	.0232	-.0261	.0235	-.0180
Stddev	.0057	.0150	.010	.0015	.2	.0102	.0061	.0007	.0003
%RSD	73.35	58.61	.8044	6.800	.2295	44.15	23.33	3.111	1.727
#1	.0039	-.0085	1.256	.0232	107.6	.0156	-.0323	.0242	-.0183
#2	.0142	-.0320	1.236	.0224	108.1	.0349	-.0259	.0234	-.0178
#3	.0050	-.0364	1.247	.0203	107.9	.0192	-.0201	.0228	-.0178

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	890.23	2503.8	19635.	2091.8
Stddev	1.40	5.0	47.	6.3
%RSD	.15756	.20014	.23956	.30285
#1	888.61	2499.1	19602.	2086.9
#2	891.11	2503.2	19689.	2089.6
#3	890.96	2509.0	19615.	2099.0

Zoom In Zoom Out

Sample Name: FA54656-4 Acquired: 6/4/2018 16:50:37 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0017	13.24	.0289	.1876	-.0002	F7148.	.0036	.0025	.1316
Stddev	.0029	.15	.0080	.0015	.0007	90.	.0001	.0007	.0016
%RSD	167.3	1.143	27.64	.7953	295.0	1.266	3.061	26.32	1.236
#1	-.0048	13.15	.0197	.1860	-.0008	7149.	.0036	.0017	.1335
#2	-.0011	13.41	.0343	.1881	.0005	7238.	.0038	.0028	.1308
#3	.0008	13.15	.0326	.1888	-.0003	7057.	.0036	.0029	.1305

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0756	8.414	.5178	16.60	.2149	-.0020	22.40	.0168	.8018
Stddev	.0021	.047	.0684	.30	.0012	.0004	.14	.0016	.0107
%RSD	2.722	.5637	13.21	1.812	.5497	21.28	.6150	9.564	1.338
#1	.0773	8.362	.5966	16.32	.2149	-.0015	22.38	.0185	.7921
#2	.0764	8.456	.4821	16.92	.2160	-.0023	22.54	.0167	.8000
#3	.0733	8.423	.4747	16.57	.2136	-.0023	22.27	.0153	.8133

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0270	-.0095	2.336	.0241	F85.03	.2119	-.0255	.0300	.0294
Stddev	.0068	.0157	.012	.0008	.76	.0193	.0023	.0023	.0007
%RSD	25.01	165.6	.5030	3.188	.8899	9.118	9.209	7.799	2.255
#1	.0195	.0032	2.339	.0242	84.34	.2340	-.0241	.0280	.0300
#2	.0289	-.0045	2.347	.0248	85.84	.2032	-.0282	.0326	.0287
#3	.0326	-.0271	2.324	.0233	84.90	.1984	-.0242	.0293	.0294

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	902.35	2568.1	20055.	2114.7
Stddev	4.30	4.3	73.	13.3
%RSD	.47683	.16589	.36646	.63035
#1	905.27	2563.2	20048.	2119.8
#2	904.38	2570.8	19985.	2099.6
#3	897.41	2570.3	20131.	2124.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 16:55:06 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2435	42.49	1.926	2.014	2.061	41.94	2.016	2.004	2.117	2.031
Stddev	.0011	.18	.001	.018	.009	.30	.001	.001	.018	.003
%RSD	.4626	.4201	.0559	.8731	.4242	.7043	.0402	.0286	.8332	.1309
#1	.2447	42.62	1.925	2.033	2.069	42.19	2.015	2.005	2.132	2.032
#2	.2425	42.28	1.927	1.998	2.052	41.61	2.016	2.004	2.097	2.033
#3	.2432	42.55	1.928	2.012	2.062	42.01	2.017	2.004	2.121	2.028

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.11	41.76	40.04	2.019	1.991	43.51	1.941	2.012	1.933	1.919
Stddev	.20	.17	.17	.013	.003	.29	.003	.002	.006	.005
%RSD	.4780	.4152	.4226	.6241	.1302	.6557	.1576	.1158	.3012	.2681
#1	41.30	41.90	40.13	2.031	1.988	43.76	1.939	2.012	1.940	1.914
#2	40.91	41.57	39.84	2.006	1.993	43.20	1.945	2.009	1.931	1.924
#3	41.11	41.82	40.14	2.019	1.993	43.58	1.940	2.014	1.928	1.917

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.987	1.949	2.119	2.062	2.010	2.025	2.010
Stddev	.002	.001	.008	.007	.003	.007	.002
%RSD	.1181	.0620	.3630	.3635	.1440	.3414	.1168
#1	1.990	1.949	2.126	2.069	2.013	2.032	2.007
#2	1.986	1.948	2.111	2.054	2.008	2.018	2.011
#3	1.985	1.950	2.121	2.063	2.007	2.025	2.011

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 16:55:06 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1070.7	2911.4	22602.	2234.5
Stddev	1.9	3.6	184.	34.2
%RSD	.17922	.12197	.81356	1.5324
#1	1071.6	2913.7	22437.	2205.4
#2	1068.5	2907.3	22800.	2272.2
#3	1072.0	2913.1	22567.	2225.9

◄ Zoom In ►
Zoom Out

Sample Name: CCB Acquired: 6/4/2018 16:59:01 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0080	.0017	.0003	.0002	.0251	.0003	.0003	.0004
Stddev	.0002	.0121	.0007	.0001	.0001	.0014	.0000	.0000	.0003
%RSD	100.3	150.9	38.53	44.79	36.09	5.583	4.193	16.80	74.57
#1	.0000	-.0052	.0011	.0002	.0001	.0263	.0003	.0003	.0007
#2	.0003	.0108	.0024	.0004	.0002	.0255	.0003	.0003	.0001
#3	.0003	.0185	.0017	.0002	.0002	.0236	.0003	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0279	-.0407	.0344	.0003	F .0030	-.0318	.0006	.0001
Stddev	.0002	.0011	.0063	.0309	.0000	.0008	.0034	.0001	.0006
%RSD	270.1	3.877	15.52	89.79	6.692	27.40	10.73	19.84	440.5
#1	-.0002	.0283	-.0431	.0656	.0003	.0039	-.0347	.0007	-.0005
#2	.0002	.0286	-.0455	.0037	.0003	.0027	-.0327	.0007	.0008
#3	.0002	.0266	-.0336	.0340	.0003	.0023	-.0281	.0005	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0002	-.0001	.0005	.0005	.0016	.0017	-.0001	.0003
Stddev	.0003	.0020	.0004	.0001	.0001	.0002	.0003	.0002	.0001
%RSD	19.96	1125.	286.9	24.73	25.44	10.74	19.55	320.5	32.63
#1	.0016	.0002	.0001	.0004	.0003	.0017	.0020	.0002	.0004
#2	.0013	-.0018	-.0006	.0005	.0006	.0014	.0013	-.0002	.0003
#3	.0019	.0022	.0001	.0007	.0005	.0015	.0017	-.0002	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

◄ Zoom In ►
Zoom Out

Sample Name: CCB Acquired: 6/4/2018 16:59:01 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1228.6	2996.1	23279.	2219.2
Stddev	1.3	3.3	36.	12.8
%RSD	.10606	.10860	.15583	.57802
#1	1228.0	2998.1	23292.	2230.8
#2	1230.1	2997.8	23238.	2221.3
#3	1227.6	2992.4	23306.	2205.4

◄ Zoom In ►
Zoom Out

Sample Name: FA54630-6 Acquired: 6/4/2018 17:03:20 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0010	9.161	.0038	.0104	-.0003	2.266	-.0002	-.0006	.0134	.0003
Stddev	.0009	.041	.0016	.0011	.0002	.015	.0003	.0001	.0005	.0009
%RSD	89.92	.4508	42.37	10.38	54.88	.6427	156.0	10.62	3.564	293.8
#1	-.0016	9.200	.0025	.0093	-.0006	2.251	-.0001	-.0007	.0138	-.0007
#2	.0000	9.118	.0056	.0105	-.0003	2.266	.0000	-.0006	.0129	.0008
#3	-.0014	9.166	.0033	.0115	-.0002	2.280	-.0005	-.0006	.0137	.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.6621	.0548	.2740	.0051	.0025	.0393	.0033	.0241	.0019	.0015
Stddev	.0124	.1259	.0399	.0007	.0005	.0164	.0003	.0045	.0060	.0044
%RSD	1.873	229.7	14.56	14.49	19.83	41.82	10.48	18.83	310.6	284.4
#1	.6764	.1304	.2651	.0050	.0022	.0449	.0033	.0210	.0056	.0023
#2	.6556	-.0906	.2393	.0044	.0030	.0208	.0029	.0219	-.0050	-.0032
#3	.6543	.1246	.3176	.0058	.0022	.0522	.0036	.0293	.0052	.0055

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.278	.0260	.0256	.4633	.0057	.0028	.0100
Stddev	.033	.0004	.0006	.0113	.0022	.0001	.0001
%RSD	1.004	1.543	2.172	2.432	38.47	4.488	1.156
#1	3.298	.0256	.0251	.4660	.0073	.0029	.0099
#2	3.296	.0264	.0255	.4729	.0032	.0027	.0101
#3	3.240	.0259	.0262	.4509	.0066	.0027	.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1238.1	3017.7	23969.	2270.6
Stddev	1.9	1.7	165.	19.8
%RSD	.15135	.05575	.68782	.87210
#1	1236.8	3017.9	23952.	2249.7
#2	1240.2	3019.3	24142.	2289.2
#3	1237.2	3016.0	23814.	2272.9

◄ Zoom In ►
Zoom Out

Sample Name: FA54630-6 Acquired: 6/4/2018 17:07:38 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	8.269	.0016	.0093	.0000	2.108	-.0001	-.0001	.0123	.0005
Stddev	.0005	.039	.0006	.0002	.000	.010	.0001	.0001	.0001	.0001
%RSD	401.6	.4718	34.59	1.920	34710.	.4632	47.64	155.1	.7273	16.45
#1	-.0007	8.285	.0016	.0091	-.0002	2.110	-.0001	.0000	.0124	.0004
#2	.0002	8.224	.0022	.0094	.0001	2.097	-.0001	-.0001	.0123	.0005
#3	.0001	8.297	.0011	.0094	.0000	2.116	-.0002	-.0001	.0123	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5520	.0905	.2105	.0045	.0009	.2810	.0023	.0219	-.0001	-.0004
Stddev	.0059	.0263	.0267	.0000	.0001	.0126	.0002	.0011	.0003	.0015
%RSD	1.065	29.01	12.68	.9965	7.379	4.489	9.113	5.034	247.5	363.5
#1	.5587	.1202	.1797	.0044	.0008	.2750	.0021	.0207	-.0004	-.0020
#2	.5481	.0812	.2265	.0045	.0009	.2724	.0023	.0222	.0002	-.0001
#3	.5491	.0703	.2254	.0045	.0010	.2955	.0025	.0228	-.0001	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.170	.0230	.0218	.0848	-.0013	.0025	.0094
Stddev	.003	.0002	.0001	.0004	.0007	.0000	.0000
%RSD	.2476	.7648	.3498	.4233	54.11	.6501	.1462
#1	1.173	.0228	.0219	.0844	-.0007	.0025	.0095
#2	1.168	.0232	.0218	.0851	-.0011	.0025	.0094
#3	1.170	.0230	.0218	.0849	-.0020	.0025	.0094

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1218.7	3004.8	24111.	2298.5
Stddev	1.5	8.6	152.	15.1
%RSD	.12041	.28532	.63228	.65576
#1	1219.7	2997.8	24193.	2302.8
#2	1217.0	3002.2	23935.	2310.9
#3	1219.3	3014.3	24205.	2281.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 6/4/2018 17:11:56 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0098	.2138	.0112	.2136	.0054	1.111	.0054	.0539	.0112	.0273
Stddev	.0004	.0068	.0004	.0005	.0001	.006	.0001	.0001	.0002	.0002
%RSD	3.960	3.180	3.449	.2408	1.120	.5545	1.676	.2251	2.216	.8084
#1	.0101	.2135	.0107	.2142	.0053	1.118	.0055	.0540	.0115	.0270
#2	.0098	.2072	.0113	.2134	.0054	1.106	.0054	.0538	.0113	.0274
#3	.0093	.2208	.0114	.2133	.0054	1.108	.0053	.0540	.0110	.0273

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3292	10.91	5.307	.0159	.0495	11.32	.0431	.0053	.0061	.0085
Stddev	.0025	.04	.006	.0001	.0004	.04	.0004	.0008	.0012	.0004
%RSD	.7462	.3622	.1217	.5493	.8789	.3768	.9921	14.25	19.32	4.493
#1	.3311	10.90	5.315	.0158	.0499	11.27	.0435	.0049	.0072	.0081
#2	.3264	10.88	5.306	.0160	.0495	11.33	.0430	.0048	.0061	.0089
#3	.3302	10.96	5.302	.0159	.0490	11.35	.0427	.0062	.0049	.0085

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0422	.0525	.0106	.0105	.0097	.0507	.0218
Stddev	.0006	.0003	.0001	.0001	.0006	.0002	.0001
%RSD	1.345	.4879	.6862	1.179	5.684	.3834	.5874
#1	.0428	.0524	.0105	.0105	.0098	.0507	.0219
#2	.0418	.0524	.0107	.0106	.0102	.0509	.0219
#3	.0419	.0528	.0106	.0104	.0091	.0505	.0217

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1128.2	2814.8	22027.	2125.9
Stddev	3.6	13.1	123.	17.4
%RSD	.31963	.46647	.56058	.81834
#1	1126.4	2800.3	21950.	2145.7
#2	1125.9	2818.2	21963.	2113.1
#3	1132.4	2825.9	22170.	2118.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 6/4/2018 17:16:15 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0012	F548.7	-.0001	.0003	-.0001	489.0	-.0008	-.0001
Stddev	.0003	.3	.0028	.0003	.0001	1.0	.0001	.0001
%RSD	29.36	.0514	2838.	116.3	85.21	.2027	7.304	142.8
#1	-.0012	548.5	-.0014	.0005	-.0002	487.9	-.0008	.0000
#2	-.0015	549.0	-.0020	-.0001	-.0002	489.8	-.0009	-.0003
#3	-.0008	548.6	.0031	.0005	.0000	489.2	-.0008	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	-.0001	.0004	190.3	-.0440	F518.9	.0000	.0005	.0809
Stddev	.0004	.0003	.2	.0143	.9	.0001	.0003	.0079
%RSD	359.0	81.97	.1016	32.58	.1638	350.9	70.78	9.732
#1	.0003	.0000	190.1	-.0315	517.9	.0000	.0002	.0900
#2	-.0001	.0006	190.5	-.0409	519.5	.0000	.0009	.0756
#3	-.0005	.0006	190.2	-.0597	519.2	.0001	.0003	.0772

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0002	F-.0084	.0031	-.0025	.0142	.0008	-.0004	-.0013
Stddev	.0001	.0016	.0008	.0047	.0017	.0007	.0003	.0000
%RSD	45.92	19.24	27.39	186.6	12.01	85.49	75.29	2.531
#1	.0001	-.0100	.0021	-.0059	.0128	.0002	-.0001	-.0012
#2	.0001	-.0068	.0036	.0029	.0138	.0016	-.0004	-.0013
#3	.0002	-.0083	.0036	-.0045	.0161	.0007	-.0008	-.0013

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0015	-.0007	.0001
Stddev	.0009	.0002	.0001
%RSD	58.60	34.20	85.58
#1	-.0025	-.0005	.0003
#2	-.0009	-.0009	.0001
#3	-.0010	-.0006	.0000

Zoom In Zoom Out

Sample Name: ICSA Acquired: 6/4/2018 17:16:15 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	929.70	2647.4	20350.	2156.3
Stddev	2.96	6.4	23.	8.1
%RSD	.31859	.24034	.11356	.37361
#1	926.65	2642.1	20325.	2165.2
#2	929.89	2654.5	20353.	2154.2
#3	932.56	2645.5	20371.	2149.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 6/4/2018 17:20:28 Type: Unk
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.081	F577.4	1.048	.5434	.5404	F513.8	.9856	.5005	.5402
Stddev	.004	3.6	.005	.0017	.0019	3.6	.0021	.0011	.0007
%RSD	.4173	.6183	.4856	.3062	.3446	.7092	.2135	.2235	.1380
#1	1.078	581.1	1.048	.5444	.5422	517.4	.9845	.5000	.5407
#2	1.078	573.9	1.042	.5415	.5385	510.1	.9843	.4996	.5406
#3	1.086	577.3	1.053	.5443	.5404	513.8	.9880	.5017	.5394

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5768	200.1	-.0513	F538.3	.5234	.8720	.0778	.9757	1.019
Stddev	.0007	.9	.0141	2.4	.0022	.0027	.0080	.0016	.003
%RSD	.1151	.4461	27.39	.4534	.4278	.3135	10.35	.1613	.3157
#1	.5760	200.9	-.0503	540.9	.5222	.8713	.0851	.9769	1.019
#2	.5770	199.1	-.0659	536.2	.5221	.8697	.0789	.9739	1.021
#3	.5773	200.3	-.0378	537.7	.5260	.8750	.0692	.9762	1.015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9796	.9347	.0344	.8974	1.034	.9939	.9430	.5092	.9871
Stddev	.0055	.0007	.0003	.0026	.004	.0015	.0057	.0021	.0009
%RSD	.5607	.0782	.9709	.2915	.4307	.1506	.6063	.4048	.0870
#1	.9771	.9353	.0340	.8956	1.039	.9935	.9436	.5105	.9862
#2	.9759	.9339	.0344	.8963	1.030	.9926	.9484	.5102	.9871
#3	.9859	.9349	.0347	.9004	1.035	.9955	.9370	.5068	.9879

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	888.95	2559.8	19595.	2085.1
Stddev	1.31	8.9	117.	20.4
%RSD	.14756	.34676	.59564	.97643
#1	887.69	2561.7	19548.	2061.8
#2	888.85	2567.6	19510.	2094.4
#3	890.31	2550.2	19728.	2099.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 17:24:29 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2502	43.31	1.998	2.080	2.106	42.86	2.081	2.068	2.157
Stddev	.0015	.26	.007	.008	.007	.22	.001	.002	.012
%RSD	.5865	.5921	.3754	.3634	.3390	.5241	.0373	.0867	.5344
#1	.2487	43.11	1.994	2.078	2.098	42.65	2.081	2.070	2.155
#2	.2517	43.23	1.993	2.074	2.109	42.84	2.080	2.067	2.169
#3	.2501	43.60	2.007	2.089	2.112	43.09	2.081	2.068	2.146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.082	42.30	43.05	41.41	2.078	2.065	F44.69	2.022	2.072
Stddev	.002	.16	.19	.31	.027	.006	.21	.005	.002
%RSD	.0832	.3853	.4511	.7433	1.297	.3011	.4653	.2283	.1068
#1	2.083	42.13	42.87	41.05	2.058	2.060	44.52	2.018	2.074
#2	2.083	42.29	43.26	41.56	2.108	2.064	44.62	2.021	2.070
#3	2.080	42.46	43.02	41.61	2.067	2.072	44.92	2.027	2.073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							40.00		
Range							10.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.005	1.998	2.062	2.036	2.165	2.115	2.071	2.088	2.078
Stddev	.004	.001	.005	.005	.003	.017	.008	.010	.003
%RSD	.2083	.0373	.2680	.2700	.1428	.8152	.4024	.4744	.1212
#1	2.000	1.999	2.058	2.035	2.161	2.103	2.074	2.081	2.081
#2	2.006	1.997	2.060	2.032	2.167	2.135	2.062	2.099	2.077
#3	2.007	1.998	2.069	2.043	2.167	2.108	2.078	2.084	2.077
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/4/2018 17:24:29 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1042.2	2826.0	22133.	2165.2
Stddev	2.7	3.1	205.	13.2
%RSD	.25586	.10916	.92519	.60754
#1	1040.7	2824.8	22244.	2176.8
#2	1045.3	2829.5	21897.	2167.7
#3	1040.6	2823.7	22258.	2150.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 17:28:25 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0162	.0013	.0005	.0003	.0151	.0003	.0003	.0004
Stddev	.0001	.0052	.0011	.0002	.0001	.0021	.0000	.0001	.0003
%RSD	122.4	32.42	81.19	40.25	31.46	14.22	8.491	23.05	91.90
#1	.0000	.0123	.0002	.0007	.0003	.0134	.0003	.0003	.0000
#2	-.0002	.0221	.0014	.0006	.0004	.0143	.0003	.0002	.0003
#3	-.0001	.0141	.0023	.0003	.0002	.0175	.0003	.0004	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0348	.0079	.0483	.0003	F.0033	-.0420	.0007	.0000
Stddev	.0002	.0026	.0334	.0088	.0000	.0009	.0066	.0001	.001
%RSD	150.7	7.425	420.4	18.29	8.441	26.81	15.81	8.613	41250.
#1	.0003	.0376	-.0054	.0582	.0004	.0043	-.0380	.0007	-.0004
#2	-.0001	.0342	-.0167	.0457	.0003	.0030	-.0496	.0007	.0007
#3	.0003	.0326	.0460	.0411	.0003	.0026	-.0383	.0006	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	-.0008	-.0007	.0007	.0004	.0017	F.0023	.0002	.0003
Stddev	.0018	.0023	.0007	.0002	.0000	.0002	.0004	.0001	.0001
%RSD	178.1	277.9	98.65	24.84	6.236	10.80	15.47	70.20	40.48
#1	.0017	-.0005	-.0012	.0008	.0004	.0019	.0025	.0001	.0004
#2	.0023	-.0033	.0001	.0008	.0004	.0016	.0025	.0004	.0005
#3	-.0010	.0013	-.0009	.0005	.0004	.0016	.0019	.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/4/2018 17:28:25 Type: QC
Method: 60102007_041712(v248) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1234.4	2997.8	23651.	2232.5
Stddev	3.2	4.3	157.	10.6
%RSD	.25614	.14380	.66334	.47627
#1	1236.4	2998.2	23650.	2222.4
#2	1230.7	2993.3	23808.	2231.5
#3	1236.0	3001.9	23495.	2243.6

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	V	-0.009834	0.000000	No
			Fe	0.000007	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.035224	0.000000	No
As 189.042 {478}	☒	5	Fe	-0.000103	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000004	0.000000	No
Be 313.042 {108}	☒	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000110	0.000000	No
			Ca	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Ti	0.000000	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000008	0.000000	No
Cr 267.716 {126}	☒	3	Al	0.000007	0.000000	No
			Fe	-0.000017	0.000000	No
			Ca	0.000004	0.000000	No
Cu 324.754 {104}	☒	10	Fe	-0.000106	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000006	0.000000	No
			Mg	0.000005	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000013	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000027	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	☒	9	Al	0.000292	0.000000	No
			Fe	-0.000147	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000006	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000002	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	0.000029	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000033	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000057	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000003	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000018	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000016	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000016	0.000000	No
			As	0.001128	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.000093	0.543281	0.000000	1.000000
Al 396.152 { 85}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	-0.002074	0.158877	0.000000	1.000000
As 189.042 {478}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	-0.000799	0.219314	0.000000	1.000000
Ba 455.403 { 74}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.036485	11.289937	0.000000	1.000000
Be 313.042 {108}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.000134	8.302020	0.000000	1.000000
Ca 317.933 {106}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.007987	0.253094	0.000000	1.000000
Cd 226.502 {449}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	-0.000072	4.664017	0.000000	1.000000
Co 228.616 {447}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.000463	2.369895	0.000000	1.000000
Cr 267.716 {126}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.000112	0.379689	0.000000	1.000000
Cu 324.754 {104}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.003354	0.778119	0.000000	1.000000
Fe 259.940 {130}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.001645	0.192656	0.000000	1.000000
In 230.606 {446}*	6/4/2018 10:55:26	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.014210	0.237736	0.000000	1.000000
Mg 279.079 {121}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	-0.000081	0.026787	0.000000	1.000000
Mn 257.610 {131}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.000160	2.279546	0.000000	1.000000
Mo 202.030 {467}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.001273	1.228131	0.000000	1.000000
Na 589.592 { 57}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	-0.012341	0.683491	0.000000	1.000000
Ni 231.604 {445}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.000098	1.405284	0.000000	1.000000
Pb 220.353 {453}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.001518	1.148971	0.000000	1.000000
Sb 206.833 {463}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.000349	0.266517	0.000000	1.000000
Se 196.090 {472}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	-0.000202	0.157697	0.000000	1.000000
Si 212.412 {459}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.004293	0.404682	0.000000	1.000000
Sn 189.989 {477}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.000624	0.499868	0.000000	1.000000
Sr 407.771 { 83}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.001328	17.197917	0.000000	1.000000
Ti 334.941 {101}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.001705	1.847790	0.000000	1.000000
Tl 190.856 {477}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	-0.003287	0.593798	0.000000	1.000000
V 292.402 {115}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	-0.000288	0.645599	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	6/4/2018 10:55:26	6/4/2018 10:17:47	Linear	1/Conc	0.000974	2.771637	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999807	0.000099	0.000534	0.001781	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999759	0.005635	0.013600	0.045333	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999973	0.000131	0.000984	0.003281	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999889	0.013559	0.000264	0.000879	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999660	0.017446	0.000115	0.000382	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999522	0.012608	0.004494	0.014980	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999720	0.008904	0.000067	0.000225	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999702	0.004671	0.000143	0.000478	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999697	0.000753	0.000433	0.001445	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999829	0.001157	0.000330	0.001099	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999122	0.013010	0.003340	0.011135	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999758	0.008421	0.025795	0.085984	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999696	0.001064	0.028528	0.095093	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999657	0.004811	0.000062	0.000208	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999806	0.001948	0.000174	0.000580	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999669	0.028338	0.008113	0.027045	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999644	0.003021	0.000236	0.000788	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999991	0.000403	0.000729	0.002431	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999968	0.000170	0.001259	0.004198	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999925	0.000156	0.002032	0.006773	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.998167	0.002014	0.000592	0.001972	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999573	0.001177	0.000366	0.001219	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999746	0.031270	0.000106	0.000353	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999710	0.003584	0.000145	0.000483	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999905	0.000634	0.000957	0.003189	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999777	0.001089	0.000339	0.001132	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999698	0.005492	0.000085	0.000283	OK.	1.000000	0.000000	1	0

DOD
Dry Sieve

SGS Accutest - Orlando Metals Digestion Log Soil

MP #: 33823 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 06/01/18 0805
HotBlock I.D. 10
Thermometer I.D. 6071
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 93 / 92
Balance I.D. ADUPB06

Spk. Sol. A	Volume Used(ml)	Pipette #
ACC1062	0.5	EU15244
ACC1051	0.25	EU15244
MET6035	0.25	EU15244

Filter Lot#: 1019Z17J-P
Dig. Tube Lot# MP3088

Added B:	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	177290	0000196399	0000190962	23430173

Sample #		D	Wt., g	Final Volume(ml)	Comments
Method Blank(MB)			1.0	50.0	
Spike Blank(SB)			1.0		
Matrix Spike(MS)			1.29		
Matrix Spike Dup(MSD)			1.06		
Duplicate(DUP)			1.08		
1 QC C	FA53517-2R	D1	1.29		
2	-3R		1.26		
3	-5R		1.19		
4	-6R		1.06		
5	-8R		1.20		
6	-9R		1.13		
7	-11R		1.04		
8	-12R		1.17		
9	-14R		1.12		
10	-15R		1.25		
11	-17R		1.22		
12	-18R		1.38		
13	FA53725-11R		1.49		
14	-12R		1.18		
15	-75R		1.15		
16	-76R		1.01		
17	-44AR		1.18		
18	D2-FA53517-2	2	1.20		
19					
20					
21 E	06/01/18 IT				
22 E					
23 E					
24 E					

Analyst: [signature] Date: 06-01-18

QC Review: [signature] Date: 6.1.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kemron Environmental Services, Inc

Ft Ord; CA

07202.2001

SGS Job Number: FA53518

Sampling Dates: 04/16/18 - 04/18/18

Report to:

Kemron Environmental Services, Inc
4522 Joe Lloyd Way
Monterey, CA 93944
EDawson@GilbaneCo.com; PCota@GilbaneCo.com;
TBeer@GilbaneCo.com
ATTN: Evenlyn Dawson

Total number of pages in report: 744

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **6**
Section 4: Sample Results **7**
4.1: FA53518-1: 25-07SC0000 8
4.2: FA53518-4: 25-08SC0000 9
4.3: FA53518-7: 25-09SC0000 10
4.4: FA53518-10: 25-10SC0000 11
4.5: FA53518-13: 25-ER01SC 12
4.6: FA53518-14: 25-ER02SC 14
Section 5: Misc. Forms **16**
5.1: Chain of Custody 17
5.2: QC Evaluation: DOD QSM5 Limits 23
Section 6: GC/LC Semi-volatiles - QC Data Summaries **24**
6.1: Method Blank Summary 25
6.2: Blank Spike Summary 30
6.3: Laboratory Control Sample Summary 32
6.4: Matrix Spike/Matrix Spike Duplicate Summary 33
6.5: Duplicate Summary 34
6.6: Surrogate Recovery Summaries 36
6.7: GC Surrogate Retention Time Summaries 38
6.8: Initial and Continuing Calibration Summaries 42
Section 7: GC/LC Semi-volatiles - Raw Data **64**
7.1: Samples 65
7.2: Method Blanks 83
7.3: Blank Spikes 93
7.4: Laboratory Control Samples 107
7.5: Matrix Spike/Matrix Spike Duplicates 132
7.6: Duplicates 146
7.7: Initial and Continuing Calibrations 156
7.8: Instrument Run Logs 457
7.9: Prep Logs 464
Section 8: Metals Analysis - QC Data Summaries **469**
8.1: Inst QC MA14858: Pb 470
8.2: Prep QC MP33665: Pb 491
8.3: IDL and Linear Range Summaries 496
Section 9: Metals Analysis - Raw Data **498**
9.1: Raw Data MA14858 499
9.2: Prep Logs 744

Sample Summary

Kemron Environmental Services, Inc

Job No: FA53518

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53518-1	04/16/18	14:50	LFRP	04/19/18	SO	Soil	25-07SC0000
FA53518-2	04/16/18	15:16	LFRP	04/19/18	SO	Soil	25-07SC0001
FA53518-3	04/16/18	15:33	LFRP	04/19/18	SO	Soil	25-07SC0002
FA53518-4	04/16/18	14:59	LFRP	04/19/18	SO	Soil	25-08SC0000
FA53518-5	04/16/18	15:10	LFRP	04/19/18	SO	Soil	25-08SC0001
FA53518-6	04/16/18	15:32	LFRP	04/19/18	SO	Soil	25-08SC0002
FA53518-7	04/18/18	09:20	LFRP	04/19/18	SO	Soil	25-09SC0000
FA53518-8	04/18/18	09:35	LFRP	04/19/18	SO	Soil	25-09SC0001
FA53518-9	04/18/18	09:50	LFRP	04/19/18	SO	Soil	25-09SC0002
FA53518-10	04/18/18	09:25	LFRP	04/19/18	SO	Soil	25-10SC0000
FA53518-11	04/18/18	09:40	LFRP	04/19/18	SO	Soil	25-10SC0001
FA53518-12	04/18/18	10:00	LFRP	04/19/18	SO	Soil	25-10SC0002
FA53518-13	04/16/18	16:35	LFRP	04/19/18	AQ	Equipment Blank	25-ER01SC

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53518

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53518-14	04/18/18	11:01	LFRP	04/19/18	AQ	Equipment Blank	25-ER02SC

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Kemron Environmental Services, Inc **Job No:** FA53518

Site: Ft Ord; CA **Report Date:** 5/7/2018 12:00:08

6 Sample(s) were collected on/ between 04/16/2018 and 04/18/2018 and were received at SGS North America Inc - Orlando on 04/19/2018 properly preserved, at 2.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA53518. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

GC/LC Semi-volatiles By Method SW846 8330B

Matrix: AQ **Batch ID:** OP69713

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

OP69713-BS: Insufficient sample for MS/MSD.

Matrix: SO **Batch ID:** OP69838

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53518-1MS, FA53518-1MSD, FA53518-4DUP were used as the QC samples indicated.

Metals Analysis By Method SW846 6020A

Matrix: AQ **Batch ID:** MP33665

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53456-6DUP, FA53456-6MS, FA53456-6MSD, FA53456-6SDL were used as the QC samples for metals.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA53518
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/16/18 thru 04/18/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53518-1	**25-07SC0000**					
No hits reported in this sample.						
FA53518-4	**25-08SC0000**					
No hits reported in this sample.						
FA53518-7	**25-09SC0000**					
No hits reported in this sample.						
FA53518-10	**25-10SC0000**					
No hits reported in this sample.						
FA53518-13	**25-ER01SC**					
No hits reported in this sample.						
FA53518-14	**25-ER02SC**					
No hits reported in this sample.						

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-07SC0000		
Lab Sample ID:	FA53518-1	**Date Sampled:**	04/16/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614541.D	1	05/03/18 13:17	EM	04/29/18 10:00	OP69838	GGG2624
Run #2							

	Initial Weight	Final Volume
Run #1	10.4 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	72 U	96	72	49	ug/kg	
121-82-4	RDX	72 U	96	72	48	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	72 U	96	72	48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	97%		69-134%

(a) Sample was dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-08SC0000		
Lab Sample ID:	FA53518-4	**Date Sampled:**	04/16/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614544.D	1	05/03/18 14:45	EM	04/29/18 10:00	OP69838	GGG2624
Run #2							

	Initial Weight	Final Volume
Run #1	10.8 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	70 U	93	70	47	ug/kg	
121-82-4	RDX	70 U	93	70	47	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	70 U	93	70	47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	113%		69-134%

(a) Sample was dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-09SC0000		
Lab Sample ID:	FA53518-7	**Date Sampled:**	04/18/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614545.D	1	05/03/18 15:15	EM	04/29/18 10:00	OP69838	GGG2624
Run #2							

	Initial Weight	Final Volume
Run #1	10.7 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	70 U	93	70	47	ug/kg	
121-82-4	RDX	70 U	93	70	47	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	70 U	93	70	47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	108%		69-134%

(a) Sample was dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-10SC0000		
Lab Sample ID:	FA53518-10	**Date Sampled:**	04/18/18
Matrix:	SO - Soil	**Date Received:**	04/19/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614546.D	1	05/03/18 15:44	EM	04/29/18 10:00	OP69838	GGG2624
Run #2							

	Initial Weight	Final Volume
Run #1	10.8 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	70 U	93	70	47	ug/kg	
121-82-4	RDX	70 U	93	70	46	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	70 U	93	70	46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		69-134%

(a) Sample was dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-ER01SC		
Lab Sample ID:	FA53518-13	**Date Sampled:**	04/16/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/19/18
Method:	SW846 8330B SW846 3535A	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059497.D	1	04/23/18 15:23	EM	04/20/18 09:30	OP69713	GBB1724
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	0.095 U	0.19	0.095	0.076	ug/l	
121-82-4	RDX	0.095 U	0.19	0.095	0.076	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.095 U	0.19	0.095	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	83%		70-136%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-ER01SC		
Lab Sample ID:	FA53518-13	**Date Sampled:**	04/16/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/19/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	1.0 U	2.0	1.0	0.20	ug/l	2	04/28/18	04/30/18	DM	SW846 6020A [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14858
(2) Prep QC Batch: MP33665

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-ER02SC		
Lab Sample ID:	FA53518-14	**Date Sampled:**	04/18/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/19/18
Method:	SW846 8330B SW846 3535A	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059498.D	1	04/23/18 15:53	EM	04/20/18 09:30	OP69713	GBB1724
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	0.095 U	0.19	0.095	0.076	ug/l	
121-82-4	RDX	0.095 U	0.19	0.095	0.076	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.095 U	0.19	0.095	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	83%		70-136%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-ER02SC		
Lab Sample ID:	FA53518-14	**Date Sampled:**	04/18/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/19/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	1.0 U	2.0	1.0	0.20	ug/l	2	04/28/18	04/30/18	DM	SW846 6020A [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14858
(2) Prep QC Batch: MP33665

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041618-01

FA53518

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:
Unit 25

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2" 1-L Amber, Less than or equal to 6 degrees C
11	1", 250mL poly with HNO3
13	1" Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
1	25-01SC0000	SO							X	25-01	N1	0.00	0.00
2	25-01SC0001	SO							X	25-01	N1	0.00	0.00
3	25-01SC0002	SO							X	25-01	N1	0.00	0.00
4	25-02SC0000	SO					X		X	25-02	N1	0.00	0.00
5	25-02SC0001	SO					X		X	25-02	N1	0.00	0.00
6	25-02SC0002	SO					X		X	25-02	N1	0.00	0.00
7	25-03SC0000	SO					X		X	25-03	N1	0.00	0.00
8	25-03SC0000Q	SO					X		X	25-03	FD1	0.00	0.00
9	25-03SC0001	SO					X		X	25-03	N1	0.00	0.00
Cooler #		**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
T Beer	4/18/18	1200	FedEx	4/18/18	1200
FX			J. Cooke	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 1 of 5

3.8 2.2

5.1 5

FA53518: Chain of Custody
Page 1 of 6

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041618-02
FA53518

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
10	25-03SC0001Q	SO					X		X	25-03	FD1	0.00	0.00
11	25-03SC0002	SO					X		X	25-03	N1	0.00	0.00
12	25-03SC0002Q	SO					X		X	25-03	FD1	0.00	0.00
13	25-04SC0000	SO					X		X	25-04	N1	0.00	0.00
14	25-04SC0001	SO					X		X	25-04	N1	0.00	0.00
15	25-04SC0002	SO					X		X	25-04	N1	0.00	0.00
16	25-05SC0000	SO					X		X	25-05	N1	0.00	0.00
17	25-05SC0001	SO					X		X	25-05	N1	0.00	0.00
18	25-05SC0002	SO					X		X	25-05	N1	0.00	0.00
Cooler #		**Turnaround Time: 14 Days**											

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200/1415	FedEx	4-18-18	1200
FX			J. Cook	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 2 of 5

FA53518: Chain of Custody
Page 2 of 6

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041618-03
FA53518

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
~~19~~	~~25-06SC0000~~	~~SO~~							~~X~~	~~25-06~~	~~N1~~	~~0.00~~	~~0.00~~	~~HOLD~~
~~20~~	~~25-06SC0001~~	~~SO~~							~~X~~	~~25-06~~	~~N1~~	~~0.00~~	~~0.00~~	~~HOLD~~
~~21~~	~~25-06SC0002~~	~~SO~~							~~X~~	~~25-06~~	~~N1~~	~~0.00~~	~~0.00~~	~~HOLD~~
22	25-07SC0000	SO	04/16/18	14:50	LF/RP				X	25-07	N1	0.00	0.00	
23	25-07SC0001	SO	04/16/18	15:16	LF/RP				X	25-07	N1	0.00	0.00	HOLD
24	25-07SC0002	SO	04/16/18	15:33	LF/RP				X	25-07	N1	0.00	0.00	HOLD
25	25-08SC0000	SO	04/16/18	14:59	RP/LF				X	25-08	N1	0.00	0.00	
26	25-08SC0001	SO	04/16/18	15:10	RP/LF				X	25-08	N1	0.00	0.00	HOLD
27	25-08SC0002	SO	04/16/18	15:32	RP/LF				X	25-08	N1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Corse	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 3 of 5

FA53518: Chain of Custody
Page 3 of 6

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041618-04
FA53518

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2" 1-L Amber, Less than or equal to 6 degrees C
11	1", 250mL poly with HNO3
13	1" Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

		Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
		Analytical Test Method					11	13	8	13					
7	28	25-09SC0000	SO	4-18-18	0925	TB/KL				X	25-09	N1	0.00	0.00	
8	29	25-09SC0001	SO	"	0935	"				X	25-09	N1	0.00	0.00	HOLD
9	30	25-09SC0002	SO	"	0950	"				X	25-09	N1	0.00	0.00	HOLD
0	31	25-10SC0000	SO	"	0925	"				X	25-10	N1	0.00	0.00	
1	32	25-10SC0001	SO	"	0940	"				X	25-10	N1	0.00	0.00	HOLD
2	33	25-10SC0002	SO	"	1000	"				X	25-10	N1	0.00	0.00	HOLD
	34	~~25-11SC0000~~	~~SO~~					X		X	~~25-11~~	~~N1~~	~~0.00~~	~~0.00~~	
	35	~~25-11SC0000Q~~	~~SO~~					X		X	~~25-11~~	~~FD1~~	~~0.00~~	~~0.00~~	
	36	~~25-11SC0001~~	~~SO~~					X		X	~~25-11~~	~~N1~~	~~0.00~~	~~0.00~~	

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J Beer	4-18-18	1200 1145
FX		

Received by: *(Signature)*	Date	Time
FedEx	4-18-18	1200
J-Cooper	04-19-18	09:30

Shipping Date / Carrier / Airbill Number
8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041618 - 05

FA53518

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

						Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM						Sample	Depth (ft bgs)	
	Event ID: Basewide Range Assessment April 2018						11	13	8	13								
	Sample ID	Matrix	Date	Time	Samp Init.										Location ID	Type	Top	Bottom
37	25-11SC0001Q	SO						X		X					25-11	FD1	0.00	0.00
38	25-11SC0002	SO						X		X					25-11	N1	0.00	0.00
39	25-11SC0002Q	SO						X		X					25-11	FD1	0.00	0.00
40	25-12SC0000	SO								X					25-12	N1	0.00	0.00
41	25-12SC0001	SO								X					25-12	N1	0.00	0.00
42	25-12SC0002	SO								X					25-12	N1	0.00	0.00
43	25-ER01SC	WQ	4/16/18	16:35	DP		X		X						FIELDQC	EB1	0.00	0.00
44	25-ER02SC	WQ					X		X						FIELDQC	EB1	0.00	0.00
45	25-ER02SC	WQ	4/18/18	11:01	TB/KL				X						FIELDQC	EB2	0.00	0.00
Cooler #		**Turnaround Time: 14 Days**																

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-18-18	1200	FedEx	4-18-18	1200
FX			J. Coppe	04-19-18	09:30

Shipping Date / Carrier / Airbill Number

8133 7208 3484

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 5 of 5

FA53518: Chain of Custody
Page 5 of 6

SGS Sample Receipt Summary

Job Number: FA53518 **Client:** GILBANE **Project:** BRA KEMRON

Date / Time Received: 4/19/2018 9:30:00 AM **Delivery Method:** FX **Airbill #'s:** 1002826072710003281100780581127816

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 2

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4); Cooler 2: (1.8);

Cooler Temps (Corrected) °C: Cooler 1: (3.8); Cooler 2: (2.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: JORGEC Date: 4/19/2018 9:30:00 AM Reviewer: HW Date: 4/19/2018

QC Evaluation: DOD QSM5 Limits

Job Number: FA53518
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/16/18 thru 04/18/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP69713	SW846 8330B						
OP69713-BS	2691-41-0	HMX	BSP	REC	84	%	65-135
OP69713-BS	121-82-4	RDX	BSP	REC	90	%	68-130
OP69713-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	102	%	71-123
OP69838	SW846 8330B						
OP69838-BS	2691-41-0	HMX	BSP	REC	118	%	74-124
OP69838-BS	121-82-4	RDX	BSP	REC	100	%	67-129
OP69838-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	96	%	71-120
OP69838-MS	2691-41-0	HMX	MS	REC	108	%	74-124
OP69838-MS	121-82-4	RDX	MS	REC	83	%	67-129
OP69838-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	81	%	71-120
OP69838-MSD	2691-41-0	HMX	MSD	REC	108	%	74-124
OP69838-MSD	2691-41-0	HMX	MSD	RPD	0	%	20
OP69838-MSD	121-82-4	RDX	MSD	REC	94	%	67-129
OP69838-MSD	121-82-4	RDX	MSD	RPD	12	%	20
OP69838-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	84	%	71-120
OP69838-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	3	%	20
OP69838-DUP	2691-41-0	HMX	DUP	RPD	0	%	20
OP69838-DUP	121-82-4	RDX	DUP	RPD	0	%	20
OP69838-DUP	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69838-DUP2	2691-41-0	HMX	DUP	RPD	0	%	20
OP69838-DUP2	121-82-4	RDX	DUP	RPD	0	%	20
OP69838-DUP2	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
MP33665	SW846 6020A						
MP33665-B1	7439-92-1	Lead	BSP	REC	107.5	%	88-115
MP33665-S1*	7439-92-1	Lead	MS	REC	94	%	88-115
MP33665-S2*	7439-92-1	Lead	MSD	REC	94.5	%	88-115
MP33665-S2*	7439-92-1	Lead	MSD	RPD	.5	%	20
MP33665-D1*	7439-92-1	Lead	DUP	RPD	0	%	20

* Sample used for QC is not from job FA53518

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69713-MB	BB059496.D	1	04/23/18	EM	04/20/18	OP69713	GBB1724

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-13, FA53518-14

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	82%	70-136%

Method Blank Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69838-MB	GG614540.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-1, FA53518-4, FA53518-7, FA53518-10

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	106%	69-134%

Method Blank Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69838-GB1	GG614562.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-1, FA53518-4, FA53518-7, FA53518-10

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	96%	69-134%

Method Blank Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69838-GB2	GG614563.D	1	05/04/18	EM	04/29/18	OP69838	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-1, FA53518-4, FA53518-7, FA53518-10

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	99	50	ug/kg	
121-82-4	RDX	ND	99	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	100%	69-134%

Method Blank Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69838-GB3	GG614564.D	1	05/04/18	EM	04/29/18	OP69838	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-1, FA53518-4, FA53518-7, FA53518-10

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	50	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	90%	69-134%

Blank Spike Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69713-BS [a]	BB059495.D	1	04/23/18	EM	04/20/18	OP69713	GBB1724

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-13, FA53518-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	4.2	84	77-144
121-82-4	RDX	5	4.5	90	77-125
118-96-7	2,4,6-Trinitrotoluene	5	5.1	102	72-112

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	89%	70-136%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69838-BS	GG614539.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-1, FA53518-4, FA53518-7, FA53518-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2960	118	75-147
121-82-4	RDX	2500	2500	100	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2400	96	70-123

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69838-PT1	GG614538.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-1, FA53518-4, FA53518-7, FA53518-10

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	4060	108	74-124
121-82-4	RDX	3200	2470	77	67-129
118-96-7	2,4,6-Trinitrotoluene	520	387	74	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	101%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69838-MS	GG614542.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624
OP69838-MSD	GG614543.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624
FA53518-1	GG614541.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-1, FA53518-4, FA53518-7, FA53518-10

CAS No.	Compound	FA53518-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	96	U	2490	2680	108	2480	2680	108	0	75-147/22
121-82-4	RDX	96	U	2490	2060	83	2480	2320	94	12	79-126/21
118-96-7	2,4,6-Trinitrotoluene	96	U	2490	2010	81	2480	2070	84	3	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53518-1	Limits
610-39-9	3,4-Dinitrotoluene	92%	93%	97%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69838-DUP	GG614550.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624
FA53518-4	GG614544.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-1, FA53518-4, FA53518-7, FA53518-10

CAS No.	Compound	FA53518-4 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	93 U		ND		nc	22
121-82-4	RDX	93 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	93 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53518-4	Limits
610-39-9	3,4-Dinitrotoluene	99%	113%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69838-DUP2	GG614551.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624
FA53518-4	GG614544.D	1	05/03/18	EM	04/29/18	OP69838	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53518-1, FA53518-4, FA53518-7, FA53518-10

CAS No.	Compound	FA53518-4 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	93 U		ND		nc	22
121-82-4	RDX	93 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	93 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53518-4	Limits
610-39-9	3,4-Dinitrotoluene	99%	113%	69-134%

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA53518-13	BB059497.D	83
FA53518-14	BB059498.D	83
OP69713-BS	BB059495.D	89
OP69713-MB	BB059496.D	82

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

Surrogate Recovery Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B	**Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA53518-1	GG614541.D	97
FA53518-4	GG614544.D	113
FA53518-7	GG614545.D	108
FA53518-10	GG614546.D	104
OP69838-BS	GG614539.D	
OP69838-DUP	GG614550.D	99
OP69838-DUP2	GG614551.D	99
OP69838-GB1	GG614562.D	96
OP69838-GB2	GG614563.D	100
OP69838-GB3	GG614564.D	90
OP69838-MB	GG614540.D	106
OP69838-MS	GG614542.D	92
OP69838-MSD	GG614543.D	93
OP69838-PT1	GG614538.D	101

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1724-CC1722	**Injection Date:**	04/23/18
Lab File ID:	BB059494.D	**Injection Time:**	13:53
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	10.34	10.34

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP69713-BS	BB059495.D	04/23/18	14:23		10.35
OP69713-MB	BB059496.D	04/23/18	14:53		10.35
FA53518-13	BB059497.D	04/23/18	15:23		10.39
FA53518-14	BB059498.D	04/23/18	15:53		10.35
GBB1724-ECC1722	BB059499.D	04/23/18	16:23	10.39	10.39

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2624-CC2571	**Injection Date:**	05/03/18
Lab File ID:	GG614537.D	**Injection Time:**	11:19
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.14

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69838-PT1	GG614538.D	05/03/18	11:49	14.15
OP69838-BS	GG614539.D	05/03/18	12:18	
OP69838-MB	GG614540.D	05/03/18	12:48	14.17
FA53518-1	GG614541.D	05/03/18	13:17	14.22
OP69838-MS	GG614542.D	05/03/18	13:46	14.23
OP69838-MSD	GG614543.D	05/03/18	14:16	14.26
FA53518-4	GG614544.D	05/03/18	14:45	14.25
FA53518-7	GG614545.D	05/03/18	15:15	14.23
FA53518-10	GG614546.D	05/03/18	15:44	14.19

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2624-CC2571	**Injection Date:**	05/03/18
Lab File ID:	GG614547.D	**Injection Time:**	16:14
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.25

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69838-DUP	GG614550.D	05/03/18	17:42	14.26
OP69838-DUP2	GG614551.D	05/03/18	18:12	14.23

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2624-CC2571	**Injection Date:**	05/03/18
Lab File ID:	GG614559.D	**Injection Time:**	22:07
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	14.26	14.27

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP69838-GB1	GG614562.D	05/03/18	23:36		14.27
OP69838-GB2	GG614563.D	05/04/18	00:05		14.31
OP69838-GB3	GG614564.D	05/04/18	00:35		14.22
OP69897-BS	GG614566.D	05/04/18	01:33		14.33
OP69897-MB	GG614567.D	05/04/18	02:03		14.27
ZZZZZZ	GG614568.D	05/04/18	02:32		14.28
ZZZZZZ	GG614569.D	05/04/18	03:02		14.25
ZZZZZZ	GG614570.D	05/04/18	03:31		14.28
GGG2624-ECC2571	GG614571.D	05/04/18	04:01	14.25	14.25

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA53518 **Sample:** GBB1722-ICC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059468.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration

Calibration Files
20 =BB059464.D 50 =BB059465.D 100 =BB059466.D 200 =BB059467.D
500 =BB059468.D 1000=BB059469.D 2000=BB059470.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	4.057	5.437	5.336	4.870	4.755	4.712	4.606	4.825	E3	9.63
2)	HMX	1.565	2.172	2.000	1.766	1.871	1.897	1.819	1.870	E3	10.12
3)	DNX	3.283	3.662	3.269	2.786	2.867	2.866	2.946	3.097	E3	10.29
4)	MNX	2.964	3.443	3.424	3.009	2.956	2.936	2.943	3.097	E3	7.48
5)	RDX	2.292	2.368	2.423	2.022	1.981	1.949	1.934	2.138	E3	9.98
6)	1,3,5-Trinitroben	5.015	4.250	4.380	4.228	4.133	4.163	4.290	4.351	E3	6.98
7)	1,3-Dinitrobenzen	5.103	6.130	6.106	5.453	5.359	5.313	5.343	5.544	E3	7.33
8)	3,5-Dinitroanilin	4.716	5.643	5.219	4.627	4.650	4.615	4.762	4.890	E3	8.03
9)	Nitrobenzene	3.761	4.464	3.850	3.539	3.342	3.234	3.316	3.644	E3	11.78
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	4.693	3.753	3.290	3.126	2.967	2.901	2.923	3.379	E3	19.28
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 2950.09304 *A + -0.01551 *A^2										
12)	2,4,6-Trinitrotol	4.956	4.943	4.194	4.070	3.843	3.741	3.794	4.220	E3	12.39
13)	2-Amino-4,6-Dinit	3.909	4.360	3.860	3.648	3.604	3.533	3.585	3.785	E3	7.68
14)	4-Amino-2,6-Dinit	1.542	3.426	2.979	2.840	2.690	2.591	2.687	2.679	E3	21.41
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997										
	Response Ratio = 0.00000 + 2602.89377 *A + 0.03960 *A^2										
15)S	3,4-Dinitrotoluen	2.547	2.965	2.725	2.872	2.626	2.453	2.542	2.676	E3	7.02
16)	2,4-Dinitrotoluen	4.866	6.729	5.238	5.204	4.993	4.826	4.971	5.261	E3	12.65
17)	2,6-Dinitrotoluen	3.711	4.396	3.251	3.385	3.230	2.946	3.275	3.456	E3	13.67
18)	o-Nitrotoluene	2.384	3.152	2.790	2.334	2.287	2.268	2.270	2.498	E3	13.69
19)	p-Nitrotoluene	3.192	4.942	4.366	3.947	3.706	3.724	3.752	3.947	E3	14.19
20)	m-Nitrotoluene	3.139	4.450	3.763	3.373	3.372	3.439	3.434	3.567	E3	12.06
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	6.055	8.407	8.188	7.236	7.294	7.503	7.246	7.418	E3	10.32
2)	HMX	3.365	6.202	5.612	5.174	4.982	5.081	5.035	5.064	E3	17.11
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 5093.51943 *A + -0.02911 *A^2										
3)	DNX	4.174	6.652	5.296	4.870	4.545	4.745	4.792	5.011	E3	15.95
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998										
	Response Ratio = 0.00000 + 4658.23377 *A + 0.06712 *A^2										
4)	MNX	4.258	4.893	5.093	4.585	4.573	4.564	4.576	4.649	E3	5.77
5)	RDX	3.570	3.610	3.606	3.105	3.137	3.116	3.125	3.324	E3	7.64
6)	1,3,5-Trinitroben	7.940	8.986	9.024	8.086	8.009	8.095	8.296	8.348	E3	5.54
7)	1,3-Dinitrobenzen	3.838	3.615	4.019	3.565	3.564	3.567	3.902	3.724	E3	5.13
8)	3,5-Dinitroanilin	5.802	7.490	8.086	7.445	7.563	7.569	8.398	7.479	E3	10.97
9)	Nitrobenzene	3.281	3.639	3.339	3.520	3.125	3.092	3.214	3.316	E3	6.09
10)	Nitroglycerin	1.415	1.345	1.370	1.191	1.221	1.213	1.214	1.281	E3	7.18
11)	Tetryl	5.506	4.771	5.669	5.060	5.077	5.090	5.183	5.194	E3	5.80

Job Number: FA53518 **Sample:** GBB1722-ICC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059468.D
Project: Ft Ord; CA

```
12)  2,4,6-Trinitrotol 3.797 4.195 5.241 4.572 4.606 4.634 4.683 4.533 E3   9.85
13)  2-Amino-4,6-Dinit 5.591 4.051 6.113 5.405 5.388 5.449 5.549 5.364 E3  11.74
14)  4-Amino-2,6-Dinit 4.328 4.594 6.000 5.208 5.287 5.370 5.487 5.182 E3  10.82
15)S 3,4-Dinitrotoluen 4.756 5.015 5.428 4.321 4.394 4.465 4.624 4.715 E3   8.35
16)  2,4-Dinitrotoluen 2.567 3.016 3.002 2.767 2.947 3.113 3.260 2.953 E3   7.70
17)  2,6-Dinitrotoluen 2.596 3.517 3.074 3.493 3.663 3.691 3.868 3.415 E3  12.80
18)  o-Nitrotoluene    2.982 3.433 3.803 3.387 3.104 3.071 3.149 3.276 E3   8.71
19)  p-Nitrotoluene    2.104 3.372 3.768 3.429 3.167 3.116 3.166 3.160 E3  16.37
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
               Response Ratio = 0.00000 + 3146.83363 *A + 0.00734 *A^2

20)  m-Nitrotoluene    3.211 4.166 4.659 4.114 3.971 3.990 4.055 4.024 E3  10.63
21)  PETN              1.516 1.363 1.415 1.322 1.380 1.356 1.369 1.389 E3   4.51
-------------------------------------------------------------------------------
(#) = Out of Range

          8330B_0419PLUS.M        Mon Apr 23 08:16:33 2018
```

Initial Calibration Verification

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GBB1722-ICV1722
Lab FileID: BB059471.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On    : 19-Apr-2018, 13:43:41                  Operator: evitam
Sample    : ICV1722-500                            Inst    : G1315B
Misc      : OP69499,gbb1722,1000,,,10,1,water      Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	446.785	10.6	91	0.00	1.01- 1.61
2	HMX	500.000	476.953	4.6	95	0.00	1.14- 1.74
3	DNX	500.000	416.669	16.7	90	0.00	1.36- 1.96
4	MNX	500.000	416.410	16.7	87	0.00	1.89- 2.49
5	RDX	500.000	405.824	18.8	88	0.00	2.36- 3.16
6	1,3,5-Trinitrobenzene	500.000	440.520	11.9	93	0.00	4.01- 4.81
7	1,3-Dinitrobenzene	500.000	414.651	17.1	86	0.00	5.18- 5.98
8	3,5-Dinitroaniline	500.000	449.315	10.1	95	0.00	5.48- 6.28
9	Nitrobenzene	500.000	428.399	14.3	93	0.00	6.69- 7.49
10	Nitroglycerin		----------NA----------				
	----------	Amount	Calc.	%Drift			
11	Tetryl	500.000	447.453	10.5	89	-0.01	8.30- 9.10
	----------	Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	500.000	366.508	26.7#	80	-0.01	8.72- 9.52
13	2-Amino-4,6-Dinitrotol	500.000	436.189	12.8	92	-0.01	9.02- 9.82
	----------	Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	500.000	475.168	5.0	93	0.00	9.45-10.25
	----------	Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	419.899	16.0	88	-0.01	10.57-11.37
17	2,6-Dinitrotoluene	500.000	409.093	18.2	88	0.00	11.01-11.81
18	o-Nitrotoluene	500.000	416.479	16.7	91	-0.01	14.30-15.17
19	p-Nitrotoluene	500.000	410.091	18.0	87	-0.01	14.75-15.75
20	m-Nitrotoluene	500.000	436.986	12.6	92	-0.01	15.73-16.73
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	442.711	11.5	90	0.00	1.01- 1.61
	----------	Amount	Calc.	%Drift			
2	HMX	500.000	502.668	-0.5	102	0.00	1.14- 1.74
3	DNX	500.000	466.541	6.7	96	0.00	1.36- 1.96
	----------	Amount	Calc.	%Drift			
4	MNX	500.000	435.357	12.9	89	0.00	1.89- 2.49
5	RDX	500.000	435.262	12.9	92	0.00	2.36- 3.16

Initial Calibration Verification

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample: GBB1722-ICV1722
Lab FileID: BB059471.D

6	1,3,5-Trinitrobenzene	500.000	440.109	12.0	92	0.00	4.01- 4.81
7	1,3-Dinitrobenzene	500.000	423.626	15.3	89	0.00	5.18- 5.98
8	3,5-Dinitroaniline	500.000	486.621	2.7	96	0.00	5.48- 6.28
9	Nitrobenzene	500.000	439.568	12.1	93	0.00	6.69- 7.49
10	Nitroglycerin	2500.000	2349.932	6.0	99	0.00	7.88- 8.88
11	Tetryl	500.000	431.996	13.6	88	-0.01	8.29- 9.09
12	2,4,6-Trinitrotoluene	500.000	430.591	13.9	85	0.00	8.72- 9.52
13	2-Amino-4,6-Dinitrotol	500.000	475.149	5.0	95	0.00	9.03- 9.83
14	4-Amino-2,6-Dinitrotol	500.000	500.329	-0.1	98	-0.01	9.46-10.26
15 S	3,4-Dinitrotoluene	----------	----------NA----------				
16	2,4-Dinitrotoluene	500.000	458.258	8.3	92	0.00	10.56-11.36
17	2,6-Dinitrotoluene	500.000	501.832	-0.4	94	0.00	11.01-11.81
18	o-Nitrotoluene	500.000	443.790	11.2	94	-0.02	14.17-15.17

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	500.000	458.274	8.3	91	0.00	14.75-15.75

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	500.000	474.905	5.0	96	-0.02	15.73-16.73
21	PETN	2500.000	2504.495	-0.2	101	0.00	17.83-19.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059468.D 8330B_0419PLUS.M Mon Apr 23 08:16:21 2018

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GBB1724-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059494.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1000.350	-0.0	102	0.00	1.01- 1.61
2	HMX	1000.000	1063.000	-6.3	105	0.00	1.14- 1.74
3	DNX	1000.000	964.262	3.6	104	0.00	1.36- 1.96
4	MNX	1000.000	941.419	5.9	99	0.00	1.89- 2.49
5	RDX	1000.000	904.310	9.6	99	0.00	2.36- 3.16
6	1,3,5-Trinitrobenzene	1000.000	958.307	4.2	100	0.02	4.01- 4.81
7	1,3-Dinitrobenzene	1000.000	969.579	3.0	101	0.01	5.18- 5.98
8	3,5-Dinitroaniline	1000.000	938.292	6.2	99	0.01	5.48- 6.28
9	Nitrobenzene	1000.000	837.331	16.3	94	0.00	6.69- 7.49
10	Nitroglycerin		----------NA----------				
	----------	Amount	Calc.	%Drift			
11	Tetryl	1000.000	917.596	8.2	93	0.03	8.30- 9.10
	----------	Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	1000.000	893.938	10.6	101	0.03	8.72- 9.52
13	2-Amino-4,6-Dinitrotol	1000.000	953.241	4.7	102	0.02	9.02- 9.82
	----------	Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	1000.000	1009.126	-0.9	103	0.03	9.45-10.25
	----------	Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene	1000.000	964.776	3.5	105	0.03	9.91-10.71
16	2,4-Dinitrotoluene	1000.000	949.368	5.1	104	0.03	10.57-11.37
17	2,6-Dinitrotoluene	1000.000	889.924	11.0	104	0.03	11.01-11.81
18	o-Nitrotoluene	1000.000	822.622	17.7	91	0.00	14.30-15.17
19	p-Nitrotoluene	1000.000	846.012	15.4	90	0.01	14.75-15.75
20	m-Nitrotoluene	1000.000	829.313	17.1	86	0.00	15.73-16.73
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	1000.000	961.669	3.8	95	0.00	1.01- 1.61
	----------	Amount	Calc.	%Drift			
2	HMX	1000.000	996.793	0.3	99	0.00	1.14- 1.74
3	DNX	1000.000	999.150	0.1	100	0.00	1.36- 1.96
	----------	Amount	Calc.	%Drift			
4	MNX	1000.000	976.738	2.3	99	0.00	1.89- 2.49
5	RDX	1000.000	936.414	6.4	100	0.00	2.36- 3.16

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GBB1724-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059494.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	1000.000	975.932	2.4	101	0.02	4.01- 4.81
7	1,3-Dinitrobenzene	1000.000	974.411	2.6	102	0.01	5.18- 5.98
8	3,5-Dinitroaniline	1000.000	1019.030	-1.9	101	0.01	5.48- 6.28
9	Nitrobenzene	1000.000	870.636	12.9	93	0.00	6.69- 7.49
10	Nitroglycerin	5000.000	4994.446	0.1	106	0.03	7.88- 8.88
11	Tetryl	1000.000	894.707	10.5	91	0.03	8.29- 9.09
12	2,4,6-Trinitrotoluene	1000.000	1015.660	-1.6	99	0.03	8.72- 9.52
13	2-Amino-4,6-Dinitrotol	1000.000	1025.195	-2.5	101	0.03	9.03- 9.83
14	4-Amino-2,6-Dinitrotol	1000.000	1037.280	-3.7	100	0.02	9.46-10.26
15 S	3,4-Dinitrotoluene	1000.000	951.588	4.8	100	0.03	9.91-10.71
16	2,4-Dinitrotoluene	1000.000	1065.451	-6.5	101	0.03	10.56-11.36
17	2,6-Dinitrotoluene	1000.000	1085.058	-8.5	100	0.03	11.01-11.81
18	o-Nitrotoluene	1000.000	840.983	15.9	90	0.00	14.17-15.17

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	1000.000	883.935	11.6	89	0.02	14.75-15.75

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	860.633	13.9	87	0.00	15.73-16.73
21	PETN	5000.000	5108.617	-2.2	105	0.03	17.83-19.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Tue Apr 24 11:12:19 2018

6.8.3

6

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GBB1724-ECC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059499.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1724,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1002.997	-0.3	103	0.00	1.01- 1.61
2	HMX	1000.000	985.729	1.4	97	0.00	1.14- 1.74
3	DNX	1000.000	947.822	5.2	102	0.00	1.36- 1.96
4	MNX	1000.000	932.112	6.8	98	0.01	1.89- 2.49
5	RDX	1000.000	911.553	8.8	100	0.02	2.36- 3.16
6	1,3,5-Trinitrobenzene	1000.000	966.644	3.3	101	0.03	4.01- 4.81
7	1,3-Dinitrobenzene	1000.000	969.356	3.1	101	0.03	5.18- 5.98
8	3,5-Dinitroaniline	1000.000	927.997	7.2	98	0.03	5.48- 6.28
9	Nitrobenzene	1000.000	829.708	17.0	93	0.04	6.69- 7.49
10	Nitroglycerin	----------NA----------					
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	905.116	9.5	92	0.07	8.30- 9.10
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	885.226	11.5	100	0.08	8.72- 9.52
13	2-Amino-4,6-Dinitrotol	1000.000	937.470	6.3	100	0.07	9.02- 9.82
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	999.872	0.0	102	0.08	9.45-10.25
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	925.278	7.5	101	0.08	9.91-10.71
16	2,4-Dinitrotoluene	1000.000	931.741	6.8	102	0.09	10.57-11.37
17	2,6-Dinitrotoluene	1000.000	852.694	14.7	100	0.09	11.01-11.81
18	o-Nitrotoluene	1000.000	808.791	19.1	89	0.07	14.30-15.17
19	p-Nitrotoluene	1000.000	839.567	16.0	89	0.08	14.75-15.75
20	m-Nitrotoluene	1000.000	830.301	17.0	86	0.07	15.73-16.73
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	968.393	3.2	96	0.00	1.01- 1.61
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1019.850	-2.0	102	0.00	1.14- 1.74
3	DNX	1000.000	996.312	0.4	99	0.00	1.36- 1.96
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	972.581	2.7	99	0.01	1.89- 2.49
5	RDX	1000.000	940.597	5.9	100	0.02	2.36- 3.16

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GBB1724-ECC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059499.D
Project: Ft Ord; CA

6		1,3,5-Trinitrobenzene	1000.000	967.888	3.2	100	0.03	4.01- 4.81
7		1,3-Dinitrobenzene	1000.000	963.764	3.6	101	0.03	5.18- 5.98
8		3,5-Dinitroaniline	1000.000	1014.349	-1.4	100	0.03	5.48- 6.28
9		Nitrobenzene	1000.000	867.521	13.2	93	0.03	6.69- 7.49
10		Nitroglycerin	5000.000	5035.384	-0.7	106	0.07	7.88- 8.88
11		Tetryl	1000.000	885.547	11.4	90	0.07	8.29- 9.09
12		2,4,6-Trinitrotoluene	1000.000	1014.281	-1.4	99	0.08	8.72- 9.52
13		2-Amino-4,6-Dinitrotol	1000.000	1019.370	-1.9	100	0.07	9.03- 9.83
14		4-Amino-2,6-Dinitrotol	1000.000	1036.254	-3.6	100	0.08	9.46-10.26
15	S	3,4-Dinitrotoluene	1000.000	948.729	5.1	100	0.08	9.91-10.71
16		2,4-Dinitrotoluene	1000.000	1069.974	-7.0	102	0.09	10.56-11.36
17		2,6-Dinitrotoluene	1000.000	1091.419	-9.1	101	0.09	11.01-11.81
18		o-Nitrotoluene	1000.000	841.967	15.8	90	0.07	14.17-15.17
			Amount	Calc.	%Drift			
19		p-Nitrotoluene	1000.000	881.295	11.9	89	0.08	14.75-15.75
			Amount	Calc.	%Drift			
20		m-Nitrotoluene	1000.000	875.373	12.5	88	0.07	15.73-16.73
21		PETN	5000.000	4879.362	2.4	100	0.06	17.83-19.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Tue Apr 24 11:24:26 2018

6.8.4 6

Initial Calibration Summary

Job Number: FA53518 **Sample:** GGG2571-ICC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613830.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration

Calibration Files
20 =GG613826.D 50 =GG613827.D 100 =GG613828.D 200 =GG613829.D
500 =GG613830.D 1000=GG613831.D 2000=GG613832.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	1.352	1.377	1.510	1.459	1.436	1.410	1.414	1.423	E4	3.67
2)	HMX	3.057	3.298	3.764	3.284	3.135	3.075	3.080	3.242	E3	7.74
3)	DNX	7.579	7.967	8.251	7.597	7.678	7.556	7.556	7.741	E3	3.46
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.012	7.160	7.024	E3	2.87
5)	1,3,5-Trinitroben	1.042	1.032	1.066	1.053	1.015	1.014	1.032	1.036	E4	1.85
6)	RDX	4.655	4.741	4.946	4.851	4.693	4.693	4.771	4.764	E3	2.15
7)	1,3-Dinitrobenzen	1.581	1.387	1.454	1.448	1.378	1.372	1.396	1.431	E4	5.16
8)	Nitrobenzene	1.168	0.878	0.954	0.925	0.890	0.891	0.899	0.944	E4	10.84
9)	2,4,6-Trinitrotol	1.271	0.986	1.002	0.994	0.945	0.938	0.957	1.013	E4	11.49
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	9.406	8.156	8.448	7.884	7.567	7.535	7.730	8.104	E3	8.15
12)S	3,4-Dinitrotoluen	4.934	5.176	5.394	5.317	5.132	5.134	5.275	5.195	E3	2.91
13)	2,6-Dinitrotoluen	7.042	7.189	7.341	7.323	7.011	6.992	7.150	7.150	E3	2.01
14)	2,4-Dinitrotoluen	1.375	1.321	1.340	1.317	1.268	1.264	1.292	1.311	E4	3.05
15)	o-Nitrotoluene	6.003	5.683	5.997	5.756	5.616	5.638	5.743	5.777	E3	2.78
16)	3,5-Dinitroanilin	1.439	1.084	1.075	1.031	0.980	0.977	0.999	1.084	E4	14.99

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999
Response Ratio = 0.00000 + 9713.03096 *A + 0.13365 *A^2

17)	p-Nitrotoluene	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
18)	4-Amino-2,6-Dinit	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
19)	m-Nitrotoluene	5.287	5.715	6.137	6.029	5.964	6.024	6.111	5.895	E3	5.12
20)	2-Amino-4,6-Dinit	8.442	8.820	9.024	9.262	9.082	9.162	9.369	9.023	E3	3.44
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	1.343	1.386	1.510	1.459	1.436	1.410	1.414	1.422	E4	3.75
2)	HMX	3.279	2.935	3.764	3.284	3.135	3.075	3.080	3.222	E3	8.34
3)	DNX	8.457	7.331	8.251	7.597	7.678	7.556	7.556	7.775	E3	5.32
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.021	7.190	7.029	E3	2.92
5)	1,3,5-Trinitroben	1.042	1.030	1.063	1.050	1.015	1.016	1.037	1.036	E4	1.68
6)	RDX	4.655	4.670	4.823	4.763	4.696	4.737	4.857	4.743	E3	1.61
7)	1,3-Dinitrobenzen	0.880	0.862	1.273	1.143	1.344	1.204	1.104	1.116	E4	16.58

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993
Response Ratio = 0.00000 + 13276.14205 *A + -1.11873 *A^2

8)	Nitrobenzene	0.924	0.888	0.901	0.870	1.044	0.976	0.880	0.926	E4	6.79
9)	2,4,6-Trinitrotol	1.089	1.237	1.458	1.298	1.440	1.347	1.310	1.311	E4	9.57
10)	Nitroglycerin	2.684	3.204	3.404	3.401	3.722	3.603	3.570	3.370	E3	10.27
11)	Tetryl	2.495	1.493	1.140	1.333	1.452	1.389	1.373	1.525	E4	29.01

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 14197.55319 *A + -0.23730 *A^2

12)S	3,4-Dinitrotoluen	1.259	1.015	1.021	1.090	1.061	1.056	1.070	1.082	E4	7.62
13)	2,6-Dinitrotoluen	0.875	1.106	0.996	1.038	1.024	1.022	1.041	1.015	E4	6.93
14)	2,4-Dinitrotoluen	2.450	1.728	1.231	1.056	0.977	0.913	0.920	1.325	E4	43.18

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICC2571
Lab FileID: GG613830.D

```
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 9621.10583 *A + -0.22476 *A^2

 15)  o-Nitrotoluene    8.554 9.270 8.481 8.837 8.240 8.443 8.540 8.624 E3   3.89
 16)  3,5-Dinitroanilin 2.378 1.717 1.751 1.723 1.603 1.631 1.657 1.780 E4  15.12
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 16131.47839 *A + 0.21636 *A^2

 17)  p-Nitrotoluene    2.097 1.953 2.158 2.200 2.120 2.137 2.170 2.119 E4   3.81
 18)  4-Amino-2,6-Dinit 2.140 1.953 2.158 2.200 2.120 2.137 2.170 2.125 E4   3.78
 19)  m-Nitrotoluene    1.024 0.732 1.030 1.026 0.980 0.989 1.027 0.972 E4  11.11
 20)  2-Amino-4,6-Dinit 0.592 0.798 1.032 1.130 1.175 1.240 1.304 1.039 E4  24.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 11496.69993 *A + 0.78000 *A^2

 21)  PETN              2.883 2.660 3.060 3.416 3.438 3.469 3.526 3.207 E3  10.60
 ---------------------------------------------------------------------------
 (#) = Out of Range

          8330RPB.M_1113M.M        Tue Nov 14 13:38:28 2017
```

Initial Calibration Verification

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICV2571
Lab FileID: GG613833.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	311.255	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	512.341	-2.5	106	-0.01	4.96- 5.96
3	DNX	500.000	481.707	3.7	97	0.00	5.08- 6.08
4	MNX	500.000	498.403	0.3	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.713	1.9	100	0.00	7.04- 8.04
6	RDX	500.000	504.766	-1.0	102	-0.03	7.57- 8.57
7	1,3-Dinitrobenzene	500.000	459.805	8.0	96	-0.01	9.58-10.58
8	Nitrobenzene	500.000	482.574	3.5	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene	500.000	493.369	1.3	101	0.00	14.38-15.38
14	2,4-Dinitrotoluene	500.000	484.298	3.1	100	-0.02	15.12-16.12
15	o-Nitrotoluene	500.000	512.102	-2.4	105	0.00	16.70-17.70
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	500.000	479.670	4.1	96	-0.07	16.16-17.16
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	500.000	491.360	1.7	101	-0.06	17.91-18.91
18	4-Amino-2,6-Dinitrotol	500.000	491.360	1.7	101	-0.06	17.91-18.91
19	m-Nitrotoluene	500.000	546.610	-9.3	108	0.00	19.13-20.13
20	2-Amino-4,6-Dinitrotol	500.000	514.599	-2.9	102	-0.07	20.16-21.16
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	311.279	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	515.543	-3.1	106	-0.01	4.96- 5.96
3	DNX	500.000	479.565	4.1	97	0.00	5.08- 6.08
4	MNX	500.000	498.000	0.4	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.831	1.8	100	0.00	7.04- 8.04
6	RDX	500.000	507.885	-1.6	103	-0.03	7.57- 8.57
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	500.000	525.898	-5.2	99	-0.01	9.57-10.57
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	500.000	577.158	-15.4#	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				

Job Number: FA53518 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613833.D
Project: Ft Ord; CA

10	Nitroglycerin	2500.000	2766.568	-10.7	100	-0.02	12.20-13.20
		Amount	Calc.	%Drift			
11	Tetryl			NA			
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene			NA			
13	2,6-Dinitrotoluene	500.000	540.982	-8.2	107	0.03	14.36-15.36
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	500.000	495.523	0.9	97	-0.02	15.12-16.12
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	500.000	509.800	-2.0	107	0.00	16.70-17.70
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	500.000	484.898	3.0	98	-0.07	16.16-17.16
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	500.000	510.118	-2.0	102	-0.06	17.92-18.92
18	4-Amino-2,6-Dinitrotol	500.000	508.634	-1.7	102	-0.06	17.92-18.92
19	m-Nitrotoluene	500.000	525.201	-5.0	104	-0.01	19.13-20.13
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	500.000	496.742	0.7	100	-0.07	20.16-21.16
		Amount	Calc.	%Drift			
21	PETN	2500.000	2876.898	-15.1#	107	-0.02	21.81-22.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:38:14 2017

Initial Calibration Verification

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICV2571
Lab FileID: GG613834.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX		----------NA----------				
2	HMX		----------NA----------				
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	1,3,5-Trinitrobenzene		----------NA----------				
6	RDX		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	Nitrobenzene		----------NA----------				
9	2,4,6-Trinitrotoluene	500.000	474.847	5.0	102	0.00	11.37-12.37
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	513.472	-2.7	110	0.00	12.78-13.78
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene		----------NA----------				
14	2,4-Dinitrotoluene		----------NA----------				
15	o-Nitrotoluene		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene		----------NA----------				
18	4-Amino-2,6-Dinitrotoluen		----------NA----------				
19	m-Nitrotoluene		----------NA----------				
20	2-Amino-4,6-Dinitrotoluen		----------NA----------				
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX		----------NA----------				
2	HMX		----------NA----------				
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	1,3,5-Trinitrobenzene		----------NA----------				
6	RDX		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene		----------NA----------				
9	2,4,6-Trinitrotoluene	500.000	485.592	2.9	88	0.00	11.37-12.37

Job Number: FA53518 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613834.D
Project: Ft Ord; CA

10	Nitroglycerin			----------NA----------				
		Amount	Calc.	%Drift				
11	Tetryl	500.000	520.034	-4.0	101	0.00	12.78-13.78	
		Amount	Calc.	%Drift				
12 S	3,4-Dinitrotoluene			----------NA----------				
13	2,6-Dinitrotoluene			----------NA----------				
		Amount	Calc.	%Drift				
14	2,4-Dinitrotoluene			----------NA----------				
		Amount	Calc.	%Drift				
15	o-Nitrotoluene			----------NA----------				
		Amount	Calc.	%Drift				
16	3,5-Dinitroaniline			----------NA----------				
		Amount	Calc.	%Drift				
17	p-Nitrotoluene			----------NA----------				
18	4-Amino-2,6-Dinitrotoluen			----------NA----------				
19	m-Nitrotoluene			----------NA----------				
		Amount	Calc.	%Drift				
20	2-Amino-4,6-Dinitrotoluen			----------NA----------				
		Amount	Calc.	%Drift				
21	PETN			----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:46:22 2017

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614537.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

```
Signal #1 : G:\DATA\0503RPB3\GG614537.D\dad1B.ch         Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614537.D\dad1A.ch
Acq On    : 03-May-2018, 11:19:40                    Operator: evitam
Sample    : cc2571-1000                              Inst    : G1315B
Misc      : op69838,Ggg2624,5.0,,,50,1,soil          Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	974.378	2.6	98	0.00	4.48- 5.48
2	HMX	1000.000	1058.886	-5.9	112	0.00	4.88- 5.88
3	DNX	1000.000	1060.812	-6.1	109	0.00	5.05- 6.05
4	MNX	1000.000	1072.244	-7.2	107	-0.02	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1007.867	-0.8	103	-0.04	6.94- 7.94
6	RDX	1000.000	1061.521	-6.2	108	-0.03	7.39- 8.39
7	1,3-Dinitrobenzene	1000.000	1011.942	-1.2	106	-0.06	9.42-10.42
8	Nitrobenzene	1000.000	996.721	0.3	106	-0.07	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1002.424	-0.2	108	-0.08	11.16-12.16
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	952.786	4.7	102	-0.09	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1131.478	-13.1	114	-0.11	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1030.893	-3.1	105	-0.10	14.11-15.11
14	2,4-Dinitrotoluene	1000.000	1027.291	-2.7	107	-0.10	14.82-15.82
15	o-Nitrotoluene	1000.000	1041.870	-4.2	107	-0.14	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1157.558	-15.8	117	-0.07	15.75-16.75
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1045.872	-4.6	107	-0.12	17.50-18.50
18	4-Amino-2,6-Dinitrotol	1000.000	1045.872	-4.6	107	-0.12	17.50-18.50
19	m-Nitrotoluene	1000.000	1085.336	-8.5	106	-0.15	18.73-19.73
20	2-Amino-4,6-Dinitrotol	1000.000	1073.848	-7.4	106	-0.11	19.66-20.66
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	974.453	2.6	98	0.00	4.48- 5.48
2	HMX	1000.000	1065.503	-6.6	112	0.00	4.88- 5.88
3	DNX	1000.000	1056.094	-5.6	109	0.00	5.05- 6.05
4	MNX	1000.000	1071.378	-7.1	107	-0.02	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1007.837	-0.8	103	-0.04	6.94- 7.94
6	RDX	1000.000	1063.820	-6.4	107	-0.03	7.39- 8.39
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	933.669	6.6	95	-0.06	9.42-10.42
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1010.209	-1.0	96	-0.07	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1095.957	-9.6	107	-0.08	11.16-12.16

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614537.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5379.490	-7.6	101	-0.09	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1048.369	-4.8	105	-0.09	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1207.247	-20.7#	124	-0.11	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1123.267	-12.3	111	-0.09	14.10-15.10
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1109.100	-10.9	114	-0.10	14.82-15.82
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1003.422	-0.3	102	-0.14	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1181.074	-18.1	119	-0.07	15.75-16.75
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1057.196	-5.7	105	-0.12	17.51-18.51
18	4-Amino-2,6-Dinitrotol	1000.000	1054.122	-5.4	105	-0.12	17.51-18.51
19	m-Nitrotoluene	1000.000	1088.140	-8.8	107	-0.15	18.73-19.73
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1101.003	-10.1	110	-0.11	19.66-20.66
		Amount	Calc.	%Drift			
21	PETN	5000.000	5523.600	-10.5	102	-0.18	21.27-22.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 04 09:38:32 2018

6.8.8

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614547.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0503RPB3\GG614547.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614547.D\dad1A.ch
Acq On : 03-May-2018, 16:14:18 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	984.952	1.5	99	0.00	4.48- 5.48
2	HMX	1000.000	1091.583	-9.2	115	0.00	4.88- 5.88
3	DNX	1000.000	1084.999	-8.5	111	0.00	5.05- 6.05
4	MNX	1000.000	1068.288	-6.8	107	0.00	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1009.053	-0.9	103	0.00	6.94- 7.94
6	RDX	1000.000	1076.593	-7.7	109	0.00	7.39- 8.39
7	1,3-Dinitrobenzene	1000.000	1015.322	-1.5	106	0.00	9.42-10.42
8	Nitrobenzene	1000.000	1005.174	-0.5	107	0.00	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1003.070	-0.3	108	0.00	11.16-12.16
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	957.506	4.2	103	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1117.669	-11.8	113	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1036.837	-3.7	106	0.00	14.11-15.11
14	2,4-Dinitrotoluene	1000.000	1026.607	-2.7	106	0.00	14.82-15.82
15	o-Nitrotoluene	1000.000	1053.008	-5.3	108	0.00	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1157.094	-15.7	117	0.00	15.75-16.75
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1050.568	-5.1	107	0.00	17.50-18.50
18	4-Amino-2,6-Dinitrotol	1000.000	1050.568	-5.1	107	0.00	17.50-18.50
19	m-Nitrotoluene	1000.000	1094.379	-9.4	107	0.00	18.73-19.73
20	2-Amino-4,6-Dinitrotol	1000.000	1076.107	-7.6	106	0.00	19.66-20.66
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	985.027	1.5	99	0.00	4.48- 5.48
2	HMX	1000.000	1098.404	-9.8	115	0.00	4.88- 5.88
3	DNX	1000.000	1080.173	-8.0	111	0.00	5.05- 6.05
4	MNX	1000.000	1067.426	-6.7	107	0.00	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1012.025	-1.2	103	0.00	6.94- 7.94
6	RDX	1000.000	1109.005	-10.9	111	0.00	7.39- 8.39
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	932.695	6.7	95	0.00	9.42-10.42
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1037.642	-3.8	98	0.00	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1083.259	-8.3	105	0.00	11.16-12.16

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614547.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5416.344	-8.3	101	0.00	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1053.227	-5.3	106	0.00	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1182.209	-18.2	121	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1092.978	-9.3	108	0.00	14.10-15.10
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1082.956	-8.3	111	0.00	14.82-15.82
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1019.417	-1.9	104	0.00	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1174.501	-17.5	118	0.00	15.75-16.75
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1046.381	-4.6	104	0.00	17.51-18.51
18	4-Amino-2,6-Dinitrotol	1000.000	1043.339	-4.3	104	0.00	17.51-18.51
19	m-Nitrotoluene	1000.000	1116.900	-11.7	110	0.00	18.73-19.73
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1108.174	-10.8	110	0.00	19.66-20.66
		Amount	Calc.	%Drift			
21	PETN	5000.000	5451.331	-9.0	101	0.00	21.27-22.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 04 09:38:33 2018

6.8.9

6

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614559.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

```
Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch         Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On    : 03-May-2018, 22:07:51                    Operator: evitam
Sample    : cc2571-1000                              Inst    : G1315B
Misc      : op69838,Ggg2624,10.75,,,50,1,soil        Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	975.314	2.5	98	0.01	4.48- 5.48
2	HMX	1000.000	1063.869	-6.4	112	0.02	4.88- 5.88
3	DNX	1000.000	1067.834	-6.8	109	0.02	5.05- 6.05
4	MNX	1000.000	1064.522	-6.5	107	0.03	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1001.327	-0.1	102	0.02	6.94- 7.94
6	RDX	1000.000	1064.581	-6.5	108	0.03	7.39- 8.39
7	1,3-Dinitrobenzene	1000.000	1008.816	-0.9	105	0.02	9.42-10.42
8	Nitrobenzene	1000.000	1016.342	-1.6	108	0.02	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	994.771	0.5	107	0.01	11.16-12.16
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	943.225	5.7	101	0.02	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1117.944	-11.8	113	0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1025.534	-2.6	105	0.02	14.11-15.11
14	2,4-Dinitrotoluene	1000.000	1018.917	-1.9	106	0.02	14.82-15.82
15	o-Nitrotoluene	1000.000	1053.323	-5.3	108	0.02	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1147.194	-14.7	116	0.04	15.75-16.75
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1041.185	-4.1	106	0.05	17.50-18.50
18	4-Amino-2,6-Dinitrotol	1000.000	1041.185	-4.1	106	0.05	17.50-18.50
19	m-Nitrotoluene	1000.000	1089.895	-9.0	107	0.03	18.73-19.73
20	2-Amino-4,6-Dinitrotol	1000.000	1064.430	-6.4	105	0.06	19.66-20.66
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	1000.000	975.388	2.5	98	0.01	4.48- 5.48
2	HMX	1000.000	1070.517	-7.1	112	0.02	4.88- 5.88
3	DNX	1000.000	1063.084	-6.3	109	0.02	5.05- 6.05
4	MNX	1000.000	1063.662	-6.4	106	0.03	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1001.443	-0.1	102	0.02	6.94- 7.94
6	RDX	1000.000	1065.694	-6.6	107	0.03	7.39- 8.39
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	937.897	6.2	95	0.02	9.42-10.42
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1093.968	-9.4	104	0.02	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1098.099	-9.8	107	0.01	11.16-12.16

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614559.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5395.734	-7.9	101	0.01	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1062.043	-6.2	107	0.02	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1209.610	-21.0#	124	0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1100.117	-10.0	109	0.02	14.10-15.10
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1056.379	-5.6	109	0.02	14.82-15.82
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1019.599	-2.0	104	0.02	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1153.122	-15.3	116	0.04	15.75-16.75
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1048.589	-4.9	104	0.05	17.51-18.51
18	4-Amino-2,6-Dinitrotol	1000.000	1045.540	-4.6	104	0.05	17.51-18.51
19	m-Nitrotoluene	1000.000	1093.677	-9.4	108	0.03	18.73-19.73
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1089.986	-9.0	109	0.06	19.66-20.66
		Amount	Calc.	%Drift			
21	PETN	5000.000	5554.954	-11.1	103	0.03	21.27-22.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 04 09:38:34 2018

6.8.10

6

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GGG2624-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614571.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	955.156	4.5	96	0.00	4.48- 5.48
2	HMX	1000.000	1021.052	-2.1	108	0.00	4.88- 5.88
3	DNX	1000.000	1041.435	-4.1	107	0.00	5.05- 6.05
4	MNX	1000.000	1060.437	-6.0	106	0.00	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	996.571	0.3	102	0.00	6.94- 7.94
6	RDX	1000.000	1058.016	-5.8	107	0.00	7.39- 8.39
7	1,3-Dinitrobenzene	1000.000	1000.504	-0.1	104	0.00	9.42-10.42
8	Nitrobenzene	1000.000	1005.328	-0.5	107	0.00	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	985.850	1.4	106	-0.01	11.16-12.16
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	928.473	7.2	100	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1104.792	-10.5	112	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1024.919	-2.5	105	0.01	14.11-15.11
14	2,4-Dinitrotoluene	1000.000	1017.583	-1.8	106	0.00	14.82-15.82
15	o-Nitrotoluene	1000.000	1053.119	-5.3	108	-0.01	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1143.053	-14.3	115	0.04	15.75-16.75
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1039.108	-3.9	106	0.02	17.50-18.50
18	4-Amino-2,6-Dinitrotol	1000.000	1039.108	-3.9	106	0.02	17.50-18.50
19	m-Nitrotoluene	1000.000	1091.149	-9.1	107	0.00	18.73-19.73
20	2-Amino-4,6-Dinitrotol	1000.000	1063.472	-6.3	105	0.03	19.66-20.66
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	955.229	4.5	96	0.00	4.48- 5.48
2	HMX	1000.000	1027.433	-2.7	108	0.00	4.88- 5.88
3	DNX	1000.000	1036.803	-3.7	107	0.00	5.05- 6.05
4	MNX	1000.000	1059.581	-6.0	106	0.00	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	997.351	0.3	102	0.00	6.94- 7.94
6	RDX	1000.000	1066.727	-6.7	107	0.00	7.39- 8.39
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	954.911	4.5	97	0.00	9.42-10.42
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1074.496	-7.4	102	0.00	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1101.672	-10.2	107	-0.01	11.16-12.16

Continuing Calibration Summary

Job Number: FA53518 **Sample:** GGG2624-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614571.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5375.208	-7.5	101	-0.01	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1028.386	-2.8	103	0.00	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1205.499	-20.5#	123	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1101.971	-10.2	109	0.02	14.10-15.10
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1059.140	-5.9	109	0.00	14.82-15.82
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1022.947	-2.3	104	-0.01	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1151.957	-15.2	116	0.04	15.75-16.75
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1041.232	-4.1	103	0.02	17.51-18.51
18	4-Amino-2,6-Dinitrotol	1000.000	1038.204	-3.8	103	0.02	17.51-18.51
19	m-Nitrotoluene	1000.000	1109.587	-11.0	109	0.00	18.73-19.73
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1092.810	-9.3	109	0.02	19.66-20.66
		Amount	Calc.	%Drift			
21	PETN	5000.000	5534.146	-10.7	102	-0.05	21.27-22.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 04 09:38:35 2018

6.8.11

6

GC/LC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614541.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0503RPB3\GG614541.D\dad1A.ch
Acq On : 03-May-2018, 13:17:27 Operator: evitam
Sample : fa53518-1 Inst : G1315B
Misc : op69838,Ggg2624,10.40,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 03 14:23:53 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.22	2525291	6401284	486.111	591.746
	Spiked Amount 500.000	Range 69 - 134		Recovery =		97.22%	118.35%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

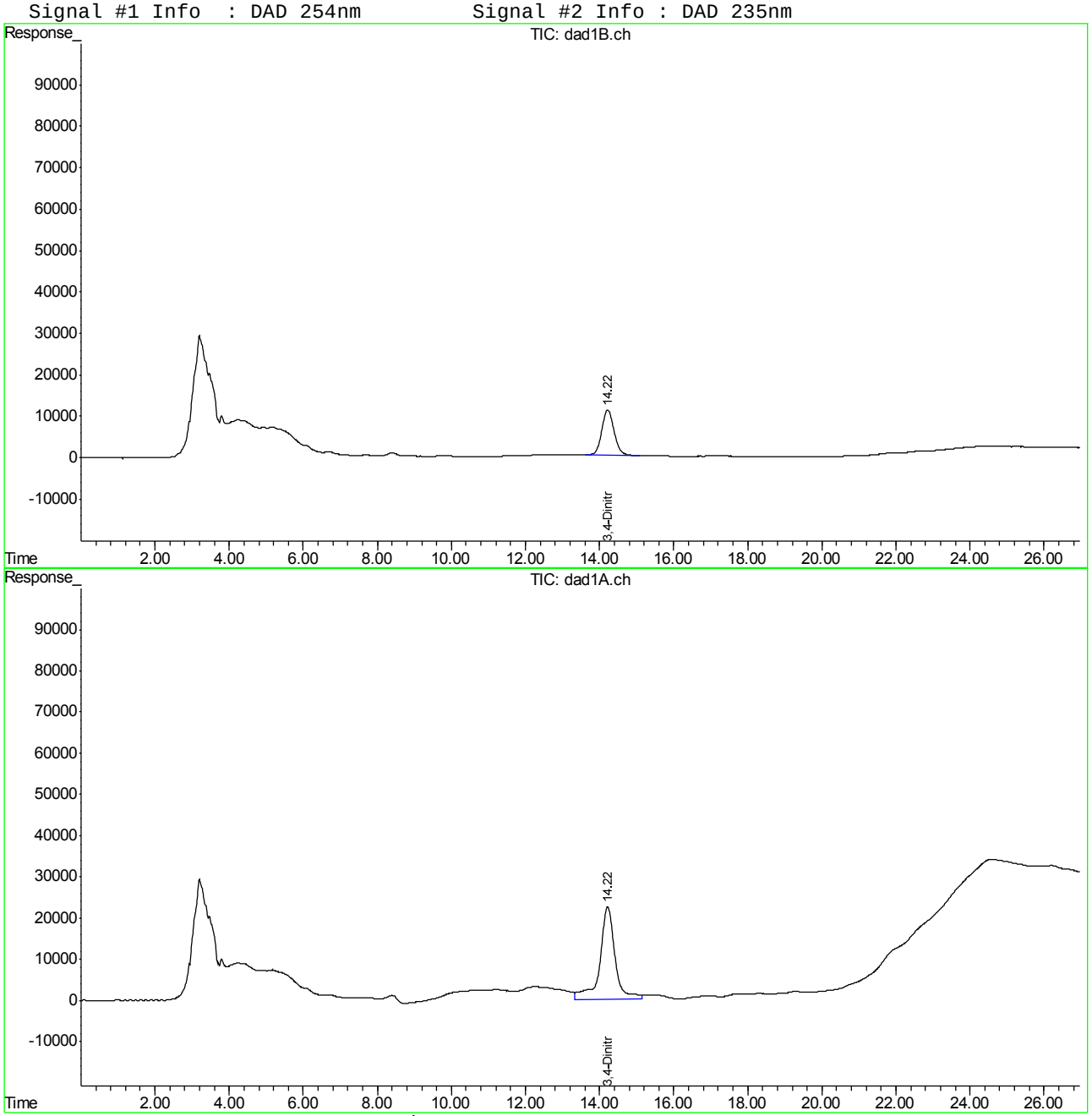
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614541.D 8330RPB.M_1113M.M Thu May 03 15:00:27 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614541.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0503RPB3\GG614541.D\dad1A.ch
Acq On : 03-May-2018, 13:17:27 Operator: evitam
Sample : fa53518-1 Inst : G1315B
Misc : op69838,Ggg2624,10.40,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614544.D\dad1B.ch Vial: 13
Signal #2 : G:\DATA\0503RPB3\GG614544.D\dad1A.ch
Acq On : 03-May-2018, 14:45:53 Operator: evitam
Sample : fa53518-4 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:11:45 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	2923300	5753854	562.727	531.896m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		112.55%	106.38%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

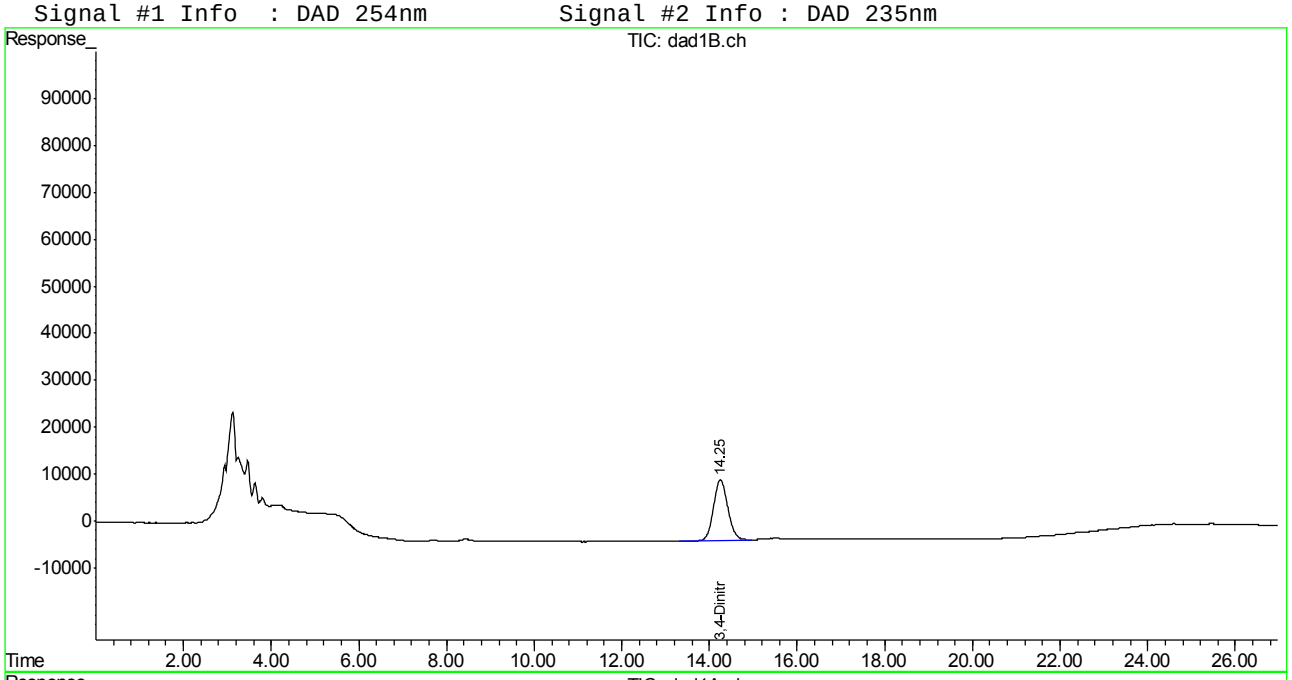
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614544.D 8330RPB.M_1113M.M Fri May 04 09:33:13 2018 Page 1

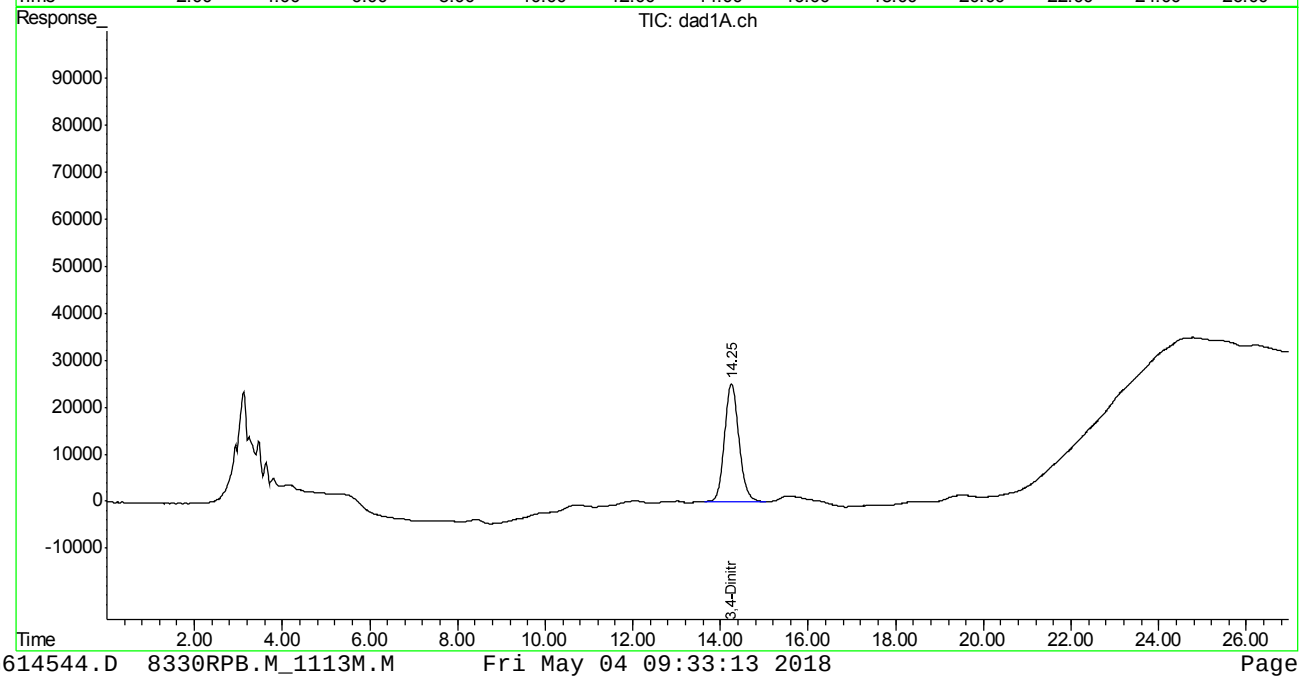
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614544.D\dad1B.ch Vial: 13
Signal #2 : G:\DATA\0503RPB3\GG614544.D\dad1A.ch
Acq On : 03-May-2018, 14:45:53 Operator: evitam
Sample : fa53518-4 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG614544.D 8330RPB.M_1113M.M Fri May 04 09:33:13 2018 Page 2

Manual Integration Approval Summary

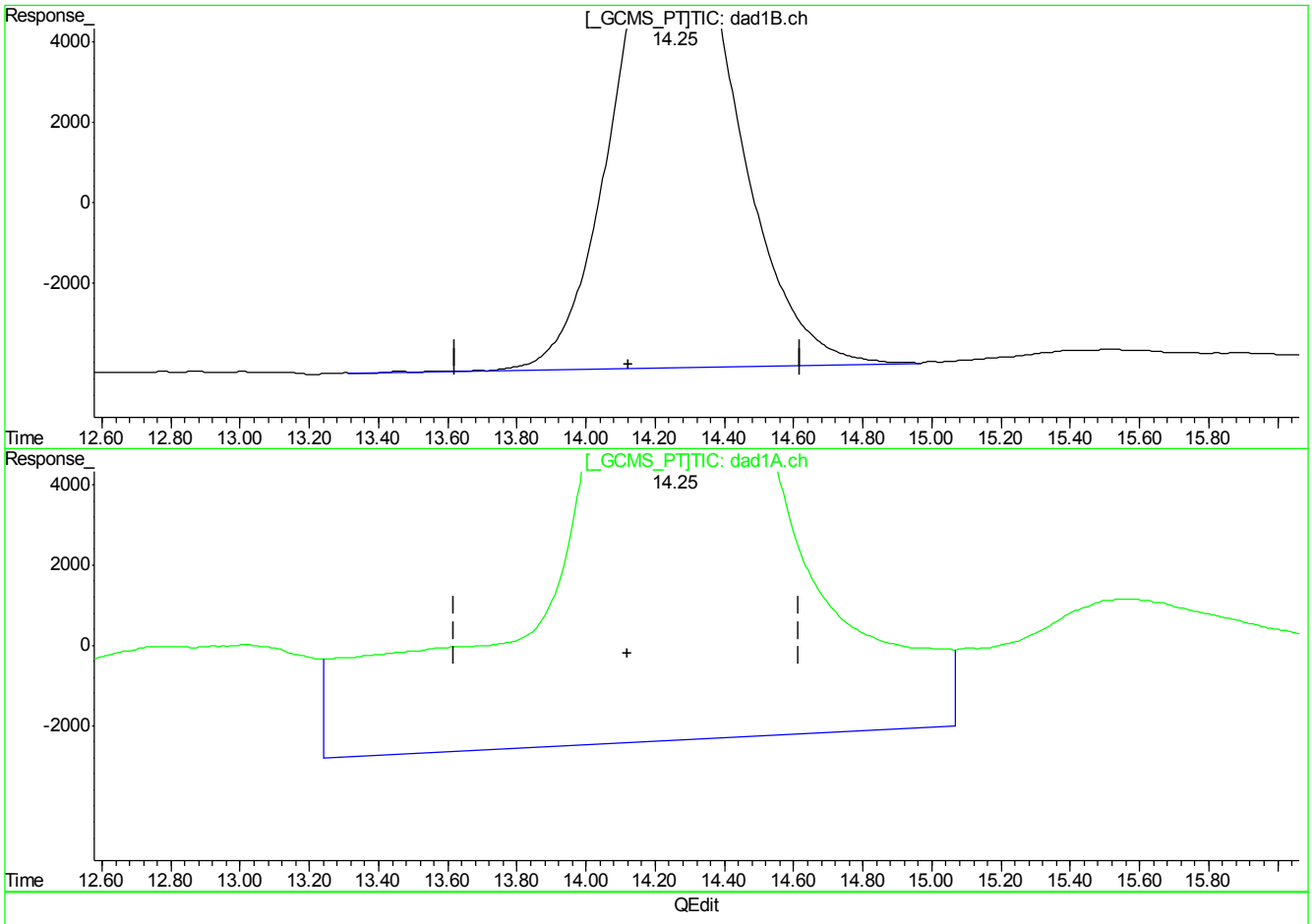
Sample Number:	FA53518-4	**Method:**	SW846 8330B
Lab FileID:	GG614544.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 14:45	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.25	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614544.D\dad1B.ch Vial: 13
Signal #2 : G:\DATA\0503RPB3\GG614544.D\dad1A.ch
Acq On : 03-May-2018, 14:45:53 Operator: evitam
Sample : fa53518-4 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.25min 562.727ppb

response 2923300

(12) 3,4-Dinitrotoluene #2 (S)

14.25min 764.935ppb

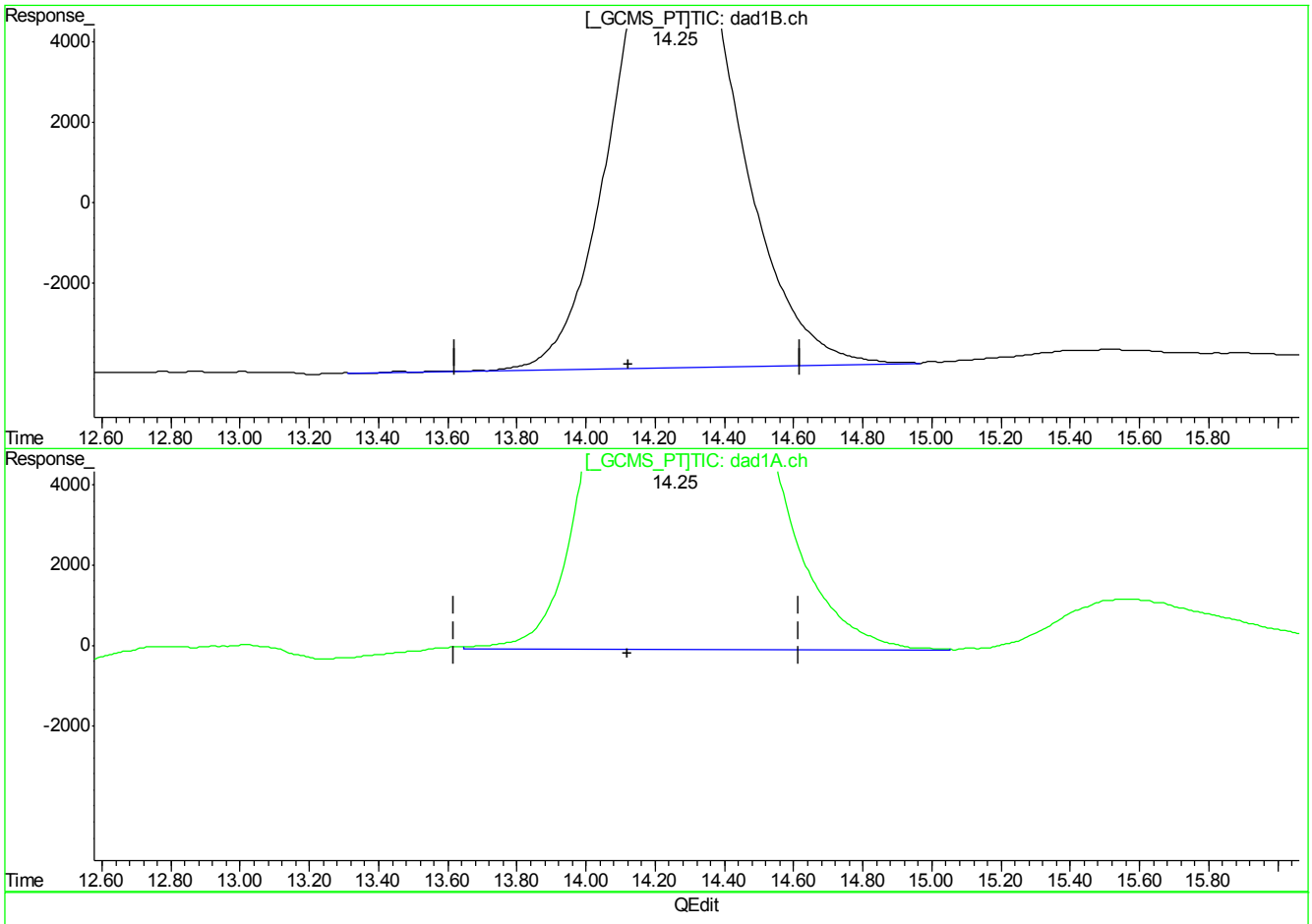
response 8274783

(+) = Expected Retention Time
GG614544.D 8330RPB.M_1113M.M Fri May 04 09:15:57 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614544.D\dad1B.ch Vial: 13
Signal #2 : G:\DATA\0503RPB3\GG614544.D\dad1A.ch
Acq On : 03-May-2018, 14:45:53 Operator: evitam
Sample : fa53518-4 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.25min 562.727ppb

response 2923300

(12) 3,4-Dinitrotoluene #2 (S)

14.25min 531.896ppb m

response 5753854

(+) = Expected Retention Time
GG614544.D 8330RPB.M_1113M.M Fri May 04 09:16:00 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614545.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0503RPB3\GG614545.D\dad1A.ch
Acq On : 03-May-2018, 15:15:20 Operator: evitam
Sample : fa53518-7 Inst : G1315B
Misc : op69838,Ggg2624,10.71,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:11:46 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.23	2816014	5632646	542.075	520.691
	Spiked Amount 500.000	Range 69 - 134		Recovery =		108.42%	104.14%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

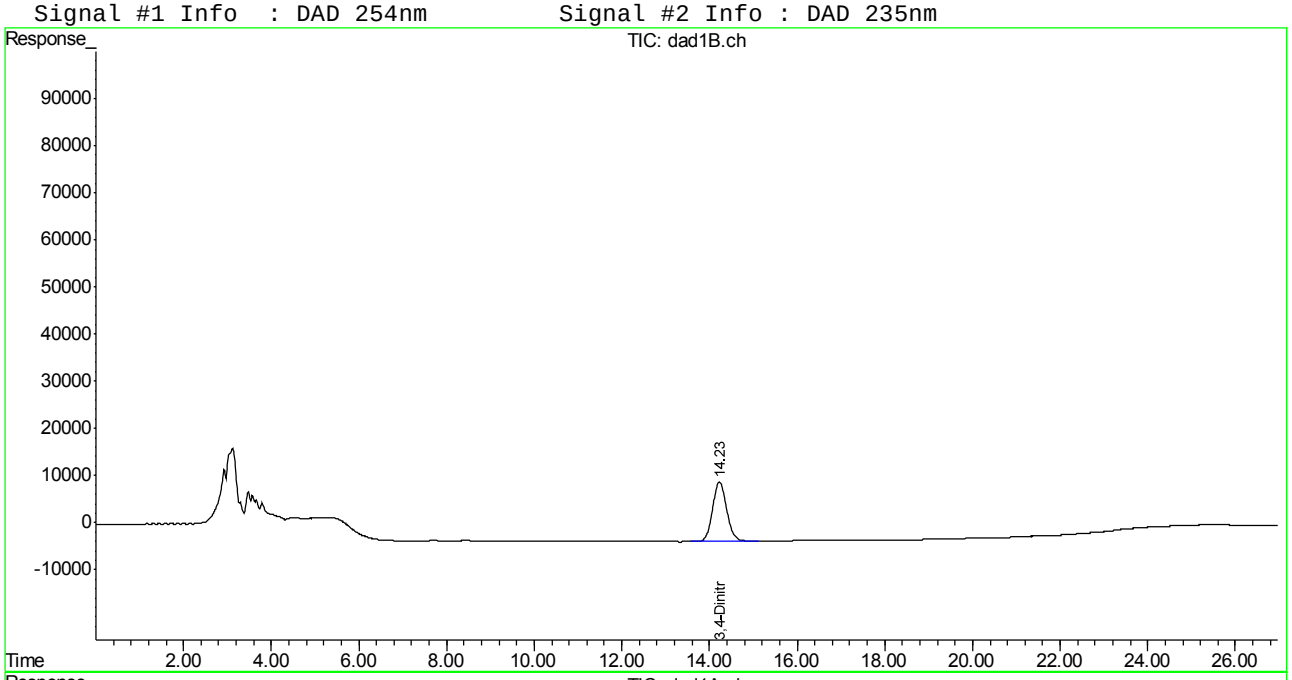
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614545.D 8330RPB.M_1113M.M Fri May 04 09:33:14 2018 Page 1

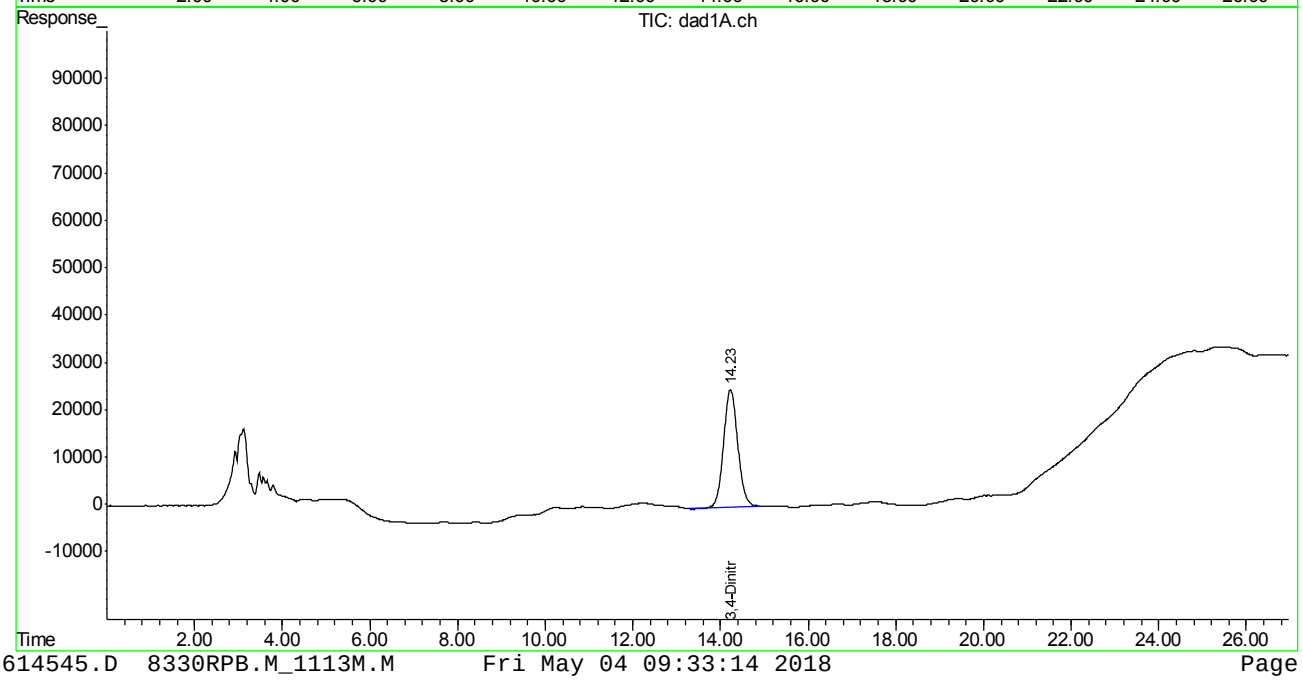
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614545.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0503RPB3\GG614545.D\dad1A.ch
Acq On : 03-May-2018, 15:15:20 Operator: evitam
Sample : fa53518-7 Inst : G1315B
Misc : op69838,Ggg2624,10.71,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614546.D\dad1B.ch Vial: 19
Signal #2 : G:\DATA\0503RPB3\GG614546.D\dad1A.ch
Acq On : 03-May-2018, 15:44:49 Operator: evitam
Sample : fa53518-10 Inst : G1315B
Misc : op69838,Ggg2624,10.78,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:11:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.19	14.18	2692820	5850540	518.360	540.834m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		103.67%	108.17%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

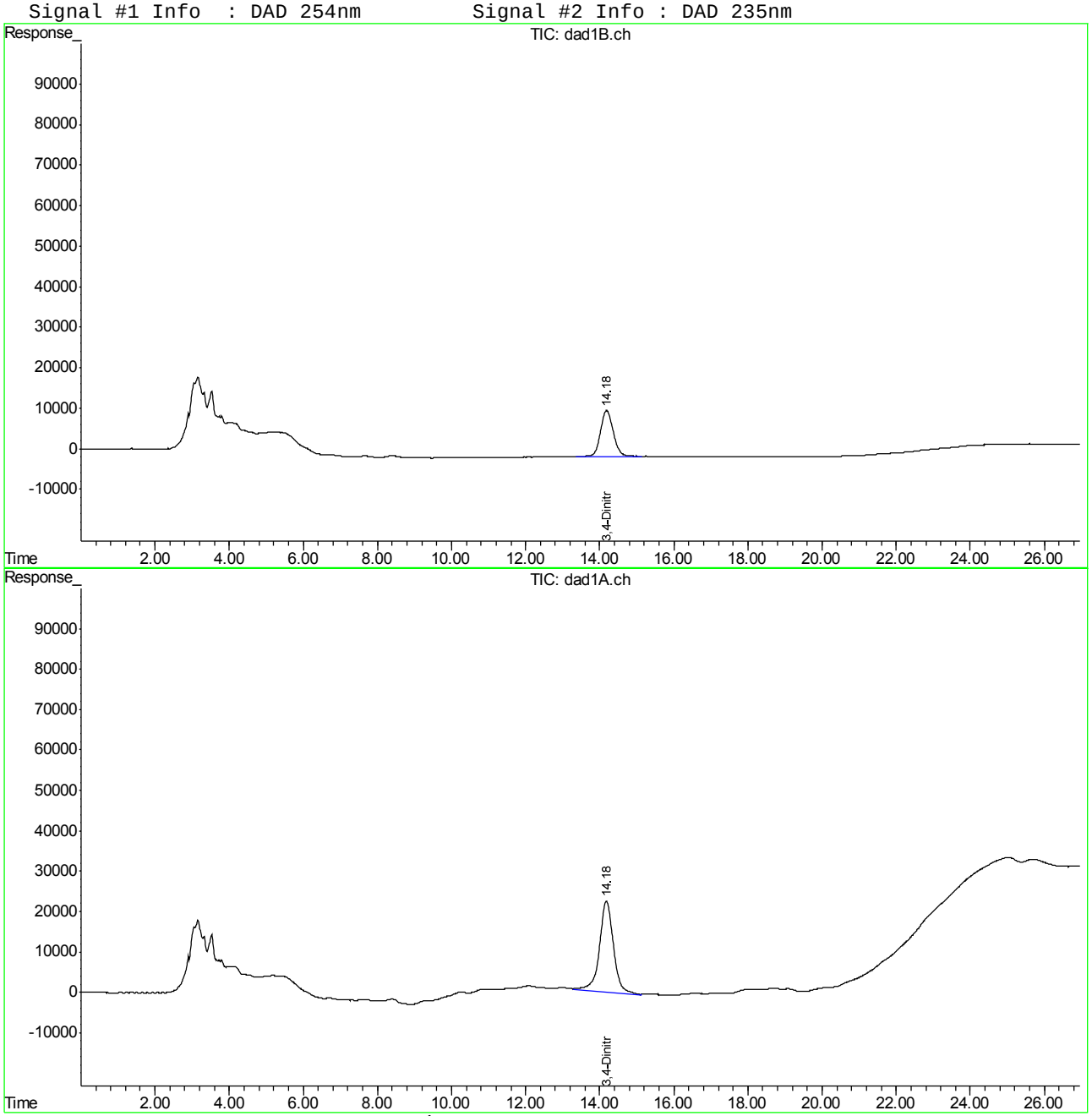
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614546.D 8330RPB.M_1113M.M Fri May 04 09:33:15 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614546.D\dad1B.ch Vial: 19
Signal #2 : G:\DATA\0503RPB3\GG614546.D\dad1A.ch
Acq On : 03-May-2018, 15:44:49 Operator: evitam
Sample : fa53518-10 Inst : G1315B
Misc : op69838,Ggg2624,10.78,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:18 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

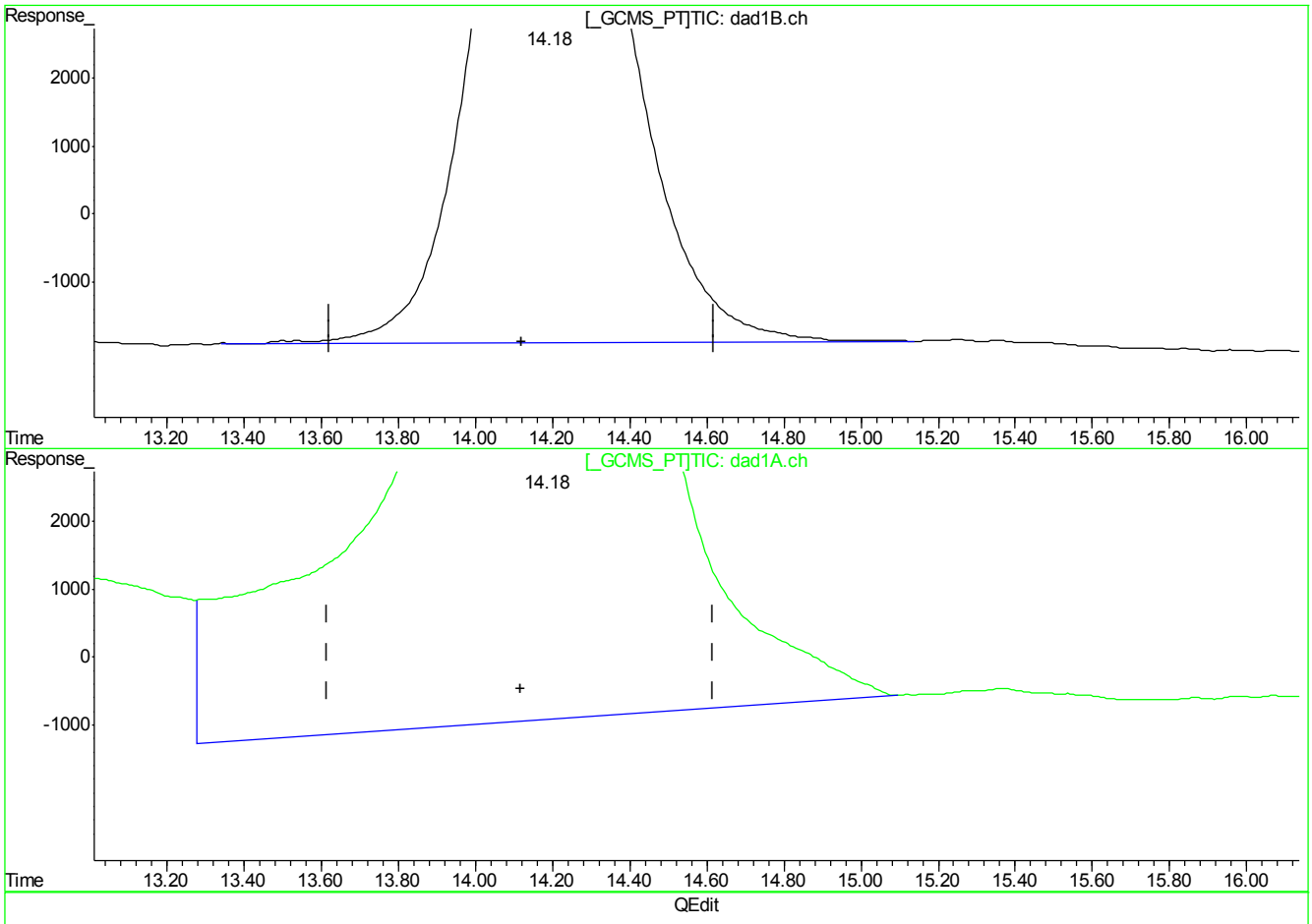
Sample Number:	FA53518-10	**Method:**	SW846 8330B
Lab FileID:	GG614546.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 15:44	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.18	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614546.D\dad1B.ch Vial: 19
Signal #2 : G:\DATA\0503RPB3\GG614546.D\dad1A.ch
Acq On : 03-May-2018, 15:44:49 Operator: evitam
Sample : fa53518-10 Inst : G1315B
Misc : op69838,Ggg2624,10.78,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.19min 518.360ppb

response 2692820

(12) 3,4-Dinitrotoluene #2 (S)

14.18min 645.968ppb

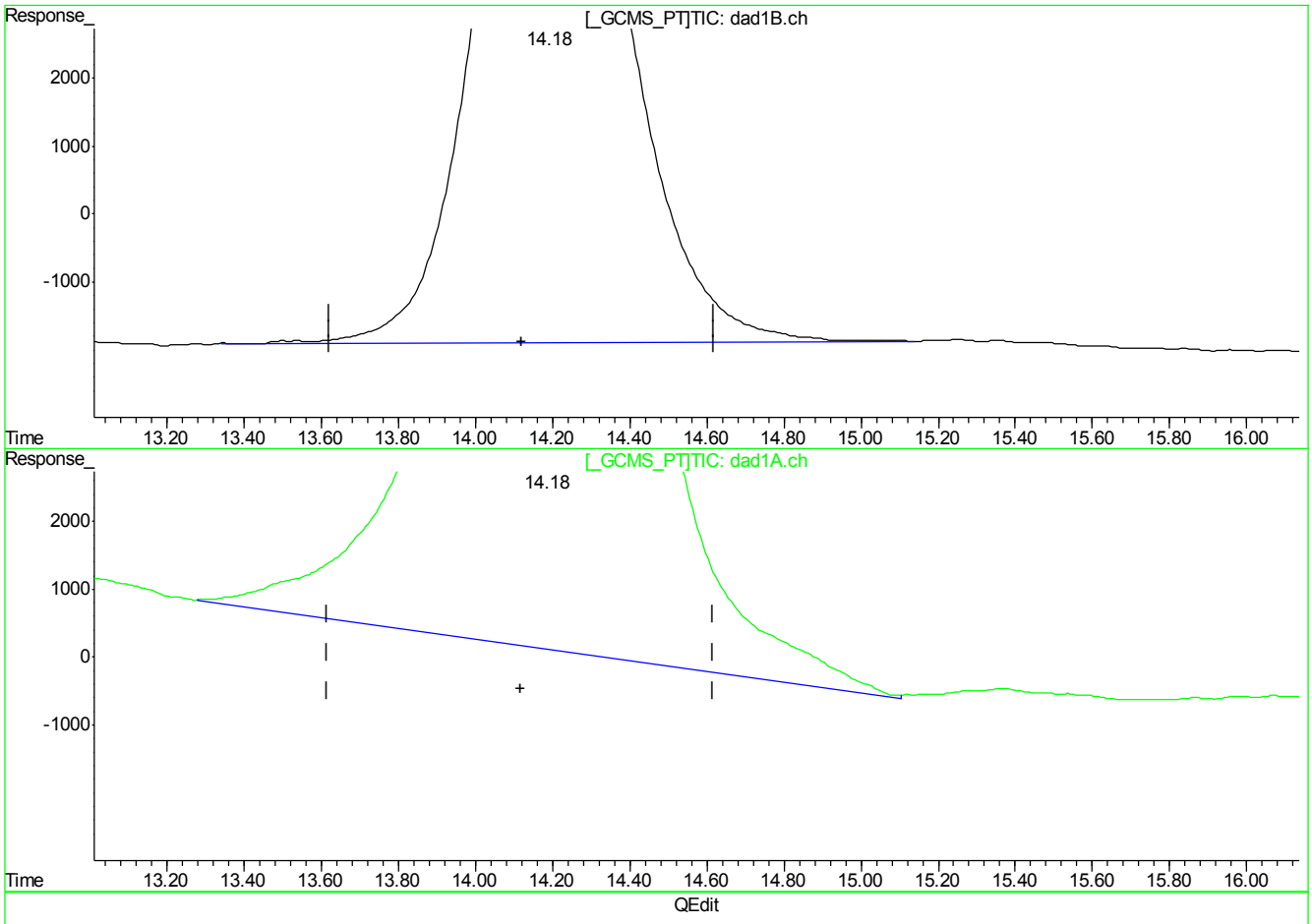
response 6987838

(+) = Expected Retention Time
GG614546.D 8330RPB.M_1113M.M Fri May 04 09:18:14 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614546.D\dad1B.ch Vial: 19
Signal #2 : G:\DATA\0503RPB3\GG614546.D\dad1A.ch
Acq On : 03-May-2018, 15:44:49 Operator: evitam
Sample : fa53518-10 Inst : G1315B
Misc : op69838,Ggg2624,10.78,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.19min 518.360ppb

response 2692820

(12) 3,4-Dinitrotoluene #2 (S)

14.18min 540.834ppb m

response 5850540

(+) = Expected Retention Time
GG614546.D 8330RPB.M_1113M.M Fri May 04 09:18:18 2018

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059497.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059497.D\dad1A.ch
Acq On : 23-Apr-2018, 15:23:29 Operator: evitam
Sample : fa53518-13 Inst : G1315B
Misc : OP69713,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 08:32:52 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.39	10.39	1106021	1932857	413.357	409.960
	Spiked Amount 500.000	Range 70 - 136		Recovery =		82.67%	81.99%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

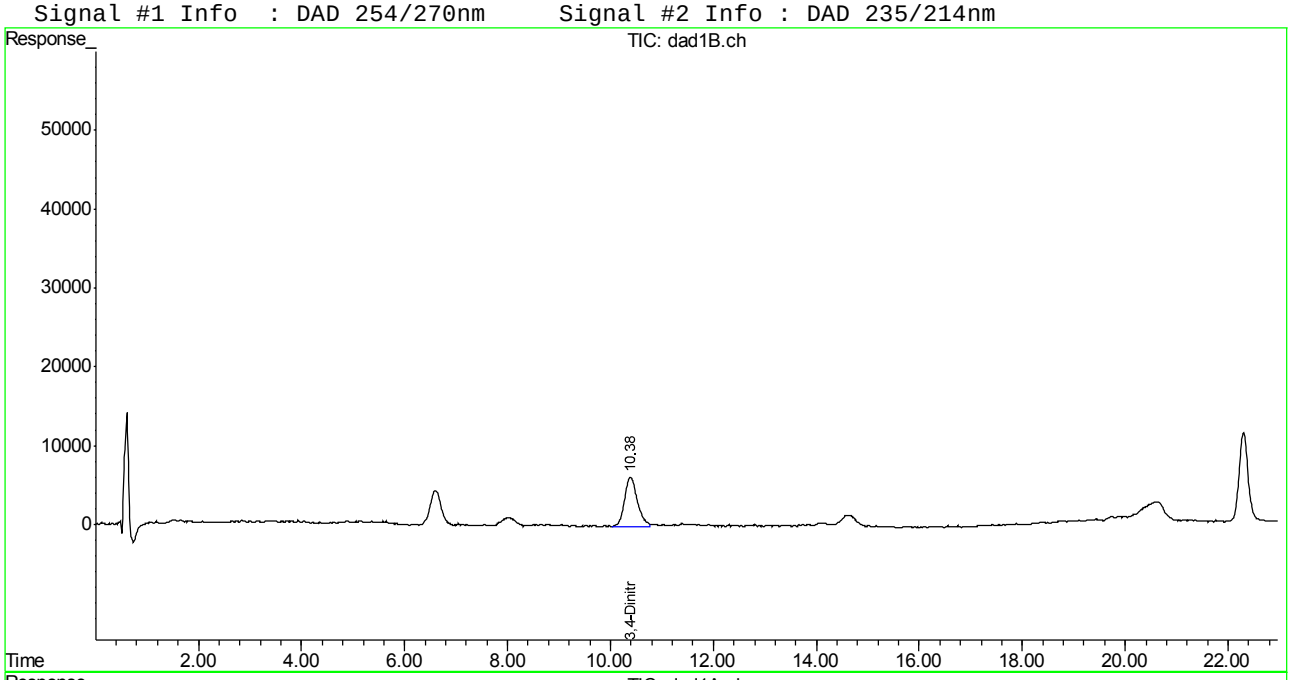
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059497.D 8330B_0419PLUS.M Tue Apr 24 11:13:48 2018 Page 1

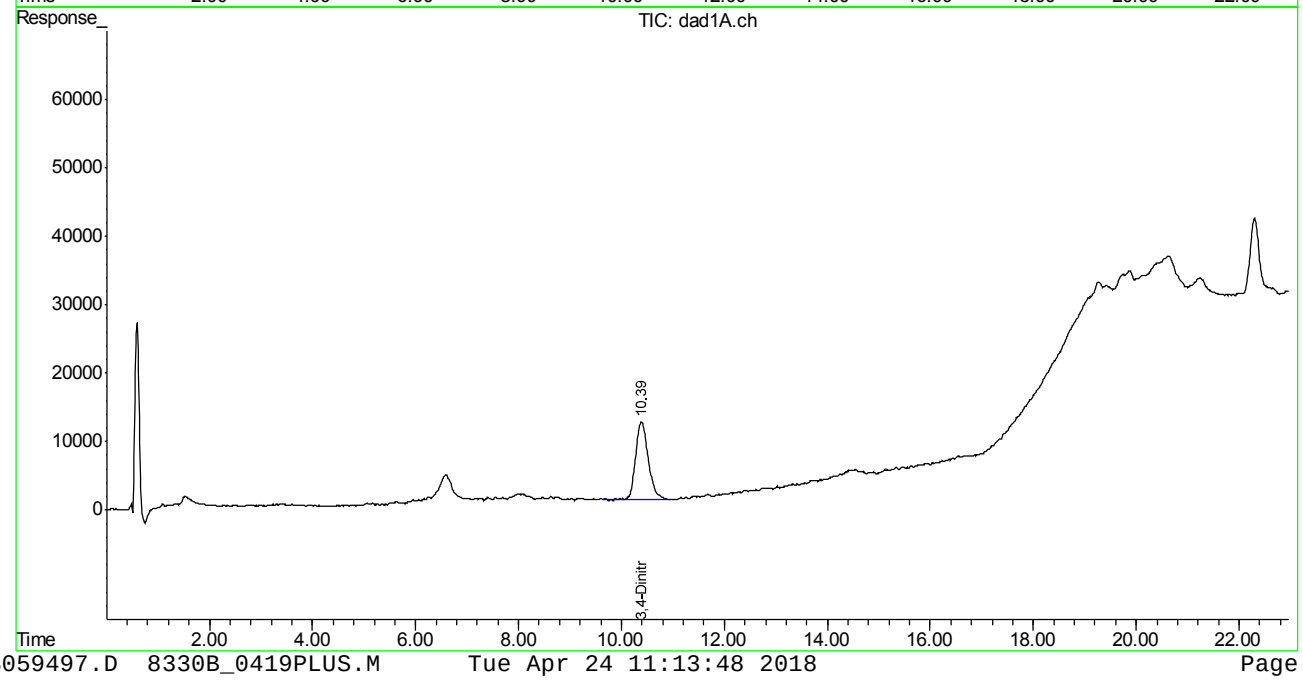
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059497.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059497.D\dad1A.ch
Acq On : 23-Apr-2018, 15:23:29 Operator: evitam
Sample : fa53518-13 Inst : G1315B
Misc : OP69713,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 11:07 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059497.D 8330B_0419PLUS.M Tue Apr 24 11:13:48 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059498.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059498.D\dad1A.ch
Acq On : 23-Apr-2018, 15:53:26 Operator: evitam
Sample : fa53518-14 Inst : G1315B
Misc : OP69713,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 08:32:53 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.35	10.36	1116198	1927593	417.161	408.843
	Spiked Amount 500.000	Range 70 - 136		Recovery =		83.43%	81.77%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

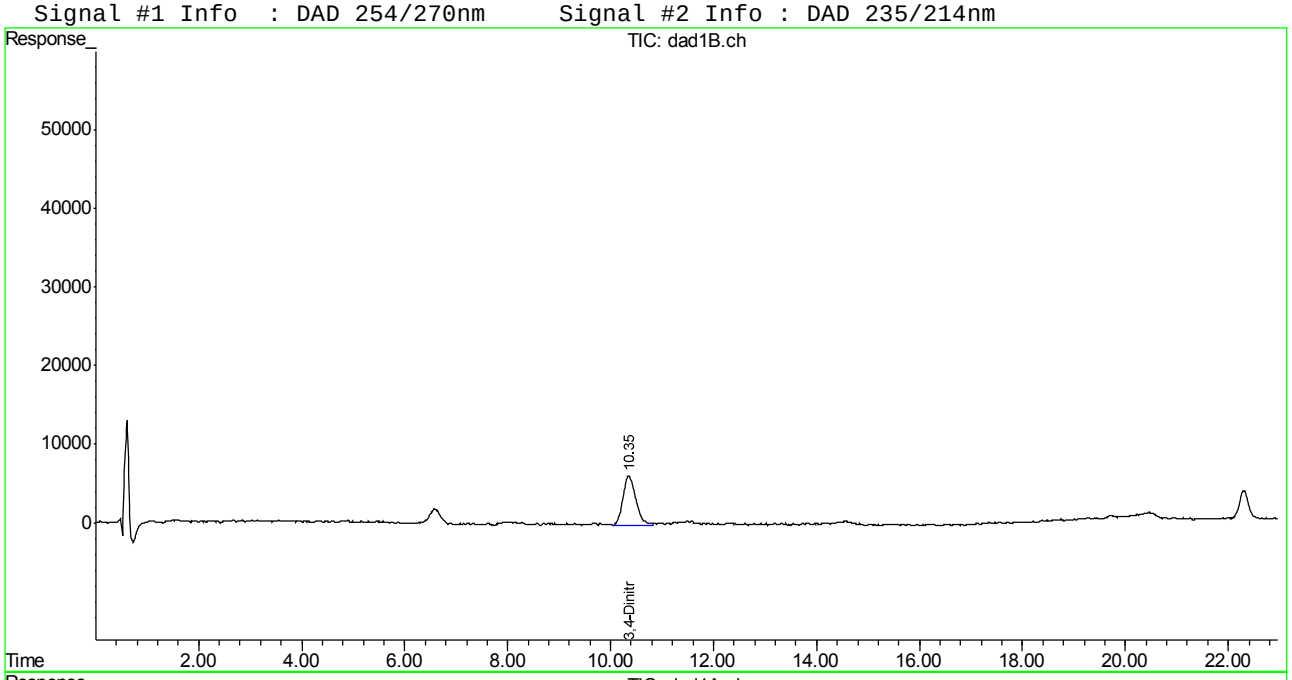
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059498.D 8330B_0419PLUS.M Tue Apr 24 11:13:49 2018 Page 1

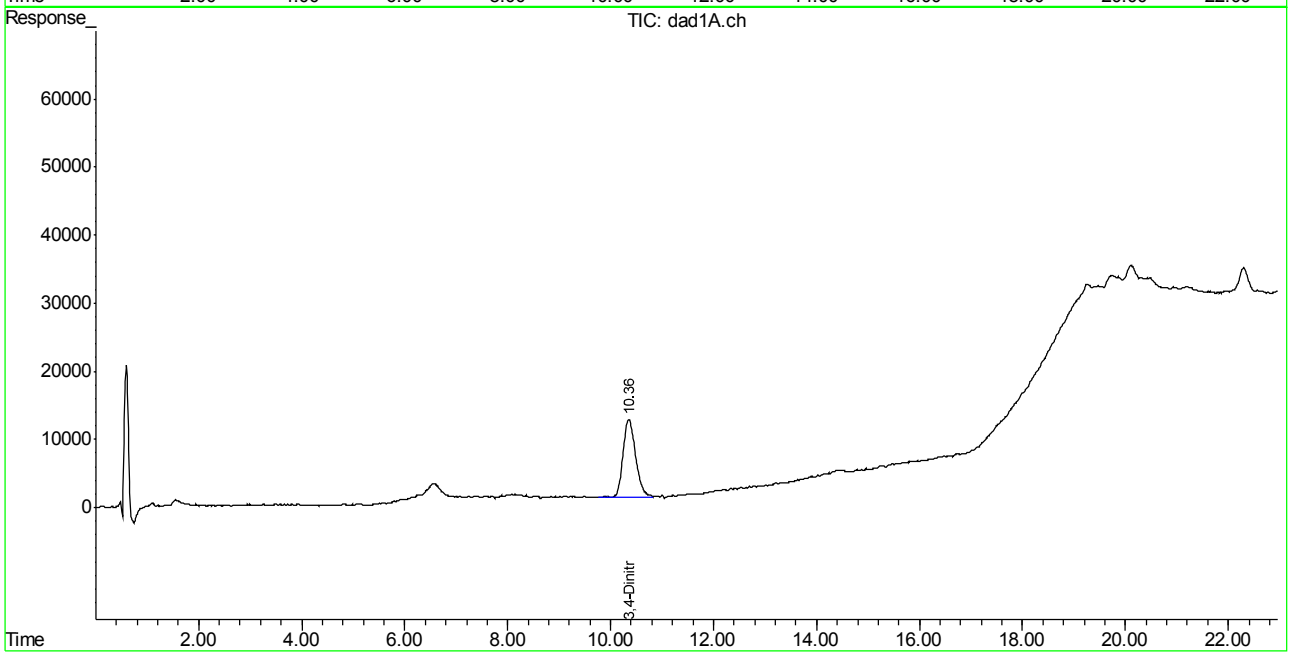
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059498.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059498.D\dad1A.ch
Acq On : 23-Apr-2018, 15:53:26 Operator: evitam
Sample : fa53518-14 Inst : G1315B
Misc : OP69713,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 11:08 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059496.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059496.D\dad1A.ch
Acq On : 23-Apr-2018, 14:53:28 Operator: evitam
Sample : op69713-mb Inst : G1315B
Misc : OP69713,gbb1724,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 08:32:51 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.35	10.35	1100503	2003787	411.295	425.004
	Spiked Amount 500.000	Range 70 - 136		Recovery =		82.26%	85.00%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

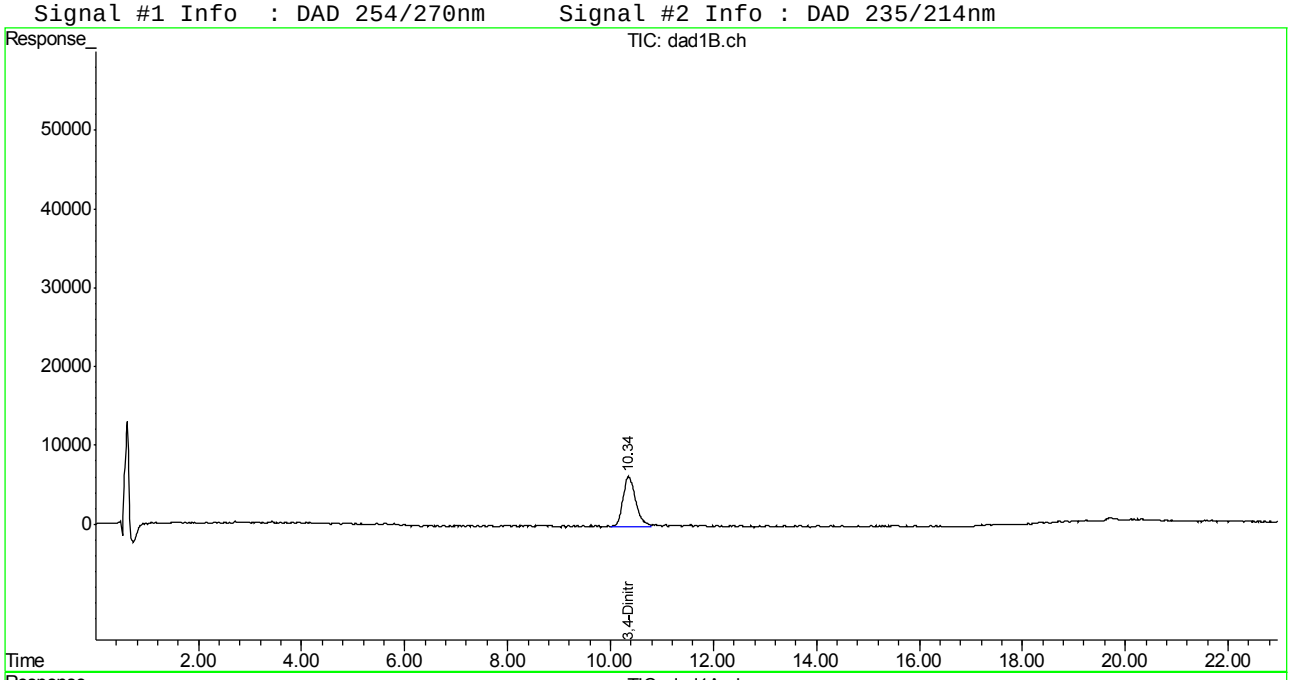
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059496.D 8330B_0419PLUS.M Tue Apr 24 11:13:47 2018 Page 1

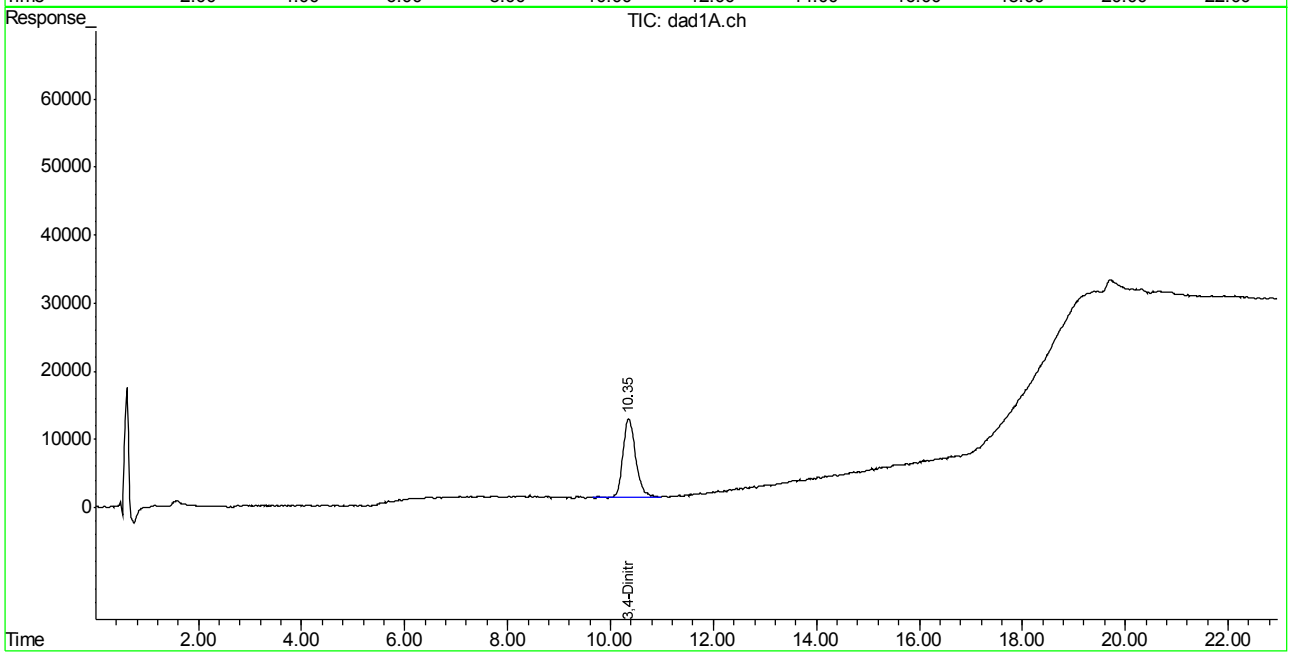
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059496.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059496.D\dad1A.ch
Acq On : 23-Apr-2018, 14:53:28 Operator: evitam
Sample : op69713-mb Inst : G1315B
Misc : OP69713,gbb1724,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 11:07 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059496.D 8330B_0419PLUS.M Tue Apr 24 11:13:47 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614540.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0503RPB3\GG614540.D\dad1A.ch
Acq On : 03-May-2018, 12:48:00 Operator: evitam
Sample : op69838-mb Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 03 14:23:52 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.17	14.17	2753762	5234043	530.091	483.844
	Spiked Amount 500.000	Range 69 - 134		Recovery =		106.02%	96.77%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

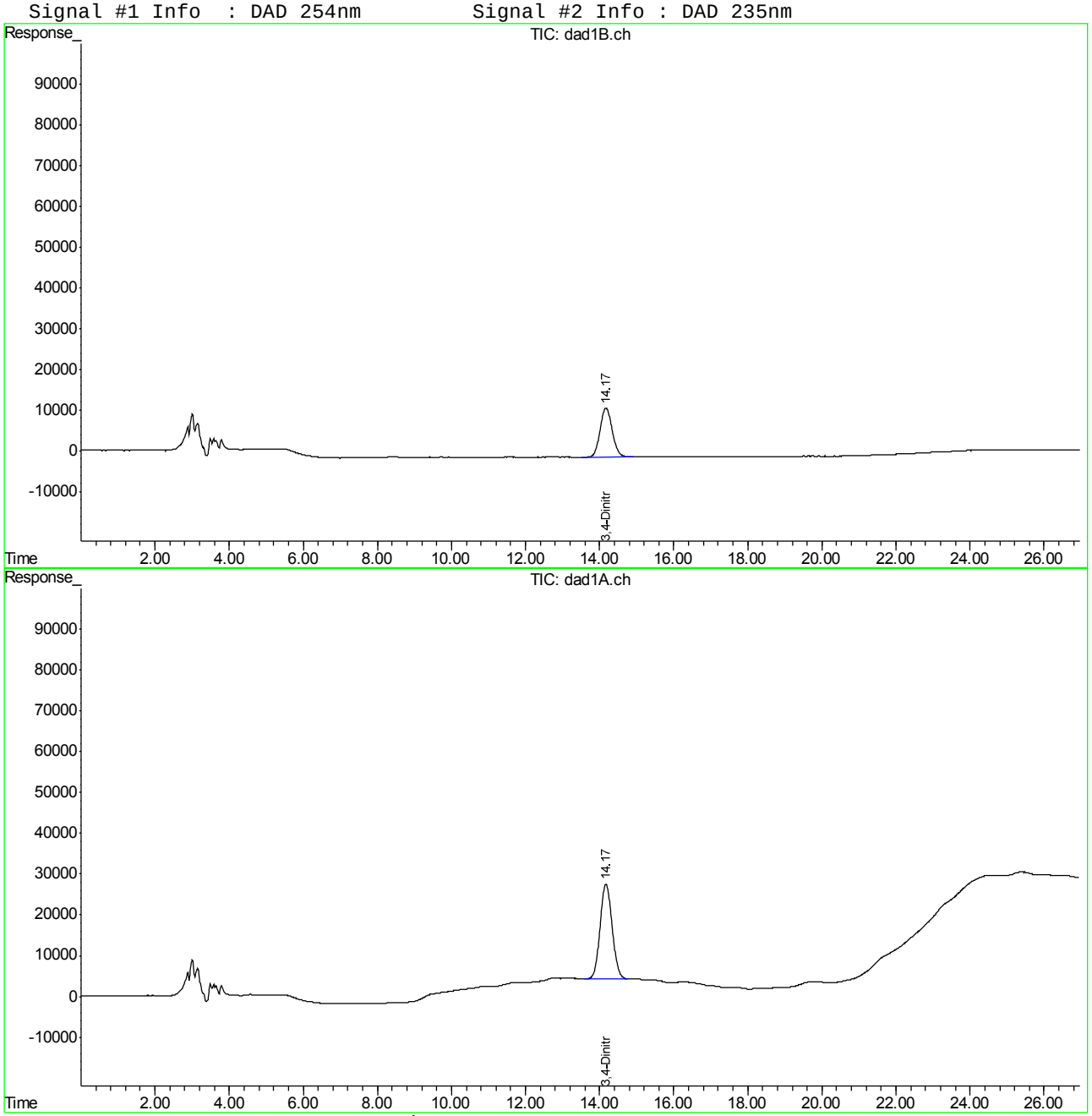
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614540.D 8330RPB.M_1113M.M Thu May 03 14:28:47 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614540.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0503RPB3\GG614540.D\dad1A.ch
Acq On : 03-May-2018, 12:48:00 Operator: evitam
Sample : op69838-mb Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614540.D 8330RPB.M_1113M.M Thu May 03 14:28:47 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614562.D\dad1B.ch Vial: 22
Signal #2 : G:\DATA\0503RPB3\GG614562.D\dad1A.ch
Acq On : 03-May-2018, 23:36:11 Operator: evitam
Sample : op69838-gb1 Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:12:03 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.27	2497428	5140826	480.748	475.227
	Spiked Amount 500.000	Range 69 - 134		Recovery =		96.15%	95.05%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D.	N.D.
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

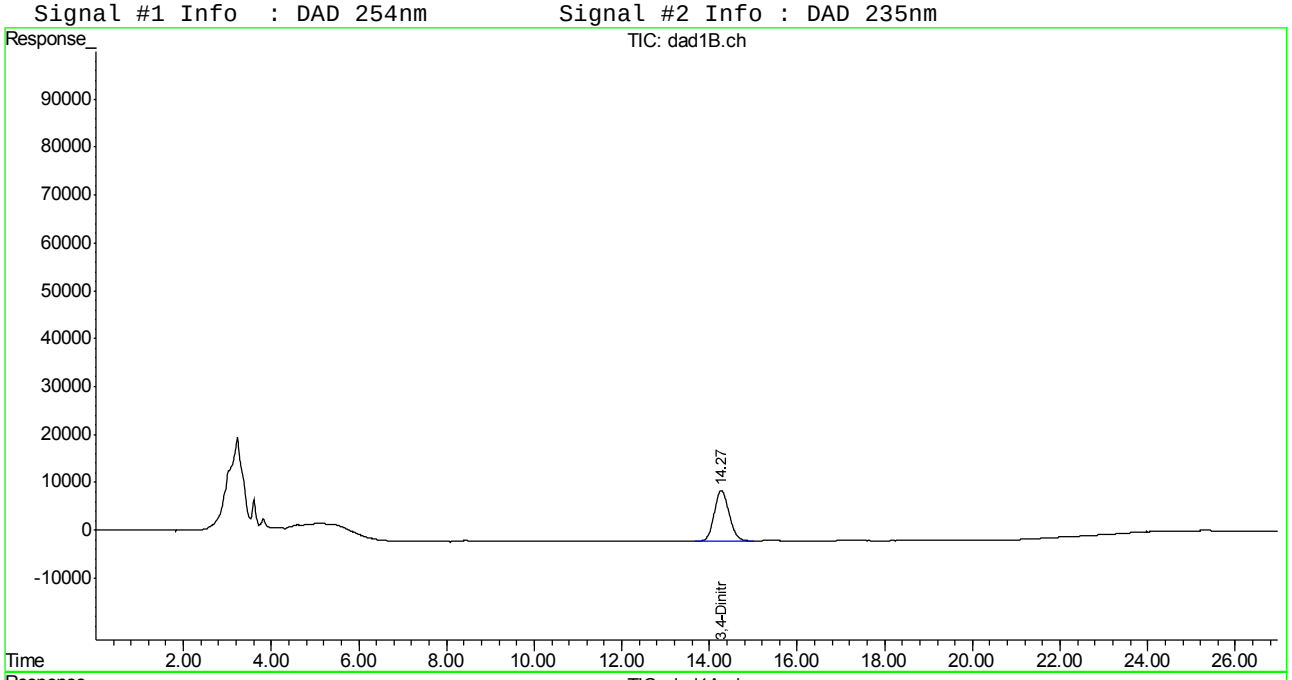
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614562.D 8330RPB.M_1113M.M Fri May 04 09:33:29 2018 Page 1

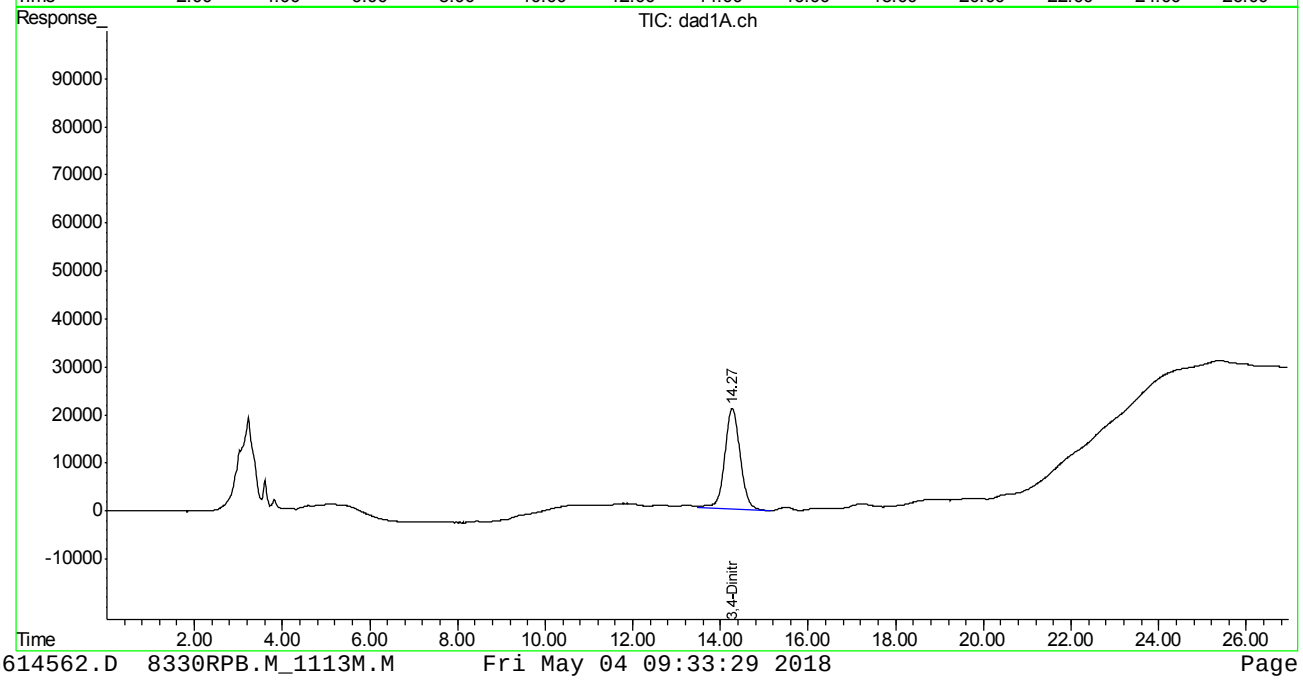
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614562.D\dad1B.ch Vial: 22
Signal #2 : G:\DATA\0503RPB3\GG614562.D\dad1A.ch
Acq On : 03-May-2018, 23:36:11 Operator: evitam
Sample : op69838-gb1 Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG614562.D 8330RPB.M_1113M.M Fri May 04 09:33:29 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614563.D\dad1B.ch Vial: 23
Signal #2 : G:\DATA\0503RPB3\GG614563.D\dad1A.ch
Acq On : 04-May-2018, 00:05:38 Operator: evitam
Sample : op69838-gb2 Inst : G1315B
Misc : op69838,Ggg2624,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:12:04 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.31	14.31	2600945	5095894	500.674	471.073
	Spiked Amount 500.000	Range 69 - 134		Recovery =		100.13%	94.21%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

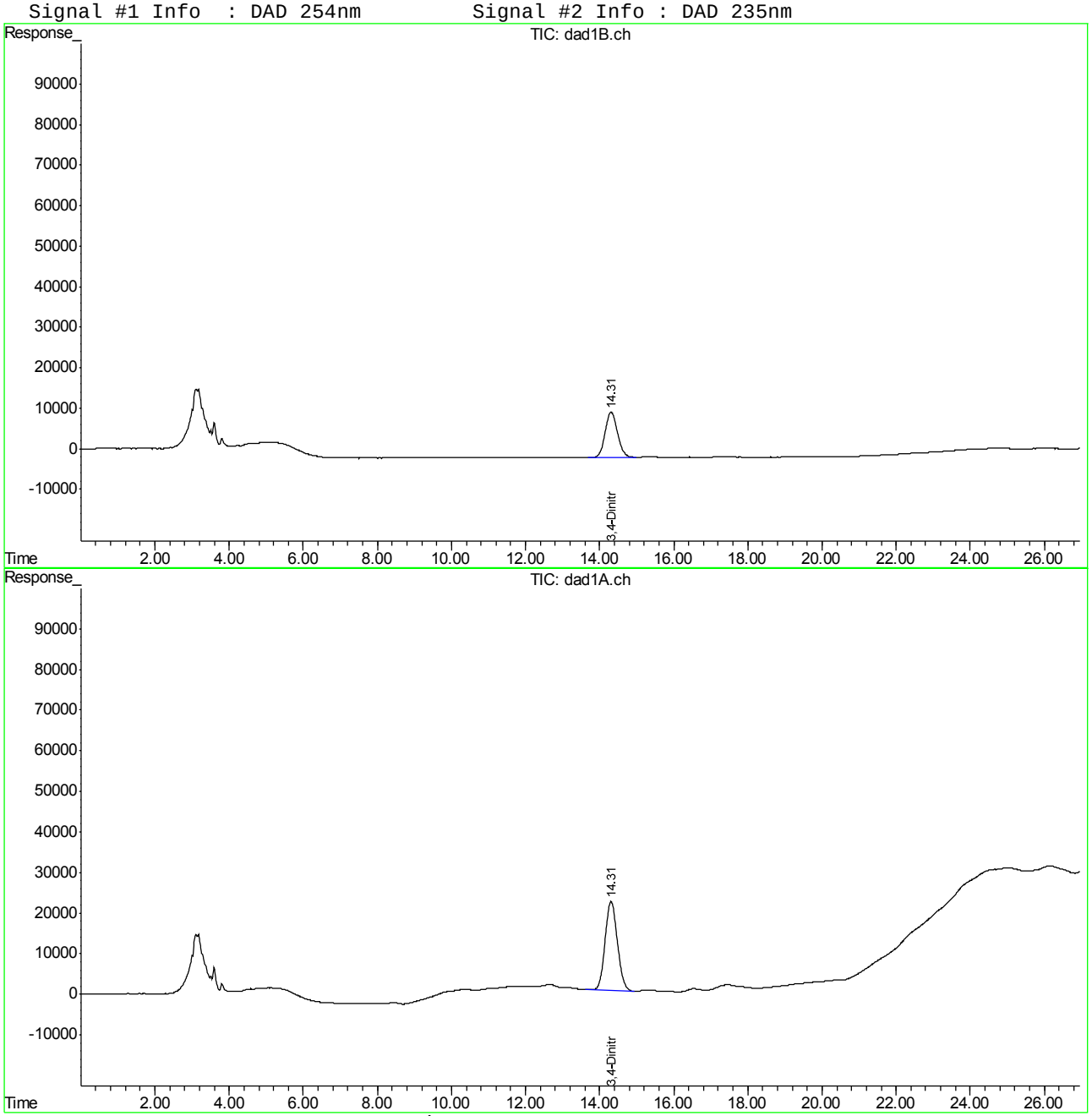
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614563.D 8330RPB.M_1113M.M Fri May 04 09:33:30 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614563.D\dad1B.ch Vial: 23
Signal #2 : G:\DATA\0503RPB3\GG614563.D\dad1A.ch
Acq On : 04-May-2018, 00:05:38 Operator: evitam
Sample : op69838-gb2 Inst : G1315B
Misc : op69838,Ggg2624,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614564.D\dad1B.ch Vial: 24
Signal #2 : G:\DATA\0503RPB3\GG614564.D\dad1A.ch
Acq On : 04-May-2018, 00:35:04 Operator: evitam
Sample : op69838-gb3 Inst : G1315B
Misc : op69838,Ggg2624,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.22	2346187	4712116	451.634	435.596
	Spiked Amount 500.000	Range 69 - 134		Recovery =		90.33%	87.12%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

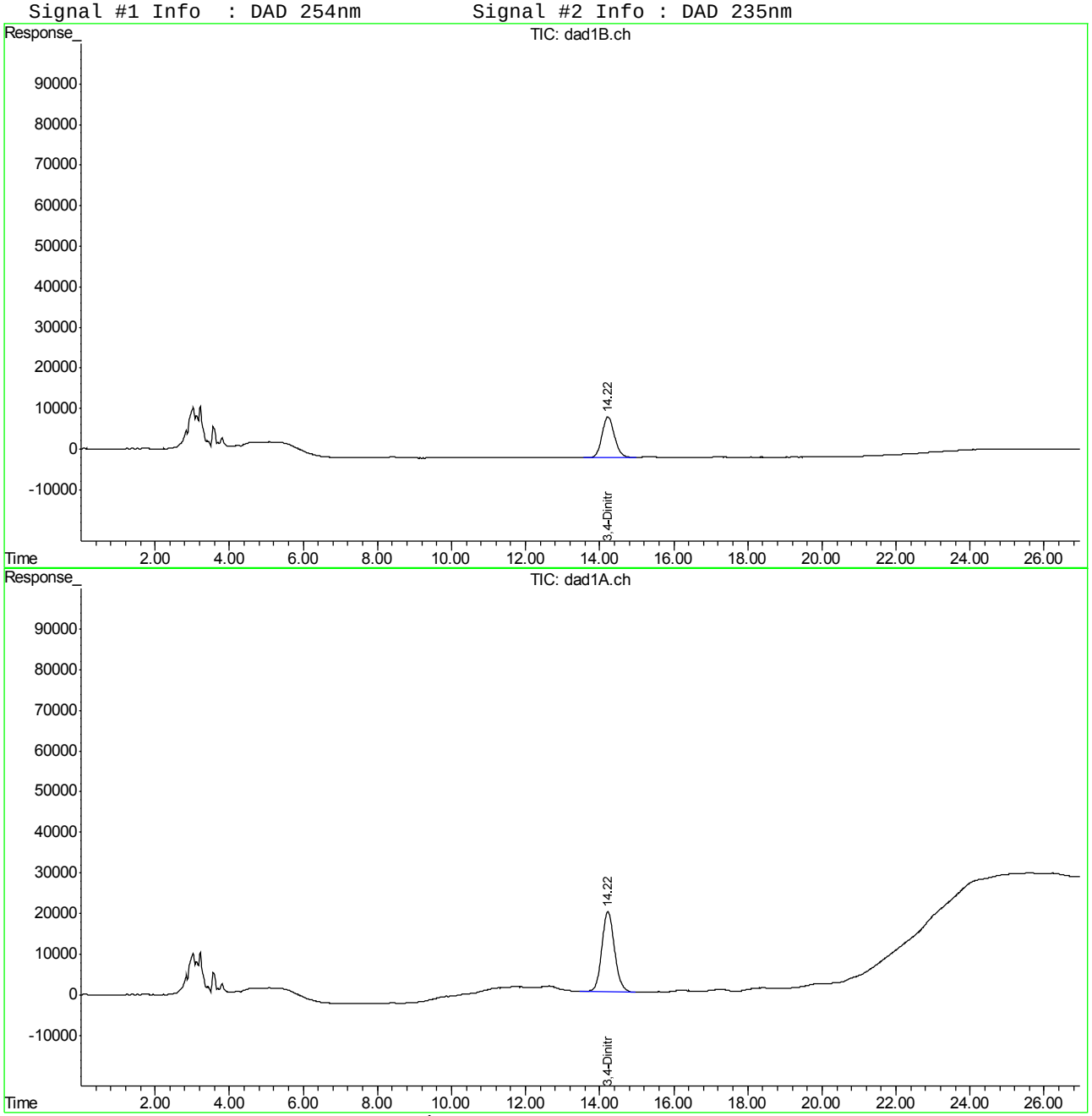
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614564.D 8330RPB.M_1113M.M Fri May 04 09:33:31 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614564.D\dad1B.ch Vial: 24
Signal #2 : G:\DATA\0503RPB3\GG614564.D\dad1A.ch
Acq On : 04-May-2018, 00:35:04 Operator: evitam
Sample : op69838-gb3 Inst : G1315B
Misc : op69838,Ggg2624,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:24 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614564.D 8330RPB.M_1113M.M Fri May 04 09:33:31 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/24/18 15:24

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1A.ch
Acq On : 23-Apr-2018, 14:23:33 Operator: evitam
Sample : op69713-bs Inst : G1315B
Misc : OP69713,gbb1724,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 08:32:50 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.35	10.36	1189764	1984113	444.655	420.831
	Spiked Amount 500.000	Range 70 - 136		Recovery =		88.93%	84.17%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.45	1.46	782864	2337664	418.621	460.159
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.77	2.76	961072	1458898	449.438	438.899
6)	1,3,5-Trinitrobe	4.43	4.43	2004433	3809891	460.652	456.379
7)	1,3-Dinitrobenze	5.59	5.59	2522861	1674888	455.063	449.709
8)	3,5-Dinitroanili	5.89	5.89	2352322	3814131	481.010	509.993
9)	Nitrobenzene	7.09	7.09	1545623	1469337	424.178	443.125
10)	Nitroglycerin	0.00	8.43	0	3571397	N.D. d	2787.043
11)	Tetryl	8.74	8.74	1177255	2033238	399.898	391.476
12)	2,4,6-Trinitroto	9.16	9.17	1890978	2293345	448.083	505.952
13)	2-Amino-4,6-Dini	9.45	9.46	1708392	2625045	451.301	489.397
14)	4-Amino-2,6-Dini	9.89	9.89	1273629	2458184	485.723	474.382
16)	2,4-Dinitrotolue	11.02	11.01	2344685	1358421	445.672	459.978
17)	2,6-Dinitrotolue	11.45	11.46	1541999	1733914	446.146	507.789
18)	o-Nitrotoluene	14.71	14.70	1225672	1559939	490.693	476.208m
19)	p-Nitrotoluene	15.29	15.29	1810147	1462760	458.609	464.332
20)	m-Nitrotoluene	16.26	16.27	1740713	1937191	487.977	481.424
21)	PETN	0.00	18.48	0	3825642	N.D. d	2754.577m

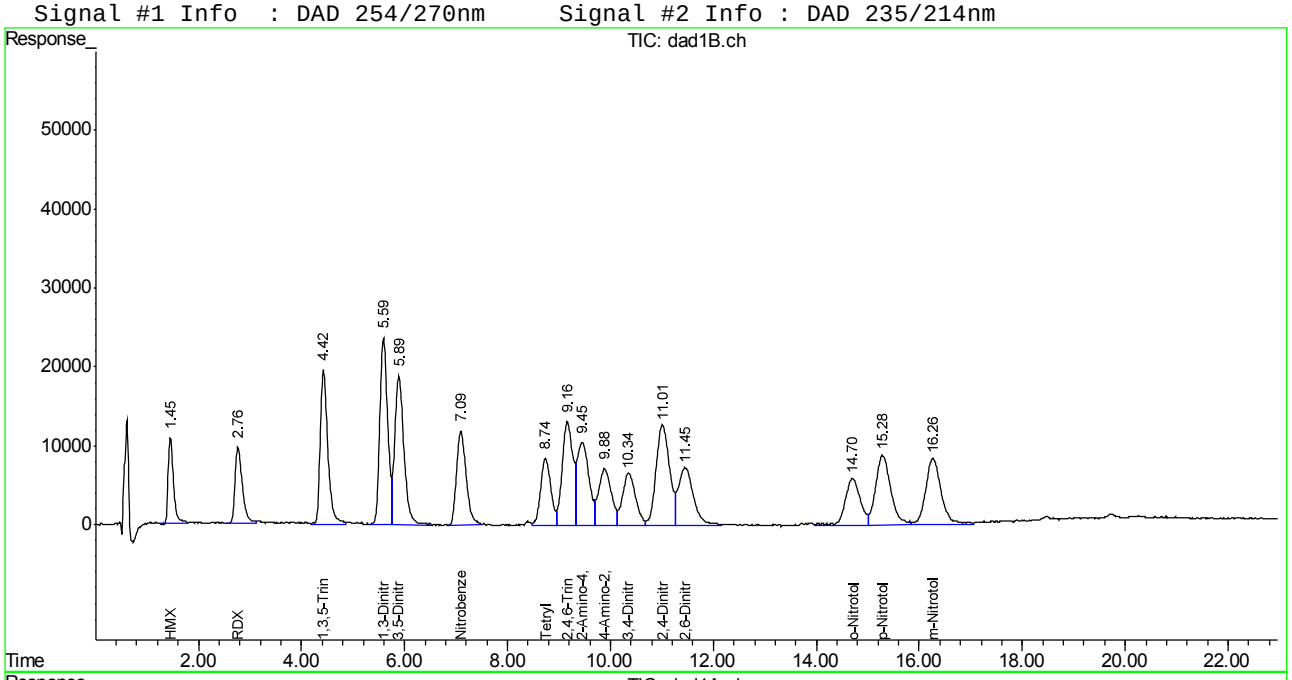
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059495.D 8330B_0419PLUS.M Tue Apr 24 11:13:46 2018 Page 1

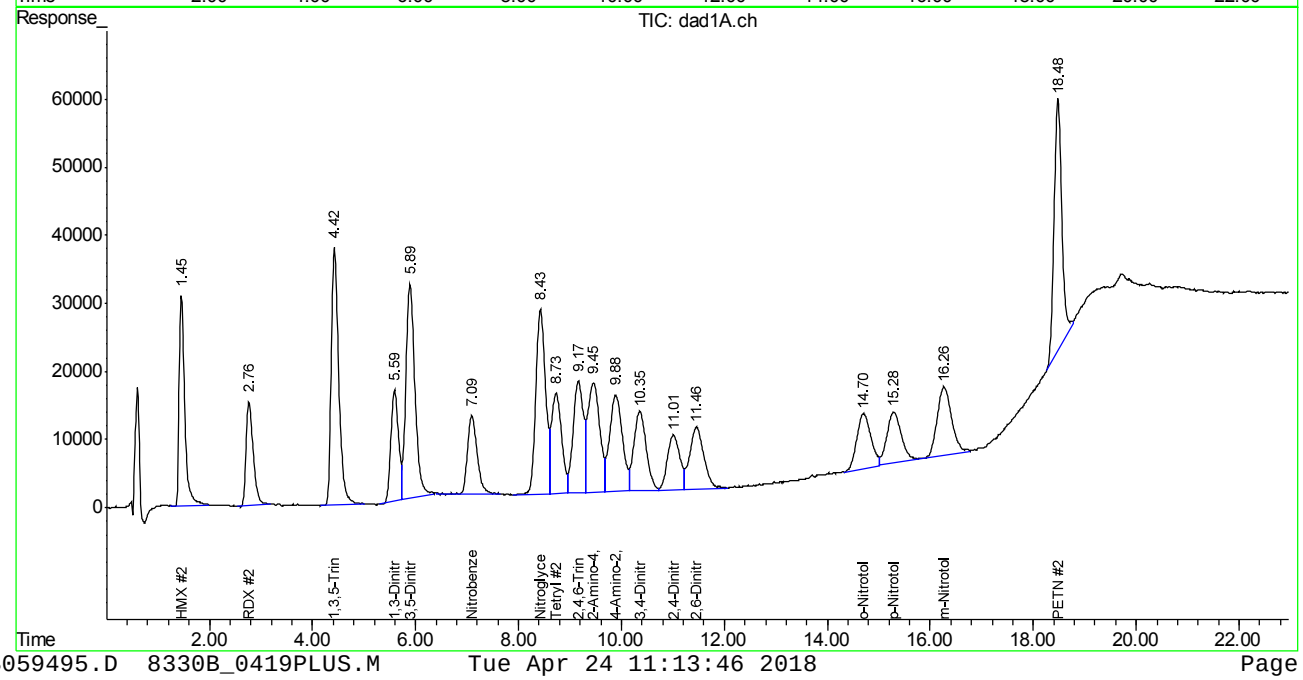
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1A.ch
Acq On : 23-Apr-2018, 14:23:33 Operator: evitam
Sample : op69713-bs Inst : G1315B
Misc : OP69713,gbb1724,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 11:07 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

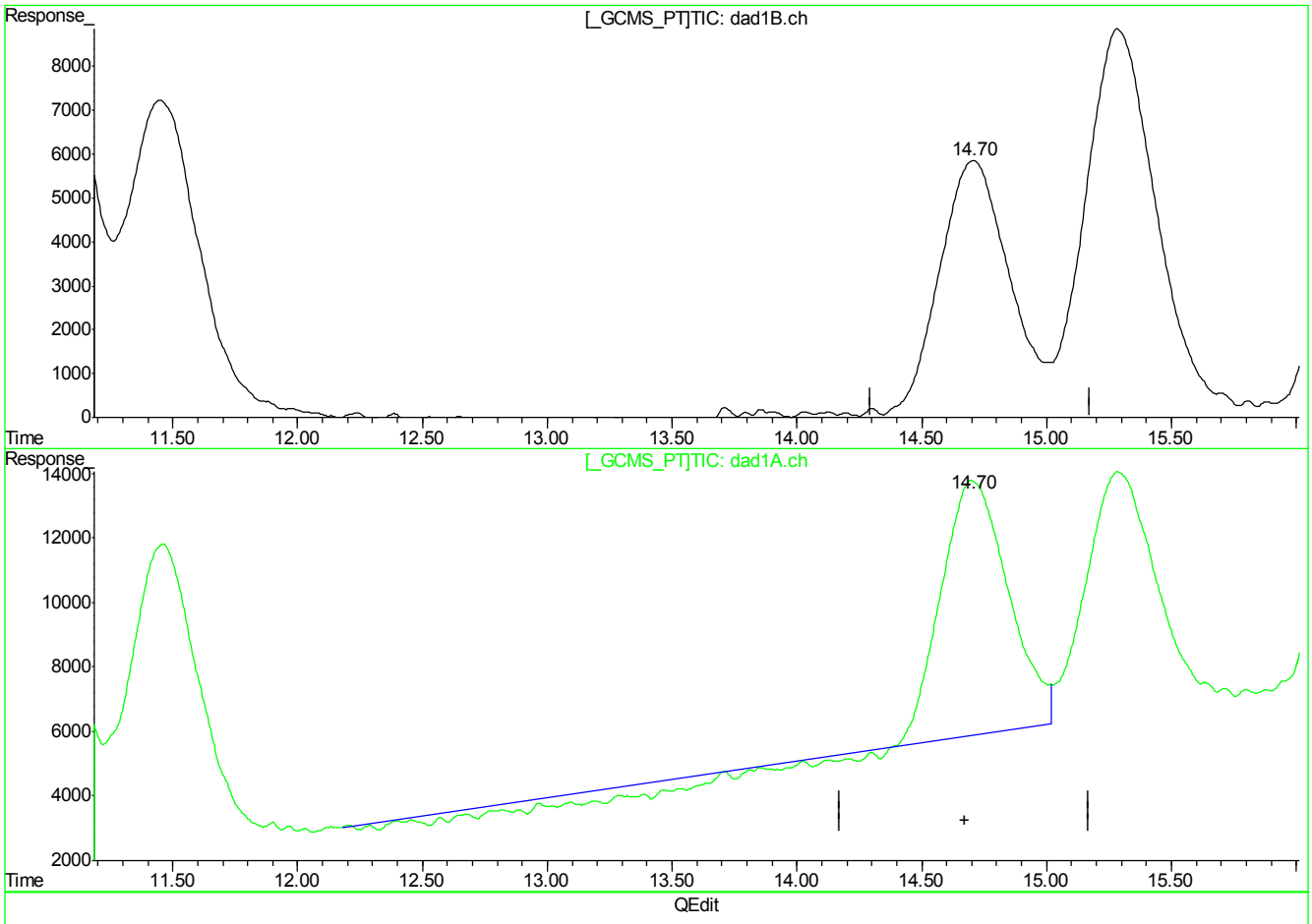
Sample Number:	OP69713-BS	**Method:**	SW846 8330B
Lab FileID:	BB059495.D	**Analyst approved:**	04/24/18 11:17 Evita Martinez
Injection Time:	04/23/18 14:23	**Supervisor approved:**	04/24/18 15:24 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.70	Poorly defined baseline
PETN	78-11-5	2	18.48	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1A.ch
Acq On : 23-Apr-2018, 14:23:33 Operator: evitam
Sample : op69713-bs Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.71min 490.693ppb

response 1225672

(18) o-Nitrotoluene #2

14.70min 362.094ppb

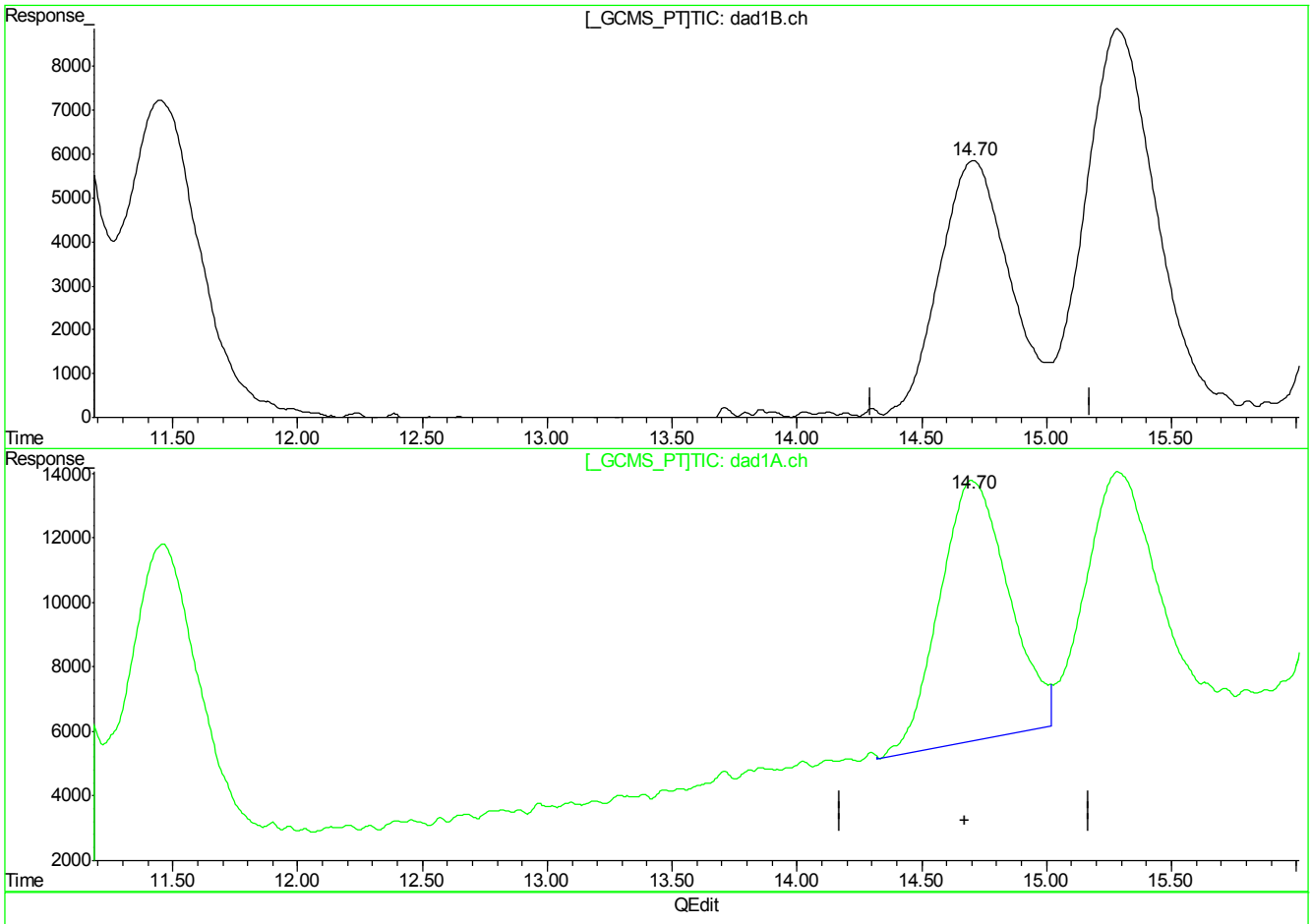
response 1186130

(+) = Expected Retention Time
BB059495.D 8330B_0419PLUS.M Tue Apr 24 11:07:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1A.ch
Acq On : 23-Apr-2018, 14:23:33 Operator: evitam
Sample : op69713-bs Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.71min 490.693ppb

response 1225672

(18) o-Nitrotoluene #2

14.70min 476.208ppb m

response 1559939

(+) = Expected Retention Time
BB059495.D 8330B_0419PLUS.M Tue Apr 24 11:07:07 2018

7.3.1.3

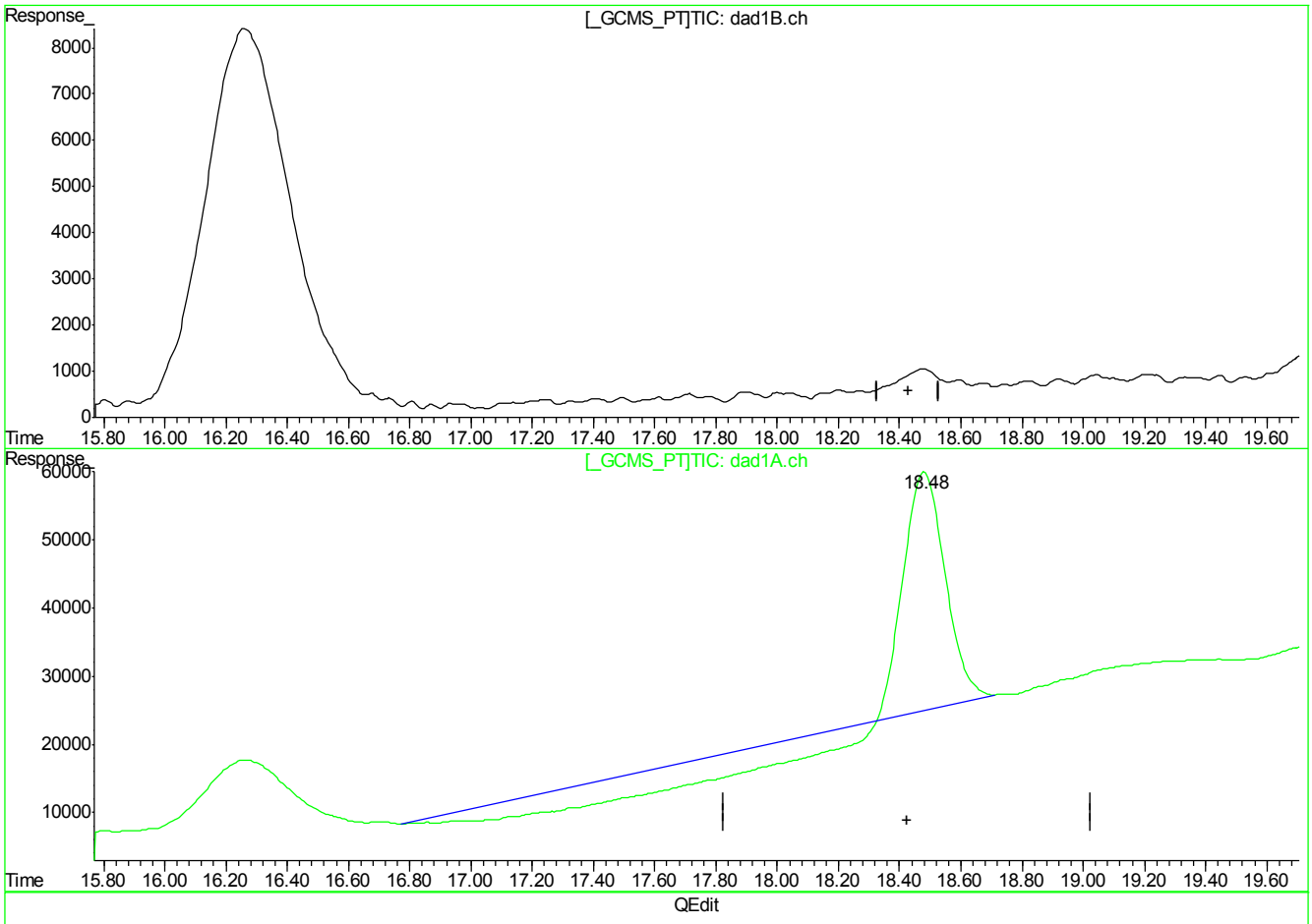
7

BB059495.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1A.ch
Acq On : 23-Apr-2018, 14:23:33 Operator: evitam
Sample : op69713-bs Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.48min 560.978ppb

response 779103

(+) = Expected Retention Time
BB059495.D 8330B_0419PLUS.M Tue Apr 24 11:07:11 2018

7.3.1.4

7

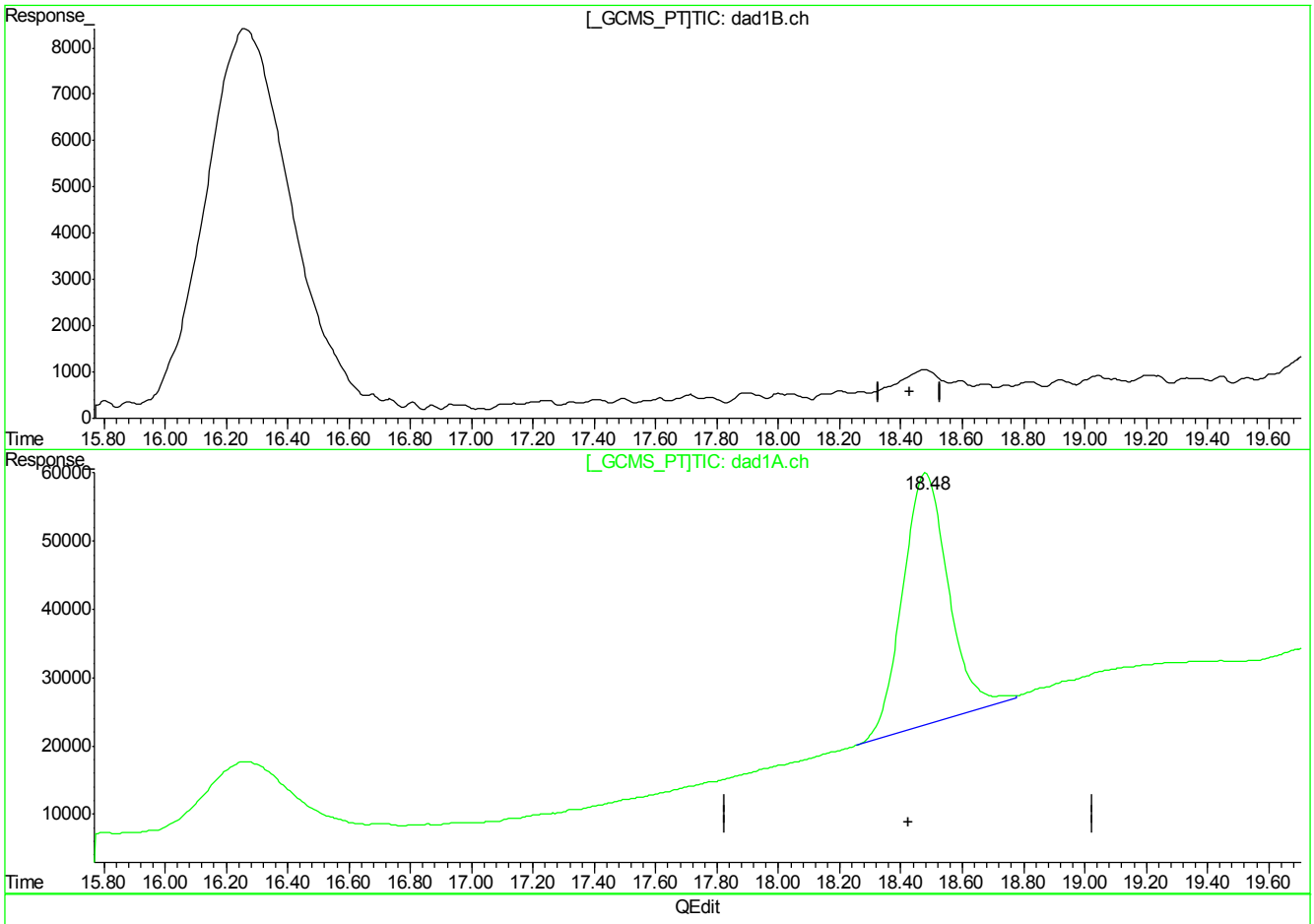
BB059495.D edits: PETN

FA53518

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059495.D\dad1A.ch
Acq On : 23-Apr-2018, 14:23:33 Operator: evitam
Sample : op69713-bs Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.48min 2754.577ppb m

response 3825642

(+) = Expected Retention Time
BB059495.D 8330B_0419PLUS.M Tue Apr 24 11:07:15 2018

7.3.1.5

7

BB059495.D edits: PETN

FA53518

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614539.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0503RPB3\GG614539.D\dad1A.ch
Acq On : 03-May-2018, 12:18:34 Operator: evitam
Sample : op69838-bs Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 03 14:23:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.24	2494328	6620302	480.151	611.992
	Spiked Amount 500.000	Range 69 - 134		Recovery =		96.03%	122.40%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	5.39	5.39	1918873	1914977	591.900m	594.390m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.44	7.44	4944553	4962849	477.200	479.015
6)	RDX	7.90	7.90	2384703	2456261	500.549	517.855
7)	1,3-Dinitrobenze	9.92	9.92	6681746	6715028	467.031	529.415
8)	Nitrobenzene	10.87	10.87	4401560	5997691	466.395	647.636
9)	2,4,6-Trinitroto	11.64	11.64	4869762	8239604	480.522	628.265
10)	Nitroglycerin	0.00	12.39	0	9459425	N.D. d	2807.162
11)	Tetryl	12.91	12.91	3518441	8949394	434.168	637.132 #
13)	2,6-Dinitrotolue	14.60	14.59	3565193	6324038	498.656	623.300
14)	2,4-Dinitrotolue	15.30	15.30	6250854	5751405	476.834	606.380
15)	o-Nitrotoluene	16.84	16.84	2905823	4426388	503.034	513.286
16)	3,5-Dinitroanili	16.27	16.27	5599211	9850867	571.963	605.740
17)	p-Nitrotoluene	17.99	18.00	5671896	10165295	483.028	479.650
18)	4-Amino-2,6-Dini	17.99	18.00	5671896	10165295	483.028	478.255
19)	m-Nitrotoluene	19.20	19.21	3014552	4879583	511.342	501.787
20)	2-Amino-4,6-Dini	20.17	20.17	4543239	6241690	503.522	524.264
21)	PETN	0.00	21.74	0	8235695	N.D. d	2567.713m

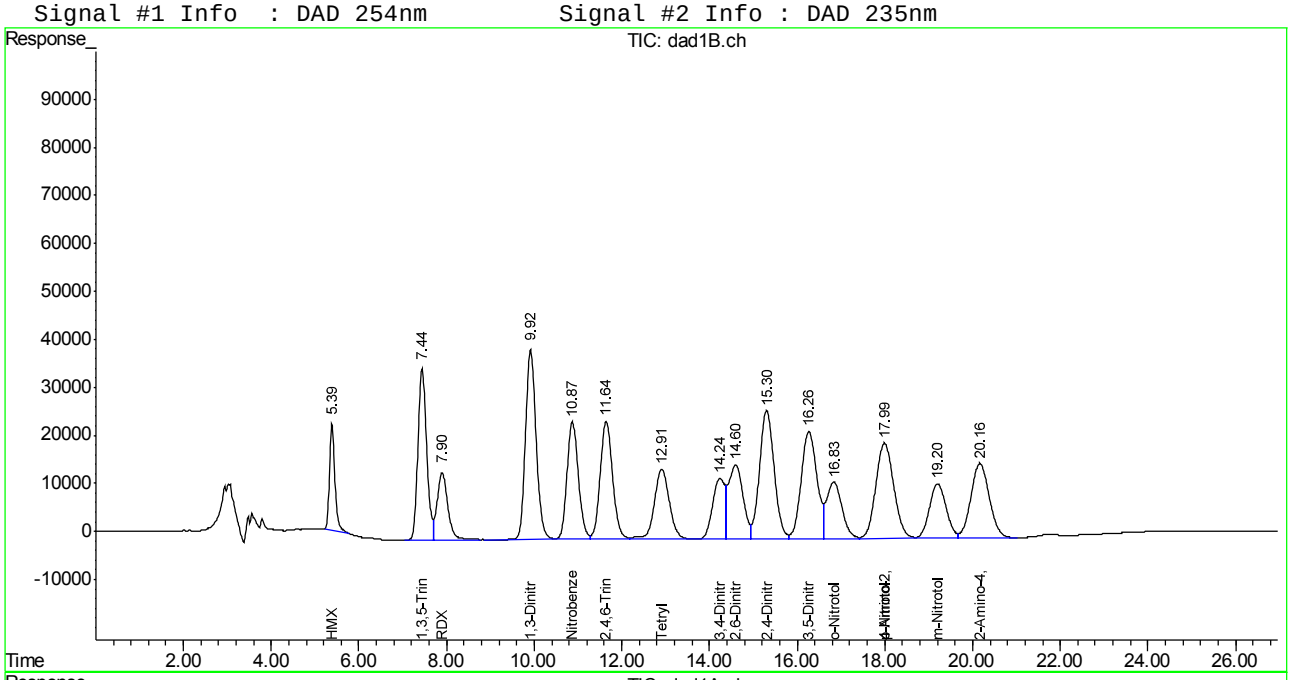
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614539.D 8330RPB.M_1113M.M Thu May 03 14:28:46 2018 Page 1

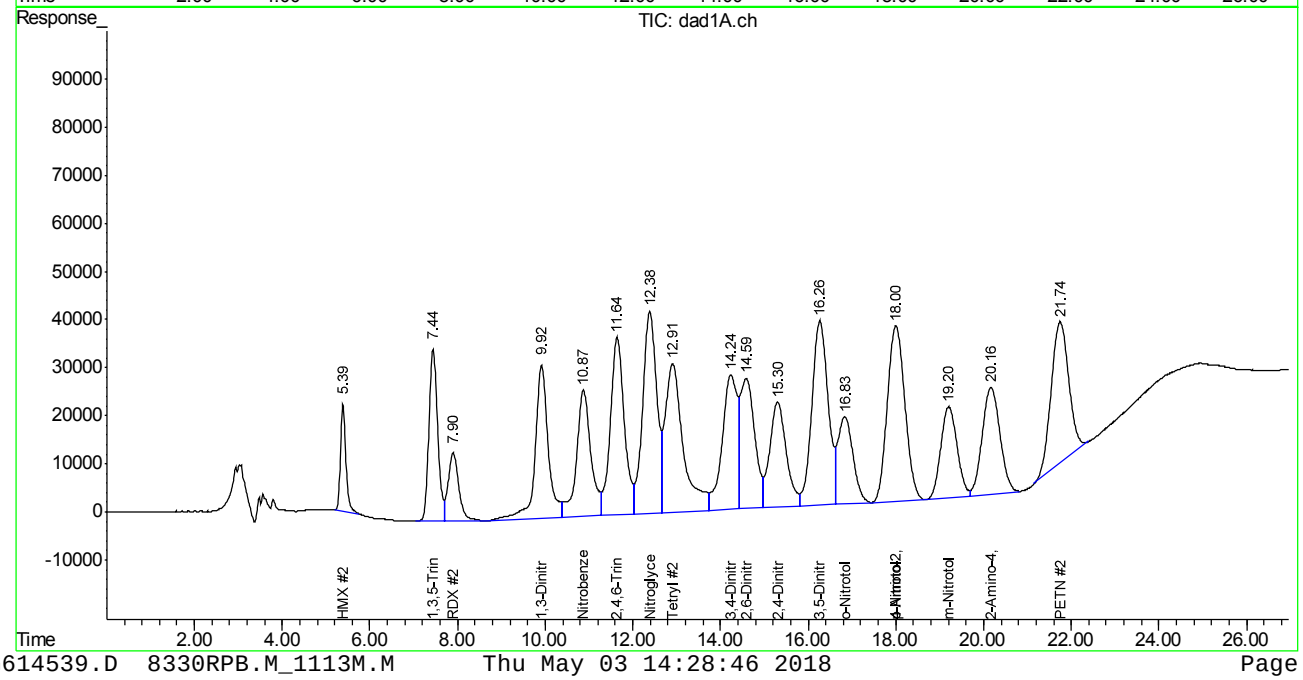
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614539.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0503RPB3\GG614539.D\dad1A.ch
Acq On : 03-May-2018, 12:18:34 Operator: evitam
Sample : op69838-bs Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

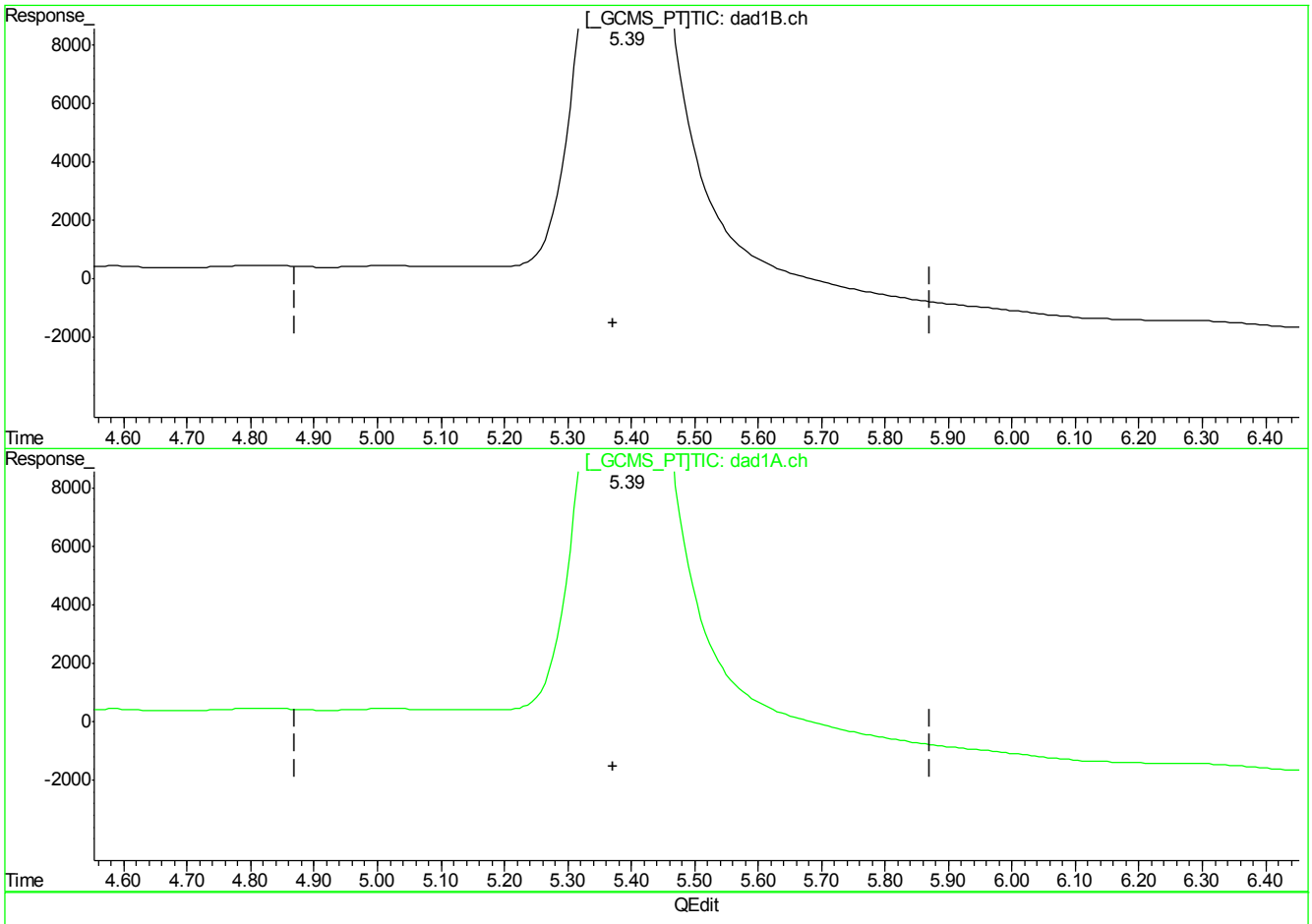
Sample Number:	OP69838-BS	**Method:**	SW846 8330B
Lab FileID:	GG614539.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 12:18	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
PETN	78-11-5	2	21.74	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614539.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0503RPB3\GG614539.D\dad1A.ch
Acq On : 03-May-2018, 12:18:34 Operator: evitam
Sample : op69838-bs Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:26 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 576.842ppb

response 1870056

(2) HMX #2

5.39min 580.446ppb

response 1870056

(+) = Expected Retention Time
GG614539.D 8330RPB.M_1113M.M Thu May 03 14:27:06 2018

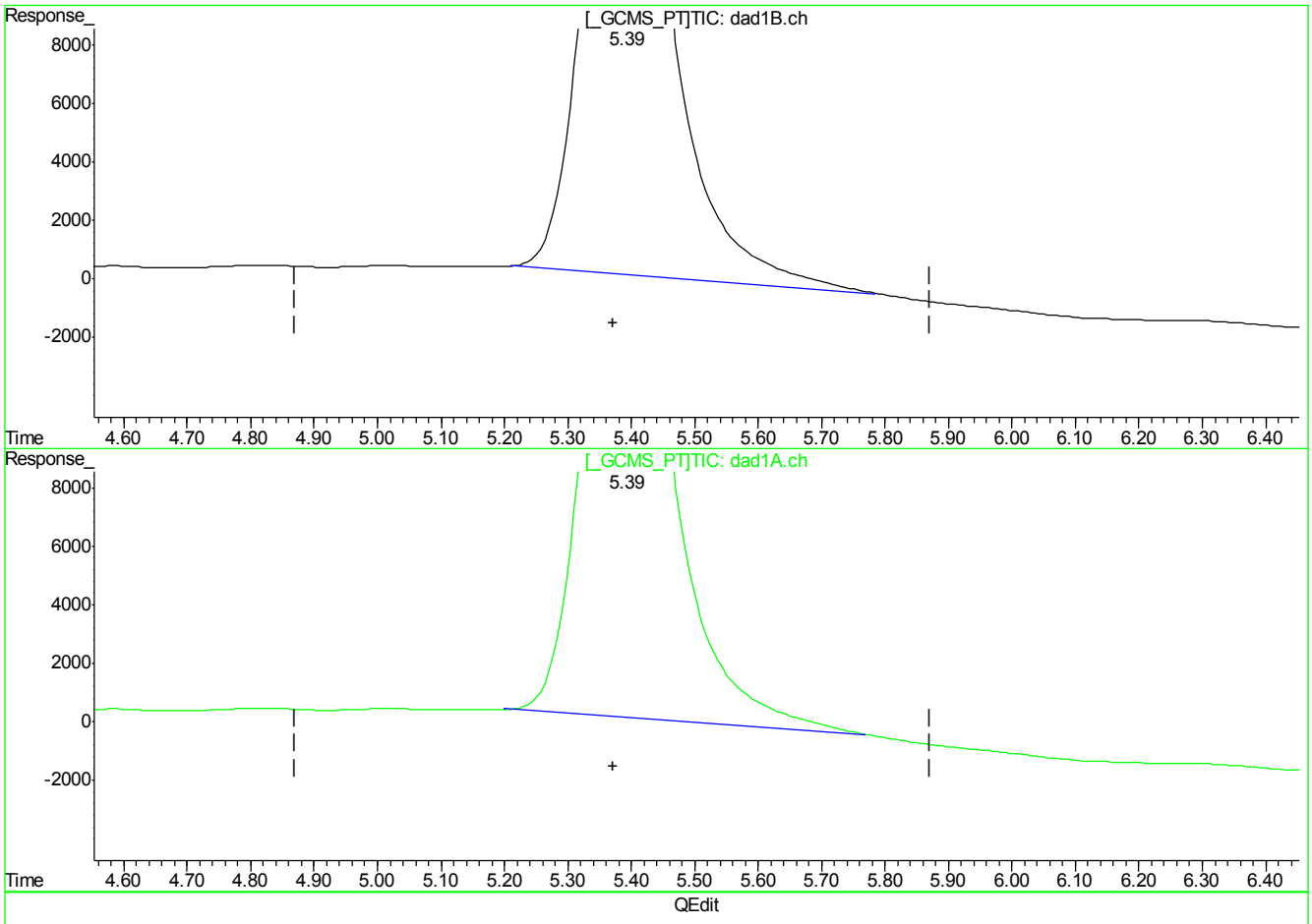
7.3.2.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614539.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0503RPB3\GG614539.D\dad1A.ch
Acq On : 03-May-2018, 12:18:34 Operator: evitam
Sample : op69838-bs Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:26 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 591.900ppb m

response 1918873

(2) HMX #2

5.39min 594.390ppb m

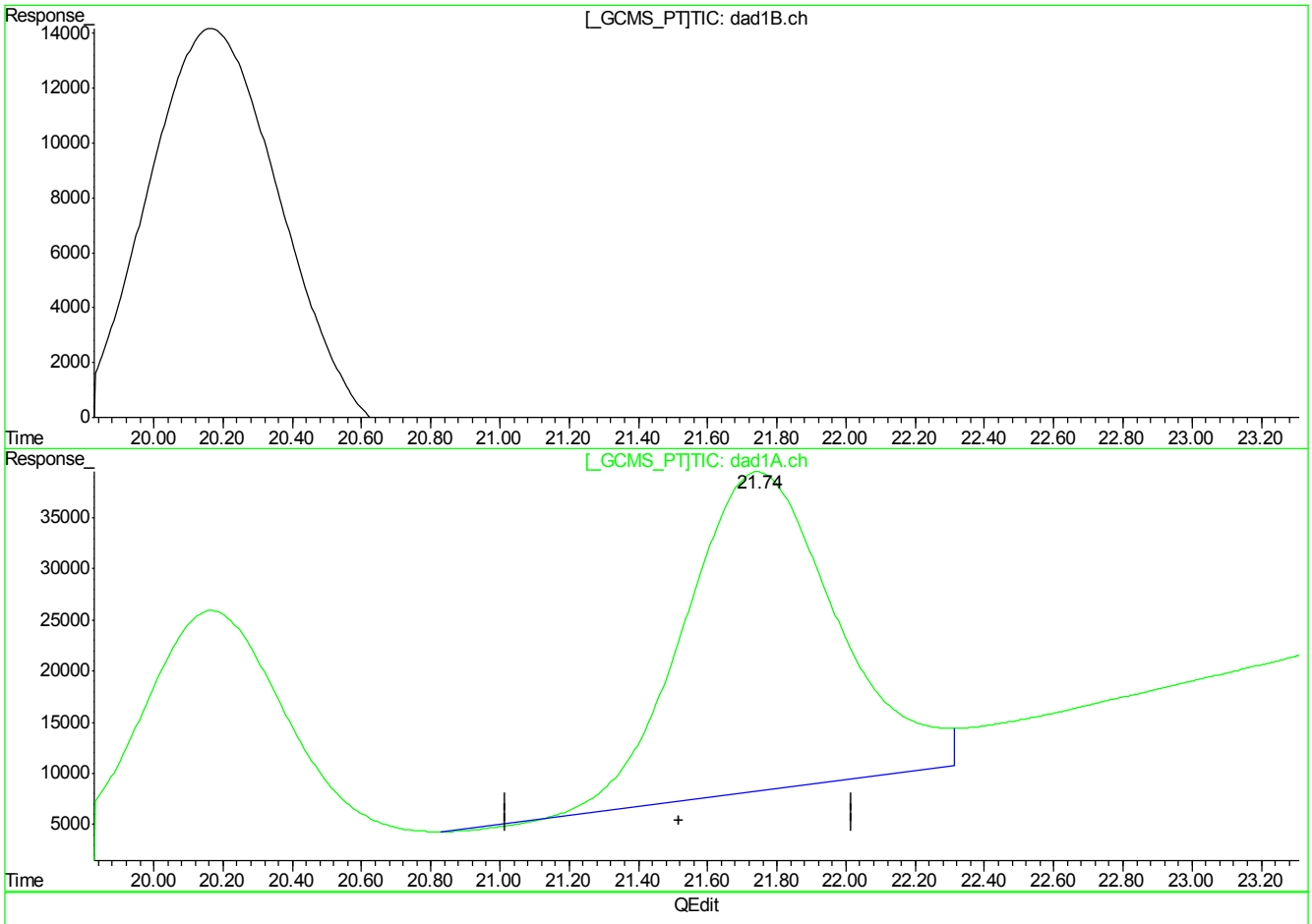
response 1914977

(+) = Expected Retention Time
GG614539.D 8330RPB.M_1113M.M Thu May 03 14:27:14 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614539.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0503RPB3\GG614539.D\dad1A.ch
Acq On : 03-May-2018, 12:18:34 Operator: evitam
Sample : op69838-bs Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:26 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.75min 2945.302ppb

response 9446778

(+) = Expected Retention Time
GG614539.D 8330RPB.M_1113M.M Thu May 03 14:27:22 2018

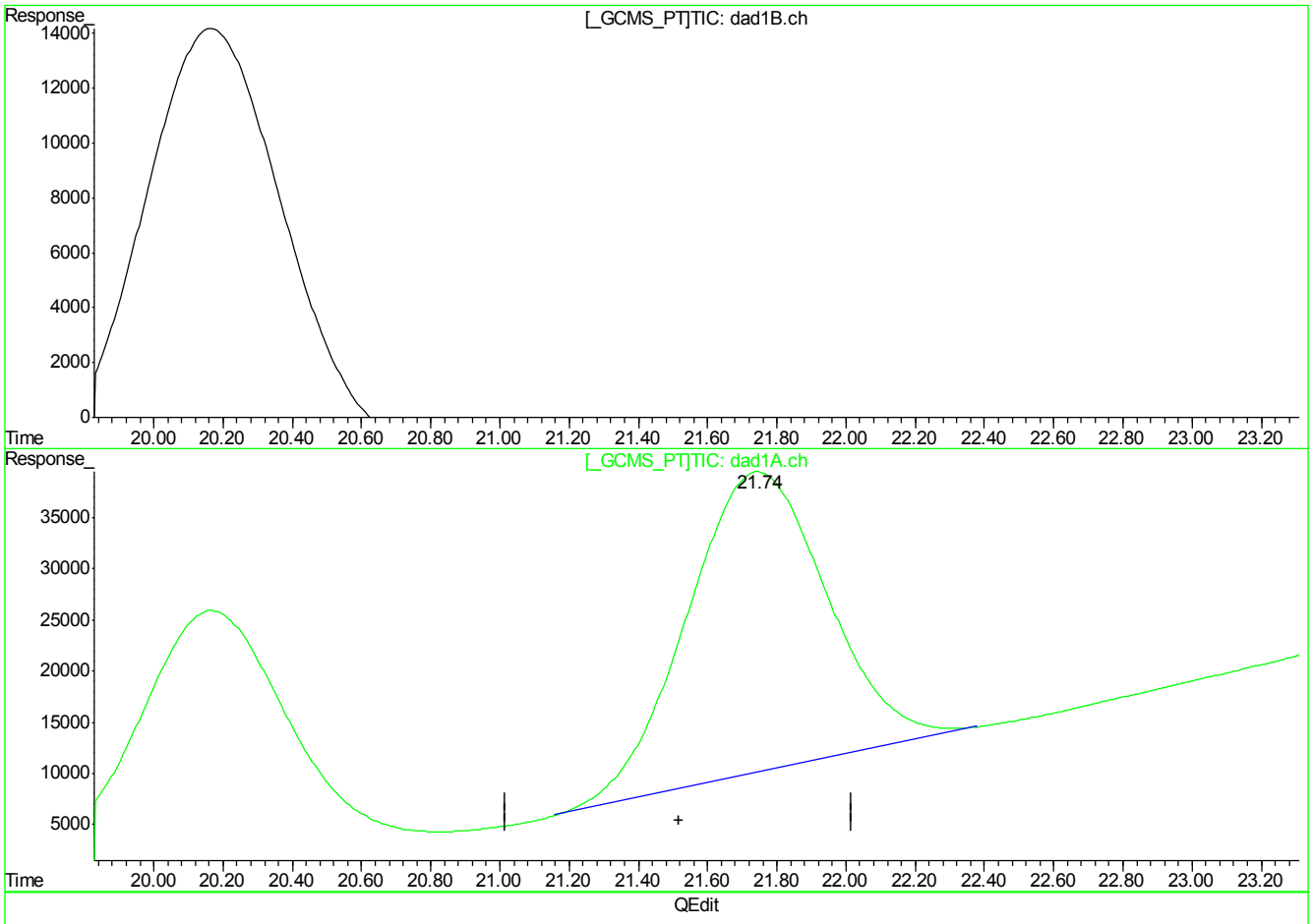
7.3.2.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614539.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0503RPB3\GG614539.D\dad1A.ch
Acq On : 03-May-2018, 12:18:34 Operator: evitam
Sample : op69838-bs Inst : G1315B
Misc : op69838,Ggg2624,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:26 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.74min 2567.713ppb m

response 8235695

(+) = Expected Retention Time
GG614539.D 8330RPB.M_1113M.M Thu May 03 14:27:25 2018

7.3.2.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 03 12:31:30 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.15	14.14	2613423	5002156	503.076	462.408m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		100.62%	92.48%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	5.37	5.37	1328682	1315366	409.848m	408.276m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.40	7.40	1470507	1489120	141.919	143.730
6)	RDX	7.85	7.85	1189556	1273305	249.688	268.452
7)	1,3-Dinitrobenze	9.87	9.87	1496579	1010711	104.606	76.625m
8)	Nitrobenzene	10.81	10.81	1725836	1581157	182.872	170.735m
9)	2,4,6-Trinitroto	11.58	11.58	396068	496909	39.082	37.889m
10)	Nitroglycerin	0.00	12.31	0	491950	N.D. d	145.990m
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.51	14.41	1649731	2583053	230.744	254.587m
14)	2,4-Dinitrotolue	15.23	15.22	965335	965021	73.639	100.539m
15)	o-Nitrotoluene	16.75	16.74	1133966	1541510	196.304	178.754m
16)	3,5-Dinitroanili	16.20	16.19	1899244	2900304	195.012	179.360m
17)	p-Nitrotoluene	17.86	17.85	2221212	4858617	189.162	229.254
18)	4-Amino-2,6-Dini	17.86	17.85	2221212	4858617	189.162	228.587
19)	m-Nitrotoluene	19.13	19.12	1711119	2562906	290.248	263.554
20)	2-Amino-4,6-Dini	20.10	20.09	3045937	3965198	337.578	337.185
21)	PETN	0.00	21.74	0	831581	N.D. d	259.269m

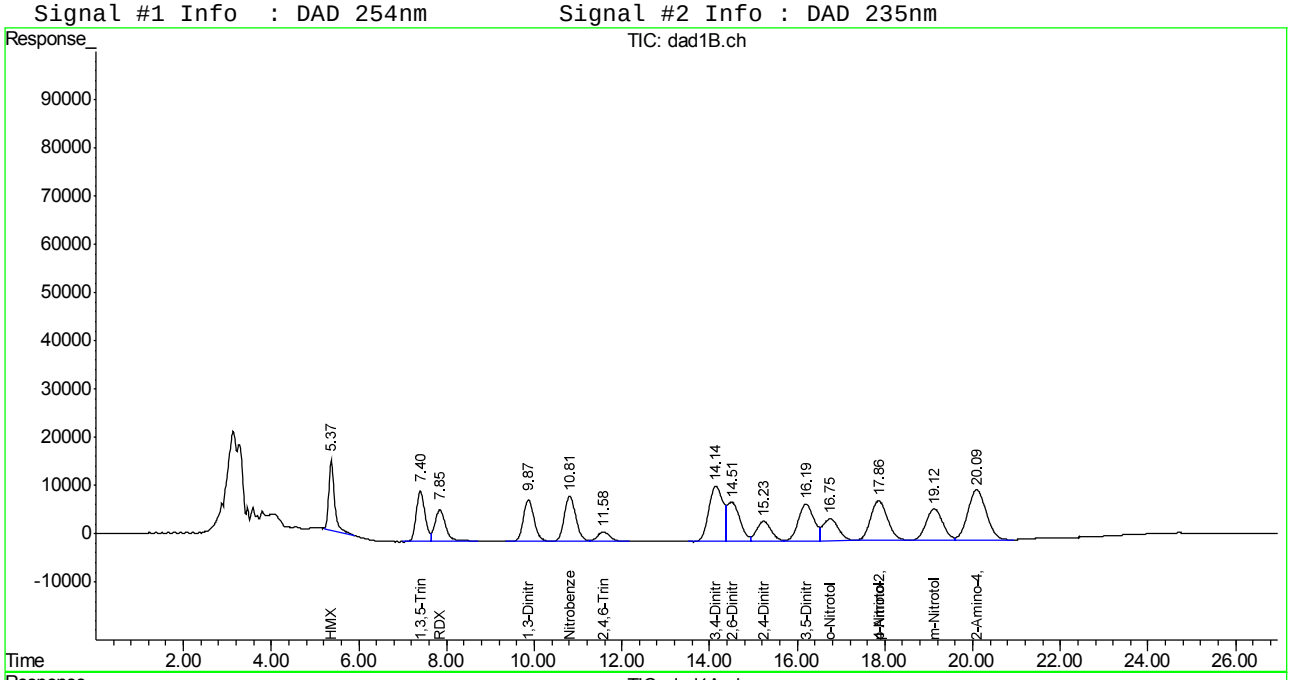
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:34:24 2018 Page 1

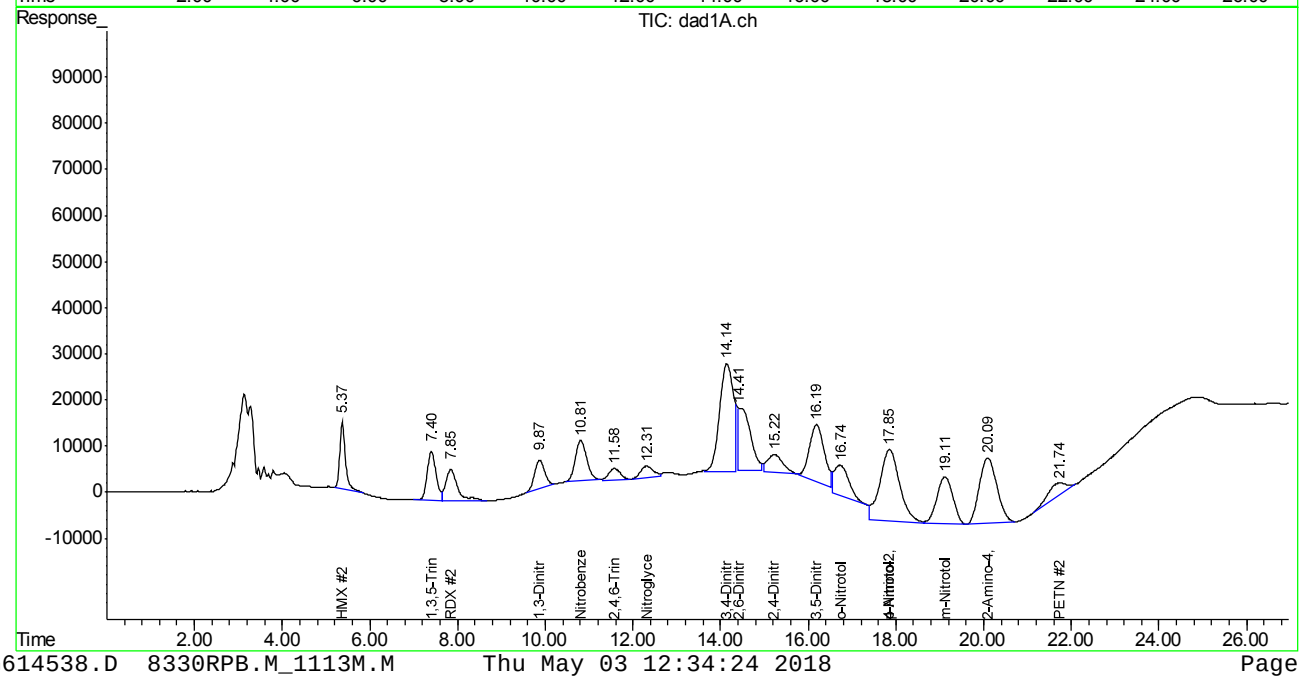
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:34 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG614538.D 8330RPB.M_1113M.M Thu May 03 12:34:24 2018 Page 2

Manual Integration Approval Summary

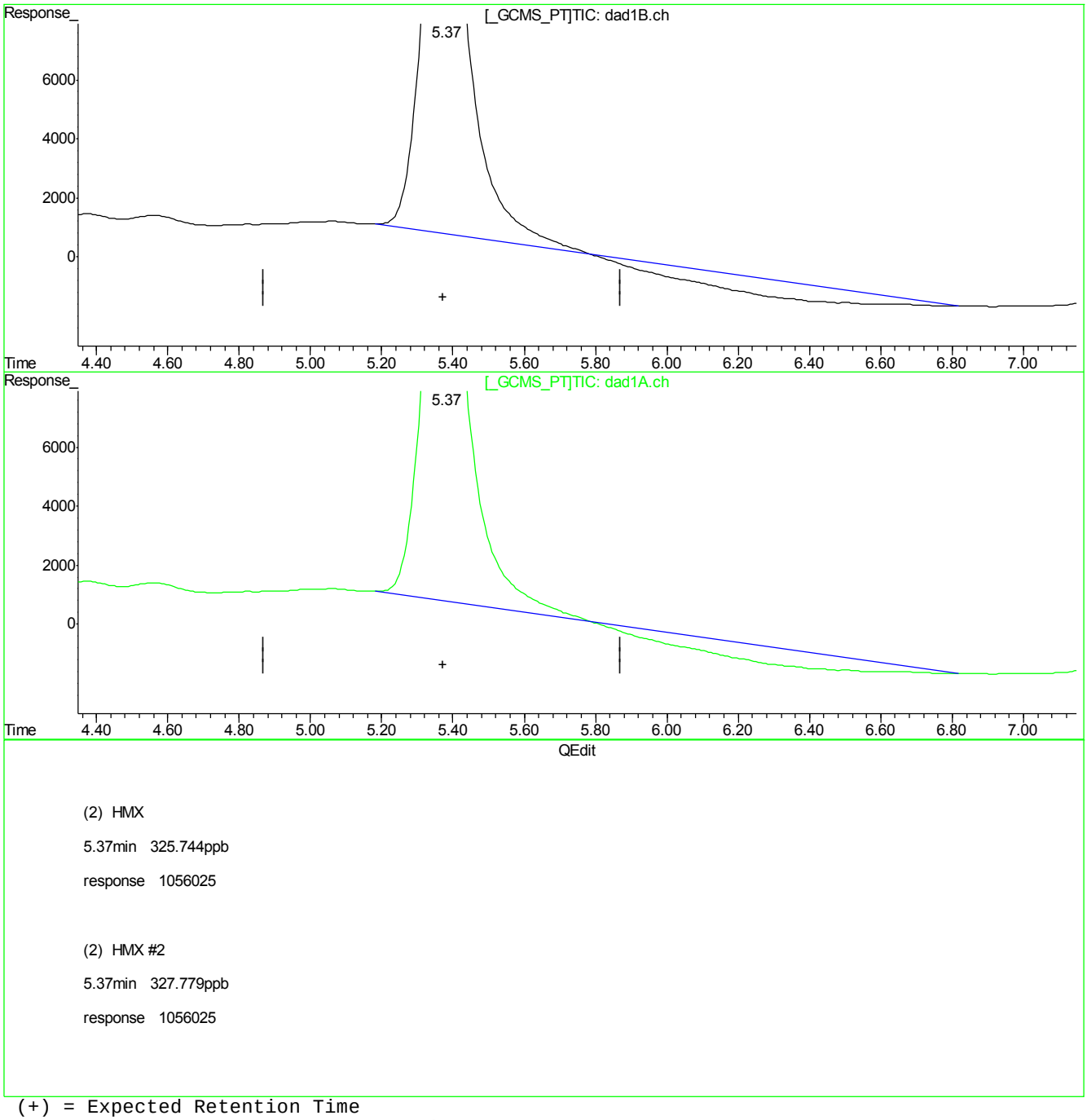
Sample Number:	OP69838-PT1	**Method:**	SW846 8330B
Lab FileID:	GG614538.D	**Analyst approved:**	05/03/18 12:35 Evita Martinez
Injection Time:	05/03/18 11:49	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.37	Poorly defined baseline
HMX	2691-41-0	2	5.37	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.87	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.81	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.58	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.31	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.14	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.41	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.22	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.19	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.74	Poorly defined baseline
PETN	78-11-5	2	21.74	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration

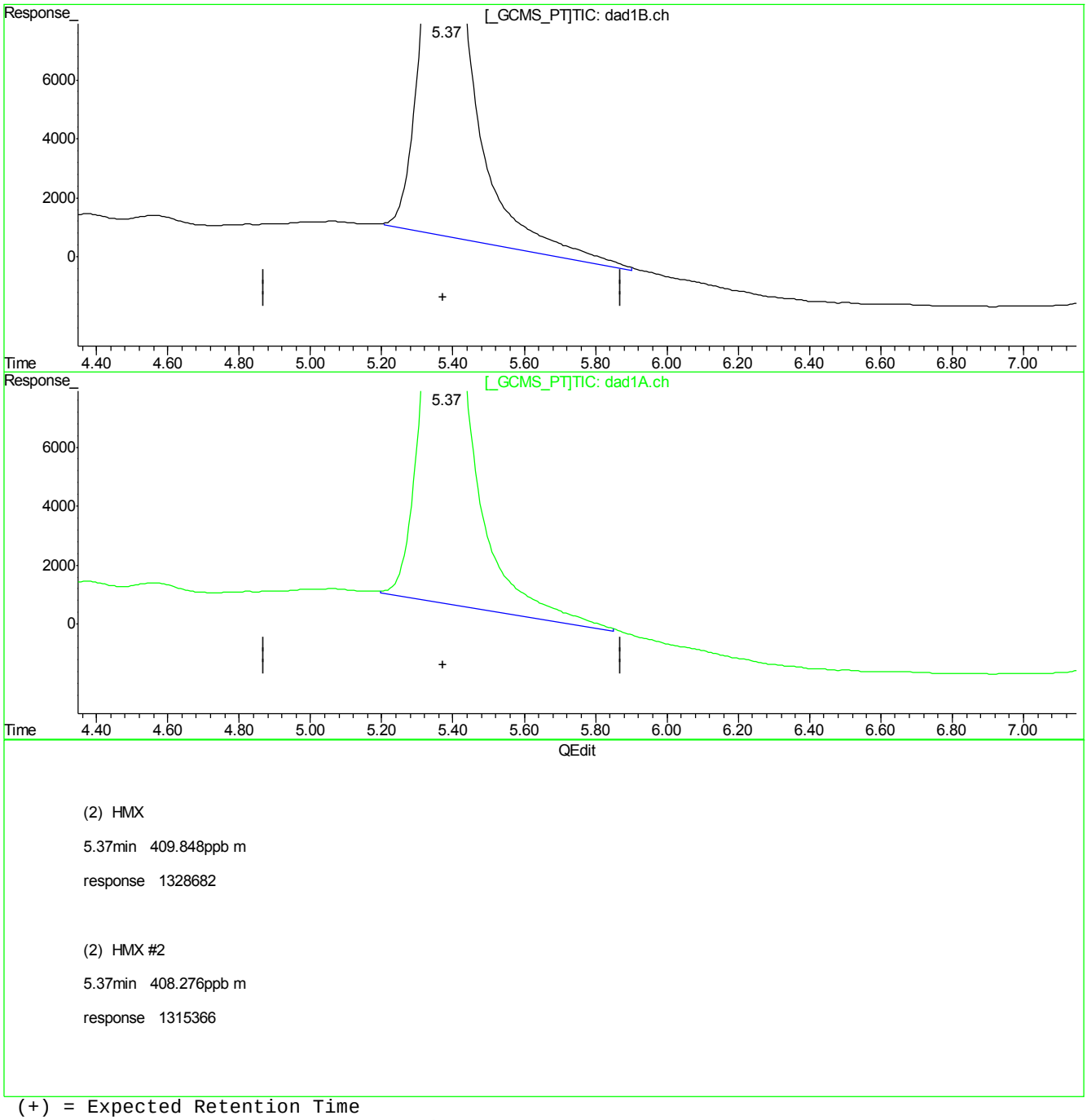


(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:31:38 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(2) HMX

5.37min 409.848ppb m

response 1328682

(2) HMX #2

5.37min 408.276ppb m

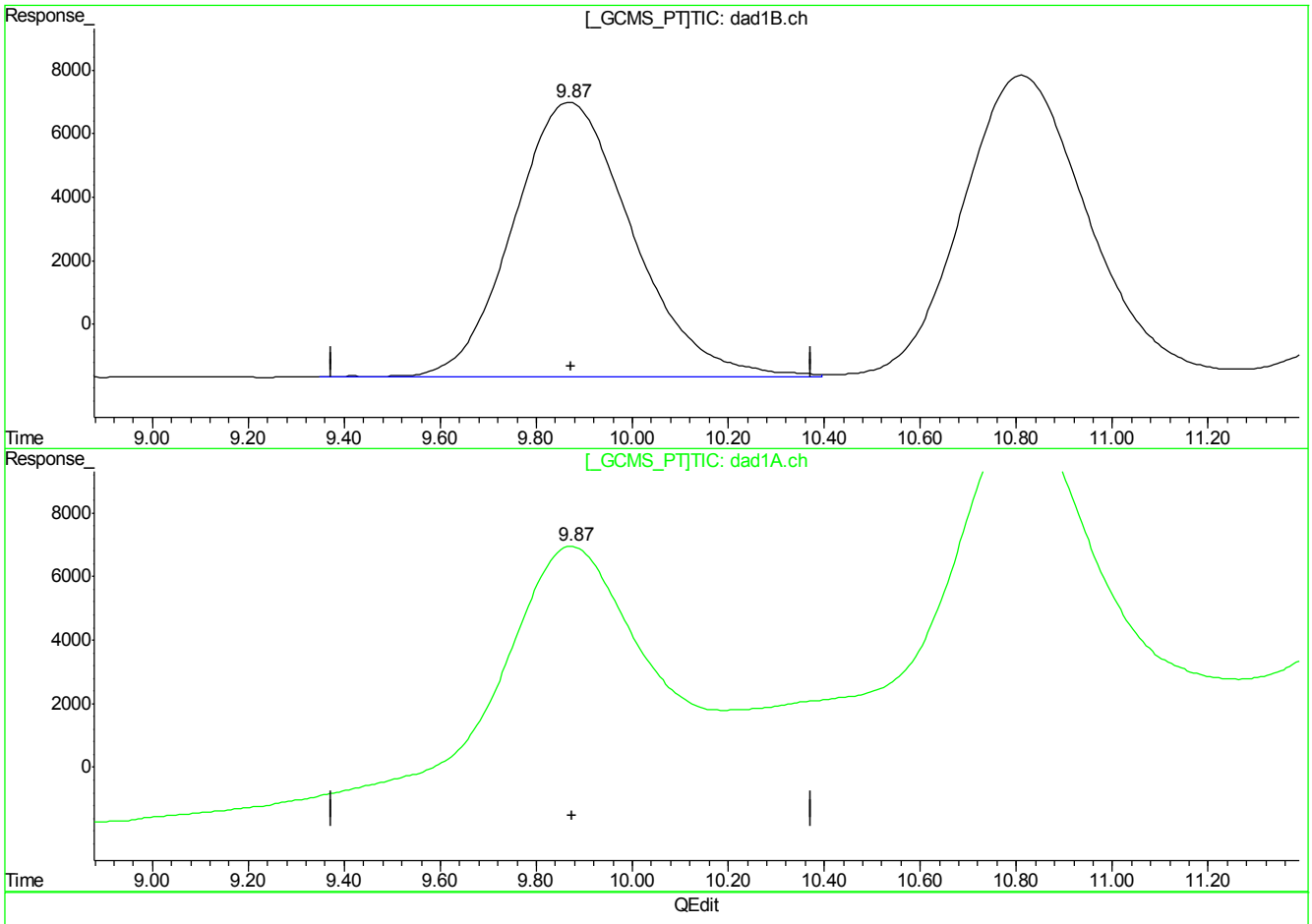
response 1315366

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:31:43 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.87min 104.606ppb

response 1496579

(7) 1,3-Dinitrobenzene #2

9.87min 201.249ppb

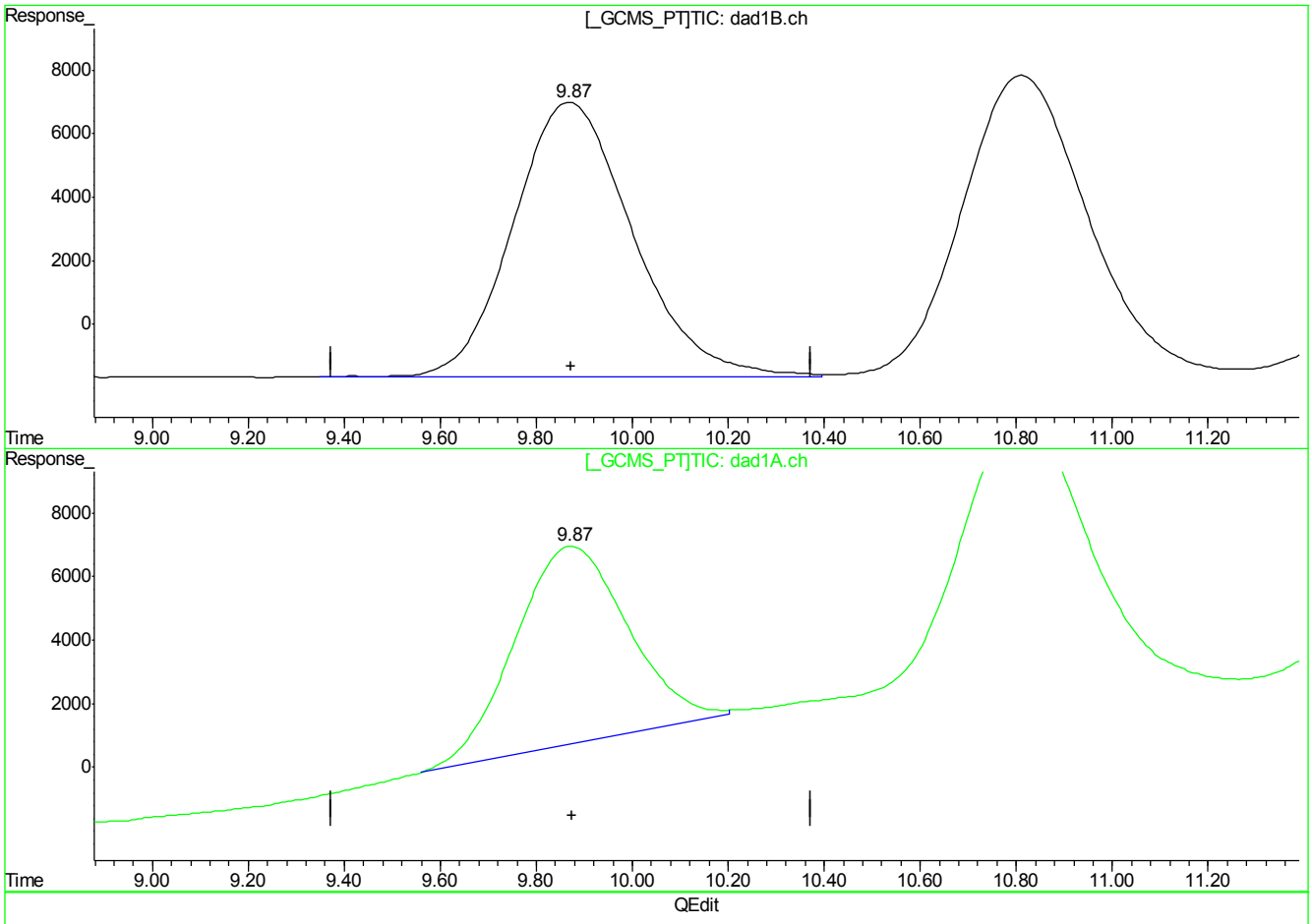
response 2626500

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:32:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.87min 104.606ppb

response 1496579

(7) 1,3-Dinitrobenzene #2

9.87min 76.625ppb m

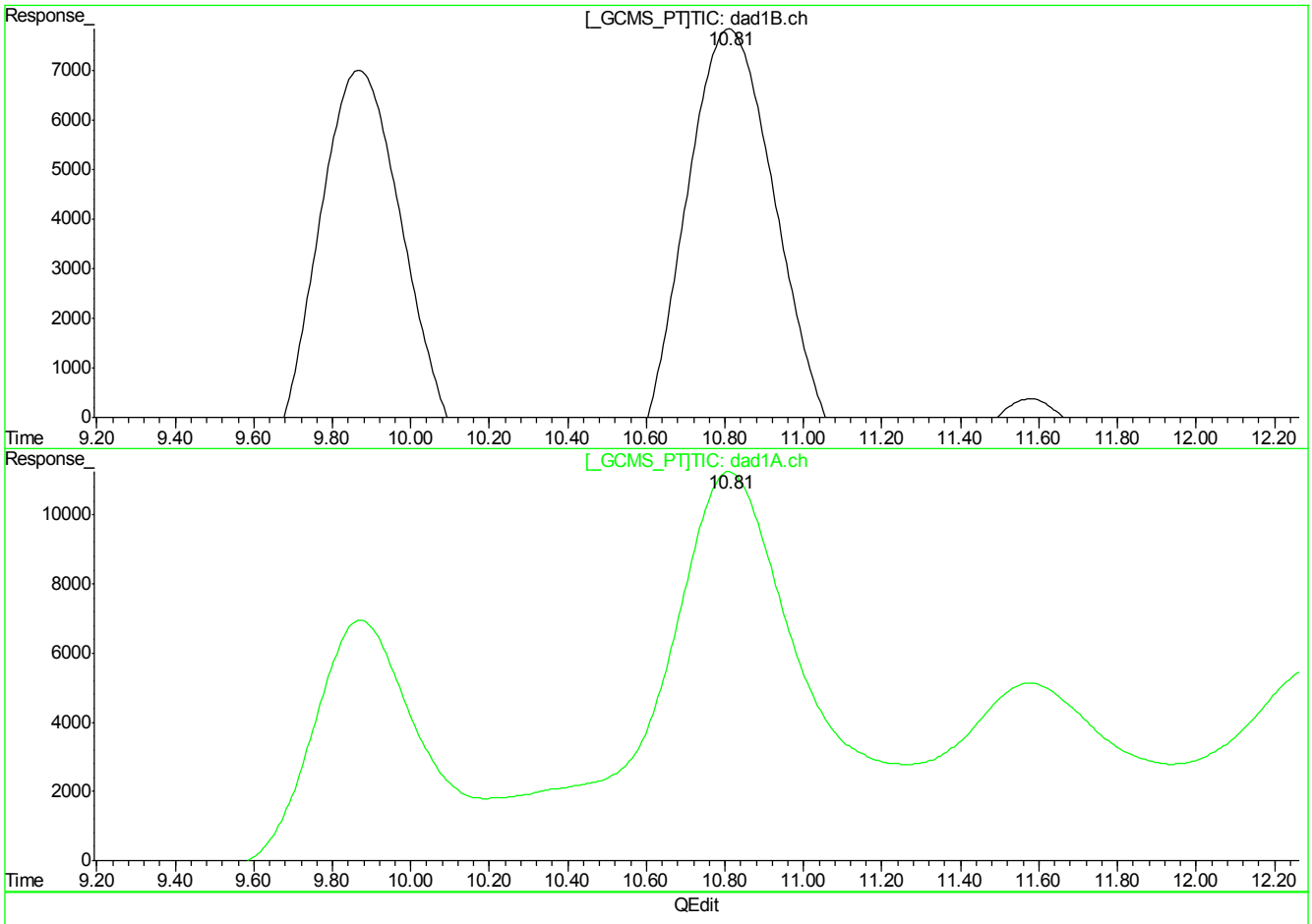
response 1010711

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:32:16 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.81min 182.872ppb

response 1725836

(8) Nitrobenzene #2

10.81min 531.045ppb

response 4917955

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:32:21 2018

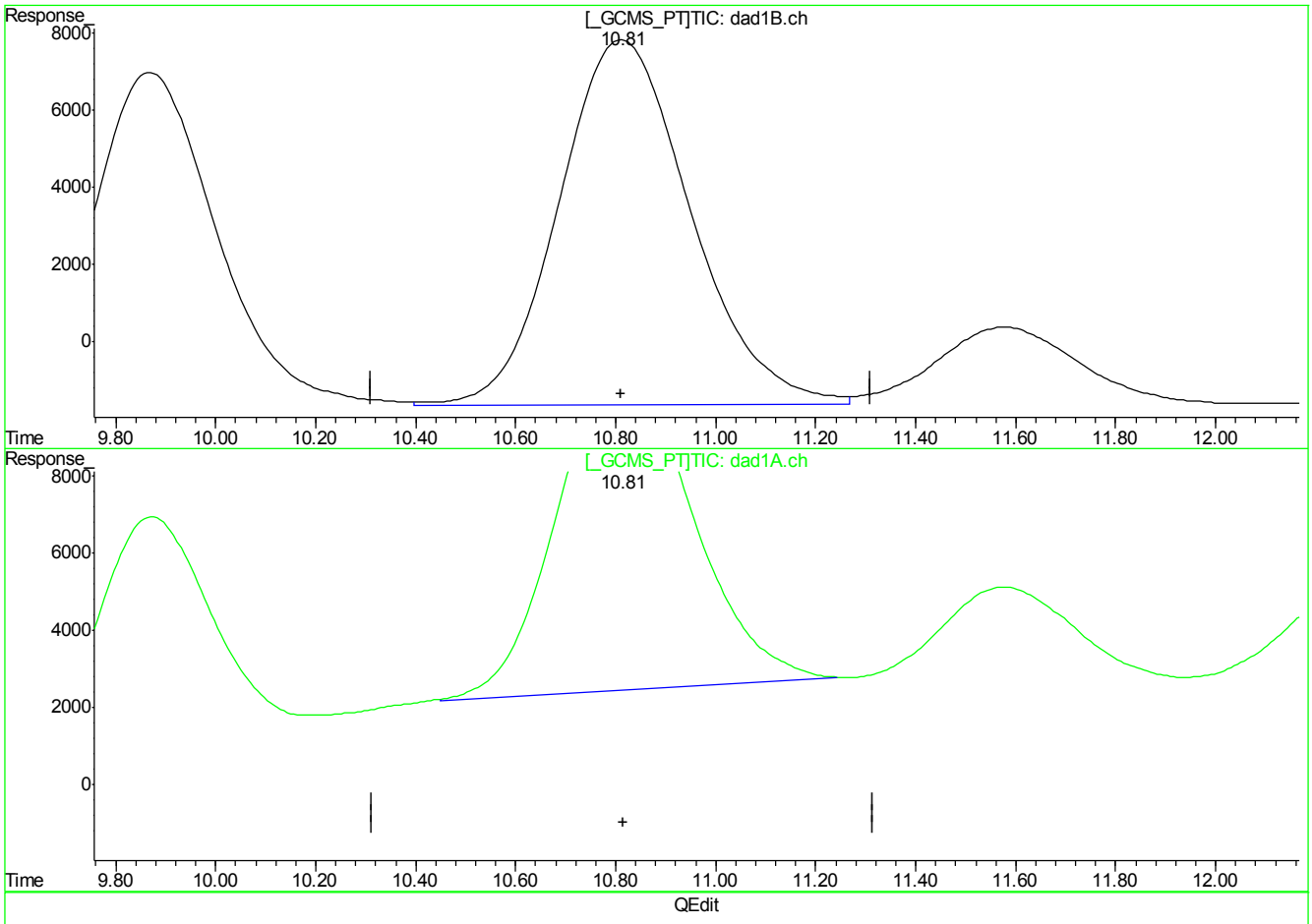
7.4.1.6

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.81min 182.872ppb

response 1725836

(8) Nitrobenzene #2

10.81min 170.735ppb m

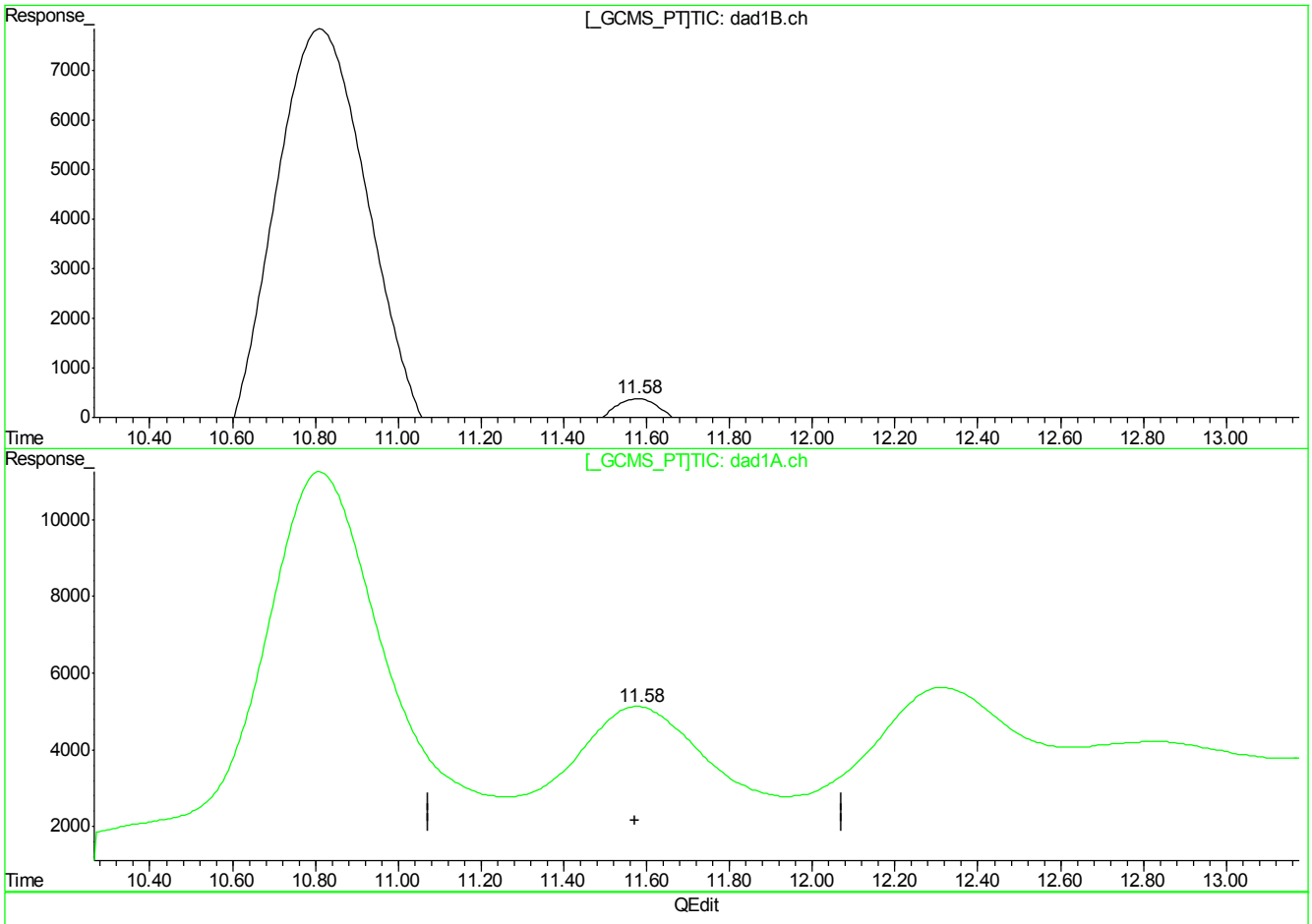
response 1581157

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:32:27 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.58min 39.082ppb

response 396068

(9) 2,4,6-Trinitrotoluene #2

11.58min 217.642ppb

response 2854346

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:32:31 2018

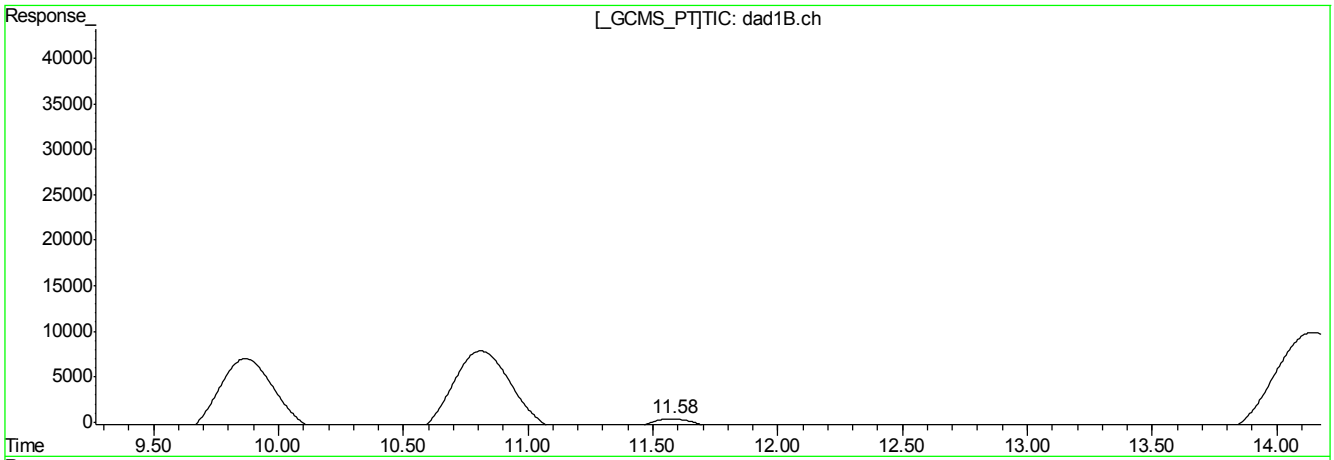
7.4.1.8

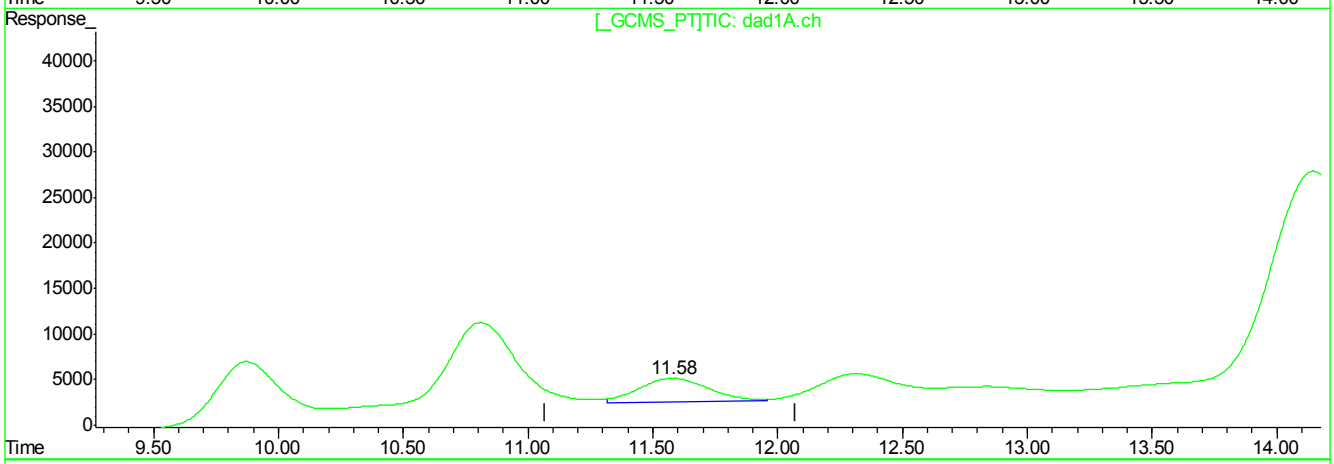
7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration





QEdit

(9) 2,4,6-Trinitrotoluene

11.58min 39.082ppb

response 396068

(9) 2,4,6-Trinitrotoluene #2

11.58min 37.889ppb m

response 496909

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:32:38 2018

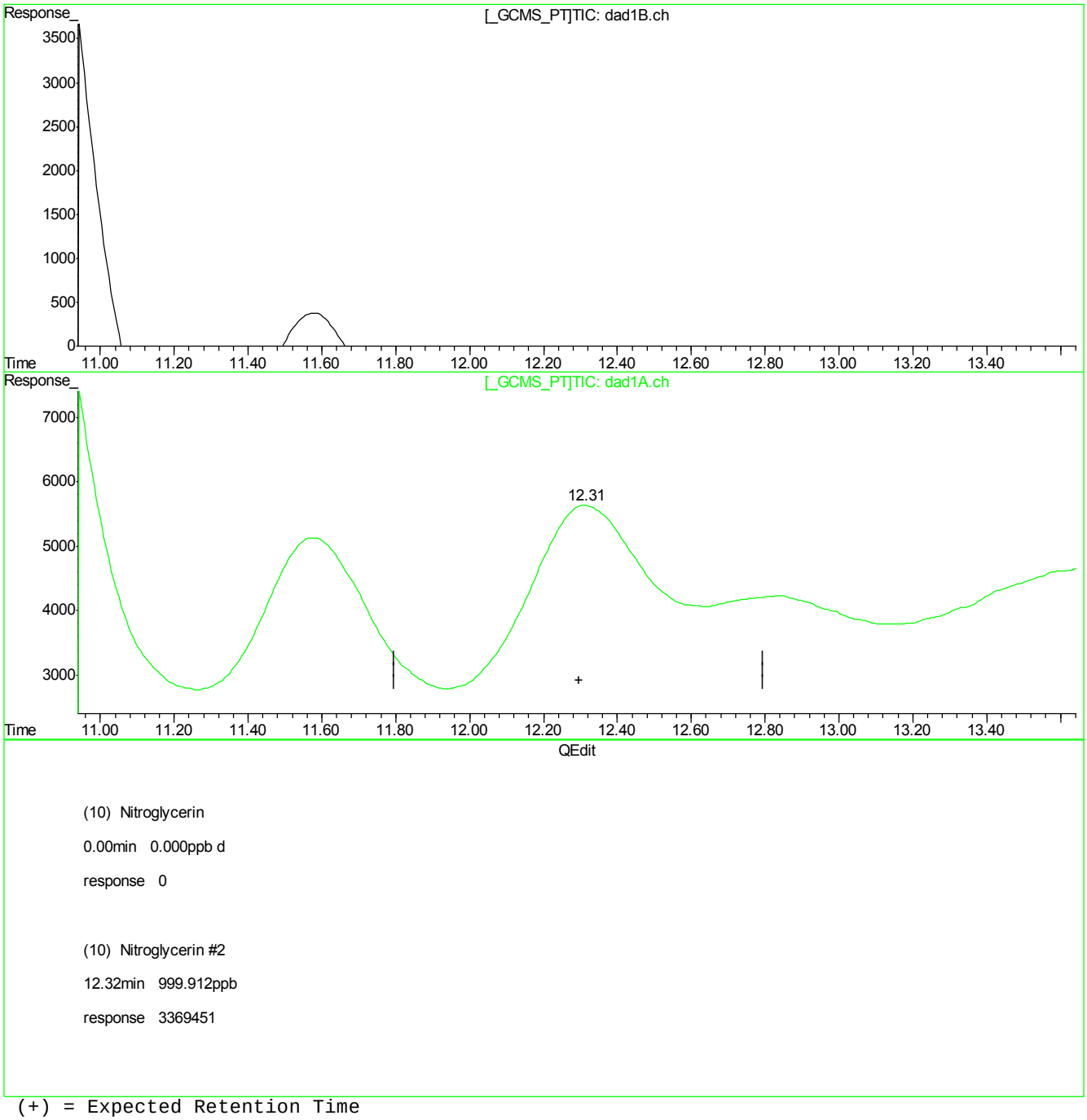
7.4.1.9

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.32min 999.912ppb

response 3369451

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:32:42 2018

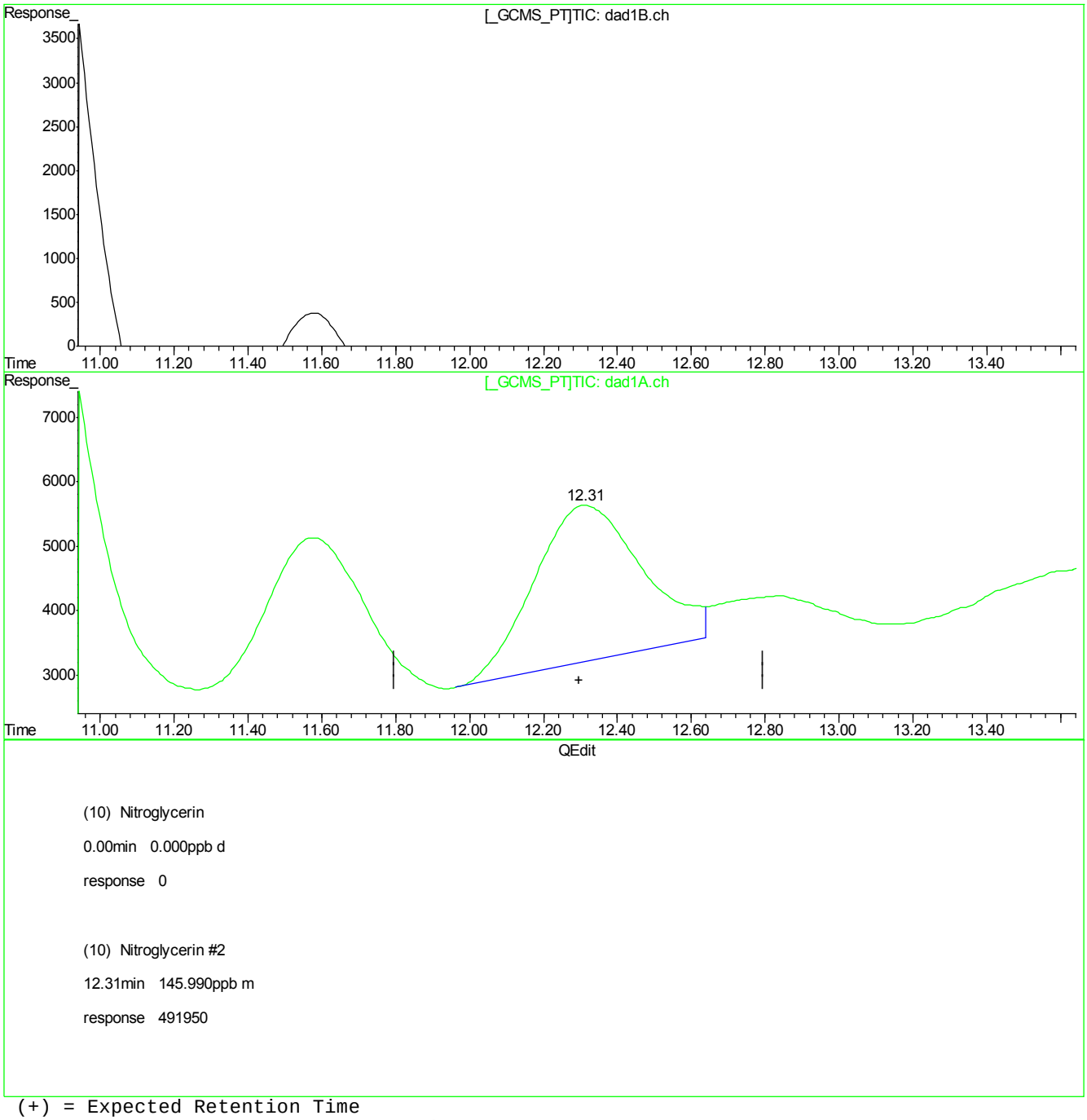
7.4.1.10

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.31min 145.990ppb m

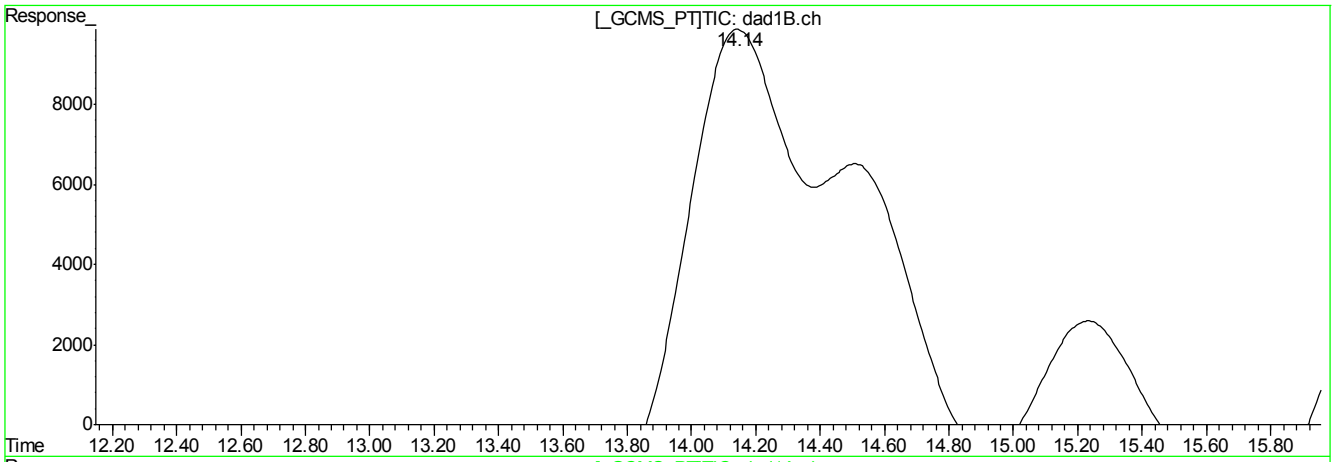
response 491950

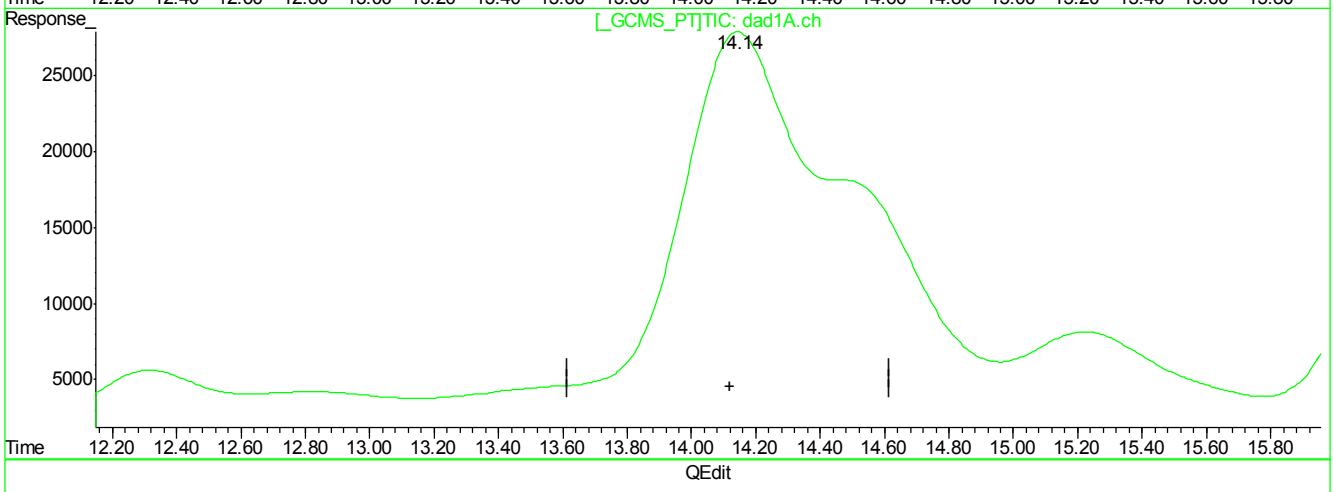
(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:32:46 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration





QEdit

(12) 3,4-Dinitrotoluene (S)

14.15min 503.076ppb

response 2613423

(12) 3,4-Dinitrotoluene #2 (S)

14.15min 1644.372ppb

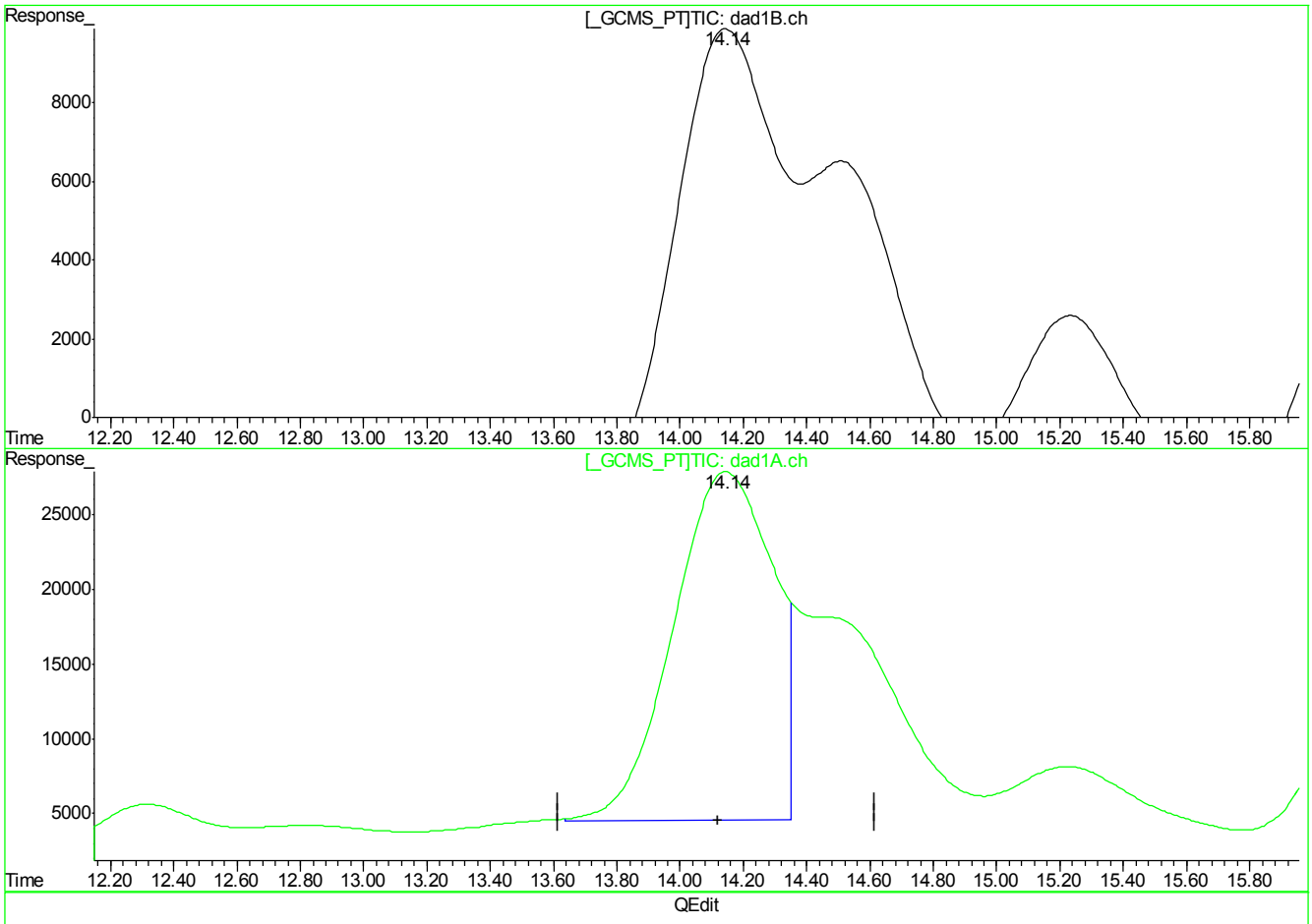
response 17788200

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:32:54 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.15min 503.076ppb

response 2613423

(12) 3,4-Dinitrotoluene #2 (S)

14.14min 462.408ppb m

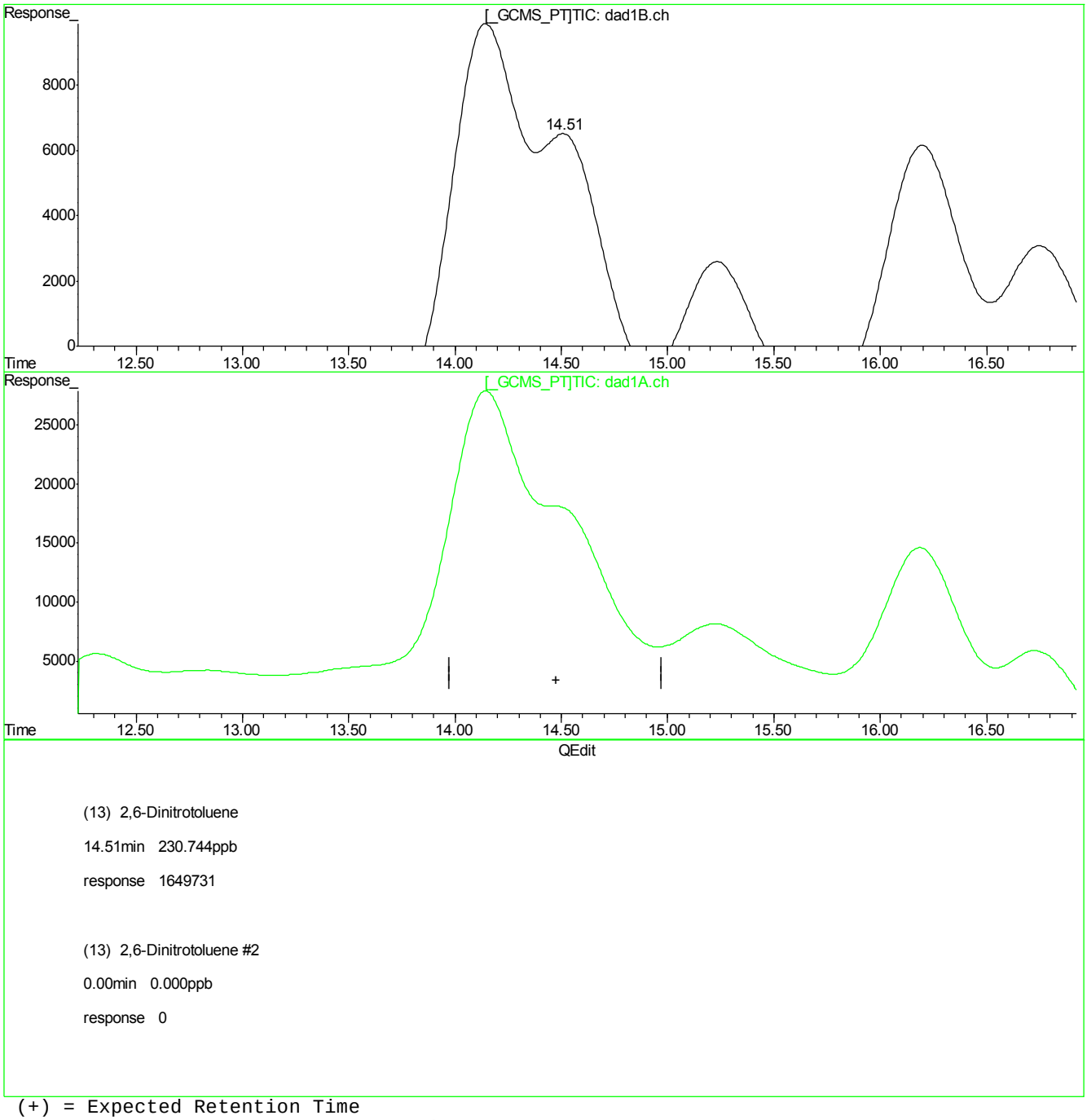
response 5002156

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:33:02 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.51min 230.744ppb

response 1649731

(13) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:33:07 2018

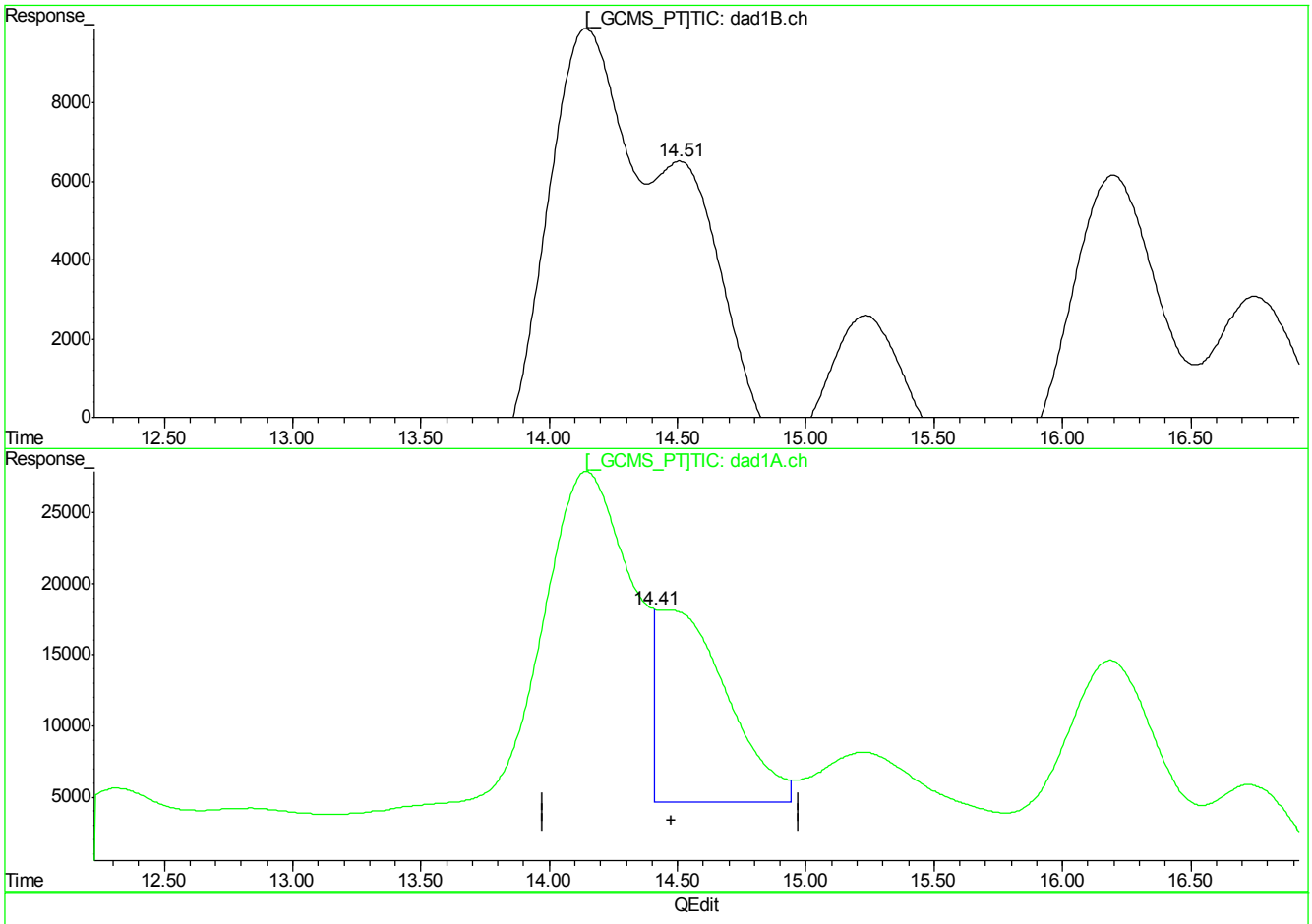
7.4.1.14

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.51min 230.744ppb

response 1649731

(13) 2,6-Dinitrotoluene #2

14.41min 254.587ppb m

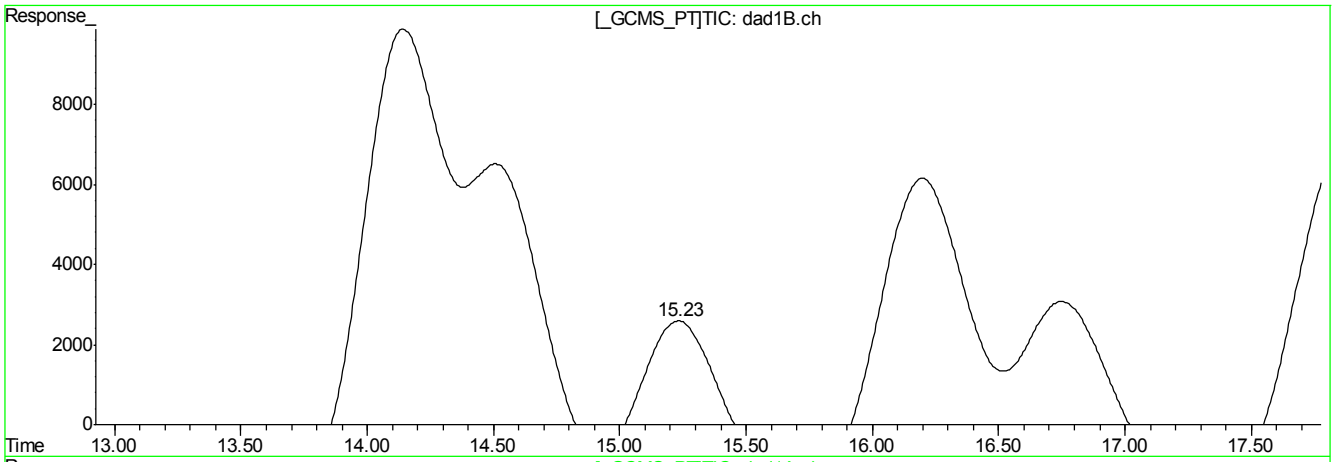
response 2583053

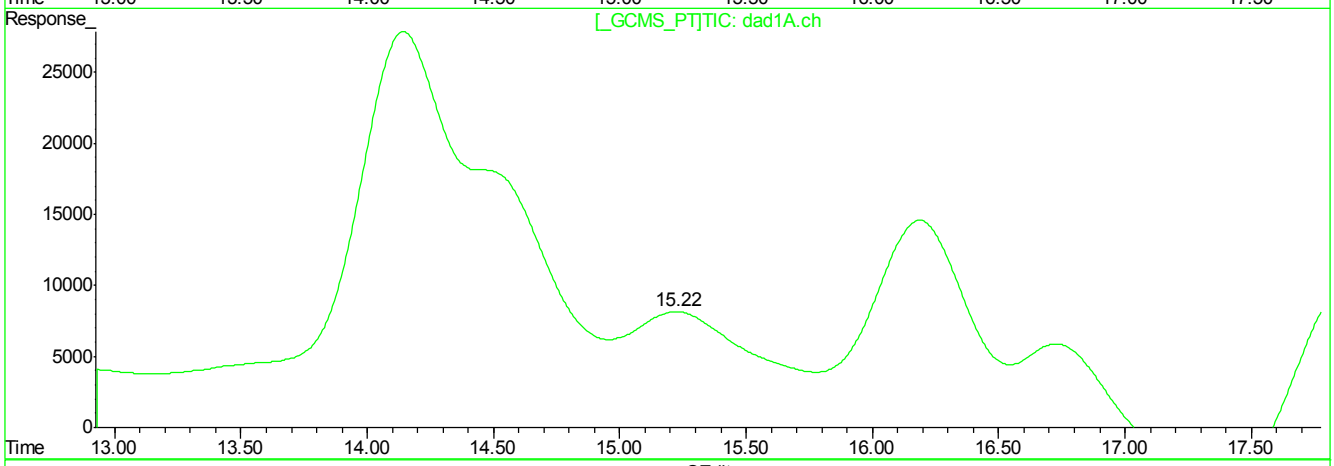
(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:33:16 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration





QEdit

(14) 2,4-Dinitrotoluene

15.23min 73.639ppb

response 965335

(14) 2,4-Dinitrotoluene #2

15.22min 582.873ppb

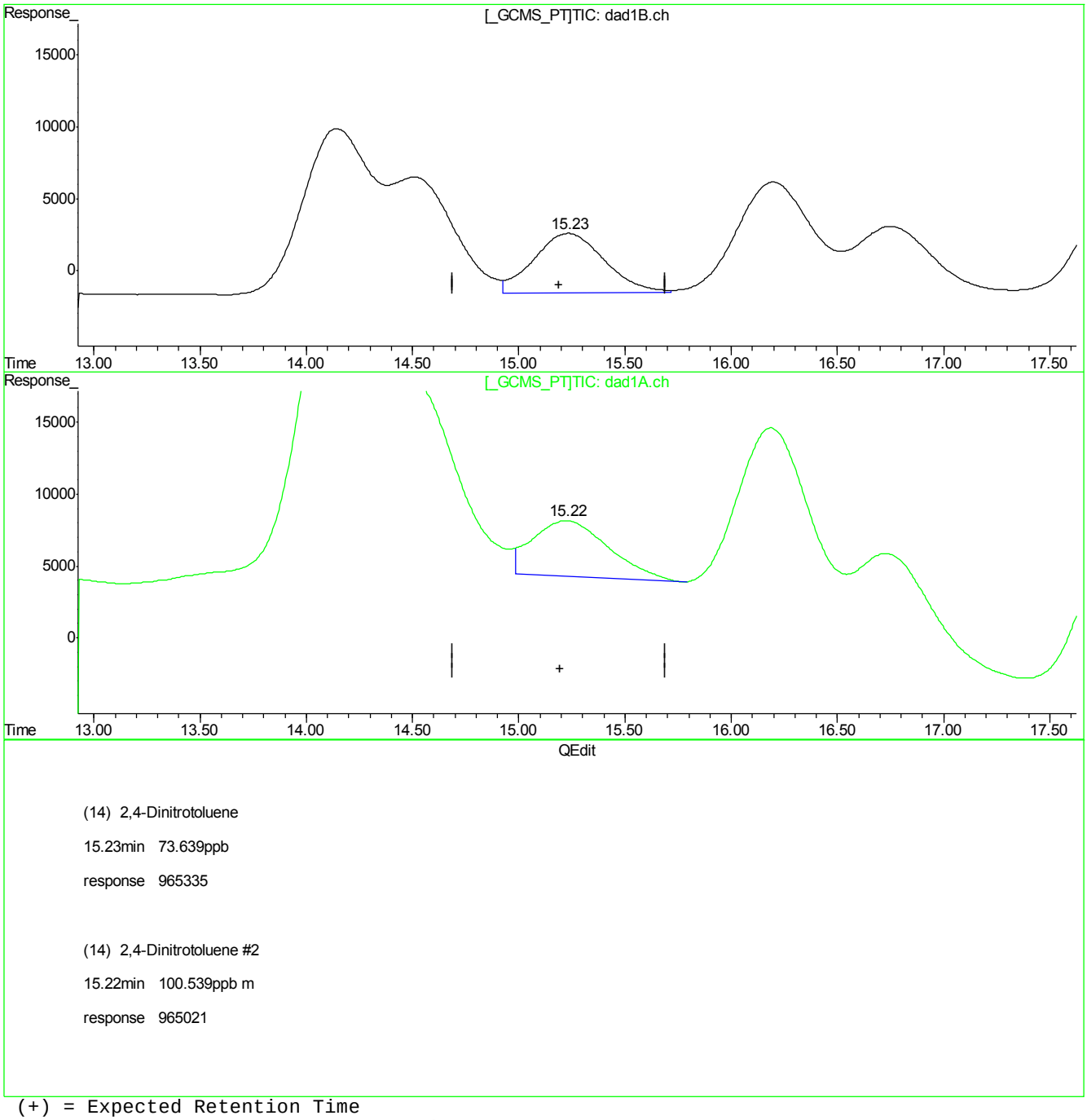
response 5531519

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:33:21 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:33:30 2018

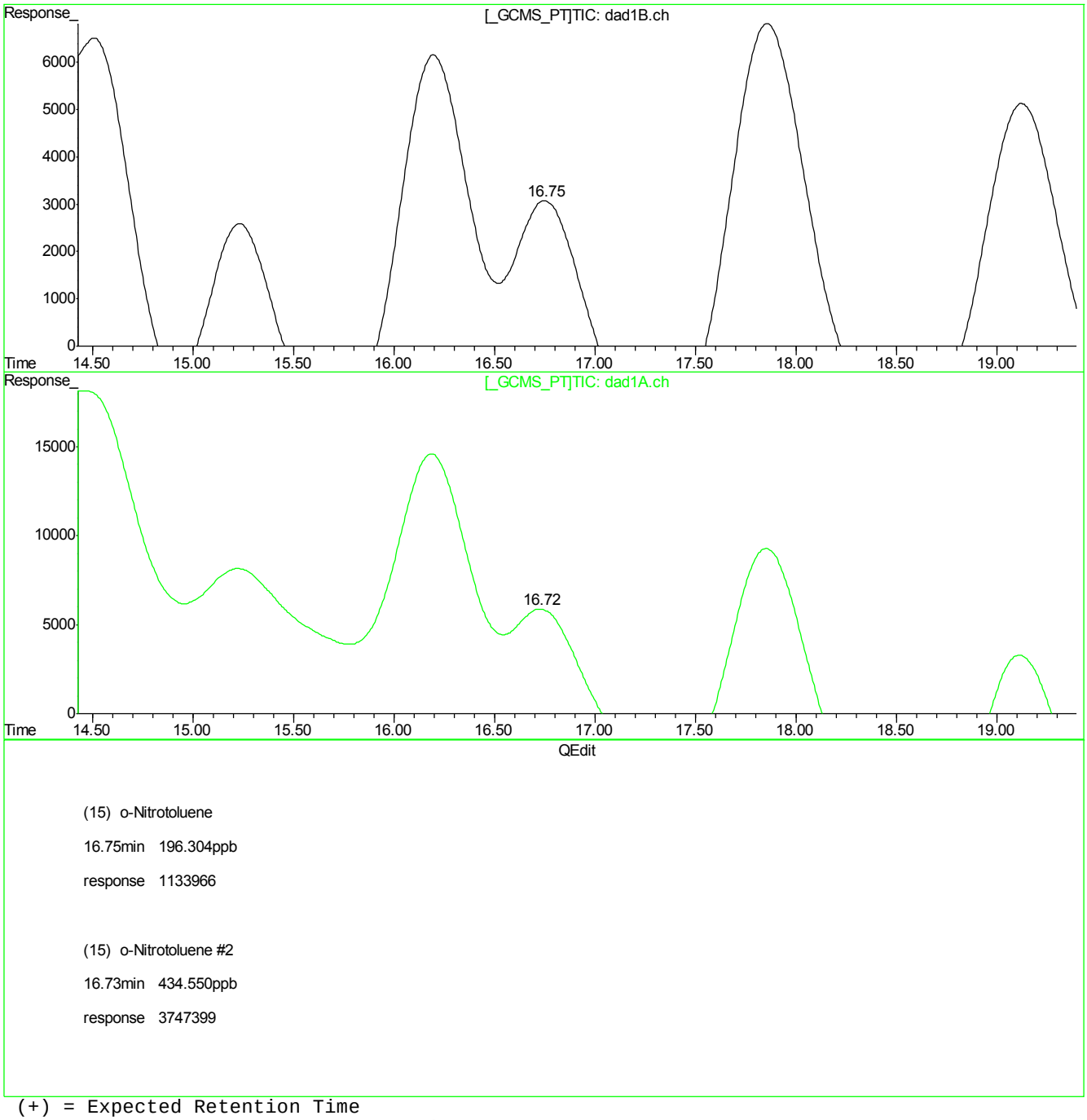
7.4.1.17

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.75min 196.304ppb

response 1133966

(15) o-Nitrotoluene #2

16.73min 434.550ppb

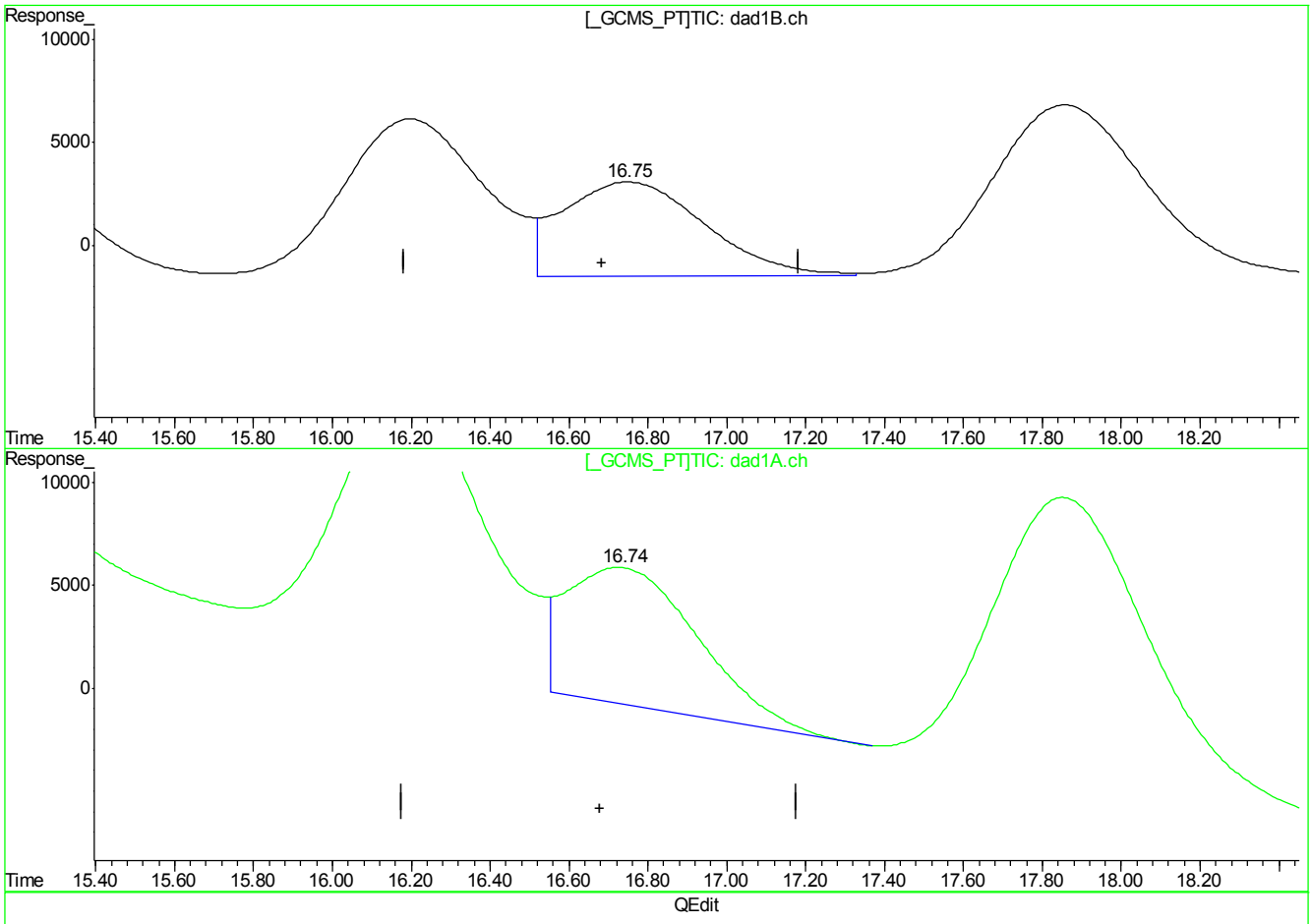
response 3747399

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:33:37 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.75min 196.304ppb

response 1133966

(15) o-Nitrotoluene #2

16.74min 178.754ppb m

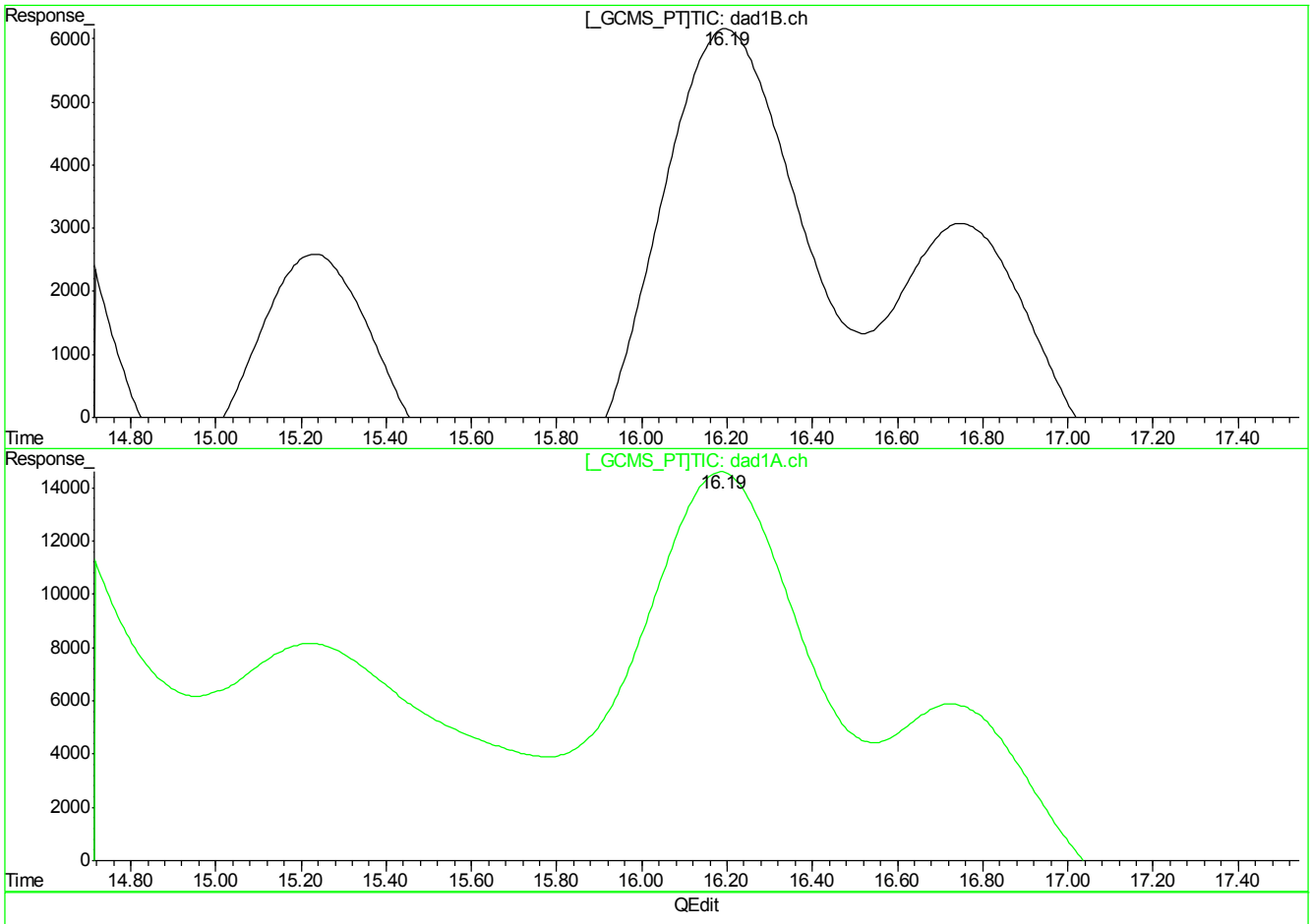
response 1541510

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:33:41 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.20min 195.012ppb

response 1899244

(16) 3,5-Dinitroaniline #2

16.19min 404.366ppb

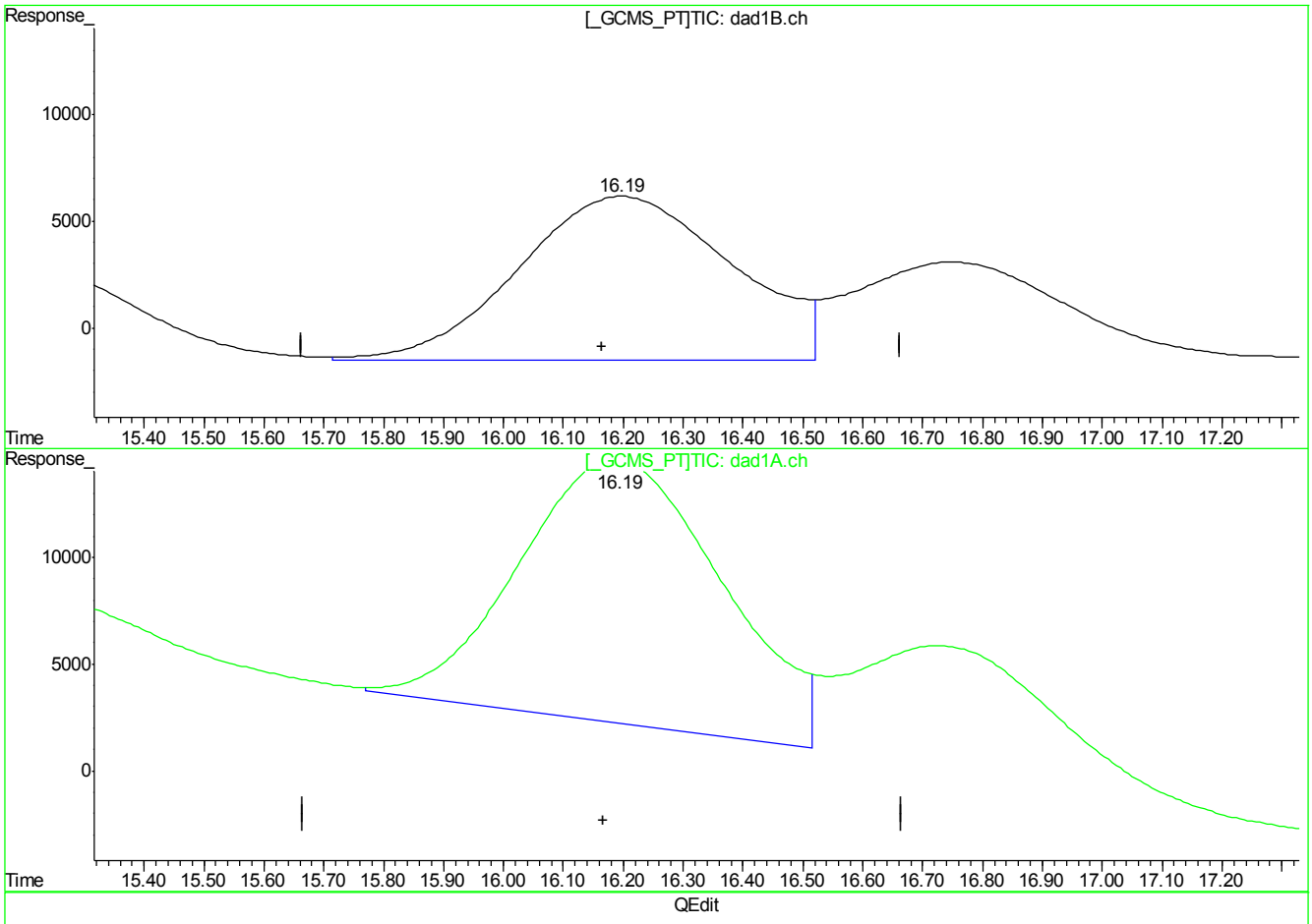
response 6558393

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:33:44 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.20min 195.012ppb

response 1899244

(16) 3,5-Dinitroaniline #2

16.19min 179.360ppb m

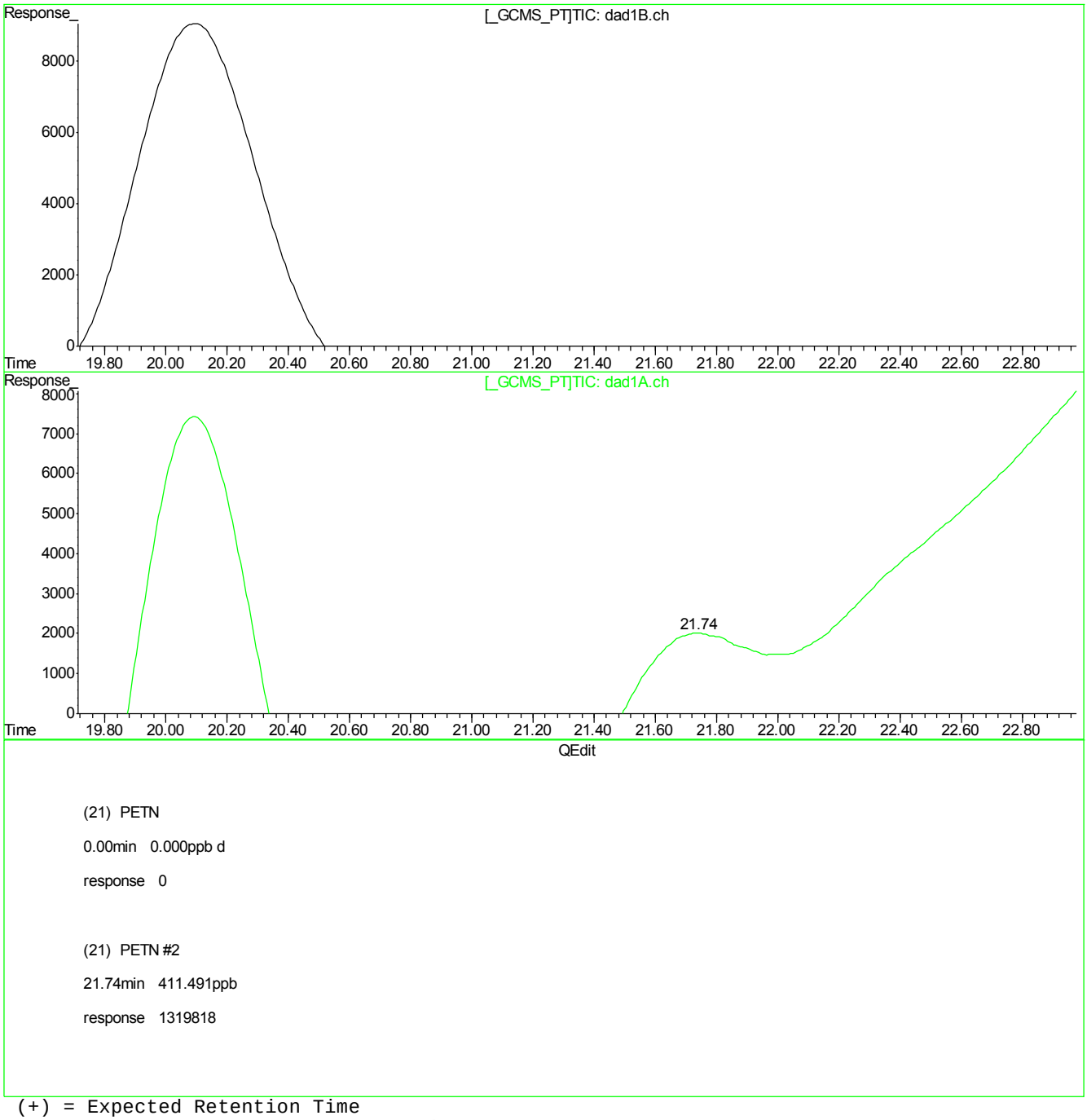
response 2900304

(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:33:51 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration

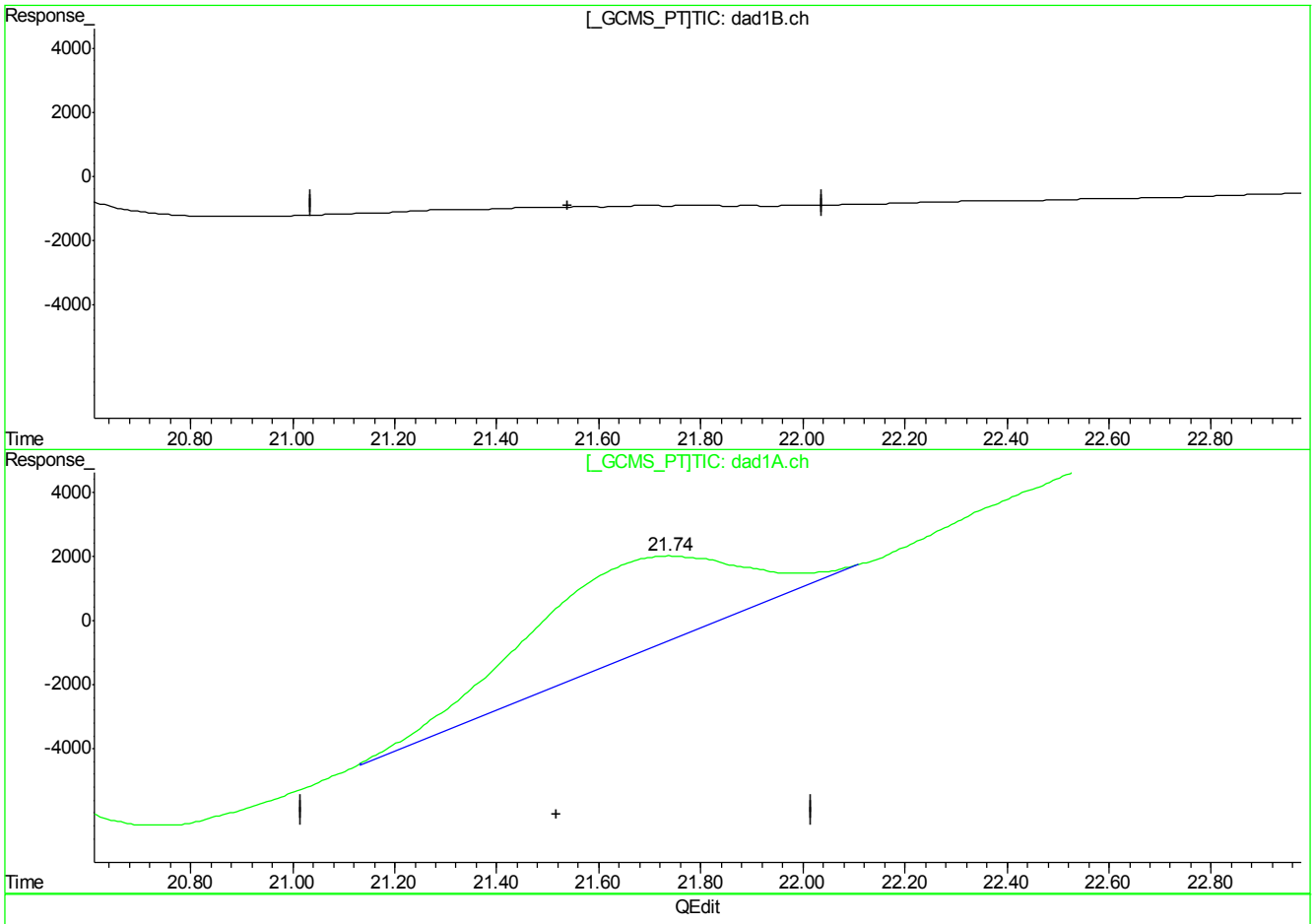


(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:34:02 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614538.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0503RPB3\GG614538.D\dad1A.ch
Acq On : 03-May-2018, 11:49:06 Operator: evitam
Sample : op69838-pt1 Inst : G1315B
Misc : op69838,Ggg2624,5.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614538.D 8330RPB.M_1113M.M Thu May 03 12:34:11 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614542.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0503RPB3\GG614542.D\dad1A.ch
Acq On : 03-May-2018, 13:46:56 Operator: evitam
Sample : op69838-ms Inst : G1315B
Misc : op69838,Ggg2624,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 03 14:23:54 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.23	2382602	5205792	458.644	481.232
	Spiked Amount 500.000	Range 69 - 134		Recovery =		91.73%	96.25%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	5.39	5.39	1744756	1743690	538.191m	541.224m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.44	7.44	4006220	4006220	386.641	386.681
6)	RDX	7.89	7.89	1976851	1976851	414.941	416.780
7)	1,3-Dinitrobenze	9.91	9.91	5921244	4847472	413.874	377.110
8)	Nitrobenzene	10.87	10.87	3957531	4670781	419.345	504.355
9)	2,4,6-Trinitroto	11.64	11.64	4097096	6234863	404.280	475.404
10)	Nitroglycerin	0.00	12.38	0	8292511	N.D. d	2460.871
11)	Tetryl	12.90	12.90	3286783	6689484	405.582	474.942
13)	2,6-Dinitrotolue	14.59	14.58	3300440	4939329	461.625	486.823
14)	2,4-Dinitrotolue	15.30	15.30	5584863	4172555	426.030	438.173
15)	o-Nitrotoluene	16.83	16.83	2597934	3485072	449.735	404.131
16)	3,5-Dinitroanili	16.26	16.26	4494656	7582064	459.835	467.091
17)	p-Nitrotoluene	17.99	17.99	4693891	8638918	399.740	407.627
18)	4-Amino-2,6-Dini	17.99	17.99	4693891	8638918	399.740	406.442
19)	m-Nitrotoluene	19.21	19.21	2575399	4223769	436.851	434.347
20)	2-Amino-4,6-Dini	20.16	20.16	3652417	5248080	404.793	443.161
21)	PETN	0.00	21.74	0	7250594	N.D. d	2260.579m

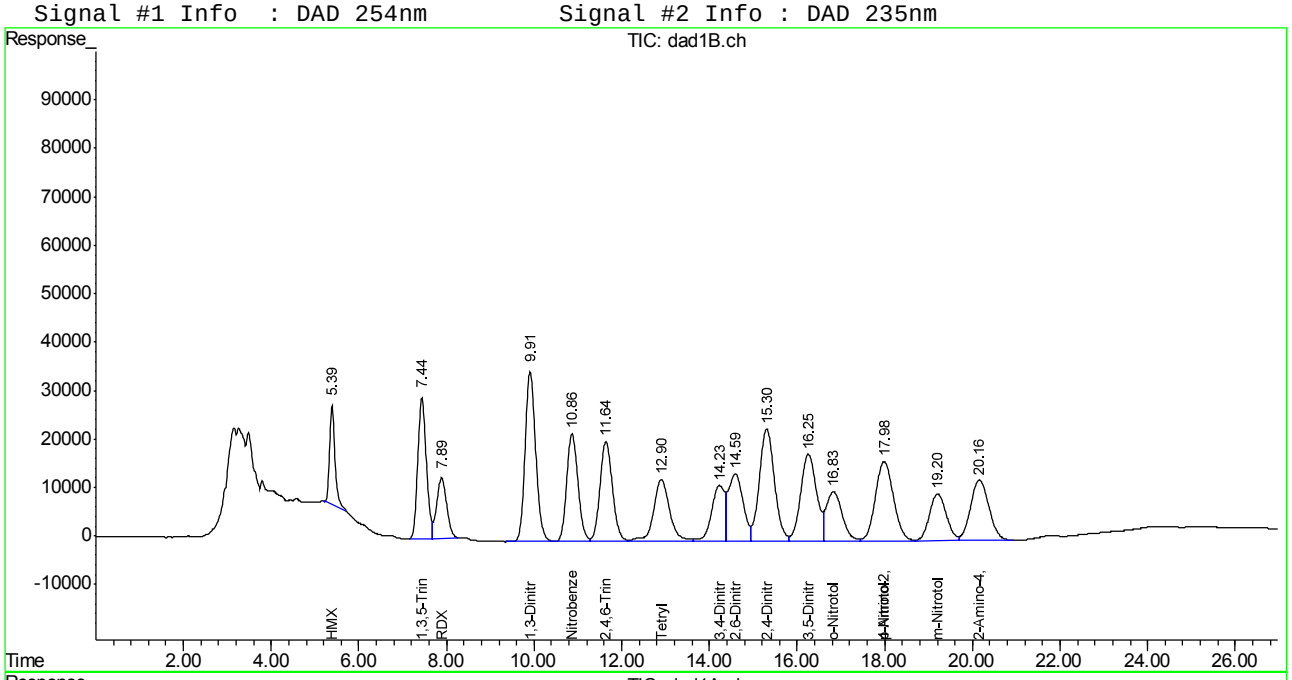
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614542.D 8330RPB.M_1113M.M Fri May 04 09:33:11 2018 Page 1

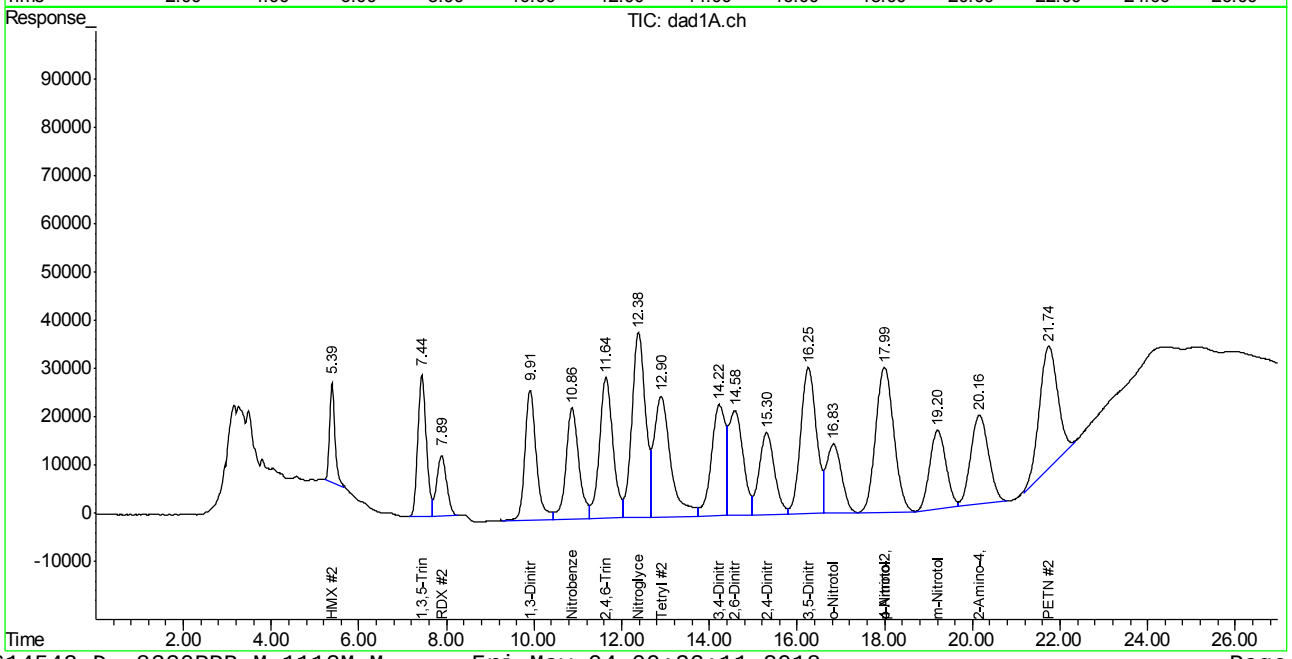
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614542.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0503RPB3\GG614542.D\dad1A.ch
Acq On : 03-May-2018, 13:46:56 Operator: evitam
Sample : op69838-ms Inst : G1315B
Misc : op69838,Ggg2624,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:28 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

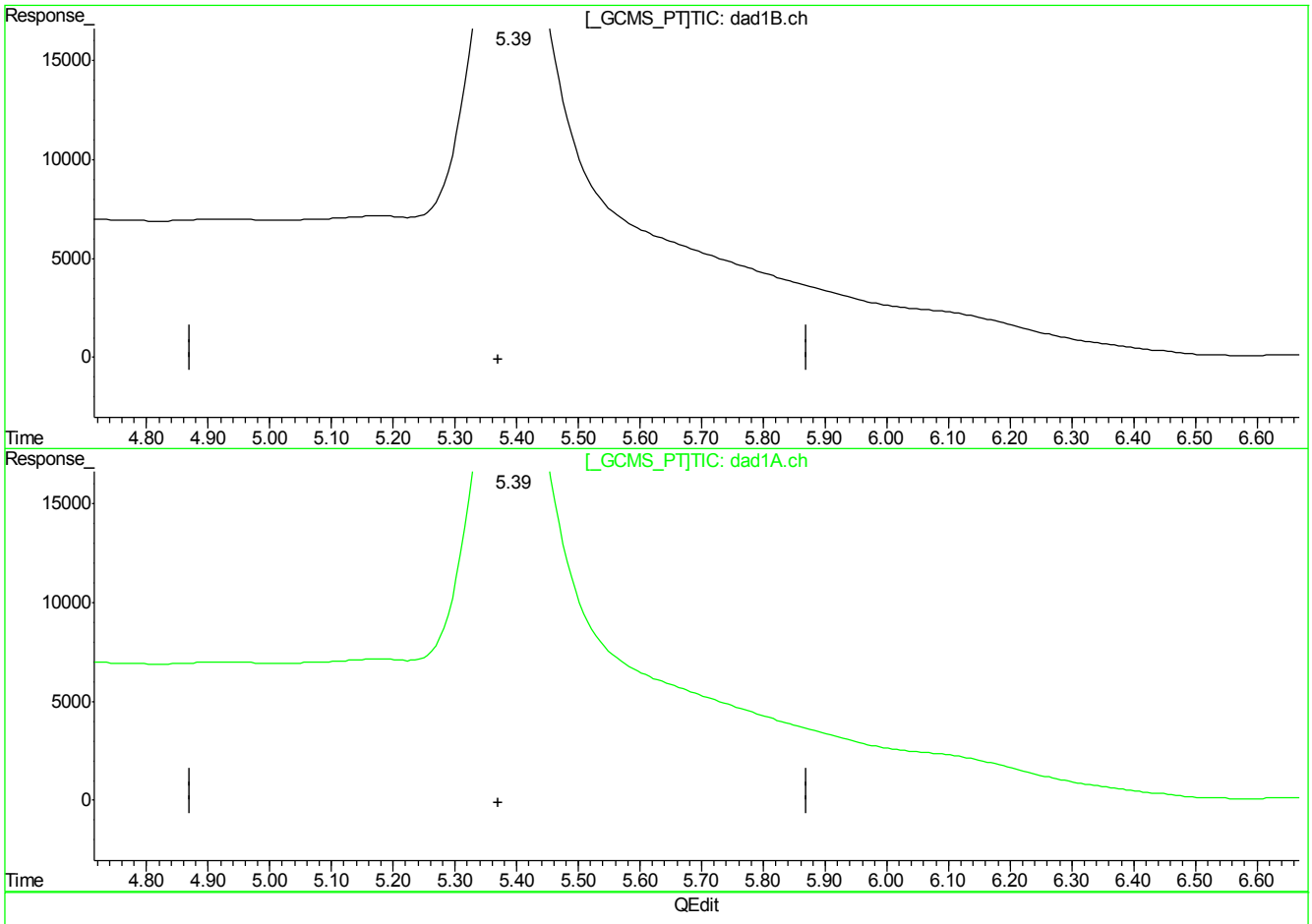
Sample Number:	OP69838-MS	**Method:**	SW846 8330B
Lab FileID:	GG614542.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 13:46	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
PETN	78-11-5	2	21.74	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614542.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0503RPB3\GG614542.D\dad1A.ch
Acq On : 03-May-2018, 13:46:56 Operator: evitam
Sample : op69838-ms Inst : G1315B
Misc : op69838,Ggg2624,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 680.232ppb

response 2205236

(2) HMX #2

5.39min 684.483ppb

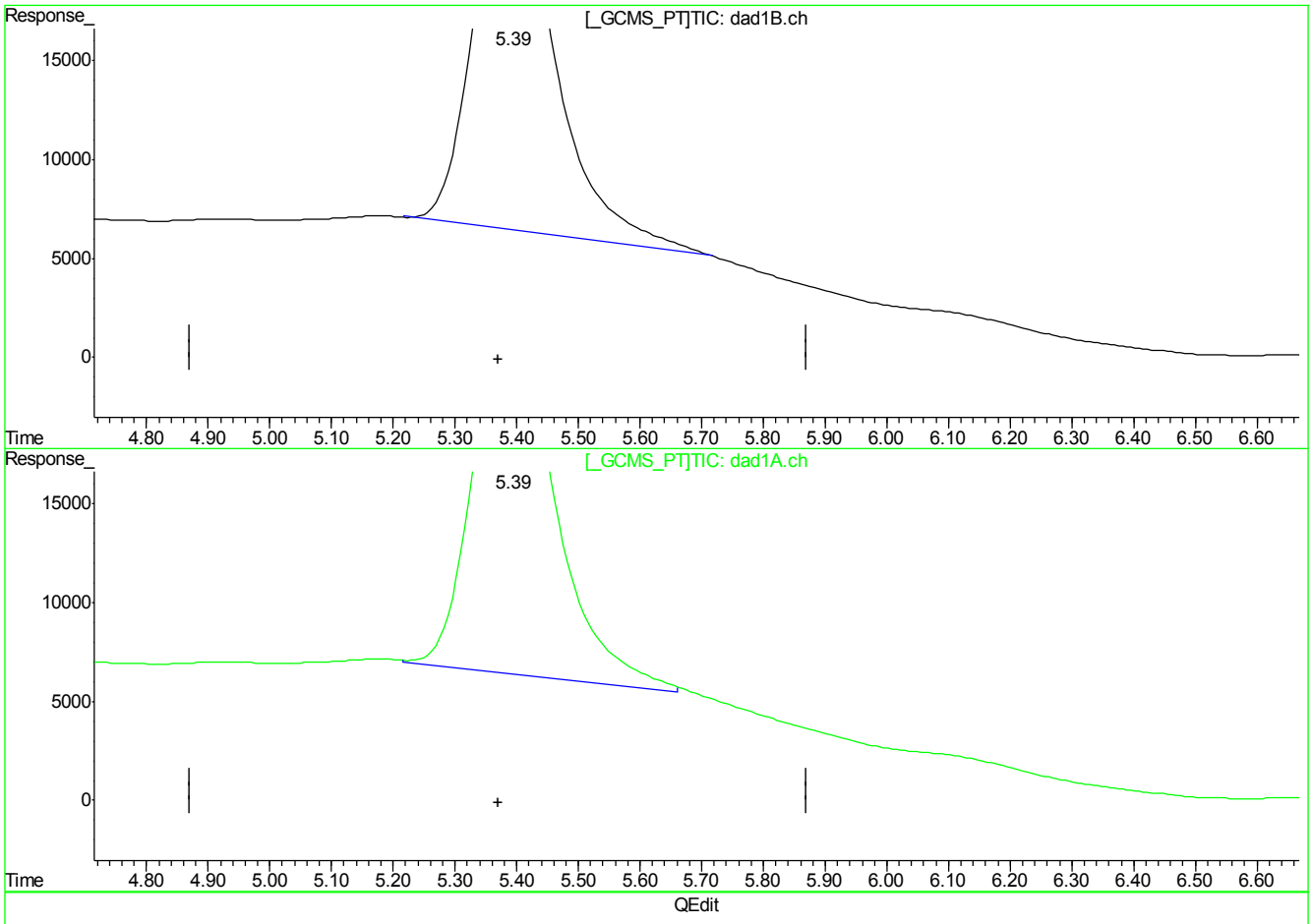
response 2205236

(+) = Expected Retention Time
GG614542.D 8330RPB.M_1113M.M Thu May 03 14:28:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614542.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0503RPB3\GG614542.D\dad1A.ch
Acq On : 03-May-2018, 13:46:56 Operator: evitam
Sample : op69838-ms Inst : G1315B
Misc : op69838,Ggg2624,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 538.191ppb m

response 1744756

(2) HMX #2

5.39min 541.224ppb m

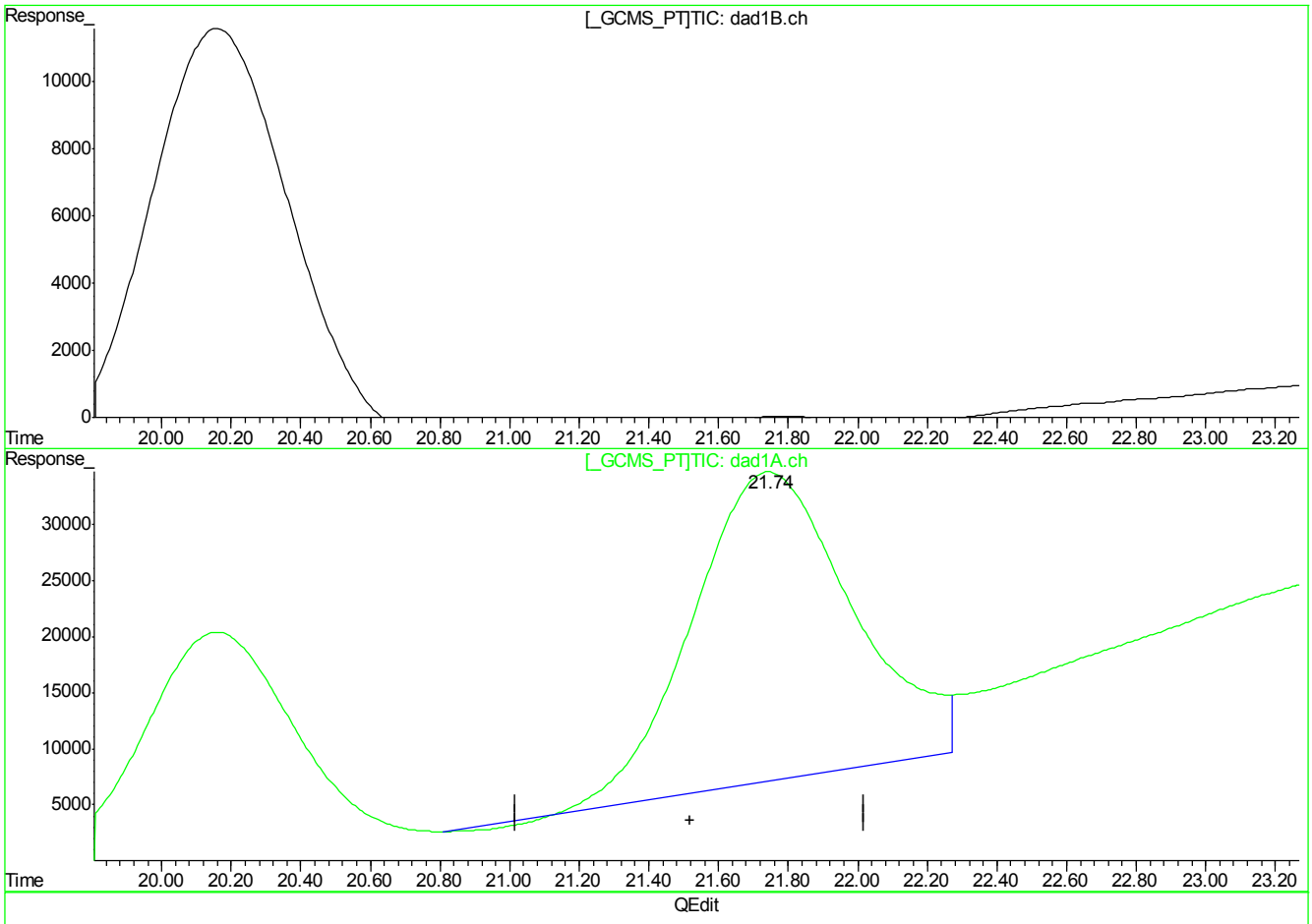
response 1743690

(+) = Expected Retention Time
GG614542.D 8330RPB.M_1113M.M Thu May 03 14:28:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614542.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0503RPB3\GG614542.D\dad1A.ch
Acq On : 03-May-2018, 13:46:56 Operator: evitam
Sample : op69838-ms Inst : G1315B
Misc : op69838,Ggg2624,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.75min 2718.203ppb

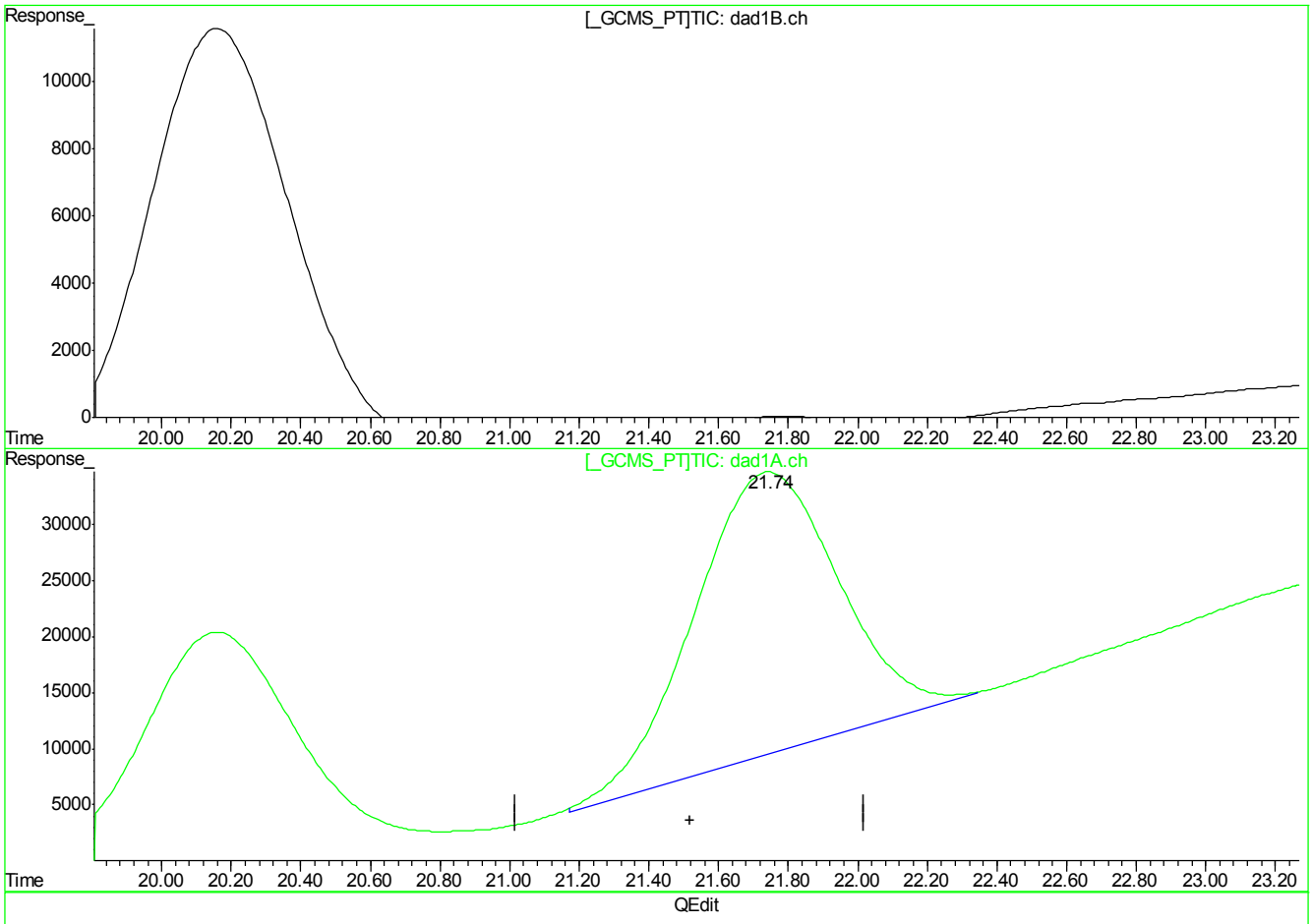
response 8718377

(+) = Expected Retention Time
GG614542.D 8330RPB.M_1113M.M Thu May 03 14:28:27 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614542.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0503RPB3\GG614542.D\dad1A.ch
Acq On : 03-May-2018, 13:46:56 Operator: evitam
Sample : op69838-ms Inst : G1315B
Misc : op69838,Ggg2624,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.74min 2260.579ppb m

response 7250594

(+) = Expected Retention Time
GG614542.D 8330RPB.M_1113M.M Thu May 03 14:28:30 2018

7.5.1.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614543.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0503RPB3\GG614543.D\dad1A.ch
Acq On : 03-May-2018, 14:16:25 Operator: evitam
Sample : op69838-msd Inst : G1315B
Misc : op69838,Ggg2624,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 03 14:59:54 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.26	14.25	2404941	5162370	462.944	477.218
	Spiked Amount 500.000	Range 69 - 134		Recovery =		92.59%	95.44%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1753911	1766108	541.015m	548.182m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.45	7.45	4101358	4147934	395.823	400.359
6)	RDX	7.90	7.90	2230799	2460500	468.245	518.748
7)	1,3-Dinitrobenze	9.93	9.93	5956503	4867013	416.339	378.682
8)	Nitrobenzene	10.89	10.89	3997007	4447077	423.528	480.199
9)	2,4,6-Trinitroto	11.66	11.66	4227699	6497426	417.167	495.425
10)	Nitroglycerin	0.00	12.41	0	8460204	N.D. d	2510.635
11)	Tetryl	12.93	12.93	3467704	6725003	427.907	477.484
13)	2,6-Dinitrotolue	14.62	14.61	3283596	4687811	459.270	462.033
14)	2,4-Dinitrotolue	15.33	15.33	5506174	4132419	420.028	433.915
15)	o-Nitrotoluene	16.86	16.86	2606785	3692765	451.267	428.215
16)	3,5-Dinitroanili	16.27	16.27	4493792	7432162	459.748	457.912
17)	p-Nitrotoluene	18.01	18.02	4679554	8322225	398.519	392.684
18)	4-Amino-2,6-Dini	18.01	18.02	4679554	8322225	398.519	391.542
19)	m-Nitrotoluene	19.23	19.23	2603020	4260222	441.536	438.096
20)	2-Amino-4,6-Dini	20.18	20.18	3671764	5224749	406.937	441.247
21)	PETN	0.00	21.78	0	6933654	N.D. d	2161.764m

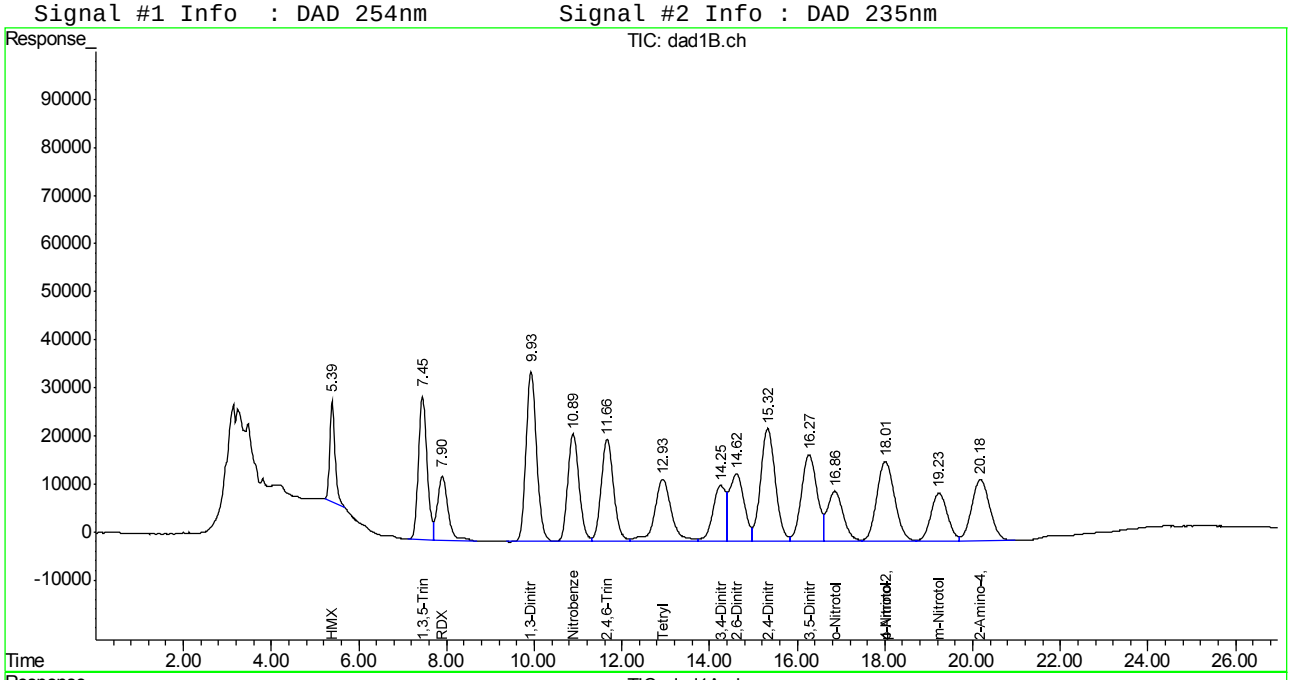
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614543.D 8330RPB.M_1113M.M Fri May 04 09:33:12 2018 Page 1

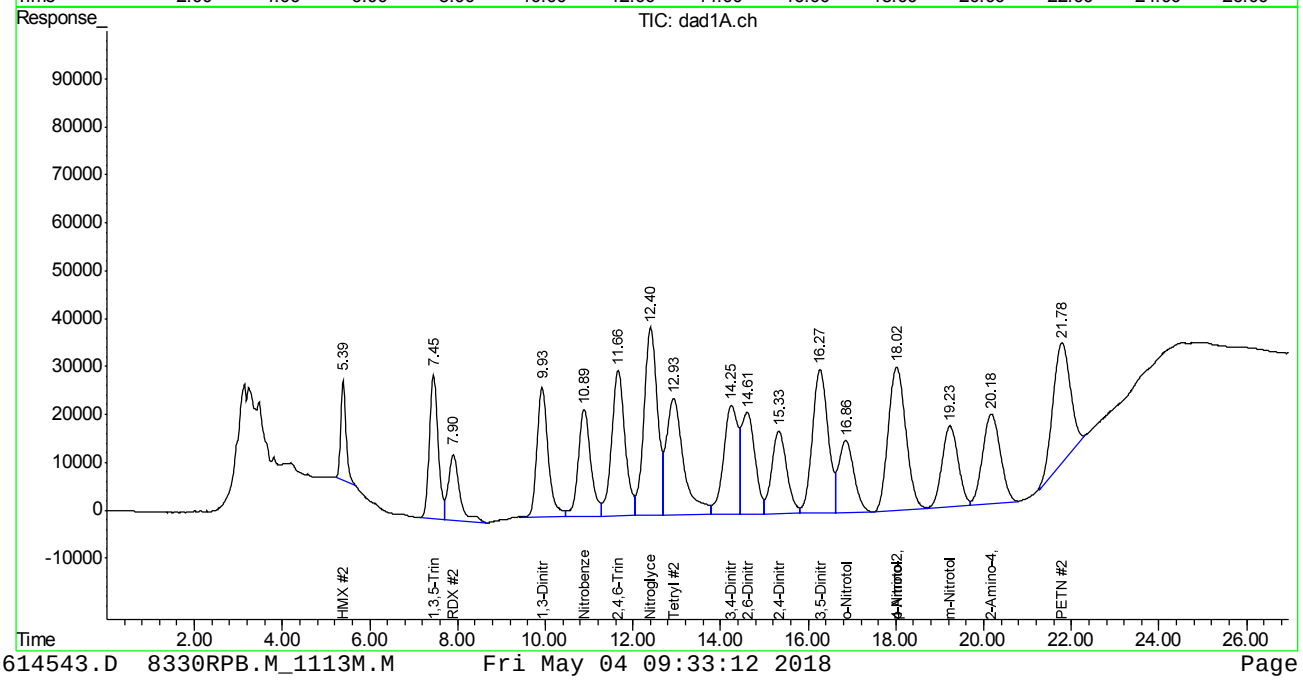
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614543.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0503RPB3\GG614543.D\dad1A.ch
Acq On : 03-May-2018, 14:16:25 Operator: evitam
Sample : op69838-msd Inst : G1315B
Misc : op69838,Ggg2624,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 15:00 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

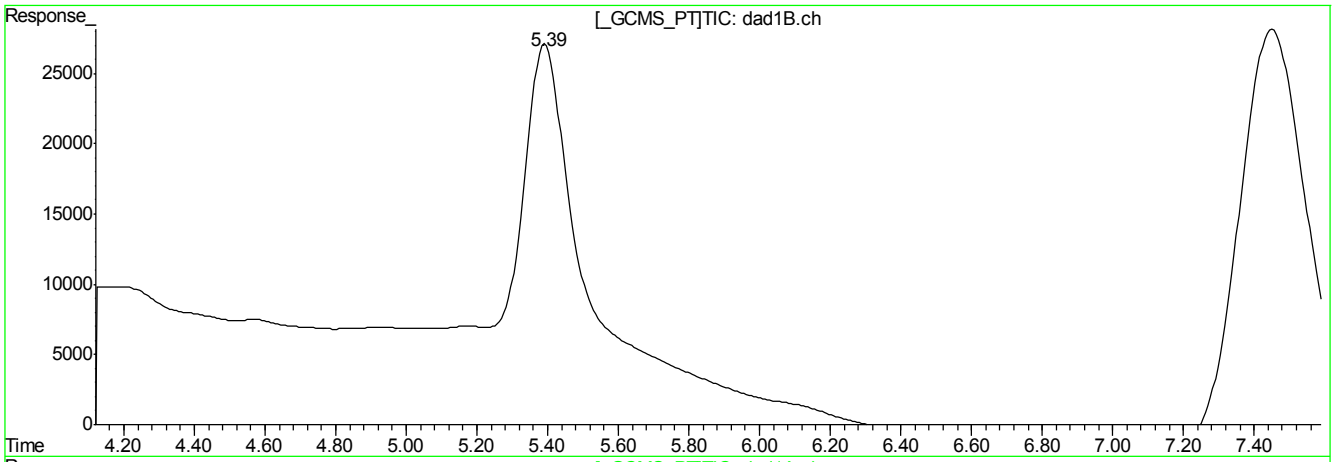
Sample Number:	OP69838-MSD	**Method:**	SW846 8330B
Lab FileID:	GG614543.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 14:16	**Supervisor approved:**	05/04/18 14:20 Mike Eger

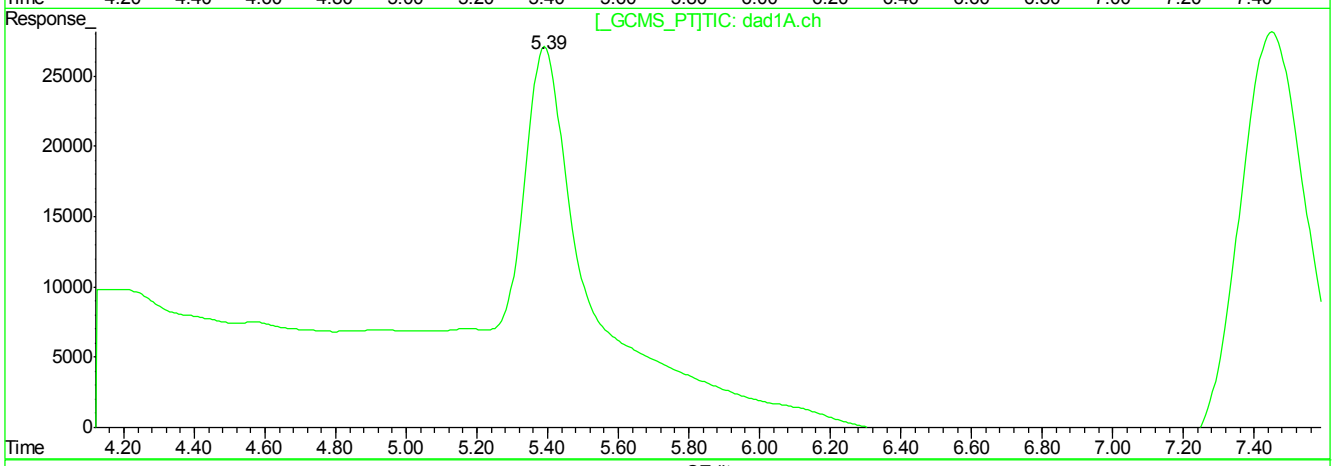
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
PETN	78-11-5	2	21.78	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614543.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0503RPB3\GG614543.D\dad1A.ch
Acq On : 03-May-2018, 14:16:25 Operator: evitam
Sample : op69838-msd Inst : G1315B
Misc : op69838,Ggg2624,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:58 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.39min 630.733ppb

response 2044764

(2) HMX #2

5.39min 634.674ppb

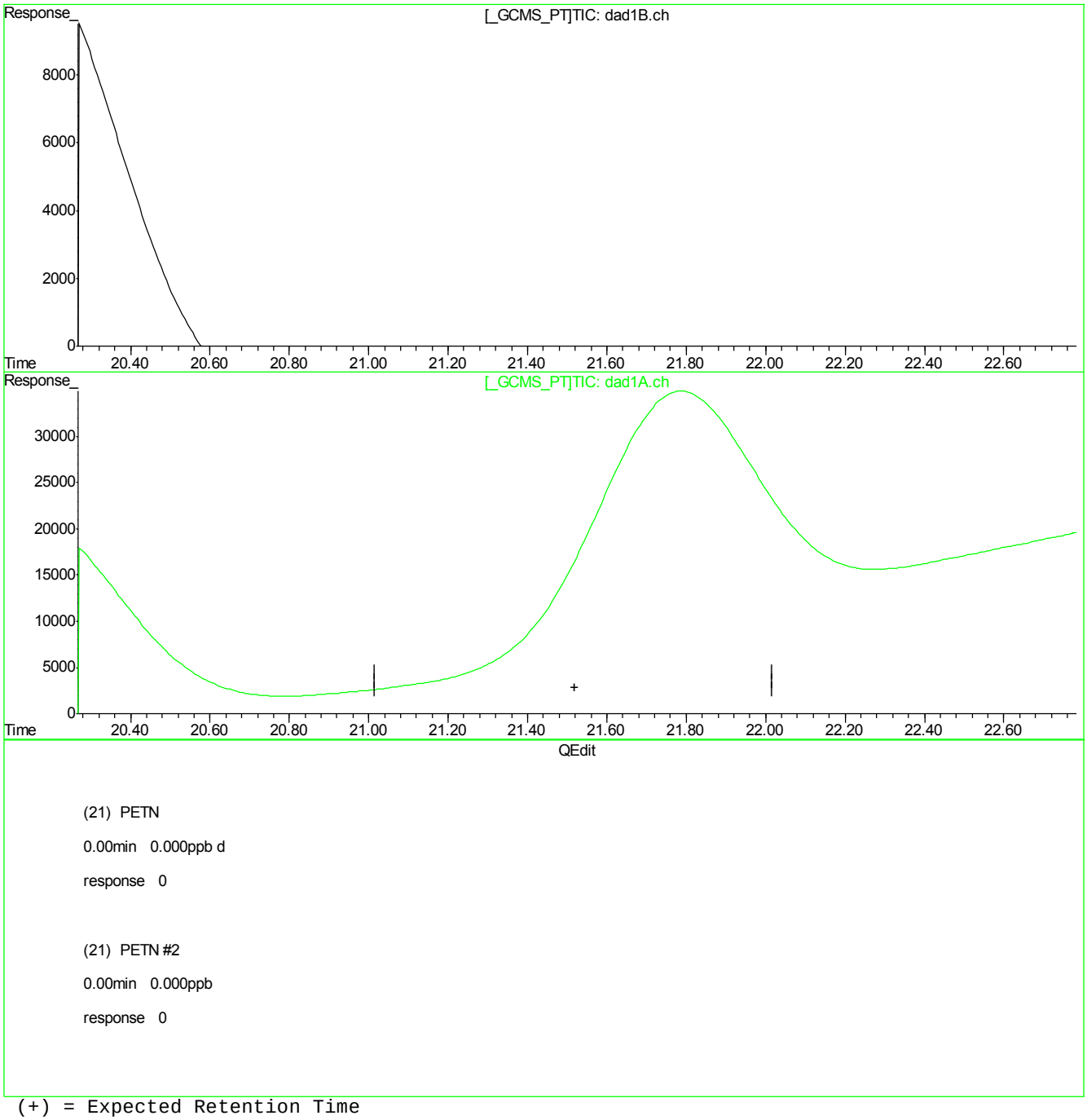
response 2044764

(+) = Expected Retention Time
GG614543.D 8330RPB.M_1113M.M Thu May 03 14:59:05 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614543.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0503RPB3\GG614543.D\dad1A.ch
Acq On : 03-May-2018, 14:16:25 Operator: evitam
Sample : op69838-msd Inst : G1315B
Misc : op69838,Ggg2624,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:58 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration

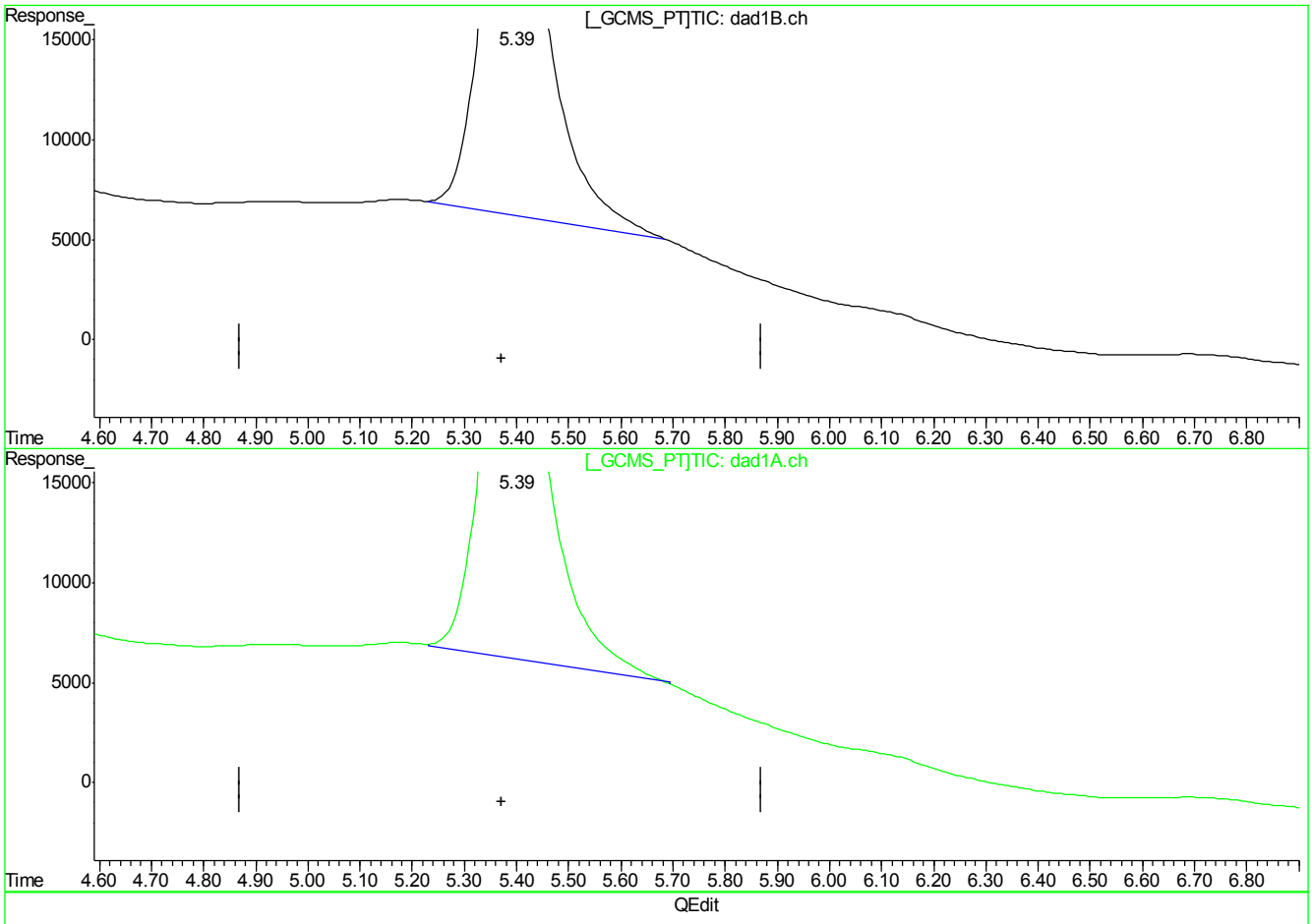


(+) = Expected Retention Time
GG614543.D 8330RPB.M_1113M.M Thu May 03 14:59:22 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614543.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0503RPB3\GG614543.D\dad1A.ch
Acq On : 03-May-2018, 14:16:25 Operator: evitam
Sample : op69838-msd Inst : G1315B
Misc : op69838,Ggg2624,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:59 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 541.015ppb m

response 1753911

(2) HMX #2

5.39min 548.182ppb m

response 1766108

(+) = Expected Retention Time
GG614543.D 8330RPB.M_1113M.M Thu May 03 15:00:05 2018

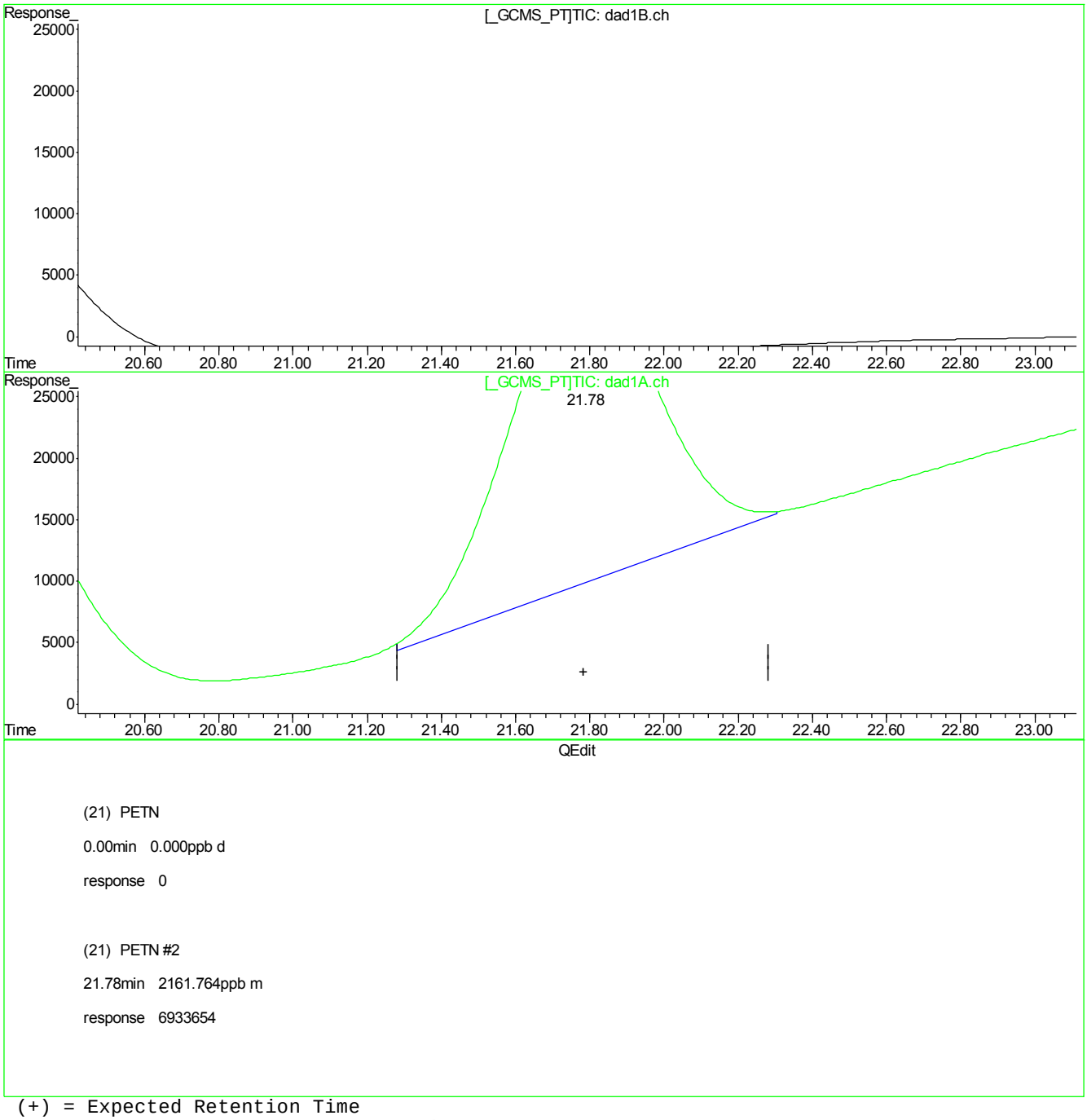
7.5.2.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614543.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0503RPB3\GG614543.D\dad1A.ch
Acq On : 03-May-2018, 14:16:25 Operator: evitam
Sample : op69838-msd Inst : G1315B
Misc : op69838,Ggg2624,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 14:59 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614543.D 8330RPB.M_1113M.M Thu May 03 15:00:14 2018

7.5.2.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:25

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614550.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0503RPB3\GG614550.D\dad1A.ch
Acq On : 03-May-2018, 17:42:43 Operator: evitam
Sample : op69838-dup Inst : G1315B
Misc : op69838,Ggg2624,10.18,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:11:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.26	14.26	2582252	5070246	497.076	468.702m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		99.42%	93.74%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

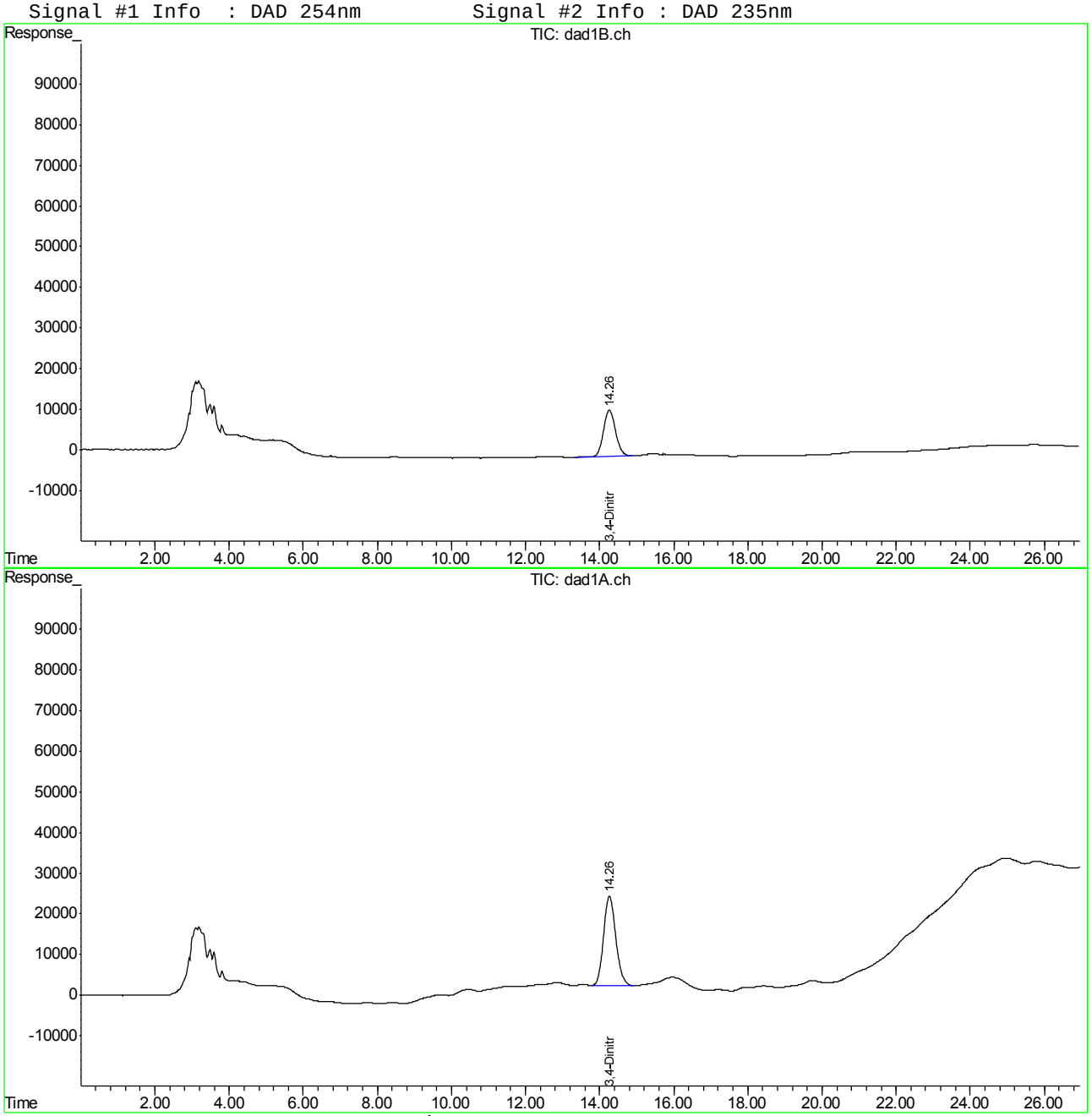
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614550.D 8330RPB.M_1113M.M Fri May 04 09:42:53 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614550.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0503RPB3\GG614550.D\dad1A.ch
Acq On : 03-May-2018, 17:42:43 Operator: evitam
Sample : op69838-dup Inst : G1315B
Misc : op69838,Ggg2624,10.18,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614550.D 8330RPB.M_1113M.M Fri May 04 09:42:53 2018 Page 2

Manual Integration Approval Summary

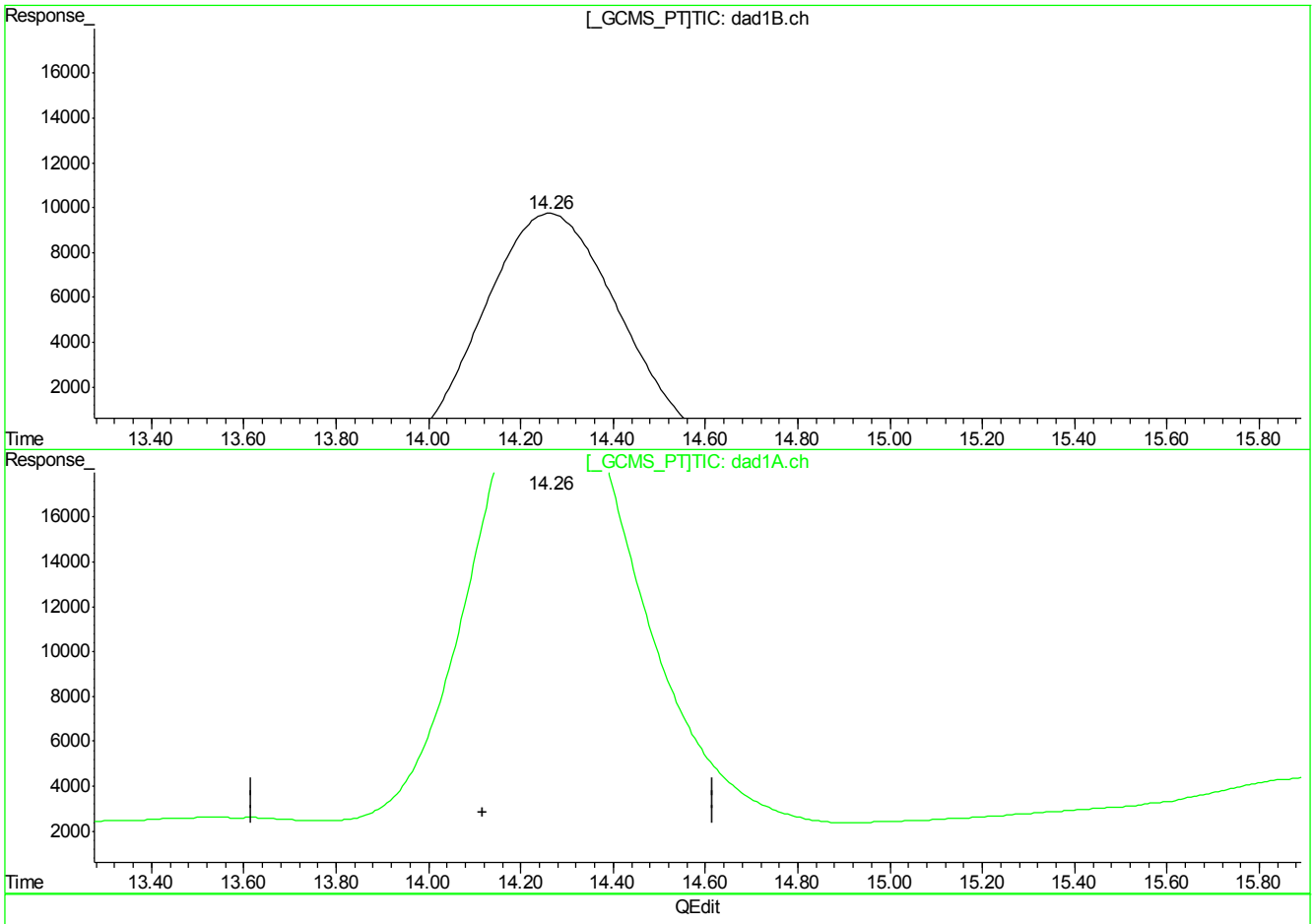
Sample Number:	OP69838-DUP	**Method:**	SW846 8330B
Lab FileID:	GG614550.D	**Analyst approved:**	05/04/18 14:25 Mike Eger
Injection Time:	05/03/18 17:42	**Supervisor approved:**	05/04/18 14:25 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.26	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614550.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0503RPB3\GG614550.D\dad1A.ch
Acq On : 03-May-2018, 17:42:43 Operator: evitam
Sample : op69838-dup Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.26min 497.076ppb

response 2582252

(12) 3,4-Dinitrotoluene #2 (S)

14.26min 620.155ppb

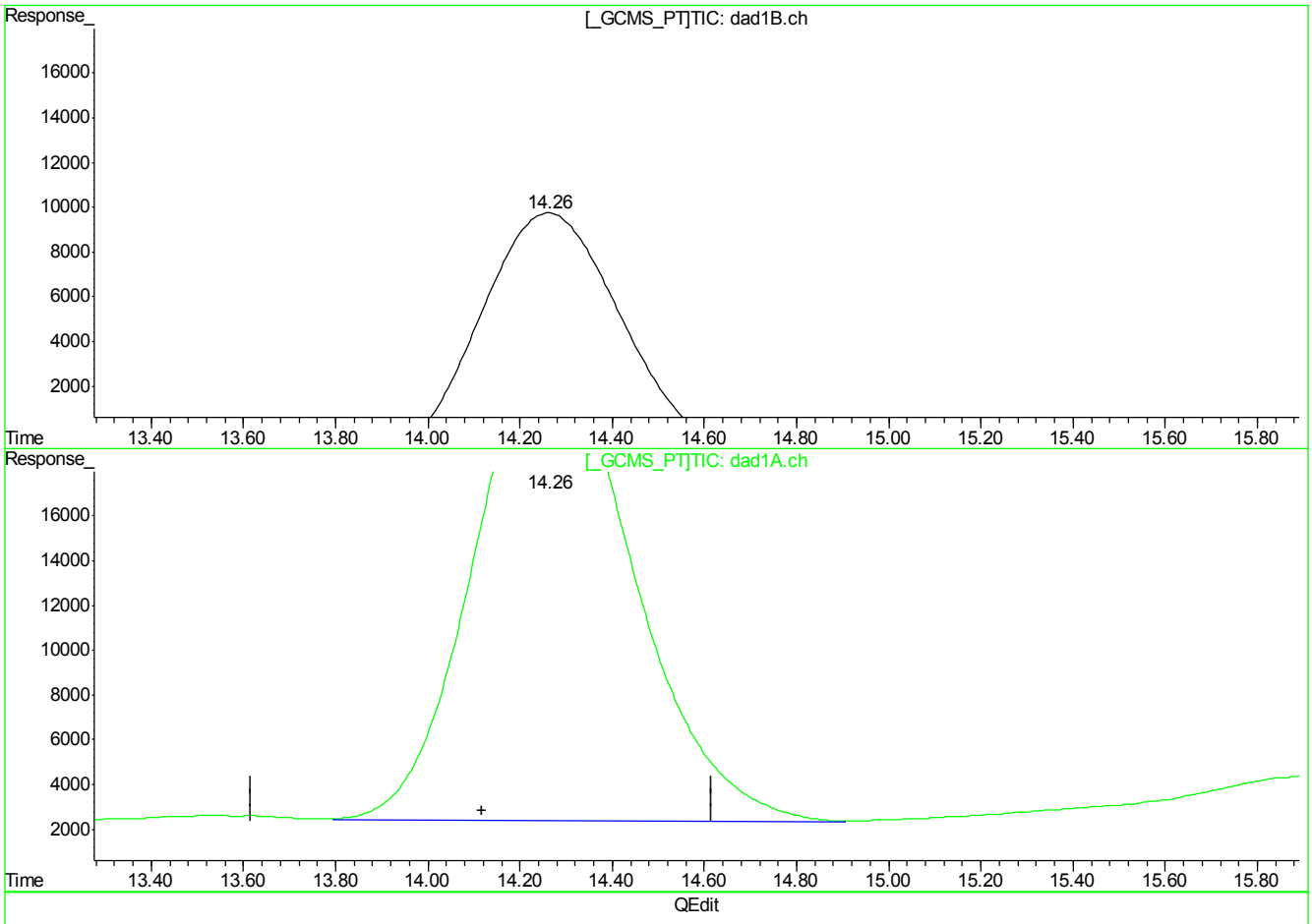
response 6708607

(+) = Expected Retention Time
GG614550.D 8330RPB.M_1113M.M Fri May 04 09:19:25 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614550.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0503RPB3\GG614550.D\dad1A.ch
Acq On : 03-May-2018, 17:42:43 Operator: evitam
Sample : op69838-dup Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.26min 497.076ppb

response 2582252

(12) 3,4-Dinitrotoluene #2 (S)

14.26min 468.702ppb m

response 5070246

(+) = Expected Retention Time
GG614550.D 8330RPB.M_1113M.M Fri May 04 09:19:28 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/04/18 14:25

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614551.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0503RPB3\GG614551.D\dad1A.ch
Acq On : 03-May-2018, 18:12:13 Operator: evitam
Sample : op69838-dup2 Inst : G1315B
Misc : op69838,Ggg2624,10.18,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:11:52 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.23	2576847	5135501	496.035	474.734m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		99.21%	94.95%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

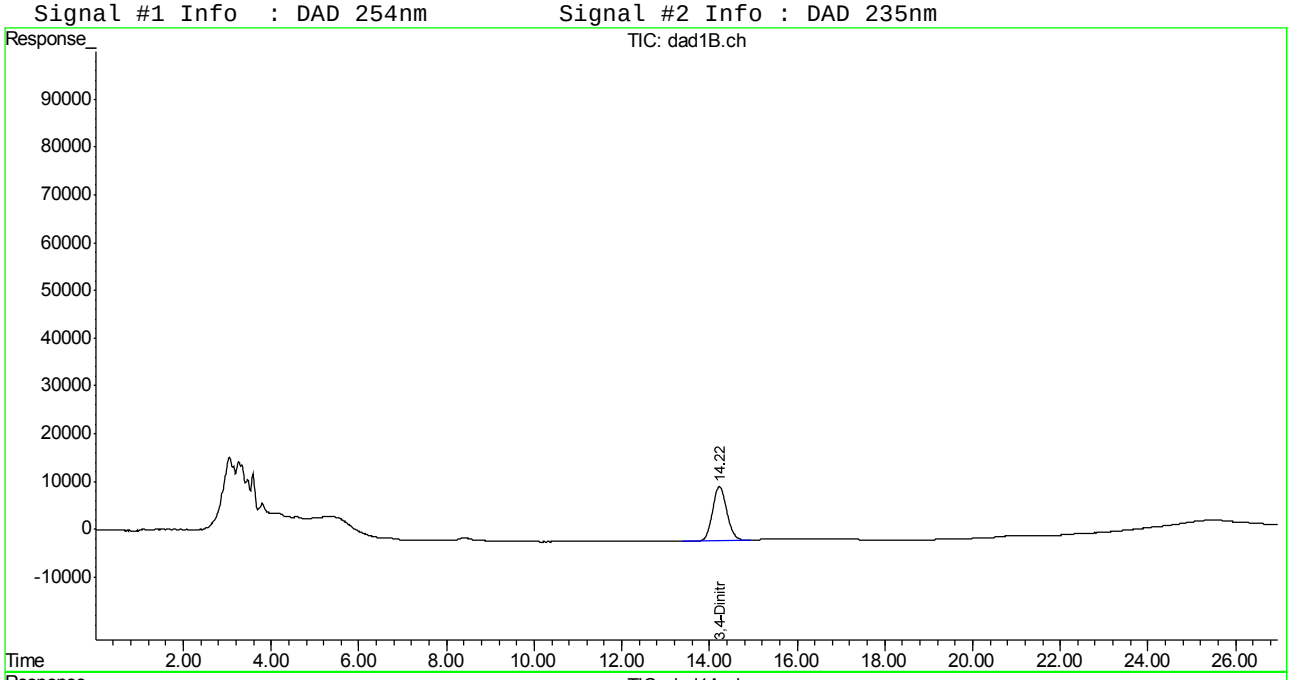
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614551.D 8330RPB.M_1113M.M Fri May 04 09:33:19 2018 Page 1

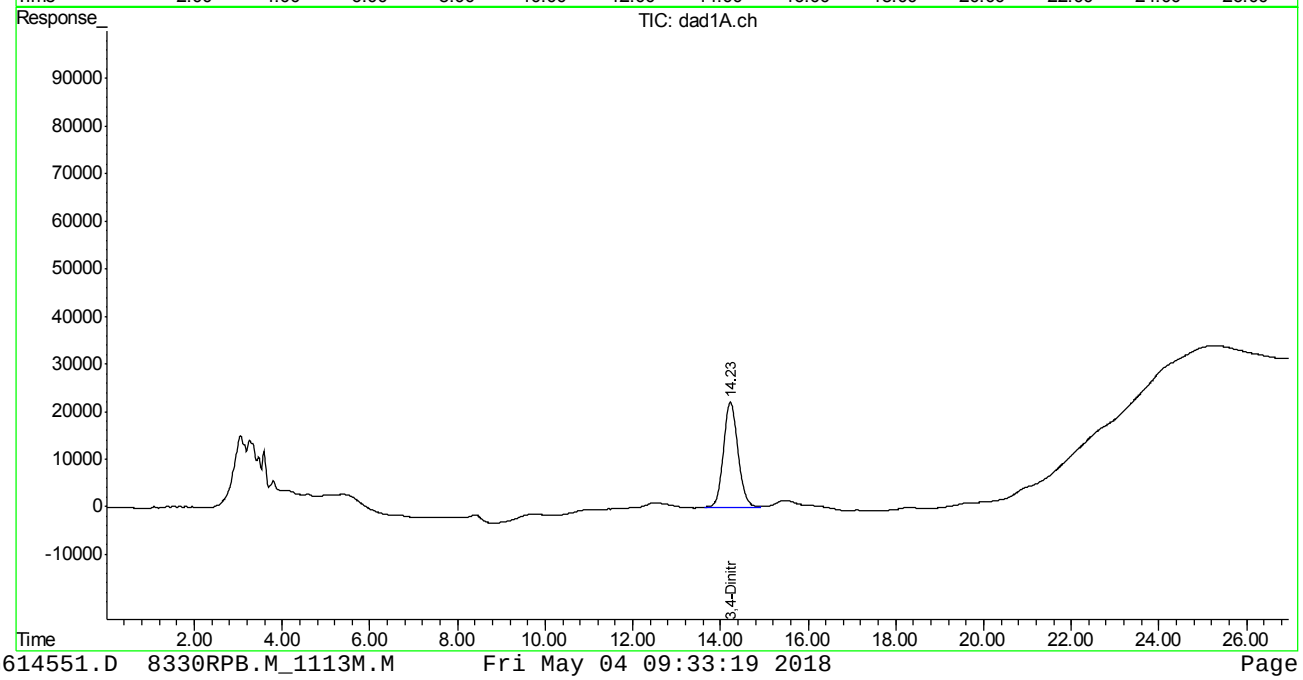
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614551.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0503RPB3\GG614551.D\dad1A.ch
Acq On : 03-May-2018, 18:12:13 Operator: evitam
Sample : op69838-dup2 Inst : G1315B
Misc : op69838,Ggg2624,10.18,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 14:59:47 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

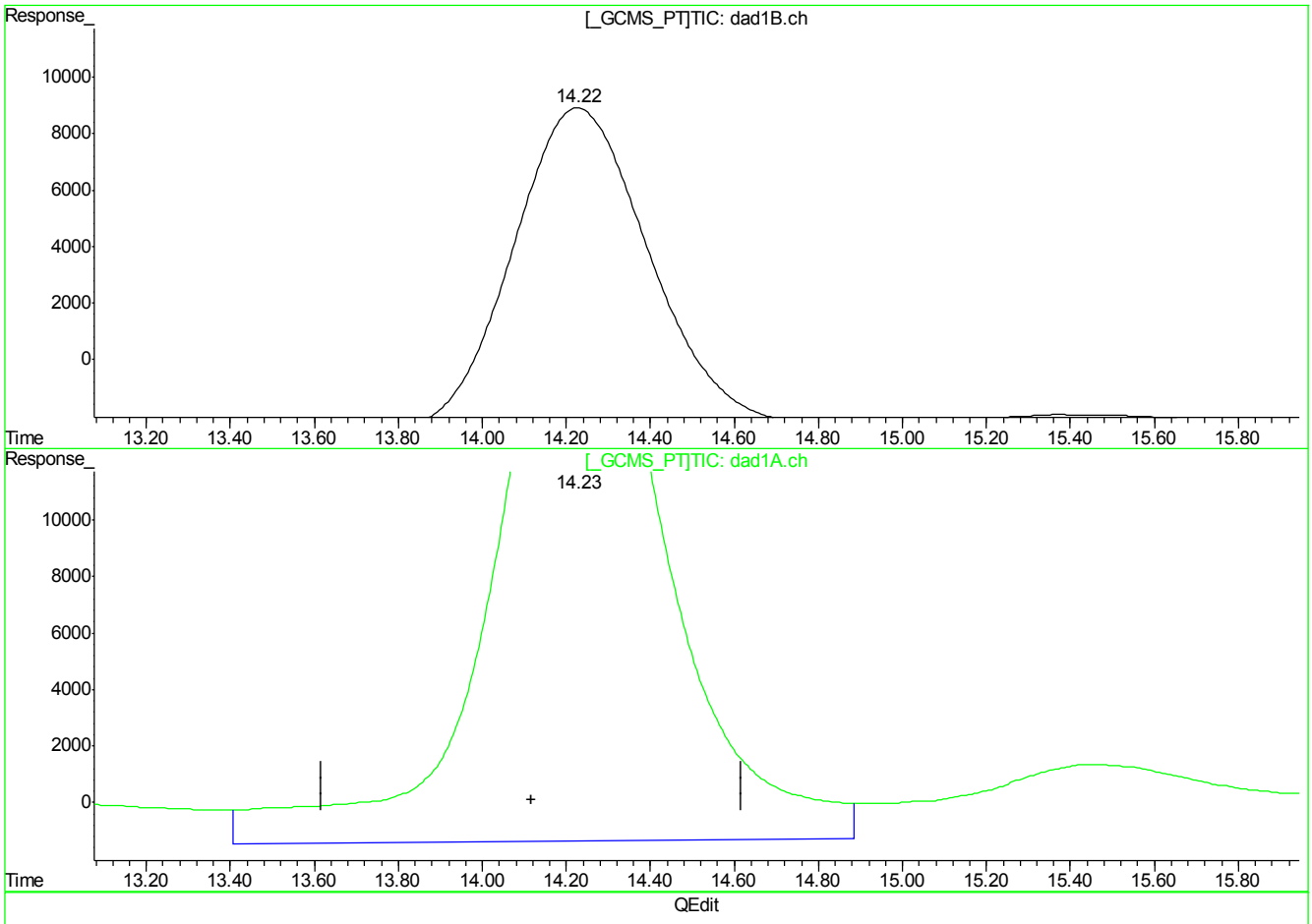
Sample Number:	OP69838-DUP2	**Method:**	SW846 8330B
Lab FileID:	GG614551.D	**Analyst approved:**	05/04/18 14:25 Mike Eger
Injection Time:	05/03/18 18:12	**Supervisor approved:**	05/04/18 14:25 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.23	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614551.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0503RPB3\GG614551.D\dad1A.ch
Acq On : 03-May-2018, 18:12:13 Operator: evitam
Sample : op69838-dup2 Inst : G1315B
Misc : op69838,Ggg2624,10.18,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 496.035ppb

response 2576847

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 571.754ppb

response 6185023

(+) = Expected Retention Time
GG614551.D 8330RPB.M_1113M.M Fri May 04 09:19:47 2018

7.6.2.2

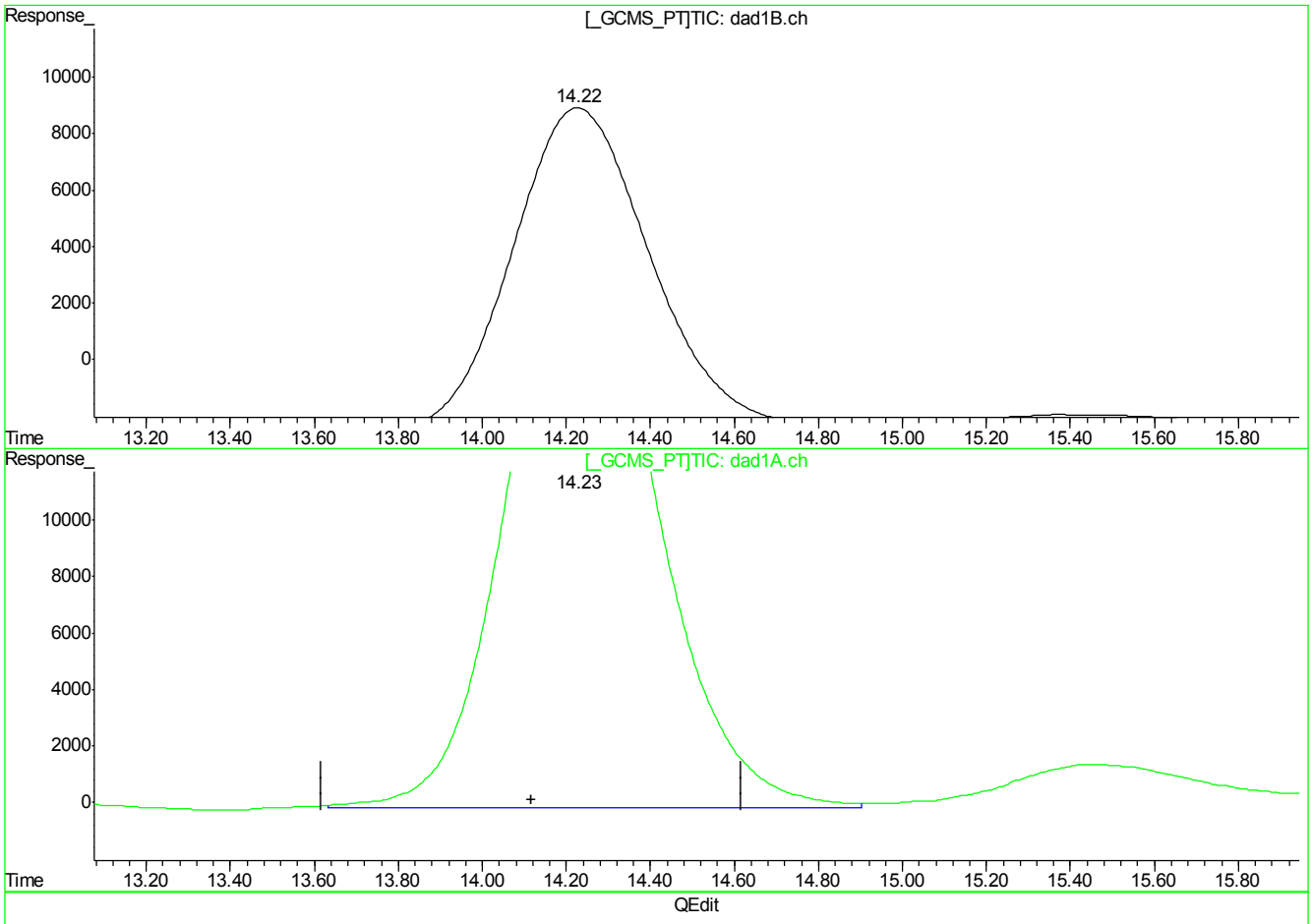
7

GG614551.D edits: 3,4-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614551.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0503RPB3\GG614551.D\dad1A.ch
Acq On : 03-May-2018, 18:12:13 Operator: evitam
Sample : op69838-dup2 Inst : G1315B
Misc : op69838,Ggg2624,10.18,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 496.035ppb

response 2576847

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 474.734ppb m

response 5135501

(+) = Expected Retention Time
GG614551.D 8330RPB.M_1113M.M Fri May 04 09:19:50 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:44 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.28	10.30	50941	95121	22.056	22.845m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	4.41%#	4.57%#
	Target Compounds						
1)	TNX	1.32	1.32	81134	121101	15.988	15.538
2)	HMX	1.44	1.44	31306	67296	16.059	12.805
3)	DNX	1.67	1.66	65656	83477	22.155m	17.466m
4)	MNX	2.21	2.20	59277	85161	19.065	18.169m
5)	RDX	2.78	2.78	45831	71397	19.752	19.064m
6)	1,3,5-Trinitrobe	4.41	4.41	100308	158806	20.299m	17.427m
7)	1,3-Dinitrobenze	5.59	5.60	102063	76764	16.722	19.482m
8)	3,5-Dinitroanili	5.88	5.89	94329	116035	20.575	14.714
9)	Nitrobenzene	7.10	7.09	75214	65624	19.715	18.304m
10)	Nitroglycerin	0.00	8.40	0	141549	N.D. d	106.959m
11)	Tetryl	8.63	8.68	93861	110112	29.498	21.477m
12)	2,4,6-Trinitroto	9.10	9.11	99127	75942	27.471	17.706m
13)	2-Amino-4,6-Dini	9.41	9.38	78176	111824	19.475	20.113m
14)	4-Amino-2,6-Dini	9.78	9.89	30840	86551	10.928	16.014m#
16)	2,4-Dinitrotolue	10.94	11.00	97322	51333	18.050	15.376m
17)	2,6-Dinitrotolue	11.43	11.44	74215	51922	22.573	13.240m#
18)	o-Nitrotoluene	14.67	14.68	47689	59648	19.100	16.353m
19)	p-Nitrotoluene	15.23	15.29	63838	42073	17.255m	13.295m
20)	m-Nitrotoluene	16.19	16.42	62788	64213	17.018m	14.807m
21)	PETN	0.00	18.50	0	151593	N.D. d	109.347m

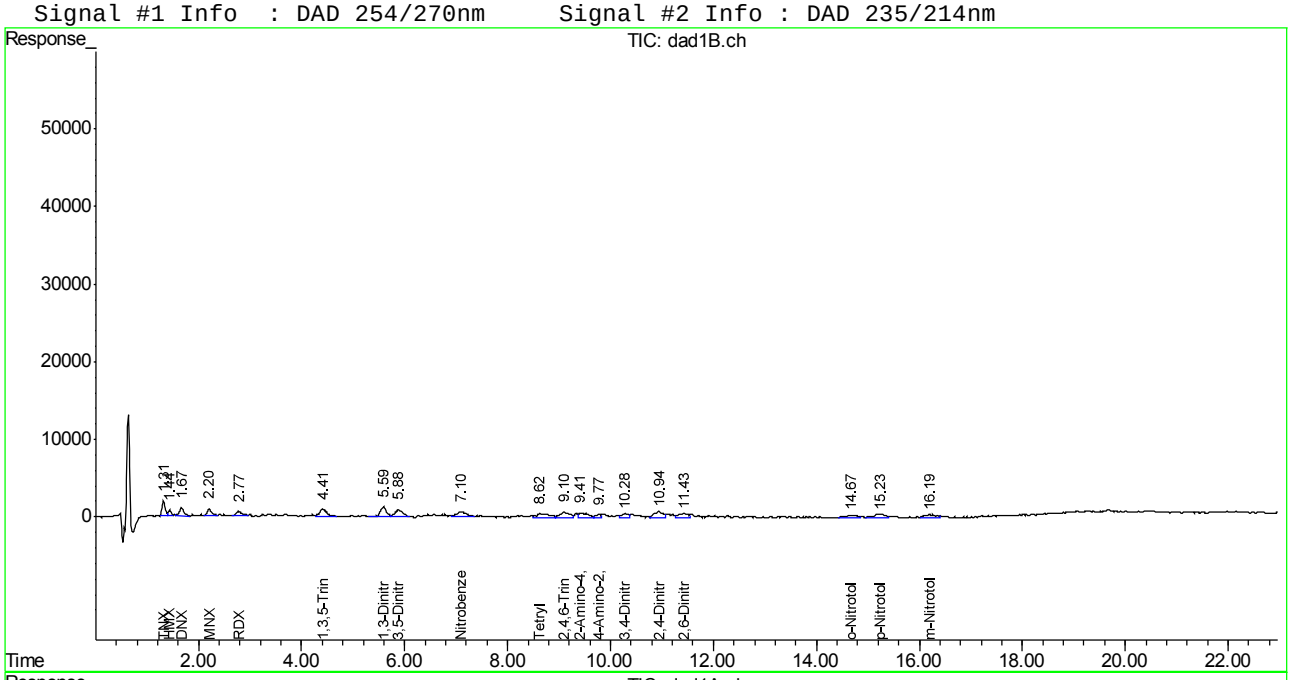
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059464.D 8330B_0419PLUS.M Fri Apr 20 08:01:18 2018 Page 1

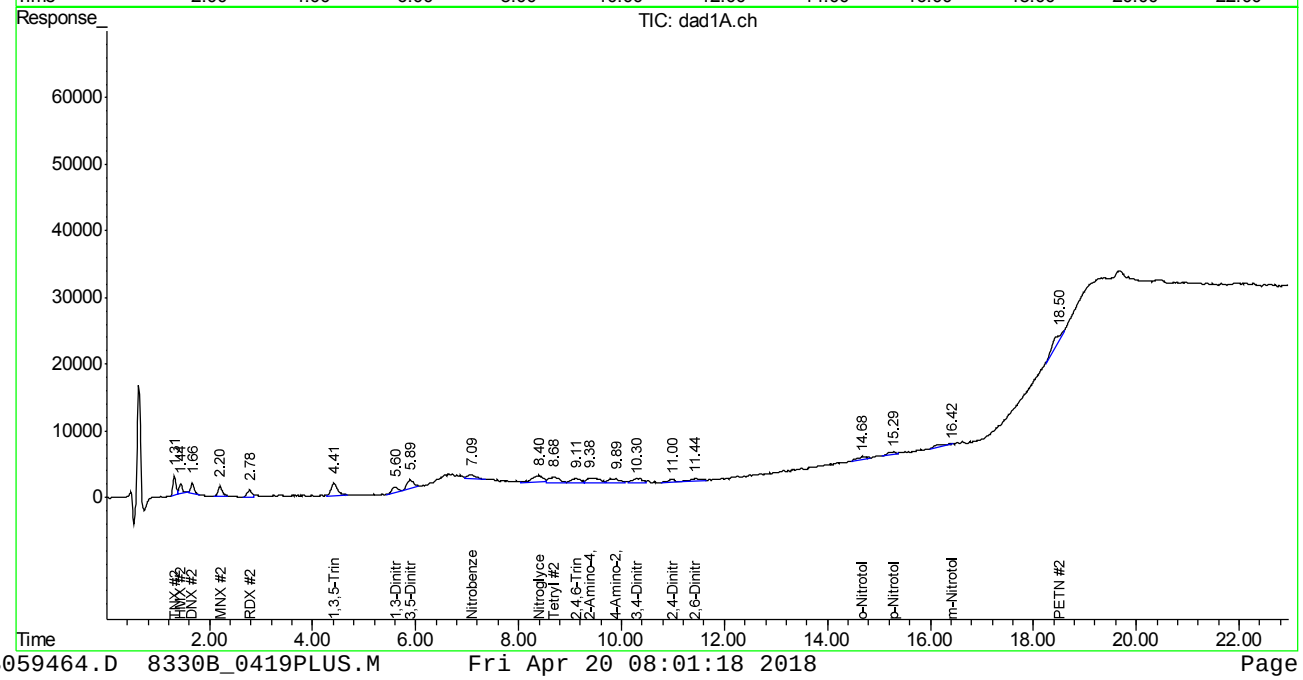
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:52 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

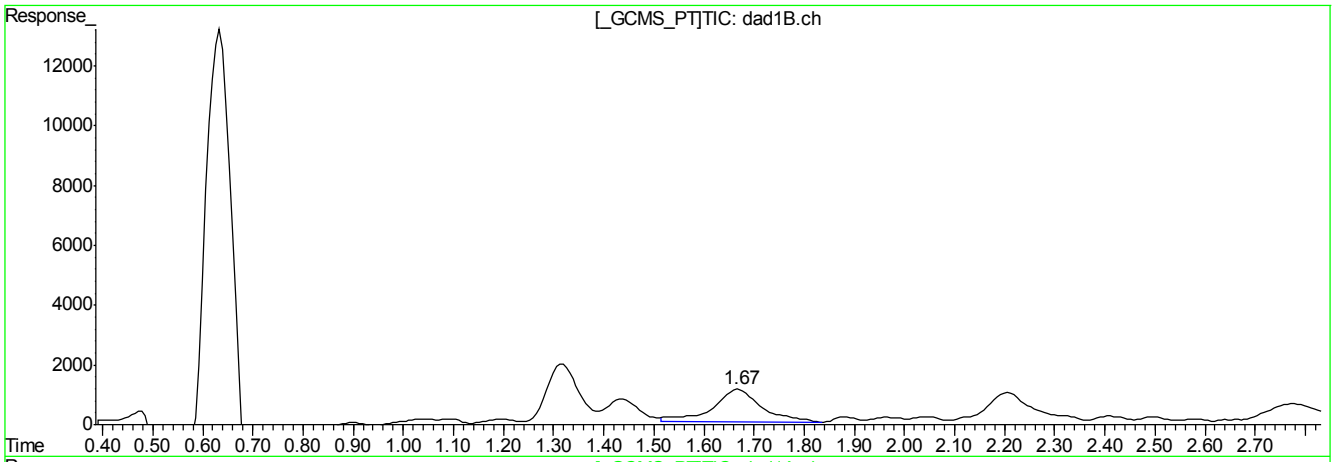
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059464.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 10:14	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

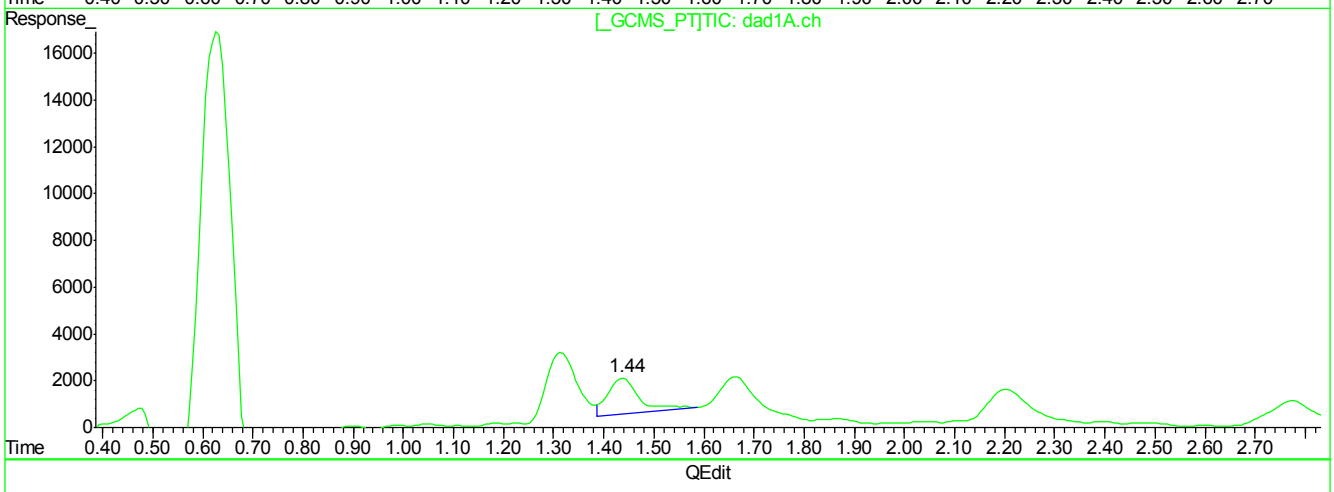
Parameter	CAS	Sig#	R.T. (min.)	Reason
DNX		2	1.66	Poorly defined baseline
DNX		1	1.67	Poorly defined baseline
MNX		2	2.20	Poorly defined baseline
RDX	121-82-4	2	2.78	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.41	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.41	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.09	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.40	Poorly defined baseline
Tetryl	479-45-8	2	8.68	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.11	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.38	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	9.89	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.30	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.00	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.44	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.68	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	15.23	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.29	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	16.19	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.42	Poorly defined baseline
PETN	78-11-5	2	18.50	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.67min 24.954ppb

response 73947

(3) DNX #2

1.44min 14.080ppb

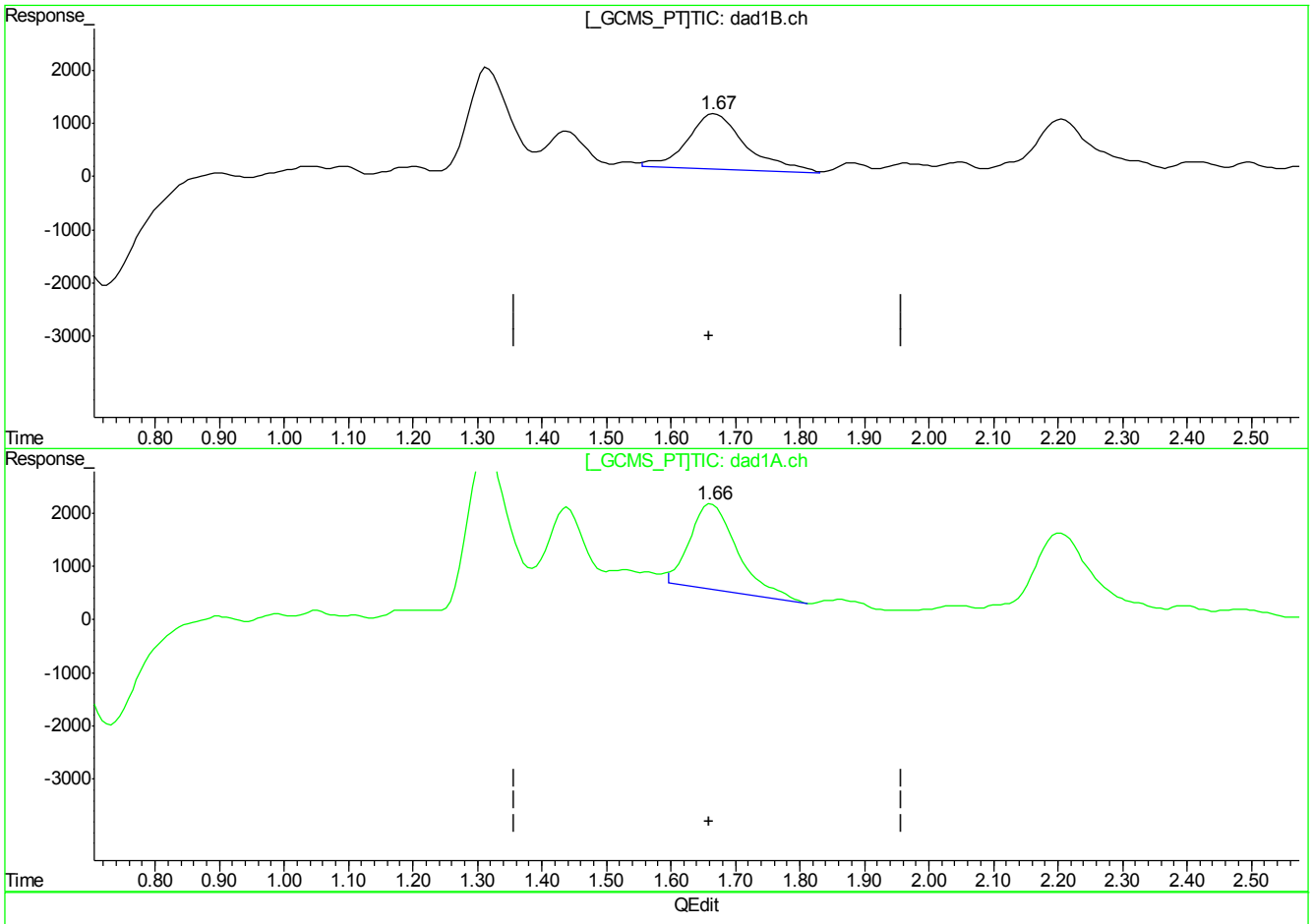
response 67296

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:48:46 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 22.155ppb m

response 65656

(3) DNX #2

1.66min 17.466ppb m

response 83477

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:48:56 2018

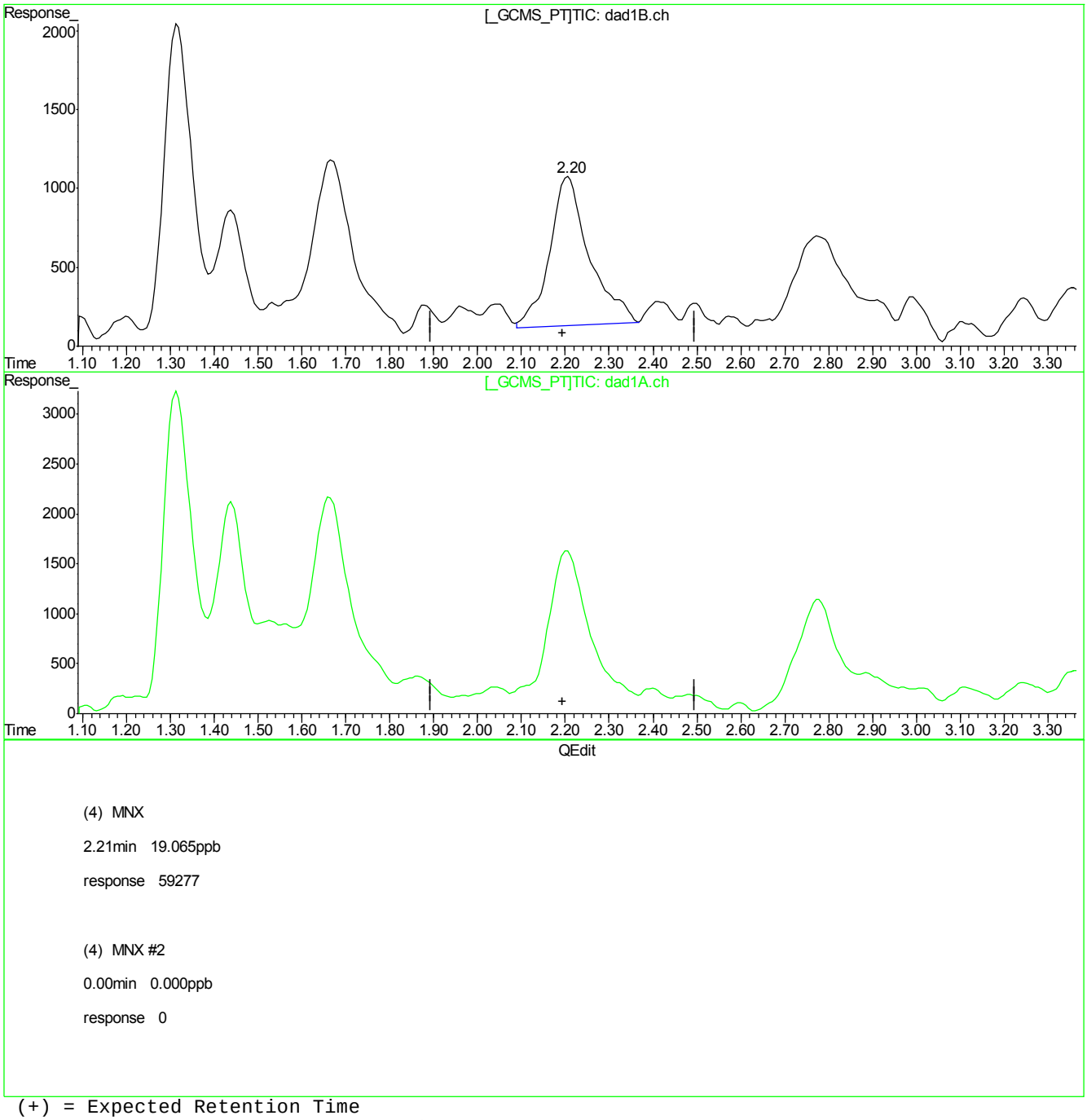
7.7.1.3

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:01 2018

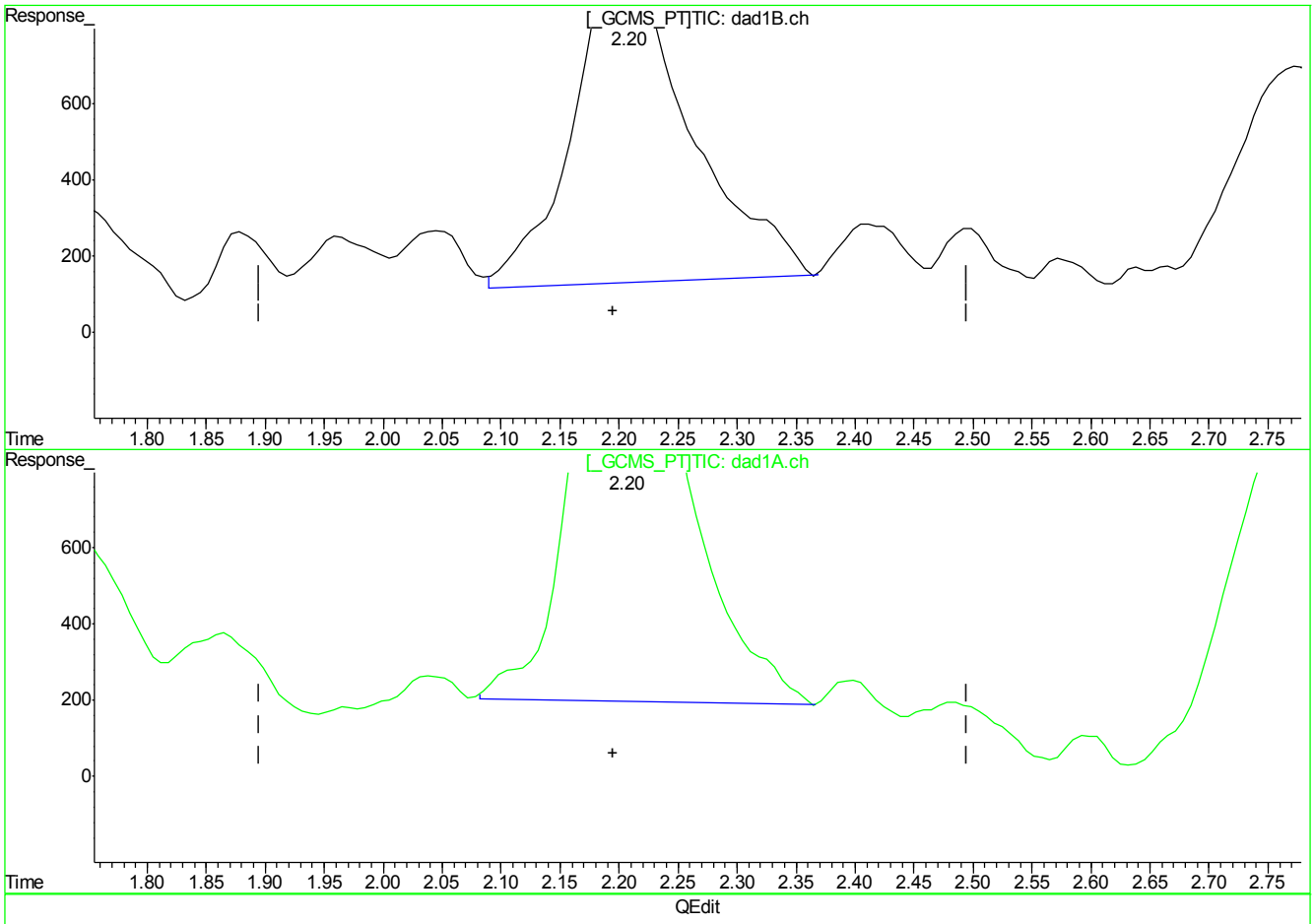
7.7.1.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(4) MNX

2.21min 19.065ppb

response 59277

(4) MNX #2

2.20min 18.169ppb m

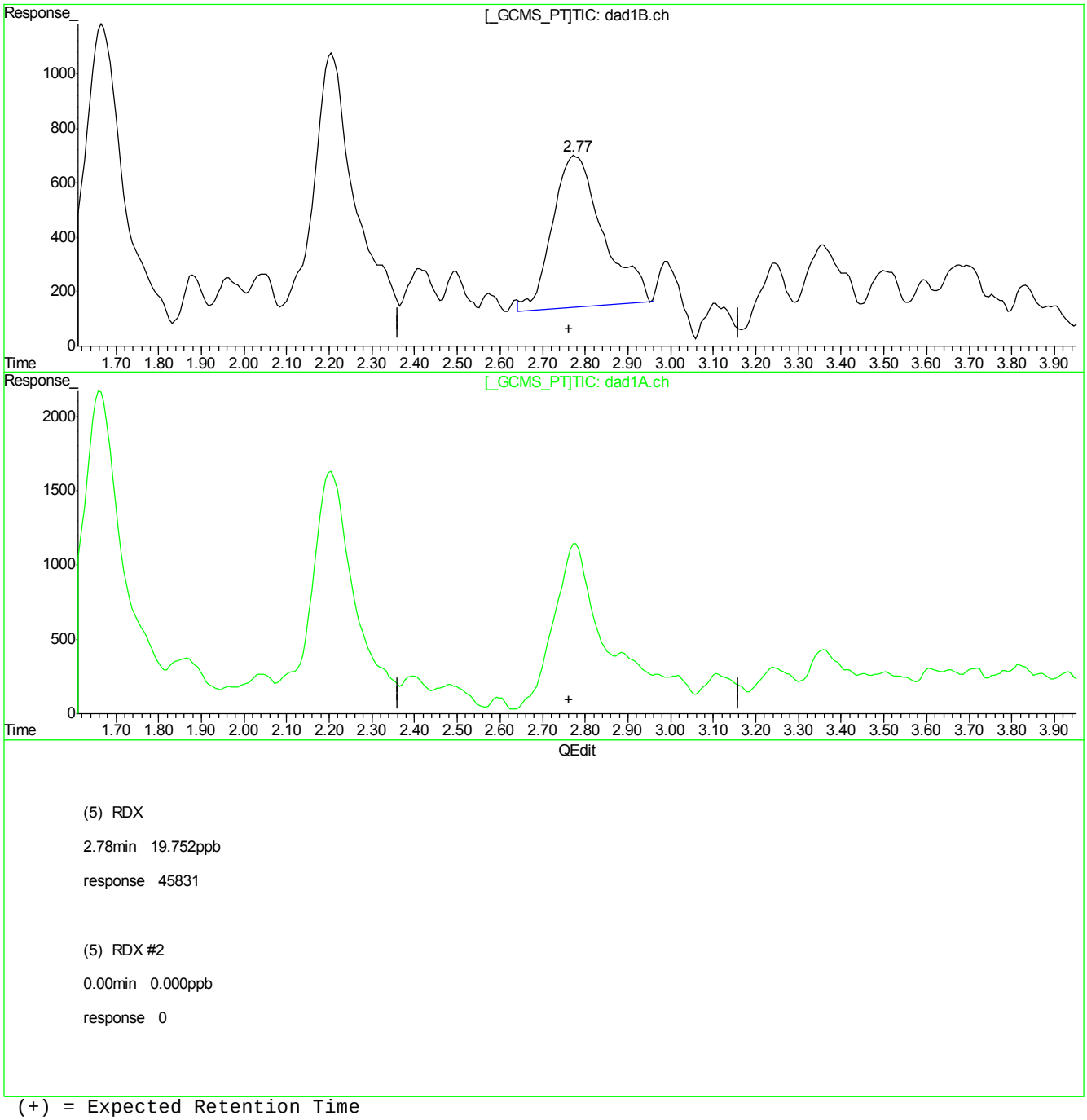
response 85161

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:06 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:09 2018

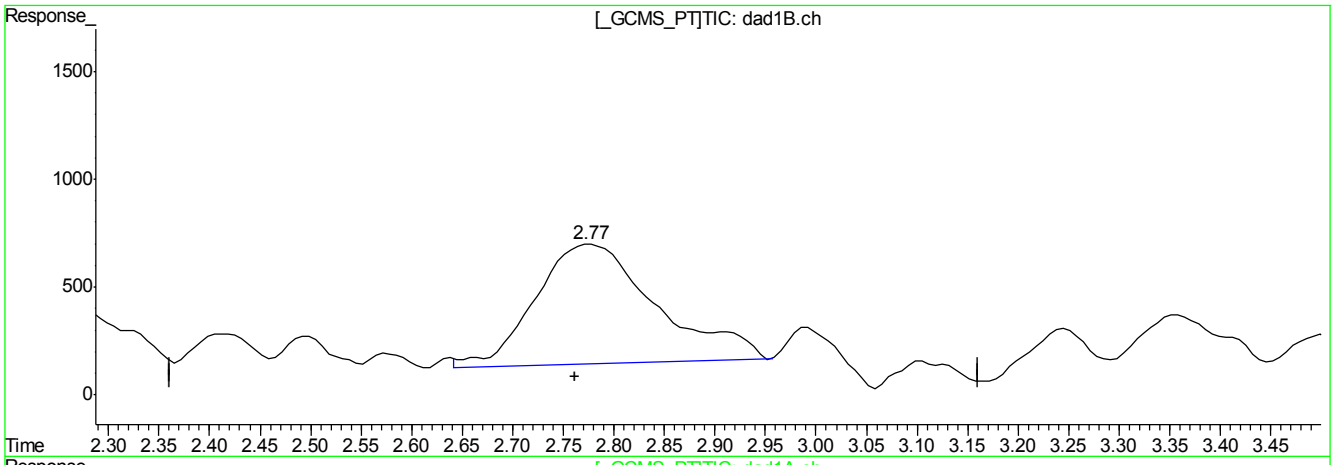
7.7.1.6

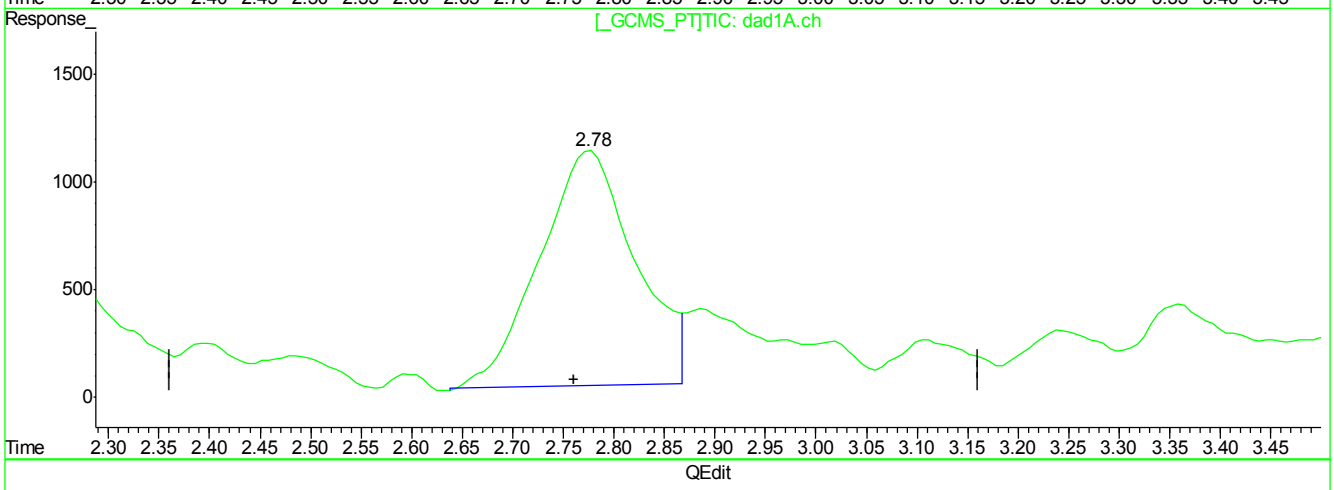
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration





QEdit

(5) RDX

2.78min 19.752ppb

response 45831

(5) RDX #2

2.78min 19.064ppb m

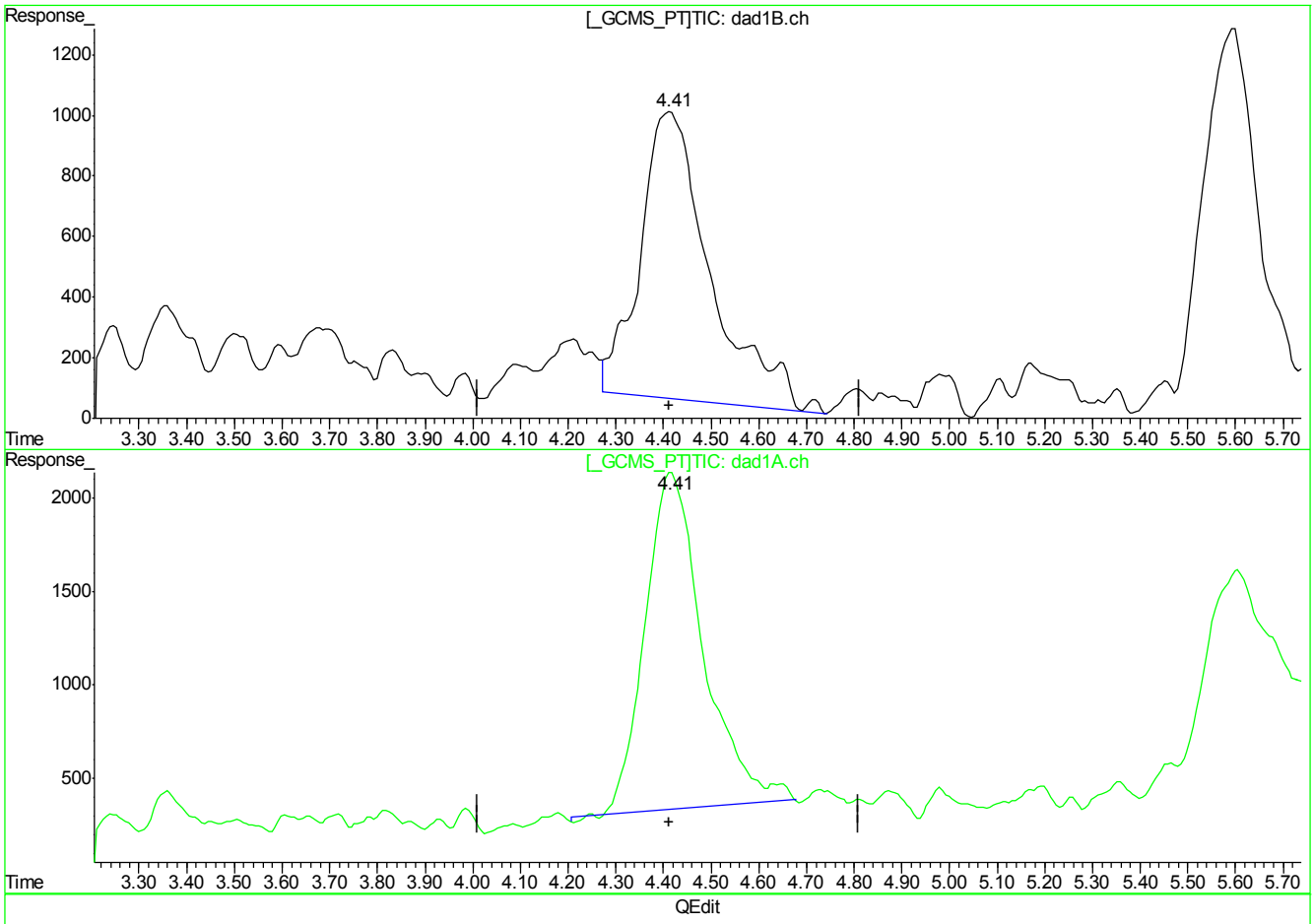
response 71397

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:12 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(6) 1,3,5-Trinitrobenzene

4.41min 19.710ppb

response 97395

(6) 1,3,5-Trinitrobenzene #2

4.42min 16.806ppb

response 153155

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:15 2018

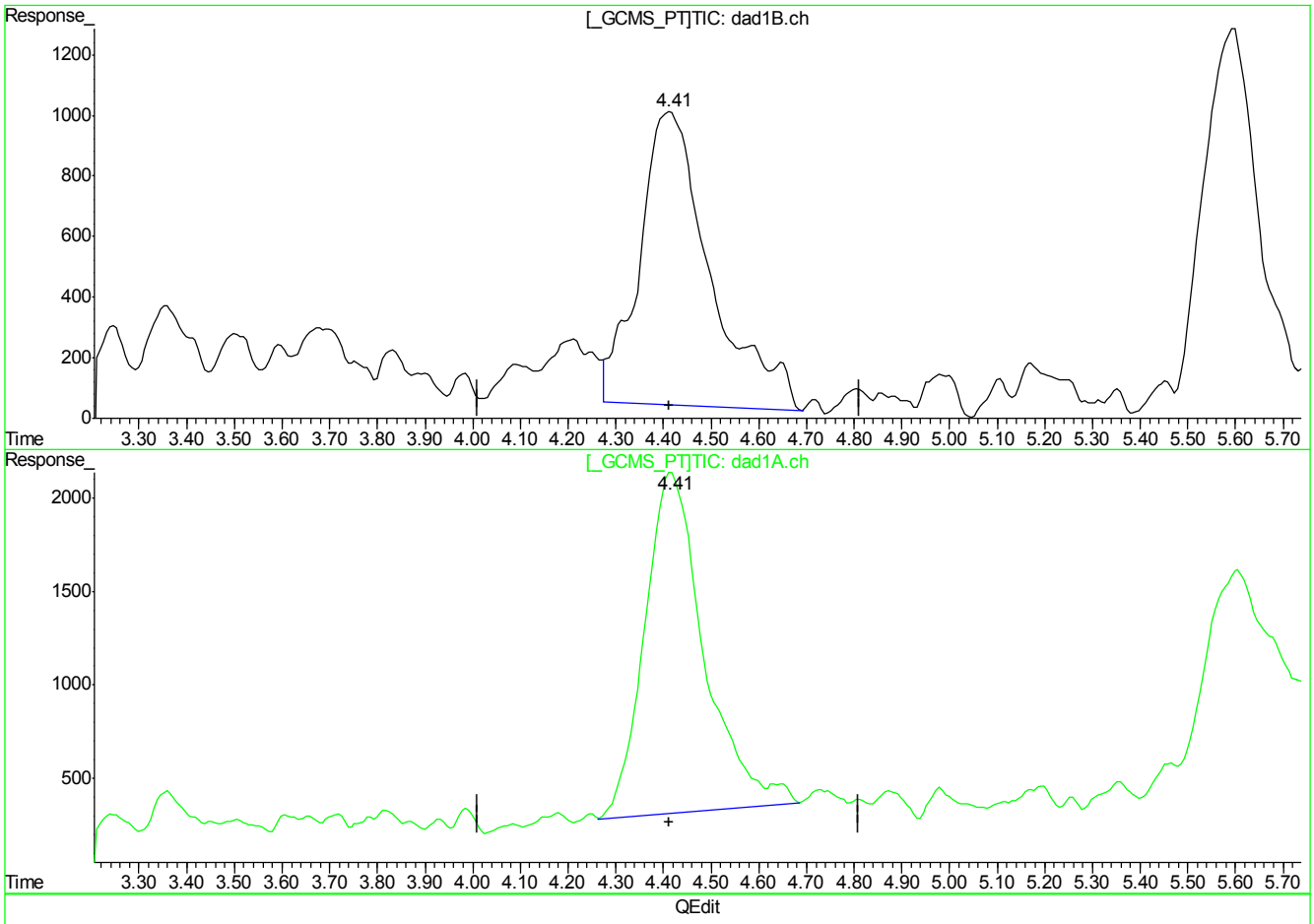
7.7.1.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(6) 1,3,5-Trinitrobenzene

4.41min 20.299ppb m

response 100308

(6) 1,3,5-Trinitrobenzene #2

4.41min 17.427ppb m

response 158806

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:23 2018

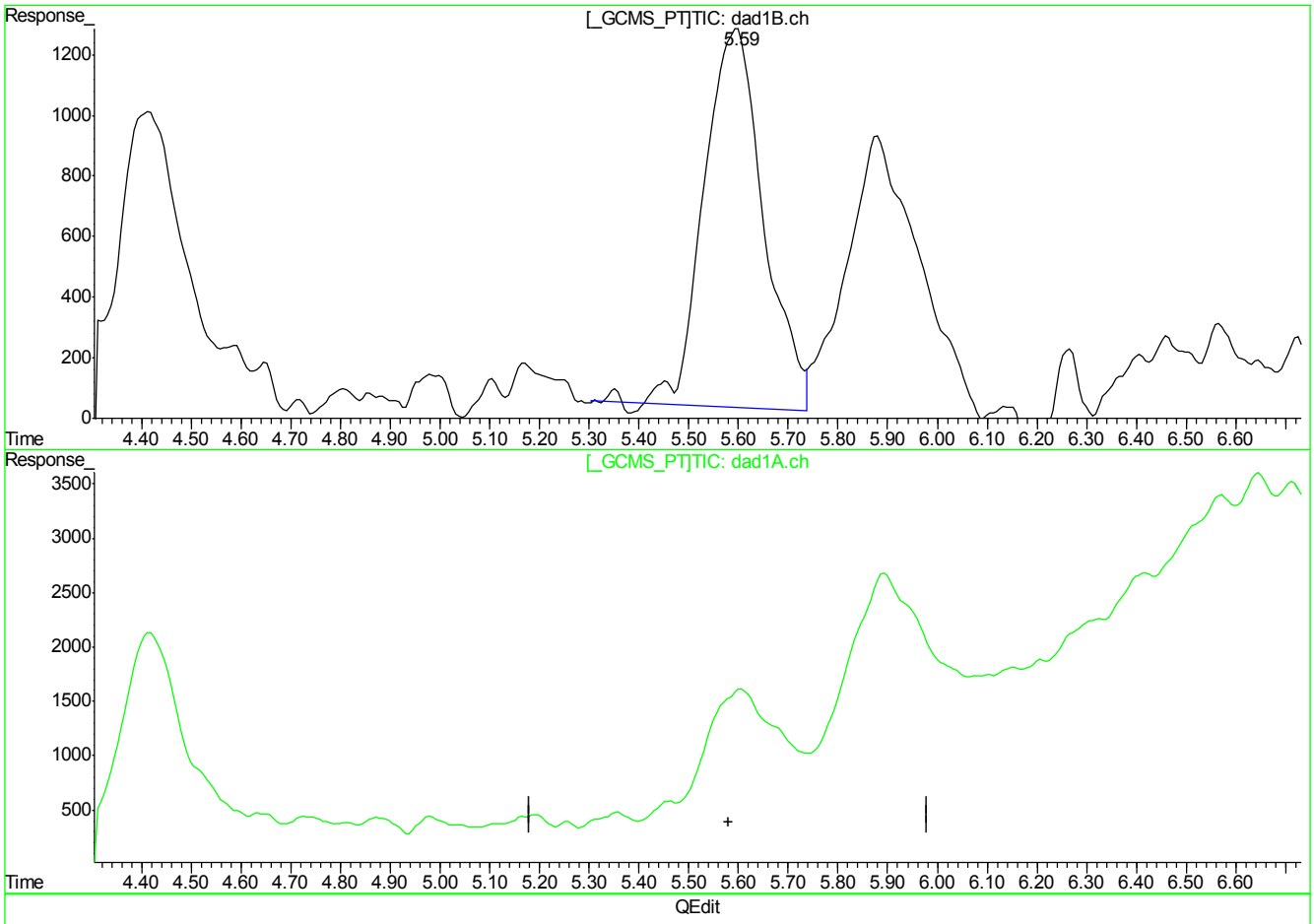
7.7.19

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 16.722ppb

response 102063

(7) 1,3-Dinitrobenzene #2

0.00min 0.000ppb

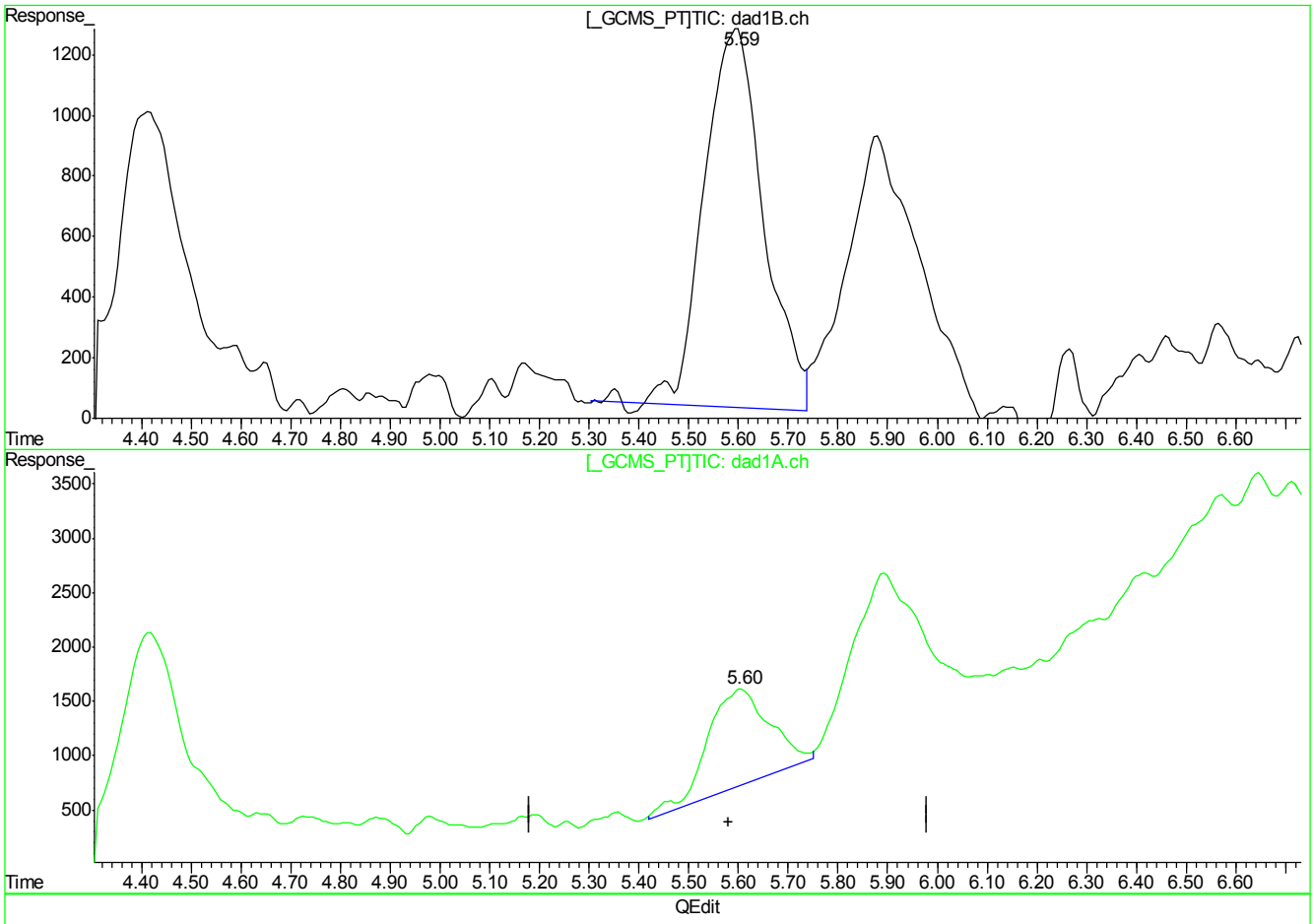
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:26 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 16.722ppb

response 102063

(7) 1,3-Dinitrobenzene #2

5.60min 19.482ppb m

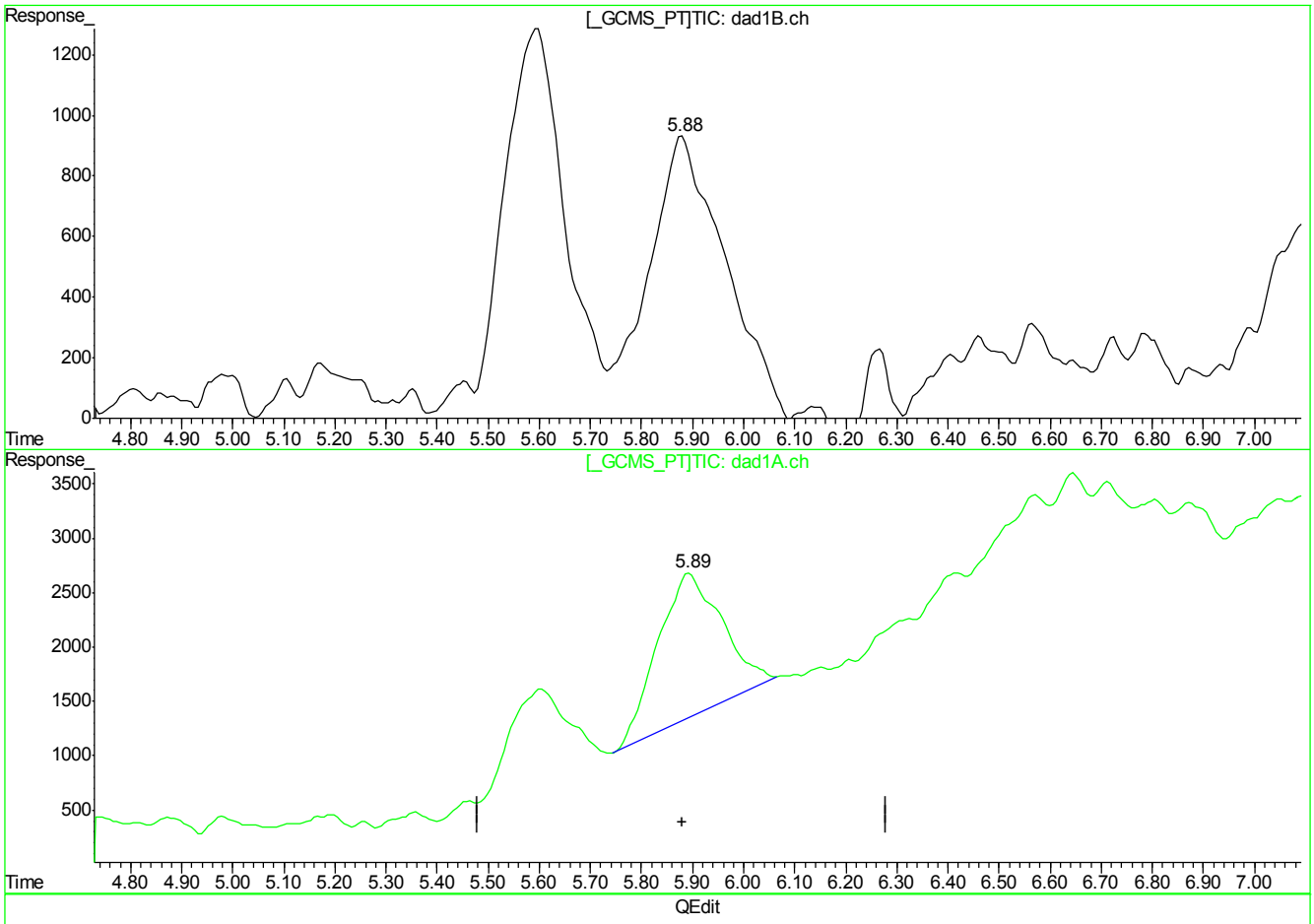
response 76764

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:30 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.88min 20.575ppb

response 94329

(8) 3,5-Dinitroaniline #2

5.89min 14.714ppb

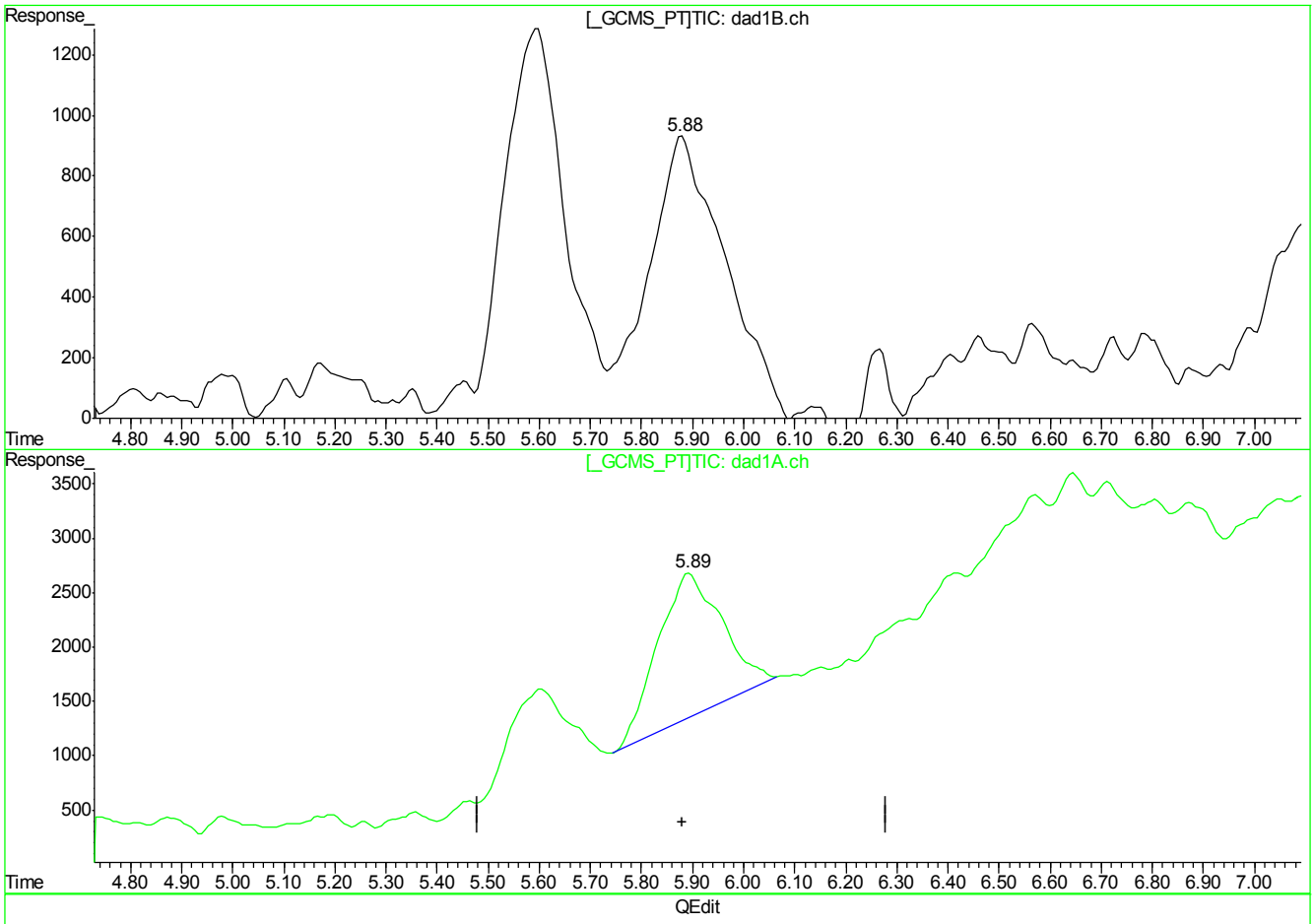
response 116035

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:32 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.88min 20.575ppb

response 94329

(8) 3,5-Dinitroaniline #2

5.89min 14.714ppb

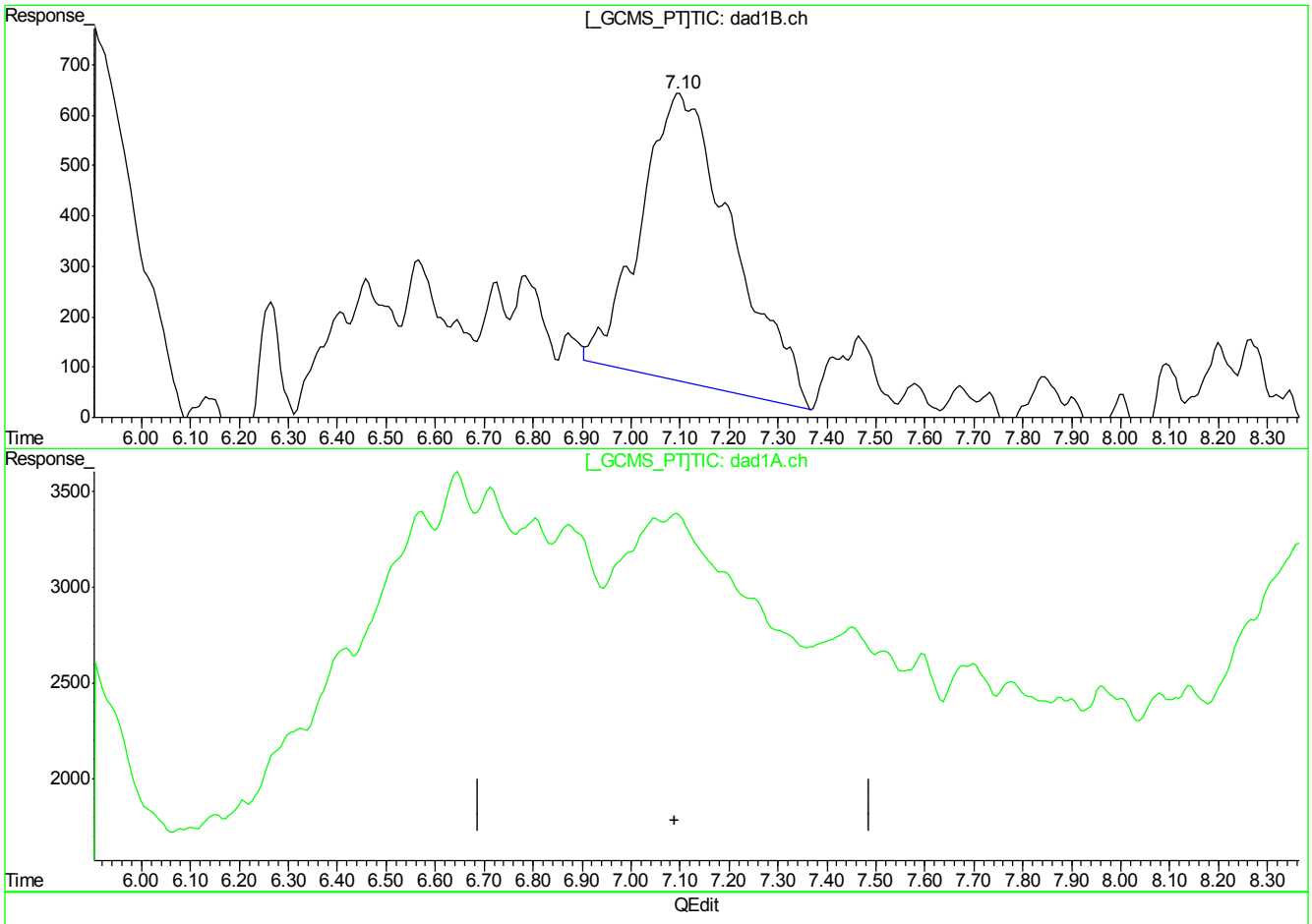
response 116035

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.10min 19.715ppb

response 75214

(9) Nitrobenzene #2

0.00min 0.000ppb

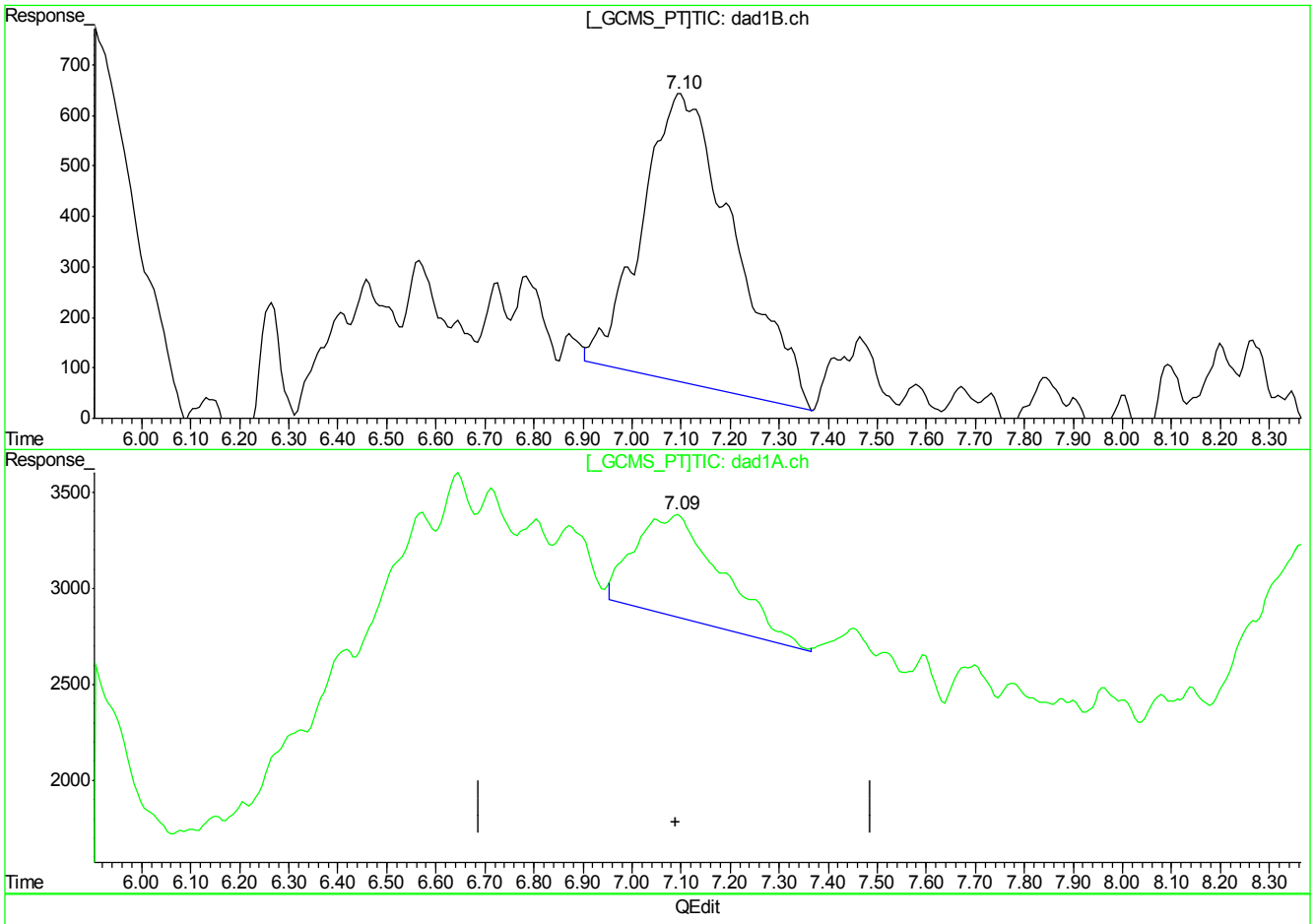
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:39 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.10min 19.715ppb

response 75214

(9) Nitrobenzene #2

7.09min 18.304ppb m

response 65624

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:43 2018

7.7.1.15

7

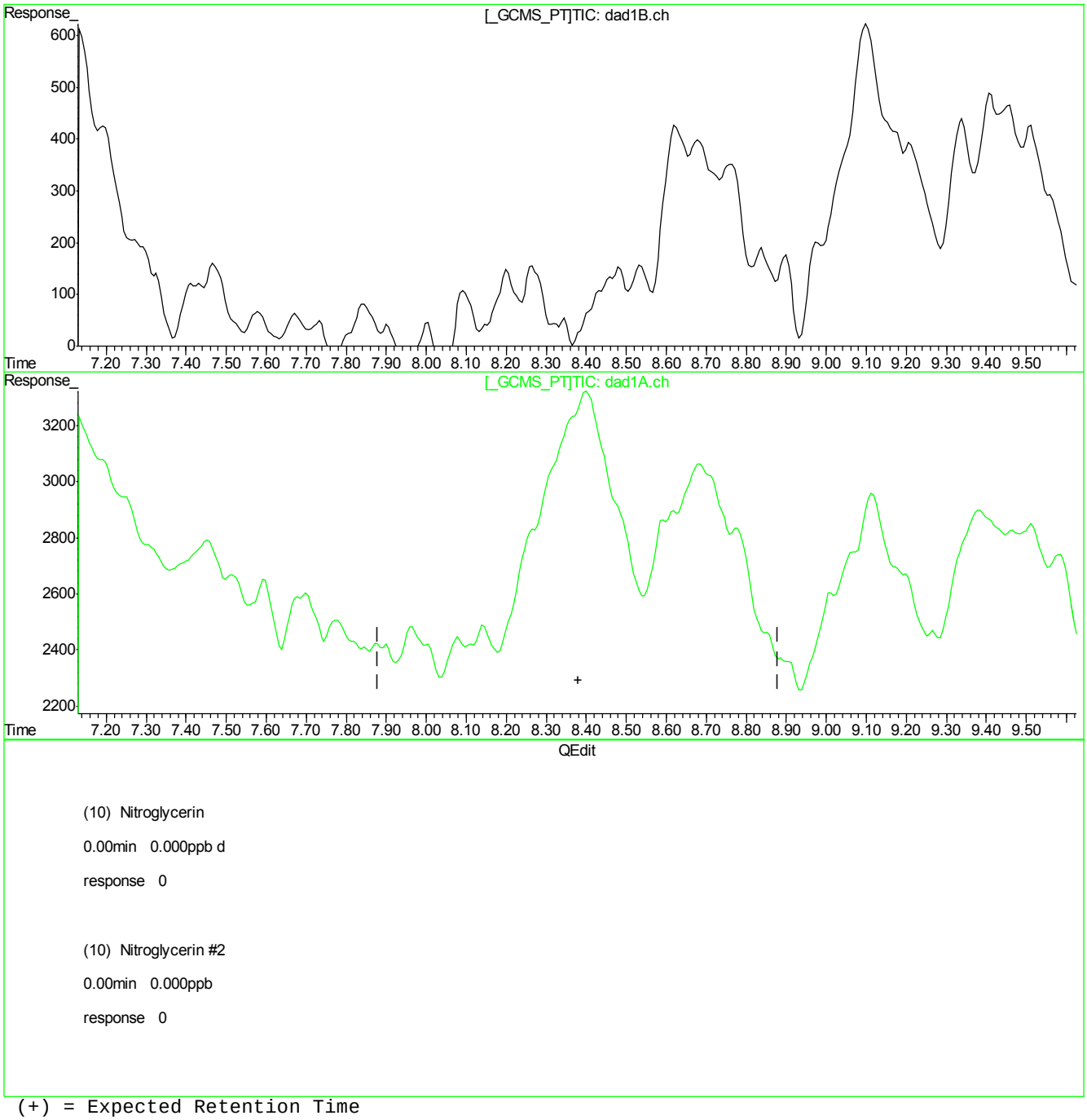
BB059464.D edits: Nitrobenzene

FA53518

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

0.00min 0.000ppb

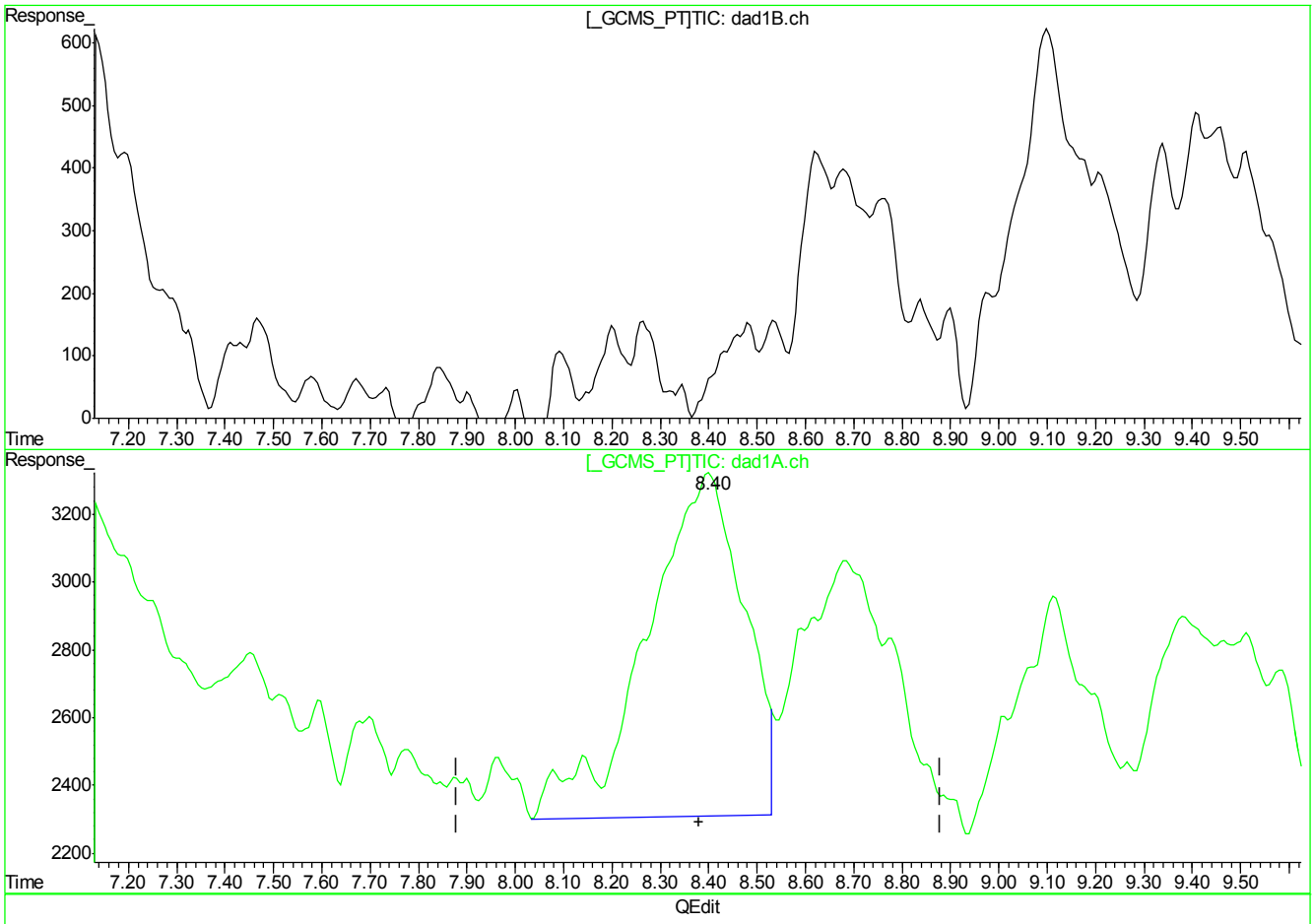
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:47 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.40min 106.959ppb m

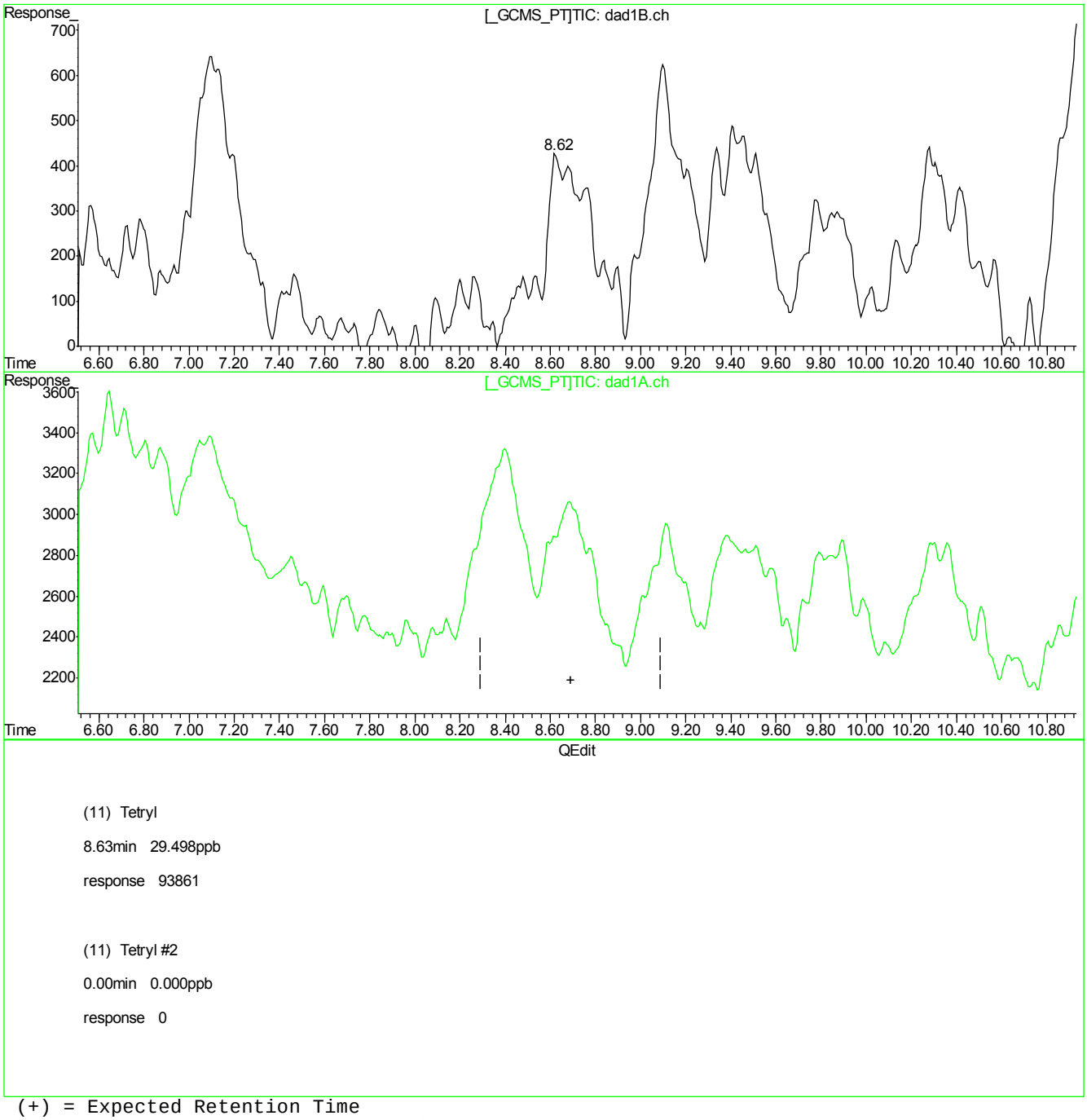
response 141549

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.63min 29.498ppb

response 93861

(11) Tetryl #2

0.00min 0.000ppb

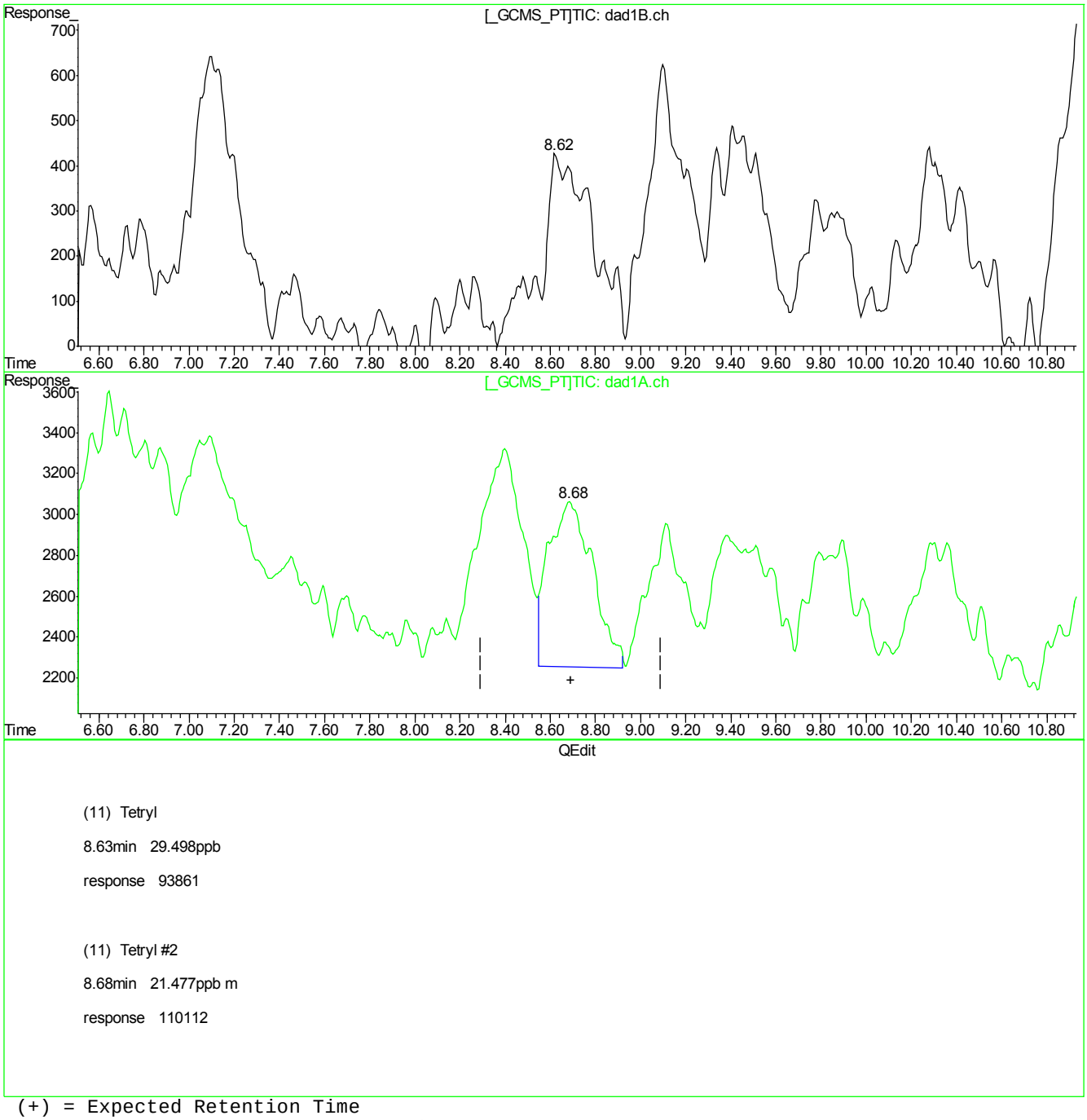
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.63min 29.498ppb

response 93861

(11) Tetryl #2

8.68min 21.477ppb m

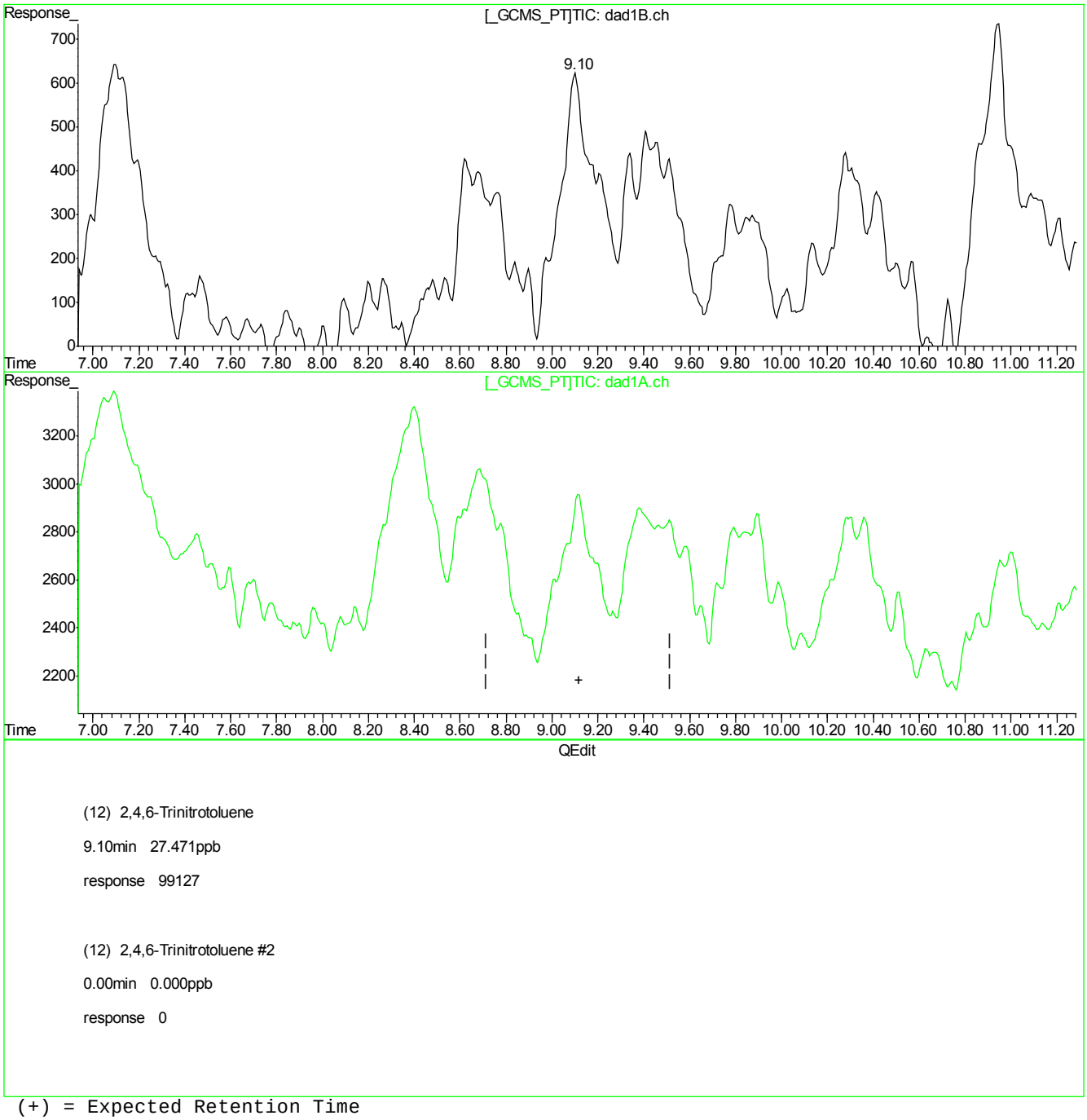
response 110112

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

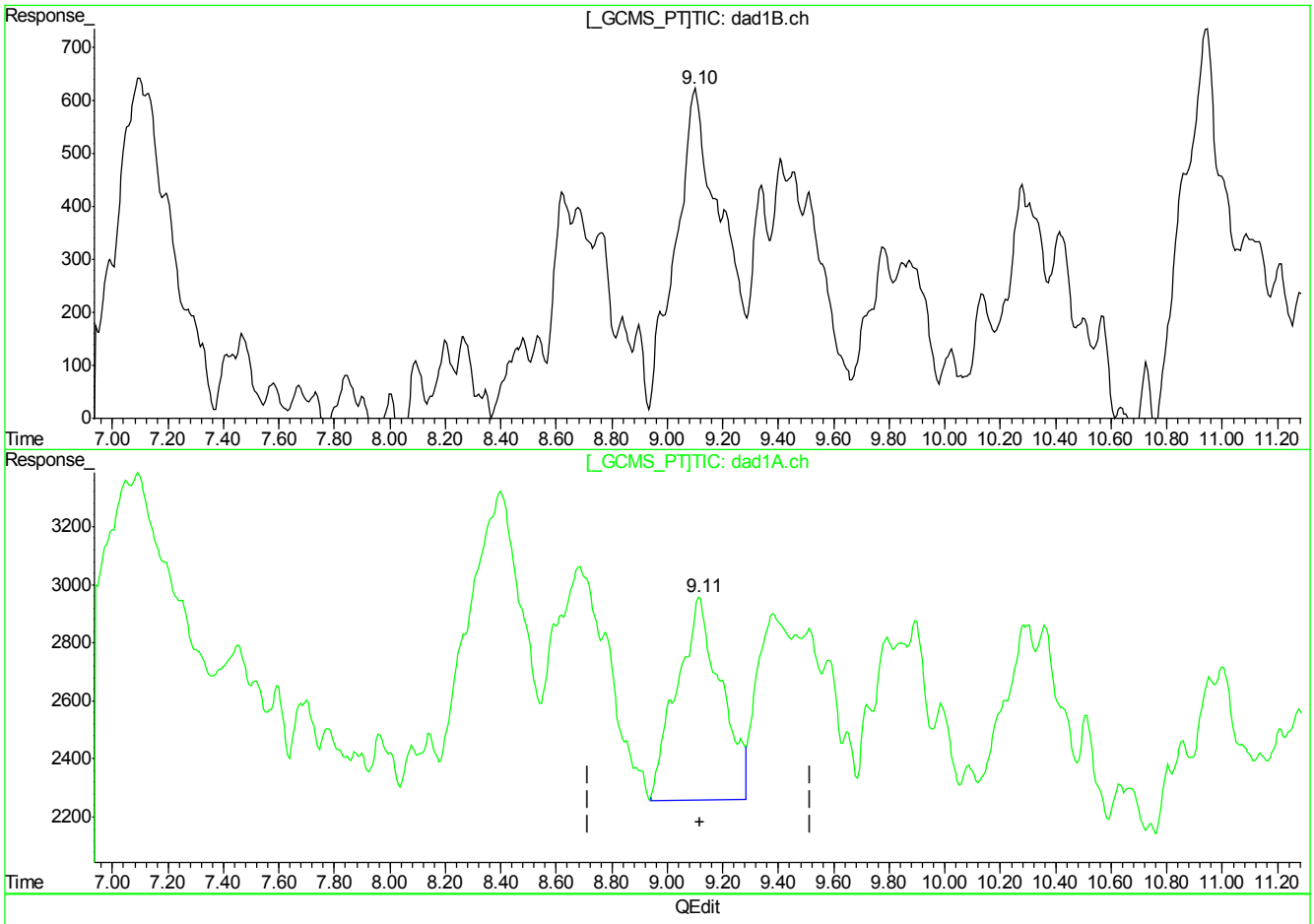


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.10min 27.471ppb

response 99127

(12) 2,4,6-Trinitrotoluene #2

9.11min 17.706ppb m

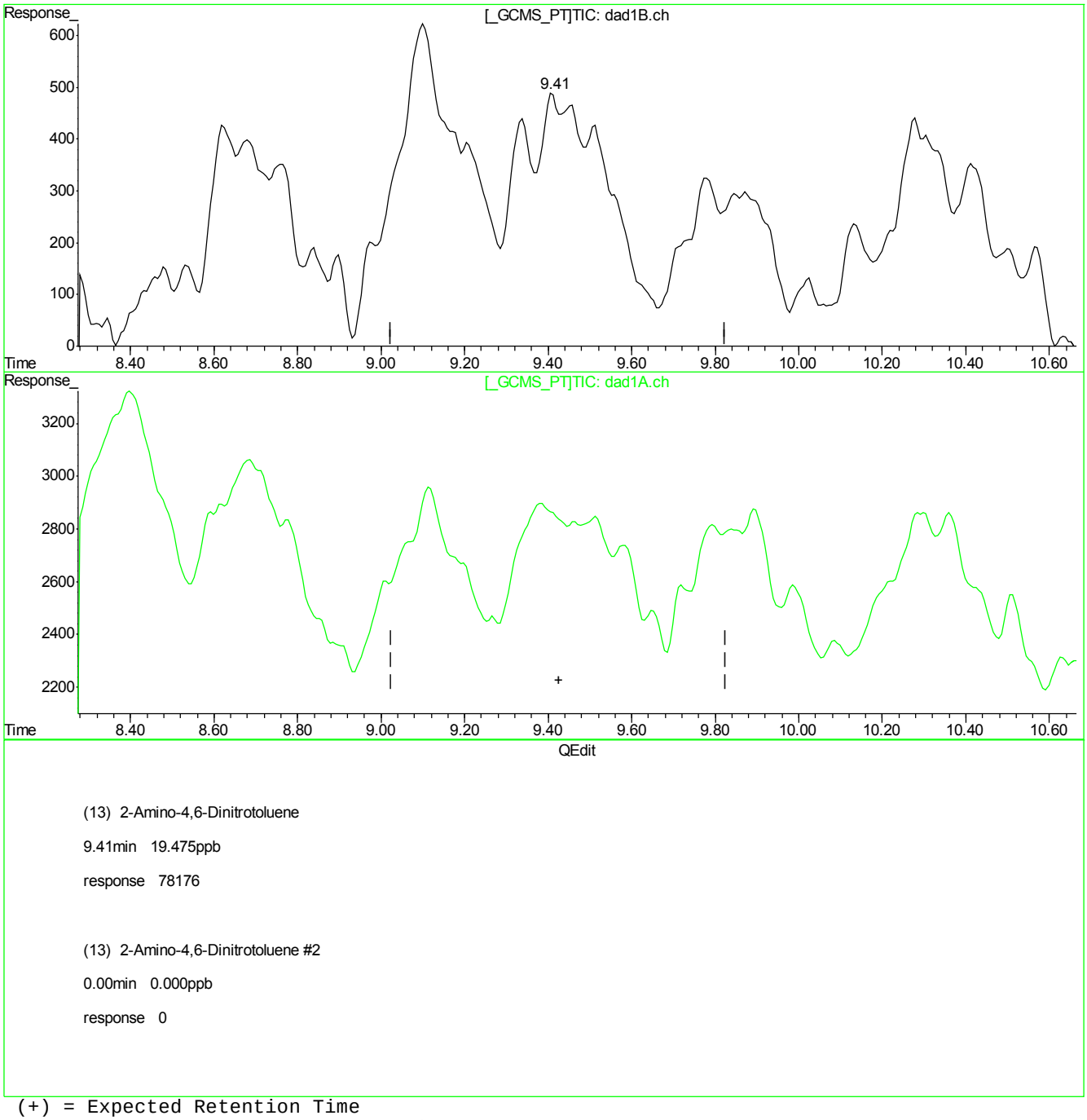
response 75942

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:23 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

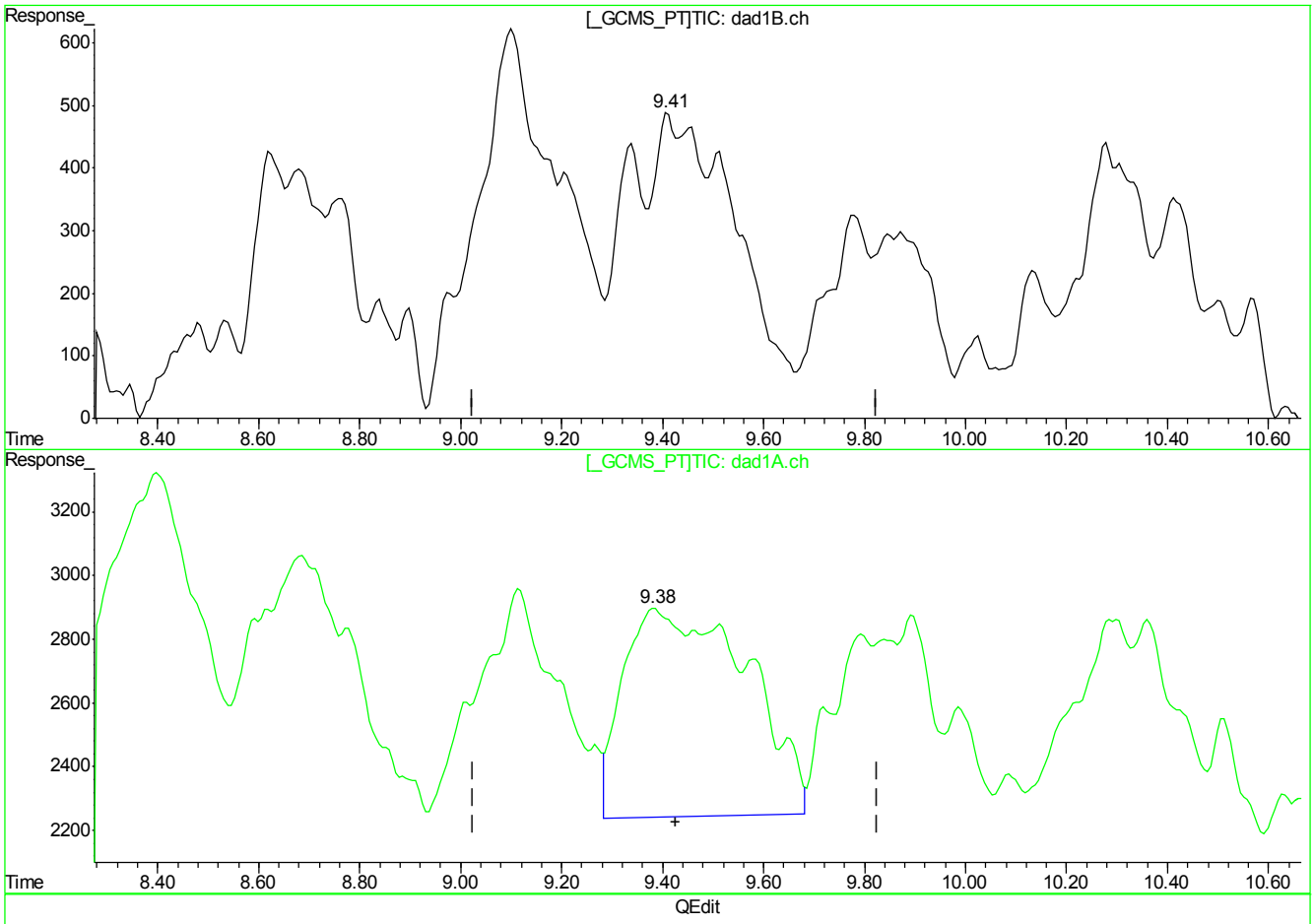


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.41min 19.475ppb

response 78176

(13) 2-Amino-4,6-Dinitrotoluene #2

9.38min 20.113ppb m

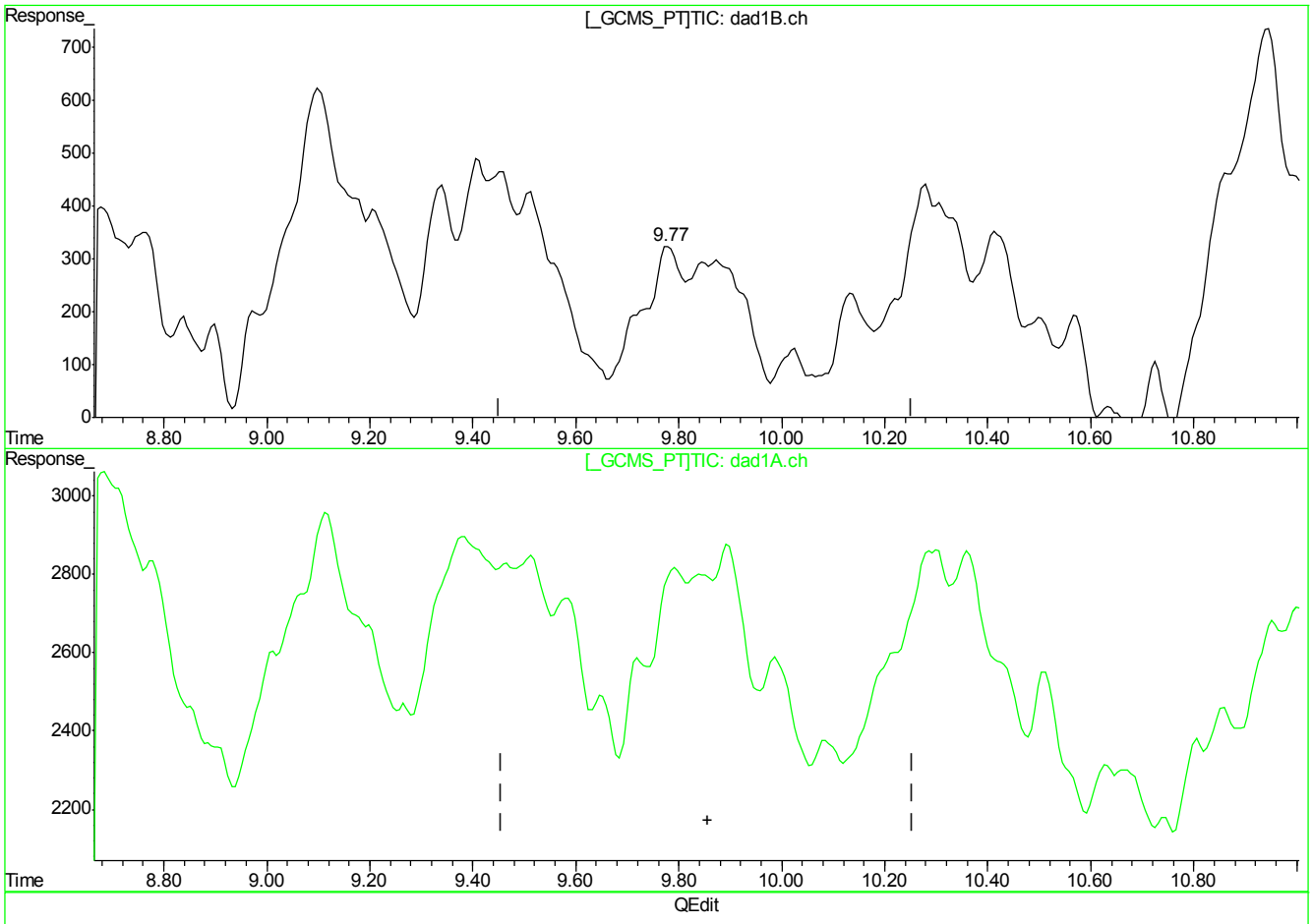
response 111824

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:31 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.78min 10.928ppb

response 30840

(14) 4-Amino-2,6-Dinitrotoluene #2

0.00min 0.000ppb

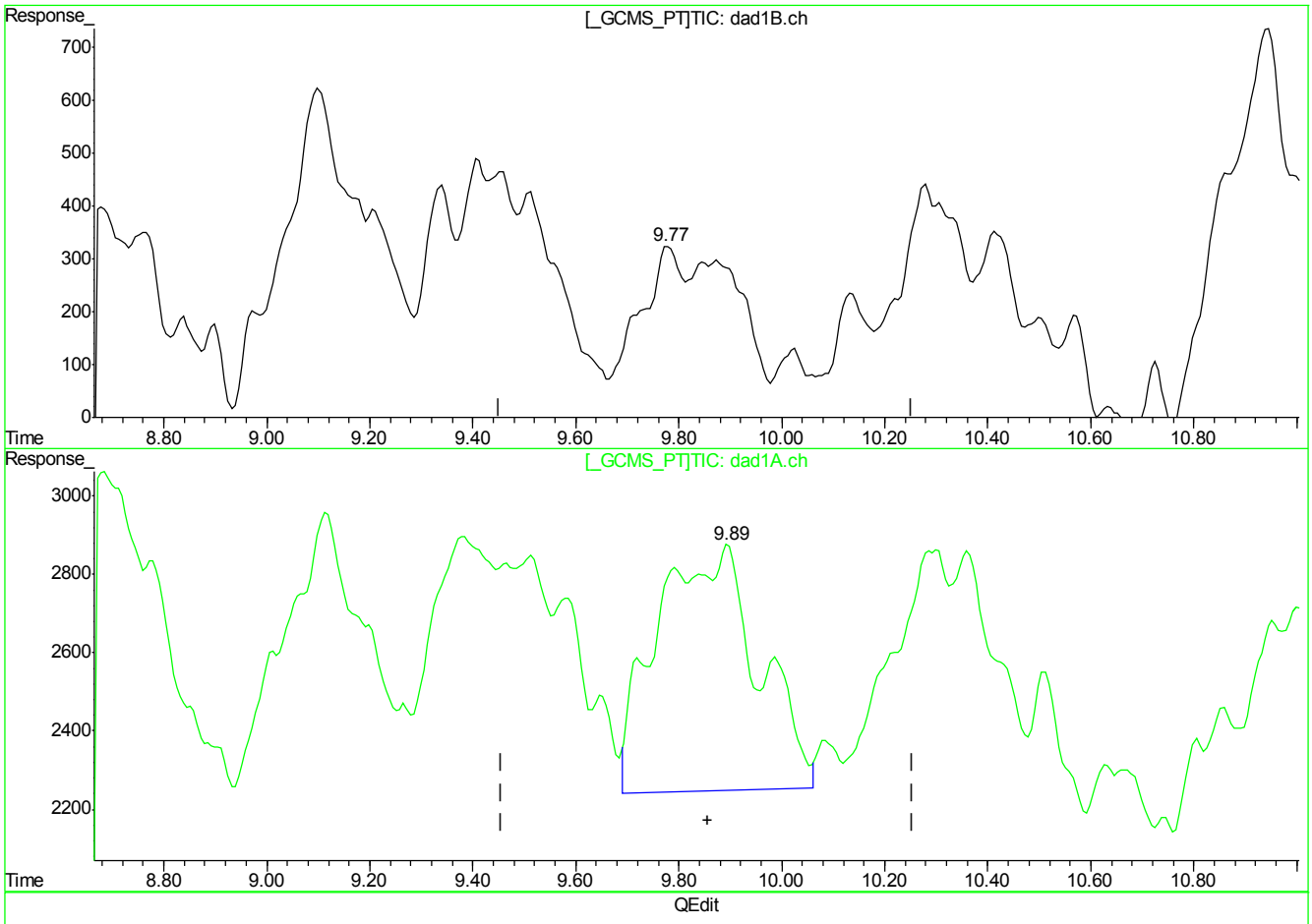
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.78min 10.928ppb

response 30840

(14) 4-Amino-2,6-Dinitrotoluene #2

9.89min 16.014ppb m

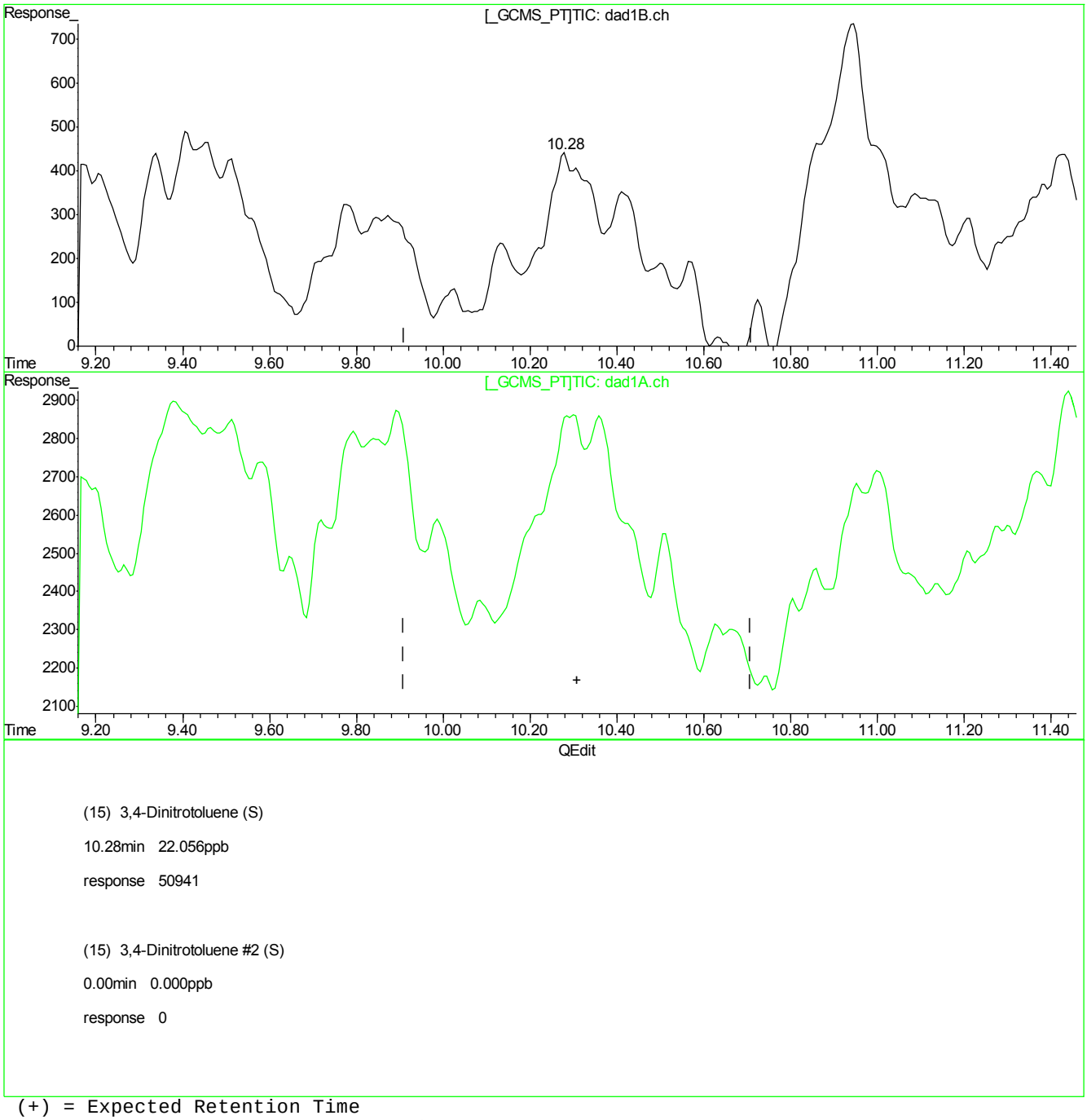
response 86551

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.28min 22.056ppb

response 50941

(15) 3,4-Dinitrotoluene #2 (S)

0.00min 0.000ppb

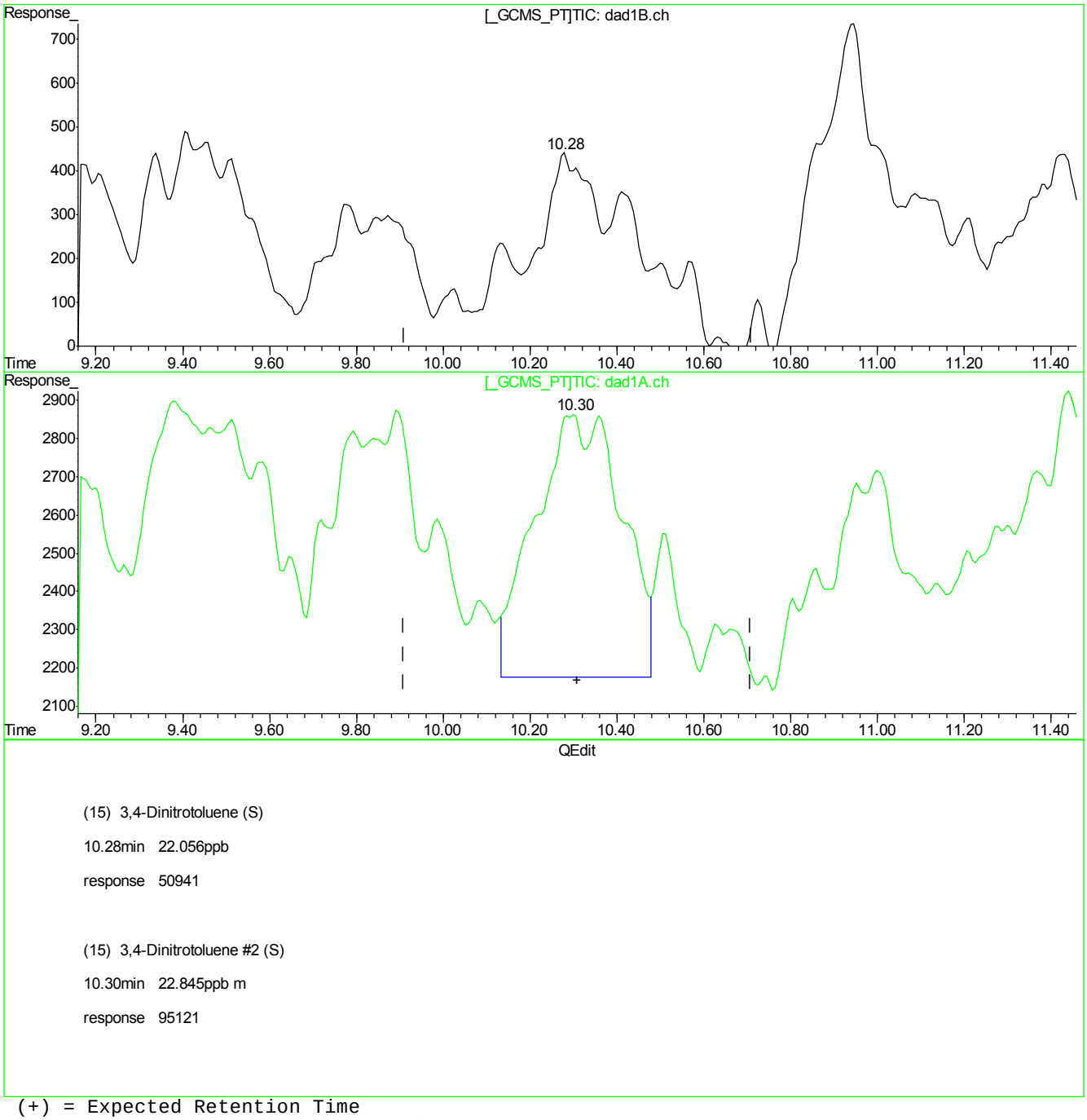
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.28min 22.056ppb

response 50941

(15) 3,4-Dinitrotoluene #2 (S)

10.30min 22.845ppb m

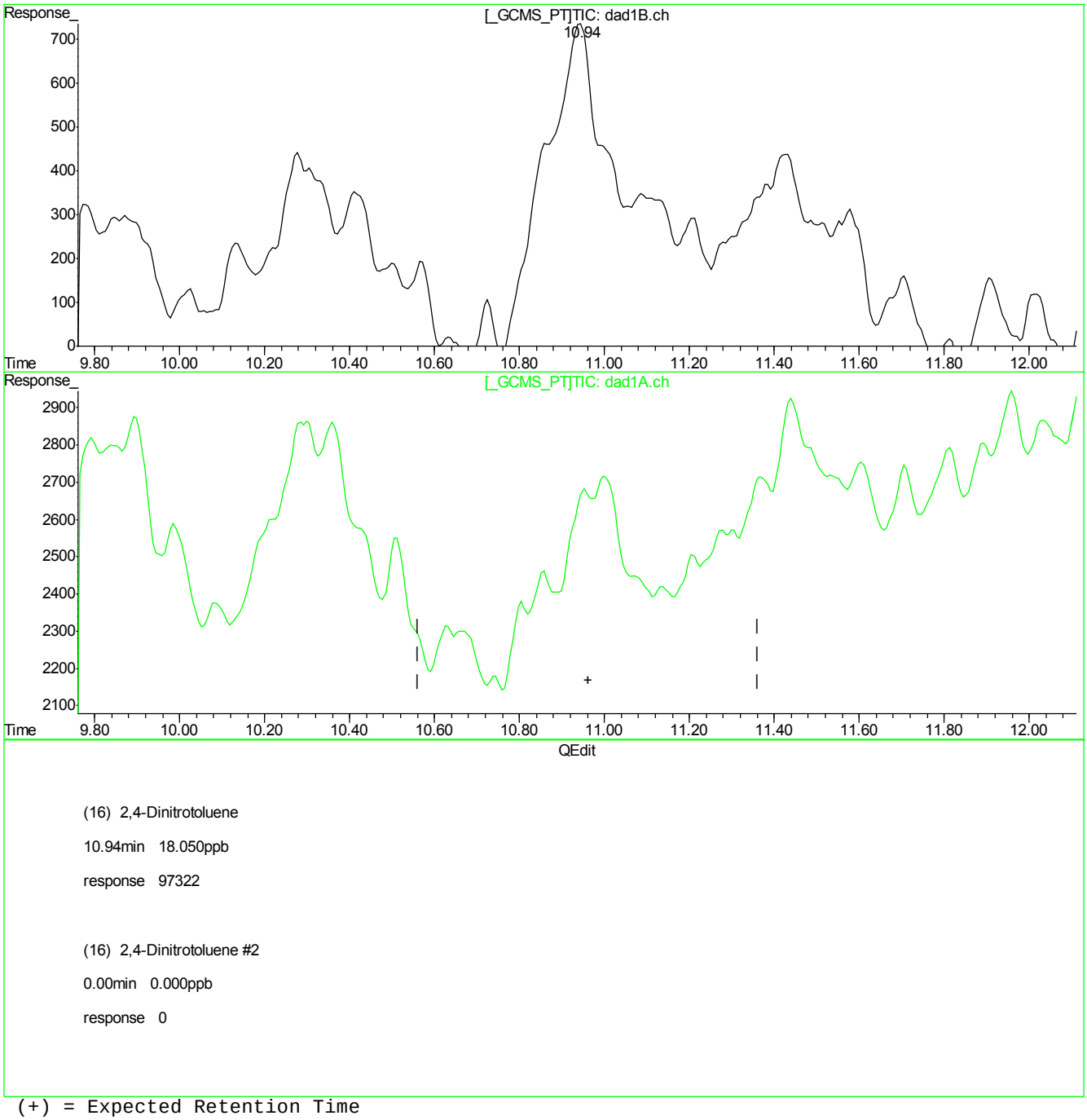
response 95121

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

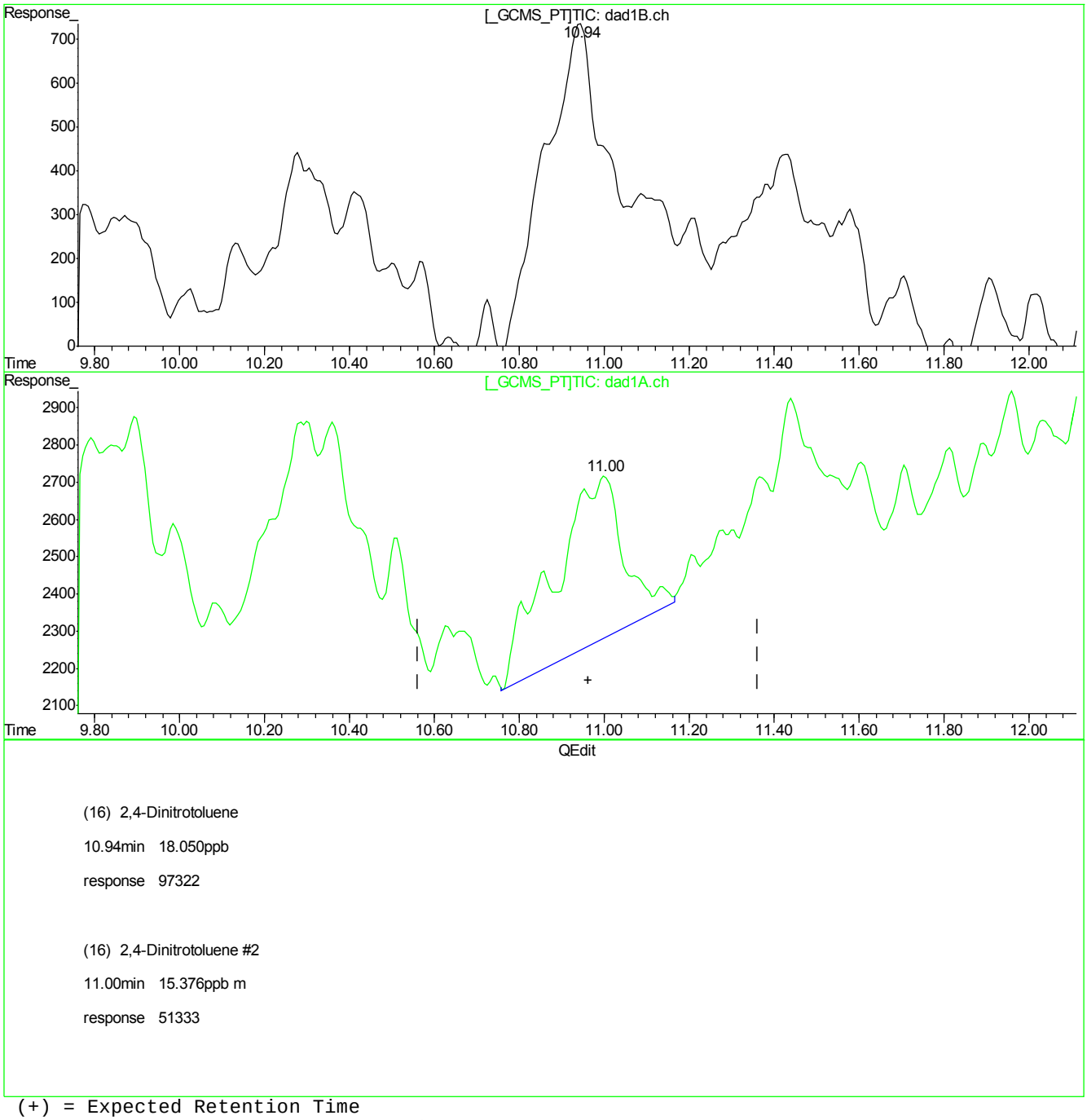


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

10.94min 18.050ppb

response 97322

(16) 2,4-Dinitrotoluene #2

11.00min 15.376ppb m

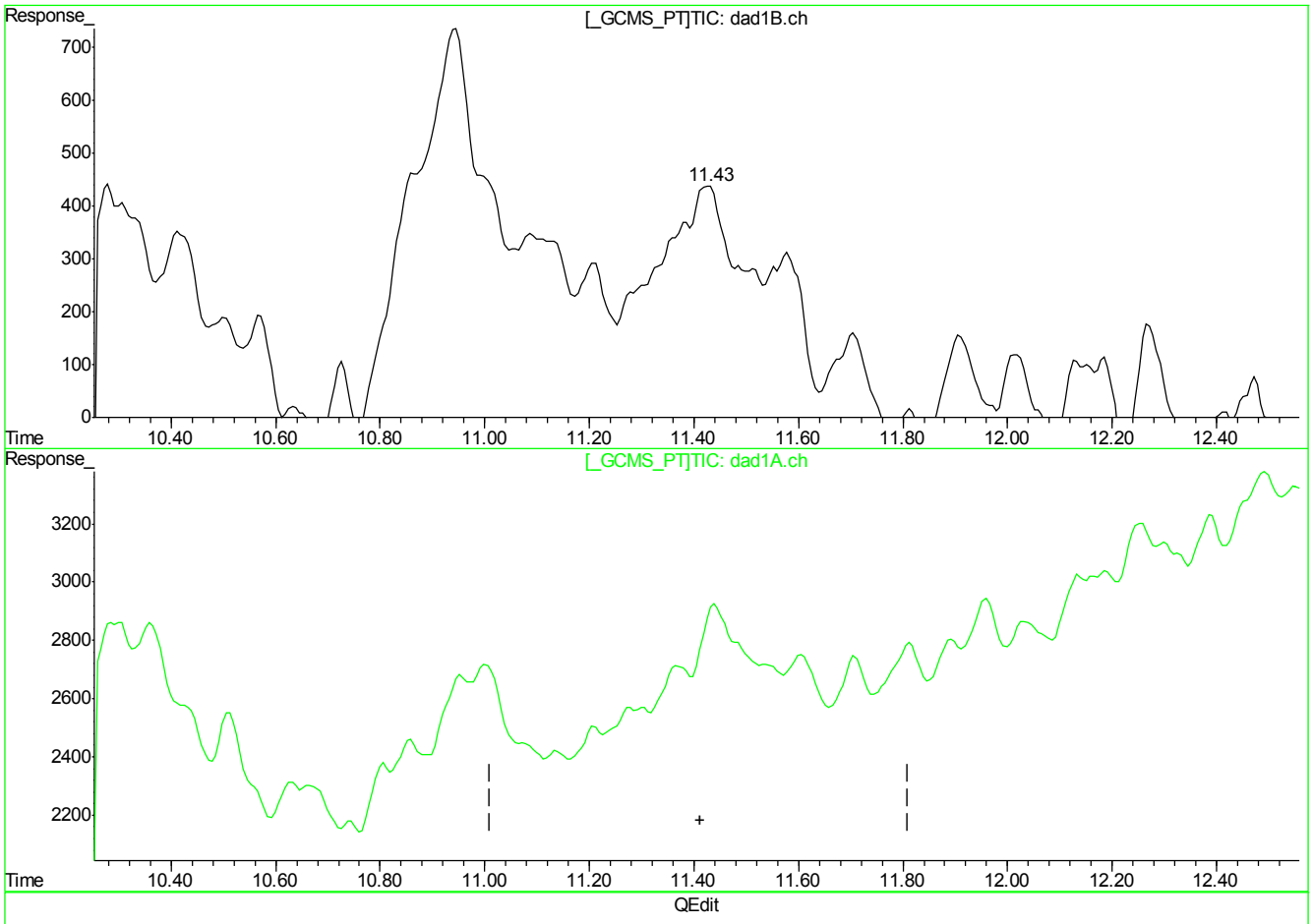
response 51333

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:53 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.43min 22.573ppb

response 74215

(17) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

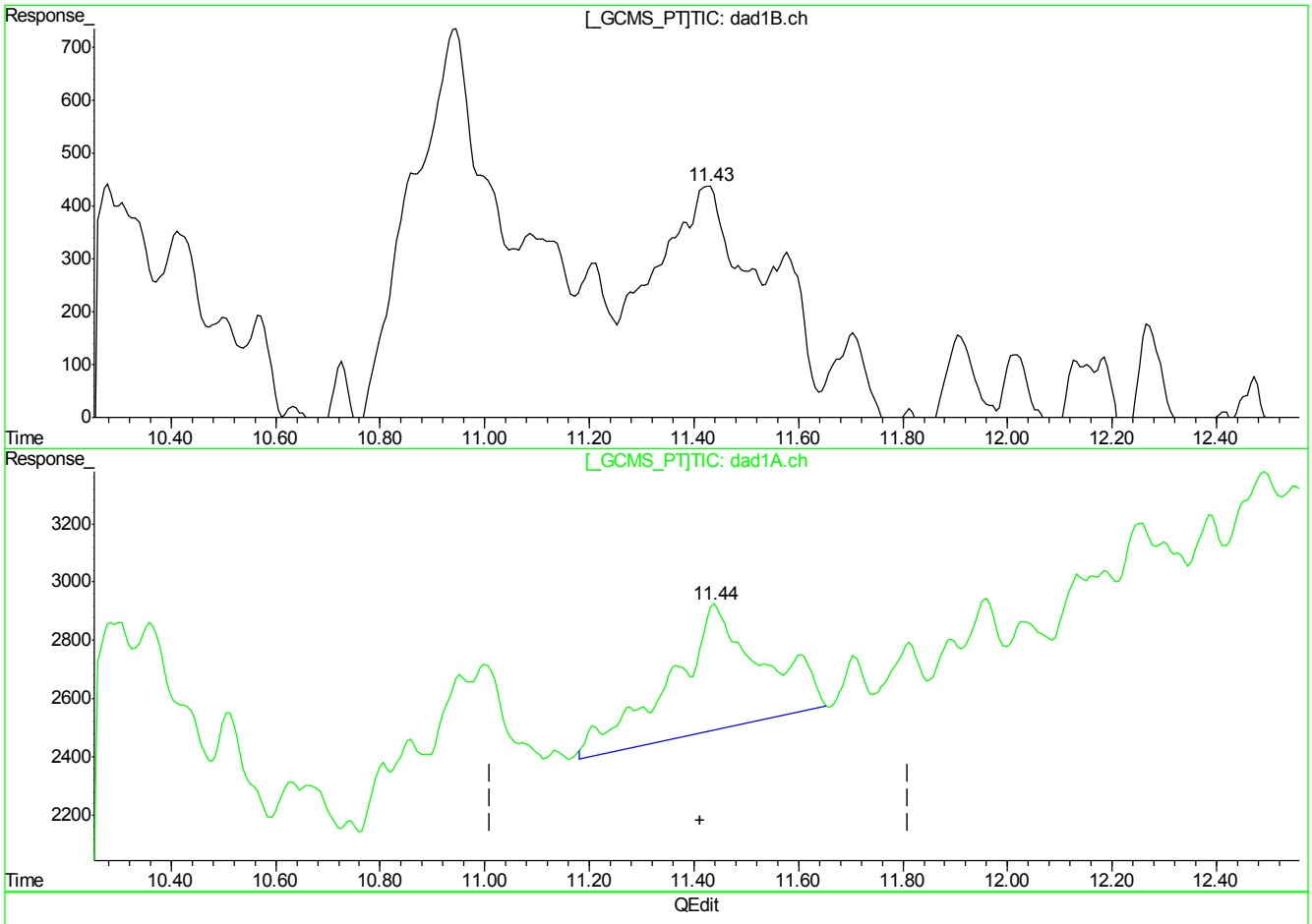
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.43min 22.573ppb

response 74215

(17) 2,6-Dinitrotoluene #2

11.44min 13.240ppb m

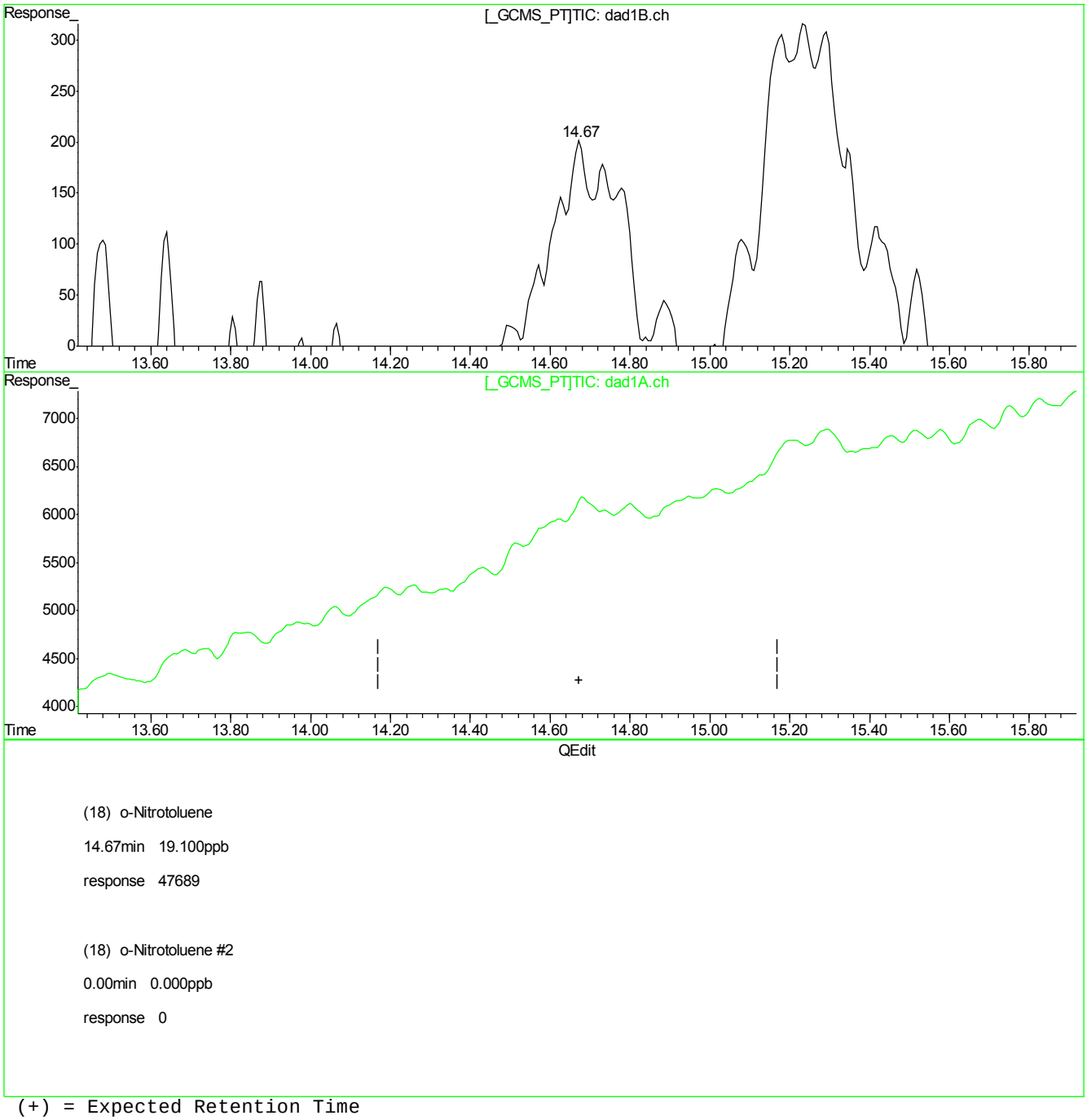
response 51922

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:07 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.67min 19.100ppb

response 47689

(18) o-Nitrotoluene #2

0.00min 0.000ppb

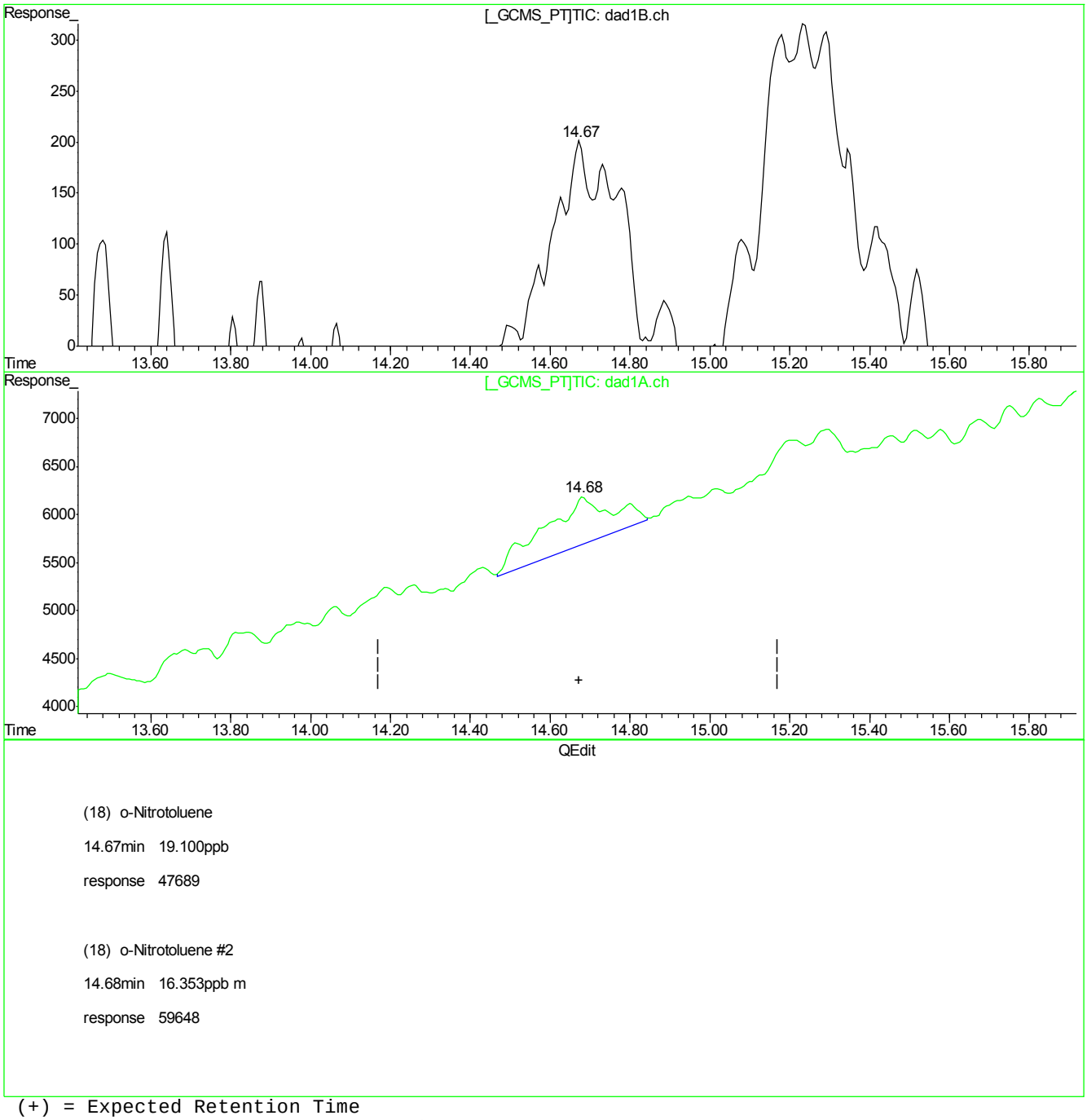
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.67min 19.100ppb

response 47689

(18) o-Nitrotoluene #2

14.68min 16.353ppb m

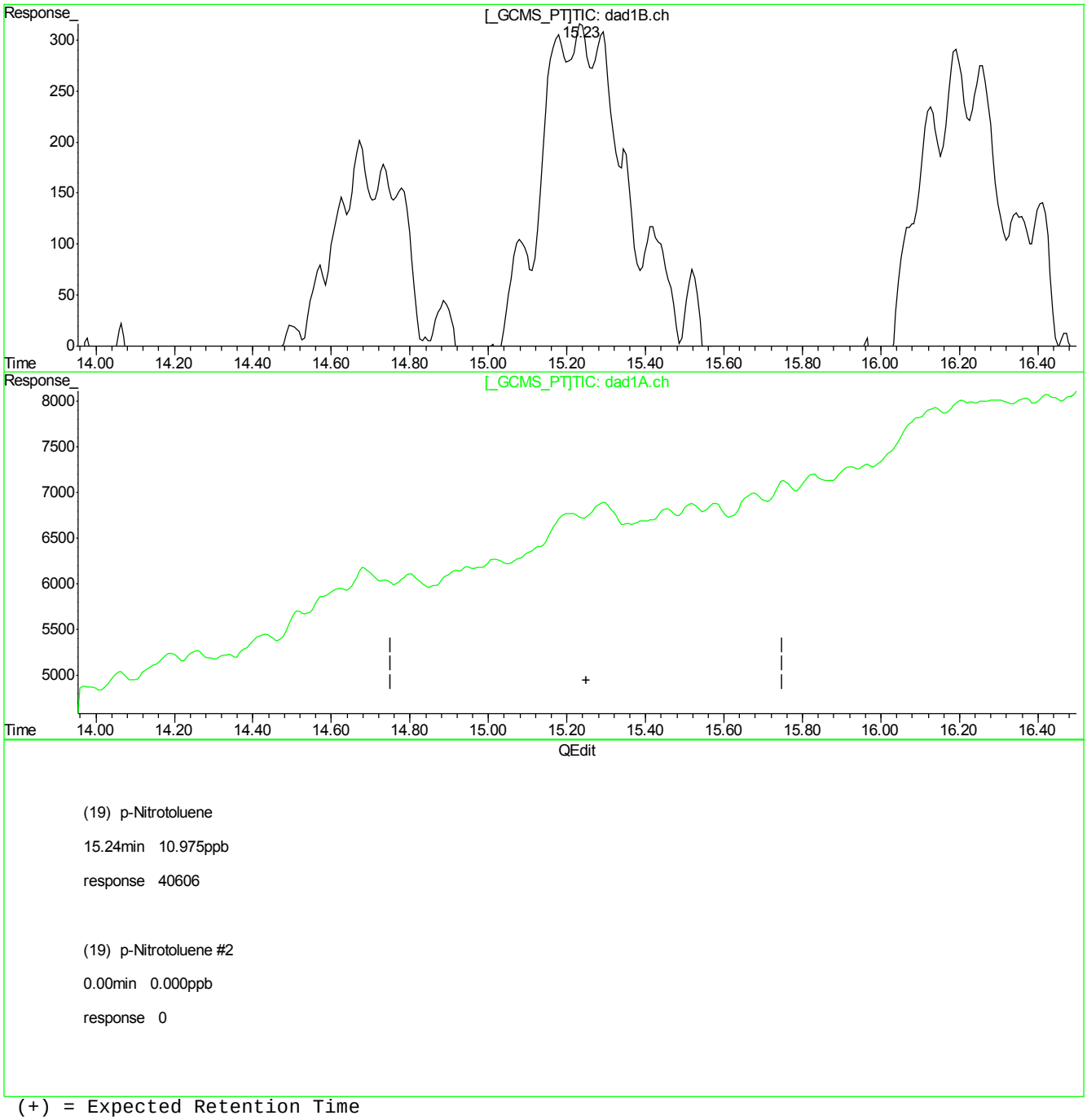
response 59648

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:14 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

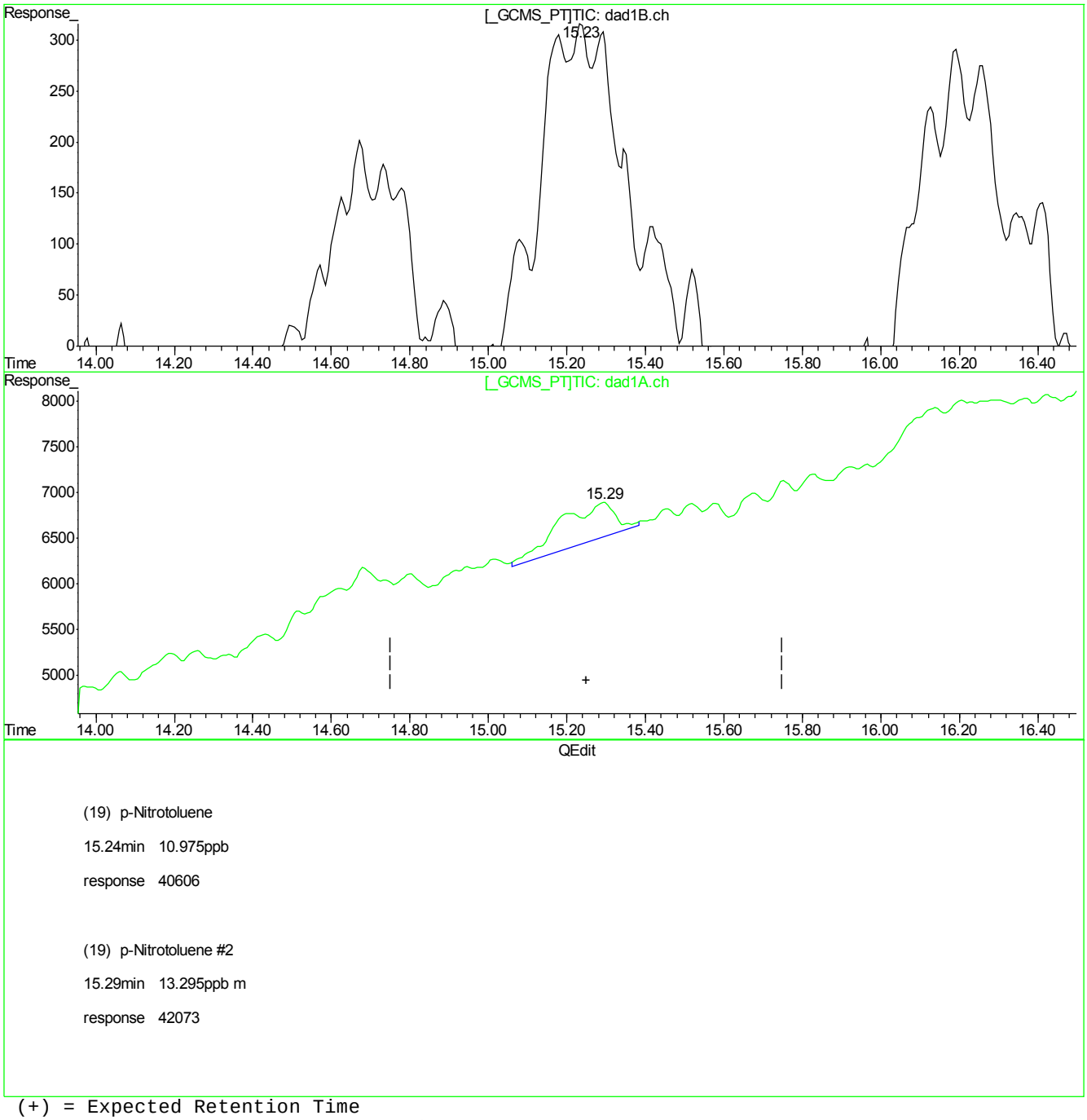


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:17 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

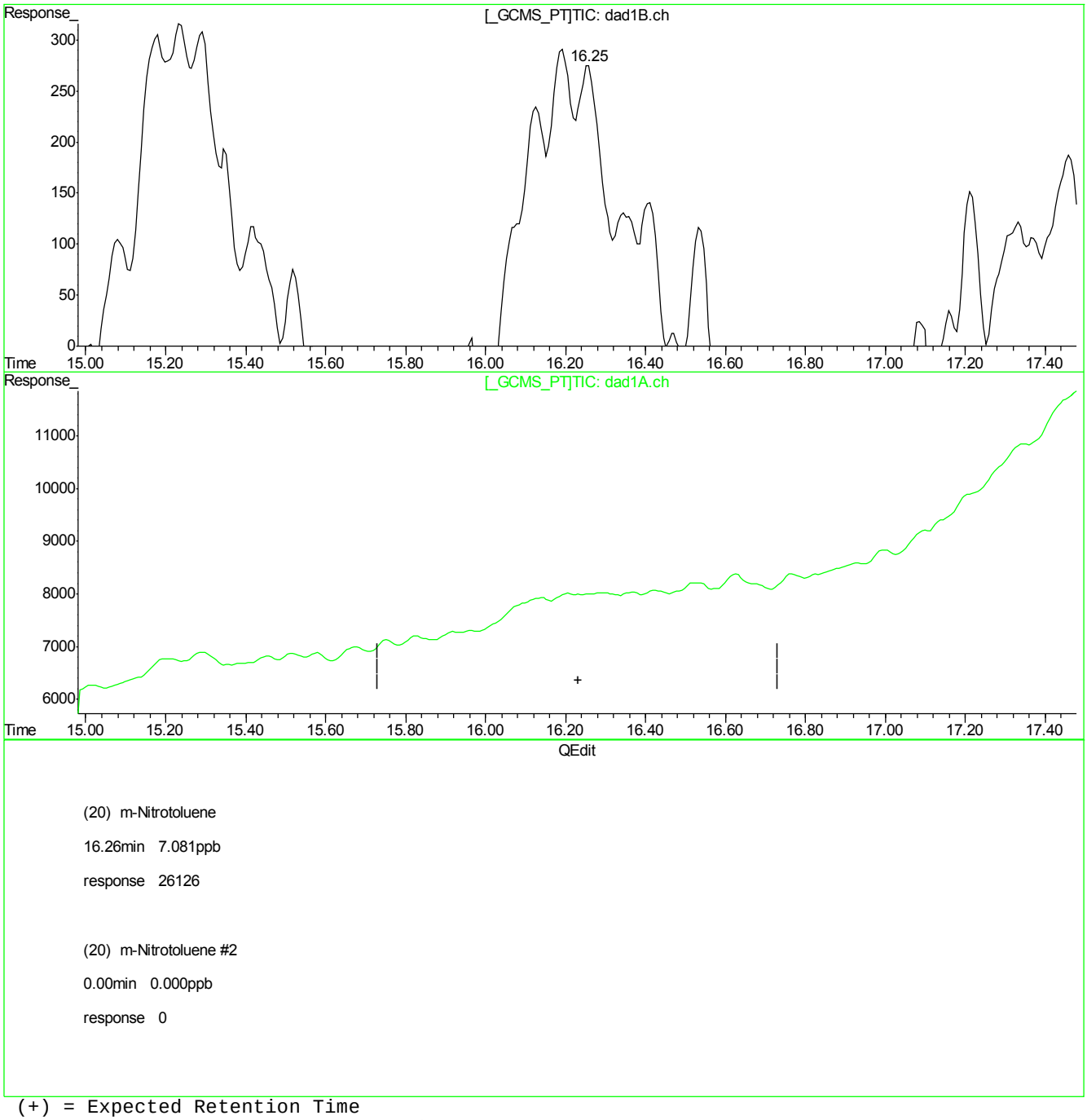


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:20 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

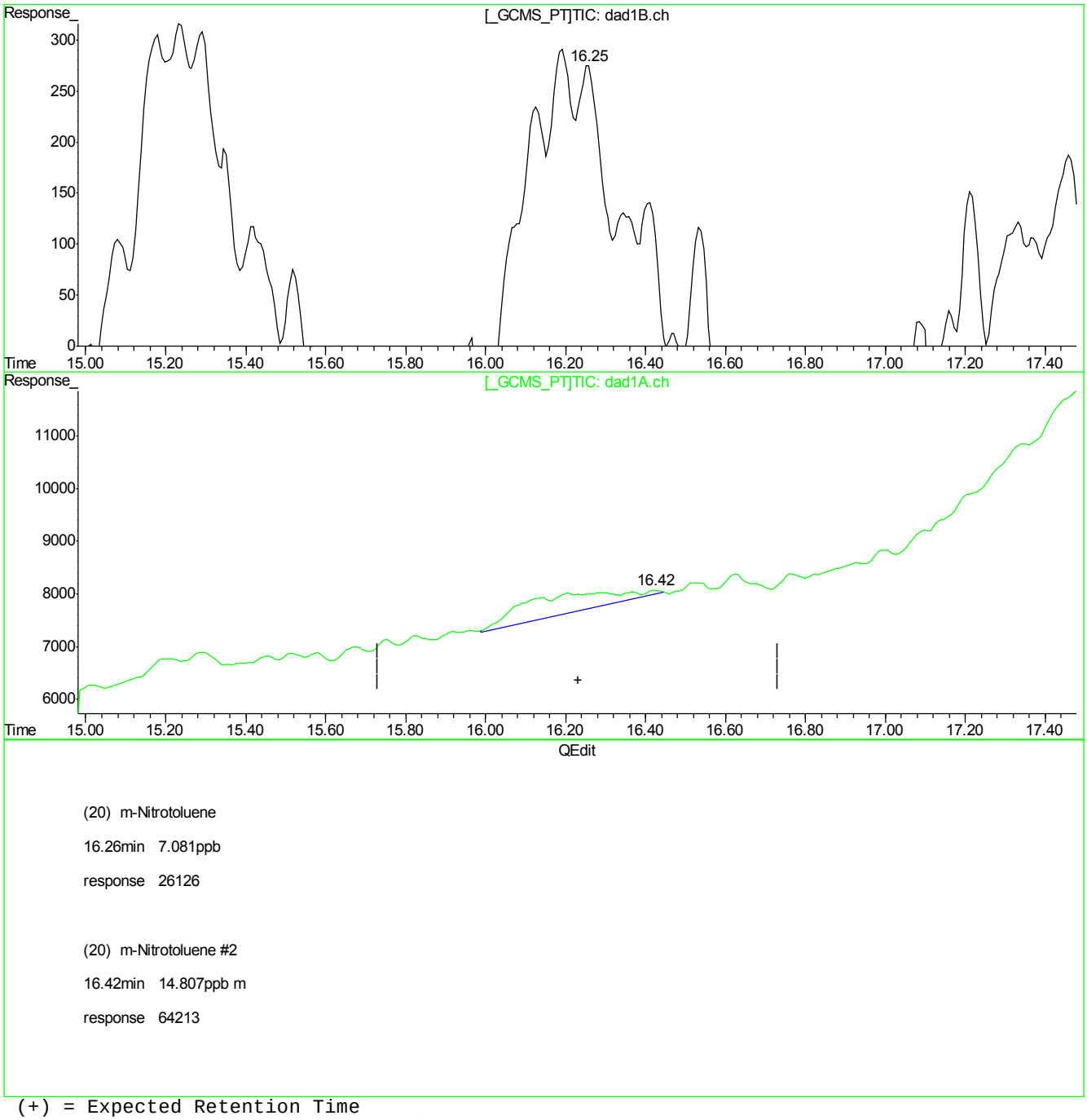


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

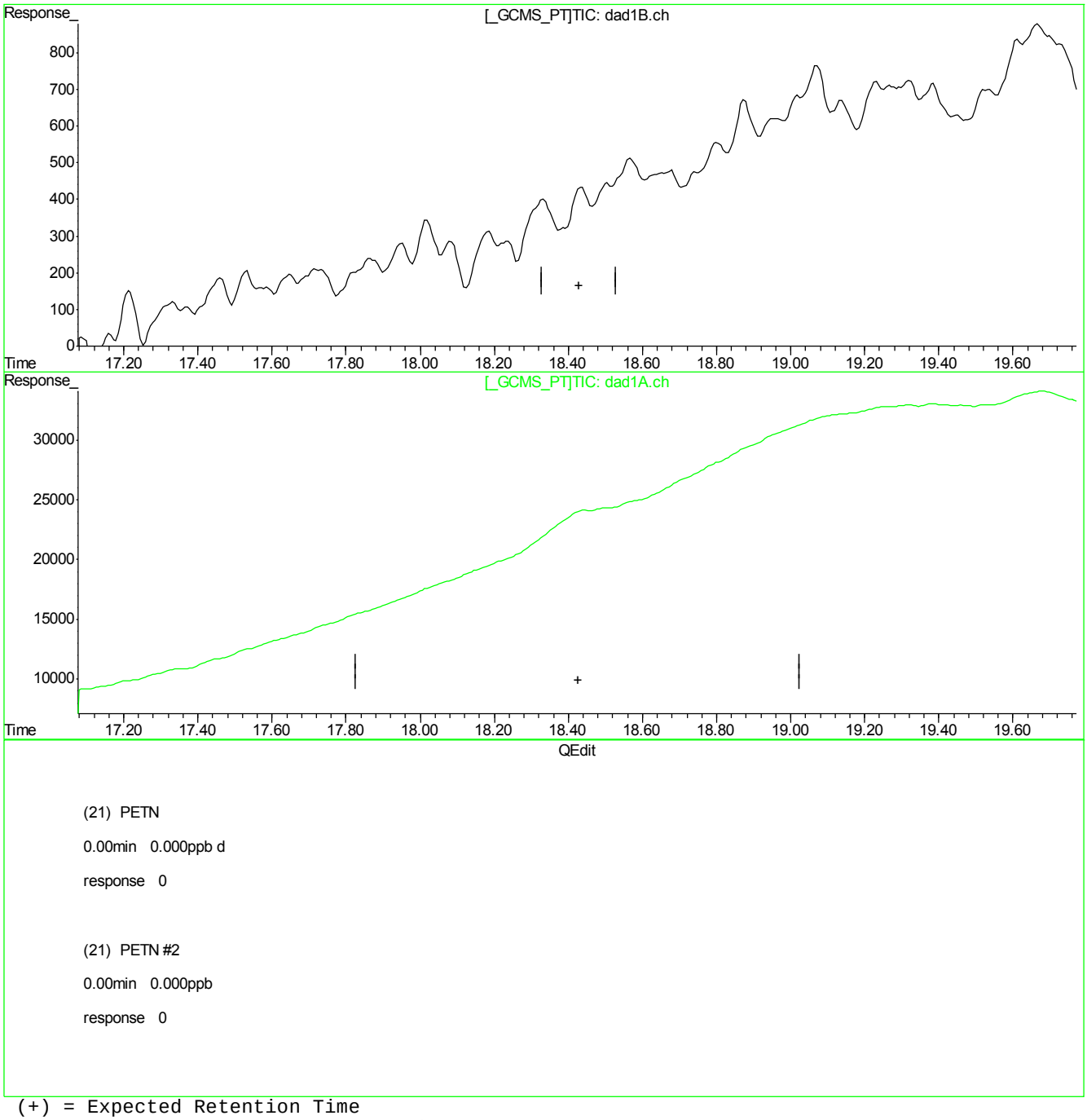


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

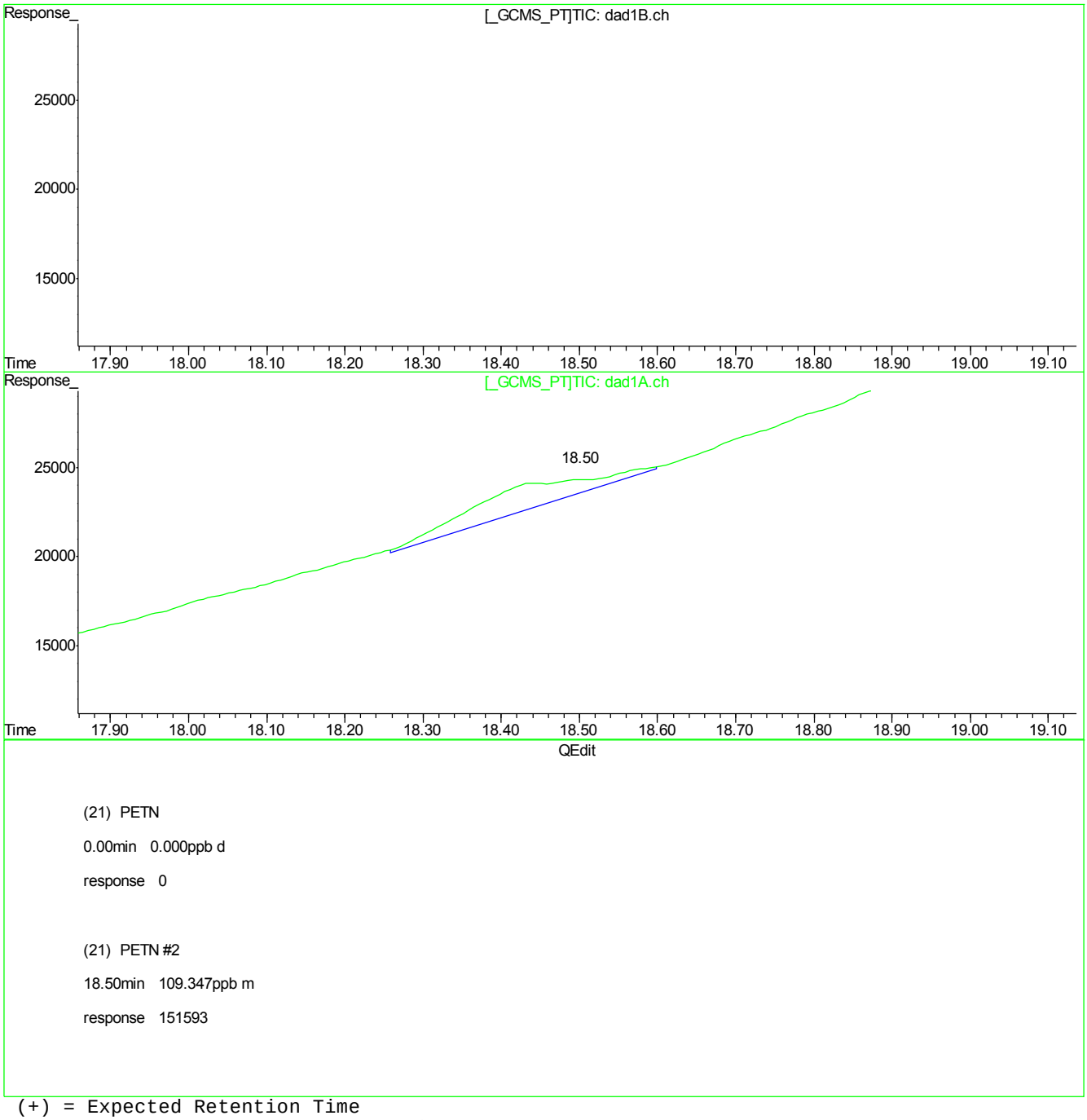


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:52:01 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:45 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.32	10.31	148252	250753	64.190m	60.222m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	12.84%#	12.04%#
	Target Compounds						
1)	TNX	1.31	1.31	271857	420352	53.572m	53.933m
2)	HMX	1.44	1.44	108610	310120	55.713	59.009m
3)	DNX	1.66	1.67	183097	332602	61.821m	69.640
4)	MNX	2.20	2.20	172151	244651	55.367	52.195
5)	RDX	2.77	2.77	118381	180480	51.055	48.190
6)	1,3,5-Trinitrobe	4.42	4.42	212484	449305	43.000	49.305
7)	1,3-Dinitrobenze	5.59	5.59	306521	180727	50.221	45.866m
8)	3,5-Dinitroanili	5.89	5.90	282156	374495	61.543	47.488
9)	Nitrobenzene	7.09	7.10	223213	181960	58.508	50.753
10)	Nitroglycerin	0.00	8.39	0	336203	N.D. d	254.046m
11)	Tetryl	8.73	8.71	187659	238575	58.975	46.534
12)	2,4,6-Trinitroto	9.13	9.12	247127	209769	68.486	48.907
13)	2-Amino-4,6-Dini	9.44	9.47	217984	202574	54.303	36.436
14)	4-Amino-2,6-Dini	9.87	9.85	171280	229722	60.694	42.505m
16)	2,4-Dinitrotolue	11.00	11.01	336433	150818	62.397	45.176m
17)	2,6-Dinitrotolue	11.39	11.46	219785	175853	66.850m	44.840m
18)	o-Nitrotoluene	14.68	14.67	157597	171653	63.119	47.060m
19)	p-Nitrotoluene	15.26	15.26	247116	168598	66.793	53.275m
20)	m-Nitrotoluene	16.24	16.30	222504	208312	60.309	48.036m
21)	PETN	0.00	18.44	0	340859	N.D. d	245.869m

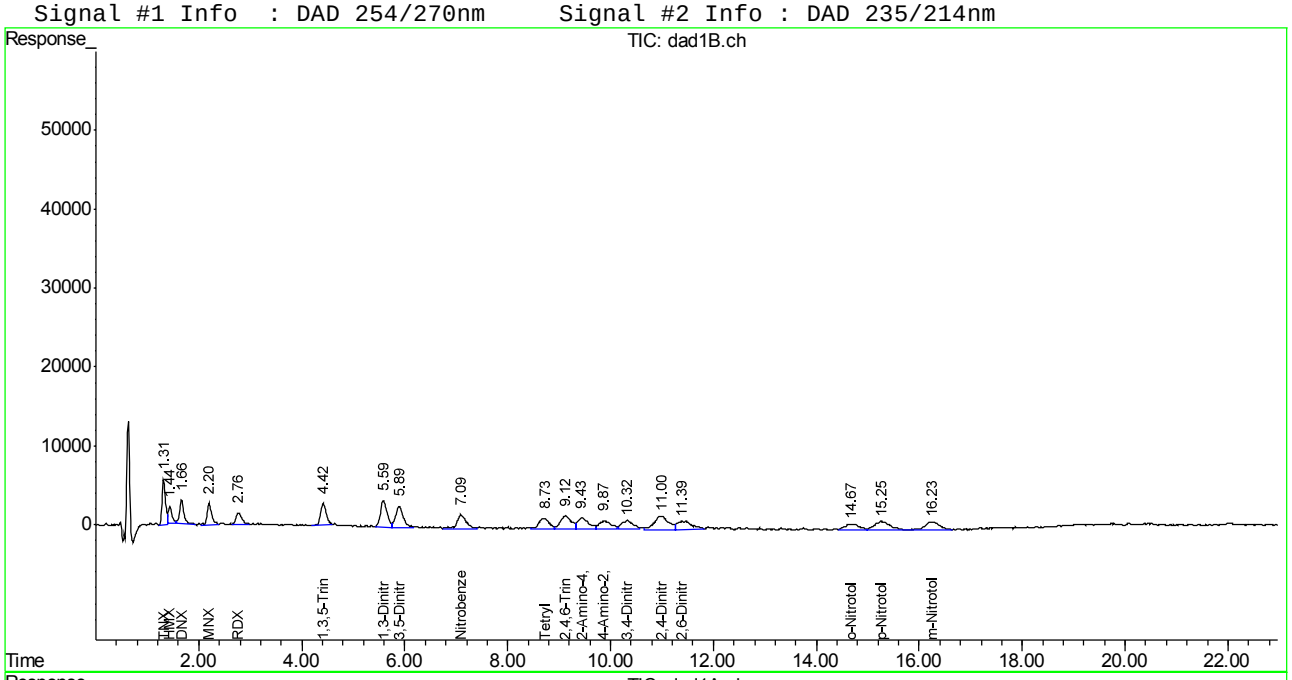
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059465.D 8330B_0419PLUS.M Fri Apr 20 08:01:19 2018 Page 1

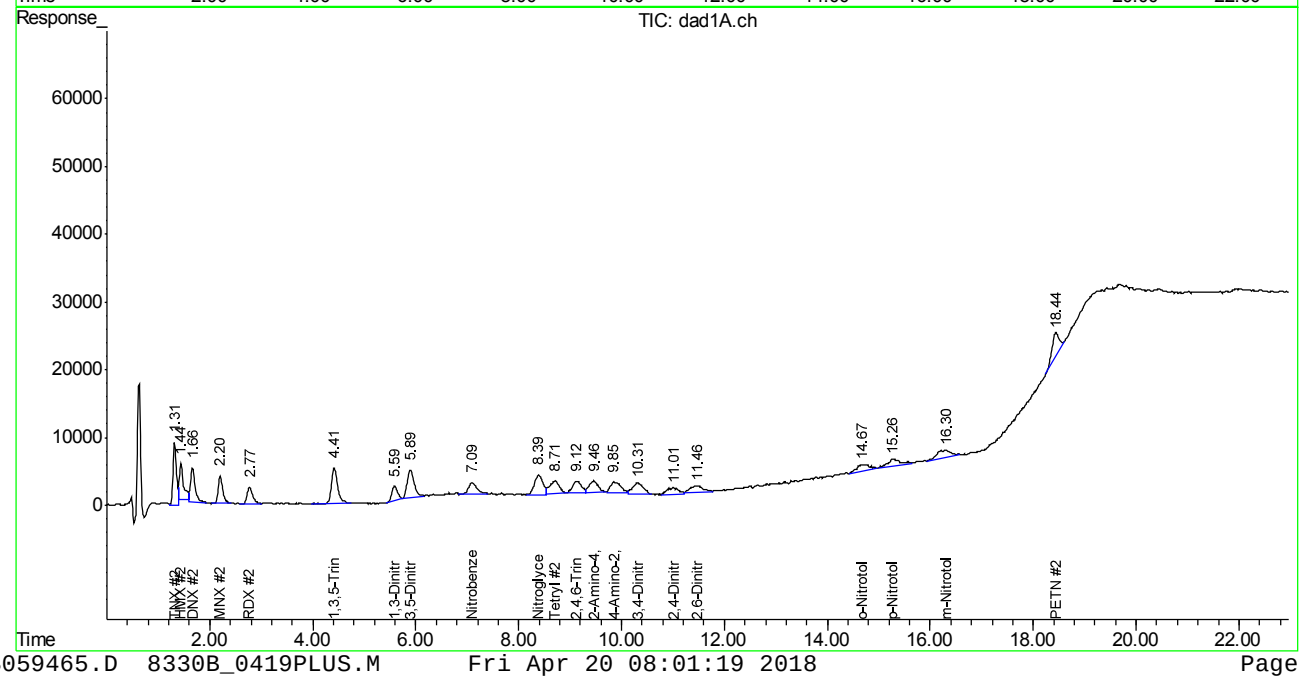
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:55 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

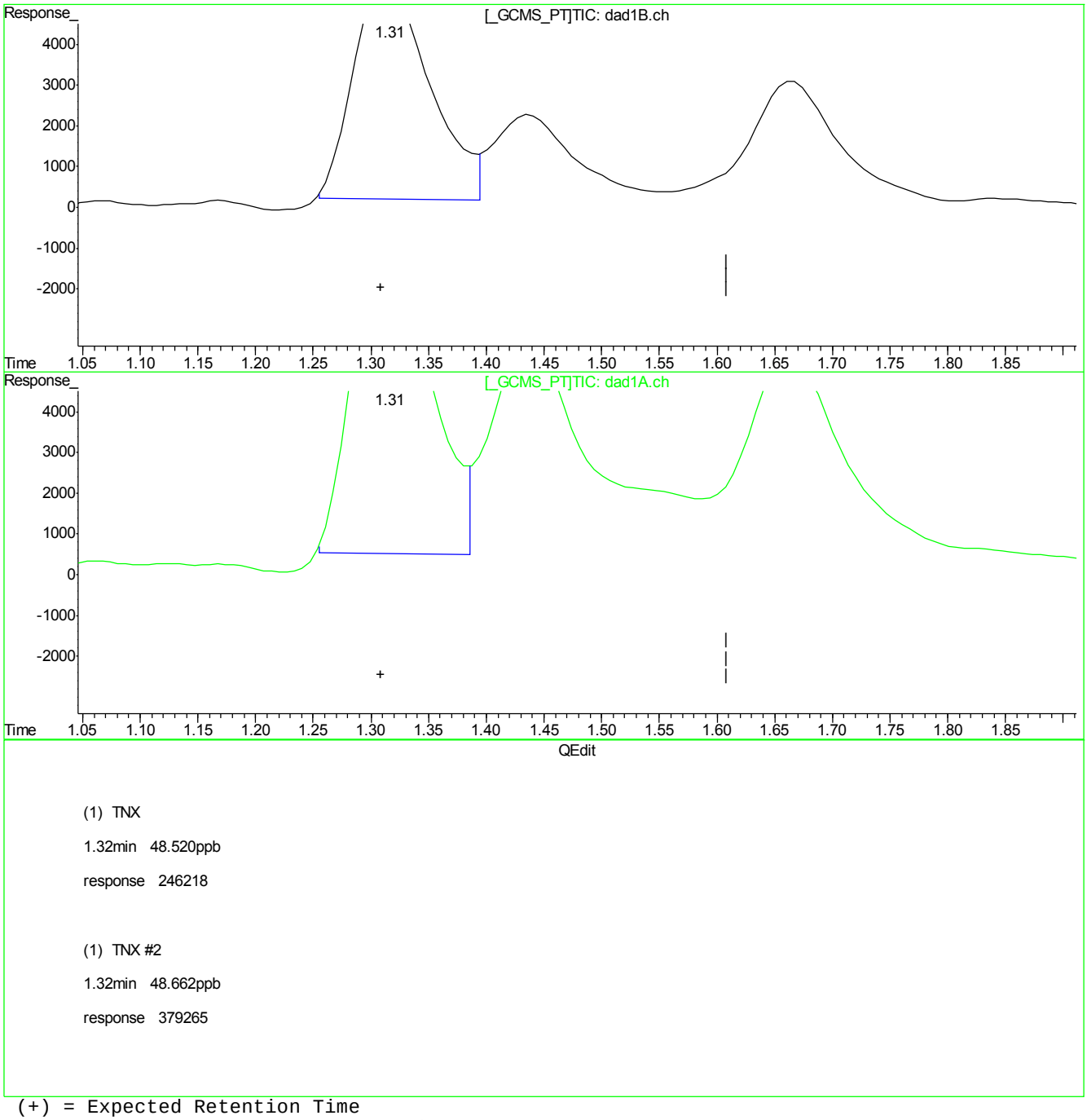
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059465.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 10:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.59	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.39	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	9.85	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.31	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.32	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.01	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.39	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.46	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.67	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.30	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 48.520ppb

response 246218

(1) TNX #2

1.32min 48.662ppb

response 379265

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:52:18 2018

7.7.2.2

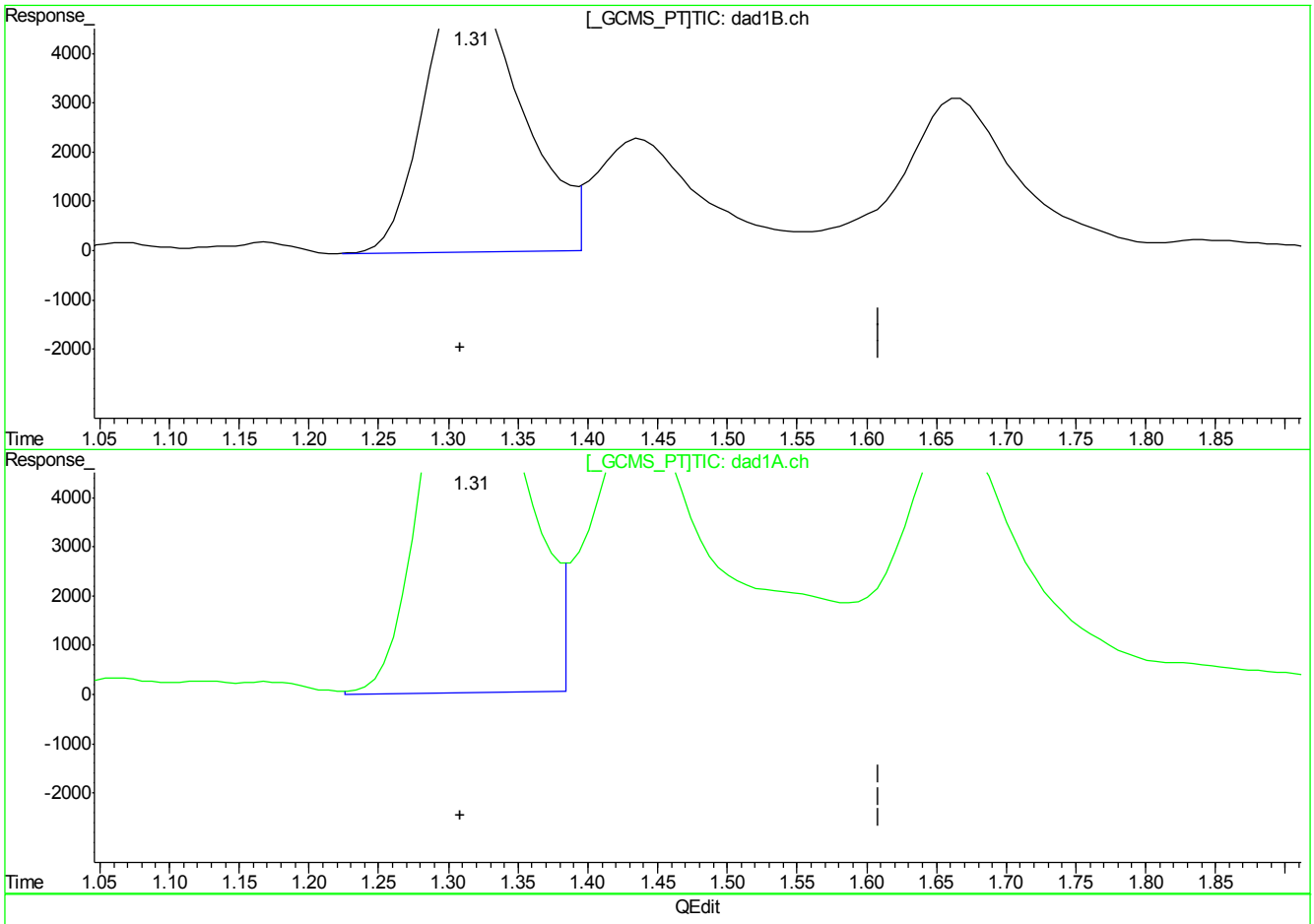
7

BB059465.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 53.572ppb m

response 271857

(1) TNX #2

1.31min 53.933ppb m

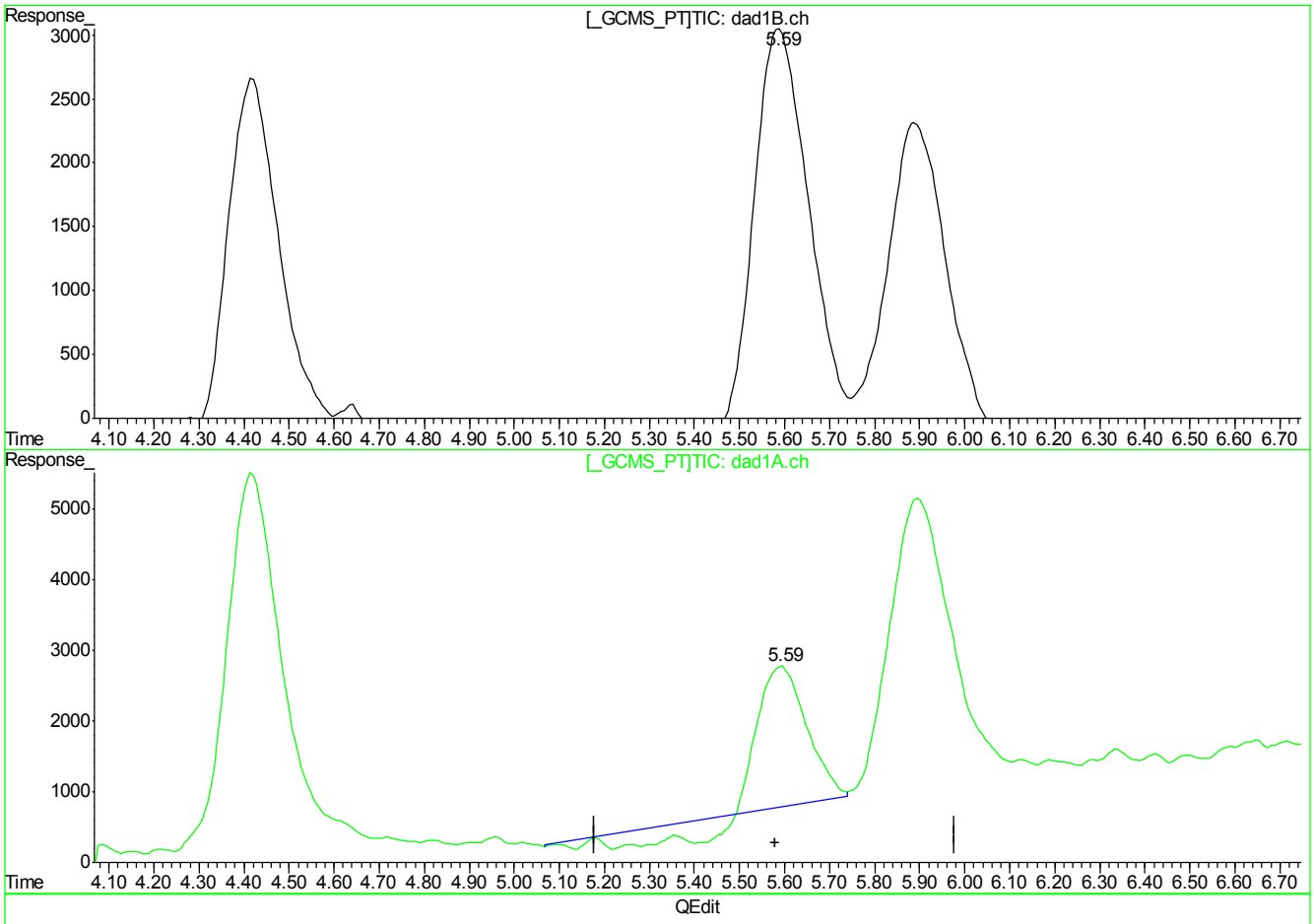
response 420352

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:52:24 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 50.221ppb

response 306521

(7) 1,3-Dinitrobenzene #2

5.59min 26.458ppb

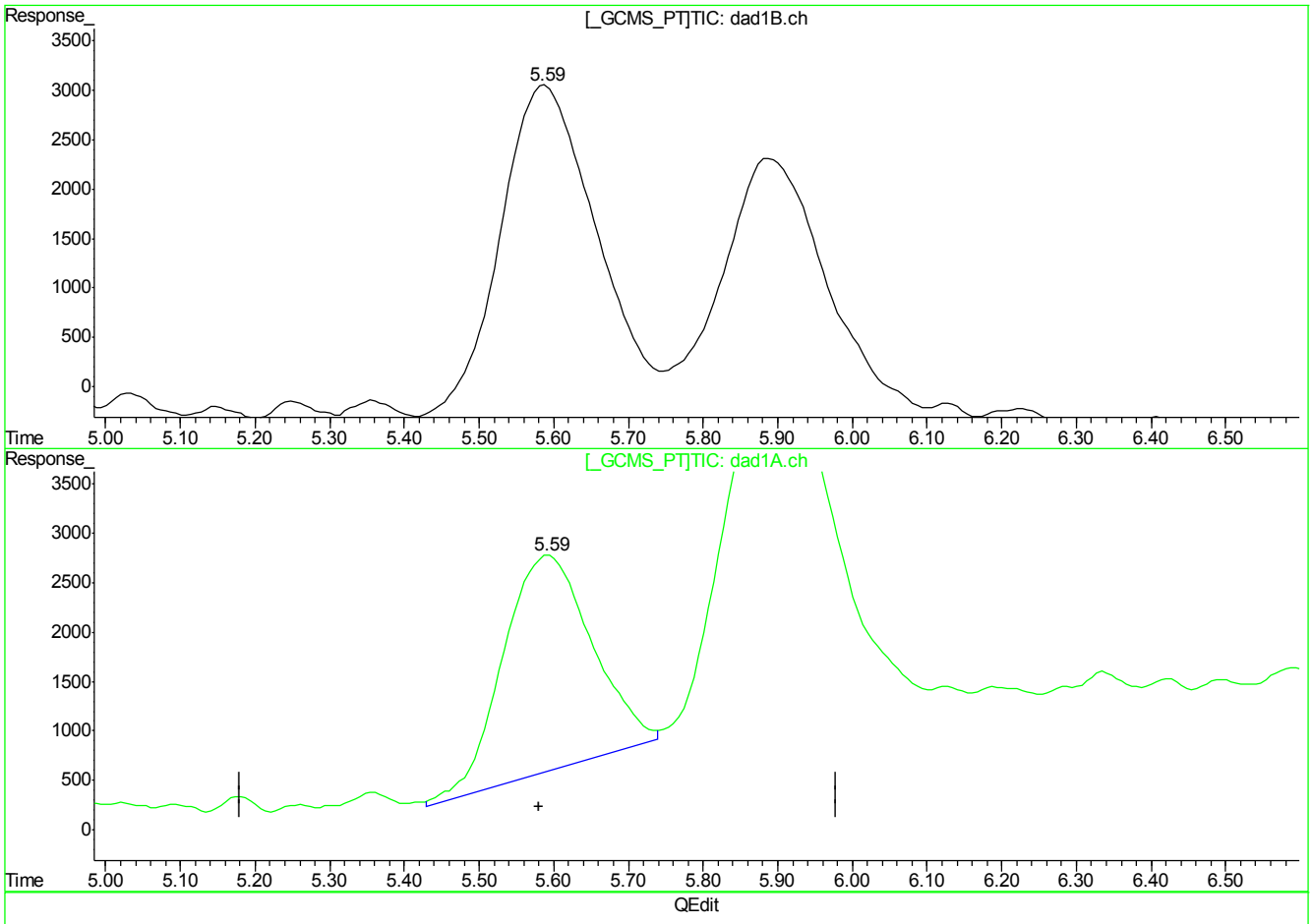
response 104252

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 50.221ppb

response 306521

(7) 1,3-Dinitrobenzene #2

5.59min 45.866ppb m

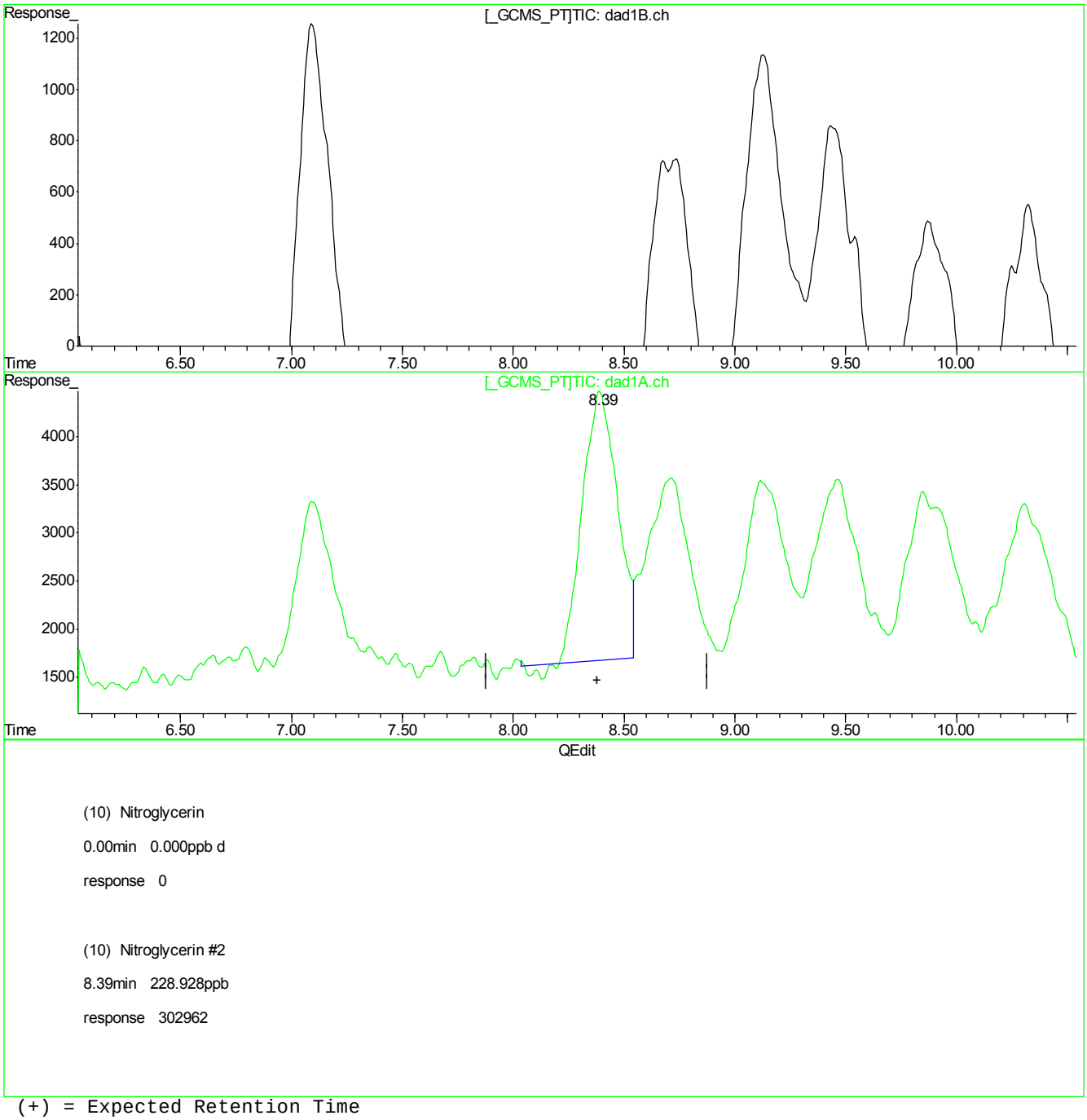
response 180727

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:21 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration

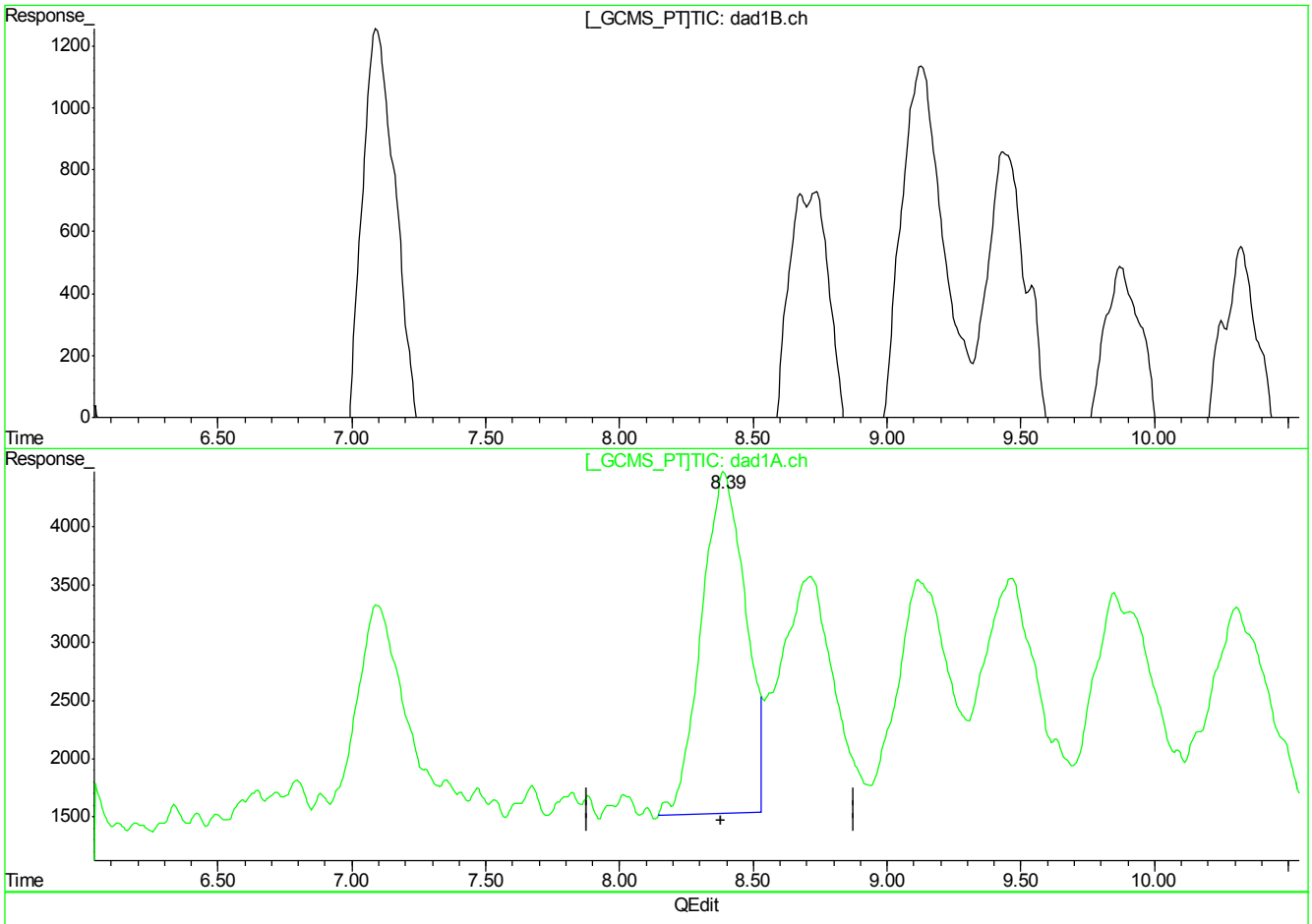


(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.39min 254.046ppb m

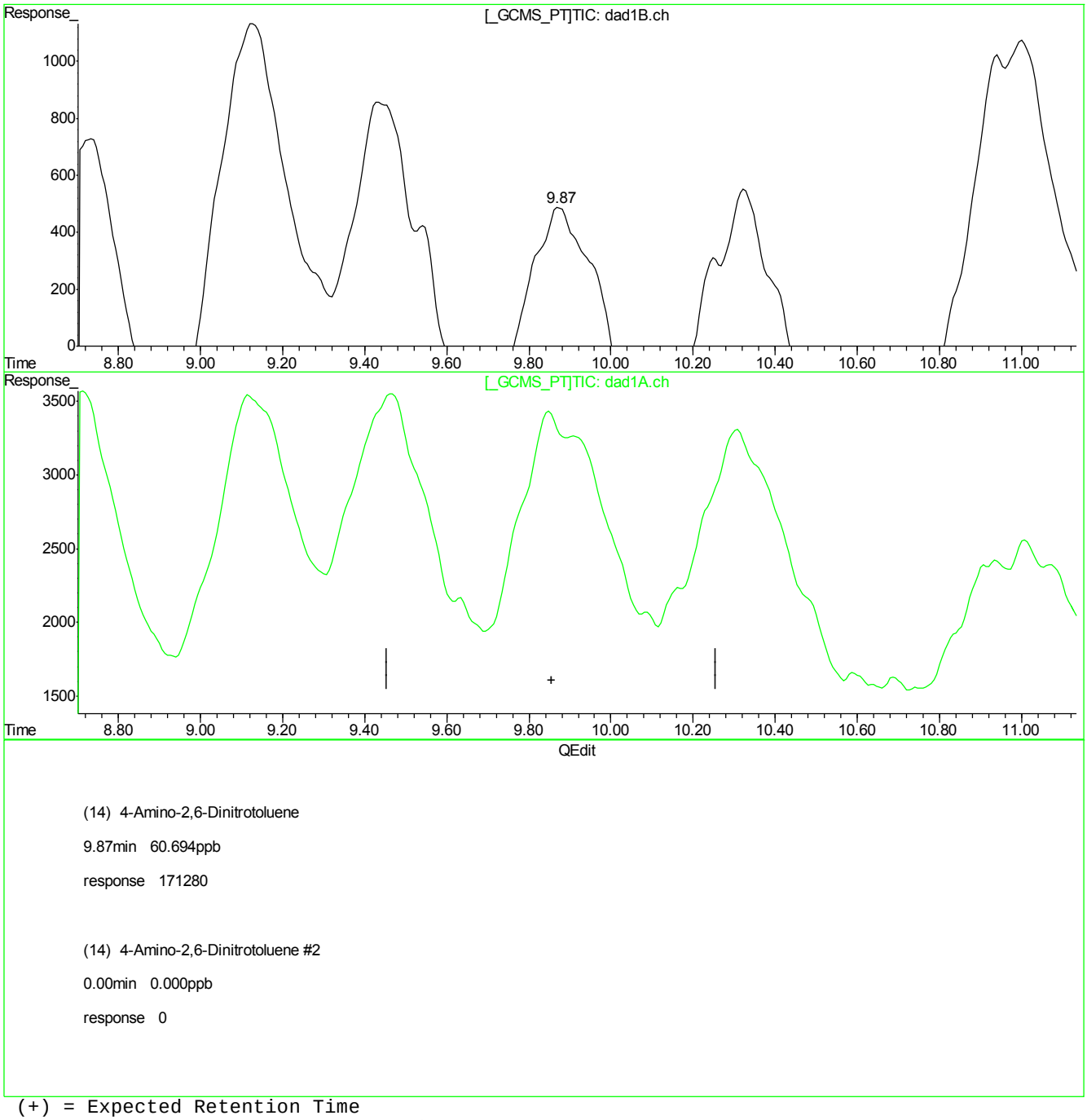
response 336203

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:32 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration

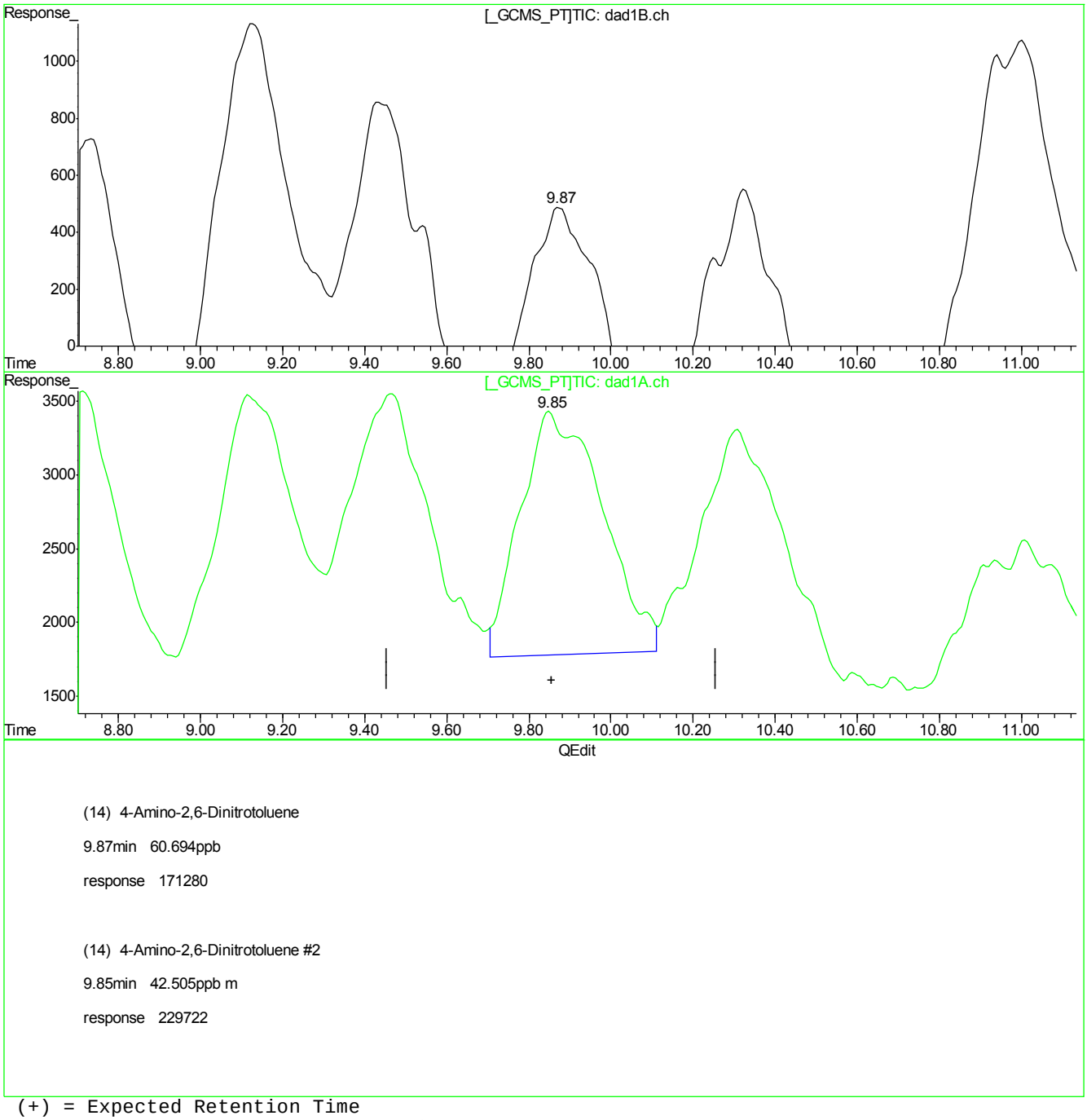


(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.87min 60.694ppb

response 171280

(14) 4-Amino-2,6-Dinitrotoluene #2

9.85min 42.505ppb m

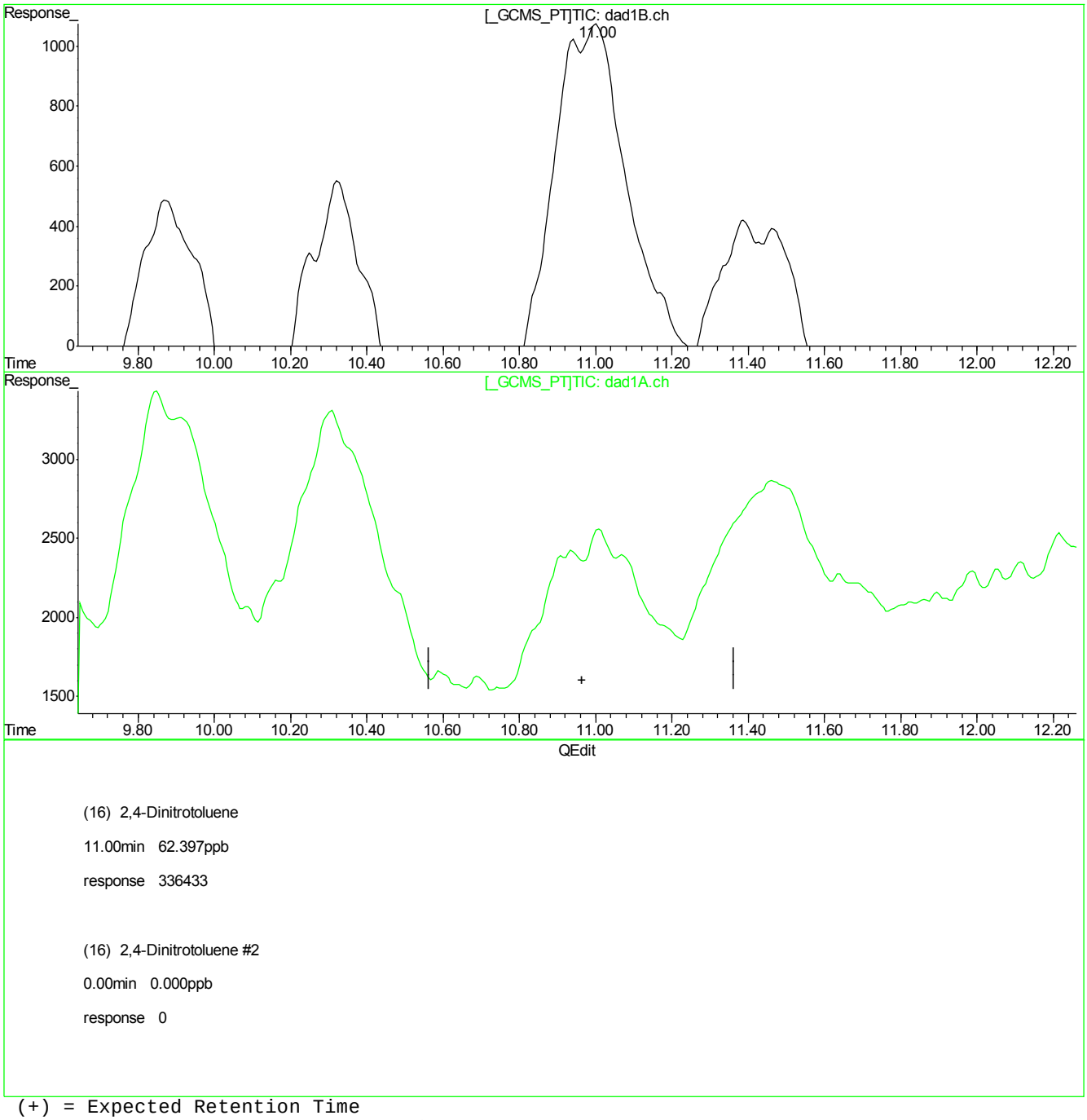
response 229722

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.00min 62.397ppb

response 336433

(16) 2,4-Dinitrotoluene #2

0.00min 0.000ppb

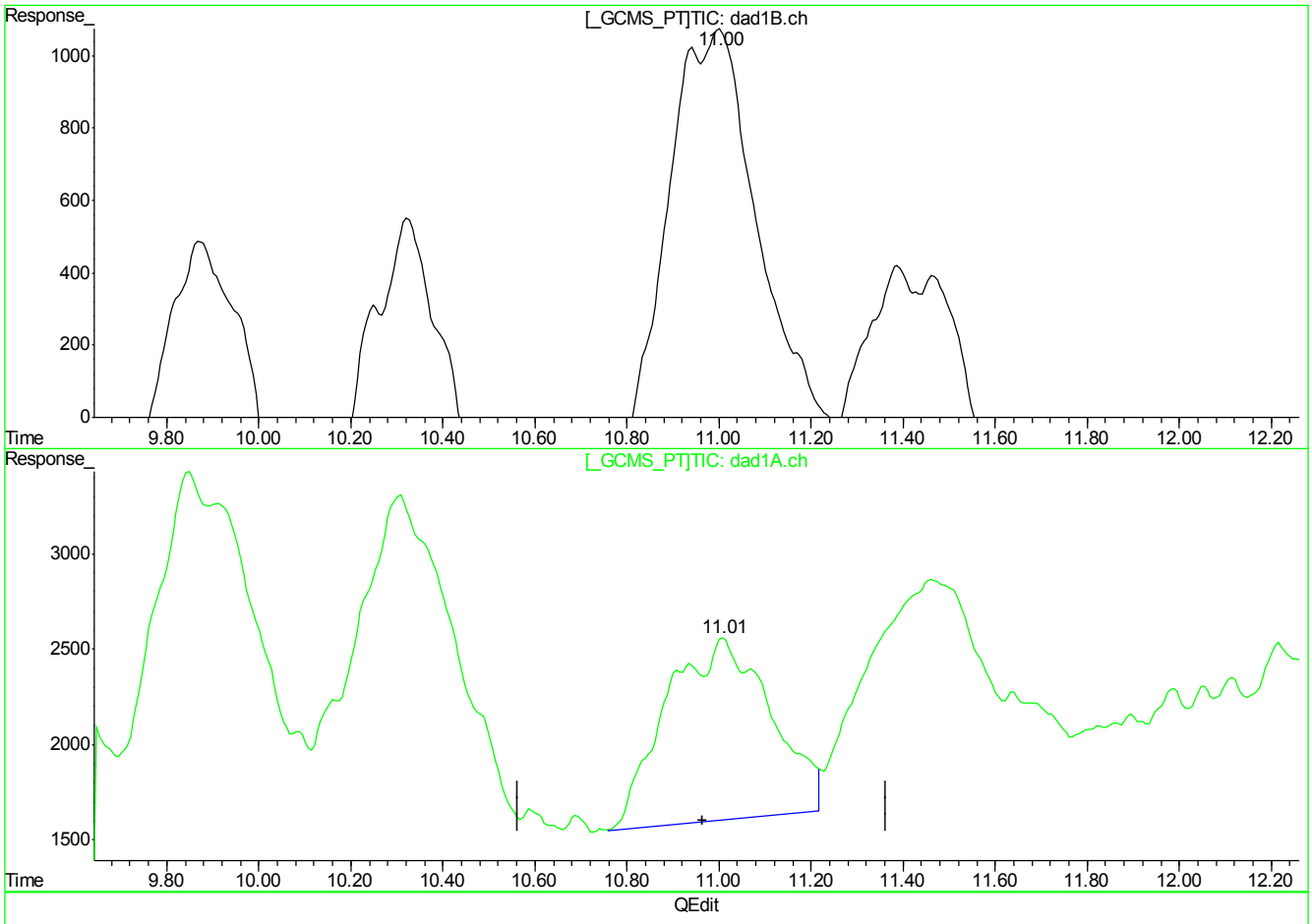
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.00min 62.397ppb

response 336433

(16) 2,4-Dinitrotoluene #2

11.01min 45.176ppb m

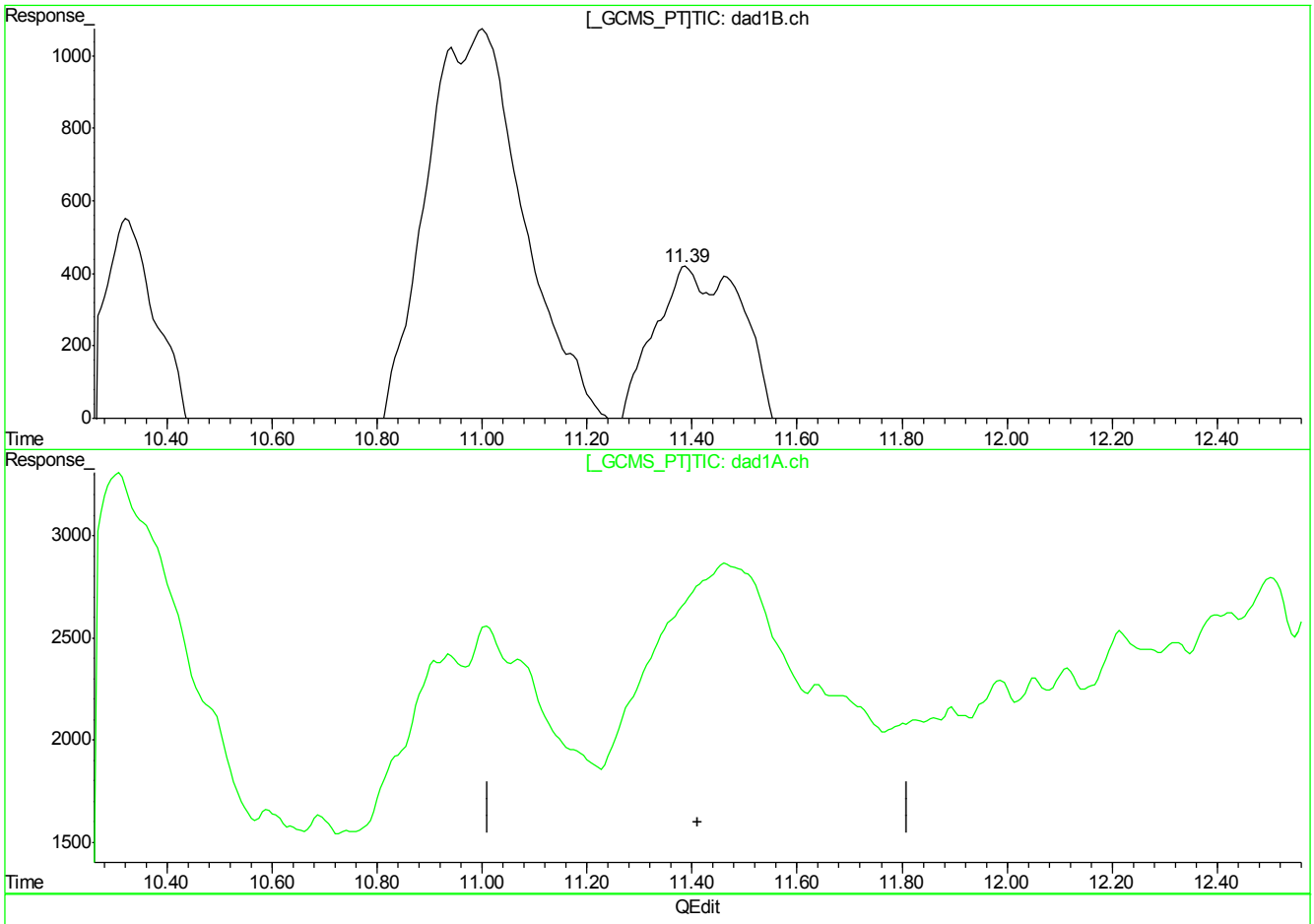
response 150818

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.39min 29.303ppb

response 96342

(17) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

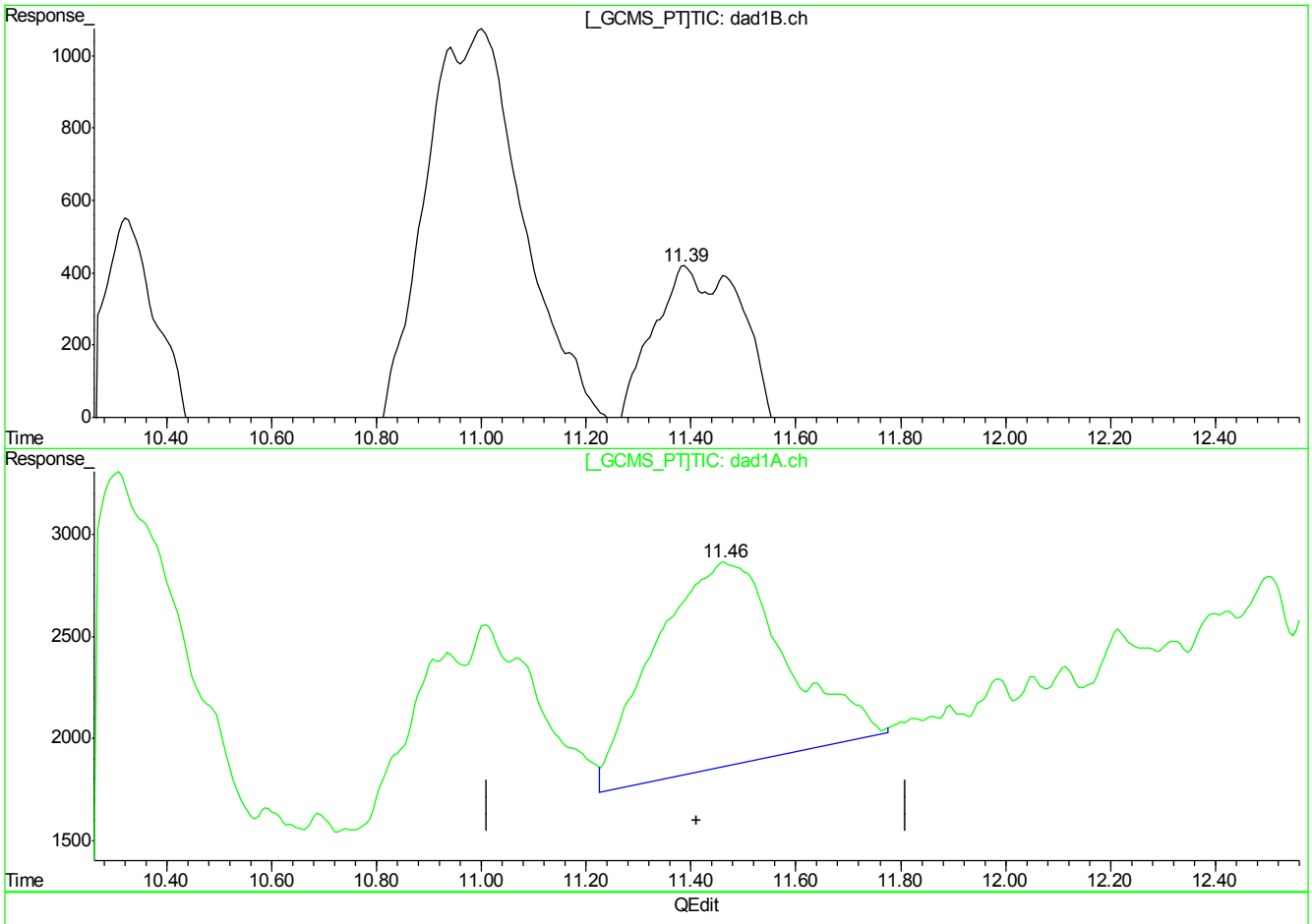
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:45 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.39min 29.303ppb

response 96342

(17) 2,6-Dinitrotoluene #2

11.46min 44.840ppb m

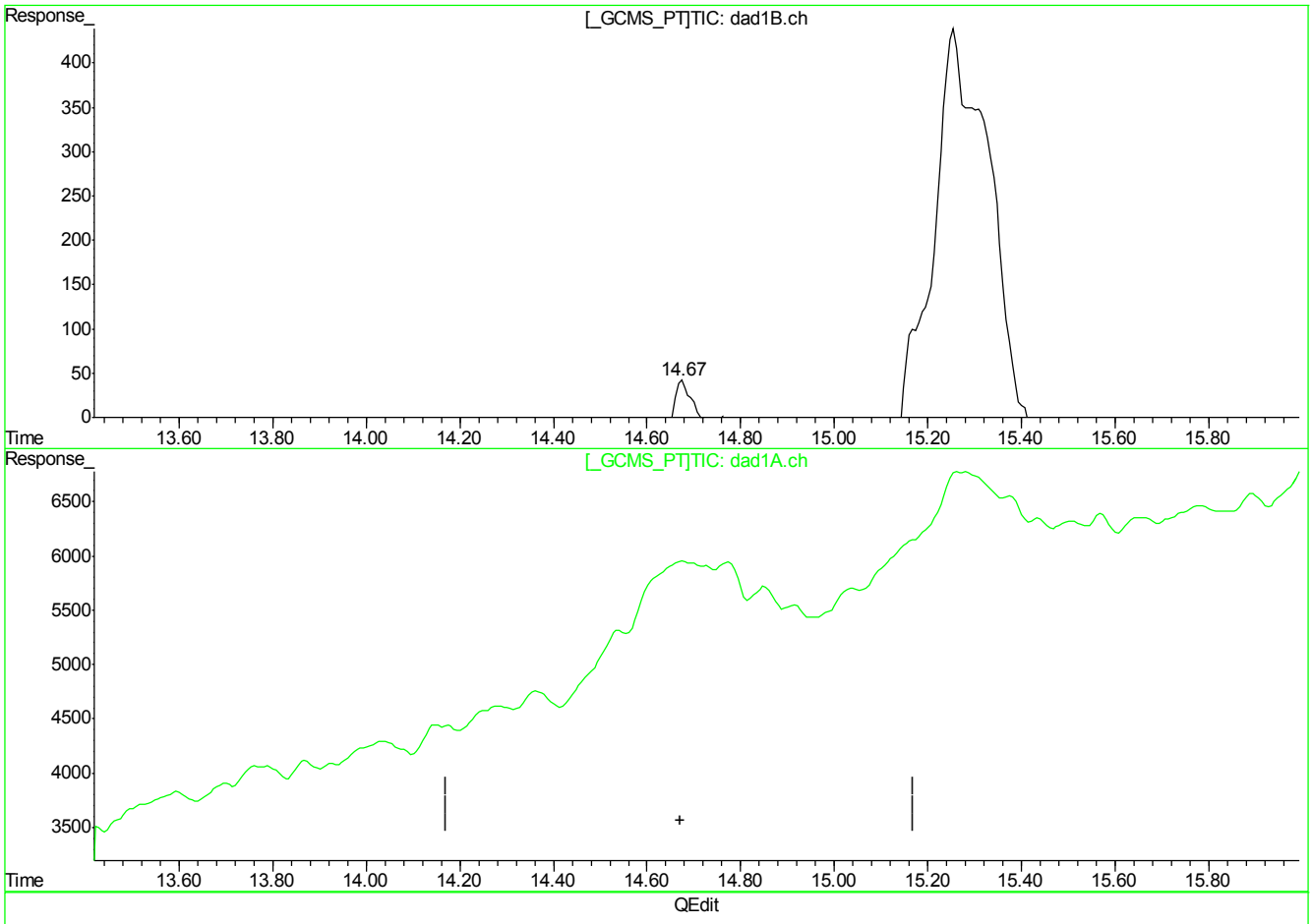
response 175853

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 63.119ppb

response 157597

(18) o-Nitrotoluene #2

0.00min 0.000ppb

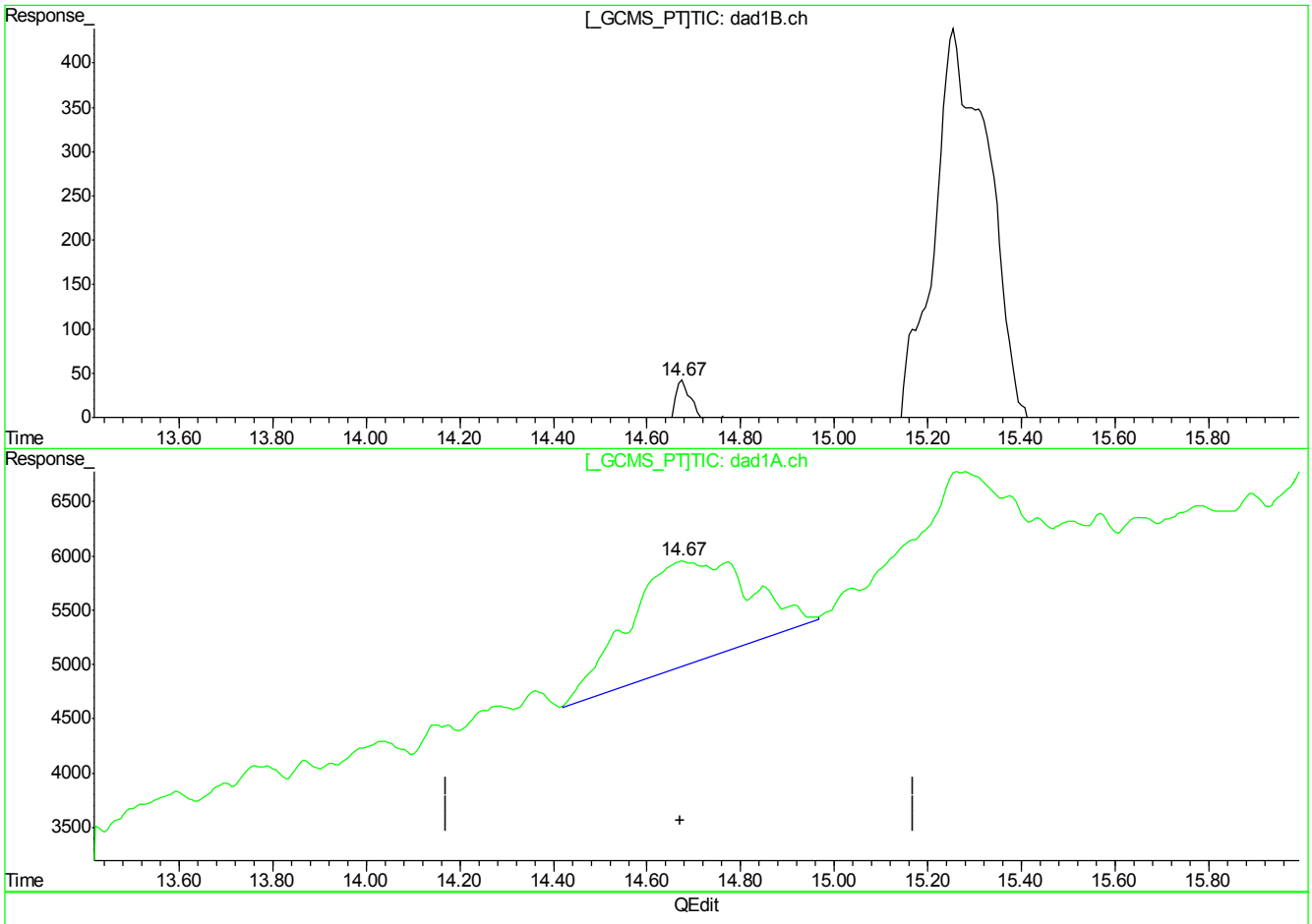
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 63.119ppb

response 157597

(18) o-Nitrotoluene #2

14.67min 47.060ppb m

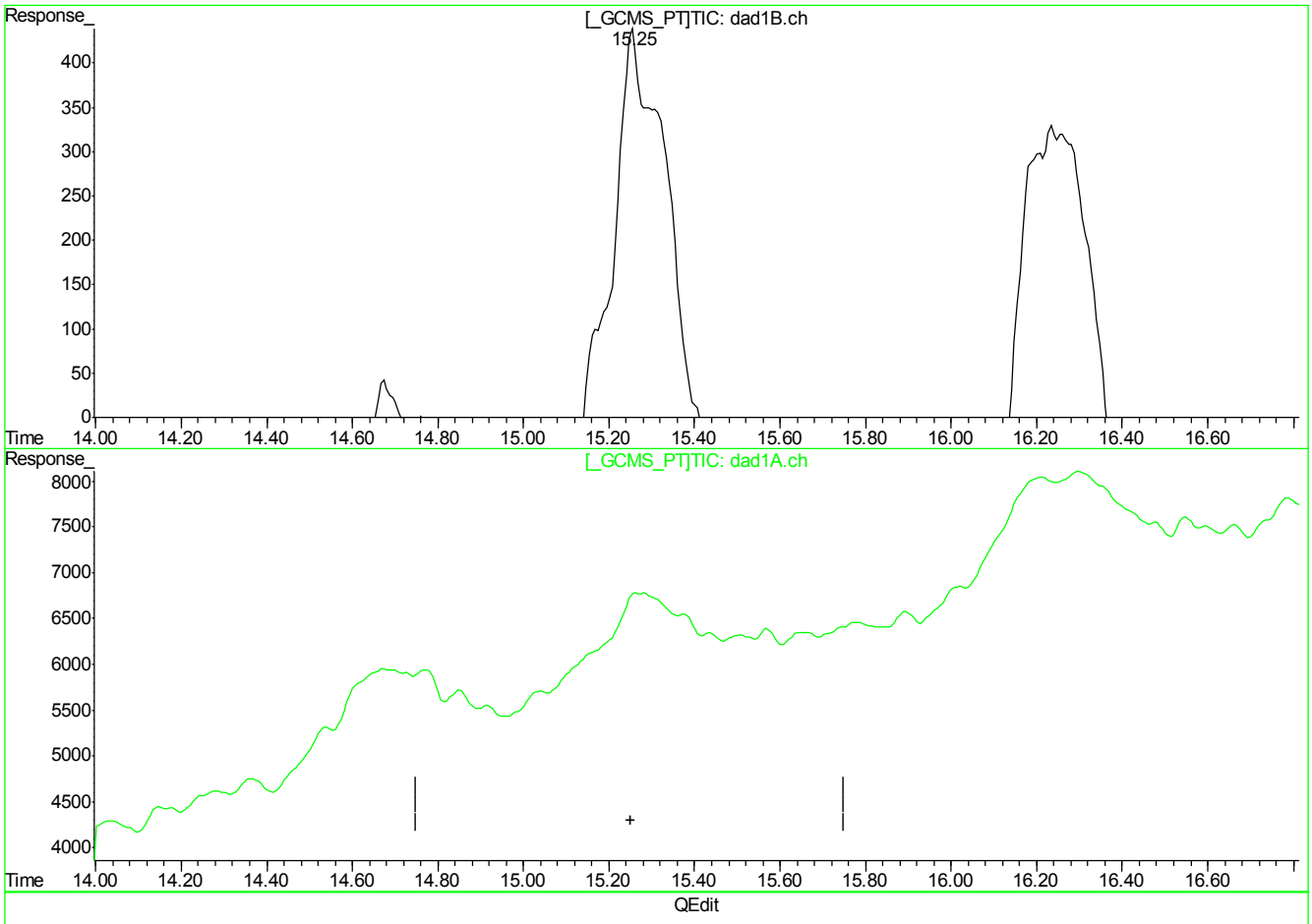
response 171653

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.26min 66.793ppb

response 247116

(19) p-Nitrotoluene #2

0.00min 0.000ppb

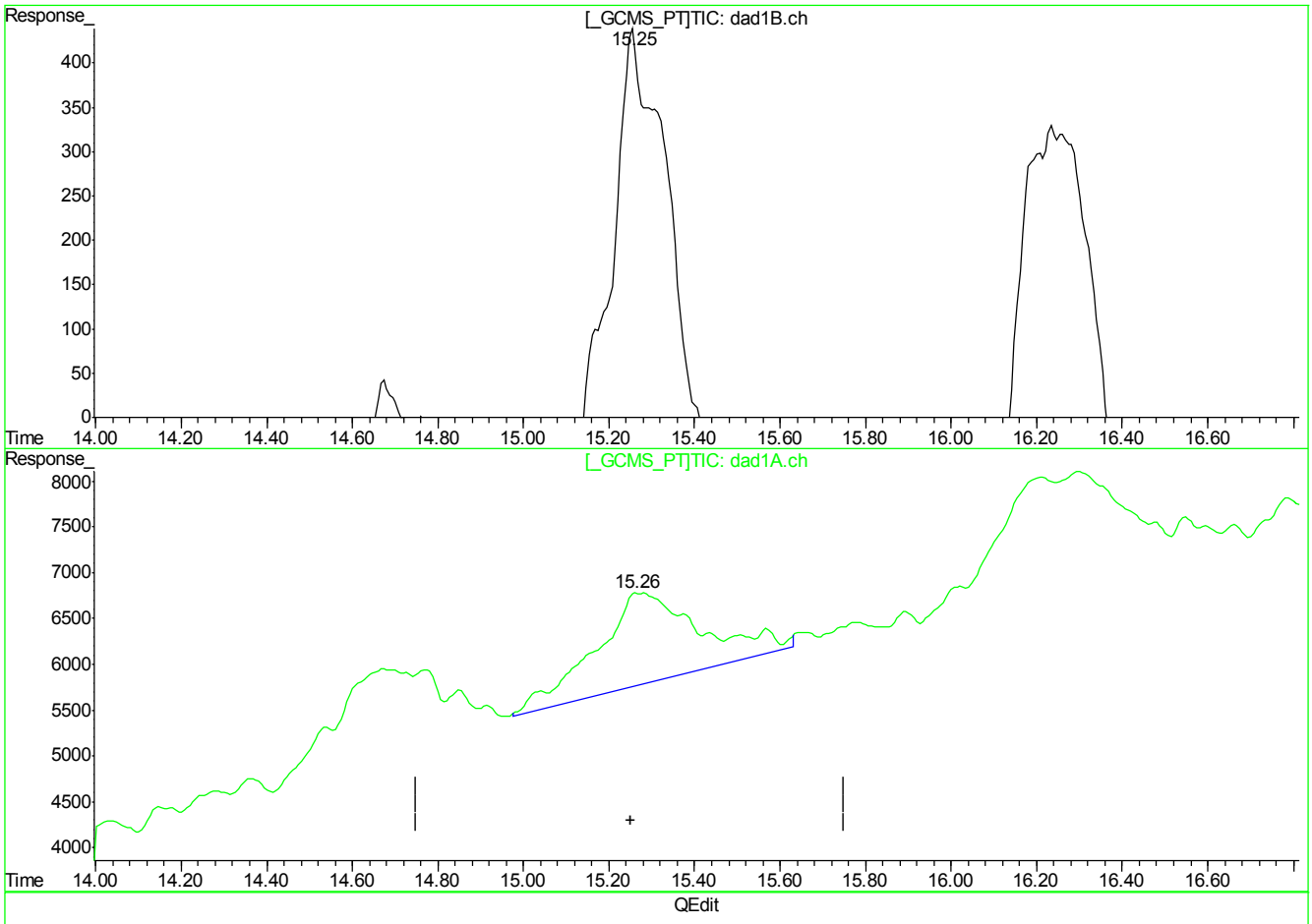
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:00 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.26min 66.793ppb

response 247116

(19) p-Nitrotoluene #2

15.26min 53.275ppb m

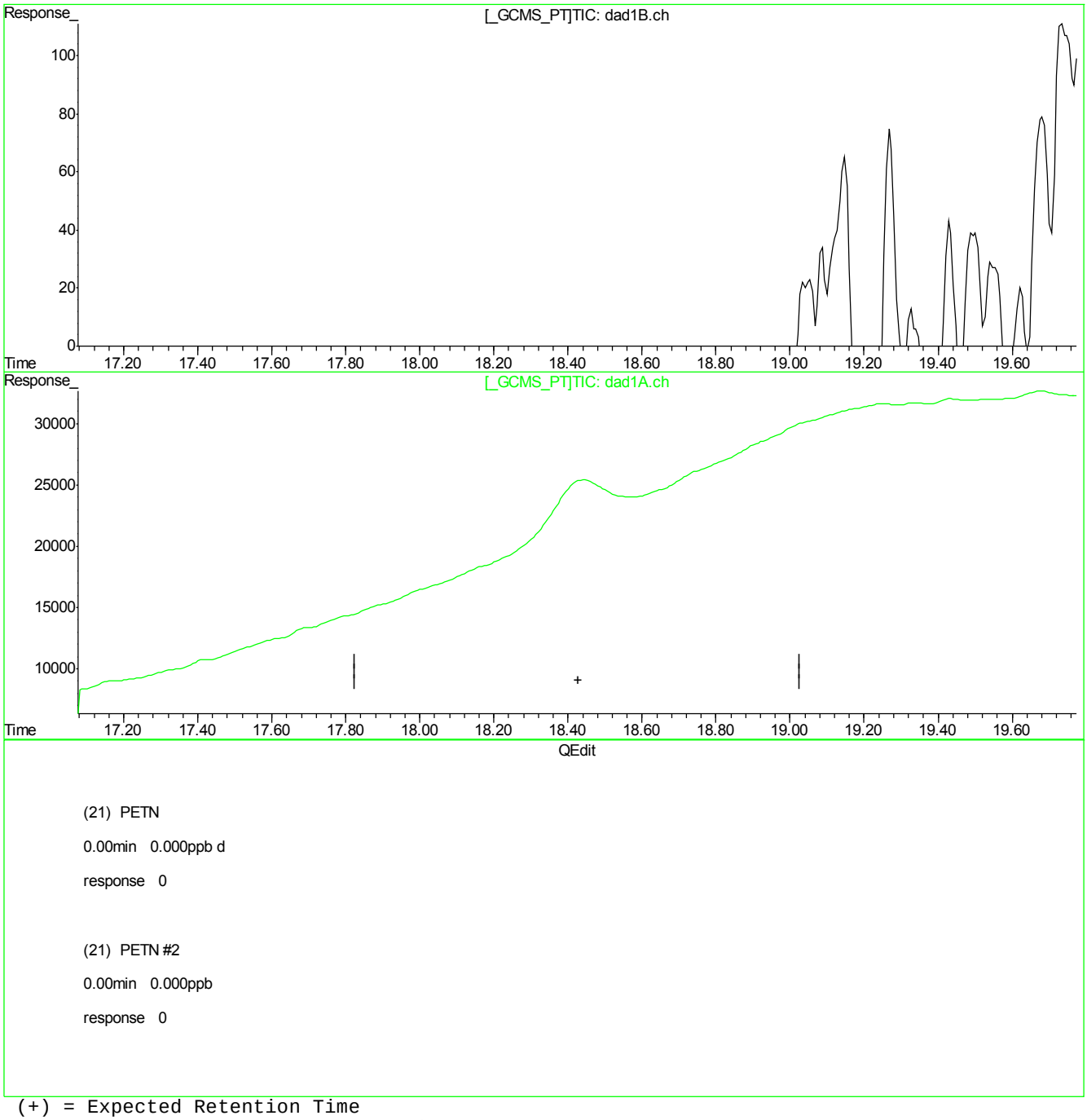
response 168598

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration

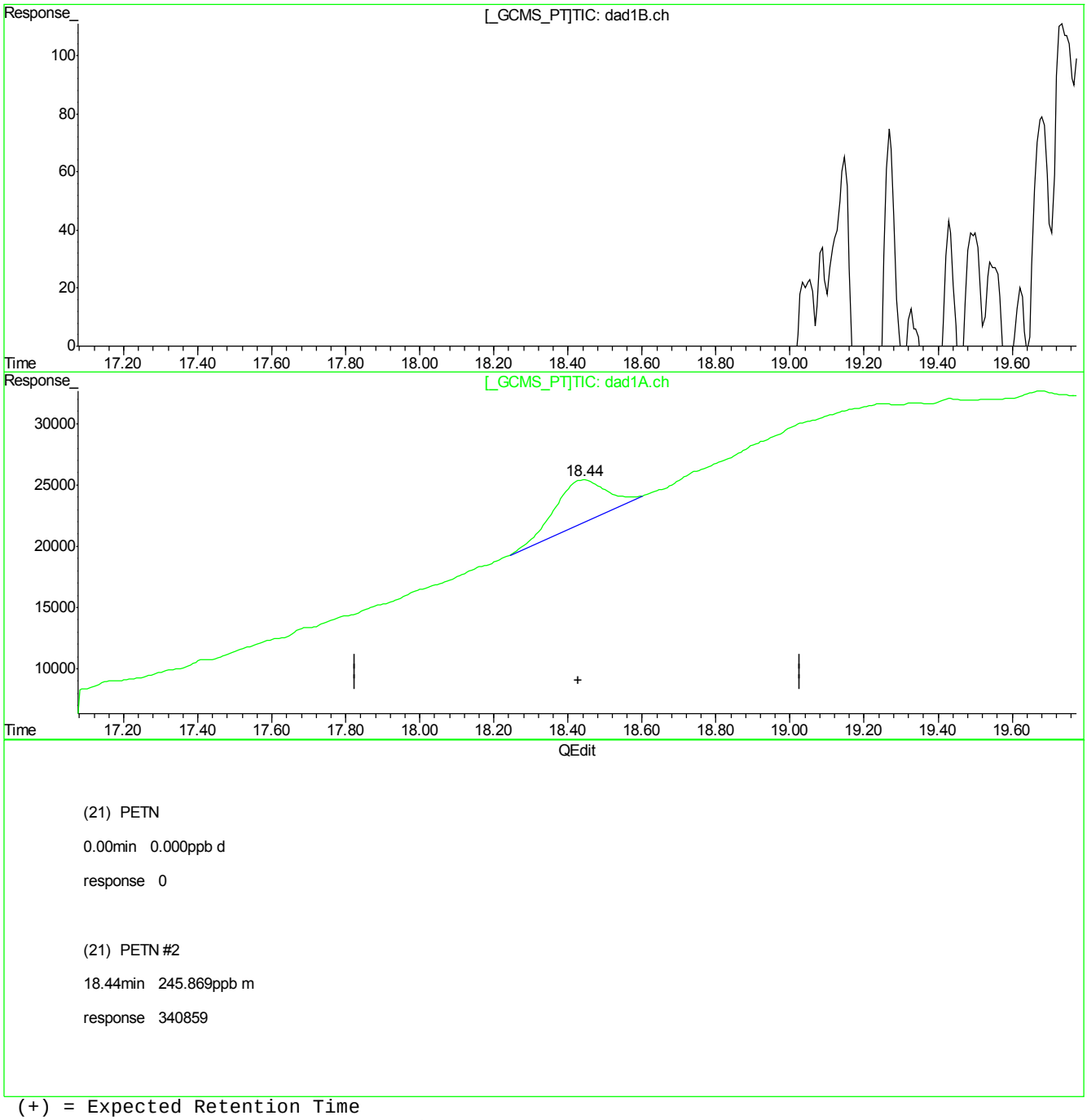


(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:32 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:46 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.34	10.34	272485	542828	117.981	130.369
	Spiked Amount 500.000	Range 70 - 136		Recovery =		23.60%#	26.07%#
	Target Compounds						
1)	TNX	1.31	1.32	533635	818783	105.159m	105.054m
2)	HMX	1.44	1.44	199951	561154	102.567	106.775
3)	DNX	1.67	1.67	326904	529647	110.452	110.960
4)	MNX	2.21	2.21	342440	509252	110.134	108.645
5)	RDX	2.77	2.77	242339	360585	104.634	96.279
6)	1,3,5-Trinitrobe	4.42	4.42	437968	902443	88.631	99.030
7)	1,3-Dinitrobenze	5.60	5.60	610628	401941	100.046	102.007m
8)	3,5-Dinitroanili	5.90	5.90	521888	808560	113.832	102.530
9)	Nitrobenzene	7.11	7.10	384978	333931	100.909	93.141
10)	Nitroglycerin	0.00	8.39	0	685075	N.D. d	517.665
11)	Tetryl	8.72	8.71	328974	566940	103.386	110.581
12)	2,4,6-Trinitroto	9.13	9.13	419408	524069	116.230	122.186
13)	2-Amino-4,6-Dini	9.46	9.46	386042	611330	96.169	109.955
14)	4-Amino-2,6-Dini	9.87	9.88	297874	600015	105.554	111.019
16)	2,4-Dinitrotolue	10.99	11.00	523838	300231	97.154	89.931
17)	2,6-Dinitrotolue	11.46	11.45	325135	307361	98.893	78.373
18)	o-Nitrotoluene	14.68	14.68	278959	380286	111.725	104.258
19)	p-Nitrotoluene	15.27	15.28	436597	376793	118.008	119.062
20)	m-Nitrotoluene	16.27	16.26	376321	465946	102.001	107.445
21)	PETN	0.00	18.44	0	707738	N.D. d	510.508m

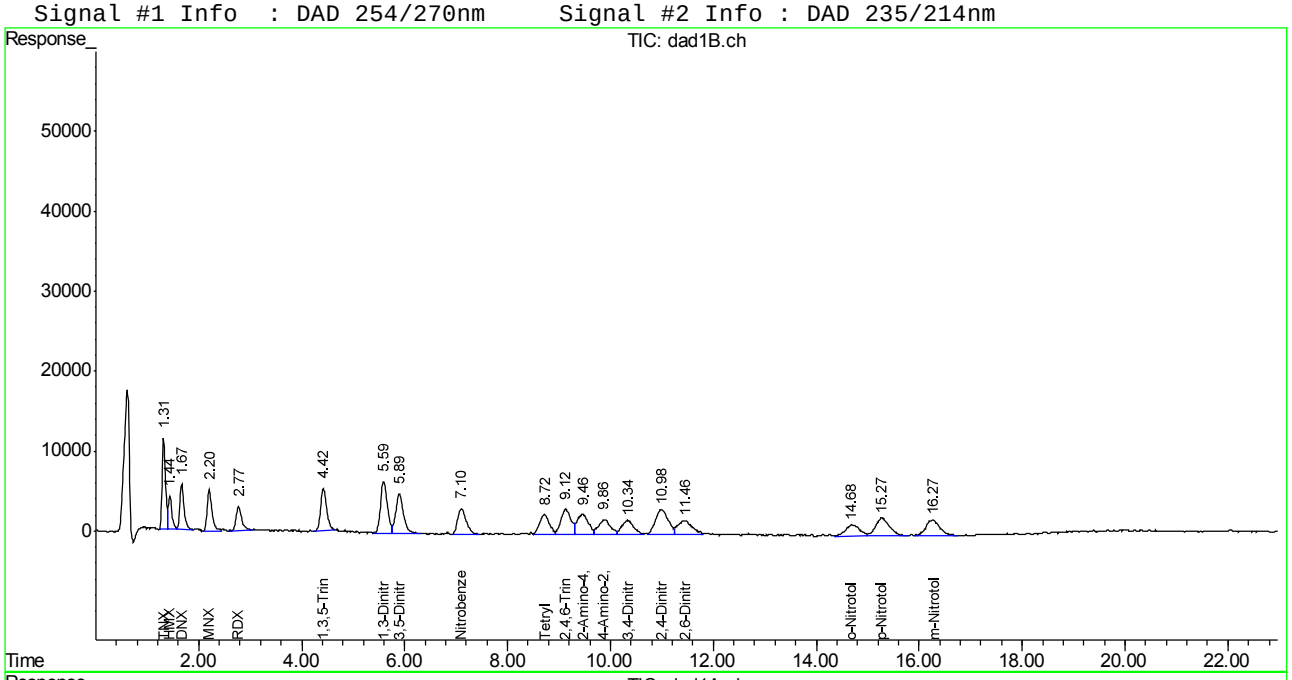
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059466.D 8330B_0419PLUS.M Fri Apr 20 08:01:20 2018 Page 1

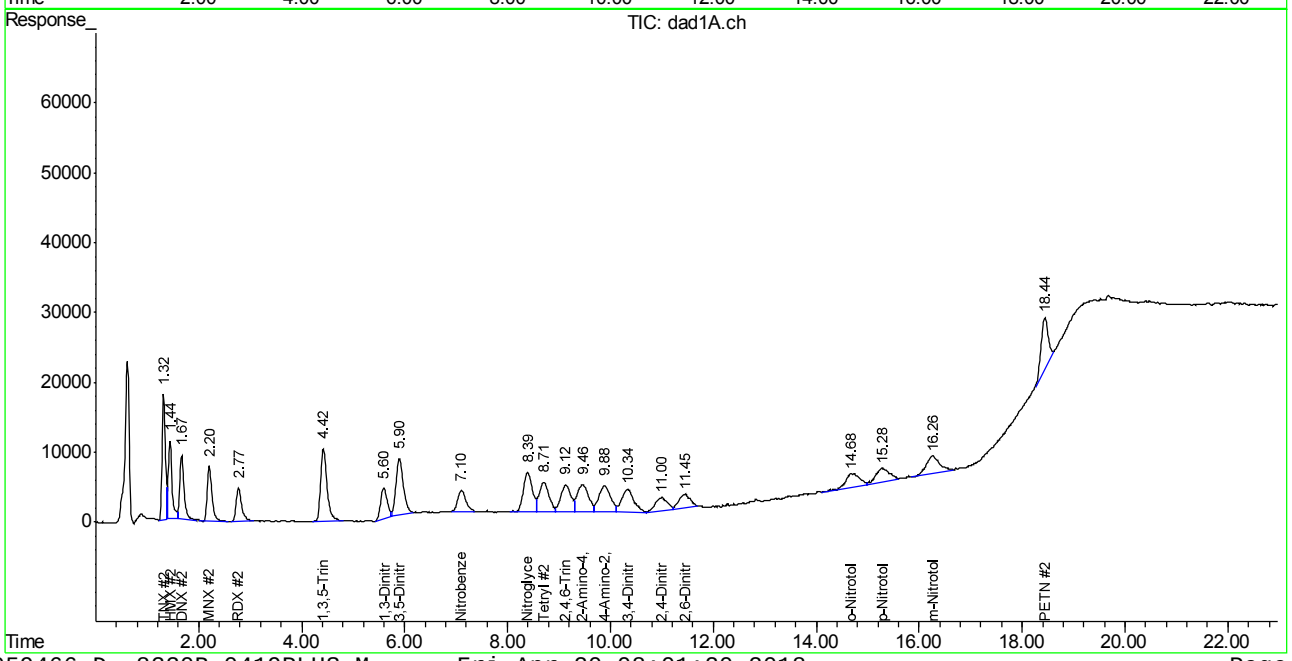
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:56 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

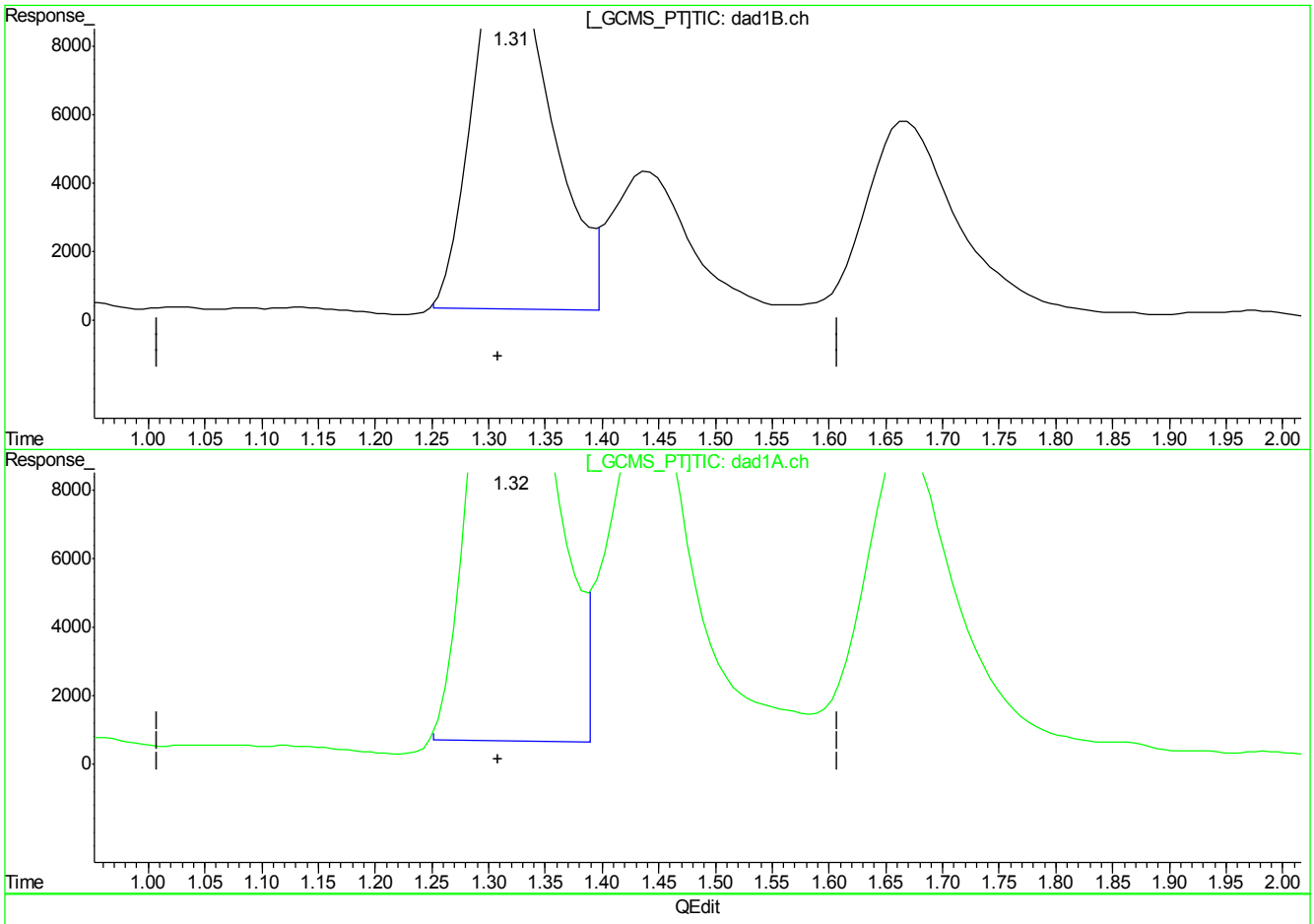
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059466.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 11:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 100.494ppb

response 509967

(1) TNX #2

1.32min 100.117ppb

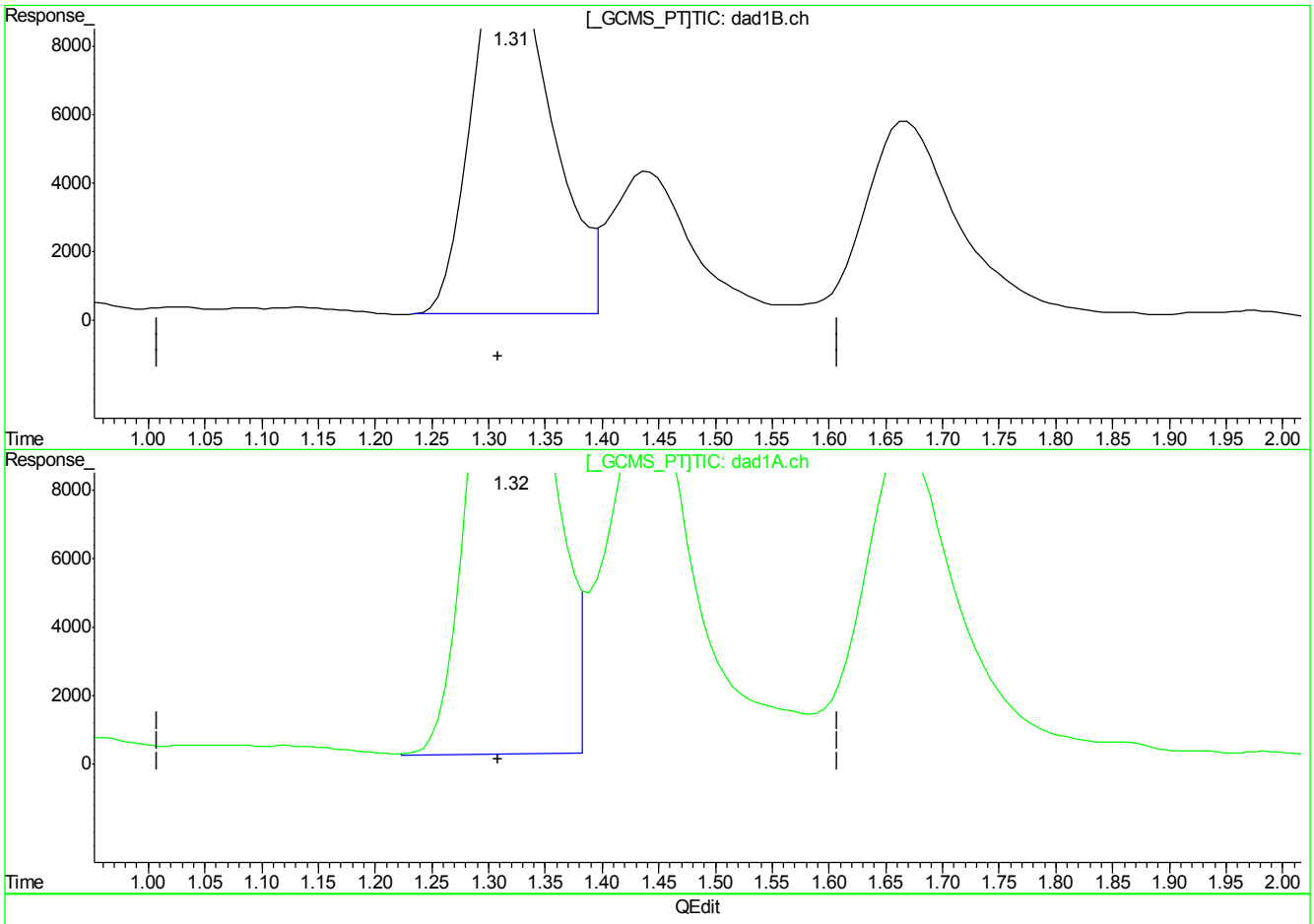
response 780302

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:55:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 105.159ppb m

response 533635

(1) TNX #2

1.32min 105.054ppb m

response 818783

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:55:48 2018

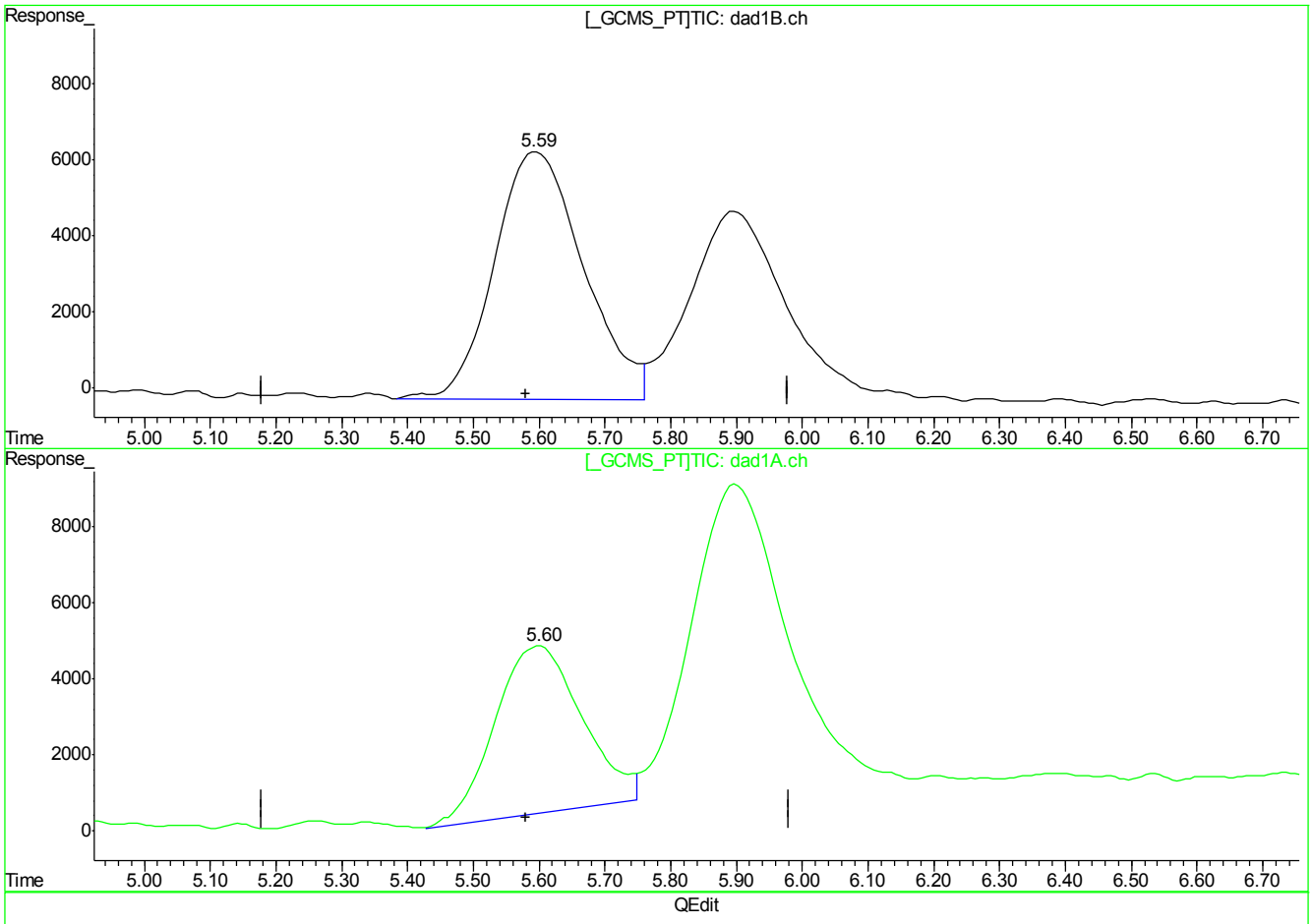
7.7.3.3

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 100.046ppb

response 610628

(7) 1,3-Dinitrobenzene #2

5.60min 102.007ppb m

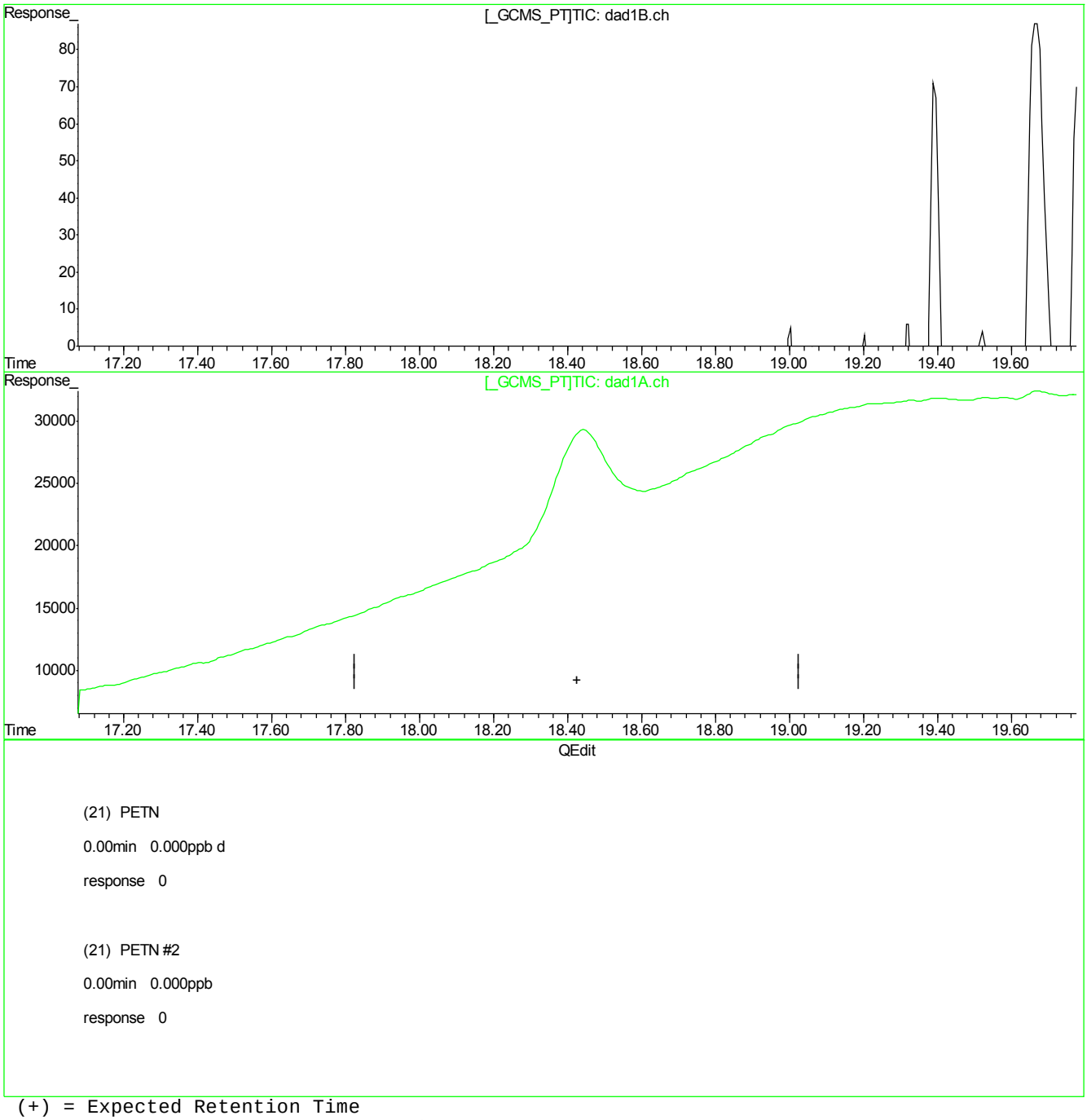
response 401941

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration

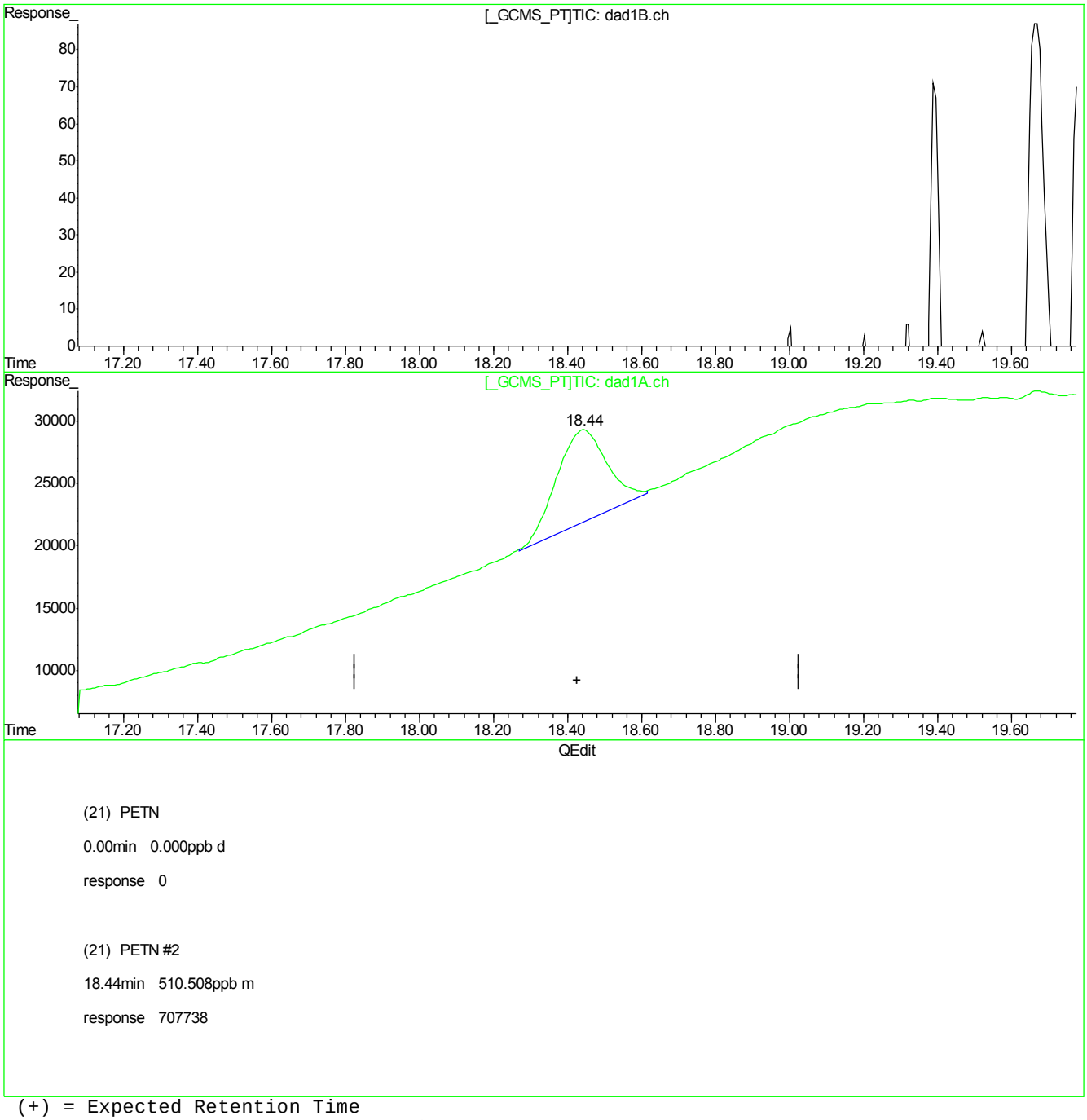


(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:22 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.44min 510.508ppb m

response 707738

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:25 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:47 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.33	10.34	574463	864172	248.731	207.544
	Spiked Amount 500.000	Range 70 - 136		Recovery =		49.75%#	41.51%#
	Target Compounds						
1)	TNX	1.32	1.32	973915	1447277	191.920m	185.693m
2)	HMX	1.44	1.44	353288	1034890	181.222	196.916
3)	DNX	1.67	1.67	557165	973975	188.461	204.311
4)	MNX	2.21	2.21	601874	917081	193.572	195.653
5)	RDX	2.77	2.77	404360	620985	174.855	165.808
6)	1,3,5-Trinitrobe	4.42	4.42	845691	1617161	171.142	177.459
7)	1,3-Dinitrobenze	5.60	5.60	1090649	713093	178.694	180.973m
8)	3,5-Dinitroanili	5.90	5.90	925462	1488930	201.858	188.806
9)	Nitrobenzene	7.11	7.11	707824	703995	185.532	196.361
10)	Nitroglycerin	0.00	8.39	0	1191118	N.D. d	900.047
11)	Tetryl	8.72	8.71	625180	1011909	196.474	197.371
12)	2,4,6-Trinitroto	9.14	9.13	813983	914451	225.578	213.203
13)	2-Amino-4,6-Dini	9.45	9.45	729629	1080997	181.762	194.431
14)	4-Amino-2,6-Dini	9.88	9.89	567927	1041527	201.249	192.711
16)	2,4-Dinitrotolue	10.99	10.98	1040801	553443	193.033	165.778
17)	2,6-Dinitrotolue	11.44	11.43	676914	698642	205.891	178.145
18)	o-Nitrotoluene	14.69	14.69	466779	677451	186.949	185.727
19)	p-Nitrotoluene	15.28	15.27	789495	685759	213.394	216.691
20)	m-Nitrotoluene	16.24	16.26	674661	822841	182.865	189.743
21)	PETN	0.00	18.44	0	1321717	N.D. d	953.386m

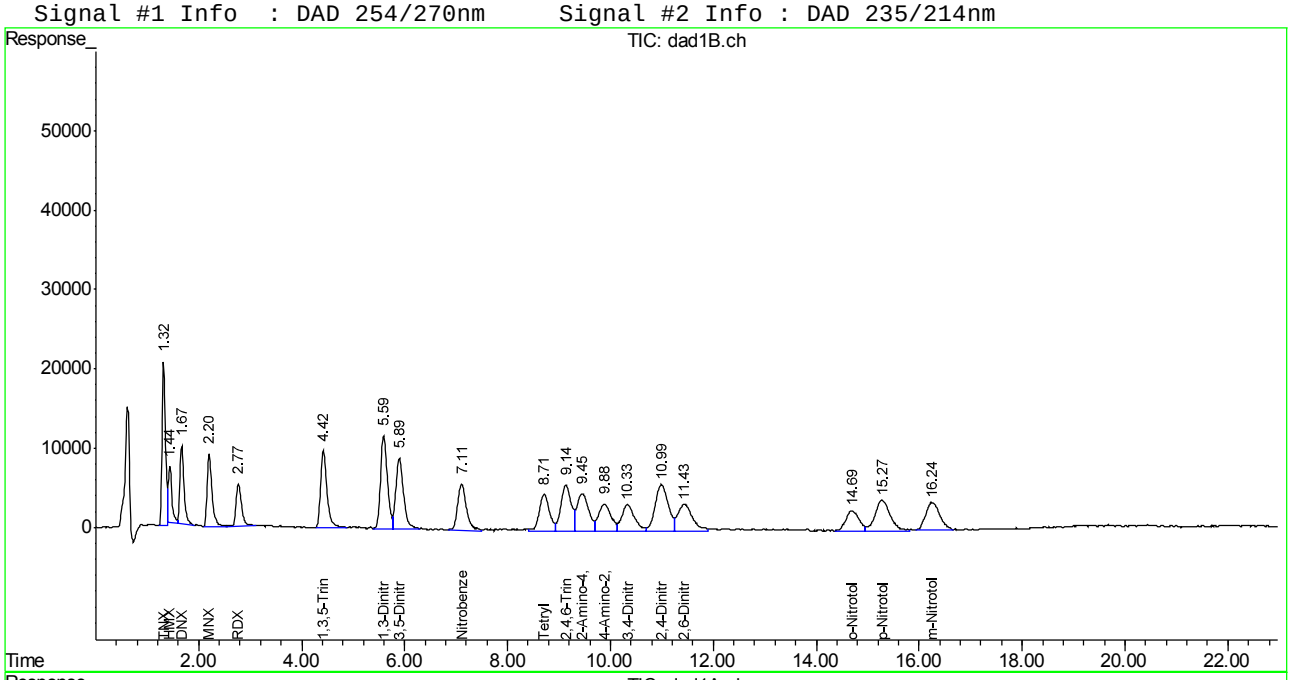
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059467.D 8330B_0419PLUS.M Fri Apr 20 08:01:21 2018 Page 1

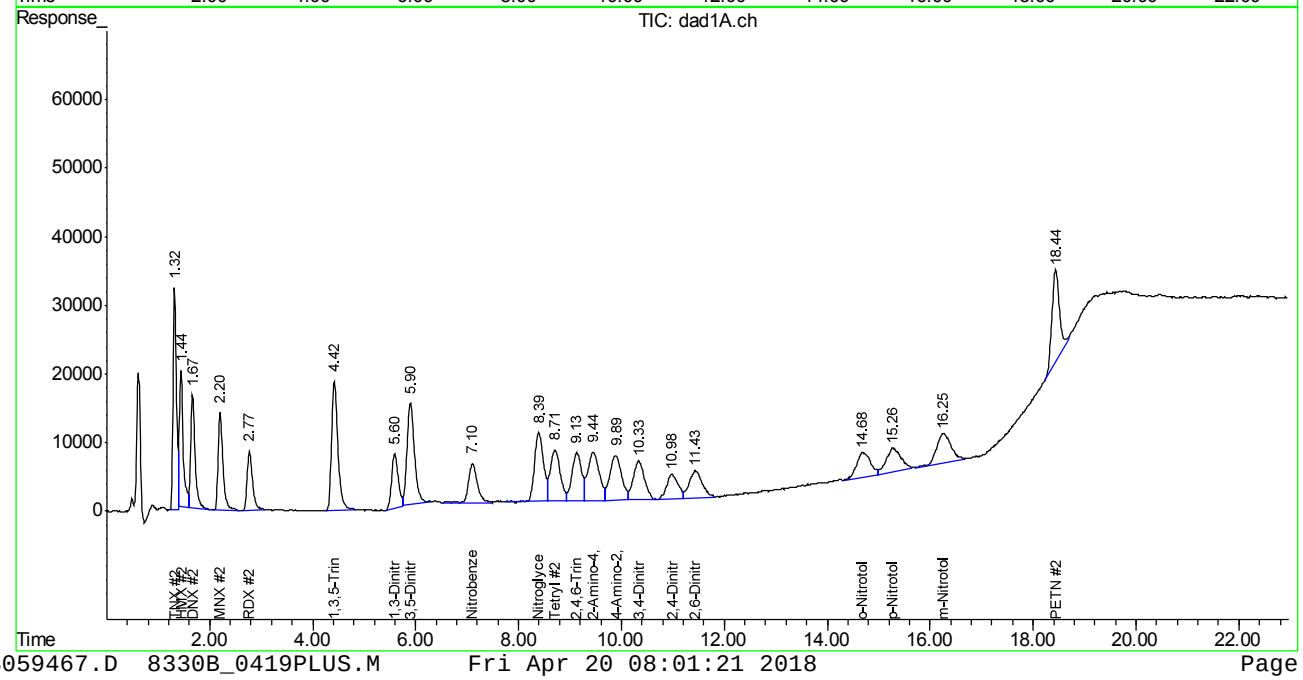
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:57 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

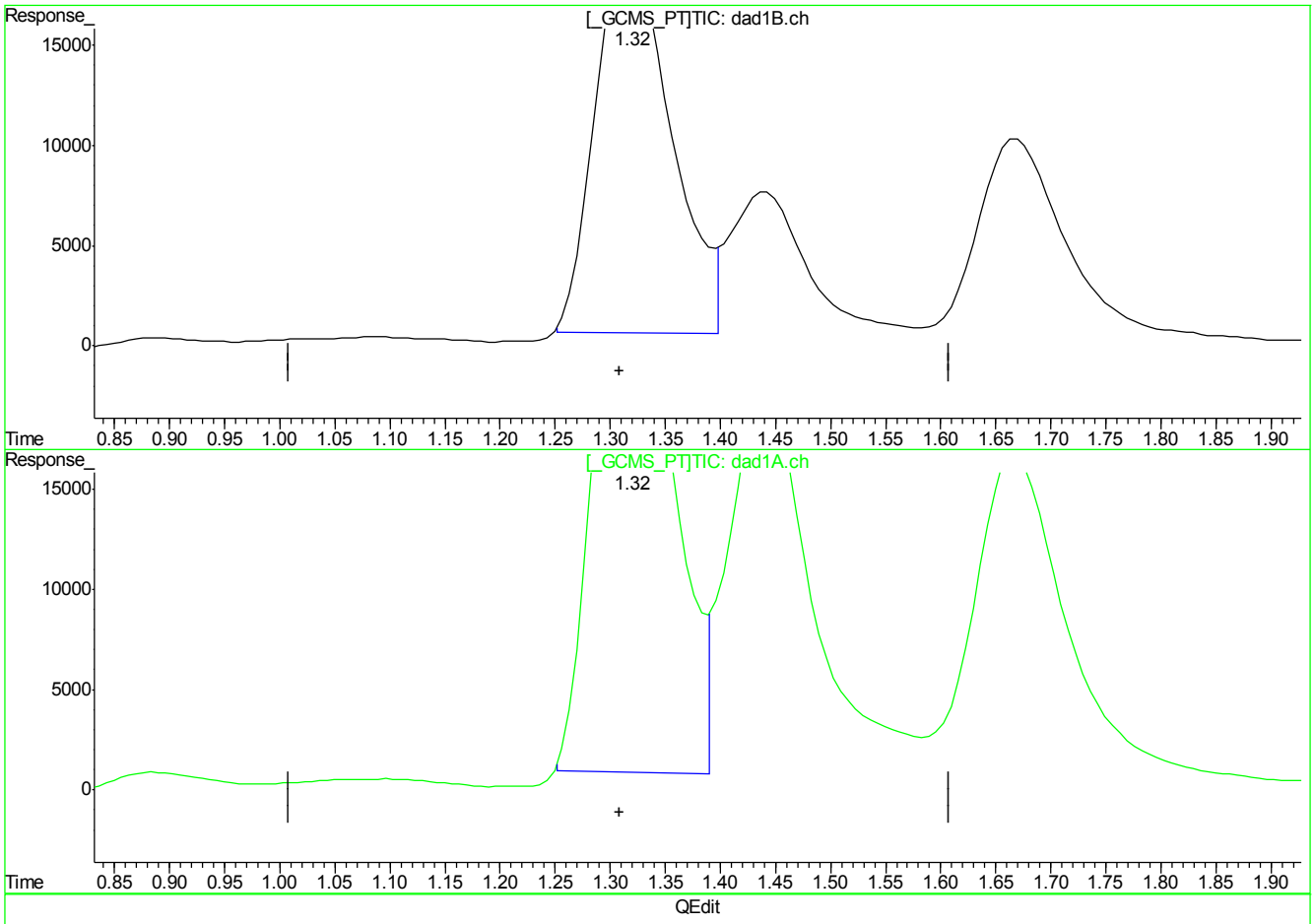
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059467.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 11:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.32	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 181.080ppb

response 918905

(1) TNX #2

1.32min 181.135ppb

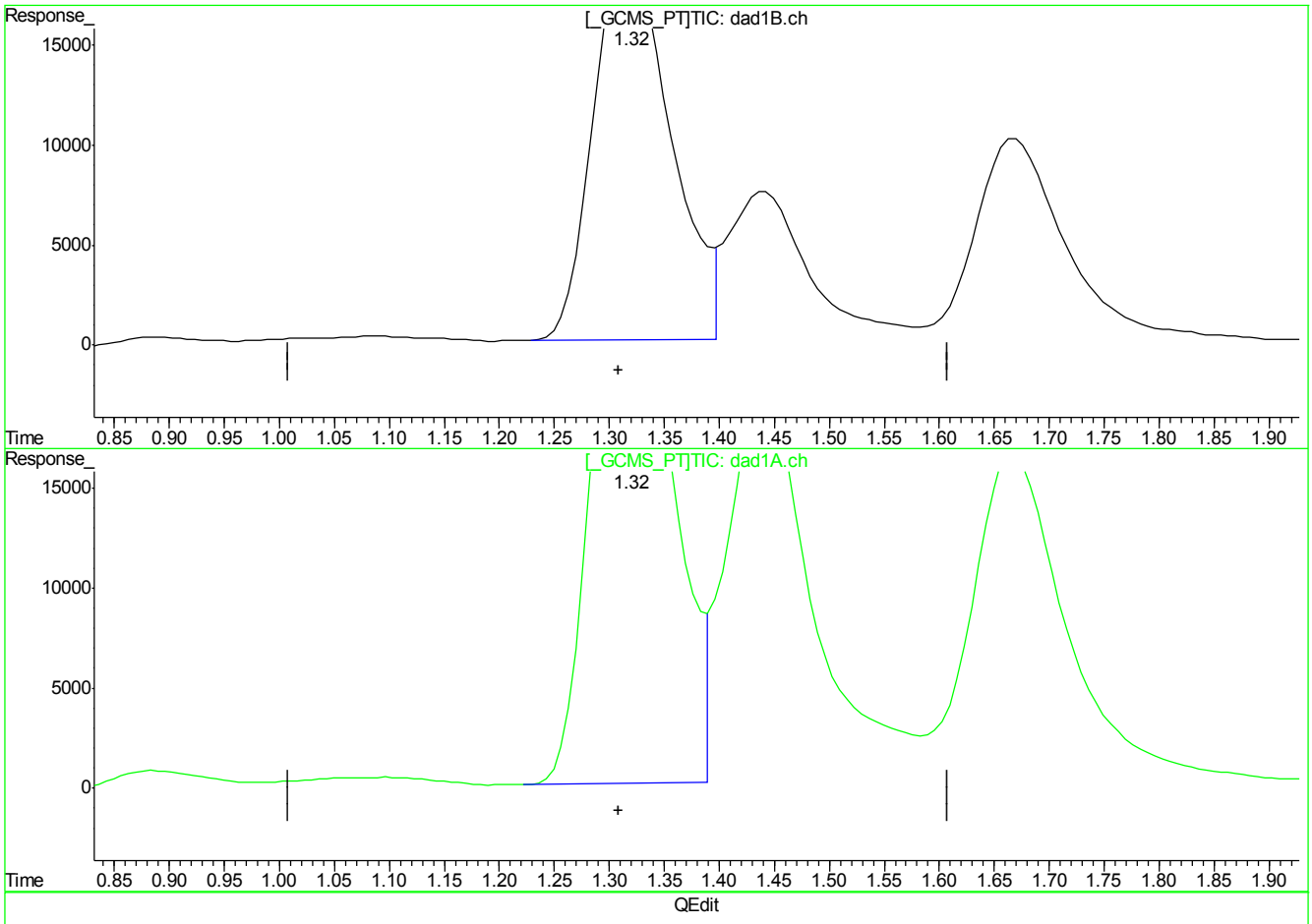
response 1411756

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 191.920ppb m

response 973915

(1) TNX #2

1.32min 185.693ppb m

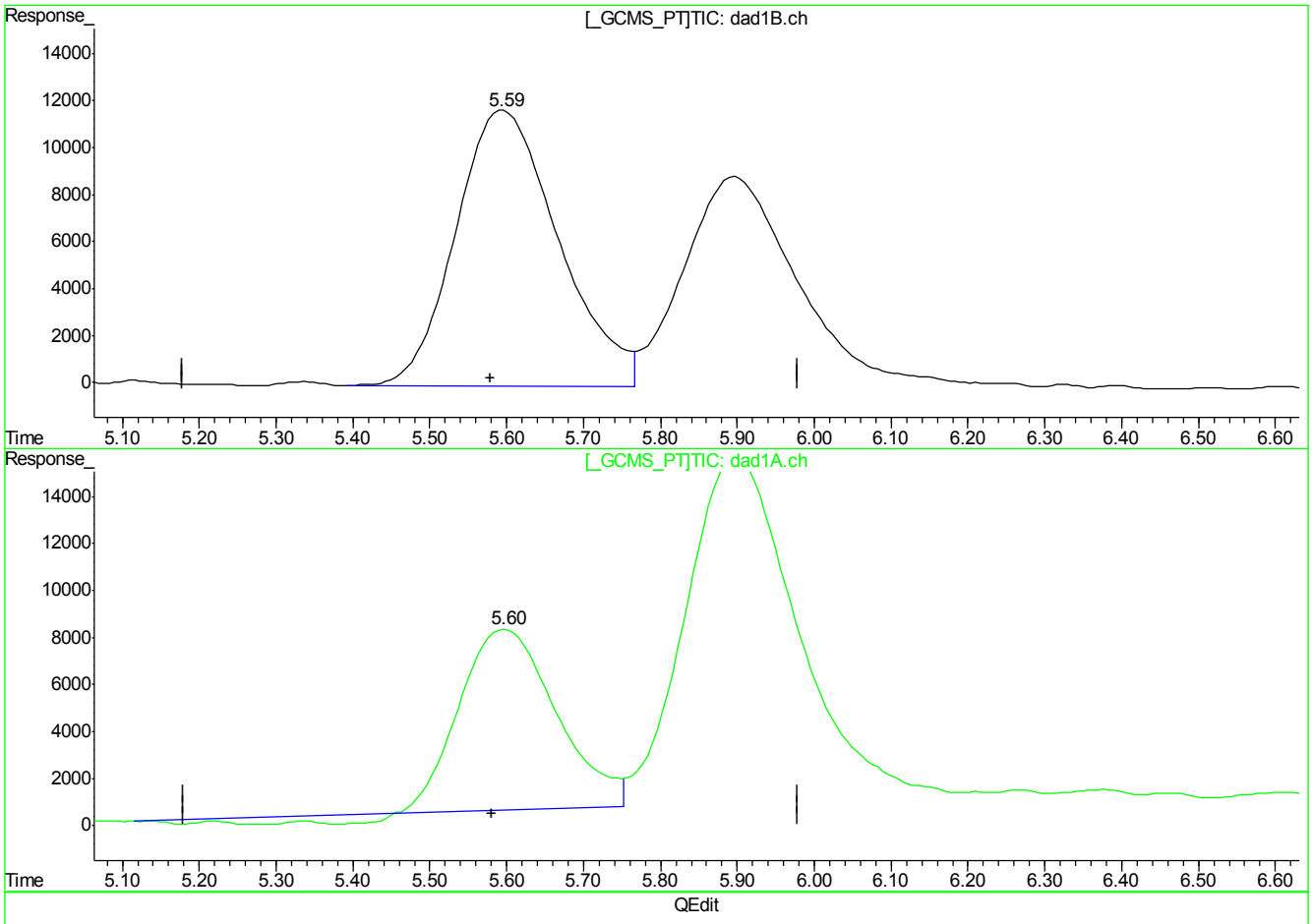
response 1447277

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 178.694ppb

response 1090649

(7) 1,3-Dinitrobenzene #2

5.60min 160.067ppb

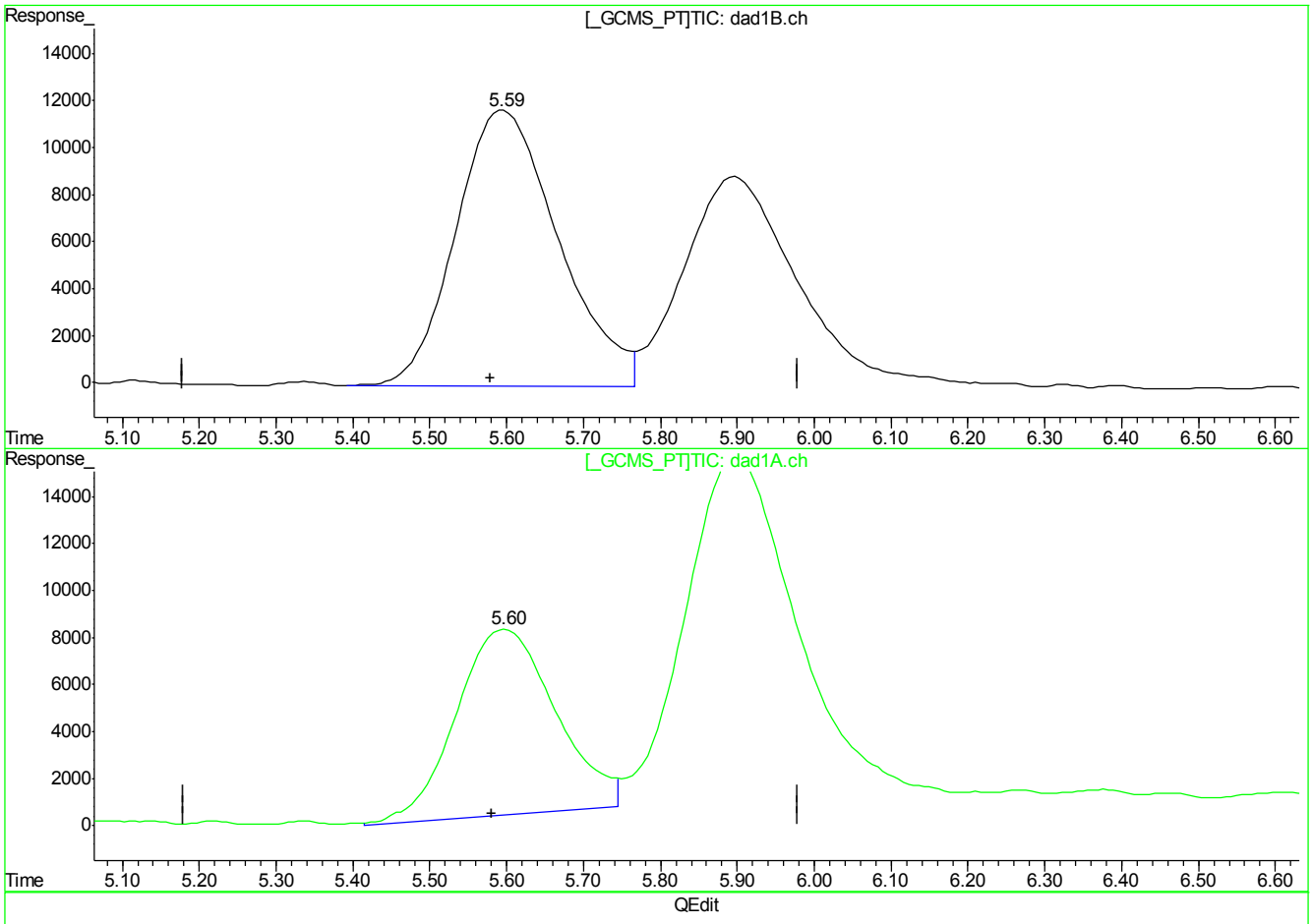
response 630718

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 178.694ppb

response 1090649

(7) 1,3-Dinitrobenzene #2

5.60min 180.973ppb m

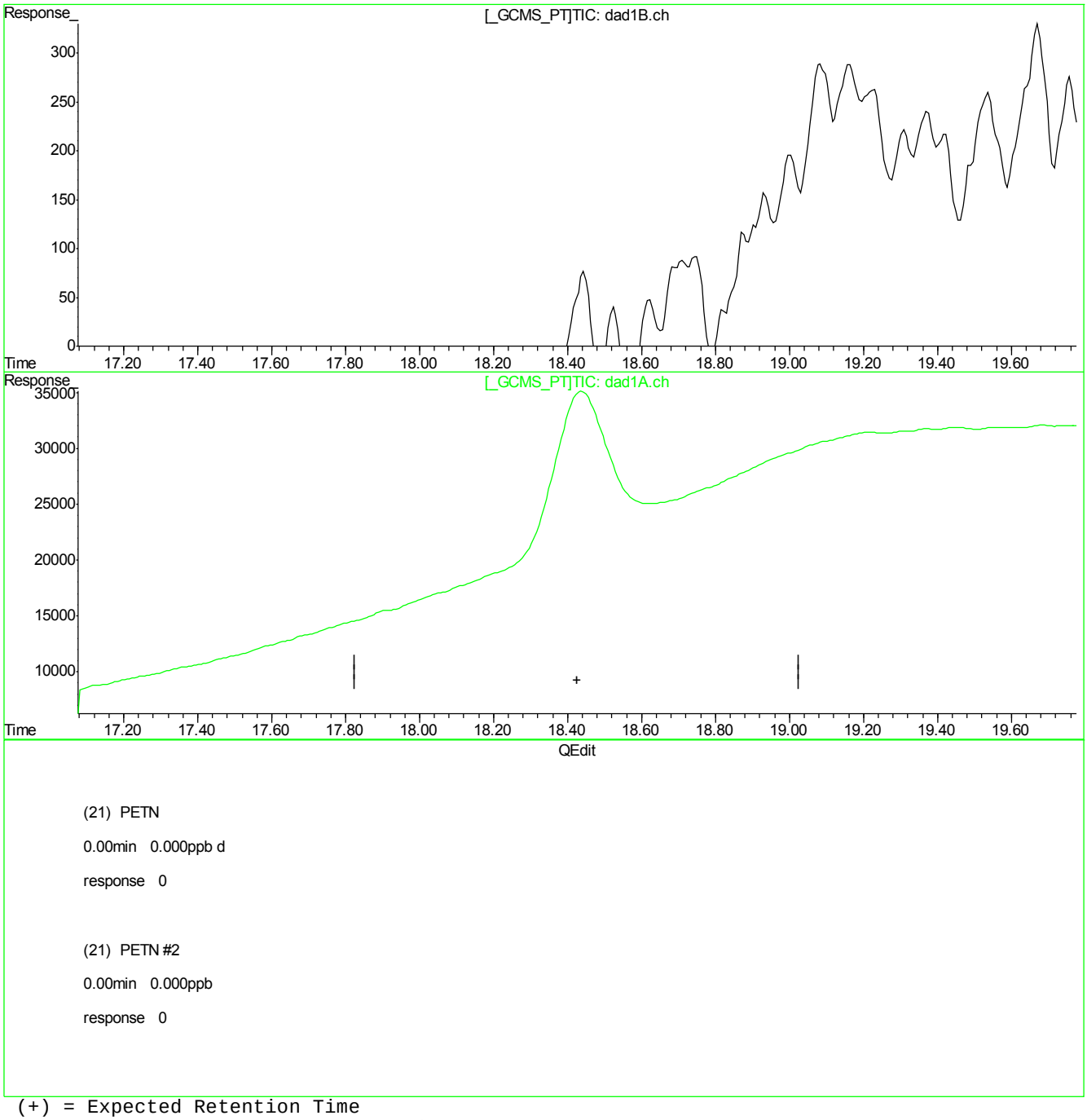
response 713093

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:54 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration

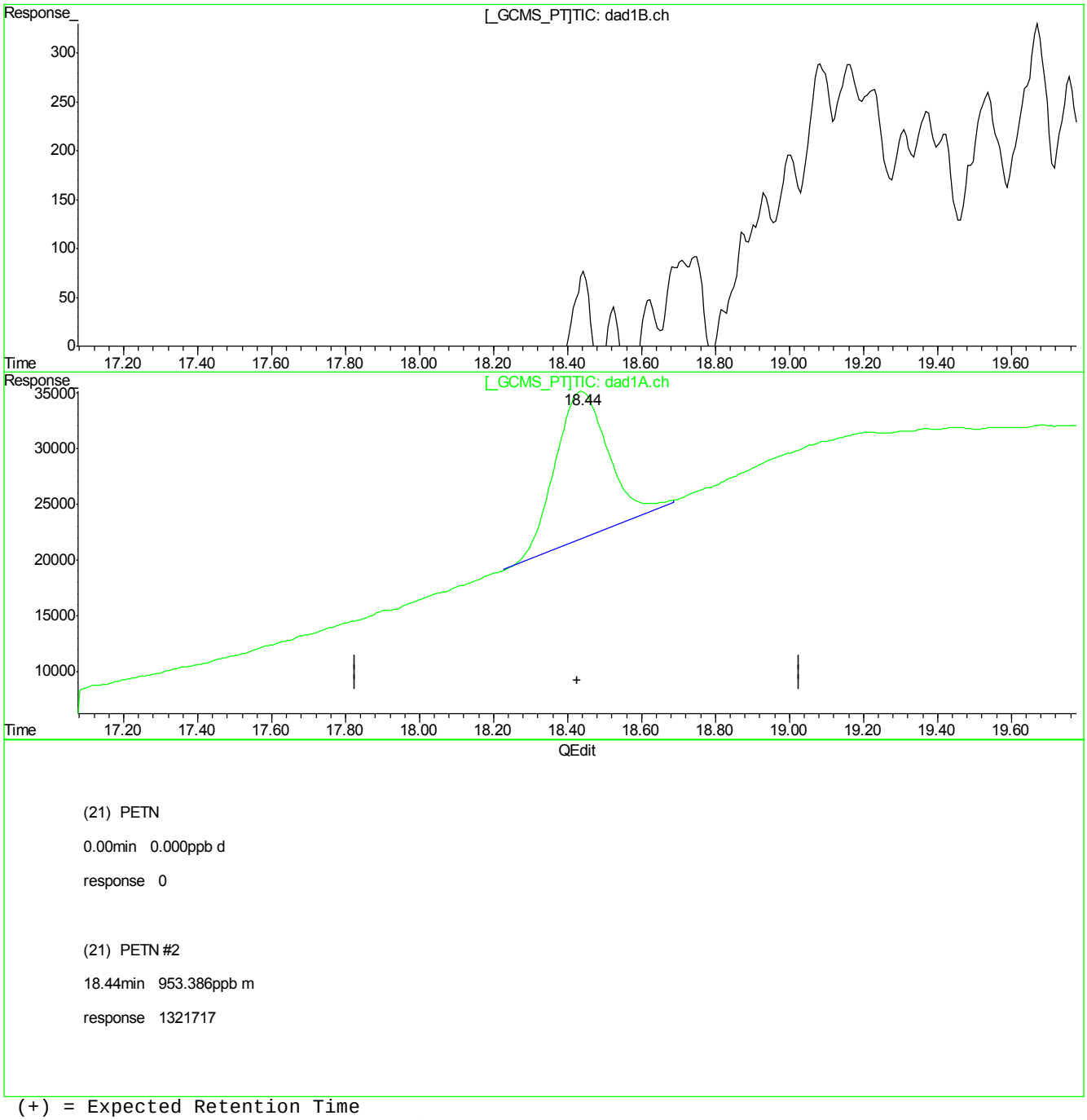


(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:57:05 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.44min 953.386ppb m

response 1321717

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:57:08 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:48 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.32	10.33	1313071	2197124	568.534	527.673
Spiked Amount	500.000	Range	70 - 136	Recovery	=	113.71%	105.53%
	Target Compounds						
1)	TNX	1.31	1.31	2377327	3647073	468.478m	467.938m
2)	HMX	1.44	1.44	935456	2491099	479.850m	473.999m
3)	DNX	1.66	1.66	1433691	2272296	487.028m	478.485m
4)	MNX	2.20	2.20	1478175	2286671	475.405	487.846
5)	RDX	2.77	2.77	990527	1568605	430.703	418.831
6)	1,3,5-Trinitrobe	4.42	4.42	2066563	4004610	418.208	439.446
7)	1,3-Dinitrobenze	5.59	5.59	2679478	1782018	439.010	452.251
8)	3,5-Dinitroanili	5.89	5.89	2324806	3781357	507.077	479.500
9)	Nitrobenzene	7.10	7.10	1671085	1562470	438.019	435.811
10)	Nitroglycerin	0.00	8.39	0	3052703	N.D. d	2306.721
11)	Tetryl	8.71	8.70	1483433	2538597	466.196	495.149
12)	2,4,6-Trinitroto	9.13	9.13	1921592	2303072	532.527	536.958
13)	2-Amino-4,6-Dini	9.45	9.44	1801766	2694209	448.848	484.588
14)	4-Amino-2,6-Dini	9.88	9.88	1344823	2643442	476.547	489.110
16)	2,4-Dinitrotolue	10.98	10.98	2496550	1473568	463.023	441.393
17)	2,6-Dinitrotolue	11.43	11.43	1615025	1831379	491.226	466.979
18)	o-Nitrotoluene	14.69	14.69	1143442	1552232	457.959	425.553m
19)	p-Nitrotoluene	15.27	15.27	1852819	1583340	500.801	500.315
20)	m-Nitrotoluene	16.24	16.24	1685984	1985596	456.981	457.869
21)	PETN	0.00	18.43	0	3450516	N.D. d	2488.940m

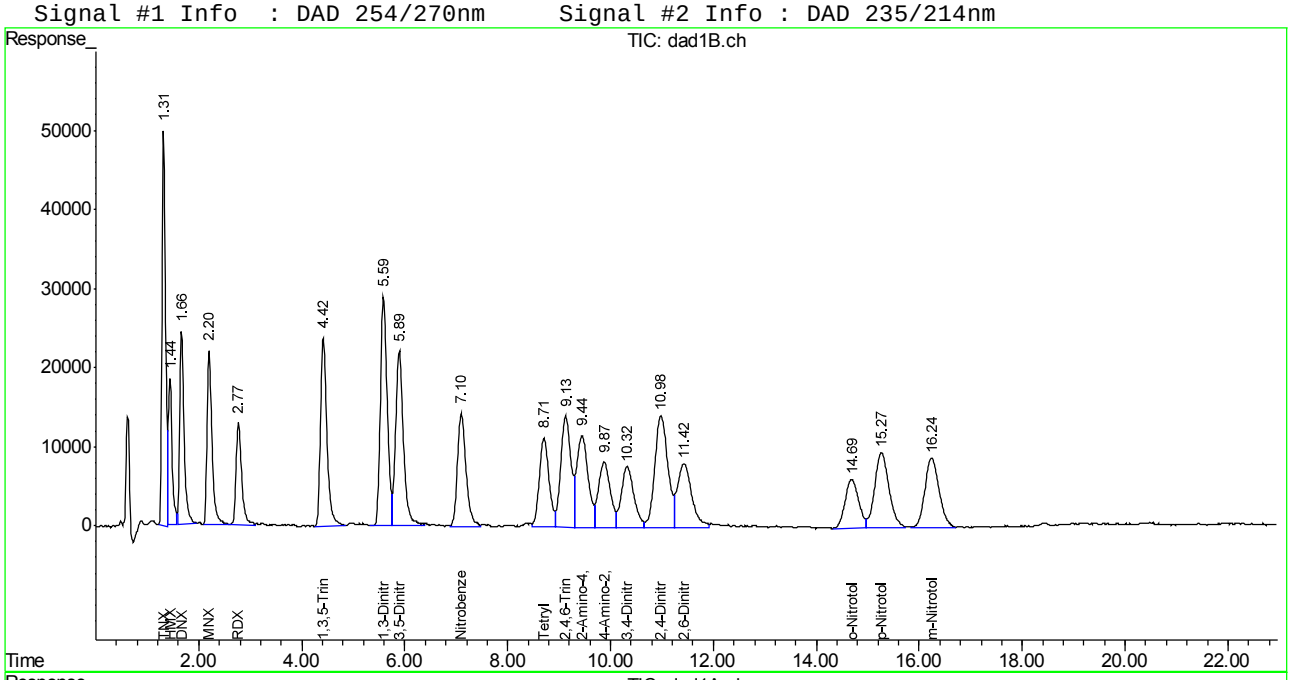
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059468.D 8330B_0419PLUS.M Fri Apr 20 08:01:22 2018 Page 1

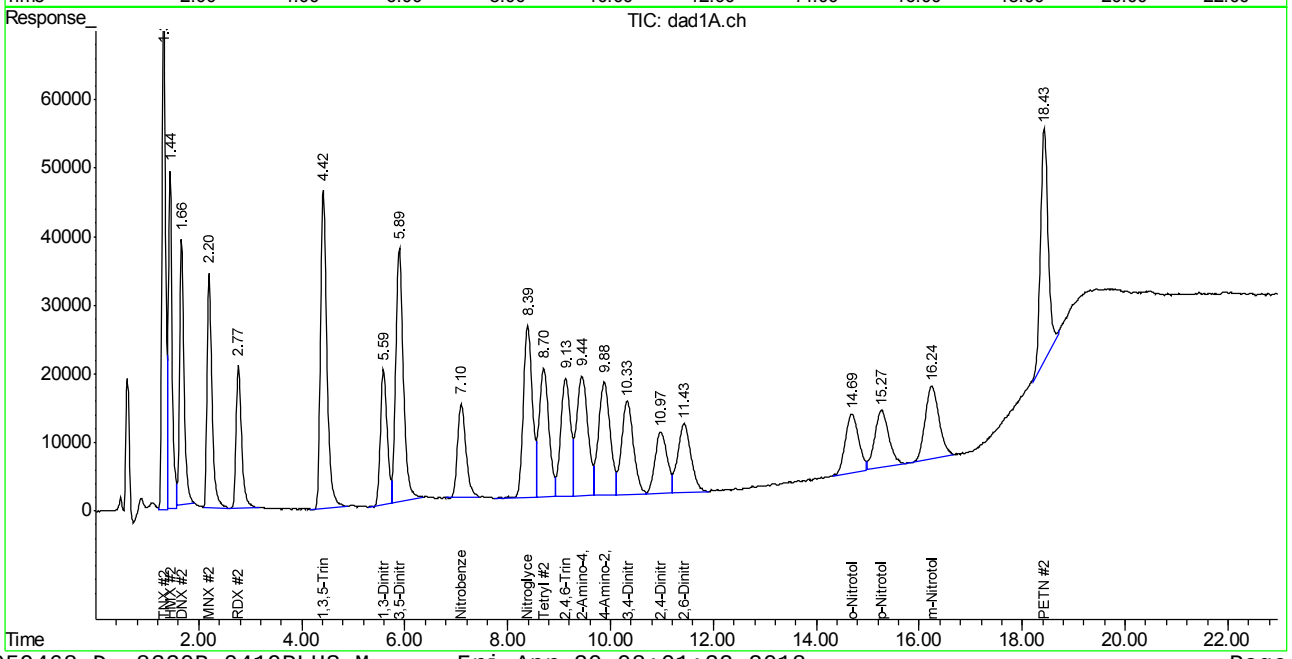
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:58 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

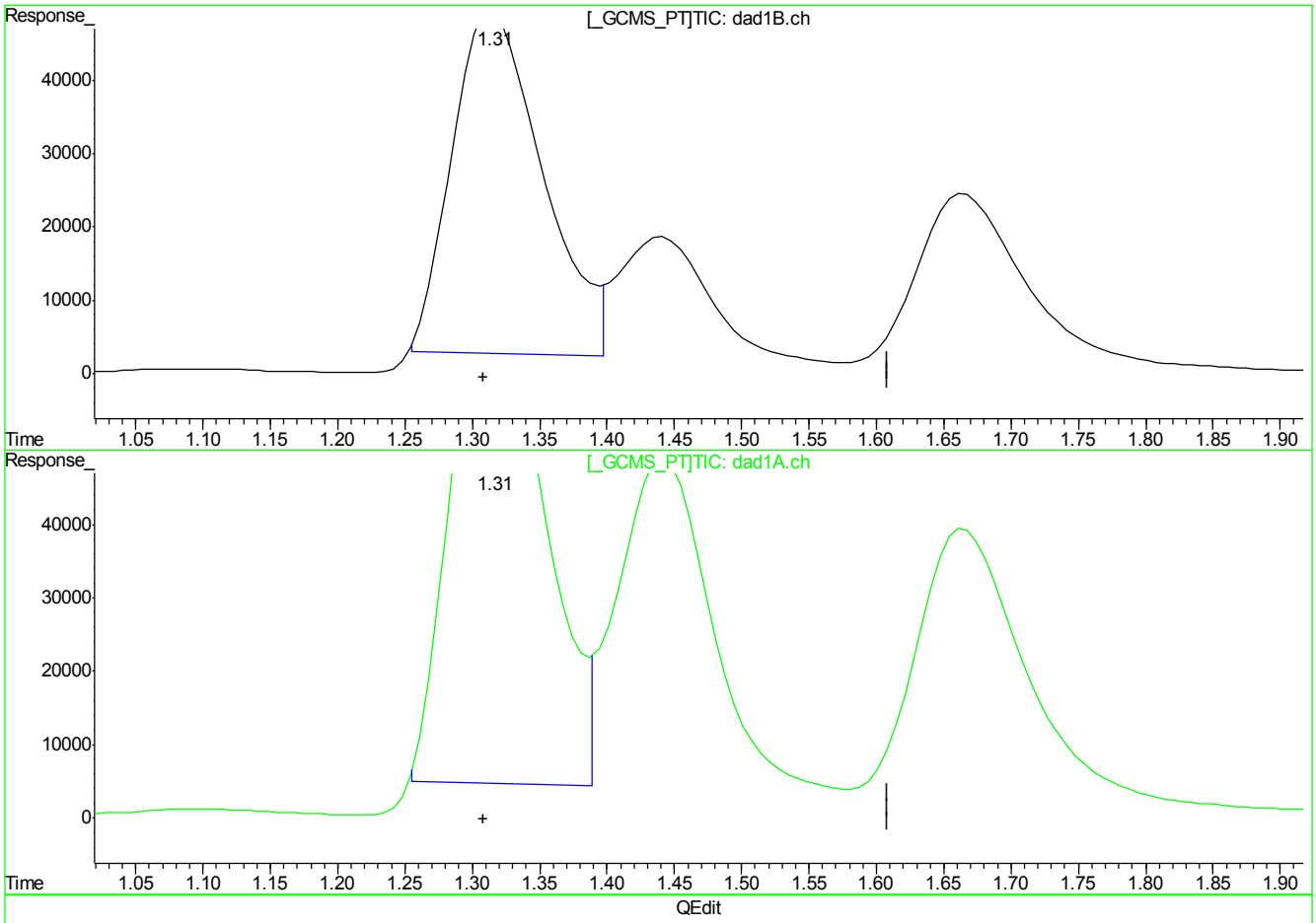
Sample Number:	GBB1722-ICC1722	**Method:**	SW846 8330B
Lab FileID:	BB059468.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 12:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.69	Poorly defined baseline
PETN	78-11-5	2	18.43	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 427.328ppb

response 2168509

(1) TNX #2

1.32min 423.577ppb

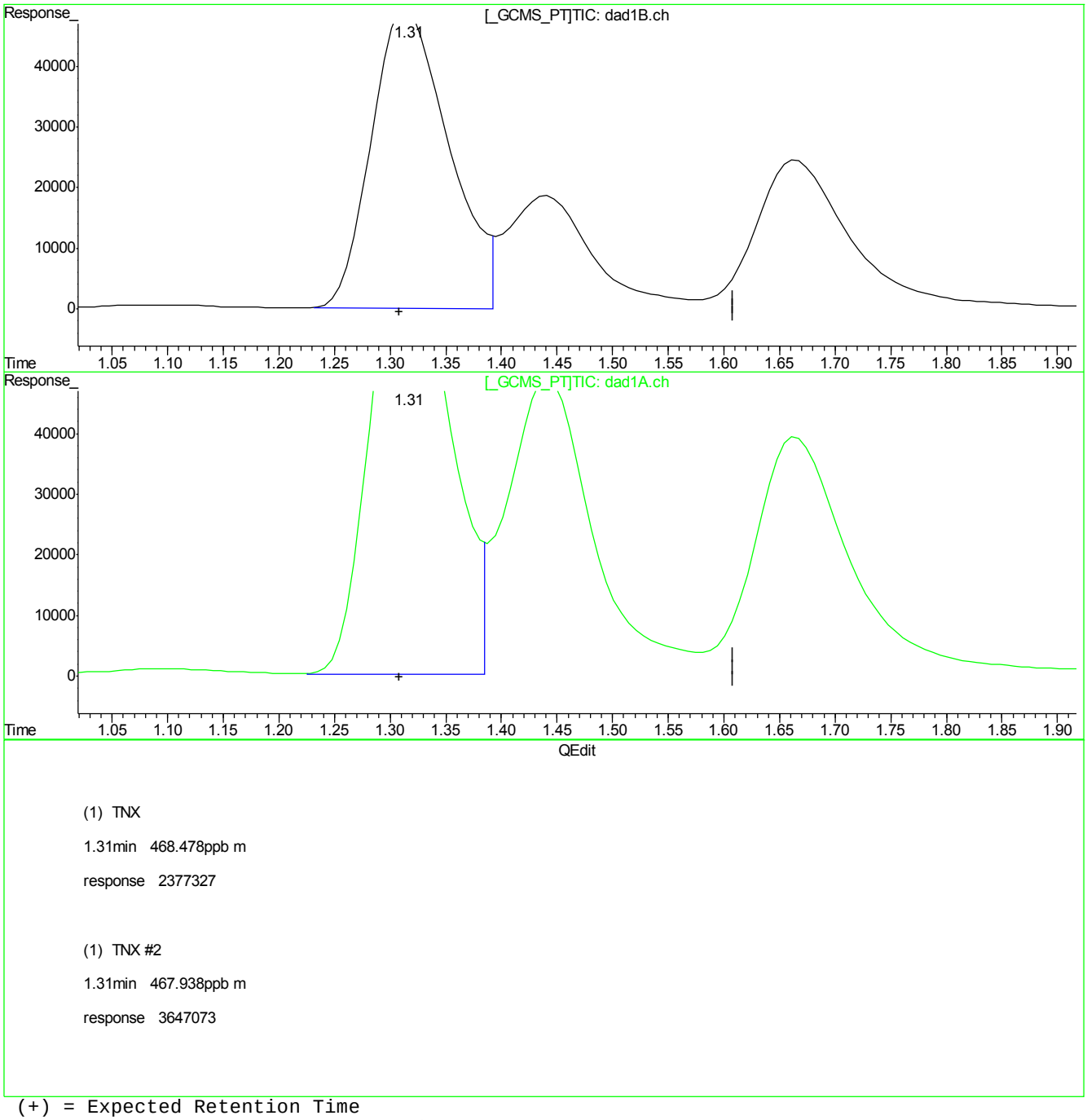
response 3301327

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:20 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 468.478ppb m

response 2377327

(1) TNX #2

1.31min 467.938ppb m

response 3647073

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:27 2018

7.7.5.3

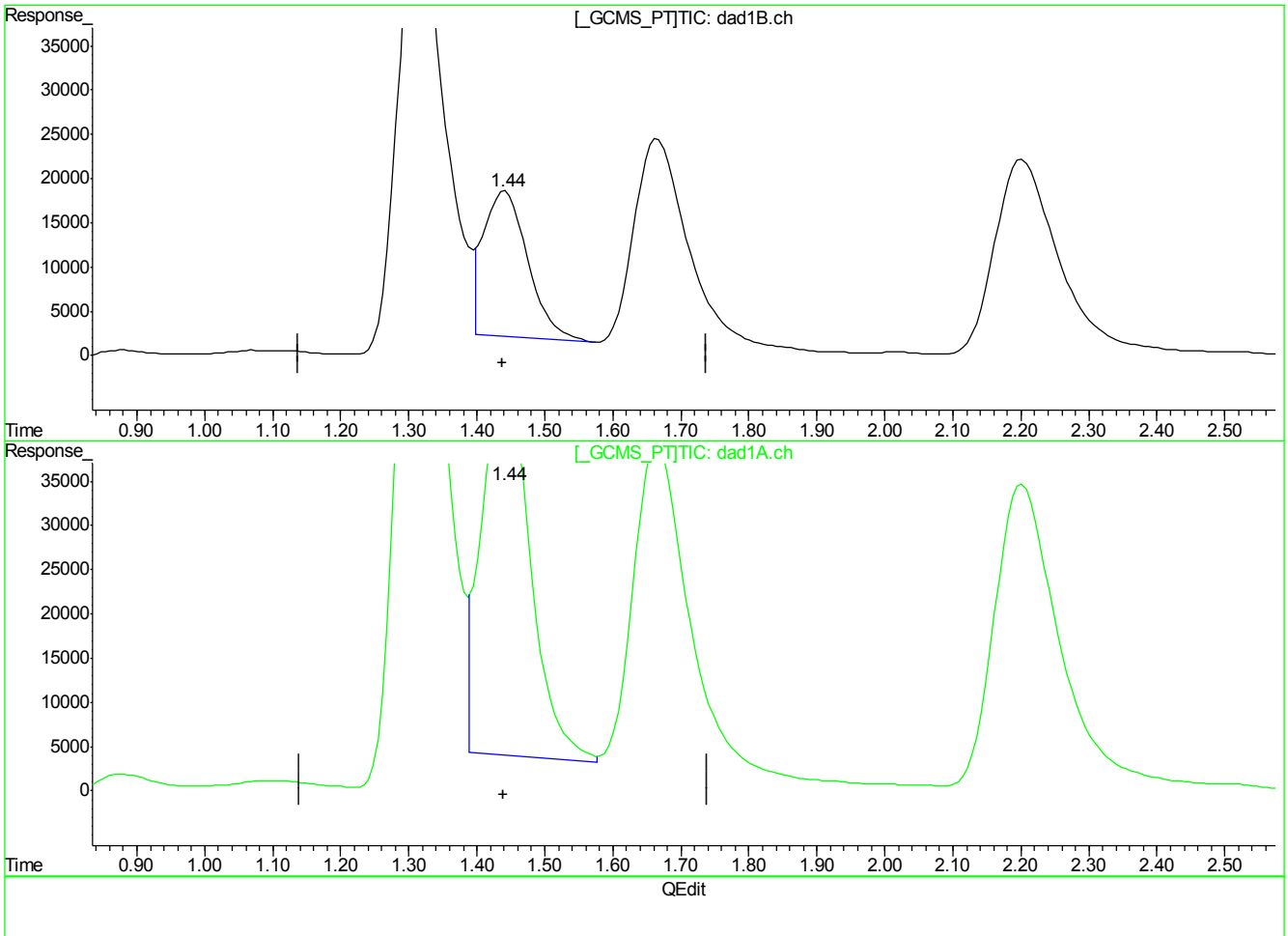
7

BB059468.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 394.488ppb

response 769046

(2) HMX #2

1.44min 414.745ppb

response 2179694

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:31 2018

7.7.5.4

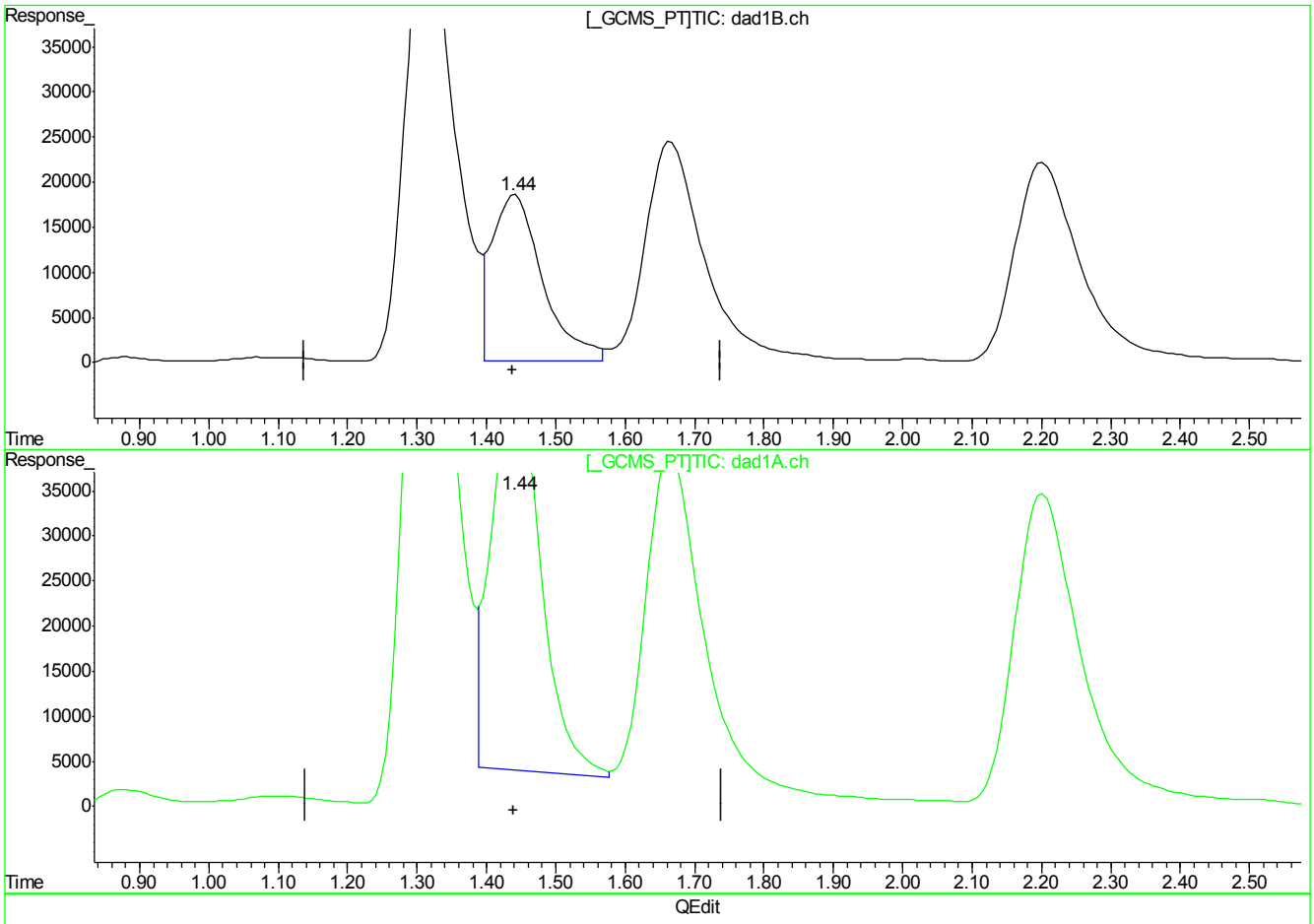
7

BB059468.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 479.850ppb m

response 935456

(2) HMX #2

1.44min 414.745ppb

response 2179694

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:38 2018

7.7.5.5

7

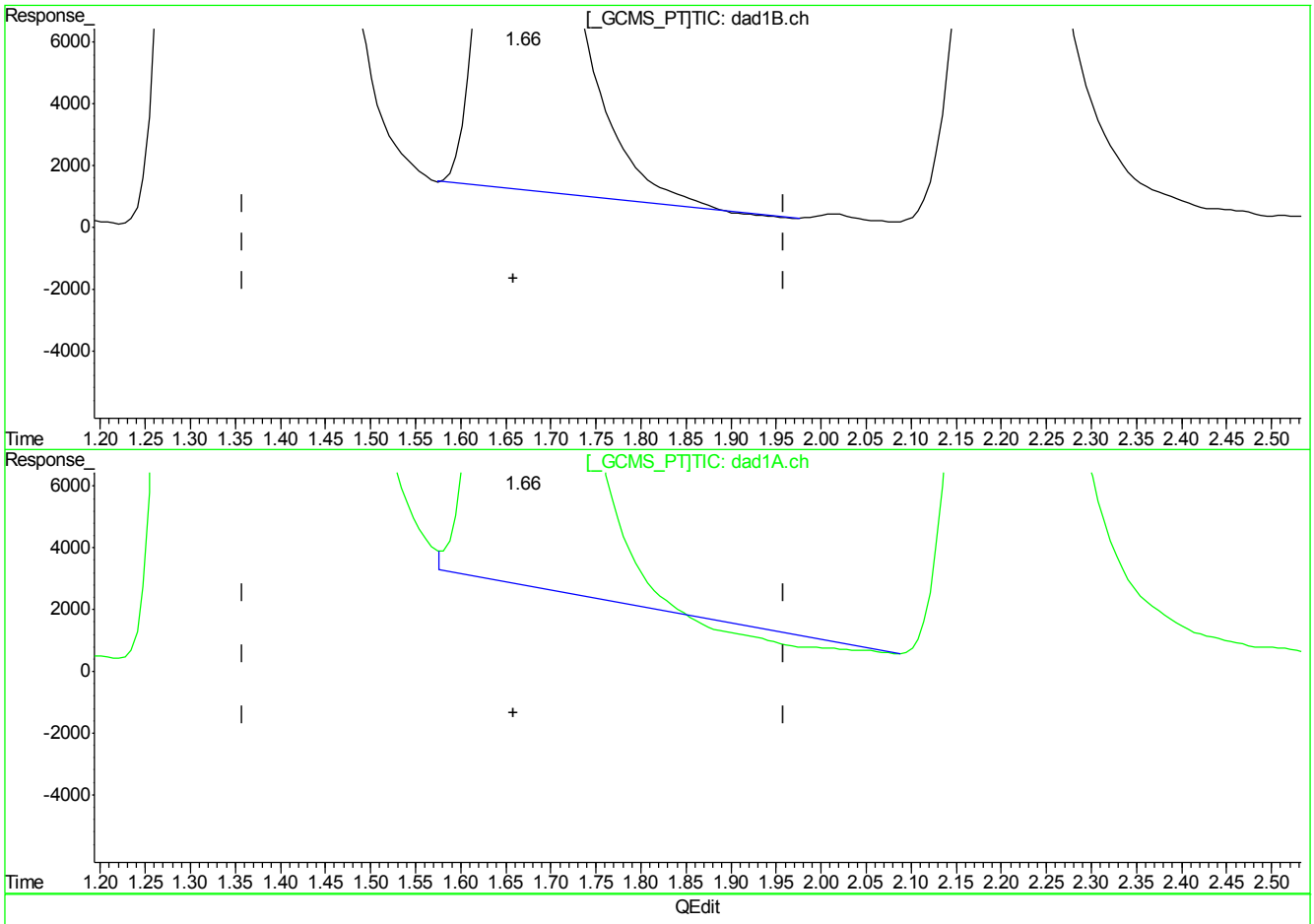
BB059468.D edits: HMX

FA53518

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 437.099ppb

response 1287636

(3) DNX #2

1.67min 414.701ppb

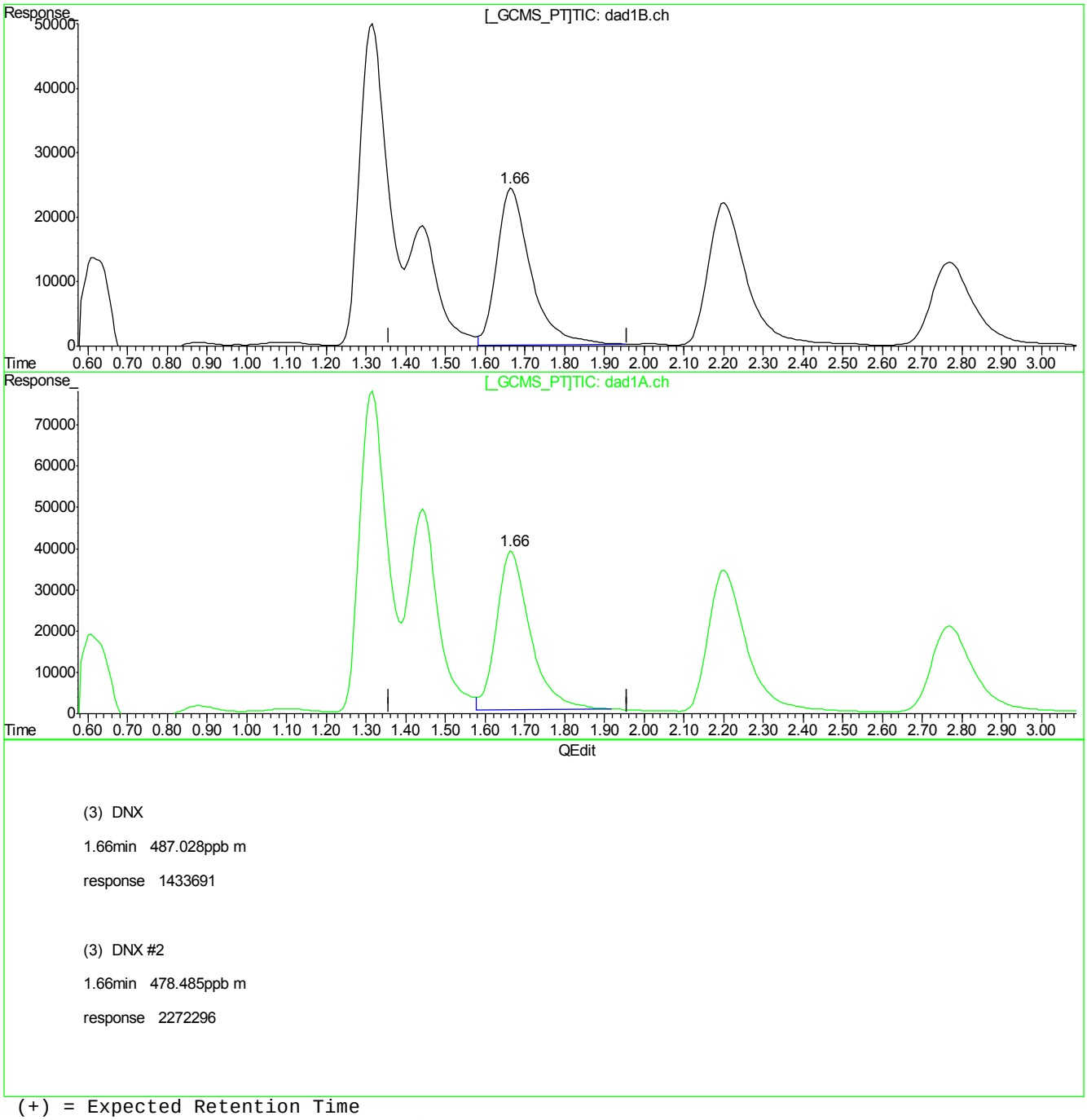
response 1971141

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 487.028ppb m

response 1433691

(3) DNX #2

1.66min 478.485ppb m

response 2272296

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:13 2018

7.7.5.7

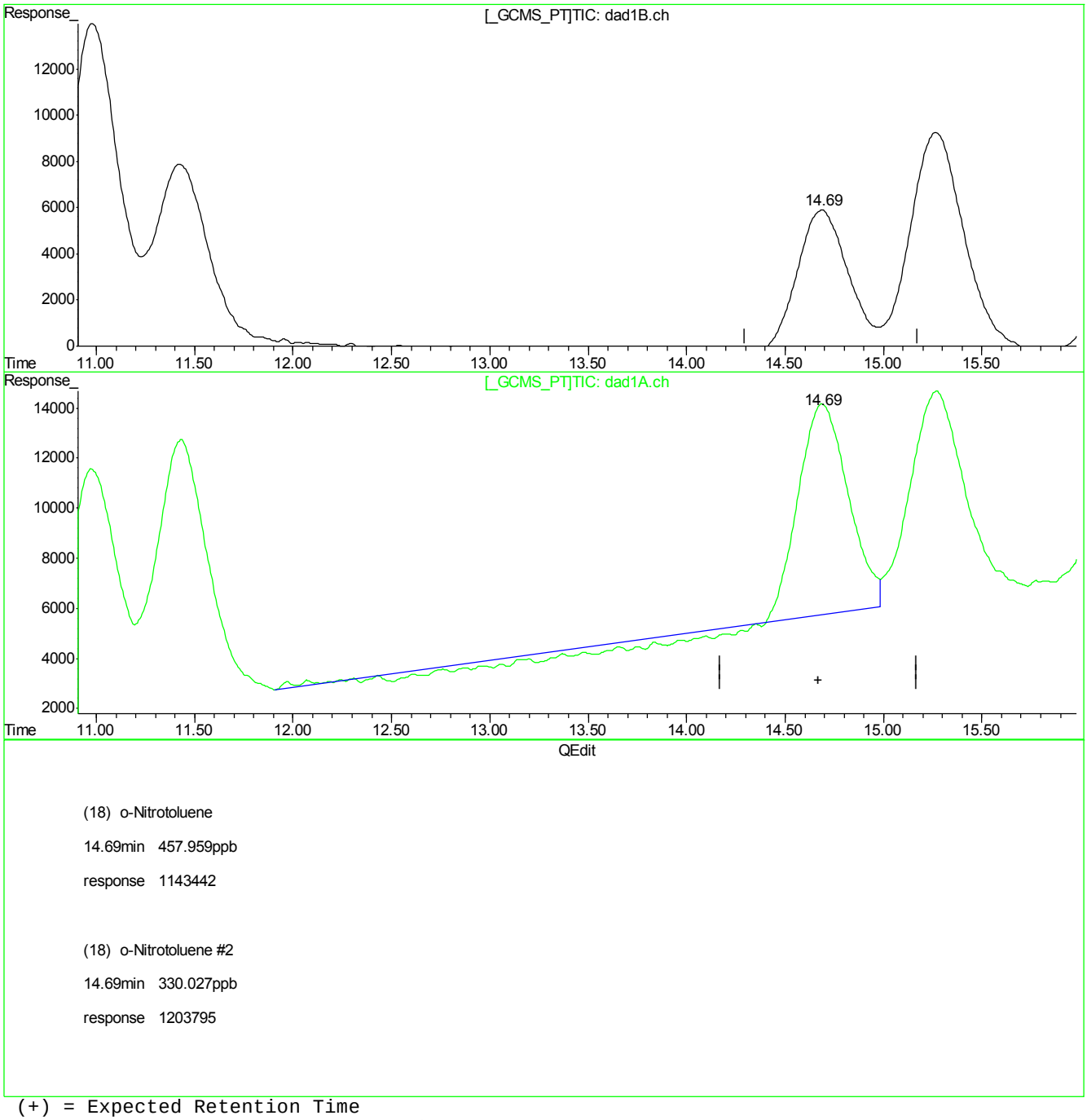
7

BB059468.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 457.959ppb

response 1143442

(18) o-Nitrotoluene #2

14.69min 330.027ppb

response 1203795

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:29 2018

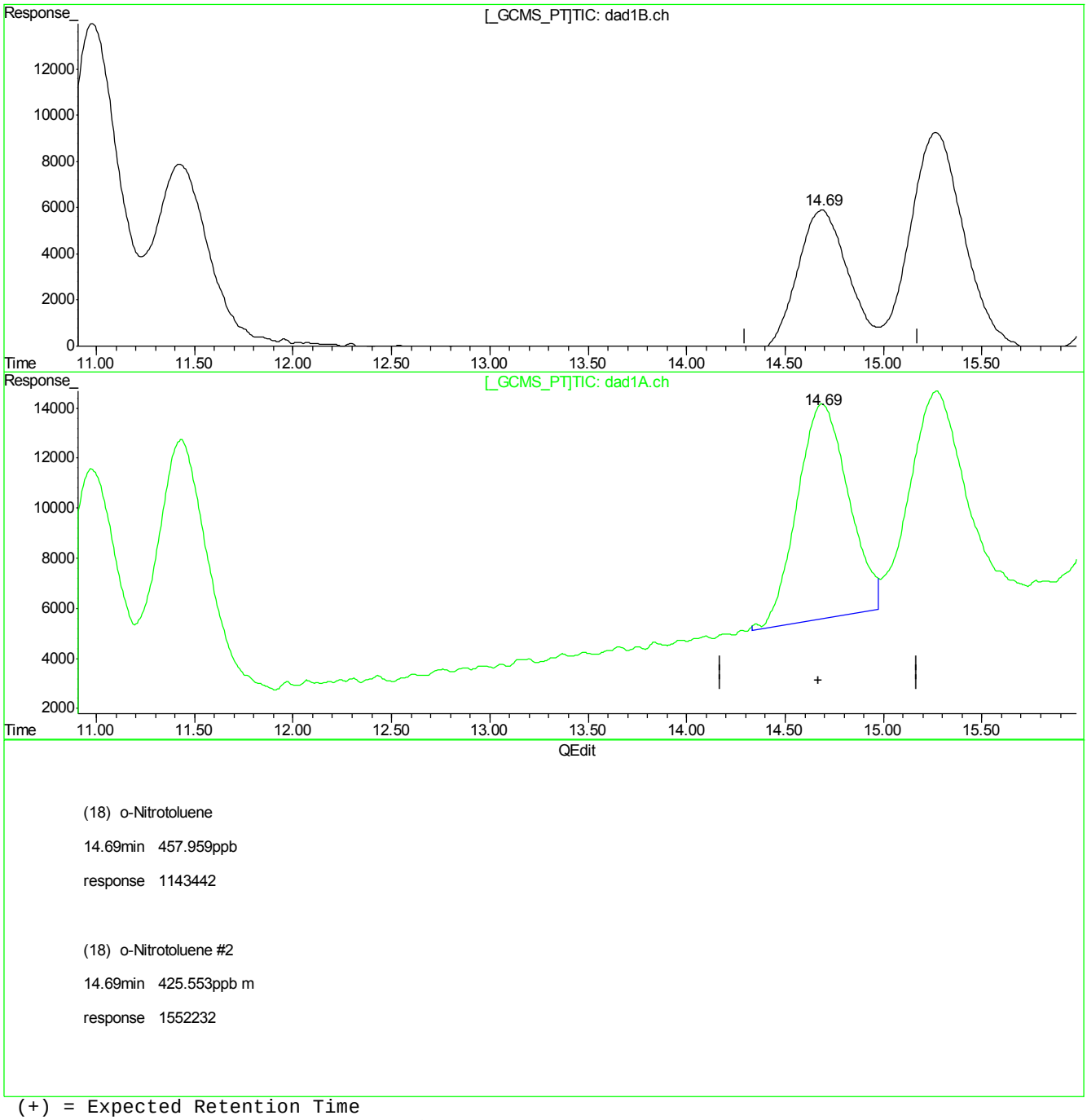
7.7.5.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 457.959ppb

response 1143442

(18) o-Nitrotoluene #2

14.69min 425.553ppb m

response 1552232

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:36 2018

7.7.5.9

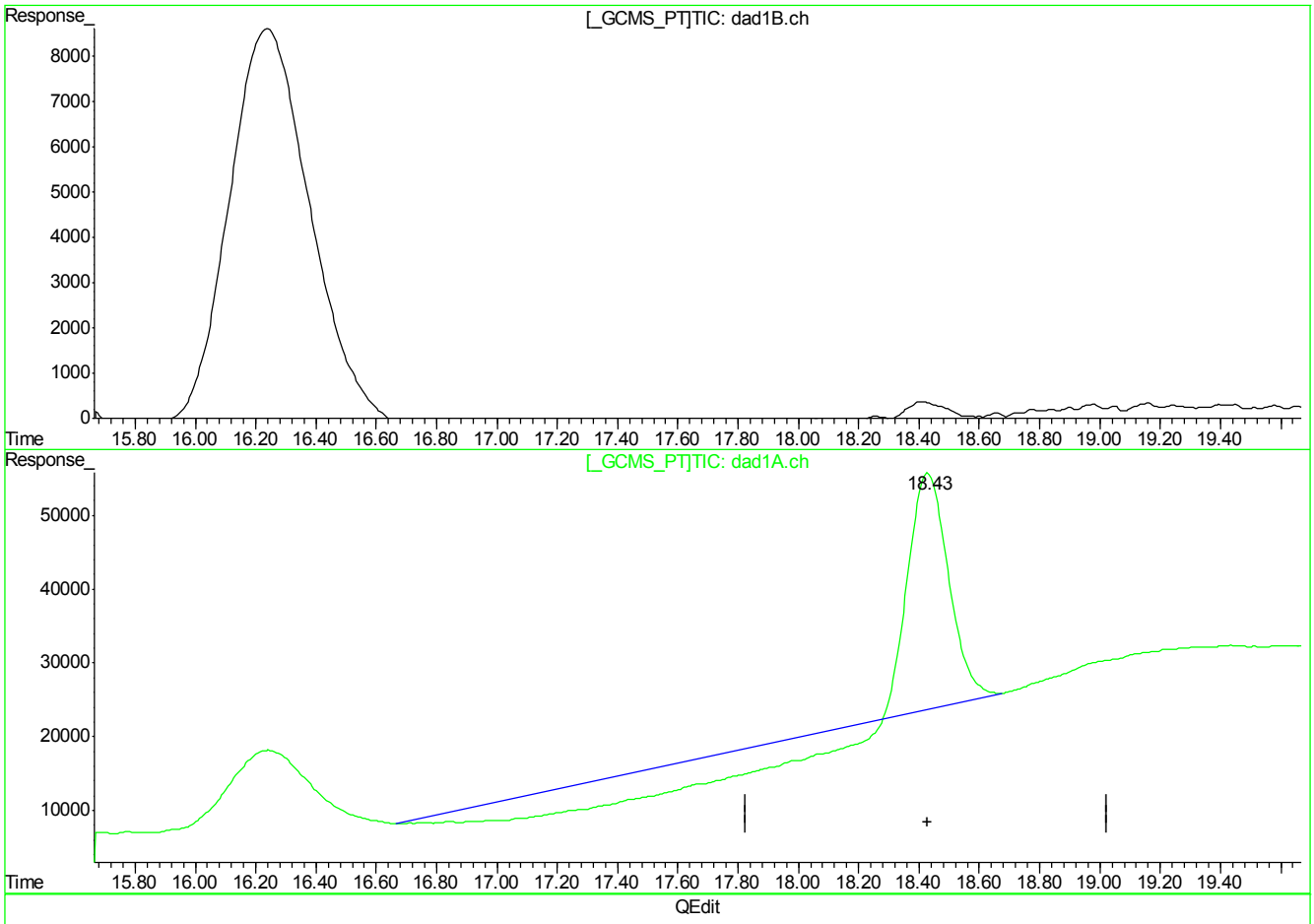
7

BB059468.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 180.022ppb

response 249572

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:40 2018

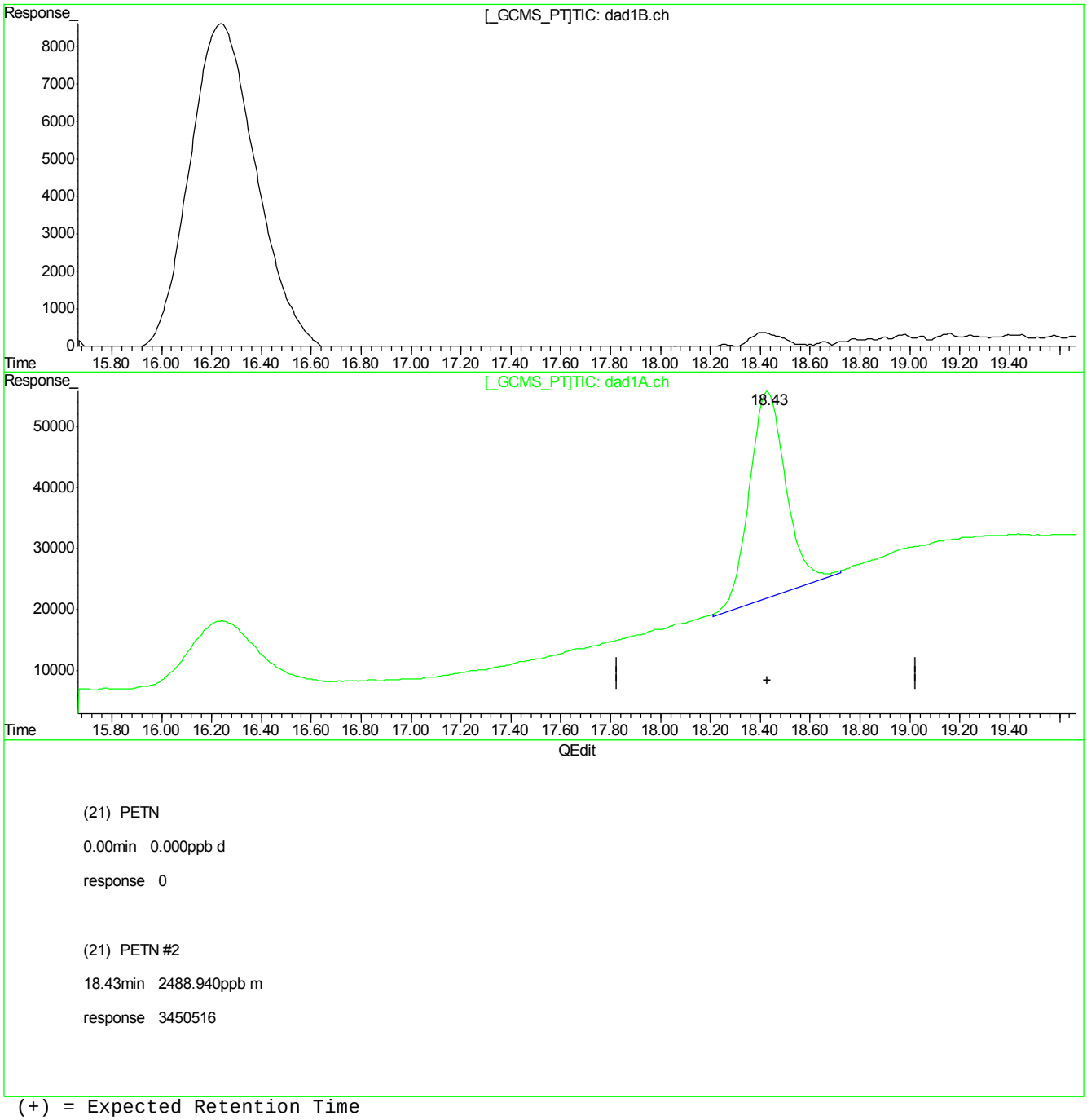
7.7.5.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:43 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:49 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.31	10.31	2452926	4465153	1062.069	1072.376
	Spiked Amount 500.000	Range 70 - 136		Recovery =		212.41%#	214.48%#
	Target Compounds						
1)	TNX	1.31	1.31	4711834	7502705	928.517m	962.635m
2)	HMX	1.44	1.44	1896985	5080506	973.074m	966.703m
3)	DNX	1.66	1.66	2865864	4744960	980.493m	1006.582m
4)	MNX	2.20	2.20	2935667	4563791	944.158	973.654
5)	RDX	2.76	2.76	1949428	3115738	855.536	831.929
6)	1,3,5-Trinitrobe	4.41	4.41	4162990	8095208	842.461	888.329
7)	1,3-Dinitrobenze	5.58	5.58	5312977	3567135	870.487	905.285
8)	3,5-Dinitroanili	5.88	5.88	4615207	7569126	1006.649	959.813
9)	Nitrobenzene	7.09	7.09	3234435	3092232	847.799	862.498
10)	Nitroglycerin	0.00	8.38	0	6065549	N.D. d	4583.325
11)	Tetryl	8.70	8.70	2900724	5089762	911.605	992.750
12)	2,4,6-Trinitroto	9.12	9.12	3740946	4634286	1036.721	1080.478
13)	2-Amino-4,6-Dini	9.43	9.43	3532796	5448944	880.074	980.062
14)	4-Amino-2,6-Dini	9.86	9.86	2590690	5369582	918.028	993.522
16)	2,4-Dinitrotolue	10.97	10.97	4825667	3112957	894.994	932.455
17)	2,6-Dinitrotolue	11.41	11.42	2946410	3691393	896.181	941.259
18)	o-Nitrotoluene	14.68	14.67	2268482	3070855	908.548	841.892m
19)	p-Nitrotoluene	15.26	15.26	3723769	3115857	1006.502	984.570
20)	m-Nitrotoluene	16.23	16.23	3438848	3990421	932.090	920.173
21)	PETN	0.00	18.43	0	6778199	N.D. d	4889.277m

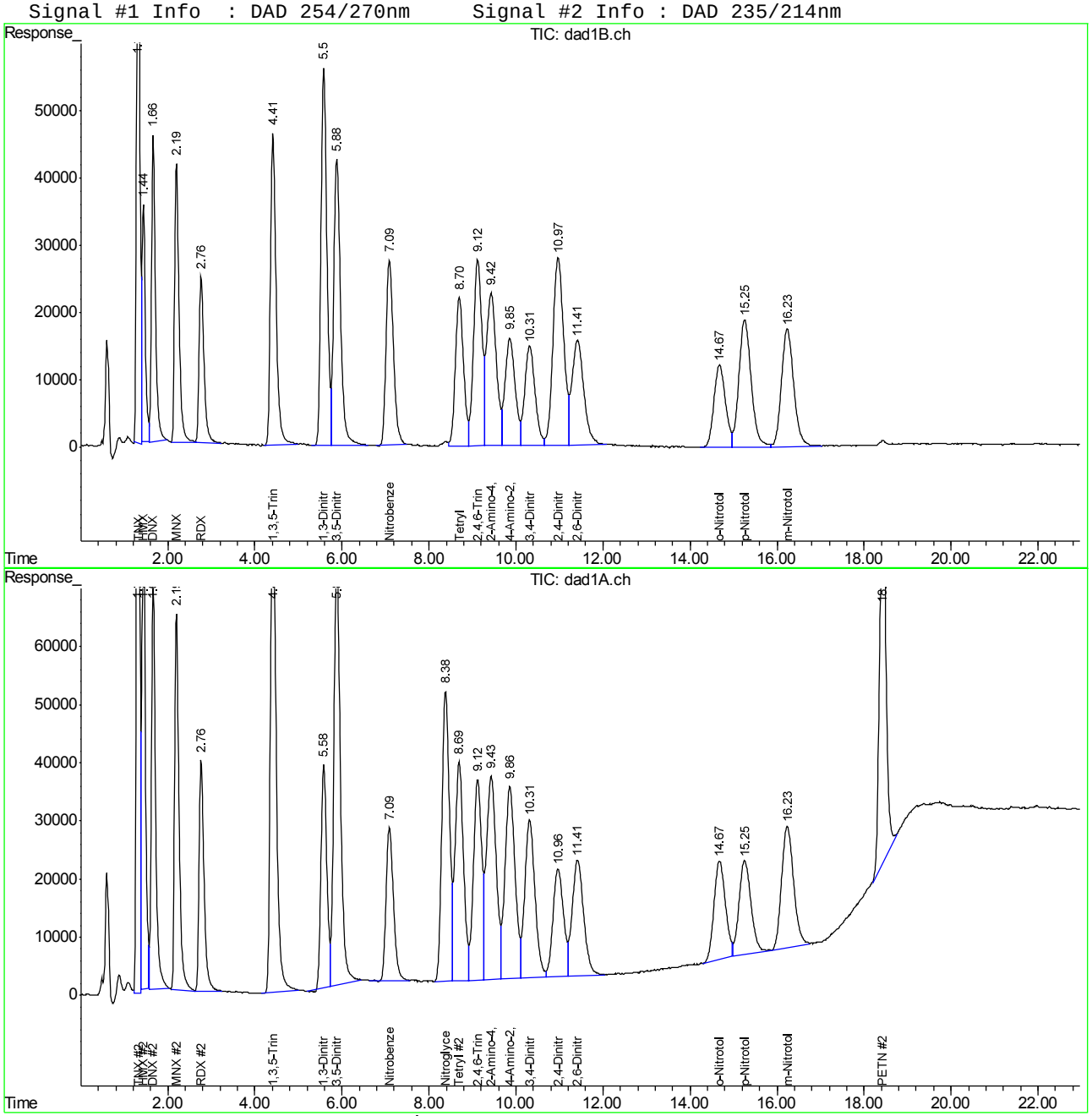
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059469.D 8330B_0419PLUS.M Fri Apr 20 08:01:23 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:00 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



Manual Integration Approval Summary

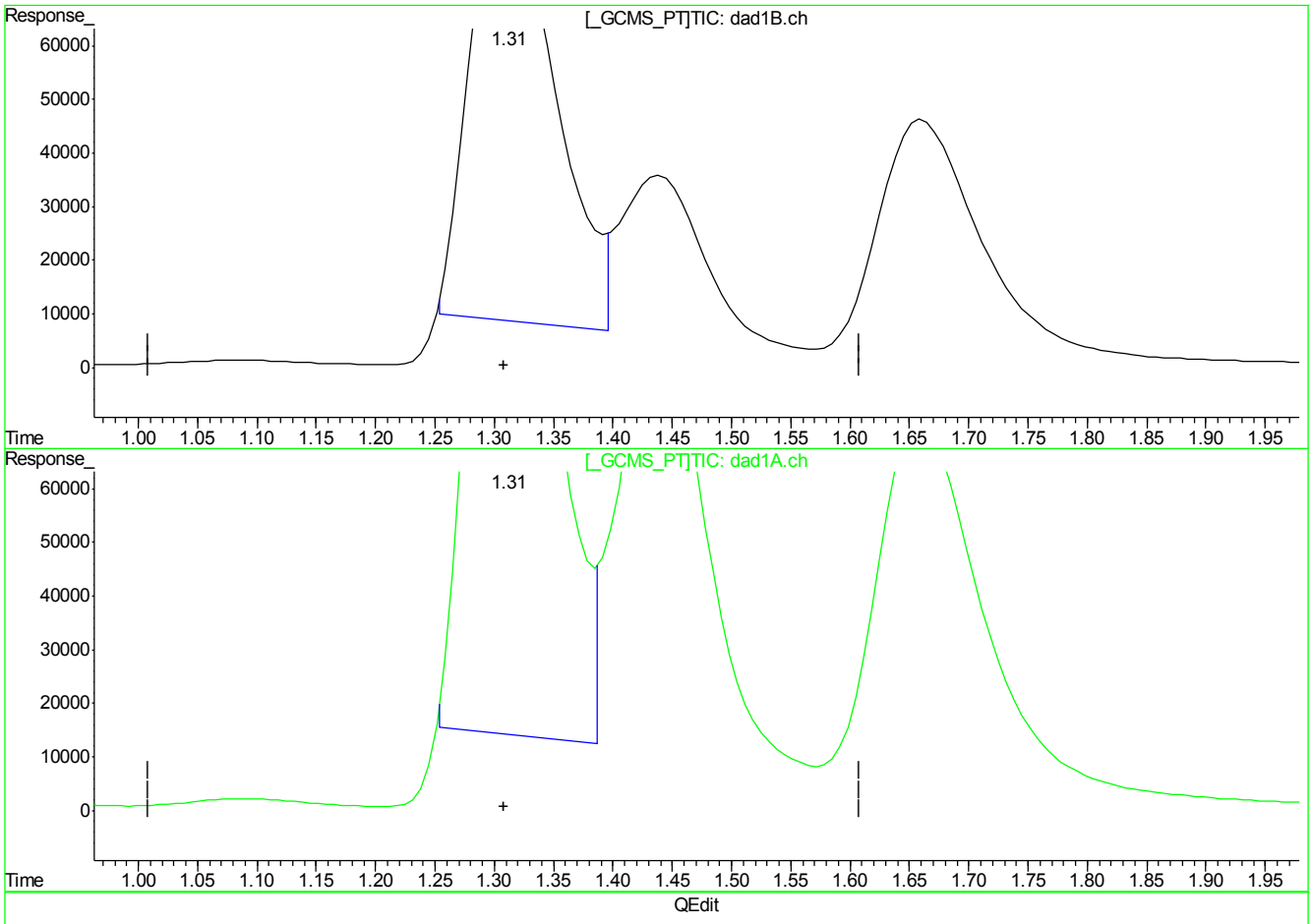
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059469.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 12:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.67	Poorly defined baseline
PETN	78-11-5	2	18.43	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 800.355ppb

response 4061464

(1) TNX #2

1.31min 788.203ppb

response 6143200

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:58:57 2018

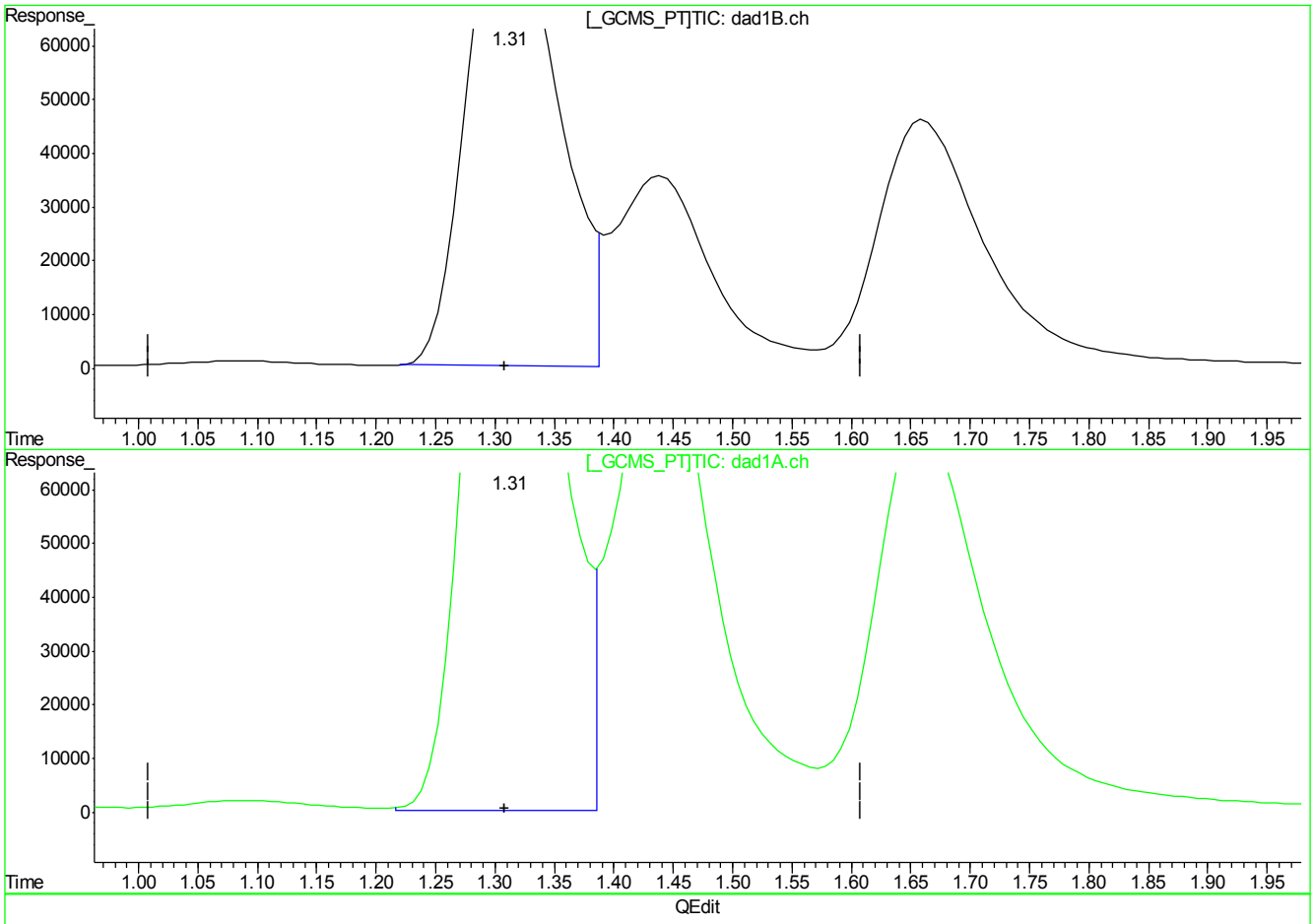
7.7.6.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 928.517ppb m

response 4711834

(1) TNX #2

1.31min 962.635ppb m

response 7502705

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:03 2018

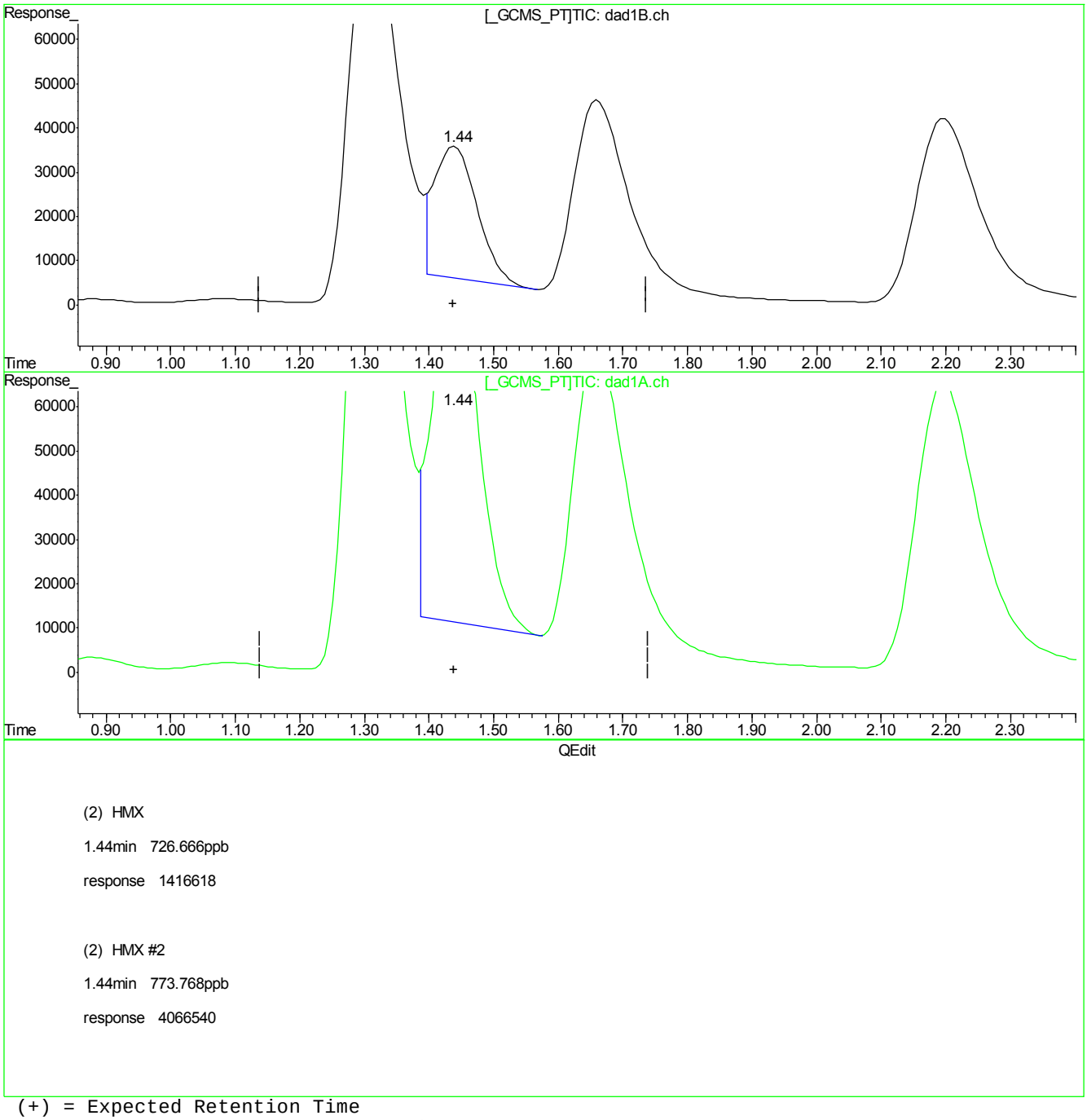
7.7.6.3

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration

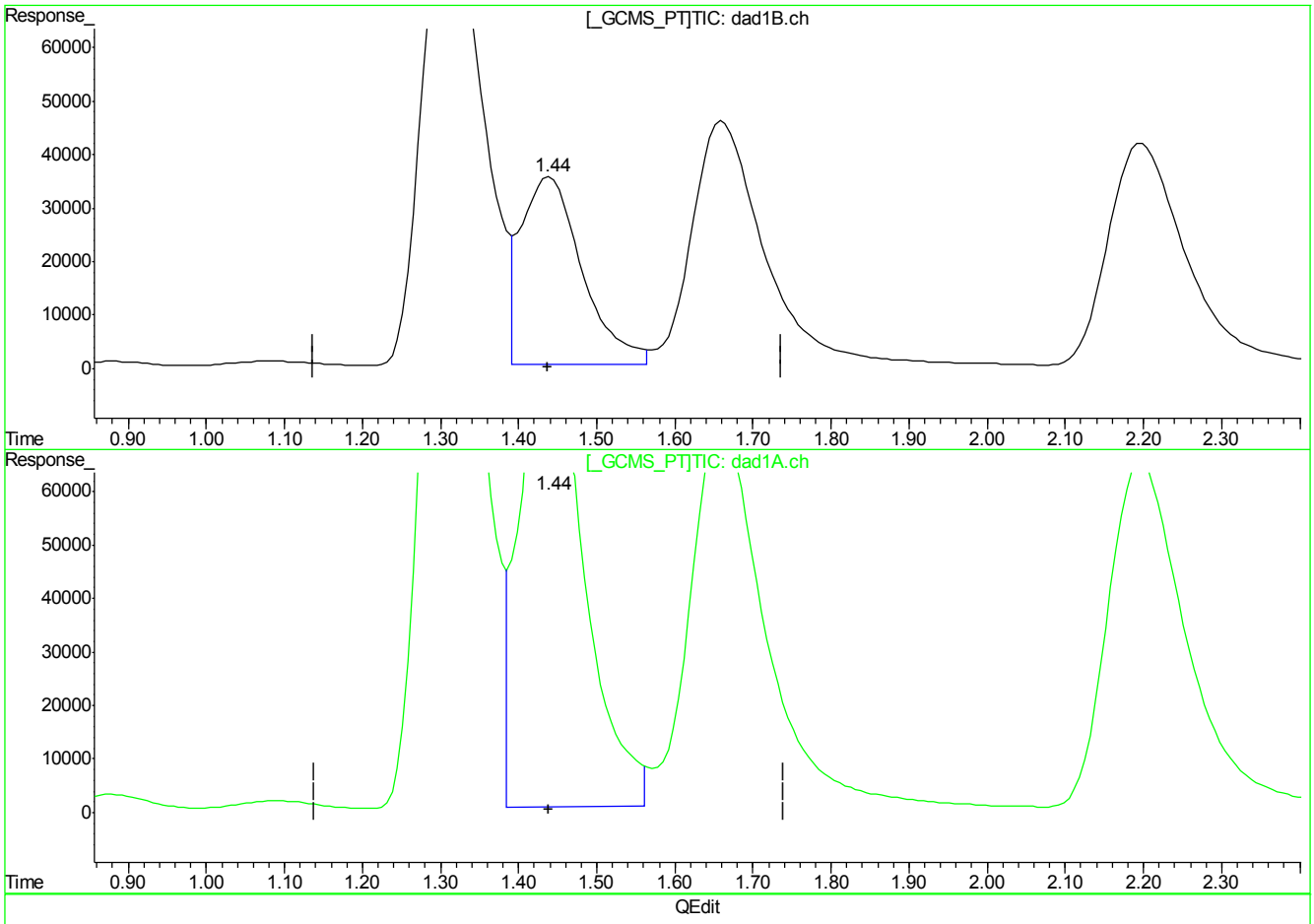


(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:06 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 973.074ppb m

response 1896985

(2) HMX #2

1.44min 966.703ppb m

response 5080506

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:30 2018

7.7.6.5

7

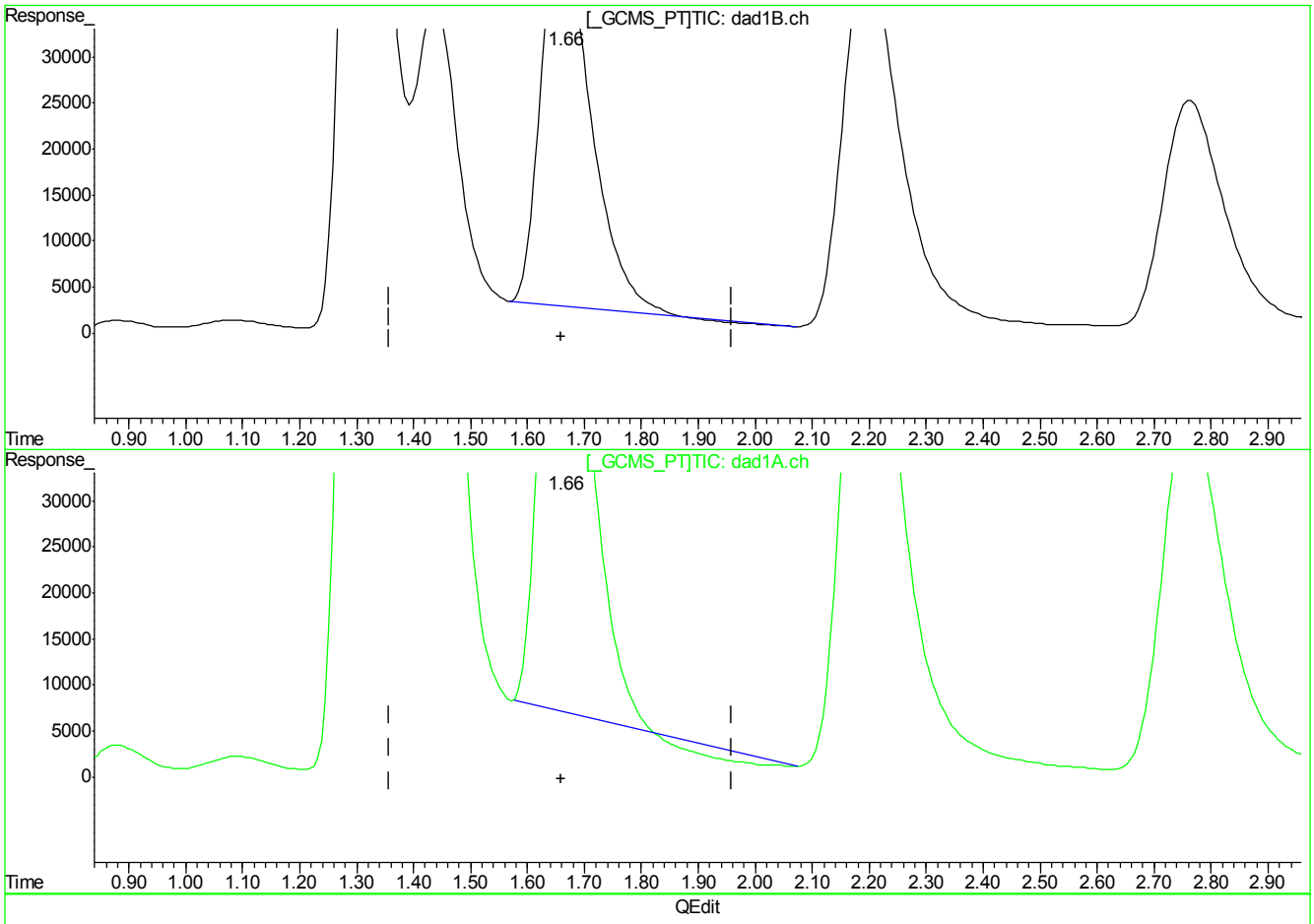
BB059469.D edits: HMX

FA53518

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 863.341ppb

response 2527721

(3) DNX #2

1.66min 781.314ppb

response 3694727

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:33 2018

7.7.6.9

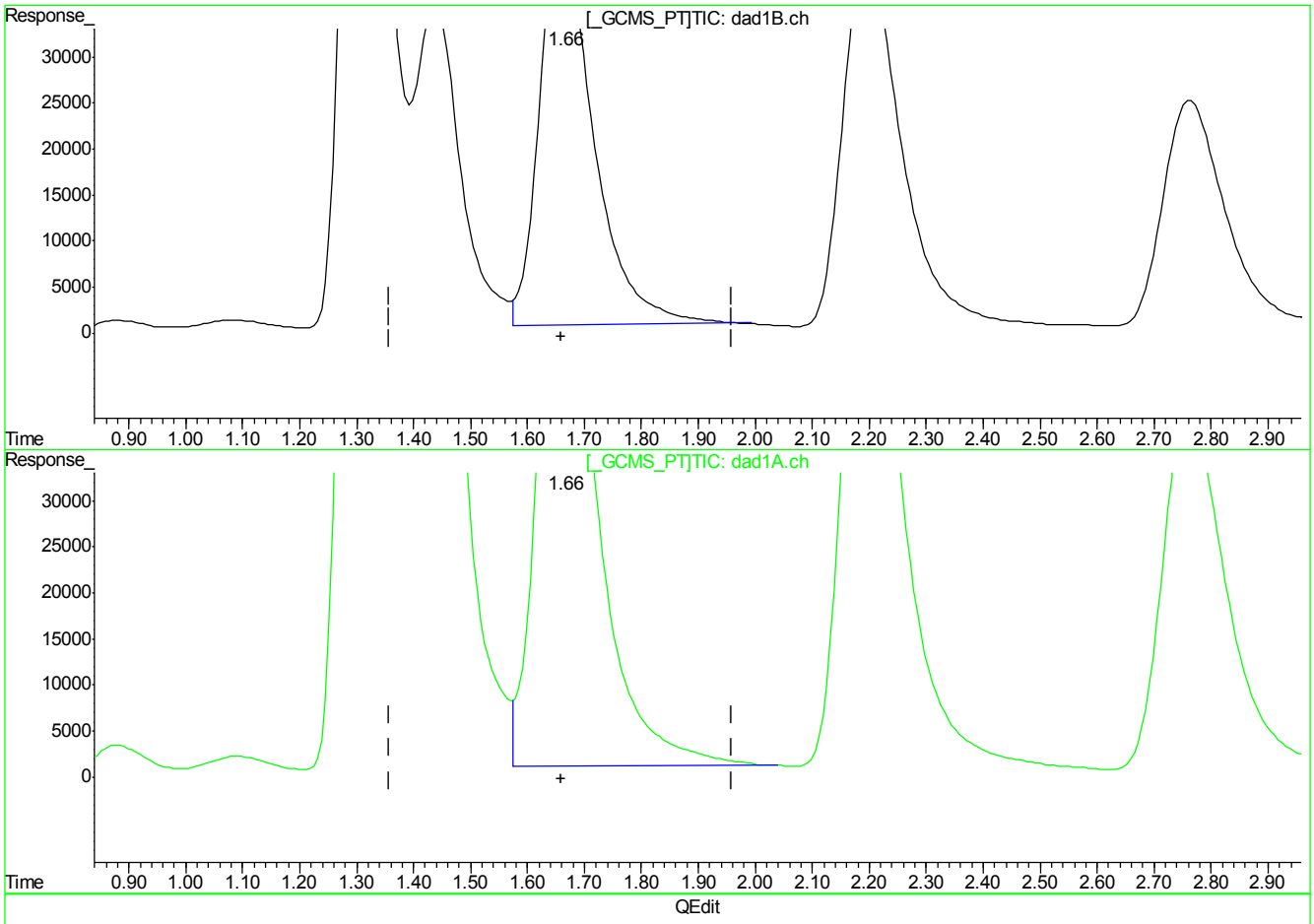
7

BB059469.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 980.493ppb m

response 2865864

(3) DNX #2

1.66min 1006.582ppb m

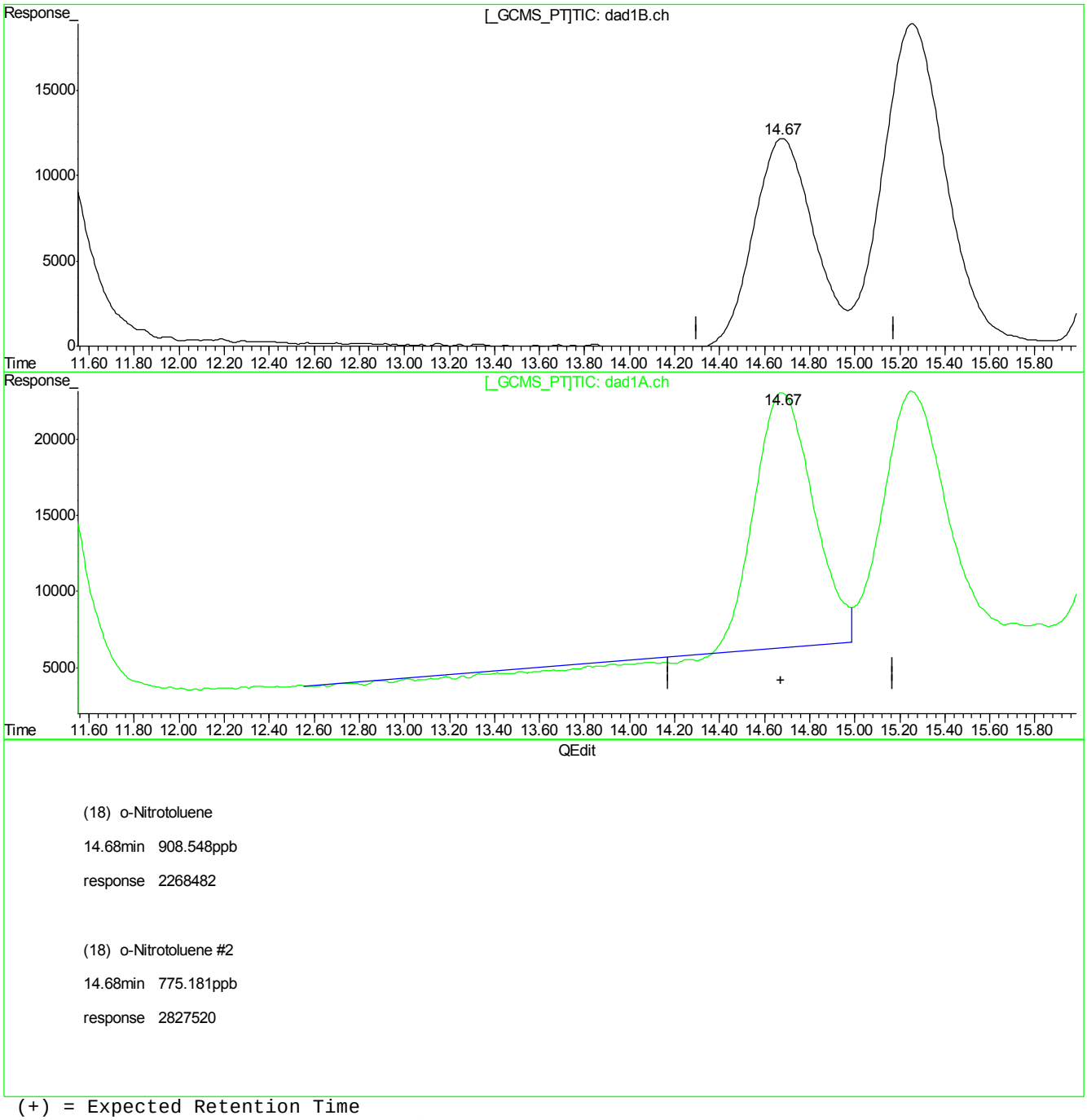
response 4744960

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration

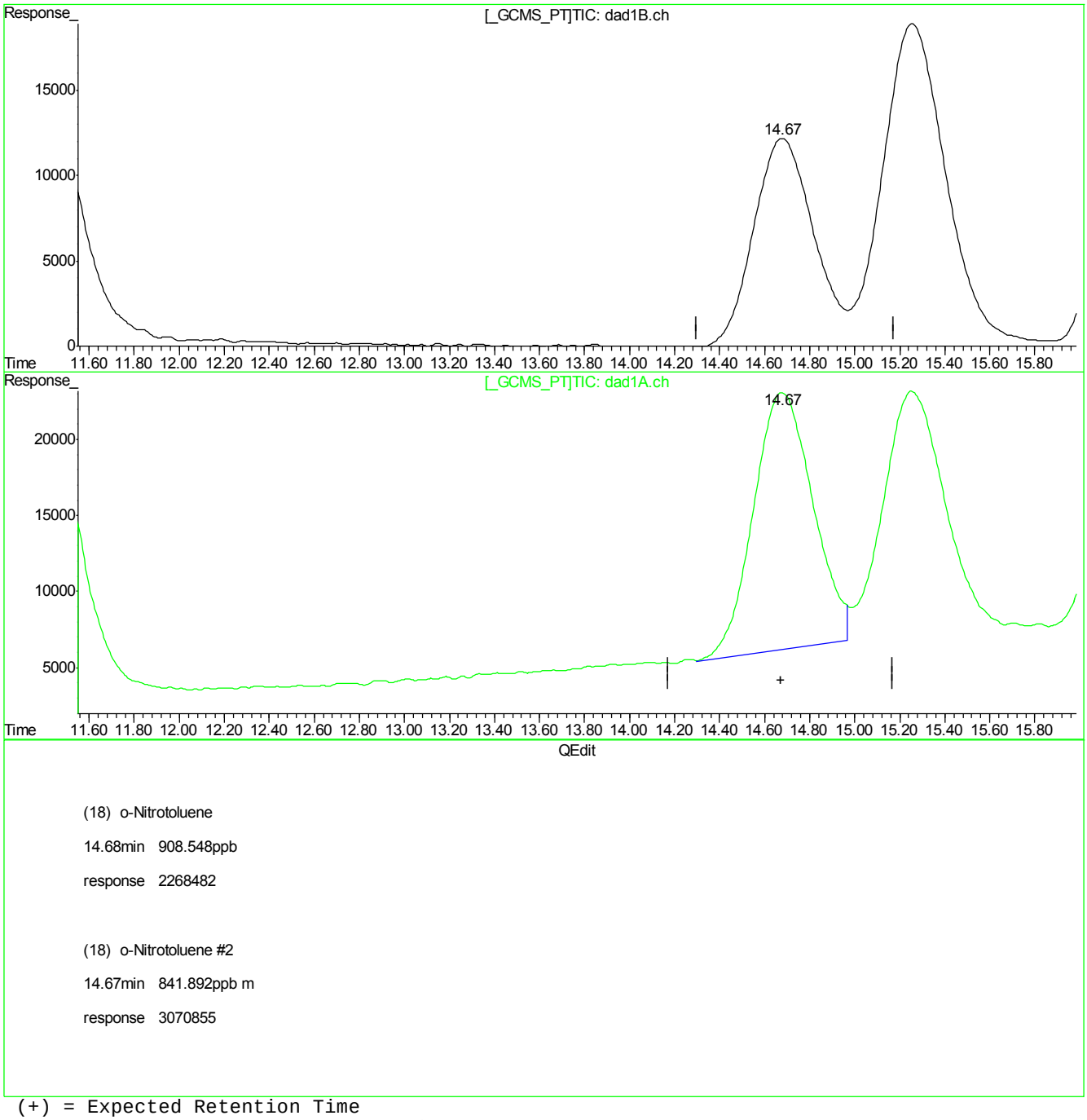


(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:02 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:05 2018

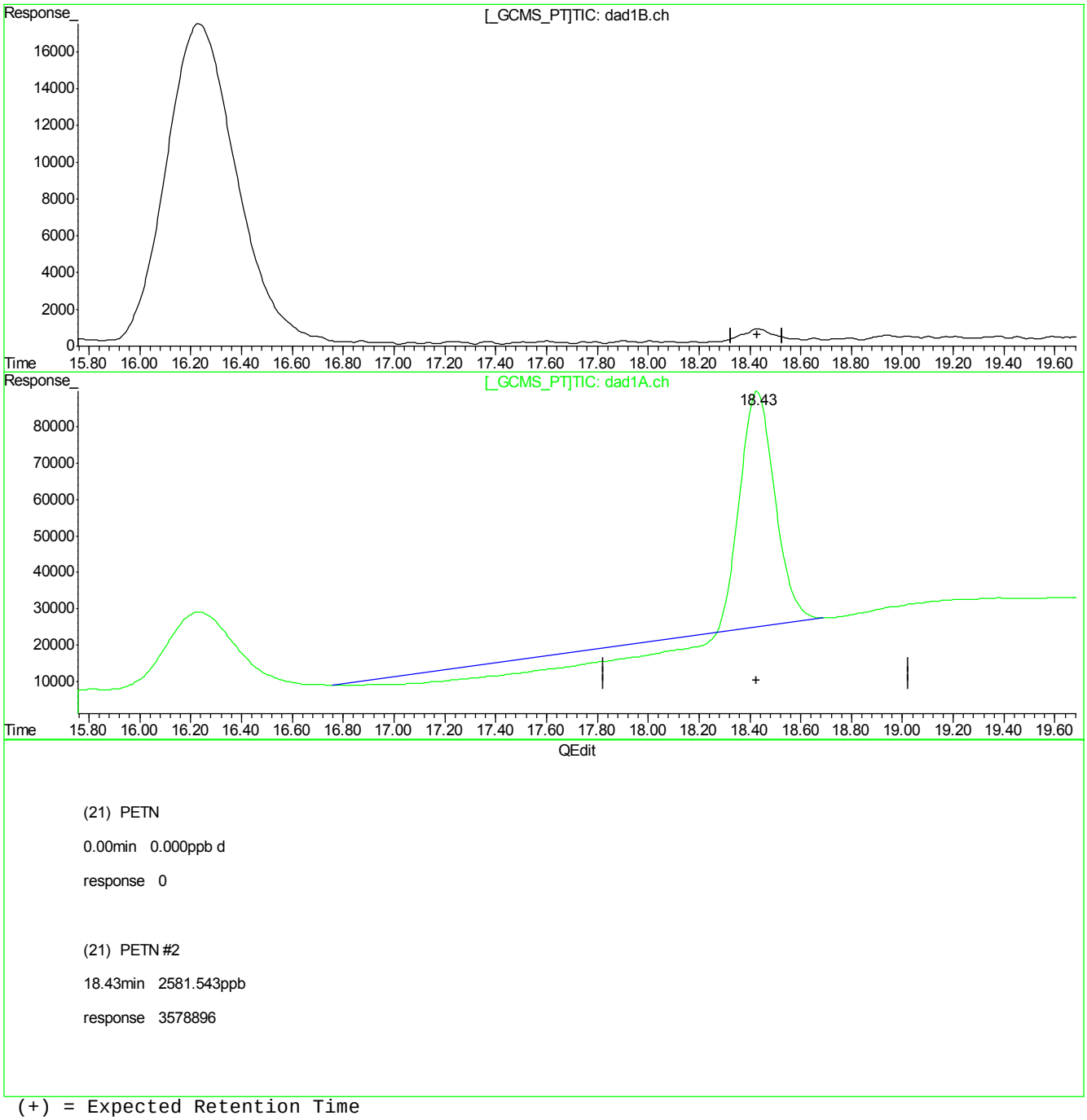
7.7.6.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 2581.543ppb

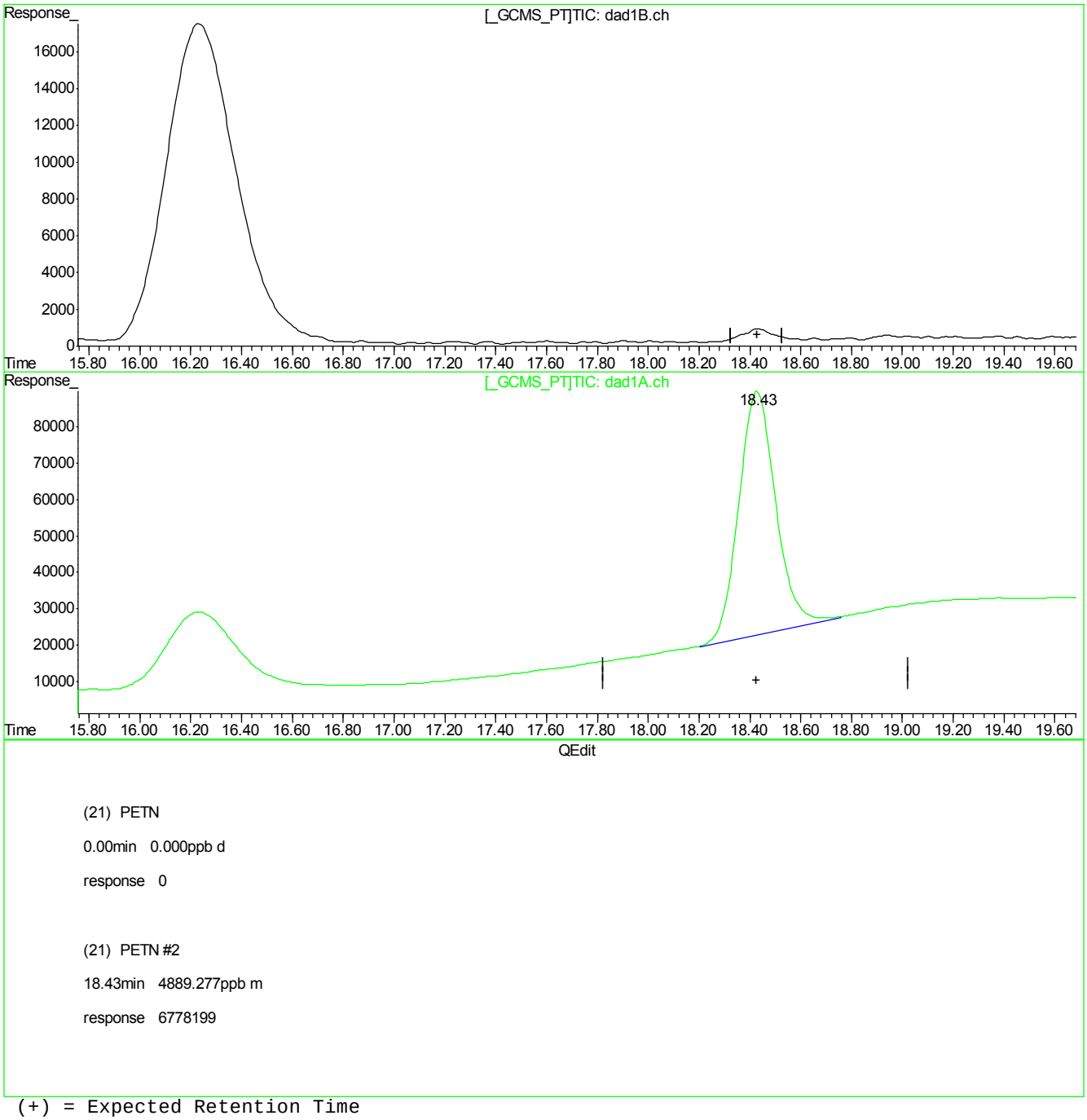
response 3578896

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 4889.277ppb m

response 6778199

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:11 2018

BB059470.D

Manual Integrations APPROVED (compounds with "m" flag)

Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:50 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.29	10.29	5083250	9247239	2200.948	2220.868
	Spiked Amount 500.000	Range 70 - 136		Recovery =		440.19%#	444.17%#
	Target Compounds						
1)	TNX	1.30	1.30	9211273	14491645	1815.179m	1859.350m
2)	HMX	1.43	1.44	3638718	10069253	1866.511m	1915.946m
3)	DNX	1.65	1.65	5892557	9584014	2047.638m	2063.804m
4)	MNX	2.19	2.19	5885974	9151830	1893.025	1952.481
5)	RDX	2.76	2.76	3867732	6249623	1730.557	1668.704
6)	1,3,5-Trinitrobe	4.41	4.41	8579482	16591008	1736.222	1820.617
7)	1,3-Dinitrobenze	5.57	5.57	10685649	7803739	1750.755	1980.456
8)	3,5-Dinitroanili	5.87	5.87	9524110	16795702	2077.357	2129.802
9)	Nitrobenzene	7.08	7.08	6632371	6428143	1738.453	1792.964
10)	Nitroglycerin	0.00	8.37	0	12142455	N.D. d	9175.233
11)	Tetryl	8.69	8.68	5845384	10366785	1837.017	2022.025
12)	2,4,6-Trinitroto	9.11	9.11	7588161	9366584	2102.893	2183.808
13)	2-Amino-4,6-Dini	9.40	9.40	7170099	11097154	1786.183	1995.964
14)	4-Amino-2,6-Dini	9.83	9.83	5374487	10973582	1904.486	2030.417
16)	2,4-Dinitrotolue	10.94	10.94	9942239	6519975	1843.940	1952.994
17)	2,6-Dinitrotolue	11.39	11.39	6550095	7736590	1992.279	1972.734
18)	o-Nitrotoluene	14.65	14.64	4539267	6298701	1818.018	1726.825m
19)	p-Nitrotoluene	15.23	15.22	7504319	6331384	2028.351	2000.634
20)	m-Nitrotoluene	16.20	16.20	6867225	8109895	1861.341	1870.104
21)	PETN	0.00	18.42	0	13694187	N.D. d	9877.944m

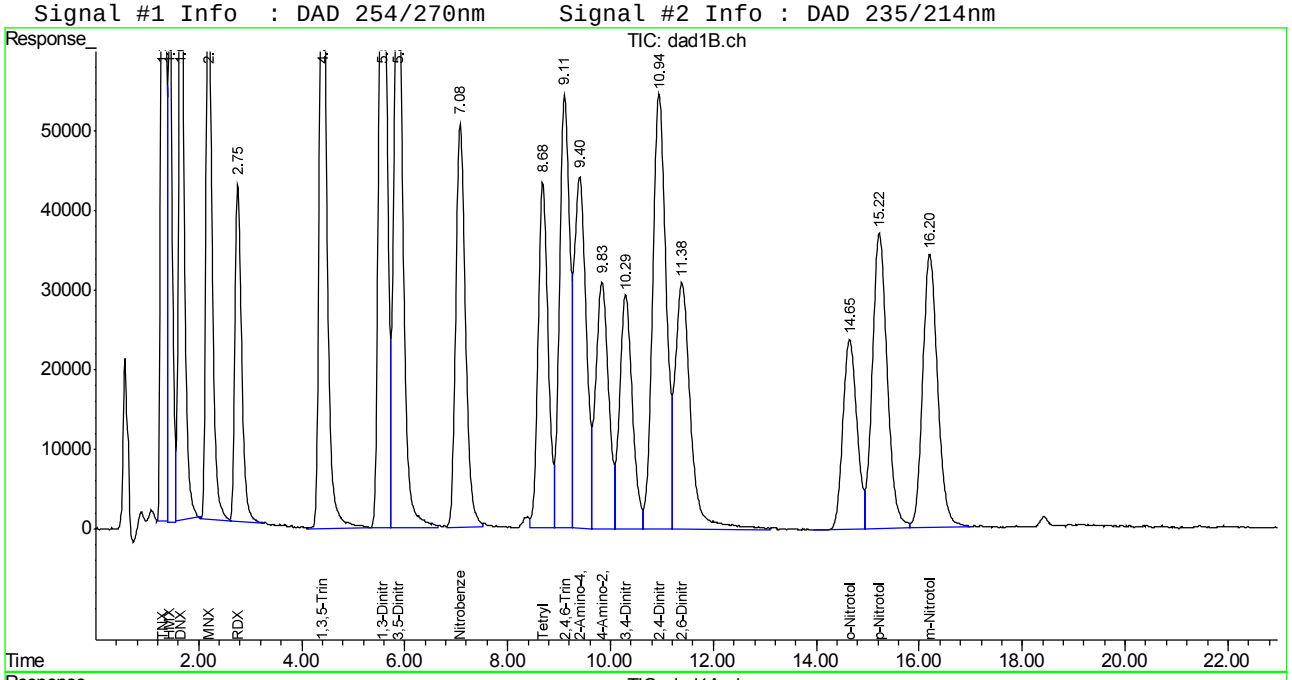
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059470.D 8330B_0419PLUS.M Fri Apr 20 08:01:24 2018 Page 1

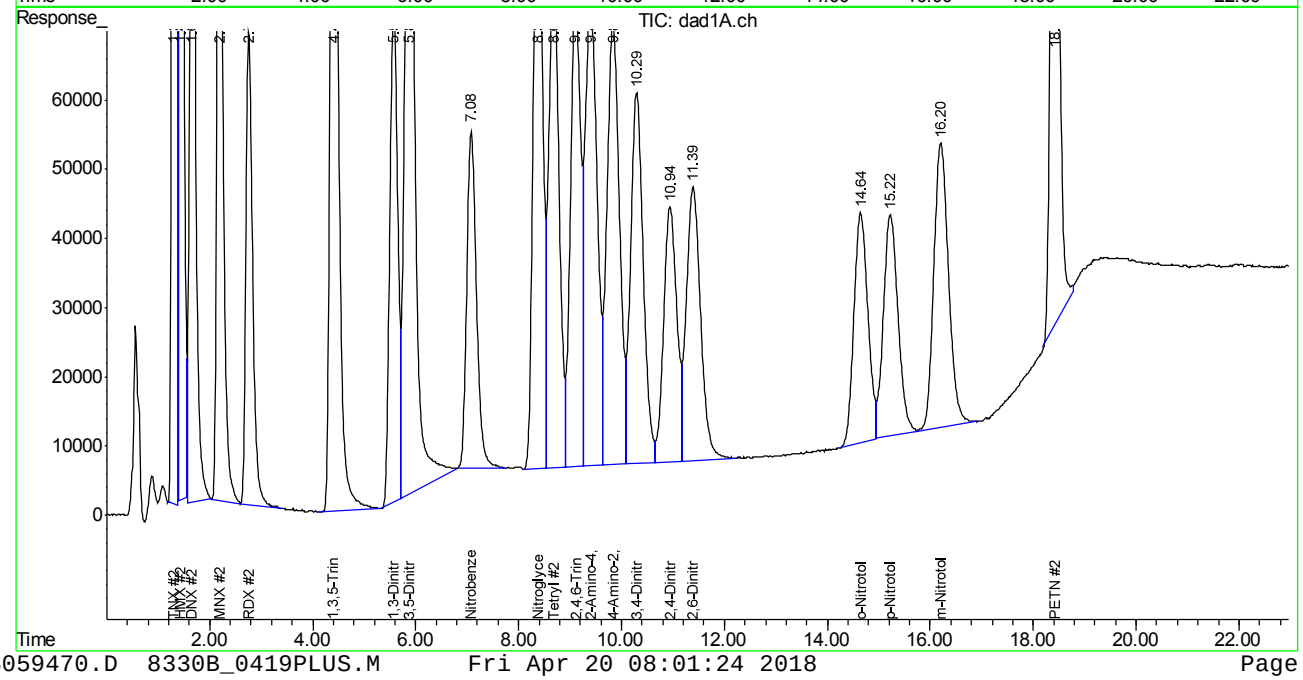
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:01 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

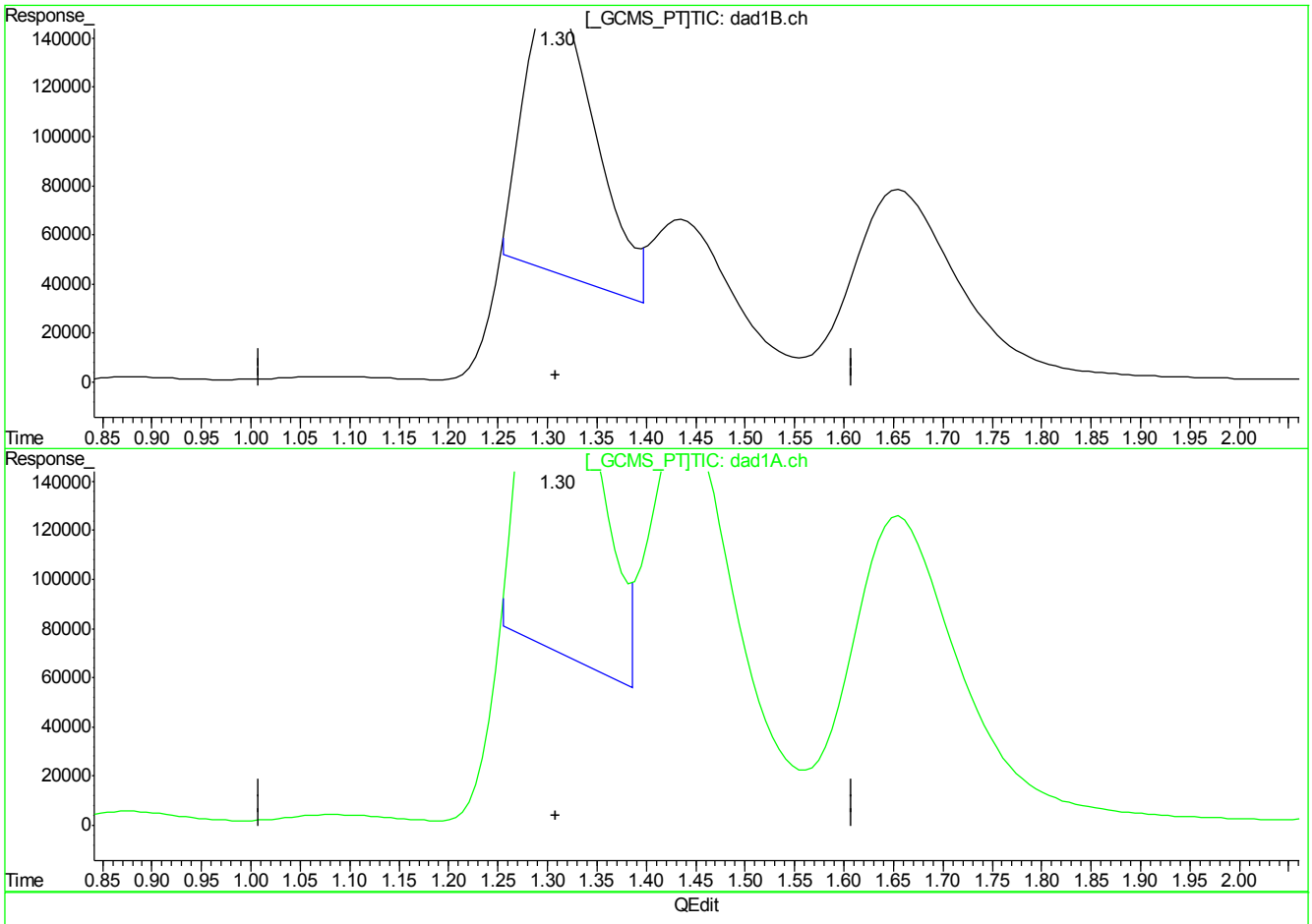
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059470.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 13:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.30	Poorly defined baseline
TNX		2	1.30	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.65	Poorly defined baseline
DNX		2	1.65	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.64	Poorly defined baseline
PETN	78-11-5	2	18.42	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 1109.709ppb

response 5631306

(1) TNX #2

1.31min 1083.207ppb

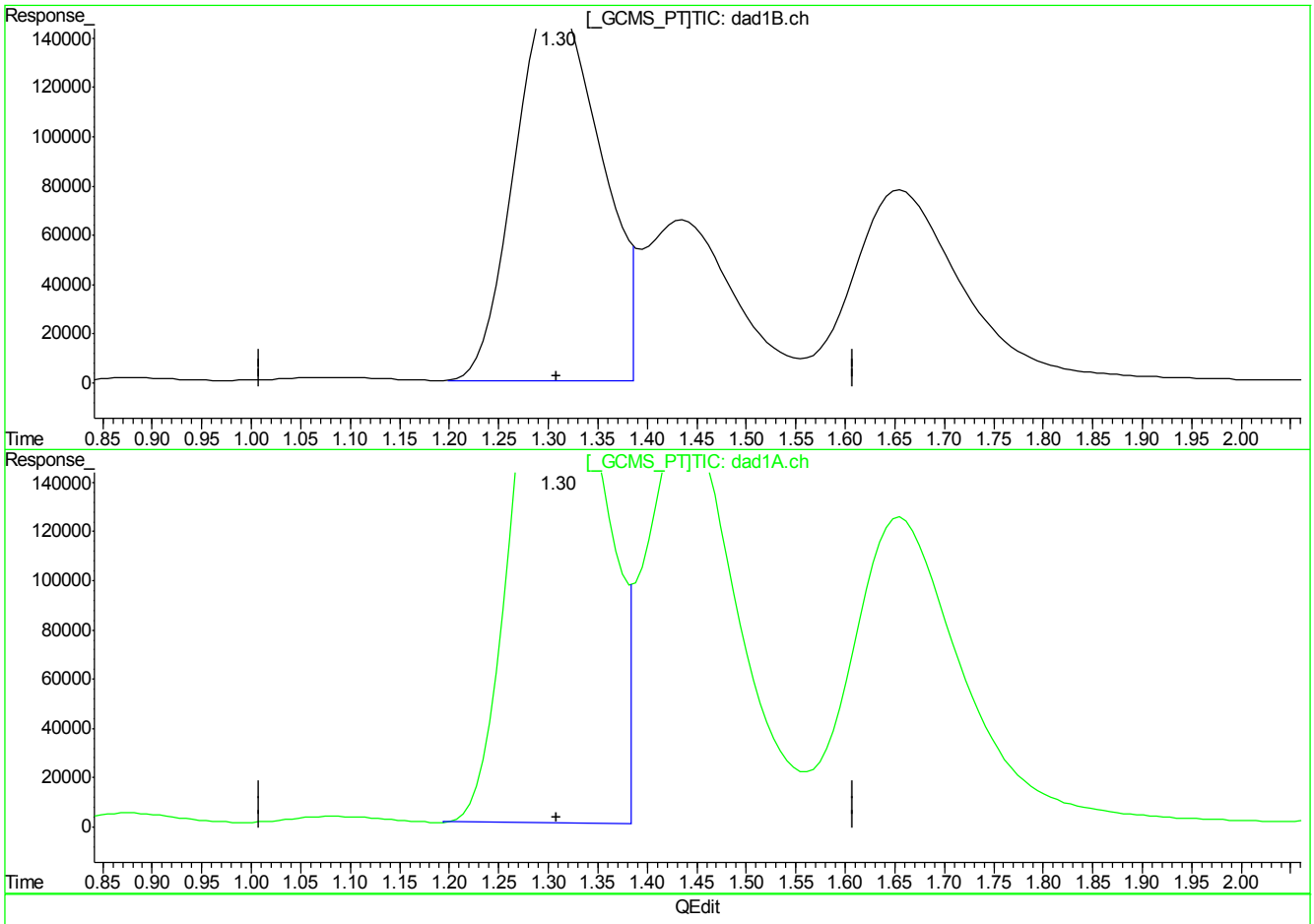
response 8442437

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(1) TNX

1.30min 1815.179ppb m

response 9211273

(1) TNX #2

1.30min 1859.350ppb m

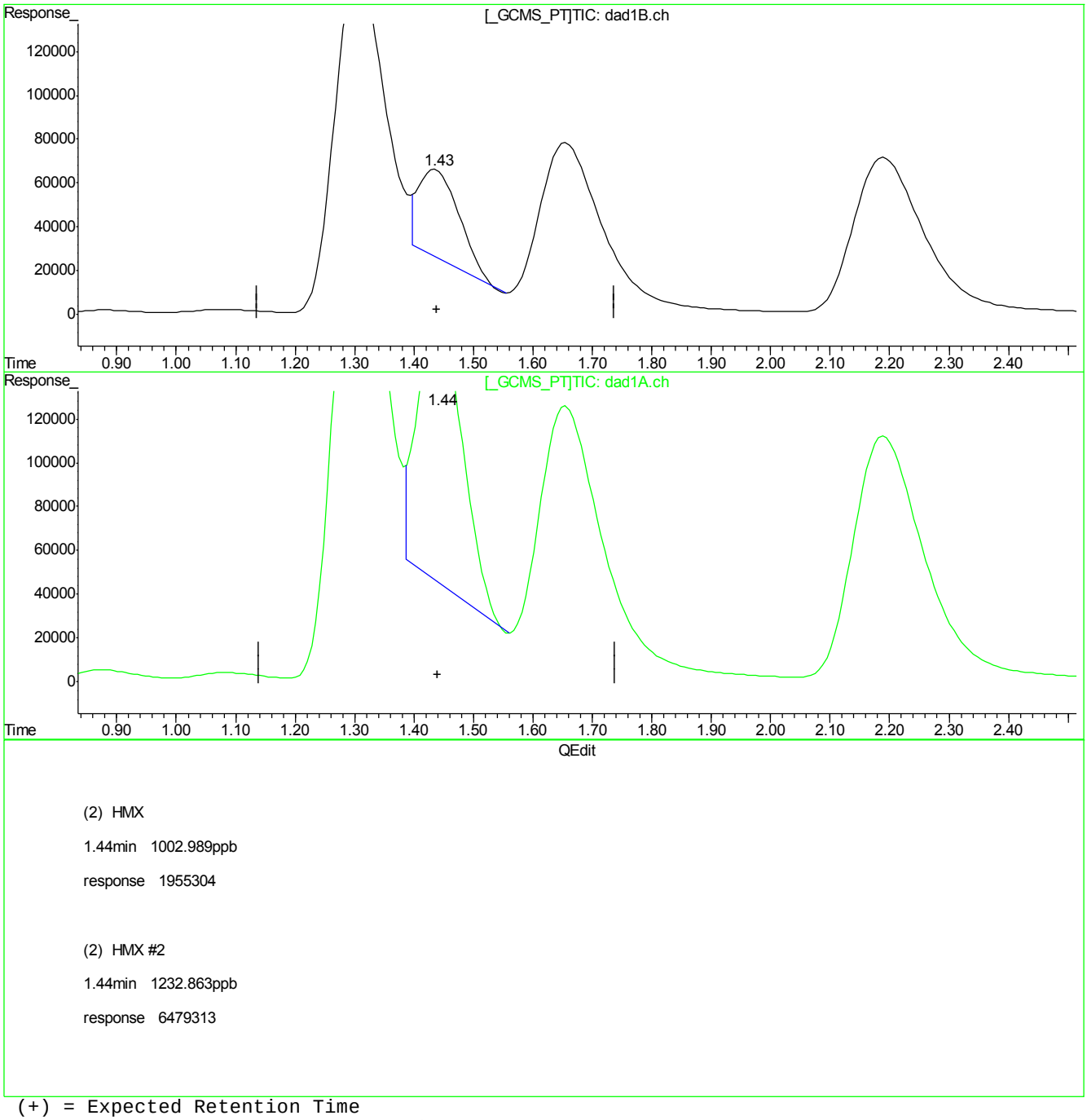
response 14491645

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 1002.989ppb

response 1955304

(2) HMX #2

1.44min 1232.863ppb

response 6479313

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:41 2018

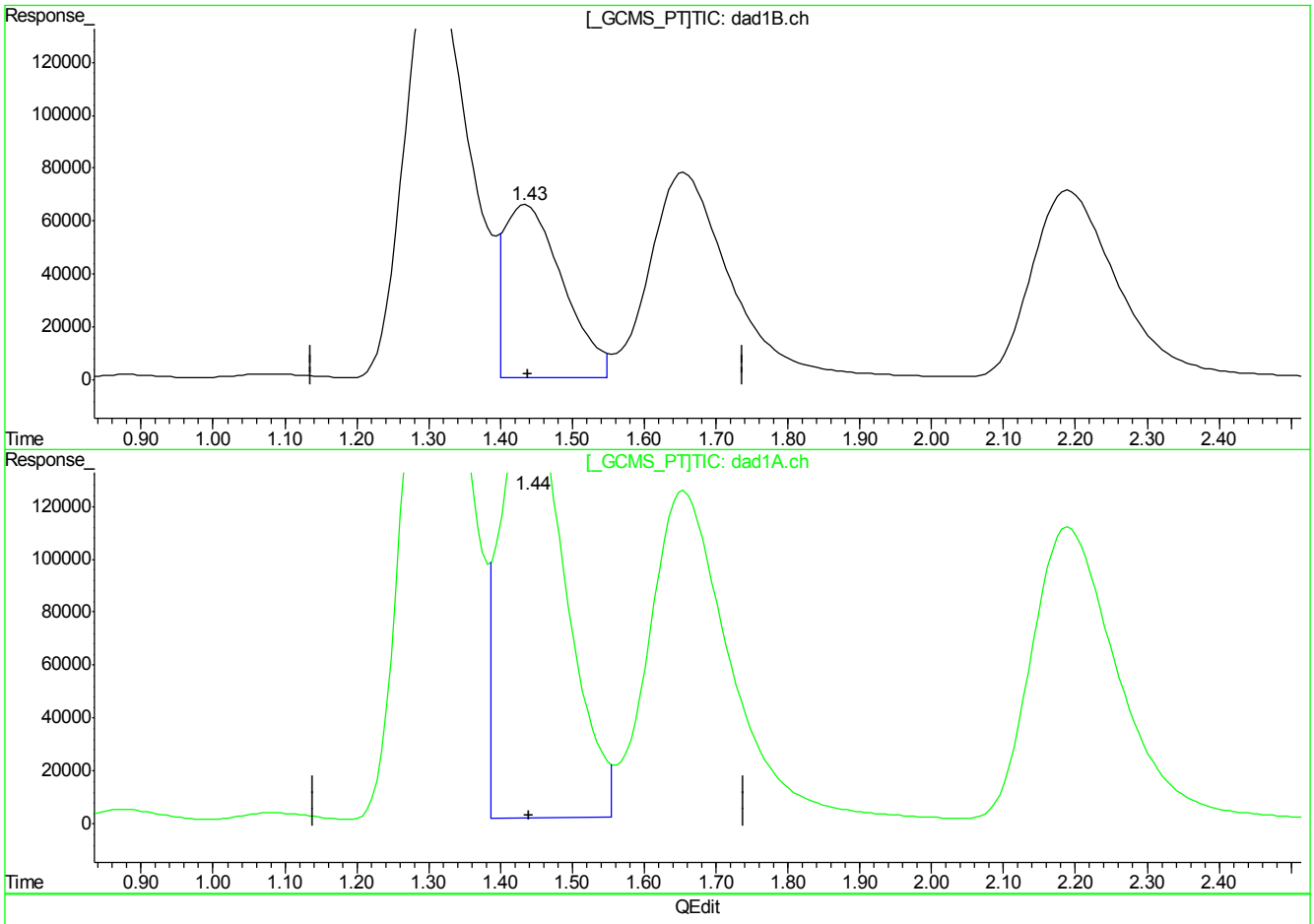
7.7.7.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(2) HMX

1.43min 1866.511ppb m

response 3638718

(2) HMX #2

1.44min 1915.946ppb m

response 10069253

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:03 2018

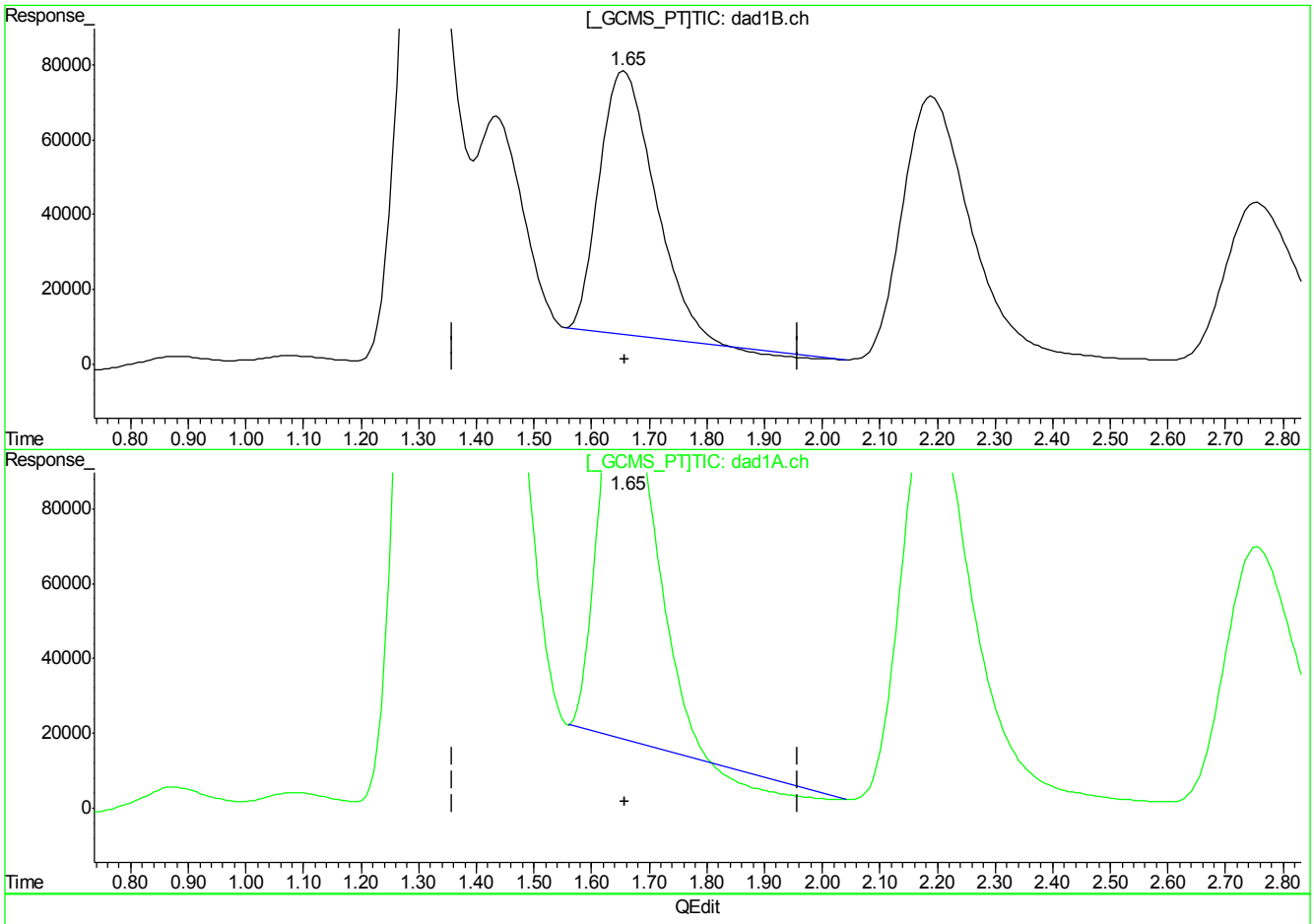
7.7.7.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 1610.843ppb

response 4665343

(3) DNX #2

1.66min 1430.253ppb

response 6701954

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:06 2018

7.7.7.6

7

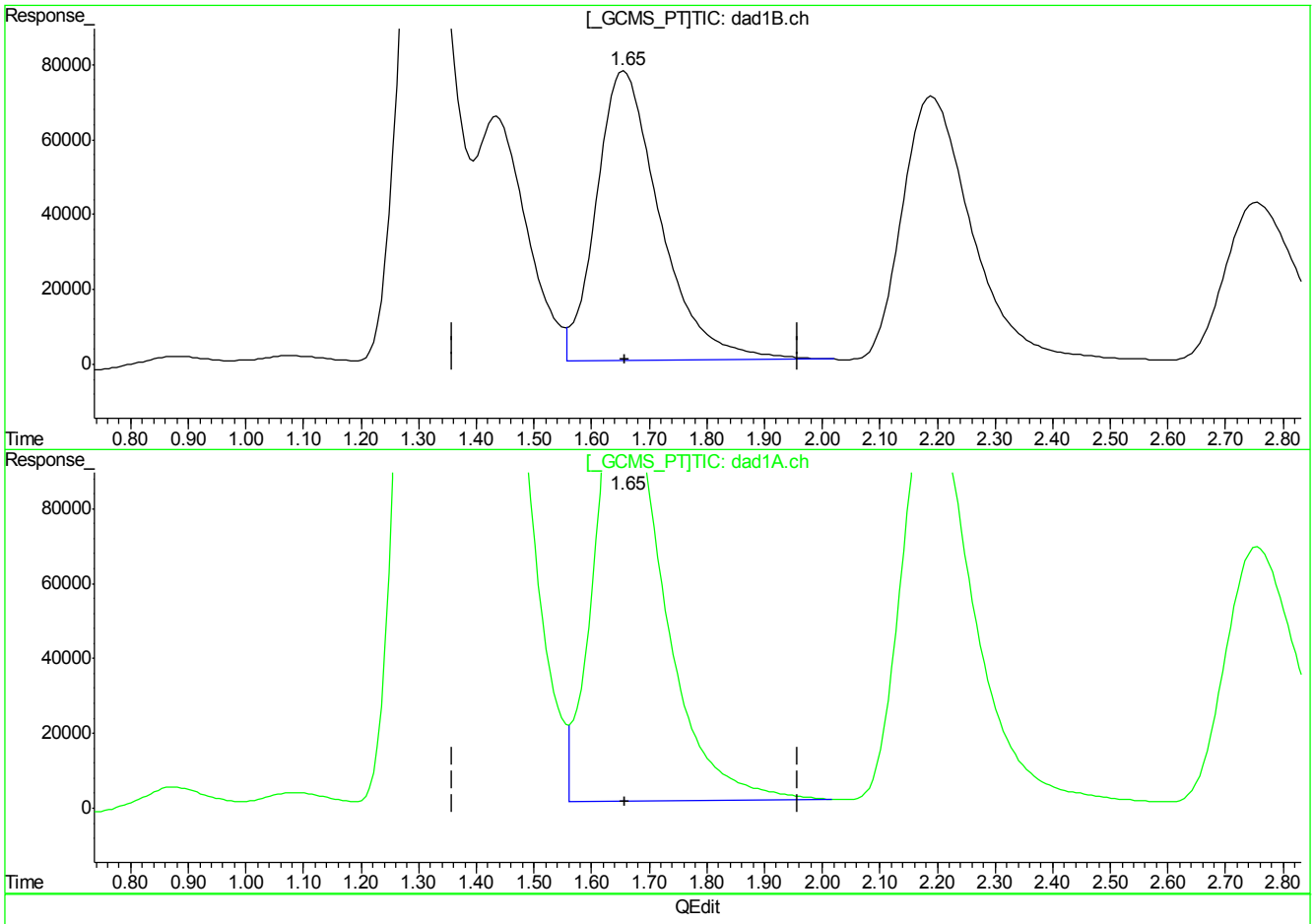
BB059470.D edits: DNX

FA53518

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(3) DNX

1.65min 2047.638ppb m

response 5892557

(3) DNX #2

1.65min 2063.804ppb m

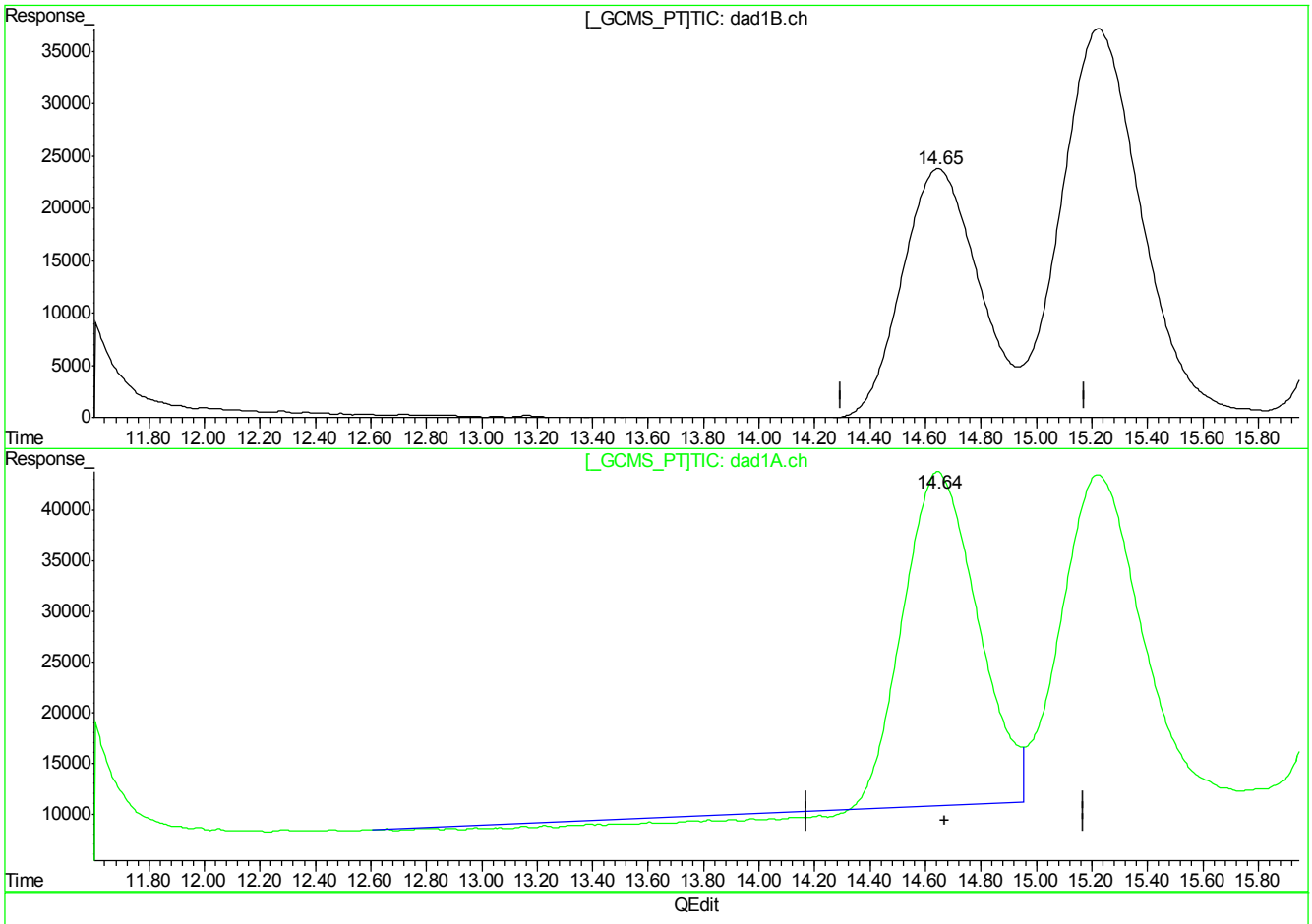
response 9584014

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.65min 1818.018ppb

response 4539267

(18) o-Nitrotoluene #2

14.65min 1563.768ppb

response 5703940

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:30 2018

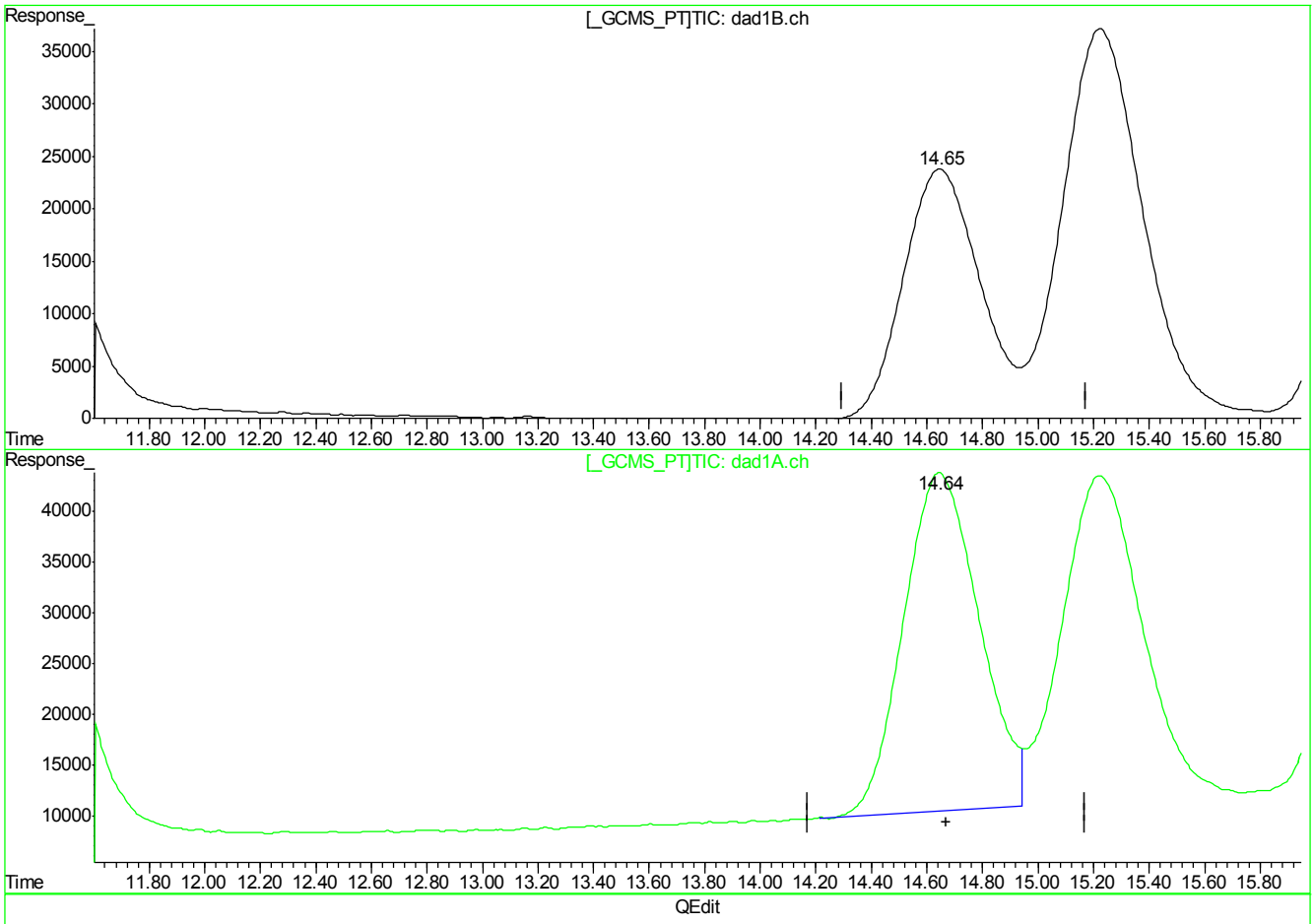
7.7.7.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.65min 1818.018ppb

response 4539267

(18) o-Nitrotoluene #2

14.64min 1726.825ppb m

response 6298701

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:34 2018

7.7.7.9

7

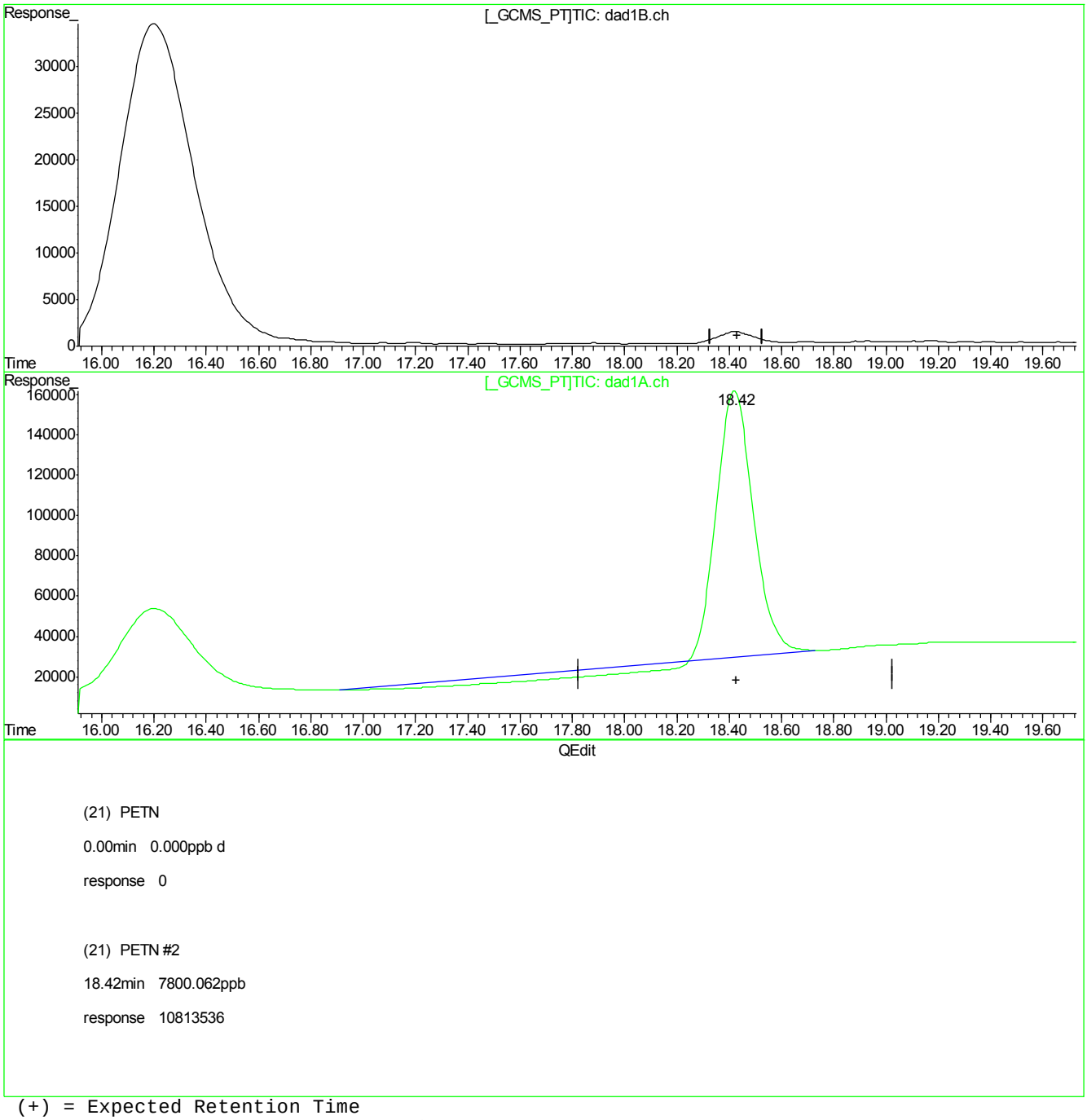
FA53518

BB059470.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 7800.062ppb

response 10813536

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:38 2018

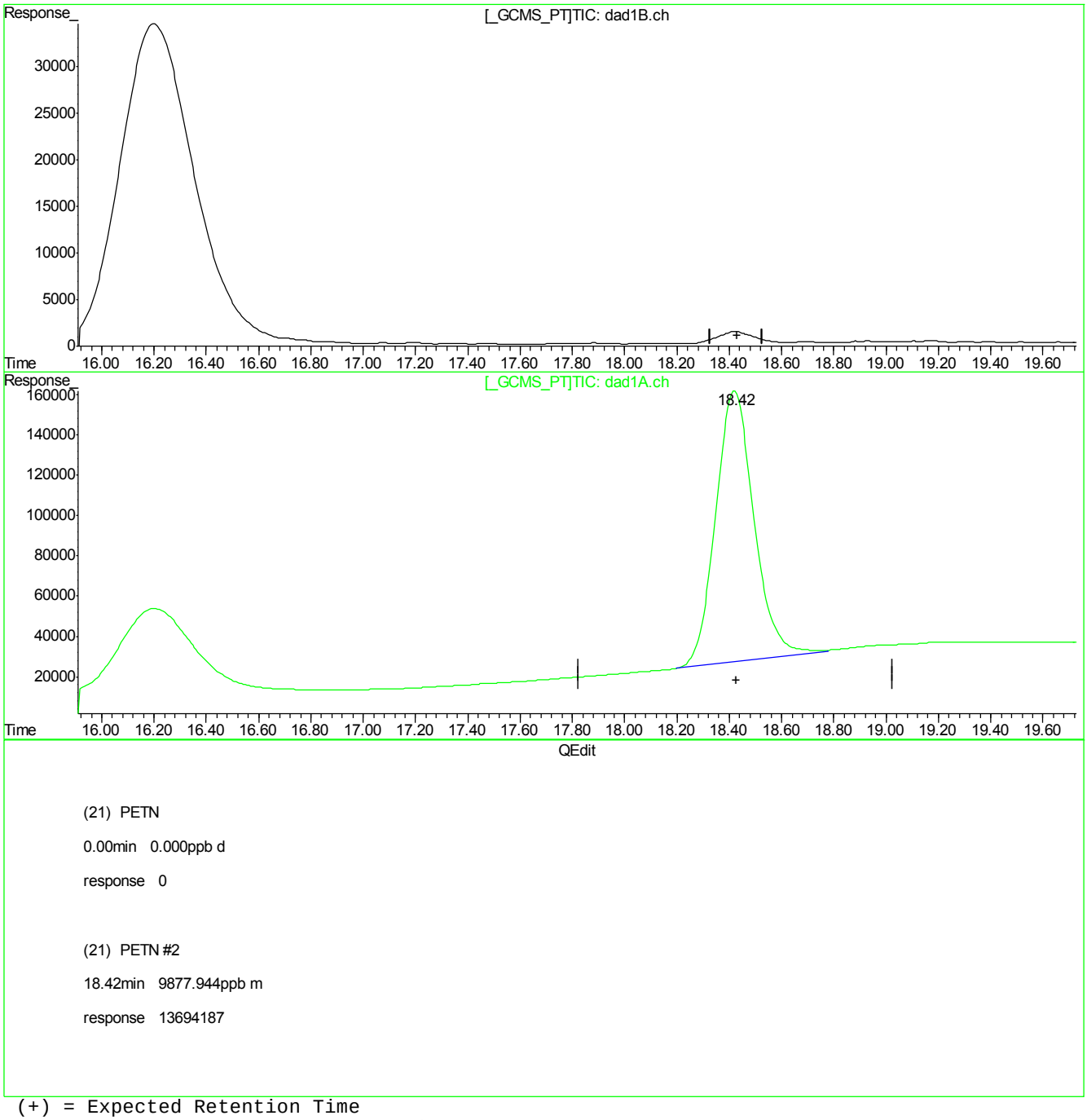
7.7.7.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 9877.944ppb m

response 13694187

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:42 2018

7.7.7.11

7

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10:27 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.31	1.31	2155539	3284215	446.785m	442.711m
2)	HMX	1.44	1.44	891952	2552992	476.953m	502.668m
3)	DNX	1.66	1.66	1290432	2187865	416.669m	466.541m
4)	MNX	2.20	2.20	1289423	2023915	416.410	435.357
5)	RDX	2.76	2.76	867810	1446810	405.824	435.262
6)	1,3,5-Trinitrobe	4.41	4.41	1916834	3674065	440.520	440.109
7)	1,3-Dinitrobenze	5.58	5.57	2298814	1577744	414.651	423.626m
8)	3,5-Dinitroanili	5.87	5.87	2197319	3639339	449.315	486.621
9)	Nitrobenzene	7.09	7.09	1561002	1457542	428.399	439.568
10)	Nitroglycerin	0.00	8.38	0	3011271	N.D. d	2349.932
11)	Tetryl	8.69	8.68	1316922	2243689	447.453	431.996
12)	2,4,6-Trinitroto	9.11	9.11	1546722	1951756	366.508	430.591
13)	2-Amino-4,6-Dini	9.41	9.42	1651187	2548623	436.189	475.149
14)	4-Amino-2,6-Dini	9.85	9.85	1245755	2592637	475.168	500.329
16)	2,4-Dinitrotolue	10.95	10.96	2209091	1353341	419.899	458.258
17)	2,6-Dinitrotolue	11.40	11.41	1413935	1713574	409.093	501.832
18)	o-Nitrotoluene	14.66	14.65	1040298	1453747	416.479	443.790m
19)	p-Nitrotoluene	15.24	15.25	1618644	1443654	410.091	458.274
20)	m-Nitrotoluene	16.22	16.22	1558816	1910959	436.986	474.905
21)	PETN	0.00	18.42	0	3478321	N.D. d	2504.495m

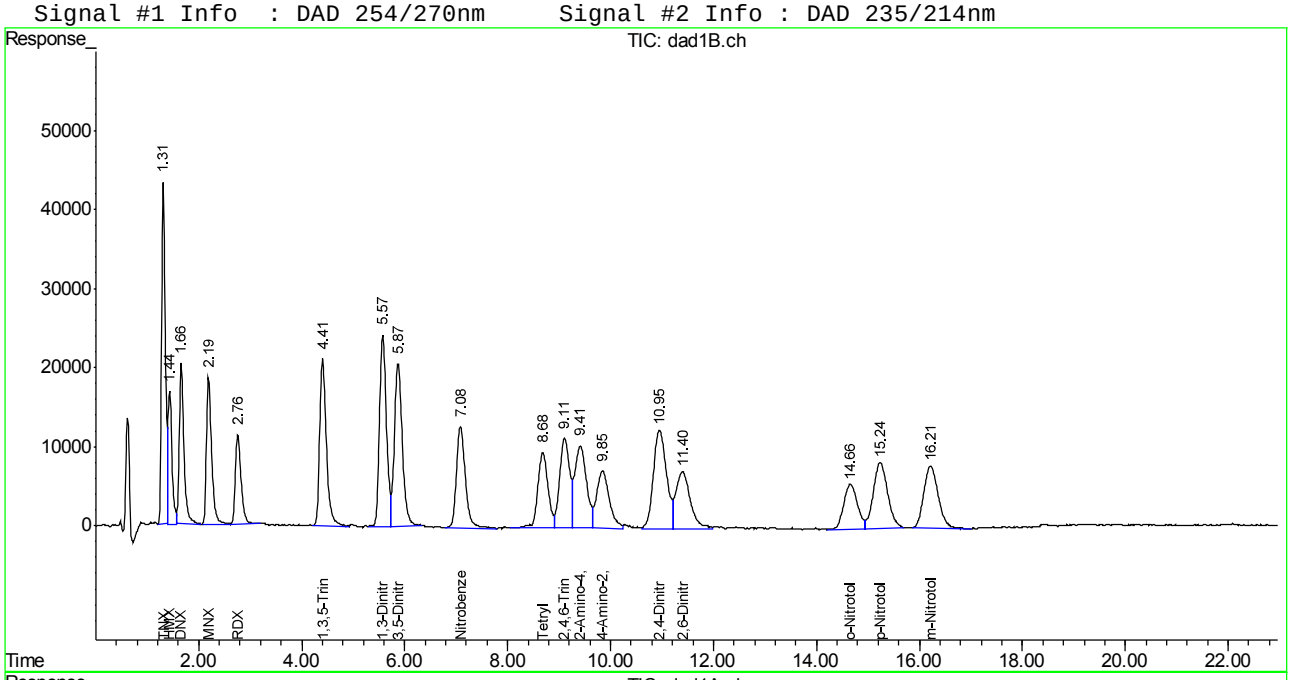
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059471.D 8330B_0419PLUS.M Mon Apr 23 08:16:05 2018 Page 1

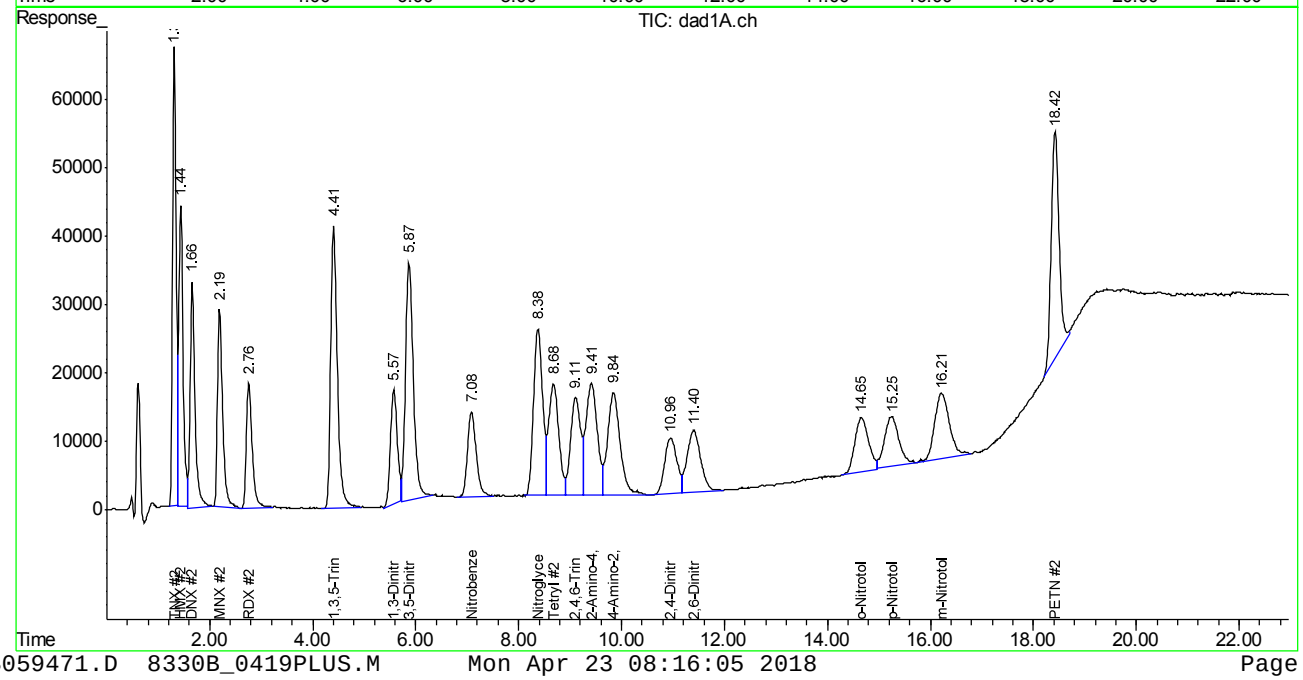
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:43 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

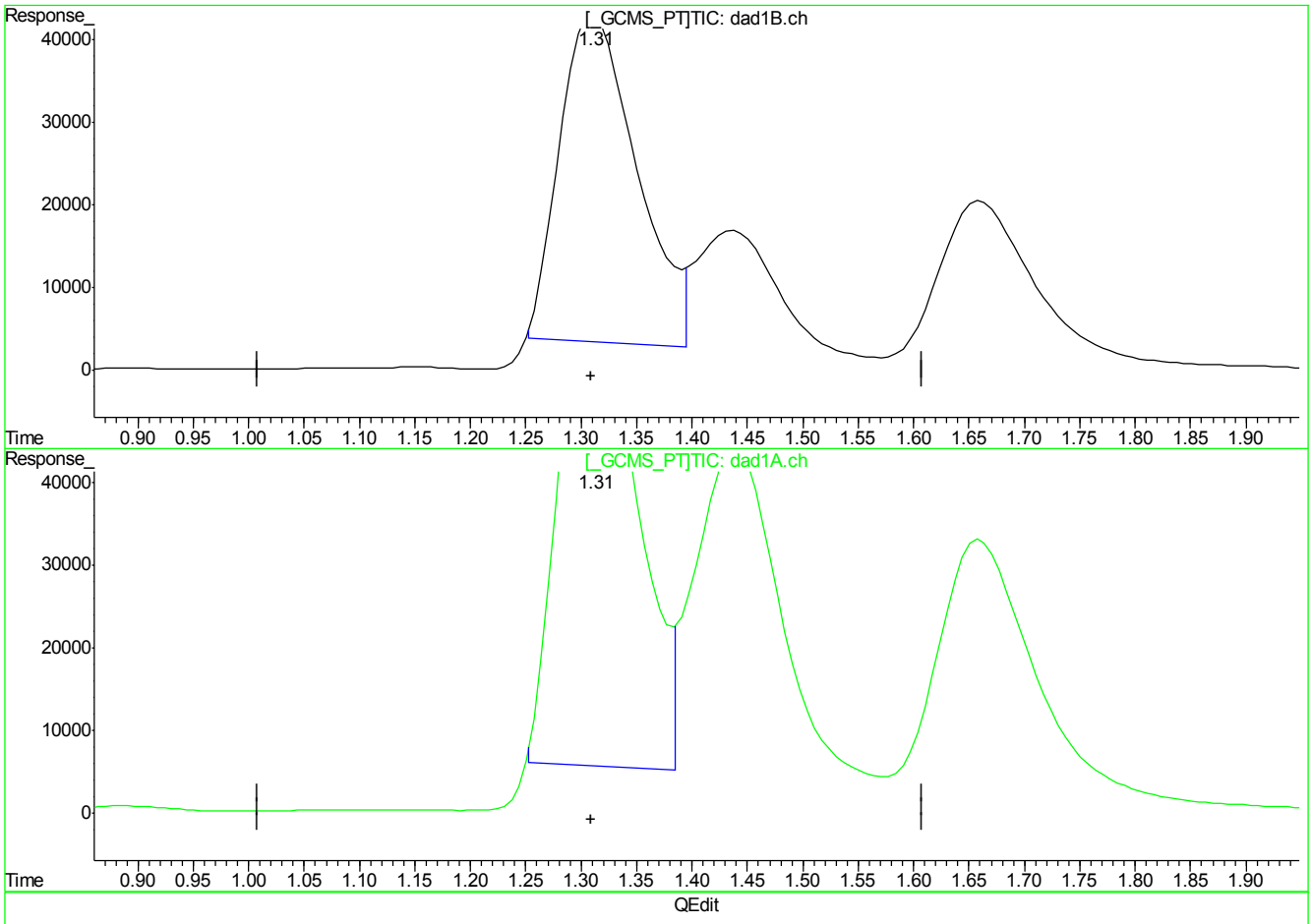
Sample Number:	GBB1722-ICV1722	**Method:**	SW846 8330B
Lab FileID:	BB059471.D	**Analyst approved:**	04/23/18 08:17 Evita Martinez
Injection Time:	04/19/18 13:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.57	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.65	Poorly defined baseline
PETN	78-11-5	2	18.42	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 394.963ppb

response 1905519

(1) TNX #2

1.31min 386.665ppb

response 2868446

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:26 2018

7.7.8.2

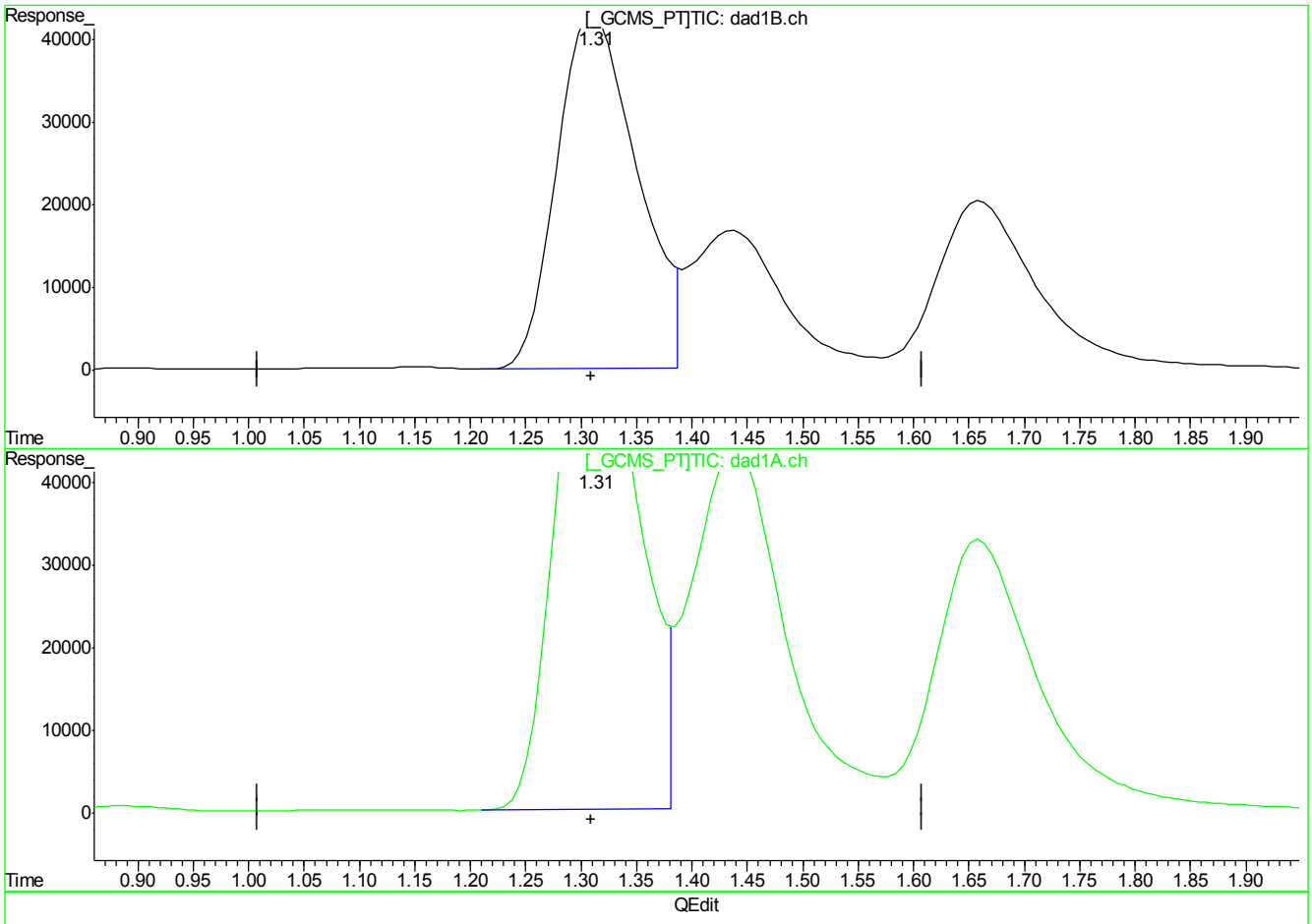
7

BB059471.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 446.785ppb m

response 2155539

(1) TNX #2

1.31min 442.711ppb m

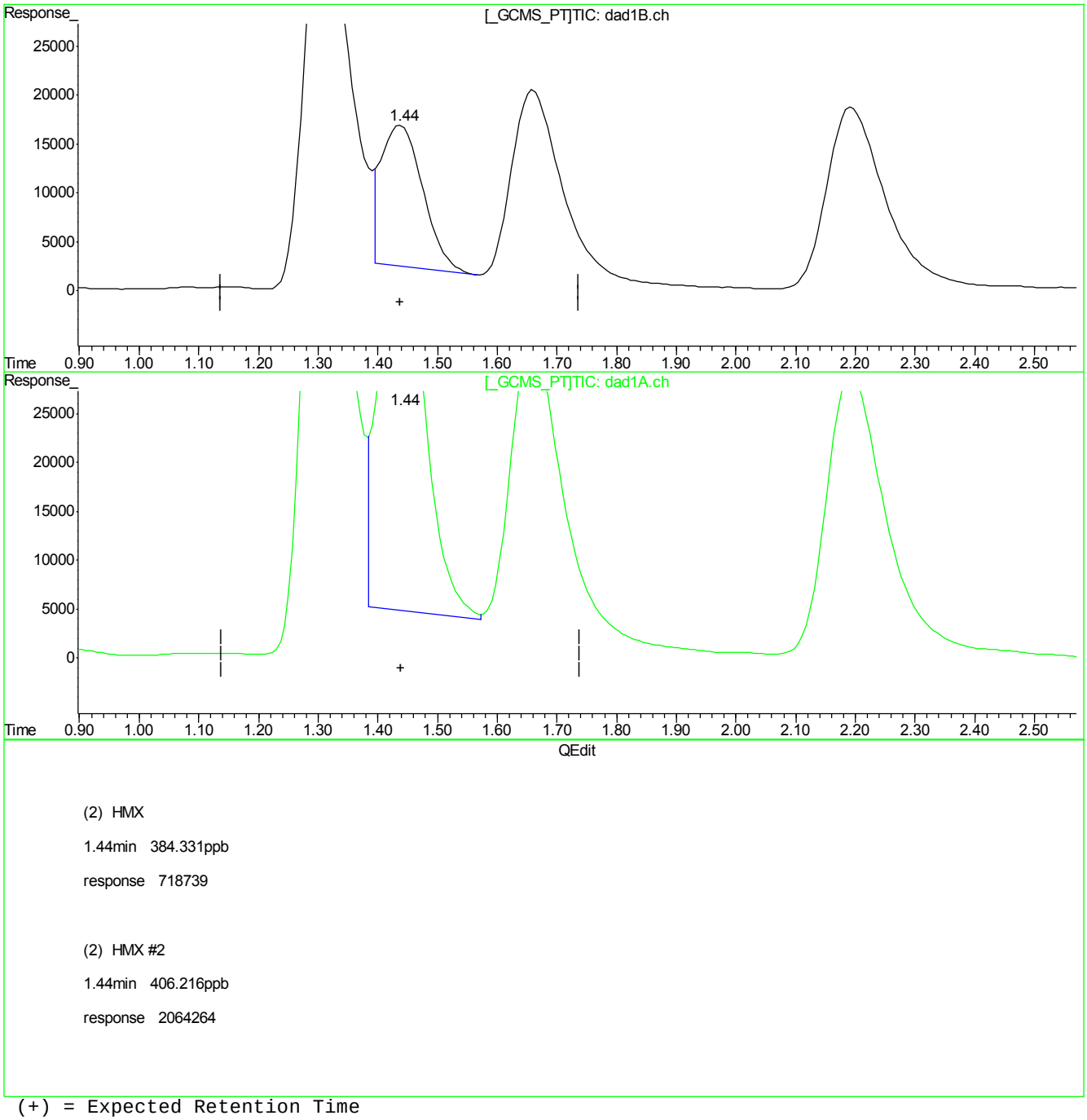
response 3284215

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 384.331ppb

response 718739

(2) HMX #2

1.44min 406.216ppb

response 2064264

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:41 2018

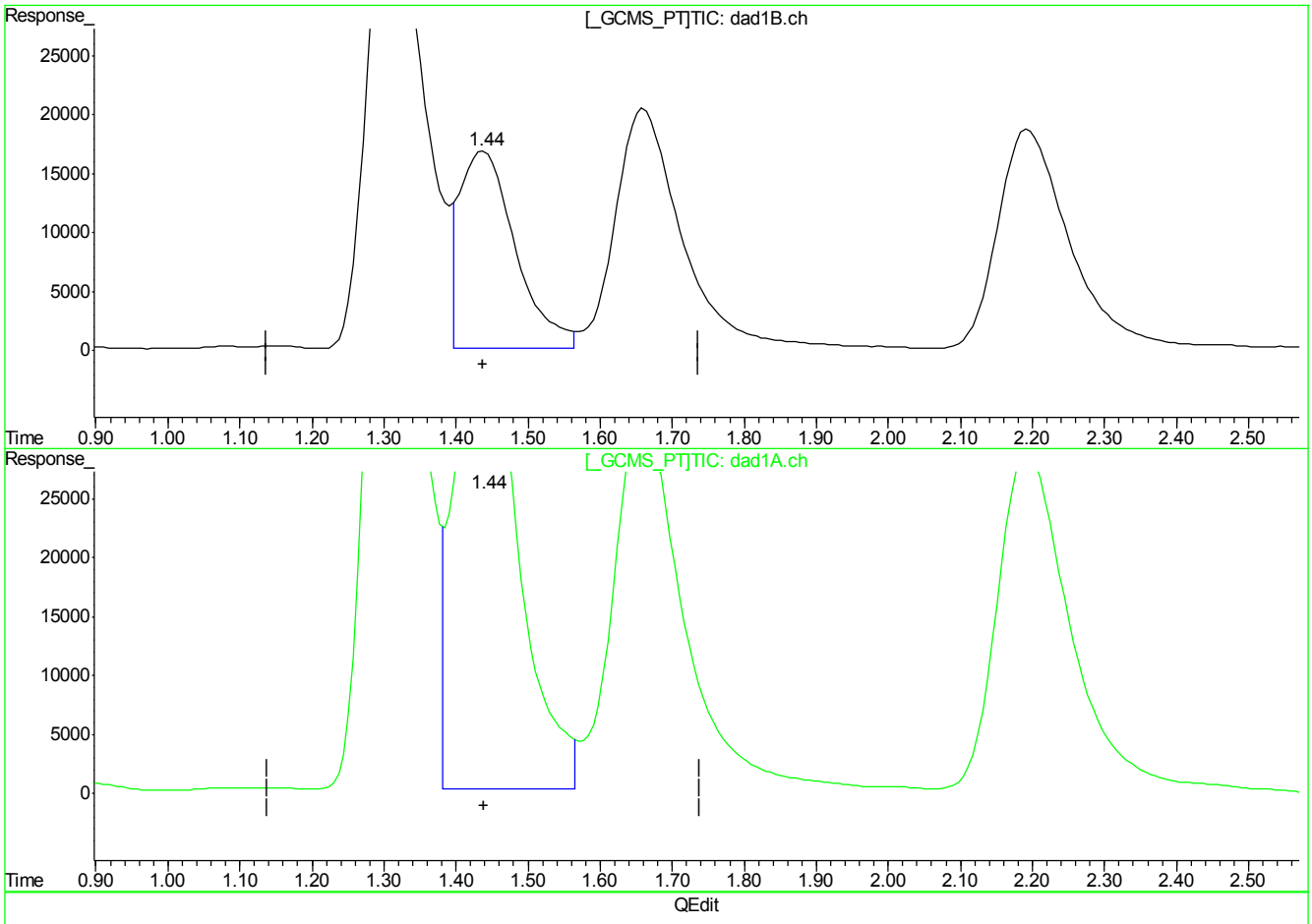
7.7.8.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 476.953ppb m

response 891952

(2) HMX #2

1.44min 502.668ppb m

response 2552992

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:10 2018

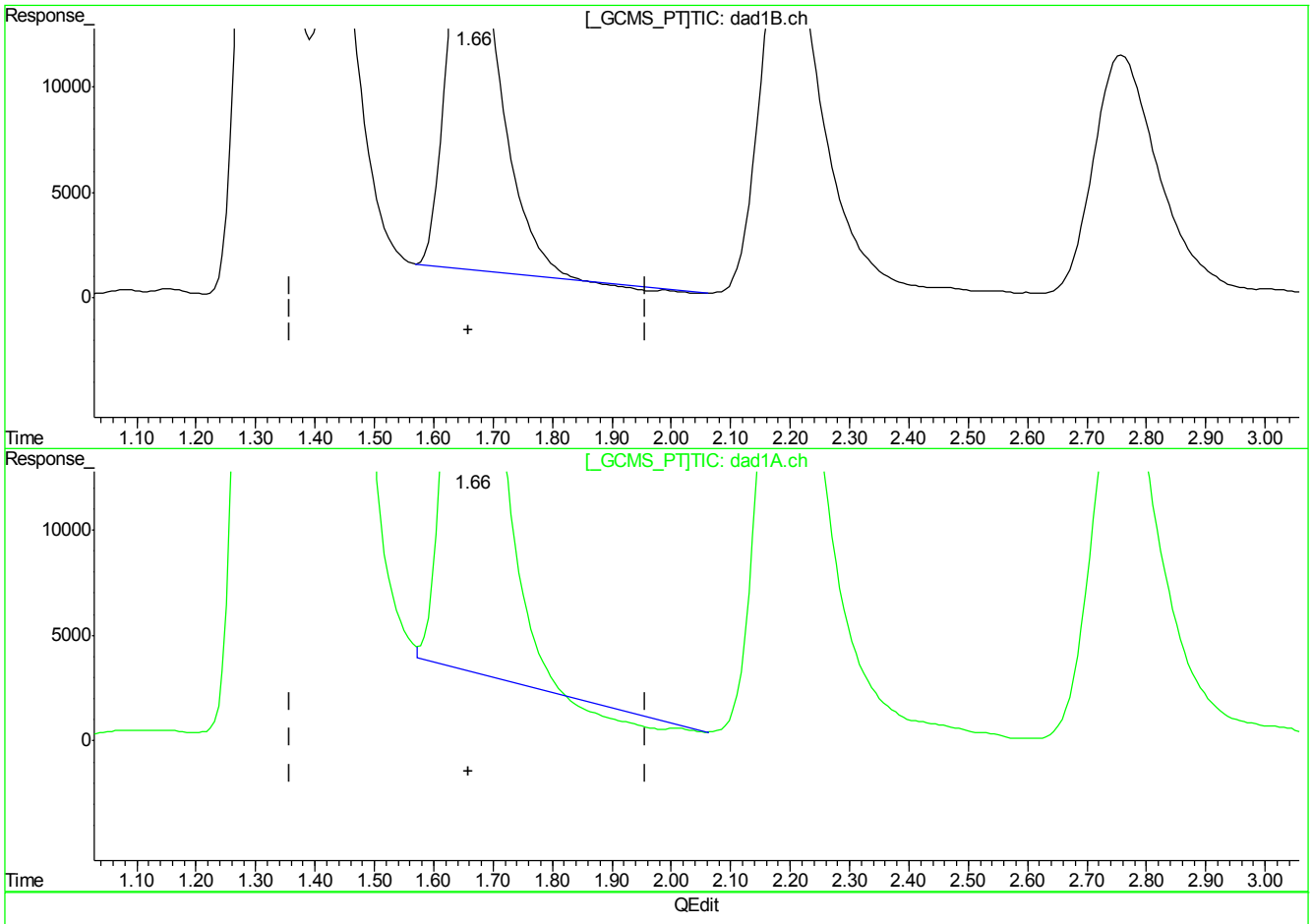
7.7.8.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 353.884ppb

response 1095983

(3) DNX #2

1.66min 351.062ppb

response 1643602

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:15 2018

7.7.8.9

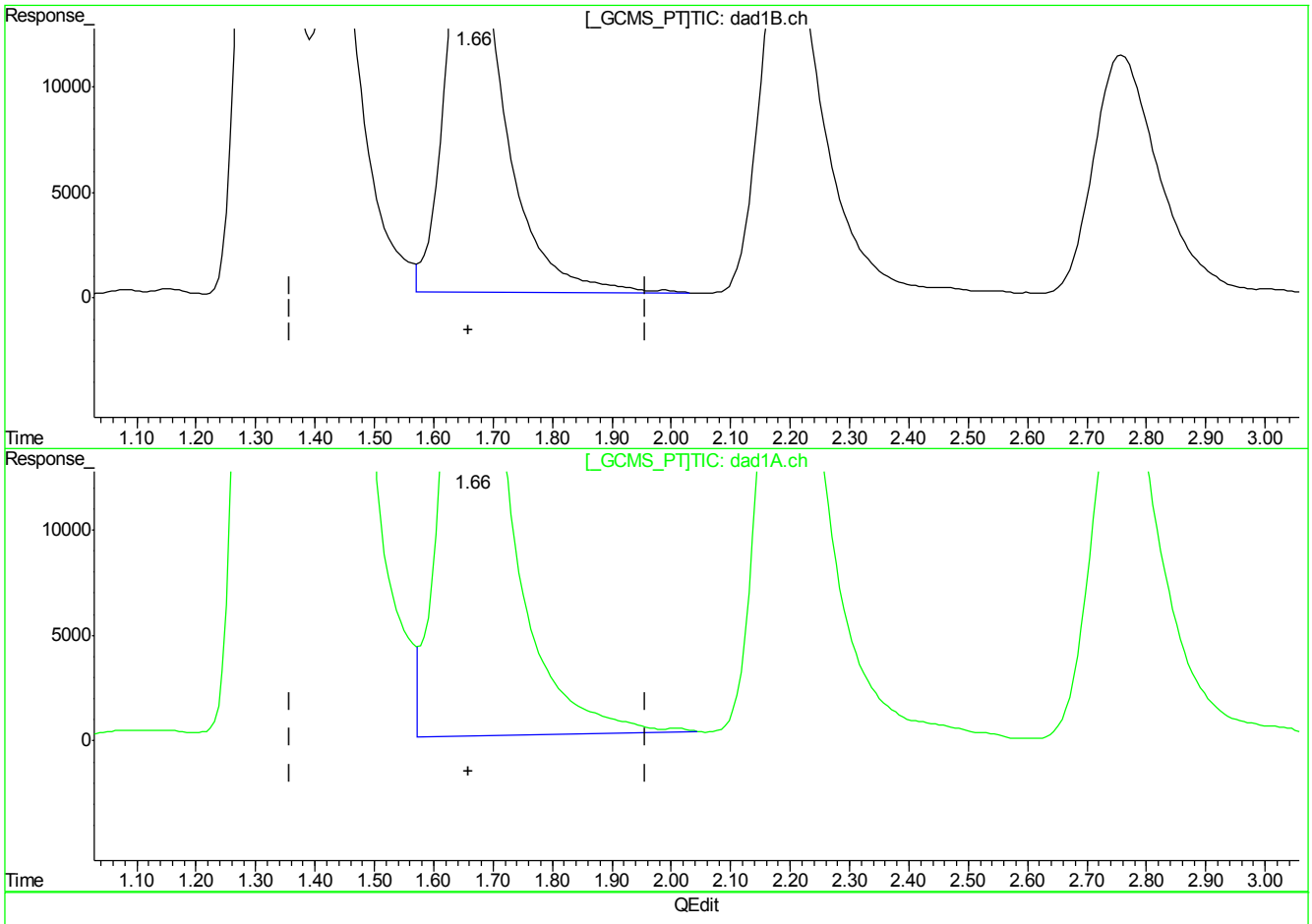
7

BB059471.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 416.669ppb m

response 1290432

(3) DNX #2

1.66min 466.541ppb m

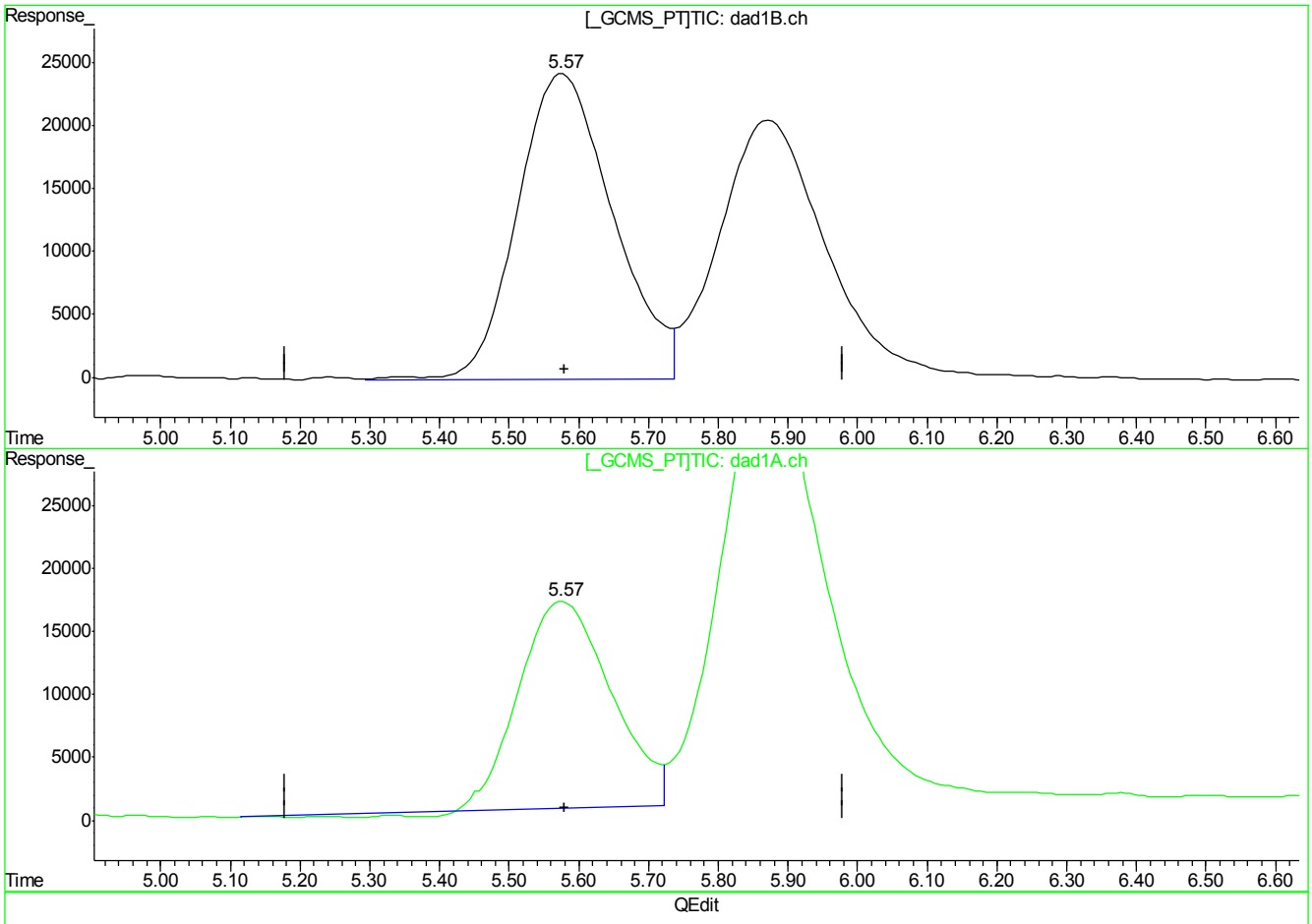
response 2187865

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.58min 414.651ppb

response 2298814

(7) 1,3-Dinitrobenzene #2

5.58min 399.114ppb

response 1486450

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:33 2018

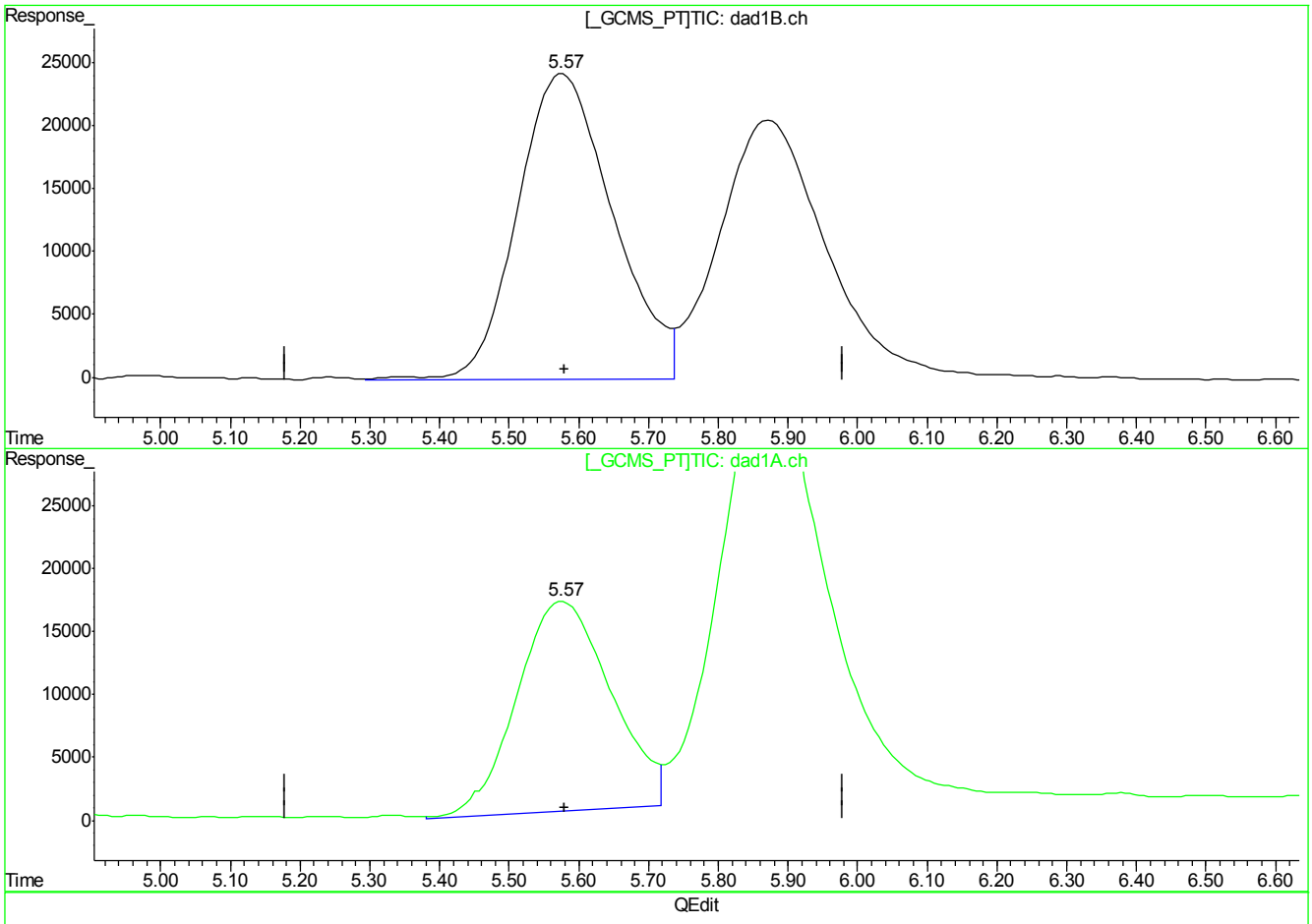
7.7.8.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.58min 414.651ppb

response 2298814

(7) 1,3-Dinitrobenzene #2

5.57min 423.626ppb m

response 1577744

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:37 2018

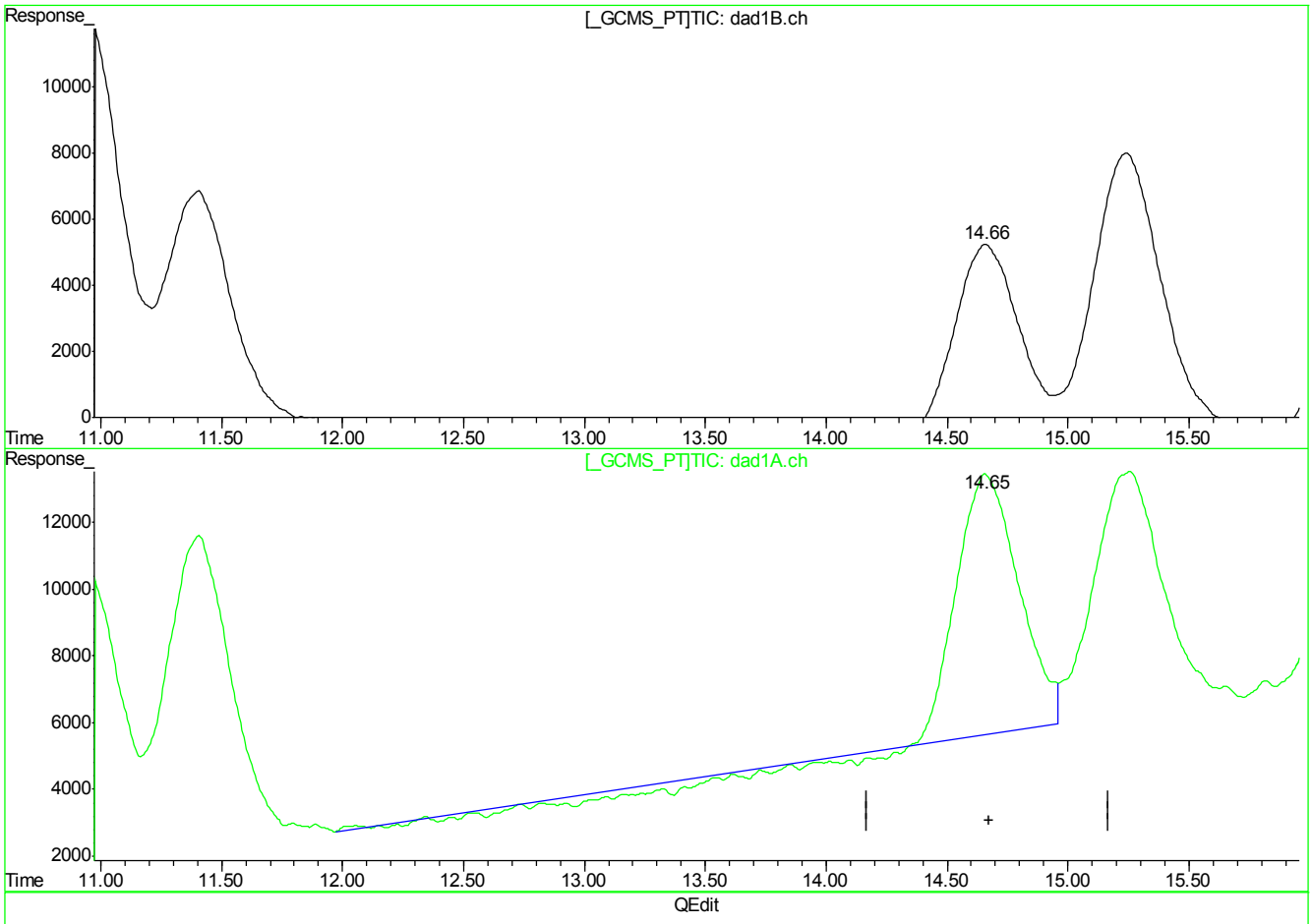
7.7.8.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.66min 416.479ppb

response 1040298

(18) o-Nitrotoluene #2

14.66min 369.601ppb

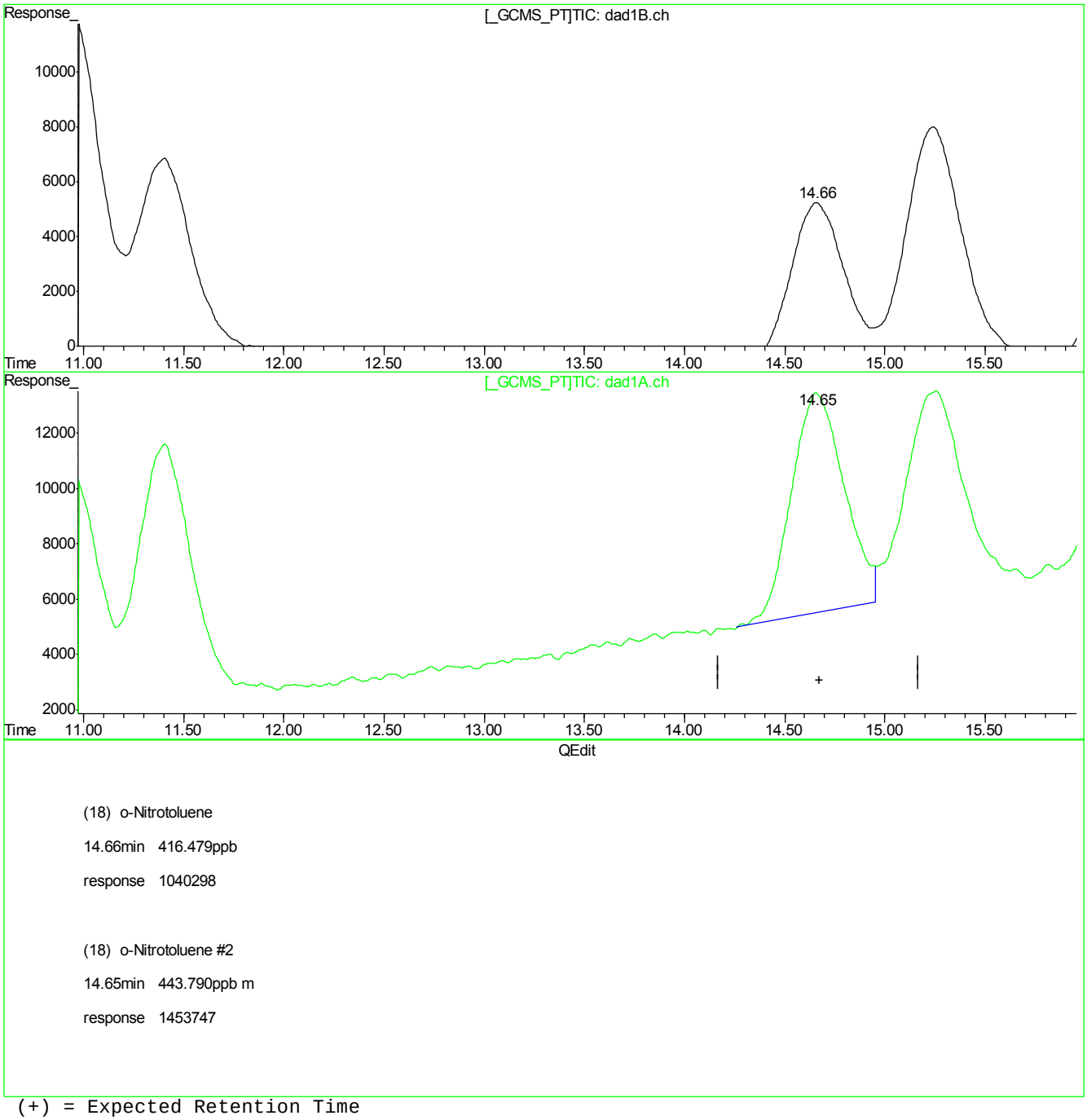
response 1210722

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:49 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.66min 416.479ppb

response 1040298

(18) o-Nitrotoluene #2

14.65min 443.790ppb m

response 1453747

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:53 2018

7.7.8.11

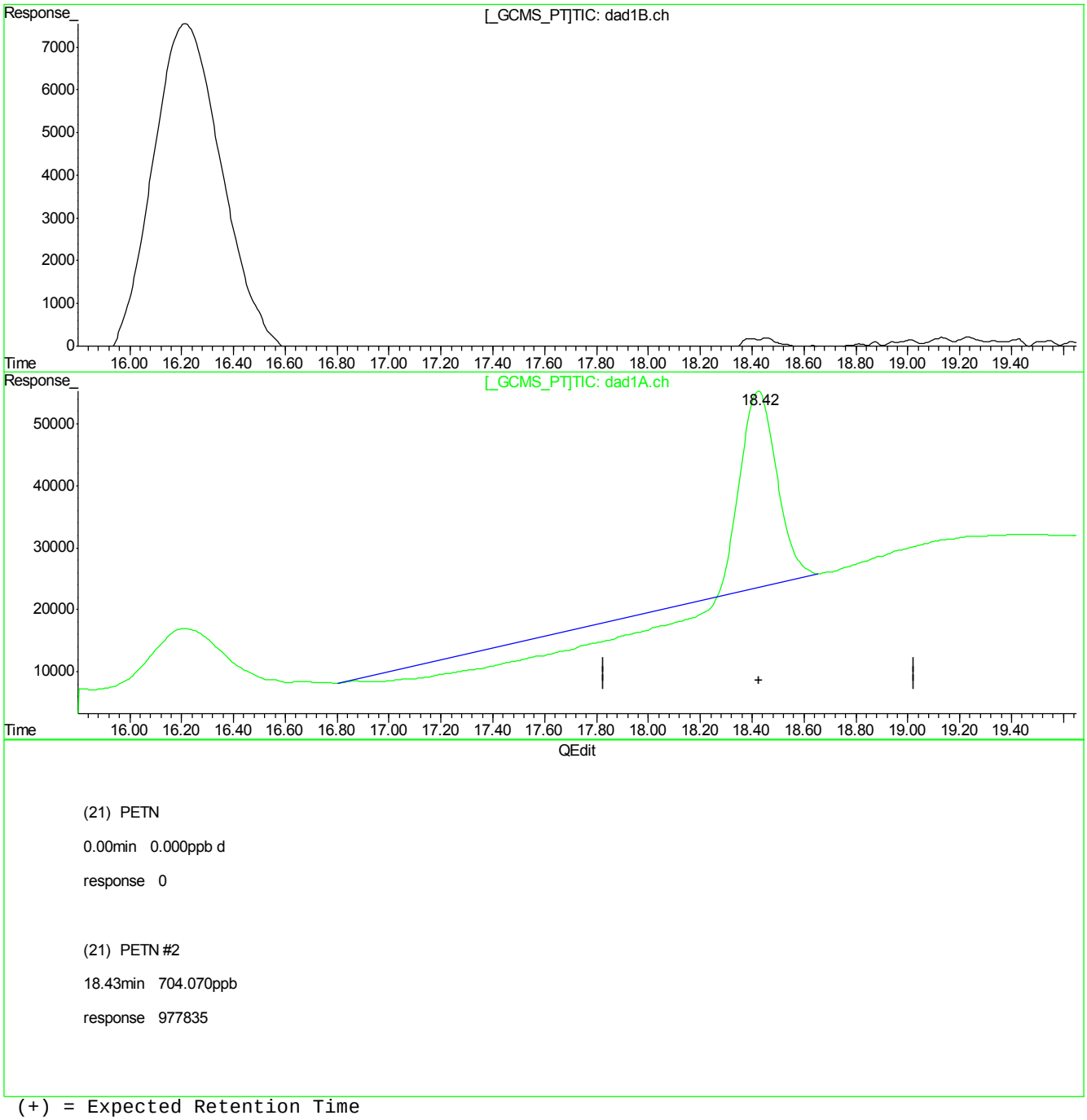
7

BB059471.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 704.070ppb

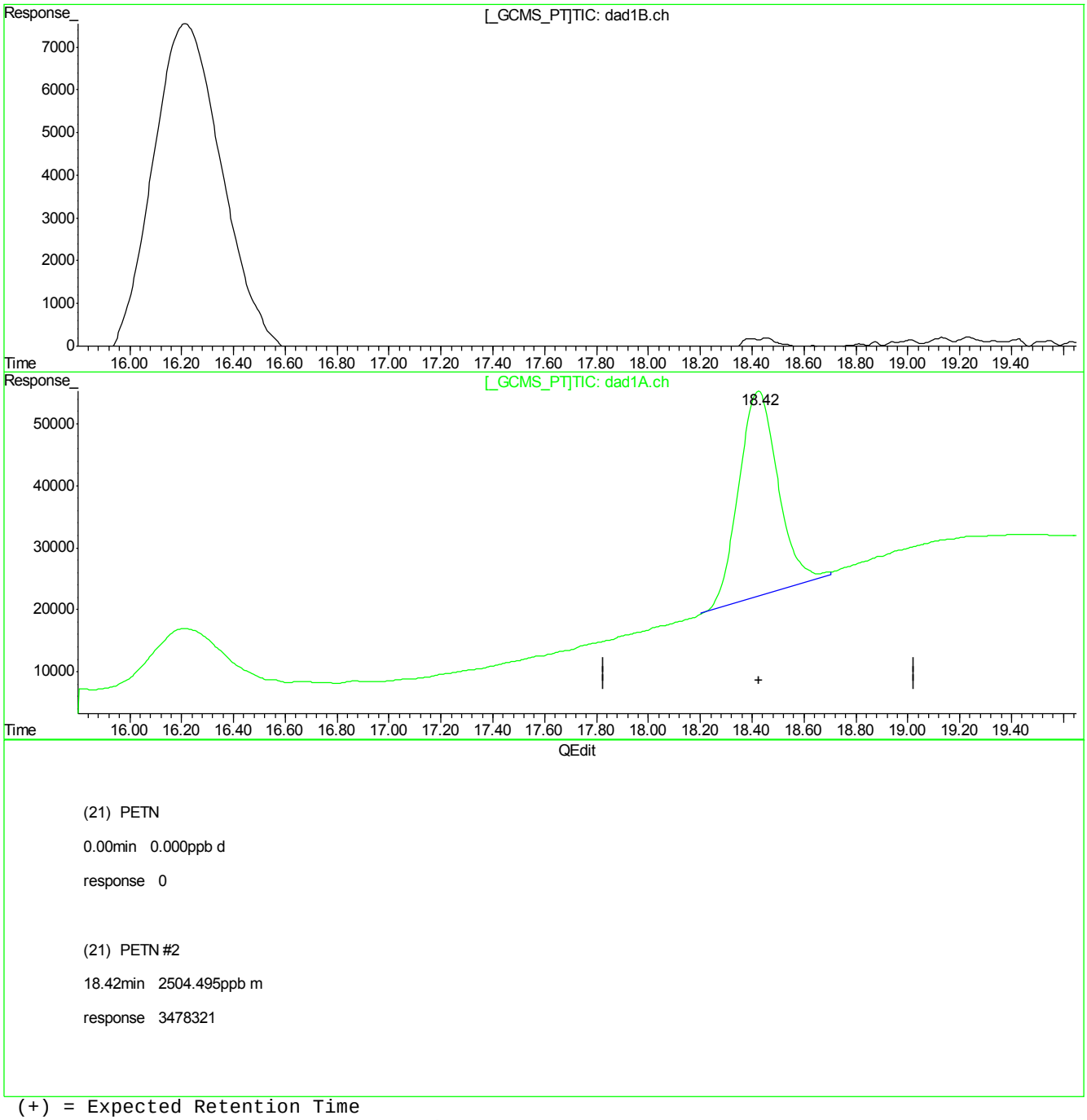
response 977835

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:58 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/24/18 15:24

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 08:32:49 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.34	10.34	2581454	4486500	964.776	951.588
	Spiked Amount 500.000	Range 70 - 136		Recovery =		192.96%#	190.32%#
	Target Compounds						
1)	TNX	1.31	1.31	4826247	7134071	1000.350m	961.669m
2)	HMX	1.44	1.44	1987920	5048257	1063.000m	996.793m
3)	DNX	1.66	1.66	2986336	4721277	964.262m	999.150m
4)	MNX	2.20	2.20	2915126	4540723	941.419	976.738
5)	RDX	2.77	2.77	1933764	3112638	904.310	936.414
6)	1,3,5-Trinitrobe	4.43	4.43	4169878	8147156	958.307	975.932
7)	1,3-Dinitrobenze	5.59	5.59	5375322	3629077	969.579	974.411
8)	3,5-Dinitroanili	5.89	5.89	4588602	7621113	938.292	1019.030
9)	Nitrobenzene	7.09	7.09	3051072	2886896	837.331	870.636
10)	Nitroglycerin	0.00	8.41	0	6400028	N.D. d	4994.446
11)	Tetryl	8.72	8.72	2693936	4646906	917.596	894.707
12)	2,4,6-Trinitroto	9.15	9.15	3772558	4603721	893.938	1015.660
13)	2-Amino-4,6-Dini	9.45	9.45	3608479	5498982	953.241	1025.195
14)	4-Amino-2,6-Dini	9.88	9.88	2666978	5375039	1009.126	1037.280
16)	2,4-Dinitrotolue	11.00	11.00	4994632	3146524	949.368	1065.451
17)	2,6-Dinitrotolue	11.44	11.44	3075816	3705078	889.924	1085.058
18)	o-Nitrotoluene	14.68	14.68	2054778	2754849	822.622	840.983m
19)	p-Nitrotoluene	15.26	15.27	3339239	2787331	846.012	883.935
20)	m-Nitrotoluene	16.24	16.24	2958326	3463078	829.313	860.633
21)	PETN	0.00	18.46	0	7095007	N.D. d	5108.617m

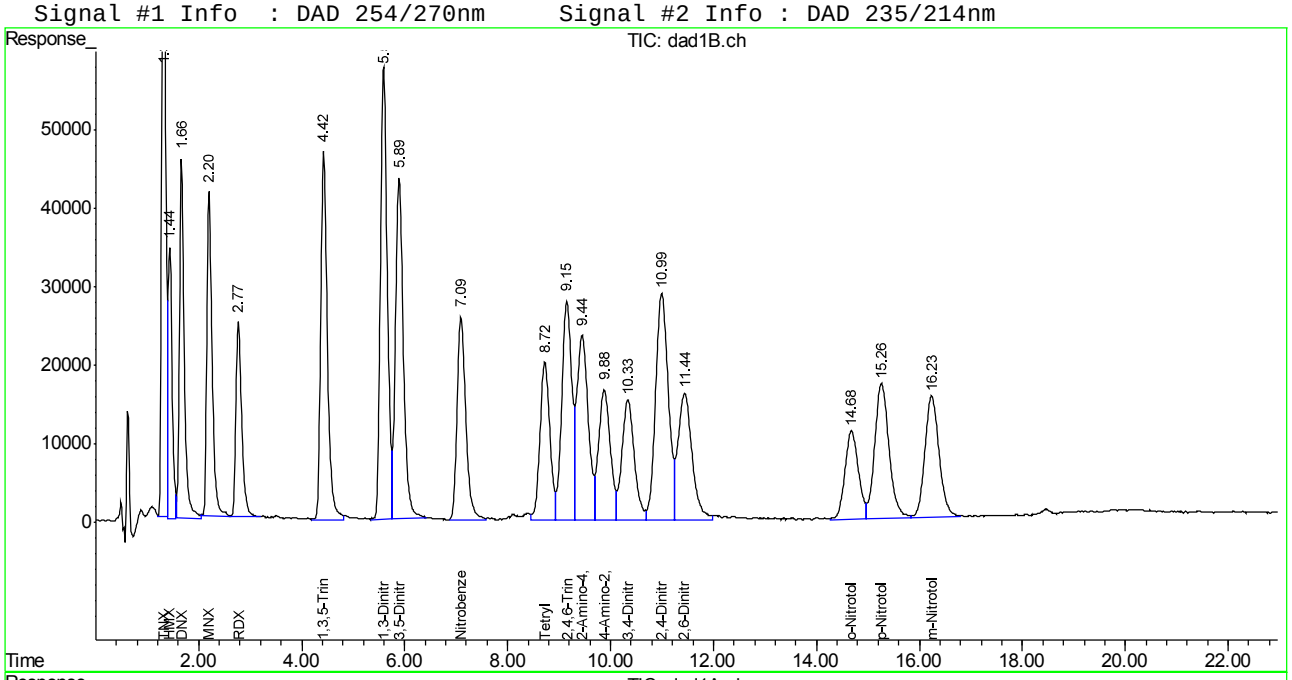
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:10:10 2018 Page 1

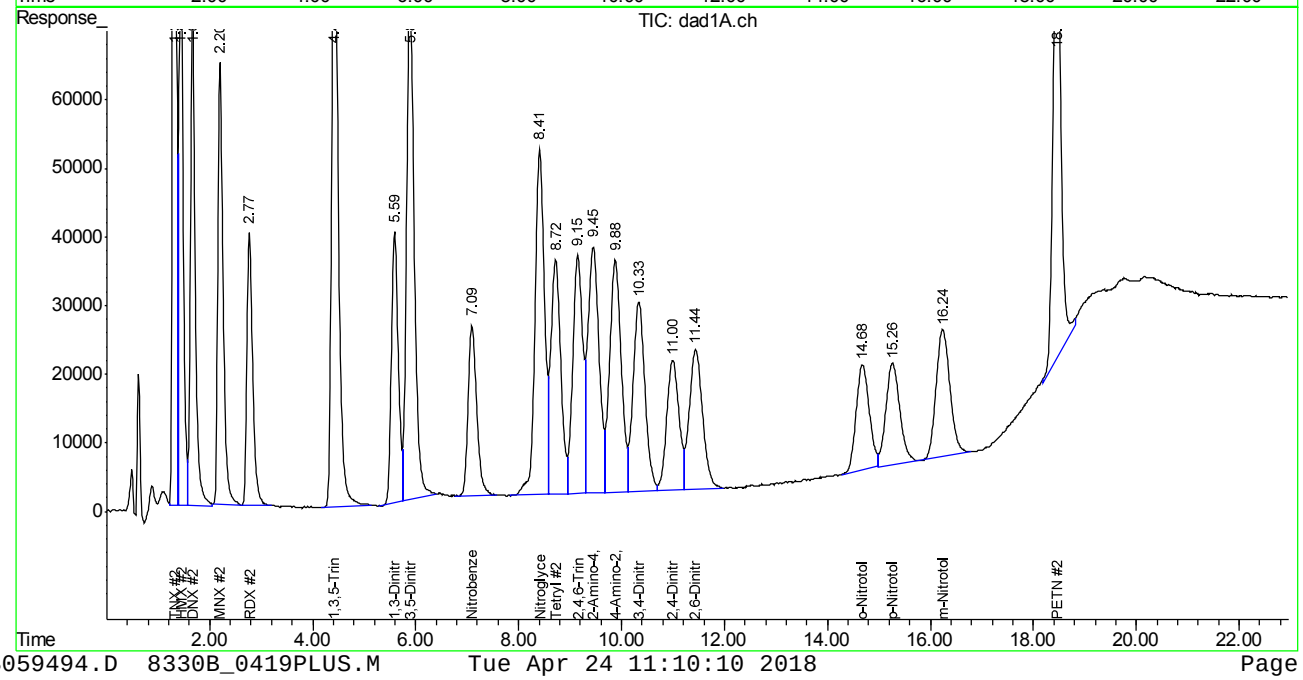
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 11:04 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

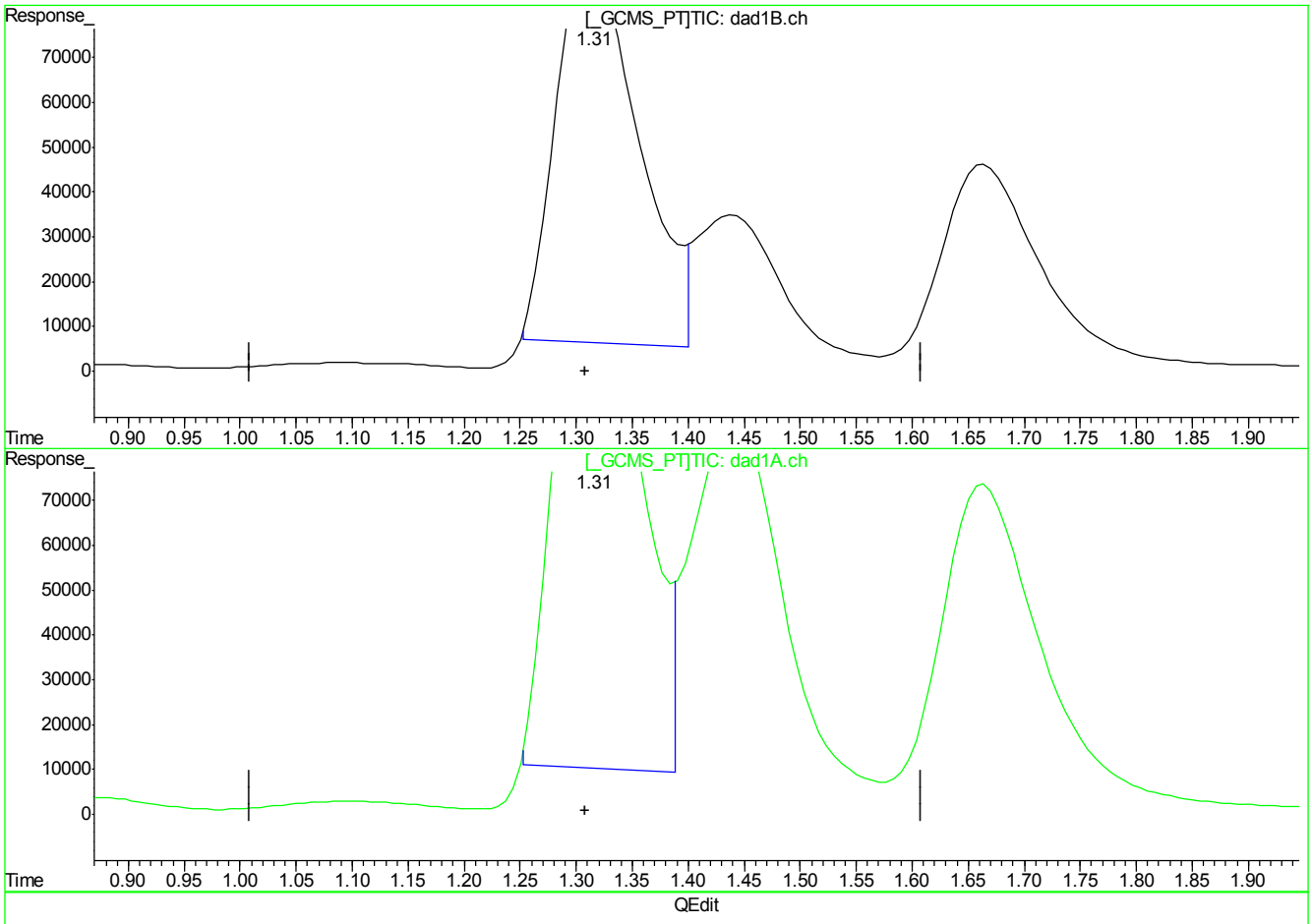
Sample Number:	GBB1724-CC1722	**Method:**	SW846 8330A
Lab FileID:	BB059494.D	**Analyst approved:**	04/24/18 11:18 Evita Martinez
Injection Time:	04/23/18 13:53	**Supervisor approved:**	04/24/18 15:24 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.68	Poorly defined baseline
PETN	78-11-5	2	18.46	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 908.993ppb

response 4385487

(1) TNX #2

1.31min 884.404ppb

response 6560881

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:03:15 2018

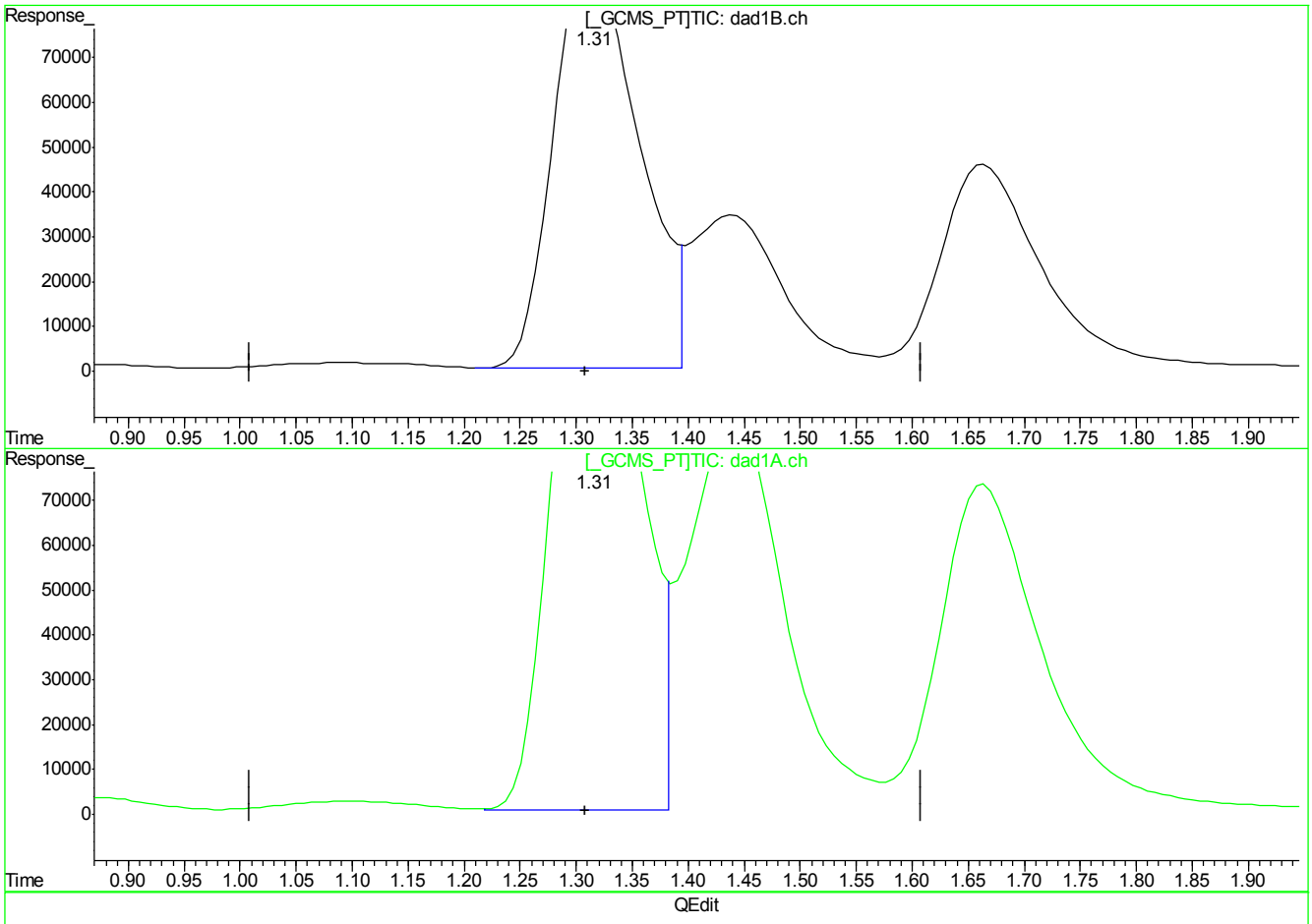
7.7.9.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 1000.350ppb m

response 4826247

(1) TNX #2

1.31min 961.669ppb m

response 7134071

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:03:28 2018

7.7.9.3

7

SGS

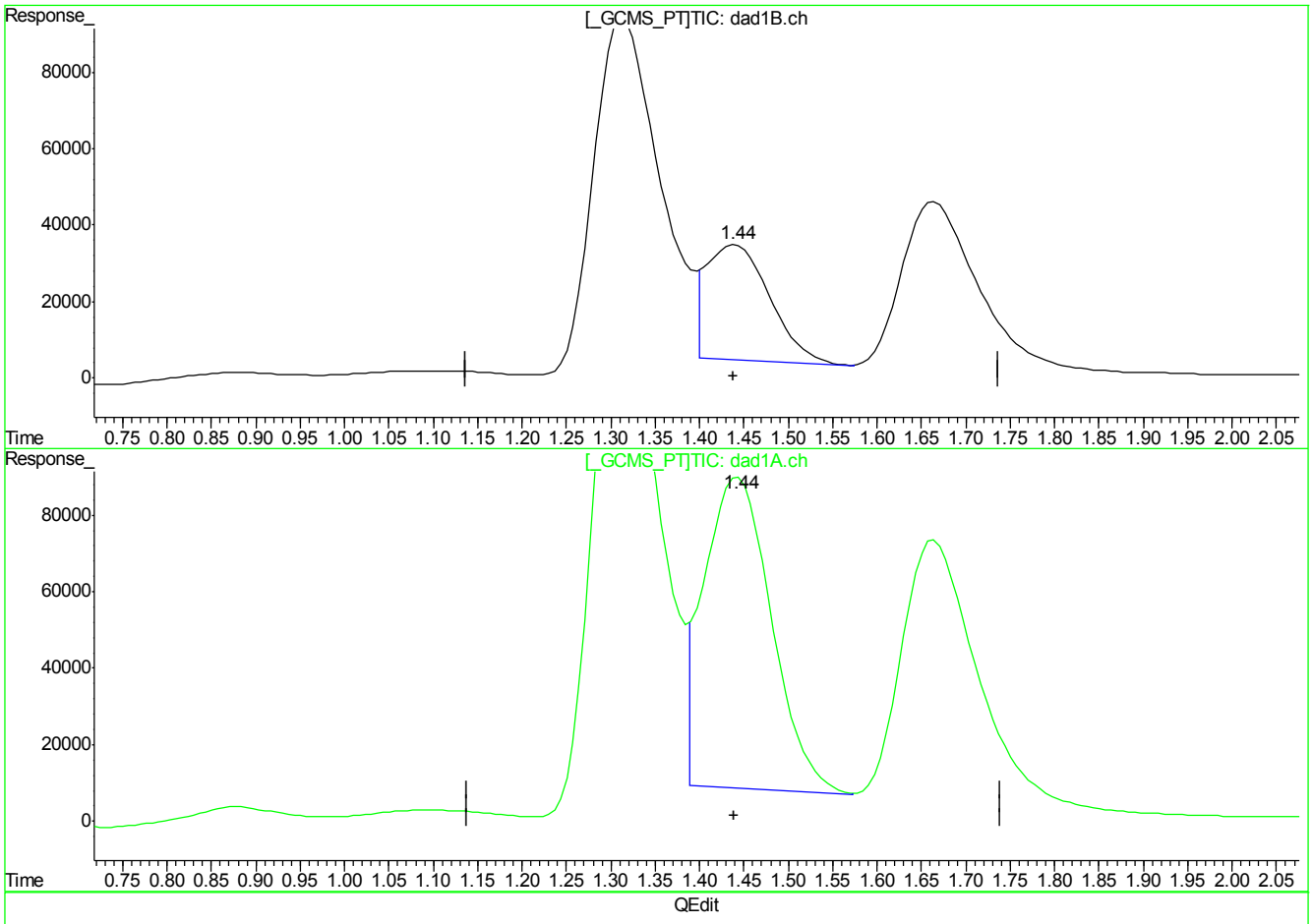
FA53518

BB059494.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 807.056ppb

response 1509278

(2) HMX #2

1.44min 857.450ppb

response 4346034

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:03:31 2018

7.7.9.4

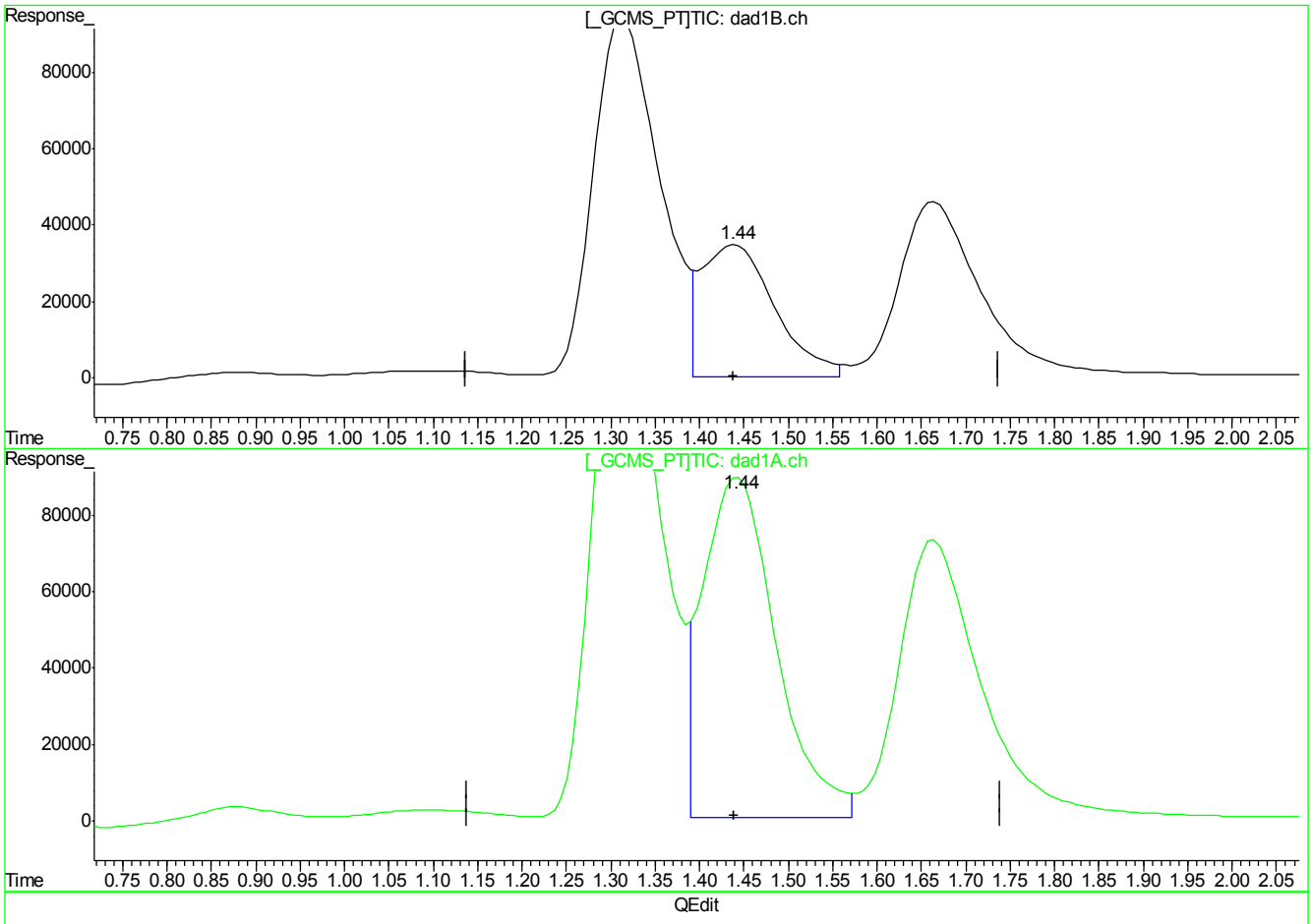
7

BB059494.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 1063.000ppb m

response 1987920

(2) HMX #2

1.44min 996.793ppb m

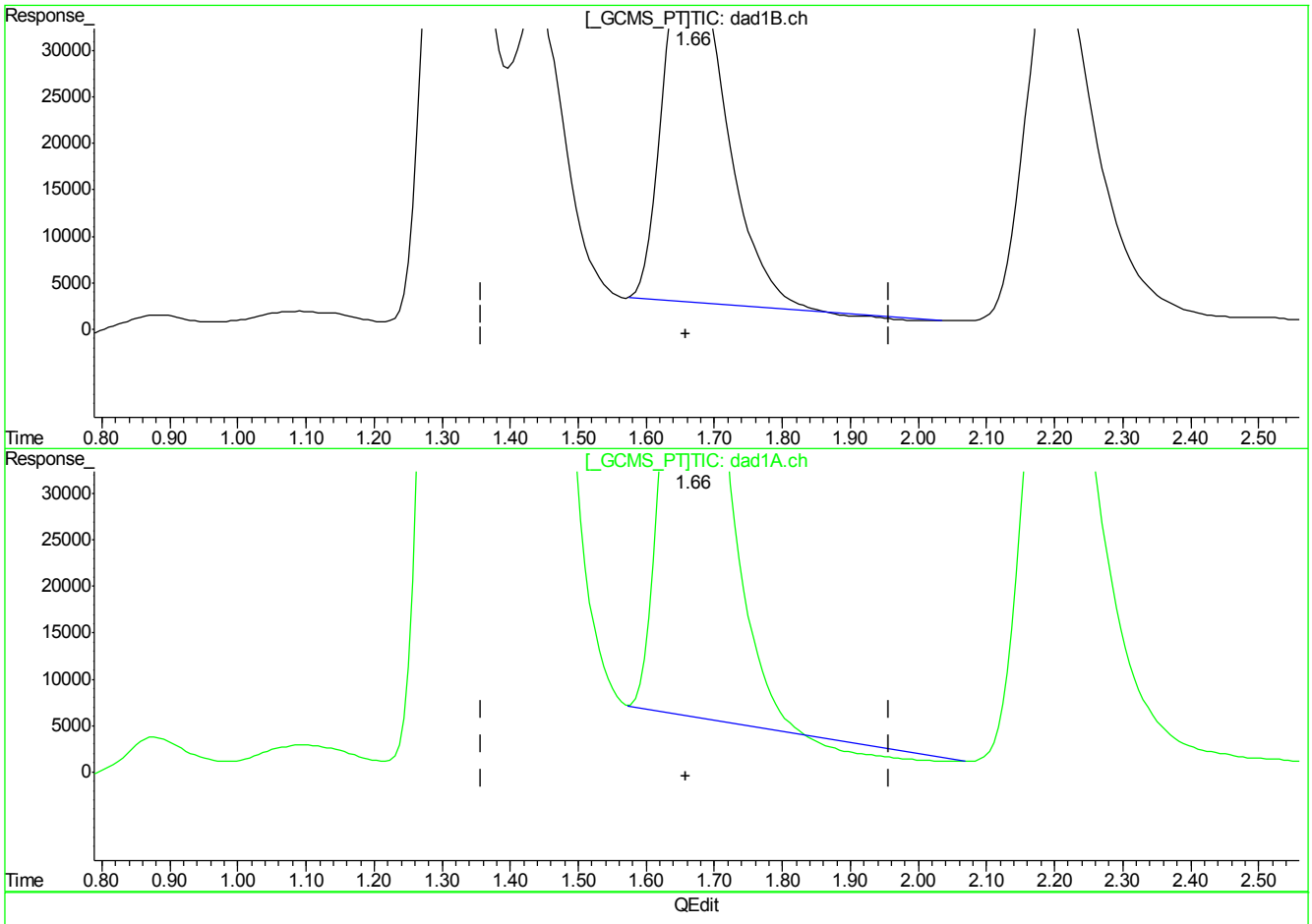
response 5048257

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:03:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 816.131ppb

response 2527570

(3) DNX #2

1.67min 803.528ppb

response 3786354

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:04:01 2018

7.7.9.6

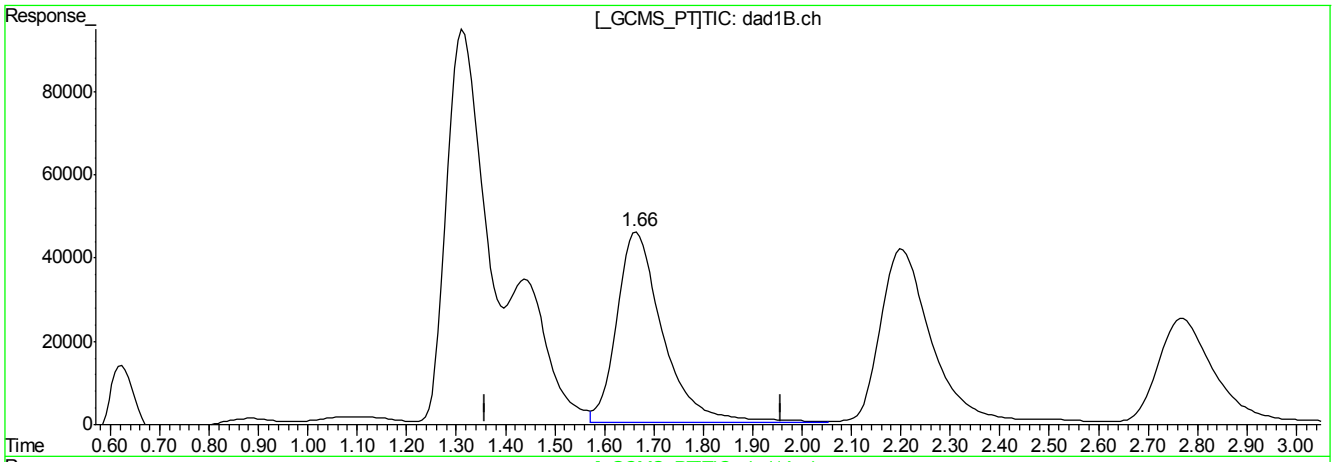
7

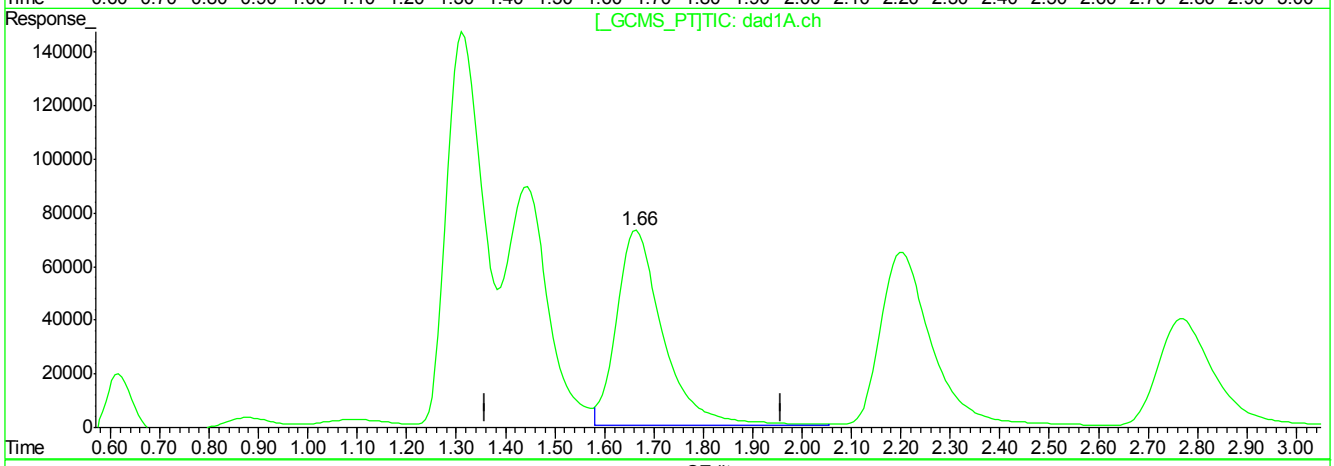
BB059494.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.66min 964.262ppb m

response 2986336

(3) DNX #2

1.66min 999.150ppb m

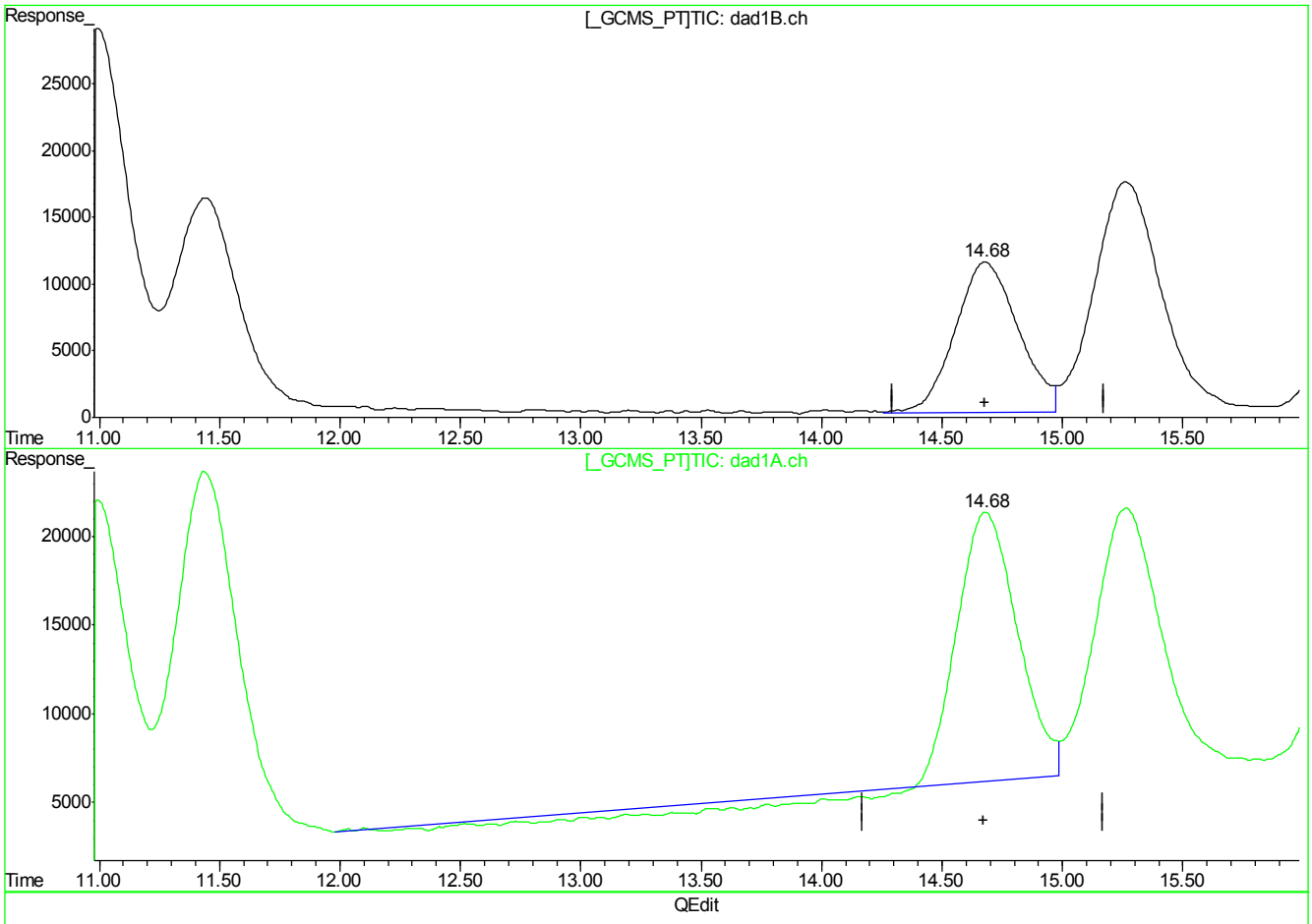
response 4721277

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:04:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 822.622ppb

response 2054778

(18) o-Nitrotoluene #2

14.68min 668.344ppb

response 2189327

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:04:39 2018

7.7.9.8

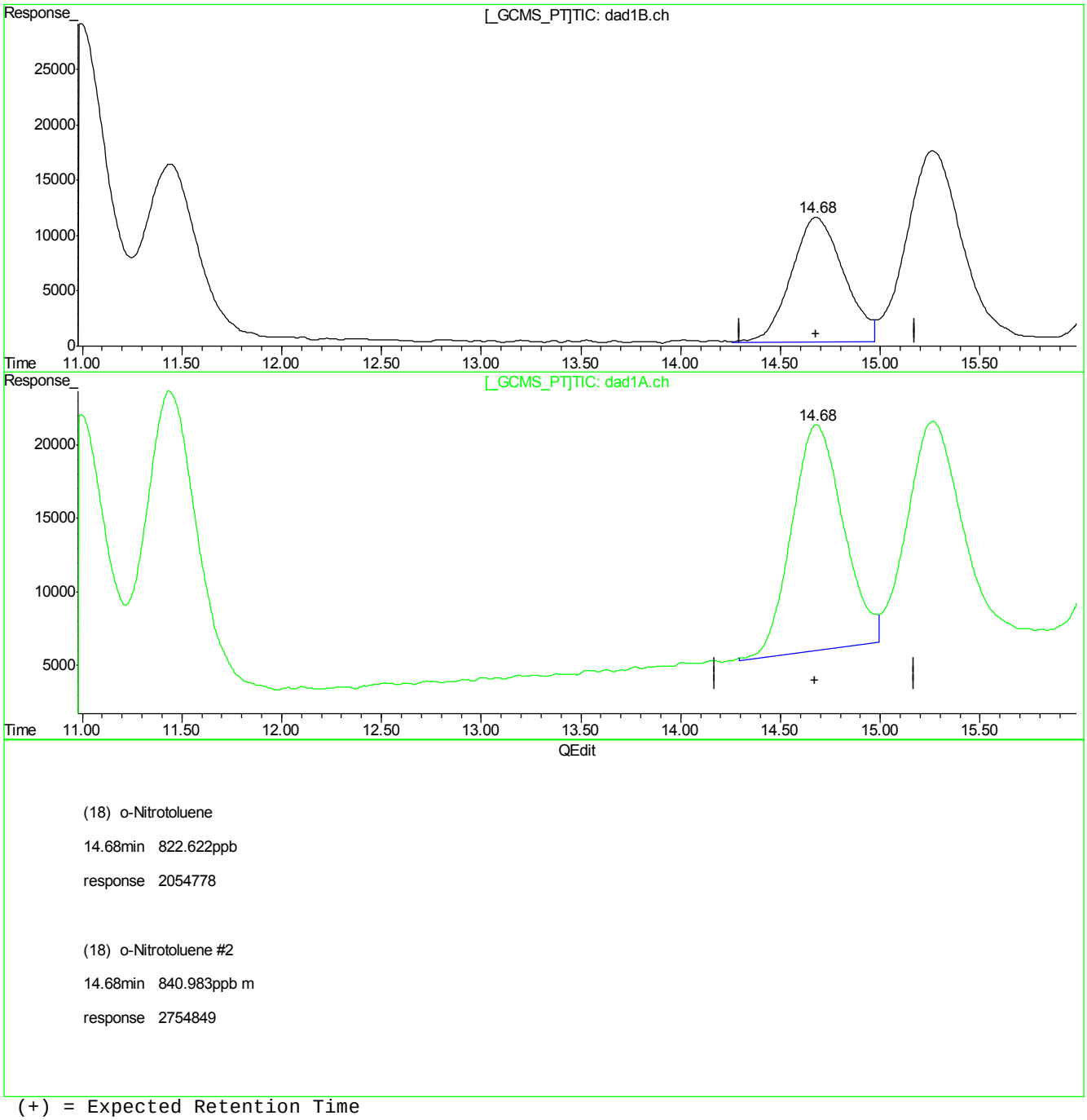
7

BB059494.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 822.622ppb

response 2054778

(18) o-Nitrotoluene #2

14.68min 840.983ppb m

response 2754849

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:04:44 2018

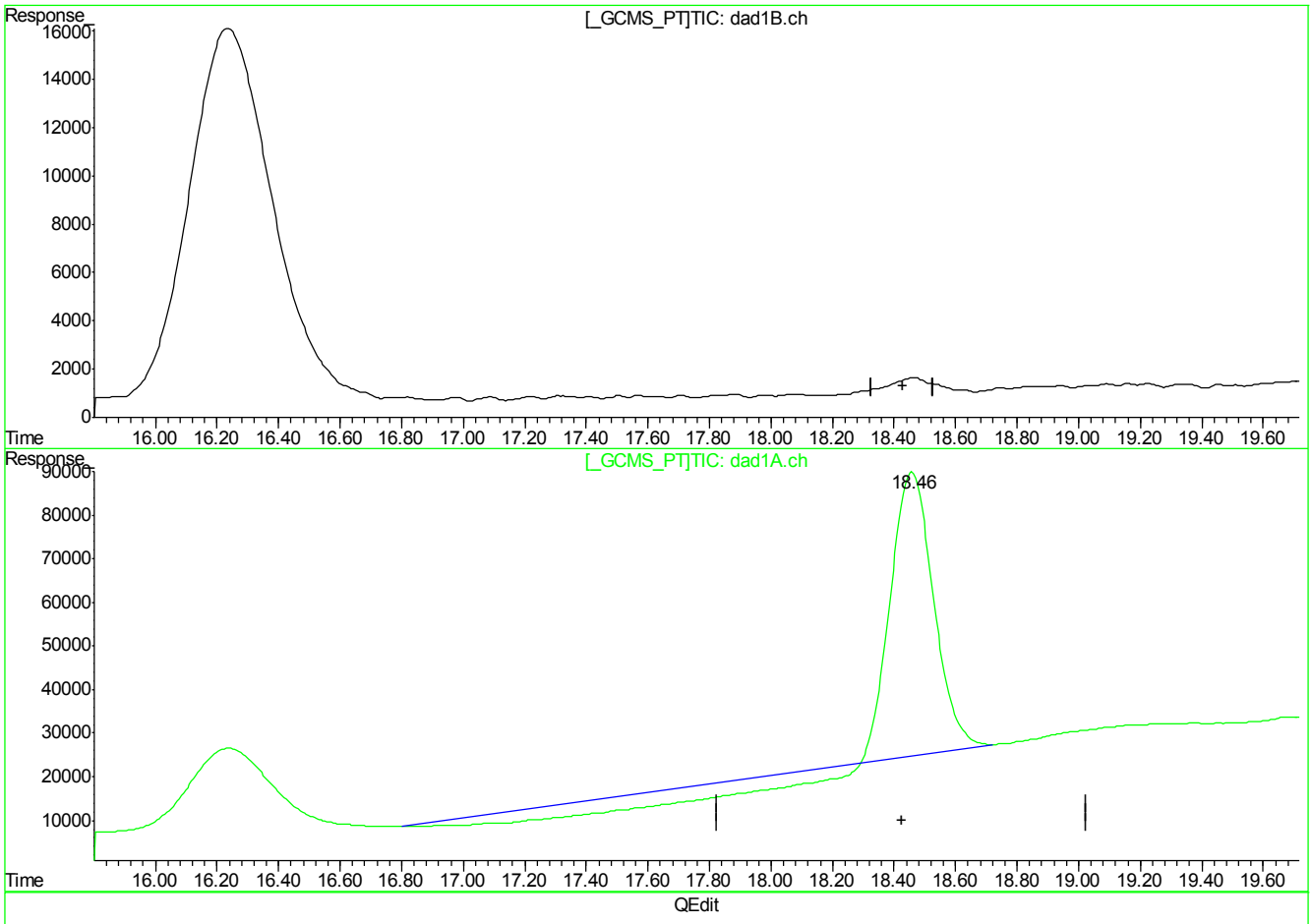
7.7.9.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.46min 2842.236ppb

response 3947385

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:04:50 2018

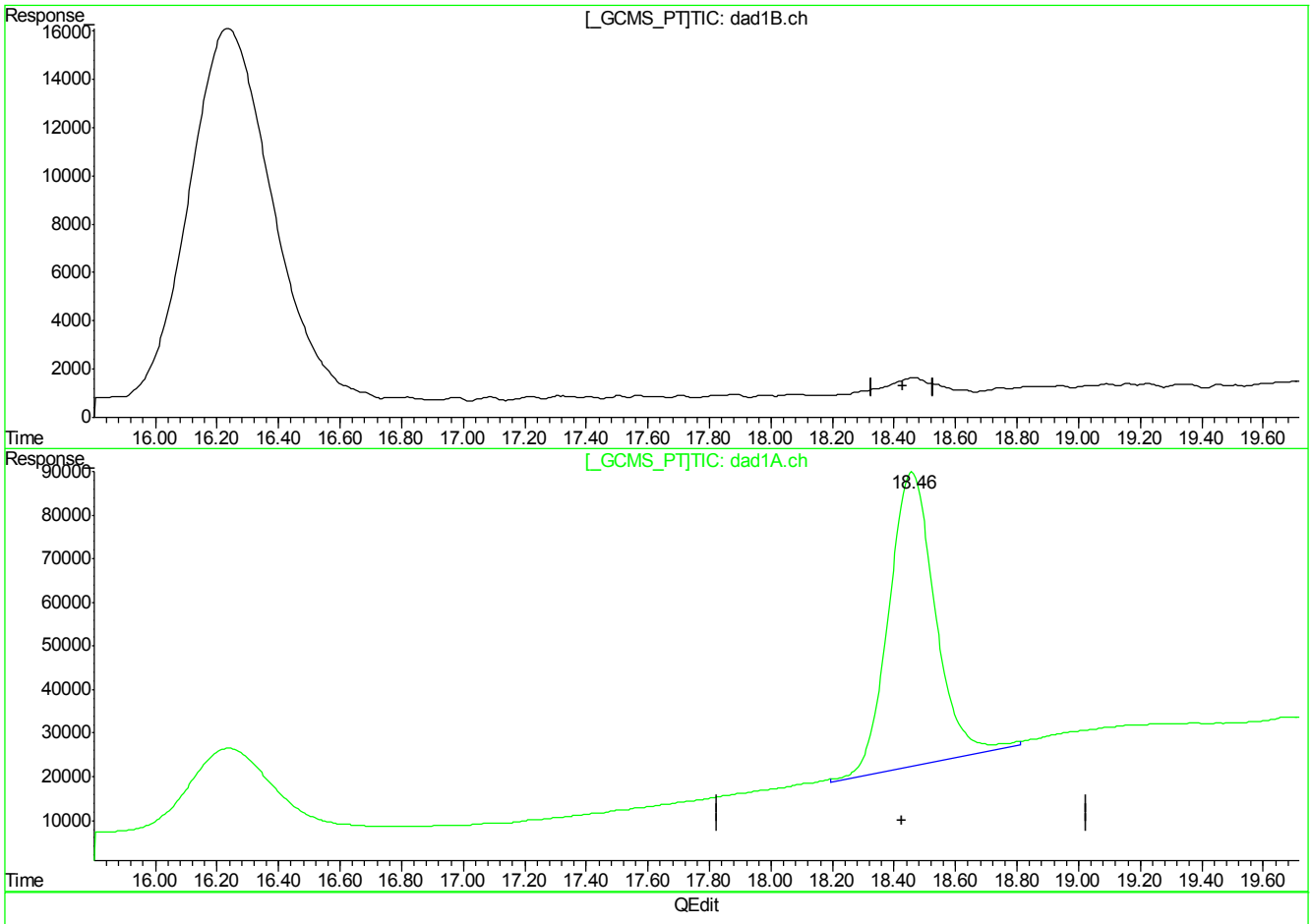
7.7.9.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059494.D\dad1A.ch
Acq On : 23-Apr-2018, 13:53:35 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69647,gbb1724,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.46min 5108.617ppb m

response 7095007

(+) = Expected Retention Time
BB059494.D 8330B_0419PLUS.M Tue Apr 24 11:04:53 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/24/18 15:24

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1724,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 08:32:54 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.39	10.39	2475769	4473022	925.278	948.729
	Spiked Amount 500.000	Range 70 - 136		Recovery =		185.06%#	189.75%#
	Target Compounds						
1)	TNX	1.31	1.31	4839015	7183947	1002.997m	968.393m
2)	HMX	1.44	1.44	1843416	5164345	985.729m	1019.850m
3)	DNX	1.66	1.66	2935419	4707676	947.822m	996.312m
4)	MNX	2.21	2.21	2886305	4521397	932.112	972.581
5)	RDX	2.78	2.78	1949253	3126544	911.553	940.597
6)	1,3,5-Trinitrobe	4.44	4.44	4206154	8080007	966.644	967.888
7)	1,3-Dinitrobenze	5.61	5.61	5374086	3589424	969.356	963.764
8)	3,5-Dinitroanili	5.91	5.91	4538253	7586111	927.997	1014.349
9)	Nitrobenzene	7.12	7.12	3023294	2876567	829.708	867.521
10)	Nitroglycerin	0.00	8.45	0	6452487	N.D. d	5035.384
11)	Tetryl	8.77	8.76	2657472	4599330	905.116	885.547
12)	2,4,6-Trinitroto	9.19	9.19	3735793	4597469	885.226	1014.281
13)	2-Amino-4,6-Dini	9.50	9.50	3548780	5467737	937.470	1019.370
14)	4-Amino-2,6-Dini	9.93	9.93	2642155	5369724	999.872	1036.254
16)	2,4-Dinitrotolue	11.05	11.05	4901897	3159881	931.741	1069.974
17)	2,6-Dinitrotolue	11.50	11.50	2947138	3726799	852.694	1091.419
18)	o-Nitrotoluene	14.74	14.74	2020230	2758073	808.791	841.967m
19)	p-Nitrotoluene	15.33	15.33	3313800	2778990	839.567	881.295
20)	m-Nitrotoluene	16.30	16.30	2961851	3522391	830.301	875.373
21)	PETN	0.00	18.49	0	6776610	N.D. d	4879.362m

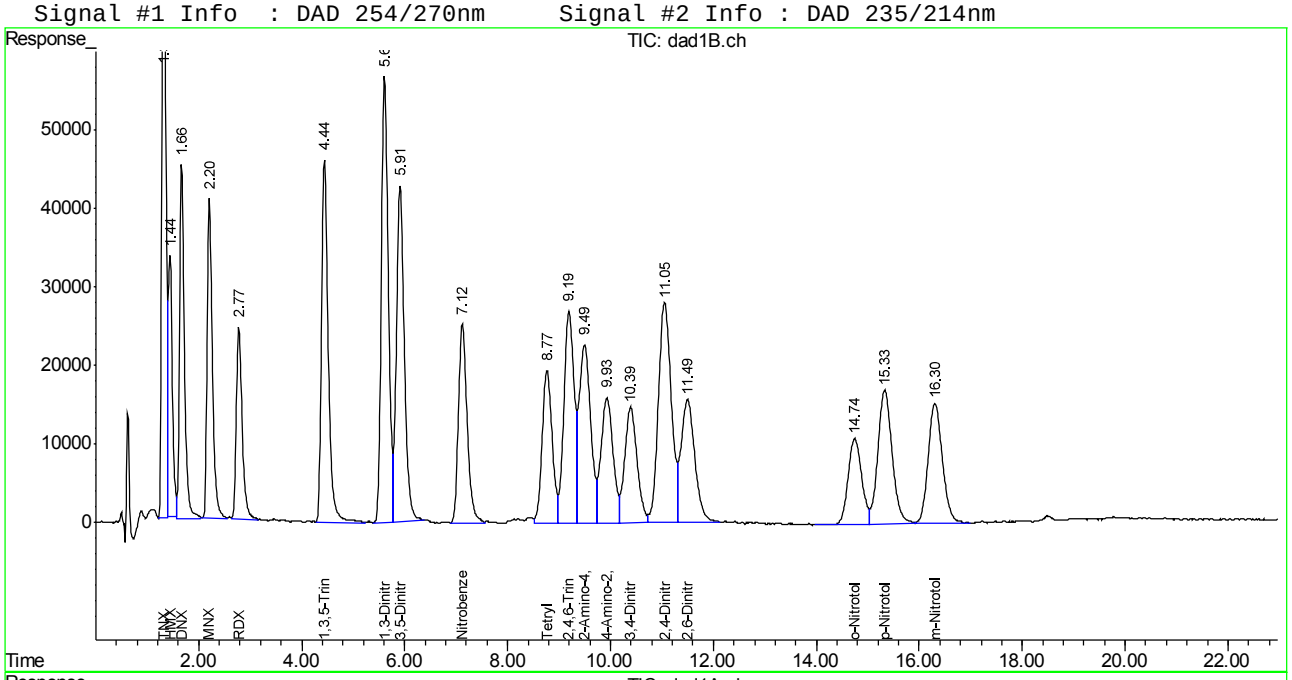
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:24:17 2018 Page 1

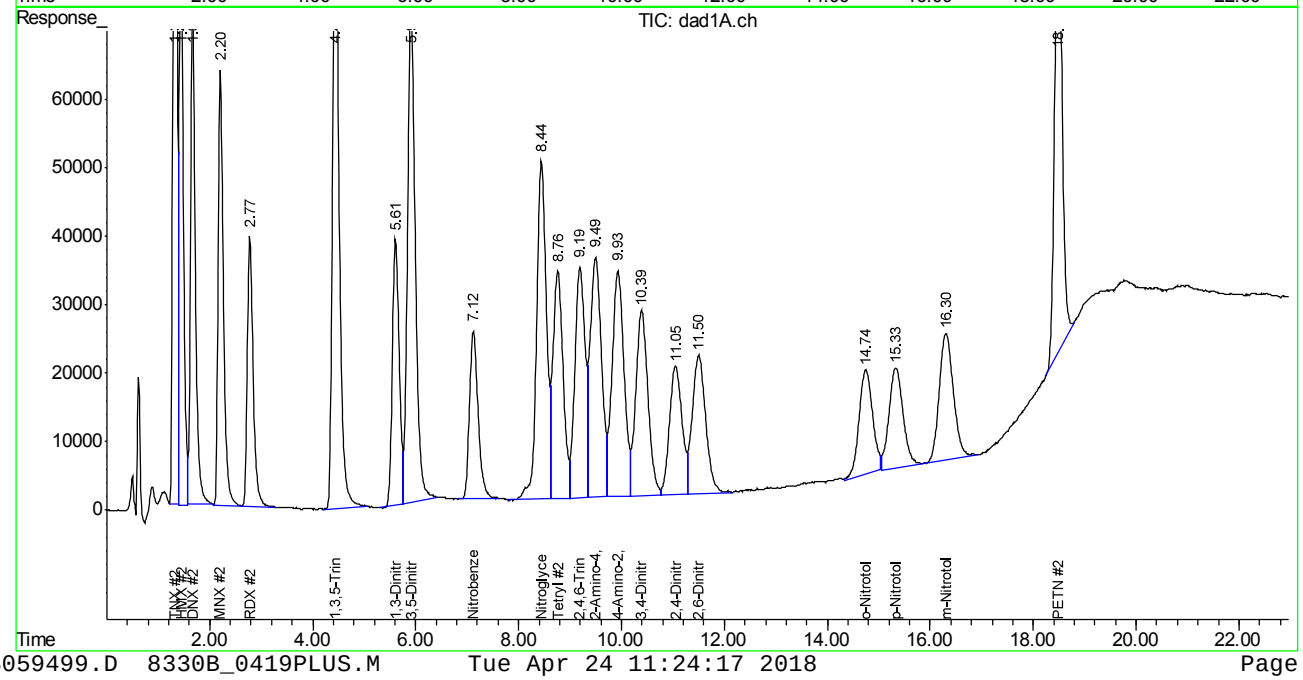
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1724,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 11:23 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

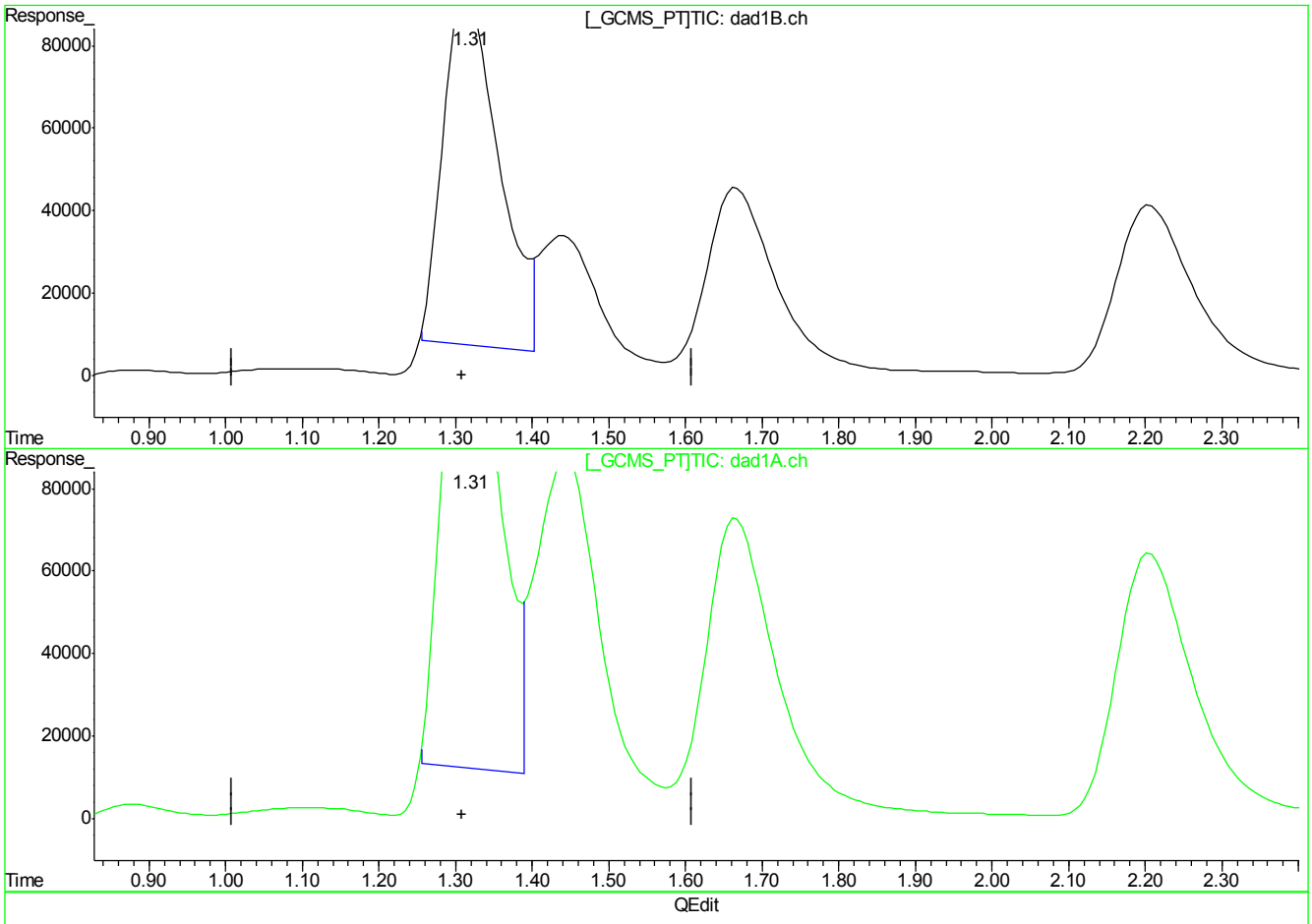
Sample Number:	GBB1724-ECC1722	**Method:**	SW846 8330B
Lab FileID:	BB059499.D	**Analyst approved:**	04/24/18 11:24 Evita Martinez
Injection Time:	04/23/18 16:23	**Supervisor approved:**	04/24/18 15:24 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.74	Poorly defined baseline
PETN	78-11-5	2	18.49	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 885.700ppb

response 4273111

(1) TNX #2

1.32min 858.084ppb

response 6365630

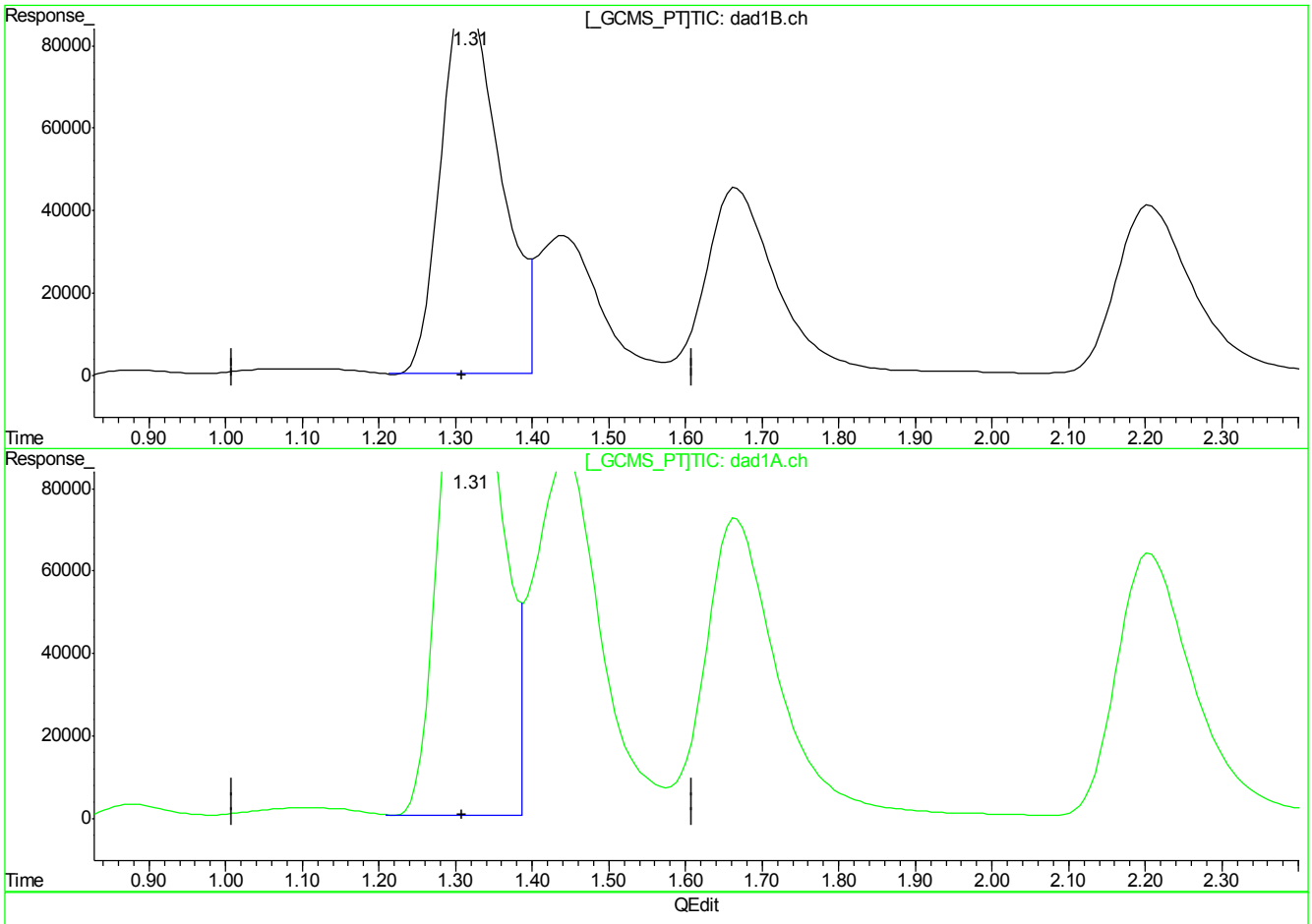
(+) = Expected Retention Time
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:08:31 2018

BB059499.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



QEdit

(1) TNX

1.31min 1002.997ppb m

response 4839015

(1) TNX #2

1.31min 968.393ppb m

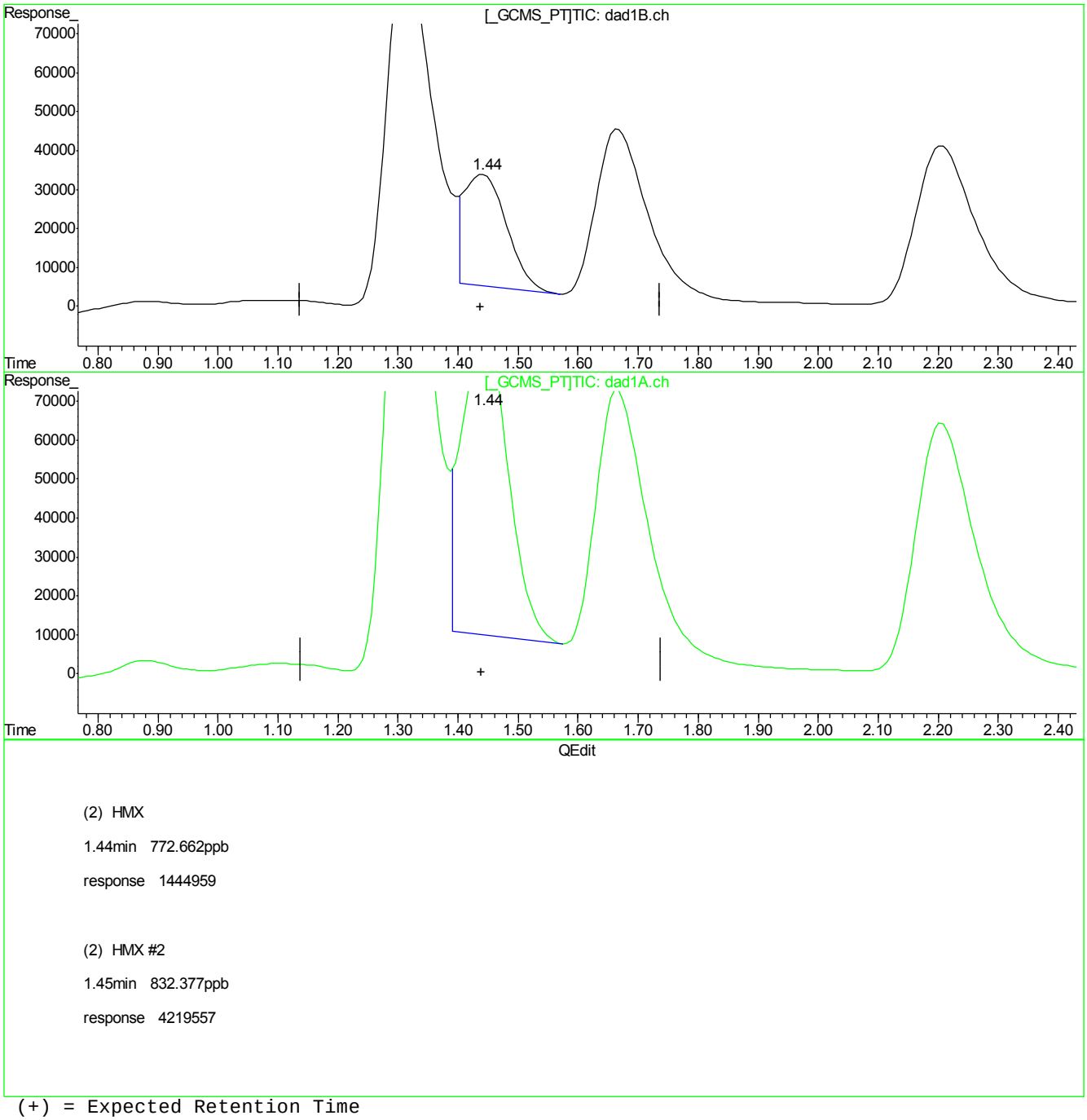
response 7183947

(+) = Expected Retention Time
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:08:40 2018

Quantitation Report (Qedit)

```
Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On    : 23-Apr-2018, 16:23:27                    Operator: evitam
Sample    : ecc1722-1000                             Inst    : G1315B
Misc      : OP69713,gbb1723,1000,,,10,1,water        Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Apr 24  8:32 2018  Quant Results File: 8330B_0419PLUS.RES

Method       : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
```



(2) HMX

1.44min 772.662ppb

response 1444959

(2) HMX #2

1.45min 832.377ppb

response 4219557

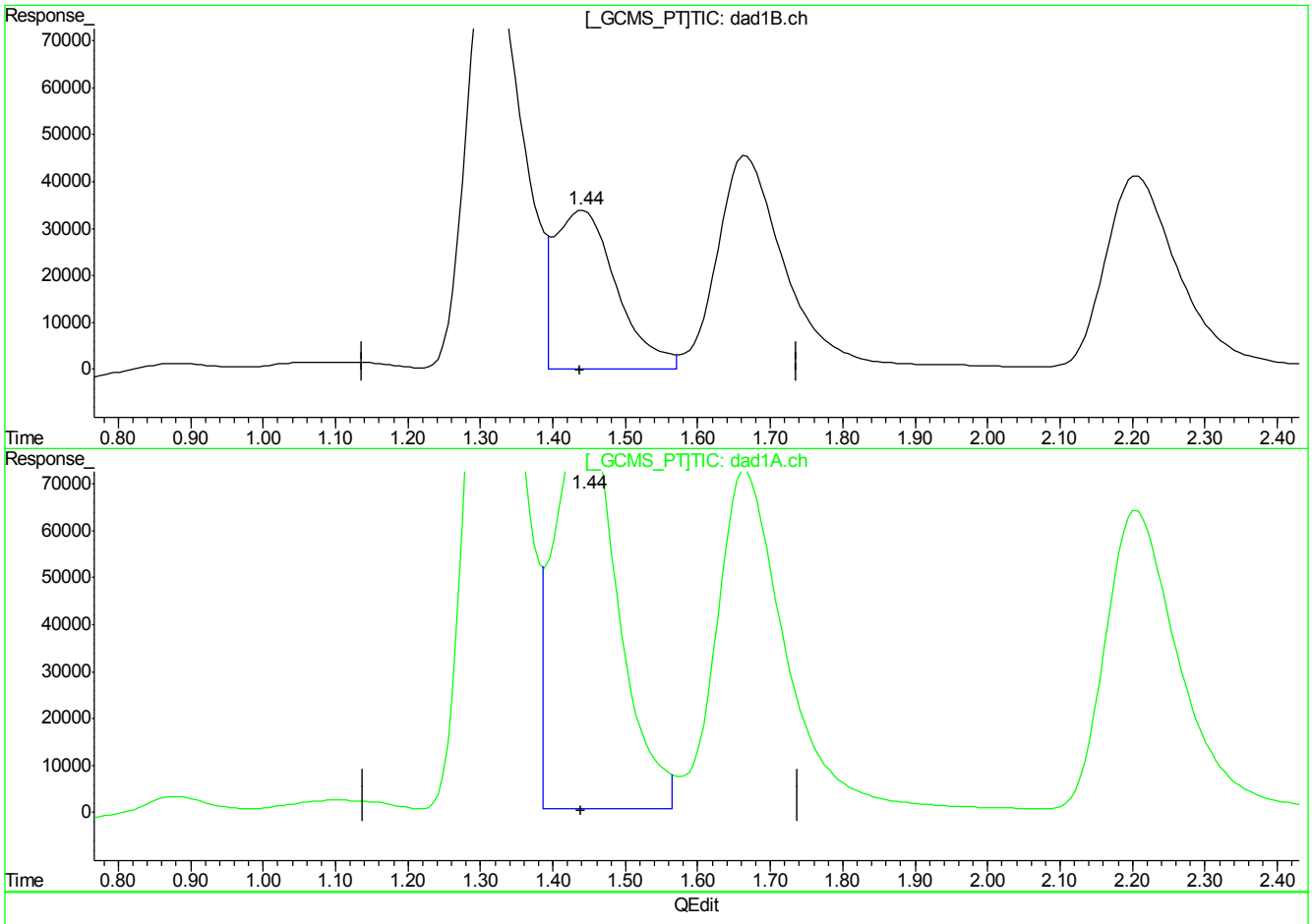
(+) = Expected Retention Time

BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:08:44 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 1075.470ppb m

response 2011240

(2) HMX #2

1.44min 1019.850ppb m

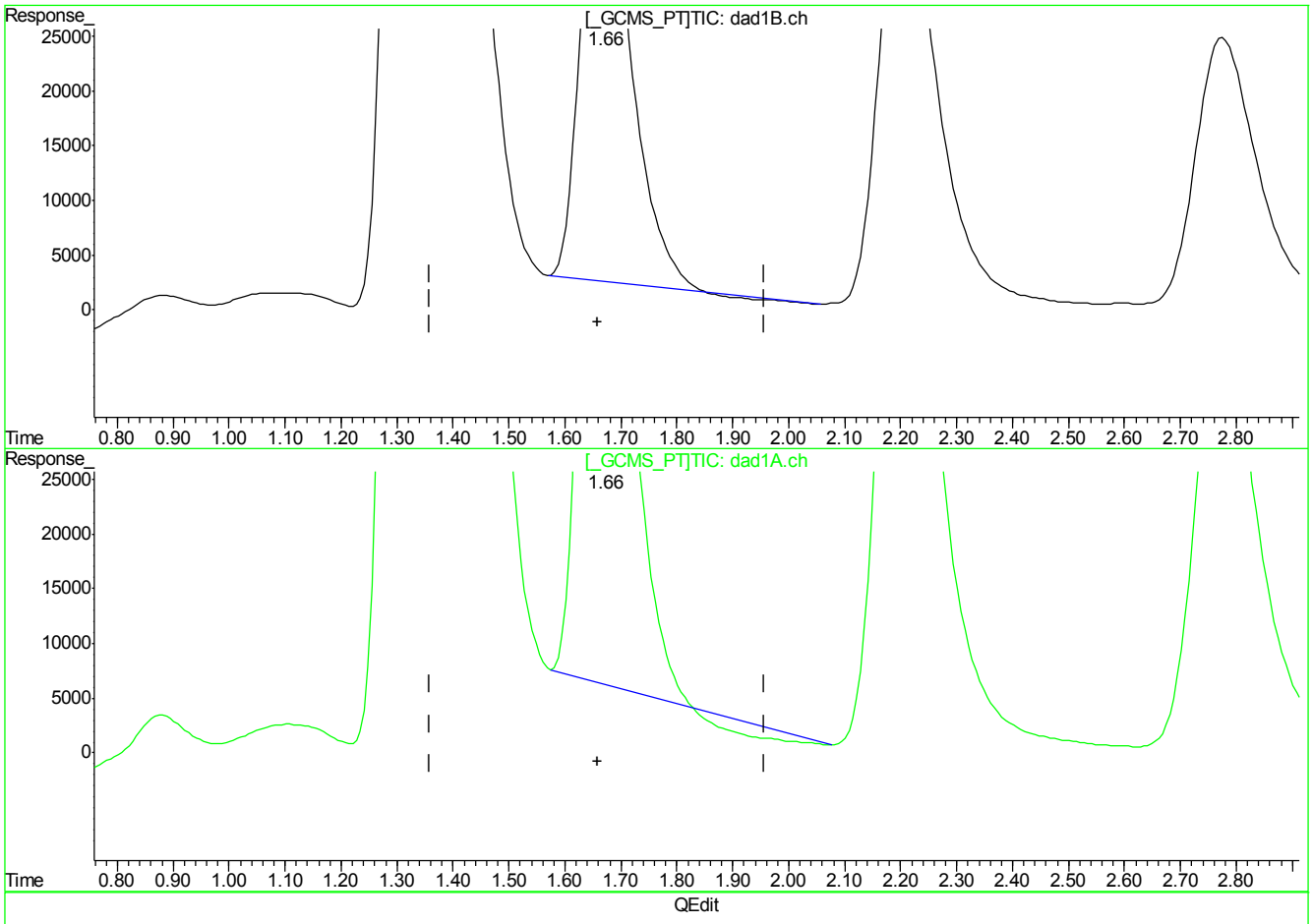
response 5164345

(+) = Expected Retention Time
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:09:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 812.314ppb

response 2515749

(3) DNX #2

1.67min 787.444ppb

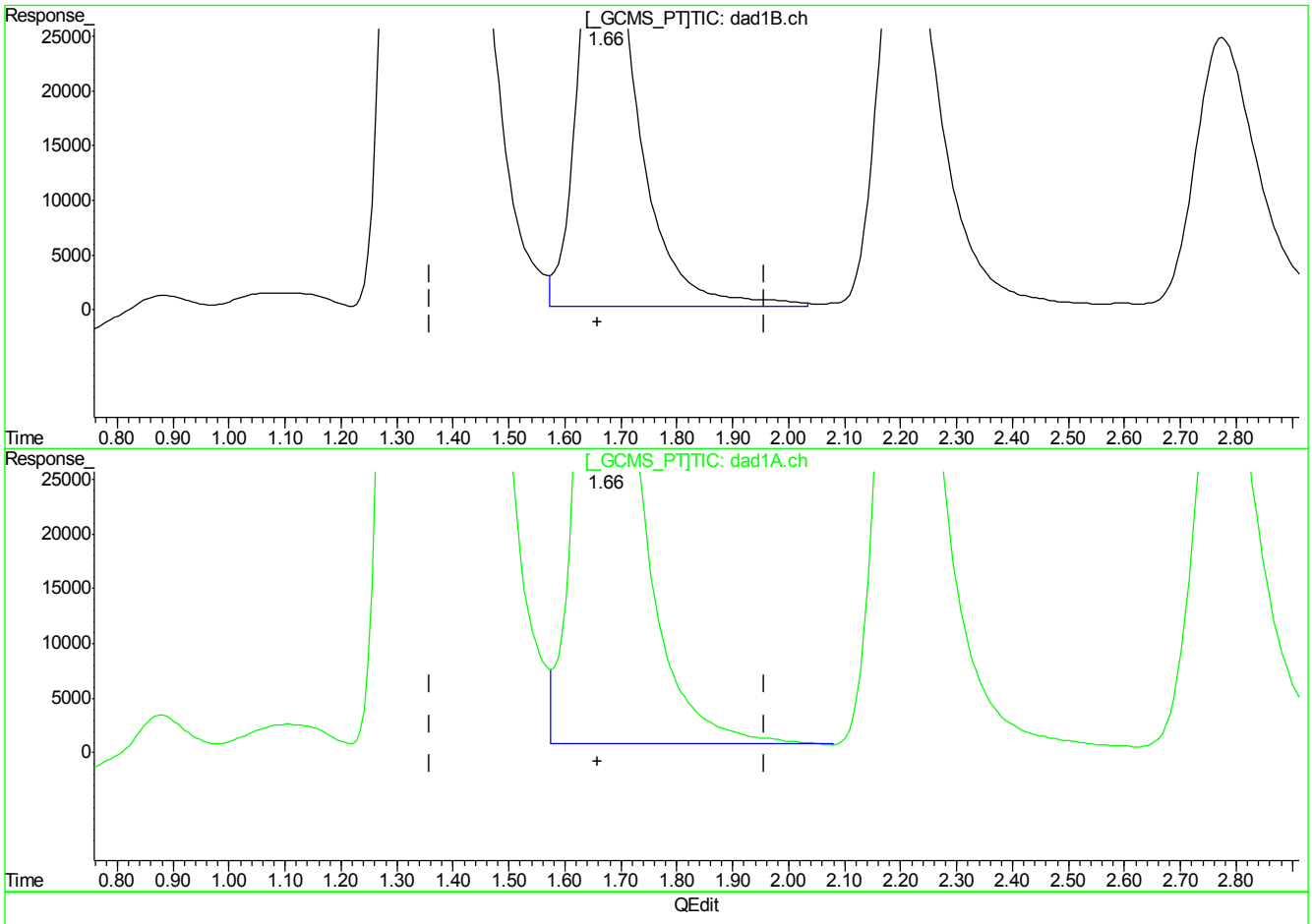
response 3709713

(+) = Expected Retention Time
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:09:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 947.822ppb m

response 2935419

(3) DNX #2

1.66min 996.312ppb m

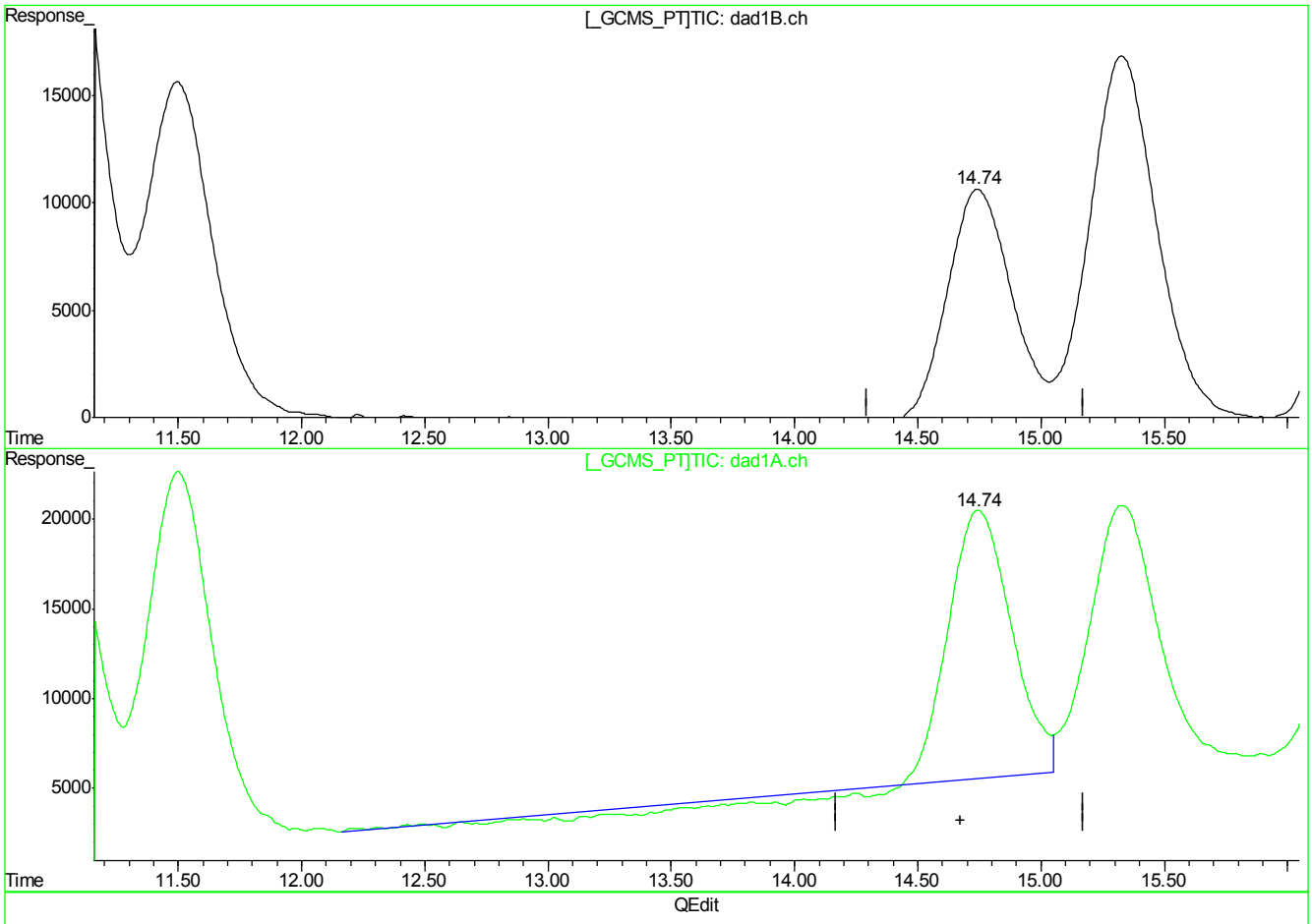
response 4707676

(+) = Expected Retention Time
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:09:30 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.74min 808.791ppb

response 2020230

(18) o-Nitrotoluene #2

14.75min 718.089ppb

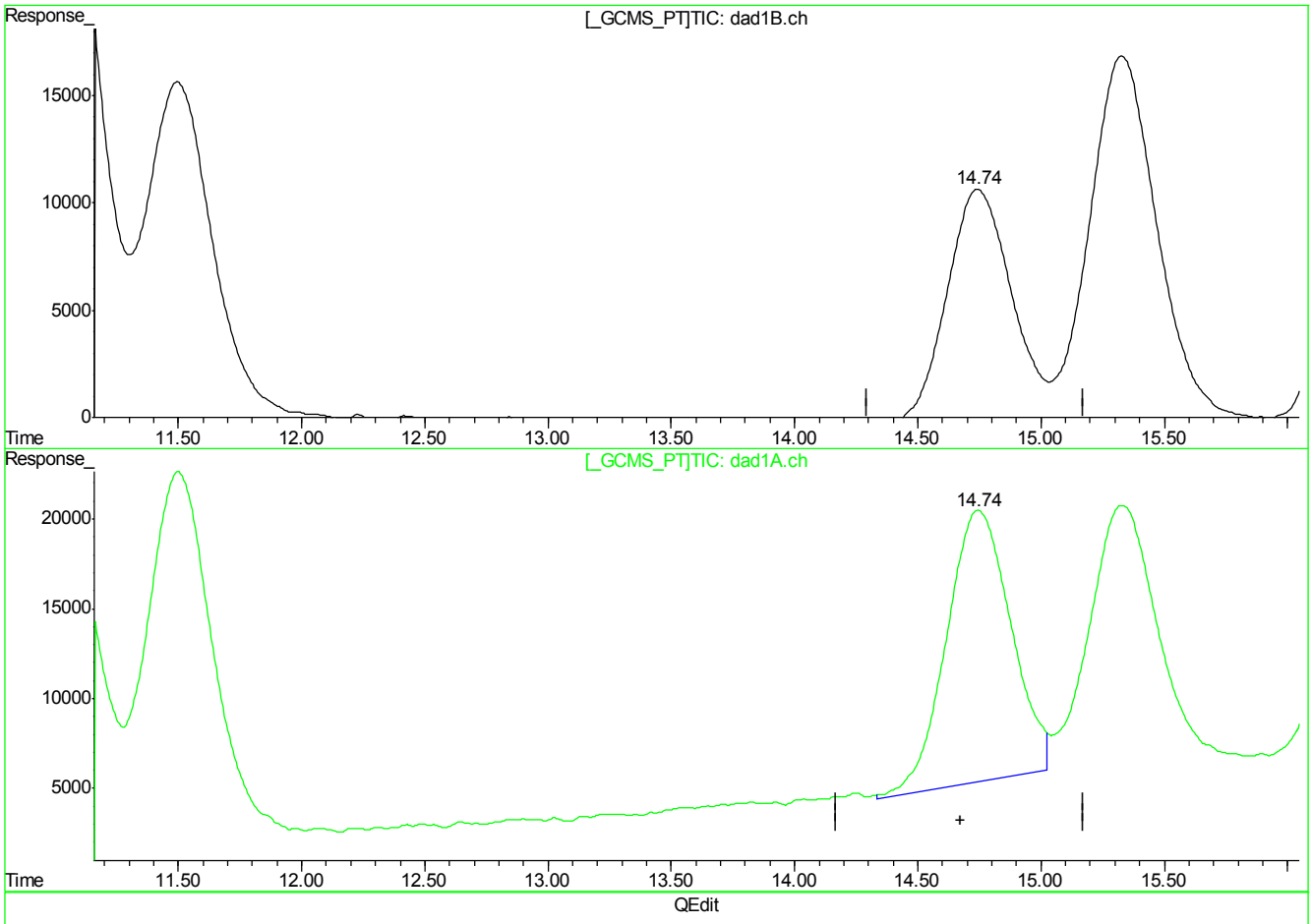
response 2352279

(+) = Expected Retention Time
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:09:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.74min 808.791ppb

response 2020230

(18) o-Nitrotoluene #2

14.74min 841.967ppb m

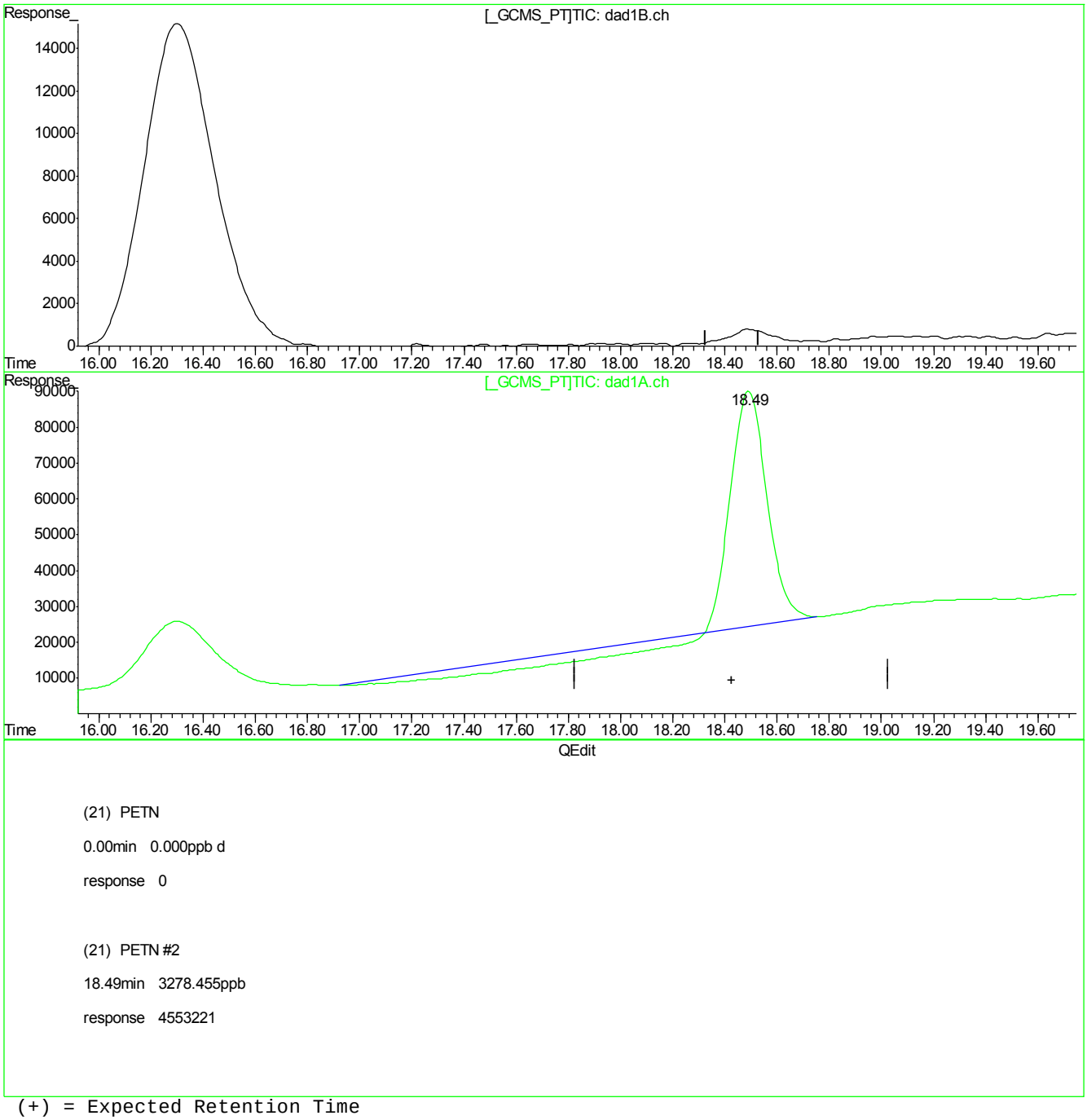
response 2758073

(+) = Expected Retention Time
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:09:44 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.49min 3278.455ppb

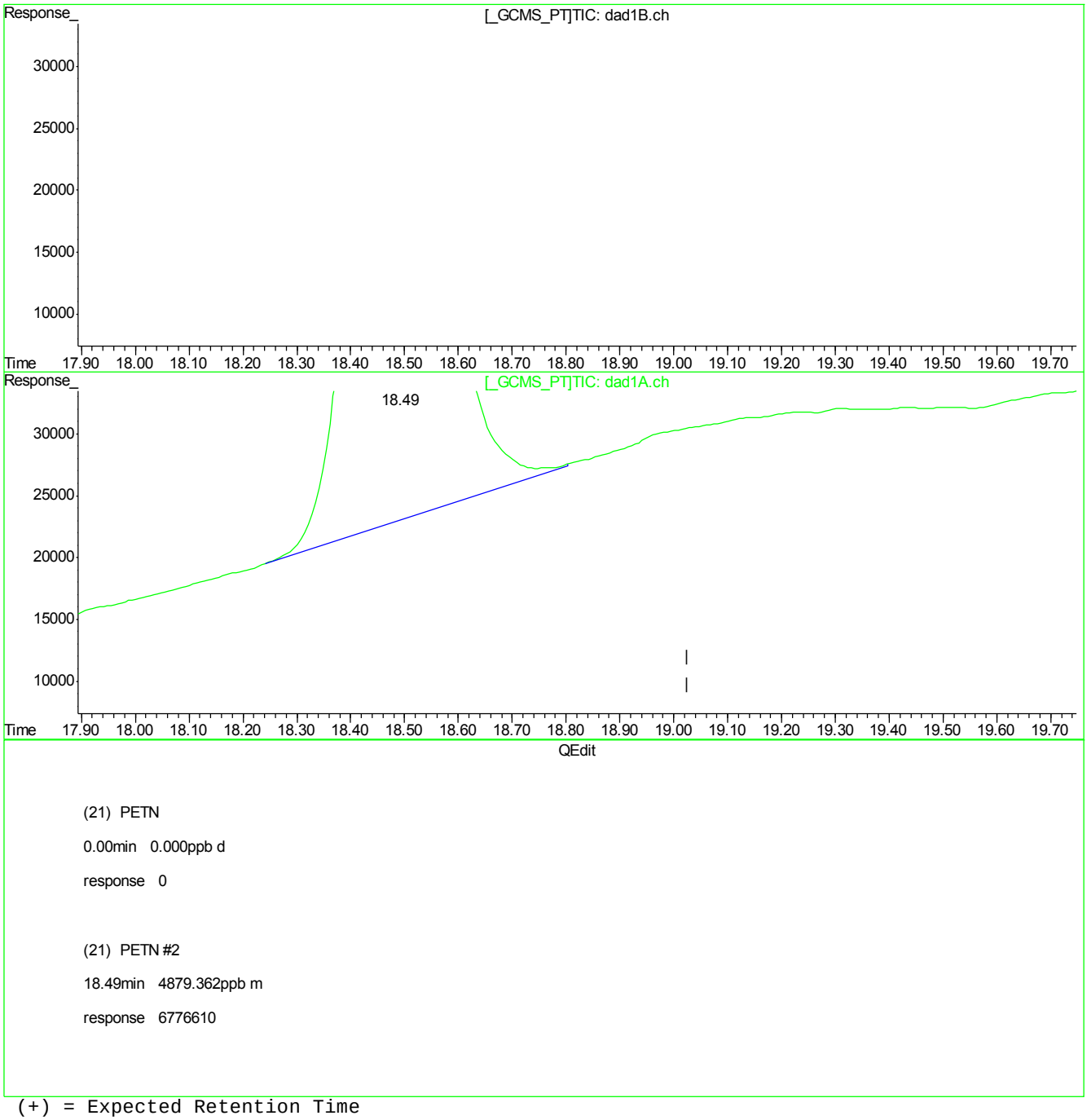
response 4553221

(+) = Expected Retention Time
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:09:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1724\BB059499.D\dad1A.ch
Acq On : 23-Apr-2018, 16:23:27 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69713,gbb1723,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 24 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059499.D 8330B_0419PLUS.M Tue Apr 24 11:09:54 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:57 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.58	14.60	98690	251786	16.740	20.083
	Spiked Amount 500.000	Range 70 - 136		Recovery =		3.35%#	4.02%#
	Target Compounds						
1)	TNX	5.00	5.00	270396	268585	32.146m	31.846m
2)	HMX	5.46	5.46	61139	65579	16.096m	17.142m
3)	DNX	5.58	5.58	151583	169136	23.094m	25.858m
4)	MNX	6.68	6.68	132741	132741	27.438	27.438
5)	1,3,5-Trinitrobe	7.55	7.55	208327	208327	20.402	20.410
6)	RDX	8.09	8.09	93105	93105	19.557	19.648
7)	1,3-Dinitrobenze	10.09	10.10	316123	176008	21.719	12.357m#
8)	Nitrobenzene	11.09	11.09	233656	184835	30.565	19.401m
9)	2,4,6-Trinitroto	11.89	11.89	254281	217868	24.940	13.900m#
10)	Nitroglycerin	0.00	12.72	0	268418	N.D. d	73.009m
11)	Tetryl	13.30	13.28	188129	499094	27.427	40.951m#
13)	2,6-Dinitrotolue	14.93	14.90	140836	174953	20.257	16.038
14)	2,4-Dinitrotolue	15.65	15.67	275037	489908	20.698	49.345 #
15)	o-Nitrotoluene	17.23	17.25	120053	171082	28.895	30.388
16)	3,5-Dinitroanili	16.68	16.68	287796	475677	27.156	26.561
17)	p-Nitrotoluene	18.42	18.46	235862	419386	20.499	19.889m
18)	4-Amino-2,6-Dini	18.42	18.46	235862	428039	20.499	20.299m
19)	m-Nitrotoluene	19.66	19.69	105739	204872	21.883	21.659
20)	2-Amino-4,6-Dini	20.68	20.83	168840	118490	17.600	8.755m#
21)	PETN	0.00	22.34	0	288256	N.D. d	88.948m

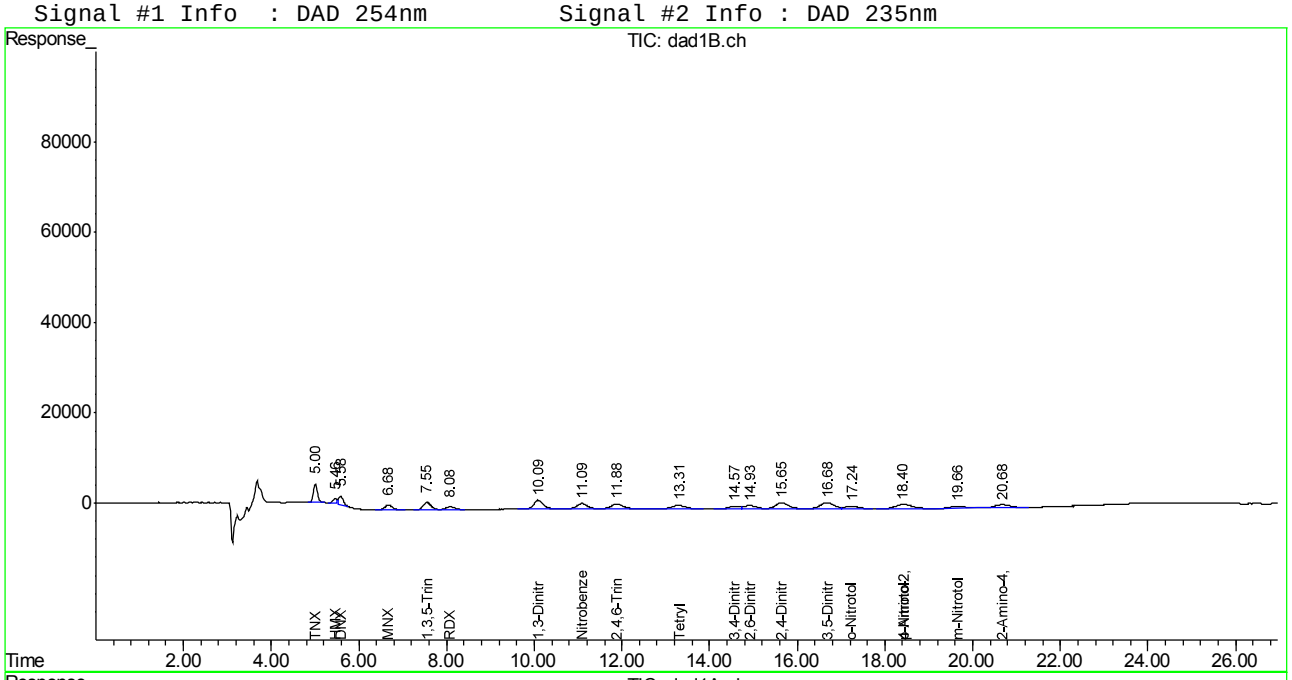
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 13:37:50 2017 Page 1

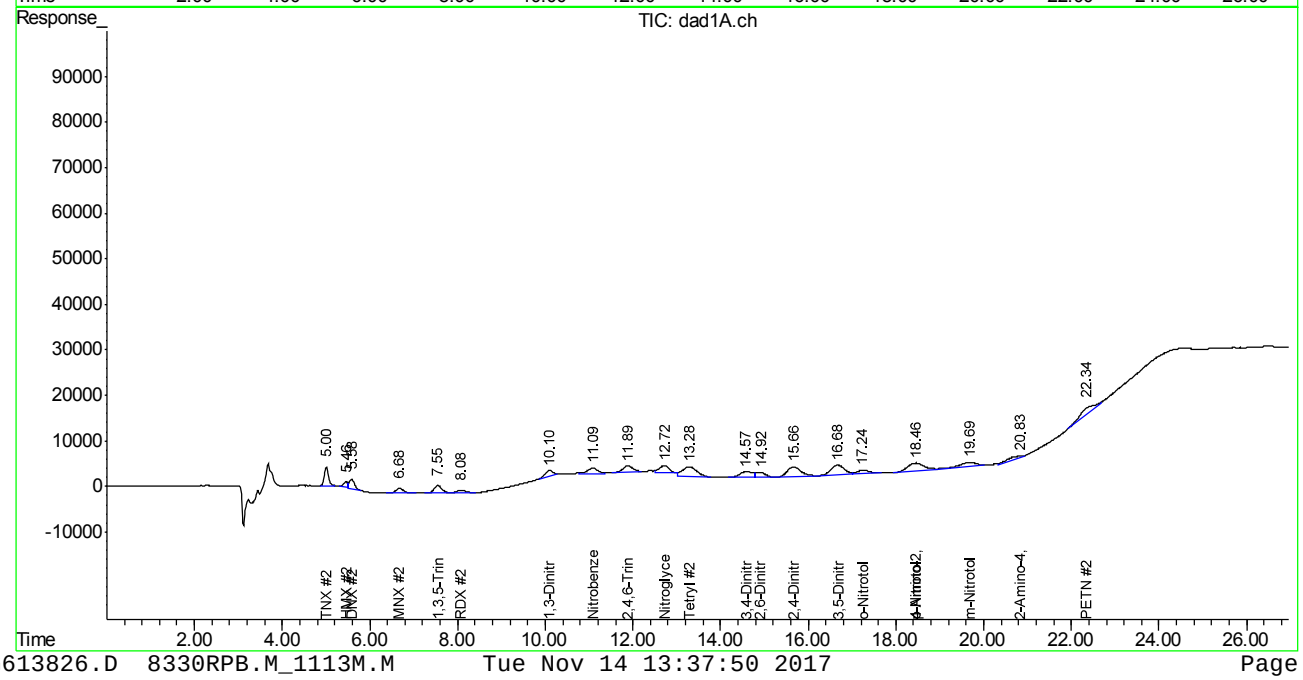
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:53 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

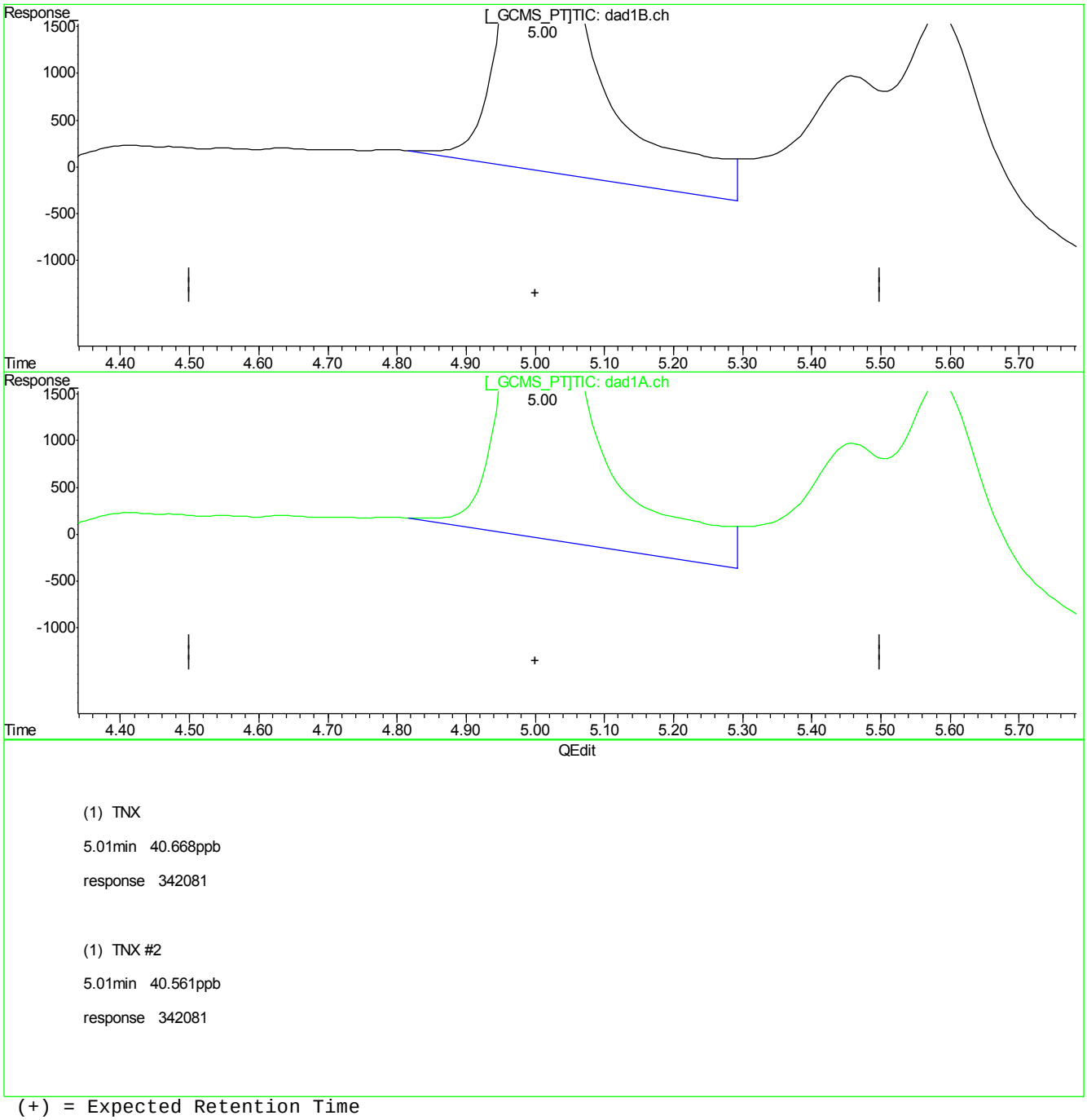
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613826.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 13:36	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.58	Poorly defined baseline
DNX		2	5.58	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.10	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.09	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.89	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.72	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.46	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.46	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.83	Poorly defined baseline
PETN	78-11-5	2	22.34	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(1) TNX

5.01min 40.668ppb

response 342081

(1) TNX #2

5.01min 40.561ppb

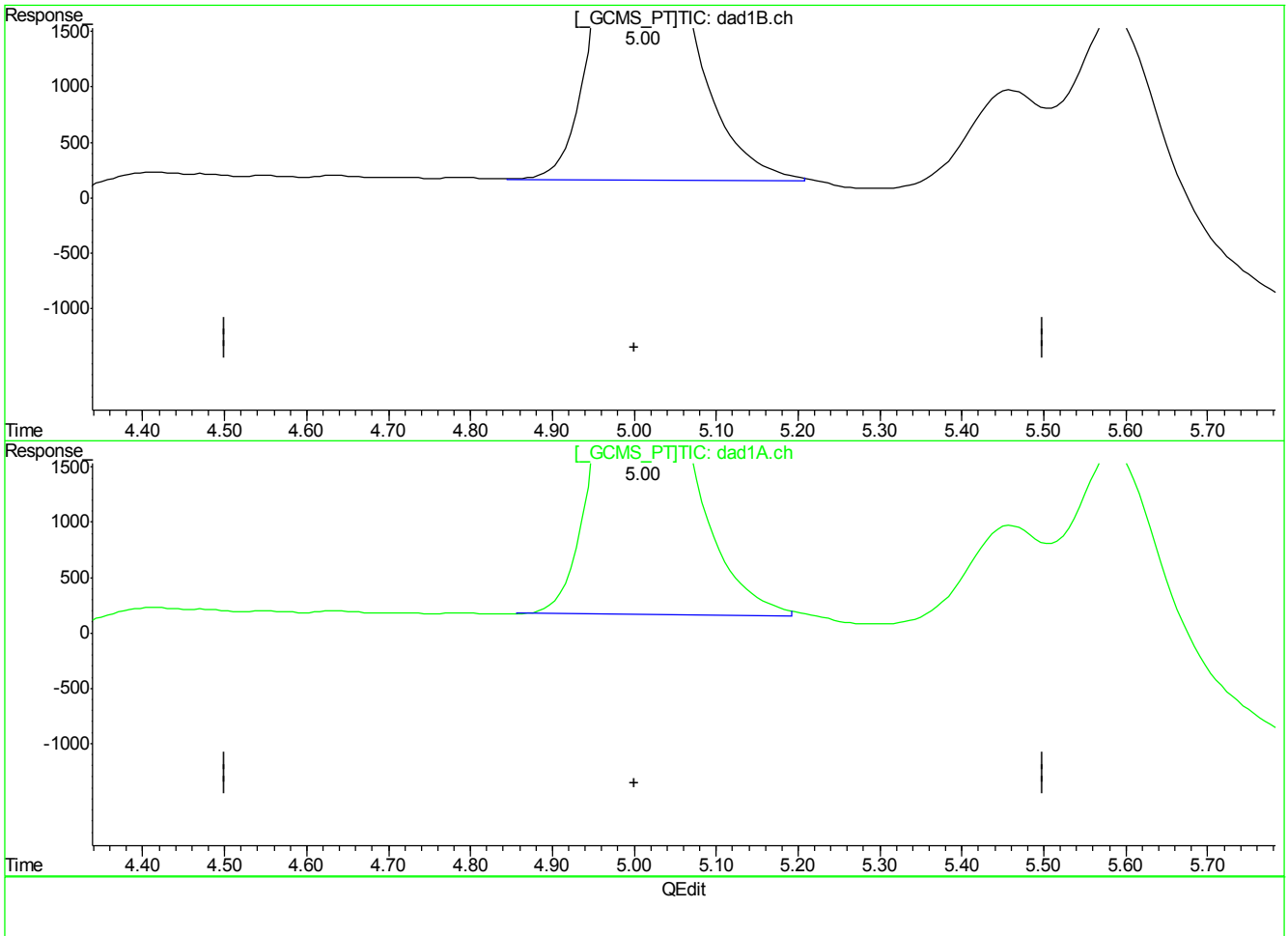
response 342081

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:24 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(1) TNX

5.00min 32.146ppb m

response 270396

(1) TNX #2

5.00min 31.846ppb m

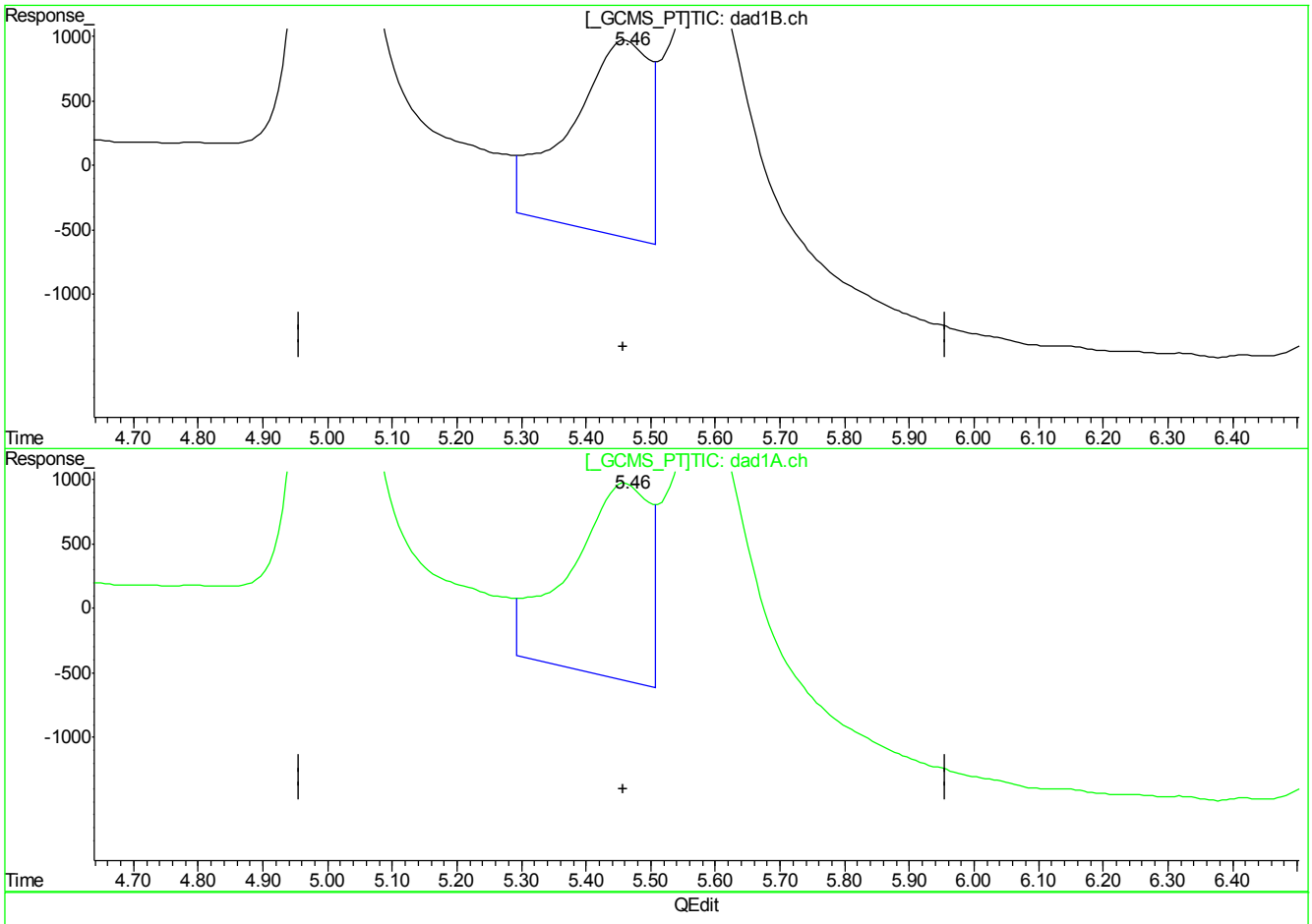
response 268585

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:29 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 33.683ppb

response 127943

(2) HMX #2

5.46min 33.445ppb

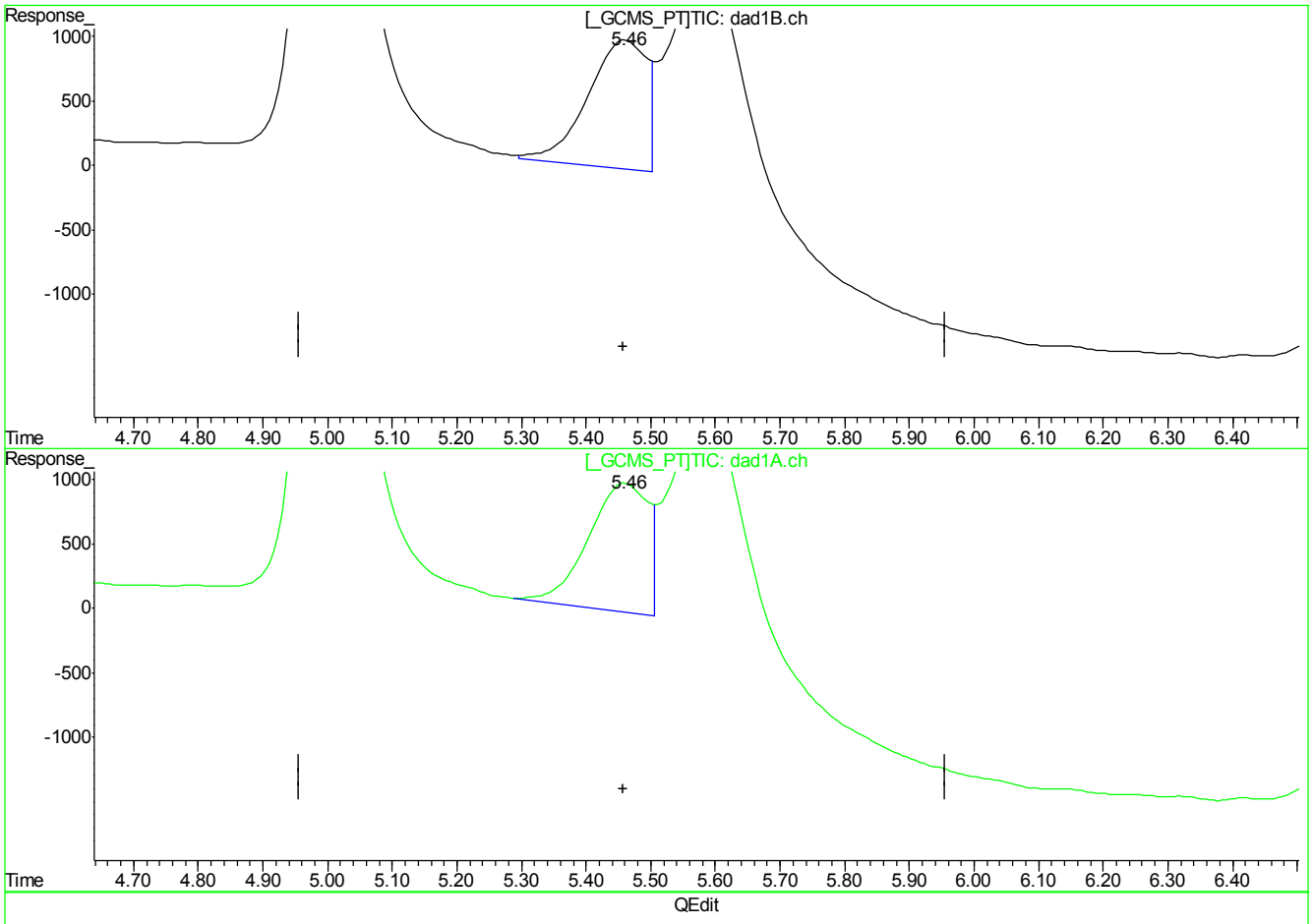
response 127943

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 16.096ppb m

response 61139

(2) HMX #2

5.46min 17.142ppb m

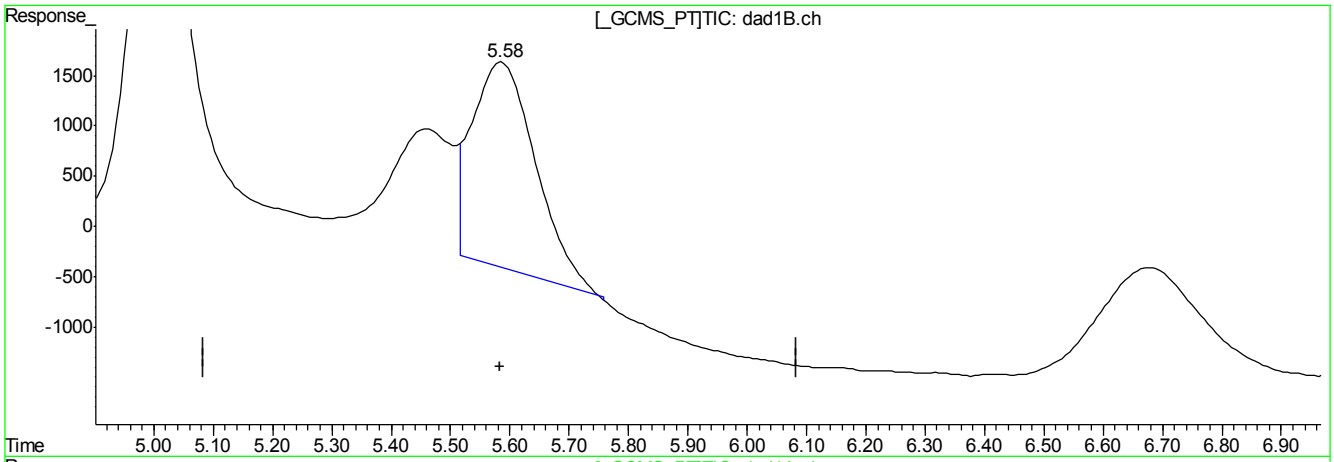
response 65579

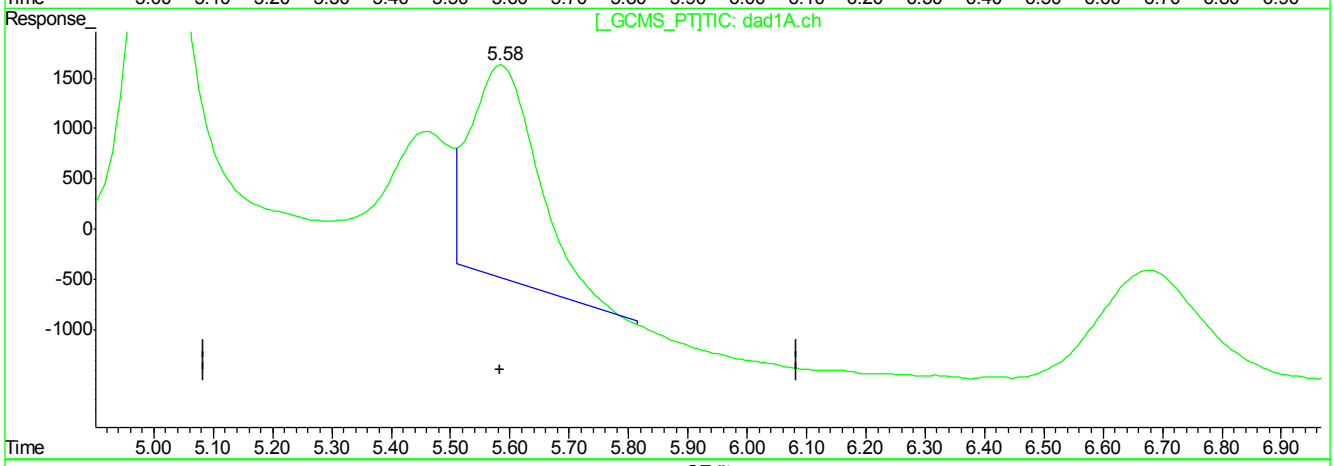
(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:39 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.58min 23.094ppb m

response 151583

(3) DNX #2

5.58min 25.858ppb m

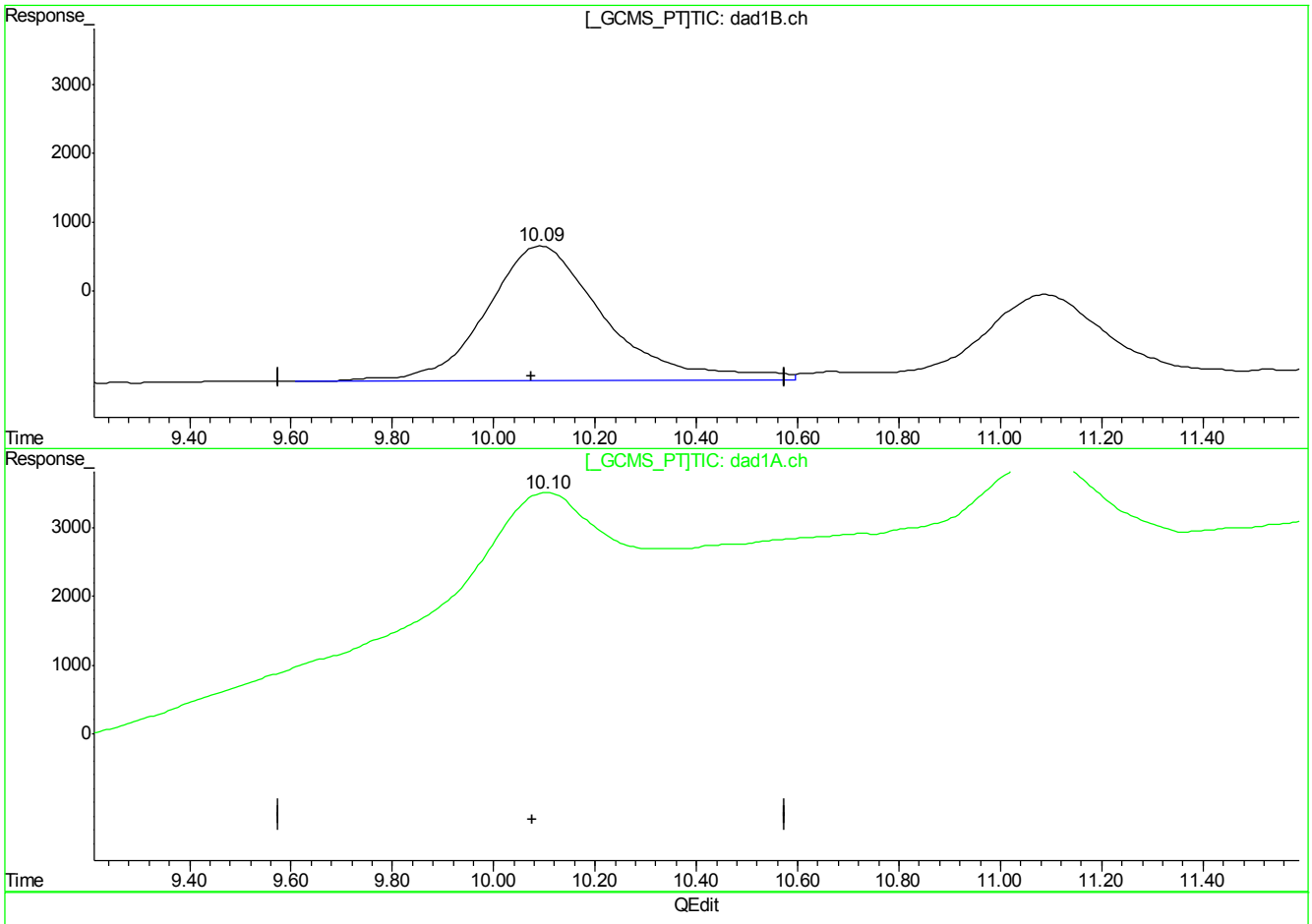
response 169136

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.11min 117.682ppb

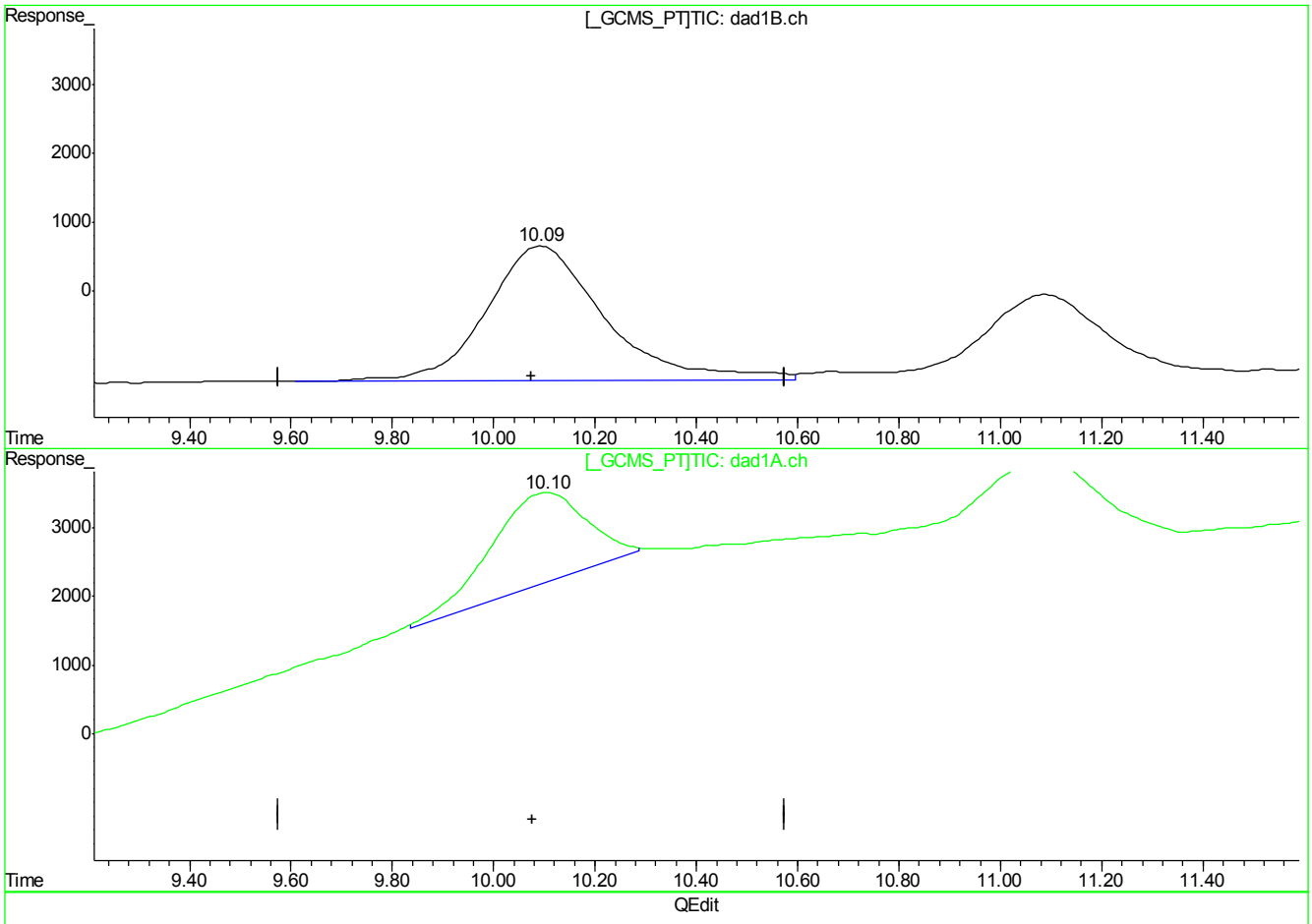
response 1660323

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:01 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.10min 12.357ppb m

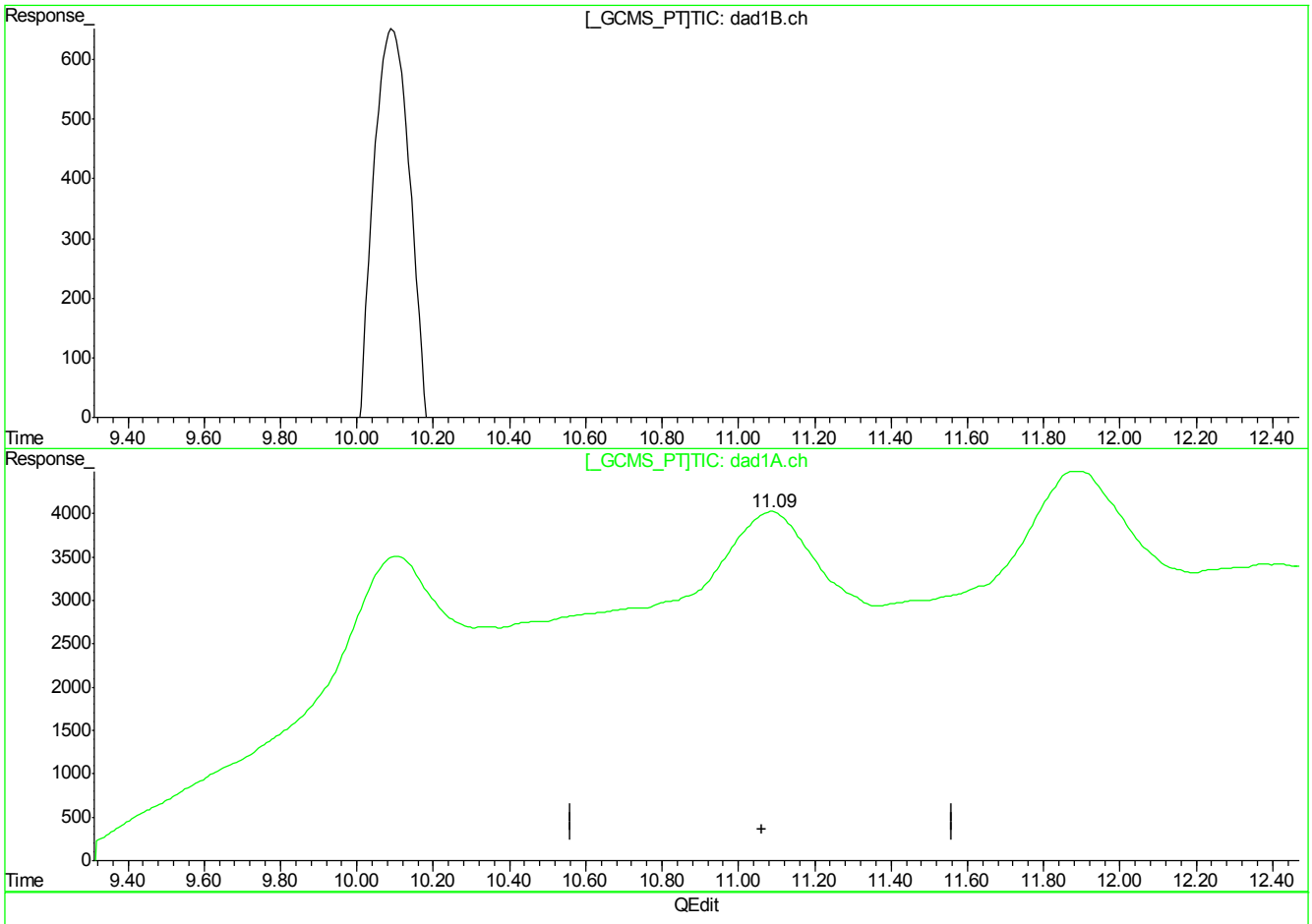
response 176008

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 206.853ppb

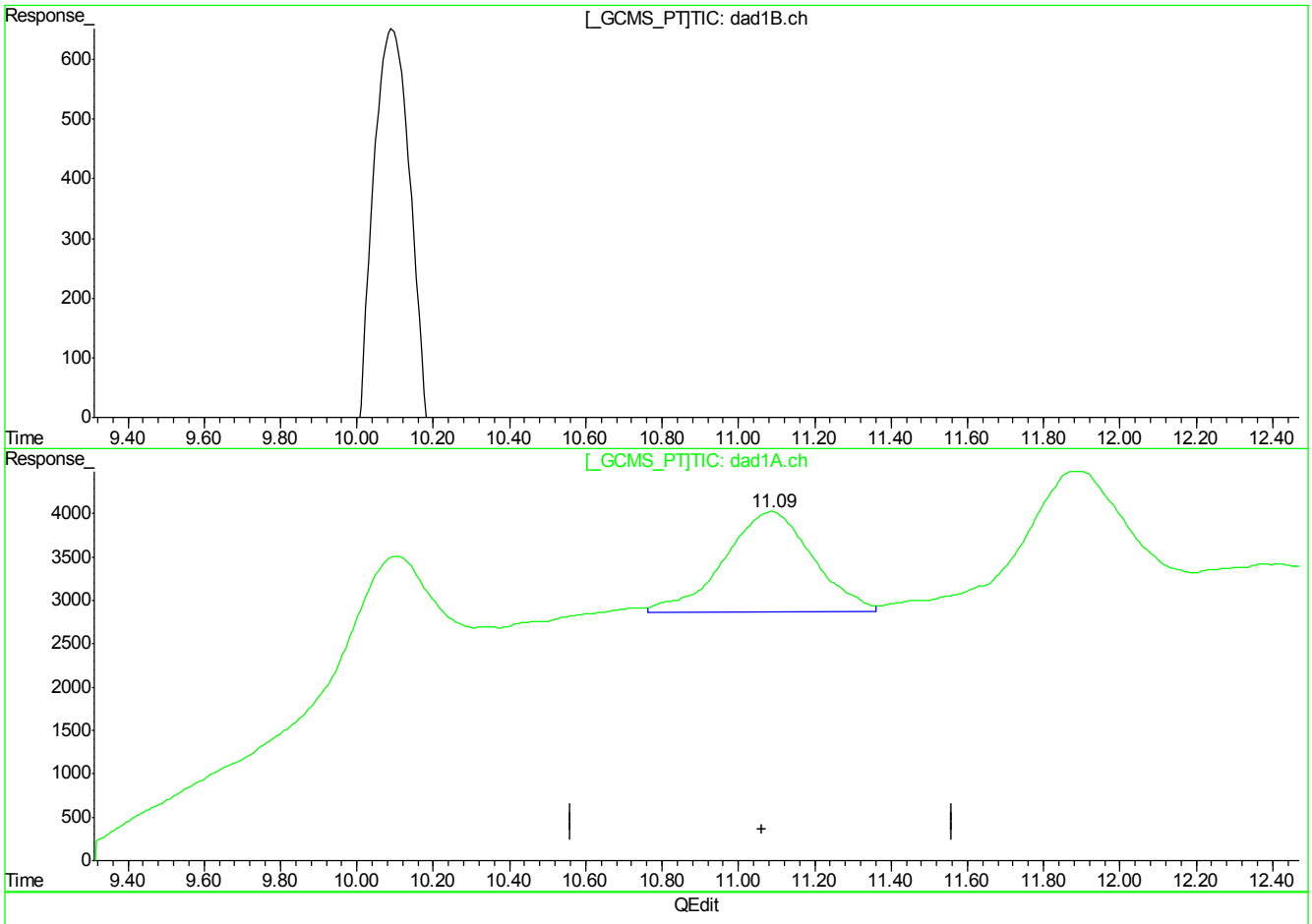
response 1961183

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 19.401ppb m

response 184835

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:15 2017

7.7.11.10

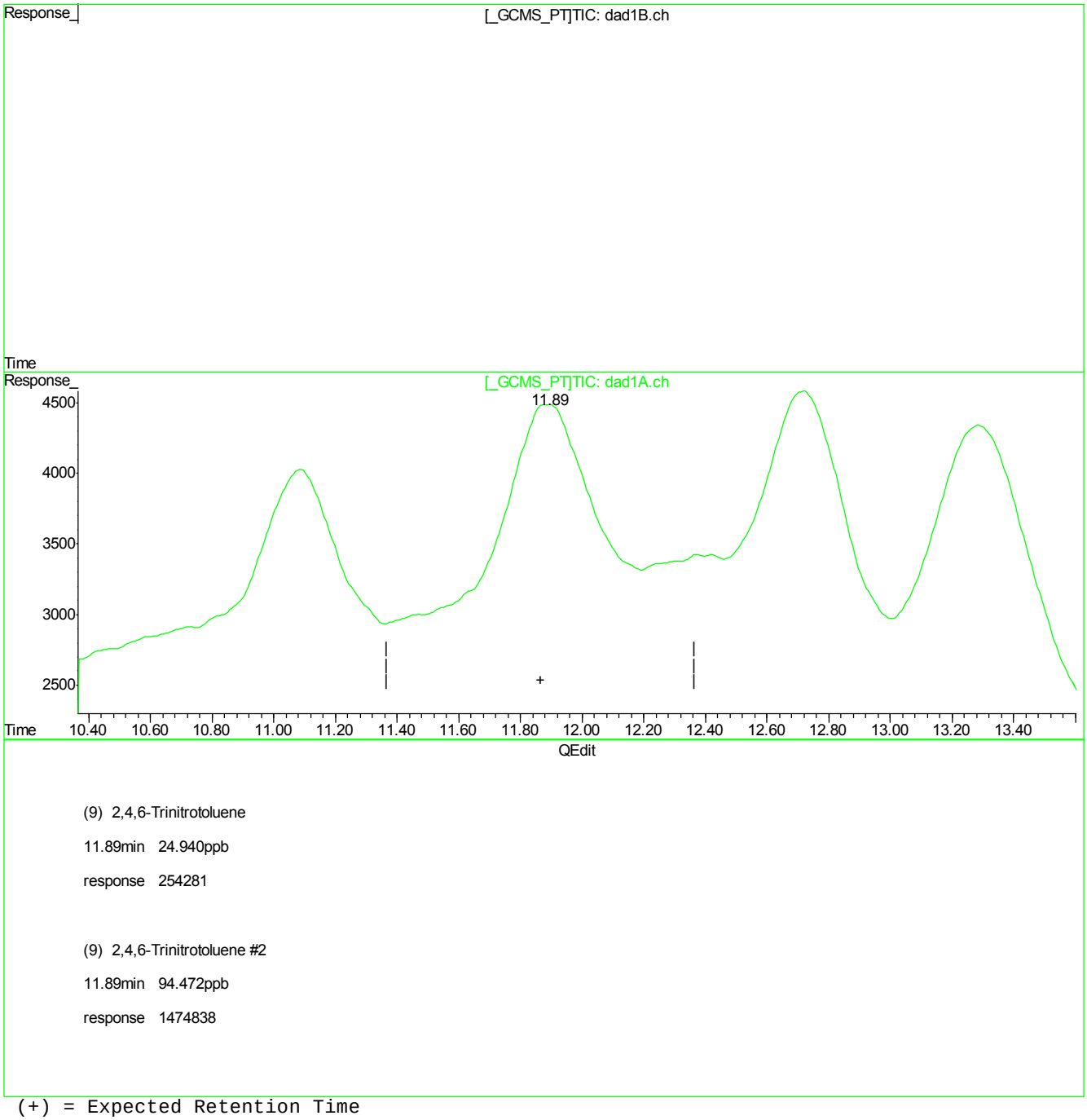
7

GG613826.D edits: Nitrobenzene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 94.472ppb

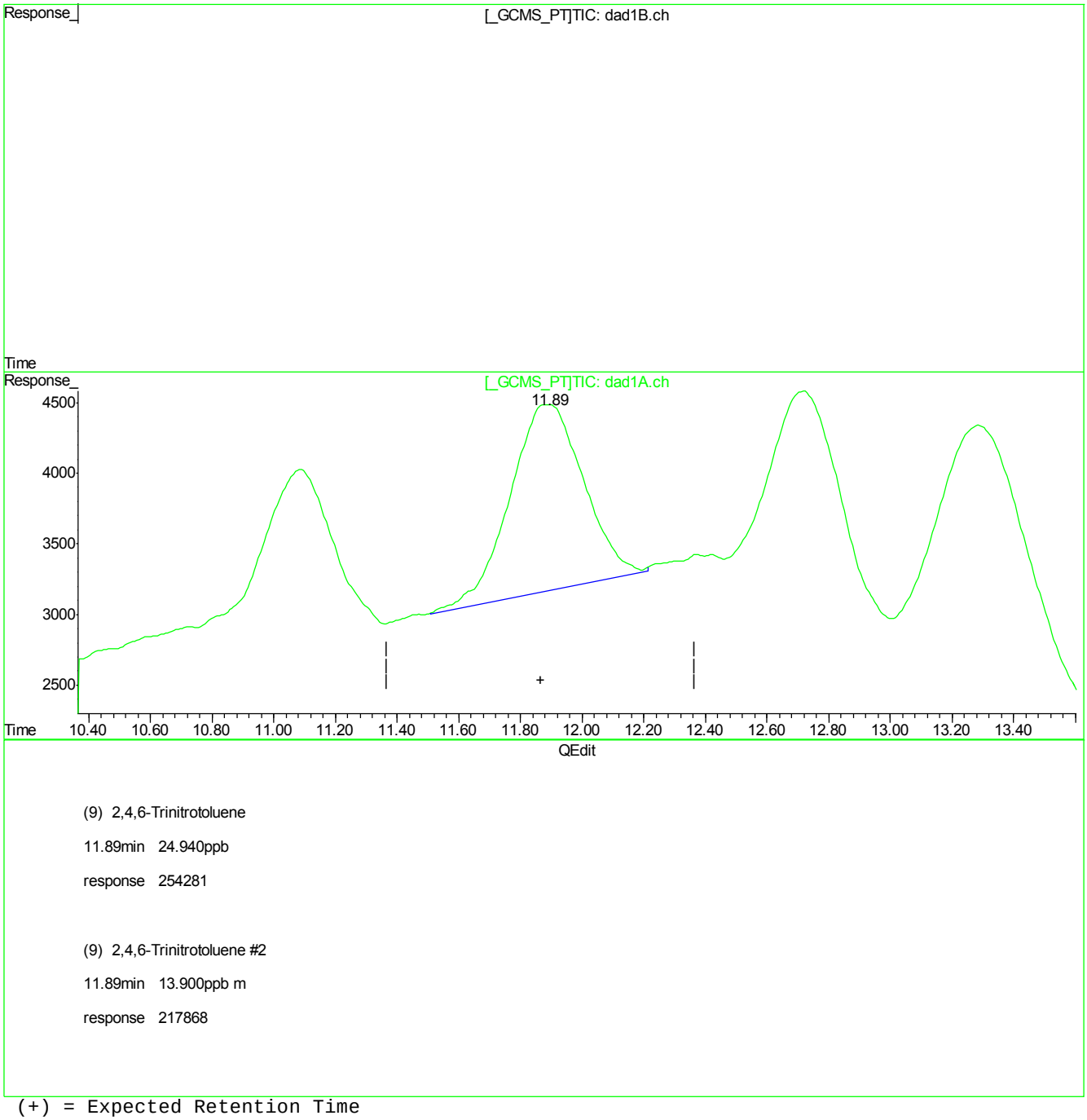
response 1474838

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:19 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 13.900ppb m

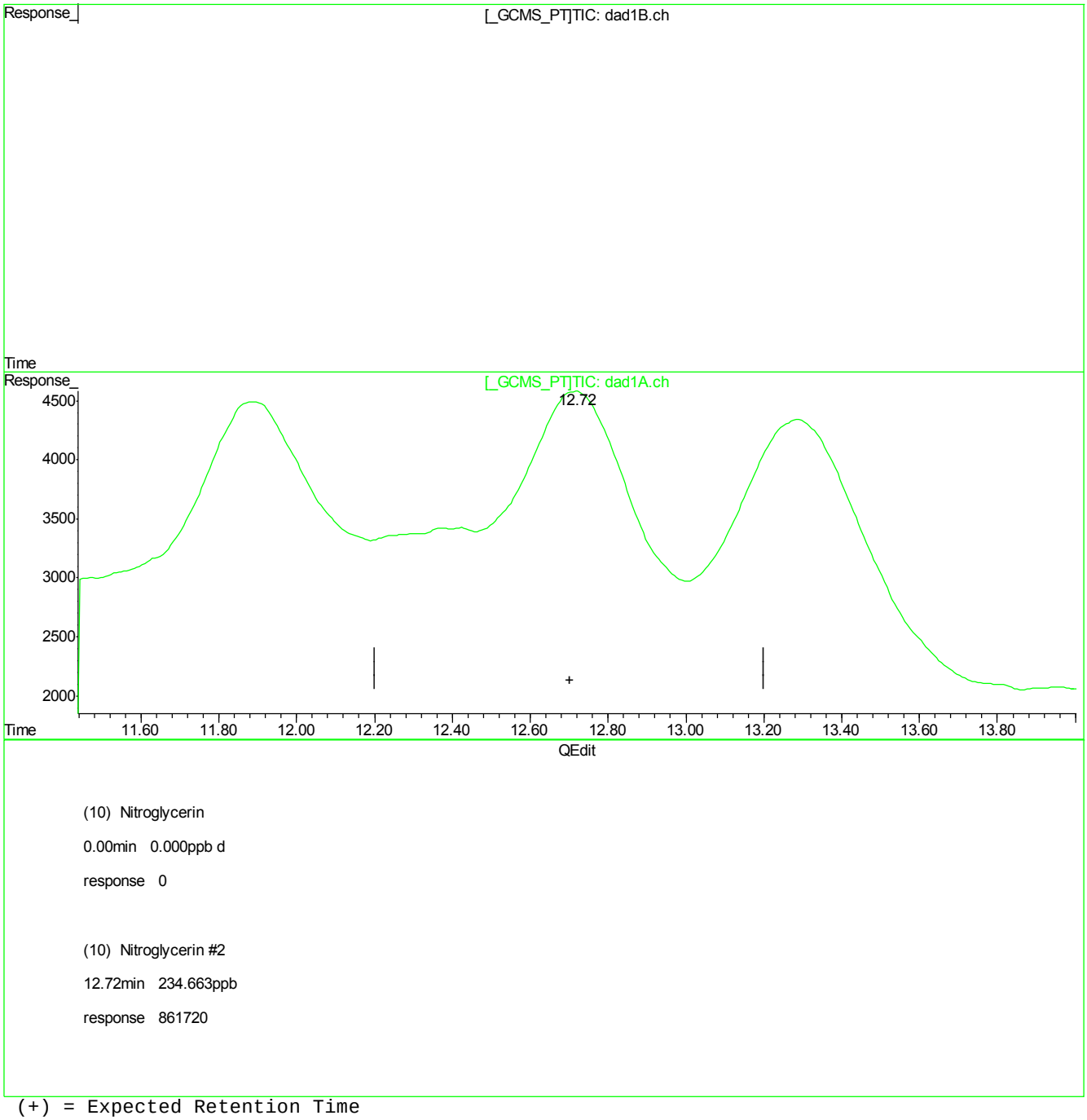
response 217868

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 234.663ppb

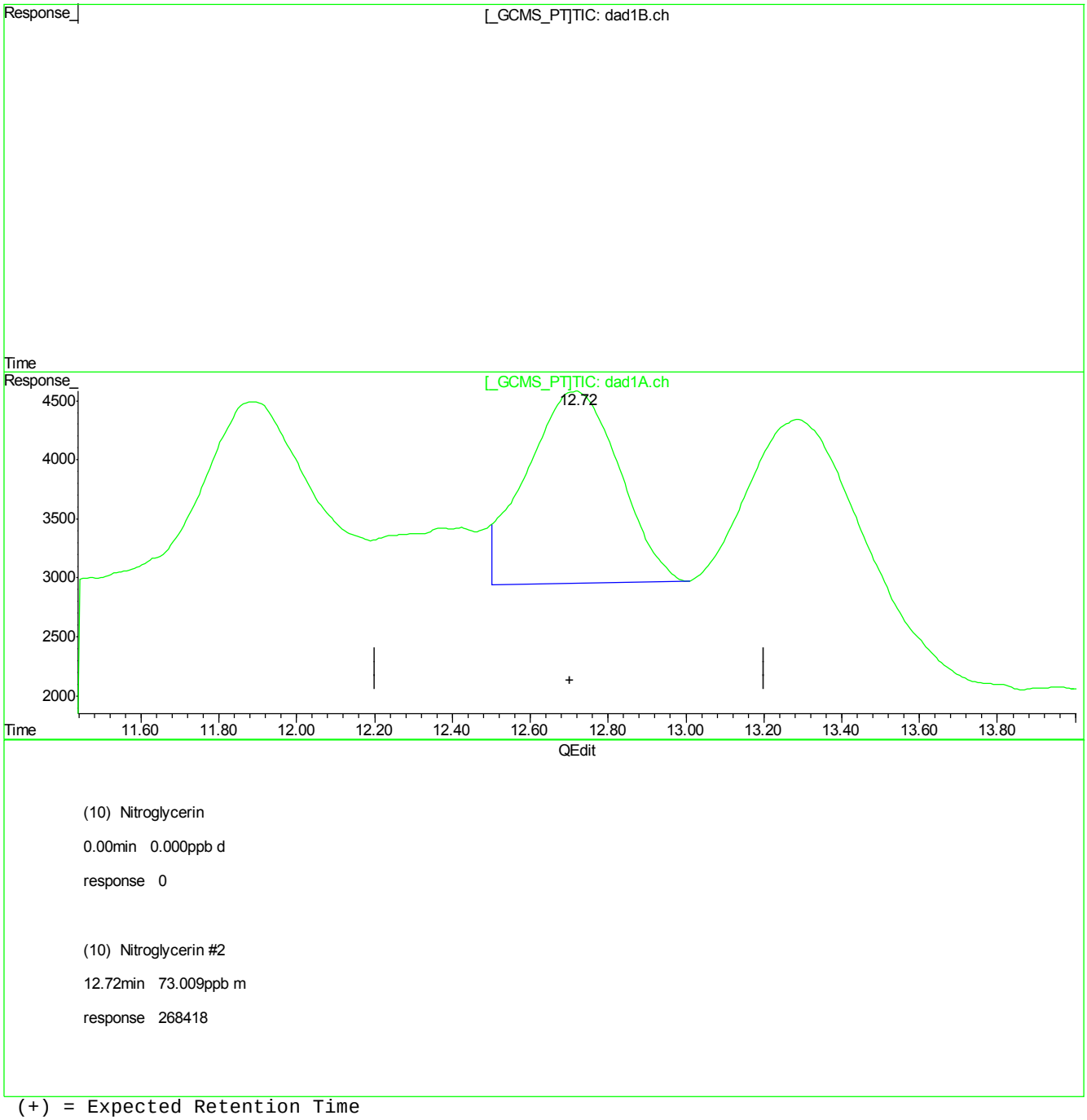
response 861720

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 73.009ppb m

response 268418

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:31 2017

7.7.11.14

7

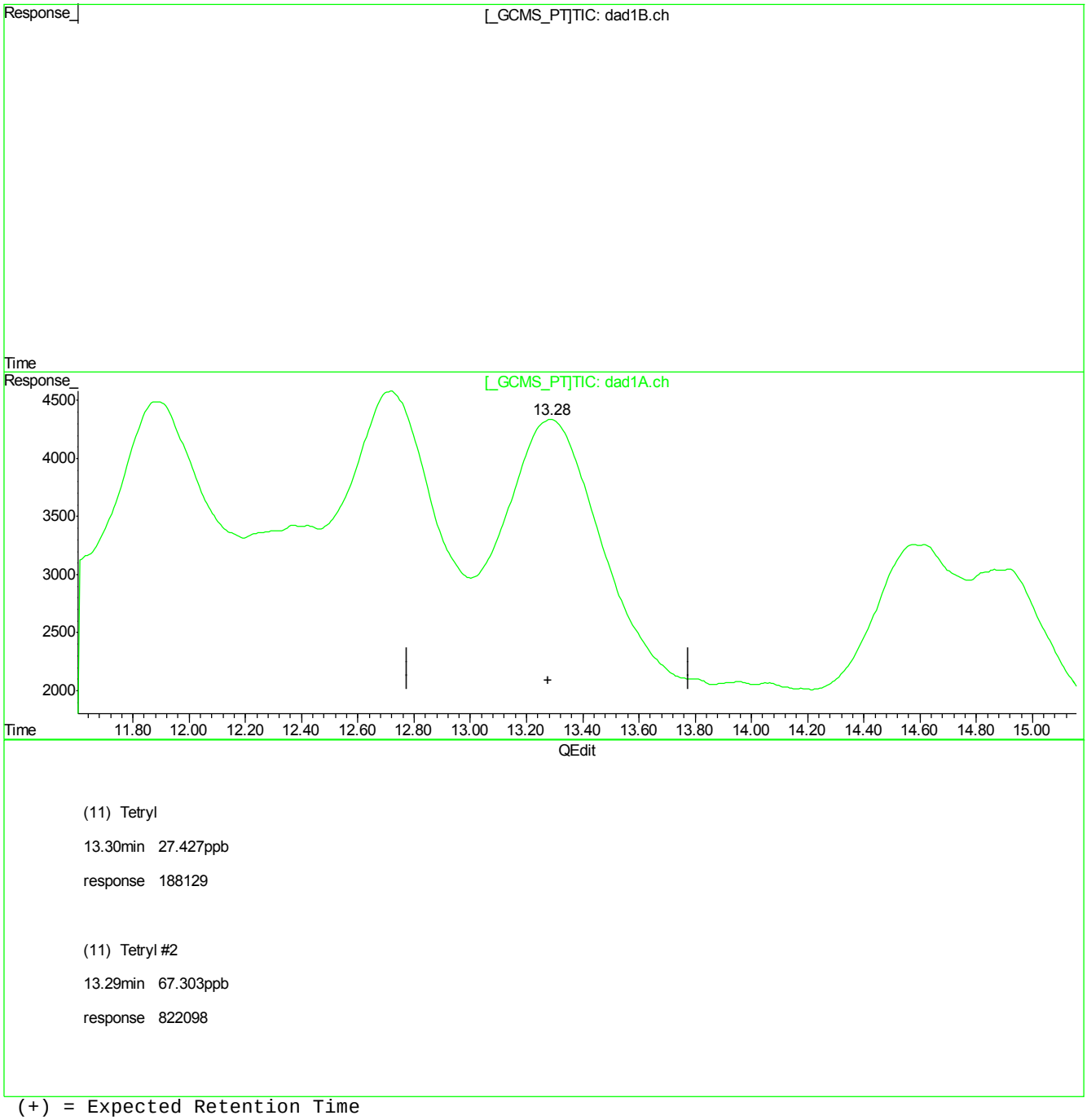
FA53518

GG613826.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

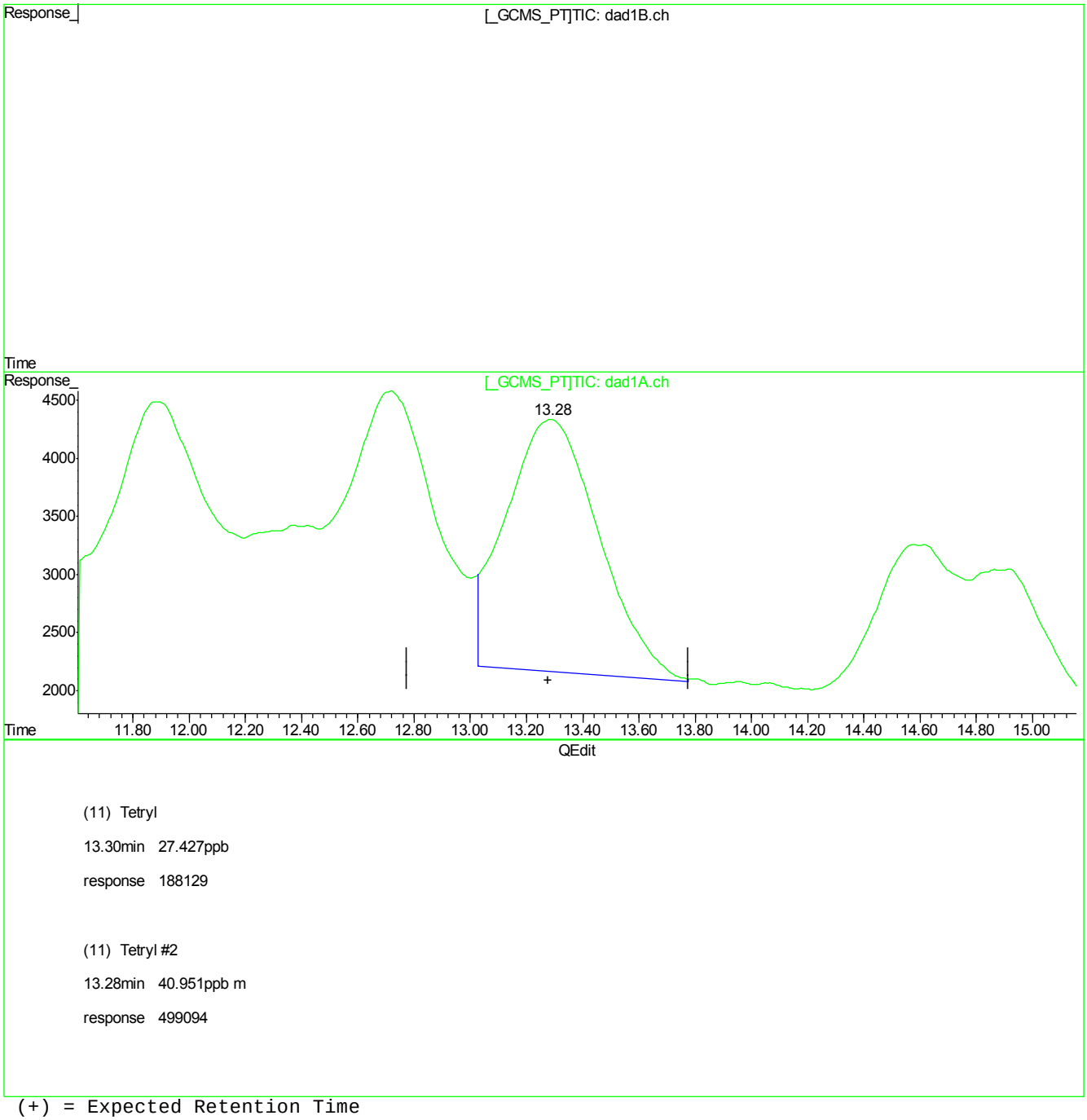


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

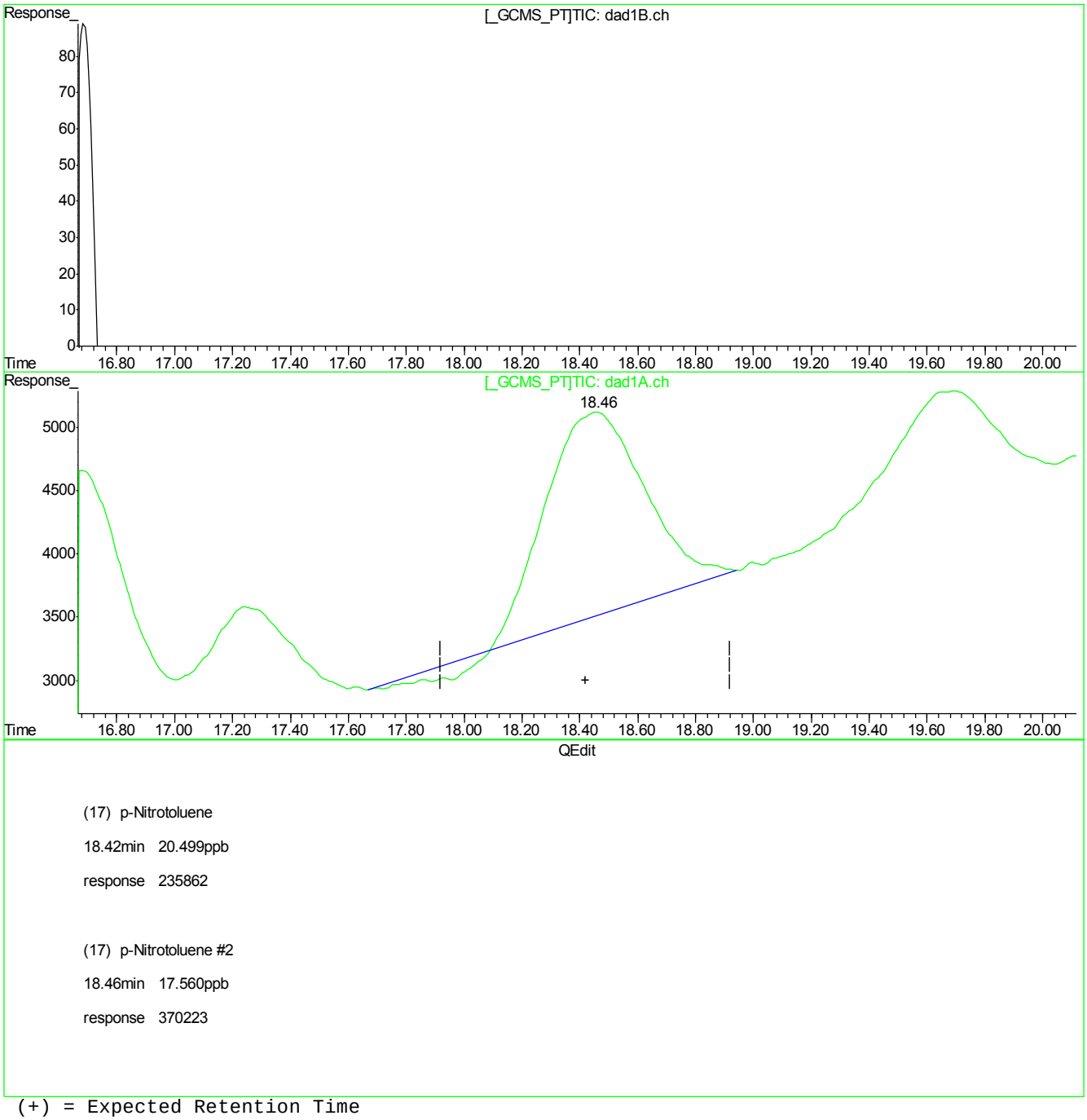


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:52:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 17.560ppb

response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:26 2017

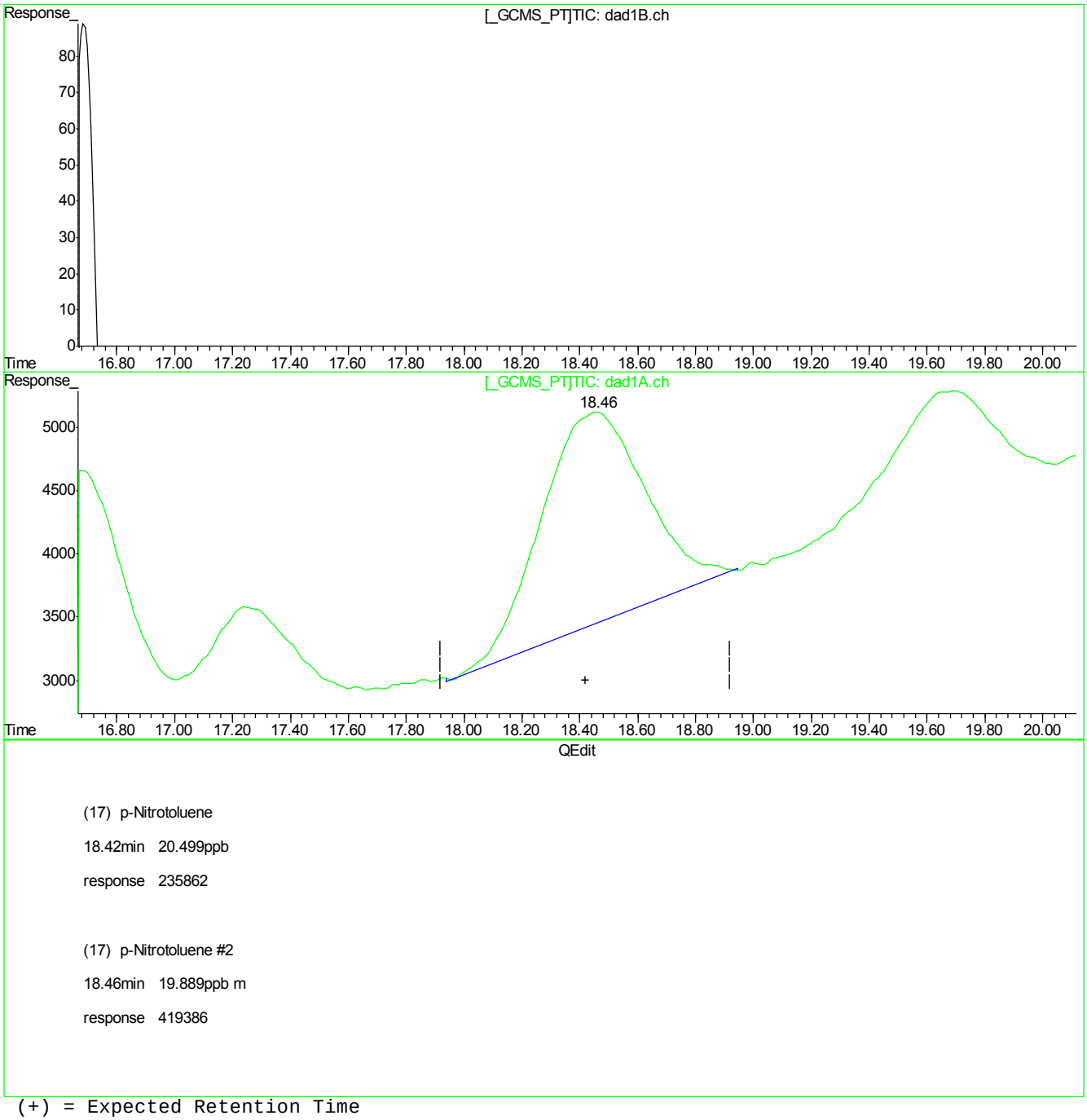
7.7.11.17

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 19.889ppb m

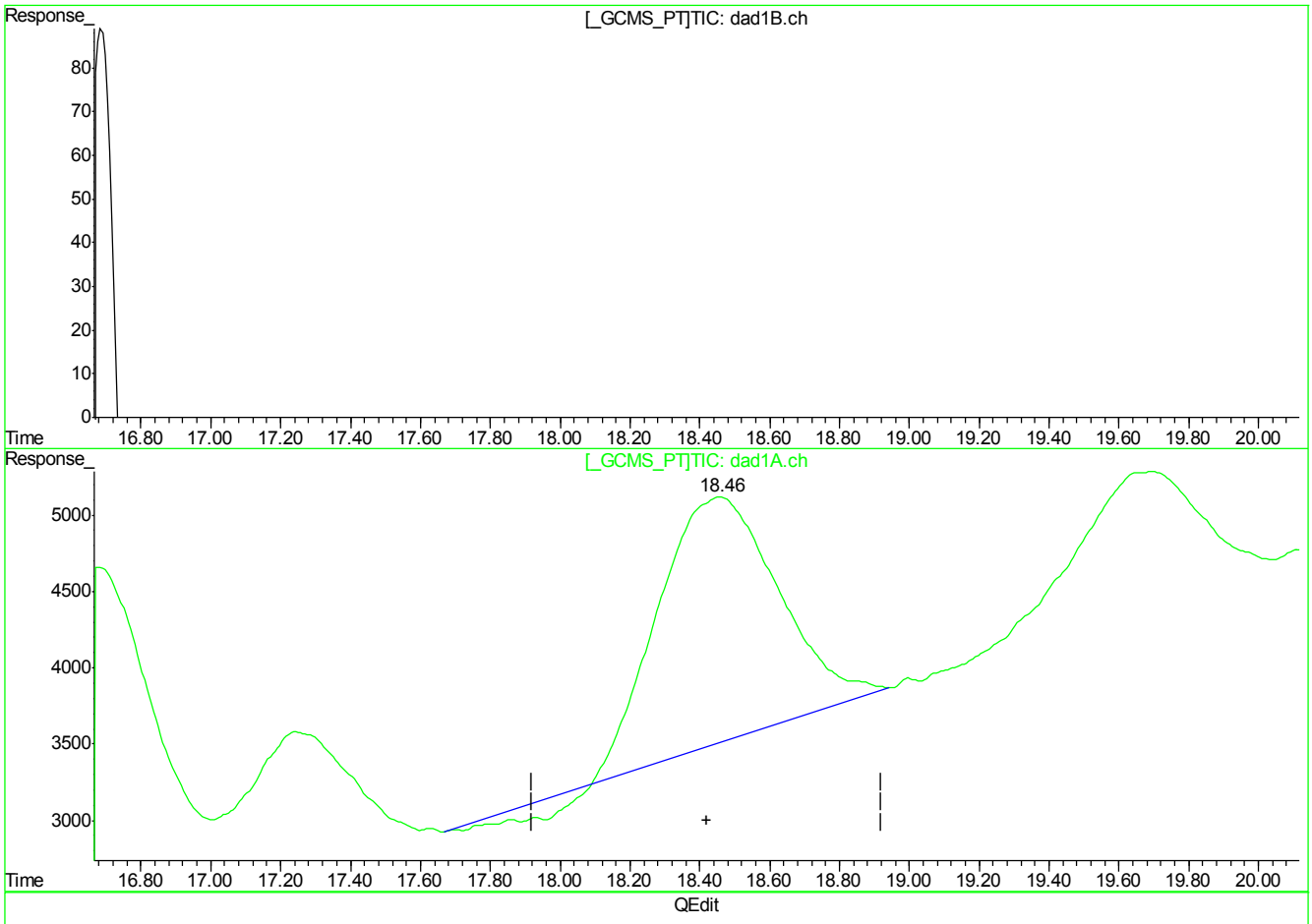
response 419386

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:29 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 17.560ppb

response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:32 2017

7.7.11.19

7

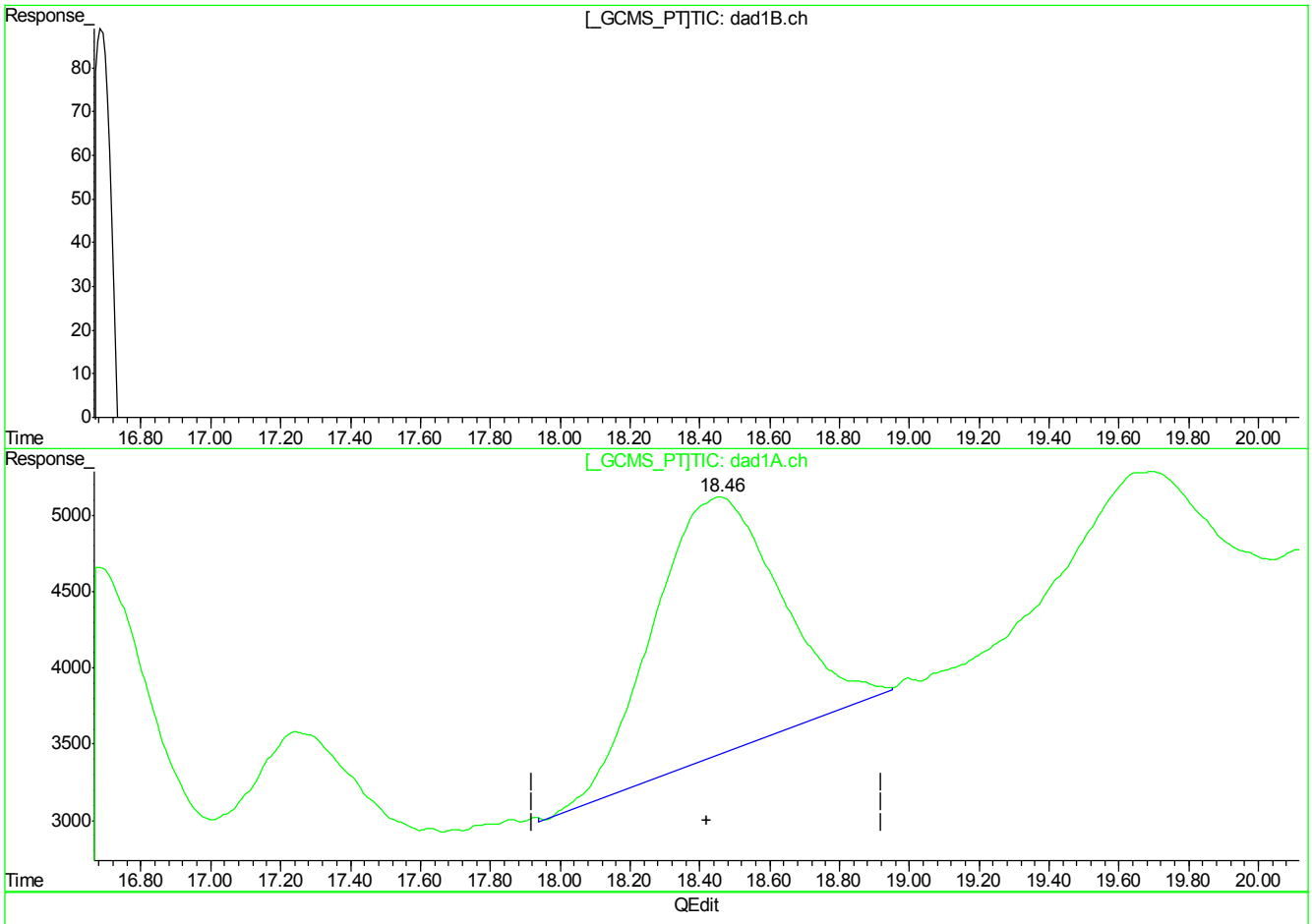
FA53518

GG613826.D edits: 4-Amino-2,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 20.299ppb m

response 428039

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:35 2017

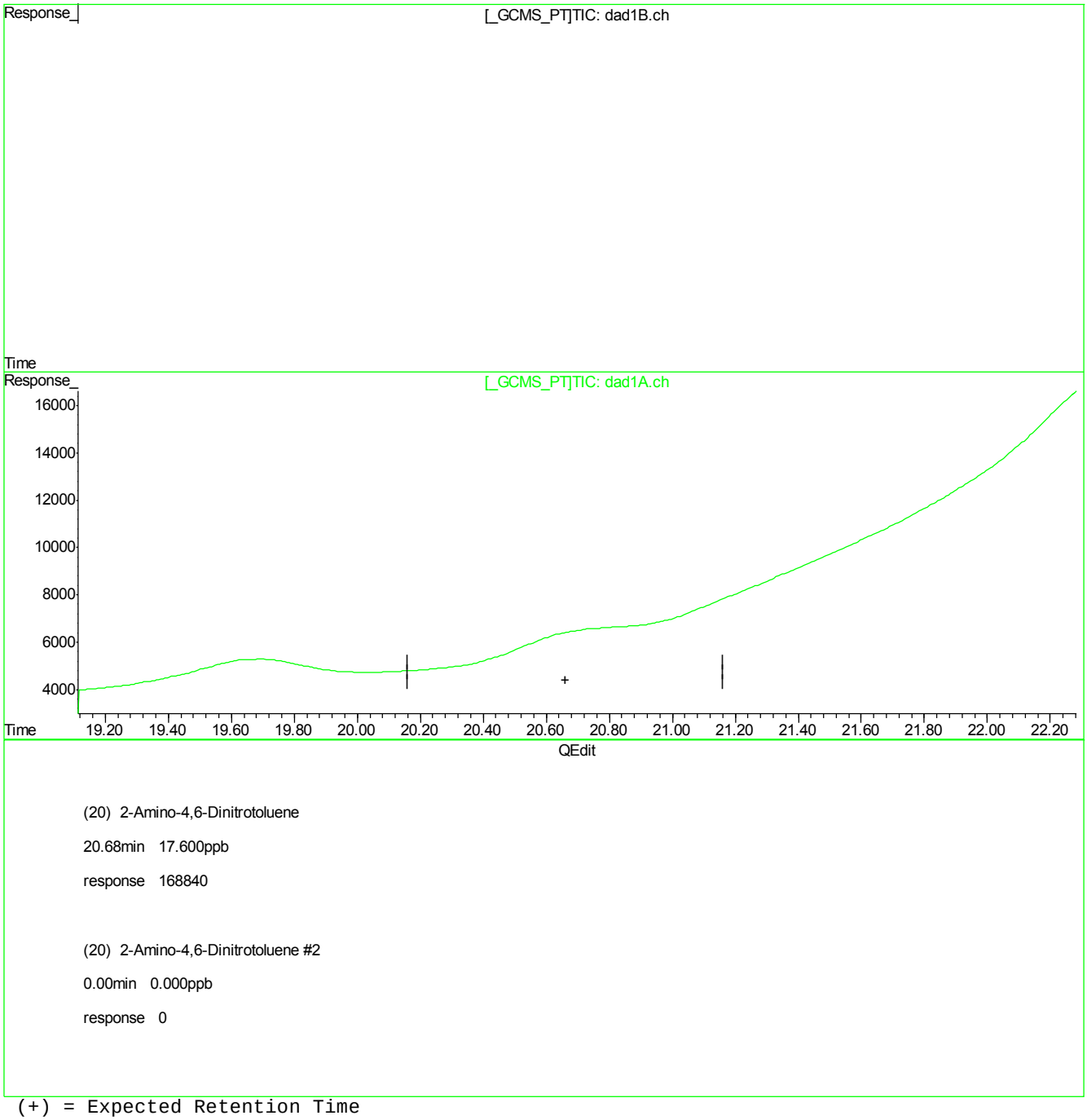
7.7.11.20

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

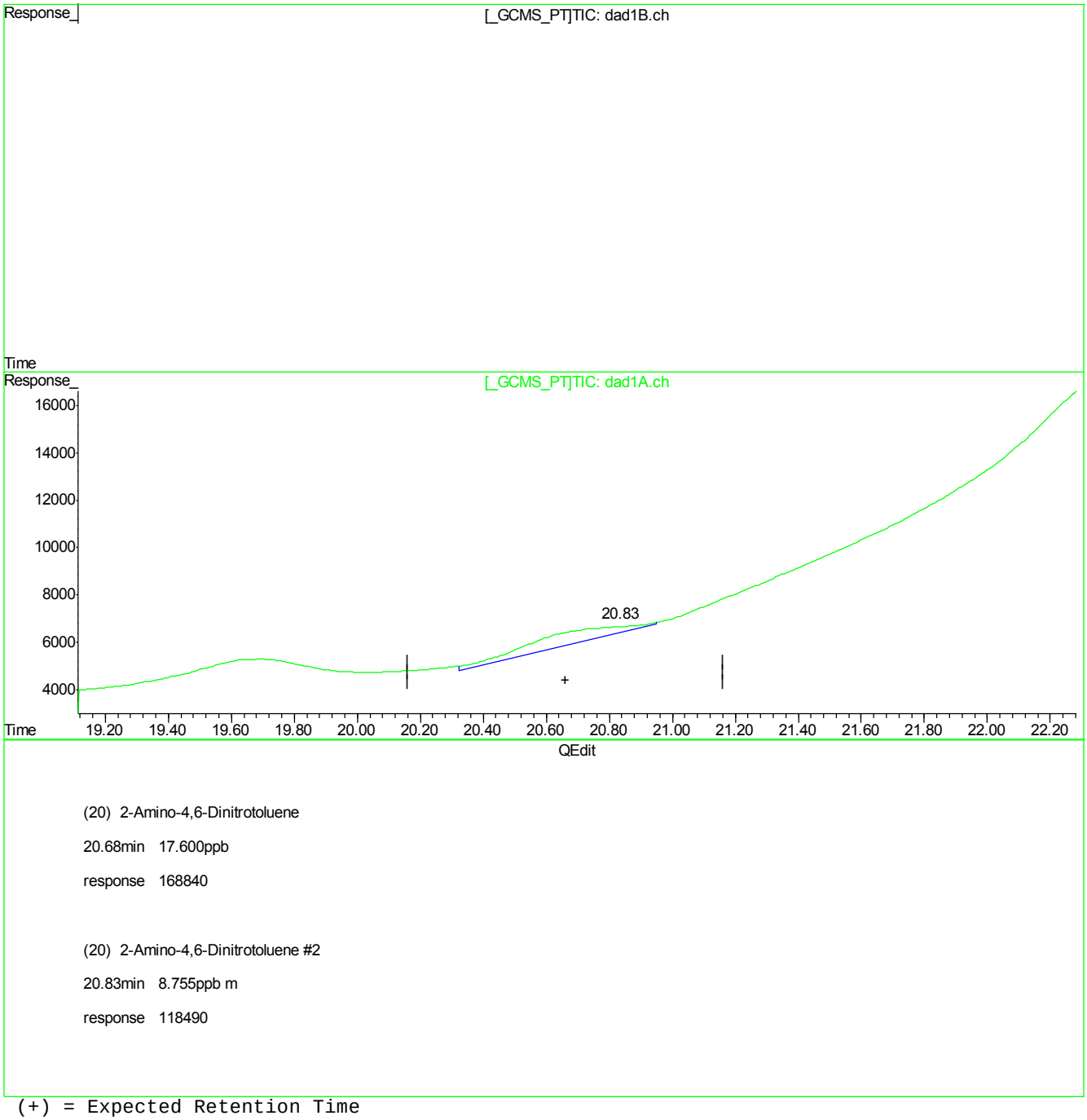


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.68min 17.600ppb

response 168840

(20) 2-Amino-4,6-Dinitrotoluene #2

20.83min 8.755ppb m

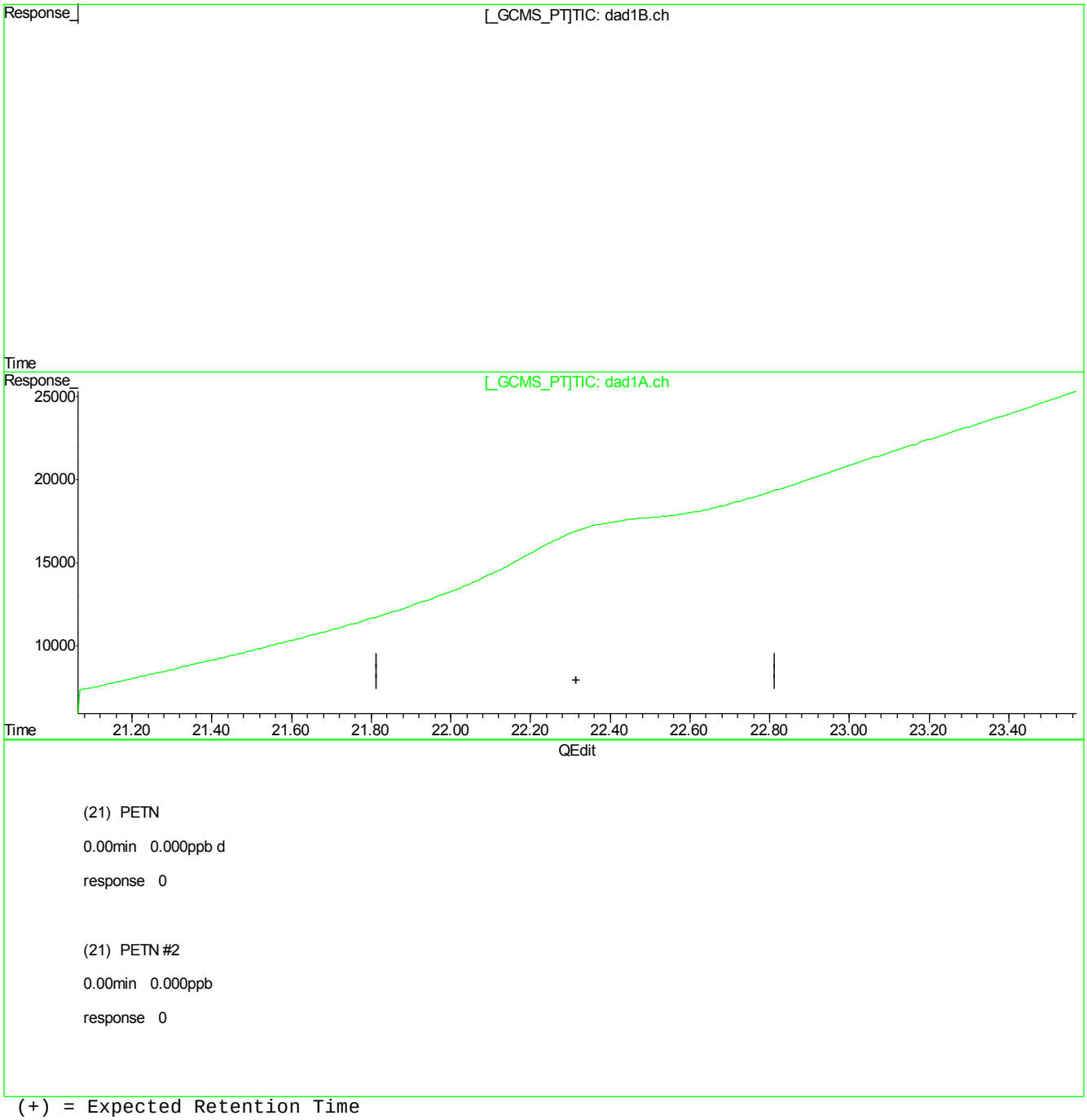
response 118490

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

0.00min 0.000ppb

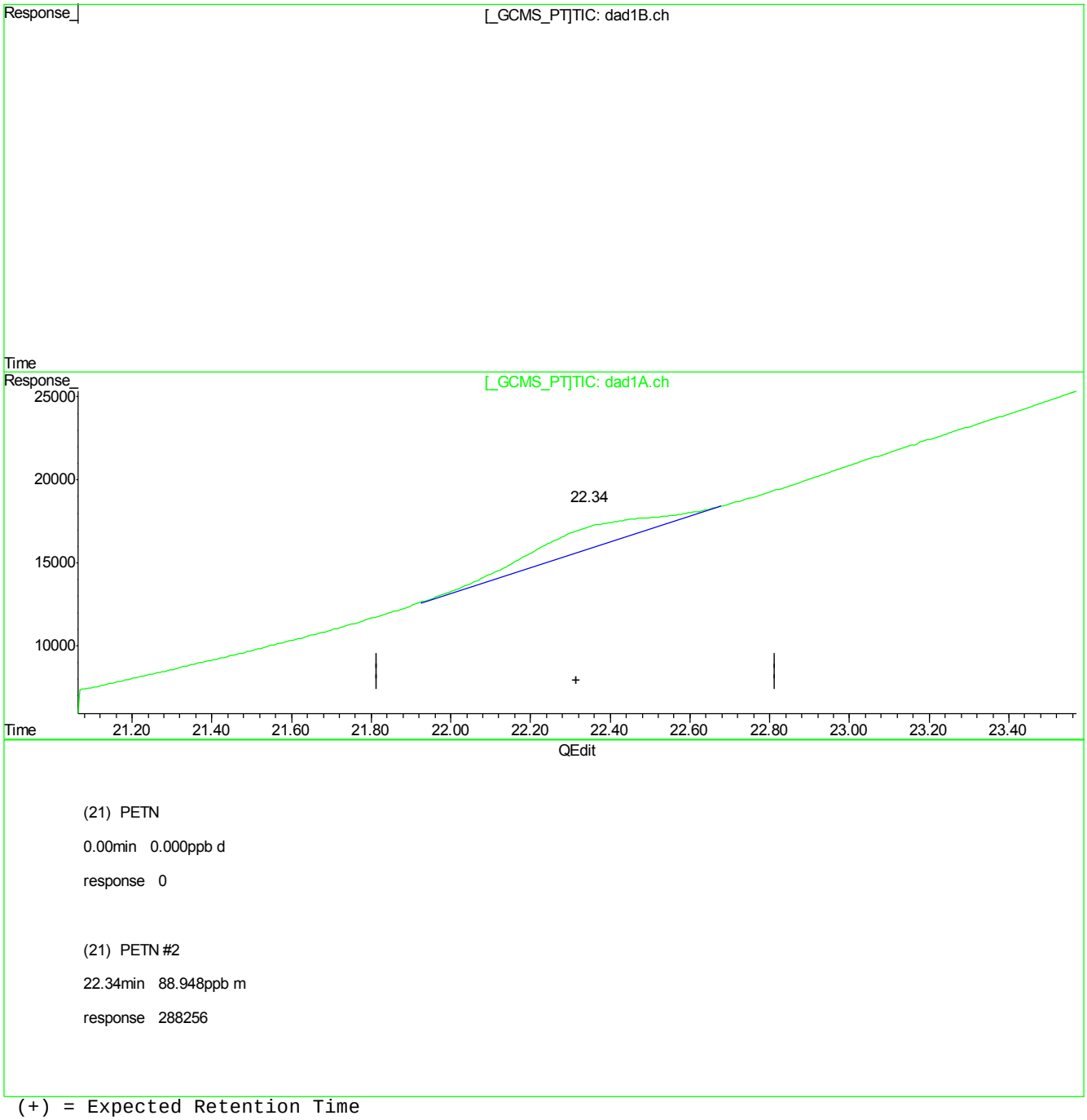
response 0

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:59 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.58	258823	507389	43.903	40.501m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		8.78%#	8.10%#
	Target Compounds						
1)	TNX	5.00	5.00	688634	692781	81.868m	82.143m
2)	HMX	5.46	5.46	164910	146764	43.415m	38.364m
3)	DNX	5.59	5.59	398344	366564	60.688m	56.040m
4)	MNX	6.67	6.67	346845	346845	71.694	71.694
5)	1,3,5-Trinitrobe	7.55	7.55	515904	514795	50.524	50.436
6)	RDX	8.08	8.08	237032	233498	49.790	49.276
7)	1,3-Dinitrobenze	10.08	10.08	693606	431067	47.654	30.312m
8)	Nitrobenzene	11.08	11.08	439122	444089	57.443	46.645m
9)	2,4,6-Trinitroto	11.88	11.87	493138	618562	48.367	39.514m
10)	Nitroglycerin	0.00	12.71	0	801043	N.D. d	218.113m
11)	Tetryl	13.28	13.27	407817	746662	59.454	61.159m
13)	2,6-Dinitrotolue	14.90	14.89	359440	552975	51.700	50.694m
14)	2,4-Dinitrotolue	15.63	15.65	660258	863855	49.688	86.988m#
15)	o-Nitrotoluene	17.23	17.24	284138	463485	67.838	81.127
16)	3,5-Dinitroanili	16.66	16.67	541983	858371	51.141	47.914
17)	p-Nitrotoluene	18.40	18.43	584278	976483	50.781	46.253
18)	4-Amino-2,6-Dini	18.40	18.43	584278	976483	50.781	46.253
19)	m-Nitrotoluene	19.66	19.66	285765	365933	58.777	38.687m
20)	2-Amino-4,6-Dini	20.66	20.66	440998	398969	45.970	29.479m
21)	PETN	0.00	22.39	0	664952	N.D. d	205.186m

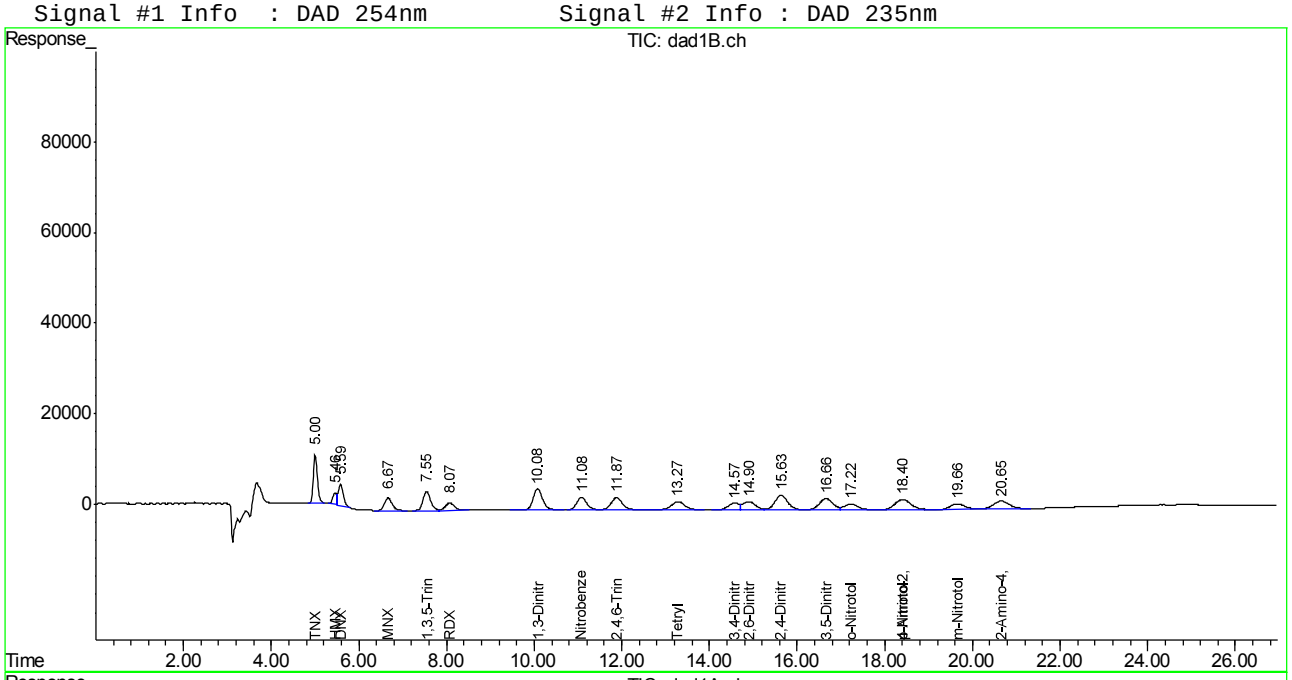
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 13:37:51 2017 Page 1

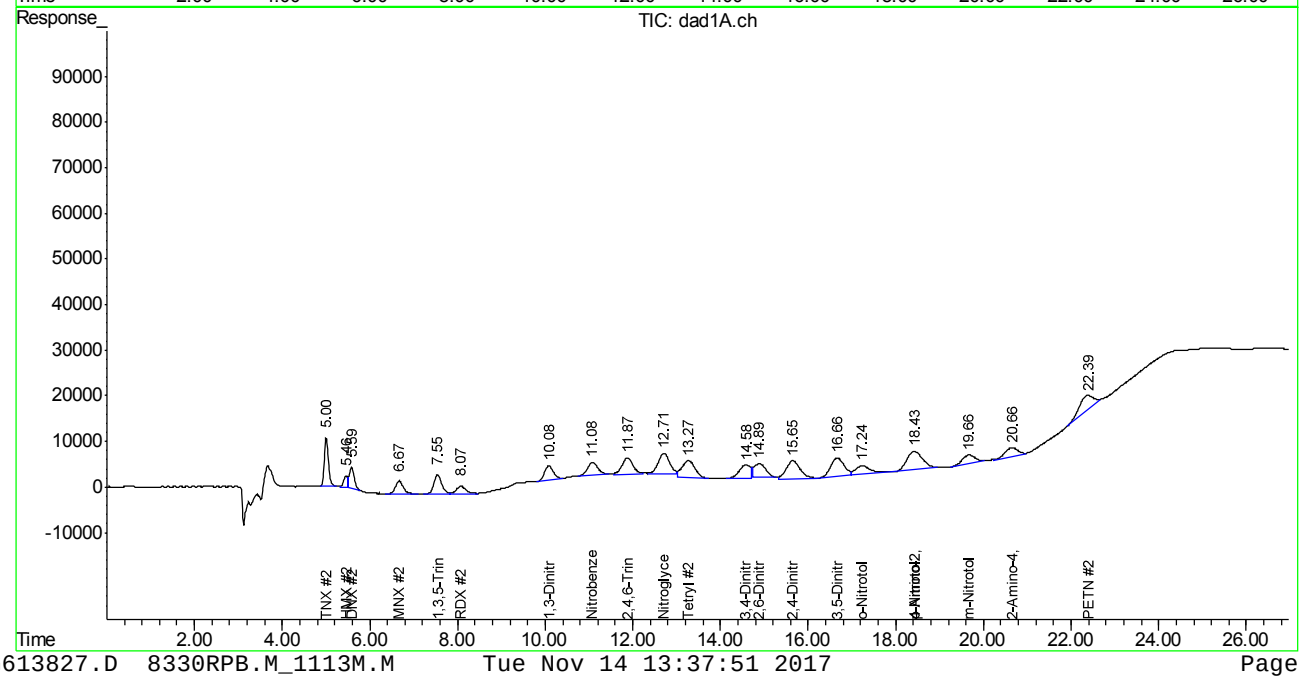
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:56 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

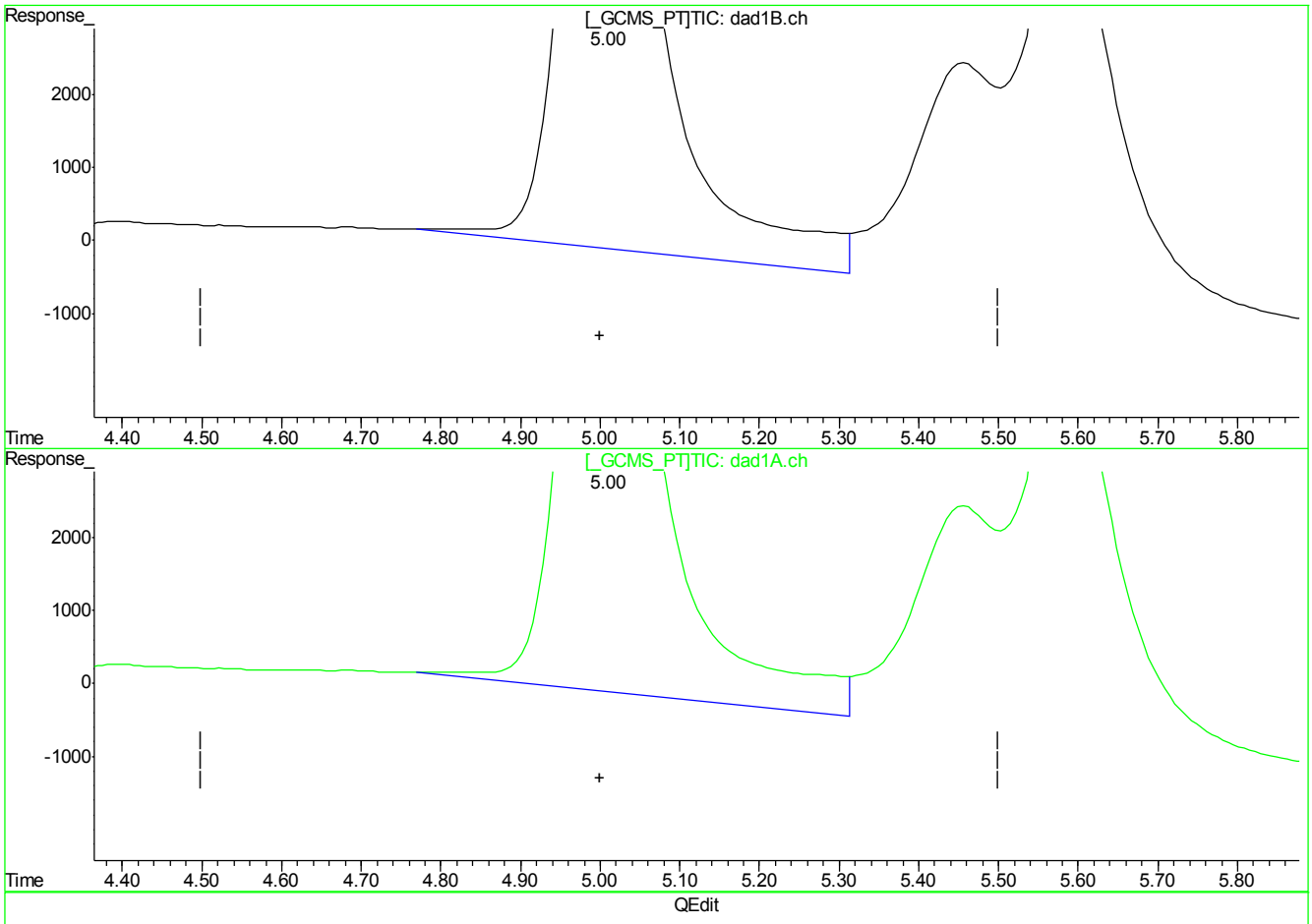
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613827.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:05	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.59	Poorly defined baseline
DNX		2	5.59	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.58	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.65	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.66	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.66	Poorly defined baseline
PETN	78-11-5	2	22.39	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.01min 93.407ppb

response 785694

(1) TNX #2

5.01min 93.160ppb

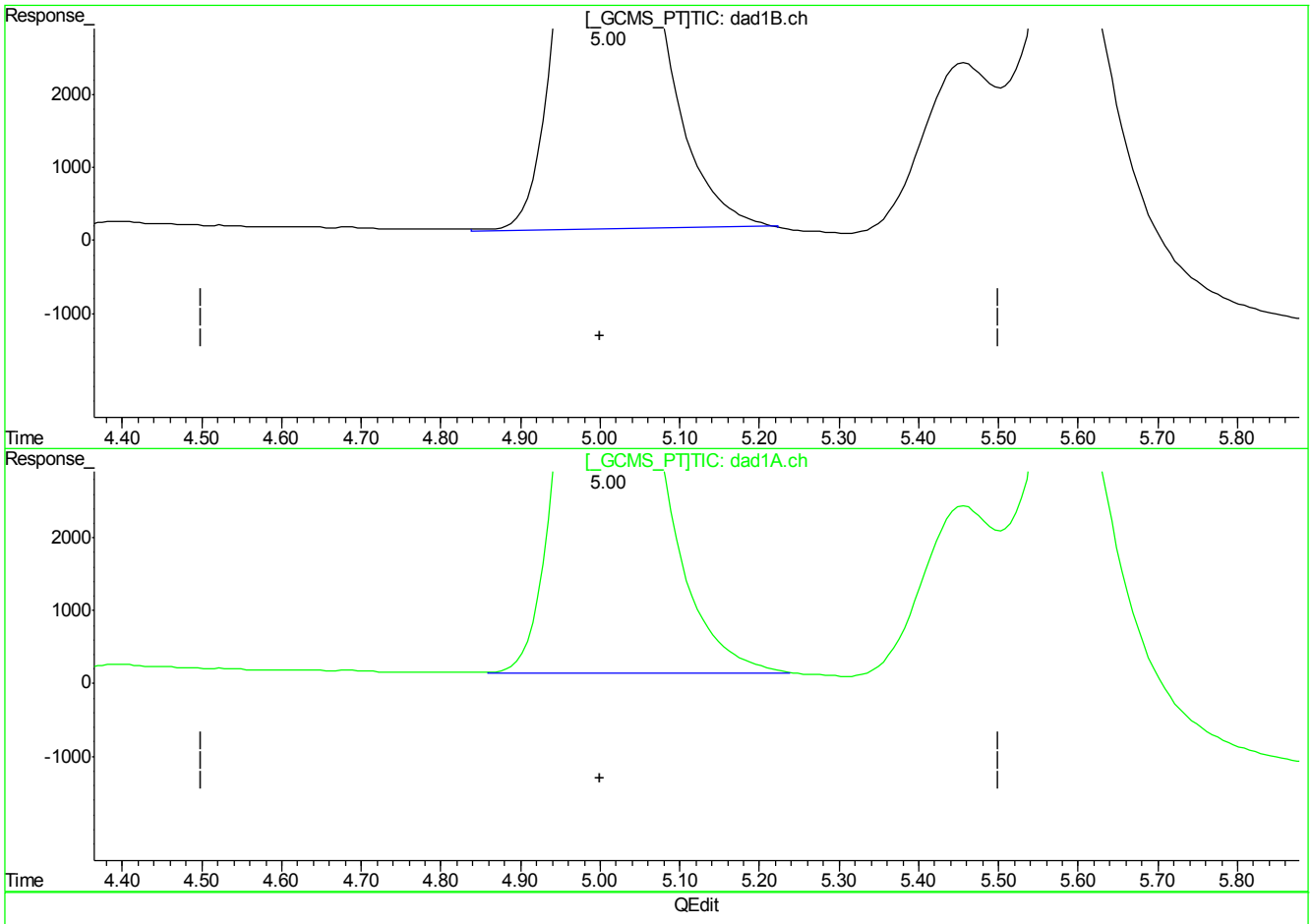
response 785694

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.00min 81.868ppb m

response 688634

(1) TNX #2

5.00min 82.143ppb m

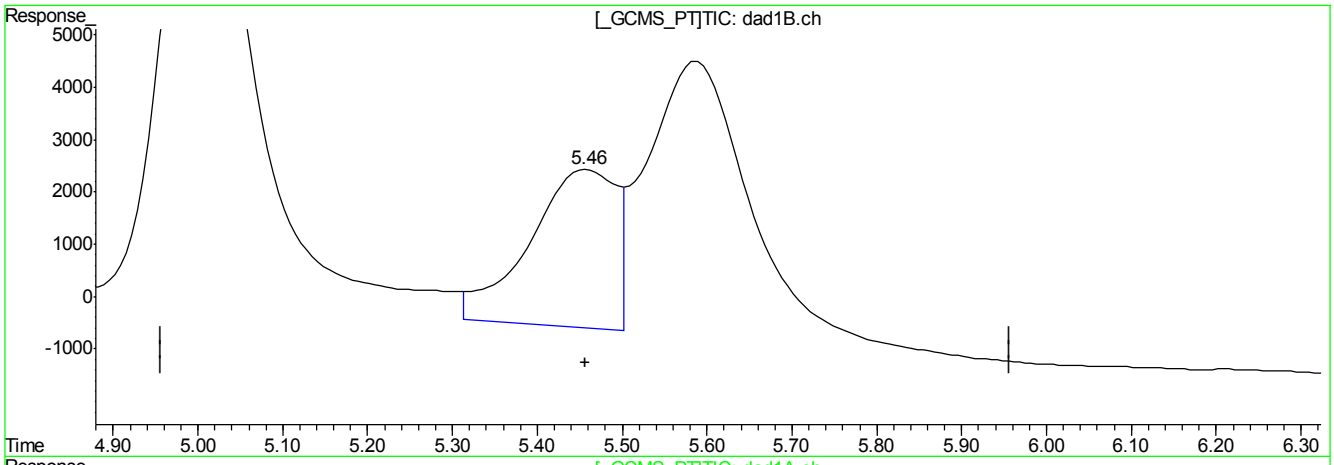
response 692781

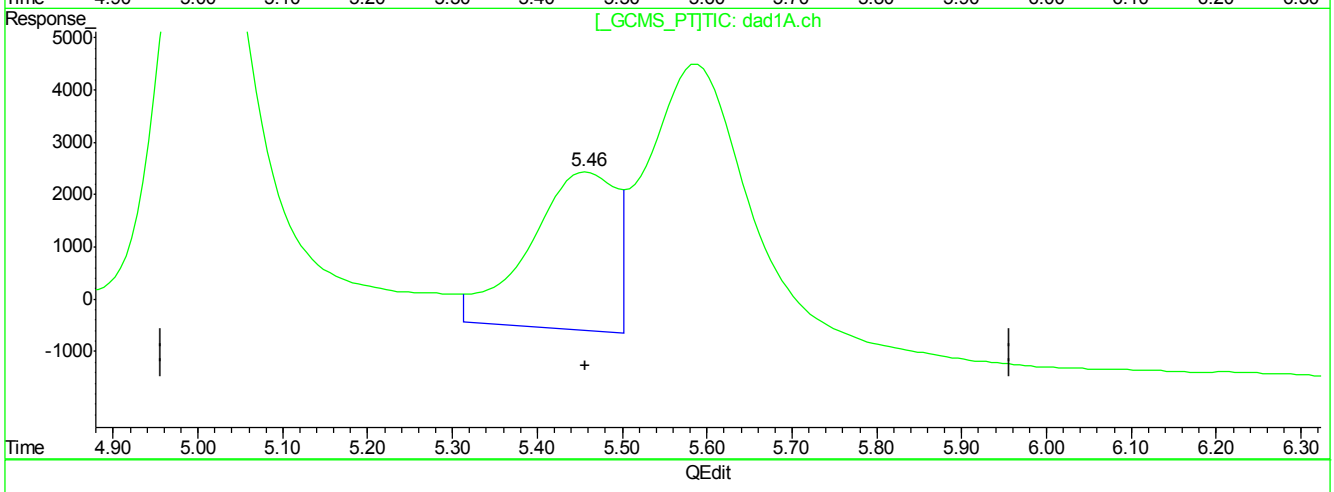
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:32 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.46min 55.811ppb

response 211996

(2) HMX #2

5.46min 55.416ppb

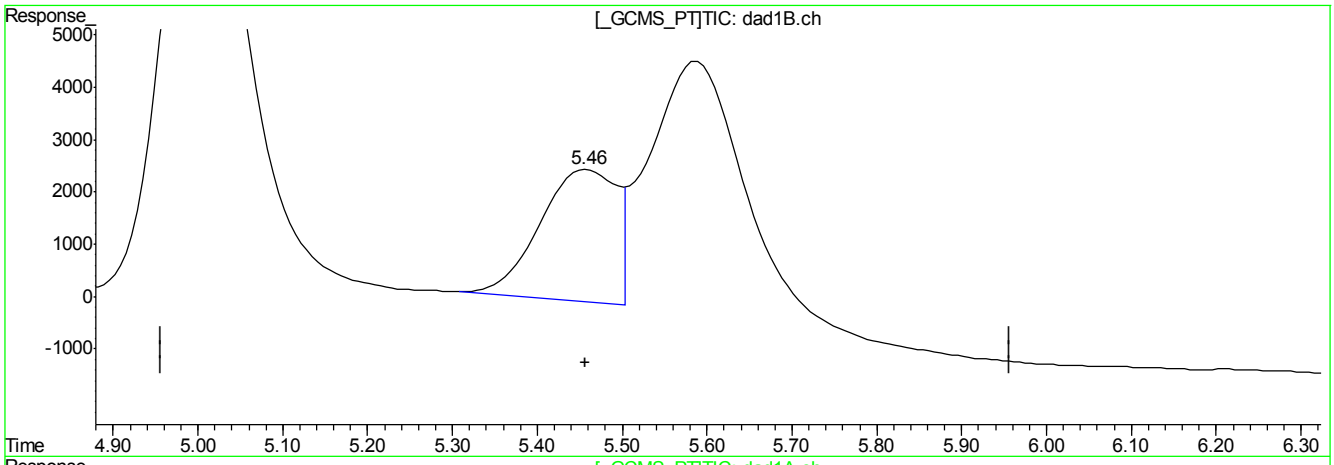
response 211996

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 43.415ppb m

response 164910

(2) HMX #2

5.46min 38.364ppb m

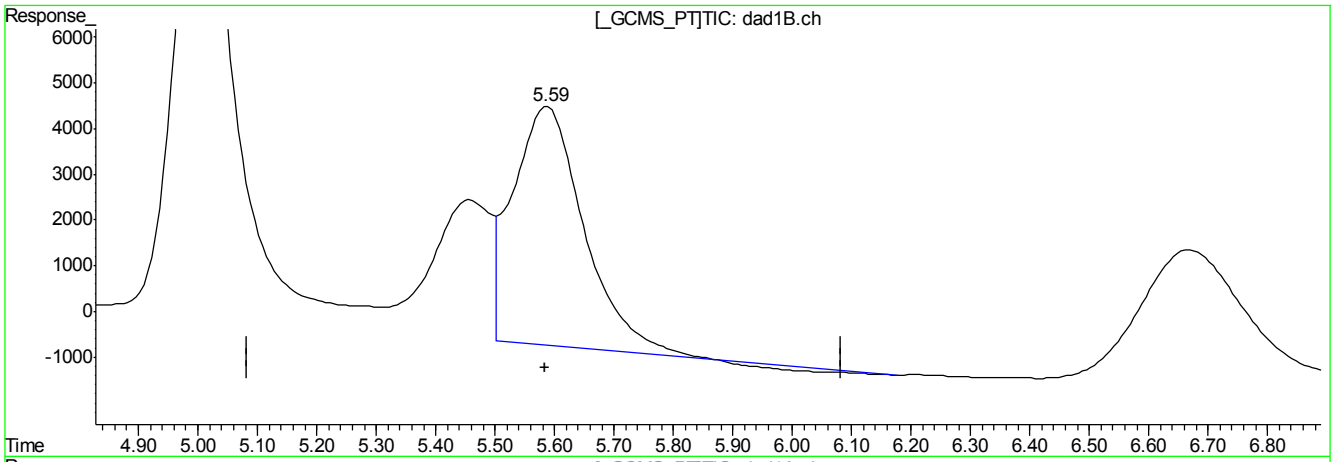
response 146764

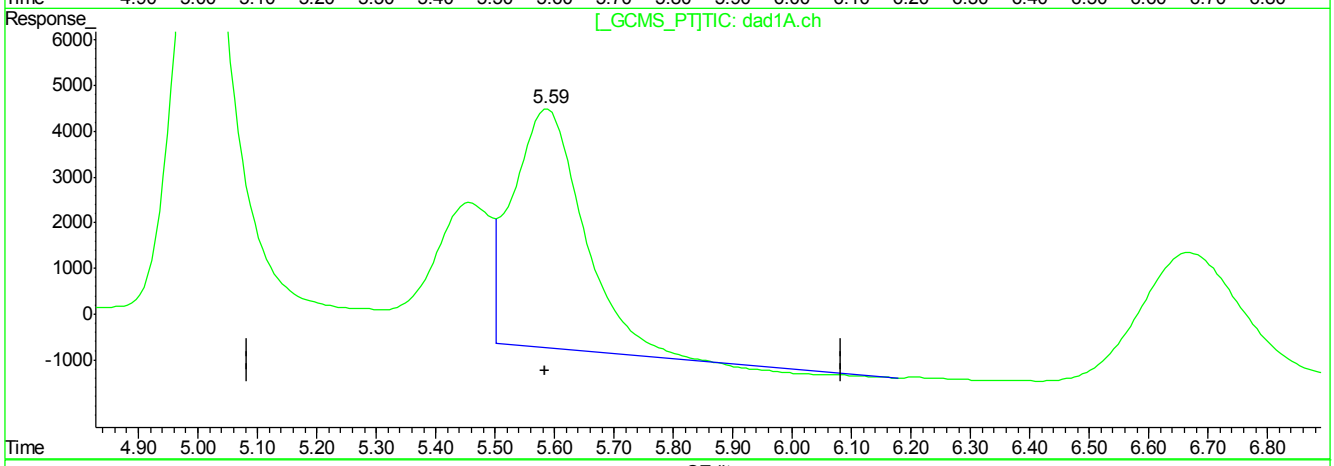
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:41 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.59min 65.551ppb

response 430267

(3) DNX #2

5.59min 65.779ppb

response 430267

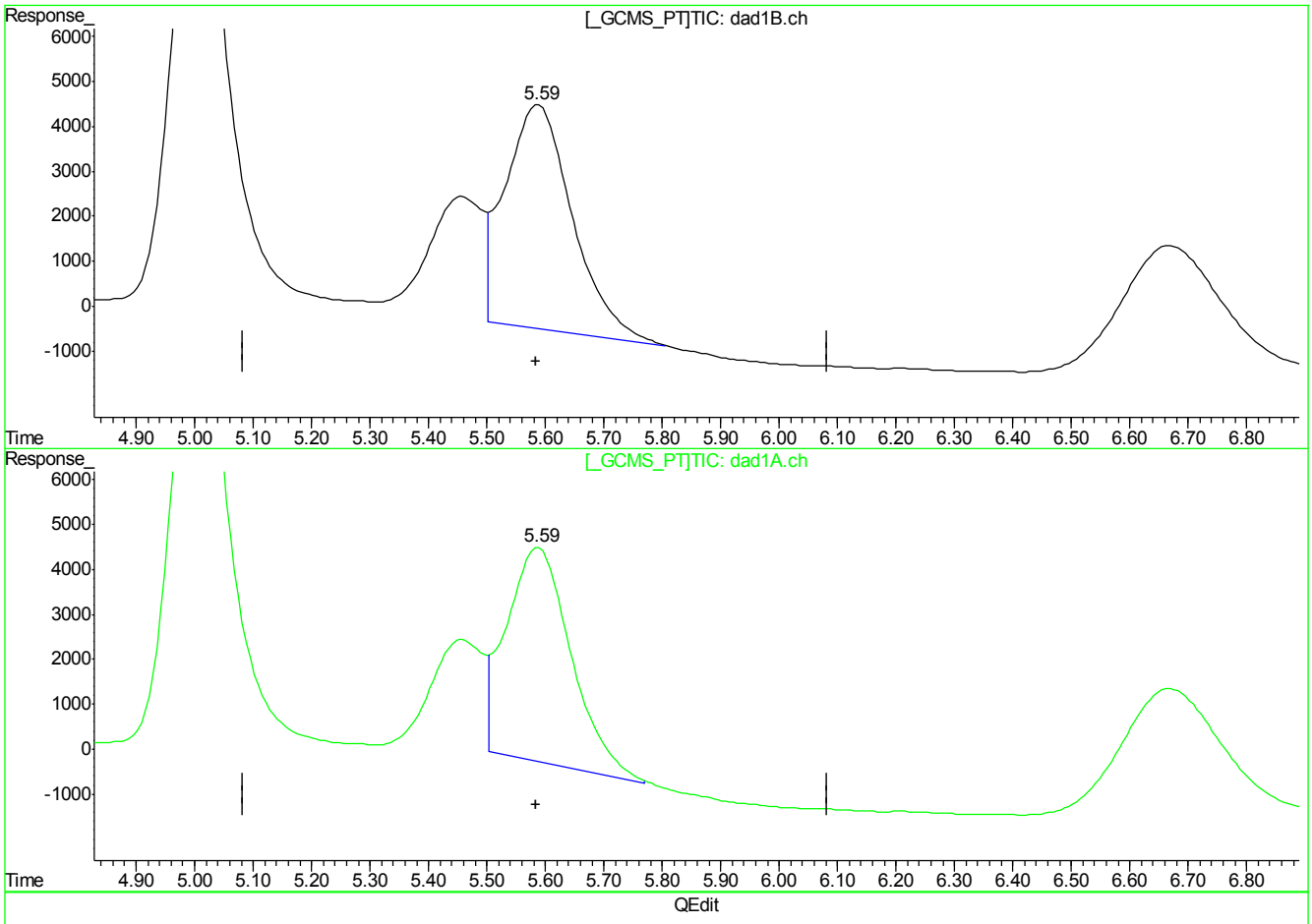
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:45 2017

GG613827.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(3) DNX

5.59min 60.688ppb m

response 398344

(3) DNX #2

5.59min 56.040ppb m

response 366564

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:51 2017

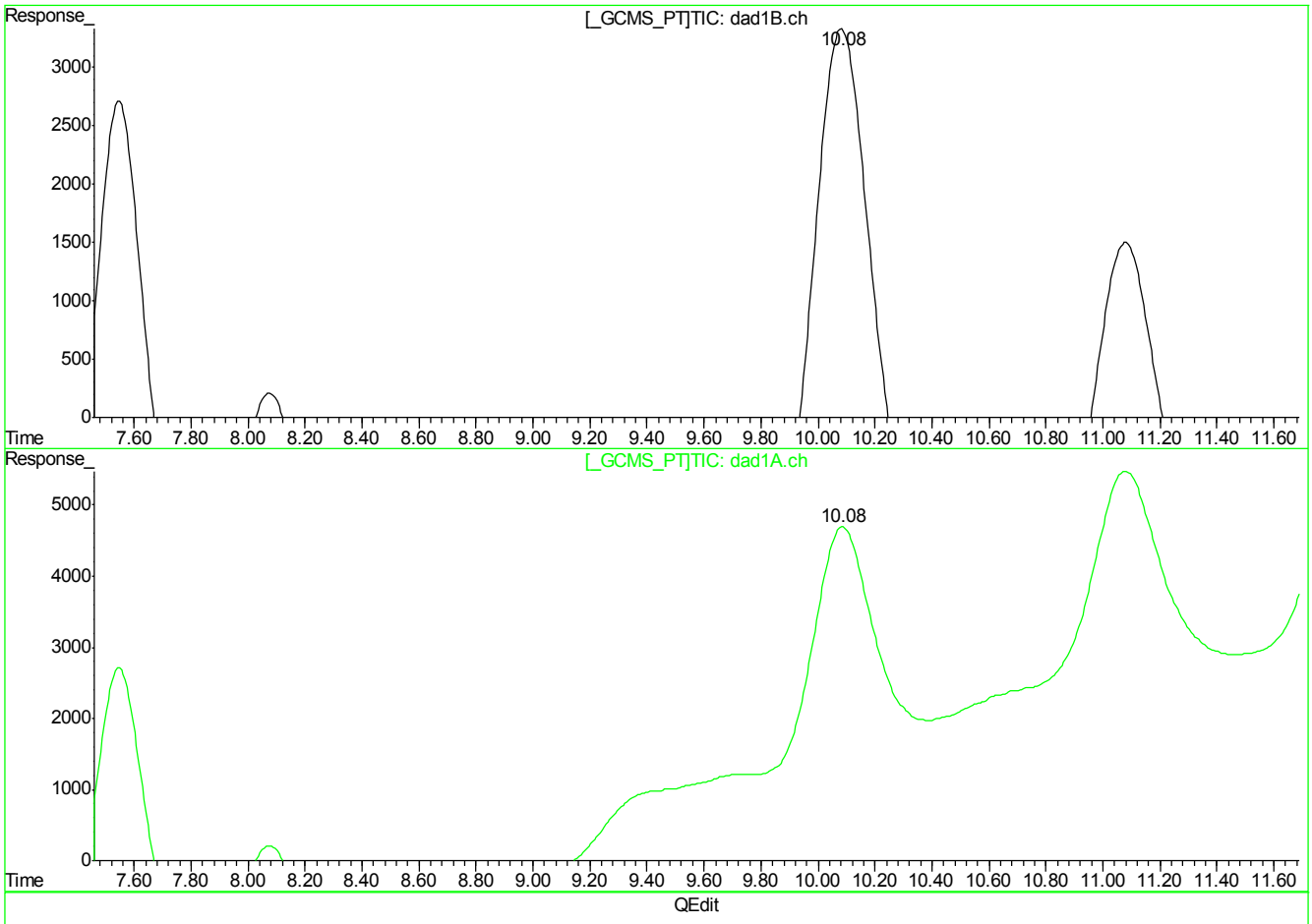
7.7.12.7

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.09min 151.649ppb

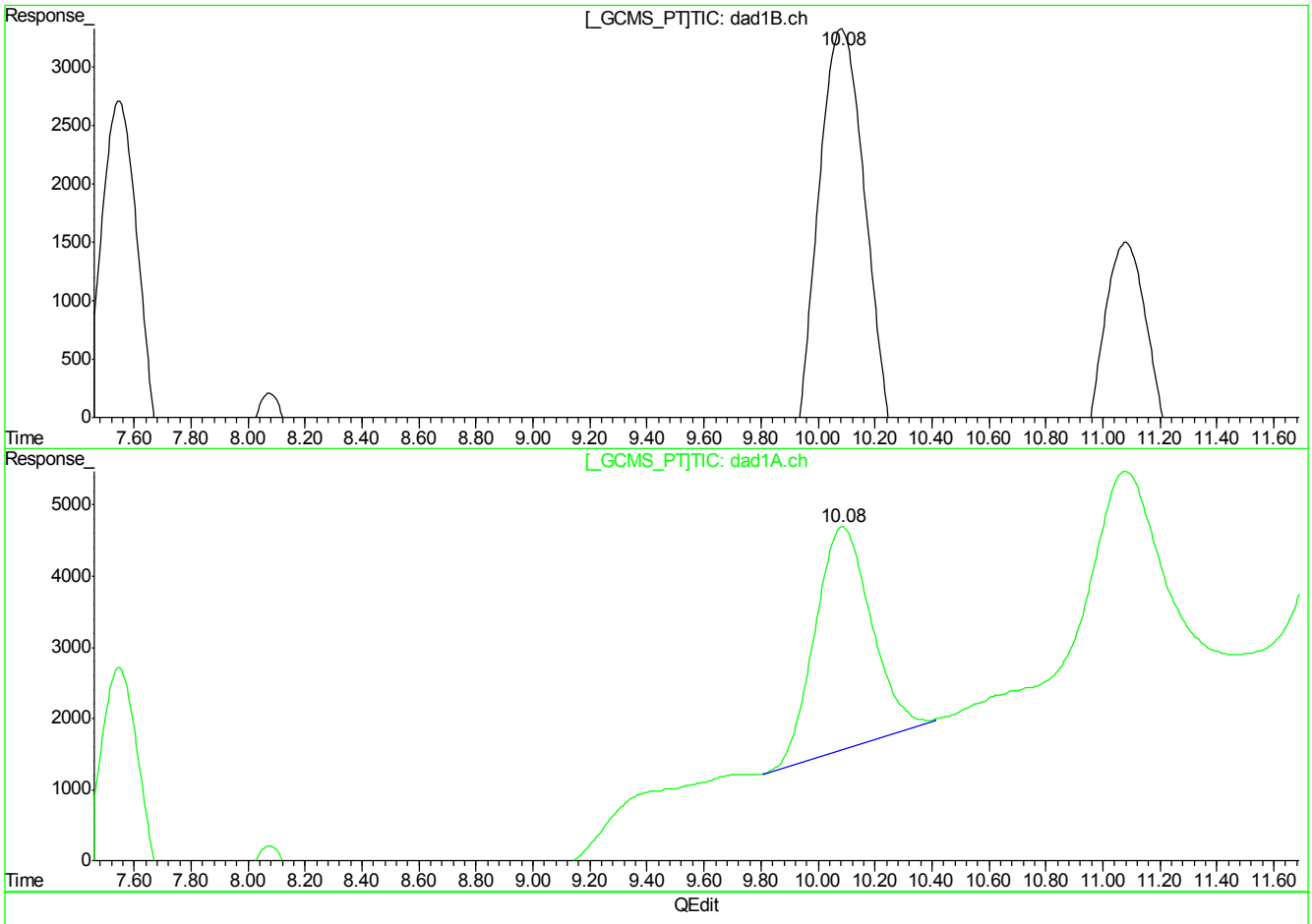
response 2132933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:00 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.08min 30.312ppb m

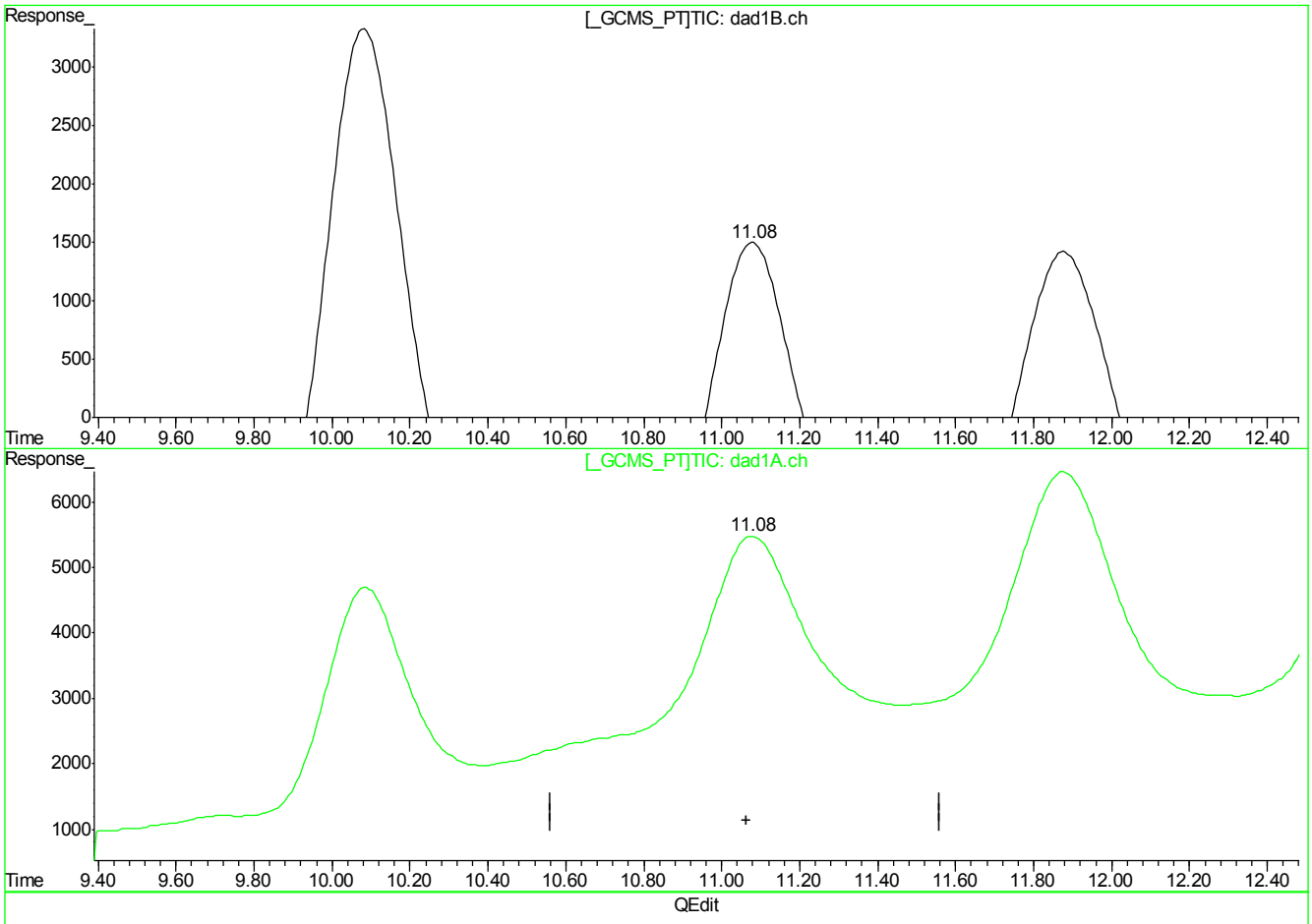
response 431067

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 240.311ppb

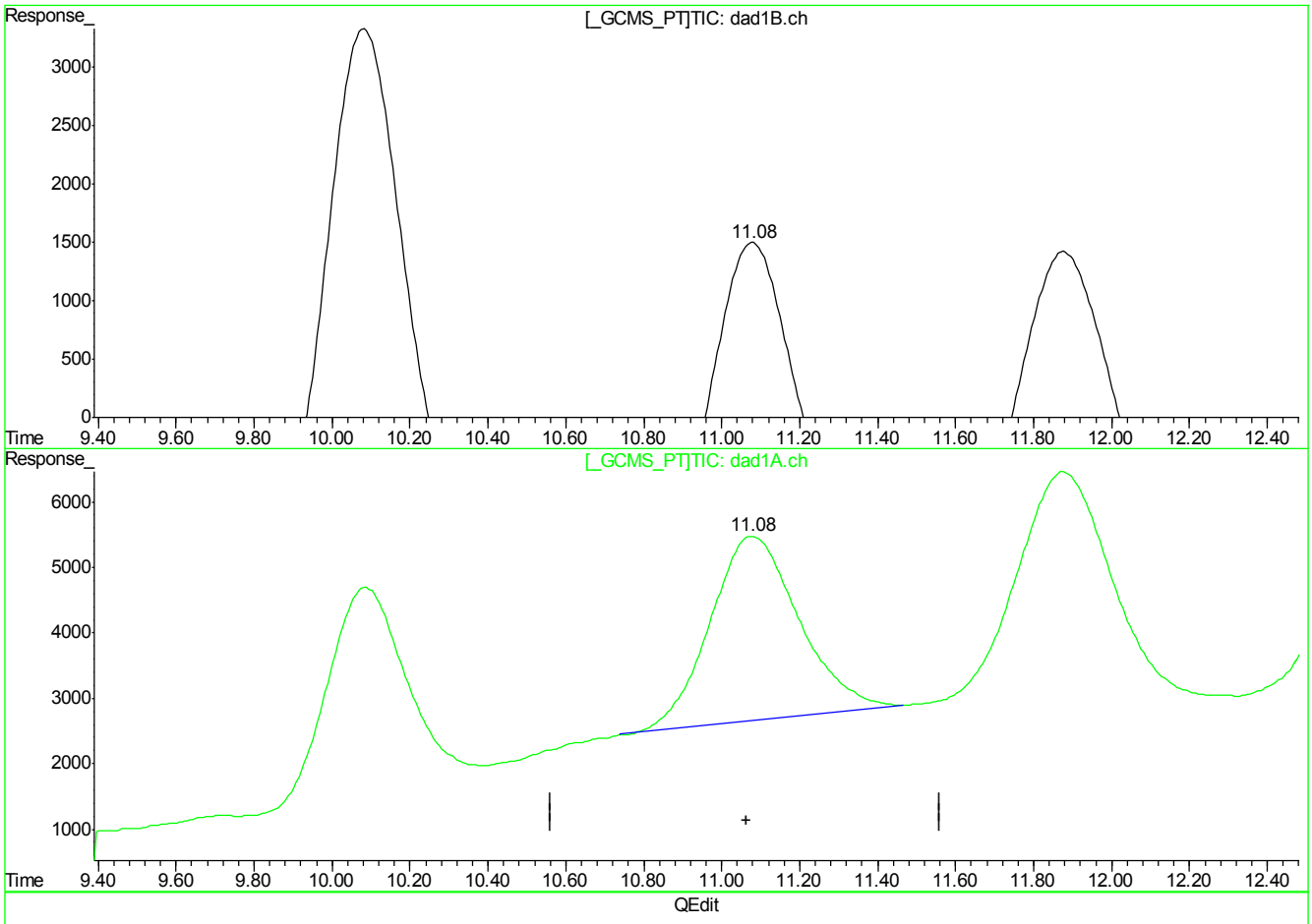
response 2276420

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 46.645ppb m

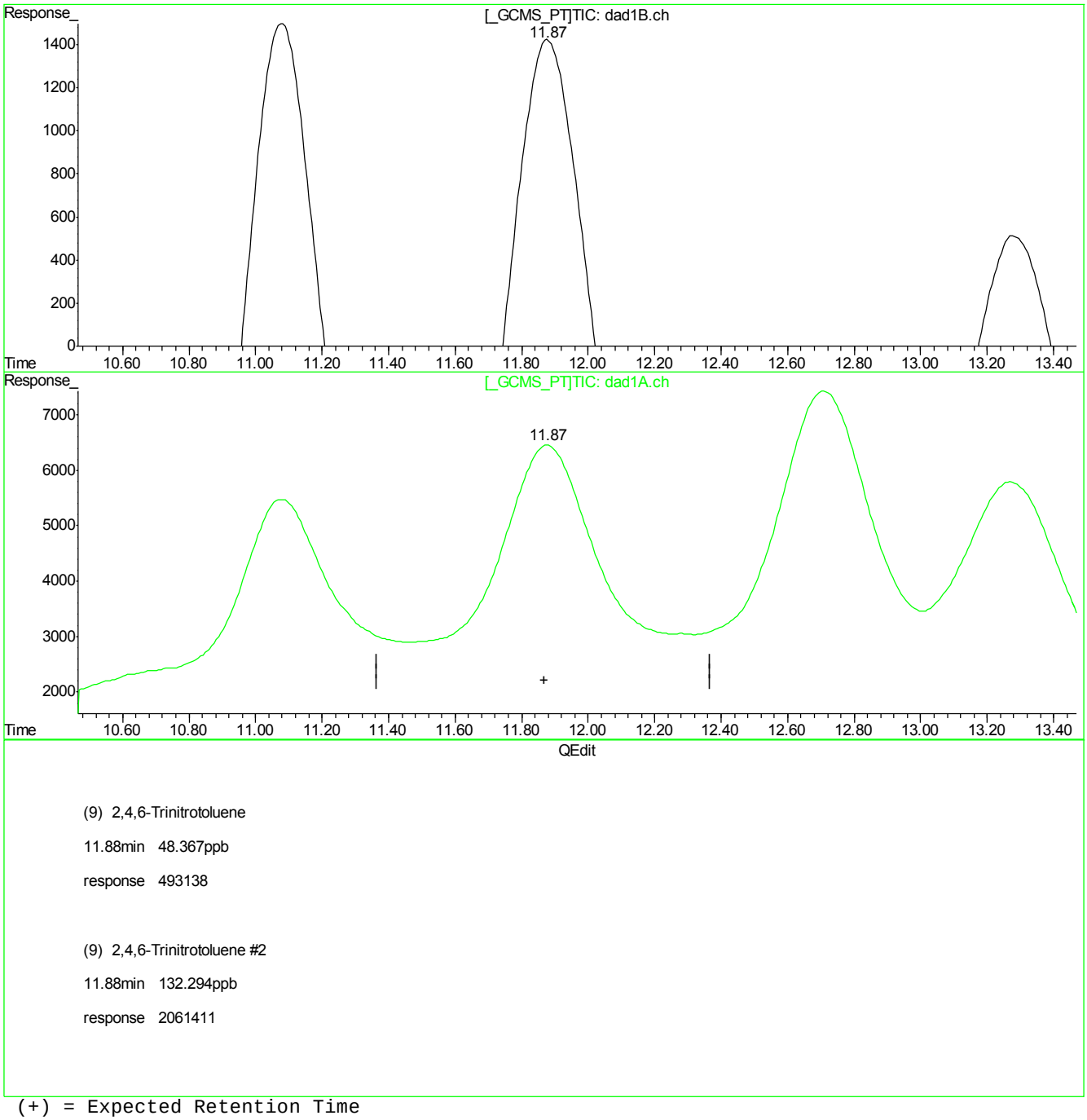
response 444089

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:13 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.88min 132.294ppb

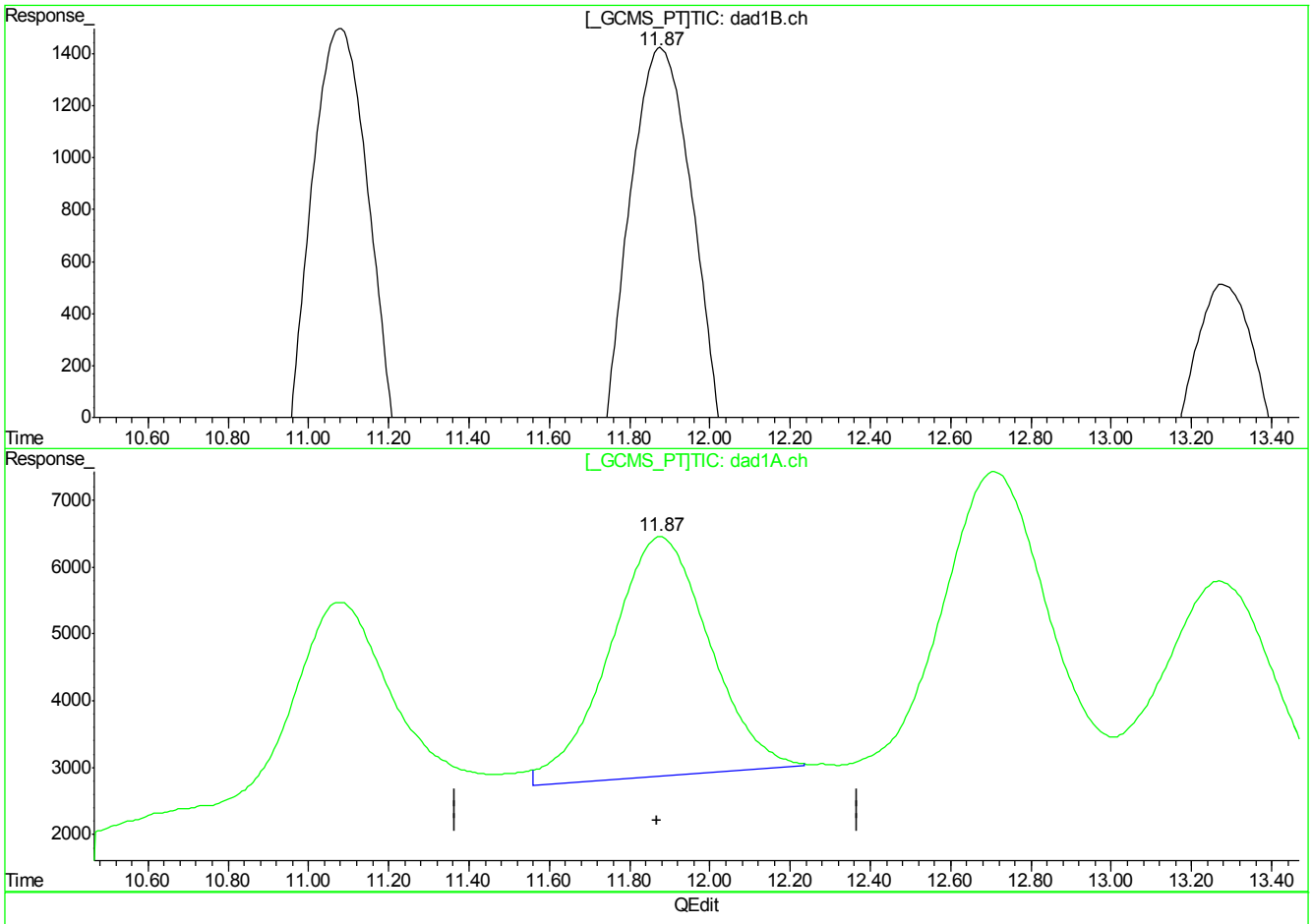
response 2061411

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:16 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.87min 39.514ppb m

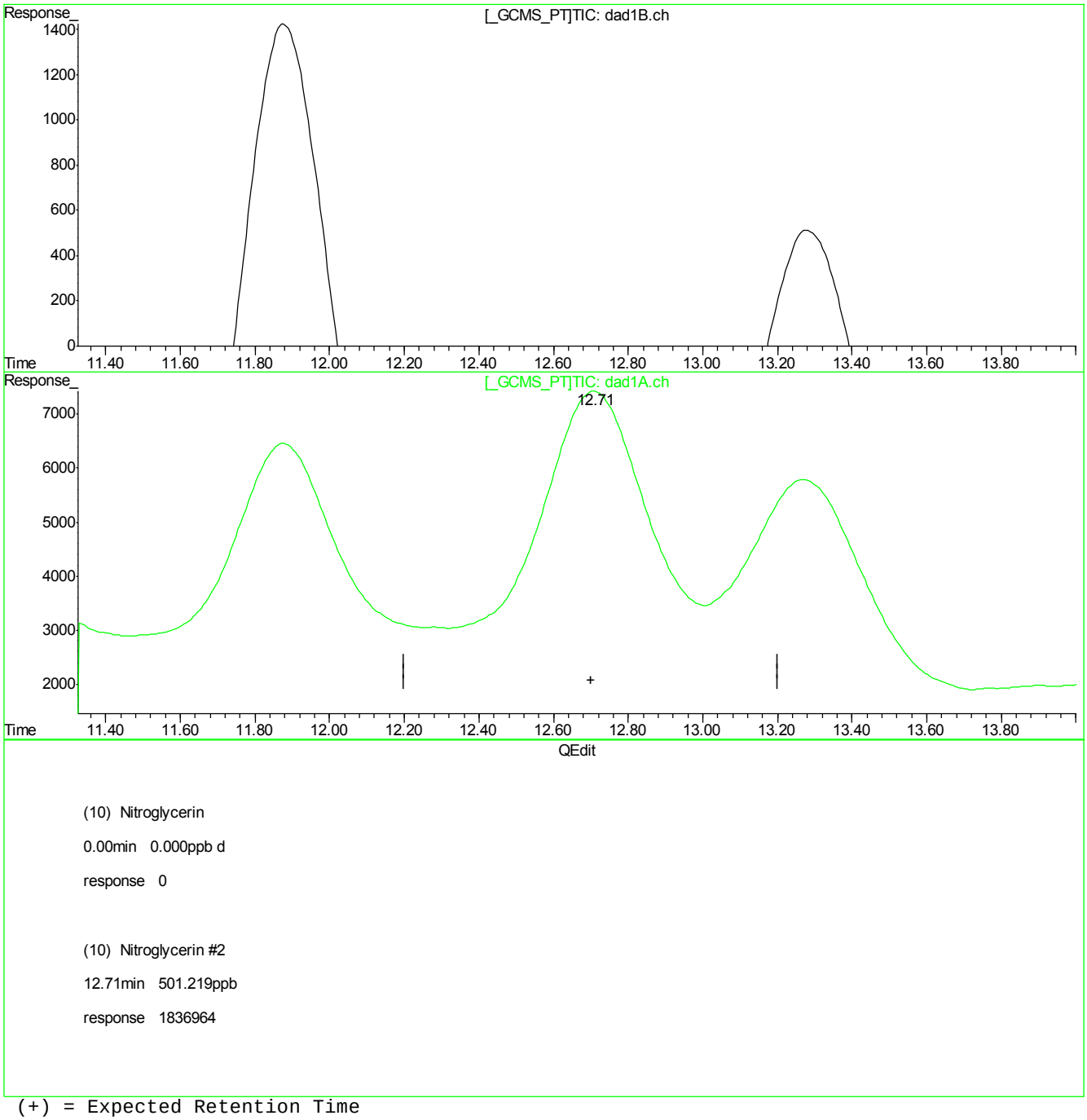
response 618562

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:20 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.71min 501.219ppb

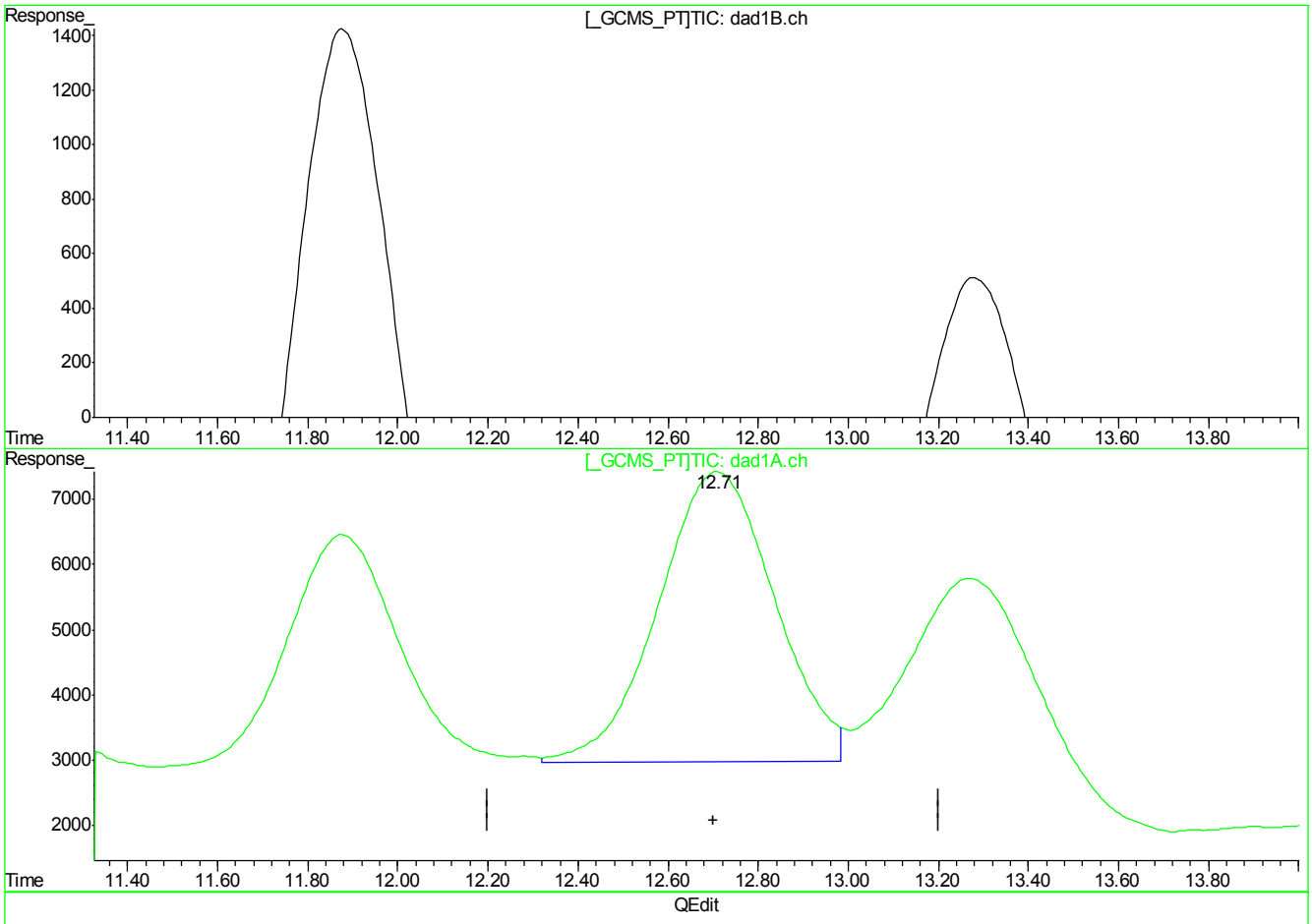
response 1836964

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.71min 218.113ppb m

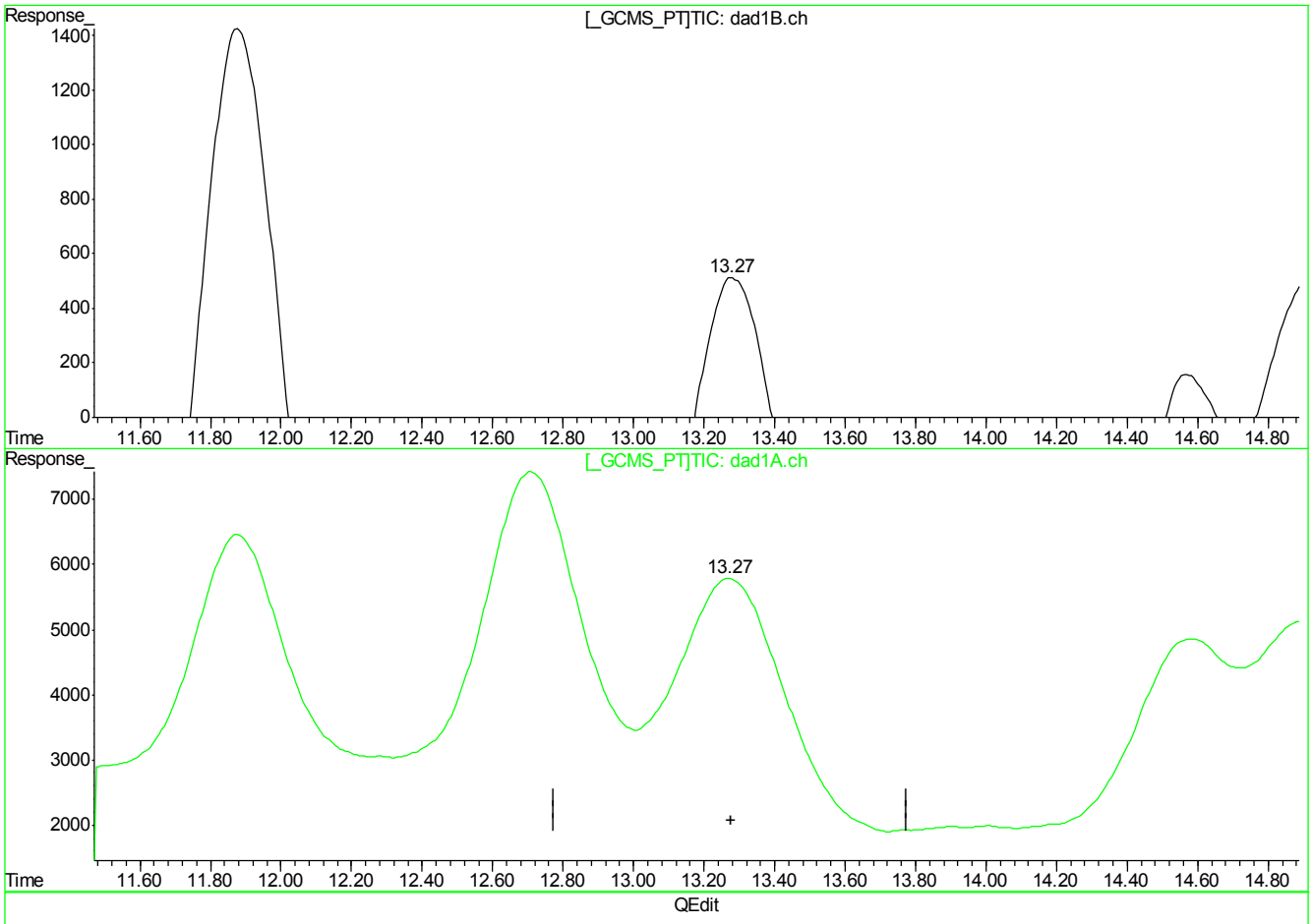
response 801043

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:27 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 109.642ppb

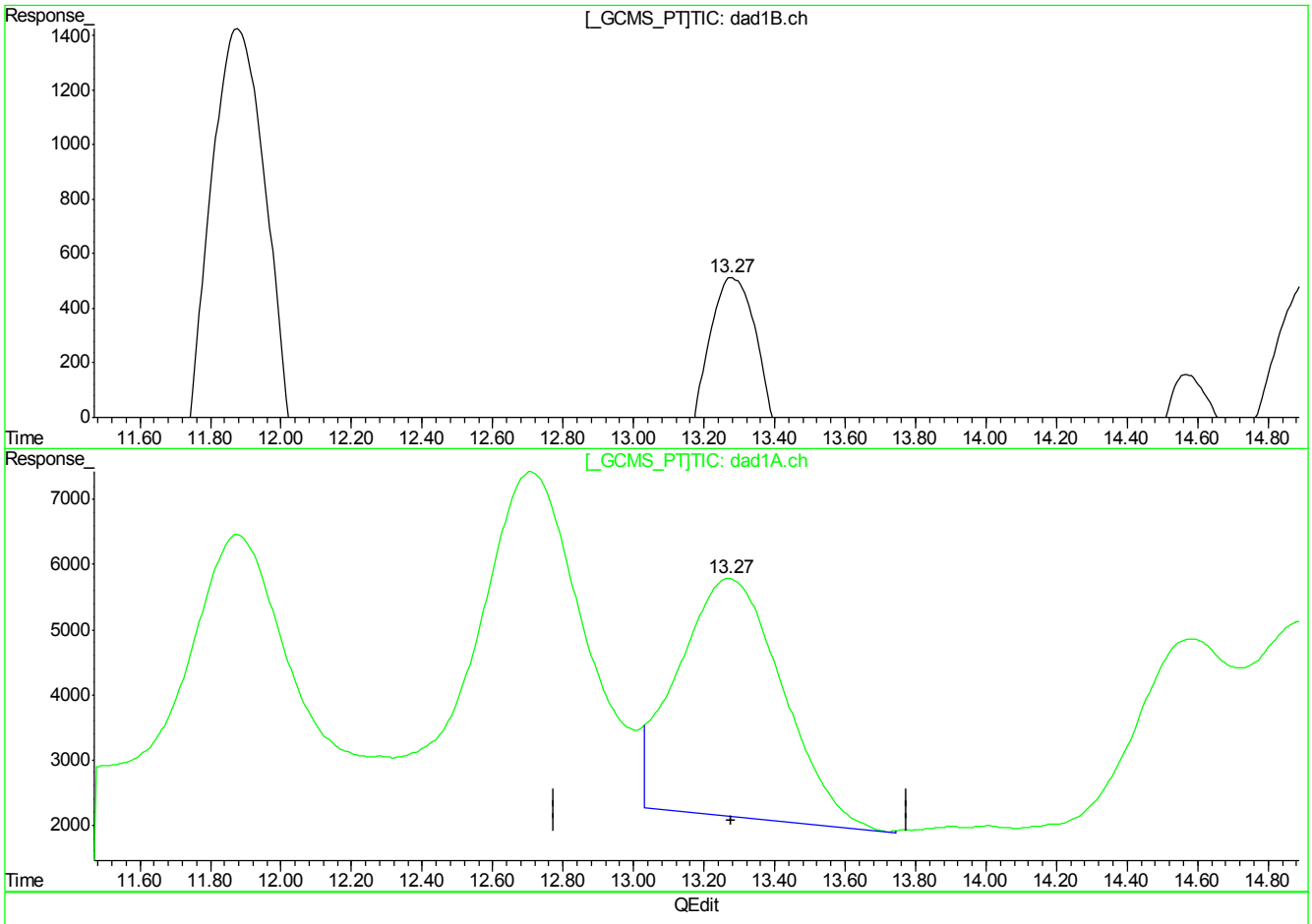
response 1344073

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:30 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 61.159ppb m

response 746662

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:33 2017

7.7.12.17

7

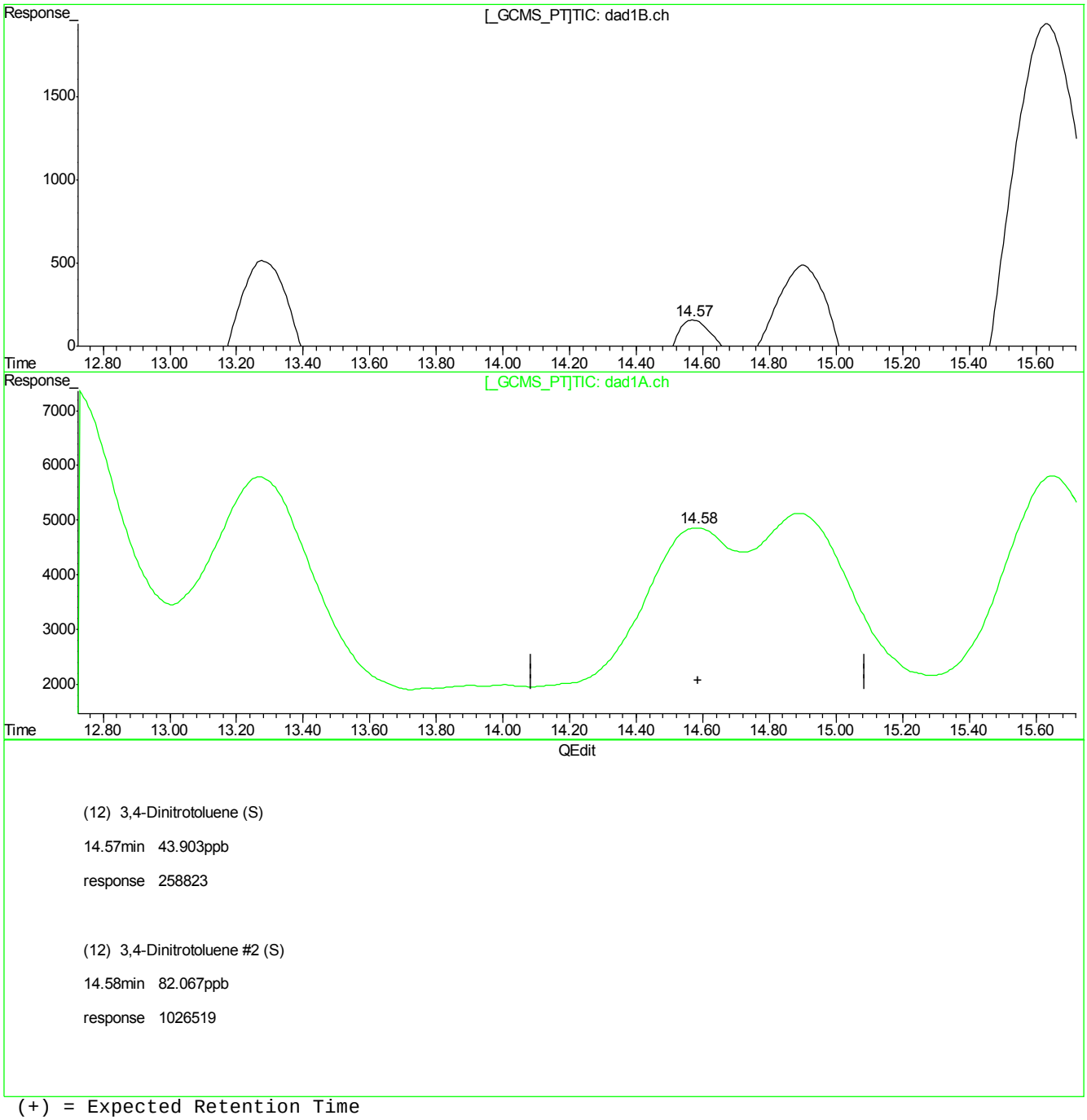
GG613827.D edits: Tetryl

FA53518

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 82.067ppb

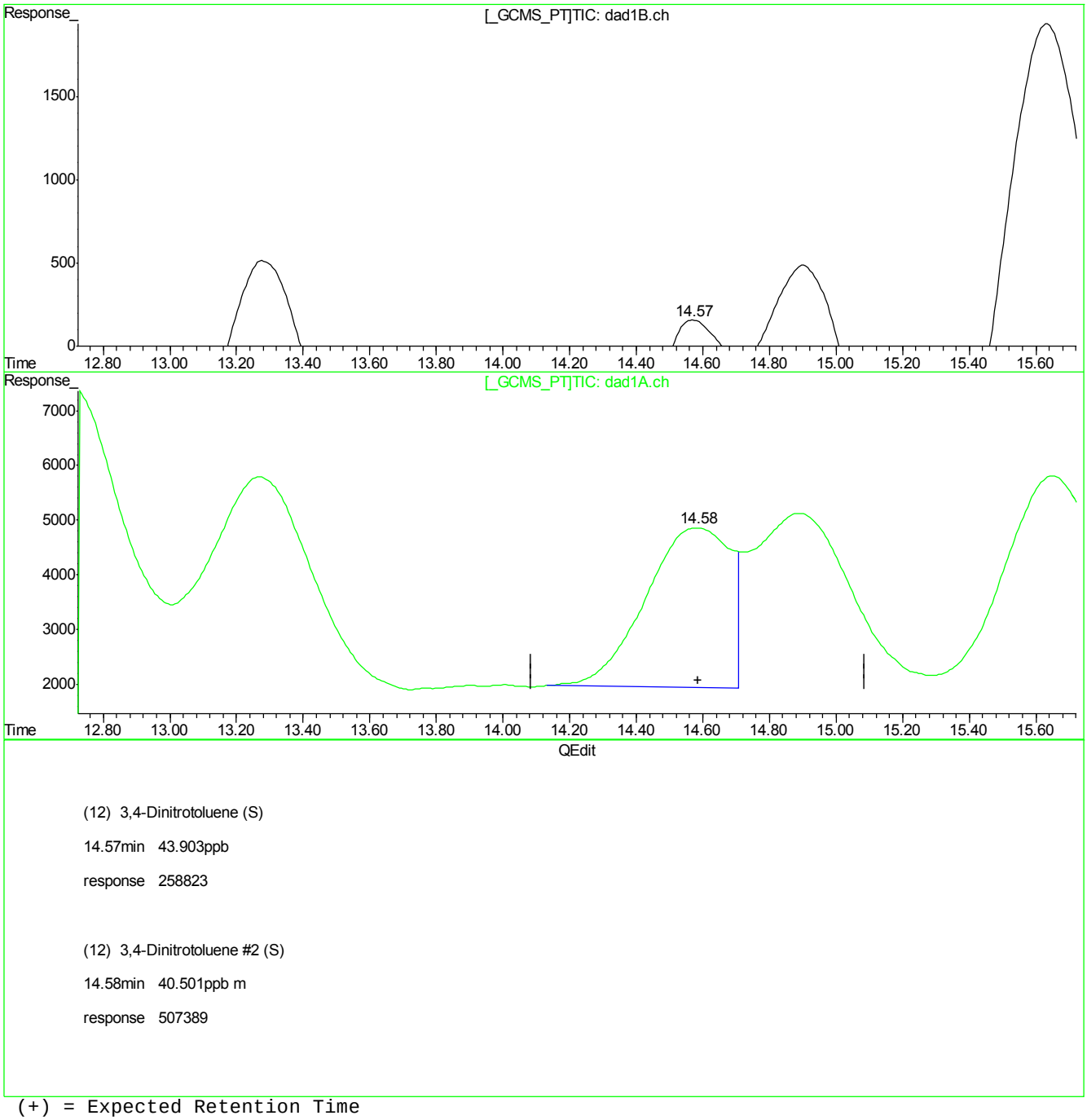
response 1026519

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:37 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 40.501ppb m

response 507389

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:40 2017

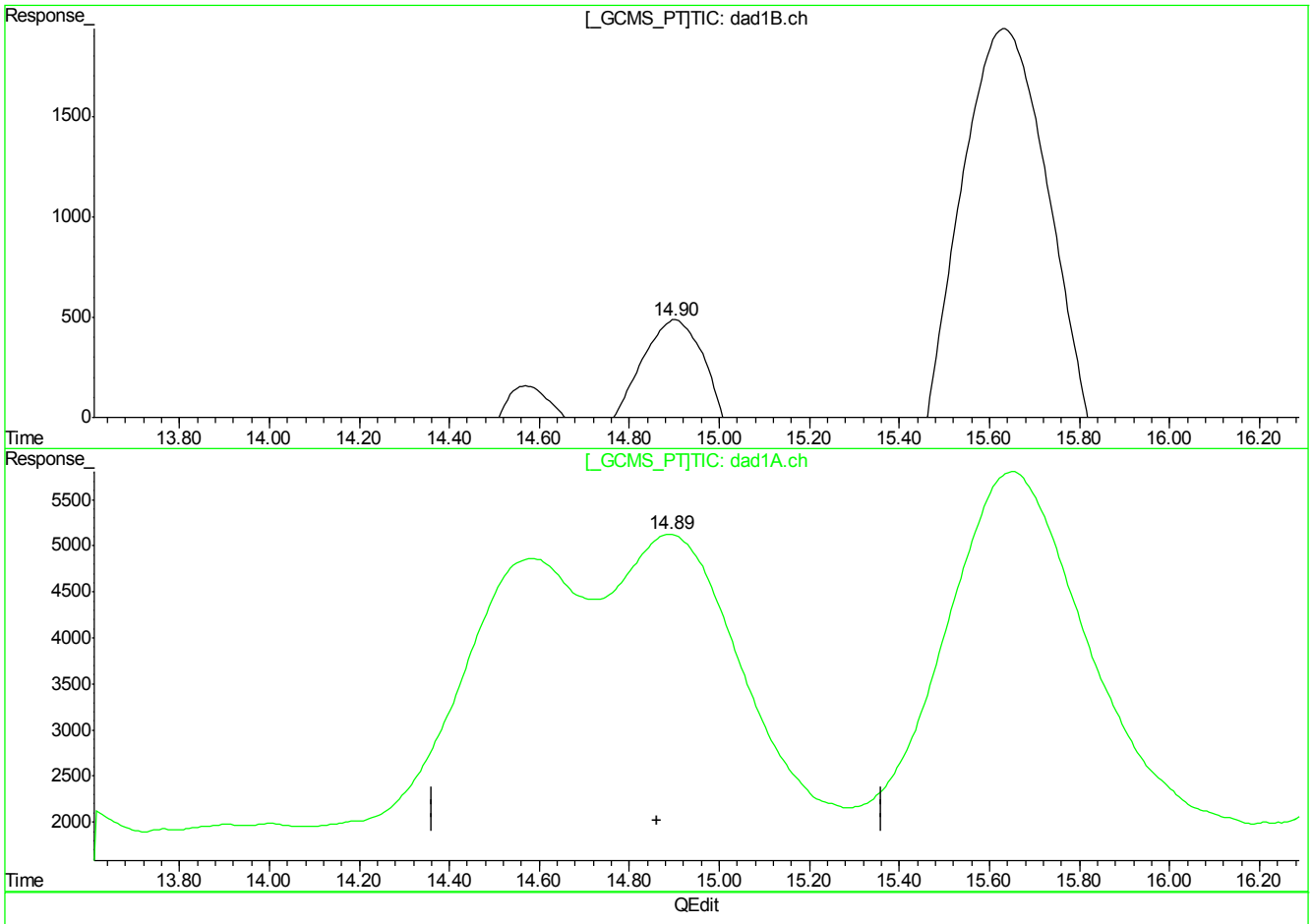
7.7.12.19

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 73.498ppb

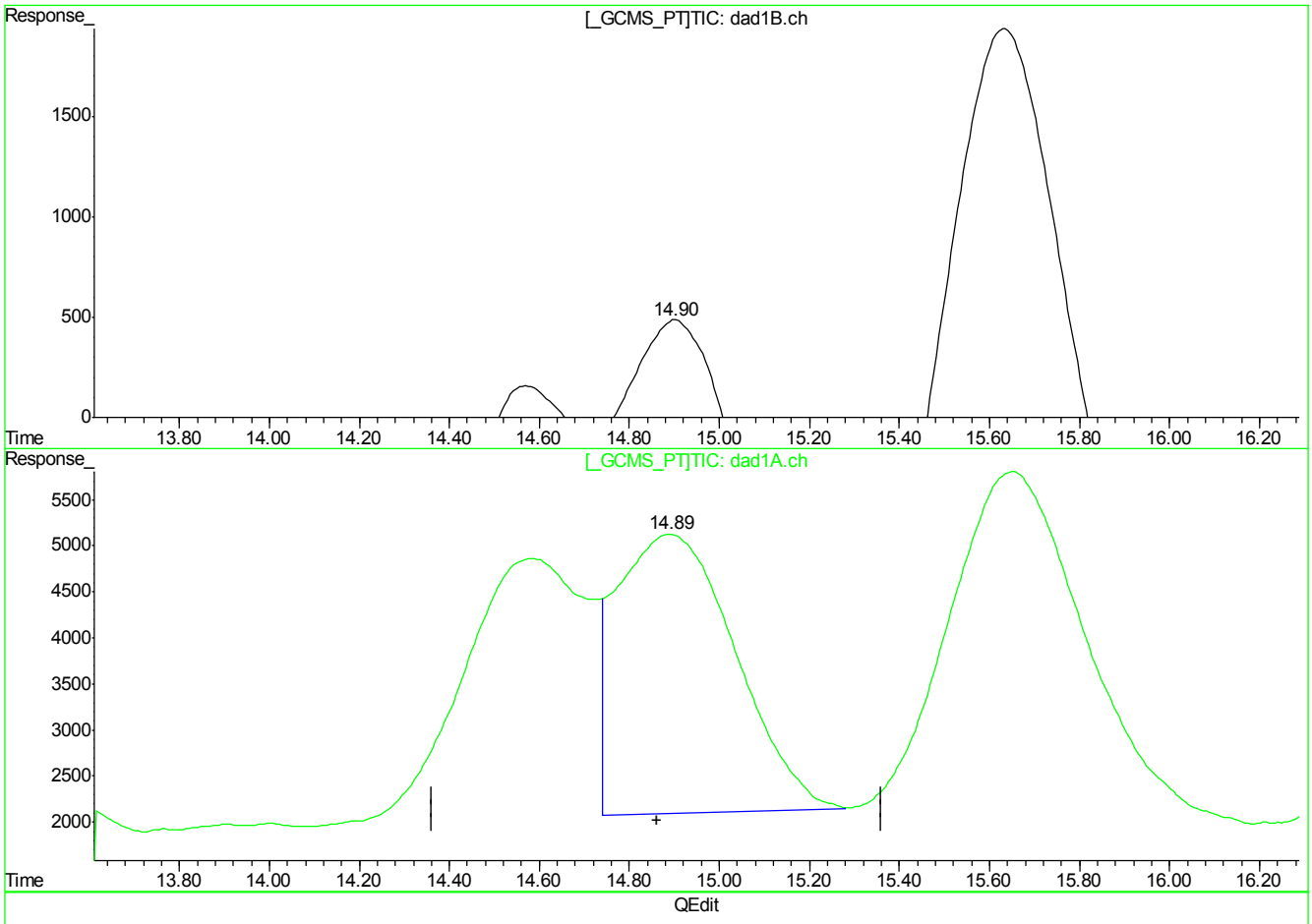
response 801693

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 50.694ppb m

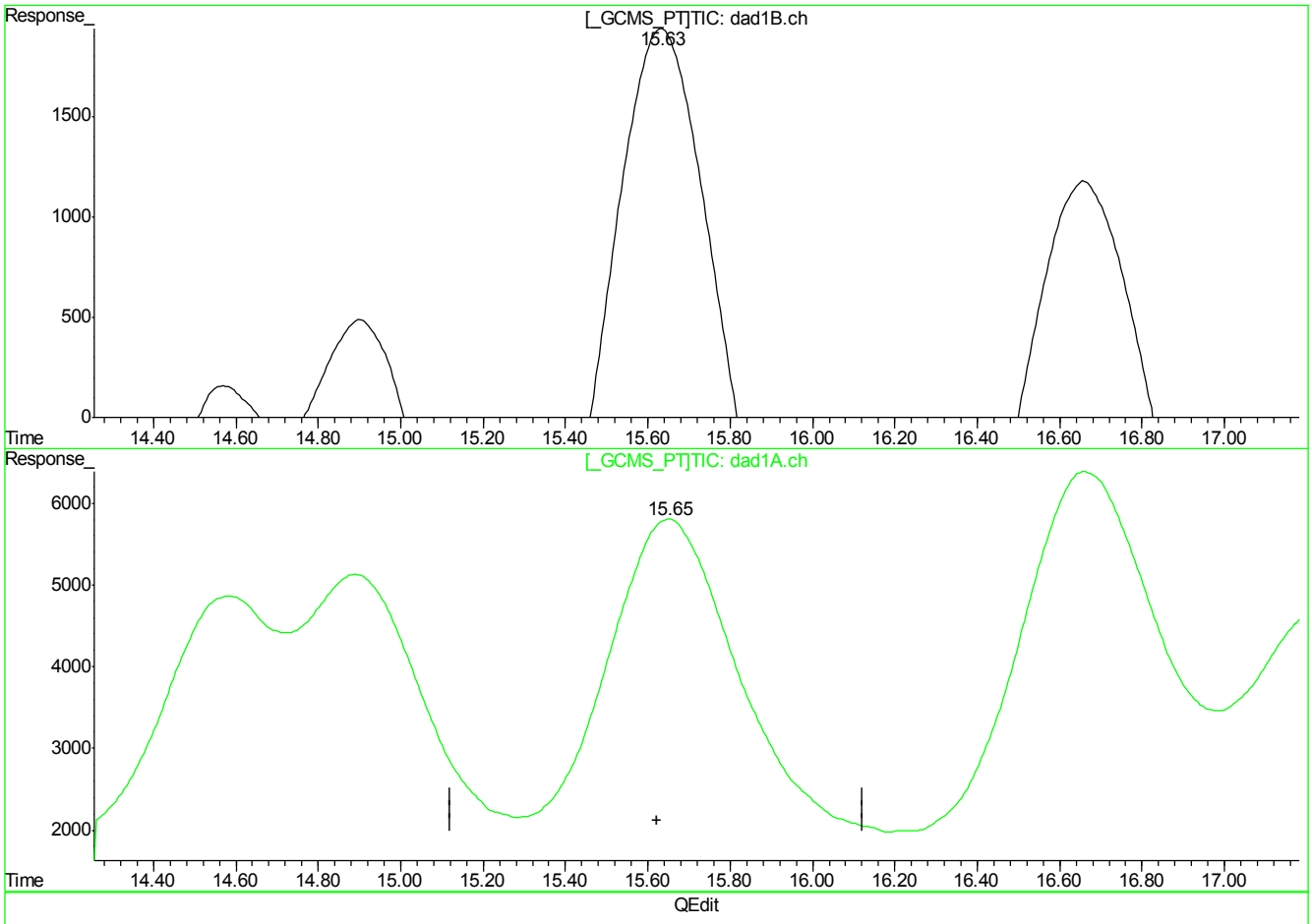
response 552975

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:47 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 93.393ppb

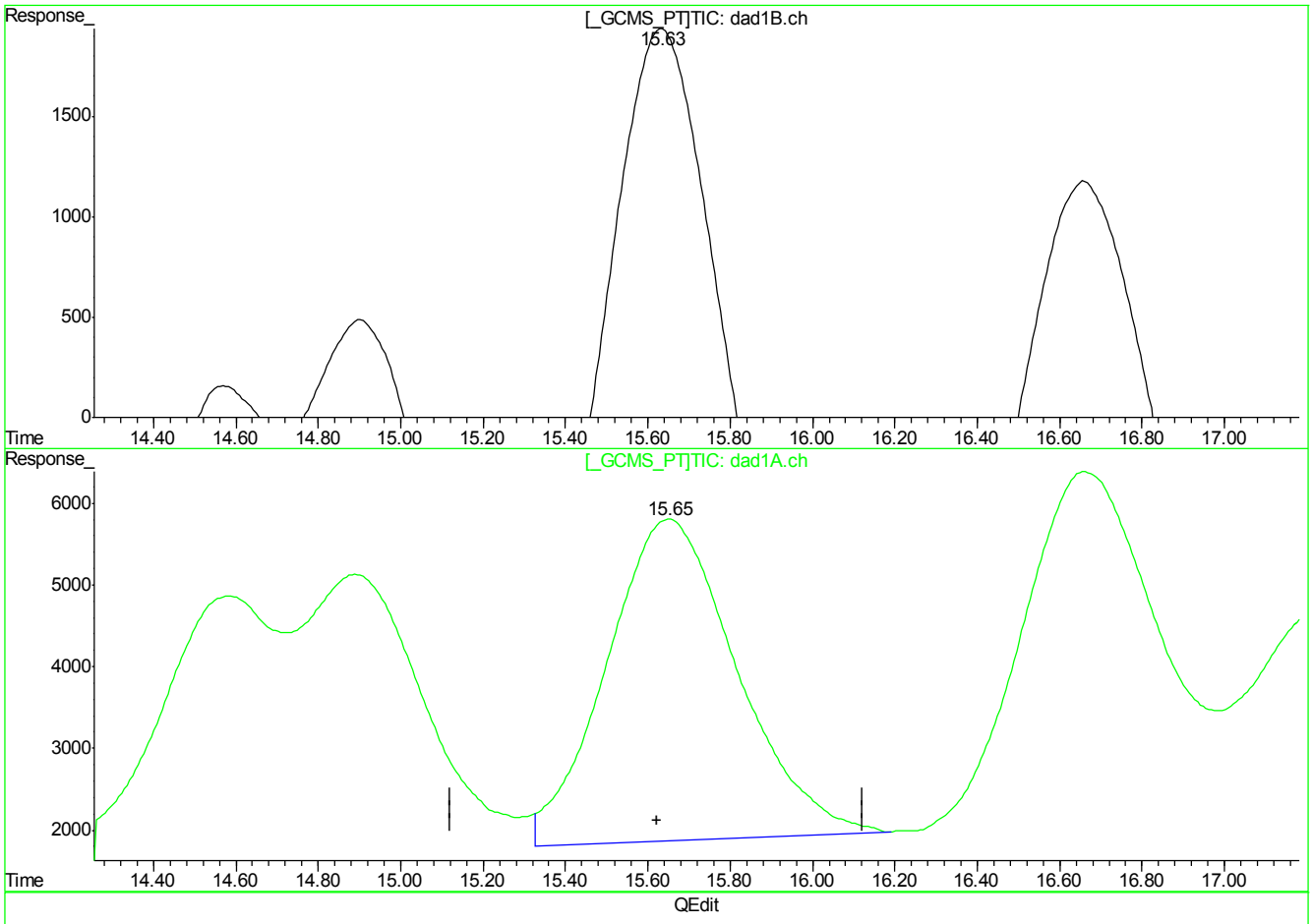
response 927502

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 86.988ppb m

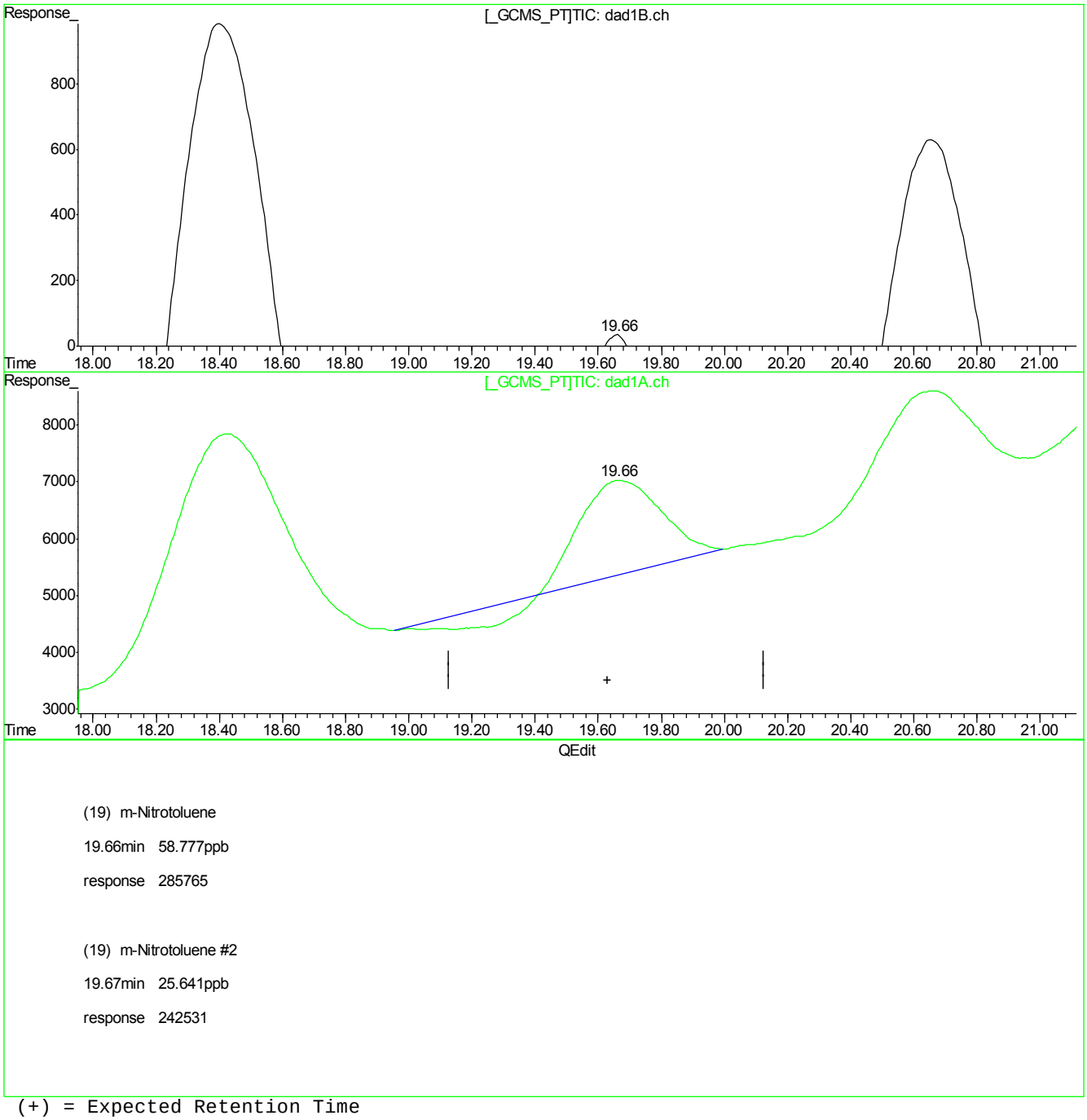
response 863855

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:53 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.67min 25.641ppb

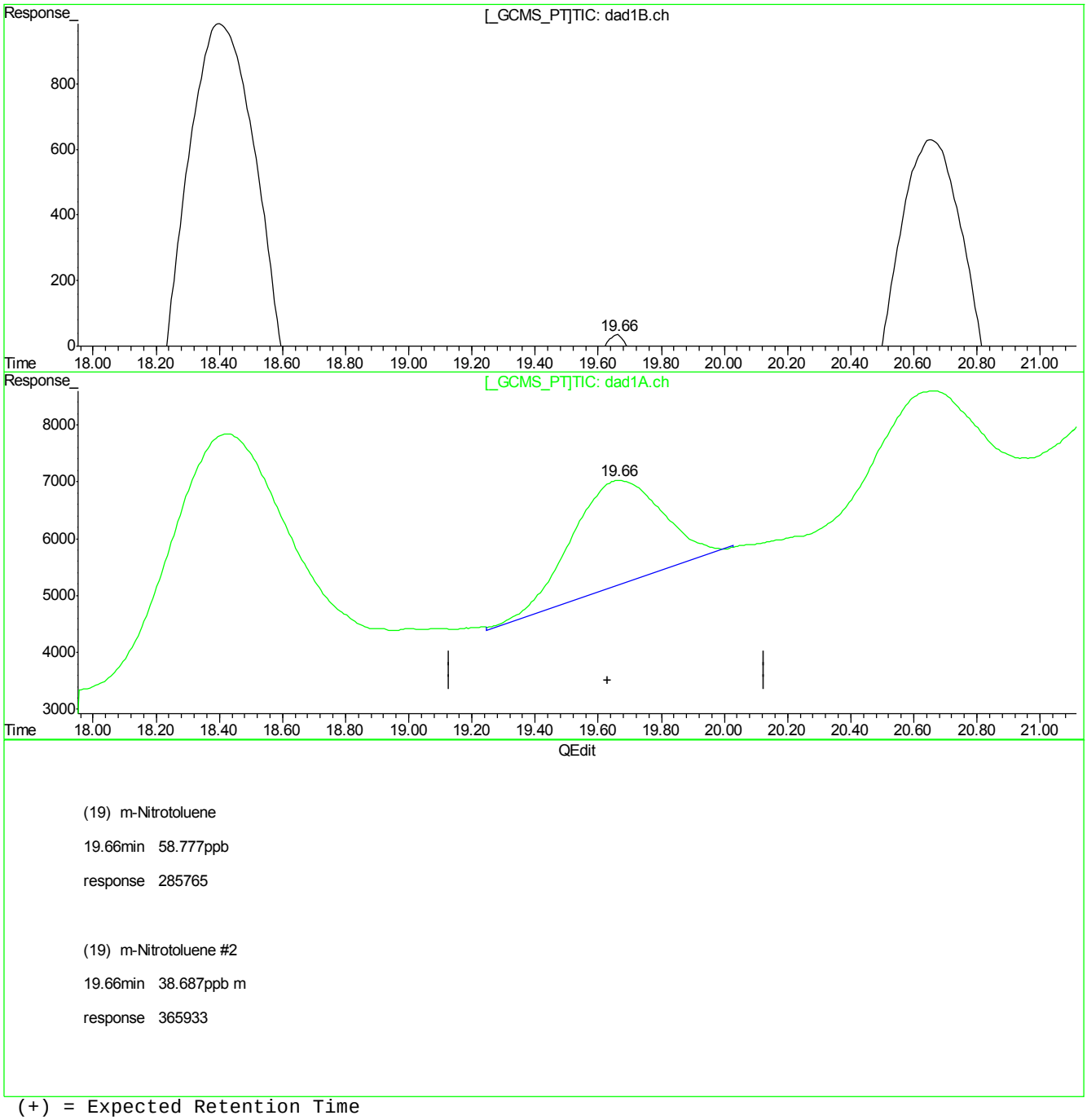
response 242531

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:01 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.66min 38.687ppb m

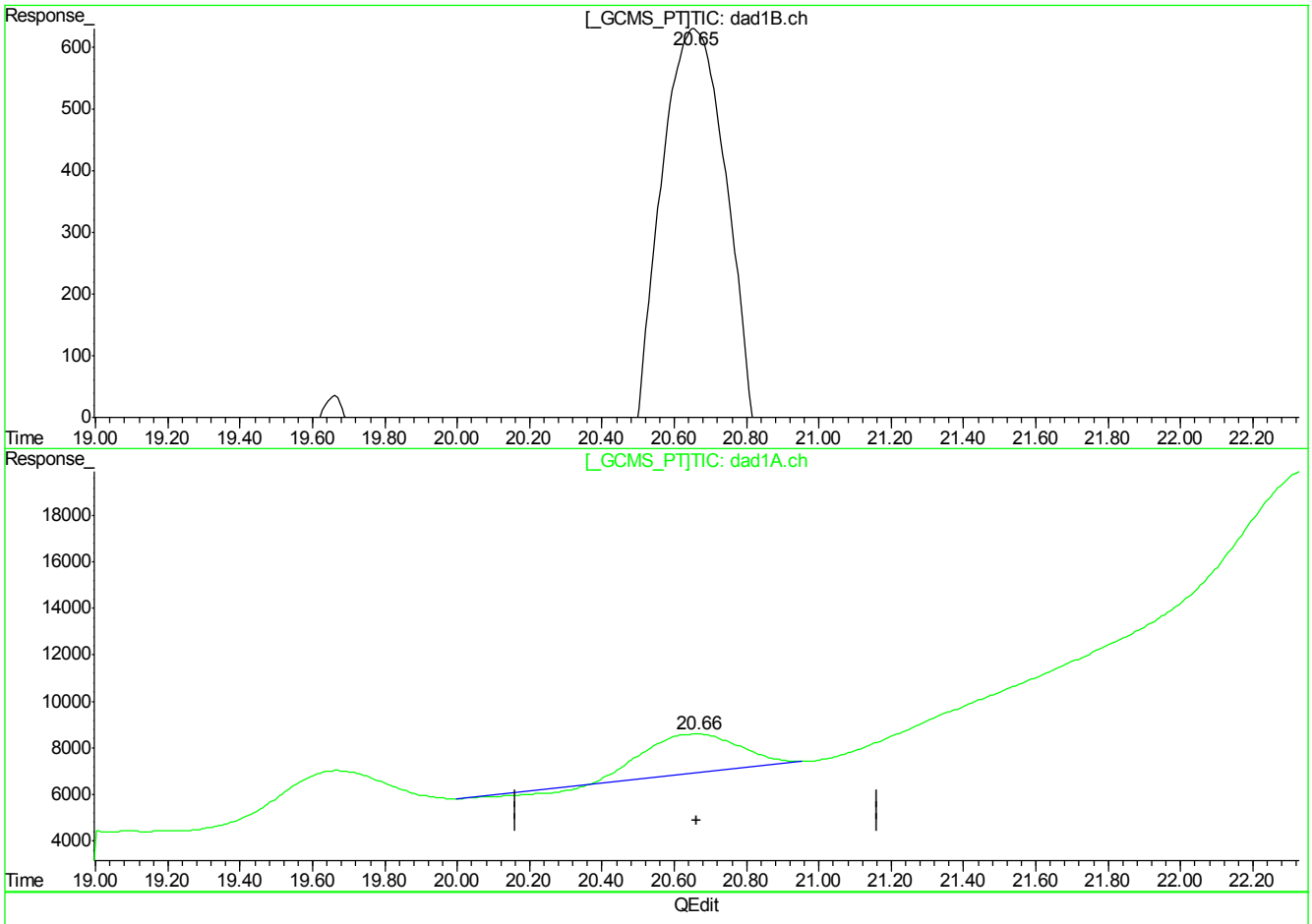
response 365933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 21.333ppb

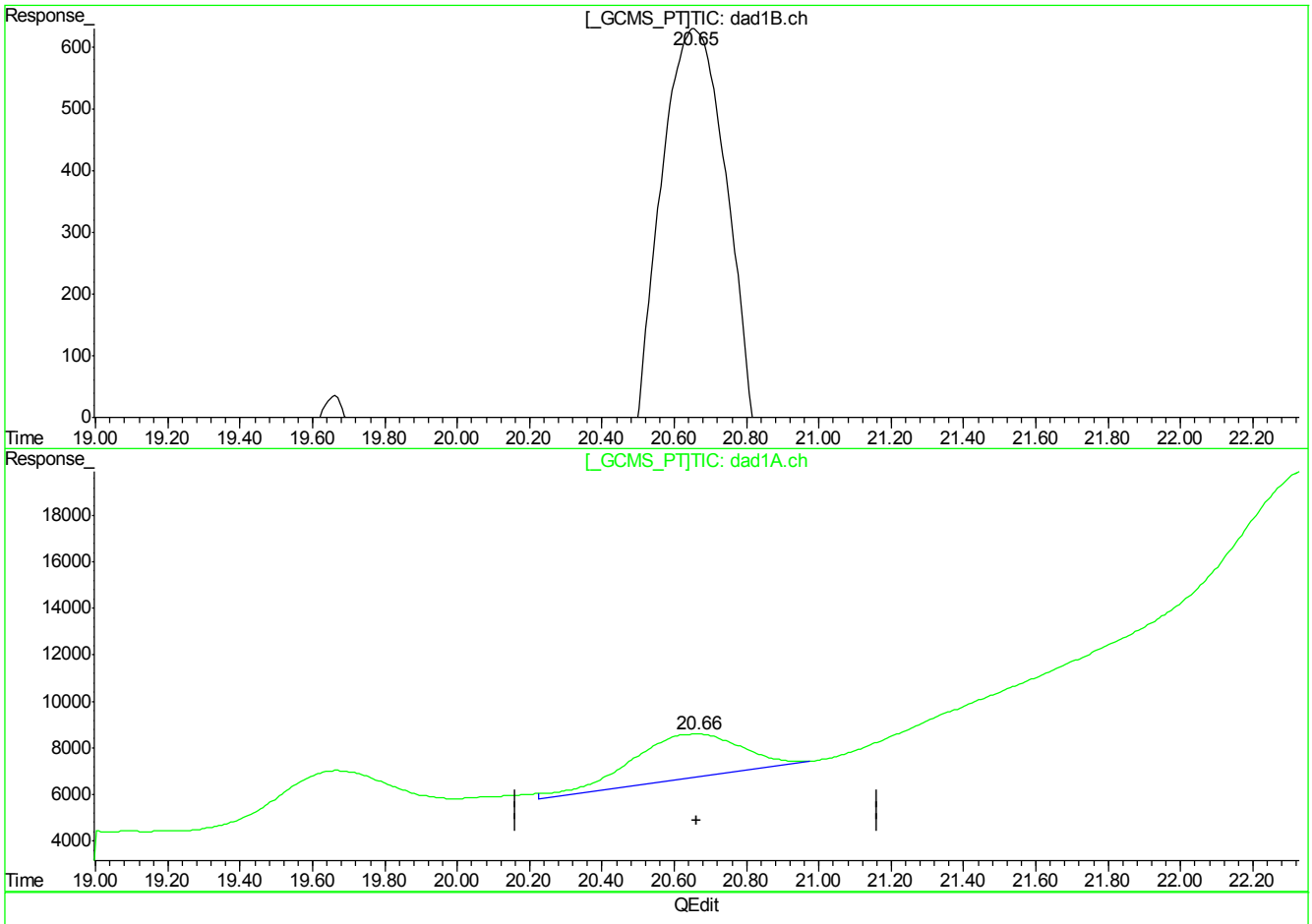
response 288721

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 29.479ppb m

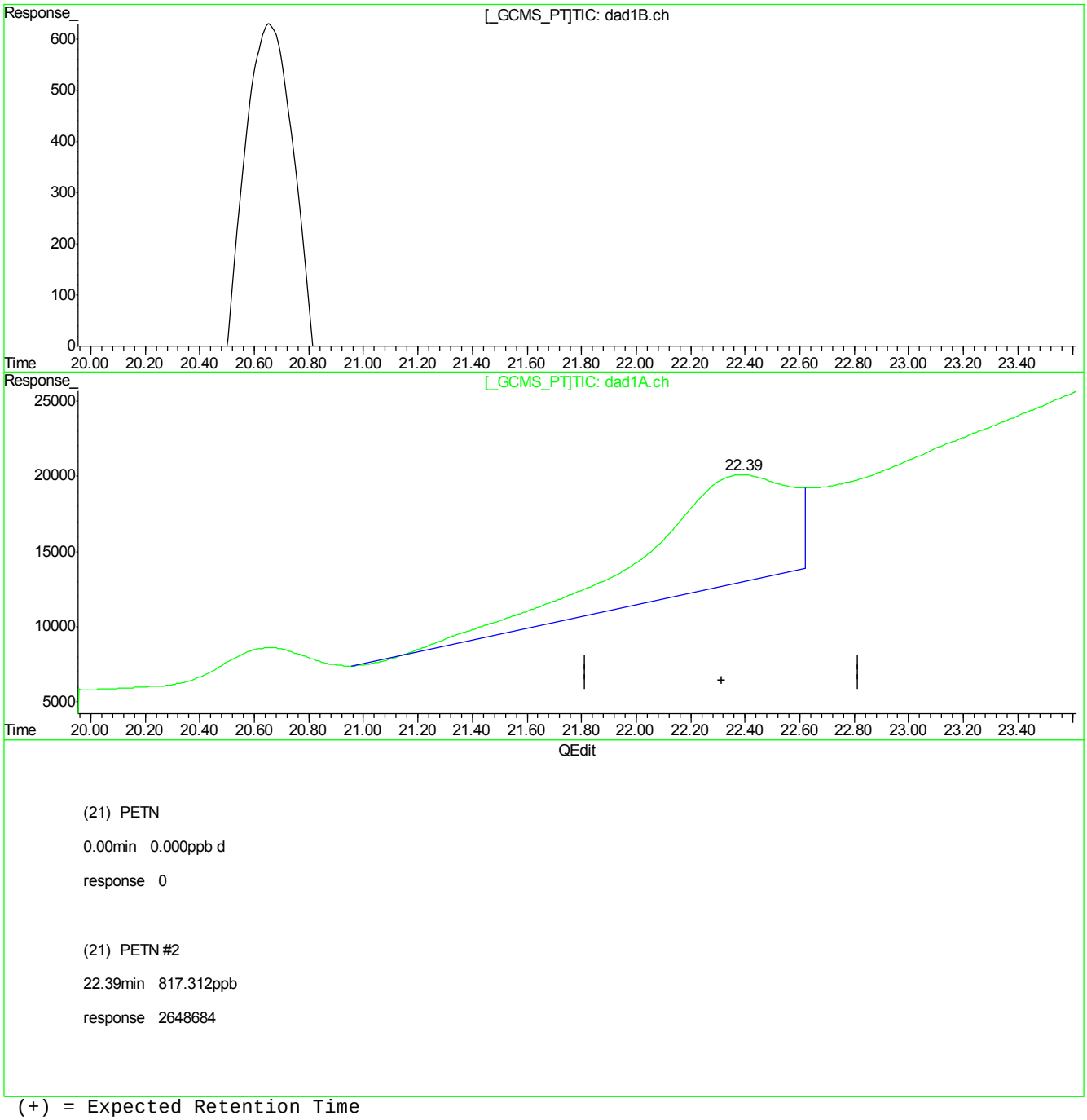
response 398969

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:09 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration

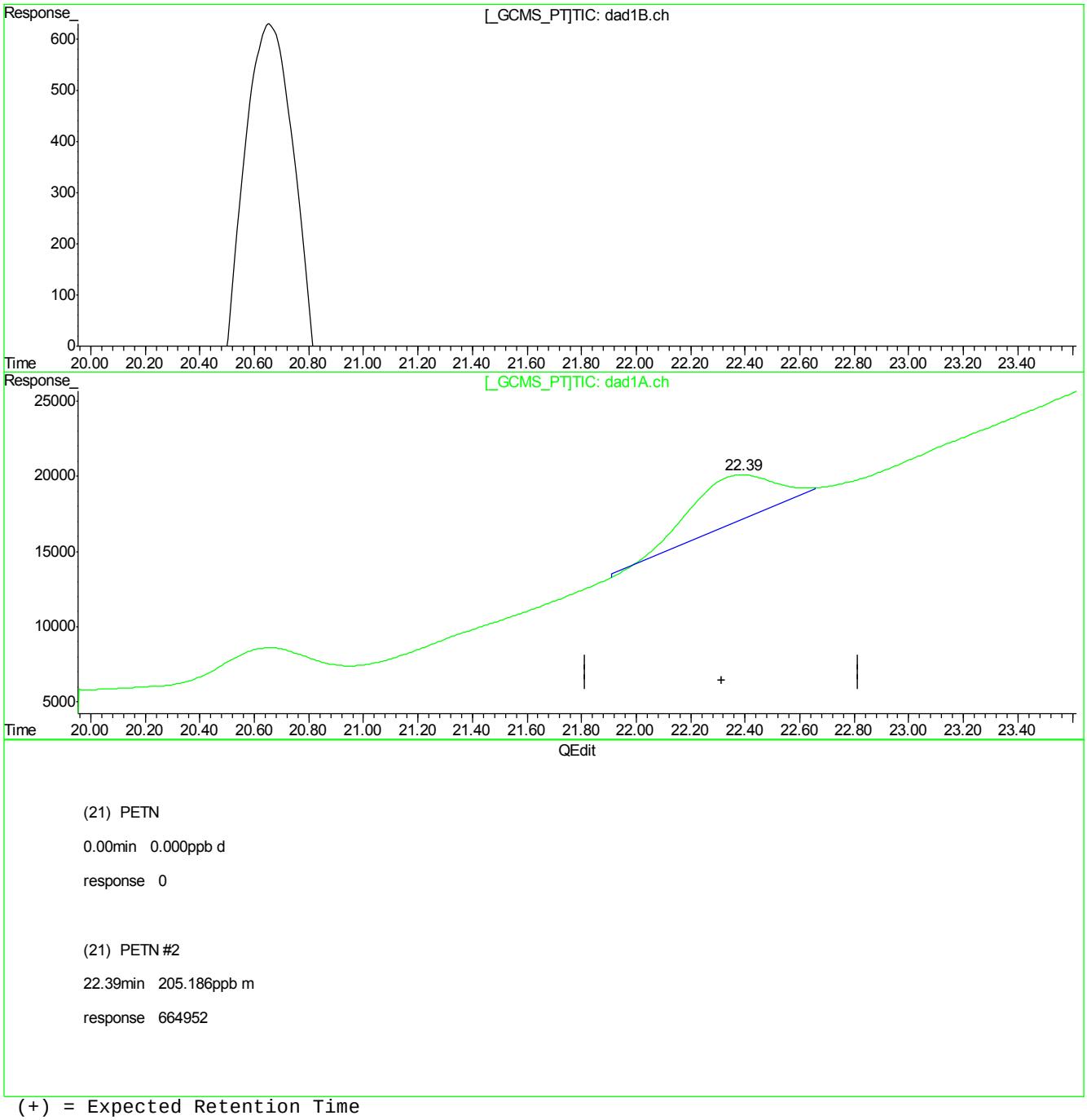


(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.39min 205.186ppb m

response 664952

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:15 2017

7.7.12.29

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:59 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	539446	1021169	91.503	81.638m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		18.30%#	16.33%#
	Target Compounds						
1)	TNX	5.01	5.01	1509922	1509922	179.506	179.032
2)	HMX	5.46	5.46	376444	376444	99.104	98.403
3)	DNX	5.59	5.59	825106	825106	125.705	126.142
4)	MNX	6.66	6.66	719732	719732	148.771	148.771
5)	1,3,5-Trinitrobe	7.54	7.54	1066153	1062518	104.411	104.098
6)	RDX	8.07	8.07	494554	482286	103.884	101.779
7)	1,3-Dinitrobenze	10.08	10.08	1453602	1272574	99.869	89.971m
8)	Nitrobenzene	11.07	11.07	953891	901312	124.781	94.788m
9)	2,4,6-Trinitroto	11.87	11.87	1001781	1458021	98.255	93.389m
10)	Nitroglycerin	0.00	12.70	0	1702013	N.D. d	464.272m
11)	Tetryl	13.28	13.27	844790	1140150	123.159	93.137m
13)	2,6-Dinitrotolue	14.89	14.89	734094	996233	105.588	91.335m
14)	2,4-Dinitrotolue	15.62	15.63	1340479	1231048	100.879	123.933
15)	o-Nitrotoluene	17.22	17.22	599687	848130	141.042	145.750
16)	3,5-Dinitroanili	16.64	16.64	1075378	1750952	101.472	97.657
17)	p-Nitrotoluene	18.39	18.40	1208979	2157804	105.075	101.946
18)	4-Amino-2,6-Dini	18.39	18.40	1208979	2157804	105.075	101.946
19)	m-Nitrotoluene	19.64	19.64	613746	1029981	124.866	108.890
20)	2-Amino-4,6-Dini	20.64	20.66	902382	1031982	94.065	76.251
21)	PETN	0.00	22.33	0	1529945	N.D. d	472.100m

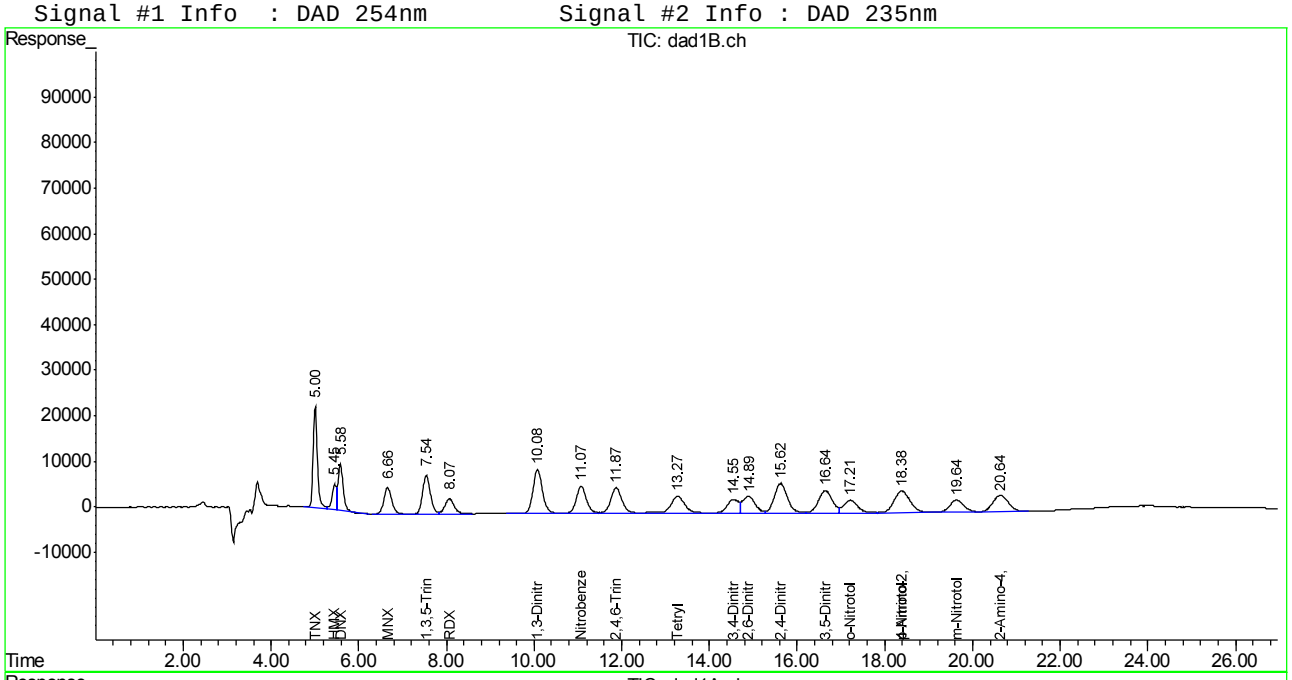
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 13:37:52 2017 Page 1

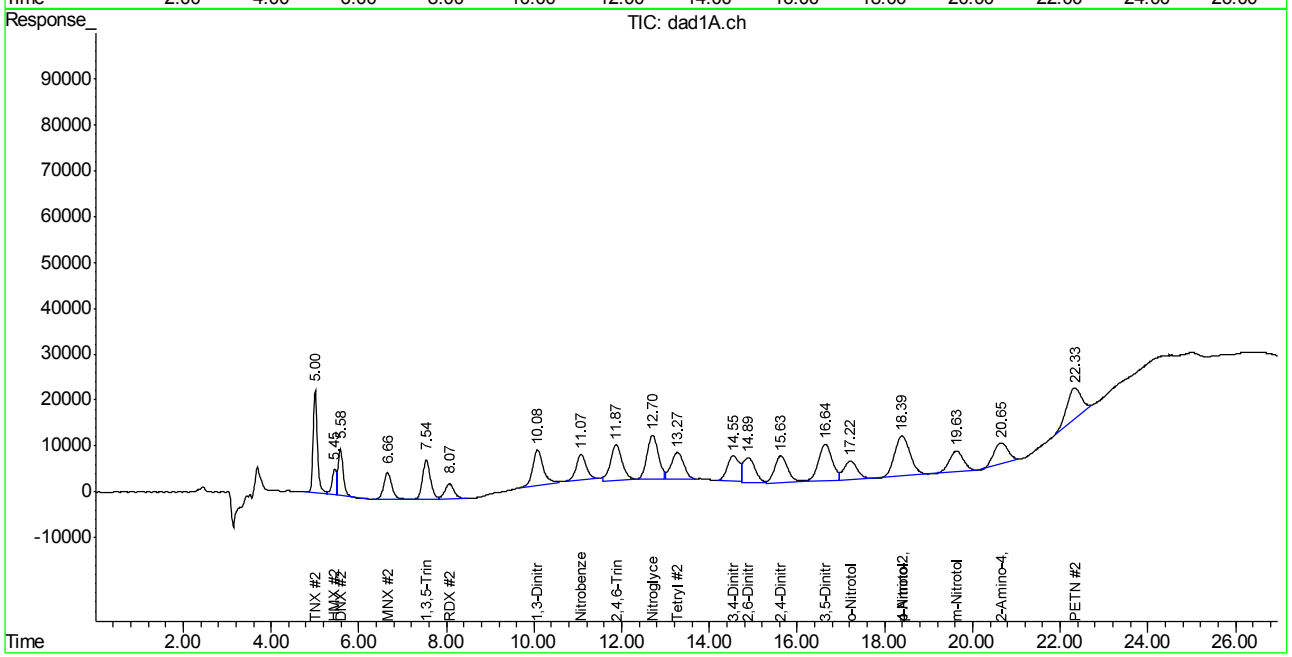
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

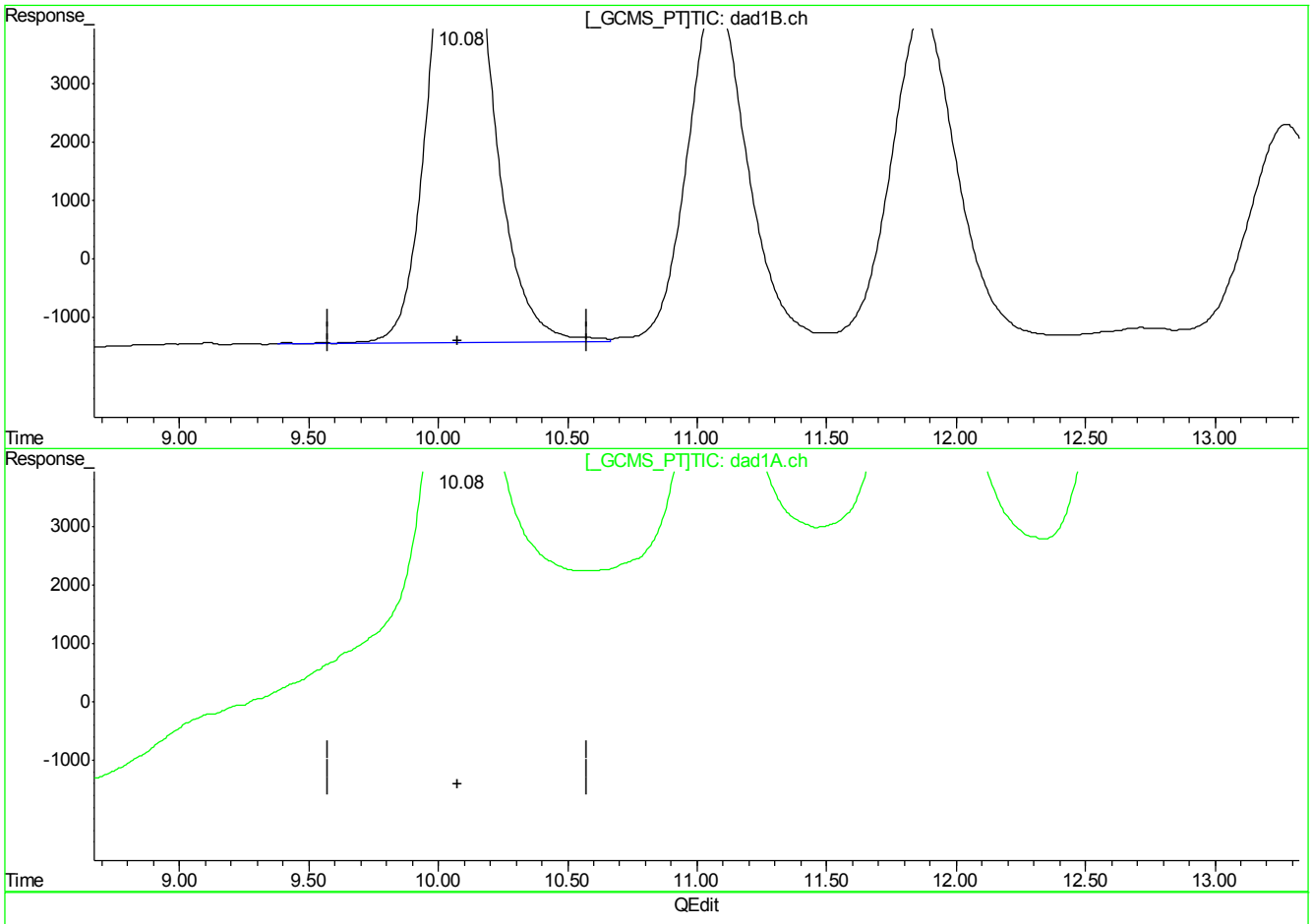
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613828.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:35	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.07	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.70	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.55	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 216.460ppb

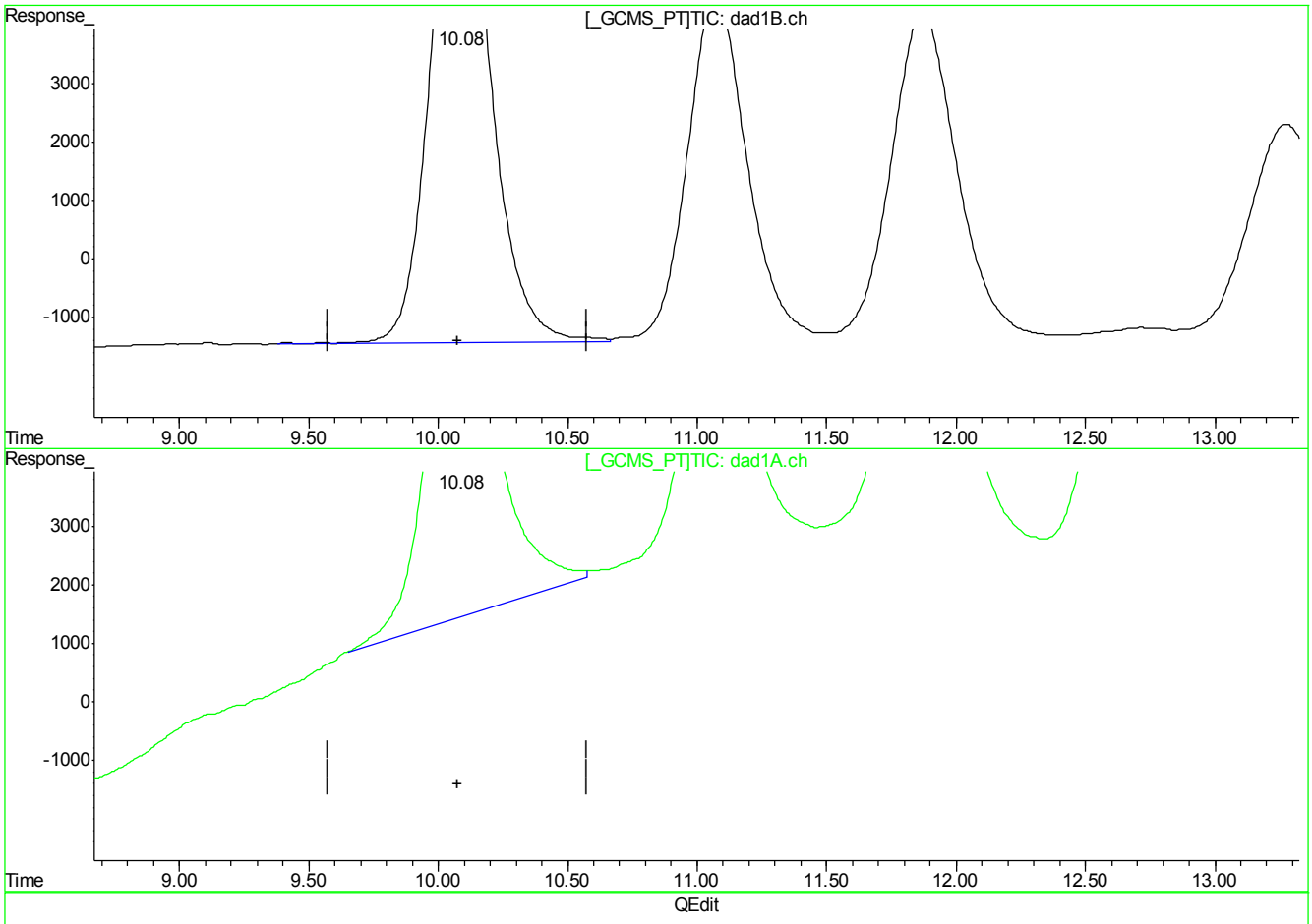
response 3026444

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 89.971ppb m

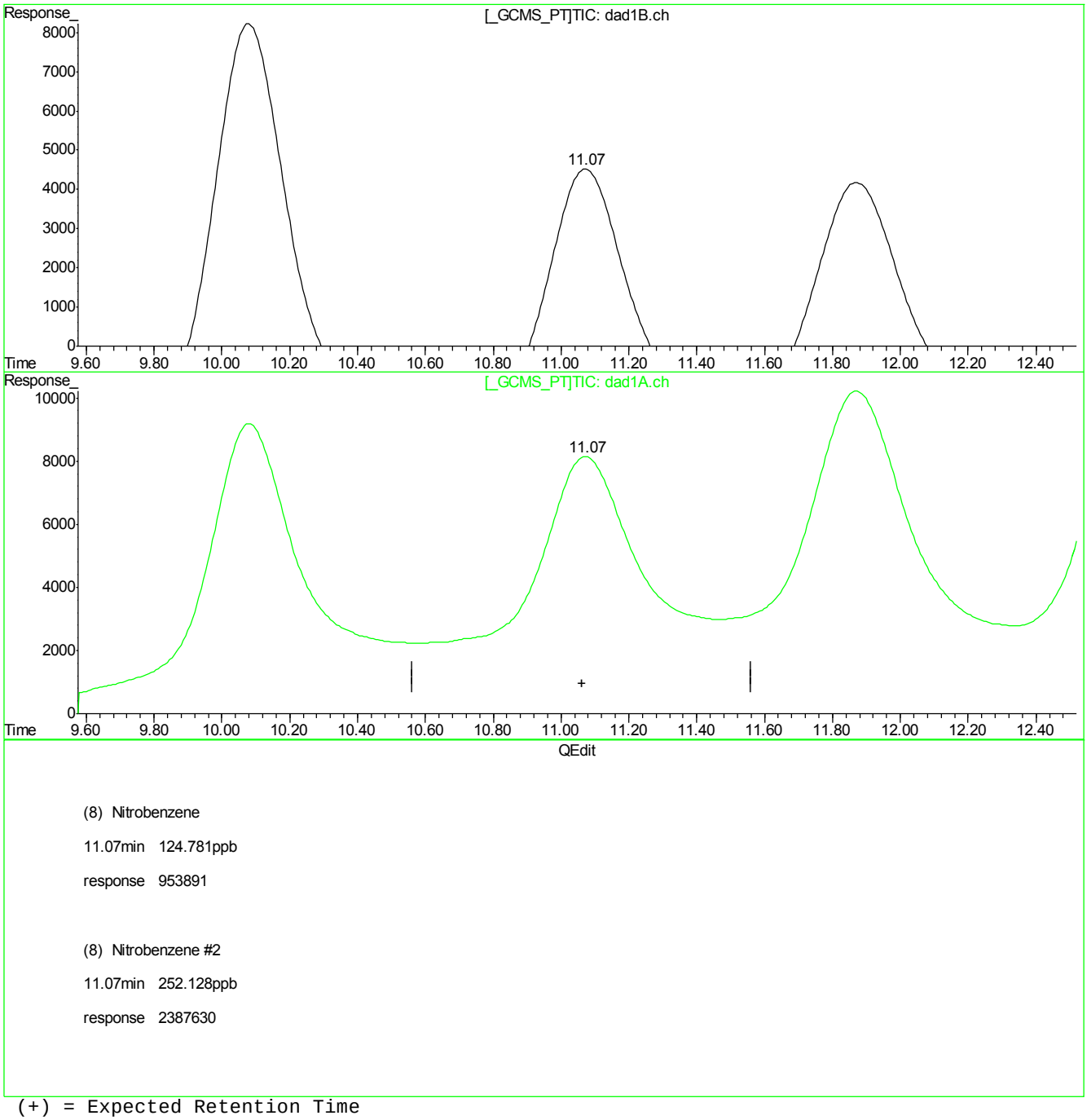
response 1272574

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration

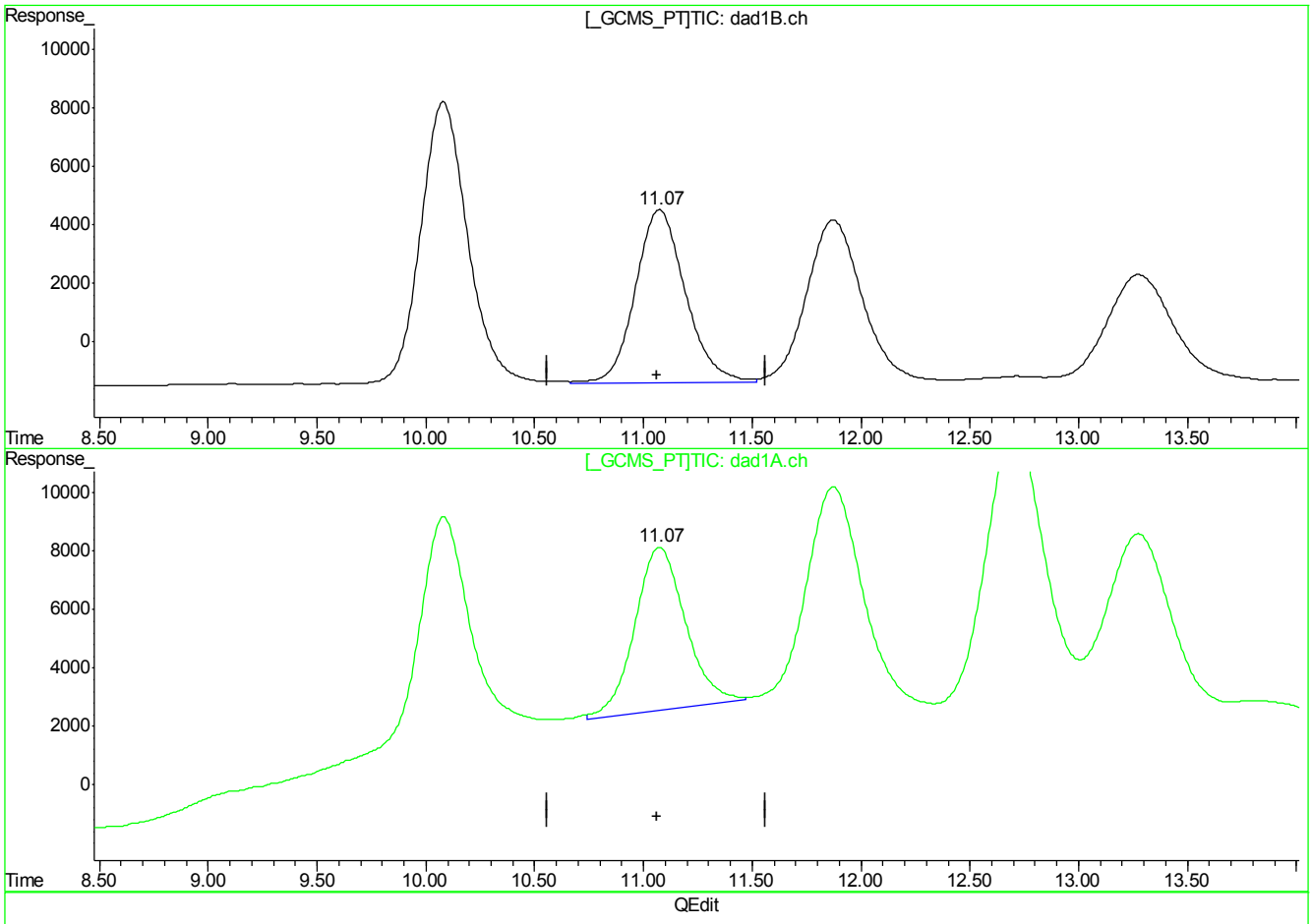


(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.07min 124.781ppb

response 953891

(8) Nitrobenzene #2

11.07min 94.788ppb m

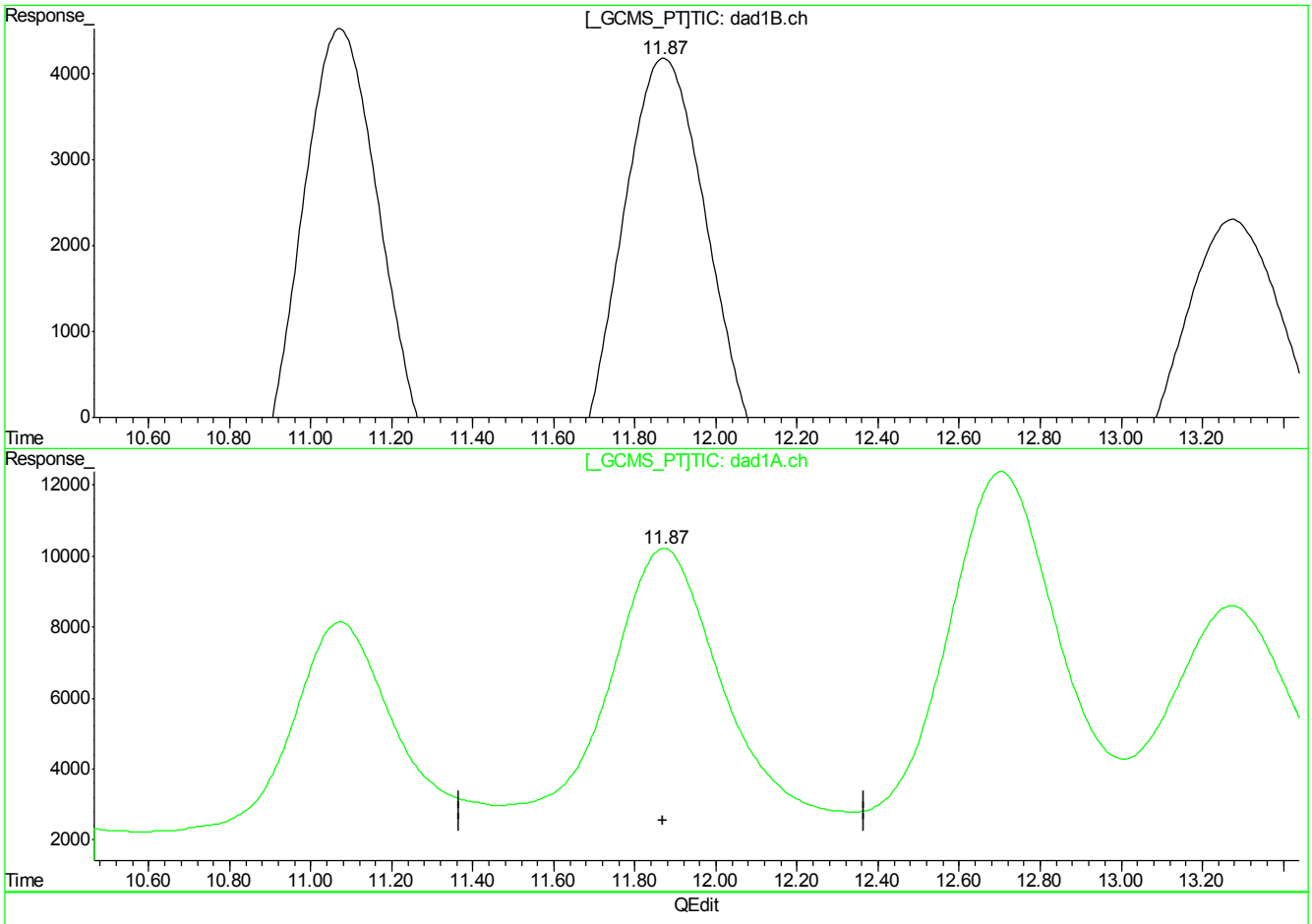
response 901312

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 174.293ppb

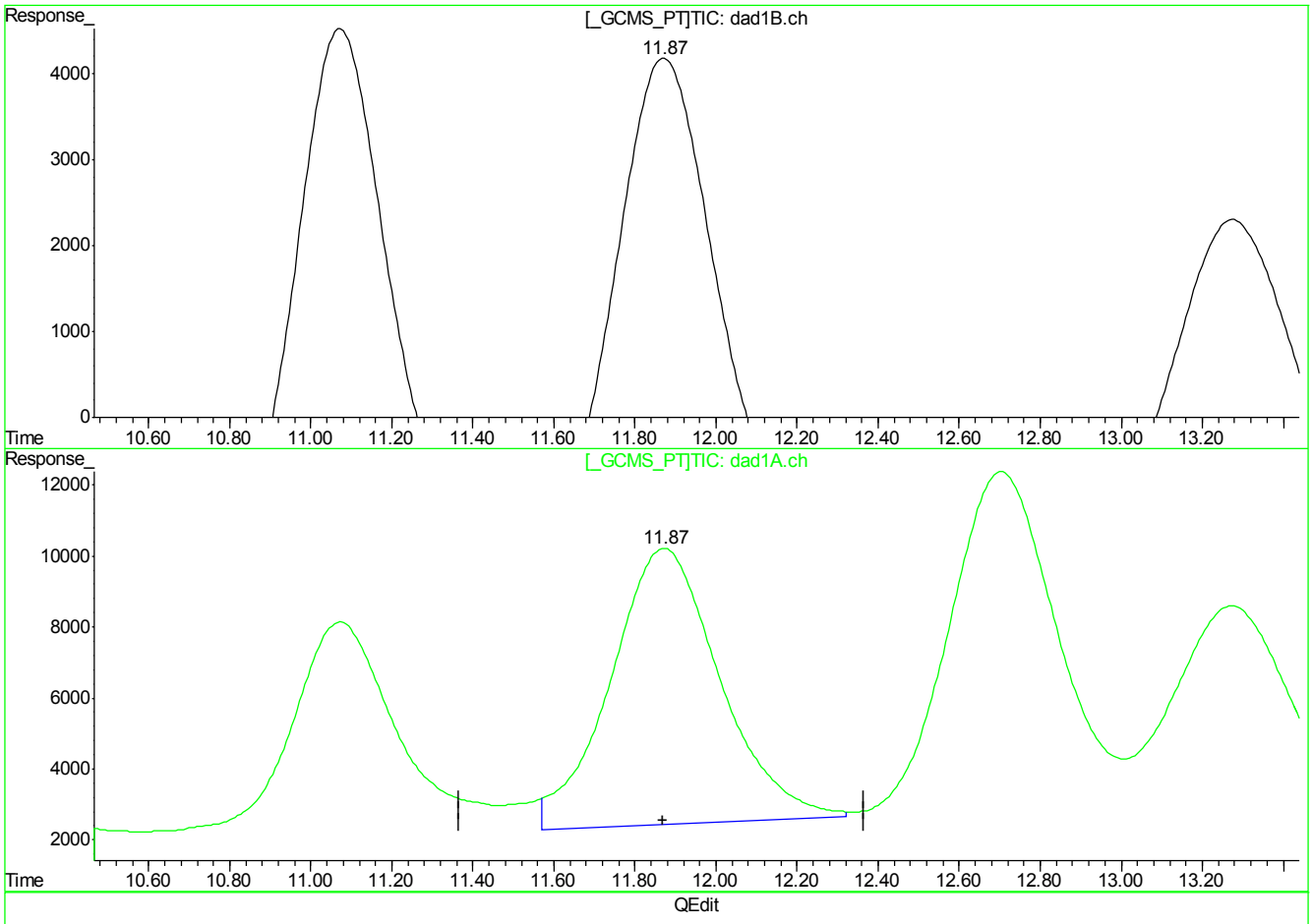
response 2710161

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:08 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 93.389ppb m

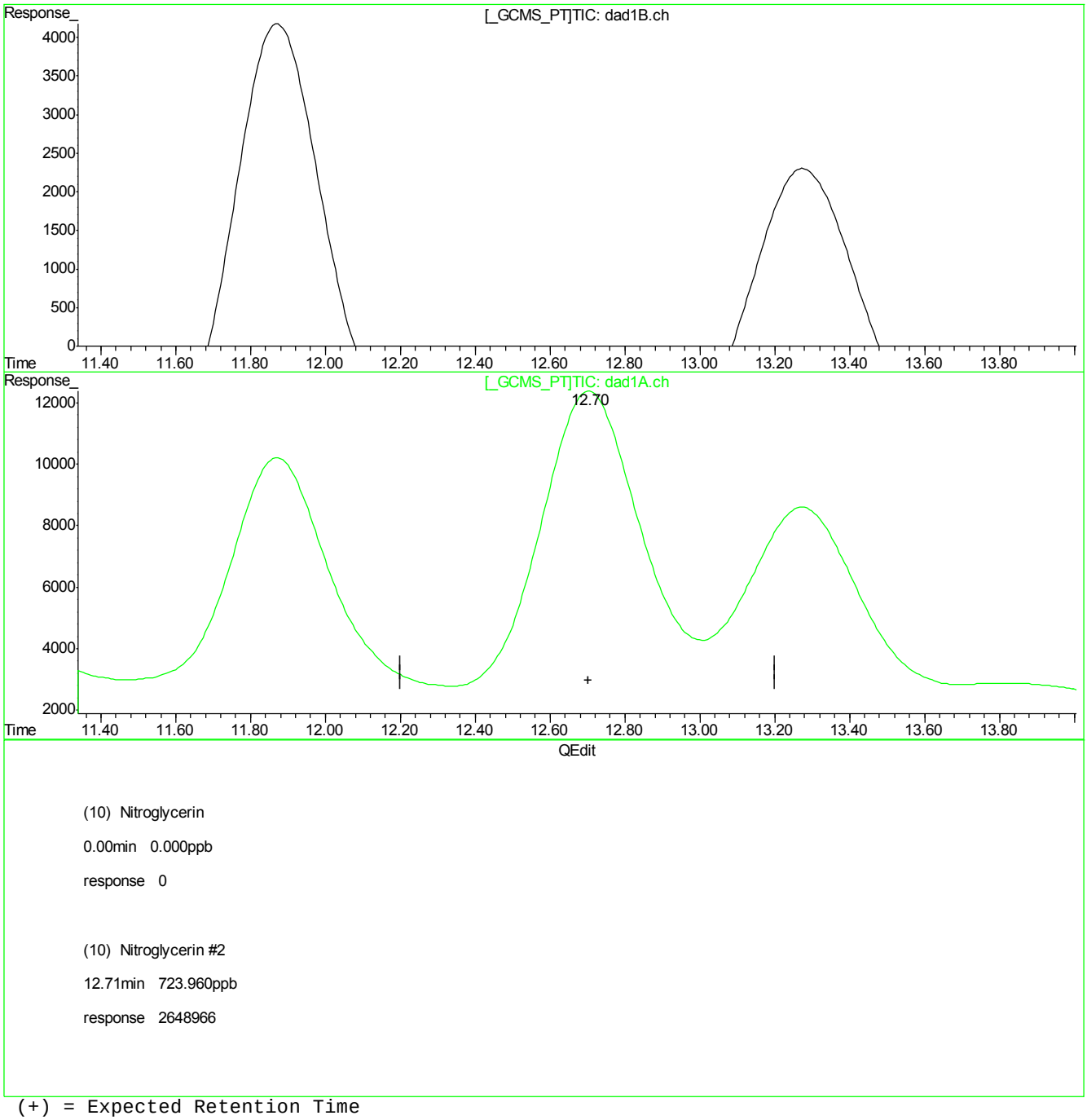
response 1458021

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration

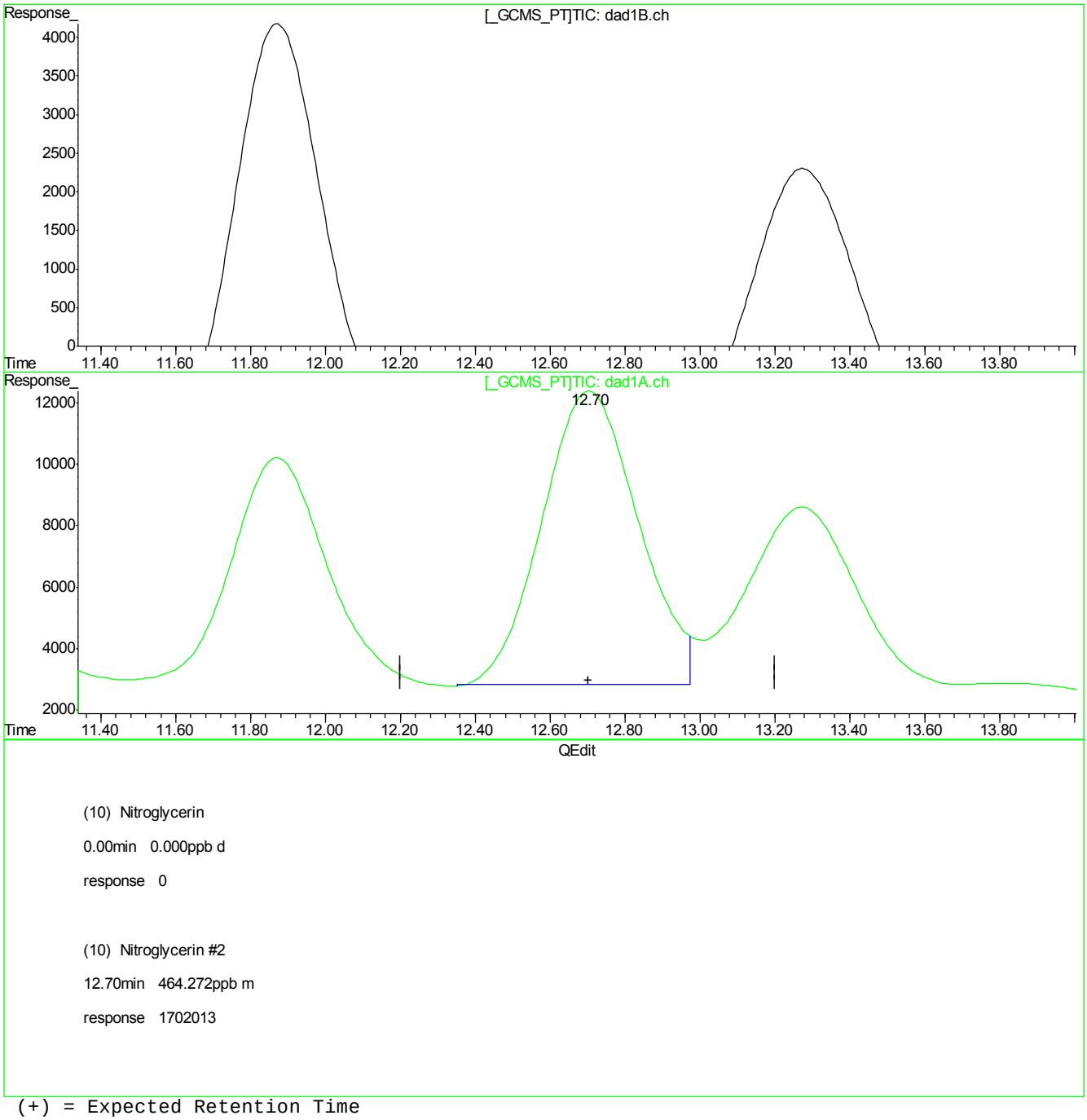


(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:14 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration

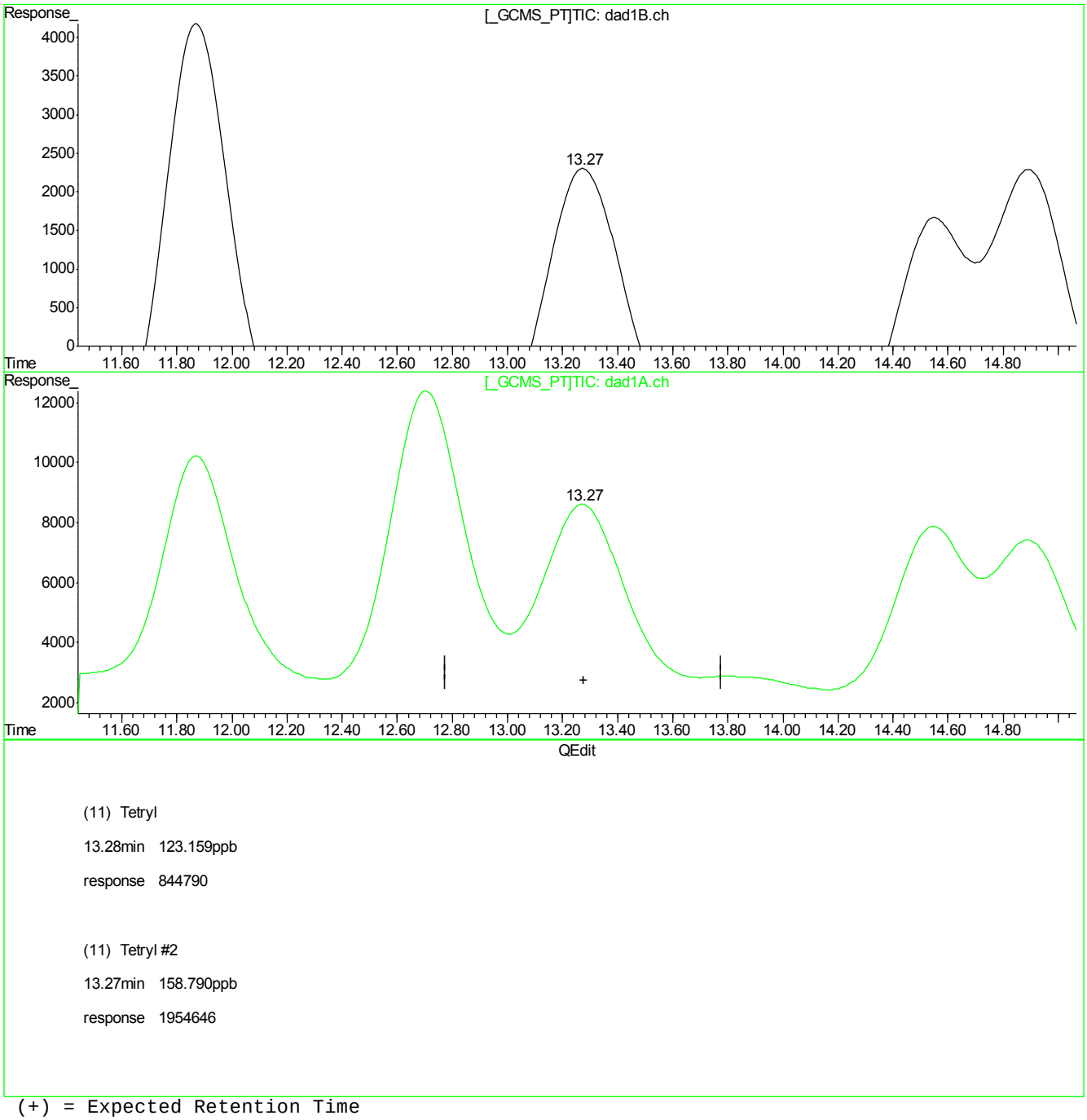


(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:20 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 158.790ppb

response 1954646

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:22 2017

7.7.13.10

7

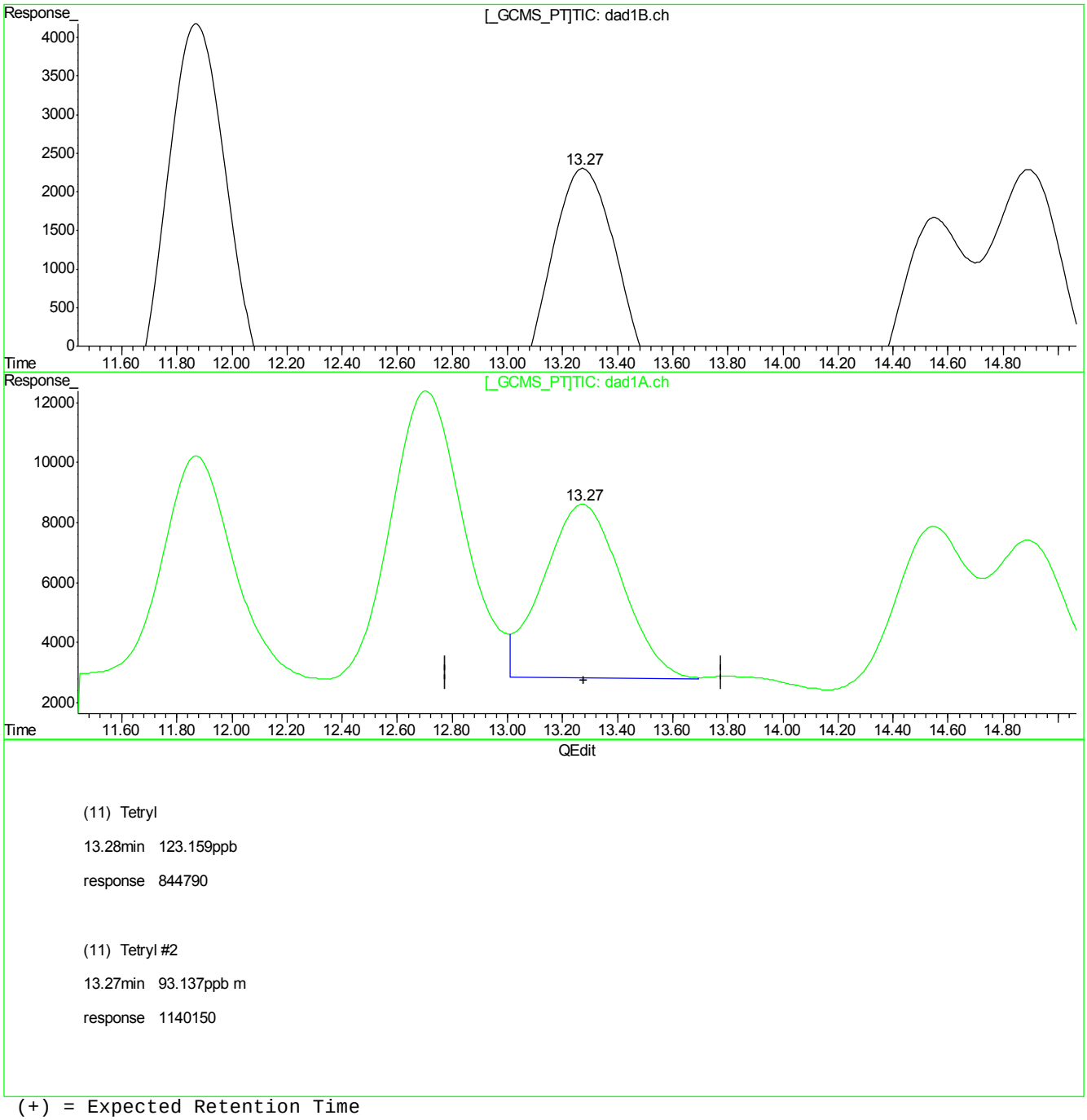
GG613828.D edits: Tetryl

FA53518

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 93.137ppb m

response 1140150

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:25 2017

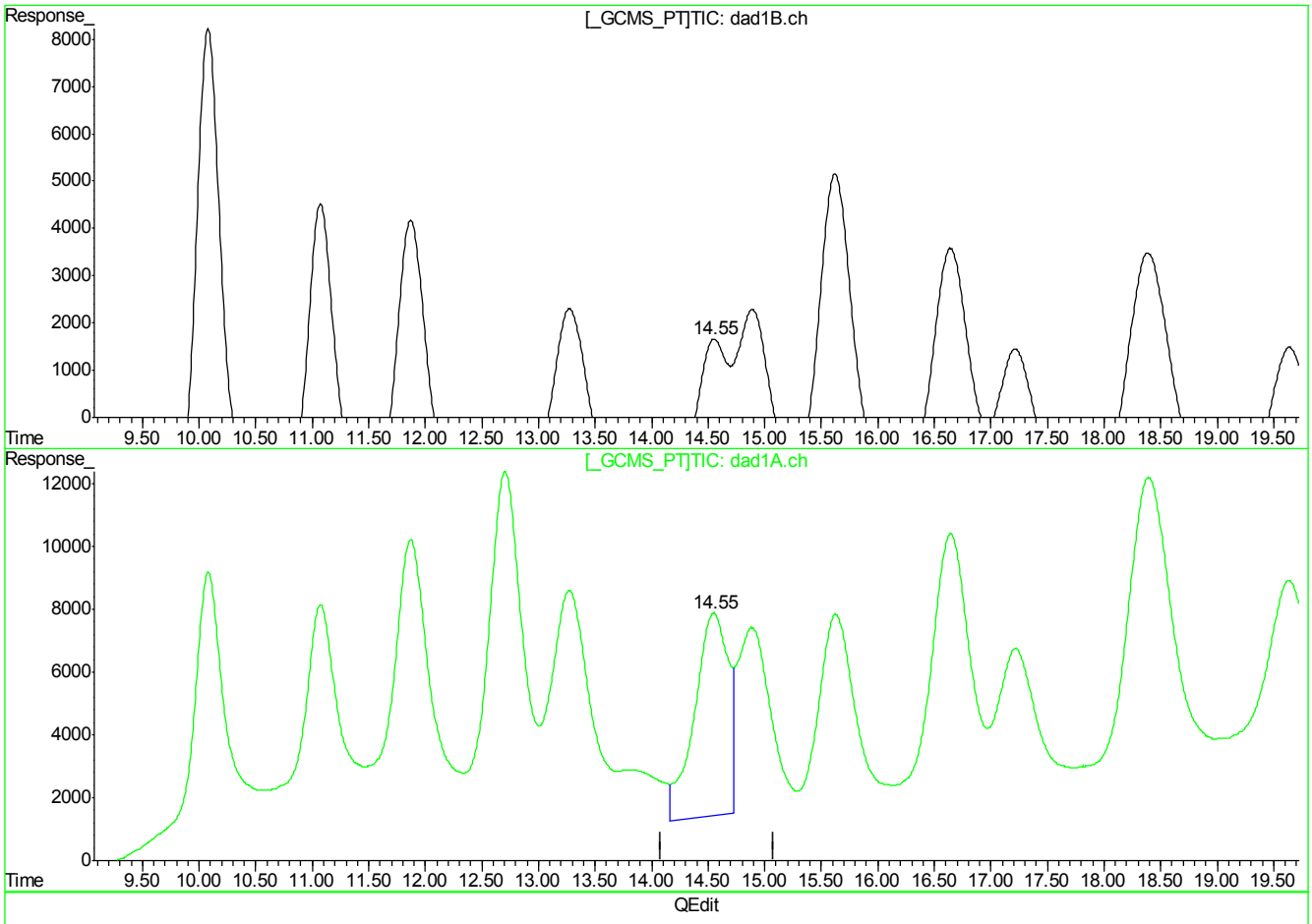
7.7.13.11

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 107.581ppb

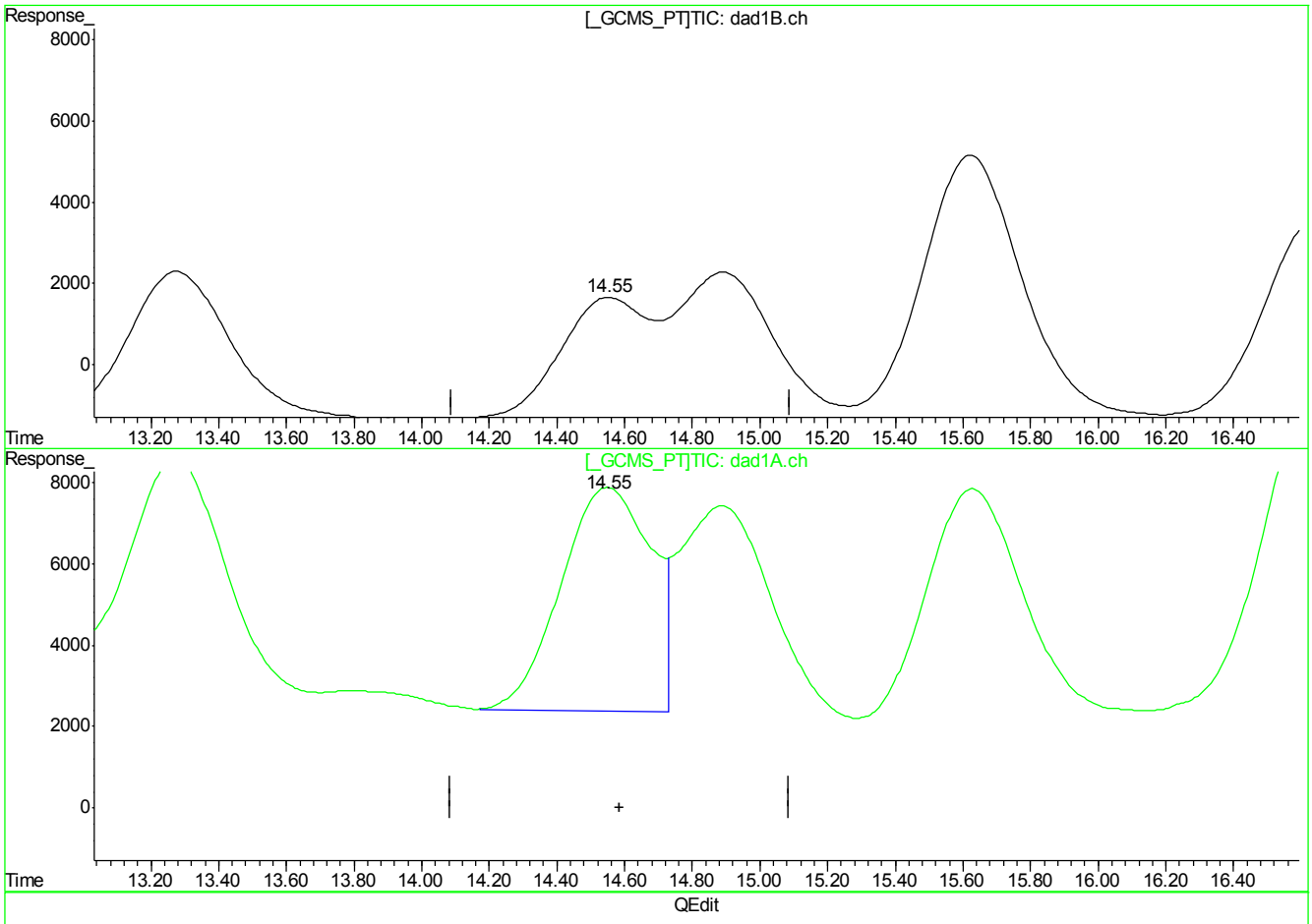
response 1344362

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 81.638ppb m

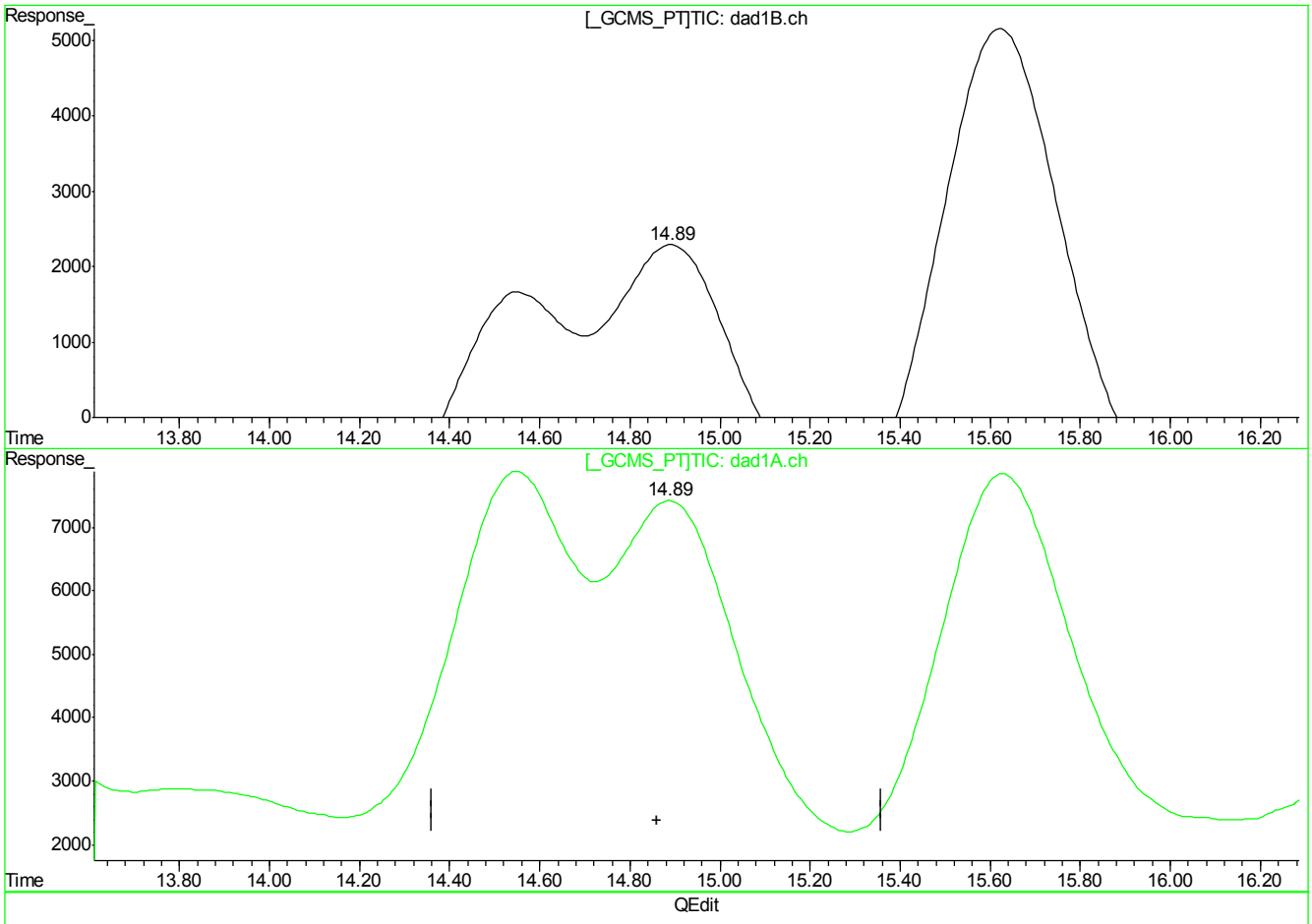
response 1021169

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:43 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 107.016ppb

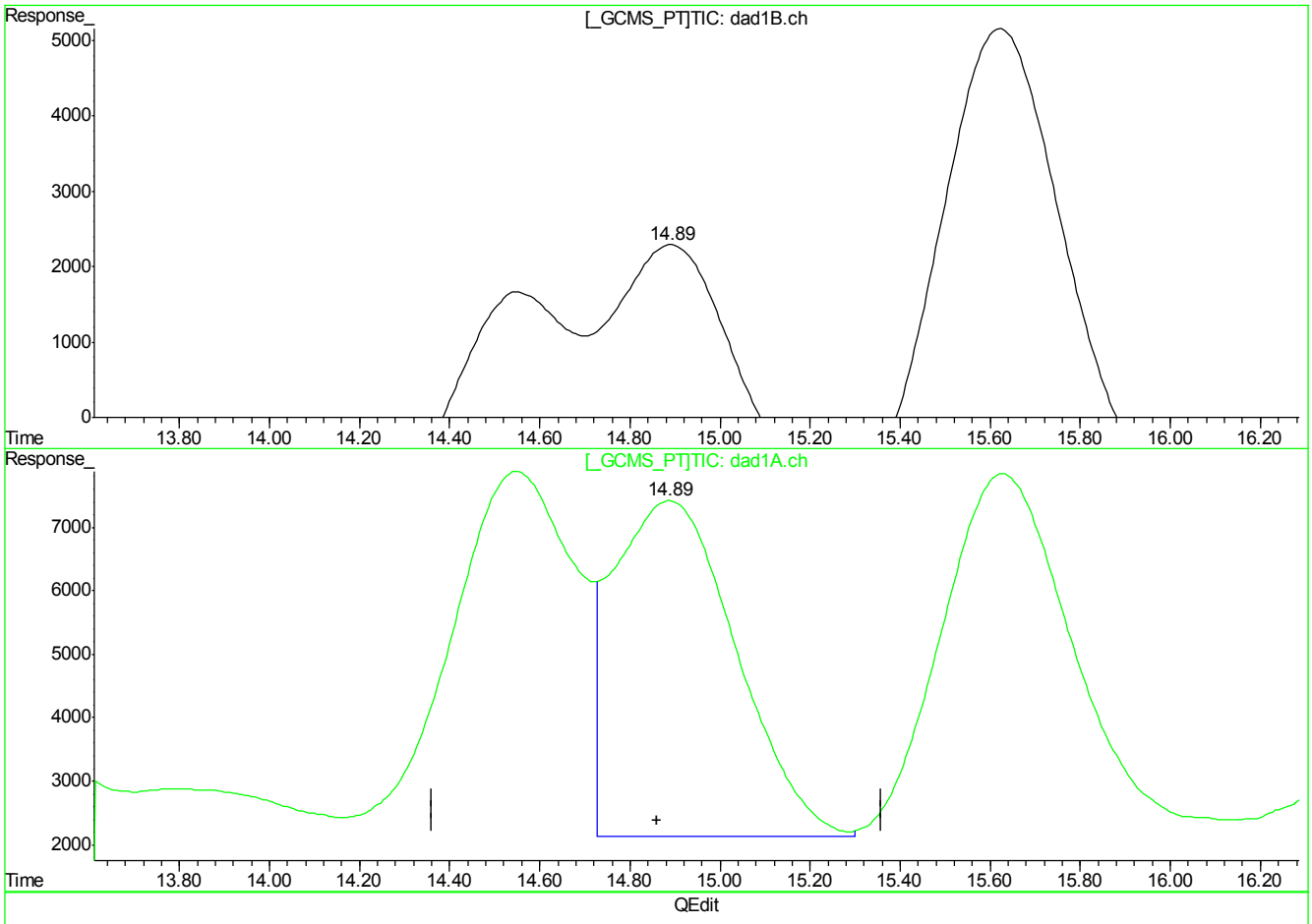
response 1167236

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 91.335ppb m

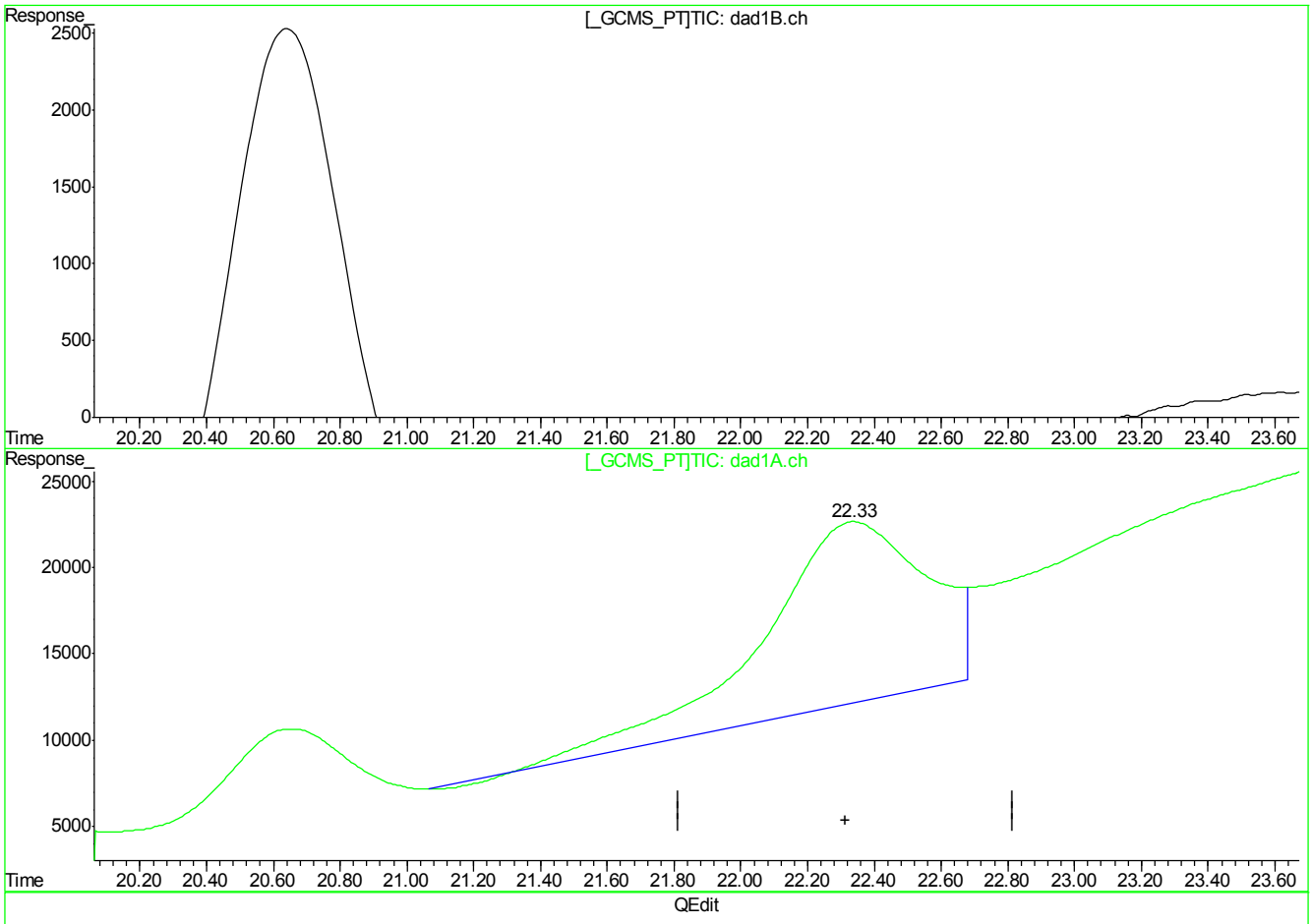
response 996233

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.34min 1088.398ppb

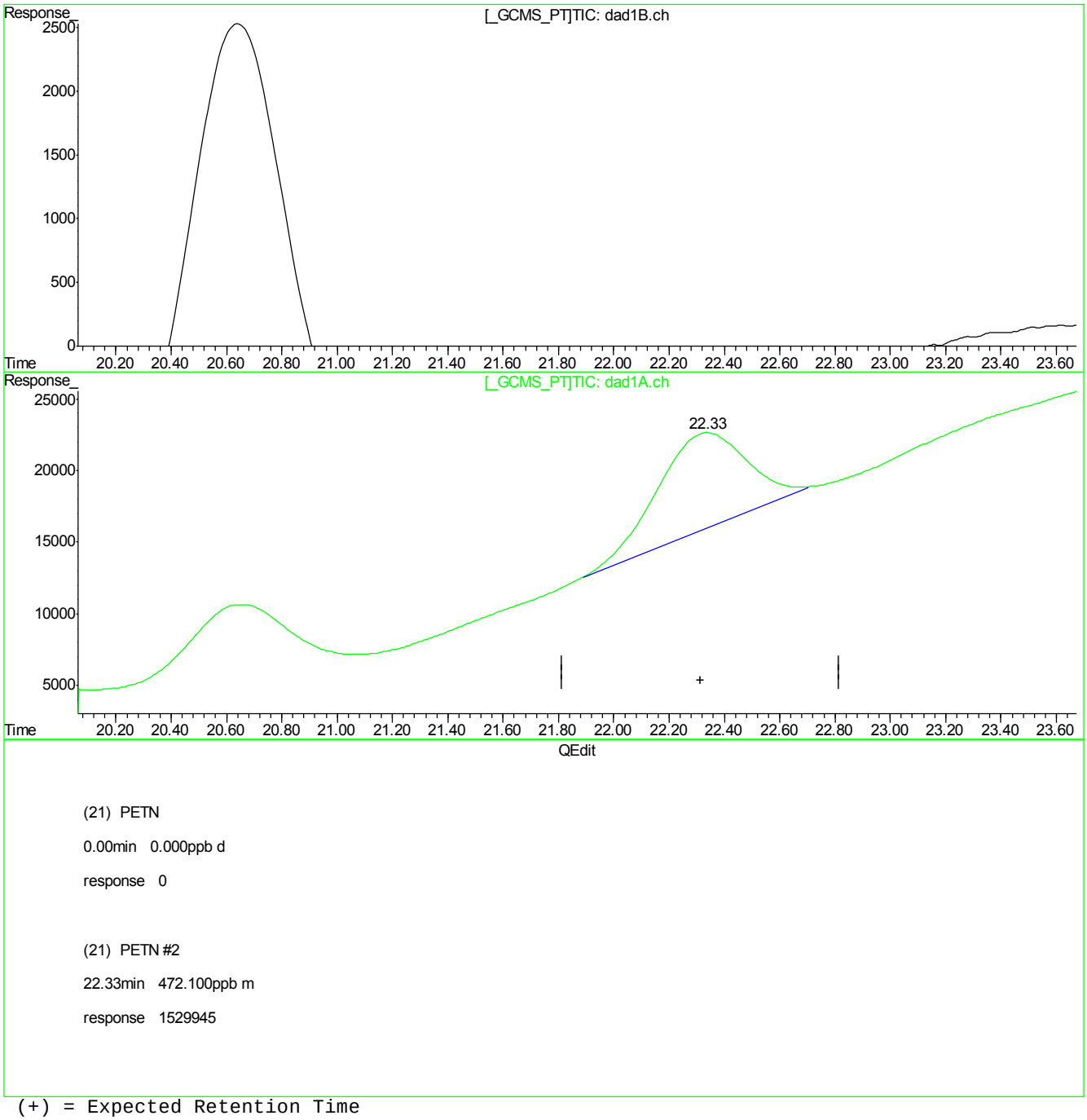
response 3527199

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:59 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 472.100ppb m

response 1529945

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:58:01 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:00 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.56	1063491	2179380	180.394	174.846m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		36.08%#	34.97%#
	Target Compounds						
1)	TNX	5.01	5.01	2917600	2917600	346.858	345.941
2)	HMX	5.46	5.46	656713	656713	172.889	171.666
3)	DNX	5.59	5.59	1519481	1519481	231.493	232.298
4)	MNX	6.67	6.67	1443328	1443328	298.340	298.340
5)	1,3,5-Trinitrobe	7.55	7.55	2106246	2100950	206.269	205.837
6)	RDX	8.07	8.07	970188	952673	203.793	201.047
7)	1,3-Dinitrobenze	10.09	10.08	2896074	2285655	198.974	162.672m
8)	Nitrobenzene	11.08	11.08	1850780	1739643	242.105	183.374m
9)	2,4,6-Trinitroto	11.88	11.87	1988673	2595550	195.051	166.860m
10)	Nitroglycerin	0.00	12.71	0	3400685	N.D. d	930.820m
11)	Tetryl	13.29	13.28	1576705	2666776	229.863	215.610m
13)	2,6-Dinitrotolue	14.91	14.90	1464572	2076245	210.655	190.384m
14)	2,4-Dinitrotolue	15.63	15.64	2633670	2111724	198.199	212.468
15)	o-Nitrotoluene	17.23	17.23	1151278	1767333	264.153	291.713
16)	3,5-Dinitroanili	16.65	16.65	2062620	3445874	194.627	191.892
17)	p-Nitrotoluene	18.40	18.40	2368549	4400784	205.856	206.913
18)	4-Amino-2,6-Dini	18.40	18.40	2368549	4400784	205.856	206.913
19)	m-Nitrotoluene	19.65	19.65	1205775	2051289	240.727	216.863
20)	2-Amino-4,6-Dini	20.64	20.65	1852313	2259776	193.086	166.971
21)	PETN	0.00	22.33	0	3416410	N.D. d	1054.212m

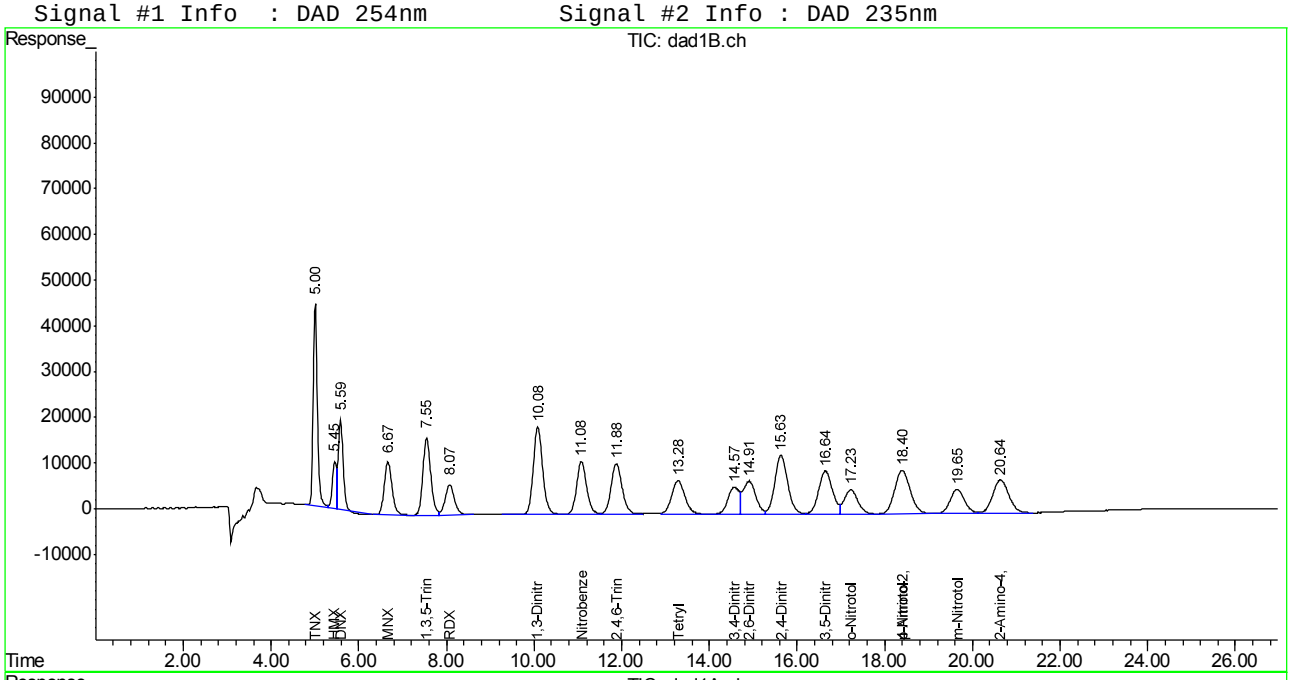
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 13:37:53 2017 Page 1

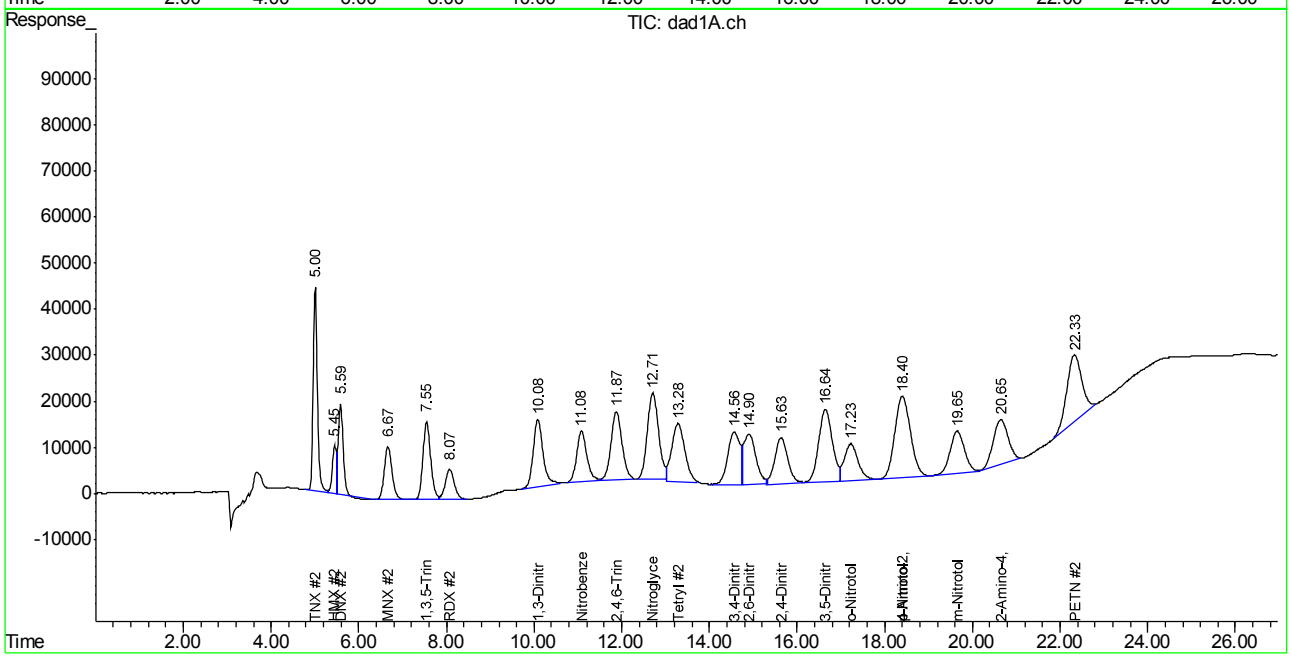
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

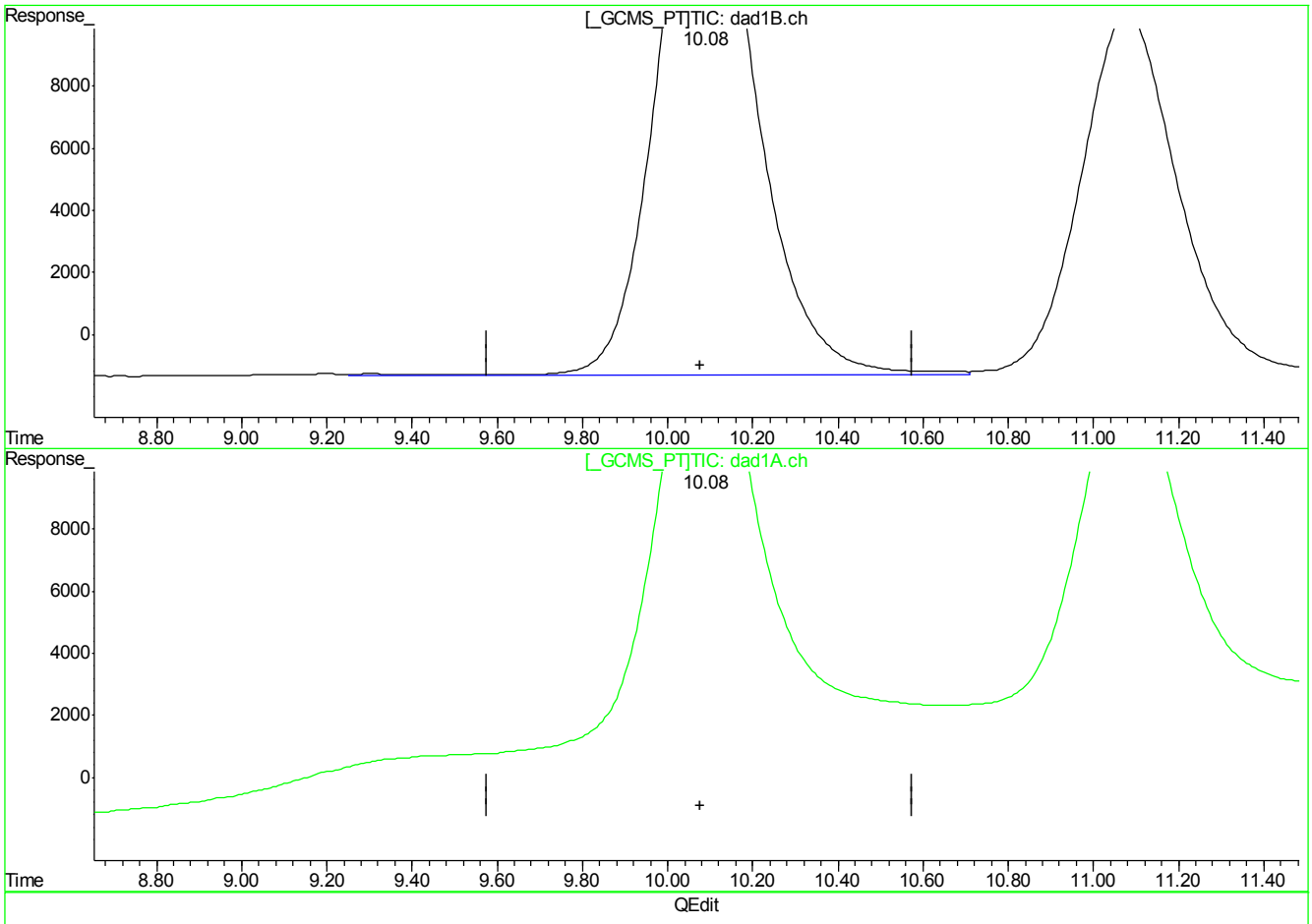
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613829.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:04	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.56	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.90	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.09min 292.876ppb

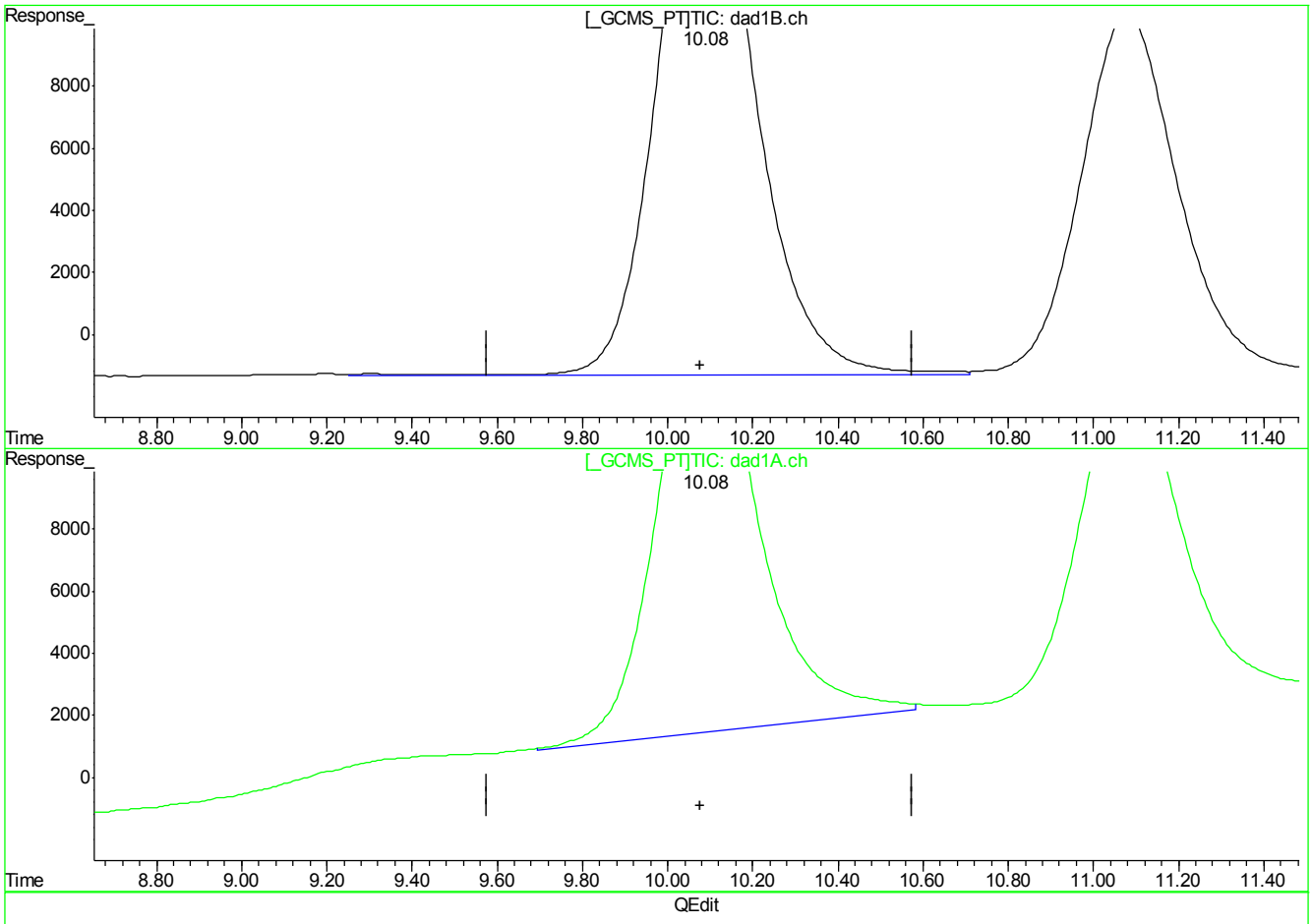
response 4066063

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:15 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.08min 162.672ppb m

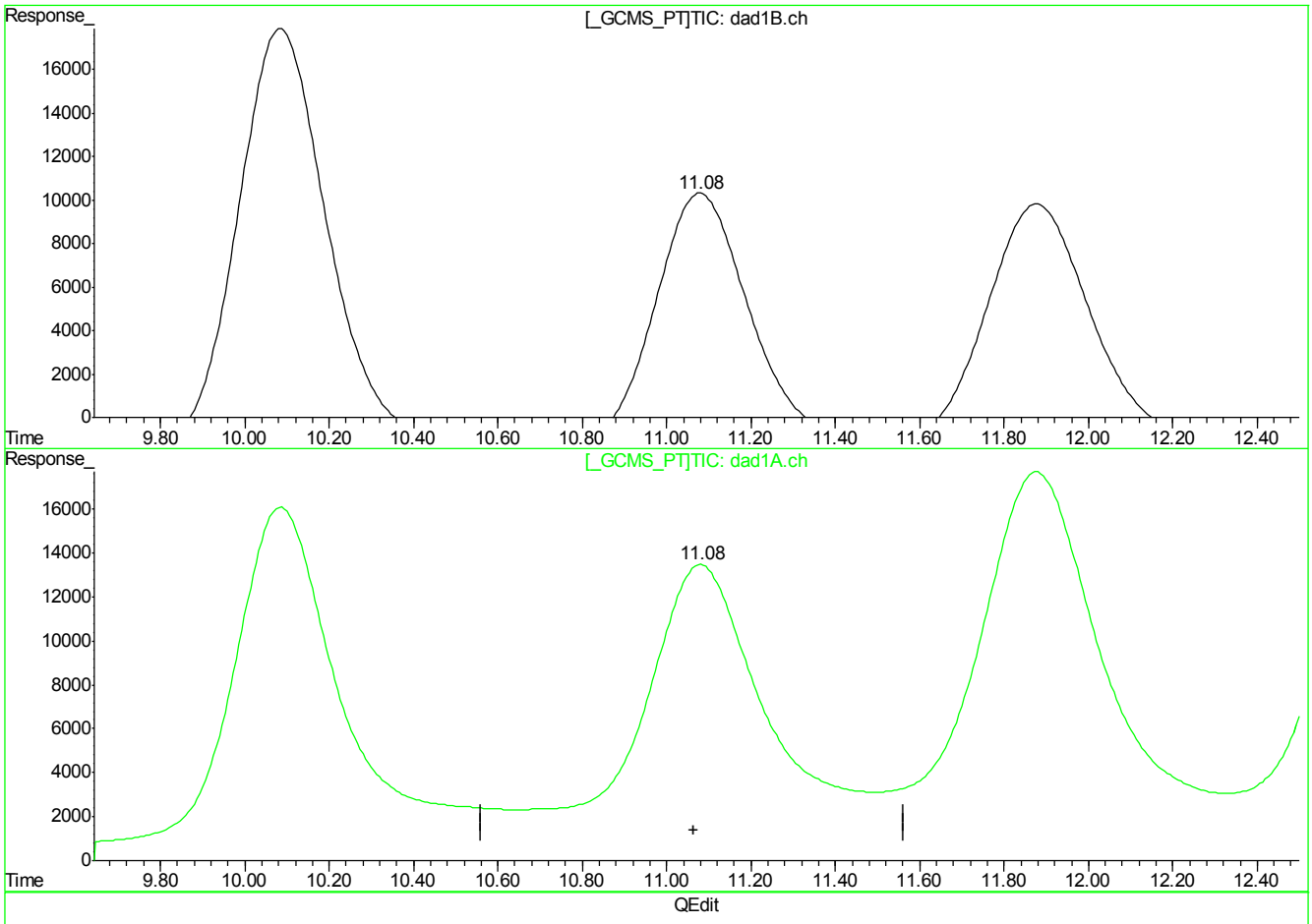
response 2285655

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 328.328ppb

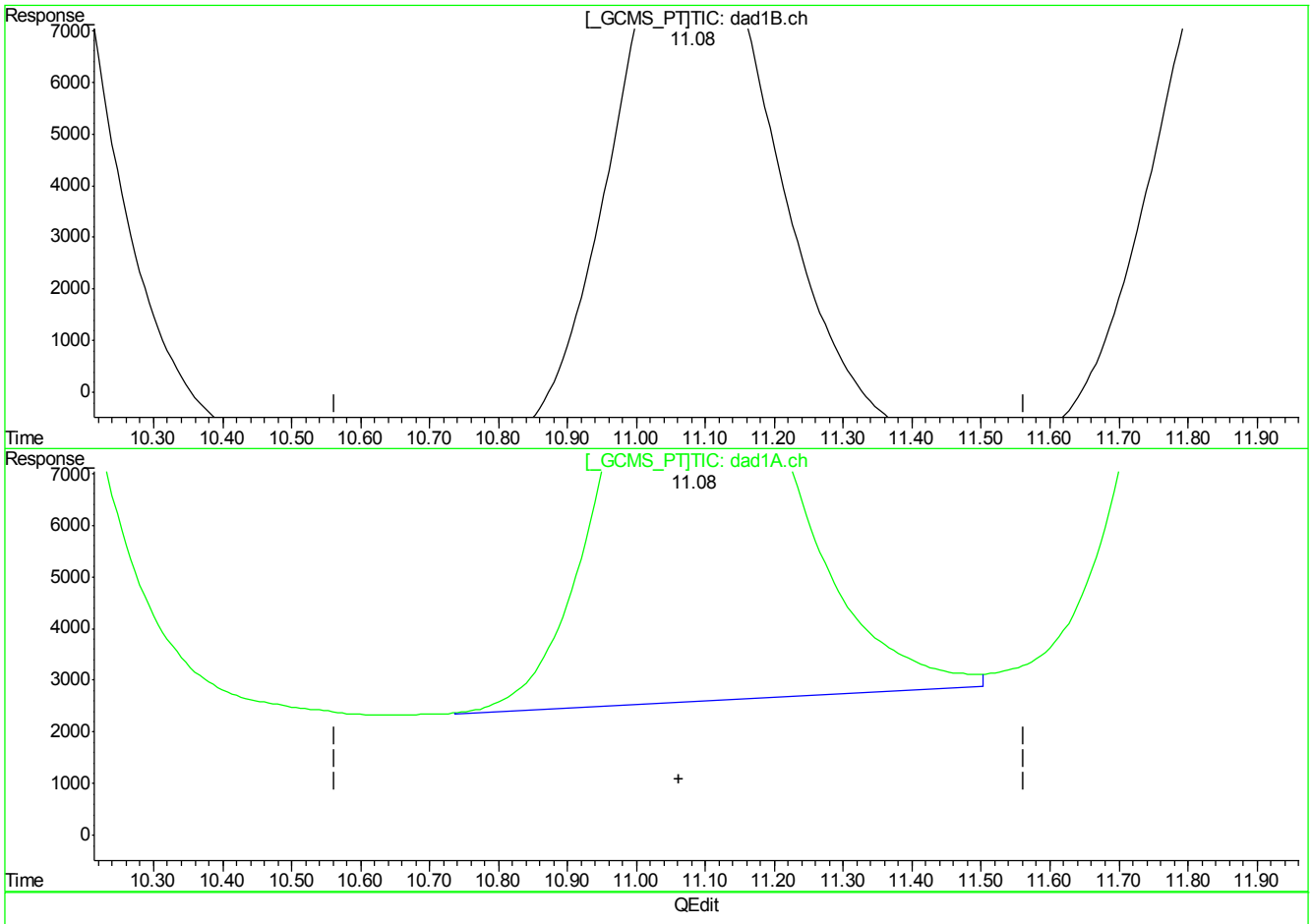
response 3103070

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:25 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 183.374ppb m

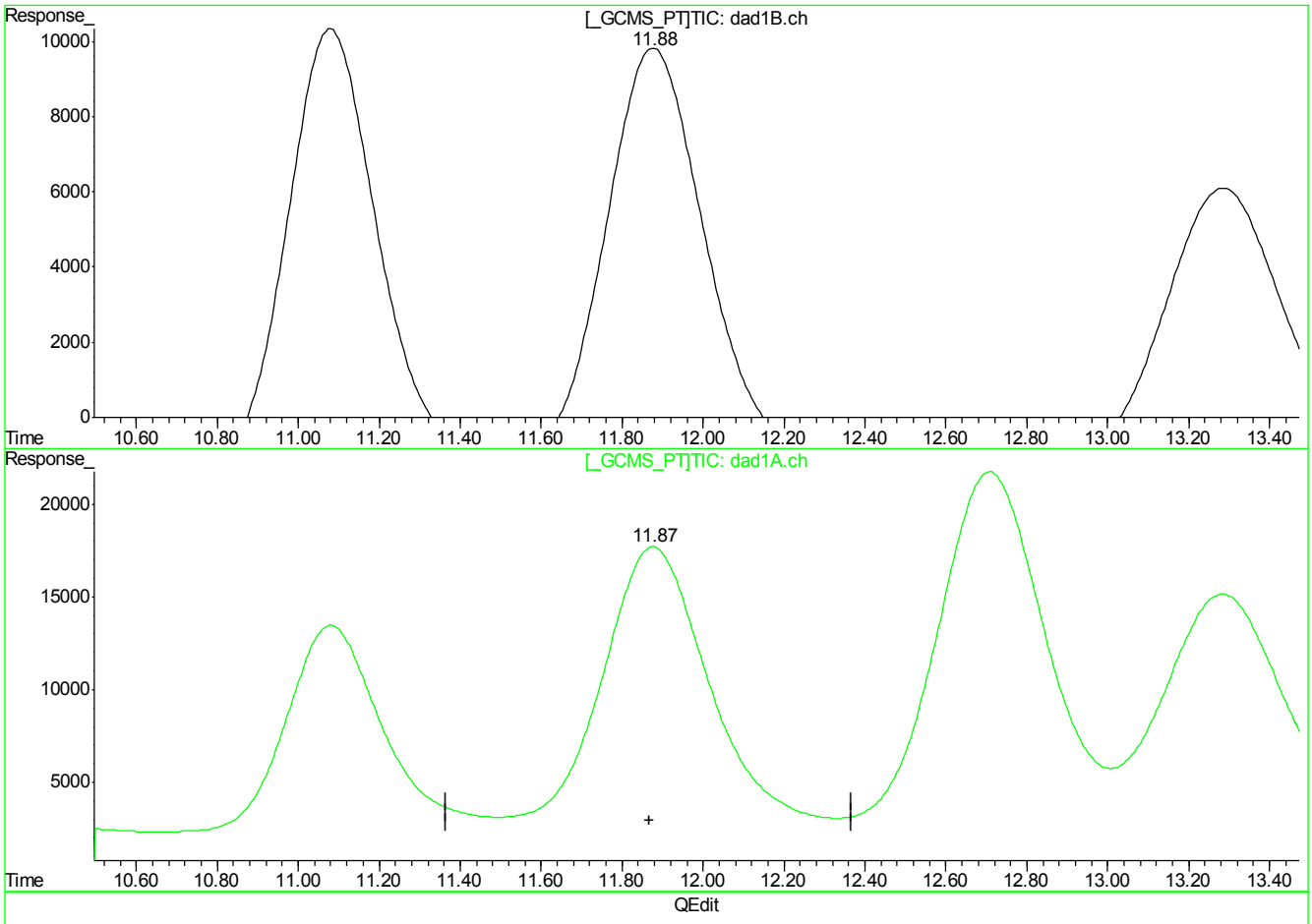
response 1739643

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:31 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.88min 253.581ppb

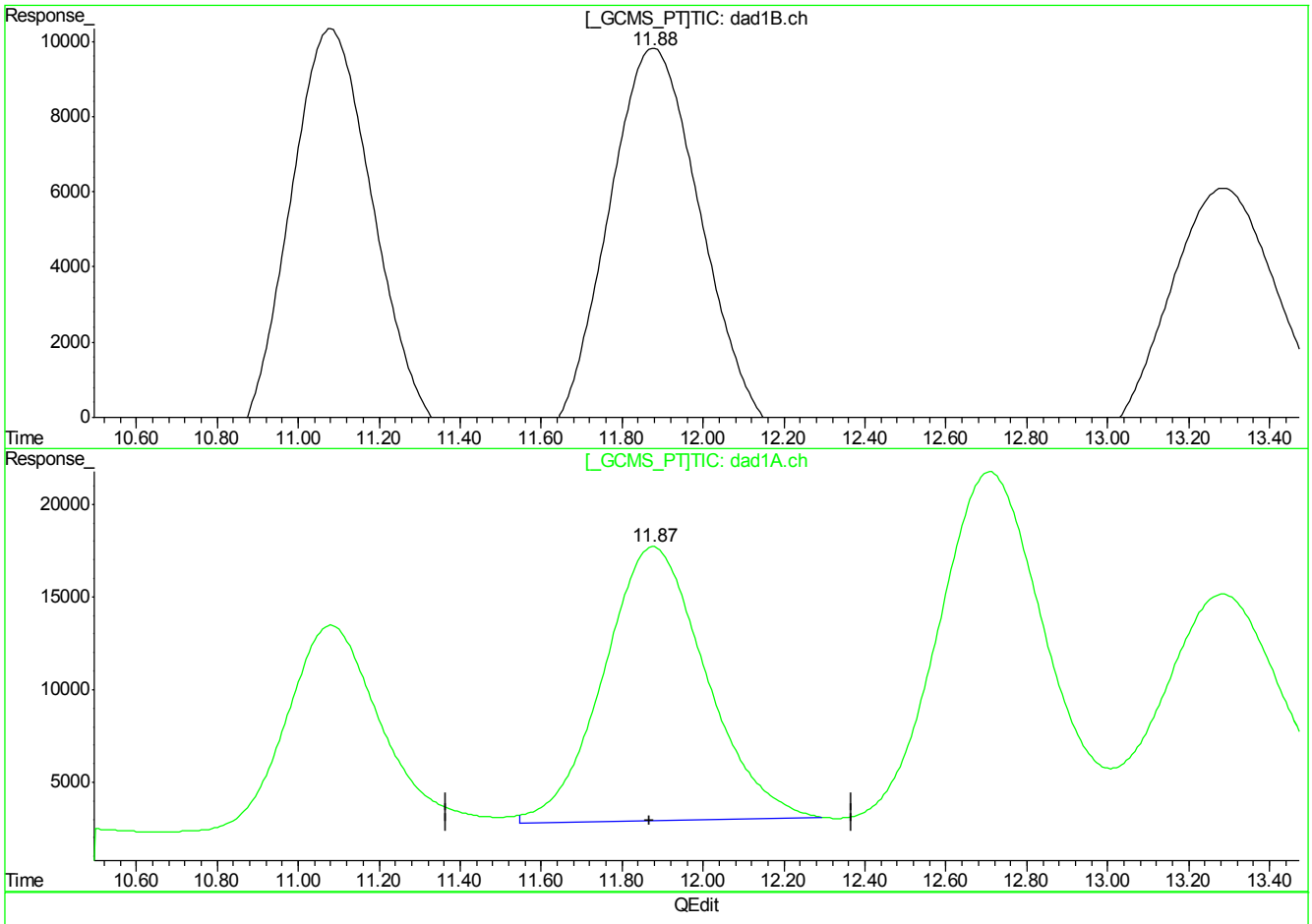
response 3927420

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:33 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.87min 166.860ppb m

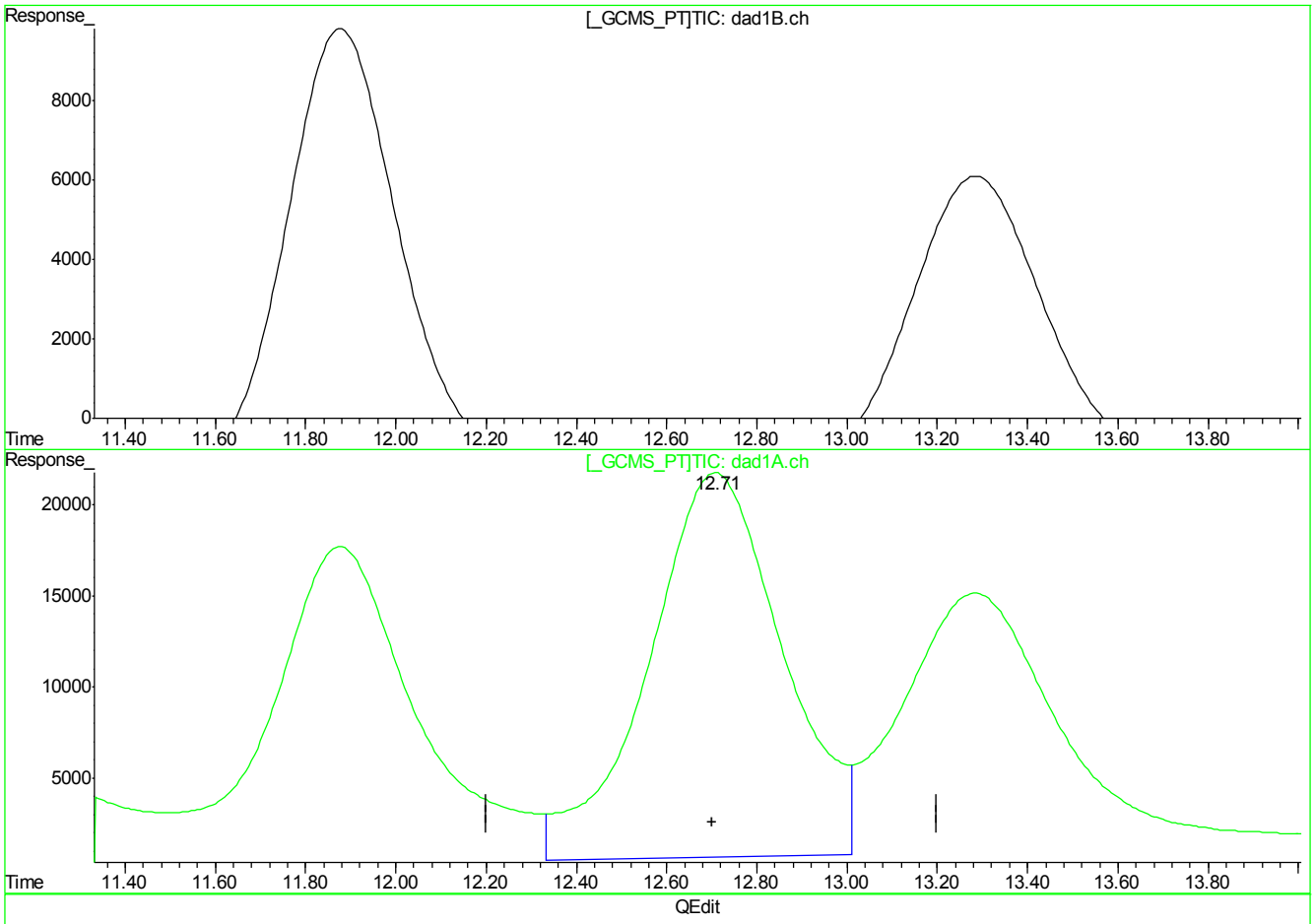
response 2595550

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 1189.969ppb

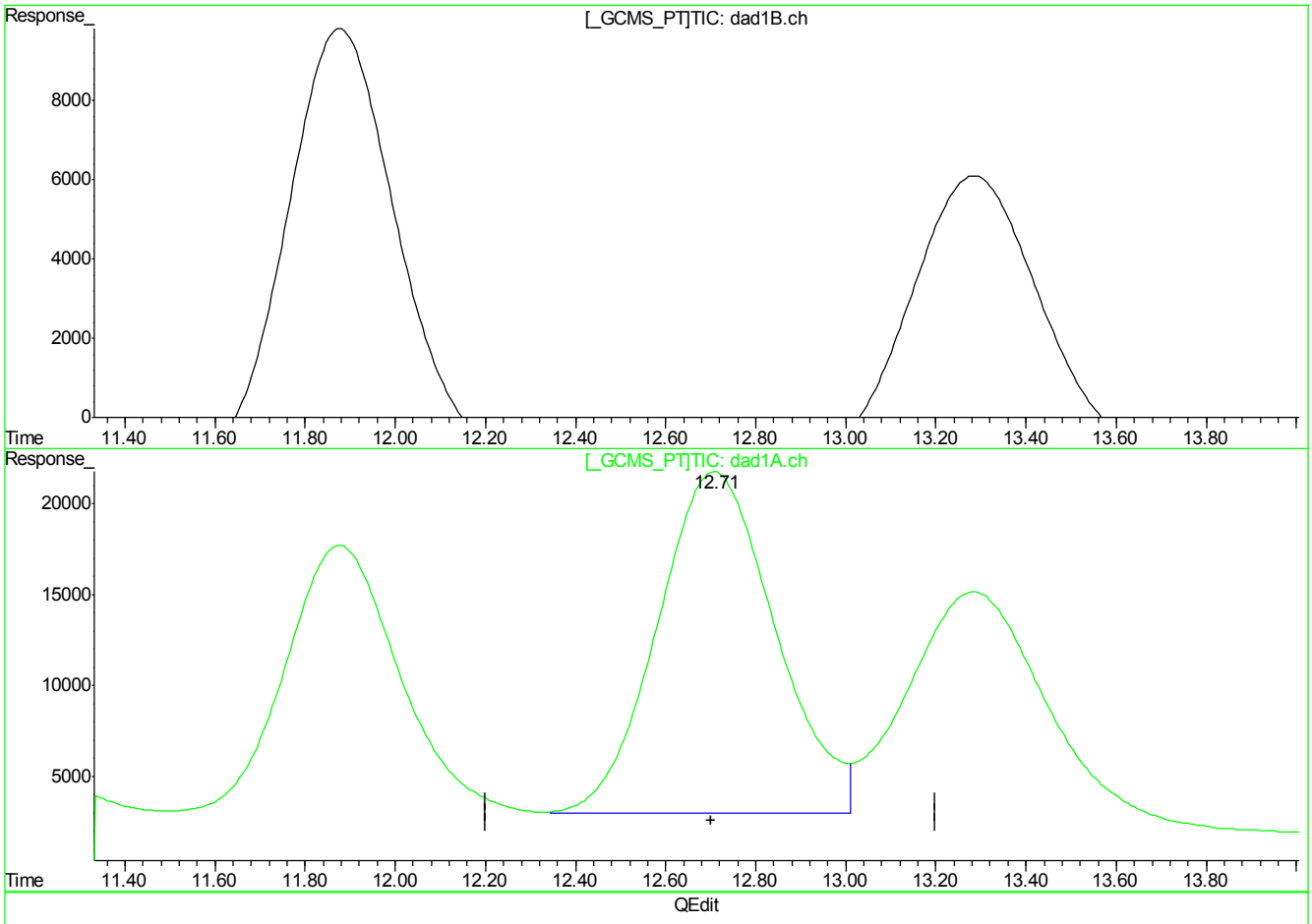
response 4339170

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:38 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 930.820ppb m

response 3400685

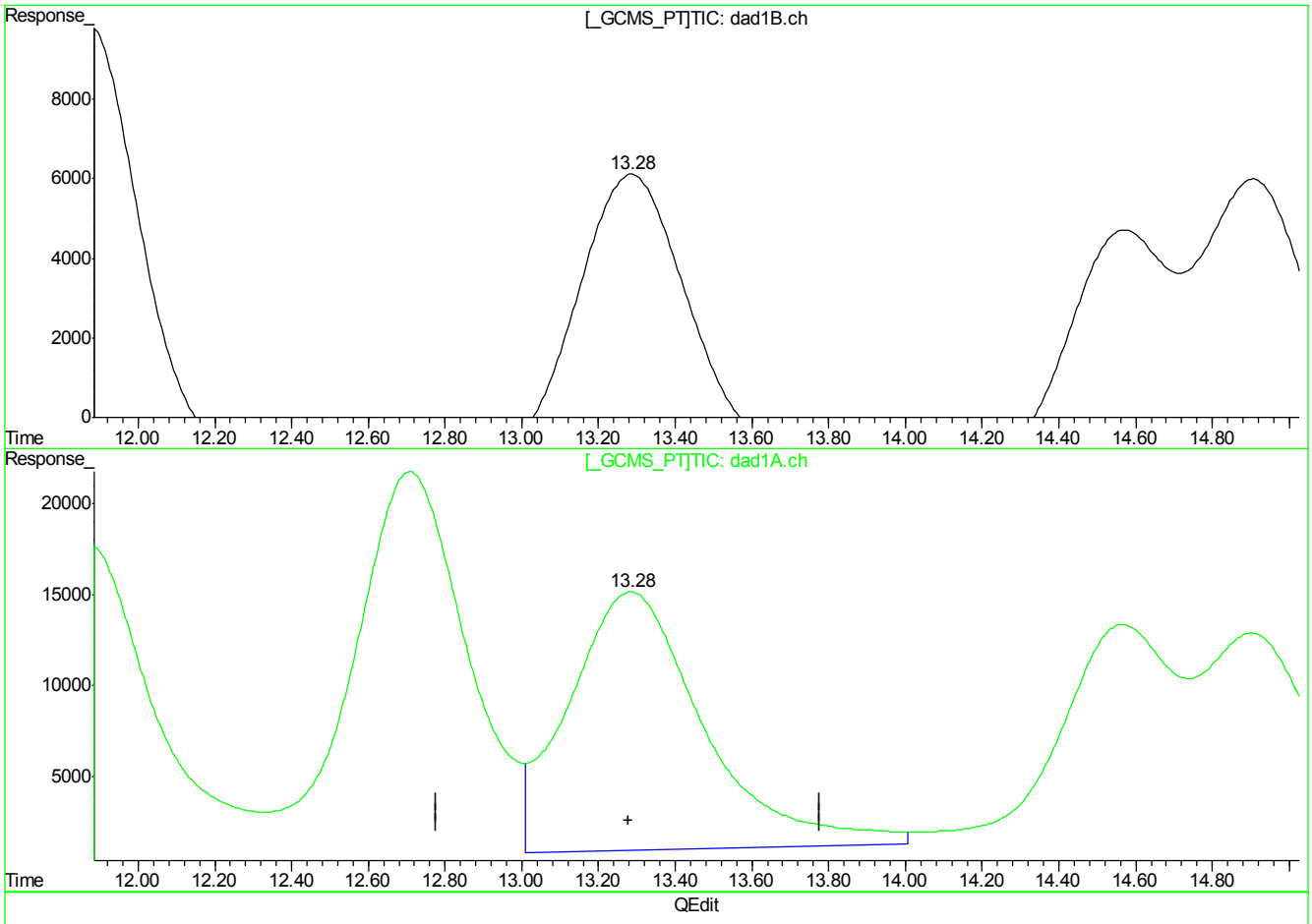
(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:42 2017

GG613829.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.29min 280.400ppb

response 3486939

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:48 2017

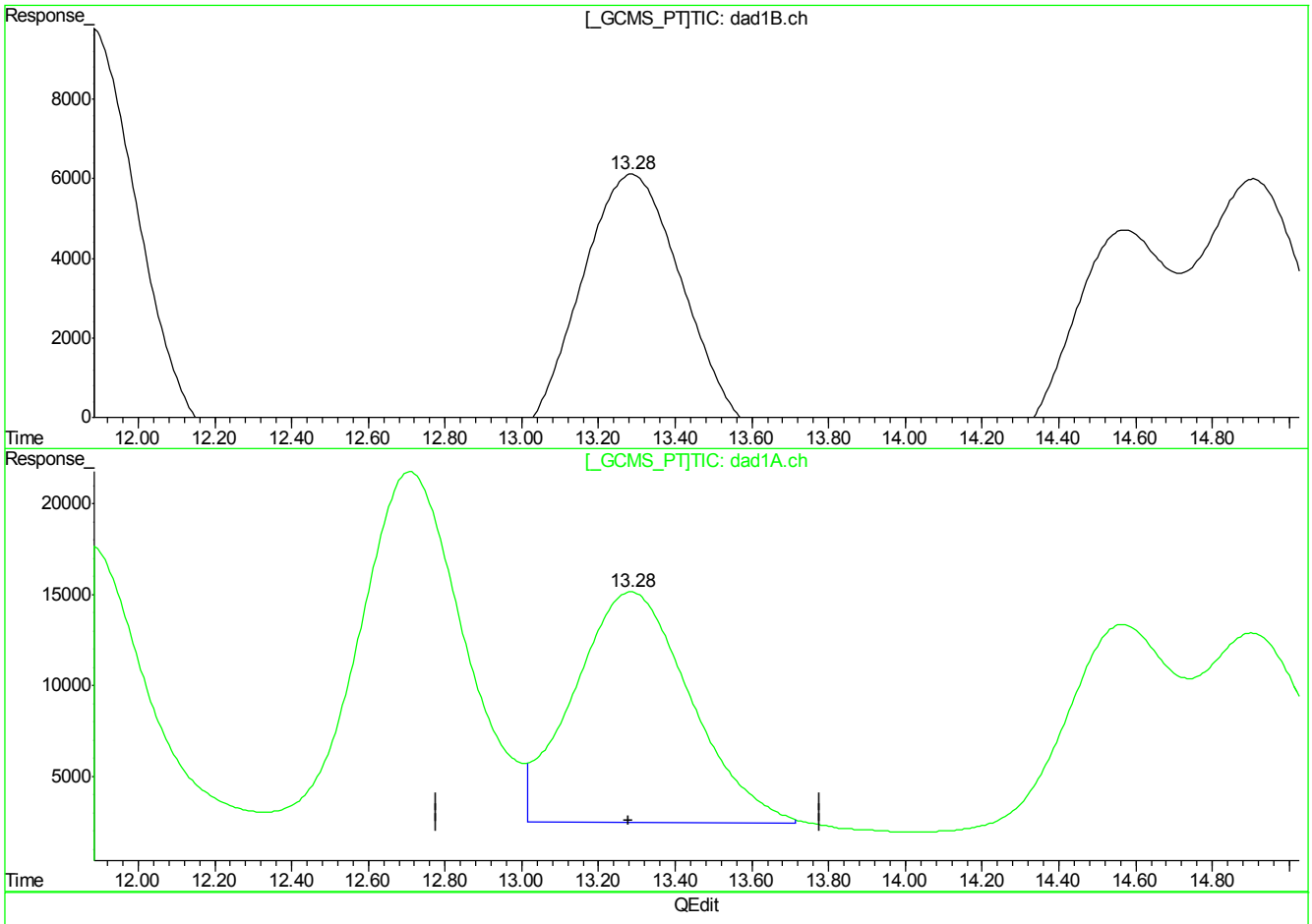
7.7.14.10

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.28min 215.610ppb m

response 2666776

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:51 2017

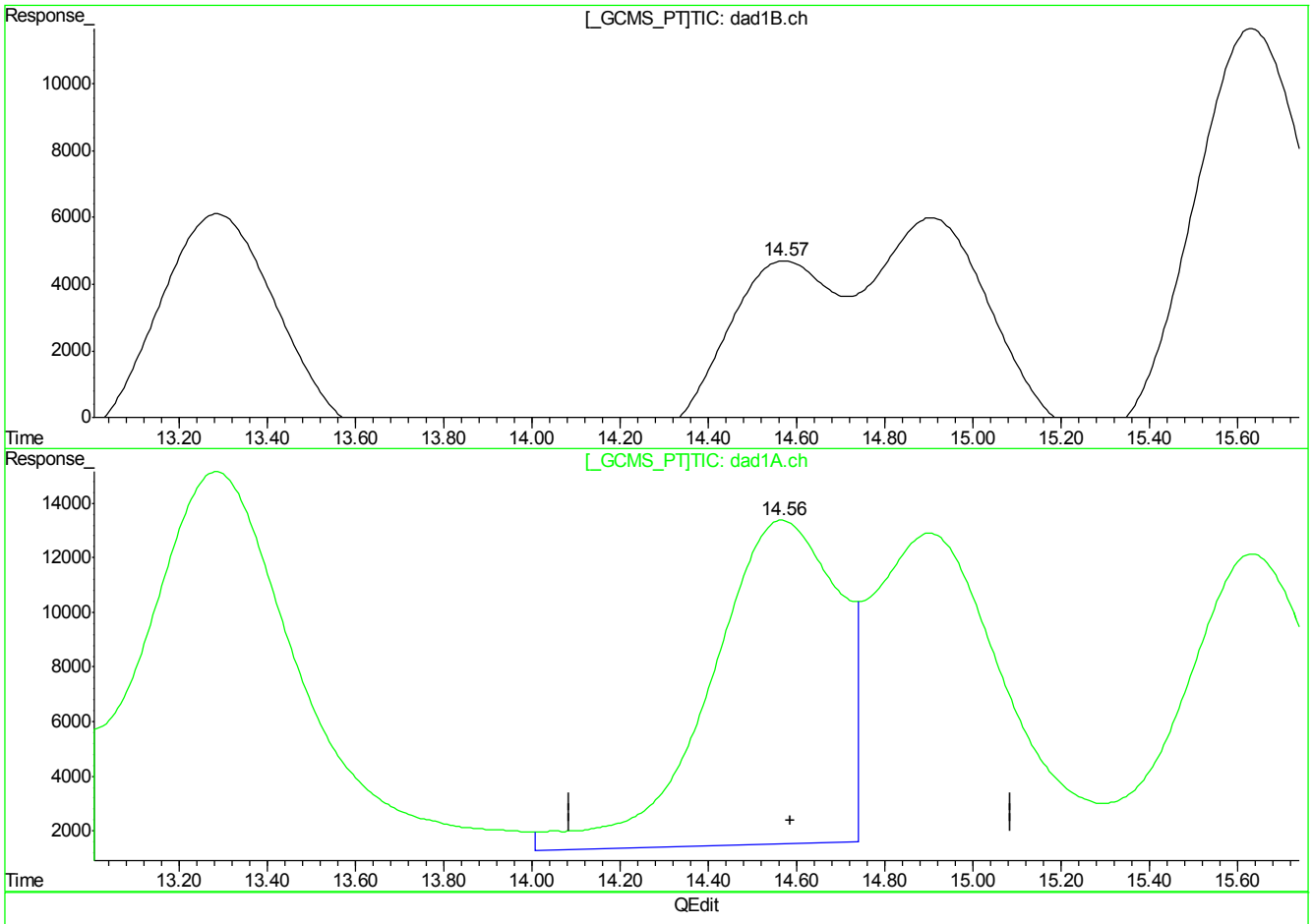
7.7.14.11

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.57min 192.743ppb

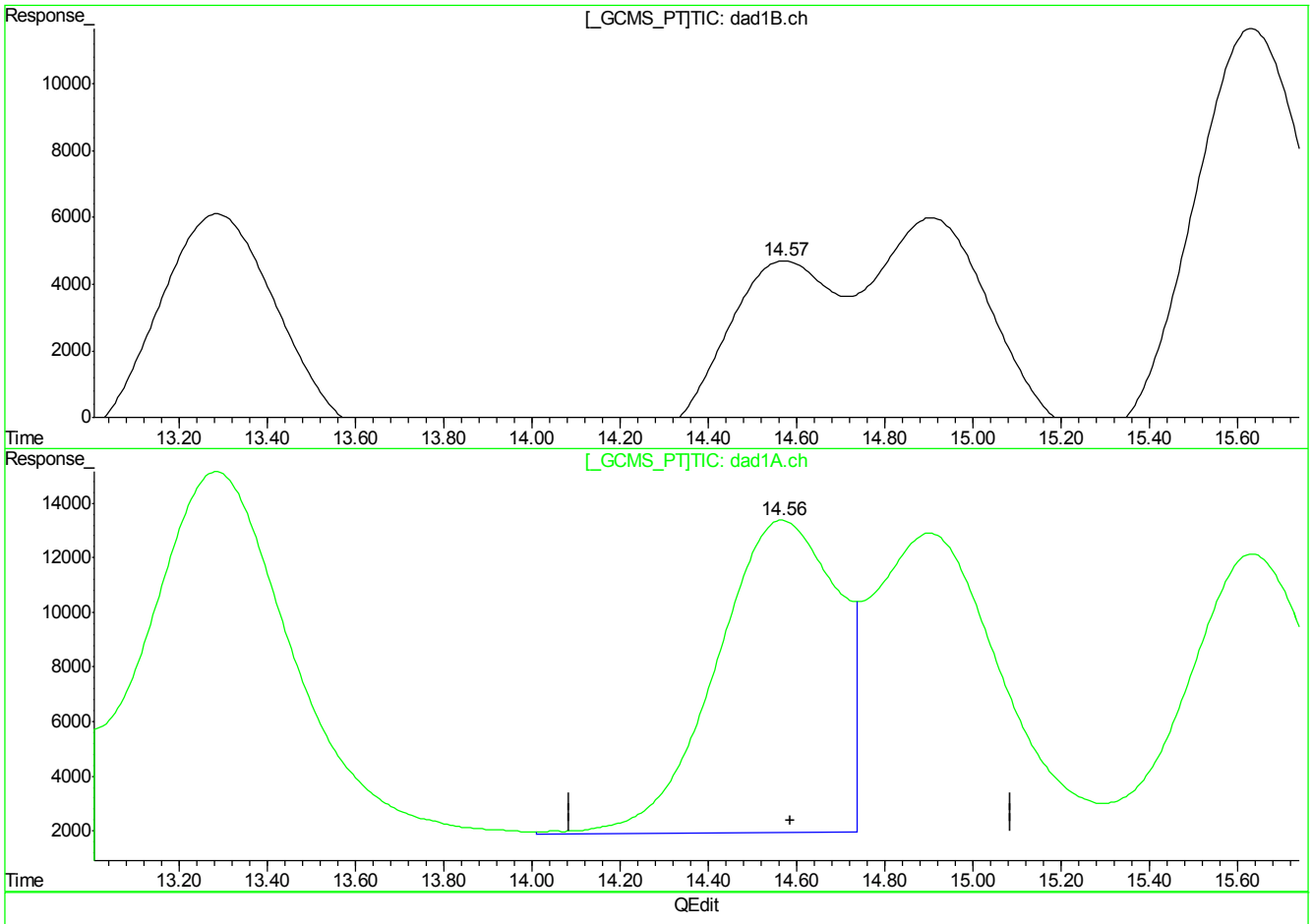
response 2400836

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:53 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.56min 174.846ppb m

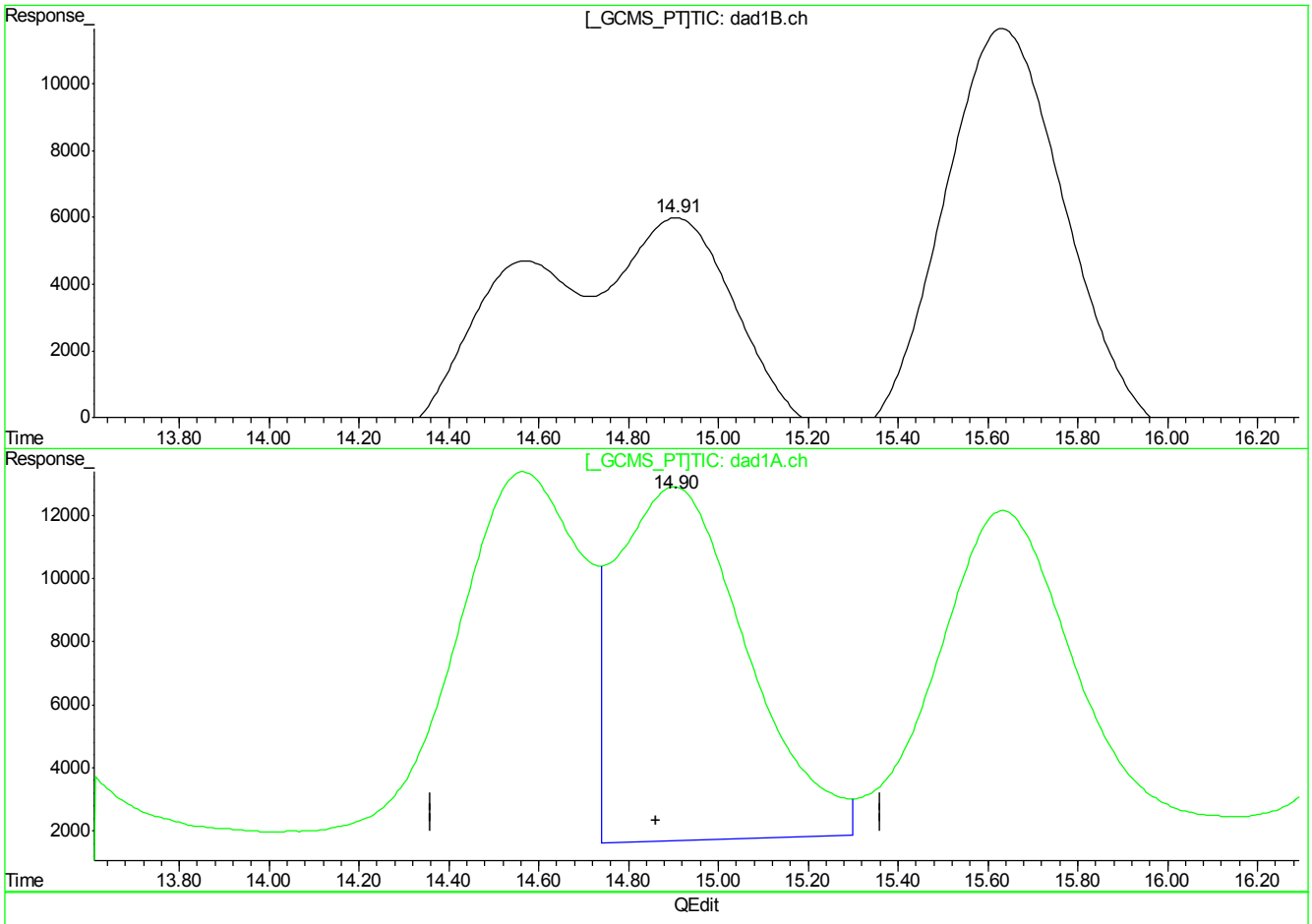
response 2179380

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:57 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 206.393ppb

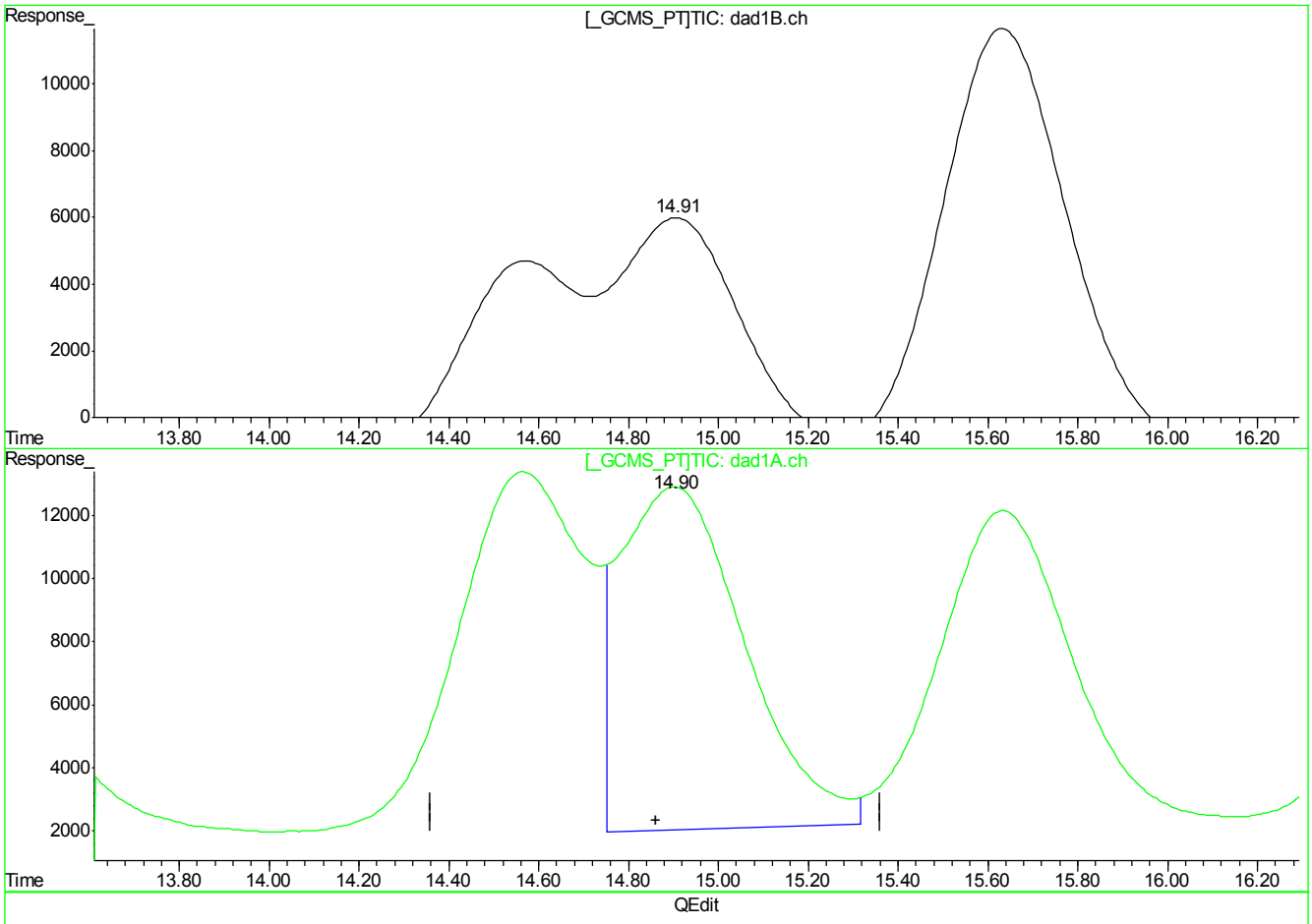
response 2250772

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:58 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 190.384ppb m

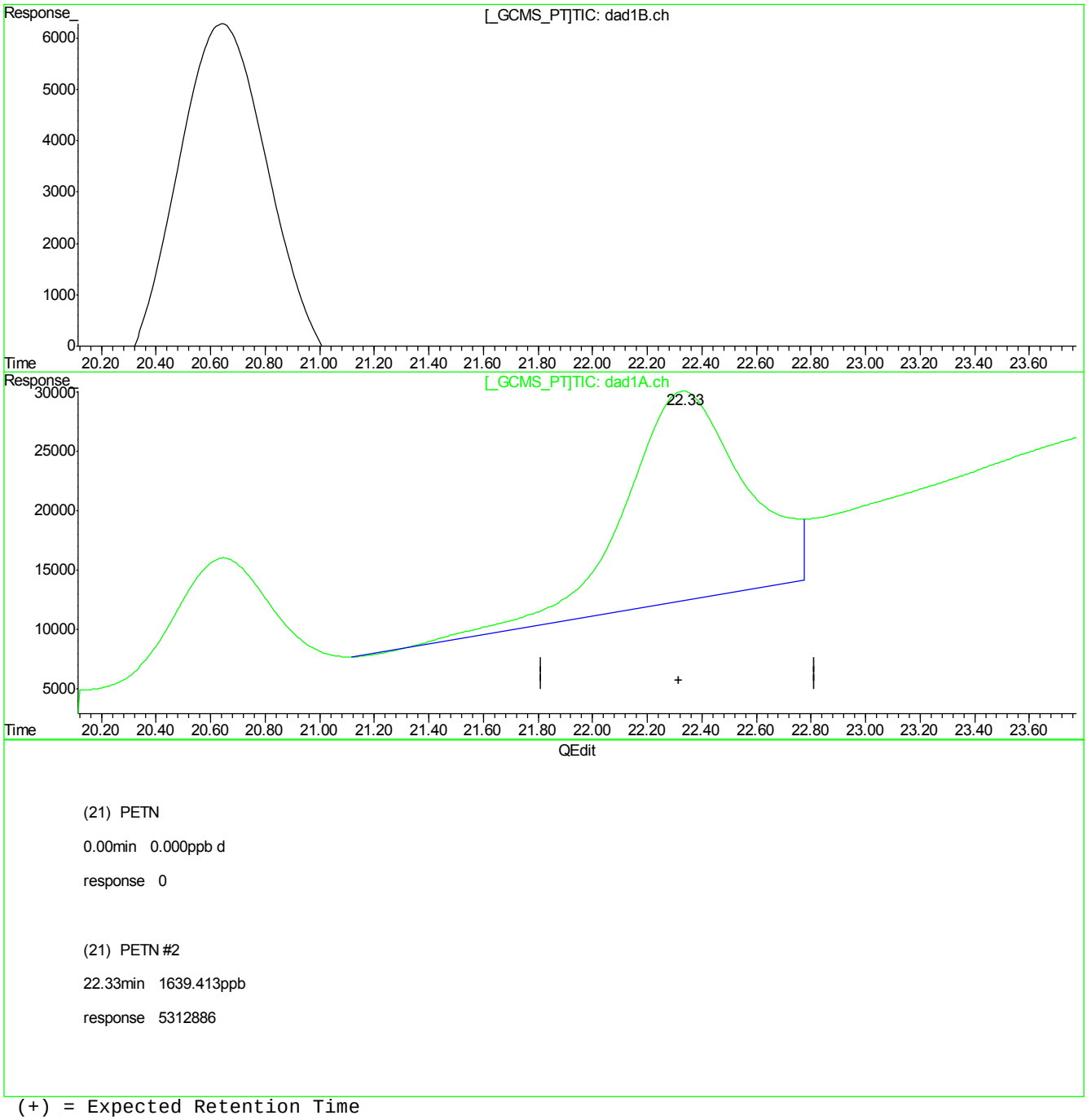
response 2076245

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:09 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 1639.413ppb

response 5312886

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:16 2017

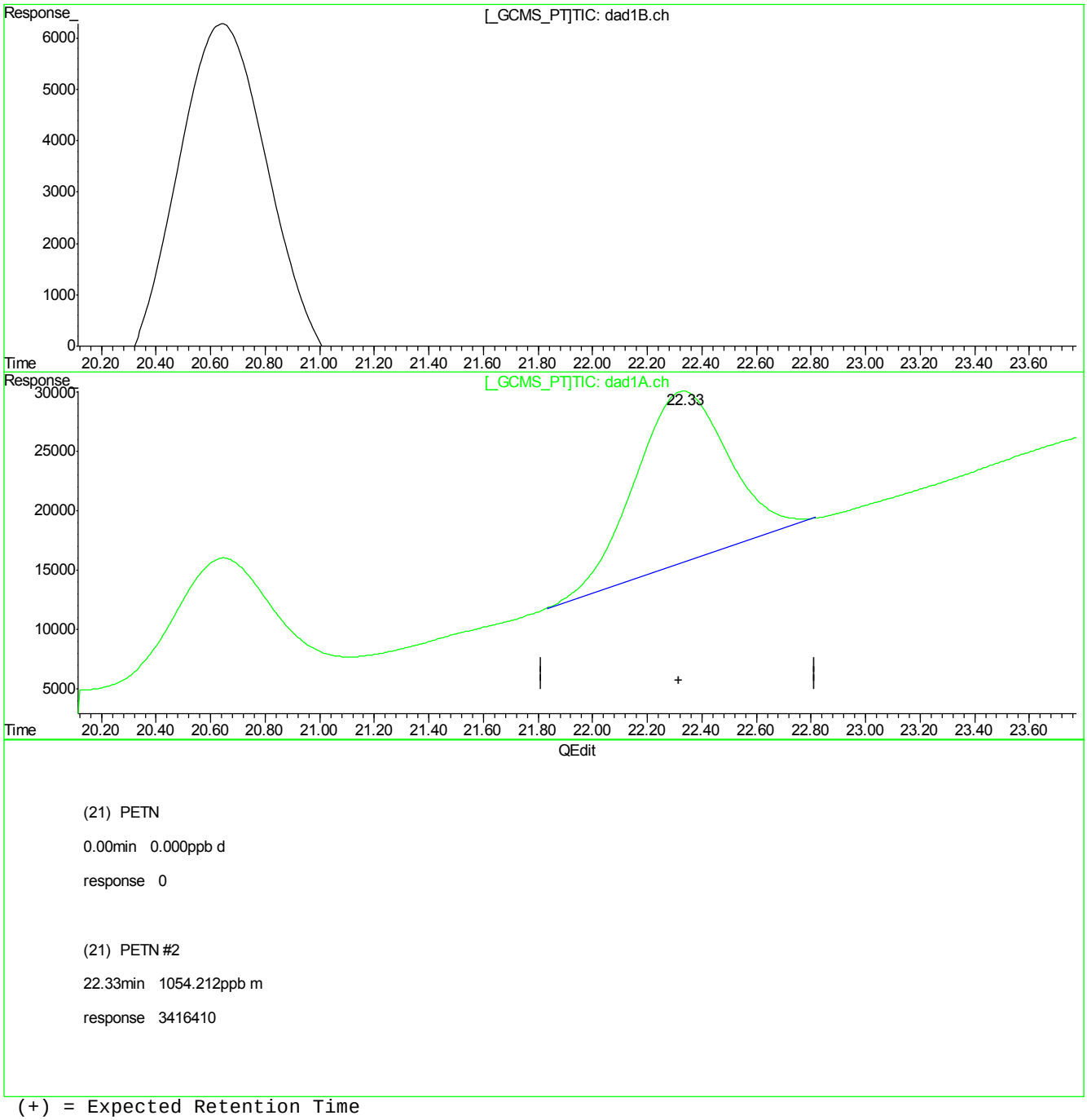
7.7.14.16

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 1054.212ppb m

response 3416410

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:18 2017

7.7.14.17

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:05 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.56	14.56	2566024	5307161	435.261	429.923
	Spiked Amount 500.000	Range 70 - 136		Recovery =		87.05%	85.98%
	Target Compounds						
1)	TNX	5.01	5.01	7178191	7178191	853.377	851.121
2)	HMX	5.46	5.46	1567471	1567471	412.659	409.740
3)	DNX	5.59	5.59	3839121	3839121	584.891	586.925
4)	MNX	6.66	6.66	3503085	3503085	724.097	724.097
5)	1,3,5-Trinitrobe	7.55	7.55	5075707	5076436	497.074	497.355
6)	RDX	8.07	8.07	2346451	2347827	492.885	495.472
7)	1,3-Dinitrobenze	10.08	10.08	6887672	6720081	473.215	493.198
8)	Nitrobenzene	11.08	11.08	4451511	5219104	582.312	555.512
9)	2,4,6-Trinitroto	11.88	11.88	4723401	7202241	463.275	470.131
10)	Nitroglycerin	0.00	12.71	0	9304341	N.D. d	2578.020
11)	Tetryl	13.28	13.28	3783586	7259516	551.597	570.016
13)	2,6-Dinitrotolue	14.90	14.90	3505597	5120931	504.224	469.790
14)	2,4-Dinitrotolue	15.63	15.63	6338975	4883124	477.045	490.411
15)	o-Nitrotoluene	17.22	17.22	2807950	4120241	603.576	623.959
16)	3,5-Dinitroanili	16.63	16.63	4900917	8015740	462.446	444.537
17)	p-Nitrotoluene	18.39	18.39	5738993	10601258	498.789	491.995
18)	4-Amino-2,6-Dini	18.39	18.39	5738993	10601258	498.789	491.995
19)	m-Nitrotoluene	19.65	19.65	2981905	4897585	565.664	517.775
20)	2-Amino-4,6-Dini	20.63	20.63	4541236	5876348	473.381	434.192
21)	PETN	0.00	22.30	0	8594642	N.D. d	2652.074m

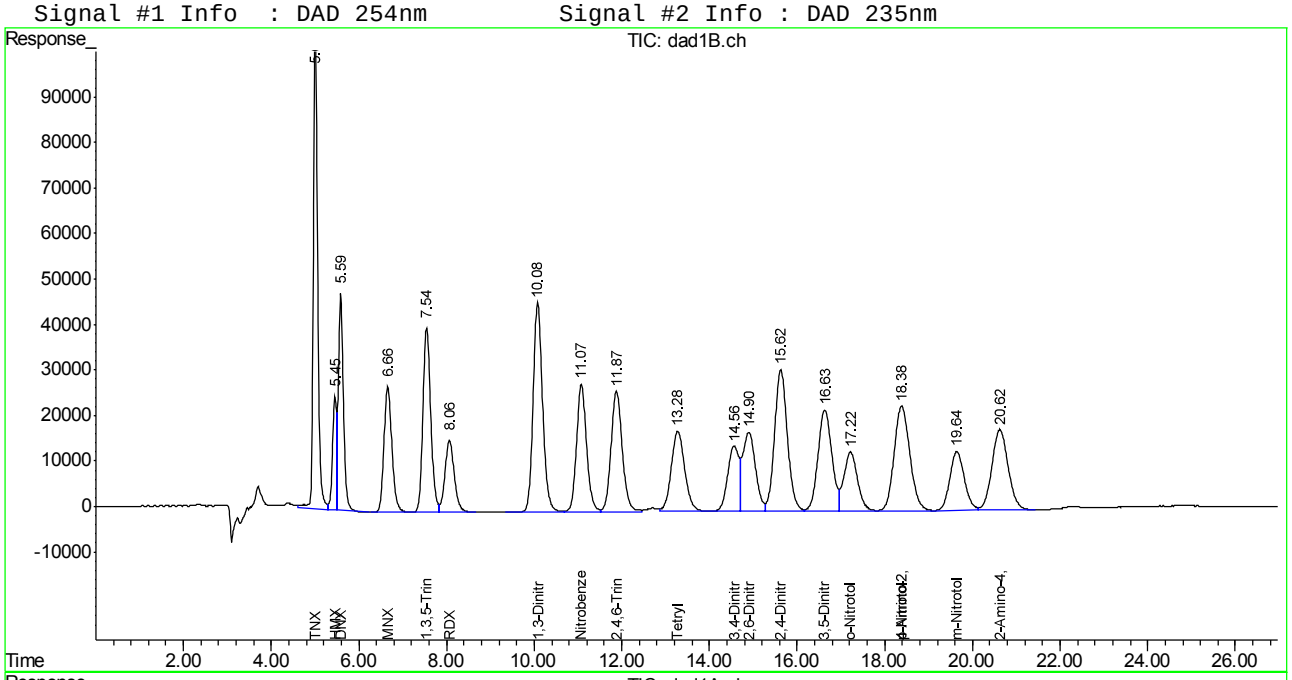
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:37:54 2017 Page 1

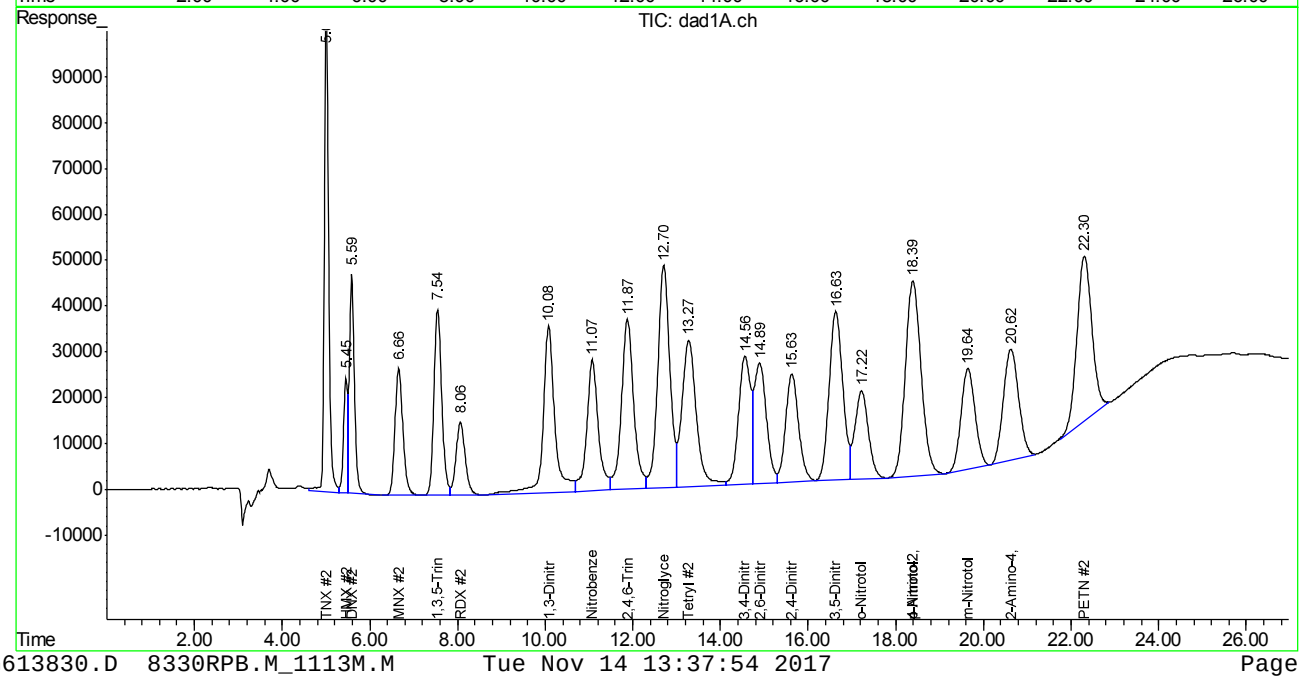
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

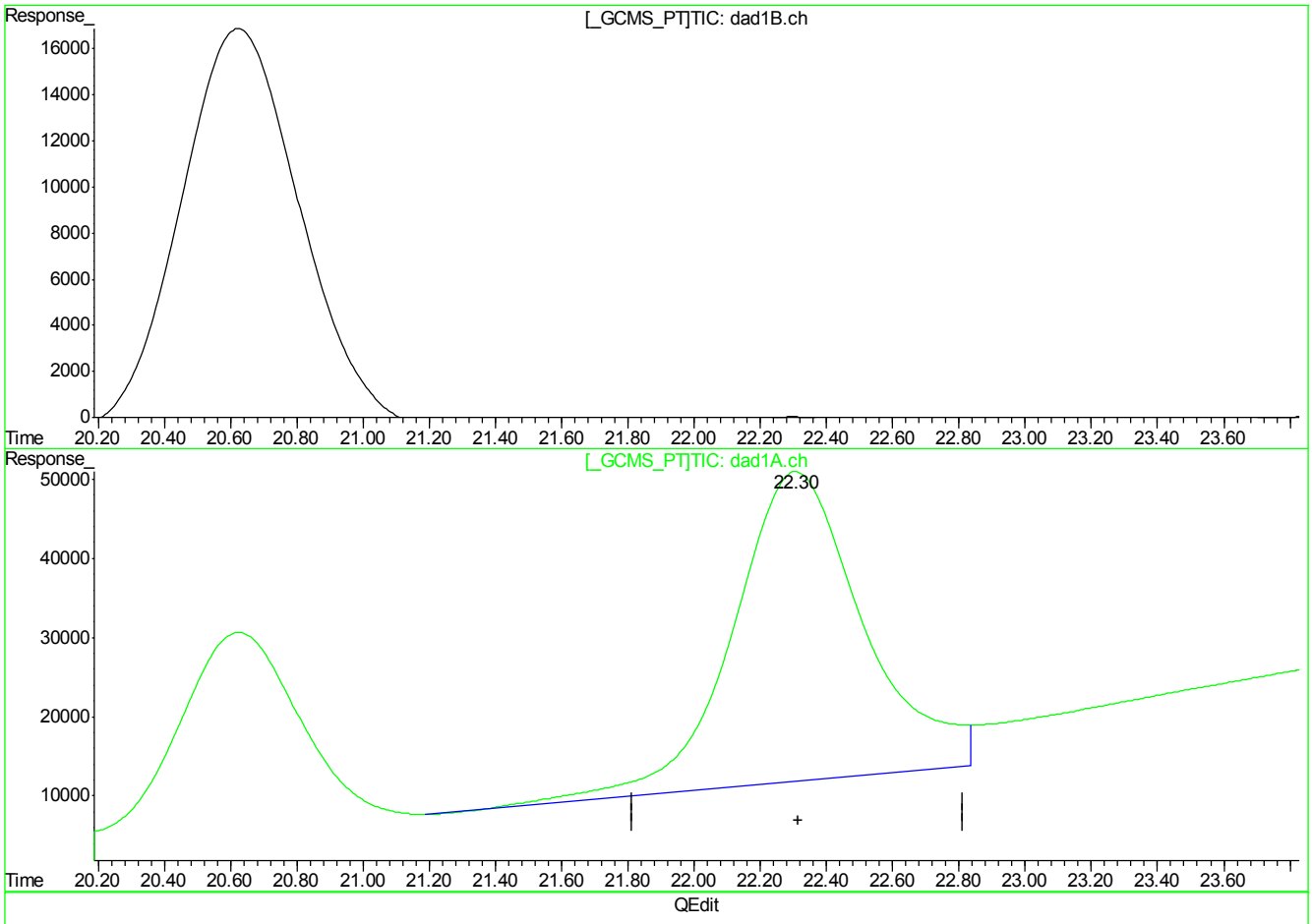
Sample Number:	GGG2571-ICC2571	**Method:**	SW846 8330A
Lab FileID:	GG613830.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:34	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.30	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 3296.542ppb

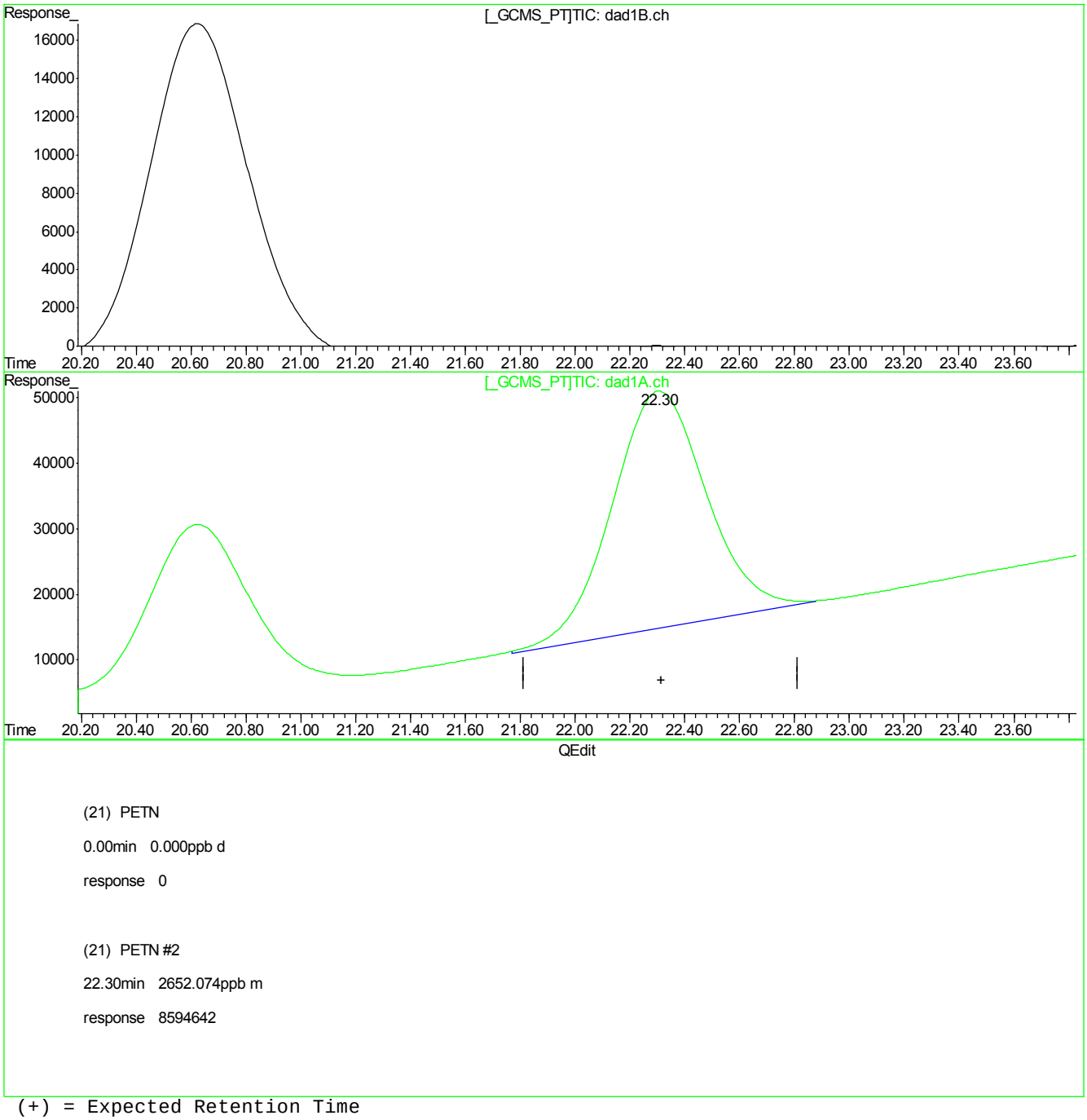
response 10683184

(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:49 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:06 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	5134237	10563524	870.893	870.355
	Spiked Amount 500.000	Range 70 - 136		Recovery =		174.18%#	174.07%#
	Target Compounds						
1)	TNX	5.01	5.01	14095710	14095710	1675.764	1671.335
2)	HMX	5.45	5.45	3075086	3075086	809.559	803.833
3)	DNX	5.59	5.59	7555662	7555662	1151.106	1155.110
4)	MNX	6.66	6.66	7011708	7021085	1449.340	1451.278
5)	1,3,5-Trinitrobe	7.54	7.54	10137190	10160510	992.756	995.458
6)	RDX	8.06	8.06	4692682	4737484	985.724	999.772
7)	1,3-Dinitrobenze	10.08	10.08	13715413	12037357	942.312	920.589
8)	Nitrobenzene	11.07	11.07	8906160	9757665	1165.035	1052.303
9)	2,4,6-Trinitroto	11.87	11.87	9383167	13474808	920.308	899.133
10)	Nitroglycerin	0.00	12.70	0	18017203	N.D. d	5087.336
11)	Tetryl	13.27	13.26	7535288	13894482	1098.545	1049.997
13)	2,6-Dinitrotolue	14.89	14.89	6992017	10221713	1005.690	938.471
14)	2,4-Dinitrotolue	15.62	15.62	12638679	9128347	951.136	914.210
15)	o-Nitrotoluene	17.22	17.21	5638423	8443365	1108.003	1134.699
16)	3,5-Dinitroanili	16.62	16.62	9768472	16313142	921.745	898.051
17)	p-Nitrotoluene	18.38	18.38	11526542	21366781	1001.798	970.537
18)	4-Amino-2,6-Dini	18.38	18.38	11526542	21366781	1001.798	970.537
19)	m-Nitrotoluene	19.64	19.64	6023786	9889615	1061.910	1045.534
20)	2-Amino-4,6-Dini	20.62	20.62	9161666	12398036	955.017	916.067
21)	PETN	0.00	22.31	0	17345332	N.D. d	5352.300m

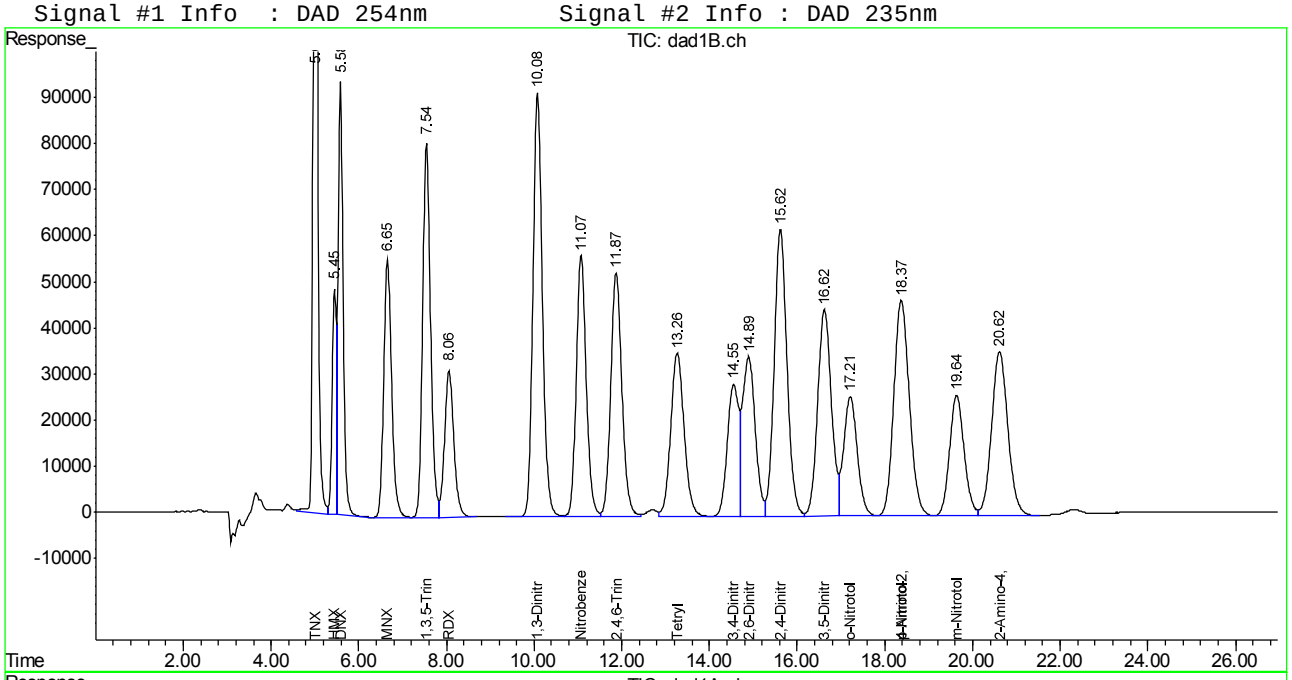
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 13:37:55 2017 Page 1

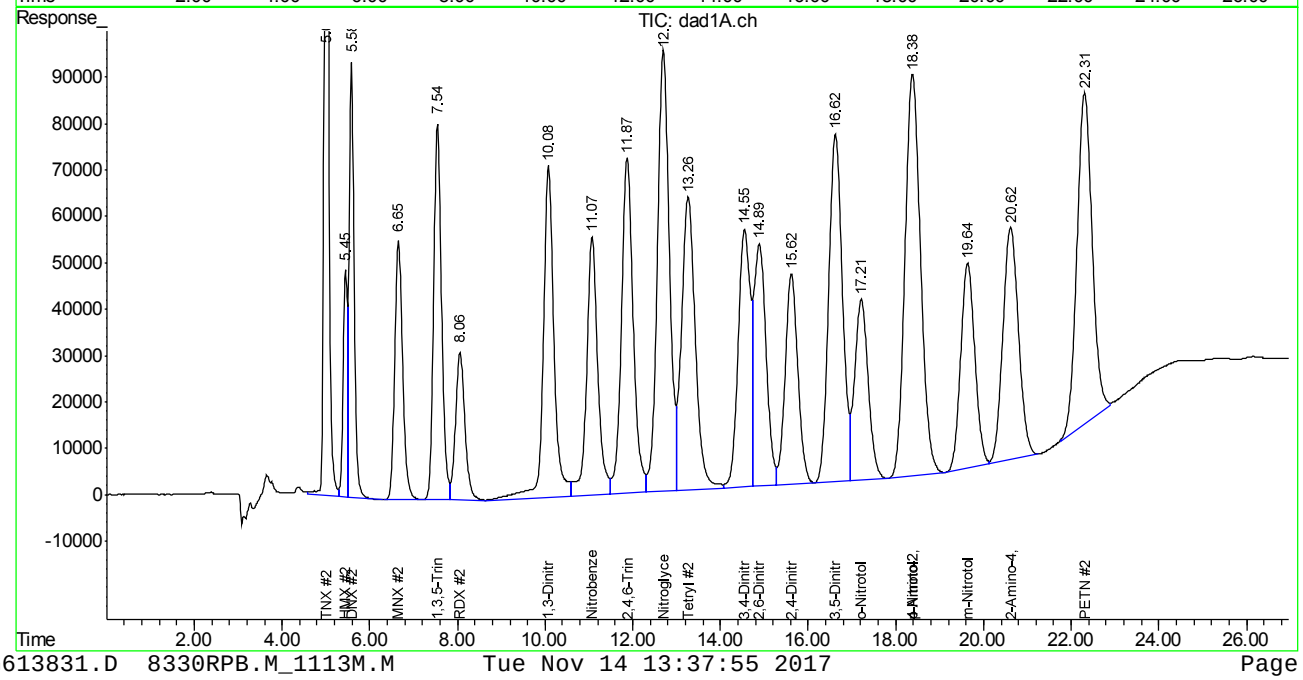
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

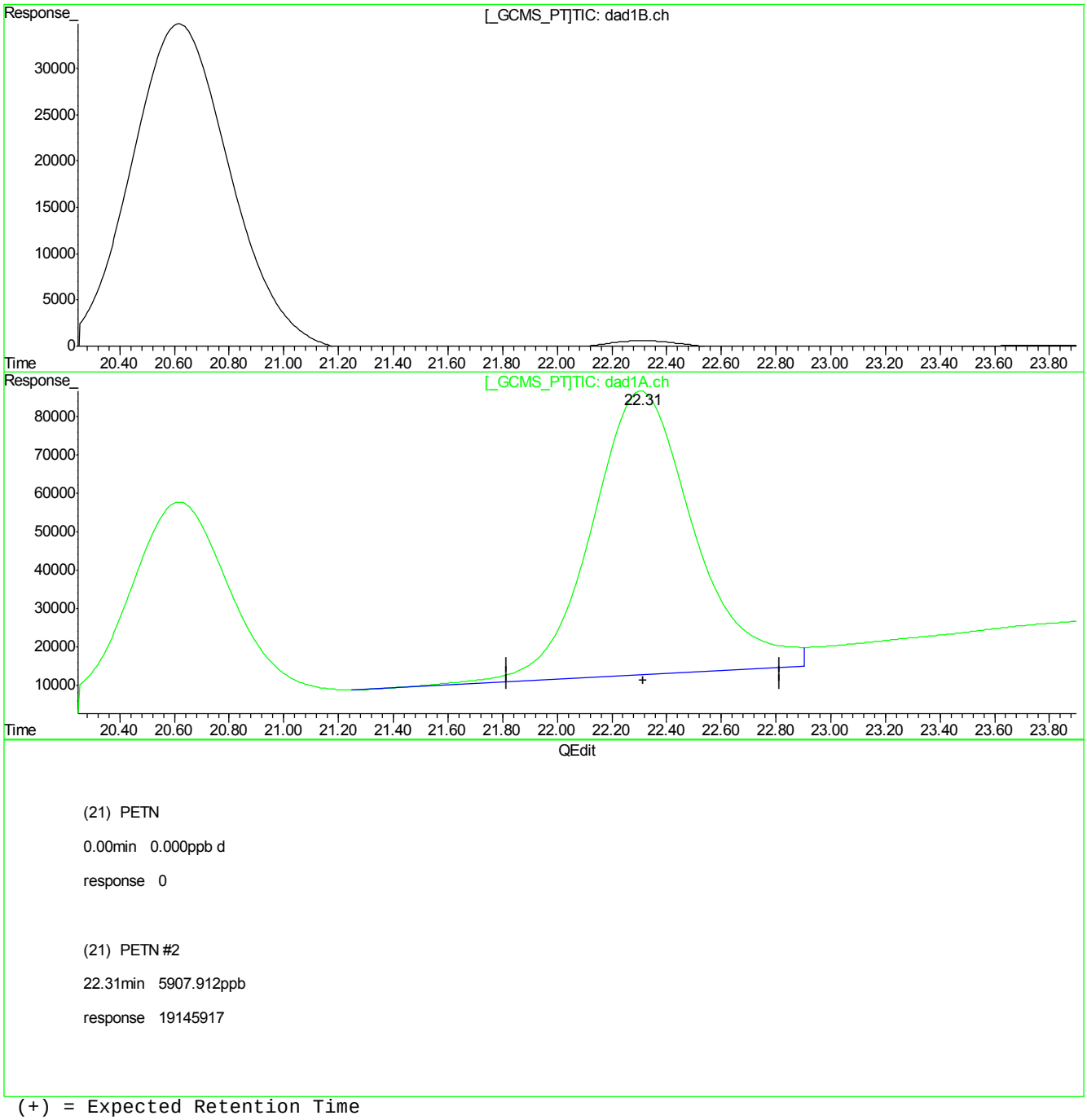
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613831.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:03	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.31	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 5907.912ppb

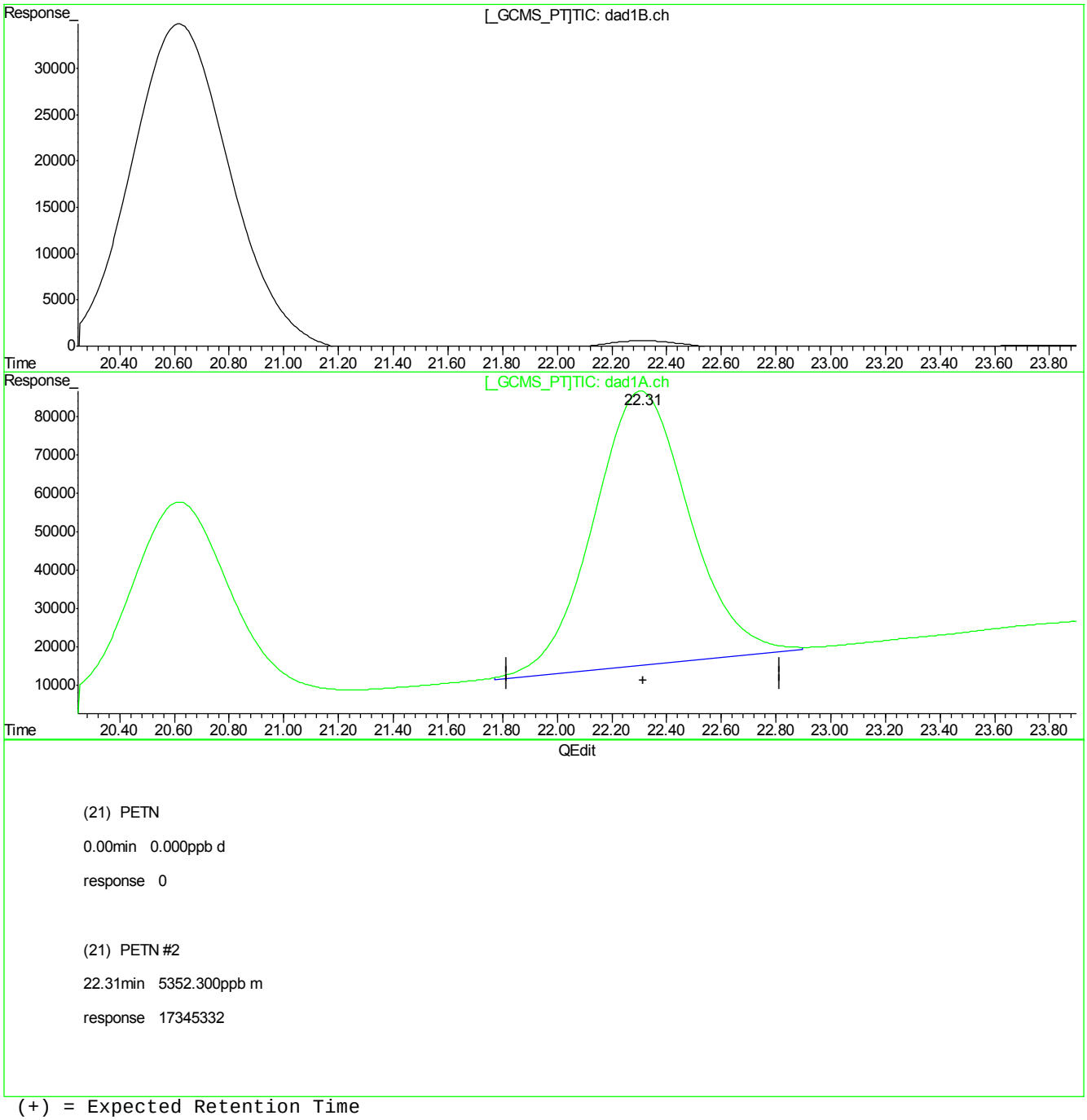
response 19145917

(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:10 2017

GG613832.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:07 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.57	10550046	21399713	1789.548	1831.472
	Spiked Amount 500.000	Range 70 - 136		Recovery =		357.91%#	366.29%#
	Target Compounds						
1)	TNX	5.01	5.01	28286611	28286611	3362.844	3353.956
2)	HMX	5.45	5.45	6160036	6160036	1621.715	1610.245
3)	DNX	5.59	5.59	15111963	15111963	2302.310	2310.317
4)	MNX	6.67	6.67	14319142	14379845	2959.807	2972.354
5)	1,3,5-Trinitrobe	7.55	7.55	20630748	20736361	2020.412	2031.609
6)	RDX	8.07	8.07	9542524	9714929	2004.461	2050.183
7)	1,3-Dinitrobenze	10.09	10.09	27925425	22088278	1918.604	1861.609
8)	Nitrobenzene	11.08	11.08	17989336	17591198	2353.226	1943.111
9)	2,4,6-Trinitroto	11.88	11.88	19144422	26204296	1877.700	1837.967
10)	Nitroglycerin	0.00	12.71	0	35699929	N.D. d	10513.714
11)	Tetryl	13.28	13.28	15460803	27450889	2253.980	1939.407
13)	2,6-Dinitrotolue	14.91	14.90	14299221	20816201	2056.715	1914.307
14)	2,4-Dinitrotolue	15.63	15.63	25833590	18399200	1944.131	1831.671
15)	o-Nitrotoluene	17.23	17.23	11486355	17079534	1968.871	1946.822
16)	3,5-Dinitroanili	16.63	16.63	19978063	33141066	1885.113	1798.231
17)	p-Nitrotoluene	18.40	18.40	23561706	43403899	2047.801	1893.857
18)	4-Amino-2,6-Dini	18.40	18.40	23561706	43403899	2047.801	1893.857
19)	m-Nitrotoluene	19.66	19.66	12222790	20535097	1919.977	2170.979
20)	2-Amino-4,6-Dini	20.63	20.63	18737965	26088409	1953.256	1927.623
21)	PETN	0.00	22.32	0	35262467	N.D. d	10881.043m

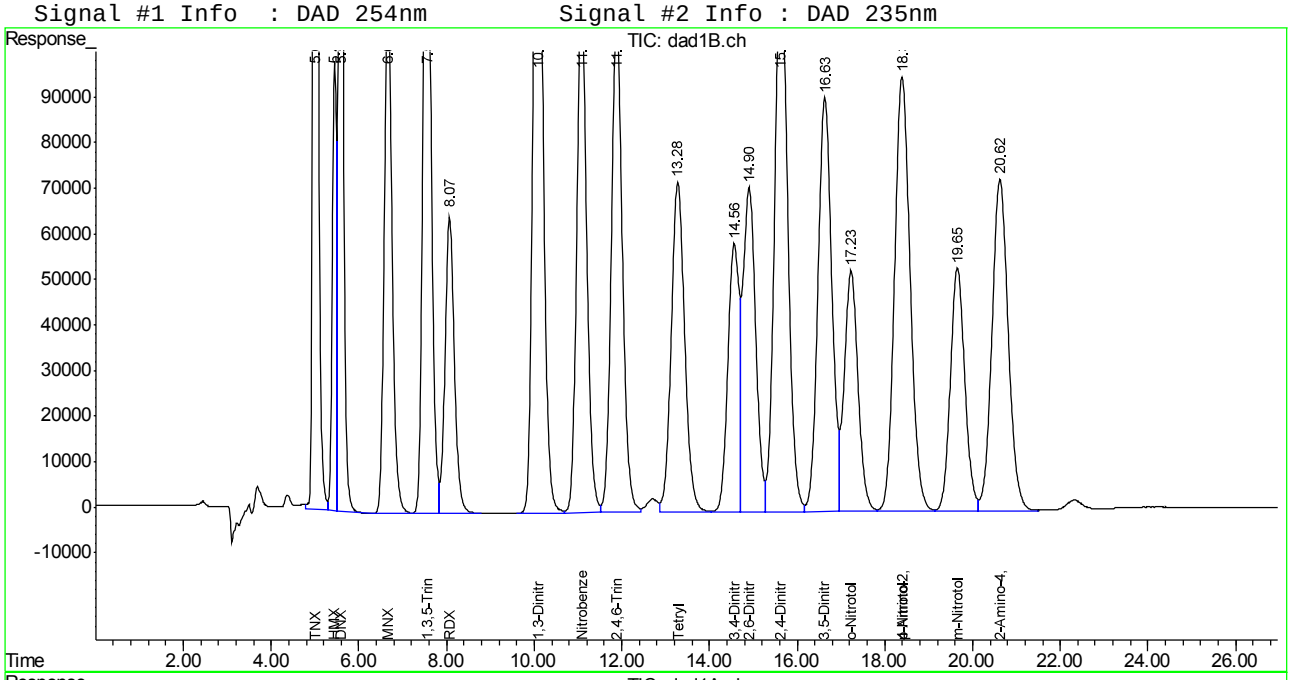
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 13:37:56 2017 Page 1

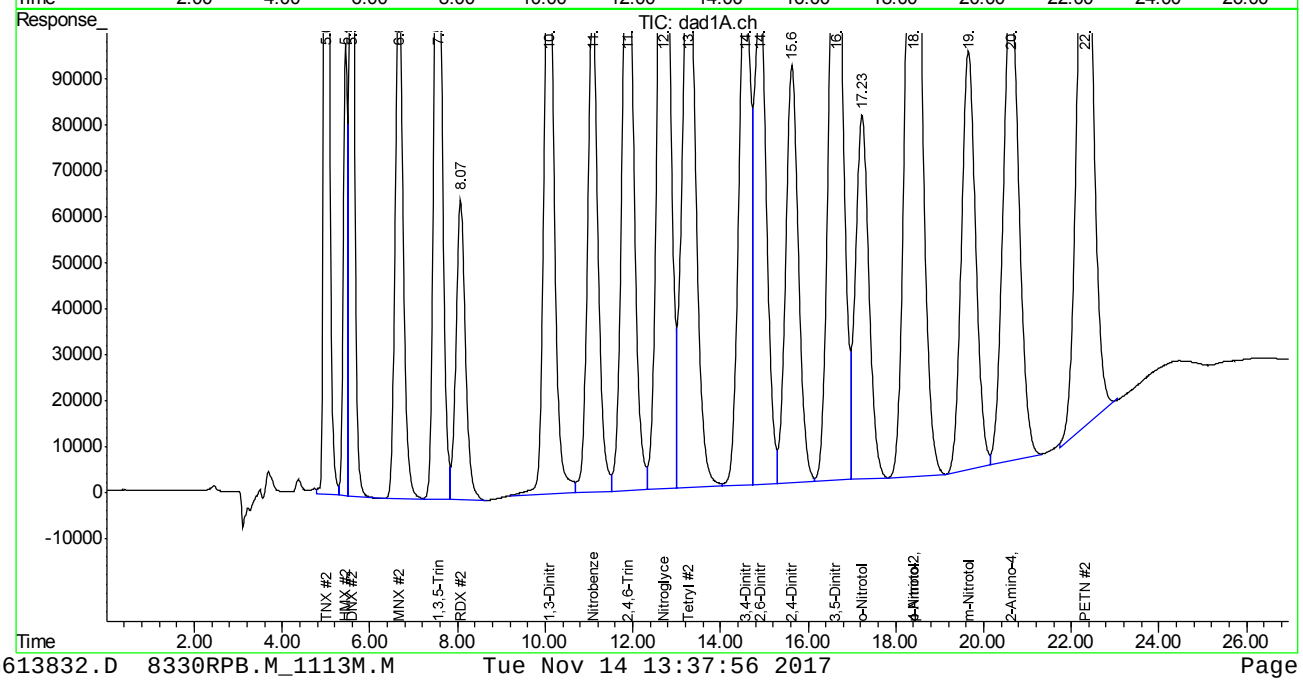
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

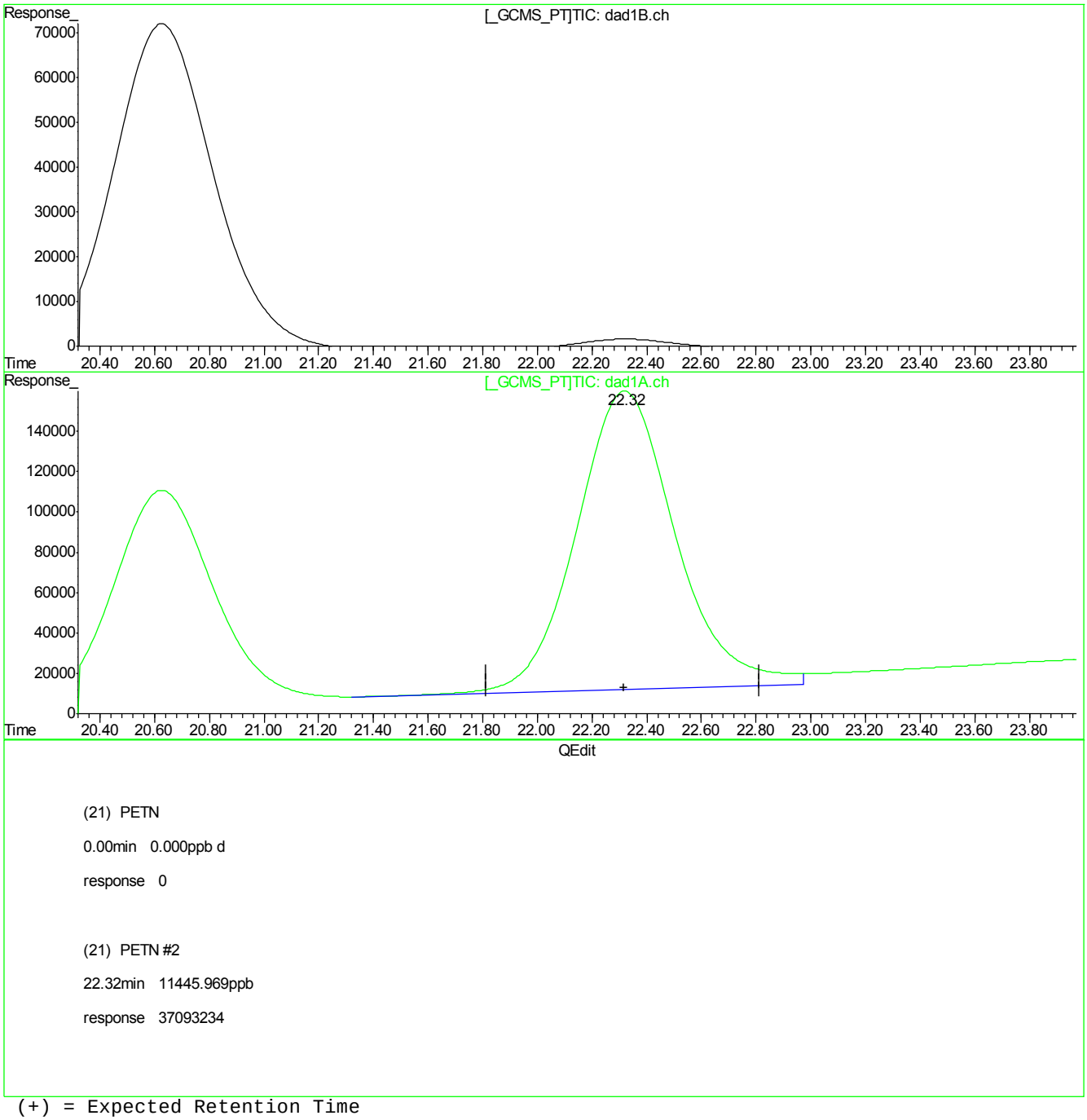
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613832.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:33	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.32	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration

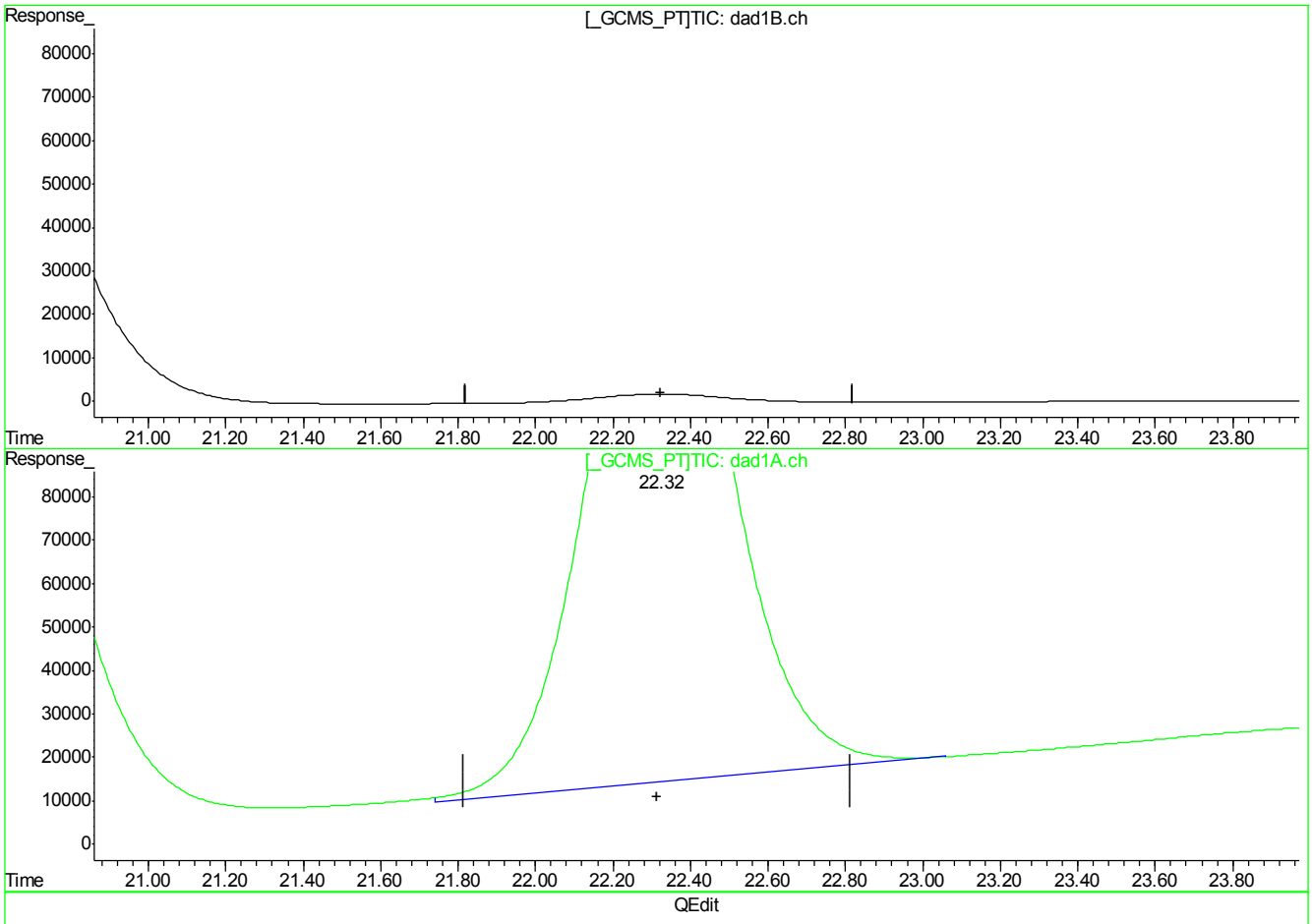


(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:30 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.32min 10881.043ppb m

response 35262467

(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:38 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15:22 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	5.00	5.00	4427614	4427614	311.255	311.279
2)	HMX	5.44	5.44	1660951	1660951	512.341	515.543
3)	DNX	5.57	5.57	3728715	3728715	481.707	479.565
4)	MNX	6.64	6.64	3500595	3500595	498.403	498.000
5)	1,3,5-Trinitrobe	7.53	7.53	5084566	5085276	490.713	490.831
6)	RDX	8.04	8.04	2404792	2408976	504.766	507.885
7)	1,3-Dinitrobenze	10.06	10.06	6578375	6672490	459.805	525.898
8)	Nitrobenzene	11.05	11.05	4554253	5345006	482.574	577.158
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	12.68	0	9322634	N.D. d	2766.568
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.89	14.89	3527390	5488834	493.369	540.982
14)	2,4-Dinitrotolue	15.60	15.60	6348698	4712292	484.298	495.523
15)	o-Nitrotoluene	17.20	17.20	2958205	4396320	512.102	509.800
16)	3,5-Dinitroanili	16.59	16.59	4689804	7872997	479.670	484.898
17)	p-Nitrotoluene	18.35	18.36	5769728	10811008	491.360	510.118
18)	4-Amino-2,6-Dini	18.35	18.36	5769728	10811008	491.360	508.634
19)	m-Nitrotoluene	19.62	19.62	3222471	5107269	546.610	525.201
20)	2-Amino-4,6-Dini	20.59	20.59	4643185	5903363	514.599	496.742
21)	PETN	0.00	22.29	0	9227376	N.D. d	2876.898m

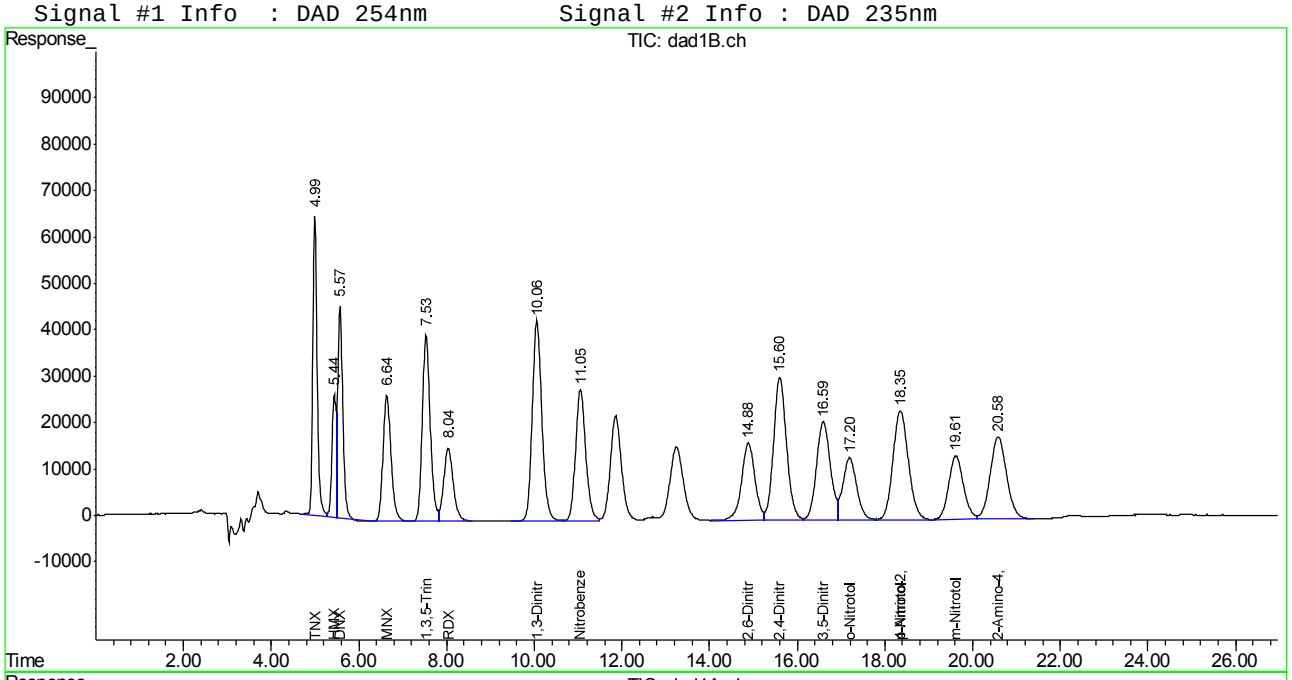
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 13:37:57 2017 Page 1

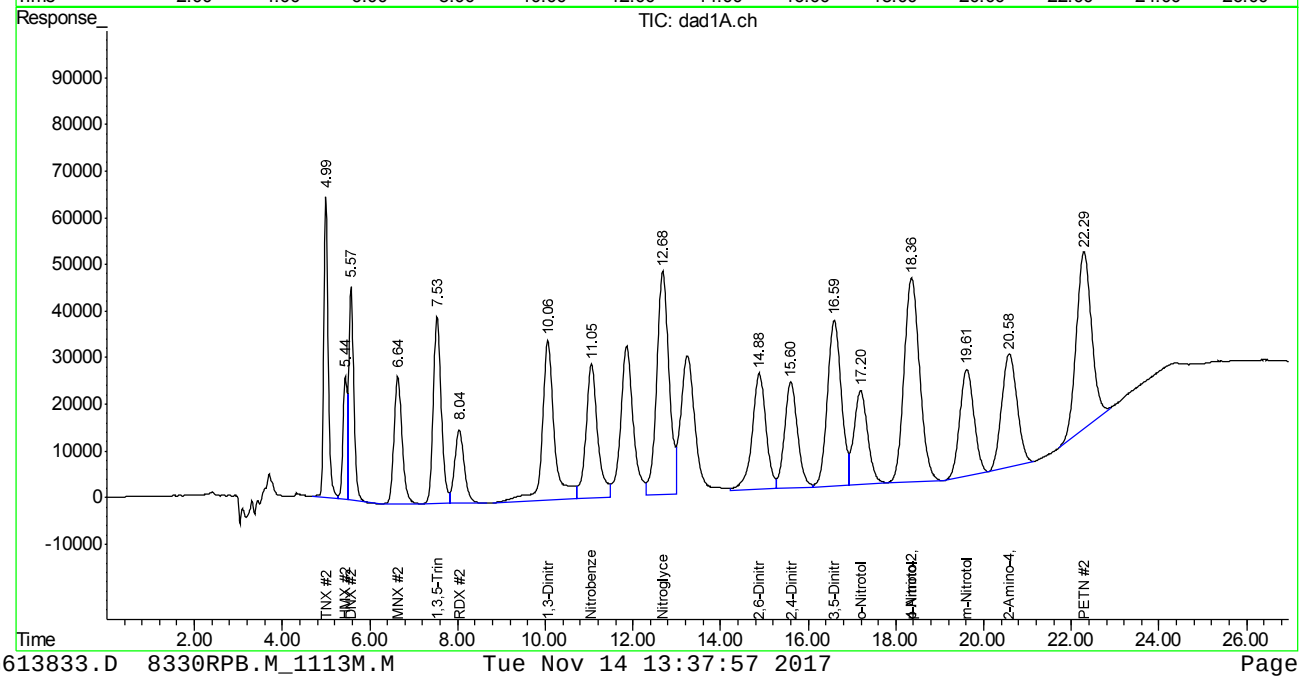
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG613833.D 8330RPB.M_1113M.M Tue Nov 14 13:37:57 2017 Page 2

Manual Integration Approval Summary

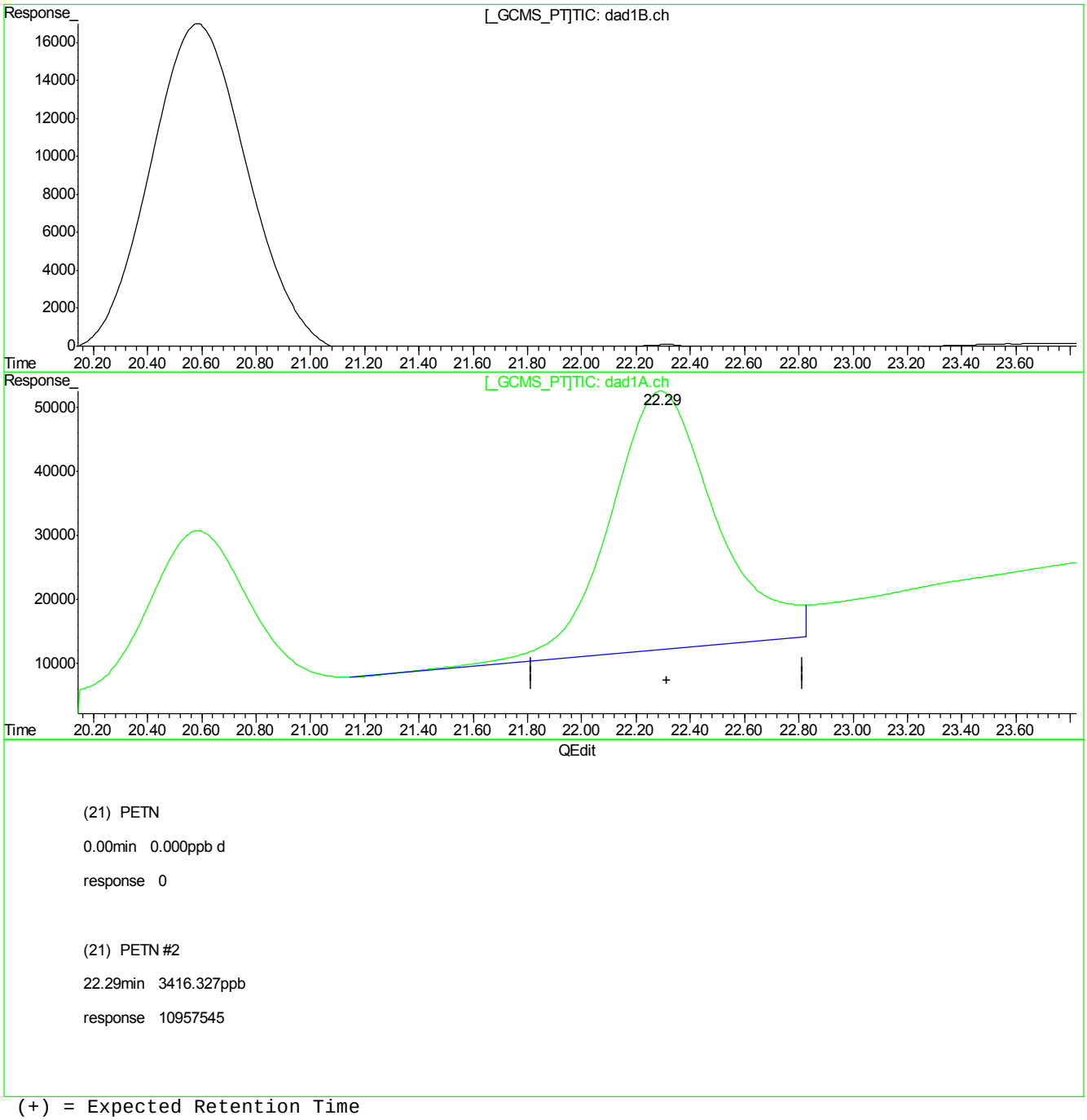
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613833.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 17:02	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.29	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

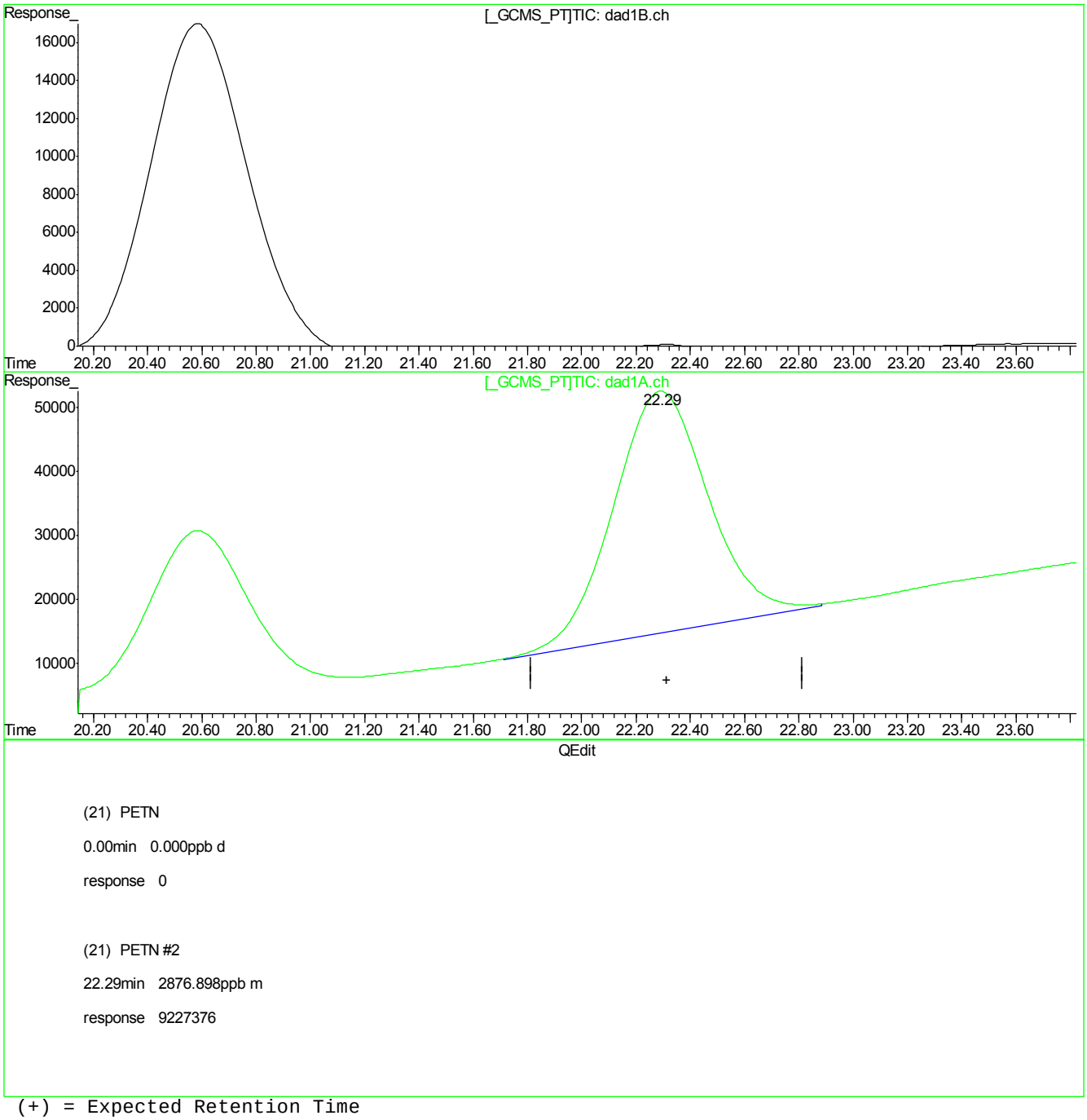


(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.29min 2876.898ppb m

response 9227376

(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:14 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:16:38 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	11.88	11.87	4812246	6368475	474.847	485.592m
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	13.27	13.27	4161106	7319038	513.472	520.034m
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

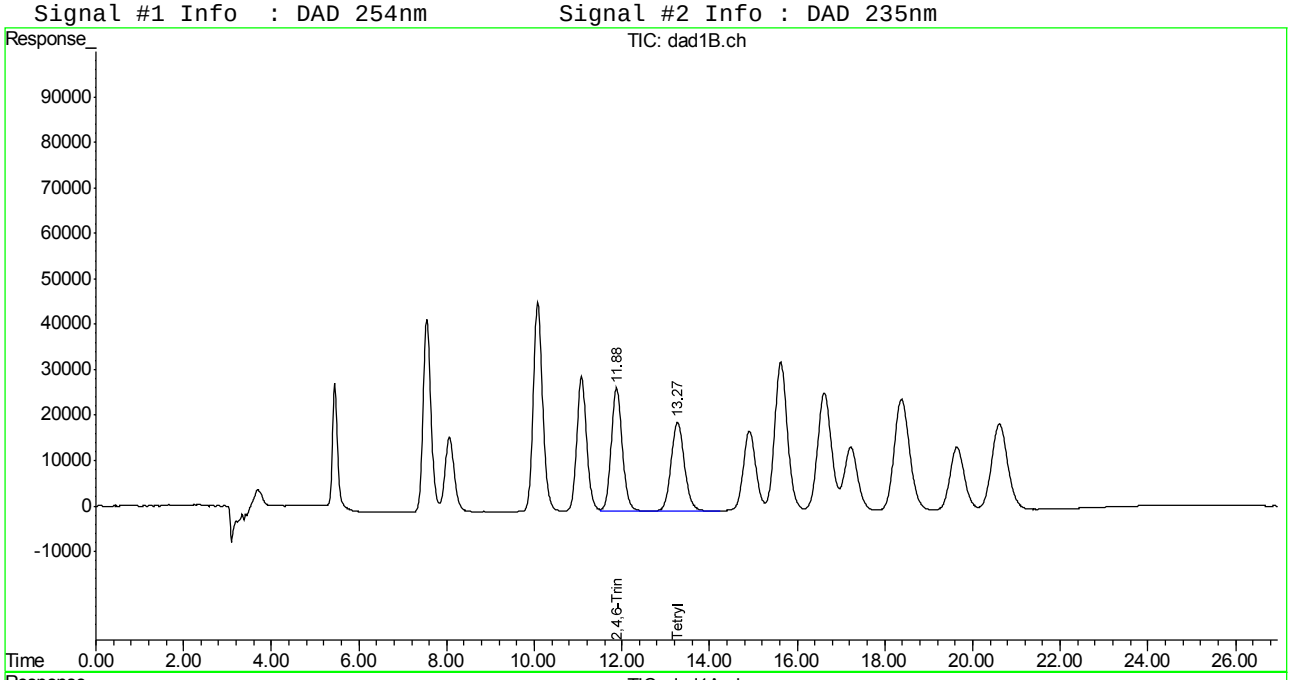
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:46:13 2017 Page 1

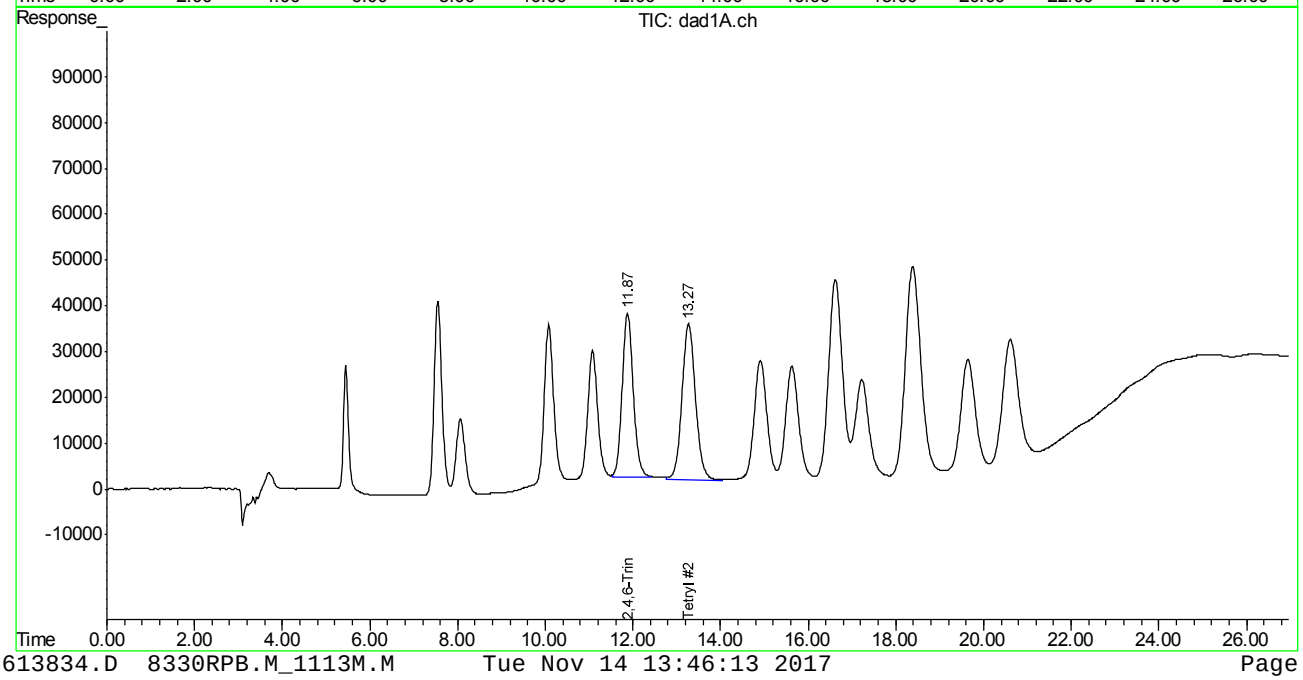
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 13:45 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:46:13 2017 Page 2

Manual Integration Approval Summary

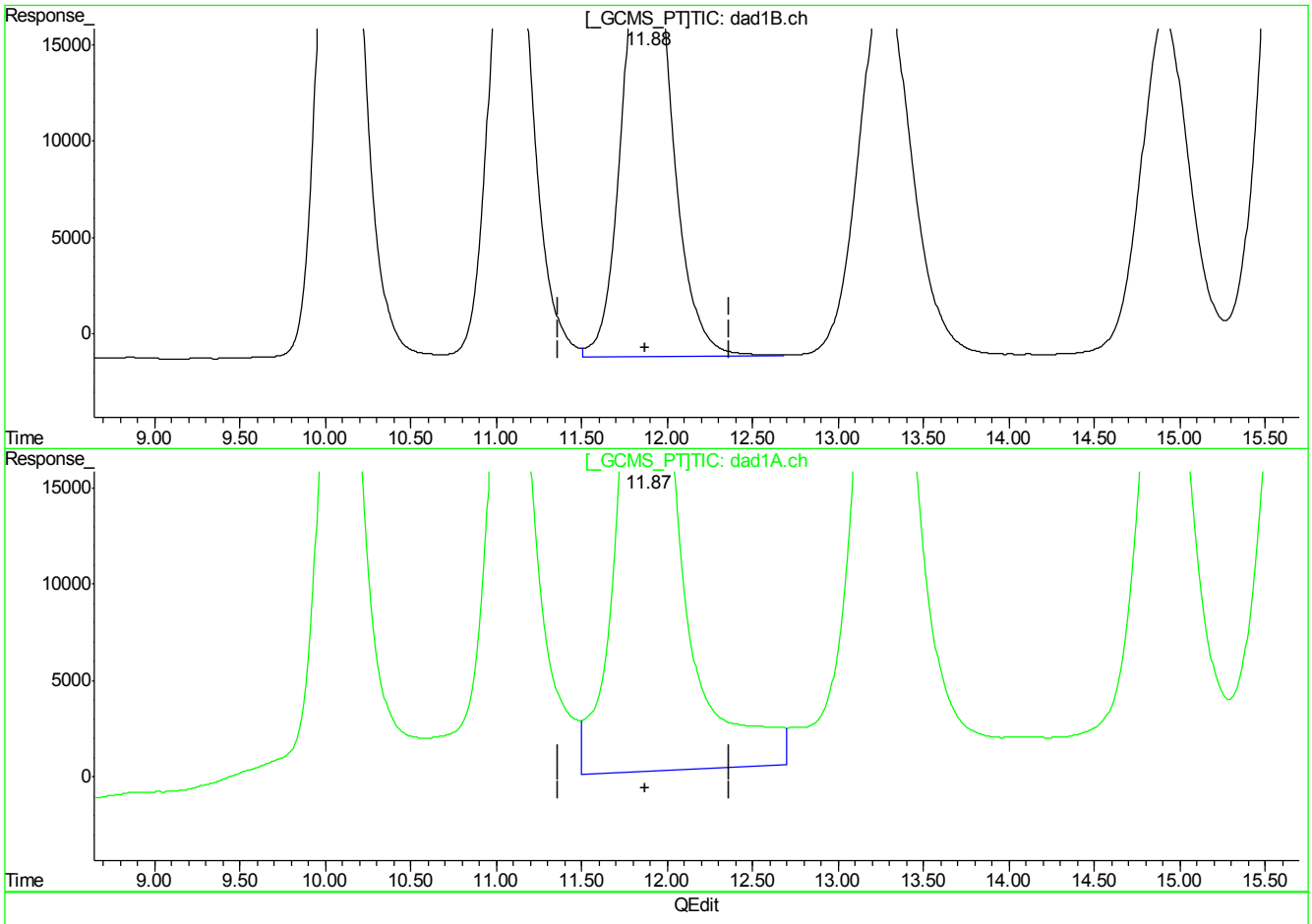
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613834.D	**Analyst approved:**	11/14/17 15:34 Evita Martinez
Injection Time:	11/13/17 17:32	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.88min 604.076ppb

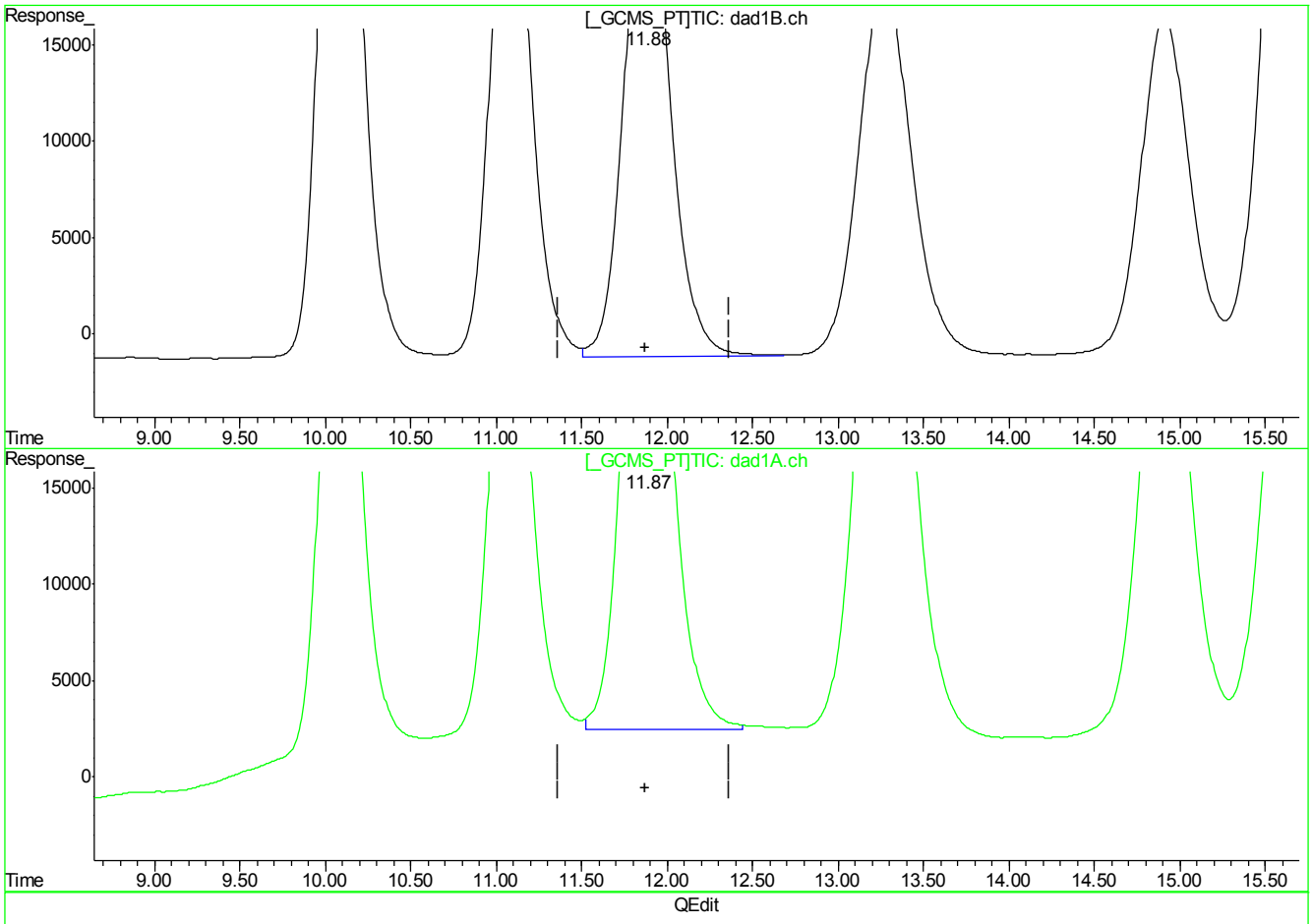
response 7922376

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.87min 485.592ppb m

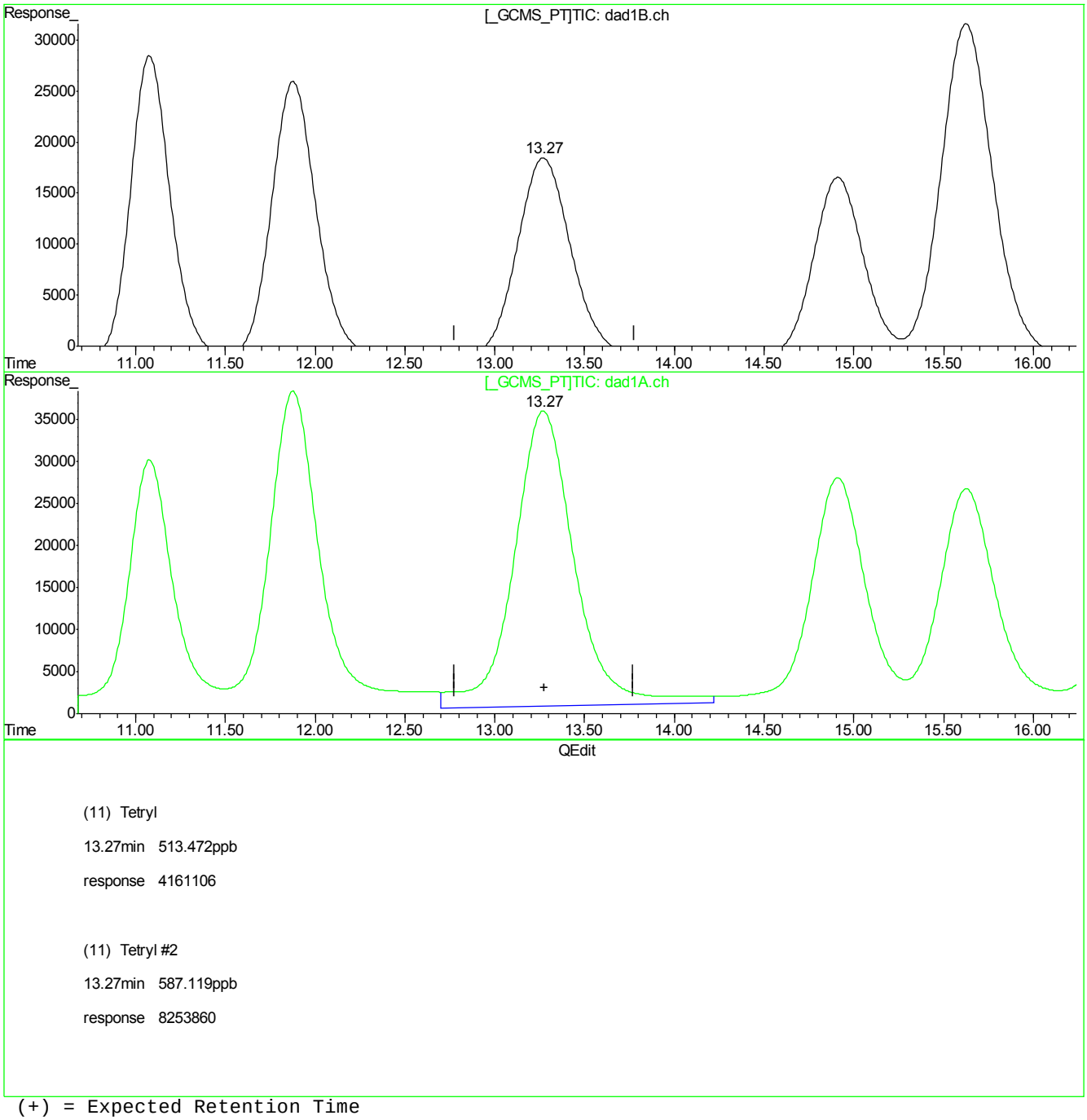
response 6368475

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 587.119ppb

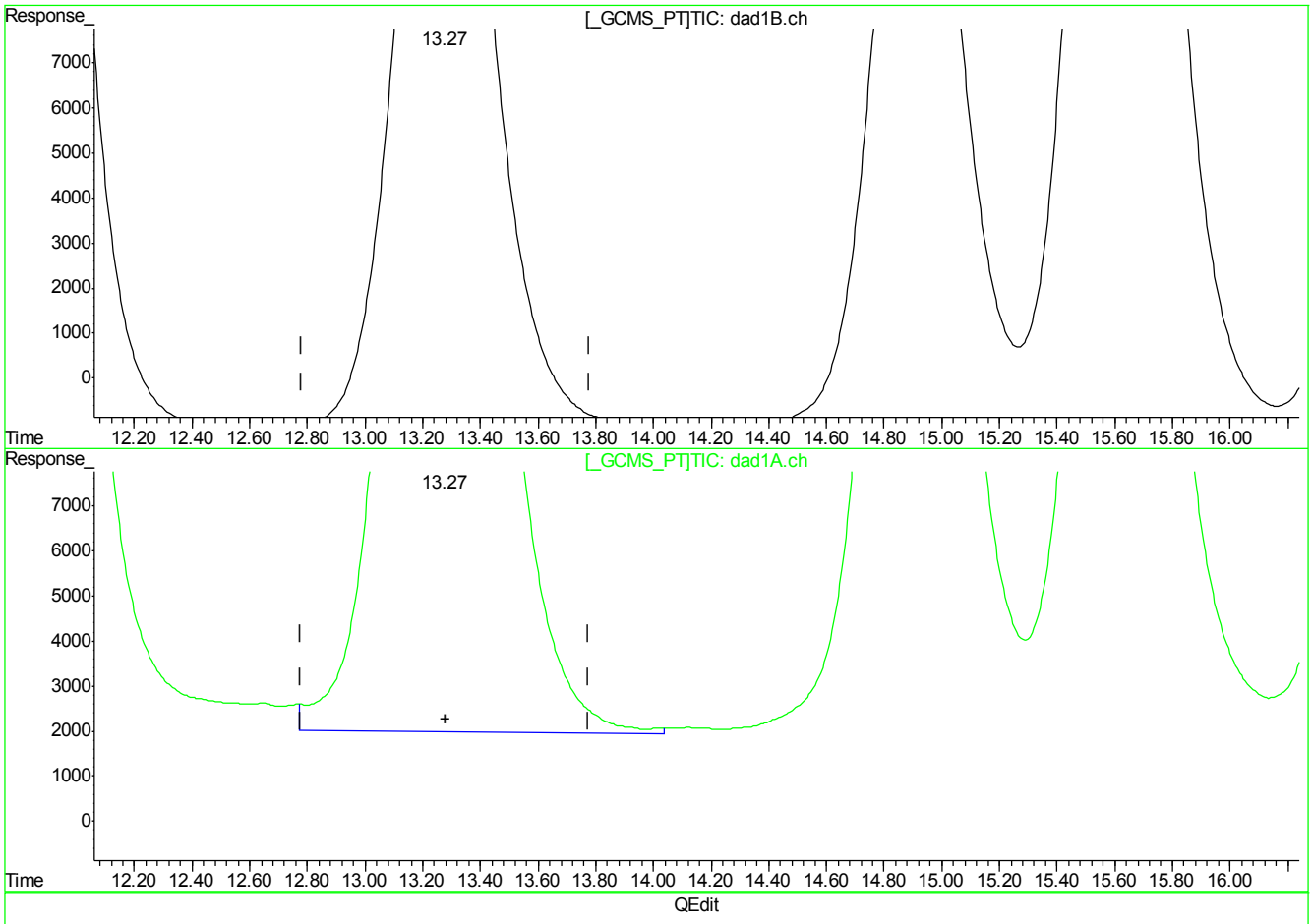
response 8253860

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:51 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 520.034ppb m

response 7319038

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:57 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614537.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614537.D\dad1A.ch
Acq On : 03-May-2018, 11:19:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,5.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 03 12:29:41 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.14	14.14	5877896	13059553	1131.478	1207.247
	Spiked Amount 500.000	Range 69 - 134		Recovery =		226.30%#	241.45%#
	Target Compounds						
1)	TNX	4.98	4.98	13860548	13860548	974.378	974.453
2)	HMX	5.38	5.38	3432789	3432789	1058.886	1065.503
3)	DNX	5.54	5.54	8211346	8211346	1060.812	1056.094
4)	MNX	6.52	6.52	7531041	7531041	1072.244	1071.378
5)	1,3,5-Trinitrobe	7.41	7.41	10443111	10441735	1007.867	1007.837
6)	RDX	7.85	7.85	5057270	5045856	1061.521	1063.820
7)	1,3-Dinitrobenze	9.87	9.87	14477718	11420288	1011.942	933.669
8)	Nitrobenzene	10.81	10.81	9406468	9355443	996.721	1010.209
9)	2,4,6-Trinitroto	11.58	11.58	10158882	14373320	1002.424	1095.957
10)	Nitroglycerin	0.00	12.31	0	18127520	N.D. d	5379.490
11)	Tetryl	12.83	12.83	7721252	14623471	952.786	1048.369
13)	2,6-Dinitrotolue	14.51	14.51	7370475	11396730	1030.893	1123.267
14)	2,4-Dinitrotolue	15.22	15.22	13466843	10394286	1027.291	1109.100
15)	o-Nitrotoluene	16.73	16.73	6018455	8653131	1041.870	1003.422
16)	3,5-Dinitroanili	16.18	16.18	11422470	19354271	1157.558	1181.074
17)	p-Nitrotoluene	17.88	17.89	12281011	22405329	1045.872	1057.196
18)	4-Amino-2,6-Dini	17.88	17.89	12281011	22405329	1045.872	1054.122
19)	m-Nitrotoluene	19.08	19.09	6398458	10581510	1085.336	1088.140
20)	2-Amino-4,6-Dini	20.05	20.05	9689245	13603427	1073.848	1101.003
21)	PETN	0.00	21.60	0	17716423	N.D. d	5523.600m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614537.D 8330RPB.M_1113M.M Thu May 03 12:36:26 2018 Page 1

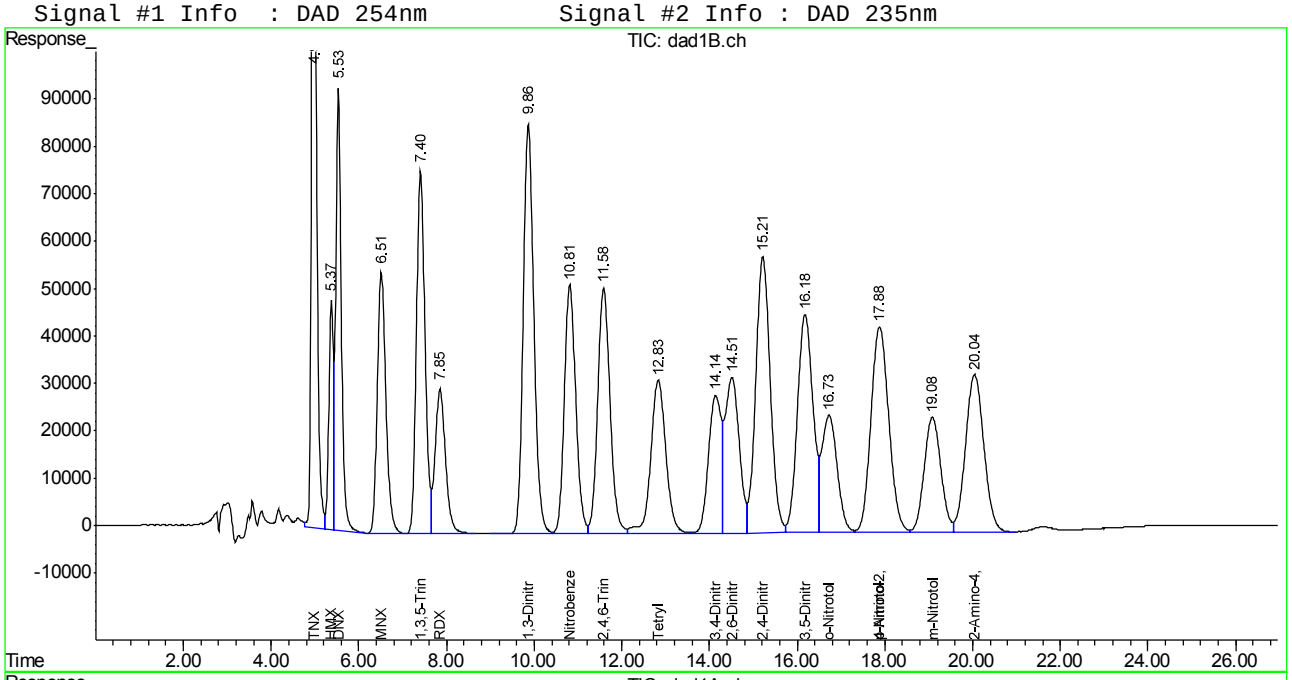
7.7.20
7

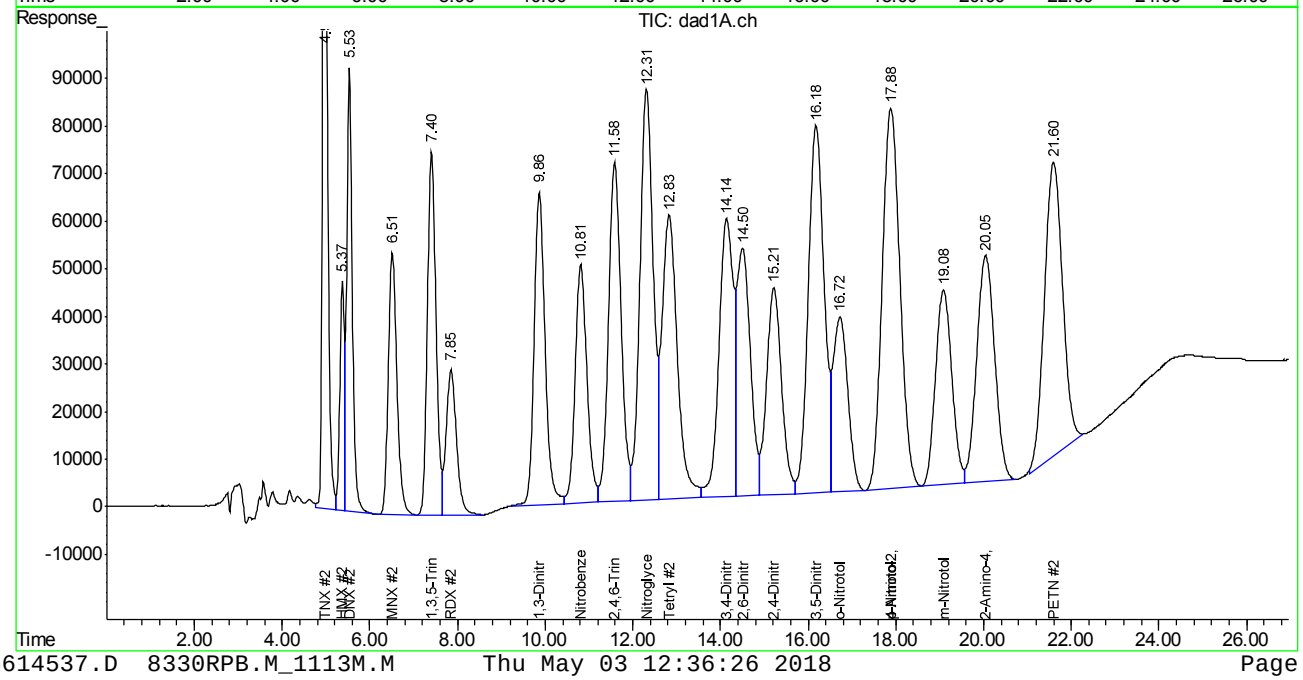
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614537.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614537.D\dad1A.ch
Acq On : 03-May-2018, 11:19:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,5.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:36 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

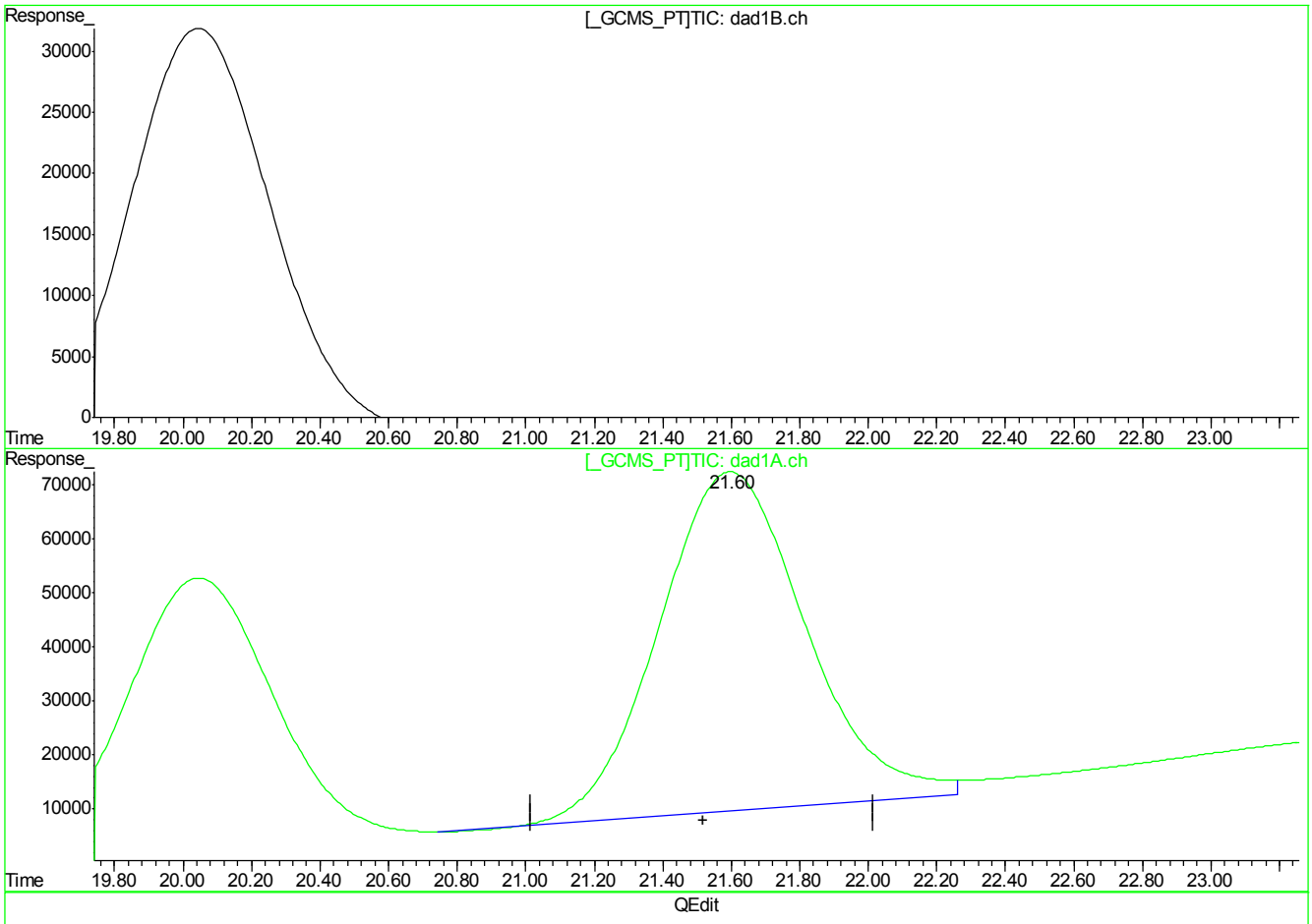
Sample Number:	GGG2624-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614537.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 11:19	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.60	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614537.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614537.D\dad1A.ch
Acq On : 03-May-2018, 11:19:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,5.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:29 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.60min 5779.479ppb

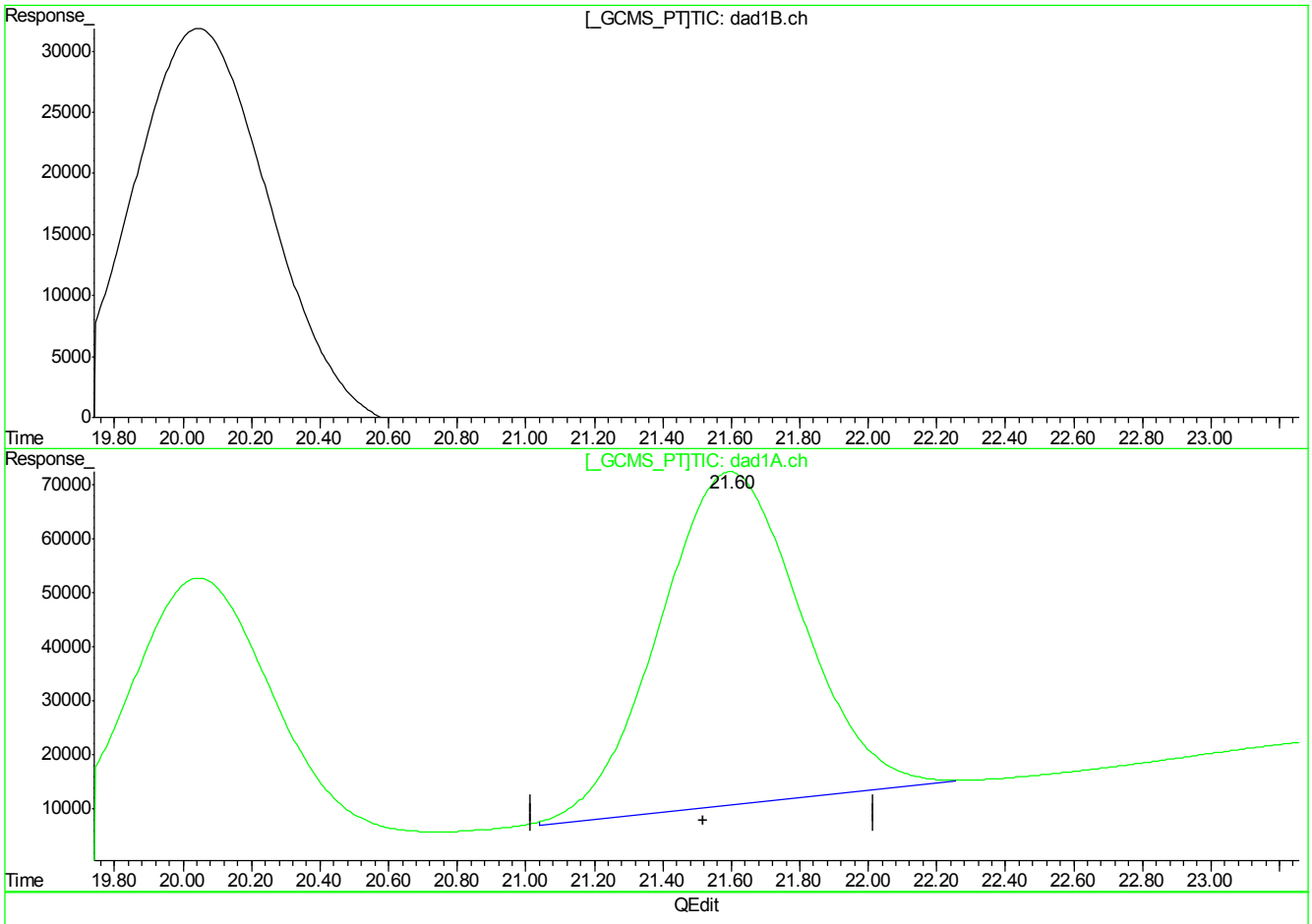
response 18537131

(+) = Expected Retention Time
GG614537.D 8330RPB.M_1113M.M Thu May 03 12:36:11 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614537.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614537.D\dad1A.ch
Acq On : 03-May-2018, 11:19:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,5.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 3 12:29 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.60min 5523.600ppb m

response 17716423

(+) = Expected Retention Time
GG614537.D 8330RPB.M_1113M.M Thu May 03 12:36:15 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614547.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614547.D\dad1A.ch
Acq On : 03-May-2018, 16:14:18 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:30 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	5806160	12788699	1117.669	1182.209
	Spiked Amount 500.000	Range 69 - 134		Recovery =		223.53%#	236.44%#
	Target Compounds						
1)	TNX	4.98	4.98	14010957	14010957	984.952	985.027
2)	HMX	5.39	5.39	3538789	3538789	1091.583	1098.404
3)	DNX	5.55	5.55	8398565	8398565	1084.999	1080.173
4)	MNX	6.54	6.54	7503257	7503257	1068.288	1067.426
5)	1,3,5-Trinitrobe	7.45	7.45	10455394	10485124	1009.053	1012.025
6)	RDX	7.89	7.89	5129074	5260173	1076.593	1109.005
7)	1,3-Dinitrobenze	9.93	9.93	14526086	11409383	1015.322	932.695
8)	Nitrobenzene	10.88	10.88	9486242	9609499	1005.174	1037.642
9)	2,4,6-Trinitroto	11.66	11.66	10165422	14206794	1003.070	1083.259
10)	Nitroglycerin	0.00	12.40	0	18251708	N.D. d	5416.344
11)	Tetryl	12.92	12.92	7759501	14690009	957.506	1053.227
13)	2,6-Dinitrotolue	14.61	14.60	7412976	11089415	1036.837	1092.978
14)	2,4-Dinitrotolue	15.32	15.32	13457872	10155638	1026.607	1082.956
15)	o-Nitrotoluene	16.87	16.86	6082796	8791069	1053.008	1019.417
16)	3,5-Dinitroanili	16.26	16.26	11417826	19244893	1157.094	1174.501
17)	p-Nitrotoluene	18.00	18.01	12336159	22176139	1050.568	1046.381
18)	4-Amino-2,6-Dini	18.00	18.01	12336159	22176139	1050.568	1043.339
19)	m-Nitrotoluene	19.24	19.24	6451771	10861192	1094.379	1116.900
20)	2-Amino-4,6-Dini	20.16	20.16	9709633	13698226	1076.107	1108.174
21)	PETN	0.00	21.77	0	17484627	N.D. d	5451.331m

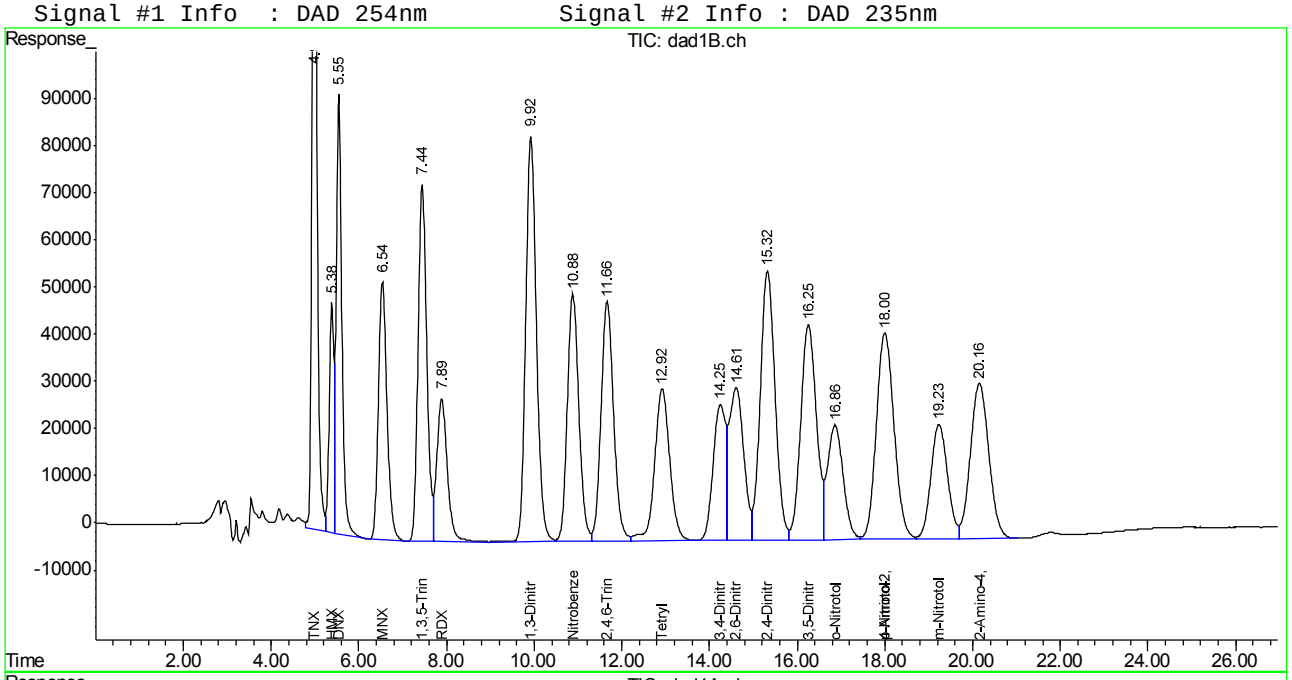
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614547.D 8330RPB.M_1113M.M Fri May 04 09:33:16 2018 Page 1

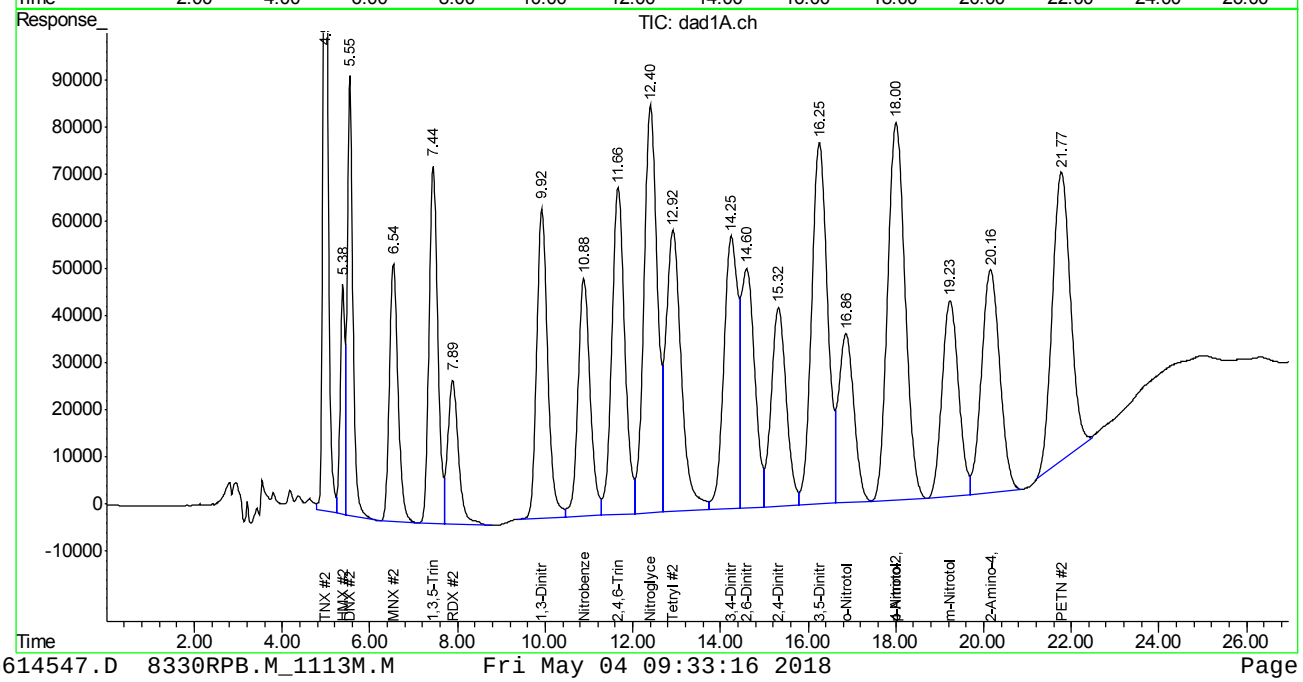
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614547.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614547.D\dad1A.ch
Acq On : 03-May-2018, 16:14:18 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:18 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

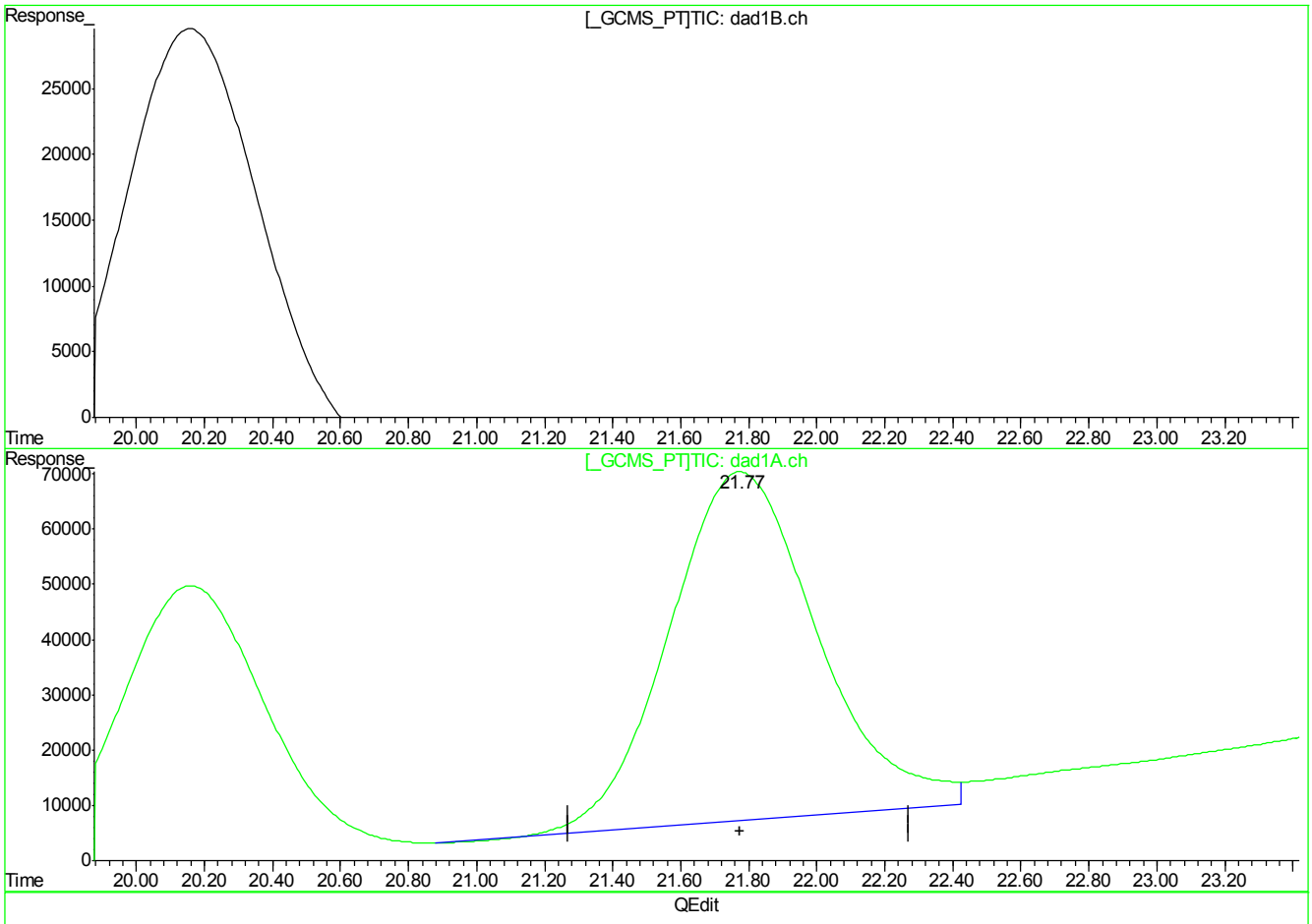
Sample Number:	GGG2624-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614547.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 16:14	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.77	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614547.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614547.D\dad1A.ch
Acq On : 03-May-2018, 16:14:18 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 5944.840ppb

response 19067508

(+) = Expected Retention Time
GG614547.D 8330RPB.M_1113M.M Fri May 04 09:18:42 2018

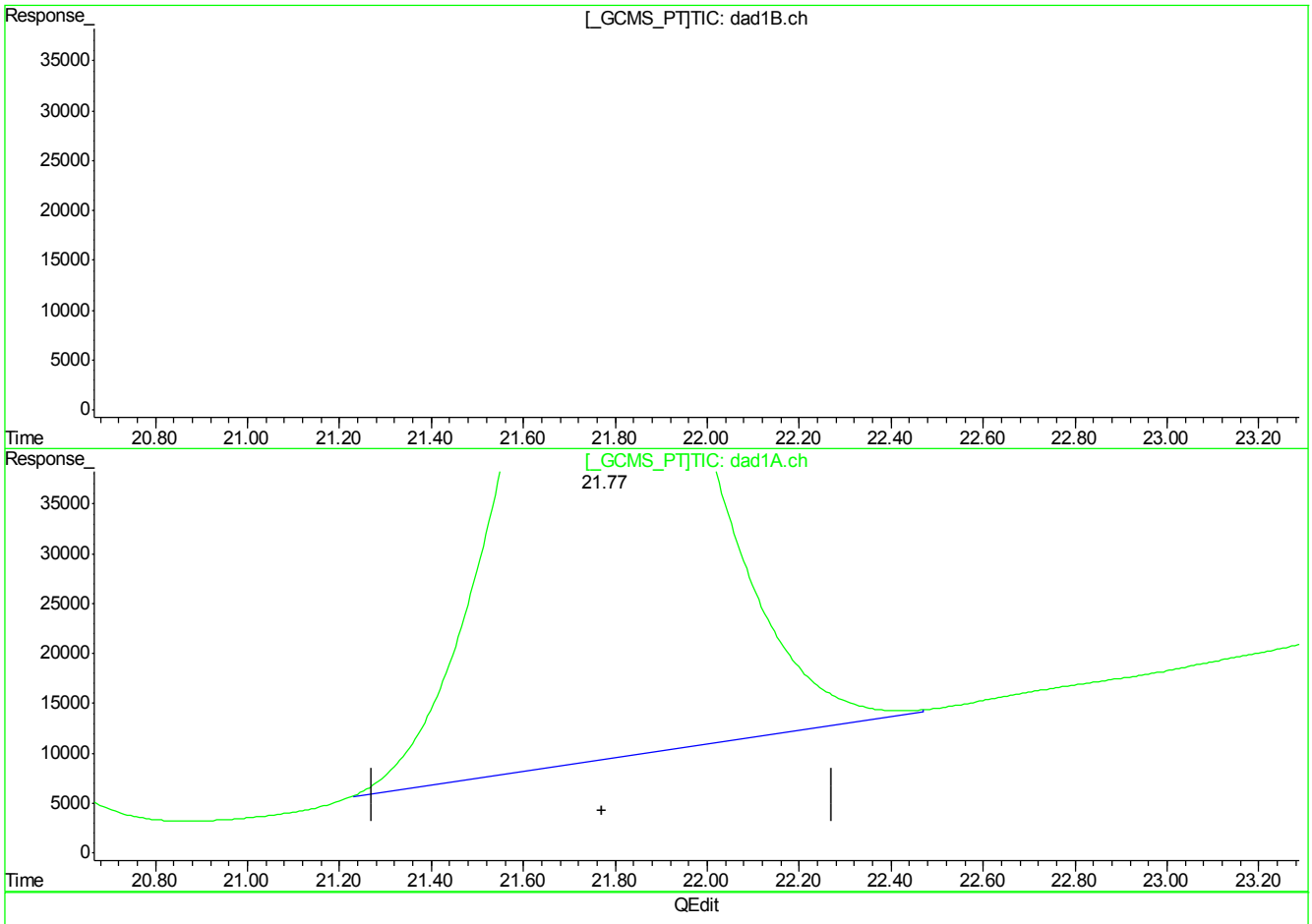
7.7.21.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614547.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614547.D\dad1A.ch
Acq On : 03-May-2018, 16:14:18 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614547.D 8330RPB.M_1113M.M Fri May 04 09:18:48 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.26	5807589	13085107	1117.944	1209.610
	Spiked Amount 500.000	Range 69 - 134		Recovery =		223.59%#	241.92%#
	Target Compounds						
1)	TNX	4.99	4.99	13873853	13873853	975.314	975.388
2)	HMX	5.40	5.40	3448943	3448943	1063.869	1070.517
3)	DNX	5.56	5.56	8265700	8265700	1067.834	1063.084
4)	MNX	6.57	6.57	7476804	7476804	1064.522	1063.662
5)	1,3,5-Trinitrobe	7.46	7.46	10375346	10375490	1001.327	1001.443
6)	RDX	7.92	7.92	5071848	5054743	1064.581	1065.694
7)	1,3-Dinitrobenze	9.94	9.94	14432999	11467565	1008.816	937.897
8)	Nitrobenzene	10.90	10.90	9591646	10131131	1016.342	1093.968
9)	2,4,6-Trinitroto	11.67	11.67	10081323	14401410	994.771	1098.099
10)	Nitroglycerin	0.00	12.41	0	18182257	N.D. d	5395.734
11)	Tetryl	12.94	12.94	7643769	14810756	943.225	1062.043
13)	2,6-Dinitrotolue	14.63	14.62	7332163	11161847	1025.534	1100.117
14)	2,4-Dinitrotolue	15.34	15.34	13357063	9912711	1018.917	1056.379
15)	o-Nitrotoluene	16.89	16.89	6084616	8792639	1053.323	1019.599
16)	3,5-Dinitroanili	16.30	16.30	11318619	18889248	1147.194	1153.122
17)	p-Nitrotoluene	18.05	18.05	12225978	22222921	1041.185	1048.589
18)	4-Amino-2,6-Dini	18.05	18.05	12225978	22222921	1041.185	1045.540
19)	m-Nitrotoluene	19.27	19.27	6425338	10635362	1089.895	1093.677
20)	2-Amino-4,6-Dini	20.22	20.22	9604266	13457936	1064.430	1089.986
21)	PETN	0.00	21.80	0	17816986	N.D. d	5554.954m

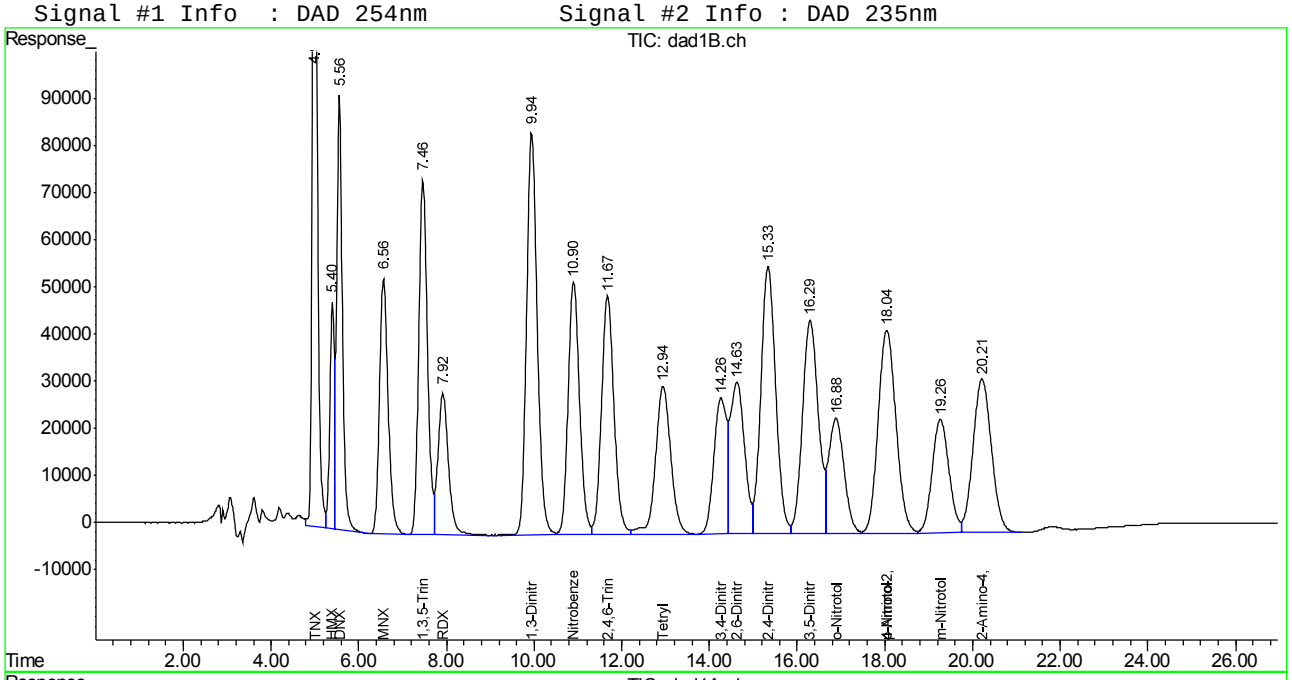
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614559.D 8330RPB.M_1113M.M Fri May 04 09:33:27 2018 Page 1

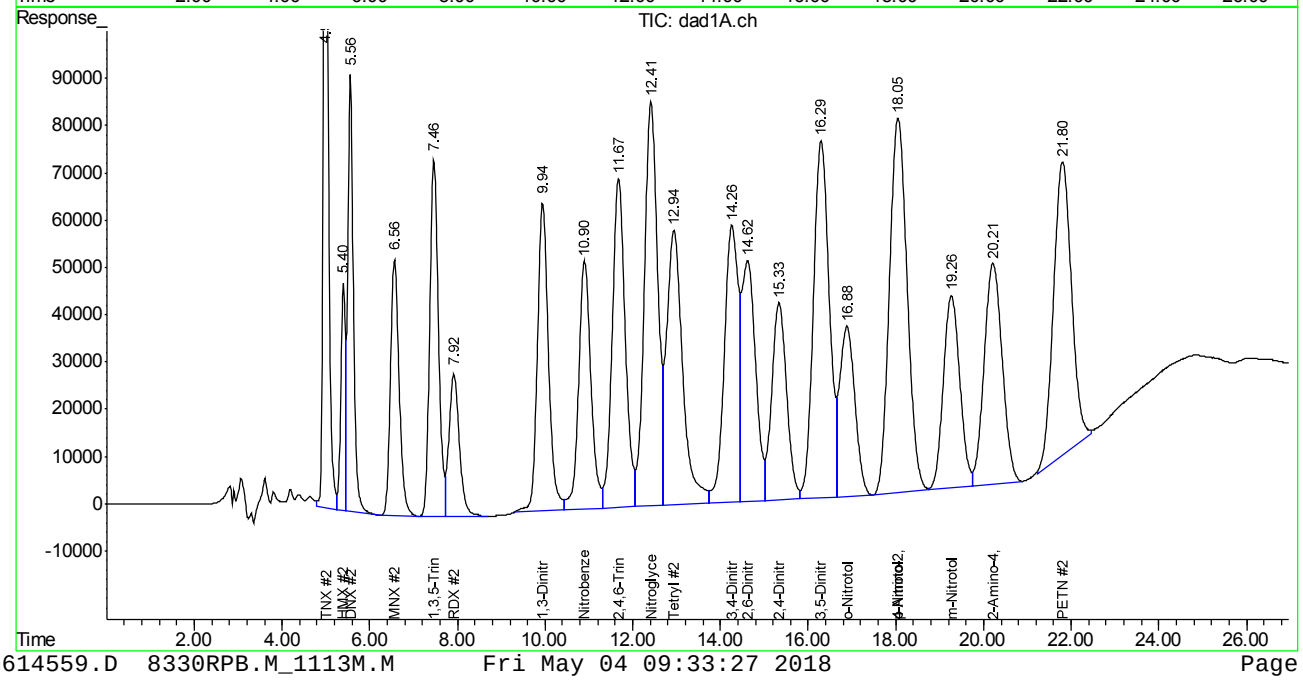
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:22 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

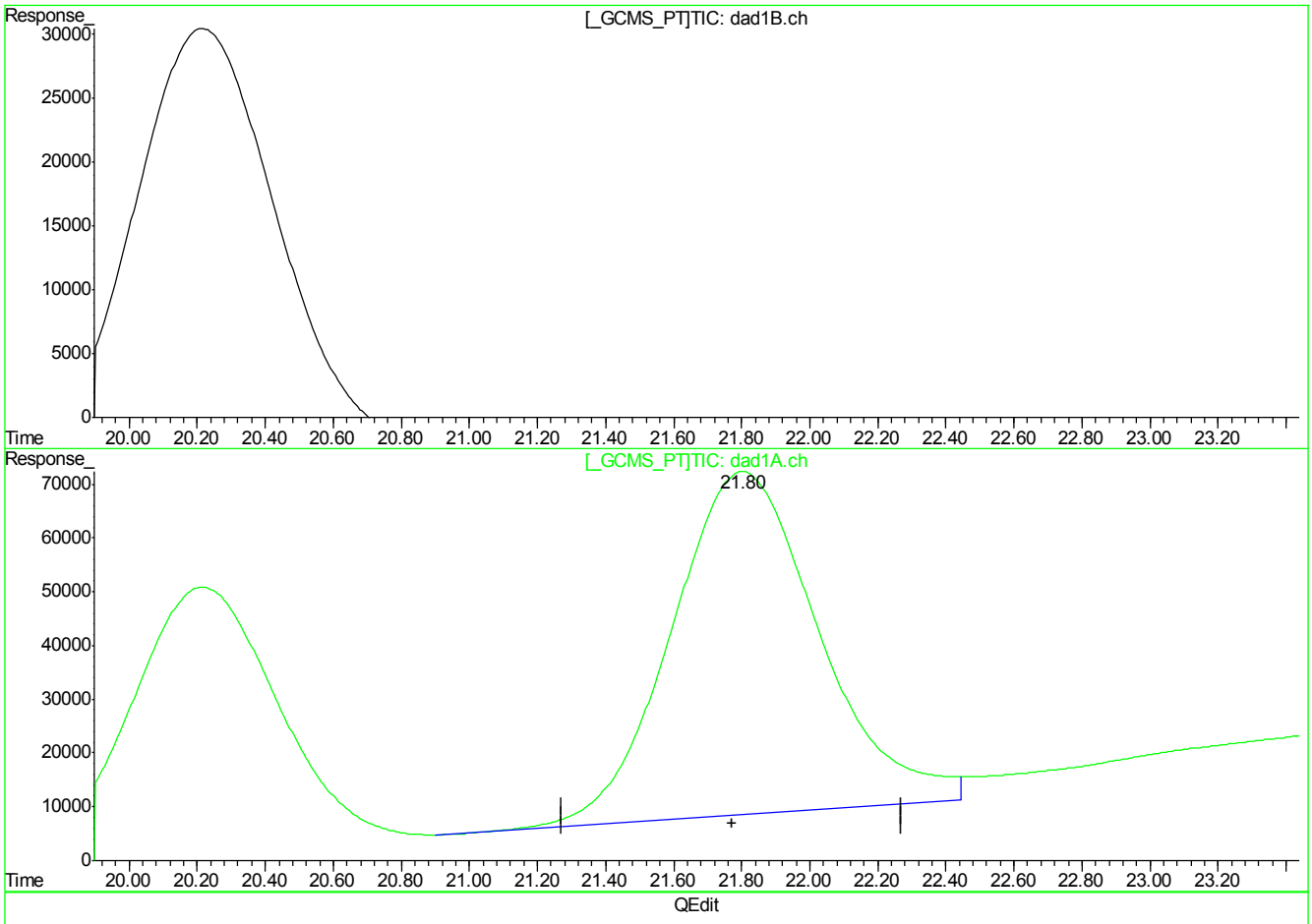
Sample Number:	GGG2624-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614559.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 22:07	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.80	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.80min 5952.541ppb

response 19092211

(+) = Expected Retention Time
GG614559.D 8330RPB.M_1113M.M Fri May 04 09:22:26 2018

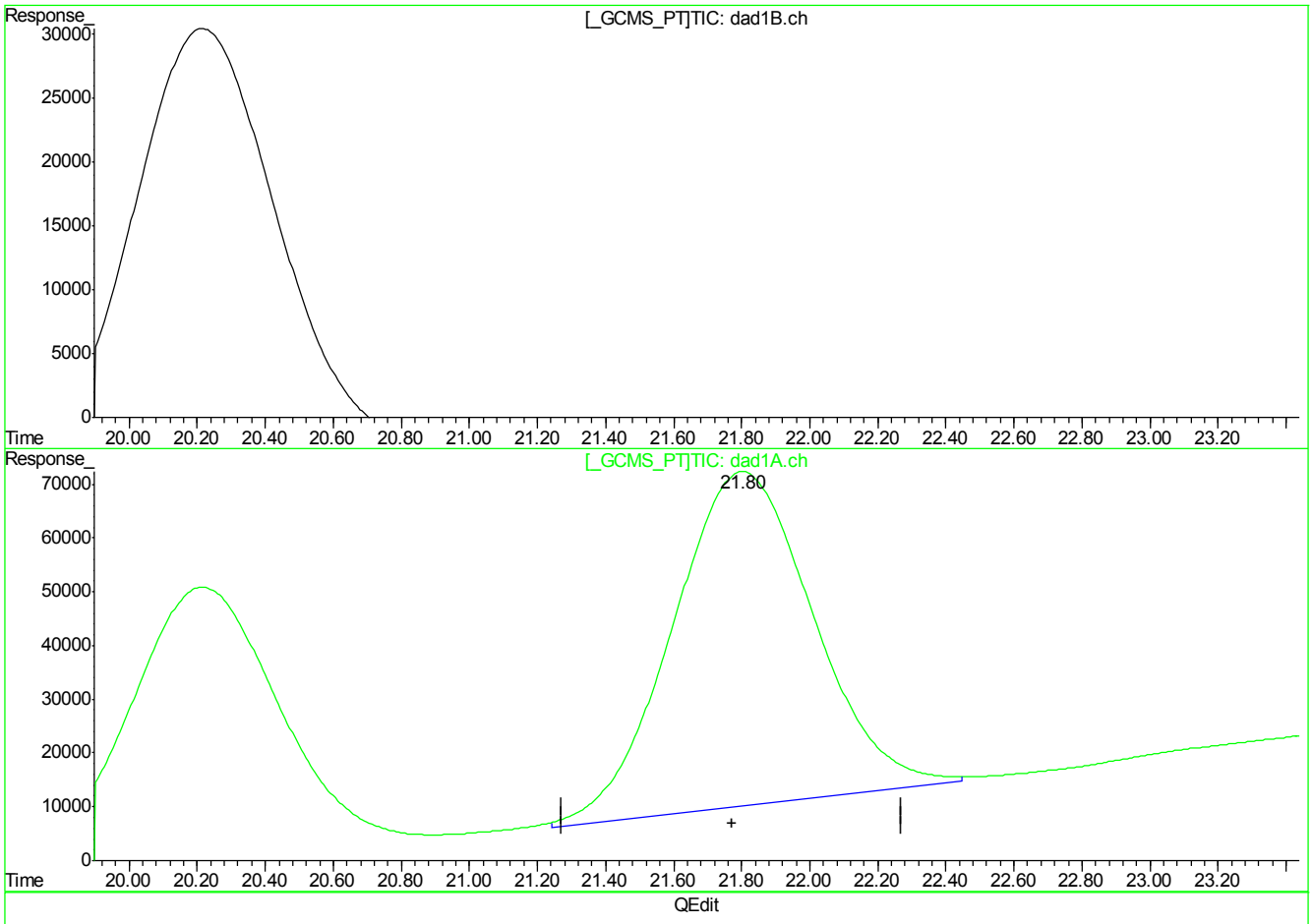
7.7.22.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.80min 5554.954ppb m

response 17816986

(+) = Expected Retention Time
GG614559.D 8330RPB.M_1113M.M Fri May 04 09:22:30 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:38 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	5739268	13040642	1104.792	1205.499
	Spiked Amount 500.000	Range 70 - 136		Recovery =		220.96%#	241.10%#
	Target Compounds						
1)	TNX	4.98	4.98	13587110	13587110	955.156	955.229
2)	HMX	5.39	5.39	3310136	3310136	1021.052	1027.433
3)	DNX	5.55	5.55	8061357	8061357	1041.435	1036.803
4)	MNX	6.55	6.55	7448117	7448117	1060.437	1059.581
5)	1,3,5-Trinitrobe	7.44	7.44	10326070	10333093	996.571	997.351
6)	RDX	7.90	7.90	5040572	5059644	1058.016	1066.727
7)	1,3-Dinitrobenze	9.93	9.93	14314085	11657418	1000.504	954.911
8)	Nitrobenzene	10.88	10.88	9487701	9950798	1005.328	1074.496
9)	2,4,6-Trinitroto	11.65	11.65	9990907	14448271	985.850	1101.672
10)	Nitroglycerin	0.00	12.39	0	18113090	N.D. d	5375.208
11)	Tetryl	12.92	12.92	7524220	14349611	928.473	1028.386
13)	2,6-Dinitrotolue	14.62	14.62	7327769	11180659	1024.919	1101.971
14)	2,4-Dinitrotolue	15.32	15.32	13339576	9937967	1017.583	1059.140
15)	o-Nitrotoluene	16.85	16.85	6083440	8821507	1053.119	1022.947
16)	3,5-Dinitroanili	16.29	16.29	11277122	18869869	1143.053	1151.957
17)	p-Nitrotoluene	18.02	18.02	12201587	22066997	1039.108	1041.232
18)	4-Amino-2,6-Dini	18.02	18.02	12201587	22066997	1039.108	1038.204
19)	m-Nitrotoluene	19.23	19.23	6432729	10790078	1091.149	1109.587
20)	2-Amino-4,6-Dini	20.18	20.18	9595622	13495211	1063.472	1092.810
21)	PETN	0.00	21.72	0	17750247	N.D. d	5534.146m

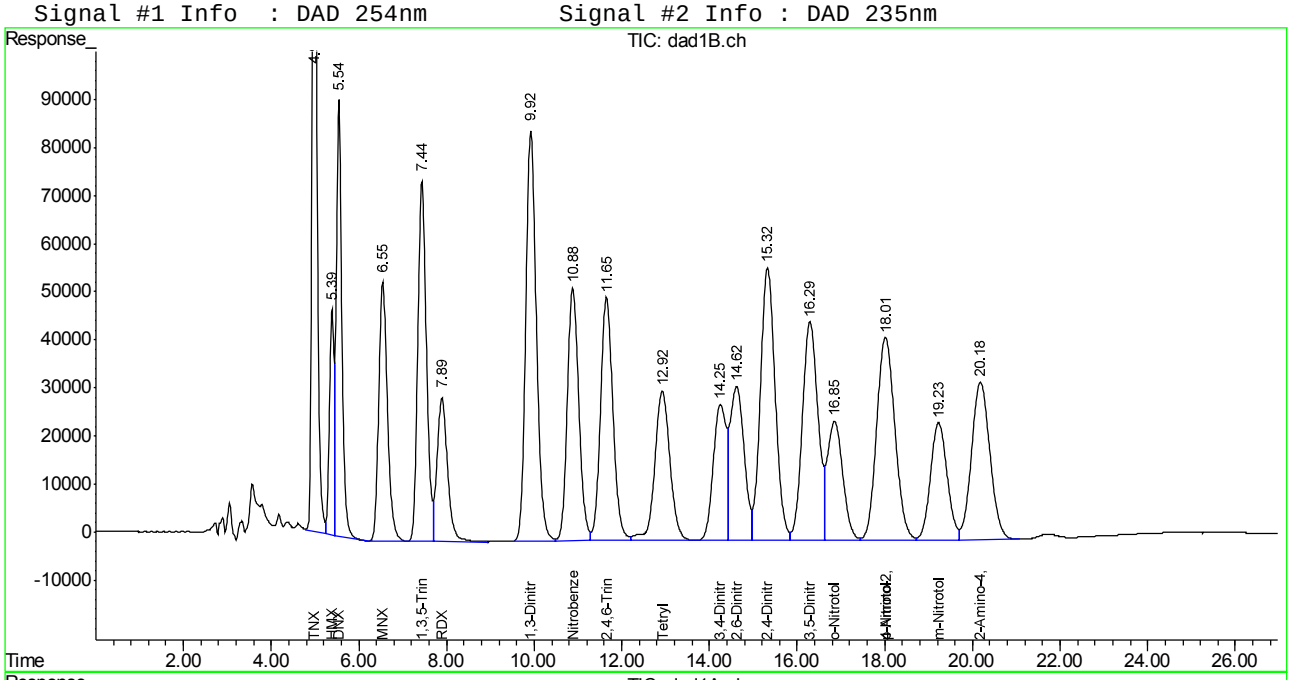
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614571.D 8330RPB.M_1113M.M Fri May 04 09:33:38 2018 Page 1

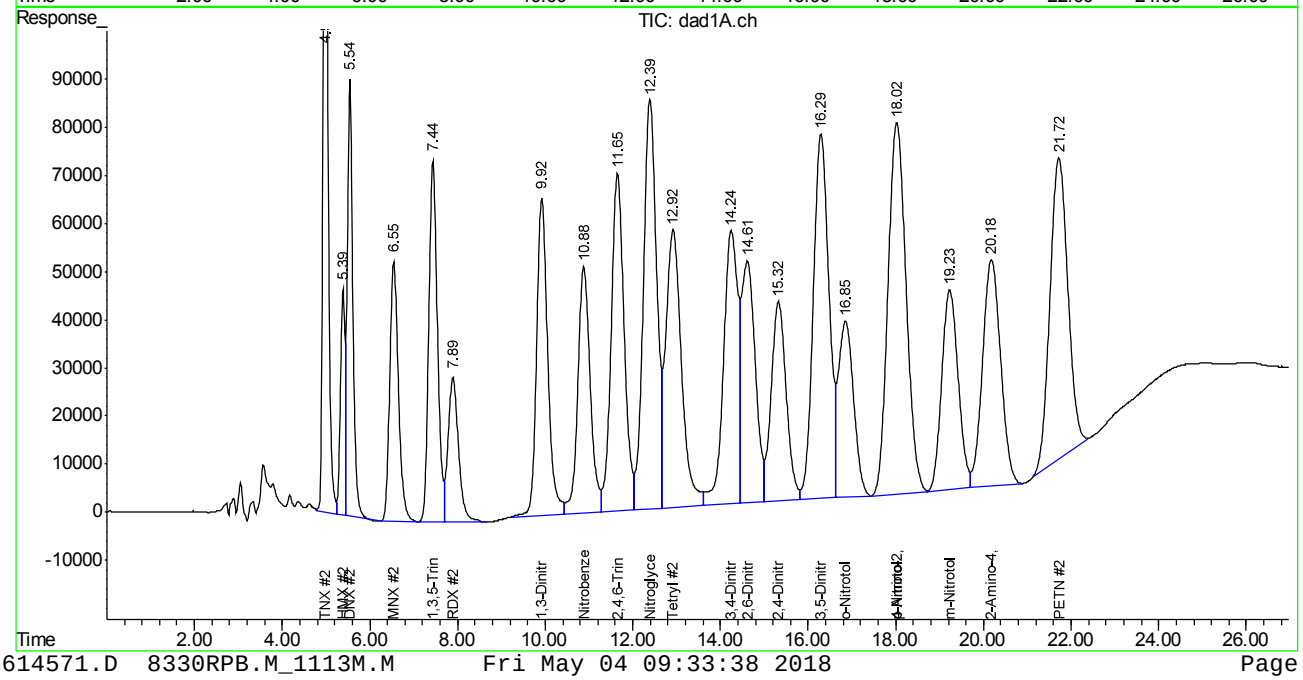
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

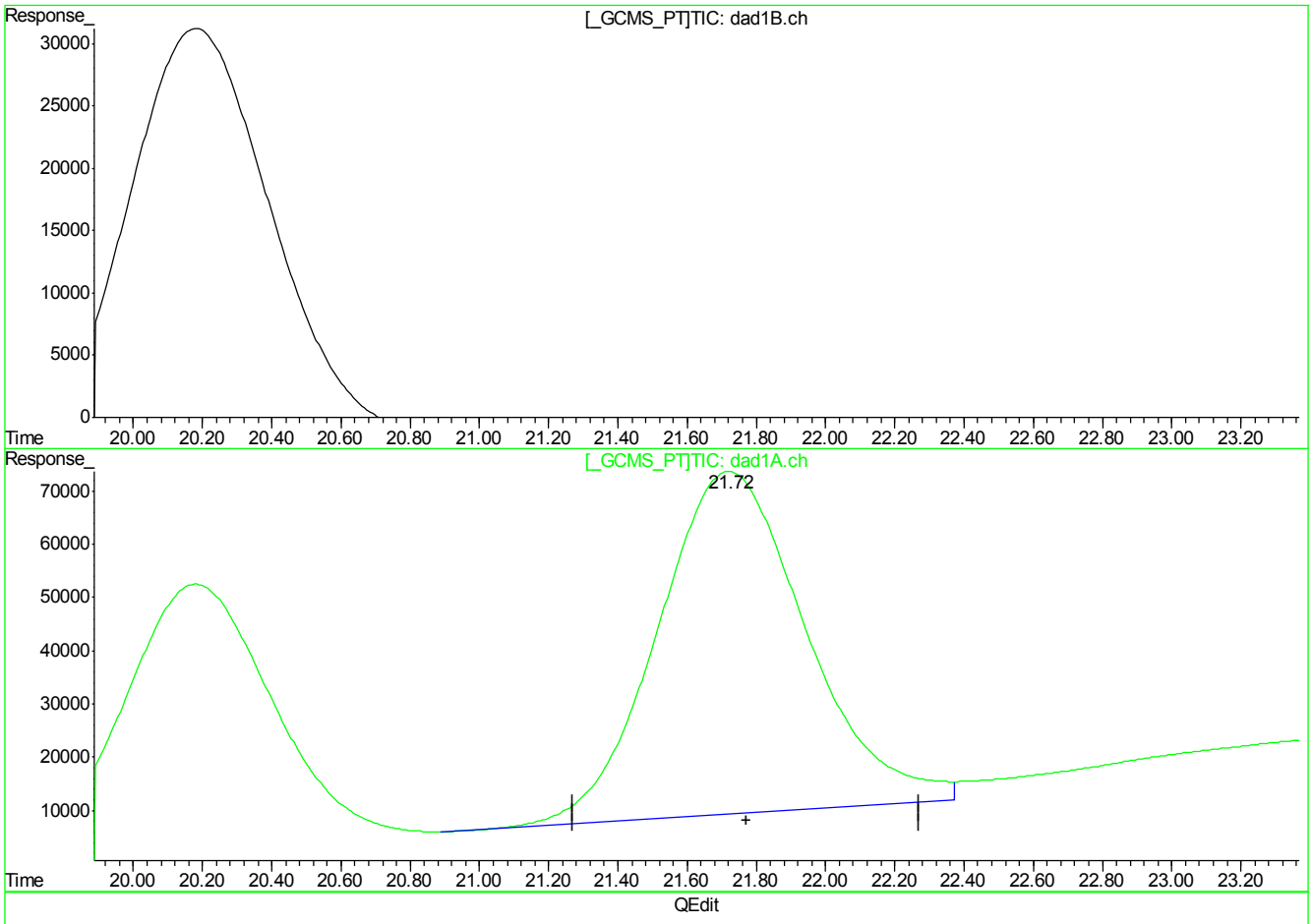
Sample Number:	GGG2624-ECC2571	**Method:**	SW846 8330B
Lab FileID:	GG614571.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/04/18 04:01	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.72	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.72min 5942.613ppb

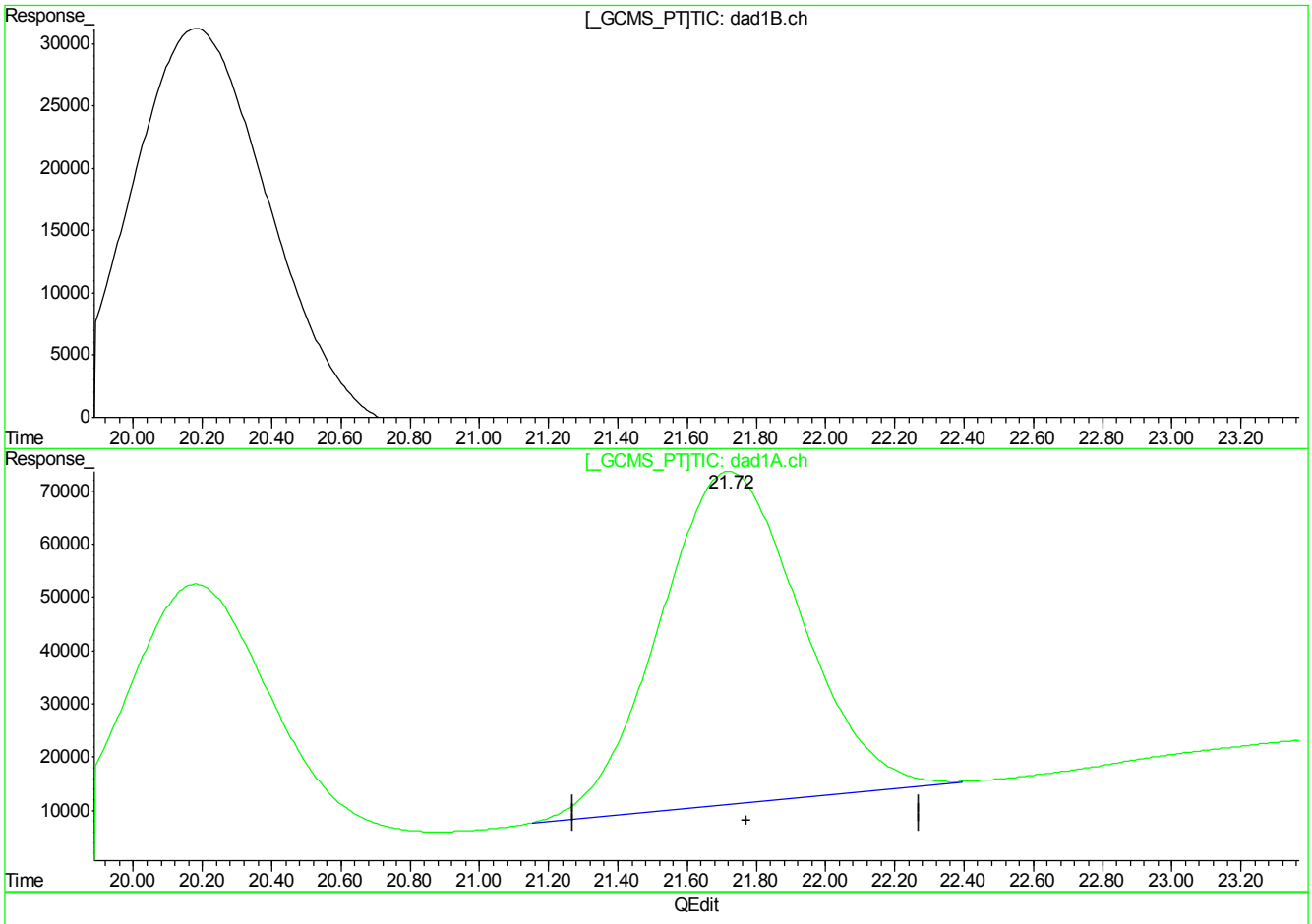
response 19060366

(+) = Expected Retention Time
GG614571.D 8330RPB.M_1113M.M Fri May 04 09:32:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.72min 5534.146ppb m

response 17750247

(+) = Expected Retention Time
GG614571.D 8330RPB.M_1113M.M Fri May 04 09:32:41 2018

SGS ACCUTEST-ORLANDO

DATE:	4/19/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 0329 plus
CALIB. DATE:	03/09/18
RUN BATCH:	GBB 1722

ANALYST:	GW
ACETONITRILE LOT #:	3510
MEOH LOT #:	—
HEAD PRESSURE:	280

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059462	1	CCB	8330				ND
BB 63	20	test					✓
BB 64	21	IC 17122-20		LC1020	50+450		test
BB 65	22	| | -50			10+90	pii	Cal curve
BB 66	23	-100			25+75		
BB 67	24	↓ -200			50+50		
BB 68	25	ICC -500			100+300		
BB 69	26	IC -1000			200+200		
BB 10	27	-2000			1X		
BB 11	28	ICV -500		Evol LC991 LC990 Evol	20:25 :10uL	>1mL	
BB 12	29	↓ ↓ -500		E 16231	10/400	40X	no need
BB 13	3	OP69647 bs		OP69647	1X		✓
BB 14	4	↓ -MB					ND
BB 15	5	IAS319461					ND
BB 26	6	OP69647 MS				pii	✓
BB 27	7	↓ -MSD				↓	✓
BB 28	8	IAS3194-2					ND
BB 75	9	IGS3384-1					✓ RL@1X
BB 80	10	↓ -2			↓		✓ RL@1X
BB 81	26	CCI722-1000	↓	LC1020	1:1	pii	pii

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: G. Mann

SGS ACCUTEST-ORLANDO

DATE:	4/19/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 0329 pkS
CALIB. DATE:	3/29/18
RUN BATCH: GBB	1722

ANALYST:	EM
ACETONITRILE LOT #:	3510
MEOH LOT #:	—
HEAD PRESSURE:	200

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059 182	1	CCB	8330	—	—		MD
BB 83	11	IQ33383		OP16647	1X		RR COK
BB 84	24	QC 1722-1000		QLC1020	1:1	EM 4/19/18 pkS	PASS
BB 85	71	E6249 spike		—			test only
BB 86	72	test spike stock		—			
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 06/16

Analyst's Signature: EMcAvin

SGS ACCUTEST-ORLANDO

DATE:	4/23/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 8329 + 5 of 7 dils
CALIB. DATE:	3/29/18 + 4/6/18
RUN BATCH: GBB	1724

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	209

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059493	1	CCB	8330	—			ND
BB 94	2	CC1722-1000		LC1020	1:1	pii	pass
BB 95	3	0409713-65		0409713	4	pii	✓
BB 96	4	↓ -MB					ND
BB 97	5	FA53518-13					ND
BB 98	6	↓ -14		↓	↓		ND
BB 99	2	CC1722-1000	↓	LC1020	1:1	pi.1	pass
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

N/A 4/23/18

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 06/16

Analyst's Signature: E. Nunez

SGS ACCUTEST-ORLANDO

DATE:	11/13/17
COLUMN TYPE:	Pres RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 4/6
ACQ. METHOD:	8330 RPB3
PROC. METHOD:	8330 RPB-1113
CALIB. DATE:	11/3/17
RUN BATCH: GGG	2571

ANALYST:	GM
ACETONITRILE LOT #:	343
MEOH LOT #:	171102
HEAD PRESSURE:	152

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 613824	1	CCb	8330	—			ND
GG 25	2	ICC25561000		LC9409	1:1		CCU + Run acetone
GG 26	3	ic2571-20			50/450 50/450	pii	acetone pass
GG 27	4	-50			100/390		
GG 28	5	-100			250/475		
GG 29	6	-200			500/450		
GG 30	7	icc -500			1000/390		
GG 31	8	ic -1000			2000/240		
GG 32	9	-2000			1X		
GG 33	10	icv -50		ES936/LC852 LC8611 & 5164	20:25 25:10	X mL	TNX/DW
GG 34	100	-50		E110198	40K		Hexyl & 246 TNT
GG 35	11	opb7519-mB		opb7519	1X		NB
GG 36	12	FAU8150-7cf					ND not needed
GG 37	13	FAU4005-1				pii	3,5 dini >40%
GG 38	14	-3					3,5 dini >40%
GG 39	15	-5					3,5 dini >40%
GG 40	16	opb64538-mB		opb67538			ND
GG 41	17	FAU8952-1Acf				pii	
GG 42	18	-2Acf				pii	
GG 43	19	opb7536-mB		opb7536			NP

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

SGS ACCUTEST-ORLANDO

DATE:	11/3/17
COLUMN TYPE:	Bives RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330 RPB -1113
CALIB. DATE:	11/3/17
RUN BATCH:	GGG 2571

ANALYST:	EM
ACETONITRILE LOT #:	343
MEOH LOT #:	171002
HEAD PRESSURE:	52

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 013844	20	FA49040-1cf	8330	op67534	1X	pii	✓
GG 45	8	CC2571-1000		LC949	1:1	pii	PASS
GG 46	1	CCB					ND
GG 47	21	FA49040-1cf		op67534	8/400	50X pii	✓
GG 48	22	-2			1X		✓
GG 49	23	-2			10/400	4X	✓
GG 50	24	-3			1X	✓	✓
GG 51	25	-3			10/400	4X	R2 @ 10X
GG 52	26	-4			1X		✓
GG 53	27	-5			↓		TNX>40% 24dini
GG 54	28	-5			10/400	4X	✓
GG 55	29	FA49077-1		✓	1X		✓
GG 56	8	CC2571-1000		LC949	1:1	pii	PASS
GG 57	1	CCB					ND
GG 58	30	op67540-MB		op67540	1X		ND
GG 59	31	FA49042-1cf			↓		2Aminos 40%
GG 60	32	-1		↓	10/400	4X pii	✓
GG 61	33	op67576-MB		op67576	1X		ND
GG 62	34	FA49036-3cf					ND
GG 63	35	-10cf		↓	↓		ND
GG 64	8	CC2571-1000		LC949	1:1	pii	PASS

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature:

SGS ACCUTEST-ORLANDO

DATE:	5/3/18
COLUMN TYPE:	3015 RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 RPB3
PROC. METHOD:	8330 RPB1113
CALIB. DATE:	11/3/17
RUN BATCH: GGG	2624

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	171

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG b1453c	1	CCB	8330	—			ND
GG 37	2	CC2571-1000		LC1000	1:1	pii	pass
GG 38	3	op69838-PTI		op69838	1X		✓
GG 39	4	↓ -BS		↓	↓	↓	✓
GG 40	5	↓ -MB					ND
GG 41	6	FA53518-1					ND
GG 42	7	op69838-MS				pii	✓
GG 43	8	↓ -MSD				pii	✓
GG 44	9	FA53518-4					
GG 45	10	↓ -7					ND
GG 46	11	↓ -10		↓	↓		ND
GG 47	12	CC2571-1000		LC1000	1:1	pii	pass
GG 48	1	CCB		—			ND
GG 49	9	FA53518-2		op69838	1X		ND
GG 50	10	op69838-dup		↓	↓		ND
GG 51	11	↓ -dup2					ND
GG 52	12	FA53518-3					ND
GG 53	14	↓ -5					ND
GG 54	15	↓ -6					ND
GG 55	17	↓ -8	↓	↓	↓		ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: E Lewis

SGS ACCUTEST-ORLANDO

DATE:	5/3/18
COLUMN TYPE:	Luna RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A1B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330 RPB1113
CALIB. DATE:	11/13/17
RUN BATCH: GGG	2624

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	171

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 614556	18	FA53518-9	8330	OP69838	1		ND
GG 57	19	-10					ND
GG 58	20	-11					ND
GG 59	2	CC2571-1000		LC1020	1:1	PII	pass
GG 60	1	CCR		—			ND
GG 61	21	FA53518-12		OP69838	1		ND
GG 62	22	OP69838-GB1					ND
GG 63	23	-GB2					ND
GG 64	24	-GB3					ND
GG 65	25	test pH 5.05g					test
GG 66	26	OP69897-BS		OP69897		PII	
GG 67	27	-MB					
GG 68	28	FA53801-22					
GG 69	29	FA53816-13					
GG 70	30	-N					
GG 71	2	CC2571-1000		LC1020	1:1	PII	pass
GG							
GG							
GG						NA CCV	5/3/18
GG							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature: [signature]

SGS - ORLANDO

SPE LIQUID SAMPLE PREP REPORT

Date/Time: 04/20/18 0930 Started {mm/dd/yy 24:00}

Date/Time: 04/20/18 1300 Finished {mm/dd/yy 24:00}

Prep Method: (3535A) or 537 or 537MOD (circle)

Analytical Method: 8330B

Batch#: OP69713 Ext. By: MB Conc. By: ✓ Vialed By: MB

Sample ID	Bottle Number	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Manifold ID	Comments
OP 69713 MB	X	1000	6	N/A	250ul		10ml	N/A	
OP 69713 BS	X	1000	↓	↓	↓	25725 250ul	↓	↓	
FA53518-13	1	1050	↓	↓	↓		↓	↓	
-14	1	1050	↓	↓	↓		↓	↓	
MS									
MSD									
DUP									

MB 04/20/18

Comments:

Surr.1 ID: ES612 m Conc: 20 ppm Exp. Date: 05/30/18 Inj. By: MB Ver. By MB

Spk.1 ID: ~~ES546~~ 12349 Conc: 20 ppm Exp. Date: 10/19/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8992B Conc: 1000 ug/ml Exp. Date: 03/20/19 Inj. By: MB Ver. By MB

MB 04/20/18

Spk.3 ID: 8937B Conc: 1000 ug/ml Exp. Date: 03/20/19 Inj. By: MB Ver. By MB

TurboVap Temp (Therm ID): ✓	N-Evap Temp (Therm ID): ✓
Observed Temp °C: ✓ Corr. Temp °C: ✓	Observed Temp °C: ✓ Corr. Temp °C: ✓

Methanol Lot # ✓	SPE Lot # 947383	pH Paper # 215517
Acetonitrile Lot # 171215	Syringe filter Lot # ✓	Reagent # ✓
Water Lot# DI H20	Pre-filter Lot# ✓	Reagent # ✓
Solvent# ✓	Carbon Lot# ✓	Other ✓

Relinquished By: [signature] Date: 04/20/18

Accepted By: [signature] 1400 Date: 4/20/18

ORLD-EXT-0001-3-08-FORM-extwater_spe.xls 032718

7.9.1

7

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B, 537MOD (PFC) or Other_____ (circle)

Date/Time: 04/29/18 1000 Started {mm/dd/yy 24:00}

Therm. ID:___ Corr. Factor (±°C):___
Bath Temp. (High) °C :___/___ {obs/corr}

Date/Time: 04/30/18 0630 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332):___
Shaker Table ID (8330B): ST1

Batch#: OP69838 Ext. By: MB, GJ TRAINER, TRAINEE Vialed By: DC Balance ID: METTLER

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69838 MB	X	10.00	1.25ml		50ml	
OP 69838 BS	X	10.00		1.25+1.25ml 1.25ml		
FA53518-1	1	10.40				
-2	1	10.53				
-3	1	10.07				
-4	1	10.75				
-5	1	10.66				
-6	1	10.25				
-7	1	10.71				
-8	1	10.41				
-9	1	10.25				
-10	1	10.78				
-11	1	10.40				
-12	1	10.15				
Grinding Blank	A	10.00				
↓	B	10.10				
	C	10.01				
			DC 04/30/18			
MB 04/29/18 OP69838 PT-1	X	~~05.05~~	1.25ml		50ml	5.05g
FA53518-1 MS	1	10.05		1.25+1.25ml 1.25ml		
-1 MSD	1	10.09		↓		
FA53518-2 DUP	1	10.18				
-2 TRP	1	10.12				

Comments:

Surr. ID: E5612A Conc: 20 ppm Exp. Date: 05/30/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6249 Conc: 20 ppm Exp. Date: 10/29/18 04/30/19 Inj. By: MB Ver. By MB

Spk.2 ID: E6537C E8992C Conc: 1000 ng/ml Exp. Date: 04/30/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 170845 Methanol Lot #___ Water Lot# 180698 HPLC

Syringe Filter Lot# 150824027 Reagent #CS1 Reagent #___

Relinquished By:___ Date: 4/30/18

Accepted By: 800 Date: 4/30/18

NF 05/16 extsolid_exp 051616.xls

7.9.2 7 7.9.2

SGS ACCUTEST - ORLANDO

8330B Weight Log

BALANCE ID: METTLER 1

DATE: 04/25/18

Sample ID	Total Weight (grams)	Weight Remaining in #10 Sieve (grams)	Sieve ID	Comments / Description Weight Remaining in Sieve # 60	Weight thru Sieve # 60
FA53517-1	809.19	84.67	10B, 60B	~~282.71~~ ①	116.81
-2	958.07	50.73	10C, 60G	775.37	129.58
-3	936.25	406.26	10F, 60A	343.70	128.63
-4	827.98	37.27	10A, 60F	681.87	121.65
-5	890.50	78.86	10A, 60F	618.53	93.20
-6	909.57	81.05	10F, 60A	711.73	102.94
-7	956.63	590.77	10G, 60C	266.64	82.91
-8	553.59	309.51	10C, 60G	319.89	47.94
-9	748.26	306.57	10B, 60B	362.57	66.79
-10	875.68	422.22	10D, 60E	332.89	112.98
-11	864.75	307.96	10B, 60B	453.97	92.82
-12	758.28	245.82	10D, 60E	382.20	116.84
-13	823.17	198.89	10C, 60G	513.36	105.54
-14	750.09	136.79	10G, 60C	478.93	128.27
-15	828.24	290.96	10G, 60C	369.01	90.96
-16	862.01	45.29	10F, 60A	707.42	102.42
-17	577.69	33.77	10D, 60E	410.95	134.34
-18	718.53	43.12	10G, 60C	527.45	125.53
-19	815.27	102.65	10E, 60D	598.14	106.77
-20	697.77	209.37	10E, 60D	365.35	111.37
-21	708.96	328.98	10C, 60G	270.84	102.78
-22	861.91	80.44	10A, 60F	665.42	109.96
-23	868.36	287.76	10E, 60D	432.98	137.98
-24	~~990.23~~ 0	333.89	10A, 60F	519.63	121.22

① 601.97

② 990.23

Analyst's Signature:

SGS ACCUTEST - ORLANDO — 8330B Air Drying Log

BALANCE ID: METTLER 1

Sample ID	Date/Time Started 04/24/18 ~~1100~~ 1200 First Weighing (grams)*	Date/Time Started 04/24/18 1430 Second Weighing (grams)*	Date/Time Started Third Weighing (grams)* If Needed
FA53517-1	10.12	10.12	
-2	10.05	10.05	
-3	10.03	10.03	
-4	10.10	10.10	
-5	10.00	10.00	
-6	10.11	10.11	
-7	10.13	10.13	
-8	10.07	10.07	
-9	10.04	10.04	
-10	10.15	10.15	
-11	10.08	10.08	
-12	10.17	10.17	
-13	10.11	10.11	
-14	10.01	10.01	
-15	10.10	10.10	
-16	10.14	10.14	
-17	10.05	10.05	
-18	10.15	10.15	
-19	10.08	10.08	
-20	10.10	10.10	
-21	10.03	10.03	
-22	10.13	10.13	
-23	10.15	10.15	

04/24/18 MB

* Includes weight of the aluminum dish.

Allow at least two hours between First and Second Weighing and between Second and Third Weighing

Sample is considered dry if the difference between consecutive weighings is less that 0.1 gram

Analyst's Signature:

NF 02/16

8330b drying log 020116.xls

DATE REVIEWED 04.30.18

BY

50 of 50

7.9.2

7

SGS ACCUTEST - ORLANDO

8330B Air Drying Log

BALANCE ID: METTLER 1

Sample ID	Date/Time Started 04/17/18 0800 First Weighing (grams)*	Date/Time Started 04/17/18 1100 Second Weighing (grams)*	Date/Time Started Third Weighing (grams) (grams)* If Needed
FA53033-1	10.10	10.10	
—	04/24/18 1200	04/24/18 1430	—
FA53518-1	10.07	10.07	
-2	10.10	10.12	
-3	10.03	10.03	
-4	10.06	10.06	
-5	10.15	10.15	
-6	10.04	10.04	
-7	10.12	10.12	
-8	10.02	10.02	
-9	10.08	10.08	
-10	10.13	10.13	
-11	10.10	10.10	
-12	10.18	10.18	
FA53517-24	10.06	10.04	

* Includes weight of the aluminum dish.

Allow at least two hours between First and Second Weighing and between Second and Third Weighing

Sample is considered dry if the difference between consecutive weighings is less that 0.1 gram

Analyst's Signature:

NF 02/16

8330b drying log 020116.xls

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:37	MA14858-STD1	1		STDA
08:41	MA14858-STD2	1		STDB
08:45	MA14858-STD3	1		STDC
08:48	MA14858-STD4	1		STDD
08:52	MA14858-STD5	1		STDE
08:56	MA14858-STD6	1		STDF
09:00	MA14858-STD7	1		STDG
09:04	MA14858-HSTD1	1		
09:07	MA14858-HSTD2	1		
09:11	MA14858-ICV1	1		
09:15	MA14858-ICB1	1		
09:18	MA14858-CRIA1	1		
09:22	MA14858-ICSA1	1		
09:26	MA14858-ICSAB1	1		
09:29	MA14858-CCV1	1		
09:33	MA14858-CCV2	1		
09:37	MA14858-CCB1	1		
09:40	MP33666-MB1	2		
09:44	MP33666-B1	2		
09:48	FA53574-4F	2		(sample used for QC only; not part of login FA53518)
09:51	MP33666-D1	2		
09:55	MP33666-SD1	10		
09:58	MP33666-S1	2		
10:02	MP33666-S2	2		
10:06	MP33666-PS1	2		
10:09	ZZZZZZ	2		
10:13	ZZZZZZ	2		
10:17	MA14858-CCV3	1		
10:20	MA14858-CCV4	1		
10:24	MA14858-CCB2	1		
10:28	ZZZZZZ	2		
10:31	ZZZZZZ	2		
10:35	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:38	ZZZZZZ	2		
10:42	ZZZZZZ	2		
10:46	ZZZZZZ	2		
10:49	ZZZZZZ	2		
10:53	ZZZZZZ	2		
10:57	ZZZZZZ	2		
11:00	ZZZZZZ	2		
11:04	MA14858-CCV5	1		
11:07	MA14858-CCV6	1		
11:11	MA14858-CCB3	1		
11:15	ZZZZZZ	2		
11:18	ZZZZZZ	2		
11:22	ZZZZZZ	2		
11:26	ZZZZZZ	2		
11:29	ZZZZZZ	2		
11:33	ZZZZZZ	2		
11:36	ZZZZZZ	2		
11:40	MP33666-MB2A	2		
11:51	MA14858-CCV7	1		
11:55	MA14858-CCV8	1		
11:58	MA14858-CCB4	1		
12:49	MA14858-CCV9	1		
12:53	MA14858-CCV10	1		
12:57	MA14858-CCB5	1		
13:11	MP33665-MB1	2		
13:15	MP33665-B1	2		
13:18	ZZZZZZ	2		
13:22	FA53518-13	2		
13:26	FA53518-14	2		
13:29	ZZZZZZ	2		
13:33	ZZZZZZ	2		
13:36	MA14858-CCV11	1		
13:40	MA14858-CCV12	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:44	MA14858-CCB6	1		
13:47	ZZZZZZ	2		
13:51	ZZZZZZ	2		
13:55	ZZZZZZ	2		
13:58	ZZZZZZ	2		
14:02	ZZZZZZ	2		
14:05	ZZZZZZ	2		
14:09	MP33665-MB2	2		
14:13	FA53456-6	20		(sample used for QC only; not part of login FA53518)
14:16	MP33665-D1	20		
14:20	MP33665-SD1	100		
14:24	MA14858-CCV13	1		
14:27	MA14858-CCV14	1		
14:31	MA14858-CCB7	1		
14:35	MP33665-S1	20		
14:38	MP33665-S2	20		
---------->	Last reportable sample/prep for job FA53518			
14:42	MP33665-PS1	20		
14:46	ZZZZZZ	20		
14:49	ZZZZZZ	20		
14:53	ZZZZZZ	20		
14:56	ZZZZZZ	20		
15:00	ZZZZZZ	20		
15:04	ZZZZZZ	20		
15:07	ZZZZZZ	20		
15:11	MA14858-CCV15	1		
15:15	MA14858-CCV16	1		
15:18	MA14858-CCB8	1		
15:22	ZZZZZZ	20		
15:36	MA14858-CRIA2	1		
15:40	MA14858-ICSA2	1		
15:44	MA14858-ICSAB2	1		
15:47	MA14858-CCV17	1		
15:51	MA14858-CCV18	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:55	MA14858-CCB9	1		
---------->	Last reportable CCB for job FA53518			
	Refer to raw data for calibration curve and standards.			

INTERNAL STANDARD SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
08:37	MA14858-STD1	100	100	100	100	100	100	100	100
08:41	MA14858-STD2	97.8	100.5	99.1	99.8	99.9	101.3	100.6	101.1
08:45	MA14858-STD3	94.5	99.6	99.8	99.5	99.8	100.5	100	97.8
08:48	MA14858-STD4	96.6	97.3	97.6	97.7	97.9	99.3	99.3	98.4
08:52	MA14858-STD5	90.2	95.8	95.4	96.4	95.8	98.5	96.3	93
08:56	MA14858-STD6	82.3	96	96	96.2	94.9	98.8	93.6	89.1
09:00	MA14858-STD7	86.7	96.1	93.9	94.1	93.2	97.2	90.1	83.2
09:04	MA14858-HSTD1	82.1	97.6	96	96	95.3	99.2	94.6	89.5
09:07	MA14858-HSTD2	84.4	97.6	95.8	95.7	94	98.9	91.4	84.5
09:11	MA14858-ICV1	91.2	97.8	96.2	96.4	95.8	100.1	94.9	89.5
09:15	MA14858-ICB1	89.9	98.1	100	99.9	98.6	101.9	101.5	99.8
09:18	MA14858-CRIA1	96	100.3	100.9	100.5	100	102.3	102.5	99.2
09:22	MA14858-ICSA1	80.8	103.2	94.5	92.1	90.1	92.4	80.3	78.6
09:26	MA14858-ICSAB1	79.2	103.4	93.6	92.5	90.2	93.8	80.6	79.7
09:29	MA14858-CCV1	88.3	96.3	97.6	97.4	95.7	101	98.5	92.9
09:33	MA14858-CCV2	91.1	97.4	97.6	97.2	95	101.1	96.1	89.1
09:37	MA14858-CCB1	100.4	97.8	99.8	99.5	98.6	101.6	102.5	96.2
09:40	MP33666-MB1	86.9	92.4	92.1	92.4	93.6	100	100.2	75.7
09:44	MP33666-B1	87.3	92.5	90.6	90.3	90.2	99.3	93.2	73.9
09:48	FA53574-4F	93.8	94.4	92.2	92.2	91.7	99.2	93.5	71.6
09:51	MP33666-D1	90.9	95.4	92.9	93.3	92.6	100.6	93.3	72
09:55	MP33666-SD1	104.1	100.2	100.4	100.3	97.7	102.1	100.5	90.1
09:58	MP33666-S1	84.7	92.9	89.2	89.7	89.4	97.7	89.6	68.3 !
10:02	MP33666-S2	86.8	94.8	90.9	90.7	89.9	98.2	90	70.5
10:06	MP33666-PS1	No results reported for the elements associated with this internal standard.							
10:09	ZZZZZZ	92.8	93.8	93.3	92.8	92.7	101.5	98	72
10:13	ZZZZZZ	96.2	93.1	91.2	91.1	90	99.8	96.1	70.6
10:17	MA14858-CCV3	95.6	101.2	101.1	100	97	102	98.9	92.2
10:20	MA14858-CCV4	99.8	103.1	101.4	100.2	97	102.5	97	89.5
10:24	MA14858-CCB2	102.2	98.4	99.8	99.9	96.6	99.9	100.2	95
10:28	ZZZZZZ	87.1	87.9	86.6	86.6	85.1	94.1	90.4	66.4 !
10:31	ZZZZZZ	88.1	88.8	88	88	86.7	95.8	92.2	68.3 !
10:35	ZZZZZZ	89.8	90.4	87.4	87.9	86.4	95.6	89.3	66.4 !

INTERNAL STANDARD SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:38	ZZZZZZ	87.7	88.3	86.4	86.6	85.3	94.3	90.3	66.5 !
10:42	ZZZZZZ	92.7	90	88.5	88.6	87	95.2	92.6	69.3 !
10:46	ZZZZZZ	88.5	88	86.3	86.9	85.7	94.9	92.4	67.6 !
10:49	ZZZZZZ	85	89.5	85.6	85.8	83.1	93.4	88.2	65 !
10:53	ZZZZZZ	88	86.7	85.4	85.7	84.2	93.9	90.2	66 !
10:57	ZZZZZZ	84.3	88	85.9	86.2	84.4	93.5	88.2	66.2 !
11:00	ZZZZZZ	86.5	87.4	85.7	85.7	84.3	94.1	90.1	66.6 !
11:04	MA14858-CCV5	98	93.1	93.4	93.1	88.9	95.7	92.7	86
11:07	MA14858-CCV6	91.9	94.2	92.4	92.2	88.1	93.8	90.5	82.3
11:11	MA14858-CCB3	96	90.2	91.2	91.2	87.6	90.8	92	86
11:15	ZZZZZZ	87	86.6	85.6	85.5	84.2	93.5	90.1	67.1 !
11:18	ZZZZZZ	89.9	86.3	85.6	84.7	84	93.4	89.1	65.8 !
11:22	ZZZZZZ	102.9	92.4	82.8	82.6	81.8	88.2	76	61.2 !
11:26	ZZZZZZ	87.8	86.4	86.2	85.3	83.6	93.7	89.6	65.7 !
11:29	ZZZZZZ	88	87	86	85.7	84.7	94	90.7	66.3 !
11:33	ZZZZZZ	95.1	86.4	85.1	85.7	84.1	93.8	88.9	65.8 !
11:36	ZZZZZZ	114.9	86.8	86	85.3	83.8	94.4	89.6	65.1 !
11:40	MP33666-MB2A	85.8	86.1	85	85.5	83.6	92.4	91	66.6 !
11:51	MA14858-CCV7	99.8	99.9	99.2	98.2	94.6	102.1	98.6	90.2
11:55	MA14858-CCV8	96.9	100.1	99.2	98.8	94.1	101.2	96.2	87.2
11:58	MA14858-CCB4	101.1	100.7	101.1	100.8	97.1	102.8	101.8	95.5
12:49	MA14858-CCV9	110.7	109.6	107.6	107.2	100.4	105.6	101.7	93
12:53	MA14858-CCV10	110.5	110.6	106.4	105.8	98.3	105.7	99.3	89.4
12:57	MA14858-CCB5	112.6	109.5	108.6	109.2	101.5	107	105.5	97.7
13:11	MP33665-MB1	106.8	106.3	103	102.2	99.4	110.1	106.5	77.7
13:15	MP33665-B1	102.6	97.6	94.2	93.5	90.7	104.1	96.4	70
13:18	ZZZZZZ	106.9	102.6	99.3	98.6	94.6	106.4	99.7	73.9
13:22	FA53518-13	109.6	102.9	99.8	99.2	93.9	105.7	100.1	73.9
13:26	FA53518-14	102.9	100.6	98.1	97.8	92.7	104.4	99.7	73.6
13:29	ZZZZZZ	101.6	97.6	94.6	94.5	90.1	98.2	95	69 !
13:33	ZZZZZZ	103.8	93.2	90.4	90.1	85.3	96.9	93	66.3 !
13:36	MA14858-CCV11	108.9	102.8	101	100.6	92.7	101.1	96	87.7
13:40	MA14858-CCV12	106.8	104.4	100.3	99.7	91.9	100	94.3	86.7

INTERNAL STANDARD SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:44	MA14858-CCB6	104.1	98.2	98.3	98.2	90.7	96.7	95.8	87.8
13:47	ZZZZZZ	95.8	92.6	90.3	90.2	85.4	97.4	92.7	66.7 !
13:51	ZZZZZZ	100.4	93.4	90.7	90.9	86.4	97.8	94.5	67.8 !
13:55	ZZZZZZ	97	91.9	89.4	89.2	84.1	96.4	92	66.1 !
13:58	ZZZZZZ	100.6	93.3	91.2	90.8	86.5	98.6	95.7	67.6 !
14:02	ZZZZZZ	93.7	94.6	88.8	88.4	84.1	96.5	91.3	64.3 !
14:05	ZZZZZZ	97.7	90	88.8	87.8	83.8	95.6	93	65.1 !
14:09	MP33665-MB2	100.1	91.1	88.3	88.9	84.6	94.7	92.8	65.6 !
14:13	FA53456-6	101.5	112.6	100.5	99.7	91.8	97.8	84.6	73.2
14:16	MP33665-D1	110.8	116	102.8	102.4	95.2	100.6	86.6	75.5
14:20	MP33665-SD1	119	112.4	106.5	105.8	98.9	107.3	98.8	89.7
14:24	MA14858-CCV13	109.1	103.5	101.7	101.5	95.4	105.5	101.8	89.3
14:27	MA14858-CCV14	111	104.5	101.2	102.1	95.6	104.9	99.5	87.7
14:31	MA14858-CCB7	113.6	103.5	103.4	103.1	97.2	105.3	105.6	95.3
14:35	MP33665-S1	107.4	116.4	102.8	102.8	94.4	100.8	86.2	75.3
14:38	MP33665-S2	108.3	117.9	103.5	102.6	95	102	87.4	75.9
14:42	MP33665-PS1	No results reported for the elements associated with this internal standard.							
14:46	ZZZZZZ	115.6	106.5	104.4	103.4	99.5	108.3	106.2	95.4
14:49	ZZZZZZ	114.2	107.4	103.5	103.7	98.4	108	103.2	91.5
14:53	ZZZZZZ	116.2	108.2	104.1	103.4	97.7	107.9	102.5	88.8
14:56	ZZZZZZ	118.6	107.3	104.4	104.7	98.4	108.1	104.7	90.2
15:00	ZZZZZZ	121.1	109.3	104.8	104.4	99	108.7	105.4	92.5
15:04	ZZZZZZ	110.5	111.4	105.3	104.3	97.5	107.7	99.1	87.5
15:07	ZZZZZZ	111.2	105.7	101	100.3	93.5	102	93.8	84
15:11	MA14858-CCV15	113	99.4	97.4	97.8	91.2	100.2	97.1	85.8
15:15	MA14858-CCV16	108.8	102.9	98	98.4	92	101.3	96.1	85.2
15:18	MA14858-CCB8	108.8	97.6	96.7	96.9	90.5	98.7	98.9	89
15:22	ZZZZZZ	106.7	105.6	101.6	100.7	93.2	101.9	94.5	83.5
15:36	MA14858-CRIA2	104.1	101.3	99.1	98.5	91.9	99.4	99.1	89.2
15:40	MA14858-ICSA2	88.6	100.9	91.7	89.1	84	92.4	79.7	73
15:44	MA14858-ICSAB2	86.5	103.1	93.1	91.1	86.3	96.1	82.8	75.1
15:47	MA14858-CCV17	102.6	100	98.1	98	93.5	105.9	102.9	86.5
15:51	MA14858-CCV18	96.3	100.9	98.9	98.6	92.7	105.5	100.2	84.9

INTERNAL STANDARD SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14858
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:55	MA14858-CCB9	104.4	100.4	100.3	99.8	95	106.3	105.9	92.5

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium	70-130 %	70-130 %
Istd#3	Germanium (72-2)	70-130 %	70-130 %
Istd#4	Germanium (74-2)	70-130 %	70-130 %
Istd#5	Indium	70-130 %	70-130 %
Istd#6	Terbium	70-130 %	70-130 %
Istd#7	Bismuth	70-130 %	70-130 %
Istd#8	Tellurium	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14858 Units: ug/l

Time: / Sample ID:			09:15 ICB1		09:37 CCB1		10:24 CCB2		11:11 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	100	4.4	anr							
Antimony	1.0	.1	anr							
Arsenic	1.0	.1	anr							
Barium	1.0	.1	anr							
Beryllium	1.0	.1	anr							
Cadmium	1.0	.1	anr							
Calcium	100	7.2	anr							
Chromium	1.0	.1	anr							
Cobalt	1.0	.1	anr							
Copper	1.0	.1	anr							
Iron	100	7.9	anr							
Lead	1.0	.1	-0.00353	<1.0	-0.00895	<1.0	-0.0129	<1.0	-0.0161	<1.0
Magnesium	100	5.2	anr							
Manganese	1.0	.1	anr							
Molybdenum	1.0	.1								
Nickel	1.0	.1	anr							
Potassium	100	6.6	anr							
Selenium	1.0	.11	anr							
Silver	1.0	.1	anr							
Sodium	100	4.8	anr							
Strontium	1.0	.1								
Thallium	1.0	.1	anr							
Tin	1.0	.1								
Titanium	1.0	.3								
Vanadium	1.0	.1	anr							
Zinc	2.0	.29	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14858 Units: ug/l

Time: / Sample ID:			11:58 CCB4		12:57 CCB5		13:44 CCB6		14:31 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	100	4.4	anr							
Antimony	1.0	.1	anr							
Arsenic	1.0	.1	anr							
Barium	1.0	.1	anr							
Beryllium	1.0	.1	anr							
Cadmium	1.0	.1	anr							
Calcium	100	7.2	anr							
Chromium	1.0	.1	anr							
Cobalt	1.0	.1	anr							
Copper	1.0	.1	anr							
Iron	100	7.9	anr							
Lead	1.0	.1	-0.0164	<1.0	-0.00817	<1.0	-0.0130	<1.0	-0.0173	<1.0
Magnesium	100	5.2	anr							
Manganese	1.0	.1	anr							
Molybdenum	1.0	.1								
Nickel	1.0	.1	anr							
Potassium	100	6.6	anr							
Selenium	1.0	.11	anr							
Silver	1.0	.1	anr							
Sodium	100	4.8	anr							
Strontium	1.0	.1								
Thallium	1.0	.1	anr							
Tin	1.0	.1								
Titanium	1.0	.3								
Vanadium	1.0	.1	anr							
Zinc	2.0	.29	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14858 Units: ug/l

Time: / Sample ID:			15:18 CCB8		15:55 CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	100	4.4	anr			
Antimony	1.0	.1	anr			
Arsenic	1.0	.1	anr			
Barium	1.0	.1	anr			
Beryllium	1.0	.1	anr			
Cadmium	1.0	.1	anr			
Calcium	100	7.2	anr			
Chromium	1.0	.1	anr			
Cobalt	1.0	.1	anr			
Copper	1.0	.1	anr			
Iron	100	7.9	anr			
Lead	1.0	.1	-0.0225	<1.0	-0.0206	<1.0
Magnesium	100	5.2	anr			
Manganese	1.0	.1	anr			
Molybdenum	1.0	.1				
Nickel	1.0	.1	anr			
Potassium	100	6.6	anr			
Selenium	1.0	.11	anr			
Silver	1.0	.1	anr			
Sodium	100	4.8	anr			
Strontium	1.0	.1				
Thallium	1.0	.1	anr			
Tin	1.0	.1				
Titanium	1.0	.3				
Vanadium	1.0	.1	anr			
Zinc	2.0	.29	anr			

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time:		09:11			09:29			09:33	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	100	99.0	99.0				100	98.9	98.9
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time:		10:17			10:20			11:04	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				100	97.5	97.5			
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	CCV True	11:07 CCV6 Results	% Rec	CCV True	11:51 CCV7 Results	% Rec	CCV True	11:55 CCV8 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	100	97.1	97.1				100	96.7	96.7
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	CCV True	12:49 CCV9 Results	% Rec	CCV True	12:53 CCV10 Results	% Rec	CCV True	13:36 CCV11 Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				100	96.7	96.7			
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	CCV True	13:40 CCV12 Results	% Rec	CCV True	14:24 CCV13 Results	% Rec	CCV True	14:27 CCV14 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	100	97.1	97.1				100	97.2	97.2
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	CCV True	15:11 CCV15 Results	% Rec	CCV True	15:15 CCV16 Results	% Rec	CCV True	15:47 CCV17 Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				100	96.8	96.8			
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time:		15:51	
Sample ID:	CCV	CCV18	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	100	96.6	96.6
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver			
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14858 Units: ug/l

Time:		09:04			09:07	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead				200	200	100.0
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: CRI 70-130% CRIA 80-120% Run ID: MA14858 Units: ug/l

Time:			09:18		15:36	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100	100	anr			
Antimony	1.0	1.0	anr			
Arsenic	1.0	1.0	anr			
Barium	1.0	1.0	anr			
Beryllium	1.0	1.0	anr			
Cadmium	1.0	1.0	anr			
Calcium	100	100	anr			
Chromium	1.0	1.0	anr			
Cobalt	1.0	1.0	anr			
Copper	1.0	1.0	anr			
Iron	100	100	anr			
Lead	1.0	1.0	0.874	87.4	0.766	76.6
Magnesium	100	100	anr			
Manganese	1.0	1.0	anr			
Molybdenum	1.0	1.0				
Nickel	1.0	1.0	anr			
Potassium	100	100	anr			
Selenium	1.0	1.0	anr			
Silver	1.0	1.0	anr			
Sodium	100	100	anr			
Strontium	1.0	1.0				
Thallium	1.0	1.0	anr			
Tin	1.0	1.0				
Titanium	1.0	1.0				
Vanadium	1.0	1.0	anr			
Zinc	1.0	1.0	anr			

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA043018M1.CSV Date Analyzed: 04/30/18 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA14858 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	09:22 ICSA1 Results	% Rec	09:26 ICSAB1 Results	% Rec	15:40 ICSA2 Results	% Rec	15:44 ICSAB2 Results	% Rec
Aluminum	100000	100000	96500	96.5	95800	95.8	97900	97.9	98200	98.2
Antimony			0.0321		0.0207		0.00740		0.0100	
Arsenic		20	0.0859		19.8	99.0	0.0799		19.3	96.5
Barium			0.0801		0.0750		0.0827		0.0759	
Beryllium			0.0123		0.0151		0.0184		0.0137	
Cadmium		20	0.369		18.3	91.5	0.387		17.9	89.5
Calcium	100000	100000	94900	94.9	93800	93.8	91700	91.7	92100	92.1
Chromium		20	1.30 (a)		21.4	107.0	1.29		21.6	108.0
Cobalt		20	0.0108		19.3	96.5	0.00647		19.1	95.5
Copper		20	-1.73		17.0	85.0	-1.98		16.6	83.0
Iron	100000	100000	101000	101.0	102000	102.0	104000	104.0	105000	105.0
Lead			0.00557		0.0207		-0.0154		0.00125	
Magnesium	100000	100000	99100	99.1	98500	98.5	103000	103.0	103000	103.0
Manganese		20	0.294		20.5	102.5	0.284		20.2	101.0
Molybdenum	2000	2000	2040	102.0	2050	102.5	2110	105.5	2130	106.5
Nickel		20	0.125		18.8	94.0	0.123		18.6	93.0
Potassium	100000	100000	103000	103.0	103000	103.0	103000	103.0	103000	103.0
Selenium			0.0742		0.0495		0.0544		0.0483	
Silver		20	0.0359		17.3	86.5	0.0206		17.0	85.0
Sodium	100000	100000	99400	99.4	99300	99.3	104000	104.0	104000	104.0
Strontium			0.981		0.983		0.980		0.968	
Thallium			0.0114		0.00831		0.00448		0.00348	
Tin			0.124		0.113		0.0939		0.0901	
Titanium	2000	2000	1990	99.5	1980	99.0	1970	98.5	1960	98.0
Vanadium			0.0115		0.00722		0.00862		0.0121	
Zinc		20	-0.562		17.7	88.5	-0.571		17.6	88.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) Possible trace level contamination.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date:				04/28/18		04/28/18	
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	8.7	22				
Antimony	2.0	.2	.2				
Arsenic	2.0	.2	.21				
Barium	2.0	.2	.2				
Beryllium	2.0	.2	.2				
Cadmium	2.0	.2	.2				
Calcium	200	14	36				
Chromium	2.0	.2	.2				
Cobalt	2.0	.2	.2				
Copper	2.0	.2	.2				
Iron	200	16	23				
Lead	2.0	.2	.2	-0.10	<2.0		
Magnesium	200	10	19				
Manganese	2.0	.2	.2				
Molybdenum	2.0	.2	.39				
Nickel	2.0	.2	.2				
Potassium	200	13	75				
Selenium	2.0	.22	.22				
Silver	2.0	.2	.2				
Sodium	200	9.6	24				
Strontium	2.0	.2	.2				
Thallium	2.0	.2	.2				
Tin	2.0	.2	.2				
Titanium	2.0	.61	.88				
Vanadium	2.0	.2	.24				
Zinc	4.0	.58	1.7				

Associated samples MP33665: FA53518-13, FA53518-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date:		04/28/18				04/28/18		
Metal	FA53456-6 Original DUP	RPD	QC Limits	FA53456-6 Original MS	Spikelot MPICPMS1 % Rec		QC Limits	
Aluminum	anr							
Antimony	anr							
Arsenic	anr							
Barium	anr							
Beryllium	anr							
Cadmium	anr							
Calcium	anr							
Chromium	anr							
Cobalt	anr							
Copper	anr							
Iron	anr							
Lead	0.0	0.0 (a)	NC	0-20	0.0	188 (a)	200	94.0	80-120
Magnesium	anr							
Manganese	anr							
Molybdenum								
Nickel	anr							
Potassium	anr							
Selenium	anr							
Silver	anr							
Sodium	anr							
Strontium								
Thallium	anr							
Tin								
Titanium								
Vanadium	anr							
Zinc	anr							

Associated samples MP33665: FA53518-13, FA53518-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 04/28/18

Metal	FA53456-6 Original	MSD	Spikelot MPICPMS1	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	0.0	189 (a)	200	94.5	0.5	20
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP33665: FA53518-13, FA53518-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 04/28/18

Metal	BSP Result	Spikelot MPICPMS1	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	215	200	107.5	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP33665: FA53518-13, FA53518-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53518
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33665
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 04/28/18

Metal	FA53456-6 Original	SDL 20:100	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	0.00	0.00	NC	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP33665: FA53518-13, FA53518-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: AGICPMS1 **Effective Date:** 05/21/16

Analyte	IDL ug/l
Aluminum	4.35
Antimony	.1
Arsenic	.1
Arsenic	.1
Barium	.1
Beryllium	.1
Boron	.5
Cadmium	.1
Cadmium	.1
Calcium	7.2
Calcium	7.2
Chromium	.1
Chromium	.1
Cobalt	.1
Cobalt	.1
Copper	.1
Copper	.1
Iron	7.9
Iron	7.9
Lead	.1
Magnesium	5.2
Manganese	.1
Manganese	.1
Molybdenum	.1
Nickel	.1
Nickel	.1
Potassium	6.57
Selenium	.11
Selenium	.11
Silver	.1
Sodium	4.8
Strontium	.1
Thallium	.1
Tin	.1
Tin	.1
Titanium	.303
Vanadium	.1
Vanadium	.1
Zinc	.29
Zinc	.29

The above applies to the following instrument runs:
MA14858

Instrument Linear Ranges

Job Number: FA53518
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: AGICPMS1 **Effective Date:** 05/21/16

Analyte	Linear Range ug/l
Aluminum	100000
Antimony	1000
Arsenic	1000
Arsenic	1000
Barium	1000
Beryllium	1000
Cadmium	1000
Cadmium	1000
Calcium	100000
Calcium	100000
Chromium	1000
Chromium	1000
Cobalt	1000
Cobalt	1000
Copper	1000
Copper	1000
Iron	100000
Iron	100000
Lead	1000
Magnesium	100000
Manganese	1000
Manganese	1000
Molybdenum	1000
Nickel	1000
Nickel	1000
Potassium	100000
Selenium	1000
Selenium	1000
Silver	100
Sodium	100000
Strontium	1000
Thallium	1000
Tin	1000
Tin	1000
Titanium	1000
Vanadium	1000
Vanadium	1000
Zinc	1000
Zinc	1000

The above applies to the following instrument runs:
MA14858

Metals Analysis

Raw Data

Quantitation Report

File Name	001CALB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:29
Sample Name	Blank
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	-908.49	771.35	2.218E-03	Pulse	0.50	3
As			1	-0.002	ug/l	-68.35	23.33	6.708E-05	Pulse	1.00	3
Mo			1	0.000	ug/l	-571.19	23.33	4.392E-05	Pulse	0.50	3
Pb			1	0.089	ug/l	18.41	21,627.02	2.059E-03	Pulse	1.00	3
Be			1	-0.001	ug/l	-172.09	0.17	3.903E-07	Pulse	2.00	3
Ag			1	0.001	ug/l	13.78	191.33	3.600E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	374.14	35.33	9.805E-06	Pulse	0.50	3
Tl			1	0.001	ug/l	13.36	261.33	2.488E-05	Pulse	0.50	3
Sn			1	0.021	ug/l	29.14	970.03	2.690E-04	Pulse	0.30	3
Sr			1	0.008	ug/l	175.90	1,380.06	3.828E-04	Pulse	0.50	3
[Pb]			1	0.089	ug/l	20.38	10,255.11	9.760E-04	Pulse	0.50	3
Ca			1	0.622	ug/l	68.02	148.67	3.504E-04	Pulse	0.50	3
Ti			1	-0.002	ug/l	-311.45	2.00	4.728E-06	Pulse	0.50	3
Na			1	0.458	ug/l	22.19	24,203.89	5.701E-02	Pulse	1.00	3
Mg			1	0.020	ug/l	107.40	178.33	4.201E-04	Pulse	1.00	3
K			1	-0.046	ug/l	-464.91	14,105.37	3.323E-02	Pulse	1.00	3
V			1	0.005	ug/l	59.67	659.35	1.553E-03	Pulse	0.50	3
Mn			1	0.001	ug/l	420.56	126.67	3.642E-04	Pulse	0.50	3
Fe			1	0.271	ug/l	140.02	10,484.57	3.018E-02	Pulse	0.50	3
Co			1	0.001	ug/l	42.30	324.67	9.335E-04	Pulse	0.50	3
Ni			1	0.017	ug/l	19.08	429.34	1.234E-03	Pulse	0.50	3
Cu			1	0.979	ug/l	20.73	110,442.75	3.176E-01	Pulse	0.50	3
Zn			1	1.620	ug/l	20.61	14,856.76	2.796E-02	Pulse	1.00	3
Cd			1	-0.001	ug/l	-99.69	4.00	7.557E-06	Pulse	0.50	3
Al			1	0.284	ug/l	41.06	454.68	1.071E-03	Pulse	1.00	3
Se			1	-0.008	ug/l	-43.31	23.22	6.440E-06	Pulse	3.00	3
Sb			1	0.016	ug/l	26.12	1,075.70	2.024E-03	Pulse	1.00	3
Se			1	-0.019	ug/l	-94.44	35.55	1.133E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,508,839.33	0.93	100.0	Analog	0.50	3
1	Sc		424,539.18	0.73	100.0	Pulse	0.30	3
1	Ge		347,809.38	0.29	100.0	Pulse	0.30	3
1	In		3,605,687.78	0.52	100.0	Pulse	0.30	3
1	Tb		14,535,780.00	0.68	100.0	Analog	0.50	3
1	Lu		8,664,215.00	0.70	100.0	Analog	0.50	3
1	Ge		531,511.78	0.81	100.0	Pulse	0.30	3
1	Te		31,381.52	0.46	100.0	Pulse	0.50	3
1	Li		2,254.59	4.80	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:33
Sample Name	Blank
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.001	ug/l	190.86	789.35	2.281E-03	Pulse	0.50	3
As			1	0.000	ug/l	-204.93	27.00	7.802E-05	Pulse	1.00	3
Mo			1	0.000	ug/l	-151.67	19.33	3.655E-05	Pulse	0.50	3
Pb			1	0.002	ug/l	166.16	13,653.79	1.294E-03	Pulse	1.00	3
Be			1	0.001	ug/l	304.94	0.50	1.164E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	-138.32	124.67	2.360E-04	Pulse	0.50	3
Ba			1	-0.002	ug/l	-80.98	20.00	5.533E-06	Pulse	0.50	3
Tl			1	0.000	ug/l	94.29	98.67	9.351E-06	Pulse	0.50	3
Sn			1	-0.002	ug/l	-405.94	660.02	1.829E-04	Pulse	0.30	3
Sr			1	-0.005	ug/l	-133.98	1,216.71	3.372E-04	Pulse	0.50	3
[Pb]			1	0.001	ug/l	540.03	6,469.91	6.133E-04	Pulse	0.50	3
Ca			1	-0.360	ug/l	-123.24	100.67	2.361E-04	Pulse	0.50	3
Ti			1	0.000	ug/l	-45744.15	2.67	6.229E-06	Pulse	0.50	3
Na			1	0.293	ug/l	33.19	23,912.55	5.601E-02	Pulse	1.00	3
Mg			1	0.011	ug/l	151.63	170.00	3.981E-04	Pulse	1.00	3
K			1	0.239	ug/l	171.20	14,441.27	3.383E-02	Pulse	1.00	3
V			1	0.002	ug/l	23.13	618.01	1.448E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	-1595.24	117.33	3.390E-04	Pulse	0.50	3
Fe			1	0.006	ug/l	212.73	5,602.17	1.619E-02	Pulse	0.50	3
Co			1	0.000	ug/l	63.70	315.33	9.110E-04	Pulse	0.50	3
Ni			1	0.001	ug/l	636.34	241.33	6.971E-04	Pulse	0.50	3
Cu			1	0.082	ug/l	21.33	81,466.71	2.354E-01	Pulse	0.50	3
Zn			1	0.285	ug/l	30.94	9,626.08	1.823E-02	Pulse	1.00	3
Cd			1	-0.001	ug/l	-189.59	5.33	1.006E-05	Pulse	0.50	3
Al			1	-0.001	ug/l	-5354.55	367.33	8.603E-04	Pulse	1.00	3
Se			1	0.026	ug/l	139.81	28.89	8.001E-06	Pulse	3.00	3
Sb			1	0.010	ug/l	6.50	982.36	1.861E-03	Pulse	1.00	3
Se			1	-0.037	ug/l	-162.06	33.89	1.082E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,549,910.67	0.15	100.0	Analog	0.50	3
1	Sc		426,912.46	0.90	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		346,118.75	0.43	100.0	Pulse	0.30	3
1	In		3,608,037.08	0.53	100.0	Pulse	0.30	3
1	Tb		14,587,467.33	0.28	100.0	Analog	0.50	3
1	Lu		8,574,224.33	0.55	100.0	Analog	0.50	3
1	Ge		527,903.12	0.81	100.0	Pulse	0.30	3
1	Te		31,357.50	1.31	100.0	Pulse	0.50	3
1	Li		2,124.57	1.37	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:37
Sample Name	CALSTD-1
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	---	775.35	2.230E-03	Pulse	0.50	3
As			1	0.000	ug/l	---	28.00	8.054E-05	Pulse	1.00	3
Mo			1	0.000	ug/l	---	25.33	4.769E-05	Pulse	0.50	3
Pb			1	0.000	ug/l	---	13,418.27	1.279E-03	Pulse	1.00	3
Be			1	0.000	ug/l	---	0.33	7.832E-07	Pulse	2.00	3
Ag			1	0.000	ug/l	---	142.00	2.671E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	---	32.67	9.111E-06	Pulse	0.50	3
Tl			1	0.000	ug/l	---	82.00	7.802E-06	Pulse	0.50	3
Sn			1	0.000	ug/l	---	678.91	1.889E-04	Pulse	0.30	3
Sr			1	0.000	ug/l	---	1,276.05	3.551E-04	Pulse	0.50	3
[Pb]			1	0.000	ug/l	---	6,411.89	6.112E-04	Pulse	0.50	3
Ca			1	0.000	ug/l	---	118.67	2.780E-04	Pulse	0.50	3
Ti			1	0.000	ug/l	---	2.67	6.253E-06	Pulse	0.50	3
Na			1	0.000	ug/l	---	23,159.00	5.424E-02	Pulse	1.00	3
Mg			1	0.000	ug/l	---	157.67	3.694E-04	Pulse	1.00	3
K			1	0.000	ug/l	---	14,227.12	3.333E-02	Pulse	1.00	3
V			1	0.000	ug/l	---	579.34	1.356E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	---	118.67	3.416E-04	Pulse	0.50	3
Fe			1	0.000	ug/l	---	5,524.80	1.590E-02	Pulse	0.50	3
Co			1	0.000	ug/l	---	298.00	8.573E-04	Pulse	0.50	3
Ni			1	0.000	ug/l	---	234.00	6.731E-04	Pulse	0.50	3
Cu			1	0.000	ug/l	---	79,200.10	2.279E-01	Pulse	0.50	3
Zn			1	0.000	ug/l	---	8,589.58	1.616E-02	Pulse	1.00	3
Cd			1	0.000	ug/l	---	9.33	1.758E-05	Pulse	0.50	3
Al			1	0.000	ug/l	---	367.67	8.613E-04	Pulse	1.00	3
Se			1	0.000	ug/l	---	24.44	6.806E-06	Pulse	3.00	3
Sb			1	0.000	ug/l	---	832.02	1.565E-03	Pulse	1.00	3
Se			1	0.000	ug/l	---	37.11	1.190E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,491,739.67	0.85	100.0	Analog	0.50	3
1	Sc		426,910.51	0.61	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		347,584.07	0.53	100.0	Pulse	0.30	3
1	In		3,594,424.99	0.85	100.0	Pulse	0.30	3
1	Tb		14,536,210.33	0.39	100.0	Analog	0.50	3
1	Lu		8,639,808.33	0.87	100.0	Analog	0.50	3
1	Ge		531,604.19	0.27	100.0	Pulse	0.30	3
1	Te		31,191.22	0.13	100.0	Pulse	0.50	3
1	Li		2,295.70	3.50	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:41
Sample Name	CALSTD-2
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.101	ug/l	2.06	3,096.92	8.992E-03	Pulse	0.50	3
As			1	0.106	ug/l	1.58	280.00	8.129E-04	Pulse	1.00	3
Mo			1	0.101	ug/l	7.63	1,672.08	3.152E-03	Pulse	0.50	3
Pb			1	0.033	ug/l	5.16	16,504.63	1.564E-03	Pulse	1.00	3
Be			1	0.079	ug/l	36.00	9.67	2.250E-05	Pulse	2.00	3
Ag			1	0.104	ug/l	4.47	6,342.44	1.196E-02	Pulse	0.50	3
Ba			1	0.110	ug/l	2.15	677.35	1.886E-04	Pulse	0.50	3
Tl			1	0.100	ug/l	1.77	13,900.35	1.317E-03	Pulse	0.50	3
Sn			1	0.126	ug/l	5.00	2,426.84	6.758E-04	Pulse	0.30	3
Sr			1	0.104	ug/l	9.02	2,493.51	6.943E-04	Pulse	0.50	3
[Pb]			1	0.029	ug/l	11.11	7,683.09	7.280E-04	Pulse	0.50	3
Ca			1	12.311	ug/l	10.68	734.68	1.712E-03	Pulse	0.50	3
Ti			1	0.124	ug/l	38.28	54.67	1.272E-04	Pulse	0.50	3
Na			1	9.325	ug/l	2.94	47,475.21	1.106E-01	Pulse	1.00	3
Mg			1	10.514	ug/l	0.33	11,847.50	2.760E-02	Pulse	1.00	3
K			1	10.665	ug/l	4.57	24,004.21	5.592E-02	Pulse	1.00	3
V			1	0.101	ug/l	3.54	2,304.15	5.368E-03	Pulse	0.50	3
Mn			1	0.119	ug/l	4.23	1,320.05	3.833E-03	Pulse	0.50	3
Fe			1	10.308	ug/l	1.59	192,340.09	5.585E-01	Pulse	0.50	3
Co			1	0.100	ug/l	2.78	4,549.22	1.321E-02	Pulse	0.50	3
Ni			1	0.115	ug/l	2.54	1,562.74	4.538E-03	Pulse	0.50	3
Cu			1	-1.519	ug/l	-0.77	30,541.45	8.868E-02	Pulse	0.50	3
Zn			1	-1.190	ug/l	-2.16	3,970.75	7.488E-03	Pulse	1.00	3
Cd			1	0.102	ug/l	3.95	763.35	1.439E-03	Pulse	0.50	3
Al			1	13.734	ug/l	2.93	4,729.90	1.102E-02	Pulse	1.00	3
Se			1	0.106	ug/l	37.24	41.67	1.161E-05	Pulse	3.00	3
Sb			1	0.093	ug/l	2.38	2,259.48	4.260E-03	Pulse	1.00	3
Se			1	-0.047	ug/l	-120.04	33.22	1.054E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,554,187.33	0.30	100.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		429,245.82	0.44	100.5	Pulse	0.30	3
1	Ge		344,425.45	1.00	99.1	Pulse	0.30	3
1	In		3,590,829.30	1.02	99.9	Pulse	0.30	3
1	Tb		14,730,359.00	0.61	101.3	Analog	0.50	3
1	Lu		8,702,400.33	0.28	100.7	Analog	0.50	3
1	Ge		530,336.86	0.88	99.8	Pulse	0.30	3
1	Te		31,530.46	0.92	101.1	Pulse	0.50	3
1	Li		2,244.59	3.67	97.8	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:45
Sample Name	CALSTD-3
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.999	ug/l	0.61	23,936.69	6.903E-02	Pulse	0.50	3
As			1	0.962	ug/l	3.93	2,330.81	6.722E-03	Pulse	1.00	3
Mo			1	0.981	ug/l	0.26	16,014.86	3.026E-02	Pulse	0.50	3
Pb			1	0.904	ug/l	0.43	96,169.13	9.167E-03	Pulse	1.00	3
Be			1	1.053	ug/l	4.88	123.17	2.897E-04	Pulse	2.00	3
Ag			1	1.032	ug/l	1.25	61,557.53	1.163E-01	Pulse	0.50	3
Ba			1	0.999	ug/l	2.20	5,883.64	1.640E-03	Pulse	0.50	3
Tl			1	0.986	ug/l	0.98	135,119.97	1.288E-02	Pulse	0.50	3
Sn			1	1.088	ug/l	1.92	15,789.06	4.400E-03	Pulse	0.30	3
Sr			1	0.997	ug/l	0.18	12,959.13	3.611E-03	Pulse	0.50	3
[Pb]			1	0.920	ug/l	1.25	45,850.50	4.371E-03	Pulse	0.50	3
Ca			1	106.877	ug/l	0.62	5,410.77	1.272E-02	Pulse	0.50	3
Ti			1	1.036	ug/l	8.81	432.01	1.015E-03	Pulse	0.50	3
Na			1	101.604	ug/l	0.21	284,187.08	6.683E-01	Pulse	1.00	3
Mg			1	102.763	ug/l	0.78	113,331.95	2.665E-01	Pulse	1.00	3
K			1	99.691	ug/l	1.14	103,988.87	2.446E-01	Pulse	1.00	3
V			1	0.989	ug/l	1.90	17,231.64	4.052E-02	Pulse	0.50	3
Mn			1	1.041	ug/l	1.44	10,750.34	3.100E-02	Pulse	0.50	3
Fe			1	101.452	ug/l	0.49	1,857,166.84	5.356E+00	Pulse	0.50	3
Co			1	1.007	ug/l	1.08	43,419.11	1.252E-01	Pulse	0.50	3
Ni			1	1.043	ug/l	2.23	12,388.00	3.573E-02	Pulse	0.50	3
Cu			1	-0.618	ug/l	-2.44	59,368.19	1.712E-01	Pulse	0.50	3
Zn			1	0.080	ug/l	19.89	8,860.04	1.674E-02	Pulse	1.00	3
Cd			1	1.044	ug/l	1.74	7,726.30	1.460E-02	Pulse	0.50	3
Al			1	103.406	ug/l	2.19	32,887.97	7.735E-02	Pulse	1.00	3
Se			1	1.058	ug/l	2.68	196.11	5.465E-05	Pulse	3.00	3
Sb			1	0.980	ug/l	0.96	15,810.13	2.988E-02	Pulse	1.00	3
Se			1	0.861	ug/l	12.77	112.67	3.694E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,490,705.33	0.46	100.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		425,232.61	0.93	99.6	Pulse	0.30	3
1	Ge		346,738.20	0.69	99.8	Pulse	0.30	3
1	In		3,588,319.58	0.51	99.8	Pulse	0.30	3
1	Tb		14,613,295.67	1.05	100.5	Analog	0.50	3
1	Lu		8,647,989.67	1.40	100.1	Analog	0.50	3
1	Ge		529,159.16	0.31	99.5	Pulse	0.30	3
1	Te		30,512.77	1.47	97.8	Pulse	0.50	3
1	Li		2,169.02	6.33	94.5	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:48
Sample Name	CALSTD-4
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	10.396	ug/l	1.06	236,593.71	6.976E-01	Pulse	0.50	3
As			1	10.409	ug/l	1.03	24,407.54	7.197E-02	Pulse	1.00	3
Mo			1	10.255	ug/l	0.56	163,987.18	3.158E-01	Pulse	0.50	3
Pb			1	9.999	ug/l	1.83	922,855.62	8.856E-02	Pulse	1.00	3
Be			1	10.641	ug/l	3.70	1,213.54	2.921E-03	Pulse	2.00	3
Ag			1	10.791	ug/l	0.31	630,344.50	1.214E+00	Pulse	0.50	3
Ba			1	10.236	ug/l	2.28	58,813.08	1.672E-02	Pulse	0.50	3
Tl			1	10.048	ug/l	1.73	1,367,500.58	1.312E-01	Pulse	0.50	3
Sn			1	10.305	ug/l	1.27	141,004.73	4.008E-02	Pulse	0.30	3
Sr			1	9.929	ug/l	0.48	115,363.53	3.279E-02	Pulse	0.50	3
[Pb]			1	10.084	ug/l	1.07	435,979.06	4.183E-02	Pulse	0.50	3
Ca			1	1041.361	ug/l	0.46	50,507.42	1.215E-01	Pulse	0.50	3
Ti			1	10.075	ug/l	0.10	4,080.44	9.819E-03	Pulse	0.50	3
Na			1	1029.347	ug/l	0.74	2,607,620.17	6.275E+00	Pulse	1.00	3
Mg			1	1061.494	ug/l	1.43	1,142,498.42	2.750E+00	Pulse	1.00	3
K			1	1034.324	ug/l	1.05	924,507.81	2.225E+00	Pulse	1.00	3
V			1	10.332	ug/l	1.62	170,509.33	4.104E-01	Pulse	0.50	3
Mn			1	10.497	ug/l	0.73	104,935.70	3.094E-01	Pulse	0.50	3
Fe			1	1035.952	ug/l	0.61	18,498,267.33	5.455E+01	Analog	0.50	3
Co			1	10.483	ug/l	0.75	439,432.17	1.296E+00	Pulse	0.50	3
Ni			1	10.748	ug/l	0.38	122,787.50	3.621E-01	Pulse	0.50	3
Cu			1	9.285	ug/l	0.82	365,863.80	1.079E+00	Pulse	0.50	3
Zn			1	10.082	ug/l	1.04	46,514.85	8.958E-02	Pulse	1.00	3
Cd			1	10.698	ug/l	1.19	77,605.11	1.495E-01	Pulse	0.50	3
Al			1	1058.063	ug/l	1.01	325,567.30	7.835E-01	Pulse	1.00	3
Se			1	10.613	ug/l	1.60	1,712.19	4.866E-04	Pulse	3.00	3
Sb			1	10.364	ug/l	0.43	156,354.41	3.011E-01	Pulse	1.00	3
Se			1	9.410	ug/l	4.16	876.91	2.857E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,423,294.67	2.32	99.3	Analog	0.50	3
1	Sc		415,568.34	1.82	97.3	Pulse	0.30	3
1	Ge		339,128.38	0.63	97.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,518,706.87	1.80	97.9	Pulse	0.30	3
1	Tb		14,437,250.33	1.70	99.3	Analog	0.50	3
1	Lu		8,557,350.00	1.67	99.0	Analog	0.50	3
1	Ge		519,262.43	1.18	97.7	Pulse	0.30	3
1	Te		30,693.06	0.59	98.4	Pulse	0.50	3
1	Li		2,217.92	8.53	96.6	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:52
Sample Name	CALSTD-5
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.310	ug/l	0.40	1,094,682.79	3.301E+00	Pulse	0.50	3
As			1	49.810	ug/l	0.35	114,126.12	3.441E-01	Pulse	1.00	3
Mo			1	48.561	ug/l	0.11	766,595.58	1.495E+00	Pulse	0.50	3
Pb			1	48.473	ug/l	0.93	4,286,601.50	4.244E-01	Pulse	1.00	3
Be			1	50.726	ug/l	1.34	5,696.96	1.392E-02	Pulse	2.00	3
Ag			1	50.453	ug/l	0.19	2,909,227.58	5.675E+00	Pulse	0.50	3
Ba			1	49.132	ug/l	1.21	276,246.95	8.021E-02	Pulse	0.50	3
Tl			1	48.683	ug/l	0.81	6,421,379.17	6.358E-01	Mix	0.50	3
Sn			1	49.521	ug/l	1.32	660,840.49	1.919E-01	Pulse	0.30	3
Sr			1	48.644	ug/l	0.79	548,431.54	1.592E-01	Pulse	0.50	3
[Pb]			1	48.998	ug/l	1.39	2,029,094.62	2.009E-01	Pulse	0.50	3
Ca			1	4955.198	ug/l	0.60	236,215.57	5.773E-01	Pulse	0.50	3
Ti			1	49.604	ug/l	0.56	19,771.29	4.832E-02	Pulse	0.50	3
Na			1	4948.226	ug/l	0.60	12,258,670.67	2.996E+01	Analog	1.00	3
Mg			1	5012.422	ug/l	0.96	5,312,034.50	1.298E+01	Analog	1.00	3
K			1	4922.603	ug/l	0.61	4,281,517.67	1.046E+01	Pulse	1.00	3
V			1	49.739	ug/l	0.60	806,181.92	1.970E+00	Pulse	0.50	3
Mn			1	49.581	ug/l	0.35	484,344.02	1.460E+00	Pulse	0.50	3
Fe			1	4916.687	ug/l	1.02	85,840,698.67	2.588E+02	Analog	0.50	3
Co			1	49.266	ug/l	0.64	2,018,638.42	6.086E+00	Pulse	0.50	3
Ni			1	50.928	ug/l	0.12	568,154.75	1.713E+00	Pulse	0.50	3
Cu			1	49.706	ug/l	0.72	1,586,466.21	4.783E+00	Pulse	0.50	3
Zn			1	50.834	ug/l	0.57	198,080.24	3.864E-01	Pulse	1.00	3
Cd			1	50.802	ug/l	0.63	363,815.85	7.096E-01	Pulse	0.50	3
Al			1	4949.464	ug/l	0.70	1,498,352.16	3.662E+00	Pulse	1.00	3
Se			1	50.243	ug/l	0.24	7,846.94	2.278E-03	Pulse	3.00	3
Sb			1	49.681	ug/l	0.34	736,980.60	1.438E+00	Pulse	1.00	3
Se			1	46.553	ug/l	0.59	3,962.52	1.366E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,100,632.67	0.69	96.3	Analog	0.50	3
1	Sc		409,178.53	0.82	95.8	Pulse	0.30	3
1	Ge		331,669.09	0.53	95.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,444,110.90	0.78	95.8	Pulse	0.30	3
1	Tb		14,320,283.67	1.03	98.5	Analog	0.50	3
1	Lu		8,461,713.33	0.45	97.9	Analog	0.50	3
1	Ge		512,671.12	0.10	96.4	Pulse	0.30	3
1	Te		28,998.29	0.48	93.0	Pulse	0.50	3
1	Li		2,071.23	3.24	90.2	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 8:56
Sample Name	CALSTD-6
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.502	ug/l	0.91	2,199,879.42	6.591E+00	Pulse	0.50	3
As			1	99.861	ug/l	0.57	230,236.28	6.898E-01	Pulse	1.00	3
Mo			1	98.963	ug/l	0.84	1,558,576.13	3.047E+00	Pulse	0.50	3
Pb			1	98.529	ug/l	1.51	8,460,048.33	8.614E-01	Analog	1.00	3
Be			1	101.834	ug/l	2.47	11,454.89	2.795E-02	Pulse	2.00	3
Ag			1	99.694	ug/l	0.94	5,734,861.83	1.121E+01	Pulse	0.50	3
Ba			1	99.613	ug/l	1.30	554,815.23	1.626E-01	Pulse	0.50	3
Tl			1	99.465	ug/l	1.31	12,758,050.67	1.299E+00	Analog	0.50	3
Sn			1	100.603	ug/l	2.32	1,329,100.92	3.896E-01	Pulse	0.30	3
Sr			1	99.490	ug/l	1.24	1,109,874.54	3.253E-01	Pulse	0.50	3
[Pb]			1	98.757	ug/l	0.83	3,971,070.83	4.043E-01	Pulse	0.50	3
Ca			1	10021.215	ug/l	1.56	478,428.16	1.167E+00	Pulse	0.50	3
Ti			1	98.502	ug/l	2.58	39,322.03	9.595E-02	Pulse	0.50	3
Na			1	9971.596	ug/l	1.73	24,723,437.33	6.032E+01	Analog	1.00	3
Mg			1	10031.737	ug/l	1.63	10,649,891.00	2.598E+01	Analog	1.00	3
K			1	9955.574	ug/l	1.74	8,659,840.33	2.113E+01	Analog	1.00	3
V			1	99.547	ug/l	2.45	1,615,580.71	3.942E+00	Pulse	0.50	3
Mn			1	98.626	ug/l	0.37	969,489.81	2.905E+00	Pulse	0.50	3
Fe			1	9802.418	ug/l	0.89	172,228,522.67	5.160E+02	Analog	0.50	3
Co			1	97.788	ug/l	1.10	4,031,970.92	1.208E+01	Pulse	0.50	3
Ni			1	99.512	ug/l	1.08	1,116,998.54	3.347E+00	Pulse	0.50	3
Cu			1	99.391	ug/l	0.79	3,116,471.75	9.337E+00	Pulse	0.50	3
Zn			1	100.350	ug/l	0.78	382,058.88	7.470E-01	Pulse	1.00	3
Cd			1	100.206	ug/l	0.96	715,917.77	1.400E+00	Pulse	0.50	3
Al			1	9976.799	ug/l	1.34	3,025,273.25	7.381E+00	Pulse	1.00	3
Se			1	100.650	ug/l	2.27	15,546.53	4.557E-03	Pulse	3.00	3
Sb			1	99.573	ug/l	0.63	1,472,836.25	2.880E+00	Pulse	1.00	3
Se			1	97.010	ug/l	1.99	7,873.96	2.835E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,822,467.67	0.81	93.6	Analog	0.50	3
1	Sc		409,952.15	1.76	96.0	Pulse	0.30	3
1	Ge		333,786.69	0.65	96.0	Pulse	0.30	3
1	In		3,412,184.03	1.82	94.9	Pulse	0.30	3
1	Tb		14,359,915.67	1.25	98.8	Analog	0.50	3
1	Lu		8,456,681.33	1.52	97.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		511,490.55	0.87	96.2	Pulse	0.30	3
1	Te		27,784.43	2.49	89.1	Pulse	0.50	3
1	Li		1,890.10	12.27	82.3	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:00
Sample Name	CALSTD-7
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	200.902	ug/l	1.66	4,387,840.67	1.344E+01	Pulse	0.50	3
As			1	200.097	ug/l	0.92	451,220.73	1.382E+00	Pulse	1.00	3
Mo			1	200.866	ug/l	0.98	3,093,292.58	6.185E+00	Pulse	0.50	3
Pb			1	201.118	ug/l	1.24	16,612,445.33	1.757E+00	Analog	1.00	3
Be			1	198.869	ug/l	1.60	22,401.64	5.458E-02	Pulse	2.00	3
Ag			1	155.843	ug/l	0.38	8,766,098.33	1.753E+01	Analog	0.50	3
Ba			1	200.399	ug/l	0.23	1,095,745.50	3.271E-01	Pulse	0.50	3
Tl			1	200.595	ug/l	0.94	24,770,891.33	2.620E+00	Analog	0.50	3
Sn			1	199.803	ug/l	0.80	2,591,190.45	7.736E-01	Pulse	0.30	3
Sr			1	200.598	ug/l	0.55	2,195,754.67	6.556E-01	Pulse	0.50	3
[Pb]			1	200.868	ug/l	2.09	7,769,036.33	8.217E-01	Analog	0.50	3
Ca			1	19998.489	ug/l	1.00	955,934.83	2.329E+00	Pulse	0.50	3
Ti			1	200.844	ug/l	2.01	80,283.47	1.956E-01	Pulse	0.50	3
Na			1	20025.671	ug/l	1.43	49,695,028.00	1.211E+02	Analog	1.00	3
Mg			1	19977.937	ug/l	1.49	21,236,509.33	5.174E+01	Analog	1.00	3
K			1	20039.847	ug/l	1.89	17,440,119.33	4.250E+01	Analog	1.00	3
V			1	200.275	ug/l	1.58	3,254,296.42	7.929E+00	Pulse	0.50	3
Mn			1	200.767	ug/l	1.09	1,930,237.08	5.912E+00	Pulse	0.50	3
Fe			1	20117.814	ug/l	1.24	345,736,832.00	1.059E+03	Analog	0.50	3
Co			1	201.265	ug/l	0.76	8,116,962.00	2.486E+01	Analog	0.50	3
Ni			1	199.974	ug/l	0.20	2,195,453.75	6.724E+00	Pulse	0.50	3
Cu			1	200.422	ug/l	0.55	6,071,413.83	1.860E+01	Analog	0.50	3
Zn			1	199.618	ug/l	0.68	735,159.10	1.470E+00	Pulse	1.00	3
Cd			1	199.662	ug/l	0.64	1,394,868.16	2.789E+00	Pulse	0.50	3
Al			1	20021.313	ug/l	1.51	6,078,463.83	1.481E+01	Analog	1.00	3
Se			1	199.583	ug/l	0.54	30,245.84	9.030E-03	Pulse	3.00	3
Sb			1	200.275	ug/l	0.12	2,895,903.83	5.790E+00	Pulse	1.00	3
Se			1	202.387	ug/l	3.89	15,298.13	5.901E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,456,969.33	1.73	90.1	Analog	0.50	3
1	Sc		410,471.96	1.48	96.1	Pulse	0.30	3
1	Ge		326,491.91	0.65	93.9	Pulse	0.30	3
1	In		3,349,458.97	0.41	93.2	Pulse	0.30	3
1	Tb		14,123,174.67	0.58	97.2	Analog	0.50	3
1	Lu		8,418,570.50	1.11	97.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		500,135.85	0.26	94.1	Pulse	0.30	3
1	Te		25,945.10	3.12	83.2	Pulse	0.50	3
1	Li		1,990.11	5.45	86.7	Pulse	0.30	3

Quantitation Report

File Name	010HSAG.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:04
Sample Name	HSTD (Ag)
Sample Type	HSTD _Ag
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.705	ug/l	0.87	2,204,817.08	6.605E+00	Pulse	0.50	3
As			1	99.746	ug/l	0.83	230,009.66	6.890E-01	Pulse	1.00	3
Mo			1	99.417	ug/l	0.70	1,562,315.29	3.061E+00	Pulse	0.50	3
Pb			1	98.080	ug/l	0.33	8,510,674.67	8.574E-01	Analog	1.00	3
Be			1	99.043	ug/l	2.29	11,321.31	2.718E-02	Pulse	2.00	3
Ag			1	99.475	ug/l	1.89	5,709,542.00	1.119E+01	Pulse	0.50	3
Ba			1	98.562	ug/l	0.34	551,199.44	1.609E-01	Pulse	0.50	3
Tl			1	98.400	ug/l	0.98	12,754,682.67	1.285E+00	Analog	0.50	3
Sn			1	99.860	ug/l	1.13	1,324,835.43	3.867E-01	Pulse	0.30	3
Sr			1	98.977	ug/l	0.07	1,108,698.71	3.236E-01	Pulse	0.50	3
[Pb]			1	97.933	ug/l	1.18	3,979,571.83	4.009E-01	Pulse	0.50	3
Ca			1	9948.056	ug/l	0.89	482,600.65	1.159E+00	Pulse	0.50	3
Ti			1	98.905	ug/l	1.22	40,123.62	9.634E-02	Pulse	0.50	3
Na			1	9863.081	ug/l	0.74	24,849,995.33	5.966E+01	Analog	1.00	3
Mg			1	9911.763	ug/l	0.47	10,692,642.33	2.567E+01	Analog	1.00	3
K			1	9850.565	ug/l	0.49	8,707,284.67	2.091E+01	Analog	1.00	3
V			1	98.786	ug/l	0.90	1,629,310.21	3.912E+00	Pulse	0.50	3
Mn			1	98.576	ug/l	1.41	969,112.33	2.903E+00	Pulse	0.50	3
Fe			1	9923.883	ug/l	1.62	174,388,138.67	5.224E+02	Analog	0.50	3
Co			1	98.000	ug/l	1.11	4,041,389.25	1.211E+01	Pulse	0.50	3
Ni			1	100.530	ug/l	1.48	1,128,586.25	3.381E+00	Pulse	0.50	3
Cu			1	100.132	ug/l	0.95	3,139,640.58	9.405E+00	Pulse	0.50	3
Zn			1	101.256	ug/l	0.51	384,596.36	7.536E-01	Pulse	1.00	3
Cd			1	100.454	ug/l	0.46	716,142.58	1.403E+00	Pulse	0.50	3
Al			1	9773.317	ug/l	0.93	3,011,318.50	7.230E+00	Pulse	1.00	3
Se			1	100.737	ug/l	0.23	15,625.26	4.561E-03	Pulse	3.00	3
Sb			1	99.503	ug/l	1.09	1,468,538.92	2.878E+00	Pulse	1.00	3
Se			1	96.727	ug/l	0.17	7,889.30	2.826E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,925,655.00	0.27	94.6	Analog	0.50	3
1	Sc		416,513.06	0.85	97.6	Pulse	0.30	3
1	Ge		333,846.96	0.75	96.0	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,425,680.01	0.47	95.3	Pulse	0.30	3
1	Tb		14,412,880.33	0.62	99.2	Analog	0.50	3
1	Lu		8,561,161.67	0.50	99.1	Analog	0.50	3
1	Ge		510,366.23	0.64	96.0	Pulse	0.30	3
1	Te		27,912.59	0.81	89.5	Pulse	0.50	3
1	Li		1,885.66	2.87	82.1	Pulse	0.30	3

Quantitation Report

File Name	011HSTD.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:07
Sample Name	HSTD
Sample Type	HSTD
Comment	=std 6
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	199.435	ug/l	1.38	4,440,330.33	1.334E+01	Pulse	0.50	3
As			1	198.882	ug/l	1.51	457,156.75	1.374E+00	Pulse	1.00	3
Mo			1	199.813	ug/l	0.63	3,129,368.58	6.153E+00	Pulse	0.50	3
Pb			1	199.722	ug/l	0.79	16,725,787.33	1.745E+00	Analog	1.00	3
Be			1	197.446	ug/l	1.10	22,575.15	5.419E-02	Pulse	2.00	3
Ag			1	152.091	ug/l	1.13	8,700,306.00	1.711E+01	Analog	0.50	3
Ba			1	201.430	ug/l	0.43	1,110,591.58	3.288E-01	Pulse	0.50	3
Tl			1	200.230	ug/l	0.41	25,067,876.00	2.615E+00	Analog	0.50	3
Sn			1	201.974	ug/l	0.99	2,641,238.16	7.820E-01	Pulse	0.30	3
Sr			1	201.916	ug/l	0.84	2,228,647.08	6.599E-01	Pulse	0.50	3
[Pb]			1	198.958	ug/l	1.64	7,802,201.33	8.139E-01	Analog	0.50	3
Ca			1	19993.640	ug/l	0.89	970,029.02	2.329E+00	Pulse	0.50	3
Ti			1	200.187	ug/l	0.68	81,231.37	1.950E-01	Pulse	0.50	3
Na			1	20071.366	ug/l	1.07	50,556,438.67	1.214E+02	Analog	1.00	3
Mg			1	20004.655	ug/l	0.96	21,584,579.33	5.181E+01	Analog	1.00	3
K			1	20167.257	ug/l	1.68	17,814,583.33	4.277E+01	Analog	1.00	3
V			1	199.439	ug/l	0.61	3,289,618.33	7.896E+00	Pulse	0.50	3
Mn			1	200.448	ug/l	1.21	1,964,494.21	5.903E+00	Pulse	0.50	3
Fe			1	19985.332	ug/l	1.95	350,093,354.67	1.052E+03	Analog	0.50	3
Co			1	200.171	ug/l	1.96	8,228,639.00	2.473E+01	Analog	0.50	3
Ni			1	197.213	ug/l	2.15	2,206,834.50	6.632E+00	Pulse	0.50	3
Cu			1	199.642	ug/l	0.93	6,165,314.67	1.852E+01	Analog	0.50	3
Zn			1	199.579	ug/l	0.38	747,501.06	1.470E+00	Pulse	1.00	3
Cd			1	197.691	ug/l	0.79	1,404,561.17	2.761E+00	Pulse	0.50	3
Al			1	19937.415	ug/l	1.75	6,143,636.83	1.475E+01	Analog	1.00	3
Se			1	199.716	ug/l	0.60	30,519.15	9.036E-03	Pulse	3.00	3
Sb			1	199.922	ug/l	0.72	2,939,863.17	5.780E+00	Pulse	1.00	3
Se			1	200.390	ug/l	0.96	15,405.99	5.843E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,586,967.00	0.63	91.4	Analog	0.50	3
1	Sc		416,612.21	1.14	97.6	Pulse	0.30	3
1	Ge		332,838.74	1.31	95.8	Pulse	0.30	3
1	In		3,377,493.69	0.50	94.0	Pulse	0.30	3
1	Tb		14,371,221.33	1.28	98.9	Analog	0.50	3
1	Lu		8,499,100.67	1.33	98.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		508,628.96	0.26	95.7	Pulse	0.30	3
1	Te		26,370.98	2.03	84.5	Pulse	0.50	3
1	Li		1,937.88	5.74	84.4	Pulse	0.30	3

Quantitation Report

File Name	012_ICV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:11
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	102.299	ug/l	0.91	2,289,234.42	6.845E+00	Pulse	0.50	3
As			1	103.669	ug/l	0.82	239,497.53	7.161E-01	Pulse	1.00	3
Mo			1	103.582	ug/l	0.47	1,633,872.96	3.189E+00	Pulse	0.50	3
Pb			1	98.984	ug/l	0.20	8,611,766.00	8.653E-01	Analog	1.00	3
Be			1	99.321	ug/l	1.42	11,384.51	2.726E-02	Pulse	2.00	3
Ag			1	49.957	ug/l	0.63	2,878,423.92	5.619E+00	Pulse	0.50	3
Ba			1	103.021	ug/l	0.35	579,059.85	1.682E-01	Pulse	0.50	3
Tl			1	99.164	ug/l	1.03	12,887,463.67	1.295E+00	Analog	0.50	3
Sn			1	106.984	ug/l	0.81	1,426,539.32	4.143E-01	Pulse	0.30	3
Sr			1	100.603	ug/l	0.98	1,132,586.50	3.290E-01	Pulse	0.50	3
[Pb]			1	97.906	ug/l	1.32	3,988,759.08	4.008E-01	Pulse	0.50	3
Ca			1	10010.688	ug/l	0.57	486,983.88	1.166E+00	Pulse	0.50	3
Ti			1	104.064	ug/l	0.41	42,334.87	1.014E-01	Pulse	0.50	3
Na			1	9854.478	ug/l	0.71	24,896,605.33	5.961E+01	Analog	1.00	3
Mg			1	10329.585	ug/l	1.41	11,173,309.33	2.675E+01	Analog	1.00	3
K			1	9924.724	ug/l	1.62	8,796,101.33	2.106E+01	Analog	1.00	3
V			1	103.882	ug/l	0.52	1,718,049.75	4.114E+00	Pulse	0.50	3
Mn			1	98.607	ug/l	1.59	971,205.58	2.904E+00	Pulse	0.50	3
Fe			1	10098.779	ug/l	0.65	177,794,640.00	5.316E+02	Analog	0.50	3
Co			1	99.839	ug/l	1.07	4,124,801.67	1.233E+01	Pulse	0.50	3
Ni			1	100.550	ug/l	1.47	1,130,889.46	3.381E+00	Pulse	0.50	3
Cu			1	101.904	ug/l	0.99	3,199,718.58	9.567E+00	Pulse	0.50	3
Zn			1	103.234	ug/l	1.13	393,400.78	7.680E-01	Pulse	1.00	3
Cd			1	101.231	ug/l	1.58	724,337.69	1.414E+00	Pulse	0.50	3
Al			1	9882.057	ug/l	1.05	3,053,209.42	7.311E+00	Pulse	1.00	3
Se			1	105.218	ug/l	1.13	16,401.35	4.764E-03	Pulse	3.00	3
Sb			1	102.826	ug/l	0.72	1,523,254.21	2.974E+00	Pulse	1.00	3
Se			1	101.044	ug/l	0.87	8,244.45	2.952E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,952,038.67	0.68	94.9	Analog	0.50	3
1	Sc		417,663.61	1.17	97.8	Pulse	0.30	3
1	Ge		334,461.92	0.80	96.2	Pulse	0.30	3
1	In		3,443,070.42	0.65	95.8	Pulse	0.30	3
1	Tb		14,547,057.33	0.95	100.1	Analog	0.50	3
1	Lu		8,578,600.67	1.23	99.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		512,280.69	0.92	96.4	Pulse	0.30	3
1	Te		27,930.62	1.93	89.5	Pulse	0.50	3
1	Li		2,094.56	6.86	91.2	Pulse	0.30	3

Quantitation Report

File Name	013_ICB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:15
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.003	ug/l	23.26	840.02	2.417E-03	Pulse	0.50	3
As			1	0.008	ug/l	40.80	46.67	1.342E-04	Pulse	1.00	3
Mo			1	0.032	ug/l	15.51	550.01	1.036E-03	Pulse	0.50	3
Pb			1	-0.004	ug/l	-84.50	13,290.83	1.248E-03	Pulse	1.00	3
Be			1	0.000	ug/l	5807.66	0.33	8.072E-07	Pulse	2.00	3
Ag			1	0.007	ug/l	18.93	568.01	1.070E-03	Pulse	0.50	3
Ba			1	0.002	ug/l	69.59	44.00	1.242E-05	Pulse	0.50	3
Tl			1	0.028	ug/l	17.34	4,016.50	3.769E-04	Pulse	0.50	3
Sn			1	0.065	ug/l	32.07	1,564.54	4.411E-04	Pulse	0.30	3
Sr			1	0.003	ug/l	210.04	1,291.38	3.644E-04	Pulse	0.50	3
[Pb]			1	-0.004	ug/l	-86.94	6,342.54	5.956E-04	Pulse	0.50	3
Ca			1	-0.377	ug/l	-20.56	98.00	2.341E-04	Pulse	0.50	3
Ti			1	-0.003	ug/l	-88.71	1.33	3.164E-06	Pulse	0.50	3
Na			1	-0.890	ug/l	-14.10	20,454.74	4.887E-02	Pulse	1.00	3
Mg			1	0.326	ug/l	20.67	508.01	1.214E-03	Pulse	1.00	3
K			1	0.472	ug/l	45.14	14,367.55	3.433E-02	Pulse	1.00	3
V			1	-0.007	ug/l	-30.44	446.68	1.067E-03	Pulse	0.50	3
Mn			1	-0.001	ug/l	-235.72	113.33	3.261E-04	Pulse	0.50	3
Fe			1	0.381	ug/l	17.60	12,498.11	3.596E-02	Pulse	0.50	3
Co			1	0.000	ug/l	-316.59	281.33	8.093E-04	Pulse	0.50	3
Ni			1	-0.002	ug/l	-52.71	213.33	6.139E-04	Pulse	0.50	3
Cu			1	-0.275	ug/l	-5.93	70,423.68	2.026E-01	Pulse	0.50	3
Zn			1	-0.211	ug/l	-8.57	7,763.57	1.462E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	14.56	30.67	5.776E-05	Pulse	0.50	3
Al			1	0.108	ug/l	106.20	393.67	9.411E-04	Pulse	1.00	3
Se			1	0.003	ug/l	318.33	24.67	6.958E-06	Pulse	3.00	3
Sb			1	-0.005	ug/l	-24.66	748.69	1.410E-03	Pulse	1.00	3
Se			1	0.000	ug/l	-14609.57	37.00	1.189E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,649,547.00	0.91	101.5	Analog	0.50	3
1	Sc		418,614.97	1.40	98.1	Pulse	0.30	3

Quantitation Report

1	Ge		347,522.19	0.36	100.0	Pulse	0.30	3
1	In		3,544,854.30	0.50	98.6	Pulse	0.30	3
1	Tb		14,807,395.67	0.58	101.9	Analog	0.50	3
1	Lu		8,703,087.00	0.60	100.7	Analog	0.50	3
1	Ge		530,963.11	0.40	99.9	Pulse	0.30	3
1	Te		31,124.47	1.50	99.8	Pulse	0.50	3
1	Li		2,063.45	7.19	89.9	Pulse	0.30	3

Quantitation Report

File Name	014LCCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:18
Sample Name	CRIA
Sample Type	CRIA
Comment	=std 2
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.994	ug/l	1.97	24,102.90	6.870E-02	Pulse	0.50	3
As			1	0.991	ug/l	4.40	2,427.83	6.922E-03	Pulse	1.00	3
Mo			1	0.985	ug/l	1.26	16,237.05	3.039E-02	Pulse	0.50	3
Pb			1	0.874	ug/l	1.97	95,819.11	8.912E-03	Pulse	1.00	3
Be			1	0.975	ug/l	10.71	114.83	2.683E-04	Pulse	2.00	3
Ag			1	1.037	ug/l	0.95	62,471.27	1.169E-01	Pulse	0.50	3
Ba			1	0.998	ug/l	3.00	5,888.98	1.639E-03	Pulse	0.50	3
Tl			1	0.961	ug/l	0.75	134,988.76	1.255E-02	Pulse	0.50	3
Sn			1	1.156	ug/l	0.96	16,761.06	4.664E-03	Pulse	0.30	3
Sr			1	1.005	ug/l	0.59	13,069.21	3.637E-03	Pulse	0.50	3
[Pb]			1	0.872	ug/l	1.31	44,880.09	4.174E-03	Pulse	0.50	3
Ca			1	106.899	ug/l	1.58	5,447.44	1.273E-02	Pulse	0.50	3
Ti			1	0.974	ug/l	4.26	408.68	9.548E-04	Pulse	0.50	3
Na			1	96.777	ug/l	0.90	273,555.09	6.391E-01	Pulse	1.00	3
Mg			1	100.079	ug/l	0.92	111,101.36	2.596E-01	Pulse	1.00	3
K			1	98.820	ug/l	0.70	103,885.39	2.427E-01	Pulse	1.00	3
V			1	0.988	ug/l	0.40	17,325.08	4.048E-02	Pulse	0.50	3
Mn			1	1.027	ug/l	0.60	10,727.66	3.058E-02	Pulse	0.50	3
Fe			1	99.970	ug/l	1.20	1,851,649.75	5.278E+00	Pulse	0.50	3
Co			1	0.999	ug/l	0.58	43,613.56	1.243E-01	Pulse	0.50	3
Ni			1	1.014	ug/l	1.23	12,200.55	3.478E-02	Pulse	0.50	3
Cu			1	-0.775	ug/l	-1.44	55,018.02	1.568E-01	Pulse	0.50	3
Zn			1	-0.183	ug/l	-10.96	7,921.97	1.483E-02	Pulse	1.00	3
Cd			1	1.027	ug/l	2.06	7,676.95	1.437E-02	Pulse	0.50	3
Al			1	99.015	ug/l	1.13	31,716.08	7.410E-02	Pulse	1.00	3
Se			1	0.998	ug/l	9.01	186.66	5.193E-05	Pulse	3.00	3
Sb			1	0.965	ug/l	1.13	15,732.41	2.945E-02	Pulse	1.00	3
Se			1	0.826	ug/l	15.83	111.22	3.594E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,752,916.00	1.32	102.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		428,020.51	0.67	100.3	Pulse	0.30	3
1	Ge		350,838.01	0.96	100.9	Pulse	0.30	3
1	In		3,593,916.25	0.32	100.0	Pulse	0.30	3
1	Tb		14,871,800.00	0.47	102.3	Analog	0.50	3
1	Lu		8,705,236.33	0.37	100.8	Analog	0.50	3
1	Ge		534,294.34	0.74	100.5	Pulse	0.30	3
1	Te		30,955.47	1.05	99.2	Pulse	0.50	3
1	Li		2,203.47	6.84	96.0	Pulse	0.30	3

Quantitation Report

File Name	015ICSA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:22
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.298	ug/l	0.65	29,256.56	8.903E-02	Pulse	0.50	3
As			1	0.086	ug/l	16.45	221.33	6.739E-04	Pulse	1.00	3
Mo			1	2038.061	ug/l	0.40	30,734,936.00	6.275E+01	Analog	0.50	3
Pb			1	0.006	ug/l	5.66	11,189.66	1.328E-03	Pulse	1.00	3
Be			1	0.012	ug/l	19.00	1.83	4.160E-06	Pulse	2.00	3
Ag			1	0.036	ug/l	1.88	2,107.46	4.303E-03	Pulse	0.50	3
Ba			1	0.080	ug/l	4.90	452.68	1.398E-04	Pulse	0.50	3
Tl			1	0.011	ug/l	15.71	1,314.73	1.560E-04	Pulse	0.50	3
Sn			1	0.124	ug/l	6.73	2,162.37	6.681E-04	Pulse	0.30	3
Sr			1	0.981	ug/l	0.50	11,518.86	3.559E-03	Pulse	0.50	3
[Pb]			1	0.002	ug/l	291.38	5,234.17	6.210E-04	Pulse	0.50	3
Ca			1	94919.591	ug/l	1.98	4,869,982.67	1.105E+01	Pulse	0.50	3
Ti			1	1985.993	ug/l	1.24	852,235.31	1.934E+00	Pulse	0.50	3
Na			1	99383.101	ug/l	1.52	264,659,728.00	6.007E+02	Analog	1.00	3
Mg			1	99145.937	ug/l	1.89	113,139,920.00	2.568E+02	Analog	1.00	3
K			1	102712.196	ug/l	1.98	95,901,405.33	2.177E+02	Analog	1.00	3
V			1	0.011	ug/l	7.62	797.35	1.810E-03	Pulse	0.50	3
Mn			1	0.294	ug/l	6.83	2,960.23	9.011E-03	Pulse	0.50	3
Fe			1	100800.785	ug/l	1.11	1,743,658,069.33	5.306E+03	Analog	0.50	3
Co			1	0.011	ug/l	4.23	720.02	2.191E-03	Pulse	0.50	3
Ni			1	0.125	ug/l	3.62	1,604.08	4.880E-03	Pulse	0.50	3
Cu			1	-1.729	ug/l	-1.10	22,794.78	6.937E-02	Pulse	0.50	3
Zn			1	-0.562	ug/l	-5.92	5,907.91	1.206E-02	Pulse	1.00	3
Cd			1	0.369	ug/l	0.86	2,534.85	5.176E-03	Pulse	0.50	3
Al			1	96457.030	ug/l	1.72	31,435,344.00	7.135E+01	Analog	1.00	3
Se			1	0.074	ug/l	15.80	32.89	1.016E-05	Pulse	3.00	3
Sb			1	0.032	ug/l	12.19	1,220.38	2.492E-03	Pulse	1.00	3
Se			1	-0.013	ug/l	-304.68	28.22	1.152E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,428,786.00	0.36	80.3	Analog	0.50	3
1	Sc		440,592.71	0.38	103.2	Pulse	0.30	3
1	Ge		328,621.78	0.80	94.5	Pulse	0.30	3
1	In		3,236,908.27	0.42	90.1	Pulse	0.30	3
1	Tb		13,428,325.33	0.64	92.4	Analog	0.50	3
1	Lu		8,020,040.00	0.78	92.8	Analog	0.50	3
1	Ge		489,751.32	0.87	92.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		24,509.09	1.02	78.6	Pulse	0.50	3
1	Li		1,855.65	5.66	80.8	Pulse	0.30	3

Quantitation Report

File Name	016ICSB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:26
Sample Name	ICSAB
Sample Type	ICSAB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	21.443	ug/l	0.59	467,400.97	1.437E+00	Pulse	0.50	3
As			1	19.773	ug/l	0.91	44,460.07	1.366E-01	Pulse	1.00	3
Mo			1	2053.009	ug/l	0.31	31,084,472.00	6.322E+01	Analog	0.50	3
Pb			1	0.021	ug/l	7.27	12,349.47	1.460E-03	Pulse	1.00	3
Be			1	0.015	ug/l	57.35	2.17	4.916E-06	Pulse	2.00	3
Ag			1	17.298	ug/l	0.22	956,722.63	1.946E+00	Pulse	0.50	3
Ba			1	0.075	ug/l	5.46	426.01	1.315E-04	Pulse	0.50	3
Tl			1	0.008	ug/l	13.35	984.04	1.163E-04	Pulse	0.50	3
Sn			1	0.113	ug/l	14.08	2,033.47	6.272E-04	Pulse	0.30	3
Sr			1	0.983	ug/l	0.69	11,560.22	3.567E-03	Pulse	0.50	3
[Pb]			1	0.015	ug/l	36.31	5,682.97	6.718E-04	Pulse	0.50	3
Ca			1	93808.660	ug/l	0.08	4,821,609.67	1.092E+01	Pulse	0.50	3
Ti			1	1980.884	ug/l	0.50	851,579.55	1.929E+00	Pulse	0.50	3
Na			1	99340.021	ug/l	1.00	265,028,037.33	6.004E+02	Analog	1.00	3
Mg			1	98511.199	ug/l	0.95	112,620,650.67	2.551E+02	Analog	1.00	3
K			1	102937.705	ug/l	1.13	96,289,733.33	2.181E+02	Analog	1.00	3
V			1	0.007	ug/l	29.14	725.02	1.642E-03	Pulse	0.50	3
Mn			1	20.548	ug/l	0.82	196,980.36	6.054E-01	Pulse	0.50	3
Fe			1	101863.021	ug/l	1.05	1,744,645,120.00	5.362E+03	Analog	0.50	3
Co			1	19.272	ug/l	1.08	774,860.37	2.381E+00	Pulse	0.50	3
Ni			1	18.837	ug/l	0.64	206,290.36	6.340E-01	Pulse	0.50	3
Cu			1	16.963	ug/l	0.44	579,950.04	1.782E+00	Pulse	0.50	3
Zn			1	17.663	ug/l	1.07	71,198.98	1.448E-01	Pulse	1.00	3
Cd			1	18.268	ug/l	1.06	125,480.78	2.552E-01	Pulse	0.50	3
Al			1	95826.669	ug/l	0.59	31,286,854.00	7.088E+01	Analog	1.00	3
Se			1	0.050	ug/l	99.48	29.33	9.044E-06	Pulse	3.00	3
Sb			1	0.021	ug/l	19.97	1,064.03	2.163E-03	Pulse	1.00	3
Se			1	15.137	ug/l	173.96	1,130.76	4.524E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,458,628.33	0.13	80.6	Analog	0.50	3
1	Sc		441,367.53	0.82	103.4	Pulse	0.30	3
1	Ge		325,361.22	0.62	93.6	Pulse	0.30	3
1	In		3,240,959.11	0.57	90.2	Pulse	0.30	3
1	Tb		13,638,864.00	0.34	93.8	Analog	0.50	3
1	Lu		8,206,078.00	1.04	95.0	Analog	0.50	3
1	Ge		491,720.26	0.56	92.5	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		24,874.92	1.31	79.7	Pulse	0.50	3
1	Li		1,817.87	5.49	79.2	Pulse	0.30	3

Quantitation Report

File Name	017CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:29
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	48.782	ug/l	0.74	1,108,062.91	3.265E+00	Pulse	0.50	3
As			1	50.068	ug/l	0.48	117,381.24	3.459E-01	Pulse	1.00	3
Mo			1	49.430	ug/l	0.77	788,046.39	1.522E+00	Pulse	0.50	3
Pb			1	47.255	ug/l	1.70	4,273,697.17	4.138E-01	Pulse	1.00	3
Be			1	48.878	ug/l	1.20	5,516.92	1.342E-02	Pulse	2.00	3
Ag			1	50.817	ug/l	0.80	2,959,247.83	5.716E+00	Pulse	0.50	3
Ba			1	49.119	ug/l	0.46	275,932.41	8.019E-02	Pulse	0.50	3
Tl			1	48.302	ug/l	1.22	6,515,610.33	6.308E-01	Mix	0.50	3
Sn			1	49.529	ug/l	0.72	660,366.27	1.919E-01	Pulse	0.30	3
Sr			1	48.685	ug/l	0.77	548,386.00	1.594E-01	Pulse	0.50	3
[Pb]			1	47.714	ug/l	0.56	2,020,990.25	1.957E-01	Pulse	0.50	3
Ca			1	4921.654	ug/l	0.59	235,773.84	5.734E-01	Pulse	0.50	3
Ti			1	49.318	ug/l	2.31	19,751.97	4.804E-02	Pulse	0.50	3
Na			1	4940.945	ug/l	0.10	12,301,311.67	2.992E+01	Analog	1.00	3
Mg			1	4978.471	ug/l	0.16	5,302,283.67	1.289E+01	Analog	1.00	3
K			1	4853.951	ug/l	0.40	4,242,786.17	1.032E+01	Pulse	1.00	3
V			1	49.729	ug/l	1.17	809,963.09	1.970E+00	Pulse	0.50	3
Mn			1	48.646	ug/l	1.04	486,216.78	1.433E+00	Pulse	0.50	3
Fe			1	5007.202	ug/l	0.84	89,448,162.67	2.636E+02	Analog	0.50	3
Co			1	49.080	ug/l	1.12	2,057,604.71	6.063E+00	Pulse	0.50	3
Ni			1	50.221	ug/l	1.06	573,257.65	1.689E+00	Pulse	0.50	3
Cu			1	49.576	ug/l	0.59	1,619,199.08	4.771E+00	Pulse	0.50	3
Zn			1	50.337	ug/l	0.66	198,169.29	3.828E-01	Pulse	1.00	3
Cd			1	51.063	ug/l	0.36	369,314.11	7.133E-01	Pulse	0.50	3
Al			1	4750.410	ug/l	0.79	1,445,171.83	3.515E+00	Pulse	1.00	3
Se			1	50.417	ug/l	0.19	7,866.73	2.286E-03	Pulse	3.00	3
Sb			1	49.487	ug/l	0.90	741,370.77	1.432E+00	Pulse	1.00	3
Se			1	46.104	ug/l	2.14	3,922.74	1.353E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,329,972.67	1.45	98.5	Analog	0.50	3
1	Sc		411,195.11	0.98	96.3	Pulse	0.30	3
1	Ge		339,366.58	0.98	97.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,440,955.35	0.58	95.7	Pulse	0.30	3
1	Tb		14,681,607.33	1.42	101.0	Analog	0.50	3
1	Lu		8,557,145.67	1.26	99.0	Analog	0.50	3
1	Ge		517,758.05	0.36	97.4	Pulse	0.30	3
1	Te		28,990.96	1.70	92.9	Pulse	0.50	3
1	Li		2,027.89	8.93	88.3	Pulse	0.30	3

Quantitation Report

File Name	018_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:33
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.697	ug/l	0.34	2,241,273.92	6.604E+00	Pulse	0.50	3
As			1	99.314	ug/l	1.04	232,817.82	6.860E-01	Pulse	1.00	3
Mo			1	99.571	ug/l	0.74	1,584,774.21	3.066E+00	Pulse	0.50	3
Pb			1	98.891	ug/l	1.12	8,714,070.00	8.645E-01	Analog	1.00	3
Be			1	99.044	ug/l	2.30	11,302.14	2.718E-02	Pulse	2.00	3
Ag			1	99.499	ug/l	0.28	5,784,388.17	1.119E+01	Pulse	0.50	3
Ba			1	98.748	ug/l	0.43	550,357.54	1.612E-01	Pulse	0.50	3
Tl			1	97.956	ug/l	0.29	12,894,806.67	1.279E+00	Analog	0.50	3
Sn			1	100.254	ug/l	0.53	1,325,548.21	3.883E-01	Pulse	0.30	3
Sr			1	100.465	ug/l	0.58	1,121,495.58	3.285E-01	Pulse	0.50	3
[Pb]			1	95.786	ug/l	1.04	3,952,791.58	3.922E-01	Pulse	0.50	3
Ca			1	9913.830	ug/l	0.75	480,134.09	1.155E+00	Pulse	0.50	3
Ti			1	98.869	ug/l	1.74	40,040.74	9.630E-02	Pulse	0.50	3
Na			1	9974.470	ug/l	1.30	25,087,192.67	6.034E+01	Analog	1.00	3
Mg			1	9969.358	ug/l	1.91	10,735,692.00	2.582E+01	Analog	1.00	3
K			1	10077.995	ug/l	0.72	8,892,876.67	2.139E+01	Analog	1.00	3
V			1	99.967	ug/l	1.13	1,645,942.42	3.959E+00	Pulse	0.50	3
Mn			1	97.158	ug/l	0.14	971,077.86	2.861E+00	Pulse	0.50	3
Fe			1	10004.020	ug/l	1.01	178,720,560.00	5.266E+02	Analog	0.50	3
Co			1	98.116	ug/l	0.93	4,113,460.50	1.212E+01	Pulse	0.50	3
Ni			1	99.658	ug/l	0.12	1,137,438.67	3.351E+00	Pulse	0.50	3
Cu			1	99.561	ug/l	0.29	3,174,091.83	9.353E+00	Pulse	0.50	3
Zn			1	100.922	ug/l	0.30	388,262.19	7.511E-01	Pulse	1.00	3
Cd			1	100.716	ug/l	0.41	727,202.52	1.407E+00	Pulse	0.50	3
Al			1	9667.246	ug/l	1.26	2,973,557.25	7.152E+00	Pulse	1.00	3
Se			1	100.859	ug/l	0.61	15,590.68	4.567E-03	Pulse	3.00	3
Sb			1	98.818	ug/l	0.63	1,477,155.83	2.858E+00	Pulse	1.00	3
Se			1	96.945	ug/l	0.53	7,872.85	2.833E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,080,036.33	0.57	96.1	Analog	0.50	3
1	Sc		415,811.21	0.87	97.4	Pulse	0.30	3
1	Ge		339,383.48	0.33	97.6	Pulse	0.30	3
1	In		3,413,974.44	0.16	95.0	Pulse	0.30	3
1	Tb		14,693,736.33	0.87	101.1	Analog	0.50	3
1	Lu		8,605,918.33	1.03	99.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		516,893.71	0.23	97.2	Pulse	0.30	3
1	Te		27,792.43	0.88	89.1	Pulse	0.50	3
1	Li		2,092.34	4.50	91.1	Pulse	0.30	3

Quantitation Report

File Name	019_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:37
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	-840.49	764.68	2.205E-03	Pulse	0.50	3
As			1	0.006	ug/l	73.54	41.33	1.193E-04	Pulse	1.00	3
Mo			1	0.053	ug/l	6.32	886.02	1.676E-03	Pulse	0.50	3
Pb			1	-0.009	ug/l	-29.91	12,918.89	1.201E-03	Pulse	1.00	3
Be			1	0.013	ug/l	116.56	1.83	4.405E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	18.22	750.02	1.418E-03	Pulse	0.50	3
Ba			1	0.004	ug/l	194.79	56.00	1.582E-05	Pulse	0.50	3
Tl			1	0.020	ug/l	9.01	2,918.93	2.713E-04	Pulse	0.50	3
Sn			1	0.058	ug/l	58.63	1,465.97	4.137E-04	Pulse	0.30	3
Sr			1	-0.002	ug/l	-333.12	1,239.38	3.496E-04	Pulse	0.50	3
[Pb]			1	-0.013	ug/l	-6.73	6,018.41	5.595E-04	Pulse	0.50	3
Ca			1	0.026	ug/l	1320.11	117.33	2.810E-04	Pulse	0.50	3
Ti			1	0.013	ug/l	64.15	8.00	1.915E-05	Pulse	0.50	3
Na			1	-0.643	ug/l	-53.61	21,021.99	5.036E-02	Pulse	1.00	3
Mg			1	0.775	ug/l	14.01	992.02	2.377E-03	Pulse	1.00	3
K			1	1.738	ug/l	20.39	15,449.70	3.701E-02	Pulse	1.00	3
V			1	-0.011	ug/l	-15.36	378.01	9.054E-04	Pulse	0.50	3
Mn			1	-0.004	ug/l	-49.69	72.67	2.095E-04	Pulse	0.50	3
Fe			1	0.772	ug/l	16.23	19,602.67	5.653E-02	Pulse	0.50	3
Co			1	-0.002	ug/l	-22.11	212.67	6.128E-04	Pulse	0.50	3
Ni			1	-0.008	ug/l	-29.51	142.00	4.097E-04	Pulse	0.50	3
Cu			1	-0.336	ug/l	-2.35	68,366.31	1.971E-01	Pulse	0.50	3
Zn			1	-0.272	ug/l	-14.80	7,497.47	1.418E-02	Pulse	1.00	3
Cd			1	0.004	ug/l	21.49	37.33	7.060E-05	Pulse	0.50	3
Al			1	0.284	ug/l	10.92	447.34	1.072E-03	Pulse	1.00	3
Se			1	0.010	ug/l	103.98	25.78	7.272E-06	Pulse	3.00	3
Sb			1	-0.019	ug/l	-9.22	531.34	1.005E-03	Pulse	1.00	3
Se			1	-0.019	ug/l	-127.74	34.00	1.134E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,757,821.67	0.29	102.5	Analog	0.50	3
1	Sc		417,502.75	0.49	97.8	Pulse	0.30	3

Quantitation Report

1	Ge		346,907.18	0.71	99.8	Pulse	0.30	3
1	In		3,545,253.19	0.27	98.6	Pulse	0.30	3
1	Tb		14,770,895.00	0.16	101.6	Analog	0.50	3
1	Lu		8,624,383.33	0.49	99.8	Analog	0.50	3
1	Ge		528,770.72	0.96	99.5	Pulse	0.30	3
1	Te		29,992.56	1.87	96.2	Pulse	0.50	3
1	Li		2,305.70	0.22	100.4	Pulse	0.30	3

Quantitation Report

File Name	020_MB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:40
Sample Name	MP33666-MB1
Sample Type	MB
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.203	ug/l	7.61	2,891.56	9.036E-03	Pulse	0.50	3
As			1	0.062	ug/l	23.40	94.67	2.957E-04	Pulse	1.00	3
Mo			1	0.217	ug/l	13.72	1,666.75	3.390E-03	Pulse	0.50	3
Pb			1	0.070	ug/l	5.10	16,635.42	1.583E-03	Pulse	1.00	3
Be			1	0.016	ug/l	121.07	1.17	2.971E-06	Pulse	2.00	3
Ag			1	0.040	ug/l	16.17	1,233.38	2.512E-03	Pulse	0.50	3
Ba			1	0.061	ug/l	4.83	198.00	5.883E-05	Pulse	0.50	3
Tl			1	0.025	ug/l	4.24	1,785.43	1.699E-04	Pulse	0.50	3
Sn			1	0.600	ug/l	8.46	4,542.82	1.350E-03	Pulse	0.30	3
Sr			1	0.112	ug/l	11.15	1,811.43	5.383E-04	Pulse	0.50	3
[Pb]			1	0.066	ug/l	15.62	7,834.48	7.457E-04	Pulse	0.50	3
Ca			1	26.621	ug/l	3.46	720.69	1.828E-03	Pulse	0.50	3
Ti			1	0.147	ug/l	21.98	30.67	7.771E-05	Pulse	0.50	3
Na			1	28.079	ug/l	3.67	54,841.28	1.391E-01	Pulse	1.00	3
Mg			1	10.597	ug/l	8.11	5,557.45	1.409E-02	Pulse	1.00	3
K			1	5.367	ug/l	9.11	15,380.66	3.901E-02	Pulse	1.00	3
V			1	0.169	ug/l	5.91	1,857.43	4.710E-03	Pulse	0.50	3
Mn			1	0.180	ug/l	8.80	959.36	2.997E-03	Pulse	0.50	3
Fe			1	8.082	ug/l	8.41	73,171.70	2.286E-01	Pulse	0.50	3
Co			1	0.004	ug/l	65.55	350.67	1.097E-03	Pulse	0.50	3
Ni			1	0.158	ug/l	12.98	1,065.37	3.329E-03	Pulse	0.50	3
Cu			1	-2.164	ug/l	-1.24	41,191.77	1.287E-01	Pulse	0.50	3
Zn			1	0.317	ug/l	7.46	8,505.88	1.731E-02	Pulse	1.00	3
Cd			1	0.013	ug/l	34.24	52.67	1.071E-04	Pulse	0.50	3
Al			1	9.887	ug/l	7.26	1,781.75	4.518E-03	Pulse	1.00	3
Se			1	0.067	ug/l	92.13	28.00	8.328E-06	Pulse	3.00	3
Sb			1	0.130	ug/l	4.36	1,691.08	3.443E-03	Pulse	1.00	3
Se			1	0.272	ug/l	33.60	37.44	1.586E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,507,726.67	0.75	100.2	Analog	0.50	3
1	Sc		394,285.01	0.75	92.4	Pulse	0.30	3
1	Ge		320,087.06	1.31	92.1	Pulse	0.30	3
1	In		3,365,564.03	0.93	93.6	Pulse	0.30	3
1	Tb		14,532,255.00	0.86	100.0	Analog	0.50	3
1	Lu		8,509,183.67	1.60	98.5	Analog	0.50	3
1	Ge		491,290.03	1.31	92.4	Pulse	0.30	3
1	Te		23,600.62	0.78	75.7	Pulse	0.50	3
1	Li		1,995.66	3.01	86.9	Pulse	0.30	3

Quantitation Report

File Name	021_BSP.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:44
Sample Name	MP33666-B1
Sample Type	BSP
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	208.479	ug/l	1.90	2,195,693.58	6.975E+00	Pulse	0.50	3
As			1	195.963	ug/l	0.61	213,079.01	6.768E-01	Pulse	1.00	3
Mo			1	210.037	ug/l	0.62	1,551,829.54	3.234E+00	Pulse	0.50	3
Pb			1	203.800	ug/l	1.57	8,708,744.67	8.908E-01	Analog	1.00	3
Be			1	207.097	ug/l	0.25	11,225.59	2.842E-02	Pulse	2.00	3
Ag			1	99.946	ug/l	1.09	2,697,208.25	5.621E+00	Pulse	0.50	3
Ba			1	201.311	ug/l	0.60	532,665.21	1.643E-01	Pulse	0.50	3
Tl			1	196.048	ug/l	1.69	12,514,886.67	1.280E+00	Analog	0.50	3
Sn			1	204.370	ug/l	0.74	1,282,864.78	3.958E-01	Pulse	0.30	3
Sr			1	200.691	ug/l	1.76	1,063,554.29	3.281E-01	Pulse	0.50	3
[Pb]			1	189.274	ug/l	1.22	3,788,065.42	3.875E-01	Pulse	0.50	3
Ca			1	18859.468	ug/l	0.67	433,836.85	1.098E+00	Pulse	0.50	3
Ti			1	203.448	ug/l	0.94	39,135.65	9.908E-02	Pulse	0.50	3
Na			1	19415.858	ug/l	1.05	23,195,128.67	5.873E+01	Analog	1.00	3
Mg			1	19295.831	ug/l	0.89	9,869,853.00	2.499E+01	Analog	1.00	3
K			1	19015.749	ug/l	0.60	7,970,363.00	2.018E+01	Analog	1.00	3
V			1	205.498	ug/l	0.59	1,607,070.59	4.069E+00	Pulse	0.50	3
Mn			1	198.487	ug/l	0.91	920,151.87	2.923E+00	Pulse	0.50	3
Fe			1	19812.195	ug/l	0.93	164,168,133.33	5.215E+02	Analog	0.50	3
Co			1	206.537	ug/l	1.05	4,016,171.33	1.276E+01	Pulse	0.50	3
Ni			1	212.295	ug/l	0.15	1,123,854.96	3.570E+00	Pulse	0.50	3
Cu			1	207.158	ug/l	0.77	3,060,423.08	9.721E+00	Pulse	0.50	3
Zn			1	191.102	ug/l	0.66	341,696.19	7.120E-01	Pulse	1.00	3
Cd			1	203.071	ug/l	0.76	680,632.08	1.418E+00	Pulse	0.50	3
Al			1	17481.590	ug/l	0.61	2,554,072.83	6.466E+00	Pulse	1.00	3
Se			1	172.881	ug/l	0.92	12,690.31	3.915E-03	Pulse	3.00	3
Sb			1	197.207	ug/l	0.94	1,368,420.46	2.852E+00	Pulse	1.00	3
Se			1	191.182	ug/l	1.21	6,438.53	2.793E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,777,140.67	0.72	93.2	Analog	0.50	3
1	Sc		394,976.63	0.39	92.5	Pulse	0.30	3
1	Ge		314,835.01	0.66	90.6	Pulse	0.30	3
1	In		3,241,715.57	0.76	90.2	Pulse	0.30	3
1	Tb		14,436,834.33	0.38	99.3	Analog	0.50	3
1	Lu		8,479,226.33	0.49	98.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		479,899.01	0.55	90.3	Pulse	0.30	3
1	Te		23,050.53	0.71	73.9	Pulse	0.50	3
1	Li		2,004.56	3.66	87.3	Pulse	0.30	3

Quantitation Report

File Name	022SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:48
Sample Name	FA53574-4F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	42.461	ug/l	0.06	455,627.25	1.422E+00	Pulse	0.50	3
As			1	0.962	ug/l	5.17	1,090.70	3.404E-03	Pulse	1.00	3
Mo			1	13.819	ug/l	0.98	104,292.43	2.128E-01	Pulse	0.50	3
Pb			1	-0.089	ug/l	-7.21	8,720.23	8.888E-04	Pulse	1.00	3
Be			1	0.009	ug/l	146.44	0.83	2.080E-06	Pulse	2.00	3
Ag			1	0.025	ug/l	11.54	819.35	1.673E-03	Pulse	0.50	3
Ba			1	44.416	ug/l	1.23	119,520.46	3.626E-02	Pulse	0.50	3
Tl			1	0.051	ug/l	12.37	3,371.02	3.436E-04	Pulse	0.50	3
Sn			1	0.476	ug/l	8.46	3,660.40	1.111E-03	Pulse	0.30	3
Sr			1	532.658	ug/l	0.76	2,868,530.58	8.703E-01	Pulse	0.50	3
[Pb]			1	-0.094	ug/l	-15.10	4,108.51	4.188E-04	Pulse	0.50	3
Ca			1	74961.769	ug/l	1.35	1,758,331.87	4.365E+00	Pulse	0.50	3
Ti			1	0.259	ug/l	39.53	53.33	1.325E-04	Pulse	0.50	3
Na			1	48107.993	ug/l	1.46	58,582,562.67	1.454E+02	Analog	1.00	3
Mg			1	59.129	ug/l	2.13	30,995.57	7.694E-02	Pulse	1.00	3
K			1	11848.795	ug/l	1.70	5,070,692.83	1.259E+01	Mix	1.00	3
V			1	10.167	ug/l	1.76	81,608.84	2.026E-01	Pulse	0.50	3
Mn			1	1.203	ug/l	0.75	5,783.55	1.805E-02	Pulse	0.50	3
Fe			1	13.322	ug/l	2.49	117,429.66	3.665E-01	Pulse	0.50	3
Co			1	1.239	ug/l	1.14	24,795.18	7.740E-02	Pulse	0.50	3
Ni			1	2.206	ug/l	2.43	12,099.15	3.777E-02	Pulse	0.50	3
Cu			1	5.303	ug/l	2.93	150,848.53	4.709E-01	Pulse	0.50	3
Zn			1	-1.223	ug/l	-3.56	5,737.53	1.171E-02	Pulse	1.00	3
Cd			1	0.014	ug/l	20.60	55.33	1.127E-04	Pulse	0.50	3
Al			1	2124.959	ug/l	1.26	316,931.57	7.868E-01	Pulse	1.00	3
Se			1	0.519	ug/l	18.93	61.11	1.855E-05	Pulse	3.00	3
Sb			1	3.347	ug/l	1.19	24,472.25	4.994E-02	Pulse	1.00	3
Se			1	0.889	ug/l	18.10	55.45	2.483E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,811,613.67	0.51	93.5	Analog	0.50	3
1	Sc		402,849.41	1.41	94.4	Pulse	0.30	3
1	Ge		320,340.64	0.81	92.2	Pulse	0.30	3
1	In		3,296,153.83	0.42	91.7	Pulse	0.30	3
1	Tb		14,417,764.00	0.37	99.2	Analog	0.50	3
1	Lu		8,475,956.00	1.59	98.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		490,122.97	1.34	92.2	Pulse	0.30	3
1	Te		22,341.67	0.96	71.6	Pulse	0.50	3
1	Li		2,152.35	13.42	93.8	Pulse	0.30	3

Quantitation Report

File Name	023SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:51
Sample Name	MP33666-D1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	42.484	ug/l	0.89	459,665.88	1.423E+00	Pulse	0.50	3
As			1	0.916	ug/l	3.34	1,047.36	3.242E-03	Pulse	1.00	3
Mo			1	13.503	ug/l	0.66	103,105.22	2.079E-01	Pulse	0.50	3
Pb			1	-0.059	ug/l	-7.42	10,019.95	1.023E-03	Pulse	1.00	3
Be			1	0.033	ug/l	63.33	2.17	5.332E-06	Pulse	2.00	3
Ag			1	0.019	ug/l	10.06	654.68	1.320E-03	Pulse	0.50	3
Ba			1	44.104	ug/l	0.86	119,801.94	3.601E-02	Pulse	0.50	3
Tl			1	0.018	ug/l	10.48	1,222.05	1.248E-04	Pulse	0.50	3
Sn			1	0.393	ug/l	5.54	3,162.52	9.505E-04	Pulse	0.30	3
Sr			1	530.464	ug/l	0.28	2,883,587.50	8.667E-01	Pulse	0.50	3
[Pb]			1	-0.068	ug/l	-4.64	4,620.65	4.719E-04	Pulse	0.50	3
Ca			1	74080.623	ug/l	0.94	1,757,053.87	4.314E+00	Pulse	0.50	3
Ti			1	0.266	ug/l	56.67	55.33	1.359E-04	Pulse	0.50	3
Na			1	47737.083	ug/l	0.70	58,779,021.33	1.443E+02	Analog	1.00	3
Mg			1	58.376	ug/l	0.16	30,943.49	7.597E-02	Pulse	1.00	3
K			1	11662.410	ug/l	1.93	5,046,326.50	1.239E+01	Mix	1.00	3
V			1	10.057	ug/l	1.09	81,628.29	2.004E-01	Pulse	0.50	3
Mn			1	1.282	ug/l	1.72	6,206.35	1.921E-02	Pulse	0.50	3
Fe			1	15.227	ug/l	2.80	134,585.22	4.167E-01	Pulse	0.50	3
Co			1	1.237	ug/l	0.09	24,953.40	7.725E-02	Pulse	0.50	3
Ni			1	2.179	ug/l	1.92	12,049.79	3.730E-02	Pulse	0.50	3
Cu			1	5.285	ug/l	0.58	151,826.00	4.700E-01	Pulse	0.50	3
Zn			1	0.449	ug/l	20.58	8,822.36	1.779E-02	Pulse	1.00	3
Cd			1	0.005	ug/l	71.33	27.33	5.509E-05	Pulse	0.50	3
Al			1	2124.063	ug/l	0.36	320,335.38	7.864E-01	Pulse	1.00	3
Se			1	0.449	ug/l	9.32	56.44	1.697E-05	Pulse	3.00	3
Sb			1	3.229	ug/l	1.76	23,915.85	4.823E-02	Pulse	1.00	3
Se			1	1.057	ug/l	8.46	61.33	2.727E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,792,578.67	0.48	93.3	Analog	0.50	3
1	Sc		407,321.69	0.66	95.4	Pulse	0.30	3
1	Ge		323,010.66	0.31	92.9	Pulse	0.30	3
1	In		3,327,152.65	0.32	92.6	Pulse	0.30	3
1	Tb		14,618,821.67	1.55	100.6	Analog	0.50	3
1	Lu		8,523,974.67	0.54	98.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		495,851.72	0.26	93.3	Pulse	0.30	3
1	Te		22,472.51	2.37	72.0	Pulse	0.50	3
1	Li		2,085.67	7.11	90.9	Pulse	0.30	3

Quantitation Report

File Name	024SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 9:55
Sample Name	MP33666-SD1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	45.239	ug/l	0.22	106,337.02	3.048E-01	Pulse	0.50	3
As			1	1.040	ug/l	4.50	278.67	7.988E-04	Pulse	1.00	3
Mo			1	14.272	ug/l	1.18	23,459.99	4.399E-02	Pulse	0.50	3
Pb			1	-0.258	ug/l	-7.82	11,110.95	1.054E-03	Pulse	1.00	3
Be			1	0.128	ug/l	51.62	1.83	4.295E-06	Pulse	2.00	3
Ag			1	0.041	ug/l	34.75	386.01	7.237E-04	Pulse	0.50	3
Ba			1	48.244	ug/l	1.65	27,693.18	7.885E-03	Pulse	0.50	3
Tl			1	0.037	ug/l	10.45	591.35	5.609E-05	Pulse	0.50	3
Sn			1	0.244	ug/l	22.06	995.59	2.833E-04	Pulse	0.30	3
Sr			1	571.489	ug/l	1.05	656,894.02	1.870E-01	Pulse	0.50	3
[Pb]			1	-0.302	ug/l	-8.94	5,142.13	4.877E-04	Pulse	0.50	3
Ca			1	80772.058	ug/l	0.27	402,582.13	9.409E-01	Pulse	0.50	3
Ti			1	0.369	ug/l	81.74	18.00	4.224E-05	Pulse	0.50	3
Na			1	52298.338	ug/l	0.90	13,547,130.33	3.166E+01	Analog	1.00	3
Mg			1	69.263	ug/l	1.47	7,834.54	1.831E-02	Pulse	1.00	3
K			1	12748.394	ug/l	0.60	1,170,054.96	2.735E+00	Pulse	1.00	3
V			1	10.826	ug/l	2.10	18,915.87	4.421E-02	Pulse	0.50	3
Mn			1	1.330	ug/l	1.41	1,485.40	4.258E-03	Pulse	0.50	3
Fe			1	14.122	ug/l	1.82	31,476.17	9.023E-02	Pulse	0.50	3
Co			1	1.286	ug/l	3.60	5,840.23	1.674E-02	Pulse	0.50	3
Ni			1	2.337	ug/l	2.04	2,975.57	8.530E-03	Pulse	0.50	3
Cu			1	1.272	ug/l	19.31	83,555.61	2.395E-01	Pulse	0.50	3
Zn			1	-2.909	ug/l	-5.65	7,486.80	1.404E-02	Pulse	1.00	3
Cd			1	0.006	ug/l	263.17	14.00	2.621E-05	Pulse	0.50	3
Al			1	2348.162	ug/l	0.98	74,685.71	1.746E-01	Pulse	1.00	3
Se			1	1.193	ug/l	71.51	42.78	1.220E-05	Pulse	3.00	3
Sb			1	3.323	ug/l	1.05	5,957.31	1.117E-02	Pulse	1.00	3
Se			1	0.630	ug/l	65.59	38.56	1.373E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,542,573.00	0.24	100.5	Analog	0.50	3
1	Sc		427,886.82	0.90	100.2	Pulse	0.30	3
1	Ge		348,841.46	0.17	100.4	Pulse	0.30	3
1	In		3,512,628.54	0.91	97.7	Pulse	0.30	3
1	Tb		14,837,849.67	1.26	102.1	Analog	0.50	3
1	Lu		8,697,394.33	0.30	100.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		533,273.16	0.44	100.3	Pulse	0.30	3
1	Te		28,088.86	0.72	90.1	Pulse	0.50	3
1	Li		2,389.05	5.86	104.1	Pulse	0.30	3

Quantitation Report

File Name 025SMPL.d
File Path D:\2018\04-April\xa043018m1.b
Method File
Method Path
Acq Time 4/30/2018 9:58
Sample Name MP33666-S1
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/30/2018 14:30
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	253.648	ug/l	0.49	2,632,248.75	8.485E+00	Pulse	0.50	3
As			1	199.850	ug/l	0.56	214,111.39	6.902E-01	Pulse	1.00	3
Mo			1	225.828	ug/l	1.30	1,657,218.92	3.477E+00	Pulse	0.50	3
Pb			1	206.820	ug/l	0.43	8,496,125.33	9.040E-01	Analog	1.00	3
Be			1	204.686	ug/l	0.41	11,138.37	2.809E-02	Pulse	2.00	3
Ag			1	102.619	ug/l	1.35	2,750,748.92	5.771E+00	Pulse	0.50	3
Ba			1	241.920	ug/l	1.14	634,682.23	1.975E-01	Pulse	0.50	3
Tl			1	200.078	ug/l	1.47	12,277,948.33	1.306E+00	Analog	0.50	3
Sn			1	203.362	ug/l	0.51	1,265,729.33	3.938E-01	Pulse	0.30	3
Sr			1	721.791	ug/l	1.19	3,789,919.08	1.179E+00	Pulse	0.50	3
[Pb]			1	191.482	ug/l	1.32	3,683,740.58	3.920E-01	Pulse	0.50	3
Ca			1	91243.208	ug/l	1.07	2,106,682.33	5.313E+00	Pulse	0.50	3
Ti			1	205.220	ug/l	0.36	39,631.99	9.995E-02	Pulse	0.50	3
Na			1	66410.416	ug/l	1.12	79,596,669.33	2.007E+02	Analog	1.00	3
Mg			1	19523.803	ug/l	1.14	10,025,711.00	2.528E+01	Analog	1.00	3
K			1	30939.459	ug/l	1.00	13,010,896.67	3.281E+01	Analog	1.00	3
V			1	217.493	ug/l	1.33	1,707,471.96	4.306E+00	Pulse	0.50	3
Mn			1	202.473	ug/l	0.85	924,826.08	2.981E+00	Pulse	0.50	3
Fe			1	20203.203	ug/l	0.49	164,949,317.33	5.318E+02	Analog	0.50	3
Co			1	210.154	ug/l	0.64	4,026,746.75	1.298E+01	Pulse	0.50	3
Ni			1	212.114	ug/l	0.29	1,106,407.67	3.567E+00	Pulse	0.50	3
Cu			1	211.087	ug/l	0.39	3,071,239.92	9.901E+00	Pulse	0.50	3
Zn			1	184.650	ug/l	0.83	328,192.64	6.885E-01	Pulse	1.00	3
Cd			1	199.863	ug/l	0.84	665,362.23	1.396E+00	Pulse	0.50	3
Al			1	19607.995	ug/l	1.36	2,875,859.00	7.253E+00	Pulse	1.00	3
Se			1	174.049	ug/l	1.47	12,667.75	3.941E-03	Pulse	3.00	3
Sb			1	198.003	ug/l	1.22	1,364,664.37	2.863E+00	Pulse	1.00	3
Se			1	204.413	ug/l	0.70	6,356.95	2.986E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,399,010.33	1.24	89.6	Analog	0.50	3
1	Sc		396,533.08	0.61	92.9	Pulse	0.30	3
1	Ge		310,206.45	0.81	89.2	Pulse	0.30	3
1	In		3,214,154.80	0.09	89.4	Pulse	0.30	3
1	Tb		14,205,005.33	0.38	97.7	Analog	0.50	3
1	Lu		8,355,872.67	0.51	96.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		476,662.71	0.52	89.7	Pulse	0.30	3
1	Te		21,291.08	1.18	68.3	Pulse	0.50	3
1	Li		1,943.44	6.65	84.7	Pulse	0.30	3

Quantitation Report

File Name 026SMPL.d
File Path D:\2018\04-April\xa043018m1.b
Method File
Method Path
Acq Time 4/30/2018 10:02
Sample Name MP33666-S2
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/30/2018 14:30
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	252.316	ug/l	0.50	2,667,427.92	8.441E+00	Pulse	0.50	3
As			1	196.897	ug/l	0.41	214,902.88	6.800E-01	Pulse	1.00	3
Mo			1	224.451	ug/l	0.50	1,666,164.33	3.456E+00	Pulse	0.50	3
Pb			1	206.332	ug/l	1.25	8,512,366.33	9.018E-01	Analog	1.00	3
Be			1	202.586	ug/l	0.74	11,255.11	2.780E-02	Pulse	2.00	3
Ag			1	102.311	ug/l	0.89	2,774,070.58	5.754E+00	Pulse	0.50	3
Ba			1	244.775	ug/l	0.54	645,547.23	1.998E-01	Pulse	0.50	3
Tl			1	200.012	ug/l	0.56	12,327,784.00	1.306E+00	Analog	0.50	3
Sn			1	204.068	ug/l	0.73	1,276,779.81	3.952E-01	Pulse	0.30	3
Sr			1	723.969	ug/l	1.03	3,821,226.67	1.183E+00	Pulse	0.50	3
[Pb]			1	191.346	ug/l	0.74	3,697,316.33	3.917E-01	Pulse	0.50	3
Ca			1	89946.197	ug/l	0.67	2,120,287.92	5.237E+00	Pulse	0.50	3
Ti			1	200.930	ug/l	1.09	39,615.92	9.786E-02	Pulse	0.50	3
Na			1	65804.355	ug/l	0.65	80,527,274.67	1.989E+02	Analog	1.00	3
Mg			1	19162.326	ug/l	0.58	10,046,528.33	2.482E+01	Analog	1.00	3
K			1	30519.784	ug/l	0.99	13,103,430.33	3.237E+01	Analog	1.00	3
V			1	214.476	ug/l	0.41	1,719,167.08	4.246E+00	Pulse	0.50	3
Mn			1	201.460	ug/l	1.00	937,462.79	2.967E+00	Pulse	0.50	3
Fe			1	19812.435	ug/l	0.70	164,791,845.33	5.215E+02	Analog	0.50	3
Co			1	206.125	ug/l	0.28	4,023,402.83	1.273E+01	Pulse	0.50	3
Ni			1	208.480	ug/l	0.97	1,107,832.25	3.506E+00	Pulse	0.50	3
Cu			1	210.547	ug/l	0.49	3,121,019.92	9.876E+00	Pulse	0.50	3
Zn			1	187.727	ug/l	0.36	337,385.28	6.997E-01	Pulse	1.00	3
Cd			1	198.011	ug/l	0.32	666,811.94	1.383E+00	Pulse	0.50	3
Al			1	19186.078	ug/l	0.35	2,873,207.08	7.097E+00	Pulse	1.00	3
Se			1	171.451	ug/l	0.86	12,544.55	3.883E-03	Pulse	3.00	3
Sb			1	197.988	ug/l	0.64	1,380,321.83	2.863E+00	Pulse	1.00	3
Se			1	198.729	ug/l	1.12	6,383.96	2.903E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,439,559.33	0.85	90.0	Analog	0.50	3
1	Sc		404,850.23	0.71	94.8	Pulse	0.30	3
1	Ge		316,020.21	0.30	90.9	Pulse	0.30	3
1	In		3,231,115.98	0.81	89.9	Pulse	0.30	3
1	Tb		14,267,944.67	0.53	98.2	Analog	0.50	3
1	Lu		8,442,697.67	0.81	97.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		482,159.18	0.54	90.7	Pulse	0.30	3
1	Te		21,989.90	0.53	70.5	Pulse	0.50	3
1	Li		1,992.33	2.56	86.8	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:06
Sample Name	MP33666-PS1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	62.736	ug/l	0.86	681,867.81	2.100E+00	Pulse	0.50	3
As			1	19.817	ug/l	0.81	22,244.90	6.852E-02	Pulse	1.00	3
Mo			1	33.569	ug/l	1.50	256,484.38	5.169E-01	Pulse	0.50	3
Pb			1	18.784	ug/l	1.71	810,125.48	8.326E-02	Pulse	1.00	3
Be			1	20.137	ug/l	1.19	1,130.53	2.764E-03	Pulse	2.00	3
Ag			1	4.462	ug/l	0.92	124,650.09	2.512E-01	Pulse	0.50	3
Ba			1	64.347	ug/l	1.50	173,076.05	5.253E-02	Pulse	0.50	3
Tl			1	18.286	ug/l	0.72	1,161,890.58	1.194E-01	Pulse	0.50	3
Sn			1	20.092	ug/l	1.90	128,749.29	3.908E-02	Pulse	0.30	3
Sr			1	559.640	ug/l	0.84	3,012,591.00	9.143E-01	Pulse	0.50	3
[Pb]			1	18.135	ug/l	0.53	366,622.82	3.768E-02	Pulse	0.50	3
Ca			1	76477.954	ug/l	0.67	1,821,315.79	4.453E+00	Pulse	0.50	3
Ti			1	19.042	ug/l	4.50	3,795.05	9.280E-03	Pulse	0.50	3
Na			1	50722.518	ug/l	1.03	62,711,301.33	1.533E+02	Analog	1.00	3
Mg			1	1949.595	ug/l	0.35	1,032,782.46	2.525E+00	Pulse	1.00	3
K			1	13924.541	ug/l	0.65	6,047,252.83	1.479E+01	Analog	1.00	3
V			1	29.972	ug/l	1.07	243,181.96	5.946E-01	Pulse	0.50	3
Mn			1	20.969	ug/l	1.97	100,338.36	3.091E-01	Pulse	0.50	3
Fe			1	1958.827	ug/l	1.33	16,741,497.00	5.157E+01	Analog	0.50	3
Co			1	21.073	ug/l	1.46	422,793.29	1.302E+00	Pulse	0.50	3
Ni			1	22.153	ug/l	0.82	121,123.71	3.731E-01	Pulse	0.50	3
Cu			1	25.297	ug/l	1.65	450,296.58	1.387E+00	Pulse	0.50	3
Zn			1	16.452	ug/l	1.31	37,747.44	7.607E-02	Pulse	1.00	3
Cd			1	18.402	ug/l	0.31	63,791.39	1.285E-01	Pulse	0.50	3
Al			1	3880.092	ug/l	0.71	587,277.11	1.436E+00	Pulse	1.00	3
Se			1	17.165	ug/l	0.76	1,300.94	3.948E-04	Pulse	3.00	3
Sb			1	20.515	ug/l	0.51	147,910.39	2.980E-01	Pulse	1.00	3
Se			1	19.901	ug/l	3.89	673.46	3.014E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,730,973.33	1.04	92.7	Analog	0.50	3
1	Sc		408,998.73	0.45	95.8	Pulse	0.30	3
1	Ge		324,655.59	0.92	93.4	Pulse	0.30	3
1	In		3,294,969.80	0.58	91.7	Pulse	0.30	3
1	Tb		14,631,605.00	0.63	100.7	Analog	0.50	3
1	Lu		8,584,725.67	1.21	99.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		496,280.34	1.20	93.4	Pulse	0.30	3
1	Te		22,347.66	1.15	71.6	Pulse	0.50	3
1	Li		2,141.24	6.00	93.3	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:09
Sample Name	FA53574-6F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.849	ug/l	2.21	9,938.56	3.064E-02	Pulse	0.50	3
As			1	0.273	ug/l	9.83	332.00	1.023E-03	Pulse	1.00	3
Mo			1	0.174	ug/l	8.86	1,346.05	2.729E-03	Pulse	0.50	3
Pb			1	-0.062	ug/l	-6.82	10,355.14	1.007E-03	Pulse	1.00	3
Be			1	0.028	ug/l	95.67	1.83	4.596E-06	Pulse	2.00	3
Ag			1	0.019	ug/l	0.83	668.68	1.356E-03	Pulse	0.50	3
Ba			1	4.416	ug/l	1.71	12,042.70	3.613E-03	Pulse	0.50	3
Tl			1	0.022	ug/l	10.87	1,544.08	1.501E-04	Pulse	0.50	3
Sn			1	0.421	ug/l	4.06	3,348.21	1.005E-03	Pulse	0.30	3
Sr			1	45.835	ug/l	0.11	250,676.34	7.521E-02	Pulse	0.50	3
[Pb]			1	-0.070	ug/l	-2.89	4,812.03	4.678E-04	Pulse	0.50	3
Ca			1	7844.363	ug/l	1.93	182,893.56	4.570E-01	Pulse	0.50	3
Ti			1	0.254	ug/l	2.11	52.00	1.299E-04	Pulse	0.50	3
Na			1	12766.222	ug/l	2.76	15,458,287.33	3.863E+01	Analog	1.00	3
Mg			1	3145.716	ug/l	2.21	1,630,368.21	4.074E+00	Pulse	1.00	3
K			1	2284.582	ug/l	2.27	981,899.54	2.454E+00	Pulse	1.00	3
V			1	2.735	ug/l	2.00	22,208.65	5.550E-02	Pulse	0.50	3
Mn			1	0.658	ug/l	3.37	3,255.62	1.004E-02	Pulse	0.50	3
Fe			1	8.419	ug/l	0.56	77,035.71	2.375E-01	Pulse	0.50	3
Co			1	0.080	ug/l	4.65	1,881.43	5.800E-03	Pulse	0.50	3
Ni			1	0.874	ug/l	1.15	4,983.99	1.536E-02	Pulse	0.50	3
Cu			1	-2.079	ug/l	-1.76	43,013.13	1.326E-01	Pulse	0.50	3
Zn			1	0.200	ug/l	61.77	8,326.14	1.688E-02	Pulse	1.00	3
Cd			1	0.010	ug/l	27.49	44.67	9.051E-05	Pulse	0.50	3
Al			1	9.736	ug/l	1.53	1,786.08	4.462E-03	Pulse	1.00	3
Se			1	0.173	ug/l	46.15	35.67	1.071E-05	Pulse	3.00	3
Sb			1	0.063	ug/l	24.09	1,222.71	2.480E-03	Pulse	1.00	3
Se			1	0.510	ug/l	40.69	43.33	1.932E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,286,389.33	0.18	98.0	Analog	0.50	3
1	Sc		400,287.12	2.05	93.8	Pulse	0.30	3
1	Ge		324,380.09	0.21	93.3	Pulse	0.30	3
1	In		3,333,009.94	0.76	92.7	Pulse	0.30	3
1	Tb		14,755,881.33	0.19	101.5	Analog	0.50	3
1	Lu		8,605,457.67	0.82	99.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		493,162.98	0.54	92.8	Pulse	0.30	3
1	Te		22,448.46	0.95	72.0	Pulse	0.50	3
1	Li		2,130.13	2.36	92.8	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:13
Sample Name	FA53574-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.175	ug/l	0.68	13,173.14	4.154E-02	Pulse	0.50	3
As			1	1.091	ug/l	5.02	1,219.71	3.847E-03	Pulse	1.00	3
Mo			1	0.170	ug/l	1.87	1,292.72	2.668E-03	Pulse	0.50	3
Pb			1	-0.107	ug/l	-3.09	8,163.63	8.101E-04	Pulse	1.00	3
Be			1	0.010	ug/l	111.39	0.83	2.102E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	8.28	460.01	9.494E-04	Pulse	0.50	3
Ba			1	11.081	ug/l	1.12	29,302.33	9.054E-03	Pulse	0.50	3
Tl			1	0.011	ug/l	20.36	770.69	7.645E-05	Pulse	0.50	3
Sn			1	0.500	ug/l	29.29	3,742.29	1.156E-03	Pulse	0.30	3
Sr			1	98.649	ug/l	0.89	522,585.74	1.615E-01	Pulse	0.50	3
[Pb]			1	-0.109	ug/l	-5.37	3,906.46	3.877E-04	Pulse	0.50	3
Ca			1	21541.357	ug/l	1.08	498,616.36	1.255E+00	Pulse	0.50	3
Ti			1	0.962	ug/l	9.58	188.67	4.750E-04	Pulse	0.50	3
Na			1	10677.102	ug/l	1.70	12,844,860.33	3.232E+01	Analog	1.00	3
Mg			1	12486.435	ug/l	1.22	6,427,013.17	1.617E+01	Analog	1.00	3
K			1	2709.140	ug/l	1.17	1,154,023.04	2.904E+00	Pulse	1.00	3
V			1	2.560	ug/l	2.14	20,681.65	5.204E-02	Pulse	0.50	3
Mn			1	351.453	ug/l	0.39	1,641,180.25	5.175E+00	Pulse	0.50	3
Fe			1	10565.433	ug/l	1.49	88,188,709.33	2.781E+02	Analog	0.50	3
Co			1	0.176	ug/l	2.79	3,716.37	1.172E-02	Pulse	0.50	3
Ni			1	0.672	ug/l	5.81	3,795.05	1.197E-02	Pulse	0.50	3
Cu			1	-2.785	ug/l	-0.91	31,796.14	1.003E-01	Pulse	0.50	3
Zn			1	0.144	ug/l	55.48	8,081.70	1.668E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	68.03	15.33	3.166E-05	Pulse	0.50	3
Al			1	30.061	ug/l	1.17	4,761.24	1.198E-02	Pulse	1.00	3
Se			1	0.101	ug/l	67.88	29.44	9.099E-06	Pulse	3.00	3
Sb			1	0.021	ug/l	36.73	907.36	1.873E-03	Pulse	1.00	3
Se			1	0.766	ug/l	30.82	50.78	2.305E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,077,551.33	1.02	96.1	Analog	0.50	3
1	Sc		397,484.51	1.09	93.1	Pulse	0.30	3
1	Ge		317,150.11	0.90	91.2	Pulse	0.30	3
1	In		3,236,580.15	0.22	90.0	Pulse	0.30	3
1	Tb		14,503,175.33	0.68	99.8	Analog	0.50	3
1	Lu		8,533,883.00	0.88	98.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		484,434.60	0.47	91.1	Pulse	0.30	3
1	Te		22,005.90	1.23	70.6	Pulse	0.50	3
1	Li		2,207.91	2.20	96.2	Pulse	0.30	3

Quantitation Report

File Name	030CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:17
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.674	ug/l	0.15	1,167,990.13	3.325E+00	Pulse	0.50	3
As			1	49.649	ug/l	1.64	120,475.30	3.430E-01	Pulse	1.00	3
Mo			1	49.641	ug/l	0.69	812,909.71	1.529E+00	Pulse	0.50	3
Pb			1	47.110	ug/l	0.59	4,279,502.83	4.125E-01	Pulse	1.00	3
Be			1	52.579	ug/l	0.60	6,233.12	1.443E-02	Pulse	2.00	3
Ag			1	50.517	ug/l	1.25	3,021,594.75	5.682E+00	Pulse	0.50	3
Ba			1	48.494	ug/l	1.55	276,123.68	7.917E-02	Pulse	0.50	3
Tl			1	49.004	ug/l	0.21	6,639,178.83	6.400E-01	Analog	0.50	3
Sn			1	49.241	ug/l	0.48	665,484.23	1.908E-01	Pulse	0.30	3
Sr			1	48.492	ug/l	0.92	553,667.25	1.587E-01	Pulse	0.50	3
[Pb]			1	47.080	ug/l	0.91	2,002,814.71	1.931E-01	Pulse	0.50	3
Ca			1	4912.441	ug/l	1.25	247,181.09	5.723E-01	Pulse	0.50	3
Ti			1	49.706	ug/l	1.04	20,913.16	4.842E-02	Pulse	0.50	3
Na			1	5109.953	ug/l	0.84	13,361,718.33	3.094E+01	Analog	1.00	3
Mg			1	5054.113	ug/l	0.06	5,653,952.17	1.309E+01	Analog	1.00	3
K			1	4898.422	ug/l	0.66	4,497,141.50	1.041E+01	Pulse	1.00	3
V			1	49.761	ug/l	0.20	851,363.36	1.971E+00	Pulse	0.50	3
Mn			1	48.636	ug/l	1.56	503,176.75	1.433E+00	Pulse	0.50	3
Fe			1	5030.405	ug/l	0.85	93,019,808.00	2.648E+02	Analog	0.50	3
Co			1	49.672	ug/l	0.89	2,155,615.58	6.137E+00	Pulse	0.50	3
Ni			1	50.544	ug/l	1.46	597,179.62	1.700E+00	Pulse	0.50	3
Cu			1	49.645	ug/l	1.12	1,678,250.37	4.778E+00	Pulse	0.50	3
Zn			1	50.324	ug/l	0.76	203,499.59	3.827E-01	Pulse	1.00	3
Cd			1	50.271	ug/l	0.19	373,459.26	7.022E-01	Pulse	0.50	3
Al			1	4732.532	ug/l	0.94	1,512,280.00	3.502E+00	Pulse	1.00	3
Se			1	50.627	ug/l	1.34	8,006.90	2.296E-03	Pulse	3.00	3
Sb			1	48.205	ug/l	0.96	741,802.90	1.395E+00	Pulse	1.00	3
Se			1	48.140	ug/l	1.70	4,060.32	1.413E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,374,571.67	0.81	98.9	Analog	0.50	3
1	Sc		431,902.78	0.61	101.2	Pulse	0.30	3
1	Ge		351,291.56	1.12	101.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,487,883.89	0.51	97.0	Pulse	0.30	3
1	Tb		14,832,578.00	0.41	102.0	Analog	0.50	3
1	Lu		8,614,663.33	0.52	99.7	Analog	0.50	3
1	Ge		531,822.93	0.50	100.0	Pulse	0.30	3
1	Te		28,745.24	1.28	92.2	Pulse	0.50	3
1	Li		2,194.58	8.64	95.6	Pulse	0.30	3

Quantitation Report

File Name	031_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:20
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.843	ug/l	0.76	2,331,107.08	6.614E+00	Pulse	0.50	3
As			1	98.633	ug/l	0.25	240,140.45	6.813E-01	Pulse	1.00	3
Mo			1	98.878	ug/l	1.02	1,622,074.46	3.045E+00	Pulse	0.50	3
Pb			1	97.499	ug/l	0.39	8,675,243.67	8.524E-01	Analog	1.00	3
Be			1	102.336	ug/l	0.94	12,363.75	2.809E-02	Pulse	2.00	3
Ag			1	102.250	ug/l	0.56	6,127,042.67	1.150E+01	Analog	0.50	3
Ba			1	96.639	ug/l	0.55	550,092.58	1.578E-01	Pulse	0.50	3
Tl			1	98.050	ug/l	0.67	13,031,799.67	1.280E+00	Analog	0.50	3
Sn			1	98.724	ug/l	0.46	1,333,188.14	3.824E-01	Pulse	0.30	3
Sr			1	98.408	ug/l	0.77	1,121,994.67	3.218E-01	Pulse	0.50	3
[Pb]			1	93.761	ug/l	1.14	3,906,864.42	3.839E-01	Pulse	0.50	3
Ca			1	9771.929	ug/l	0.49	501,028.33	1.138E+00	Pulse	0.50	3
Ti			1	96.393	ug/l	0.14	41,330.76	9.389E-02	Pulse	0.50	3
Na			1	10134.797	ug/l	1.17	26,985,100.67	6.131E+01	Analog	1.00	3
Mg			1	10029.885	ug/l	0.84	11,434,972.00	2.598E+01	Analog	1.00	3
K			1	10057.312	ug/l	1.33	9,394,745.33	2.134E+01	Analog	1.00	3
V			1	98.782	ug/l	1.20	1,721,799.09	3.912E+00	Pulse	0.50	3
Mn			1	97.037	ug/l	0.15	1,007,266.04	2.858E+00	Pulse	0.50	3
Fe			1	9963.492	ug/l	1.06	184,861,152.00	5.245E+02	Analog	0.50	3
Co			1	98.014	ug/l	0.56	4,267,668.33	1.211E+01	Pulse	0.50	3
Ni			1	99.657	ug/l	0.36	1,181,281.00	3.351E+00	Pulse	0.50	3
Cu			1	99.609	ug/l	0.22	3,298,029.58	9.357E+00	Pulse	0.50	3
Zn			1	100.604	ug/l	0.58	398,956.28	7.488E-01	Pulse	1.00	3
Cd			1	98.933	ug/l	0.94	736,287.64	1.382E+00	Pulse	0.50	3
Al			1	9526.807	ug/l	0.84	3,102,279.42	7.048E+00	Pulse	1.00	3
Se			1	100.716	ug/l	0.12	15,901.04	4.560E-03	Pulse	3.00	3
Sb			1	96.015	ug/l	0.60	1,479,373.59	2.777E+00	Pulse	1.00	3
Se			1	97.966	ug/l	1.54	7,991.79	2.862E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,177,691.33	0.54	97.0	Analog	0.50	3
1	Sc		440,194.19	0.83	103.1	Pulse	0.30	3
1	Ge		352,469.06	0.23	101.4	Pulse	0.30	3
1	In		3,486,852.92	0.52	97.0	Pulse	0.30	3
1	Tb		14,896,800.67	0.38	102.5	Analog	0.50	3
1	Lu		8,619,853.67	0.63	99.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		532,780.64	0.45	100.2	Pulse	0.30	3
1	Te		27,921.98	1.04	89.5	Pulse	0.50	3
1	Li		2,291.25	5.17	99.8	Pulse	0.30	3

Quantitation Report

File Name	032_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:24
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.002	ug/l	79.45	812.69	2.345E-03	Pulse	0.50	3
As			1	0.005	ug/l	103.51	40.00	1.158E-04	Pulse	1.00	3
Mo			1	0.028	ug/l	9.37	488.68	9.190E-04	Pulse	0.50	3
Pb			1	-0.013	ug/l	-12.52	12,255.08	1.166E-03	Pulse	1.00	3
Be			1	-0.001	ug/l	-167.23	0.17	3.847E-07	Pulse	2.00	3
Ag			1	0.005	ug/l	9.29	451.34	8.486E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	-181.78	30.67	8.824E-06	Pulse	0.50	3
Tl			1	0.022	ug/l	10.41	3,131.63	2.989E-04	Pulse	0.50	3
Sn			1	0.026	ug/l	35.44	1,012.26	2.906E-04	Pulse	0.30	3
Sr			1	0.005	ug/l	65.51	1,291.38	3.719E-04	Pulse	0.50	3
[Pb]			1	-0.016	ug/l	-23.63	5,728.98	5.457E-04	Pulse	0.50	3
Ca			1	-0.171	ug/l	-321.39	107.33	2.580E-04	Pulse	0.50	3
Ti			1	0.007	ug/l	219.79	5.33	1.260E-05	Pulse	0.50	3
Na			1	-3.353	ug/l	-4.88	14,256.74	3.398E-02	Pulse	1.00	3
Mg			1	0.405	ug/l	19.87	596.68	1.417E-03	Pulse	1.00	3
K			1	1.558	ug/l	43.53	15,359.97	3.663E-02	Pulse	1.00	3
V			1	-0.010	ug/l	-18.25	411.34	9.795E-04	Pulse	0.50	3
Mn			1	-0.004	ug/l	-37.68	77.33	2.220E-04	Pulse	0.50	3
Fe			1	0.430	ug/l	18.61	13,400.05	3.854E-02	Pulse	0.50	3
Co			1	-0.002	ug/l	-40.55	210.00	6.032E-04	Pulse	0.50	3
Ni			1	-0.005	ug/l	-46.83	169.33	4.886E-04	Pulse	0.50	3
Cu			1	-0.398	ug/l	-8.31	66,356.29	1.914E-01	Pulse	0.50	3
Zn			1	-0.266	ug/l	-6.63	7,552.16	1.422E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	38.09	20.00	3.774E-05	Pulse	0.50	3
Al			1	-0.008	ug/l	-785.89	359.67	8.551E-04	Pulse	1.00	3
Se			1	0.004	ug/l	468.63	24.34	7.001E-06	Pulse	3.00	3
Sb			1	-0.026	ug/l	-16.23	429.01	8.105E-04	Pulse	1.00	3
Se			1	0.006	ug/l	810.72	35.89	1.209E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,511,398.00	6.35	100.2	Analog	0.50	3
1	Sc		420,001.50	5.82	98.4	Pulse	0.30	3

Quantitation Report

1	Ge		346,763.88	4.47	99.8	Pulse	0.30	3
1	In		3,472,274.51	6.06	96.6	Pulse	0.30	3
1	Tb		14,523,515.33	5.66	99.9	Analog	0.50	3
1	Lu		8,406,966.50	5.68	97.3	Analog	0.50	3
1	Ge		531,006.38	4.62	99.9	Pulse	0.30	3
1	Te		29,646.72	5.11	95.0	Pulse	0.50	3
1	Li		2,346.82	10.62	102.2	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:28
Sample Name	FA53574-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	5.893	ug/l	2.83	59,980.35	1.993E-01	Pulse	0.50	3
As			1	7.018	ug/l	1.56	7,319.41	2.432E-02	Pulse	1.00	3
Mo			1	2.952	ug/l	2.79	20,947.71	4.550E-02	Pulse	0.50	3
Pb			1	0.363	ug/l	6.58	27,140.79	2.863E-03	Pulse	1.00	3
Be			1	0.072	ug/l	74.13	4.00	1.068E-05	Pulse	2.00	3
Ag			1	0.051	ug/l	8.74	1,432.06	3.113E-03	Pulse	0.50	3
Ba			1	8.516	ug/l	3.50	21,279.18	6.960E-03	Pulse	0.50	3
Tl			1	0.033	ug/l	9.79	2,088.14	2.204E-04	Pulse	0.50	3
Sn			1	0.577	ug/l	9.12	3,993.81	1.305E-03	Pulse	0.30	3
Sr			1	133.817	ug/l	1.73	669,442.02	2.189E-01	Pulse	0.50	3
[Pb]			1	0.367	ug/l	1.29	12,916.92	1.362E-03	Pulse	0.50	3
Ca			1	25935.848	ug/l	2.26	566,233.46	1.510E+00	Pulse	0.50	3
Ti			1	45.353	ug/l	0.71	8,287.11	2.209E-02	Pulse	0.50	3
Na			1	19533.332	ug/l	3.33	22,144,322.00	5.908E+01	Analog	1.00	3
Mg			1	10610.984	ug/l	2.48	5,151,436.33	1.374E+01	Analog	1.00	3
K			1	3861.144	ug/l	2.89	1,545,878.83	4.124E+00	Pulse	1.00	3
V			1	31.250	ug/l	3.98	232,311.86	6.199E-01	Pulse	0.50	3
Mn			1	2292.599	ug/l	3.23	10,156,933.33	3.376E+01	Analog	0.50	3
Fe			1	15413.736	ug/l	3.28	122,071,978.67	4.057E+02	Analog	0.50	3
Co			1	0.437	ug/l	4.28	8,387.17	2.788E-02	Pulse	0.50	3
Ni			1	16.100	ug/l	6.47	81,594.80	2.713E-01	Pulse	0.50	3
Cu			1	7.176	ug/l	6.42	167,499.31	5.567E-01	Pulse	0.50	3
Zn			1	0.339	ug/l	67.64	8,004.00	1.739E-02	Pulse	1.00	3
Cd			1	0.021	ug/l	24.93	74.00	1.609E-04	Pulse	0.50	3
Al			1	112.722	ug/l	3.95	15,947.36	4.255E-02	Pulse	1.00	3
Se			1	0.534	ug/l	14.69	57.78	1.887E-05	Pulse	3.00	3
Sb			1	0.094	ug/l	19.37	1,347.72	2.927E-03	Pulse	1.00	3
Se			1	2.121	ug/l	14.19	88.33	4.276E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,486,302.00	2.38	90.4	Analog	0.50	3
1	Sc		375,057.99	3.02	87.9	Pulse	0.30	3
1	Ge		301,091.37	2.97	86.6	Pulse	0.30	3
1	In		3,058,924.11	1.95	85.1	Pulse	0.30	3
1	Tb		13,683,637.67	1.94	94.1	Analog	0.50	3
1	Lu		7,976,538.83	2.01	92.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		460,522.32	2.08	86.6	Pulse	0.30	3
1	Te		20,702.42	2.99	66.4	Pulse	0.50	3
1	Li		2,000.11	2.57	87.1	Pulse	0.30	3

Quantitation Report

File Name	034SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:31
Sample Name	FA53574-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.852	ug/l	2.76	9,397.62	3.074E-02	Pulse	0.50	3
As			1	2.251	ug/l	1.40	2,401.15	7.853E-03	Pulse	1.00	3
Mo			1	0.375	ug/l	3.15	2,720.21	5.816E-03	Pulse	0.50	3
Pb			1	-0.044	ug/l	-4.88	10,500.90	1.086E-03	Pulse	1.00	3
Be			1	0.023	ug/l	83.14	1.50	3.954E-06	Pulse	2.00	3
Ag			1	0.014	ug/l	8.62	506.01	1.082E-03	Pulse	0.50	3
Ba			1	5.678	ug/l	2.56	14,467.82	4.643E-03	Pulse	0.50	3
Tl			1	0.013	ug/l	19.50	917.37	9.487E-05	Pulse	0.50	3
Sn			1	0.498	ug/l	3.20	3,592.60	1.153E-03	Pulse	0.30	3
Sr			1	67.528	ug/l	0.35	344,756.77	1.106E-01	Pulse	0.50	3
[Pb]			1	-0.051	ug/l	-13.48	4,906.06	5.072E-04	Pulse	0.50	3
Ca			1	11629.038	ug/l	1.16	256,747.56	6.774E-01	Pulse	0.50	3
Ti			1	3.913	ug/l	3.46	724.68	1.912E-03	Pulse	0.50	3
Na			1	11190.249	ug/l	0.36	12,838,072.33	3.387E+01	Analog	1.00	3
Mg			1	5515.041	ug/l	0.77	2,707,243.00	7.142E+00	Pulse	1.00	3
K			1	2697.108	ug/l	0.49	1,095,711.08	2.891E+00	Pulse	1.00	3
V			1	3.048	ug/l	0.97	23,379.34	6.168E-02	Pulse	0.50	3
Mn			1	281.081	ug/l	1.23	1,265,526.00	4.139E+00	Pulse	0.50	3
Fe			1	9146.877	ug/l	0.42	73,617,210.67	2.408E+02	Analog	0.50	3
Co			1	0.157	ug/l	0.60	3,219.61	1.053E-02	Pulse	0.50	3
Ni			1	0.384	ug/l	4.40	2,182.13	7.137E-03	Pulse	0.50	3
Cu			1	-2.558	ug/l	-0.91	33,836.90	1.107E-01	Pulse	0.50	3
Zn			1	1.644	ug/l	1.83	10,355.79	2.214E-02	Pulse	1.00	3
Cd			1	0.004	ug/l	24.87	22.00	4.703E-05	Pulse	0.50	3
Al			1	54.826	ug/l	3.41	8,012.29	2.114E-02	Pulse	1.00	3
Se			1	0.202	ug/l	17.73	35.44	1.138E-05	Pulse	3.00	3
Sb			1	0.027	ug/l	52.23	917.02	1.960E-03	Pulse	1.00	3
Se			1	0.534	ug/l	22.11	41.89	1.967E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,672,874.67	0.25	92.2	Analog	0.50	3
1	Sc		379,041.21	0.46	88.8	Pulse	0.30	3
1	Ge		305,779.50	0.44	88.0	Pulse	0.30	3
1	In		3,116,114.11	0.54	86.7	Pulse	0.30	3
1	Tb		13,932,217.67	0.70	95.8	Analog	0.50	3
1	Lu		8,053,399.33	0.55	93.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		467,651.58	0.33	88.0	Pulse	0.30	3
1	Te		21,307.77	1.73	68.3	Pulse	0.50	3
1	Li		2,022.33	9.12	88.1	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:35
Sample Name	FA53574-4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	44.031	ug/l	0.43	447,844.14	1.475E+00	Pulse	0.50	3
As			1	1.043	ug/l	5.62	1,118.37	3.683E-03	Pulse	1.00	3
Mo			1	14.004	ug/l	0.88	100,808.97	2.156E-01	Pulse	0.50	3
Pb			1	-0.065	ug/l	-4.24	9,328.88	9.960E-04	Pulse	1.00	3
Be			1	-0.006	ug/l	0.00	0.00	0.000E+00	Pulse	2.00	3
Ag			1	0.012	ug/l	13.71	447.34	9.571E-04	Pulse	0.50	3
Ba			1	46.519	ug/l	1.00	118,009.28	3.798E-02	Pulse	0.50	3
Tl			1	0.010	ug/l	27.06	695.35	7.416E-05	Pulse	0.50	3
Sn			1	0.380	ug/l	2.80	2,869.14	9.234E-04	Pulse	0.30	3
Sr			1	550.760	ug/l	0.48	2,795,957.75	8.998E-01	Pulse	0.50	3
[Pb]			1	-0.066	ug/l	-13.06	4,456.60	4.758E-04	Pulse	0.50	3
Ca			1	76325.629	ug/l	0.65	1,714,477.29	4.444E+00	Pulse	0.50	3
Ti			1	0.686	ug/l	7.27	131.33	3.404E-04	Pulse	0.50	3
Na			1	49528.033	ug/l	0.70	57,757,261.33	1.497E+02	Analog	1.00	3
Mg			1	254.201	ug/l	0.38	127,135.28	3.296E-01	Pulse	1.00	3
K			1	12073.515	ug/l	1.99	4,946,968.00	1.282E+01	Mix	1.00	3
V			1	10.415	ug/l	1.07	80,046.54	2.075E-01	Pulse	0.50	3
Mn			1	4.512	ug/l	1.01	20,274.58	6.677E-02	Pulse	0.50	3
Fe			1	32.684	ug/l	0.51	266,045.08	8.761E-01	Pulse	0.50	3
Co			1	1.287	ug/l	1.30	24,392.00	8.033E-02	Pulse	0.50	3
Ni			1	2.360	ug/l	0.94	12,254.57	4.036E-02	Pulse	0.50	3
Cu			1	5.683	ug/l	3.88	148,272.50	4.883E-01	Pulse	0.50	3
Zn			1	1.430	ug/l	3.31	9,987.59	2.136E-02	Pulse	1.00	3
Cd			1	0.006	ug/l	29.66	29.33	6.269E-05	Pulse	0.50	3
Al			1	2261.623	ug/l	0.63	323,015.00	8.373E-01	Pulse	1.00	3
Se			1	0.539	ug/l	18.95	59.00	1.899E-05	Pulse	3.00	3
Sb			1	3.278	ug/l	1.63	22,874.21	4.893E-02	Pulse	1.00	3
Se			1	0.848	ug/l	26.78	50.22	2.424E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,366,400.33	0.75	89.3	Analog	0.50	3
1	Sc		385,771.23	0.65	90.4	Pulse	0.30	3
1	Ge		303,661.03	0.15	87.4	Pulse	0.30	3
1	In		3,107,235.29	0.30	86.4	Pulse	0.30	3
1	Tb		13,902,151.67	0.30	95.6	Analog	0.50	3
1	Lu		8,087,090.33	0.44	93.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		467,478.58	0.70	87.9	Pulse	0.30	3
1	Te		20,717.77	0.82	66.4	Pulse	0.50	3
1	Li		2,061.23	6.09	89.8	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:38
Sample Name	FA53574-5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.839	ug/l	1.71	19,144.09	6.372E-02	Pulse	0.50	3
As			1	19.744	ug/l	0.55	20,509.97	6.826E-02	Pulse	1.00	3
Mo			1	0.890	ug/l	2.08	6,328.43	1.374E-02	Pulse	0.50	3
Pb			1	-0.097	ug/l	-1.28	8,089.92	8.542E-04	Pulse	1.00	3
Be			1	0.020	ug/l	100.44	1.33	3.545E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	11.77	285.33	6.196E-04	Pulse	0.50	3
Ba			1	12.197	ug/l	0.81	30,537.05	9.965E-03	Pulse	0.50	3
Tl			1	0.006	ug/l	16.27	444.01	4.688E-05	Pulse	0.50	3
Sn			1	0.401	ug/l	6.79	2,958.04	9.652E-04	Pulse	0.30	3
Sr			1	188.633	ug/l	1.15	945,168.77	3.084E-01	Pulse	0.50	3
[Pb]			1	-0.107	ug/l	-3.41	3,724.42	3.933E-04	Pulse	0.50	3
Ca			1	34215.614	ug/l	0.82	751,297.65	1.992E+00	Pulse	0.50	3
Ti			1	2.591	ug/l	10.38	478.01	1.268E-03	Pulse	0.50	3
Na			1	16058.468	ug/l	1.29	18,317,860.67	4.858E+01	Analog	1.00	3
Mg			1	12338.759	ug/l	1.26	6,025,119.33	1.598E+01	Analog	1.00	3
K			1	1561.849	ug/l	0.75	636,502.17	1.688E+00	Pulse	1.00	3
V			1	7.050	ug/l	1.34	53,124.68	1.409E-01	Pulse	0.50	3
Mn			1	1666.198	ug/l	1.11	7,370,770.33	2.453E+01	Analog	0.50	3
Fe			1	52252.578	ug/l	1.04	413,202,496.00	1.375E+03	Analog	0.50	3
Co			1	6.600	ug/l	0.21	122,731.38	4.085E-01	Pulse	0.50	3
Ni			1	2.453	ug/l	3.27	12,592.79	4.192E-02	Pulse	0.50	3
Cu			1	-2.427	ug/l	-1.79	35,052.39	1.167E-01	Pulse	0.50	3
Zn			1	-0.773	ug/l	-8.16	6,143.99	1.334E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	184.36	12.00	2.607E-05	Pulse	0.50	3
Al			1	32.627	ug/l	3.01	4,874.60	1.293E-02	Pulse	1.00	3
Se			1	0.552	ug/l	14.01	59.11	1.929E-05	Pulse	3.00	3
Sb			1	0.059	ug/l	1.85	1,112.37	2.416E-03	Pulse	1.00	3
Se			1	1.886	ug/l	8.26	81.56	3.934E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,470,384.00	0.87	90.3	Analog	0.50	3
1	Sc		377,084.77	0.93	88.3	Pulse	0.30	3
1	Ge		300,460.18	0.40	86.4	Pulse	0.30	3
1	In		3,064,572.93	0.08	85.3	Pulse	0.30	3
1	Tb		13,712,377.67	0.80	94.3	Analog	0.50	3
1	Lu		7,975,728.17	0.81	92.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		460,463.42	0.61	86.6	Pulse	0.30	3
1	Te		20,741.77	1.46	66.5	Pulse	0.50	3
1	Li		2,013.45	4.07	87.7	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:42
Sample Name	FA53574-6
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.036	ug/l	3.05	11,340.65	3.686E-02	Pulse	0.50	3
As			1	0.277	ug/l	3.49	319.00	1.037E-03	Pulse	1.00	3
Mo			1	0.142	ug/l	6.97	1,052.70	2.234E-03	Pulse	0.50	3
Pb			1	-0.081	ug/l	-3.98	8,969.02	9.237E-04	Pulse	1.00	3
Be			1	0.026	ug/l	42.44	1.67	4.342E-06	Pulse	2.00	3
Ag			1	0.008	ug/l	8.29	334.67	7.103E-04	Pulse	0.50	3
Ba			1	4.415	ug/l	2.86	11,295.55	3.613E-03	Pulse	0.50	3
Tl			1	0.010	ug/l	7.48	728.69	7.506E-05	Pulse	0.50	3
Sn			1	0.443	ug/l	2.85	3,271.43	1.046E-03	Pulse	0.30	3
Sr			1	45.698	ug/l	0.62	234,442.72	7.499E-02	Pulse	0.50	3
[Pb]			1	-0.089	ug/l	-3.71	4,171.19	4.296E-04	Pulse	0.50	3
Ca			1	7563.681	ug/l	1.03	169,223.12	4.407E-01	Pulse	0.50	3
Ti			1	0.479	ug/l	8.13	92.00	2.396E-04	Pulse	0.50	3
Na			1	12172.999	ug/l	0.74	14,146,966.00	3.684E+01	Analog	1.00	3
Mg			1	3030.381	ug/l	0.59	1,507,183.29	3.925E+00	Pulse	1.00	3
K			1	2126.685	ug/l	0.63	878,030.79	2.286E+00	Pulse	1.00	3
V			1	2.684	ug/l	1.35	20,922.56	5.448E-02	Pulse	0.50	3
Mn			1	1.240	ug/l	2.47	5,722.86	1.860E-02	Pulse	0.50	3
Fe			1	30.690	ug/l	1.72	253,434.56	8.236E-01	Pulse	0.50	3
Co			1	0.077	ug/l	4.57	1,724.75	5.607E-03	Pulse	0.50	3
Ni			1	0.879	ug/l	2.94	4,751.94	1.545E-02	Pulse	0.50	3
Cu			1	-2.197	ug/l	-2.34	39,133.54	1.272E-01	Pulse	0.50	3
Zn			1	0.922	ug/l	6.65	9,196.54	1.952E-02	Pulse	1.00	3
Cd			1	0.009	ug/l	38.73	37.33	7.918E-05	Pulse	0.50	3
Al			1	50.942	ug/l	1.58	7,566.44	1.970E-02	Pulse	1.00	3
Se			1	0.155	ug/l	46.72	32.22	1.031E-05	Pulse	3.00	3
Sb			1	0.012	ug/l	97.05	816.69	1.734E-03	Pulse	1.00	3
Se			1	0.583	ug/l	35.89	44.00	2.038E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,710,453.33	0.62	92.6	Analog	0.50	3
1	Sc		384,021.49	0.41	90.0	Pulse	0.30	3
1	Ge		307,682.10	0.76	88.5	Pulse	0.30	3
1	In		3,126,501.41	0.34	87.0	Pulse	0.30	3
1	Tb		13,842,264.67	0.47	95.2	Analog	0.50	3
1	Lu		8,058,508.83	0.16	93.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		471,202.55	0.33	88.6	Pulse	0.30	3
1	Te		21,612.11	1.26	69.3	Pulse	0.50	3
1	Li		2,127.90	5.56	92.7	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:46
Sample Name	FA53574-7
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.566	ug/l	3.71	6,345.72	2.115E-02	Pulse	0.50	3
As			1	1.167	ug/l	4.50	1,233.38	4.111E-03	Pulse	1.00	3
Mo			1	0.795	ug/l	1.86	5,677.54	1.228E-02	Pulse	0.50	3
Pb			1	-0.062	ug/l	-2.61	9,761.45	1.007E-03	Pulse	1.00	3
Be			1	0.004	ug/l	243.26	0.50	1.333E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	17.73	381.34	8.247E-04	Pulse	0.50	3
Ba			1	6.736	ug/l	1.29	16,969.95	5.507E-03	Pulse	0.50	3
Tl			1	0.012	ug/l	15.65	833.36	8.598E-05	Pulse	0.50	3
Sn			1	0.377	ug/l	2.60	2,833.57	9.195E-04	Pulse	0.30	3
Sr			1	83.680	ug/l	0.38	422,215.87	1.370E-01	Pulse	0.50	3
[Pb]			1	-0.071	ug/l	-11.43	4,506.61	4.652E-04	Pulse	0.50	3
Ca			1	14396.548	ug/l	0.41	315,170.51	8.385E-01	Pulse	0.50	3
Ti			1	0.443	ug/l	28.30	83.33	2.218E-04	Pulse	0.50	3
Na			1	8941.520	ug/l	0.37	10,176,437.00	2.707E+01	Analog	1.00	3
Mg			1	6707.729	ug/l	0.69	3,265,152.25	8.687E+00	Pulse	1.00	3
K			1	2254.832	ug/l	0.30	910,437.15	2.422E+00	Pulse	1.00	3
V			1	14.782	ug/l	1.31	110,482.41	2.939E-01	Pulse	0.50	3
Mn			1	19.102	ug/l	0.99	84,473.15	2.816E-01	Pulse	0.50	3
Fe			1	24.270	ug/l	2.12	196,378.46	6.547E-01	Pulse	0.50	3
Co			1	1.209	ug/l	0.53	22,651.90	7.551E-02	Pulse	0.50	3
Ni			1	3.339	ug/l	0.98	17,040.19	5.680E-02	Pulse	0.50	3
Cu			1	-0.722	ug/l	-3.08	58,438.61	1.948E-01	Pulse	0.50	3
Zn			1	0.317	ug/l	22.31	8,001.00	1.731E-02	Pulse	1.00	3
Cd			1	0.019	ug/l	8.70	68.67	1.486E-04	Pulse	0.50	3
Al			1	90.034	ug/l	0.21	12,839.80	3.416E-02	Pulse	1.00	3
Se			1	1.967	ug/l	12.91	158.00	5.128E-05	Pulse	3.00	3
Sb			1	0.065	ug/l	8.65	1,154.71	2.499E-03	Pulse	1.00	3
Se			1	2.801	ug/l	15.77	111.00	5.265E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,689,266.67	0.51	92.4	Analog	0.50	3
1	Sc		375,872.17	0.48	88.0	Pulse	0.30	3
1	Ge		299,994.08	0.57	86.3	Pulse	0.30	3
1	In		3,081,525.64	0.40	85.7	Pulse	0.30	3
1	Tb		13,789,423.00	0.49	94.9	Analog	0.50	3
1	Lu		8,042,058.50	0.33	93.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		462,214.55	0.93	86.9	Pulse	0.30	3
1	Te		21,090.84	1.39	67.6	Pulse	0.50	3
1	Li		2,031.23	1.90	88.5	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:49
Sample Name	FA53574-8
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.897	ug/l	2.38	9,591.06	3.223E-02	Pulse	0.50	3
As			1	0.751	ug/l	4.52	795.69	2.676E-03	Pulse	1.00	3
Mo			1	1.062	ug/l	2.19	7,482.19	1.639E-02	Pulse	0.50	3
Pb			1	-0.069	ug/l	-3.30	9,058.40	9.790E-04	Pulse	1.00	3
Be			1	0.013	ug/l	0.57	1.00	2.616E-06	Pulse	2.00	3
Ag			1	0.024	ug/l	12.20	733.35	1.608E-03	Pulse	0.50	3
Ba			1	13.661	ug/l	1.65	33,340.03	1.116E-02	Pulse	0.50	3
Tl			1	0.032	ug/l	8.00	1,976.12	2.135E-04	Pulse	0.50	3
Sn			1	0.562	ug/l	2.56	3,812.66	1.276E-03	Pulse	0.30	3
Sr			1	254.514	ug/l	0.35	1,242,862.33	4.160E-01	Pulse	0.50	3
[Pb]			1	-0.076	ug/l	-10.02	4,211.87	4.552E-04	Pulse	0.50	3
Ca			1	48801.123	ug/l	0.75	1,086,323.67	2.842E+00	Pulse	0.50	3
Ti			1	0.797	ug/l	19.57	150.67	3.943E-04	Pulse	0.50	3
Na			1	16869.776	ug/l	0.63	19,508,591.33	5.103E+01	Analog	1.00	3
Mg			1	25093.868	ug/l	0.49	12,423,275.67	3.250E+01	Analog	1.00	3
K			1	4722.674	ug/l	0.49	1,925,445.37	5.037E+00	Pulse	1.00	3
V			1	14.834	ug/l	0.90	112,759.91	2.950E-01	Pulse	0.50	3
Mn			1	3125.755	ug/l	0.94	13,690,659.33	4.602E+01	Analog	0.50	3
Fe			1	888.873	ug/l	1.58	6,963,823.17	2.341E+01	Analog	0.50	3
Co			1	21.723	ug/l	1.64	399,344.04	1.343E+00	Pulse	0.50	3
Ni			1	147.284	ug/l	1.83	736,730.90	2.477E+00	Pulse	0.50	3
Cu			1	76.910	ug/l	1.19	1,116,196.33	3.752E+00	Pulse	0.50	3
Zn			1	2.433	ug/l	3.45	11,416.72	2.502E-02	Pulse	1.00	3
Cd			1	0.341	ug/l	1.04	1,093.37	2.396E-03	Pulse	0.50	3
Al			1	62.203	ug/l	1.27	9,123.76	2.387E-02	Pulse	1.00	3
Se			1	0.667	ug/l	15.11	65.33	2.188E-05	Pulse	3.00	3
Sb			1	0.030	ug/l	11.74	913.69	2.002E-03	Pulse	1.00	3
Se			1	5.241	ug/l	5.69	178.78	8.815E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,252,719.00	0.34	88.2	Analog	0.50	3
1	Sc		382,281.88	0.40	89.5	Pulse	0.30	3
1	Ge		297,508.45	1.44	85.6	Pulse	0.30	3
1	In		2,987,593.21	0.63	83.1	Pulse	0.30	3
1	Tb		13,583,328.00	0.38	93.4	Analog	0.50	3
1	Lu		8,023,308.50	0.82	92.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		456,375.92	1.09	85.8	Pulse	0.30	3
1	Te		20,281.25	0.92	65.0	Pulse	0.50	3
1	Li		1,951.21	2.29	85.0	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:53
Sample Name	FA53574-9
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.844	ug/l	3.44	9,040.80	3.045E-02	Pulse	0.50	3
As			1	0.270	ug/l	6.38	300.67	1.012E-03	Pulse	1.00	3
Mo			1	0.380	ug/l	3.98	2,682.87	5.892E-03	Pulse	0.50	3
Pb			1	-0.027	ug/l	-7.31	10,990.21	1.161E-03	Pulse	1.00	3
Be			1	0.011	ug/l	140.60	0.83	2.248E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	4.66	386.68	8.493E-04	Pulse	0.50	3
Ba			1	7.213	ug/l	0.82	17,837.48	5.897E-03	Pulse	0.50	3
Tl			1	0.017	ug/l	6.00	1,110.04	1.172E-04	Pulse	0.50	3
Sn			1	0.411	ug/l	3.33	2,978.04	9.844E-04	Pulse	0.30	3
Sr			1	114.851	ug/l	0.44	568,475.48	1.879E-01	Pulse	0.50	3
[Pb]			1	-0.031	ug/l	-7.94	5,188.14	5.480E-04	Pulse	0.50	3
Ca			1	27968.234	ug/l	0.71	602,754.96	1.629E+00	Pulse	0.50	3
Ti			1	5.152	ug/l	3.67	930.69	2.515E-03	Pulse	0.50	3
Na			1	10212.963	ug/l	0.94	11,441,503.00	3.092E+01	Analog	1.00	3
Mg			1	10468.004	ug/l	0.24	5,017,088.83	1.356E+01	Analog	1.00	3
K			1	3408.407	ug/l	0.43	1,348,718.92	3.644E+00	Pulse	1.00	3
V			1	13.693	ug/l	1.55	100,800.37	2.724E-01	Pulse	0.50	3
Mn			1	2.968	ug/l	2.24	13,080.43	4.405E-02	Pulse	0.50	3
Fe			1	91.525	ug/l	1.08	720,065.71	2.425E+00	Pulse	0.50	3
Co			1	1.289	ug/l	1.15	23,900.74	8.048E-02	Pulse	0.50	3
Ni			1	8.980	ug/l	1.18	45,033.52	1.516E-01	Pulse	0.50	3
Cu			1	-0.630	ug/l	-14.59	59,089.29	1.990E-01	Pulse	0.50	3
Zn			1	5.861	ug/l	4.17	17,072.88	3.750E-02	Pulse	1.00	3
Cd			1	0.023	ug/l	25.70	81.33	1.787E-04	Pulse	0.50	3
Al			1	106.810	ug/l	1.84	14,937.92	4.037E-02	Pulse	1.00	3
Se			1	0.378	ug/l	16.52	46.44	1.536E-05	Pulse	3.00	3
Sb			1	0.027	ug/l	8.76	889.35	1.953E-03	Pulse	1.00	3
Se			1	1.094	ug/l	13.39	57.22	2.781E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,467,961.67	0.38	90.2	Analog	0.50	3
1	Sc		370,082.36	0.30	86.7	Pulse	0.30	3
1	Ge		296,988.81	1.32	85.4	Pulse	0.30	3
1	In		3,025,031.90	0.38	84.2	Pulse	0.30	3
1	Tb		13,652,965.67	0.41	93.9	Analog	0.50	3
1	Lu		7,848,323.33	0.57	90.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		455,331.89	0.62	85.7	Pulse	0.30	3
1	Te		20,577.59	0.97	66.0	Pulse	0.50	3
1	Li		2,020.11	5.16	88.0	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 10:57
Sample Name	FA53625-1F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.915	ug/l	1.96	9,803.16	3.282E-02	Pulse	0.50	3
As			1	0.118	ug/l	8.00	145.33	4.866E-04	Pulse	1.00	3
Mo			1	0.164	ug/l	0.45	1,180.04	2.576E-03	Pulse	0.50	3
Pb			1	-0.060	ug/l	-4.89	9,397.92	1.015E-03	Pulse	1.00	3
Be			1	0.004	ug/l	422.48	0.50	1.327E-06	Pulse	2.00	3
Ag			1	0.005	ug/l	32.81	252.67	5.511E-04	Pulse	0.50	3
Ba			1	7.078	ug/l	3.30	17,550.52	5.786E-03	Pulse	0.50	3
Tl			1	0.005	ug/l	9.91	388.68	4.199E-05	Pulse	0.50	3
Sn			1	0.318	ug/l	6.23	2,441.29	8.049E-04	Pulse	0.30	3
Sr			1	63.194	ug/l	1.18	314,152.39	1.036E-01	Pulse	0.50	3
[Pb]			1	-0.073	ug/l	-9.30	4,274.55	4.618E-04	Pulse	0.50	3
Ca			1	16360.560	ug/l	1.38	358,075.45	9.529E-01	Pulse	0.50	3
Ti			1	1.481	ug/l	5.94	273.33	7.275E-04	Pulse	0.50	3
Na			1	47826.642	ug/l	0.71	54,333,361.33	1.446E+02	Analog	1.00	3
Mg			1	5393.874	ug/l	1.09	2,625,113.50	6.986E+00	Pulse	1.00	3
K			1	1003.180	ug/l	0.15	411,940.52	1.096E+00	Pulse	1.00	3
V			1	0.303	ug/l	3.99	2,760.21	7.344E-03	Pulse	0.50	3
Mn			1	1.189	ug/l	2.40	5,328.75	1.784E-02	Pulse	0.50	3
Fe			1	111.337	ug/l	0.51	879,929.50	2.946E+00	Pulse	0.50	3
Co			1	0.080	ug/l	5.97	1,733.42	5.803E-03	Pulse	0.50	3
Ni			1	0.252	ug/l	3.77	1,467.40	4.912E-03	Pulse	0.50	3
Cu			1	-1.945	ug/l	-2.73	41,436.98	1.387E-01	Pulse	0.50	3
Zn			1	1.053	ug/l	3.96	9,159.85	1.999E-02	Pulse	1.00	3
Cd			1	0.073	ug/l	1.14	242.67	5.297E-04	Pulse	0.50	3
Al			1	42.986	ug/l	0.67	6,298.34	1.676E-02	Pulse	1.00	3
Se			1	0.467	ug/l	17.51	52.67	1.736E-05	Pulse	3.00	3
Sb			1	0.065	ug/l	12.97	1,147.71	2.504E-03	Pulse	1.00	3
Se			1	1.229	ug/l	24.84	61.44	2.978E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,255,463.67	0.69	88.2	Analog	0.50	3
1	Sc		375,809.87	0.75	88.0	Pulse	0.30	3
1	Ge		298,672.14	0.70	85.9	Pulse	0.30	3
1	In		3,033,725.92	1.00	84.4	Pulse	0.30	3
1	Tb		13,586,969.00	0.91	93.5	Analog	0.50	3
1	Lu		7,907,392.83	0.36	91.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		458,169.01	0.87	86.2	Pulse	0.30	3
1	Te		20,651.01	1.30	66.2	Pulse	0.50	3
1	Li		1,934.55	1.84	84.3	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:00
Sample Name	FA53625-2F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.385	ug/l	1.17	14,460.73	4.854E-02	Pulse	0.50	3
As			1	0.151	ug/l	11.24	179.33	6.025E-04	Pulse	1.00	3
Mo			1	0.223	ug/l	2.95	1,583.41	3.473E-03	Pulse	0.50	3
Pb			1	-0.013	ug/l	-26.99	11,558.91	1.223E-03	Pulse	1.00	3
Be			1	0.033	ug/l	127.87	2.00	5.366E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	26.89	390.01	8.554E-04	Pulse	0.50	3
Ba			1	3.984	ug/l	0.94	9,882.73	3.261E-03	Pulse	0.50	3
Tl			1	0.005	ug/l	5.35	402.01	4.253E-05	Pulse	0.50	3
Sn			1	0.337	ug/l	4.01	2,551.31	8.418E-04	Pulse	0.30	3
Sr			1	35.669	ug/l	0.41	177,613.42	5.861E-02	Pulse	0.50	3
[Pb]			1	-0.017	ug/l	-23.20	5,448.22	5.763E-04	Pulse	0.50	3
Ca			1	8848.192	ug/l	0.71	192,227.24	5.155E-01	Pulse	0.50	3
Ti			1	3.432	ug/l	8.52	625.35	1.678E-03	Pulse	0.50	3
Na			1	27691.586	ug/l	1.06	31,226,471.33	8.374E+01	Analog	1.00	3
Mg			1	2527.230	ug/l	0.42	1,220,660.83	3.273E+00	Pulse	1.00	3
K			1	804.722	ug/l	0.55	330,371.18	8.859E-01	Pulse	1.00	3
V			1	0.458	ug/l	6.27	3,886.40	1.042E-02	Pulse	0.50	3
Mn			1	1.783	ug/l	4.40	7,919.63	2.659E-02	Pulse	0.50	3
Fe			1	122.660	ug/l	2.13	966,397.50	3.244E+00	Pulse	0.50	3
Co			1	0.066	ug/l	8.24	1,461.39	4.907E-03	Pulse	0.50	3
Ni			1	0.284	ug/l	4.44	1,625.41	5.454E-03	Pulse	0.50	3
Cu			1	-2.275	ug/l	-0.66	36,835.67	1.236E-01	Pulse	0.50	3
Zn			1	4.074	ug/l	4.02	14,128.52	3.099E-02	Pulse	1.00	3
Cd			1	0.023	ug/l	10.38	80.67	1.769E-04	Pulse	0.50	3
Al			1	77.315	ug/l	0.44	10,985.02	2.946E-02	Pulse	1.00	3
Se			1	0.366	ug/l	18.14	45.67	1.507E-05	Pulse	3.00	3
Sb			1	-0.006	ug/l	-27.79	670.68	1.471E-03	Pulse	1.00	3
Se			1	1.461	ug/l	5.68	68.89	3.316E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,452,987.00	0.19	90.1	Analog	0.50	3
1	Sc		372,934.01	0.82	87.4	Pulse	0.30	3
1	Ge		297,947.75	1.63	85.7	Pulse	0.30	3
1	In		3,030,539.18	0.76	84.3	Pulse	0.30	3
1	Tb		13,674,619.67	0.55	94.1	Analog	0.50	3
1	Lu		7,955,928.67	0.35	92.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		455,839.97	0.81	85.7	Pulse	0.30	3
1	Te		20,773.80	0.29	66.6	Pulse	0.50	3
1	Li		1,986.78	6.57	86.5	Pulse	0.30	3

Quantitation Report

File Name	043CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:04
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.387	ug/l	1.01	1,073,419.29	3.306E+00	Pulse	0.50	3
As			1	49.632	ug/l	0.97	111,336.18	3.429E-01	Pulse	1.00	3
Mo			1	49.184	ug/l	1.60	749,709.29	1.515E+00	Pulse	0.50	3
Pb			1	45.863	ug/l	1.21	3,905,831.75	4.016E-01	Pulse	1.00	3
Be			1	54.641	ug/l	1.08	5,958.54	1.500E-02	Pulse	2.00	3
Ag			1	49.425	ug/l	1.23	2,751,896.50	5.559E+00	Pulse	0.50	3
Ba			1	48.838	ug/l	0.68	254,894.05	7.973E-02	Pulse	0.50	3
Tl			1	46.416	ug/l	0.88	5,894,909.67	6.062E-01	Pulse	0.50	3
Sn			1	49.376	ug/l	0.80	611,647.09	1.913E-01	Pulse	0.30	3
Sr			1	48.478	ug/l	0.78	507,336.80	1.587E-01	Pulse	0.50	3
[Pb]			1	46.392	ug/l	0.37	1,850,221.75	1.902E-01	Pulse	0.50	3
Ca			1	4896.407	ug/l	1.52	226,653.99	5.705E-01	Pulse	0.50	3
Ti			1	48.765	ug/l	0.98	18,873.10	4.750E-02	Pulse	0.50	3
Na			1	5165.744	ug/l	0.92	12,425,463.00	3.127E+01	Analog	1.00	3
Mg			1	5083.160	ug/l	1.04	5,230,823.33	1.317E+01	Analog	1.00	3
K			1	4882.513	ug/l	0.38	4,123,728.67	1.038E+01	Pulse	1.00	3
V			1	50.009	ug/l	0.73	787,059.27	1.981E+00	Pulse	0.50	3
Mn			1	48.217	ug/l	0.65	461,167.99	1.420E+00	Pulse	0.50	3
Fe			1	4983.802	ug/l	0.90	85,193,264.00	2.624E+02	Analog	0.50	3
Co			1	49.195	ug/l	1.24	1,973,485.83	6.078E+00	Pulse	0.50	3
Ni			1	50.169	ug/l	1.00	547,972.94	1.688E+00	Pulse	0.50	3
Cu			1	49.372	ug/l	0.22	1,543,361.83	4.753E+00	Pulse	0.50	3
Zn			1	50.119	ug/l	1.35	188,687.74	3.812E-01	Pulse	1.00	3
Cd			1	49.432	ug/l	0.66	341,840.28	6.905E-01	Pulse	0.50	3
Al			1	4725.818	ug/l	0.90	1,389,183.92	3.497E+00	Pulse	1.00	3
Se			1	50.471	ug/l	1.44	7,316.40	2.289E-03	Pulse	3.00	3
Sb			1	47.751	ug/l	1.02	684,015.13	1.382E+00	Pulse	1.00	3
Se			1	47.333	ug/l	1.32	3,724.14	1.389E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,725,242.33	0.40	92.7	Analog	0.50	3
1	Sc		397,317.53	0.77	93.1	Pulse	0.30	3
1	Ge		324,733.14	0.67	93.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,196,927.16	0.65	88.9	Pulse	0.30	3
1	Tb		13,907,129.67	0.57	95.7	Analog	0.50	3
1	Lu		7,939,552.33	0.67	91.9	Analog	0.50	3
1	Ge		495,066.40	0.91	93.1	Pulse	0.30	3
1	Te		26,812.29	1.72	86.0	Pulse	0.50	3
1	Li		2,250.14	1.71	98.0	Pulse	0.30	3

Quantitation Report

File Name	044_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:07
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.984	ug/l	0.12	2,127,944.50	6.623E+00	Pulse	0.50	3
As			1	99.889	ug/l	0.70	221,680.76	6.900E-01	Pulse	1.00	3
Mo			1	98.811	ug/l	0.76	1,490,744.75	3.043E+00	Pulse	0.50	3
Pb			1	97.115	ug/l	0.84	8,057,278.83	8.490E-01	Analog	1.00	3
Be			1	104.294	ug/l	0.55	11,512.59	2.863E-02	Pulse	2.00	3
Ag			1	96.975	ug/l	0.62	5,343,881.83	1.091E+01	Pulse	0.50	3
Ba			1	98.110	ug/l	1.23	507,438.83	1.602E-01	Pulse	0.50	3
Tl			1	97.052	ug/l	0.79	12,027,923.67	1.267E+00	Analog	0.50	3
Sn			1	99.753	ug/l	0.63	1,223,995.02	3.863E-01	Pulse	0.30	3
Sr			1	98.979	ug/l	0.50	1,025,395.23	3.236E-01	Pulse	0.50	3
[Pb]			1	92.351	ug/l	1.06	3,588,373.92	3.781E-01	Pulse	0.50	3
Ca			1	9773.411	ug/l	1.11	457,817.41	1.138E+00	Pulse	0.50	3
Ti			1	97.319	ug/l	0.93	38,126.96	9.479E-02	Pulse	0.50	3
Na			1	10172.792	ug/l	1.05	24,747,710.67	6.154E+01	Analog	1.00	3
Mg			1	10051.128	ug/l	0.86	10,469,687.00	2.603E+01	Analog	1.00	3
K			1	10035.832	ug/l	0.93	8,565,402.67	2.130E+01	Analog	1.00	3
V			1	98.880	ug/l	0.98	1,574,713.25	3.916E+00	Pulse	0.50	3
Mn			1	97.097	ug/l	0.53	918,736.29	2.860E+00	Pulse	0.50	3
Fe			1	10009.333	ug/l	0.64	169,285,520.00	5.269E+02	Analog	0.50	3
Co			1	97.935	ug/l	0.11	3,887,008.92	1.210E+01	Pulse	0.50	3
Ni			1	99.274	ug/l	0.19	1,072,644.87	3.339E+00	Pulse	0.50	3
Cu			1	99.495	ug/l	1.05	3,002,884.08	9.346E+00	Pulse	0.50	3
Zn			1	100.288	ug/l	0.88	365,764.82	7.465E-01	Pulse	1.00	3
Cd			1	97.501	ug/l	0.65	667,299.08	1.362E+00	Pulse	0.50	3
Al			1	9423.638	ug/l	1.07	2,803,704.17	6.972E+00	Pulse	1.00	3
Se			1	101.009	ug/l	0.52	14,489.92	4.574E-03	Pulse	3.00	3
Sb			1	95.996	ug/l	0.47	1,360,228.17	2.776E+00	Pulse	1.00	3
Se			1	96.362	ug/l	2.05	7,230.15	2.816E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,490,432.33	0.69	90.5	Analog	0.50	3
1	Sc		402,185.36	0.90	94.2	Pulse	0.30	3
1	Ge		321,289.92	0.33	92.4	Pulse	0.30	3
1	In		3,168,253.21	0.33	88.1	Pulse	0.30	3
1	Tb		13,635,793.00	0.26	93.8	Analog	0.50	3
1	Lu		7,981,255.67	0.22	92.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		489,961.34	0.44	92.2	Pulse	0.30	3
1	Te		25,680.71	1.09	82.3	Pulse	0.50	3
1	Li		2,110.12	2.95	91.9	Pulse	0.30	3

Quantitation Report

File Name	045_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:11
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	2684.50	708.02	2.234E-03	Pulse	0.50	3
As			1	0.003	ug/l	80.63	32.67	1.031E-04	Pulse	1.00	3
Mo			1	0.025	ug/l	3.02	392.01	8.083E-04	Pulse	0.50	3
Pb			1	-0.016	ug/l	-18.39	10,990.54	1.139E-03	Pulse	1.00	3
Be			1	0.010	ug/l	27.80	1.33	3.461E-06	Pulse	2.00	3
Ag			1	0.005	ug/l	29.32	375.34	7.748E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	-281.95	28.00	8.894E-06	Pulse	0.50	3
Tl			1	0.021	ug/l	11.86	2,730.90	2.829E-04	Pulse	0.50	3
Sn			1	0.018	ug/l	37.06	817.80	2.598E-04	Pulse	0.30	3
Sr			1	0.002	ug/l	362.30	1,134.04	3.602E-04	Pulse	0.50	3
[Pb]			1	-0.018	ug/l	-29.83	5,192.14	5.380E-04	Pulse	0.50	3
Ca			1	-0.843	ug/l	-94.37	69.33	1.798E-04	Pulse	0.50	3
Ti			1	-0.003	ug/l	-213.31	1.33	3.451E-06	Pulse	0.50	3
Na			1	-3.688	ug/l	-2.71	12,309.11	3.196E-02	Pulse	1.00	3
Mg			1	0.278	ug/l	22.17	419.34	1.089E-03	Pulse	1.00	3
K			1	2.095	ug/l	11.56	14,546.35	3.777E-02	Pulse	1.00	3
V			1	-0.008	ug/l	-15.27	403.34	1.047E-03	Pulse	0.50	3
Mn			1	0.001	ug/l	72.10	114.00	3.597E-04	Pulse	0.50	3
Fe			1	0.313	ug/l	24.67	10,254.10	3.236E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-15.25	150.00	4.734E-04	Pulse	0.50	3
Ni			1	-0.005	ug/l	-58.60	155.33	4.902E-04	Pulse	0.50	3
Cu			1	-0.453	ug/l	-1.26	59,049.88	1.863E-01	Pulse	0.50	3
Zn			1	-0.328	ug/l	-19.31	6,676.83	1.377E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	101.79	21.33	4.410E-05	Pulse	0.50	3
Al			1	-0.234	ug/l	-65.36	265.00	6.881E-04	Pulse	1.00	3
Se			1	0.061	ug/l	14.33	30.11	9.566E-06	Pulse	3.00	3
Sb			1	-0.030	ug/l	-8.10	341.67	7.049E-04	Pulse	1.00	3
Se			1	0.032	ug/l	292.42	34.44	1.283E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,653,093.00	1.29	92.0	Analog	0.50	3
1	Sc		385,186.56	0.27	90.2	Pulse	0.30	3

Quantitation Report

1	Ge		316,925.53	0.24	91.2	Pulse	0.30	3
1	In		3,147,793.14	0.28	87.6	Pulse	0.30	3
1	Tb		13,191,616.00	0.57	90.8	Analog	0.50	3
1	Lu		7,649,786.00	0.36	88.5	Analog	0.50	3
1	Ge		484,932.67	0.81	91.2	Pulse	0.30	3
1	Te		26,822.35	0.51	86.0	Pulse	0.50	3
1	Li		2,204.58	4.43	96.0	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:15
Sample Name	FA53625-3F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.524	ug/l	2.08	15,825.78	5.321E-02	Pulse	0.50	3
As			1	0.182	ug/l	8.21	211.33	7.107E-04	Pulse	1.00	3
Mo			1	0.271	ug/l	4.53	1,920.11	4.222E-03	Pulse	0.50	3
Pb			1	-0.049	ug/l	-0.30	10,076.31	1.066E-03	Pulse	1.00	3
Be			1	0.027	ug/l	84.47	1.67	4.522E-06	Pulse	2.00	3
Ag			1	0.018	ug/l	16.99	572.01	1.258E-03	Pulse	0.50	3
Ba			1	4.426	ug/l	1.45	10,962.67	3.621E-03	Pulse	0.50	3
Tl			1	0.024	ug/l	10.10	1,543.41	1.633E-04	Pulse	0.50	3
Sn			1	0.454	ug/l	8.46	3,233.64	1.068E-03	Pulse	0.30	3
Sr			1	34.949	ug/l	1.11	173,861.21	5.743E-02	Pulse	0.50	3
[Pb]			1	-0.049	ug/l	-31.20	4,830.03	5.112E-04	Pulse	0.50	3
Ca			1	9202.782	ug/l	0.38	198,086.95	5.361E-01	Pulse	0.50	3
Ti			1	4.222	ug/l	8.79	762.02	2.063E-03	Pulse	0.50	3
Na			1	28139.468	ug/l	0.49	31,439,680.00	8.509E+01	Analog	1.00	3
Mg			1	2602.761	ug/l	0.66	1,245,539.00	3.371E+00	Pulse	1.00	3
K			1	829.399	ug/l	0.71	336,981.29	9.120E-01	Pulse	1.00	3
V			1	0.478	ug/l	2.84	3,997.09	1.082E-02	Pulse	0.50	3
Mn			1	1.002	ug/l	2.03	4,490.54	1.510E-02	Pulse	0.50	3
Fe			1	162.865	ug/l	1.63	1,279,745.21	4.302E+00	Pulse	0.50	3
Co			1	0.075	ug/l	5.70	1,627.41	5.472E-03	Pulse	0.50	3
Ni			1	0.189	ug/l	9.19	1,142.70	3.843E-03	Pulse	0.50	3
Cu			1	-2.245	ug/l	-1.61	37,174.36	1.250E-01	Pulse	0.50	3
Zn			1	3.179	ug/l	5.04	12,612.79	2.773E-02	Pulse	1.00	3
Cd			1	0.034	ug/l	10.24	116.67	2.565E-04	Pulse	0.50	3
Al			1	99.514	ug/l	1.45	13,917.18	3.767E-02	Pulse	1.00	3
Se			1	0.428	ug/l	13.88	49.89	1.648E-05	Pulse	3.00	3
Sb			1	0.051	ug/l	18.06	1,049.37	2.307E-03	Pulse	1.00	3
Se			1	1.431	ug/l	5.90	68.44	3.271E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,449,183.00	0.79	90.1	Analog	0.50	3
1	Sc		369,494.93	0.71	86.6	Pulse	0.30	3
1	Ge		297,483.37	1.17	85.6	Pulse	0.30	3
1	In		3,027,334.19	0.38	84.2	Pulse	0.30	3
1	Tb		13,590,577.67	0.61	93.5	Analog	0.50	3
1	Lu		7,932,946.50	1.63	91.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		454,786.01	0.15	85.5	Pulse	0.30	3
1	Te		20,923.33	1.42	67.1	Pulse	0.50	3
1	Li		1,996.78	1.77	87.0	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:18
Sample Name	FA53625-4F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	11.414	ug/l	1.01	114,183.00	3.840E-01	Pulse	0.50	3
As			1	1.361	ug/l	3.29	1,421.72	4.781E-03	Pulse	1.00	3
Mo			1	2.297	ug/l	1.69	15,945.46	3.541E-02	Pulse	0.50	3
Pb			1	-0.108	ug/l	-7.51	7,551.01	8.076E-04	Pulse	1.00	3
Be			1	0.004	ug/l	235.86	0.50	1.358E-06	Pulse	2.00	3
Ag			1	0.007	ug/l	7.48	299.33	6.646E-04	Pulse	0.50	3
Ba			1	10.528	ug/l	1.17	25,961.93	8.602E-03	Pulse	0.50	3
Tl			1	0.012	ug/l	15.56	820.69	8.774E-05	Pulse	0.50	3
Sn			1	0.464	ug/l	31.99	3,278.03	1.088E-03	Pulse	0.30	3
Sr			1	377.774	ug/l	1.62	1,862,923.50	6.173E-01	Pulse	0.50	3
[Pb]			1	-0.114	ug/l	-5.72	3,529.71	3.774E-04	Pulse	0.50	3
Ca			1	47763.640	ug/l	0.37	1,024,351.11	2.781E+00	Pulse	0.50	3
Ti			1	0.537	ug/l	22.82	98.67	2.679E-04	Pulse	0.50	3
Na			1	25915.295	ug/l	0.69	28,862,131.33	7.837E+01	Analog	1.00	3
Mg			1	7331.828	ug/l	0.96	3,497,031.58	9.495E+00	Pulse	1.00	3
K			1	2347.246	ug/l	0.12	928,160.36	2.520E+00	Pulse	1.00	3
V			1	0.296	ug/l	2.74	2,660.19	7.223E-03	Pulse	0.50	3
Mn			1	1258.437	ug/l	0.74	5,510,049.50	1.853E+01	Analog	0.50	3
Fe			1	580.023	ug/l	0.95	4,544,412.00	1.528E+01	Pulse	0.50	3
Co			1	1.974	ug/l	0.95	36,505.62	1.228E-01	Pulse	0.50	3
Ni			1	65.974	ug/l	0.80	330,029.79	1.110E+00	Pulse	0.50	3
Cu			1	-2.477	ug/l	-1.07	34,008.52	1.144E-01	Pulse	0.50	3
Zn			1	2.579	ug/l	3.95	11,505.77	2.555E-02	Pulse	1.00	3
Cd			1	0.048	ug/l	7.09	157.33	3.495E-04	Pulse	0.50	3
Al			1	14.188	ug/l	1.16	2,249.80	6.109E-03	Pulse	1.00	3
Se			1	0.198	ug/l	44.67	34.00	1.127E-05	Pulse	3.00	3
Sb			1	0.056	ug/l	16.89	1,071.03	2.378E-03	Pulse	1.00	3
Se			1	0.499	ug/l	13.47	39.33	1.915E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,352,205.67	0.78	89.1	Analog	0.50	3
1	Sc		368,298.45	0.33	86.3	Pulse	0.30	3
1	Ge		297,387.22	0.59	85.6	Pulse	0.30	3
1	In		3,018,133.98	1.06	84.0	Pulse	0.30	3
1	Tb		13,575,785.33	0.72	93.4	Analog	0.50	3
1	Lu		7,921,166.33	0.91	91.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		450,326.16	0.83	84.7	Pulse	0.30	3
1	Te		20,534.89	0.58	65.8	Pulse	0.50	3
1	Li		2,063.45	2.99	89.9	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:22
Sample Name	FA53625-5F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	18.138	ug/l	1.26	175,140.37	6.088E-01	Pulse	0.50	3
As			1	0.357	ug/l	3.51	378.00	1.314E-03	Pulse	1.00	3
Mo			1	8.263	ug/l	0.50	55,899.55	1.273E-01	Pulse	0.50	3
Pb			1	0.477	ug/l	1.69	26,777.55	3.361E-03	Pulse	1.00	3
Be			1	0.013	ug/l	72.38	1.00	2.536E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	10.89	415.34	9.455E-04	Pulse	0.50	3
Ba			1	855.153	ug/l	0.65	2,052,920.50	6.980E-01	Pulse	0.50	3
Tl			1	0.050	ug/l	1.94	2,687.56	3.373E-04	Pulse	0.50	3
Sn			1	0.493	ug/l	6.64	3,362.55	1.143E-03	Pulse	0.30	3
Sr			1	16725.513	ug/l	0.81	80,340,202.67	2.732E+01	Analog	0.50	3
[Pb]			1	0.492	ug/l	4.85	12,873.54	1.616E-03	Pulse	0.50	3
Ca			1	481269.485	ug/l	0.08	11,056,080.00	2.802E+01	Analog	0.50	3
Ti			1	0.143	ug/l	14.71	30.00	7.605E-05	Pulse	0.50	3
Na			1	167169.133	ug/l	0.80	199,328,912.00	5.052E+02	Analog	1.00	3
Mg			1	30.976	ug/l	0.27	15,973.03	4.048E-02	Pulse	1.00	3
K			1	310892.489	ug/l	0.47	129,967,474.67	3.294E+02	Analog	1.00	3
V			1	1.060	ug/l	1.01	8,810.01	2.233E-02	Pulse	0.50	3
Mn			1	0.616	ug/l	3.19	2,707.53	9.411E-03	Pulse	0.50	3
Fe			1	27.916	ug/l	16.35	216,039.44	7.506E-01	Pulse	0.50	3
Co			1	0.230	ug/l	1.28	4,324.50	1.503E-02	Pulse	0.50	3
Ni			1	3.478	ug/l	1.67	17,014.83	5.915E-02	Pulse	0.50	3
Cu			1	3.643	ug/l	1.80	113,571.91	3.948E-01	Pulse	0.50	3
Zn			1	6.508	ug/l	2.79	17,506.94	3.986E-02	Pulse	1.00	3
Cd			1	0.009	ug/l	31.46	34.67	7.898E-05	Pulse	0.50	3
Al			1	981.822	ug/l	0.52	143,611.77	3.640E-01	Pulse	1.00	3
Se			1	0.598	ug/l	16.44	59.78	2.033E-05	Pulse	3.00	3
Sb			1	0.151	ug/l	3.76	1,646.08	3.747E-03	Pulse	1.00	3
Se			1	1.408	ug/l	22.31	61.89	3.238E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		7,968,558.17	0.81	76.0	Analog	0.50	3
1	Sc		394,549.23	0.52	92.4	Pulse	0.30	3
1	Ge		287,675.62	0.56	82.8	Pulse	0.30	3
1	In		2,941,265.86	0.66	81.8	Pulse	0.30	3
1	Tb		12,827,213.67	0.88	88.2	Analog	0.50	3
1	Lu		7,633,579.67	0.92	88.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		439,271.44	0.54	82.6	Pulse	0.30	3
1	Te		19,093.32	1.16	61.2	Pulse	0.50	3
1	Li		2,362.38	1.92	102.9	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:26
Sample Name	FA53625-6F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	10.838	ug/l	4.81	109,270.02	3.647E-01	Pulse	0.50	3
As			1	0.110	ug/l	2.95	138.33	4.616E-04	Pulse	1.00	3
Mo			1	4.709	ug/l	7.85	32,902.27	7.255E-02	Pulse	0.50	3
Pb			1	-0.082	ug/l	-13.96	8,669.54	9.226E-04	Pulse	1.00	3
Be			1	0.030	ug/l	122.00	1.83	4.949E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	18.54	282.67	6.234E-04	Pulse	0.50	3
Ba			1	7.436	ug/l	1.10	18,266.56	6.078E-03	Pulse	0.50	3
Tl			1	0.009	ug/l	9.73	611.34	6.507E-05	Pulse	0.50	3
Sn			1	0.558	ug/l	61.86	3,804.94	1.269E-03	Pulse	0.30	3
Sr			1	60.082	ug/l	0.16	295,960.93	9.848E-02	Pulse	0.50	3
[Pb]			1	-0.077	ug/l	-13.55	4,264.55	4.538E-04	Pulse	0.50	3
Ca			1	25863.404	ug/l	0.69	555,647.69	1.506E+00	Pulse	0.50	3
Ti			1	0.069	ug/l	64.87	14.67	3.967E-05	Pulse	0.50	3
Na			1	23446.182	ug/l	0.58	26,158,556.67	7.091E+01	Analog	1.00	3
Mg			1	8235.010	ug/l	0.64	3,934,500.08	1.066E+01	Pulse	1.00	3
K			1	2048.891	ug/l	0.76	813,099.08	2.204E+00	Pulse	1.00	3
V			1	0.595	ug/l	14.73	4,843.96	1.313E-02	Pulse	0.50	3
Mn			1	29.557	ug/l	1.11	130,528.44	4.355E-01	Pulse	0.50	3
Fe			1	88.434	ug/l	7.72	701,974.04	2.343E+00	Pulse	0.50	3
Co			1	3.198	ug/l	9.71	59,411.76	1.984E-01	Pulse	0.50	3
Ni			1	52.622	ug/l	2.30	265,308.46	8.853E-01	Pulse	0.50	3
Cu			1	-1.376	ug/l	-9.13	49,388.88	1.648E-01	Pulse	0.50	3
Zn			1	1.859	ug/l	5.33	10,398.81	2.293E-02	Pulse	1.00	3
Cd			1	0.049	ug/l	21.69	164.67	3.629E-04	Pulse	0.50	3
Al			1	7.321	ug/l	4.78	1,316.71	3.569E-03	Pulse	1.00	3
Se			1	0.209	ug/l	31.05	34.67	1.153E-05	Pulse	3.00	3
Sb			1	0.004	ug/l	187.63	735.02	1.620E-03	Pulse	1.00	3
Se			1	0.471	ug/l	33.01	38.44	1.876E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,397,896.00	0.46	89.6	Analog	0.50	3
1	Sc		368,925.04	0.65	86.4	Pulse	0.30	3
1	Ge		299,747.08	1.65	86.2	Pulse	0.30	3
1	In		3,005,353.49	0.89	83.6	Pulse	0.30	3
1	Tb		13,623,248.00	1.09	93.7	Analog	0.50	3
1	Lu		7,960,048.33	0.55	92.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		453,563.37	0.34	85.3	Pulse	0.30	3
1	Te		20,503.51	1.05	65.7	Pulse	0.50	3
1	Li		2,014.56	2.53	87.8	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:29
Sample Name	FA53625-7F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	13.893	ug/l	0.43	139,626.08	4.669E-01	Pulse	0.50	3
As			1	0.099	ug/l	14.05	126.33	4.222E-04	Pulse	1.00	3
Mo			1	0.270	ug/l	9.53	1,916.77	4.208E-03	Pulse	0.50	3
Pb			1	-0.046	ug/l	-8.99	10,277.10	1.080E-03	Pulse	1.00	3
Be			1	0.027	ug/l	127.83	1.67	4.516E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	37.55	268.00	5.879E-04	Pulse	0.50	3
Ba			1	7.719	ug/l	2.01	19,206.21	6.310E-03	Pulse	0.50	3
Tl			1	0.004	ug/l	44.29	334.67	3.521E-05	Pulse	0.50	3
Sn			1	0.312	ug/l	11.14	2,413.51	7.930E-04	Pulse	0.30	3
Sr			1	62.858	ug/l	1.45	313,571.48	1.030E-01	Pulse	0.50	3
[Pb]			1	-0.029	ug/l	-187.47	5,252.33	5.516E-04	Pulse	0.50	3
Ca			1	13495.711	ug/l	0.82	291,893.88	7.861E-01	Pulse	0.50	3
Ti			1	0.920	ug/l	16.70	168.67	4.545E-04	Pulse	0.50	3
Na			1	23591.769	ug/l	0.99	26,493,454.00	7.135E+01	Analog	1.00	3
Mg			1	4281.651	ug/l	0.91	2,059,129.83	5.545E+00	Pulse	1.00	3
K			1	904.075	ug/l	0.52	368,059.69	9.912E-01	Pulse	1.00	3
V			1	0.332	ug/l	5.07	2,941.57	7.922E-03	Pulse	0.50	3
Mn			1	1.051	ug/l	2.73	4,729.93	1.582E-02	Pulse	0.50	3
Fe			1	70.617	ug/l	1.31	560,594.57	1.874E+00	Pulse	0.50	3
Co			1	0.080	ug/l	2.83	1,733.42	5.796E-03	Pulse	0.50	3
Ni			1	0.471	ug/l	3.28	2,567.51	8.584E-03	Pulse	0.50	3
Cu			1	-2.223	ug/l	-2.36	37,685.96	1.260E-01	Pulse	0.50	3
Zn			1	1.325	ug/l	6.73	9,561.04	2.098E-02	Pulse	1.00	3
Cd			1	0.024	ug/l	25.45	84.67	1.858E-04	Pulse	0.50	3
Al			1	18.693	ug/l	9.75	2,886.59	7.775E-03	Pulse	1.00	3
Se			1	0.540	ug/l	6.99	57.89	1.902E-05	Pulse	3.00	3
Sb			1	-0.015	ug/l	-28.84	616.68	1.353E-03	Pulse	1.00	3
Se			1	1.716	ug/l	11.34	76.22	3.686E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,515,909.33	0.51	90.7	Analog	0.50	3
1	Sc		371,353.87	0.89	87.0	Pulse	0.30	3
1	Ge		299,077.99	0.71	86.0	Pulse	0.30	3
1	In		3,044,088.21	0.28	84.7	Pulse	0.30	3
1	Tb		13,659,915.33	0.44	94.0	Analog	0.50	3
1	Lu		7,984,146.83	0.66	92.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		455,657.33	0.56	85.7	Pulse	0.30	3
1	Te		20,691.04	1.14	66.3	Pulse	0.50	3
1	Li		2,020.11	1.31	88.0	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:33
Sample Name	FA53625-8F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	6.059	ug/l	2.18	60,557.59	2.049E-01	Pulse	0.50	3
As			1	0.273	ug/l	5.66	302.67	1.024E-03	Pulse	1.00	3
Mo			1	2.528	ug/l	0.97	17,743.07	3.896E-02	Pulse	0.50	3
Pb			1	-0.104	ug/l	-4.12	7,681.74	8.236E-04	Pulse	1.00	3
Be			1	0.008	ug/l	151.62	0.67	1.826E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	19.07	210.67	4.626E-04	Pulse	0.50	3
Ba			1	8.672	ug/l	1.78	21,414.00	7.087E-03	Pulse	0.50	3
Tl			1	0.011	ug/l	12.89	765.35	8.209E-05	Pulse	0.50	3
Sn			1	0.368	ug/l	5.30	2,721.33	9.009E-04	Pulse	0.30	3
Sr			1	142.866	ug/l	1.00	705,968.15	2.337E-01	Pulse	0.50	3
[Pb]			1	-0.109	ug/l	-7.73	3,629.73	3.892E-04	Pulse	0.50	3
Ca			1	31719.132	ug/l	1.09	681,051.81	1.847E+00	Pulse	0.50	3
Ti			1	0.129	ug/l	37.52	25.33	6.897E-05	Pulse	0.50	3
Na			1	25445.816	ug/l	1.19	28,371,563.33	7.695E+01	Analog	1.00	3
Mg			1	6483.991	ug/l	0.88	3,096,250.17	8.397E+00	Pulse	1.00	3
K			1	25989.299	ug/l	0.87	10,164,768.00	2.757E+01	Analog	1.00	3
V			1	0.584	ug/l	0.91	4,761.27	1.291E-02	Pulse	0.50	3
Mn			1	10.052	ug/l	1.53	43,851.90	1.483E-01	Pulse	0.50	3
Fe			1	36.874	ug/l	0.27	291,615.79	9.864E-01	Pulse	0.50	3
Co			1	0.261	ug/l	1.31	5,014.67	1.696E-02	Pulse	0.50	3
Ni			1	30.238	ug/l	0.90	150,478.25	5.090E-01	Pulse	0.50	3
Cu			1	-1.976	ug/l	-2.70	40,589.83	1.373E-01	Pulse	0.50	3
Zn			1	1.385	ug/l	5.74	9,656.43	2.120E-02	Pulse	1.00	3
Cd			1	0.021	ug/l	41.06	74.00	1.622E-04	Pulse	0.50	3
Al			1	7.774	ug/l	2.26	1,377.72	3.737E-03	Pulse	1.00	3
Se			1	0.265	ug/l	17.09	38.66	1.280E-05	Pulse	3.00	3
Sb			1	0.115	ug/l	9.80	1,468.73	3.226E-03	Pulse	1.00	3
Se			1	0.756	ug/l	0.85	47.00	2.289E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,328,250.00	0.75	88.9	Analog	0.50	3
1	Sc		368,756.13	1.76	86.4	Pulse	0.30	3
1	Ge		295,634.73	1.07	85.1	Pulse	0.30	3
1	In		3,021,332.73	0.94	84.1	Pulse	0.30	3
1	Tb		13,627,779.00	0.15	93.8	Analog	0.50	3
1	Lu		7,918,045.50	0.99	91.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		455,438.61	1.05	85.7	Pulse	0.30	3
1	Te		20,529.51	2.06	65.8	Pulse	0.50	3
1	Li		2,183.46	1.86	95.1	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:36
Sample Name	FA53625-9F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	5.562	ug/l	1.86	56,266.82	1.883E-01	Pulse	0.50	3
As			1	0.175	ug/l	15.84	204.67	6.850E-04	Pulse	1.00	3
Mo			1	1.692	ug/l	1.28	11,831.09	2.610E-02	Pulse	0.50	3
Pb			1	-0.128	ug/l	-0.44	6,793.36	7.223E-04	Pulse	1.00	3
Be			1	0.014	ug/l	243.39	1.00	2.716E-06	Pulse	2.00	3
Ag			1	0.002	ug/l	38.05	173.33	3.825E-04	Pulse	0.50	3
Ba			1	8.275	ug/l	0.66	20,374.83	6.763E-03	Pulse	0.50	3
Tl			1	0.010	ug/l	15.03	717.35	7.627E-05	Pulse	0.50	3
Sn			1	0.342	ug/l	4.08	2,562.42	8.505E-04	Pulse	0.30	3
Sr			1	149.953	ug/l	0.51	738,875.21	2.453E-01	Pulse	0.50	3
[Pb]			1	-0.138	ug/l	-0.88	3,098.30	3.294E-04	Pulse	0.50	3
Ca			1	41579.845	ug/l	0.10	897,482.25	2.421E+00	Pulse	0.50	3
Ti			1	0.109	ug/l	46.16	22.00	5.927E-05	Pulse	0.50	3
Na			1	18691.996	ug/l	0.62	20,957,654.00	5.654E+01	Analog	1.00	3
Mg			1	7029.298	ug/l	0.96	3,374,432.08	9.104E+00	Pulse	1.00	3
K			1	14082.011	ug/l	1.00	5,542,550.17	1.495E+01	Analog	1.00	3
V			1	0.420	ug/l	3.24	3,581.68	9.662E-03	Pulse	0.50	3
Mn			1	13.690	ug/l	1.56	60,343.94	2.019E-01	Pulse	0.50	3
Fe			1	22.410	ug/l	1.01	181,019.17	6.057E-01	Pulse	0.50	3
Co			1	0.355	ug/l	3.66	6,811.22	2.279E-02	Pulse	0.50	3
Ni			1	42.539	ug/l	1.18	213,940.08	7.158E-01	Pulse	0.50	3
Cu			1	-2.386	ug/l	-0.55	35,421.89	1.185E-01	Pulse	0.50	3
Zn			1	3.156	ug/l	2.75	12,531.42	2.765E-02	Pulse	1.00	3
Cd			1	0.020	ug/l	33.30	72.67	1.604E-04	Pulse	0.50	3
Al			1	7.089	ug/l	6.84	1,291.04	3.483E-03	Pulse	1.00	3
Se			1	0.178	ug/l	19.78	32.67	1.084E-05	Pulse	3.00	3
Sb			1	0.053	ug/l	15.94	1,056.70	2.332E-03	Pulse	1.00	3
Se			1	0.806	ug/l	64.73	47.89	2.362E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,405,314.67	0.39	89.6	Analog	0.50	3
1	Sc		370,668.72	0.57	86.8	Pulse	0.30	3
1	Ge		298,866.52	0.54	86.0	Pulse	0.30	3
1	In		3,012,655.30	0.83	83.8	Pulse	0.30	3
1	Tb		13,725,927.33	0.55	94.4	Analog	0.50	3
1	Lu		7,954,789.83	1.22	92.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		453,234.03	0.49	85.3	Pulse	0.30	3
1	Te		20,299.27	1.99	65.1	Pulse	0.50	3
1	Li		2,636.97	38.33	114.9	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:40
Sample Name	MP33666-MB2A
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.231	ug/l	5.42	2,944.90	9.968E-03	Pulse	0.50	3
As			1	0.058	ug/l	18.41	82.67	2.798E-04	Pulse	1.00	3
Mo			1	0.012	ug/l	19.56	107.33	2.360E-04	Pulse	0.50	3
Pb			1	0.243	ug/l	1.20	22,354.25	2.341E-03	Pulse	1.00	3
Be			1	0.011	ug/l	105.91	0.83	2.268E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	24.04	194.00	4.267E-04	Pulse	0.50	3
Ba			1	0.273	ug/l	6.77	697.35	2.319E-04	Pulse	0.50	3
Tl			1	0.002	ug/l	17.47	197.33	2.067E-05	Pulse	0.50	3
Sn			1	0.379	ug/l	15.16	2,776.99	9.232E-04	Pulse	0.30	3
Sr			1	0.555	ug/l	4.06	3,793.06	1.262E-03	Pulse	0.50	3
[Pb]			1	0.252	ug/l	3.84	10,748.74	1.126E-03	Pulse	0.50	3
Ca			1	33.749	ug/l	15.37	824.69	2.243E-03	Pulse	0.50	3
Ti			1	0.147	ug/l	26.91	28.67	7.805E-05	Pulse	0.50	3
Na			1	53.098	ug/l	0.23	78,901.51	2.147E-01	Pulse	1.00	3
Mg			1	11.811	ug/l	0.35	5,756.84	1.567E-02	Pulse	1.00	3
K			1	29.117	ug/l	0.93	23,583.70	6.417E-02	Pulse	1.00	3
V			1	0.229	ug/l	1.80	2,160.80	5.880E-03	Pulse	0.50	3
Mn			1	1.281	ug/l	1.05	5,671.51	1.920E-02	Pulse	0.50	3
Fe			1	66.679	ug/l	0.09	523,175.18	1.771E+00	Pulse	0.50	3
Co			1	0.005	ug/l	20.41	336.67	1.140E-03	Pulse	0.50	3
Ni			1	0.123	ug/l	14.98	812.02	2.749E-03	Pulse	0.50	3
Cu			1	-2.424	ug/l	-0.64	34,504.09	1.168E-01	Pulse	0.50	3
Zn			1	0.812	ug/l	13.36	8,693.30	1.912E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	152.85	14.00	3.079E-05	Pulse	0.50	3
Al			1	10.616	ug/l	1.33	1,759.41	4.788E-03	Pulse	1.00	3
Se			1	0.089	ug/l	98.53	26.56	8.823E-06	Pulse	3.00	3
Sb			1	-0.031	ug/l	-14.15	509.68	1.121E-03	Pulse	1.00	3
Se			1	0.287	ug/l	27.98	33.44	1.607E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,547,509.33	0.41	91.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		367,495.85	0.64	86.1	Pulse	0.30	3
1	Ge		295,439.76	0.57	85.0	Pulse	0.30	3
1	In		3,006,538.49	0.79	83.6	Pulse	0.30	3
1	Tb		13,433,309.00	0.57	92.4	Analog	0.50	3
1	Lu		7,808,214.33	0.81	90.4	Analog	0.50	3
1	Ge		454,758.37	0.23	85.5	Pulse	0.30	3
1	Te		20,776.50	3.34	66.6	Pulse	0.50	3
1	Li		1,970.11	3.96	85.8	Pulse	0.30	3

Quantitation Report

File Name	054_MB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:44
Sample Name	MP33667-MB1
Sample Type	MB
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.174	ug/l	1.69	2,402.16	8.053E-03	Pulse	0.50	3
As			1	0.056	ug/l	20.65	81.67	2.739E-04	Pulse	1.00	3
Mo			1	0.007	ug/l	10.53	69.33	1.513E-04	Pulse	0.50	3
Pb			1	-0.085	ug/l	-4.04	8,704.22	9.073E-04	Pulse	1.00	3
Be			1	-0.002	ug/l	-229.22	0.17	4.461E-07	Pulse	2.00	3
Ag			1	0.002	ug/l	52.29	174.67	3.812E-04	Pulse	0.50	3
Ba			1	0.096	ug/l	14.82	264.00	8.769E-05	Pulse	0.50	3
Tl			1	0.002	ug/l	32.32	194.00	2.021E-05	Pulse	0.50	3
Sn			1	0.284	ug/l	3.36	2,225.71	7.392E-04	Pulse	0.30	3
Sr			1	0.150	ug/l	5.07	1,808.76	6.007E-04	Pulse	0.50	3
[Pb]			1	-0.091	ug/l	-13.47	4,082.50	4.256E-04	Pulse	0.50	3
Ca			1	21.329	ug/l	8.97	564.01	1.520E-03	Pulse	0.50	3
Ti			1	0.146	ug/l	37.86	28.67	7.721E-05	Pulse	0.50	3
Na			1	4.655	ug/l	4.24	25,350.30	6.831E-02	Pulse	1.00	3
Mg			1	7.746	ug/l	2.87	3,859.37	1.040E-02	Pulse	1.00	3
K			1	5.318	ug/l	4.50	14,457.96	3.896E-02	Pulse	1.00	3
V			1	0.190	ug/l	3.44	1,898.10	5.115E-03	Pulse	0.50	3
Mn			1	0.189	ug/l	10.28	933.36	3.130E-03	Pulse	0.50	3
Fe			1	3.975	ug/l	5.45	35,948.18	1.205E-01	Pulse	0.50	3
Co			1	0.001	ug/l	28.18	276.00	9.252E-04	Pulse	0.50	3
Ni			1	0.028	ug/l	120.67	340.05	1.138E-03	Pulse	0.50	3
Cu			1	-2.529	ug/l	-1.05	33,405.49	1.120E-01	Pulse	0.50	3
Zn			1	-0.899	ug/l	-14.56	5,904.25	1.289E-02	Pulse	1.00	3
Cd			1	-0.001	ug/l	-97.26	6.00	1.309E-05	Pulse	0.50	3
Al			1	5.842	ug/l	7.94	1,121.70	3.022E-03	Pulse	1.00	3
Se			1	0.071	ug/l	29.72	25.33	8.414E-06	Pulse	3.00	3
Sb			1	-0.035	ug/l	-16.38	483.34	1.055E-03	Pulse	1.00	3
Se			1	0.470	ug/l	9.34	39.33	1.873E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,594,122.33	0.62	91.4	Analog	0.50	3
1	Sc		371,096.84	0.71	86.9	Pulse	0.30	3
1	Ge		298,305.25	0.55	85.8	Pulse	0.30	3
1	In		3,010,863.21	0.21	83.8	Pulse	0.30	3
1	Tb		13,379,439.67	0.75	92.0	Analog	0.50	3
1	Lu		7,716,564.50	0.87	89.3	Analog	0.50	3
1	Ge		458,196.79	0.14	86.2	Pulse	0.30	3
1	Te		20,994.72	0.51	67.3	Pulse	0.50	3
1	Li		2,089.01	3.41	91.0	Pulse	0.30	3

Quantitation Report

File Name	055_BSP.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:47
Sample Name	MP33667-B1
Sample Type	BSP
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	212.550	ug/l	0.62	2,148,851.92	7.111E+00	Pulse	0.50	3
As			1	196.288	ug/l	0.68	204,863.10	6.779E-01	Pulse	1.00	3
Mo			1	213.374	ug/l	1.07	1,525,920.34	3.285E+00	Pulse	0.50	3
Pb			1	207.140	ug/l	0.31	8,745,001.33	9.054E-01	Analog	1.00	3
Be			1	218.840	ug/l	0.97	11,504.41	3.003E-02	Pulse	2.00	3
Ag			1	107.338	ug/l	0.94	2,803,842.25	6.036E+00	Pulse	0.50	3
Ba			1	204.081	ug/l	1.02	516,312.03	1.666E-01	Pulse	0.50	3
Tl			1	199.646	ug/l	0.55	12,592,114.00	1.304E+00	Analog	0.50	3
Sn			1	206.384	ug/l	0.80	1,238,733.18	3.996E-01	Pulse	0.30	3
Sr			1	201.445	ug/l	0.38	1,020,838.98	3.293E-01	Pulse	0.50	3
[Pb]			1	187.759	ug/l	0.50	3,712,655.50	3.844E-01	Pulse	0.50	3
Ca			1	18813.488	ug/l	1.25	419,714.15	1.096E+00	Pulse	0.50	3
Ti			1	201.697	ug/l	2.08	37,627.38	9.823E-02	Pulse	0.50	3
Na			1	19846.649	ug/l	1.18	22,994,195.33	6.003E+01	Analog	1.00	3
Mg			1	19628.457	ug/l	0.96	9,737,183.00	2.542E+01	Analog	1.00	3
K			1	19240.956	ug/l	0.36	7,821,440.33	2.042E+01	Analog	1.00	3
V			1	207.872	ug/l	1.10	1,576,560.21	4.116E+00	Pulse	0.50	3
Mn			1	202.318	ug/l	1.17	900,251.29	2.979E+00	Pulse	0.50	3
Fe			1	20340.062	ug/l	0.48	161,778,736.00	5.354E+02	Analog	0.50	3
Co			1	210.638	ug/l	0.38	3,931,652.17	1.301E+01	Pulse	0.50	3
Ni			1	212.933	ug/l	0.21	1,081,975.92	3.580E+00	Pulse	0.50	3
Cu			1	208.555	ug/l	1.10	2,956,927.33	9.785E+00	Pulse	0.50	3
Zn			1	189.301	ug/l	0.40	327,684.64	7.055E-01	Pulse	1.00	3
Cd			1	203.121	ug/l	0.67	658,947.06	1.419E+00	Pulse	0.50	3
Al			1	17278.665	ug/l	0.64	2,448,273.17	6.391E+00	Pulse	1.00	3
Se			1	172.734	ug/l	1.03	12,123.95	3.912E-03	Pulse	3.00	3
Sb			1	195.420	ug/l	0.46	1,312,514.71	2.826E+00	Pulse	1.00	3
Se			1	200.209	ug/l	1.89	6,137.88	2.925E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,659,262.67	0.89	92.1	Analog	0.50	3
1	Sc		383,062.55	0.28	89.7	Pulse	0.30	3
1	Ge		302,194.50	0.43	86.9	Pulse	0.30	3
1	In		3,099,582.31	0.72	86.2	Pulse	0.30	3
1	Tb		14,346,651.33	1.15	98.7	Analog	0.50	3
1	Lu		8,375,772.00	0.68	96.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		464,488.87	0.40	87.4	Pulse	0.30	3
1	Te		20,990.06	1.43	67.3	Pulse	0.50	3
1	Li		1,980.11	1.21	86.3	Pulse	0.30	3

Quantitation Report

File Name	056CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:51
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.666	ug/l	0.61	1,146,300.25	3.324E+00	Pulse	0.50	3
As			1	49.553	ug/l	0.99	118,038.23	3.423E-01	Pulse	1.00	3
Mo			1	49.306	ug/l	1.05	792,449.54	1.518E+00	Pulse	0.50	3
Pb			1	45.435	ug/l	0.90	4,115,451.42	3.979E-01	Pulse	1.00	3
Be			1	53.558	ug/l	1.69	6,268.30	1.470E-02	Pulse	2.00	3
Ag			1	50.297	ug/l	1.27	2,952,683.25	5.657E+00	Pulse	0.50	3
Ba			1	48.839	ug/l	1.69	270,975.04	7.974E-02	Pulse	0.50	3
Tl			1	48.354	ug/l	0.80	6,531,550.50	6.315E-01	Analog	0.50	3
Sn			1	49.221	ug/l	0.81	648,209.09	1.907E-01	Pulse	0.30	3
Sr			1	49.121	ug/l	1.34	546,482.11	1.608E-01	Pulse	0.50	3
[Pb]			1	46.296	ug/l	0.44	1,963,764.71	1.899E-01	Pulse	0.50	3
Ca			1	4897.185	ug/l	0.38	243,293.00	5.706E-01	Pulse	0.50	3
Ti			1	48.916	ug/l	1.84	20,317.90	4.765E-02	Pulse	0.50	3
Na			1	5135.974	ug/l	0.40	13,259,330.33	3.109E+01	Analog	1.00	3
Mg			1	5088.503	ug/l	0.43	5,620,084.00	1.318E+01	Analog	1.00	3
K			1	4898.397	ug/l	0.50	4,440,103.00	1.041E+01	Pulse	1.00	3
V			1	49.264	ug/l	0.45	832,146.64	1.951E+00	Pulse	0.50	3
Mn			1	48.250	ug/l	0.62	490,040.00	1.421E+00	Pulse	0.50	3
Fe			1	5068.523	ug/l	1.02	92,003,581.33	2.668E+02	Analog	0.50	3
Co			1	49.087	ug/l	0.21	2,091,111.13	6.064E+00	Pulse	0.50	3
Ni			1	50.405	ug/l	0.44	584,624.89	1.695E+00	Pulse	0.50	3
Cu			1	49.316	ug/l	0.66	1,637,066.92	4.748E+00	Pulse	0.50	3
Zn			1	50.361	ug/l	0.24	199,867.13	3.829E-01	Pulse	1.00	3
Cd			1	49.835	ug/l	0.65	363,351.07	6.961E-01	Pulse	0.50	3
Al			1	4701.263	ug/l	0.62	1,483,248.67	3.478E+00	Pulse	1.00	3
Se			1	50.230	ug/l	0.84	7,741.23	2.278E-03	Pulse	3.00	3
Sb			1	48.070	ug/l	0.83	726,014.92	1.391E+00	Pulse	1.00	3
Se			1	47.470	ug/l	2.39	3,917.63	1.393E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,343,658.33	0.76	98.6	Analog	0.50	3
1	Sc		426,418.38	0.35	99.9	Pulse	0.30	3
1	Ge		344,822.21	0.32	99.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,398,828.41	1.02	94.6	Pulse	0.30	3
1	Tb		14,842,704.00	0.46	102.1	Analog	0.50	3
1	Lu		8,606,117.33	0.47	99.6	Analog	0.50	3
1	Ge		521,948.63	0.04	98.2	Pulse	0.30	3
1	Te		28,124.91	1.05	90.2	Pulse	0.50	3
1	Li		2,290.14	2.81	99.8	Pulse	0.30	3

Quantitation Report

File Name	057_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:55
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.946	ug/l	0.67	2,282,169.17	6.621E+00	Pulse	0.50	3
As			1	98.479	ug/l	1.35	234,477.92	6.802E-01	Pulse	1.00	3
Mo			1	98.012	ug/l	0.51	1,585,308.04	3.018E+00	Pulse	0.50	3
Pb			1	96.747	ug/l	0.38	8,539,431.67	8.458E-01	Analog	1.00	3
Be			1	105.495	ug/l	1.65	12,370.25	2.895E-02	Pulse	2.00	3
Ag			1	98.968	ug/l	4.34	5,846,510.33	1.113E+01	Mix	0.50	3
Ba			1	97.227	ug/l	0.60	536,850.21	1.587E-01	Pulse	0.50	3
Tl			1	98.323	ug/l	0.14	12,963,698.33	1.284E+00	Analog	0.50	3
Sn			1	98.952	ug/l	0.26	1,296,227.48	3.832E-01	Pulse	0.30	3
Sr			1	98.862	ug/l	0.07	1,093,394.17	3.233E-01	Pulse	0.50	3
[Pb]			1	91.669	ug/l	0.63	3,789,337.33	3.753E-01	Pulse	0.50	3
Ca			1	9799.927	ug/l	0.76	487,699.23	1.141E+00	Pulse	0.50	3
Ti			1	97.238	ug/l	0.49	40,467.69	9.471E-02	Pulse	0.50	3
Na			1	10318.905	ug/l	0.99	26,667,639.33	6.242E+01	Analog	1.00	3
Mg			1	10146.159	ug/l	0.96	11,227,454.33	2.628E+01	Analog	1.00	3
K			1	10183.451	ug/l	0.48	9,233,184.67	2.161E+01	Analog	1.00	3
V			1	98.891	ug/l	0.61	1,673,113.41	3.916E+00	Pulse	0.50	3
Mn			1	97.141	ug/l	0.91	986,125.23	2.861E+00	Pulse	0.50	3
Fe			1	10055.720	ug/l	1.29	182,461,637.33	5.293E+02	Analog	0.50	3
Co			1	97.195	ug/l	0.42	4,138,911.08	1.201E+01	Pulse	0.50	3
Ni			1	99.005	ug/l	0.14	1,147,738.58	3.330E+00	Pulse	0.50	3
Cu			1	98.277	ug/l	0.55	3,183,327.33	9.235E+00	Pulse	0.50	3
Zn			1	98.745	ug/l	0.55	386,239.27	7.353E-01	Pulse	1.00	3
Cd			1	96.481	ug/l	1.17	707,938.06	1.348E+00	Pulse	0.50	3
Al			1	9506.234	ug/l	0.73	3,004,618.92	7.033E+00	Pulse	1.00	3
Se			1	99.903	ug/l	1.17	15,300.34	4.524E-03	Pulse	3.00	3
Sb			1	94.656	ug/l	0.41	1,437,961.92	2.737E+00	Pulse	1.00	3
Se			1	97.968	ug/l	0.69	7,789.48	2.863E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,096,181.33	0.27	96.2	Analog	0.50	3
1	Sc		427,251.54	0.71	100.1	Pulse	0.30	3
1	Ge		344,719.08	0.86	99.2	Pulse	0.30	3
1	In		3,382,320.84	0.32	94.1	Pulse	0.30	3
1	Tb		14,709,346.67	0.85	101.2	Analog	0.50	3
1	Lu		8,486,204.67	0.56	98.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		525,291.84	0.29	98.8	Pulse	0.30	3
1	Te		27,212.89	1.56	87.2	Pulse	0.50	3
1	Li		2,224.58	5.34	96.9	Pulse	0.30	3

Quantitation Report

File Name	058_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 11:58
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	-0.001	ug/l	-46.69	749.35	2.133E-03	Pulse	0.50	3
As			1	0.003	ug/l	114.03	34.67	9.855E-05	Pulse	1.00	3
Mo			1	0.026	ug/l	4.63	448.68	8.378E-04	Pulse	0.50	3
Pb			1	-0.016	ug/l	-6.66	12,126.63	1.136E-03	Pulse	1.00	3
Be			1	0.017	ug/l	94.70	2.33	5.426E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	33.21	496.01	9.264E-04	Pulse	0.50	3
Ba			1	0.002	ug/l	115.40	42.00	1.201E-05	Pulse	0.50	3
Tl			1	0.024	ug/l	11.80	3,408.36	3.193E-04	Pulse	0.50	3
Sn			1	0.029	ug/l	10.94	1,053.37	3.017E-04	Pulse	0.30	3
Sr			1	0.010	ug/l	124.63	1,352.72	3.875E-04	Pulse	0.50	3
[Pb]			1	-0.020	ug/l	-5.60	5,667.63	5.308E-04	Pulse	0.50	3
Ca			1	-0.429	ug/l	-52.02	98.00	2.281E-04	Pulse	0.50	3
Ti			1	0.002	ug/l	640.11	3.33	7.771E-06	Pulse	0.50	3
Na			1	-4.123	ug/l	-2.33	12,602.63	2.933E-02	Pulse	1.00	3
Mg			1	0.238	ug/l	34.43	423.67	9.857E-04	Pulse	1.00	3
K			1	1.060	ug/l	41.98	15,286.25	3.557E-02	Pulse	1.00	3
V			1	-0.010	ug/l	-35.54	416.01	9.683E-04	Pulse	0.50	3
Mn			1	-0.004	ug/l	-44.77	82.67	2.353E-04	Pulse	0.50	3
Fe			1	0.310	ug/l	29.46	11,331.40	3.223E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-9.72	161.33	4.591E-04	Pulse	0.50	3
Ni			1	-0.004	ug/l	-54.30	185.33	5.270E-04	Pulse	0.50	3
Cu			1	-0.467	ug/l	-5.83	65,026.28	1.851E-01	Pulse	0.50	3
Zn			1	-0.322	ug/l	-9.14	7,399.43	1.382E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	23.18	24.00	4.479E-05	Pulse	0.50	3
Al			1	-0.161	ug/l	-39.54	319.00	7.423E-04	Pulse	1.00	3
Se			1	0.018	ug/l	29.32	26.66	7.641E-06	Pulse	3.00	3
Sb			1	-0.029	ug/l	-15.88	395.01	7.380E-04	Pulse	1.00	3
Se			1	-0.001	ug/l	-2589.48	35.33	1.186E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,677,740.33	1.55	101.8	Analog	0.50	3
1	Sc		429,718.99	0.22	100.7	Pulse	0.30	3

Quantitation Report

1	Ge		351,337.58	0.94	101.1	Pulse	0.30	3
1	In		3,490,763.75	1.15	97.1	Pulse	0.30	3
1	Tb		14,950,438.00	1.38	102.8	Analog	0.50	3
1	Lu		8,584,462.00	1.39	99.4	Analog	0.50	3
1	Ge		535,618.61	0.61	100.8	Pulse	0.30	3
1	Te		29,784.22	1.04	95.5	Pulse	0.50	3
1	Li		2,320.15	1.87	101.1	Pulse	0.30	3

Quantitation Report

File Name	059SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:02
Sample Name	FA53465-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.408	ug/l	1.27	26,172.89	8.278E-02	Pulse	0.50	3
As			1	0.924	ug/l	4.20	1,034.70	3.272E-03	Pulse	1.00	3
Mo			1	0.185	ug/l	4.66	1,394.72	2.900E-03	Pulse	0.50	3
Pb			1	3.886	ug/l	1.13	186,047.71	1.824E-02	Pulse	1.00	3
Be			1	0.161	ug/l	14.98	9.00	2.287E-05	Pulse	2.00	3
Ag			1	0.080	ug/l	2.98	2,302.82	4.787E-03	Pulse	0.50	3
Ba			1	66.167	ug/l	0.09	173,306.12	5.401E-02	Pulse	0.50	3
Tl			1	0.035	ug/l	5.40	2,388.84	2.342E-04	Pulse	0.50	3
Sn			1	0.636	ug/l	7.13	4,552.82	1.419E-03	Pulse	0.30	3
Sr			1	83.210	ug/l	1.24	437,137.49	1.362E-01	Pulse	0.50	3
[Pb]			1	4.015	ug/l	0.59	89,931.95	8.817E-03	Pulse	0.50	3
Ca			1	13107.412	ug/l	1.02	300,313.60	7.635E-01	Pulse	0.50	3
Ti			1	22.712	ug/l	1.53	4,353.17	1.107E-02	Pulse	0.50	3
Na			1	5525.063	ug/l	0.97	6,588,962.83	1.675E+01	Analog	1.00	3
Mg			1	4409.890	ug/l	0.18	2,246,690.92	5.711E+00	Pulse	1.00	3
K			1	930.065	ug/l	0.37	400,732.02	1.019E+00	Pulse	1.00	3
V			1	9.870	ug/l	1.14	77,381.75	1.967E-01	Pulse	0.50	3
Mn			1	267.787	ug/l	0.51	1,246,775.00	3.943E+00	Pulse	0.50	3
Fe			1	4199.375	ug/l	0.41	34,952,466.67	1.105E+02	Analog	0.50	3
Co			1	1.425	ug/l	1.17	28,106.37	8.889E-02	Pulse	0.50	3
Ni			1	3.281	ug/l	1.83	17,652.73	5.583E-02	Pulse	0.50	3
Cu			1	11.372	ug/l	0.99	236,822.40	7.490E-01	Pulse	0.50	3
Zn			1	6.501	ug/l	1.26	19,159.84	3.983E-02	Pulse	1.00	3
Cd			1	0.083	ug/l	5.44	286.67	5.961E-04	Pulse	0.50	3
Al			1	730.365	ug/l	0.86	106,596.90	2.710E-01	Pulse	1.00	3
Se			1	1.212	ug/l	2.61	109.78	3.422E-05	Pulse	3.00	3
Sb			1	0.094	ug/l	25.18	1,407.06	2.924E-03	Pulse	1.00	3
Se			1	4.726	ug/l	6.14	175.22	8.066E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,200,218.33	0.38	97.2	Analog	0.50	3
1	Sc		393,379.88	0.72	92.1	Pulse	0.30	3
1	Ge		316,198.64	0.37	91.0	Pulse	0.30	3
1	In		3,208,488.34	0.50	89.3	Pulse	0.30	3
1	Tb		14,540,547.67	0.58	100.0	Analog	0.50	3
1	Lu		8,424,084.33	0.37	97.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		481,035.16	0.66	90.5	Pulse	0.30	3
1	Te		21,722.91	0.31	69.6	Pulse	0.50	3
1	Li		2,160.13	3.99	94.1	Pulse	0.30	3

Quantitation Report

File Name	060SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:05
Sample Name	MP33667-D1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.637	ug/l	3.03	28,430.04	9.042E-02	Pulse	0.50	3
As			1	0.919	ug/l	2.83	1,022.70	3.253E-03	Pulse	1.00	3
Mo			1	0.166	ug/l	9.46	1,250.05	2.600E-03	Pulse	0.50	3
Pb			1	4.051	ug/l	1.06	192,669.10	1.896E-02	Pulse	1.00	3
Be			1	0.153	ug/l	40.32	8.50	2.174E-05	Pulse	2.00	3
Ag			1	0.073	ug/l	6.21	2,099.46	4.365E-03	Pulse	0.50	3
Ba			1	68.964	ug/l	0.39	178,880.77	5.630E-02	Pulse	0.50	3
Tl			1	0.023	ug/l	6.76	1,585.41	1.560E-04	Pulse	0.50	3
Sn			1	0.615	ug/l	17.84	4,379.95	1.379E-03	Pulse	0.30	3
Sr			1	86.809	ug/l	0.28	451,591.96	1.421E-01	Pulse	0.50	3
[Pb]			1	4.121	ug/l	2.17	91,791.11	9.034E-03	Pulse	0.50	3
Ca			1	13567.967	ug/l	0.89	309,274.46	7.903E-01	Pulse	0.50	3
Ti			1	25.000	ug/l	4.16	4,767.26	1.218E-02	Pulse	0.50	3
Na			1	5751.025	ug/l	0.74	6,822,489.83	1.743E+01	Analog	1.00	3
Mg			1	4602.367	ug/l	0.83	2,332,642.83	5.961E+00	Pulse	1.00	3
K			1	966.796	ug/l	0.72	413,884.76	1.058E+00	Pulse	1.00	3
V			1	10.500	ug/l	0.69	81,864.48	2.092E-01	Pulse	0.50	3
Mn			1	277.864	ug/l	1.87	1,286,565.71	4.091E+00	Pulse	0.50	3
Fe			1	4530.714	ug/l	1.89	37,501,716.00	1.193E+02	Analog	0.50	3
Co			1	1.493	ug/l	1.38	29,264.06	9.306E-02	Pulse	0.50	3
Ni			1	3.487	ug/l	1.34	18,646.99	5.930E-02	Pulse	0.50	3
Cu			1	11.341	ug/l	1.22	235,090.10	7.476E-01	Pulse	0.50	3
Zn			1	5.791	ug/l	0.94	17,917.65	3.725E-02	Pulse	1.00	3
Cd			1	0.085	ug/l	12.73	294.67	6.124E-04	Pulse	0.50	3
Al			1	828.179	ug/l	0.33	120,207.77	3.072E-01	Pulse	1.00	3
Se			1	1.246	ug/l	7.79	111.11	3.497E-05	Pulse	3.00	3
Sb			1	0.056	ug/l	6.27	1,140.37	2.371E-03	Pulse	1.00	3
Se			1	4.156	ug/l	2.94	158.89	7.236E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,160,926.00	0.37	96.8	Analog	0.50	3
1	Sc		391,347.66	0.30	91.7	Pulse	0.30	3
1	Ge		314,486.43	0.95	90.5	Pulse	0.30	3
1	In		3,177,380.15	0.39	88.4	Pulse	0.30	3
1	Tb		14,614,403.00	0.71	100.5	Analog	0.50	3
1	Lu		8,459,218.00	0.40	97.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		481,073.71	0.89	90.5	Pulse	0.30	3
1	Te		21,955.19	1.39	70.4	Pulse	0.50	3
1	Li		2,115.68	1.41	92.2	Pulse	0.30	3

Quantitation Report

File Name	061SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:09
Sample Name	MP33667-SD1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.369	ug/l	2.03	6,042.29	1.807E-02	Pulse	0.50	3
As			1	0.947	ug/l	15.48	245.33	7.344E-04	Pulse	1.00	3
Mo			1	0.194	ug/l	5.65	329.33	6.450E-04	Pulse	0.50	3
Pb			1	3.561	ug/l	2.17	46,180.72	4.387E-03	Pulse	1.00	3
Be			1	0.175	ug/l	57.31	2.33	5.589E-06	Pulse	2.00	3
Ag			1	0.072	ug/l	20.12	548.01	1.073E-03	Pulse	0.50	3
Ba			1	64.887	ug/l	1.50	35,633.02	1.060E-02	Pulse	0.50	3
Tl			1	0.030	ug/l	7.52	489.34	4.647E-05	Pulse	0.50	3
Sn			1	0.403	ug/l	9.92	1,158.94	3.448E-04	Pulse	0.30	3
Sr			1	82.631	ug/l	0.93	91,914.00	2.734E-02	Pulse	0.50	3
[Pb]			1	3.731	ug/l	1.21	22,492.80	2.136E-03	Pulse	0.50	3
Ca			1	12992.589	ug/l	0.49	63,207.20	1.516E-01	Pulse	0.50	3
Ti			1	21.700	ug/l	2.24	884.02	2.120E-03	Pulse	0.50	3
Na			1	5315.795	ug/l	0.92	1,362,281.95	3.267E+00	Pulse	1.00	3
Mg			1	4469.727	ug/l	1.12	482,890.71	1.158E+00	Pulse	1.00	3
K			1	1035.122	ug/l	1.36	105,353.38	2.527E-01	Pulse	1.00	3
V			1	9.665	ug/l	1.67	16,520.35	3.962E-02	Pulse	0.50	3
Mn			1	262.104	ug/l	0.49	258,133.19	7.722E-01	Pulse	0.50	3
Fe			1	4189.839	ug/l	1.58	7,377,712.33	2.207E+01	Analog	0.50	3
Co			1	1.360	ug/l	1.88	5,900.92	1.765E-02	Pulse	0.50	3
Ni			1	3.268	ug/l	1.76	3,897.74	1.166E-02	Pulse	0.50	3
Cu			1	6.177	ug/l	7.07	95,097.16	2.845E-01	Pulse	0.50	3
Zn			1	2.377	ug/l	26.78	9,135.50	1.789E-02	Pulse	1.00	3
Cd			1	0.077	ug/l	35.07	64.00	1.254E-04	Pulse	0.50	3
Al			1	738.503	ug/l	0.55	23,138.05	5.549E-02	Pulse	1.00	3
Se			1	1.159	ug/l	42.77	40.44	1.204E-05	Pulse	3.00	3
Sb			1	-0.250	ug/l	-9.43	430.68	8.435E-04	Pulse	1.00	3
Se			1	3.500	ug/l	10.99	59.22	2.208E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,527,849.00	1.16	100.3	Analog	0.50	3
1	Sc		416,994.79	0.51	97.7	Pulse	0.30	3
1	Ge		334,307.12	0.86	96.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,361,486.53	0.92	93.5	Pulse	0.30	3
1	Tb		14,772,919.67	0.46	101.6	Analog	0.50	3
1	Lu		8,505,044.83	1.62	98.4	Analog	0.50	3
1	Ge		510,652.20	0.34	96.1	Pulse	0.30	3
1	Te		26,822.31	0.48	86.0	Pulse	0.50	3
1	Li		2,284.59	3.62	99.5	Pulse	0.30	3

Quantitation Report

File Name	062SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:13
Sample Name	MP33667-S1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	208.475	ug/l	1.27	2,141,690.08	6.975E+00	Pulse	0.50	3
As			1	191.303	ug/l	0.71	202,890.57	6.607E-01	Pulse	1.00	3
Mo			1	207.648	ug/l	1.68	1,501,014.67	3.197E+00	Pulse	0.50	3
Pb			1	208.778	ug/l	0.53	8,689,561.00	9.125E-01	Analog	1.00	3
Be			1	210.476	ug/l	0.90	11,190.41	2.888E-02	Pulse	2.00	3
Ag			1	98.262	ug/l	1.70	2,594,513.83	5.526E+00	Pulse	0.50	3
Ba			1	263.948	ug/l	1.03	668,796.19	2.154E-01	Pulse	0.50	3
Tl			1	197.408	ug/l	0.40	12,274,642.67	1.289E+00	Analog	0.50	3
Sn			1	202.247	ug/l	0.45	1,215,754.40	3.916E-01	Pulse	0.30	3
Sr			1	281.227	ug/l	0.99	1,426,816.42	4.596E-01	Pulse	0.50	3
[Pb]			1	187.411	ug/l	0.75	3,653,355.92	3.837E-01	Pulse	0.50	3
Ca			1	31249.311	ug/l	0.41	705,020.42	1.820E+00	Pulse	0.50	3
Ti			1	213.646	ug/l	1.42	40,310.69	1.041E-01	Pulse	0.50	3
Na			1	25047.379	ug/l	0.26	29,345,174.67	7.574E+01	Analog	1.00	3
Mg			1	23768.004	ug/l	0.25	11,925,184.33	3.078E+01	Analog	1.00	3
K			1	19847.686	ug/l	0.19	8,159,547.17	2.106E+01	Analog	1.00	3
V			1	211.013	ug/l	0.58	1,618,614.33	4.178E+00	Pulse	0.50	3
Mn			1	458.257	ug/l	0.43	2,071,985.96	6.747E+00	Pulse	0.50	3
Fe			1	23983.152	ug/l	0.24	193,840,122.67	6.312E+02	Analog	0.50	3
Co			1	202.842	ug/l	0.67	3,847,293.33	1.253E+01	Pulse	0.50	3
Ni			1	209.355	ug/l	0.22	1,081,006.96	3.520E+00	Pulse	0.50	3
Cu			1	212.810	ug/l	0.89	3,064,528.33	9.980E+00	Pulse	0.50	3
Zn			1	188.722	ug/l	1.05	330,258.08	7.034E-01	Pulse	1.00	3
Cd			1	194.802	ug/l	0.60	638,856.19	1.361E+00	Pulse	0.50	3
Al			1	17744.041	ug/l	0.39	2,542,843.42	6.564E+00	Pulse	1.00	3
Se			1	169.523	ug/l	0.99	11,916.93	3.839E-03	Pulse	3.00	3
Sb			1	188.066	ug/l	0.83	1,276,907.58	2.719E+00	Pulse	1.00	3
Se			1	200.921	ug/l	0.74	6,158.77	2.935E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,522,556.33	0.39	90.8	Analog	0.50	3
1	Sc		387,423.94	0.28	90.8	Pulse	0.30	3
1	Ge		307,081.85	0.41	88.3	Pulse	0.30	3
1	In		3,104,312.65	0.58	86.4	Pulse	0.30	3
1	Tb		14,274,076.67	0.71	98.2	Analog	0.50	3
1	Lu		8,231,147.67	0.33	95.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		469,569.18	1.01	88.3	Pulse	0.30	3
1	Te		20,983.39	0.98	67.3	Pulse	0.50	3
1	Li		1,962.33	4.64	85.5	Pulse	0.30	3

Quantitation Report

File Name	063SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:16
Sample Name	MP33667-S2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	215.334	ug/l	0.65	2,229,714.33	7.204E+00	Pulse	0.50	3
As			1	195.932	ug/l	0.36	209,449.78	6.767E-01	Pulse	1.00	3
Mo			1	212.024	ug/l	0.83	1,538,054.46	3.264E+00	Pulse	0.50	3
Pb			1	212.648	ug/l	0.94	8,873,523.00	9.294E-01	Analog	1.00	3
Be			1	213.915	ug/l	0.65	11,532.26	2.936E-02	Pulse	2.00	3
Ag			1	105.310	ug/l	0.44	2,790,398.50	5.922E+00	Pulse	0.50	3
Ba			1	269.249	ug/l	0.86	685,021.23	2.198E-01	Pulse	0.50	3
Tl			1	201.425	ug/l	0.93	12,557,483.67	1.315E+00	Analog	0.50	3
Sn			1	206.913	ug/l	1.28	1,248,865.33	4.007E-01	Pulse	0.30	3
Sr			1	286.027	ug/l	0.44	1,457,141.67	4.675E-01	Pulse	0.50	3
[Pb]			1	192.212	ug/l	1.12	3,756,594.00	3.935E-01	Pulse	0.50	3
Ca			1	31802.173	ug/l	0.53	727,502.25	1.852E+00	Pulse	0.50	3
Ti			1	219.792	ug/l	1.35	42,048.99	1.070E-01	Pulse	0.50	3
Na			1	25225.366	ug/l	0.92	29,965,466.67	7.628E+01	Analog	1.00	3
Mg			1	24034.842	ug/l	0.54	12,227,211.67	3.113E+01	Analog	1.00	3
K			1	20140.819	ug/l	0.83	8,395,266.33	2.137E+01	Analog	1.00	3
V			1	214.662	ug/l	1.05	1,669,549.37	4.250E+00	Pulse	0.50	3
Mn			1	466.650	ug/l	0.41	2,126,708.92	6.871E+00	Pulse	0.50	3
Fe			1	24309.202	ug/l	0.69	198,031,600.00	6.398E+02	Analog	0.50	3
Co			1	208.092	ug/l	0.71	3,978,185.83	1.285E+01	Pulse	0.50	3
Ni			1	212.172	ug/l	0.94	1,104,225.37	3.568E+00	Pulse	0.50	3
Cu			1	218.519	ug/l	0.99	3,169,806.75	1.024E+01	Pulse	0.50	3
Zn			1	193.985	ug/l	0.42	340,440.91	7.225E-01	Pulse	1.00	3
Cd			1	199.655	ug/l	0.17	657,036.40	1.394E+00	Pulse	0.50	3
Al			1	18111.112	ug/l	0.69	2,631,655.50	6.699E+00	Pulse	1.00	3
Se			1	173.765	ug/l	0.93	12,264.70	3.935E-03	Pulse	3.00	3
Sb			1	192.334	ug/l	0.21	1,310,397.37	2.781E+00	Pulse	1.00	3
Se			1	202.844	ug/l	1.41	6,270.26	2.963E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,548,118.67	0.98	91.0	Analog	0.50	3
1	Sc		392,833.05	0.44	92.0	Pulse	0.30	3
1	Ge		309,523.20	0.76	89.0	Pulse	0.30	3
1	In		3,117,076.96	0.66	86.7	Pulse	0.30	3
1	Tb		14,311,072.00	0.87	98.5	Analog	0.50	3
1	Lu		8,401,244.17	0.92	97.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		471,175.43	0.31	88.6	Pulse	0.30	3
1	Te		21,164.92	1.71	67.9	Pulse	0.50	3
1	Li		2,124.57	6.12	92.5	Pulse	0.30	3

Quantitation Report

File Name	064SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:20
Sample Name	MP33667-PS1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	22.035	ug/l	0.87	233,321.25	7.392E-01	Pulse	0.50	3
As			1	19.641	ug/l	0.09	21,435.64	6.791E-02	Pulse	1.00	3
Mo			1	19.818	ug/l	1.36	147,187.98	3.052E-01	Pulse	0.50	3
Pb			1	21.806	ug/l	1.02	969,096.29	9.645E-02	Pulse	1.00	3
Be			1	20.434	ug/l	6.11	1,113.20	2.805E-03	Pulse	2.00	3
Ag			1	4.706	ug/l	1.78	127,774.56	2.649E-01	Pulse	0.50	3
Ba			1	85.202	ug/l	1.63	221,354.24	6.955E-02	Pulse	0.50	3
Tl			1	17.575	ug/l	1.35	1,153,064.29	1.148E-01	Pulse	0.50	3
Sn			1	20.430	ug/l	1.35	126,453.49	3.973E-02	Pulse	0.30	3
Sr			1	102.243	ug/l	0.87	532,576.67	1.673E-01	Pulse	0.50	3
[Pb]			1	21.329	ug/l	1.95	444,093.93	4.420E-02	Pulse	0.50	3
Ca			1	14760.429	ug/l	0.80	341,139.73	8.597E-01	Pulse	0.50	3
Ti			1	40.446	ug/l	2.08	7,818.27	1.970E-02	Pulse	0.50	3
Na			1	7378.854	ug/l	1.10	8,869,214.00	2.235E+01	Analog	1.00	3
Mg			1	6224.634	ug/l	0.77	3,198,764.50	8.061E+00	Pulse	1.00	3
K			1	2731.533	ug/l	0.52	1,161,555.00	2.927E+00	Pulse	1.00	3
V			1	28.989	ug/l	0.67	228,218.53	5.751E-01	Pulse	0.50	3
Mn			1	280.600	ug/l	0.54	1,304,202.08	4.132E+00	Pulse	0.50	3
Fe			1	6105.727	ug/l	0.61	50,729,933.33	1.607E+02	Analog	0.50	3
Co			1	21.232	ug/l	0.39	414,195.13	1.312E+00	Pulse	0.50	3
Ni			1	23.301	ug/l	1.37	123,855.88	3.924E-01	Pulse	0.50	3
Cu			1	31.855	ug/l	1.34	532,683.09	1.688E+00	Pulse	0.50	3
Zn			1	23.342	ug/l	0.82	48,791.04	1.012E-01	Pulse	1.00	3
Cd			1	18.834	ug/l	1.39	63,452.83	1.316E-01	Pulse	0.50	3
Al			1	2422.762	ug/l	0.63	355,902.54	8.969E-01	Pulse	1.00	3
Se			1	17.658	ug/l	1.97	1,292.04	4.060E-04	Pulse	3.00	3
Sb			1	17.447	ug/l	0.58	122,372.68	2.537E-01	Pulse	1.00	3
Se			1	22.902	ug/l	0.65	752.46	3.451E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,048,112.67	1.23	95.8	Analog	0.50	3
1	Sc		396,813.59	0.81	93.0	Pulse	0.30	3
1	Ge		315,662.25	0.76	90.8	Pulse	0.30	3
1	In		3,182,907.65	0.96	88.6	Pulse	0.30	3
1	Tb		14,603,660.67	0.23	100.5	Analog	0.50	3
1	Lu		8,448,955.17	0.96	97.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		482,345.78	0.59	90.7	Pulse	0.30	3
1	Te		21,803.68	1.00	69.9	Pulse	0.50	3
1	Li		2,243.47	2.34	97.7	Pulse	0.30	3

Quantitation Report

File Name	065SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:24
Sample Name	FA53465-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.265	ug/l	2.79	23,699.15	7.799E-02	Pulse	0.50	3
As			1	0.220	ug/l	4.83	255.67	8.416E-04	Pulse	1.00	3
Mo			1	0.149	ug/l	4.84	1,084.70	2.340E-03	Pulse	0.50	3
Pb			1	-0.104	ug/l	-6.29	7,530.67	8.241E-04	Pulse	1.00	3
Be			1	0.057	ug/l	162.92	3.33	8.542E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	19.83	384.67	8.304E-04	Pulse	0.50	3
Ba			1	24.083	ug/l	1.01	60,058.53	1.967E-02	Pulse	0.50	3
Tl			1	0.021	ug/l	5.91	1,344.72	1.471E-04	Pulse	0.50	3
Sn			1	0.492	ug/l	2.64	3,487.02	1.142E-03	Pulse	0.30	3
Sr			1	208.261	ug/l	1.76	1,039,773.56	3.405E-01	Pulse	0.50	3
[Pb]			1	-0.113	ug/l	-2.69	3,471.70	3.799E-04	Pulse	0.50	3
Ca			1	45889.355	ug/l	1.49	1,042,780.12	2.672E+00	Pulse	0.50	3
Ti			1	0.208	ug/l	15.20	42.00	1.076E-04	Pulse	0.50	3
Na			1	138719.947	ug/l	1.29	163,606,506.67	4.193E+02	Analog	1.00	3
Mg			1	49380.629	ug/l	1.38	24,955,434.67	6.395E+01	Analog	1.00	3
K			1	364.032	ug/l	0.81	163,509.35	4.190E-01	Pulse	1.00	3
V			1	0.378	ug/l	12.40	3,448.32	8.837E-03	Pulse	0.50	3
Mn			1	71.399	ug/l	0.61	319,493.76	1.052E+00	Pulse	0.50	3
Fe			1	52.341	ug/l	2.40	423,412.96	1.393E+00	Pulse	0.50	3
Co			1	0.290	ug/l	3.43	5,702.85	1.877E-02	Pulse	0.50	3
Ni			1	1.411	ug/l	0.88	7,409.44	2.439E-02	Pulse	0.50	3
Cu			1	-2.629	ug/l	-1.11	32,630.19	1.074E-01	Pulse	0.50	3
Zn			1	1.488	ug/l	0.82	9,999.60	2.158E-02	Pulse	1.00	3
Cd			1	0.022	ug/l	46.86	80.00	1.725E-04	Pulse	0.50	3
Al			1	7.148	ug/l	8.23	1,367.71	3.505E-03	Pulse	1.00	3
Se			1	0.798	ug/l	18.43	75.89	2.485E-05	Pulse	3.00	3
Sb			1	0.009	ug/l	141.86	783.02	1.690E-03	Pulse	1.00	3
Se			1	1.436	ug/l	9.30	66.33	3.280E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,139,938.33	0.94	87.1	Analog	0.50	3
1	Sc		390,236.19	0.03	91.4	Pulse	0.30	3
1	Ge		303,821.51	0.83	87.4	Pulse	0.30	3
1	In		3,054,039.53	0.80	85.0	Pulse	0.30	3
1	Tb		14,066,552.00	0.74	96.8	Analog	0.50	3
1	Lu		8,243,128.67	0.78	95.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		463,467.15	0.98	87.2	Pulse	0.30	3
1	Te		20,231.19	0.77	64.9	Pulse	0.50	3
1	Li		1,981.22	7.91	86.3	Pulse	0.30	3

Quantitation Report

File Name	066SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:27
Sample Name	FA53465-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.459	ug/l	0.52	15,875.17	5.103E-02	Pulse	0.50	3
As			1	1.411	ug/l	3.19	1,540.73	4.953E-03	Pulse	1.00	3
Mo			1	0.557	ug/l	7.73	4,067.79	8.620E-03	Pulse	0.50	3
Pb			1	-0.081	ug/l	-2.11	9,111.77	9.269E-04	Pulse	1.00	3
Be			1	0.041	ug/l	127.40	2.50	6.427E-06	Pulse	2.00	3
Ag			1	0.016	ug/l	15.02	549.34	1.164E-03	Pulse	0.50	3
Ba			1	101.807	ug/l	0.25	260,459.88	8.310E-02	Pulse	0.50	3
Tl			1	0.012	ug/l	13.24	838.69	8.529E-05	Pulse	0.50	3
Sn			1	0.643	ug/l	73.34	4,493.04	1.434E-03	Pulse	0.30	3
Sr			1	282.788	ug/l	1.07	1,448,516.83	4.622E-01	Pulse	0.50	3
[Pb]			1	-0.086	ug/l	-6.58	4,276.55	4.351E-04	Pulse	0.50	3
Ca			1	64971.566	ug/l	0.60	1,473,031.67	3.783E+00	Pulse	0.50	3
Ti			1	1.894	ug/l	15.81	361.34	9.285E-04	Pulse	0.50	3
Na			1	10531.109	ug/l	0.59	12,412,122.00	3.188E+01	Analog	1.00	3
Mg			1	16508.988	ug/l	1.09	8,324,230.00	2.138E+01	Analog	1.00	3
K			1	6733.066	ug/l	0.59	2,790,438.83	7.167E+00	Pulse	1.00	3
V			1	7.572	ug/l	1.22	58,881.01	1.512E-01	Pulse	0.50	3
Mn			1	6962.579	ug/l	0.88	31,890,676.00	1.025E+02	Analog	0.50	3
Fe			1	13709.977	ug/l	1.14	112,257,040.00	3.609E+02	Analog	0.50	3
Co			1	19.651	ug/l	0.42	377,836.35	1.215E+00	Pulse	0.50	3
Ni			1	29.978	ug/l	3.12	156,982.87	5.047E-01	Pulse	0.50	3
Cu			1	-2.410	ug/l	-1.16	36,525.79	1.174E-01	Pulse	0.50	3
Zn			1	2.340	ug/l	3.86	11,647.52	2.468E-02	Pulse	1.00	3
Cd			1	0.018	ug/l	17.31	68.67	1.455E-04	Pulse	0.50	3
Al			1	44.301	ug/l	2.74	6,714.48	1.725E-02	Pulse	1.00	3
Se			1	0.457	ug/l	33.63	53.67	1.713E-05	Pulse	3.00	3
Sb			1	0.006	ug/l	26.36	779.02	1.651E-03	Pulse	1.00	3
Se			1	1.362	ug/l	18.35	67.89	3.171E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,830,698.67	0.40	93.7	Analog	0.50	3
1	Sc		389,369.91	0.81	91.2	Pulse	0.30	3
1	Ge		311,097.57	0.43	89.5	Pulse	0.30	3
1	In		3,134,118.90	0.40	87.2	Pulse	0.30	3
1	Tb		14,423,021.67	0.66	99.2	Analog	0.50	3
1	Lu		8,401,261.33	0.36	97.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		471,957.95	0.34	88.8	Pulse	0.30	3
1	Te		21,412.50	0.12	68.6	Pulse	0.50	3
1	Li		1,989.00	6.38	86.6	Pulse	0.30	3

Quantitation Report

File Name	068CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:49
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	50.807	ug/l	1.48	1,272,287.84	3.401E+00	Pulse	0.50	3
As			1	49.278	ug/l	1.04	127,365.82	3.404E-01	Pulse	1.00	3
Mo			1	48.772	ug/l	1.22	856,163.04	1.502E+00	Pulse	0.50	3
Pb			1	44.925	ug/l	1.31	4,195,977.42	3.934E-01	Pulse	1.00	3
Be			1	53.729	ug/l	1.42	6,900.84	1.475E-02	Pulse	2.00	3
Ag			1	49.247	ug/l	0.87	3,157,705.83	5.539E+00	Pulse	0.50	3
Ba			1	46.683	ug/l	0.50	275,120.17	7.621E-02	Pulse	0.50	3
Tl			1	48.386	ug/l	0.64	6,739,200.67	6.319E-01	Analog	0.50	3
Sn			1	48.555	ug/l	0.95	679,162.91	1.881E-01	Pulse	0.30	3
Sr			1	48.102	ug/l	0.89	568,427.08	1.575E-01	Pulse	0.50	3
[Pb]			1	45.123	ug/l	0.86	1,973,718.88	1.851E-01	Pulse	0.50	3
Ca			1	4834.507	ug/l	0.89	263,561.42	5.633E-01	Pulse	0.50	3
Ti			1	48.380	ug/l	1.25	22,053.07	4.713E-02	Pulse	0.50	3
Na			1	5177.729	ug/l	0.17	14,668,286.67	3.135E+01	Analog	1.00	3
Mg			1	5169.456	ug/l	0.69	6,265,214.00	1.339E+01	Analog	1.00	3
K			1	4789.772	ug/l	0.44	4,764,572.00	1.018E+01	Pulse	1.00	3
V			1	49.893	ug/l	0.73	924,811.46	1.976E+00	Pulse	0.50	3
Mn			1	48.801	ug/l	1.04	537,772.04	1.437E+00	Pulse	0.50	3
Fe			1	5128.772	ug/l	0.29	101,017,072.00	2.700E+02	Analog	0.50	3
Co			1	50.826	ug/l	0.96	2,349,225.33	6.279E+00	Pulse	0.50	3
Ni			1	52.062	ug/l	0.53	655,182.17	1.751E+00	Pulse	0.50	3
Cu			1	51.149	ug/l	1.19	1,839,107.67	4.916E+00	Pulse	0.50	3
Zn			1	49.645	ug/l	0.98	215,330.55	3.777E-01	Pulse	1.00	3
Cd			1	47.738	ug/l	1.74	380,160.04	6.668E-01	Pulse	0.50	3
Al			1	4771.065	ug/l	0.49	1,651,774.50	3.530E+00	Pulse	1.00	3
Se			1	50.150	ug/l	1.29	8,208.87	2.274E-03	Pulse	3.00	3
Sb			1	45.978	ug/l	1.41	758,481.58	1.330E+00	Pulse	1.00	3
Se			1	49.071	ug/l	0.58	4,176.90	1.440E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,665,351.00	0.42	101.7	Analog	0.50	3
1	Sc		467,927.46	0.44	109.6	Pulse	0.30	3
1	Ge		374,152.74	0.73	107.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,609,868.19	0.68	100.4	Pulse	0.30	3
1	Tb		15,345,755.67	1.47	105.6	Analog	0.50	3
1	Lu		8,880,138.67	0.50	102.8	Analog	0.50	3
1	Ge		570,131.07	1.11	107.2	Pulse	0.30	3
1	Te		29,010.34	0.67	93.0	Pulse	0.50	3
1	Li		2,542.40	4.15	110.7	Pulse	0.30	3

Quantitation Report

File Name	069_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:53
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	102.087	ug/l	0.61	2,526,670.58	6.831E+00	Pulse	0.50	3
As			1	99.236	ug/l	0.40	253,562.14	6.855E-01	Pulse	1.00	3
Mo			1	98.132	ug/l	0.58	1,699,974.75	3.022E+00	Pulse	0.50	3
Pb			1	96.693	ug/l	1.07	8,809,501.67	8.453E-01	Analog	1.00	3
Be			1	104.713	ug/l	0.85	13,570.85	2.874E-02	Pulse	2.00	3
Ag			1	103.447	ug/l	0.64	6,545,466.83	1.163E+01	Analog	0.50	3
Ba			1	95.233	ug/l	0.28	549,288.79	1.555E-01	Pulse	0.50	3
Tl			1	97.274	ug/l	1.05	13,238,994.00	1.270E+00	Analog	0.50	3
Sn			1	99.565	ug/l	0.64	1,362,400.54	3.856E-01	Pulse	0.30	3
Sr			1	99.226	ug/l	0.90	1,146,339.50	3.245E-01	Pulse	0.50	3
[Pb]			1	90.709	ug/l	0.66	3,870,512.00	3.714E-01	Pulse	0.50	3
Ca			1	9643.975	ug/l	0.54	530,376.15	1.123E+00	Pulse	0.50	3
Ti			1	96.716	ug/l	1.38	44,479.62	9.421E-02	Pulse	0.50	3
Na			1	10275.236	ug/l	0.98	29,346,103.33	6.216E+01	Analog	1.00	3
Mg			1	10200.610	ug/l	0.73	12,474,341.33	2.642E+01	Analog	1.00	3
K			1	9926.525	ug/l	1.01	9,946,380.33	2.107E+01	Analog	1.00	3
V			1	98.841	ug/l	0.93	1,847,988.04	3.914E+00	Pulse	0.50	3
Mn			1	97.913	ug/l	0.68	1,066,617.67	2.884E+00	Pulse	0.50	3
Fe			1	10301.789	ug/l	1.68	200,584,453.33	5.423E+02	Analog	0.50	3
Co			1	100.432	ug/l	1.03	4,589,059.33	1.241E+01	Pulse	0.50	3
Ni			1	103.283	ug/l	0.28	1,284,853.83	3.473E+00	Pulse	0.50	3
Cu			1	101.521	ug/l	0.55	3,525,948.58	9.532E+00	Pulse	0.50	3
Zn			1	99.911	ug/l	0.31	418,449.44	7.438E-01	Pulse	1.00	3
Cd			1	94.996	ug/l	0.49	746,548.00	1.327E+00	Pulse	0.50	3
Al			1	9573.701	ug/l	0.54	3,344,055.00	7.083E+00	Pulse	1.00	3
Se			1	100.852	ug/l	0.54	16,133.67	4.566E-03	Pulse	3.00	3
Sb			1	92.617	ug/l	0.41	1,506,905.38	2.679E+00	Pulse	1.00	3
Se			1	102.037	ug/l	1.90	8,306.48	2.981E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,421,564.00	0.46	99.3	Analog	0.50	3
1	Sc		472,169.15	1.01	110.6	Pulse	0.30	3
1	Ge		369,913.58	0.95	106.4	Pulse	0.30	3
1	In		3,533,147.08	0.29	98.3	Pulse	0.30	3
1	Tb		15,364,697.00	0.52	105.7	Analog	0.50	3
1	Lu		8,823,921.00	0.83	102.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		562,592.76	0.50	105.8	Pulse	0.30	3
1	Te		27,870.51	1.59	89.4	Pulse	0.50	3
1	Li		2,536.84	3.88	110.5	Pulse	0.30	3

Quantitation Report

File Name	070_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 12:57
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.008	ug/l	31.02	1,040.03	2.757E-03	Pulse	0.50	3
As			1	0.007	ug/l	31.76	48.33	1.282E-04	Pulse	1.00	3
Mo			1	0.025	ug/l	6.20	483.34	8.325E-04	Pulse	0.50	3
Pb			1	-0.008	ug/l	-19.39	13,367.90	1.208E-03	Pulse	1.00	3
Be			1	0.005	ug/l	136.57	1.00	2.141E-06	Pulse	2.00	3
Ag			1	0.002	ug/l	54.37	272.00	4.681E-04	Pulse	0.50	3
Ba			1	0.005	ug/l	13.08	62.00	1.700E-05	Pulse	0.50	3
Tl			1	0.025	ug/l	12.97	3,710.42	3.356E-04	Pulse	0.50	3
Sn			1	0.038	ug/l	31.58	1,220.05	3.345E-04	Pulse	0.30	3
Sr			1	0.010	ug/l	53.00	1,417.40	3.886E-04	Pulse	0.50	3
[Pb]			1	-0.013	ug/l	-32.76	6,195.81	5.597E-04	Pulse	0.50	3
Ca			1	-0.403	ug/l	-77.49	108.00	2.310E-04	Pulse	0.50	3
Ti			1	-0.002	ug/l	-215.22	2.00	4.270E-06	Pulse	0.50	3
Na			1	-4.159	ug/l	-4.10	13,602.95	2.911E-02	Pulse	1.00	3
Mg			1	0.224	ug/l	36.37	443.34	9.487E-04	Pulse	1.00	3
K			1	0.123	ug/l	142.42	15,695.91	3.359E-02	Pulse	1.00	3
V			1	-0.011	ug/l	-18.84	430.01	9.202E-04	Pulse	0.50	3
Mn			1	0.002	ug/l	189.83	152.67	4.035E-04	Pulse	0.50	3
Fe			1	0.320	ug/l	27.97	12,365.38	3.274E-02	Pulse	0.50	3
Co			1	-0.002	ug/l	-23.00	208.00	5.512E-04	Pulse	0.50	3
Ni			1	0.009	ug/l	36.25	370.67	9.812E-04	Pulse	0.50	3
Cu			1	-0.416	ug/l	-11.57	71,598.69	1.897E-01	Pulse	0.50	3
Zn			1	-0.330	ug/l	-7.07	7,987.99	1.376E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	33.22	27.33	4.706E-05	Pulse	0.50	3
Al			1	-0.193	ug/l	-17.70	335.67	7.182E-04	Pulse	1.00	3
Se			1	0.007	ug/l	303.00	26.00	7.131E-06	Pulse	3.00	3
Sb			1	-0.018	ug/l	-12.47	609.34	1.049E-03	Pulse	1.00	3
Se			1	0.057	ug/l	179.83	41.33	1.356E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,068,844.67	1.32	105.5	Analog	0.50	3
1	Sc		467,338.70	0.34	109.5	Pulse	0.30	3

Quantitation Report

1	Ge		377,445.25	1.30	108.6	Pulse	0.30	3
1	In		3,647,446.66	0.51	101.5	Pulse	0.30	3
1	Tb		15,552,647.00	0.45	107.0	Analog	0.50	3
1	Lu		8,935,426.00	0.41	103.4	Analog	0.50	3
1	Ge		580,586.44	0.65	109.2	Pulse	0.30	3
1	Te		30,480.72	0.69	97.7	Pulse	0.50	3
1	Li		2,584.62	6.78	112.6	Pulse	0.30	3

Quantitation Report

File Name	071SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:00
Sample Name	FA53465-4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	3.516	ug/l	0.78	38,474.54	1.198E-01	Pulse	0.50	3
As			1	0.303	ug/l	8.88	361.67	1.126E-03	Pulse	1.00	3
Mo			1	0.205	ug/l	8.14	1,578.07	3.202E-03	Pulse	0.50	3
Pb			1	0.001	ug/l	523.09	11,361.45	1.284E-03	Pulse	1.00	3
Be			1	0.038	ug/l	44.50	2.67	6.064E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	8.50	394.01	7.994E-04	Pulse	0.50	3
Ba			1	614.033	ug/l	1.45	1,589,709.00	5.012E-01	Pulse	0.50	3
Tl			1	0.024	ug/l	9.32	1,440.74	1.628E-04	Pulse	0.50	3
Sn			1	0.490	ug/l	14.02	3,609.28	1.138E-03	Pulse	0.30	3
Sr			1	1528.882	ug/l	1.39	7,920,997.00	2.497E+00	Analog	0.50	3
[Pb]			1	-0.006	ug/l	-76.09	5,302.17	5.993E-04	Pulse	0.50	3
Ca			1	208599.342	ug/l	0.43	5,337,045.83	1.215E+01	Analog	0.50	3
Ti			1	3.433	ug/l	6.43	737.35	1.678E-03	Pulse	0.50	3
Na			1	384612.896	ug/l	0.75	510,728,320.00	1.162E+03	Analog	1.00	3
Mg			1	72983.523	ug/l	0.33	41,531,517.33	9.452E+01	Analog	1.00	3
K			1	64242.499	ug/l	1.01	29,921,052.00	6.810E+01	Analog	1.00	3
V			1	191.771	ug/l	0.98	1,668,438.92	3.797E+00	Pulse	0.50	3
Mn			1	1247.256	ug/l	0.84	5,896,656.33	1.836E+01	Analog	0.50	3
Fe			1	200.617	ug/l	1.21	1,700,496.63	5.296E+00	Pulse	0.50	3
Co			1	0.577	ug/l	0.51	11,714.23	3.648E-02	Pulse	0.50	3
Ni			1	2.261	ug/l	2.23	12,418.01	3.868E-02	Pulse	0.50	3
Cu			1	-2.599	ug/l	-0.31	34,932.20	1.088E-01	Pulse	0.50	3
Zn			1	1.891	ug/l	1.91	11,359.34	2.305E-02	Pulse	1.00	3
Cd			1	0.079	ug/l	9.49	280.00	5.680E-04	Pulse	0.50	3
Al			1	51.596	ug/l	1.65	8,763.93	1.994E-02	Pulse	1.00	3
Se			1	0.245	ug/l	39.62	39.11	1.233E-05	Pulse	3.00	3
Sb			1	0.146	ug/l	20.34	1,808.43	3.668E-03	Pulse	1.00	3
Se			1	1.434	ug/l	9.10	67.22	3.276E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,847,517.00	0.67	84.3	Analog	0.50	3
1	Sc		439,412.19	0.45	102.9	Pulse	0.30	3
1	Ge		321,106.48	0.62	92.4	Pulse	0.30	3
1	In		3,172,054.32	0.55	88.2	Pulse	0.30	3
1	Tb		14,267,520.33	1.95	98.2	Analog	0.50	3
1	Lu		8,445,427.17	2.61	97.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		492,906.94	0.31	92.7	Pulse	0.30	3
1	Te		20,506.18	2.43	65.7	Pulse	0.50	3
1	Li		2,467.94	3.14	107.5	Pulse	0.30	3

Quantitation Report

File Name	072SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:04
Sample Name	FA53465-5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.891	ug/l	2.69	10,558.22	3.204E-02	Pulse	0.50	3
As			1	0.302	ug/l	5.83	370.33	1.124E-03	Pulse	1.00	3
Mo			1	0.437	ug/l	4.31	3,392.98	6.779E-03	Pulse	0.50	3
Pb			1	-0.084	ug/l	-2.00	8,442.09	9.116E-04	Pulse	1.00	3
Be			1	0.028	ug/l	61.23	2.00	4.586E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	17.64	222.67	4.448E-04	Pulse	0.50	3
Ba			1	111.238	ug/l	0.58	294,386.39	9.080E-02	Pulse	0.50	3
Tl			1	0.014	ug/l	11.82	914.03	9.864E-05	Pulse	0.50	3
Sn			1	0.362	ug/l	3.66	2,883.57	8.895E-04	Pulse	0.30	3
Sr			1	867.564	ug/l	0.90	4,594,598.33	1.417E+00	Pulse	0.50	3
[Pb]			1	-0.091	ug/l	-3.21	3,933.80	4.248E-04	Pulse	0.50	3
Ca			1	130681.743	ug/l	0.94	3,330,904.58	7.609E+00	Pulse	0.50	3
Ti			1	0.185	ug/l	39.41	42.00	9.621E-05	Pulse	0.50	3
Na			1	289897.314	ug/l	1.09	383,495,008.00	8.761E+02	Analog	1.00	3
Mg			1	69546.762	ug/l	1.10	39,424,630.67	9.007E+01	Analog	1.00	3
K			1	8321.440	ug/l	1.23	3,873,715.17	8.850E+00	Pulse	1.00	3
V			1	0.507	ug/l	2.26	4,985.99	1.139E-02	Pulse	0.50	3
Mn			1	202.696	ug/l	0.59	983,598.93	2.985E+00	Pulse	0.50	3
Fe			1	313.603	ug/l	0.69	2,725,245.75	8.270E+00	Pulse	0.50	3
Co			1	1.422	ug/l	2.10	29,220.68	8.867E-02	Pulse	0.50	3
Ni			1	2.894	ug/l	1.97	16,257.54	4.933E-02	Pulse	0.50	3
Cu			1	-2.307	ug/l	-1.24	40,253.84	1.221E-01	Pulse	0.50	3
Zn			1	0.979	ug/l	12.22	9,873.20	1.972E-02	Pulse	1.00	3
Cd			1	0.082	ug/l	4.06	296.00	5.913E-04	Pulse	0.50	3
Al			1	7.187	ug/l	5.42	1,540.40	3.519E-03	Pulse	1.00	3
Se			1	7.436	ug/l	4.79	566.90	1.749E-04	Pulse	3.00	3
Sb			1	0.078	ug/l	14.71	1,349.72	2.696E-03	Pulse	1.00	3
Se			1	9.854	ug/l	2.00	332.67	1.553E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,261,070.33	1.00	88.3	Analog	0.50	3
1	Sc		437,772.47	1.21	102.5	Pulse	0.30	3
1	Ge		329,553.95	0.58	94.8	Pulse	0.30	3
1	In		3,242,131.40	0.74	90.2	Pulse	0.30	3
1	Tb		14,666,958.67	0.17	100.9	Analog	0.50	3
1	Lu		8,656,765.00	0.32	100.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		500,602.29	0.46	94.2	Pulse	0.30	3
1	Te		21,428.56	0.83	68.7	Pulse	0.50	3
1	Li		2,355.71	7.30	102.6	Pulse	0.30	3

Quantitation Report

File Name	073SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:07
Sample Name	FA53465-6
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	3.412	ug/l	0.06	37,242.79	1.163E-01	Pulse	0.50	3
As			1	0.291	ug/l	2.78	347.67	1.086E-03	Pulse	1.00	3
Mo			1	0.153	ug/l	7.73	1,168.04	2.403E-03	Pulse	0.50	3
Pb			1	0.020	ug/l	17.21	12,204.70	1.368E-03	Pulse	1.00	3
Be			1	0.037	ug/l	45.43	2.50	5.816E-06	Pulse	2.00	3
Ag			1	0.005	ug/l	25.73	256.67	5.269E-04	Pulse	0.50	3
Ba			1	584.334	ug/l	0.27	1,514,338.04	4.769E-01	Pulse	0.50	3
Tl			1	0.007	ug/l	24.55	494.68	5.545E-05	Pulse	0.50	3
Sn			1	0.326	ug/l	4.55	2,605.76	8.208E-04	Pulse	0.30	3
Sr			1	1451.780	ug/l	0.42	7,529,077.00	2.371E+00	Analog	0.50	3
[Pb]			1	0.016	ug/l	11.03	5,738.98	6.433E-04	Pulse	0.50	3
Ca			1	199243.352	ug/l	1.10	4,980,597.50	1.160E+01	Mix	0.50	3
Ti			1	3.156	ug/l	7.84	662.68	1.543E-03	Pulse	0.50	3
Na			1	372931.331	ug/l	1.01	483,774,837.33	1.127E+03	Analog	1.00	3
Mg			1	71018.005	ug/l	0.47	39,480,525.33	9.197E+01	Analog	1.00	3
K			1	61965.838	ug/l	1.05	28,194,905.33	6.568E+01	Analog	1.00	3
V			1	184.735	ug/l	0.32	1,570,203.92	3.658E+00	Pulse	0.50	3
Mn			1	1180.755	ug/l	0.68	5,565,619.50	1.738E+01	Analog	0.50	3
Fe			1	176.436	ug/l	0.14	1,491,702.12	4.660E+00	Pulse	0.50	3
Co			1	0.547	ug/l	3.12	11,095.21	3.466E-02	Pulse	0.50	3
Ni			1	2.066	ug/l	2.72	11,334.68	3.540E-02	Pulse	0.50	3
Cu			1	-2.712	ug/l	-1.62	33,163.10	1.036E-01	Pulse	0.50	3
Zn			1	1.212	ug/l	6.90	10,006.93	2.057E-02	Pulse	1.00	3
Cd			1	0.083	ug/l	8.85	288.67	5.938E-04	Pulse	0.50	3
Al			1	48.125	ug/l	1.78	8,010.61	1.866E-02	Pulse	1.00	3
Se			1	0.194	ug/l	36.01	35.56	1.119E-05	Pulse	3.00	3
Sb			1	0.048	ug/l	17.93	1,098.04	2.256E-03	Pulse	1.00	3
Se			1	1.316	ug/l	5.50	63.00	3.105E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,921,539.67	0.32	85.0	Analog	0.50	3
1	Sc		429,285.65	1.07	100.6	Pulse	0.30	3
1	Ge		320,135.69	0.25	92.1	Pulse	0.30	3
1	In		3,175,094.73	0.57	88.3	Pulse	0.30	3
1	Tb		14,277,388.67	0.42	98.2	Analog	0.50	3
1	Lu		8,542,440.33	0.31	98.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		486,526.92	1.65	91.5	Pulse	0.30	3
1	Te		20,299.95	1.62	65.1	Pulse	0.50	3
1	Li		2,435.72	5.63	106.1	Pulse	0.30	3

Quantitation Report

File Name	074_MB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:11
Sample Name	MP33665-MB1
Sample Type	MB
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.172	ug/l	10.05	2,860.89	7.991E-03	Pulse	0.50	3
As			1	0.069	ug/l	16.15	113.67	3.174E-04	Pulse	1.00	3
Mo			1	0.017	ug/l	14.00	166.00	3.055E-04	Pulse	0.50	3
Pb			1	-0.100	ug/l	-1.04	9,419.60	8.432E-04	Pulse	1.00	3
Be			1	0.037	ug/l	66.27	2.67	5.857E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	2738.11	146.00	2.689E-04	Pulse	0.50	3
Ba			1	0.045	ug/l	22.21	164.67	4.616E-05	Pulse	0.50	3
Tl			1	0.004	ug/l	33.93	386.01	3.454E-05	Pulse	0.50	3
Sn			1	0.295	ug/l	5.96	2,713.55	7.600E-04	Pulse	0.30	3
Sr			1	0.142	ug/l	13.84	2,098.13	5.877E-04	Pulse	0.50	3
[Pb]			1	-0.103	ug/l	-2.10	4,475.94	4.007E-04	Pulse	0.50	3
Ca			1	23.699	ug/l	4.34	752.69	1.658E-03	Pulse	0.50	3
Ti			1	0.050	ug/l	17.85	14.00	3.084E-05	Pulse	0.50	3
Na			1	41.135	ug/l	15.37	80,940.92	1.786E-01	Pulse	1.00	3
Mg			1	10.607	ug/l	8.35	6,396.70	1.411E-02	Pulse	1.00	3
K			1	3.628	ug/l	2.36	16,873.87	3.717E-02	Pulse	1.00	3
V			1	0.267	ug/l	3.38	3,010.24	6.633E-03	Pulse	0.50	3
Mn			1	0.121	ug/l	3.01	760.02	2.123E-03	Pulse	0.50	3
Fe			1	3.317	ug/l	5.25	36,961.08	1.032E-01	Pulse	0.50	3
Co			1	-0.004	ug/l	-35.23	229.33	6.400E-04	Pulse	0.50	3
Ni			1	0.078	ug/l	7.51	708.02	1.977E-03	Pulse	0.50	3
Cu			1	-2.463	ug/l	-1.44	41,183.80	1.150E-01	Pulse	0.50	3
Zn			1	-0.753	ug/l	-10.56	7,287.05	1.342E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	161.63	14.00	2.570E-05	Pulse	0.50	3
Al			1	5.130	ug/l	11.48	1,251.71	2.758E-03	Pulse	1.00	3
Se			1	0.047	ug/l	22.85	28.11	7.869E-06	Pulse	3.00	3
Sb			1	-0.012	ug/l	-33.48	752.02	1.385E-03	Pulse	1.00	3
Se			1	0.480	ug/l	29.60	45.78	1.888E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,171,191.33	0.21	106.5	Analog	0.50	3
1	Sc		453,995.45	2.24	106.3	Pulse	0.30	3
1	Ge		358,073.92	1.17	103.0	Pulse	0.30	3
1	In		3,571,525.83	1.07	99.4	Pulse	0.30	3
1	Tb		15,997,720.67	0.81	110.1	Analog	0.50	3
1	Lu		9,226,676.33	1.05	106.8	Analog	0.50	3
1	Ge		543,162.10	1.00	102.2	Pulse	0.30	3
1	Te		24,250.05	1.38	77.7	Pulse	0.50	3
1	Li		2,451.27	3.27	106.8	Pulse	0.30	3

Quantitation Report

File Name 075_BSP.d
File Path D:\2018\04-April\xa043018m1.b
Method File
Method Path
Acq Time 4/30/2018 13:15
Sample Name MP33665-B1
Sample Type BSP
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/30/2018 14:30
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	223.434	ug/l	0.99	2,447,100.17	7.475E+00	Pulse	0.50	3
As			1	200.941	ug/l	0.61	227,200.37	6.940E-01	Pulse	1.00	3
Mo			1	219.601	ug/l	1.50	1,679,990.17	3.381E+00	Pulse	0.50	3
Pb			1	214.772	ug/l	1.49	9,493,968.00	9.387E-01	Analog	1.00	3
Be			1	234.705	ug/l	0.34	13,426.75	3.221E-02	Pulse	2.00	3
Ag			1	109.808	ug/l	0.82	3,068,477.33	6.175E+00	Pulse	0.50	3
Ba			1	205.631	ug/l	2.40	546,961.13	1.678E-01	Pulse	0.50	3
Tl			1	206.924	ug/l	1.14	13,665,824.00	1.351E+00	Analog	0.50	3
Sn			1	212.822	ug/l	0.80	1,343,038.11	4.121E-01	Pulse	0.30	3
Sr			1	207.052	ug/l	0.63	1,103,140.83	3.385E-01	Pulse	0.50	3
[Pb]			1	191.493	ug/l	2.68	3,964,385.42	3.920E-01	Pulse	0.50	3
Ca			1	19509.932	ug/l	0.37	473,653.41	1.136E+00	Pulse	0.50	3
Ti			1	209.738	ug/l	1.00	42,580.80	1.021E-01	Pulse	0.50	3
Na			1	21077.833	ug/l	1.37	26,574,138.00	6.375E+01	Analog	1.00	3
Mg			1	21050.871	ug/l	0.57	11,364,300.00	2.726E+01	Analog	1.00	3
K			1	19776.146	ug/l	0.84	8,747,835.00	2.099E+01	Analog	1.00	3
V			1	216.210	ug/l	1.44	1,784,472.25	4.281E+00	Pulse	0.50	3
Mn			1	208.155	ug/l	0.79	1,003,456.00	3.065E+00	Pulse	0.50	3
Fe			1	21403.926	ug/l	1.53	184,432,922.67	5.634E+02	Analog	0.50	3
Co			1	218.808	ug/l	1.23	4,424,534.50	1.351E+01	Pulse	0.50	3
Ni			1	222.753	ug/l	1.33	1,226,212.00	3.745E+00	Pulse	0.50	3
Cu			1	218.428	ug/l	1.30	3,351,487.25	1.024E+01	Pulse	0.50	3
Zn			1	199.446	ug/l	1.26	368,904.09	7.424E-01	Pulse	1.00	3
Cd			1	206.467	ug/l	0.91	716,548.08	1.442E+00	Pulse	0.50	3
Al			1	18269.921	ug/l	0.65	2,817,124.17	6.758E+00	Pulse	1.00	3
Se			1	181.444	ug/l	2.21	13,389.24	4.108E-03	Pulse	3.00	3
Sb			1	199.071	ug/l	1.28	1,430,328.83	2.879E+00	Pulse	1.00	3
Se			1	211.738	ug/l	2.21	6,746.64	3.092E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,115,236.67	1.13	96.4	Analog	0.50	3
1	Sc		416,860.24	0.16	97.6	Pulse	0.30	3
1	Ge		327,380.89	0.18	94.2	Pulse	0.30	3
1	In		3,258,963.06	0.54	90.7	Pulse	0.30	3
1	Tb		15,137,558.00	1.21	104.1	Analog	0.50	3
1	Lu		8,744,217.33	0.22	101.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		496,915.52	0.68	93.5	Pulse	0.30	3
1	Te		21,819.69	1.02	70.0	Pulse	0.50	3
1	Li		2,354.59	3.78	102.6	Pulse	0.30	3

Quantitation Report

File Name	076SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:18
Sample Name	FA53517-25
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.265	ug/l	3.95	3,825.72	1.109E-02	Pulse	0.50	3
As			1	0.544	ug/l	1.83	676.01	1.959E-03	Pulse	1.00	3
Mo			1	0.091	ug/l	2.90	755.35	1.441E-03	Pulse	0.50	3
Pb			1	0.157	ug/l	6.06	20,523.63	1.962E-03	Pulse	1.00	3
Be			1	0.030	ug/l	88.73	2.17	4.961E-06	Pulse	2.00	3
Ag			1	0.004	ug/l	32.23	258.67	4.937E-04	Pulse	0.50	3
Ba			1	33.587	ug/l	0.48	93,200.78	2.742E-02	Pulse	0.50	3
Tl			1	0.044	ug/l	10.10	3,119.63	2.981E-04	Pulse	0.50	3
Sn			1	0.417	ug/l	11.16	3,381.46	9.950E-04	Pulse	0.30	3
Sr			1	588.130	ug/l	1.00	3,265,557.58	9.609E-01	Pulse	0.50	3
[Pb]			1	0.155	ug/l	3.57	9,700.11	9.273E-04	Pulse	0.50	3
Ca			1	36431.982	ug/l	0.91	929,655.67	2.122E+00	Pulse	0.50	3
Ti			1	0.206	ug/l	27.22	46.67	1.066E-04	Pulse	0.50	3
Na			1	10735.304	ug/l	1.20	14,239,145.67	3.250E+01	Analog	1.00	3
Mg			1	9116.930	ug/l	1.14	5,173,746.33	1.181E+01	Analog	1.00	3
K			1	883.976	ug/l	1.42	424,971.75	9.699E-01	Pulse	1.00	3
V			1	0.368	ug/l	4.49	3,783.05	8.633E-03	Pulse	0.50	3
Mn			1	10.493	ug/l	1.07	53,433.06	1.548E-01	Pulse	0.50	3
Fe			1	12.967	ug/l	0.25	123,268.74	3.572E-01	Pulse	0.50	3
Co			1	0.040	ug/l	6.46	1,152.04	3.338E-03	Pulse	0.50	3
Ni			1	0.545	ug/l	2.00	3,394.31	9.836E-03	Pulse	0.50	3
Cu			1	3.709	ug/l	2.03	137,289.80	3.978E-01	Pulse	0.50	3
Zn			1	1.272	ug/l	5.39	10,898.75	2.079E-02	Pulse	1.00	3
Cd			1	0.006	ug/l	40.61	29.33	5.600E-05	Pulse	0.50	3
Al			1	16.064	ug/l	1.15	2,980.89	6.803E-03	Pulse	1.00	3
Se			1	0.017	ug/l	383.03	24.44	7.194E-06	Pulse	3.00	3
Sb			1	0.023	ug/l	30.97	997.70	1.903E-03	Pulse	1.00	3
Se			1	0.707	ug/l	38.93	51.00	2.219E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,460,834.67	0.80	99.7	Analog	0.50	3
1	Sc		438,216.07	0.94	102.6	Pulse	0.30	3
1	Ge		345,104.84	0.68	99.3	Pulse	0.30	3
1	In		3,398,726.18	0.70	94.6	Pulse	0.30	3
1	Tb		15,461,552.00	0.36	106.4	Analog	0.50	3
1	Lu		8,900,585.33	1.33	103.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		524,212.79	0.56	98.6	Pulse	0.30	3
1	Te		23,047.85	2.32	73.9	Pulse	0.50	3
1	Li		2,453.50	7.51	106.9	Pulse	0.30	3

Quantitation Report

File Name	077SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:22
Sample Name	FA53518-13
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.263	ug/l	3.75	3,825.72	1.103E-02	Pulse	0.50	3
As			1	0.566	ug/l	5.96	705.68	2.034E-03	Pulse	1.00	3
Mo			1	0.081	ug/l	11.30	682.01	1.294E-03	Pulse	0.50	3
Pb			1	-0.117	ug/l	-0.76	8,063.91	7.682E-04	Pulse	1.00	3
Be			1	-0.006	ug/l	0.00	0.00	0.000E+00	Pulse	2.00	3
Ag			1	0.000	ug/l	-150.30	136.00	2.580E-04	Pulse	0.50	3
Ba			1	34.963	ug/l	0.62	96,390.73	2.855E-02	Pulse	0.50	3
Tl			1	0.012	ug/l	12.86	913.36	8.703E-05	Pulse	0.50	3
Sn			1	0.349	ug/l	11.47	2,915.86	8.635E-04	Pulse	0.30	3
Sr			1	614.306	ug/l	0.40	3,388,867.75	1.004E+00	Pulse	0.50	3
[Pb]			1	-0.128	ug/l	-3.98	3,677.07	3.503E-04	Pulse	0.50	3
Ca			1	37661.894	ug/l	1.06	963,751.42	2.193E+00	Pulse	0.50	3
Ti			1	0.105	ug/l	42.60	25.33	5.745E-05	Pulse	0.50	3
Na			1	11431.404	ug/l	1.38	15,203,468.33	3.460E+01	Analog	1.00	3
Mg			1	9490.271	ug/l	1.76	5,400,535.83	1.229E+01	Analog	1.00	3
K			1	918.682	ug/l	1.24	442,342.52	1.007E+00	Pulse	1.00	3
V			1	0.439	ug/l	1.30	4,415.85	1.005E-02	Pulse	0.50	3
Mn			1	10.302	ug/l	0.75	52,723.17	1.520E-01	Pulse	0.50	3
Fe			1	3.206	ug/l	2.95	34,781.04	1.003E-01	Pulse	0.50	3
Co			1	0.027	ug/l	18.06	872.03	2.516E-03	Pulse	0.50	3
Ni			1	0.216	ug/l	3.21	1,491.40	4.300E-03	Pulse	0.50	3
Cu			1	3.385	ug/l	3.48	132,812.13	3.830E-01	Pulse	0.50	3
Zn			1	-0.849	ug/l	-6.52	6,887.90	1.307E-02	Pulse	1.00	3
Cd			1	0.005	ug/l	35.11	29.33	5.565E-05	Pulse	0.50	3
Al			1	9.513	ug/l	9.29	1,925.45	4.380E-03	Pulse	1.00	3
Se			1	0.010	ug/l	288.15	23.78	7.042E-06	Pulse	3.00	3
Sb			1	0.005	ug/l	307.27	862.36	1.636E-03	Pulse	1.00	3
Se			1	0.421	ug/l	24.34	41.56	1.802E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,497,418.33	0.39	100.1	Analog	0.50	3
1	Sc		439,483.46	1.50	102.9	Pulse	0.30	3
1	Ge		346,814.50	0.62	99.8	Pulse	0.30	3
1	In		3,376,718.55	0.24	93.9	Pulse	0.30	3
1	Tb		15,369,255.67	0.44	105.7	Analog	0.50	3
1	Lu		8,896,736.67	0.59	103.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		527,159.27	0.09	99.2	Pulse	0.30	3
1	Te		23,059.18	0.42	73.9	Pulse	0.50	3
1	Li		2,516.84	3.00	109.6	Pulse	0.30	3

Quantitation Report

File Name	078SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:26
Sample Name	FA53518-14
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.733	ug/l	25.91	9,092.88	2.675E-02	Pulse	0.50	3
As			1	0.136	ug/l	7.80	188.00	5.516E-04	Pulse	1.00	3
Mo			1	0.127	ug/l	4.97	1,044.03	2.009E-03	Pulse	0.50	3
Pb			1	-0.057	ug/l	-6.33	10,757.39	1.029E-03	Pulse	1.00	3
Be			1	0.008	ug/l	58.30	0.83	1.941E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	10.45	312.00	6.003E-04	Pulse	0.50	3
Ba			1	14.671	ug/l	1.48	39,921.86	1.198E-02	Pulse	0.50	3
Tl			1	0.007	ug/l	18.62	545.34	5.223E-05	Pulse	0.50	3
Sn			1	0.354	ug/l	5.03	2,911.36	8.736E-04	Pulse	0.30	3
Sr			1	678.719	ug/l	0.38	3,693,966.92	1.109E+00	Pulse	0.50	3
[Pb]			1	-0.065	ug/l	-9.19	5,011.43	4.791E-04	Pulse	0.50	3
Ca			1	38979.399	ug/l	0.53	975,095.79	2.270E+00	Pulse	0.50	3
Ti			1	0.242	ug/l	46.04	53.33	1.240E-04	Pulse	0.50	3
Na			1	10414.309	ug/l	0.54	13,542,772.67	3.153E+01	Analog	1.00	3
Mg			1	10017.717	ug/l	0.90	5,573,104.83	1.297E+01	Analog	1.00	3
K			1	931.015	ug/l	0.96	438,031.99	1.020E+00	Pulse	1.00	3
V			1	0.311	ug/l	5.87	3,230.95	7.521E-03	Pulse	0.50	3
Mn			1	5.036	ug/l	1.47	25,387.25	7.448E-02	Pulse	0.50	3
Fe			1	7.082	ug/l	17.27	68,823.60	2.023E-01	Pulse	0.50	3
Co			1	0.028	ug/l	13.89	881.36	2.587E-03	Pulse	0.50	3
Ni			1	0.489	ug/l	21.40	3,023.59	8.892E-03	Pulse	0.50	3
Cu			1	1.052	ug/l	6.87	94,108.38	2.761E-01	Pulse	0.50	3
Zn			1	-0.248	ug/l	-13.07	7,928.64	1.526E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	244.06	13.33	2.571E-05	Pulse	0.50	3
Al			1	5.064	ug/l	5.46	1,174.37	2.734E-03	Pulse	1.00	3
Se			1	0.000	ug/l	-36212.63	22.67	6.804E-06	Pulse	3.00	3
Sb			1	-0.018	ug/l	-16.75	679.34	1.307E-03	Pulse	1.00	3
Se			1	0.344	ug/l	51.74	38.89	1.690E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,459,042.67	1.57	99.7	Analog	0.50	3
1	Sc		429,604.85	1.22	100.6	Pulse	0.30	3
1	Ge		340,896.98	1.91	98.1	Pulse	0.30	3
1	In		3,331,531.40	1.08	92.7	Pulse	0.30	3
1	Tb		15,177,989.33	1.03	104.4	Analog	0.50	3
1	Lu		8,814,884.67	1.35	102.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		519,694.49	0.48	97.8	Pulse	0.30	3
1	Te		22,962.41	3.03	73.6	Pulse	0.50	3
1	Li		2,361.26	1.42	102.9	Pulse	0.30	3

Quantitation Report

File Name	079SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:29
Sample Name	FA53716-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.192	ug/l	9.14	2,848.89	8.664E-03	Pulse	0.50	3
As			1	0.052	ug/l	5.80	85.33	2.595E-04	Pulse	1.00	3
Mo			1	0.010	ug/l	11.47	100.67	2.004E-04	Pulse	0.50	3
Pb			1	-0.118	ug/l	-2.42	7,597.38	7.620E-04	Pulse	1.00	3
Be			1	0.023	ug/l	42.75	1.67	3.998E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	-86.39	126.67	2.522E-04	Pulse	0.50	3
Ba			1	0.060	ug/l	10.82	188.67	5.823E-05	Pulse	0.50	3
Tl			1	0.005	ug/l	16.02	409.34	4.105E-05	Pulse	0.50	3
Sn			1	0.326	ug/l	9.00	2,659.10	8.208E-04	Pulse	0.30	3
Sr			1	0.378	ug/l	6.38	3,152.27	9.731E-04	Pulse	0.50	3
[Pb]			1	-0.128	ug/l	-1.18	3,485.71	3.496E-04	Pulse	0.50	3
Ca			1	32.778	ug/l	6.26	910.69	2.186E-03	Pulse	0.50	3
Ti			1	0.033	ug/l	61.65	9.33	2.240E-05	Pulse	0.50	3
Na			1	12.416	ug/l	2.15	38,216.24	9.176E-02	Pulse	1.00	3
Mg			1	12.014	ug/l	1.19	6,633.44	1.593E-02	Pulse	1.00	3
K			1	4.066	ug/l	11.06	15,672.88	3.763E-02	Pulse	1.00	3
V			1	0.240	ug/l	2.81	2,540.84	6.101E-03	Pulse	0.50	3
Mn			1	0.068	ug/l	8.59	441.34	1.342E-03	Pulse	0.50	3
Fe			1	3.134	ug/l	3.96	32,348.92	9.837E-02	Pulse	0.50	3
Co			1	-0.005	ug/l	-15.88	180.67	5.493E-04	Pulse	0.50	3
Ni			1	0.037	ug/l	11.05	428.01	1.301E-03	Pulse	0.50	3
Cu			1	-2.578	ug/l	-1.86	36,092.98	1.098E-01	Pulse	0.50	3
Zn			1	-1.252	ug/l	-4.09	5,825.55	1.160E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	76.73	14.00	2.787E-05	Pulse	0.50	3
Al			1	4.479	ug/l	5.45	1,048.70	2.518E-03	Pulse	1.00	3
Se			1	0.024	ug/l	51.14	23.78	7.341E-06	Pulse	3.00	3
Sb			1	-0.024	ug/l	-21.47	609.01	1.213E-03	Pulse	1.00	3
Se			1	0.591	ug/l	48.90	44.11	2.050E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,970,853.67	0.09	95.0	Analog	0.50	3
1	Sc		416,473.93	0.37	97.6	Pulse	0.30	3
1	Ge		328,886.15	0.49	94.6	Pulse	0.30	3
1	In		3,239,086.40	0.54	90.1	Pulse	0.30	3
1	Tb		14,274,074.00	0.65	98.2	Analog	0.50	3
1	Lu		8,226,160.00	0.74	95.2	Analog	0.50	3
1	Ge		502,203.68	0.52	94.5	Pulse	0.30	3
1	Te		21,517.98	0.23	69.0	Pulse	0.50	3
1	Li		2,332.37	5.52	101.6	Pulse	0.30	3

Quantitation Report

File Name	080SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:33
Sample Name	FA53574-1F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.968	ug/l	3.44	10,870.39	3.460E-02	Pulse	0.50	3
As			1	1.000	ug/l	3.25	1,110.37	3.534E-03	Pulse	1.00	3
Mo			1	0.149	ug/l	3.72	1,119.37	2.337E-03	Pulse	0.50	3
Pb			1	-0.144	ug/l	-1.03	6,342.85	6.501E-04	Pulse	1.00	3
Be			1	0.019	ug/l	57.06	1.33	3.356E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	-298.54	125.33	2.617E-04	Pulse	0.50	3
Ba			1	10.658	ug/l	0.35	26,692.99	8.708E-03	Pulse	0.50	3
Tl			1	0.003	ug/l	22.87	295.34	3.026E-05	Pulse	0.50	3
Sn			1	0.330	ug/l	1.17	2,536.86	8.276E-04	Pulse	0.30	3
Sr			1	96.482	ug/l	0.86	484,057.44	1.579E-01	Pulse	0.50	3
[Pb]			1	-0.150	ug/l	-2.24	2,970.27	3.045E-04	Pulse	0.50	3
Ca			1	20625.413	ug/l	0.28	477,815.45	1.201E+00	Pulse	0.50	3
Ti			1	0.796	ug/l	7.12	156.67	3.940E-04	Pulse	0.50	3
Na			1	10937.970	ug/l	0.96	13,168,760.33	3.311E+01	Analog	1.00	3
Mg			1	12731.223	ug/l	1.16	6,557,987.00	1.649E+01	Analog	1.00	3
K			1	2634.601	ug/l	0.64	1,123,520.62	2.825E+00	Pulse	1.00	3
V			1	2.515	ug/l	0.55	20,342.62	5.114E-02	Pulse	0.50	3
Mn			1	341.429	ug/l	0.89	1,579,452.67	5.027E+00	Pulse	0.50	3
Fe			1	10591.100	ug/l	0.76	87,580,384.00	2.788E+02	Analog	0.50	3
Co			1	0.187	ug/l	3.23	3,891.07	1.238E-02	Pulse	0.50	3
Ni			1	0.707	ug/l	3.43	3,947.75	1.257E-02	Pulse	0.50	3
Cu			1	-2.958	ug/l	-0.97	29,004.42	9.232E-02	Pulse	0.50	3
Zn			1	-0.083	ug/l	-93.47	7,592.50	1.586E-02	Pulse	1.00	3
Cd			1	0.000	ug/l	-276.32	7.33	1.530E-05	Pulse	0.50	3
Al			1	8.044	ug/l	0.68	1,526.06	3.836E-03	Pulse	1.00	3
Se			1	0.121	ug/l	58.57	29.22	9.539E-06	Pulse	3.00	3
Sb			1	-0.014	ug/l	-121.05	652.01	1.362E-03	Pulse	1.00	3
Se			1	0.831	ug/l	25.07	49.56	2.399E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,756,225.67	0.57	93.0	Analog	0.50	3
1	Sc		397,781.60	0.98	93.2	Pulse	0.30	3
1	Ge		314,169.58	0.28	90.4	Pulse	0.30	3
1	In		3,065,234.32	0.51	85.3	Pulse	0.30	3
1	Tb		14,081,246.33	0.85	96.9	Analog	0.50	3
1	Lu		8,222,841.00	1.13	95.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		478,908.16	0.75	90.1	Pulse	0.30	3
1	Te		20,667.01	0.57	66.3	Pulse	0.50	3
1	Li		2,382.38	7.66	103.8	Pulse	0.30	3

Quantitation Report

File Name	081CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:36
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	50.194	ug/l	0.37	1,179,746.83	3.360E+00	Pulse	0.50	3
As			1	49.017	ug/l	0.38	118,908.90	3.386E-01	Pulse	1.00	3
Mo			1	48.183	ug/l	0.78	793,420.42	1.484E+00	Pulse	0.50	3
Pb			1	44.927	ug/l	0.40	3,964,206.75	3.935E-01	Pulse	1.00	3
Be			1	55.210	ug/l	1.30	6,652.76	1.515E-02	Pulse	2.00	3
Ag			1	48.730	ug/l	0.91	2,930,967.00	5.481E+00	Pulse	0.50	3
Ba			1	47.758	ug/l	0.27	259,742.18	7.797E-02	Pulse	0.50	3
Tl			1	44.958	ug/l	0.88	5,915,466.17	5.871E-01	Pulse	0.50	3
Sn			1	49.393	ug/l	0.06	637,583.36	1.914E-01	Pulse	0.30	3
Sr			1	48.674	ug/l	0.26	530,802.25	1.593E-01	Pulse	0.50	3
[Pb]			1	45.464	ug/l	2.03	1,878,380.21	1.865E-01	Pulse	0.50	3
Ca			1	4850.282	ug/l	0.83	248,084.08	5.651E-01	Pulse	0.50	3
Ti			1	48.301	ug/l	1.46	20,656.92	4.705E-02	Pulse	0.50	3
Na			1	5289.359	ug/l	0.58	14,058,044.00	3.202E+01	Analog	1.00	3
Mg			1	5232.421	ug/l	0.26	5,949,886.33	1.355E+01	Analog	1.00	3
K			1	4816.339	ug/l	0.79	4,494,900.00	1.024E+01	Pulse	1.00	3
V			1	49.770	ug/l	0.37	865,556.77	1.972E+00	Pulse	0.50	3
Mn			1	48.414	ug/l	0.43	500,735.85	1.426E+00	Pulse	0.50	3
Fe			1	5125.338	ug/l	0.96	94,741,181.33	2.698E+02	Analog	0.50	3
Co			1	49.780	ug/l	0.46	2,159,508.50	6.150E+00	Pulse	0.50	3
Ni			1	50.657	ug/l	1.24	598,327.60	1.704E+00	Pulse	0.50	3
Cu			1	50.021	ug/l	0.49	1,689,800.08	4.812E+00	Pulse	0.50	3
Zn			1	49.752	ug/l	1.20	202,402.30	3.785E-01	Pulse	1.00	3
Cd			1	47.945	ug/l	0.95	358,149.34	6.697E-01	Pulse	0.50	3
Al			1	4781.988	ug/l	0.29	1,553,296.83	3.538E+00	Pulse	1.00	3
Se			1	50.689	ug/l	0.56	7,657.09	2.298E-03	Pulse	3.00	3
Sb			1	46.074	ug/l	0.94	712,991.33	1.333E+00	Pulse	1.00	3
Se			1	48.519	ug/l	2.66	3,891.29	1.424E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,075,566.00	1.09	96.0	Analog	0.50	3
1	Sc		439,018.82	0.38	102.8	Pulse	0.30	3
1	Ge		351,152.94	0.43	101.0	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,331,338.06	0.43	92.7	Pulse	0.30	3
1	Tb		14,697,520.67	0.66	101.1	Analog	0.50	3
1	Lu		8,486,065.33	0.76	98.2	Analog	0.50	3
1	Ge		534,785.69	0.68	100.6	Pulse	0.30	3
1	Te		27,340.41	1.80	87.7	Pulse	0.50	3
1	Li		2,500.17	4.74	108.9	Pulse	0.30	3

Quantitation Report

File Name	082_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:40
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	101.512	ug/l	1.26	2,368,036.58	6.792E+00	Pulse	0.50	3
As			1	98.662	ug/l	1.54	237,590.80	6.815E-01	Pulse	1.00	3
Mo			1	97.641	ug/l	0.24	1,593,133.25	3.007E+00	Pulse	0.50	3
Pb			1	97.097	ug/l	1.06	8,394,835.67	8.489E-01	Analog	1.00	3
Be			1	107.816	ug/l	1.41	13,181.59	2.959E-02	Pulse	2.00	3
Ag			1	97.515	ug/l	4.21	5,812,139.50	1.097E+01	Mix	0.50	3
Ba			1	95.927	ug/l	0.70	517,207.56	1.566E-01	Pulse	0.50	3
Tl			1	97.429	ug/l	0.61	12,583,030.33	1.272E+00	Analog	0.50	3
Sn			1	100.049	ug/l	1.13	1,279,709.74	3.875E-01	Pulse	0.30	3
Sr			1	99.706	ug/l	1.51	1,076,733.16	3.260E-01	Pulse	0.50	3
[Pb]			1	89.718	ug/l	0.31	3,633,066.25	3.674E-01	Pulse	0.50	3
Ca			1	9619.211	ug/l	1.00	499,100.84	1.120E+00	Pulse	0.50	3
Ti			1	98.125	ug/l	1.00	42,577.50	9.558E-02	Pulse	0.50	3
Na			1	10496.577	ug/l	0.78	28,283,874.00	6.349E+01	Analog	1.00	3
Mg			1	10374.867	ug/l	1.11	11,970,076.00	2.687E+01	Analog	1.00	3
K			1	10044.193	ug/l	0.92	9,495,365.00	2.132E+01	Analog	1.00	3
V			1	98.971	ug/l	0.85	1,745,858.00	3.919E+00	Pulse	0.50	3
Mn			1	97.575	ug/l	1.87	1,001,777.17	2.874E+00	Pulse	0.50	3
Fe			1	10384.093	ug/l	0.98	190,578,005.33	5.466E+02	Analog	0.50	3
Co			1	99.111	ug/l	0.99	4,268,672.00	1.224E+01	Pulse	0.50	3
Ni			1	100.768	ug/l	2.03	1,181,374.33	3.389E+00	Pulse	0.50	3
Cu			1	100.141	ug/l	1.04	3,279,268.92	9.406E+00	Pulse	0.50	3
Zn			1	100.299	ug/l	1.04	395,620.00	7.466E-01	Pulse	1.00	3
Cd			1	95.472	ug/l	1.09	706,641.37	1.334E+00	Pulse	0.50	3
Al			1	9671.346	ug/l	0.94	3,187,141.67	7.155E+00	Pulse	1.00	3
Se			1	102.366	ug/l	0.57	15,307.56	4.635E-03	Pulse	3.00	3
Sb			1	92.974	ug/l	0.27	1,424,788.13	2.689E+00	Pulse	1.00	3
Se			1	97.473	ug/l	2.56	7,701.55	2.848E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,889,823.67	0.42	94.3	Analog	0.50	3
1	Sc		445,490.16	1.25	104.4	Pulse	0.30	3
1	Ge		348,685.84	1.68	100.3	Pulse	0.30	3
1	In		3,302,788.96	0.72	91.9	Pulse	0.30	3
1	Tb		14,539,839.00	0.22	100.0	Analog	0.50	3
1	Lu		8,387,918.17	0.94	97.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		529,889.48	0.64	99.7	Pulse	0.30	3
1	Te		27,049.34	1.90	86.7	Pulse	0.50	3
1	Li		2,451.28	4.97	106.8	Pulse	0.30	3

Quantitation Report

File Name	083_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:44
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.001	ug/l	239.61	790.02	2.311E-03	Pulse	0.50	3
As			1	0.002	ug/l	155.32	33.33	9.735E-05	Pulse	1.00	3
Mo			1	0.023	ug/l	12.73	396.67	7.600E-04	Pulse	0.50	3
Pb			1	-0.013	ug/l	-20.99	11,711.68	1.165E-03	Pulse	1.00	3
Be			1	0.004	ug/l	57.68	0.83	1.990E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	13.02	340.00	6.518E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	-203.11	28.67	8.787E-06	Pulse	0.50	3
Tl			1	0.024	ug/l	12.49	3,194.32	3.180E-04	Pulse	0.50	3
Sn			1	0.035	ug/l	3.42	1,054.48	3.233E-04	Pulse	0.30	3
Sr			1	0.010	ug/l	51.84	1,261.38	3.867E-04	Pulse	0.50	3
[Pb]			1	-0.014	ug/l	-38.08	5,556.26	5.528E-04	Pulse	0.50	3
Ca			1	0.249	ug/l	50.24	128.67	3.069E-04	Pulse	0.50	3
Ti			1	0.005	ug/l	58.56	4.67	1.115E-05	Pulse	0.50	3
Na			1	-3.307	ug/l	-4.68	14,363.48	3.426E-02	Pulse	1.00	3
Mg			1	0.512	ug/l	17.86	710.01	1.694E-03	Pulse	1.00	3
K			1	1.987	ug/l	11.41	15,738.60	3.754E-02	Pulse	1.00	3
V			1	-0.005	ug/l	-22.55	479.34	1.143E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	405.70	121.33	3.555E-04	Pulse	0.50	3
Fe			1	0.344	ug/l	27.42	11,615.56	3.403E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-46.64	186.67	5.469E-04	Pulse	0.50	3
Ni			1	0.004	ug/l	53.72	281.33	8.236E-04	Pulse	0.50	3
Cu			1	-0.487	ug/l	-10.03	62,580.95	1.832E-01	Pulse	0.50	3
Zn			1	-0.321	ug/l	-16.18	7,213.02	1.382E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	60.71	30.00	5.757E-05	Pulse	0.50	3
Al			1	-0.181	ug/l	-48.43	305.00	7.273E-04	Pulse	1.00	3
Se			1	0.035	ug/l	85.53	27.33	8.382E-06	Pulse	3.00	3
Sb			1	-0.026	ug/l	-5.61	429.68	8.236E-04	Pulse	1.00	3
Se			1	0.040	ug/l	387.99	35.78	1.307E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,050,113.00	0.47	95.8	Analog	0.50	3
1	Sc		419,319.87	0.87	98.2	Pulse	0.30	3

Quantitation Report

1	Ge		341,677.36	1.29	98.3	Pulse	0.30	3
1	In		3,261,571.47	0.74	90.7	Pulse	0.30	3
1	Tb		14,055,384.00	0.45	96.7	Analog	0.50	3
1	Lu		8,084,035.33	1.21	93.6	Analog	0.50	3
1	Ge		521,803.21	0.60	98.2	Pulse	0.30	3
1	Te		27,390.47	0.57	87.8	Pulse	0.50	3
1	Li		2,389.04	2.23	104.1	Pulse	0.30	3

Quantitation Report

File Name	084SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:47
Sample Name	FA53574-2F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	5.490	ug/l	1.62	58,354.33	1.859E-01	Pulse	0.50	3
As			1	6.723	ug/l	2.97	7,314.07	2.330E-02	Pulse	1.00	3
Mo			1	2.925	ug/l	0.76	21,618.45	4.508E-02	Pulse	0.50	3
Pb			1	0.286	ug/l	1.74	24,587.29	2.528E-03	Pulse	1.00	3
Be			1	0.074	ug/l	35.65	4.33	1.096E-05	Pulse	2.00	3
Ag			1	0.036	ug/l	4.30	1,092.70	2.278E-03	Pulse	0.50	3
Ba			1	7.863	ug/l	1.38	19,731.43	6.427E-03	Pulse	0.50	3
Tl			1	0.030	ug/l	13.15	1,990.79	2.048E-04	Pulse	0.50	3
Sn			1	0.543	ug/l	22.33	3,801.34	1.239E-03	Pulse	0.30	3
Sr			1	130.132	ug/l	1.64	653,513.69	2.129E-01	Pulse	0.50	3
[Pb]			1	0.281	ug/l	0.99	11,524.57	1.185E-03	Pulse	0.50	3
Ca			1	25016.284	ug/l	0.79	575,665.46	1.457E+00	Pulse	0.50	3
Ti			1	39.467	ug/l	1.55	7,596.83	1.923E-02	Pulse	0.50	3
Na			1	20058.000	ug/l	0.92	23,972,111.33	6.067E+01	Analog	1.00	3
Mg			1	10777.688	ug/l	1.13	5,515,198.33	1.396E+01	Analog	1.00	3
K			1	3719.795	ug/l	1.29	1,570,352.92	3.974E+00	Pulse	1.00	3
V			1	29.913	ug/l	1.76	234,469.48	5.934E-01	Pulse	0.50	3
Mn			1	2280.040	ug/l	1.32	10,540,179.33	3.357E+01	Analog	0.50	3
Fe			1	15227.835	ug/l	1.97	125,837,141.33	4.008E+02	Analog	0.50	3
Co			1	0.432	ug/l	3.11	8,647.97	2.754E-02	Pulse	0.50	3
Ni			1	15.619	ug/l	1.12	82,657.44	2.633E-01	Pulse	0.50	3
Cu			1	6.141	ug/l	2.46	159,902.20	5.093E-01	Pulse	0.50	3
Zn			1	0.268	ug/l	11.47	8,215.76	1.713E-02	Pulse	1.00	3
Cd			1	0.015	ug/l	21.46	57.33	1.196E-04	Pulse	0.50	3
Al			1	63.384	ug/l	2.12	9,602.65	2.430E-02	Pulse	1.00	3
Se			1	0.623	ug/l	8.38	64.11	2.089E-05	Pulse	3.00	3
Sb			1	0.100	ug/l	25.36	1,445.73	3.014E-03	Pulse	1.00	3
Se			1	2.072	ug/l	12.52	87.55	4.204E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,726,899.67	1.12	92.7	Analog	0.50	3
1	Sc		395,169.47	1.19	92.6	Pulse	0.30	3
1	Ge		314,002.95	1.02	90.3	Pulse	0.30	3
1	In		3,070,102.93	0.82	85.4	Pulse	0.30	3
1	Tb		14,156,361.67	1.06	97.4	Analog	0.50	3
1	Lu		8,156,091.83	1.29	94.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		479,517.08	0.62	90.2	Pulse	0.30	3
1	Te		20,812.52	1.14	66.7	Pulse	0.50	3
1	Li		2,199.03	2.18	95.8	Pulse	0.30	3

Quantitation Report

File Name	085SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:51
Sample Name	FA53574-3F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.571	ug/l	2.29	6,720.51	2.132E-02	Pulse	0.50	3
As			1	2.119	ug/l	0.49	2,332.15	7.397E-03	Pulse	1.00	3
Mo			1	0.344	ug/l	0.88	2,580.19	5.339E-03	Pulse	0.50	3
Pb			1	-0.115	ug/l	-2.20	7,703.75	7.770E-04	Pulse	1.00	3
Be			1	0.049	ug/l	66.53	3.00	7.501E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	7.94	367.34	7.600E-04	Pulse	0.50	3
Ba			1	5.014	ug/l	1.95	12,739.20	4.102E-03	Pulse	0.50	3
Tl			1	0.011	ug/l	24.31	775.36	7.820E-05	Pulse	0.50	3
Sn			1	0.444	ug/l	59.93	3,251.97	1.049E-03	Pulse	0.30	3
Sr			1	64.037	ug/l	1.34	325,886.17	1.049E-01	Pulse	0.50	3
[Pb]			1	-0.119	ug/l	-5.03	3,650.40	3.681E-04	Pulse	0.50	3
Ca			1	10903.621	ug/l	0.88	253,220.18	6.351E-01	Pulse	0.50	3
Ti			1	2.322	ug/l	1.10	453.34	1.137E-03	Pulse	0.50	3
Na			1	11065.812	ug/l	0.91	13,353,624.00	3.349E+01	Analog	1.00	3
Mg			1	5389.522	ug/l	0.99	2,782,802.25	6.980E+00	Pulse	1.00	3
K			1	2533.938	ug/l	0.88	1,083,602.37	2.718E+00	Pulse	1.00	3
V			1	2.776	ug/l	2.08	22,448.92	5.631E-02	Pulse	0.50	3
Mn			1	264.320	ug/l	0.52	1,227,023.54	3.892E+00	Pulse	0.50	3
Fe			1	8829.891	ug/l	0.79	73,270,717.33	2.324E+02	Analog	0.50	3
Co			1	0.143	ug/l	5.63	3,064.25	9.718E-03	Pulse	0.50	3
Ni			1	0.344	ug/l	6.45	2,036.12	6.459E-03	Pulse	0.50	3
Cu			1	-2.676	ug/l	-1.31	33,182.44	1.053E-01	Pulse	0.50	3
Zn			1	-1.013	ug/l	-2.96	6,025.61	1.247E-02	Pulse	1.00	3
Cd			1	0.005	ug/l	50.60	26.00	5.386E-05	Pulse	0.50	3
Al			1	13.651	ug/l	2.25	2,356.14	5.910E-03	Pulse	1.00	3
Se			1	0.112	ug/l	40.41	29.00	9.342E-06	Pulse	3.00	3
Sb			1	0.024	ug/l	43.88	924.36	1.912E-03	Pulse	1.00	3
Se			1	0.777	ug/l	29.65	49.11	2.320E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,914,735.00	0.45	94.5	Analog	0.50	3
1	Sc		398,715.27	1.34	93.4	Pulse	0.30	3
1	Ge		315,268.02	0.54	90.7	Pulse	0.30	3
1	In		3,105,739.46	0.63	86.4	Pulse	0.30	3
1	Tb		14,223,163.33	0.19	97.8	Analog	0.50	3
1	Lu		8,176,755.50	0.66	94.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		483,288.49	0.52	90.9	Pulse	0.30	3
1	Te		21,146.23	1.64	67.8	Pulse	0.50	3
1	Li		2,305.70	3.91	100.4	Pulse	0.30	3

Quantitation Report

File Name	086SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:55
Sample Name	FA53574-5F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.052	ug/l	2.88	11,636.17	3.742E-02	Pulse	0.50	3
As			1	5.887	ug/l	1.16	6,345.73	2.041E-02	Pulse	1.00	3
Mo			1	0.759	ug/l	0.98	5,562.18	1.173E-02	Pulse	0.50	3
Pb			1	-0.115	ug/l	-1.50	7,497.32	7.766E-04	Pulse	1.00	3
Be			1	0.035	ug/l	16.50	2.17	5.526E-06	Pulse	2.00	3
Ag			1	0.001	ug/l	95.27	154.00	3.249E-04	Pulse	0.50	3
Ba			1	5.231	ug/l	0.67	12,929.98	4.279E-03	Pulse	0.50	3
Tl			1	0.007	ug/l	24.19	518.68	5.371E-05	Pulse	0.50	3
Sn			1	0.327	ug/l	7.59	2,482.41	8.216E-04	Pulse	0.30	3
Sr			1	189.813	ug/l	0.35	937,794.71	3.103E-01	Pulse	0.50	3
[Pb]			1	-0.122	ug/l	-7.36	3,492.37	3.617E-04	Pulse	0.50	3
Ca			1	34416.123	ug/l	0.80	786,319.73	2.004E+00	Pulse	0.50	3
Ti			1	0.799	ug/l	16.53	155.33	3.955E-04	Pulse	0.50	3
Na			1	17406.507	ug/l	1.04	20,658,304.00	5.265E+01	Analog	1.00	3
Mg			1	13378.766	ug/l	1.20	6,797,613.00	1.733E+01	Analog	1.00	3
K			1	1605.937	ug/l	0.15	680,633.79	1.735E+00	Pulse	1.00	3
V			1	1.917	ug/l	0.84	15,419.44	3.930E-02	Pulse	0.50	3
Mn			1	1731.262	ug/l	0.58	7,925,019.33	2.549E+01	Analog	0.50	3
Fe			1	26977.827	ug/l	0.52	220,760,960.00	7.101E+02	Analog	0.50	3
Co			1	6.485	ug/l	1.07	124,792.52	4.014E-01	Pulse	0.50	3
Ni			1	2.457	ug/l	1.43	13,051.09	4.198E-02	Pulse	0.50	3
Cu			1	-2.509	ug/l	-0.84	35,097.16	1.129E-01	Pulse	0.50	3
Zn			1	0.033	ug/l	172.92	7,717.55	1.628E-02	Pulse	1.00	3
Cd			1	0.001	ug/l	261.88	10.67	2.250E-05	Pulse	0.50	3
Al			1	12.184	ug/l	5.37	2,105.45	5.368E-03	Pulse	1.00	3
Se			1	0.237	ug/l	8.37	36.78	1.217E-05	Pulse	3.00	3
Sb			1	0.047	ug/l	15.24	1,066.37	2.249E-03	Pulse	1.00	3
Se			1	1.275	ug/l	5.75	62.78	3.045E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,654,648.67	0.17	92.0	Analog	0.50	3
1	Sc		392,358.20	0.91	91.9	Pulse	0.30	3
1	Ge		310,907.80	0.52	89.4	Pulse	0.30	3
1	In		3,021,789.46	0.63	84.1	Pulse	0.30	3
1	Tb		14,012,716.33	1.05	96.4	Analog	0.50	3
1	Lu		8,124,821.83	0.56	94.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		474,082.88	0.10	89.2	Pulse	0.30	3
1	Te		20,615.63	0.37	66.1	Pulse	0.50	3
1	Li		2,227.91	4.13	97.0	Pulse	0.30	3

Quantitation Report

File Name	087SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 13:58
Sample Name	FA53574-7F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.338	ug/l	2.45	4,292.49	1.354E-02	Pulse	0.50	3
As			1	1.112	ug/l	1.78	1,242.37	3.920E-03	Pulse	1.00	3
Mo			1	0.993	ug/l	2.94	7,400.16	1.534E-02	Pulse	0.50	3
Pb			1	-0.125	ug/l	-2.29	7,359.59	7.331E-04	Pulse	1.00	3
Be			1	0.019	ug/l	76.46	1.33	3.373E-06	Pulse	2.00	3
Ag			1	0.003	ug/l	11.13	205.33	4.257E-04	Pulse	0.50	3
Ba			1	6.562	ug/l	0.59	16,673.71	5.365E-03	Pulse	0.50	3
Tl			1	0.012	ug/l	8.68	834.02	8.308E-05	Pulse	0.50	3
Sn			1	0.332	ug/l	4.55	2,583.53	8.313E-04	Pulse	0.30	3
Sr			1	84.153	ug/l	0.47	428,259.16	1.378E-01	Pulse	0.50	3
[Pb]			1	-0.126	ug/l	-1.66	3,552.38	3.539E-04	Pulse	0.50	3
Ca			1	14391.497	ug/l	1.31	333,779.23	8.382E-01	Pulse	0.50	3
Ti			1	0.208	ug/l	23.11	42.67	1.075E-04	Pulse	0.50	3
Na			1	9427.751	ug/l	1.13	11,366,396.33	2.854E+01	Analog	1.00	3
Mg			1	7022.568	ug/l	0.88	3,621,808.67	9.095E+00	Pulse	1.00	3
K			1	2258.169	ug/l	0.43	966,050.46	2.426E+00	Pulse	1.00	3
V			1	14.613	ug/l	1.88	115,706.06	2.906E-01	Pulse	0.50	3
Mn			1	21.753	ug/l	0.51	101,614.09	3.206E-01	Pulse	0.50	3
Fe			1	65.574	ug/l	0.37	552,028.42	1.742E+00	Pulse	0.50	3
Co			1	1.225	ug/l	1.45	24,247.90	7.651E-02	Pulse	0.50	3
Ni			1	3.385	ug/l	2.09	18,251.99	5.759E-02	Pulse	0.50	3
Cu			1	-0.788	ug/l	-3.13	60,775.92	1.918E-01	Pulse	0.50	3
Zn			1	0.188	ug/l	68.80	8,125.39	1.684E-02	Pulse	1.00	3
Cd			1	0.013	ug/l	54.82	52.67	1.093E-04	Pulse	0.50	3
Al			1	9.972	ug/l	10.25	1,809.75	4.549E-03	Pulse	1.00	3
Se			1	1.945	ug/l	6.54	157.78	5.078E-05	Pulse	3.00	3
Sb			1	0.082	ug/l	11.25	1,326.05	2.748E-03	Pulse	1.00	3
Se			1	2.907	ug/l	7.40	114.22	5.419E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,038,741.67	0.20	95.7	Analog	0.50	3
1	Sc		398,271.07	2.11	93.3	Pulse	0.30	3
1	Ge		316,934.00	0.51	91.2	Pulse	0.30	3
1	In		3,107,991.96	0.91	86.5	Pulse	0.30	3
1	Tb		14,338,641.67	0.79	98.6	Analog	0.50	3
1	Lu		8,280,002.67	0.31	95.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		482,462.84	0.45	90.8	Pulse	0.30	3
1	Te		21,080.17	0.84	67.6	Pulse	0.50	3
1	Li		2,309.04	2.02	100.6	Pulse	0.30	3

Quantitation Report

File Name 088SMPL.d
File Path D:\2018\04-April\xa043018m1.b
Method File
Method Path
Acq Time 4/30/2018 14:02
Sample Name FA53574-8F
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/30/2018 14:30
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.638	ug/l	1.41	7,272.71	2.358E-02	Pulse	0.50	3
As			1	0.693	ug/l	2.83	763.02	2.473E-03	Pulse	1.00	3
Mo			1	1.045	ug/l	2.09	7,582.89	1.613E-02	Pulse	0.50	3
Pb			1	-0.126	ug/l	-0.24	6,967.76	7.272E-04	Pulse	1.00	3
Be			1	0.018	ug/l	185.60	1.33	3.299E-06	Pulse	2.00	3
Ag			1	0.007	ug/l	11.77	298.67	6.352E-04	Pulse	0.50	3
Ba			1	12.849	ug/l	2.05	31,745.09	1.050E-02	Pulse	0.50	3
Tl			1	0.030	ug/l	2.40	1,974.79	2.061E-04	Pulse	0.50	3
Sn			1	0.266	ug/l	3.16	2,127.92	7.036E-04	Pulse	0.30	3
Sr			1	251.497	ug/l	0.69	1,243,302.29	4.111E-01	Pulse	0.50	3
[Pb]			1	-0.127	ug/l	-3.50	3,365.68	3.512E-04	Pulse	0.50	3
Ca			1	47511.265	ug/l	0.95	1,116,745.71	2.767E+00	Pulse	0.50	3
Ti			1	0.390	ug/l	12.46	79.33	1.964E-04	Pulse	0.50	3
Na			1	17256.061	ug/l	0.90	21,070,522.00	5.220E+01	Analog	1.00	3
Mg			1	25629.564	ug/l	0.67	13,397,938.67	3.319E+01	Analog	1.00	3
K			1	4572.584	ug/l	0.38	1,969,016.21	4.878E+00	Pulse	1.00	3
V			1	14.509	ug/l	0.93	116,469.99	2.885E-01	Pulse	0.50	3
Mn			1	3130.867	ug/l	0.22	14,220,912.67	4.610E+01	Analog	0.50	3
Fe			1	891.881	ug/l	0.32	7,246,445.50	2.349E+01	Analog	0.50	3
Co			1	21.595	ug/l	1.33	411,707.46	1.335E+00	Pulse	0.50	3
Ni			1	146.276	ug/l	0.93	758,828.88	2.460E+00	Pulse	0.50	3
Cu			1	77.022	ug/l	0.74	1,159,111.67	3.757E+00	Pulse	0.50	3
Zn			1	1.753	ug/l	1.60	10,597.91	2.254E-02	Pulse	1.00	3
Cd			1	0.351	ug/l	0.98	1,159.37	2.466E-03	Pulse	0.50	3
Al			1	8.736	ug/l	4.82	1,652.07	4.092E-03	Pulse	1.00	3
Se			1	0.451	ug/l	6.64	51.44	1.701E-05	Pulse	3.00	3
Sb			1	0.026	ug/l	30.34	914.36	1.944E-03	Pulse	1.00	3
Se			1	6.036	ug/l	2.07	200.00	9.972E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,581,561.67	1.03	91.3	Analog	0.50	3
1	Sc		403,676.49	1.18	94.6	Pulse	0.30	3
1	Ge		308,501.28	0.86	88.8	Pulse	0.30	3
1	In		3,024,559.95	0.87	84.1	Pulse	0.30	3
1	Tb		14,021,800.00	1.26	96.5	Analog	0.50	3
1	Lu		8,170,690.67	0.90	94.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		470,165.47	0.77	88.4	Pulse	0.30	3
1	Te		20,059.00	1.27	64.3	Pulse	0.50	3
1	Li		2,150.13	6.71	93.7	Pulse	0.30	3

Quantitation Report

File Name	089SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:05
Sample Name	FA53574-9F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.498	ug/l	1.69	5,826.89	1.889E-02	Pulse	0.50	3
As			1	0.232	ug/l	9.95	272.33	8.831E-04	Pulse	1.00	3
Mo			1	0.464	ug/l	2.71	3,356.31	7.188E-03	Pulse	0.50	3
Pb			1	-0.110	ug/l	-1.27	7,789.45	7.980E-04	Pulse	1.00	3
Be			1	0.042	ug/l	159.57	2.50	6.499E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	65.22	129.33	2.771E-04	Pulse	0.50	3
Ba			1	6.728	ug/l	1.59	16,558.26	5.501E-03	Pulse	0.50	3
Tl			1	0.014	ug/l	7.60	968.03	9.915E-05	Pulse	0.50	3
Sn			1	0.604	ug/l	68.38	4,104.74	1.359E-03	Pulse	0.30	3
Sr			1	111.473	ug/l	1.13	549,112.50	1.824E-01	Pulse	0.50	3
[Pb]			1	-0.121	ug/l	-7.16	3,547.72	3.635E-04	Pulse	0.50	3
Ca			1	27224.582	ug/l	1.45	608,979.08	1.585E+00	Pulse	0.50	3
Ti			1	0.714	ug/l	2.38	136.00	3.541E-04	Pulse	0.50	3
Na			1	10404.116	ug/l	1.75	12,096,954.33	3.149E+01	Analog	1.00	3
Mg			1	10698.428	ug/l	1.37	5,321,962.67	1.386E+01	Analog	1.00	3
K			1	3312.106	ug/l	1.10	1,360,691.50	3.542E+00	Pulse	1.00	3
V			1	13.208	ug/l	2.14	100,930.98	2.628E-01	Pulse	0.50	3
Mn			1	3.566	ug/l	1.05	16,302.19	5.284E-02	Pulse	0.50	3
Fe			1	51.341	ug/l	0.84	421,796.27	1.367E+00	Pulse	0.50	3
Co			1	0.868	ug/l	0.88	16,810.64	5.449E-02	Pulse	0.50	3
Ni			1	8.665	ug/l	1.35	45,145.76	1.463E-01	Pulse	0.50	3
Cu			1	-0.800	ug/l	-10.15	58,994.34	1.912E-01	Pulse	0.50	3
Zn			1	6.094	ug/l	2.17	17,903.30	3.835E-02	Pulse	1.00	3
Cd			1	0.019	ug/l	25.67	69.33	1.486E-04	Pulse	0.50	3
Al			1	14.467	ug/l	1.28	2,386.48	6.212E-03	Pulse	1.00	3
Se			1	0.609	ug/l	71.65	61.89	2.057E-05	Pulse	3.00	3
Sb			1	0.030	ug/l	32.45	934.36	2.001E-03	Pulse	1.00	3
Se			1	1.109	ug/l	19.37	57.00	2.804E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,761,664.00	0.52	93.0	Analog	0.50	3
1	Sc		384,154.49	1.22	90.0	Pulse	0.30	3
1	Ge		308,521.98	0.69	88.8	Pulse	0.30	3
1	In		3,010,556.61	0.93	83.8	Pulse	0.30	3
1	Tb		13,899,750.00	0.47	95.6	Analog	0.50	3
1	Lu		8,116,931.50	1.68	93.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		466,865.23	0.59	87.8	Pulse	0.30	3
1	Te		20,313.30	1.86	65.1	Pulse	0.50	3
1	Li		2,243.48	5.80	97.7	Pulse	0.30	3

Quantitation Report

File Name	090SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:09
Sample Name	MP33665-MB2A
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.489	ug/l	2.61	5,702.19	1.857E-02	Pulse	0.50	3
As			1	0.072	ug/l	18.19	101.00	3.290E-04	Pulse	1.00	3
Mo			1	0.018	ug/l	28.11	154.00	3.259E-04	Pulse	0.50	3
Pb			1	-0.065	ug/l	-1.48	9,706.43	9.971E-04	Pulse	1.00	3
Be			1	-0.003	ug/l	-206.69	0.17	4.261E-07	Pulse	2.00	3
Ag			1	-0.001	ug/l	-51.77	98.67	2.089E-04	Pulse	0.50	3
Ba			1	0.053	ug/l	13.07	159.33	5.238E-05	Pulse	0.50	3
Tl			1	0.002	ug/l	37.75	217.33	2.234E-05	Pulse	0.50	3
Sn			1	0.320	ug/l	5.31	2,457.96	8.081E-04	Pulse	0.30	3
Sr			1	0.210	ug/l	11.88	2,122.79	6.978E-04	Pulse	0.50	3
[Pb]			1	-0.071	ug/l	-7.73	4,535.28	4.658E-04	Pulse	0.50	3
Ca			1	22.751	ug/l	4.68	623.34	1.603E-03	Pulse	0.50	3
Ti			1	0.071	ug/l	50.12	16.00	4.105E-05	Pulse	0.50	3
Na			1	325.992	ug/l	1.12	404,309.51	1.039E+00	Pulse	1.00	3
Mg			1	11.291	ug/l	2.34	5,831.86	1.499E-02	Pulse	1.00	3
K			1	16.496	ug/l	1.09	19,763.53	5.080E-02	Pulse	1.00	3
V			1	0.260	ug/l	1.37	2,528.84	6.500E-03	Pulse	0.50	3
Mn			1	0.134	ug/l	3.84	712.35	2.320E-03	Pulse	0.50	3
Fe			1	6.444	ug/l	2.90	56,943.92	1.855E-01	Pulse	0.50	3
Co			1	-0.003	ug/l	-30.54	206.67	6.732E-04	Pulse	0.50	3
Ni			1	0.149	ug/l	5.30	976.03	3.179E-03	Pulse	0.50	3
Cu			1	-2.657	ug/l	-0.46	32,579.44	1.061E-01	Pulse	0.50	3
Zn			1	-1.196	ug/l	-0.88	5,576.15	1.180E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	80.40	18.67	3.952E-05	Pulse	0.50	3
Al			1	7.012	ug/l	3.07	1,343.72	3.455E-03	Pulse	1.00	3
Se			1	0.048	ug/l	212.13	24.00	7.889E-06	Pulse	3.00	3
Sb			1	-0.020	ug/l	-27.43	600.68	1.271E-03	Pulse	1.00	3
Se			1	0.417	ug/l	34.30	36.78	1.797E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,734,553.33	0.75	92.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		389,032.10	1.21	91.1	Pulse	0.30	3
1	Ge		307,005.59	0.12	88.3	Pulse	0.30	3
1	In		3,042,085.09	0.39	84.6	Pulse	0.30	3
1	Tb		13,766,974.67	0.66	94.7	Analog	0.50	3
1	Lu		8,001,689.00	0.38	92.6	Analog	0.50	3
1	Ge		472,433.19	0.17	88.9	Pulse	0.30	3
1	Te		20,476.80	1.32	65.6	Pulse	0.50	3
1	Li		2,297.92	2.82	100.1	Pulse	0.30	3

Quantitation Report

File Name	091SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:13
Sample Name	FA53456-6
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.699	ug/l	4.82	1,596.07	4.567E-03	Pulse	0.50	3
As			1	1.081	ug/l	15.06	158.67	4.539E-04	Pulse	1.00	3
Mo			1	3.539	ug/l	5.29	2,912.23	5.496E-03	Pulse	0.50	3
Pb			1	-0.069	ug/l	-67.89	11,080.93	1.249E-03	Pulse	1.00	3
Be			1	0.069	ug/l	126.82	0.83	1.736E-06	Pulse	2.00	3
Ag			1	-0.007	ug/l	-101.13	120.67	2.275E-04	Pulse	0.50	3
Ba			1	39.060	ug/l	2.25	10,543.11	3.197E-03	Pulse	0.50	3
Tl			1	0.019	ug/l	24.78	178.67	2.013E-05	Pulse	0.50	3
Sn			1	0.354	ug/l	48.01	847.82	2.574E-04	Pulse	0.30	3
Sr			1	6048.602	ug/l	0.85	3,259,334.58	9.882E-01	Pulse	0.50	3
[Pb]			1	0.072	ug/l	311.56	5,551.08	6.259E-04	Pulse	0.50	3
Ca			1	359942.430	ug/l	0.42	1,007,842.69	2.096E+00	Pulse	0.50	3
Ti			1	0.751	ug/l	45.56	20.67	4.284E-05	Pulse	0.50	3
Na			1	7101955.560	ug/l	1.29	1,032,050,090.67	2.146E+03	Analog	1.00	3
Mg			1	914056.138	ug/l	1.45	56,924,817.33	1.184E+02	Analog	1.00	3
K			1	238123.505	ug/l	1.49	12,147,606.33	2.526E+01	Analog	1.00	3
V			1	0.635	ug/l	12.01	1,256.71	2.614E-03	Pulse	0.50	3
Mn			1	52.154	ug/l	1.63	26,952.69	7.713E-02	Pulse	0.50	3
Fe			1	16231.625	ug/l	1.26	14,934,153.67	4.274E+01	Analog	0.50	3
Co			1	0.280	ug/l	9.55	904.02	2.586E-03	Pulse	0.50	3
Ni			1	1.306	ug/l	15.53	1,002.03	2.870E-03	Pulse	0.50	3
Cu			1	-18.620	ug/l	-0.83	49,807.40	1.425E-01	Pulse	0.50	3
Zn			1	63.557	ug/l	1.85	20,831.23	3.930E-02	Pulse	1.00	3
Cd			1	0.018	ug/l	1.74	16.00	3.019E-05	Pulse	0.50	3
Al			1	22.613	ug/l	13.12	816.35	1.698E-03	Pulse	1.00	3
Se			1	0.907	ug/l	21.30	29.22	8.856E-06	Pulse	3.00	3
Sb			1	-0.657	ug/l	-3.91	326.33	6.156E-04	Pulse	1.00	3
Se			1	60.266	ug/l	3.98	227.45	9.958E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,872,620.00	0.99	84.6	Analog	0.50	3
1	Sc		480,838.30	1.31	112.6	Pulse	0.30	3
1	Ge		349,423.34	0.84	100.5	Pulse	0.30	3
1	In		3,298,251.54	1.43	91.8	Pulse	0.30	3
1	Tb		14,219,424.00	1.77	97.8	Analog	0.50	3
1	Lu		8,390,619.83	0.76	97.1	Analog	0.50	3
1	Ge		530,060.79	0.73	99.7	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		22,834.93	1.16	73.2	Pulse	0.50	3
1	Li		2,330.15	3.28	101.5	Pulse	0.30	3

Quantitation Report

File Name	092SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:16
Sample Name	MP33665-D1
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.336	ug/l	8.18	1,198.71	3.355E-03	Pulse	0.50	3
As			1	1.044	ug/l	7.26	157.67	4.412E-04	Pulse	1.00	3
Mo			1	3.360	ug/l	2.31	2,841.56	5.221E-03	Pulse	0.50	3
Pb			1	-0.032	ug/l	-150.31	11,495.87	1.265E-03	Pulse	1.00	3
Be			1	0.162	ug/l	135.95	1.50	3.006E-06	Pulse	2.00	3
Ag			1	0.065	ug/l	4.89	344.67	6.336E-04	Pulse	0.50	3
Ba			1	38.521	ug/l	1.78	10,792.58	3.153E-03	Pulse	0.50	3
Tl			1	0.009	ug/l	1.30	124.00	1.365E-05	Pulse	0.50	3
Sn			1	0.121	ug/l	87.66	726.68	2.122E-04	Pulse	0.30	3
Sr			1	5943.092	ug/l	1.63	3,323,726.75	9.709E-01	Pulse	0.50	3
[Pb]			1	-0.086	ug/l	-55.56	5,394.20	5.936E-04	Pulse	0.50	3
Ca			1	352852.710	ug/l	1.45	1,018,001.27	2.055E+00	Pulse	0.50	3
Ti			1	0.699	ug/l	57.86	20.00	4.028E-05	Pulse	0.50	3
Na			1	6905757.204	ug/l	1.04	1,033,849,429.33	2.087E+03	Analog	1.00	3
Mg			1	894066.060	ug/l	1.54	57,364,266.67	1.158E+02	Analog	1.00	3
K			1	233315.231	ug/l	1.49	12,263,021.33	2.475E+01	Analog	1.00	3
V			1	0.573	ug/l	5.48	1,234.04	2.492E-03	Pulse	0.50	3
Mn			1	51.258	ug/l	0.34	27,078.18	7.581E-02	Pulse	0.50	3
Fe			1	15969.314	ug/l	1.58	15,018,930.33	4.205E+01	Analog	0.50	3
Co			1	0.249	ug/l	6.47	856.02	2.398E-03	Pulse	0.50	3
Ni			1	0.872	ug/l	18.59	763.35	2.139E-03	Pulse	0.50	3
Cu			1	-18.605	ug/l	-0.39	50,935.57	1.426E-01	Pulse	0.50	3
Zn			1	59.054	ug/l	3.83	20,489.53	3.766E-02	Pulse	1.00	3
Cd			1	0.008	ug/l	241.34	12.67	2.344E-05	Pulse	0.50	3
Al			1	28.465	ug/l	39.92	950.70	1.914E-03	Pulse	1.00	3
Se			1	1.400	ug/l	33.49	34.11	9.970E-06	Pulse	3.00	3
Sb			1	-0.663	ug/l	-3.71	330.33	6.072E-04	Pulse	1.00	3
Se			1	59.866	ug/l	5.37	233.22	9.900E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,087,086.67	0.56	86.6	Analog	0.50	3
1	Sc		495,346.49	1.94	116.0	Pulse	0.30	3
1	Ge		357,172.51	1.52	102.8	Pulse	0.30	3
1	In		3,422,819.58	1.21	95.2	Pulse	0.30	3
1	Tb		14,622,290.67	1.57	100.6	Analog	0.50	3
1	Lu		8,714,995.67	0.27	100.9	Analog	0.50	3
1	Ge		544,143.16	2.20	102.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		23,562.51	0.82	75.5	Pulse	0.50	3
1	Li		2,543.51	4.44	110.8	Pulse	0.30	3

Quantitation Report

File Name	093SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:20
Sample Name	MP33665-SD1
Sample Type	Sample
Comment	
Prep Dilution	100.000
Auto Dilution	N/A
Total Dilution	100.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.267	ug/l	14.87	1,138.71	3.077E-03	Pulse	0.50	3
As			1	1.364	ug/l	5.58	64.67	1.747E-04	Pulse	1.00	3
Mo			1	3.232	ug/l	3.86	586.68	1.043E-03	Pulse	0.50	3
Pb			1	-2.546	ug/l	-8.15	10,954.18	1.057E-03	Pulse	1.00	3
Be			1	0.352	ug/l	227.78	0.83	1.749E-06	Pulse	2.00	3
Ag			1	-0.106	ug/l	-16.79	83.33	1.481E-04	Pulse	0.50	3
Ba			1	37.748	ug/l	1.37	2,223.48	6.253E-04	Pulse	0.50	3
Tl			1	0.047	ug/l	49.87	144.67	1.394E-05	Pulse	0.50	3
Sn			1	-0.528	ug/l	-52.17	598.90	1.684E-04	Pulse	0.30	3
Sr			1	5286.017	ug/l	0.83	615,207.17	1.730E-01	Pulse	0.50	3
[Pb]			1	-2.690	ug/l	-15.32	5,195.47	5.012E-04	Pulse	0.50	3
Ca			1	331385.326	ug/l	0.69	185,278.03	3.862E-01	Pulse	0.50	3
Ti			1	1.653	ug/l	98.85	10.67	2.235E-05	Pulse	0.50	3
Na			1	6404775.362	ug/l	1.33	185,732,944.00	3.871E+02	Analog	1.00	3
Mg			1	838992.692	ug/l	1.31	10,425,354.67	2.173E+01	Analog	1.00	3
K			1	200959.829	ug/l	1.01	2,058,895.79	4.291E+00	Pulse	1.00	3
V			1	1.743	ug/l	30.50	982.03	2.046E-03	Pulse	0.50	3
Mn			1	51.252	ug/l	3.92	5,711.52	1.543E-02	Pulse	0.50	3
Fe			1	13726.980	ug/l	1.53	2,680,065.67	7.242E+00	Pulse	0.50	3
Co			1	-0.182	ug/l	-31.69	234.00	6.328E-04	Pulse	0.50	3
Ni			1	1.170	ug/l	19.96	394.68	1.066E-03	Pulse	0.50	3
Cu			1	-78.391	ug/l	-1.48	57,747.29	1.560E-01	Pulse	0.50	3
Zn			1	15.627	ug/l	32.88	9,727.13	1.730E-02	Pulse	1.00	3
Cd			1	-0.016	ug/l	-731.40	8.67	1.540E-05	Pulse	0.50	3
Al			1	21.073	ug/l	21.16	488.01	1.017E-03	Pulse	1.00	3
Se			1	3.060	ug/l	64.58	29.11	8.190E-06	Pulse	3.00	3
Sb			1	-3.875	ug/l	-2.56	250.33	4.450E-04	Pulse	1.00	3
Se			1	51.966	ug/l	8.12	75.56	2.702E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,366,156.00	0.70	98.8	Analog	0.50	3
1	Sc		479,804.44	1.28	112.4	Pulse	0.30	3
1	Ge		370,139.59	1.23	106.5	Pulse	0.30	3
1	In		3,555,970.83	0.51	98.9	Pulse	0.30	3
1	Tb		15,593,638.33	1.11	107.3	Analog	0.50	3
1	Lu		9,108,609.67	0.23	105.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		562,438.33	0.65	105.8	Pulse	0.30	3
1	Te		27,967.39	1.69	89.7	Pulse	0.50	3
1	Li		2,731.31	1.65	119.0	Pulse	0.30	3

Quantitation Report

File Name	094CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:24
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	50.232	ug/l	2.53	1,187,844.29	3.362E+00	Pulse	0.50	3
As			1	49.112	ug/l	2.34	119,869.84	3.393E-01	Pulse	1.00	3
Mo			1	48.809	ug/l	4.13	810,517.33	1.503E+00	Pulse	0.50	3
Pb			1	44.252	ug/l	2.28	4,139,014.42	3.876E-01	Pulse	1.00	3
Be			1	55.616	ug/l	2.01	6,741.12	1.527E-02	Pulse	2.00	3
Ag			1	49.499	ug/l	2.93	3,003,154.75	5.567E+00	Pulse	0.50	3
Ba			1	47.814	ug/l	3.48	267,373.00	7.806E-02	Pulse	0.50	3
Tl			1	48.886	ug/l	1.82	6,818,454.17	6.384E-01	Analog	0.50	3
Sn			1	49.667	ug/l	3.83	659,120.96	1.924E-01	Pulse	0.30	3
Sr			1	48.996	ug/l	3.33	549,374.56	1.604E-01	Pulse	0.50	3
[Pb]			1	44.499	ug/l	2.72	1,948,987.87	1.825E-01	Pulse	0.50	3
Ca			1	4866.111	ug/l	3.39	250,272.16	5.669E-01	Pulse	0.50	3
Ti			1	48.852	ug/l	1.93	21,013.95	4.759E-02	Pulse	0.50	3
Na			1	5321.834	ug/l	2.68	14,224,428.67	3.222E+01	Analog	1.00	3
Mg			1	5313.189	ug/l	1.80	6,076,703.00	1.376E+01	Analog	1.00	3
K			1	4826.852	ug/l	2.42	4,530,441.83	1.026E+01	Pulse	1.00	3
V			1	49.705	ug/l	2.86	869,272.89	1.969E+00	Pulse	0.50	3
Mn			1	49.270	ug/l	1.68	512,761.25	1.451E+00	Pulse	0.50	3
Fe			1	5217.026	ug/l	2.64	97,024,781.33	2.746E+02	Analog	0.50	3
Co			1	49.796	ug/l	2.03	2,173,605.50	6.152E+00	Pulse	0.50	3
Ni			1	50.777	ug/l	2.16	603,445.98	1.708E+00	Pulse	0.50	3
Cu			1	49.765	ug/l	2.56	1,691,856.21	4.789E+00	Pulse	0.50	3
Zn			1	50.252	ug/l	3.37	206,116.60	3.821E-01	Pulse	1.00	3
Cd			1	48.631	ug/l	3.44	366,401.07	6.793E-01	Pulse	0.50	3
Al			1	4907.681	ug/l	2.61	1,603,135.50	3.631E+00	Pulse	1.00	3
Se			1	51.821	ug/l	3.62	8,048.37	2.350E-03	Pulse	3.00	3
Sb			1	47.398	ug/l	3.86	739,686.52	1.372E+00	Pulse	1.00	3
Se			1	48.859	ug/l	0.42	3,993.64	1.434E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,683,363.67	2.31	101.8	Analog	0.50	3
1	Sc		441,692.80	2.46	103.5	Pulse	0.30	3
1	Ge		353,433.26	2.33	101.7	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,427,757.09	3.29	95.4	Pulse	0.30	3
1	Tb		15,338,792.33	2.76	105.5	Analog	0.50	3
1	Lu		8,934,348.00	2.60	103.4	Analog	0.50	3
1	Ge		539,767.67	3.26	101.5	Pulse	0.30	3
1	Te		27,857.87	0.23	89.3	Pulse	0.50	3
1	Li		2,505.73	4.14	109.1	Pulse	0.30	3

Quantitation Report

File Name	095_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:27
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	100.783	ug/l	1.53	2,372,260.17	6.743E+00	Pulse	0.50	3
As			1	98.336	ug/l	0.75	238,961.00	6.793E-01	Pulse	1.00	3
Mo			1	97.371	ug/l	0.68	1,626,921.17	2.998E+00	Pulse	0.50	3
Pb			1	97.238	ug/l	0.81	8,873,338.00	8.501E-01	Analog	1.00	3
Be			1	108.188	ug/l	0.98	13,241.63	2.969E-02	Pulse	2.00	3
Ag			1	103.580	ug/l	0.71	6,321,586.17	1.165E+01	Analog	0.50	3
Ba			1	94.555	ug/l	2.15	530,589.32	1.544E-01	Pulse	0.50	3
Tl			1	97.849	ug/l	1.28	13,338,388.33	1.278E+00	Analog	0.50	3
Sn			1	99.051	ug/l	0.21	1,318,782.38	3.836E-01	Pulse	0.30	3
Sr			1	98.206	ug/l	1.08	1,103,864.54	3.211E-01	Pulse	0.50	3
[Pb]			1	88.499	ug/l	1.19	3,782,459.25	3.624E-01	Pulse	0.50	3
Ca			1	9713.800	ug/l	0.77	504,578.47	1.131E+00	Pulse	0.50	3
Ti			1	98.098	ug/l	1.00	42,611.51	9.555E-02	Pulse	0.50	3
Na			1	10570.548	ug/l	1.06	28,513,019.33	6.394E+01	Analog	1.00	3
Mg			1	10495.855	ug/l	1.44	12,122,401.00	2.719E+01	Analog	1.00	3
K			1	10151.573	ug/l	1.54	9,606,614.00	2.154E+01	Analog	1.00	3
V			1	98.662	ug/l	1.34	1,742,213.84	3.907E+00	Pulse	0.50	3
Mn			1	98.239	ug/l	0.24	1,017,845.54	2.893E+00	Pulse	0.50	3
Fe			1	10430.764	ug/l	0.49	193,166,880.00	5.491E+02	Analog	0.50	3
Co			1	98.807	ug/l	1.32	4,293,886.33	1.221E+01	Pulse	0.50	3
Ni			1	101.067	ug/l	0.87	1,195,709.13	3.399E+00	Pulse	0.50	3
Cu			1	99.742	ug/l	0.33	3,296,112.33	9.369E+00	Pulse	0.50	3
Zn			1	98.819	ug/l	1.00	399,272.74	7.358E-01	Pulse	1.00	3
Cd			1	95.567	ug/l	0.39	724,388.19	1.335E+00	Pulse	0.50	3
Al			1	9817.455	ug/l	1.53	3,238,616.75	7.263E+00	Pulse	1.00	3
Se			1	101.484	ug/l	1.23	15,795.07	4.595E-03	Pulse	3.00	3
Sb			1	92.786	ug/l	1.11	1,456,051.25	2.683E+00	Pulse	1.00	3
Se			1	99.743	ug/l	2.14	7,973.56	2.914E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,438,410.67	0.52	99.5	Analog	0.50	3
1	Sc		445,969.81	1.19	104.5	Pulse	0.30	3
1	Ge		351,810.32	0.74	101.2	Pulse	0.30	3
1	In		3,437,754.31	1.08	95.6	Pulse	0.30	3
1	Tb		15,245,377.33	0.48	104.9	Analog	0.50	3
1	Lu		8,864,514.33	0.14	102.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		542,642.84	0.81	102.1	Pulse	0.30	3
1	Te		27,365.79	1.34	87.7	Pulse	0.50	3
1	Li		2,549.06	5.08	111.0	Pulse	0.30	3

Quantitation Report

File Name	096_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:31
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.002	ug/l	173.71	858.02	2.389E-03	Pulse	0.50	3
As			1	0.006	ug/l	42.53	43.67	1.214E-04	Pulse	1.00	3
Mo			1	0.022	ug/l	14.45	394.67	7.205E-04	Pulse	0.50	3
Pb			1	-0.017	ug/l	-14.54	12,495.23	1.128E-03	Pulse	1.00	3
Be			1	0.007	ug/l	93.41	1.17	2.644E-06	Pulse	2.00	3
Ag			1	0.004	ug/l	20.10	408.68	7.462E-04	Pulse	0.50	3
Ba			1	0.005	ug/l	143.09	62.00	1.775E-05	Pulse	0.50	3
Tl			1	0.022	ug/l	19.77	3,218.99	2.909E-04	Pulse	0.50	3
Sn			1	0.033	ug/l	27.63	1,105.60	3.165E-04	Pulse	0.30	3
Sr			1	0.011	ug/l	44.33	1,370.72	3.922E-04	Pulse	0.50	3
[Pb]			1	-0.022	ug/l	-9.79	5,768.99	5.209E-04	Pulse	0.50	3
Ca			1	0.231	ug/l	112.14	134.67	3.048E-04	Pulse	0.50	3
Ti			1	0.054	ug/l	127.29	26.00	5.885E-05	Pulse	0.50	3
Na			1	4.929	ug/l	7.98	37,126.54	8.404E-02	Pulse	1.00	3
Mg			1	0.601	ug/l	10.90	851.35	1.927E-03	Pulse	1.00	3
K			1	0.500	ug/l	40.05	15,191.84	3.439E-02	Pulse	1.00	3
V			1	-0.008	ug/l	-11.56	451.34	1.022E-03	Pulse	0.50	3
Mn			1	0.006	ug/l	36.74	188.00	5.230E-04	Pulse	0.50	3
Fe			1	0.360	ug/l	30.25	12,509.45	3.485E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-19.87	163.33	4.550E-04	Pulse	0.50	3
Ni			1	0.000	ug/l	2789.71	244.00	6.798E-04	Pulse	0.50	3
Cu			1	-0.473	ug/l	-3.23	66,301.88	1.845E-01	Pulse	0.50	3
Zn			1	-0.299	ug/l	-4.21	7,658.86	1.398E-02	Pulse	1.00	3
Cd			1	0.002	ug/l	61.42	26.00	4.749E-05	Pulse	0.50	3
Al			1	-0.098	ug/l	-121.91	348.67	7.890E-04	Pulse	1.00	3
Se			1	0.087	ug/l	179.09	37.67	1.075E-05	Pulse	3.00	3
Sb			1	-0.027	ug/l	-7.52	429.34	7.838E-04	Pulse	1.00	3
Se			1	-0.020	ug/l	-269.96	33.66	1.133E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,075,769.33	0.66	105.6	Analog	0.50	3
1	Sc		441,816.25	0.31	103.5	Pulse	0.30	3

Quantitation Report

1	Ge		359,412.81	1.20	103.4	Pulse	0.30	3
1	In		3,494,281.74	0.67	97.2	Pulse	0.30	3
1	Tb		15,310,330.67	1.44	105.3	Analog	0.50	3
1	Lu		8,885,556.67	1.24	102.8	Analog	0.50	3
1	Ge		547,937.25	0.56	103.1	Pulse	0.30	3
1	Te		29,716.80	0.13	95.3	Pulse	0.50	3
1	Li		2,606.85	4.86	113.6	Pulse	0.30	3

Quantitation Report

File Name	097SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:35
Sample Name	MP33665-S1
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	214.053	ug/l	0.66	256,643.24	7.181E-01	Pulse	0.50	3
As			1	205.301	ug/l	0.83	25,364.76	7.098E-02	Pulse	1.00	3
Mo			1	203.098	ug/l	0.60	170,847.18	3.127E-01	Pulse	0.50	3
Pb			1	188.032	ug/l	0.17	753,755.21	8.335E-02	Pulse	1.00	3
Be			1	191.829	ug/l	3.77	1,308.38	2.633E-03	Pulse	2.00	3
Ag			1	88.472	ug/l	0.29	271,937.58	4.978E-01	Pulse	0.50	3
Ba			1	230.156	ug/l	0.57	63,755.59	1.879E-02	Pulse	0.50	3
Tl			1	180.620	ug/l	1.02	1,066,561.08	1.179E-01	Pulse	0.50	3
Sn			1	202.228	ug/l	0.90	133,417.71	3.933E-02	Pulse	0.30	3
Sr			1	6175.593	ug/l	0.74	3,422,577.08	1.009E+00	Pulse	0.50	3
[Pb]			1	180.361	ug/l	0.46	338,888.67	3.747E-02	Pulse	0.50	3
Ca			1	373408.939	ug/l	0.37	1,080,115.08	2.174E+00	Pulse	0.50	3
Ti			1	203.950	ug/l	4.19	4,935.31	9.939E-03	Pulse	0.50	3
Na			1	6953248.284	ug/l	0.97	1,043,819,968.00	2.101E+03	Analog	1.00	3
Mg			1	912748.388	ug/l	0.78	58,719,253.33	1.182E+02	Analog	1.00	3
K			1	255170.556	ug/l	0.83	13,446,415.00	2.707E+01	Analog	1.00	3
V			1	199.784	ug/l	0.70	197,070.54	3.968E-01	Pulse	0.50	3
Mn			1	253.726	ug/l	0.21	133,640.07	3.739E-01	Pulse	0.50	3
Fe			1	36358.587	ug/l	0.76	34,208,232.00	9.571E+01	Analog	0.50	3
Co			1	200.707	ug/l	0.66	443,348.80	1.240E+00	Pulse	0.50	3
Ni			1	198.419	ug/l	0.71	119,462.48	3.342E-01	Pulse	0.50	3
Cu			1	175.484	ug/l	0.16	368,842.57	1.032E+00	Pulse	0.50	3
Zn			1	244.321	ug/l	0.87	57,433.05	1.051E-01	Pulse	1.00	3
Cd			1	176.675	ug/l	0.90	67,415.37	1.234E-01	Pulse	0.50	3
Al			1	18295.950	ug/l	1.11	336,581.62	6.775E-01	Pulse	1.00	3
Se			1	206.587	ug/l	3.32	1,607.51	4.738E-04	Pulse	3.00	3
Sb			1	186.432	ug/l	1.08	148,050.97	2.710E-01	Pulse	1.00	3
Se			1	286.221	ug/l	3.99	1,005.47	4.283E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,043,596.33	1.21	86.2	Analog	0.50	3
1	Sc		496,713.38	2.20	116.4	Pulse	0.30	3
1	Ge		357,403.84	2.37	102.8	Pulse	0.30	3
1	In		3,392,151.74	1.15	94.4	Pulse	0.30	3
1	Tb		14,646,262.00	0.85	100.8	Analog	0.50	3
1	Lu		8,672,449.00	1.01	100.4	Analog	0.50	3
1	Ge		546,307.50	1.46	102.8	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		23,471.72	1.88	75.3	Pulse	0.50	3
1	Li		2,464.61	5.14	107.4	Pulse	0.30	3

Quantitation Report

File Name	098SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:38
Sample Name	MP33665-S2
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	216.314	ug/l	1.02	261,102.74	7.257E-01	Pulse	0.50	3
As			1	211.136	ug/l	1.55	26,260.64	7.299E-02	Pulse	1.00	3
Mo			1	209.331	ug/l	1.85	175,683.66	3.223E-01	Pulse	0.50	3
Pb			1	188.668	ug/l	0.24	766,623.54	8.363E-02	Pulse	1.00	3
Be			1	193.700	ug/l	0.45	1,338.38	2.659E-03	Pulse	2.00	3
Ag			1	88.553	ug/l	1.97	271,556.91	4.982E-01	Pulse	0.50	3
Ba			1	236.080	ug/l	0.57	65,833.93	1.928E-02	Pulse	0.50	3
Tl			1	183.014	ug/l	0.81	1,095,544.63	1.195E-01	Pulse	0.50	3
Sn			1	208.057	ug/l	3.09	138,125.65	4.046E-02	Pulse	0.30	3
Sr			1	6356.146	ug/l	0.86	3,545,894.00	1.038E+00	Pulse	0.50	3
[Pb]			1	181.770	ug/l	0.90	346,170.49	3.776E-02	Pulse	0.50	3
Ca			1	378049.367	ug/l	0.48	1,108,175.83	2.201E+00	Pulse	0.50	3
Ti			1	202.085	ug/l	2.48	4,955.31	9.848E-03	Pulse	0.50	3
Na			1	7120437.720	ug/l	0.25	1,083,122,858.67	2.152E+03	Analog	1.00	3
Mg			1	927454.216	ug/l	0.84	60,459,808.00	1.201E+02	Analog	1.00	3
K			1	257339.449	ug/l	0.74	13,740,948.00	2.730E+01	Analog	1.00	3
V			1	200.595	ug/l	0.40	200,535.31	3.984E-01	Pulse	0.50	3
Mn			1	259.228	ug/l	1.86	137,432.02	3.820E-01	Pulse	0.50	3
Fe			1	34180.591	ug/l	1.27	32,373,550.00	8.998E+01	Analog	0.50	3
Co			1	204.026	ug/l	1.51	453,663.76	1.261E+00	Pulse	0.50	3
Ni			1	201.103	ug/l	0.65	121,887.68	3.388E-01	Pulse	0.50	3
Cu			1	178.705	ug/l	0.72	376,649.10	1.047E+00	Pulse	0.50	3
Zn			1	249.632	ug/l	1.22	58,358.22	1.071E-01	Pulse	1.00	3
Cd			1	181.368	ug/l	1.23	69,059.51	1.267E-01	Pulse	0.50	3
Al			1	15874.039	ug/l	0.86	295,951.40	5.880E-01	Pulse	1.00	3
Se			1	209.038	ug/l	2.82	1,637.18	4.793E-04	Pulse	3.00	3
Sb			1	190.075	ug/l	1.49	150,584.43	2.763E-01	Pulse	1.00	3
Se			1	292.847	ug/l	0.59	1,037.59	4.380E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,167,463.00	0.85	87.4	Analog	0.50	3
1	Sc		503,364.14	2.20	117.9	Pulse	0.30	3
1	Ge		359,833.64	1.92	103.5	Pulse	0.30	3
1	In		3,414,816.81	1.18	95.0	Pulse	0.30	3
1	Tb		14,823,736.33	1.08	102.0	Analog	0.50	3
1	Lu		8,688,958.67	1.01	100.6	Analog	0.50	3
1	Ge		545,183.99	2.07	102.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		23,688.69	3.11	75.9	Pulse	0.50	3
1	Li		2,485.72	5.66	108.3	Pulse	0.30	3

Quantitation Report

File Name	099SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:42
Sample Name	MP33665-PS1
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	13.445	ug/l	1.93	17,384.42	4.720E-02	Pulse	0.50	3
As			1	13.276	ug/l	2.46	1,718.41	4.665E-03	Pulse	1.00	3
Mo			1	15.384	ug/l	3.46	13,164.64	2.373E-02	Pulse	0.50	3
Pb			1	11.281	ug/l	1.93	57,311.79	6.203E-03	Pulse	1.00	3
Be			1	12.619	ug/l	21.73	88.33	1.739E-04	Pulse	2.00	3
Ag			1	2.178	ug/l	4.10	6,943.36	1.252E-02	Pulse	0.50	3
Ba			1	49.795	ug/l	1.86	14,264.32	4.073E-03	Pulse	0.50	3
Tl			1	10.987	ug/l	1.21	66,365.25	7.182E-03	Pulse	0.50	3
Sn			1	12.460	ug/l	2.45	9,105.64	2.600E-03	Pulse	0.30	3
Sr			1	6053.919	ug/l	2.53	3,463,196.08	9.890E-01	Pulse	0.50	3
[Pb]			1	10.899	ug/l	0.80	26,232.74	2.839E-03	Pulse	0.50	3
Ca			1	361218.036	ug/l	3.13	1,070,598.37	2.103E+00	Pulse	0.50	3
Ti			1	12.784	ug/l	7.78	320.00	6.288E-04	Pulse	0.50	3
Na			1	7012299.371	ug/l	2.44	1,078,626,410.67	2.119E+03	Analog	1.00	3
Mg			1	907871.576	ug/l	3.05	59,839,478.67	1.176E+02	Analog	1.00	3
K			1	238543.783	ug/l	2.60	12,879,774.00	2.531E+01	Analog	1.00	3
V			1	12.599	ug/l	4.88	13,381.28	2.629E-02	Pulse	0.50	3
Mn			1	65.213	ug/l	1.87	35,492.33	9.636E-02	Pulse	0.50	3
Fe			1	17328.760	ug/l	2.24	16,805,397.00	4.562E+01	Analog	0.50	3
Co			1	12.488	ug/l	3.68	28,725.26	7.798E-02	Pulse	0.50	3
Ni			1	13.251	ug/l	3.76	8,453.88	2.295E-02	Pulse	0.50	3
Cu			1	-6.380	ug/l	-10.80	73,165.20	1.986E-01	Pulse	0.50	3
Zn			1	73.335	ug/l	1.00	23,774.95	4.286E-02	Pulse	1.00	3
Cd			1	10.865	ug/l	1.64	4,218.50	7.606E-03	Pulse	0.50	3
Al			1	1218.804	ug/l	3.45	23,384.32	4.594E-02	Pulse	1.00	3
Se			1	13.098	ug/l	4.64	127.56	3.642E-05	Pulse	3.00	3
Sb			1	10.224	ug/l	0.54	9,062.91	1.634E-02	Pulse	1.00	3
Se			1	75.204	ug/l	3.02	298.11	1.213E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,240,605.00	0.77	88.1	Analog	0.50	3
1	Sc		509,022.20	1.76	119.2	Pulse	0.30	3
1	Ge		368,344.75	0.04	106.0	Pulse	0.30	3
1	In		3,501,933.13	1.04	97.4	Pulse	0.30	3
1	Tb		15,016,447.67	0.68	103.3	Analog	0.50	3
1	Lu		8,860,927.00	1.36	102.6	Analog	0.50	3
1	Ge		554,663.31	1.05	104.3	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		24,575.84	0.85	78.8	Pulse	0.50	3
1	Li		2,572.40	6.81	112.1	Pulse	0.30	3

Quantitation Report

File Name	100SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:46
Sample Name	FA53456-1
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.833	ug/l	6.74	1,819.42	5.015E-03	Pulse	0.50	3
As			1	3.822	ug/l	10.75	507.68	1.400E-03	Pulse	1.00	3
Mo			1	3.600	ug/l	3.32	3,071.59	5.591E-03	Pulse	0.50	3
Pb			1	-0.204	ug/l	-28.43	13,260.48	1.190E-03	Pulse	1.00	3
Be			1	0.236	ug/l	96.59	1.83	4.016E-06	Pulse	2.00	3
Ag			1	0.005	ug/l	212.26	164.00	2.976E-04	Pulse	0.50	3
Ba			1	69.737	ug/l	1.22	20,386.86	5.701E-03	Pulse	0.50	3
Tl			1	0.066	ug/l	13.04	570.01	5.117E-05	Pulse	0.50	3
Sn			1	0.356	ug/l	17.39	921.14	2.577E-04	Pulse	0.30	3
Sr			1	708.987	ug/l	0.81	415,268.24	1.161E-01	Pulse	0.50	3
[Pb]			1	-0.251	ug/l	-18.66	6,240.49	5.599E-04	Pulse	0.50	3
Ca			1	118444.038	ug/l	1.91	313,428.18	6.899E-01	Pulse	0.50	3
Ti			1	2.476	ug/l	35.78	58.00	1.268E-04	Pulse	0.50	3
Na			1	113475.677	ug/l	2.35	15,601,706.00	3.435E+01	Analog	1.00	3
Mg			1	19081.996	ug/l	2.05	1,122,782.50	2.472E+00	Pulse	1.00	3
K			1	6984.830	ug/l	2.30	351,317.29	7.733E-01	Pulse	1.00	3
V			1	3.846	ug/l	3.49	4,078.44	8.969E-03	Pulse	0.50	3
Mn			1	522.613	ug/l	1.78	279,361.11	7.698E-01	Pulse	0.50	3
Fe			1	7242.677	ug/l	1.43	6,924,098.00	1.908E+01	Analog	0.50	3
Co			1	0.217	ug/l	8.26	798.02	2.198E-03	Pulse	0.50	3
Ni			1	2.025	ug/l	1.04	1,480.06	4.077E-03	Pulse	0.50	3
Cu			1	-11.225	ug/l	-7.40	64,022.26	1.764E-01	Pulse	0.50	3
Zn			1	299.333	ug/l	1.02	68,765.88	1.252E-01	Pulse	1.00	3
Cd			1	0.006	ug/l	313.69	12.00	2.169E-05	Pulse	0.50	3
Al			1	307.613	ug/l	10.55	5,551.45	1.224E-02	Pulse	1.00	3
Se			1	0.019	ug/l	4117.02	24.44	6.850E-06	Pulse	3.00	3
Sb			1	0.135	ug/l	35.23	967.03	1.761E-03	Pulse	1.00	3
Se			1	2.053	ug/l	76.44	44.22	1.488E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,146,948.00	1.56	106.2	Analog	0.50	3
1	Sc		454,458.71	2.89	106.5	Pulse	0.30	3
1	Ge		362,989.33	2.36	104.4	Pulse	0.30	3
1	In		3,575,644.58	1.34	99.5	Pulse	0.30	3
1	Tb		15,745,865.00	1.39	108.3	Analog	0.50	3
1	Lu		9,294,305.33	1.57	107.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		549,499.96	2.06	103.4	Pulse	0.30	3
1	Te		29,750.19	1.54	95.4	Pulse	0.50	3
1	Li		2,654.64	3.88	115.6	Pulse	0.30	3

Quantitation Report

File Name	101SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:49
Sample Name	FA53456-2
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.490	ug/l	14.63	1,392.06	3.868E-03	Pulse	0.50	3
As			1	22.844	ug/l	1.41	2,867.89	7.969E-03	Pulse	1.00	3
Mo			1	1.303	ug/l	9.40	1,132.70	2.054E-03	Pulse	0.50	3
Pb			1	-0.529	ug/l	-5.70	11,350.44	1.048E-03	Pulse	1.00	3
Be			1	0.048	ug/l	249.62	0.67	1.443E-06	Pulse	2.00	3
Ag			1	-0.016	ug/l	-27.34	96.67	1.754E-04	Pulse	0.50	3
Ba			1	75.120	ug/l	0.32	21,715.71	6.140E-03	Pulse	0.50	3
Tl			1	0.054	ug/l	24.29	464.01	4.280E-05	Pulse	0.50	3
Sn			1	0.237	ug/l	19.89	830.02	2.347E-04	Pulse	0.30	3
Sr			1	4168.564	ug/l	0.42	2,408,856.00	6.811E-01	Pulse	0.50	3
[Pb]			1	-0.595	ug/l	-5.07	5,303.51	4.896E-04	Pulse	0.50	3
Ca			1	552821.049	ug/l	1.54	1,475,883.13	3.219E+00	Pulse	0.50	3
Ti			1	0.646	ug/l	47.58	17.33	3.771E-05	Pulse	0.50	3
Na			1	243782.702	ug/l	1.06	33,801,462.67	7.372E+01	Analog	1.00	3
Mg			1	89081.402	ug/l	1.41	5,289,386.67	1.154E+01	Analog	1.00	3
K			1	5742.345	ug/l	1.20	294,217.73	6.417E-01	Pulse	1.00	3
V			1	0.704	ug/l	8.57	1,261.38	2.751E-03	Pulse	0.50	3
Mn			1	1749.225	ug/l	1.47	926,915.56	2.576E+00	Pulse	0.50	3
Fe			1	20966.191	ug/l	1.23	19,863,445.33	5.520E+01	Analog	0.50	3
Co			1	0.851	ug/l	6.69	2,200.80	6.115E-03	Pulse	0.50	3
Ni			1	0.682	ug/l	2.16	654.68	1.819E-03	Pulse	0.50	3
Cu			1	-16.729	ug/l	-1.50	54,414.97	1.512E-01	Pulse	0.50	3
Zn			1	-5.128	ug/l	-1.47	7,881.62	1.429E-02	Pulse	1.00	3
Cd			1	0.011	ug/l	283.21	14.00	2.526E-05	Pulse	0.50	3
Al			1	12.622	ug/l	5.28	609.01	1.328E-03	Pulse	1.00	3
Se			1	0.116	ug/l	558.36	25.00	7.068E-06	Pulse	3.00	3
Sb			1	-0.582	ug/l	-2.67	399.01	7.234E-04	Pulse	1.00	3
Se			1	4.041	ug/l	44.34	50.67	1.778E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,831,496.33	0.72	103.2	Analog	0.50	3
1	Sc		458,526.16	0.97	107.4	Pulse	0.30	3
1	Ge		359,881.19	0.67	103.5	Pulse	0.30	3
1	In		3,536,538.89	0.37	98.4	Pulse	0.30	3
1	Tb		15,692,959.00	0.52	108.0	Analog	0.50	3
1	Lu		9,175,067.67	1.20	106.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		551,525.57	0.96	103.7	Pulse	0.30	3
1	Te		28,540.89	1.53	91.5	Pulse	0.50	3
1	Li		2,622.41	2.35	114.2	Pulse	0.30	3

Quantitation Report

File Name	102SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:53
Sample Name	FA53456-3
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.051	ug/l	4.16	2,079.45	5.746E-03	Pulse	0.50	3
As			1	2.682	ug/l	3.16	364.33	1.007E-03	Pulse	1.00	3
Mo			1	0.636	ug/l	6.91	564.01	1.026E-03	Pulse	0.50	3
Pb			1	1.854	ug/l	5.04	22,452.04	2.088E-03	Pulse	1.00	3
Be			1	0.049	ug/l	249.39	0.67	1.453E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	2181.22	148.00	2.696E-04	Pulse	0.50	3
Ba			1	131.674	ug/l	2.08	37,785.28	1.076E-02	Pulse	0.50	3
Tl			1	0.048	ug/l	13.06	418.01	3.889E-05	Pulse	0.50	3
Sn			1	0.202	ug/l	42.93	801.13	2.280E-04	Pulse	0.30	3
Sr			1	1168.800	ug/l	1.09	671,827.63	1.912E-01	Pulse	0.50	3
[Pb]			1	1.836	ug/l	6.47	10,607.32	9.864E-04	Pulse	0.50	3
Ca			1	144198.488	ug/l	1.34	388,054.23	8.399E-01	Pulse	0.50	3
Ti			1	2.565	ug/l	18.79	60.67	1.311E-04	Pulse	0.50	3
Na			1	687880.327	ug/l	0.83	96,072,077.33	2.079E+02	Analog	1.00	3
Mg			1	81707.894	ug/l	1.45	4,889,163.00	1.058E+01	Analog	1.00	3
K			1	21288.956	ug/l	1.71	1,057,494.17	2.289E+00	Pulse	1.00	3
V			1	1.801	ug/l	6.79	2,274.14	4.921E-03	Pulse	0.50	3
Mn			1	266.915	ug/l	1.52	142,334.38	3.933E-01	Pulse	0.50	3
Fe			1	3563.824	ug/l	1.82	3,399,938.00	9.396E+00	Pulse	0.50	3
Co			1	0.269	ug/l	14.10	912.02	2.522E-03	Pulse	0.50	3
Ni			1	1.183	ug/l	7.02	963.36	2.662E-03	Pulse	0.50	3
Cu			1	-15.309	ug/l	-0.13	57,077.96	1.577E-01	Pulse	0.50	3
Zn			1	296.084	ug/l	1.62	68,143.67	1.240E-01	Pulse	1.00	3
Cd			1	0.065	ug/l	37.44	34.67	6.312E-05	Pulse	0.50	3
Al			1	176.719	ug/l	1.85	3,417.97	7.397E-03	Pulse	1.00	3
Se			1	0.287	ug/l	234.21	26.22	7.454E-06	Pulse	3.00	3
Sb			1	-0.582	ug/l	-14.44	397.67	7.232E-04	Pulse	1.00	3
Se			1	5.774	ug/l	28.62	56.22	2.030E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,753,619.00	0.83	102.5	Analog	0.50	3
1	Sc		462,077.86	0.94	108.2	Pulse	0.30	3
1	Ge		361,902.79	0.97	104.1	Pulse	0.30	3
1	In		3,513,348.33	1.11	97.7	Pulse	0.30	3
1	Tb		15,685,041.33	0.45	107.9	Analog	0.50	3
1	Lu		9,196,176.00	0.75	106.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		549,718.21	1.07	103.4	Pulse	0.30	3
1	Te		27,694.27	0.45	88.8	Pulse	0.50	3
1	Li		2,666.86	4.35	116.2	Pulse	0.30	3

Quantitation Report

File Name	103SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 14:56
Sample Name	FA53456-4
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.335	ug/l	32.08	1,216.04	3.351E-03	Pulse	0.50	3
As			1	1.584	ug/l	7.69	227.67	6.275E-04	Pulse	1.00	3
Mo			1	0.397	ug/l	5.53	366.67	6.588E-04	Pulse	0.50	3
Pb			1	-0.682	ug/l	-3.37	10,778.07	9.814E-04	Pulse	1.00	3
Be			1	-0.030	ug/l	-151.43	0.17	3.653E-07	Pulse	2.00	3
Ag			1	-0.017	ug/l	-45.65	94.67	1.702E-04	Pulse	0.50	3
Ba			1	95.063	ug/l	1.29	27,484.85	7.768E-03	Pulse	0.50	3
Tl			1	0.023	ug/l	20.96	250.00	2.277E-05	Pulse	0.50	3
Sn			1	0.271	ug/l	26.74	853.36	2.413E-04	Pulse	0.30	3
Sr			1	1513.783	ug/l	1.39	875,946.29	2.476E-01	Pulse	0.50	3
[Pb]			1	-0.733	ug/l	-8.69	5,066.77	4.614E-04	Pulse	0.50	3
Ca			1	189708.995	ug/l	0.77	506,232.93	1.105E+00	Pulse	0.50	3
Ti			1	0.379	ug/l	35.22	11.33	2.471E-05	Pulse	0.50	3
Na			1	291749.269	ug/l	0.94	40,419,802.67	8.822E+01	Analog	1.00	3
Mg			1	39589.220	ug/l	0.75	2,349,270.58	5.127E+00	Pulse	1.00	3
K			1	18236.676	ug/l	0.81	900,551.63	1.965E+00	Pulse	1.00	3
V			1	0.504	ug/l	8.72	1,078.03	2.353E-03	Pulse	0.50	3
Mn			1	991.452	ug/l	0.82	529,866.06	1.460E+00	Pulse	0.50	3
Fe			1	1912.006	ug/l	0.81	1,831,993.00	5.048E+00	Pulse	0.50	3
Co			1	0.011	ug/l	56.12	334.67	9.223E-04	Pulse	0.50	3
Ni			1	0.454	ug/l	20.60	521.34	1.436E-03	Pulse	0.50	3
Cu			1	-16.440	ug/l	-0.15	55,354.90	1.525E-01	Pulse	0.50	3
Zn			1	1.606	ug/l	60.76	9,316.92	1.674E-02	Pulse	1.00	3
Cd			1	0.004	ug/l	324.86	11.33	2.039E-05	Pulse	0.50	3
Al			1	8.375	ug/l	39.50	536.34	1.171E-03	Pulse	1.00	3
Se			1	-0.179	ug/l	-362.11	22.67	6.401E-06	Pulse	3.00	3
Sb			1	-0.638	ug/l	-1.99	357.67	6.427E-04	Pulse	1.00	3
Se			1	1.294	ug/l	25.00	38.78	1.378E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,982,012.67	0.45	104.7	Analog	0.50	3
1	Sc		458,211.35	0.99	107.3	Pulse	0.30	3
1	Ge		362,905.59	0.37	104.4	Pulse	0.30	3
1	In		3,538,372.08	0.93	98.4	Pulse	0.30	3
1	Tb		15,709,706.00	0.91	108.1	Analog	0.50	3
1	Lu		9,197,405.00	0.37	106.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		556,511.54	0.40	104.7	Pulse	0.30	3
1	Te		28,132.31	1.10	90.2	Pulse	0.50	3
1	Li		2,722.42	6.07	118.6	Pulse	0.30	3

Quantitation Report

File Name	104SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:00
Sample Name	FA53456-5
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.914	ug/l	6.56	1,926.77	5.288E-03	Pulse	0.50	3
As			1	0.731	ug/l	41.04	121.34	3.329E-04	Pulse	1.00	3
Mo			1	0.164	ug/l	2.62	166.67	3.004E-04	Pulse	0.50	3
Pb			1	-0.463	ug/l	-11.70	11,912.49	1.077E-03	Pulse	1.00	3
Be			1	-0.005	ug/l	-873.14	0.33	7.125E-07	Pulse	2.00	3
Ag			1	-0.011	ug/l	-50.29	114.67	2.067E-04	Pulse	0.50	3
Ba			1	37.650	ug/l	2.45	10,967.36	3.082E-03	Pulse	0.50	3
Tl			1	0.041	ug/l	10.37	384.01	3.473E-05	Pulse	0.50	3
Sn			1	0.123	ug/l	77.61	756.69	2.127E-04	Pulse	0.30	3
Sr			1	685.509	ug/l	0.80	399,628.87	1.123E-01	Pulse	0.50	3
[Pb]			1	-0.452	ug/l	-6.97	5,740.32	5.189E-04	Pulse	0.50	3
Ca			1	133036.620	ug/l	1.05	361,690.22	7.749E-01	Pulse	0.50	3
Ti			1	0.106	ug/l	208.87	5.33	1.139E-05	Pulse	0.50	3
Na			1	260170.711	ug/l	0.33	36,723,480.00	7.867E+01	Analog	1.00	3
Mg			1	35328.260	ug/l	1.11	2,135,663.33	4.575E+00	Pulse	1.00	3
K			1	11211.595	ug/l	1.45	569,982.79	1.221E+00	Pulse	1.00	3
V			1	0.982	ug/l	59.66	1,540.34	3.300E-03	Pulse	0.50	3
Mn			1	1578.494	ug/l	0.42	846,863.48	2.324E+00	Pulse	0.50	3
Fe			1	72.081	ug/l	0.75	74,910.20	2.056E-01	Pulse	0.50	3
Co			1	0.814	ug/l	4.06	2,144.79	5.887E-03	Pulse	0.50	3
Ni			1	2.148	ug/l	8.23	1,560.74	4.284E-03	Pulse	0.50	3
Cu			1	-15.987	ug/l	-1.55	56,329.07	1.546E-01	Pulse	0.50	3
Zn			1	-6.515	ug/l	-13.36	7,647.20	1.379E-02	Pulse	1.00	3
Cd			1	0.047	ug/l	0.56	28.00	5.047E-05	Pulse	0.50	3
Al			1	55.172	ug/l	9.26	1,354.38	2.902E-03	Pulse	1.00	3
Se			1	0.486	ug/l	89.88	28.11	7.904E-06	Pulse	3.00	3
Sb			1	-0.646	ug/l	-2.13	350.67	6.321E-04	Pulse	1.00	3
Se			1	2.005	ug/l	55.55	42.78	1.482E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,063,324.00	1.00	105.4	Analog	0.50	3
1	Sc		466,778.52	0.47	109.3	Pulse	0.30	3
1	Ge		364,335.13	0.27	104.8	Pulse	0.30	3
1	In		3,558,462.64	1.06	99.0	Pulse	0.30	3
1	Tb		15,800,141.00	0.39	108.7	Analog	0.50	3
1	Lu		9,230,669.33	0.62	106.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		554,748.78	0.37	104.4	Pulse	0.30	3
1	Te		28,858.09	1.05	92.5	Pulse	0.50	3
1	Li		2,779.10	2.23	121.1	Pulse	0.30	3

Quantitation Report

File Name	105SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:04
Sample Name	FA53456-7
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.594	ug/l	18.32	1,542.73	4.218E-03	Pulse	0.50	3
As			1	0.611	ug/l	15.84	106.67	2.916E-04	Pulse	1.00	3
Mo			1	1.988	ug/l	4.80	1,722.75	3.109E-03	Pulse	0.50	3
Pb			1	-0.325	ug/l	-8.62	11,823.75	1.137E-03	Pulse	1.00	3
Be			1	0.019	ug/l	684.39	0.50	1.049E-06	Pulse	2.00	3
Ag			1	-0.017	ug/l	-21.52	94.00	1.697E-04	Pulse	0.50	3
Ba			1	9.400	ug/l	5.01	2,719.55	7.763E-04	Pulse	0.50	3
Tl			1	0.017	ug/l	29.74	197.33	1.898E-05	Pulse	0.50	3
Sn			1	0.101	ug/l	21.59	730.02	2.084E-04	Pulse	0.30	3
Sr			1	1121.710	ug/l	0.44	642,996.65	1.835E-01	Pulse	0.50	3
[Pb]			1	-0.433	ug/l	-21.63	5,434.89	5.227E-04	Pulse	0.50	3
Ca			1	70844.056	ug/l	2.45	196,304.14	4.128E-01	Pulse	0.50	3
Ti			1	0.676	ug/l	31.33	18.67	3.919E-05	Pulse	0.50	3
Na			1	1411868.338	ug/l	1.86	202,947,861.33	4.267E+02	Analog	1.00	3
Mg			1	186670.794	ug/l	1.16	11,498,716.00	2.417E+01	Analog	1.00	3
K			1	51423.318	ug/l	1.84	2,607,026.25	5.481E+00	Pulse	1.00	3
V			1	1.241	ug/l	13.74	1,814.76	3.813E-03	Pulse	0.50	3
Mn			1	24.861	ug/l	1.31	13,516.73	3.695E-02	Pulse	0.50	3
Fe			1	143.093	ug/l	1.83	143,590.46	3.925E-01	Pulse	0.50	3
Co			1	0.047	ug/l	46.70	418.68	1.145E-03	Pulse	0.50	3
Ni			1	0.873	ug/l	15.56	783.35	2.141E-03	Pulse	0.50	3
Cu			1	-16.807	ug/l	-3.21	55,185.15	1.508E-01	Pulse	0.50	3
Zn			1	-8.732	ug/l	-5.55	7,193.35	1.298E-02	Pulse	1.00	3
Cd			1	-0.003	ug/l	-212.61	8.67	1.563E-05	Pulse	0.50	3
Al			1	22.573	ug/l	4.02	807.02	1.696E-03	Pulse	1.00	3
Se			1	0.271	ug/l	250.50	26.00	7.419E-06	Pulse	3.00	3
Sb			1	-0.705	ug/l	-4.99	302.33	5.457E-04	Pulse	1.00	3
Se			1	9.099	ug/l	48.71	68.56	2.514E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,397,358.67	0.24	99.1	Analog	0.50	3
1	Sc		475,709.95	1.68	111.4	Pulse	0.30	3
1	Ge		365,846.58	0.44	105.3	Pulse	0.30	3
1	In		3,503,230.35	0.45	97.5	Pulse	0.30	3
1	Tb		15,659,474.67	1.06	107.7	Analog	0.50	3
1	Lu		9,214,811.33	1.41	106.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		554,262.93	0.95	104.3	Pulse	0.30	3
1	Te		27,289.67	2.07	87.5	Pulse	0.50	3
1	Li		2,536.84	5.56	110.5	Pulse	0.30	3

Quantitation Report

File Name	106SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:07
Sample Name	FA53456-8
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.335	ug/l	14.50	1,174.71	3.349E-03	Pulse	0.50	3
As			1	0.533	ug/l	26.57	92.67	2.645E-04	Pulse	1.00	3
Mo			1	1.891	ug/l	8.49	1,575.41	2.959E-03	Pulse	0.50	3
Pb			1	-0.439	ug/l	-14.10	10,693.01	1.087E-03	Pulse	1.00	3
Be			1	0.183	ug/l	114.77	1.50	3.290E-06	Pulse	2.00	3
Ag			1	-0.023	ug/l	-20.33	73.33	1.378E-04	Pulse	0.50	3
Ba			1	14.694	ug/l	3.22	4,063.81	1.208E-03	Pulse	0.50	3
Tl			1	0.011	ug/l	20.62	149.33	1.519E-05	Pulse	0.50	3
Sn			1	0.279	ug/l	28.09	815.58	2.428E-04	Pulse	0.30	3
Sr			1	1122.982	ug/l	1.80	617,495.40	1.838E-01	Pulse	0.50	3
[Pb]			1	-0.533	ug/l	-7.47	4,941.40	5.022E-04	Pulse	0.50	3
Ca			1	73521.803	ug/l	0.92	193,265.44	4.284E-01	Pulse	0.50	3
Ti			1	0.973	ug/l	43.74	24.00	5.364E-05	Pulse	0.50	3
Na			1	1699006.234	ug/l	1.17	231,655,290.67	5.135E+02	Analog	1.00	3
Mg			1	181213.326	ug/l	1.59	10,587,501.33	2.347E+01	Analog	1.00	3
K			1	52716.133	ug/l	1.44	2,534,591.75	5.618E+00	Pulse	1.00	3
V			1	1.310	ug/l	7.40	1,782.76	3.949E-03	Pulse	0.50	3
Mn			1	11.547	ug/l	5.90	6,091.07	1.734E-02	Pulse	0.50	3
Fe			1	263.564	ug/l	0.69	249,032.99	7.096E-01	Pulse	0.50	3
Co			1	-0.057	ug/l	-26.12	178.67	5.081E-04	Pulse	0.50	3
Ni			1	0.267	ug/l	18.17	393.34	1.122E-03	Pulse	0.50	3
Cu			1	-16.795	ug/l	-2.67	52,970.40	1.509E-01	Pulse	0.50	3
Zn			1	-12.101	ug/l	-2.97	6,263.36	1.175E-02	Pulse	1.00	3
Cd			1	0.004	ug/l	381.63	10.67	2.017E-05	Pulse	0.50	3
Al			1	30.428	ug/l	10.93	895.35	1.987E-03	Pulse	1.00	3
Se			1	0.710	ug/l	47.25	28.22	8.411E-06	Pulse	3.00	3
Sb			1	-0.689	ug/l	-5.52	303.67	5.700E-04	Pulse	1.00	3
Se			1	10.013	ug/l	34.17	69.56	2.647E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,838,627.00	2.45	93.8	Analog	0.50	3
1	Sc		451,267.17	3.33	105.7	Pulse	0.30	3
1	Ge		350,945.49	2.20	101.0	Pulse	0.30	3
1	In		3,361,573.69	3.18	93.5	Pulse	0.30	3
1	Tb		14,820,890.67	3.49	102.0	Analog	0.50	3
1	Lu		8,655,659.33	2.62	100.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		533,079.56	2.92	100.3	Pulse	0.30	3
1	Te		26,193.45	3.04	84.0	Pulse	0.50	3
1	Li		2,553.51	1.29	111.2	Pulse	0.30	3

Quantitation Report

File Name	107CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:11
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.962	ug/l	0.20	1,132,371.50	3.344E+00	Pulse	0.50	3
As			1	49.204	ug/l	0.83	115,098.47	3.399E-01	Pulse	1.00	3
Mo			1	47.978	ug/l	0.49	767,878.02	1.477E+00	Pulse	0.50	3
Pb			1	43.430	ug/l	0.48	3,876,962.42	3.804E-01	Pulse	1.00	3
Be			1	54.894	ug/l	0.65	6,395.68	1.507E-02	Pulse	2.00	3
Ag			1	48.386	ug/l	1.27	2,828,549.17	5.442E+00	Pulse	0.50	3
Ba			1	47.383	ug/l	1.11	253,601.80	7.736E-02	Pulse	0.50	3
Tl			1	46.394	ug/l	5.18	6,175,748.33	6.059E-01	Mix	0.50	3
Sn			1	48.904	ug/l	1.68	621,208.40	1.895E-01	Pulse	0.30	3
Sr			1	48.717	ug/l	0.83	522,823.16	1.595E-01	Pulse	0.50	3
[Pb]			1	43.607	ug/l	1.16	1,822,926.50	1.789E-01	Pulse	0.50	3
Ca			1	4869.994	ug/l	1.26	240,831.68	5.674E-01	Pulse	0.50	3
Ti			1	48.628	ug/l	0.86	20,106.98	4.737E-02	Pulse	0.50	3
Na			1	5308.030	ug/l	0.19	13,640,812.67	3.213E+01	Analog	1.00	3
Mg			1	5294.685	ug/l	0.54	5,821,191.00	1.371E+01	Analog	1.00	3
K			1	4847.821	ug/l	0.76	4,374,321.50	1.031E+01	Pulse	1.00	3
V			1	49.433	ug/l	1.16	831,180.54	1.958E+00	Pulse	0.50	3
Mn			1	49.061	ug/l	0.27	489,297.93	1.445E+00	Pulse	0.50	3
Fe			1	5156.175	ug/l	0.48	91,909,682.67	2.714E+02	Analog	0.50	3
Co			1	49.504	ug/l	0.54	2,070,906.38	6.116E+00	Pulse	0.50	3
Ni			1	50.336	ug/l	0.77	573,309.83	1.693E+00	Pulse	0.50	3
Cu			1	49.355	ug/l	1.04	1,608,786.63	4.751E+00	Pulse	0.50	3
Zn			1	49.703	ug/l	1.16	196,530.21	3.781E-01	Pulse	1.00	3
Cd			1	48.105	ug/l	1.87	349,241.06	6.720E-01	Pulse	0.50	3
Al			1	4895.150	ug/l	0.78	1,537,360.34	3.622E+00	Pulse	1.00	3
Se			1	51.004	ug/l	1.43	7,581.95	2.313E-03	Pulse	3.00	3
Sb			1	46.480	ug/l	1.12	699,056.31	1.345E+00	Pulse	1.00	3
Se			1	49.223	ug/l	3.64	3,865.73	1.444E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,192,359.00	0.71	97.1	Analog	0.50	3
1	Sc		424,489.50	1.03	99.4	Pulse	0.30	3
1	Ge		338,612.96	0.22	97.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,278,369.31	0.57	91.2	Pulse	0.30	3
1	Tb		14,571,837.00	0.40	100.2	Analog	0.50	3
1	Lu		8,456,862.33	0.86	97.9	Analog	0.50	3
1	Ge		519,768.90	0.76	97.8	Pulse	0.30	3
1	Te		26,775.57	1.79	85.8	Pulse	0.50	3
1	Li		2,593.51	3.62	113.0	Pulse	0.30	3

Quantitation Report

File Name	108_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:15
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	100.893	ug/l	0.53	2,300,663.08	6.751E+00	Pulse	0.50	3
As			1	99.003	ug/l	1.22	233,031.98	6.839E-01	Pulse	1.00	3
Mo			1	96.843	ug/l	0.86	1,559,435.75	2.982E+00	Pulse	0.50	3
Pb			1	96.762	ug/l	2.02	8,531,125.00	8.459E-01	Analog	1.00	3
Be			1	107.077	ug/l	2.13	12,902.75	2.939E-02	Pulse	2.00	3
Ag			1	101.165	ug/l	3.95	5,953,415.17	1.138E+01	Mix	0.50	3
Ba			1	94.260	ug/l	1.27	508,972.71	1.539E-01	Pulse	0.50	3
Tl			1	97.499	ug/l	1.75	12,841,377.67	1.273E+00	Analog	0.50	3
Sn			1	99.180	ug/l	1.61	1,270,439.81	3.841E-01	Pulse	0.30	3
Sr			1	99.152	ug/l	1.51	1,072,371.54	3.242E-01	Pulse	0.50	3
[Pb]			1	88.769	ug/l	0.70	3,666,168.75	3.635E-01	Pulse	0.50	3
Ca			1	9646.357	ug/l	1.73	493,308.18	1.124E+00	Pulse	0.50	3
Ti			1	97.909	ug/l	1.99	41,868.59	9.537E-02	Pulse	0.50	3
Na			1	10492.562	ug/l	2.68	27,860,437.33	6.347E+01	Analog	1.00	3
Mg			1	10392.949	ug/l	2.48	11,816,703.33	2.692E+01	Analog	1.00	3
K			1	10111.377	ug/l	2.27	9,420,437.33	2.146E+01	Analog	1.00	3
V			1	97.723	ug/l	1.90	1,698,949.79	3.870E+00	Pulse	0.50	3
Mn			1	98.770	ug/l	0.83	991,276.79	2.909E+00	Pulse	0.50	3
Fe			1	10538.597	ug/l	1.00	189,043,408.00	5.548E+02	Analog	0.50	3
Co			1	99.552	ug/l	1.22	4,190,629.58	1.230E+01	Pulse	0.50	3
Ni			1	101.216	ug/l	1.33	1,159,886.17	3.404E+00	Pulse	0.50	3
Cu			1	99.575	ug/l	0.32	3,187,759.42	9.354E+00	Pulse	0.50	3
Zn			1	100.253	ug/l	0.91	390,298.48	7.463E-01	Pulse	1.00	3
Cd			1	96.246	ug/l	0.96	703,077.09	1.344E+00	Pulse	0.50	3
Al			1	9709.567	ug/l	2.05	3,153,461.25	7.183E+00	Pulse	1.00	3
Se			1	102.732	ug/l	1.95	15,384.30	4.651E-03	Pulse	3.00	3
Sb			1	93.486	ug/l	1.57	1,413,780.37	2.704E+00	Pulse	1.00	3
Se			1	99.039	ug/l	1.03	7,691.11	2.894E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,087,398.00	2.01	96.1	Analog	0.50	3
1	Sc		439,181.70	2.81	102.9	Pulse	0.30	3
1	Ge		340,798.47	1.48	98.0	Pulse	0.30	3
1	In		3,308,178.97	2.17	92.0	Pulse	0.30	3
1	Tb		14,722,336.67	2.60	101.3	Analog	0.50	3
1	Lu		8,594,586.67	1.15	99.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		523,004.60	1.69	98.4	Pulse	0.30	3
1	Te		26,582.00	2.15	85.2	Pulse	0.50	3
1	Li		2,497.95	3.55	108.8	Pulse	0.30	3

Quantitation Report

File Name	109_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:18
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.003	ug/l	131.47	811.35	2.414E-03	Pulse	0.50	3
As			1	0.003	ug/l	185.98	33.33	9.912E-05	Pulse	1.00	3
Mo			1	0.023	ug/l	4.17	384.68	7.465E-04	Pulse	0.50	3
Pb			1	-0.022	ug/l	-17.34	11,232.03	1.083E-03	Pulse	1.00	3
Be			1	0.013	ug/l	18.79	1.83	4.398E-06	Pulse	2.00	3
Ag			1	0.006	ug/l	11.36	486.68	9.443E-04	Pulse	0.50	3
Ba			1	0.001	ug/l	288.28	36.00	1.108E-05	Pulse	0.50	3
Tl			1	0.023	ug/l	17.21	3,196.98	3.084E-04	Pulse	0.50	3
Sn			1	0.038	ug/l	19.58	1,090.04	3.349E-04	Pulse	0.30	3
Sr			1	0.013	ug/l	29.41	1,298.05	3.989E-04	Pulse	0.50	3
[Pb]			1	-0.026	ug/l	-3.74	5,232.15	5.043E-04	Pulse	0.50	3
Ca			1	0.882	ug/l	43.76	158.67	3.806E-04	Pulse	0.50	3
Ti			1	0.010	ug/l	57.40	6.67	1.602E-05	Pulse	0.50	3
Na			1	5.589	ug/l	7.73	36,685.39	8.802E-02	Pulse	1.00	3
Mg			1	0.527	ug/l	14.11	723.01	1.734E-03	Pulse	1.00	3
K			1	1.678	ug/l	9.64	15,369.31	3.688E-02	Pulse	1.00	3
V			1	-0.004	ug/l	-97.65	496.68	1.192E-03	Pulse	0.50	3
Mn			1	0.005	ug/l	57.44	162.67	4.839E-04	Pulse	0.50	3
Fe			1	0.353	ug/l	25.72	11,590.87	3.449E-02	Pulse	0.50	3
Co			1	-0.003	ug/l	-4.92	180.00	5.357E-04	Pulse	0.50	3
Ni			1	0.000	ug/l	902.19	230.00	6.843E-04	Pulse	0.50	3
Cu			1	-0.492	ug/l	-4.32	61,420.54	1.828E-01	Pulse	0.50	3
Zn			1	-0.256	ug/l	-11.02	7,365.42	1.429E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	34.13	30.00	5.820E-05	Pulse	0.50	3
Al			1	0.045	ug/l	279.76	373.00	8.948E-04	Pulse	1.00	3
Se			1	0.022	ug/l	140.92	25.45	7.817E-06	Pulse	3.00	3
Sb			1	-0.027	ug/l	-7.07	407.01	7.898E-04	Pulse	1.00	3
Se			1	-0.093	ug/l	-9.86	25.56	9.206E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,374,008.67	0.89	98.9	Analog	0.50	3
1	Sc		416,748.08	0.50	97.6	Pulse	0.30	3

Quantitation Report

1	Ge		335,990.06	0.39	96.7	Pulse	0.30	3
1	In		3,254,242.65	0.40	90.5	Pulse	0.30	3
1	Tb		14,345,513.00	0.55	98.7	Analog	0.50	3
1	Lu		8,289,317.33	0.02	95.9	Analog	0.50	3
1	Ge		515,279.37	0.33	96.9	Pulse	0.30	3
1	Te		27,757.06	0.95	89.0	Pulse	0.50	3
1	Li		2,497.95	5.00	108.8	Pulse	0.30	3

Quantitation Report

File Name	110SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:22
Sample Name	FA53456-9
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.455	ug/l	17.47	1,324.71	3.753E-03	Pulse	0.50	3
As			1	0.663	ug/l	20.94	109.33	3.095E-04	Pulse	1.00	3
Mo			1	2.095	ug/l	3.56	1,752.75	3.274E-03	Pulse	0.50	3
Pb			1	-0.462	ug/l	-8.25	10,677.35	1.077E-03	Pulse	1.00	3
Be			1	0.104	ug/l	134.20	1.00	2.209E-06	Pulse	2.00	3
Ag			1	0.065	ug/l	3.65	338.67	6.326E-04	Pulse	0.50	3
Ba			1	8.904	ug/l	2.17	2,465.51	7.359E-04	Pulse	0.50	3
Tl			1	0.126	ug/l	17.78	896.03	9.033E-05	Pulse	0.50	3
Sn			1	0.530	ug/l	23.40	976.70	2.915E-04	Pulse	0.30	3
Sr			1	1095.815	ug/l	1.41	600,740.46	1.793E-01	Pulse	0.50	3
[Pb]			1	-0.533	ug/l	-16.59	4,976.74	5.022E-04	Pulse	0.50	3
Ca			1	69371.303	ug/l	1.01	182,189.76	4.042E-01	Pulse	0.50	3
Ti			1	0.844	ug/l	23.26	21.33	4.736E-05	Pulse	0.50	3
Na			1	1409693.146	ug/l	0.87	192,044,624.00	4.260E+02	Analog	1.00	3
Mg			1	184218.927	ug/l	0.91	10,753,718.33	2.386E+01	Analog	1.00	3
K			1	51140.029	ug/l	1.02	2,457,214.33	5.451E+00	Pulse	1.00	3
V			1	1.030	ug/l	9.41	1,530.06	3.395E-03	Pulse	0.50	3
Mn			1	19.319	ug/l	0.41	10,162.01	2.879E-02	Pulse	0.50	3
Fe			1	216.068	ug/l	0.98	206,363.33	5.846E-01	Pulse	0.50	3
Co			1	0.069	ug/l	28.34	452.01	1.280E-03	Pulse	0.50	3
Ni			1	0.320	ug/l	15.44	427.34	1.211E-03	Pulse	0.50	3
Cu			1	-17.376	ug/l	-2.95	52,331.23	1.482E-01	Pulse	0.50	3
Zn			1	-6.308	ug/l	-6.00	7,420.44	1.386E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	183.39	10.67	1.992E-05	Pulse	0.50	3
Al			1	16.852	ug/l	22.04	669.68	1.485E-03	Pulse	1.00	3
Se			1	0.011	ug/l	1446.11	22.89	6.832E-06	Pulse	3.00	3
Sb			1	-0.532	ug/l	-6.47	426.01	7.956E-04	Pulse	1.00	3
Se			1	10.156	ug/l	15.16	69.44	2.667E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,911,272.67	1.22	94.5	Analog	0.50	3
1	Sc		450,784.60	1.16	105.6	Pulse	0.30	3
1	Ge		353,024.70	0.59	101.6	Pulse	0.30	3
1	In		3,350,243.83	0.29	93.2	Pulse	0.30	3
1	Tb		14,812,266.33	0.60	101.9	Analog	0.50	3
1	Lu		8,652,406.33	1.63	100.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		535,350.99	0.42	100.7	Pulse	0.30	3
1	Te		26,044.54	1.02	83.5	Pulse	0.50	3
1	Li		2,450.16	0.68	106.7	Pulse	0.30	3

Quantitation Report

File Name	111SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:25
Sample Name	FA53465-3
Sample Type	Sample
Comment	
Prep Dilution	100.000
Auto Dilution	N/A
Total Dilution	100.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.270	ug/l	18.56	1,062.04	3.080E-03	Pulse	0.50	3
As			1	1.074	ug/l	26.56	53.33	1.547E-04	Pulse	1.00	3
Mo			1	0.873	ug/l	21.07	166.67	3.166E-04	Pulse	0.50	3
Pb			1	-3.574	ug/l	-5.85	10,167.36	9.670E-04	Pulse	1.00	3
Be			1	0.136	ug/l	310.72	0.50	1.157E-06	Pulse	2.00	3
Ag			1	0.063	ug/l	46.09	178.00	3.380E-04	Pulse	0.50	3
Ba			1	83.640	ug/l	4.24	4,593.93	1.374E-03	Pulse	0.50	3
Tl			1	0.300	ug/l	31.32	493.34	4.703E-05	Pulse	0.50	3
Sn			1	0.521	ug/l	9.90	698.91	2.090E-04	Pulse	0.30	3
Sr			1	243.765	ug/l	1.16	27,811.17	8.317E-03	Pulse	0.50	3
[Pb]			1	-4.037	ug/l	-4.82	4,692.00	4.462E-04	Pulse	0.50	3
Ca			1	56778.630	ug/l	1.45	28,595.48	6.640E-02	Pulse	0.50	3
Ti			1	1.586	ug/l	97.16	9.33	2.170E-05	Pulse	0.50	3
Na			1	10124.309	ug/l	0.78	286,888.99	6.661E-01	Pulse	1.00	3
Mg			1	14827.334	ug/l	0.46	165,541.98	3.844E-01	Pulse	1.00	3
K			1	6165.647	ug/l	0.34	70,613.30	1.640E-01	Pulse	1.00	3
V			1	7.151	ug/l	2.27	1,803.43	4.187E-03	Pulse	0.50	3
Mn			1	5860.615	ug/l	0.55	595,082.90	1.726E+00	Pulse	0.50	3
Fe			1	11421.554	ug/l	0.41	2,078,207.04	6.028E+00	Pulse	0.50	3
Co			1	17.104	ug/l	1.45	7,578.84	2.198E-02	Pulse	0.50	3
Ni			1	23.151	ug/l	3.53	2,916.23	8.457E-03	Pulse	0.50	3
Cu			1	-72.469	ug/l	-1.70	55,661.15	1.615E-01	Pulse	0.50	3
Zn			1	-60.325	ug/l	-2.80	6,199.01	1.176E-02	Pulse	1.00	3
Cd			1	0.046	ug/l	90.70	12.67	2.404E-05	Pulse	0.50	3
Al			1	31.781	ug/l	21.24	472.01	1.096E-03	Pulse	1.00	3
Se			1	65.141	ug/l	161.91	121.14	3.626E-05	Pulse	3.00	3
Sb			1	-3.360	ug/l	-4.81	313.00	5.939E-04	Pulse	1.00	3
Se			1	1.619	ug/l	294.76	35.67	1.237E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,516,204.33	1.46	100.2	Analog	0.50	3
1	Sc		430,656.78	1.05	100.9	Pulse	0.30	3
1	Ge		344,760.33	0.80	99.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,343,704.38	1.43	93.0	Pulse	0.30	3
1	Tb		14,498,217.00	1.30	99.7	Analog	0.50	3
1	Lu		8,402,987.83	1.29	97.3	Analog	0.50	3
1	Ge		526,956.02	0.95	99.1	Pulse	0.30	3
1	Te		28,828.07	0.34	92.4	Pulse	0.50	3
1	Li		2,480.17	5.21	108.0	Pulse	0.30	3

Quantitation Report

File Name	112SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:29
Sample Name	FA53465-4
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	3.584	ug/l	0.81	8,758.00	2.621E-02	Pulse	0.50	3
As			1	0.320	ug/l	18.28	100.67	3.015E-04	Pulse	1.00	3
Mo			1	0.199	ug/l	4.37	337.33	6.611E-04	Pulse	0.50	3
Pb			1	-0.303	ug/l	-6.40	9,987.26	1.015E-03	Pulse	1.00	3
Be			1	0.113	ug/l	42.75	1.67	3.884E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	42.69	190.00	3.723E-04	Pulse	0.50	3
Ba			1	608.755	ug/l	1.30	319,946.61	9.938E-02	Pulse	0.50	3
Tl			1	0.020	ug/l	15.15	332.67	3.382E-05	Pulse	0.50	3
Sn			1	0.381	ug/l	27.94	1,082.26	3.365E-04	Pulse	0.30	3
Sr			1	1444.111	ug/l	1.26	1,519,664.00	4.720E-01	Pulse	0.50	3
[Pb]			1	-0.378	ug/l	-8.61	4,495.27	4.568E-04	Pulse	0.50	3
Ca			1	206226.202	ug/l	1.40	1,028,946.29	2.402E+00	Pulse	0.50	3
Ti			1	3.317	ug/l	29.96	141.33	3.293E-04	Pulse	0.50	3
Na			1	402461.051	ug/l	0.79	104,233,413.33	2.433E+02	Analog	1.00	3
Mg			1	77972.996	ug/l	0.77	8,652,474.33	2.020E+01	Analog	1.00	3
K			1	66286.645	ug/l	0.91	6,031,698.67	1.408E+01	Analog	1.00	3
V			1	196.057	ug/l	0.81	333,088.00	7.775E-01	Pulse	0.50	3
Mn			1	1169.368	ug/l	1.36	1,150,844.13	3.444E+00	Pulse	0.50	3
Fe			1	294.297	ug/l	0.84	523,059.55	1.565E+00	Pulse	0.50	3
Co			1	0.481	ug/l	2.01	2,273.48	6.803E-03	Pulse	0.50	3
Ni			1	2.186	ug/l	4.52	2,680.86	8.023E-03	Pulse	0.50	3
Cu			1	-9.125	ug/l	-1.44	48,206.63	1.442E-01	Pulse	0.50	3
Zn			1	-3.483	ug/l	-19.10	6,948.93	1.362E-02	Pulse	1.00	3
Cd			1	0.114	ug/l	22.14	90.00	1.765E-04	Pulse	0.50	3
Al			1	57.671	ug/l	3.81	2,196.79	5.127E-03	Pulse	1.00	3
Se			1	0.351	ug/l	46.25	27.00	8.391E-06	Pulse	3.00	3
Sb			1	-0.209	ug/l	-8.83	490.68	9.618E-04	Pulse	1.00	3
Se			1	1.750	ug/l	21.06	41.56	1.699E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,842,677.33	1.09	93.8	Analog	0.50	3
1	Sc		428,444.92	0.86	100.4	Pulse	0.30	3
1	Ge		334,219.87	1.21	96.2	Pulse	0.30	3
1	In		3,219,668.42	1.27	89.6	Pulse	0.30	3
1	Tb		14,522,375.00	0.92	99.9	Analog	0.50	3
1	Lu		8,409,750.50	0.66	97.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		510,290.21	1.12	96.0	Pulse	0.30	3
1	Te		24,457.68	0.47	78.4	Pulse	0.50	3
1	Li		2,532.40	7.89	110.3	Pulse	0.30	3

Quantitation Report

File Name	113SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:33
Sample Name	FA53465-6
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	3.505	ug/l	1.76	8,633.94	2.567E-02	Pulse	0.50	3
As			1	0.333	ug/l	22.86	104.33	3.103E-04	Pulse	1.00	3
Mo			1	0.190	ug/l	3.35	326.00	6.336E-04	Pulse	0.50	3
Pb			1	-0.215	ug/l	-10.97	10,797.77	1.092E-03	Pulse	1.00	3
Be			1	0.070	ug/l	92.38	1.17	2.695E-06	Pulse	2.00	3
Ag			1	0.004	ug/l	64.18	161.33	3.139E-04	Pulse	0.50	3
Ba			1	609.745	ug/l	0.36	322,197.55	9.954E-02	Pulse	0.50	3
Tl			1	0.021	ug/l	26.32	351.34	3.549E-05	Pulse	0.50	3
Sn			1	0.282	ug/l	8.66	964.47	2.979E-04	Pulse	0.30	3
Sr			1	1444.039	ug/l	0.44	1,527,760.88	4.720E-01	Pulse	0.50	3
[Pb]			1	-0.255	ug/l	-19.48	5,014.09	5.069E-04	Pulse	0.50	3
Ca			1	207668.645	ug/l	1.84	1,044,826.88	2.419E+00	Pulse	0.50	3
Ti			1	3.901	ug/l	12.40	166.67	3.863E-04	Pulse	0.50	3
Na			1	402325.971	ug/l	1.25	105,074,858.67	2.432E+02	Analog	1.00	3
Mg			1	77581.393	ug/l	1.89	8,680,713.67	2.009E+01	Analog	1.00	3
K			1	66216.941	ug/l	1.19	6,076,159.83	1.406E+01	Analog	1.00	3
V			1	196.277	ug/l	1.22	336,268.03	7.783E-01	Pulse	0.50	3
Mn			1	1167.826	ug/l	0.95	1,156,525.75	3.439E+00	Pulse	0.50	3
Fe			1	189.415	ug/l	0.56	340,641.17	1.013E+00	Pulse	0.50	3
Co			1	0.453	ug/l	9.21	2,170.13	6.454E-03	Pulse	0.50	3
Ni			1	9.826	ug/l	1.34	11,336.09	3.371E-02	Pulse	0.50	3
Cu			1	-8.547	ug/l	-3.19	50,289.25	1.495E-01	Pulse	0.50	3
Zn			1	-4.185	ug/l	-9.71	6,742.85	1.311E-02	Pulse	1.00	3
Cd			1	0.077	ug/l	18.87	64.67	1.258E-04	Pulse	0.50	3
Al			1	69.347	ug/l	5.24	2,589.17	5.991E-03	Pulse	1.00	3
Se			1	0.287	ug/l	39.52	26.22	8.105E-06	Pulse	3.00	3
Sb			1	-0.218	ug/l	-9.40	481.01	9.355E-04	Pulse	1.00	3
Se			1	1.441	ug/l	63.87	40.33	1.609E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,893,842.67	1.12	94.3	Analog	0.50	3
1	Sc		432,092.14	1.74	101.2	Pulse	0.30	3
1	Ge		336,285.17	0.47	96.7	Pulse	0.30	3
1	In		3,236,724.94	1.21	90.0	Pulse	0.30	3
1	Tb		14,513,543.00	1.32	99.8	Analog	0.50	3
1	Lu		8,524,648.33	1.16	98.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		514,389.65	1.20	96.8	Pulse	0.30	3
1	Te		25,070.53	1.37	80.4	Pulse	0.50	3
1	Li		2,475.72	1.03	107.8	Pulse	0.30	3

Quantitation Report

File Name	114SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:36
Sample Name	CRIA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.016	ug/l	0.61	24,183.69	7.017E-02	Pulse	0.50	3
As			1	0.968	ug/l	1.68	2,331.48	6.766E-03	Pulse	1.00	3
Mo			1	0.953	ug/l	0.68	15,391.69	2.938E-02	Pulse	0.50	3
Pb			1	0.766	ug/l	0.94	82,809.71	7.964E-03	Pulse	1.00	3
Be			1	1.095	ug/l	9.09	130.33	3.013E-04	Pulse	2.00	3
Ag			1	0.980	ug/l	0.42	57,879.38	1.105E-01	Pulse	0.50	3
Ba			1	0.951	ug/l	0.29	5,159.42	1.562E-03	Pulse	0.50	3
Tl			1	0.860	ug/l	0.70	116,858.23	1.124E-02	Pulse	0.50	3
Sn			1	1.125	ug/l	0.40	15,011.74	4.545E-03	Pulse	0.30	3
Sr			1	0.991	ug/l	3.34	11,867.76	3.594E-03	Pulse	0.50	3
[Pb]			1	0.769	ug/l	1.56	39,047.22	3.755E-03	Pulse	0.50	3
Ca			1	100.907	ug/l	1.03	5,199.37	1.203E-02	Pulse	0.50	3
Ti			1	0.947	ug/l	11.25	402.01	9.290E-04	Pulse	0.50	3
Na			1	109.252	ug/l	0.83	308,873.48	7.145E-01	Pulse	1.00	3
Mg			1	104.648	ug/l	0.66	117,323.45	2.714E-01	Pulse	1.00	3
K			1	99.060	ug/l	1.49	105,131.36	2.432E-01	Pulse	1.00	3
V			1	1.013	ug/l	0.75	17,923.58	4.146E-02	Pulse	0.50	3
Mn			1	1.019	ug/l	1.21	10,461.52	3.036E-02	Pulse	0.50	3
Fe			1	99.285	ug/l	1.02	1,806,471.58	5.242E+00	Pulse	0.50	3
Co			1	0.996	ug/l	0.81	42,698.98	1.239E-01	Pulse	0.50	3
Ni			1	1.029	ug/l	3.18	12,160.51	3.529E-02	Pulse	0.50	3
Cu			1	-0.993	ug/l	-0.78	47,170.82	1.369E-01	Pulse	0.50	3
Zn			1	-0.183	ug/l	-31.90	7,767.24	1.483E-02	Pulse	1.00	3
Cd			1	0.959	ug/l	0.78	7,028.02	1.342E-02	Pulse	0.50	3
Al			1	99.202	ug/l	0.81	32,093.74	7.424E-02	Pulse	1.00	3
Se			1	1.071	ug/l	8.94	182.44	5.523E-05	Pulse	3.00	3
Sb			1	0.879	ug/l	3.27	14,125.43	2.697E-02	Pulse	1.00	3
Se			1	0.821	ug/l	8.96	99.45	3.578E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,398,494.00	1.40	99.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		432,301.68	1.68	101.3	Pulse	0.30	3
1	Ge		344,628.82	1.11	99.1	Pulse	0.30	3
1	In		3,302,798.48	1.87	91.9	Pulse	0.30	3
1	Tb		14,455,446.33	1.08	99.4	Analog	0.50	3
1	Lu		8,281,365.33	1.99	95.9	Analog	0.50	3
1	Ge		523,893.80	1.62	98.5	Pulse	0.30	3
1	Te		27,813.83	2.08	89.2	Pulse	0.50	3
1	Li		2,389.04	4.54	104.1	Pulse	0.30	3

Quantitation Report

File Name	115SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:40
Sample Name	ICSA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.291	ug/l	0.86	28,231.06	8.859E-02	Pulse	0.50	3
As			1	0.080	ug/l	13.82	201.67	6.321E-04	Pulse	1.00	3
Mo			1	2109.313	ug/l	0.19	30,772,448.00	6.495E+01	Analog	0.50	3
Pb			1	-0.015	ug/l	-13.42	9,573.02	1.145E-03	Pulse	1.00	3
Be			1	0.018	ug/l	81.18	2.50	5.831E-06	Pulse	2.00	3
Ag			1	0.021	ug/l	2.19	1,221.38	2.578E-03	Pulse	0.50	3
Ba			1	0.083	ug/l	8.24	435.34	1.440E-04	Pulse	0.50	3
Tl			1	0.004	ug/l	8.48	554.68	6.631E-05	Pulse	0.50	3
Sn			1	0.094	ug/l	5.11	1,666.76	5.523E-04	Pulse	0.30	3
Sr			1	0.980	ug/l	3.01	10,740.42	3.558E-03	Pulse	0.50	3
[Pb]			1	-0.017	ug/l	-12.87	4,545.29	5.436E-04	Pulse	0.50	3
Ca			1	91658.872	ug/l	1.07	4,596,355.17	1.067E+01	Pulse	0.50	3
Ti			1	1966.951	ug/l	0.76	824,893.58	1.916E+00	Pulse	0.50	3
Na			1	104356.906	ug/l	0.21	271,603,706.67	6.308E+02	Analog	1.00	3
Mg			1	103251.114	ug/l	0.01	115,150,765.33	2.674E+02	Analog	1.00	3
K			1	103036.780	ug/l	1.07	94,019,312.00	2.184E+02	Analog	1.00	3
V			1	0.009	ug/l	30.71	731.35	1.698E-03	Pulse	0.50	3
Mn			1	0.284	ug/l	1.01	2,773.54	8.702E-03	Pulse	0.50	3
Fe			1	104333.210	ug/l	0.61	1,750,320,256.00	5.492E+03	Analog	0.50	3
Co			1	0.006	ug/l	30.76	528.68	1.657E-03	Pulse	0.50	3
Ni			1	0.123	ug/l	4.06	1,528.07	4.796E-03	Pulse	0.50	3
Cu			1	-1.975	ug/l	-0.80	14,923.78	4.683E-02	Pulse	0.50	3
Zn			1	-0.571	ug/l	-0.70	5,683.85	1.200E-02	Pulse	1.00	3
Cd			1	0.387	ug/l	5.12	2,570.19	5.423E-03	Pulse	0.50	3
Al			1	97850.902	ug/l	0.70	31,166,984.00	7.238E+01	Analog	1.00	3
Se			1	0.054	ug/l	22.01	28.00	9.267E-06	Pulse	3.00	3
Sb			1	0.007	ug/l	15.86	842.69	1.779E-03	Pulse	1.00	3
Se			1	0.036	ug/l	158.17	29.44	1.294E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,360,324.67	1.25	79.7	Analog	0.50	3
1	Sc		430,588.72	1.17	100.9	Pulse	0.30	3
1	Ge		318,693.43	1.36	91.7	Pulse	0.30	3
1	In		3,019,163.98	2.18	84.0	Pulse	0.30	3
1	Tb		13,432,319.33	2.00	92.4	Analog	0.50	3
1	Lu		7,945,111.17	2.48	92.0	Analog	0.50	3
1	Ge		473,793.21	1.22	89.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		22,774.86	1.52	73.0	Pulse	0.50	3
1	Li		2,033.45	1.02	88.6	Pulse	0.30	3

Quantitation Report

File Name	116SMPL.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:44
Sample Name	ICSAB
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	21.557	ug/l	0.44	467,413.91	1.444E+00	Pulse	0.50	3
As			1	19.334	ug/l	0.61	43,244.62	1.336E-01	Pulse	1.00	3
Mo			1	2128.987	ug/l	1.01	31,747,684.00	6.555E+01	Analog	0.50	3
Pb			1	0.001	ug/l	153.28	11,205.34	1.290E-03	Pulse	1.00	3
Be			1	0.014	ug/l	1.05	2.00	4.545E-06	Pulse	2.00	3
Ag			1	17.021	ug/l	1.03	927,218.92	1.915E+00	Pulse	0.50	3
Ba			1	0.076	ug/l	12.69	412.01	1.330E-04	Pulse	0.50	3
Tl			1	0.003	ug/l	6.27	462.01	5.319E-05	Pulse	0.50	3
Sn			1	0.090	ug/l	5.50	1,666.76	5.376E-04	Pulse	0.30	3
Sr			1	0.968	ug/l	3.73	10,904.53	3.517E-03	Pulse	0.50	3
[Pb]			1	0.003	ug/l	365.97	5,403.54	6.221E-04	Pulse	0.50	3
Ca			1	92141.573	ug/l	1.66	4,721,566.17	1.073E+01	Pulse	0.50	3
Ti			1	1956.237	ug/l	1.45	838,402.54	1.905E+00	Pulse	0.50	3
Na			1	103903.178	ug/l	1.35	276,346,293.33	6.280E+02	Analog	1.00	3
Mg			1	102535.926	ug/l	1.27	116,862,357.33	2.656E+02	Analog	1.00	3
K			1	103146.941	ug/l	0.77	96,189,704.00	2.186E+02	Analog	1.00	3
V			1	0.012	ug/l	8.32	806.69	1.833E-03	Pulse	0.50	3
Mn			1	20.221	ug/l	1.04	192,825.59	5.958E-01	Pulse	0.50	3
Fe			1	105422.536	ug/l	0.64	1,796,046,165.33	5.549E+03	Analog	0.50	3
Co			1	19.118	ug/l	0.19	764,622.17	2.362E+00	Pulse	0.50	3
Ni			1	18.570	ug/l	0.78	202,302.04	6.251E-01	Pulse	0.50	3
Cu			1	16.586	ug/l	1.02	565,736.38	1.748E+00	Pulse	0.50	3
Zn			1	17.566	ug/l	0.66	69,782.44	1.441E-01	Pulse	1.00	3
Cd			1	17.947	ug/l	0.86	121,422.32	2.507E-01	Pulse	0.50	3
Al			1	98217.283	ug/l	1.41	31,969,111.33	7.265E+01	Analog	1.00	3
Se			1	0.048	ug/l	61.72	27.89	8.990E-06	Pulse	3.00	3
Sb			1	0.010	ug/l	24.82	898.36	1.854E-03	Pulse	1.00	3
Se			1	0.044	ug/l	156.02	30.89	1.319E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,688,099.33	0.94	82.8	Analog	0.50	3
1	Sc		440,059.99	0.87	103.1	Pulse	0.30	3
1	Ge		323,659.98	0.59	93.1	Pulse	0.30	3
1	In		3,100,590.23	0.94	86.3	Pulse	0.30	3
1	Tb		13,969,747.67	1.40	96.1	Analog	0.50	3
1	Lu		8,241,572.83	0.87	95.4	Analog	0.50	3
1	Ge		484,321.51	0.88	91.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		23,429.66	1.07	75.1	Pulse	0.50	3
1	Li		1,986.78	4.41	86.5	Pulse	0.30	3

Quantitation Report

File Name	117CCVA.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:47
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.784	ug/l	0.75	1,136,241.08	3.332E+00	Pulse	0.50	3
As			1	49.118	ug/l	0.67	115,705.41	3.393E-01	Pulse	1.00	3
Mo			1	49.362	ug/l	0.62	791,682.23	1.520E+00	Pulse	0.50	3
Pb			1	43.376	ug/l	0.27	4,102,290.92	3.799E-01	Pulse	1.00	3
Be			1	52.789	ug/l	0.87	6,183.11	1.449E-02	Pulse	2.00	3
Ag			1	50.023	ug/l	1.39	2,930,326.75	5.626E+00	Pulse	0.50	3
Ba			1	47.860	ug/l	1.15	262,728.66	7.814E-02	Pulse	0.50	3
Tl			1	48.168	ug/l	0.75	6,792,198.17	6.290E-01	Analog	0.50	3
Sn			1	49.170	ug/l	0.45	640,631.23	1.905E-01	Pulse	0.30	3
Sr			1	48.222	ug/l	0.36	530,798.21	1.579E-01	Pulse	0.50	3
[Pb]			1	43.685	ug/l	0.59	1,934,769.21	1.792E-01	Pulse	0.50	3
Ca			1	4799.795	ug/l	0.41	238,641.88	5.592E-01	Pulse	0.50	3
Ti			1	47.928	ug/l	1.55	19,924.16	4.669E-02	Pulse	0.50	3
Na			1	5153.477	ug/l	0.61	13,314,792.33	3.120E+01	Analog	1.00	3
Mg			1	5135.593	ug/l	0.55	5,676,407.17	1.330E+01	Analog	1.00	3
K			1	4706.247	ug/l	0.45	4,269,715.17	1.001E+01	Pulse	1.00	3
V			1	49.160	ug/l	0.24	831,037.48	1.947E+00	Pulse	0.50	3
Mn			1	48.427	ug/l	0.41	486,362.66	1.426E+00	Pulse	0.50	3
Fe			1	5199.318	ug/l	0.83	93,328,968.00	2.737E+02	Analog	0.50	3
Co			1	49.577	ug/l	0.61	2,088,489.71	6.125E+00	Pulse	0.50	3
Ni			1	50.177	ug/l	0.30	575,506.25	1.688E+00	Pulse	0.50	3
Cu			1	49.132	ug/l	0.71	1,613,116.33	4.731E+00	Pulse	0.50	3
Zn			1	50.061	ug/l	1.14	198,306.78	3.807E-01	Pulse	1.00	3
Cd			1	49.145	ug/l	0.90	357,558.99	6.865E-01	Pulse	0.50	3
Al			1	4709.131	ug/l	0.60	1,486,857.37	3.484E+00	Pulse	1.00	3
Se			1	50.910	ug/l	1.00	7,762.14	2.308E-03	Pulse	3.00	3
Sb			1	47.710	ug/l	0.53	719,067.25	1.381E+00	Pulse	1.00	3
Se			1	48.633	ug/l	1.96	3,850.95	1.427E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,797,837.67	0.03	102.9	Analog	0.50	3
1	Sc		426,745.72	0.46	100.0	Pulse	0.30	3
1	Ge		340,987.77	0.25	98.1	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,362,427.16	0.11	93.5	Pulse	0.30	3
1	Tb		15,391,025.67	0.66	105.9	Analog	0.50	3
1	Lu		9,018,462.33	0.12	104.4	Analog	0.50	3
1	Ge		520,854.30	0.36	98.0	Pulse	0.30	3
1	Te		26,991.93	1.77	86.5	Pulse	0.50	3
1	Li		2,354.60	2.48	102.6	Pulse	0.30	3

Quantitation Report

File Name	118_CCV.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:51
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	99.235	ug/l	0.31	2,283,102.50	6.640E+00	Pulse	0.50	3
As			1	97.474	ug/l	0.67	231,506.40	6.733E-01	Pulse	1.00	3
Mo			1	98.166	ug/l	1.15	1,584,473.96	3.023E+00	Pulse	0.50	3
Pb			1	96.583	ug/l	0.92	8,873,014.00	8.444E-01	Analog	1.00	3
Be			1	106.347	ug/l	1.18	12,566.38	2.919E-02	Pulse	2.00	3
Ag			1	105.953	ug/l	0.76	6,246,528.50	1.192E+01	Analog	0.50	3
Ba			1	95.606	ug/l	0.61	520,313.66	1.561E-01	Pulse	0.50	3
Tl			1	97.450	ug/l	1.38	13,373,301.00	1.273E+00	Analog	0.50	3
Sn			1	99.427	ug/l	0.66	1,283,717.86	3.851E-01	Pulse	0.30	3
Sr			1	98.072	ug/l	1.31	1,069,061.54	3.207E-01	Pulse	0.50	3
[Pb]			1	87.427	ug/l	0.85	3,761,829.33	3.580E-01	Pulse	0.50	3
Ca			1	9638.328	ug/l	1.19	483,337.42	1.123E+00	Pulse	0.50	3
Ti			1	96.236	ug/l	1.41	40,356.14	9.374E-02	Pulse	0.50	3
Na			1	10446.153	ug/l	0.37	27,205,230.67	6.319E+01	Analog	1.00	3
Mg			1	10346.246	ug/l	0.22	11,537,520.67	2.680E+01	Analog	1.00	3
K			1	10039.027	ug/l	0.56	9,172,486.33	2.131E+01	Analog	1.00	3
V			1	98.242	ug/l	0.95	1,674,891.50	3.890E+00	Pulse	0.50	3
Mn			1	97.028	ug/l	0.27	982,522.54	2.857E+00	Pulse	0.50	3
Fe			1	10365.988	ug/l	1.00	187,620,890.67	5.457E+02	Analog	0.50	3
Co			1	97.577	ug/l	0.20	4,144,636.25	1.205E+01	Pulse	0.50	3
Ni			1	99.552	ug/l	0.37	1,151,154.71	3.348E+00	Pulse	0.50	3
Cu			1	98.439	ug/l	0.40	3,180,451.42	9.250E+00	Pulse	0.50	3
Zn			1	99.700	ug/l	1.47	389,062.55	7.423E-01	Pulse	1.00	3
Cd			1	97.001	ug/l	0.29	710,286.54	1.355E+00	Pulse	0.50	3
Al			1	9521.338	ug/l	0.43	3,032,610.58	7.044E+00	Pulse	1.00	3
Se			1	100.951	ug/l	1.02	15,237.84	4.571E-03	Pulse	3.00	3
Sb			1	94.282	ug/l	0.53	1,429,296.33	2.727E+00	Pulse	1.00	3
Se			1	100.209	ug/l	1.25	7,753.57	2.928E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,508,561.00	0.52	100.2	Analog	0.50	3
1	Sc		430,540.07	0.63	100.9	Pulse	0.30	3
1	Ge		343,842.95	0.29	98.9	Pulse	0.30	3
1	In		3,333,729.87	0.39	92.7	Pulse	0.30	3
1	Tb		15,330,530.67	0.52	105.5	Analog	0.50	3
1	Lu		8,842,843.00	0.56	102.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		524,209.75	0.87	98.6	Pulse	0.30	3
1	Te		26,483.15	0.11	84.9	Pulse	0.50	3
1	Li		2,211.25	4.62	96.3	Pulse	0.30	3

Quantitation Report

File Name	119_CCB.d
File Path	D:\2018\04-April\xa043018m1.b
Method File	
Method Path	
Acq Time	4/30/2018 15:55
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/30/2018 14:30
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.001	ug/l	112.60	808.02	2.318E-03	Pulse	0.50	3
As			1	0.000	ug/l	-705.80	27.33	7.836E-05	Pulse	1.00	3
Mo			1	0.055	ug/l	6.65	926.69	1.747E-03	Pulse	0.50	3
Pb			1	-0.021	ug/l	-13.26	12,211.69	1.099E-03	Pulse	1.00	3
Be			1	0.006	ug/l	130.85	1.00	2.338E-06	Pulse	2.00	3
Ag			1	0.007	ug/l	20.75	566.68	1.068E-03	Pulse	0.50	3
Ba			1	0.003	ug/l	86.41	46.00	1.349E-05	Pulse	0.50	3
Tl			1	0.024	ug/l	12.62	3,609.07	3.251E-04	Pulse	0.50	3
Sn			1	0.031	ug/l	2.75	1,051.15	3.078E-04	Pulse	0.30	3
Sr			1	0.009	ug/l	58.68	1,314.05	3.849E-04	Pulse	0.50	3
[Pb]			1	-0.024	ug/l	-17.92	5,708.31	5.138E-04	Pulse	0.50	3
Ca			1	1.525	ug/l	8.67	195.33	4.556E-04	Pulse	0.50	3
Ti			1	0.025	ug/l	10.36	13.33	3.109E-05	Pulse	0.50	3
Na			1	2.510	ug/l	13.47	29,766.02	6.941E-02	Pulse	1.00	3
Mg			1	1.167	ug/l	11.31	1,455.06	3.392E-03	Pulse	1.00	3
K			1	2.207	ug/l	4.16	16,294.71	3.800E-02	Pulse	1.00	3
V			1	-0.006	ug/l	-105.80	480.01	1.119E-03	Pulse	0.50	3
Mn			1	0.031	ug/l	3.61	436.01	1.251E-03	Pulse	0.50	3
Fe			1	0.954	ug/l	14.96	23,058.55	6.611E-02	Pulse	0.50	3
Co			1	-0.002	ug/l	-103.08	220.00	6.301E-04	Pulse	0.50	3
Ni			1	-0.002	ug/l	-185.02	212.67	6.096E-04	Pulse	0.50	3
Cu			1	-0.482	ug/l	-1.92	64,039.63	1.837E-01	Pulse	0.50	3
Zn			1	-0.260	ug/l	-8.93	7,568.49	1.427E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	83.07	28.00	5.270E-05	Pulse	0.50	3
Al			1	0.690	ug/l	25.74	588.34	1.372E-03	Pulse	1.00	3
Se			1	-0.005	ug/l	-200.79	22.44	6.569E-06	Pulse	3.00	3
Sb			1	-0.028	ug/l	-11.51	407.00	7.669E-04	Pulse	1.00	3
Se			1	-0.095	ug/l	-130.65	26.44	9.125E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,107,920.67	0.54	105.9	Analog	0.50	3
1	Sc		428,787.74	0.45	100.4	Pulse	0.30	3

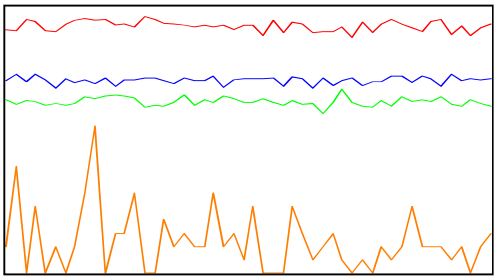
Quantitation Report

1	Ge		348,601.58	0.63	100.3	Pulse	0.30	3
1	In		3,415,327.64	1.16	95.0	Pulse	0.30	3
1	Tb		15,449,222.33	0.51	106.3	Analog	0.50	3
1	Lu		8,896,271.67	1.33	103.0	Analog	0.50	3
1	Ge		530,533.64	0.49	99.8	Pulse	0.30	3
1	Te		28,845.42	1.81	92.5	Pulse	0.50	3
1	Li		2,396.82	1.96	104.4	Pulse	0.30	3

Tune Report

Batch Folder	D:\2018\04-April\xa043018m1.b
Acq. Date-Time	4/30/2018 8:19
Report Comment	043018TUNE
Instrument Name	G3281A JP12151709

[2]



Mass	Range	Count (Actual)	Response (Actual) [cps/ug/l]	Response (Required) [cps/ug/l]	Response (Flag)
59	5000	4629	46287.61	5000.00	
89	5000	3213	32126.33	5000.00	
205	20000	14454	144537.28	5000.00	
78	20	2			

Mass	Resp Ratio (Actual)	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
205		-	
78		-	

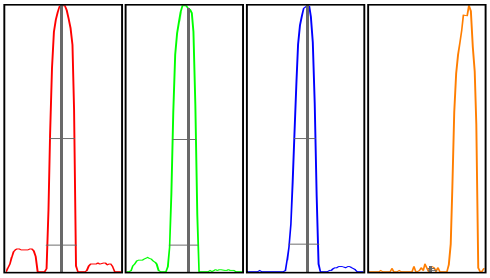
Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	2.05	8.00	
89	2.53	8.00	
205	1.85	8.00	
78	97.52		

Mass	Background (Actual)	Background (Required)	Background (Flag)
59	0.10	2	
89	0.10	2	
205	0.30	2	
78	0.00	5	

Ratio	156/140	0.298 %	
Ratio	70/140	1.694 %	

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.412

Tune Report



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	W-50%	W-10% (Actual)	W-10% (Required)	W-10% (Flag)
59	4736.01	59.00	58.9 - 59.1		0.61	0.723	0.900	
89	3219.15	89.10	88.9 - 89.1		0.58	0.725	0.900	
205	14737.46	205.05	204.9 - 205.1		0.53	0.731	0.900	
78	4.00	78.10	-		0.14	0.188		

Integration Time [sec] 0.1 **Acquisition Time [sec]** 29.92 **Y Axis** Linear

Tune Parameters
Plasma Paramters

RF Power	1600 W	Nebulizer Pump	0.10 rps
RF Matching	1.70 V	S/C Temp	2 ℃
Smpl Depth	9.0 mm	Gas Switch	Dilution Gas
Carrier Gas	0.80 L/min	Makeup/Dilution Gas	0.35 L/min
Option Gas	0.0 %		

Lenses Parameters

Extract 1	0.0 V	Cell Entrance	-36 V
Extract 2	-135.0 V	Cell Exit	-70 V
Omega Bias	-70 V	Deflect	2.2 V
Omega Lens	7.8 V	Plate Bias	-60 V

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V
He Flow	5.0 mL/min	OctP RF	200 V
H2 Flow	0.0 mL/min	Energy Discrimination	3.0 V
3rd Gas Flow	0 %		

History

	Sensitivity										
Created Date	Channel 1 Count	Channel 1 Mass	Channel 1 RSD%	Channel 2 Count	Channel 2 Mass	Channel 2 RSD%	Channel 3 Count	Integration Time	Channel 3 Mass	Channel 3 RSD%	Oxide Mass
4/30/2018 8:10 AM	6074.4869	7	2.7382235	28317.748	89	1.7157445	21916.631	0.100 sec	205	1.8401479	156/140

History

				Background							
Oxide Ratio	Doubly Charged Mass	Doubly Charged Ratio	Sampling Period	Channel 1 Count	Channel 1 Mass	Channel 2 Count	Channel 2 Mass	Channel 3 Count	Channel 3 Mass	Acquisition Time	Channel 1 Axis
1.21 %	70/140	10.48 %	0.311 sec	4.000003	7	4.1000008	89	17.600009	205	00:00:23	6.95

History

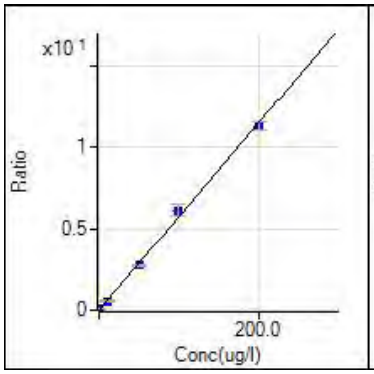
Resolution/Axis

Channel 1 Height	Integration Time	Channel 1 Mass	Channel 1 W-10%	Channel 1 W-50%	Channel 2 Axis	Channel 2 Height	Channel 2 Mass	Channel 2 W-10%	Channel 2 W-50%	Channel 3 Axis	Channel 3 Height	Channel 3 Mass
5979.2194	0.100 sec	7	0.7685376	0.6595335	89	28614.251	89	0.7617241	0.5971795	205.05	22200.01	205

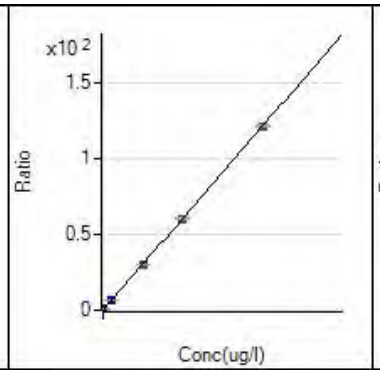
History

		Standard Tune Parameters Ion Lenses		
Channel 3 W-10%	Channel 3 W-50%	Extract 1	Extract 2	Omega Bias
0.7599828	0.5201241	0.0 V	-185.0 V	-80 V

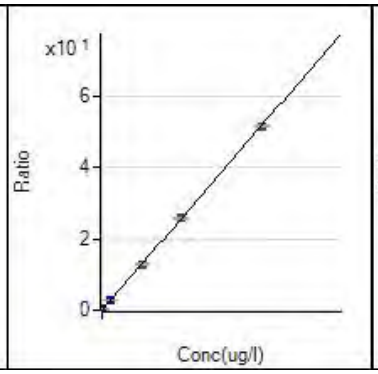
Calibration for D:\2018\04-April\xa043018m1.b\083_CCB.d



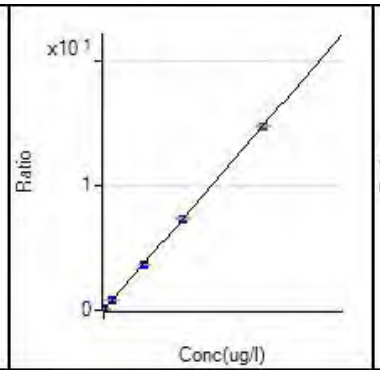
9 Be [2] / ISTD: 6 Li
y = 5.724E-2 x + 1.510E-4
R 0.9991
DL 0.01371
BEC 0.002639



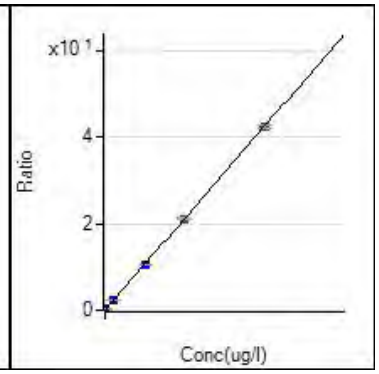
23 Na [2] / ISTD: 45 Sc
y = 6.044E-3 x + 5.424E-2
R 1.0000
DL 0.3628
BEC 8.975



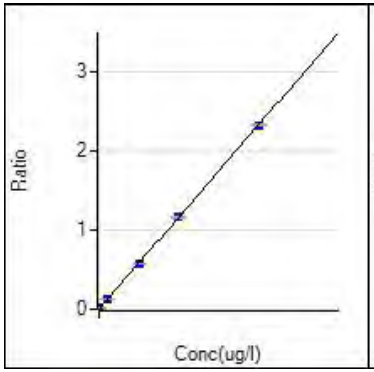
24 Mg [2] / ISTD: 45 Sc
y = 2.590E-3 x + 3.694E-4
R 1.0000
DL 0.06841
BEC 0.1426



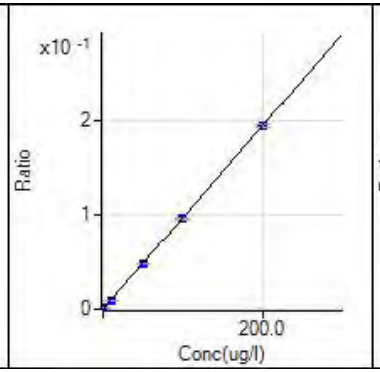
27 Al [2] / ISTD: 45 Sc
y = 7.397E-4 x + 8.613E-4
R 1.0000
DL 0.05171
BEC 1.164



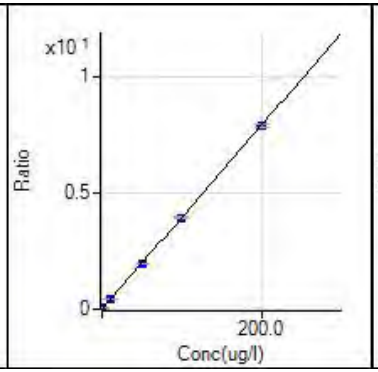
39 K [2] / ISTD: 45 Sc
y = 2.119E-3 x + 3.333E-2
R 1.0000
DL 0.3112
BEC 15.73



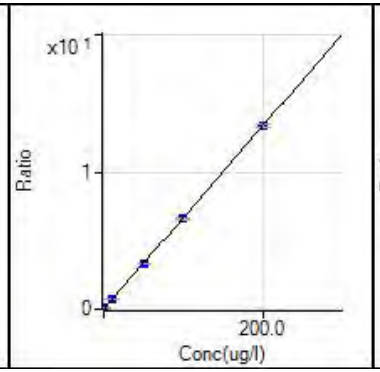
44 Ca [2] / ISTD: 45 Sc
y = 1.164E-4 x + 2.780E-4
R 1.0000
DL 0.5543
BEC 2.387



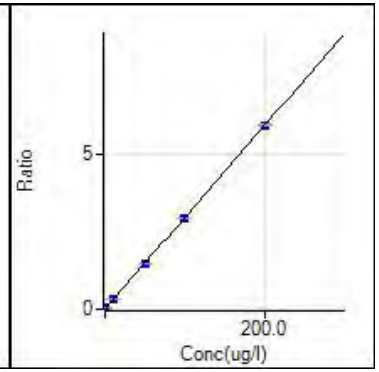
47 Ti [2] / ISTD: 45 Sc
y = 9.740E-4 x + 6.253E-6
R 1.0000
DL 0.008415
BEC 0.00642



51 V [2] / ISTD: 45 Sc
y = 3.959E-2 x + 1.356E-3
R 1.0000
DL 0.01184
BEC 0.03427

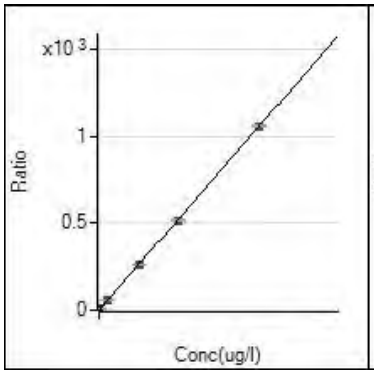


52 Cr [2] / ISTD: 72 Ge
y = 6.689E-2 x + 2.230E-3
R 0.9999
DL 0.007702
BEC 0.03334

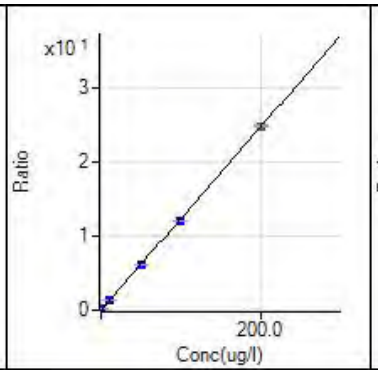


55 Mn [2] / ISTD: 72 Ge
y = 2.945E-2 x + 3.416E-4
R 1.0000
DL 0.005184
BEC 0.0116

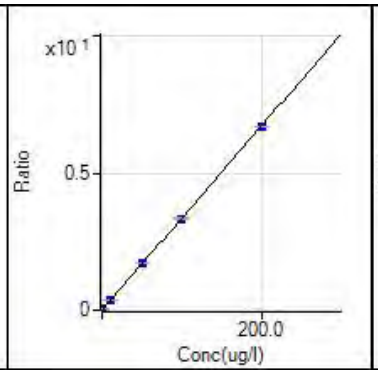
Calibration for D:\2018\04-April\xa043018m1.b\083_CCB.d



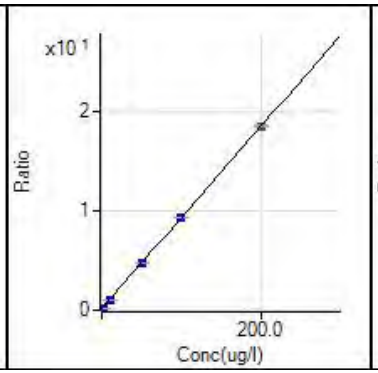
56 Fe [2] / ISTD: 72 Ge
y = 5.264E-2 x + 1.590E-2
R 0.9999
DL 0.02014
BEC 0.302



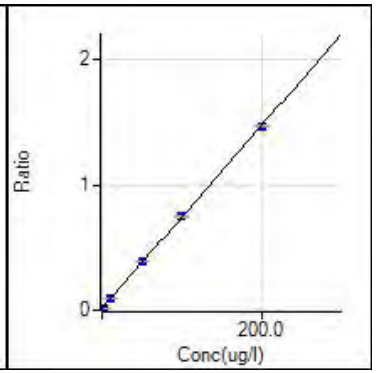
59 Co [2] / ISTD: 72 Ge
y = 1.235E-1 x + 8.573E-4
R 0.9999
DL 0.0009303
BEC 0.00694



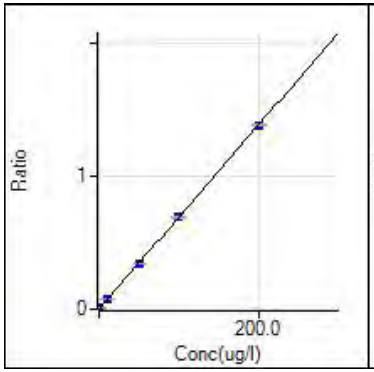
60 Ni [2] / ISTD: 72 Ge
y = 3.362E-2 x + 6.731E-4
R 1.0000
DL 0.003121
BEC 0.02002



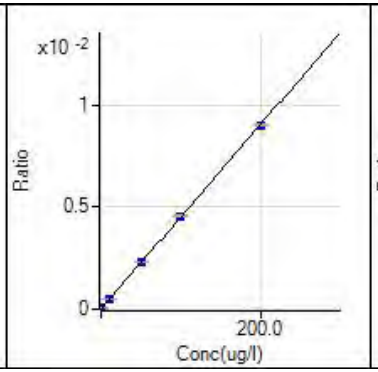
63 Cu [2] / ISTD: 72 Ge
y = 9.165E-2 x + 2.279E-1
R 1.0000
DL 0.123
BEC 2.486



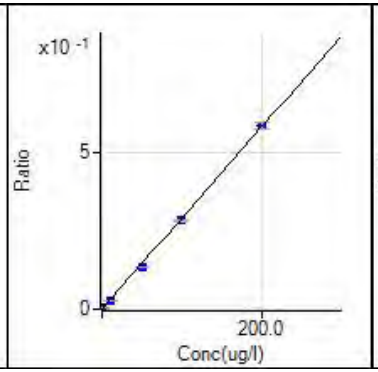
66 Zn [2] / ISTD: 74 Ge
y = 7.283E-3 x + 1.616E-2
R 1.0000
DL 0.01737
BEC 2.219



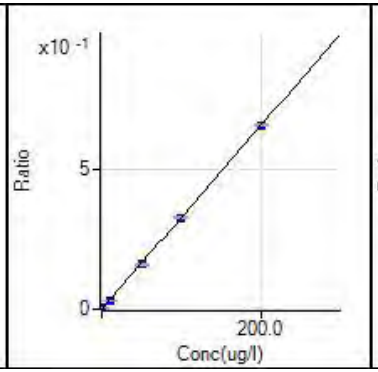
75 As [2] / ISTD: 72 Ge
y = 6.907E-3 x + 8.054E-5
R 1.0000
DL 0.007734
BEC 0.01166



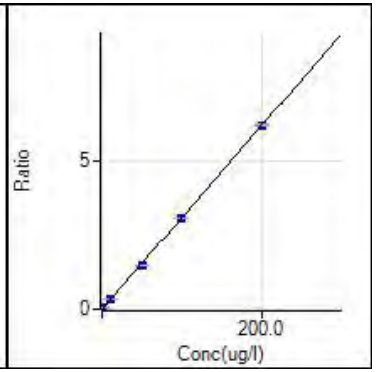
78 Se [2] / ISTD: 115 In
y = 4.521E-5 x + 6.806E-6
R 1.0000
DL 0.06806
BEC 0.1505



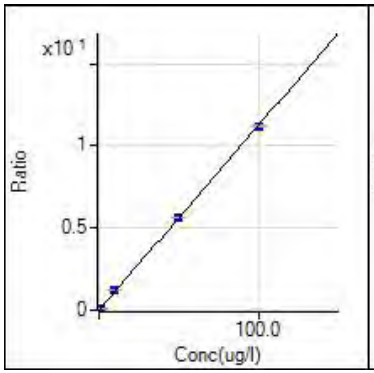
82 Se [2] / ISTD: 125 Te
y = 2.910E-3 x + 1.190E-3
R 0.9997
DL 0.1147
BEC 0.4089



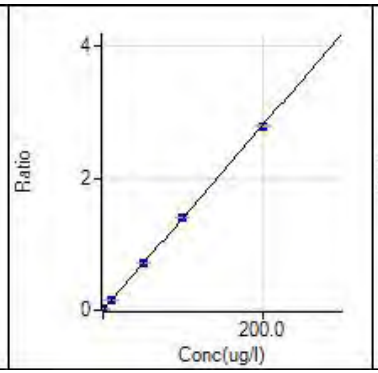
88 Sr [2] / ISTD: 115 In
y = 3.266E-3 x + 3.551E-4
R 1.0000
DL 0.01421
BEC 0.1087



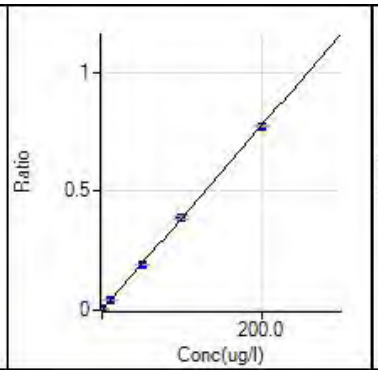
95 Mo [2] / ISTD: 74 Ge
y = 3.079E-2 x + 4.769E-5
R 0.9999
DL 0.002034
BEC 0.001549



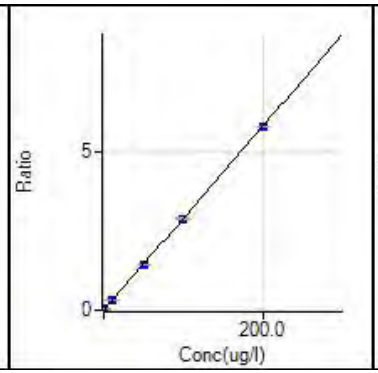
107 Ag [2] / ISTD: 74 Ge
y = 1.125E-1 x + 2.671E-4
R 1.0000
DL 0.001764
BEC 0.002375



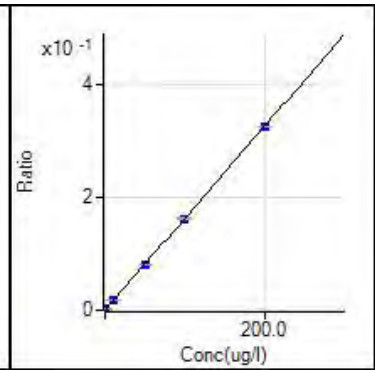
111 Cd [2] / ISTD: 74 Ge
y = 1.397E-2 x + 1.758E-5
R 1.0000
DL 0.002848
BEC 0.001259



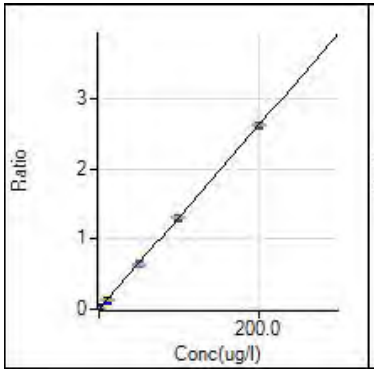
118 Sn [2] / ISTD: 115 In
y = 3.871E-3 x + 1.889E-4
R 1.0000
DL 0.01704
BEC 0.04879



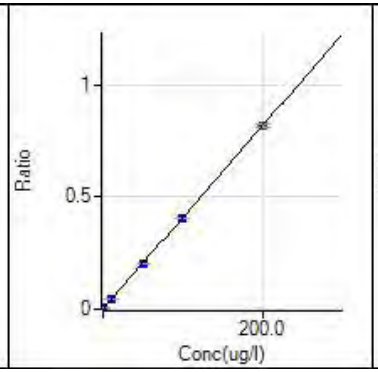
121 Sb [2] / ISTD: 74 Ge
y = 2.890E-2 x + 1.565E-3
R 1.0000
DL 0.008129
BEC 0.05415



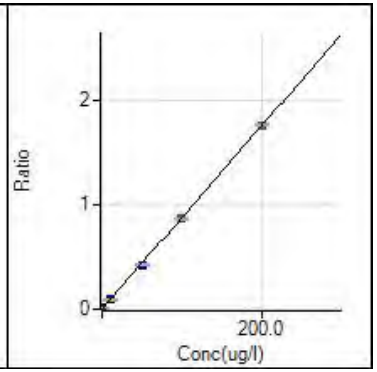
137 Ba [2] / ISTD: 115 In
y = 1.632E-3 x + 9.111E-6
R 1.0000
DL 0.007825
BEC 0.005581



205 Tl [2] / ISTD: 209 Bi
y = 1.306E-2 x + 7.802E-6
R 1.0000
DL 0.0006732
BEC 0.0005974



206 [Pb] [2] / ISTD: 209 Bi
y = 4.088E-3 x + 6.112E-4
R 1.0000
DL 0.01363
BEC 0.1495



208 Pb [2] / ISTD: 209 Bi
y = 8.729E-3 x + 1.279E-3
R 0.9999
DL 0.00623
BEC 0.1465

DOD

SGS Accutest - Orlando **Metals Digestion Log Water**

Method of digestion(circle one): SW846-3010A / SW846-3005A / EPA 200.7 / EPA 200.8 / SM3030C

MP #: 33665

Prep Date/Time (mm/dd/yy 24:00): 04/28/18 0755

HotBlock I.D. 9

Thermometer I.D. 6071

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 93, 92

pH paper lot# 230315

Volume

Spk. Sol. [A]	Used(ml)	Pipette #
ACC 1074	0.05	MU 45274
ACC 1051	0.2	METALS #19
MET 5963	1.0	METALS #18

Dig. Tube Lot#: MP3088

Added [B]:

Lot# HNO_3 0000187388 HCL 0000189306

Sample #		Initial Volume(ml)	pH<2	Final Volume(ml)	Comments
Method Blank(MB)		50.0	N/A	50.0	
Spike Blank(SB)			N/A		
Matrix Spike(MS)			✓		
Matrix Spike Dup(MSD)			✓		
Duplicate(DUP)			✓		
1 QC [C] FA 53456-6	D 18		✓		
2 -1	1		✓		
3 -2			✓		
4 -3			✓		
5 -4	↓		✓		
6 -5	5		✓		
7 -7	6		✓		
8 -8			✓		
9 -9	↓		✓		
10 FA 53517-25	1		✓		
11 FA 53518-13	2		✓		① Sample received ① improperly preserved, pH >2 ✓
12 ↓ -14	2		✓		
13 FA 53716-1	5		✓		
14 FA 53574-1F	2		✓		
15 -2F			✓		
16 -3F			✓		
17 -5F			✓		
18 -7F			✓		
19 -8F			✓		
20 -9F	↓		✓		
21 [E] MB2A 04/20/18	NA	↓		↓	
22 [E]					
23 [E] 04-28-18 IT					
24 [E]					

Analyst: Date: 04-28-18

QC Review: Date: 4.30.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 103, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E. Additional matrix QC

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kemron Environmental Services, Inc

Ft Ord; CA

07202.2001

SGS Job Number: FA53725

Sampling Dates: 04/18/18 - 04/25/18

Report to:

Kemron Environmental Services, Inc
4522 Joe Lloyd Way
Monterey, CA 93944
EDawson@GilbaneCo.com; TBeer@GilbaneCo.com

ATTN: Evenlyn Dawson

Total number of pages in report: 1345

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

Section 1: Sample Summary 5
Section 2: Case Narrative/Conformance Summary 18
Section 3: Summary of Hits 20
Section 4: Sample Results 26
4.1: FA53725-1: 31-01SC0000 27
4.2: FA53725-1A: 31-01SC0000 28
4.3: FA53725-4: 31-02SC0000 29
4.4: FA53725-7: 31-03SC0000 30
4.5: FA53725-10: 31-04SC0000 31
4.6: FA53725-13: 31-05SC0000 32
4.7: FA53725-16: 31-08SC0000 33
4.8: FA53725-19: 31-09SC0000 34
4.9: FA53725-20: 31-09SC0000Q 35
4.10: FA53725-25: 31-10SC0000 36
4.11: FA53725-28: 31-15SC0000 37
4.12: FA53725-31: 31-18SC0000 38
4.13: FA53725-31A: 31-18SC0000 39
4.14: FA53725-34: 31-19SC0000 40
4.15: FA53725-37: 31-20SC0000 41
4.16: FA53725-40: 31-21SC0000 42
4.17: FA53725-40A: 31-21SC0000 43
4.18: FA53725-43: 31-22SC0000 44
4.19: FA53725-43A: 31-22SC0000 45
4.20: FA53725-45: 31-23SC0000 46
4.21: FA53725-48: 31-24SC0000 47
4.22: FA53725-51: 31-25SC0000 48
4.23: FA53725-51A: 31-25SC0000 49
4.24: FA53725-54: 31-26SC0000 50
4.25: FA53725-54A: 31-26SC0000 51
4.26: FA53725-56: 31-27SC0000 52
4.27: FA53725-56A: 31-27SC0000 53
4.28: FA53725-59: 31-28SC0000 54
4.29: FA53725-60: 31-28SC0000Q 55
4.30: FA53725-60A: 31-28SC0000Q 56
4.31: FA53725-65: 31-29SC0000 57
4.32: FA53725-65A: 31-29SC0000 58
4.33: FA53725-68: 31-30SC0000 59
4.34: FA53725-69: 31-30SC0000Q 60
4.35: FA53725-74: 31-31SC0000 61
4.36: FA53725-77: 31-32SC0000 62
4.37: FA53725-80: 31-33SC0000 63
4.38: FA53725-83: 31-34SC0000 64

Table of Contents

4.39: FA53725-84: 31-34SC0000Q 65
4.40: FA53725-89: 31-35SC0000 66
4.41: FA53725-89A: 31-35SC0000 67
4.42: FA53725-92: 31-36SC0000 68
4.43: FA53725-92A: 31-36SC0000 69
4.44: FA53725-95: 31-37SC0000 70
4.45: FA53725-95A: 31-37SC0000 71
4.46: FA53725-96: 31-37SC0000Q 72
4.47: FA53725-96A: 31-37SC0000Q 73
4.48: FA53725-101: 31-38SC0000 74
4.49: FA53725-104: 31-39SC0000 75
4.50: FA53725-107: 31-40SC0000 76
4.51: FA53725-110: 31-41SC0000 77
4.52: FA53725-113: 31-42SC0000 78
4.53: FA53725-114: 31-42SC0000Q 79
4.54: FA53725-119: 31-43SC0000 80
4.55: FA53725-122: 31-ER02SC 81
4.56: FA53725-123: 31-ER03SC 82
4.57: FA53725-124: 31-ER04SC 83
4.58: FA53725-125: 31-ER05SC 85
Section 5: Misc. Forms 87
5.1: Chain of Custody 88
5.2: QC Evaluation: DOD QSM5 Limits 108
Section 6: GC/LC Semi-volatiles - QC Data Summaries 112
6.1: Method Blank Summary 113
6.2: Blank Spike Summary 135
6.3: Laboratory Control Sample Summary 141
6.4: Matrix Spike/Matrix Spike Duplicate Summary 146
6.5: Duplicate Summary 152
6.6: Surrogate Recovery Summaries 162
6.7: GC Surrogate Retention Time Summaries 165
6.8: Initial and Continuing Calibration Summaries 177
Section 7: GC/LC Semi-volatiles - Raw Data 221
7.1: Samples 222
7.2: Method Blanks 289
7.3: Blank Spikes 363
7.4: Laboratory Control Samples 461
7.5: Matrix Spike/Matrix Spike Duplicates 593
7.6: Duplicates 695
7.7: Initial and Continuing Calibrations 721
7.8: Instrument Run Logs 1120
7.9: Prep Logs 1134

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

Section 8: Metals Analysis - QC Data Summaries 1140
8.1: Inst QC MA14869: Pb 1141
8.2: Inst QC MA14898: Pb 1155
8.3: Inst QC MA14907: Pb 1169
8.4: Prep QC MP33680: Pb 1191
8.5: Prep QC MP33734: Pb 1197
8.6: Prep QC MP33740: Pb 1204
8.7: Prep QC MP33746: Pb 1211
8.8: IDL and Linear Range Summaries 1218
Section 9: Metals Analysis - Raw Data 1222
9.1: Raw Data MA14869 1223
9.2: Raw Data MA14898 1254
9.3: Raw Data MA14907 1285
9.4: Prep Logs 1342

SGS North America Inc.

Sample Summary

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-1	04/24/18	15:05	FPBL	04/26/18	SO	Soil	31-01SC0000
FA53725-1A	04/24/18	15:05	FPBL	04/26/18	SO	Soil	31-01SC0000
FA53725-2	04/24/18	15:22	FPBL	04/26/18	SO	Soil	31-01SC0001
FA53725-2A	04/24/18	15:22	FPBL	04/26/18	SO	Soil	31-01SC0001
FA53725-3	04/24/18	15:41	FPBL	04/26/18	SO	Soil	31-01SC0002
FA53725-3A	04/24/18	15:41	FPBL	04/26/18	SO	Soil	31-01SC0002
FA53725-4	04/24/18	13:21	FPBL	04/26/18	SO	Soil	31-02SC0000
FA53725-5	04/24/18	13:38	FPBL	04/26/18	SO	Soil	31-02SC0001
FA53725-6	04/24/18	13:55	FPBL	04/26/18	SO	Soil	31-02SC0002
FA53725-7	04/18/18	14:27	FPBL	04/26/18	SO	Soil	31-03SC0000
FA53725-8	04/18/18	14:45	FPBL	04/26/18	SO	Soil	31-03SC0001
FA53725-9	04/18/18	15:00	FPBL	04/26/18	SO	Soil	31-03SC0002
FA53725-10	04/18/18	13:21	FPBL	04/26/18	SO	Soil	31-04SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-11	04/18/18	13:36	FPBL	04/26/18	SO	Soil	31-04SC0001
FA53725-12	04/18/18	13:54	FPBL	04/26/18	SO	Soil	31-04SC0002
FA53725-13	04/19/18	09:20	FPBL	04/26/18	SO	Soil	31-05SC0000
FA53725-14	04/19/18	09:32	FPBL	04/26/18	SO	Soil	31-05SC0001
FA53725-15	04/19/18	09:52	FPBL	04/26/18	SO	Soil	31-05SC0002
FA53725-16	04/18/18	11:17	FPBL	04/26/18	SO	Soil	31-08SC0000
FA53725-17	04/18/18	11:34	FPBL	04/26/18	SO	Soil	31-08SC0001
FA53725-18	04/18/18	11:54	FPBL	04/26/18	SO	Soil	31-08SC0002
FA53725-19	04/19/18	09:11	FPBL	04/26/18	SO	Soil	31-09SC0000
FA53725-20	04/19/18	09:44	FPBL	04/26/18	SO	Soil	31-09SC0000Q
FA53725-21	04/19/18	09:28	FPBL	04/26/18	SO	Soil	31-09SC0001
FA53725-22	04/19/18	10:10	FPBL	04/26/18	SO	Soil	31-09SC0001Q
FA53725-23	04/19/18	09:47	FPBL	04/26/18	SO	Soil	31-09SC0002

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-24	04/19/18	10:20	FPBL	04/26/18	SO	Soil	31-09SC0002Q
FA53725-25	04/18/18	14:44	FPBL	04/26/18	SO	Soil	31-10SC0000
FA53725-26	04/18/18	15:00	FPBL	04/26/18	SO	Soil	31-10SC0001
FA53725-27	04/18/18	15:15	FPBL	04/26/18	SO	Soil	31-10SC0002
FA53725-28	04/19/18	10:18	FPBL	04/26/18	SO	Soil	31-15SC0000
FA53725-29	04/19/18	10:40	FPBL	04/26/18	SO	Soil	31-15SC0001
FA53725-30	04/19/18	11:08	FPBL	04/26/18	SO	Soil	31-15SC0002
FA53725-31	04/23/18	13:05	FPBL	04/26/18	SO	Soil	31-18SC0000
FA53725-31A	04/25/18	13:05	FPBL	04/26/18	SO	Soil	31-18SC0000
FA53725-32	04/23/18	13:20	FPBL	04/26/18	SO	Soil	31-18SC0001
FA53725-32A	04/25/18	13:20	FPBL	04/26/18	SO	Soil	31-18SC0001
FA53725-33	04/23/18	13:45	FPBL	04/26/18	SO	Soil	31-18SC0002
FA53725-33A	04/25/18	13:45	FPBL	04/26/18	SO	Soil	31-18SC0002

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA53725-34	04/23/18	13:54	FPBL	04/26/18	SO	Soil	31-19SC0000
FA53725-35	04/23/18	14:09	FPBL	04/26/18	SO	Soil	31-19SC0001
FA53725-36	04/23/18	14:29	FPBL	04/26/18	SO	Soil	31-19SC0002
FA53725-37	04/19/18	10:33	FPBL	04/26/18	SO	Soil	31-20SC0000
FA53725-38	04/19/18	10:45	FPBL	04/26/18	SO	Soil	31-20SC0001
FA53725-39	04/19/18	11:01	FPBL	04/26/18	SO	Soil	31-20SC0002
FA53725-40	04/23/18	14:58	FPBL	04/26/18	SO	Soil	31-21SC0000
FA53725-40A	04/23/18	14:58	FPBL	04/26/18	SO	Soil	31-21SC0000
FA53725-41	04/23/18	15:12	FPBL	04/26/18	SO	Soil	31-21SC0001
FA53725-41A	04/23/18	15:12	FPBL	04/26/18	SO	Soil	31-21SC0001
FA53725-42	04/23/18	15:26	FPBL	04/26/18	SO	Soil	31-21SC0002
FA53725-42A	04/23/18	15:26	FPBL	04/26/18	SO	Soil	31-21SC0002
FA53725-43	04/23/18	12:54	FPBL	04/26/18	SO	Soil	31-22SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-43A	04/23/18	12:54	FPBL	04/26/18	SO	Soil	31-22SC0000
FA53725-44	04/23/18	13:24	FPBL	04/26/18	SO	Soil	31-22SC0001
FA53725-44A	04/23/18	13:24	FPBL	04/26/18	SO	Soil	31-22SC0001
FA53725-45	04/19/18	13:10	FPBL	04/26/18	SO	Soil	31-23SC0000
FA53725-46	04/19/18	13:30	FPBL	04/26/18	SO	Soil	31-23SC0001
FA53725-47	04/19/18	13:54	FPBL	04/26/18	SO	Soil	31-23SC0002
FA53725-48	04/23/18	14:02	FPBL	04/26/18	SO	Soil	31-24SC0000
FA53725-49	04/23/18	14:14	FPBL	04/26/18	SO	Soil	31-24SC0001
FA53725-50	04/23/18	14:35	FPBL	04/26/18	SO	Soil	31-24SC0002
FA53725-51	04/23/18	09:53	FPBL	04/26/18	SO	Soil	31-25SC0000
FA53725-51A	04/23/18	09:53	FPBL	04/26/18	SO	Soil	31-25SC0000
FA53725-52	04/23/18	10:22	FPBL	04/26/18	SO	Soil	31-25SC0001
FA53725-52A	04/23/18	10:22	FPBL	04/26/18	SO	Soil	31-25SC0001

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-53	04/23/18	11:04	FPBL	04/26/18	SO	Soil	31-25SC0002
FA53725-53A	04/23/18	11:04	FPBL	04/26/18	SO	Soil	31-25SC0002
FA53725-54	04/23/18	15:26	FPBL	04/26/18	SO	Soil	31-26SC0000
FA53725-54A	04/23/18	15:26	FPBL	04/26/18	SO	Soil	31-26SC0000
FA53725-55	04/23/18	15:58	FPBL	04/26/18	SO	Soil	31-26SC0001
FA53725-55A	04/23/18	15:58	FPBL	04/26/18	SO	Soil	31-26SC0001
FA53725-56	04/23/18	15:33	FPBL	04/26/18	SO	Soil	31-27SC0000
FA53725-56A	04/23/18	15:33	FPBL	04/26/18	SO	Soil	31-27SC0000
FA53725-57	04/23/18	15:50	FPBL	04/26/18	SO	Soil	31-27SC0001
FA53725-57A	04/23/18	15:50	FPBL	04/26/18	SO	Soil	31-27SC0001
FA53725-58	04/23/18	16:26	FPBL	04/26/18	SO	Soil	31-27SC0002
FA53725-58A	04/23/18	16:26	FPBL	04/26/18	SO	Soil	31-27SC0002
FA53725-59	04/23/18	09:32	FPBL	04/26/18	SO	Soil	31-28SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-60	04/23/18	09:38	FPBL	04/26/18	SO	Soil	31-28SC0000Q
FA53725-60A	04/23/18	09:38	FPBL	04/26/18	SO	Soil	31-28SC0000Q
FA53725-61	04/23/18	09:54	FPBL	04/26/18	SO	Soil	31-28SC0001
FA53725-61A	04/23/18	09:54	FPBL	04/26/18	SO	Soil	31-28SC0001
FA53725-62	04/23/18	10:00	FPBL	04/26/18	SO	Soil	31-28SC0001Q
FA53725-62A	04/23/18	10:00	FPBL	04/26/18	SO	Soil	31-28SC0001Q
FA53725-63	04/23/18	10:10	FPBL	04/26/18	SO	Soil	31-28SC0002
FA53725-63A	04/23/18	10:10	FPBL	04/26/18	SO	Soil	31-28SC0002
FA53725-64	04/23/18	10:14	FPBL	04/26/18	SO	Soil	31-28SC0002Q
FA53725-64A	04/23/18	10:14	FPBL	04/26/18	SO	Soil	31-28SC0002Q
FA53725-65	04/23/18	08:34	FPBL	04/26/18	SO	Soil	31-29SC0000
FA53725-65A	04/23/18	08:34	FPBL	04/26/18	SO	Soil	31-29SC0000
FA53725-66	04/23/18	08:55	FPBL	04/26/18	SO	Soil	31-29SC0001

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-66A	04/23/18	08:55	FPBL	04/26/18	SO	Soil	31-29SC0001
FA53725-67	04/23/18	09:25	FPBL	04/26/18	SO	Soil	31-29SC0002
FA53725-67A	04/23/18	09:25	FPBL	04/26/18	SO	Soil	31-29SC0002
FA53725-68	04/19/18	13:53	FPBL	04/26/18	SO	Soil	31-30SC0000
FA53725-69	04/19/18	13:53	FPBL	04/26/18	SO	Soil	31-30SC0000Q
FA53725-70	04/19/18	14:09	FPBL	04/26/18	SO	Soil	31-30SC0001
FA53725-71	04/19/18	14:09	FPBL	04/26/18	SO	Soil	31-30SC0001Q
FA53725-72	04/19/18	14:40	FPBL	04/26/18	SO	Soil	31-30SC0002
FA53725-73	04/19/18	14:40	FPBL	04/26/18	SO	Soil	31-30SC0002Q
FA53725-74	04/19/18	15:00	FPBL	04/26/18	SO	Soil	31-31SC0000
FA53725-75	04/19/18	15:09	FPBL	04/26/18	SO	Soil	31-31SC0001
FA53725-76	04/19/18	15:29	FPBL	04/26/18	SO	Soil	31-31SC0002
FA53725-77	04/24/18	10:10	FPBL	04/26/18	SO	Soil	31-32SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA53725-78	04/24/18	10:20	FPBL	04/26/18	SO	Soil	31-32SC0001
FA53725-79	04/24/18	10:45	FPBL	04/26/18	SO	Soil	31-32SC0002
FA53725-80	04/23/18	10:37	FPBL	04/26/18	SO	Soil	31-33SC0000
FA53725-81	04/23/18	10:53	FPBL	04/26/18	SO	Soil	31-33SC0001
FA53725-82	04/23/18	11:09	FPBL	04/26/18	SO	Soil	31-33SC0002
FA53725-83	04/19/18	14:28	FPBL	04/26/18	SO	Soil	31-34SC0000
FA53725-84	04/19/18	14:32	FPBL	04/26/18	SO	Soil	31-34SC0000Q
FA53725-85	04/19/18	14:53	FPBL	04/26/18	SO	Soil	31-34SC0001
FA53725-86	04/19/18	14:56	FPBL	04/26/18	SO	Soil	31-34SC0001Q
FA53725-87	04/19/18	15:15	FPBL	04/26/18	SO	Soil	31-34SC0002
FA53725-88	04/19/18	15:20	FPBL	04/26/18	SO	Soil	31-34SC0002Q
FA53725-89	04/24/18	11:25	FPBL	04/26/18	SO	Soil	31-35SC0000
FA53725-89A	04/24/18	11:25	FPBL	04/26/18	SO	Soil	31-35SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA53725-90	04/24/18	11:45	FPBL	04/26/18	SO	Soil	31-35SC0001
FA53725-90A	04/24/18	11:45	FPBL	04/26/18	SO	Soil	31-35SC0001
FA53725-91	04/24/18	12:05	FPBL	04/26/18	SO	Soil	31-35SC0002
FA53725-91A	04/24/18	12:05	FPBL	04/26/18	SO	Soil	31-35SC0002
FA53725-92	04/24/18	11:30	FPBL	04/26/18	SO	Soil	31-36SC0000
FA53725-92A	04/24/18	11:30	FPBL	04/26/18	SO	Soil	31-36SC0000
FA53725-93	04/24/18	11:50	FPBL	04/26/18	SO	Soil	31-36SC0001
FA53725-93A	04/24/18	11:50	FPBL	04/26/18	SO	Soil	31-36SC0001
FA53725-94	04/24/18	12:38	FPBL	04/26/18	SO	Soil	31-36SC0002
FA53725-94A	04/24/18	12:38	FPBL	04/26/18	SO	Soil	31-36SC0002
FA53725-95	04/24/18	11:49	FPBL	04/26/18	SO	Soil	31-37SC0000
FA53725-95A	04/24/18	11:49	FPBL	04/26/18	SO	Soil	31-37SC0000
FA53725-96	04/24/18	11:49	FPBL	04/26/18	SO	Soil	31-37SC0000Q

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-96A	04/24/18	11:49	FPBL	04/26/18	SO	Soil	31-37SC0000Q
FA53725-97	04/24/18	13:37	FPBL	04/26/18	SO	Soil	31-37SC0001
FA53725-97A	04/24/18	13:37	FPBL	04/26/18	SO	Soil	31-37SC0001
FA53725-98	04/24/18	13:37	FPBL	04/26/18	SO	Soil	31-37SC0001Q
FA53725-98A	04/24/18	13:37	FPBL	04/26/18	SO	Soil	31-37SC0001Q
FA53725-99	04/24/18	14:21	FPBL	04/26/18	SO	Soil	31-37SC0002
FA53725-99A	04/24/18	14:21	FPBL	04/26/18	SO	Soil	31-37SC0002
FA53725-100	04/24/18	14:21	FPBL	04/26/18	SO	Soil	31-37SC0002Q
FA53725-100A	04/24/18	14:21	FPBL	04/26/18	SO	Soil	31-37SC0002Q
FA53725-101	04/24/18	09:47	FPBL	04/26/18	SO	Soil	31-38SC0000
FA53725-102	04/24/18	10:07	FPBL	04/26/18	SO	Soil	31-38SC0001
FA53725-103	04/24/18	10:28	FPBL	04/26/18	SO	Soil	31-38SC0002
FA53725-104	04/24/18	09:43	FPBL	04/26/18	SO	Soil	31-39SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-105	04/24/18	10:10	FPBL	04/26/18	SO	Soil	31-39SC0001
FA53725-106	04/24/18	10:45	FPBL	04/26/18	SO	Soil	31-39SC0002
FA53725-107	04/24/18	09:15	FPBL	04/26/18	SO	Soil	31-40SC0000
FA53725-108	04/24/18	09:30	FPBL	04/26/18	SO	Soil	31-40SC0001
FA53725-109	04/24/18	09:45	FPBL	04/26/18	SO	Soil	31-40SC0002
FA53725-110	04/24/18	08:33	FPBL	04/26/18	SO	Soil	31-41SC0000
FA53725-111	04/24/18	08:50	FPBL	04/26/18	SO	Soil	31-41SC0001
FA53725-112	04/24/18	09:14	FPBL	04/26/18	SO	Soil	31-41SC0002
FA53725-113	04/24/18	08:30	FPBL	04/26/18	SO	Soil	31-42SC0000
FA53725-114	04/24/18	08:34	FPBL	04/26/18	SO	Soil	31-42SC0000Q
FA53725-115	04/24/18	08:50	FPBL	04/26/18	SO	Soil	31-42SC0001
FA53725-116	04/24/18	08:55	FPBL	04/26/18	SO	Soil	31-42SC0001Q
FA53725-117	04/24/18	09:14	FPBL	04/26/18	SO	Soil	31-42SC0002

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53725

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-118	04/24/18	09:17	FPBL	04/26/18	SO	Soil	31-42SC0002Q
FA53725-119	04/24/18	08:30	FPBL	04/26/18	SO	Soil	31-43SC0000
FA53725-120	04/24/18	08:45	FPBL	04/26/18	SO	Soil	31-43SC0001
FA53725-121	04/24/18	09:05	FPBL	04/26/18	SO	Soil	31-43SC0002
FA53725-122	04/19/18	06:54	FPBL	04/26/18	AQ	Equipment Blank	31-ER02SC
FA53725-123	04/23/18	07:36	FPBL	04/26/18	AQ	Equipment Blank	31-ER03SC
FA53725-124	04/23/18	16:55	FPBL	04/26/18	AQ	Equipment Blank	31-ER04SC
FA53725-125	04/25/18	07:13	FPBL	04/26/18	AQ	Equipment Blank	31-ER05SC

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Kemron Environmental Services, Inc **Job No:** FA53725

Site: Ft Ord; CA **Report Date:** 5/24/2018 2:19:32

46 Sample(s) were collected on/ between 04/18/2018 and 04/25/2018 and were received at SGS North America Inc - Orlando on 04/26/2018 properly preserved, at 4.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA53725. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

GC/LC Semi-volatiles By Method SW846 8330B

Matrix: AQ **Batch ID:** OP69837

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53700-1MS, FA53700-1MSD were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for 2,4,6-Trinitrotoluene, HMX are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits in MS/MSD.

Matrix: SO **Batch ID:** OP69919

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-1MS, FA53725-1MSD, FA53725-31DUP were used as the QC samples indicated.

Matrix: SO **Batch ID:** OP69920

All samples were extracted within the recommended method holding time.
All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-54MS, FA53725-54MSD, FA53725-56DUP were used as the QC samples indicated.

Matrix: SO **Batch ID:** OP69921

All samples were extracted within the recommended method holding time.
All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-89MS, FA53725-89MSD, FA53725-92DUP were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for HMX are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits in MS/MSD.

Matrix: SO **Batch ID:** OP69945

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-104MS, FA53725-104MSD, FA53725-107DUP were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for HMX are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits in MS/MSD.

Matrix: SO **Batch ID:** OP69946

All samples were extracted within the recommended method holding time.
All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-119MS, FA53725-119MSD, FA53800-1DUP were used as the QC samples indicated.

Metals Analysis By Method SW846 6010C

Matrix: AQ **Batch ID:** MP33680

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53663-8DUP, FA53663-8MS, FA53663-8MSD, FA53663-8PS, FA53663-8SDL were used as the QC samples for metals.

Metals Analysis By Method SW846 6010C

Matrix: SO **Batch ID:** MP33734

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-4DUP, FA53725-4MS, FA53725-4MSD, FA53725-4PS, FA53725-4SDL were used as the QC samples for metals.

Matrix: SO **Batch ID:** MP33740

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-31ADUP, FA53725-31AMS, FA53725-31AMSD, FA53725-31ASDL, FA53725-31APS were used as the QC samples for metals.

Matrix: SO **Batch ID:** MP33746

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-34DUP, FA53725-34MS, FA53725-34MSD, FA53725-34PS, FA53725-34SDL were used as the QC samples for metals.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53725-1	**31-01SC0000**					
No hits reported in this sample.						
FA53725-1A	**31-01SC0000**					
Lead		19.7	4.0	0.79	mg/kg	SW846 6010C
FA53725-4	**31-02SC0000**					
Lead		12.5	4.0	0.79	mg/kg	SW846 6010C
FA53725-7	**31-03SC0000**					
Lead		1.6 J	2.0	0.40	mg/kg	SW846 6010C
FA53725-10	**31-04SC0000**					
Lead		237	4.0	0.79	mg/kg	SW846 6010C
FA53725-13	**31-05SC0000**					
Lead		18.0	4.0	0.79	mg/kg	SW846 6010C
FA53725-16	**31-08SC0000**					
Lead		76.2	4.0	0.80	mg/kg	SW846 6010C
FA53725-19	**31-09SC0000**					
Lead		3.8	2.0	0.39	mg/kg	SW846 6010C
FA53725-20	**31-09SC0000Q**					
Lead		3.4	2.0	0.39	mg/kg	SW846 6010C
FA53725-25	**31-10SC0000**					
Lead		5.3	4.0	0.80	mg/kg	SW846 6010C
FA53725-28	**31-15SC0000**					
Lead		32.3	4.0	0.80	mg/kg	SW846 6010C

Summary of Hits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53725-31	**31-18SC0000**					
No hits reported in this sample.						
FA53725-31A	**31-18SC0000**					
Lead		14.1	2.0	0.39	mg/kg	SW846 6010C
FA53725-34	**31-19SC0000**					
Lead		6.4	2.0	0.40	mg/kg	SW846 6010C
FA53725-37	**31-20SC0000**					
Lead		4.0	2.0	0.40	mg/kg	SW846 6010C
FA53725-40	**31-21SC0000**					
No hits reported in this sample.						
FA53725-40A	**31-21SC0000**					
Lead		61.3	2.0	0.40	mg/kg	SW846 6010C
FA53725-43	**31-22SC0000**					
No hits reported in this sample.						
FA53725-43A	**31-22SC0000**					
Lead		236	2.0	0.39	mg/kg	SW846 6010C
FA53725-45	**31-23SC0000**					
Lead		5.0	4.0	0.79	mg/kg	SW846 6010C
FA53725-48	**31-24SC0000**					
Lead		40.5	4.0	0.79	mg/kg	SW846 6010C
FA53725-51	**31-25SC0000**					
No hits reported in this sample.						

Summary of Hits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53725-51A	**31-25SC0000**					
Lead		48.1	2.0	0.40	mg/kg	SW846 6010C
FA53725-54	**31-26SC0000**					
No hits reported in this sample.						
FA53725-54A	**31-26SC0000**					
Lead		52.9	2.0	0.39	mg/kg	SW846 6010C
FA53725-56	**31-27SC0000**					
No hits reported in this sample.						
FA53725-56A	**31-27SC0000**					
Lead		19.9	2.0	0.39	mg/kg	SW846 6010C
FA53725-59	**31-28SC0000**					
No hits reported in this sample.						
FA53725-60	**31-28SC0000Q**					
No hits reported in this sample.						
FA53725-60A	**31-28SC0000Q**					
Lead		5.4	2.0	0.39	mg/kg	SW846 6010C
FA53725-65	**31-29SC0000**					
No hits reported in this sample.						
FA53725-65A	**31-29SC0000**					
Lead		2.9	2.0	0.39	mg/kg	SW846 6010C
FA53725-68	**31-30SC0000**					
Lead		180	2.0	0.40	mg/kg	SW846 6010C

Summary of Hits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53725-69	**31-30SC0000Q**					
Lead		190	4.0	0.79	mg/kg	SW846 6010C
FA53725-74	**31-31SC0000**					
Lead		381	4.0	0.80	mg/kg	SW846 6010C
FA53725-77	**31-32SC0000**					
Lead		38.5	4.0	0.80	mg/kg	SW846 6010C
FA53725-80	**31-33SC0000**					
Lead		203	4.0	0.80	mg/kg	SW846 6010C
FA53725-83	**31-34SC0000**					
Lead		172	3.9	0.79	mg/kg	SW846 6010C
FA53725-84	**31-34SC0000Q**					
Lead		197	2.0	0.39	mg/kg	SW846 6010C
FA53725-89	**31-35SC0000**					
No hits reported in this sample.						
FA53725-89A	**31-35SC0000**					
Lead		4.3	2.0	0.40	mg/kg	SW846 6010C
FA53725-92	**31-36SC0000**					
No hits reported in this sample.						
FA53725-92A	**31-36SC0000**					
Lead		7.1	2.0	0.40	mg/kg	SW846 6010C
FA53725-95	**31-37SC0000**					
No hits reported in this sample.						

Summary of Hits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53725-95A	**31-37SC0000**					
Lead		6.0	2.0	0.40	mg/kg	SW846 6010C
FA53725-96	**31-37SC0000Q**					
No hits reported in this sample.						
FA53725-96A	**31-37SC0000Q**					
Lead		5.7	2.0	0.40	mg/kg	SW846 6010C
FA53725-101	**31-38SC0000**					
No hits reported in this sample.						
FA53725-104	**31-39SC0000**					
No hits reported in this sample.						
FA53725-107	**31-40SC0000**					
No hits reported in this sample.						
FA53725-110	**31-41SC0000**					
No hits reported in this sample.						
FA53725-113	**31-42SC0000**					
No hits reported in this sample.						
FA53725-114	**31-42SC0000Q**					
No hits reported in this sample.						
FA53725-119	**31-43SC0000**					
No hits reported in this sample.						
FA53725-122	**31-ER02SC**					
No hits reported in this sample.						

Summary of Hits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53725-123	31-ER03SC					
No hits reported in this sample.						
FA53725-124	31-ER04SC					
No hits reported in this sample.						
FA53725-125	31-ER05SC					
No hits reported in this sample.						

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-01SC0000		
Lab Sample ID:	FA53725-1	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614591.D	1	05/07/18 17:50	EM	05/04/18 15:00	OP69919	GGG2625
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	97%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-01SC0000		
Lab Sample ID:	FA53725-1A	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	19.7	4.0	0.79	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-02SC0000		
Lab Sample ID:	FA53725-4	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	12.5	4.0	0.79	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-03SC0000		
Lab Sample ID:	FA53725-7	**Date Sampled:**	04/18/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	1.6 J	2.0	0.40	0.099	mg/kg	5	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-04SC0000		
Lab Sample ID:	FA53725-10	**Date Sampled:**	04/18/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	237	4.0	0.79	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-05SC0000		
Lab Sample ID:	FA53725-13	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	18.0	4.0	0.79	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-08SC0000		
Lab Sample ID:	FA53725-16	**Date Sampled:**	04/18/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	76.2	4.0	0.80	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-09SC0000		
Lab Sample ID:	FA53725-19	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	3.8	2.0	0.39	0.099	mg/kg	5	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-09SC0000Q		
Lab Sample ID:	FA53725-20	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	3.4	2.0	0.39	0.098	mg/kg	5	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-10SC0000		
Lab Sample ID:	FA53725-25	**Date Sampled:**	04/18/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	5.3	4.0	0.80	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-15SC0000		
Lab Sample ID:	FA53725-28	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	32.3	4.0	0.80	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-18SC0000		
Lab Sample ID:	FA53725-31	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614594.D	1	05/07/18 19:18	EM	05/04/18 15:00	OP69919	GGG2625
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	101%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-18SC0000		
Lab Sample ID:	FA53725-31A	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	14.1	2.0	0.39	0.098	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-19SC0000		
Lab Sample ID:	FA53725-34	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	6.4	2.0	0.40	0.10	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-20SC0000		
Lab Sample ID:	FA53725-37	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	4.0	2.0	0.40	0.10	mg/kg	5	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-21SC0000		
Lab Sample ID:	FA53725-40	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614603.D	1	05/08/18 09:58	EM	05/04/18 15:00	OP69919	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	75 U	100	75	50	ug/kg	
121-82-4	RDX	75 U	100	75	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	75 U	100	75	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-21SC0000		
Lab Sample ID:	FA53725-40A	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	61.3	2.0	0.40	0.10	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-22SC0000		
Lab Sample ID:	FA53725-43	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614587.D	1	05/07/18 15:52	EM	05/04/18 15:00	OP69919	GGG2625
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	101%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-22SC0000		
Lab Sample ID:	FA53725-43A	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	236	2.0	0.39	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-23SC0000		
Lab Sample ID:	FA53725-45	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	5.0	4.0	0.79	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-24SC0000		
Lab Sample ID:	FA53725-48	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	40.5	4.0	0.79	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-25SC0000		
Lab Sample ID:	FA53725-51	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614604.D	1	05/08/18 10:28	EM	05/04/18 15:00	OP69919	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	75 U	100	75	50	ug/kg	
121-82-4	RDX	75 U	100	75	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	75 U	100	75	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	97%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-25SC0000		
Lab Sample ID:	FA53725-51A	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	48.1	2.0	0.40	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-26SC0000		
Lab Sample ID:	FA53725-54	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614608.D	1	05/08/18 12:25	EM	05/04/18 15:00	OP69920	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	102%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-26SC0000		
Lab Sample ID:	FA53725-54A	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	52.9	2.0	0.39	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-27SC0000		
Lab Sample ID:	FA53725-56	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614611.D	1	05/08/18 13:54	EM	05/04/18 15:00	OP69920	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	75 U	100	75	50	ug/kg	
121-82-4	RDX	75 U	100	75	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	75 U	100	75	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	103%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-27SC0000		
Lab Sample ID:	FA53725-56A	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	19.9	2.0	0.39	0.098	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-28SC0000		
Lab Sample ID:	FA53725-59	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614617.D	1	05/08/18 18:26	EM	05/04/18 15:00	OP69920	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	105%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-28SC0000Q		
Lab Sample ID:	FA53725-60	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614618.D	1	05/08/18 18:55	EM	05/04/18 15:00	OP69920	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	75 U	99	75	50	ug/kg	
121-82-4	RDX	75 U	99	75	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	75 U	99	75	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	103%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-28SC0000Q		
Lab Sample ID:	FA53725-60A	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	5.4	2.0	0.39	0.098	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-29SC0000		
Lab Sample ID:	FA53725-65	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614619.D	1	05/08/18 19:25	EM	05/04/18 15:00	OP69920	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	100%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-29SC0000		
Lab Sample ID:	FA53725-65A	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	2.9	2.0	0.39	0.098	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-30SC0000		
Lab Sample ID:	FA53725-68	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	180	2.0	0.40	0.10	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-30SC0000Q		
Lab Sample ID:	FA53725-69	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	190	4.0	0.79	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-31SC0000		
Lab Sample ID:	FA53725-74	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	381	4.0	0.80	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-32SC0000		
Lab Sample ID:	FA53725-77	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	38.5	4.0	0.80	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-33SC0000		
Lab Sample ID:	FA53725-80	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	203	4.0	0.80	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-34SC0000		
Lab Sample ID:	FA53725-83	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	172	3.9	0.79	0.20	mg/kg	10	05/14/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33734

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-34SC0000Q		
Lab Sample ID:	FA53725-84	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	197	2.0	0.39	0.098	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-35SC0000		
Lab Sample ID:	FA53725-89	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059602.D	1	05/08/18 12:01	EM	05/04/18 15:00	OP69921	GBB1729
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	75 U	100	75	50	ug/kg	
121-82-4	RDX	75 U	100	75	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	75 U	100	75	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	77%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-35SC0000		
Lab Sample ID:	FA53725-89A	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	4.3	2.0	0.40	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-36SC0000		
Lab Sample ID:	FA53725-92	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059605.D	1	05/08/18 13:31	EM	05/04/18 15:00	OP69921	GBB1729
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	98	74	50	ug/kg	
121-82-4	RDX	74 U	98	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	98	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	70%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-36SC0000		
Lab Sample ID:	FA53725-92A	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	7.1	2.0	0.40	0.10	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-37SC0000		
Lab Sample ID:	FA53725-95	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059608.D	1	05/08/18 15:06	EM	05/04/18 15:00	OP69921	GBB1729
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	72%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value

LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-37SC0000		
Lab Sample ID:	FA53725-95A	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	6.0	2.0	0.40	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-37SC0000Q		
Lab Sample ID:	FA53725-96	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059612.D	1	05/08/18 17:24	EM	05/04/18 15:00	OP69921	GBB1729
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	71%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-37SC0000Q		
Lab Sample ID:	FA53725-96A	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	5.7	2.0	0.40	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-38SC0000		
Lab Sample ID:	FA53725-101	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059613.D	1	05/08/18 17:54	EM	05/04/18 15:00	OP69921	GBB1729
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	72%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-39SC0000		
Lab Sample ID:	FA53725-104	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614631.D	1	05/09/18 01:18	EM	05/07/18 17:00	OP69945	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	100%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-40SC0000		
Lab Sample ID:	FA53725-107	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614634.D	1	05/09/18 02:47	EM	05/07/18 17:00	OP69945	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	88%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-41SC0000		
Lab Sample ID:	FA53725-110	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614639.D	1	05/09/18 05:14	EM	05/07/18 17:00	OP69945	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	92%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-42SC0000		
Lab Sample ID:	FA53725-113	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614640.D	1	05/09/18 05:43	EM	05/07/18 17:00	OP69945	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-42SC0000Q		
Lab Sample ID:	FA53725-114	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614641.D	1	05/09/18 06:13	EM	05/07/18 17:00	OP69945	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	75 U	100	75	50	ug/kg	
121-82-4	RDX	75 U	100	75	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	75 U	100	75	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	116%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-43SC0000		
Lab Sample ID:	FA53725-119	**Date Sampled:**	04/24/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614650.D	1	05/09/18 10:41	EM	05/07/18 17:00	OP69946	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	98%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-ER02SC		
Lab Sample ID:	FA53725-122	**Date Sampled:**	04/19/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	2.0 U	5.0	2.0	1.1	ug/l	1	05/02/18	05/02/18	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14869
(2) Prep QC Batch: MP33680

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-ER03SC		
Lab Sample ID:	FA53725-123	**Date Sampled:**	04/23/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	2.0 U	5.0	2.0	1.1	ug/l	1	05/02/18	05/02/18	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14869
(2) Prep QC Batch: MP33680

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-ER04SC		
Lab Sample ID:	FA53725-124	**Date Sampled:**	04/23/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 3535A	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059530.D	1	04/30/18 19:38	EM	04/29/18 07:30	OP69837	GBB1726
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	0.094 U	0.19	0.094	0.075	ug/l	
121-82-4	RDX	0.094 U	0.19	0.094	0.075	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.094 U	0.19	0.094	0.075	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	79%		70-136%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-ER04SC		
Lab Sample ID:	FA53725-124	**Date Sampled:**	04/23/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	2.0 U	5.0	2.0	1.1	ug/l	1	05/02/18	05/02/18	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14869
(2) Prep QC Batch: MP33680

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	31-ER05SC		
Lab Sample ID:	FA53725-125	**Date Sampled:**	04/25/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/18
Method:	SW846 8330B SW846 3535A	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059531.D	1	04/30/18 20:08	EM	04/29/18 07:30	OP69837	GBB1726
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	0.095 U	0.19	0.095	0.076	ug/l	
121-82-4	RDX	0.095 U	0.19	0.095	0.076	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.095 U	0.19	0.095	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	75%		70-136%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31-ER05SC		
Lab Sample ID:	FA53725-125	**Date Sampled:**	04/25/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	2.0 U	5.0	2.0	1.1	ug/l	1	05/02/18	05/02/18	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14869
(2) Prep QC Batch: MP33680

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-01
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:
Unit 31

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	13	8	13					
1	31-01SC0000	SO	4-24-18	1505	LF/RP	2		X		X	31-01	N1	0.00	0.00	
2	31-01SC0001	SO	〃	1522	〃	2		X		X	31-01	N1	0.00	0.00	HOLD
3	31-01SC0002	SO	〃	1321/1541	TB/KL	2		X		X	31-01	N1	0.00	0.00	HOLD Time 1541
4	31-02SC0000	SO	4-24-18	1321	TB/KL	1		X			31-02	N1	0.00	0.00	
5	31-02SC0001	SO	〃	1338	〃	1		X			31-02	N1	0.00	0.00	HOLD
6	31-02SC0002	SO	〃	1355	〃	1		X			31-02	N1	0.00	0.00	HOLD
7	31-03SC0000	SO	4-18-18	1827	LF/RP	1		X			31-03	N1	0.00	0.00	RunTime 1427
8	31-03SC0001	SO	〃	1445	〃	1		X			31-03	N1	0.00	0.00	HOLD
9	31-03SC0002	SO	〃	1500	〃	1		X			31-03	N1	0.00	0.00	HOLD

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-24-18 TB	0900 1645	FedEx	4-24-18 TB	0800 1655
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

4.0, 4.2, 4.0, 3.8, 20.2

ENV.COC_Record
April 13, 2018

Page 1 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041818-02
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
10	31-04SC0000 (10)	SO	4-18-18	1321	LF/RP		X			31-04	N1	0.00	0.00	
11	31-04SC0001 (11)	SO	"	1336	"		X			31-04	N1	0.00	0.00	HOLD
12	31-04SC0002 (12)	SO	"	1354	"		X			31-04	N1	0.00	0.00	HOLD
13	31-05SC0000 (13)	SO	4-19-18	0920	LF/RP		X			31-05	N1	0.00	0.00	
14	31-05SC0001 (14)	SO	"	0932	"		X			31-05	N1	0.00	0.00	HOLD
15	31-05SC0002 (15)	SO	"	0952	"		X			31-05	N1	0.00	0.00	HOLD
~~16~~	~~31-06SC0000~~	~~SO~~					~~X~~			~~31-06~~	~~N1~~	~~0.00~~	~~0.00~~	JB
~~17~~	~~31-06SC0001~~	~~SO~~					~~X~~			~~31-06~~	~~N1~~	~~0.00~~	~~0.00~~	JB
~~18~~	~~31-06SC0002~~	~~SO~~					X			~~31-06~~	~~N1~~	~~0.00~~	~~0.00~~	JB
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-24-18	0800 1645	Fed Ex	4-25-18	0800 1655
Fed Ex	18				

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 2 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/918-03
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram beg

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
~~19~~	~~31-07SC0000~~	SO					~~X~~			~~31-07~~	~~N1~~	~~0.00~~	~~0.00~~	JB
~~20~~	~~31-07SC0001~~	SO					~~X~~			~~31-07~~	~~N1~~	~~0.00~~	~~0.00~~	JB
~~21~~	~~31-07SC0002~~	SO					~~X~~			~~31-07~~	~~N1~~	~~0.00~~	~~0.00~~	JB
22	31-08SC0000 (16)	SO	4-18-18	1117	RP/LF		X			31-08	N1	0.00	0.00	
23	31-08SC0001 (17)	SO	〃	1134	〃		X			31-08	N1	0.00	0.00	HOLD
24	31-08SC0002 (18)	SO	〃	1154	〃		X			31-08	N1	0.00	0.00	HOLD
25	31-09SC0000 (19)	SO	4-19-18	0911	TS/KL		X			31-09	N1	0.00	0.00	
26	31-09SC0000Q (20)	SO	〃	0944	〃		X			31-09	FD1	0.00	0.00	
27	31-09SC0001 (21)	SO	〃	0928	〃		X			31-09	N1	0.00	0.00	HOLD

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-24-18	0800 1645
Fed Ex		

Received by: *(Signature)*	Date	Time
FedEx	4-25-18	0800

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 3 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-04
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
28	31-09SC0001Q (22)	SO	4-19-18	1010	TB/KL		X			31-09	FD1	0.00	0.00	HOLD
29	31-09SC0002 (23)	SO	4-19-18	0947	1		X			31-09	N1	0.00	0.00	HOLD
30	31-09SC0002Q (24)	SO	4-19-18	1020	1		X			31-09	FD1	0.00	0.00	HOLD
31	31-10SC0000 (25)	SO	4-18-18	1444	TB/KL		X			31-10	N1	0.00	0.00	
32	31-10SC0001 (26)	SO	1	1500	1		X			31-10	N1	0.00	0.00	HOLD
33	31-10SC0002 (27)	SO	1	1515	1		X			31-10	N1	0.00	0.00	HOLD
~~34~~	~~31-11SC0000~~	~~SO~~					~~X~~			~~31-11~~	~~N1~~	~~0.00~~	~~0.00~~	~~JB~~
~~35~~	~~31-11SC0001~~	~~SO~~					~~X~~			~~31-11~~	~~N1~~	~~0.00~~	~~0.00~~	~~JB~~
~~36~~	~~31-11SC0002~~	~~SO~~					~~X~~			~~31-11~~	~~N1~~	~~0.00~~	~~0.00~~	~~JB~~
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	Fed Ex	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number: 8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**: 04/26/18 930

ENV.COC_Record
April 13, 2018

Page 4 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
						11	13	8	13				
37	31-12SC0000	SO					X			31-12	N1	0.00	0.00
38	31-12SC0001	SO					X			31-12	N1	0.00	0.00
39	31-12SC0002	SO					X			31-12	N1	0.00	0.00
40	31-13SC0000	SO					X			31-13	N1	0.00	0.00
41	31-13SC0001	SO					X			31-13	N1	0.00	0.00
42	31-13SC0002	SO					X			31-13	N1	0.00	0.00
43	31-14SC0000	SO					X			31-14	N1	0.00	0.00
44	31-14SC0001	SO					X			31-14	N1	0.00	0.00
45	31-14SC0002	SO					X			31-14	N1	0.00	0.00

J.Beer 4-25-18

Cooler # **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex		

Shipping Date / Carrier / Airbill Number

Received by Laboratory: *(Signature, Date, Time)* **& condition**

04/26/18 930

ENV.COC_Record
April 13, 2018

Page 5 of 18

5.1 5

FA53725: Chain of Custody
Page 5 of 20

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-06
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	8	13					
46	31-15SC0000 (28)	SO	4-19-18	1018	LF/RF		X			31-15	N1	0.00	0.00	
47	31-15SC0001 (29)	SO	"	1040	"		X			31-15	N1	0.00	0.00	HOLD
48	31-15SC0002 (30)	SO	"	1108	"		X			31-15	N1	0.00	0.00	HOLD
49	31-16SC0000	SO					X			31-16	N1	0.00	0.00	
50	31-16SC0001	SO					X			31-16	N1	0.00	0.00	
51	31-16SC0002	SO					X			31-16	N1	0.00	0.00	
52	31-17SC0000	SO					X			31-17	N1	0.00	0.00	
53	31-17SC0001	SO					X			31-17	N1	0.00	0.00	
54	31-17SC0002	SO					X			31-17	N1	0.00	0.00	

J. Beer 4-25-18

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J Beer	4-25-18	0800	Fed Ex	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number: 8133 7208 3495

Received by Laboratory *(Signature, Date, Time)* **& condition**: 04/26/18 930

ENV.COC_Record
April 13, 2018

Page 6 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-07
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID		Matrix	Date	Time	Samp Init.	Analytical Test Method: No. of Bags.	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
								11	13	8	13					
55	31-18SC0000	31	SO	4-23-18	1305	KL/TB	1		X		X	31-18	N1	0.00	0.00	
56	31-18SC0001	32	SO	"	1320	"	1		X		X	31-18	N1	0.00	0.00	HOLD
57	31-18SC0002	33	SO	"	1345	"	1		X		X	31-18	N1	0.00	0.00	HOLD
58	31-19SC0000	34	SO	4-23-18	1354	LF/RP	1		X			31-19	N1	0.00	0.00	
59	31-19SC0001	35	SO	"	1409	"	1		X			31-19	N1	0.00	0.00	HOLD
60	31-19SC0002	36	SO	"	1429	"	1		X			31-19	N1	0.00	0.00	HOLD
61	31-20SC0000	37	SO	4-19-18	1033	KL/TB	1		X			31-20	N1	0.00	0.00	
62	31-20SC0001	38	SO	"	1045	"	1		X			31-20	N1	0.00	0.00	HOLD
63	31-20SC0002	39	SO	"	1101	"	1		X			31-20	N1	0.00	0.00	HOLD
Cooler #			**Turnaround Time: 14 Days**													

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	Fed Ex	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 7 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-08

FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	8	13					
64	31-21SC0000 40	SO	4-23-18	1458	KL/TB		X		X	31-21	N1	0.00	0.00	
65	31-21SC0001 41	SO	"	1512	"		X		X	31-21	N1	0.00	0.00	HOLD
66	31-21SC0002 42	SO	"	1526	"		X		X	31-21	N1	0.00	0.00	HOLD
67	31-22SC0000 43	SO	"	1254	RS/LF		X		X	31-22	N1	0.00	0.00	
68	31-22SC0001 44	SO	"	1324	"		X		X	31-22	N1	0.00	0.00	HOLD
~~69~~	~~31-22SC0002~~	~~SO~~	~~"~~		"		~~X~~		~~X~~	~~31-22~~	~~N1~~	~~0.00~~	~~0.00~~	~~HOLD~~ e-JWB
70	31-23SC0000 45	SO	4-19-18	1310	TB/KL		X			31-23	N1	0.00	0.00	
71	31-23SC0001 46	SO	"	1330	"		X			31-23	N1	0.00	0.00	HOLD
72	31-23SC0002 47	SO	"	1354	"		X			31-23	N1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-25-18	0800

Shipping Date / Carrier / Airbill Number

8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* & condition

04/26/18 930

ENV.COC_Record
April 13, 2018

Page 8 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042318-09
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
	Analytical Test Method														
							11	13	8	13					
73	31-24SC0000 48	SO	4-23-18	1402	TB/KL	1		X			31-24	N1	0.00	0.00	
74	31-24SC0001 49	SO	1	1414	1	1		X			31-24	N1	0.00	0.00	HOLD
75	31-24SC0002 50	SO	1	1435	1	1		X			31-24	N1	0.00	0.00	HOLD
76	31-25SC0000 51	SO	4-23-18	0953	LF/RP	2		X		X	31-25	N1	0.00	0.00	
77	31-25SC0001 52	SO	1	1022	1	2		X		X	31-25	N1	0.00	0.00	HOLD
78	31-25SC0002 53	SO	1	1104	1	2		X		X	31-25	N1	0.00	0.00	HOLD
79	31-26SC0000 54	SO	4-23-18	1526	RP/LF	2		X		X	31-26	N1	0.00	0.00	
80	31-26SC0001 55	SO	1	1558	1	2		X		X	31-26	N1	0.00	0.00	HOLD
~~81~~	~~31-26SG0002~~	~~SO~~	~~1~~		~~1~~	~~2~~		~~X~~		~~X~~	~~31-26~~	~~N1~~	~~0.00~~	~~0.00~~	~~HOLD~~ e JWS

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-25-18	0800

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 9 of 18

5.1 5

FA53725: Chain of Custody
Page 9 of 20

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042318-10
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
							11	13	8	13					
82	31-27SC0000 56	SO	4-23-18	1533	LF/RP	2		X		X	31-27	N1	0.00	0.00	
83	31-27SC0001 57	SO	"	1550	"	2		X		X	31-27	N1	0.00	0.00	HOLD
84	31-27SC0002 58	SO	"	1626	"	2		X		X	31-27	N1	0.00	0.00	HOLD
85	31-28SC0000 59	SO	4-23-18	0932	TB/KL	1		X		X	31-28	N1	0.00	0.00	
86	31-28SC0000Q 60	SO	"	0938	"	1		X		X	31-28	FD1	0.00	0.00	
87	31-28SC0001 61	SO	"	0954	"	1		X		X	31-28	N1	0.00	0.00	HOLD
88	31-28SC0001Q 62	SO	"	1000	"	1		X		X	31-28	FD1	0.00	0.00	HOLD
89	31-28SC0002 63	SO	"	1010	"	1		X		X	31-28	N1	0.00	0.00	HOLD
90	31-28SC0002Q 64	SO	"	1014	"	1		X		X	31-28	FD1	0.00	0.00	HOLD
Cooler #		Turnaround Time: 14 Days													

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	FedEx	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 10 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-11

FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	13	8	13					
91	31-29SC0000 65	SO	4-23-18	0834	LF/RP	2		X		X	31-29	N1	0.00	0.00	
92	31-29SC0001 66	SO	"	0855	"	2		X		X	31-29	N1	0.00	0.00	HOLD
93	31-29SC0002 67	SO	"	0925	"	2		X		X	31-29	N1	0.00	0.00	HOLD
94	31-30SC0000 68	SO	4-19-18	13-53	LF/RP			X			31-30	N1	0.00	0.00	
95	31-30SC0000Q 69	SO	"	1353	"			X			31-30	FD1	0.00	0.00	
96	31-30SC0001 70	SO	"	1409	"			X			31-30	N1	0.00	0.00	HOLD
97	31-30SC0001Q 71	SO	"	1409	"			X			31-30	FD1	0.00	0.00	HOLD
98	31-30SC0002 72	SO	"	1440	"			X			31-30	N1	0.00	0.00	HOLD
99	31-30SC0002Q 73	SO	"	1440	"			X			31-30	FD1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**													

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J Beer	4-25-18	0800	FedEx	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number

8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**

930
04/26/18

ENV.COC_Record
April 13, 2018

Page 11 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 0419/8-12.
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
100	31-31SC0000 74	SO	4-19-18	1500	TB/KL		X			31-31	N1	0.00	0.00	
101	31-31SC0001 75	SO	4-19-18	1509	〃		X			31-31	N1	0.00	0.00	HOLD
102	31-31SC0002 76	SO	4-19-18	1529	〃		X			31-31	N1	0.00	0.00	HOLD
103	31-32SC0000 77	SO	4-24-18	1010	TO/TE		X			31-32	N1	0.00	0.00	
104	31-32SC0001 78	SO	〃	1020	〃		X			31-32	N1	0.00	0.00	HOLD
105	31-32SC0002 79	SO	〃	1045	〃		X			31-32	N1	0.00	0.00	HOLD
106	31-33SC0000 80	SO	4-23-18	1037	TB/KL		X			31-33	N1	0.00	0.00	
107	31-33SC0001 81	SO	〃	1053	〃		X			31-33	N1	0.00	0.00	HOLD
108	31-33SC0002 82	SO	〃	1109	〃		X			31-33	N1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	FedEx	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 12 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-13
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM					Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	8	13									
109	31-34SC0000 83	SO	4-19-18	1428	KL/TB		X							31-34	N1	0.00	0.00	
110	31-34SC0000Q 84	SO	"	1432	"		X							31-34	FD1	0.00	0.00	
111	31-34SC0001 85	SO	"	1453	"		X							31-34	N1	0.00	0.00	HOLD
112	31-34SC0001Q 86	SO	"	1456	"		X							31-34	FD1	0.00	0.00	HOLD
113	31-34SC0002 87	SO	"	1515	"		X							31-34	N1	0.00	0.00	HOLD
114	31-34SC0002Q 88	SO	"	1520	"		X							31-34	FD1	0.00	0.00	HOLD
115	31-35SC0000 89	SO	4-24-18	1125	TO/TE		X		X					31-35	N1	0.00	0.00	
116	31-35SC0001 90	SO	"	1145	"		X		X					31-35	N1	0.00	0.00	HOLD
117	31-35SC0002 91	SO	"	1205	"		X		X					31-35	N1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**																

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	Fed Ex	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
930
04/26/18

ENV.COC_Record
April 13, 2018

Page 13 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042418-14
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: No. of EA's	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
							11	13	8	13					
118	31-36SC0000 92	SO	4-24-18	1130	TB/KL	2		X		X	31-36	N1	0.00	0.00	
119	31-36SC0001 93	SO	"	1150	"	2		X		X	31-36	N1	0.00	0.00	HOLD
120	31-36SC0002 94	SO	"	1238	"	2		X		X	31-36	N1	0.00	0.00	HOLD
121	31-37SC0000 95	SO	4-24-18	1149	LF/RP	2		X		X	31-37	N1	0.00	0.00	
122	31-37SC0000Q 96	SO	"	1149	"	2		X		X	31-37	FD1	0.00	0.00	
123	31-37SC0001 97	SO	"	1337	"	2		X		X	31-37	N1	0.00	0.00	HOLD
124	31-37SC0001Q 98	SO	"	1337	"	2		X		X	31-37	FD1	0.00	0.00	HOLD
125	31-37SC0002 99	SO	"	1421	"	2		X		X	31-37	N1	0.00	0.00	HOLD
126	31-37SC0002Q 100	SO	"	1421	"	2		X		X	31-37	FD1	0.00	0.00	HOLD

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	FedEx	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 14 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042418-15

FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
127	31-38SC0000 101	SO	4-24-18	0947	LF/KP				X	31-38	N1	0.00	0.00	
128	31-38SC0001 102	SO	1	1007	1				X	31-38	N1	0.00	0.00	HOLD
129	31-38SC0002 103	SO	1	1028	1				X	31-38	N1	0.00	0.00	HOLD
130	31-39SC0000 104	SO	4-24-18	0943	TB/KL				X	31-39	N1	0.00	0.00	
131	31-39SC0001 105	SO	1	1010	TB/KL				X	31-39	N1	0.00	0.00	HOLD
132	31-39SC0002 106	SO	1	1045	TB				X	31-39	N1	0.00	0.00	HOLD
133	31-40SC0000 107	SO	4-24-18	0915	TO/TE				X	31-40	N1	0.00	0.00	
134	31-40SC0001 108	SO	1	0930	1				X	31-40	N1	0.00	0.00	HOLD
135	31-40SC0002 109	SO	1	0945	1				X	31-40	N1	0.00	0.00	HOLD
Cooler #		Turnaround Time: 14 Days												

Relinquished by: *(Signature)*	Date	Time
J Beer	4-25-18	
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-25-18	0800

Shipping Date / Carrier / Airbill Number

8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**

930
04/26/18

ENV.COC_Record
April 13, 2018

Page 15 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042418-16
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
	Event ID: Basewide Range Assessment April 2018						11	13	8	13					
136	31-41SC0000 110	SO	4-24-18	0833	LF/KP	1				X	31-41	N1	0.00	0.00	
137	31-41SC0001 111	SO	"	0850	"	1				X	31-41	N1	0.00	0.00	HOLD
138	31-41SC0002 112	SO	"	0914	"	1				X	31-41	N1	0.00	0.00	HOLD
139	31-42SC0000 113	SO	4-24-18	0830	TB/KL	1				X	31-42	N1	0.00	0.00	
140	31-42SC0000Q 114	SO	"	0834	"	1				X	31-42	FD1	0.00	0.00	
141	31-42SC0001 115	SO	"	0850	"	1				X	31-42	N1	0.00	0.00	HOLD
142	31-42SC0001Q 116	SO	"	0855	"	1				X	31-42	FD1	0.00	0.00	HOLD
143	31-42SC0002 117	SO	"	0914	"	1				X	31-42	N1	0.00	0.00	HOLD
144	31-42SC0002Q 118	SO	"	0917	"	1				X	31-42	FD1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**													

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J Beer	4-25-18	0800	Fed Ex	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
930
04/26/18

ENV.COC_Record
April 13, 2018

Page 16 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-17
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
145	31-43SC0000 119	SO	4-24-18	0830	TO/TE				X	31-43	N1	0.00	0.00	
146	31-43SC0001 120	SO	"	0845	"				X	31-43	N1	0.00	0.00	HOLD
147	31-43SC0002 121	SO	"	0905	"				X	31-43	N1	0.00	0.00	HOLD
~~148~~	~~31-ER01SC~~	~~WQ~~				X				FIELDQC*	EB1	0.00	0.00	eJB
149	31-ER02SC 122	WQ	4-19-18	0654	KL/JB	X				FIELDQC	EB1	0.00	0.00	
150	31-ER03SC 123	WQ	4-23-18	0736	KL/JB	X				FIELDQC	EB1	0.00	0.00	~~HOLD~~ JB Run
151	31-ER04SC 124	WQ	4-23-18	1655	KL/JB	X		X		FIELDQC	EB1	0.00	0.00	~~HOLD~~ JB Run
152	31-ER05SC 125	WQ	4-25-18	0713	KL/JB	X		X		FIELDQC	EB1	0.00	0.00	
~~153~~	~~31-ER06SC~~	~~WQ~~				X		X		FIELDQC	EB1	0.00	0.00	eJB

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-25-18	0800

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

* 31-ER03SC for samples collected by JB on 4-22-18.

Page 17 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
154													
155													
156													
157													
158													
159													
160													
161													
162													

Cooler # **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex		

Shipping Date / Carrier / Airbill Number

Received by Laboratory: *(Signature, Date, Time)* **& condition**

04/26/18 930

ENV.COC_Record
April 13, 2018

Page 18 of 18

FA53725: Chain of Custody
Page 18 of 20

SGS Sample Receipt Summary

Job Number: FA53725 **Client:** GILBANE **Project:** BRA KEMRON SOIL SAMPLING

Date / Time Received: 4/26/2018 9:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** 1015923873760003281100780684030524

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 5

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6); Cooler 2: (3.8); Cooler 3: (3.6); Cooler 4: (3.4); Cooler 5: (19.8);

Cooler Temps (Corrected) °C: Cooler 1: (4.0); Cooler 2: (4.2); Cooler 3: (4.0); Cooler 4: (3.8); Cooler 5: (20.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 4/26/2018 9:30:00 AM Reviewer: SP Date: 4/26/2018

Job Change Order: FA53725

Requested Date:	4/26/2018	**Received Date:**	4/26/2018
Account Name:	Kemron Environmental	**Due Date:**	5/10/2018
Project	Ft Ord; CA	**Deliverable:**	FULT1
CSR:	jeans	**TAT (Days):**	14

Sample #: FA53725-31, 59	**Change:**	Per client for Samples 31-18 and 31-28, please log and analyze 8330 explosives only. Client will collect another sample for Lead analysis. Thank you.
Sample #: FA53725-	**Change:**	All samples listed as "HOLD" for LC8330B, are to be dried and logged for LC8330B XH. Thank you.

Above Changes Per: client, Thomas Beer, via e-mail request **Date:** 4/26/2018

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

QC Evaluation: DOD QSM5 Limits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP69837	SW846 8330B						
OP69837-BS	2691-41-0	HMX	BSP	REC	78	%	65-135
OP69837-BS	121-82-4	RDX	BSP	REC	80	%	68-130
OP69837-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	92	%	71-123
OP69837-MS*	2691-41-0	HMX	MS	REC	55 [a]	%	65-135
OP69837-MS*	121-82-4	RDX	MS	REC	82	%	68-130
OP69837-MS*	118-96-7	2,4,6-Trinitrotoluene	MS	REC	66 [a]	%	71-123
OP69837-MSD*	2691-41-0	HMX	MSD	REC	57 [a]	%	65-135
OP69837-MSD*	2691-41-0	HMX	MSD	RPD	4	%	20
OP69837-MSD*	121-82-4	RDX	MSD	REC	79	%	68-130
OP69837-MSD*	121-82-4	RDX	MSD	RPD	4	%	20
OP69837-MSD*	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	67 [a]	%	71-123
OP69837-MSD*	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	2	%	20
OP69919	SW846 8330B						
OP69919-BS	2691-41-0	HMX	BSP	REC	122	%	74-124
OP69919-BS	121-82-4	RDX	BSP	REC	98	%	67-129
OP69919-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	94	%	71-120
OP69919-MS	2691-41-0	HMX	MS	REC	114	%	74-124
OP69919-MS	121-82-4	RDX	MS	REC	92	%	67-129
OP69919-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	85	%	71-120
OP69919-MSD	2691-41-0	HMX	MSD	REC	109	%	74-124
OP69919-MSD	2691-41-0	HMX	MSD	RPD	4	%	20
OP69919-MSD	121-82-4	RDX	MSD	REC	91	%	67-129
OP69919-MSD	121-82-4	RDX	MSD	RPD	1	%	20
OP69919-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	88	%	71-120
OP69919-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	4	%	20
OP69919-DUP	2691-41-0	HMX	DUP	RPD	0	%	20
OP69919-DUP	121-82-4	RDX	DUP	RPD	0	%	20
OP69919-DUP	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69919-DUP2	2691-41-0	HMX	DUP	RPD	0	%	20
OP69919-DUP2	121-82-4	RDX	DUP	RPD	0	%	20
OP69919-DUP2	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69920	SW846 8330B						
OP69920-BS	2691-41-0	HMX	BSP	REC	119	%	74-124
OP69920-BS	121-82-4	RDX	BSP	REC	99	%	67-129
OP69920-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	95	%	71-120
OP69920-MS	2691-41-0	HMX	MS	REC	118	%	74-124
OP69920-MS	121-82-4	RDX	MS	REC	92	%	67-129
OP69920-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	91	%	71-120

* Sample used for QC is not from job FA53725

QC Evaluation: DOD QSM5 Limits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP69920-MSD	2691-41-0	HMX	MSD	REC	119	%	74-124
OP69920-MSD	2691-41-0	HMX	MSD	RPD	1	%	20
OP69920-MSD	121-82-4	RDX	MSD	REC	95	%	67-129
OP69920-MSD	121-82-4	RDX	MSD	RPD	3	%	20
OP69920-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	94	%	71-120
OP69920-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	3	%	20
OP69920-DUP	2691-41-0	HMX	DUP	RPD	0	%	20
OP69920-DUP	121-82-4	RDX	DUP	RPD	0	%	20
OP69920-DUP	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69920-DUP2	2691-41-0	HMX	DUP	RPD	0	%	20
OP69920-DUP2	121-82-4	RDX	DUP	RPD	0	%	20
OP69920-DUP2	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69921	SW846 8330B						
OP69921-BS	2691-41-0	HMX	BSP	REC	86	%	74-124
OP69921-BS	121-82-4	RDX	BSP	REC	86	%	67-129
OP69921-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	92	%	71-120
OP69921-MS	2691-41-0	HMX	MS	REC	71	%	74-124
OP69921-MS	121-82-4	RDX	MS	REC	81	%	67-129
OP69921-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	88	%	71-120
OP69921-MSD	2691-41-0	HMX	MSD	REC	65	%	74-124
OP69921-MSD	2691-41-0	HMX	MSD	RPD	9	%	20
OP69921-MSD	121-82-4	RDX	MSD	REC	79	%	67-129
OP69921-MSD	121-82-4	RDX	MSD	RPD	3	%	20
OP69921-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	89	%	71-120
OP69921-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	1	%	20
OP69921-DUP	2691-41-0	HMX	DUP	RPD	0	%	20
OP69921-DUP	121-82-4	RDX	DUP	RPD	0	%	20
OP69921-DUP	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69921-DUP2	2691-41-0	HMX	DUP	RPD	0	%	20
OP69921-DUP2	121-82-4	RDX	DUP	RPD	0	%	20
OP69921-DUP2	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69945	SW846 8330B						
OP69945-BS	2691-41-0	HMX	BSP	REC	118	%	74-124
OP69945-BS	121-82-4	RDX	BSP	REC	98	%	67-129
OP69945-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	93	%	71-120
OP69945-MS	2691-41-0	HMX	MS	REC	121	%	74-124
OP69945-MS	121-82-4	RDX	MS	REC	95	%	67-129
OP69945-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	89	%	71-120
OP69945-MSD	2691-41-0	HMX	MSD	REC	151	%	74-124
OP69945-MSD	2691-41-0	HMX	MSD	RPD	22	%	20
OP69945-MSD	121-82-4	RDX	MSD	REC	95	%	67-129

* Sample used for QC is not from job FA53725

QC Evaluation: DOD QSM5 Limits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP69945-MSD	121-82-4	RDX	MSD	RPD	1	%	20
OP69945-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	89	%	71-120
OP69945-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	0	%	20
OP69945-DUP	2691-41-0	HMX	DUP	RPD	0	%	20
OP69945-DUP	121-82-4	RDX	DUP	RPD	0	%	20
OP69945-DUP	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69945-DUP2	2691-41-0	HMX	DUP	RPD	0	%	20
OP69945-DUP2	121-82-4	RDX	DUP	RPD	0	%	20
OP69945-DUP2	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69946	SW846 8330B						
OP69946-BS	2691-41-0	HMX	BSP	REC	122	%	74-124
OP69946-BS	121-82-4	RDX	BSP	REC	99	%	67-129
OP69946-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	93	%	71-120
OP69946-MS	2691-41-0	HMX	MS	REC	117	%	74-124
OP69946-MS	121-82-4	RDX	MS	REC	96	%	67-129
OP69946-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	89	%	71-120
OP69946-MSD	2691-41-0	HMX	MSD	REC	120	%	74-124
OP69946-MSD	2691-41-0	HMX	MSD	RPD	2	%	20
OP69946-MSD	121-82-4	RDX	MSD	REC	97	%	67-129
OP69946-MSD	121-82-4	RDX	MSD	RPD	0	%	20
OP69946-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	88	%	71-120
OP69946-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	1	%	20
OP69946-DUP*	2691-41-0	HMX	DUP	RPD	0	%	20
OP69946-DUP*	121-82-4	RDX	DUP	RPD	0	%	20
OP69946-DUP*	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69946-DUP2*	2691-41-0	HMX	DUP	RPD	0	%	20
OP69946-DUP2*	121-82-4	RDX	DUP	RPD	0	%	20
OP69946-DUP2*	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
MP33680	SW846 6010C						
MP33680-B1	7439-92-1	Lead	BSP	REC	93.6	%	86-113
MP33680-S1*	7439-92-1	Lead	MS	REC	94.4	%	86-113
MP33680-S2*	7439-92-1	Lead	MSD	REC	94.2	%	86-113
MP33680-S2*	7439-92-1	Lead	MSD	RPD	.2	%	20
MP33680-D1*	7439-92-1	Lead	DUP	RPD	0	%	20
MP33734	SW846 6010C						
MP33734-B1	7439-92-1	Lead	BSP	REC	101	%	81-112
MP33734-S1	7439-92-1	Lead	MS	REC	94.4	%	81-112
MP33734-S2	7439-92-1	Lead	MSD	REC	100	%	81-112
MP33734-S2	7439-92-1	Lead	MSD	RPD	2.7	%	20

* Sample used for QC is not from job FA53725

QC Evaluation: DOD QSM5 Limits

Job Number: FA53725
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/25/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP33734-D1	7439-92-1	Lead	DUP	RPD	0	%	20
MP33734-D2	7439-92-1	Lead	DUP	RPD	7.5	%	20
MP33740	SW846 6010C						
MP33740-B1	7439-92-1	Lead	BSP	REC	108	%	81-112
MP33740-S1	7439-92-1	Lead	MS	REC	110.9	%	81-112
MP33740-S2	7439-92-1	Lead	MSD	REC	97.2	%	81-112
MP33740-S2	7439-92-1	Lead	MSD	RPD	5.3	%	20
MP33740-D1	7439-92-1	Lead	DUP	RPD	7.4	%	20
MP33740-D2	7439-92-1	Lead	DUP	RPD	2.2	%	20
MP33746	SW846 6010C						
MP33746-B1	7439-92-1	Lead	BSP	REC	100	%	81-112
MP33746-S1	7439-92-1	Lead	MS	REC	97.5	%	81-112
MP33746-S2	7439-92-1	Lead	MSD	REC	114.45	%	81-112
MP33746-S2	7439-92-1	Lead	MSD	RPD	10	%	20
MP33746-D1	7439-92-1	Lead	DUP	RPD	3.2	%	20
MP33746-D2	7439-92-1	Lead	DUP	RPD	4.8	%	20

(a) Outside DoD QSM control limits.

* Sample used for QC is not from job FA53725

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69837-MB	BB059526.D	1	04/30/18	EM	04/29/18	OP69837	GBB1726

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-124, FA53725-125

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	77%	70-136%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69837-MB	GG614533.D	1	05/01/18	EM	04/29/18	OP69837	GGG2623

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-124, FA53725-125

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	103%	70-136%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69919-MB	GG614590.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-1, FA53725-31, FA53725-40, FA53725-43, FA53725-51

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	103%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69921-MB	BB059601.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-89, FA53725-92, FA53725-95, FA53725-96, FA53725-101

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	80%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69920-MB	GG614607.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-54, FA53725-56, FA53725-59, FA53725-60, FA53725-65

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	109%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69921-GB1	BB059614.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-89, FA53725-92, FA53725-95, FA53725-96, FA53725-101

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	69%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69921-GB2	BB059615.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-89, FA53725-92, FA53725-95, FA53725-96, FA53725-101

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	50	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	73%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69921-GB3	BB059616.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-89, FA53725-92, FA53725-95, FA53725-96, FA53725-101

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	69%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69919-GB1	GG614620.D	1	05/08/18	EM	05/04/18	OP69919	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-1, FA53725-31, FA53725-40, FA53725-43, FA53725-51

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	92%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69919-GB2	GG614621.D	1	05/08/18	EM	05/04/18	OP69919	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-1, FA53725-31, FA53725-40, FA53725-43, FA53725-51

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	88%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69919-GB3	GG614622.D	1	05/08/18	EM	05/04/18	OP69919	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-1, FA53725-31, FA53725-40, FA53725-43, FA53725-51

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	85%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69920-GB1	GG614625.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-54, FA53725-56, FA53725-59, FA53725-60, FA53725-65

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	89%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69920-GB2	GG614626.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-54, FA53725-56, FA53725-59, FA53725-60, FA53725-65

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	50	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	85%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69920-GB3	GG614627.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-54, FA53725-56, FA53725-59, FA53725-60, FA53725-65

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	87%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69945-MB	GG614628.D	1	05/08/18	EM	05/07/18	OP69945	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-104, FA53725-107, FA53725-110, FA53725-113, FA53725-114

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	104%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69945-GB1	GG614642.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-104, FA53725-107, FA53725-110, FA53725-113, FA53725-114

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	99	50	ug/kg	
121-82-4	RDX	ND	99	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	99%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69945-GB2	GG614643.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-104, FA53725-107, FA53725-110, FA53725-113, FA53725-114

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	84%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69945-GB3	GG614644.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-104, FA53725-107, FA53725-110, FA53725-113, FA53725-114

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	50	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	84%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-MB	GG614649.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-119

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	101%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-GB1	GG614663.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-119

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	50	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	93%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-GB2	GG614664.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-119

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	93%	69-134%

Method Blank Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-GB3	GG614665.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-119

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	50	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	89%	69-134%

Blank Spike Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69837-BS	BB059525.D	1	04/30/18	EM	04/29/18	OP69837	GBB1726

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-124, FA53725-125

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	3.9	78	77-144
121-82-4	RDX	5	4.0	80	77-125
118-96-7	2,4,6-Trinitrotoluene	5	4.6	92	72-112

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	80%	70-136%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69919-BS	GG614588.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-1, FA53725-31, FA53725-40, FA53725-43, FA53725-51

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	3050	122	75-147
121-82-4	RDX	2500	2440	98	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2350	94	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	97%	69-134%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69920-BS	GG614605.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-54, FA53725-56, FA53725-59, FA53725-60, FA53725-65

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2970	119	75-147
121-82-4	RDX	2500	2470	99	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2380	95	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	98%	69-134%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69921-BS	BB059600.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-89, FA53725-92, FA53725-95, FA53725-96, FA53725-101

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2150	86	75-147
121-82-4	RDX	2500	2140	86	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2310	92	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	82%	69-134%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69945-BS	GG614630.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-104, FA53725-107, FA53725-110, FA53725-113, FA53725-114

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2960	118	75-147
121-82-4	RDX	2500	2450	98	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2330	93	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	97%	69-134%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-BS	GG614647.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: Method: SW846 8330B

FA53725-119

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	3050	122	75-147
121-82-4	RDX	2500	2470	99	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2330	93	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	99%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69919-PT1	GG614589.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-1, FA53725-31, FA53725-40, FA53725-43, FA53725-51

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	4420	118	74-124
121-82-4	RDX	3200	2740	86	67-129
118-96-7	2,4,6-Trinitrotoluene	520	466	90	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	98%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69921-PT1	BB059599.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-89, FA53725-92, FA53725-95, FA53725-96, FA53725-101

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	3540	94	74-124
121-82-4	RDX	3200	2630	82	67-129
118-96-7	2,4,6-Trinitrotoluene	520	494	95	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	79%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69920-PT1	GG614606.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-54, FA53725-56, FA53725-59, FA53725-60, FA53725-65

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	4140	110	74-124
121-82-4	RDX	3200	2660	83	67-129
118-96-7	2,4,6-Trinitrotoluene	520	443	85	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	102%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69945-PT1	GG614629.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-104, FA53725-107, FA53725-110, FA53725-113, FA53725-114

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	3750	100	74-124
121-82-4	RDX	3200	2160	68	67-129
118-96-7	2,4,6-Trinitrotoluene	520	402	77	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	85%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-PT1	GG614648.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: Method: SW846 8330B

FA53725-119

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	4160	111	74-124
121-82-4	RDX	3200	2480	78	67-129
118-96-7	2,4,6-Trinitrotoluene	520	427	82	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	99%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69837-MS	BB059528.D	1	04/30/18	EM	04/29/18	OP69837	GBB1726
OP69837-MSD	BB059529.D	1	04/30/18	EM	04/29/18	OP69837	GBB1726
FA53700-1	BB059527.D	1	04/30/18	EM	04/29/18	OP69837	GBB1726
FA53700-1 [a]	GG614534.D	1	05/01/18	EM	04/29/18	OP69837	GGG2623

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-124, FA53725-125

CAS No.	Compound	FA53700-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	0.19	U	9.62	5.3	55* [b]	9.62	5.5	57* [b]	4	77-144/21
121-82-4	RDX	0.19	U	9.62	7.9	82	9.62	7.6	79	4	77-125/19
118-96-7	2,4,6-Trinitrotoluene	0.19	U	9.62	6.3	66* [b]	9.62	6.4	67* [b]	2	72-112/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53700-1	FA53700-1	Limits
610-39-9	3,4-Dinitrotoluene	72%	71%			70-136%
610-39-9	3,4-Dinitrotoluene			70%	101%	70-136%

(a) Confirmation run.
(b) Outside DoD QSM control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69919-MS	GG614592.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625
OP69919-MSD	GG614593.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625
FA53725-1	GG614591.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-1, FA53725-31, FA53725-40, FA53725-43, FA53725-51

CAS No.	Compound	FA53725-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99	U	2460	2810	114	2460	2690	109	4	75-147/22
121-82-4	RDX	99	U	2460	2260	92	2460	2230	91	1	79-126/21
118-96-7	2,4,6-Trinitrotoluene	99	U	2460	2090	85	2460	2170	88	4	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53725-1	Limits
610-39-9	3,4-Dinitrotoluene	90%	85%	97%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69921-MS	BB059603.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729
OP69921-MSD	BB059604.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729
FA53725-89	BB059602.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-89, FA53725-92, FA53725-95, FA53725-96, FA53725-101

CAS No.	Compound	FA53725-89 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	100 U		2480	1760	71*	2470	1610	65*	9	75-147/22
121-82-4	RDX	100 U		2480	2000	81	2470	1950	79	3	79-126/21
118-96-7	2,4,6-Trinitrotoluene	100 U		2480	2180	88	2470	2200	89	1	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53725-89	Limits
610-39-9	3,4-Dinitrotoluene	78%	80%	77%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69920-MS	GG614609.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626
OP69920-MSD	GG614610.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626
FA53725-54	GG614608.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-54, FA53725-56, FA53725-59, FA53725-60, FA53725-65

CAS No.	Compound	FA53725-54 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99	U	2470	2910	118	2470	2930	119	1	75-147/22
121-82-4	RDX	99	U	2470	2280	92	2470	2350	95	3	79-126/21
118-96-7	2,4,6-Trinitrotoluene	99	U	2470	2250	91	2470	2320	94	3	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53725-54	Limits
610-39-9	3,4-Dinitrotoluene	99%	100%	102%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69945-MS	GG614632.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626
OP69945-MSD	GG614633.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626
FA53725-104	GG614631.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-104, FA53725-107, FA53725-110, FA53725-113, FA53725-114

CAS No.	Compound	FA53725-104 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99 U		2460	2970	121	2460	3720	151*	22	75-147/22
121-82-4	RDX	99 U		2460	2330	95	2460	2350	95	1	79-126/21
118-96-7	2,4,6-Trinitrotoluene	99 U		2460	2180	89	2460	2180	89	0	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53725-104	Limits
610-39-9	3,4-Dinitrotoluene	91%	93%	100%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-MS	GG614651.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626
OP69946-MSD	GG614652.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626
FA53725-119	GG614650.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-119

CAS No.	Compound	FA53725-119 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99 U		2490	2910	117	2490	2980	120	2	75-147/22
121-82-4	RDX	99 U		2490	2400	96	2490	2410	97	0	79-126/21
118-96-7	2,4,6-Trinitrotoluene	99 U		2490	2230	89	2490	2200	88	1	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53725-119	Limits
610-39-9	3,4-Dinitrotoluene	94%	93%	98%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69919-DUP	GG614595.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625
FA53725-31	GG614594.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-1, FA53725-31, FA53725-40, FA53725-43, FA53725-51

CAS No.	Compound	FA53725-31 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53725-31	Limits
610-39-9	3,4-Dinitrotoluene	100%	101%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69919-DUP2	GG614596.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625
FA53725-31	GG614594.D	1	05/07/18	EM	05/04/18	OP69919	GGG2625

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-1, FA53725-31, FA53725-40, FA53725-43, FA53725-51

CAS No.	Compound	FA53725-31 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53725-31	Limits
610-39-9	3,4-Dinitrotoluene	100%	101%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69921-DUP	BB059606.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729
FA53725-92	BB059605.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-89, FA53725-92, FA53725-95, FA53725-96, FA53725-101

CAS No.	Compound	FA53725-92 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	98 U		ND		nc	22
121-82-4	RDX	98 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	98 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53725-92	Limits
610-39-9	3,4-Dinitrotoluene	73%	70%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69921-DUP2	BB059607.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729
FA53725-92	BB059605.D	1	05/08/18	EM	05/04/18	OP69921	GBB1729

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-89, FA53725-92, FA53725-95, FA53725-96, FA53725-101

CAS No.	Compound	FA53725-92 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	98 U		ND		nc	22
121-82-4	RDX	98 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	98 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53725-92	Limits
610-39-9	3,4-Dinitrotoluene	74%	70%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69920-DUP	GG614615.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626
FA53725-56	GG614611.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-54, FA53725-56, FA53725-59, FA53725-60, FA53725-65

CAS No.	Compound	FA53725-56 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53725-56	Limits
610-39-9	3,4-Dinitrotoluene	102%	103%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69920-DUP2	GG614616.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626
FA53725-56	GG614611.D	1	05/08/18	EM	05/04/18	OP69920	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-54, FA53725-56, FA53725-59, FA53725-60, FA53725-65

CAS No.	Compound	FA53725-56 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53725-56	Limits
610-39-9	3,4-Dinitrotoluene	101%	103%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69945-DUP	GG614637.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626
FA53725-107	GG614634.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-104, FA53725-107, FA53725-110, FA53725-113, FA53725-114

CAS No.	Compound	FA53725-107 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53725-107	Limits
610-39-9	3,4-Dinitrotoluene	91%	88%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69945-DUP2	GG614638.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626
FA53725-107	GG614634.D	1	05/09/18	EM	05/07/18	OP69945	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53725-104, FA53725-107, FA53725-110, FA53725-113, FA53725-114

CAS No.	Compound	FA53725-107 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53725-107	Limits
610-39-9	3,4-Dinitrotoluene	90%	88%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-DUP	GG614656.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626
FA53800-1	GG614655.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: Method: SW846 8330B

FA53725-119

CAS No.	Compound	FA53800-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53800-1	Limits
610-39-9	3,4-Dinitrotoluene	96%	94%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-DUP2	GG614657.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626
FA53800-1	GG614655.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: Method: SW846 8330B

FA53725-119

CAS No.	Compound	FA53800-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53800-1	Limits
610-39-9	3,4-Dinitrotoluene	93%	94%	69-134%

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA53725-124	BB059530.D	79
FA53725-125	BB059531.D	75
OP69837-BS	BB059525.D	80
OP69837-MB	BB059526.D	77
OP69837-MB	GG614533.D	103
OP69837-MS	BB059528.D	
OP69837-MSD	BB059529.D	

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

Surrogate Recovery Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA53725-1	GG614591.D	97
FA53725-31	GG614594.D	101
FA53725-40	GG614603.D	107
FA53725-43	GG614587.D	101
FA53725-51	GG614604.D	97
FA53725-54	GG614608.D	102
FA53725-56	GG614611.D	103
FA53725-59	GG614617.D	105
FA53725-60	GG614618.D	103
FA53725-65	GG614619.D	100
FA53725-89	BB059602.D	77
FA53725-92	BB059605.D	70
FA53725-95	BB059608.D	72
FA53725-96	BB059612.D	71
FA53725-101	BB059613.D	72
FA53725-104	GG614631.D	100
FA53725-107	GG614634.D	88
FA53725-110	GG614639.D	92
FA53725-113	GG614640.D	107
FA53725-114	GG614641.D	116
FA53725-119	GG614650.D	98
OP69919-BS	GG614588.D	97
OP69919-DUP	GG614595.D	100
OP69919-DUP2	GG614596.D	100
OP69919-GB1	GG614620.D	92
OP69919-GB2	GG614621.D	88
OP69919-GB3	GG614622.D	85
OP69919-MB	GG614590.D	103
OP69919-MS	GG614592.D	90
OP69919-MSD	GG614593.D	85
OP69919-PT1	GG614589.D	98
OP69920-BS	GG614605.D	98
OP69920-DUP	GG614615.D	102
OP69920-DUP2	GG614616.D	101
OP69920-GB1	GG614625.D	89
OP69920-GB2	GG614626.D	85
OP69920-GB3	GG614627.D	87
OP69920-MB	GG614607.D	109
OP69920-MS	GG614609.D	99
OP69920-MSD	GG614610.D	100

Surrogate Recovery Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
OP69920-PT1	GG614606.D	102
OP69921-BS	BB059600.D	82
OP69921-DUP	BB059606.D	73
OP69921-DUP2	BB059607.D	74
OP69921-GB1	BB059614.D	69
OP69921-GB2	BB059615.D	73
OP69921-GB3	BB059616.D	
OP69921-MB	BB059601.D	80
OP69921-MS	BB059603.D	78
OP69921-MSD	BB059604.D	80
OP69921-PT1	BB059599.D	79
OP69945-BS	GG614630.D	97
OP69945-DUP	GG614637.D	91
OP69945-DUP2	GG614638.D	90
OP69945-GB1	GG614642.D	99
OP69945-GB2	GG614643.D	84
OP69945-GB3	GG614644.D	84
OP69945-MB	GG614628.D	104
OP69945-MS	GG614632.D	91
OP69945-MSD	GG614633.D	93
OP69945-PT1	GG614629.D	85
OP69946-BS	GG614647.D	99
OP69946-DUP	GG614656.D	96
OP69946-DUP2	GG614657.D	93
OP69946-GB1	GG614663.D	93
OP69946-GB2	GG614664.D	93
OP69946-GB3	GG614665.D	89
OP69946-MB	GG614649.D	101
OP69946-MS	GG614651.D	94
OP69946-MSD	GG614652.D	93
OP69946-PT1	GG614648.D	99

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1726-CC1722	**Injection Date:**	04/30/18
Lab File ID:	BB059523.D	**Injection Time:**	16:08
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	10.40	10.40

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP69837-BS	BB059525.D	04/30/18	17:08		10.39
OP69837-MB	BB059526.D	04/30/18	17:38		10.38
FA53700-1	BB059527.D	04/30/18	18:08		10.37
OP69837-MS	BB059528.D	04/30/18	18:38	10.35	
OP69837-MSD	BB059529.D	04/30/18	19:08	10.37	
FA53725-124	BB059530.D	04/30/18	19:38		10.35
FA53725-125	BB059531.D	04/30/18	20:08		10.38

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1729-CC1722	**Injection Date:**	05/08/18
Lab File ID:	BB059598.D	**Injection Time:**	09:41
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	10.19

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69921-PT1	BB059599.D	05/08/18	10:11	10.20
OP69921-BS	BB059600.D	05/08/18	11:01	10.18
OP69921-MB	BB059601.D	05/08/18	11:31	10.19
FA53725-89	BB059602.D	05/08/18	12:01	10.22
OP69921-MS	BB059603.D	05/08/18	12:31	10.19
OP69921-MSD	BB059604.D	05/08/18	13:01	10.22
FA53725-92	BB059605.D	05/08/18	13:31	10.16
OP69921-DUP	BB059606.D	05/08/18	14:06	10.14
OP69921-DUP2	BB059607.D	05/08/18	14:36	10.17
FA53725-95	BB059608.D	05/08/18	15:06	10.17

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1729-CC1722	**Injection Date:**	05/08/18
Lab File ID:	BB059610.D	**Injection Time:**	16:24
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	10.20	10.20

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA53725-96	BB059612.D	05/08/18	17:24		10.20
FA53725-101	BB059613.D	05/08/18	17:54		10.16
OP69921-GB1	BB059614.D	05/08/18	18:24		10.18
OP69921-GB2	BB059615.D	05/08/18	18:54		10.16
OP69921-GB3	BB059616.D	05/08/18	19:24	10.18	

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2623-CC2571	**Injection Date:**	05/01/18
Lab File ID:	GG614527.D	**Injection Time:**	09:54
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	14.12	14.12

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP69811-MB	GG614528.D	05/01/18	10:23		14.06
ZZZZZZ	GG614529.D	05/01/18	10:52		14.06
ZZZZZZ	GG614530.D	05/01/18	11:22		14.07
ZZZZZZ	GG614531.D	05/01/18	11:51	14.10	
ZZZZZZ	GG614532.D	05/01/18	12:21		14.23
OP69837-MB	GG614533.D	05/01/18	12:50		14.19
FA53700-1	GG614534.D	05/01/18	13:20		14.20
GGG2623-ECC2571	GG614535.D	05/01/18	13:49	14.23	14.24

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2625-CC2571	**Injection Date:**	05/07/18
Lab File ID:	GG614586.D	**Injection Time:**	15:23
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	14.25	14.25

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA53725-43	GG614587.D	05/07/18	15:52		14.19
OP69919-BS	GG614588.D	05/07/18	16:22		14.31
OP69919-PT1	GG614589.D	05/07/18	16:51		14.26
OP69919-MB	GG614590.D	05/07/18	17:20		14.26
FA53725-1	GG614591.D	05/07/18	17:50		14.24
OP69919-MS	GG614592.D	05/07/18	18:19		14.26
OP69919-MSD	GG614593.D	05/07/18	18:49		14.58
FA53725-31	GG614594.D	05/07/18	19:18		14.25
OP69919-DUP	GG614595.D	05/07/18	19:48		14.46
OP69919-DUP2	GG614596.D	05/07/18	20:17		14.27
GGG2625-ECC2571	GG614597.D	05/07/18	20:47	14.21	14.21

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/08/18
Lab File ID:	GG614602.D	**Injection Time:**	09:29
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.26

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
FA53725-40	GG614603.D	05/08/18	09:58	14.19
FA53725-51	GG614604.D	05/08/18	10:28	14.18
OP69920-BS	GG614605.D	05/08/18	10:57	14.20
OP69920-PT1	GG614606.D	05/08/18	11:27	14.21
OP69920-MB	GG614607.D	05/08/18	11:56	14.21
FA53725-54	GG614608.D	05/08/18	12:25	14.21
OP69920-MS	GG614609.D	05/08/18	12:55	14.26
OP69920-MSD	GG614610.D	05/08/18	13:24	14.22
FA53725-56	GG614611.D	05/08/18	13:54	14.19

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/08/18
Lab File ID:	GG614612.D	**Injection Time:**	14:23
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.23

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69920-DUP	GG614615.D	05/08/18	17:27	14.21
OP69920-DUP2	GG614616.D	05/08/18	17:56	14.22
FA53725-59	GG614617.D	05/08/18	18:26	14.22
FA53725-60	GG614618.D	05/08/18	18:55	14.22
FA53725-65	GG614619.D	05/08/18	19:25	14.21
OP69919-GB1	GG614620.D	05/08/18	19:54	14.20
OP69919-GB2	GG614621.D	05/08/18	20:24	14.20
OP69919-GB3	GG614622.D	05/08/18	20:53	14.21

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/08/18
Lab File ID:	GG614623.D	**Injection Time:**	21:23
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.24

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69920-GB1	GG614625.D	05/08/18	22:22	14.21
OP69920-GB2	GG614626.D	05/08/18	22:51	14.21
OP69920-GB3	GG614627.D	05/08/18	23:20	14.21
OP69945-MB	GG614628.D	05/08/18	23:50	14.21
OP69945-PT1	GG614629.D	05/09/18	00:19	14.23
OP69945-BS	GG614630.D	05/09/18	00:49	14.27
FA53725-104	GG614631.D	05/09/18	01:18	14.25
OP69945-MS	GG614632.D	05/09/18	01:48	14.24
OP69945-MSD	GG614633.D	05/09/18	02:17	14.18
FA53725-107	GG614634.D	05/09/18	02:47	14.19

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/09/18
Lab File ID:	GG614635.D	**Injection Time:**	03:16
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.28

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69945-DUP	GG614637.D	05/09/18	04:15	14.17
OP69945-DUP2	GG614638.D	05/09/18	04:45	14.19
FA53725-110	GG614639.D	05/09/18	05:14	14.21
FA53725-113	GG614640.D	05/09/18	05:43	14.21
FA53725-114	GG614641.D	05/09/18	06:13	14.20
OP69945-GB1	GG614642.D	05/09/18	06:42	14.18
OP69945-GB2	GG614643.D	05/09/18	07:12	14.21
OP69945-GB3	GG614644.D	05/09/18	07:41	14.18

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/09/18
Lab File ID:	GG614645.D	**Injection Time:**	08:11
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.23

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69946-BS	GG614647.D	05/09/18	09:10	14.28
OP69946-PT1	GG614648.D	05/09/18	09:39	14.22
OP69946-MB	GG614649.D	05/09/18	10:09	14.21
FA53725-119	GG614650.D	05/09/18	10:41	14.15
OP69946-MS	GG614651.D	05/09/18	11:10	14.22
OP69946-MSD	GG614652.D	05/09/18	11:40	14.18

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/09/18
Lab File ID:	GG614653.D	**Injection Time:**	12:09
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.24

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
FA53800-1	GG614655.D	05/09/18	13:08	14.20
OP69946-DUP	GG614656.D	05/09/18	13:37	14.14
OP69946-DUP2	GG614657.D	05/09/18	14:07	14.15
ZZZZZZ	GG614658.D	05/09/18	14:36	14.22

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/09/18
Lab File ID:	GG614659.D	**Injection Time:**	15:06
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	14.24	14.24

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	GG614661.D	05/09/18	16:05		14.23
ZZZZZZ	GG614662.D	05/09/18	16:34		14.23
OP69946-GB1	GG614663.D	05/09/18	17:04		14.24
OP69946-GB2	GG614664.D	05/09/18	17:33		14.23
OP69946-GB3	GG614665.D	05/09/18	18:03		14.23
GGG2626-ECC2571	GG614666.D	05/09/18	18:32	14.28	14.28

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA53725 **Sample:** GBB1722-ICC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059468.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration

Calibration Files
20 =BB059464.D 50 =BB059465.D 100 =BB059466.D 200 =BB059467.D
500 =BB059468.D 1000=BB059469.D 2000=BB059470.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	4.057	5.437	5.336	4.870	4.755	4.712	4.606	4.825	E3	9.63
2)	HMX	1.565	2.172	2.000	1.766	1.871	1.897	1.819	1.870	E3	10.12
3)	DNX	3.283	3.662	3.269	2.786	2.867	2.866	2.946	3.097	E3	10.29
4)	MNX	2.964	3.443	3.424	3.009	2.956	2.936	2.943	3.097	E3	7.48
5)	RDX	2.292	2.368	2.423	2.022	1.981	1.949	1.934	2.138	E3	9.98
6)	1,3,5-Trinitroben	5.015	4.250	4.380	4.228	4.133	4.163	4.290	4.351	E3	6.98
7)	1,3-Dinitrobenzen	5.103	6.130	6.106	5.453	5.359	5.313	5.343	5.544	E3	7.33
8)	3,5-Dinitroanilin	4.716	5.643	5.219	4.627	4.650	4.615	4.762	4.890	E3	8.03
9)	Nitrobenzene	3.761	4.464	3.850	3.539	3.342	3.234	3.316	3.644	E3	11.78
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	4.693	3.753	3.290	3.126	2.967	2.901	2.923	3.379	E3	19.28
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 2950.09304 *A + -0.01551 *A^2										
12)	2,4,6-Trinitrotol	4.956	4.943	4.194	4.070	3.843	3.741	3.794	4.220	E3	12.39
13)	2-Amino-4,6-Dinit	3.909	4.360	3.860	3.648	3.604	3.533	3.585	3.785	E3	7.68
14)	4-Amino-2,6-Dinit	1.542	3.426	2.979	2.840	2.690	2.591	2.687	2.679	E3	21.41
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997										
	Response Ratio = 0.00000 + 2602.89377 *A + 0.03960 *A^2										
15)S	3,4-Dinitrotoluen	2.547	2.965	2.725	2.872	2.626	2.453	2.542	2.676	E3	7.02
16)	2,4-Dinitrotoluen	4.866	6.729	5.238	5.204	4.993	4.826	4.971	5.261	E3	12.65
17)	2,6-Dinitrotoluen	3.711	4.396	3.251	3.385	3.230	2.946	3.275	3.456	E3	13.67
18)	o-Nitrotoluene	2.384	3.152	2.790	2.334	2.287	2.268	2.270	2.498	E3	13.69
19)	p-Nitrotoluene	3.192	4.942	4.366	3.947	3.706	3.724	3.752	3.947	E3	14.19
20)	m-Nitrotoluene	3.139	4.450	3.763	3.373	3.372	3.439	3.434	3.567	E3	12.06
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	6.055	8.407	8.188	7.236	7.294	7.503	7.246	7.418	E3	10.32
2)	HMX	3.365	6.202	5.612	5.174	4.982	5.081	5.035	5.064	E3	17.11
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 5093.51943 *A + -0.02911 *A^2										
3)	DNX	4.174	6.652	5.296	4.870	4.545	4.745	4.792	5.011	E3	15.95
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998										
	Response Ratio = 0.00000 + 4658.23377 *A + 0.06712 *A^2										
4)	MNX	4.258	4.893	5.093	4.585	4.573	4.564	4.576	4.649	E3	5.77
5)	RDX	3.570	3.610	3.606	3.105	3.137	3.116	3.125	3.324	E3	7.64
6)	1,3,5-Trinitroben	7.940	8.986	9.024	8.086	8.009	8.095	8.296	8.348	E3	5.54
7)	1,3-Dinitrobenzen	3.838	3.615	4.019	3.565	3.564	3.567	3.902	3.724	E3	5.13
8)	3,5-Dinitroanilin	5.802	7.490	8.086	7.445	7.563	7.569	8.398	7.479	E3	10.97
9)	Nitrobenzene	3.281	3.639	3.339	3.520	3.125	3.092	3.214	3.316	E3	6.09
10)	Nitroglycerin	1.415	1.345	1.370	1.191	1.221	1.213	1.214	1.281	E3	7.18
11)	Tetryl	5.506	4.771	5.669	5.060	5.077	5.090	5.183	5.194	E3	5.80

Job Number: FA53725 **Sample:** GBB1722-ICC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059468.D
Project: Ft Ord; CA

```
12)  2,4,6-Trinitrotol 3.797 4.195 5.241 4.572 4.606 4.634 4.683 4.533 E3   9.85
13)  2-Amino-4,6-Dinit 5.591 4.051 6.113 5.405 5.388 5.449 5.549 5.364 E3  11.74
14)  4-Amino-2,6-Dinit 4.328 4.594 6.000 5.208 5.287 5.370 5.487 5.182 E3  10.82
15)S 3,4-Dinitrotoluen 4.756 5.015 5.428 4.321 4.394 4.465 4.624 4.715 E3   8.35
16)  2,4-Dinitrotoluen 2.567 3.016 3.002 2.767 2.947 3.113 3.260 2.953 E3   7.70
17)  2,6-Dinitrotoluen 2.596 3.517 3.074 3.493 3.663 3.691 3.868 3.415 E3  12.80
18)  o-Nitrotoluene    2.982 3.433 3.803 3.387 3.104 3.071 3.149 3.276 E3   8.71
19)  p-Nitrotoluene    2.104 3.372 3.768 3.429 3.167 3.116 3.166 3.160 E3  16.37
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
               Response Ratio = 0.00000 + 3146.83363 *A + 0.00734 *A^2

20)  m-Nitrotoluene    3.211 4.166 4.659 4.114 3.971 3.990 4.055 4.024 E3  10.63
21)  PETN              1.516 1.363 1.415 1.322 1.380 1.356 1.369 1.389 E3   4.51
-------------------------------------------------------------------------------
(#) = Out of Range

          8330B_0419PLUS.M        Mon Apr 23 08:16:33 2018
```

Initial Calibration Verification

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GBB1722-ICV1722
Lab FileID: BB059471.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On    : 19-Apr-2018, 13:43:41                  Operator: evitam
Sample    : ICV1722-500                            Inst    : G1315B
Misc      : OP69499,gbb1722,1000,,,10,1,water      Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	446.785	10.6	91	0.00	1.01- 1.61
2	HMX	500.000	476.953	4.6	95	0.00	1.14- 1.74
3	DNX	500.000	416.669	16.7	90	0.00	1.36- 1.96
4	MNX	500.000	416.410	16.7	87	0.00	1.89- 2.49
5	RDX	500.000	405.824	18.8	88	0.00	2.36- 3.16
6	1,3,5-Trinitrobenzene	500.000	440.520	11.9	93	0.00	4.01- 4.81
7	1,3-Dinitrobenzene	500.000	414.651	17.1	86	0.00	5.18- 5.98
8	3,5-Dinitroaniline	500.000	449.315	10.1	95	0.00	5.48- 6.28
9	Nitrobenzene	500.000	428.399	14.3	93	0.00	6.69- 7.49
10	Nitroglycerin		----------NA----------				
	----------	Amount	Calc.	%Drift			
11	Tetryl	500.000	447.453	10.5	89	-0.01	8.30- 9.10
	----------	Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	500.000	366.508	26.7#	80	-0.01	8.72- 9.52
13	2-Amino-4,6-Dinitrotol	500.000	436.189	12.8	92	-0.01	9.02- 9.82
	----------	Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	500.000	475.168	5.0	93	0.00	9.45-10.25
	----------	Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	419.899	16.0	88	-0.01	10.57-11.37
17	2,6-Dinitrotoluene	500.000	409.093	18.2	88	0.00	11.01-11.81
18	o-Nitrotoluene	500.000	416.479	16.7	91	-0.01	14.30-15.17
19	p-Nitrotoluene	500.000	410.091	18.0	87	-0.01	14.75-15.75
20	m-Nitrotoluene	500.000	436.986	12.6	92	-0.01	15.73-16.73
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	442.711	11.5	90	0.00	1.01- 1.61
	----------	Amount	Calc.	%Drift			
2	HMX	500.000	502.668	-0.5	102	0.00	1.14- 1.74
3	DNX	500.000	466.541	6.7	96	0.00	1.36- 1.96
	----------	Amount	Calc.	%Drift			
4	MNX	500.000	435.357	12.9	89	0.00	1.89- 2.49
5	RDX	500.000	435.262	12.9	92	0.00	2.36- 3.16

Initial Calibration Verification

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample: GBB1722-ICV1722
Lab FileID: BB059471.D

6		1,3,5-Trinitrobenzene	500.000	440.109	12.0	92	0.00	4.01- 4.81
7		1,3-Dinitrobenzene	500.000	423.626	15.3	89	0.00	5.18- 5.98
8		3,5-Dinitroaniline	500.000	486.621	2.7	96	0.00	5.48- 6.28
9		Nitrobenzene	500.000	439.568	12.1	93	0.00	6.69- 7.49
10		Nitroglycerin	2500.000	2349.932	6.0	99	0.00	7.88- 8.88
11		Tetryl	500.000	431.996	13.6	88	-0.01	8.29- 9.09
12		2,4,6-Trinitrotoluene	500.000	430.591	13.9	85	0.00	8.72- 9.52
13		2-Amino-4,6-Dinitrotol	500.000	475.149	5.0	95	0.00	9.03- 9.83
14		4-Amino-2,6-Dinitrotol	500.000	500.329	-0.1	98	-0.01	9.46-10.26
15	S	3,4-Dinitrotoluene	----------	NA	----------			
16		2,4-Dinitrotoluene	500.000	458.258	8.3	92	0.00	10.56-11.36
17		2,6-Dinitrotoluene	500.000	501.832	-0.4	94	0.00	11.01-11.81
18		o-Nitrotoluene	500.000	443.790	11.2	94	-0.02	14.17-15.17
		----------	Amount	Calc.	%Drift			----------
19		p-Nitrotoluene	500.000	458.274	8.3	91	0.00	14.75-15.75
		----------	Amount	Calc.	%Drift			----------
20		m-Nitrotoluene	500.000	474.905	5.0	96	-0.02	15.73-16.73
21		PETN	2500.000	2504.495	-0.2	101	0.00	17.83-19.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059468.D 8330B_0419PLUS.M Mon Apr 23 08:16:21 2018

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GBB1726-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059523.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1015.541	-1.6	104	0.00	1.02- 1.62
2	HMX	1000.000	905.443	9.5	89	0.00	1.15- 1.75
3	DNX	1000.000	953.671	4.6	103	0.00	1.38- 1.98
4	MNX	1000.000	954.625	4.5	101	0.00	1.92- 2.52
5	RDX	1000.000	928.782	7.1	102	0.00	2.39- 3.19
6	1,3,5-Trinitrobenzene	1000.000	957.596	4.2	100	0.01	4.06- 4.86
7	1,3-Dinitrobenzene	1000.000	964.547	3.5	101	0.01	5.22- 6.02
8	3,5-Dinitroaniline	1000.000	929.306	7.1	98	0.00	5.52- 6.32
9	Nitrobenzene	1000.000	916.278	8.4	103	0.02	6.71- 7.51
10	Nitroglycerin	----------NA----------					
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	995.531	0.4	101	0.02	8.37- 9.17
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	878.966	12.1	99	0.03	8.80- 9.60
13	2-Amino-4,6-Dinitrotol	1000.000	957.795	4.2	103	0.02	9.07- 9.87
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	1012.230	-1.2	103	0.02	9.51-10.31
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	946.774	5.3	103	0.04	9.97-10.77
16	2,4-Dinitrotoluene	1000.000	947.990	5.2	103	0.04	10.63-11.43
17	2,6-Dinitrotoluene	1000.000	884.097	11.6	104	0.04	11.06-11.86
18	o-Nitrotoluene	1000.000	926.683	7.3	102	0.05	14.31-15.19
19	p-Nitrotoluene	1000.000	945.837	5.4	100	0.05	14.77-15.77
20	m-Nitrotoluene	1000.000	963.927	3.6	100	0.05	15.75-16.75
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	962.039	3.8	95	0.00	1.02- 1.62
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1025.033	-2.5	102	0.00	1.15- 1.75
3	DNX	1000.000	1007.913	-0.8	100	0.00	1.38- 1.98
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	989.859	1.0	101	0.00	1.92- 2.52
5	RDX	1000.000	947.105	5.3	101	0.00	2.39- 3.19

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GBB1726-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059523.D
Project: Ft Ord; CA

6		1,3,5-Trinitrobenzene	1000.000	977.264	2.3	101	0.01	4.06- 4.86
7		1,3-Dinitrobenzene	1000.000	961.404	3.9	100	0.01	5.22- 6.02
8		3,5-Dinitroaniline	1000.000	1028.876	-2.9	102	0.00	5.52- 6.32
9		Nitrobenzene	1000.000	974.799	2.5	105	0.02	6.71- 7.51
10		Nitroglycerin	5000.000	4708.193	5.8	99	0.02	7.97- 8.97
11		Tetryl	1000.000	956.495	4.4	98	0.02	8.37- 9.17
12		2,4,6-Trinitrotoluene	1000.000	985.425	1.5	96	0.03	8.80- 9.60
13		2-Amino-4,6-Dinitrotol	1000.000	1029.967	-3.0	101	0.02	9.08- 9.88
14		4-Amino-2,6-Dinitrotol	1000.000	1036.788	-3.7	100	0.03	9.51-10.31
15	S	3,4-Dinitrotoluene	1000.000	939.540	6.0	99	0.04	9.97-10.77
16		2,4-Dinitrotoluene	1000.000	1057.425	-5.7	100	0.04	10.62-11.42
17		2,6-Dinitrotoluene	1000.000	1093.558	-9.4	101	0.04	11.07-11.87
18		o-Nitrotoluene	1000.000	923.079	7.7	98	0.04	14.19-15.19
		----------	Amount	Calc.	%Drift	----------		
19		p-Nitrotoluene	1000.000	1007.048	-0.7	102	0.06	14.77-15.77
		----------	Amount	Calc.	%Drift	----------		
20		m-Nitrotoluene	1000.000	1005.503	-0.6	101	0.05	15.74-16.74
21		PETN	5000.000	4834.025	3.3	99	0.02	17.92-19.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Tue May 01 08:38:23 2018

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GBB1726-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059532.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	993.017	0.7	102	0.00	1.02- 1.62
2	HMX	1000.000	1048.207	-4.8	103	0.00	1.15- 1.75
3	DNX	1000.000	914.451	8.6	99	0.00	1.38- 1.98
4	MNX	1000.000	965.944	3.4	102	0.00	1.92- 2.52
5	RDX	1000.000	959.736	4.0	105	0.00	2.39- 3.19
6	1,3,5-Trinitrobenzene	1000.000	959.310	4.1	100	0.00	4.06- 4.86
7	1,3-Dinitrobenzene	1000.000	956.111	4.4	100	0.00	5.22- 6.02
8	3,5-Dinitroaniline	1000.000	932.002	6.8	99	-0.01	5.52- 6.32
9	Nitrobenzene	1000.000	912.963	8.7	103	0.00	6.71- 7.51
10	Nitroglycerin	----------	NA	----------			
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	980.403	2.0	99	-0.01	8.37- 9.17
		Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	1000.000	889.826	11.0	100	0.00	8.80- 9.60
13	2-Amino-4,6-Dinitrotol	1000.000	939.183	6.1	101	-0.02	9.07- 9.87
		Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	1000.000	999.535	0.0	102	-0.01	9.51-10.31
		Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene	1000.000	931.818	6.8	102	0.00	9.97-10.77
16	2,4-Dinitrotoluene	1000.000	932.563	6.7	102	0.00	10.63-11.43
17	2,6-Dinitrotoluene	1000.000	870.836	12.9	102	0.00	11.06-11.86
18	o-Nitrotoluene	1000.000	919.227	8.1	101	0.00	14.31-15.19
19	p-Nitrotoluene	1000.000	944.009	5.6	100	0.00	14.77-15.77
20	m-Nitrotoluene	1000.000	955.922	4.4	99	0.00	15.75-16.75
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	999.262	0.1	99	0.00	1.02- 1.62
		Amount	Calc.	%Drift			
2	HMX	1000.000	983.196	1.7	98	0.00	1.15- 1.75
3	DNX	1000.000	996.113	0.4	99	0.00	1.38- 1.98
		Amount	Calc.	%Drift			
4	MNX	1000.000	983.354	1.7	100	0.00	1.92- 2.52
5	RDX	1000.000	938.893	6.1	100	0.00	2.39- 3.19

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GBB1726-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059532.D
Project: Ft Ord; CA

6		1,3,5-Trinitrobenzene	1000.000	965.783	3.4	100	0.00	4.06- 4.86
7		1,3-Dinitrobenzene	1000.000	963.789	3.6	101	0.00	5.22- 6.02
8		3,5-Dinitroaniline	1000.000	1017.753	-1.8	101	-0.01	5.52- 6.32
9		Nitrobenzene	1000.000	977.724	2.2	105	0.00	6.71- 7.51
10		Nitroglycerin	5000.000	4727.721	5.4	100	0.00	7.97- 8.97
11		Tetryl	1000.000	954.117	4.6	97	-0.02	8.37- 9.17
12		2,4,6-Trinitrotoluene	1000.000	987.015	1.3	97	0.00	8.80- 9.60
13		2-Amino-4,6-Dinitrotol	1000.000	1031.685	-3.2	102	-0.02	9.08- 9.88
14		4-Amino-2,6-Dinitrotol	1000.000	1038.936	-3.9	100	-0.01	9.51-10.31
15	S	3,4-Dinitrotoluene	1000.000	937.244	6.3	99	0.00	9.97-10.77
16		2,4-Dinitrotoluene	1000.000	1051.115	-5.1	100	0.00	10.62-11.42
17		2,6-Dinitrotoluene	1000.000	1082.297	-8.2	100	0.00	11.07-11.87
18		o-Nitrotoluene	1000.000	949.198	5.1	101	0.00	14.19-15.19
		----------	Amount	Calc.	%Drift	----------		
19		p-Nitrotoluene	1000.000	1004.478	-0.4	102	0.00	14.77-15.77
		----------	Amount	Calc.	%Drift	----------		
20		m-Nitrotoluene	1000.000	1006.895	-0.7	102	0.00	15.74-16.74
21		PETN	5000.000	4735.699	5.3	97	0.00	17.92-19.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Tue May 01 08:38:24 2018

6.8.4 6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GBB1729-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059598.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	985.132	1.5	101	0.00	1.00- 1.60
2	HMX	1000.000	971.884	2.8	96	0.00	1.12- 1.72
3	DNX	1000.000	929.774	7.0	100	0.00	1.34- 1.94
4	MNX	1000.000	930.529	6.9	98	0.00	1.88- 2.48
5	RDX	1000.000	905.815	9.4	99	0.00	2.34- 3.14
6	1,3,5-Trinitrobenzene	1000.000	941.866	5.8	98	-0.02	4.00- 4.80
7	1,3-Dinitrobenzene	1000.000	946.351	5.4	99	-0.01	5.15- 5.95
8	3,5-Dinitroaniline	1000.000	931.235	6.9	99	-0.01	5.43- 6.23
9	Nitrobenzene	1000.000	907.308	9.3	102	0.00	6.64- 7.44
10	Nitroglycerin		----------NA----------				
	----------	Amount	Calc.	%Drift			
11	Tetryl	1000.000	994.354	0.6	101	-0.04	8.24- 9.04
	----------	Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	1000.000	862.278	13.8	97	-0.05	8.68- 9.48
13	2-Amino-4,6-Dinitrotol	1000.000	945.614	5.4	101	-0.02	8.92- 9.72
	----------	Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	1000.000	996.805	0.3	102	-0.02	9.35-10.15
	----------	Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene	1000.000	936.990	6.3	102	-0.04	9.83-10.63
16	2,4-Dinitrotoluene	1000.000	932.756	6.7	102	-0.03	10.47-11.27
17	2,6-Dinitrotoluene	1000.000	860.246	14.0	101	-0.04	10.91-11.71
18	o-Nitrotoluene	1000.000	904.688	9.5	100	-0.02	14.17-15.04
19	p-Nitrotoluene	1000.000	932.707	6.7	99	-0.02	14.63-15.63
20	m-Nitrotoluene	1000.000	952.995	4.7	99	-0.02	15.60-16.60
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	1000.000	959.439	4.1	95	0.00	1.00- 1.60
	----------	Amount	Calc.	%Drift			
2	HMX	1000.000	961.337	3.9	96	0.00	1.12- 1.72
3	DNX	1000.000	977.188	2.3	97	0.00	1.34- 1.94
	----------	Amount	Calc.	%Drift			
4	MNX	1000.000	960.928	3.9	98	0.00	1.88- 2.48
5	RDX	1000.000	917.400	8.3	98	0.00	2.34- 3.14

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GBB1729-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059598.D
Project: Ft Ord; CA

6		1,3,5-Trinitrobenzene	1000.000	948.901	5.1	98	-0.02	4.00- 4.80
7		1,3-Dinitrobenzene	1000.000	1115.170	-11.5	116	-0.01	5.15- 5.95
8		3,5-Dinitroaniline	1000.000	1099.476	-9.9	109	-0.01	5.43- 6.23
9		Nitrobenzene	1000.000	929.162	7.1	100	-0.01	6.64- 7.44
10		Nitroglycerin	5000.000	4634.314	7.3	98	-0.04	7.88- 8.88
11		Tetryl	1000.000	948.236	5.2	97	-0.03	8.23- 9.03
12		2,4,6-Trinitrotoluene	1000.000	969.107	3.1	95	-0.05	8.68- 9.48
13		2-Amino-4,6-Dinitrotol	1000.000	1016.435	-1.6	100	-0.02	8.92- 9.72
14		4-Amino-2,6-Dinitrotol	1000.000	1026.413	-2.6	99	-0.02	9.35-10.15
15	S	3,4-Dinitrotoluene	1000.000	937.148	6.3	99	-0.04	9.83-10.63
16		2,4-Dinitrotoluene	1000.000	1063.163	-6.3	101	-0.04	10.47-11.27
17		2,6-Dinitrotoluene	1000.000	1069.067	-6.9	99	-0.04	10.91-11.71
18		o-Nitrotoluene	1000.000	962.496	3.8	103	-0.02	14.04-15.04
		----------	Amount	Calc.	%Drift			----------
19		p-Nitrotoluene	1000.000	971.513	2.8	98	-0.02	14.62-15.62
		----------	Amount	Calc.	%Drift			----------
20		m-Nitrotoluene	1000.000	997.056	0.3	101	-0.02	15.60-16.60
21		PETN	5000.000	4757.268	4.9	97	-0.04	17.84-19.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Wed May 09 09:32:42 2018

Continuing Calibration Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GBB1729-CC1722
Lab FileID: BB059610.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	960.530	3.9	98	0.00	1.00- 1.60
2	HMX	1000.000	992.701	0.7	98	0.00	1.12- 1.72
3	DNX	1000.000	920.305	8.0	99	0.00	1.34- 1.94
4	MNX	1000.000	940.221	6.0	99	0.00	1.88- 2.48
5	RDX	1000.000	896.540	10.3	98	0.00	2.34- 3.14
6	1,3,5-Trinitrobenzene	1000.000	944.492	5.6	99	-0.02	4.00- 4.80
7	1,3-Dinitrobenzene	1000.000	946.014	5.4	99	-0.02	5.15- 5.95
8	3,5-Dinitroaniline	1000.000	938.348	6.2	99	-0.02	5.43- 6.23
9	Nitrobenzene	1000.000	899.320	10.1	101	0.00	6.64- 7.44
10	Nitroglycerin	----------	NA	----------			
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	935.901	6.4	95	-0.04	8.24- 9.04
		Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	1000.000	844.401	15.6	95	-0.04	8.68- 9.48
13	2-Amino-4,6-Dinitrotol	1000.000	947.714	5.2	102	-0.04	8.92- 9.72
		Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	1000.000	1001.146	-0.1	102	-0.03	9.35-10.15
		Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene	1000.000	920.755	7.9	100	-0.03	9.83-10.63
16	2,4-Dinitrotoluene	1000.000	931.218	6.9	102	-0.03	10.47-11.27
17	2,6-Dinitrotoluene	1000.000	860.636	13.9	101	-0.03	10.91-11.71
18	o-Nitrotoluene	1000.000	905.063	9.5	100	0.00	14.17-15.04
19	p-Nitrotoluene	1000.000	920.689	7.9	98	0.00	14.63-15.63
20	m-Nitrotoluene	1000.000	948.076	5.2	98	0.00	15.60-16.60
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	956.474	4.4	95	0.00	1.00- 1.60
		Amount	Calc.	%Drift			
2	HMX	1000.000	993.021	0.7	99	0.00	1.12- 1.72
3	DNX	1000.000	987.214	1.3	98	0.00	1.34- 1.94
		Amount	Calc.	%Drift			
4	MNX	1000.000	976.111	2.4	99	0.00	1.88- 2.48
5	RDX	1000.000	925.301	7.5	99	0.00	2.34- 3.14

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GBB1729-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059610.D
Project: Ft Ord; CA

6		1,3,5-Trinitrobenzene	1000.000	957.007	4.3	99	-0.02	4.00- 4.80
7		1,3-Dinitrobenzene	1000.000	1138.395	-13.8	119	-0.02	5.15- 5.95
8		3,5-Dinitroaniline	1000.000	1106.273	-10.6	109	-0.02	5.43- 6.23
9		Nitrobenzene	1000.000	942.589	5.7	101	0.00	6.64- 7.44
10		Nitroglycerin	5000.000	4621.330	7.6	98	-0.03	7.88- 8.88
11		Tetryl	1000.000	879.955	12.0	90	-0.04	8.23- 9.03
12		2,4,6-Trinitrotoluene	1000.000	946.818	5.3	93	-0.04	8.68- 9.48
13		2-Amino-4,6-Dinitrotol	1000.000	1032.565	-3.3	102	-0.03	8.92- 9.72
14		4-Amino-2,6-Dinitrotol	1000.000	1019.998	-2.0	98	-0.03	9.35-10.15
15	S	3,4-Dinitrotoluene	1000.000	921.047	7.9	97	-0.03	9.83-10.63
16		2,4-Dinitrotoluene	1000.000	1058.196	-5.8	100	-0.03	10.47-11.27
17		2,6-Dinitrotoluene	1000.000	1072.463	-7.2	99	-0.03	10.91-11.71
18		o-Nitrotoluene	1000.000	976.292	2.4	104	0.00	14.04-15.04
		----------	Amount	Calc.	%Drift			----------
19		p-Nitrotoluene	1000.000	1004.726	-0.5	102	0.00	14.62-15.62
		----------	Amount	Calc.	%Drift			----------
20		m-Nitrotoluene	1000.000	978.900	2.1	99	0.00	15.60-16.60
21		PETN	5000.000	4801.735	4.0	98	-0.02	17.84-19.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Wed May 09 09:32:43 2018

Continuing Calibration Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GBB1729-CC1722
Lab FileID: BB059617.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	921.051	7.9	94	0.00	1.00- 1.60
2	HMX	1000.000	948.555	5.1	94	0.00	1.12- 1.72
3	DNX	1000.000	919.624	8.0	99	0.00	1.34- 1.94
4	MNX	1000.000	934.735	6.5	99	0.00	1.88- 2.48
5	RDX	1000.000	890.845	10.9	98	-0.01	2.34- 3.14
6	1,3,5-Trinitrobenzene	1000.000	940.371	6.0	98	-0.02	4.00- 4.80
7	1,3-Dinitrobenzene	1000.000	942.490	5.8	98	-0.02	5.15- 5.95
8	3,5-Dinitroaniline	1000.000	931.008	6.9	99	-0.03	5.43- 6.23
9	Nitrobenzene	1000.000	890.266	11.0	100	-0.01	6.64- 7.44
10	Nitroglycerin	----------	NA	----------			
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	925.252	7.5	94	-0.05	8.24- 9.04
		Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	1000.000	842.610	15.7	95	-0.05	8.68- 9.48
13	2-Amino-4,6-Dinitrotol	1000.000	943.995	5.6	101	-0.04	8.92- 9.72
		Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	1000.000	994.431	0.6	101	-0.04	9.35-10.15
		Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene	1000.000	909.510	9.0	99	-0.04	9.83-10.63
16	2,4-Dinitrotoluene	1000.000	928.476	7.2	101	-0.04	10.47-11.27
17	2,6-Dinitrotoluene	1000.000	854.629	14.5	100	-0.03	10.91-11.71
18	o-Nitrotoluene	1000.000	901.260	9.9	99	-0.01	14.17-15.04
19	p-Nitrotoluene	1000.000	926.963	7.3	98	-0.01	14.63-15.63
20	m-Nitrotoluene	1000.000	939.667	6.0	97	0.00	15.60-16.60
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	956.591	4.3	95	0.00	1.00- 1.60
		Amount	Calc.	%Drift			
2	HMX	1000.000	1017.579	-1.8	101	0.00	1.12- 1.72
3	DNX	1000.000	1002.760	-0.3	100	0.00	1.34- 1.94
		Amount	Calc.	%Drift			
4	MNX	1000.000	967.677	3.2	99	0.00	1.88- 2.48
5	RDX	1000.000	924.968	7.5	99	-0.02	2.34- 3.14

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GBB1729-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059617.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	1000.000	958.906	4.1	99	-0.02	4.00- 4.80
7	1,3-Dinitrobenzene	1000.000	1166.000	-16.6	122	-0.02	5.15- 5.95
8	3,5-Dinitroaniline	1000.000	1135.581	-13.6	112	-0.03	5.43- 6.23
9	Nitrobenzene	1000.000	927.844	7.2	99	-0.01	6.64- 7.44
10	Nitroglycerin	5000.000	4583.055	8.3	97	-0.04	7.88- 8.88
11	Tetryl	1000.000	875.668	12.4	89	-0.05	8.23- 9.03
12	2,4,6-Trinitrotoluene	1000.000	938.776	6.1	92	-0.05	8.68- 9.48
13	2-Amino-4,6-Dinitrotol	1000.000	1031.614	-3.2	102	-0.04	8.92- 9.72
14	4-Amino-2,6-Dinitrotol	1000.000	1018.362	-1.8	98	-0.04	9.35-10.15
15 S	3,4-Dinitrotoluene	1000.000	913.401	8.7	96	-0.04	9.83-10.63
16	2,4-Dinitrotoluene	1000.000	1055.128	-5.5	100	-0.04	10.47-11.27
17	2,6-Dinitrotoluene	1000.000	1058.247	-5.8	98	-0.04	10.91-11.71
18	o-Nitrotoluene	1000.000	932.505	6.7	99	0.00	14.04-15.04

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	1000.000	978.583	2.1	99	-0.01	14.62-15.62

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	989.064	1.1	100	0.00	15.60-16.60
21	PETN	5000.000	4810.720	3.8	99	-0.03	17.84-19.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Wed May 09 09:32:44 2018

Initial Calibration Summary

Job Number: FA53725 **Sample:** GGG2571-ICC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613830.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration

Calibration Files
20 =GG613826.D 50 =GG613827.D 100 =GG613828.D 200 =GG613829.D
500 =GG613830.D 1000=GG613831.D 2000=GG613832.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	1.352	1.377	1.510	1.459	1.436	1.410	1.414	1.423	E4	3.67
2)	HMX	3.057	3.298	3.764	3.284	3.135	3.075	3.080	3.242	E3	7.74
3)	DNX	7.579	7.967	8.251	7.597	7.678	7.556	7.556	7.741	E3	3.46
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.012	7.160	7.024	E3	2.87
5)	1,3,5-Trinitroben	1.042	1.032	1.066	1.053	1.015	1.014	1.032	1.036	E4	1.85
6)	RDX	4.655	4.741	4.946	4.851	4.693	4.693	4.771	4.764	E3	2.15
7)	1,3-Dinitrobenzen	1.581	1.387	1.454	1.448	1.378	1.372	1.396	1.431	E4	5.16
8)	Nitrobenzene	1.168	0.878	0.954	0.925	0.890	0.891	0.899	0.944	E4	10.84
9)	2,4,6-Trinitrotol	1.271	0.986	1.002	0.994	0.945	0.938	0.957	1.013	E4	11.49
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	9.406	8.156	8.448	7.884	7.567	7.535	7.730	8.104	E3	8.15
12)S	3,4-Dinitrotoluen	4.934	5.176	5.394	5.317	5.132	5.134	5.275	5.195	E3	2.91
13)	2,6-Dinitrotoluen	7.042	7.189	7.341	7.323	7.011	6.992	7.150	7.150	E3	2.01
14)	2,4-Dinitrotoluen	1.375	1.321	1.340	1.317	1.268	1.264	1.292	1.311	E4	3.05
15)	o-Nitrotoluene	6.003	5.683	5.997	5.756	5.616	5.638	5.743	5.777	E3	2.78
16)	3,5-Dinitroanilin	1.439	1.084	1.075	1.031	0.980	0.977	0.999	1.084	E4	14.99

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999
Response Ratio = 0.00000 + 9713.03096 *A + 0.13365 *A^2

17)	p-Nitrotoluene	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
18)	4-Amino-2,6-Dinit	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
19)	m-Nitrotoluene	5.287	5.715	6.137	6.029	5.964	6.024	6.111	5.895	E3	5.12
20)	2-Amino-4,6-Dinit	8.442	8.820	9.024	9.262	9.082	9.162	9.369	9.023	E3	3.44
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	1.343	1.386	1.510	1.459	1.436	1.410	1.414	1.422	E4	3.75
2)	HMX	3.279	2.935	3.764	3.284	3.135	3.075	3.080	3.222	E3	8.34
3)	DNX	8.457	7.331	8.251	7.597	7.678	7.556	7.556	7.775	E3	5.32
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.021	7.190	7.029	E3	2.92
5)	1,3,5-Trinitroben	1.042	1.030	1.063	1.050	1.015	1.016	1.037	1.036	E4	1.68
6)	RDX	4.655	4.670	4.823	4.763	4.696	4.737	4.857	4.743	E3	1.61
7)	1,3-Dinitrobenzen	0.880	0.862	1.273	1.143	1.344	1.204	1.104	1.116	E4	16.58

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993
Response Ratio = 0.00000 + 13276.14205 *A + -1.11873 *A^2

8)	Nitrobenzene	0.924	0.888	0.901	0.870	1.044	0.976	0.880	0.926	E4	6.79
9)	2,4,6-Trinitrotol	1.089	1.237	1.458	1.298	1.440	1.347	1.310	1.311	E4	9.57
10)	Nitroglycerin	2.684	3.204	3.404	3.401	3.722	3.603	3.570	3.370	E3	10.27
11)	Tetryl	2.495	1.493	1.140	1.333	1.452	1.389	1.373	1.525	E4	29.01

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 14197.55319 *A + -0.23730 *A^2

12)S	3,4-Dinitrotoluen	1.259	1.015	1.021	1.090	1.061	1.056	1.070	1.082	E4	7.62
13)	2,6-Dinitrotoluen	0.875	1.106	0.996	1.038	1.024	1.022	1.041	1.015	E4	6.93
14)	2,4-Dinitrotoluen	2.450	1.728	1.231	1.056	0.977	0.913	0.920	1.325	E4	43.18

Job Number: FA53725 **Sample:** GGG2571-ICC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613830.D
Project: Ft Ord; CA

```
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 9621.10583 *A + -0.22476 *A^2

 15)  o-Nitrotoluene    8.554 9.270 8.481 8.837 8.240 8.443 8.540 8.624 E3   3.89
 16)  3,5-Dinitroanilin 2.378 1.717 1.751 1.723 1.603 1.631 1.657 1.780 E4  15.12
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 16131.47839 *A + 0.21636 *A^2

 17)  p-Nitrotoluene    2.097 1.953 2.158 2.200 2.120 2.137 2.170 2.119 E4   3.81
 18)  4-Amino-2,6-Dinit 2.140 1.953 2.158 2.200 2.120 2.137 2.170 2.125 E4   3.78
 19)  m-Nitrotoluene    1.024 0.732 1.030 1.026 0.980 0.989 1.027 0.972 E4  11.11
 20)  2-Amino-4,6-Dinit 0.592 0.798 1.032 1.130 1.175 1.240 1.304 1.039 E4  24.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 11496.69993 *A + 0.78000 *A^2

 21)  PETN              2.883 2.660 3.060 3.416 3.438 3.469 3.526 3.207 E3  10.60
 ------------------------------------------------------------------------------
 (#) = Out of Range

          8330RPB.M_1113M.M        Tue Nov 14 13:38:28 2017
```

Initial Calibration Verification

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICV2571
Lab FileID: GG613833.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	311.255	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	512.341	-2.5	106	-0.01	4.96- 5.96
3	DNX	500.000	481.707	3.7	97	0.00	5.08- 6.08
4	MNX	500.000	498.403	0.3	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.713	1.9	100	0.00	7.04- 8.04
6	RDX	500.000	504.766	-1.0	102	-0.03	7.57- 8.57
7	1,3-Dinitrobenzene	500.000	459.805	8.0	96	-0.01	9.58-10.58
8	Nitrobenzene	500.000	482.574	3.5	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene	500.000	493.369	1.3	101	0.00	14.38-15.38
14	2,4-Dinitrotoluene	500.000	484.298	3.1	100	-0.02	15.12-16.12
15	o-Nitrotoluene	500.000	512.102	-2.4	105	0.00	16.70-17.70
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	500.000	479.670	4.1	96	-0.07	16.16-17.16
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	500.000	491.360	1.7	101	-0.06	17.91-18.91
18	4-Amino-2,6-Dinitrotol	500.000	491.360	1.7	101	-0.06	17.91-18.91
19	m-Nitrotoluene	500.000	546.610	-9.3	108	0.00	19.13-20.13
20	2-Amino-4,6-Dinitrotol	500.000	514.599	-2.9	102	-0.07	20.16-21.16
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	311.279	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	515.543	-3.1	106	-0.01	4.96- 5.96
3	DNX	500.000	479.565	4.1	97	0.00	5.08- 6.08
4	MNX	500.000	498.000	0.4	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.831	1.8	100	0.00	7.04- 8.04
6	RDX	500.000	507.885	-1.6	103	-0.03	7.57- 8.57
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	500.000	525.898	-5.2	99	-0.01	9.57-10.57
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	500.000	577.158	-15.4#	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				

Job Number: FA53725 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613833.D
Project: Ft Ord; CA

10	Nitroglycerin	2500.000	2766.568	-10.7	100	-0.02	12.20-13.20
		Amount	Calc.	%Drift			
11	Tetryl			NA			
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene			NA			
13	2,6-Dinitrotoluene	500.000	540.982	-8.2	107	0.03	14.36-15.36
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	500.000	495.523	0.9	97	-0.02	15.12-16.12
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	500.000	509.800	-2.0	107	0.00	16.70-17.70
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	500.000	484.898	3.0	98	-0.07	16.16-17.16
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	500.000	510.118	-2.0	102	-0.06	17.92-18.92
18	4-Amino-2,6-Dinitrotol	500.000	508.634	-1.7	102	-0.06	17.92-18.92
19	m-Nitrotoluene	500.000	525.201	-5.0	104	-0.01	19.13-20.13
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	500.000	496.742	0.7	100	-0.07	20.16-21.16
		Amount	Calc.	%Drift			
21	PETN	2500.000	2876.898	-15.1#	107	-0.02	21.81-22.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:38:14 2017

Initial Calibration Verification

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICV2571
Lab FileID: GG613834.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX		NA				
2	HMX		NA				
3	DNX		NA				
4	MNX		NA				
5	1,3,5-Trinitrobenzene		NA				
6	RDX		NA				
7	1,3-Dinitrobenzene		NA				
8	Nitrobenzene		NA				
9	2,4,6-Trinitrotoluene	500.000	474.847	5.0	102	0.00	11.37-12.37
10	Nitroglycerin		NA				
11	Tetryl	500.000	513.472	-2.7	110	0.00	12.78-13.78
12 S	3,4-Dinitrotoluene		NA				
13	2,6-Dinitrotoluene		NA				
14	2,4-Dinitrotoluene		NA				
15	o-Nitrotoluene		NA				
	Amount	Calc.	%Drift				
16	3,5-Dinitroaniline		NA				
	Amount	Calc.	%Drift				
17	p-Nitrotoluene		NA				
18	4-Amino-2,6-Dinitrotoluen		NA				
19	m-Nitrotoluene		NA				
20	2-Amino-4,6-Dinitrotoluen		NA				
21	PETN		NA				

***** Signal #2 *****

1	TNX		NA				
2	HMX		NA				
3	DNX		NA				
4	MNX		NA				
5	1,3,5-Trinitrobenzene		NA				
6	RDX		NA				
	Amount	Calc.	%Drift				
7	1,3-Dinitrobenzene		NA				
	Amount	Calc.	%Drift				
8	Nitrobenzene		NA				
9	2,4,6-Trinitrotoluene	500.000	485.592	2.9	88	0.00	11.37-12.37

Job Number: FA53725 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613834.D
Project: Ft Ord; CA

```
10      Nitroglycerin                          ----------NA----------

            -------------------- Amount  Calc.    %Drift  -------------
11      Tetryl                  500.000 520.034     -4.0  101   0.00   12.78-13.78

            -------------------- Amount  Calc.    %Drift   -------------
12 S    3,4-Dinitrotoluene                       ----------NA----------
13      2,6-Dinitrotoluene                       ----------NA----------

            -------------------- Amount  Calc.    %Drift  -------------
14      2,4-Dinitrotoluene                       ----------NA----------

            -------------------- Amount  Calc.    %Drift   -------------
15      o-Nitrotoluene                           ----------NA----------

            -------------------- Amount  Calc.    %Drift  -------------
16      3,5-Dinitroaniline                       ----------NA----------

            -------------------- Amount  Calc.    %Drift   -------------
17      p-Nitrotoluene                           ----------NA----------
18      4-Amino-2,6-Dinitrotoluen                ----------NA----------
19      m-Nitrotoluene                           ----------NA----------

            -------------------- Amount  Calc.    %Drift  -------------
20      2-Amino-4,6-Dinitrotoluen                ----------NA----------

            -------------------- Amount  Calc.    %Drift   -------------
21      PETN                                     ----------NA----------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range               SPCC's out = 0  CCC's out = 0
    GG613830.D 8330RPB.M_1113M.M       Tue Nov 14 13:46:22 2017
```

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2623-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614527.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

```
Signal #1 : G:\DATA\0501RPB3\GG614527.D\dad1B.ch         Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614527.D\dad1A.ch
Acq On    : 01-May-2018, 09:54:02                    Operator: evitam
Sample    : cc2571-1000                              Inst    : G1315B
Misc      : op69539,Ggg2623,10.00,,,50,1,soil        Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	941.961	5.8	95	0.00	4.47- 5.47
2	HMX	1000.000	1022.851	-2.3	108	0.00	4.87- 5.87
3	DNX	1000.000	1022.249	-2.2	105	0.00	5.04- 6.04
4	MNX	1000.000	1040.365	-4.0	104	0.00	6.02- 7.02
5	1,3,5-Trinitrobenzene	1000.000	978.821	2.1	100	0.00	6.91- 7.91
6	RDX	1000.000	1020.137	-2.0	104	0.00	7.36- 8.36
7	1,3-Dinitrobenzene	1000.000	979.288	2.1	102	0.00	9.37-10.37
8	Nitrobenzene	1000.000	978.042	2.2	104	0.00	10.31-11.31
9	2,4,6-Trinitrotoluene	1000.000	973.037	2.7	105	0.00	11.07-12.07
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	939.934	6.0	101	0.00	12.32-13.32
12 S	3,4-Dinitrotoluene	1000.000	1075.281	-7.5	109	0.00	13.62-14.62
13	2,6-Dinitrotoluene	1000.000	1014.662	-1.5	104	0.00	13.99-14.99
14	2,4-Dinitrotoluene	1000.000	997.308	0.3	103	0.00	14.69-15.69
15	o-Nitrotoluene	1000.000	1008.864	-0.9	103	0.00	16.18-17.18
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1131.796	-13.2	114	0.00	15.66-16.66
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1017.005	-1.7	104	0.00	17.34-18.34
18	4-Amino-2,6-Dinitrotol	1000.000	1017.005	-1.7	104	0.00	17.34-18.34
19	m-Nitrotoluene	1000.000	1066.906	-6.7	104	0.00	18.53-19.53
20	2-Amino-4,6-Dinitrotol	1000.000	1042.144	-4.2	103	0.00	19.50-20.50
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	942.033	5.8	95	0.00	4.47- 5.47
2	HMX	1000.000	1029.243	-2.9	108	0.00	4.87- 5.87
3	DNX	1000.000	1017.702	-1.8	105	0.00	5.04- 6.04
4	MNX	1000.000	1039.525	-4.0	104	0.00	6.02- 7.02
5	1,3,5-Trinitrobenzene	1000.000	978.558	2.1	100	0.00	6.91- 7.91
6	RDX	1000.000	1020.589	-2.1	102	0.00	7.36- 8.36
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	941.326	5.9	96	0.00	9.37-10.37
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1042.565	-4.3	99	0.00	10.31-11.31
9	2,4,6-Trinitrotoluene	1000.000	1061.915	-6.2	103	0.00	11.07-12.07

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2623-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614527.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5233.869	-4.7	98	0.00	11.80-12.80
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1013.169	-1.3	102	0.00	12.31-13.31
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1146.598	-14.7	117	0.00	13.62-14.62
13	2,6-Dinitrotoluene	1000.000	1062.609	-6.3	105	0.00	13.98-14.98
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1058.827	-5.9	109	0.00	14.69-15.69
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1009.774	-1.0	103	0.00	16.18-17.18
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1168.869	-16.9	117	0.00	15.67-16.67
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1023.944	-2.4	102	0.00	17.35-18.35
18	4-Amino-2,6-Dinitrotol	1000.000	1020.967	-2.1	102	0.00	17.35-18.35
19	m-Nitrotoluene	1000.000	1061.593	-6.2	104	0.00	18.53-19.53
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1068.563	-6.9	106	0.00	19.50-20.50
		Amount	Calc.	%Drift			
21	PETN	5000.000	5329.956	-6.6	99	0.00	21.02-22.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Tue May 01 14:46:59 2018

6.8.11

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2623-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614535.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0501RPB3\GG614535.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614535.D\dad1A.ch
Acq On : 01-May-2018, 13:49:45 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69837,Ggg2623,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	945.887	5.4	95	0.01	4.47- 5.47
2	HMX	1000.000	1054.222	-5.4	111	0.02	4.87- 5.87
3	DNX	1000.000	1045.160	-4.5	107	0.02	5.04- 6.04
4	MNX	1000.000	1029.199	-2.9	103	0.02	6.02- 7.02
5	1,3,5-Trinitrobenzene	1000.000	972.751	2.7	99	0.03	6.91- 7.91
6	RDX	1000.000	1017.944	-1.8	103	0.03	7.36- 8.36
7	1,3-Dinitrobenzene	1000.000	979.337	2.1	102	0.04	9.37-10.37
8	Nitrobenzene	1000.000	987.925	1.2	105	0.05	10.31-11.31
9	2,4,6-Trinitrotoluene	1000.000	965.765	3.4	104	0.07	11.07-12.07
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	923.574	7.6	99	0.09	12.32-13.32
12 S	3,4-Dinitrotoluene	1000.000	1076.259	-7.6	109	0.12	13.62-14.62
13	2,6-Dinitrotoluene	1000.000	1001.552	-0.2	102	0.12	13.99-14.99
14	2,4-Dinitrotoluene	1000.000	990.535	0.9	103	0.12	14.69-15.69
15	o-Nitrotoluene	1000.000	1029.023	-2.9	105	0.16	16.18-17.18
	----------	Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1112.175	-11.2	112	0.11	15.66-16.66
	----------	Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1014.547	-1.5	103	0.16	17.34-18.34
18	4-Amino-2,6-Dinitrotol	1000.000	1014.547	-1.5	103	0.16	17.34-18.34
19	m-Nitrotoluene	1000.000	1069.985	-7.0	105	0.20	18.53-19.53
20	2-Amino-4,6-Dinitrotol	1000.000	1030.860	-3.1	102	0.18	19.50-20.50
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	945.960	5.4	95	0.01	4.47- 5.47
2	HMX	1000.000	1060.810	-6.1	111	0.02	4.87- 5.87
3	DNX	1000.000	1040.511	-4.1	107	0.02	5.04- 6.04
4	MNX	1000.000	1028.368	-2.8	103	0.02	6.02- 7.02
5	1,3,5-Trinitrobenzene	1000.000	973.113	2.7	99	0.03	6.91- 7.91
6	RDX	1000.000	1024.403	-2.4	103	0.03	7.36- 8.36
	----------	Amount	Calc.	%Drift			
7	1,3-Dinitrobenzene	1000.000	945.246	5.5	96	0.04	9.37-10.37
	----------	Amount	Calc.	%Drift			
8	Nitrobenzene	1000.000	1025.135	-2.5	97	0.05	10.31-11.31
9	2,4,6-Trinitrotoluene	1000.000	1042.509	-4.3	101	0.07	11.07-12.07

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2623-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614535.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5090.249	-1.8	95	0.08	11.80-12.80
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	977.249	2.3	98	0.09	12.31-13.31
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1124.006	-12.4	115	0.12	13.62-14.62
13	2,6-Dinitrotoluene	1000.000	1039.085	-3.9	103	0.12	13.98-14.98
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1053.403	-5.3	108	0.12	14.69-15.69
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1022.330	-2.2	104	0.17	16.18-17.18
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1136.811	-13.7	114	0.11	15.67-16.67
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1027.737	-2.8	102	0.16	17.35-18.35
18	4-Amino-2,6-Dinitrotol	1000.000	1024.748	-2.5	102	0.16	17.35-18.35
19	m-Nitrotoluene	1000.000	1075.262	-7.5	106	0.19	18.53-19.53
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1059.166	-5.9	105	0.18	19.50-20.50
		Amount	Calc.	%Drift			
21	PETN	5000.000	5328.254	-6.6	99	0.25	21.02-22.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Tue May 01 14:47:00 2018

6.8.12

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2625-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614586.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0507RPB3\GG614586.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614586.D\dad1A.ch
Acq On : 07-May-2018, 15:23:02 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2625,5.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:16:38 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	978.512	2.1	99	0.00	4.50- 5.50
2	HMX	1000.000	1075.681	-7.6	113	0.00	4.90- 5.90
3	DNX	1000.000	1064.992	-6.5	109	0.00	5.06- 6.06
4	MNX	1000.000	1071.260	-7.1	107	0.00	6.05- 7.05
5	1,3,5-Trinitrobenzene	1000.000	1009.031	-0.9	103	-0.16	7.11- 8.11
6	RDX	1000.000	1058.617	-5.9	107	-0.22	7.61- 8.61
7	1,3-Dinitrobenzene	1000.000	1014.855	-1.5	106	-0.19	9.63-10.63
8	Nitrobenzene	1000.000	1012.896	-1.3	107	-0.22	10.62-11.62
9	2,4,6-Trinitrotoluene	1000.000	998.267	0.2	108	-0.22	11.39-12.39
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	950.961	4.9	102	-0.30	12.73-13.73
12 S	3,4-Dinitrotoluene	1000.000	1117.802	-11.8	113	-0.33	14.08-15.08
13	2,6-Dinitrotoluene	1000.000	1037.943	-3.8	106	-0.27	14.40-15.40
14	2,4-Dinitrotoluene	1000.000	1025.938	-2.6	106	-0.26	15.09-16.09
15	o-Nitrotoluene	1000.000	1054.072	-5.4	108	-0.28	16.66-17.66
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1153.183	-15.3	116	-0.27	16.04-17.04
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1047.369	-4.7	107	-0.30	17.83-18.83
18	4-Amino-2,6-Dinitrotol	1000.000	1047.369	-4.7	107	-0.30	17.83-18.83
19	m-Nitrotoluene	1000.000	1093.875	-9.4	107	-0.29	19.04-20.04
20	2-Amino-4,6-Dinitrotol	1000.000	1070.561	-7.1	105	-0.32	20.01-21.01
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	978.586	2.1	99	0.00	4.50- 5.50
2	HMX	1000.000	1082.403	-8.2	113	0.00	4.90- 5.90
3	DNX	1000.000	1060.256	-6.0	109	0.00	5.06- 6.06
4	MNX	1000.000	1070.395	-7.0	107	0.00	6.05- 7.05
5	1,3,5-Trinitrobenzene	1000.000	1007.979	-0.8	103	-0.16	7.11- 8.11
6	RDX	1000.000	1049.767	-5.0	105	-0.22	7.61- 8.61
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	962.050	3.8	98	-0.19	9.63-10.63
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1095.326	-9.5	104	-0.21	10.62-11.62
9	2,4,6-Trinitrotoluene	1000.000	1115.020	-11.5	109	-0.22	11.39-12.39

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2625-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614586.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5459.411	-9.2	102	-0.26	12.17-13.17
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1095.813	-9.6	110	-0.30	12.72-13.72
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1237.044	-23.7#	127	-0.32	14.07-15.07
13	2,6-Dinitrotoluene	1000.000	1130.806	-13.1	112	-0.27	14.39-15.39
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1076.364	-7.6	111	-0.26	15.09-16.09
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1009.662	-1.0	103	-0.28	16.66-17.66
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1159.027	-15.9	116	-0.27	16.04-17.04
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1061.628	-6.2	105	-0.30	17.84-18.84
18	4-Amino-2,6-Dinitrotol	1000.000	1058.540	-5.9	105	-0.30	17.84-18.84
19	m-Nitrotoluene	1000.000	1097.234	-9.7	108	-0.28	19.04-20.04
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1075.739	-7.6	107	-0.32	20.01-21.01
		Amount	Calc.	%Drift			
21	PETN	5000.000	5412.971	-8.3	100	-0.29	21.56-22.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Tue May 08 11:21:52 2018

6.8.13

6

Continuing Calibration Summary

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2625-ECC2571
Lab FileID: GG614597.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0507RPB3\GG614597.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614597.D\dad1A.ch
Acq On : 07-May-2018, 20:47:11 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:16:38 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	961.373	3.9	97	0.00	4.50- 5.50
2	HMX	1000.000	1046.028	-4.6	110	0.00	4.90- 5.90
3	DNX	1000.000	1065.220	-6.5	109	0.00	5.06- 6.06
4	MNX	1000.000	1058.818	-5.9	106	-0.01	6.05- 7.05
5	1,3,5-Trinitrobenzene	1000.000	998.976	0.1	102	-0.19	7.11- 8.11
6	RDX	1000.000	1044.960	-4.5	106	-0.25	7.61- 8.61
7	1,3-Dinitrobenzene	1000.000	1005.266	-0.5	105	-0.23	9.63-10.63
8	Nitrobenzene	1000.000	1008.081	-0.8	107	-0.26	10.62-11.62
9	2,4,6-Trinitrotoluene	1000.000	991.490	0.9	107	-0.27	11.39-12.39
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	945.086	5.5	102	-0.35	12.73-13.73
12 S	3,4-Dinitrotoluene	1000.000	1102.965	-10.3	112	-0.37	14.08-15.08
13	2,6-Dinitrotoluene	1000.000	1034.240	-3.4	106	-0.30	14.40-15.40
14	2,4-Dinitrotoluene	1000.000	1019.914	-2.0	106	-0.29	15.09-16.09
15	o-Nitrotoluene	1000.000	1053.376	-5.3	108	-0.33	16.66-17.66
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1140.201	-14.0	115	-0.27	16.04-17.04
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1037.405	-3.7	106	-0.34	17.83-18.83
18	4-Amino-2,6-Dinitrotol	1000.000	1037.405	-3.7	106	-0.34	17.83-18.83
19	m-Nitrotoluene	1000.000	1086.340	-8.6	106	-0.33	19.04-20.04
20	2-Amino-4,6-Dinitrotol	1000.000	1057.900	-5.8	104	-0.32	20.01-21.01
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	961.446	3.9	97	0.00	4.50- 5.50
2	HMX	1000.000	1052.565	-5.3	110	0.00	4.90- 5.90
3	DNX	1000.000	1060.482	-6.0	109	0.00	5.06- 6.06
4	MNX	1000.000	1057.963	-5.8	106	-0.01	6.05- 7.05
5	1,3,5-Trinitrobenzene	1000.000	999.042	0.1	102	-0.19	7.11- 8.11
6	RDX	1000.000	1048.823	-4.9	105	-0.25	7.61- 8.61
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	974.001	2.6	99	-0.23	9.63-10.63
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1089.143	-8.9	103	-0.26	10.62-11.62
9	2,4,6-Trinitrotoluene	1000.000	1090.922	-9.1	106	-0.27	11.39-12.39

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2625-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614597.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5360.437	-7.2	100	-0.31	12.17-13.17
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1034.385	-3.4	104	-0.35	12.72-13.72
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1169.110	-16.9	120	-0.36	14.07-15.07
13	2,6-Dinitrotoluene	1000.000	1140.409	-14.0	113	-0.30	14.39-15.39
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1150.510	-15.1	118	-0.29	15.09-16.09
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1118.124	-11.8	114	-0.33	16.66-17.66
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1212.773	-21.3#	122	-0.27	16.04-17.04
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1055.899	-5.6	105	-0.34	17.84-18.84
18	4-Amino-2,6-Dinitrotol	1000.000	1052.828	-5.3	105	-0.34	17.84-18.84
19	m-Nitrotoluene	1000.000	1103.334	-10.3	108	-0.32	19.04-20.04
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1064.982	-6.5	106	-0.33	20.01-21.01
		Amount	Calc.	%Drift			
21	PETN	5000.000	5341.609	-6.8	99	-0.36	21.56-22.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Tue May 08 11:19:35 2018

6.8.14

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614602.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0508RPB3\GG614602.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614602.D\dad1A.ch
Acq On : 08-May-2018, 09:29:06 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69919,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	982.728	1.7	99	0.00	4.49- 5.49
2	HMX	1000.000	1073.094	-7.3	113	0.00	4.89- 5.89
3	DNX	1000.000	1069.901	-7.0	110	0.00	5.06- 6.06
4	MNX	1000.000	1072.245	-7.2	107	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	1012.376	-1.2	103	0.00	6.94- 7.94
6	RDX	1000.000	1076.379	-7.6	109	0.00	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	1012.155	-1.2	106	0.00	9.43-10.43
8	Nitrobenzene	1000.000	989.564	1.0	105	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	999.985	0.0	108	0.00	11.16-12.16
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	948.622	5.1	102	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1116.362	-11.6	113	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1037.936	-3.8	106	0.00	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1027.573	-2.8	107	0.00	14.83-15.83
15	o-Nitrotoluene	1000.000	1037.664	-3.8	106	0.00	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1156.583	-15.7	117	0.00	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1041.382	-4.1	106	0.00	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1041.382	-4.1	106	0.00	17.53-18.53
19	m-Nitrotoluene	1000.000	1072.931	-7.3	105	0.00	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1075.103	-7.5	106	0.00	19.71-20.71
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	982.803	1.7	99	0.00	4.49- 5.49
2	HMX	1000.000	1079.800	-8.0	113	0.00	4.89- 5.89
3	DNX	1000.000	1065.142	-6.5	110	0.00	5.06- 6.06
4	MNX	1000.000	1074.288	-7.4	108	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	1017.750	-1.8	104	0.00	6.94- 7.94
6	RDX	1000.000	1117.438	-11.7	112	0.00	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	931.687	6.8	95	0.00	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1022.799	-2.3	97	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1078.696	-7.9	105	0.00	11.16-12.16

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614602.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5335.782	-6.7	100	0.00	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1013.289	-1.3	102	0.00	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1180.547	-18.1	121	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1115.910	-11.6	111	0.00	14.12-15.12
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1123.295	-12.3	115	0.00	14.83-15.83
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1064.264	-6.4	109	0.00	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1205.217	-20.5#	121	0.00	15.80-16.80
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1047.786	-4.8	104	0.00	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1044.740	-4.5	104	0.00	17.53-18.53
19	m-Nitrotoluene	1000.000	1060.333	-6.0	104	0.00	18.75-19.75
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1084.079	-8.4	108	0.00	19.71-20.71
		Amount	Calc.	%Drift			
21	PETN	5000.000	5470.898	-9.4	101	0.00	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Tue May 08 14:42:22 2018

6.8.15

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614612.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

```
Signal #1 : G:\DATA\0508RPB3\GG614612.D\dad1B.ch         Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614612.D\dad1A.ch
Acq On    : 08-May-2018, 14:23:49                    Operator: evitam
Sample    : cc2571-1000                              Inst    : G1315B
Misc      : op69920,Ggg2626,10.01,,,50,1,soil        Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	980.399	2.0	99	0.00	4.49- 5.49
2	HMX	1000.000	1091.523	-9.2	115	0.00	4.89- 5.89
3	DNX	1000.000	1063.269	-6.3	109	0.00	5.06- 6.06
4	MNX	1000.000	1074.338	-7.4	108	-0.01	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	1010.792	-1.1	103	0.00	6.94- 7.94
6	RDX	1000.000	1078.123	-7.8	109	-0.01	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	1016.399	-1.6	106	0.00	9.43-10.43
8	Nitrobenzene	1000.000	999.586	0.0	106	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1003.771	-0.4	108	0.00	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	953.253	4.7	103	-0.01	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1144.967	-14.5	116	-0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1024.990	-2.5	105	-0.01	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1026.342	-2.6	106	-0.01	14.83-15.83
15	o-Nitrotoluene	1000.000	1037.954	-3.8	106	0.00	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1160.259	-16.0	117	-0.06	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1044.548	-4.5	106	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1044.548	-4.5	106	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1081.018	-8.1	106	-0.01	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1075.305	-7.5	106	-0.08	19.71-20.71
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	980.474	2.0	99	0.00	4.49- 5.49
2	HMX	1000.000	1098.344	-9.8	115	0.00	4.89- 5.89
3	DNX	1000.000	1058.540	-5.9	109	0.00	5.06- 6.06
4	MNX	1000.000	1073.470	-7.3	107	-0.01	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	1012.063	-1.2	103	0.00	6.94- 7.94
6	RDX	1000.000	1091.270	-9.1	109	-0.01	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	939.980	6.0	95	0.00	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1054.017	-5.4	100	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1085.782	-8.6	106	0.00	11.16-12.16

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614612.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5363.131	-7.3	100	0.00	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1033.253	-3.3	104	-0.01	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1181.554	-18.2	121	-0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1104.206	-10.4	110	0.00	14.12-15.12
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1119.165	-11.9	115	-0.01	14.83-15.83
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1056.458	-5.6	108	0.00	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1209.276	-20.9#	122	-0.06	15.80-16.80
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1052.316	-5.2	104	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1049.256	-4.9	104	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1116.857	-11.7	110	-0.02	18.75-19.75
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1100.962	-10.1	110	-0.08	19.71-20.71
		Amount	Calc.	%Drift			
21	PETN	5000.000	5602.471	-12.0	104	0.00	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Tue May 08 14:52:58 2018

6.8.16

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614623.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

```
Signal #1 : G:\DATA\0508RPB3\GG614623.D\dad1B.ch         Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614623.D\dad1A.ch
Acq On    : 08-May-2018, 21:23:05                    Operator: evitam
Sample    : cc2571-1000                              Inst    : G1315B
Misc      : op69920,Ggg2626,10.01,,,50,1,soil        Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	974.585	2.5	98	0.01	4.49- 5.49
2	HMX	1000.000	1082.570	-8.3	114	0.01	4.89- 5.89
3	DNX	1000.000	1055.674	-5.6	108	0.01	5.06- 6.06
4	MNX	1000.000	1071.482	-7.1	107	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	1003.707	-0.4	103	0.01	6.94- 7.94
6	RDX	1000.000	1080.033	-8.0	110	0.00	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	1011.708	-1.2	106	0.00	9.43-10.43
8	Nitrobenzene	1000.000	995.393	0.5	105	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	996.704	0.3	108	0.00	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	944.588	5.5	102	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1143.819	-14.4	116	-0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1014.827	-1.5	104	-0.01	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1019.022	-1.9	106	-0.02	14.83-15.83
15	o-Nitrotoluene	1000.000	1030.159	-3.0	106	0.00	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1154.082	-15.4	117	-0.07	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1042.273	-4.2	106	-0.05	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1042.273	-4.2	106	-0.05	17.53-18.53
19	m-Nitrotoluene	1000.000	1072.662	-7.3	105	-0.02	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1071.331	-7.1	106	-0.08	19.71-20.71
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	974.659	2.5	98	0.01	4.49- 5.49
2	HMX	1000.000	1089.335	-8.9	114	0.01	4.89- 5.89
3	DNX	1000.000	1050.978	-5.1	108	0.01	5.06- 6.06
4	MNX	1000.000	1079.482	-7.9	108	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	1015.256	-1.5	104	0.01	6.94- 7.94
6	RDX	1000.000	1148.199	-14.8	115	0.00	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	944.875	5.5	96	0.00	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1012.299	-1.2	96	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1062.660	-6.3	103	0.00	11.16-12.16

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614623.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5313.908	-6.3	99	0.01	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	997.639	0.2	100	-0.01	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1164.702	-16.5	119	-0.01	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1085.737	-8.6	108	0.00	14.12-15.12
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1123.959	-12.4	115	-0.02	14.83-15.83
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1099.058	-9.9	112	0.00	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1221.049	-22.1#	123	-0.07	15.80-16.80
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1051.935	-5.2	104	-0.05	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1048.876	-4.9	104	-0.05	17.53-18.53
19	m-Nitrotoluene	1000.000	1082.726	-8.3	106	-0.02	18.75-19.75
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1098.898	-9.9	109	-0.08	19.71-20.71
		Amount	Calc.	%Drift			
21	PETN	5000.000	5615.569	-12.3	104	0.02	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Wed May 09 11:11:15 2018

6.8.17

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614635.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	978.787	2.1	99	0.00	4.49- 5.49
2	HMX	1000.000	1103.456	-10.3	116	0.00	4.89- 5.89
3	DNX	1000.000	1151.196	-15.1	118	0.00	5.06- 6.06
4	MNX	1000.000	1054.174	-5.4	106	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	988.785	1.1	101	0.00	6.94- 7.94
6	RDX	1000.000	1021.750	-2.2	104	0.00	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	1001.260	-0.1	104	0.02	9.43-10.43
8	Nitrobenzene	1000.000	995.652	0.4	106	0.02	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	996.000	0.4	108	0.03	11.16-12.16
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	943.917	5.6	102	0.03	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1120.334	-12.0	113	0.03	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1006.638	-0.7	103	0.03	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1005.339	-0.5	104	0.02	14.83-15.83
15	o-Nitrotoluene	1000.000	991.233	0.9	102	0.03	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1128.323	-12.8	114	0.00	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1012.807	-1.3	103	0.01	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1012.807	-1.3	103	0.01	17.53-18.53
19	m-Nitrotoluene	1000.000	1076.701	-7.7	105	0.02	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1106.091	-10.6	109	0.00	19.71-20.71
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	978.862	2.1	99	0.00	4.49- 5.49
2	HMX	1000.000	1110.351	-11.0	116	0.00	4.89- 5.89
3	DNX	1000.000	1146.076	-14.6	118	0.00	5.06- 6.06
4	MNX	1000.000	1053.322	-5.3	105	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	991.180	0.9	101	0.00	6.94- 7.94
6	RDX	1000.000	1052.391	-5.2	105	0.00	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	928.475	7.2	94	0.01	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1112.586	-11.3	106	0.02	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1118.110	-11.8	109	0.03	11.16-12.16

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614635.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5299.240	-6.0	99	0.03	11.90-12.90
	---------- Amount	Calc.	%Drift	----------			
11	Tetryl	1000.000	955.957	4.4	96	0.03	12.42-13.42
	---------- Amount	Calc.	%Drift	----------			
12 S	3,4-Dinitrotoluene	1000.000	1012.462	-1.2	104	0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1067.965	-6.8	106	0.03	14.12-15.12
	---------- Amount	Calc.	%Drift	----------			
14	2,4-Dinitrotoluene	1000.000	1071.320	-7.1	110	0.01	14.83-15.83
	---------- Amount	Calc.	%Drift	----------			
15	o-Nitrotoluene	1000.000	969.954	3.0	99	0.03	16.37-17.37
	---------- Amount	Calc.	%Drift	----------			
16	3,5-Dinitroaniline	1000.000	1154.306	-15.4	116	0.00	15.80-16.80
	---------- Amount	Calc.	%Drift	----------			
17	p-Nitrotoluene	1000.000	1078.251	-7.8	107	0.00	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1075.116	-7.5	107	0.00	17.53-18.53
19	m-Nitrotoluene	1000.000	1130.784	-13.1	111	0.02	18.75-19.75
	---------- Amount	Calc.	%Drift	----------			
20	2-Amino-4,6-Dinitrotol	1000.000	1151.452	-15.1	115	0.00	19.71-20.71
	---------- Amount	Calc.	%Drift	----------			
21	PETN	5000.000	5462.455	-9.2	101	0.05	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Wed May 09 11:11:16 2018

6.8.18

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614645.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On : 09-May-2018, 08:11:13 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	988.389	1.2	100	0.00	4.49- 5.49
2	HMX	1000.000	1120.680	-12.1	118	0.00	4.89- 5.89
3	DNX	1000.000	1101.960	-10.2	113	0.00	5.06- 6.06
4	MNX	1000.000	1048.730	-4.9	105	-0.01	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	992.353	0.8	101	0.00	6.94- 7.94
6	RDX	1000.000	1066.959	-6.7	108	0.00	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	994.030	0.6	104	0.00	9.43-10.43
8	Nitrobenzene	1000.000	980.601	1.9	104	-0.01	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	980.444	2.0	106	0.00	11.16-12.16
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	921.611	7.8	99	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1138.065	-13.8	115	-0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	988.359	1.2	101	-0.02	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1003.868	-0.4	104	-0.02	14.83-15.83
15	o-Nitrotoluene	1000.000	1007.713	-0.8	103	-0.02	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1132.768	-13.3	114	-0.04	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1026.262	-2.6	105	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1026.262	-2.6	105	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1057.407	-5.7	103	-0.03	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1057.797	-5.8	104	-0.05	19.71-20.71
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	988.465	1.2	100	0.00	4.49- 5.49
2	HMX	1000.000	1127.684	-12.8	118	0.00	4.89- 5.89
3	DNX	1000.000	1097.059	-9.7	113	0.00	5.06- 6.06
4	MNX	1000.000	1047.883	-4.8	105	-0.01	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	997.167	0.3	102	0.00	6.94- 7.94
6	RDX	1000.000	1119.982	-12.0	112	0.00	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	946.423	5.4	96	0.00	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1056.348	-5.6	100	-0.01	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1084.394	-8.4	106	0.00	11.16-12.16

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614645.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5245.820	-4.9	98	0.00	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	984.331	1.6	99	0.00	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1190.969	-19.1	122	-0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1069.702	-7.0	106	-0.01	14.12-15.12
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1123.240	-12.3	115	-0.01	14.83-15.83
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1098.983	-9.9	112	-0.02	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1222.663	-22.3#	123	-0.04	15.80-16.80
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1047.941	-4.8	104	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1044.894	-4.5	104	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1080.180	-8.0	106	-0.03	18.75-19.75
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1102.621	-10.3	110	-0.05	19.71-20.71
		Amount	Calc.	%Drift			
21	PETN	5000.000	5485.963	-9.7	101	0.00	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Wed May 09 11:11:17 2018

6.8.19

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614653.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

```
Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch         Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On    : 09-May-2018, 12:09:40                    Operator: evitam
Sample    : cc2571-1000                              Inst    : G1315B
Misc      : op69946,Ggg2626,10.08,,,50,1,soil        Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	973.179	2.7	98	0.02	4.49- 5.49
2	HMX	1000.000	1095.361	-9.5	115	0.02	4.89- 5.89
3	DNX	1000.000	1070.928	-7.1	110	0.02	5.06- 6.06
4	MNX	1000.000	1049.860	-5.0	105	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	980.088	2.0	100	0.02	6.94- 7.94
6	RDX	1000.000	985.389	1.5	100	0.01	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	999.221	0.1	104	0.00	9.43-10.43
8	Nitrobenzene	1000.000	977.288	2.3	104	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	979.745	2.0	106	0.01	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	927.285	7.3	100	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1138.218	-13.8	115	-0.01	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	994.276	0.6	102	0.00	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1004.888	-0.5	104	0.00	14.83-15.83
15	o-Nitrotoluene	1000.000	1000.775	-0.1	103	-0.01	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1133.087	-13.3	114	-0.06	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1019.331	-1.9	104	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1019.331	-1.9	104	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1052.370	-5.2	103	-0.02	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1052.508	-5.3	104	-0.07	19.71-20.71
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	973.253	2.7	98	0.02	4.49- 5.49
2	HMX	1000.000	1102.206	-10.2	115	0.02	4.89- 5.89
3	DNX	1000.000	1066.165	-6.6	110	0.02	5.06- 6.06
4	MNX	1000.000	1049.013	-4.9	105	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	980.188	2.0	100	0.02	6.94- 7.94
6	RDX	1000.000	989.757	1.0	99	0.01	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	917.861	8.2	93	0.00	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	993.650	0.6	94	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1073.362	-7.3	104	0.01	11.16-12.16

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614653.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5261.751	-5.2	98	0.00	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1003.614	-0.4	101	0.00	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1178.936	-17.9	121	-0.01	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1091.704	-9.2	108	0.00	14.12-15.12
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1124.503	-12.5	115	0.00	14.83-15.83
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1026.418	-2.6	105	-0.01	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1202.354	-20.2#	121	-0.06	15.80-16.80
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1029.591	-3.0	102	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1026.597	-2.7	102	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1103.667	-10.4	109	-0.03	18.75-19.75
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1098.752	-9.9	109	-0.07	19.71-20.71
		Amount	Calc.	%Drift			
21	PETN	5000.000	5581.870	-11.6	103	0.02	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Wed May 09 14:14:08 2018

6.8.20

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614659.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On : 09-May-2018, 15:06:24 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	973.267	2.7	98	0.02	4.49- 5.49
2	HMX	1000.000	1105.504	-10.6	117	0.02	4.89- 5.89
3	DNX	1000.000	1076.866	-7.7	110	0.02	5.06- 6.06
4	MNX	1000.000	1045.438	-4.5	105	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	977.072	2.3	100	0.02	6.94- 7.94
6	RDX	1000.000	981.099	1.9	100	0.00	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	994.263	0.6	104	0.00	9.43-10.43
8	Nitrobenzene	1000.000	969.301	3.1	103	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	969.333	3.1	105	0.02	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	920.428	8.0	99	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1127.096	-12.7	114	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	999.220	0.1	102	0.00	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1002.711	-0.3	104	-0.01	14.83-15.83
15	o-Nitrotoluene	1000.000	992.948	0.7	102	0.00	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1130.732	-13.1	114	-0.08	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1017.504	-1.8	104	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1017.504	-1.8	104	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1042.268	-4.2	102	-0.02	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1049.620	-5.0	103	-0.09	19.71-20.71
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	973.342	2.7	98	0.02	4.49- 5.49
2	HMX	1000.000	1112.413	-11.2	117	0.02	4.89- 5.89
3	DNX	1000.000	1072.077	-7.2	110	0.02	5.06- 6.06
4	MNX	1000.000	1044.594	-4.5	105	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	977.172	2.3	100	0.02	6.94- 7.94
6	RDX	1000.000	985.448	1.5	99	0.00	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	942.805	5.7	96	0.00	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1020.185	-2.0	97	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1049.528	-5.0	102	0.02	11.16-12.16

6.8.21

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614659.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5250.607	-5.0	98	0.02	11.90-12.90	
		Amount	Calc.	%Drift				
11	Tetryl	1000.000	1021.991	-2.2	103	0.00	12.42-13.42	
		Amount	Calc.	%Drift				
12 S	3,4-Dinitrotoluene	1000.000	1180.561	-18.1	121	0.00	13.75-14.75	
13	2,6-Dinitrotoluene	1000.000	1109.183	-10.9	110	0.00	14.12-15.12	
		Amount	Calc.	%Drift				
14	2,4-Dinitrotoluene	1000.000	1117.953	-11.8	115	-0.01	14.83-15.83	
		Amount	Calc.	%Drift				
15	o-Nitrotoluene	1000.000	998.107	0.2	102	0.00	16.37-17.37	
		Amount	Calc.	%Drift				
16	3,5-Dinitroaniline	1000.000	1184.025	-18.4	119	-0.08	15.80-16.80	
		Amount	Calc.	%Drift				
17	p-Nitrotoluene	1000.000	1033.084	-3.3	102	-0.04	17.53-18.53	
18	4-Amino-2,6-Dinitrotol	1000.000	1030.080	-3.0	102	-0.04	17.53-18.53	
19	m-Nitrotoluene	1000.000	1080.116	-8.0	106	-0.03	18.75-19.75	
		Amount	Calc.	%Drift				
20	2-Amino-4,6-Dinitrotol	1000.000	1095.568	-9.6	109	-0.09	19.71-20.71	
		Amount	Calc.	%Drift				
21	PETN	5000.000	5424.961	-8.5	100	0.04	21.25-22.25	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Thu May 10 13:17:27 2018

6.8.21

6

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614666.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	963.679	3.6	97	0.03	4.49- 5.49
2	HMX	1000.000	1070.987	-7.1	113	0.04	4.89- 5.89
3	DNX	1000.000	1052.334	-5.2	108	0.03	5.06- 6.06
4	MNX	1000.000	1045.217	-4.5	105	0.02	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	975.245	2.5	100	0.05	6.94- 7.94
6	RDX	1000.000	977.029	2.3	99	0.04	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	996.769	0.3	104	0.04	9.43-10.43
8	Nitrobenzene	1000.000	961.532	3.8	102	0.03	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	966.653	3.3	104	0.05	11.16-12.16
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	906.723	9.3	98	0.04	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1119.219	-11.9	113	0.03	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1004.018	-0.4	103	0.04	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1004.950	-0.5	104	0.03	14.83-15.83
15	o-Nitrotoluene	1000.000	984.504	1.5	101	0.04	16.37-17.37
	---------- Amount	Calc.	%Drift	----------			
16	3,5-Dinitroaniline	1000.000	1125.205	-12.5	114	-0.03	15.80-16.80
	---------- Amount	Calc.	%Drift	----------			
17	p-Nitrotoluene	1000.000	1010.044	-1.0	103	0.00	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1010.044	-1.0	103	0.00	17.53-18.53
19	m-Nitrotoluene	1000.000	1029.273	-2.9	101	0.02	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1043.792	-4.4	103	-0.03	19.71-20.71
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	963.753	3.6	97	0.03	4.49- 5.49
2	HMX	1000.000	1077.679	-7.8	113	0.04	4.89- 5.89
3	DNX	1000.000	1047.653	-4.8	108	0.03	5.06- 6.06
4	MNX	1000.000	1044.373	-4.4	105	0.02	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	975.345	2.5	99	0.05	6.94- 7.94
6	RDX	1000.000	981.360	1.9	98	0.04	7.40- 8.40
	---------- Amount	Calc.	%Drift	----------			
7	1,3-Dinitrobenzene	1000.000	923.211	7.7	94	0.04	9.43-10.43
	---------- Amount	Calc.	%Drift	----------			
8	Nitrobenzene	1000.000	975.456	2.5	93	0.03	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1050.880	-5.1	102	0.05	11.16-12.16

Continuing Calibration Summary

Job Number: FA53725 **Sample:** GGG2626-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614666.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5167.220	-3.3	97	0.06	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	970.472	3.0	98	0.04	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1176.120	-17.6	120	0.03	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1107.588	-10.8	110	0.04	14.12-15.12
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1138.873	-13.9	117	0.03	14.83-15.83
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	986.285	1.4	101	0.04	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1178.461	-17.8	118	-0.03	15.80-16.80
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1016.031	-1.6	101	0.00	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1013.077	-1.3	101	0.00	17.53-18.53
19	m-Nitrotoluene	1000.000	1060.041	-6.0	104	0.02	18.75-19.75
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1084.317	-8.4	108	-0.03	19.71-20.71
		Amount	Calc.	%Drift			
21	PETN	5000.000	5441.897	-8.8	101	0.08	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Thu May 10 13:17:28 2018

6.8.22

6

GC/LC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:15

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614591.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0507RPB3\GG614591.D\dad1A.ch
Acq On : 07-May-2018, 17:50:24 Operator: evitam
Sample : fa53725-1 Inst : G1315B
Misc : op69919,Ggg2625,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:06:03 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.23	2526688	4849786	486.380	448.322m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		97.28%	89.66%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

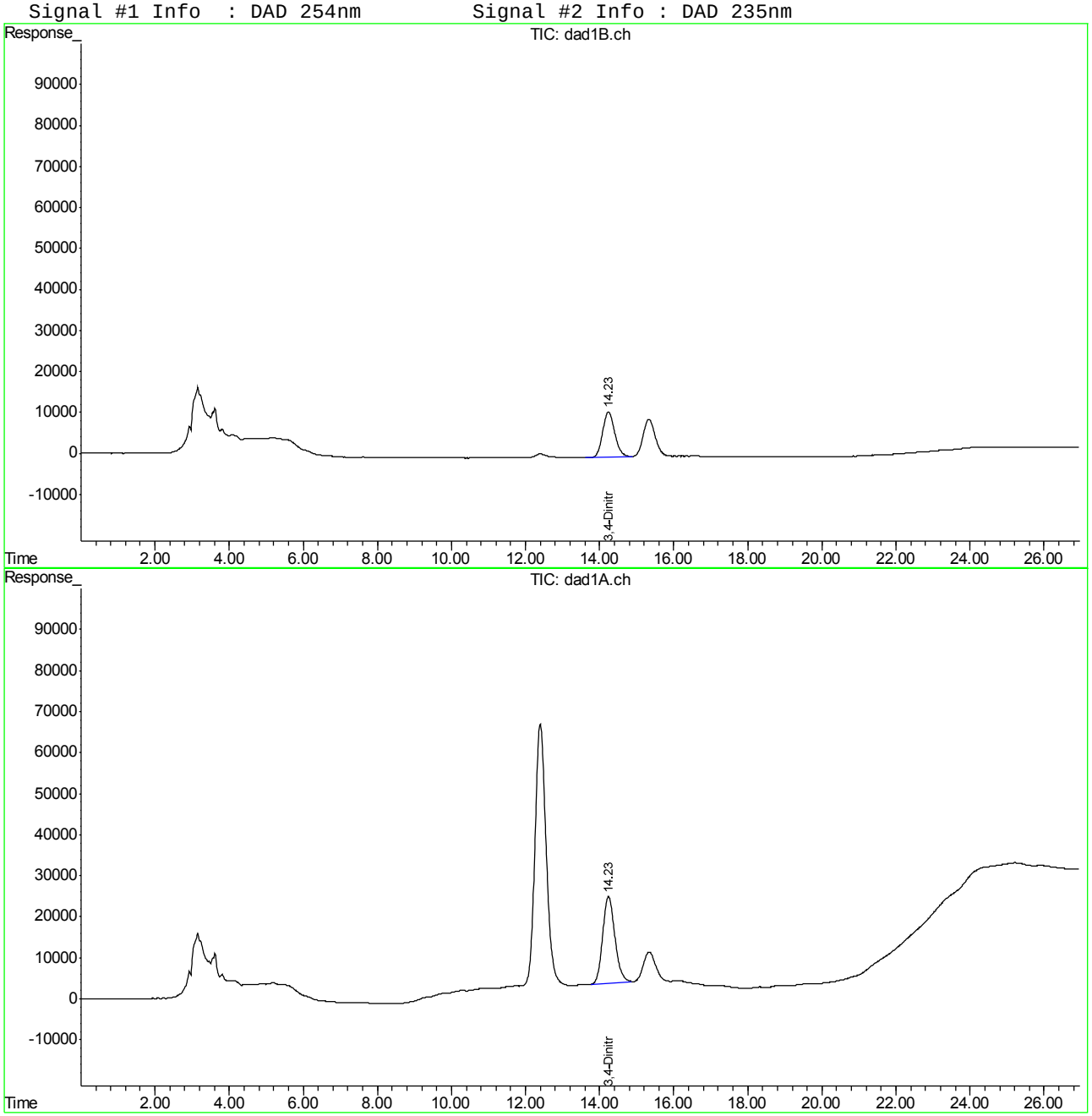
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614591.D 8330RPB.M_1113M.M Tue May 08 11:19:00 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614591.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0507RPB3\GG614591.D\dad1A.ch
Acq On : 07-May-2018, 17:50:24 Operator: evitam
Sample : fa53725-1 Inst : G1315B
Misc : op69919,Ggg2625,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:14 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

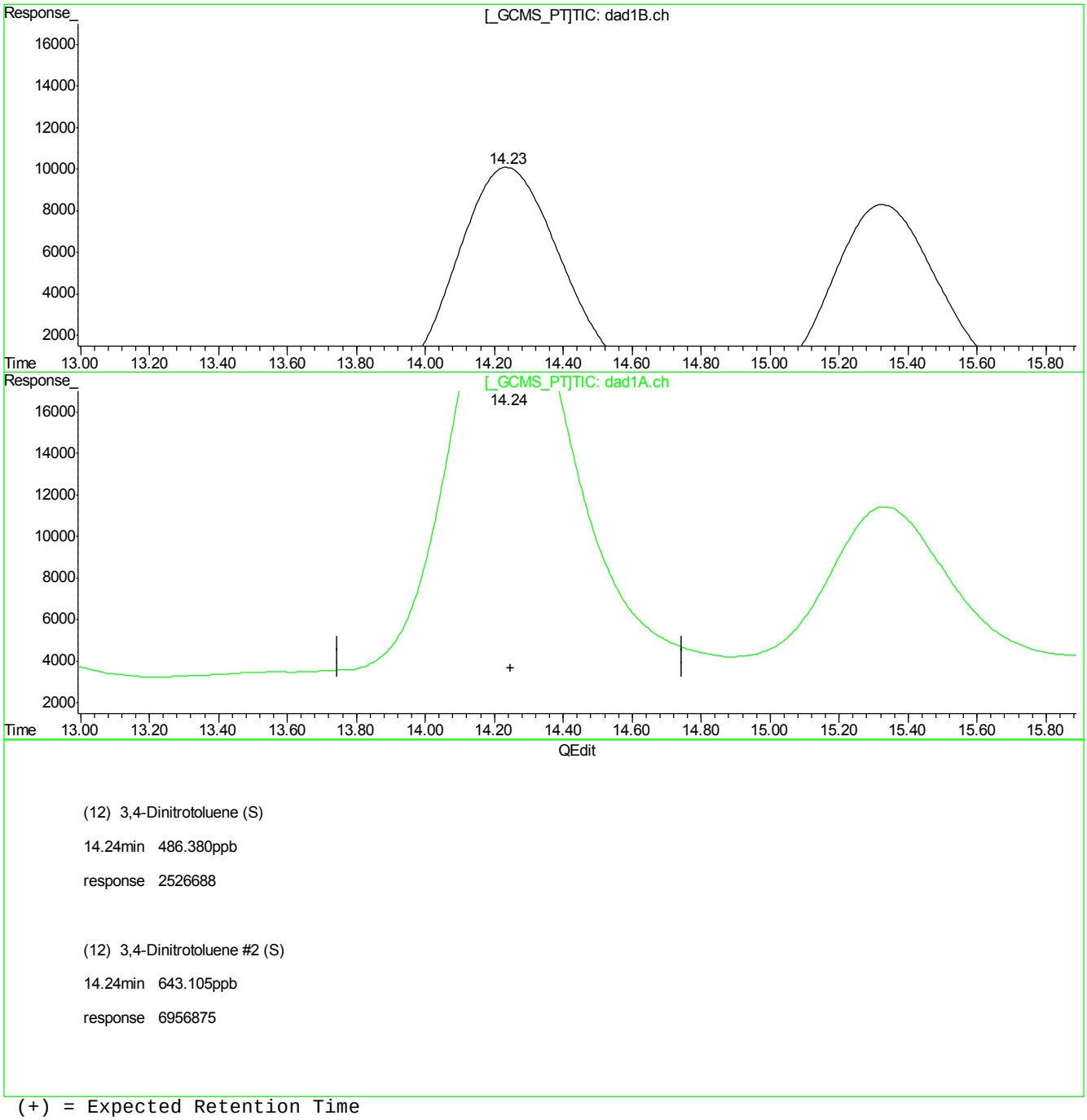
Sample Number:	FA53725-1	**Method:**	SW846 8330B
Lab FileID:	GG614591.D	**Analyst approved:**	05/08/18 11:23 Evita Martinez
Injection Time:	05/07/18 17:50	**Supervisor approved:**	05/08/18 16:15 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.23	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614591.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0507RPB3\GG614591.D\dad1A.ch
Acq On : 07-May-2018, 17:50:24 Operator: evitam
Sample : fa53725-1 Inst : G1315B
Misc : op69919,Ggg2625,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.24min 486.380ppb

response 2526688

(12) 3,4-Dinitrotoluene #2 (S)

14.24min 643.105ppb

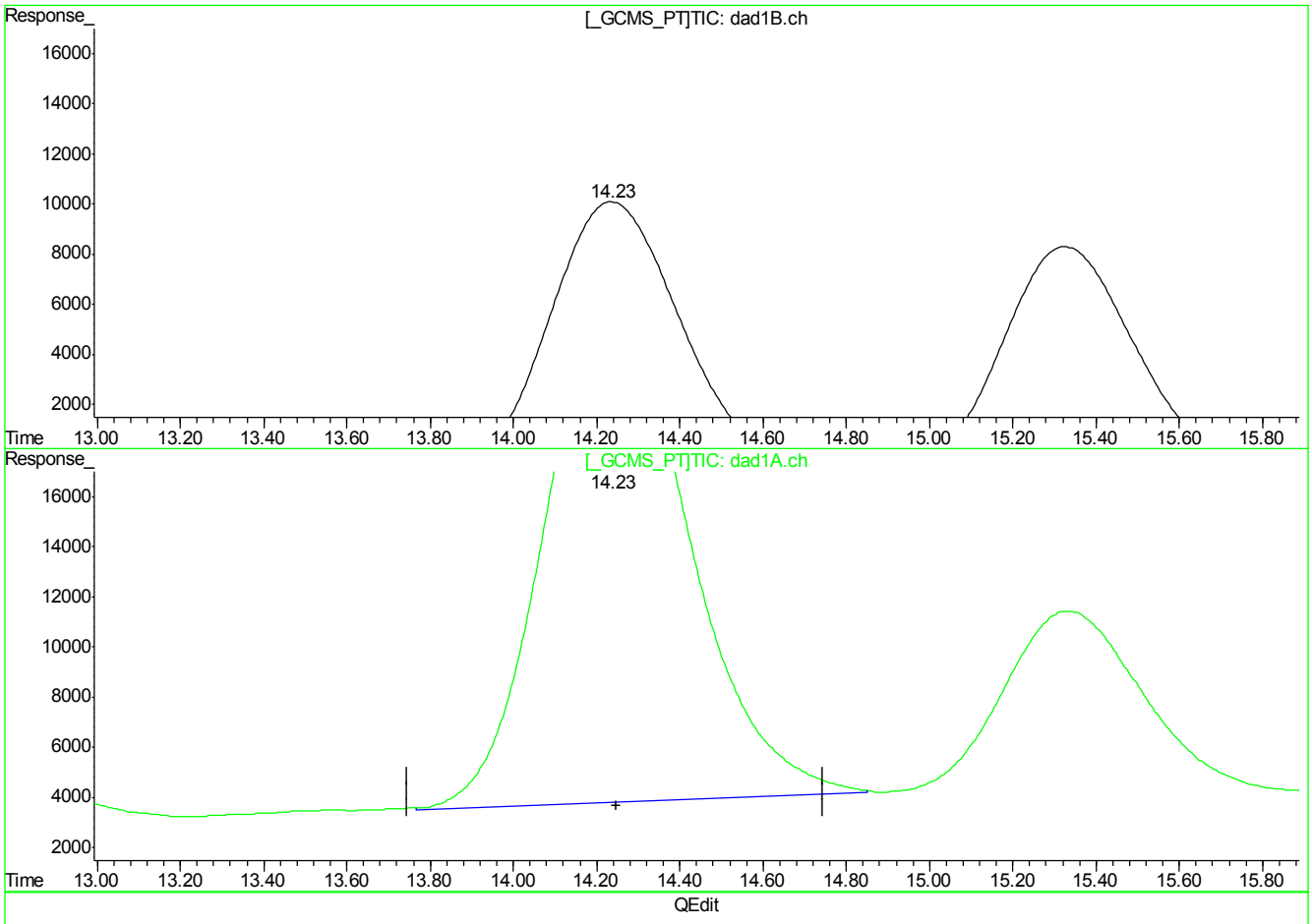
response 6956875

(+) = Expected Retention Time
GG614591.D 8330RPB.M_1113M.M Tue May 08 11:14:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614591.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0507RPB3\GG614591.D\dad1A.ch
Acq On : 07-May-2018, 17:50:24 Operator: evitam
Sample : fa53725-1 Inst : G1315B
Misc : op69919,Ggg2625,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.24min 486.380ppb

response 2526688

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 448.322ppb m

response 4849786

(+) = Expected Retention Time
GG614591.D 8330RPB.M_1113M.M Tue May 08 11:14:09 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614594.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0507RPB3\GG614594.D\dad1A.ch
Acq On : 07-May-2018, 19:18:51 Operator: evitam
Sample : fa53725-31 Inst : G1315B
Misc : op69919,Ggg2625,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:06:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	2630757	5600581	506.413	517.727
	Spiked Amount 500.000	Range 69 - 134		Recovery =		101.28%	103.55%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

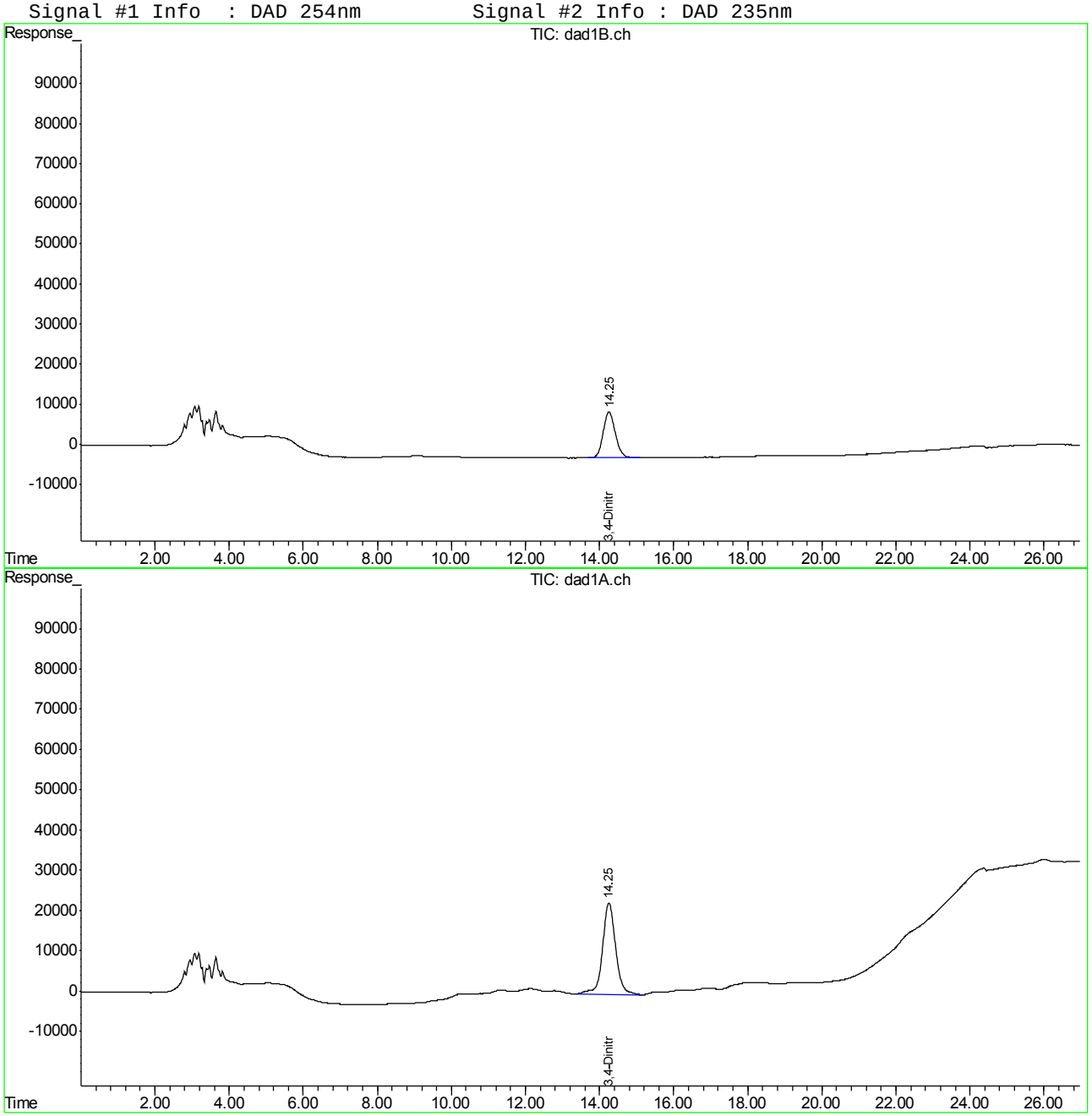
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614594.D 8330RPB.M_1113M.M Tue May 08 11:19:03 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614594.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0507RPB3\GG614594.D\dad1A.ch
Acq On : 07-May-2018, 19:18:51 Operator: evitam
Sample : fa53725-31 Inst : G1315B
Misc : op69919,Ggg2625,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614603.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0508RPB3\GG614603.D\dad1A.ch
Acq On : 08-May-2018, 09:58:33 Operator: evitam
Sample : fa53725-40 Inst : G1315B
Misc : op69919,Ggg2626,10.02,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.19	14.19	2772614	5342963	533.720	493.913
	Spiked Amount 500.000	Range 69 - 134		Recovery =		106.74%	98.78%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

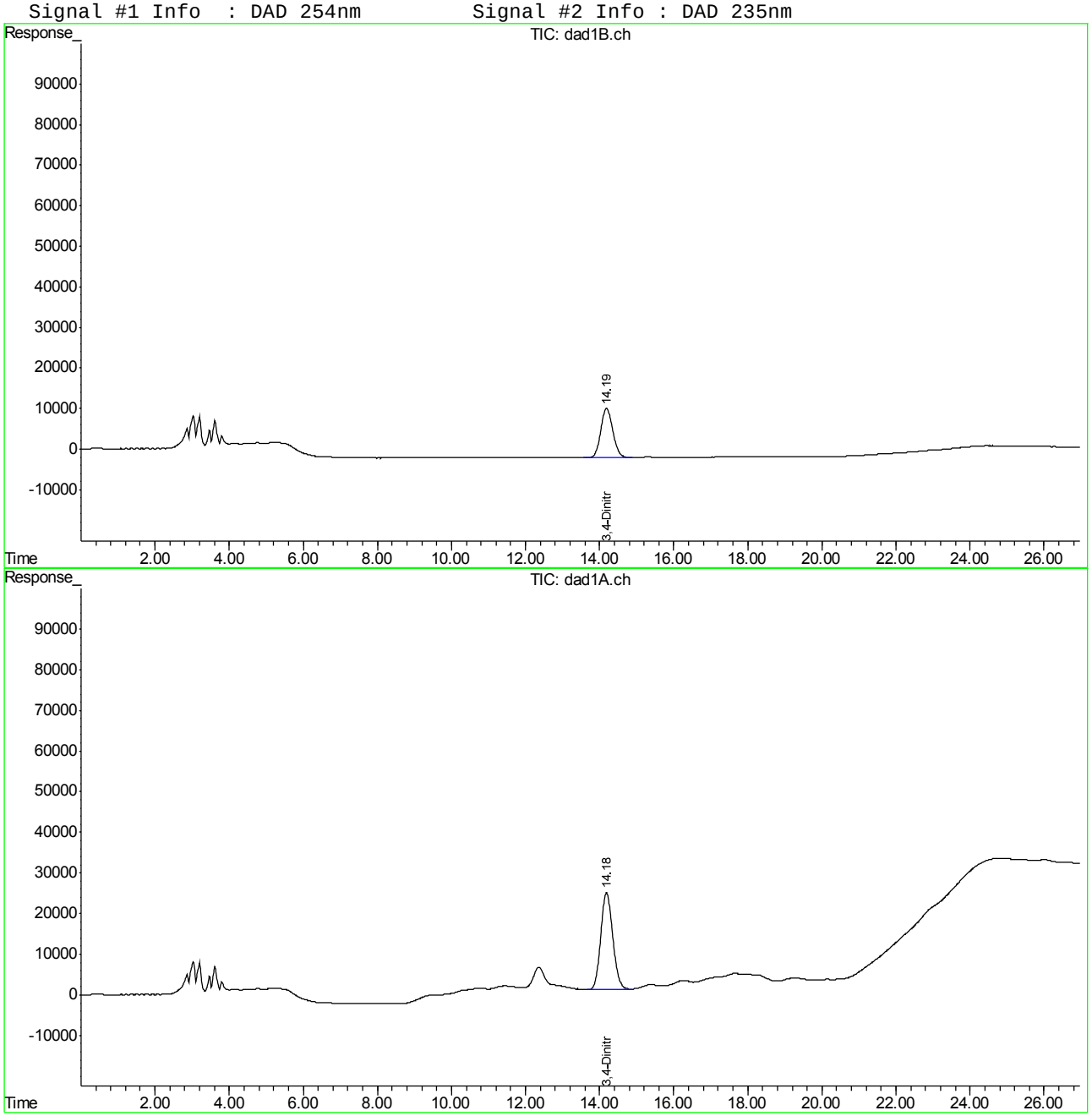
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614603.D 8330RPB.M_1113M.M Tue May 08 14:41:42 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614603.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0508RPB3\GG614603.D\dad1A.ch
Acq On : 08-May-2018, 09:58:33 Operator: evitam
Sample : fa53725-40 Inst : G1315B
Misc : op69919,Ggg2626,10.02,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:35 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614587.D\dad1B.ch Vial: 19
Signal #2 : G:\DATA\0507RPB3\GG614587.D\dad1A.ch
Acq On : 07-May-2018, 15:52:31 Operator: evitam
Sample : fa53725-43 Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:05:59 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.19	14.19	2611689	5264274	502.743	486.638
	Spiked Amount 500.000	Range 69 - 134		Recovery =		100.55%	97.33%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

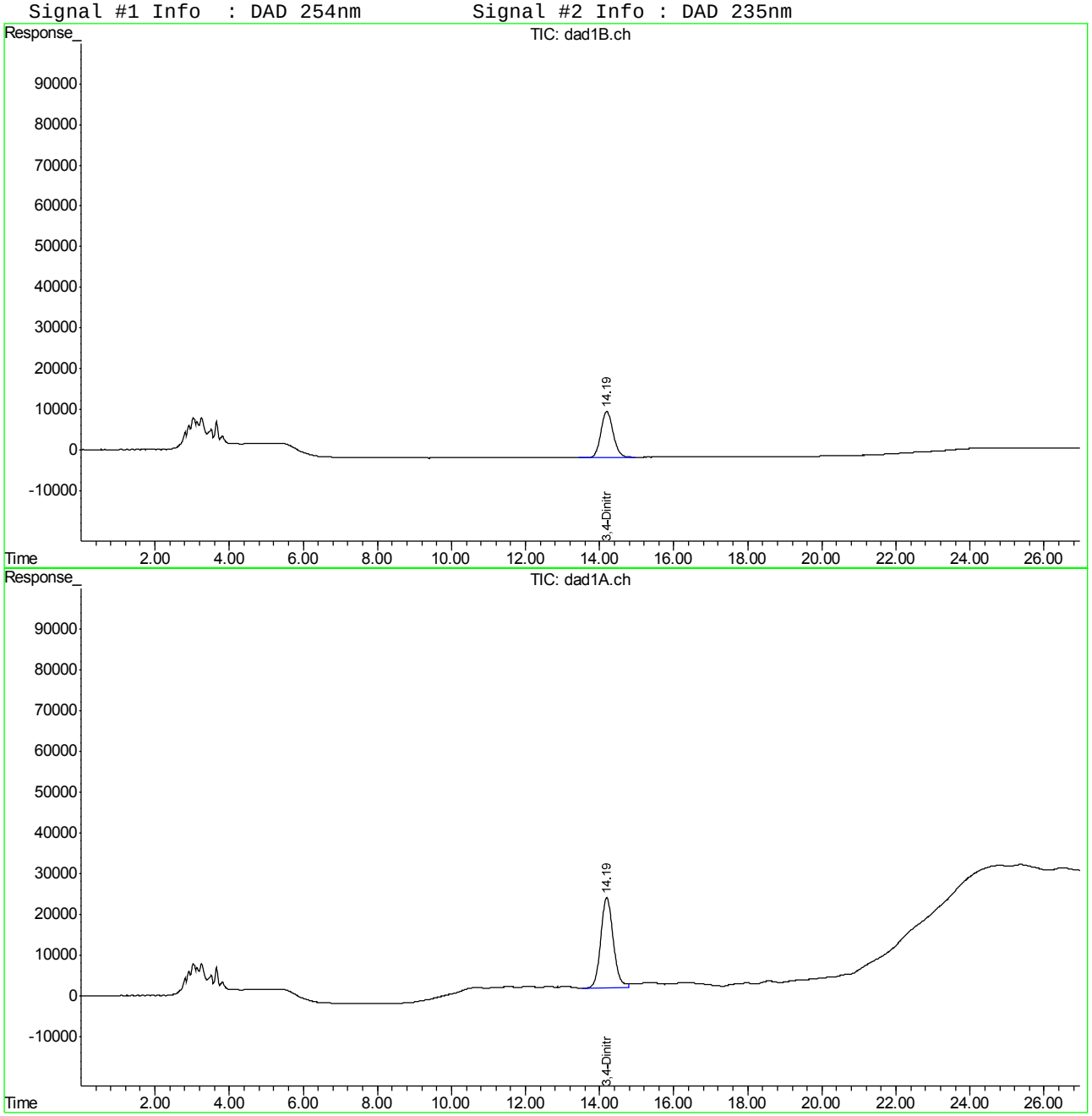
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614587.D 8330RPB.M_1113M.M Tue May 08 11:18:56 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614587.D\dad1B.ch Vial: 19
Signal #2 : G:\DATA\0507RPB3\GG614587.D\dad1A.ch
Acq On : 07-May-2018, 15:52:31 Operator: evitam
Sample : fa53725-43 Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:08 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614604.D\dad1B.ch Vial: 21
Signal #2 : G:\DATA\0508RPB3\GG614604.D\dad1A.ch
Acq On : 08-May-2018, 10:28:02 Operator: evitam
Sample : fa53725-51 Inst : G1315B
Misc : op69919,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:50 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.18	14.19	2524861	5241242	486.028	484.509
	Spiked Amount 500.000	Range 69 - 134		Recovery =		97.21%	96.90%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

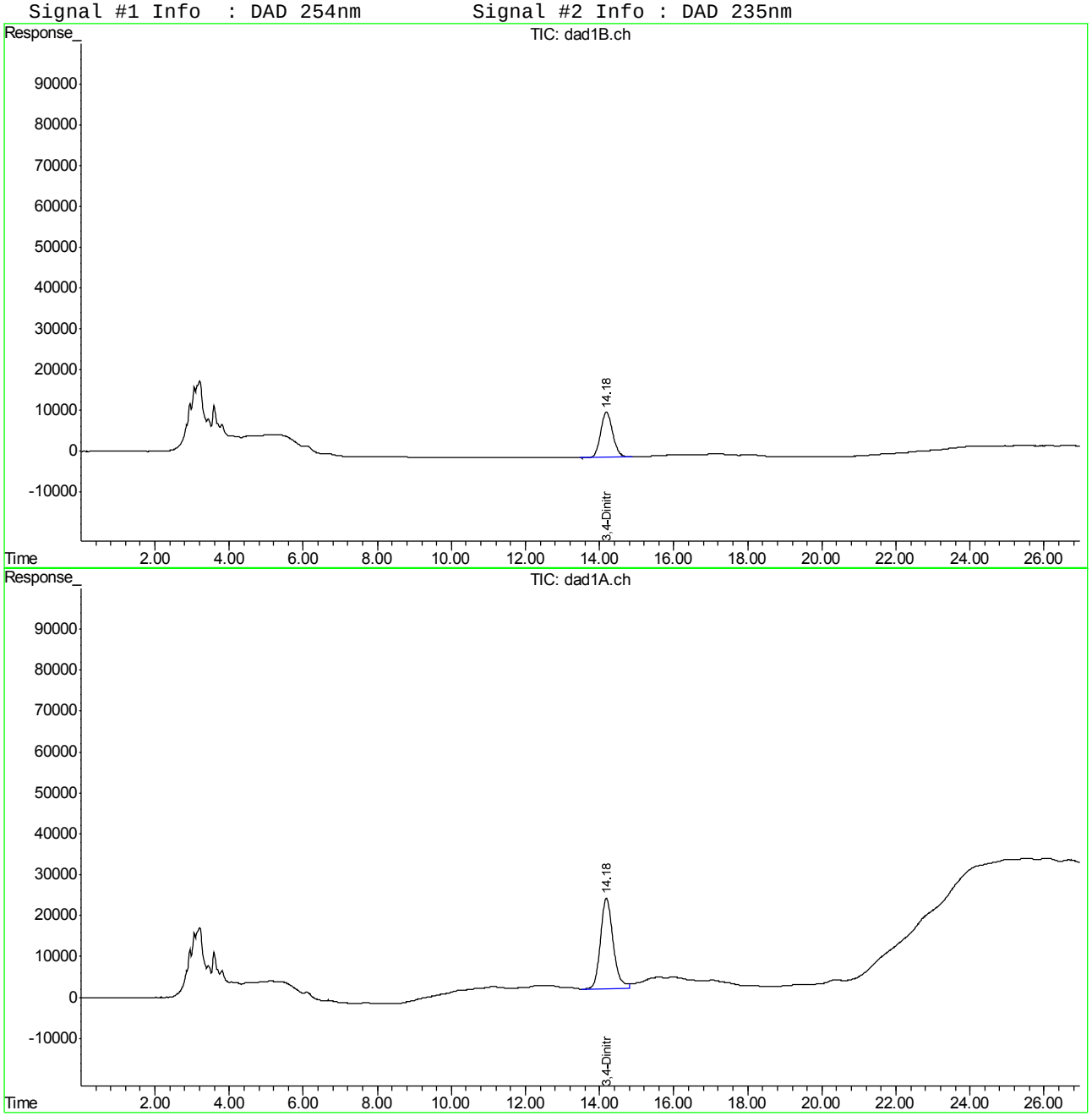
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614604.D 8330RPB.M_1113M.M Tue May 08 14:41:49 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614604.D\dad1B.ch Vial: 21
Signal #2 : G:\DATA\0508RPB3\GG614604.D\dad1A.ch
Acq On : 08-May-2018, 10:28:02 Operator: evitam
Sample : fa53725-51 Inst : G1315B
Misc : op69919,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:35 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614608.D\dad1B.ch Vial: 30
Signal #2 : G:\DATA\0508RPB3\GG614608.D\dad1A.ch
Acq On : 08-May-2018, 12:25:55 Operator: evitam
Sample : fa53725-54 Inst : G1315B
Misc : op69920,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:54 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2654818	5141067	511.045	475.249
	Spiked Amount 500.000	Range 69 - 134		Recovery =		102.21%	95.05%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

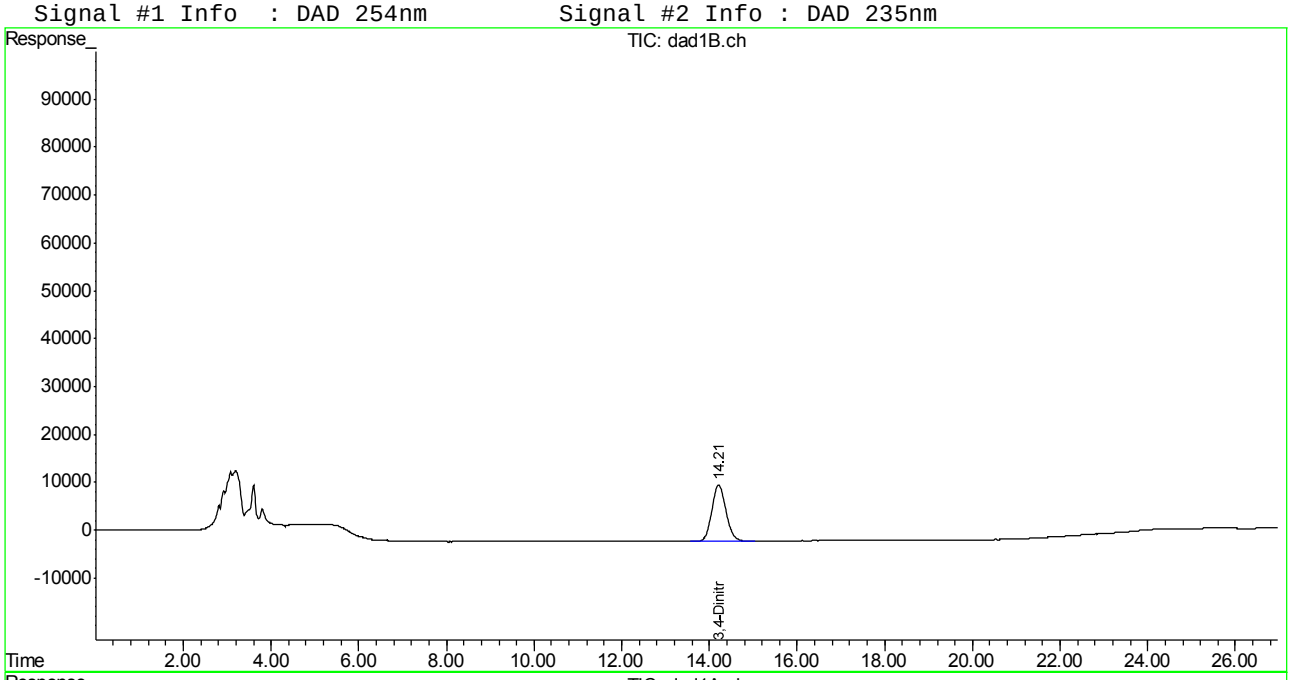
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614608.D 8330RPB.M_1113M.M Tue May 08 14:41:53 2018 Page 1

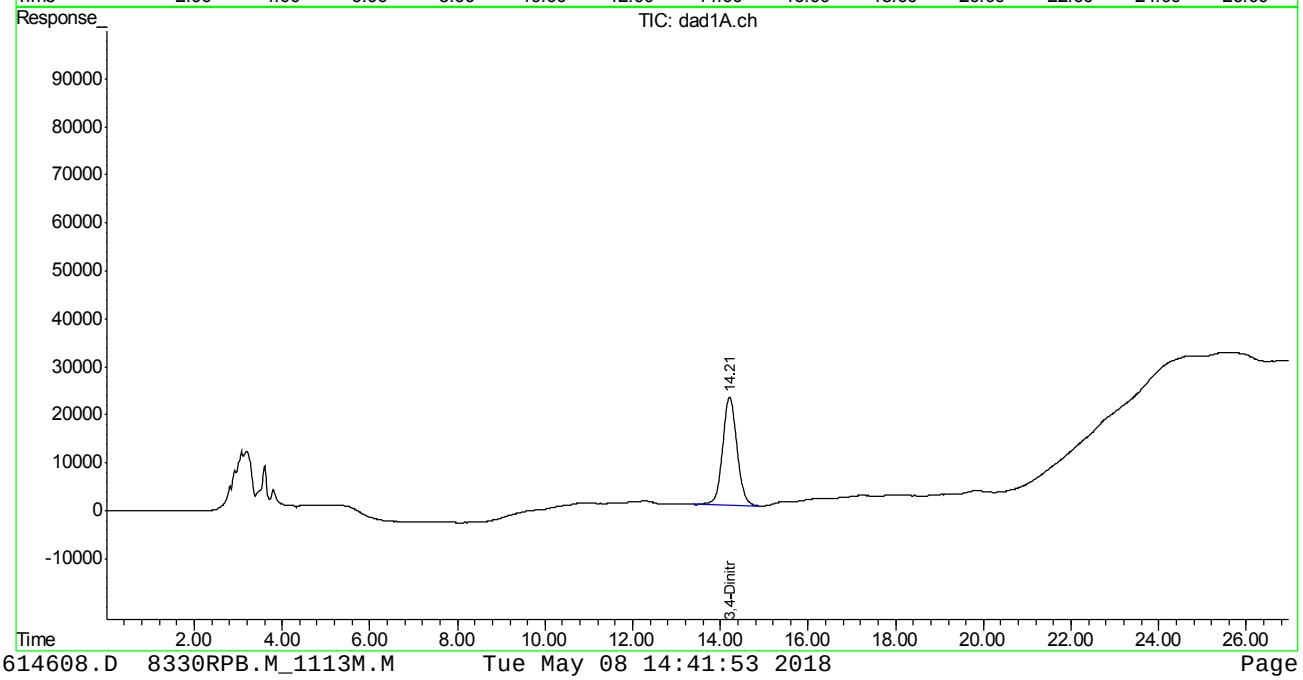
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614608.D\dad1B.ch Vial: 30
Signal #2 : G:\DATA\0508RPB3\GG614608.D\dad1A.ch
Acq On : 08-May-2018, 12:25:55 Operator: evitam
Sample : fa53725-54 Inst : G1315B
Misc : op69920,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:39 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614611.D\dad1B.ch Vial: 34
Signal #2 : G:\DATA\0508RPB3\GG614611.D\dad1A.ch
Acq On : 08-May-2018, 13:54:21 Operator: evitam
Sample : fa53725-56 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:57 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.19	14.19	2678871	5092802	515.675	470.787
	Spiked Amount 500.000	Range 69 - 134		Recovery =		103.14%	94.16%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

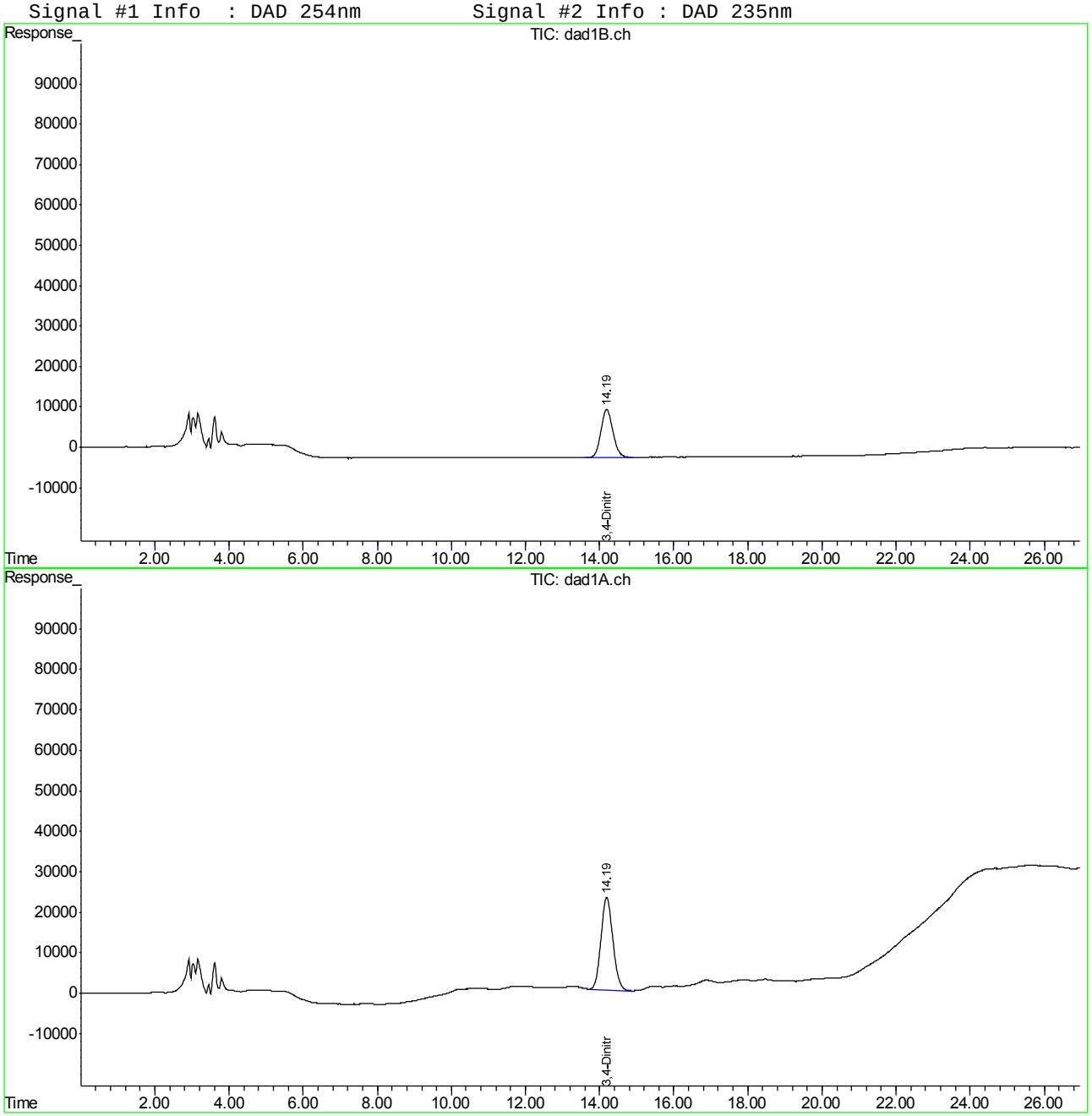
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614611.D 8330RPB.M_1113M.M Tue May 08 14:41:56 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614611.D\dad1B.ch Vial: 34
Signal #2 : G:\DATA\0508RPB3\GG614611.D\dad1A.ch
Acq On : 08-May-2018, 13:54:21 Operator: evitam
Sample : fa53725-56 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:41 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614617.D\dad1B.ch Vial: 39
Signal #2 : G:\DATA\0508RPB3\GG614617.D\dad1A.ch
Acq On : 08-May-2018, 18:26:20 Operator: evitam
Sample : fa53725-59 Inst : G1315B
Misc : op69920,Ggg2626,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:11:59 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.22	2720017	5422614	523.595	501.276m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		104.72%	100.26%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

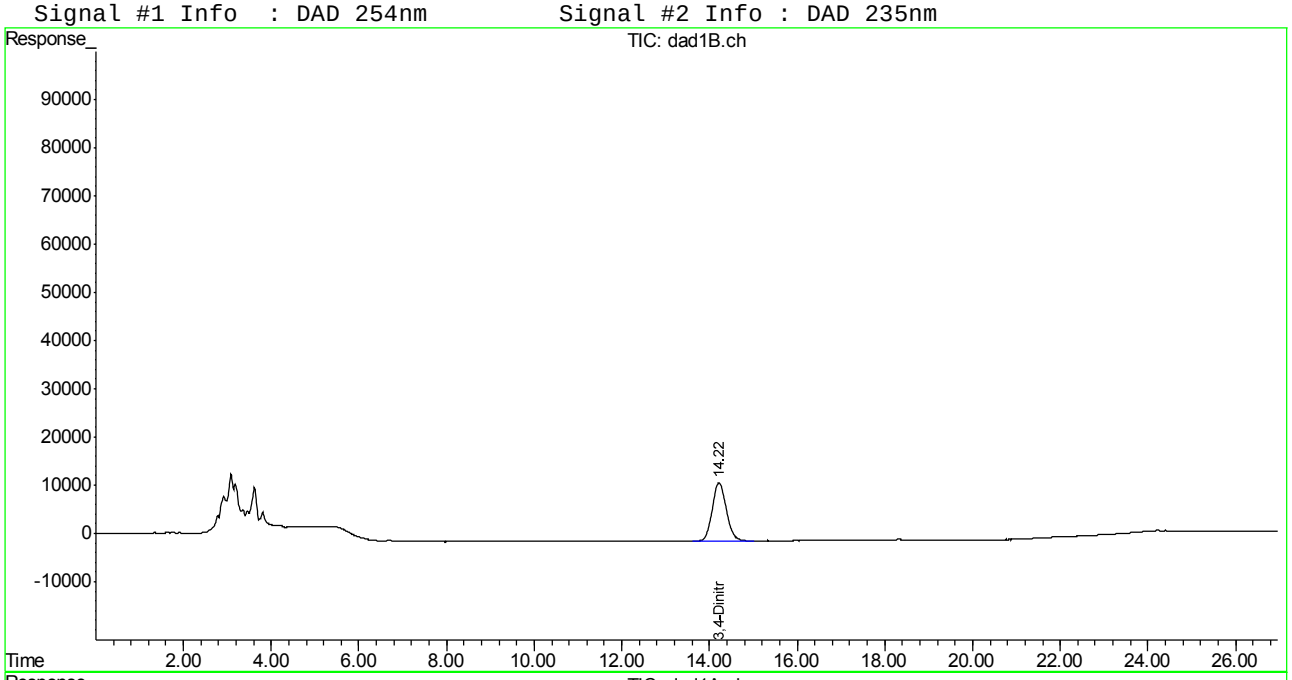
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614617.D 8330RPB.M_1113M.M Wed May 09 11:10:08 2018 Page 1

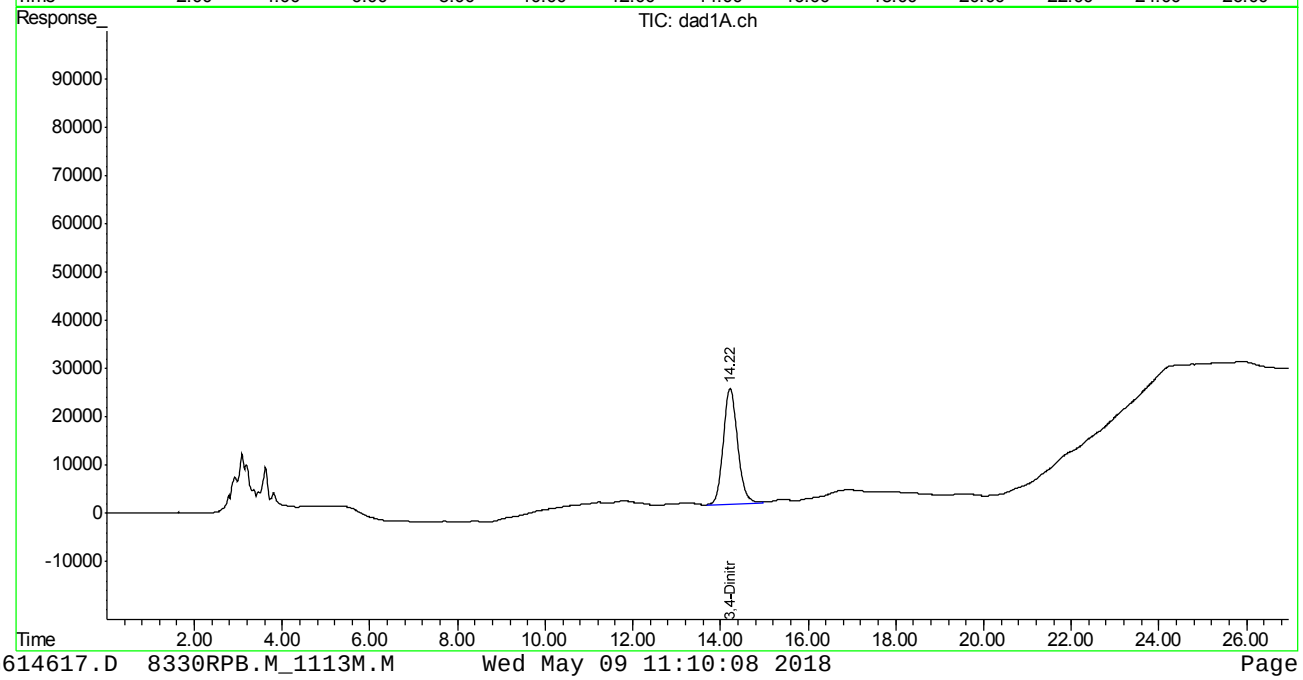
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614617.D\dad1B.ch Vial: 39
Signal #2 : G:\DATA\0508RPB3\GG614617.D\dad1A.ch
Acq On : 08-May-2018, 18:26:20 Operator: evitam
Sample : fa53725-59 Inst : G1315B
Misc : op69920,Ggg2626,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:25 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

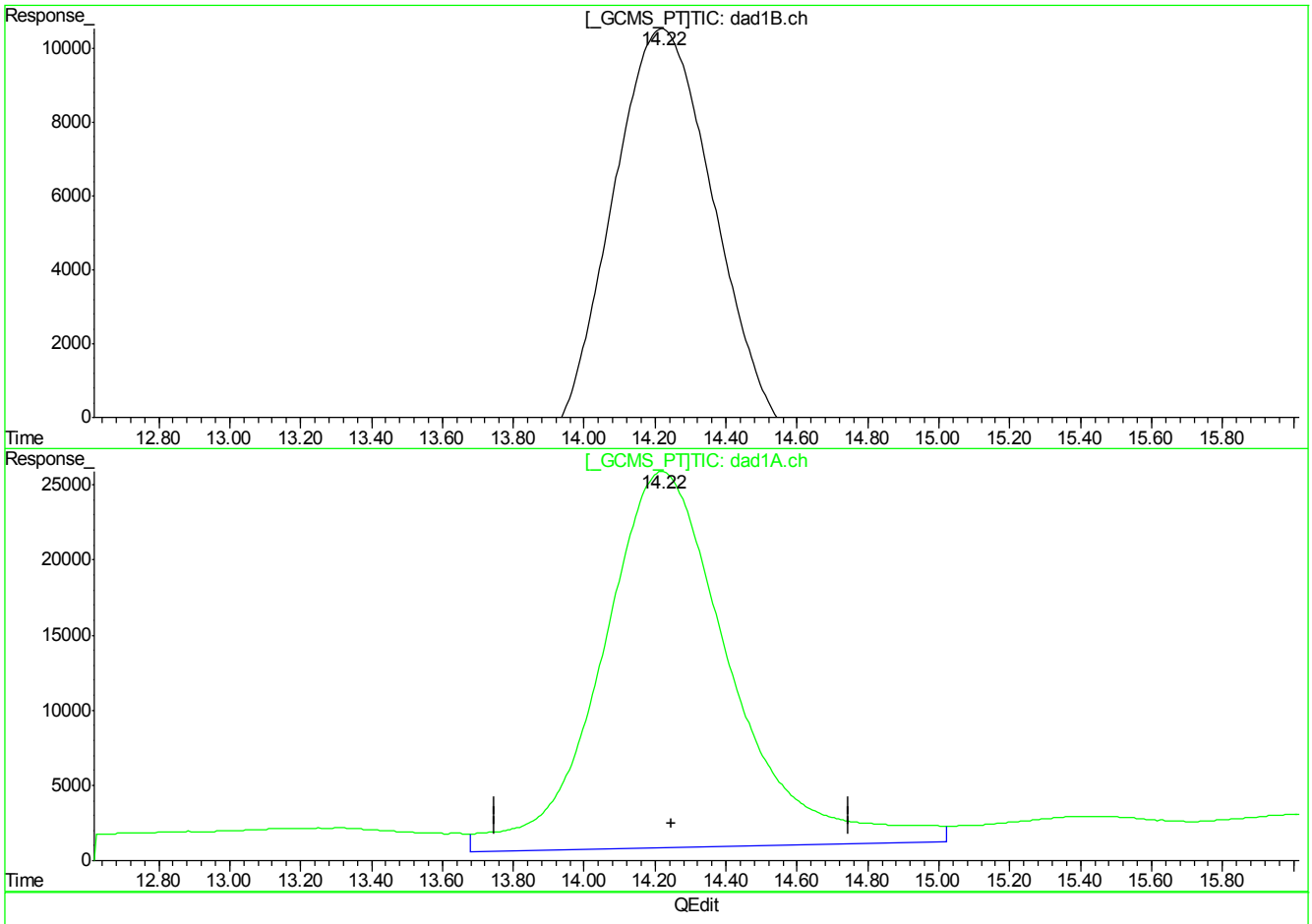
Sample Number:	FA53725-59	**Method:**	SW846 8330B
Lab FileID:	GG614617.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/08/18 18:26	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.22	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614617.D\dad1B.ch Vial: 39
Signal #2 : G:\DATA\0508RPB3\GG614617.D\dad1A.ch
Acq On : 08-May-2018, 18:26:20 Operator: evitam
Sample : fa53725-59 Inst : G1315B
Misc : op69920,Ggg2626,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.22min 523.595ppb

response 2720017

(12) 3,4-Dinitrotoluene #2 (S)

14.22min 585.143ppb

response 6329859

(+) = Expected Retention Time
GG614617.D 8330RPB.M_1113M.M Wed May 09 10:25:39 2018

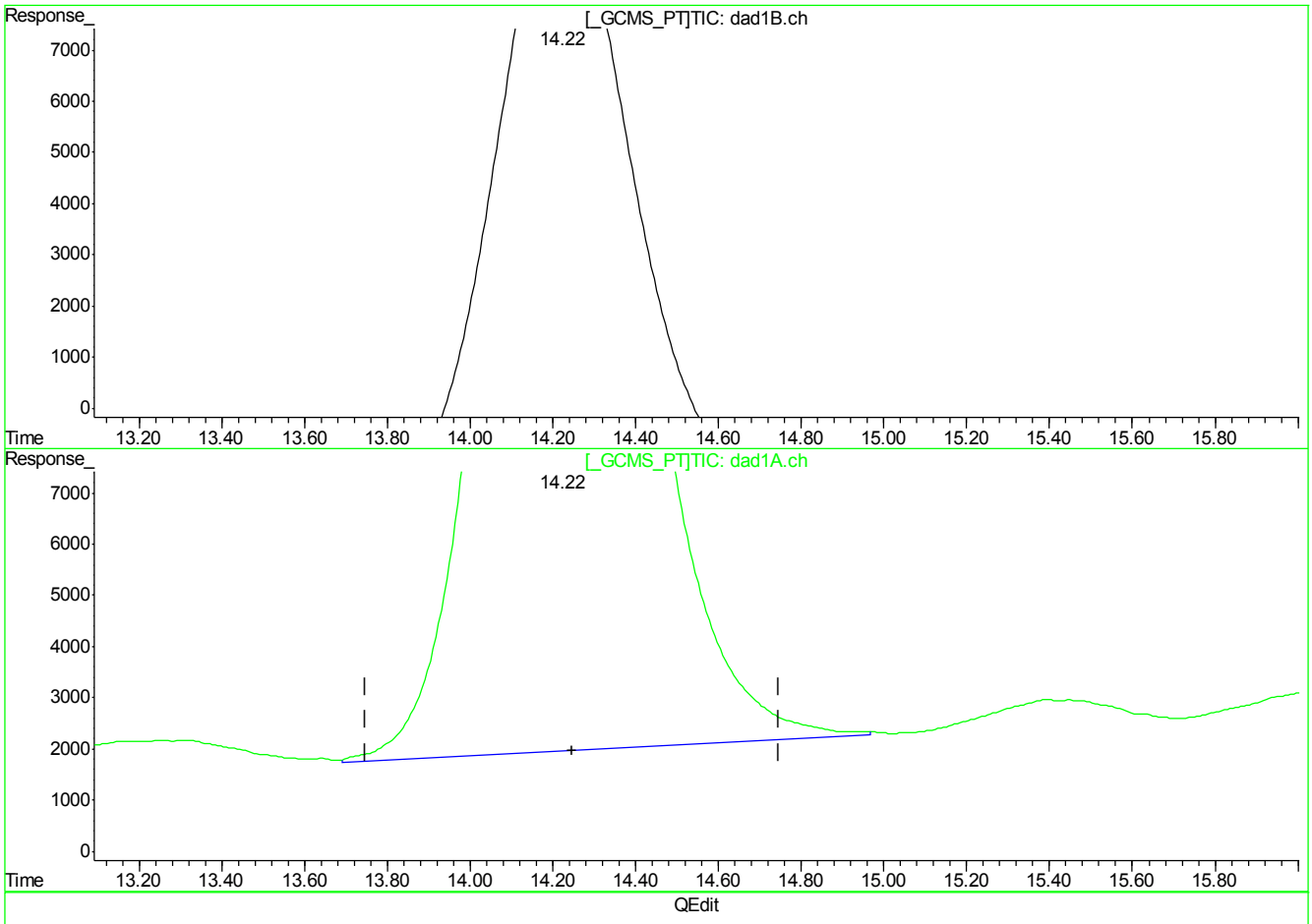
7.1.8.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614617.D\dad1B.ch Vial: 39
Signal #2 : G:\DATA\0508RPB3\GG614617.D\dad1A.ch
Acq On : 08-May-2018, 18:26:20 Operator: evitam
Sample : fa53725-59 Inst : G1315B
Misc : op69920,Ggg2626,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.22min 523.595ppb

response 2720017

(12) 3,4-Dinitrotoluene #2 (S)

14.22min 501.276ppb m

response 5422614

(+) = Expected Retention Time
GG614617.D 8330RPB.M_1113M.M Wed May 09 10:25:42 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614618.D\dad1B.ch Vial: 40
Signal #2 : G:\DATA\0508RPB3\GG614618.D\dad1A.ch
Acq On : 08-May-2018, 18:55:48 Operator: evitam
Sample : fa53725-60 Inst : G1315B
Misc : op69920,Ggg2626,10.06,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:00 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.22	2670419	5661635	514.048	523.371
	Spiked Amount 500.000	Range 69 - 134		Recovery =		102.81%	104.67%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

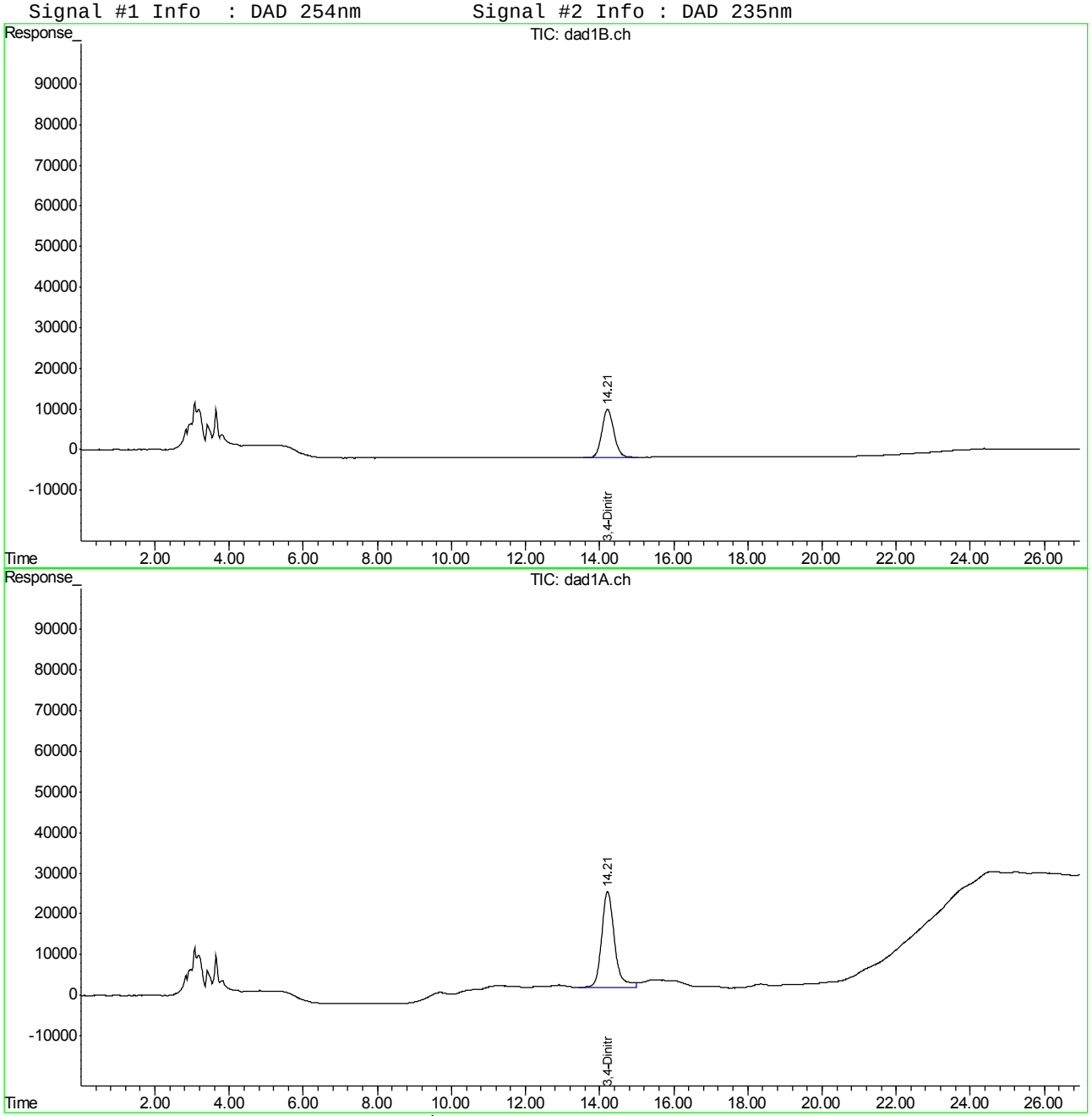
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614618.D 8330RPB.M_1113M.M Wed May 09 11:10:09 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614618.D\dad1B.ch Vial: 40
Signal #2 : G:\DATA\0508RPB3\GG614618.D\dad1A.ch
Acq On : 08-May-2018, 18:55:48 Operator: evitam
Sample : fa53725-60 Inst : G1315B
Misc : op69920,Ggg2626,10.06,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:26 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614619.D\dad1B.ch Vial: 45
Signal #2 : G:\DATA\0508RPB3\GG614619.D\dad1A.ch
Acq On : 08-May-2018, 19:25:17 Operator: evitam
Sample : fa53725-65 Inst : G1315B
Misc : op69920,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2597892	5034069	500.087	465.358
	Spiked Amount 500.000	Range 69 - 134		Recovery =		100.02%	93.07%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

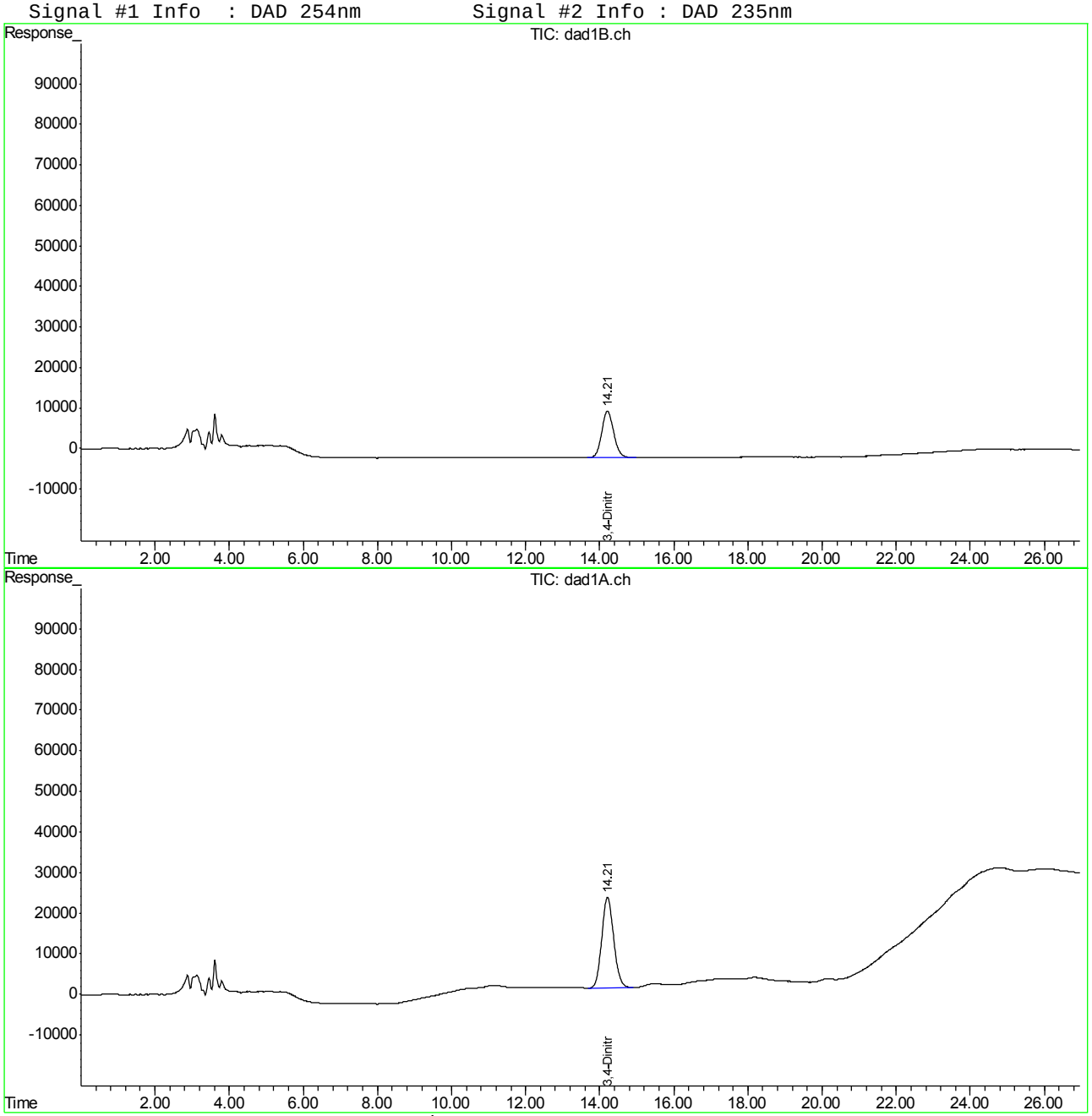
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614619.D 8330RPB.M_1113M.M Wed May 09 11:10:10 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614619.D\dad1B.ch Vial: 45
Signal #2 : G:\DATA\0508RPB3\GG614619.D\dad1A.ch
Acq On : 08-May-2018, 19:25:17 Operator: evitam
Sample : fa53725-65 Inst : G1315B
Misc : op69920,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:26 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059602.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059602.D\dad1A.ch
Acq On : 08-May-2018, 12:01:15 Operator: evitam
Sample : fa53725-89 Inst : G1315B
Misc : OP69921,gbb1729,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 13:00:14 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.22	10.21	1026196	1843973	383.524	391.107
	Spiked Amount 500.000	Range 69 - 134		Recovery =		76.70%	78.22%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

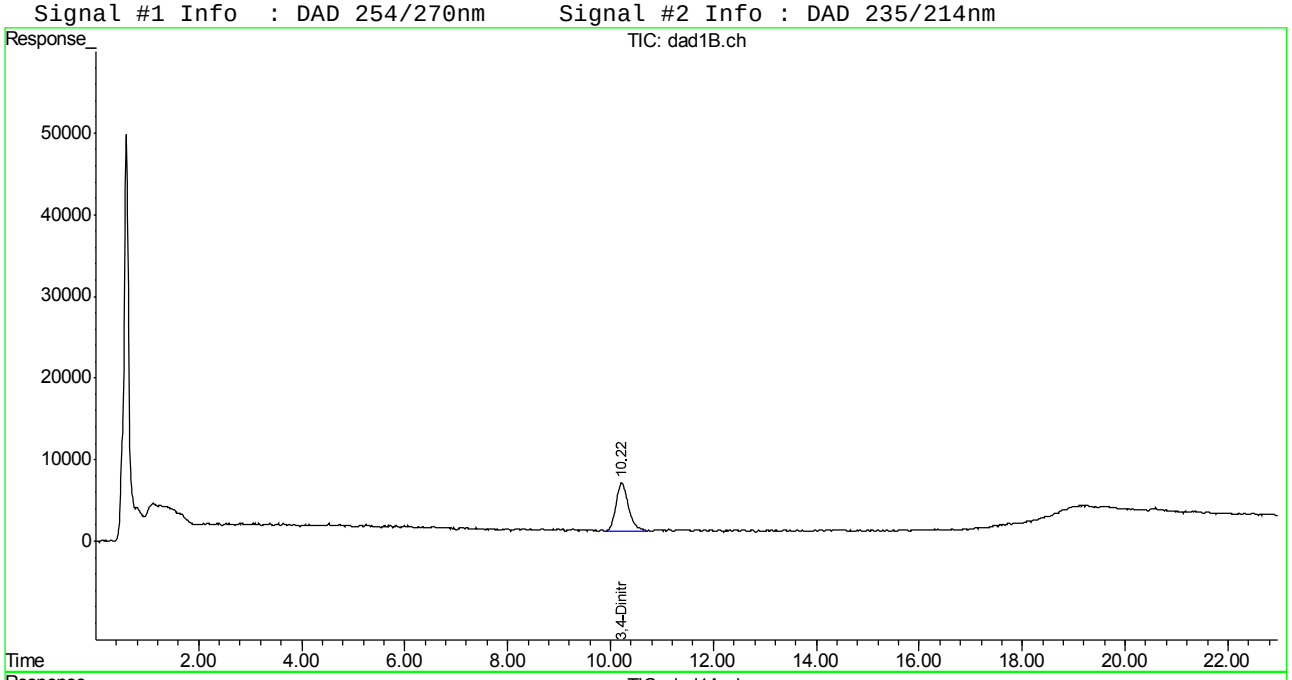
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059602.D 8330B_0419PLUS.M Tue May 08 14:12:00 2018 Page 1

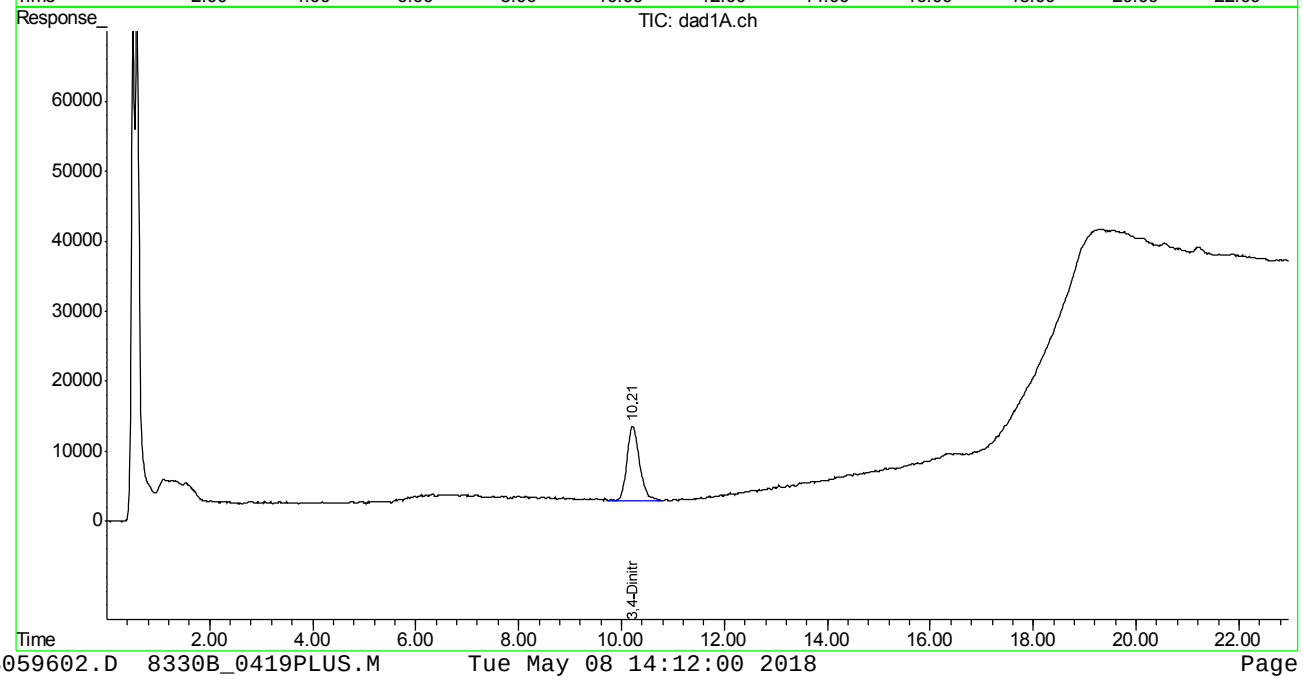
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059602.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059602.D\dad1A.ch
Acq On : 08-May-2018, 12:01:15 Operator: evitam
Sample : fa53725-89 Inst : G1315B
Misc : OP69921,gbb1729,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:09 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059605.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059605.D\dad1A.ch
Acq On : 08-May-2018, 13:31:04 Operator: evitam
Sample : fa53725-92 Inst : G1315B
Misc : OP69921,gbb1729,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 14:11:12 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.16	10.17	938010	1741015	350.566	369.270
	Spiked Amount 500.000	Range 69 - 134		Recovery =		70.11%	73.85%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D.	N.D.
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

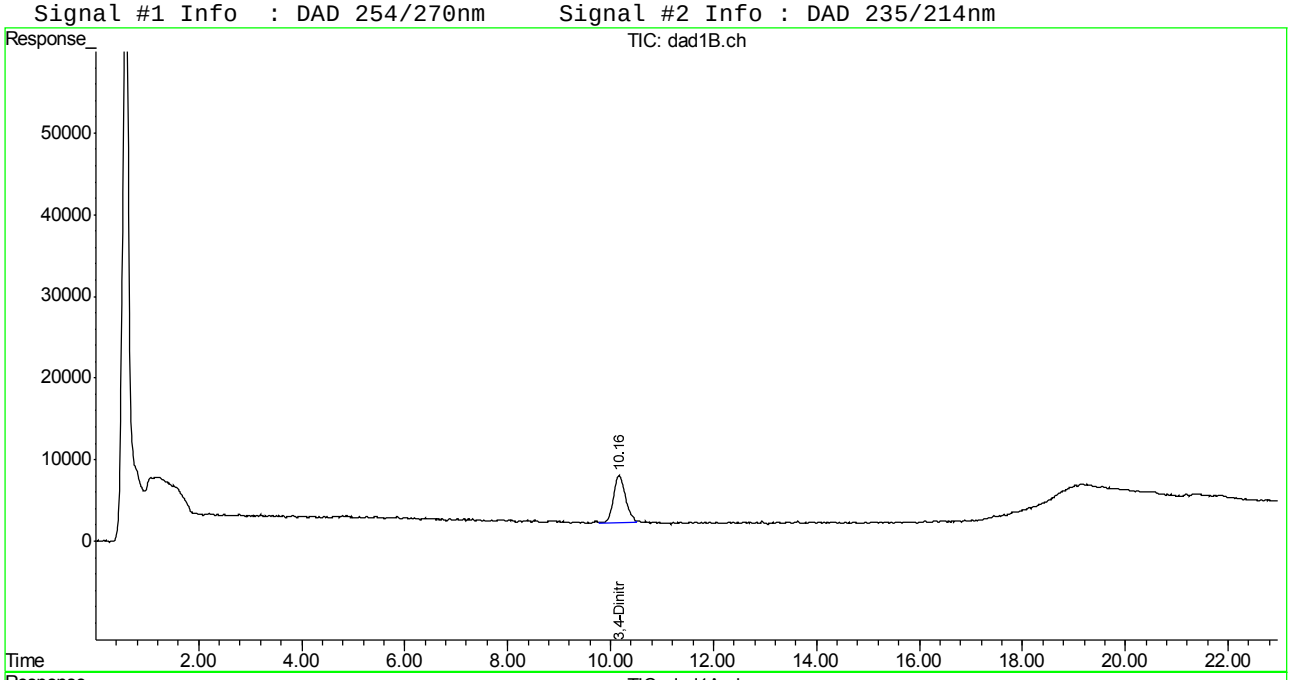
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059605.D 8330B_0419PLUS.M Tue May 08 14:18:57 2018 Page 1

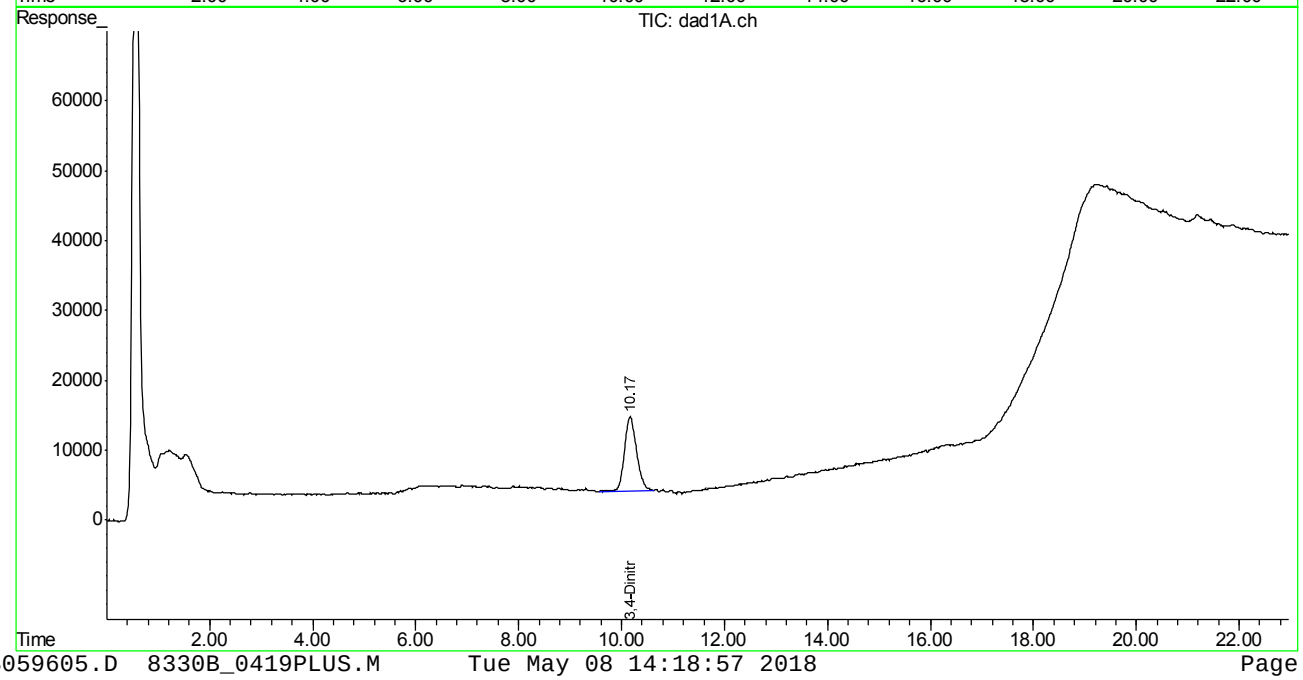
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059605.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059605.D\dad1A.ch
Acq On : 08-May-2018, 13:31:04 Operator: evitam
Sample : fa53725-92 Inst : G1315B
Misc : OP69921,gbb1729,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:11 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059608.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059608.D\dad1A.ch
Acq On : 08-May-2018, 15:06:26 Operator: evitam
Sample : fa53725-95 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 09 06:56:12 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.17	10.17	963458	1827345	360.077	387.580
	Spiked Amount 500.000	Range 69 - 134		Recovery =		72.02%	77.52%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

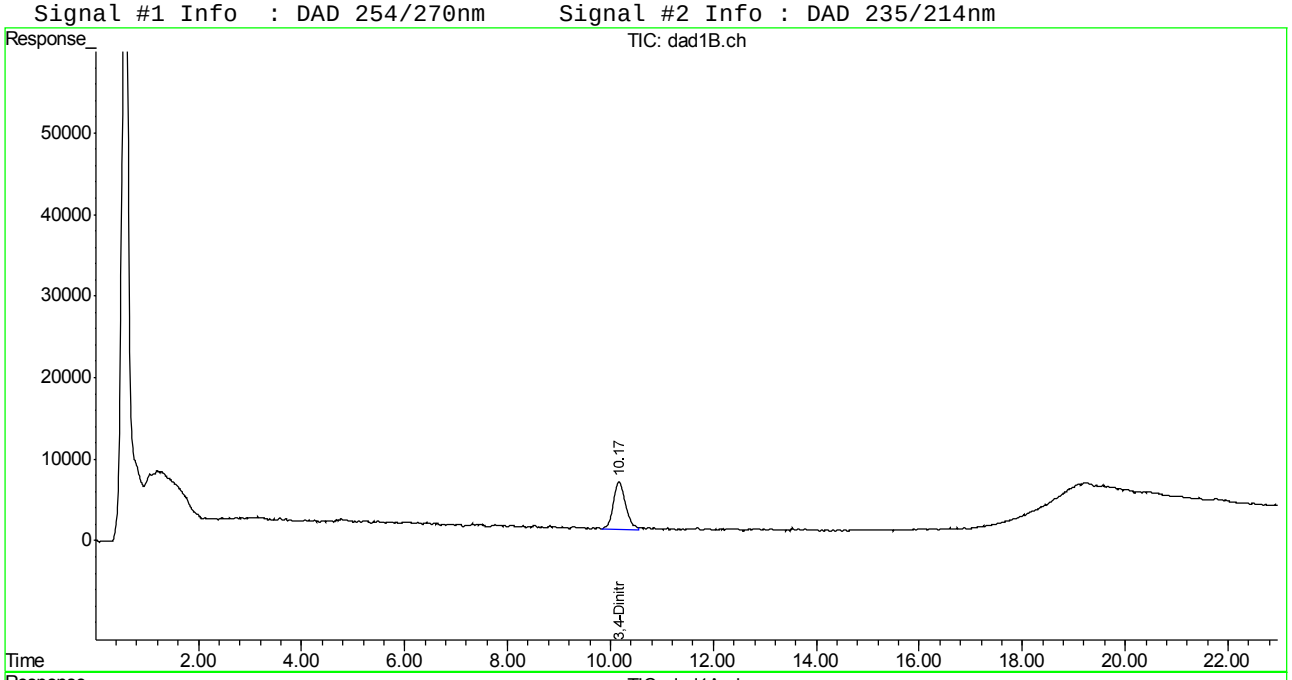
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059608.D 8330B_0419PLUS.M Wed May 09 09:30:56 2018 Page 1

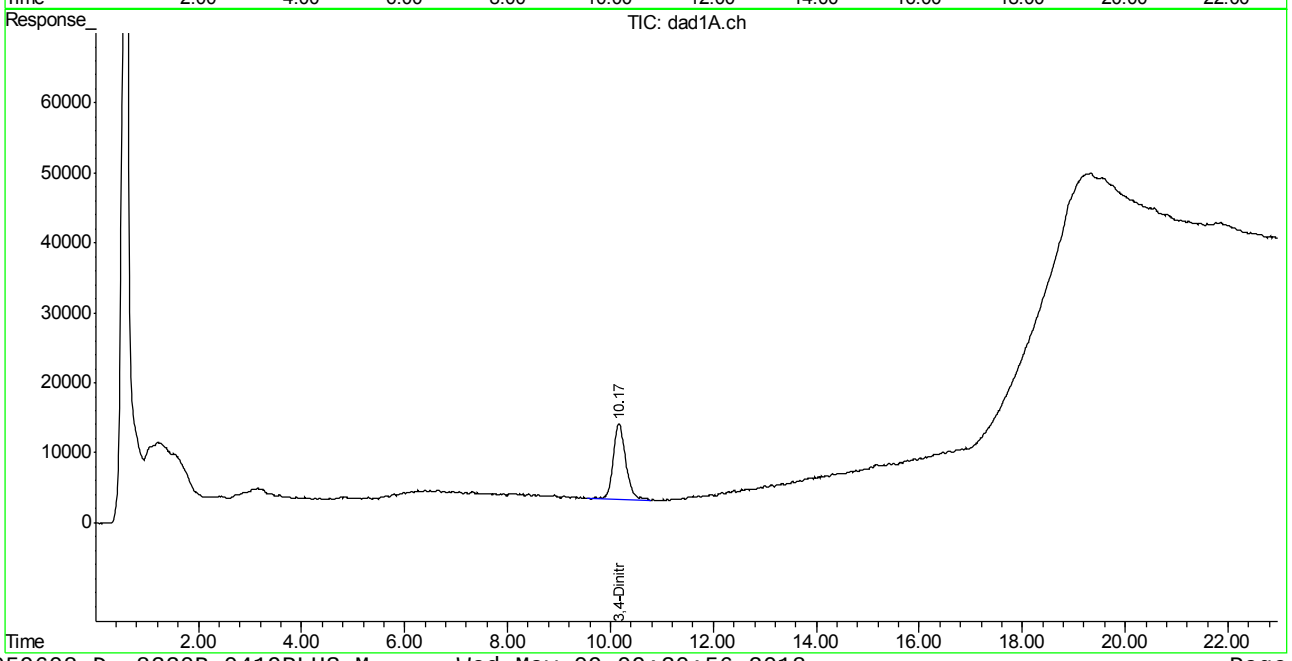
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059608.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059608.D\dad1A.ch
Acq On : 08-May-2018, 15:06:26 Operator: evitam
Sample : fa53725-95 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:46 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059608.D 8330B_0419PLUS.M Wed May 09 09:30:56 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059612.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059612.D\dad1A.ch
Acq On : 08-May-2018, 17:24:13 Operator: evitam
Sample : fa53725-96 Inst : G1315B
Misc : OP69921,gbb1729,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 09 06:56:16 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.20	10.20	955661	1717707	357.163	364.326
	Spiked Amount 500.000	Range 69 - 134		Recovery =		71.43%	72.87%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

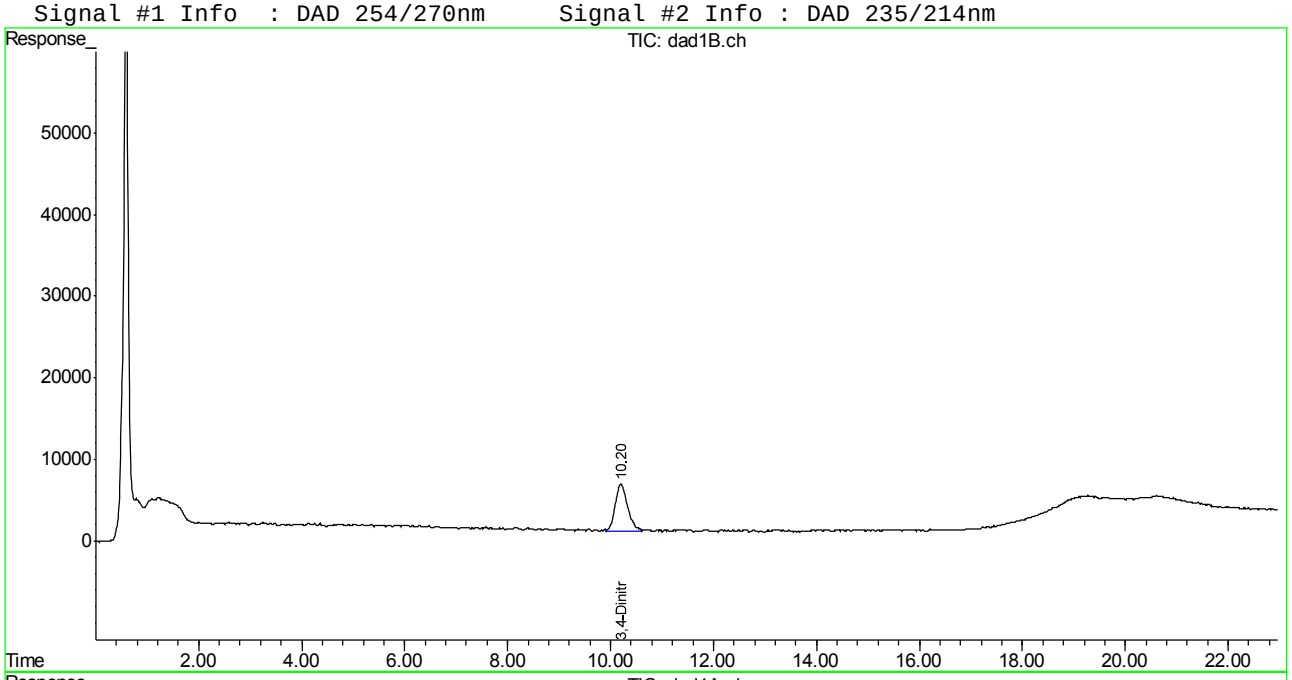
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059612.D 8330B_0419PLUS.M Wed May 09 09:30:58 2018

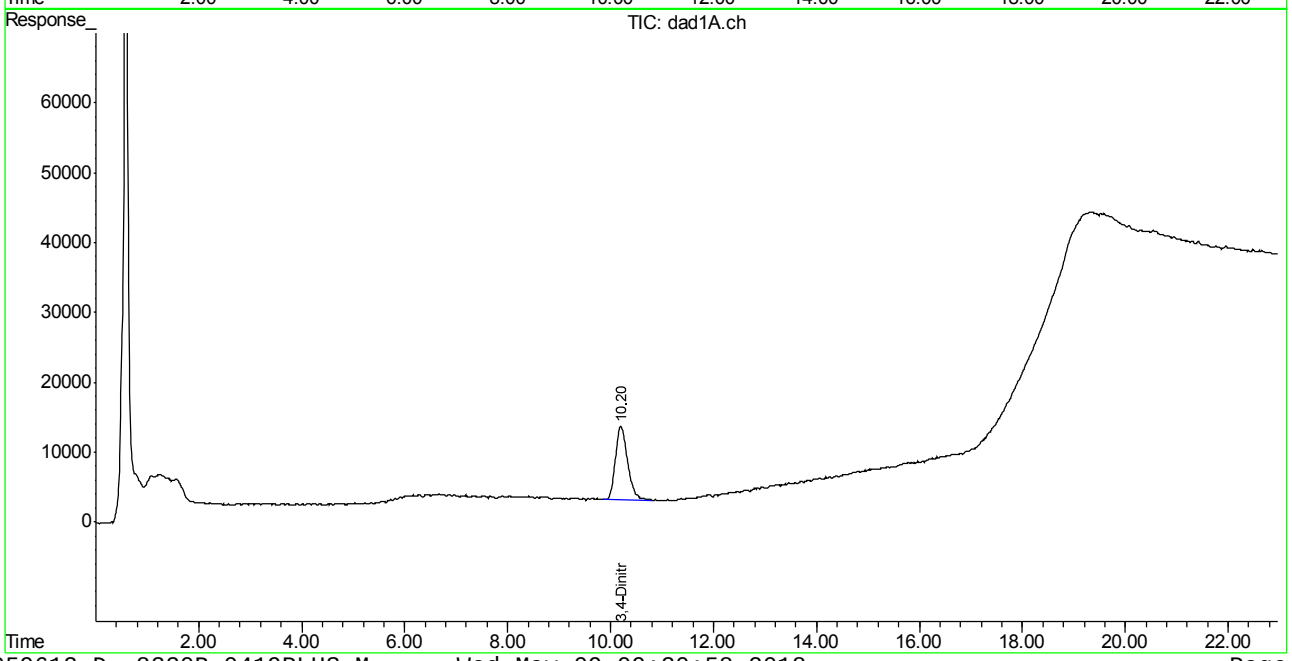
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059612.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059612.D\dad1A.ch
Acq On : 08-May-2018, 17:24:13 Operator: evitam
Sample : fa53725-96 Inst : G1315B
Misc : OP69921,gbb1729,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:50 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059613.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059613.D\dad1A.ch
Acq On : 08-May-2018, 17:54:16 Operator: evitam
Sample : fa53725-101 Inst : G1315B
Misc : OP69921,gbb1729,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 09 06:56:17 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
15) S 3,4-Dinitrotolue	10.16	10.16	956604	1559559	357.515	330.783
Spiked Amount 500.000	Range 69 - 134		Recovery =		71.50%	66.16%#
Target Compounds						
1) TNX	0.00	0.00	0	0	N.D.	N.D.
2) HMX	0.00	0.00	0	0	N.D. d	N.D. d
3) DNX	0.00	0.00	0	0	N.D. d	N.D. d
4) MNX	0.00	0.00	0	0	N.D. d	N.D. d
5) RDX	0.00	0.00	0	0	N.D. d	N.D. d
6) 1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7) 1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8) 3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9) Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10) Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11) Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12) 2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13) 2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14) 4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16) 2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17) 2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18) o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19) p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20) m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21) PETN	0.00	0.00	0	0	N.D. d	N.D. d

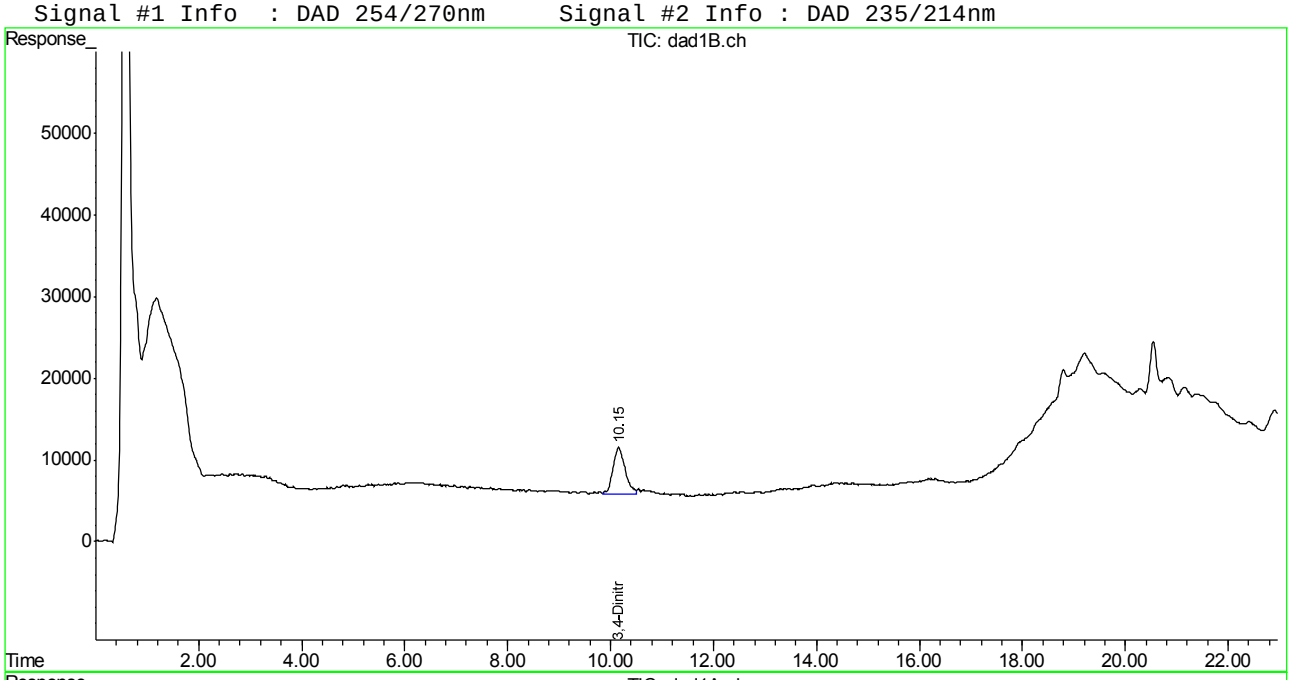
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059613.D 8330B_0419PLUS.M Wed May 09 09:30:59 2018

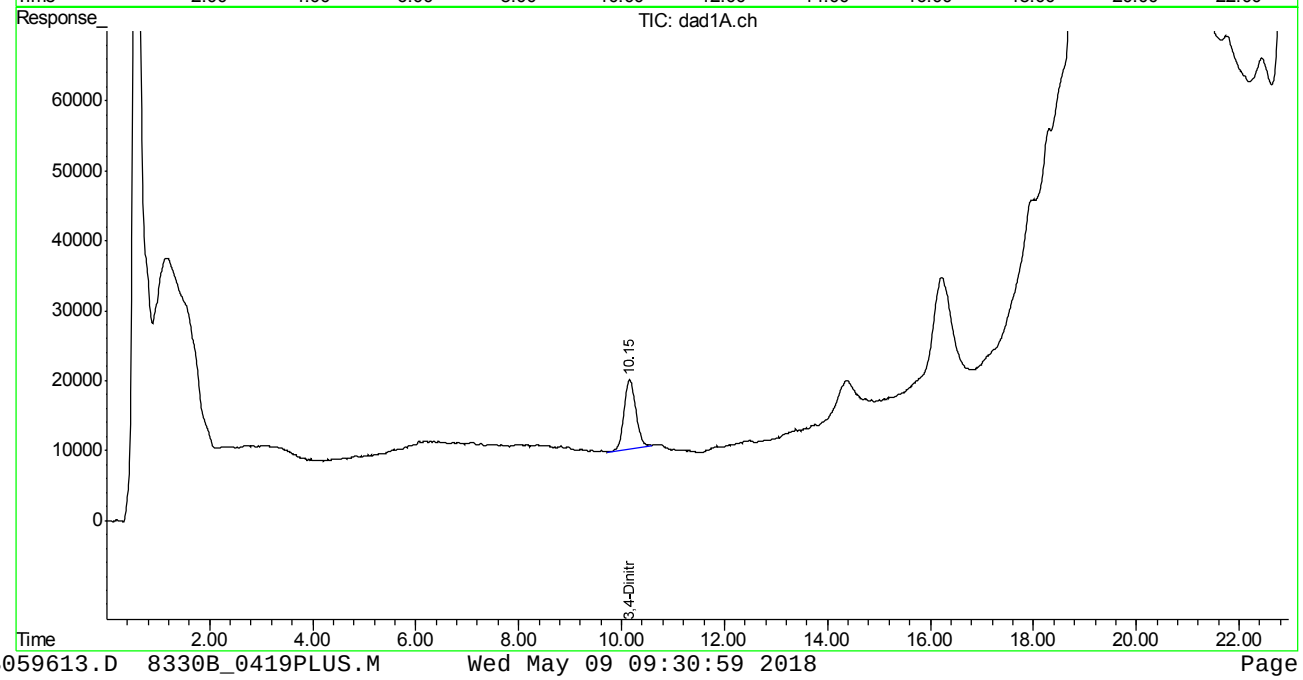
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059613.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059613.D\dad1A.ch
Acq On : 08-May-2018, 17:54:16 Operator: evitam
Sample : fa53725-101 Inst : G1315B
Misc : OP69921,gbb1729,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:50 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614631.D\dad1B.ch Vial: 54
Signal #2 : G:\DATA\0508RPB3\GG614631.D\dad1A.ch
Acq On : 09-May-2018, 01:18:45 Operator: evitam
Sample : fa53725-104 Inst : G1315B
Misc : op69945,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:13 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	2602432	5455965	500.961	504.359
	Spiked Amount 500.000	Range 69 - 134		Recovery =		100.19%	100.87%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

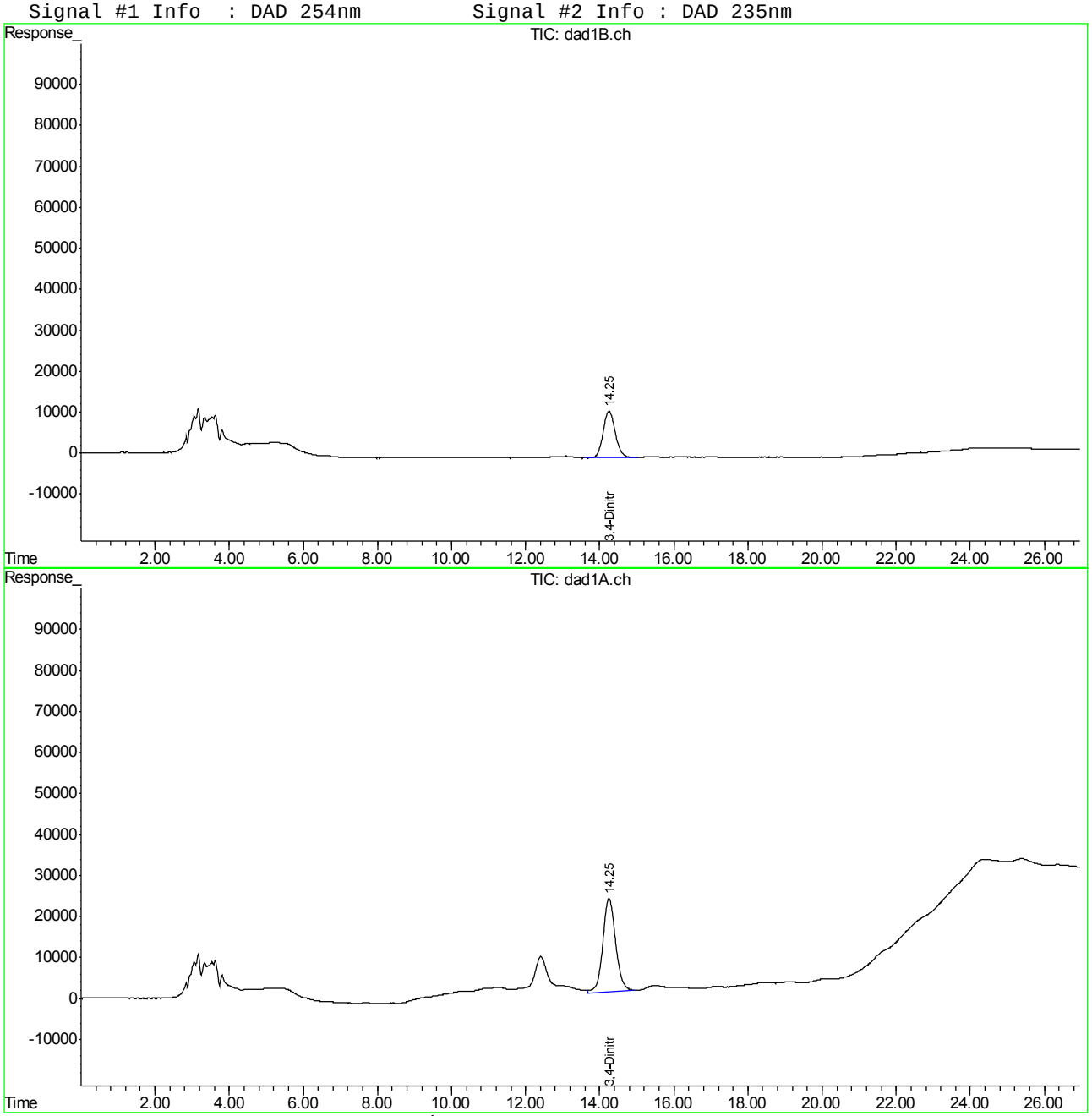
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614631.D 8330RPB.M_1113M.M Wed May 09 11:10:21 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614631.D\dad1B.ch Vial: 54
Signal #2 : G:\DATA\0508RPB3\GG614631.D\dad1A.ch
Acq On : 09-May-2018, 01:18:45 Operator: evitam
Sample : fa53725-104 Inst : G1315B
Misc : op69945,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614634.D\dad1B.ch Vial: 57
Signal #2 : G:\DATA\0508RPB3\GG614634.D\dad1A.ch
Acq On : 09-May-2018, 02:47:09 Operator: evitam
Sample : fa53725-107 Inst : G1315B
Misc : op69945,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:16 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.19	14.19	2298048	4174076	442.368m	385.859m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		88.47%	77.17%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

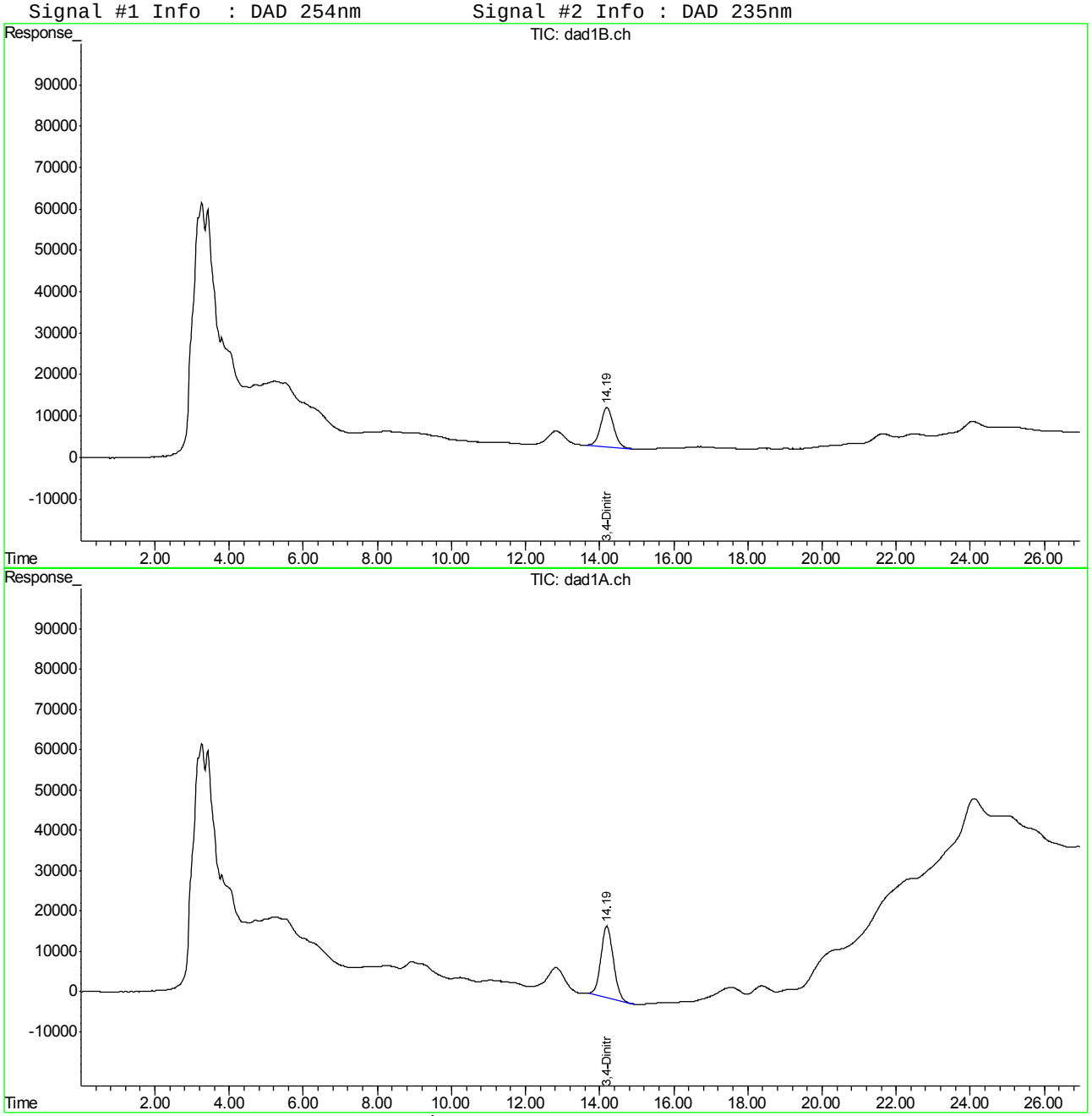
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614634.D 8330RPB.M_1113M.M Wed May 09 11:10:24 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614634.D\dad1B.ch Vial: 57
Signal #2 : G:\DATA\0508RPB3\GG614634.D\dad1A.ch
Acq On : 09-May-2018, 02:47:09 Operator: evitam
Sample : fa53725-107 Inst : G1315B
Misc : op69945,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

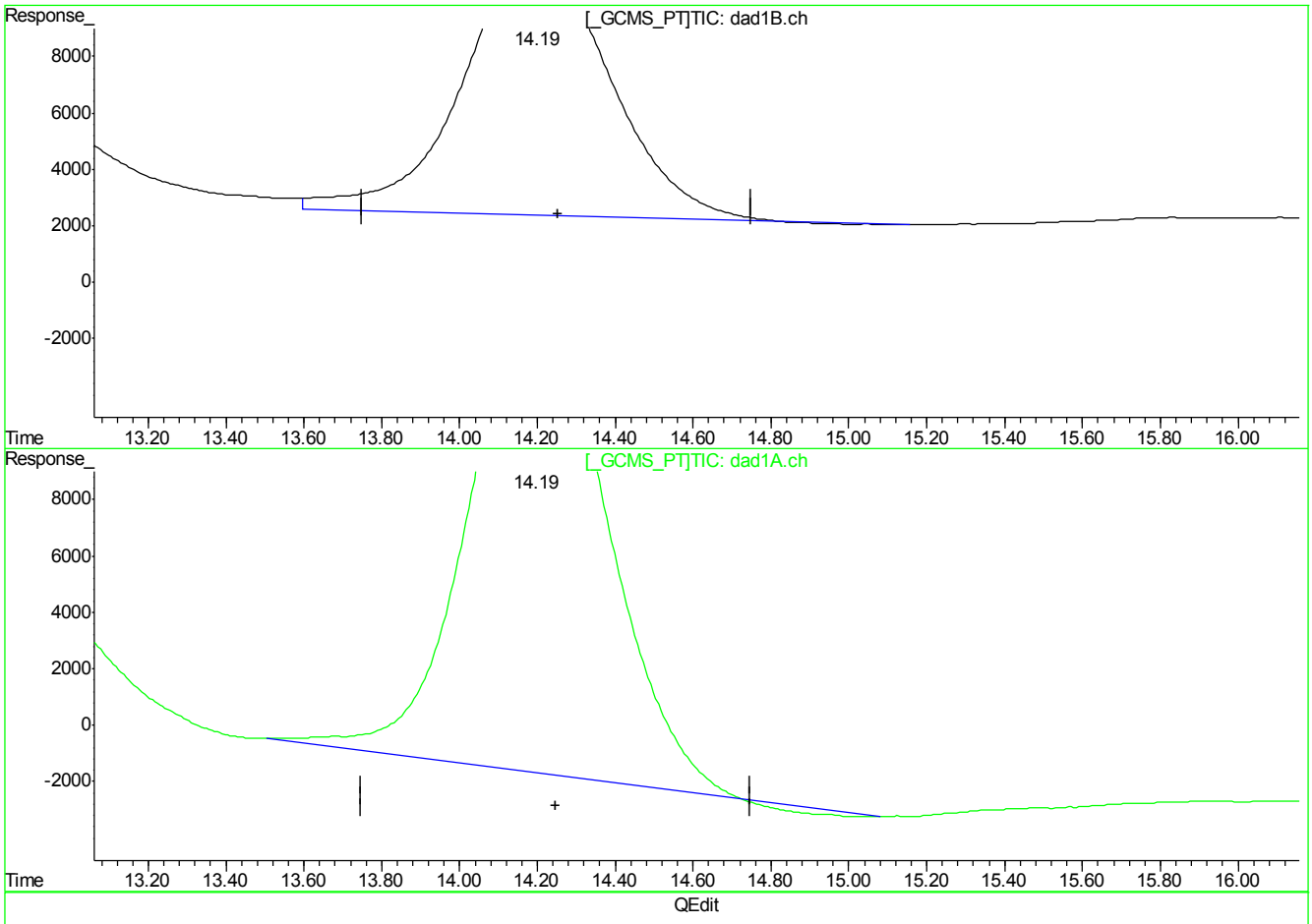
Sample Number:	FA53725-107	**Method:**	SW846 8330B
Lab FileID:	GG614634.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 02:47	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	14.19	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.19	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614634.D\dad1B.ch Vial: 57
Signal #2 : G:\DATA\0508RPB3\GG614634.D\dad1A.ch
Acq On : 09-May-2018, 02:47:09 Operator: evitam
Sample : fa53725-107 Inst : G1315B
Misc : op69945,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.20min 470.278ppb

response 2443041

(12) 3,4-Dinitrotoluene #2 (S)

14.19min 388.750ppb

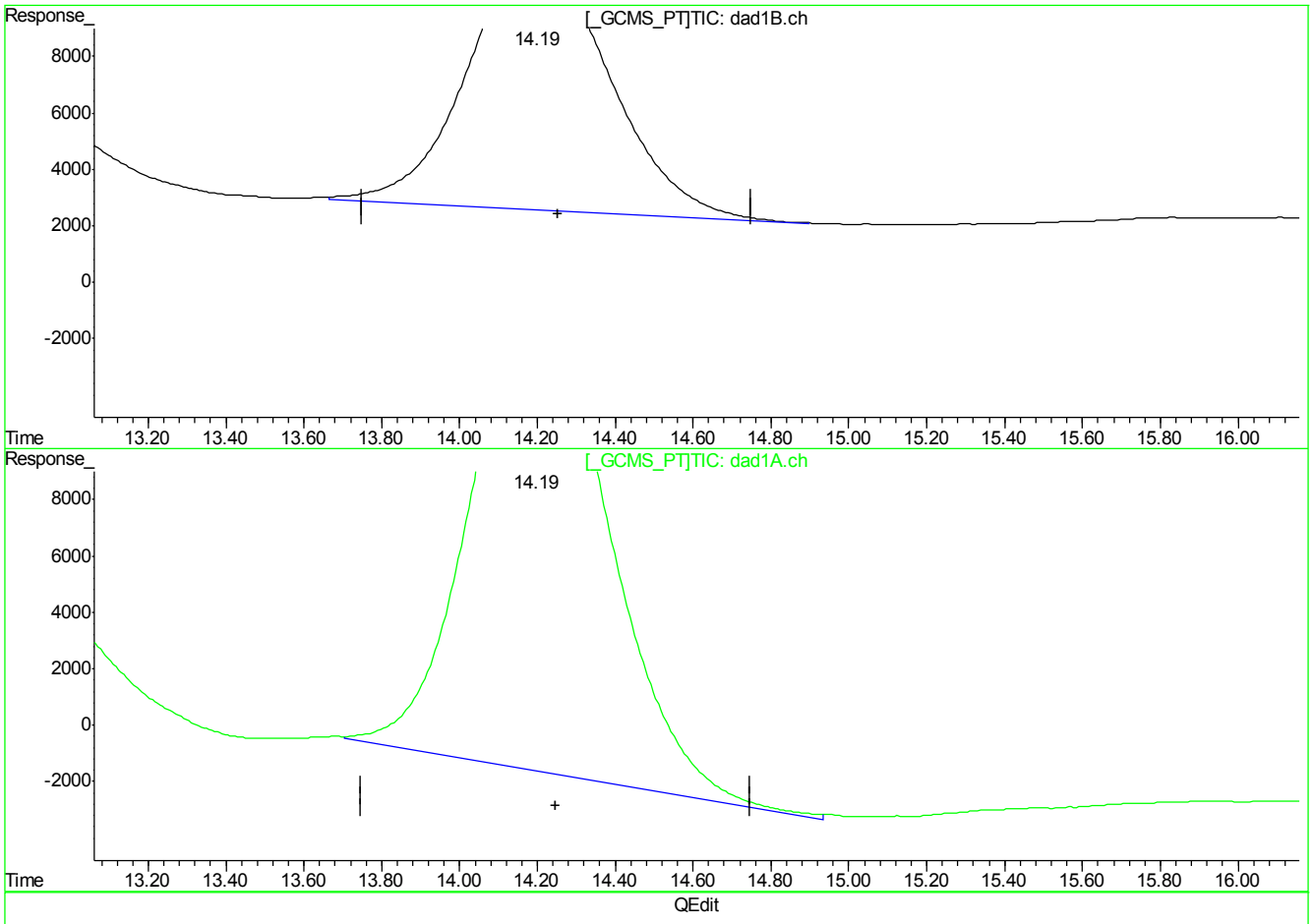
response 4205348

(+) = Expected Retention Time
GG614634.D 8330RPB.M_1113M.M Wed May 09 10:49:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614634.D\dad1B.ch Vial: 57
Signal #2 : G:\DATA\0508RPB3\GG614634.D\dad1A.ch
Acq On : 09-May-2018, 02:47:09 Operator: evitam
Sample : fa53725-107 Inst : G1315B
Misc : op69945,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.19min 442.368ppb m

response 2298048

(12) 3,4-Dinitrotoluene #2 (S)

14.19min 385.859ppb m

response 4174076

(+) = Expected Retention Time
GG614634.D 8330RPB.M_1113M.M Wed May 09 10:49:18 2018

7.1.17.3

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614639.D\dad1B.ch Vial: 60
Signal #2 : G:\DATA\0508RPB3\GG614639.D\dad1A.ch
Acq On : 09-May-2018, 05:14:27 Operator: evitam
Sample : fa53725-110 Inst : G1315B
Misc : op69945,Ggg2626,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:21 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2395301	4895257	461.089	452.526m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		92.22%	90.51%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

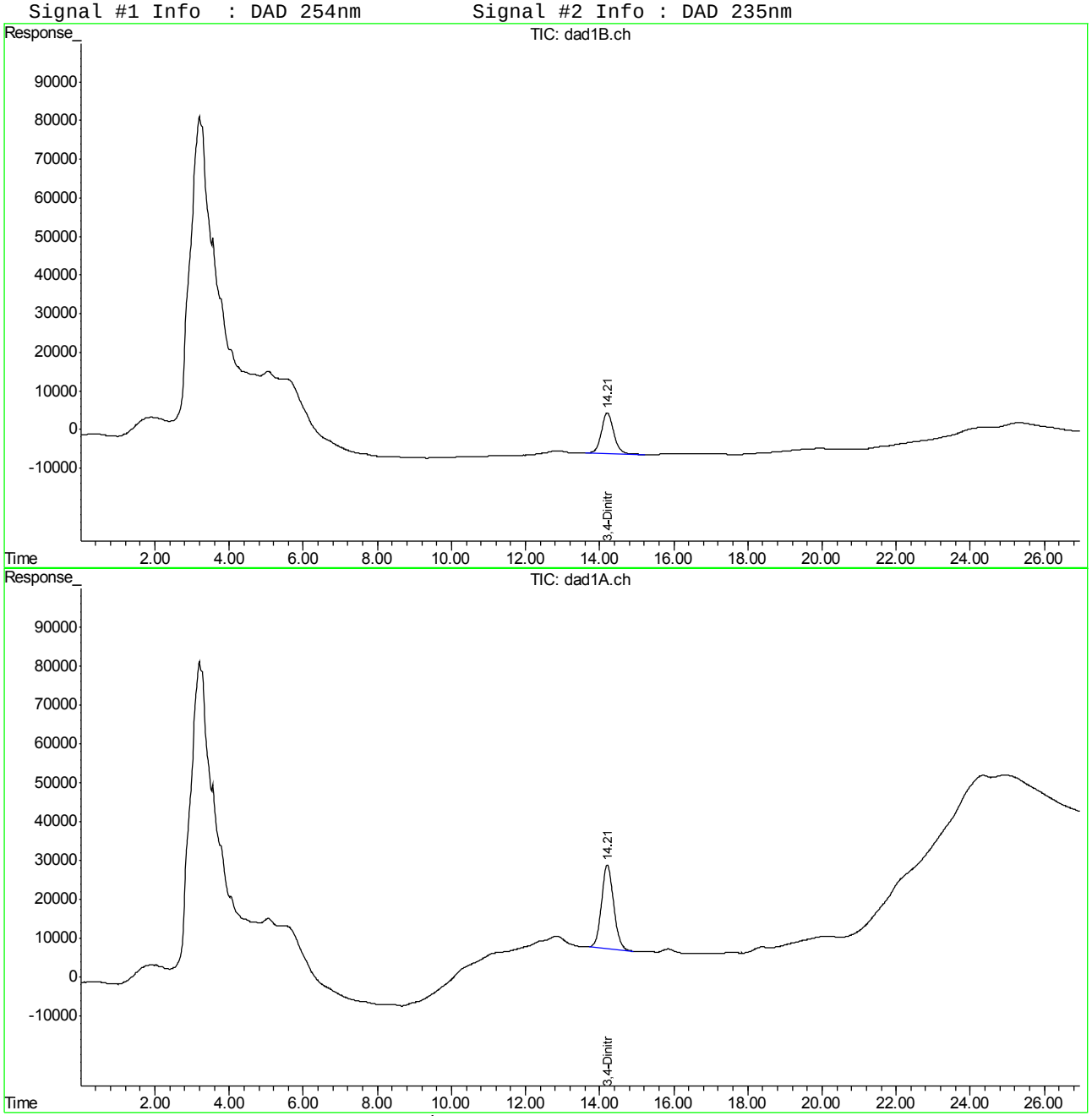
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614639.D 8330RPB.M_1113M.M Wed May 09 11:10:28 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614639.D\dad1B.ch Vial: 60
Signal #2 : G:\DATA\0508RPB3\GG614639.D\dad1A.ch
Acq On : 09-May-2018, 05:14:27 Operator: evitam
Sample : fa53725-110 Inst : G1315B
Misc : op69945,Ggg2626,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:57 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

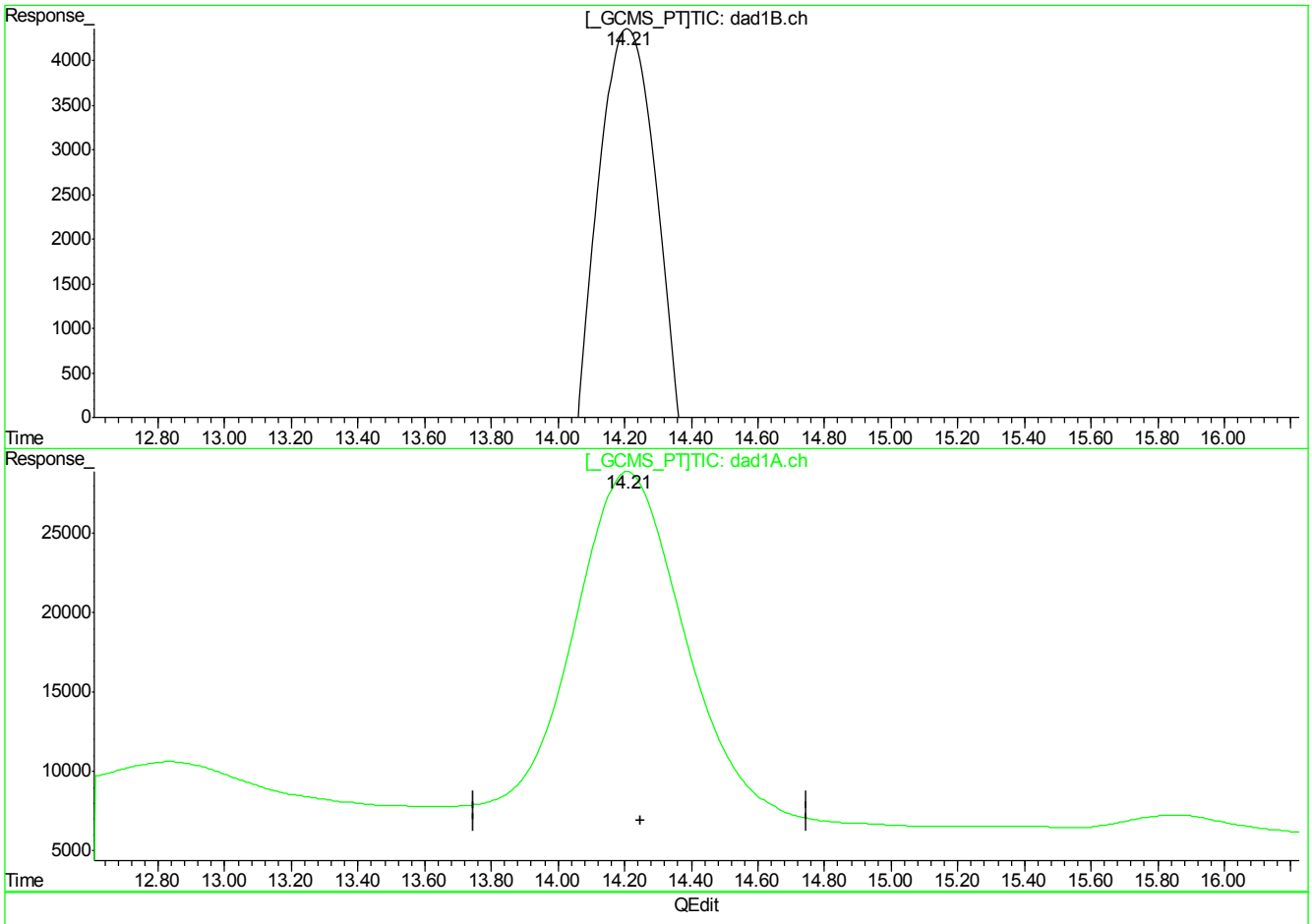
Sample Number:	FA53725-110	**Method:**	SW846 8330B
Lab FileID:	GG614639.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 05:14	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.21	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614639.D\dad1B.ch Vial: 60
Signal #2 : G:\DATA\0508RPB3\GG614639.D\dad1A.ch
Acq On : 09-May-2018, 05:14:27 Operator: evitam
Sample : fa53725-110 Inst : G1315B
Misc : op69945,Ggg2626,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 461.089ppb

response 2395301

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 939.285ppb

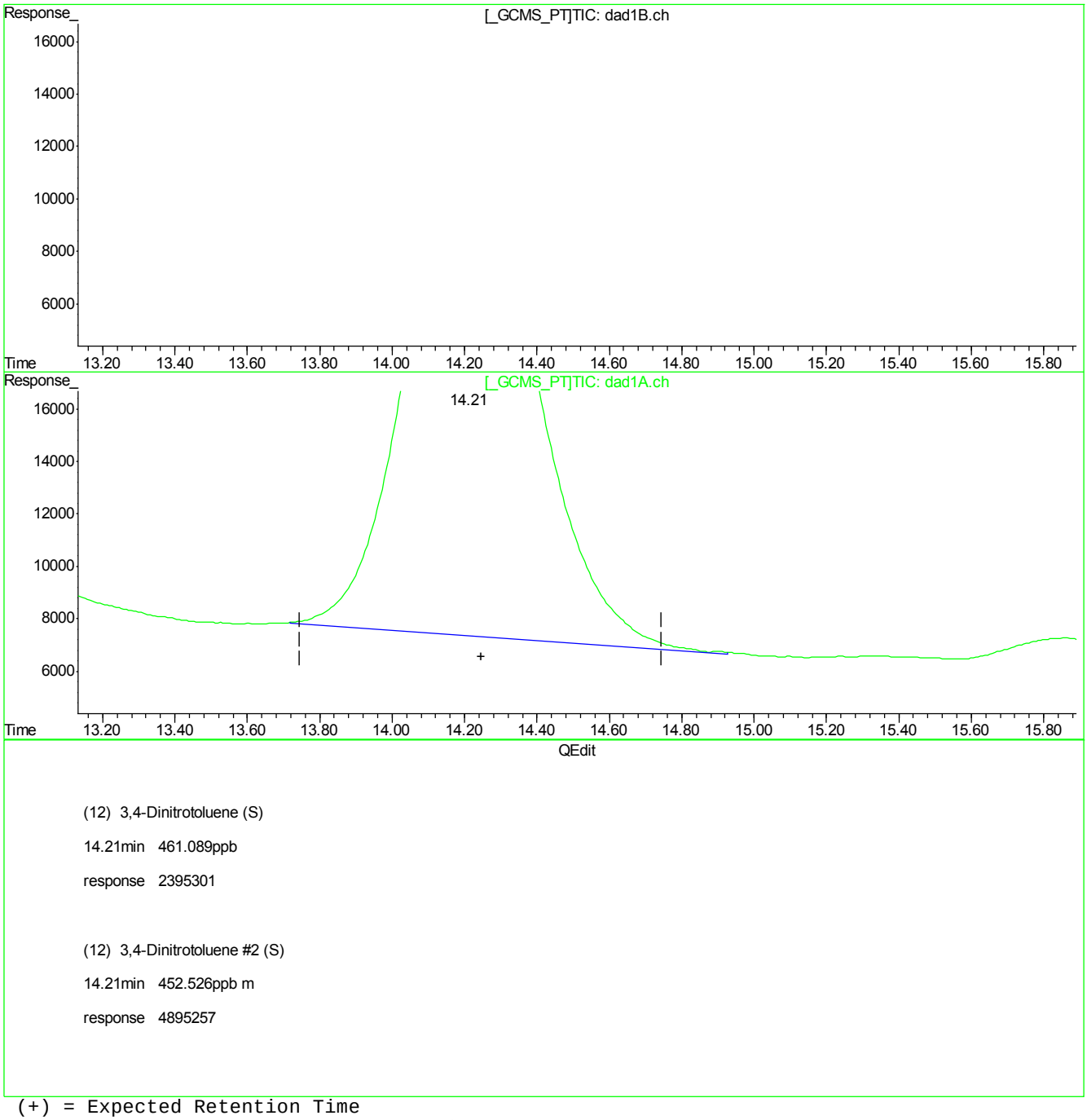
response 10160835

(+) = Expected Retention Time
GG614639.D 8330RPB.M_1113M.M Wed May 09 10:57:32 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614639.D\dad1B.ch Vial: 60
Signal #2 : G:\DATA\0508RPB3\GG614639.D\dad1A.ch
Acq On : 09-May-2018, 05:14:27 Operator: evitam
Sample : fa53725-110 Inst : G1315B
Misc : op69945,Ggg2626,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 461.089ppb

response 2395301

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 452.526ppb m

response 4895257

(+) = Expected Retention Time
GG614639.D 8330RPB.M_1113M.M Wed May 09 10:57:36 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614640.D\dad1B.ch Vial: 61
Signal #2 : G:\DATA\0508RPB3\GG614640.D\dad1A.ch
Acq On : 09-May-2018, 05:43:55 Operator: evitam
Sample : fa53725-113 Inst : G1315B
Misc : op69945,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:22 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2783259	4528297	535.769	418.604m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		107.15%	83.72%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

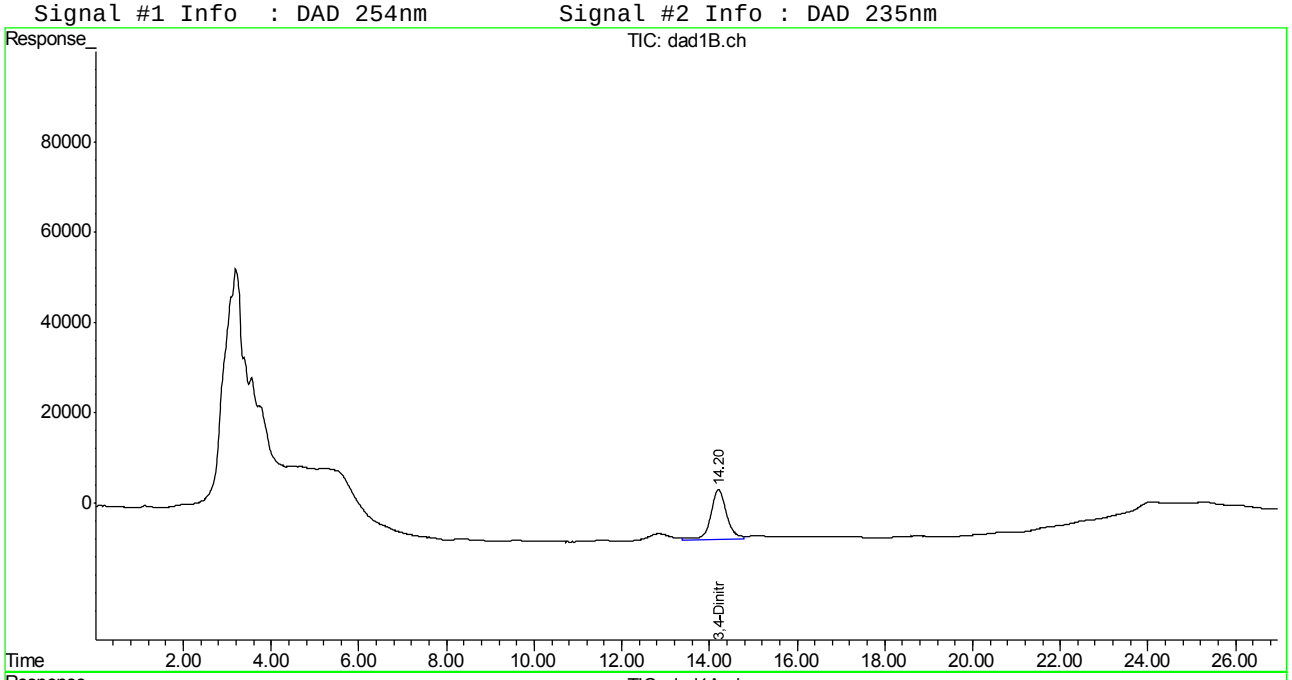
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614640.D 8330RPB.M_1113M.M Wed May 09 11:10:29 2018 Page 1

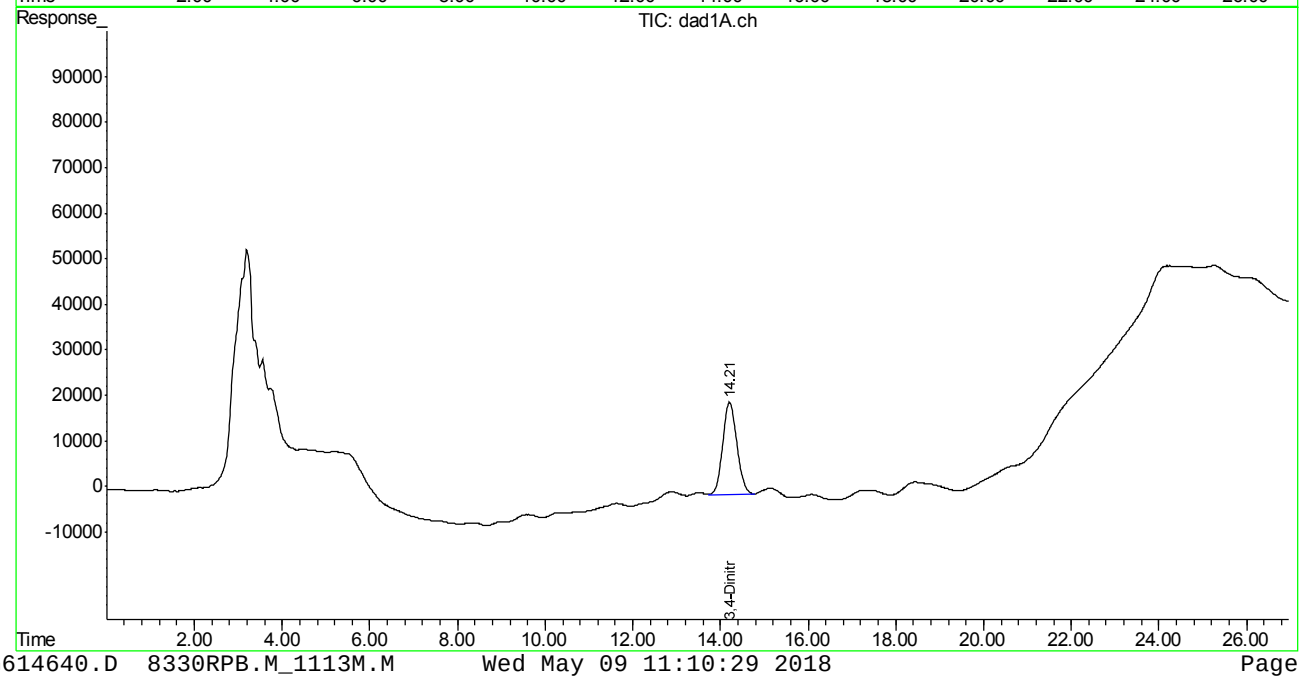
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614640.D\dad1B.ch Vial: 61
Signal #2 : G:\DATA\0508RPB3\GG614640.D\dad1A.ch
Acq On : 09-May-2018, 05:43:55 Operator: evitam
Sample : fa53725-113 Inst : G1315B
Misc : op69945,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:58 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

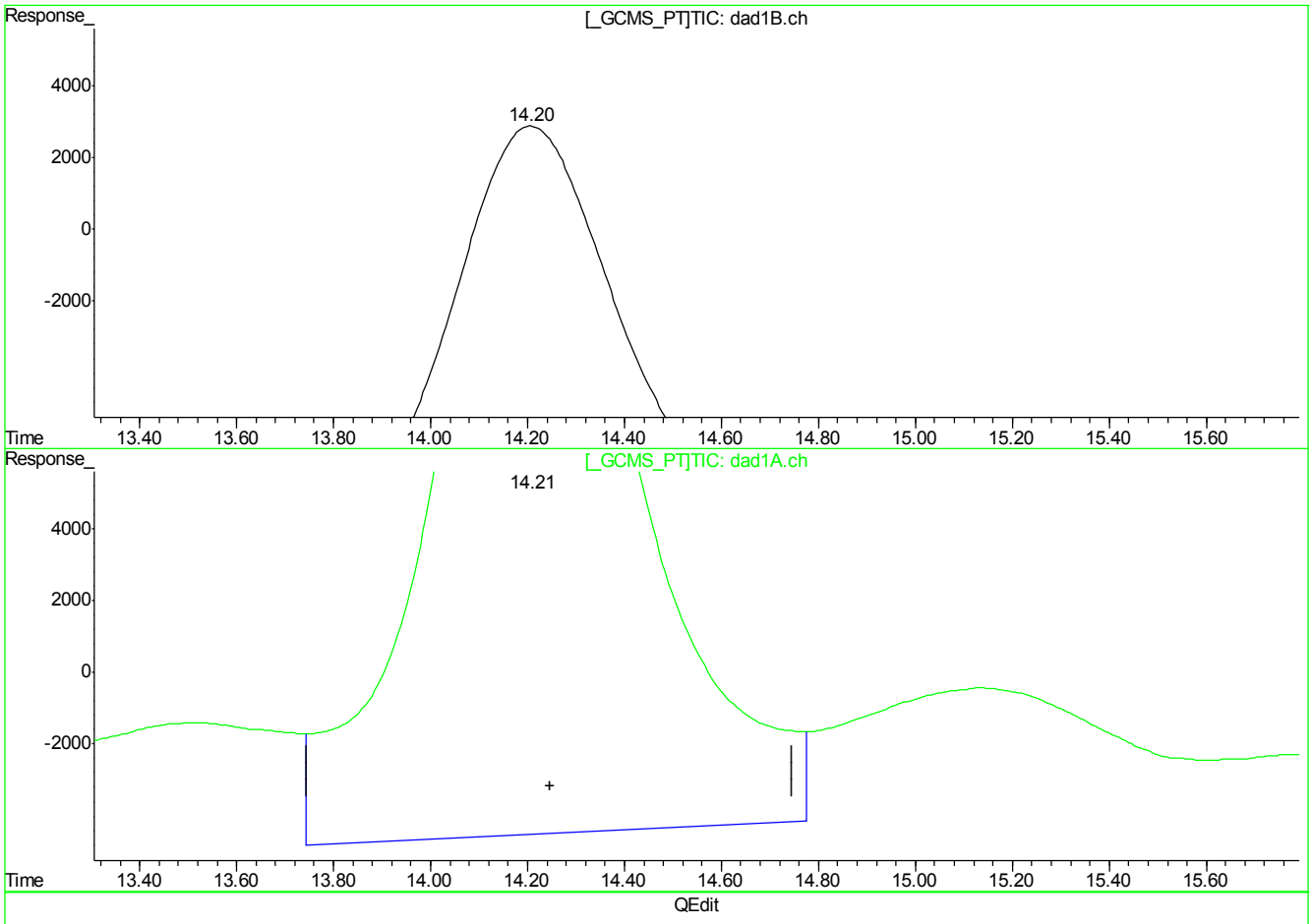
Sample Number:	FA53725-113	**Method:**	SW846 8330B
Lab FileID:	GG614640.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 05:43	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.21	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614640.D\dad1B.ch Vial: 61
Signal #2 : G:\DATA\0508RPB3\GG614640.D\dad1A.ch
Acq On : 09-May-2018, 05:43:55 Operator: evitam
Sample : fa53725-113 Inst : G1315B
Misc : op69945,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 535.769ppb

response 2783259

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 574.205ppb

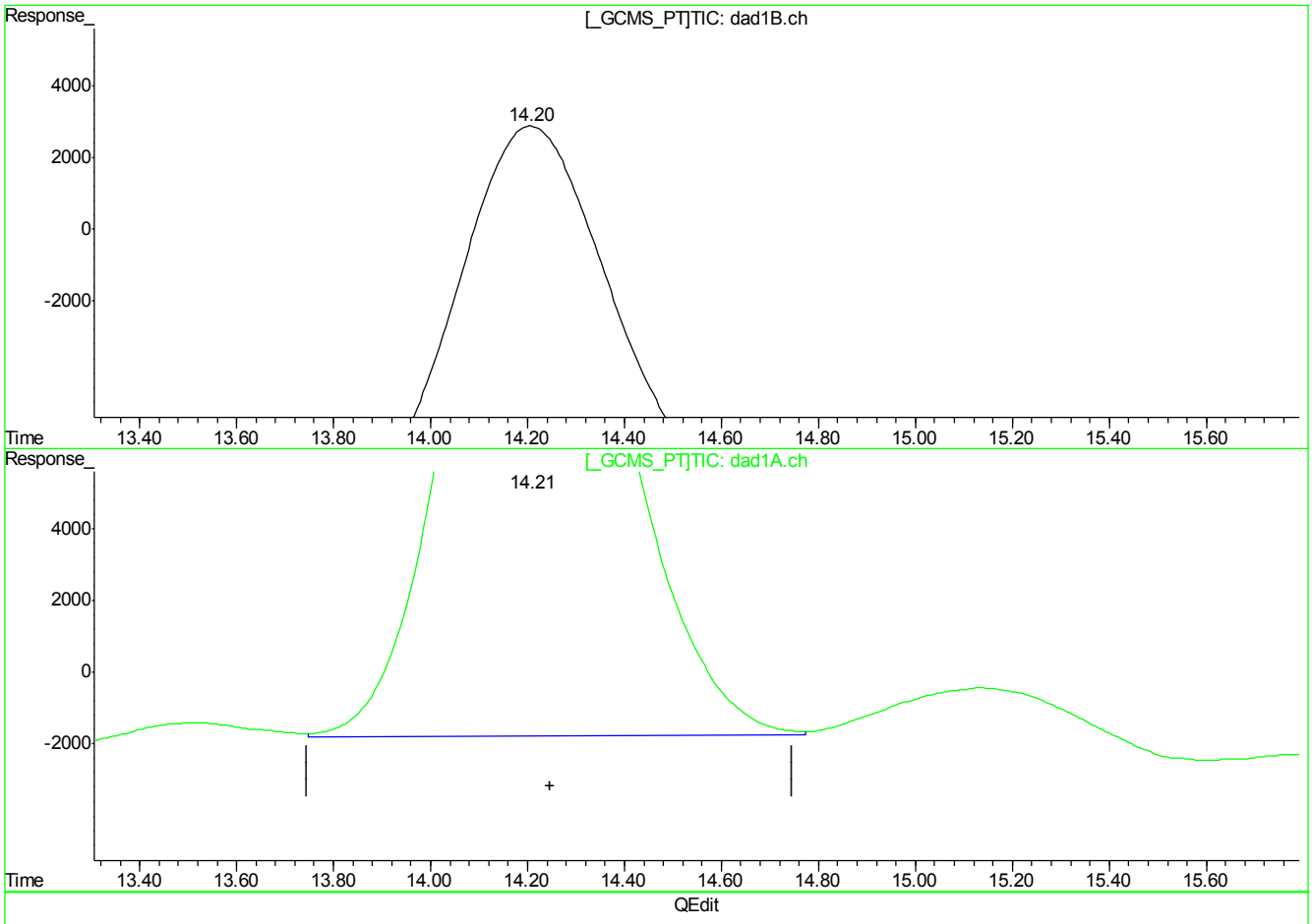
response 6211538

(+) = Expected Retention Time
GG614640.D 8330RPB.M_1113M.M Wed May 09 10:57:56 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614640.D\dad1B.ch Vial: 61
Signal #2 : G:\DATA\0508RPB3\GG614640.D\dad1A.ch
Acq On : 09-May-2018, 05:43:55 Operator: evitam
Sample : fa53725-113 Inst : G1315B
Misc : op69945,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 535.769ppb

response 2783259

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 418.604ppb m

response 4528297

(+) = Expected Retention Time
GG614640.D 8330RPB.M_1113M.M Wed May 09 10:58:00 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614641.D\dad1B.ch Vial: 62
Signal #2 : G:\DATA\0508RPB3\GG614641.D\dad1A.ch
Acq On : 09-May-2018, 06:13:23 Operator: evitam
Sample : fa53725-114 Inst : G1315B
Misc : op69945,Ggg2626,10.04,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.20	14.20	3012150	5112185	579.830	472.579m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		115.97%	94.52%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

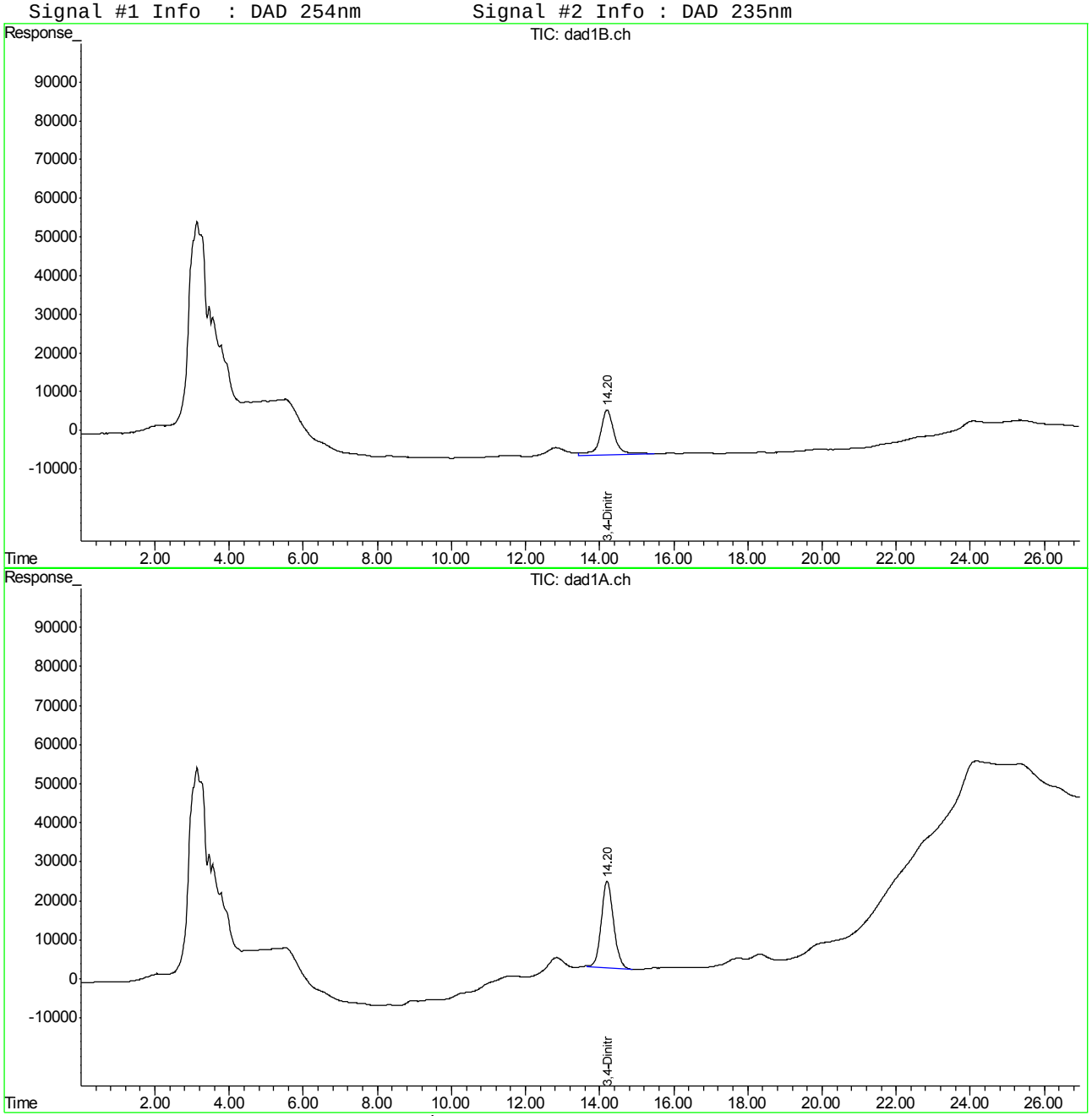
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614641.D 8330RPB.M_1113M.M Wed May 09 11:10:30 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614641.D\dad1B.ch Vial: 62
Signal #2 : G:\DATA\0508RPB3\GG614641.D\dad1A.ch
Acq On : 09-May-2018, 06:13:23 Operator: evitam
Sample : fa53725-114 Inst : G1315B
Misc : op69945,Ggg2626,10.04,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:58 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

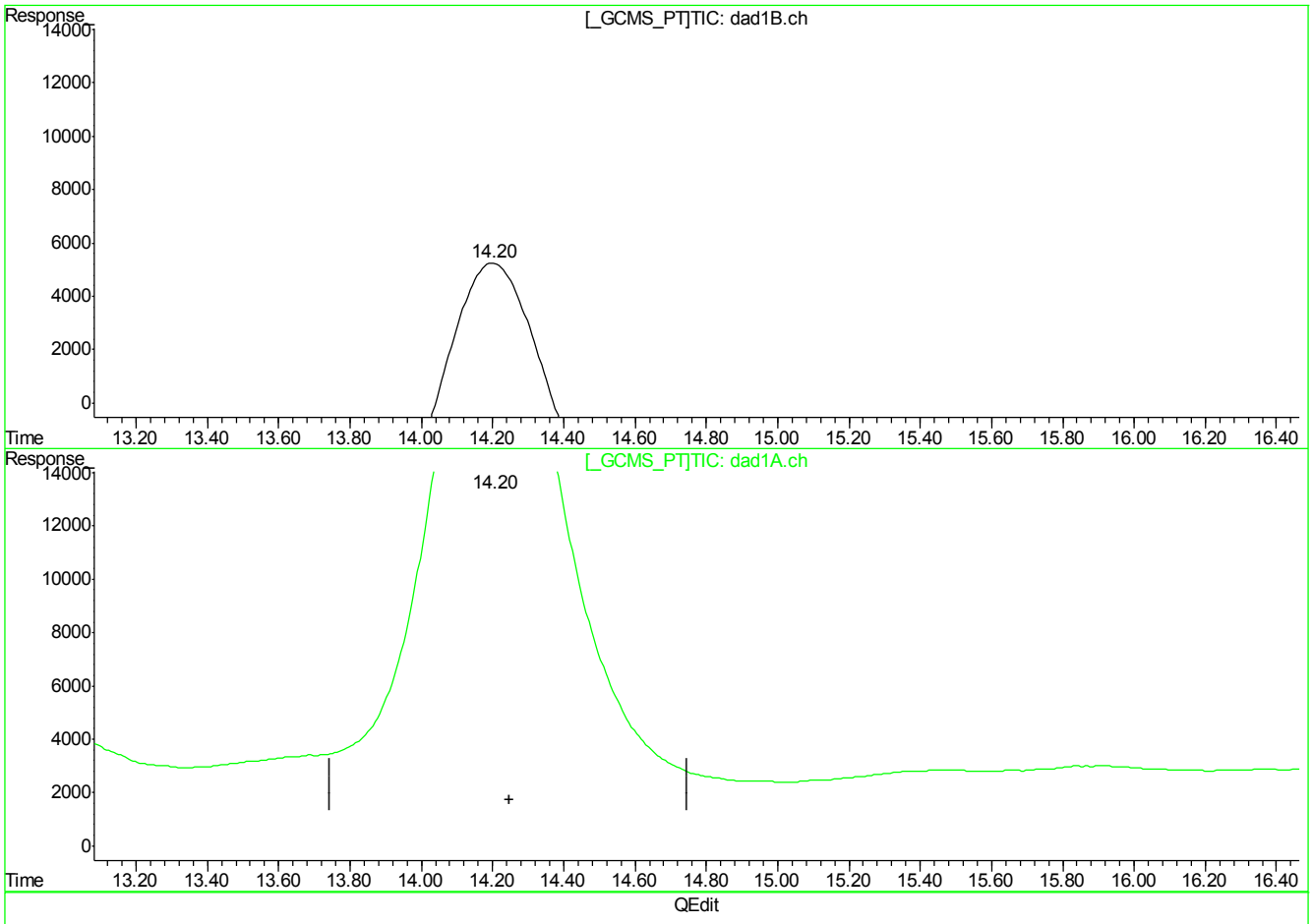
Sample Number:	FA53725-114	**Method:**	SW846 8330B
Lab FileID:	GG614641.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 06:13	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.20	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614641.D\dad1B.ch Vial: 62
Signal #2 : G:\DATA\0508RPB3\GG614641.D\dad1A.ch
Acq On : 09-May-2018, 06:13:23 Operator: evitam
Sample : fa53725-114 Inst : G1315B
Misc : op69945,Ggg2626,10.04,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.20min 579.830ppb

response 3012150

(12) 3,4-Dinitrotoluene #2 (S)

14.20min 771.379ppb

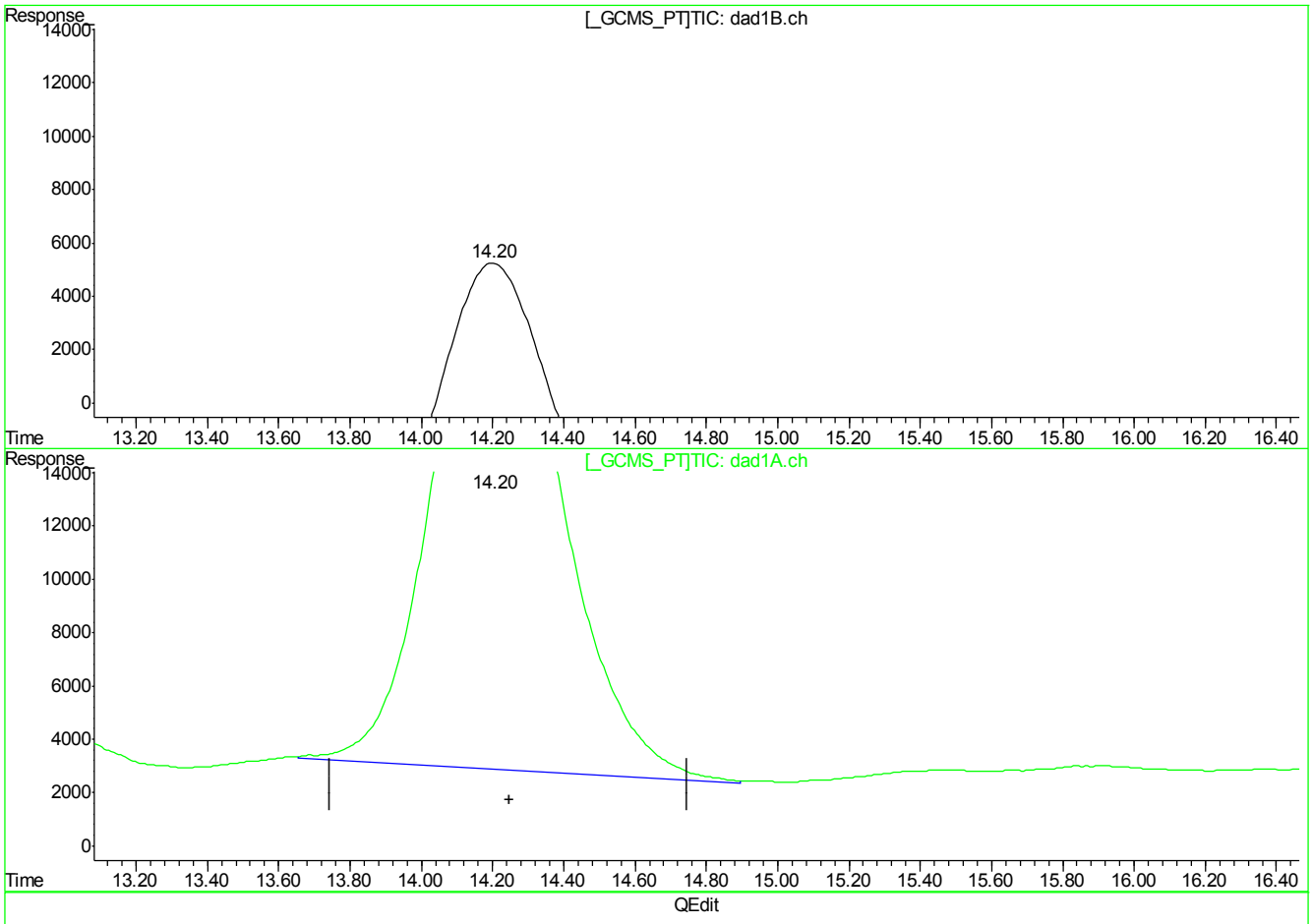
response 8344491

(+) = Expected Retention Time
GG614641.D 8330RPB.M_1113M.M Wed May 09 10:58:21 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614641.D\dad1B.ch Vial: 62
Signal #2 : G:\DATA\0508RPB3\GG614641.D\dad1A.ch
Acq On : 09-May-2018, 06:13:23 Operator: evitam
Sample : fa53725-114 Inst : G1315B
Misc : op69945,Ggg2626,10.04,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.20min 579.830ppb

response 3012150

(12) 3,4-Dinitrotoluene #2 (S)

14.20min 472.579ppb m

response 5112185

(+) = Expected Retention Time
GG614641.D 8330RPB.M_1113M.M Wed May 09 10:58:24 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614650.D\dad1B.ch Vial: 69
Signal #2 : G:\DATA\0508RPB3\GG614650.D\dad1A.ch
Acq On : 09-May-2018, 10:41:14 Operator: evitam
Sample : fa53725-119 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 11:09:24 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.15	14.15	2546160	5129631	490.128	474.192m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		98.03%	94.84%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

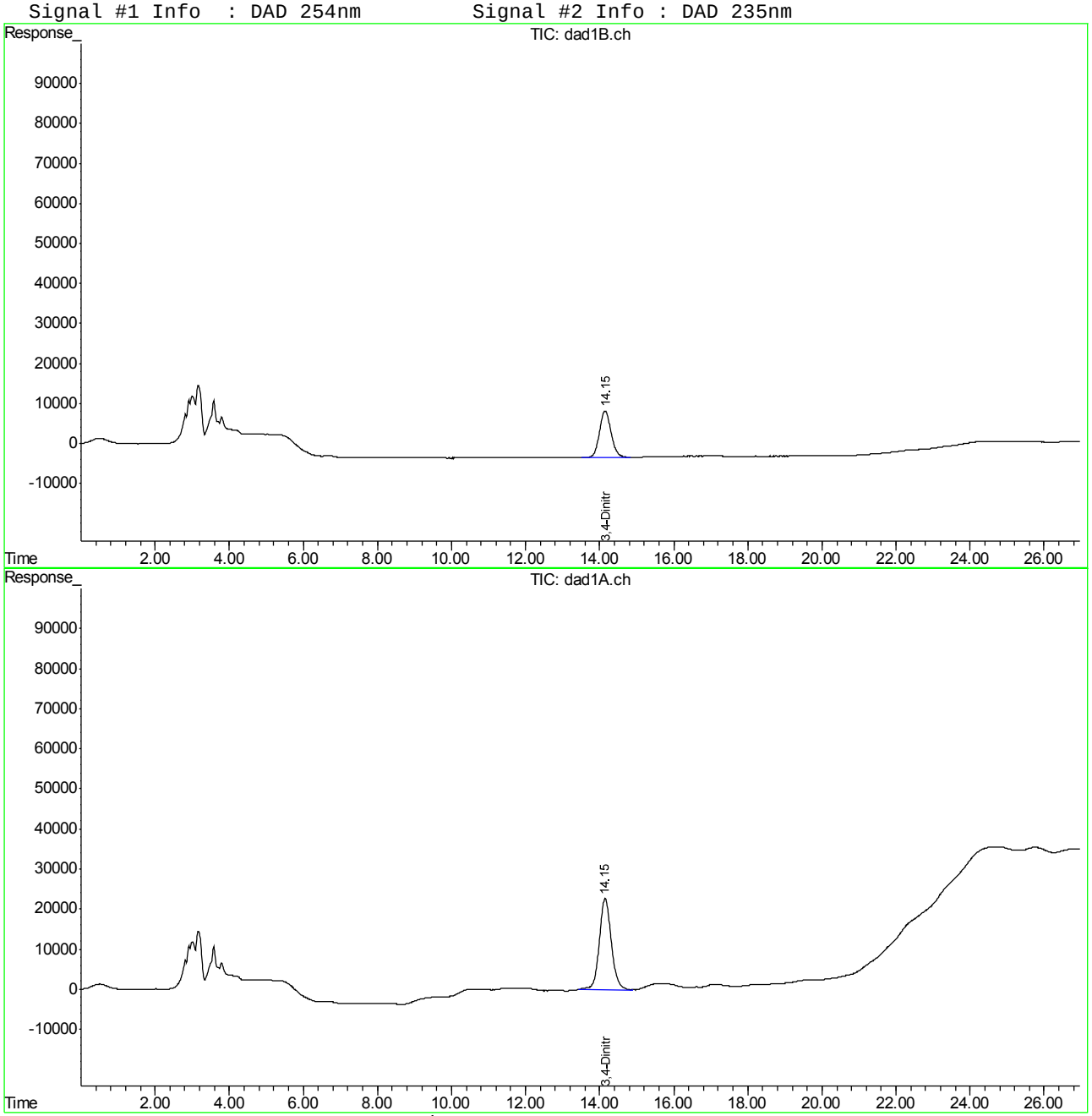
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614650.D 8330RPB.M_1113M.M Wed May 09 14:13:11 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614650.D\dad1B.ch Vial: 69
Signal #2 : G:\DATA\0508RPB3\GG614650.D\dad1A.ch
Acq On : 09-May-2018, 10:41:14 Operator: evitam
Sample : fa53725-119 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:09 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

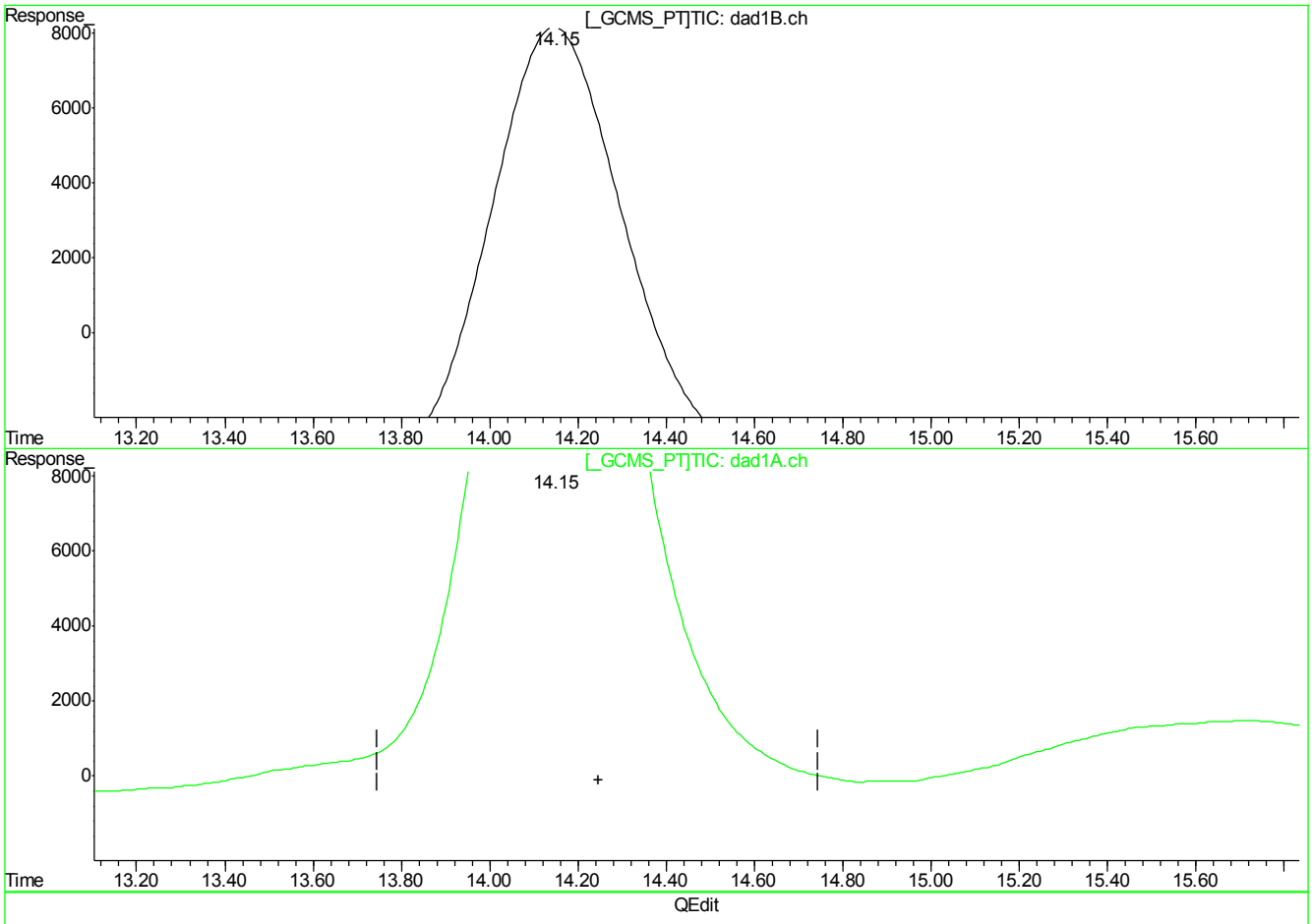
Sample Number:	FA53725-119	**Method:**	SW846 8330B
Lab FileID:	GG614650.D	**Analyst approved:**	05/09/18 14:15 Evita Martinez
Injection Time:	05/09/18 10:41	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.15	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614650.D\dad1B.ch Vial: 69
Signal #2 : G:\DATA\0508RPB3\GG614650.D\dad1A.ch
Acq On : 09-May-2018, 10:41:14 Operator: evitam
Sample : fa53725-119 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:09 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.15min 490.128ppb

response 2546160

(12) 3,4-Dinitrotoluene #2 (S)

14.15min 486.094ppb

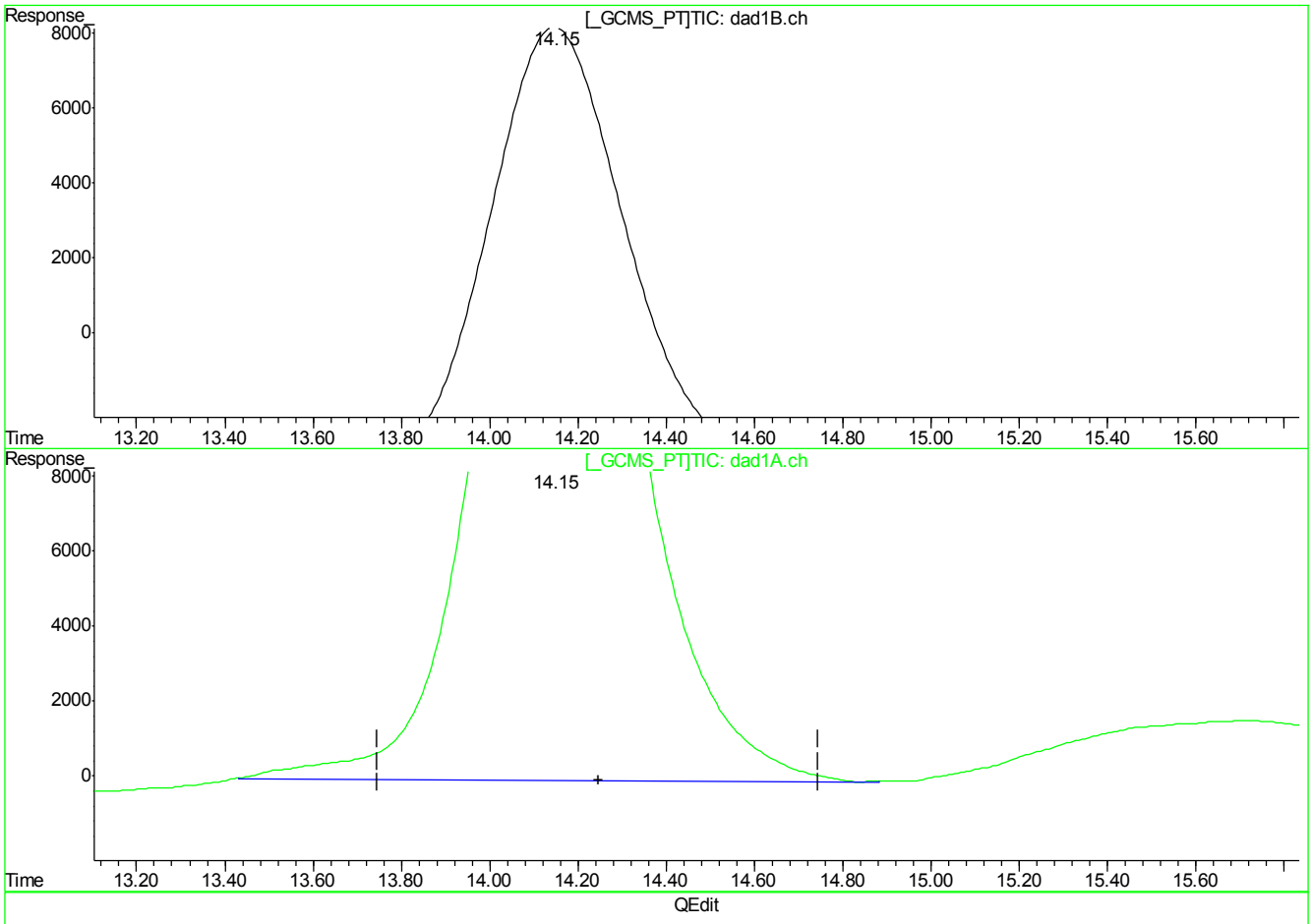
response 5258386

(+) = Expected Retention Time
GG614650.D 8330RPB.M_1113M.M Wed May 09 11:09:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614650.D\dad1B.ch Vial: 69
Signal #2 : G:\DATA\0508RPB3\GG614650.D\dad1A.ch
Acq On : 09-May-2018, 10:41:14 Operator: evitam
Sample : fa53725-119 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:09 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.15min 490.128ppb

response 2546160

(12) 3,4-Dinitrotoluene #2 (S)

14.15min 474.192ppb m

response 5129631

(+) = Expected Retention Time
GG614650.D 8330RPB.M_1113M.M Wed May 09 11:09:36 2018

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059530.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059530.D\dad1A.ch
Acq On : 30-Apr-2018, 19:38:14 Operator: evitam
Sample : fa53725-124 Inst : G1315B
Misc : OP69837,gbb1726,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 01 06:56:00 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.35	10.36	1055040	1906060	394.304	404.276
	Spiked Amount 500.000	Range 70 - 136		Recovery =		78.86%	80.86%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D.	N.D.
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

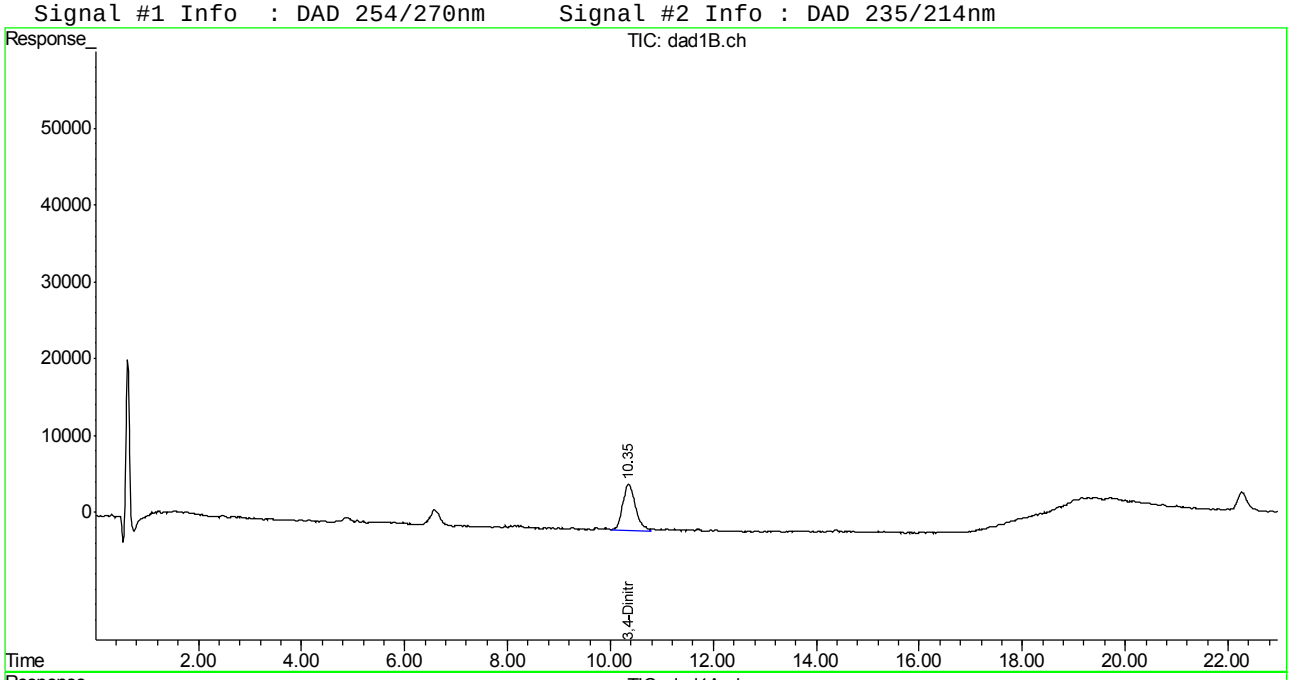
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059530.D 8330B_0419PLUS.M Tue May 01 08:37:20 2018 Page 1

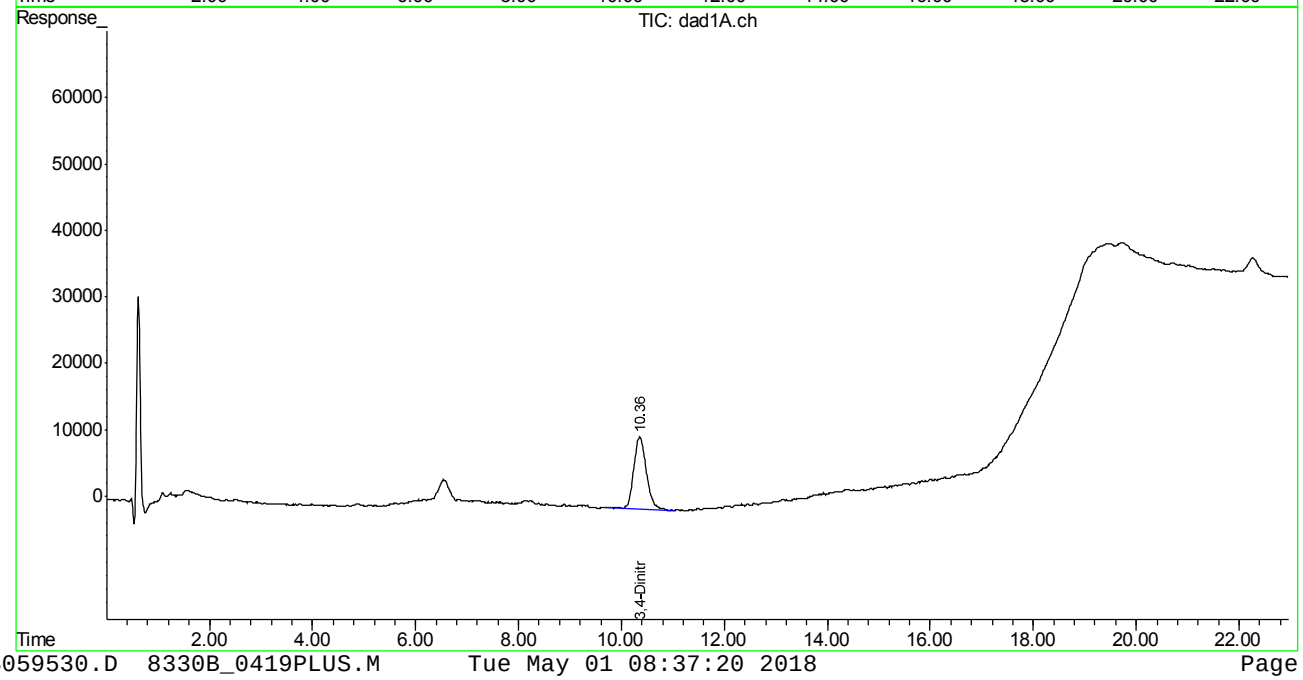
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059530.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059530.D\dad1A.ch
Acq On : 30-Apr-2018, 19:38:14 Operator: evitam
Sample : fa53725-124 Inst : G1315B
Misc : OP69837,gbb1726,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 8:20 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059531.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059531.D\dad1A.ch
Acq On : 30-Apr-2018, 20:08:12 Operator: evitam
Sample : fa53725-125 Inst : G1315B
Misc : OP69837,gbb1726,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 01 06:56:01 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.38	10.38	1007407	1785776	376.502	378.764
	Spiked Amount 500.000	Range 70 - 136		Recovery =		75.30%	75.75%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

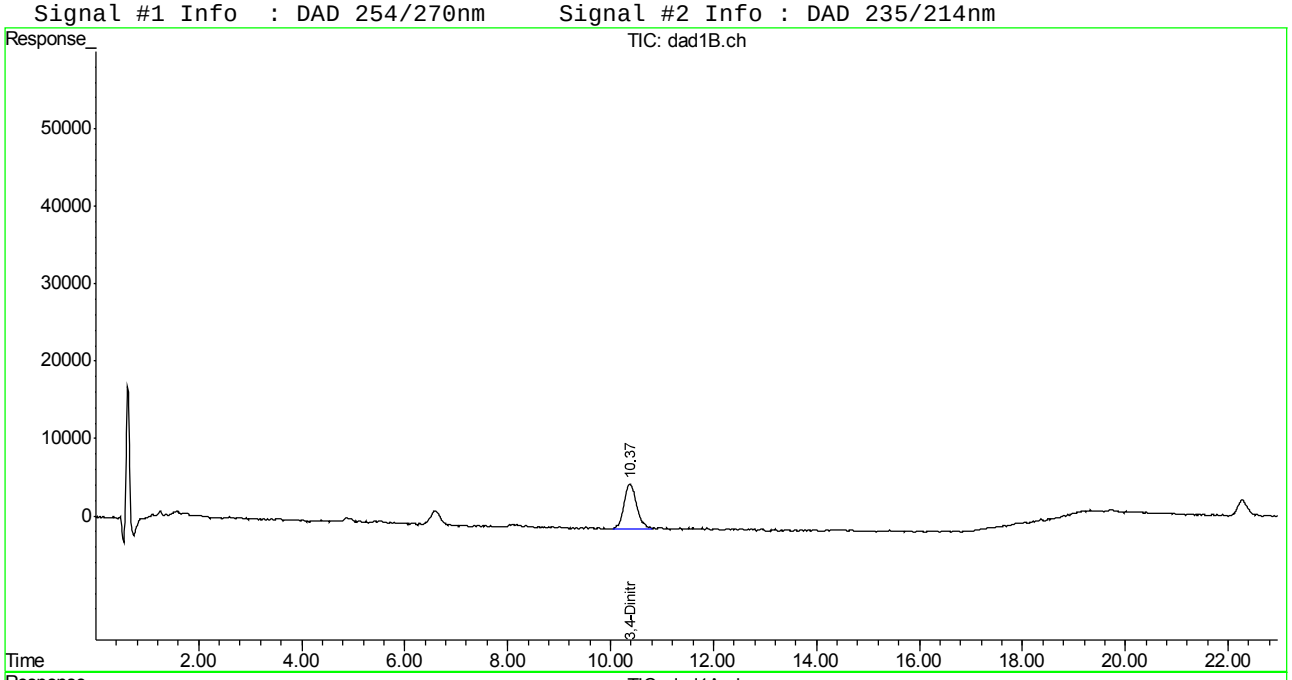
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059531.D 8330B_0419PLUS.M Tue May 01 08:37:21 2018 Page 1

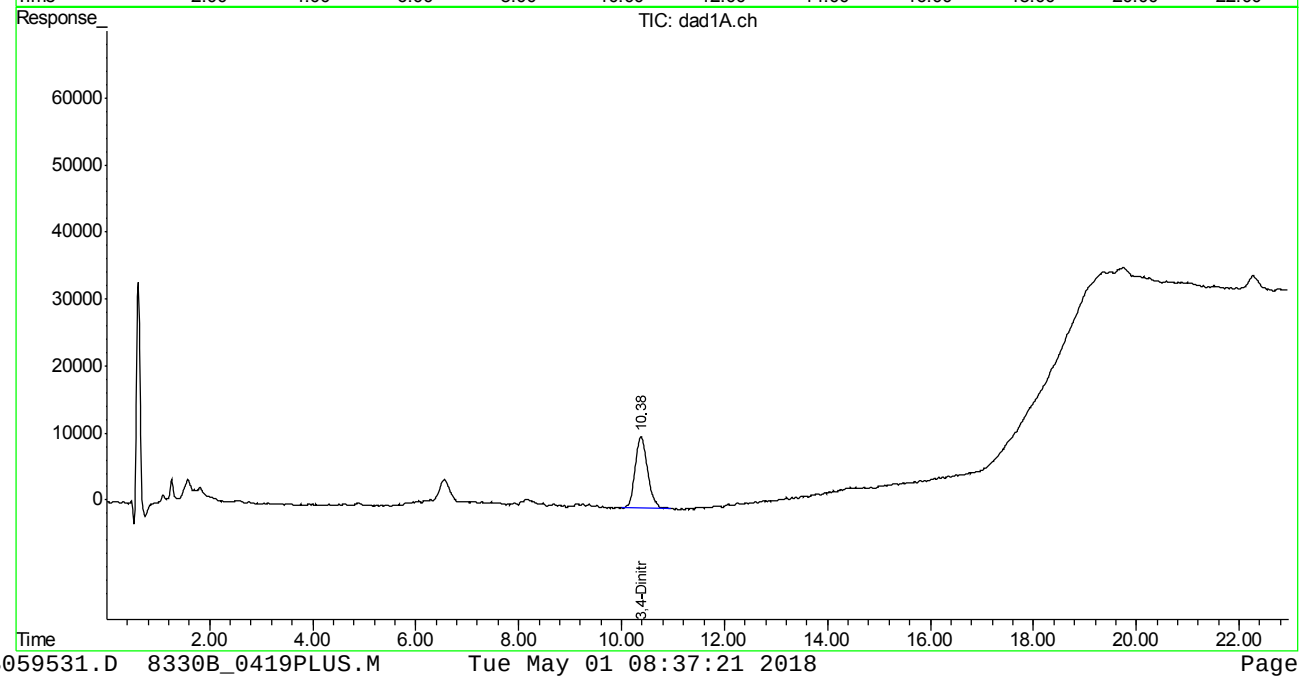
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059531.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059531.D\dad1A.ch
Acq On : 30-Apr-2018, 20:08:12 Operator: evitam
Sample : fa53725-125 Inst : G1315B
Misc : OP69837,gbb1726,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 8:21 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059531.D 8330B_0419PLUS.M Tue May 01 08:37:21 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059526.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059526.D\dad1A.ch
Acq On : 30-Apr-2018, 17:38:28 Operator: evitam
Sample : op69837-mb Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 01 06:55:56 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.38	10.38	1029526	1866432	384.768	395.871
	Spiked Amount 500.000	Range 70 - 136		Recovery =		76.95%	79.17%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

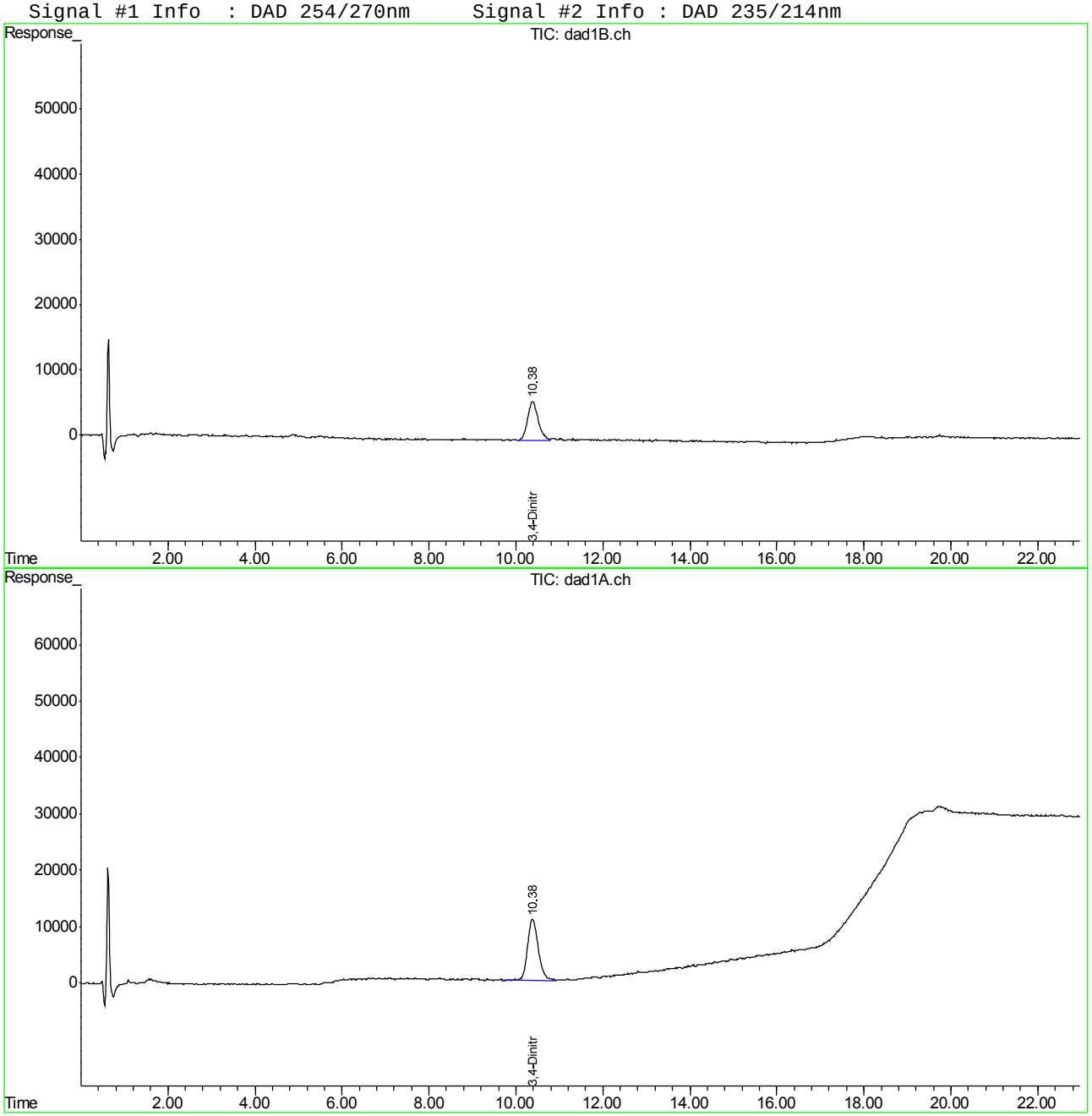
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059526.D 8330B_0419PLUS.M Tue May 01 08:37:16 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059526.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059526.D\dad1A.ch
Acq On : 30-Apr-2018, 17:38:28 Operator: evitam
Sample : op69837-mb Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 8:12 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



BB059526.D 8330B_0419PLUS.M Tue May 01 08:37:16 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/01/18 17:23

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0501RPB3\GG614533.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0501RPB3\GG614533.D\dad1A.ch
Acq On : 01-May-2018, 12:50:49 Operator: evitam
Sample : op69837-mb Inst : G1315B
Misc : op69837,Ggg2623,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 01 14:18:34 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.19	14.19	2684194	5145219	516.700	475.633m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		103.34%	95.13%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

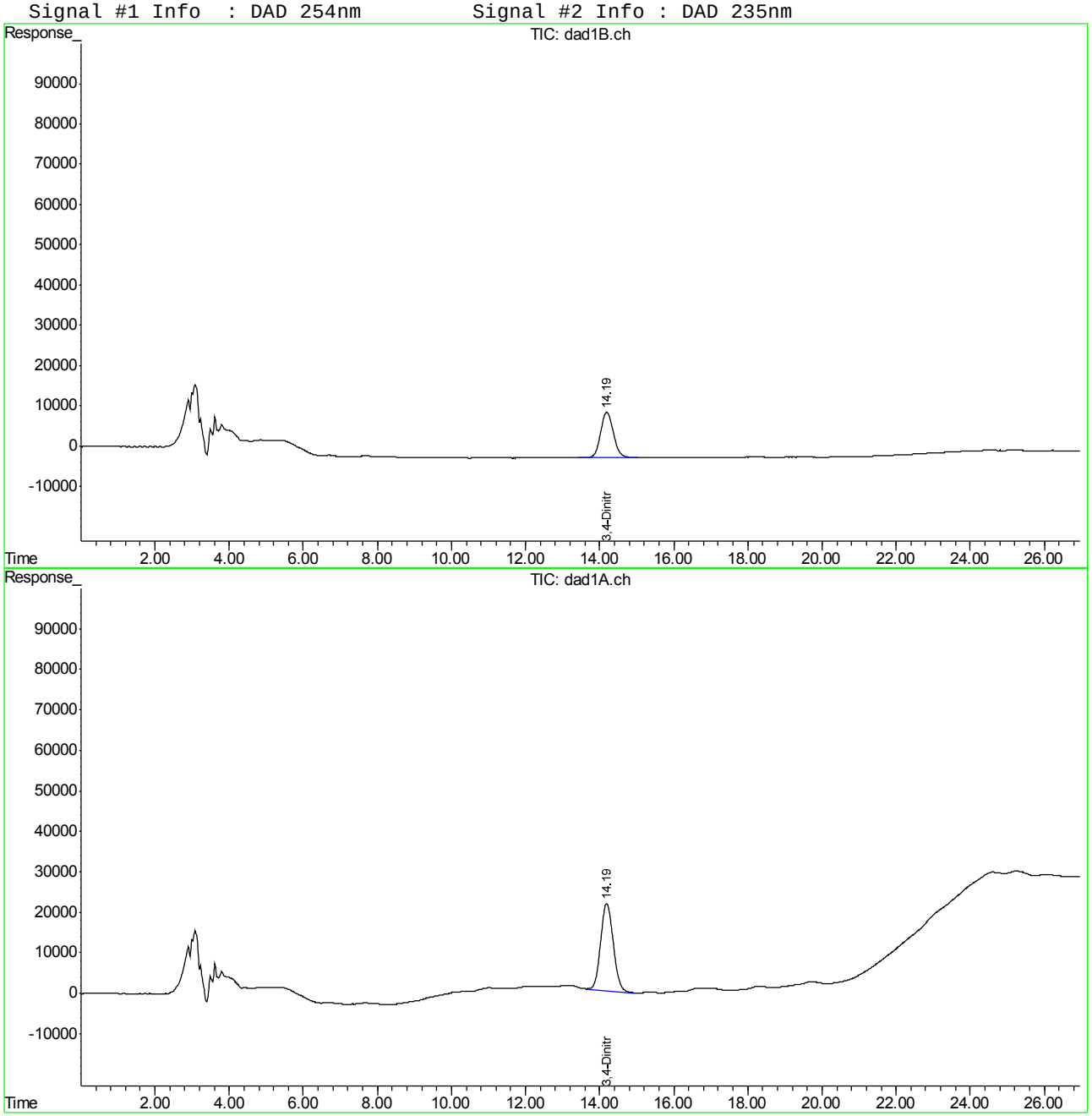
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614533.D 8330RPB.M_1113M.M Tue May 01 14:44:59 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0501RPB3\GG614533.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0501RPB3\GG614533.D\dad1A.ch
Acq On : 01-May-2018, 12:50:49 Operator: evitam
Sample : op69837-mb Inst : G1315B
Misc : op69837,Ggg2623,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 1 14:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

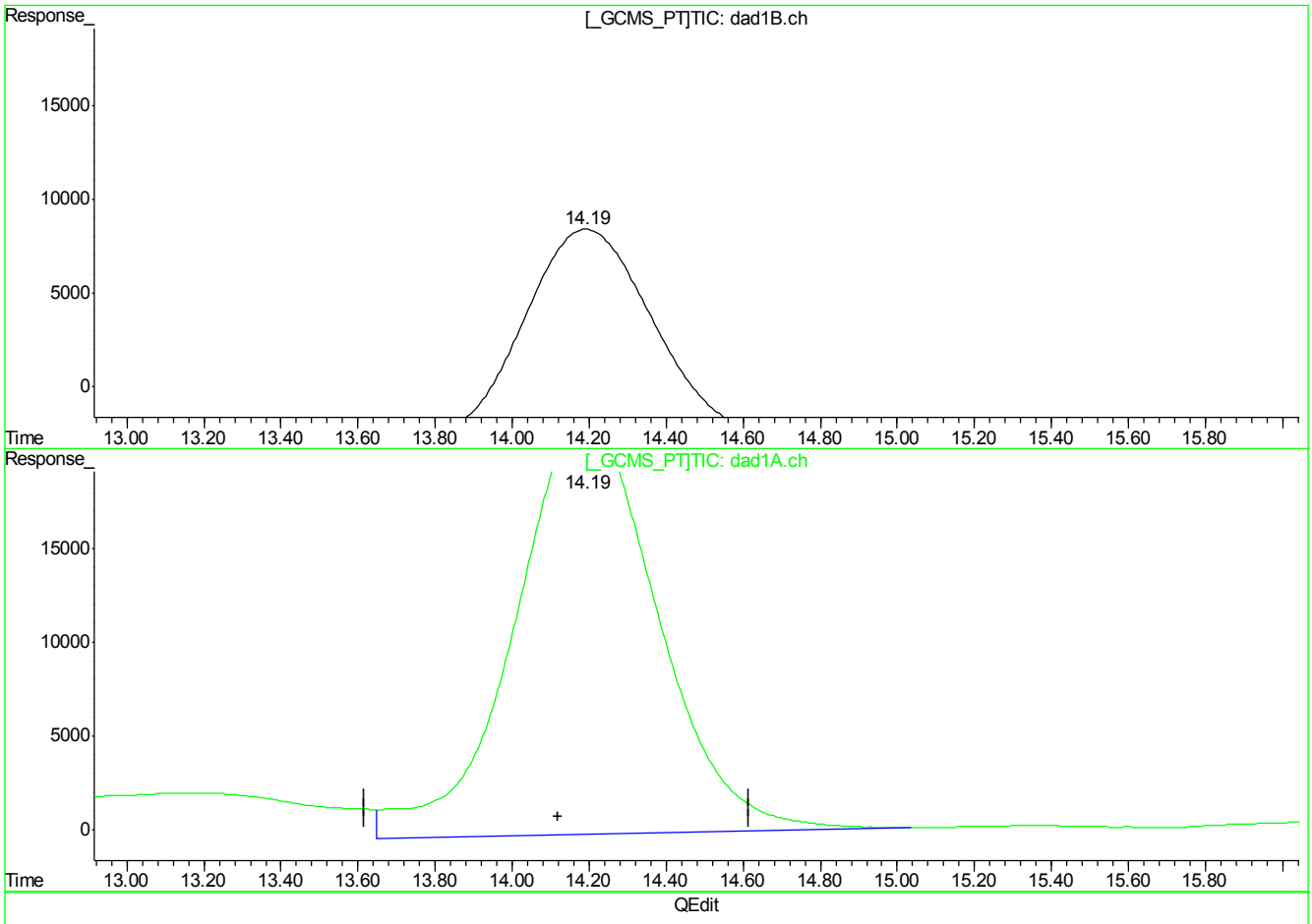
Sample Number:	OP69837-MB	**Method:**	SW846 8330B
Lab FileID:	GG614533.D	**Analyst approved:**	05/01/18 14:50 Evita Martinez
Injection Time:	05/01/18 12:50	**Supervisor approved:**	05/01/18 17:23 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.19	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0501RPB3\GG614533.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0501RPB3\GG614533.D\dad1A.ch
Acq On : 01-May-2018, 12:50:49 Operator: evitam
Sample : op69837-mb Inst : G1315B
Misc : op69837,Ggg2623,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 1 14:18 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.19min 516.700ppb

response 2684194

(12) 3,4-Dinitrotoluene #2 (S)

14.19min 526.469ppb

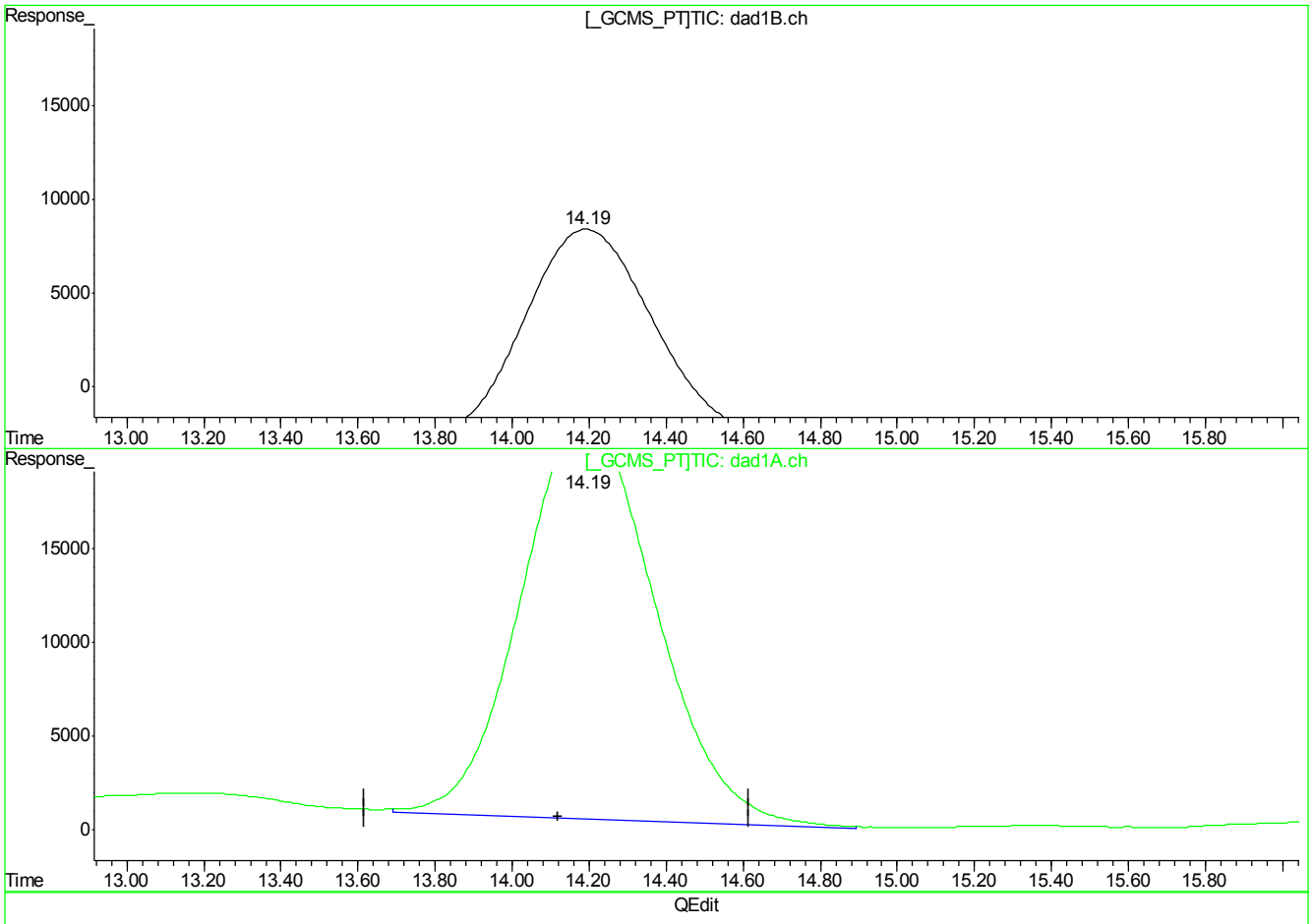
response 5695141

(+) = Expected Retention Time
GG614533.D 8330RPB.M_1113M.M Tue May 01 14:40:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0501RPB3\GG614533.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0501RPB3\GG614533.D\dad1A.ch
Acq On : 01-May-2018, 12:50:49 Operator: evitam
Sample : op69837-mb Inst : G1315B
Misc : op69837,Ggg2623,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 1 14:18 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.19min 516.700ppb

response 2684194

(12) 3,4-Dinitrotoluene #2 (S)

14.19min 475.633ppb m

response 5145219

(+) = Expected Retention Time
GG614533.D 8330RPB.M_1113M.M Tue May 01 14:40:28 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614590.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0507RPB3\GG614590.D\dad1A.ch
Acq On : 07-May-2018, 17:20:55 Operator: evitam
Sample : op69919-mb Inst : G1315B
Misc : op69919,Ggg2625,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:06:02 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.26	14.25	2684076	6124479	516.677	566.157
	Spiked Amount 500.000	Range 69 - 134		Recovery =		103.34%	113.23%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

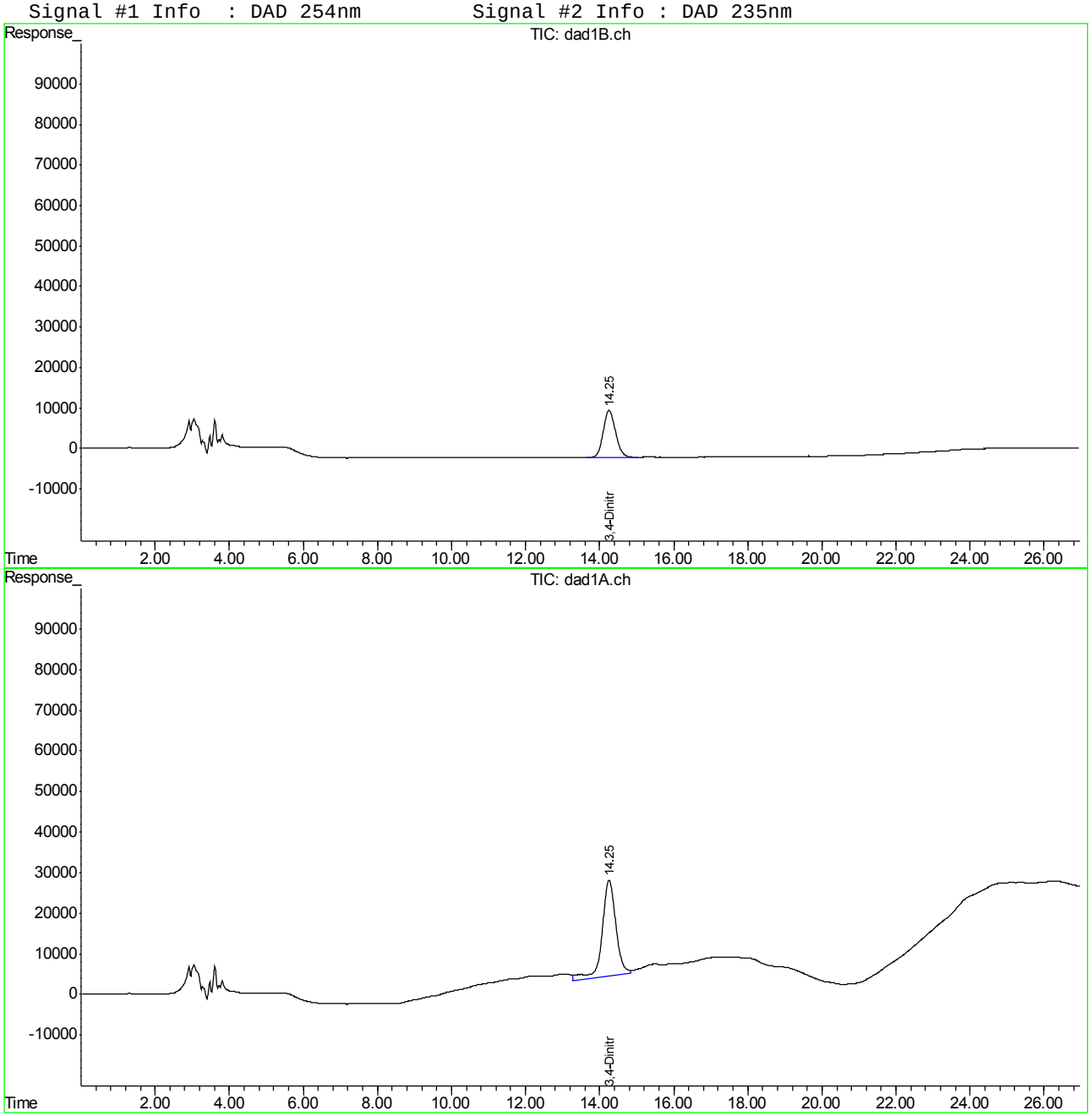
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614590.D 8330RPB.M_1113M.M Tue May 08 11:18:59 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614590.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0507RPB3\GG614590.D\dad1A.ch
Acq On : 07-May-2018, 17:20:55 Operator: evitam
Sample : op69919-mb Inst : G1315B
Misc : op69919,Ggg2625,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:13 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059601.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059601.D\dad1A.ch
Acq On : 08-May-2018, 11:31:16 Operator: evitam
Sample : op69921-mb Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 13:00:13 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.19	10.19	1075012	1828107	401.768	387.742
	Spiked Amount 500.000	Range 69 - 134		Recovery =		80.35%	77.55%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

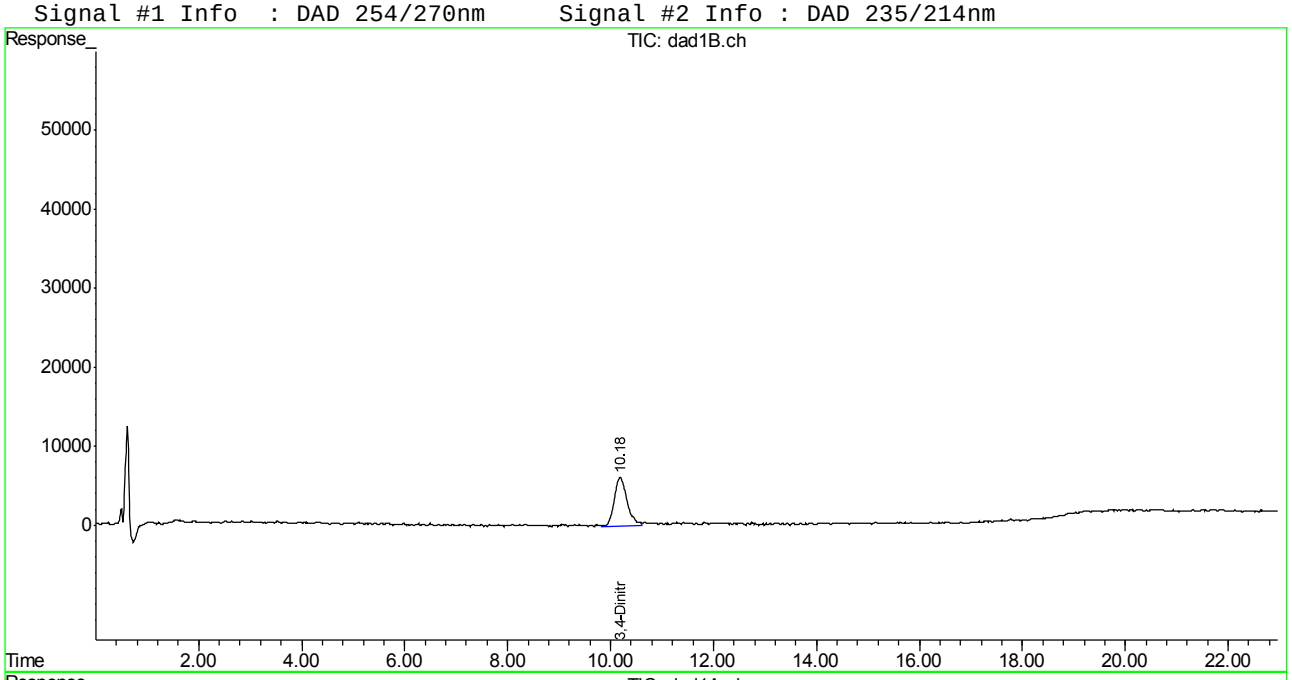
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059601.D 8330B_0419PLUS.M Tue May 08 14:11:59 2018 Page 1

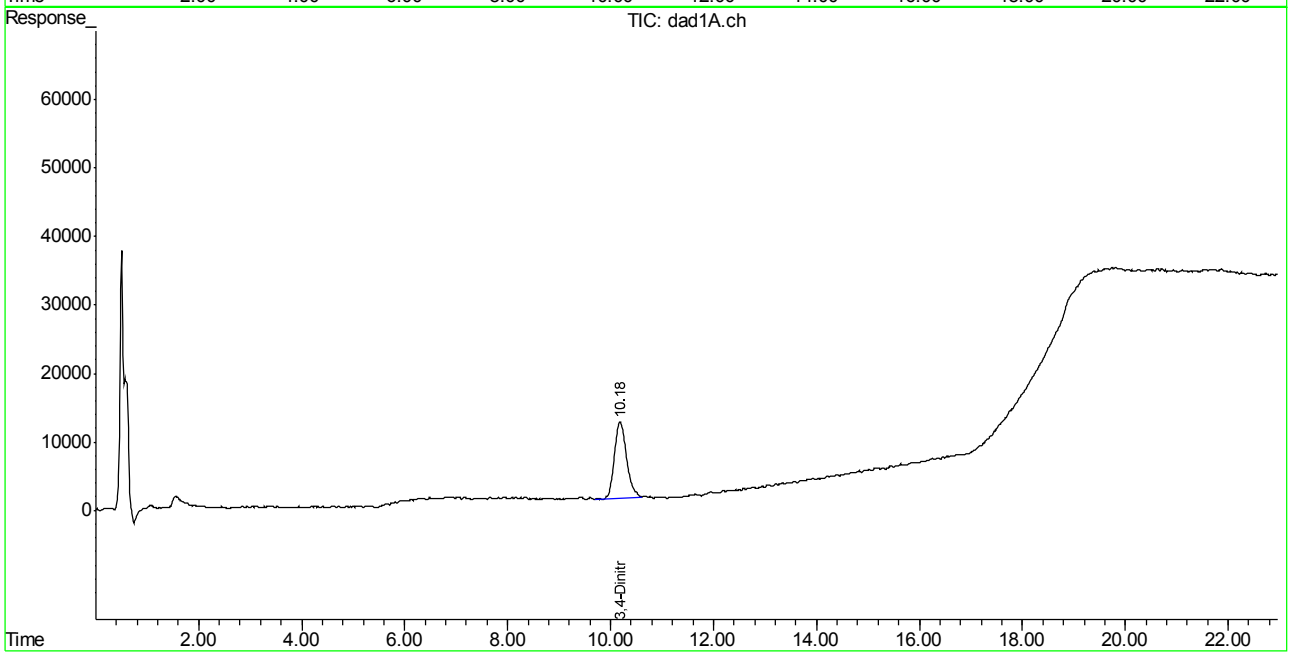
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059601.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059601.D\dad1A.ch
Acq On : 08-May-2018, 11:31:16 Operator: evitam
Sample : op69921-mb Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:08 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059601.D 8330B_0419PLUS.M Tue May 08 14:11:59 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614607.D\dad1B.ch Vial: 29
Signal #2 : G:\DATA\0508RPB3\GG614607.D\dad1A.ch
Acq On : 08-May-2018, 11:56:26 Operator: evitam
Sample : op69920-mb Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:53 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.22	2828724	6387528	544.521	590.474
	Spiked Amount 500.000	Range 69 - 134		Recovery =		108.90%	118.09%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

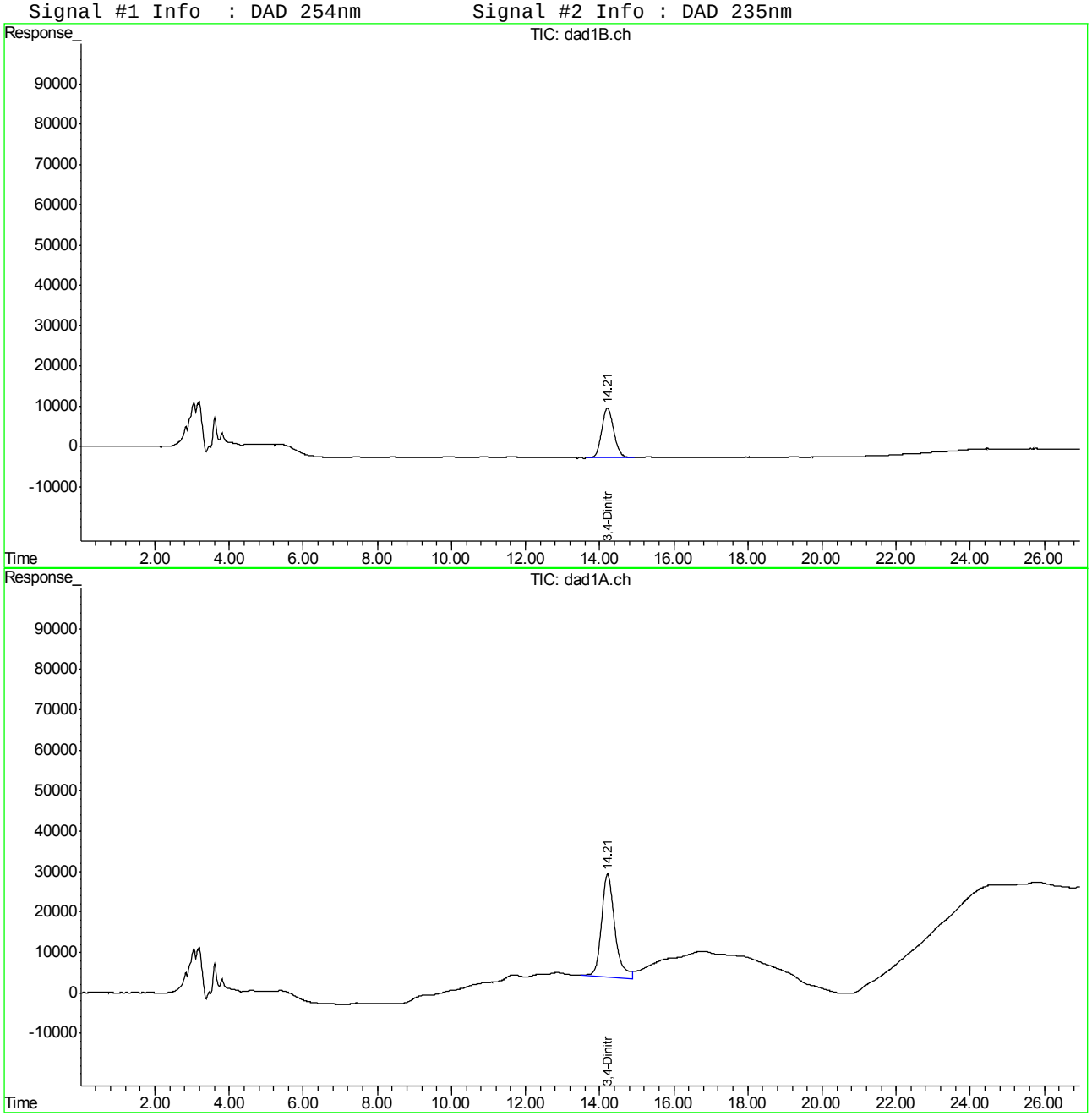
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614607.D 8330RPB.M_1113M.M Tue May 08 14:41:52 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614607.D\dad1B.ch Vial: 29
Signal #2 : G:\DATA\0508RPB3\GG614607.D\dad1A.ch
Acq On : 08-May-2018, 11:56:26 Operator: evitam
Sample : op69920-mb Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:39 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059614.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059614.D\dad1A.ch
Acq On : 08-May-2018, 18:24:15 Operator: evitam
Sample : op69921-gb1 Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 09 06:56:18 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.18	10.18	927583	1684644	346.669	357.313
	Spiked Amount 500.000	Range 69 - 134		Recovery =		69.33%	71.46%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

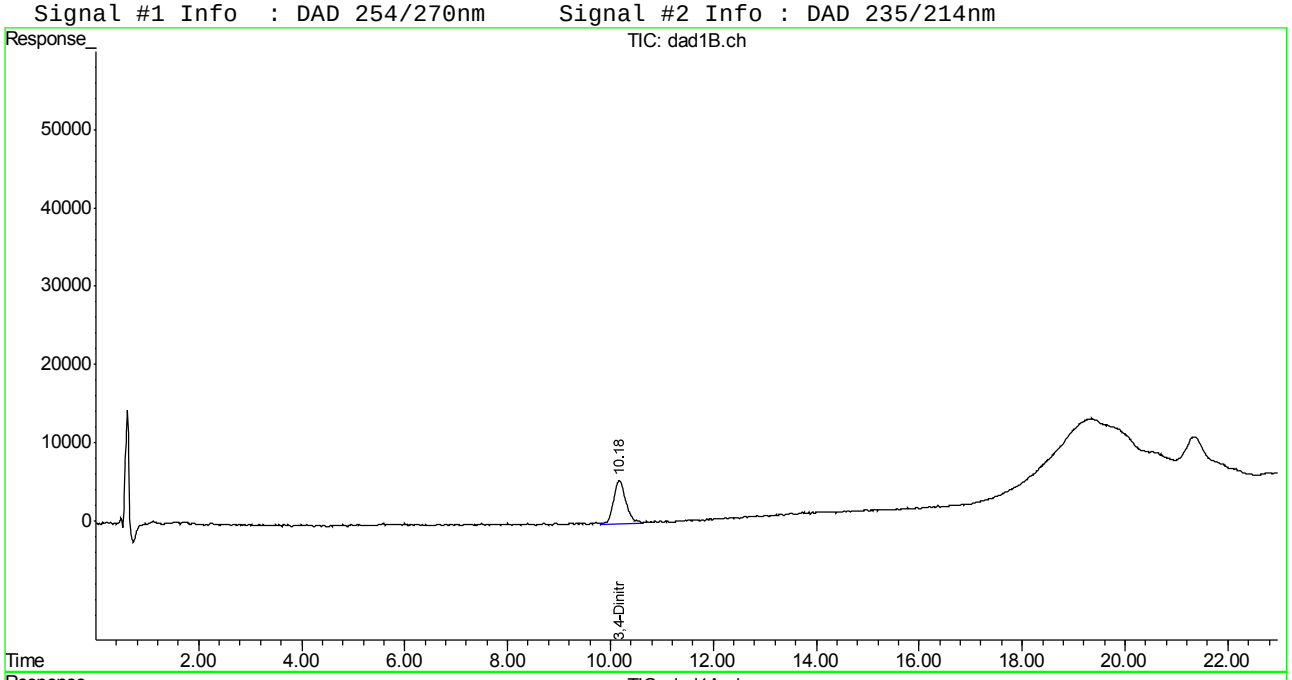
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059614.D 8330B_0419PLUS.M Wed May 09 09:31:00 2018 Page 1

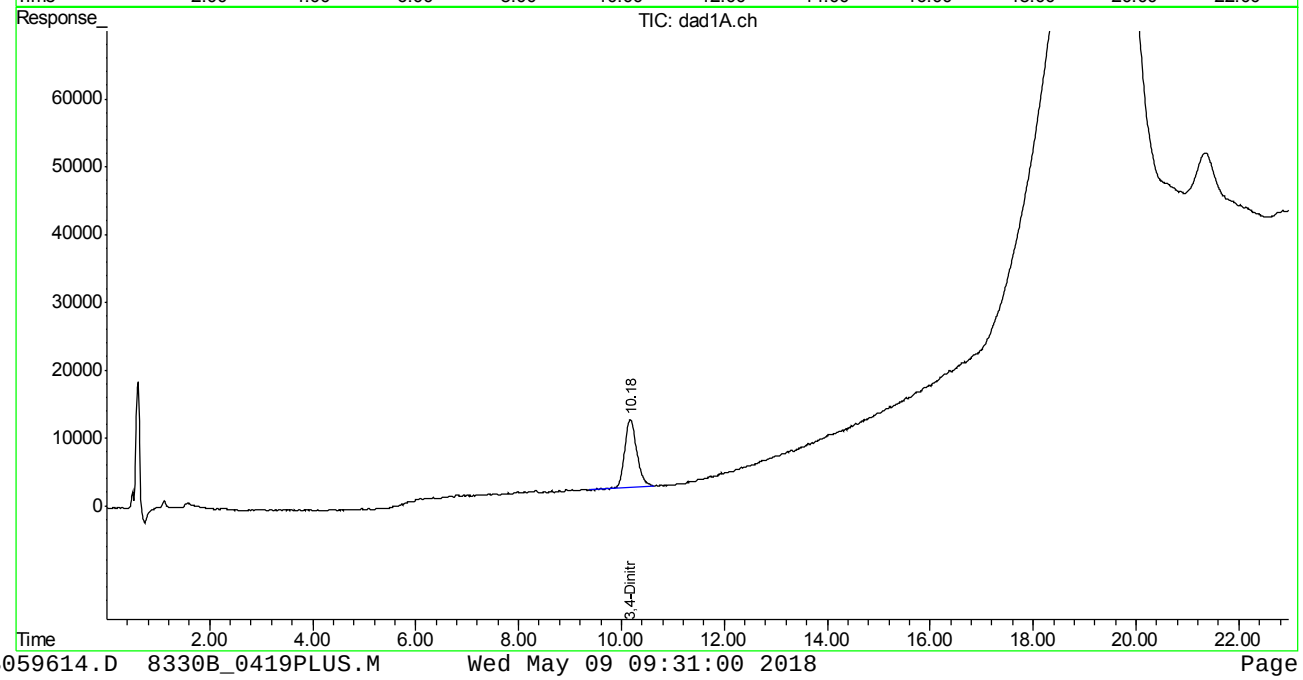
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059614.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059614.D\dad1A.ch
Acq On : 08-May-2018, 18:24:15 Operator: evitam
Sample : op69921-gb1 Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:51 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059614.D 8330B_0419PLUS.M Wed May 09 09:31:00 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059615.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059615.D\dad1A.ch
Acq On : 08-May-2018, 18:54:15 Operator: evitam
Sample : op69921-gb2 Inst : G1315B
Misc : OP69921,gbb1729,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 09 06:56:19 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.16	10.16	970781	1749933	362.814	371.161
	Spiked Amount 500.000	Range 69 - 134		Recovery =		72.56%	74.23%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

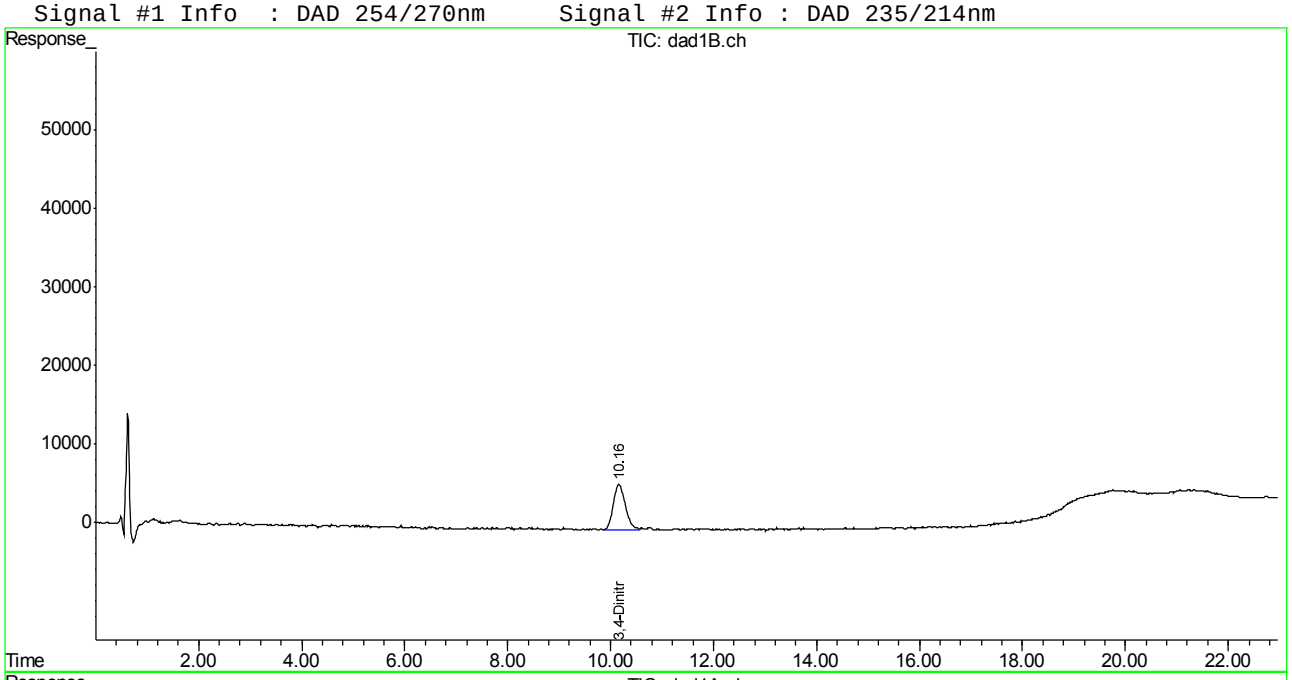
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059615.D 8330B_0419PLUS.M Wed May 09 09:31:01 2018 Page 1

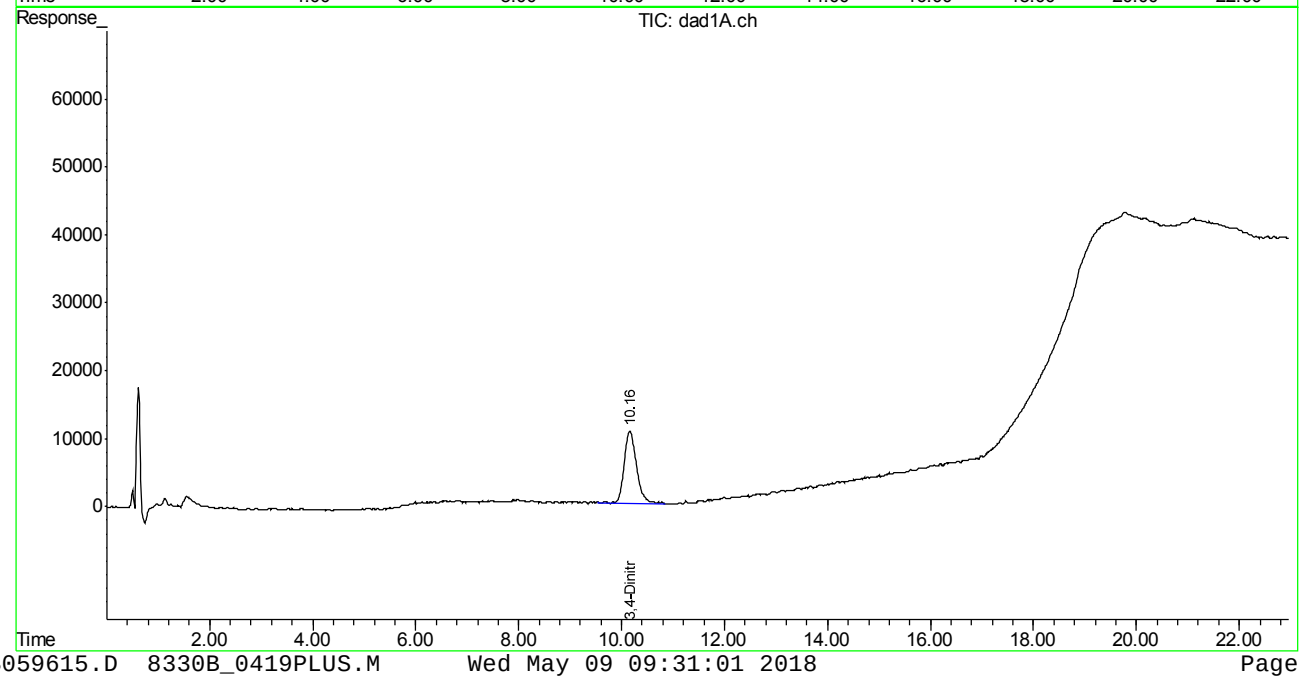
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059615.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059615.D\dad1A.ch
Acq On : 08-May-2018, 18:54:15 Operator: evitam
Sample : op69921-gb2 Inst : G1315B
Misc : OP69921,gbb1729,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:51 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059615.D 8330B_0419PLUS.M Wed May 09 09:31:01 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059616.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059616.D\dad1A.ch
Acq On : 08-May-2018, 19:24:14 Operator: evitam
Sample : op69921-gb3 Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 09 06:56:20 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.18	10.18	903397	1621161	337.630	343.849
	Spiked Amount 500.000	Range 69 - 134		Recovery =		67.53%#	68.77%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

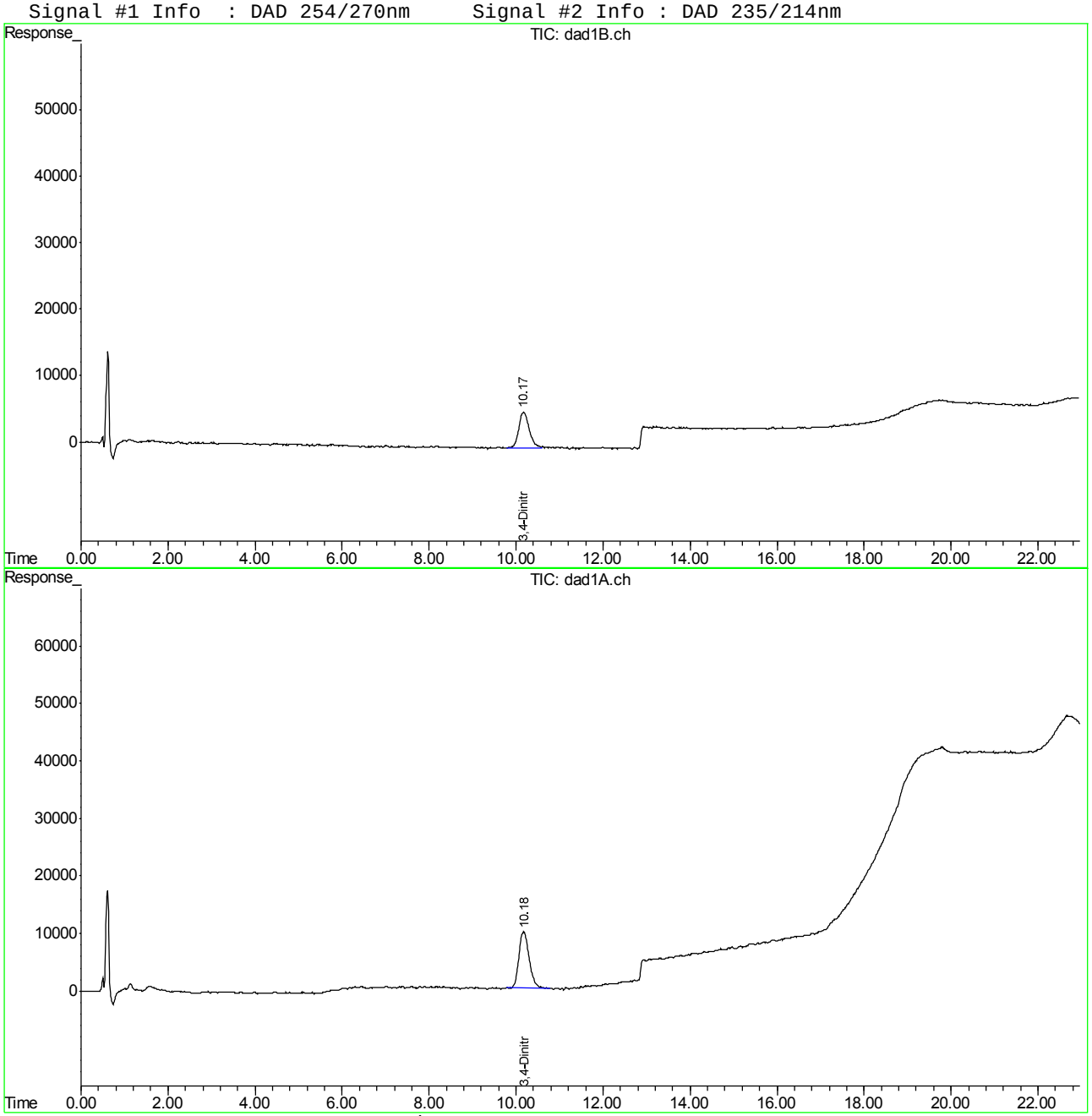
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059616.D 8330B_0419PLUS.M Wed May 09 09:31:02 2018

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059616.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059616.D\dad1A.ch
Acq On : 08-May-2018, 19:24:14 Operator: evitam
Sample : op69921-gb3 Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:51 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614620.D\dad1B.ch Vial: 24
Signal #2 : G:\DATA\0508RPB3\GG614620.D\dad1A.ch
Acq On : 08-May-2018, 19:54:44 Operator: evitam
Sample : op69919-gb1 Inst : G1315B
Misc : op69919,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:02 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.20	14.20	2386900	4673138	459.471	431.993
	Spiked Amount 500.000	Range 69 - 134		Recovery =		91.89%	86.40%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

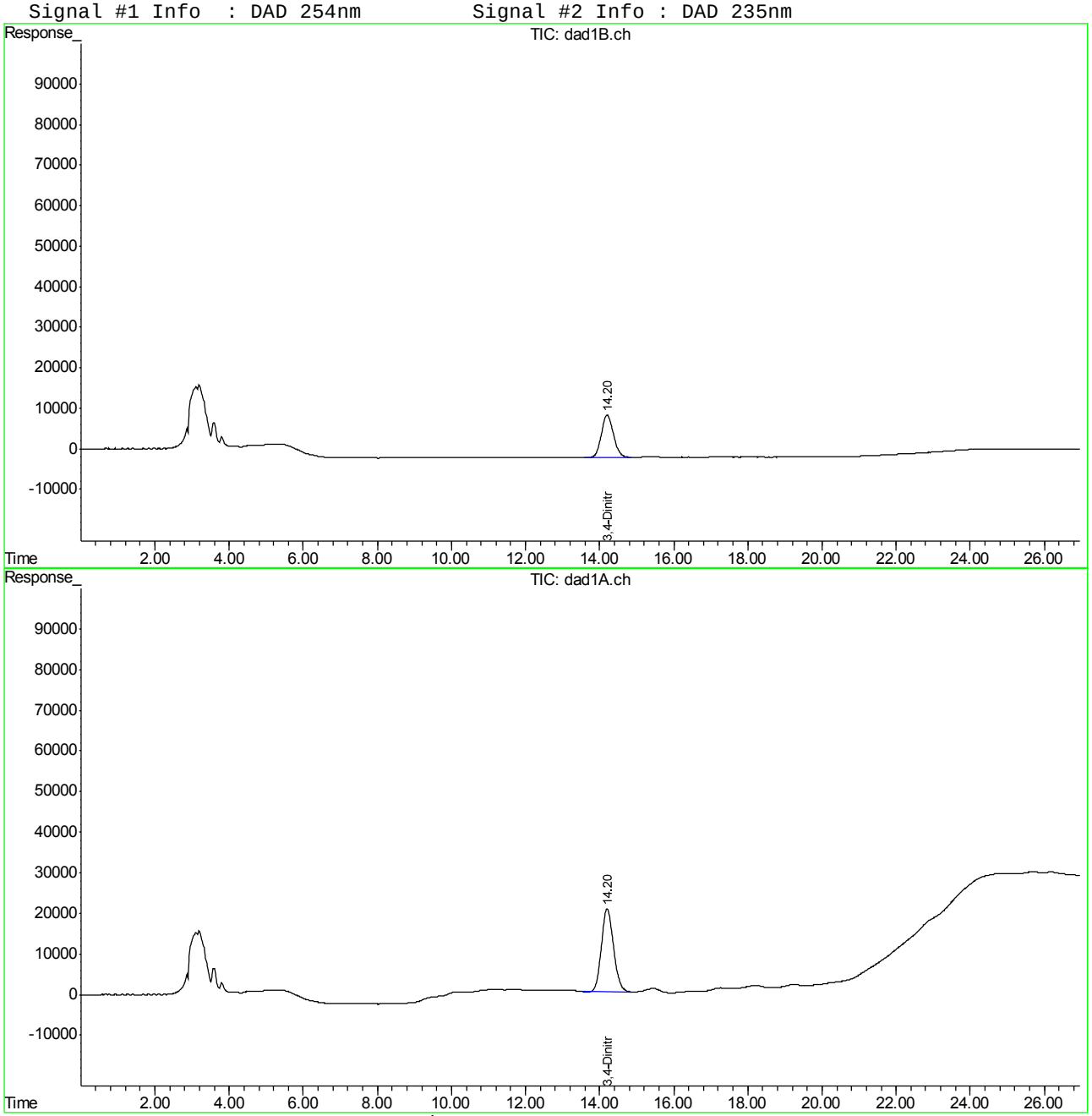
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614620.D 8330RPB.M_1113M.M Wed May 09 11:10:11 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614620.D\dad1B.ch Vial: 24
Signal #2 : G:\DATA\0508RPB3\GG614620.D\dad1A.ch
Acq On : 08-May-2018, 19:54:44 Operator: evitam
Sample : op69919-gb1 Inst : G1315B
Misc : op69919,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:26 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614620.D 8330RPB.M_1113M.M Wed May 09 11:10:11 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614621.D\dad1B.ch Vial: 25
Signal #2 : G:\DATA\0508RPB3\GG614621.D\dad1A.ch
Acq On : 08-May-2018, 20:24:10 Operator: evitam
Sample : op69919-gb2 Inst : G1315B
Misc : op69919,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:03 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.20	14.19	2296970	4518184	442.160	417.669m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		88.43%	83.53%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

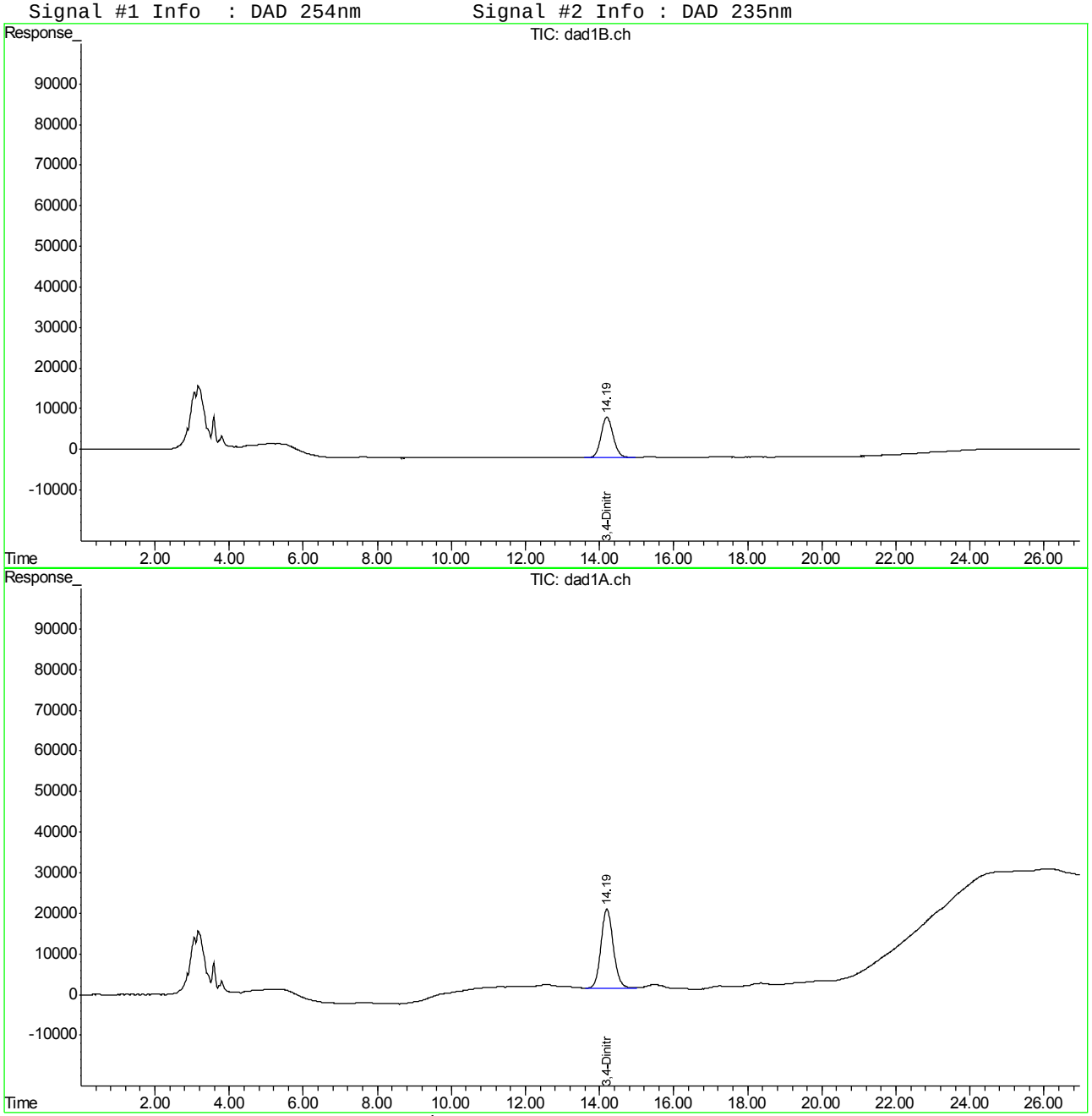
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614621.D 8330RPB.M_1113M.M Wed May 09 11:12:58 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614621.D\dad1B.ch Vial: 25
Signal #2 : G:\DATA\0508RPB3\GG614621.D\dad1A.ch
Acq On : 08-May-2018, 20:24:10 Operator: evitam
Sample : op69919-gb2 Inst : G1315B
Misc : op69919,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

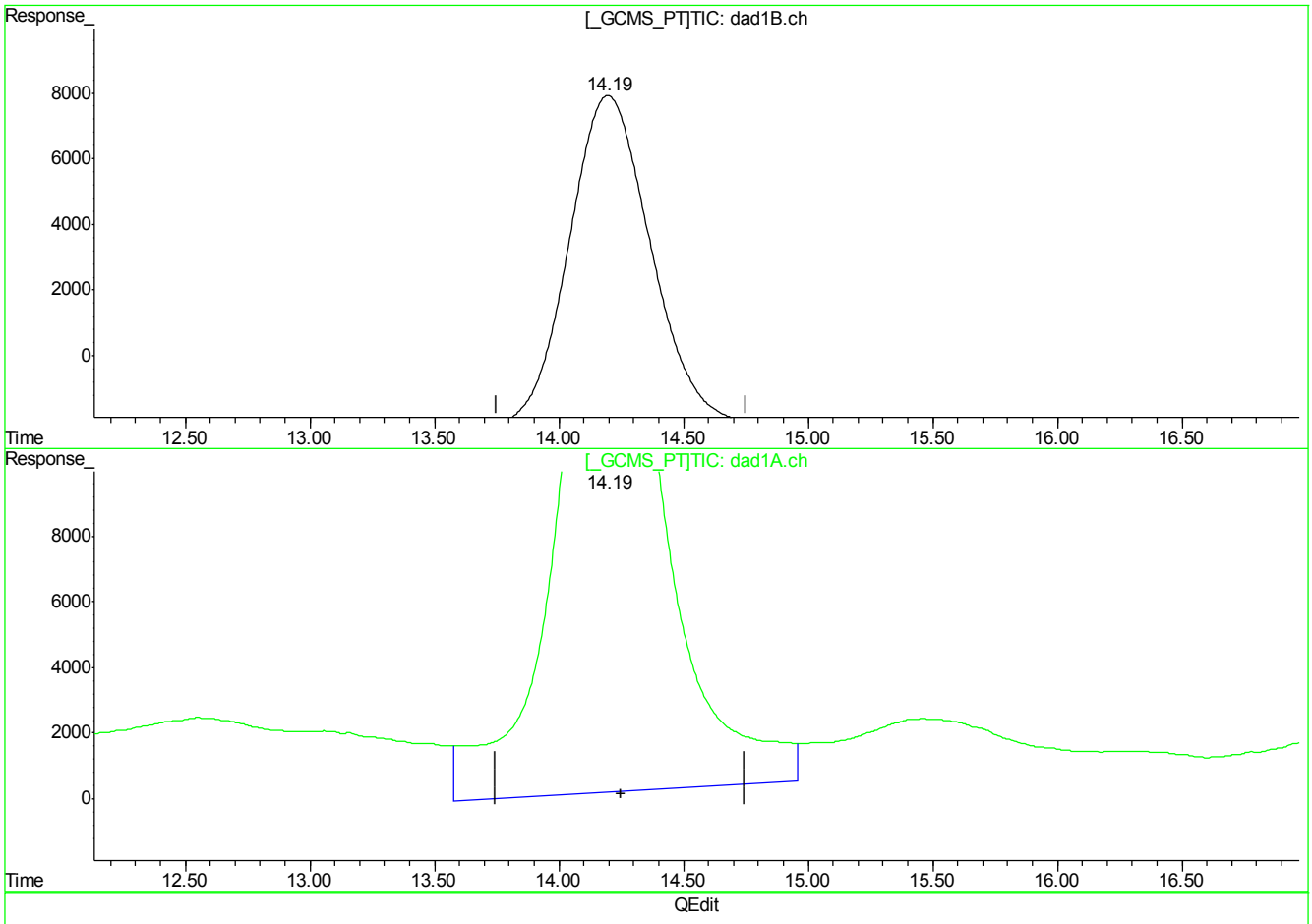
Sample Number:	OP69919-GB2	**Method:**	SW846 8330B
Lab FileID:	GG614621.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/08/18 20:24	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.19	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614621.D\dad1B.ch Vial: 25
Signal #2 : G:\DATA\0508RPB3\GG614621.D\dad1A.ch
Acq On : 08-May-2018, 20:24:10 Operator: evitam
Sample : op69919-gb2 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.20min 442.160ppb

response 2296970

(12) 3,4-Dinitrotoluene #2 (S)

14.20min 520.739ppb

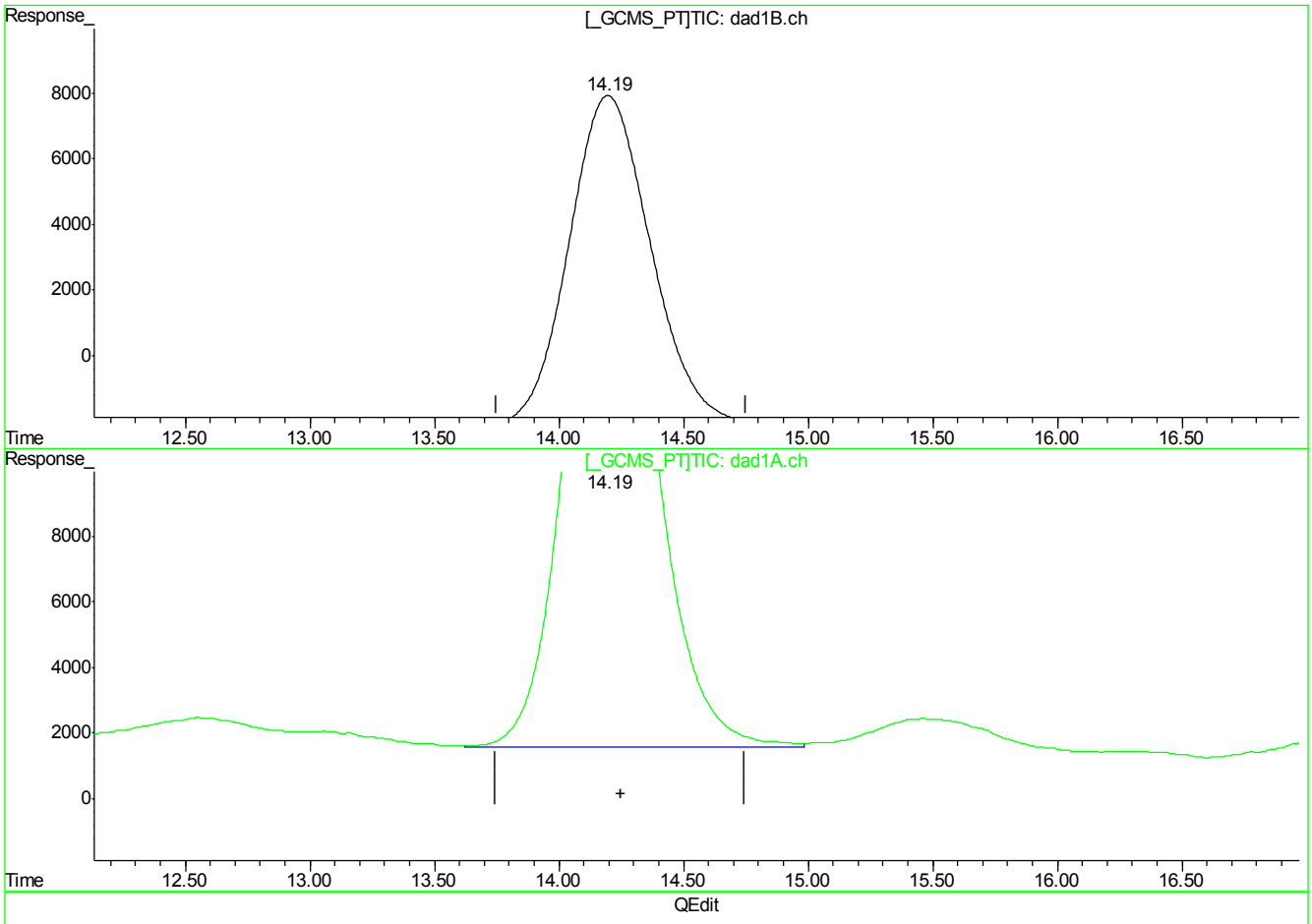
response 5633160

(+) = Expected Retention Time
GG614621.D 8330RPB.M_1113M.M Wed May 09 10:27:10 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614621.D\dad1B.ch Vial: 25
Signal #2 : G:\DATA\0508RPB3\GG614621.D\dad1A.ch
Acq On : 08-May-2018, 20:24:10 Operator: evitam
Sample : op69919-gb2 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.20min 442.160ppb

response 2296970

(12) 3,4-Dinitrotoluene #2 (S)

14.19min 417.669ppb m

response 4518184

(+) = Expected Retention Time
GG614621.D 8330RPB.M_1113M.M Wed May 09 10:27:13 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614622.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0508RPB3\GG614622.D\dad1A.ch
Acq On : 08-May-2018, 20:53:38 Operator: evitam
Sample : op69919-gb3 Inst : G1315B
Misc : op69919,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:04 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.22	2216821	4330262	426.732	400.297
	Spiked Amount 500.000	Range 69 - 134		Recovery =		85.35%	80.06%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

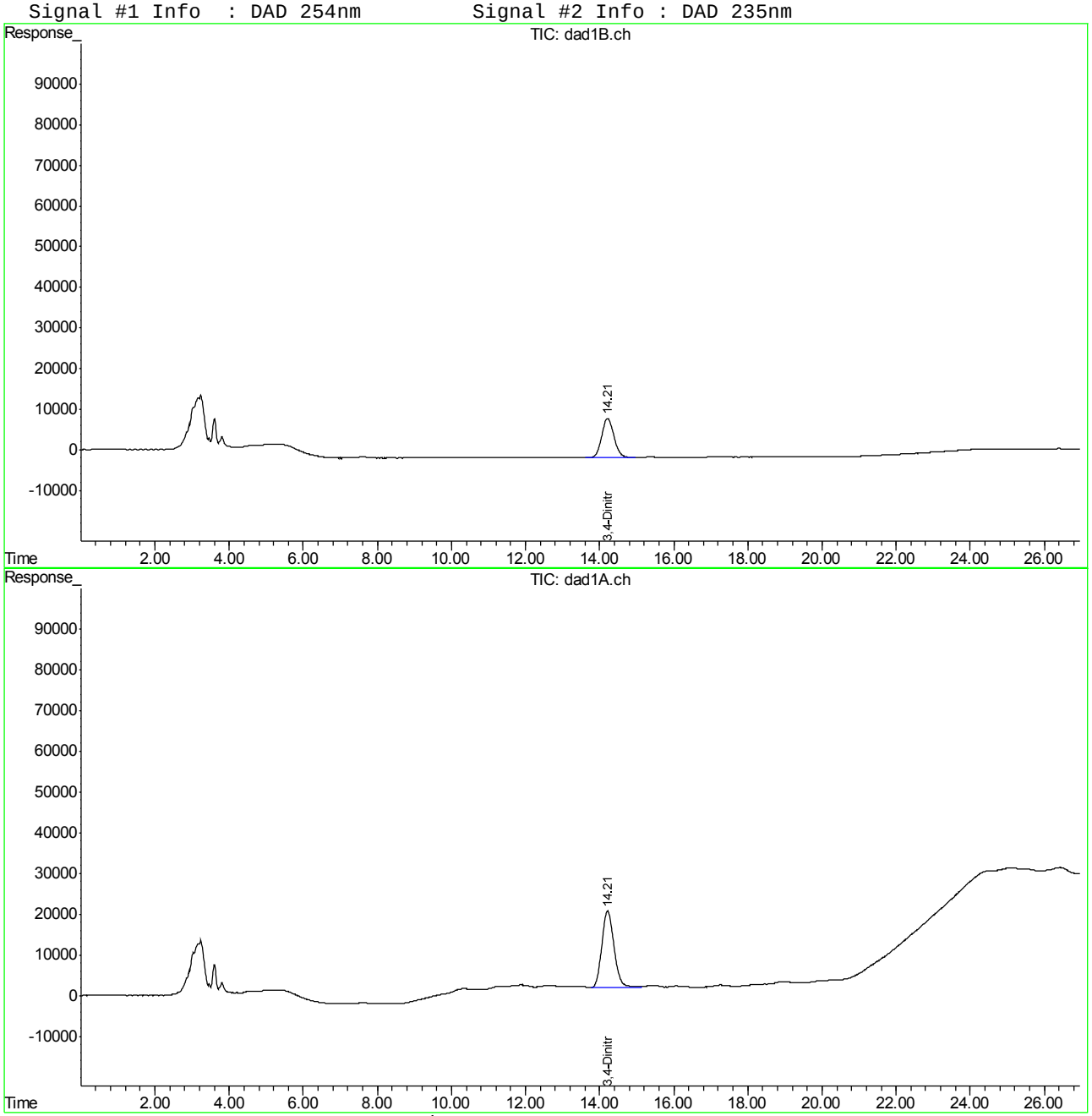
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614622.D 8330RPB.M_1113M.M Wed May 09 11:10:13 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614622.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0508RPB3\GG614622.D\dad1A.ch
Acq On : 08-May-2018, 20:53:38 Operator: evitam
Sample : op69919-gb3 Inst : G1315B
Misc : op69919,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614625.D\dad1B.ch Vial: 48
Signal #2 : G:\DATA\0508RPB3\GG614625.D\dad1A.ch
Acq On : 08-May-2018, 22:22:01 Operator: evitam
Sample : op69920-gb1 Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:07 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2317383	4638965	446.089	428.834
	Spiked Amount 500.000	Range 69 - 134		Recovery =		89.22%	85.77%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

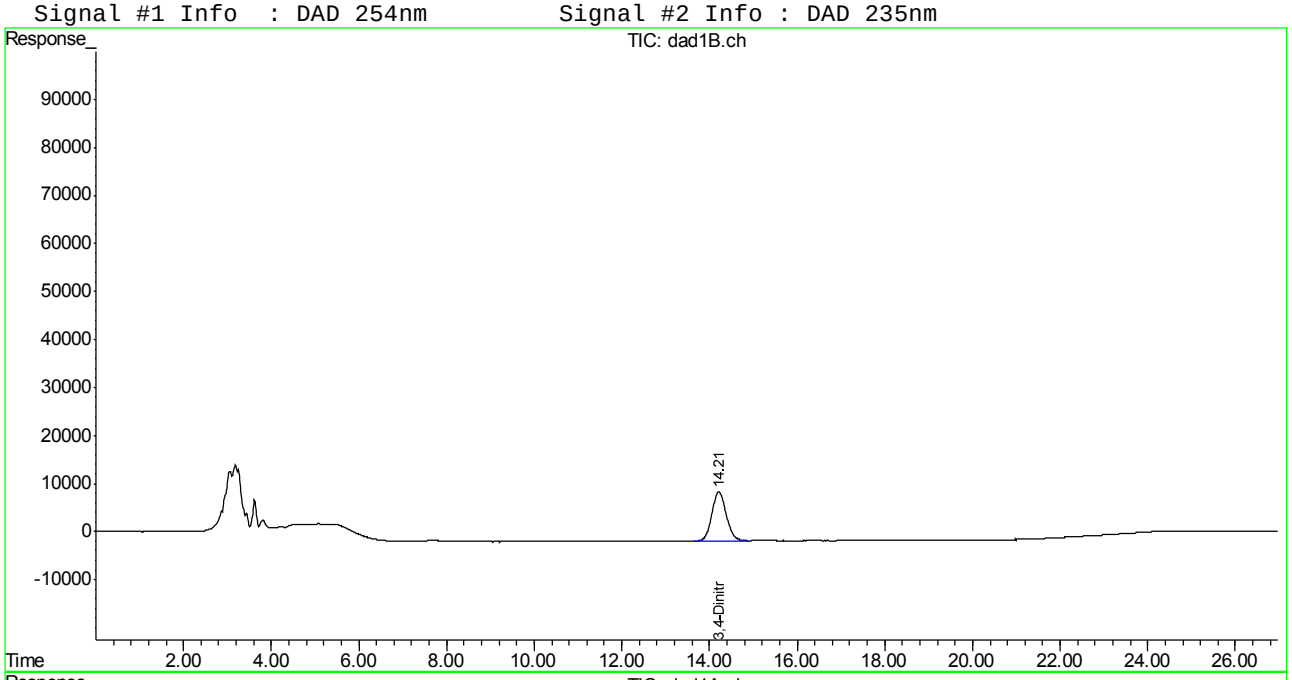
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614625.D 8330RPB.M_1113M.M Wed May 09 11:10:15 2018 Page 1

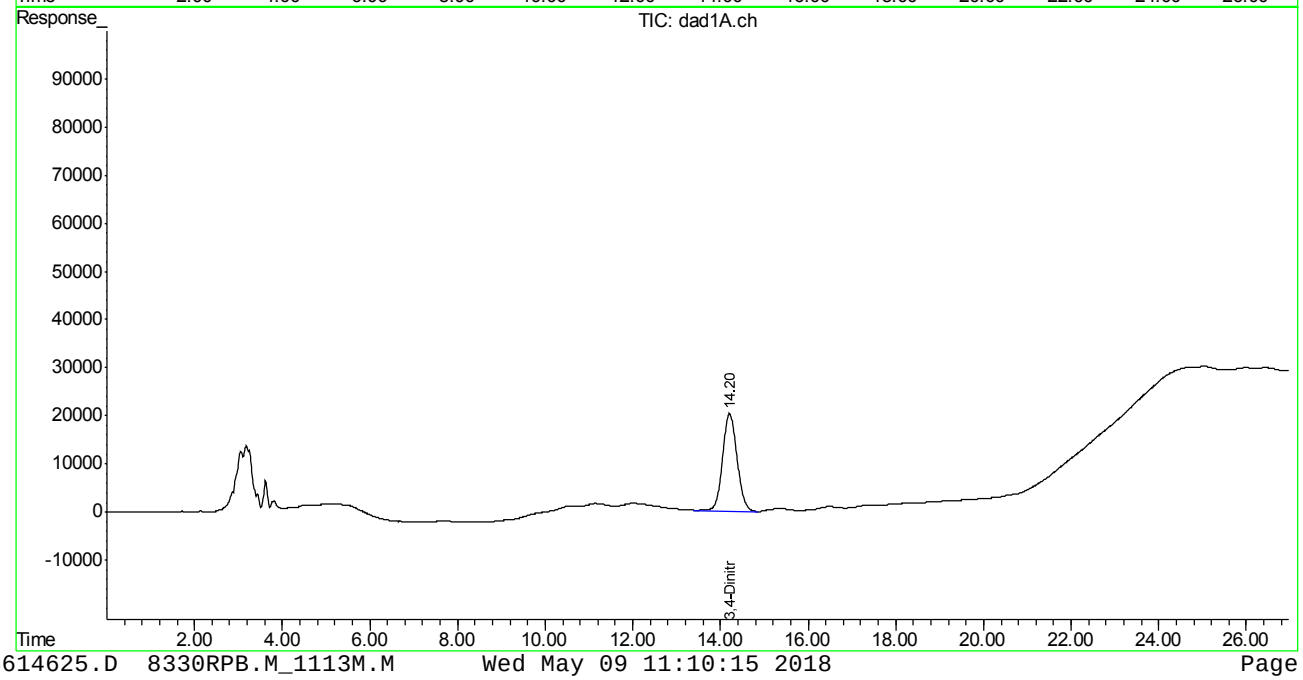
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614625.D\dad1B.ch Vial: 48
Signal #2 : G:\DATA\0508RPB3\GG614625.D\dad1A.ch
Acq On : 08-May-2018, 22:22:01 Operator: evitam
Sample : op69920-gb1 Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:33 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG614625.D 8330RPB.M_1113M.M Wed May 09 11:10:15 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614626.D\dad1B.ch Vial: 49
Signal #2 : G:\DATA\0508RPB3\GG614626.D\dad1A.ch
Acq On : 08-May-2018, 22:51:29 Operator: evitam
Sample : op69920-gb2 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:08 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2205073	4176592	424.470	386.091m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		84.89%	77.22%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

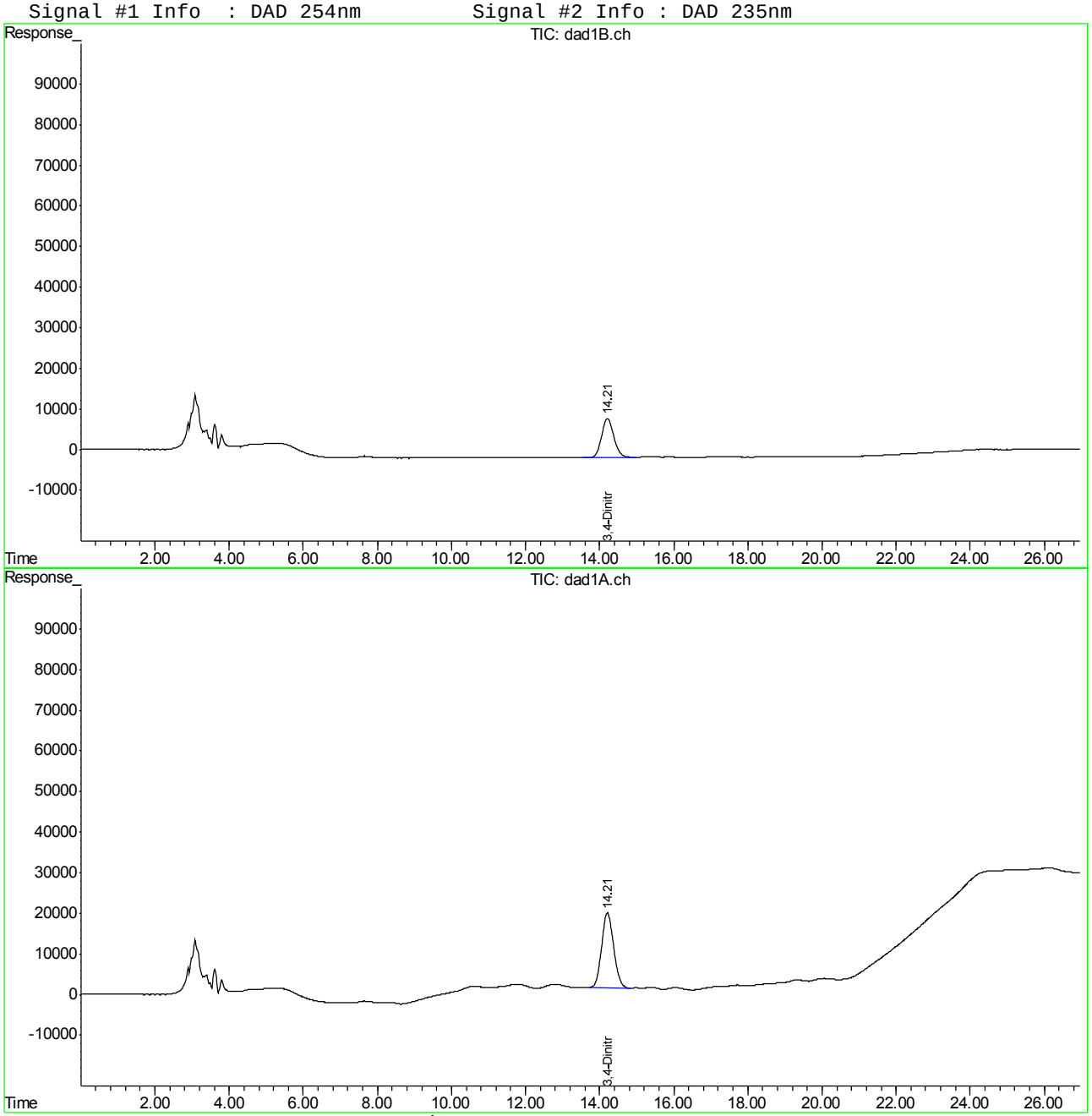
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614626.D 8330RPB.M_1113M.M Wed May 09 11:10:16 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614626.D\dad1B.ch Vial: 49
Signal #2 : G:\DATA\0508RPB3\GG614626.D\dad1A.ch
Acq On : 08-May-2018, 22:51:29 Operator: evitam
Sample : op69920-gb2 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:34 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

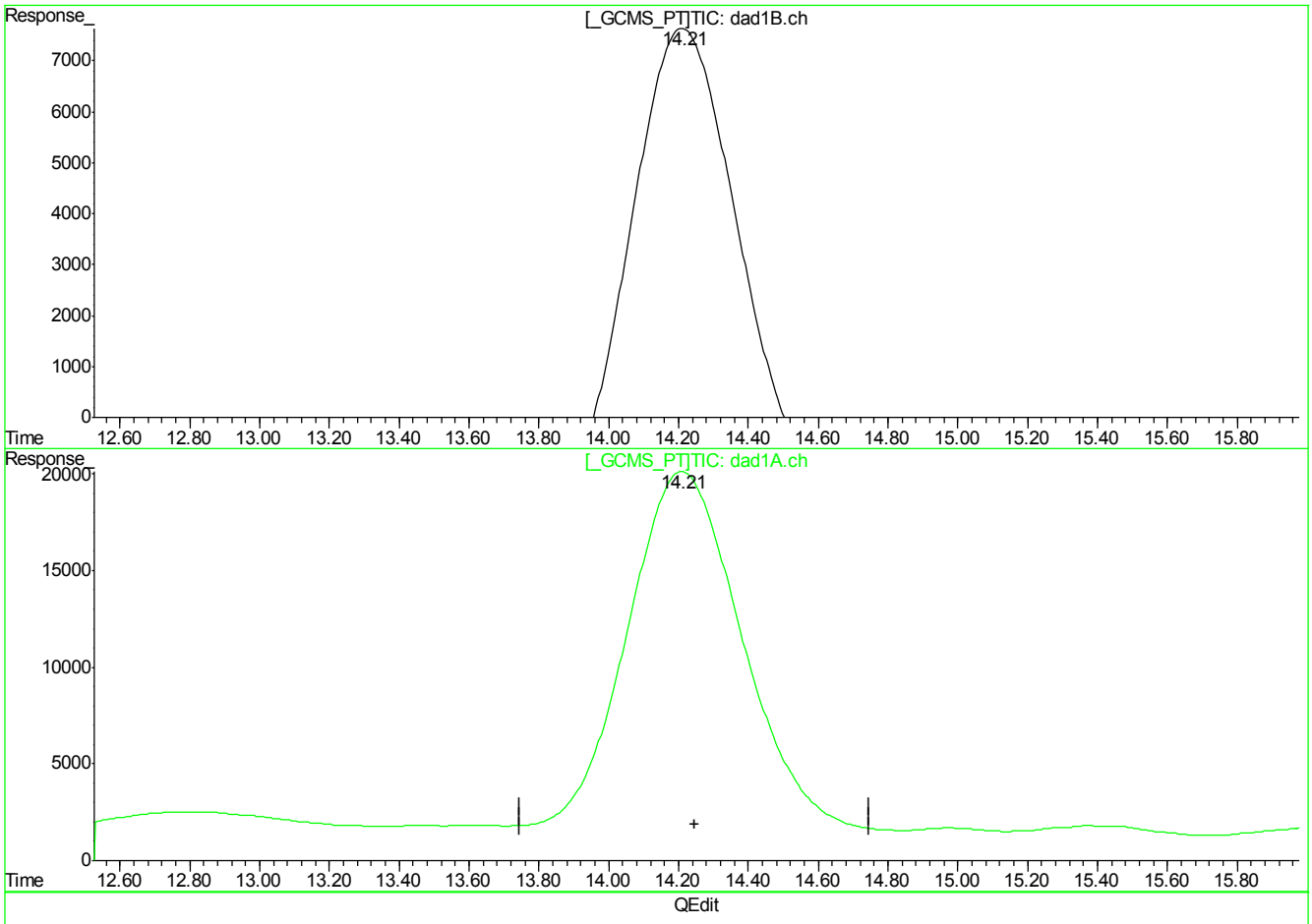
Sample Number:	OP69920-GB2	**Method:**	SW846 8330B
Lab FileID:	GG614626.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/08/18 22:51	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.21	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614626.D\dad1B.ch Vial: 49
Signal #2 : G:\DATA\0508RPB3\GG614626.D\dad1A.ch
Acq On : 08-May-2018, 22:51:29 Operator: evitam
Sample : op69920-gb2 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 424.470ppb

response 2205073

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 480.887ppb

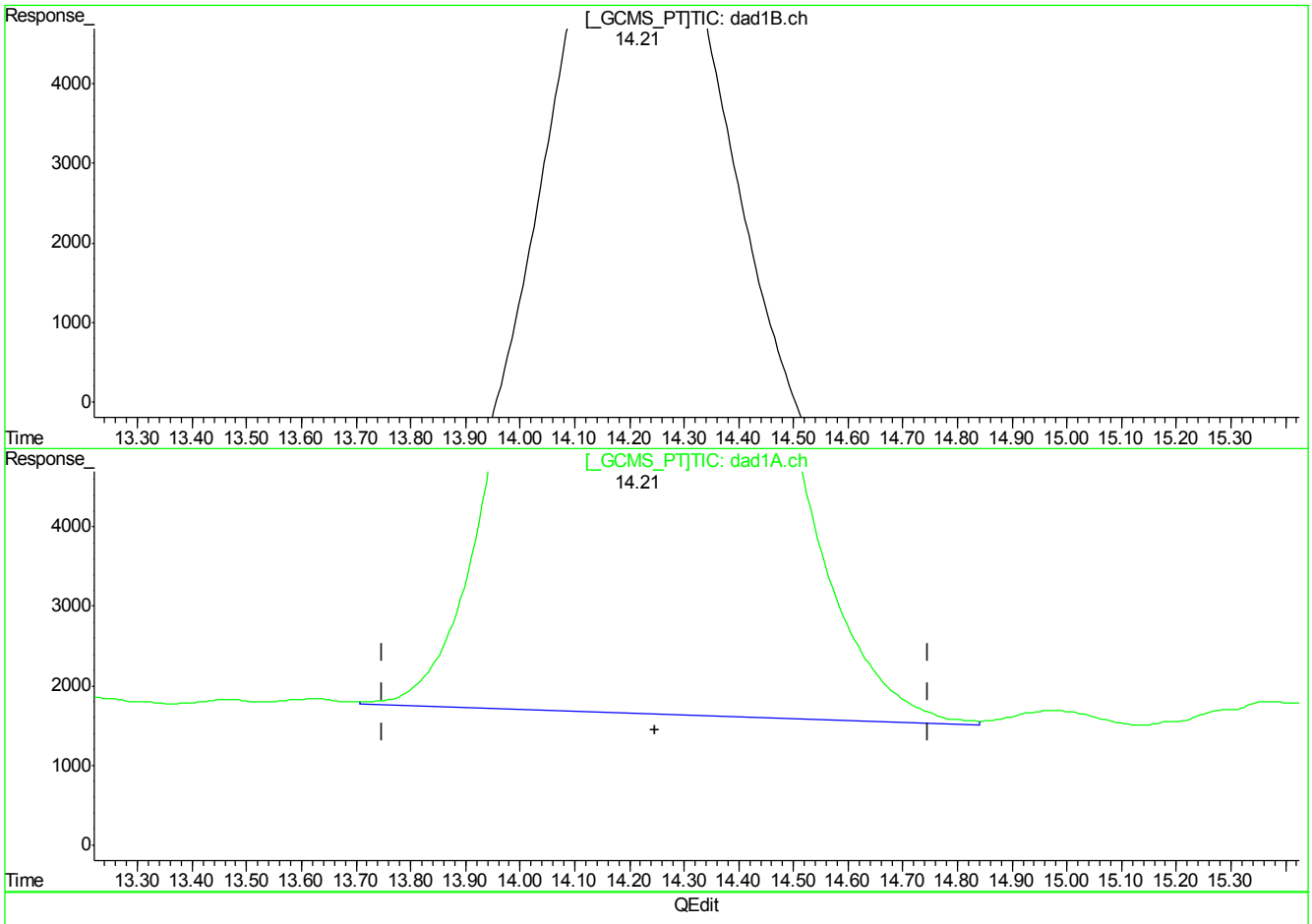
response 5202062

(+) = Expected Retention Time
GG614626.D 8330RPB.M_1113M.M Wed May 09 10:34:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614626.D\dad1B.ch Vial: 49
Signal #2 : G:\DATA\0508RPB3\GG614626.D\dad1A.ch
Acq On : 08-May-2018, 22:51:29 Operator: evitam
Sample : op69920-gb2 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 424.470ppb

response 2205073

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 386.091ppb m

response 4176592

(+) = Expected Retention Time
GG614626.D 8330RPB.M_1113M.M Wed May 09 10:34:19 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614627.D\dad1B.ch Vial: 50
Signal #2 : G:\DATA\0508RPB3\GG614627.D\dad1A.ch
Acq On : 08-May-2018, 23:20:57 Operator: evitam
Sample : op69920-gb3 Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:09 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.20	2270242	4447224	437.015	411.109m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		87.40%	82.22%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

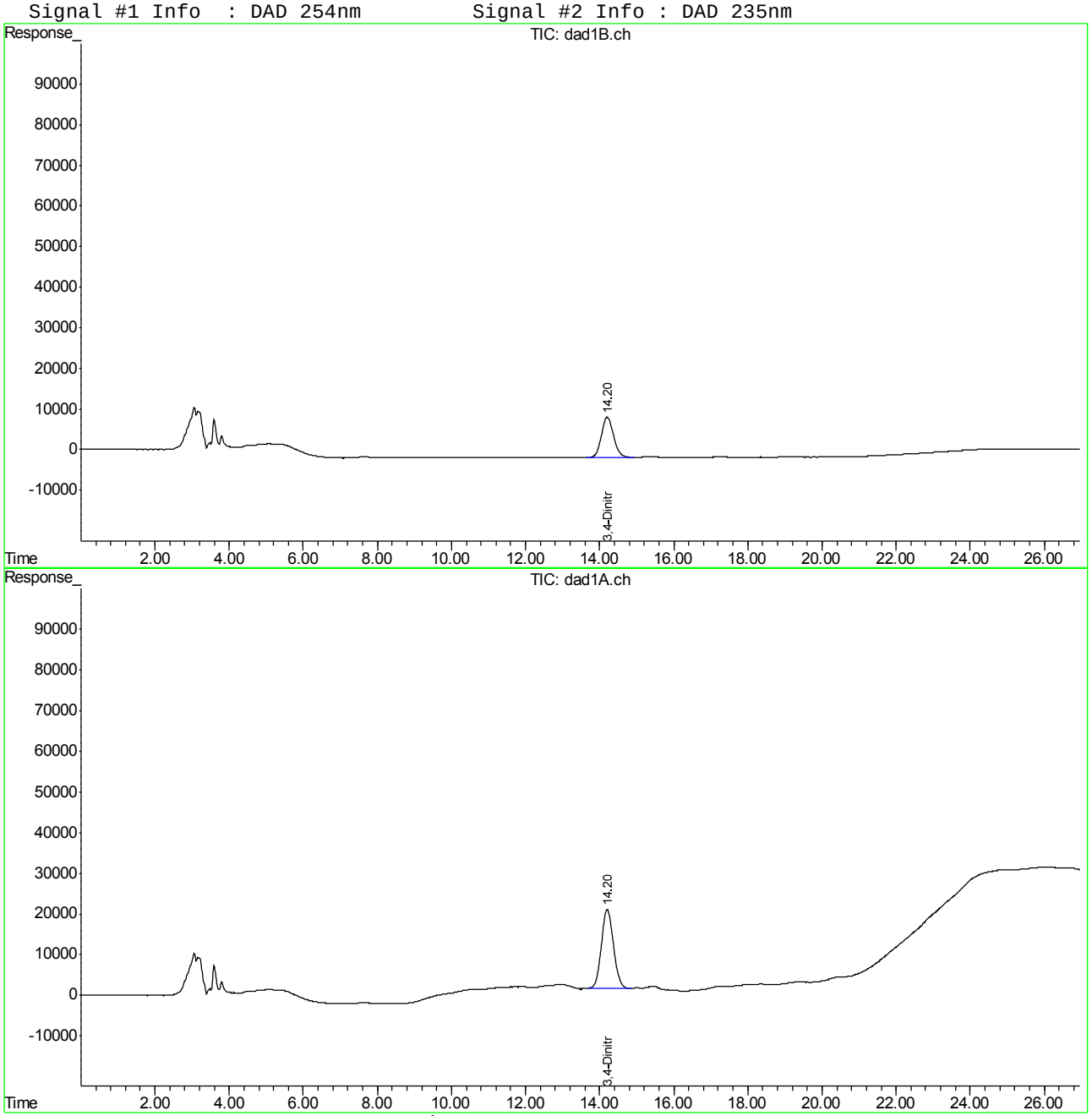
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614627.D 8330RPB.M_1113M.M Wed May 09 11:10:17 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614627.D\dad1B.ch Vial: 50
Signal #2 : G:\DATA\0508RPB3\GG614627.D\dad1A.ch
Acq On : 08-May-2018, 23:20:57 Operator: evitam
Sample : op69920-gb3 Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:35 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

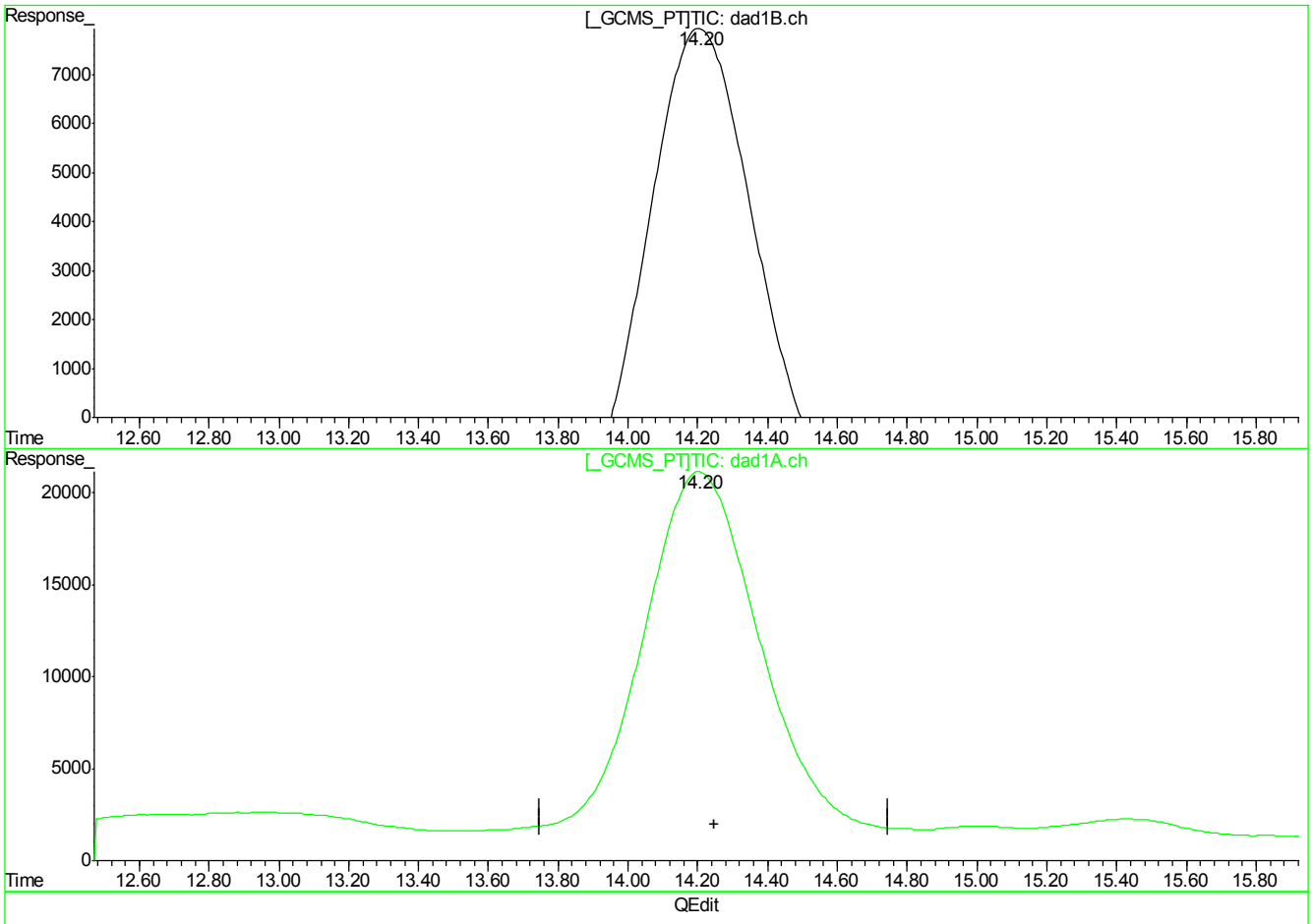
Sample Number:	OP69920-GB3	**Method:**	SW846 8330B
Lab FileID:	GG614627.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/08/18 23:20	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.20	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614627.D\dad1B.ch Vial: 50
Signal #2 : G:\DATA\0508RPB3\GG614627.D\dad1A.ch
Acq On : 08-May-2018, 23:20:57 Operator: evitam
Sample : op69920-gb3 Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 437.015ppb

response 2270242

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 520.617ppb

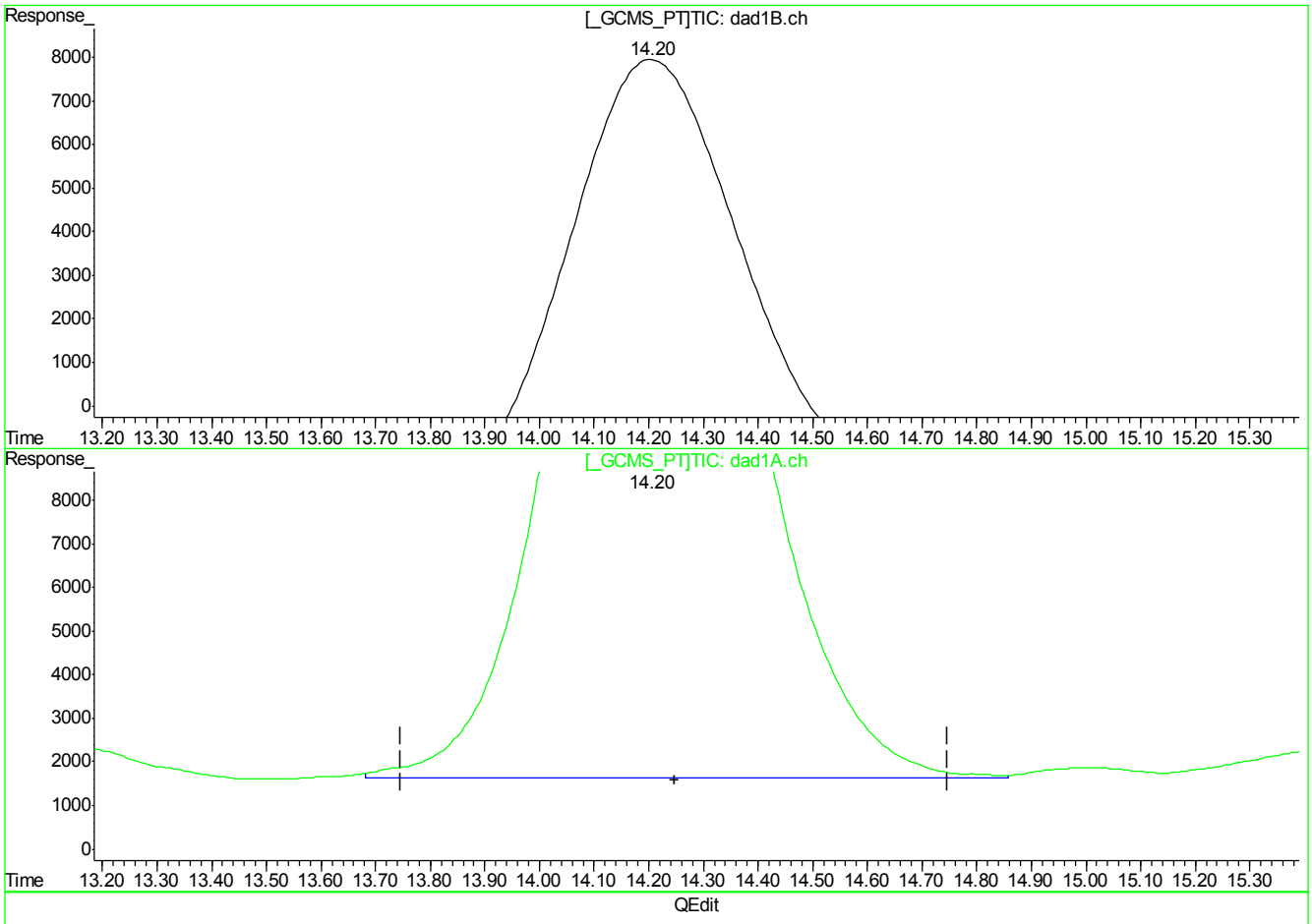
response 5631838

(+) = Expected Retention Time
GG614627.D 8330RPB.M_1113M.M Wed May 09 10:35:02 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614627.D\dad1B.ch Vial: 50
Signal #2 : G:\DATA\0508RPB3\GG614627.D\dad1A.ch
Acq On : 08-May-2018, 23:20:57 Operator: evitam
Sample : op69920-gb3 Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 437.015ppb

response 2270242

(12) 3,4-Dinitrotoluene #2 (S)

14.20min 411.109ppb m

response 4447224

(+) = Expected Retention Time
GG614627.D 8330RPB.M_1113M.M Wed May 09 10:35:05 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614628.D\dad1B.ch Vial: 51
Signal #2 : G:\DATA\0508RPB3\GG614628.D\dad1A.ch
Acq On : 08-May-2018, 23:50:24 Operator: evitam
Sample : op69945-mb Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:10 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2708486	5280787	521.376	488.165m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		104.28%	97.63%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

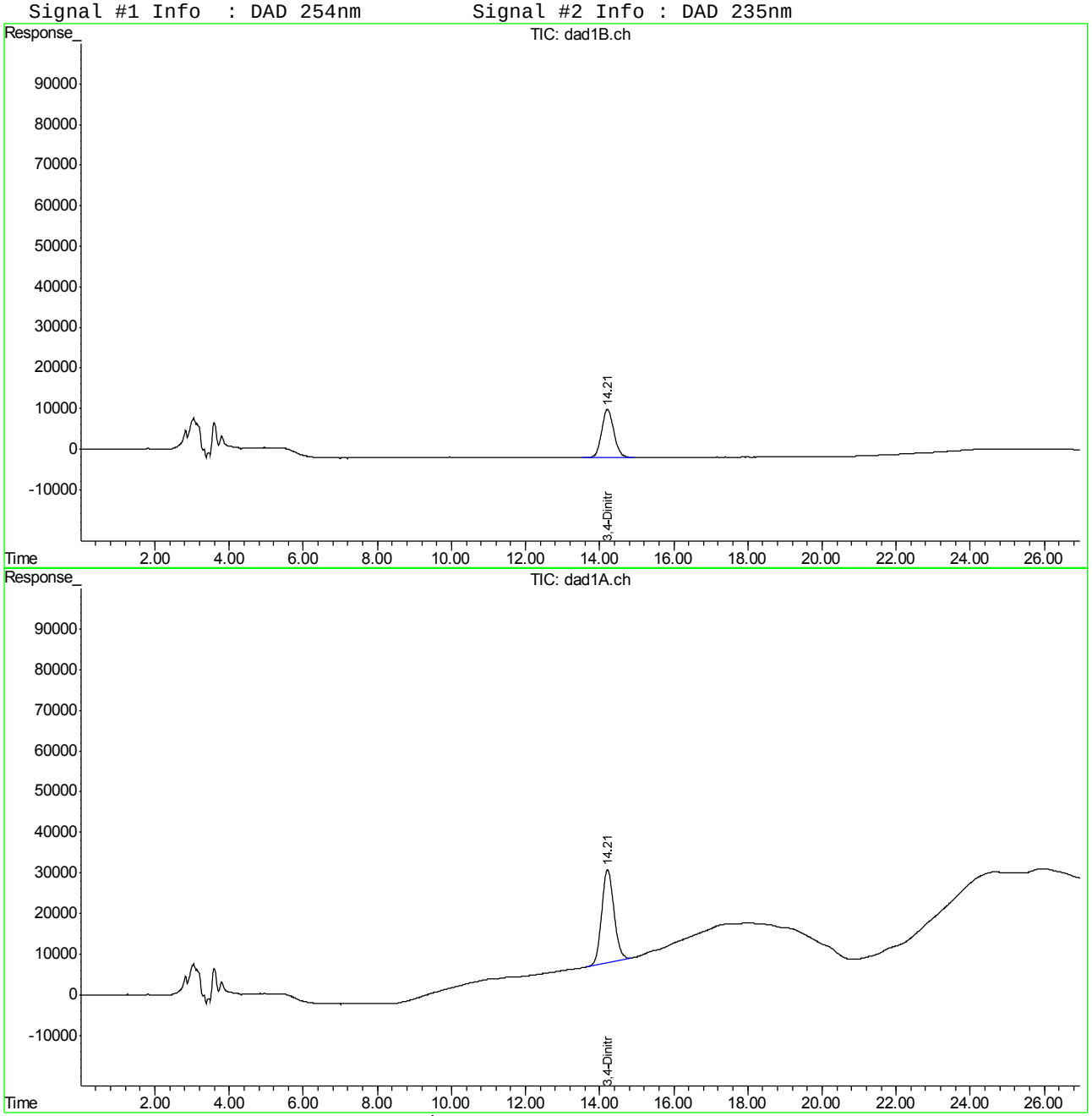
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614628.D 8330RPB.M_1113M.M Wed May 09 11:10:18 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614628.D\dad1B.ch Vial: 51
Signal #2 : G:\DATA\0508RPB3\GG614628.D\dad1A.ch
Acq On : 08-May-2018, 23:50:24 Operator: evitam
Sample : op69945-mb Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:38 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614628.D 8330RPB.M_1113M.M Wed May 09 11:10:18 2018 Page 2

Manual Integration Approval Summary

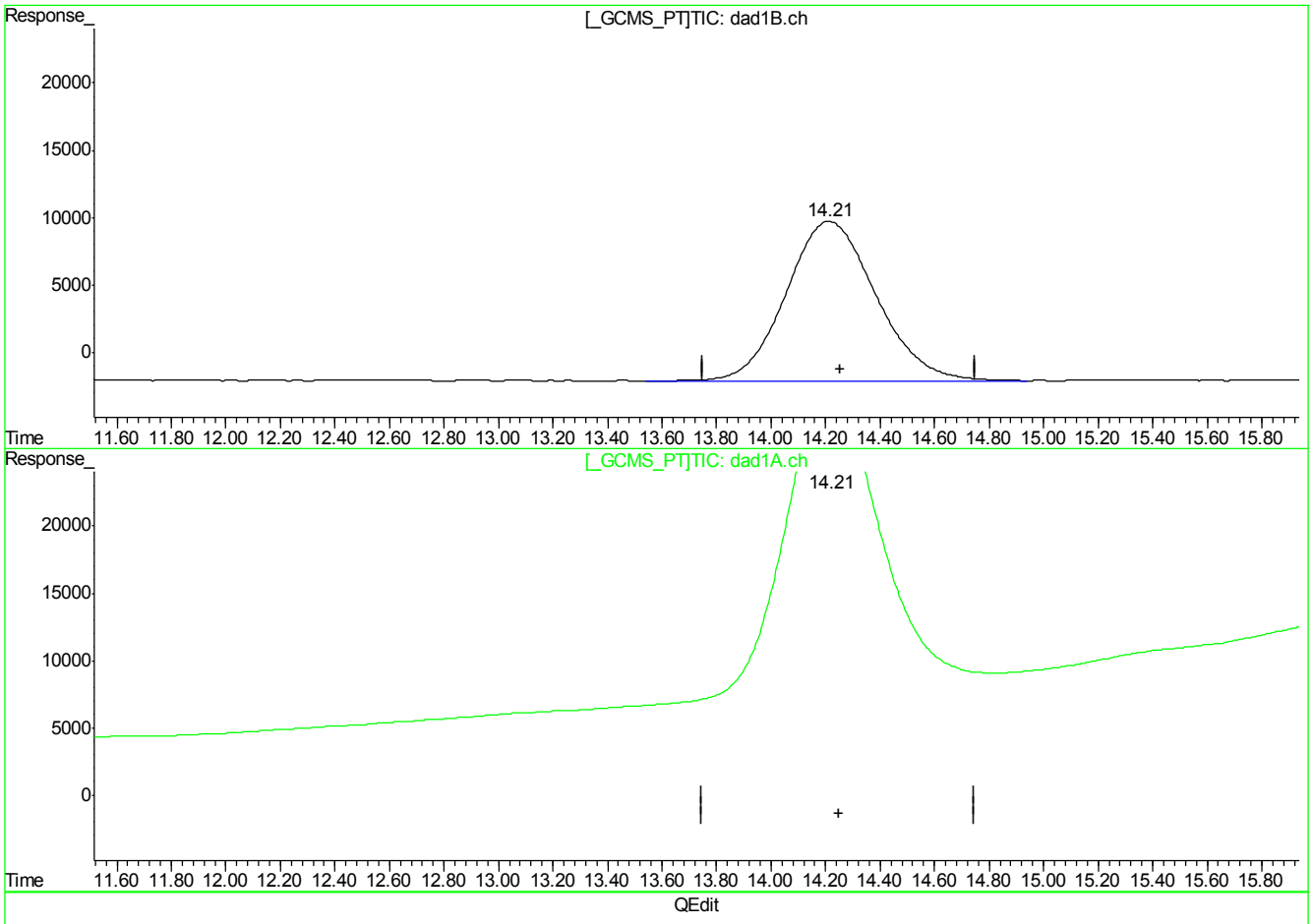
Sample Number:	OP69945-MB	**Method:**	SW846 8330B
Lab FileID:	GG614628.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/08/18 23:50	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.21	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614628.D\dad1B.ch Vial: 51
Signal #2 : G:\DATA\0508RPB3\GG614628.D\dad1A.ch
Acq On : 08-May-2018, 23:50:24 Operator: evitam
Sample : op69945-mb Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 521.376ppb

response 2708486

(12) 3,4-Dinitrotoluene #2 (S)

14.22min 653.383ppb

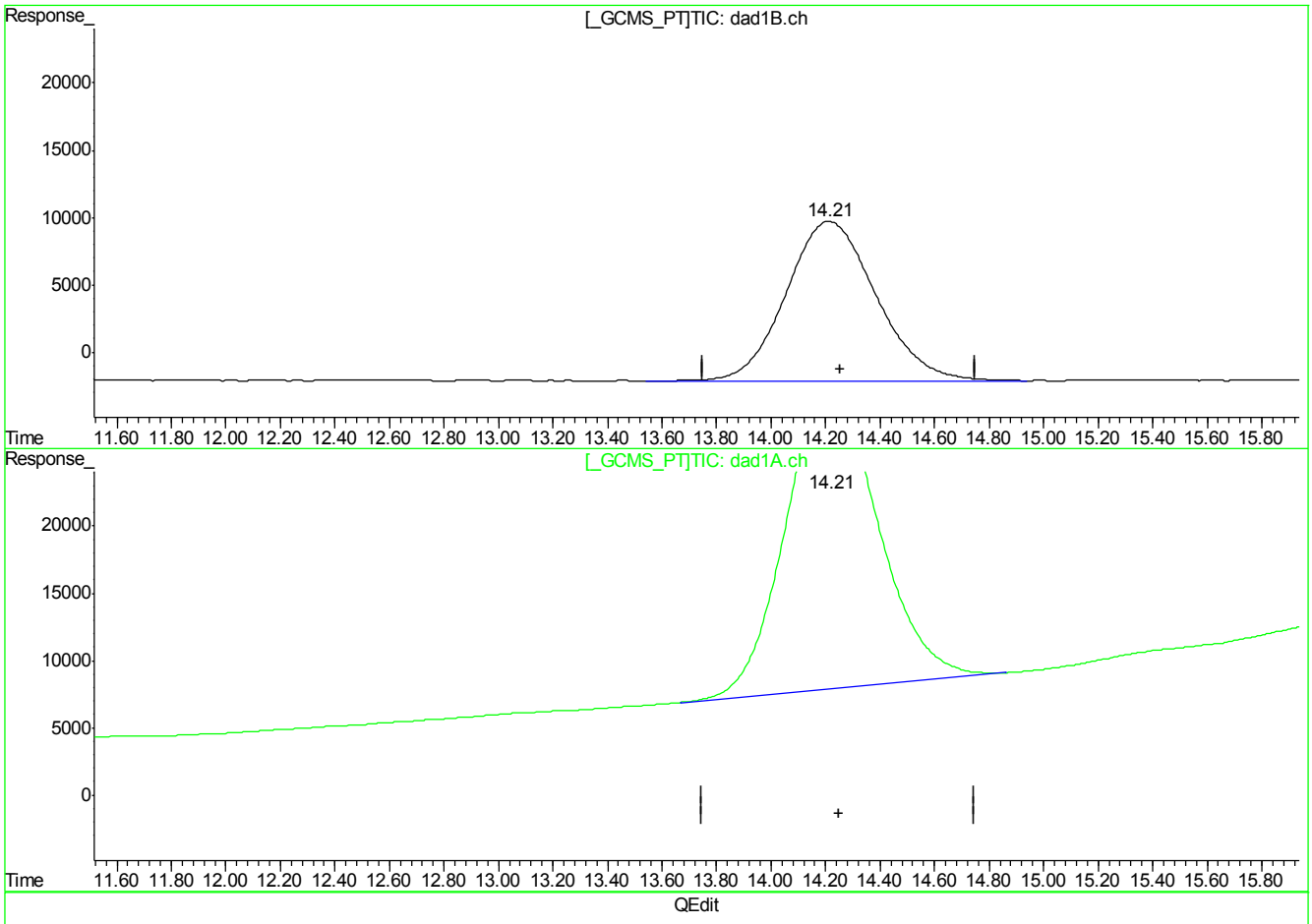
response 7068057

(+) = Expected Retention Time
GG614628.D 8330RPB.M_1113M.M Wed May 09 10:38:42 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614628.D\dad1B.ch Vial: 51
Signal #2 : G:\DATA\0508RPB3\GG614628.D\dad1A.ch
Acq On : 08-May-2018, 23:50:24 Operator: evitam
Sample : op69945-mb Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 521.376ppb

response 2708486

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 488.165ppb m

response 5280787

(+) = Expected Retention Time
GG614628.D 8330RPB.M_1113M.M Wed May 09 10:38:46 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614642.D\dad1B.ch Vial: 63
Signal #2 : G:\DATA\0508RPB3\GG614642.D\dad1A.ch
Acq On : 09-May-2018, 06:42:50 Operator: evitam
Sample : op69945-gb1 Inst : G1315B
Misc : op69945,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 10:17:39 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.18	14.18	2571255	4813788	494.959	444.995m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		98.99%	89.00%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

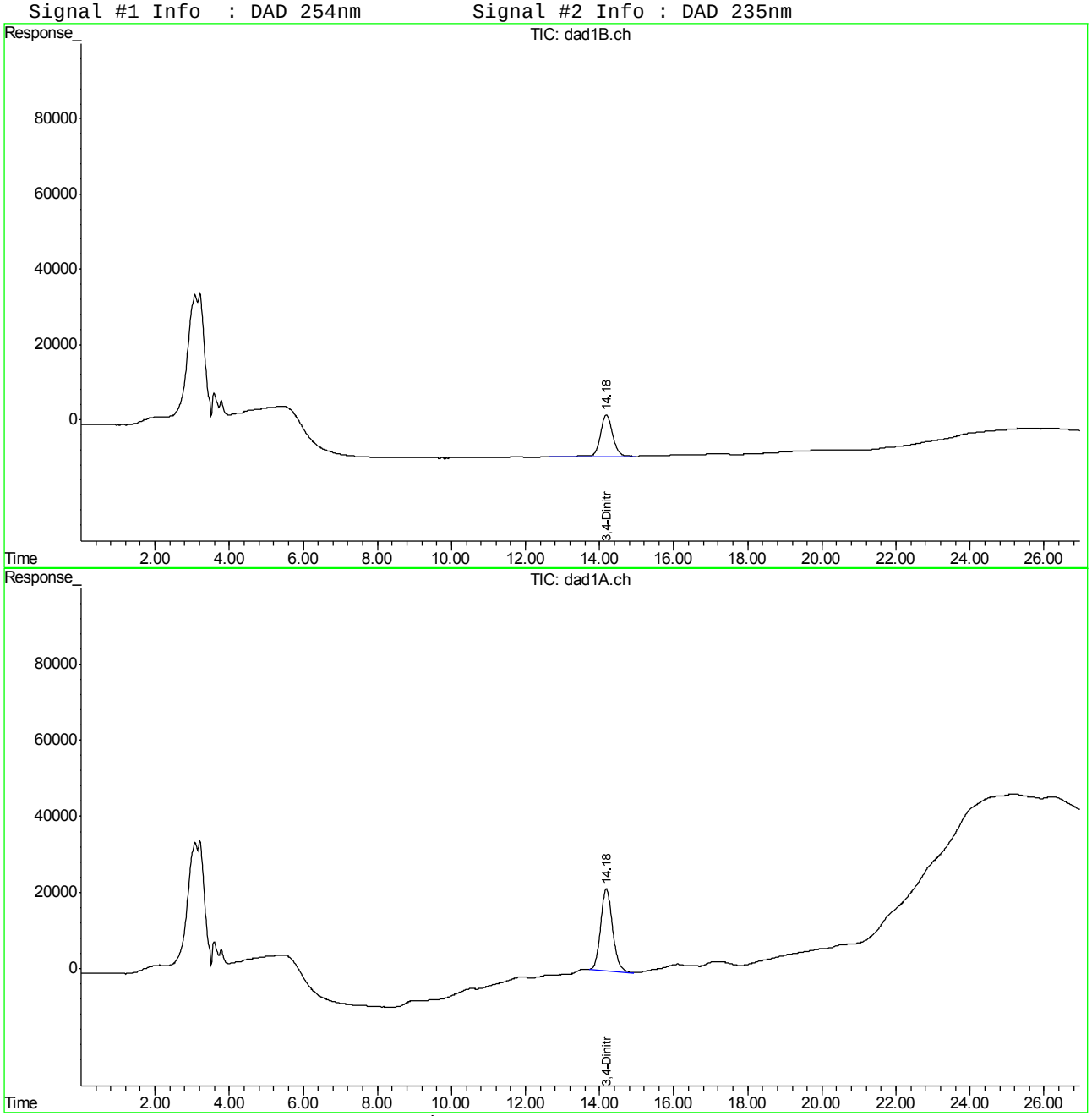
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614642.D 8330RPB.M_1113M.M Wed May 09 11:10:31 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614642.D\dad1B.ch Vial: 63
Signal #2 : G:\DATA\0508RPB3\GG614642.D\dad1A.ch
Acq On : 09-May-2018, 06:42:50 Operator: evitam
Sample : op69945-gb1 Inst : G1315B
Misc : op69945,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:58 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614642.D 8330RPB.M_1113M.M Wed May 09 11:10:31 2018 Page 2

Manual Integration Approval Summary

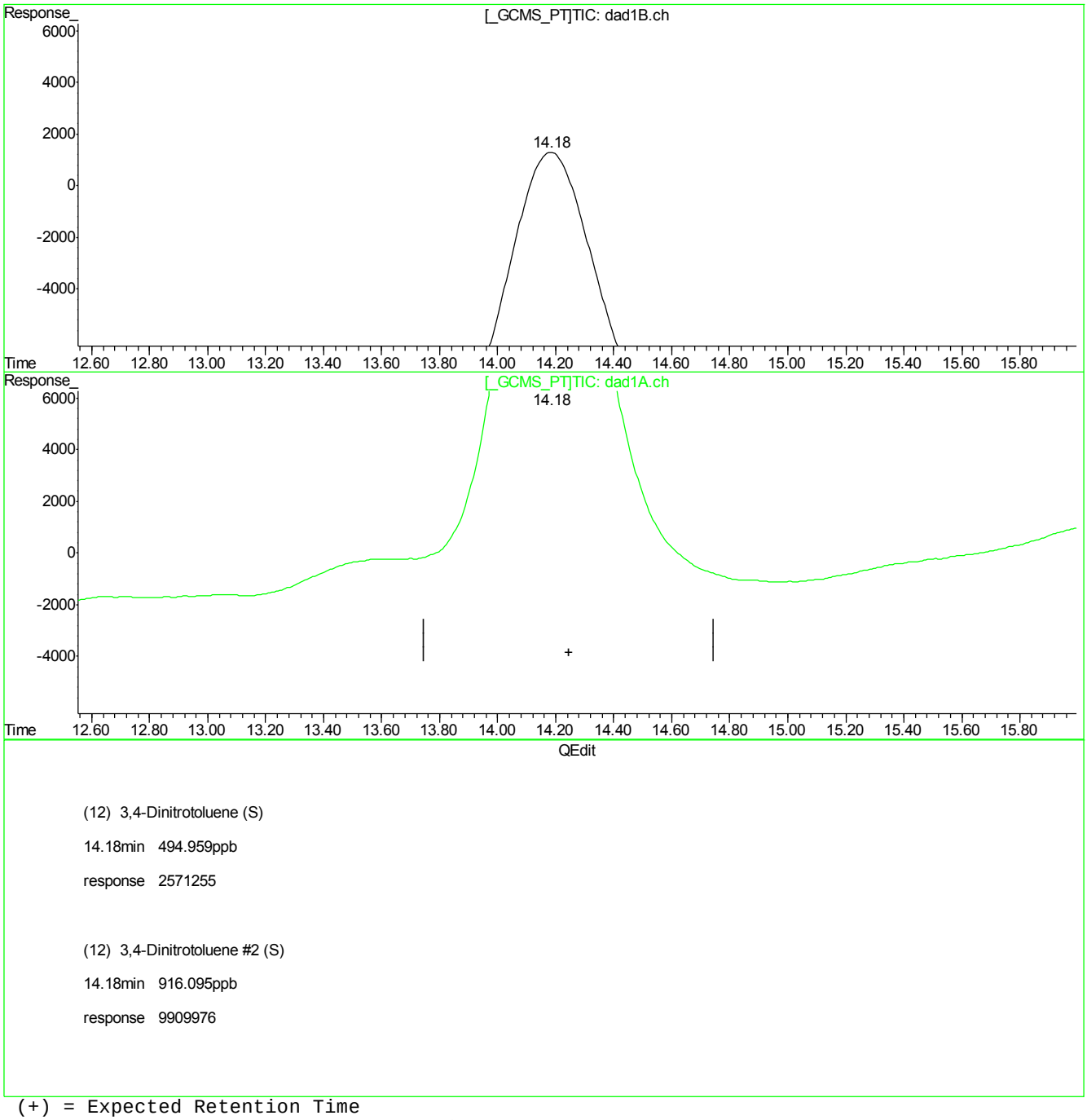
Sample Number:	OP69945-GB1	**Method:**	SW846 8330B
Lab FileID:	GG614642.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 06:42	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.18	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614642.D\dad1B.ch Vial: 63
Signal #2 : G:\DATA\0508RPB3\GG614642.D\dad1A.ch
Acq On : 09-May-2018, 06:42:50 Operator: evitam
Sample : op69945-gb1 Inst : G1315B
Misc : op69945,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.18min 494.959ppb

response 2571255

(12) 3,4-Dinitrotoluene #2 (S)

14.18min 916.095ppb

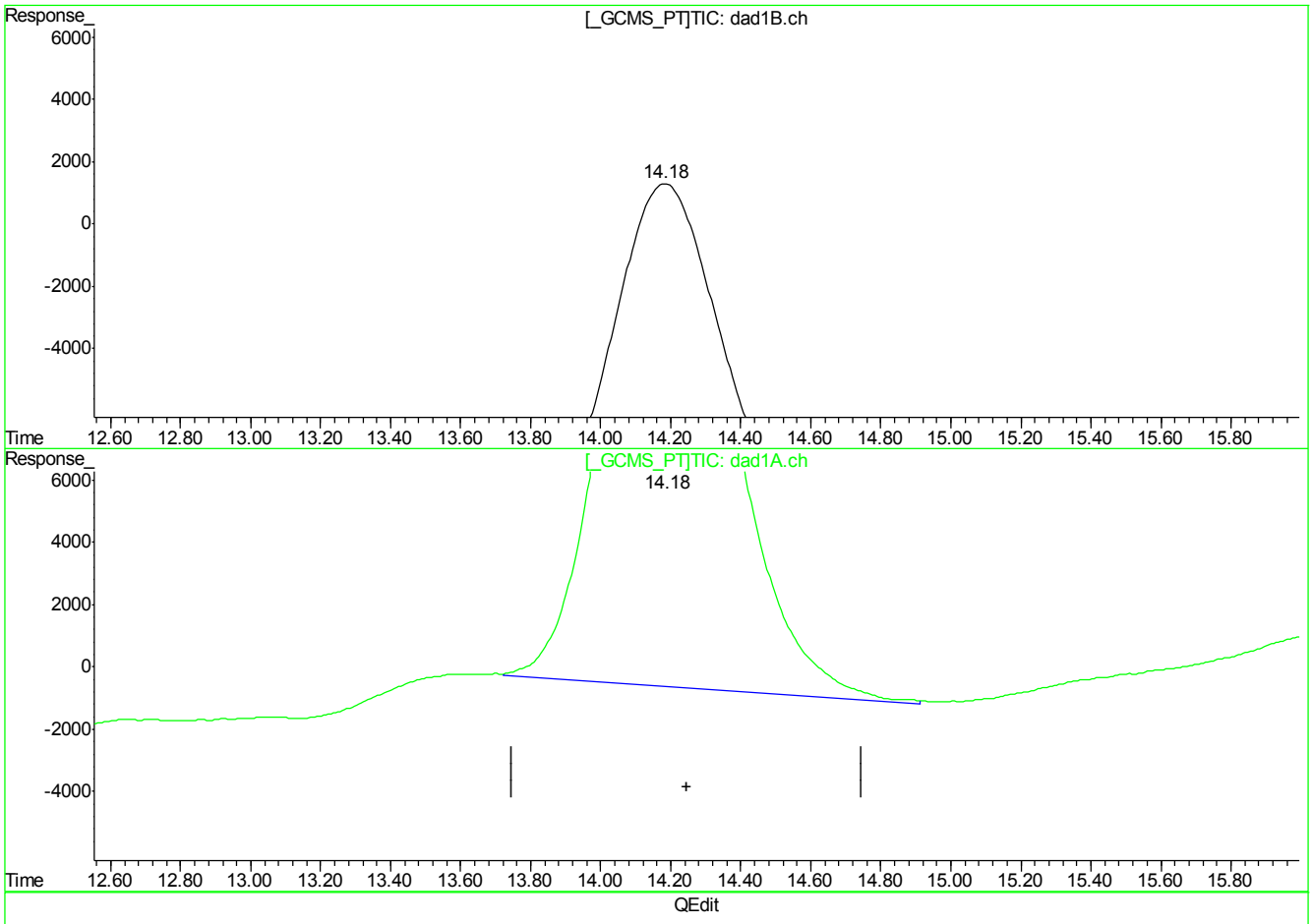
response 9909976

(+) = Expected Retention Time
GG614642.D 8330RPB.M_1113M.M Wed May 09 10:58:47 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614642.D\dad1B.ch Vial: 63
Signal #2 : G:\DATA\0508RPB3\GG614642.D\dad1A.ch
Acq On : 09-May-2018, 06:42:50 Operator: evitam
Sample : op69945-gb1 Inst : G1315B
Misc : op69945,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.18min 494.959ppb

response 2571255

(12) 3,4-Dinitrotoluene #2 (S)

14.18min 444.995ppb m

response 4813788

(+) = Expected Retention Time
GG614642.D 8330RPB.M_1113M.M Wed May 09 10:58:51 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614643.D\dad1B.ch Vial: 64
Signal #2 : G:\DATA\0508RPB3\GG614643.D\dad1A.ch
Acq On : 09-May-2018, 07:12:19 Operator: evitam
Sample : op69945-gb2 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 10:17:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2180361	4028694	419.713	372.419m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		83.94%	74.48%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

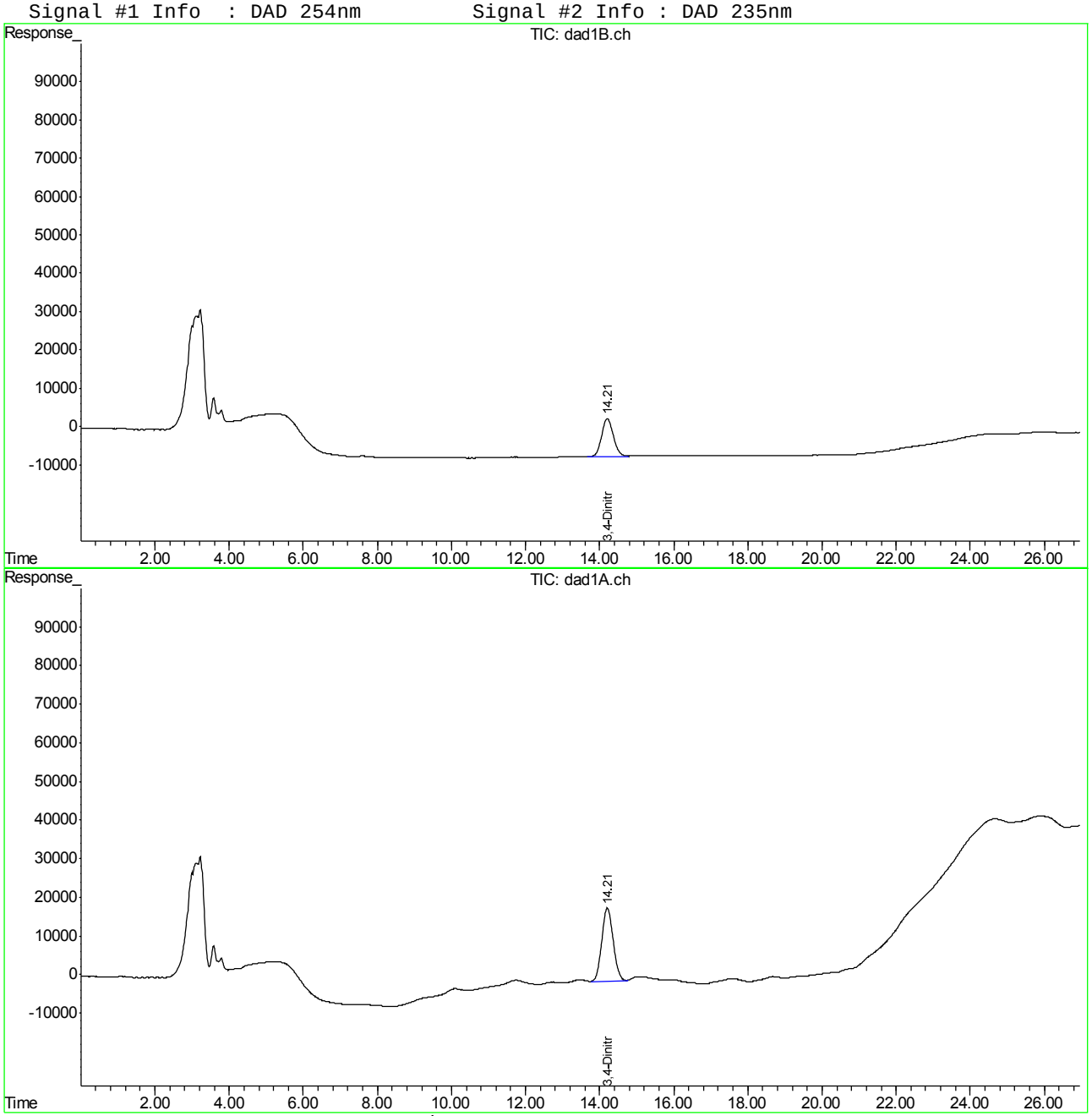
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614643.D 8330RPB.M_1113M.M Wed May 09 11:10:32 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614643.D\dad1B.ch Vial: 64
Signal #2 : G:\DATA\0508RPB3\GG614643.D\dad1A.ch
Acq On : 09-May-2018, 07:12:19 Operator: evitam
Sample : op69945-gb2 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:59 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

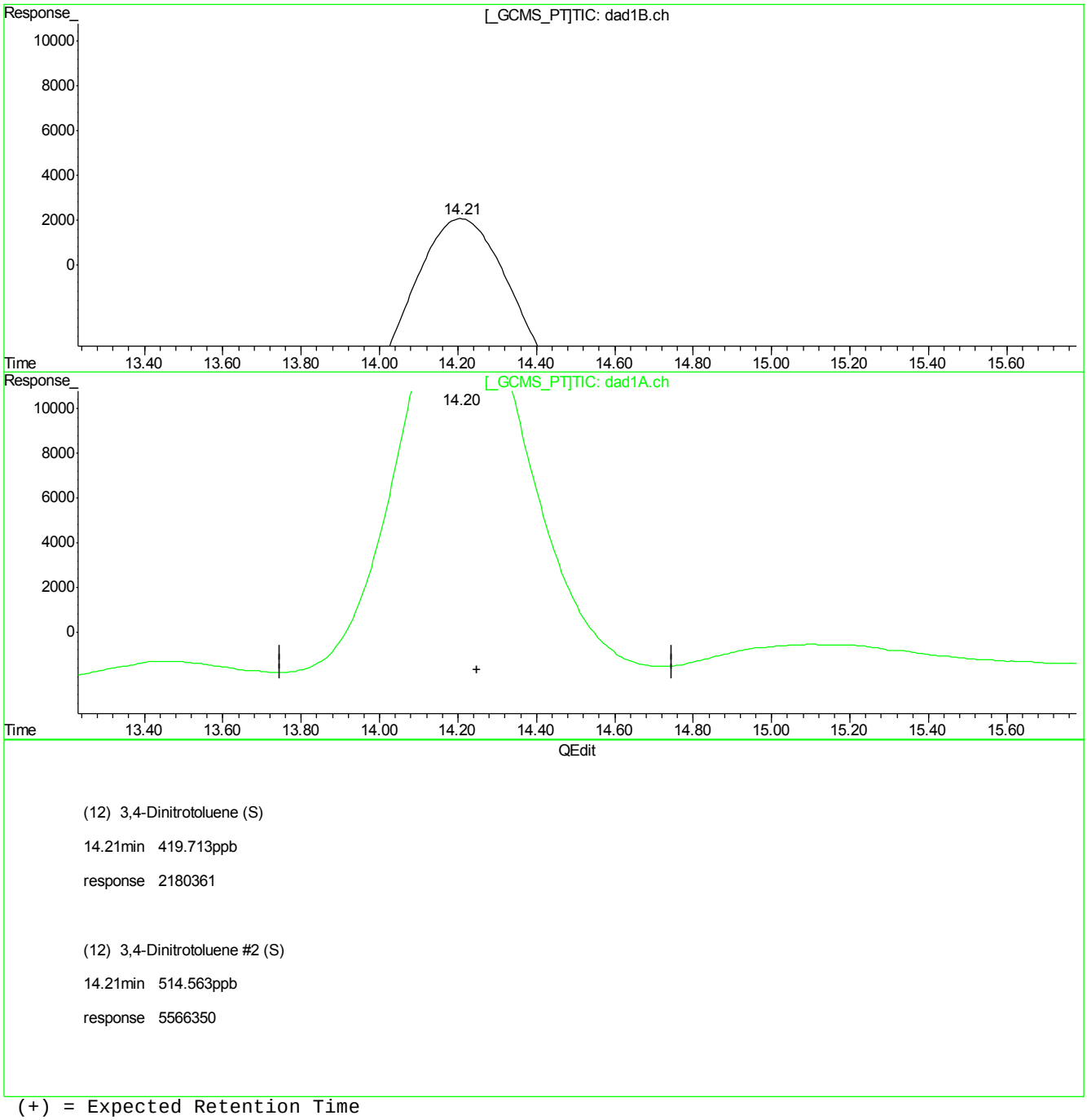
Sample Number:	OP69945-GB2	**Method:**	SW846 8330B
Lab FileID:	GG614643.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 07:12	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.21	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614643.D\dad1B.ch Vial: 64
Signal #2 : G:\DATA\0508RPB3\GG614643.D\dad1A.ch
Acq On : 09-May-2018, 07:12:19 Operator: evitam
Sample : op69945-gb2 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 419.713ppb

response 2180361

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 514.563ppb

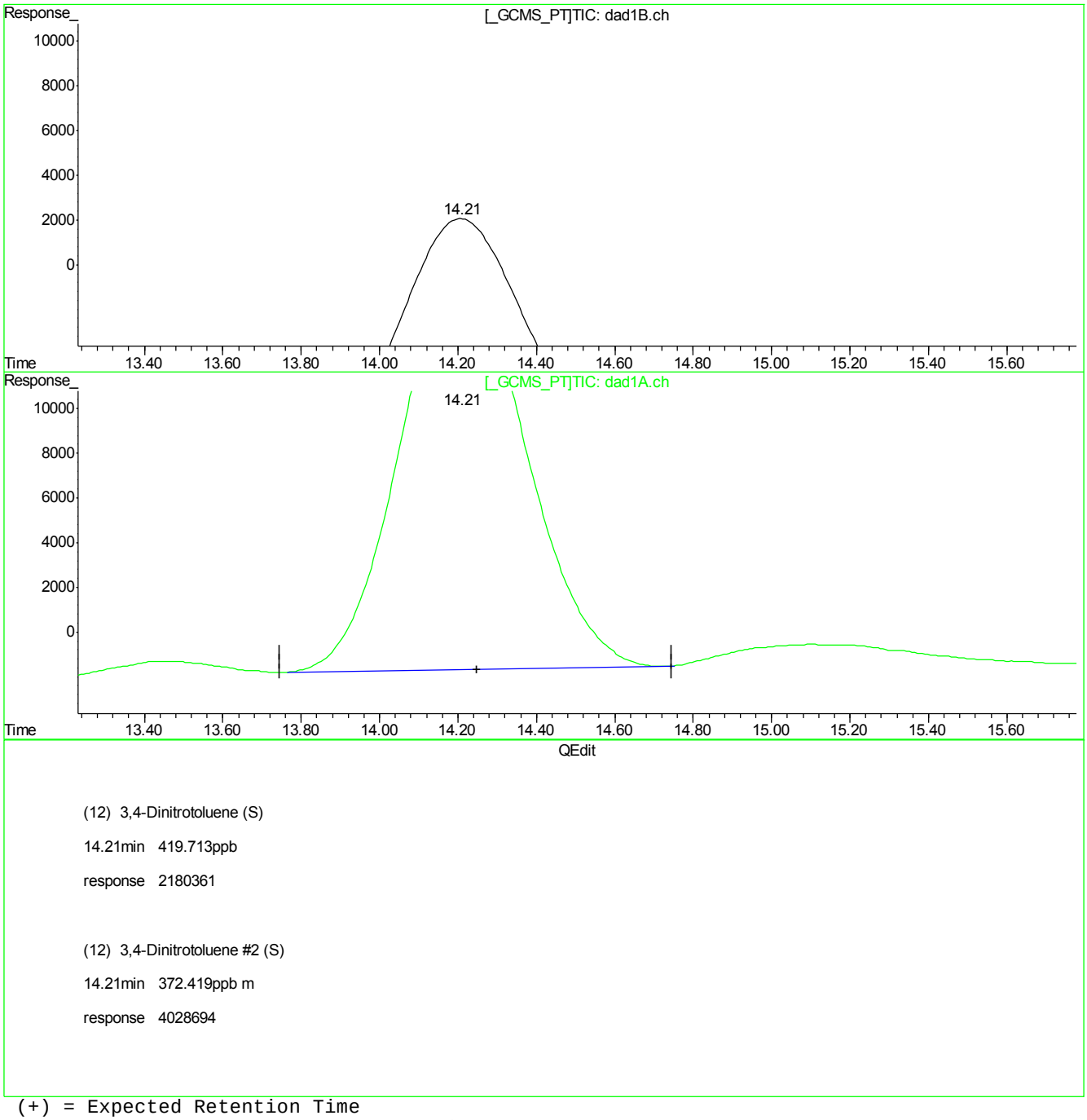
response 5566350

(+) = Expected Retention Time
GG614643.D 8330RPB.M_1113M.M Wed May 09 10:59:22 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614643.D\dad1B.ch Vial: 64
Signal #2 : G:\DATA\0508RPB3\GG614643.D\dad1A.ch
Acq On : 09-May-2018, 07:12:19 Operator: evitam
Sample : op69945-gb2 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614643.D 8330RPB.M_1113M.M Wed May 09 10:59:27 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614644.D\dad1B.ch Vial: 65
Signal #2 : G:\DATA\0508RPB3\GG614644.D\dad1A.ch
Acq On : 09-May-2018, 07:41:46 Operator: evitam
Sample : op69945-gb3 Inst : G1315B
Misc : op69945,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 10:17:46 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.18	14.17	2183155	4504827	420.251	416.434m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		84.05%	83.29%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

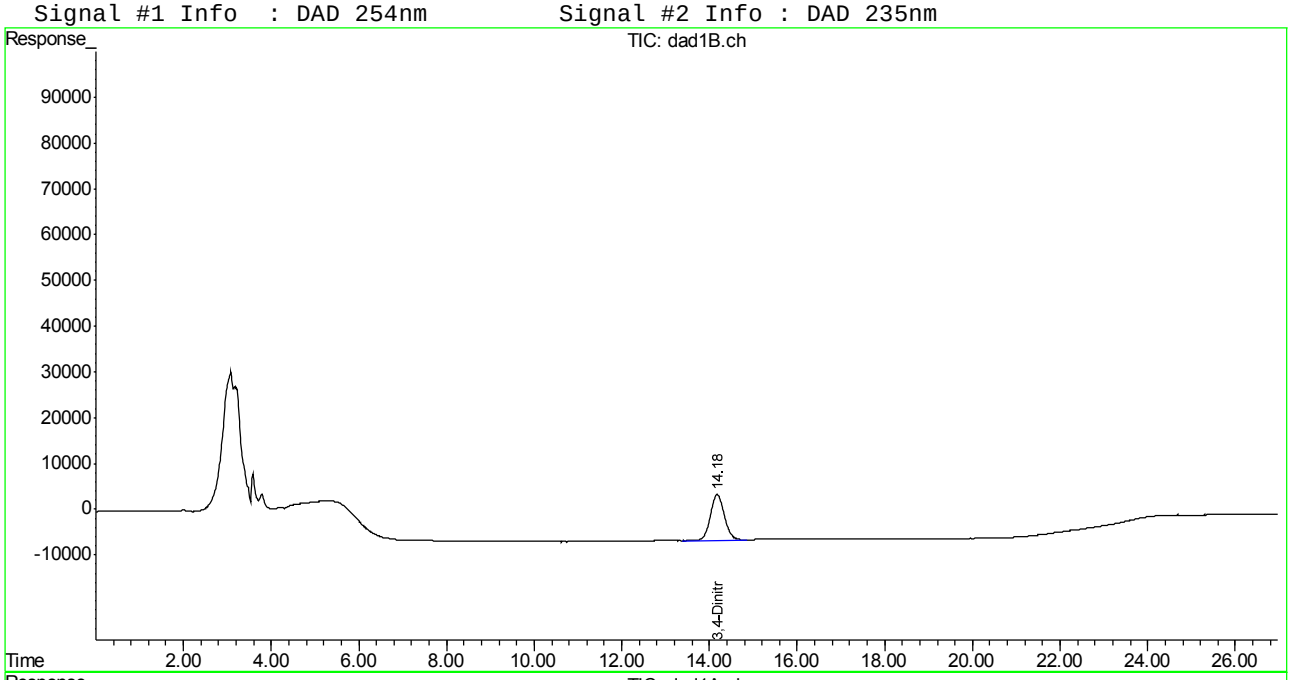
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614644.D 8330RPB.M_1113M.M Wed May 09 11:10:33 2018 Page 1

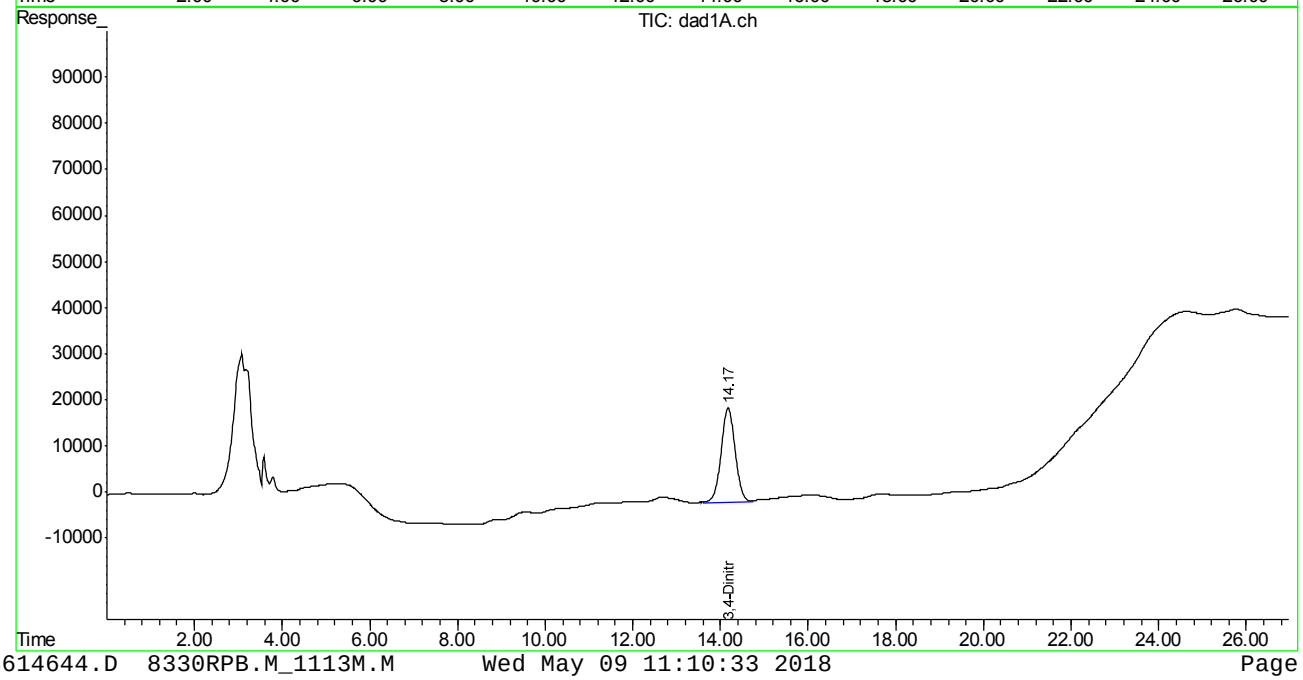
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614644.D\dad1B.ch Vial: 65
Signal #2 : G:\DATA\0508RPB3\GG614644.D\dad1A.ch
Acq On : 09-May-2018, 07:41:46 Operator: evitam
Sample : op69945-gb3 Inst : G1315B
Misc : op69945,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:59 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

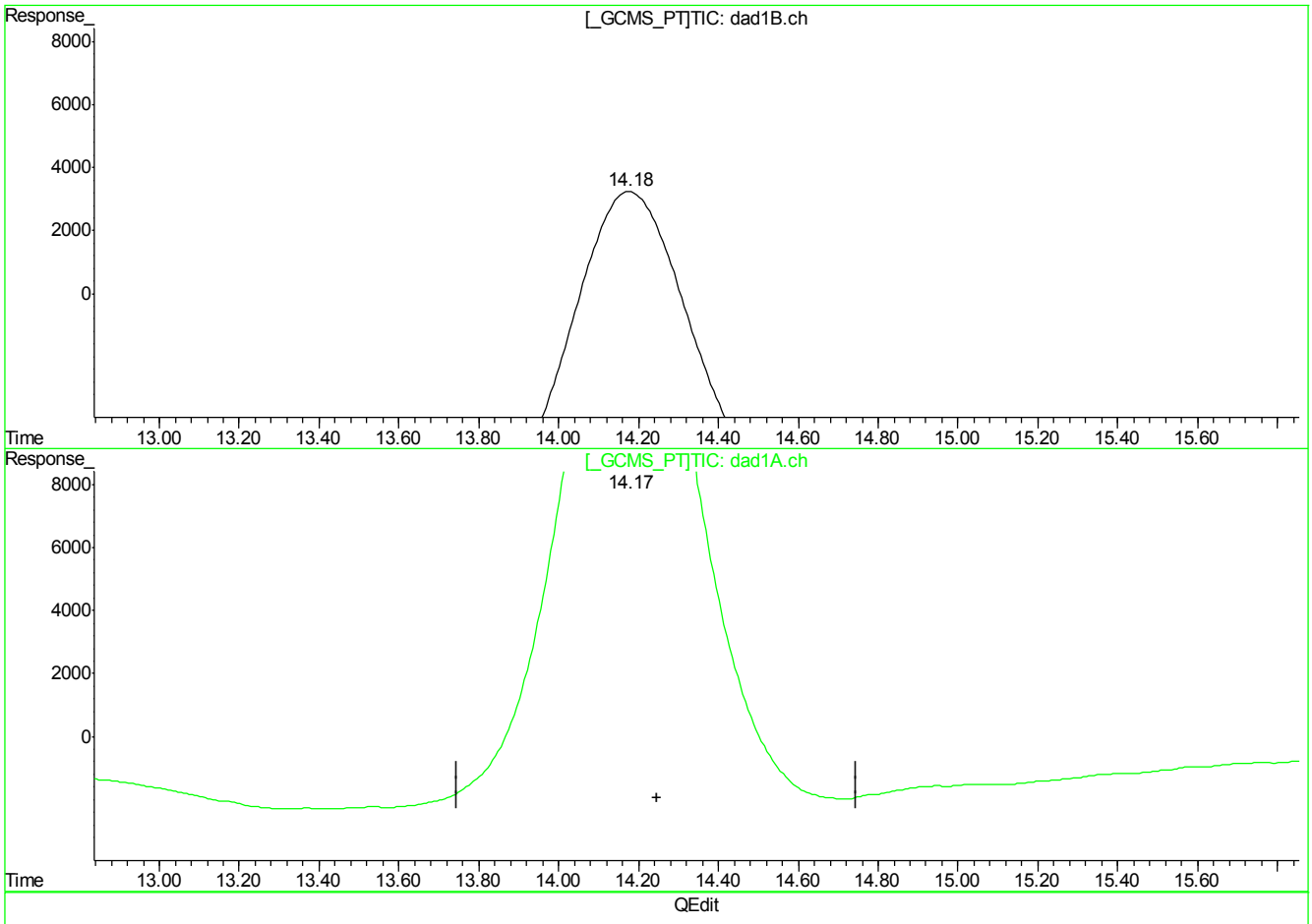
Sample Number:	OP69945-GB3	**Method:**	SW846 8330B
Lab FileID:	GG614644.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 07:41	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.17	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614644.D\dad1B.ch Vial: 65
Signal #2 : G:\DATA\0508RPB3\GG614644.D\dad1A.ch
Acq On : 09-May-2018, 07:41:46 Operator: evitam
Sample : op69945-gb3 Inst : G1315B
Misc : op69945,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.18min 420.251ppb

response 2183155

(12) 3,4-Dinitrotoluene #2 (S)

14.18min 522.172ppb

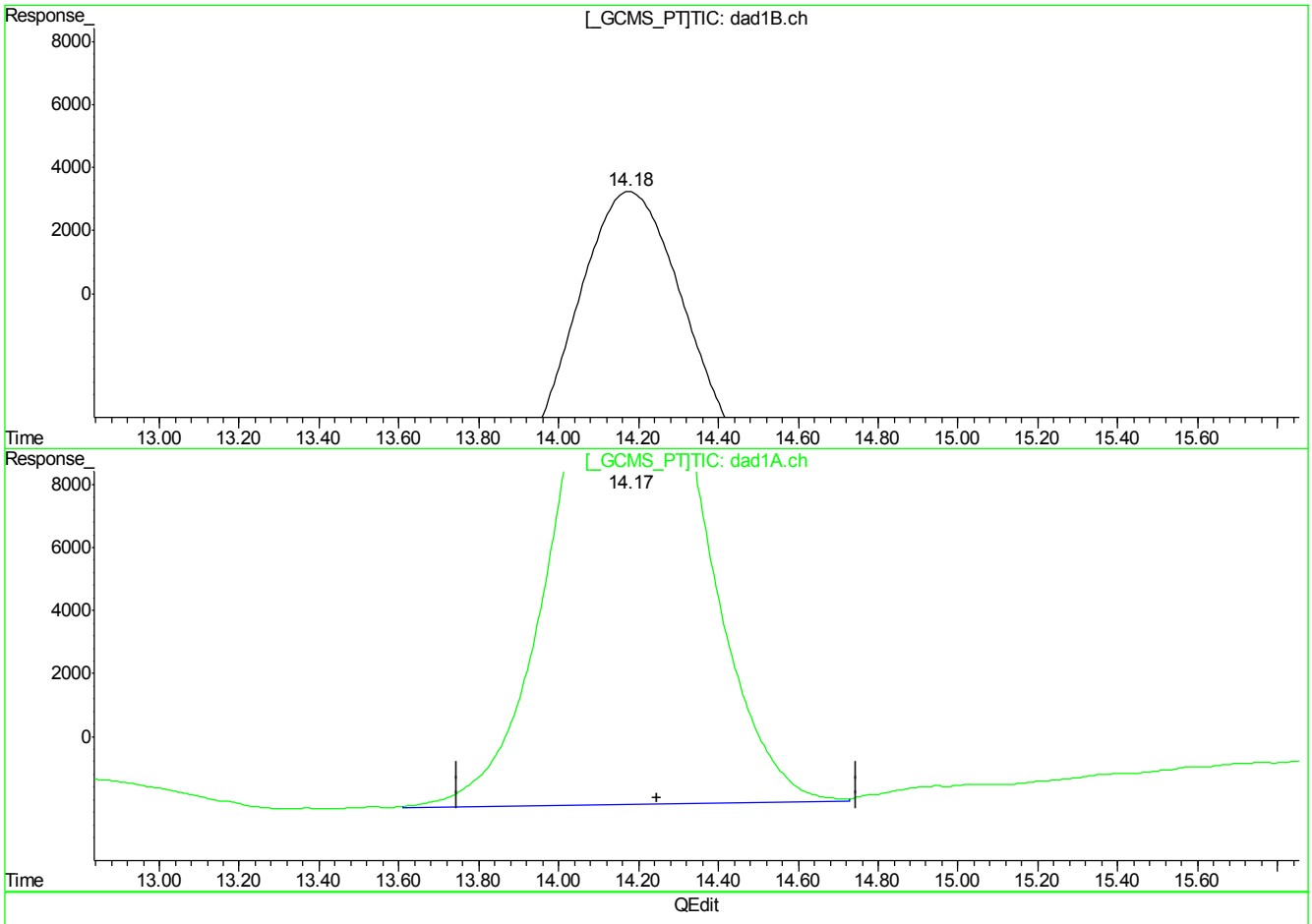
response 5648668

(+) = Expected Retention Time
GG614644.D 8330RPB.M_1113M.M Wed May 09 10:59:51 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614644.D\dad1B.ch Vial: 65
Signal #2 : G:\DATA\0508RPB3\GG614644.D\dad1A.ch
Acq On : 09-May-2018, 07:41:46 Operator: evitam
Sample : op69945-gb3 Inst : G1315B
Misc : op69945,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.18min 420.251ppb

response 2183155

(12) 3,4-Dinitrotoluene #2 (S)

14.17min 416.434ppb m

response 4504827

(+) = Expected Retention Time
GG614644.D 8330RPB.M_1113M.M Wed May 09 10:59:55 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614649.D\dad1B.ch Vial: 68
Signal #2 : G:\DATA\0508RPB3\GG614649.D\dad1A.ch
Acq On : 09-May-2018, 10:09:06 Operator: evitam
Sample : op69946-mb Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 11:08:59 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2623906	5772946	505.094	533.661
	Spiked Amount 500.000	Range 69 - 134		Recovery =		101.02%	106.73%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

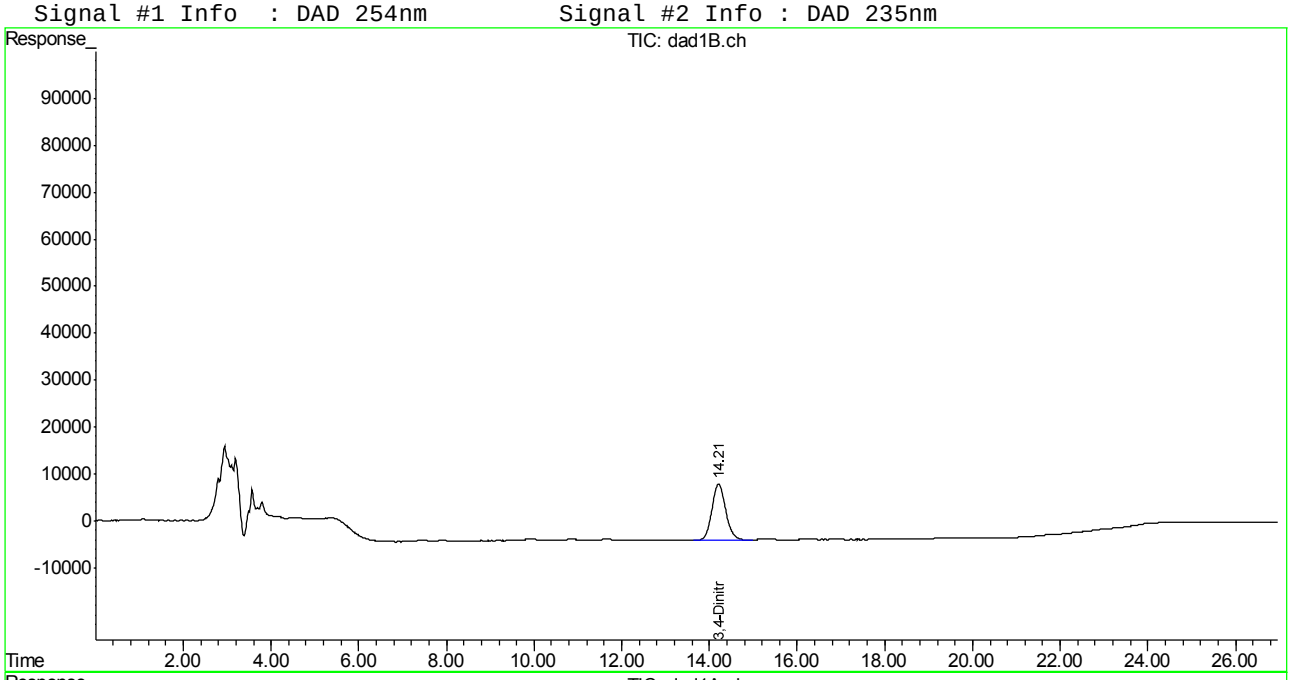
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614649.D 8330RPB.M_1113M.M Wed May 09 11:14:51 2018 Page 1

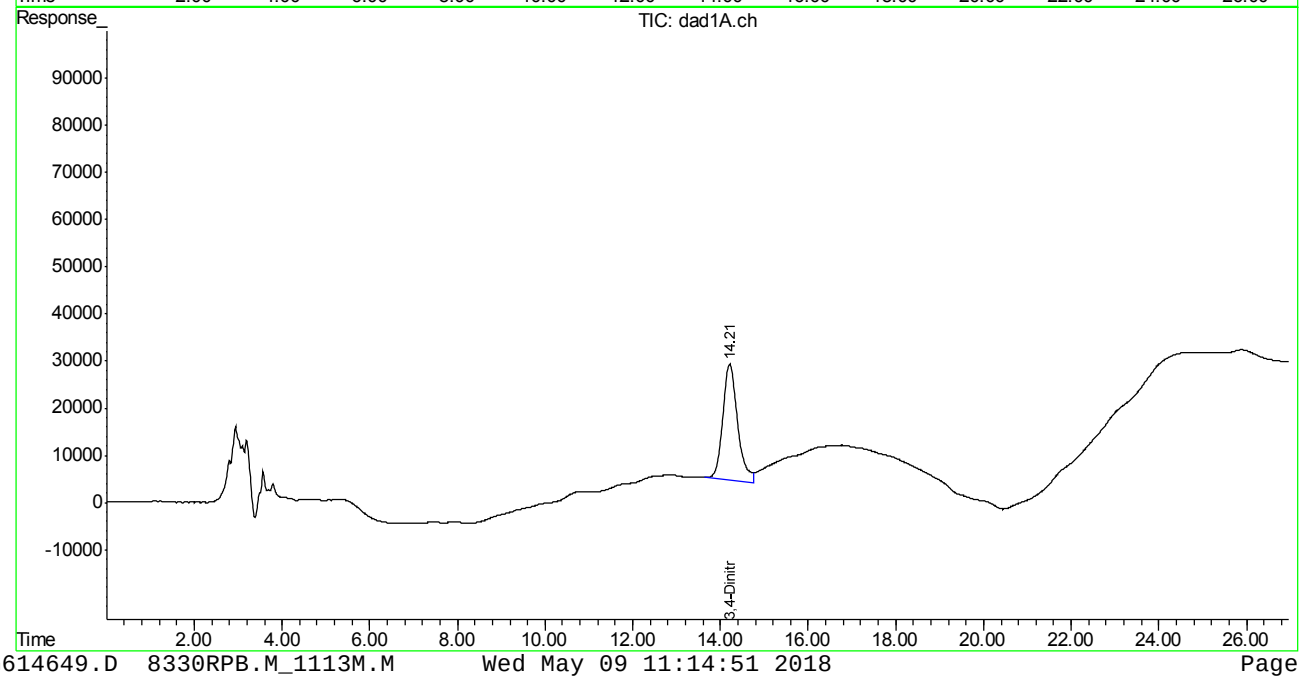
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614649.D\dad1B.ch Vial: 68
Signal #2 : G:\DATA\0508RPB3\GG614649.D\dad1A.ch
Acq On : 09-May-2018, 10:09:06 Operator: evitam
Sample : op69946-mb Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:09 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG614649.D 8330RPB.M_1113M.M Wed May 09 11:14:51 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614663.D\dad1B.ch Vial: 78
Signal #2 : G:\DATA\0508RPB3\GG614663.D\dad1A.ch
Acq On : 09-May-2018, 17:04:15 Operator: evitam
Sample : op69946-gb1 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.24	2416731	5493730	465.214	507.850
	Spiked Amount 500.000	Range 69 - 134		Recovery =		93.04%	101.57%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

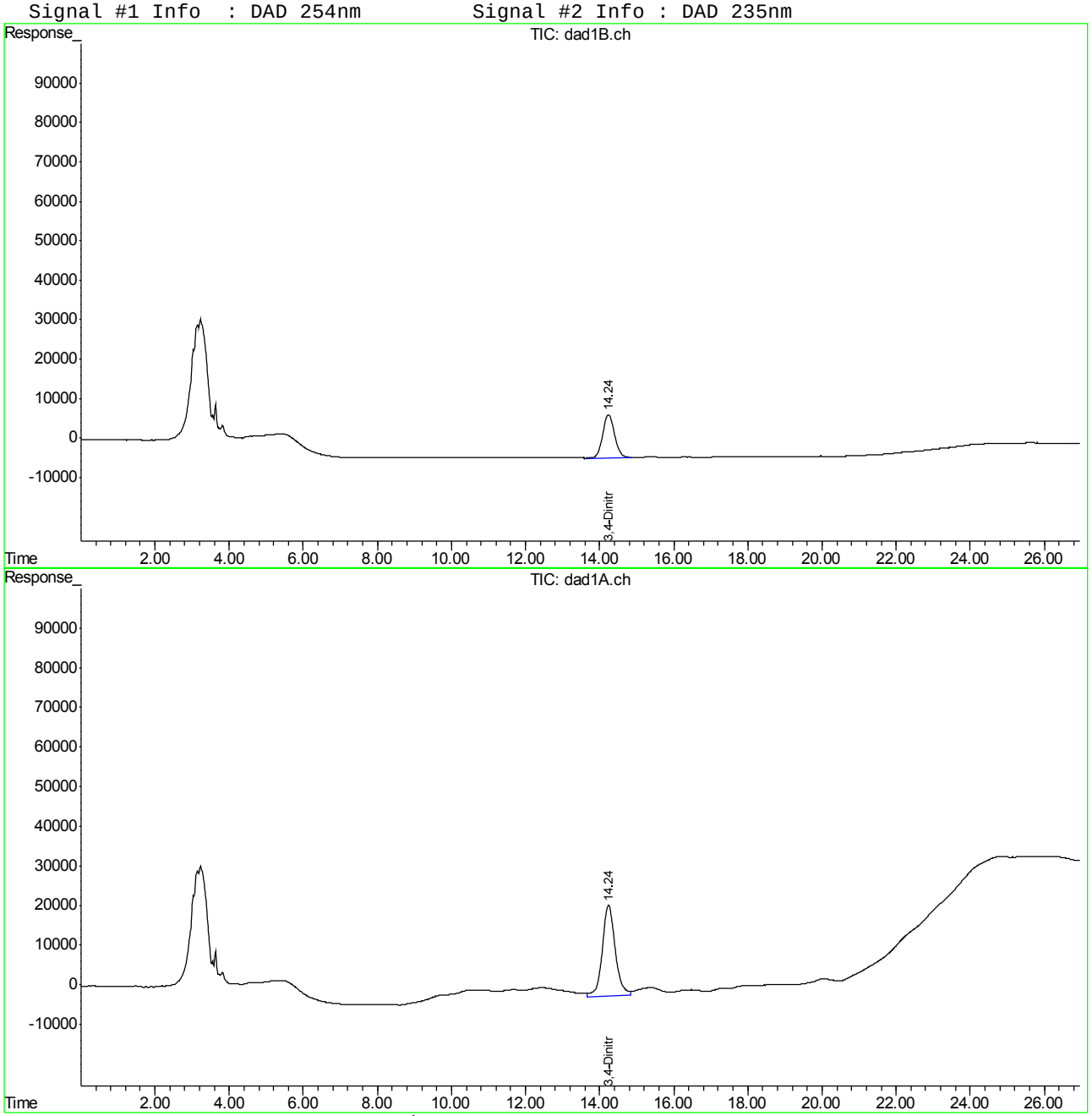
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614663.D 8330RPB.M_1113M.M Thu May 10 13:16:40 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614663.D\dad1B.ch Vial: 78
Signal #2 : G:\DATA\0508RPB3\GG614663.D\dad1A.ch
Acq On : 09-May-2018, 17:04:15 Operator: evitam
Sample : op69946-gb1 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:14 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614663.D 8330RPB.M_1113M.M Thu May 10 13:16:40 2018 Page 2

7.2.20
7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614664.D\dad1B.ch Vial: 79
Signal #2 : G:\DATA\0508RPB3\GG614664.D\dad1A.ch
Acq On : 09-May-2018, 17:33:45 Operator: evitam
Sample : op69946-gb2 Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:41 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.22	2409228	4766767	463.769	440.648m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		92.75%	88.13%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

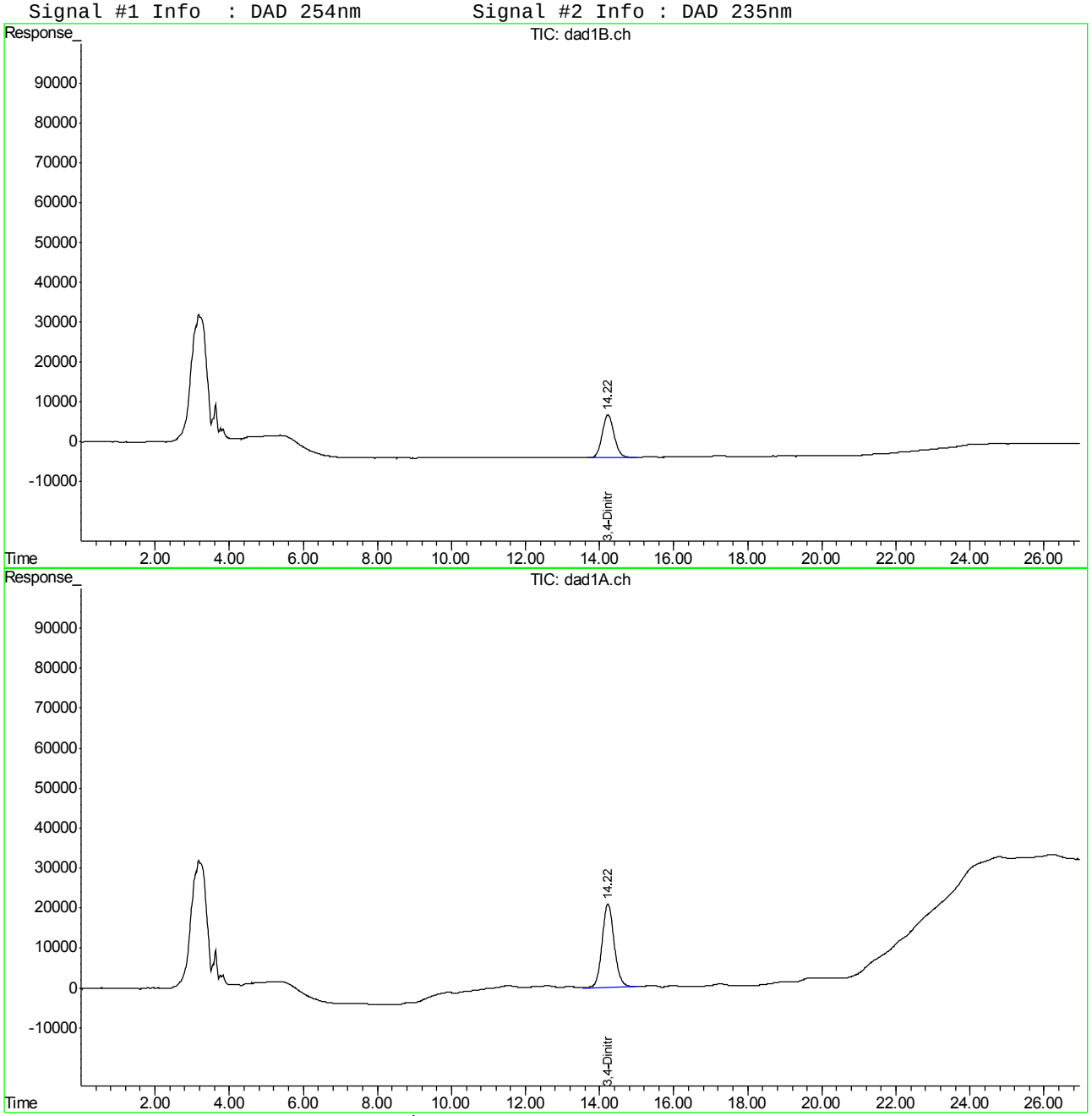
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614664.D 8330RPB.M_1113M.M Thu May 10 13:16:41 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614664.D\dad1B.ch Vial: 79
Signal #2 : G:\DATA\0508RPB3\GG614664.D\dad1A.ch
Acq On : 09-May-2018, 17:33:45 Operator: evitam
Sample : op69946-gb2 Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:14 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

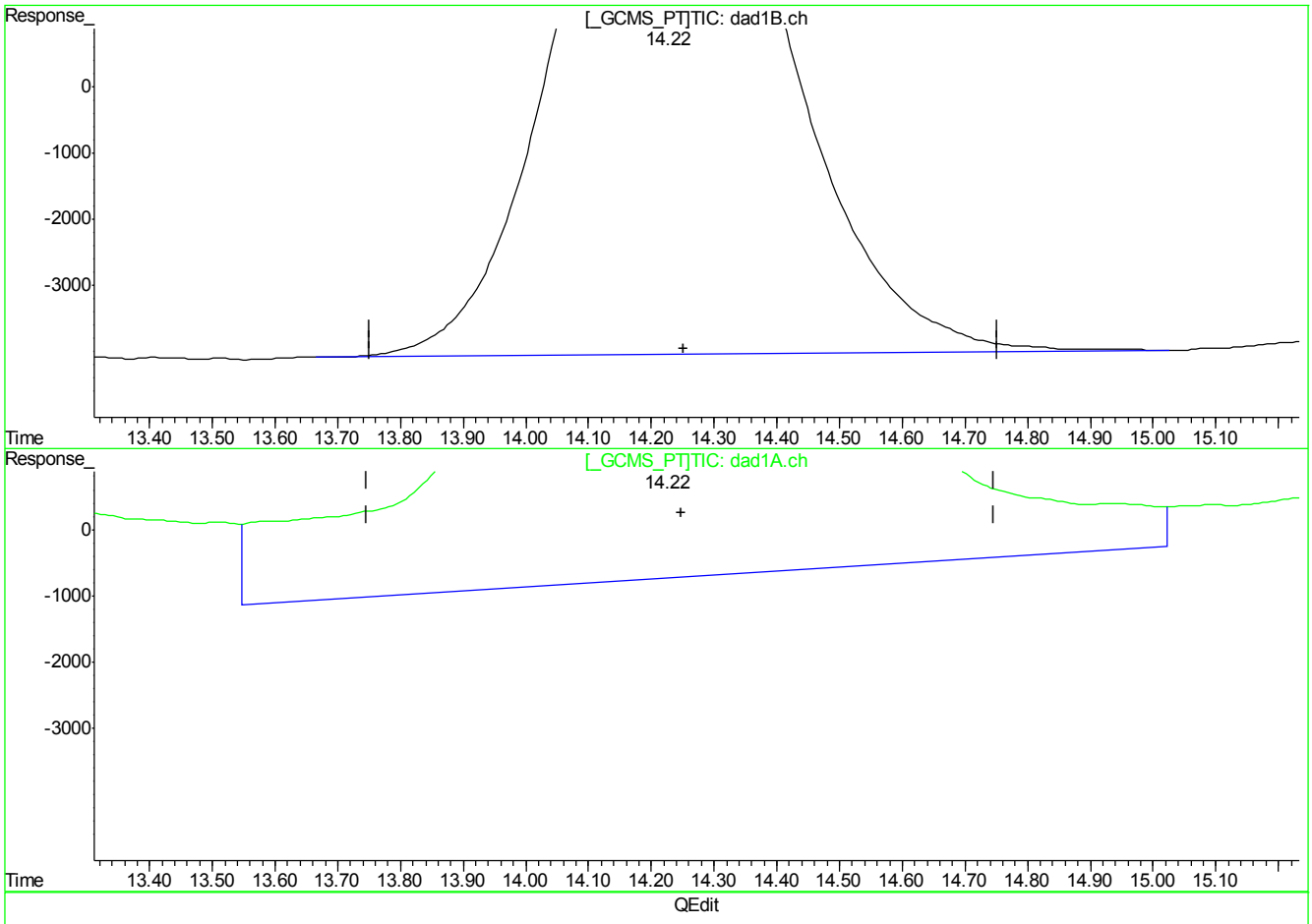
Sample Number:	OP69946-GB2	**Method:**	SW846 8330B
Lab FileID:	GG614664.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 17:33	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.22	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614664.D\dad1B.ch Vial: 79
Signal #2 : G:\DATA\0508RPB3\GG614664.D\dad1A.ch
Acq On : 09-May-2018, 17:33:45 Operator: evitam
Sample : op69946-gb2 Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 463.769ppb

response 2409228

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 509.750ppb

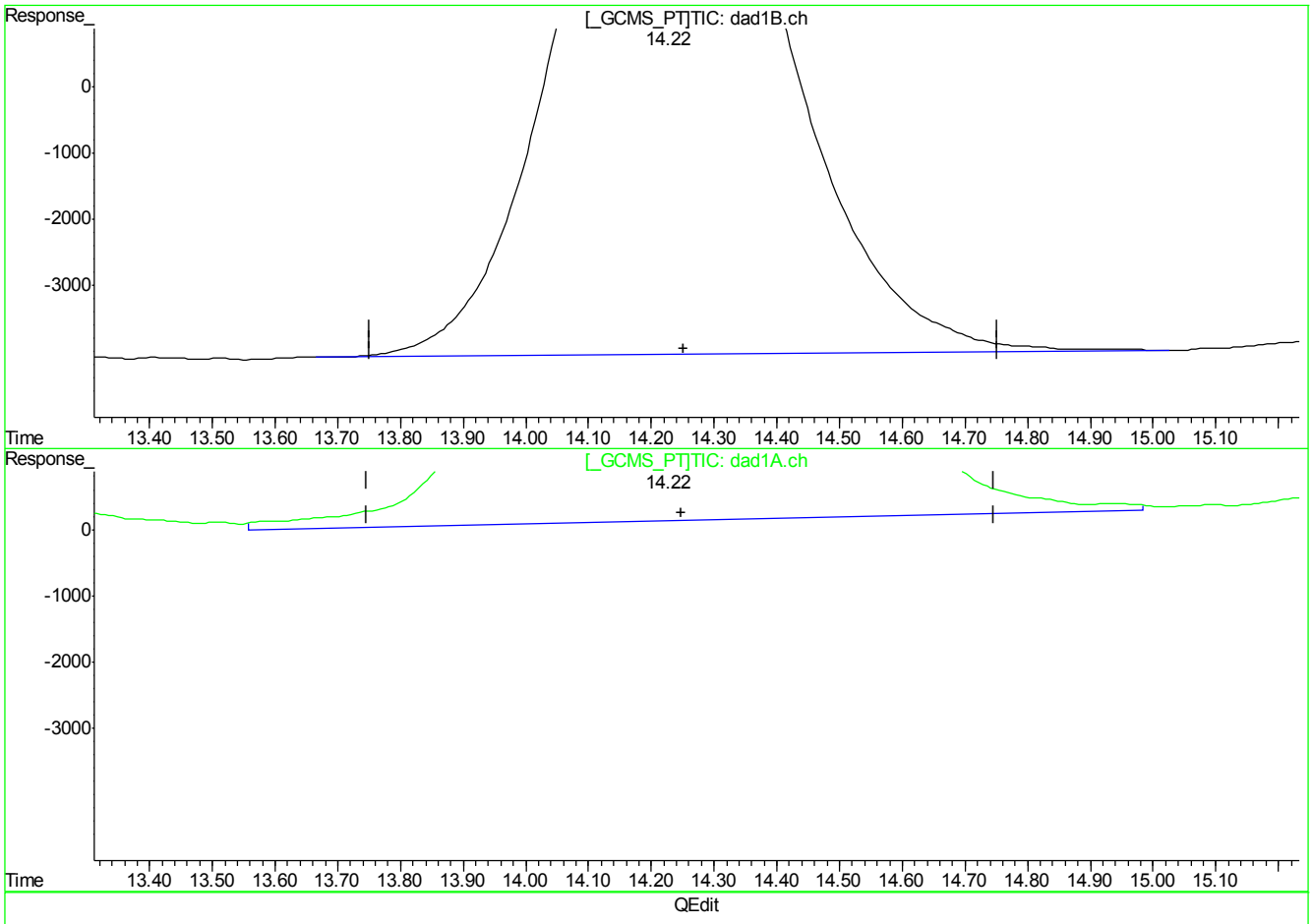
response 5514285

(+) = Expected Retention Time
GG614664.D 8330RPB.M_1113M.M Thu May 10 13:14:54 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614664.D\dad1B.ch Vial: 79
Signal #2 : G:\DATA\0508RPB3\GG614664.D\dad1A.ch
Acq On : 09-May-2018, 17:33:45 Operator: evitam
Sample : op69946-gb2 Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 463.769ppb

response 2409228

(12) 3,4-Dinitrotoluene #2 (S)

14.22min 440.648ppb m

response 4766767

(+) = Expected Retention Time
GG614664.D 8330RPB.M_1113M.M Thu May 10 13:14:57 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614665.D\dad1B.ch Vial: 80
Signal #2 : G:\DATA\0508RPB3\GG614665.D\dad1A.ch
Acq On : 09-May-2018, 18:03:14 Operator: evitam
Sample : op69946-gb3 Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.23	2323571	4730617	447.281	437.306m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		89.46%	87.46%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

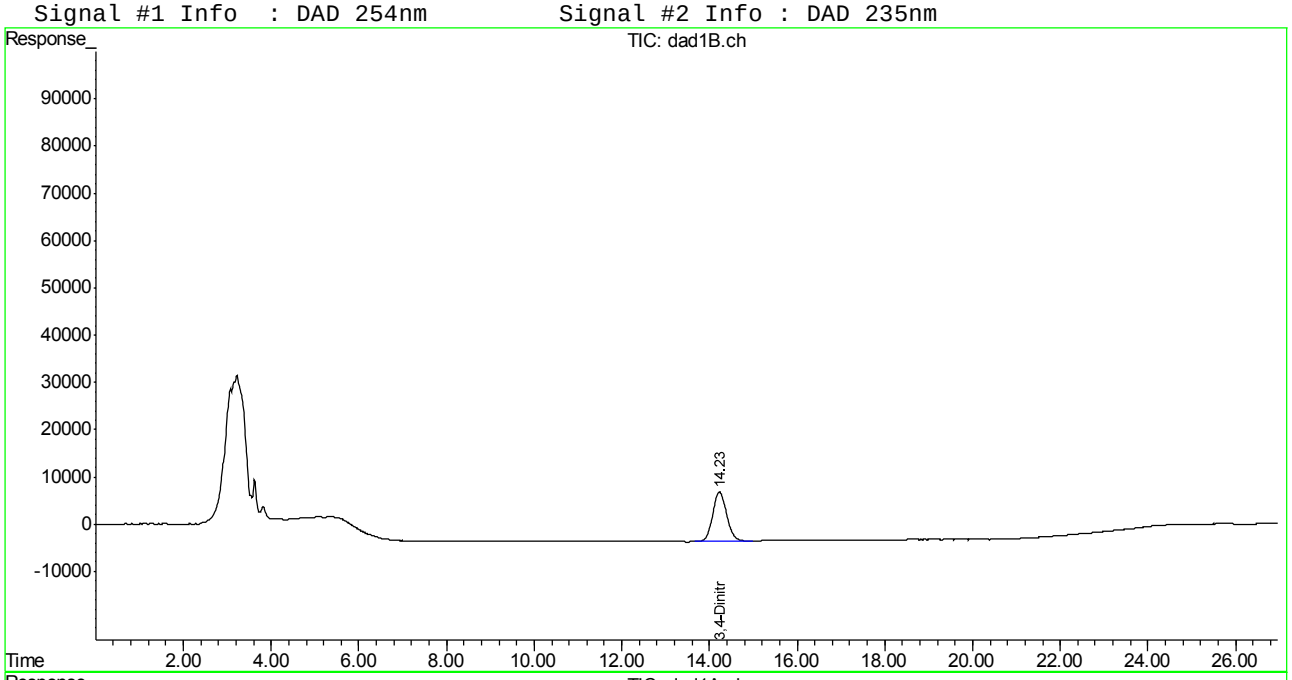
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614665.D 8330RPB.M_1113M.M Thu May 10 13:16:42 2018 Page 1

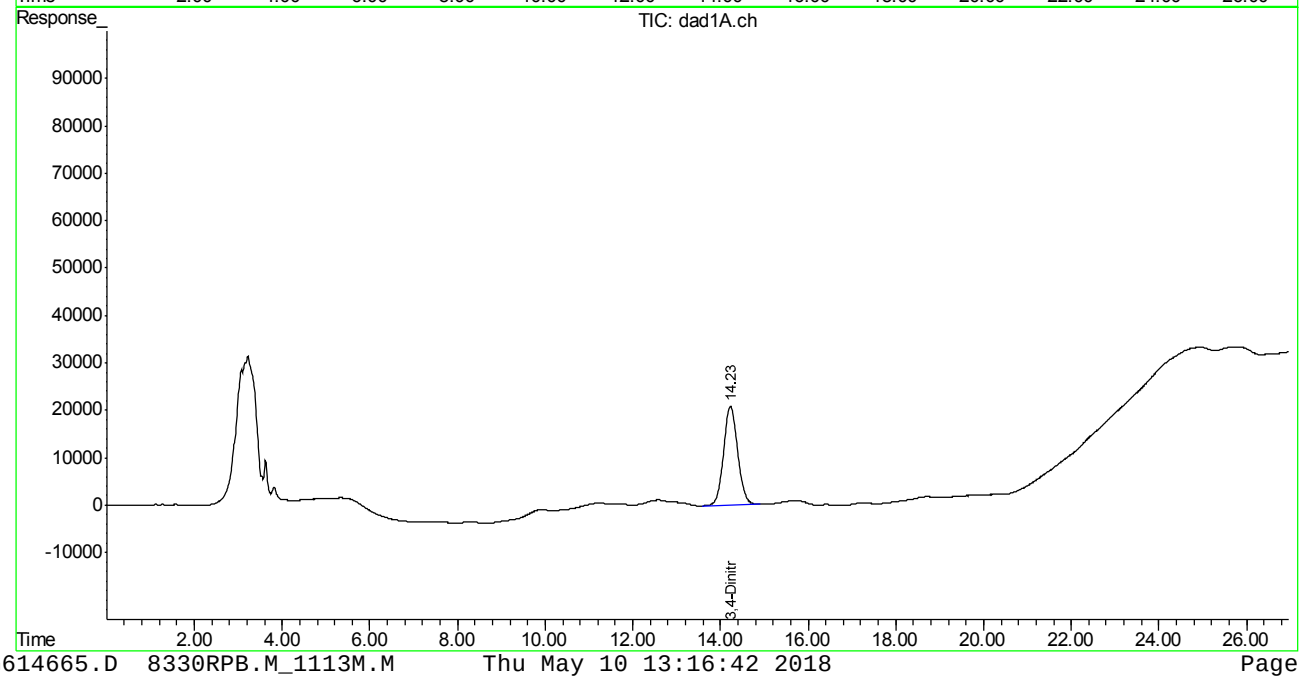
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614665.D\dad1B.ch Vial: 80
Signal #2 : G:\DATA\0508RPB3\GG614665.D\dad1A.ch
Acq On : 09-May-2018, 18:03:14 Operator: evitam
Sample : op69946-gb3 Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

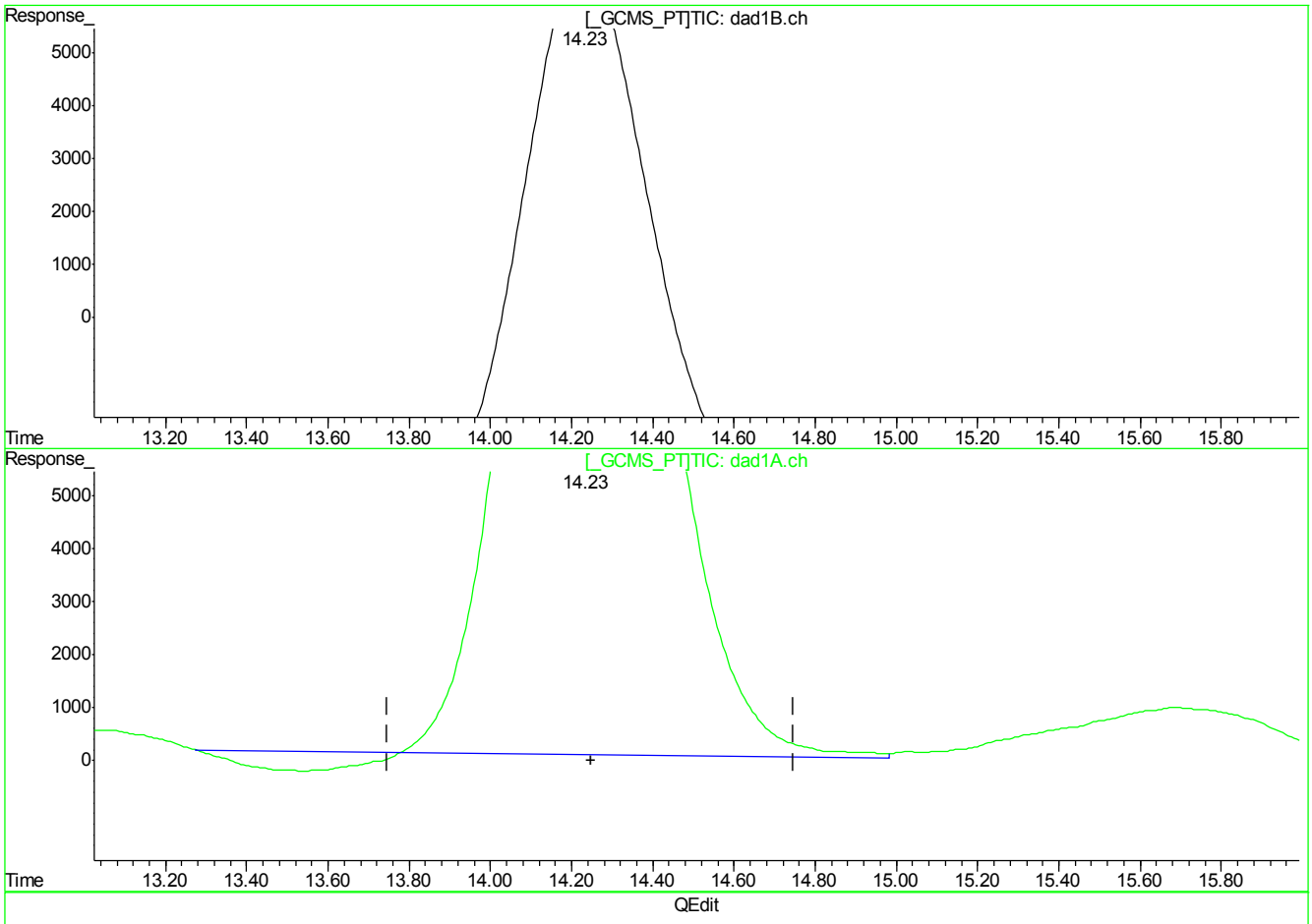
Sample Number:	OP69946-GB3	**Method:**	SW846 8330B
Lab FileID:	GG614665.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 18:03	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.23	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614665.D\dad1B.ch Vial: 80
Signal #2 : G:\DATA\0508RPB3\GG614665.D\dad1A.ch
Acq On : 09-May-2018, 18:03:14 Operator: evitam
Sample : op69946-gb3 Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 447.281ppb

response 2323571

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 418.974ppb

response 4532304

(+) = Expected Retention Time
GG614665.D 8330RPB.M_1113M.M Thu May 10 13:15:32 2018

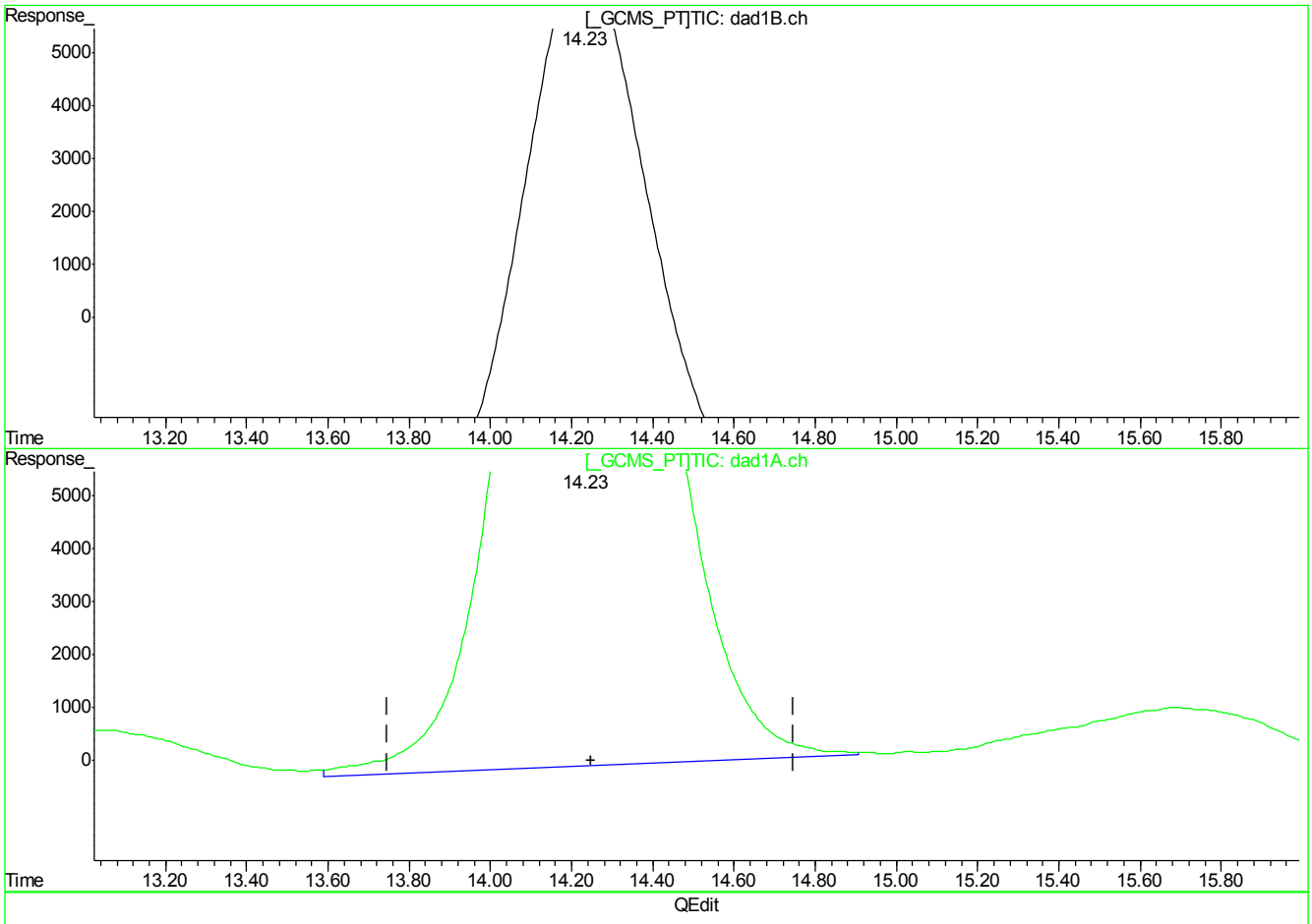
7.2.22.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614665.D\dad1B.ch Vial: 80
Signal #2 : G:\DATA\0508RPB3\GG614665.D\dad1A.ch
Acq On : 09-May-2018, 18:03:14 Operator: evitam
Sample : op69946-gb3 Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 447.281ppb

response 2323571

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 437.306ppb m

response 4730617

(+) = Expected Retention Time
GG614665.D 8330RPB.M_1113M.M Thu May 10 13:15:36 2018

7.2.22.3

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/01/18 17:21

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059525.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059525.D\dad1A.ch
Acq On : 30-Apr-2018, 17:08:30 Operator: evitam
Sample : op69837-bs Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 01 06:55:55 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.39	10.38	1065761	1819396	398.311	385.894
	Spiked Amount 500.000	Range 70 - 136		Recovery =		79.66%	77.18%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.46	1.46	726616	2145601	388.543	422.261
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.79	2.79	857495	1327072	401.001	399.240
6)	1,3,5-Trinitrobe	4.46	4.47	1807799	3468762	415.462	415.516
7)	1,3-Dinitrobenze	5.63	5.63	2342604	1538629	422.549	413.124
8)	3,5-Dinitroanili	5.92	5.92	2116772	3463268	432.844	463.078
9)	Nitrobenzene	7.12	7.12	1405721	1306936	385.784	394.148
10)	Nitroglycerin	0.00	8.49	0	3271247	N.D. d	2552.812
11)	Tetryl	8.78	8.77	1146915	1903695	389.570	366.534
12)	2,4,6-Trinitroto	9.21	9.21	1739206	2089979	412.119	461.085
13)	2-Amino-4,6-Dini	9.48	9.48	1571612	2427510	415.168	452.569
14)	4-Amino-2,6-Dini	9.91	9.91	1143977	2276126	436.602	439.249
16)	2,4-Dinitrotolue	11.04	11.03	2124695	1268174	403.857	429.419
17)	2,6-Dinitrotolue	11.49	11.50	1330691	1567842	385.008	459.153
18)	o-Nitrotoluene	14.71	14.72	989727	1401061	396.233	427.707
19)	p-Nitrotoluene	15.31	15.31	1596647	1385323	404.518	439.776
20)	m-Nitrotoluene	16.28	16.29	1479489	1767477	414.748	439.248
21)	PETN	0.00	18.53	0	3425354	N.D. d	2466.357m

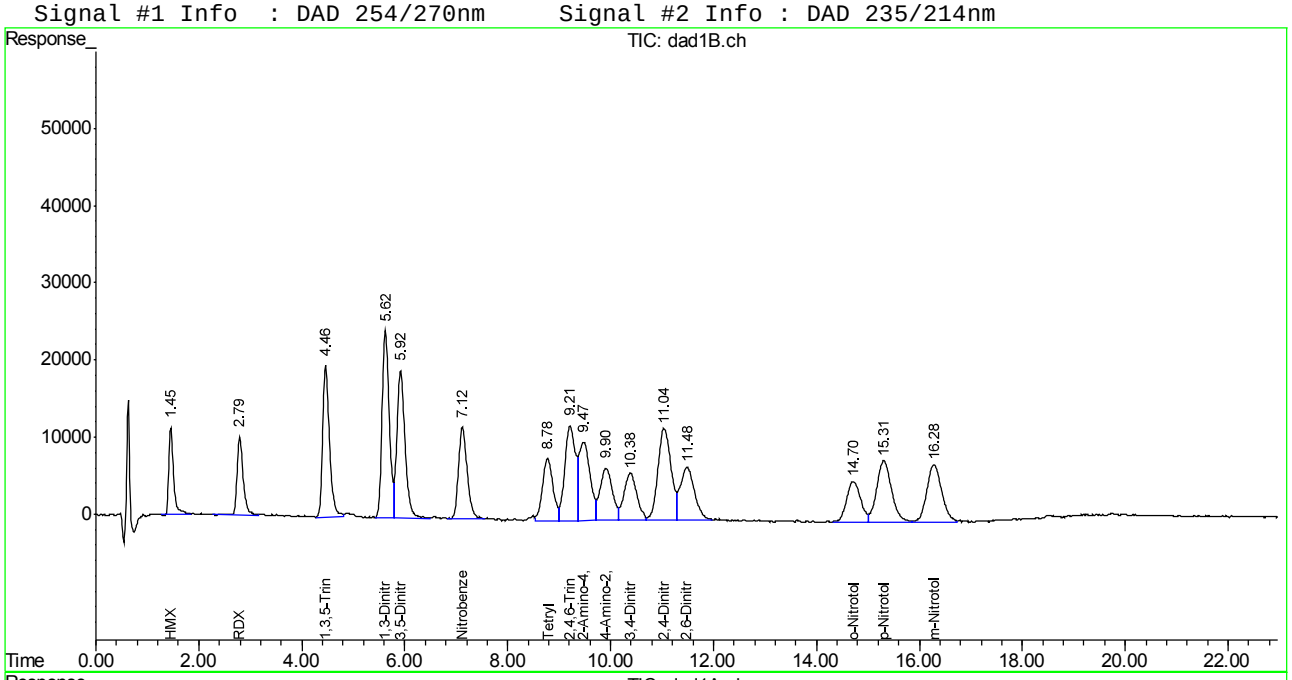
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059525.D 8330B_0419PLUS.M Tue May 01 08:37:15 2018 Page 1

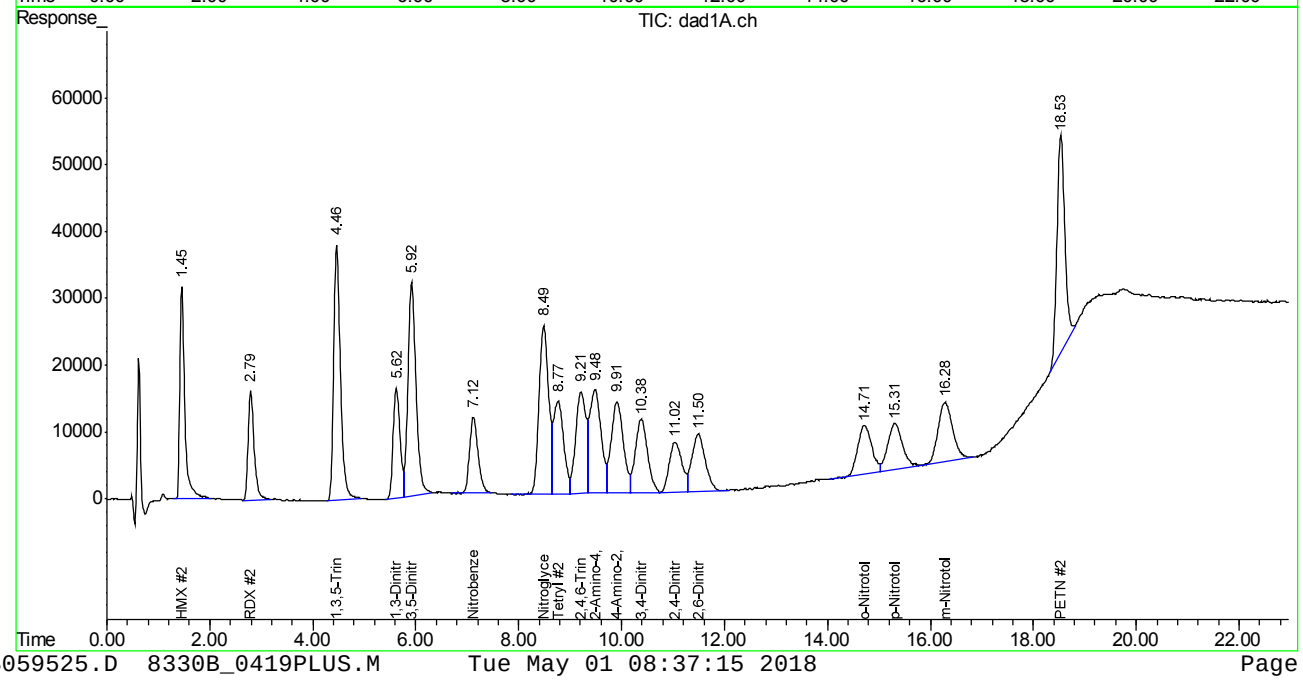
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059525.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059525.D\dad1A.ch
Acq On : 30-Apr-2018, 17:08:30 Operator: evitam
Sample : op69837-bs Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 8:12 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059525.D 8330B_0419PLUS.M Tue May 01 08:37:15 2018 Page 2

Manual Integration Approval Summary

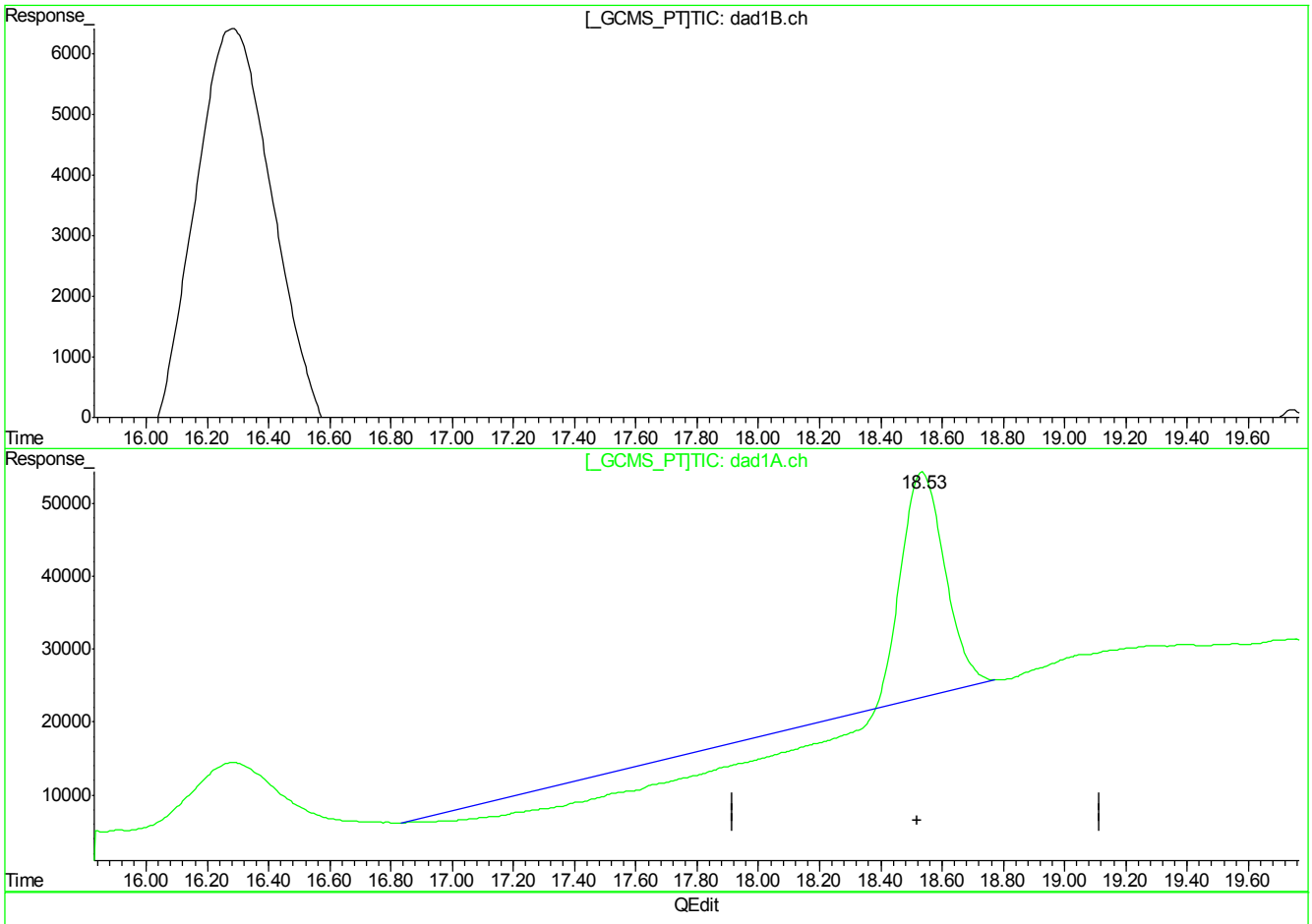
Sample Number:	OP69837-BS	**Method:**	SW846 8330B
Lab FileID:	BB059525.D	**Analyst approved:**	05/01/18 08:46 Evita Martinez
Injection Time:	04/30/18 17:08	**Supervisor approved:**	05/01/18 17:21 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	18.53	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059525.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059525.D\dad1A.ch
Acq On : 30-Apr-2018, 17:08:30 Operator: evitam
Sample : op69837-bs Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.54min 490.218ppb

response 680830

(+) = Expected Retention Time
BB059525.D 8330B_0419PLUS.M Tue May 01 08:12:12 2018

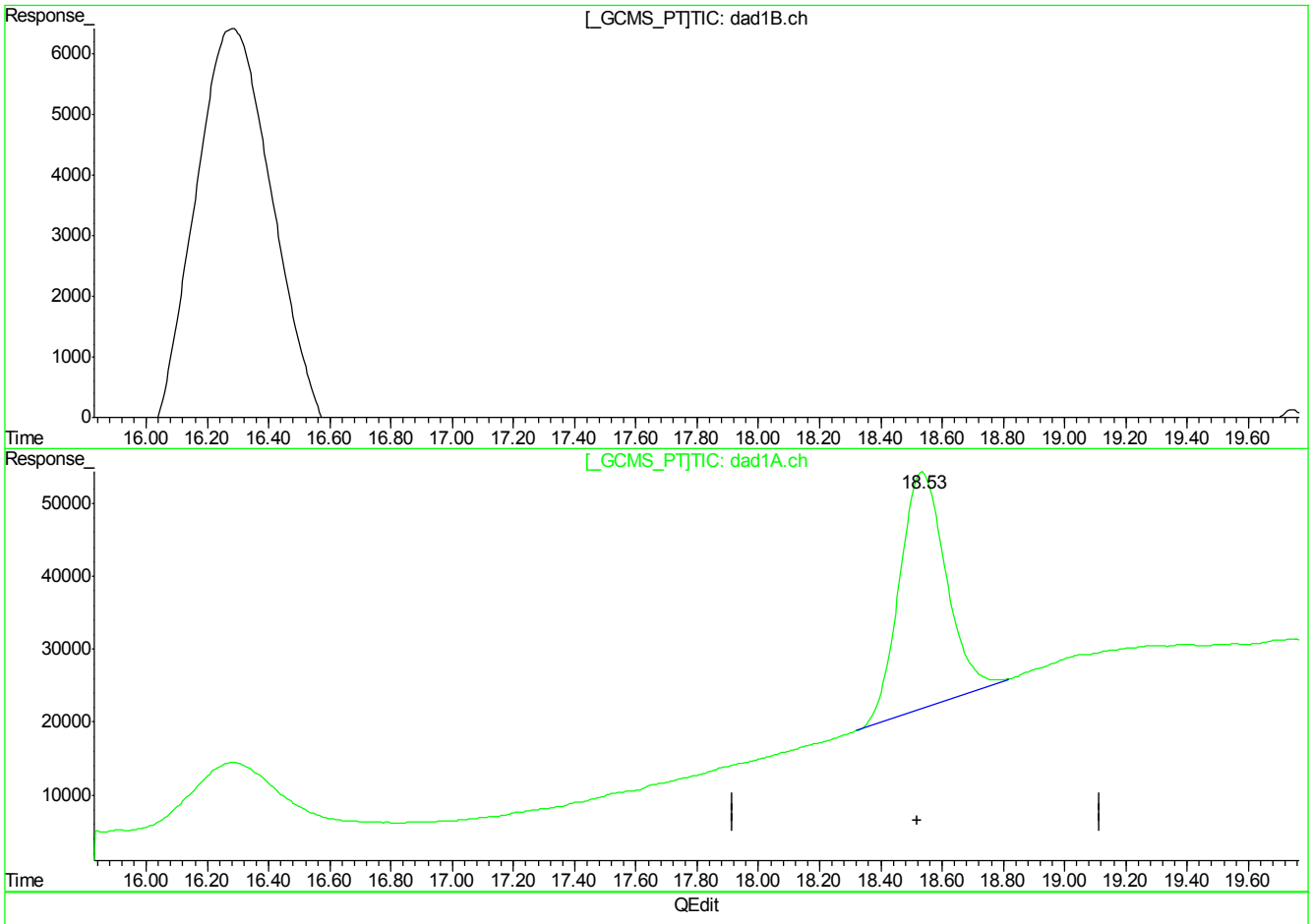
7.3.1.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059525.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059525.D\dad1A.ch
Acq On : 30-Apr-2018, 17:08:30 Operator: evitam
Sample : op69837-bs Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.53min 2466.357ppb m

response 3425354

(+) = Expected Retention Time
BB059525.D 8330B_0419PLUS.M Tue May 01 08:12:16 2018

7.3.1.3

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:15

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614588.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0507RPB3\GG614588.D\dad1A.ch
Acq On : 07-May-2018, 16:22:01 Operator: evitam
Sample : op69919-bs Inst : G1315B
Misc : op69919,Ggg2625,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:06:00 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12)	S 3,4-Dinitrotolue	14.31	14.30	2518138	7773339	484.734	718.581 #
	Spiked Amount 500.000	Range 69 - 134		Recovery =		96.95%	143.72%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	5.40	5.40	1975516	1933697	609.372m	600.200m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.45	7.45	4859199	4852254	468.962	468.340
6)	RDX	7.91	7.91	2325319	2305299	488.084	486.027
7)	1,3-Dinitrobenze	9.96	9.96	6592558	6534712	460.797	514.523
8)	Nitrobenzene	10.92	10.92	4287163	6401626	454.273	691.253 #
9)	2,4,6-Trinitroto	11.70	11.70	4757782	8584171	469.473	654.538
10)	Nitroglycerin	0.00	12.45	0	10242342	N.D. d	3039.499
11)	Tetryl	12.97	12.97	3587829	10262736	442.731	731.803 #
13)	2,6-Dinitrotolue	14.67	14.66	3522997	7215153	492.754	711.129 #
14)	2,4-Dinitrotolue	15.37	15.37	6154408	8160168	469.477	865.659 #
15)	o-Nitrotoluene	16.92	16.92	2751503	8482117	476.319	983.591 #
16)	3,5-Dinitroanili	16.33	16.33	5472621	13432200	559.129	823.573 #
17)	p-Nitrotoluene	18.07	18.08	5447040	14643692	463.879	690.963 #
18)	4-Amino-2,6-Dini	18.07	18.08	5447040	14643692	463.879	688.954 #
19)	m-Nitrotoluene	19.30	19.29	2888173	6190710	489.905	636.616
20)	2-Amino-4,6-Dini	20.25	20.25	4446534	6335145	492.804	531.849
21)	PETN	0.00	21.81	0	8070936	N.D. d	2516.345m

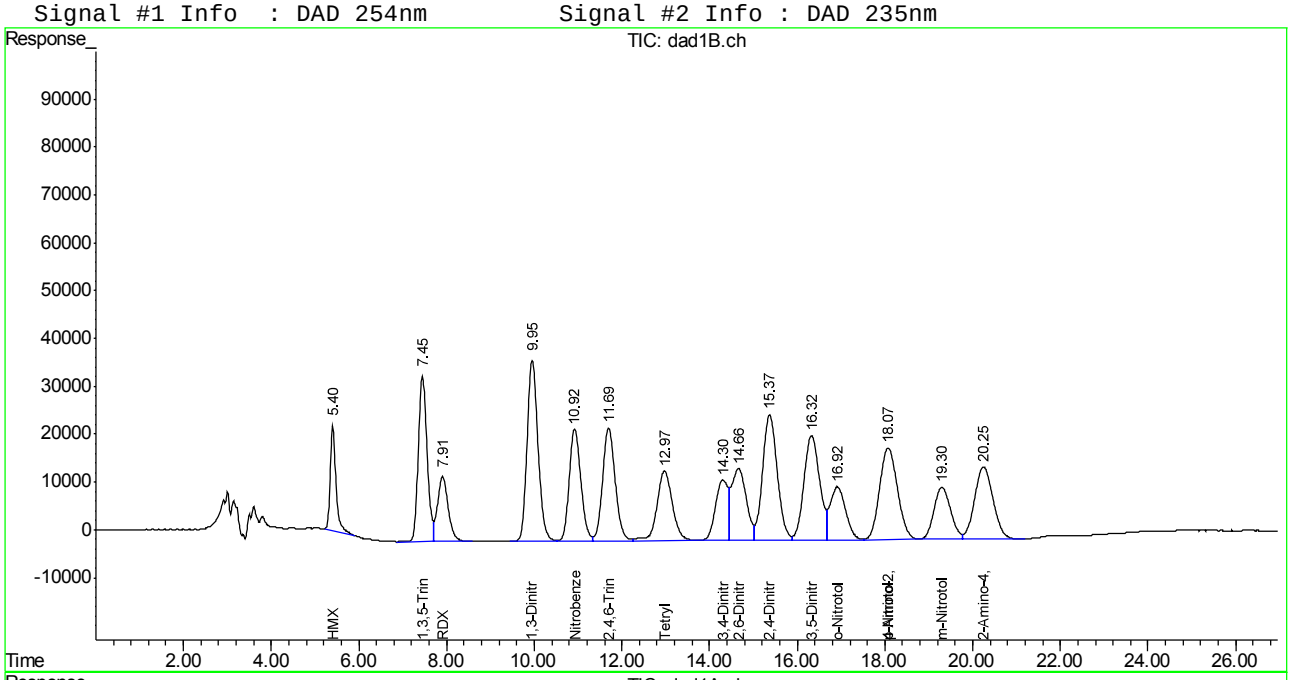
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614588.D 8330RPB.M_1113M.M Tue May 08 11:18:57 2018 Page 1

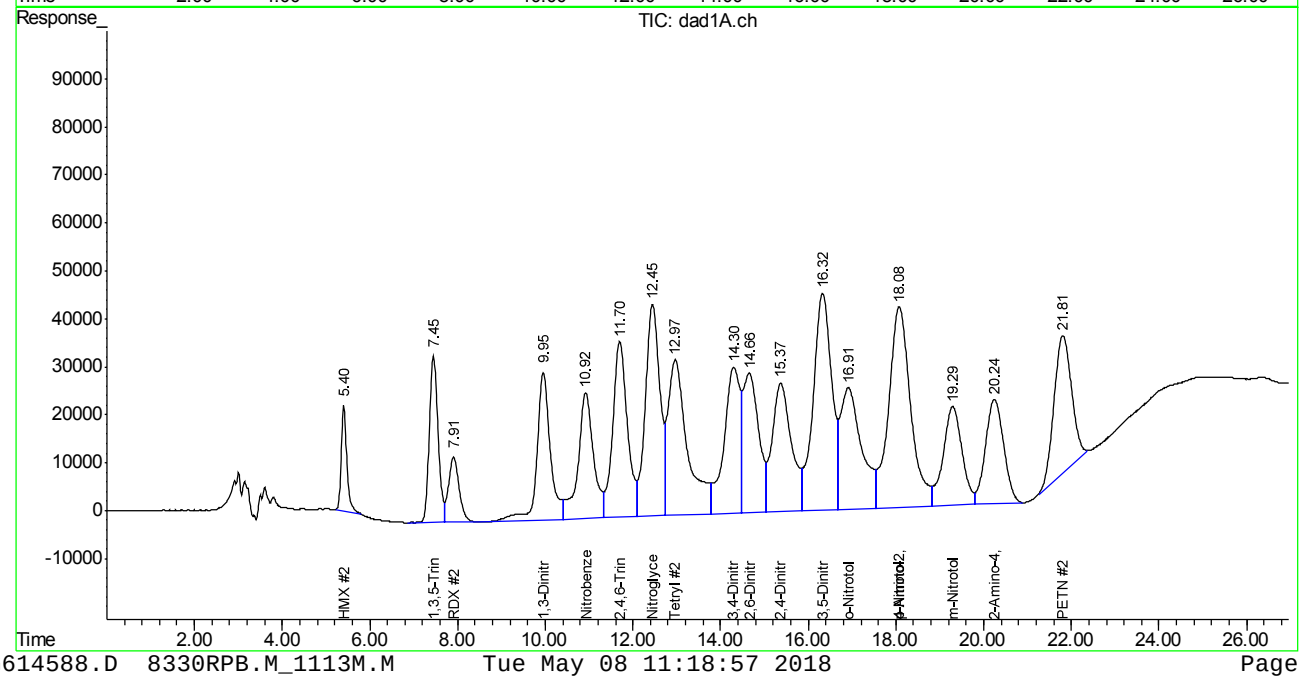
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614588.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0507RPB3\GG614588.D\dad1A.ch
Acq On : 07-May-2018, 16:22:01 Operator: evitam
Sample : op69919-bs Inst : G1315B
Misc : op69919,Ggg2625,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:08 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG614588.D 8330RPB.M_1113M.M Tue May 08 11:18:57 2018 Page 2

Manual Integration Approval Summary

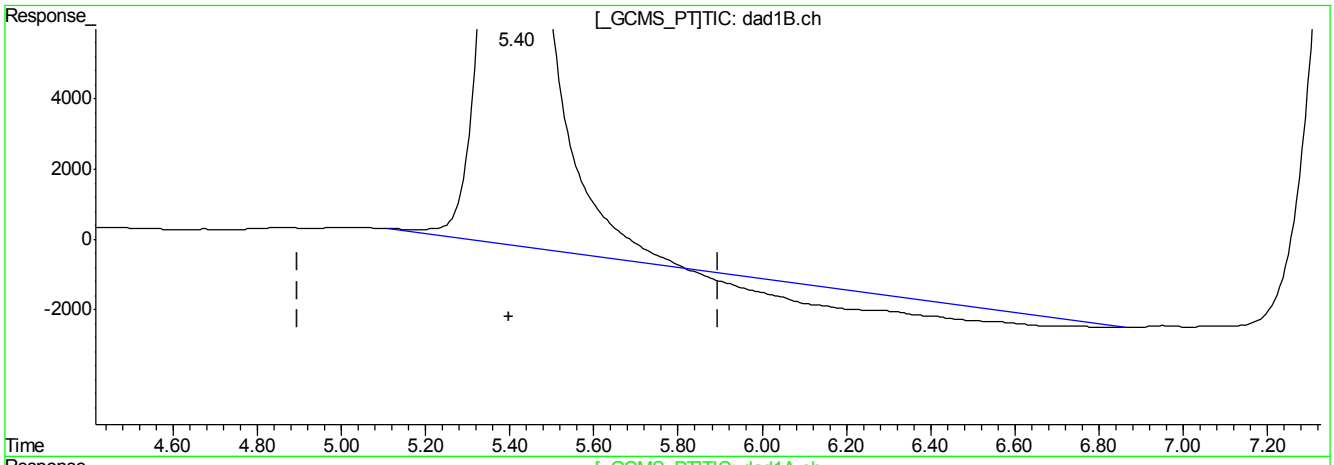
Sample Number:	OP69919-BS	**Method:**	SW846 8330B
Lab FileID:	GG614588.D	**Analyst approved:**	05/08/18 11:23 Evita Martinez
Injection Time:	05/07/18 16:22	**Supervisor approved:**	05/08/18 16:15 Mike Eger

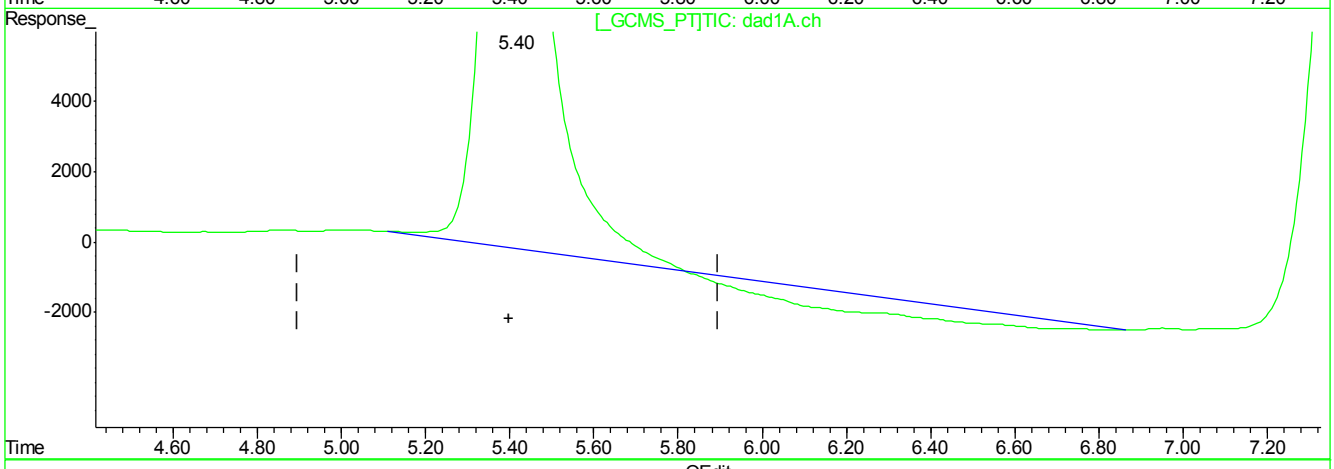
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.40	Poorly defined baseline
HMX	2691-41-0	2	5.40	Poorly defined baseline
PETN	78-11-5	2	21.81	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614588.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0507RPB3\GG614588.D\dad1A.ch
Acq On : 07-May-2018, 16:22:01 Operator: evitam
Sample : op69919-bs Inst : G1315B
Misc : op69919,Ggg2625,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.41min 546.805ppb

response 1772681

(2) HMX #2

5.41min 550.222ppb

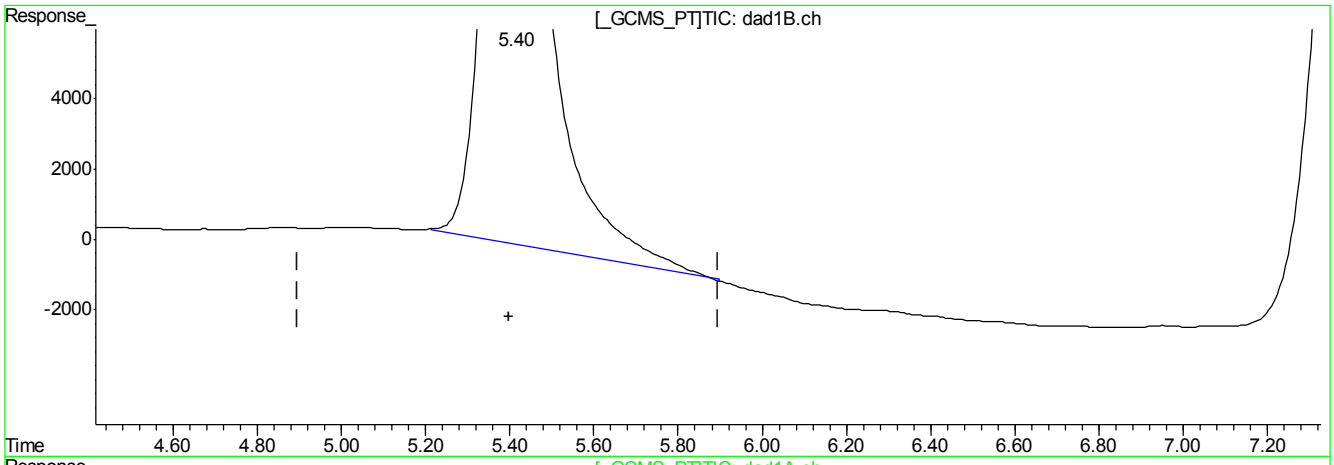
response 1772681

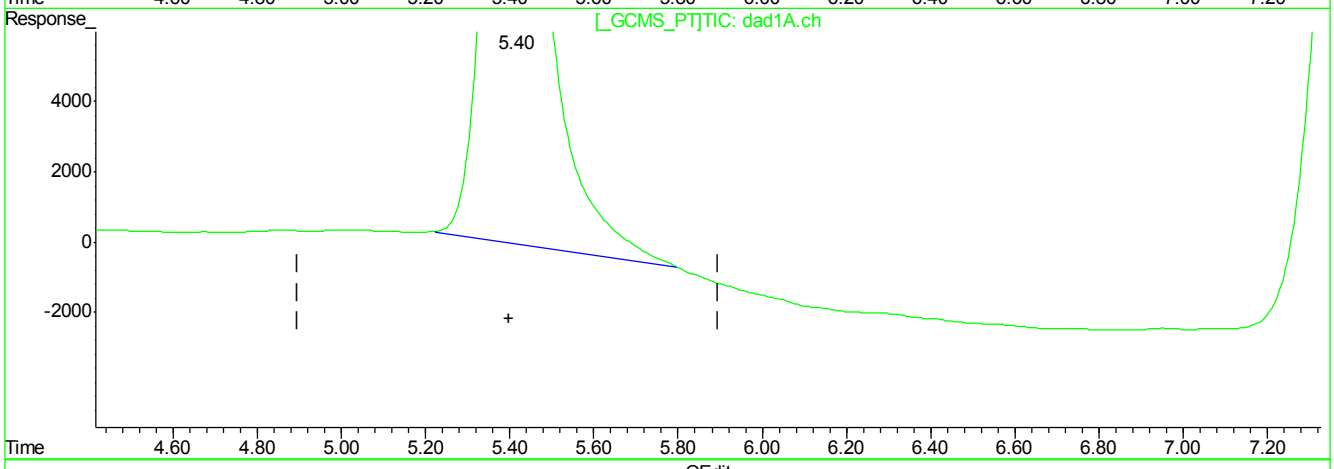
(+) = Expected Retention Time
GG614588.D 8330RPB.M_1113M.M Tue May 08 11:08:34 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614588.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0507RPB3\GG614588.D\dad1A.ch
Acq On : 07-May-2018, 16:22:01 Operator: evitam
Sample : op69919-bs Inst : G1315B
Misc : op69919,Ggg2625,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.40min 609.372ppb m

response 1975516

(2) HMX #2

5.40min 600.200ppb m

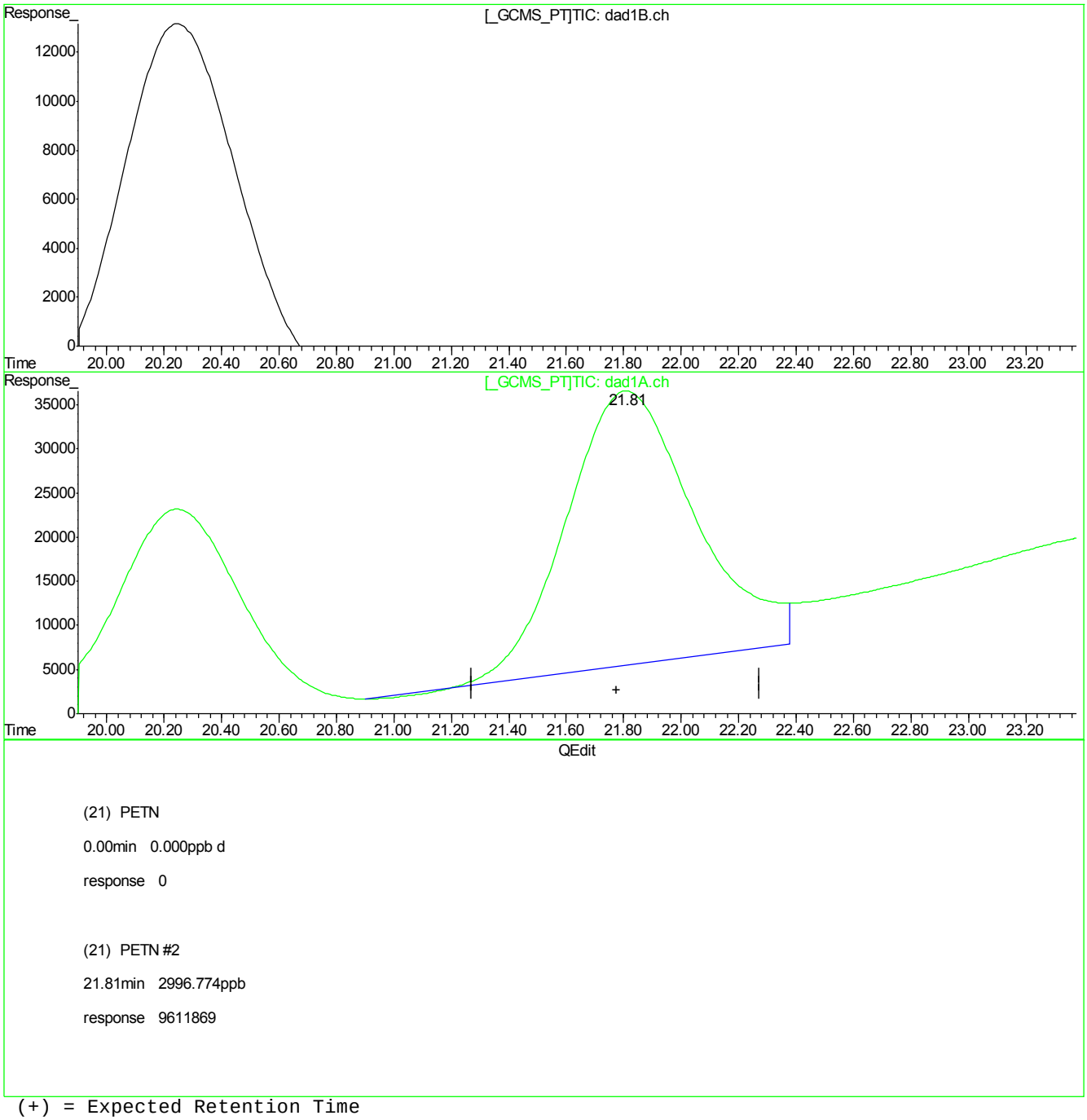
response 1933697

(+) = Expected Retention Time
GG614588.D 8330RPB.M_1113M.M Tue May 08 11:08:39 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614588.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0507RPB3\GG614588.D\dad1A.ch
Acq On : 07-May-2018, 16:22:01 Operator: evitam
Sample : op69919-bs Inst : G1315B
Misc : op69919,Ggg2625,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.81min 2996.774ppb

response 9611869

(+) = Expected Retention Time
GG614588.D 8330RPB.M_1113M.M Tue May 08 11:08:51 2018

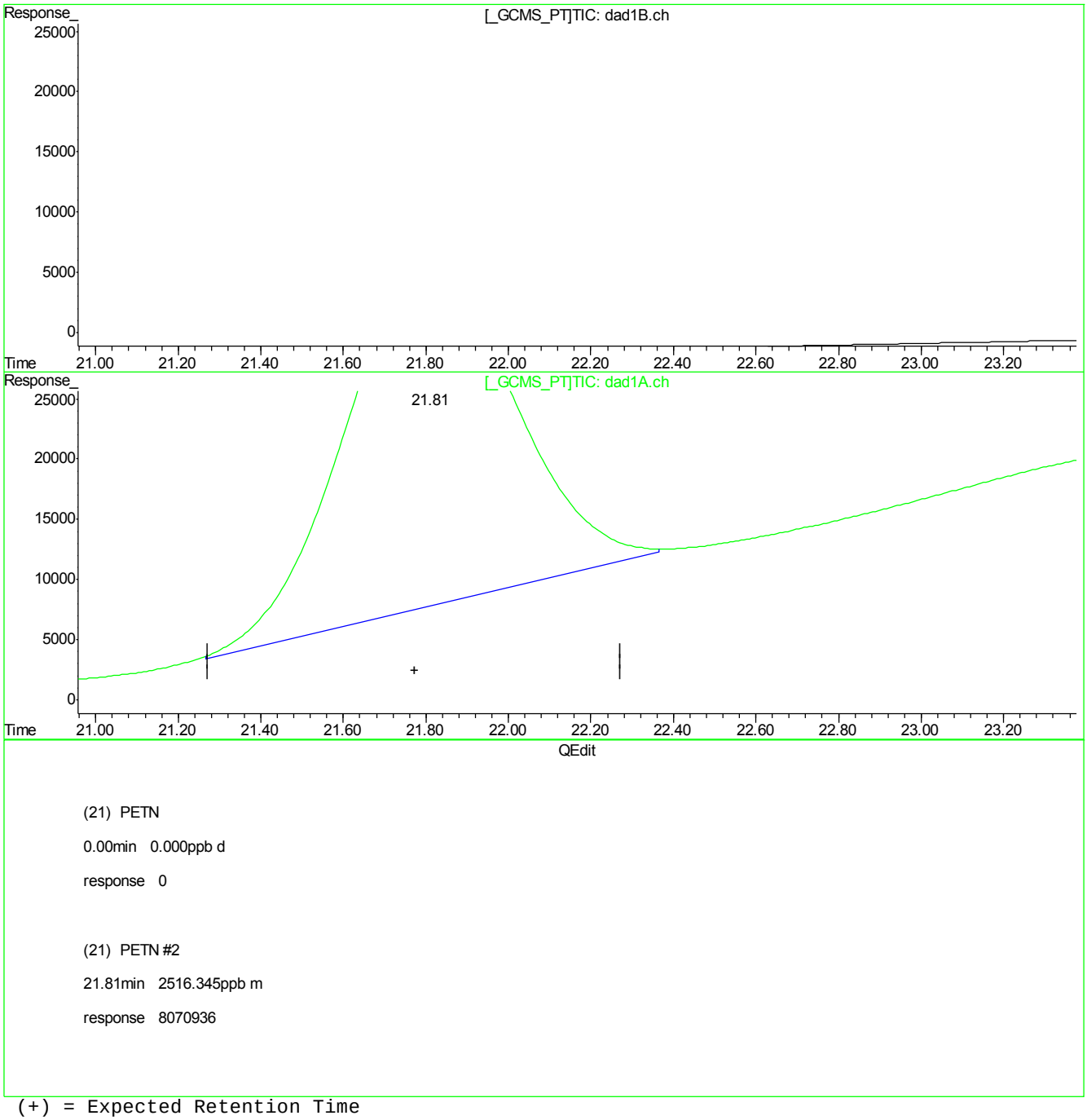
7.3.2.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614588.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0507RPB3\GG614588.D\dad1A.ch
Acq On : 07-May-2018, 16:22:01 Operator: evitam
Sample : op69919-bs Inst : G1315B
Misc : op69919,Ggg2625,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614588.D 8330RPB.M_1113M.M Tue May 08 11:08:57 2018

7.3.2.5

7

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/08/18 16:16

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614605.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0508RPB3\GG614605.D\dad1A.ch
Acq On : 08-May-2018, 10:57:32 Operator: evitam
Sample : op69920-bs Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.20	14.19	2554596	7278050	491.752	672.795
	Spiked Amount 500.000	Range 69 - 134		Recovery =		98.35%	134.56%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.38	5.38	1924277	1898738	593.567m	589.349m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.42	7.42	4917346	4914148	474.574	474.314
6)	RDX	7.87	7.87	2355332	2341126	494.384	493.581
7)	1,3-Dinitrobenze	9.89	9.89	6746689	7800906	471.570	619.978
8)	Nitrobenzene	10.85	10.85	4363519	6405068	462.364	691.625 #
9)	2,4,6-Trinitroto	11.62	11.62	4831284	8863238	476.725	675.816 #
10)	Nitroglycerin	0.00	12.35	0	10279324	N.D. d	3050.474
11)	Tetryl	12.87	12.87	3578466	9831223	441.575	700.664 #
13)	2,6-Dinitrotolue	14.57	14.56	3557494	6944117	497.579	684.416
14)	2,4-Dinitrotolue	15.27	15.27	6238512	7567951	475.892	801.610 #
15)	o-Nitrotoluene	16.81	16.81	2795063	9310651	483.860	1079.668 #
16)	3,5-Dinitroanili	16.22	16.22	5527275	13598658	564.670	833.668 #
17)	p-Nitrotoluene	17.96	17.96	5541412	18074536	471.916	852.847 #
18)	4-Amino-2,6-Dini	17.96	17.96	5541412	18074536	471.916	850.367 #
19)	m-Nitrotoluene	19.18	19.17	2928384	8624800	496.726	886.923 #
20)	2-Amino-4,6-Dini	20.11	20.11	4529291	7470281	501.976	623.409
21)	PETN	0.00	21.69	0	8013731	N.D. d	2498.509m

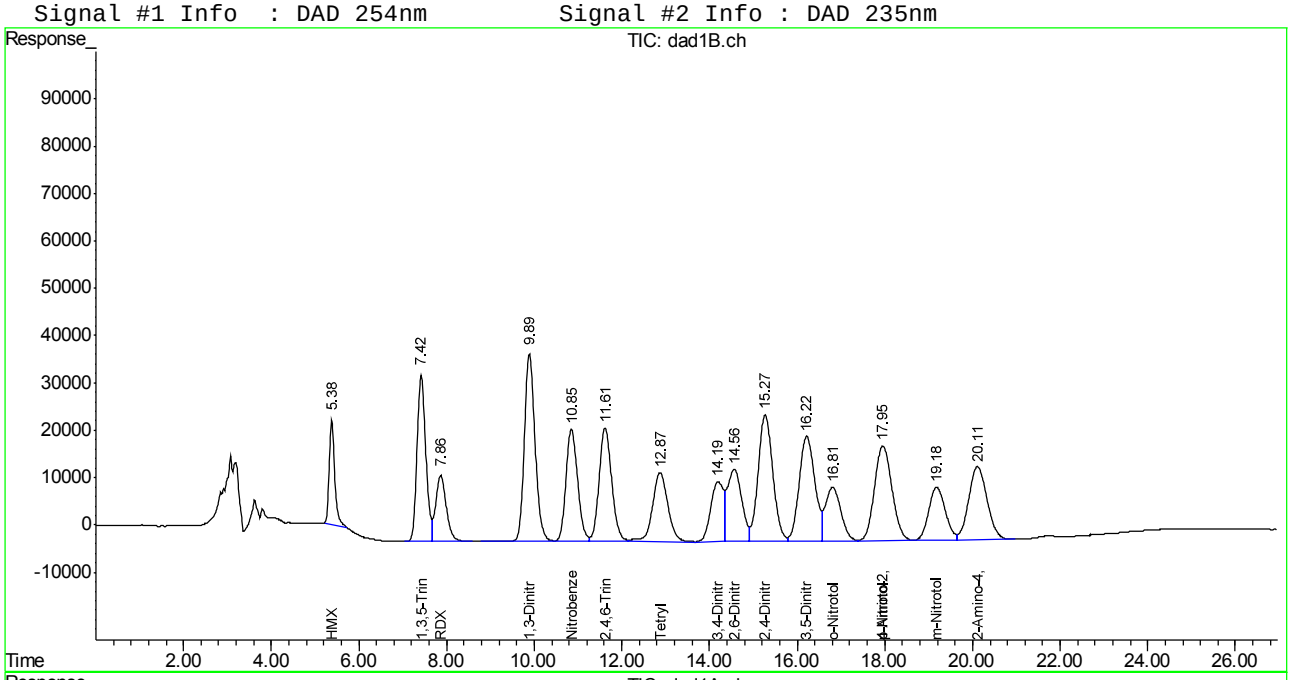
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614605.D 8330RPB.M_1113M.M Tue May 08 14:41:50 2018 Page 1

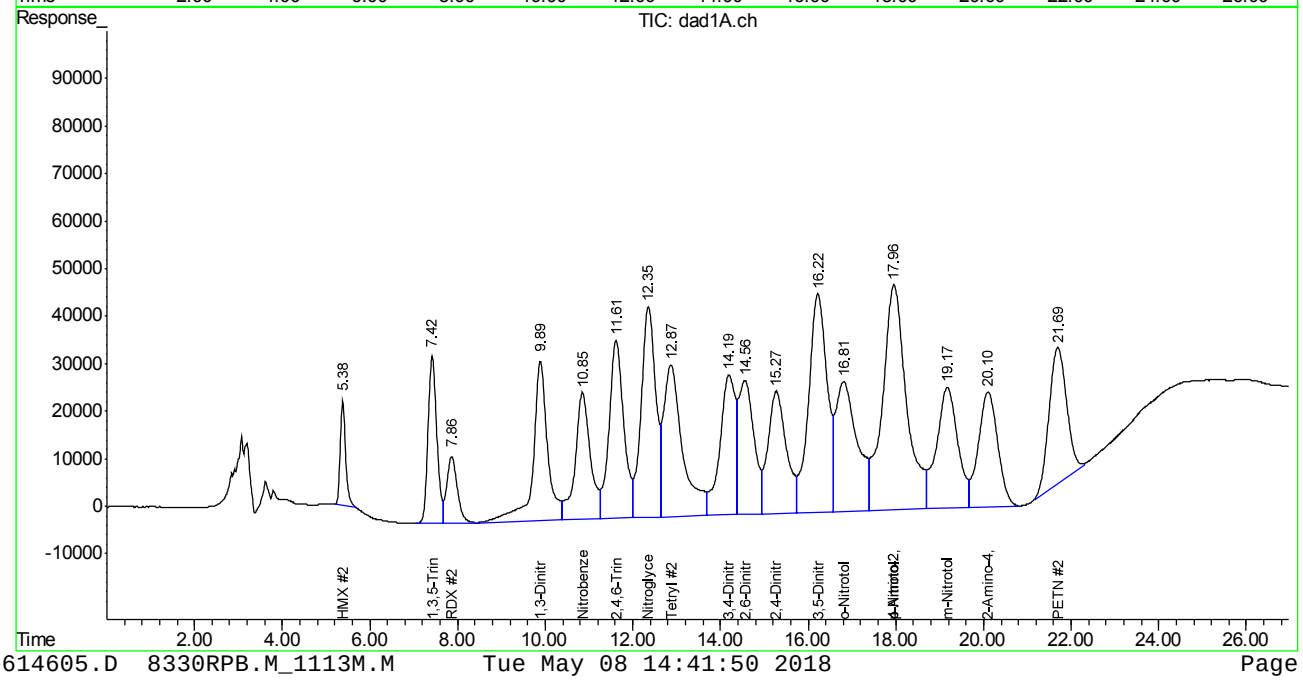
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614605.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0508RPB3\GG614605.D\dad1A.ch
Acq On : 08-May-2018, 10:57:32 Operator: evitam
Sample : op69920-bs Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:36 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

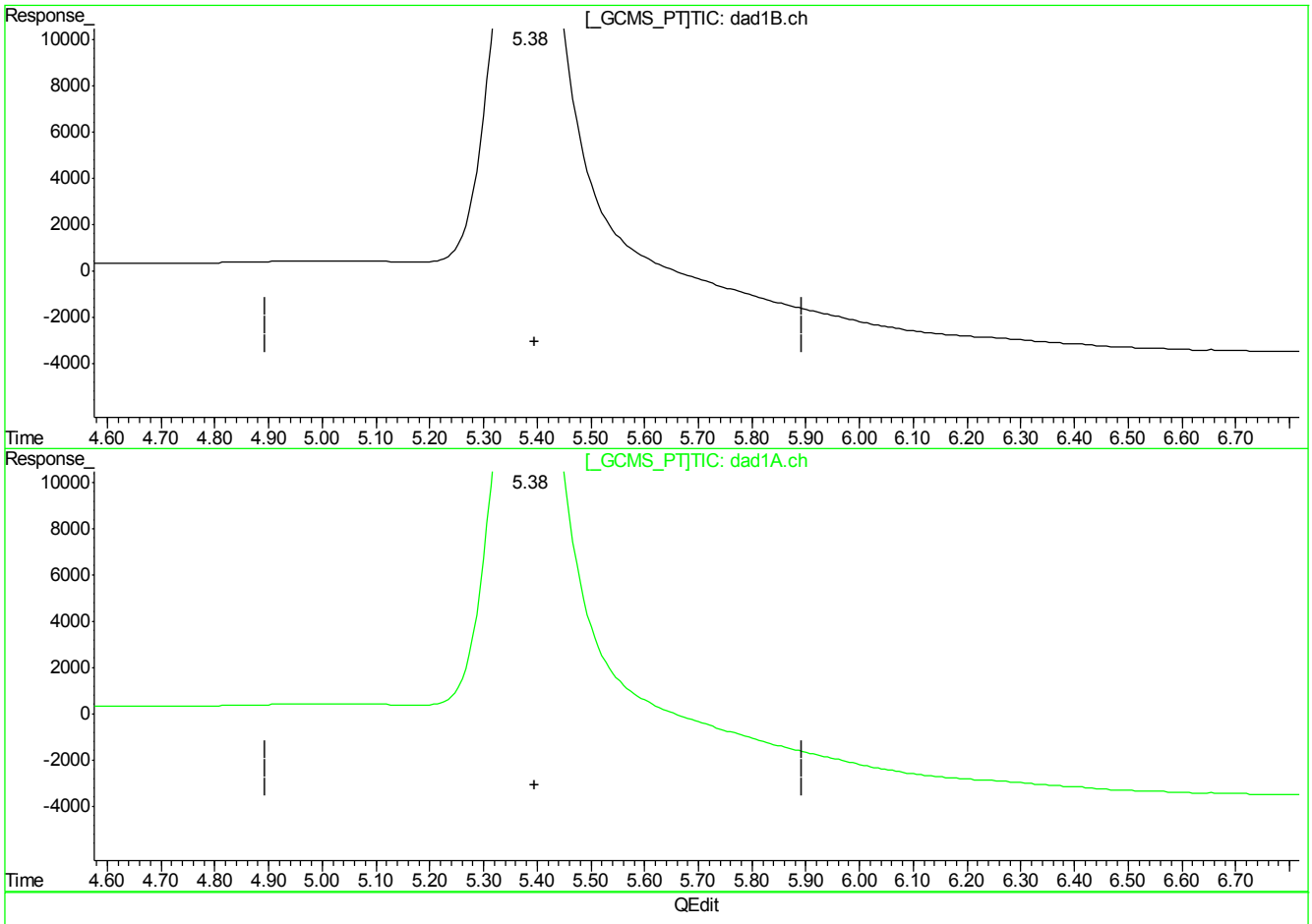
Sample Number:	OP69920-BS	**Method:**	SW846 8330B
Lab FileID:	GG614605.D	**Analyst approved:**	05/08/18 14:44 Evita Martinez
Injection Time:	05/08/18 10:57	**Supervisor approved:**	05/08/18 16:16 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.38	Poorly defined baseline
HMX	2691-41-0	2	5.38	Poorly defined baseline
PETN	78-11-5	2	21.69	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614605.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0508RPB3\GG614605.D\dad1A.ch
Acq On : 08-May-2018, 10:57:32 Operator: evitam
Sample : op69920-bs Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.38min 455.951ppb

response 1478140

(2) HMX #2

5.38min 458.800ppb

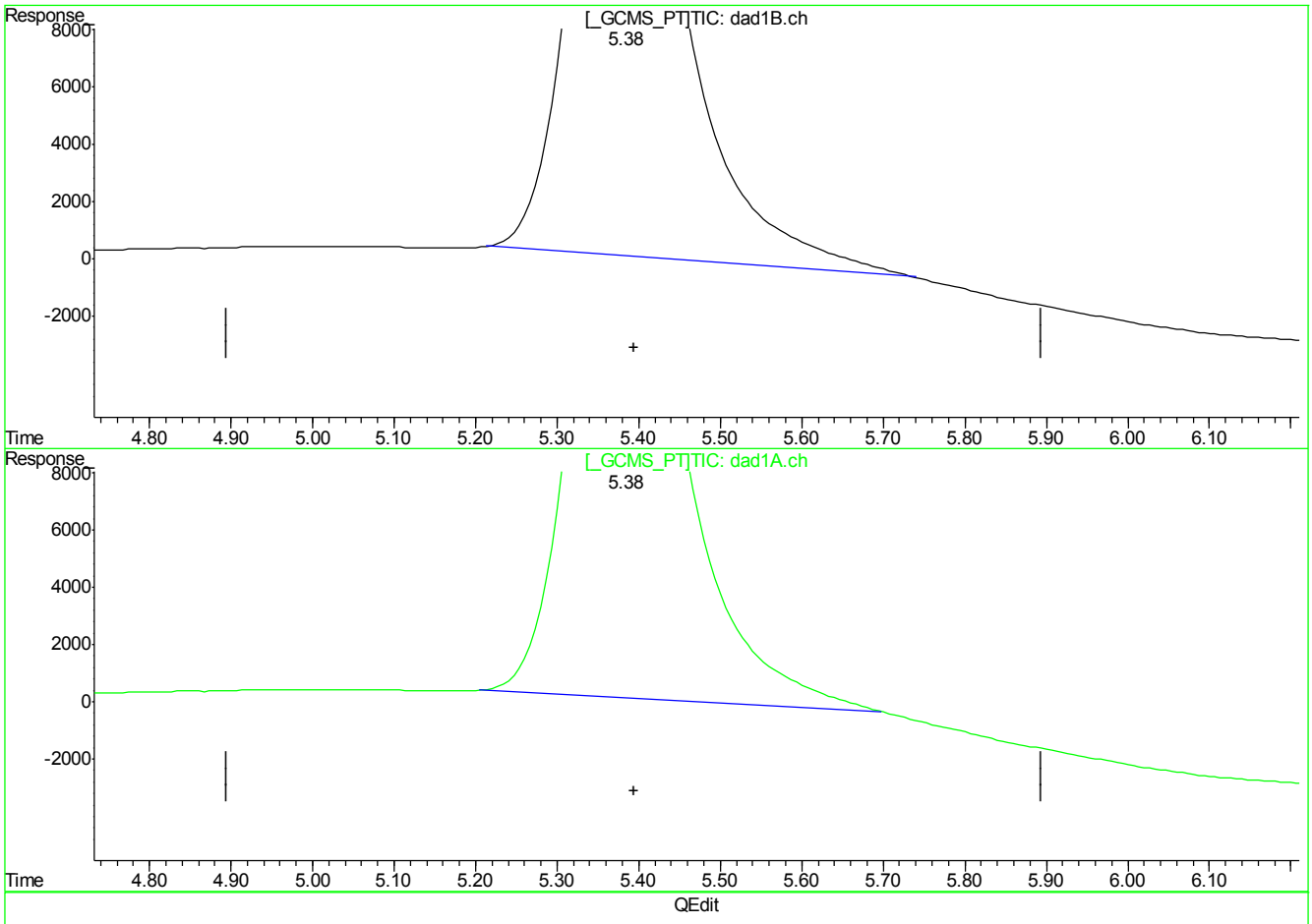
response 1478140

(+) = Expected Retention Time
GG614605.D 8330RPB.M_1113M.M Tue May 08 14:36:14 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614605.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0508RPB3\GG614605.D\dad1A.ch
Acq On : 08-May-2018, 10:57:32 Operator: evitam
Sample : op69920-bs Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.38min 593.567ppb m

response 1924277

(2) HMX #2

5.38min 589.349ppb m

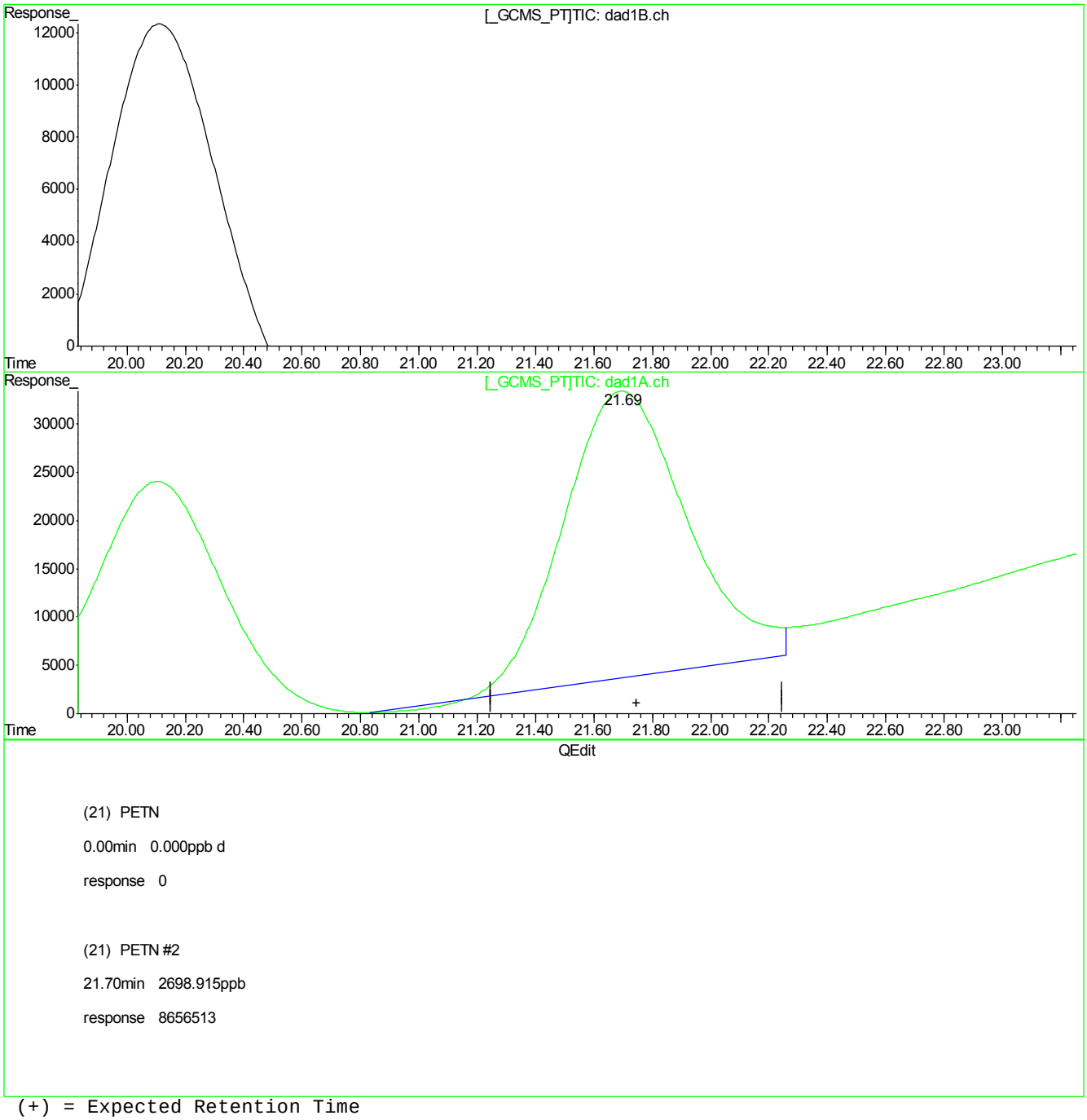
response 1898738

(+) = Expected Retention Time
GG614605.D 8330RPB.M_1113M.M Tue May 08 14:36:28 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614605.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0508RPB3\GG614605.D\dad1A.ch
Acq On : 08-May-2018, 10:57:32 Operator: evitam
Sample : op69920-bs Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614605.D 8330RPB.M_1113M.M Tue May 08 14:36:36 2018

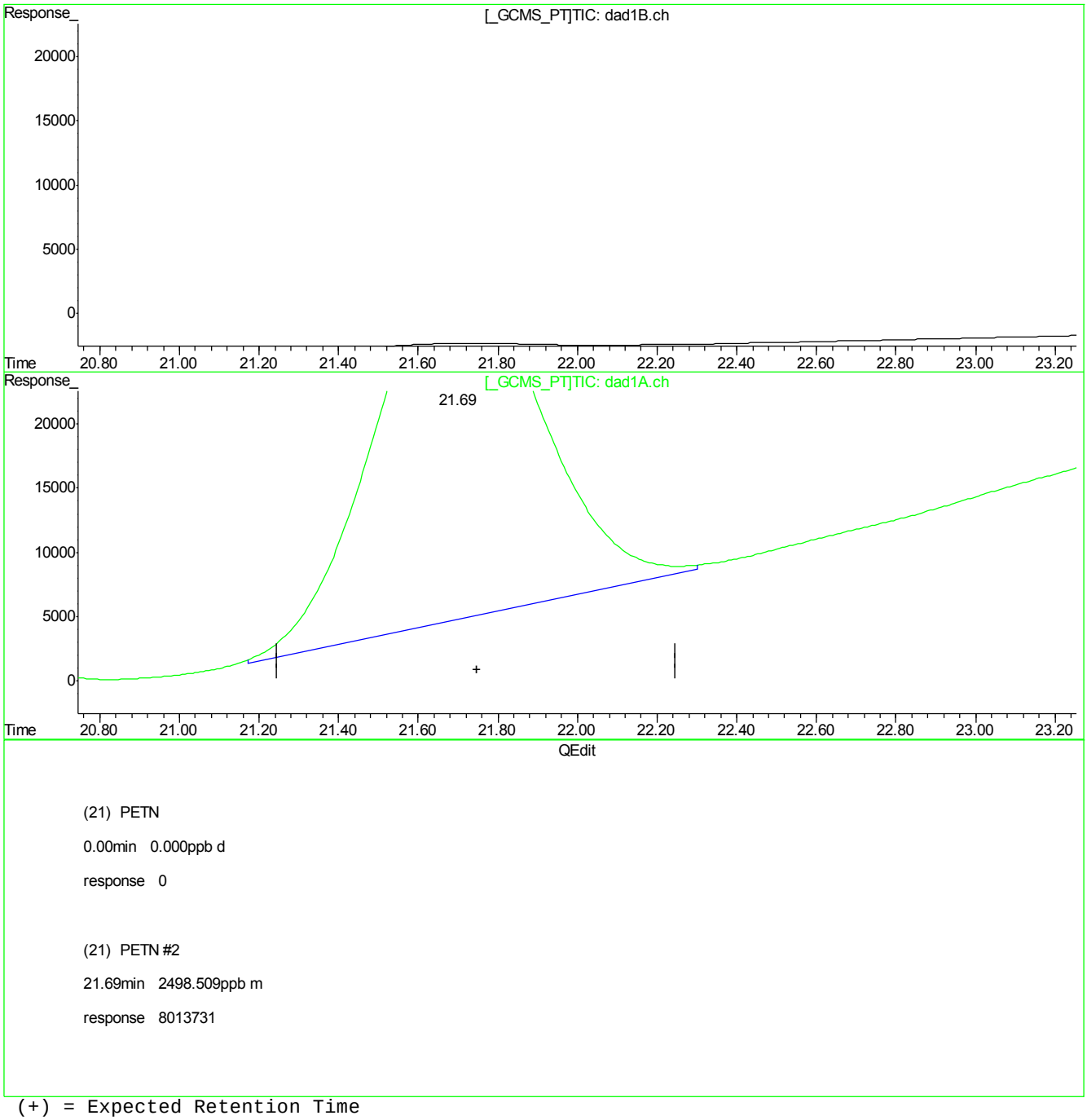
7.3.3.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614605.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0508RPB3\GG614605.D\dad1A.ch
Acq On : 08-May-2018, 10:57:32 Operator: evitam
Sample : op69920-bs Inst : G1315B
Misc : op69920,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614605.D 8330RPB.M_1113M.M Tue May 08 14:36:42 2018

7.3.3.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1A.ch
Acq On : 08-May-2018, 11:01:21 Operator: evitam
Sample : op69921-bs Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 13:00:12 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.18	10.18	1099534	1901367	410.933	403.281
	Spiked Amount 500.000	Range 69 - 134		Recovery =		82.19%	80.66%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.44	1.44	803579	2288494	429.697	450.455
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.73	2.73	914148	1449631	427.494	436.111
6)	1,3,5-Trinitrobe	4.38	4.38	2021840	3820777	464.652	457.683
7)	1,3-Dinitrobenze	5.53	5.53	2468440	1868985	445.247	501.825
8)	3,5-Dinitroanili	5.81	5.81	2311535	4078801	472.670	545.382
9)	Nitrobenzene	7.02	7.02	1570436	1507346	430.988	454.588
10)	Nitroglycerin	0.00	8.35	0	2677590	N.D. d	2089.535
11)	Tetryl	8.60	8.59	1352097	2244409	459.433	432.135
12)	2,4,6-Trinitroto	9.04	9.03	1829775	2093840	433.580	461.937
13)	2-Amino-4,6-Dini	9.28	9.28	1679992	2666444	443.798	497.115
14)	4-Amino-2,6-Dini	9.71	9.71	1246400	2441975	475.413	471.254
16)	2,4-Dinitrotolue	10.83	10.83	2301264	1405147	437.419	475.800
17)	2,6-Dinitrotolue	11.27	11.28	1470562	1725962	425.477	505.460
18)	o-Nitrotoluene	14.52	14.53	1070543	1482955	428.588	452.707m
19)	p-Nitrotoluene	15.10	15.11	1705156	1436631	432.009	456.047
20)	m-Nitrotoluene	16.08	16.08	1607150	1933198	450.535	480.432
21)	PETN	0.00	18.41	0	3166481	N.D. d	2279.961m

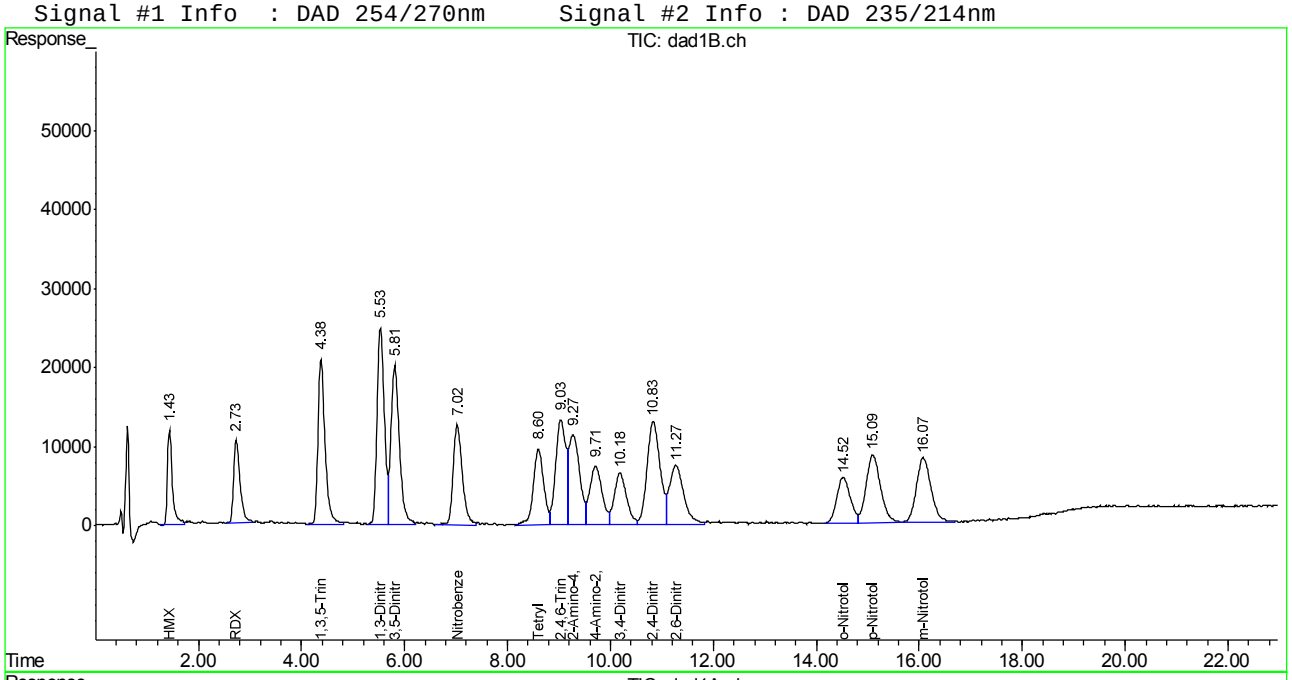
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059600.D 8330B_0419PLUS.M Tue May 08 14:11:58 2018 Page 1

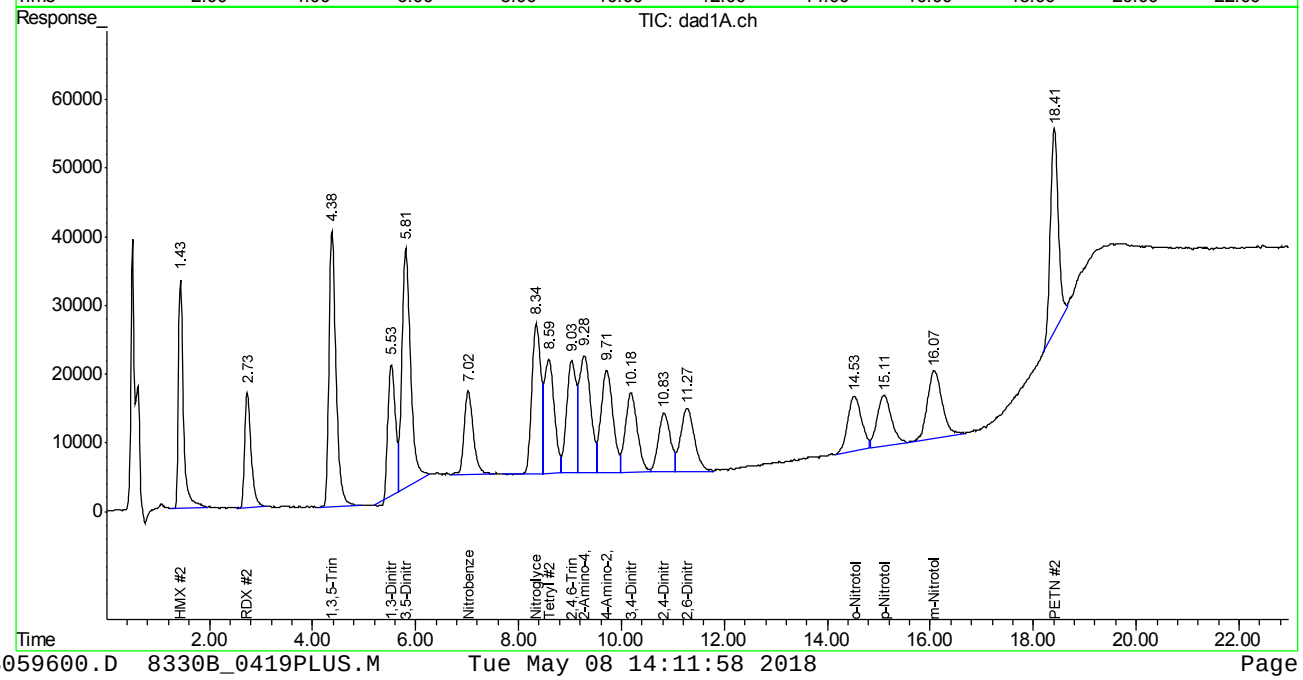
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1A.ch
Acq On : 08-May-2018, 11:01:21 Operator: evitam
Sample : op69921-bs Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:08 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

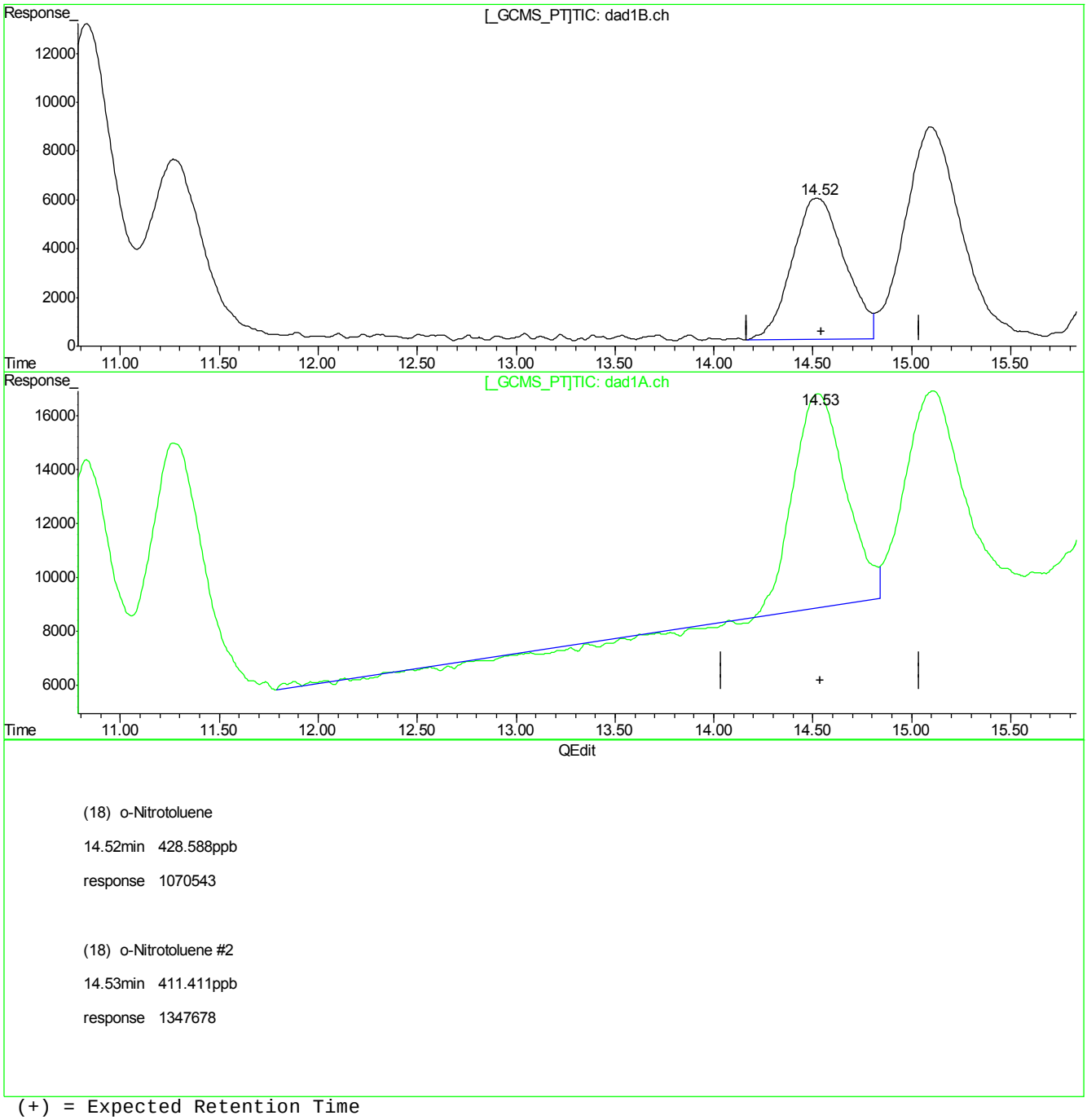
Sample Number:	OP69921-BS	**Method:**	SW846 8330B
Lab FileID:	BB059600.D	**Analyst approved:**	05/08/18 14:20 Evita Martinez
Injection Time:	05/08/18 11:01	**Supervisor approved:**	05/09/18 15:58 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.53	Poorly defined baseline
PETN	78-11-5	2	18.41	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1A.ch
Acq On : 08-May-2018, 11:01:21 Operator: evitam
Sample : op69921-bs Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 13:00 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.52min 428.588ppb

response 1070543

(18) o-Nitrotoluene #2

14.53min 411.411ppb

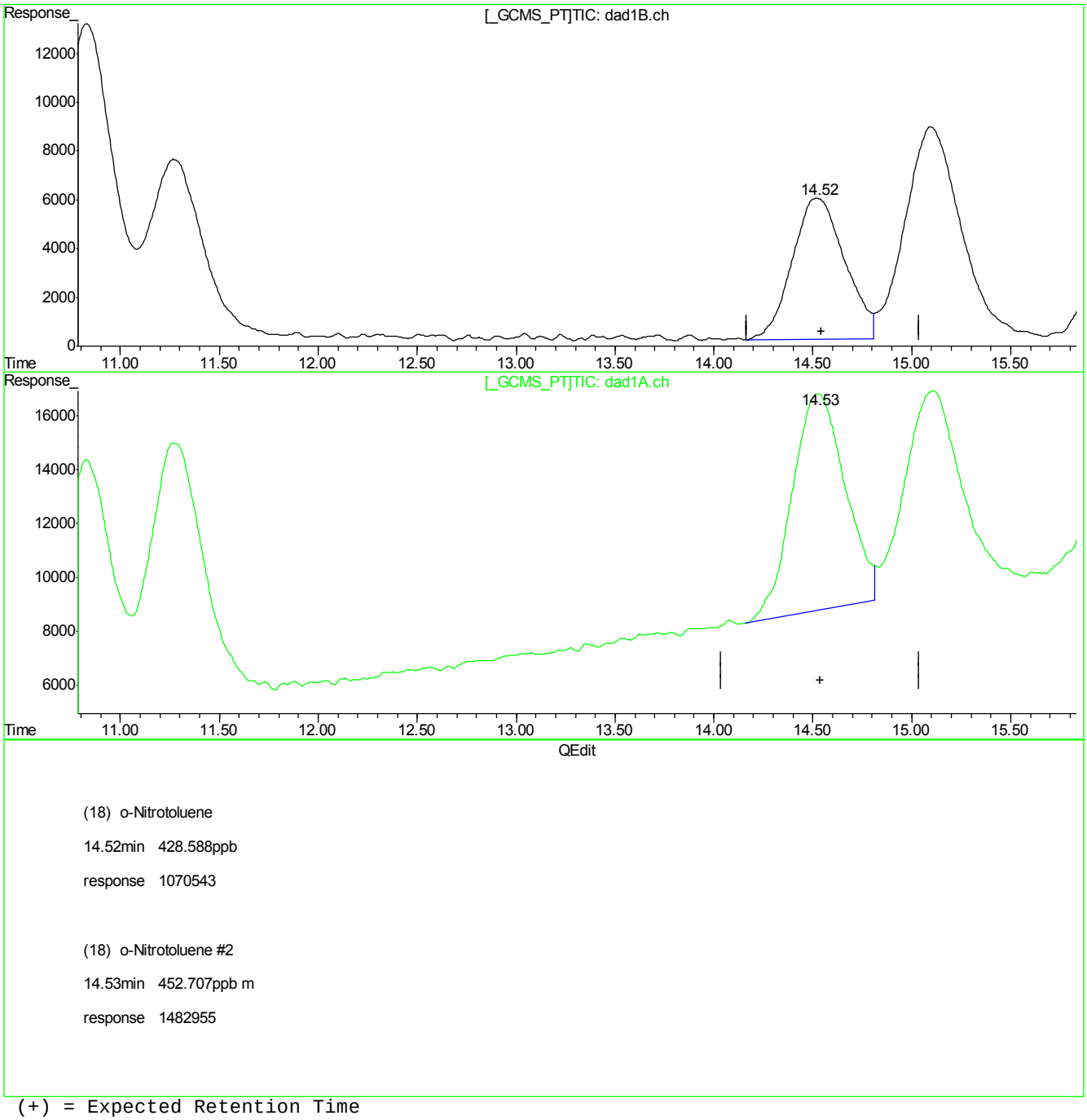
response 1347678

(+) = Expected Retention Time
BB059600.D 8330B_0419PLUS.M Tue May 08 14:08:05 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1A.ch
Acq On : 08-May-2018, 11:01:21 Operator: evitam
Sample : op69921-bs Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 13:00 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.52min 428.588ppb

response 1070543

(18) o-Nitrotoluene #2

14.53min 452.707ppb m

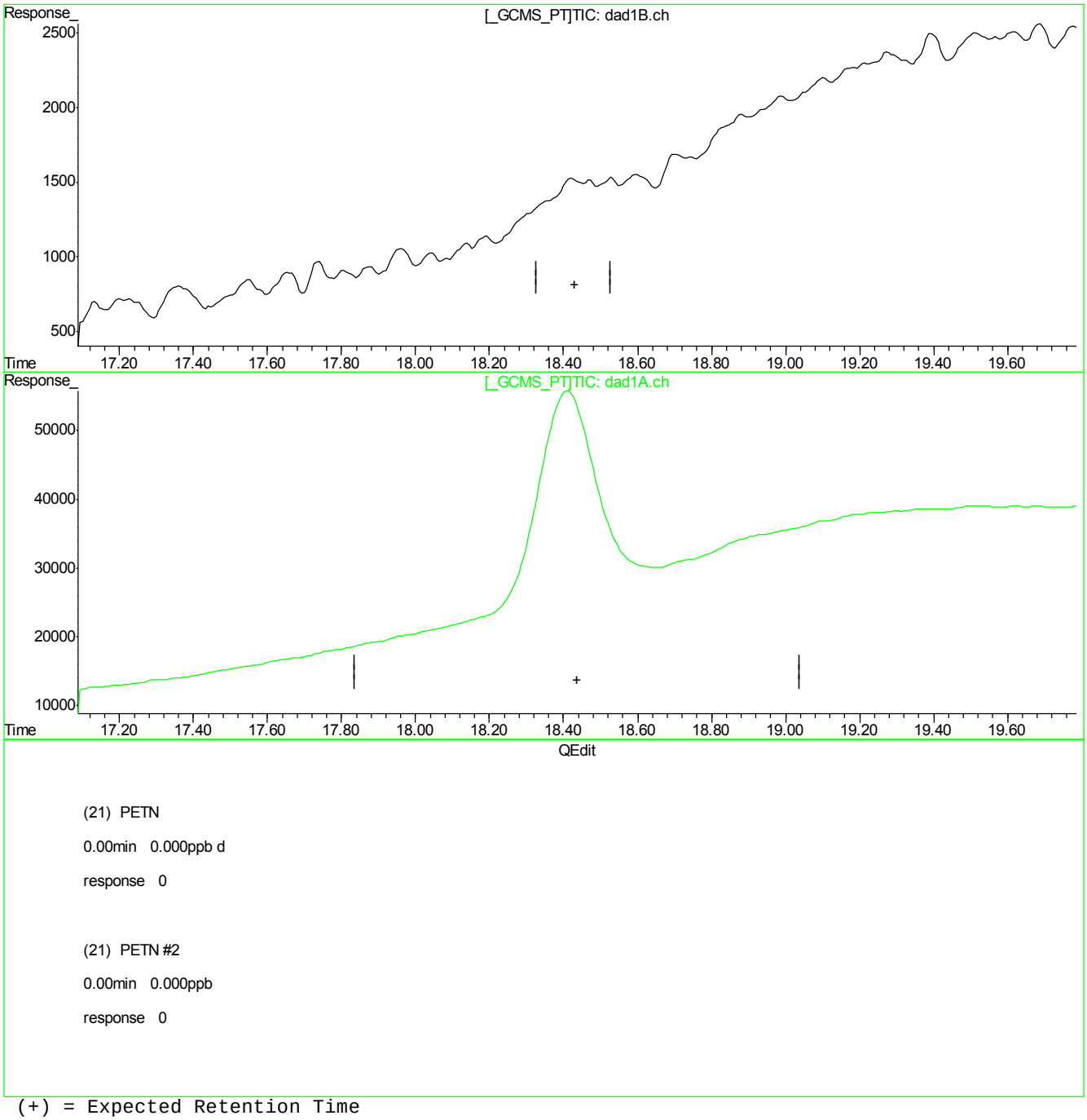
response 1482955

(+) = Expected Retention Time
BB059600.D 8330B_0419PLUS.M Tue May 08 14:08:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1A.ch
Acq On : 08-May-2018, 11:01:21 Operator: evitam
Sample : op69921-bs Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 13:00 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration

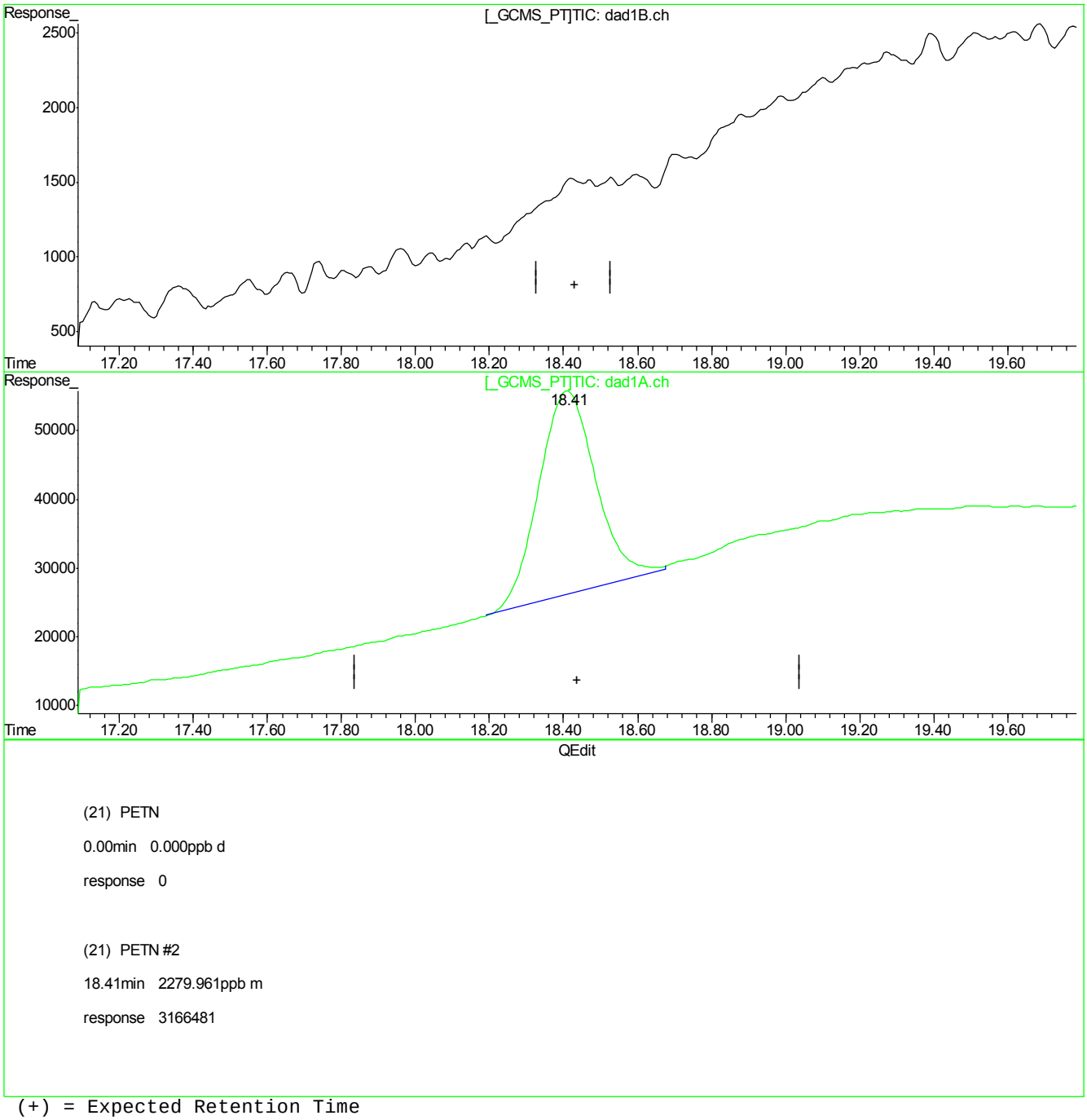


(+) = Expected Retention Time
BB059600.D 8330B_0419PLUS.M Tue May 08 14:08:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059600.D\dad1A.ch
Acq On : 08-May-2018, 11:01:21 Operator: evitam
Sample : op69921-bs Inst : G1315B
Misc : OP69921,gbb1729,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 13:00 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059600.D 8330B_0419PLUS.M Tue May 08 14:08:23 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.26	2511390	5197535	483.435	480.469m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		96.69%	96.09%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1920239	1939107	592.321m	601.879m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.45	7.45	4860074	4853195	469.047	468.431
6)	RDX	7.89	7.89	2336639	2313773	490.461	487.814
7)	1,3-Dinitrobenze	9.93	9.93	6608667	4776115	461.923	371.374m
8)	Nitrobenzene	10.89	10.89	4335658	3958162	459.412	427.406m
9)	2,4,6-Trinitroto	11.67	11.66	4718836	5633099	465.630	429.520m
10)	Nitroglycerin	0.00	12.41	0	7050095	N.D.	2092.174m#
11)	Tetryl	12.93	12.93	3503866	5926278	432.370	420.369m
13)	2,6-Dinitrotolue	14.63	14.63	3467647	5018560	485.012	494.632m
14)	2,4-Dinitrotolue	15.34	15.34	6113652	3657544	466.368	383.596m
15)	o-Nitrotoluene	16.89	16.88	2795398	5159488	483.918	598.297m
16)	3,5-Dinitroanili	16.27	16.27	5484710	9538491	560.355	586.680m
17)	p-Nitrotoluene	18.02	18.02	5546226	11228439	472.326	529.814m
18)	4-Amino-2,6-Dini	18.02	18.02	5546226	11011916	472.326	518.086m
19)	m-Nitrotoluene	19.27	19.26	2950548	4961356	500.486	510.196m
20)	2-Amino-4,6-Dini	20.19	20.18	4466948	5504673	495.067	464.186m
21)	PETN	0.00	21.81	0	8148915	N.D. d	2540.657m

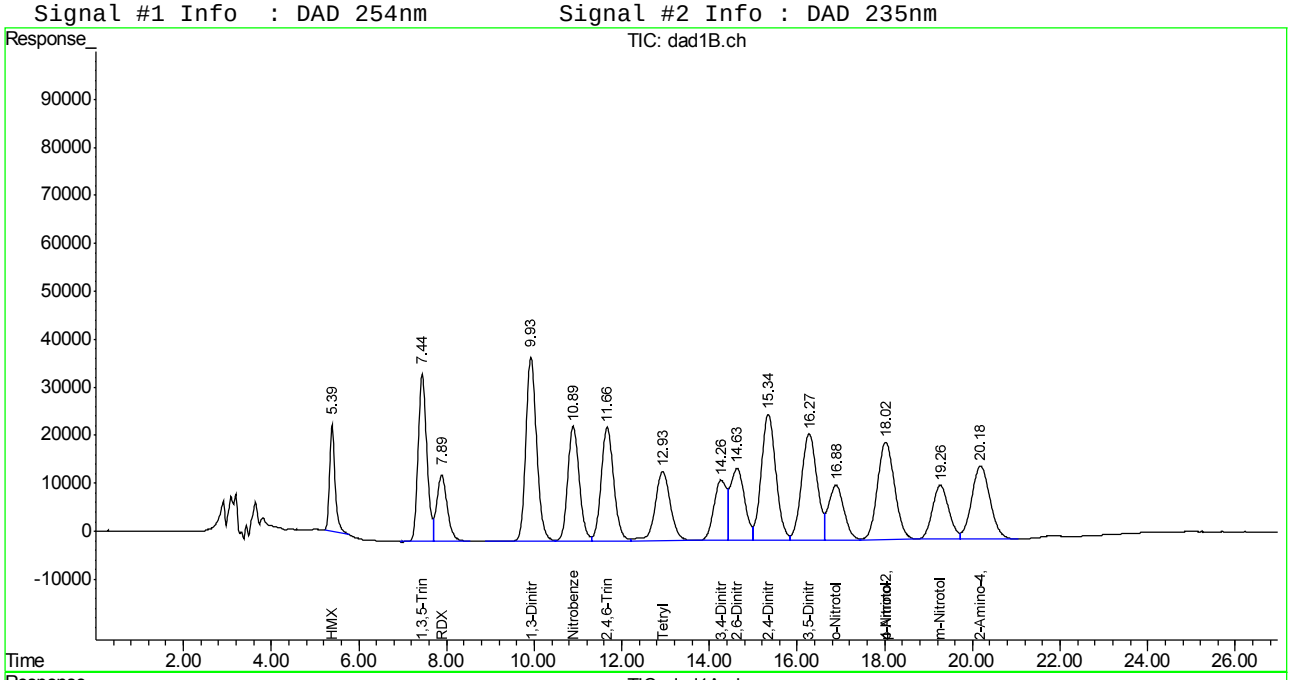
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614630.D 8330RPB.M_1113M.M Wed May 09 11:10:20 2018 Page 1

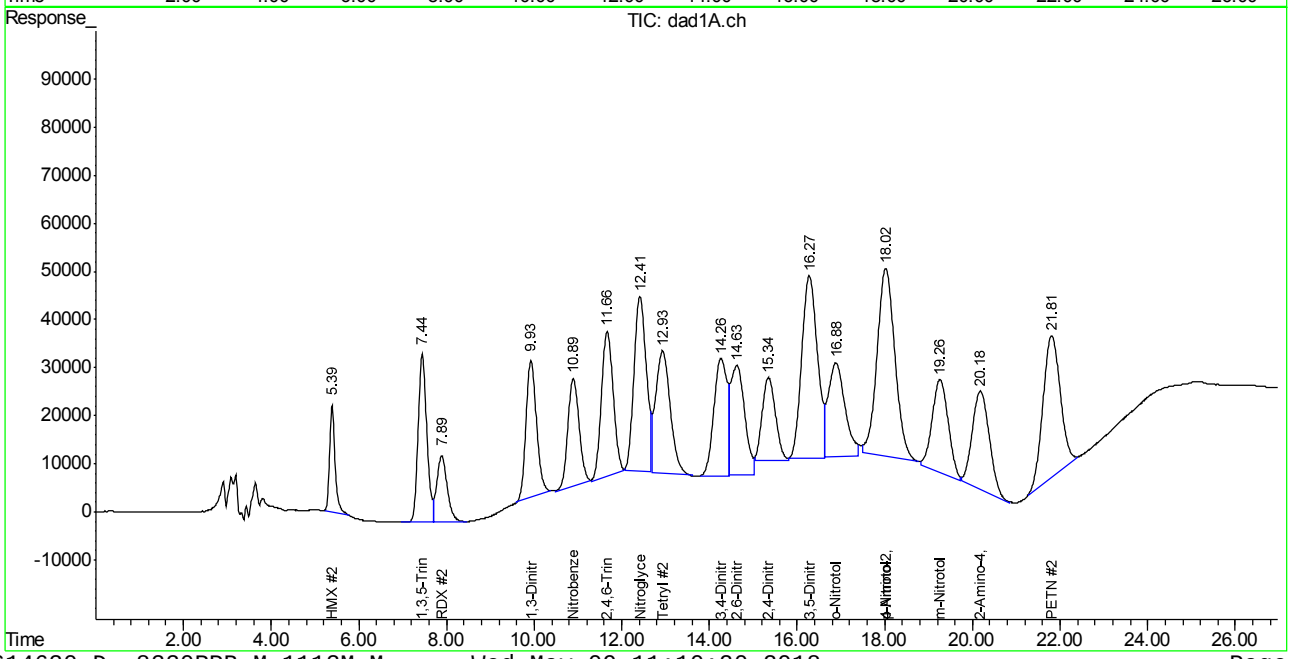
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:46 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

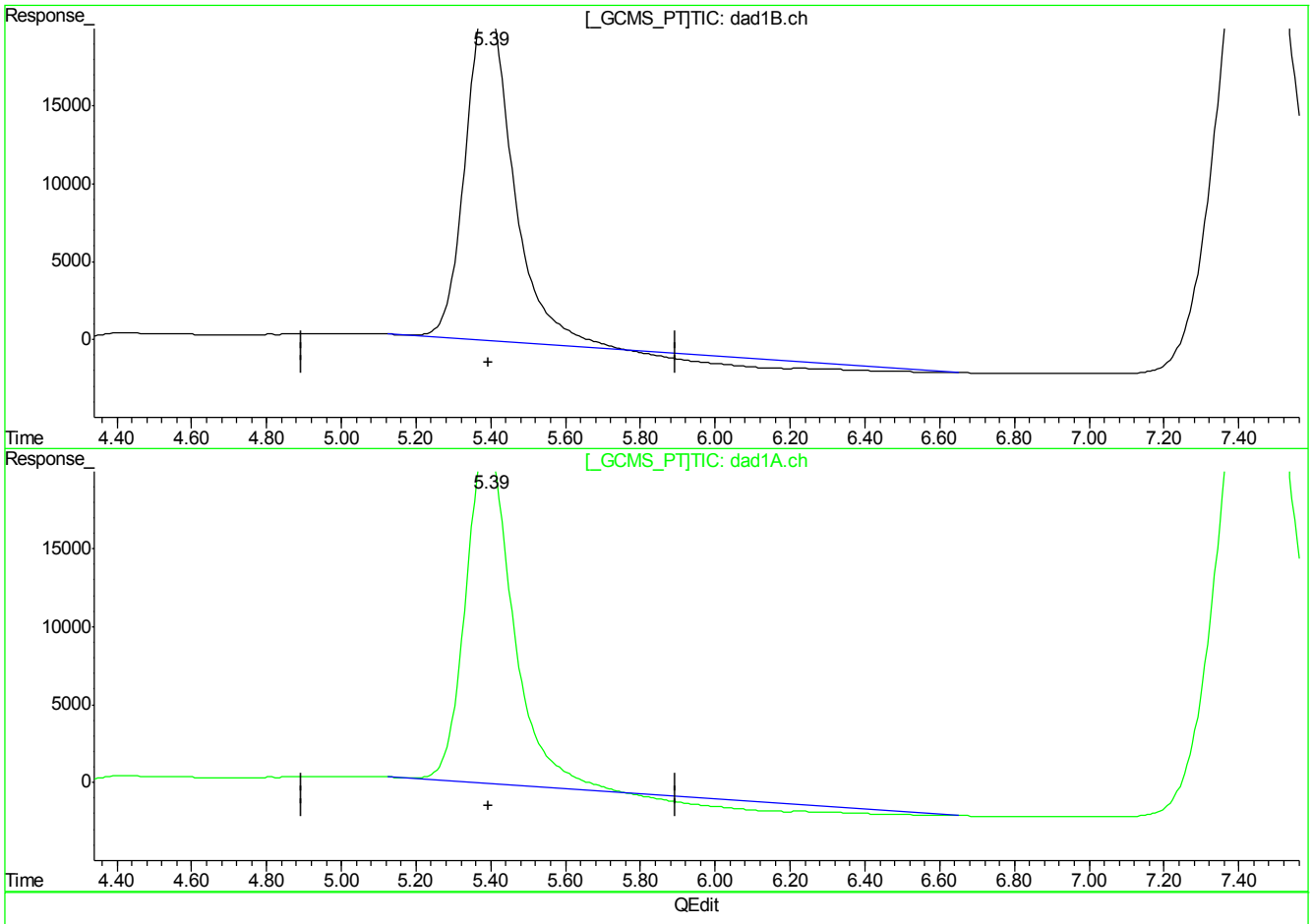
Sample Number:	OP69945-BS	**Method:**	SW846 8330B
Lab FileID:	GG614630.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 00:49	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.93	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.89	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.66	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.41	Poorly defined baseline
Tetryl	479-45-8	2	12.93	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.26	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.63	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.34	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.27	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.88	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.02	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.02	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.26	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.18	Poorly defined baseline
PETN	78-11-5	2	21.81	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 551.883ppb

response 1789144

(2) HMX #2

5.39min 555.332ppb

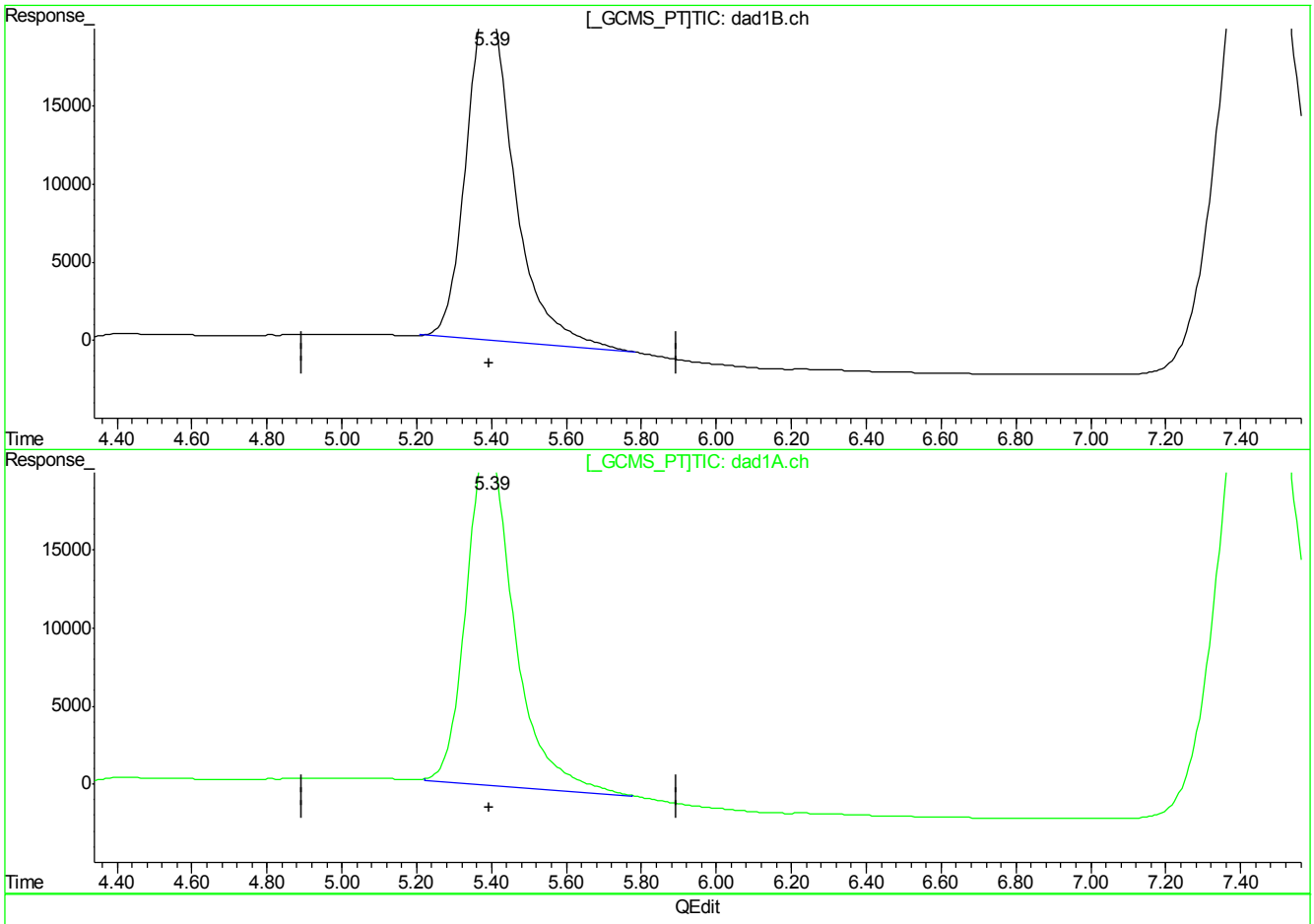
response 1789144

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:42:19 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



QEdit

(2) HMX

5.39min 592.321ppb m

response 1920239

(2) HMX #2

5.39min 601.879ppb m

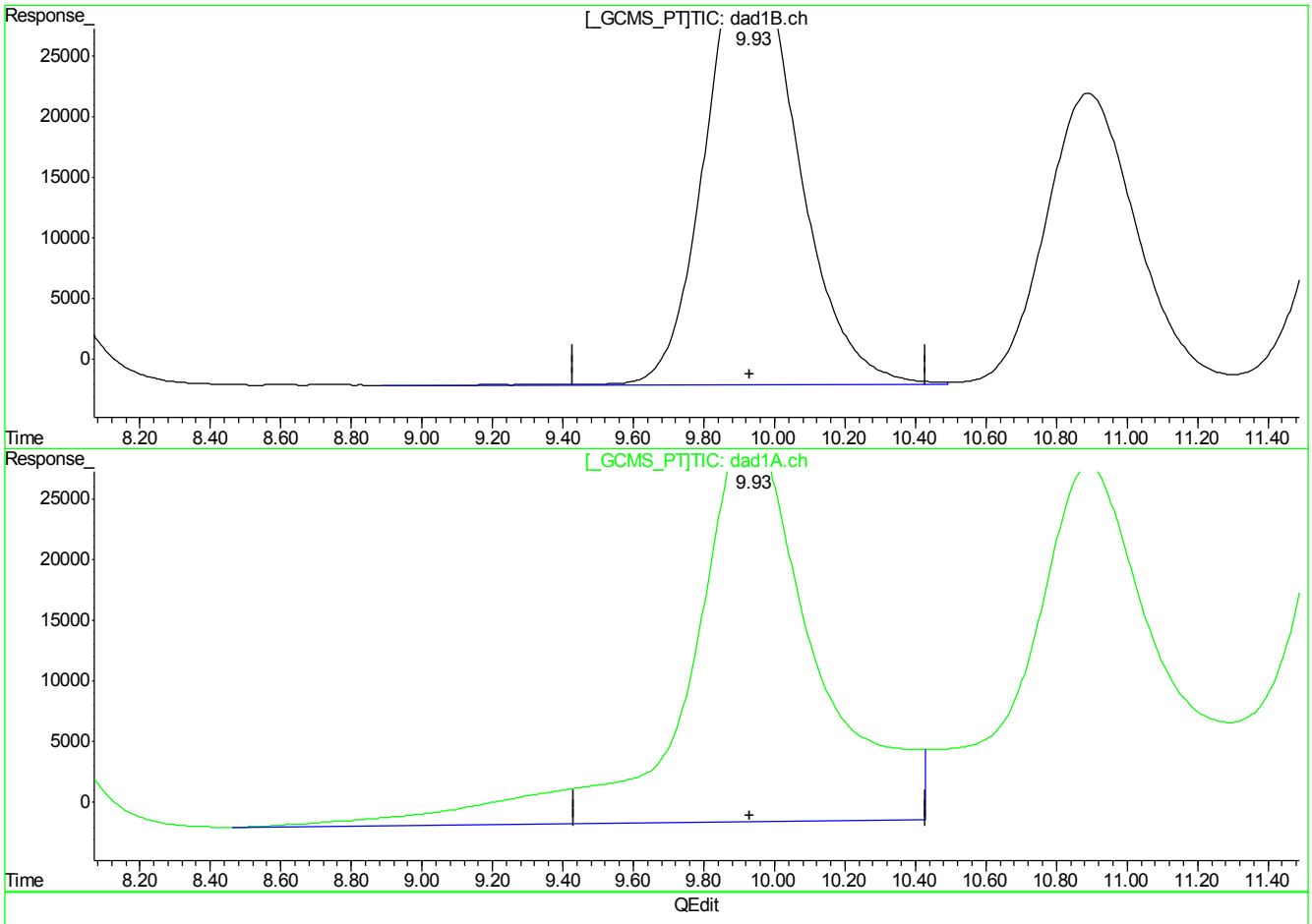
response 1939107

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:42:25 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.93min 461.923ppb

response 6608667

(7) 1,3-Dinitrobenzene #2

9.93min 644.784ppb

response 8095131

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:42:58 2018

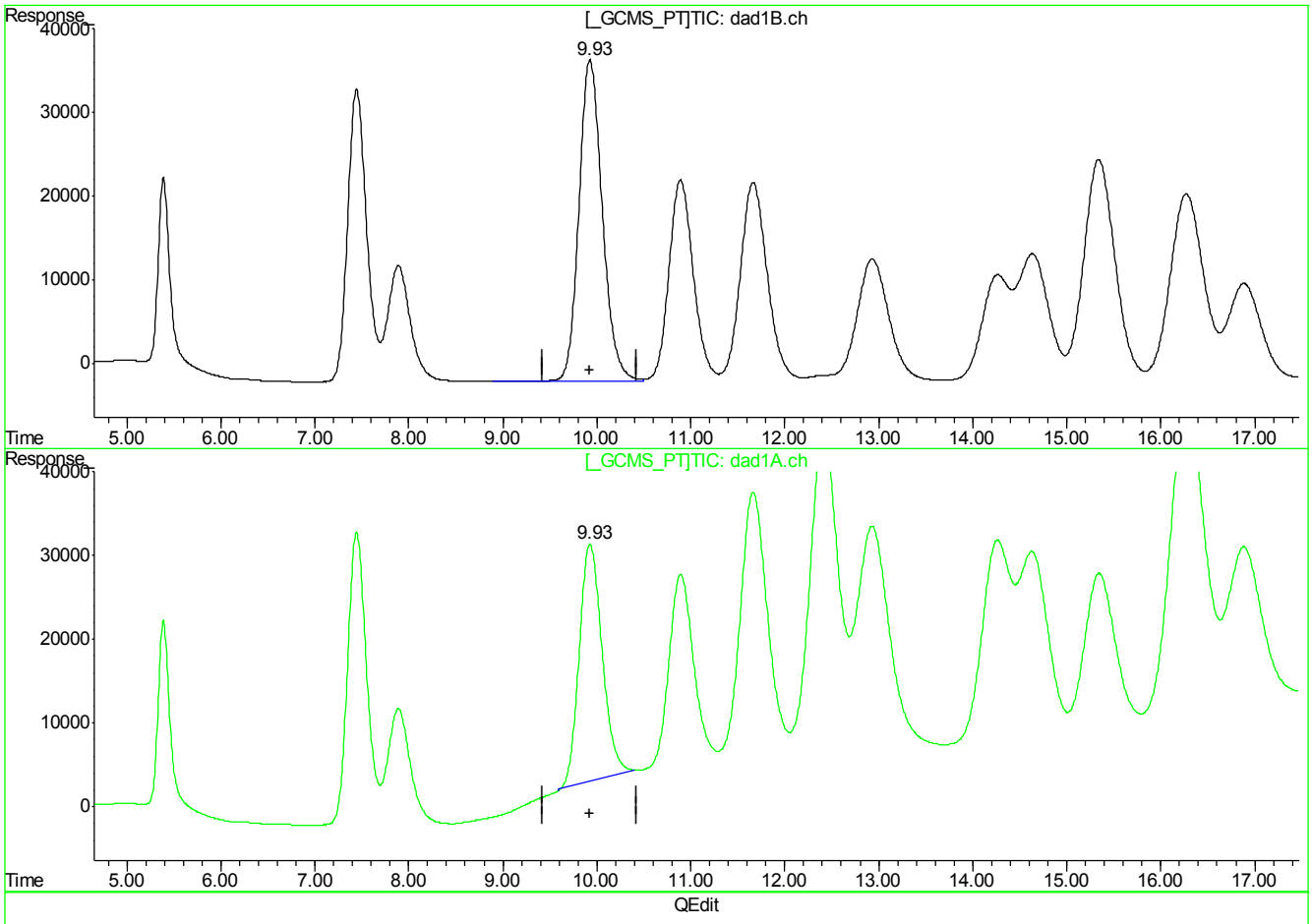
7.3.5.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.93min 461.923ppb

response 6608667

(7) 1,3-Dinitrobenzene #2

9.93min 371.374ppb m

response 4776115

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:43:14 2018

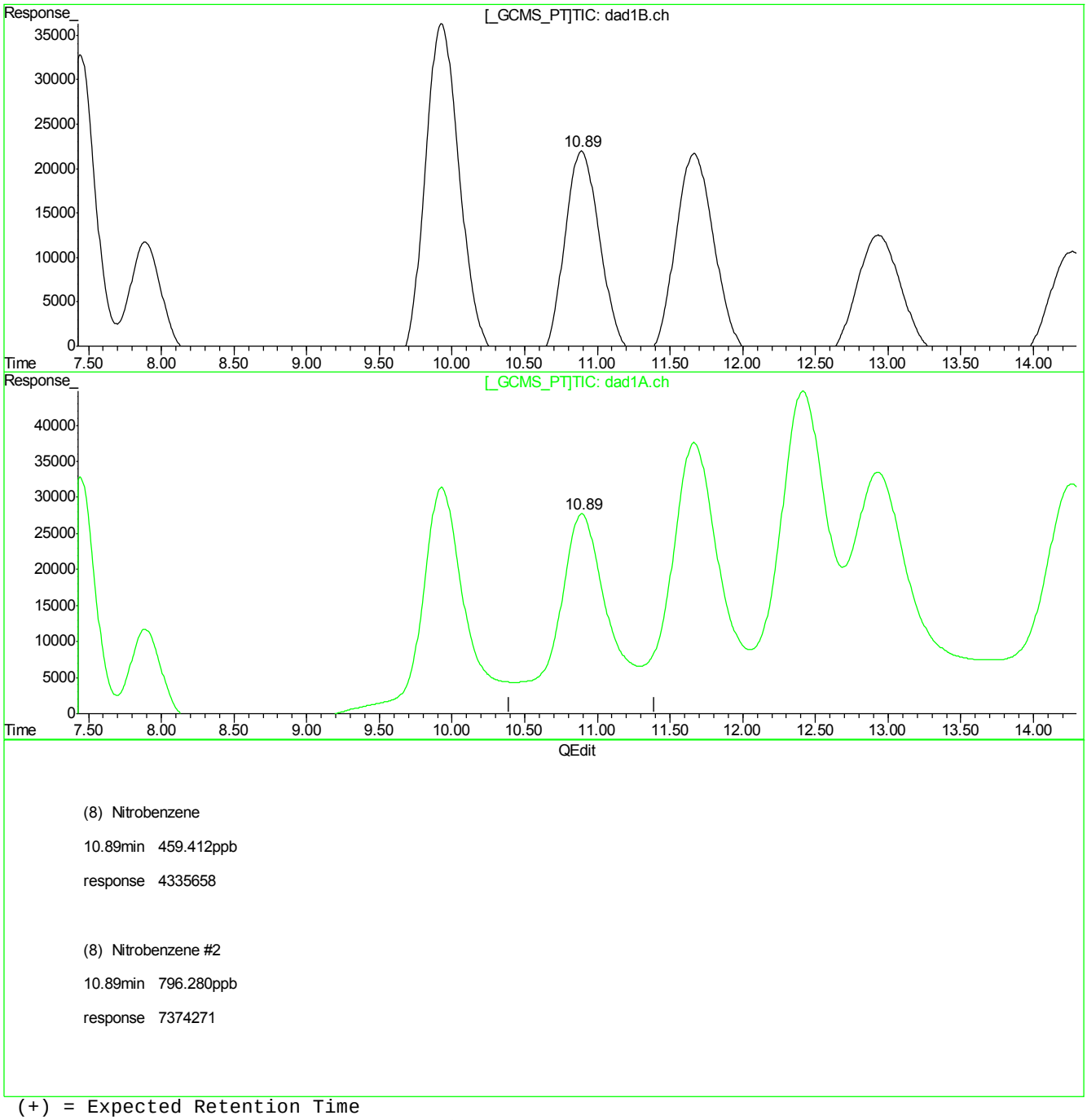
7.3.5.5

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

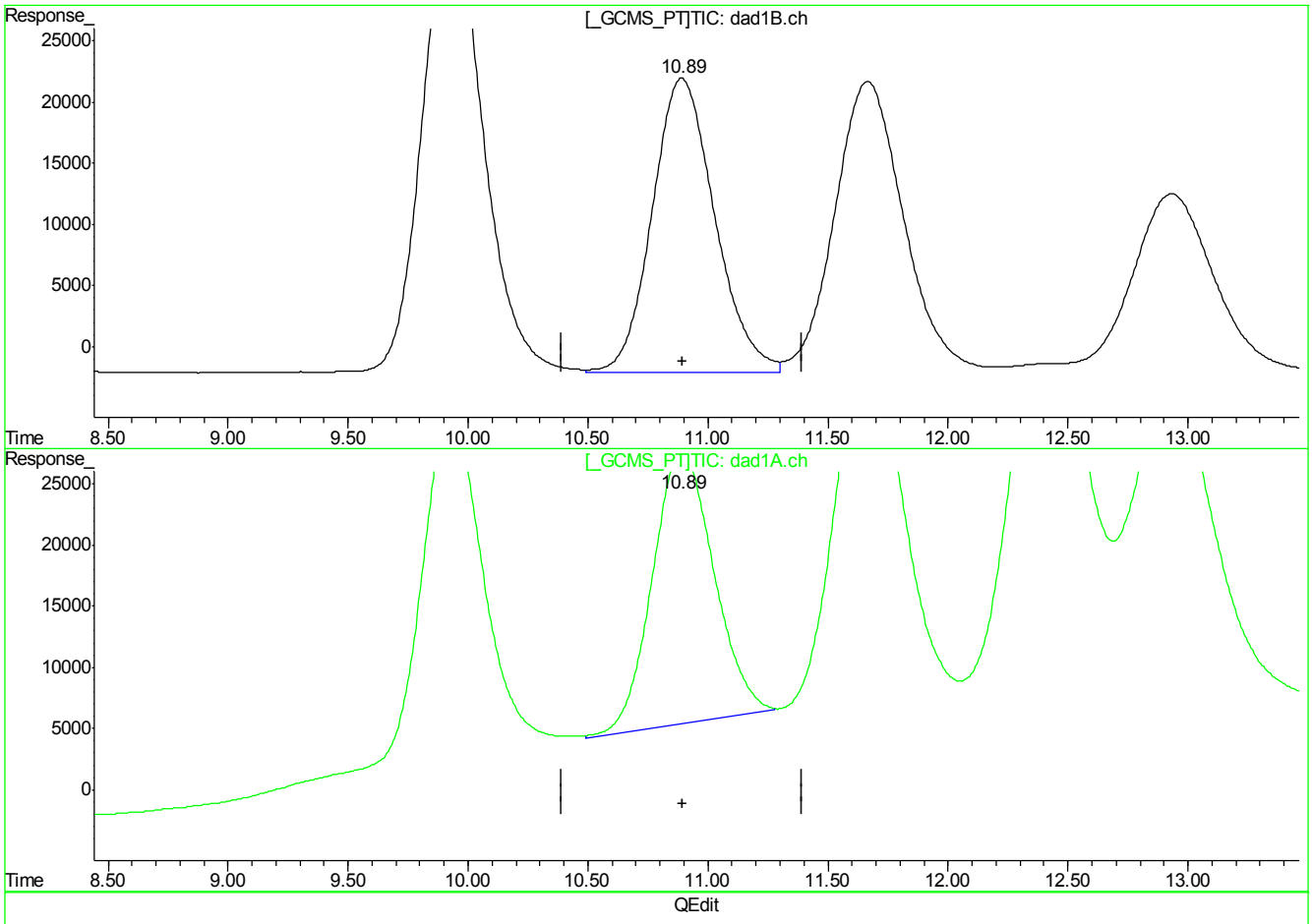


(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:43:17 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.89min 459.412ppb

response 4335658

(8) Nitrobenzene #2

10.89min 427.406ppb m

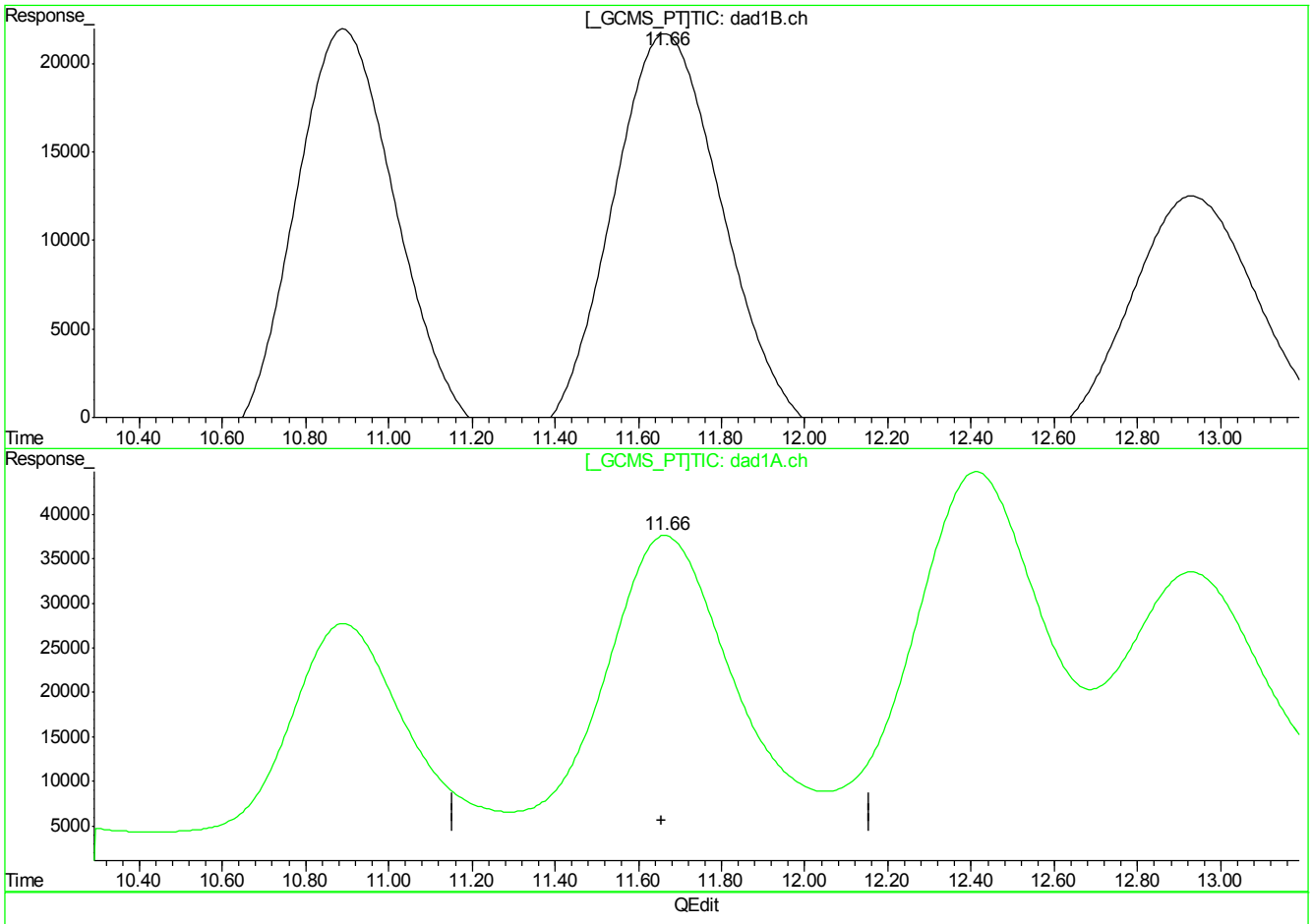
response 3958162

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:43:21 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.67min 465.630ppb

response 4718836

(9) 2,4,6-Trinitrotoluene #2

11.67min 725.289ppb

response 9512070

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:43:23 2018

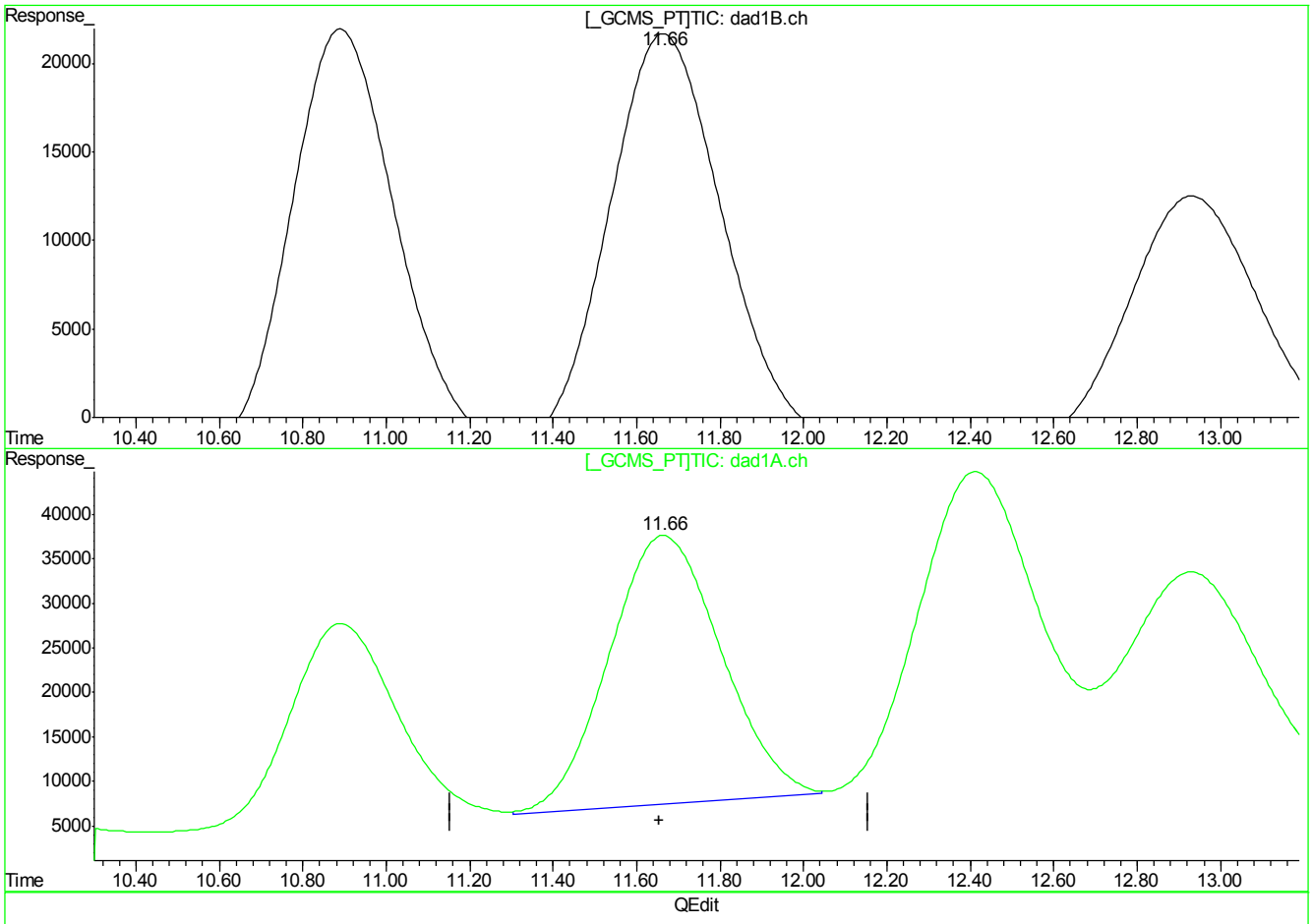
7.3.5.8

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.67min 465.630ppb

response 4718836

(9) 2,4,6-Trinitrotoluene #2

11.66min 429.520ppb m

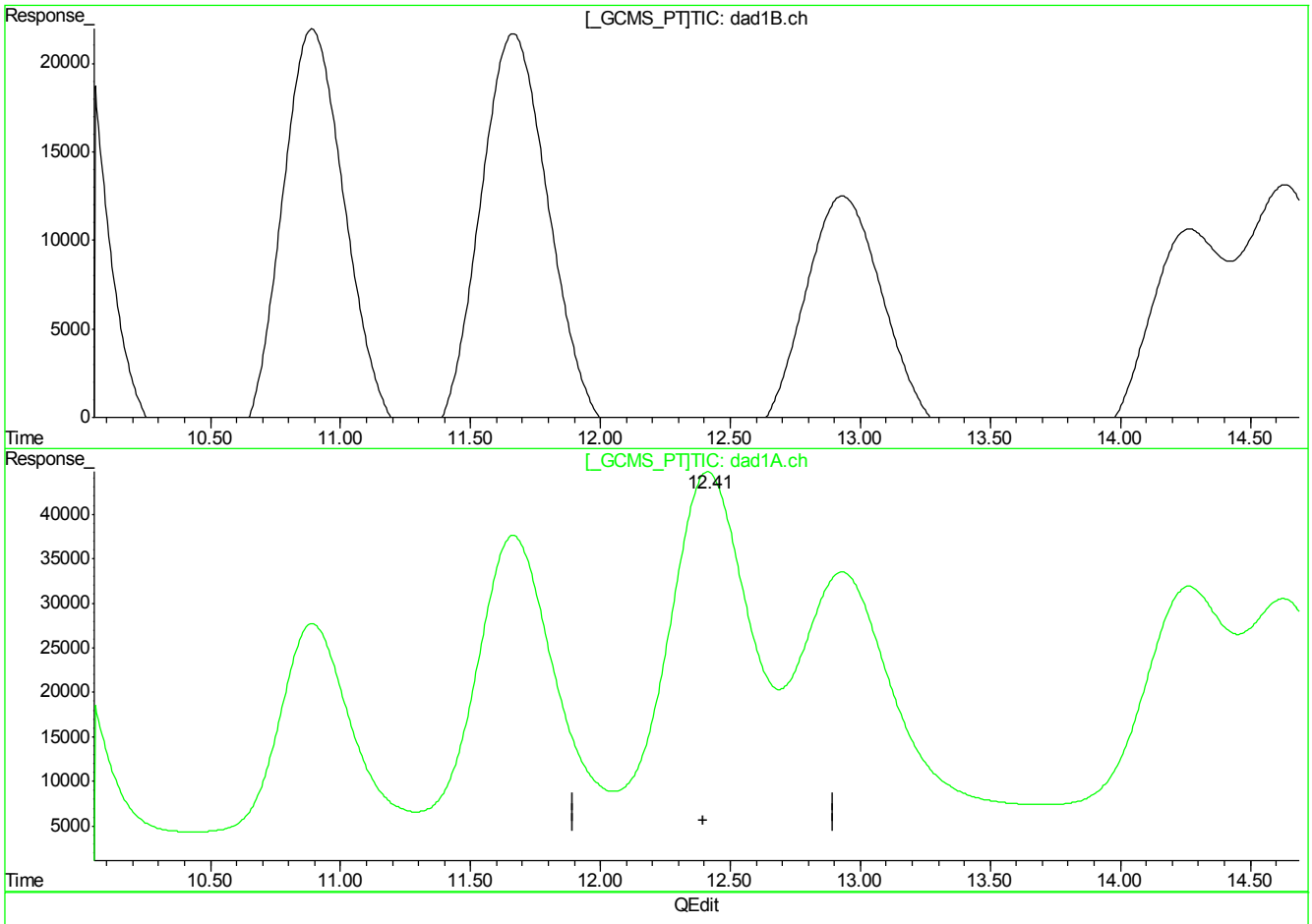
response 5633099

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:43:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.41min 3208.850ppb

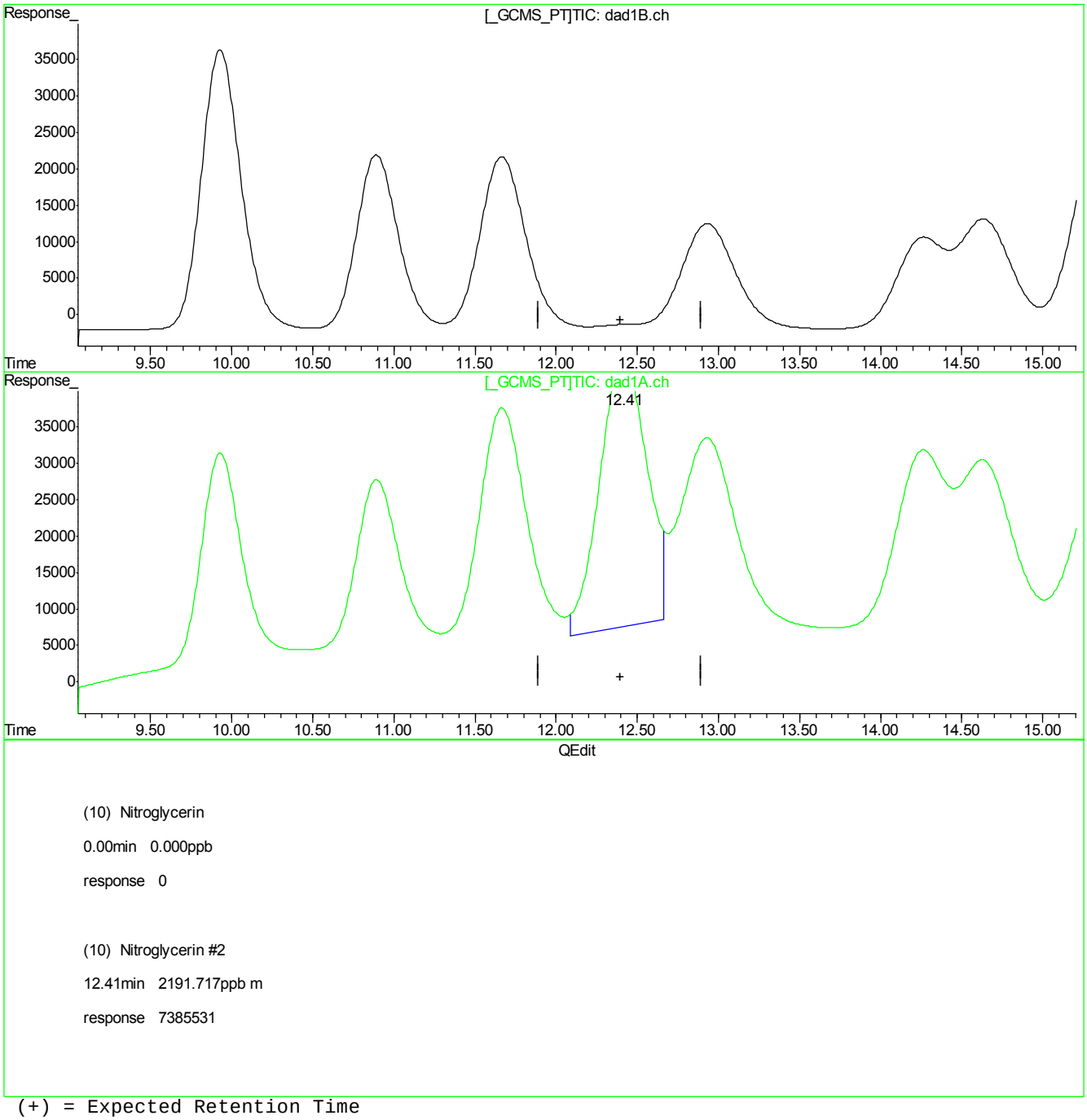
response 10813013

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:43:50 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:44:13 2018

7.3.5.11

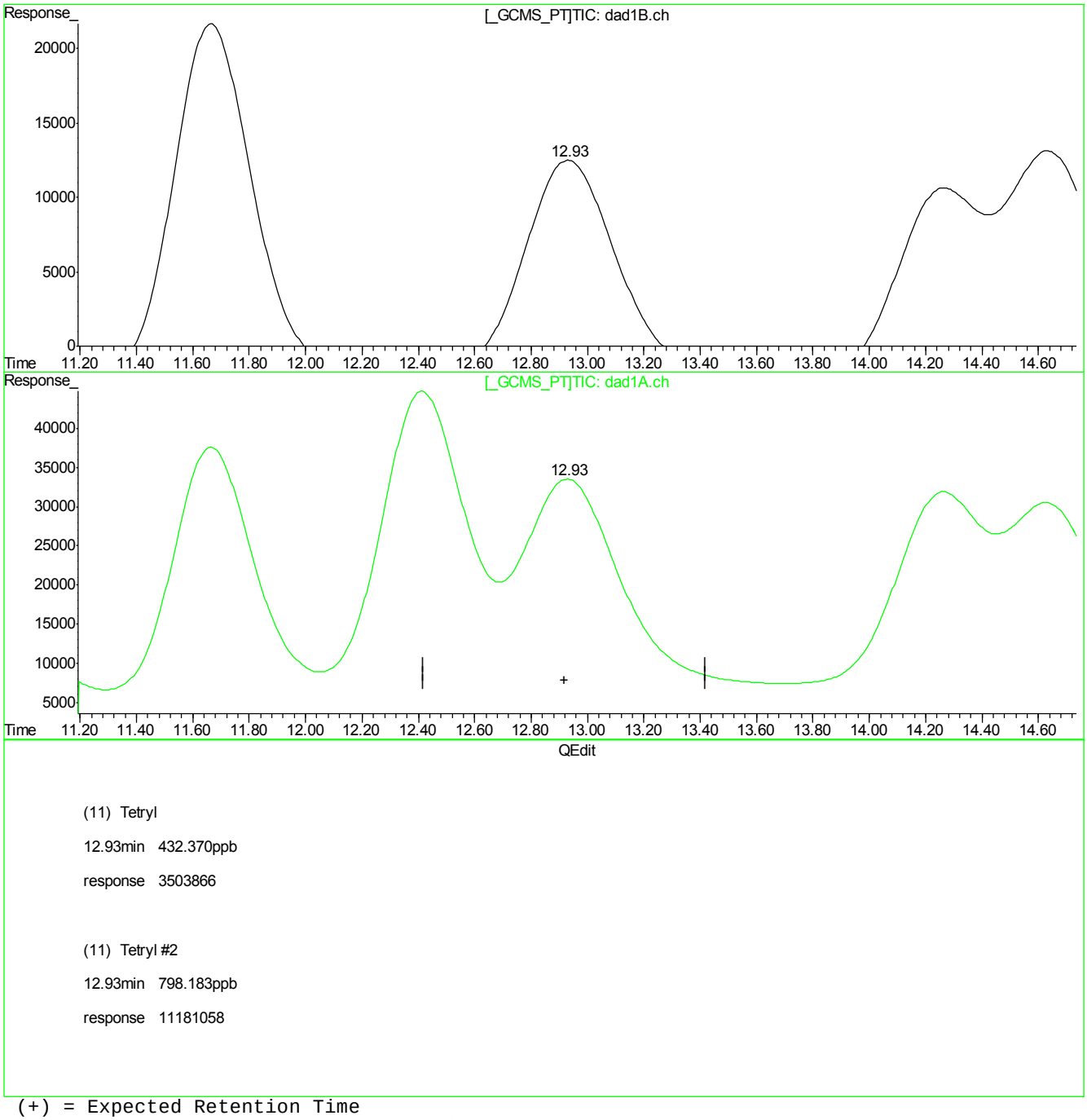
7

GG614630.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(11) Tetryl

12.93min 432.370ppb

response 3503866

(11) Tetryl #2

12.93min 798.183ppb

response 11181058

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:44:16 2018

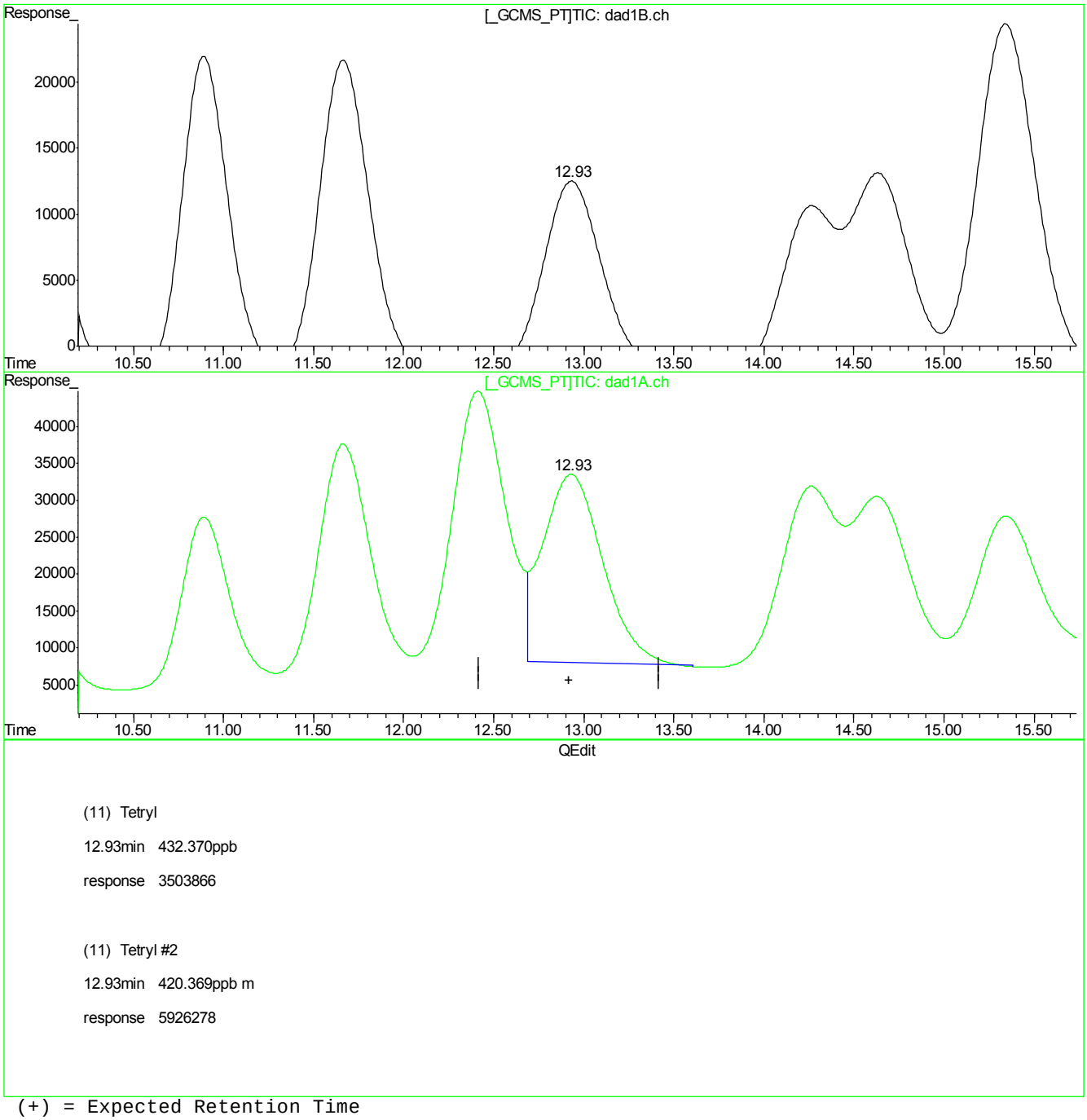
7.3.5.12

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(11) Tetryl

12.93min 432.370ppb

response 3503866

(11) Tetryl #2

12.93min 420.369ppb m

response 5926278

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:44:30 2018

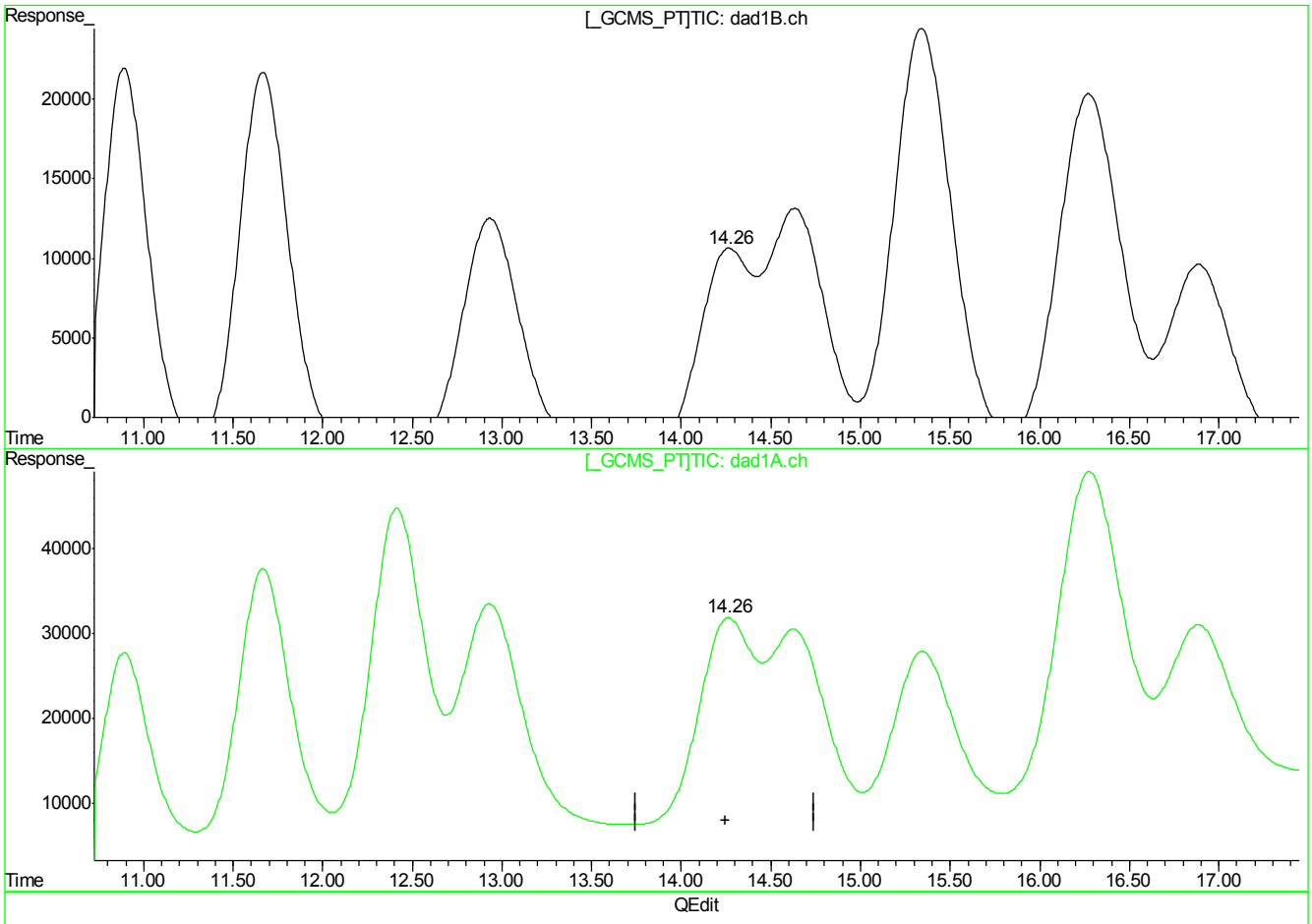
7.3.5.13

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.27min 483.435ppb

response 2511390

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 789.548ppb

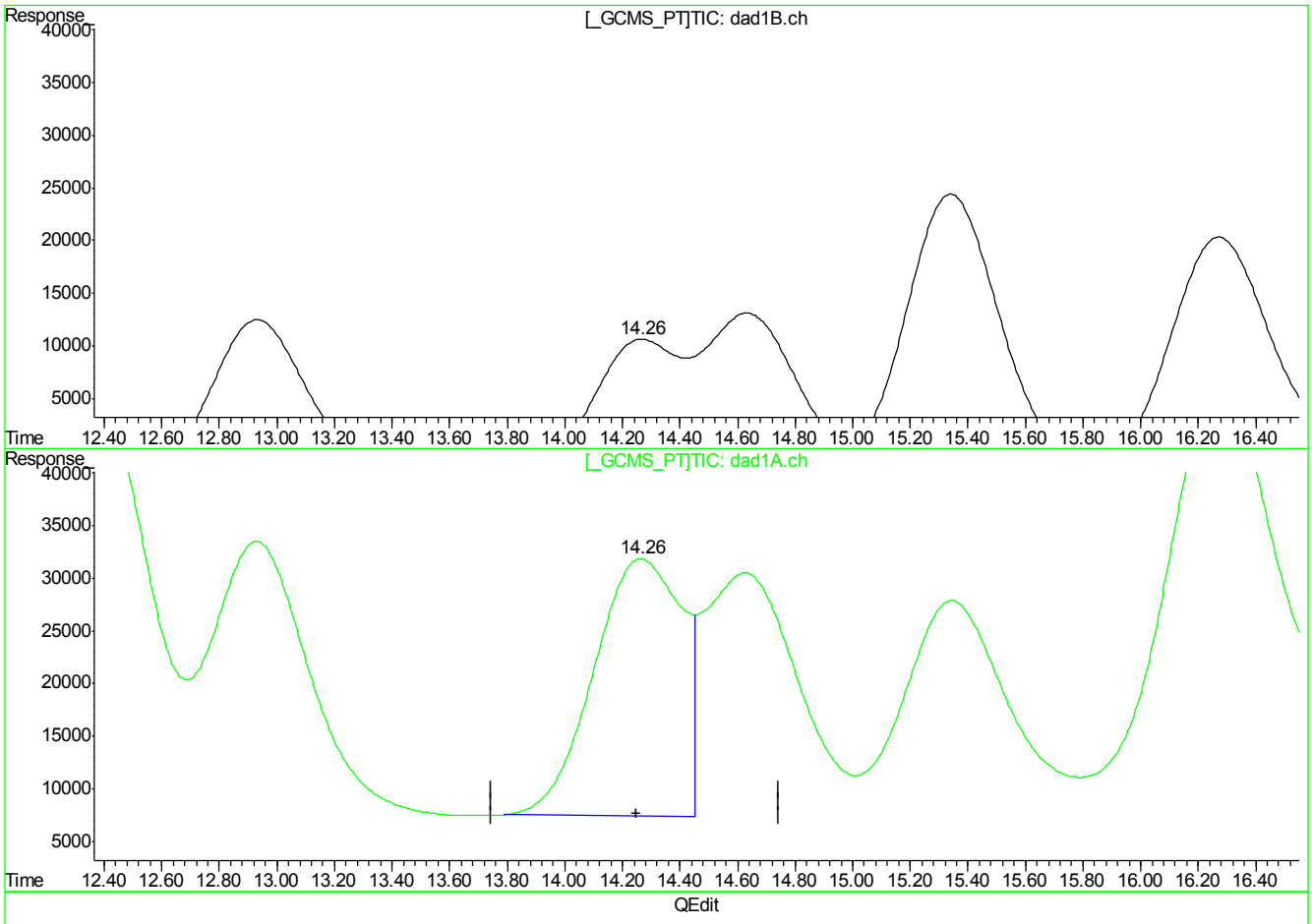
response 8541040

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:44:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.27min 483.435ppb

response 2511390

(12) 3,4-Dinitrotoluene #2 (S)

14.26min 480.469ppb m

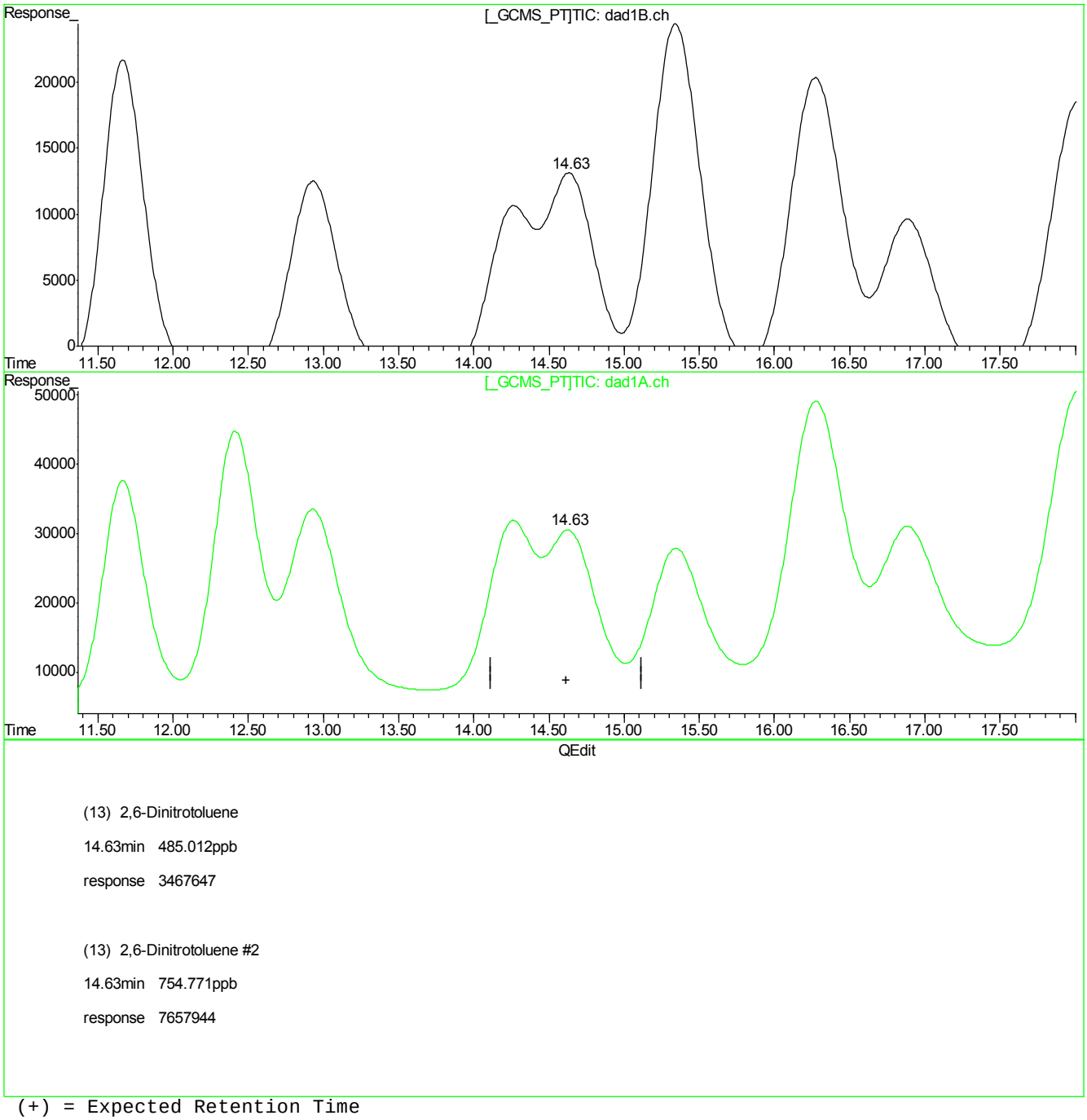
response 5197535

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:44:54 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.63min 485.012ppb

response 3467647

(13) 2,6-Dinitrotoluene #2

14.63min 754.771ppb

response 7657944

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:44:59 2018

7.3.5.16

7

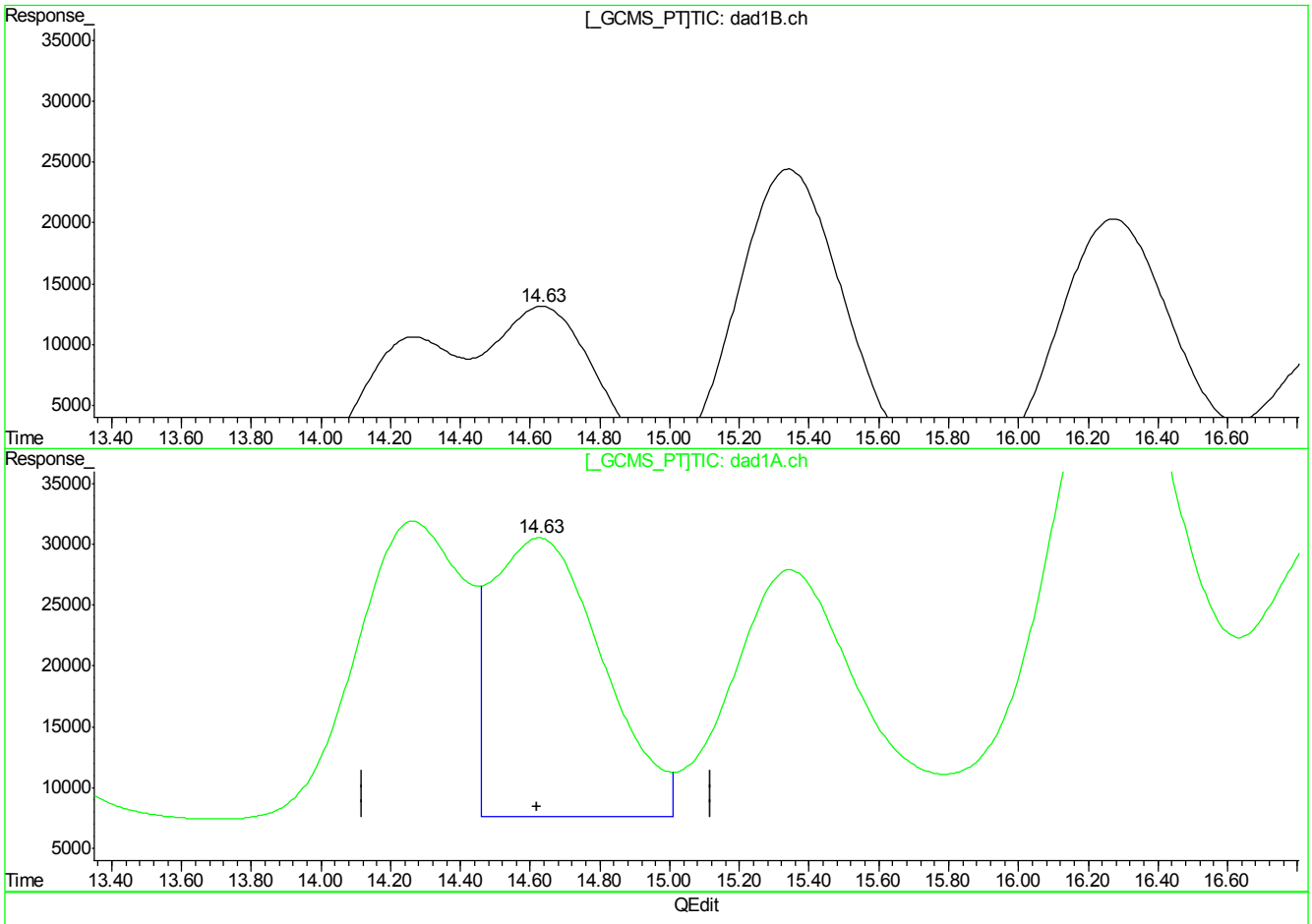
FA53725

GG614630.D edits: 2,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.63min 485.012ppb

response 3467647

(13) 2,6-Dinitrotoluene #2

14.63min 494.632ppb m

response 5018560

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:45:09 2018

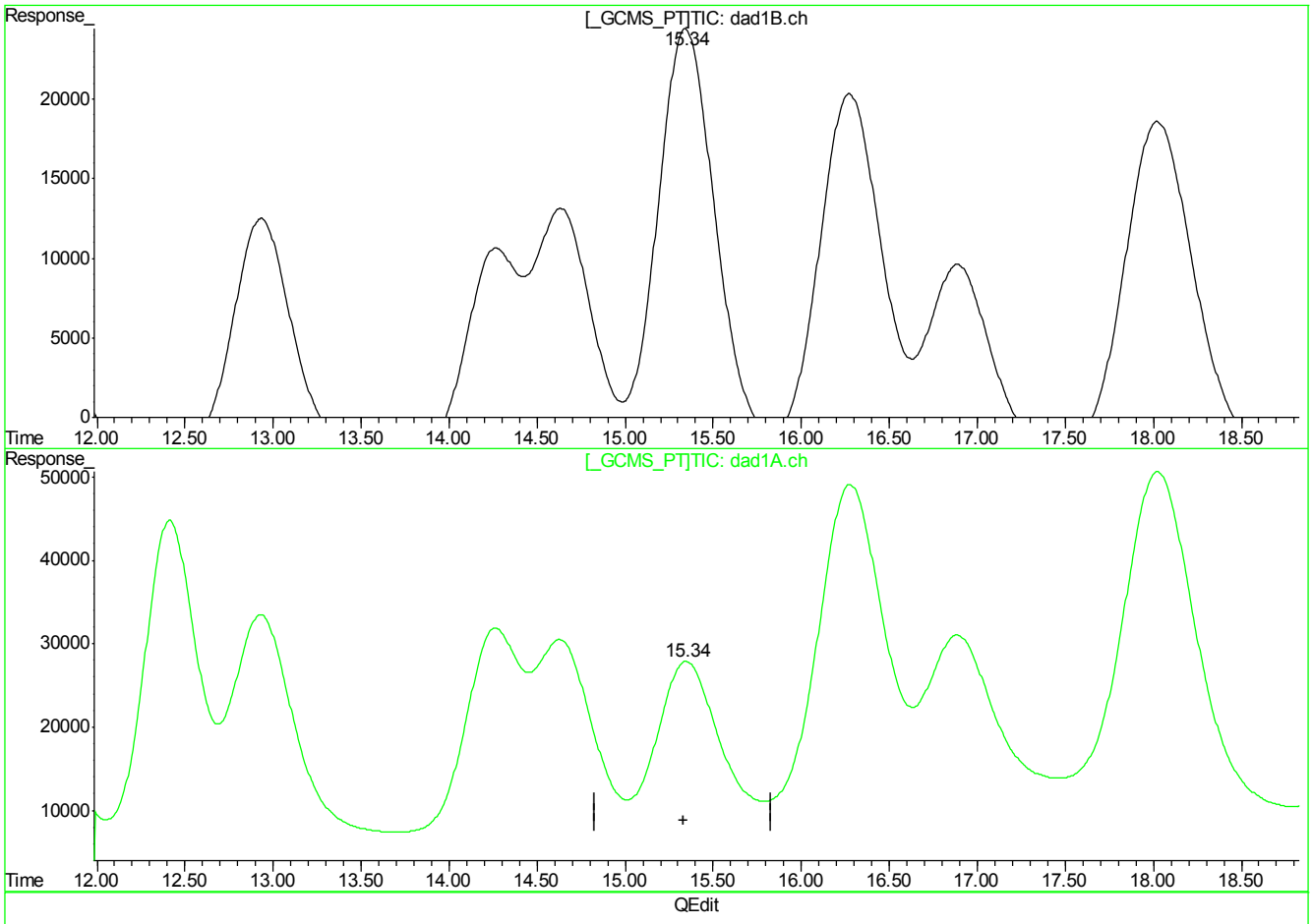
7.3.5.17

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.34min 466.368ppb

response 6113652

(14) 2,4-Dinitrotoluene #2

15.35min 909.374ppb

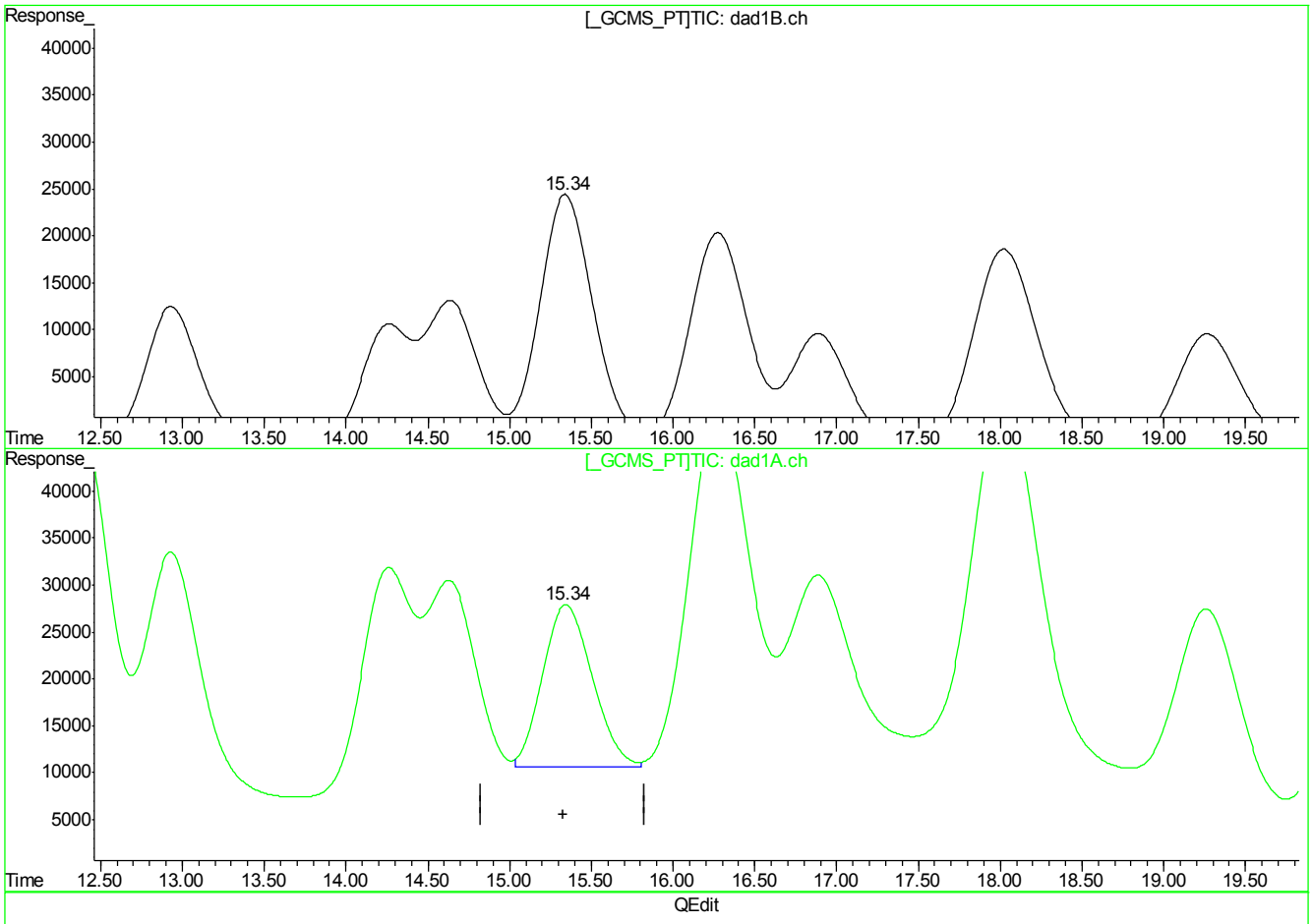
response 8563313

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:45:13 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.34min 466.368ppb

response 6113652

(14) 2,4-Dinitrotoluene #2

15.34min 383.596ppb m

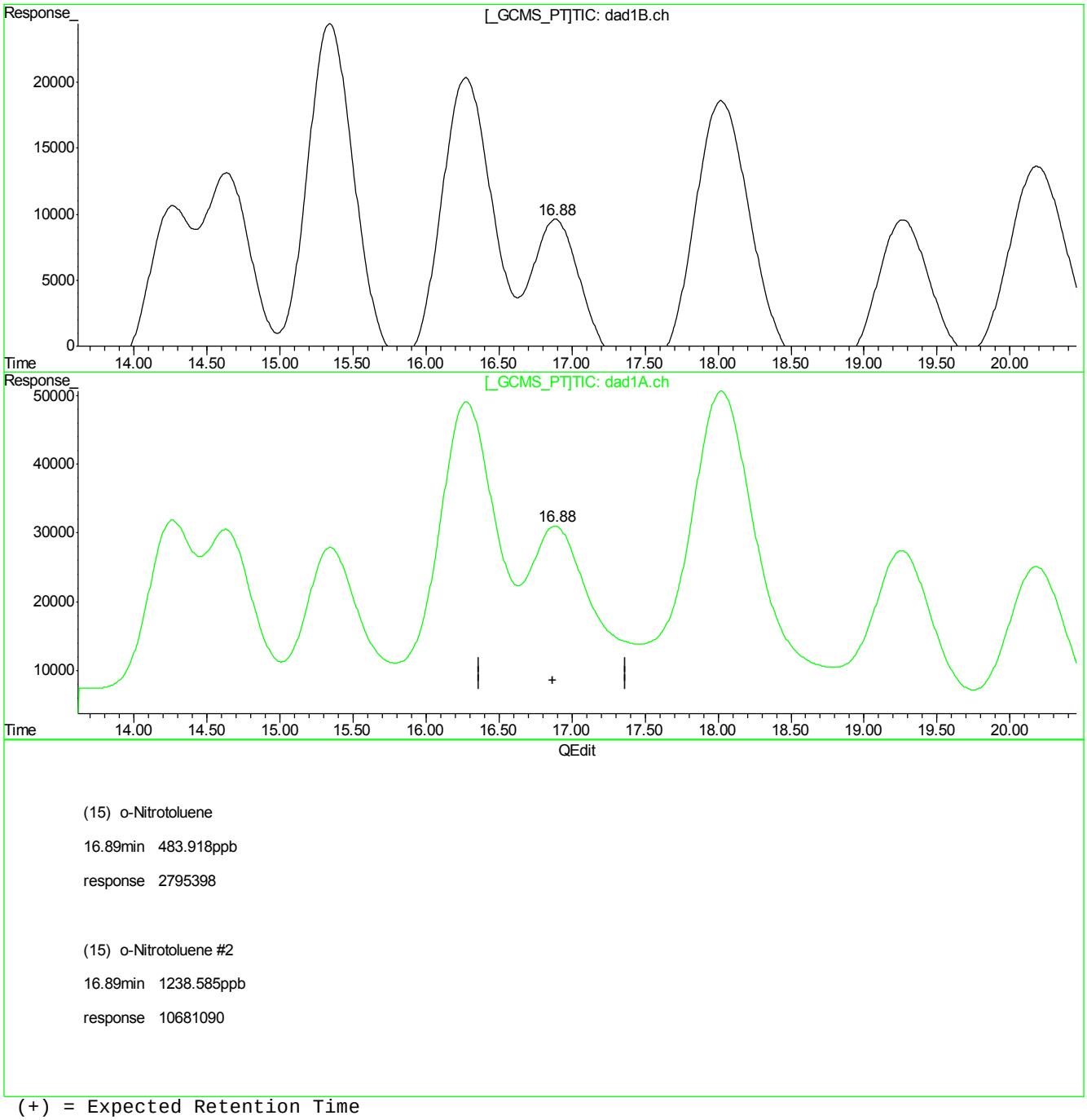
response 3657544

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:45:30 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.89min 483.918ppb

response 2795398

(15) o-Nitrotoluene #2

16.89min 1238.585ppb

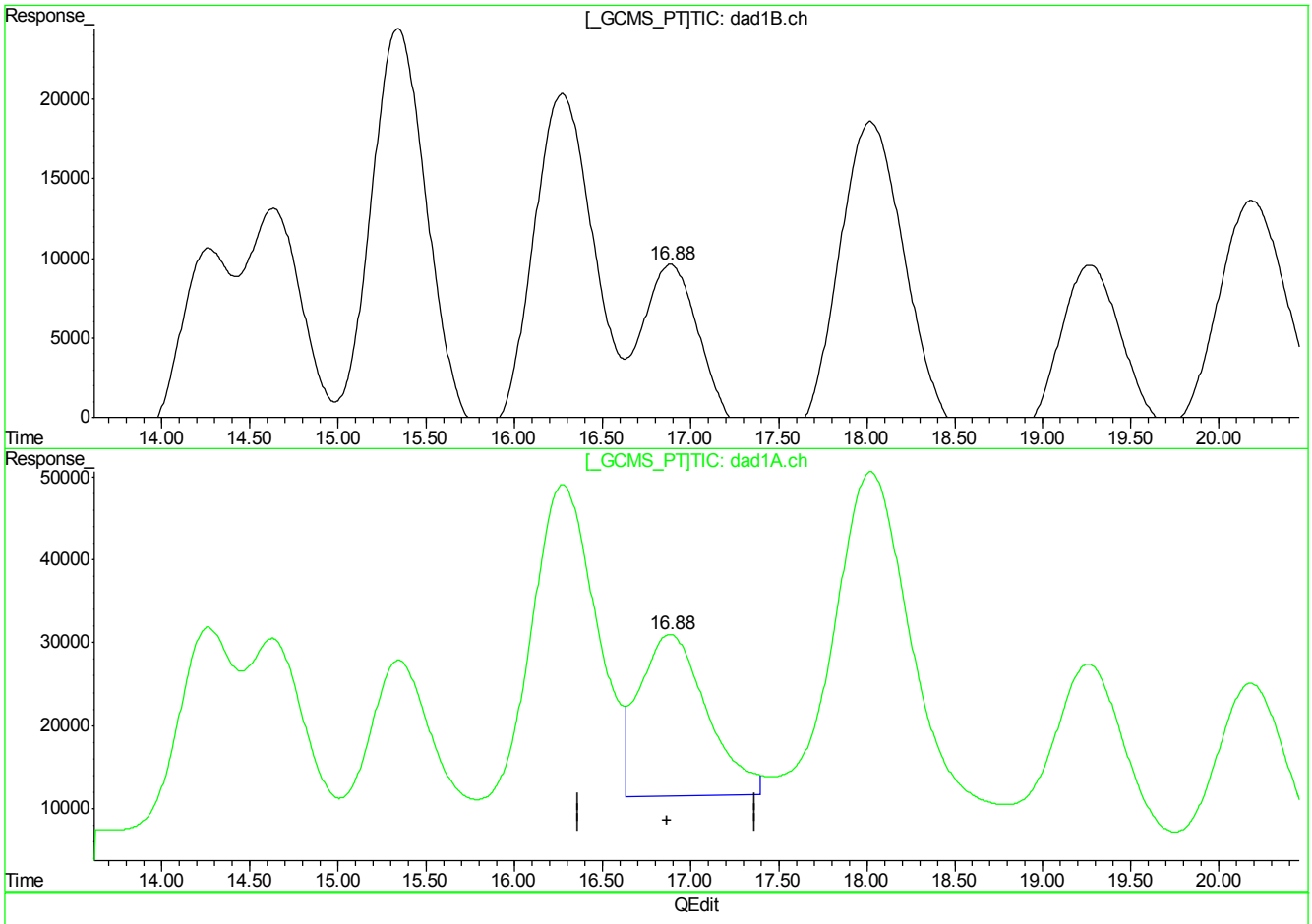
response 10681090

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:45:35 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.89min 483.918ppb

response 2795398

(15) o-Nitrotoluene #2

16.88min 598.297ppb m

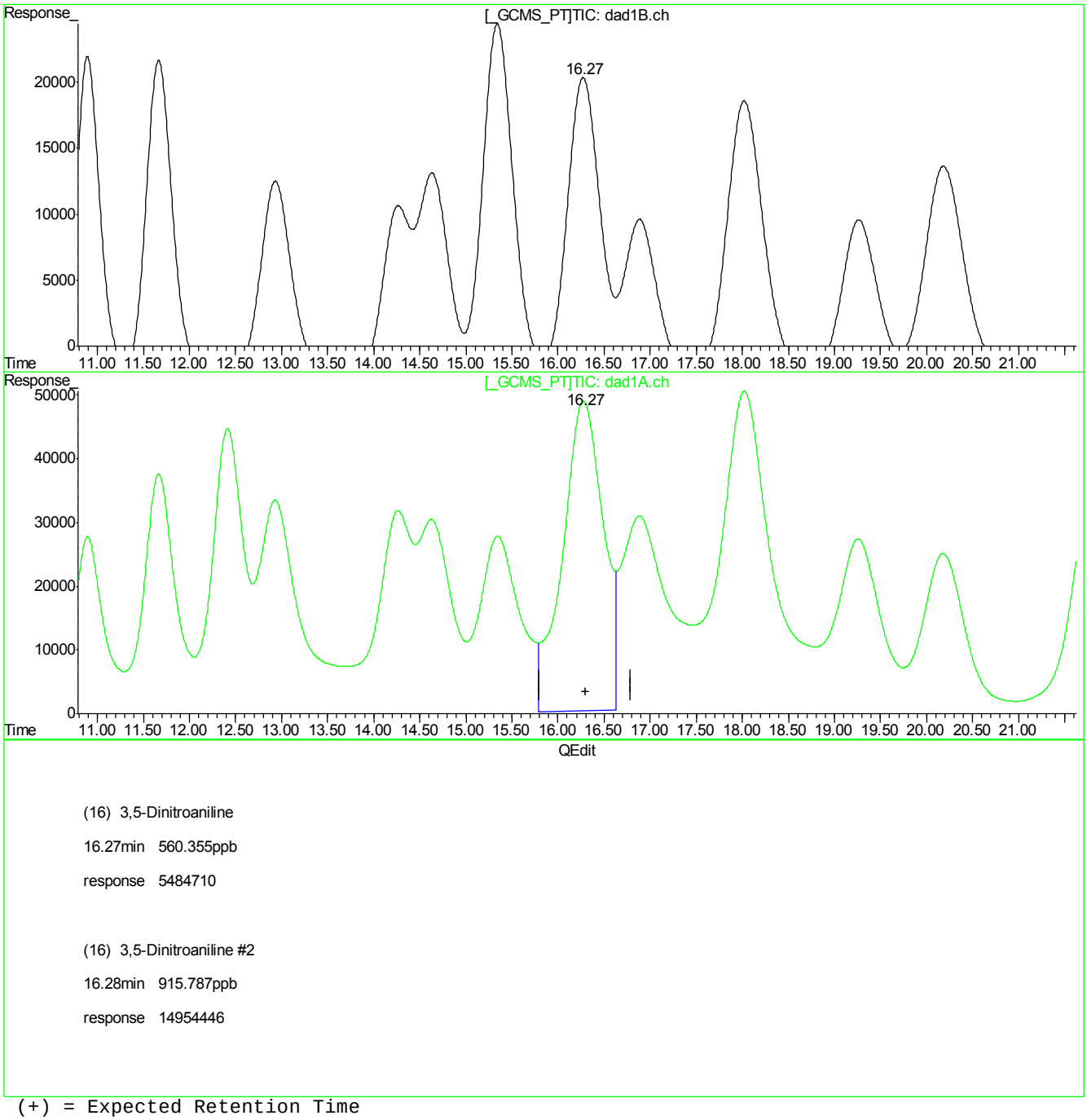
response 5159488

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:45:49 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.27min 560.355ppb

response 5484710

(16) 3,5-Dinitroaniline #2

16.28min 915.787ppb

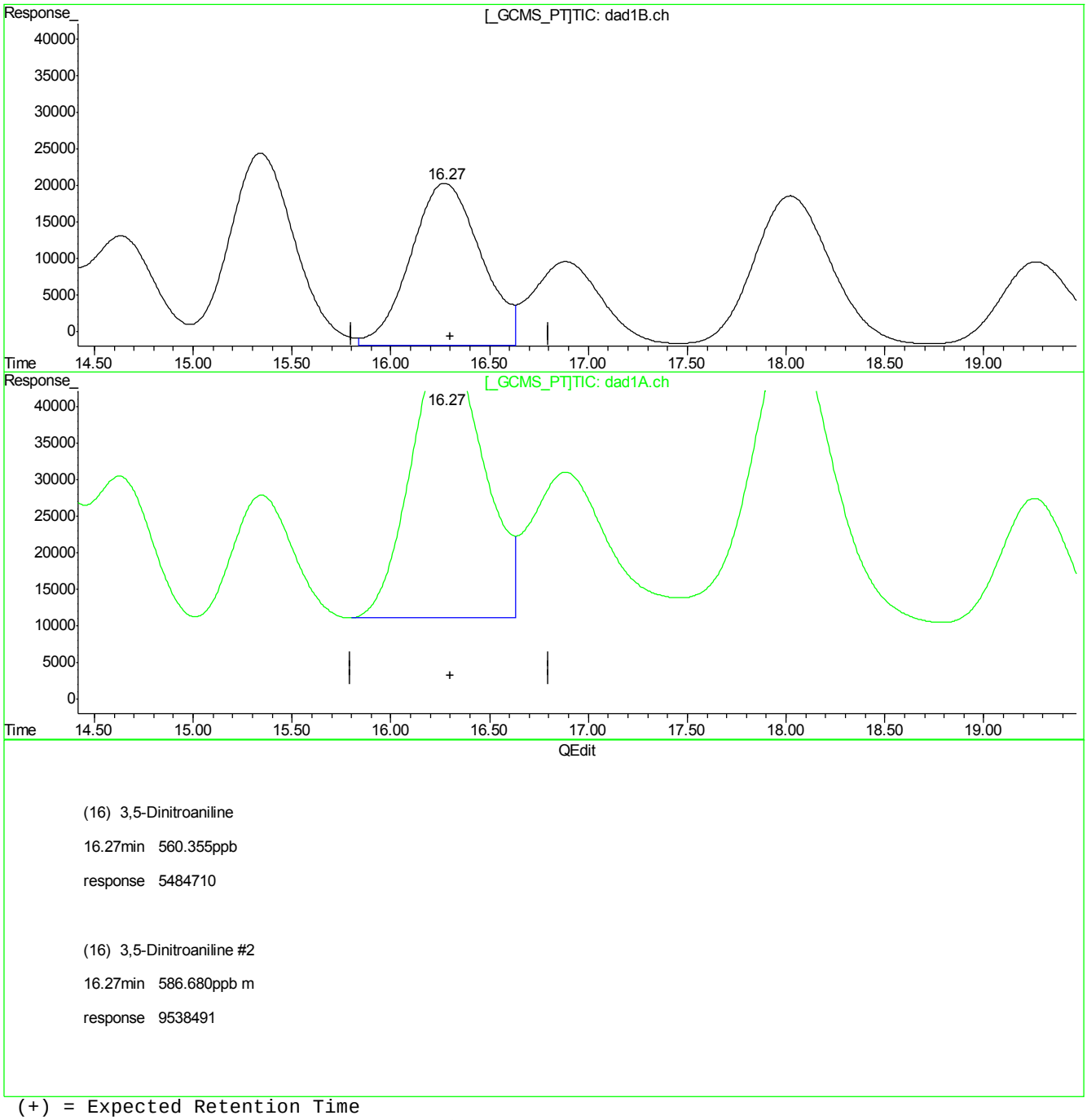
response 14954446

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:45:55 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.27min 560.355ppb

response 5484710

(16) 3,5-Dinitroaniline #2

16.27min 586.680ppb m

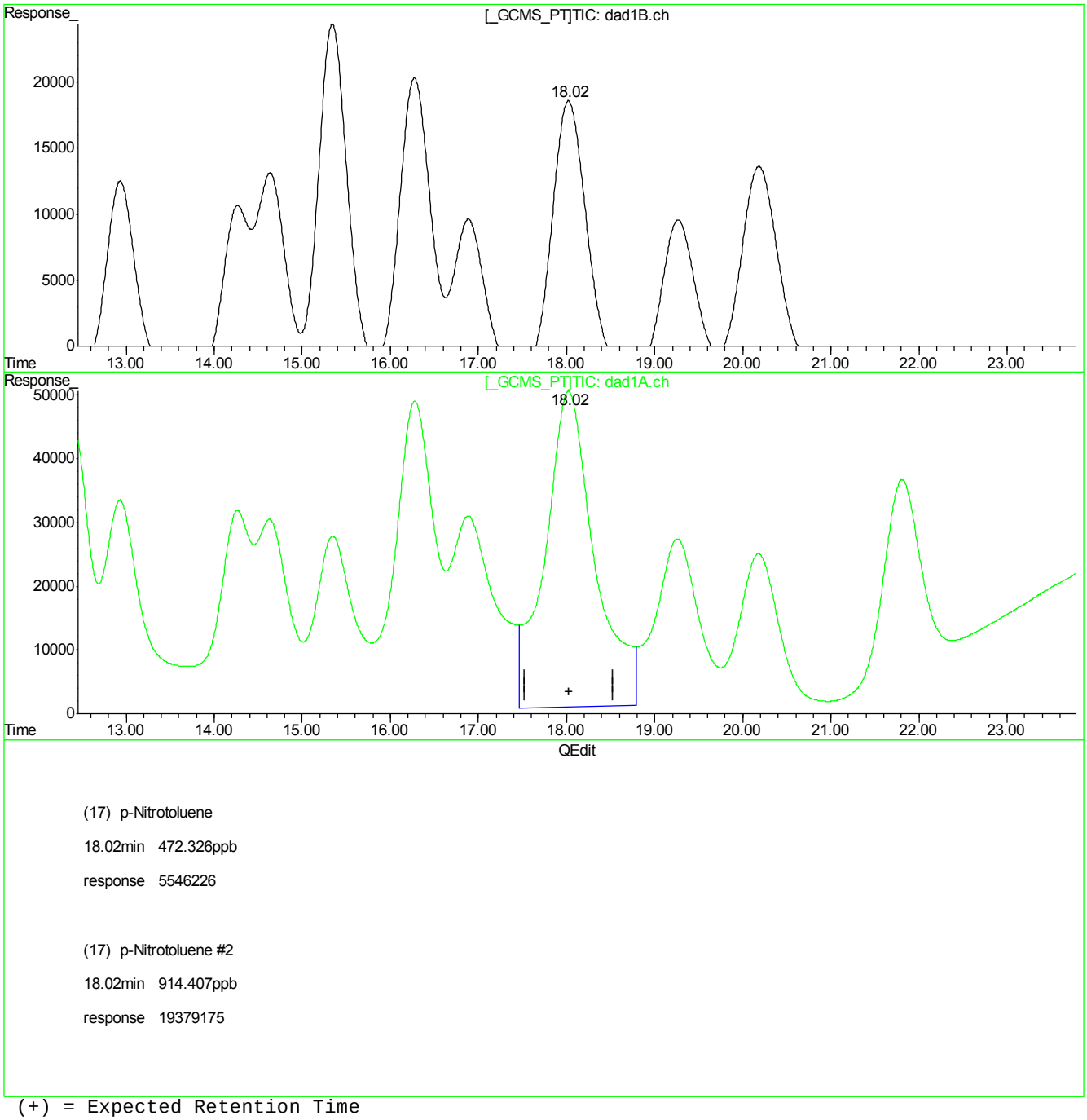
response 9538491

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:45:59 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.02min 472.326ppb

response 5546226

(17) p-Nitrotoluene #2

18.02min 914.407ppb

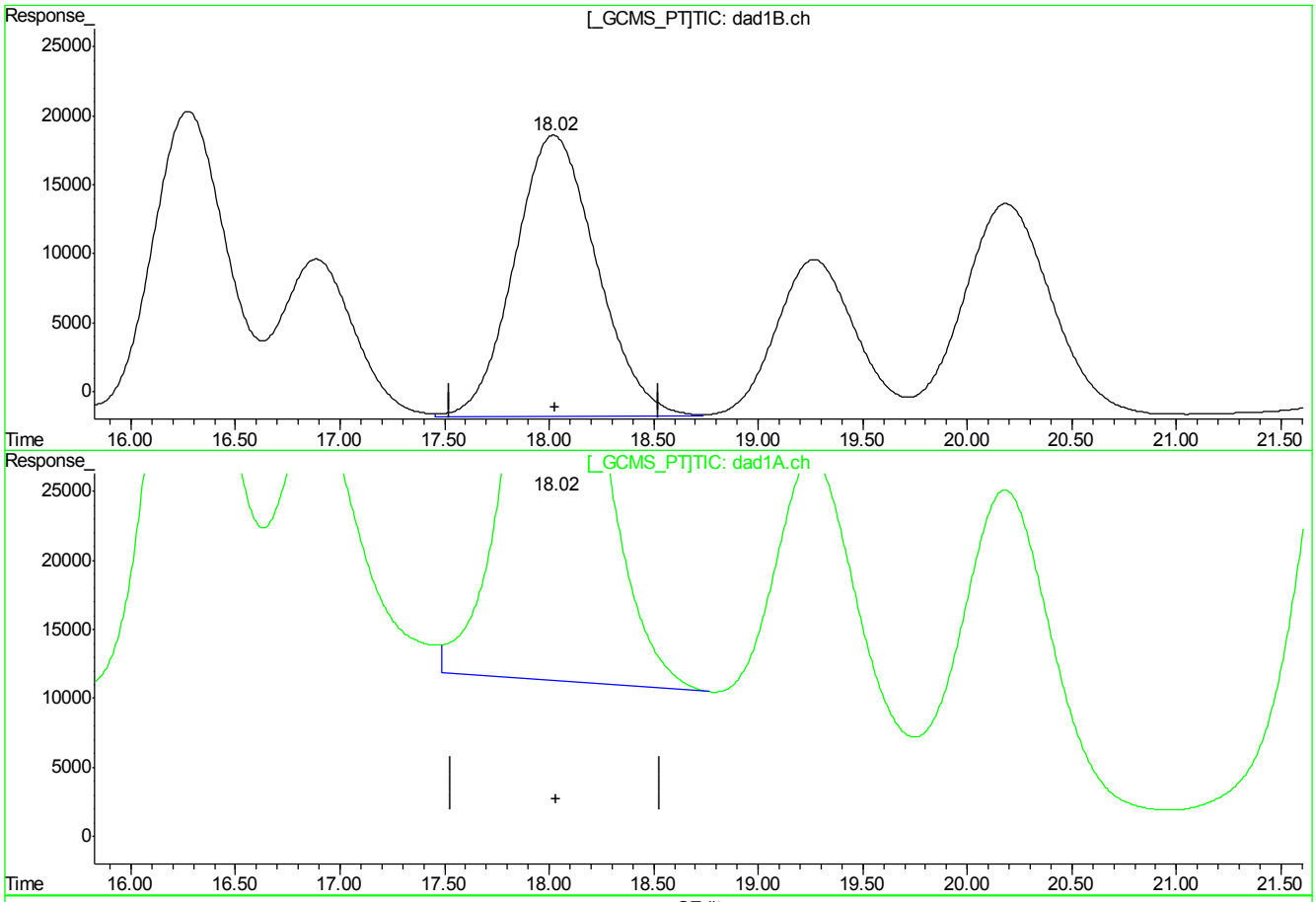
response 19379175

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:05 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.02min 472.326ppb

response 5546226

(17) p-Nitrotoluene #2

18.02min 529.814ppb m

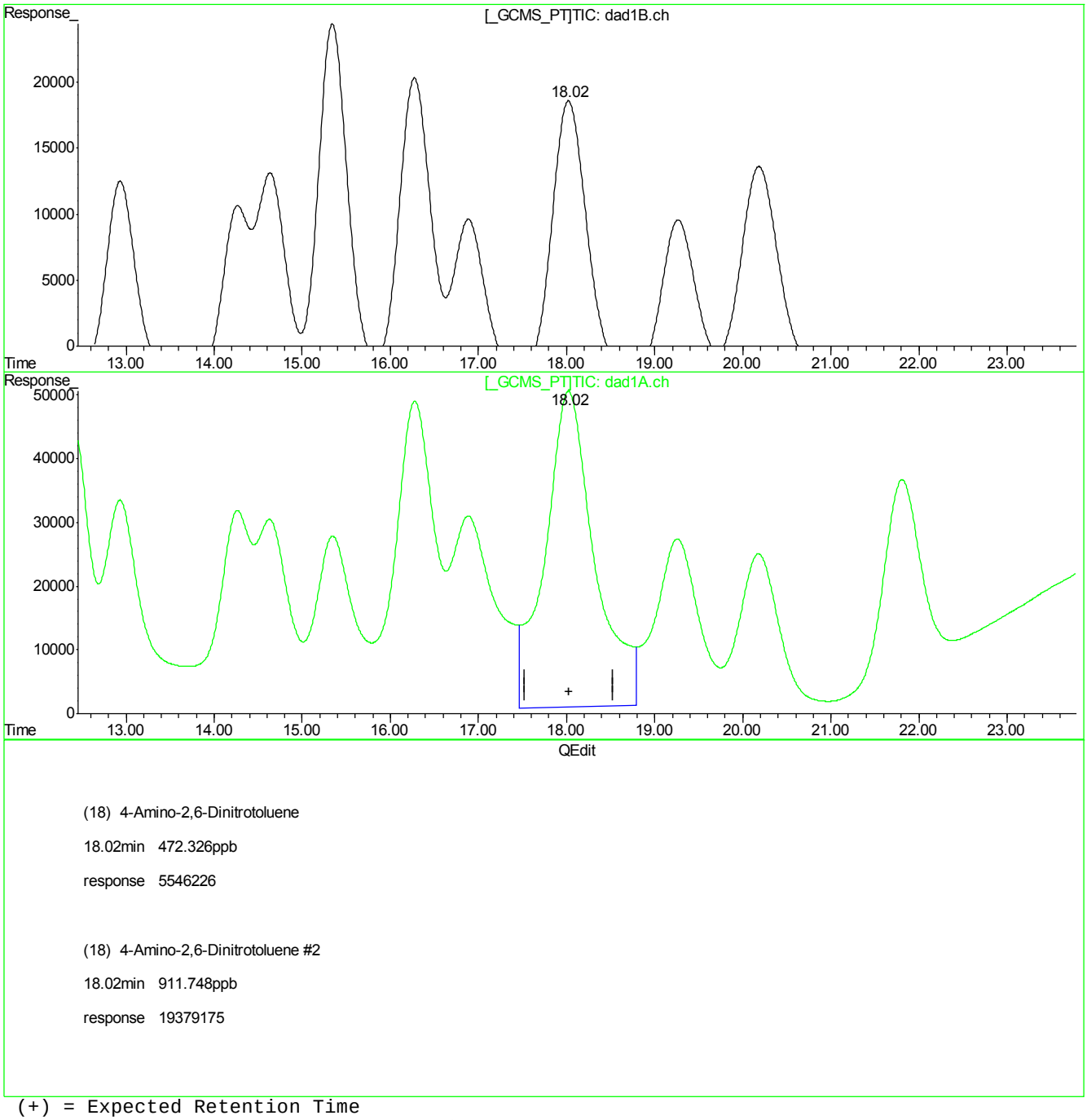
response 11228439

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:11 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.02min 472.326ppb

response 5546226

(18) 4-Amino-2,6-Dinitrotoluene #2

18.02min 911.748ppb

response 19379175

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:16 2018

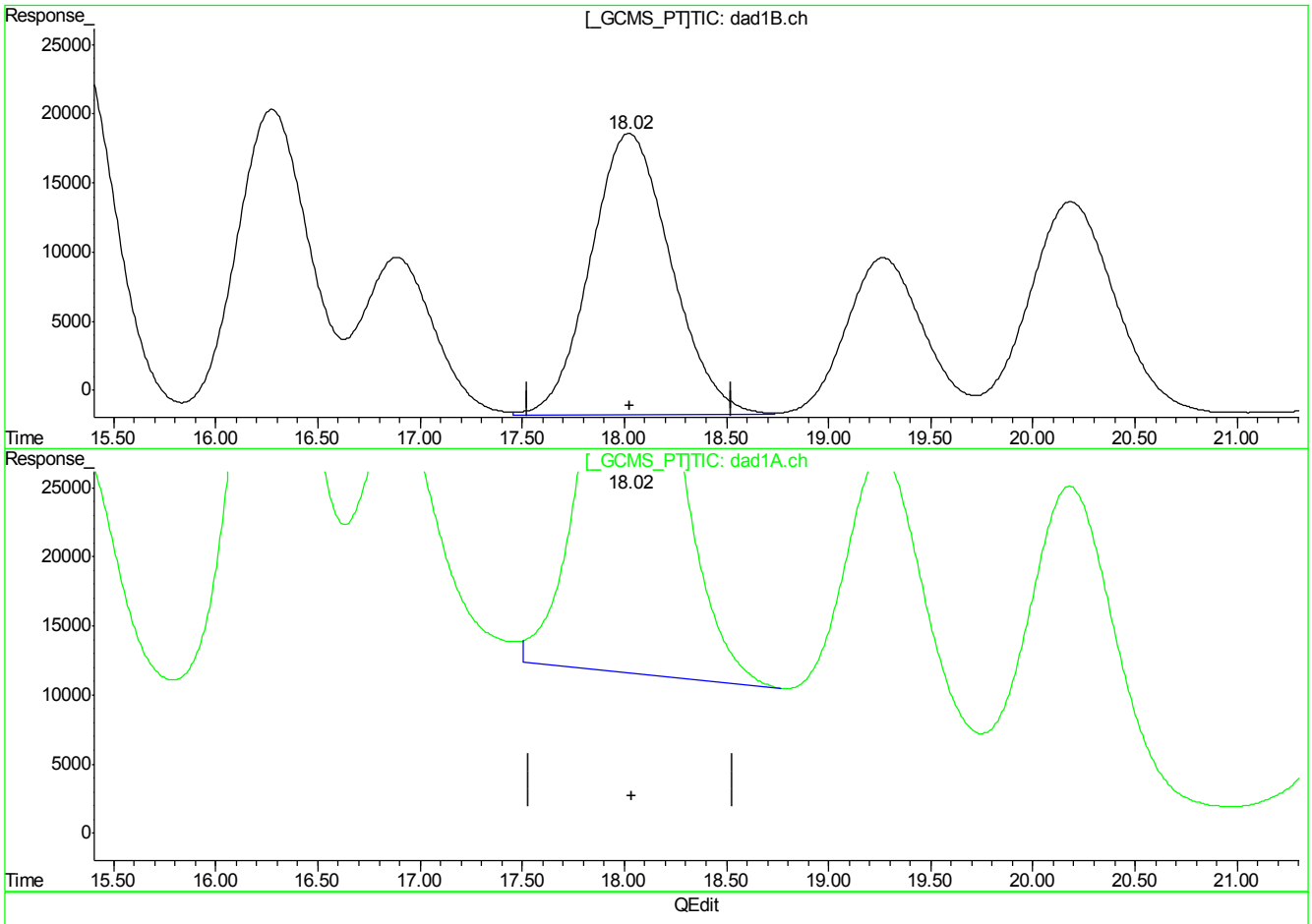
7.3.5.26

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.02min 472.326ppb

response 5546226

(18) 4-Amino-2,6-Dinitrotoluene #2

18.02min 518.086ppb m

response 11011916

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:20 2018

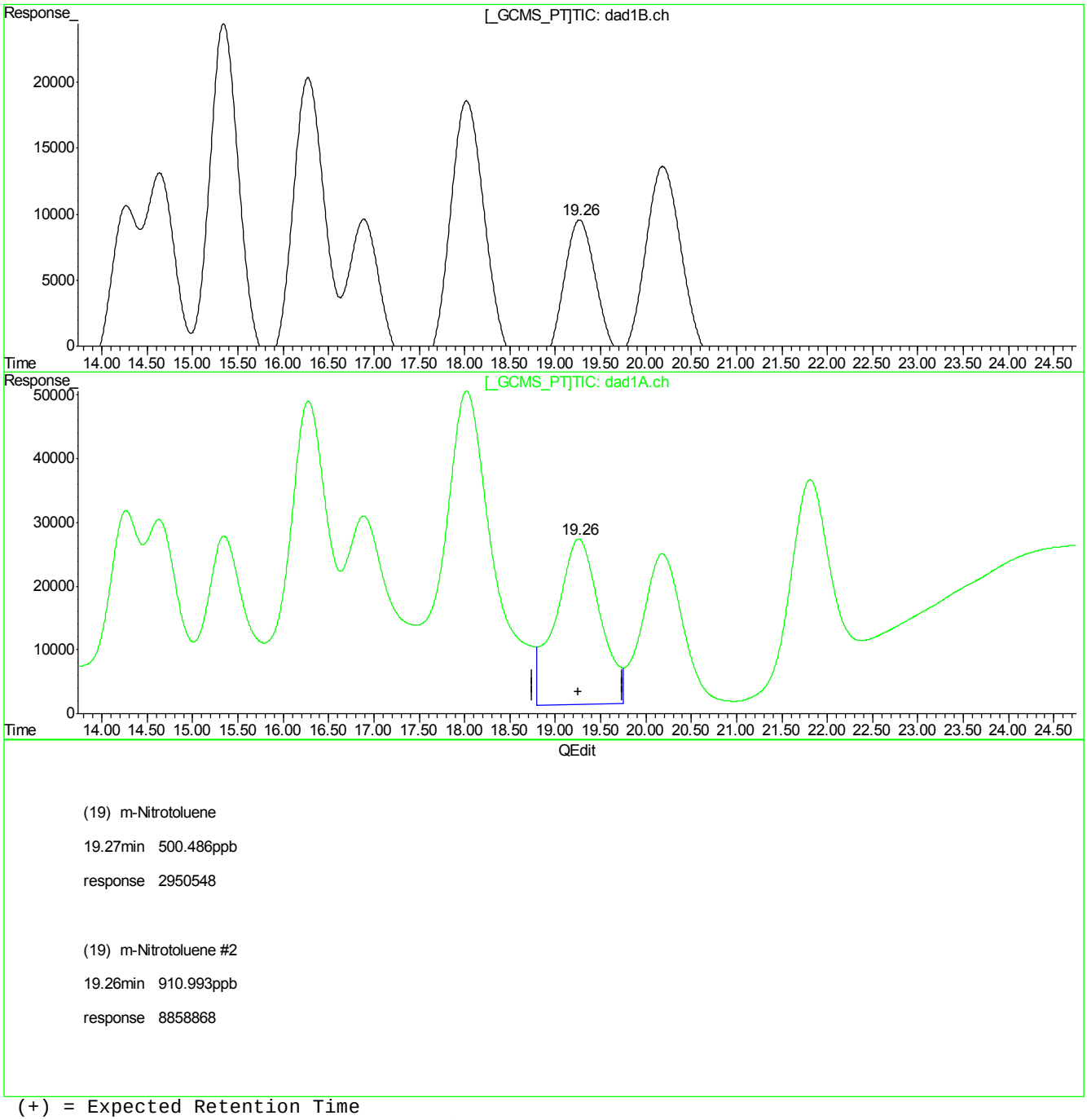
7.3.5.27

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.27min 500.486ppb

response 2950548

(19) m-Nitrotoluene #2

19.26min 910.993ppb

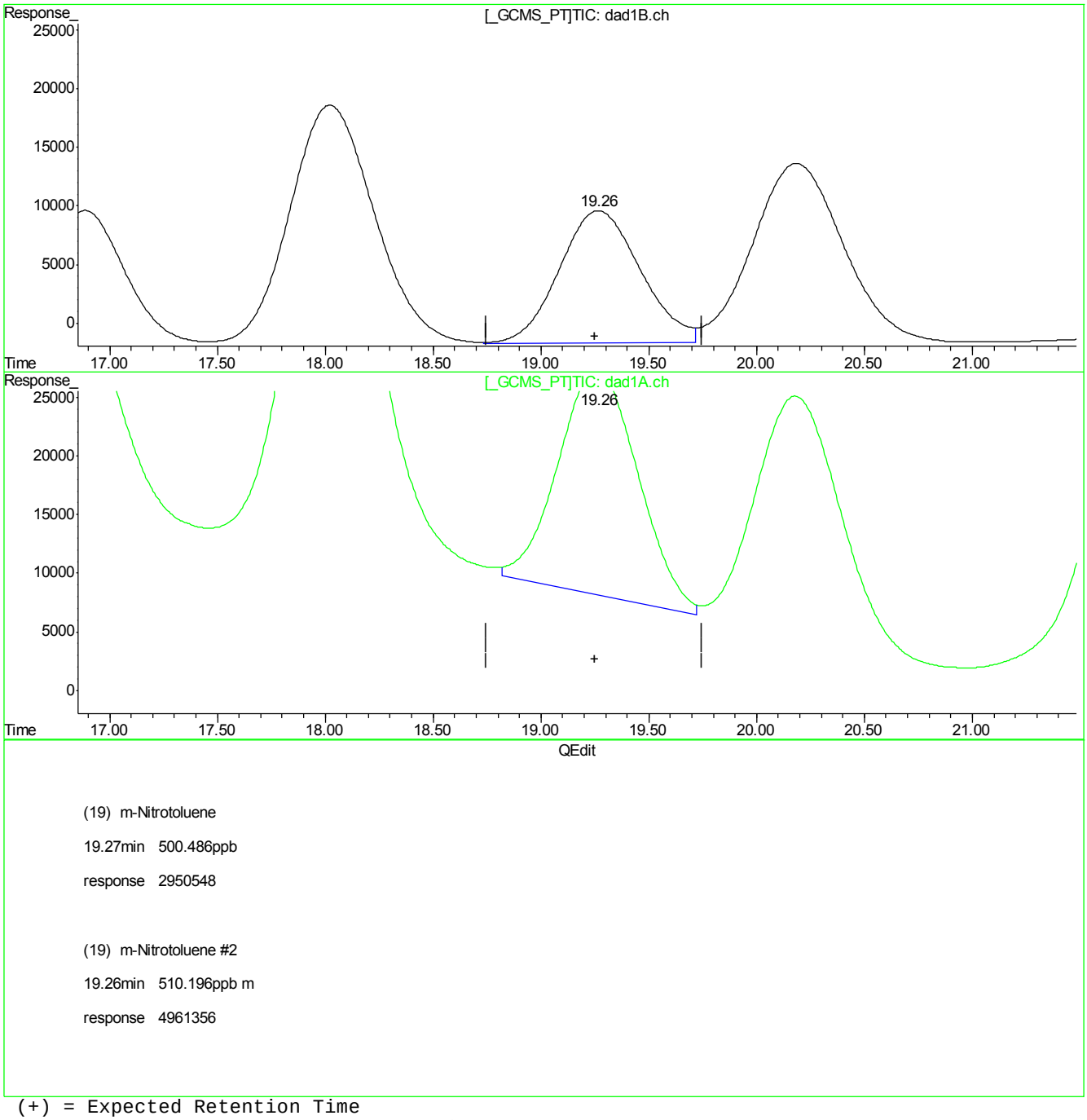
response 8858868

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:28 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:35 2018

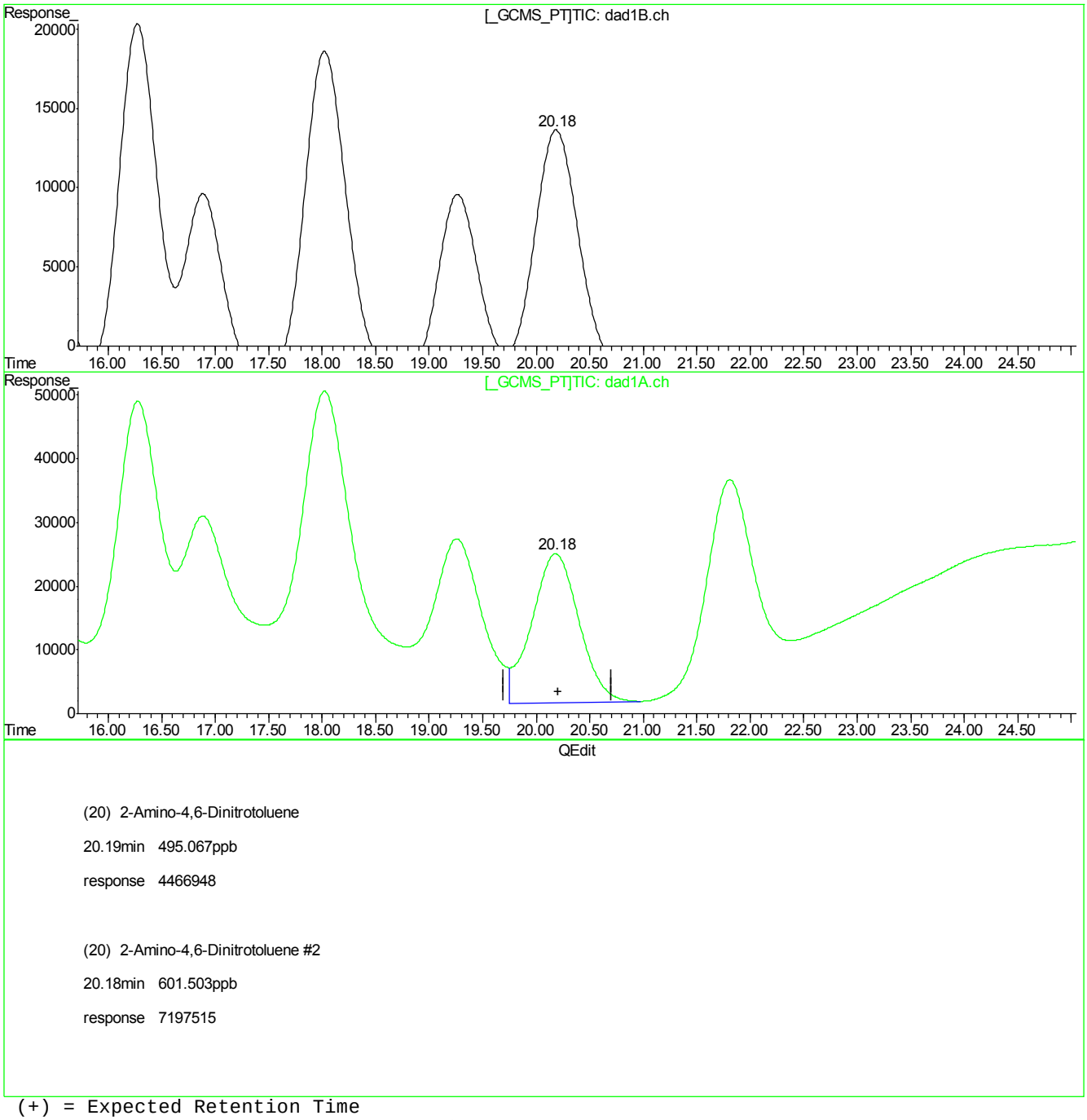
7.3.5.29

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.19min 495.067ppb

response 4466948

(20) 2-Amino-4,6-Dinitrotoluene #2

20.18min 601.503ppb

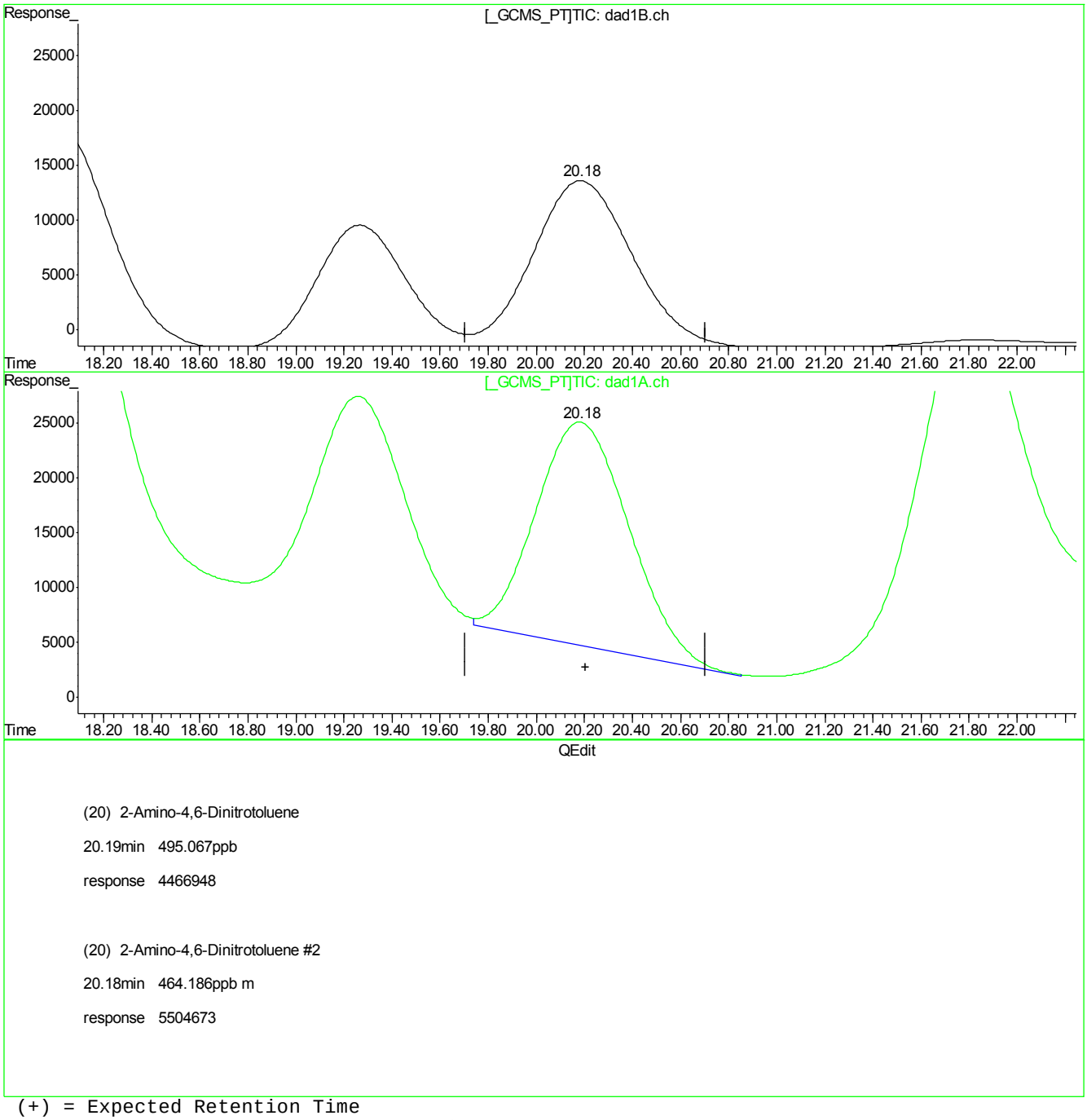
response 7197515

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:41 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.19min 495.067ppb

response 4466948

(20) 2-Amino-4,6-Dinitrotoluene #2

20.18min 464.186ppb m

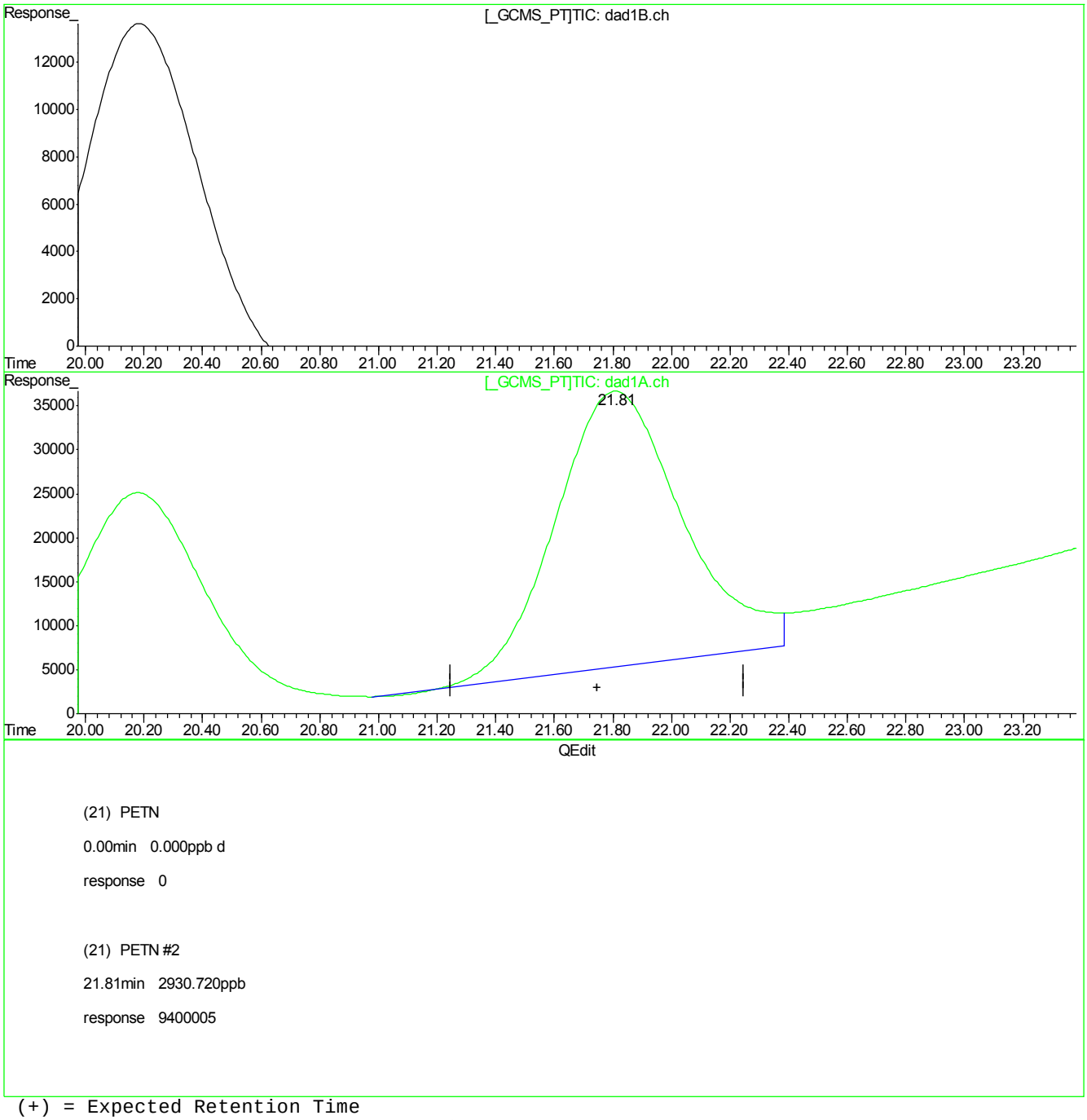
response 5504673

(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:48 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

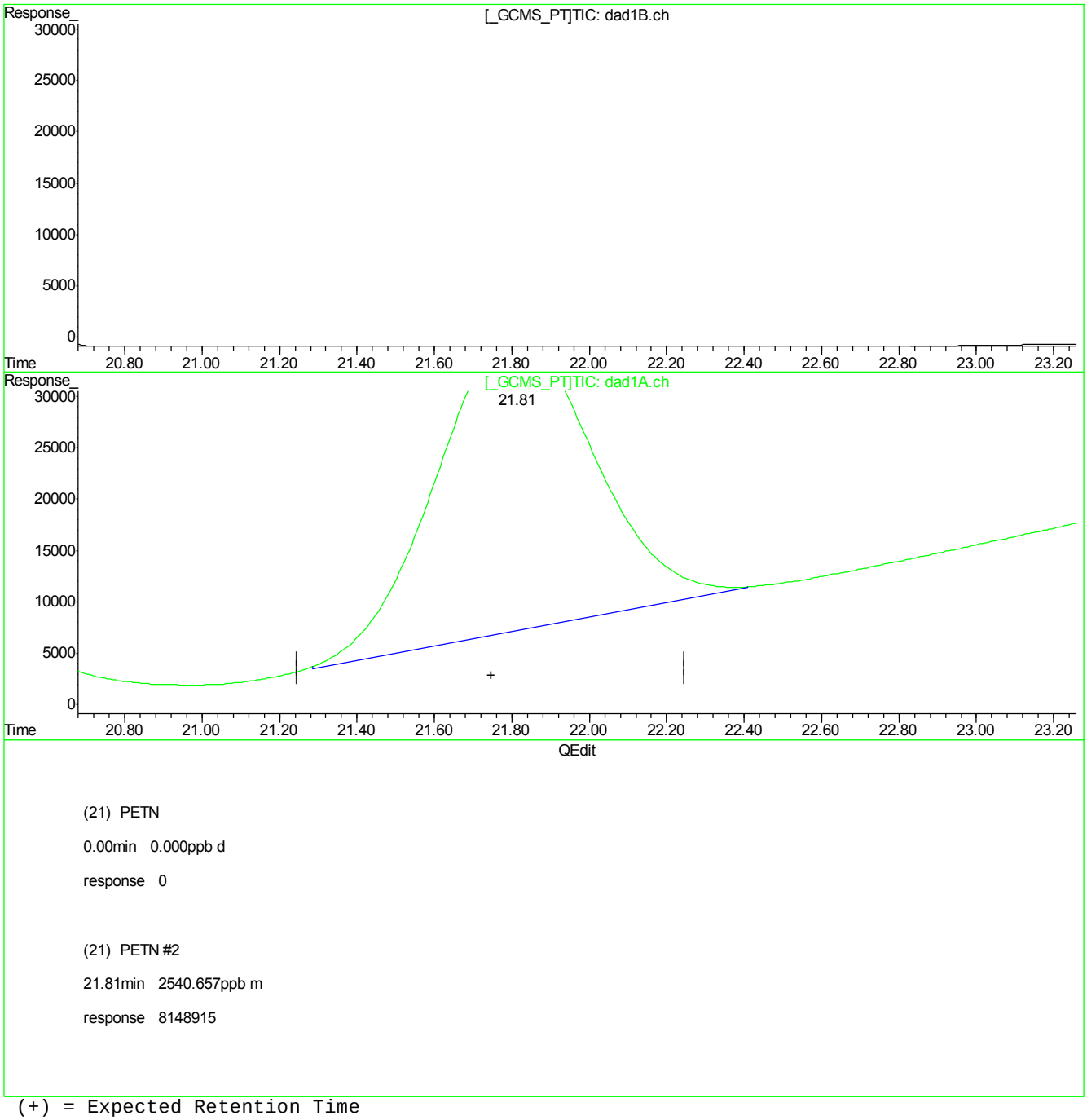


(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:50 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614630.D\dad1B.ch Vial: 53
Signal #2 : G:\DATA\0508RPB3\GG614630.D\dad1A.ch
Acq On : 09-May-2018, 00:49:18 Operator: evitam
Sample : op69945-bs Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614630.D 8330RPB.M_1113M.M Wed May 09 10:46:57 2018

7.3.5.33

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 10:17:50 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.28	14.27	2579498	4850973	496.546	448.432m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		99.31%	89.69%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.42	5.42	1980222	1993185	610.824m	618.665m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.46	7.46	4873156	4864347	470.309	469.507
6)	RDX	7.92	7.92	2353235	2321424	493.944	489.427
7)	1,3-Dinitrobenze	9.95	9.94	6603125	5105078	461.535	397.870m
8)	Nitrobenzene	10.91	10.90	4341134	4487418	459.992	484.555m
9)	2,4,6-Trinitroto	11.68	11.68	4719733	6833744	465.718	521.069m
10)	Nitroglycerin	0.00	12.43	0	8021507	N.D. d	2380.448m
11)	Tetryl	12.95	12.95	3505980	6303189	432.631	447.307m
13)	2,6-Dinitrotolue	14.64	14.64	3394647	4588360	474.802	452.231m
14)	2,4-Dinitrotolue	15.35	15.35	6093328	3868860	464.817	405.972m
15)	o-Nitrotoluene	16.89	16.89	2801324	4543500	484.944	526.867m
16)	3,5-Dinitroanili	16.29	16.28	5464839	9279949	558.340	570.898m
17)	p-Nitrotoluene	18.03	18.04	5520024	10274054	470.095	484.781m
18)	4-Amino-2,6-Dini	18.03	18.04	5520024	10273975	470.095	483.368m
19)	m-Nitrotoluene	19.26	19.26	2952011	5192768	500.734	533.993m
20)	2-Amino-4,6-Dini	20.20	20.20	4454049	5616832	493.637	473.358m
21)	PETN	0.00	21.79	0	8442995	N.D. d	2632.345m

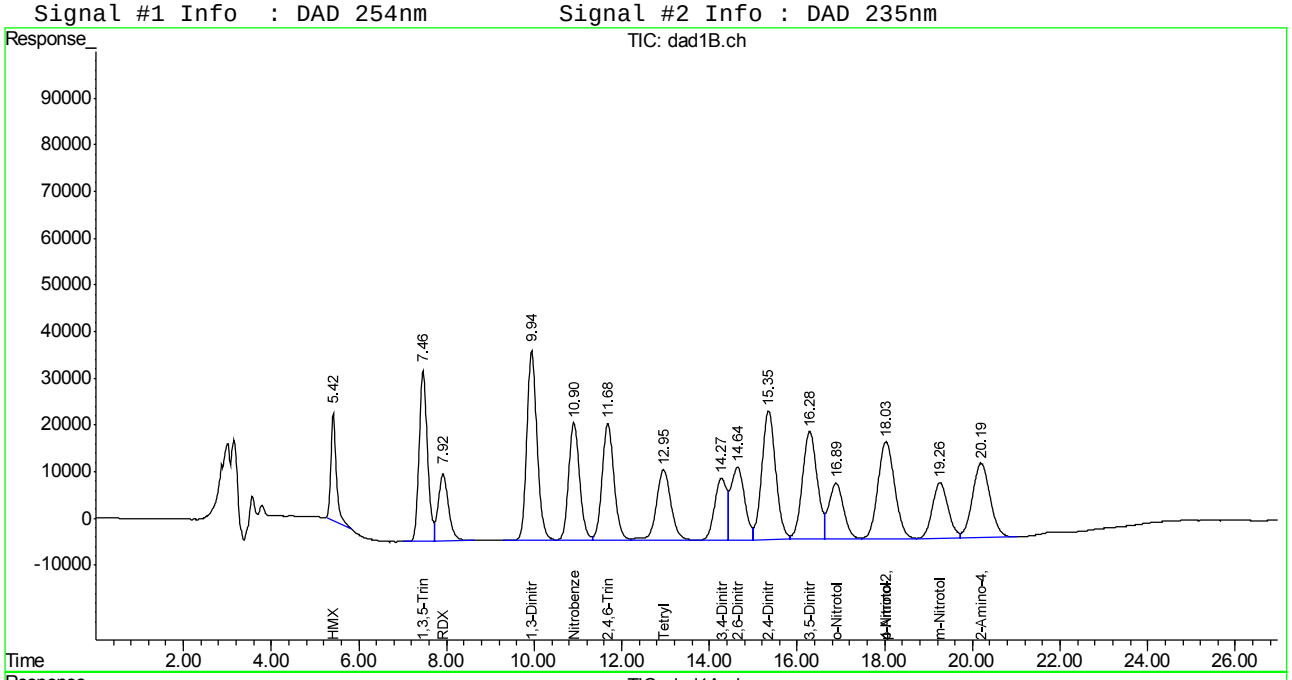
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:33:15 2018 Page 1

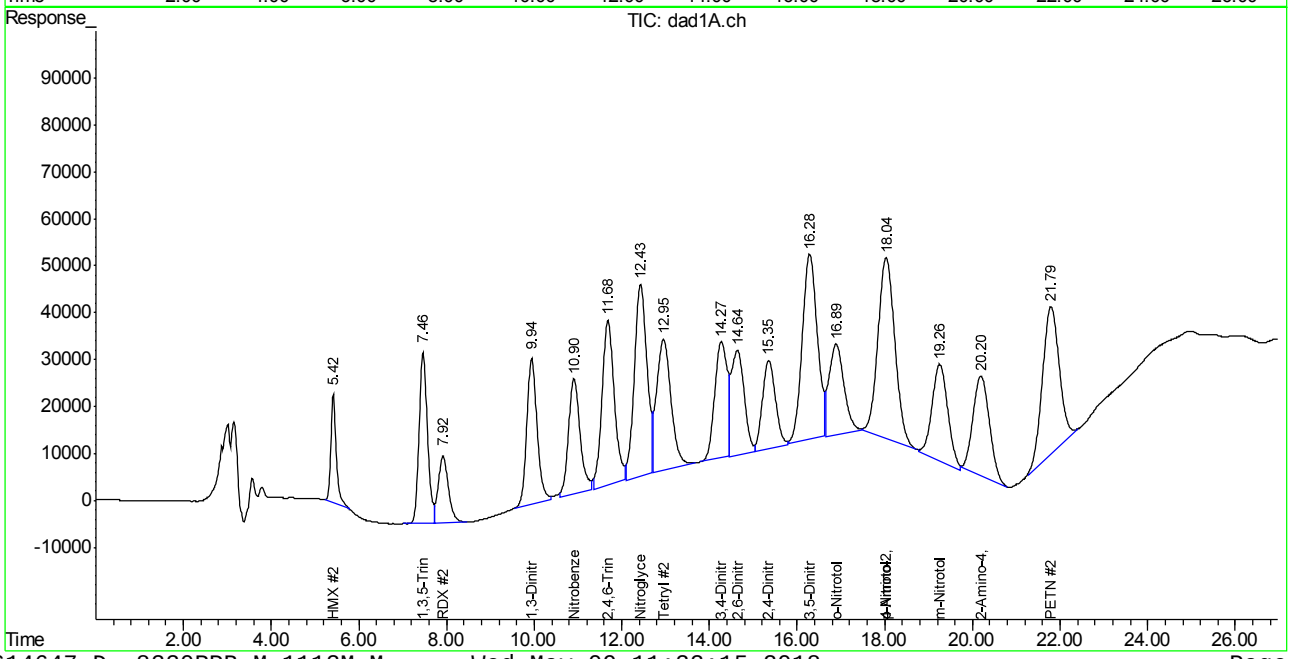
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

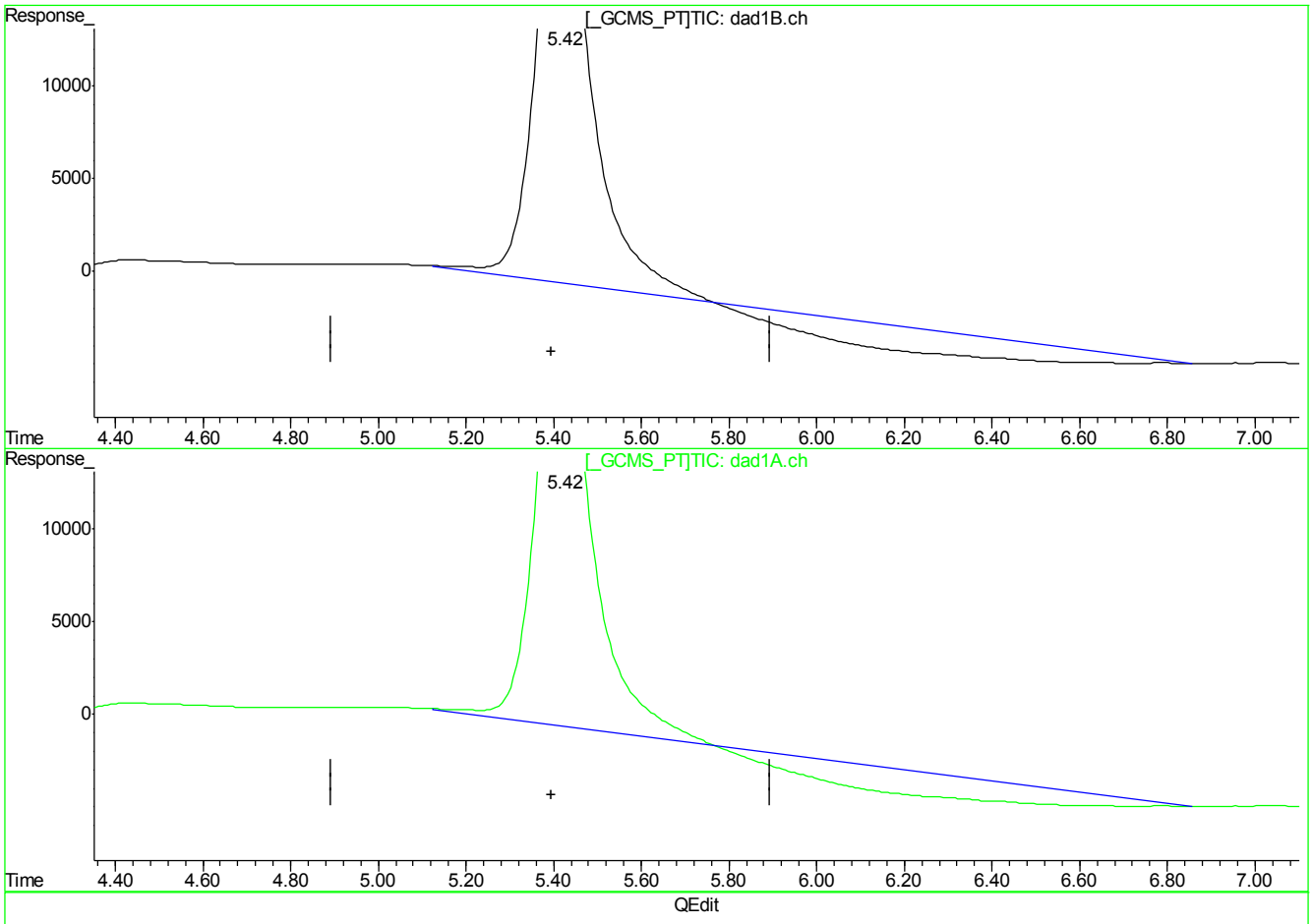
Sample Number:	OP69946-BS	**Method:**	SW846 8330B
Lab FileID:	GG614647.D	**Analyst approved:**	05/09/18 11:26 Evita Martinez
Injection Time:	05/09/18 09:10	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.42	Poorly defined baseline
HMX	2691-41-0	2	5.42	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.94	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.90	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.68	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.43	Poorly defined baseline
Tetryl	479-45-8	2	12.95	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.27	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.64	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.35	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.28	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.89	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.04	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.04	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.26	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.20	Poorly defined baseline
PETN	78-11-5	2	21.79	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.42min 453.289ppb

response 1469511

(2) HMX #2

5.42min 456.121ppb

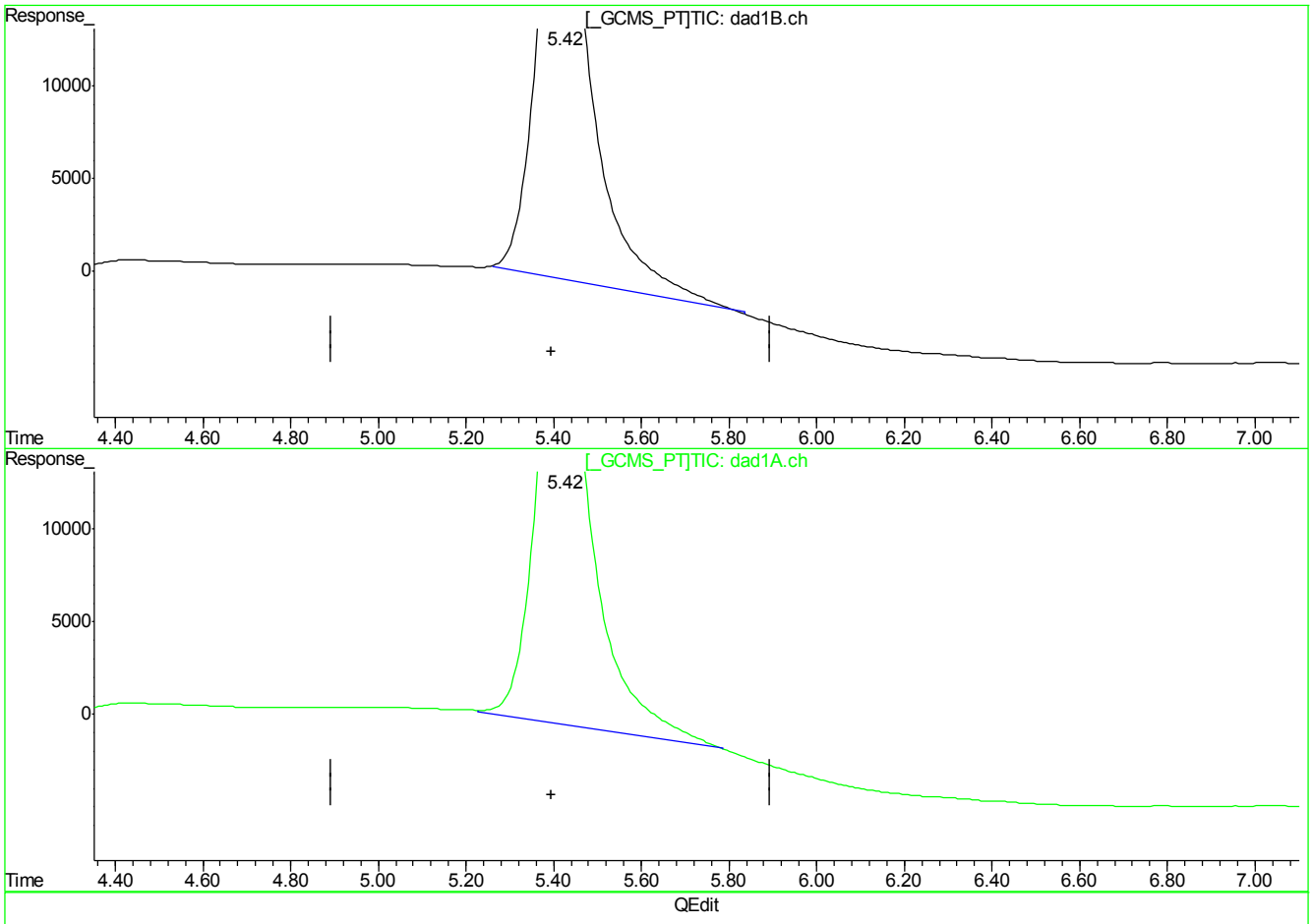
response 1469511

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:13 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.42min 610.824ppb m

response 1980222

(2) HMX #2

5.42min 618.665ppb m

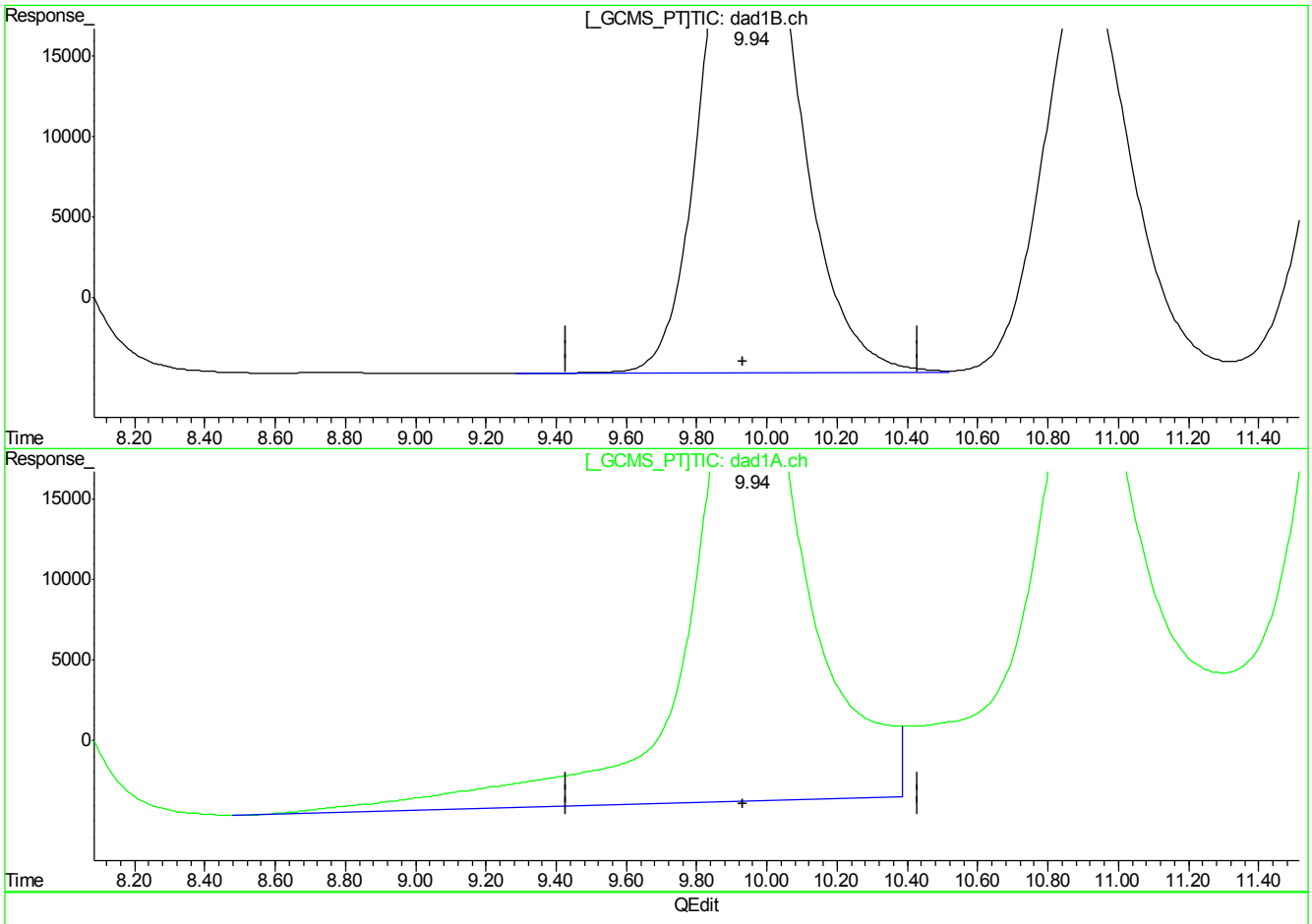
response 1993185

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.95min 461.535ppb

response 6603125

(7) 1,3-Dinitrobenzene #2

9.95min 568.112ppb

response 7181266

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:33 2018

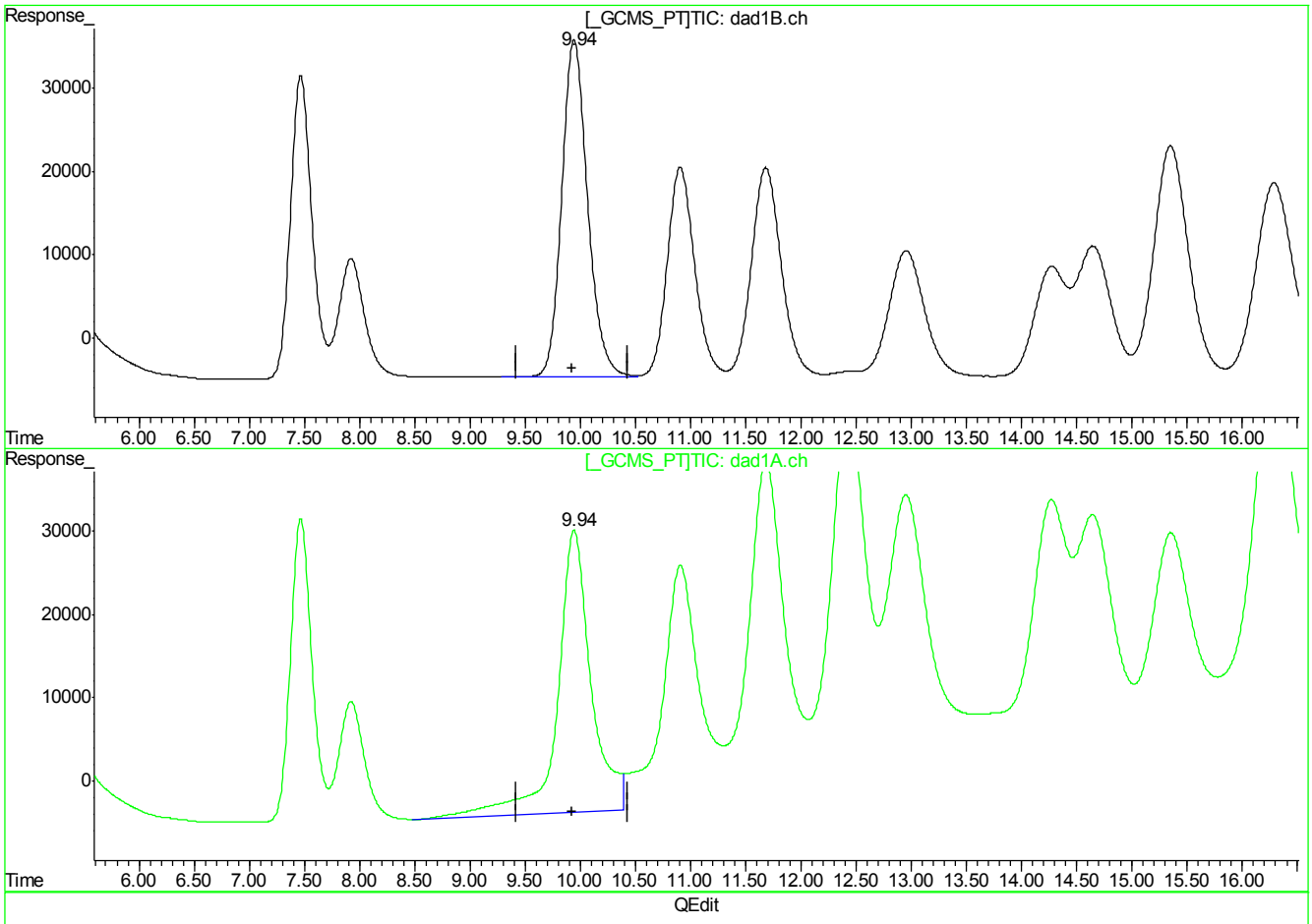
7.3.6.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.95min 461.535ppb

response 6603125

(7) 1,3-Dinitrobenzene #2

9.95min 568.112ppb

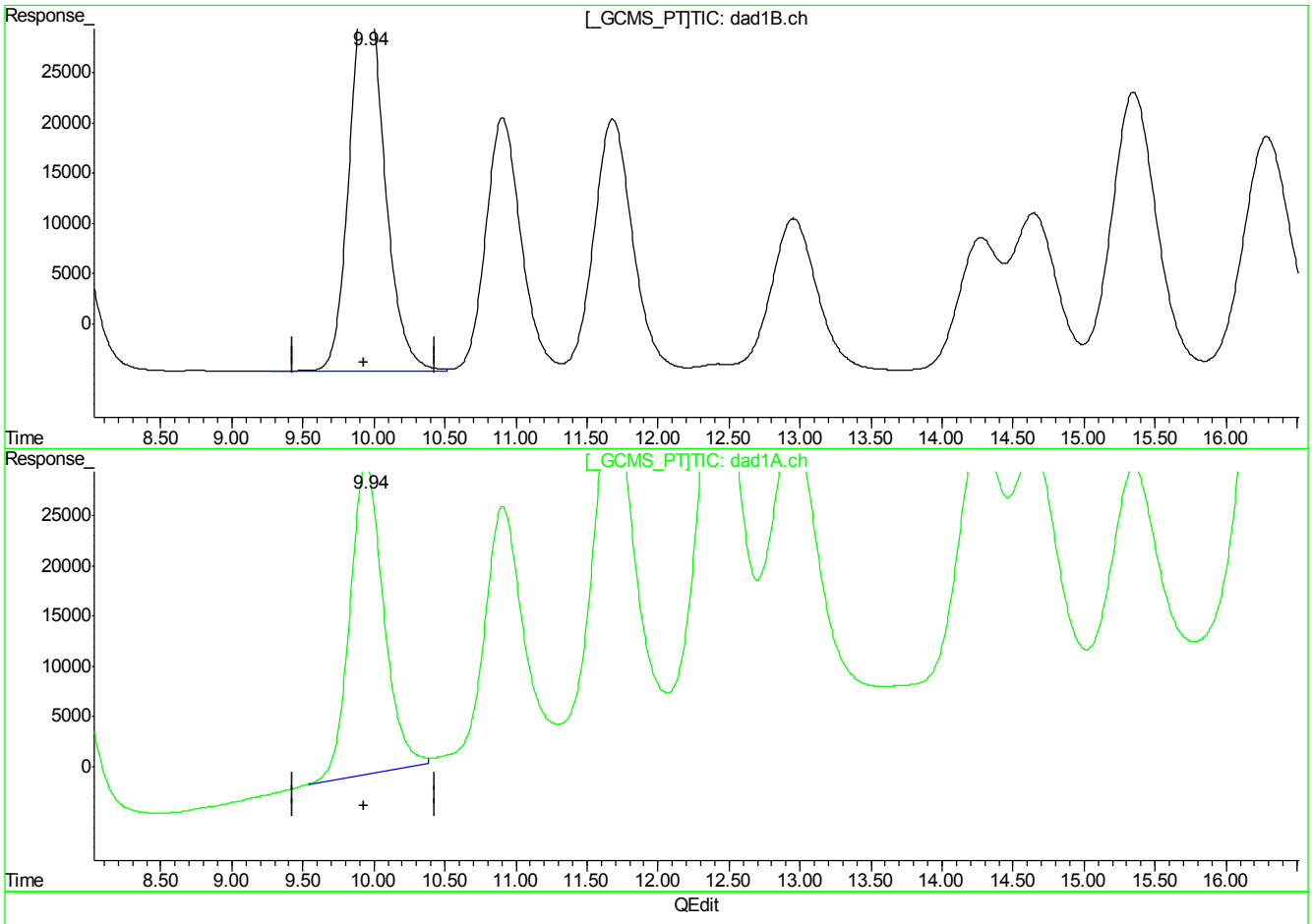
response 7181266

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:41 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.95min 461.535ppb

response 6603125

(7) 1,3-Dinitrobenzene #2

9.94min 397.870ppb m

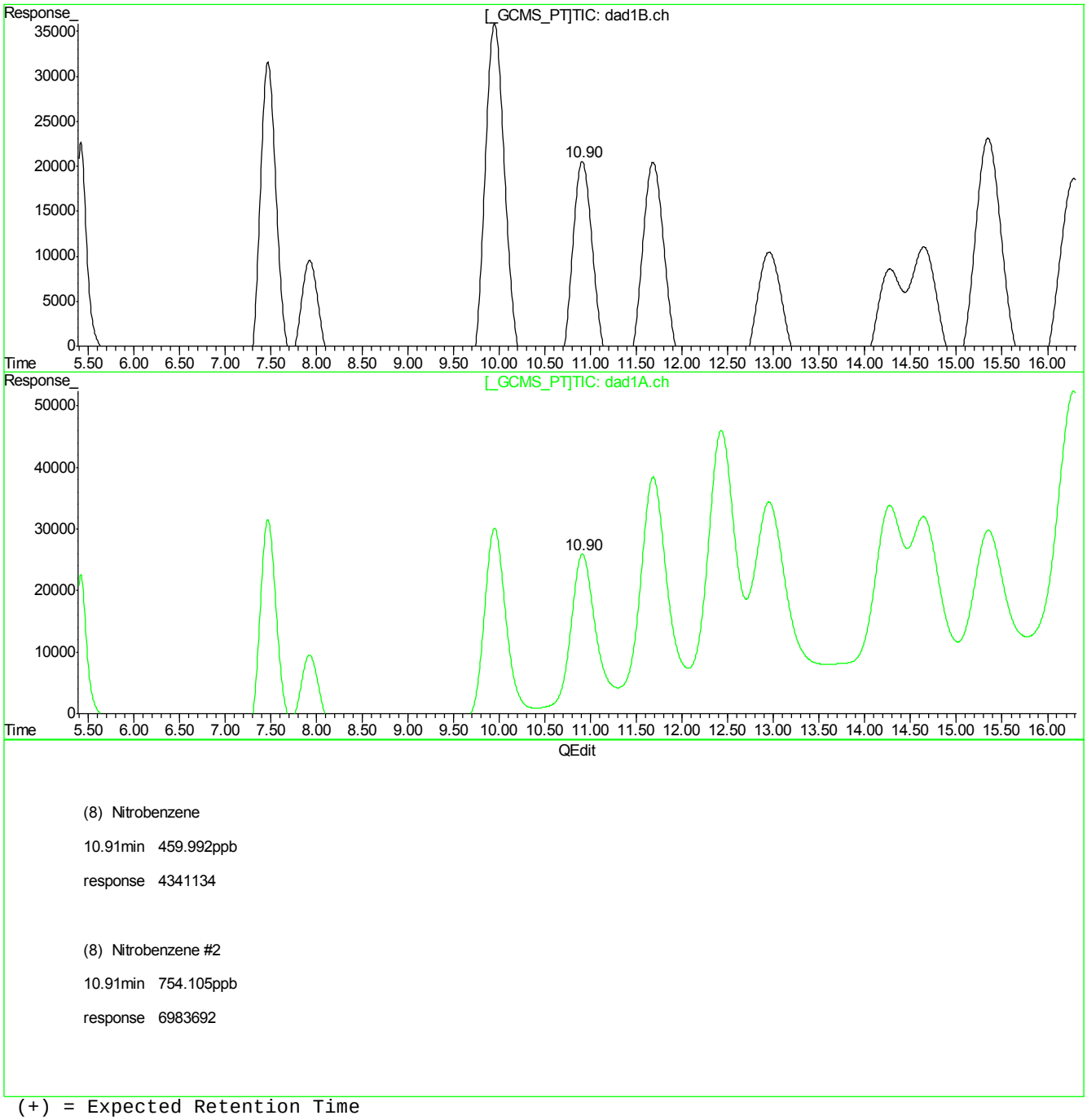
response 5105078

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:49 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.91min 459.992ppb

response 4341134

(8) Nitrobenzene #2

10.91min 754.105ppb

response 6983692

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:54 2018

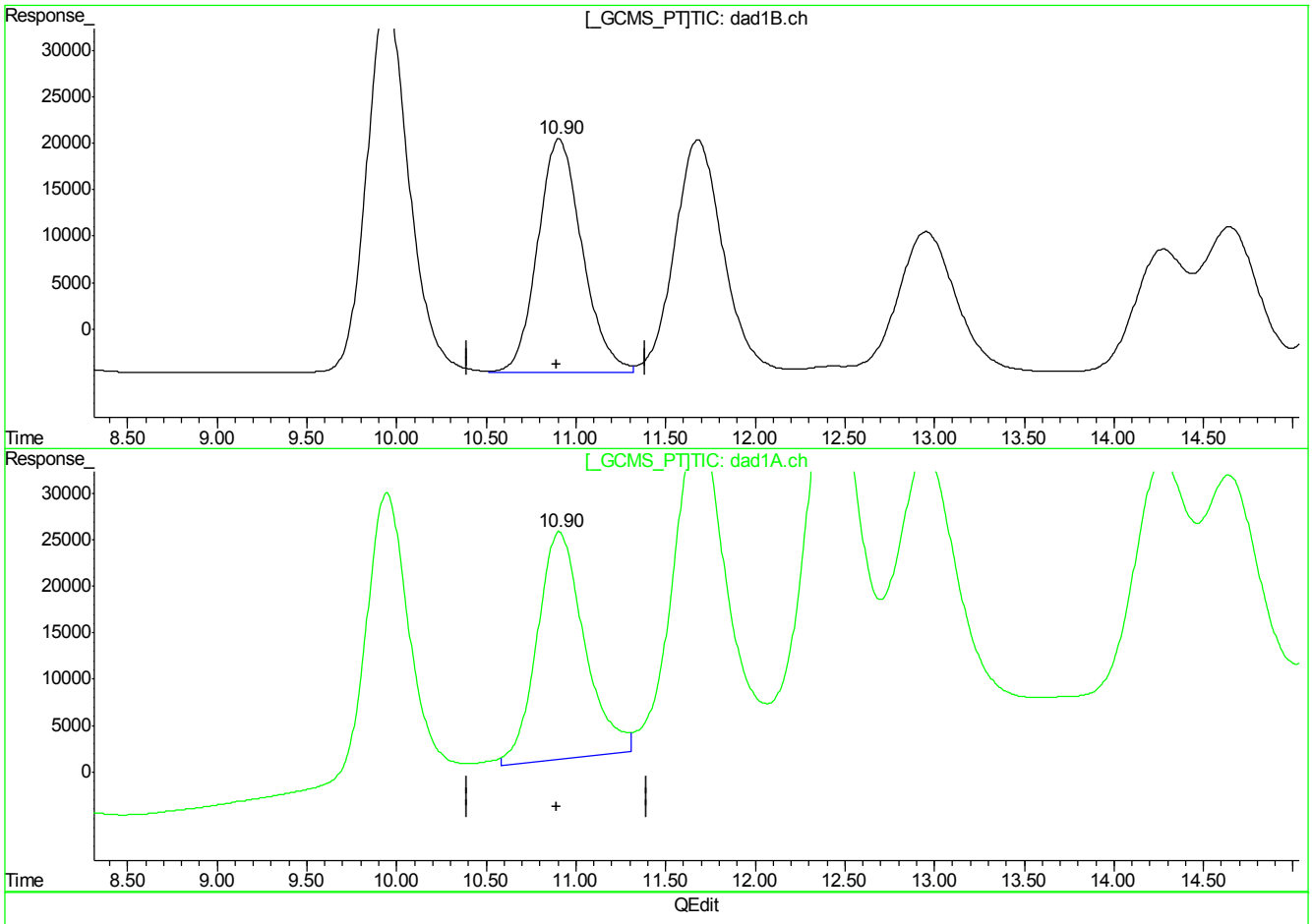
7.3.6.7

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.91min 459.992ppb

response 4341134

(8) Nitrobenzene #2

10.90min 484.555ppb m

response 4487418

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:00 2018

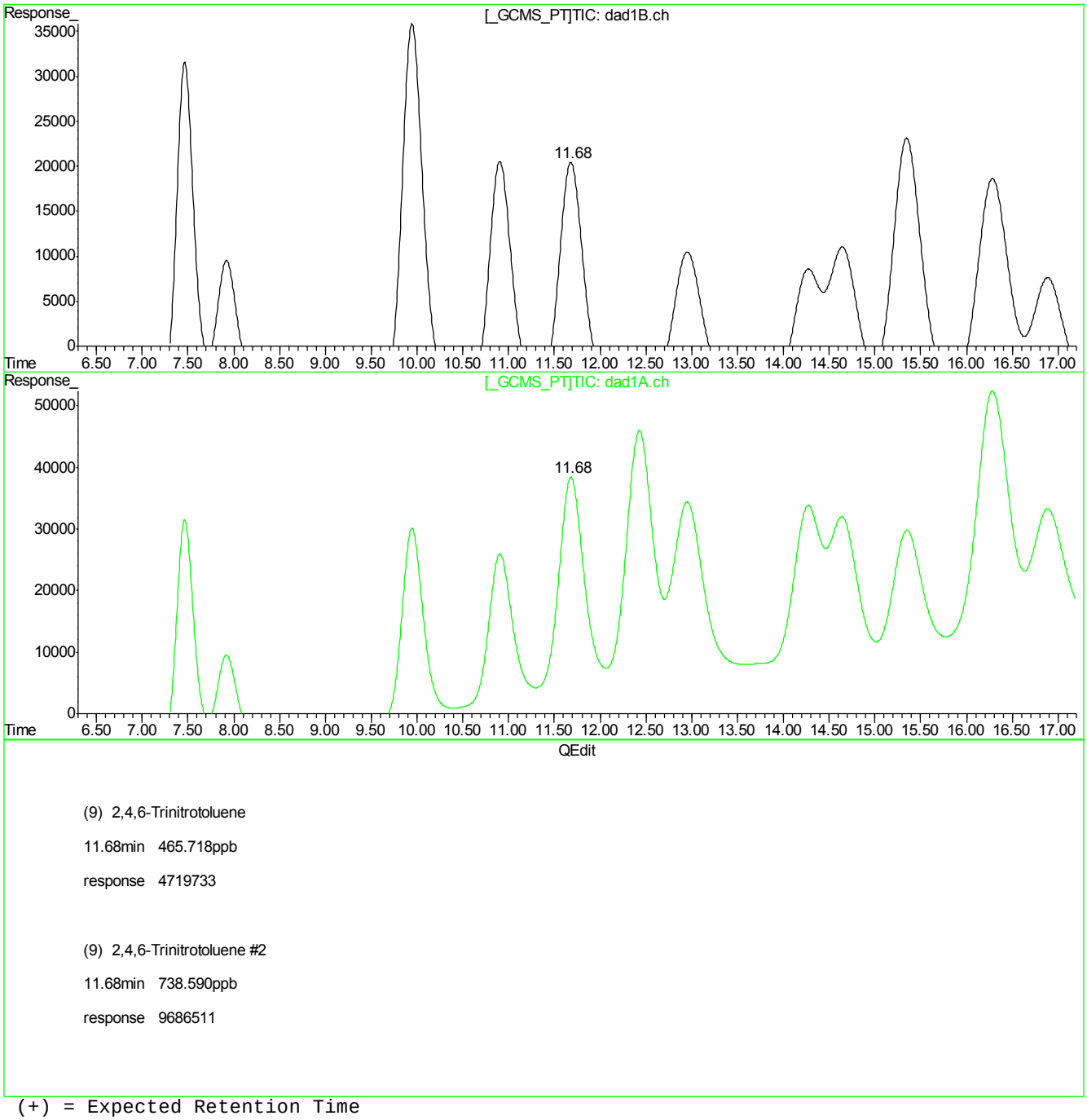
7.3.6.8

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.68min 465.718ppb

response 4719733

(9) 2,4,6-Trinitrotoluene #2

11.68min 738.590ppb

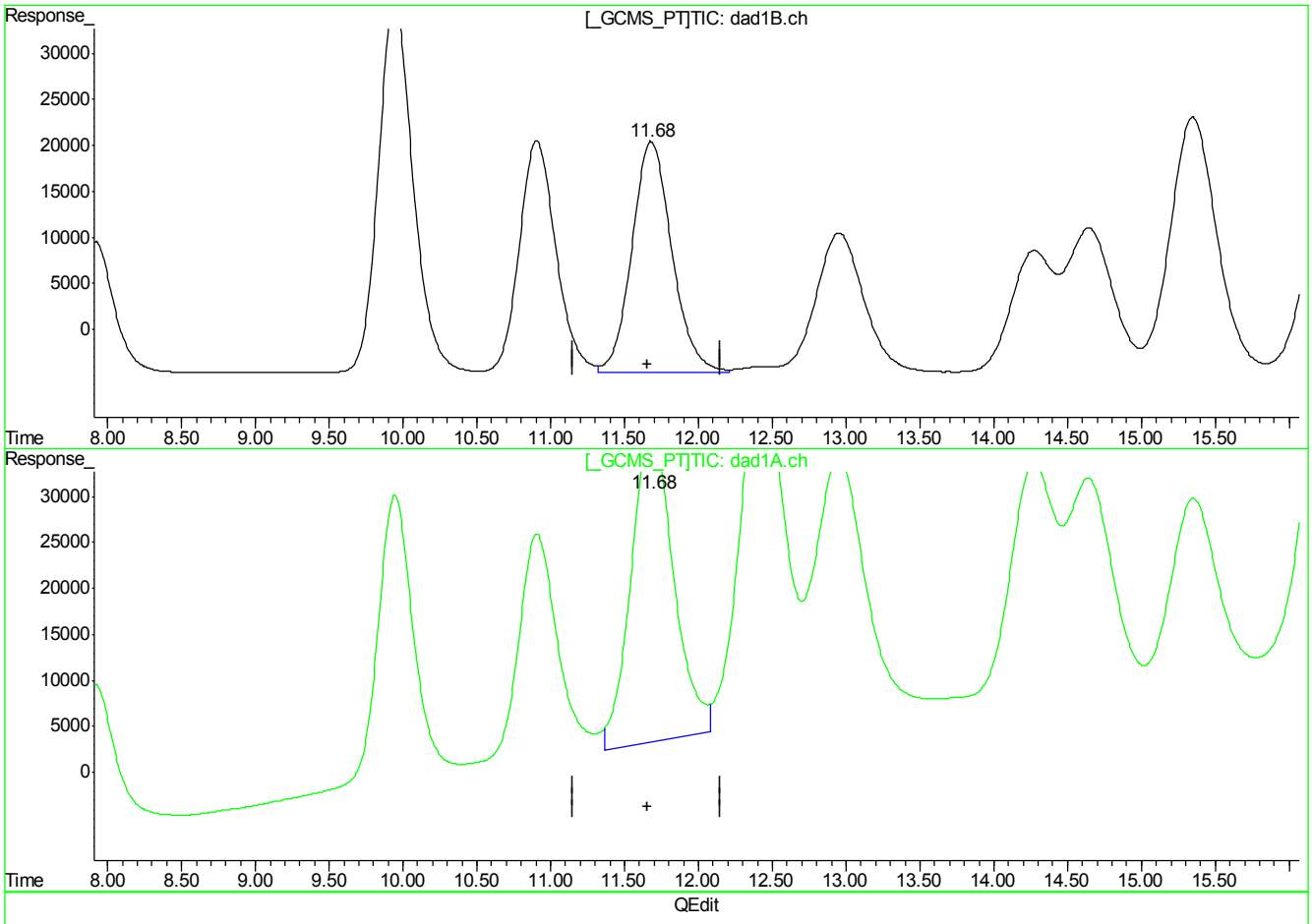
response 9686511

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:05 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.68min 465.718ppb

response 4719733

(9) 2,4,6-Trinitrotoluene #2

11.68min 521.069ppb m

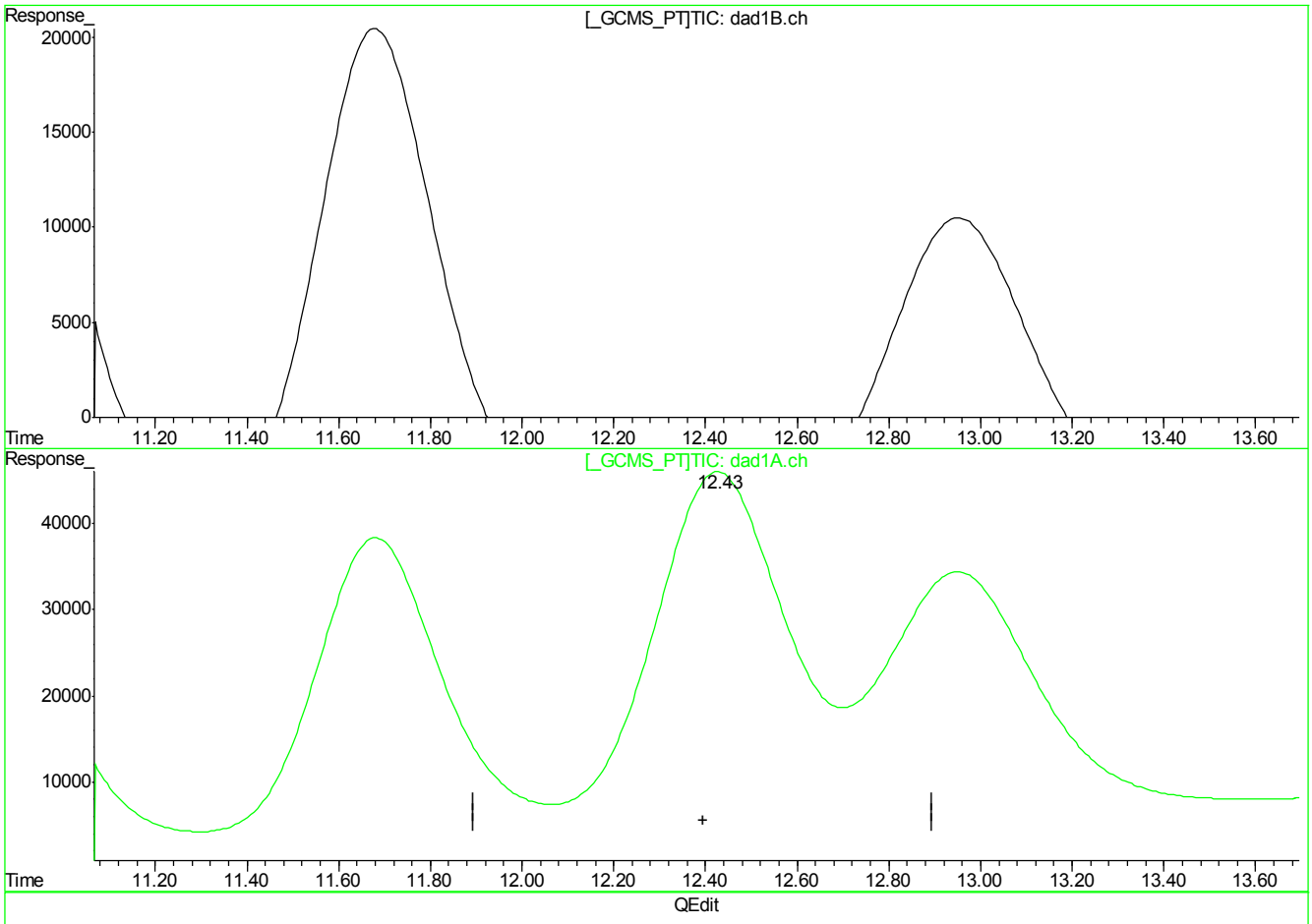
response 6833744

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:13 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.43min 3290.451ppb

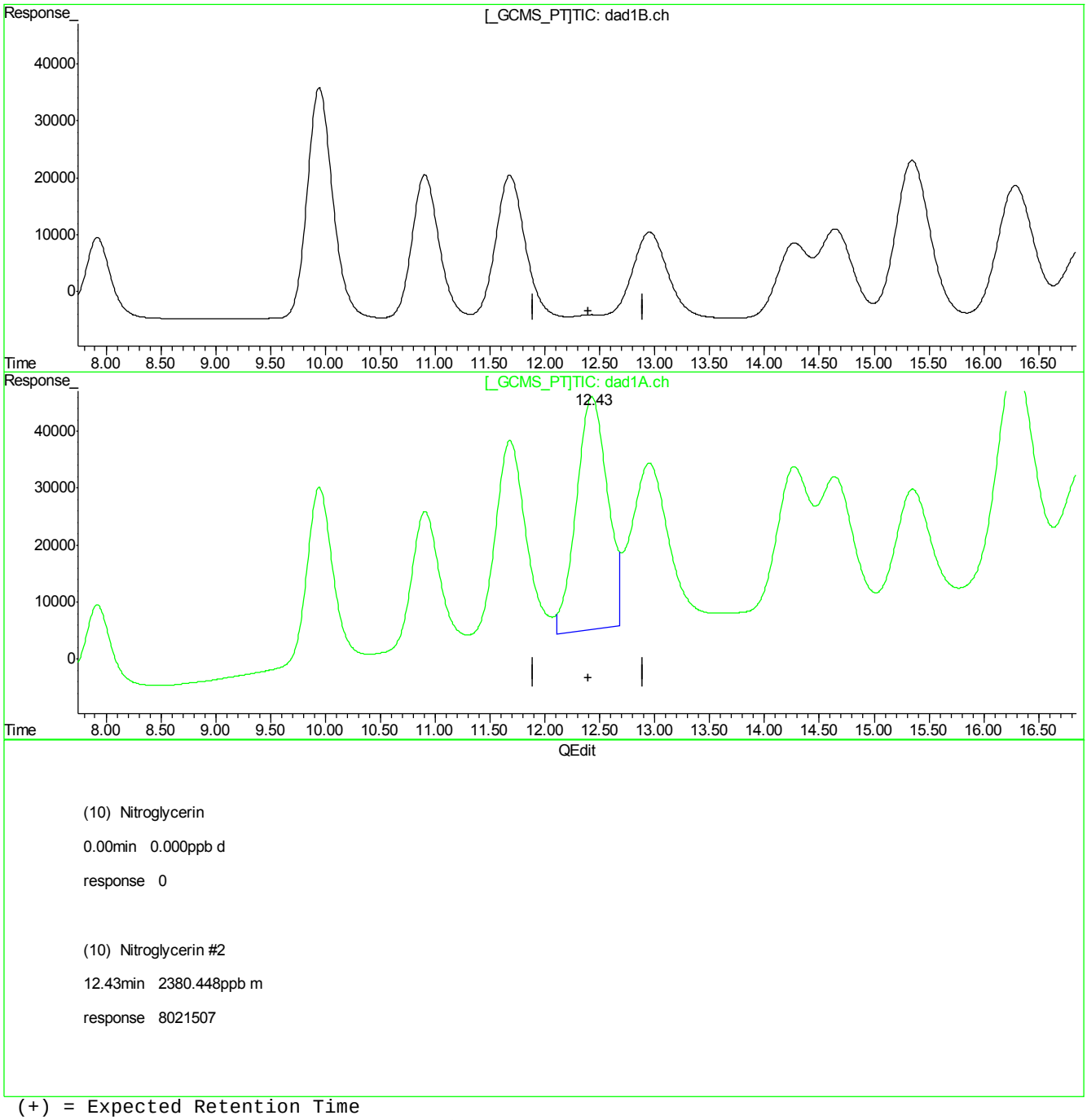
response 11087988

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:19 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.43min 2380.448ppb m

response 8021507

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:35 2018

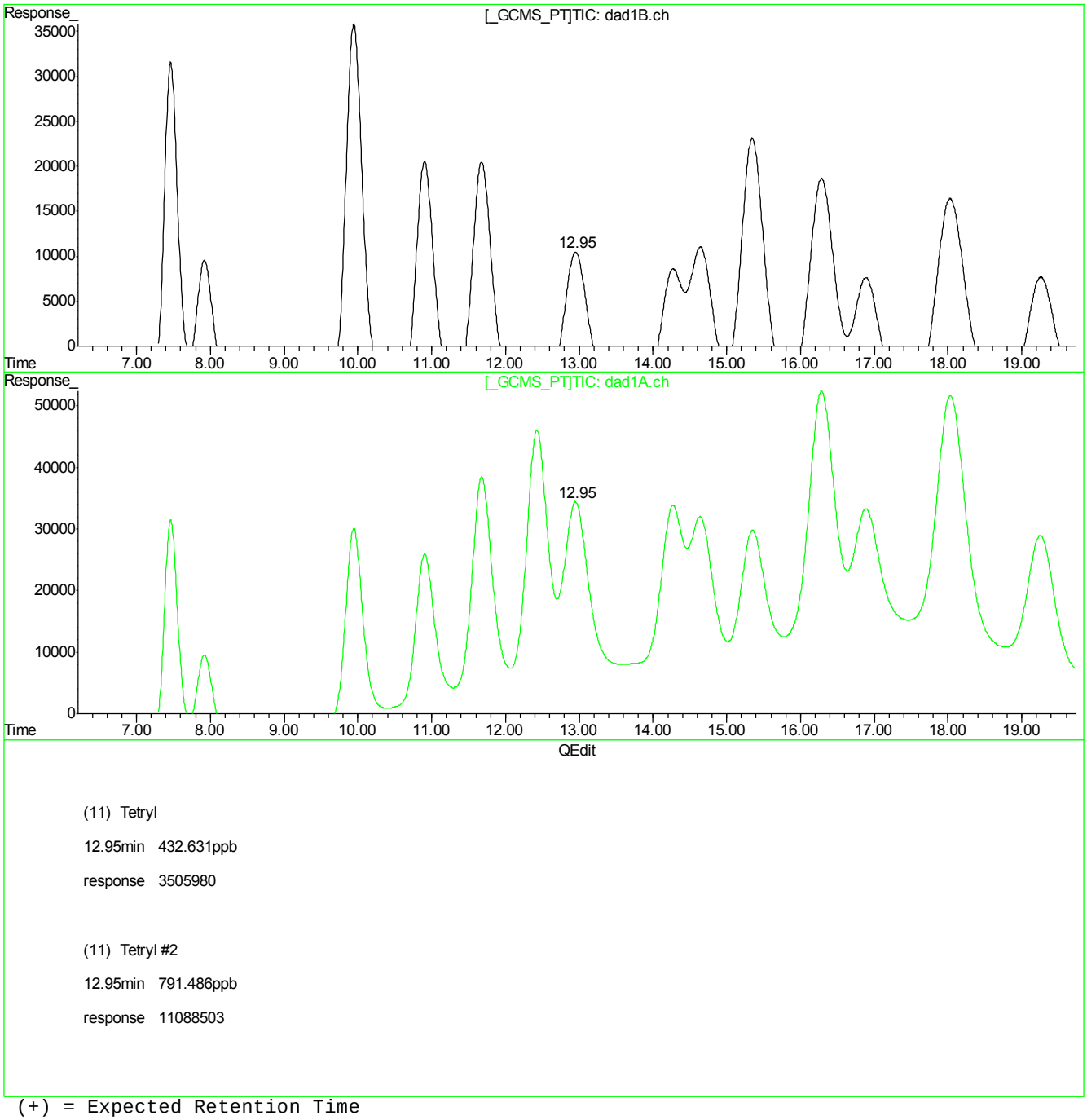
7.3.6.12

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(11) Tetryl

12.95min 432.631ppb

response 3505980

(11) Tetryl #2

12.95min 791.486ppb

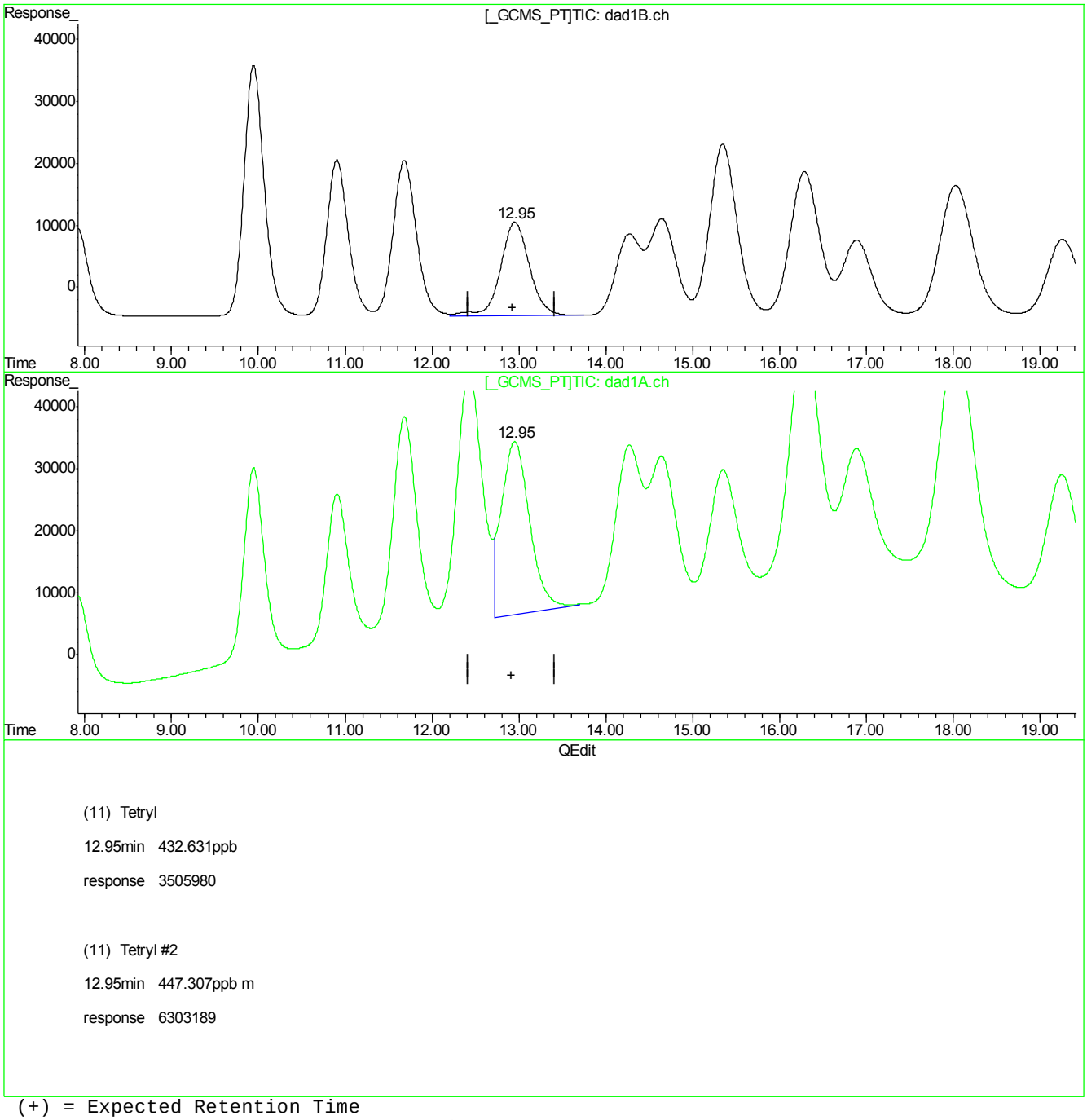
response 11088503

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:41 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(11) Tetryl

12.95min 432.631ppb

response 3505980

(11) Tetryl #2

12.95min 447.307ppb m

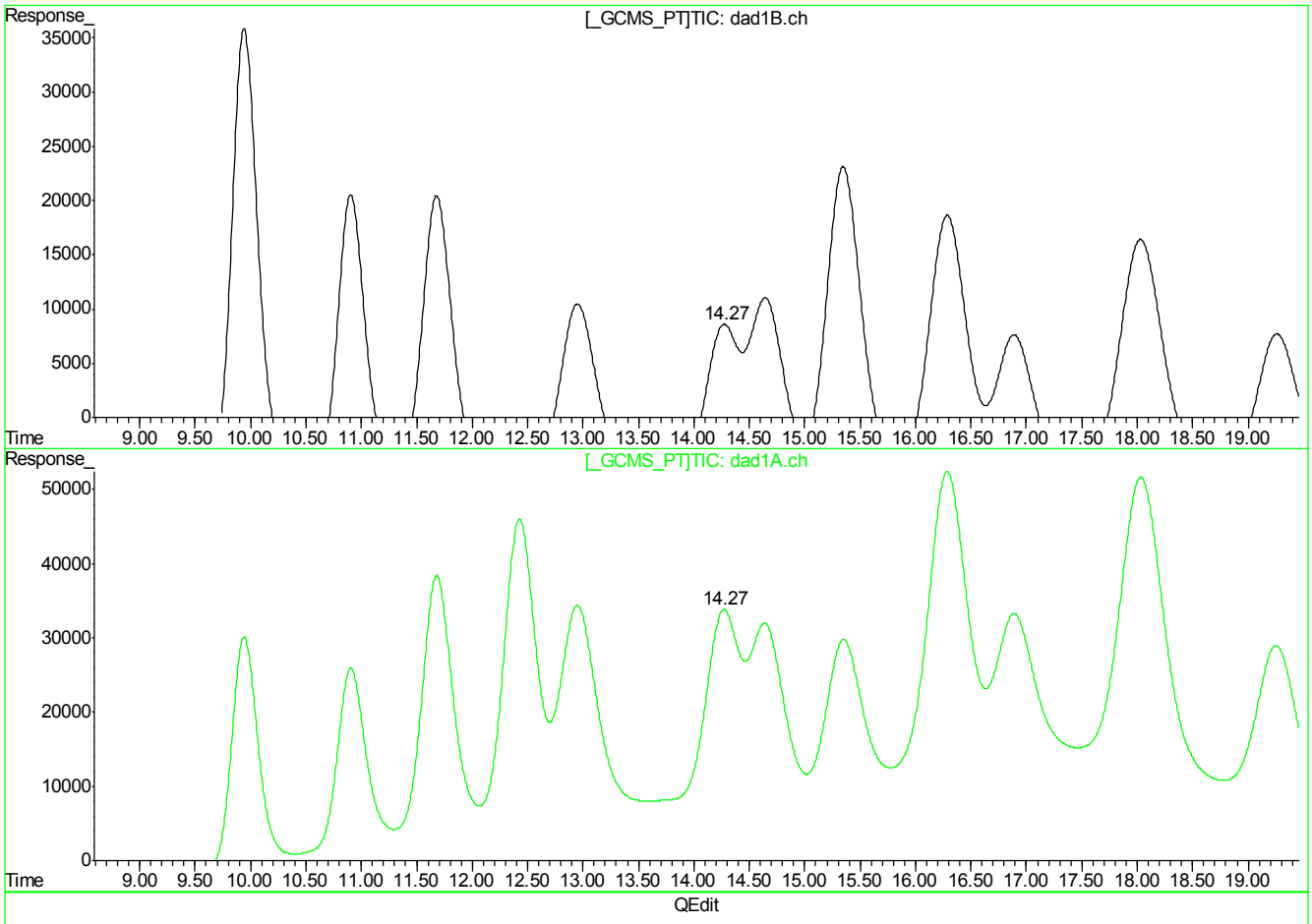
response 6303189

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:51 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.28min 496.546ppb

response 2579498

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 944.575ppb

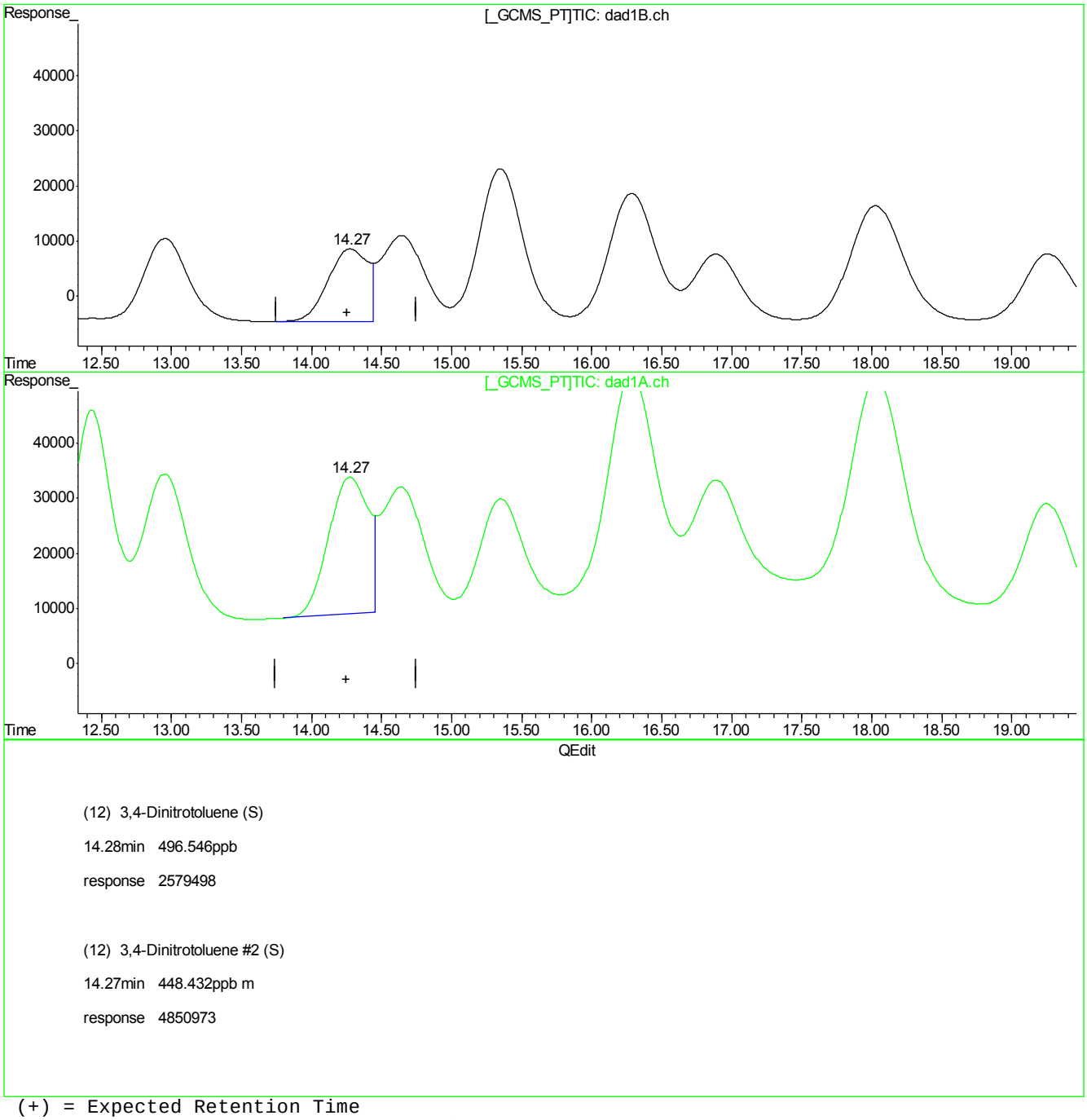
response 10218058

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:57 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.28min 496.546ppb

response 2579498

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 448.432ppb m

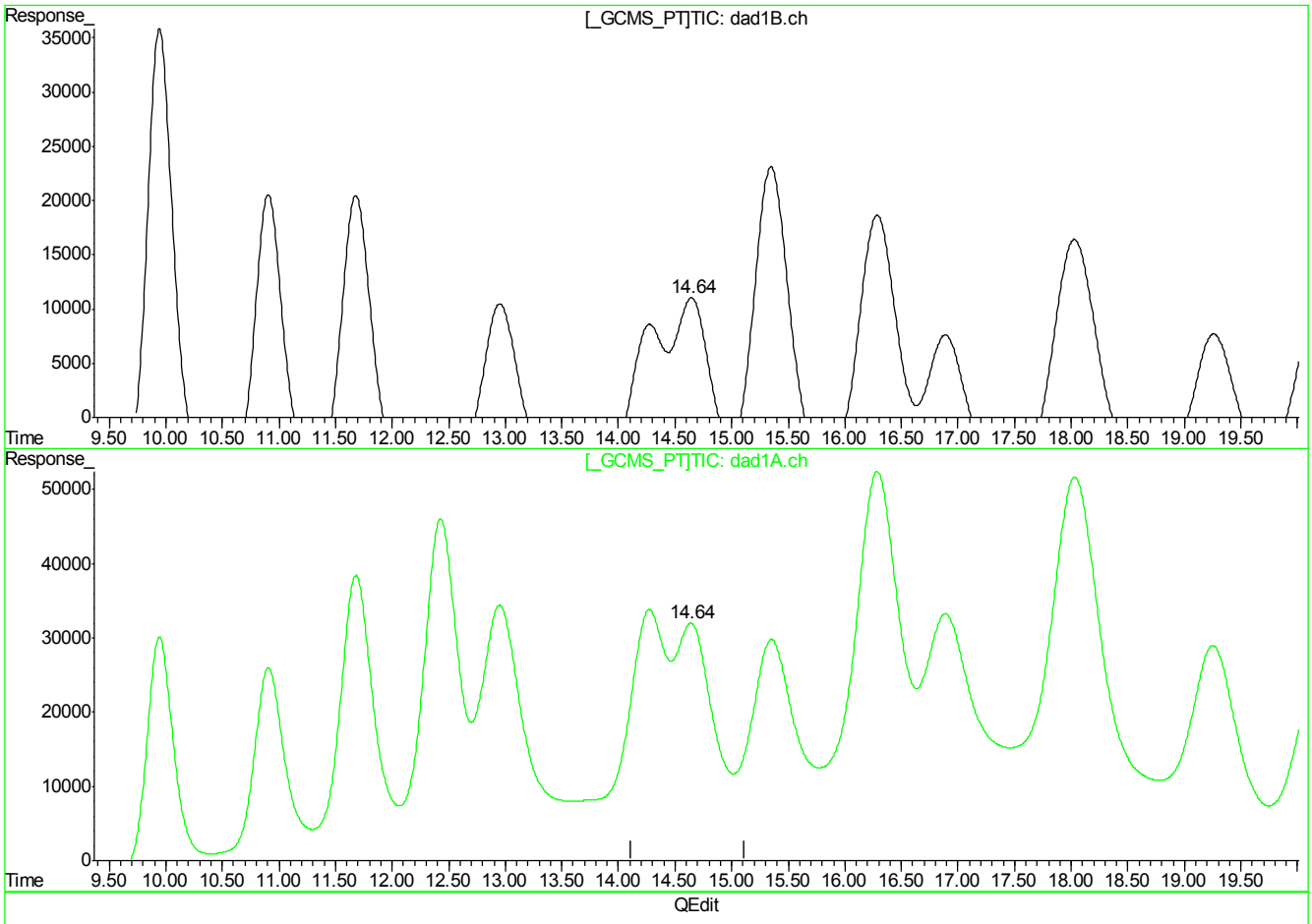
response 4850973

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.64min 474.802ppb

response 3394647

(13) 2,6-Dinitrotoluene #2

14.64min 798.456ppb

response 8101179

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:12 2018

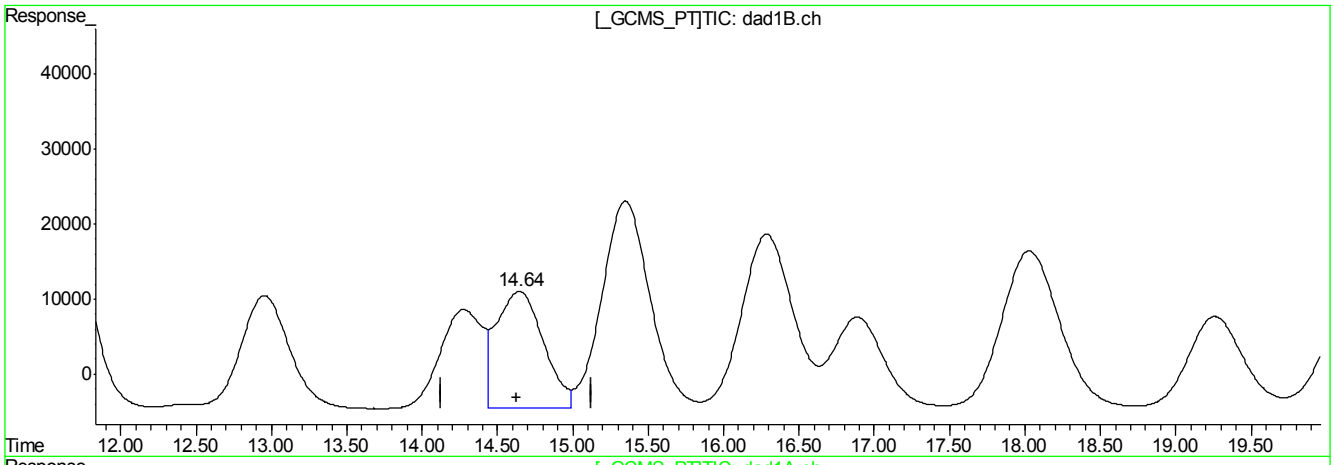
7.3.6.17

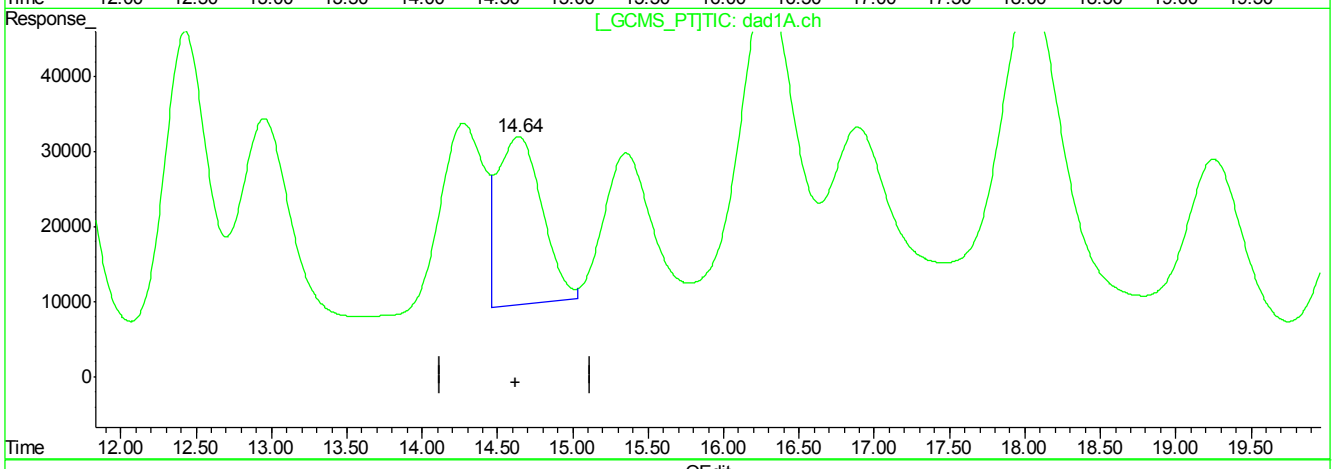
7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(13) 2,6-Dinitrotoluene

14.64min 474.802ppb

response 3394647

(13) 2,6-Dinitrotoluene #2

14.64min 452.231ppb m

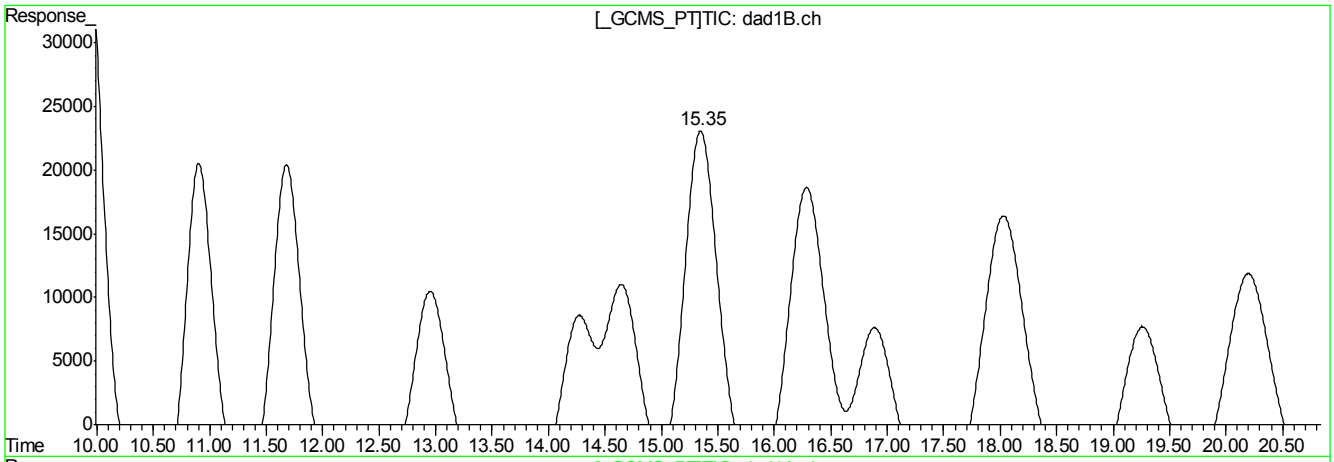
response 4588360

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:21 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.35min 464.817ppb

response 6093328

(14) 2,4-Dinitrotoluene #2

15.35min 976.312ppb

response 9178960

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:28 2018

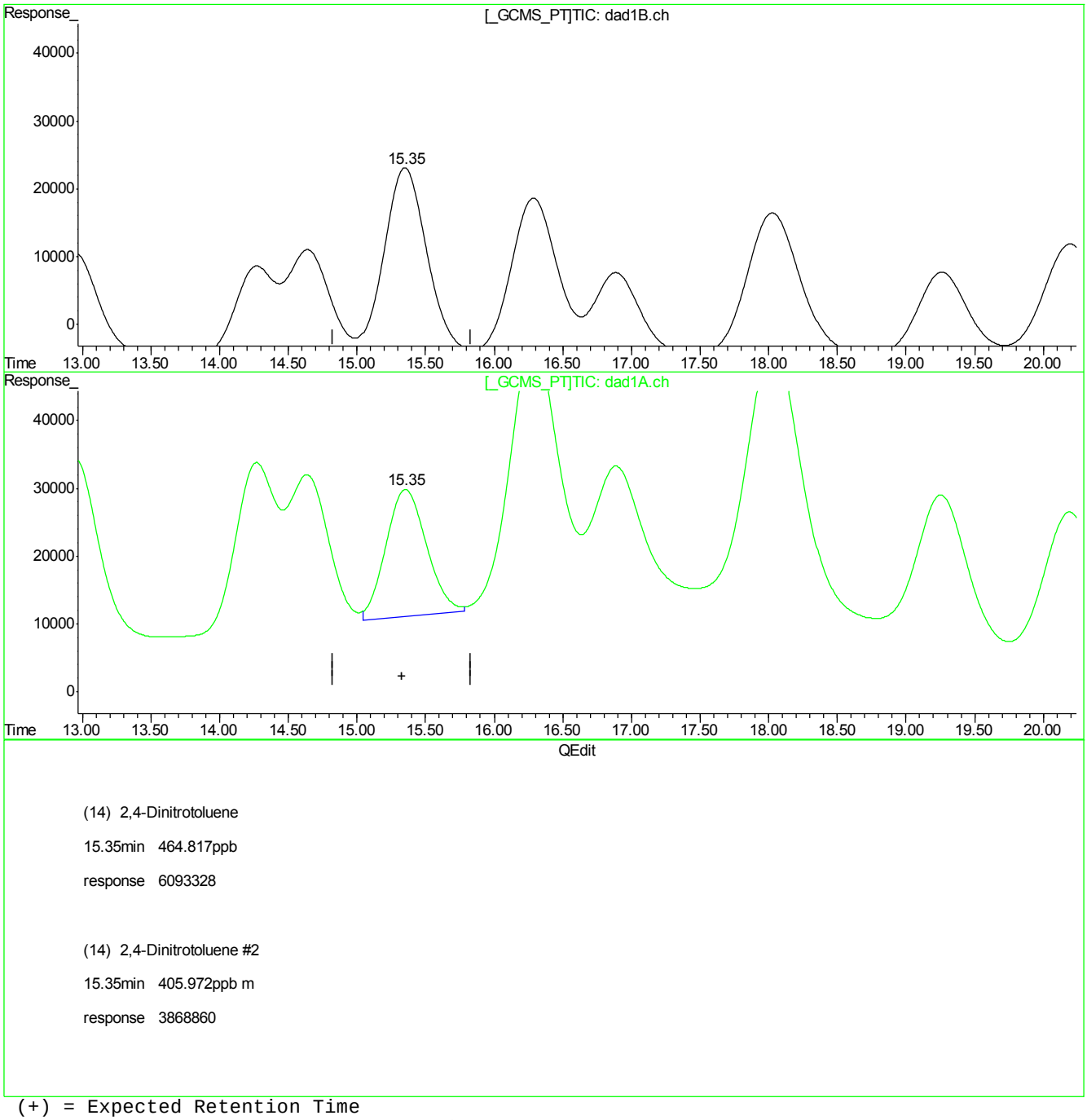
7.3.6.19

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.35min 464.817ppb

response 6093328

(14) 2,4-Dinitrotoluene #2

15.35min 405.972ppb m

response 3868860

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:34 2018

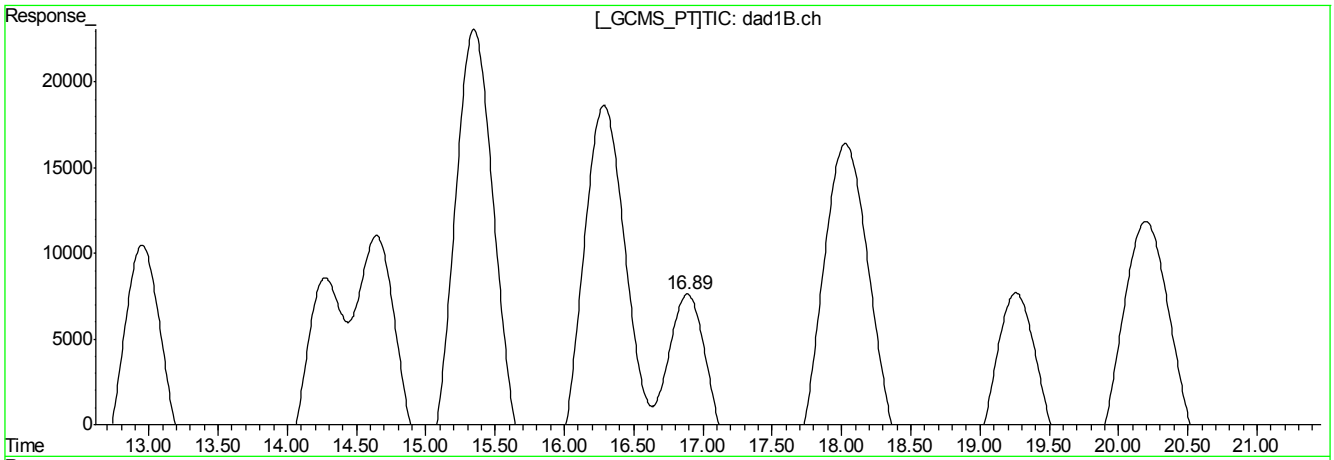
7.3.6.20

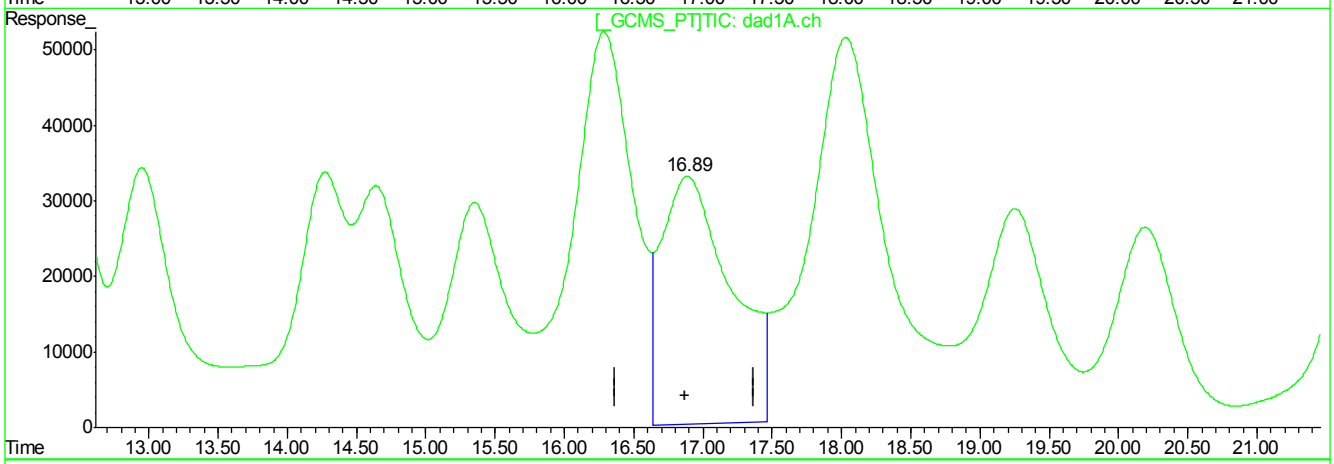
7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(15) o-Nitrotoluene

16.89min 484.944ppb

response 2801324

(15) o-Nitrotoluene #2

16.89min 1333.045ppb

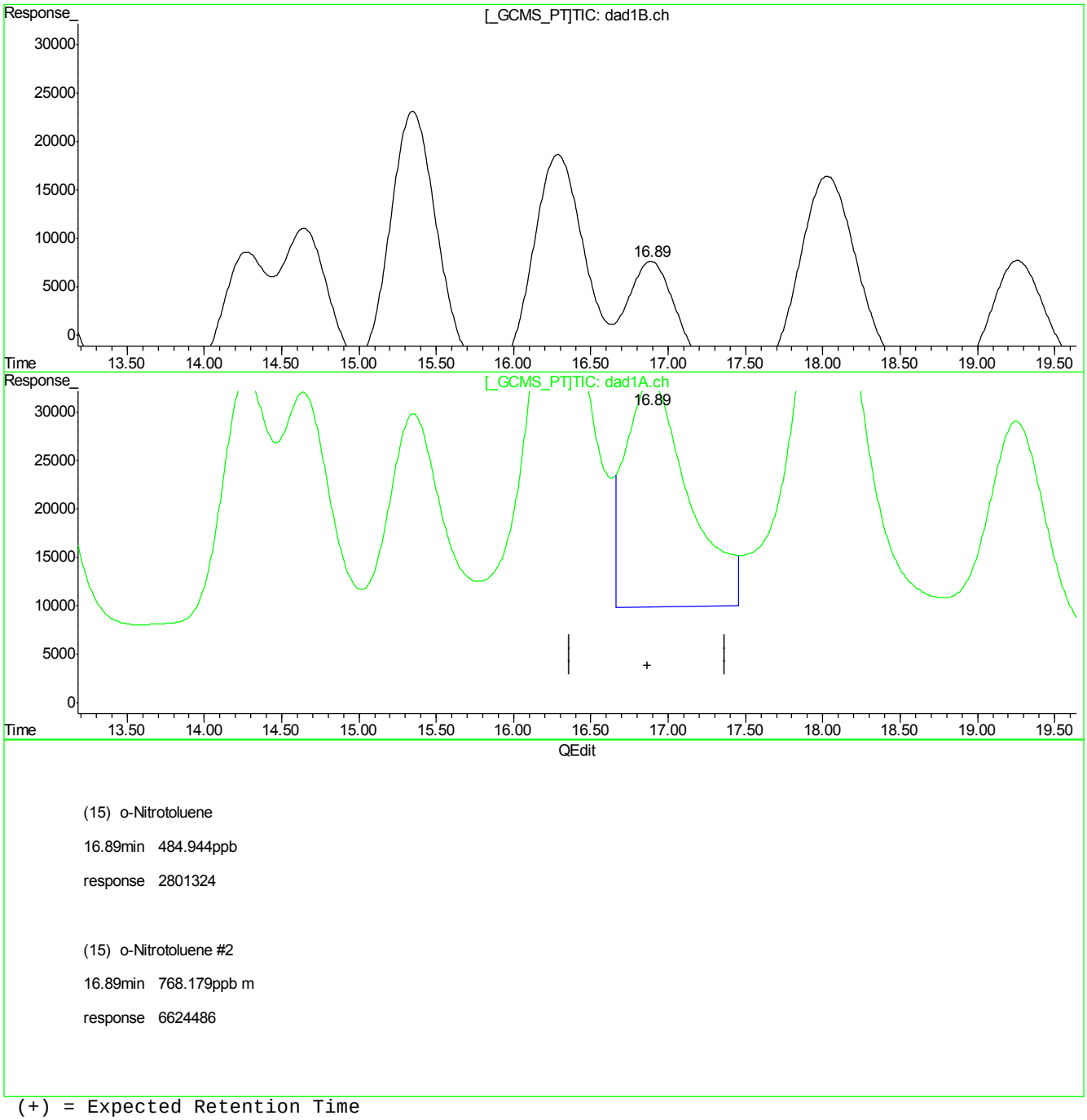
response 11495683

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:39 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.89min 484.944ppb

response 2801324

(15) o-Nitrotoluene #2

16.89min 768.179ppb m

response 6624486

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:12 2018

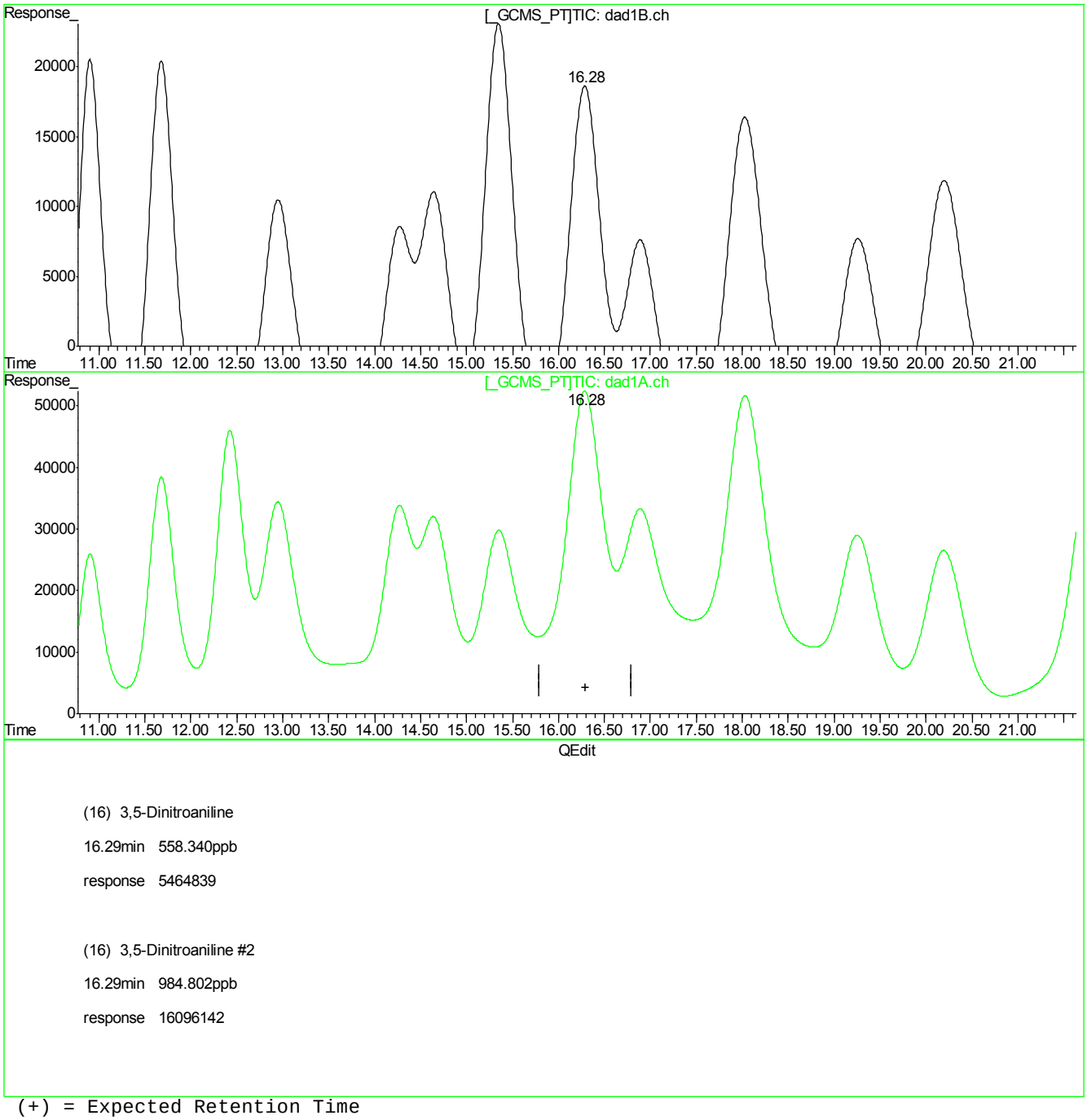
7.3.6.22

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.29min 558.340ppb

response 5464839

(16) 3,5-Dinitroaniline #2

16.29min 984.802ppb

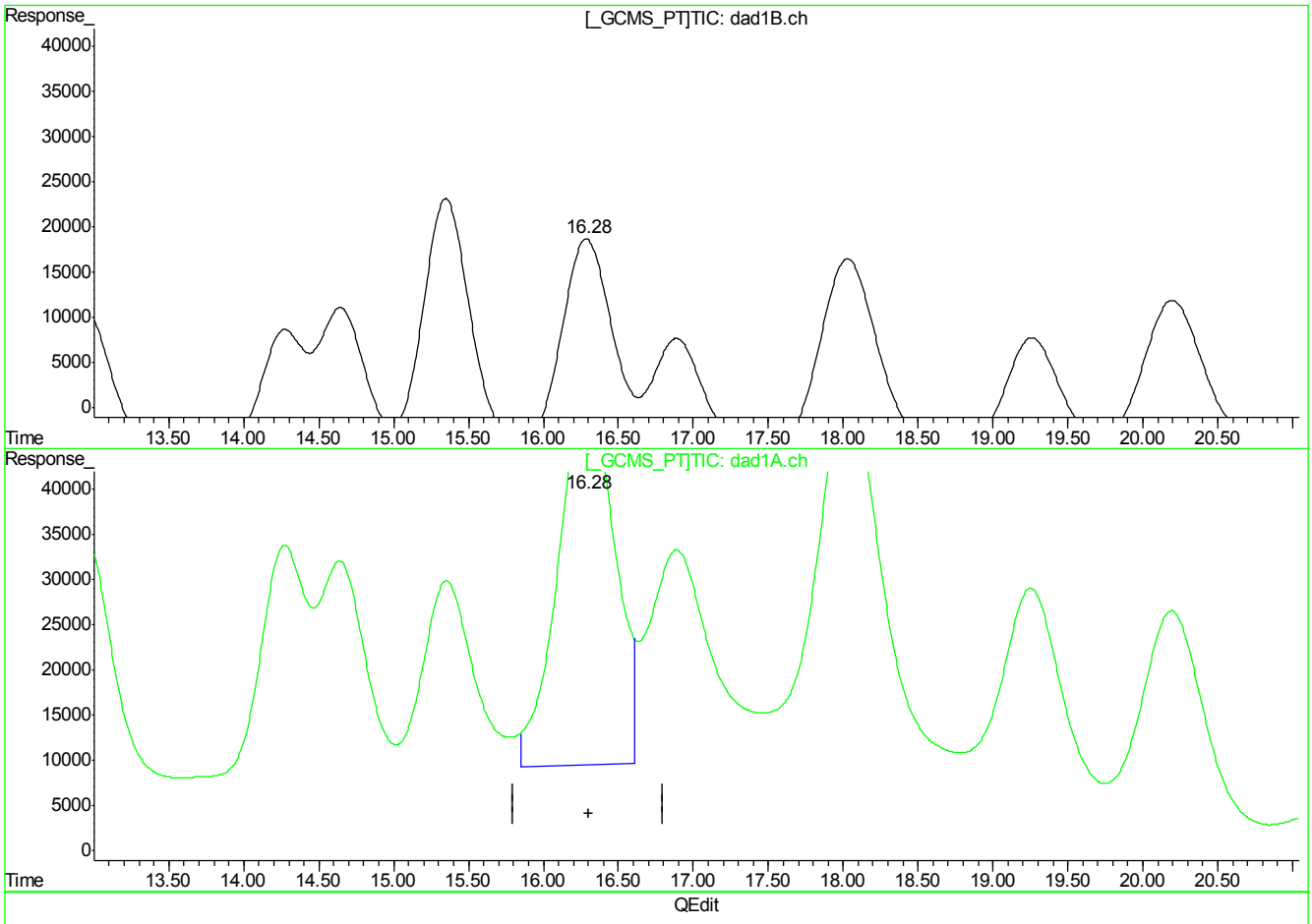
response 16096142

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:19 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.29min 558.340ppb

response 5464839

(16) 3,5-Dinitroaniline #2

16.28min 668.213ppb m

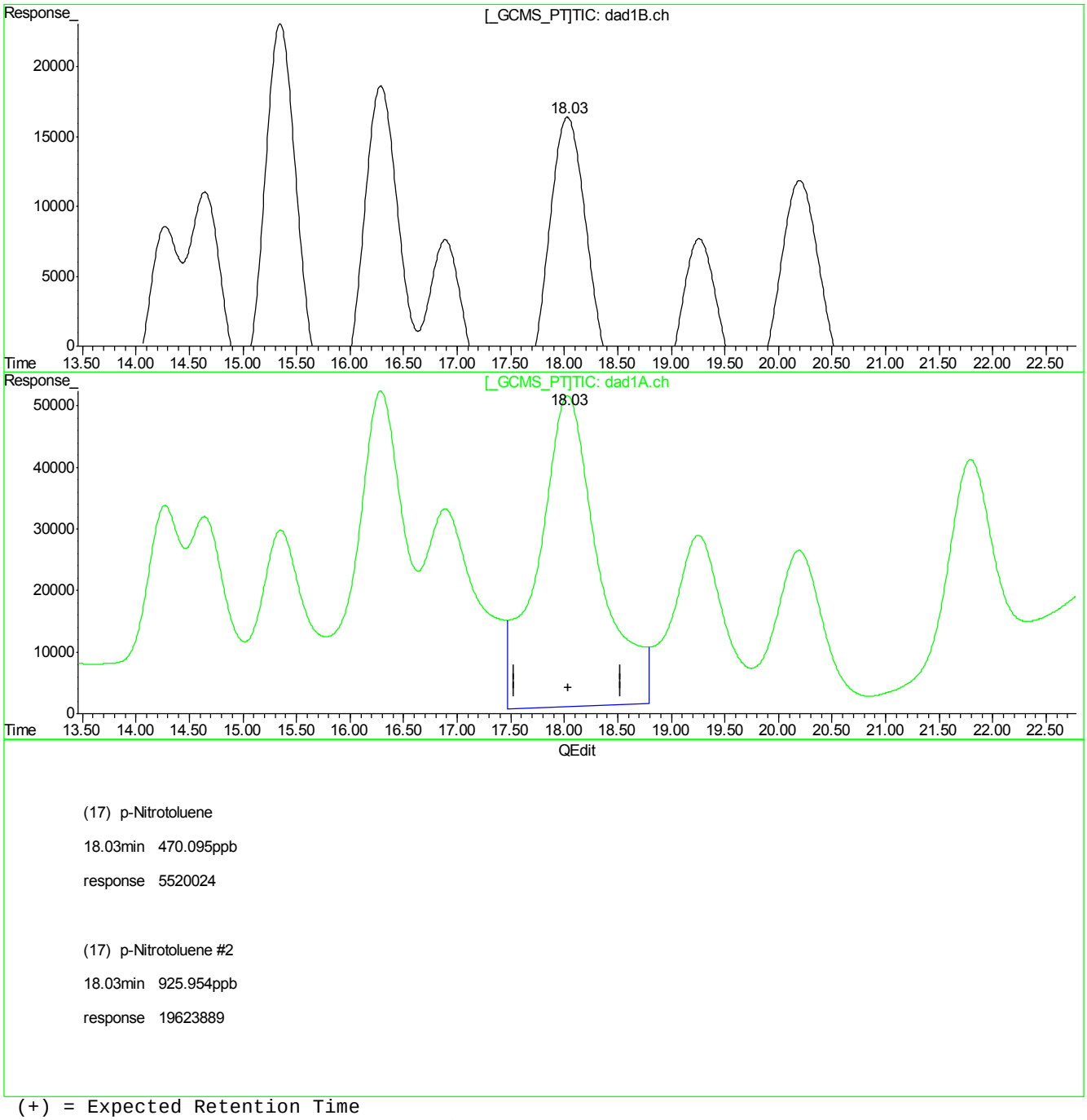
response 10875861

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:30 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.03min 470.095ppb

response 5520024

(17) p-Nitrotoluene #2

18.03min 925.954ppb

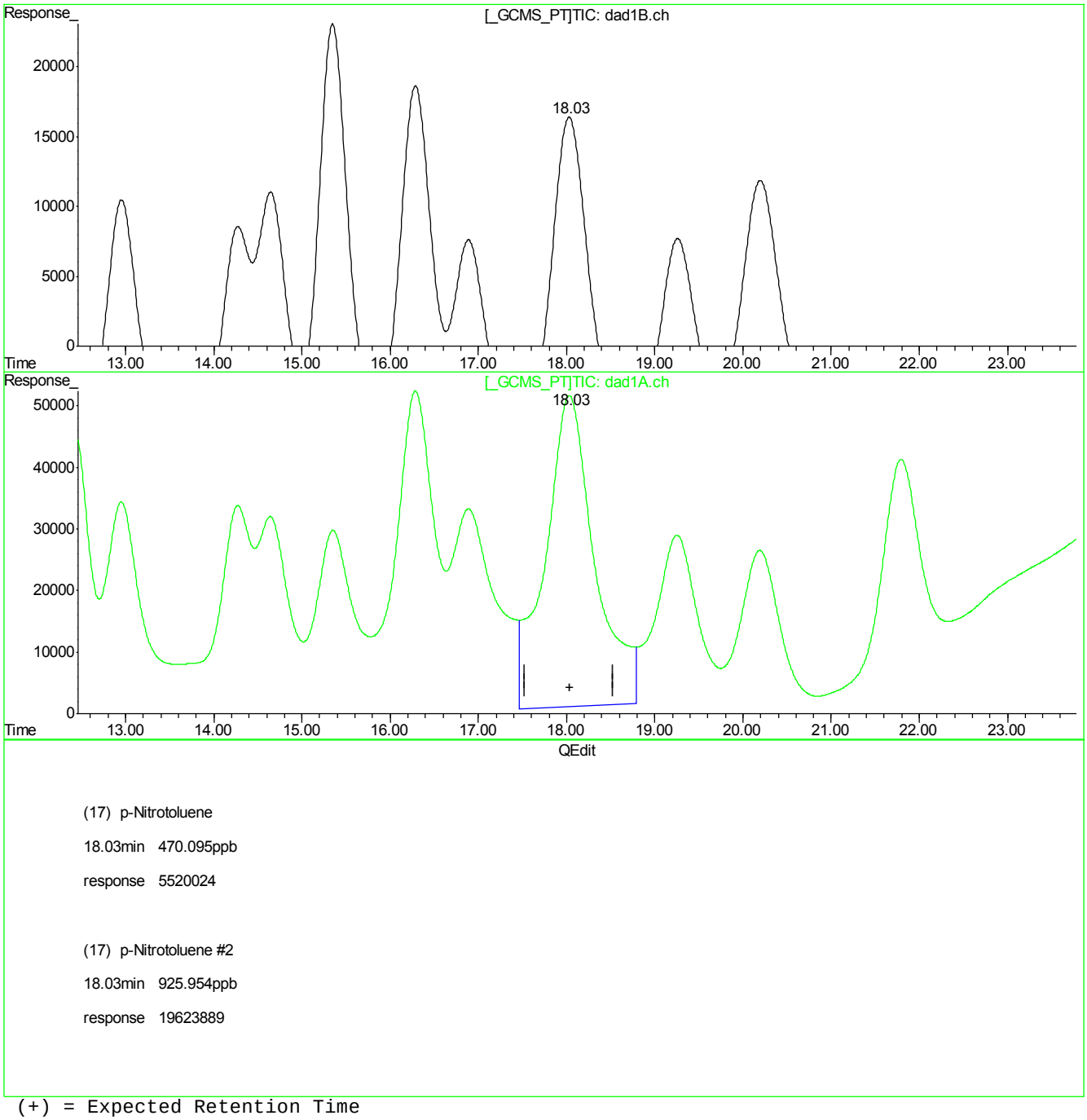
response 19623889

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:35 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.03min 470.095ppb

response 5520024

(17) p-Nitrotoluene #2

18.03min 925.954ppb

response 19623889

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:40 2018

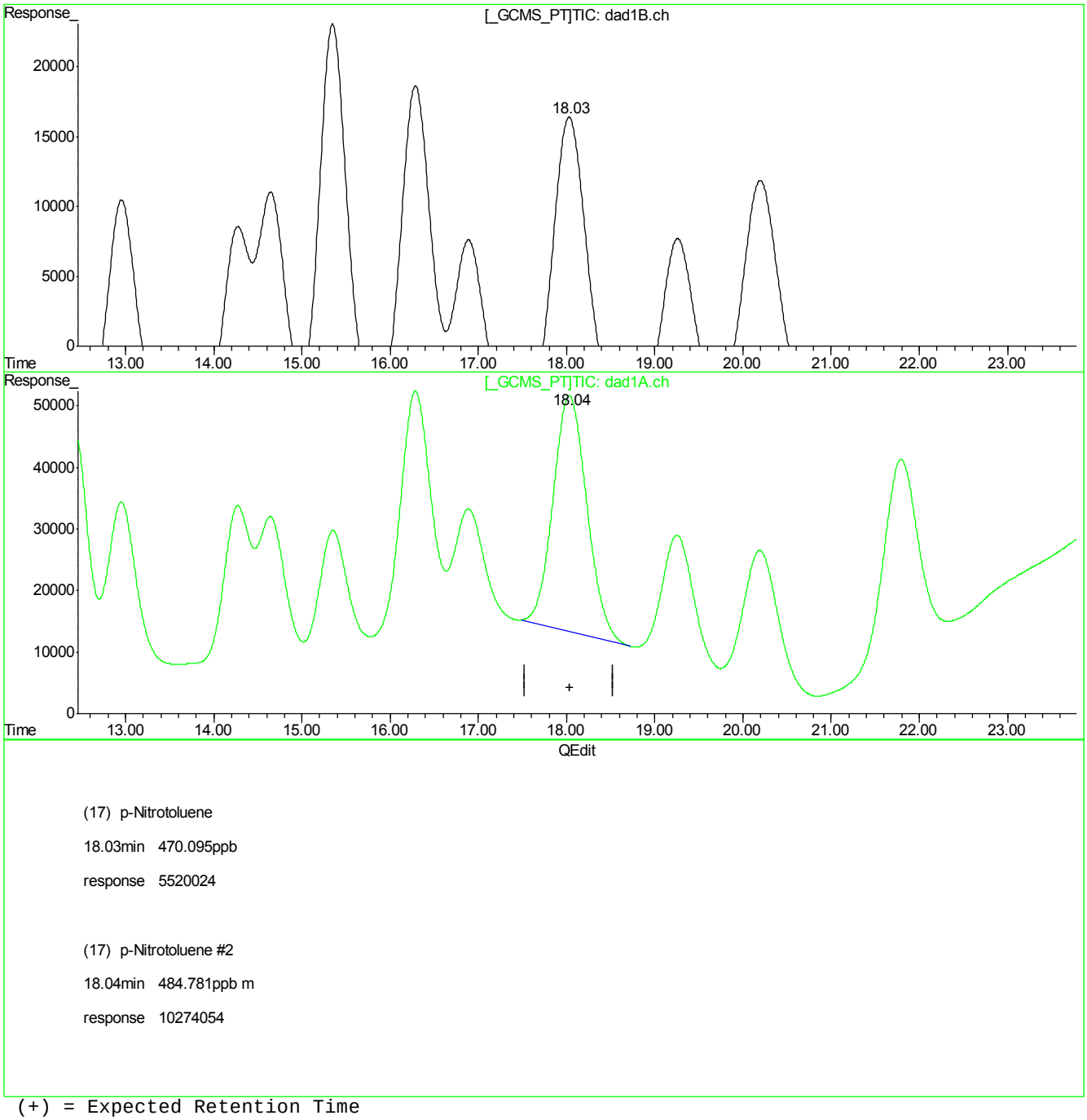
7.3.6.26

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.03min 470.095ppb

response 5520024

(17) p-Nitrotoluene #2

18.04min 484.781ppb m

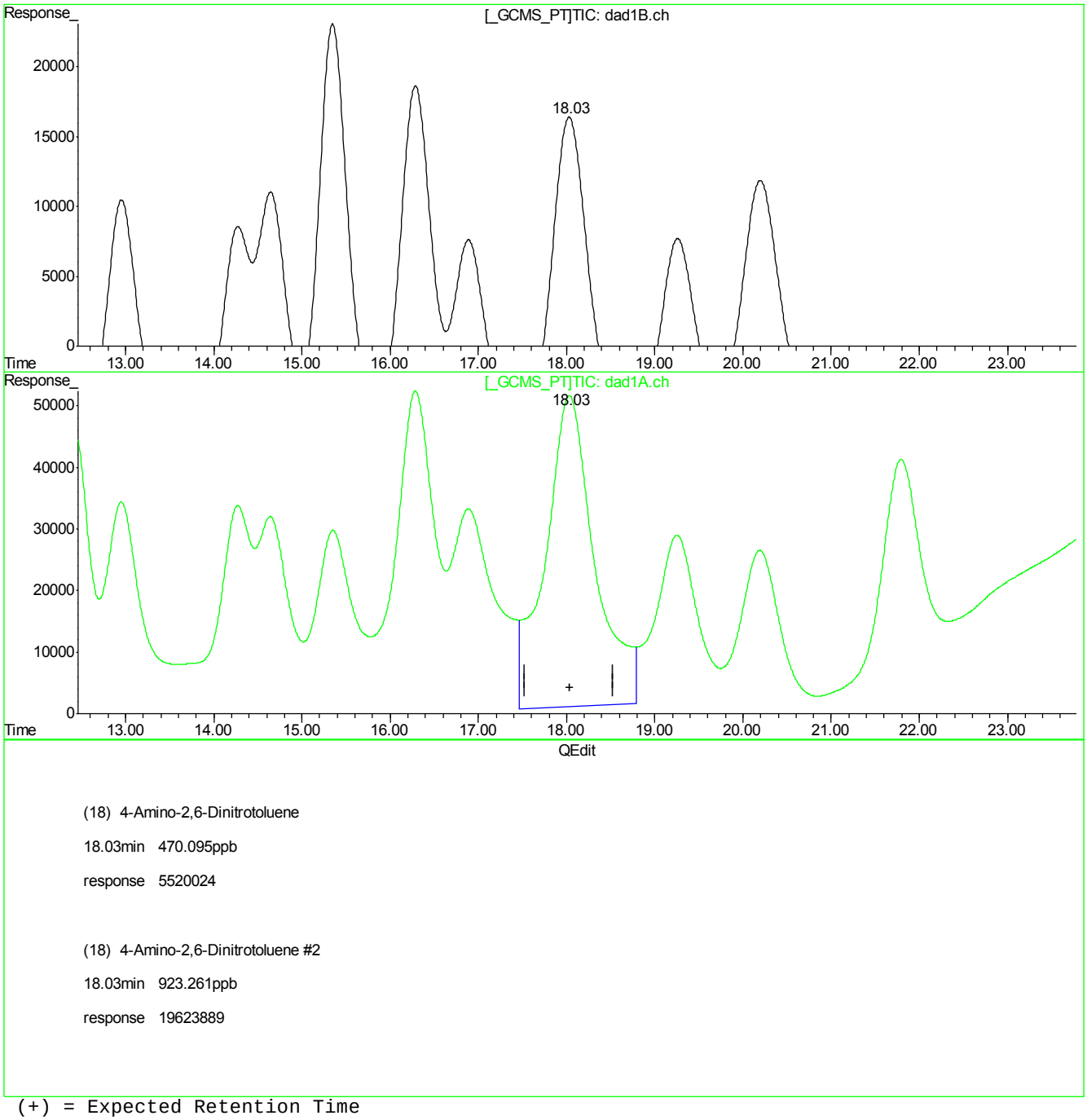
response 10274054

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:50 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.03min 470.095ppb

response 5520024

(18) 4-Amino-2,6-Dinitrotoluene #2

18.03min 923.261ppb

response 19623889

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:11 2018

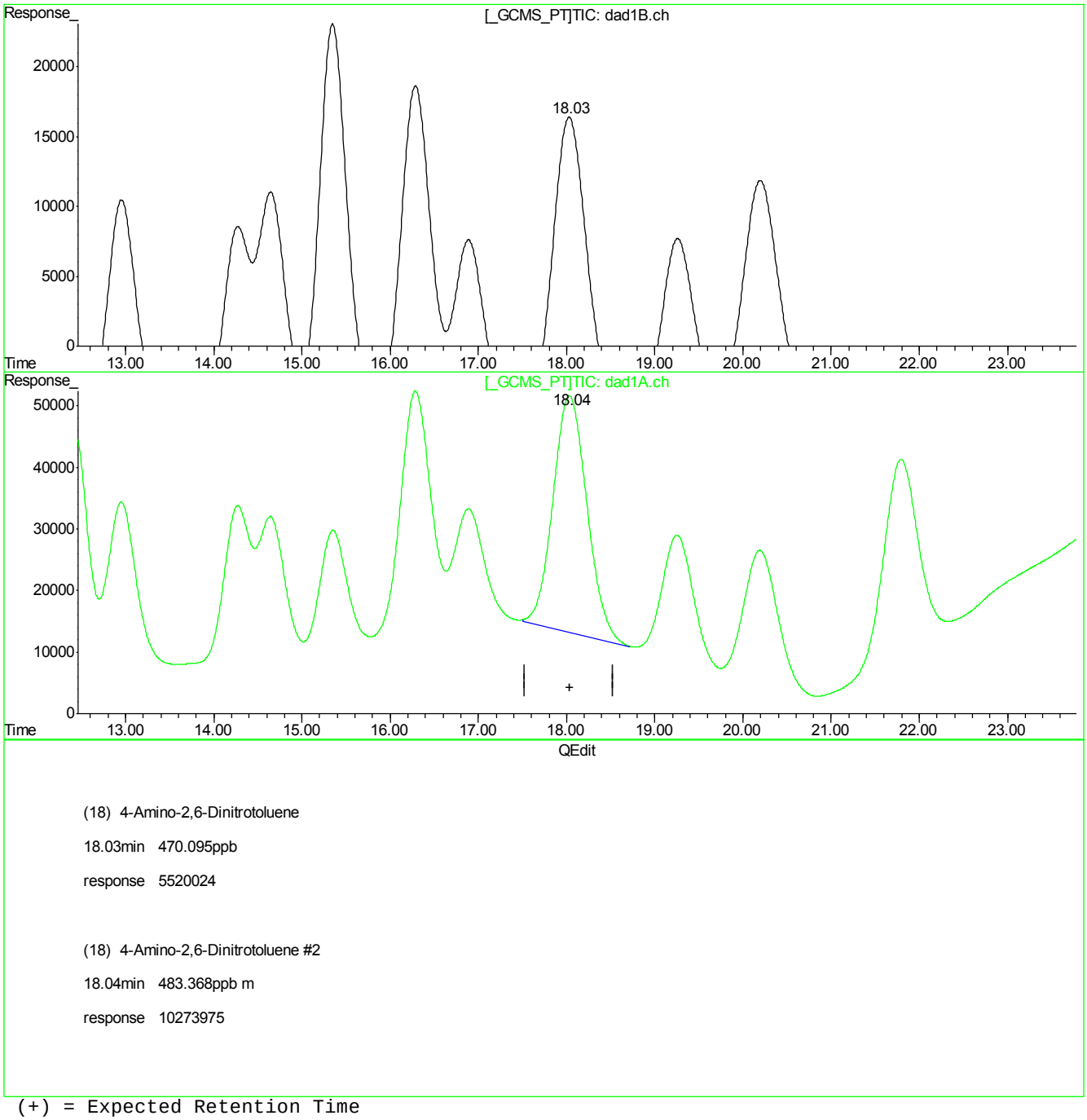
7.3.6.28

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.03min 470.095ppb

response 5520024

(18) 4-Amino-2,6-Dinitrotoluene #2

18.04min 483.368ppb m

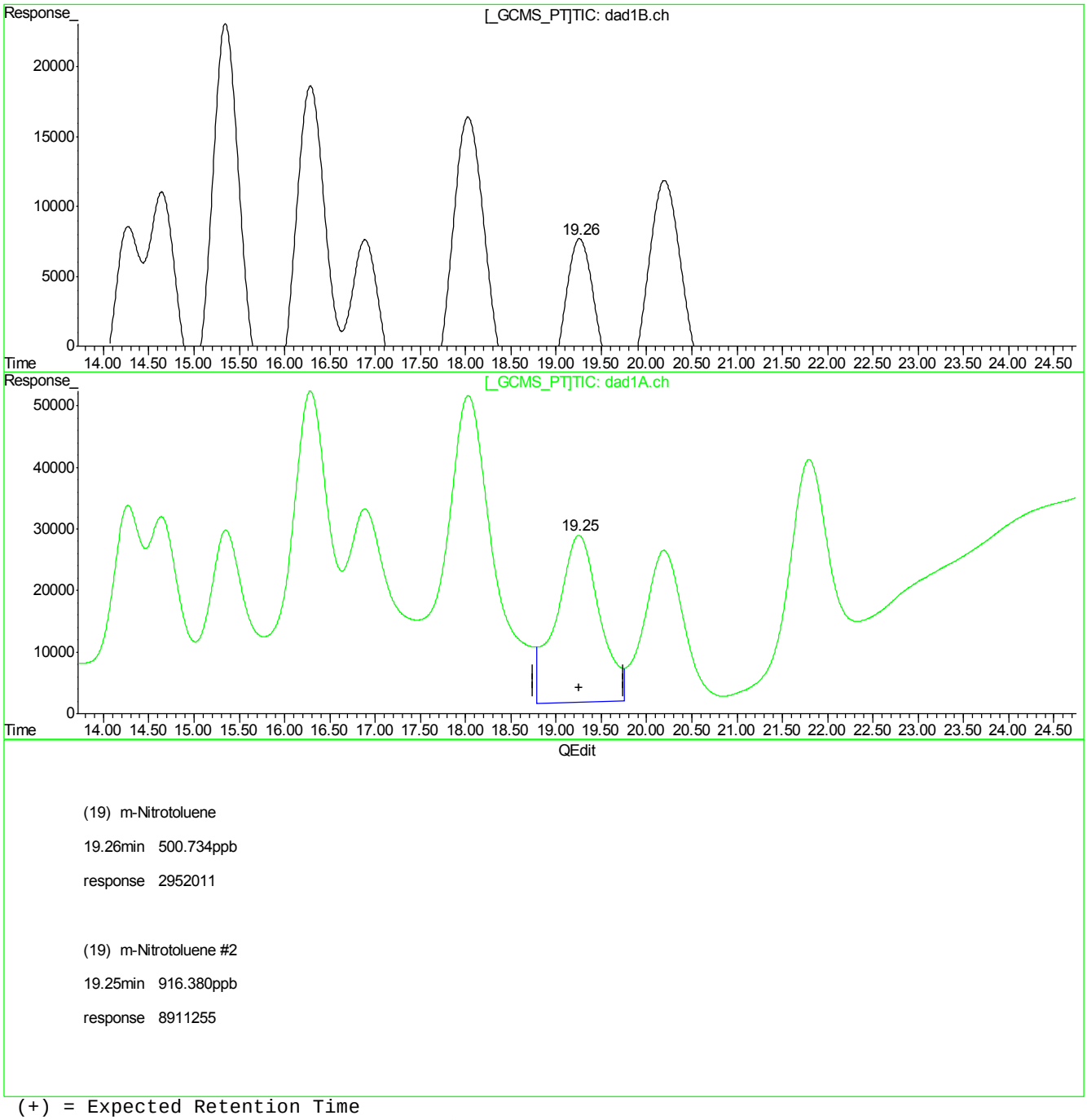
response 10273975

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:17 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.26min 500.734ppb

response 2952011

(19) m-Nitrotoluene #2

19.25min 916.380ppb

response 8911255

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:23 2018

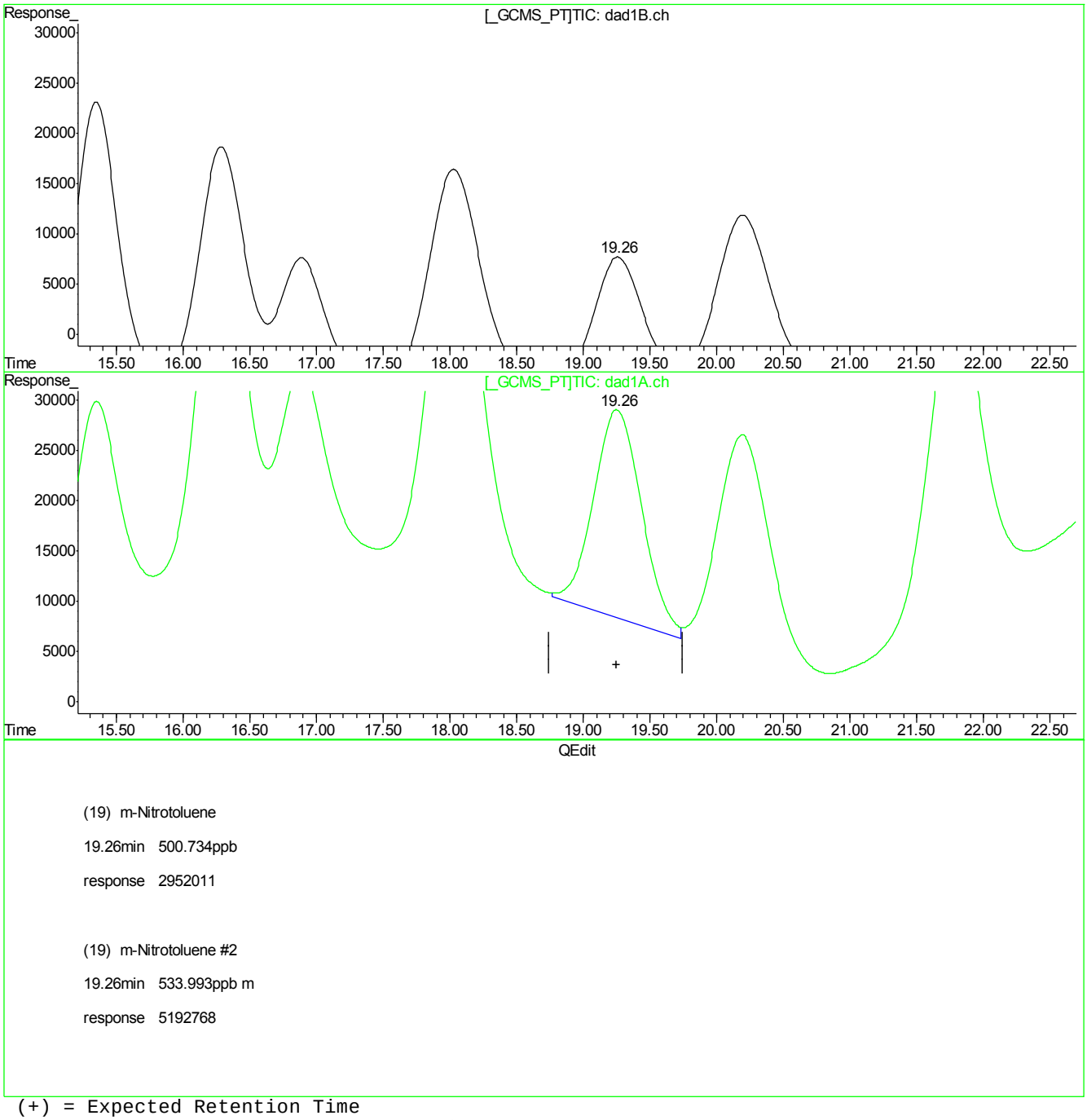
7.3.6.30

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.26min 500.734ppb

response 2952011

(19) m-Nitrotoluene #2

19.26min 533.993ppb m

response 5192768

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:31 2018

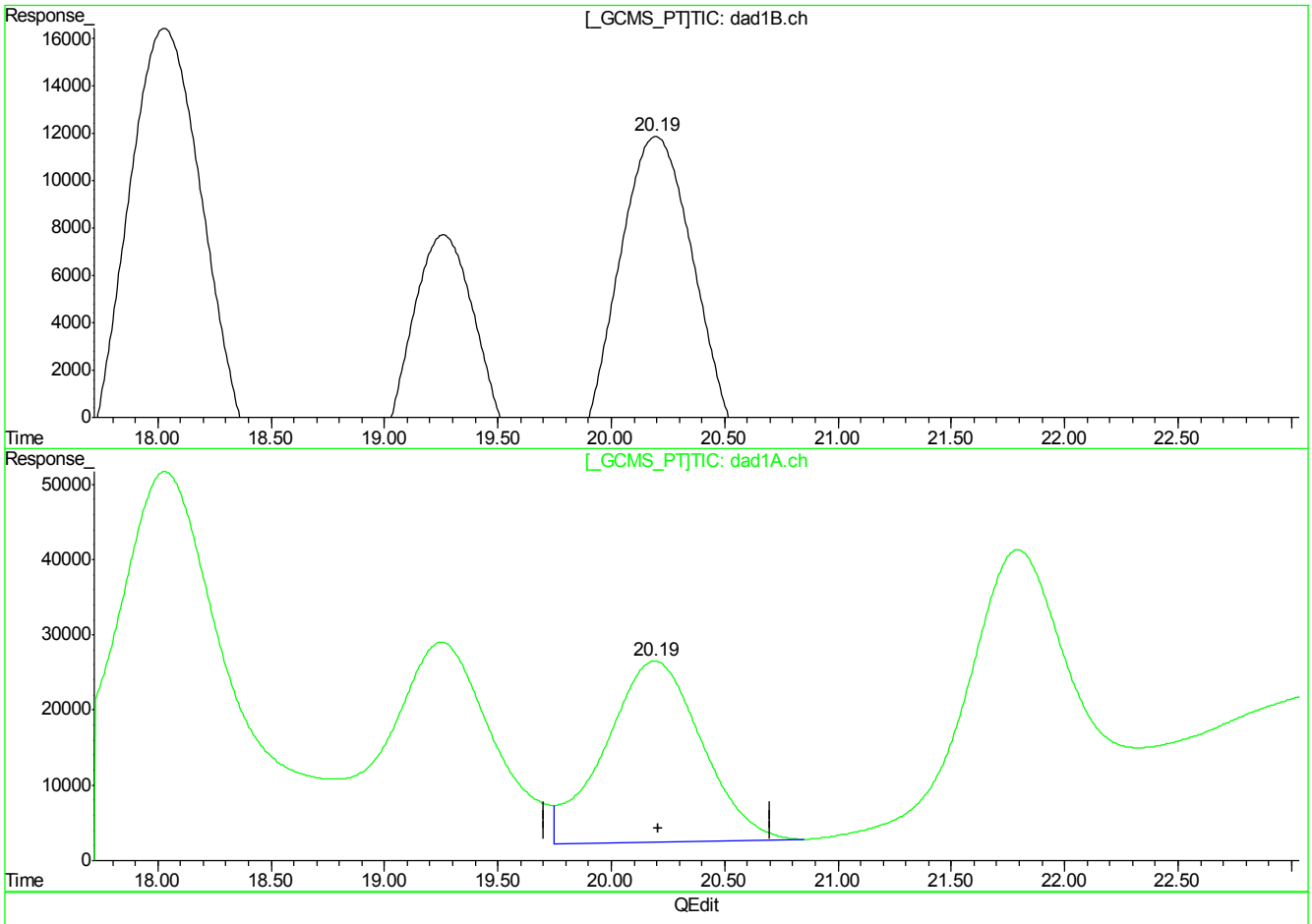
7.3.6.31

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.20min 493.637ppb

response 4454049

(20) 2-Amino-4,6-Dinitrotoluene #2

20.19min 595.630ppb

response 7124503

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:34 2018

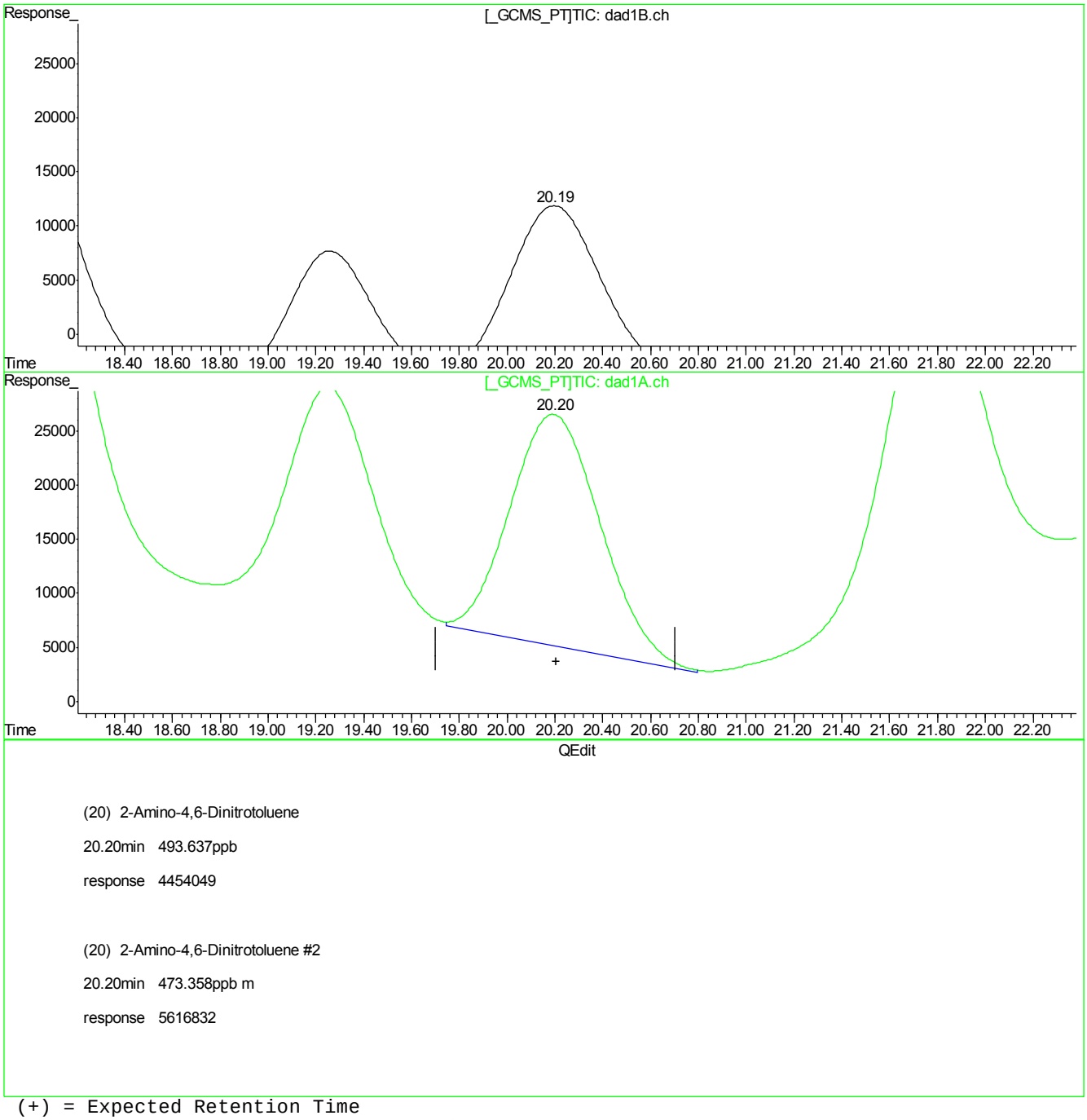
7.3.6.32

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.20min 493.637ppb

response 4454049

(20) 2-Amino-4,6-Dinitrotoluene #2

20.20min 473.358ppb m

response 5616832

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:43 2018

7.3.6.33

7

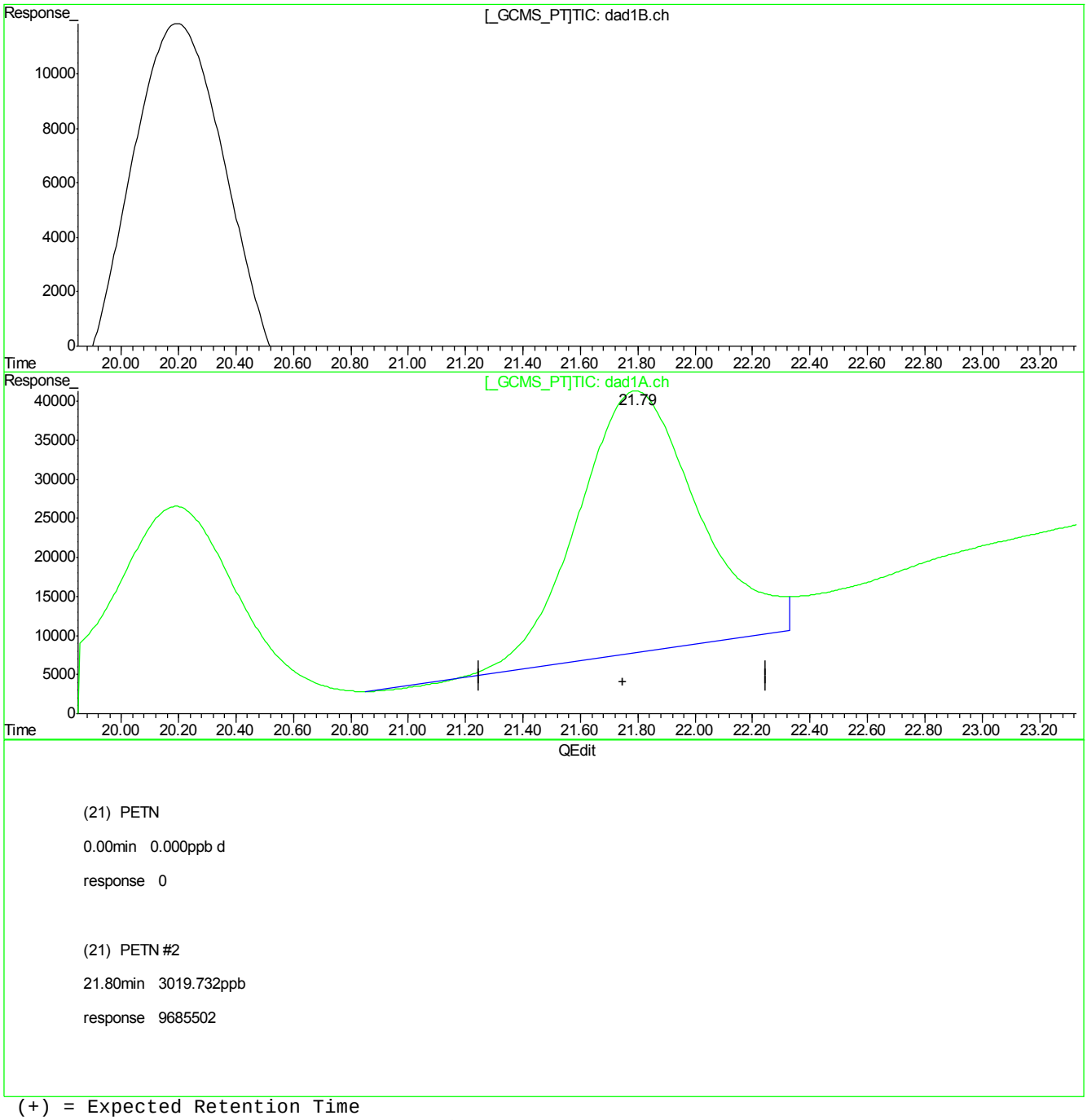
FA53725

GG614647.D edits: 2-Amino-4,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:46 2018

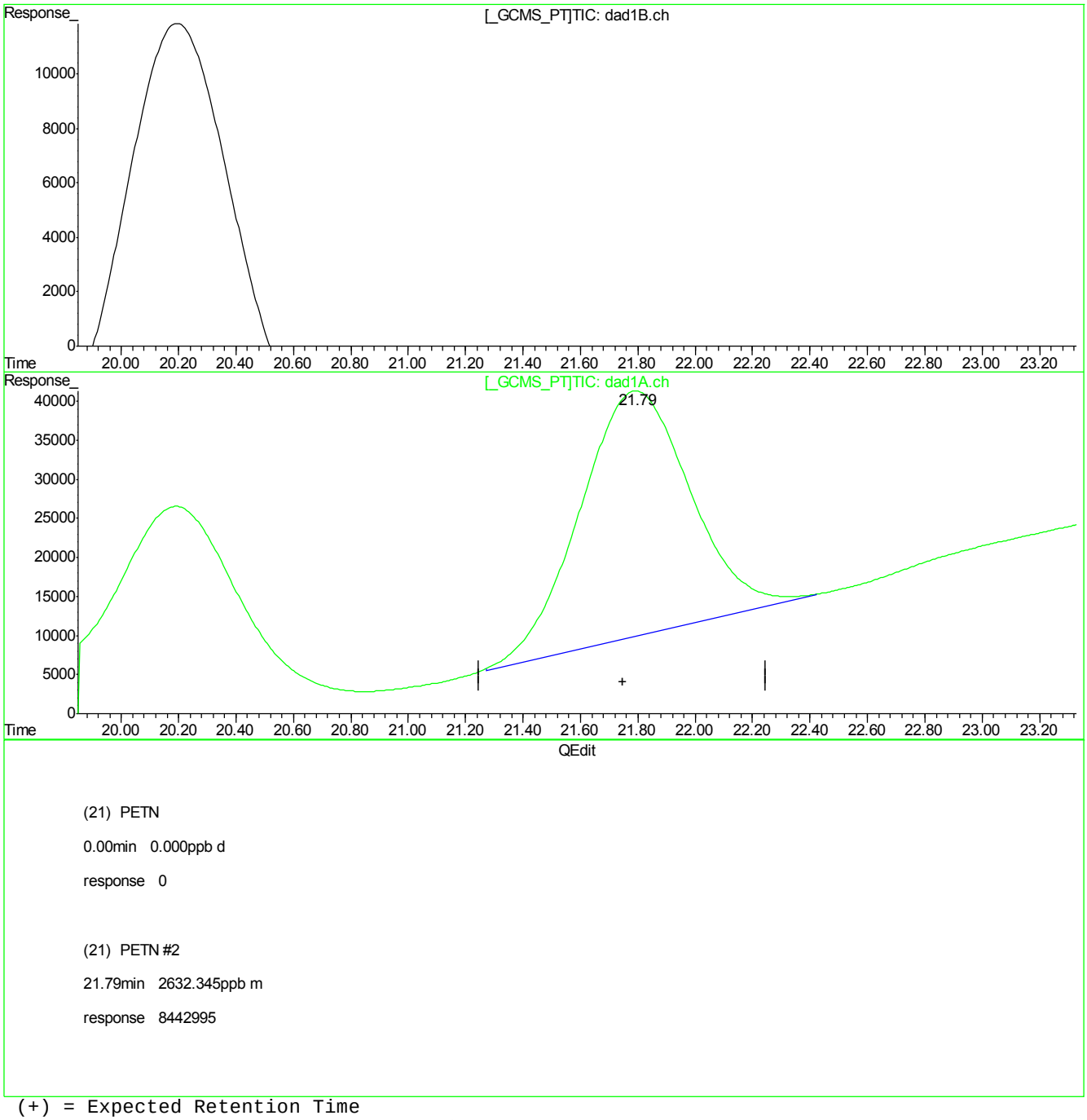
7.3.6.34

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:50 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:15

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:06:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.26	14.25	2532912	4709682	487.578	435.371m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		97.52%	87.07%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1432296	1429144	441.809m	443.592m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.43	7.43	1735946	1740074	167.537	167.952
6)	RDX	7.88	7.88	1305841	1321894	274.096	278.695
7)	1,3-Dinitrobenze	9.92	9.93	1798163	1406667	125.685	106.918m
8)	Nitrobenzene	10.89	10.88	1974938	1766267	209.267	190.723m
9)	2,4,6-Trinitroto	11.65	11.65	472066	611249	46.581	46.607m
10)	Nitroglycerin	0.00	12.40	0	748080	N.D. d	221.999m
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.61	14.60	2065851	2633369	288.946	259.546m
14)	2,4-Dinitrotolue	15.33	15.36	1130404	692473	86.231	72.096m
15)	o-Nitrotoluene	16.88	16.88	1260716	2190070	218.246	253.962m
16)	3,5-Dinitroanili	16.30	16.30	2141541	3596462	219.816	222.284m
17)	p-Nitrotoluene	17.99	17.99	2561006	5458652	218.100	257.567m
18)	4-Amino-2,6-Dini	17.99	17.99	2561006	5283481	218.100	248.576m
19)	m-Nitrotoluene	19.27	19.25	1984633	3263018	336.643	335.549m
20)	2-Amino-4,6-Dini	20.22	20.21	3679287	4663466	407.771	395.047m
21)	PETN	0.00	21.81	0	730069	N.D. d	227.620m

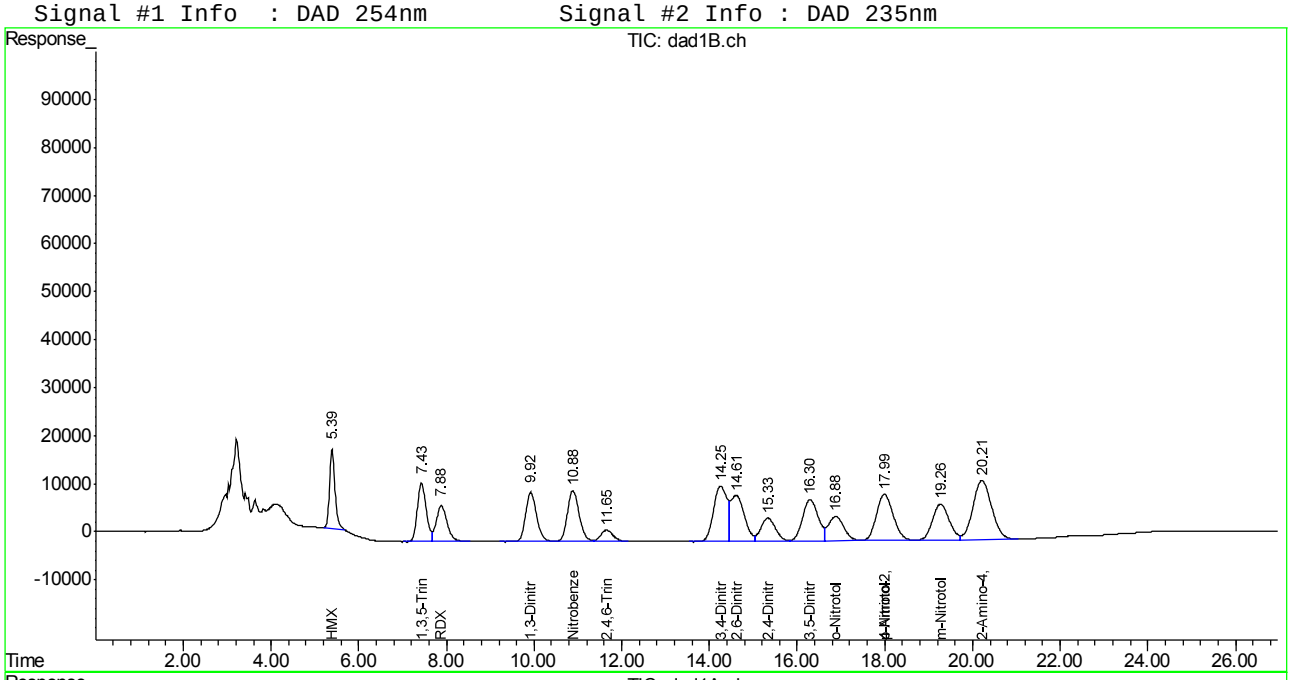
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:28:56 2018 Page 1

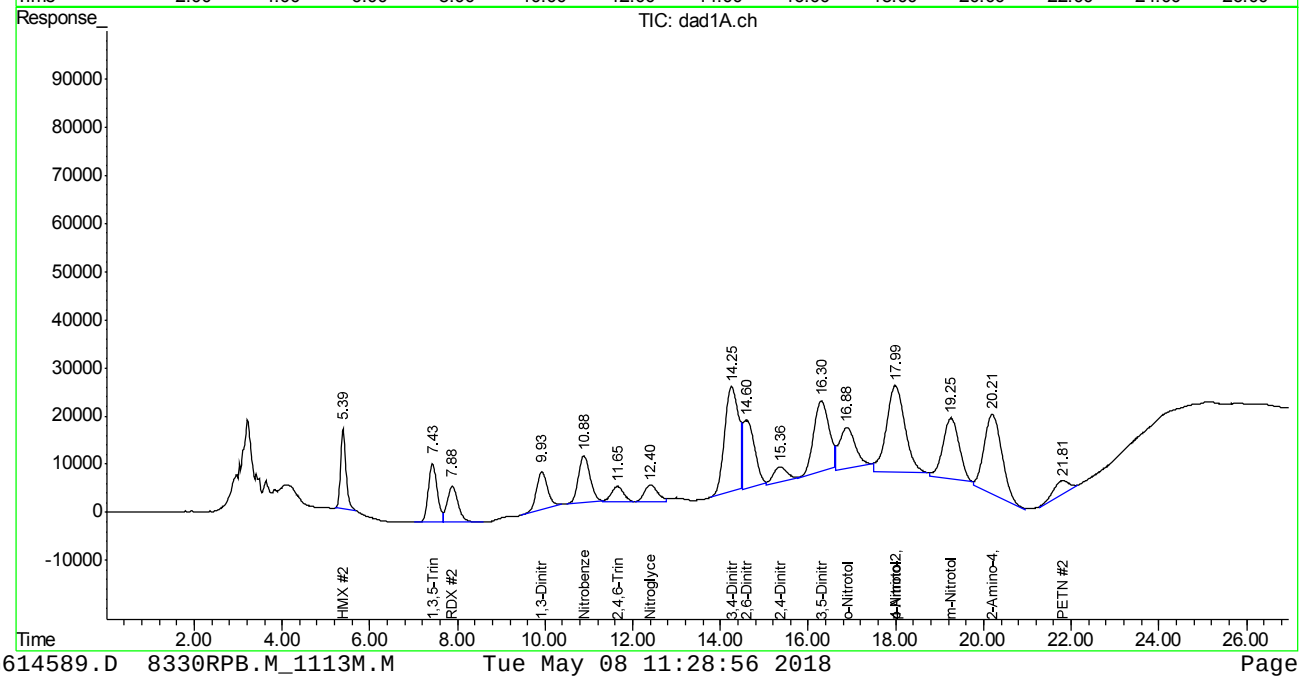
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:28 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

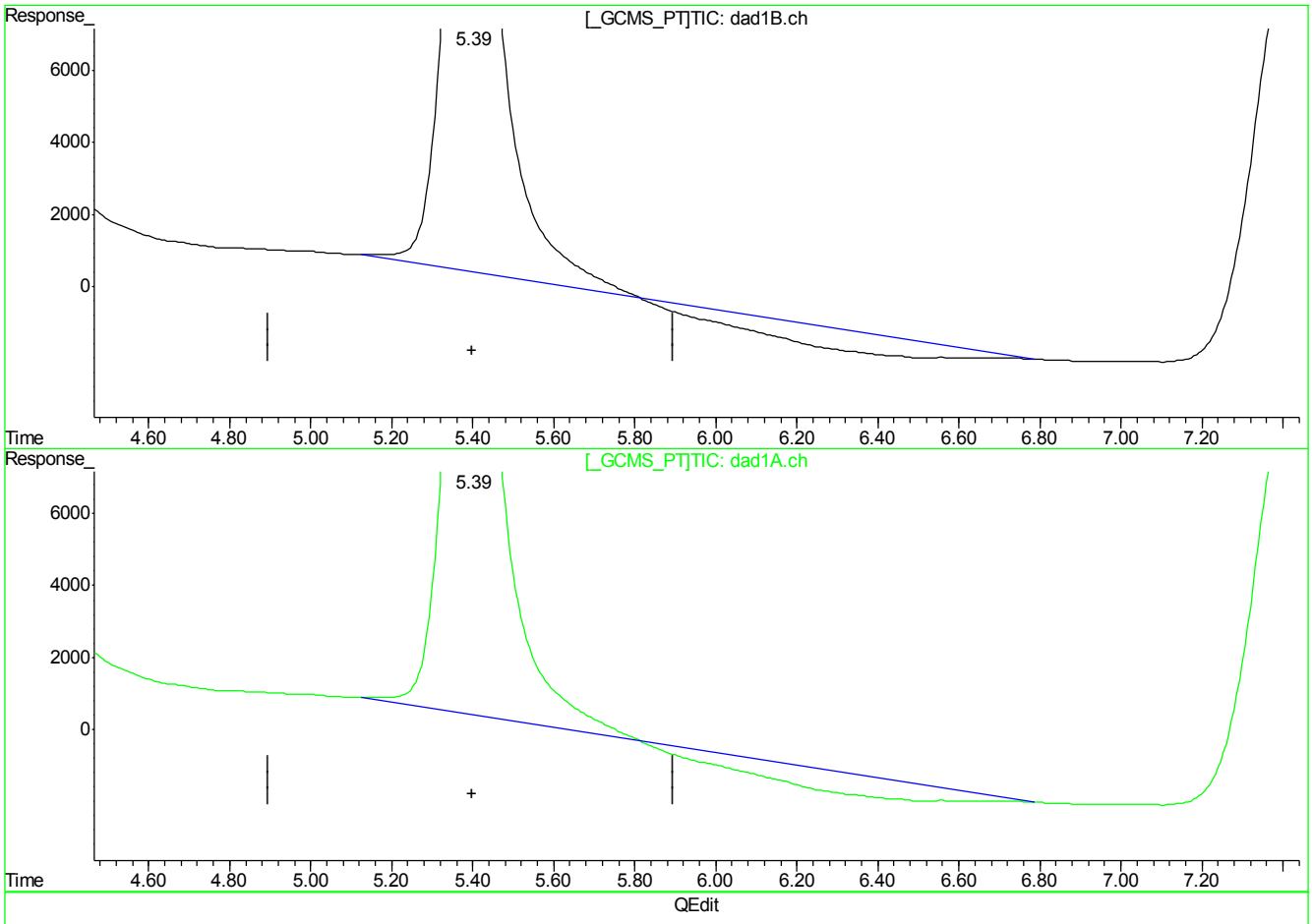
Sample Number:	OP69919-PT1	**Method:**	SW846 8330B
Lab FileID:	GG614589.D	**Analyst approved:**	05/08/18 11:27 Evita Martinez
Injection Time:	05/07/18 16:51	**Supervisor approved:**	05/08/18 16:15 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.93	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.88	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.65	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.40	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.25	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.60	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.36	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.30	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.88	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	17.99	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	17.99	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.25	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.21	Poorly defined baseline
PETN	78-11-5	2	21.81	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 410.735ppb

response 1331556

(2) HMX #2

5.39min 413.301ppb

response 1331556

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:09:19 2018

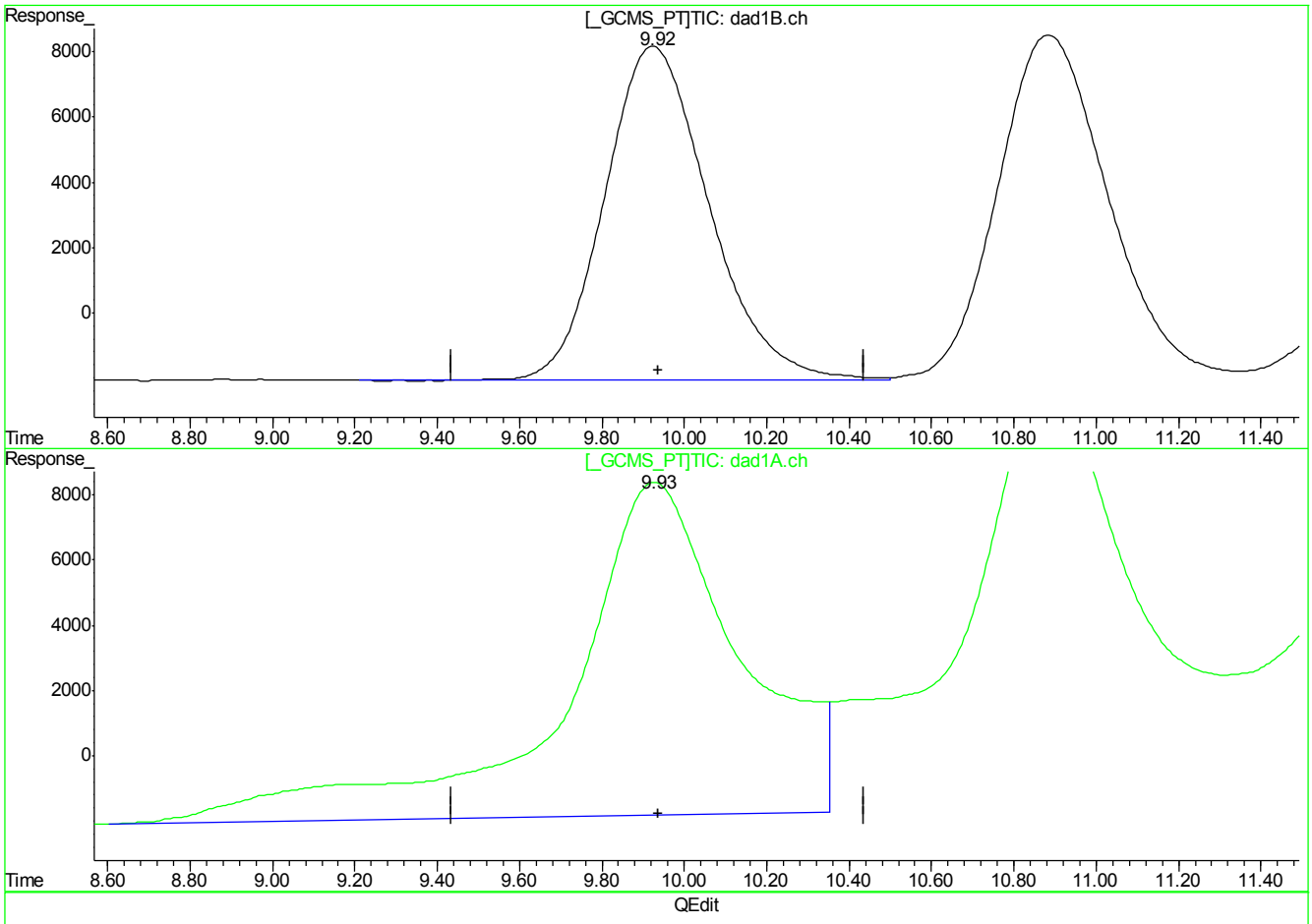
7.4.1.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.92min 125.685ppb

response 1798163

(7) 1,3-Dinitrobenzene #2

9.93min 231.015ppb

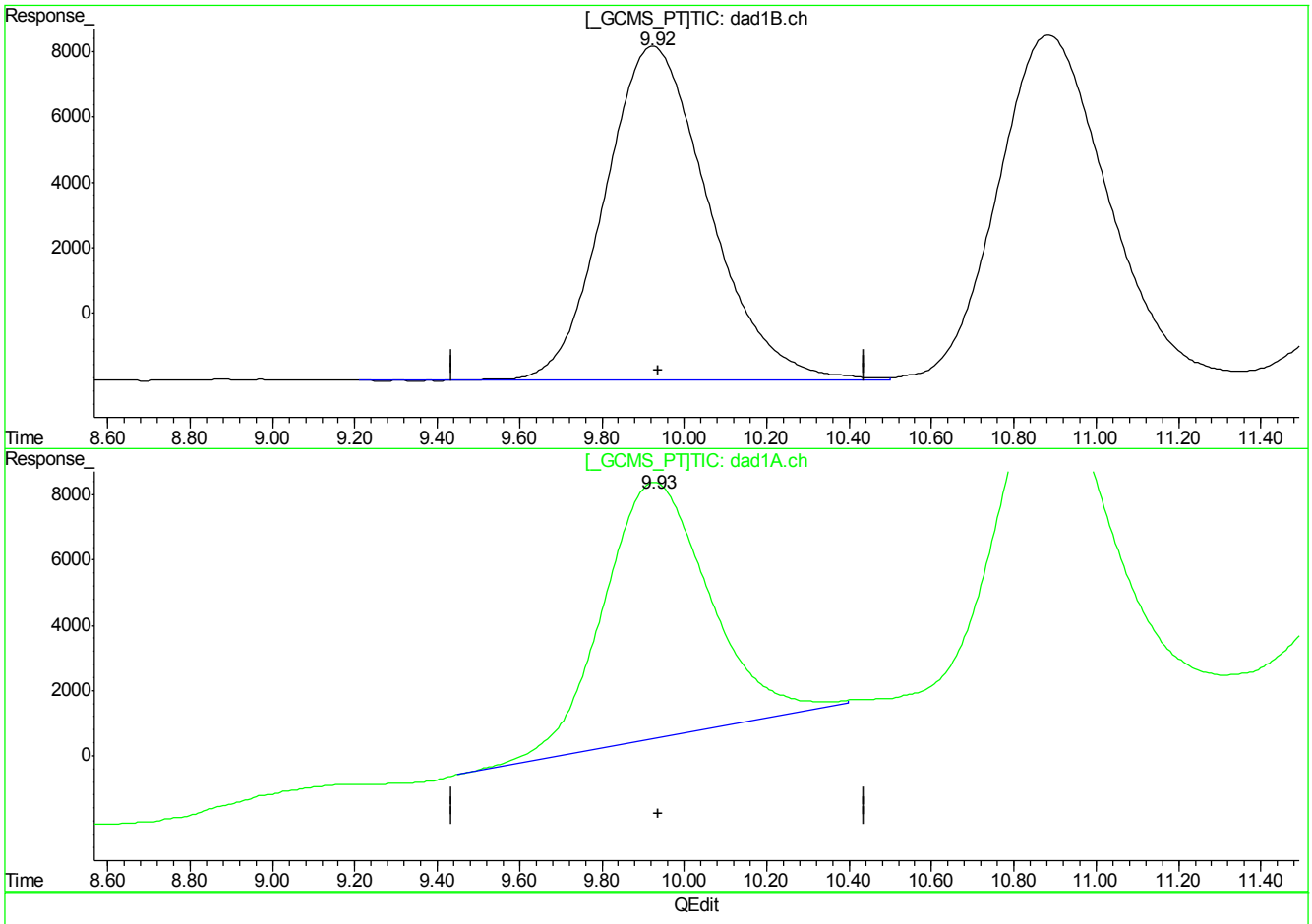
response 3007279

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:09:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.92min 125.685ppb

response 1798163

(7) 1,3-Dinitrobenzene #2

9.93min 106.918ppb m

response 1406667

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:09:37 2018

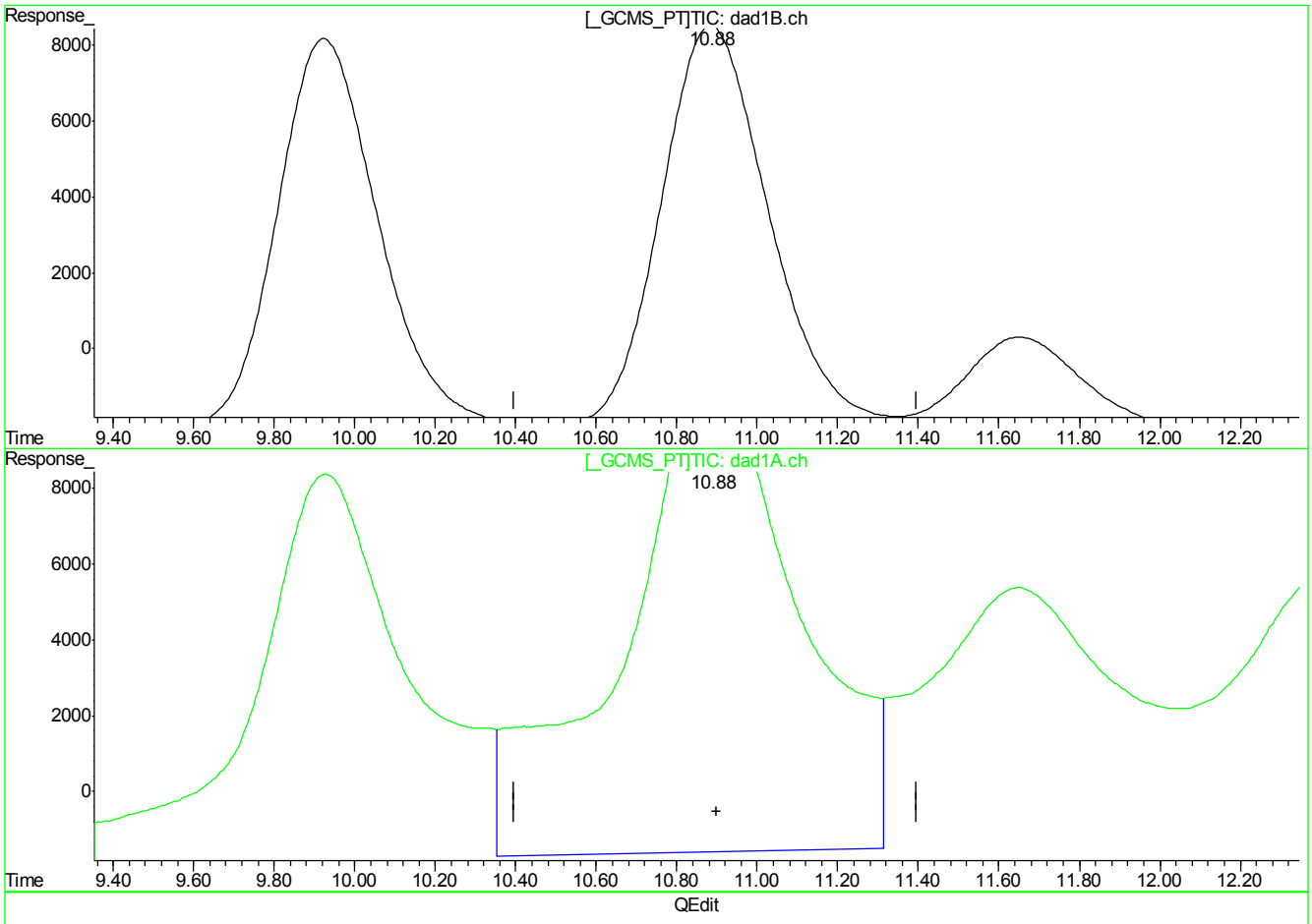
7.4.1.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.89min 209.267ppb

response 1974938

(8) Nitrobenzene #2

10.89min 416.022ppb

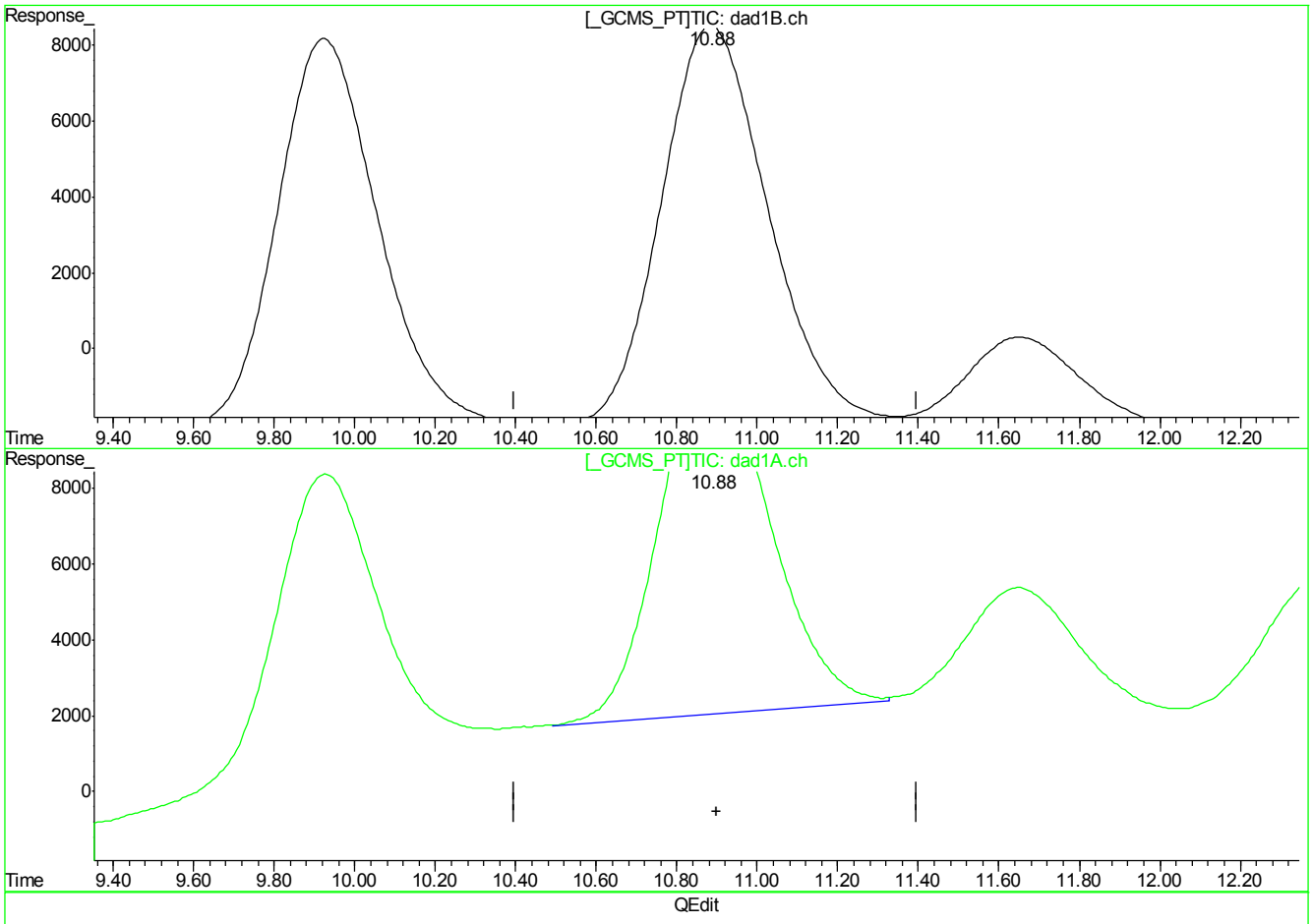
response 3852741

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:09:40 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.89min 209.267ppb

response 1974938

(8) Nitrobenzene #2

10.88min 190.723ppb m

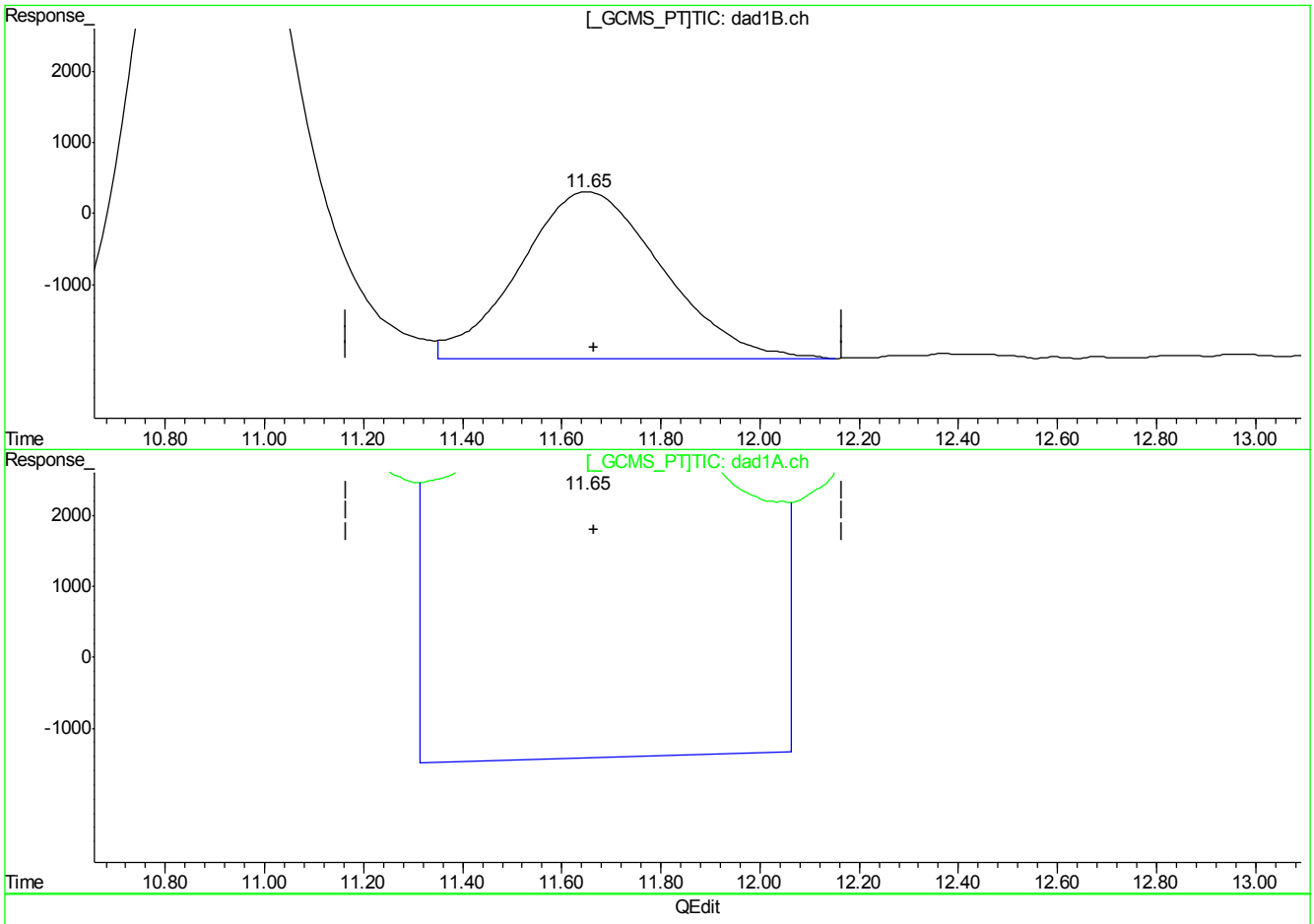
response 1766267

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:09:43 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.65min 46.581ppb

response 472066

(9) 2,4,6-Trinitrotoluene #2

11.65min 171.349ppb

response 2247225

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:10:01 2018

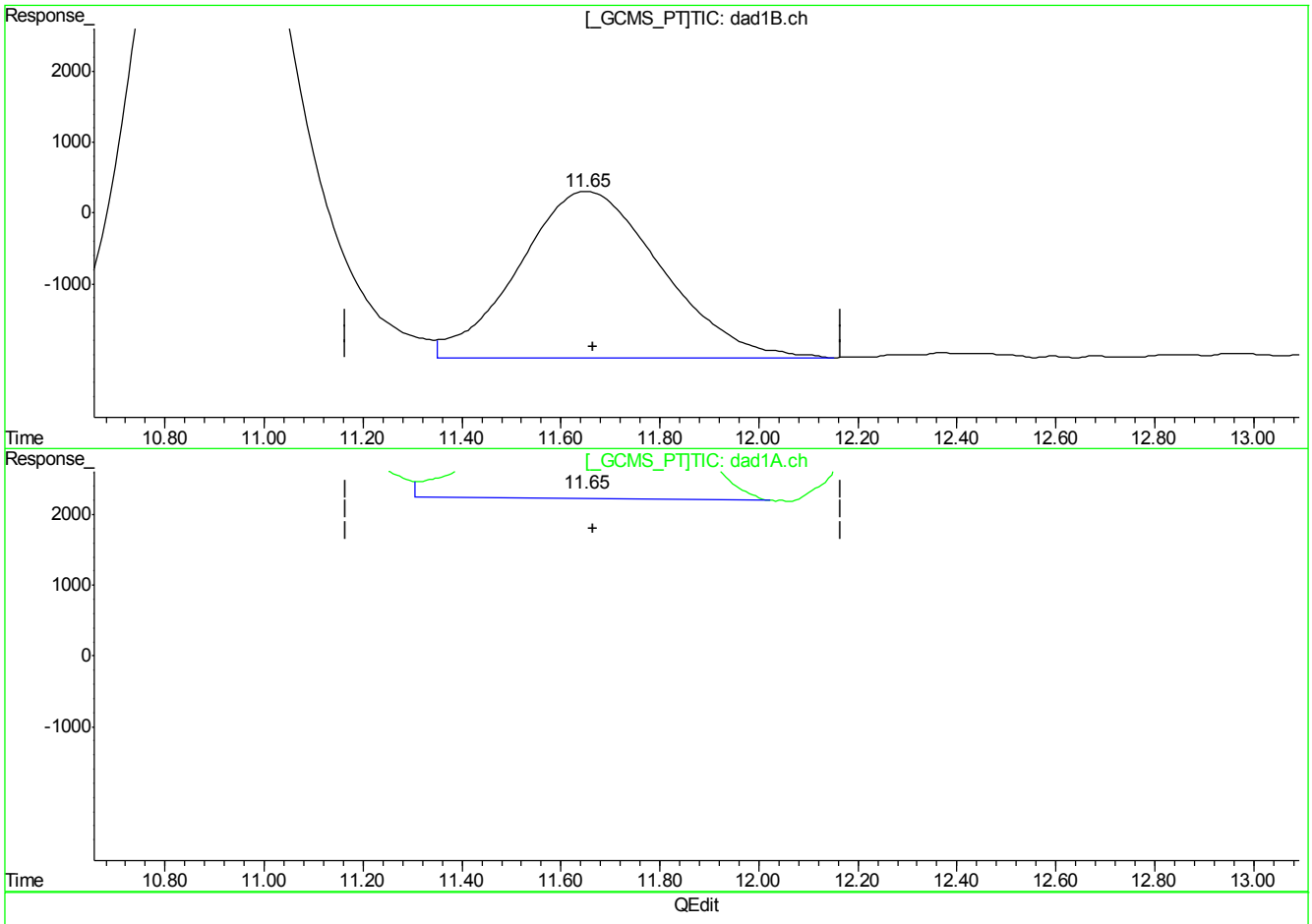
7.4.1.7

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.65min 46.581ppb

response 472066

(9) 2,4,6-Trinitrotoluene #2

11.65min 46.607ppb m

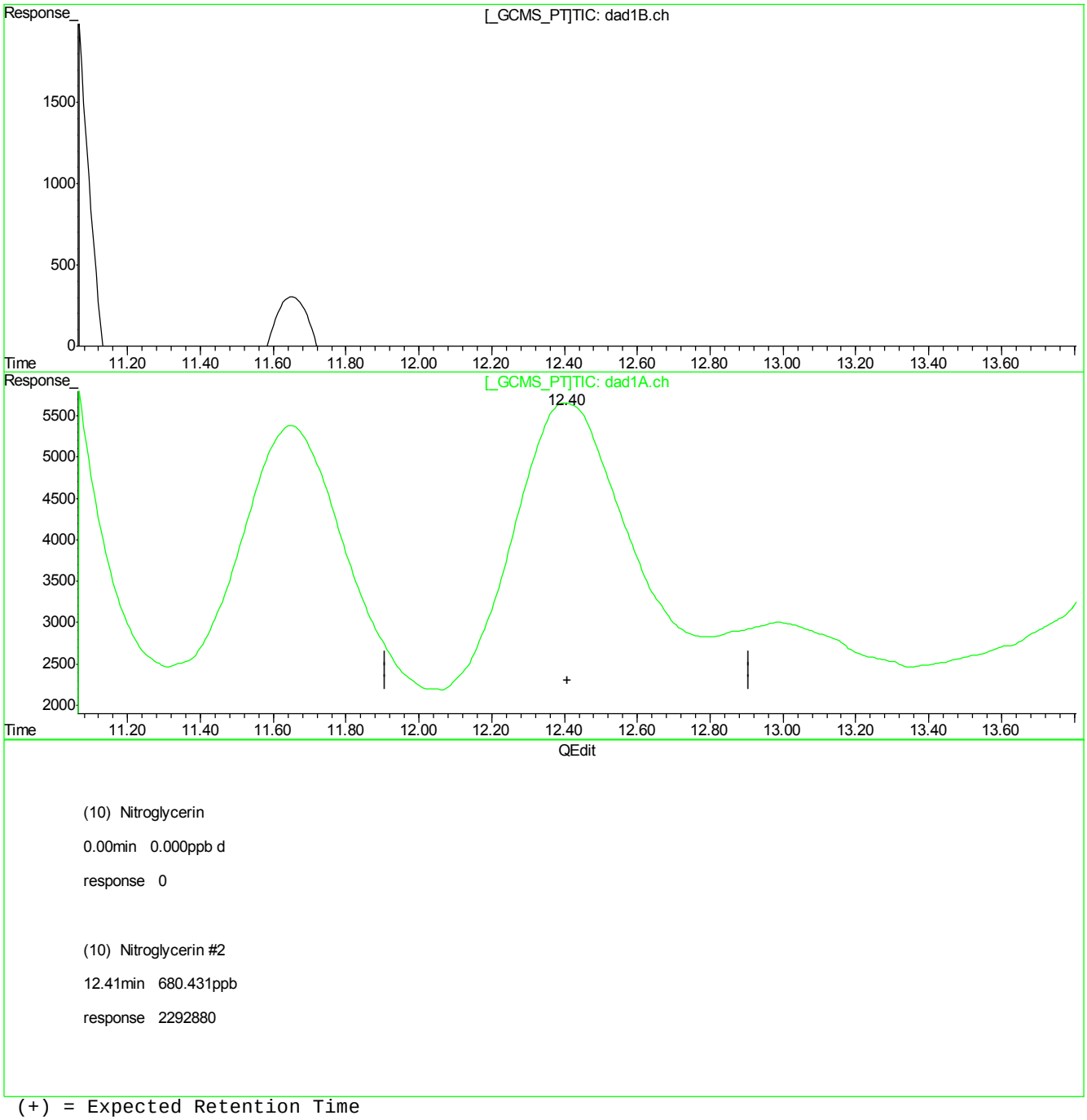
response 611249

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:10:04 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration

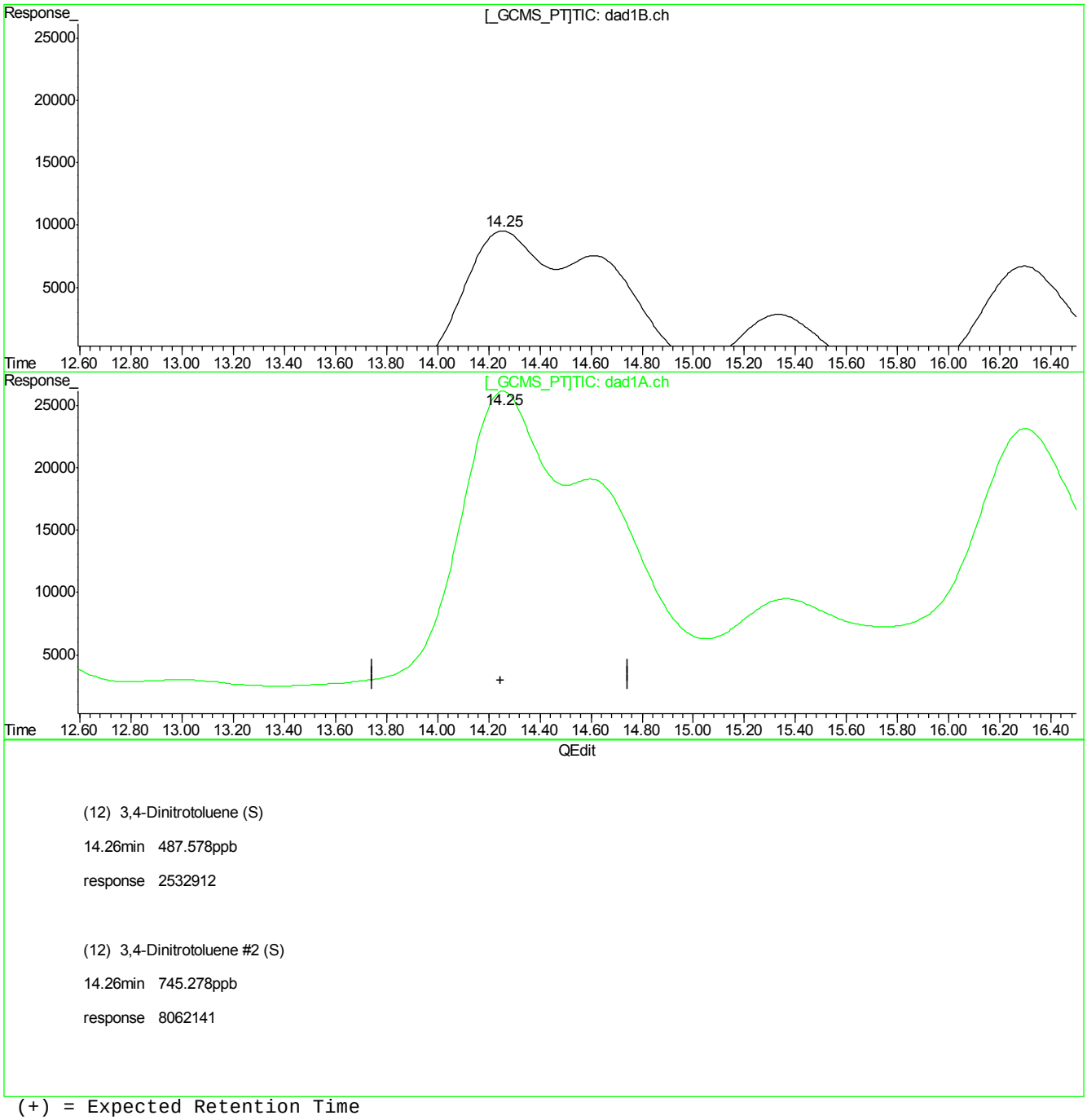


(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:10:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.26min 487.578ppb

response 2532912

(12) 3,4-Dinitrotoluene #2 (S)

14.26min 745.278ppb

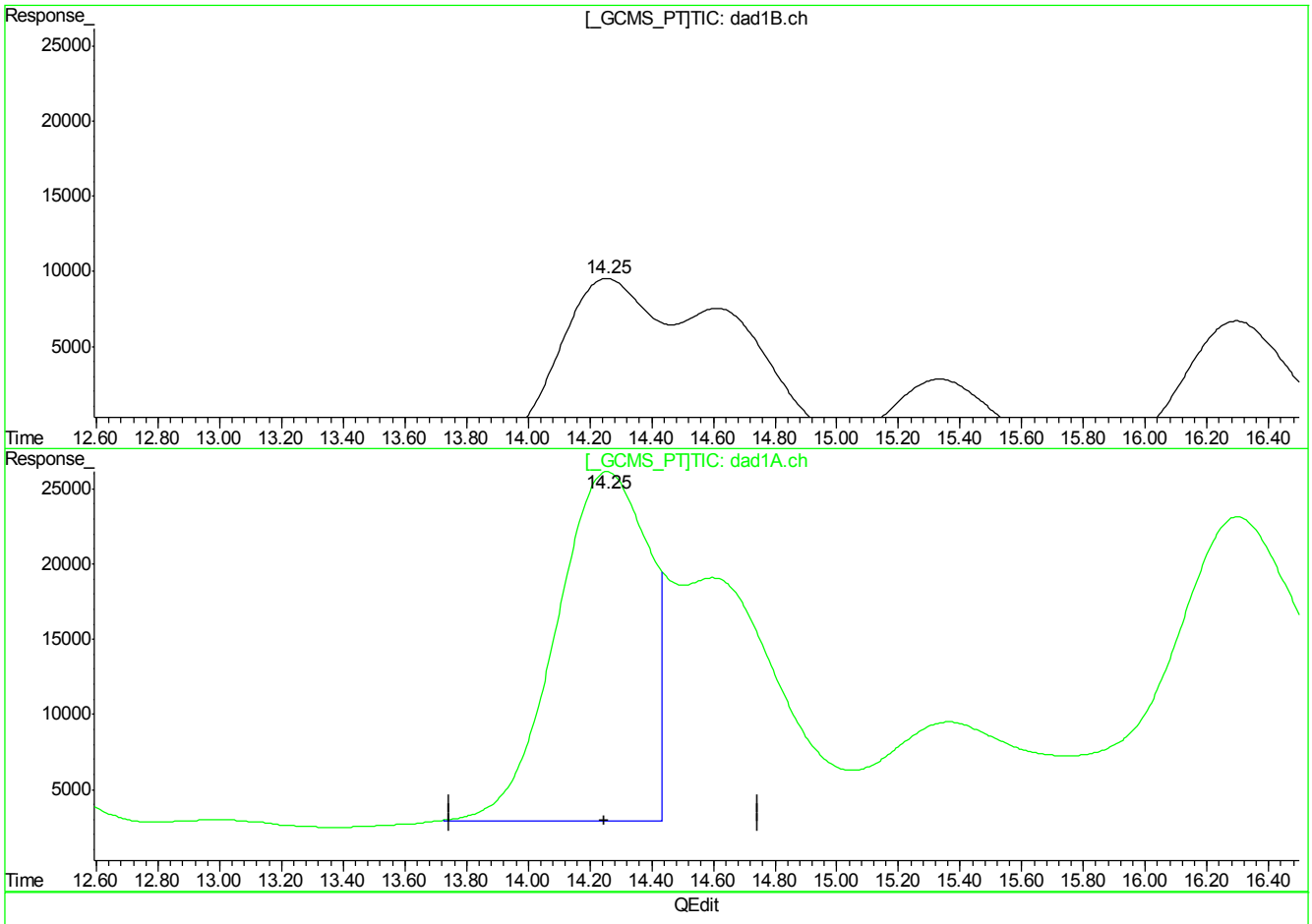
response 8062141

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:10:27 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.26min 487.578ppb

response 2532912

(12) 3,4-Dinitrotoluene #2 (S)

14.25min 439.283ppb m

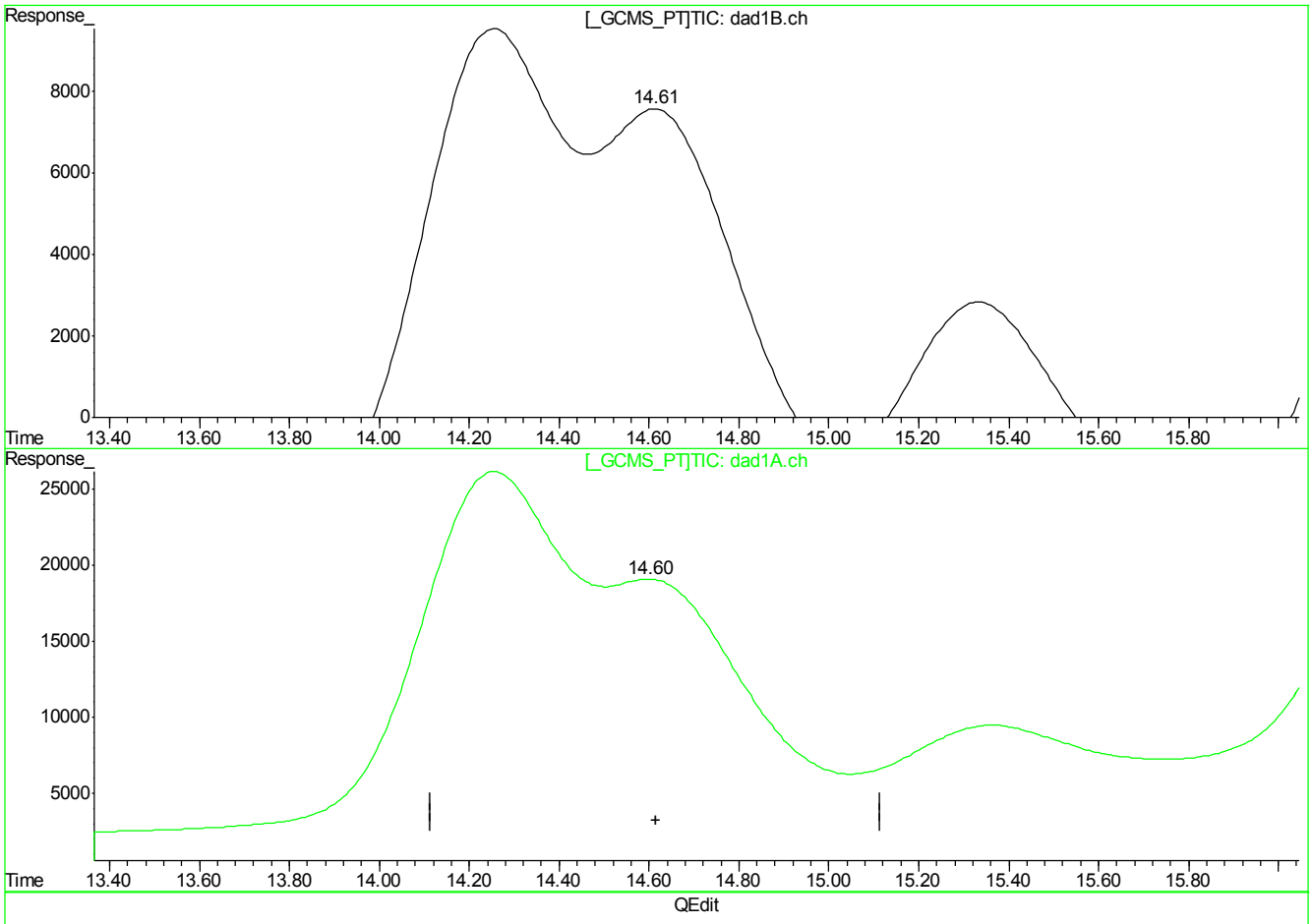
response 4752002

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:10:32 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.61min 288.946ppb

response 2065851

(13) 2,6-Dinitrotoluene #2

14.60min 452.199ppb

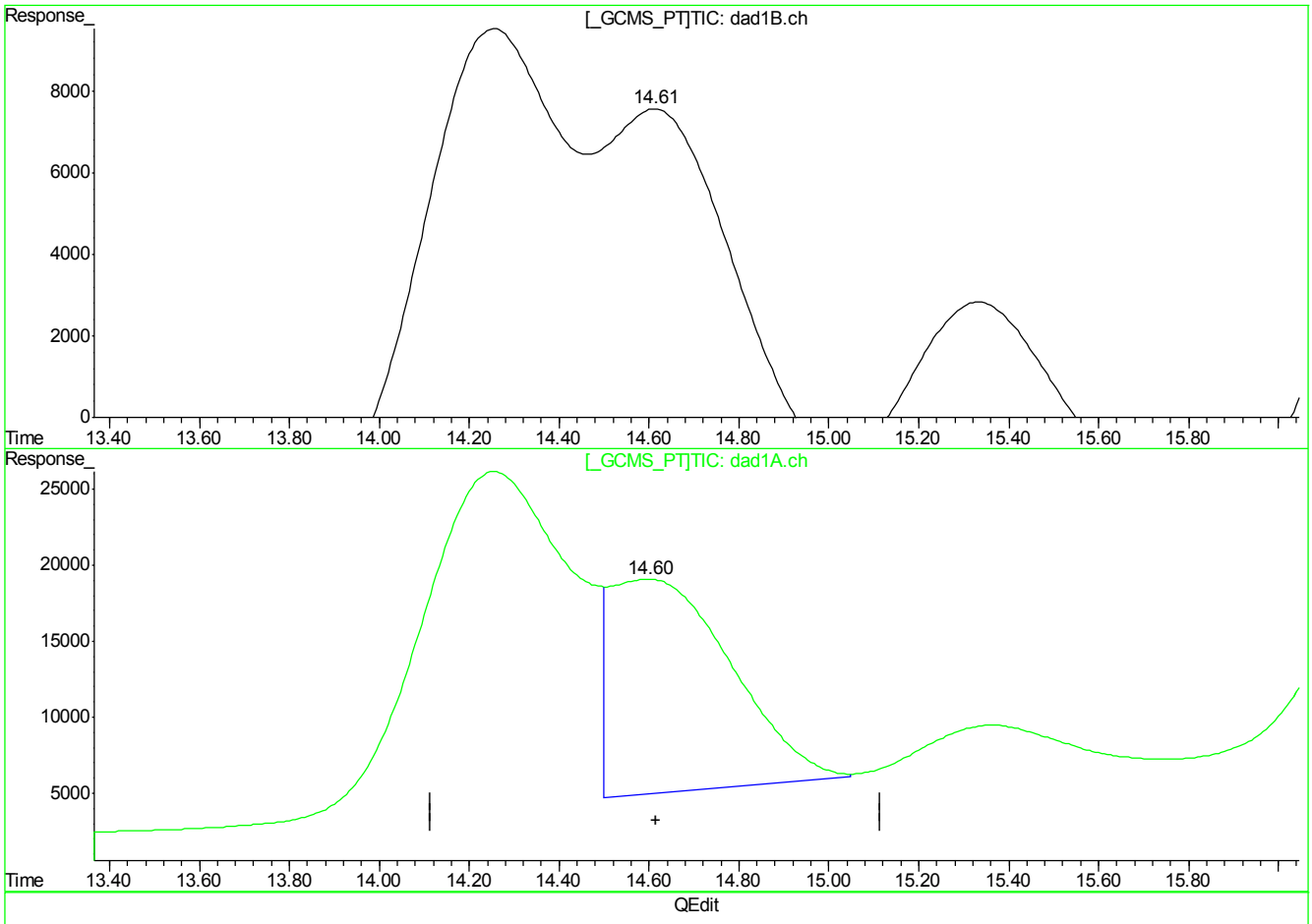
response 4588040

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:10:36 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.61min 288.946ppb

response 2065851

(13) 2,6-Dinitrotoluene #2

14.60min 259.546ppb m

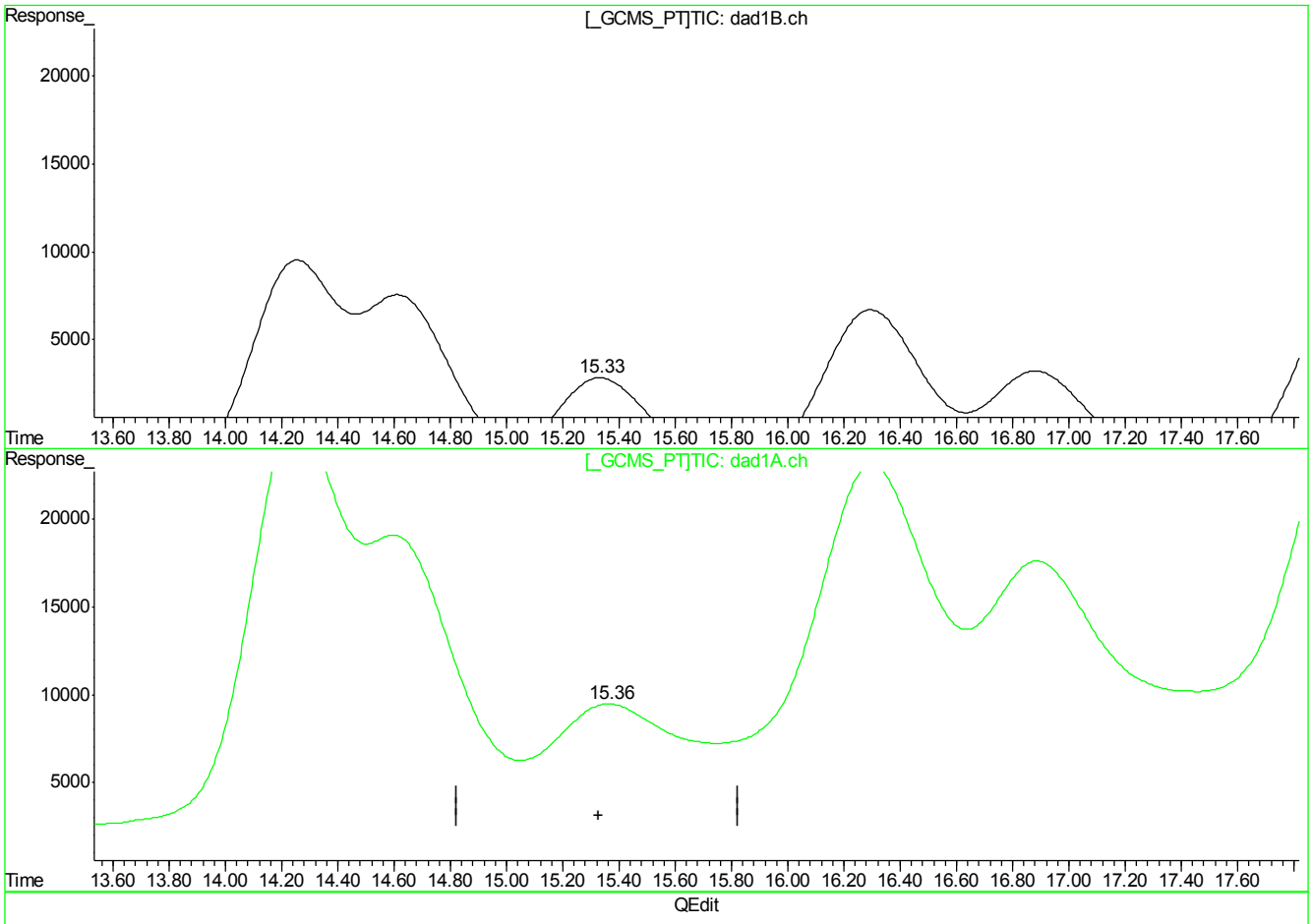
response 2633369

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:10:42 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.33min 86.231ppb

response 1130404

(14) 2,4-Dinitrotoluene #2

15.37min 384.569ppb

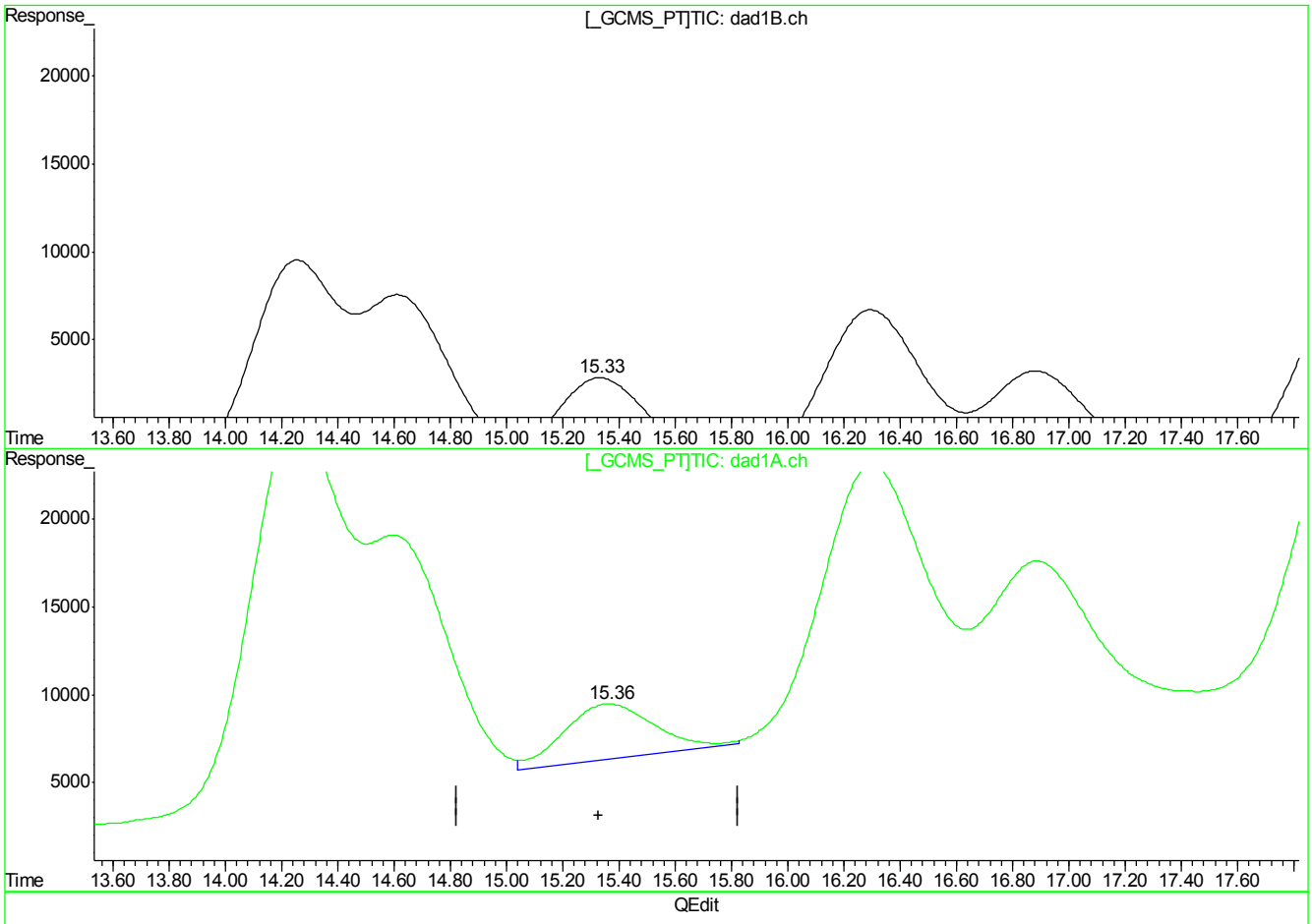
response 3666739

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:14 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.33min 86.231ppb

response 1130404

(14) 2,4-Dinitrotoluene #2

15.36min 72.096ppb m

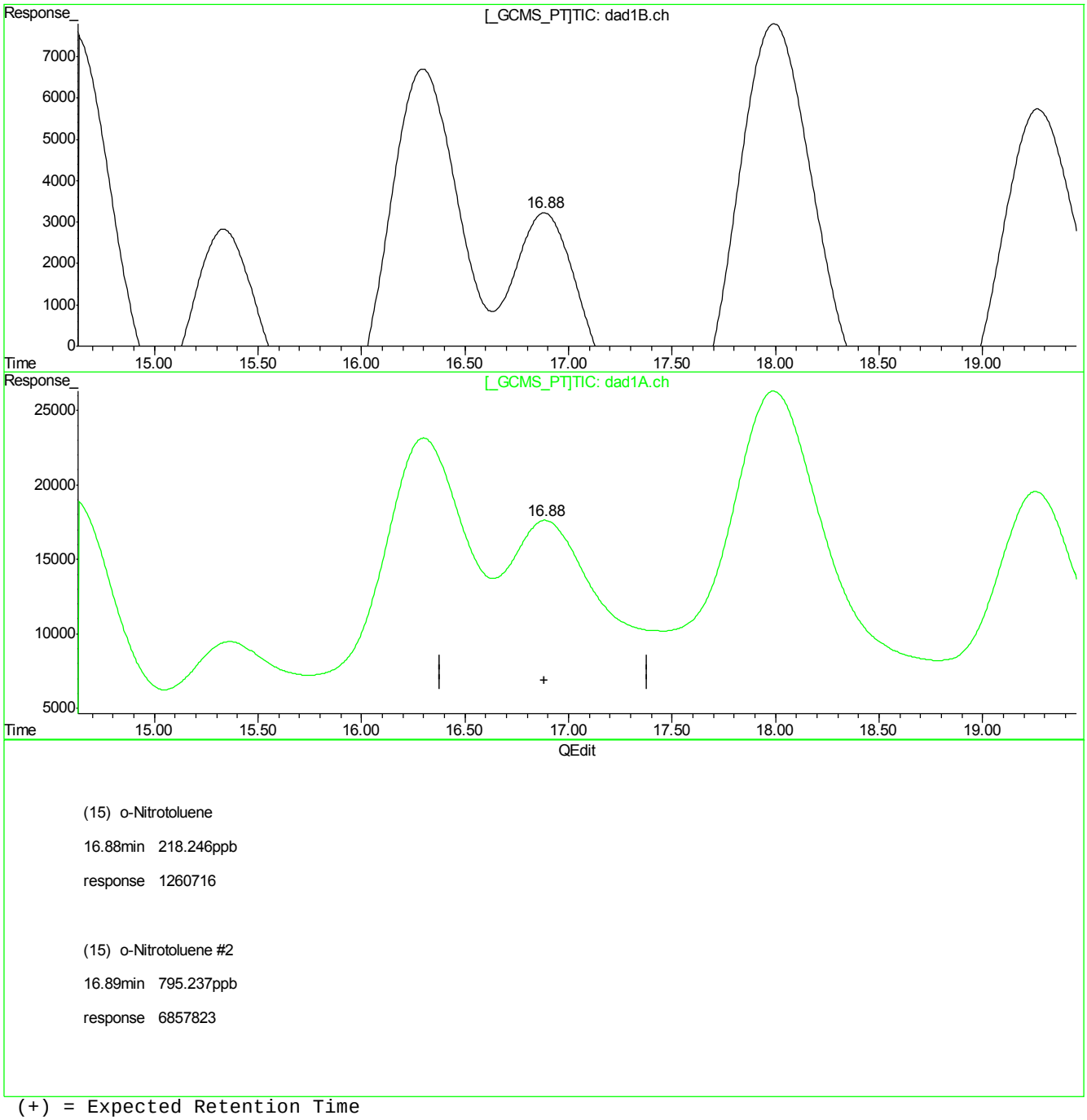
response 692473

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:21 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.88min 218.246ppb

response 1260716

(15) o-Nitrotoluene #2

16.89min 795.237ppb

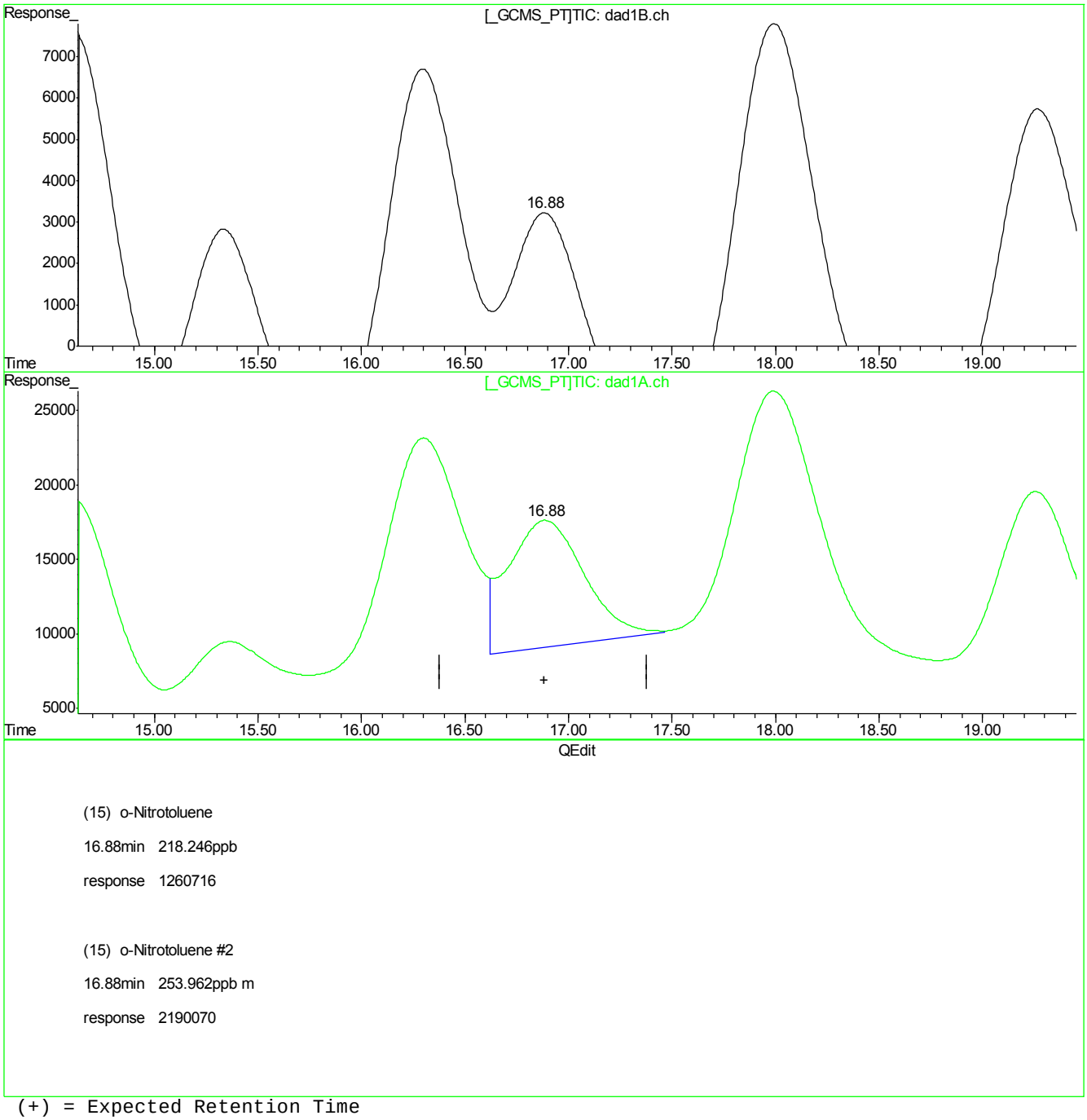
response 6857823

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:26 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.88min 218.246ppb

response 1260716

(15) o-Nitrotoluene #2

16.88min 253.962ppb m

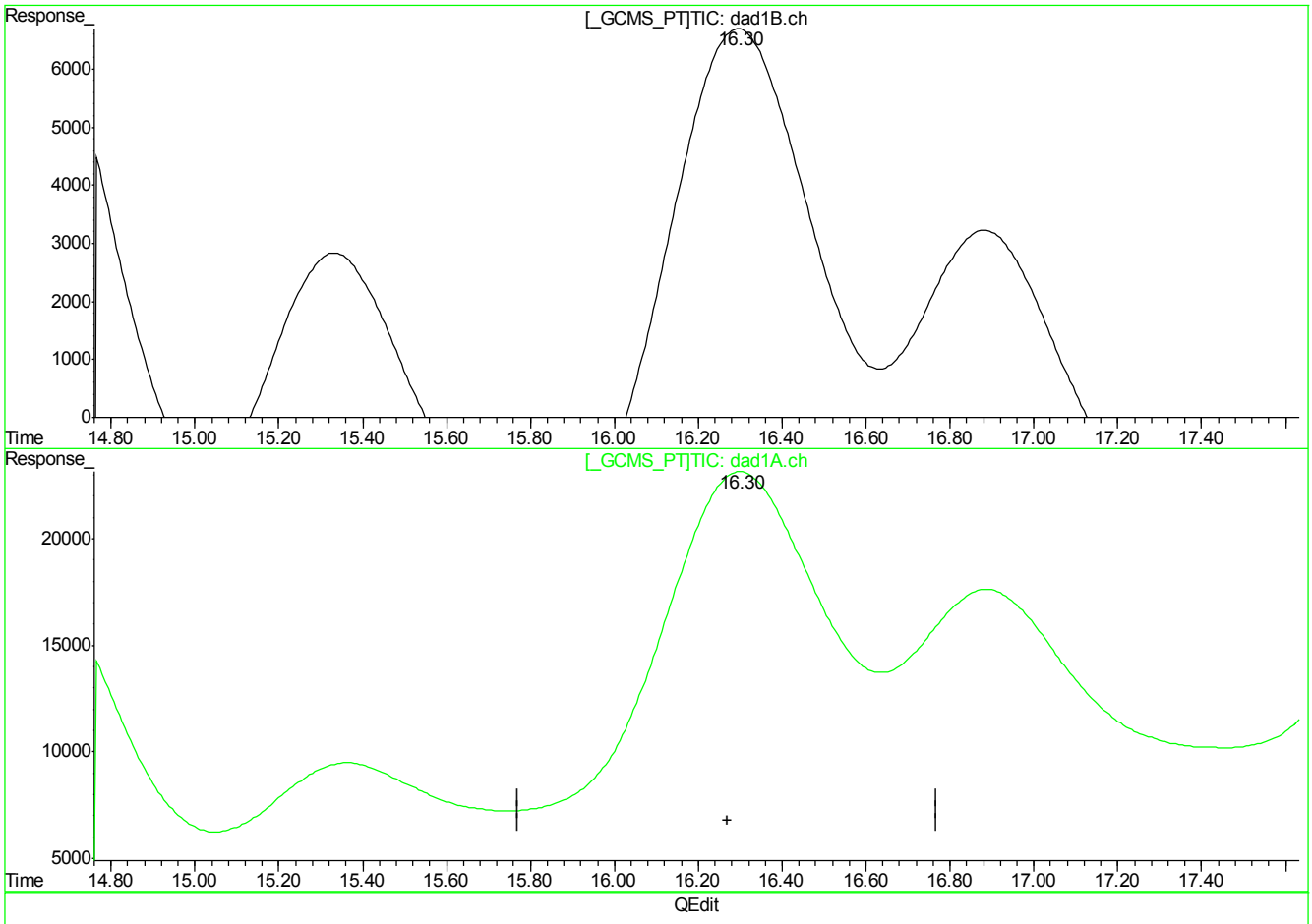
response 2190070

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:31 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.30min 219.816ppb

response 2141541

(16) 3,5-Dinitroaniline #2

16.30min 504.032ppb

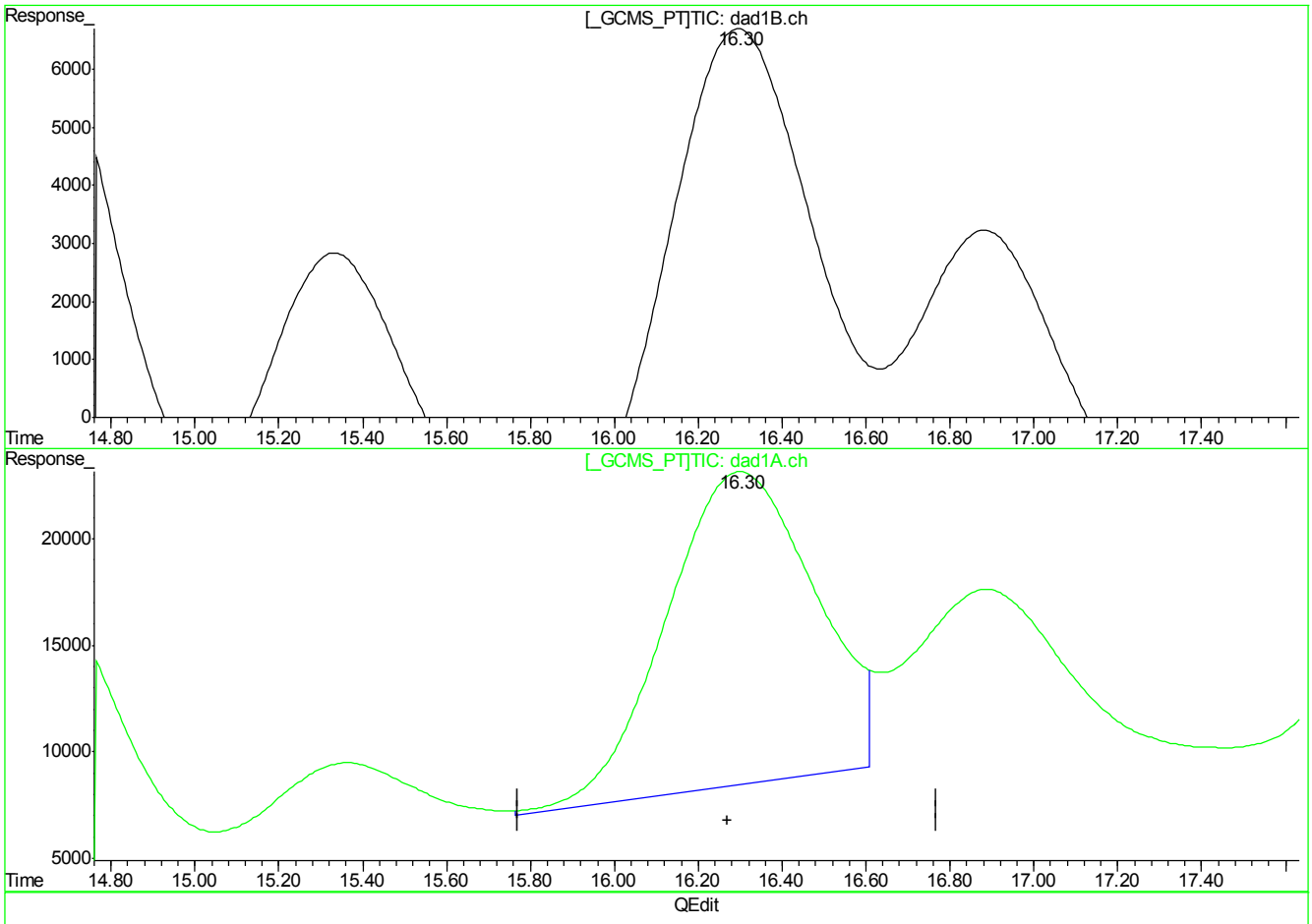
response 8185739

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.30min 219.816ppb

response 2141541

(16) 3,5-Dinitroaniline #2

16.30min 222.284ppb m

response 3596462

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:37 2018

7.4.1.19

7

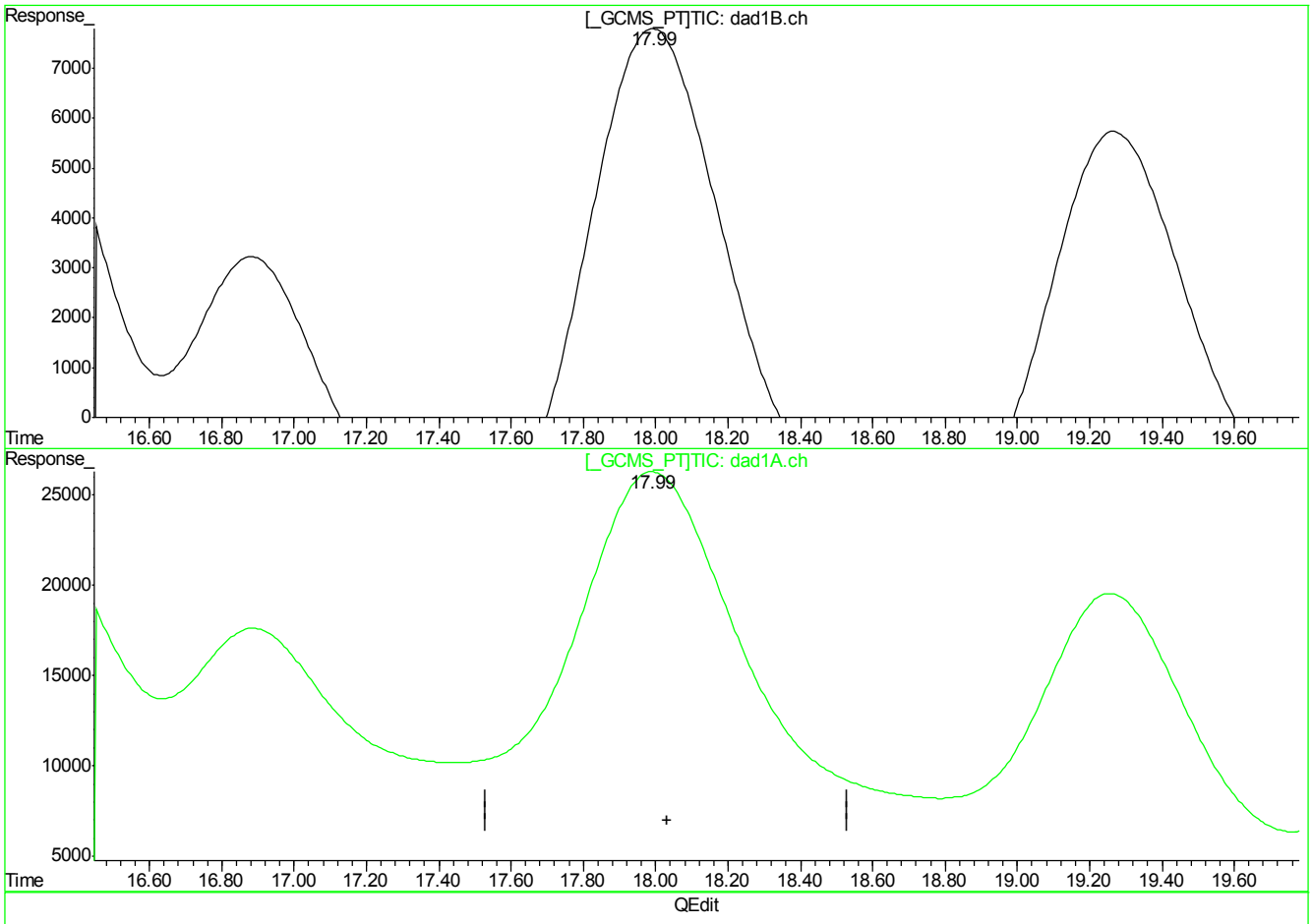
FA53725

GG614589.D edits: 3,5-Dinitroaniline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.99min 218.100ppb

response 2561006

(17) p-Nitrotoluene #2

17.99min 562.821ppb

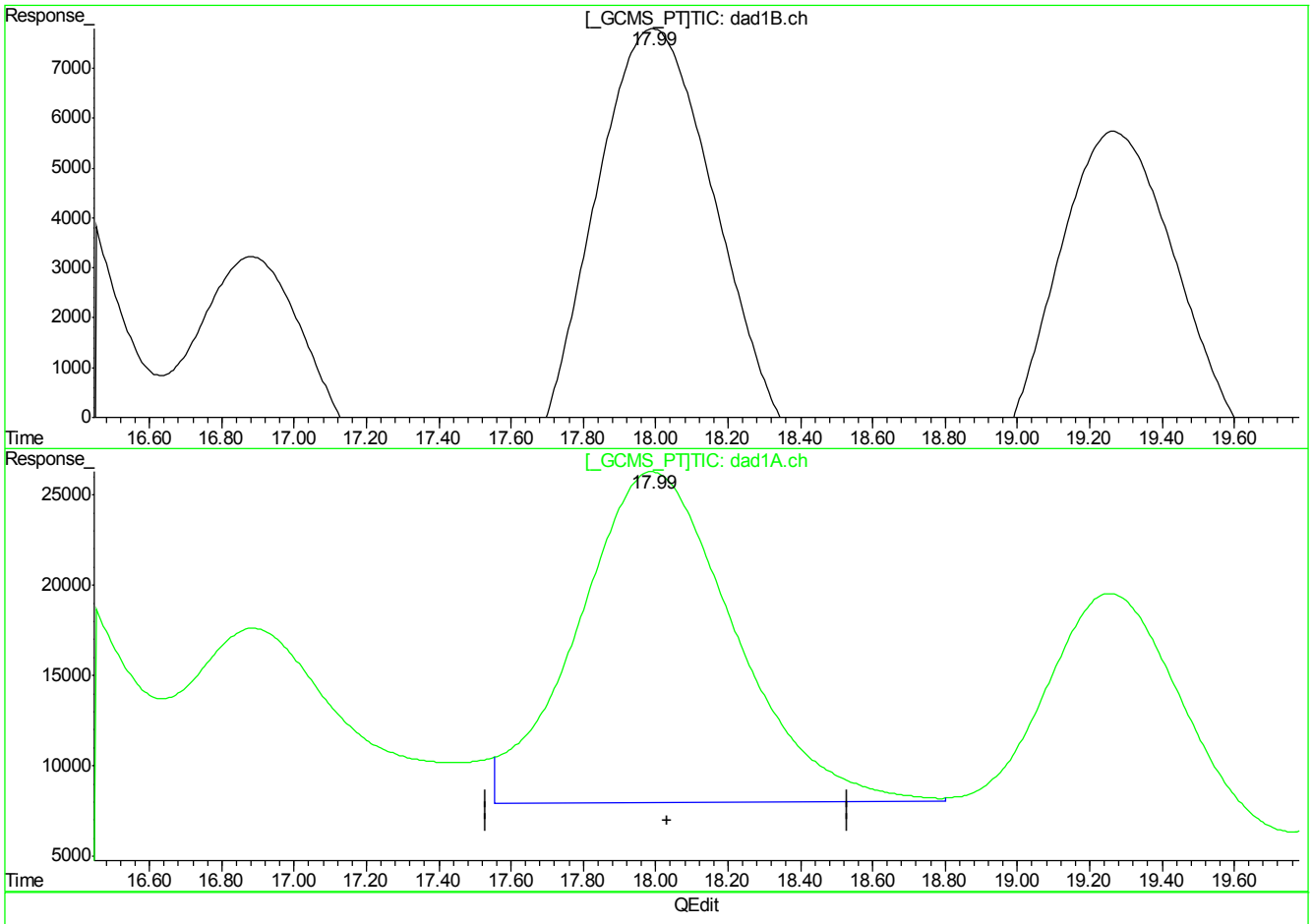
response 11927960

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:39 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.99min 218.100ppb

response 2561006

(17) p-Nitrotoluene #2

17.99min 257.567ppb m

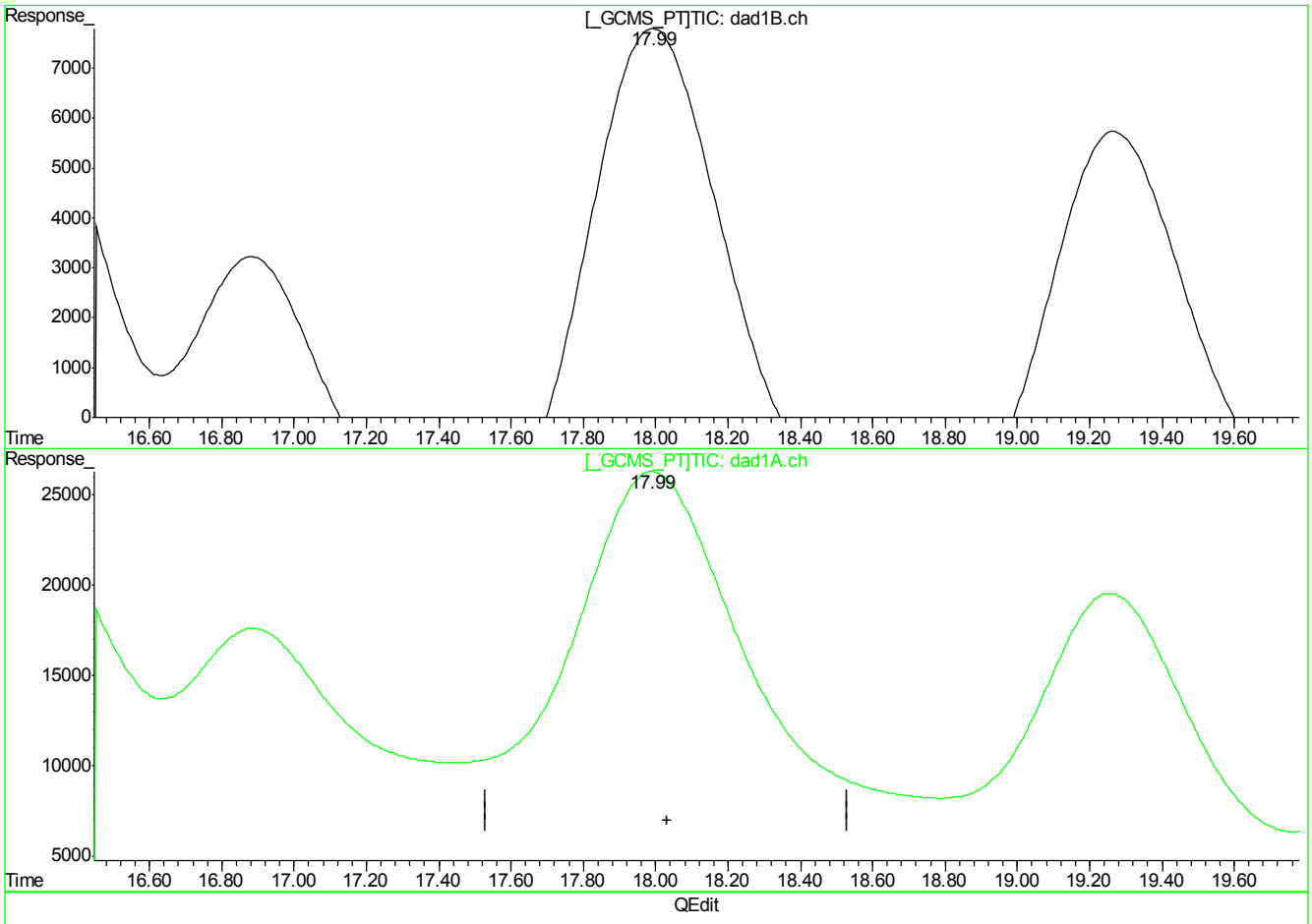
response 5458652

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:44 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.99min 218.100ppb

response 2561006

(18) 4-Amino-2,6-Dinitrotoluene #2

17.99min 561.184ppb

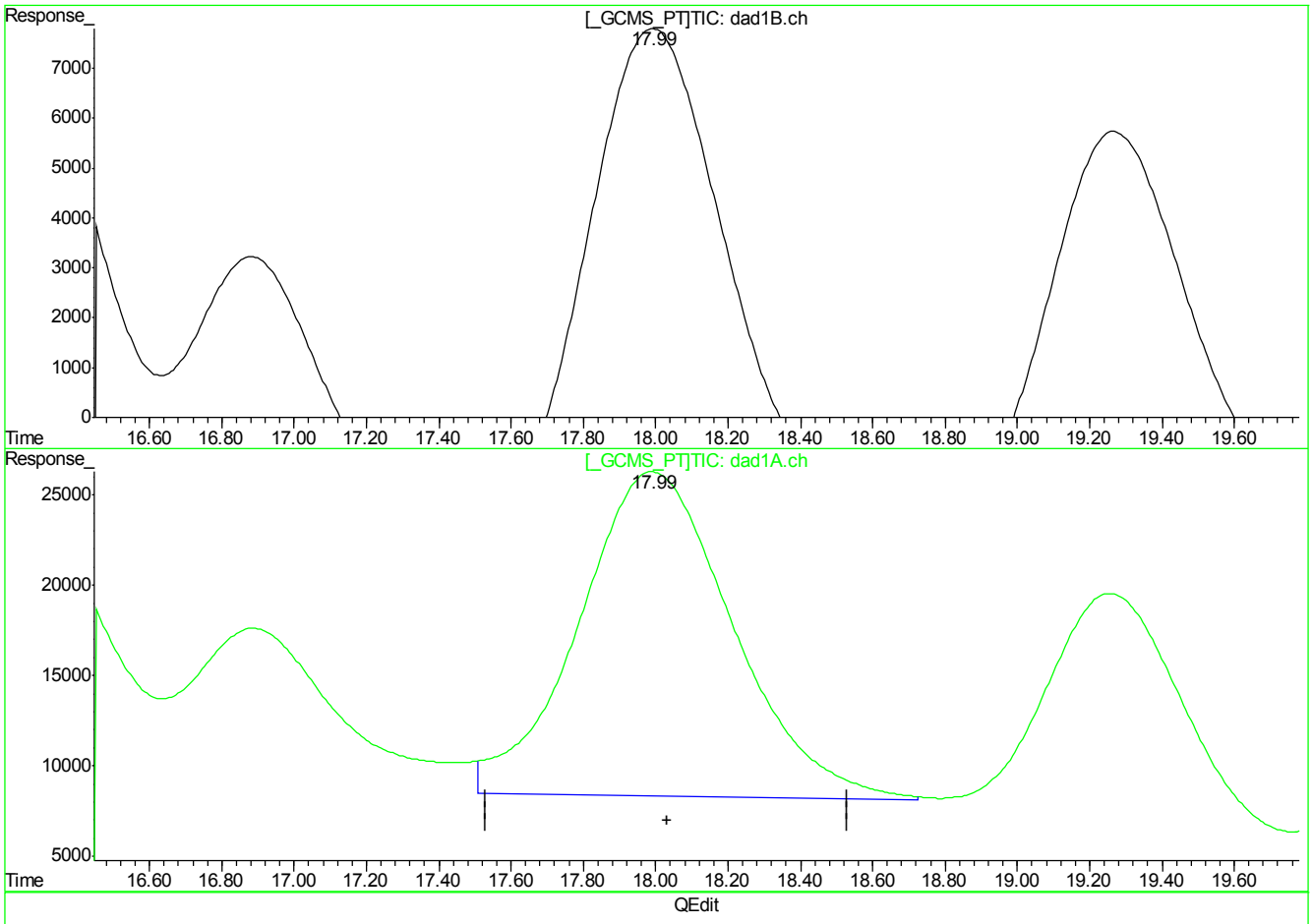
response 11927960

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:47 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.99min 218.100ppb

response 2561006

(18) 4-Amino-2,6-Dinitrotoluene #2

17.99min 248.576ppb m

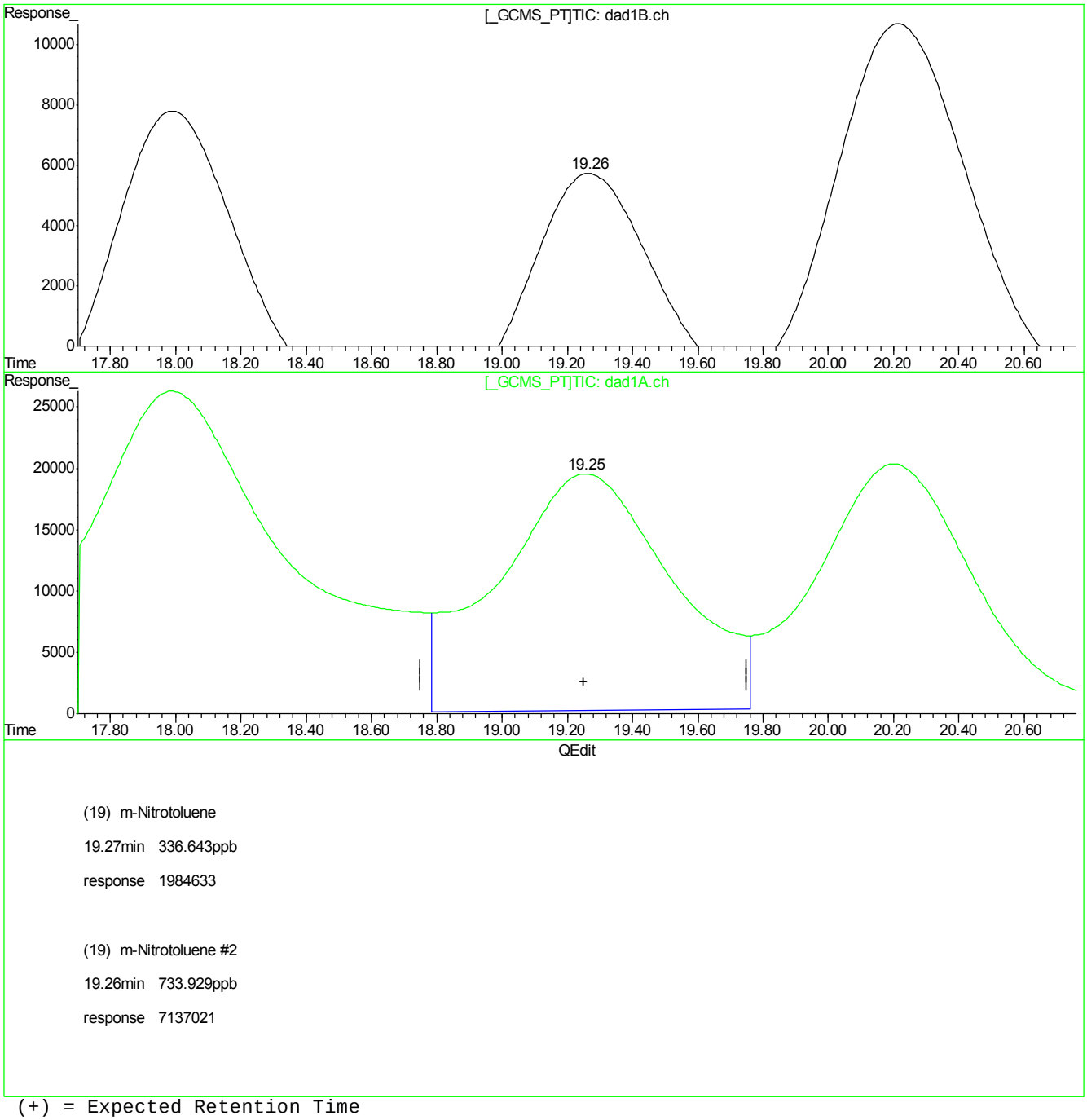
response 5283481

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:50 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.27min 336.643ppb

response 1984633

(19) m-Nitrotoluene #2

19.26min 733.929ppb

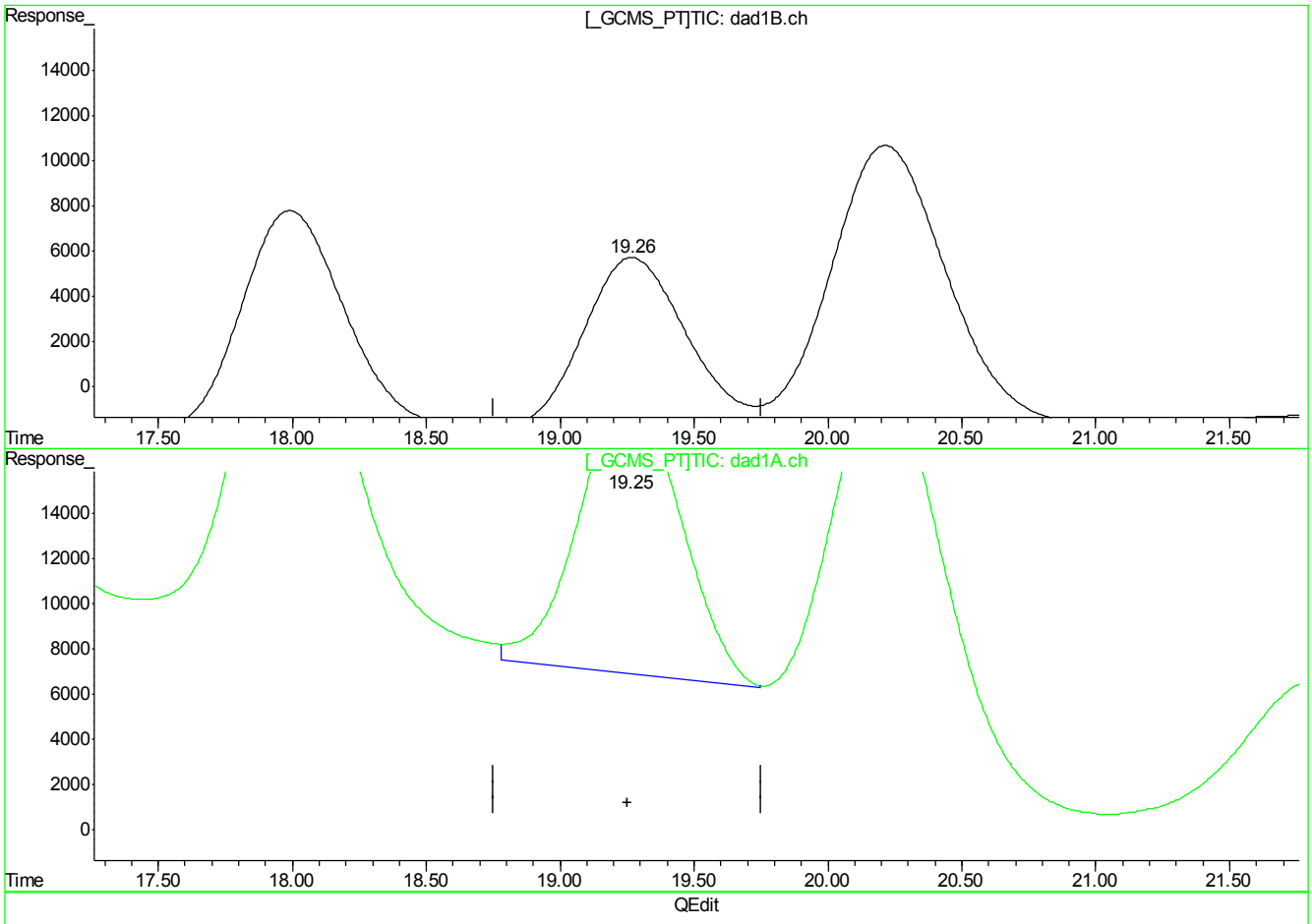
response 7137021

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:11:53 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.27min 336.643ppb

response 1984633

(19) m-Nitrotoluene #2

19.25min 335.549ppb m

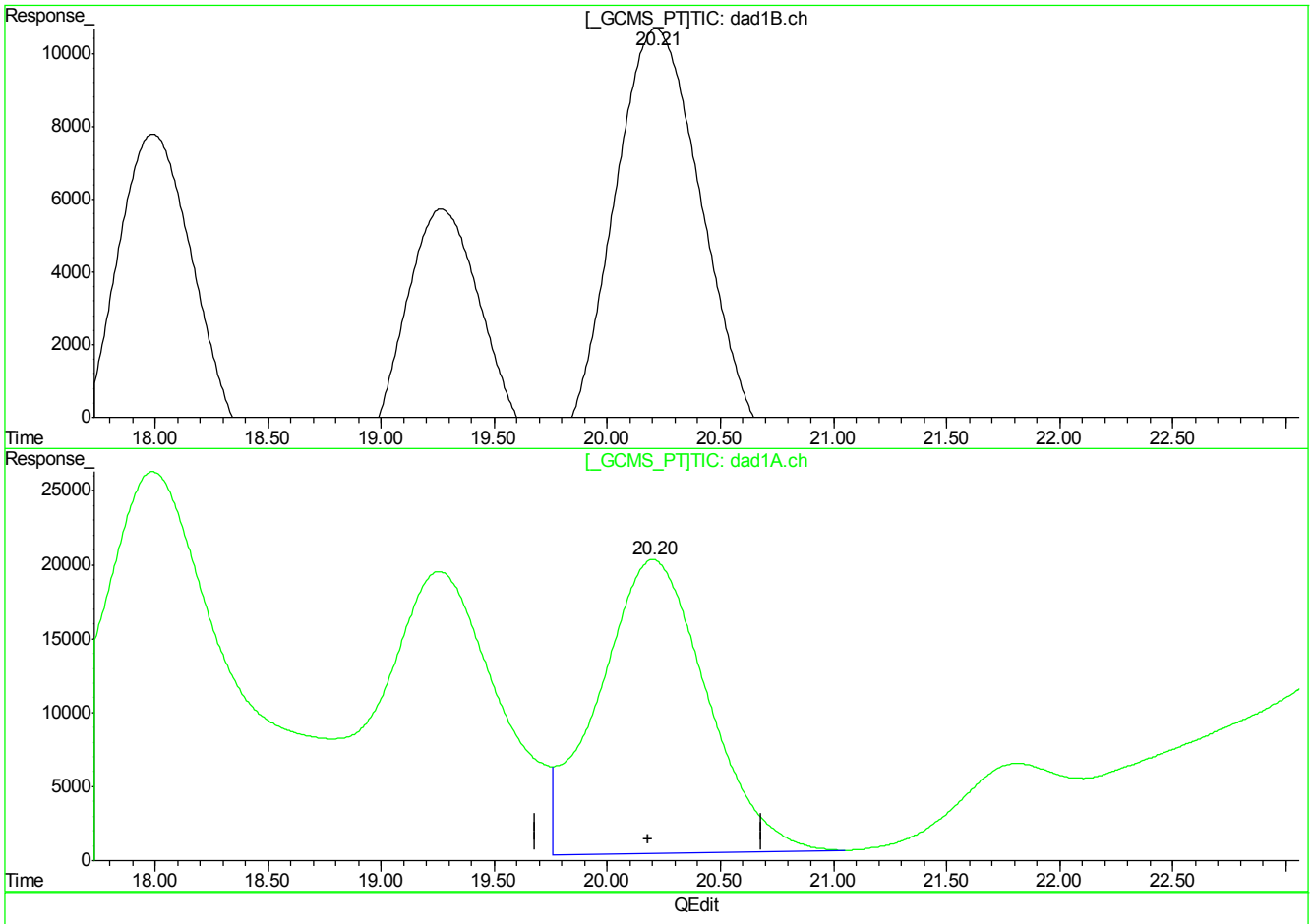
response 3263018

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:12:01 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.22min 407.771ppb

response 3679287

(20) 2-Amino-4,6-Dinitrotoluene #2

20.20min 550.920ppb

response 6570509

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:12:14 2018

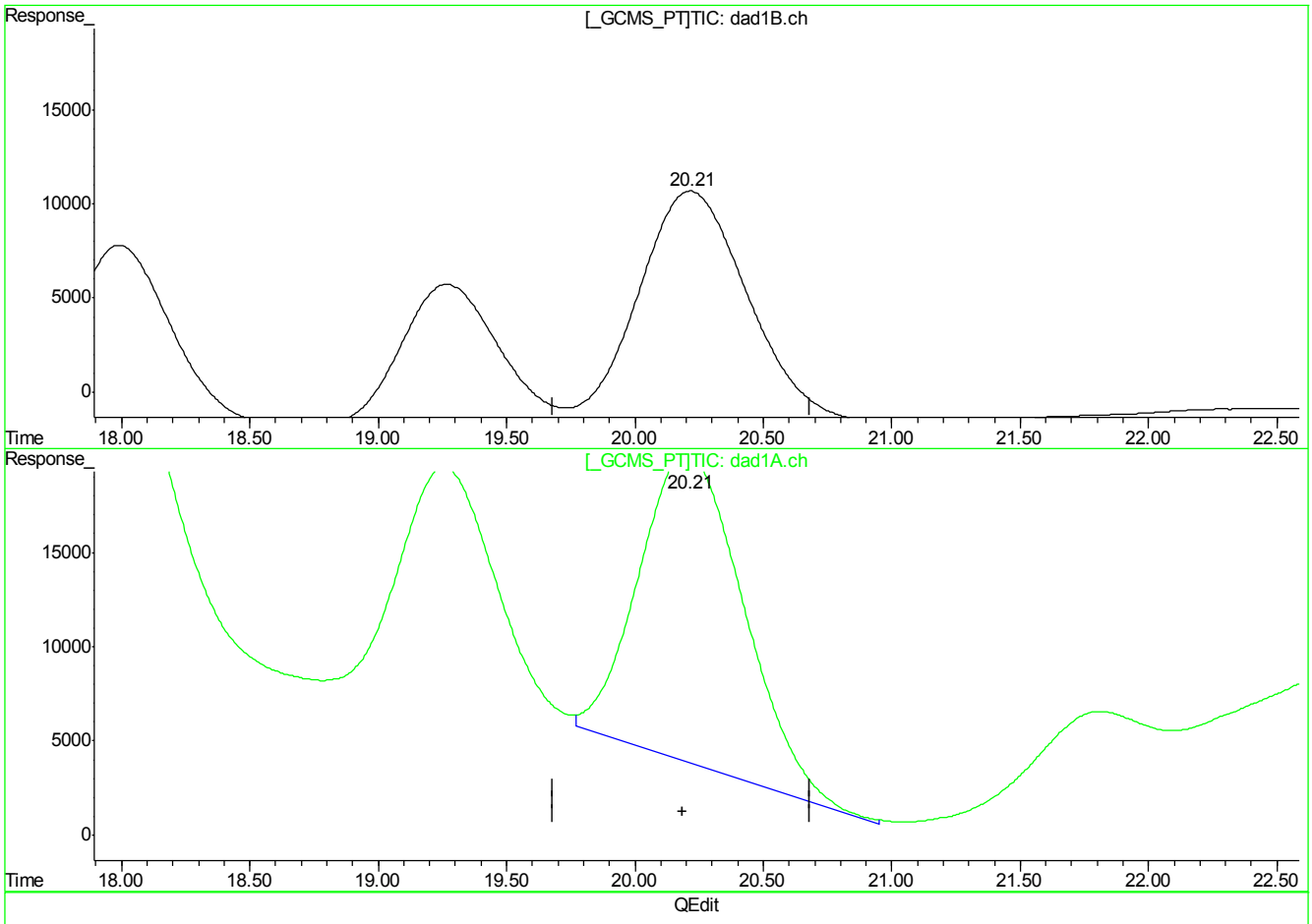
7.4.1.26

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.22min 407.771ppb

response 3679287

(20) 2-Amino-4,6-Dinitrotoluene #2

20.21min 395.047ppb m

response 4663466

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:12:20 2018

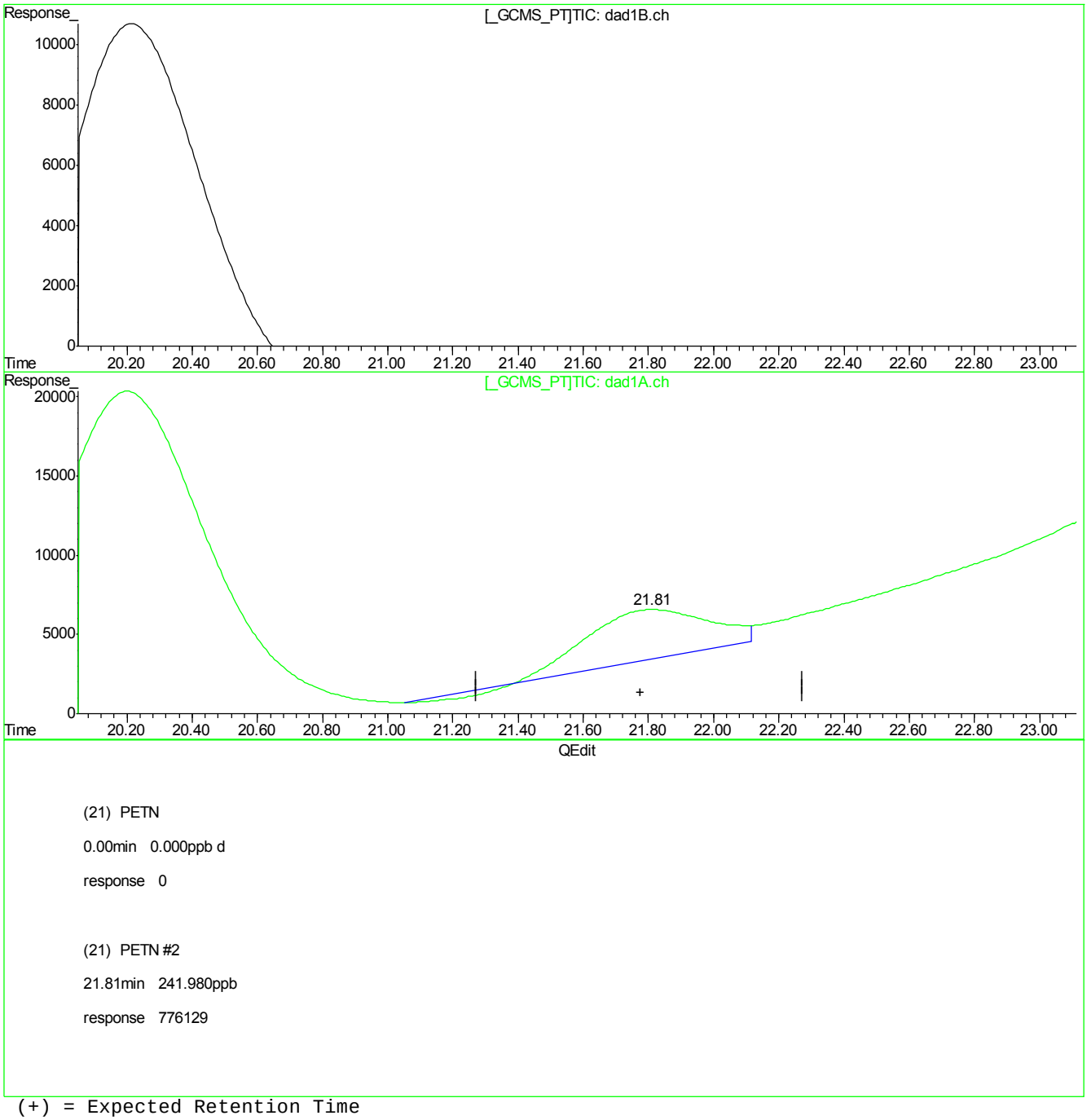
7.4.1.27

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.81min 241.980ppb

response 776129

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:12:23 2018

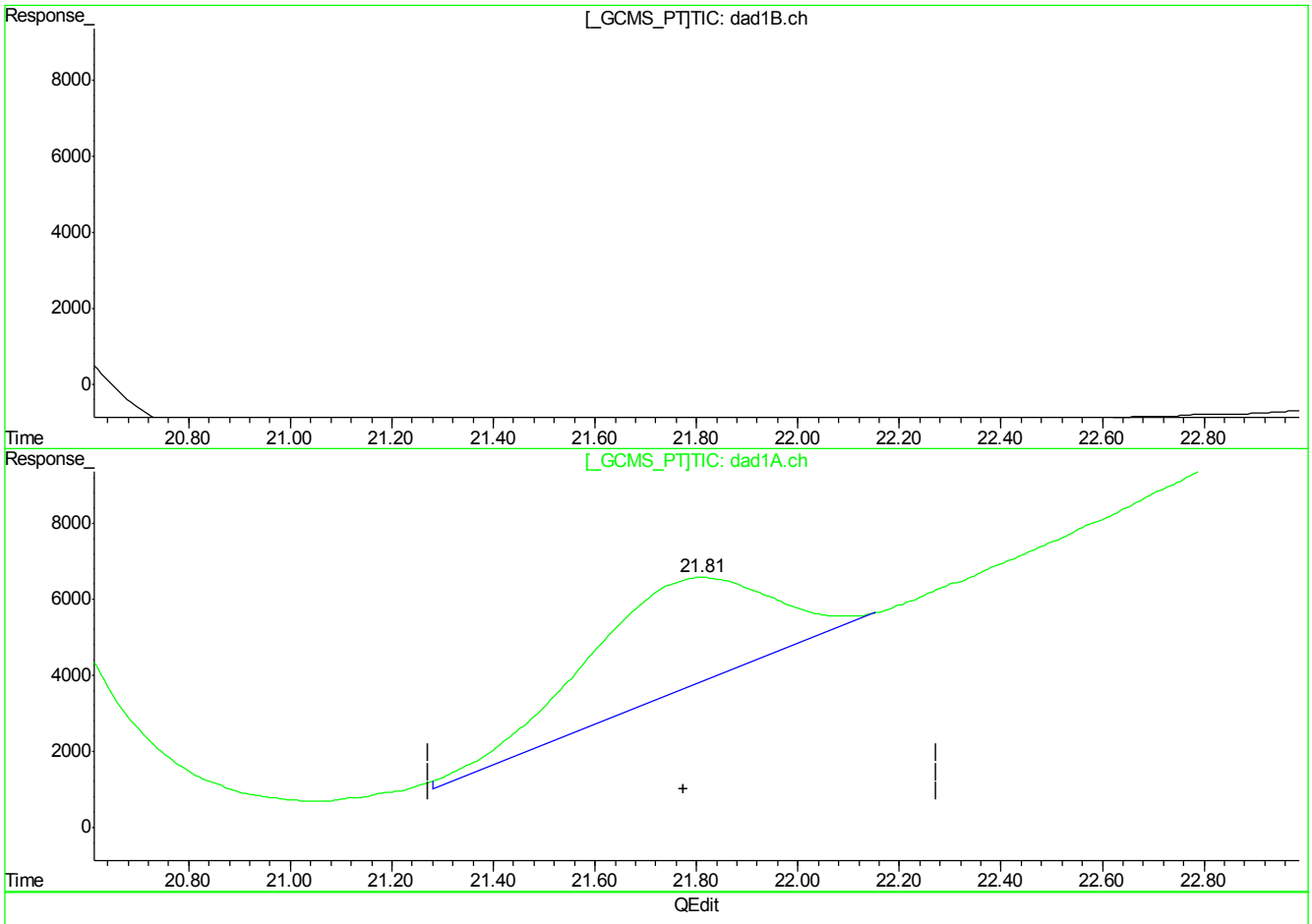
7.4.1.28

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.81min 227.620ppb m

response 730069

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:12:31 2018

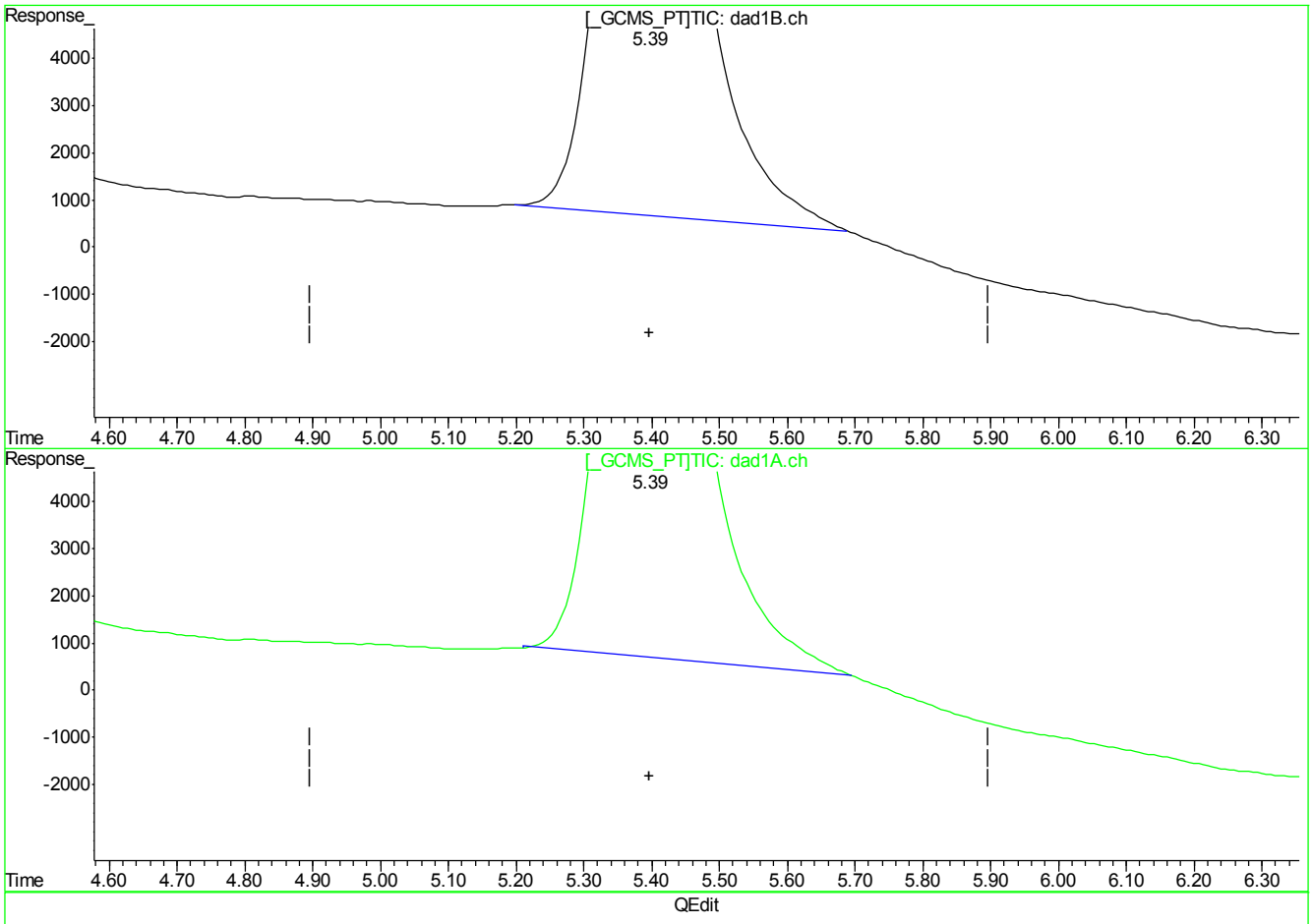
7.4.1.29

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614589.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0507RPB3\GG614589.D\dad1A.ch
Acq On : 07-May-2018, 16:51:28 Operator: evitam
Sample : op69919-pt1 Inst : G1315B
Misc : op69919,Ggg2625,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:16:38 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 441.809ppb m

response 1432296

(2) HMX #2

5.39min 443.592ppb m

response 1429144

(+) = Expected Retention Time
GG614589.D 8330RPB.M_1113M.M Tue May 08 11:25:17 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059599.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059599.D\dad1A.ch
Acq On : 08-May-2018, 10:11:25 Operator: evitam
Sample : op69921-pt1 Inst : G1315B
Misc : OP69921,gbb1729,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 10:37:41 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.20	10.19	1060945	1874202	396.511	397.519
	Spiked Amount 500.000	Range 69 - 134		Recovery =		79.30%	79.50%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.43	1.43	661861	1833337	353.917m	360.679m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.73	2.73	562030	831328	262.829	250.099
6)	1,3,5-Trinitrobe	4.38	4.38	698847	1331003	160.607	159.438
7)	1,3-Dinitrobenze	5.53	5.54	661755	488956	119.365	131.285
8)	3,5-Dinitroanili	5.81	5.82	899350	1513348	183.902	202.352
9)	Nitrobenzene	7.03	7.03	703369	698899	193.031	210.775
10)	Nitroglycerin	0.00	8.36	0	309095	N.D. d	241.211
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D.
12)	2,4,6-Trinitroto	9.12	9.10	187928	223921	44.531m	49.401m
13)	2-Amino-4,6-Dini	9.30	9.30	1333640	2078526	352.303m	387.507m
14)	4-Amino-2,6-Dini	9.71	9.72	171078	379357	65.661	73.209
16)	2,4-Dinitrotolue	10.81	0.00	414674	0	78.820	N.D. #
17)	2,6-Dinitrotolue	11.29	11.29	888207	1001077	256.984	293.172
18)	o-Nitrotoluene	14.54	14.54	517428	705538	207.150	215.382
19)	p-Nitrotoluene	15.10	15.10	1548899	1376260	392.421	436.902
20)	m-Nitrotoluene	16.08	16.10	1087035	1336658	304.730	332.182
21)	PETN	0.00	18.44	0	342234	N.D. d	246.418m

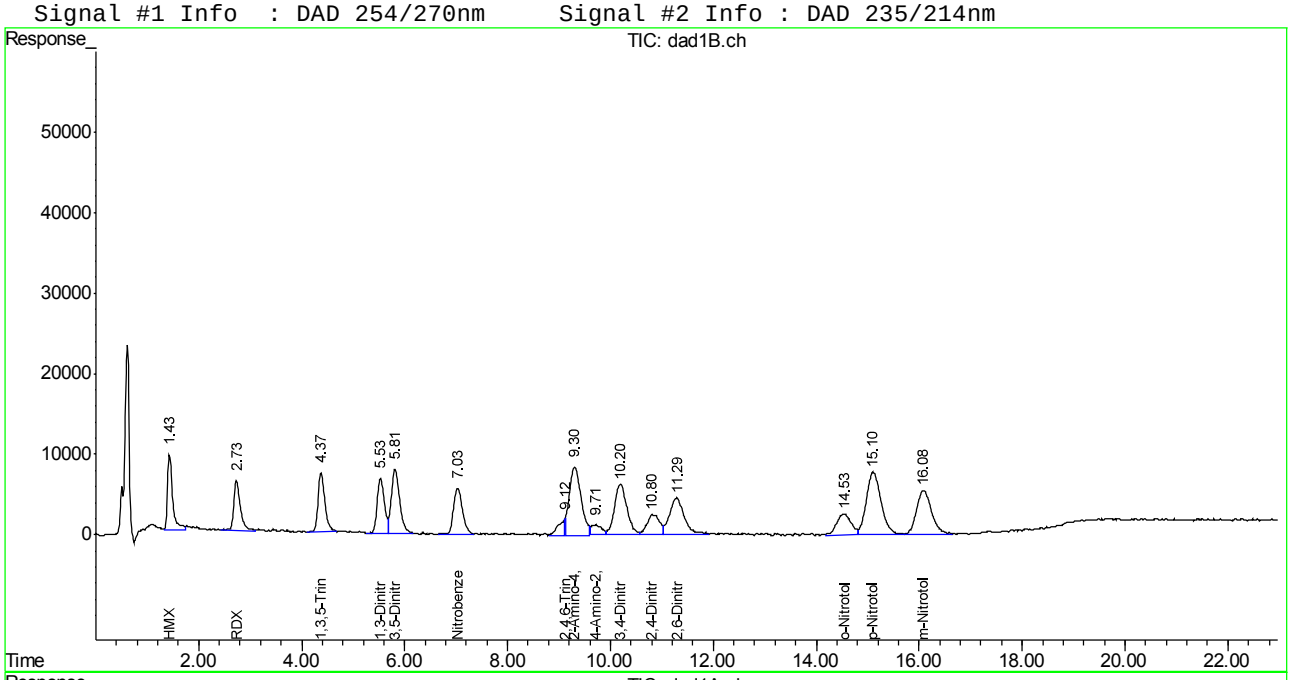
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059599.D 8330B_0419PLUS.M Tue May 08 14:11:57 2018 Page 1

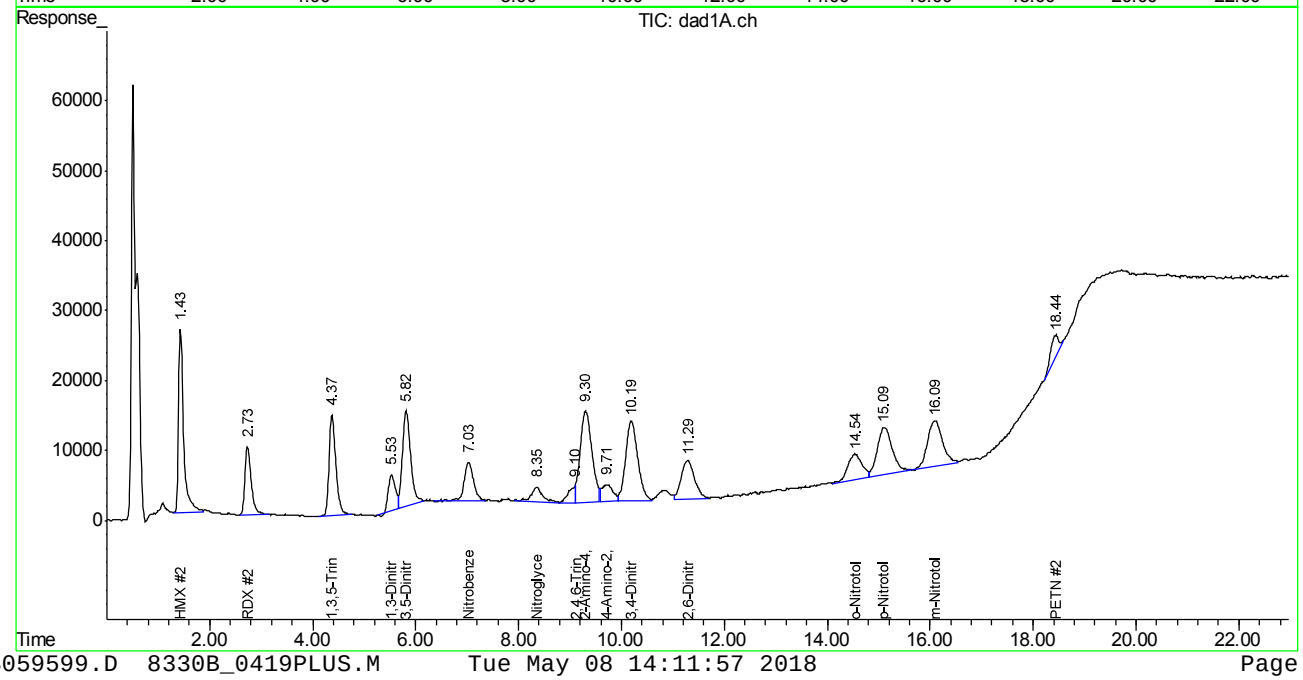
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059599.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059599.D\dad1A.ch
Acq On : 08-May-2018, 10:11:25 Operator: evitam
Sample : op69921-pt1 Inst : G1315B
Misc : OP69921,gbb1729,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:38 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

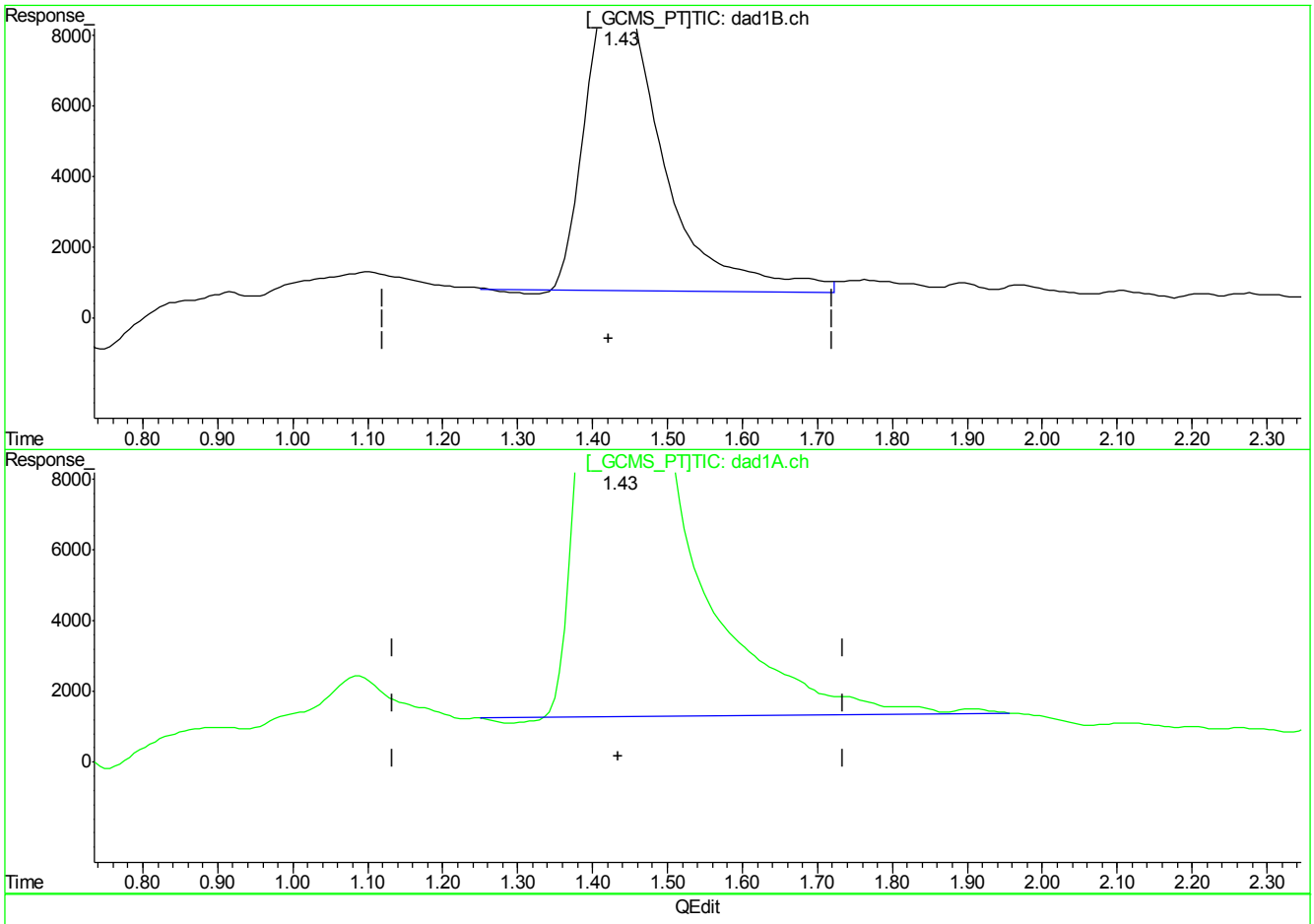
Sample Number:	OP69921-PT1	**Method:**	SW846 8330B
Lab FileID:	BB059599.D	**Analyst approved:**	05/08/18 10:45 Evita Martinez
Injection Time:	05/08/18 10:11	**Supervisor approved:**	05/09/18 15:58 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.43	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.10	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.12	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	9.30	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.30	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059599.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059599.D\dad1A.ch
Acq On : 08-May-2018, 10:11:25 Operator: evitam
Sample : op69921-pt1 Inst : G1315B
Misc : OP69921,gbb1729,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:37 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(2) HMX

1.43min 328.054ppb

response 613495

(2) HMX #2

1.43min 350.499ppb

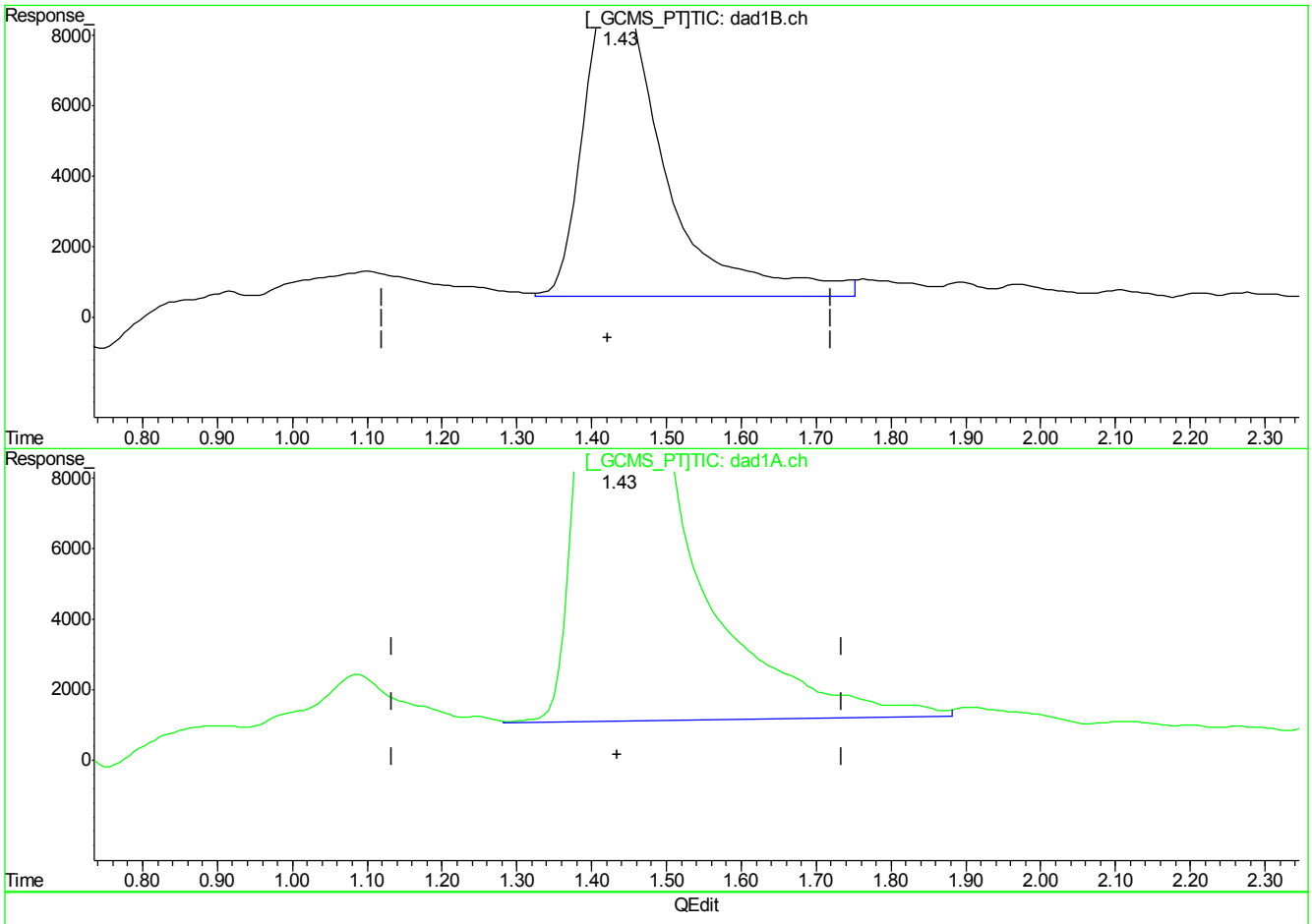
response 1781695

(+) = Expected Retention Time
BB059599.D 8330B_0419PLUS.M Tue May 08 10:37:49 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059599.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059599.D\dad1A.ch
Acq On : 08-May-2018, 10:11:25 Operator: evitam
Sample : op69921-pt1 Inst : G1315B
Misc : OP69921,gbb1729,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:37 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(2) HMX

1.43min 353.917ppb m

response 661861

(2) HMX #2

1.43min 360.679ppb m

response 1833337

(+) = Expected Retention Time
BB059599.D 8330B_0419PLUS.M Tue May 08 10:38:04 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:16

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:52 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2637585	4823261	507.727	445.870m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		101.55%	89.17%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1341191	1334726	413.707m	414.285m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.44	7.44	1609671	1609892	155.350	155.387
6)	RDX	7.89	7.89	1269230	1270516	266.411	267.863
7)	1,3-Dinitrobenze	9.91	9.91	1666552	1296027	116.486	98.437m
8)	Nitrobenzene	10.87	10.87	1824866	1744791	193.365	188.404m
9)	2,4,6-Trinitroto	11.64	11.65	449153	619962	44.320	47.272m
10)	Nitroglycerin	0.00	12.39	0	717485	N.D. d	212.920m
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D.
13)	2,6-Dinitrotolue	14.57	14.56	1895479	2177432	265.117	214.609m
14)	2,4-Dinitrotolue	15.29	15.32	1054450	631403	80.437	65.728m
15)	o-Nitrotoluene	16.84	16.84	1155589	2104618	200.047	244.053m
16)	3,5-Dinitroanili	16.24	16.24	2006532	3562538	205.998	220.194m
17)	p-Nitrotoluene	17.93	17.94	2398776	4403018	204.284	207.756m
18)	4-Amino-2,6-Dini	17.93	17.94	2398776	4368161	204.284	205.512m
19)	m-Nitrotoluene	19.20	19.19	1874238	3029096	317.917	311.494m
20)	2-Amino-4,6-Dini	20.13	20.12	3429359	4714337	380.072	399.246m
21)	PETN	0.00	21.78	0	1032758	N.D. d	321.992m

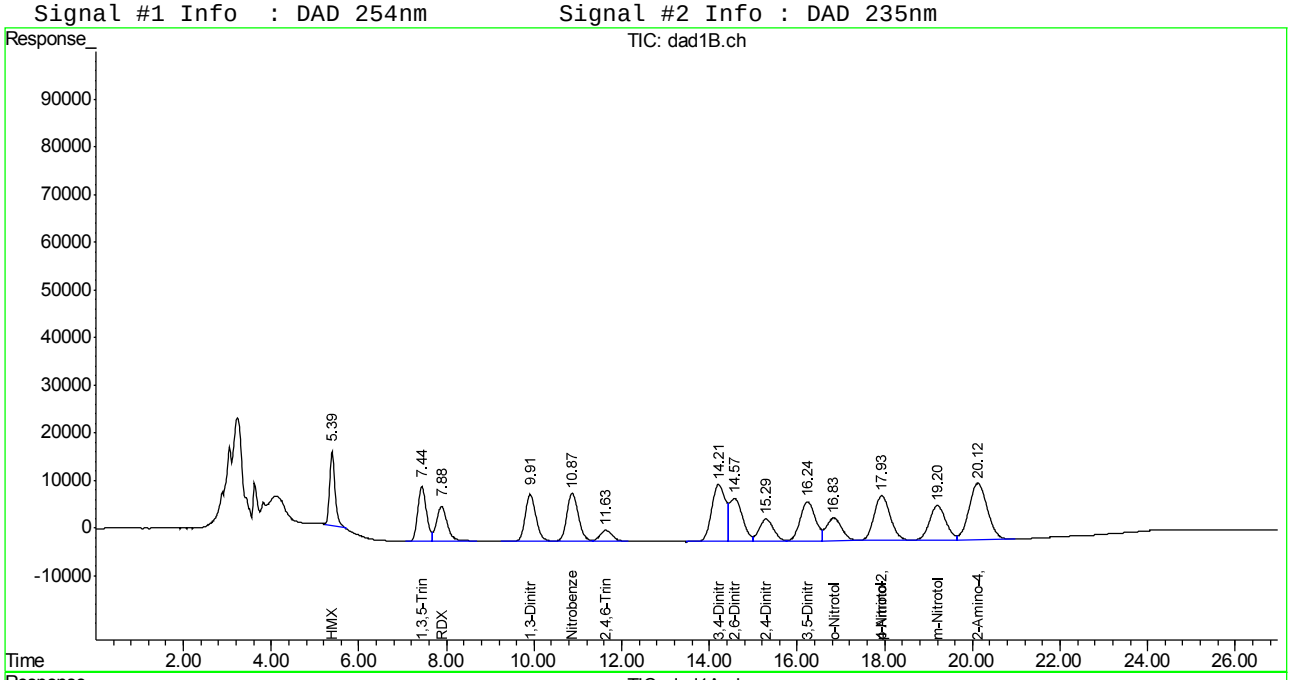
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:41:51 2018 Page 1

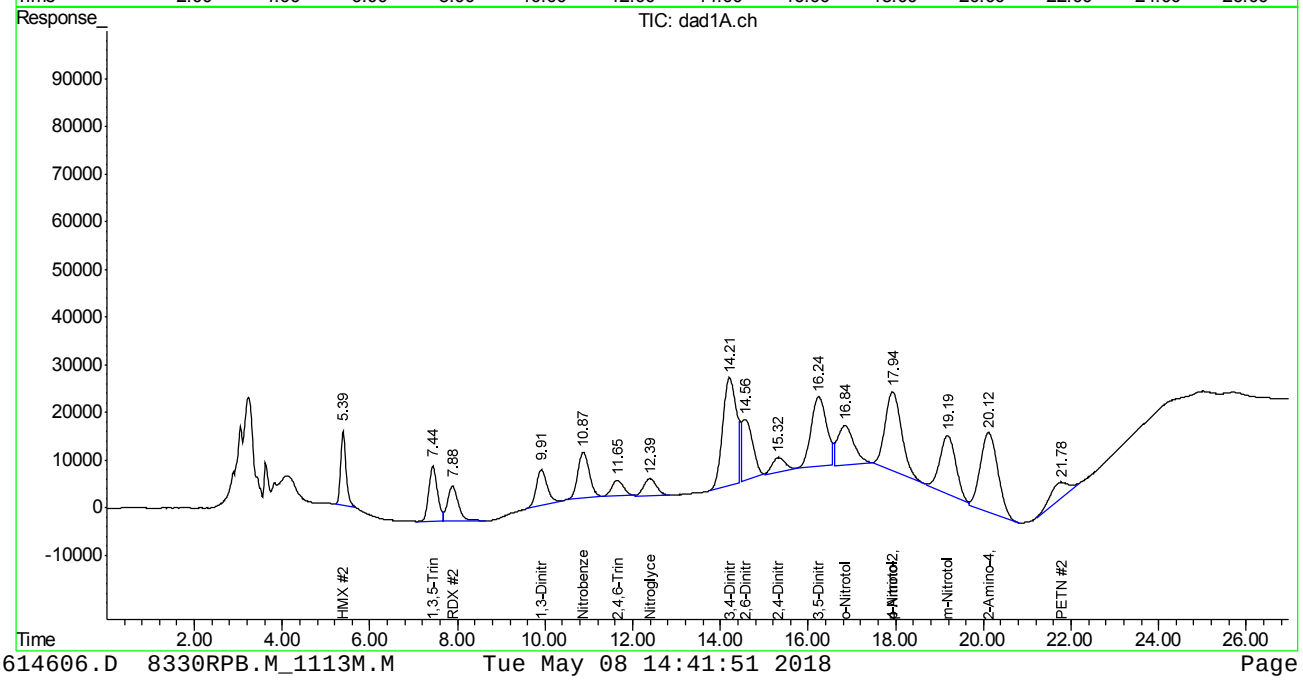
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:39 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

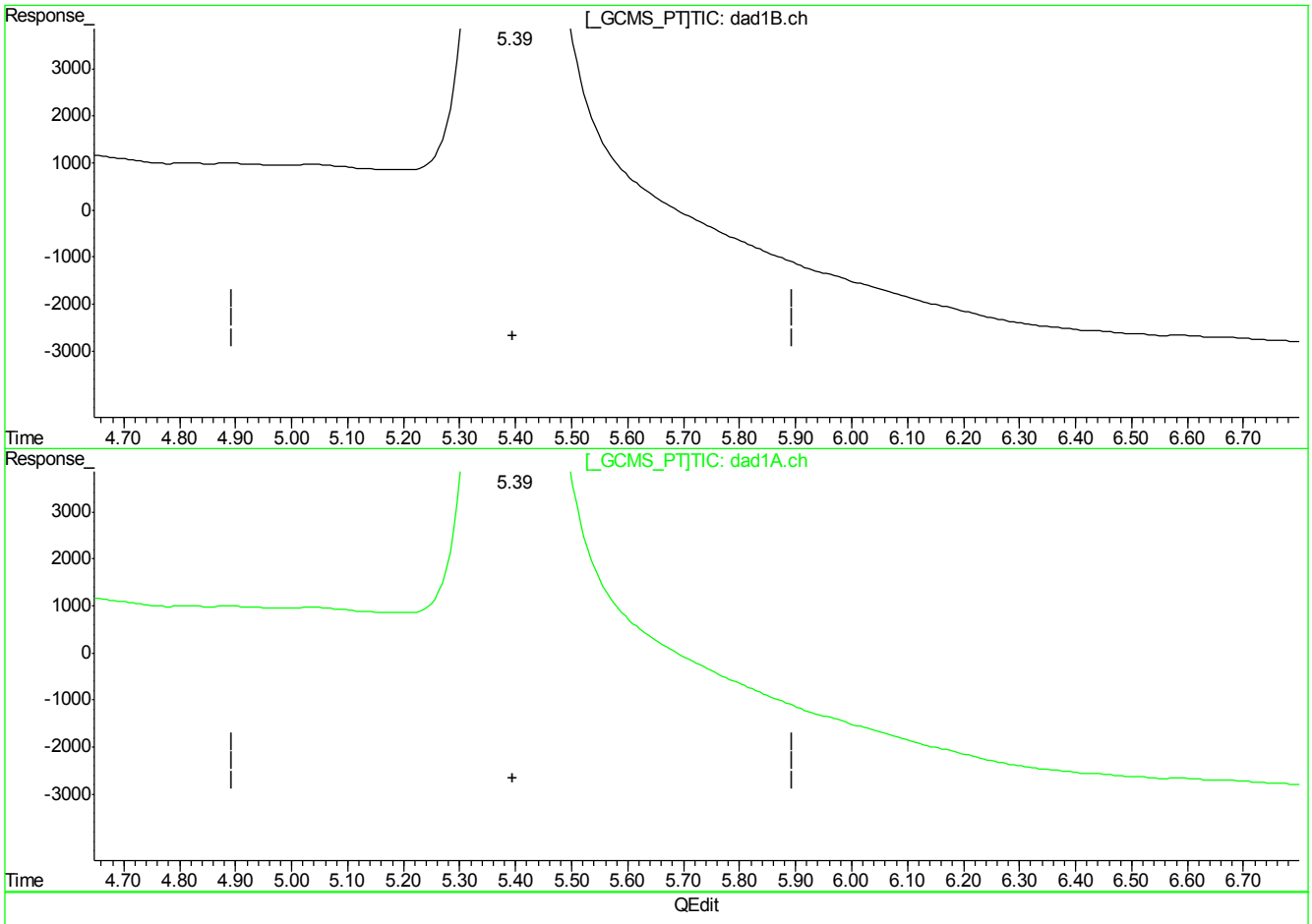
Sample Number:	OP69920-PT1	**Method:**	SW846 8330B
Lab FileID:	GG614606.D	**Analyst approved:**	05/08/18 14:44 Evita Martinez
Injection Time:	05/08/18 11:27	**Supervisor approved:**	05/08/18 16:16 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.91	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.87	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.65	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.39	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.21	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.56	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.32	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.24	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.84	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	17.94	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	17.94	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.19	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.12	Poorly defined baseline
PETN	78-11-5	2	21.78	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 316.245ppb

response 1025230

(2) HMX #2

5.39min 318.221ppb

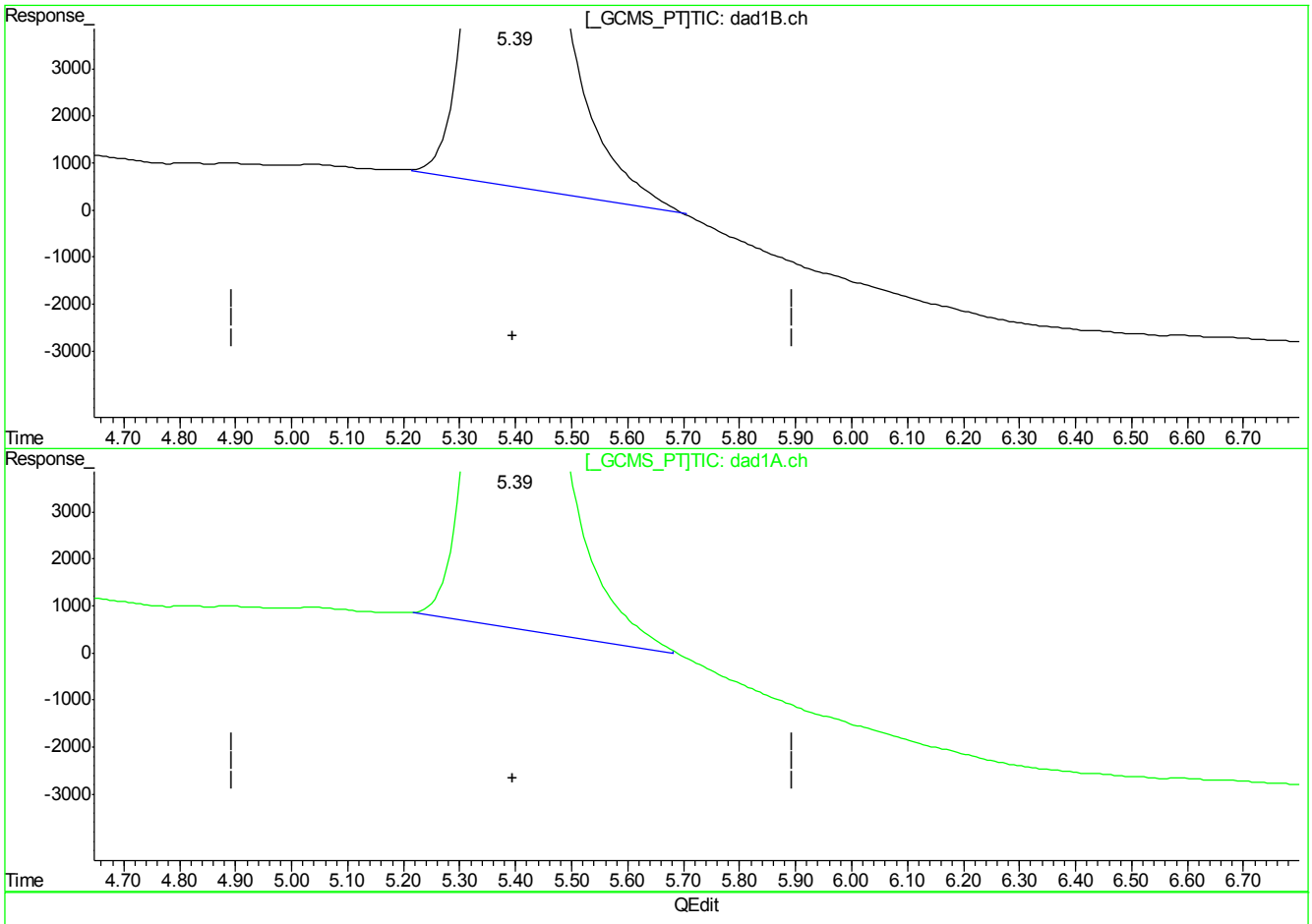
response 1025230

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:07 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 413.707ppb m

response 1341191

(2) HMX #2

5.39min 414.285ppb m

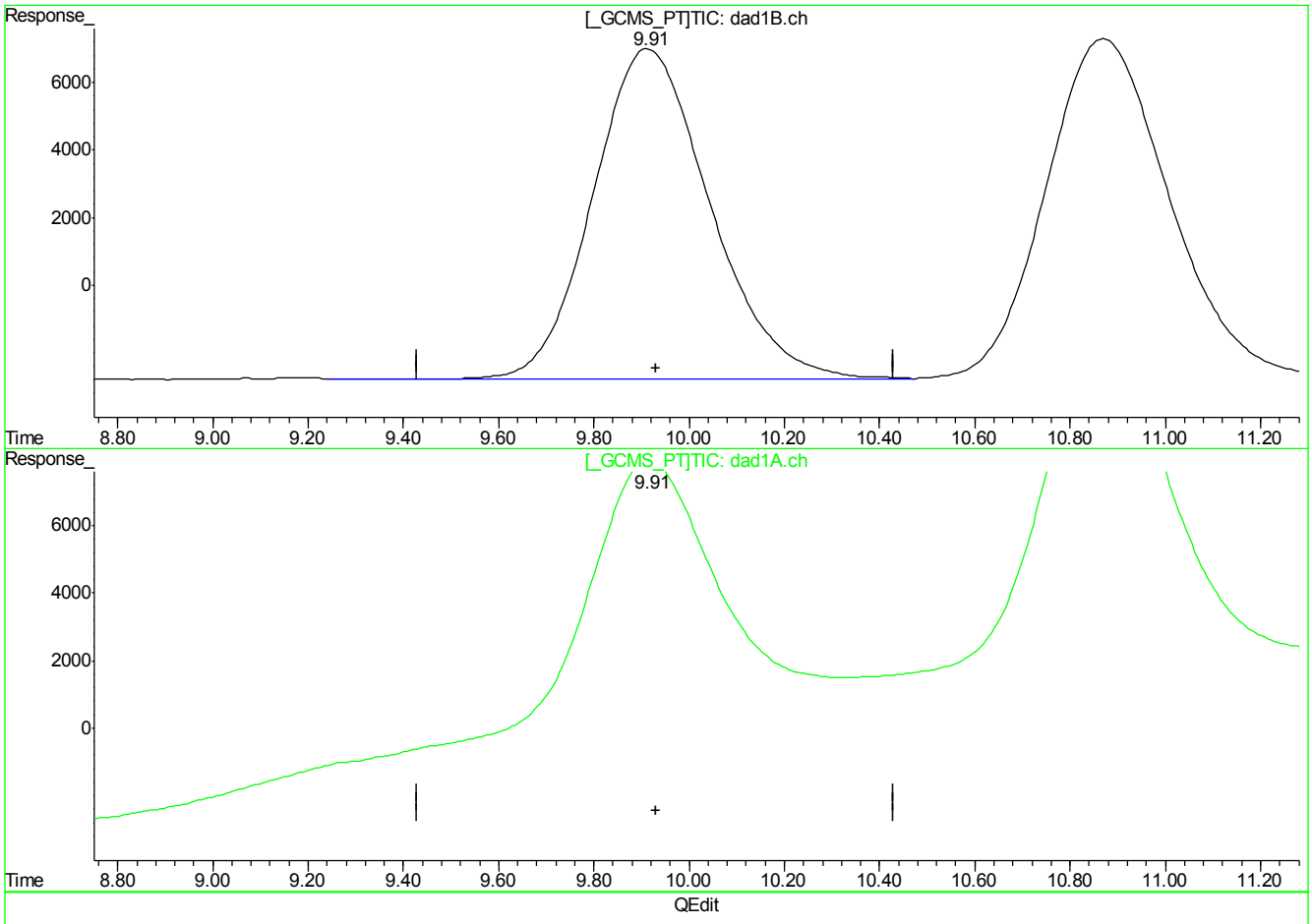
response 1334726

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.91min 116.486ppb

response 1666552

(7) 1,3-Dinitrobenzene #2

9.92min 267.249ppb

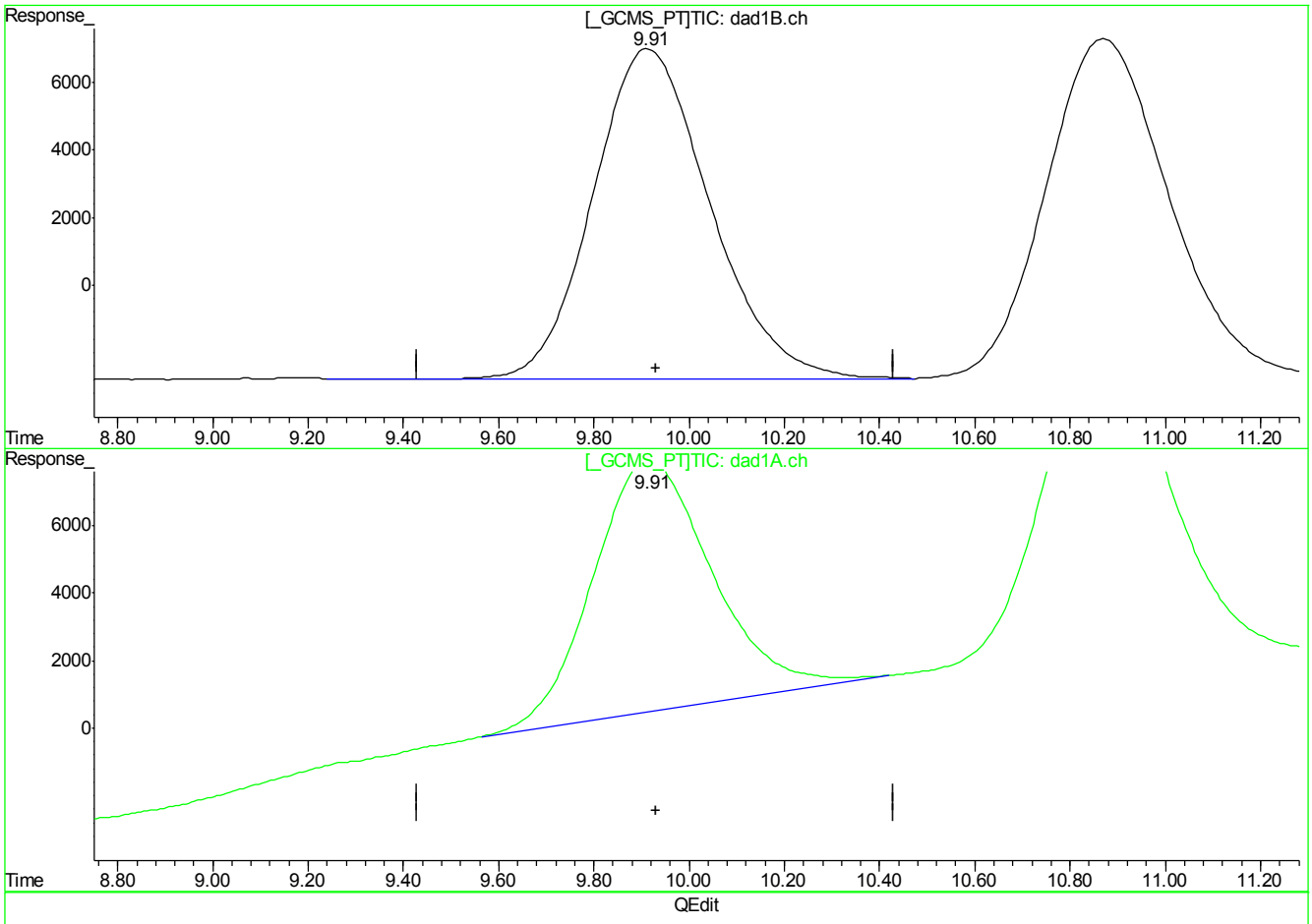
response 3468132

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:22 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.91min 116.486ppb

response 1666552

(7) 1,3-Dinitrobenzene #2

9.91min 98.437ppb m

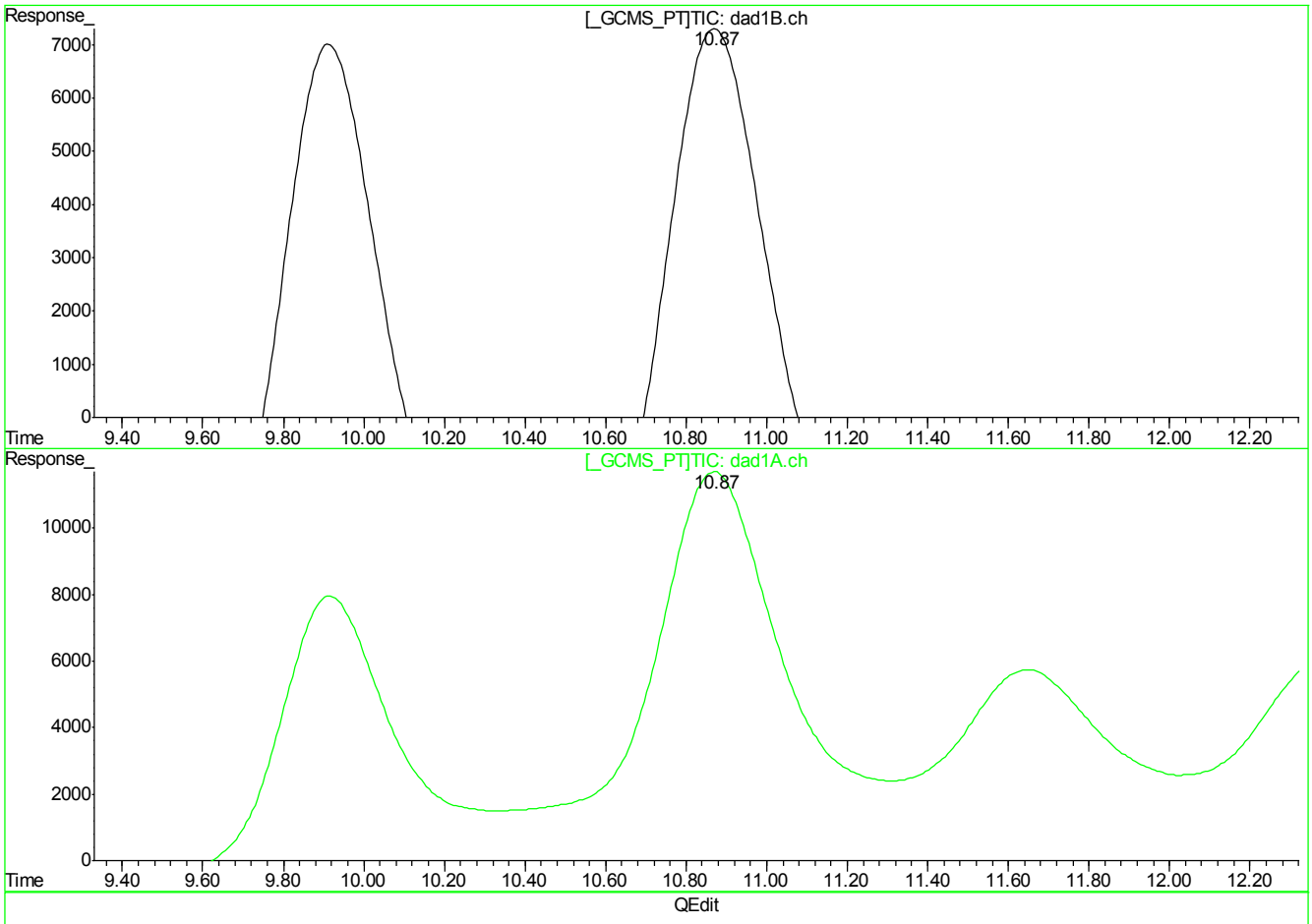
response 1296027

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:25 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.87min 193.365ppb

response 1824866

(8) Nitrobenzene #2

10.87min 493.141ppb

response 4566929

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:32 2018

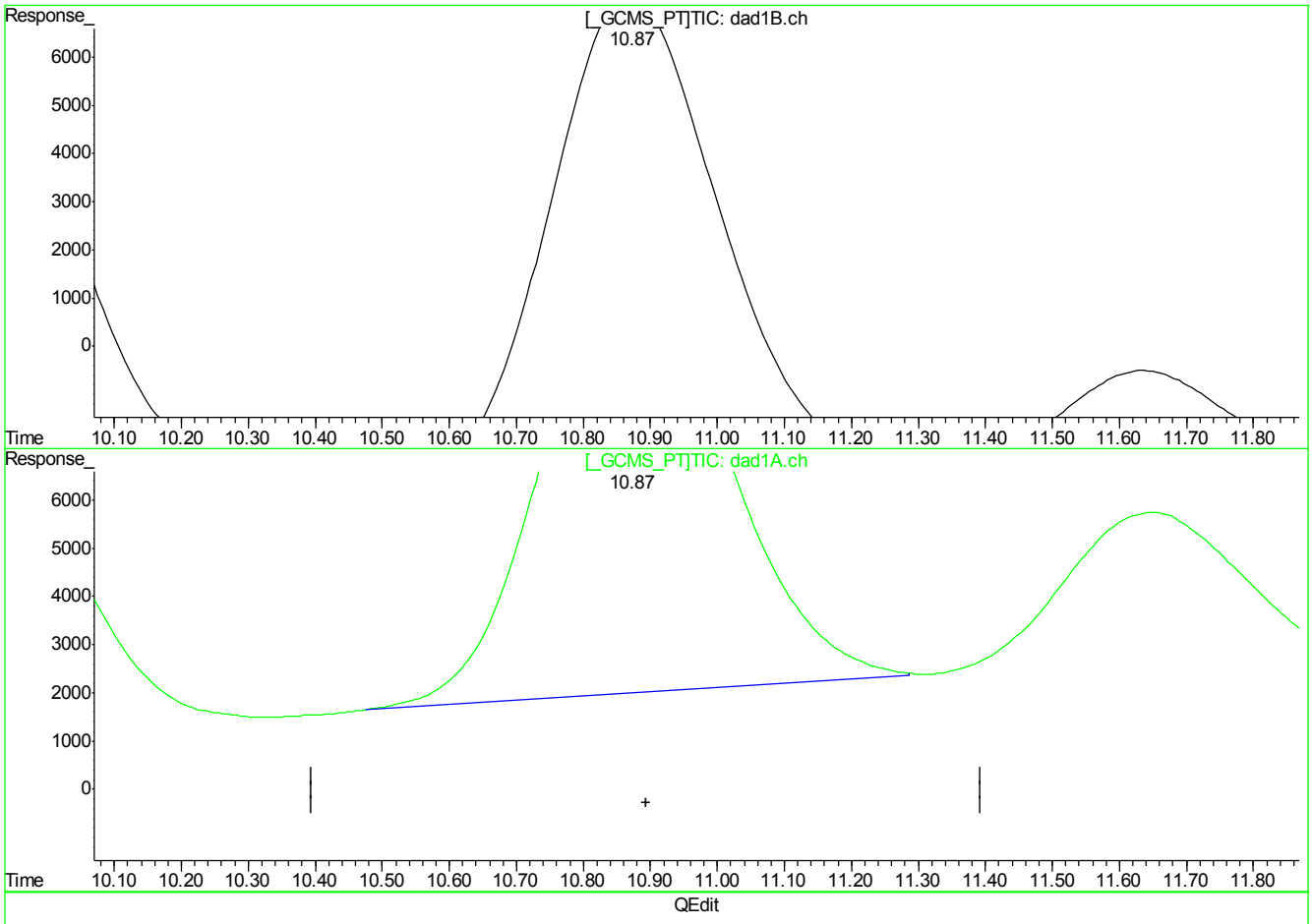
7.4.3.6

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.87min 193.365ppb

response 1824866

(8) Nitrobenzene #2

10.87min 188.404ppb m

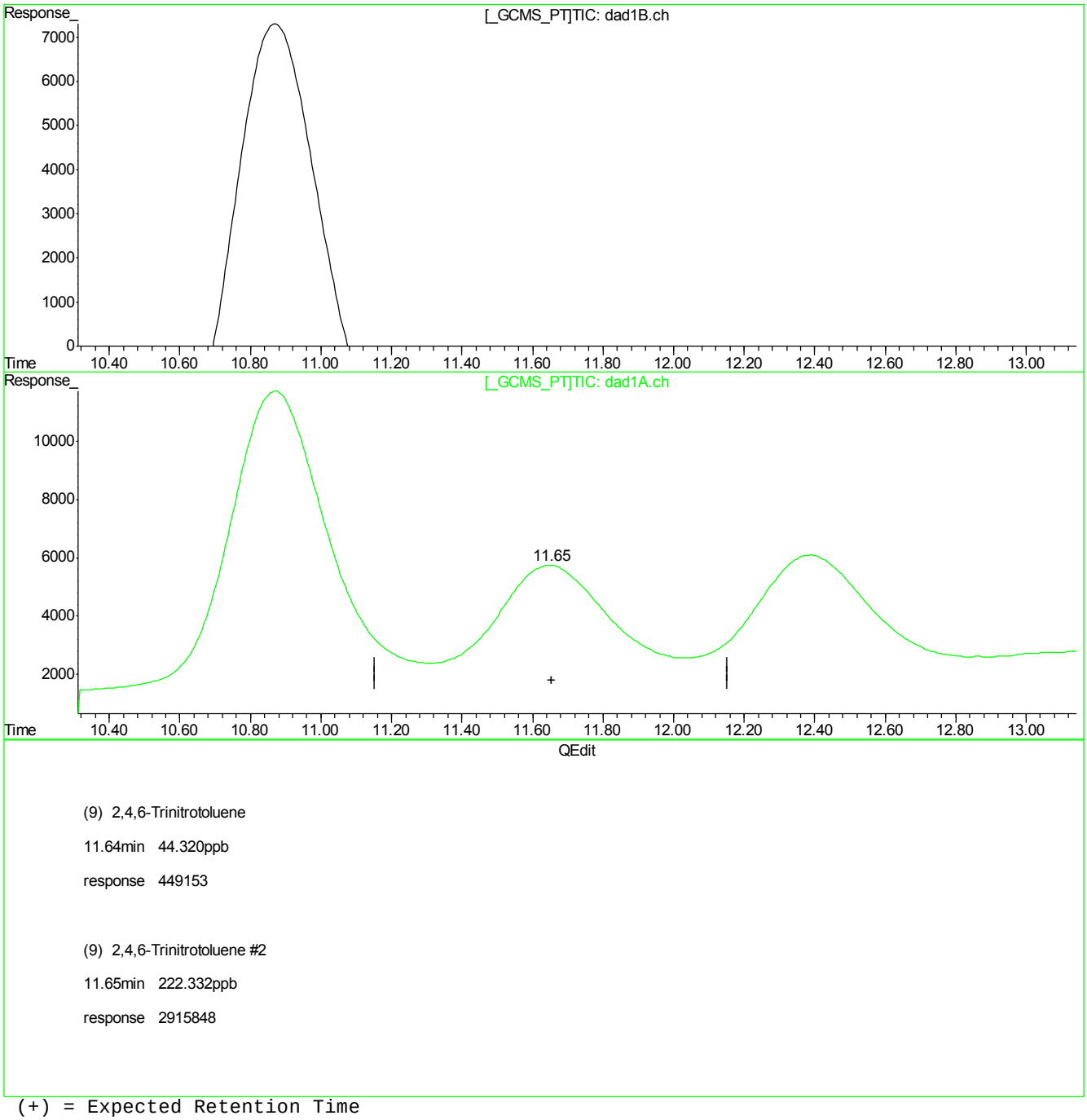
response 1744791

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:40 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.64min 44.320ppb

response 449153

(9) 2,4,6-Trinitrotoluene #2

11.65min 222.332ppb

response 2915848

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:43 2018

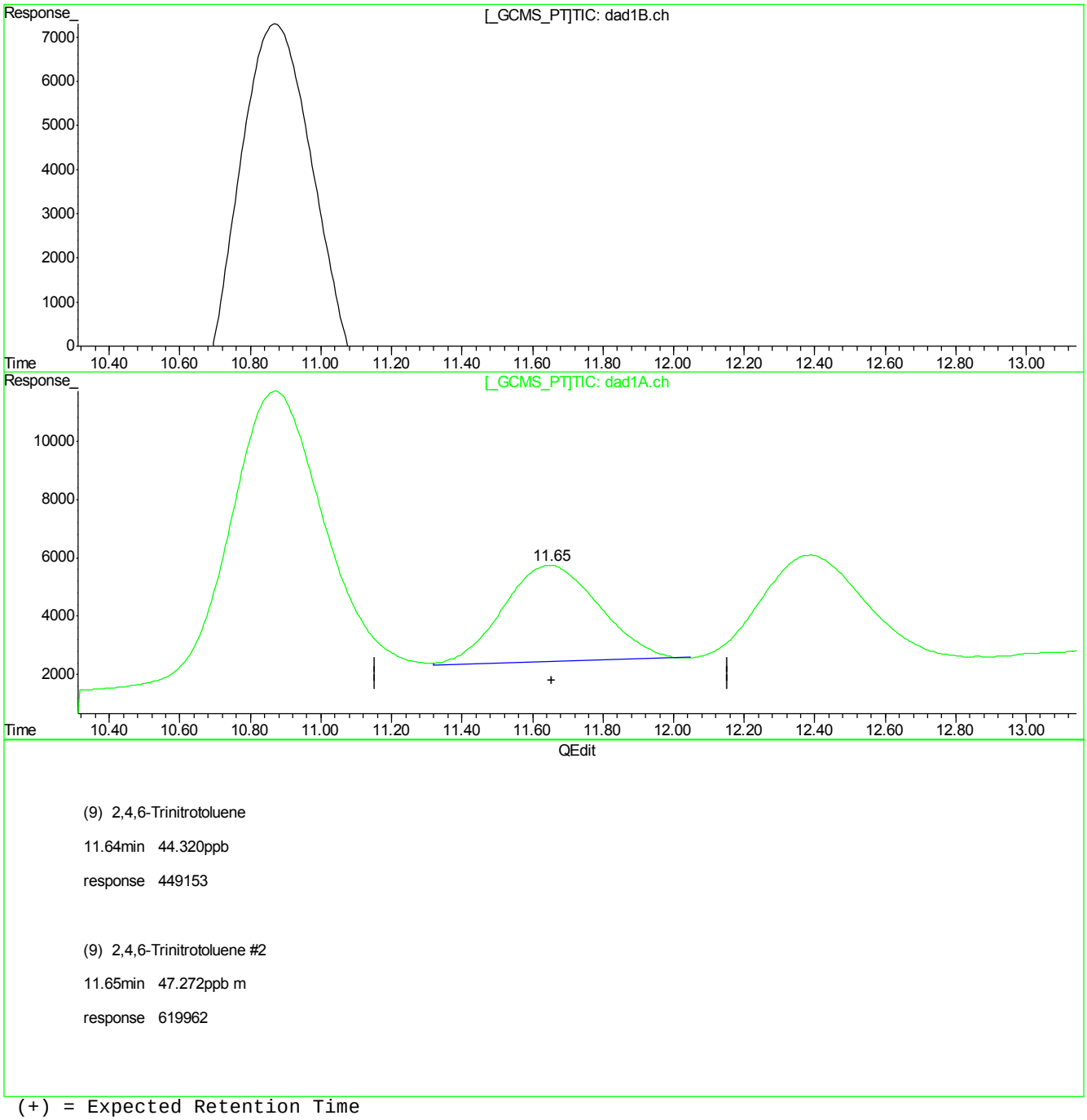
7.4.3.8

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.64min 44.320ppb

response 449153

(9) 2,4,6-Trinitrotoluene #2

11.65min 47.272ppb m

response 619962

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:47 2018

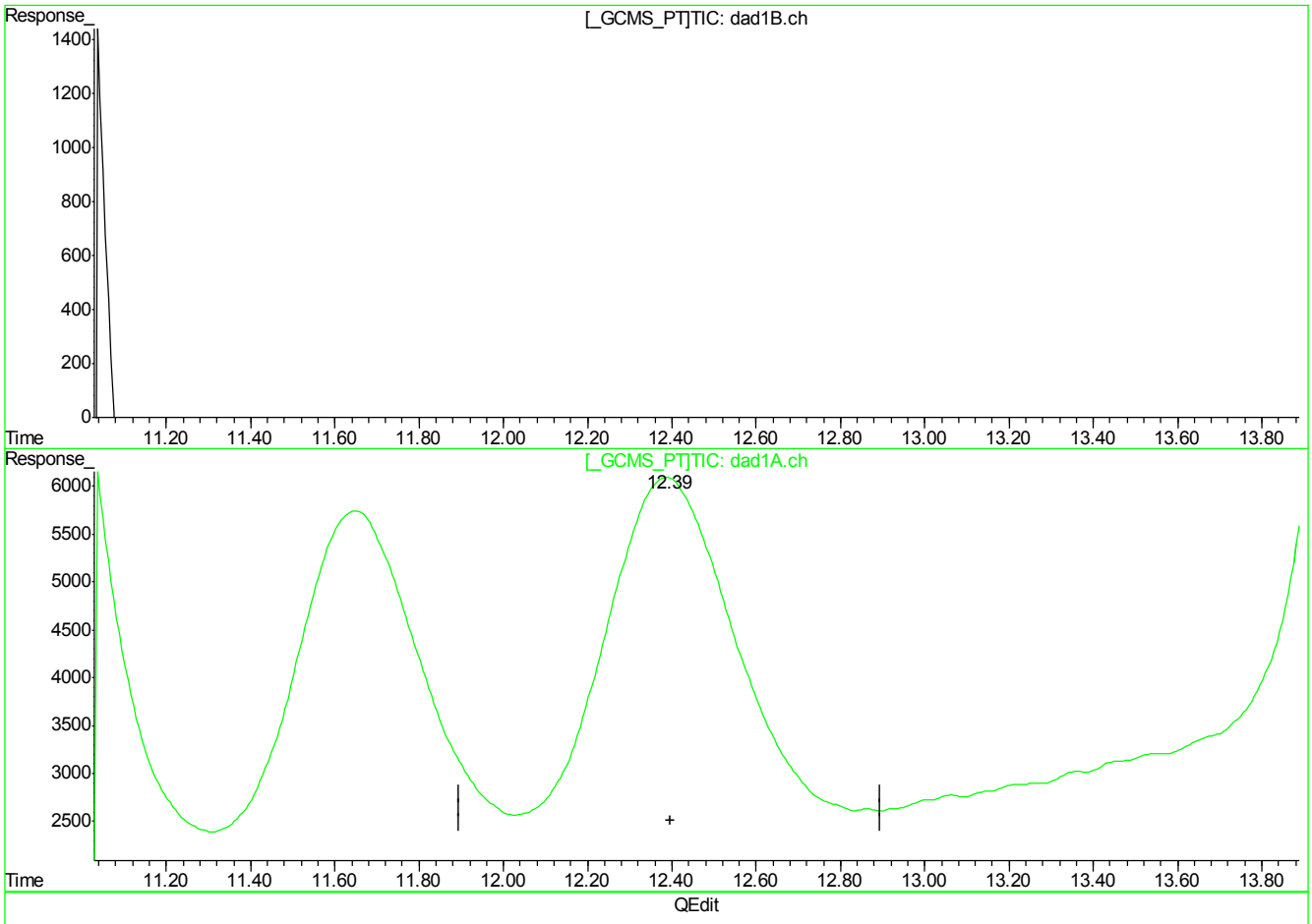
7.4.3.9

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.39min 1053.078ppb

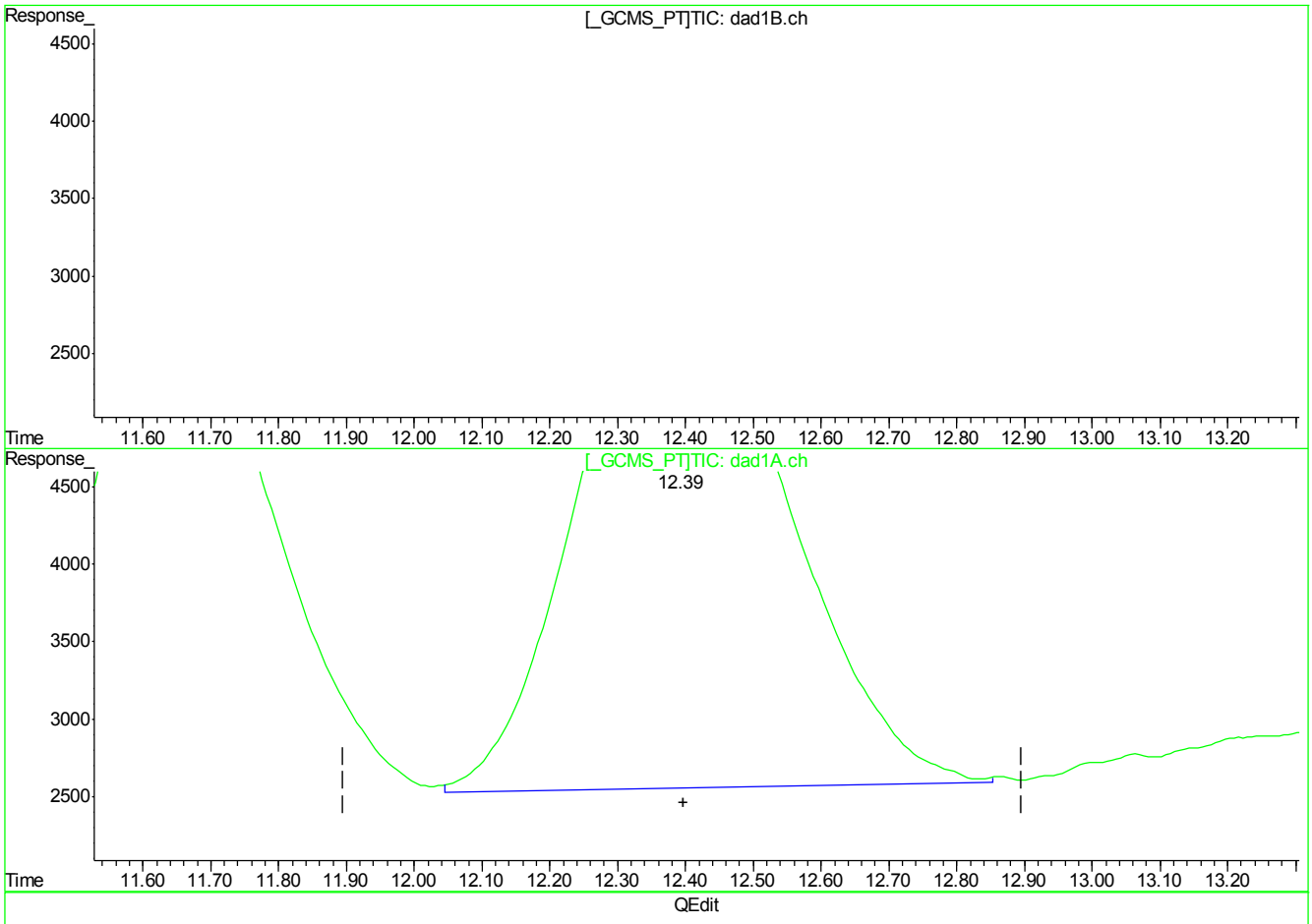
response 3548607

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:50 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.39min 212.920ppb m

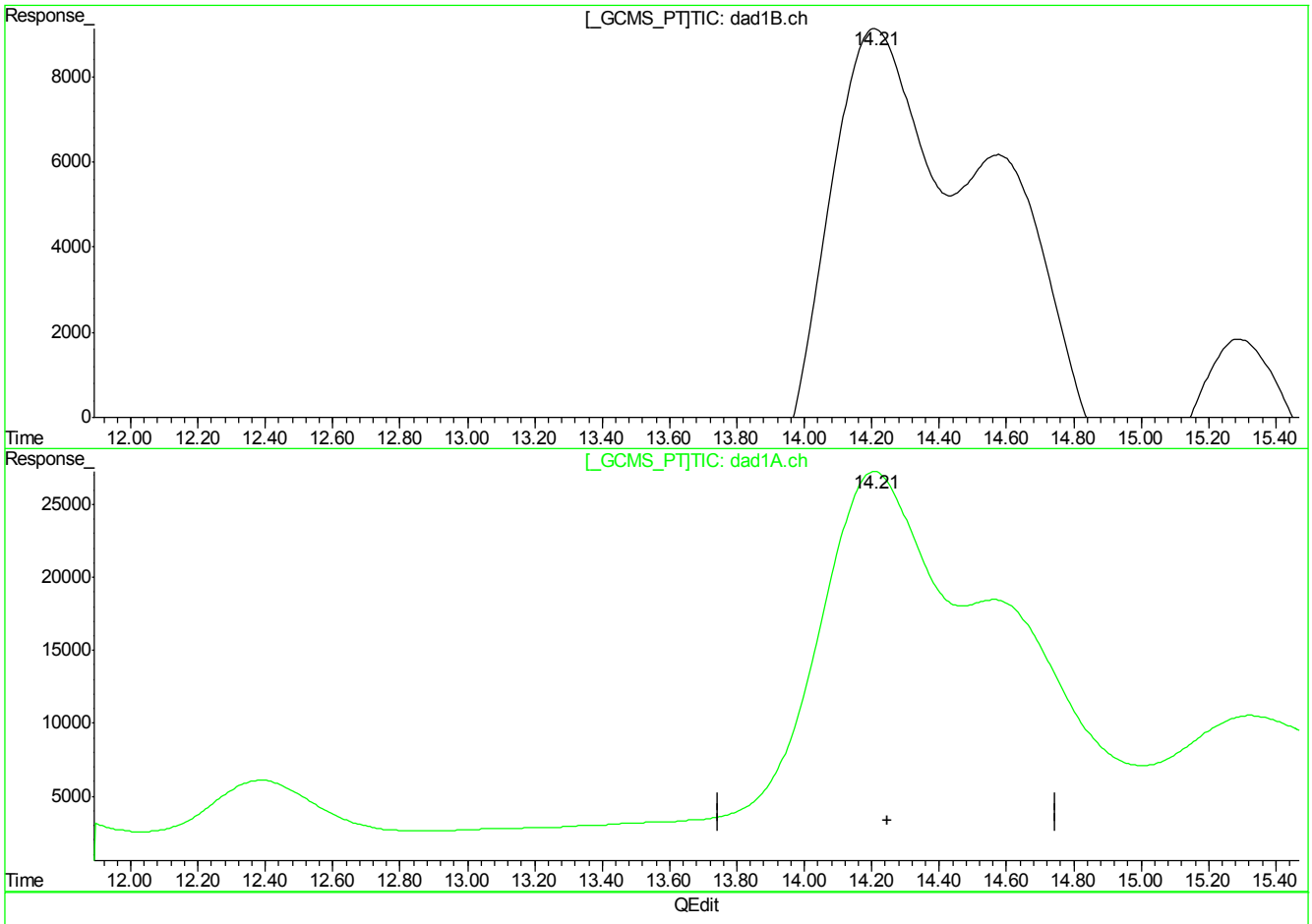
response 717485

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:54 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 507.727ppb

response 2637585

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 1055.709ppb

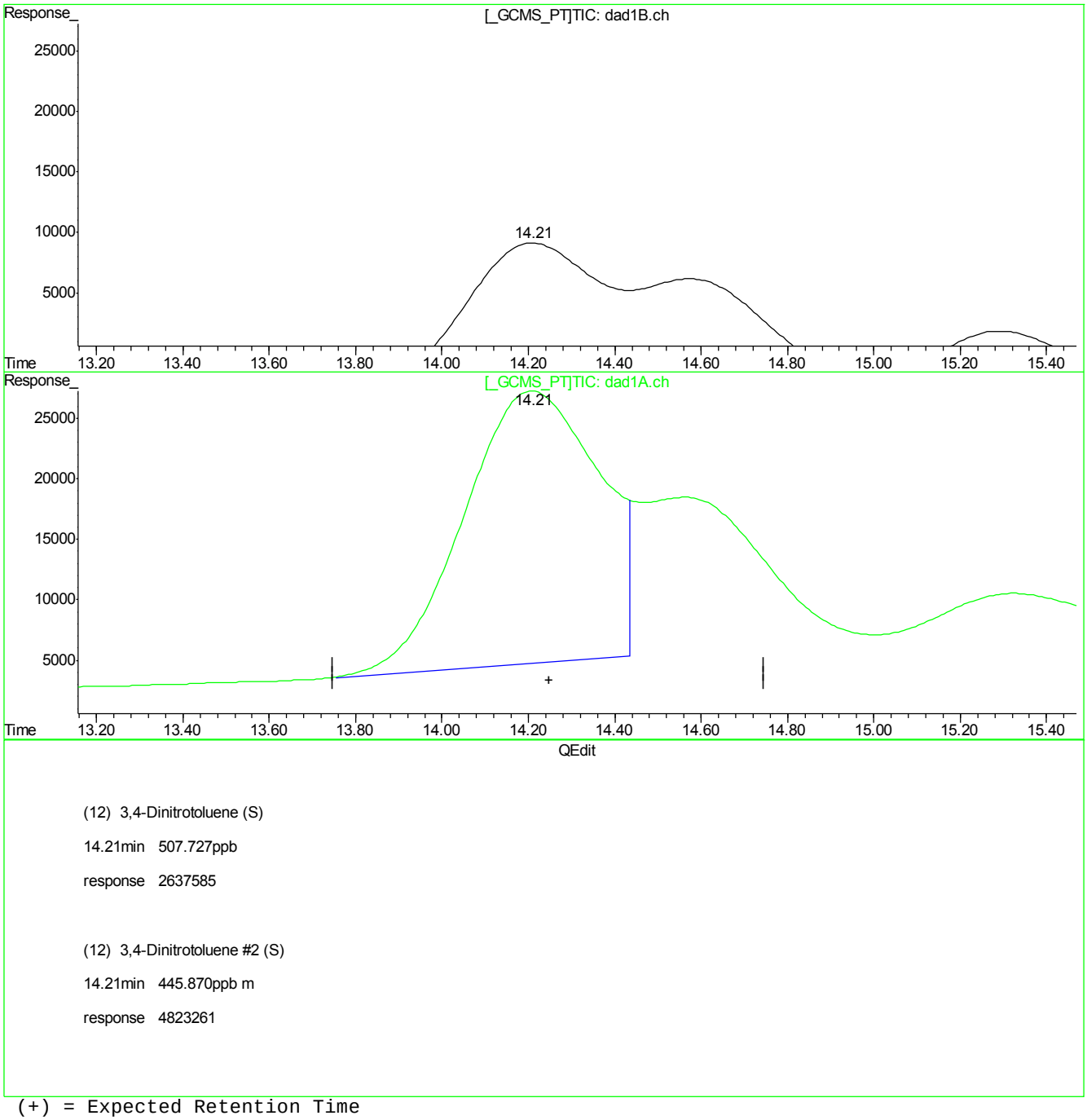
response 11420262

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:37:58 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.21min 507.727ppb

response 2637585

(12) 3,4-Dinitrotoluene #2 (S)

14.21min 445.870ppb m

response 4823261

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:05 2018

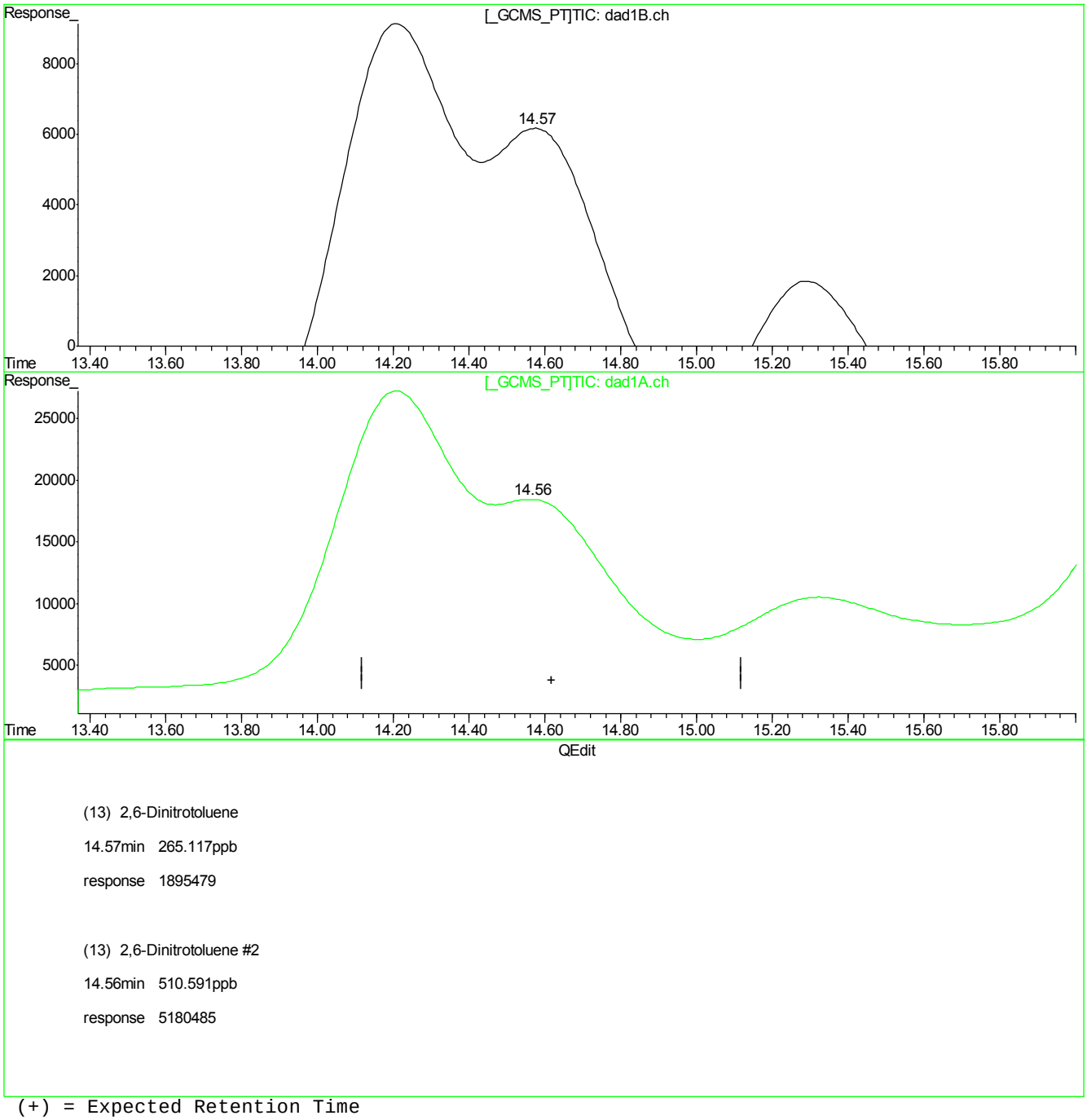
7.4.3.13

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.57min 265.117ppb

response 1895479

(13) 2,6-Dinitrotoluene #2

14.56min 510.591ppb

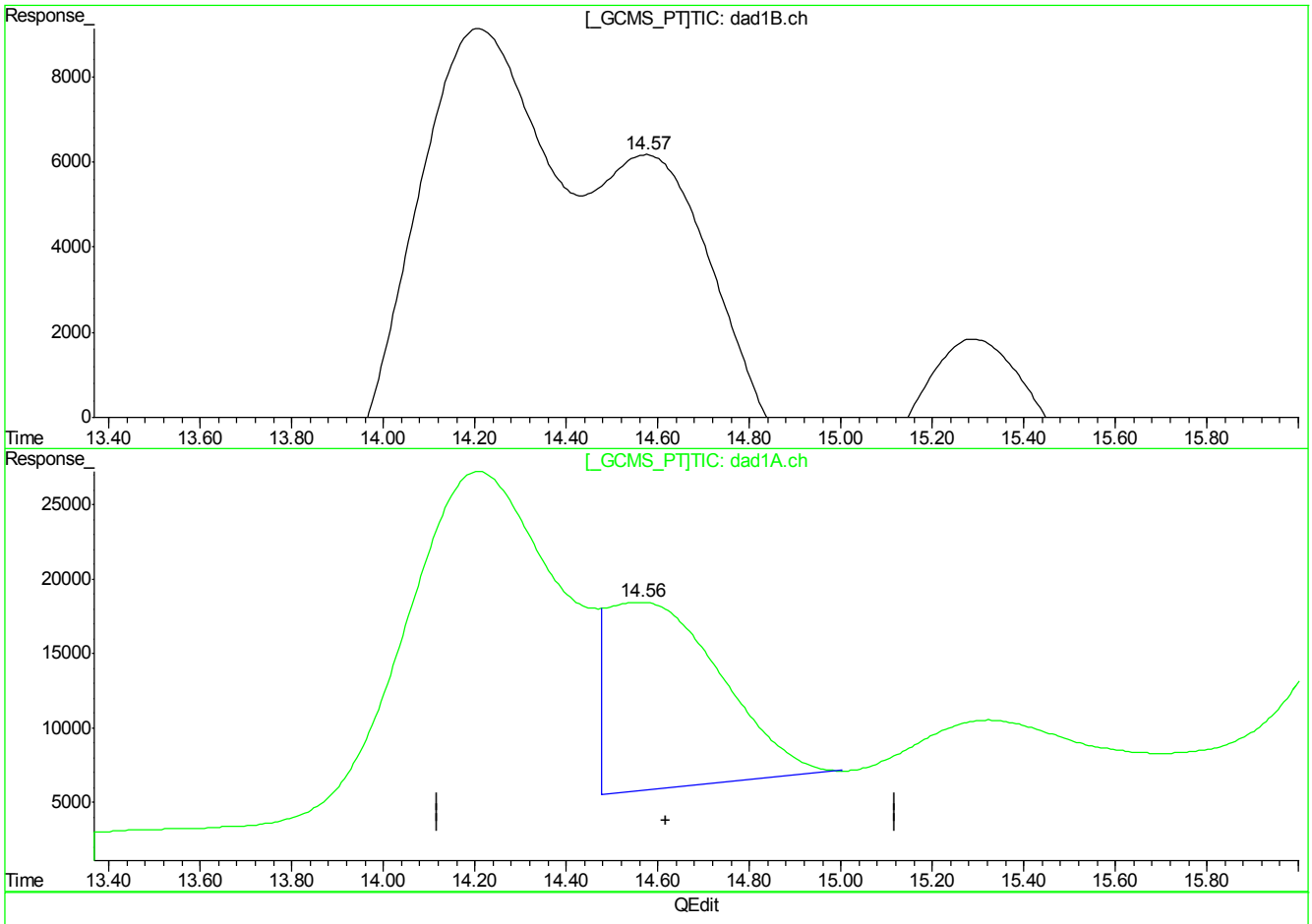
response 5180485

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:08 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.57min 265.117ppb

response 1895479

(13) 2,6-Dinitrotoluene #2

14.56min 214.609ppb m

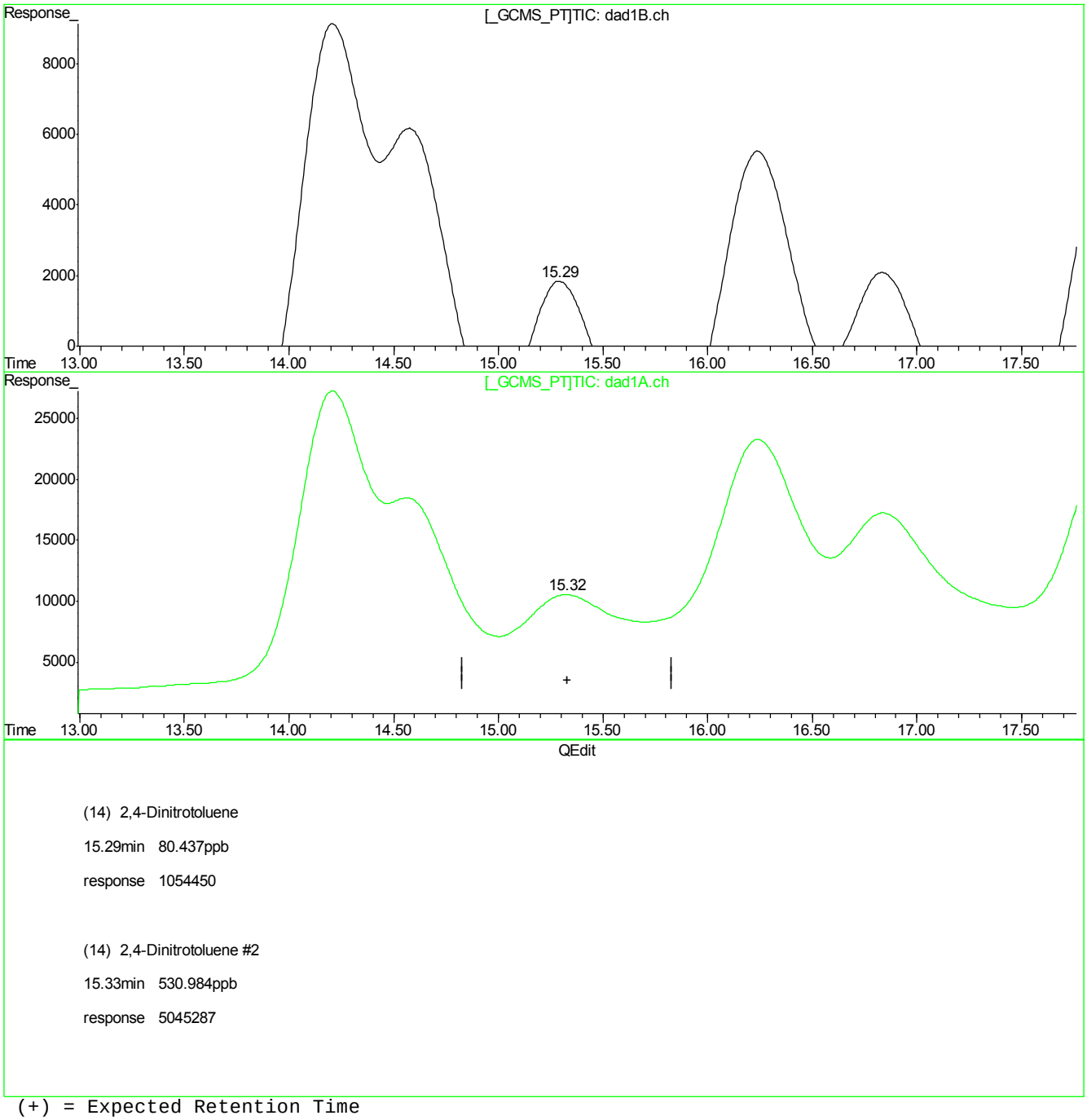
response 2177432

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:13 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

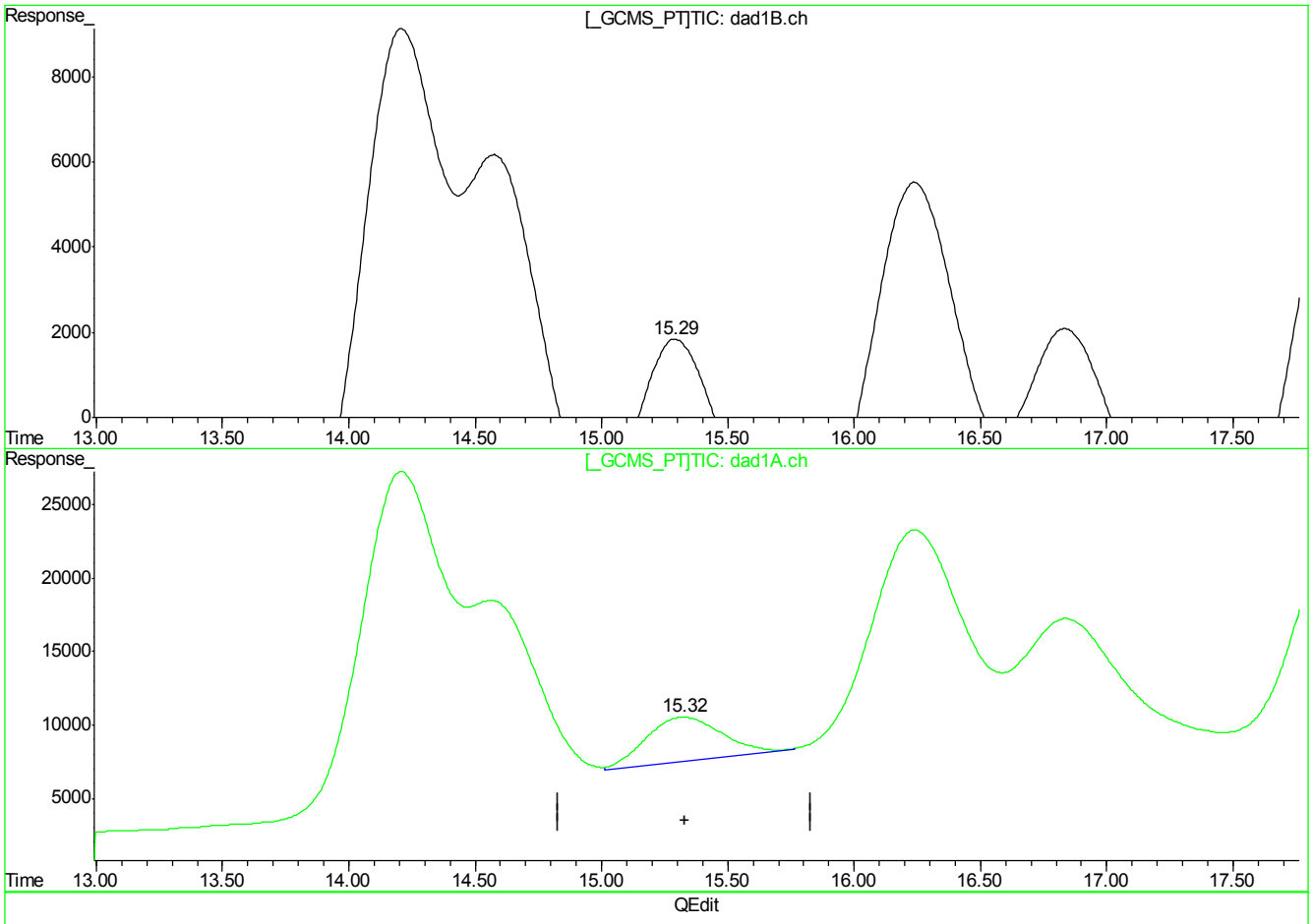


(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:16 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.29min 80.437ppb

response 1054450

(14) 2,4-Dinitrotoluene #2

15.32min 65.728ppb m

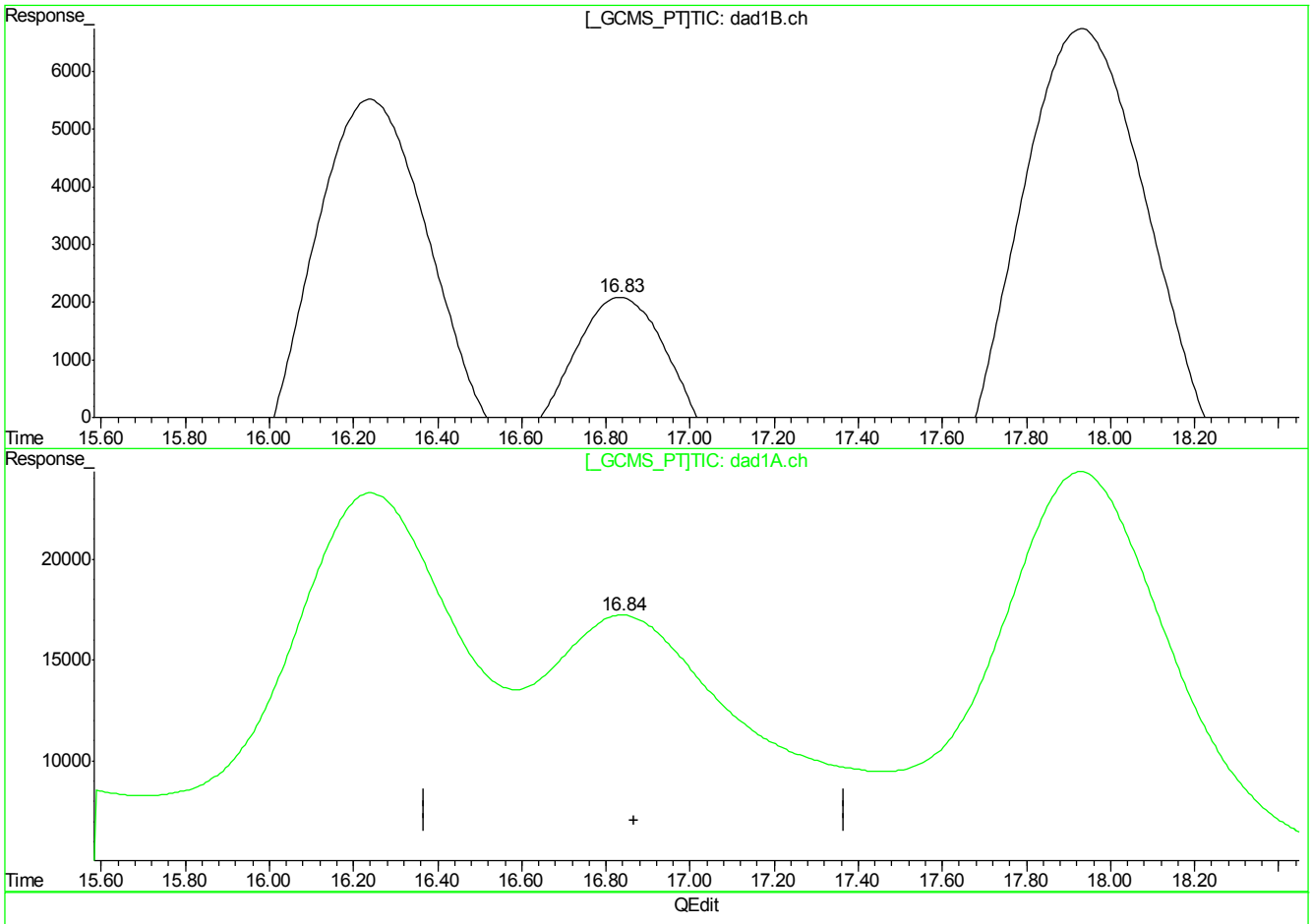
response 631403

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:20 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.84min 200.047ppb

response 1155589

(15) o-Nitrotoluene #2

16.84min 987.132ppb

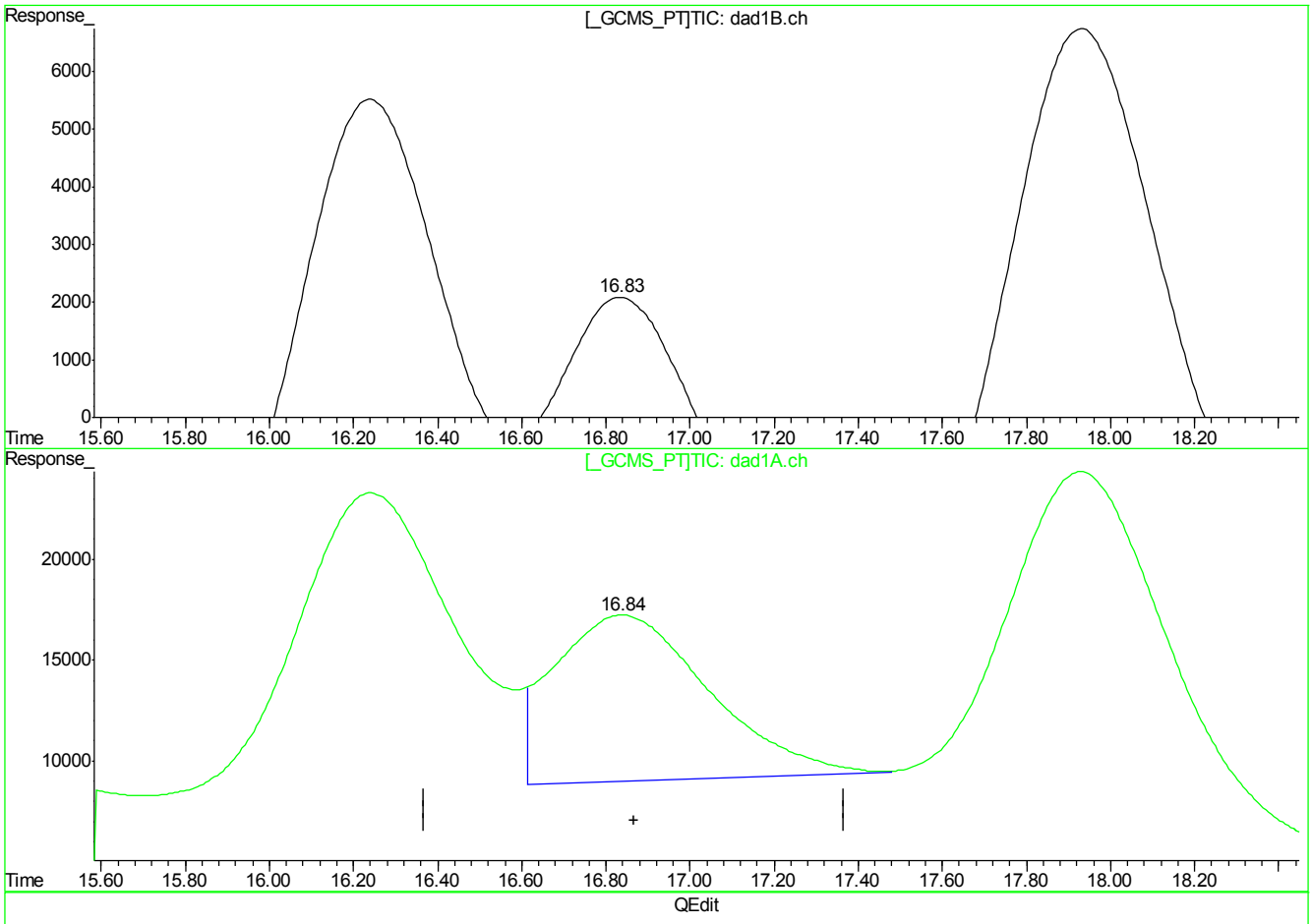
response 8512657

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.84min 200.047ppb

response 1155589

(15) o-Nitrotoluene #2

16.84min 244.053ppb m

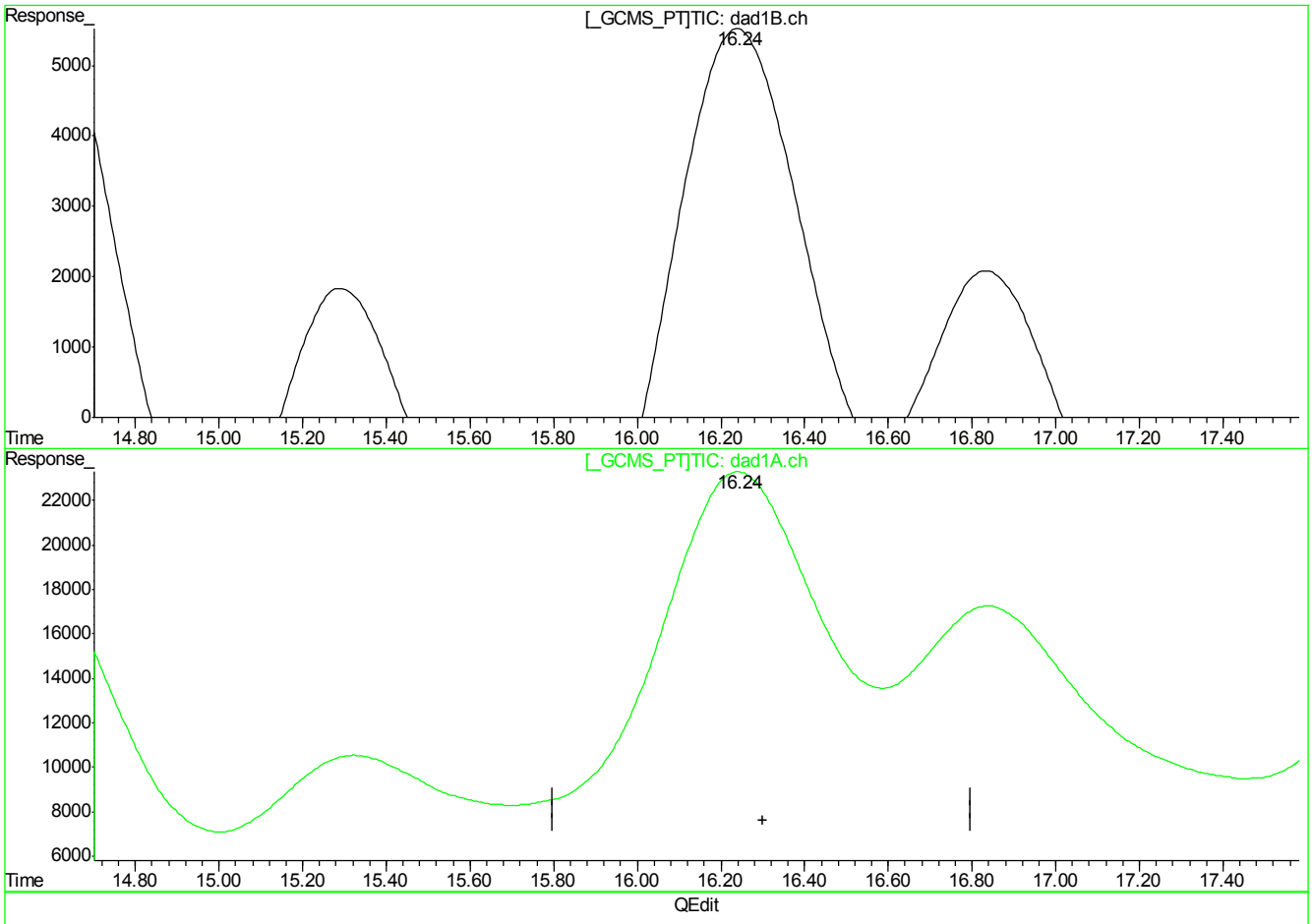
response 2104618

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:31 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



QEdit

(16) 3,5-Dinitroaniline

16.24min 205.998ppb

response 2006532

(16) 3,5-Dinitroaniline #2

16.24min 605.423ppb

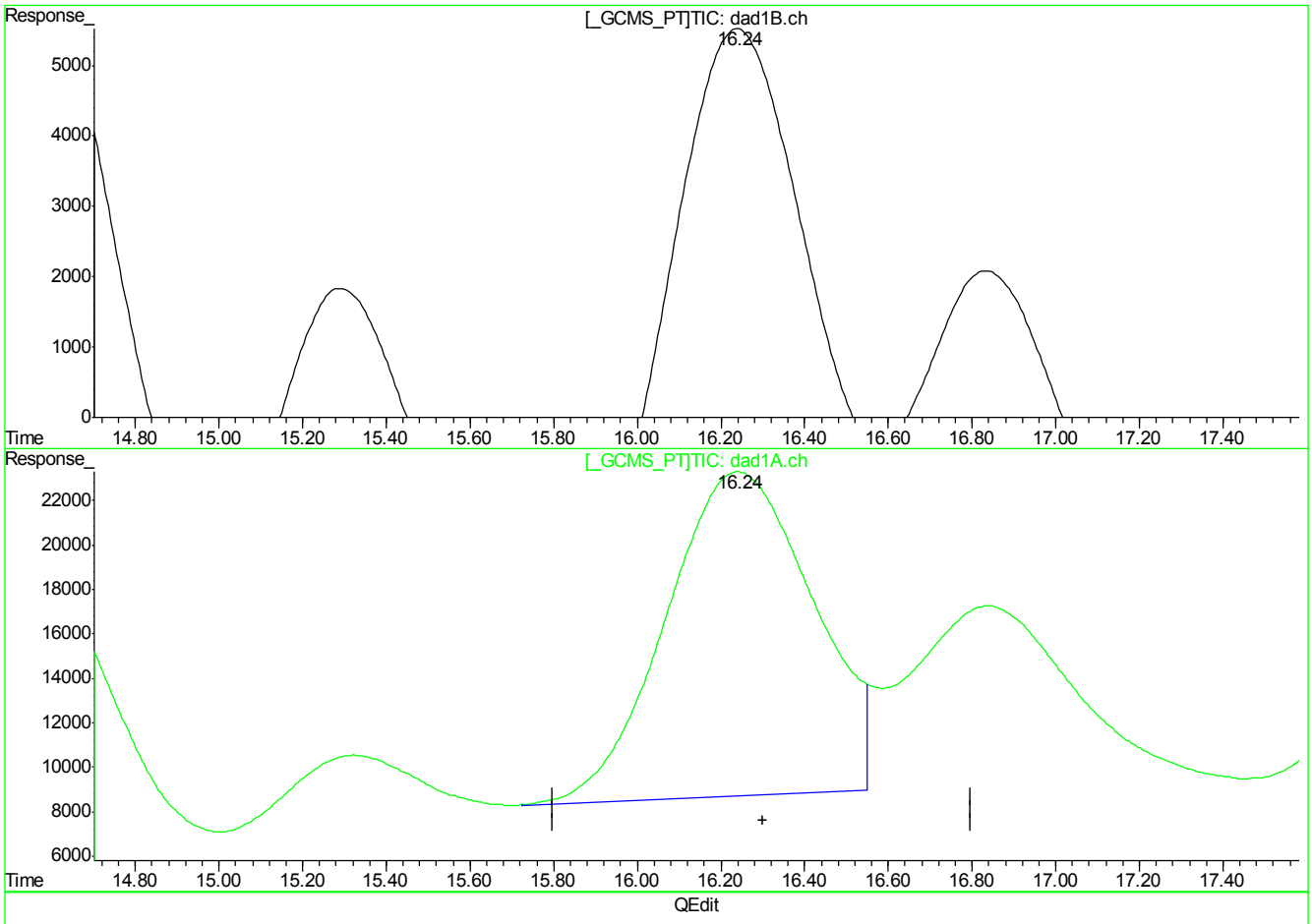
response 9845678

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.24min 205.998ppb

response 2006532

(16) 3,5-Dinitroaniline #2

16.24min 220.194ppb m

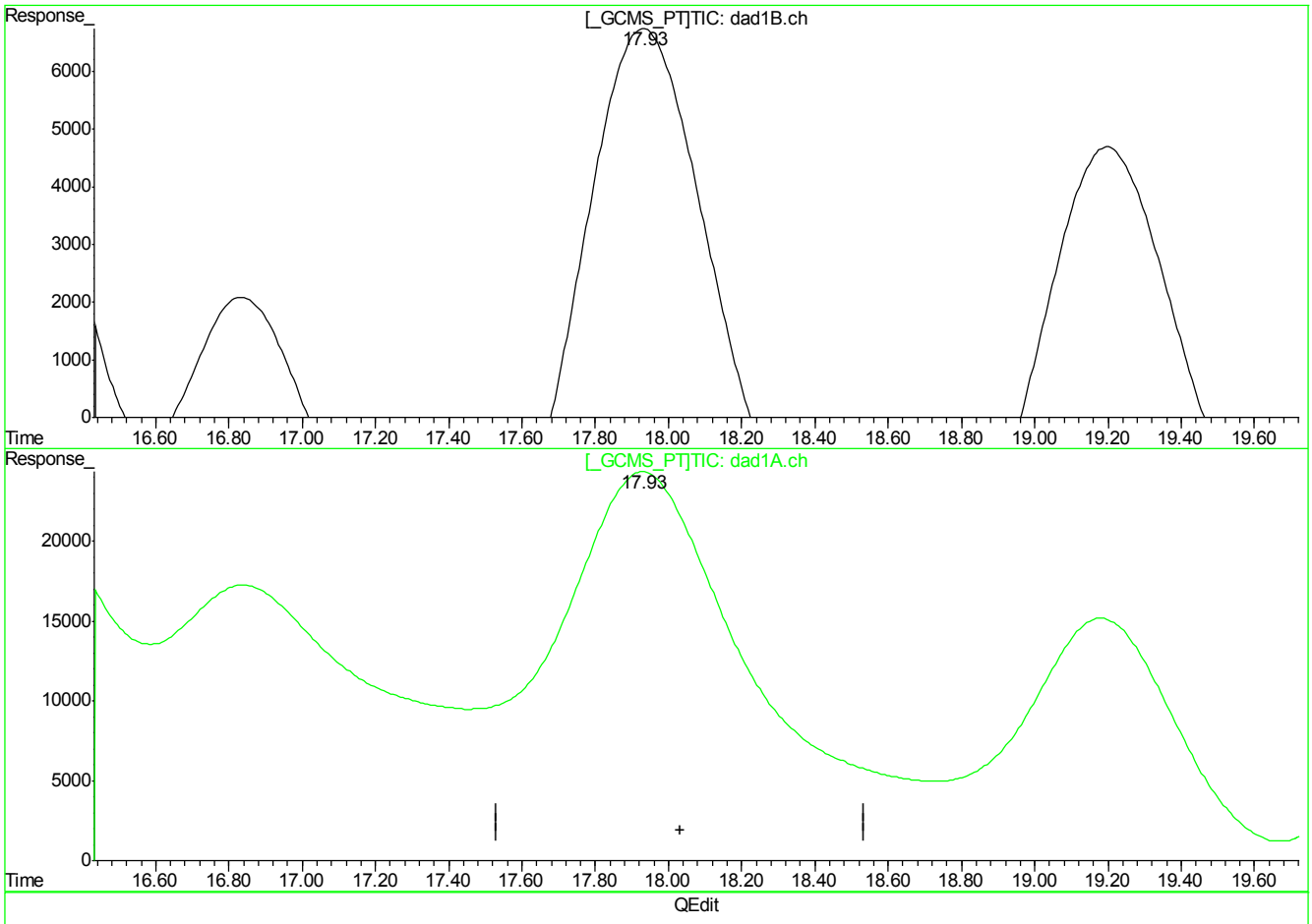
response 3562538

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:37 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.93min 204.284ppb

response 2398776

(17) p-Nitrotoluene #2

17.93min 574.345ppb

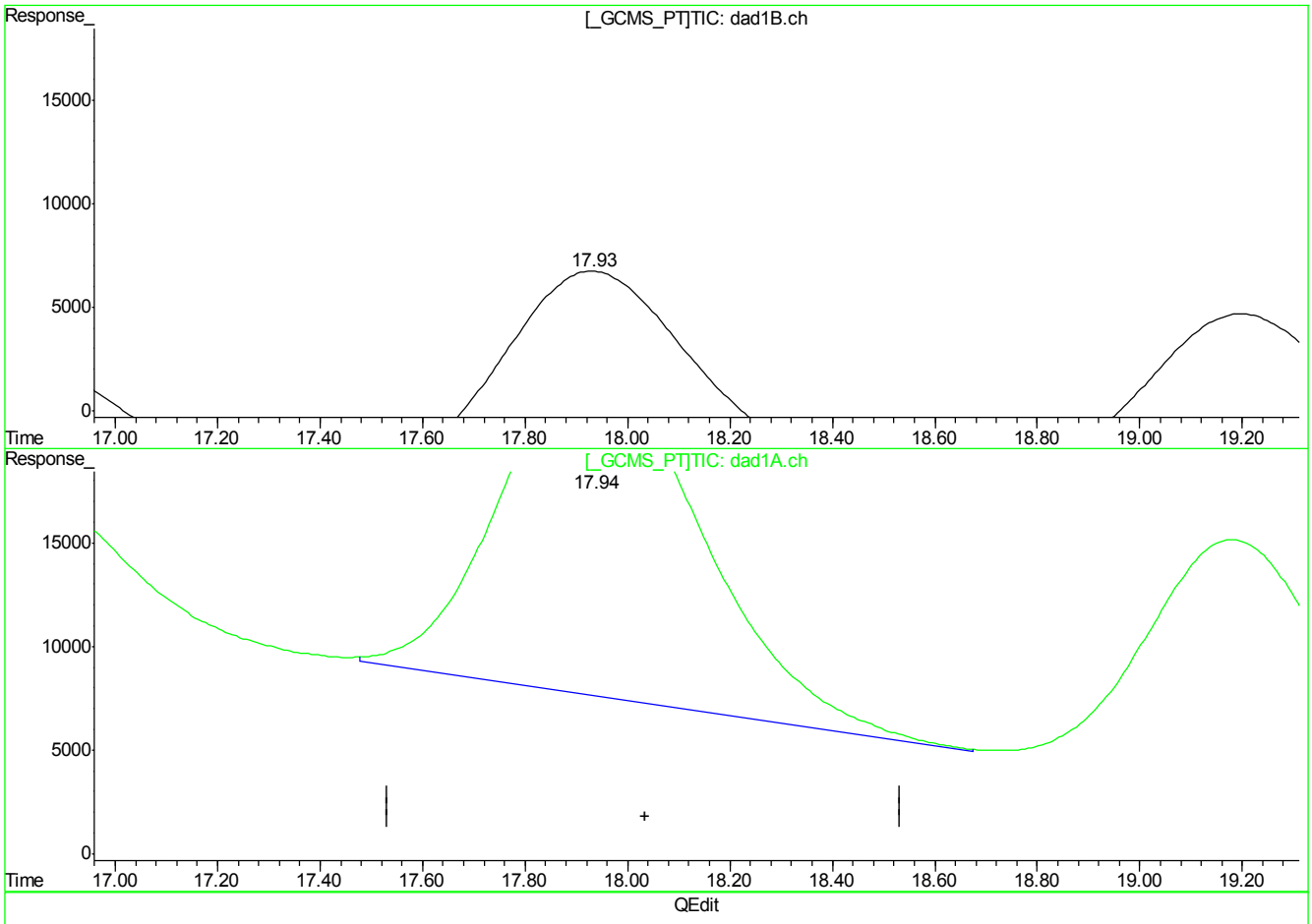
response 12172182

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:39 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.93min 204.284ppb

response 2398776

(17) p-Nitrotoluene #2

17.94min 207.756ppb m

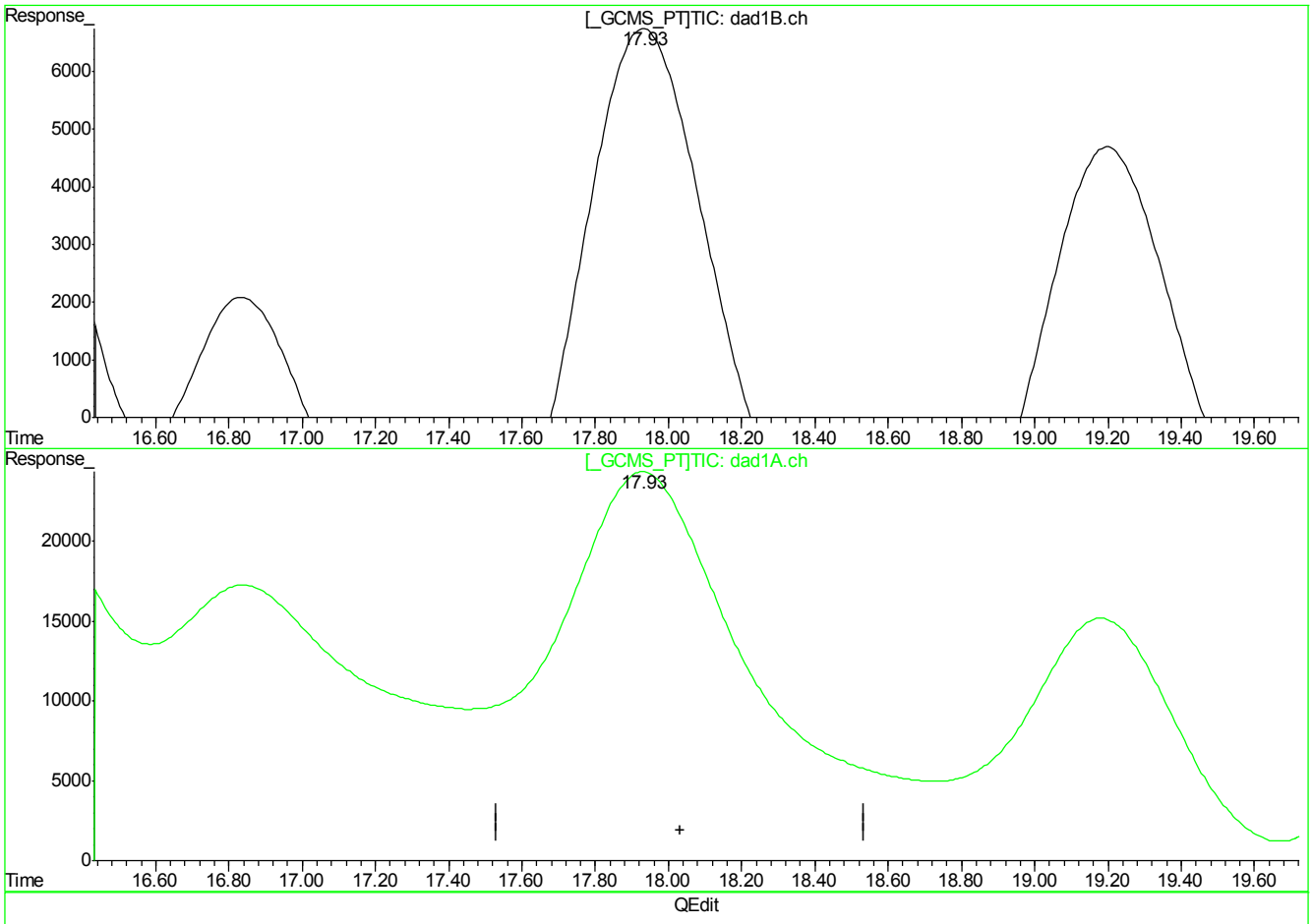
response 4403018

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.93min 204.284ppb

response 2398776

(18) 4-Amino-2,6-Dinitrotoluene #2

17.93min 572.674ppb

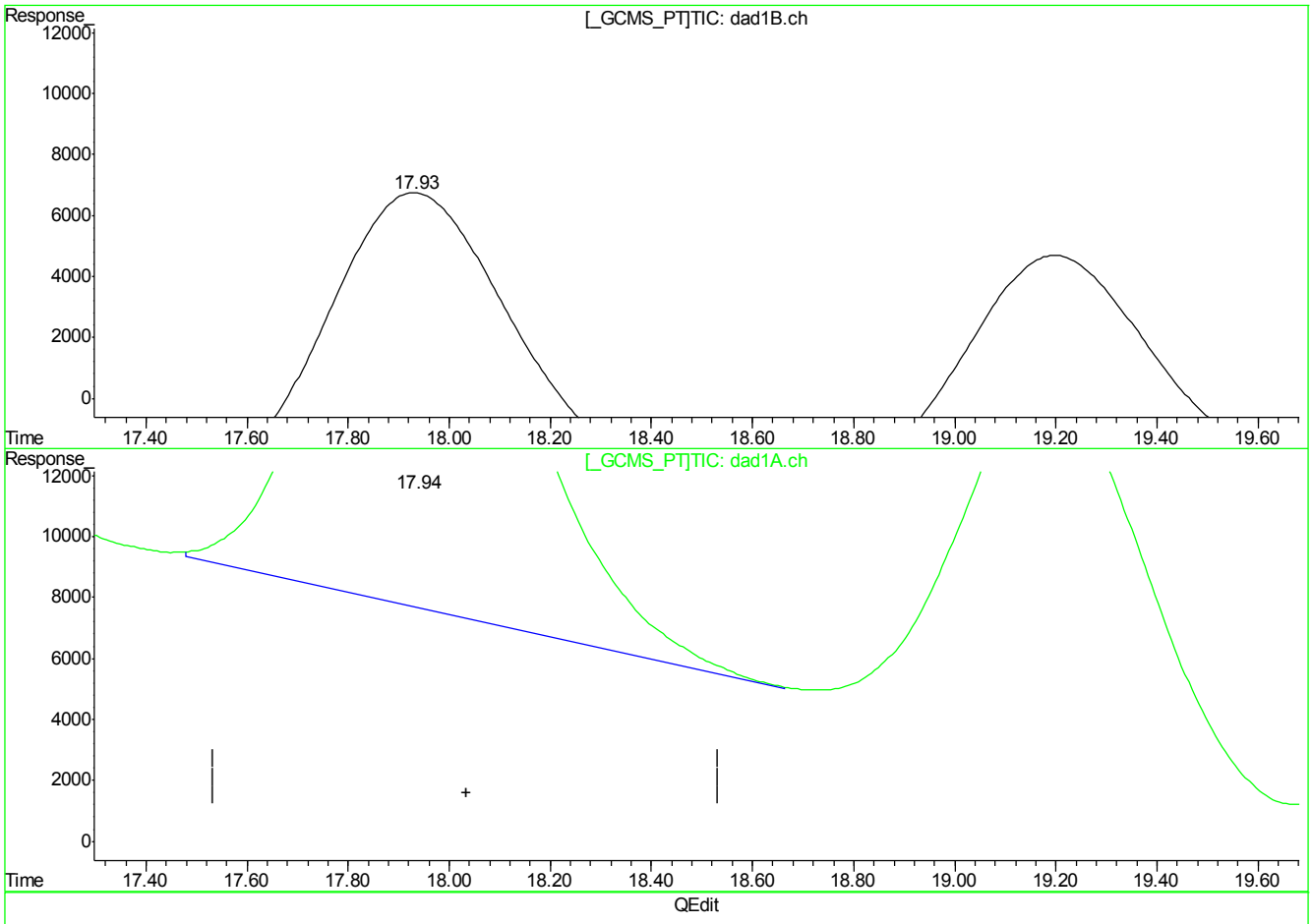
response 12172182

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:47 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.93min 204.284ppb

response 2398776

(18) 4-Amino-2,6-Dinitrotoluene #2

17.94min 205.512ppb m

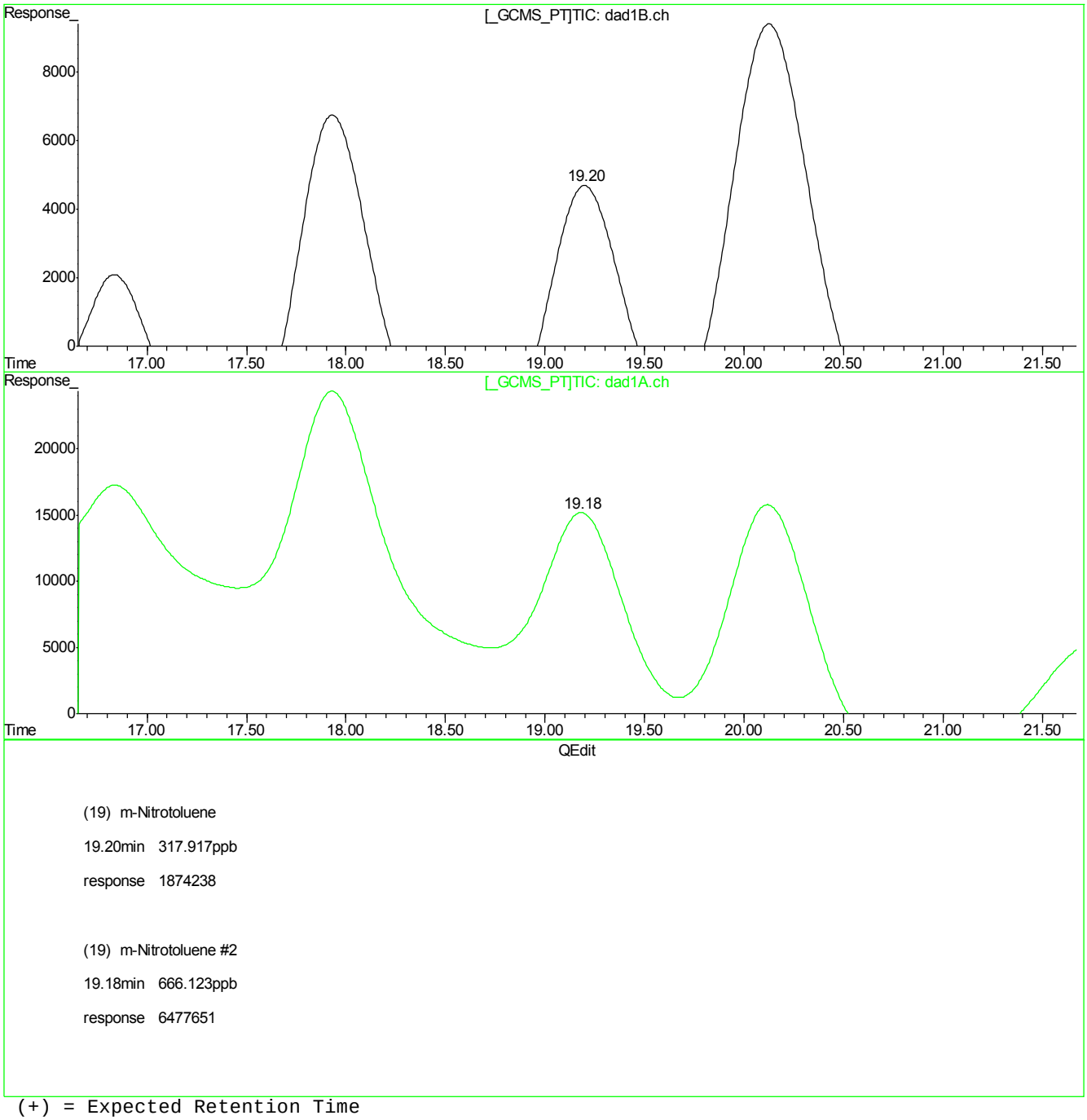
response 4368161

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:54 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.20min 317.917ppb

response 1874238

(19) m-Nitrotoluene #2

19.18min 666.123ppb

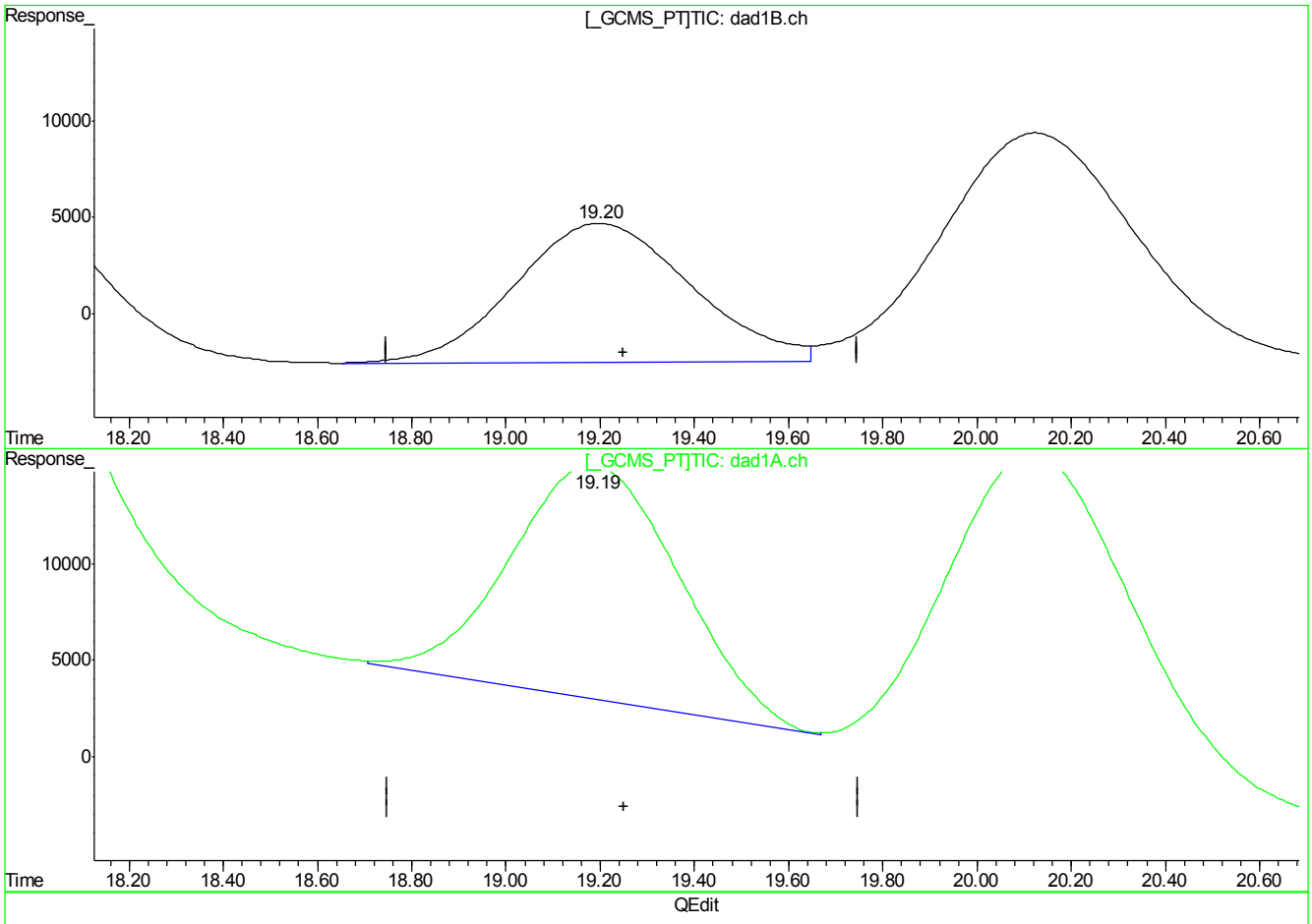
response 6477651

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:38:57 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.20min 317.917ppb

response 1874238

(19) m-Nitrotoluene #2

19.19min 311.494ppb m

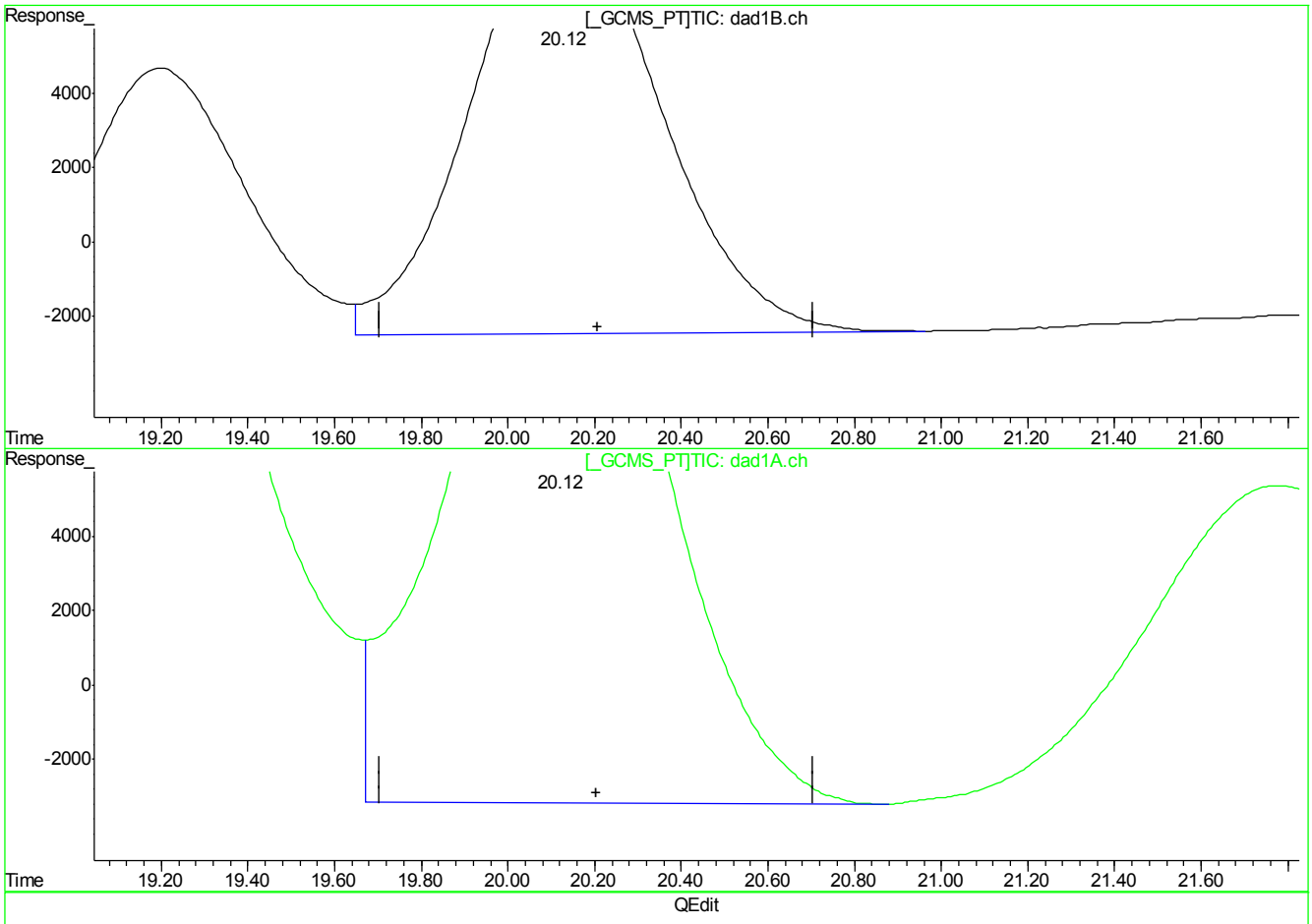
response 3029096

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:39:03 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.13min 380.072ppb

response 3429359

(20) 2-Amino-4,6-Dinitrotoluene #2

20.12min 498.121ppb

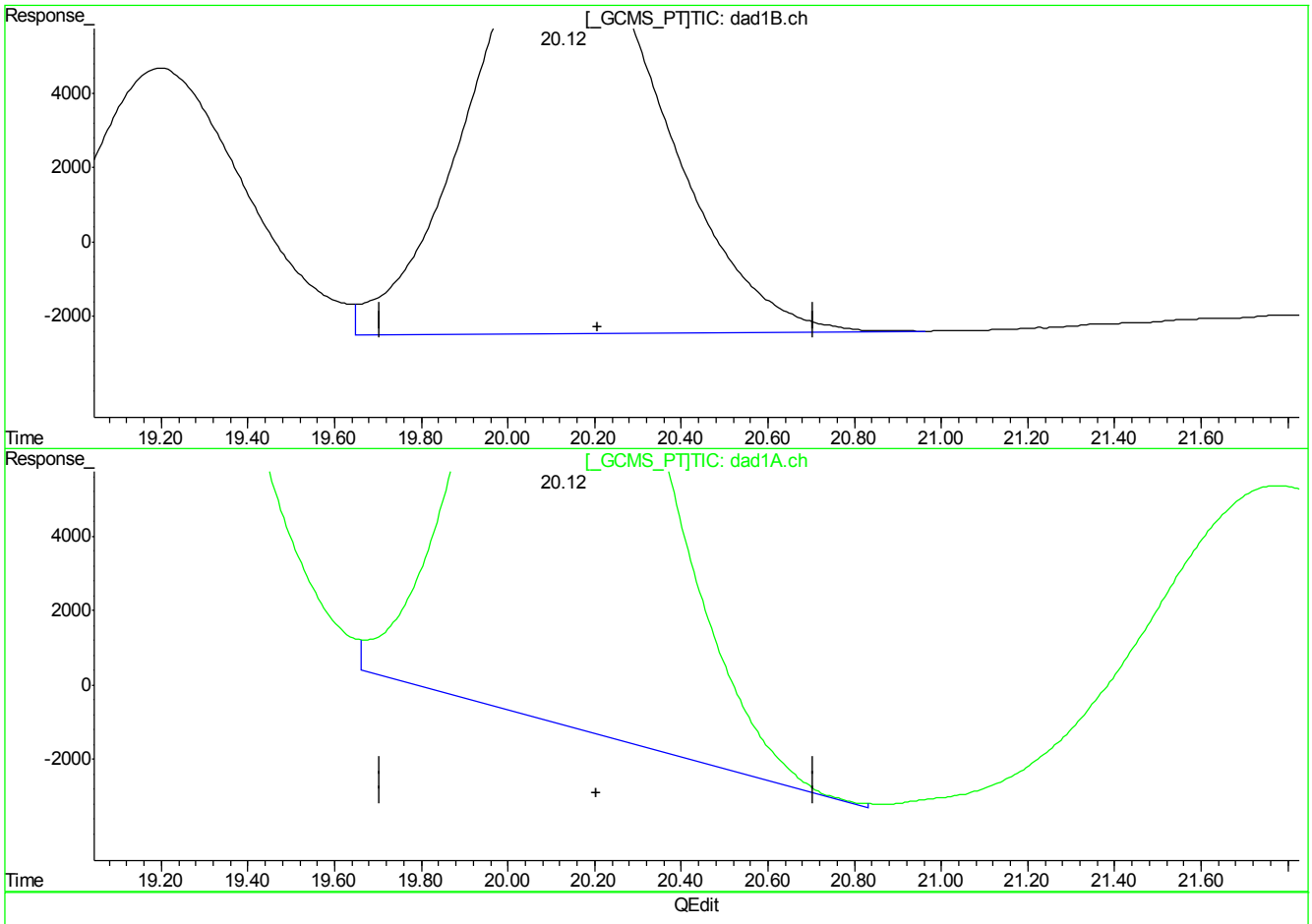
response 5920290

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:39:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.13min 380.072ppb

response 3429359

(20) 2-Amino-4,6-Dinitrotoluene #2

20.12min 399.246ppb m

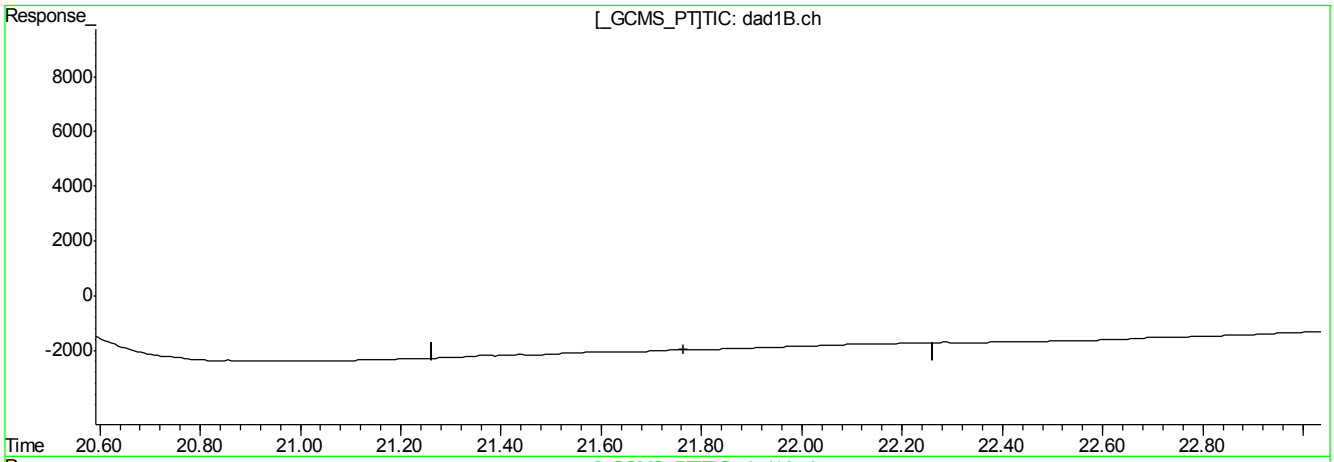
response 4714337

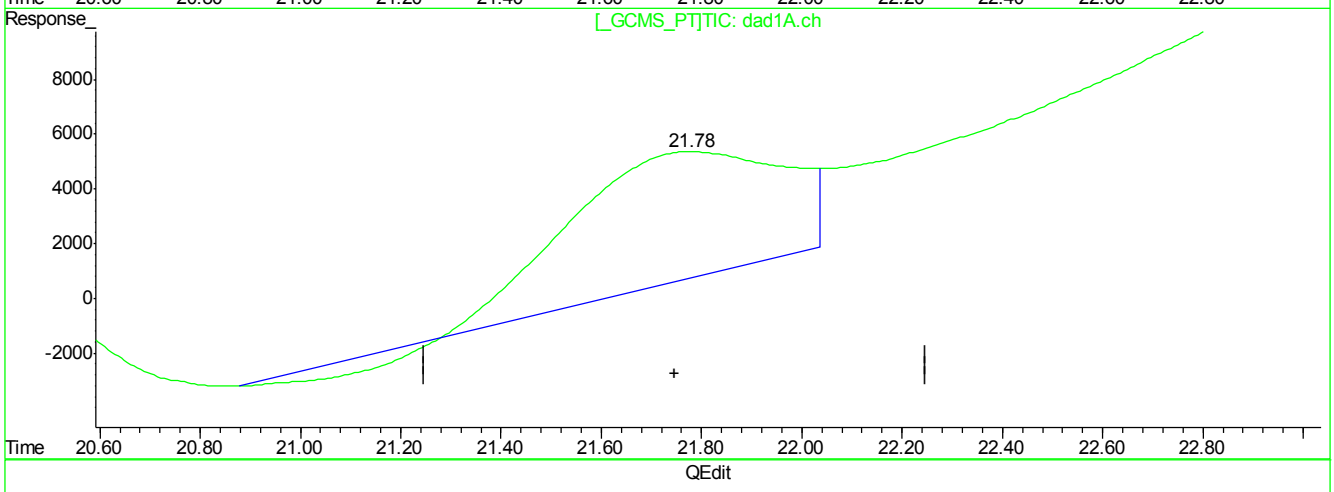
(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:39:10 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 407.423ppb

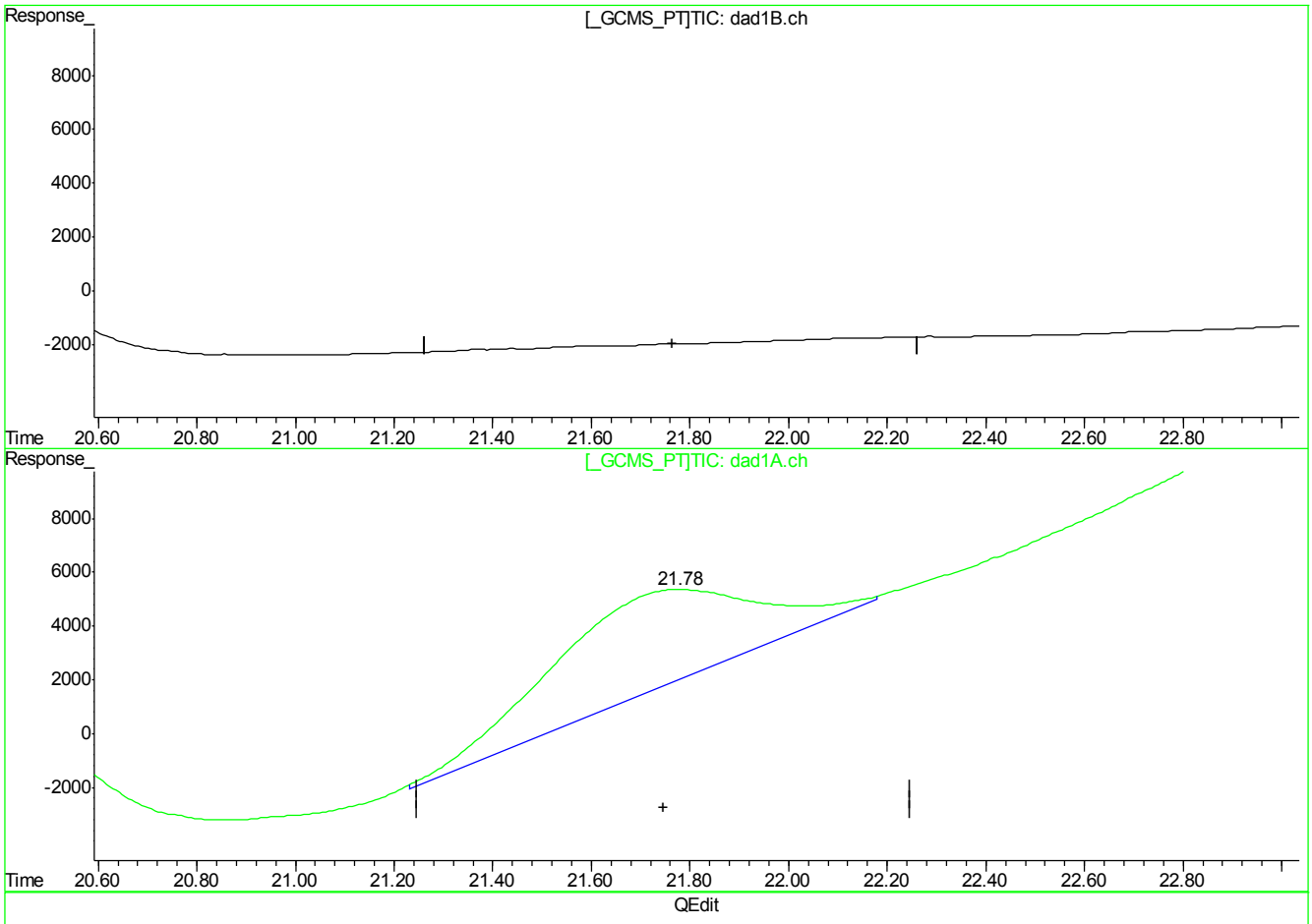
response 1306772

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:39:14 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614606.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0508RPB3\GG614606.D\dad1A.ch
Acq On : 08-May-2018, 11:27:00 Operator: evitam
Sample : op69920-pt1 Inst : G1315B
Misc : op69920,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 321.992ppb m

response 1032758

(+) = Expected Retention Time
GG614606.D 8330RPB.M_1113M.M Tue May 08 14:39:18 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,10.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.22	2199280	4404352	423.355	407.146m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		84.67%	81.43%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.38	5.38	2432460	2394011	750.322m	743.077m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.43	7.43	2917748	2913900	281.593	281.250
6)	RDX	7.87	7.87	2062155	2019480	432.846m	425.768
7)	1,3-Dinitrobenze	9.91	9.90	3070844	2301218	214.641	175.943m
8)	Nitrobenzene	10.87	10.86	3398265	3017130	360.084	325.792m
9)	2,4,6-Trinitroto	11.64	11.63	815652	1206876	80.484	92.024m
10)	Nitroglycerin	0.00	12.38	0	1274508	N.D.	378.221m#
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.60	14.60	3737188	4615013	522.712	454.858m
14)	2,4-Dinitrotolue	15.31	15.31	1978182	1353468	150.902	141.142m
15)	o-Nitrotoluene	16.85	16.86	2182555	3170790	377.828	367.686m
16)	3,5-Dinitroanili	16.24	16.24	3726019	6136845	381.607	378.505m
17)	p-Nitrotoluene	17.95	17.95	4518396	7700104	384.794	363.330m
18)	4-Amino-2,6-Dini	17.95	17.95	4518396	7745233	384.794	364.396m
19)	m-Nitrotoluene	19.23	19.23	3432915	5711175	582.307	587.303m
20)	2-Amino-4,6-Dini	20.15	20.14	6318615	9913341	700.285	816.992m
21)	PETN	0.00	21.78	0	1790471	N.D. d	558.230m

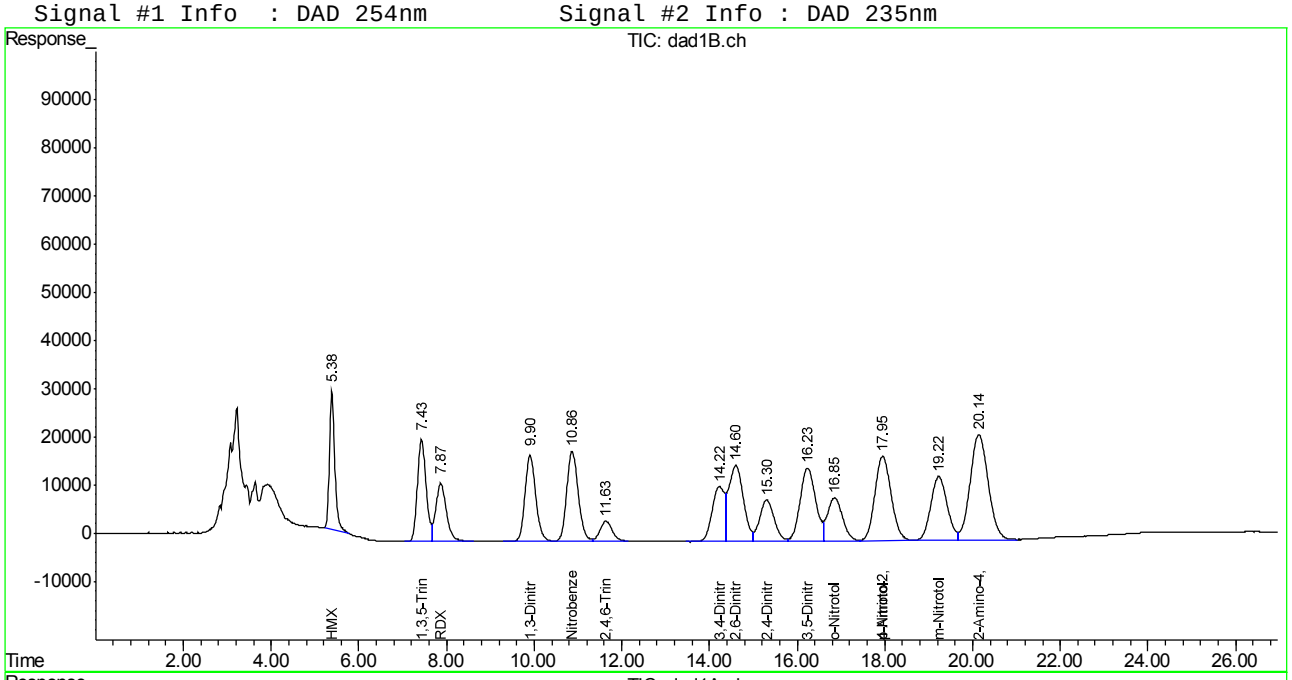
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614629.D 8330RPB.M_1113M.M Wed May 09 11:36:26 2018 Page 1

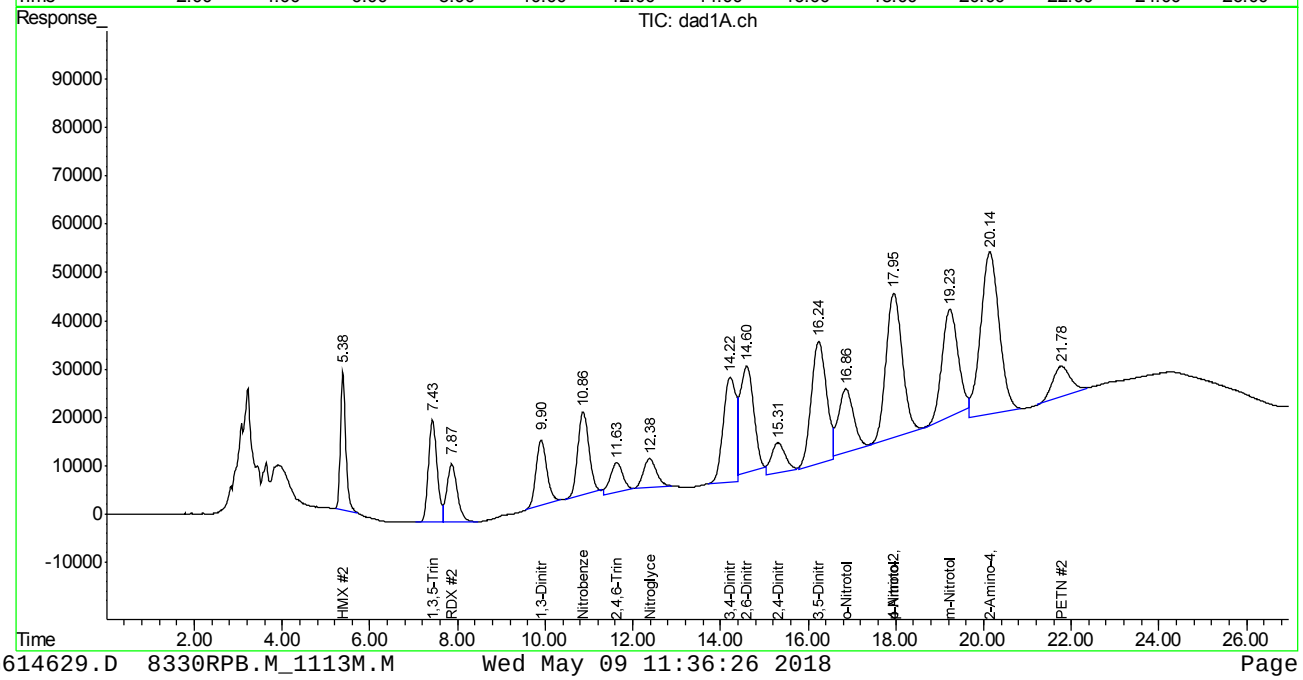
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,10.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:35 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

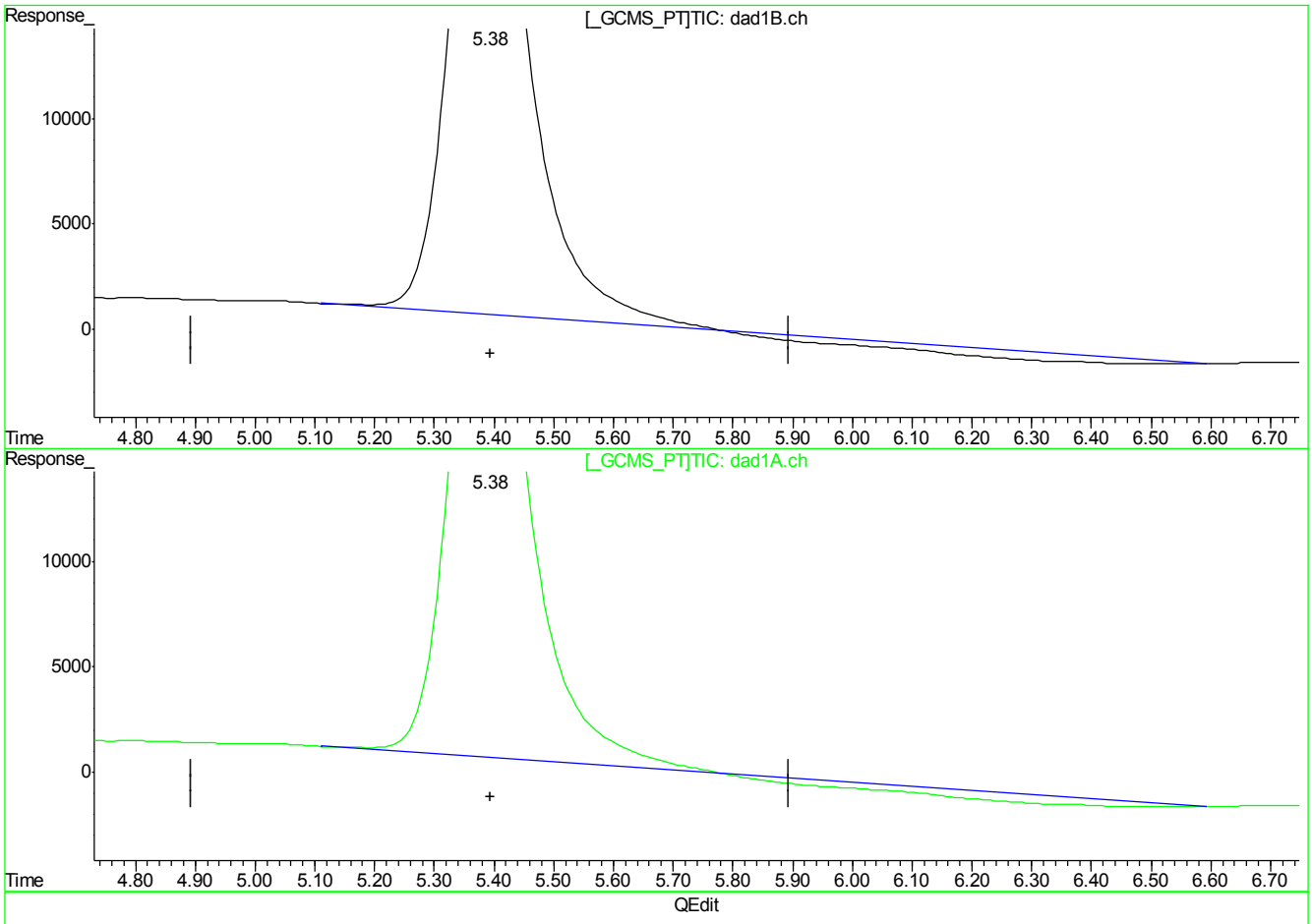
Sample Number:	OP69945-PT1	**Method:**	SW846 8330B
Lab FileID:	GG614629.D	**Analyst approved:**	05/09/18 11:37 Evita Martinez
Injection Time:	05/09/18 00:19	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.38	Poorly defined baseline
HMX	2691-41-0	2	5.38	Poorly defined baseline
RDX	121-82-4	1	7.87	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.90	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.86	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.63	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.38	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.22	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.60	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.31	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.24	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.86	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	17.95	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	17.95	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.23	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.14	Poorly defined baseline
PETN	78-11-5	2	21.78	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 721.525ppb

response 2339102

(2) HMX #2

5.39min 726.034ppb

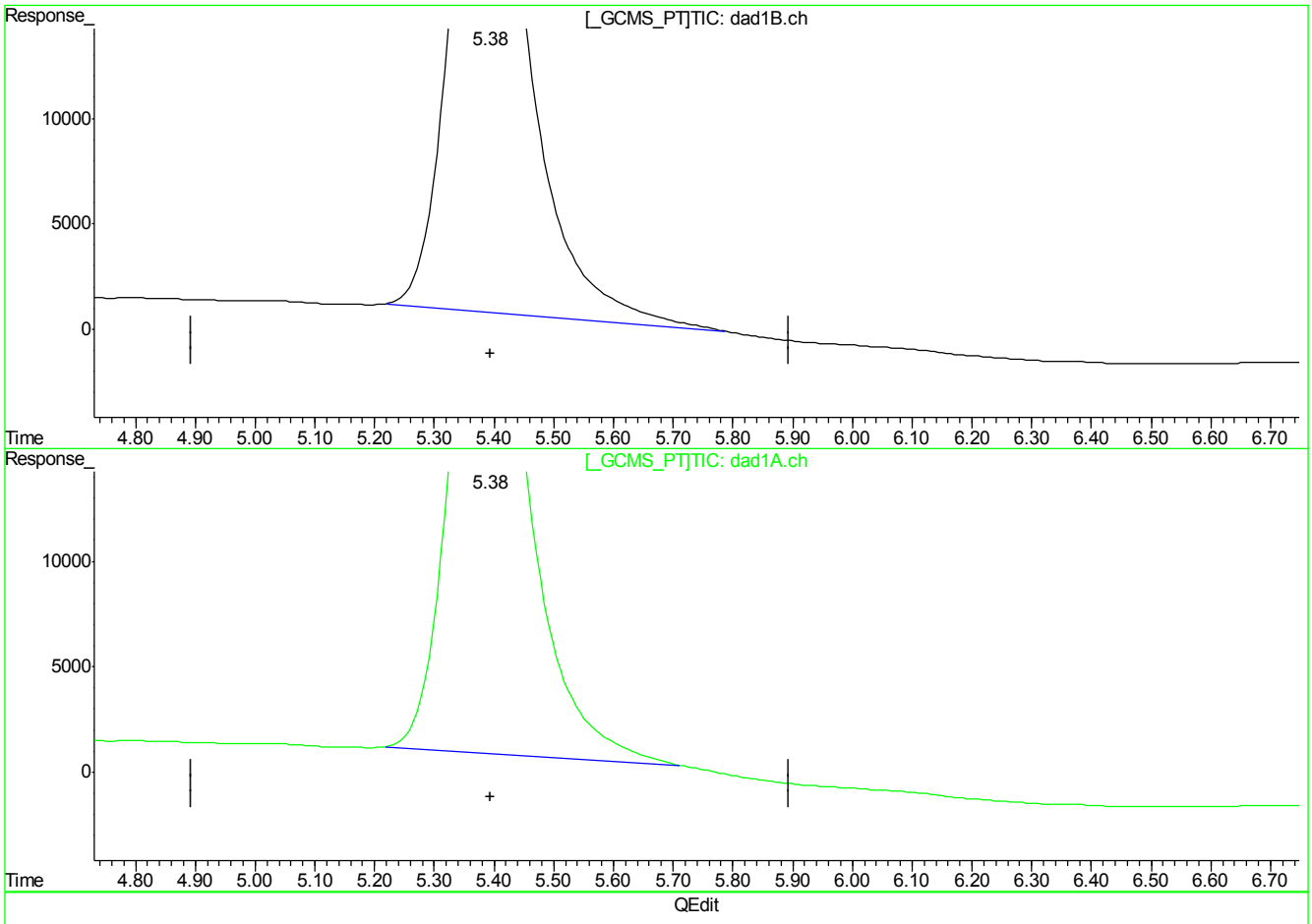
response 2339102

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:39:29 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.38min 750.322ppb m

response 2432460

(2) HMX #2

5.38min 743.077ppb m

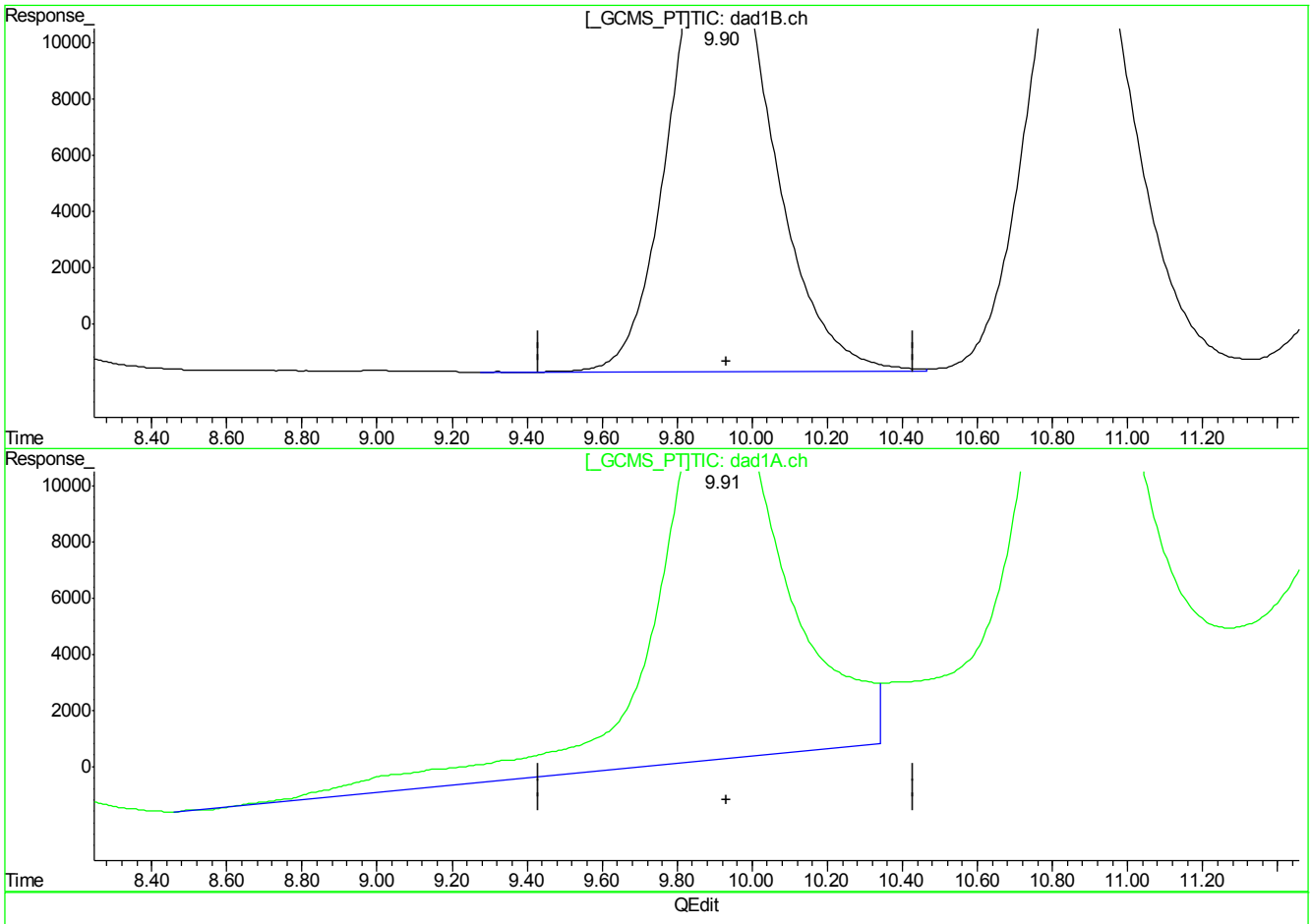
response 2394011

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:39:37 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.91min 214.641ppb

response 3070844

(7) 1,3-Dinitrobenzene #2

9.91min 256.479ppb

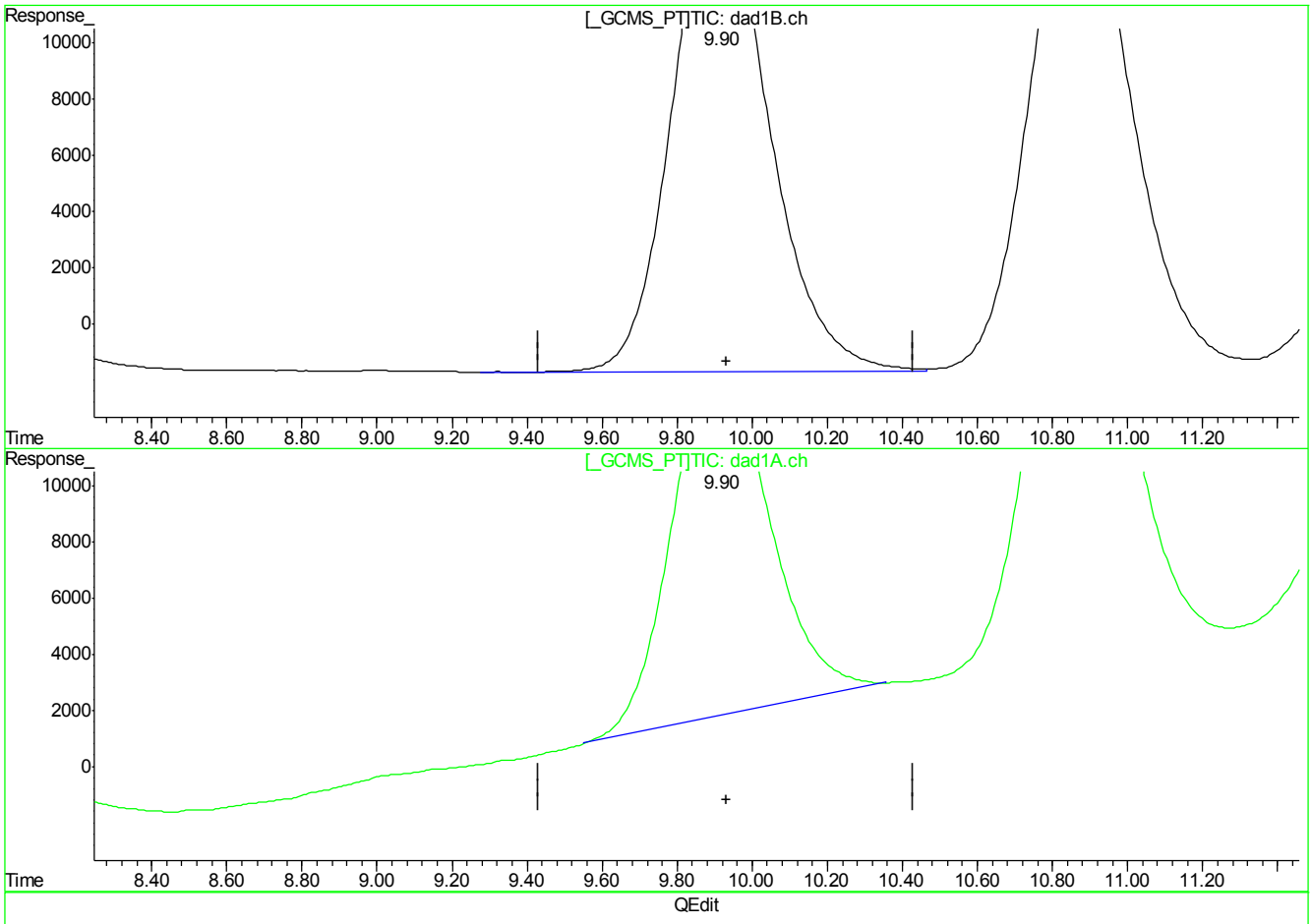
response 3331454

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:39:50 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.91min 214.641ppb

response 3070844

(7) 1,3-Dinitrobenzene #2

9.90min 175.943ppb m

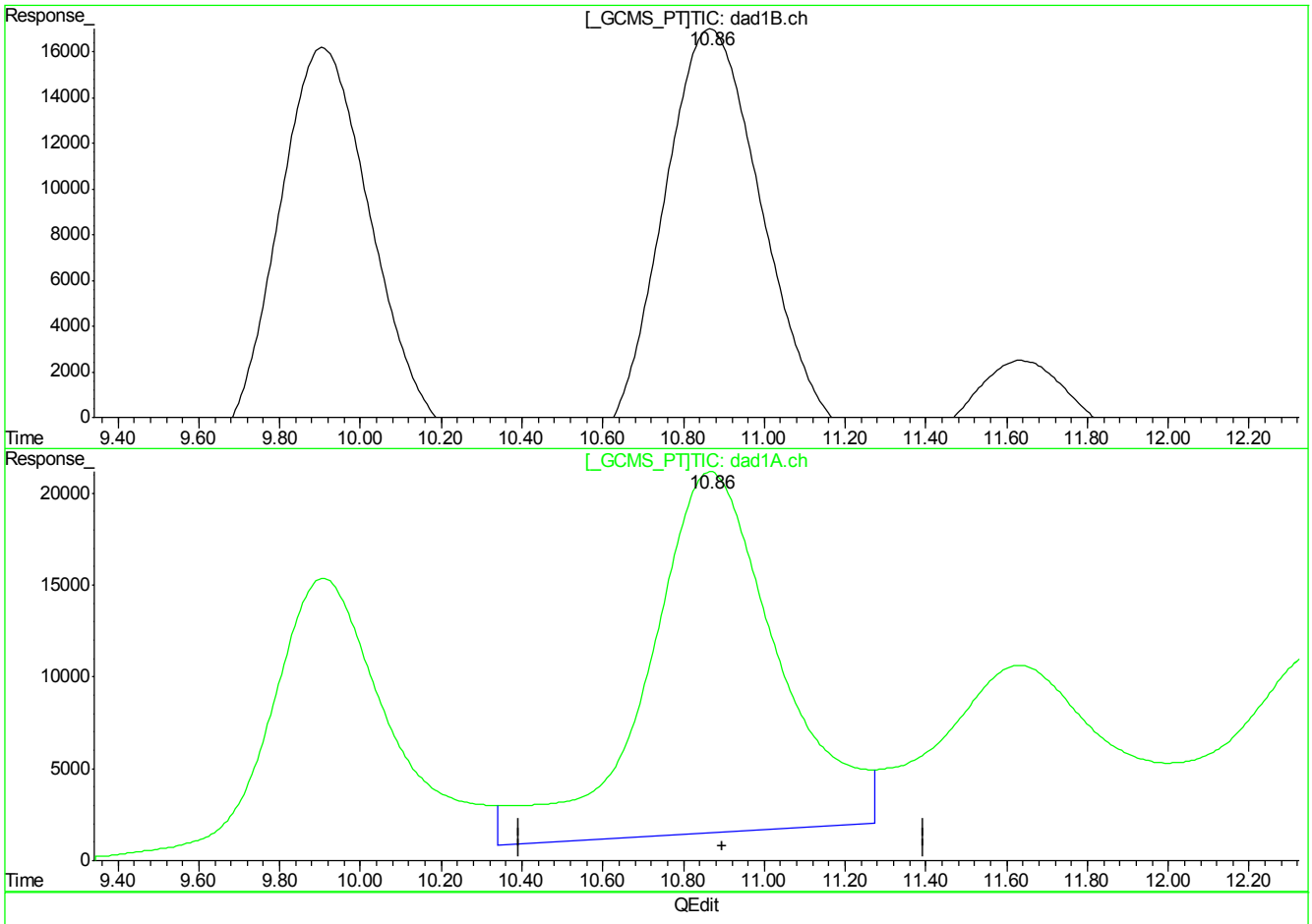
response 2301218

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:39:52 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.87min 360.084ppb

response 3398265

(8) Nitrobenzene #2

10.87min 473.307ppb

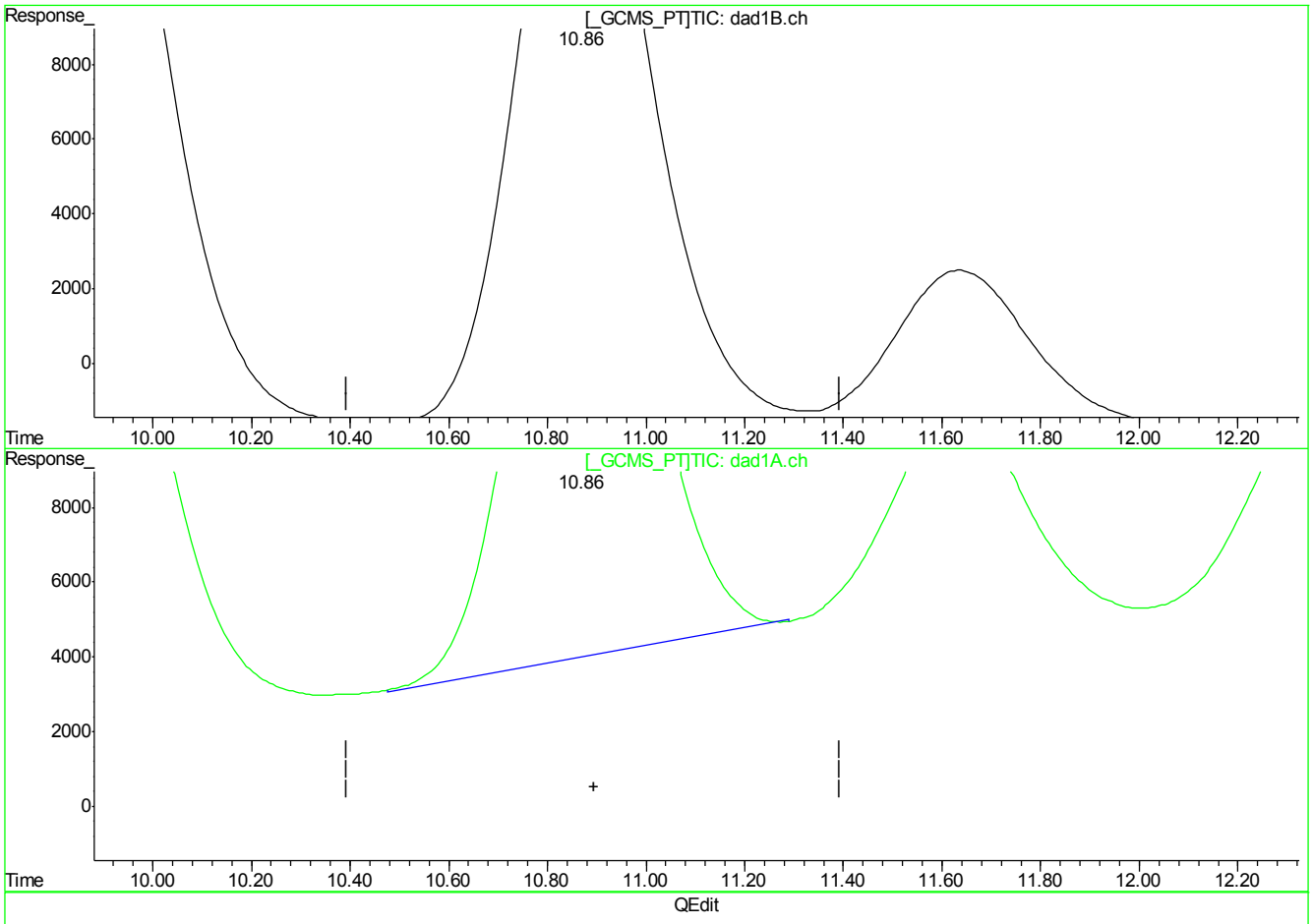
response 4383250

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:39:55 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.87min 360.084ppb

response 3398265

(8) Nitrobenzene #2

10.86min 325.792ppb m

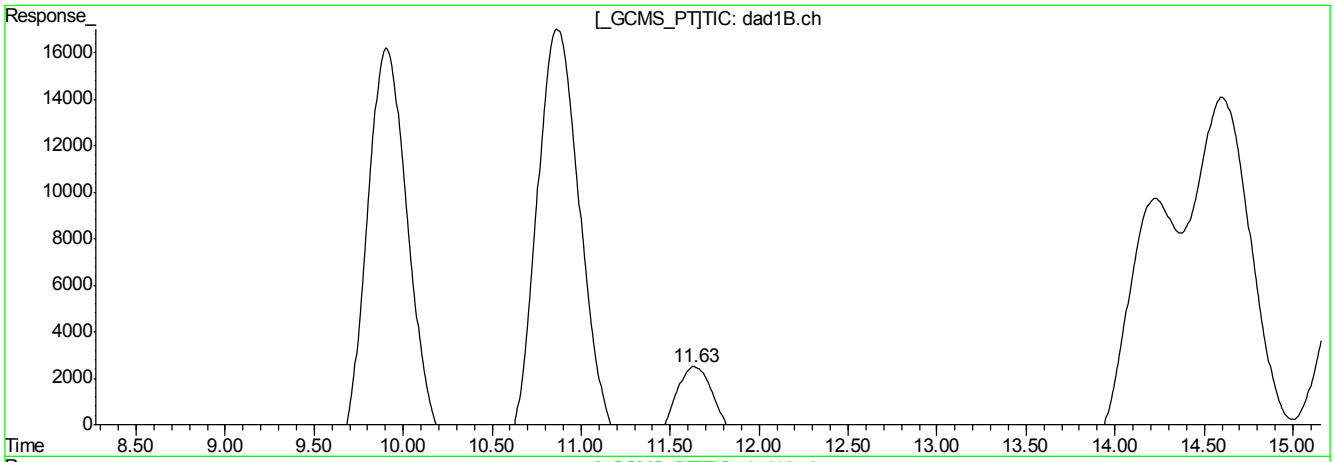
response 3017130

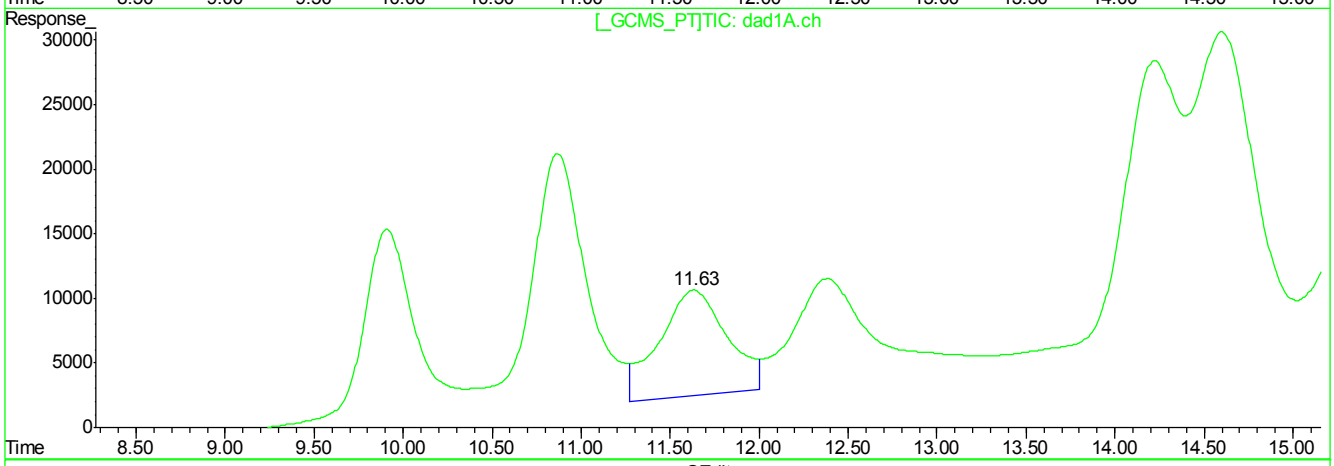
(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:01 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(9) 2,4,6-Trinitrotoluene

11.64min 80.484ppb

response 815652

(9) 2,4,6-Trinitrotoluene #2

11.64min 164.417ppb

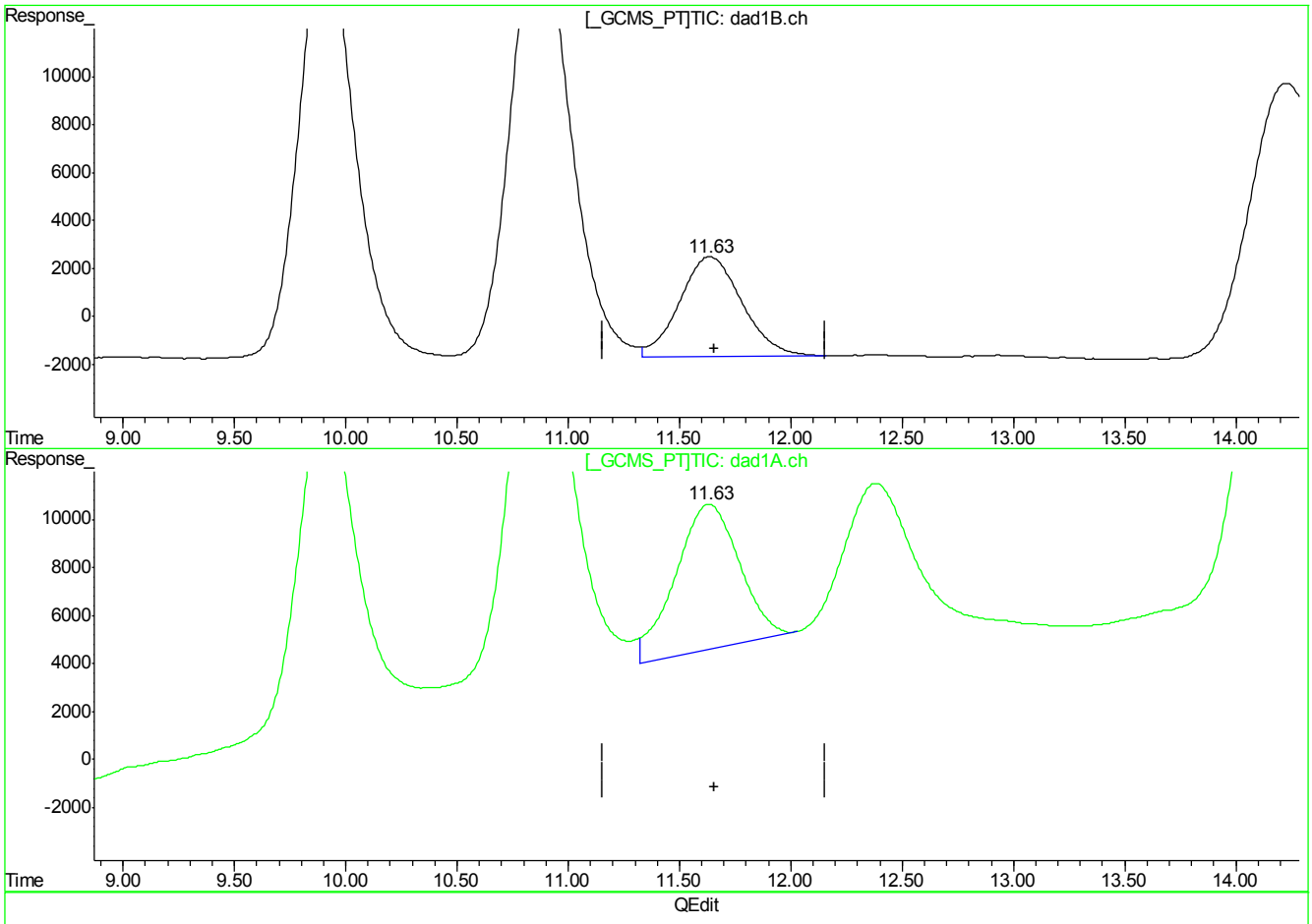
response 2156312

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.64min 80.484ppb

response 815652

(9) 2,4,6-Trinitrotoluene #2

11.63min 92.024ppb m

response 1206876

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:13 2018

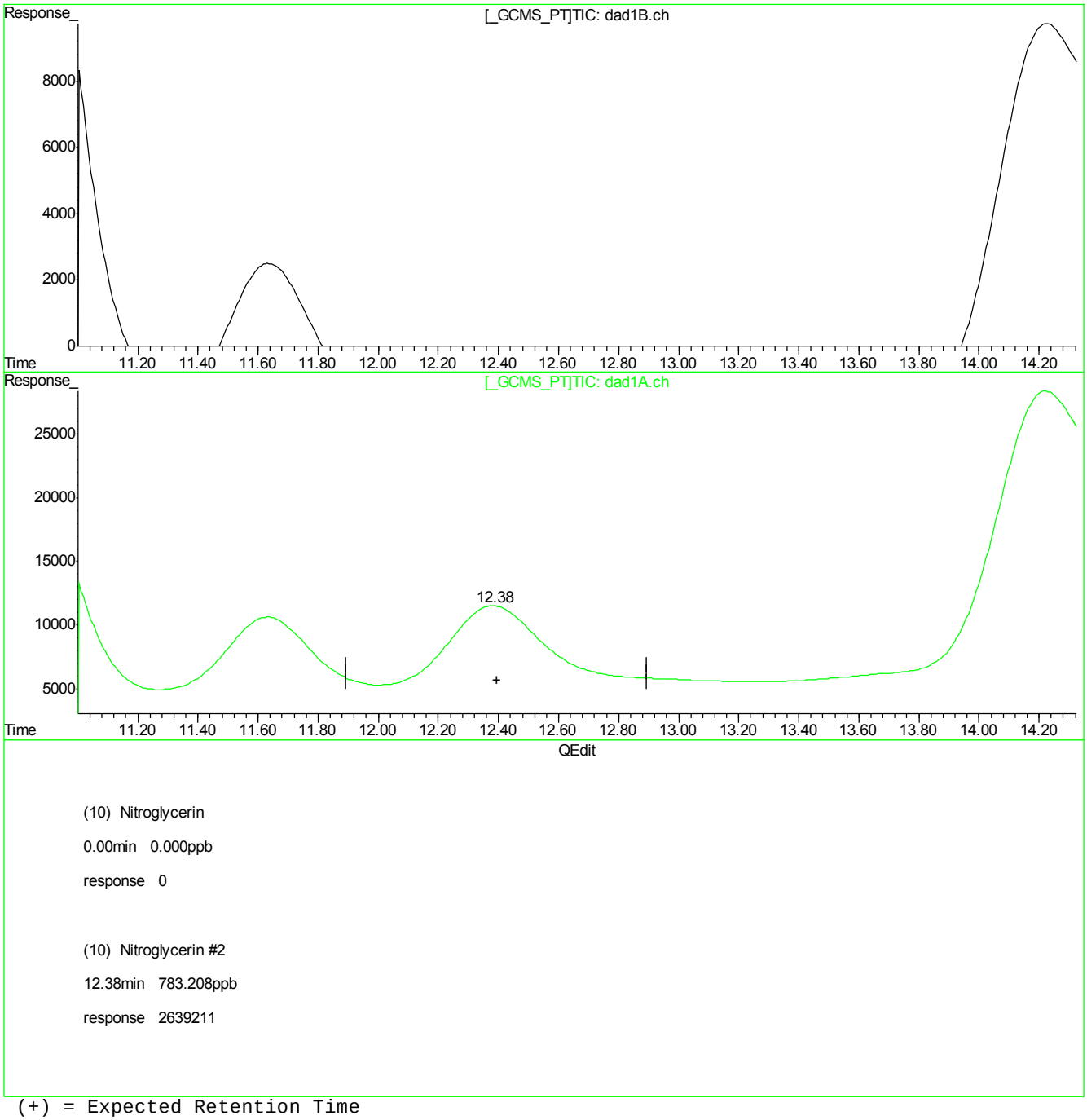
7.4.4.9

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:16 2018

7.4.4.10

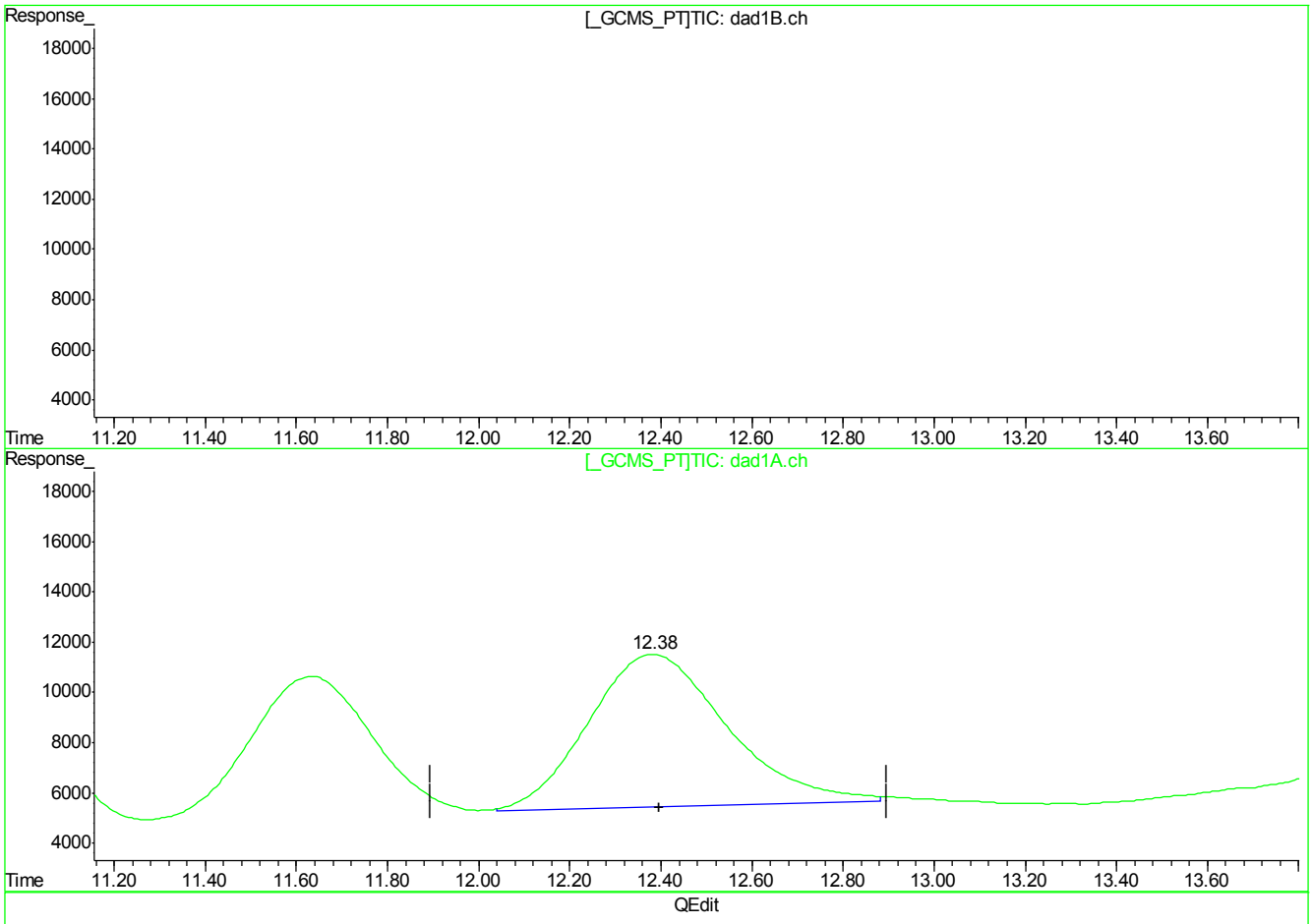
7

GG614629.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.38min 378.221ppb m

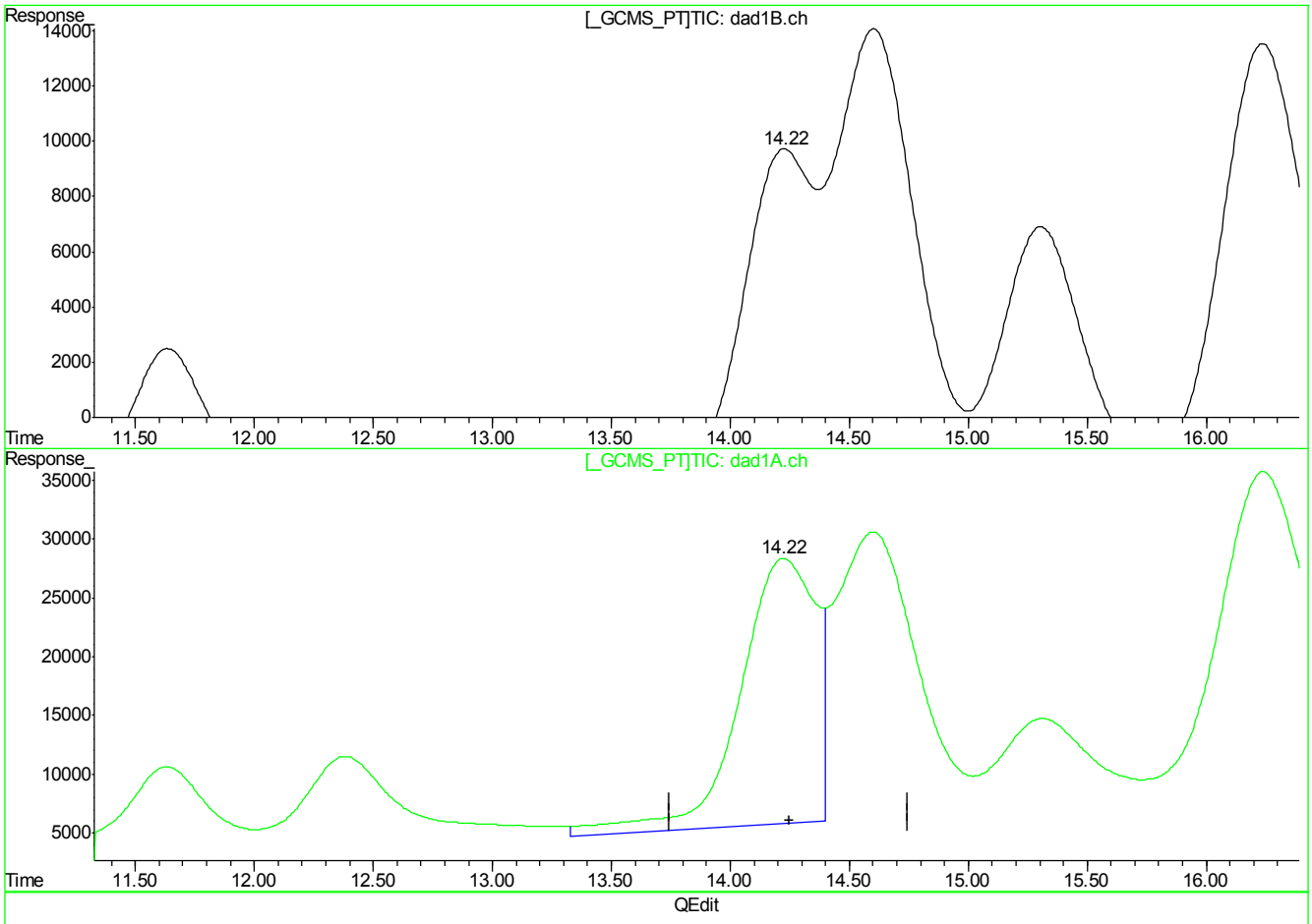
response 1274508

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:20 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 423.355ppb

response 2199280

(12) 3,4-Dinitrotoluene #2 (S)

14.22min 461.738ppb

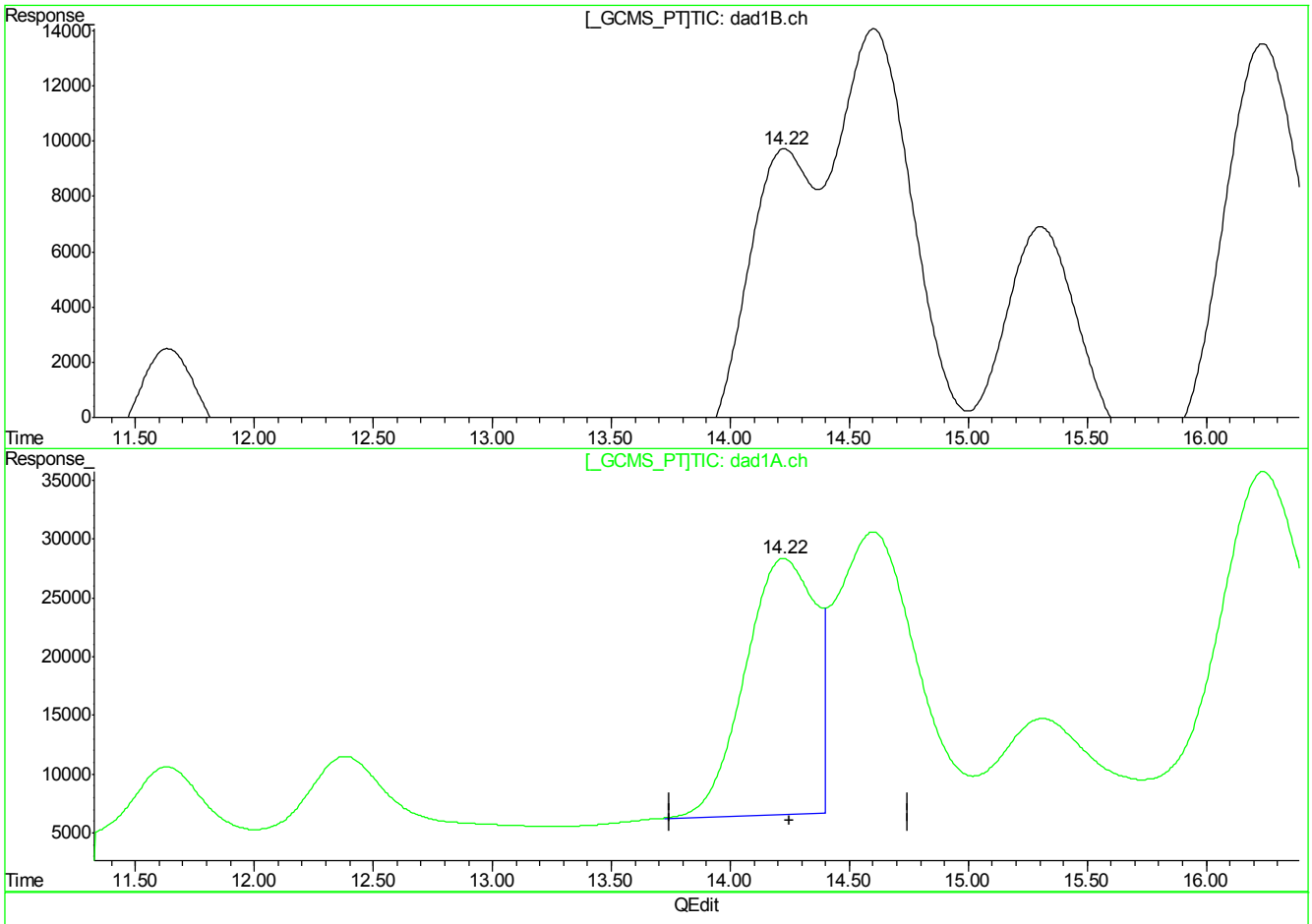
response 4994911

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:25 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 423.355ppb

response 2199280

(12) 3,4-Dinitrotoluene #2 (S)

14.22min 407.146ppb m

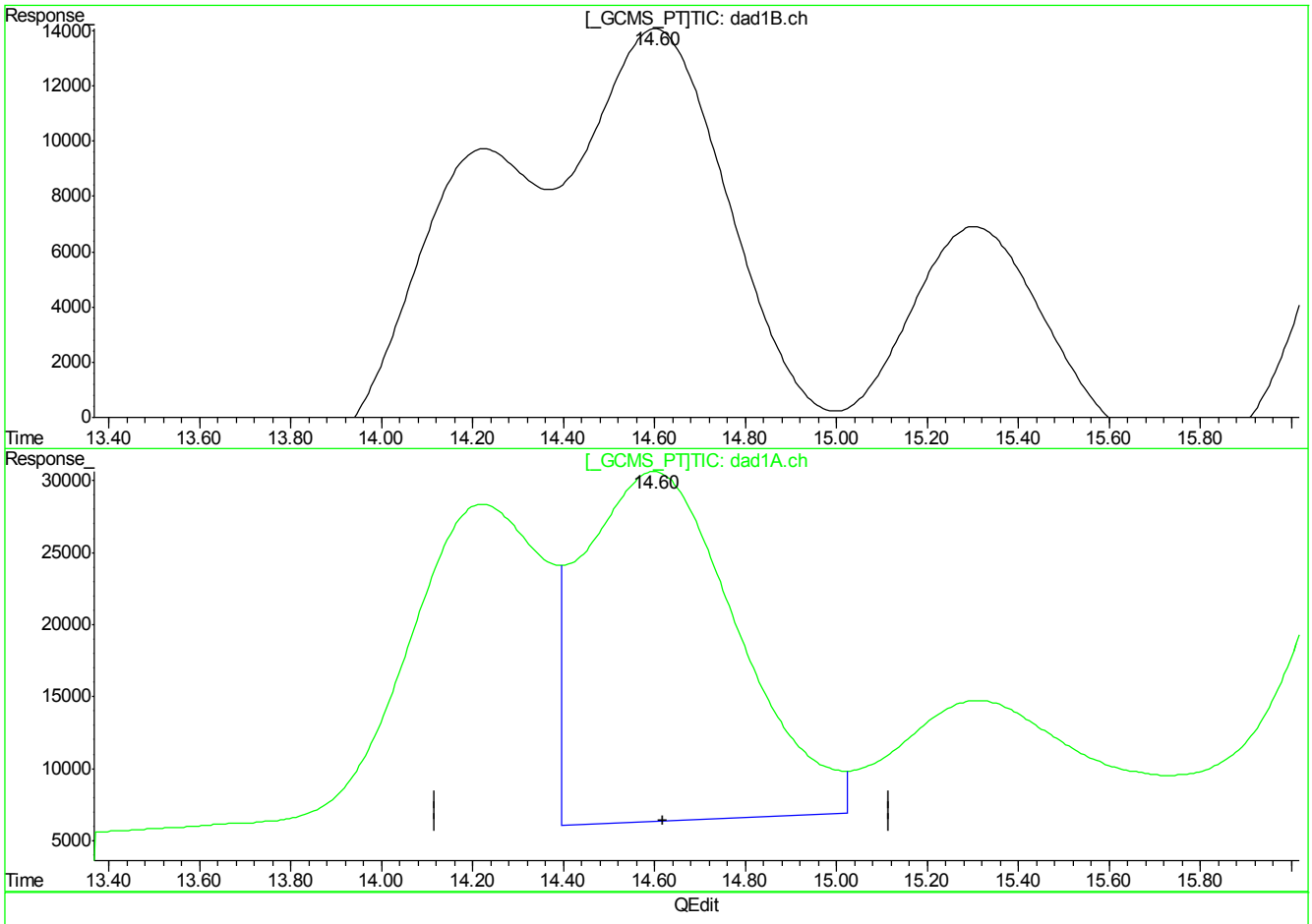
response 4404352

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:29 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.60min 522.712ppb

response 3737188

(13) 2,6-Dinitrotoluene #2

14.60min 561.989ppb

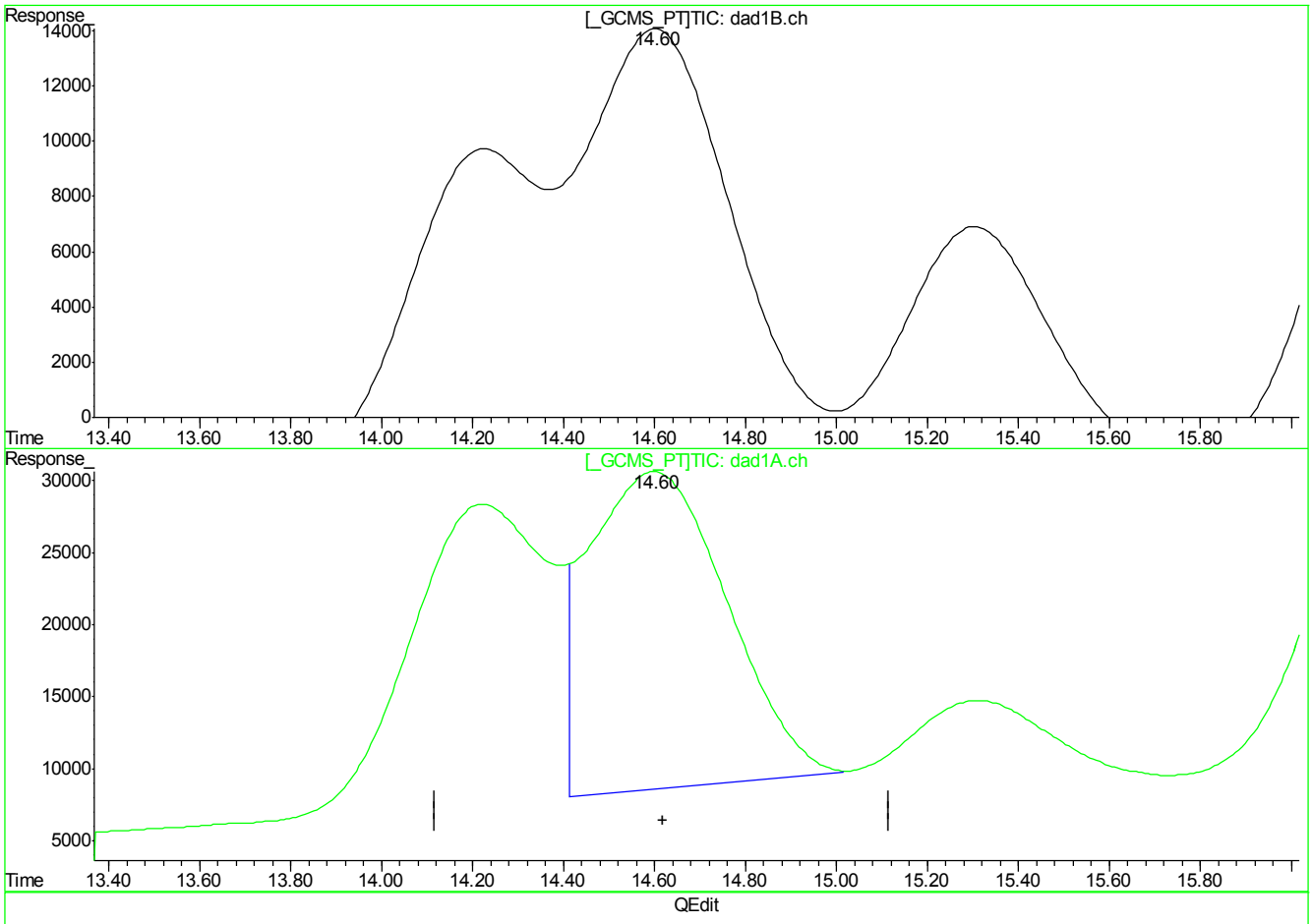
response 5701974

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:31 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.60min 522.712ppb

response 3737188

(13) 2,6-Dinitrotoluene #2

14.60min 454.858ppb m

response 4615013

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:39 2018

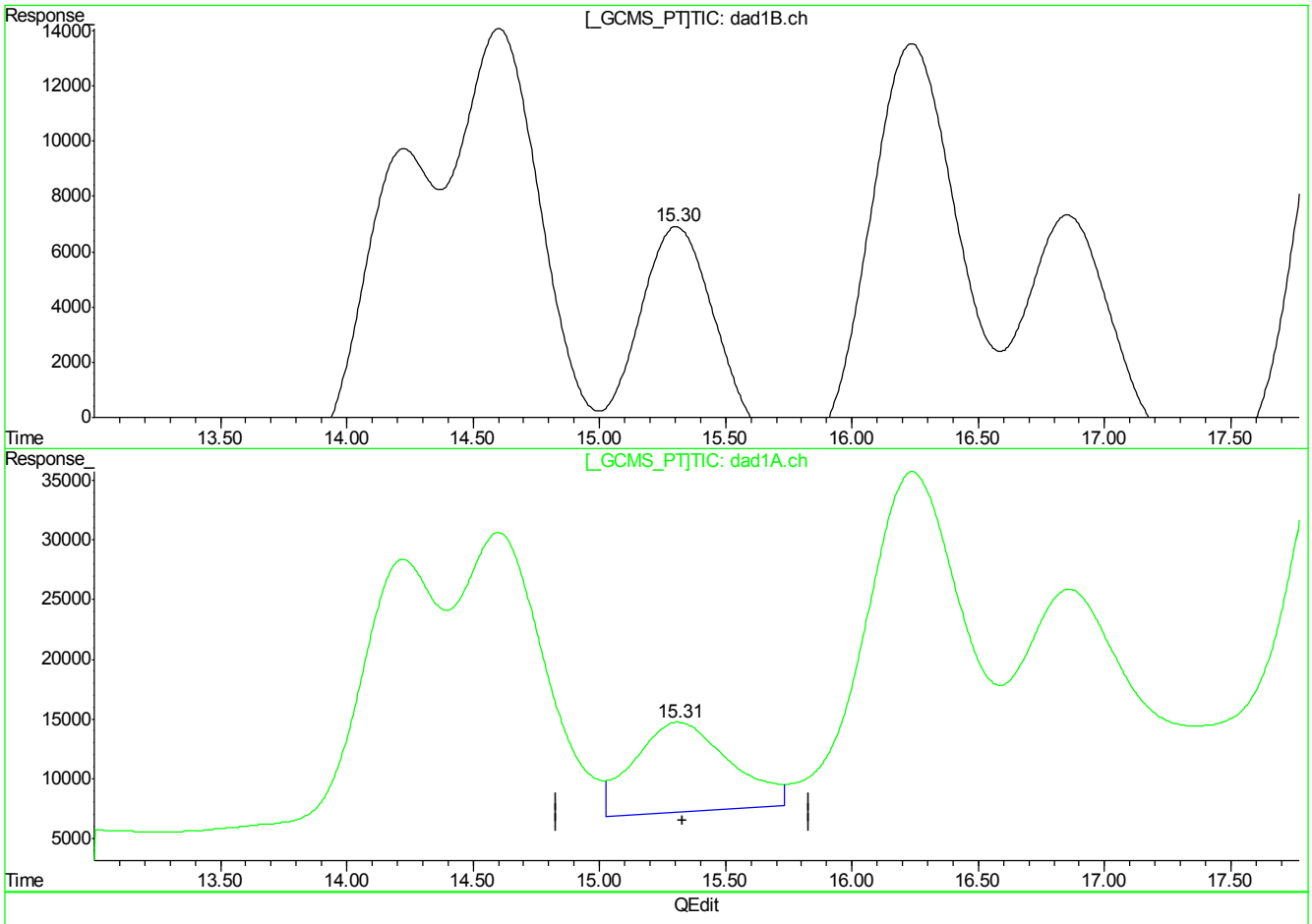
7.4.4.15

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.31min 150.902ppb

response 1978182

(14) 2,4-Dinitrotoluene #2

15.31min 205.196ppb

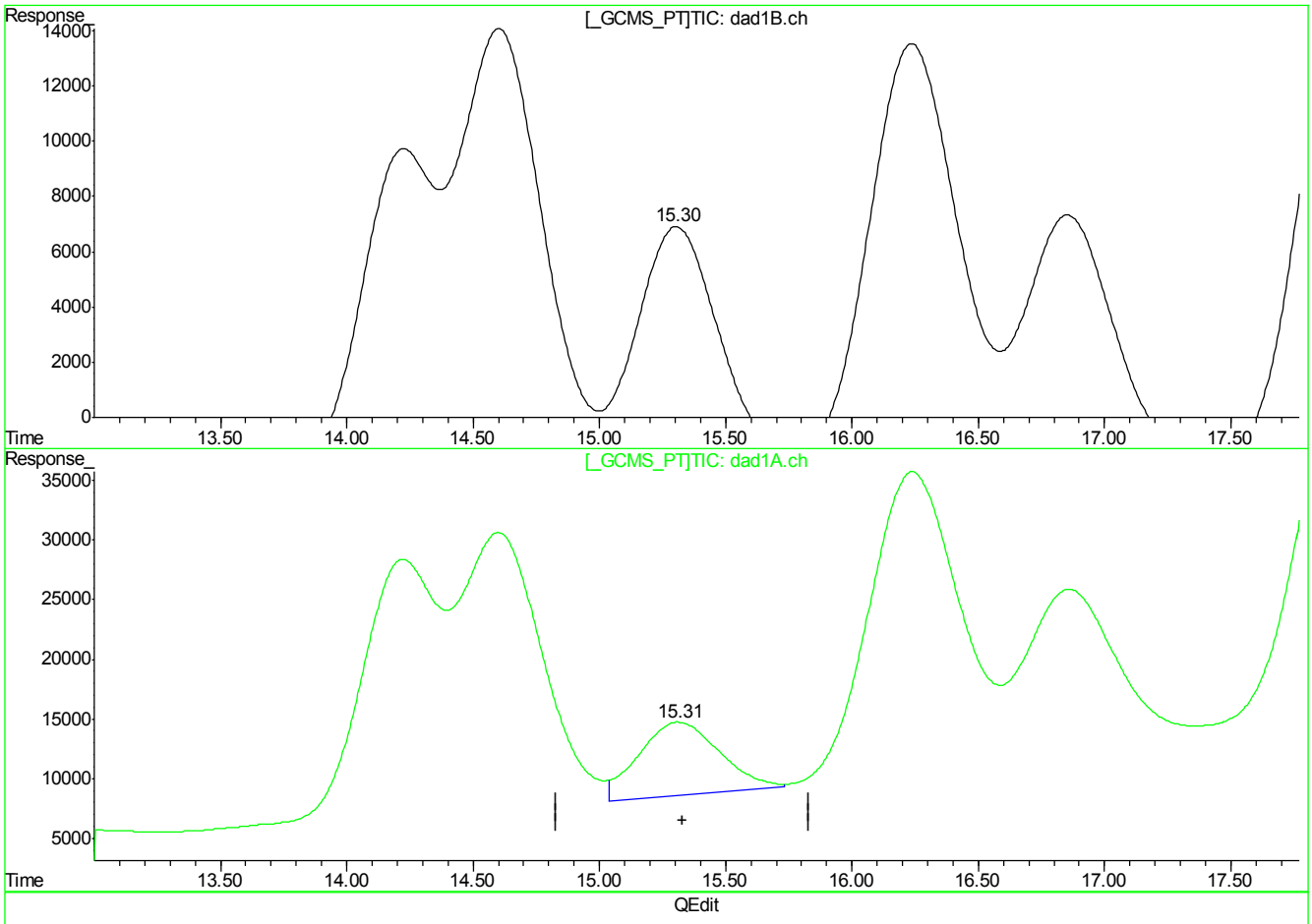
response 1964750

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:43 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.31min 150.902ppb

response 1978182

(14) 2,4-Dinitrotoluene #2

15.31min 141.142ppb m

response 1353468

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:40:49 2018

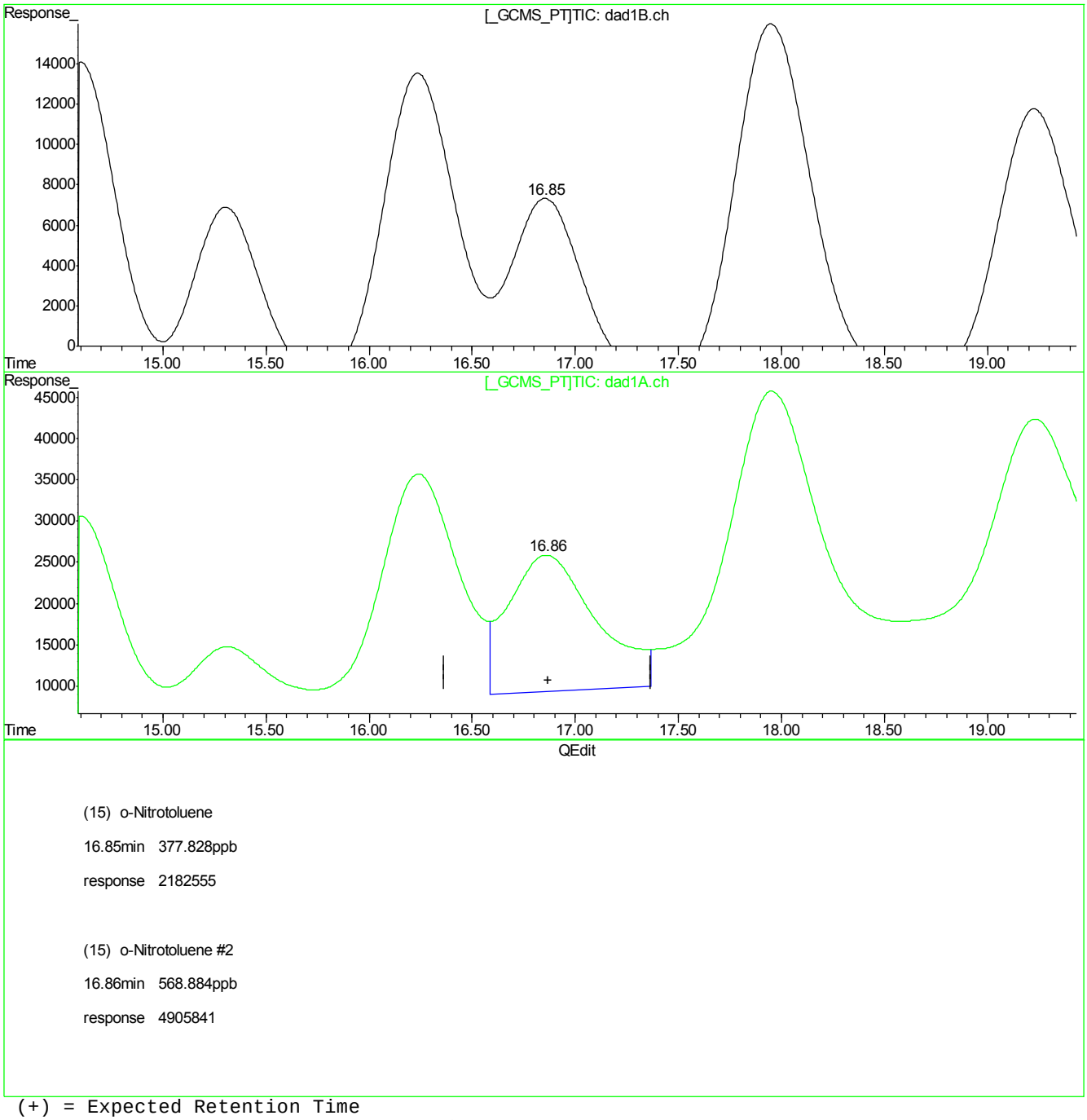
7.4.4.17

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.85min 377.828ppb

response 2182555

(15) o-Nitrotoluene #2

16.86min 568.884ppb

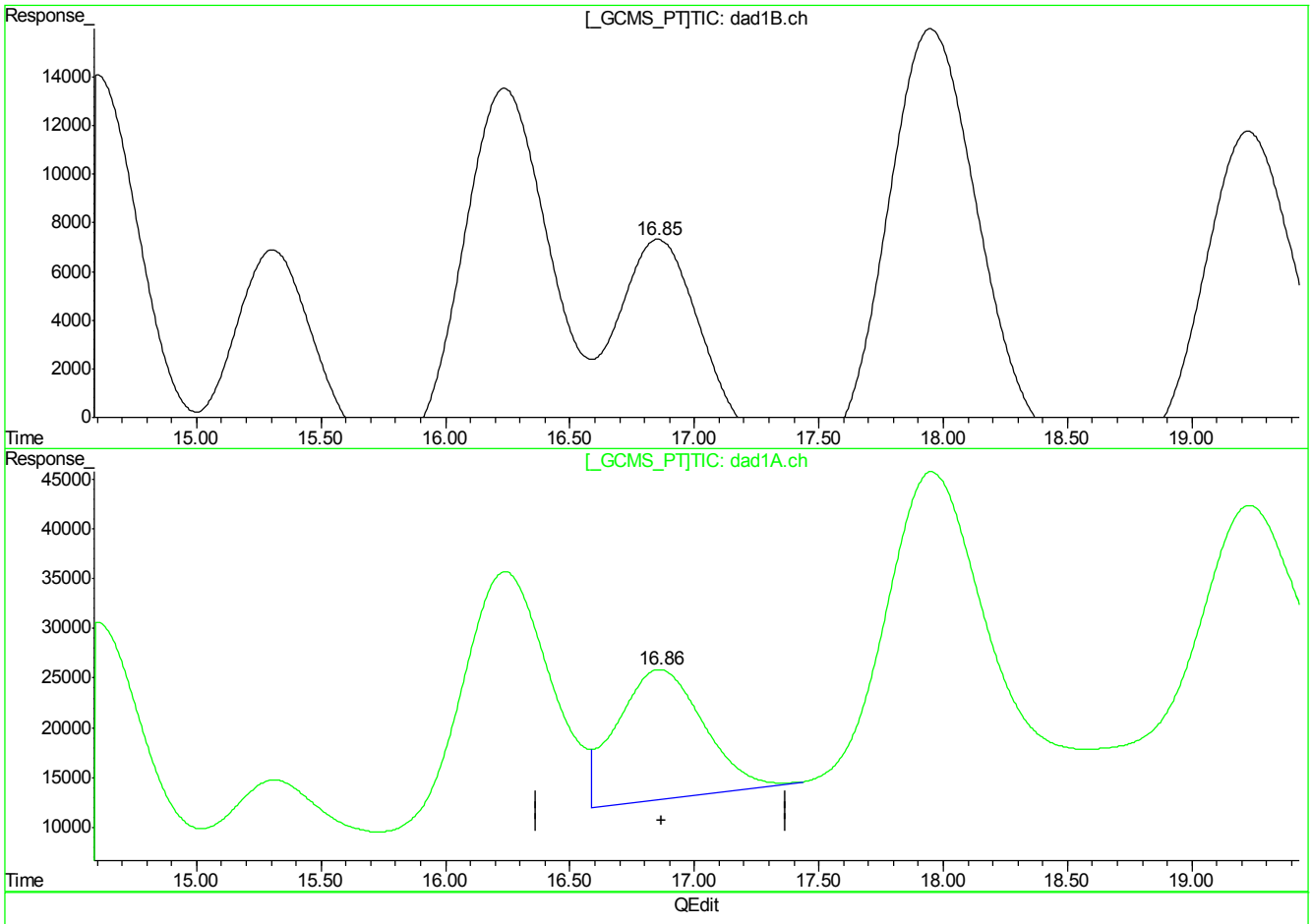
response 4905841

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:11 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.85min 377.828ppb

response 2182555

(15) o-Nitrotoluene #2

16.86min 367.686ppb m

response 3170790

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:18 2018

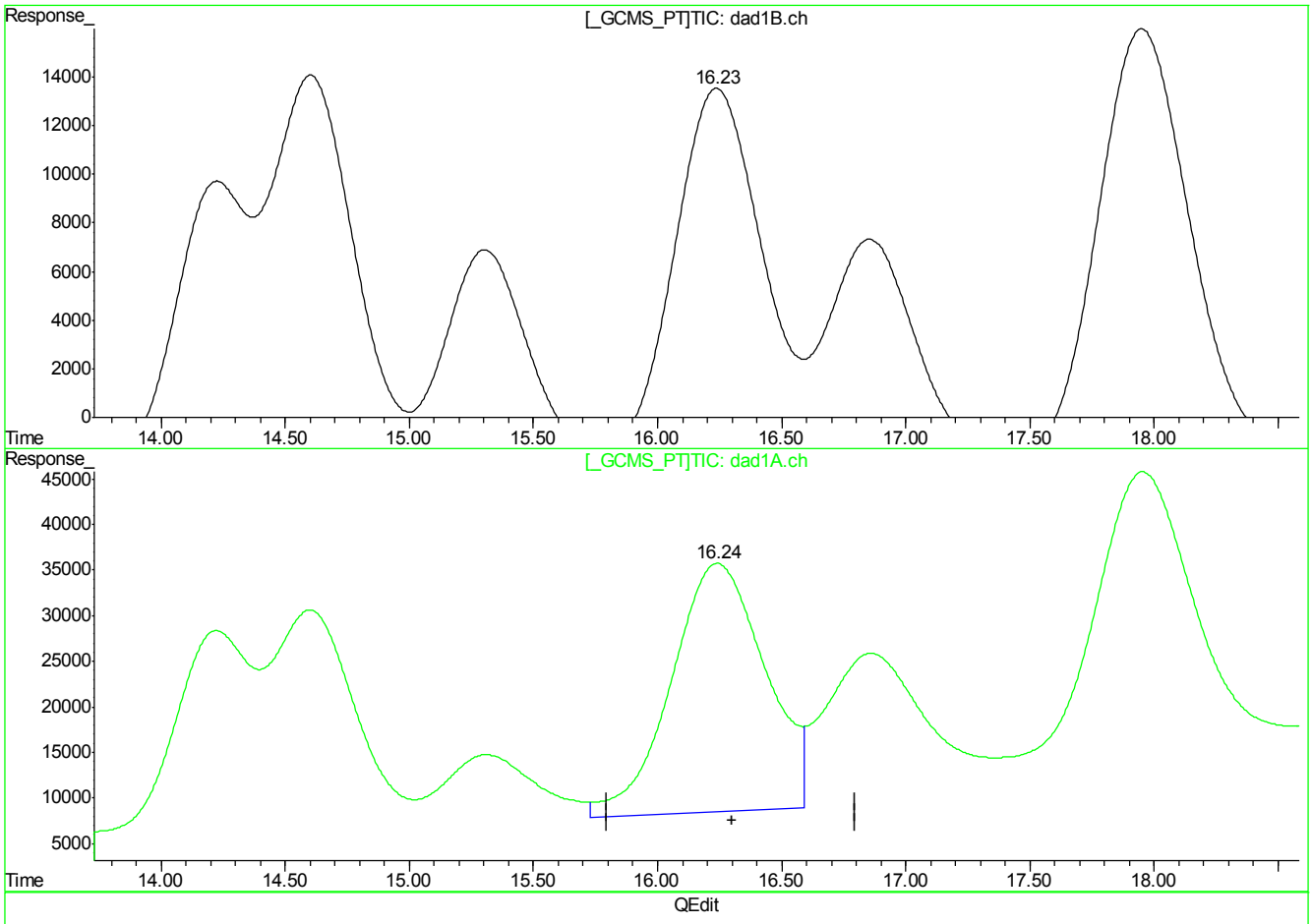
7.4.4.19

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.24min 381.607ppb

response 3726019

(16) 3,5-Dinitroaniline #2

16.24min 441.670ppb

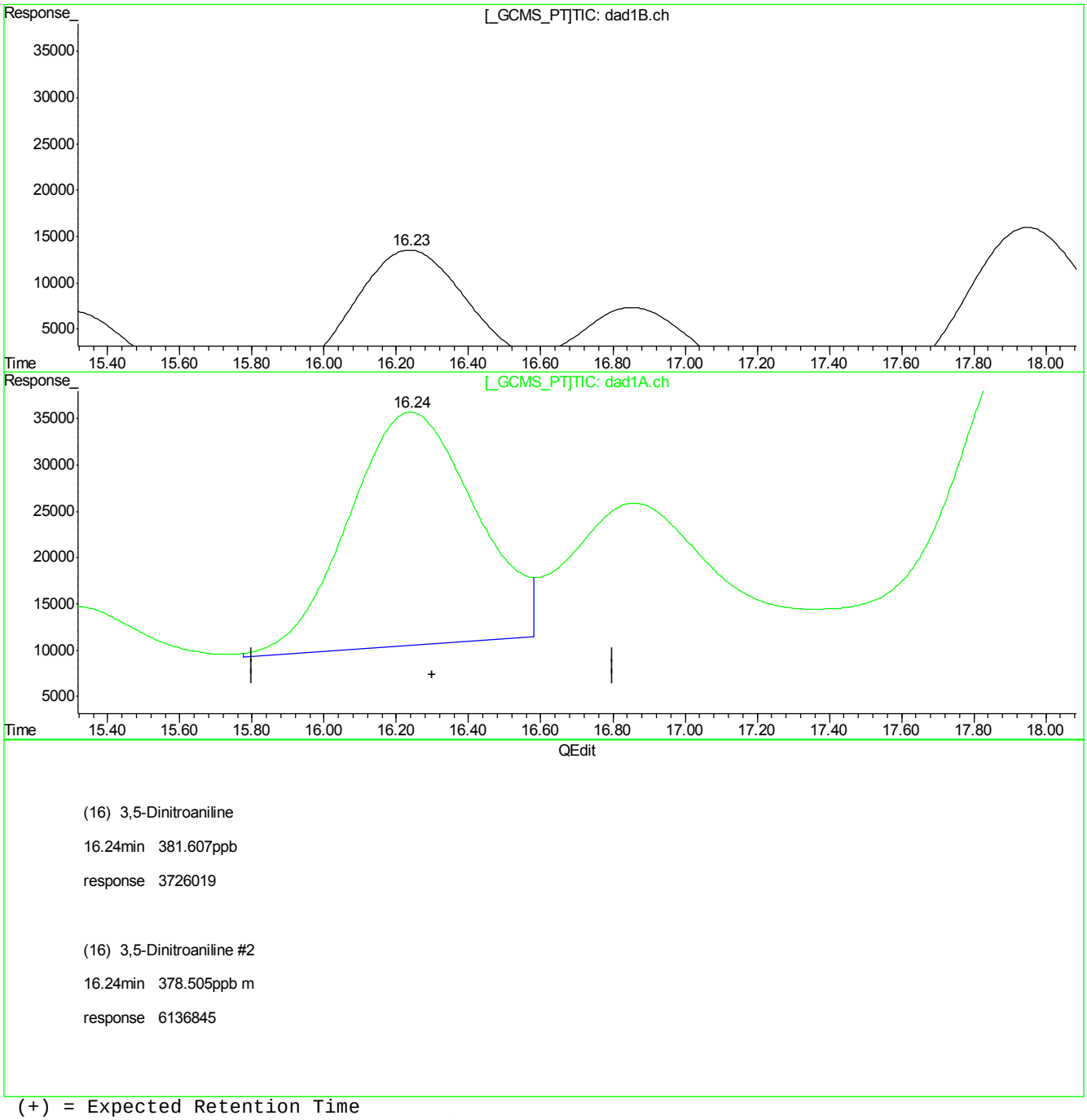
response 7166992

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.24min 381.607ppb

response 3726019

(16) 3,5-Dinitroaniline #2

16.24min 378.505ppb m

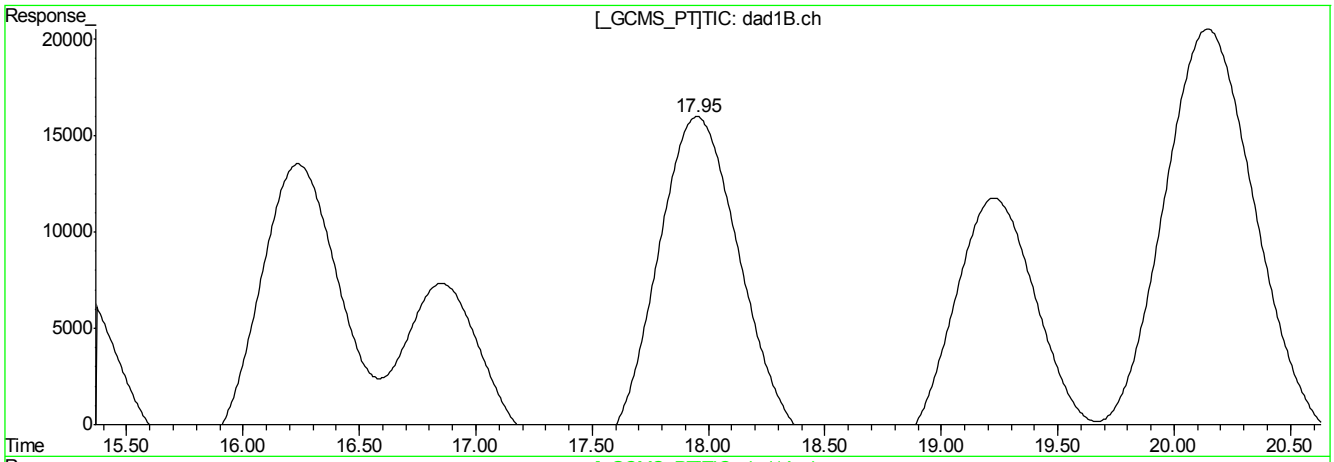
response 6136845

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:32 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.95min 384.794ppb

response 4518396

(17) p-Nitrotoluene #2

17.96min 544.746ppb

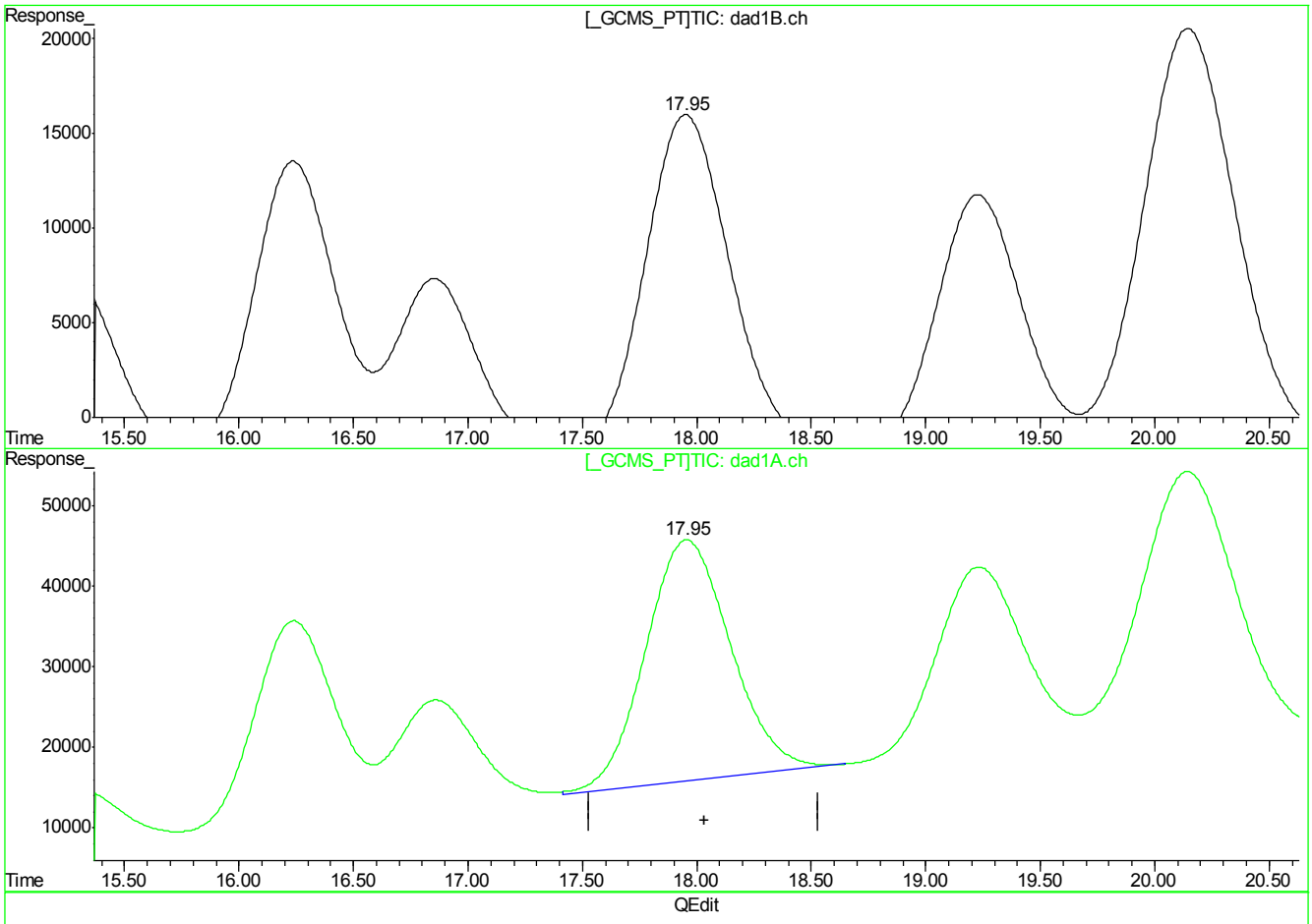
response 11544897

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:35 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.95min 384.794ppb

response 4518396

(17) p-Nitrotoluene #2

17.95min 363.330ppb m

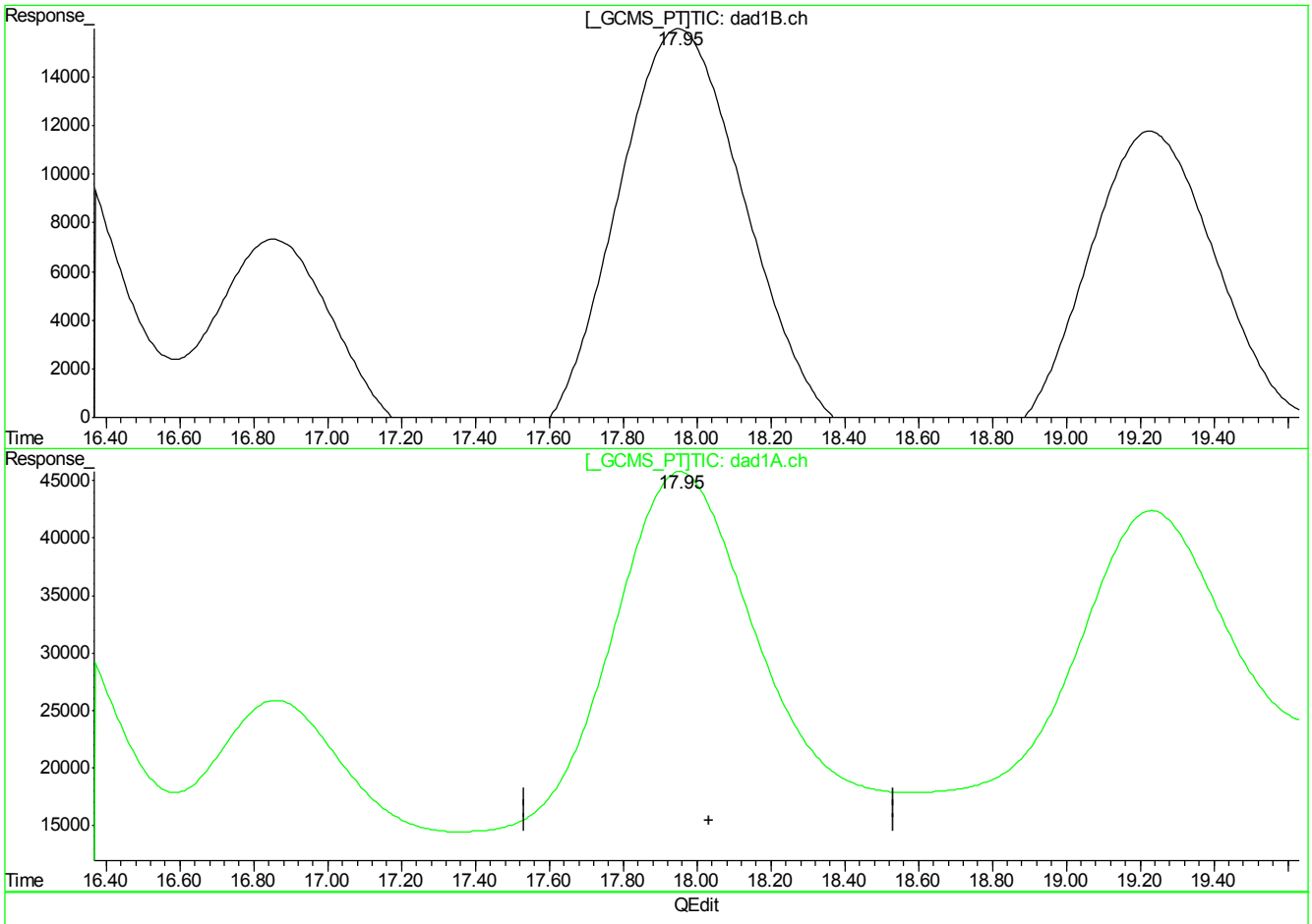
response 7700104

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:39 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.95min 384.794ppb

response 4518396

(18) 4-Amino-2,6-Dinitrotoluene #2

17.96min 543.162ppb

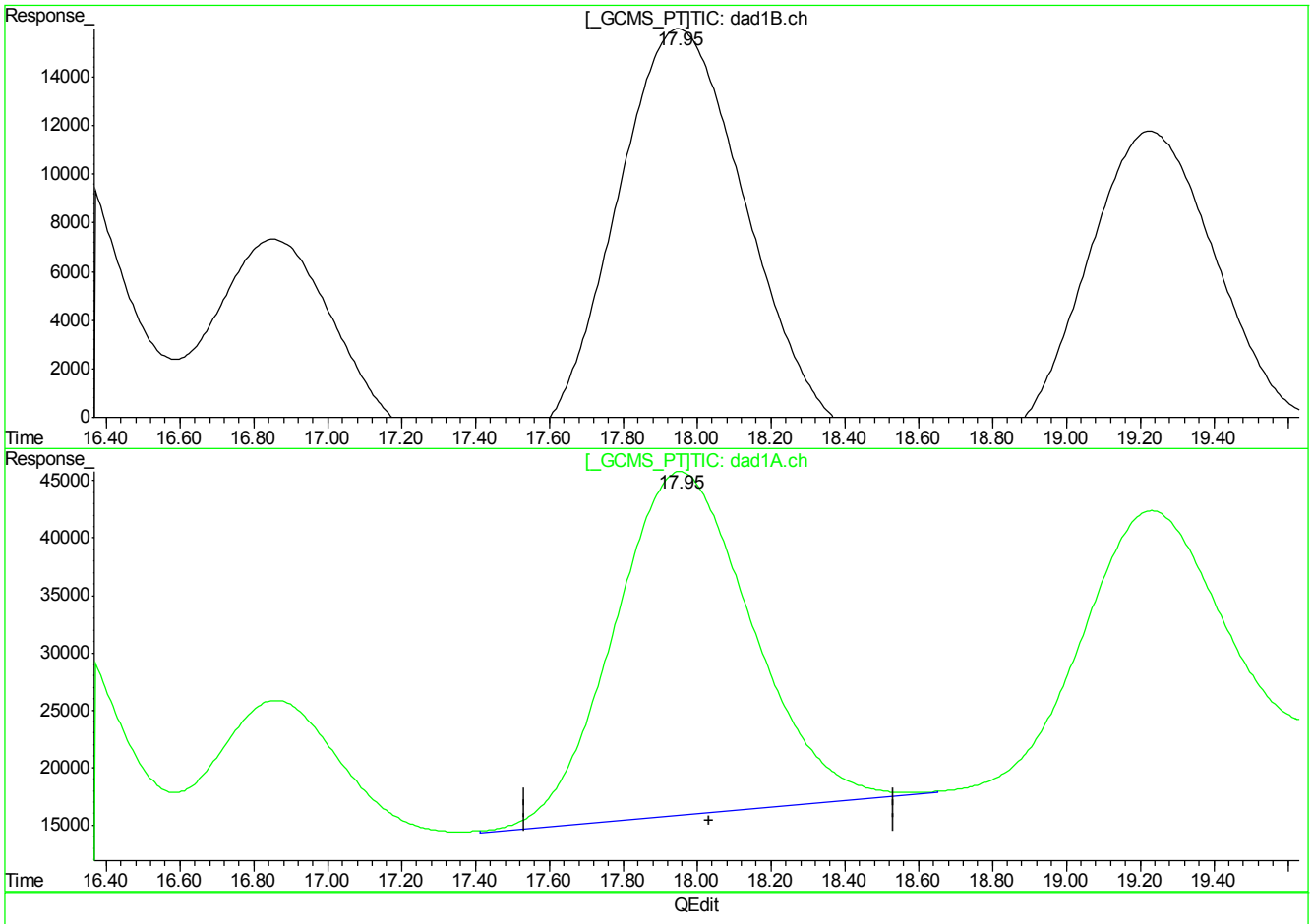
response 11544897

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:42 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.95min 384.794ppb

response 4518396

(18) 4-Amino-2,6-Dinitrotoluene #2

17.95min 364.396ppb m

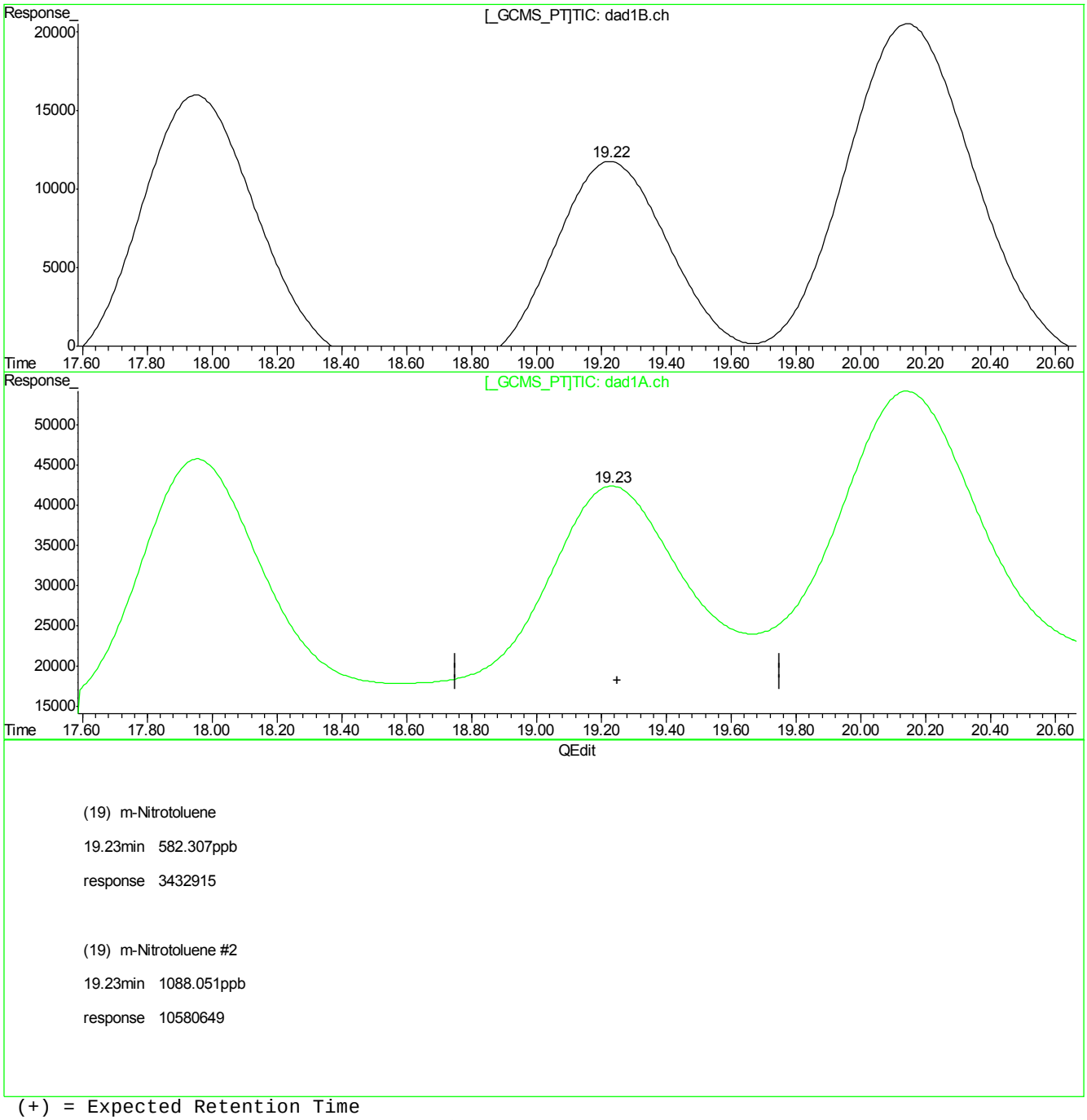
response 7745233

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.23min 582.307ppb

response 3432915

(19) m-Nitrotoluene #2

19.23min 1088.051ppb

response 10580649

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:47 2018

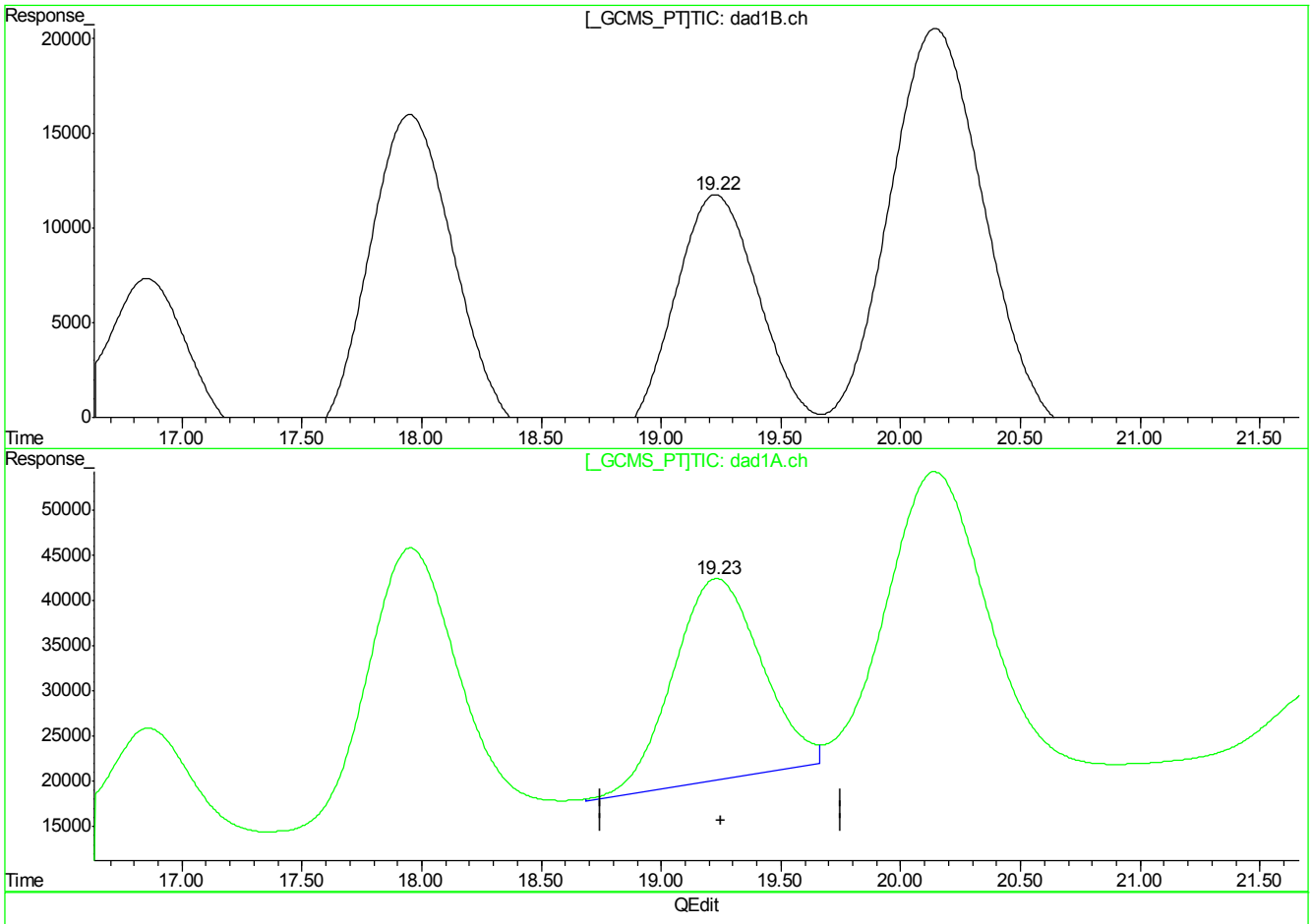
7.4.4.26

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.23min 582.307ppb

response 3432915

(19) m-Nitrotoluene #2

19.23min 587.303ppb m

response 5711175

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:52 2018

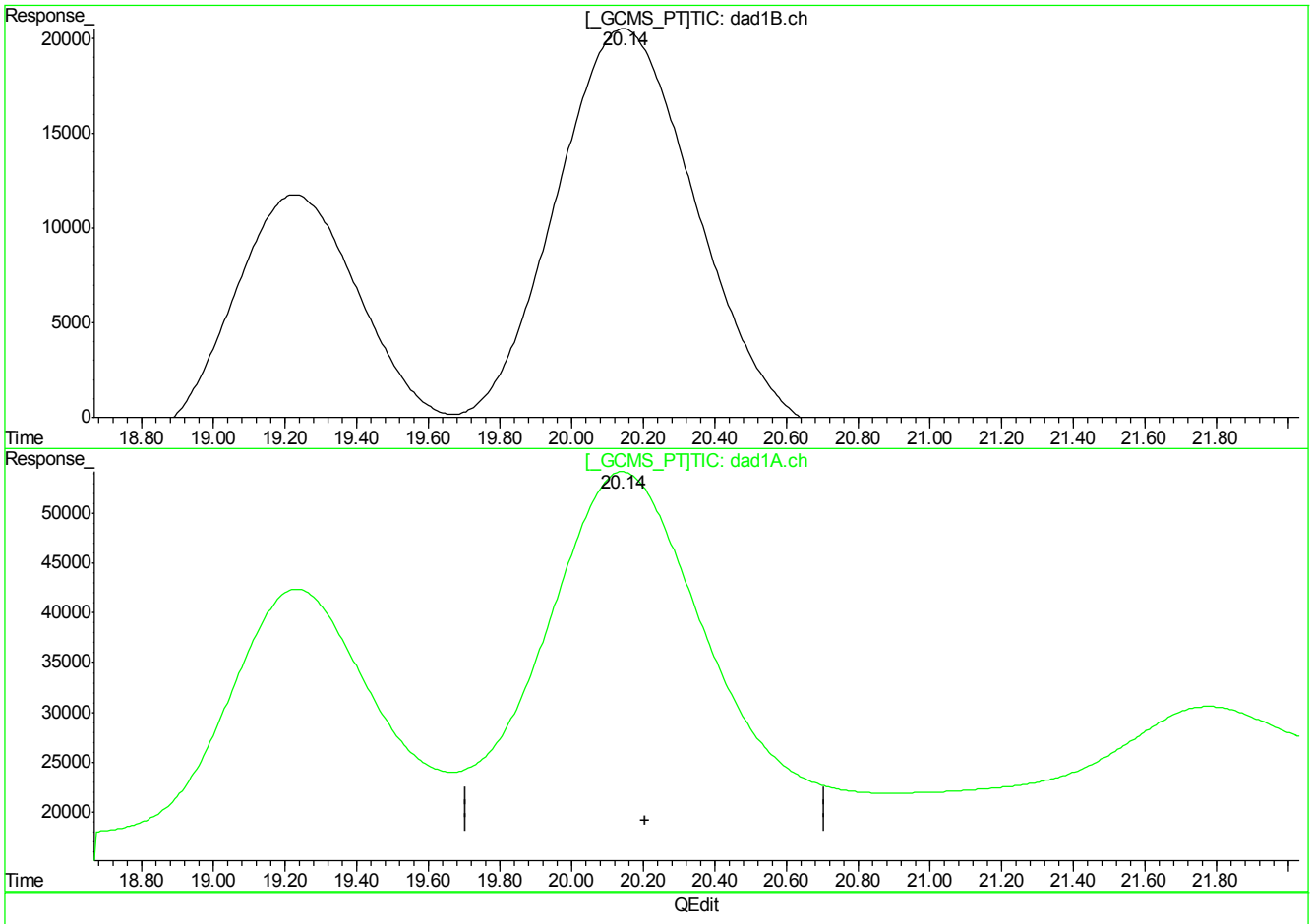
7.4.4.27

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.15min 700.285ppb

response 6318615

(20) 2-Amino-4,6-Dinitrotoluene #2

20.14min 1229.700ppb

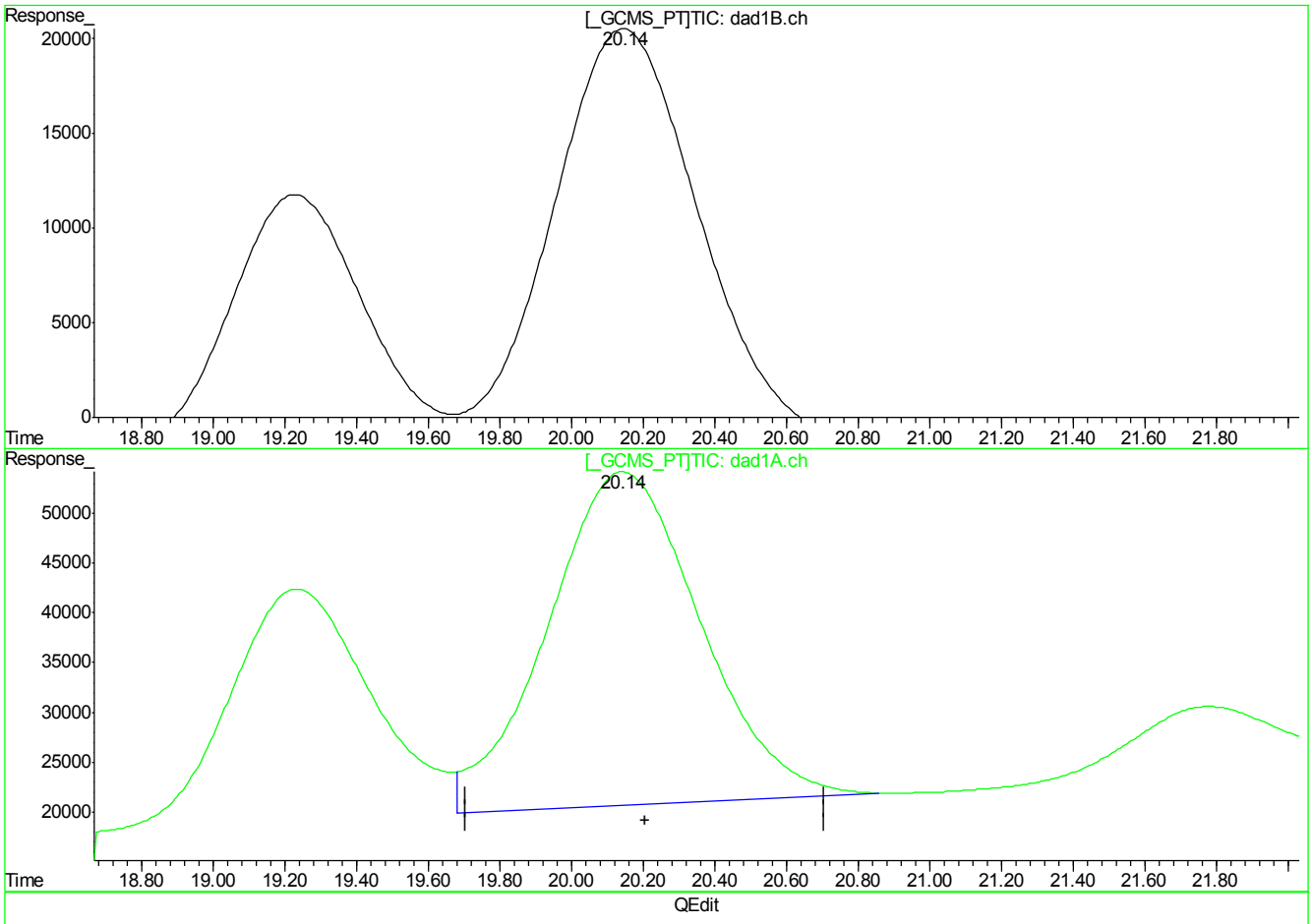
response 15316980

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:54 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.15min 700.285ppb

response 6318615

(20) 2-Amino-4,6-Dinitrotoluene #2

20.14min 816.992ppb m

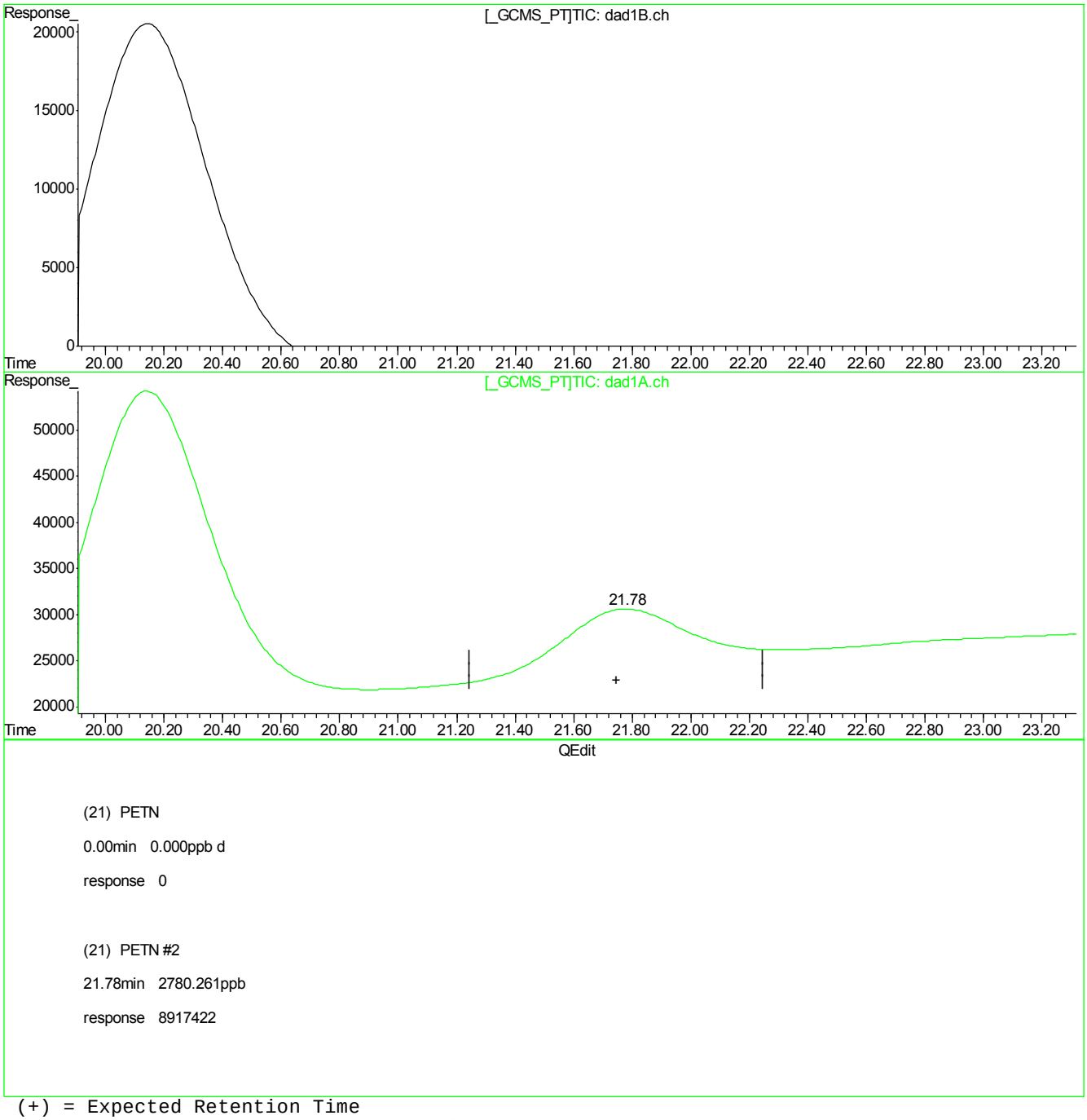
response 9913341

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:57 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 2780.261ppb

response 8917422

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:41:59 2018

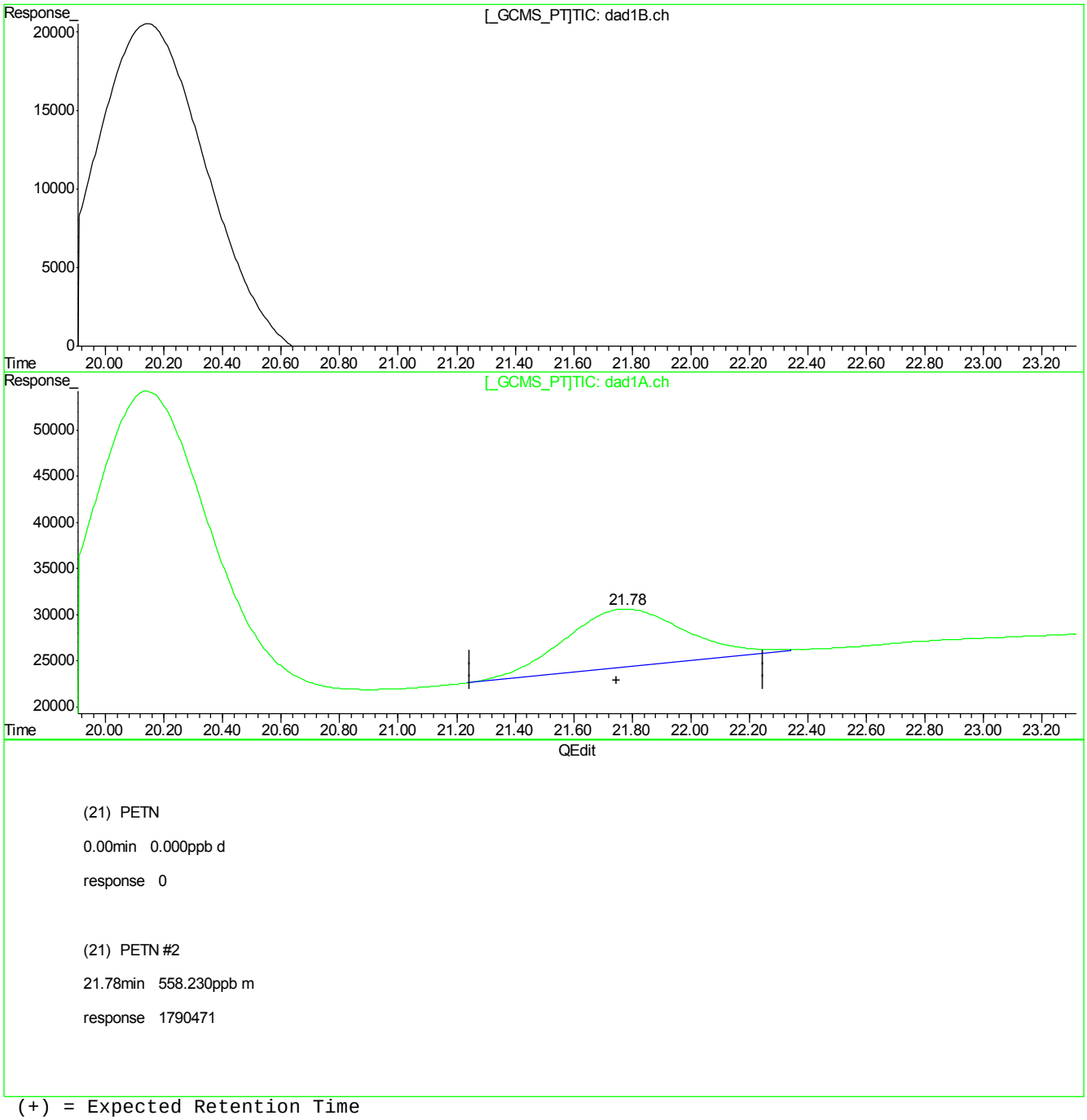
7.4.4.30

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614629.D\dad1B.ch Vial: 52
Signal #2 : G:\DATA\0508RPB3\GG614629.D\dad1A.ch
Acq On : 09-May-2018, 00:19:50 Operator: evitam
Sample : op69945-pt1 Inst : G1315B
Misc : op69945,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 558.230ppb m

response 1790471

(+) = Expected Retention Time
GG614629.D 8330RPB.M_1113M.M Wed May 09 10:42:03 2018

7.4.4.31

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 10:17:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.21	2567972	5477161	494.327	506.318
	Spiked Amount 500.000	Range 69 - 134		Recovery =		98.87%	101.26%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1347979	1298250	415.801m	402.964m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.43	7.43	1490945	1486169	143.891	143.445
6)	RDX	7.88	7.88	1179501	1157493	247.577	244.035
7)	1,3-Dinitrobenze	9.91	9.91	1577666	1122108	110.273	85.131m
8)	Nitrobenzene	10.87	10.86	1750930	1730888	185.531	186.903m
9)	2,4,6-Trinitroto	11.65	11.65	432580	845516	42.685	64.470m#
10)	Nitroglycerin	0.00	12.40	0	612977	N.D.	181.906m#
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.59	14.58	1734260	2690793	242.567	265.206
14)	2,4-Dinitrotolue	15.31	15.31	963653	640083	73.510	66.633m
15)	o-Nitrotoluene	16.84	16.86	1094769	1482628	189.518	171.926m
16)	3,5-Dinitroanili	16.25	16.25	1868044	3250224	191.817	200.942m
17)	p-Nitrotoluene	17.94	17.94	2283495	4570588	194.466	215.663m
18)	4-Amino-2,6-Dini	17.94	17.94	2283495	4539733	194.466	213.584m
19)	m-Nitrotoluene	19.22	19.21	1748073	2943834	296.516	302.726m
20)	2-Amino-4,6-Dini	20.15	20.14	3183533	4623824	352.827	391.774m
21)	PETN	0.00	21.83	0	579922	N.D. d	180.807m

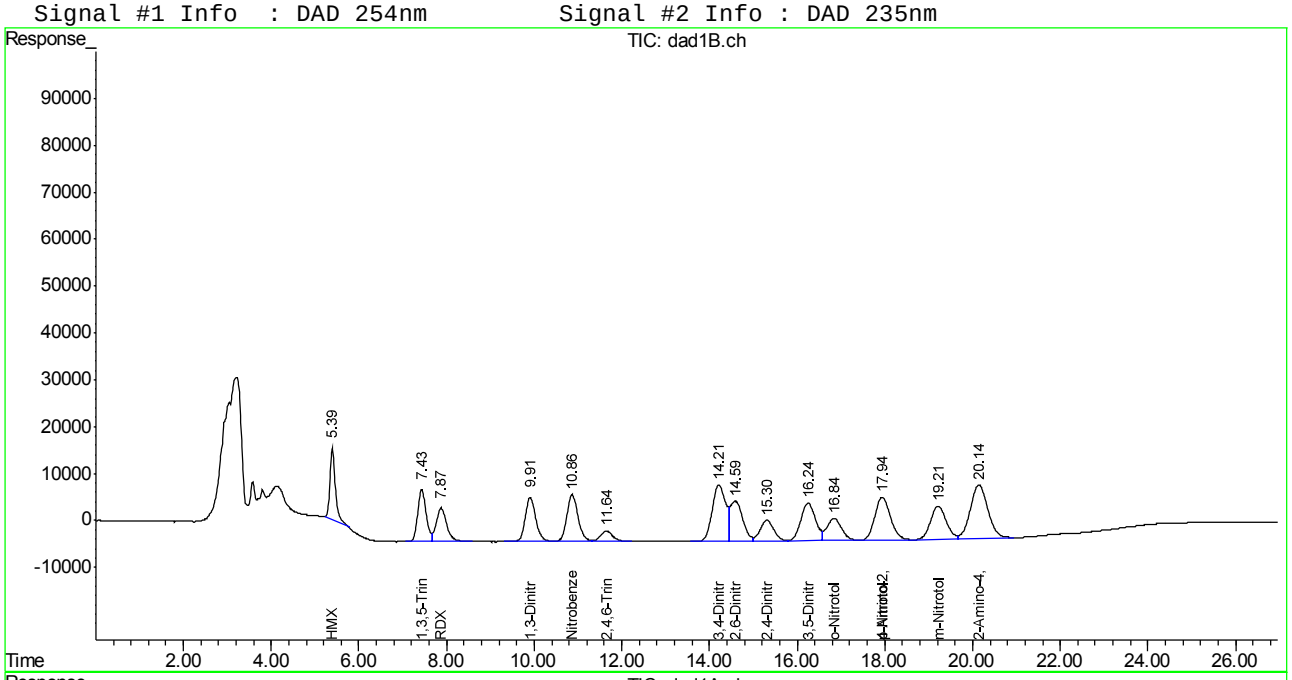
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:10:36 2018 Page 1

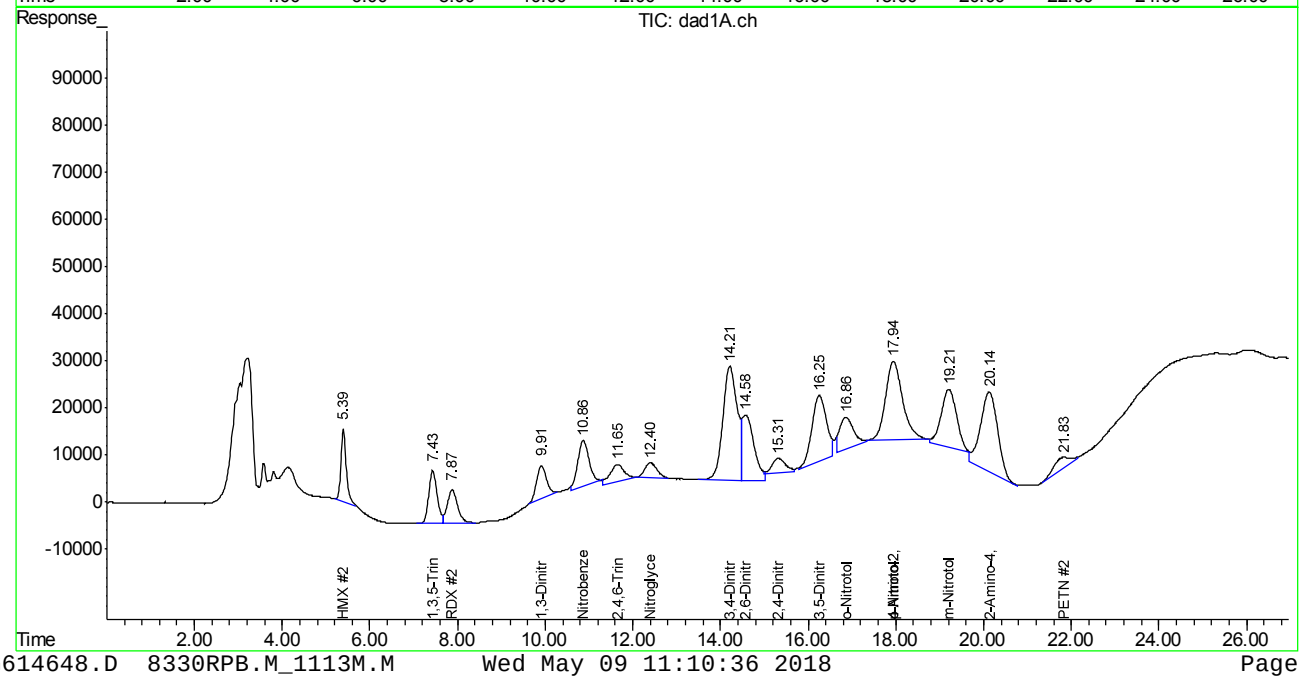
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:08 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG614648.D 8330RPB.M_1113M.M Wed May 09 11:10:36 2018 Page 2

Manual Integration Approval Summary

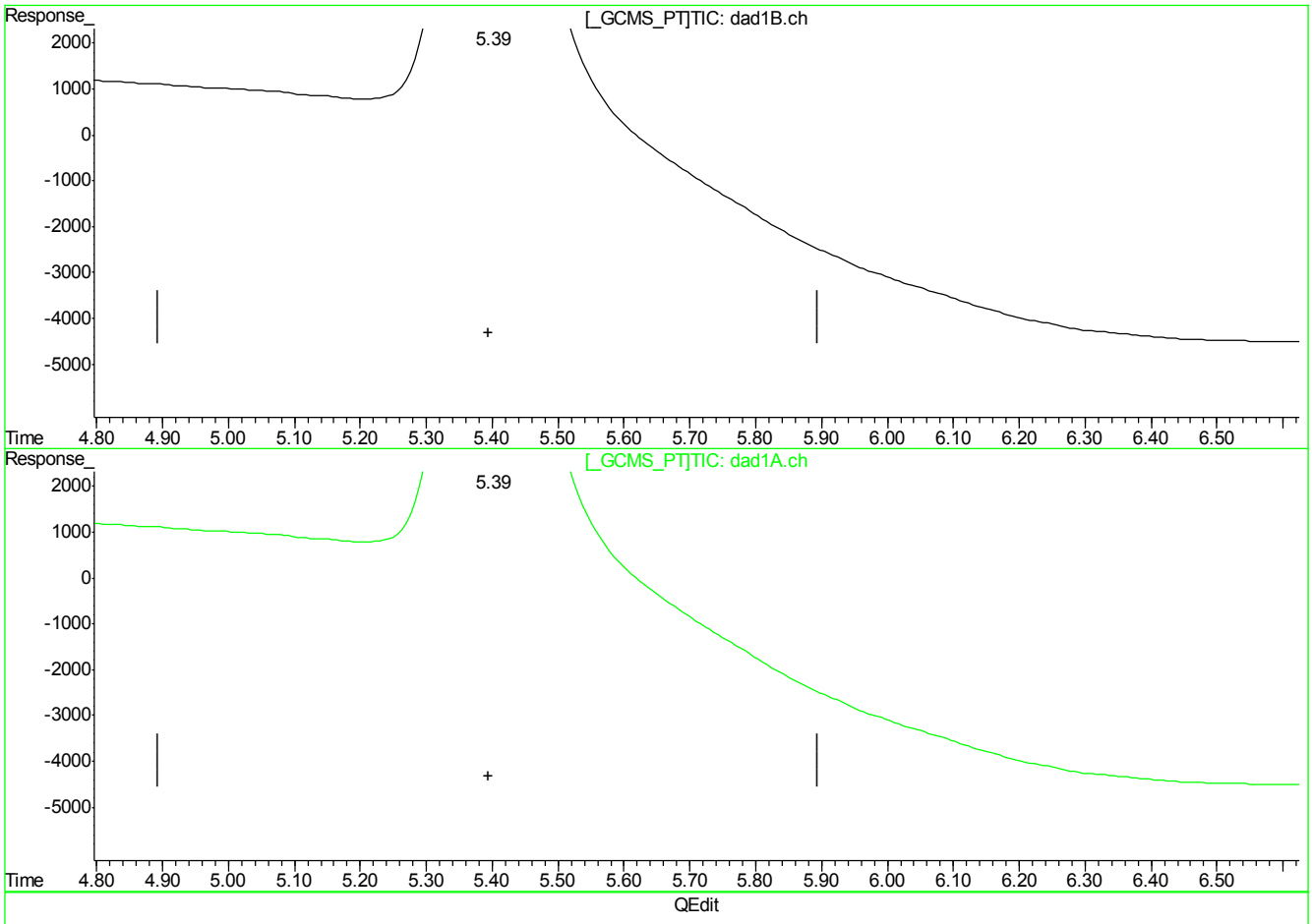
Sample Number:	OP69946-PT1	**Method:**	SW846 8330B
Lab FileID:	GG614648.D	**Analyst approved:**	05/09/18 11:26 Evita Martinez
Injection Time:	05/09/18 09:39	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.91	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.86	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.65	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.40	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.31	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.25	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.86	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	17.94	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	17.94	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.21	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.14	Poorly defined baseline
PETN	78-11-5	2	21.83	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.40min 252.504ppb

response 818589

(2) HMX #2

5.40min 254.082ppb

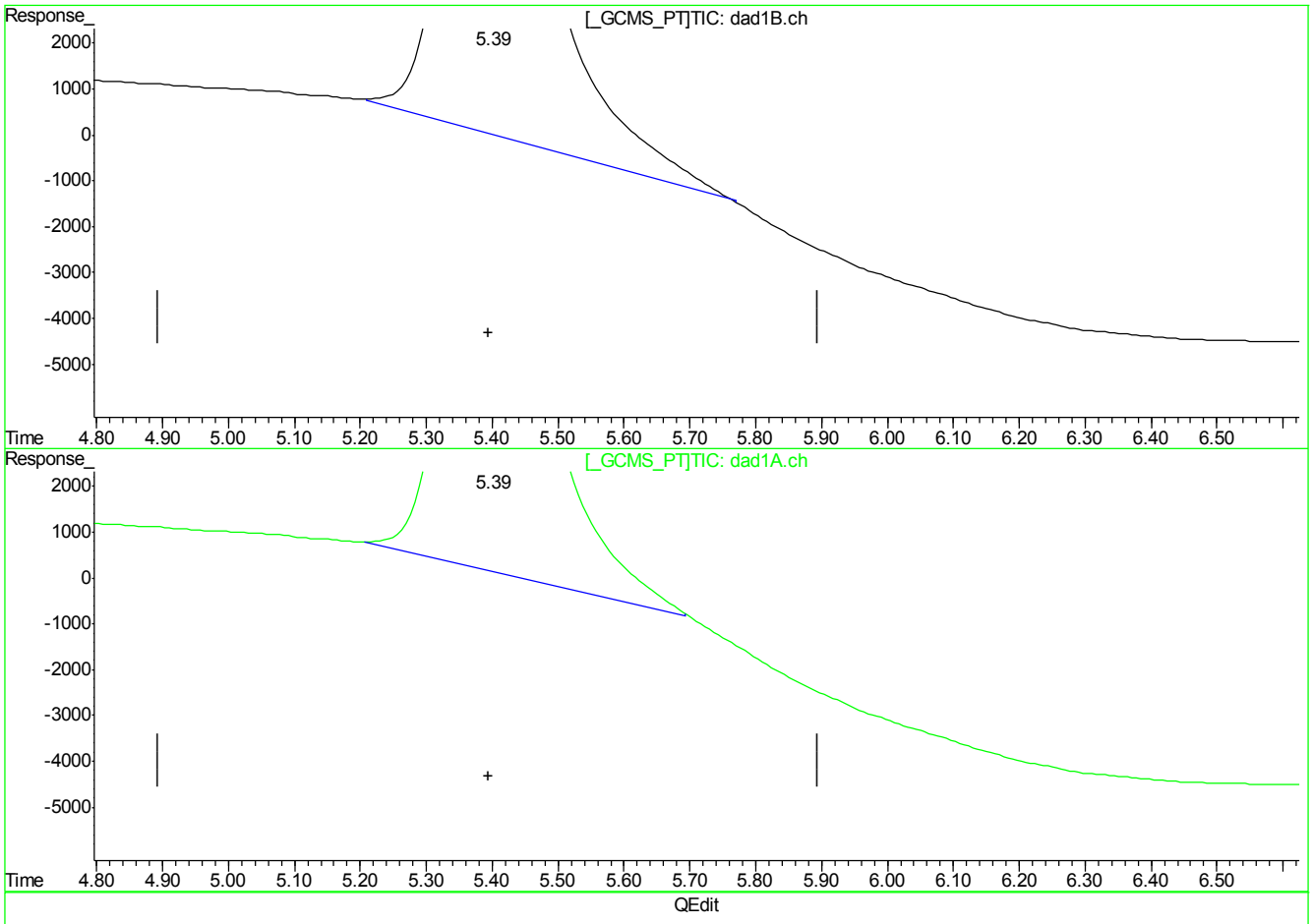
response 818589

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 415.801ppb m

response 1347979

(2) HMX #2

5.39min 402.964ppb m

response 1298250

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:24 2018

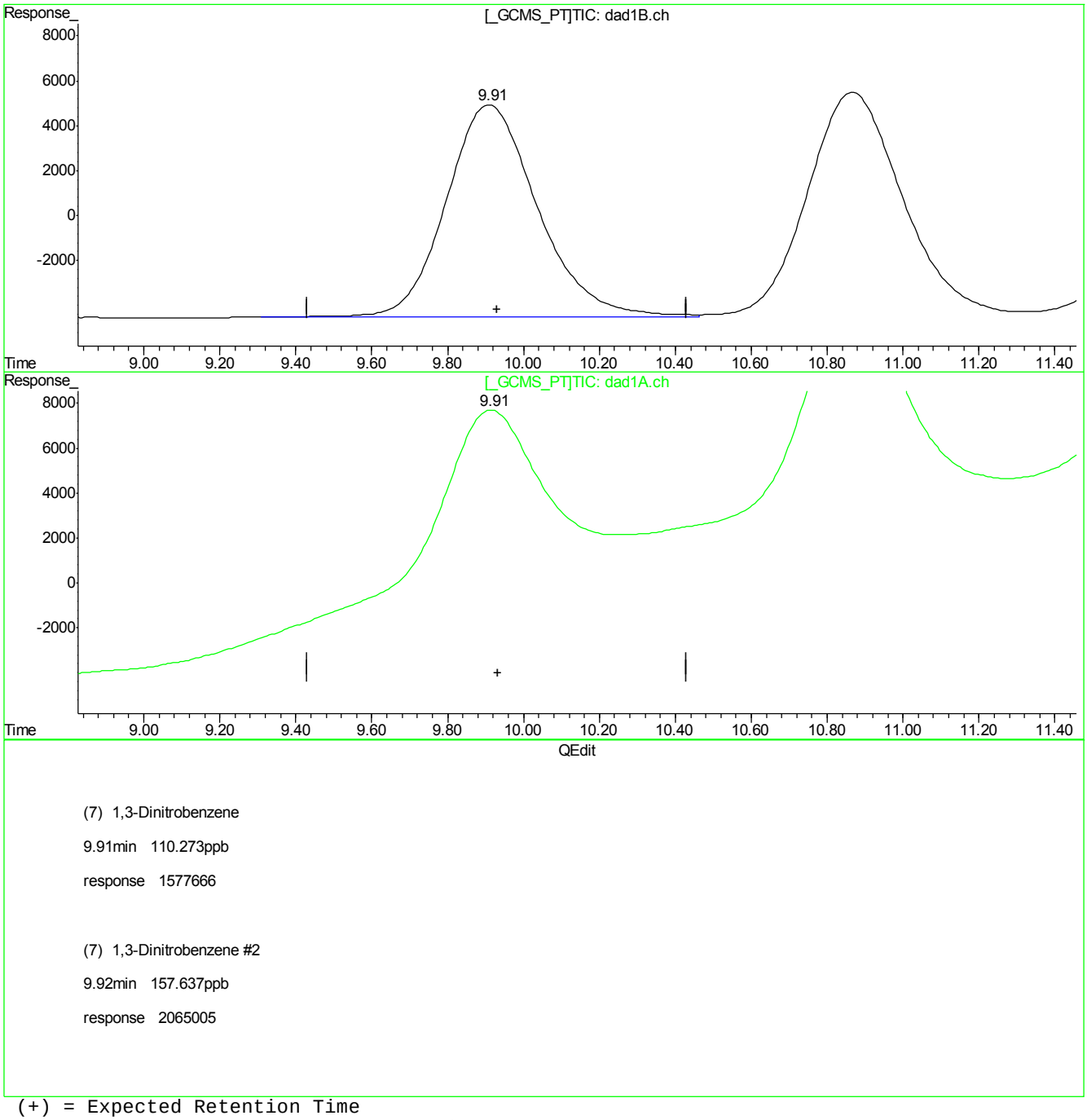
7.4.5.3

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.91min 110.273ppb

response 1577666

(7) 1,3-Dinitrobenzene #2

9.92min 157.637ppb

response 2065005

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:33 2018

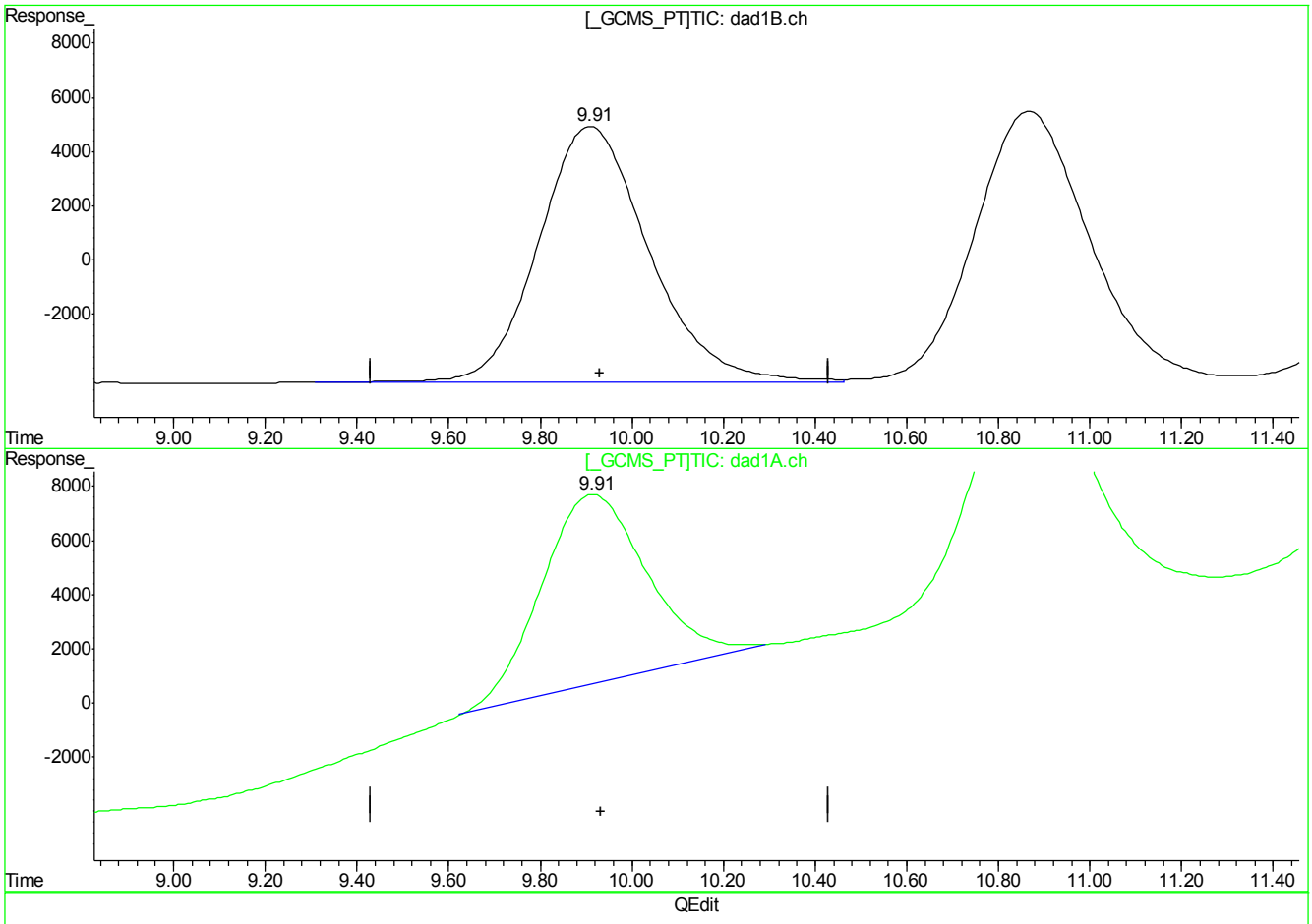
7.4.5.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.91min 110.273ppb

response 1577666

(7) 1,3-Dinitrobenzene #2

9.91min 85.131ppb m

response 1122108

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:37 2018

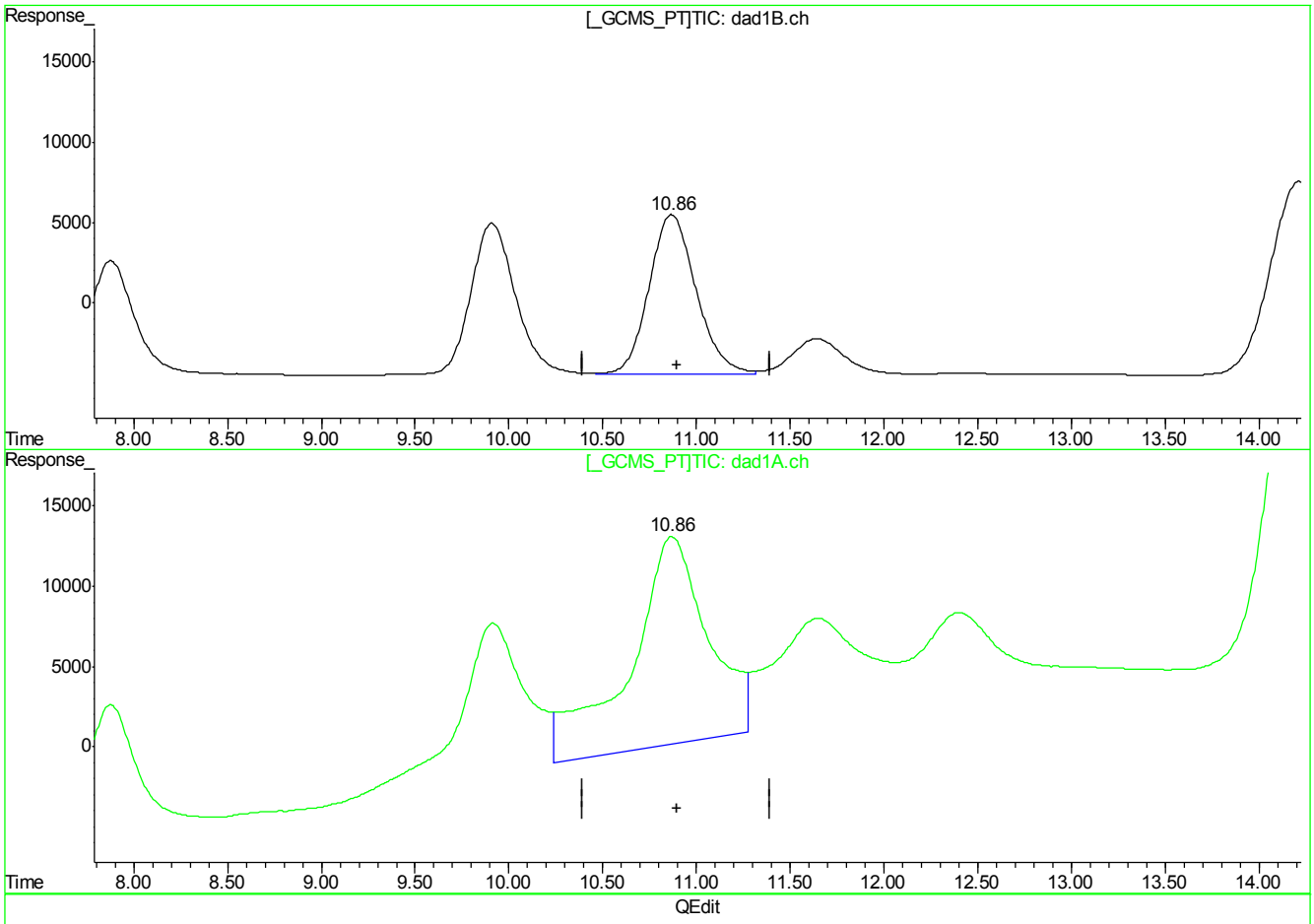
7.4.5.5

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.87min 185.531ppb

response 1750930

(8) Nitrobenzene #2

10.87min 406.252ppb

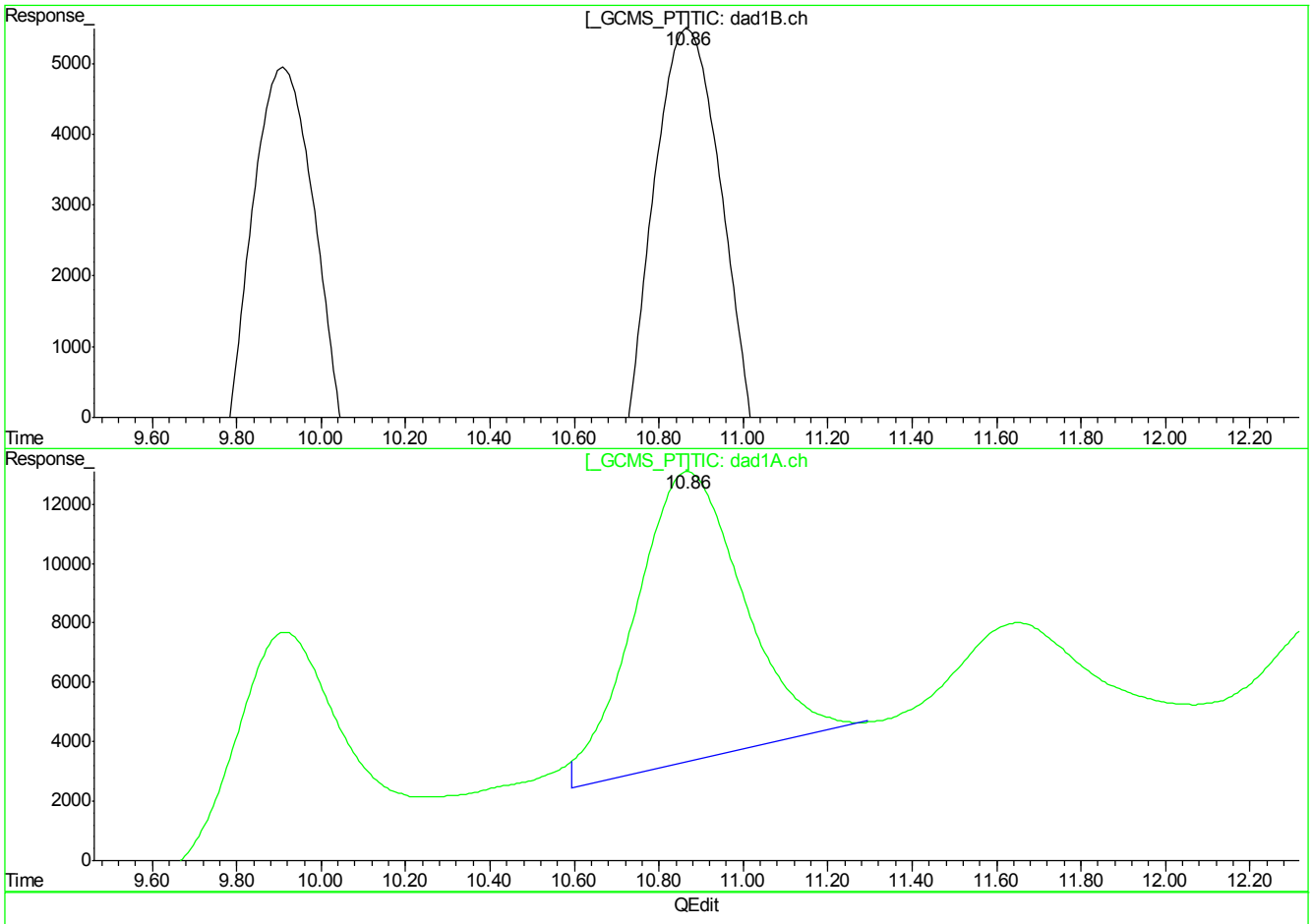
response 3762264

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.87min 185.531ppb

response 1750930

(8) Nitrobenzene #2

10.86min 186.903ppb m

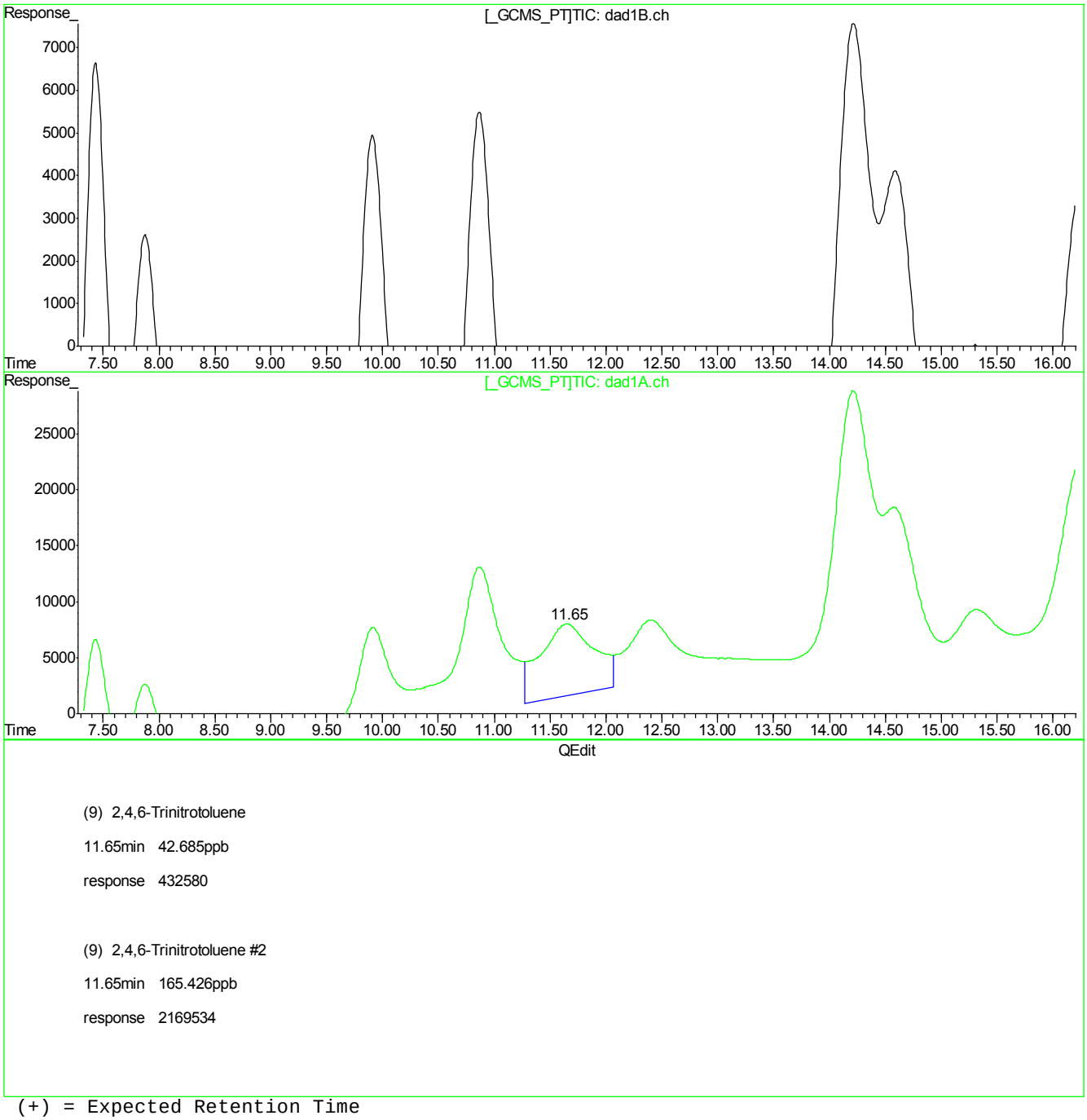
response 1730888

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:52 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.65min 42.685ppb

response 432580

(9) 2,4,6-Trinitrotoluene #2

11.65min 165.426ppb

response 2169534

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:01 2018

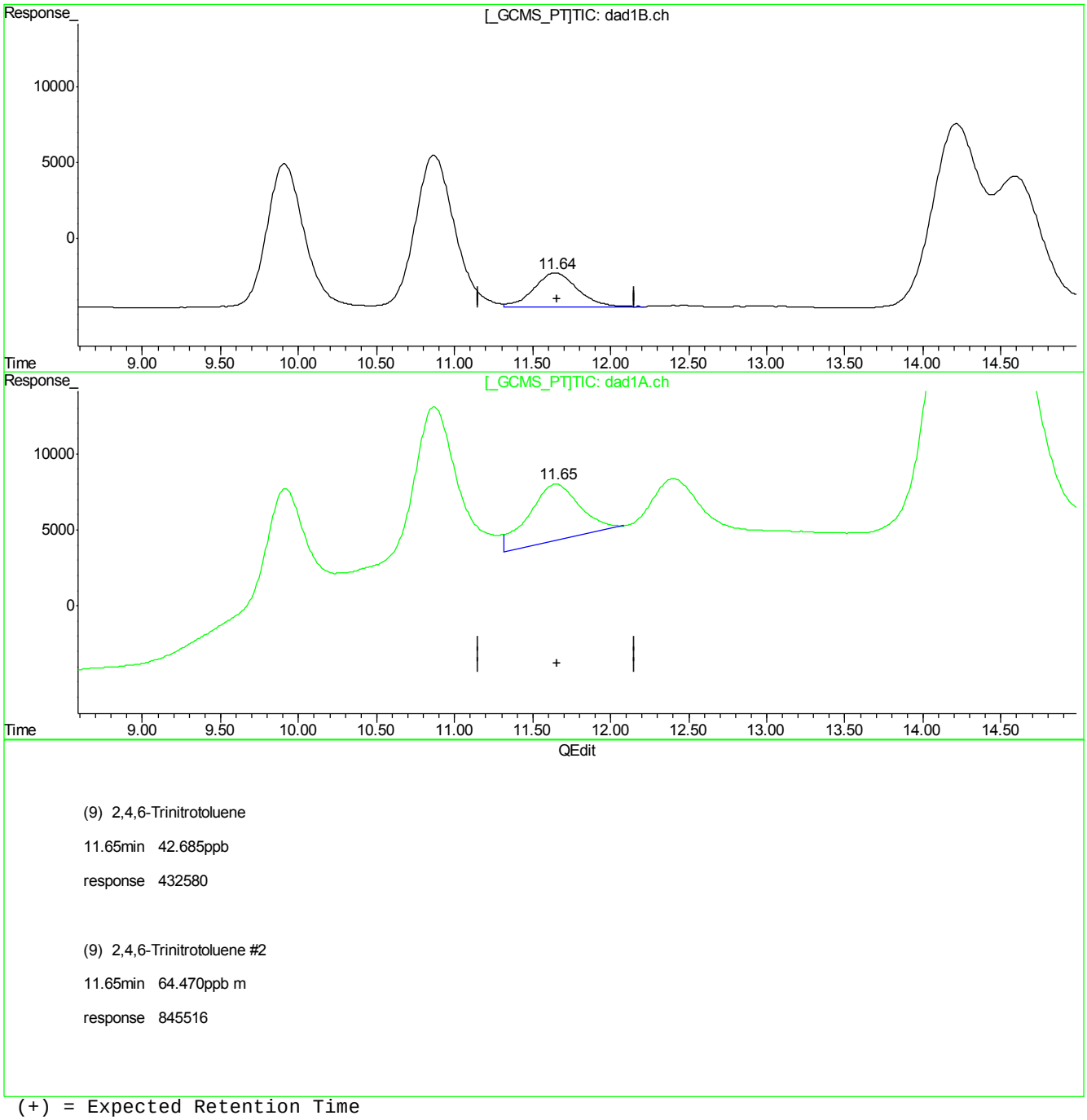
7.4.5.8

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.65min 42.685ppb

response 432580

(9) 2,4,6-Trinitrotoluene #2

11.65min 64.470ppb m

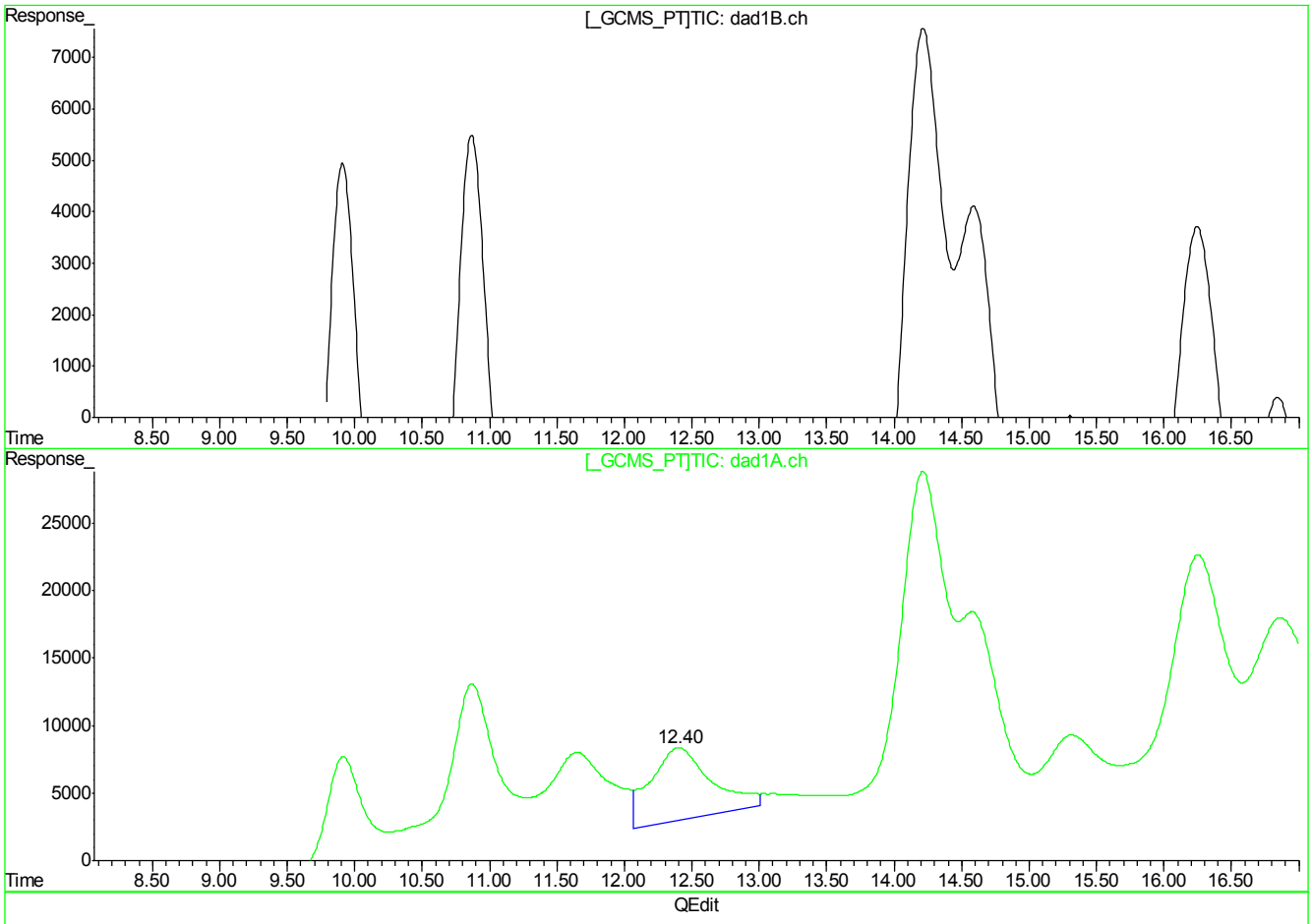
response 845516

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.40min 499.353ppb

response 1682692

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:17 2018

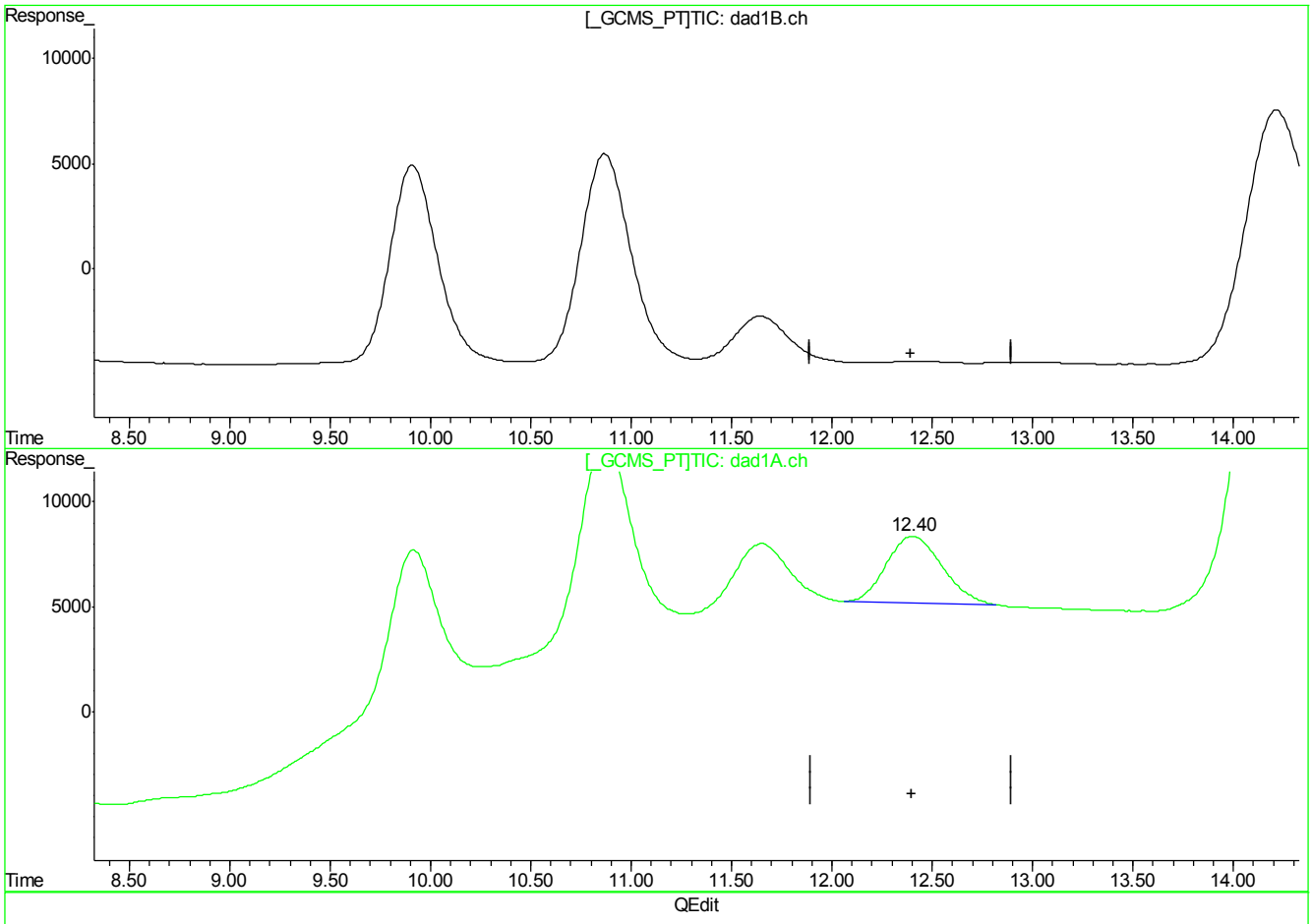
7.4.5.10

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.40min 181.906ppb m

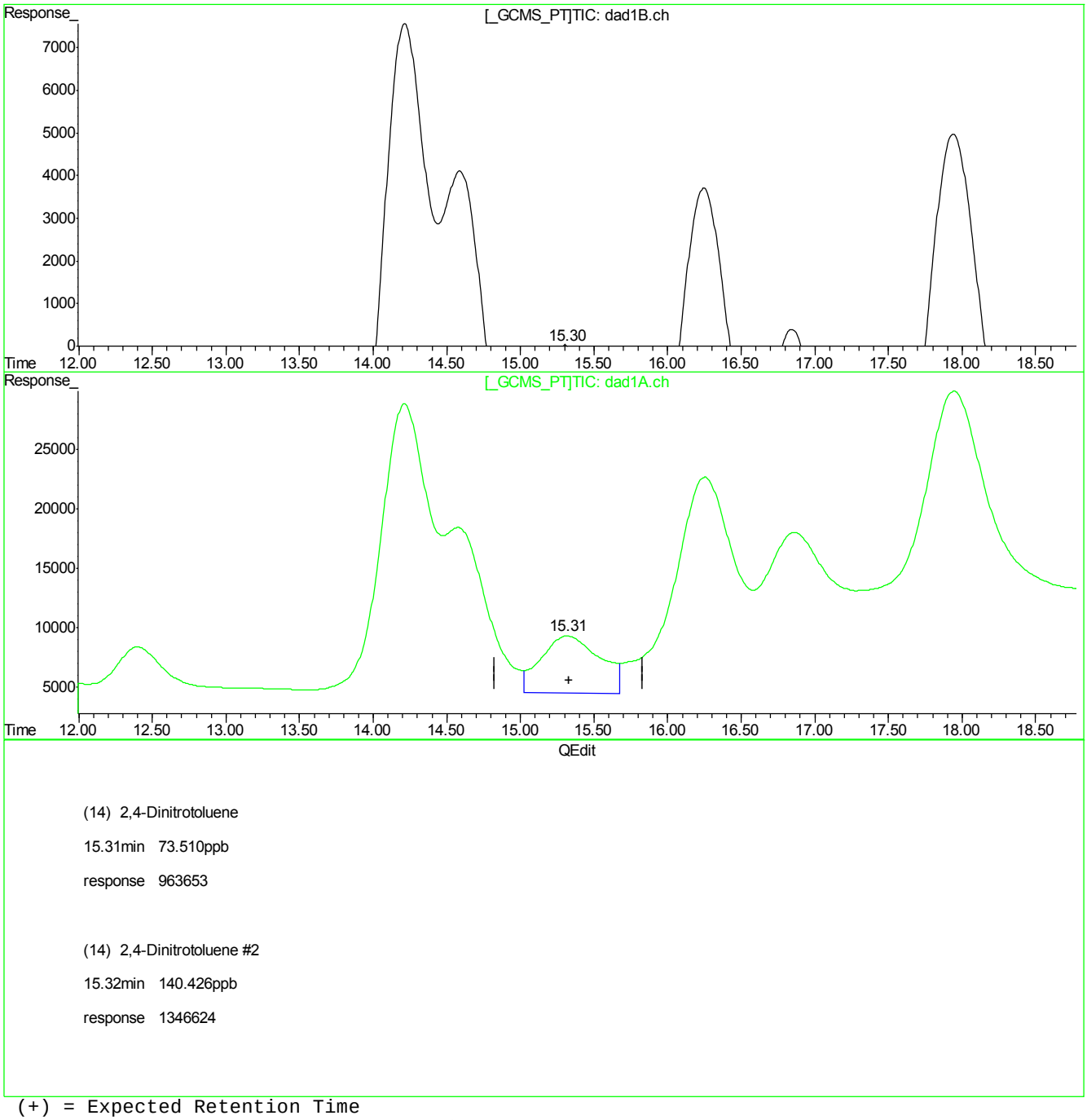
response 612977

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:26 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.31min 73.510ppb

response 963653

(14) 2,4-Dinitrotoluene #2

15.32min 140.426ppb

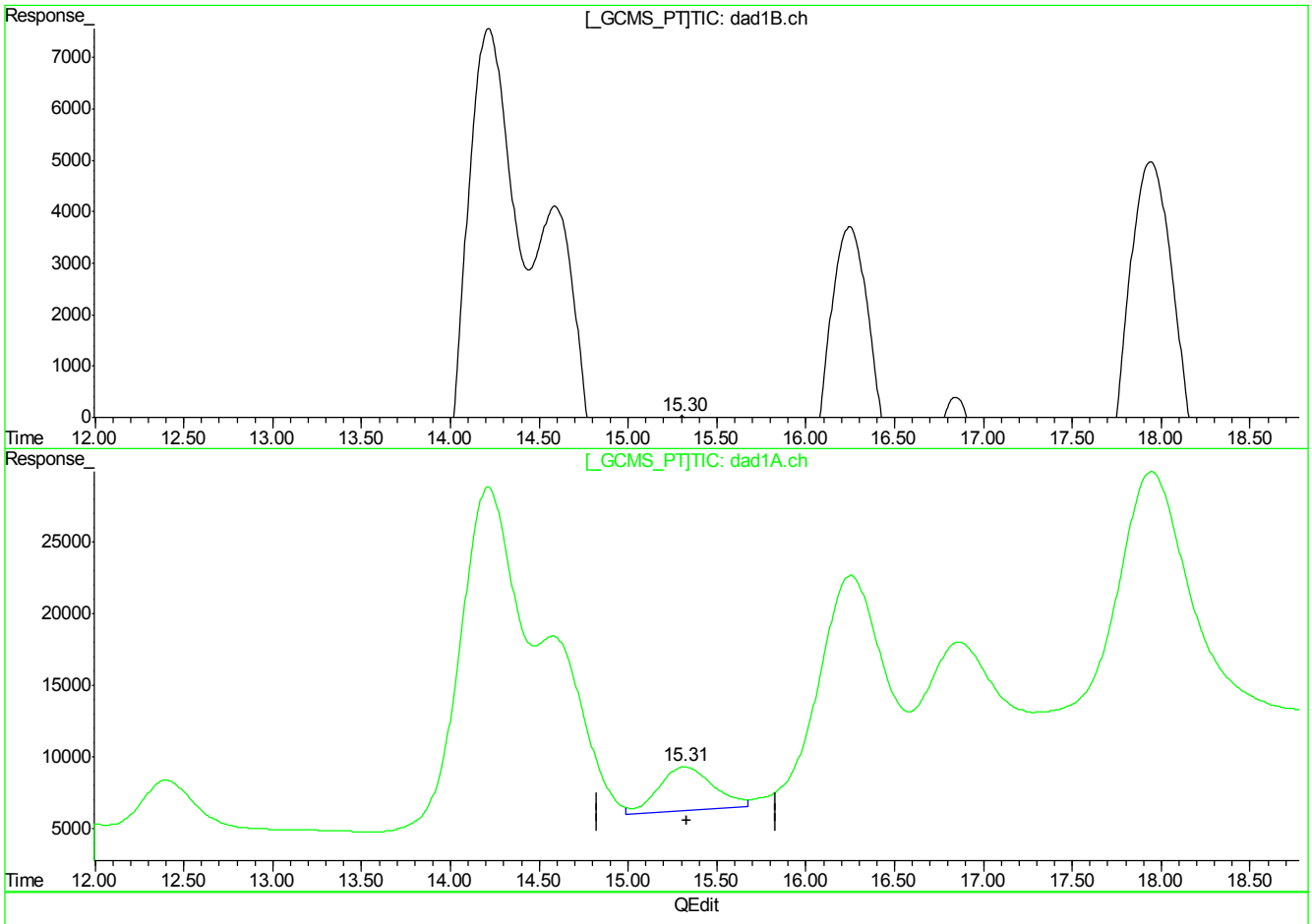
response 1346624

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:39 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.31min 73.510ppb

response 963653

(14) 2,4-Dinitrotoluene #2

15.31min 66.633ppb m

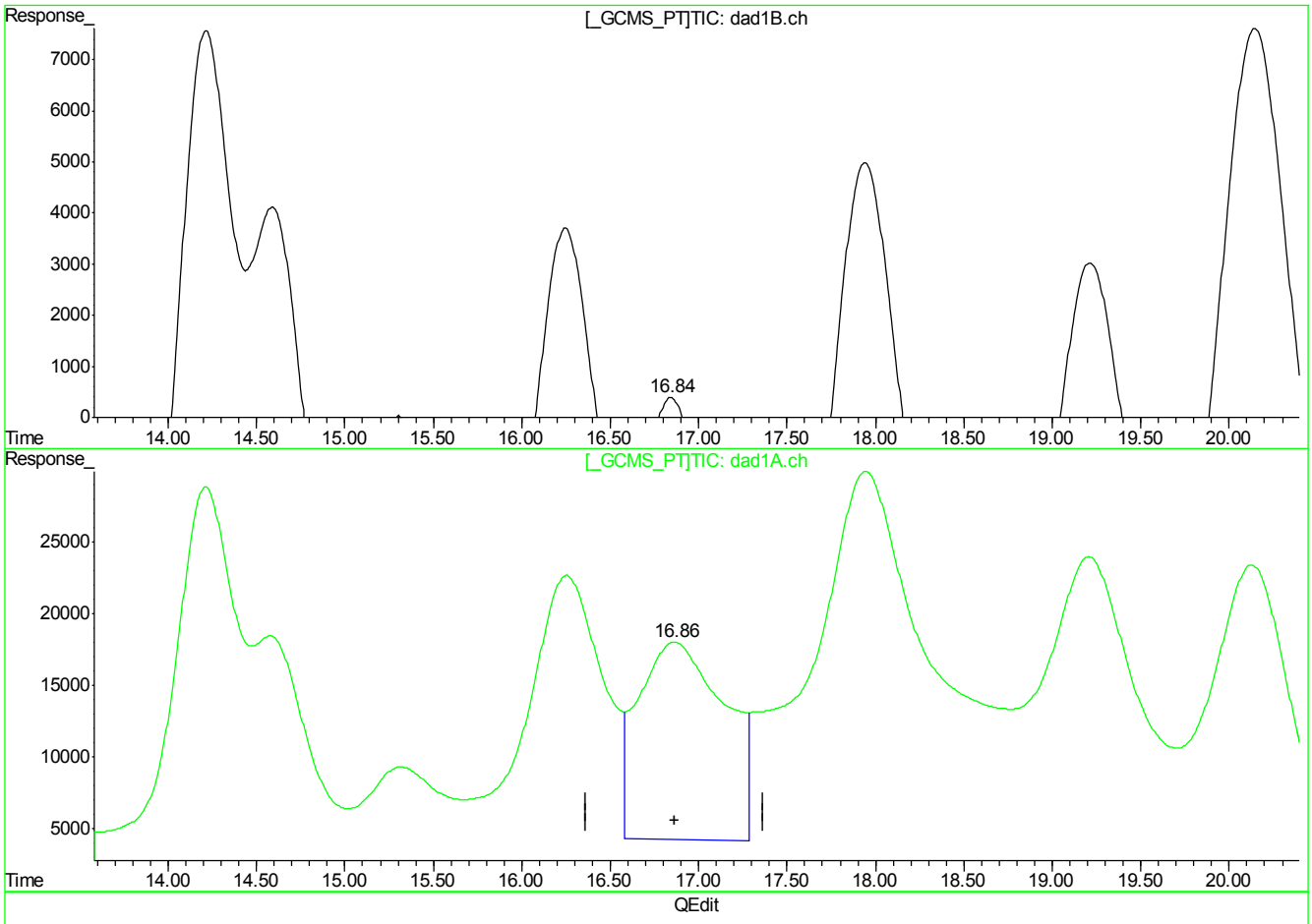
response 640083

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.84min 189.518ppb

response 1094769

(15) o-Nitrotoluene #2

16.86min 541.191ppb

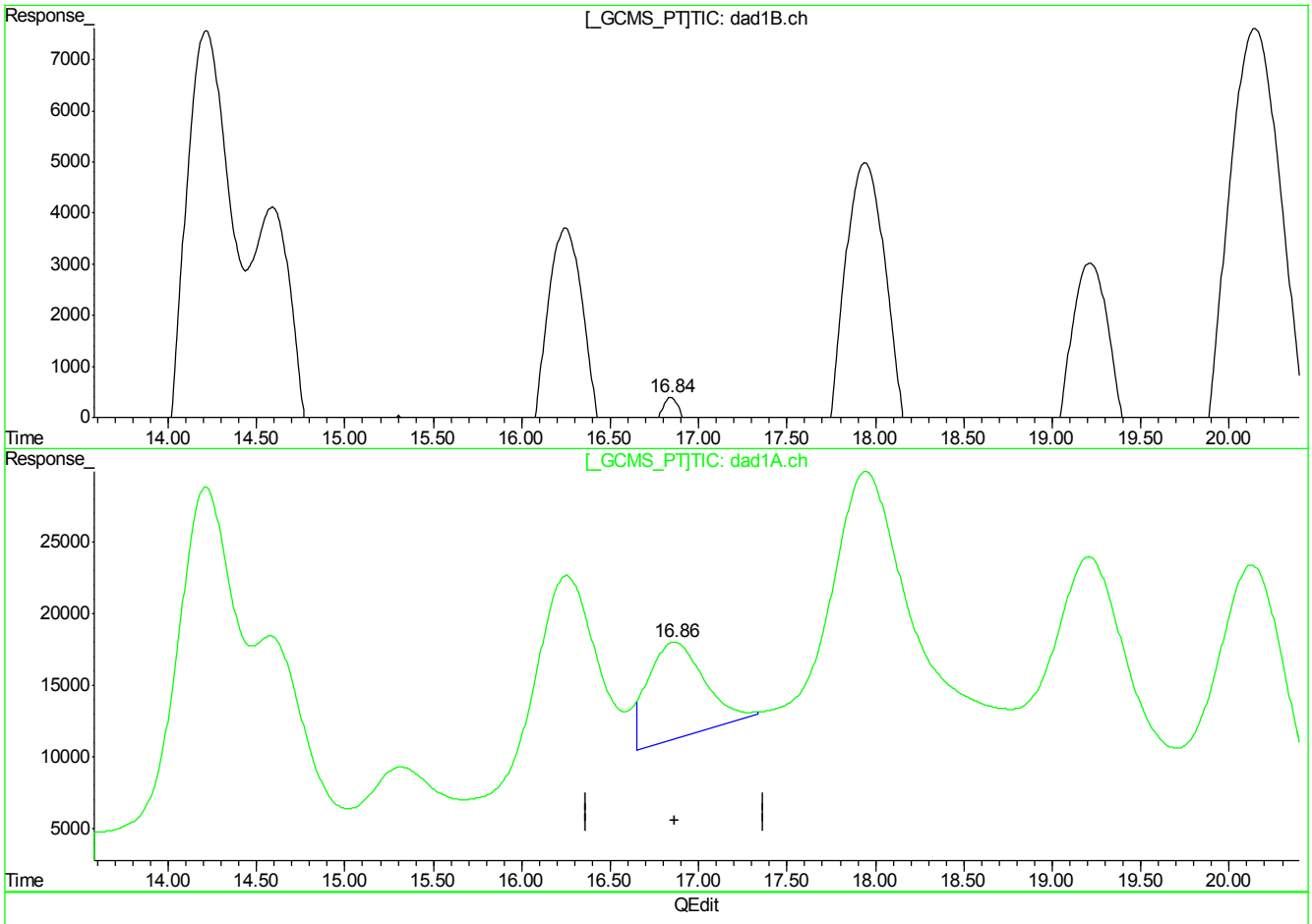
response 4667025

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:49 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.84min 189.518ppb

response 1094769

(15) o-Nitrotoluene #2

16.86min 171.926ppb m

response 1482628

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:54 2018

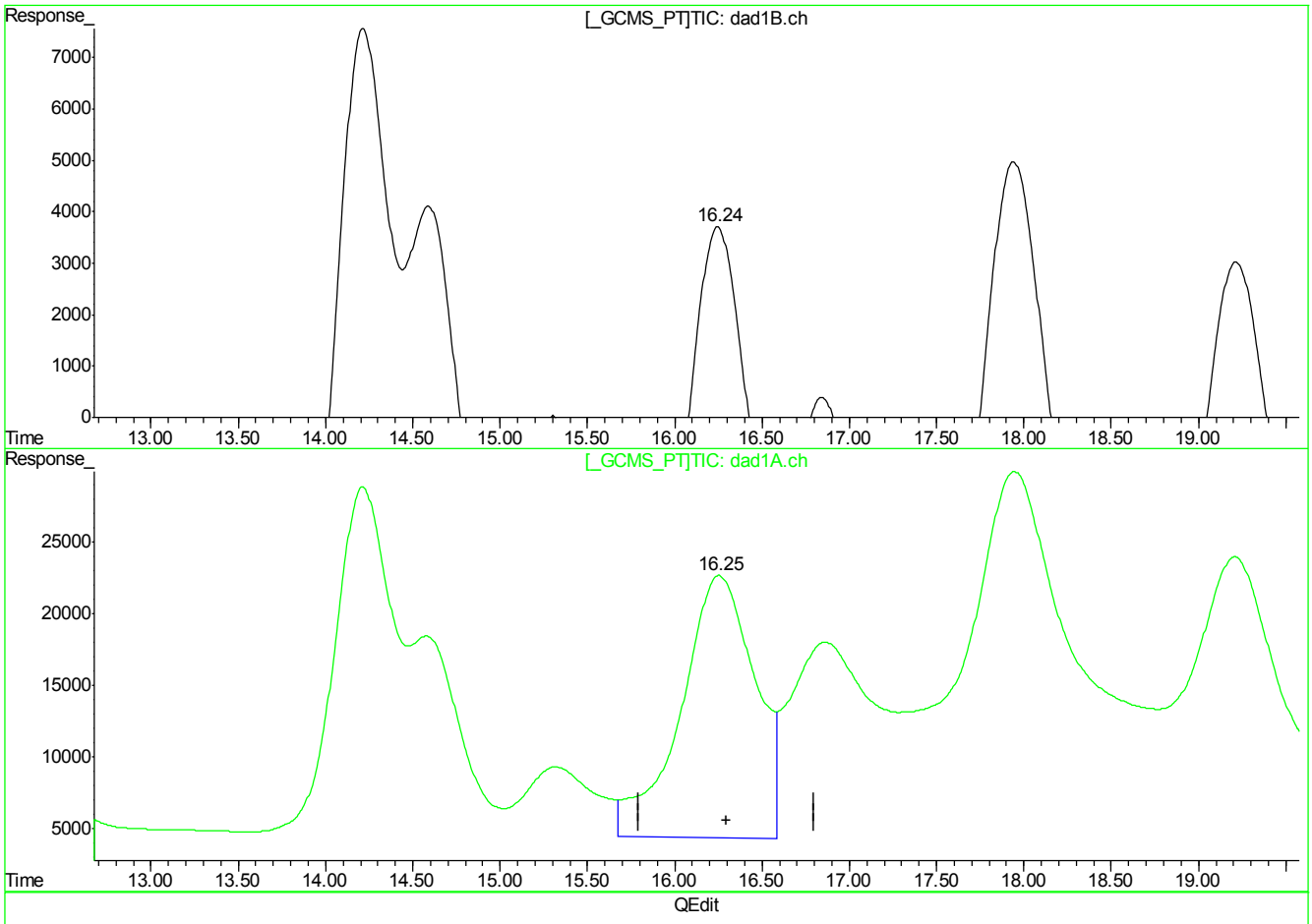
7.4.5.15

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.25min 191.817ppb

response 1868044

(16) 3,5-Dinitroaniline #2

16.25min 332.934ppb

response 5394697

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:58 2018

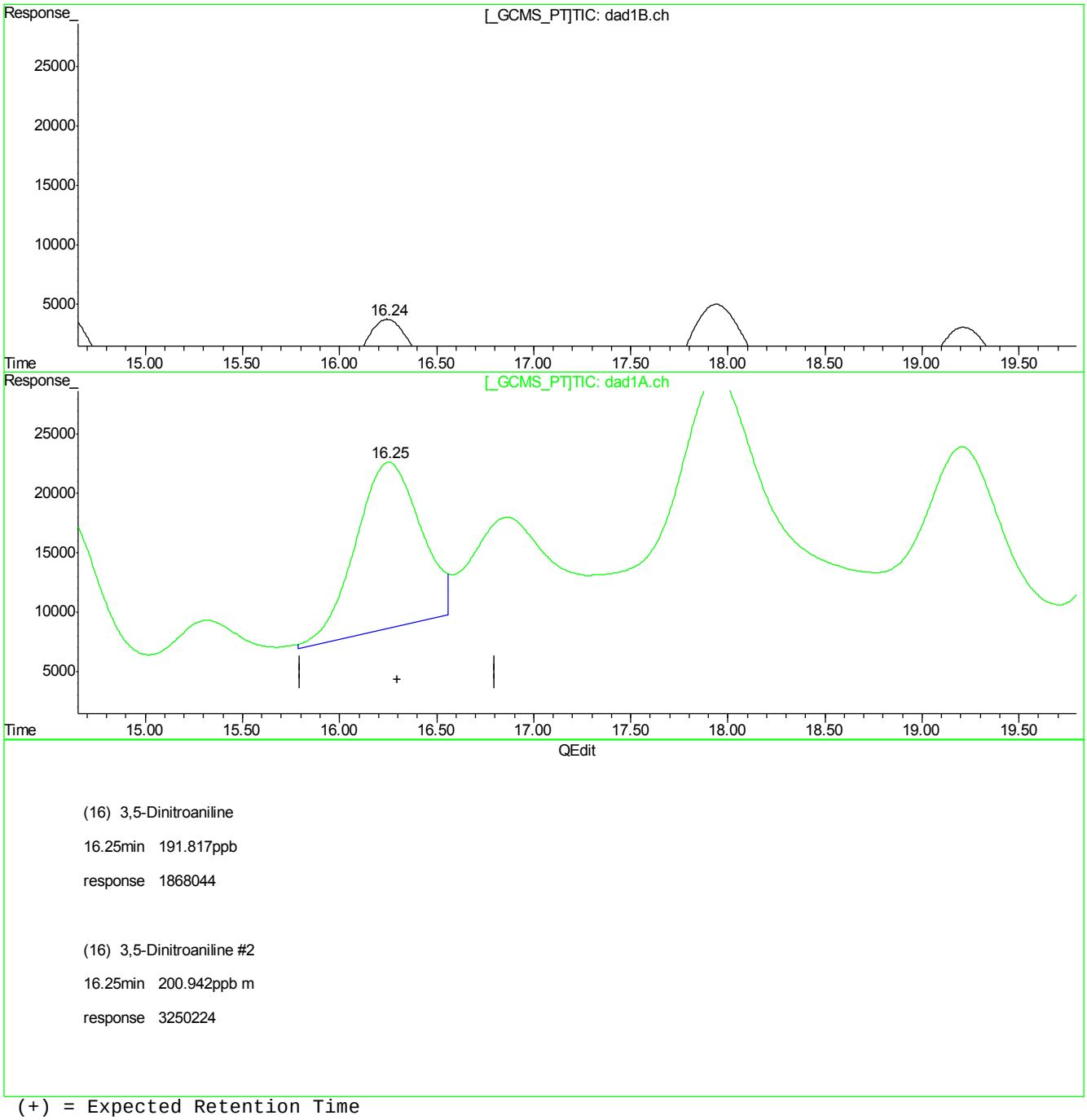
7.4.5.16

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.25min 191.817ppb

response 1868044

(16) 3,5-Dinitroaniline #2

16.25min 200.942ppb m

response 3250224

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:08 2018

7.4.5.17

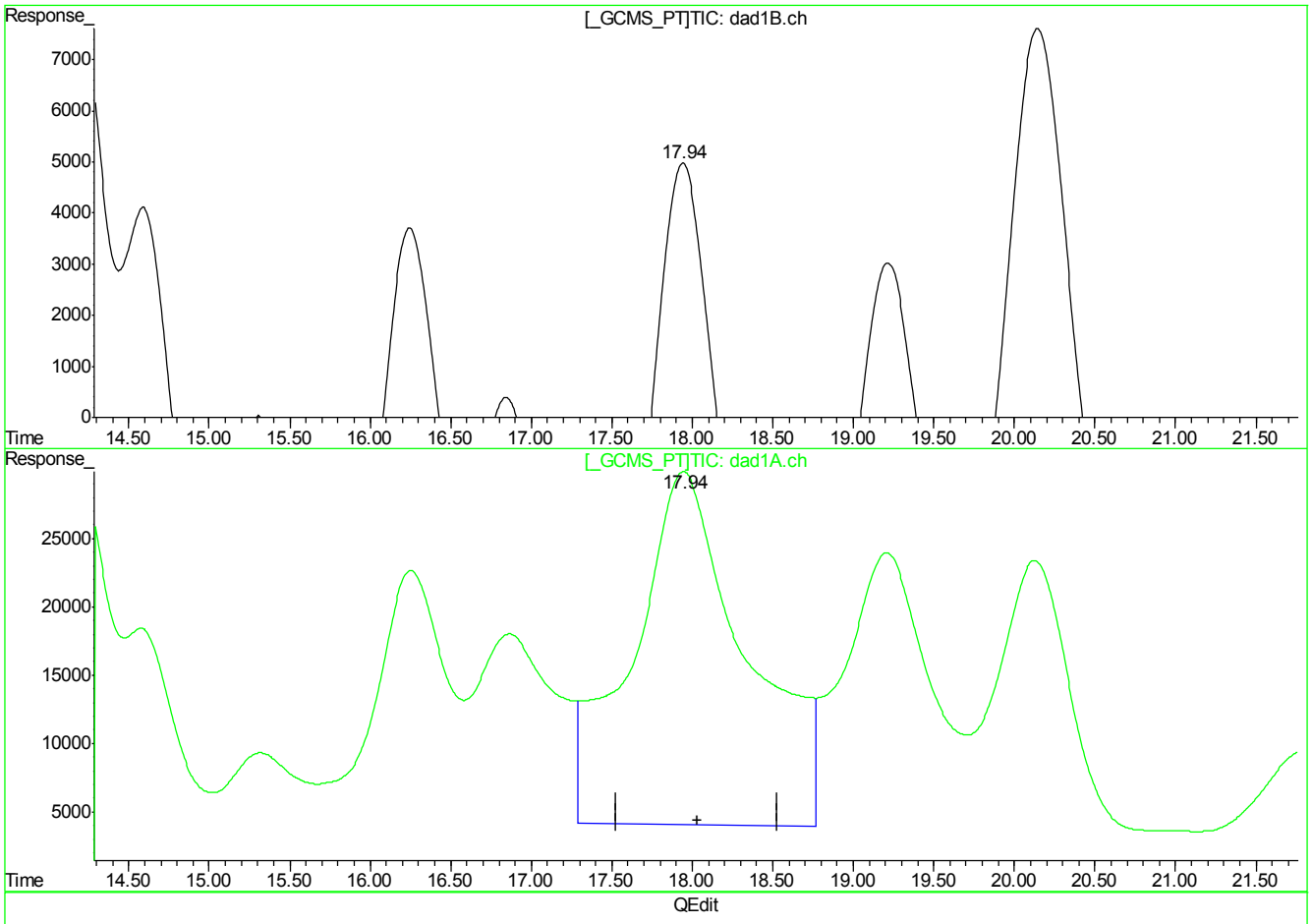
7

GG614648.D edits: 3,5-Dinitroaniline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.94min 194.466ppb

response 2283495

(17) p-Nitrotoluene #2

17.95min 597.965ppb

response 12672782

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:12 2018

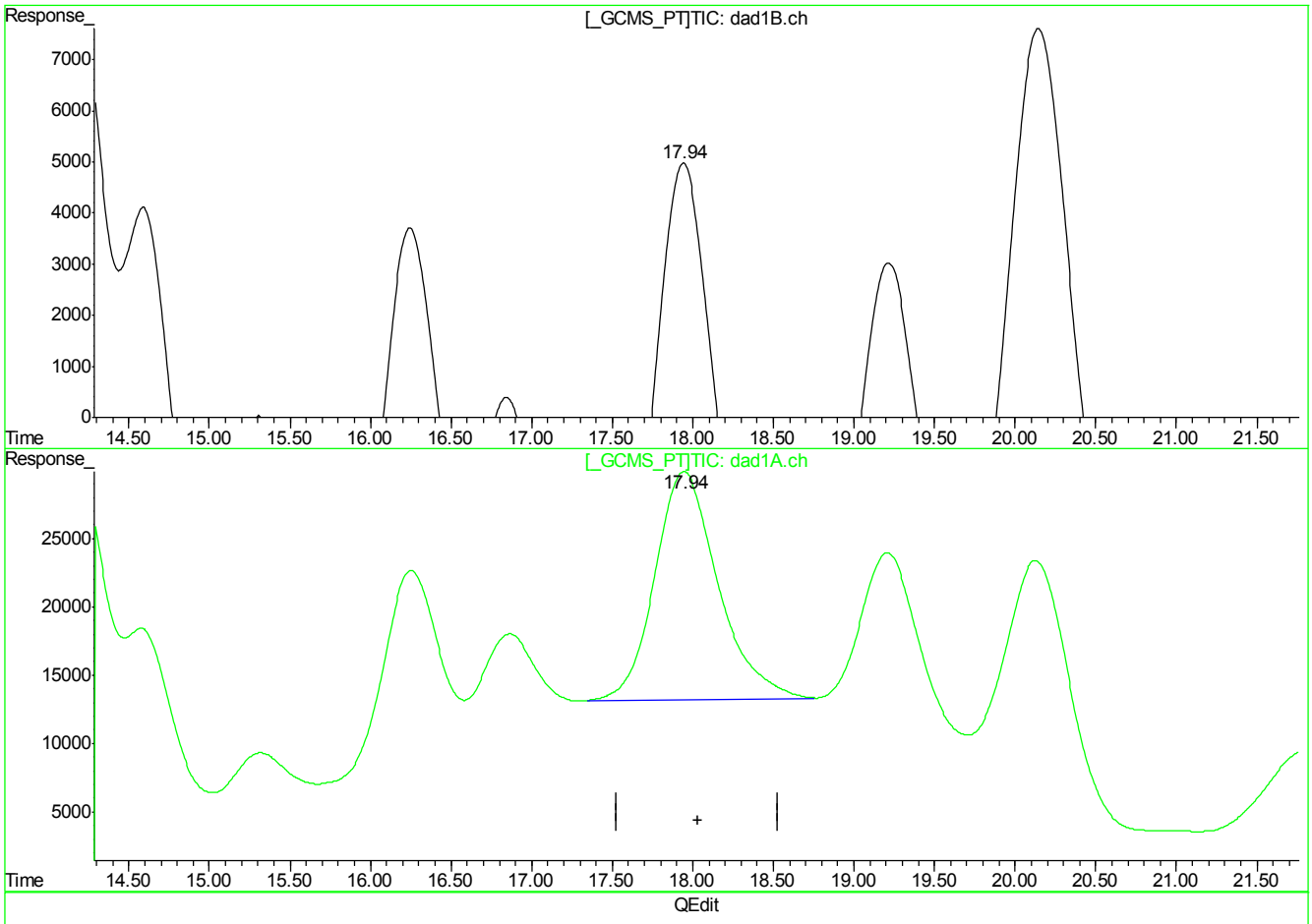
7.4.5.18

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.94min 194.466ppb

response 2283495

(17) p-Nitrotoluene #2

17.94min 215.663ppb m

response 4570588

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:15 2018

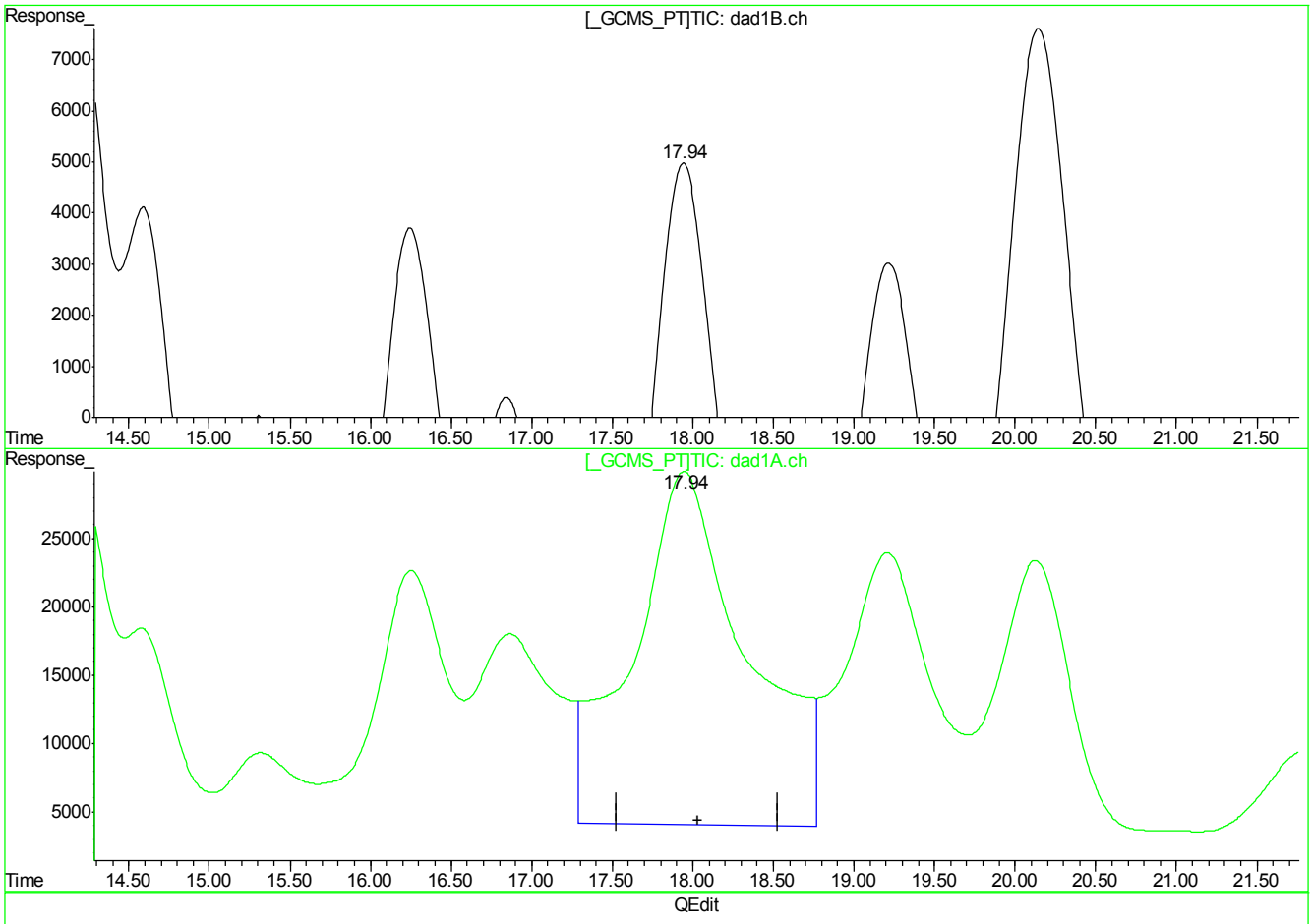
7.4.5.19

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.94min 194.466ppb

response 2283495

(18) 4-Amino-2,6-Dinitrotoluene #2

17.95min 596.227ppb

response 12672782

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:20 2018

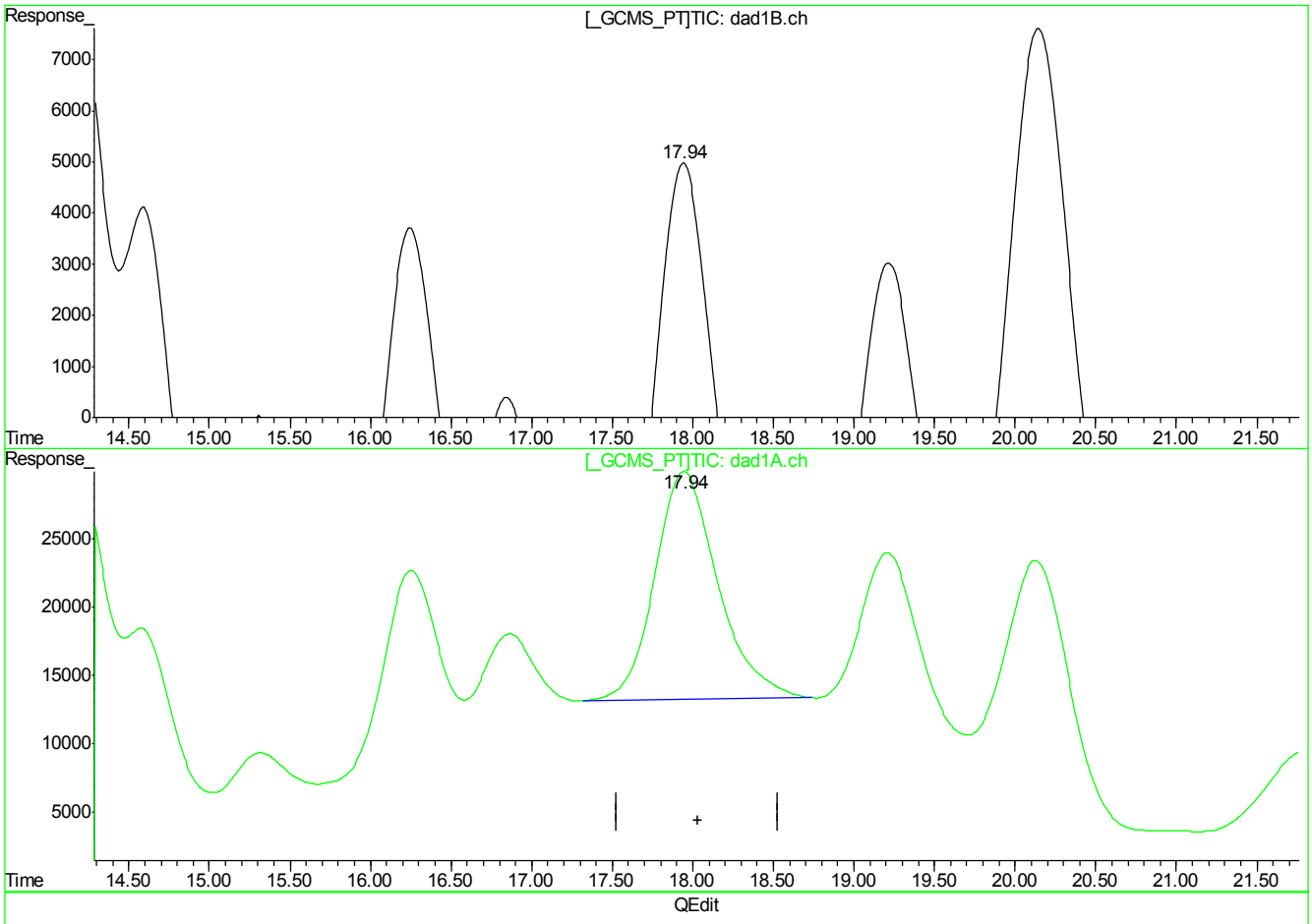
7.4.5.20

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.94min 194.466ppb

response 2283495

(18) 4-Amino-2,6-Dinitrotoluene #2

17.94min 213.584ppb m

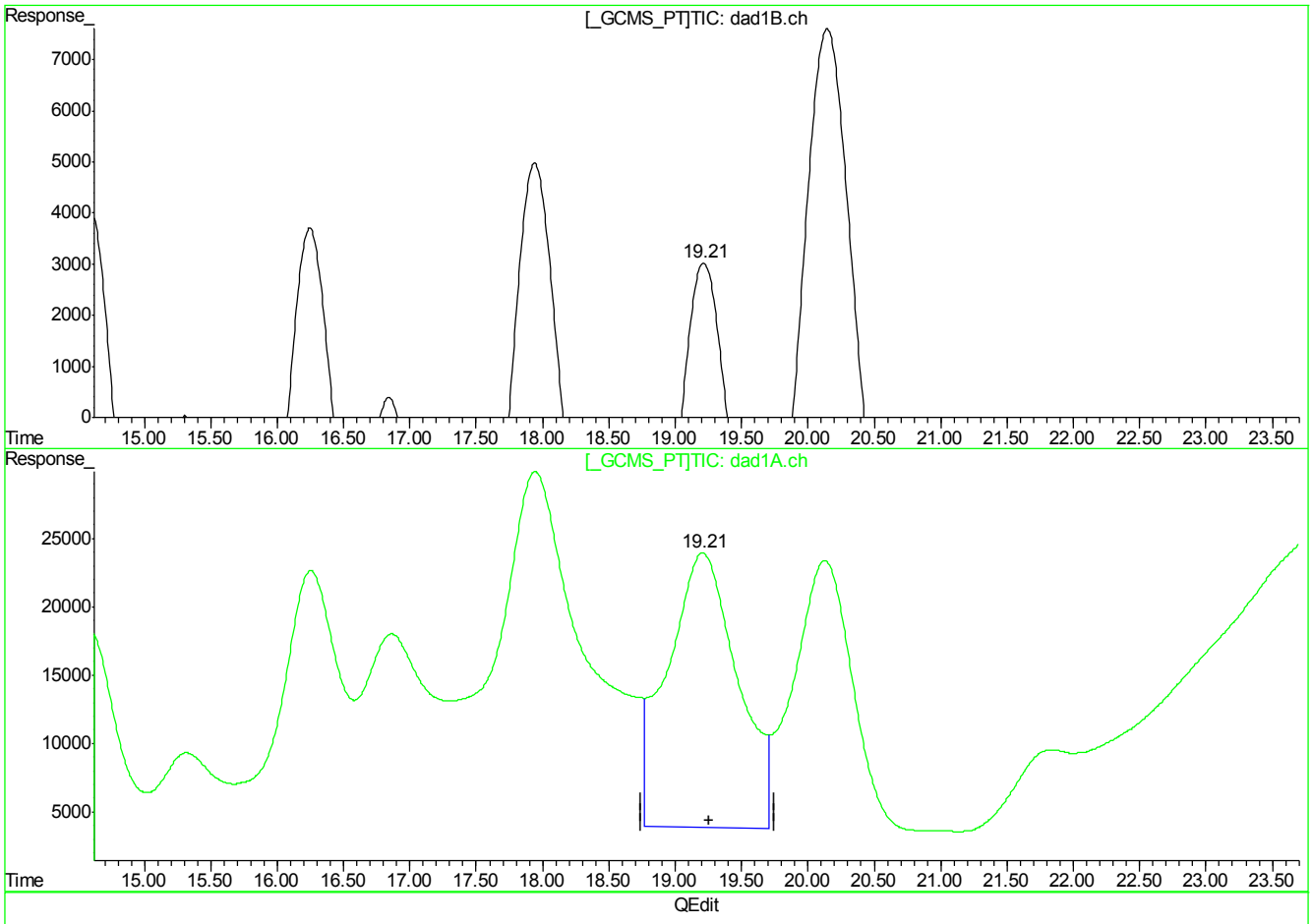
response 4539733

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.22min 296.516ppb

response 1748073

(19) m-Nitrotoluene #2

19.21min 759.634ppb

response 7386990

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:29 2018

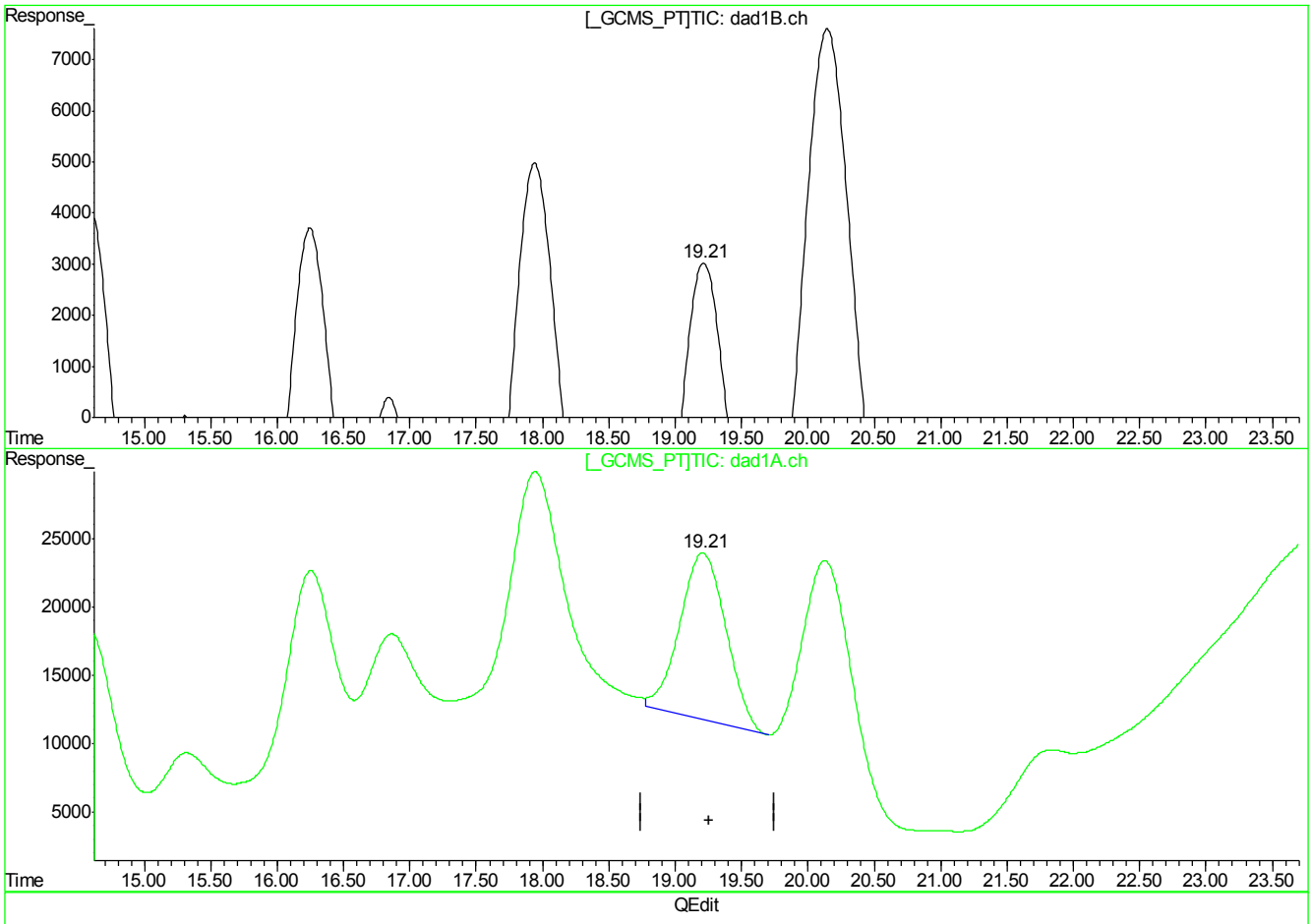
7.4.5.22

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.22min 296.516ppb

response 1748073

(19) m-Nitrotoluene #2

19.21min 302.726ppb m

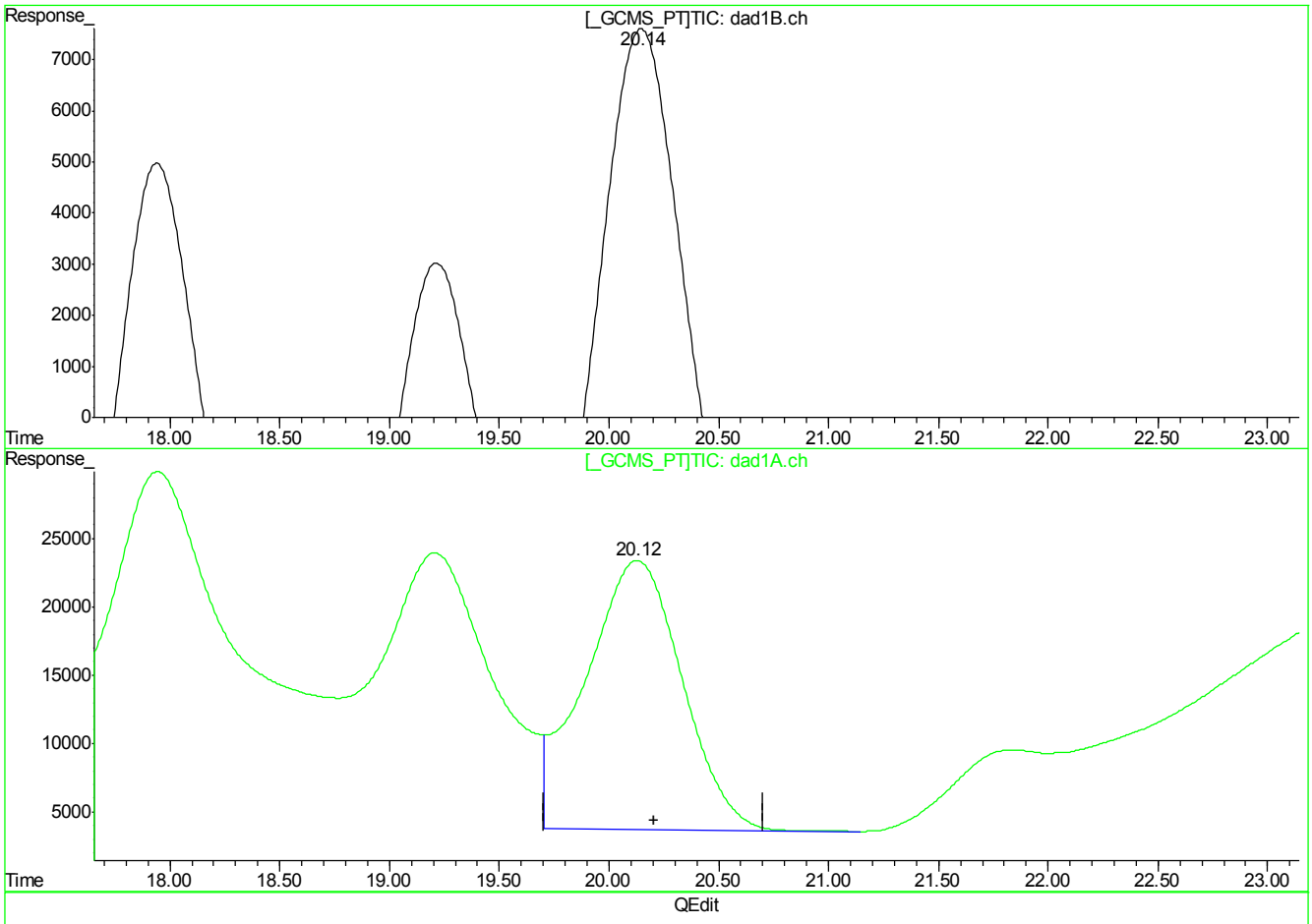
response 2943834

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.15min 352.827ppb

response 3183533

(20) 2-Amino-4,6-Dinitrotoluene #2

20.13min 508.856ppb

response 6052130

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:36 2018

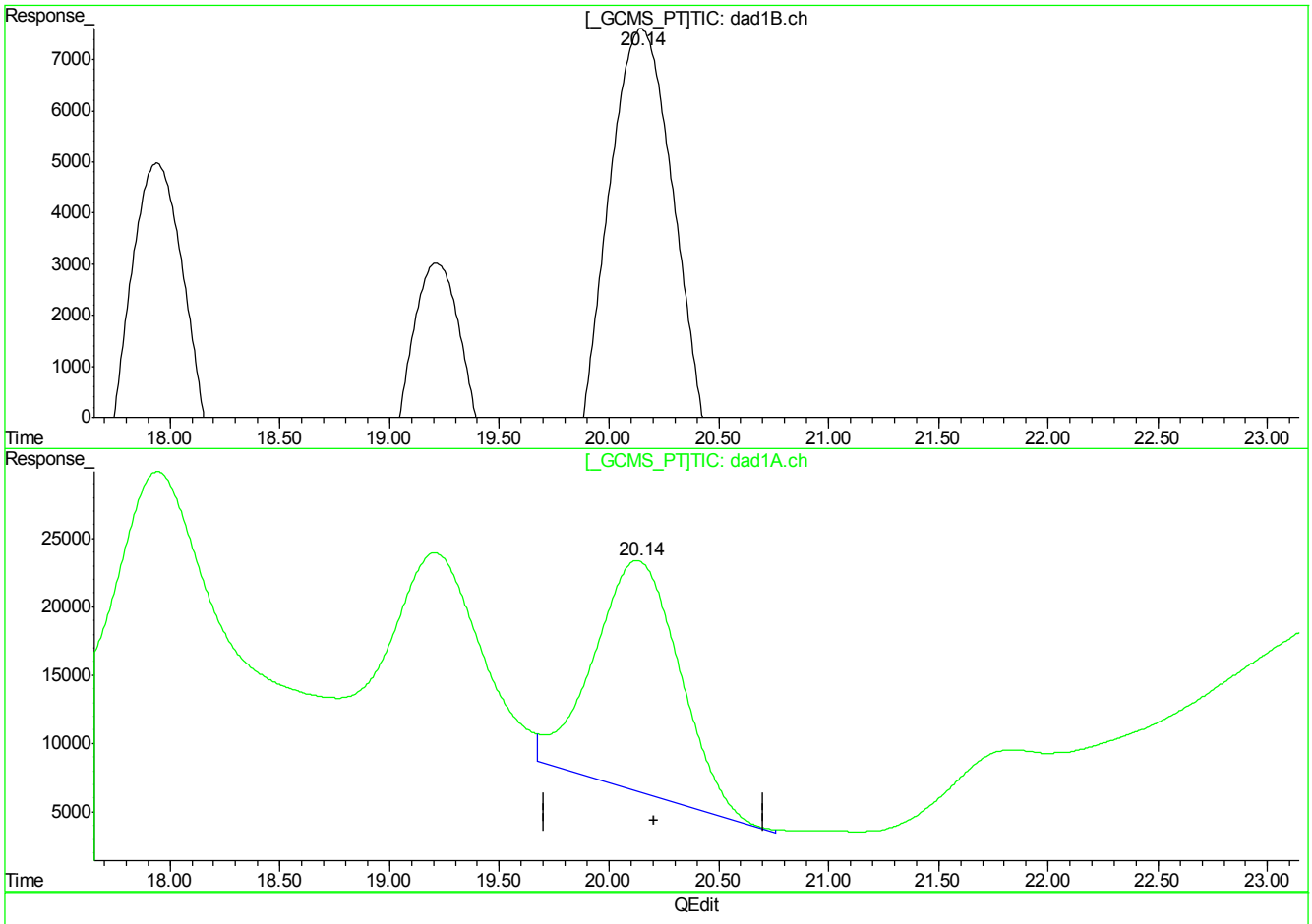
7.4.5.24

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.15min 352.827ppb

response 3183533

(20) 2-Amino-4,6-Dinitrotoluene #2

20.14min 391.774ppb m

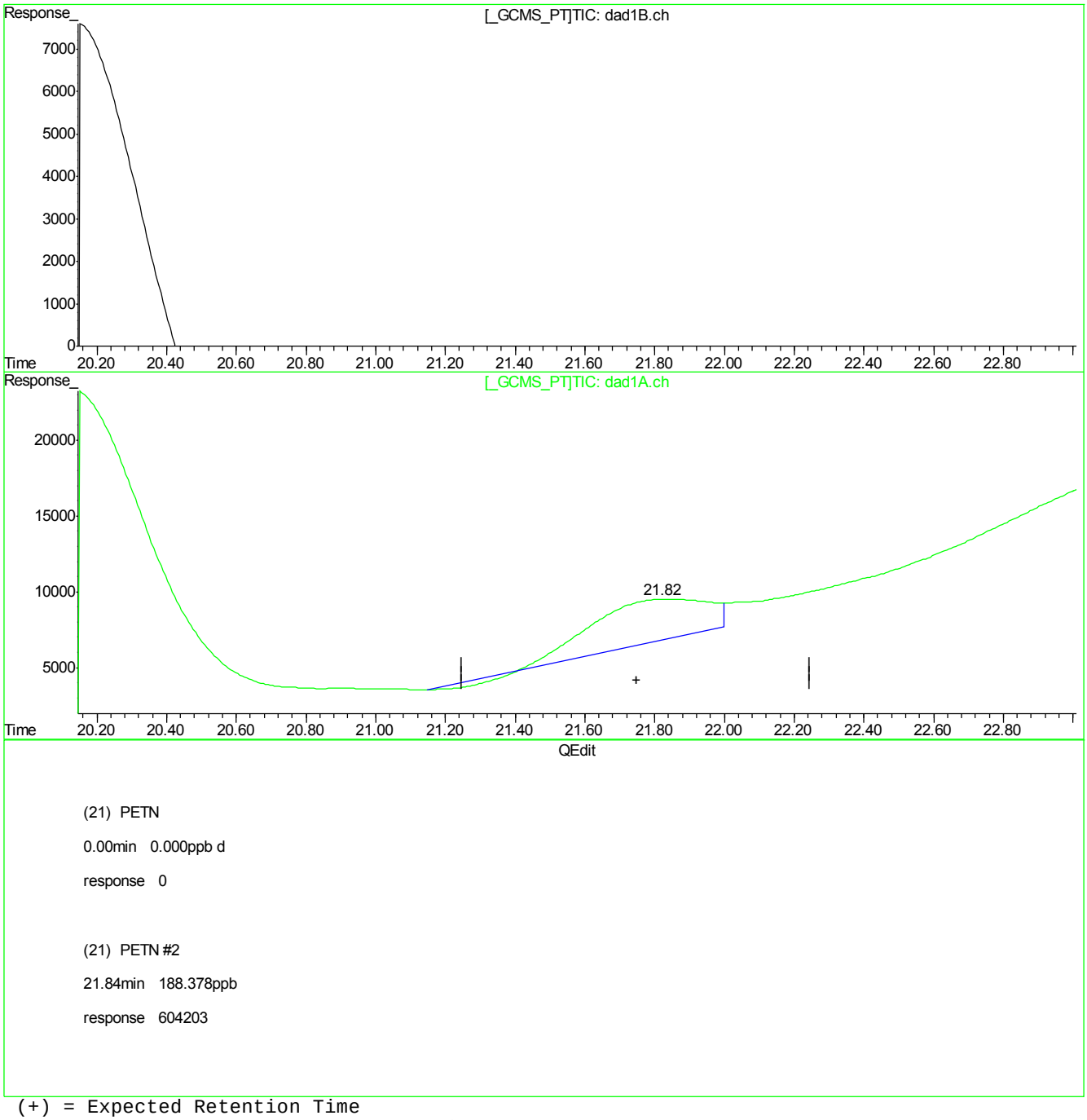
response 4623824

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:42 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

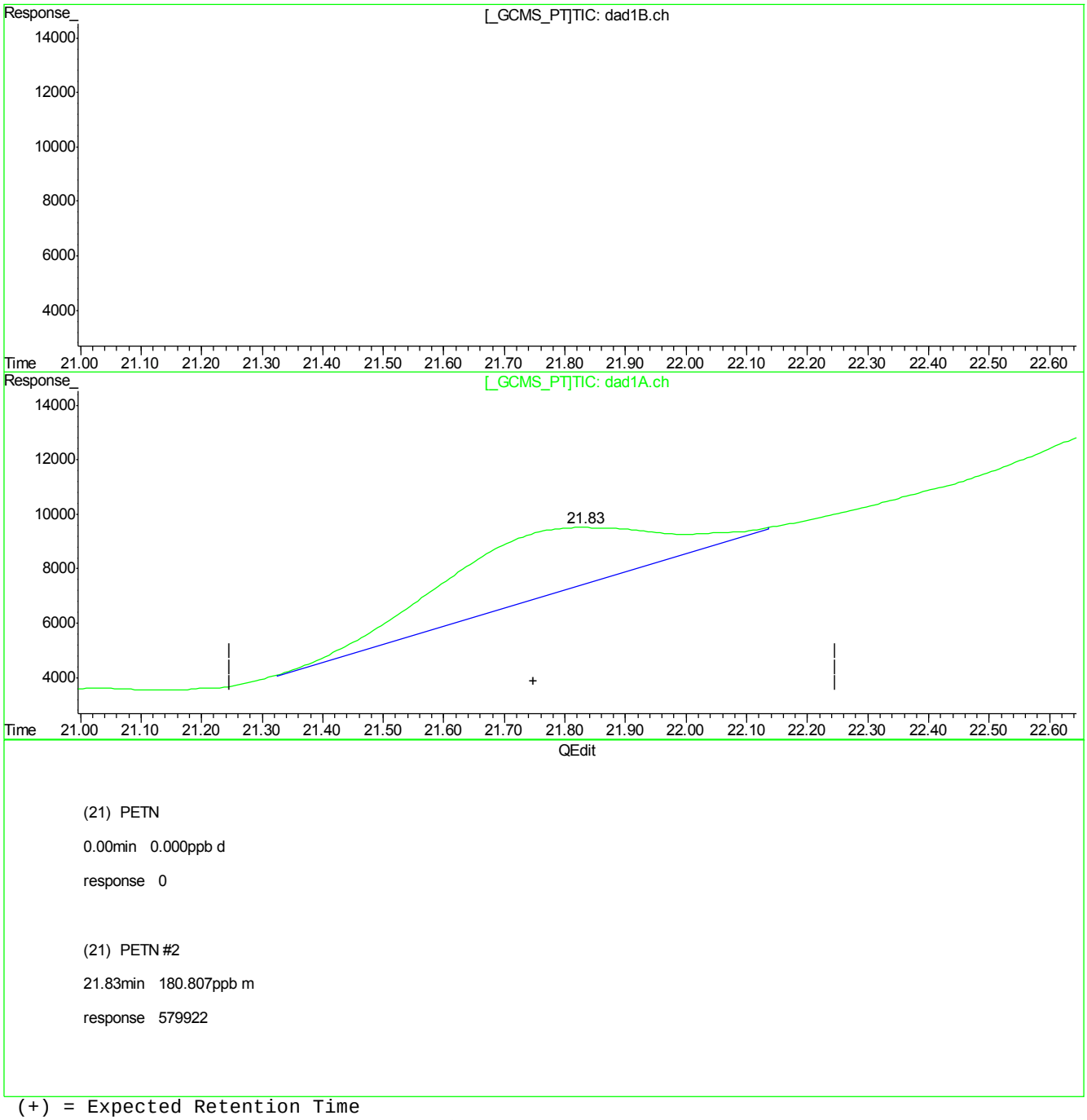


(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:54 2018

7.4.5.27

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/01/18 17:21

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 01 06:55:58 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.35	10.35	902315	1704584	337.225	361.543
	Spiked Amount 500.000	Range 70 - 136		Recovery =		67.44%#	72.31%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	1.45	1.45	515701	1515640	275.761m	298.070m
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.78	2.78	873997	1295691	408.718m	389.799m
6)	1,3,5-Trinitrobe	4.45	4.45	1280521	2336307	294.285	279.862
7)	1,3-Dinitrobenze	5.61	5.61	2424365	1662603	437.297m	446.411m
8)	3,5-Dinitroanili	5.90	5.90	2085461	3584855	426.442m	479.336m
9)	Nitrobenzene	7.11	7.10	1474330	1463270	404.612m	441.296m
10)	Nitroglycerin	0.00	8.47	0	3324626	N.D. d	2594.468
11)	Tetryl	8.75	8.73	765357	1157541	259.790	222.871
12)	2,4,6-Trinitroto	9.19	9.19	1319334	1485996	312.627	327.836
13)	2-Amino-4,6-Dini	9.44	9.45	1502352	2334276	396.872	435.187
14)	4-Amino-2,6-Dini	9.88	9.88	1105383	2213444	421.965	427.152
16)	2,4-Dinitrotolue	11.01	11.02	1990934	1168654	378.432	395.720
17)	2,6-Dinitrotolue	11.46	11.46	1172007	1458891	339.096	427.247
18)	o-Nitrotoluene	14.68	14.69	1004797	1429507	402.266	436.391
19)	p-Nitrotoluene	15.27	15.28	1630012	1411524	412.971	448.085
20)	m-Nitrotoluene	16.24	16.25	1857856	2474192	520.816	614.878
21)	PETN	0.00	18.51	0	3531311	N.D. d	2542.650m

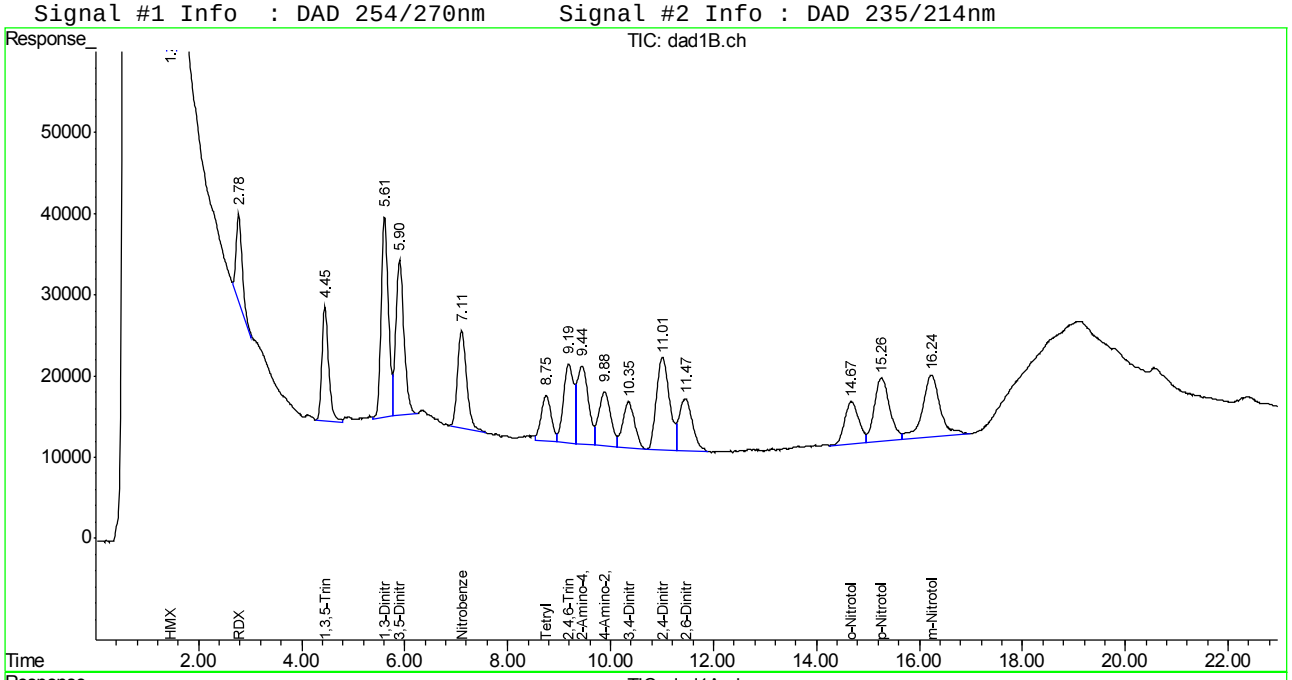
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059528.D 8330B_0419PLUS.M Tue May 01 09:08:24 2018 Page 1

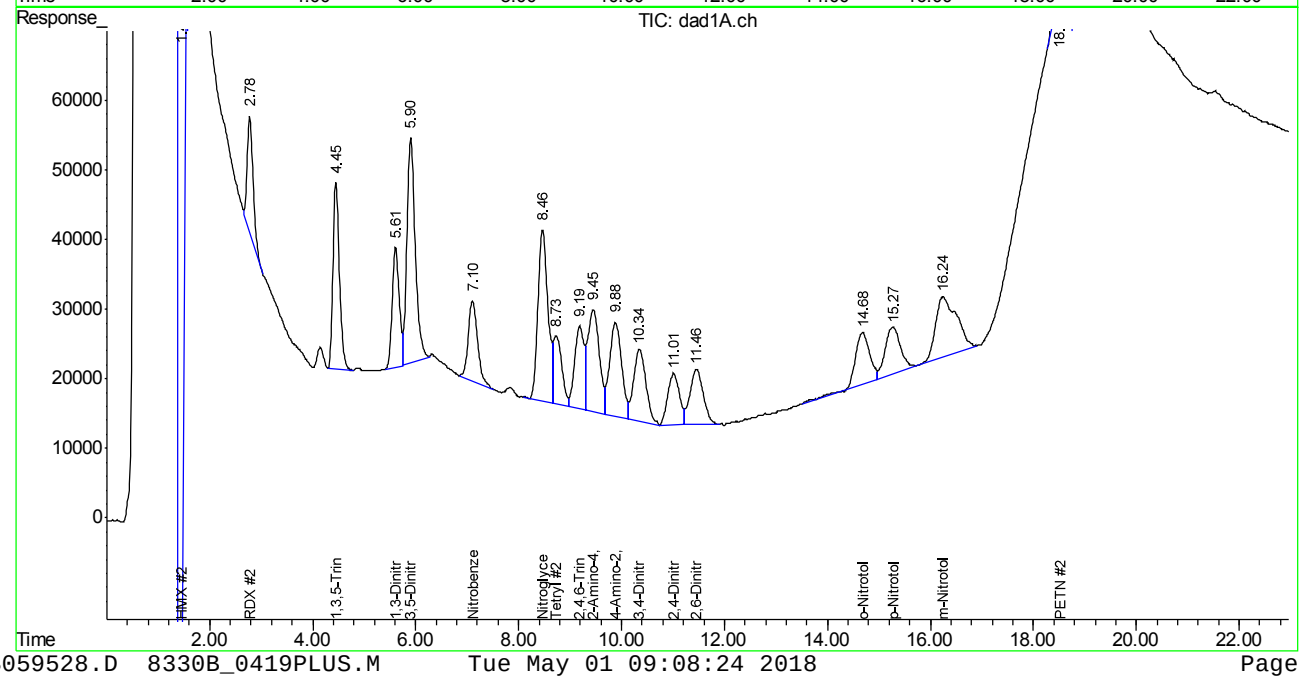
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 8:15 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

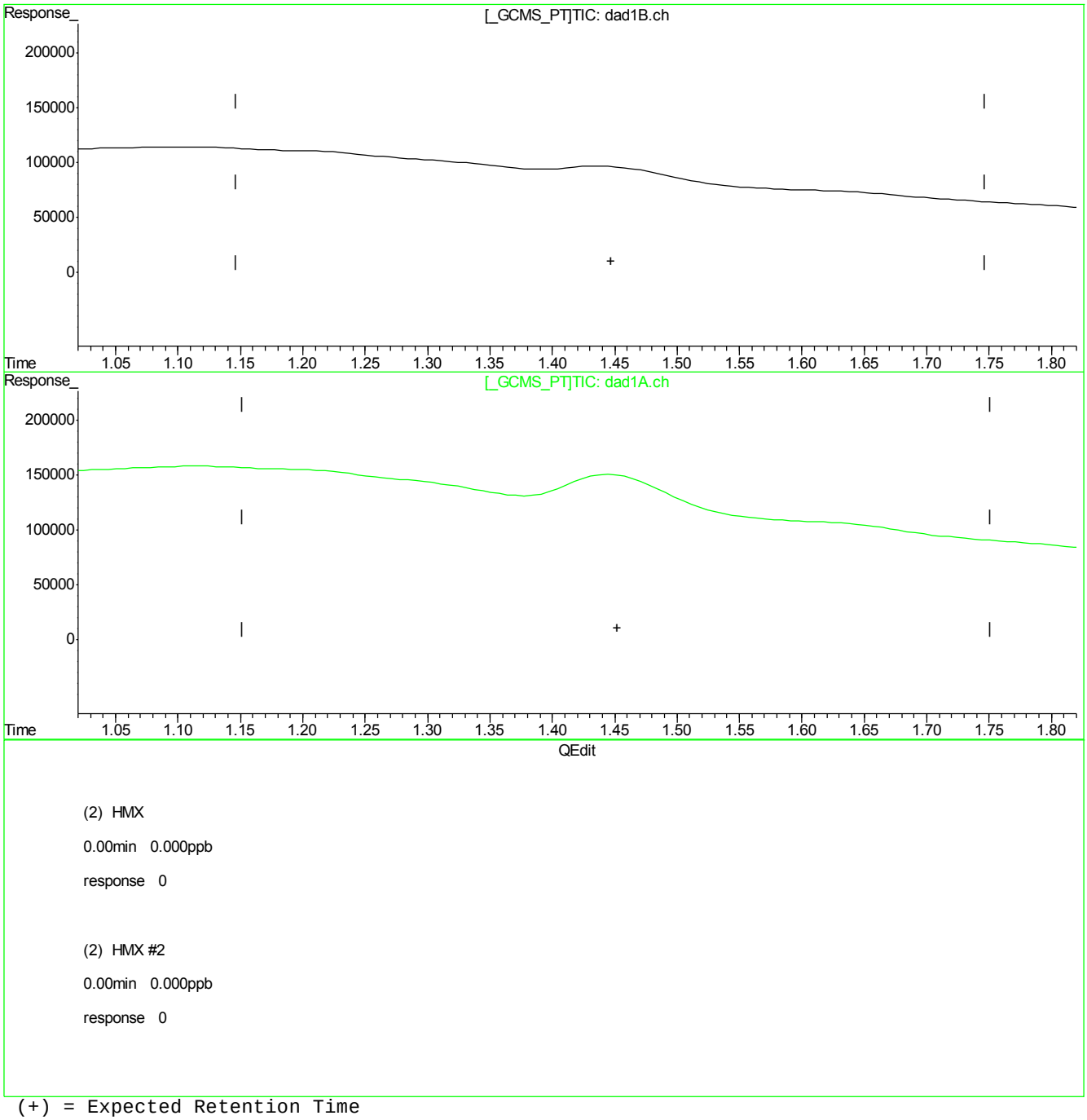
Sample Number:	OP69837-MS	**Method:**	SW846 8330B
Lab FileID:	BB059528.D	**Analyst approved:**	05/01/18 14:52 Evita Martinez
Injection Time:	04/30/18 18:38	**Supervisor approved:**	05/01/18 17:21 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.45	Poorly defined baseline
HMX	2691-41-0	2	1.45	Poorly defined baseline
RDX	121-82-4	1	2.78	Poorly defined baseline
RDX	121-82-4	2	2.78	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.61	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.61	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	5.90	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	5.90	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.10	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.11	Poorly defined baseline
PETN	78-11-5	2	18.51	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



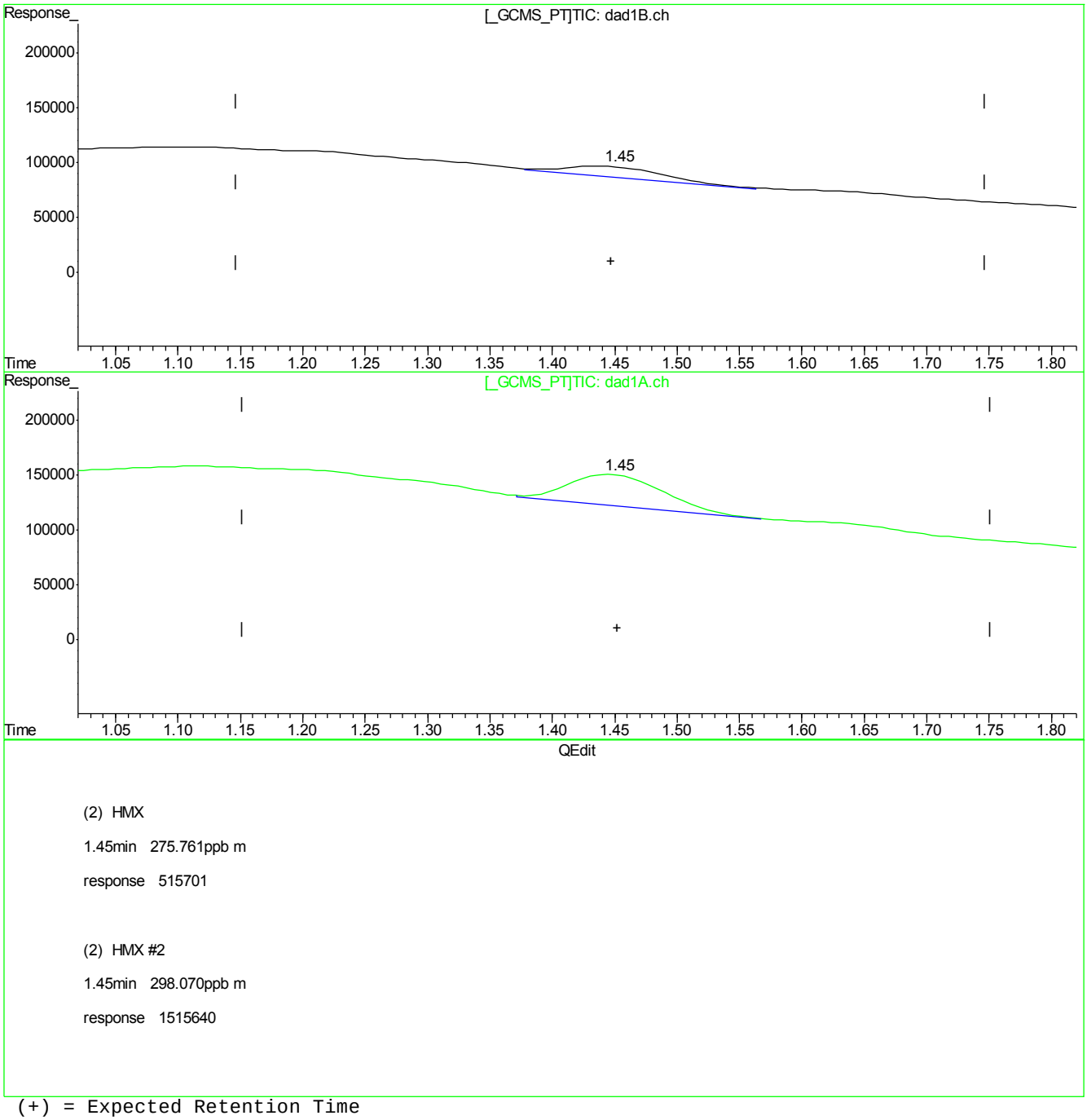
(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:13:56 2018

7.5.1.2
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration

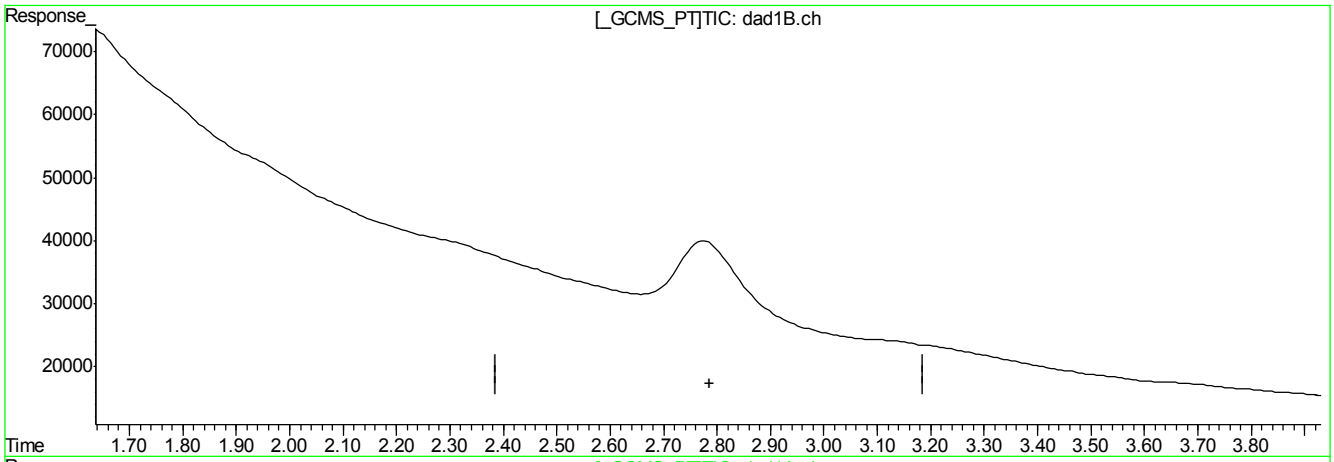


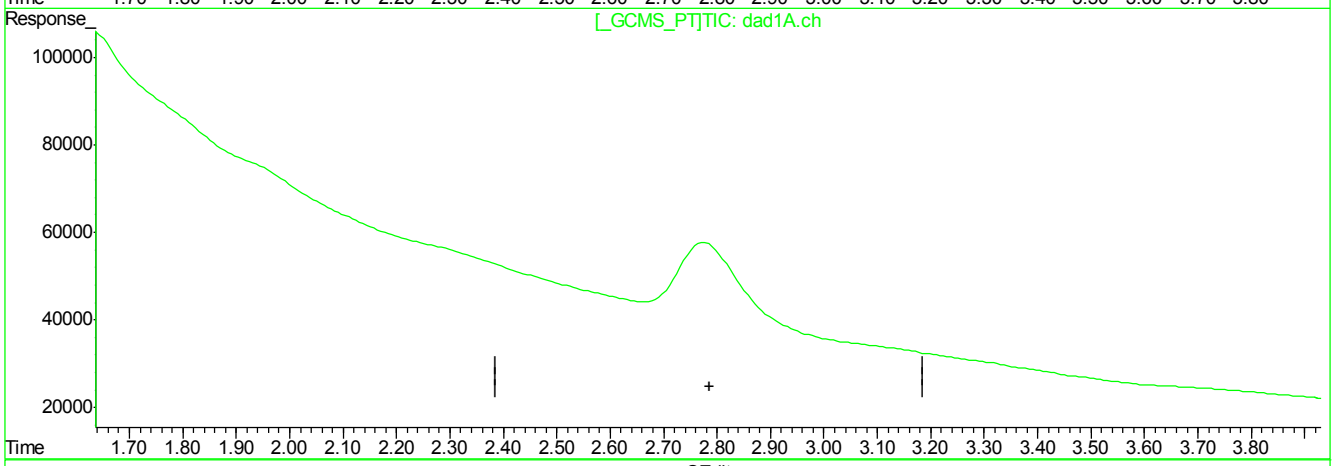
(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:14:26 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration





QEdit

(5) RDX

0.00min 0.000ppb

response 0

(5) RDX #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:14:28 2018

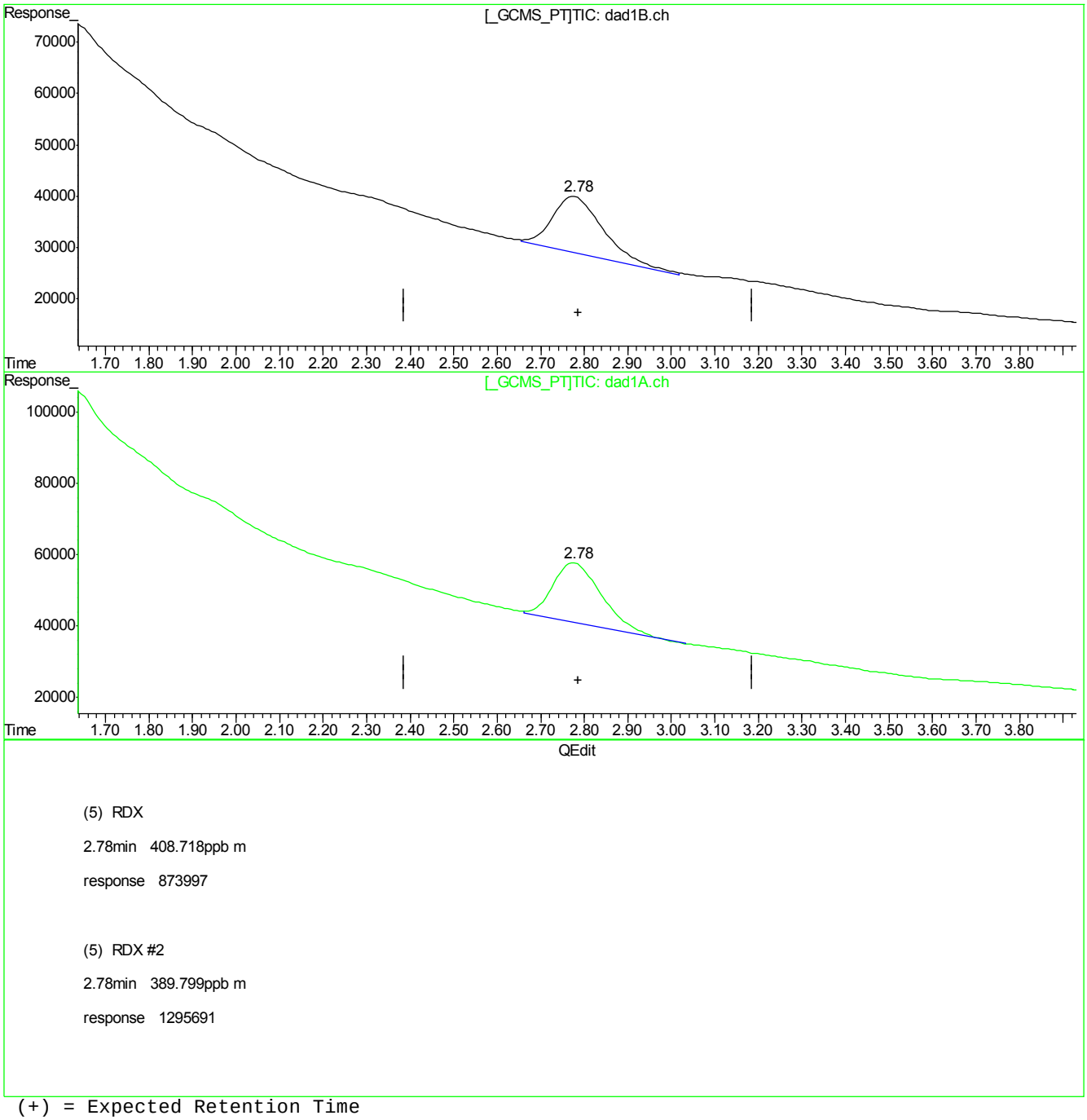
7.5.1.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



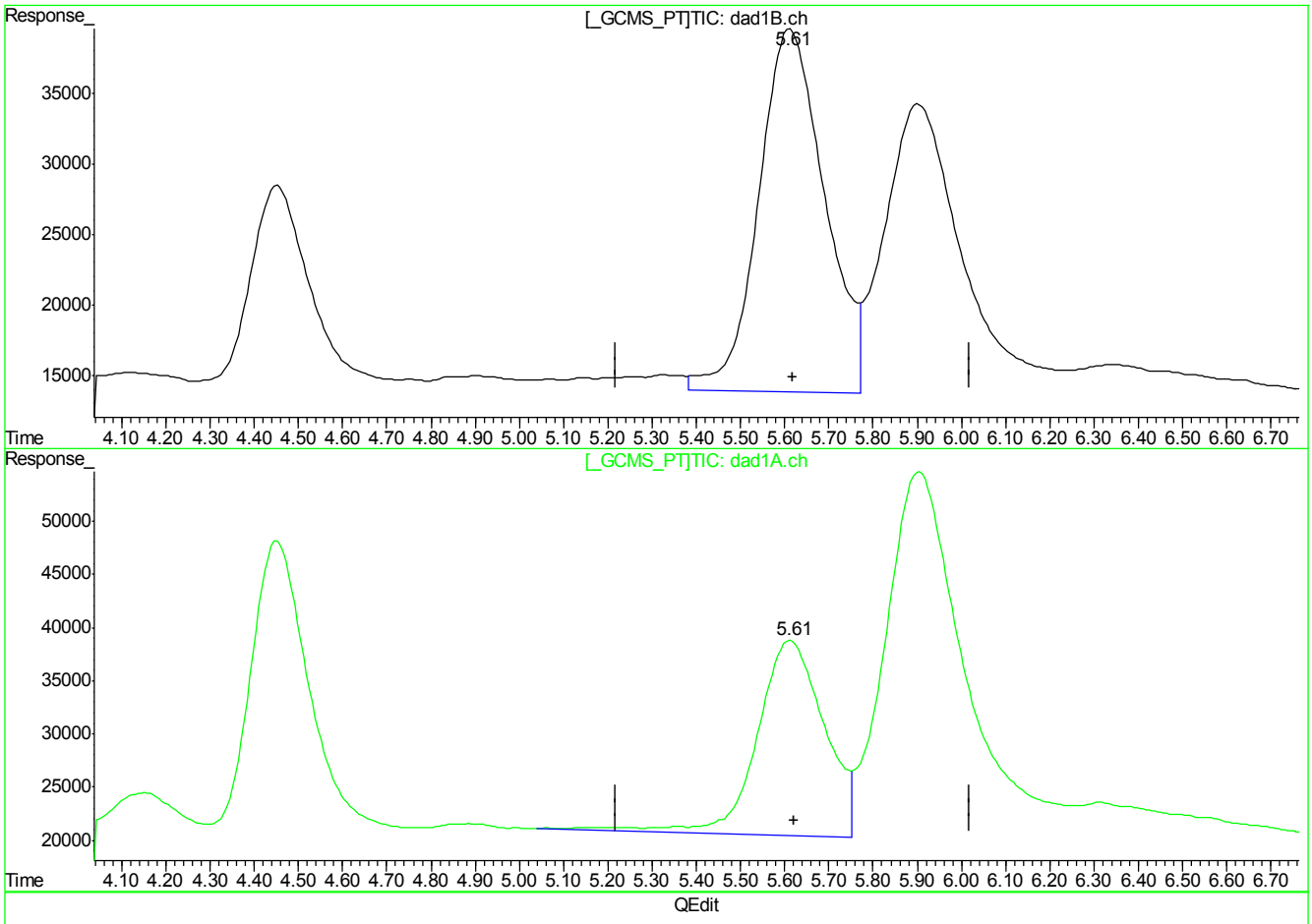
(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:14:34 2018

BB059528.D edits: RDX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.61min 481.818ppb

response 2671188

(7) 1,3-Dinitrobenzene #2

5.61min 521.250ppb

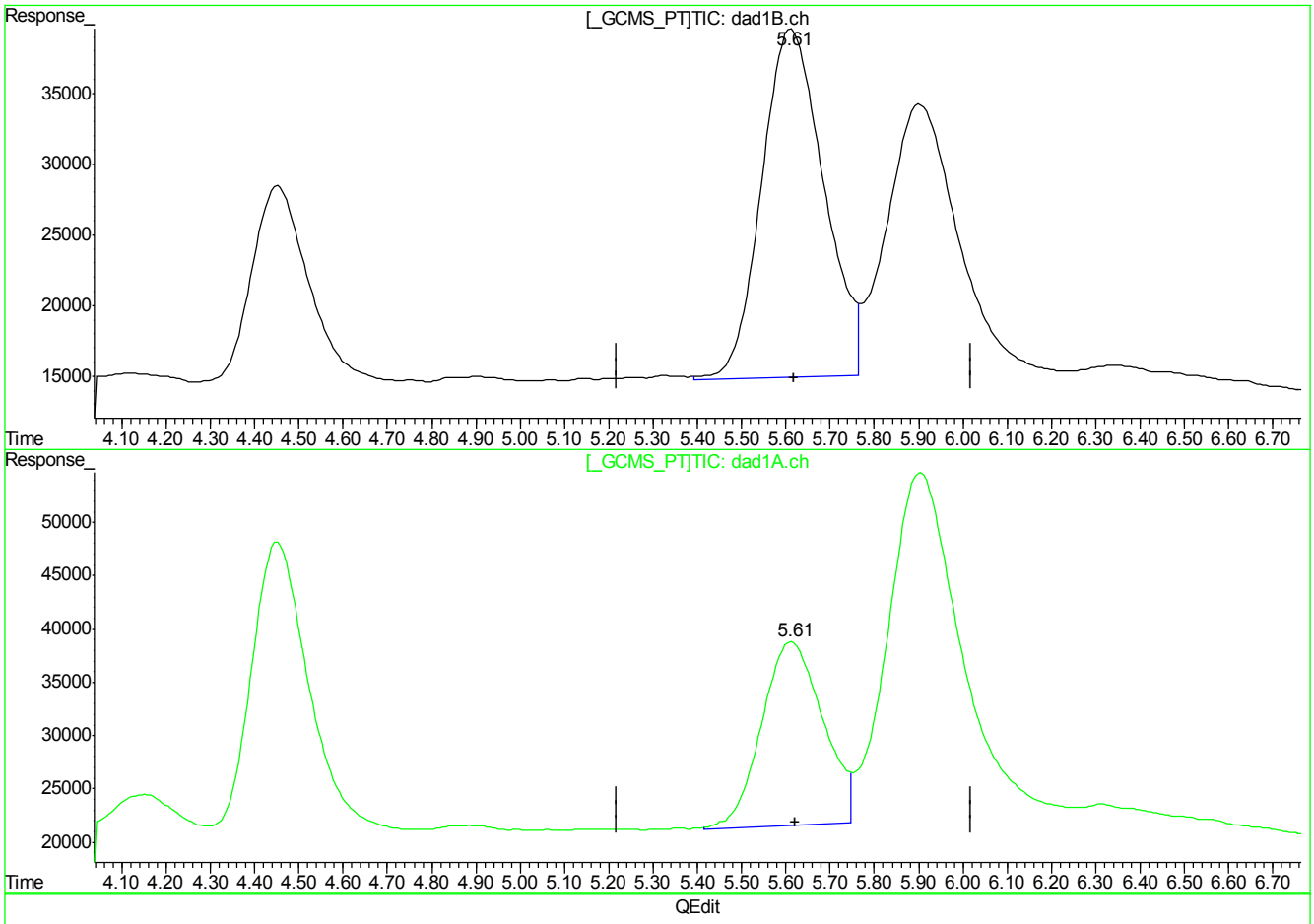
response 1941332

(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:14:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.61min 437.297ppb m

response 2424365

(7) 1,3-Dinitrobenzene #2

5.61min 446.411ppb m

response 1662603

(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:14:48 2018

7.5.1.7

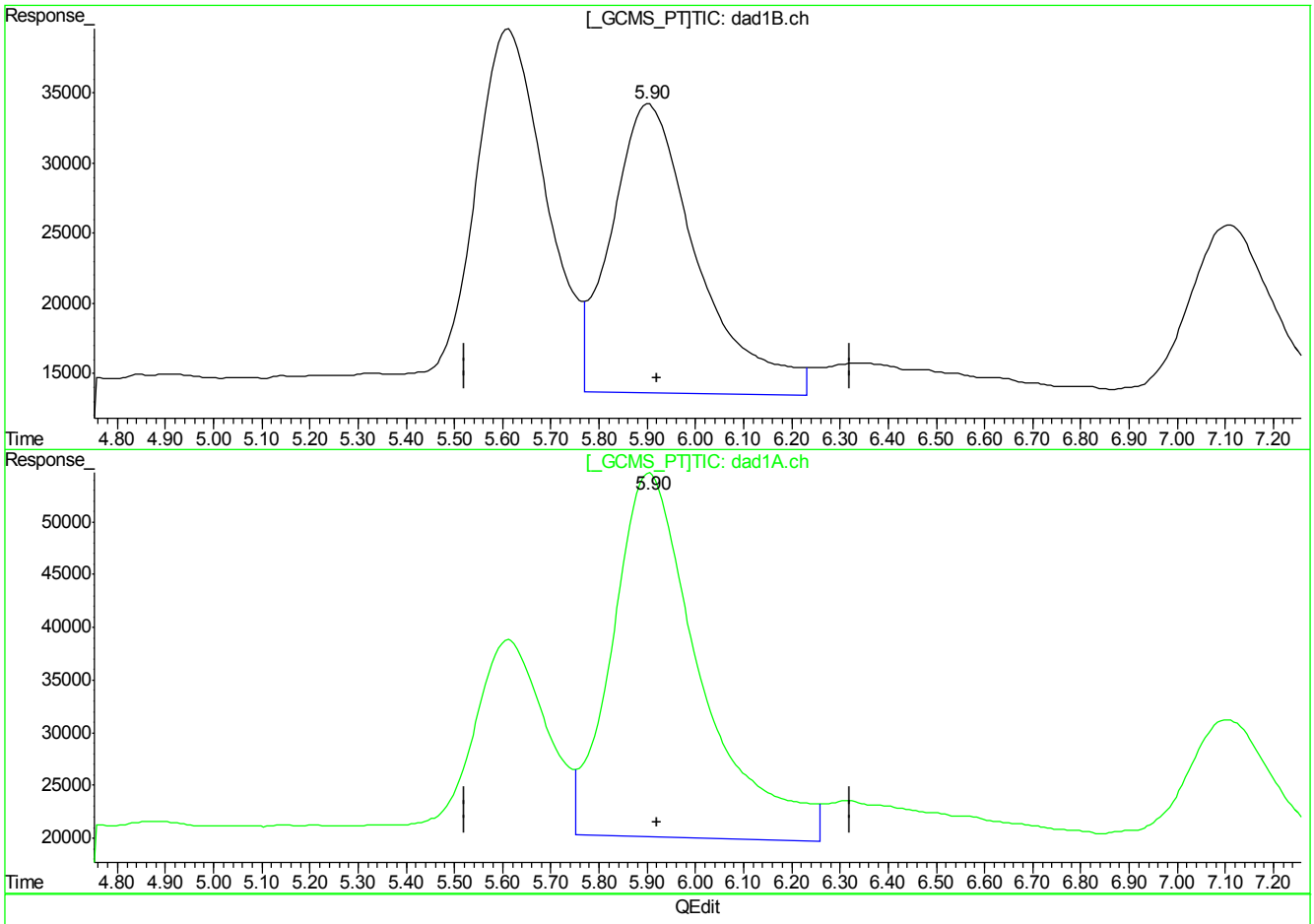
7

BB059528.D edits: 1,3-Dinitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.90min 523.706ppb

response 2561121

(8) 3,5-Dinitroaniline #2

5.91min 587.850ppb

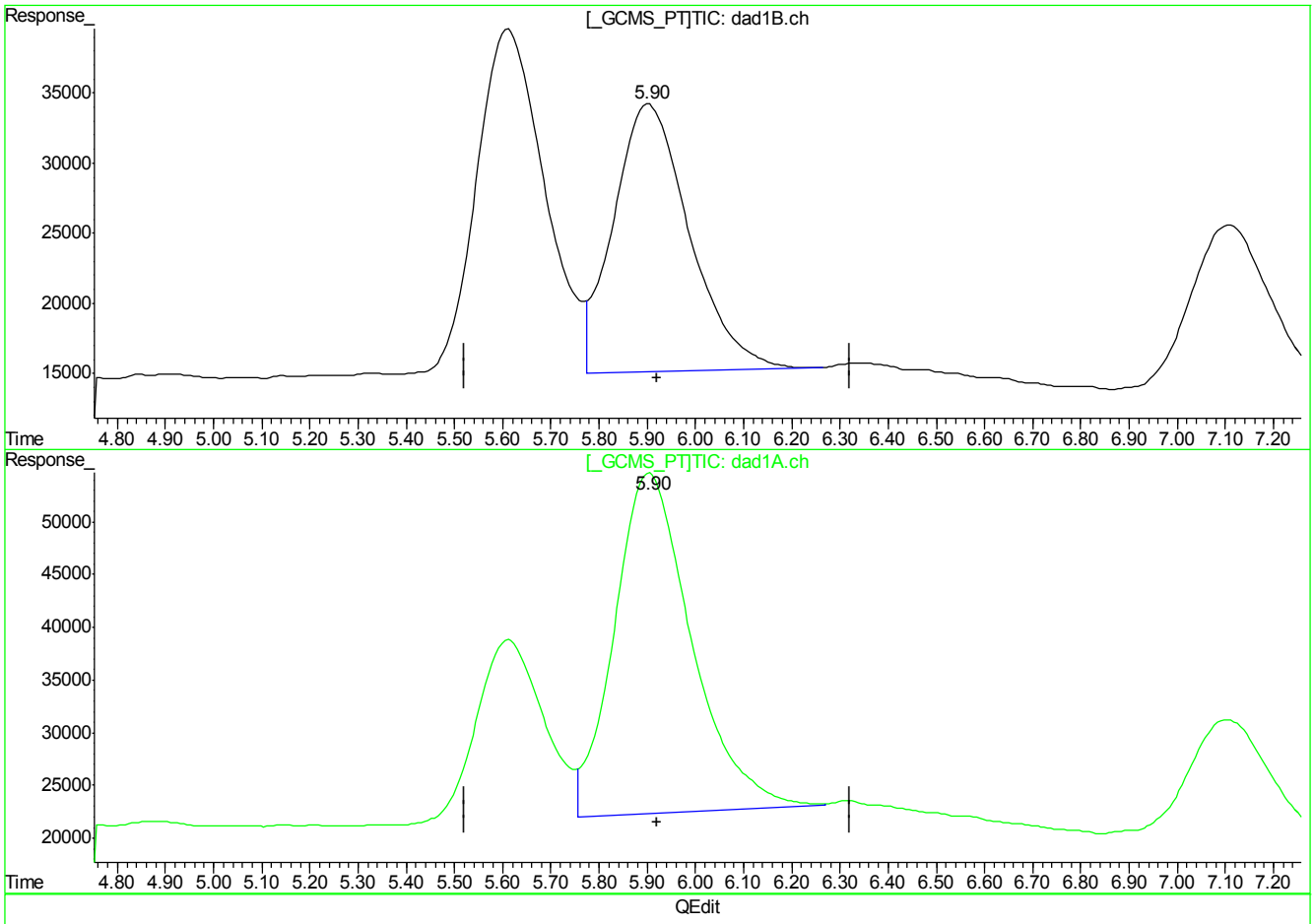
response 4396411

(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:14:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.90min 426.442ppb m

response 2085461

(8) 3,5-Dinitroaniline #2

5.90min 479.336ppb m

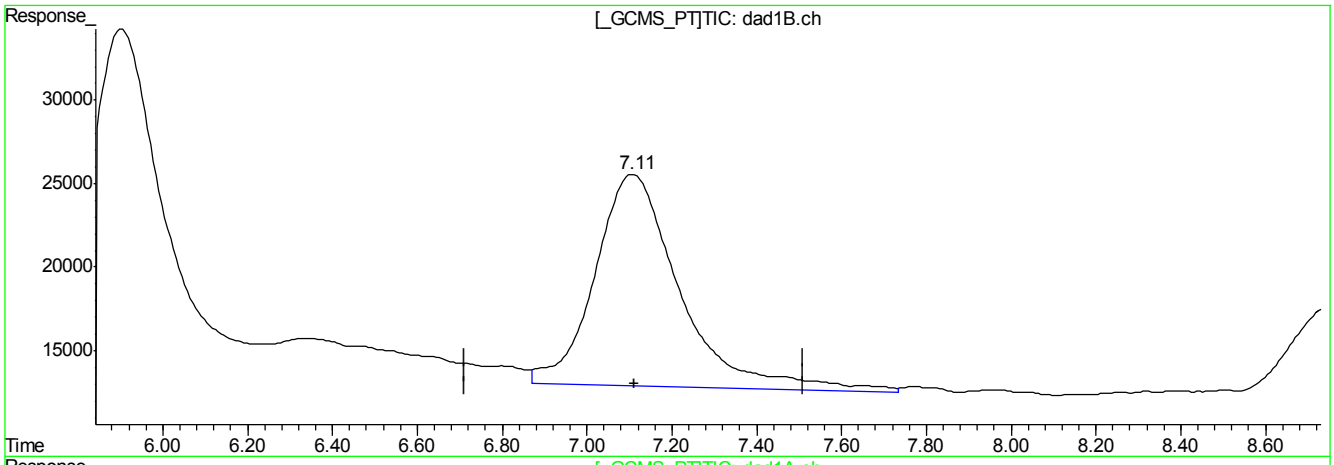
response 3584855

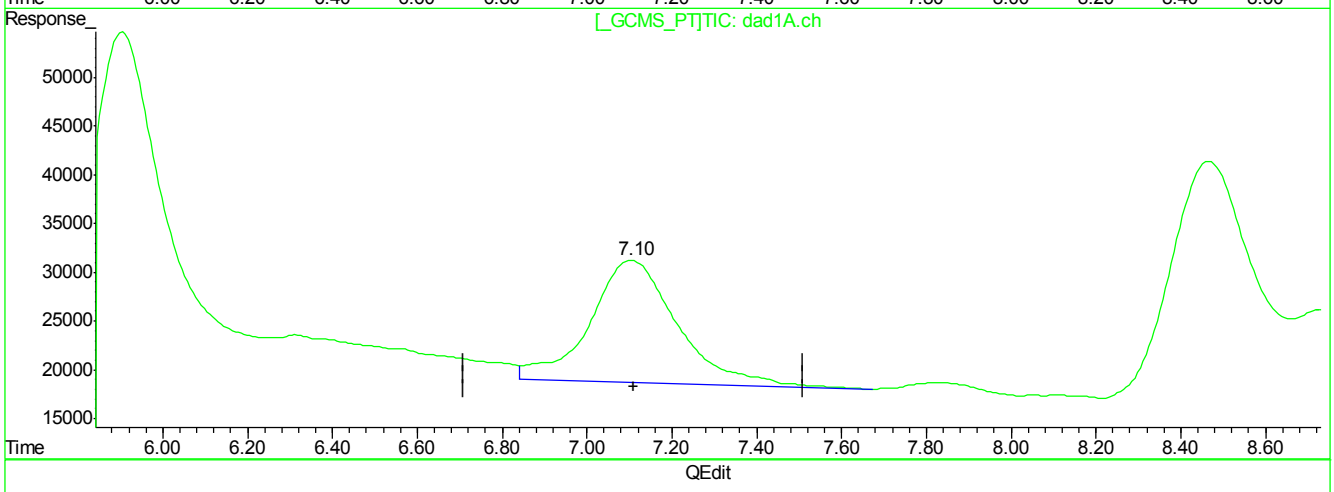
(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:15:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration





QEdit

(9) Nitrobenzene

7.11min 484.561ppb

response 1765647

(9) Nitrobenzene #2

7.11min 550.129ppb

response 1824145

(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:15:06 2018

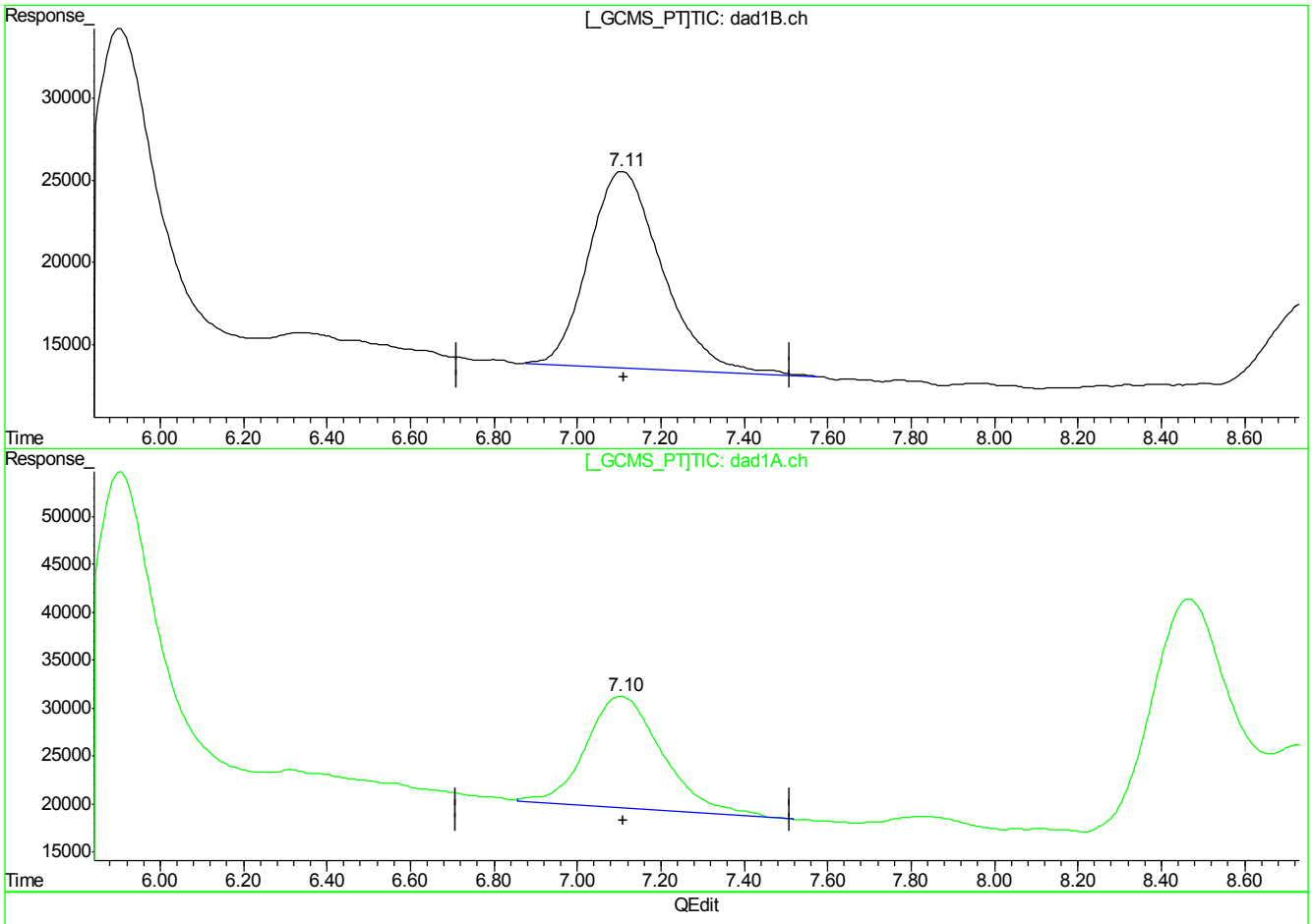
7.5.1.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.11min 404.612ppb m

response 1474330

(9) Nitrobenzene #2

7.10min 441.296ppb m

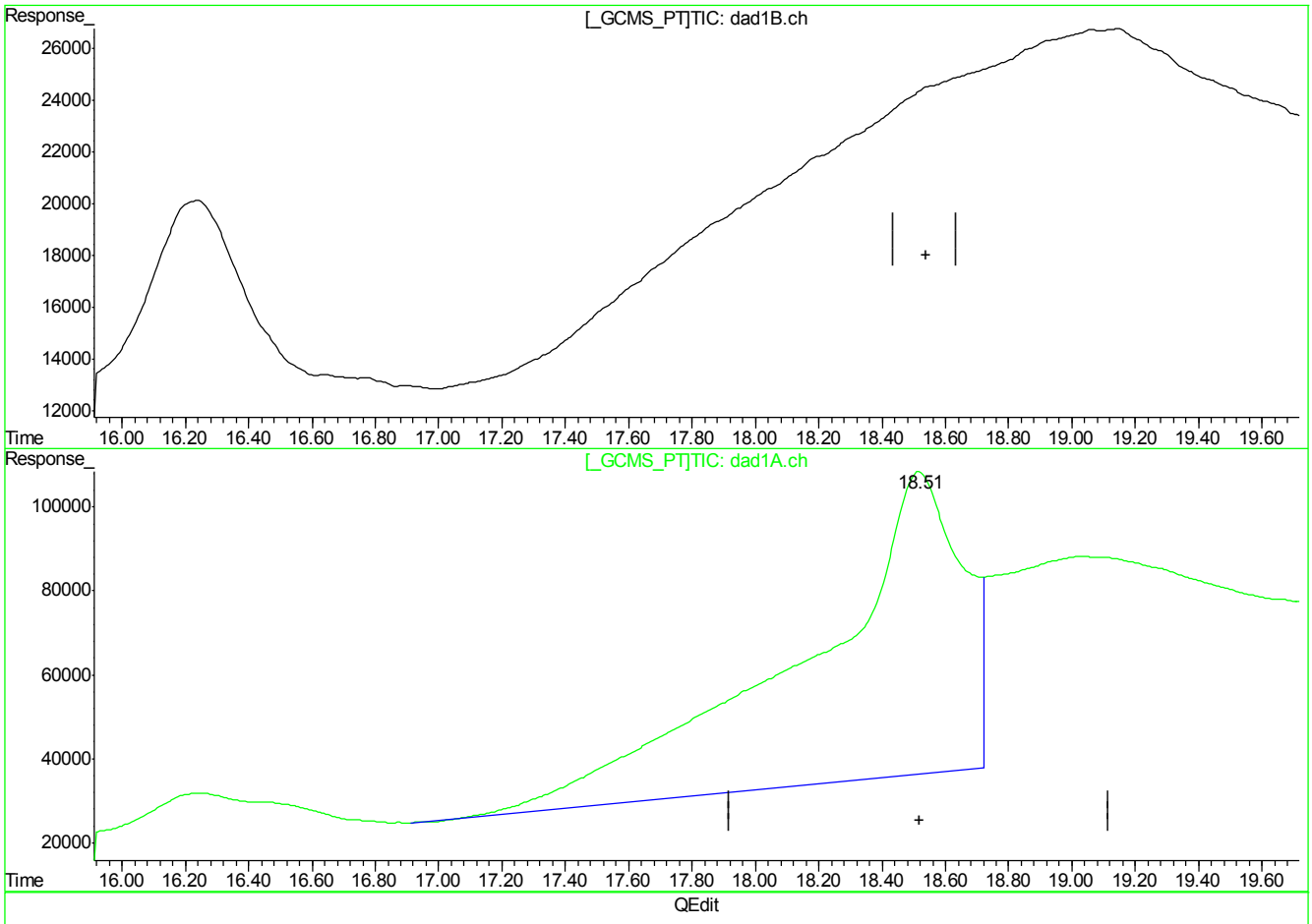
response 1463270

(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:15:10 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.52min 17509.531ppb

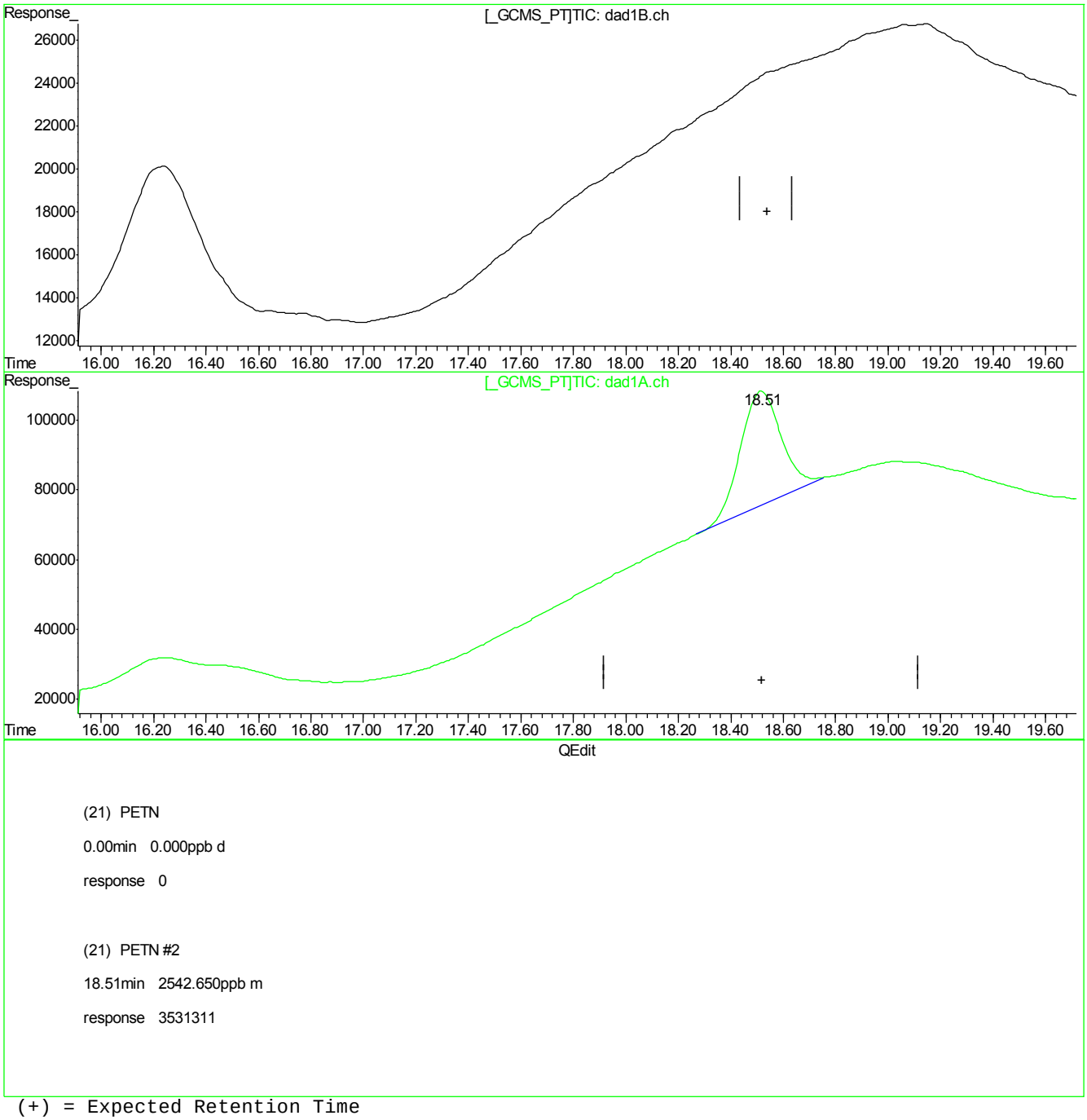
response 24317782

(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:15:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059528.D\dad1A.ch
Acq On : 30-Apr-2018, 18:38:19 Operator: evitam
Sample : op69837-ms Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059528.D 8330B_0419PLUS.M Tue May 01 08:15:25 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/01/18 17:21

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 01 06:55:59 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.35	10.37	884764	1676986	330.666	355.689
	Spiked Amount 500.000	Range 70 - 136		Recovery =		66.13%#	71.14%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	1.44	1.44	532218	1856381	284.593m	365.222m
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.77	2.77	848047	1325153	396.582m	398.662m
6)	1,3,5-Trinitrobe	4.45	4.45	1269329	2373614	291.713	284.331
7)	1,3-Dinitrobenze	5.61	5.61	2413455	1610953	435.329m	432.543m
8)	3,5-Dinitroanili	5.90	5.90	2133329	3615928	436.230m	483.491m
9)	Nitrobenzene	7.11	7.10	1739491	1715168	477.383	517.264
10)	Nitroglycerin	0.00	8.47	0	3264963	N.D. d	2547.908
11)	Tetryl	8.75	8.74	757486	1173541	257.114	225.951
12)	2,4,6-Trinitroto	9.19	9.19	1319536	1504646	312.675	331.951
13)	2-Amino-4,6-Dini	9.45	9.46	1526632	2301845	403.285	429.141
14)	4-Amino-2,6-Dini	9.88	9.89	1099542	2206214	419.750	425.757
16)	2,4-Dinitrotolue	11.02	11.02	2015259	1194224	383.056	404.379
17)	2,6-Dinitrotolue	11.46	11.46	1211091	1435497	350.404	420.395
18)	o-Nitrotoluene	14.69	14.67	998610	1402370	399.789	428.106m
19)	p-Nitrotoluene	15.28	15.28	1670883	1409536	423.326	447.455
20)	m-Nitrotoluene	16.24	16.25	1818661	2400977	509.828	596.683
21)	PETN	0.00	18.52	0	3578931	N.D. d	2576.938m

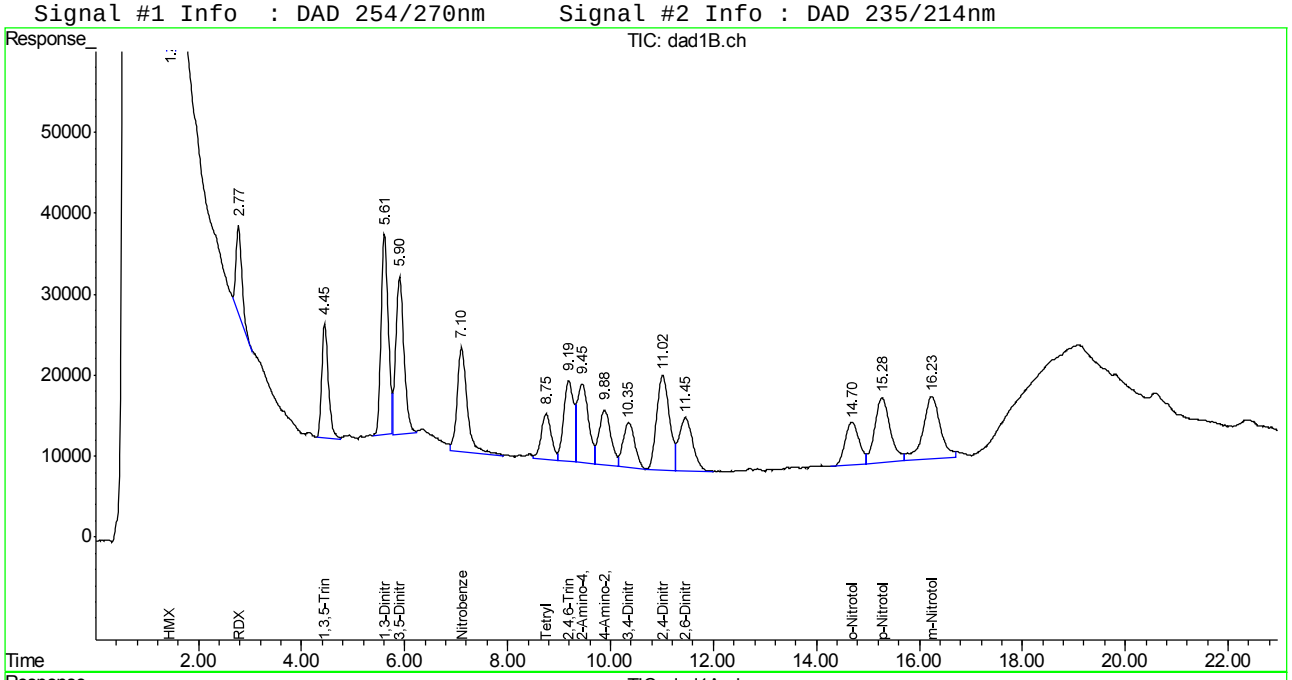
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059529.D 8330B_0419PLUS.M Tue May 01 09:08:27 2018 Page 1

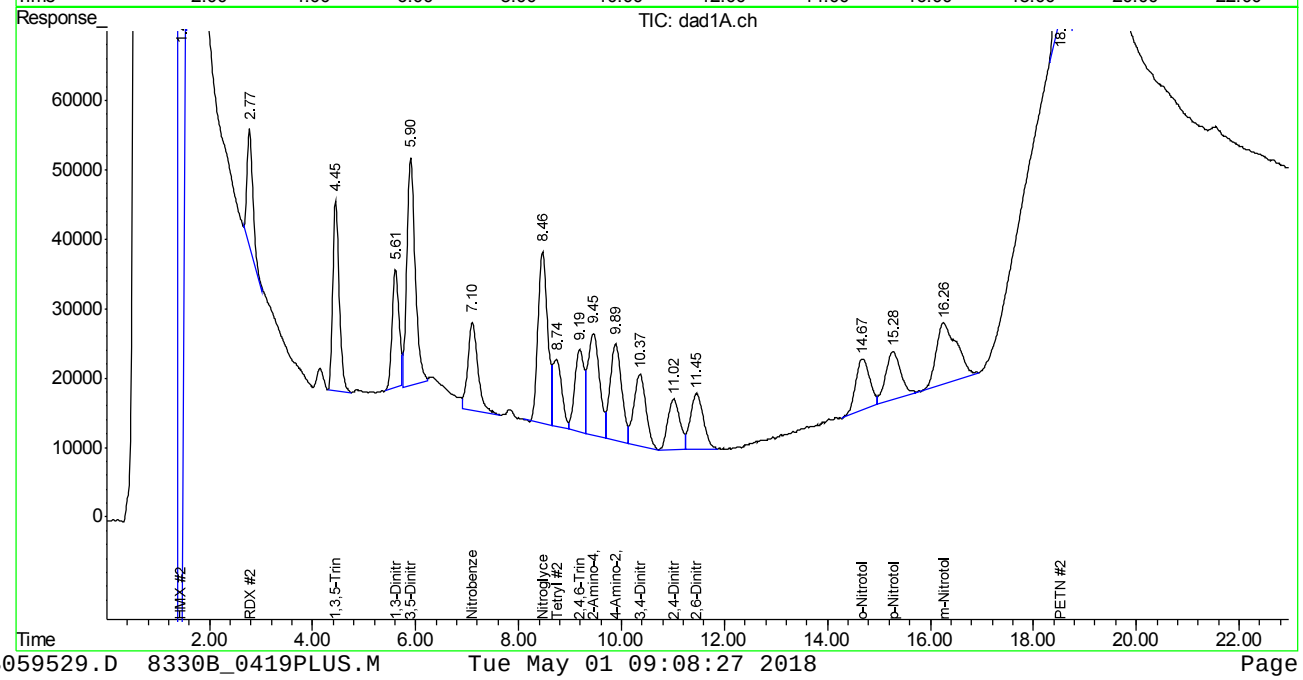
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 8:19 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

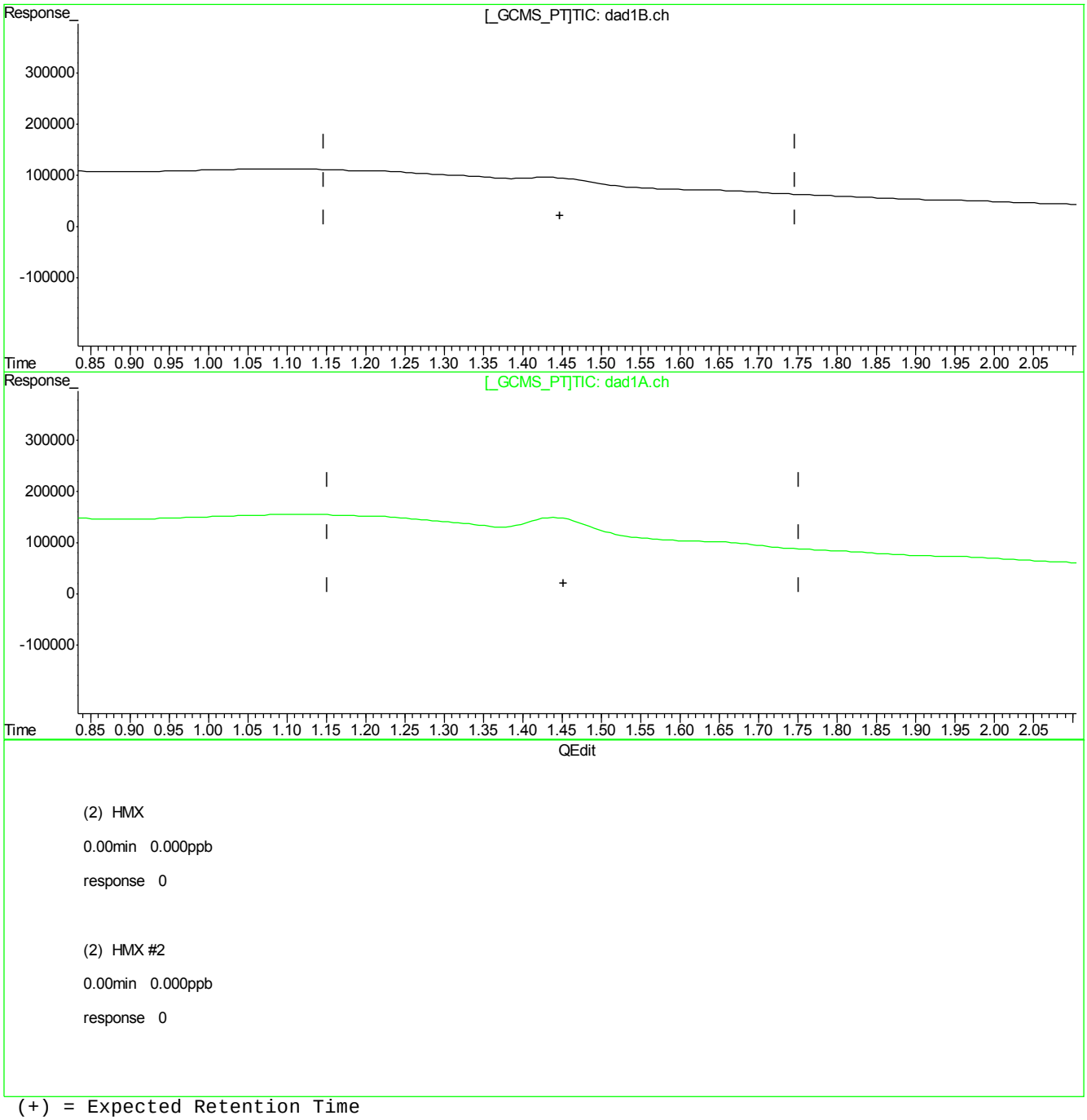
Sample Number:	OP69837-MSD	**Method:**	SW846 8330B
Lab FileID:	BB059529.D	**Analyst approved:**	05/01/18 14:52 Evita Martinez
Injection Time:	04/30/18 19:08	**Supervisor approved:**	05/01/18 17:21 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
RDX	121-82-4	1	2.77	Poorly defined baseline
RDX	121-82-4	2	2.77	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.61	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.61	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	5.90	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	5.90	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.67	Poorly defined baseline
PETN	78-11-5	2	18.52	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



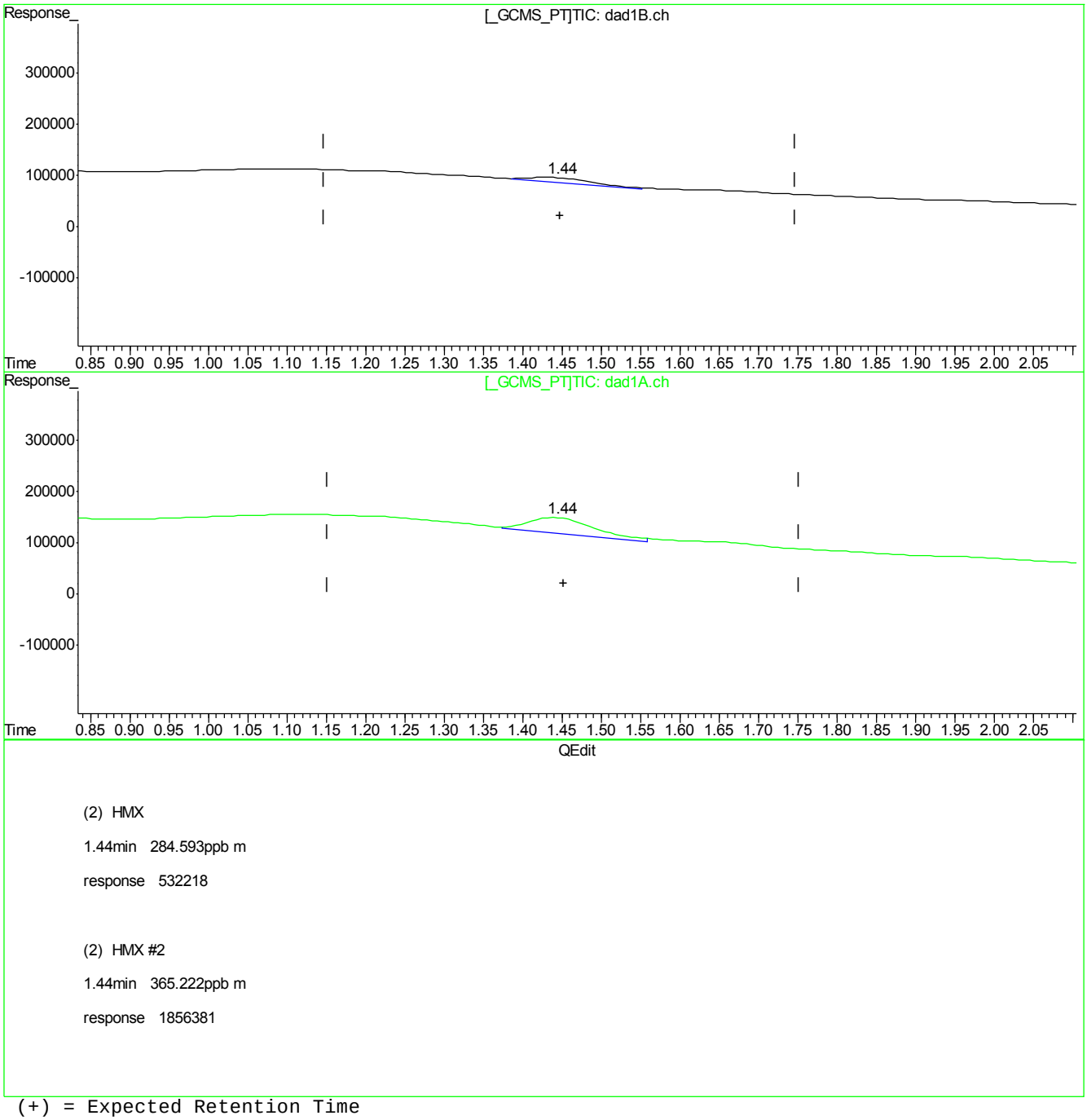
(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:18:45 2018

BB059529.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 284.593ppb m

response 532218

(2) HMX #2

1.44min 365.222ppb m

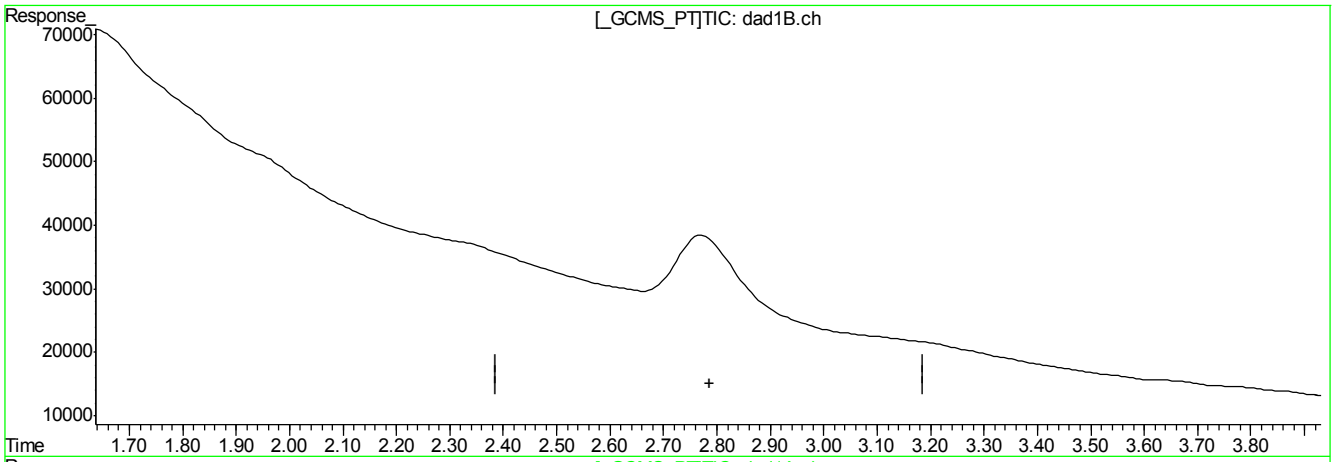
response 1856381

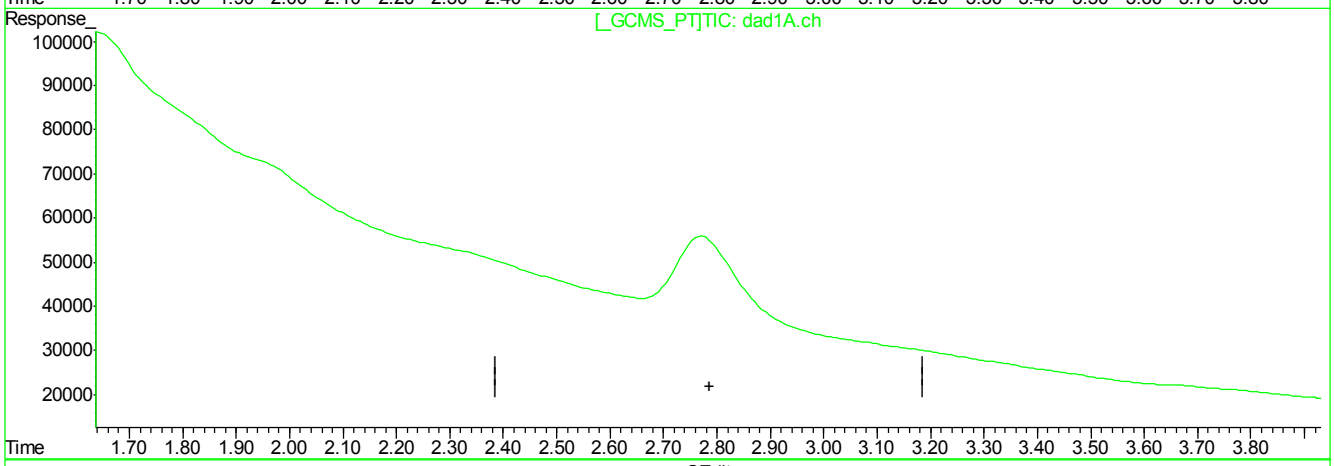
(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:18:54 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration





QEdit

(5) RDX

0.00min 0.000ppb

response 0

(5) RDX #2

0.00min 0.000ppb

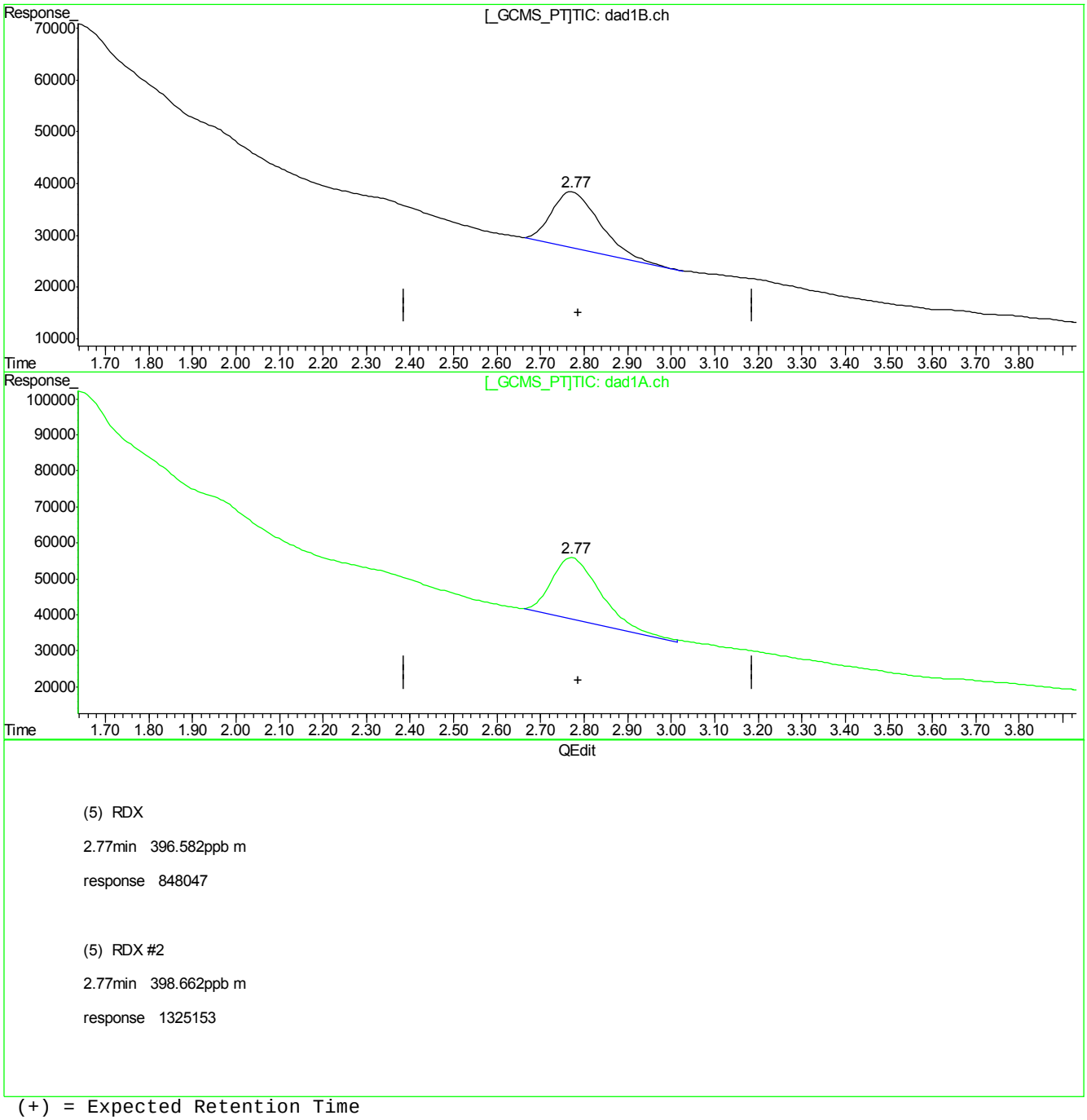
response 0

(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:18:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:19:03 2018

7.5.2.5

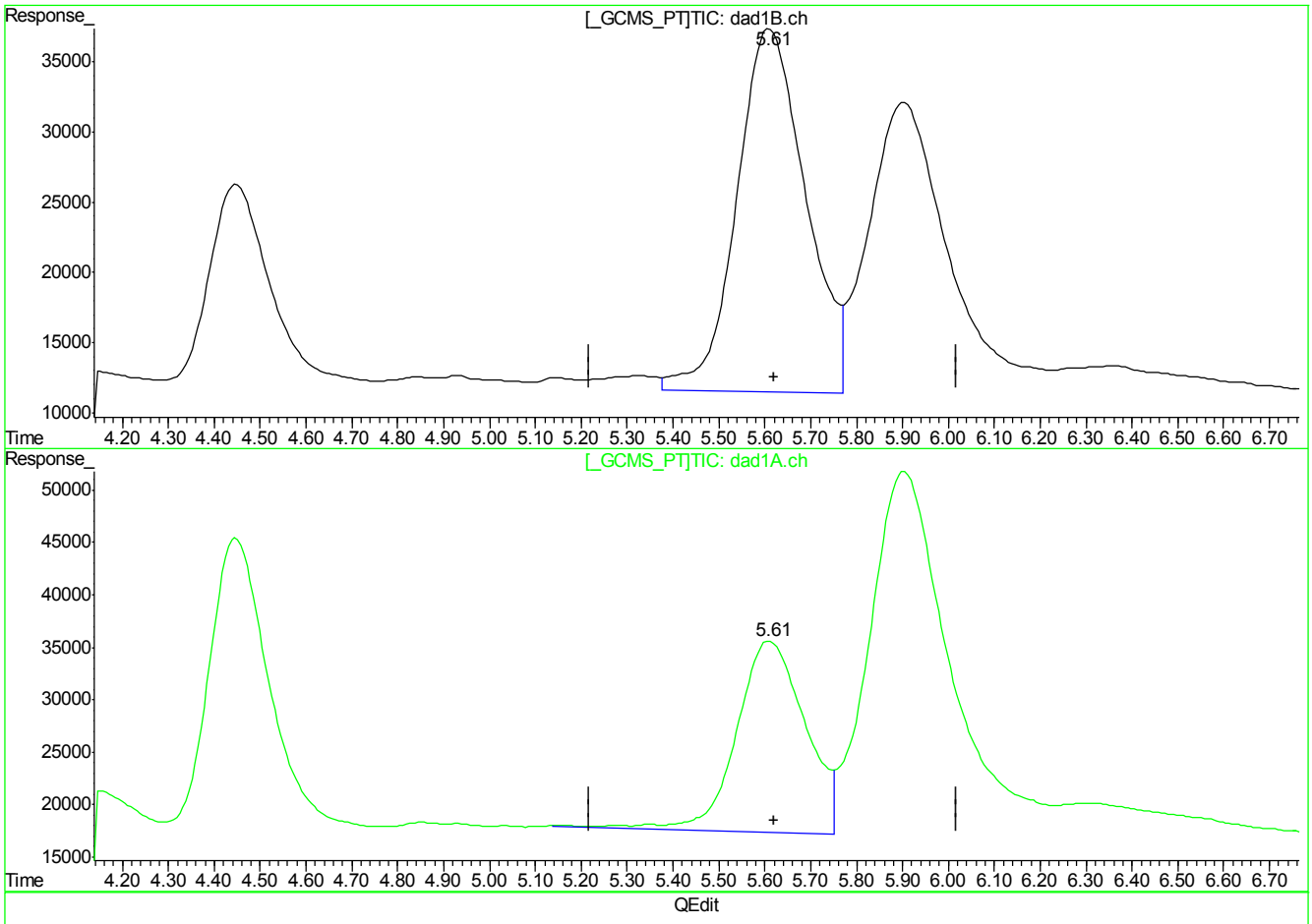
7

BB059529.D edits: RDX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.61min 485.757ppb

response 2693027

(7) 1,3-Dinitrobenzene #2

5.61min 508.416ppb

response 1893533

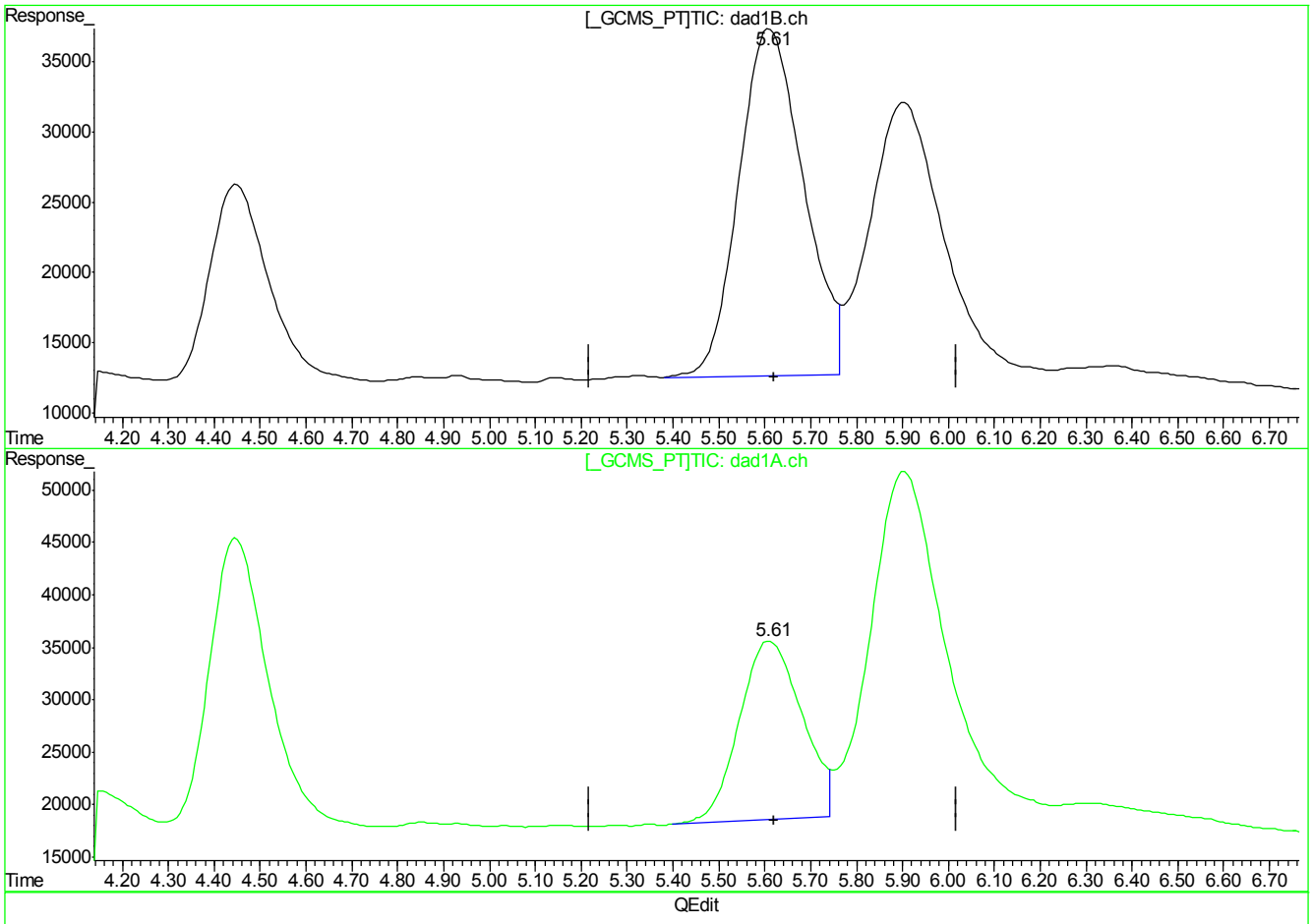
(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:19:08 2018

BB059529.D edits: 1,3-Dinitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.61min 435.329ppb m

response 2413455

(7) 1,3-Dinitrobenzene #2

5.61min 432.543ppb m

response 1610953

(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:19:21 2018

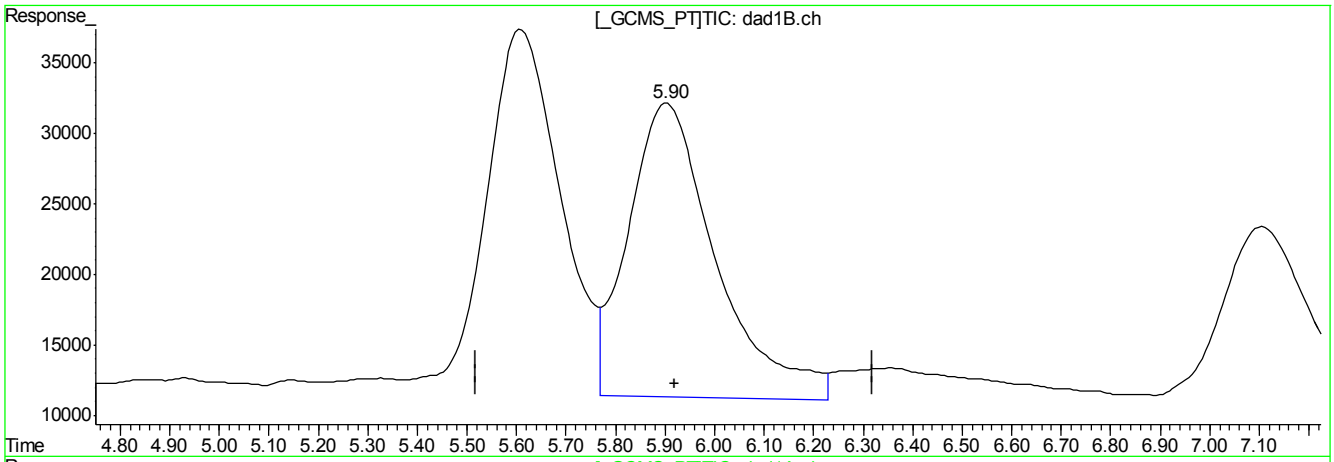
7.5.2.7

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.90min 523.577ppb

response 2560490

(8) 3,5-Dinitroaniline #2

5.90min 576.095ppb

response 4308500

(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:19:23 2018

7.5.2.8

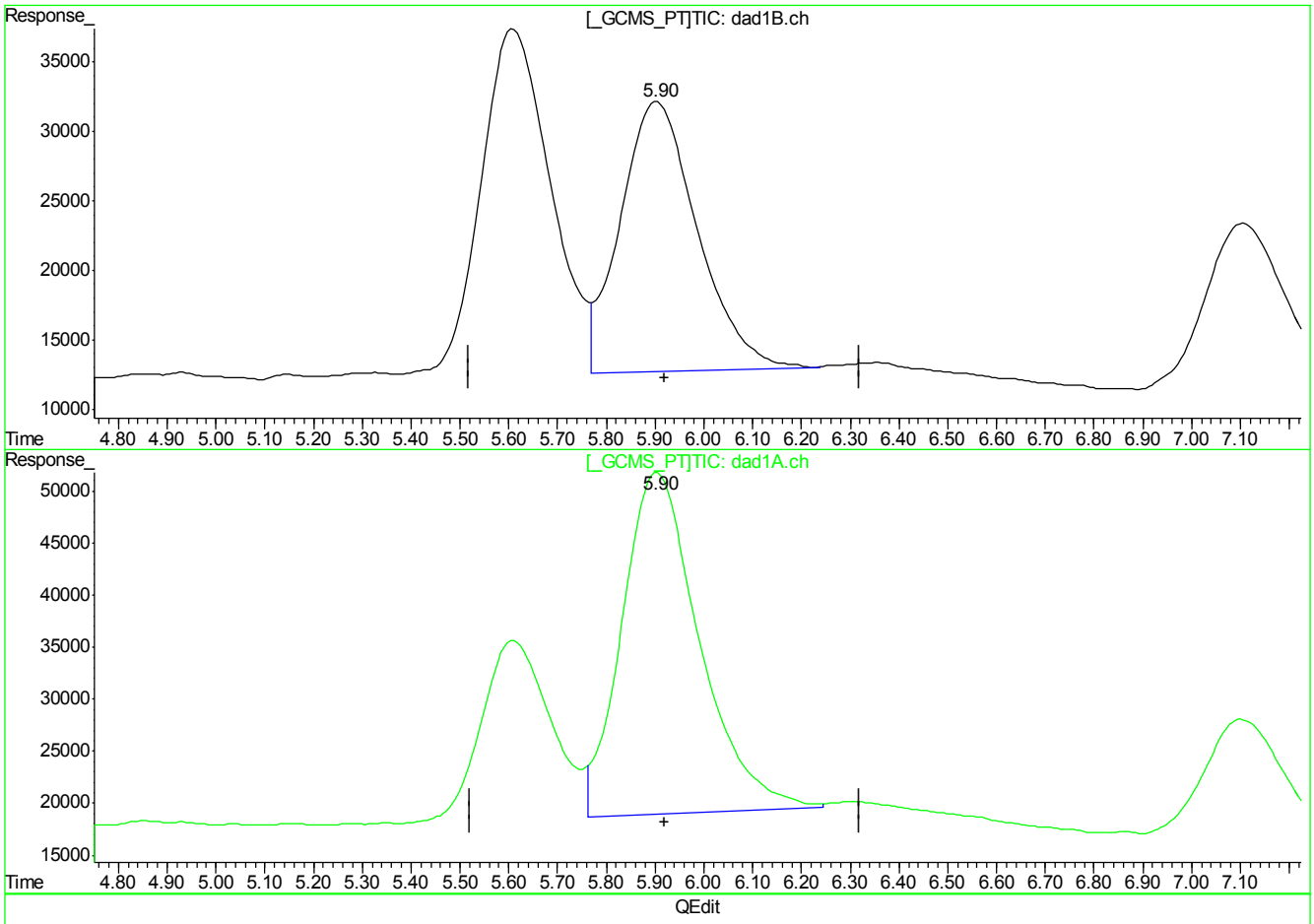
7

BB059529.D edits: 3,5-Dinitroaniline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.90min 436.230ppb m

response 2133329

(8) 3,5-Dinitroaniline #2

5.90min 483.491ppb m

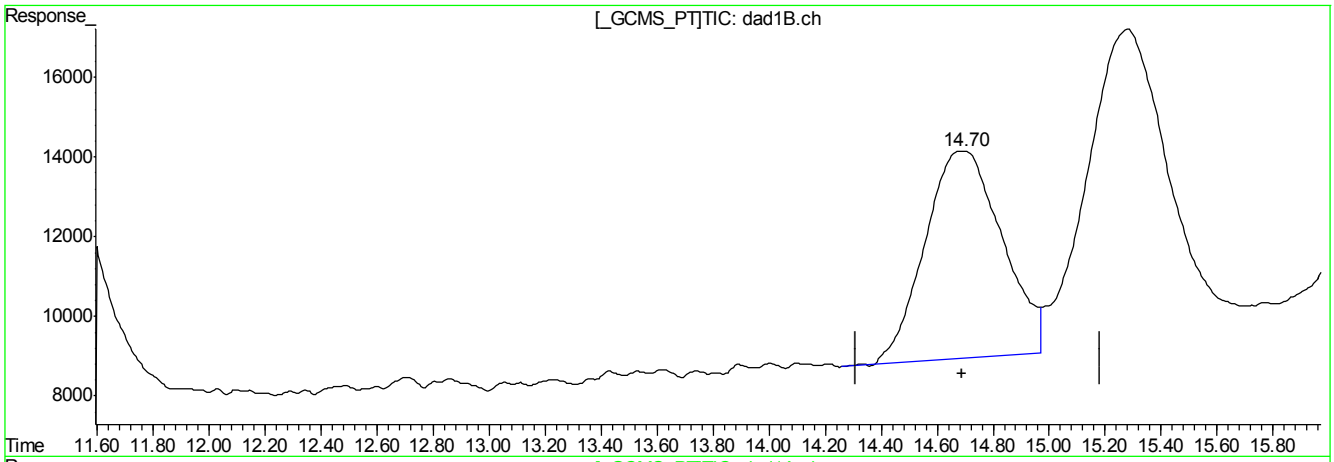
response 3615928

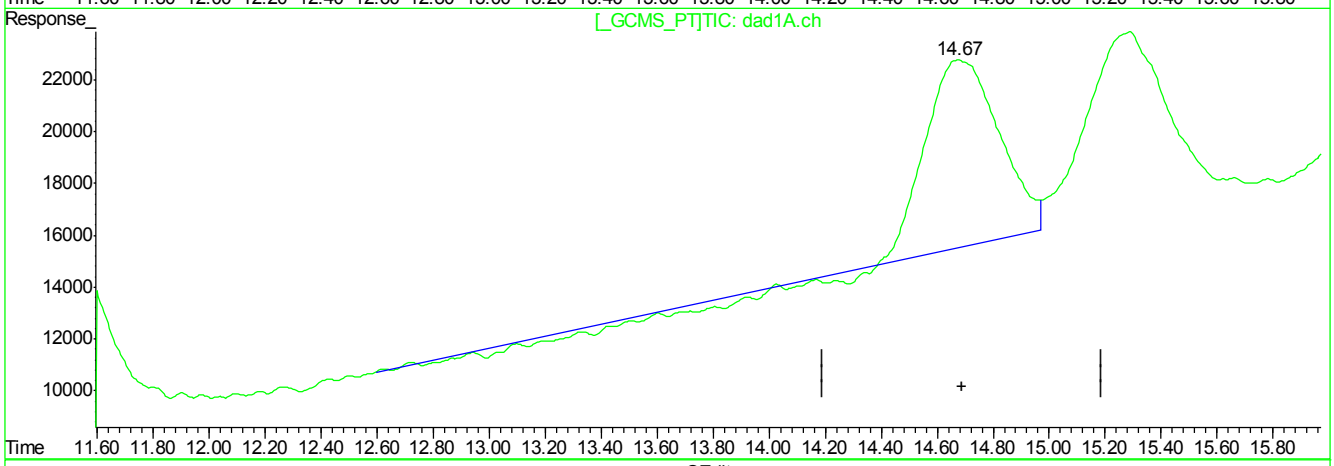
(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:19:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration





QEdit

(18) o-Nitrotoluene

14.69min 399.789ppb

response 998610

(18) o-Nitrotoluene #2

14.68min 348.074ppb

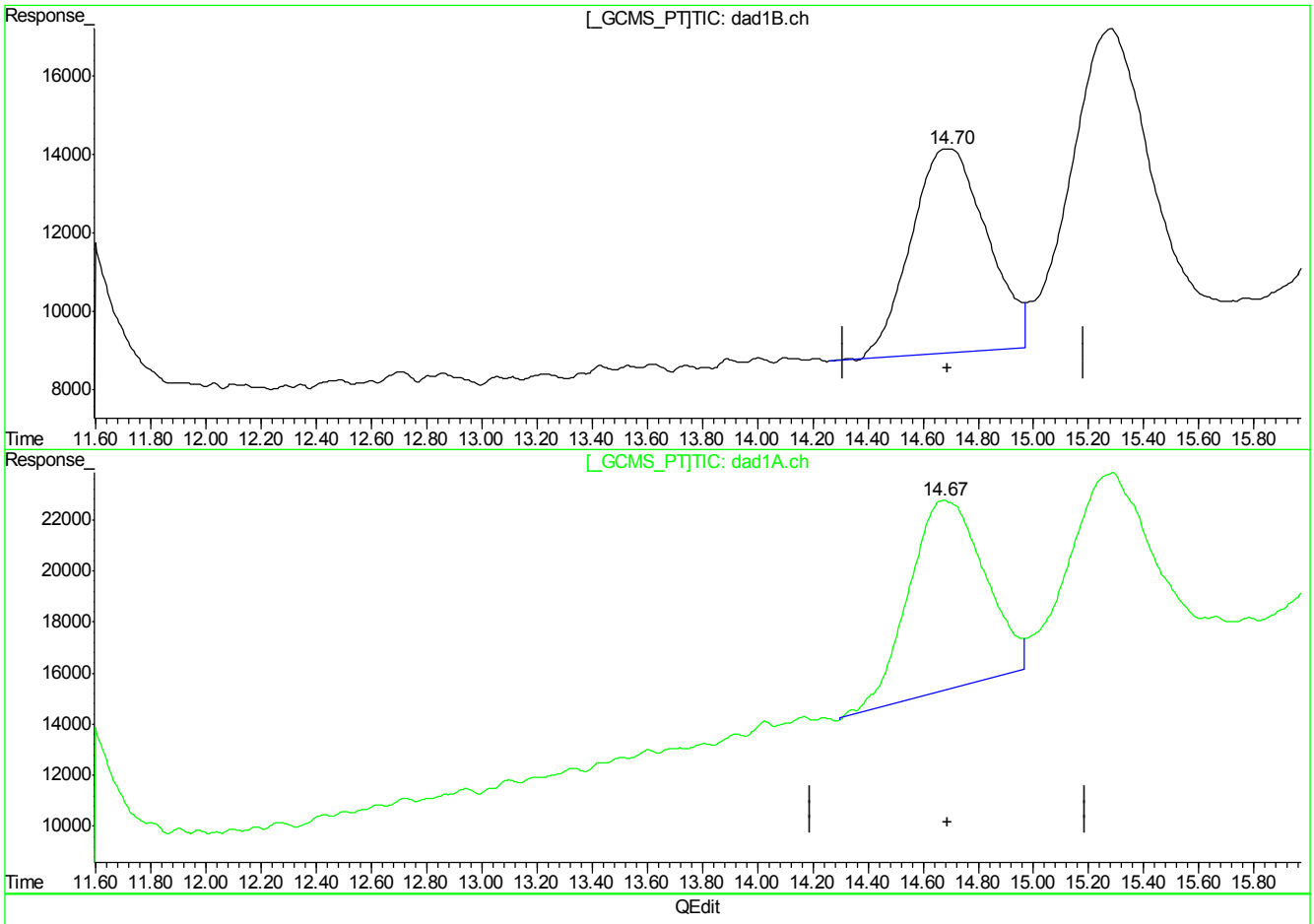
response 1140203

(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:19:45 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 399.789ppb

response 998610

(18) o-Nitrotoluene #2

14.67min 428.106ppb m

response 1402370

(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:19:48 2018

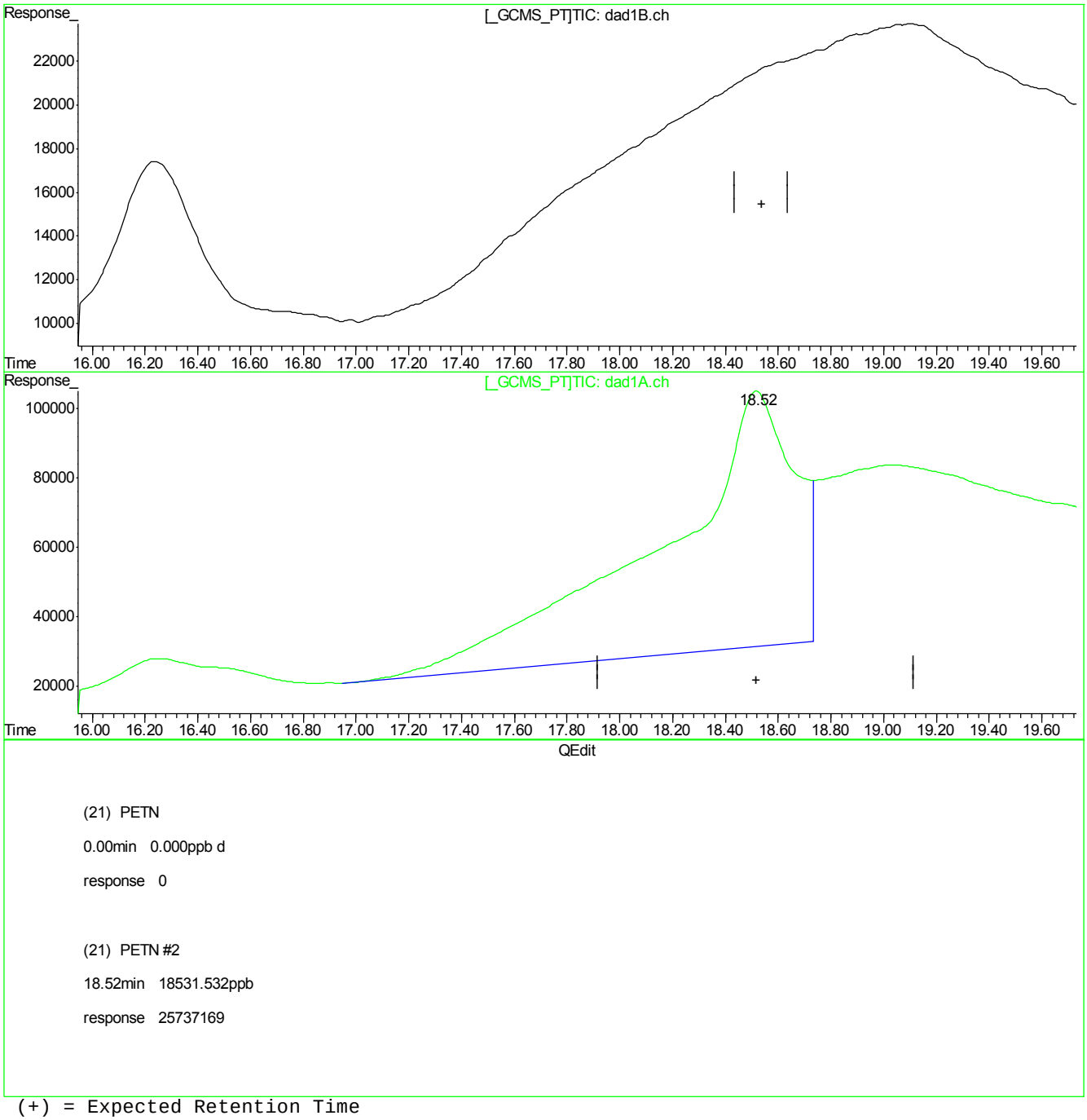
7.5.2.11

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration

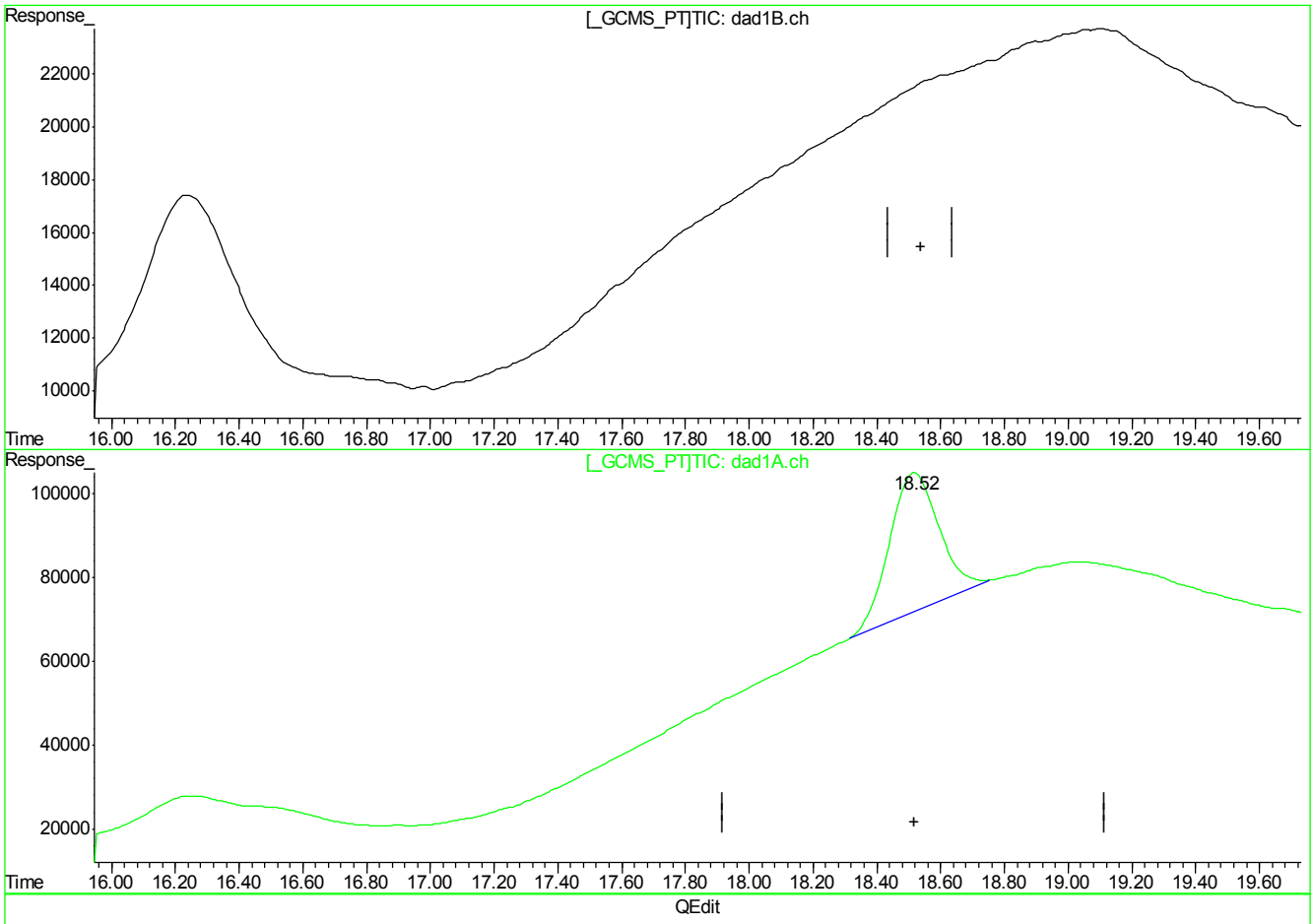


(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:19:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059529.D\dad1A.ch
Acq On : 30-Apr-2018, 19:08:18 Operator: evitam
Sample : op69837-msd Inst : G1315B
Misc : OP69837,gbb1726,520,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.52min 2576.938ppb m

response 3578931

(+) = Expected Retention Time
BB059529.D 8330B_0419PLUS.M Tue May 01 08:19:59 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:15

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614592.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0507RPB3\GG614592.D\dad1A.ch
Acq On : 07-May-2018, 18:19:52 Operator: evitam
Sample : op69919-ms Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:06:04 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.26	14.25	2339866	5656860	450.417	522.930
	Spiked Amount 500.000	Range 69 - 134		Recovery =		90.08%	104.59%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1847024	1862127	569.737m	577.985m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.43	7.43	4347621	4352562	419.590	420.110
6)	RDX	7.88	7.88	2188576	2210315	459.382	466.002
7)	1,3-Dinitrobenze	9.92	9.92	5996411	5007549	419.128	390.001
8)	Nitrobenzene	10.89	10.89	4018241	4501028	425.778	486.025
9)	2,4,6-Trinitroto	11.66	11.66	4290740	6453245	423.387	492.056
10)	Nitroglycerin	0.00	12.40	0	28748700	N.D. d	8531.412
11)	Tetryl	12.92	12.90	3268291	6030072	403.300	427.785
13)	2,6-Dinitrotolue	14.63	14.63	3280460	5427216	458.831	534.909
14)	2,4-Dinitrotolue	15.34	15.34	8857774	7495928	675.698	793.835
15)	o-Nitrotoluene	16.88	16.88	2755718	4208596	477.049	488.031
16)	3,5-Dinitroanili	16.29	16.29	4844383	9187891	495.374	565.277
17)	p-Nitrotoluene	18.04	18.04	5009935	9022539	426.655	425.729
18)	4-Amino-2,6-Dini	18.04	18.04	5009935	9022539	426.655	424.491
19)	m-Nitrotoluene	19.26	19.26	2712805	4449296	460.158	457.539
20)	2-Amino-4,6-Dini	20.21	20.21	3910205	5505770	433.363	464.276
21)	PETN	0.00	21.78	0	7881481	N.D. d	2457.277m

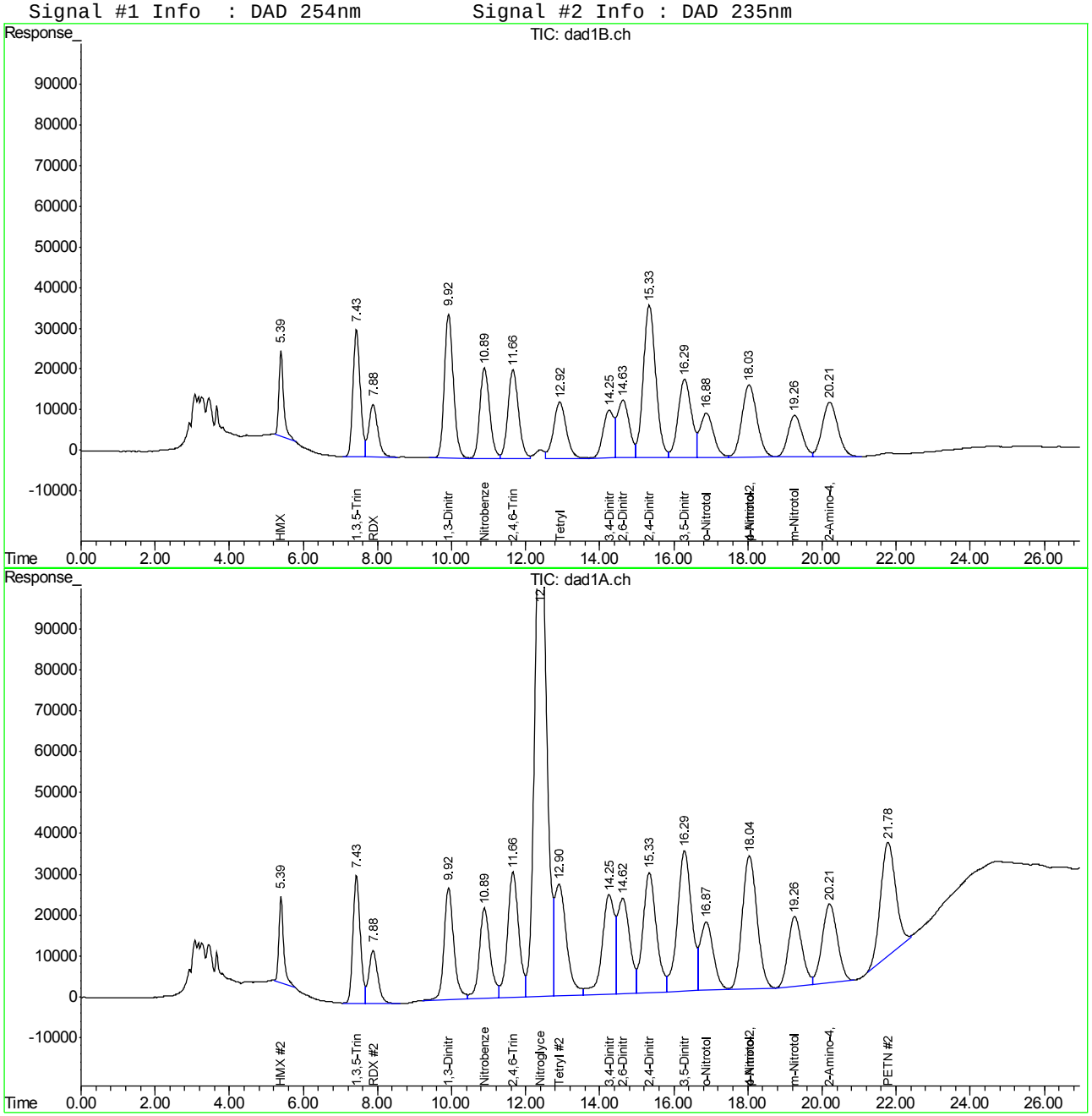
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614592.D 8330RPB.M_1113M.M Tue May 08 11:19:01 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614592.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0507RPB3\GG614592.D\dad1A.ch
Acq On : 07-May-2018, 18:19:52 Operator: evitam
Sample : op69919-ms Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:14 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

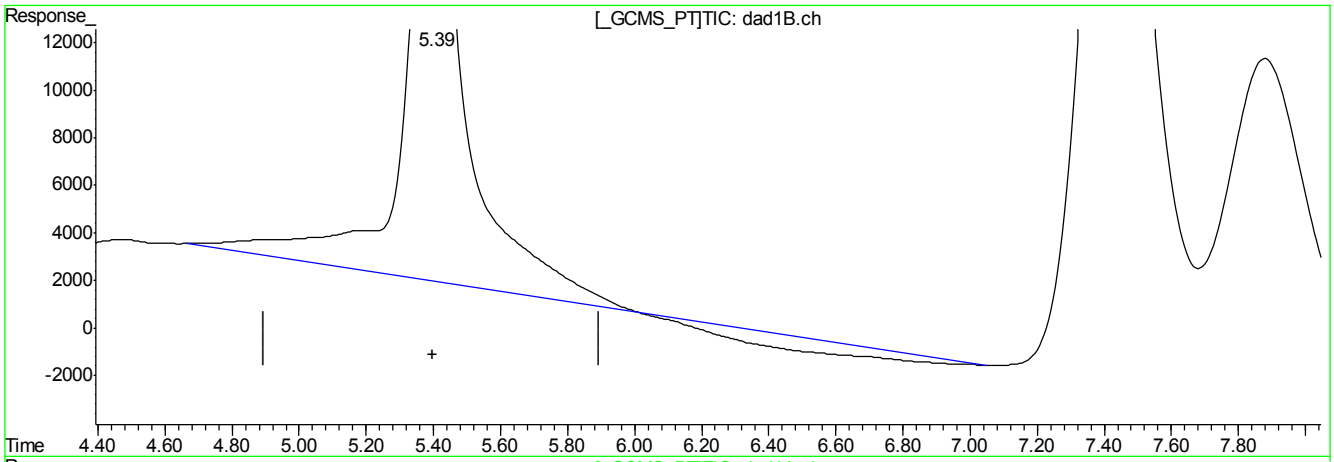
Sample Number:	OP69919-MS	**Method:**	SW846 8330B
Lab FileID:	GG614592.D	**Analyst approved:**	05/08/18 11:23 Evita Martinez
Injection Time:	05/07/18 18:19	**Supervisor approved:**	05/08/18 16:15 Mike Eger

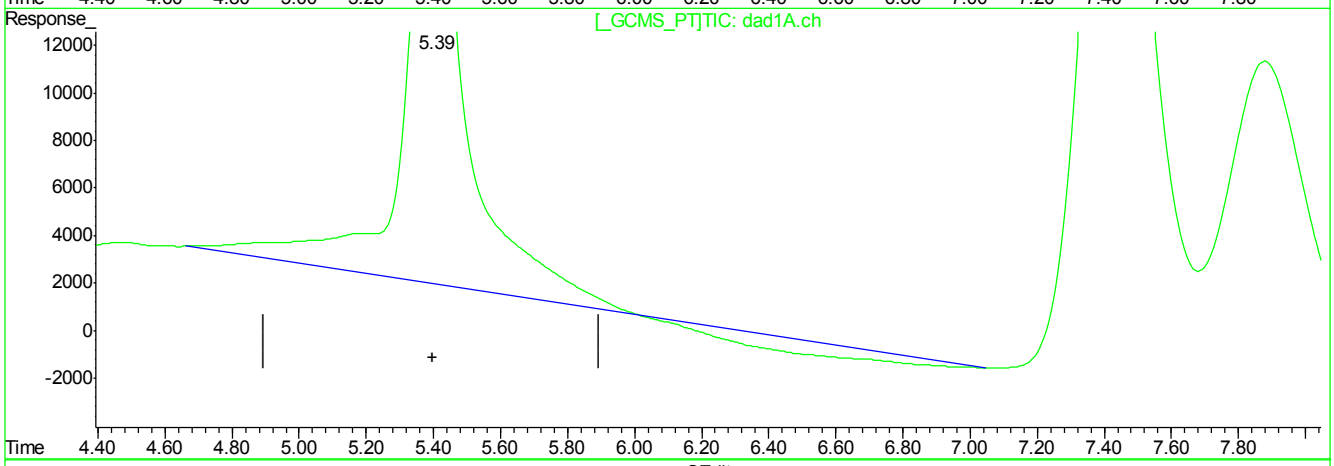
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
PETN	78-11-5	2	21.78	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614592.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0507RPB3\GG614592.D\dad1A.ch
Acq On : 07-May-2018, 18:19:52 Operator: evitam
Sample : op69919-ms Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.40min 753.563ppb

response 2442965

(2) HMX #2

5.40min 758.272ppb

response 2442965

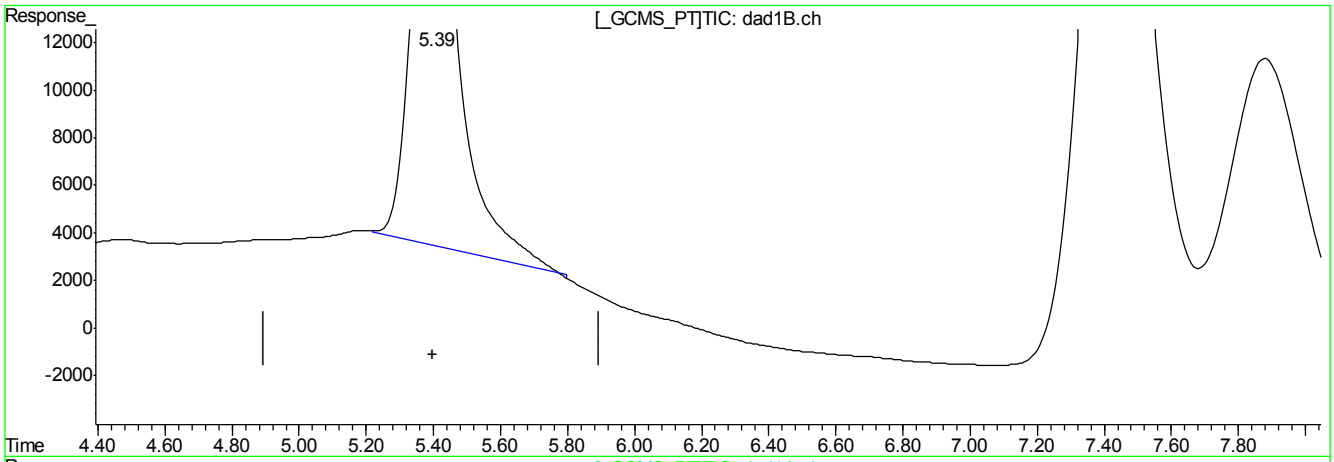
(+) = Expected Retention Time
GG614592.D 8330RPB.M_1113M.M Tue May 08 11:14:27 2018

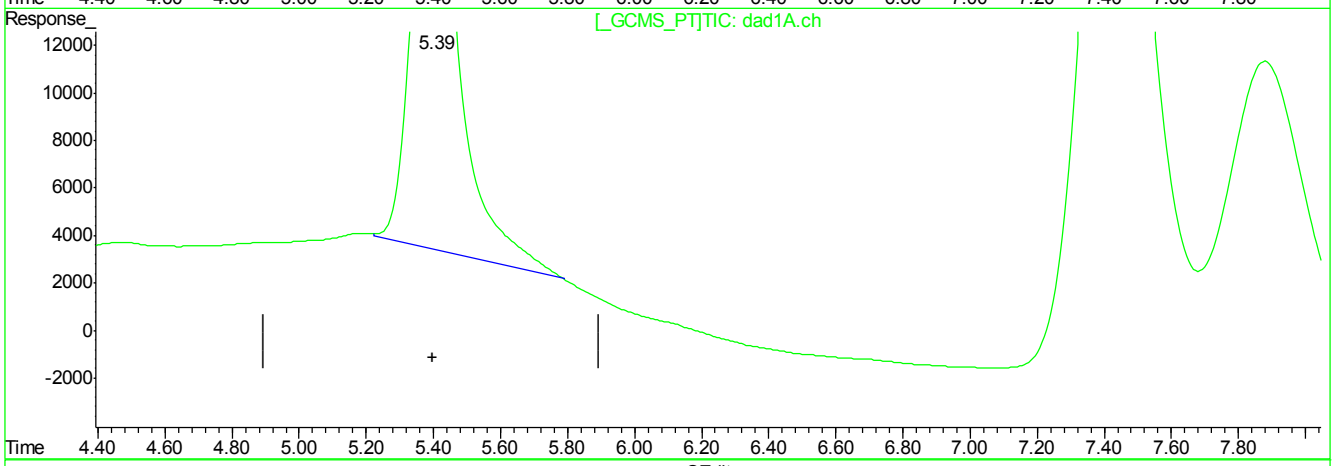
7.5.3.2
7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614592.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0507RPB3\GG614592.D\dad1A.ch
Acq On : 07-May-2018, 18:19:52 Operator: evitam
Sample : op69919-ms Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.39min 569.737ppb m

response 1847024

(2) HMX #2

5.39min 577.985ppb m

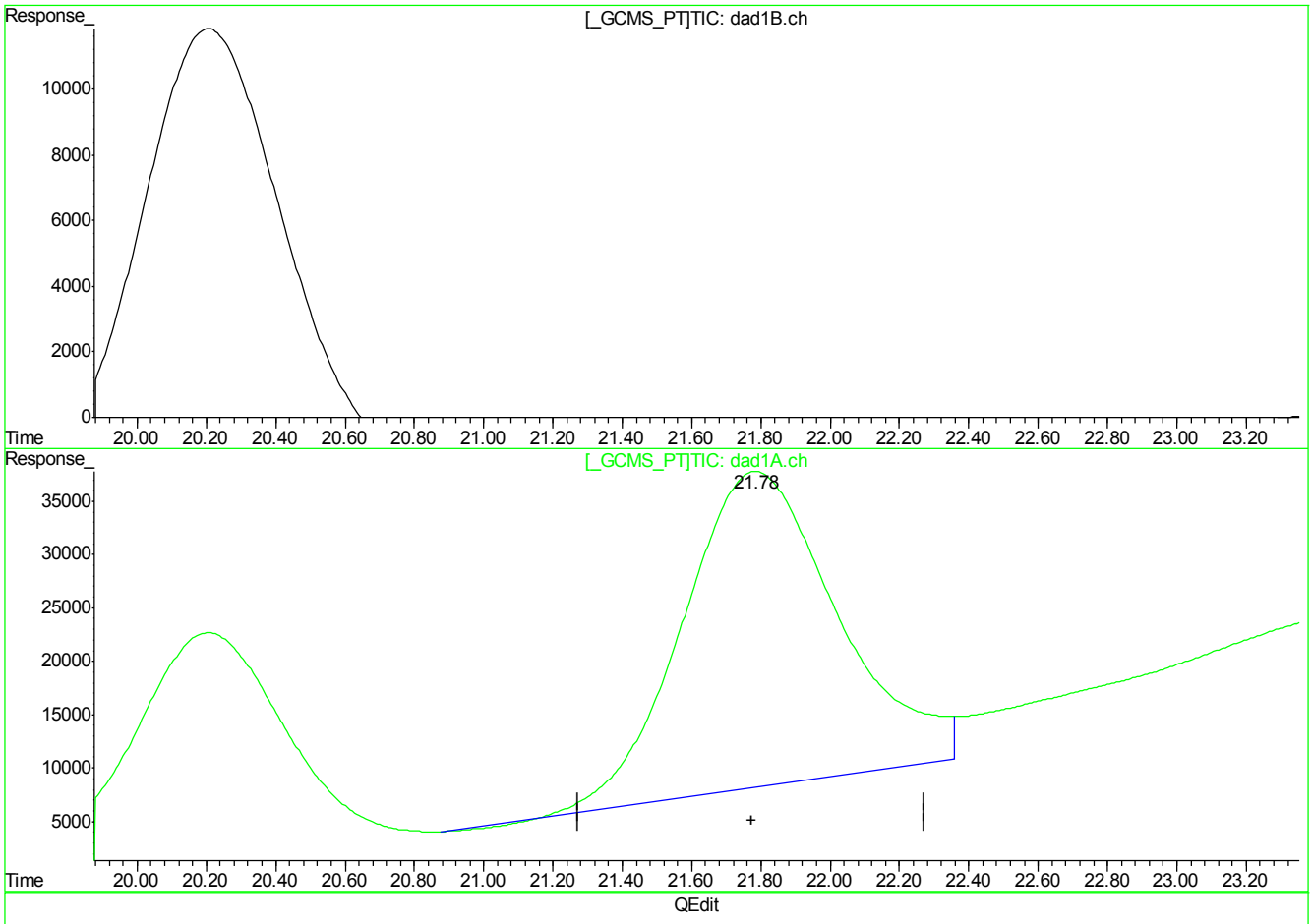
response 1862127

(+) = Expected Retention Time
GG614592.D 8330RPB.M_1113M.M Tue May 08 11:14:31 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614592.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0507RPB3\GG614592.D\dad1A.ch
Acq On : 07-May-2018, 18:19:52 Operator: evitam
Sample : op69919-ms Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.79min 2848.876ppb

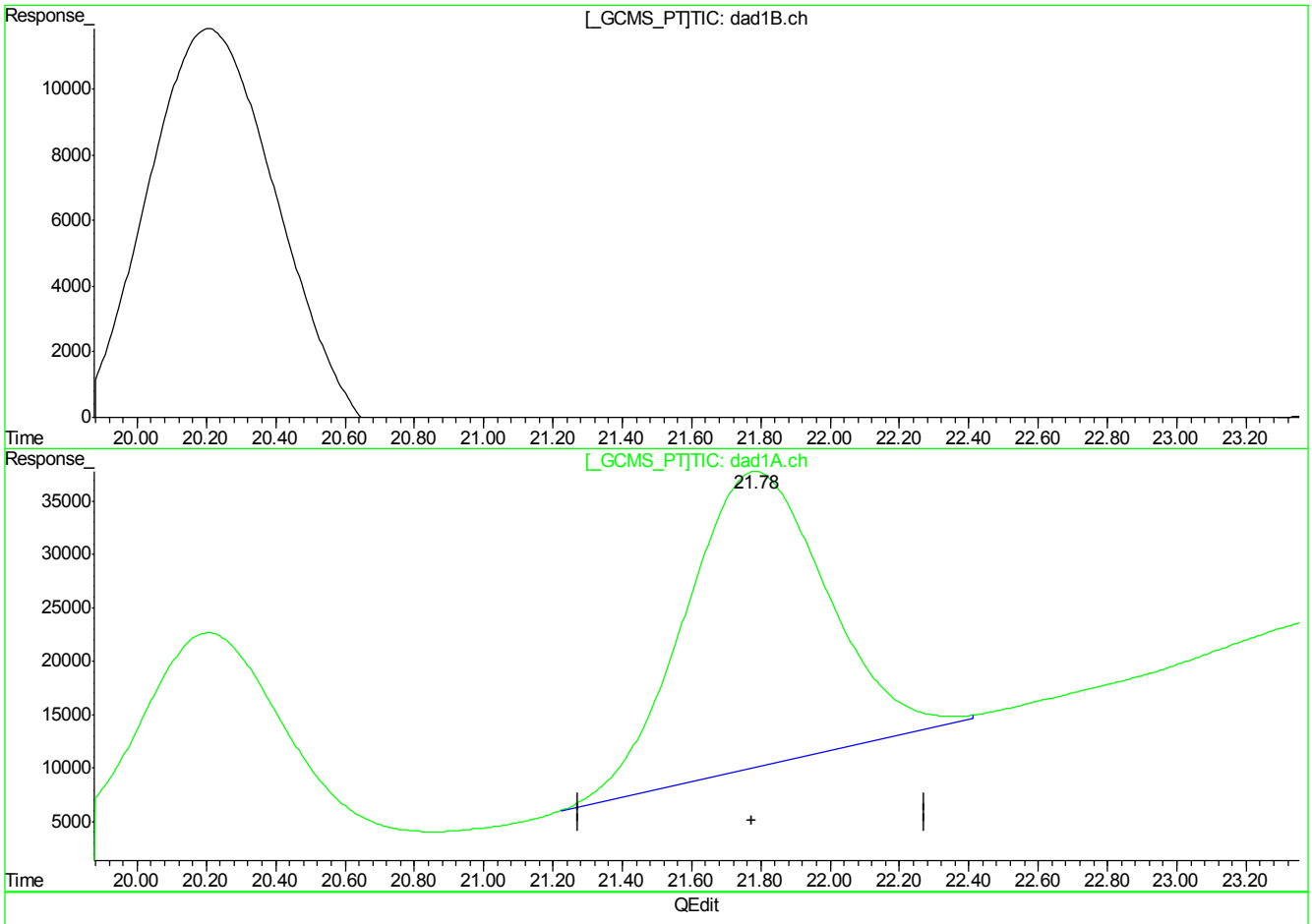
response 9137500

(+) = Expected Retention Time
GG614592.D 8330RPB.M_1113M.M Tue May 08 11:14:40 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614592.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0507RPB3\GG614592.D\dad1A.ch
Acq On : 07-May-2018, 18:19:52 Operator: evitam
Sample : op69919-ms Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 2457.277ppb m

response 7881481

(+) = Expected Retention Time
GG614592.D 8330RPB.M_1113M.M Tue May 08 11:14:44 2018

7.5.3.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:15

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614593.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0507RPB3\GG614593.D\dad1A.ch
Acq On : 07-May-2018, 18:49:22 Operator: evitam
Sample : op69919-msd Inst : G1315B
Misc : op69919,Ggg2625,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:16:41 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:16:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.58	14.58	2198475	5622944	423.200	519.795
	Spiked Amount 500.000	Range 69 - 134		Recovery =		84.64%	103.96%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	5.53	5.53	1770719	1772754	546.200m	550.245m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.61	7.61	4392461	4432813	423.917	427.855
6)	RDX	8.12	8.12	2156679	2288762	452.687	482.541
7)	1,3-Dinitrobenze	10.13	10.13	6109196	4766323	427.011	370.587
8)	Nitrobenzene	11.12	11.12	4199232	4325833	444.956	467.107
9)	2,4,6-Trinitroto	11.89	11.89	4477968	6546599	441.862	499.174
10)	Nitroglycerin	0.00	12.67	0	28175784	N.D. d	8361.395
11)	Tetryl	13.24	13.23	3296952	6672389	406.837	473.718
13)	2,6-Dinitrotolue	14.90	14.89	3433961	5769371	480.301	568.632
14)	2,4-Dinitrotolue	15.59	15.59	8859607	7751930	675.837	821.486
15)	o-Nitrotoluene	17.17	17.16	2782656	4325932	481.713	501.637
16)	3,5-Dinitroanili	16.54	16.54	4867495	9139456	497.722	562.319
17)	p-Nitrotoluene	18.33	18.34	5024257	9084146	427.874	428.636
18)	4-Amino-2,6-Dini	18.33	18.34	5024257	9084146	427.874	427.389
19)	m-Nitrotoluene	19.54	19.54	2634839	4151639	446.933	426.930
20)	2-Amino-4,6-Dini	20.51	20.51	3801813	4874773	421.350	412.472
21)	PETN	0.00	22.06	0	7622601	N.D. d	2376.563m

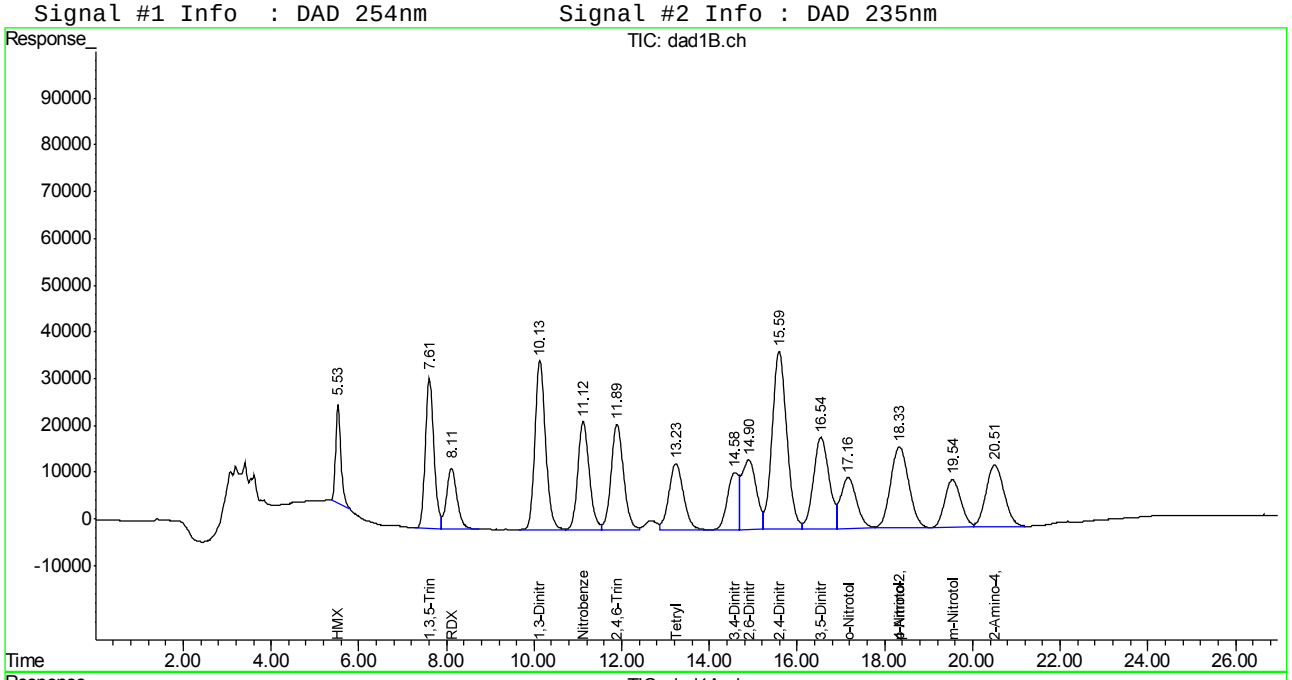
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614593.D 8330RPB.M_1113M.M Tue May 08 11:19:02 2018 Page 1

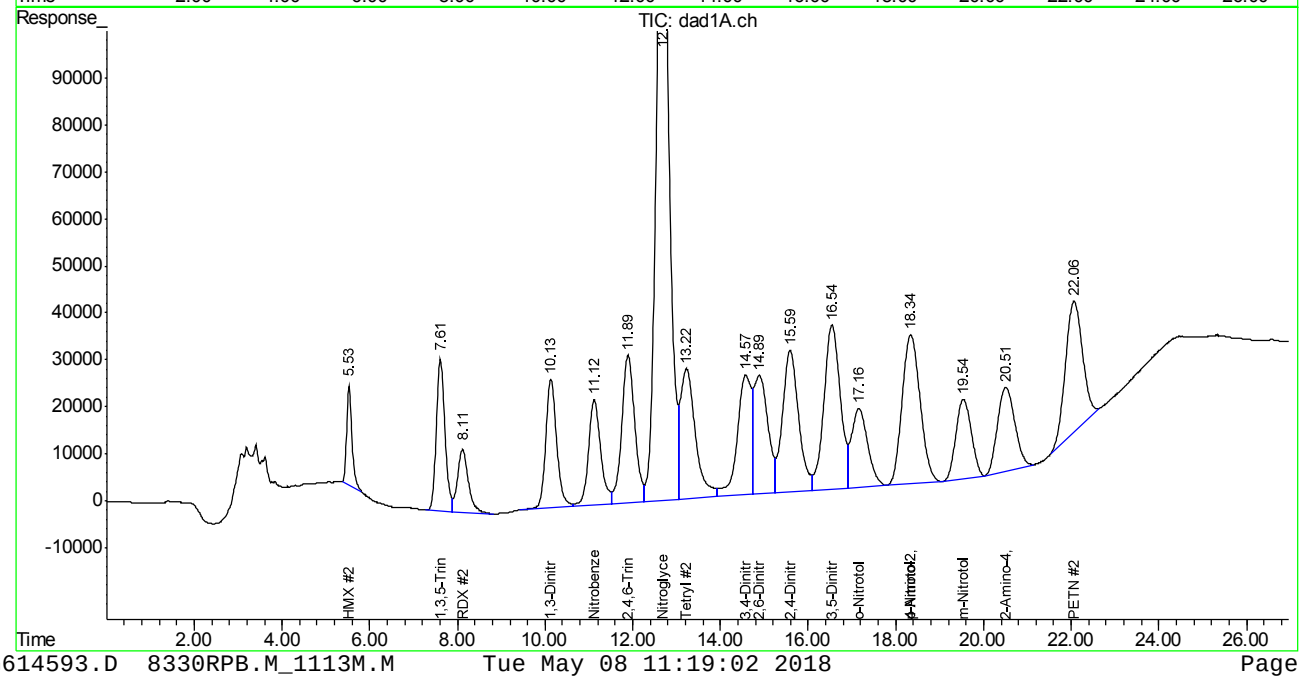
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614593.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0507RPB3\GG614593.D\dad1A.ch
Acq On : 07-May-2018, 18:49:22 Operator: evitam
Sample : op69919-msd Inst : G1315B
Misc : op69919,Ggg2625,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:16:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

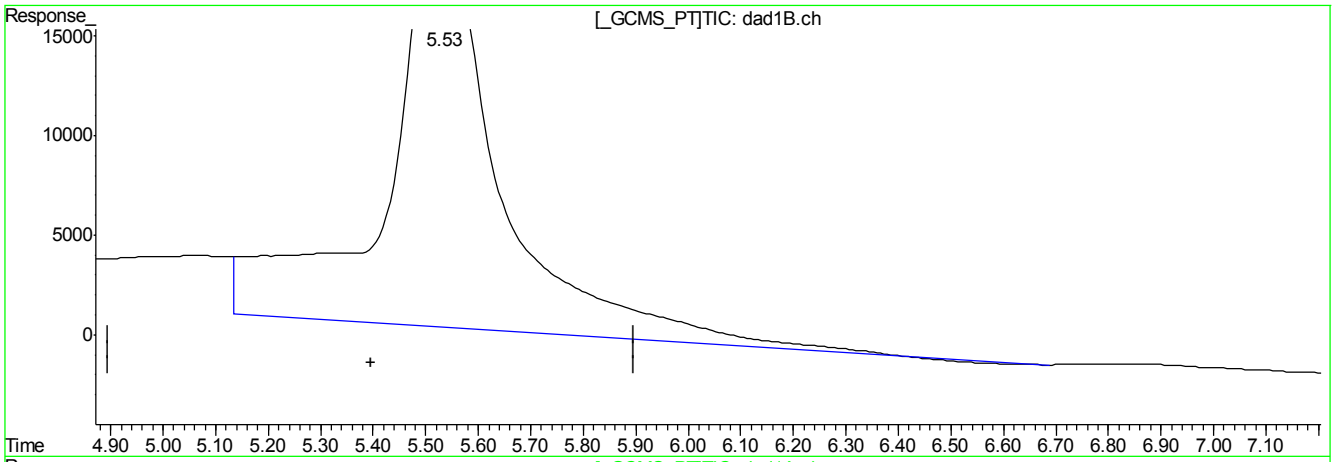
Sample Number:	OP69919-MSD	**Method:**	SW846 8330B
Lab FileID:	GG614593.D	**Analyst approved:**	05/08/18 11:23 Evita Martinez
Injection Time:	05/07/18 18:49	**Supervisor approved:**	05/08/18 16:15 Mike Eger

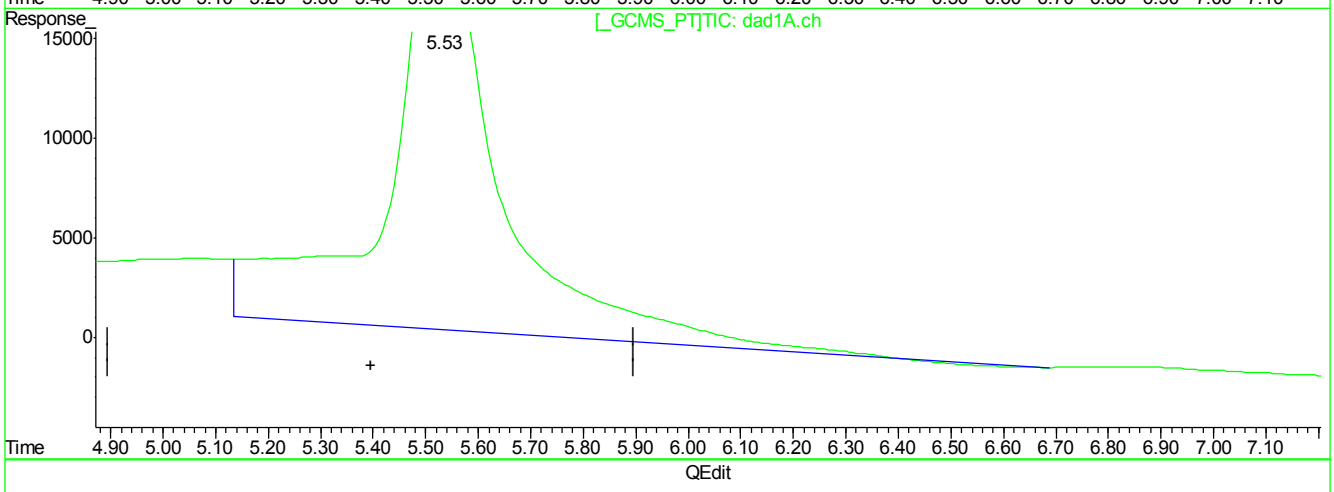
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.53	Poorly defined baseline
HMX	2691-41-0	2	5.53	Poorly defined baseline
PETN	78-11-5	2	22.06	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614593.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0507RPB3\GG614593.D\dad1A.ch
Acq On : 07-May-2018, 18:49:22 Operator: evitam
Sample : op69919-msd Inst : G1315B
Misc : op69919,Ggg2625,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.53min 977.002ppb

response 3167329

(2) HMX #2

5.53min 983.107ppb

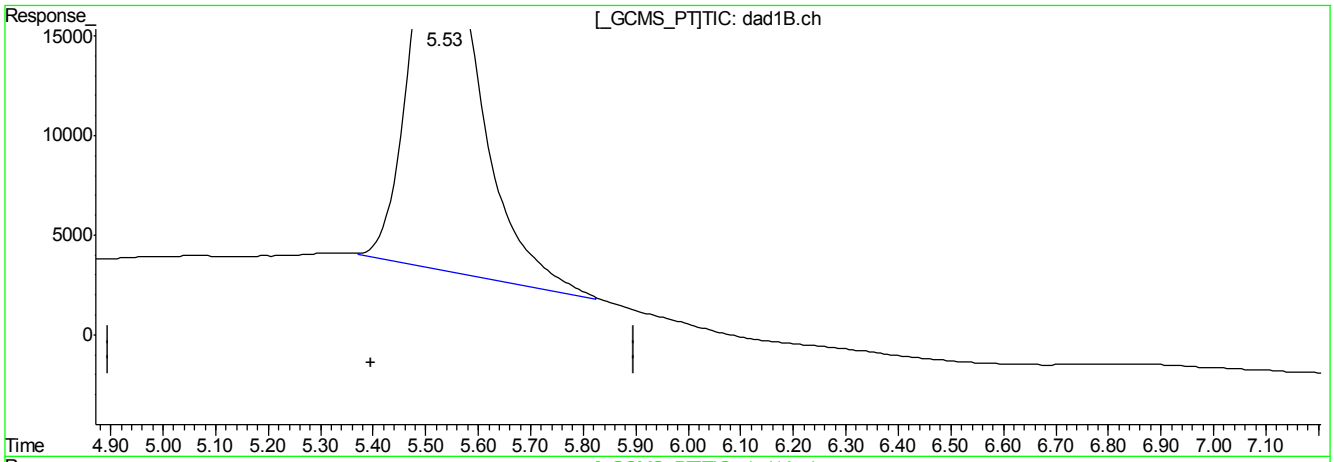
response 3167329

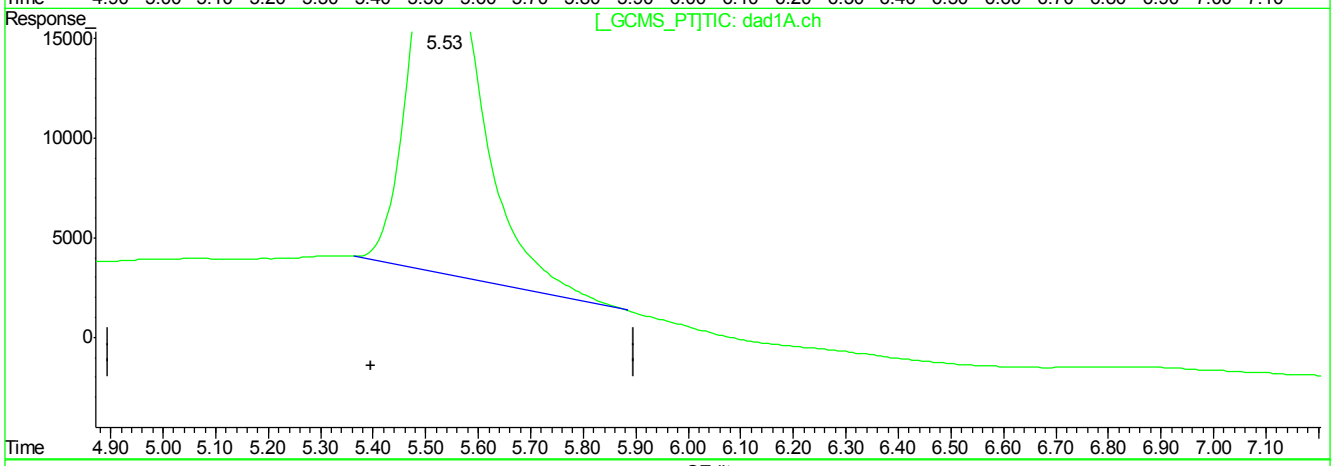
(+) = Expected Retention Time
GG614593.D 8330RPB.M_1113M.M Tue May 08 11:15:00 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614593.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0507RPB3\GG614593.D\dad1A.ch
Acq On : 07-May-2018, 18:49:22 Operator: evitam
Sample : op69919-msd Inst : G1315B
Misc : op69919,Ggg2625,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.53min 552.052ppb m

response 1789692

(2) HMX #2

5.53min 561.012ppb m

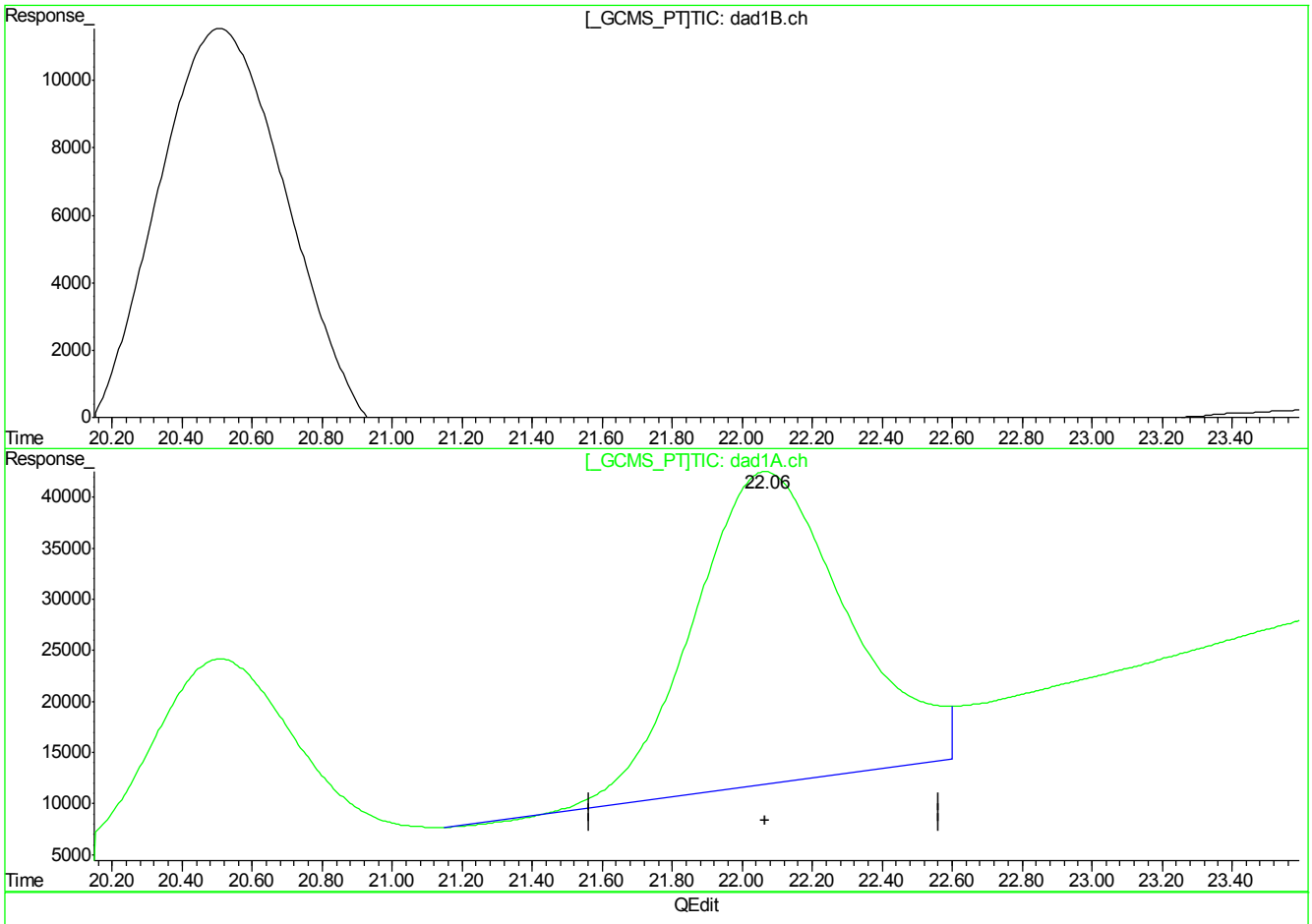
response 1807444

(+) = Expected Retention Time
GG614593.D 8330RPB.M_1113M.M Tue May 08 11:15:04 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614593.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0507RPB3\GG614593.D\dad1A.ch
Acq On : 07-May-2018, 18:49:22 Operator: evitam
Sample : op69919-msd Inst : G1315B
Misc : op69919,Ggg2625,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:16 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:16:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.07min 2885.522ppb

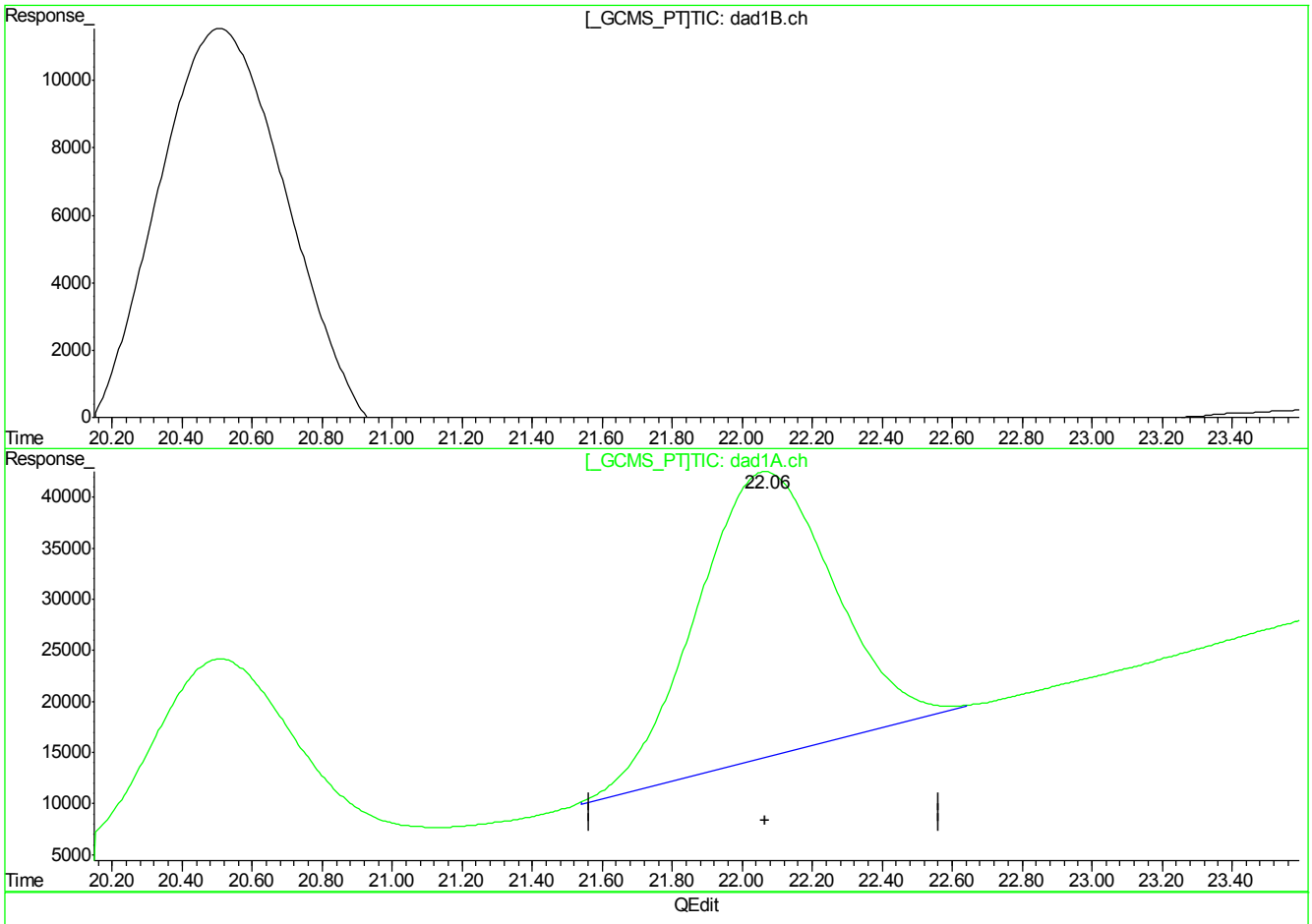
response 9255039

(+) = Expected Retention Time
GG614593.D 8330RPB.M_1113M.M Tue May 08 11:17:02 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614593.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0507RPB3\GG614593.D\dad1A.ch
Acq On : 07-May-2018, 18:49:22 Operator: evitam
Sample : op69919-msd Inst : G1315B
Misc : op69919,Ggg2625,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:16 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:16:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.06min 2376.563ppb m

response 7622601

(+) = Expected Retention Time
GG614593.D 8330RPB.M_1113M.M Tue May 08 11:17:05 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/09/18 15:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1A.ch
Acq On : 08-May-2018, 12:31:10 Operator: evitam
Sample : op69921-ms Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 13:00:15 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.19	10.19	1038916	1763066	388.278	373.947
	Spiked Amount 500.000	Range 69 - 134		Recovery =		77.66%	74.79%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.43	1.44	663442	1955613	354.762	384.788
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.73	2.73	865948	1333810	404.954	401.267
6)	1,3,5-Trinitrobe	4.38	4.38	1817512	3485388	417.694	417.508
7)	1,3-Dinitrobenze	5.53	5.53	2296581	1913769	414.248	513.849m
8)	3,5-Dinitroanili	5.81	5.81	2046653	3692527	418.506	493.733m
9)	Nitrobenzene	7.03	7.03	1483912	1388753	407.242	418.823
10)	Nitroglycerin	0.00	8.35	0	2694336	N.D. d	2102.603
11)	Tetryl	8.60	8.59	1312540	2202267	445.960	424.021
12)	2,4,6-Trinitroto	9.04	9.04	1677673	1992343	397.538	439.545
13)	2-Amino-4,6-Dini	9.27	9.28	1587139	2441902	419.269	455.253
14)	4-Amino-2,6-Dini	9.71	9.71	1104430	2204855	421.604	425.495
16)	2,4-Dinitrotolue	10.83	10.83	2125027	1263471	403.920	427.827
17)	2,6-Dinitrotolue	11.28	11.28	1353862	1616479	391.712	473.397
18)	o-Nitrotoluene	14.54	14.54	1055382	1445996	422.518	441.424m
19)	p-Nitrotoluene	15.11	15.11	1595286	1321411	404.173	419.507
20)	m-Nitrotoluene	16.09	16.10	1525475	1857764	427.639	461.685
21)	PETN	0.00	18.42	0	2835619	N.D. d	2041.731m

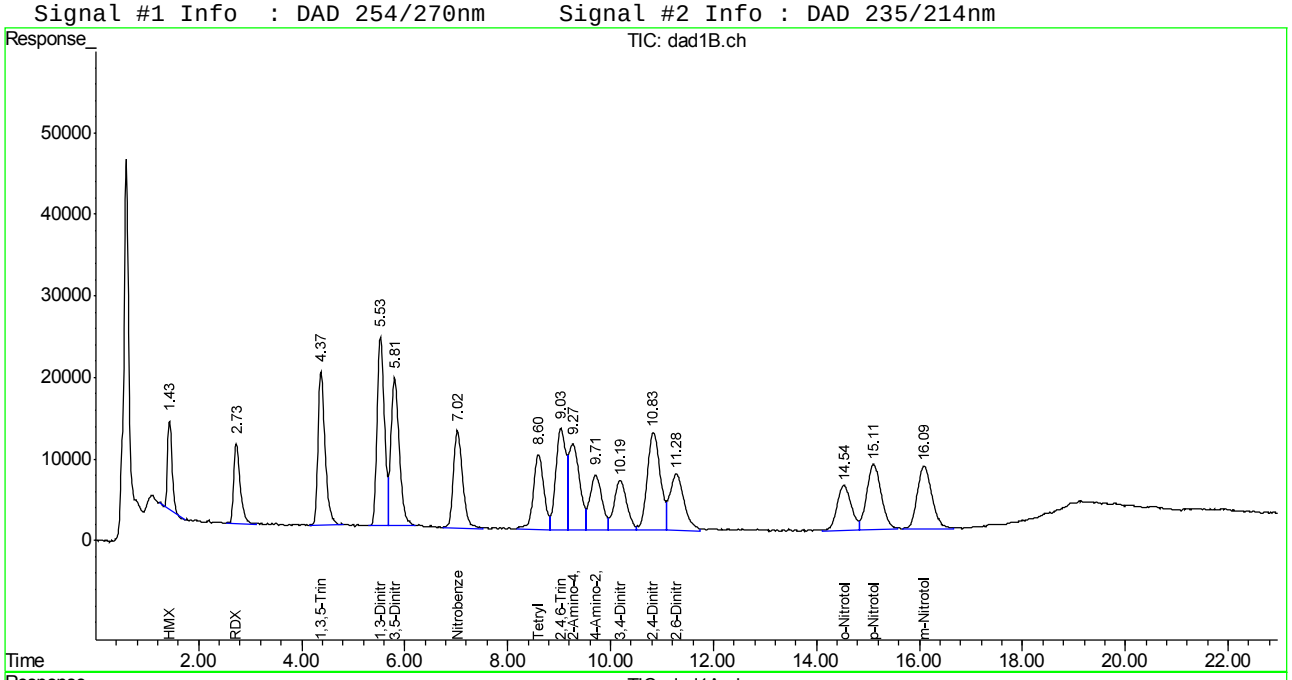
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059603.D 8330B_0419PLUS.M Wed May 09 09:48:44 2018 Page 1

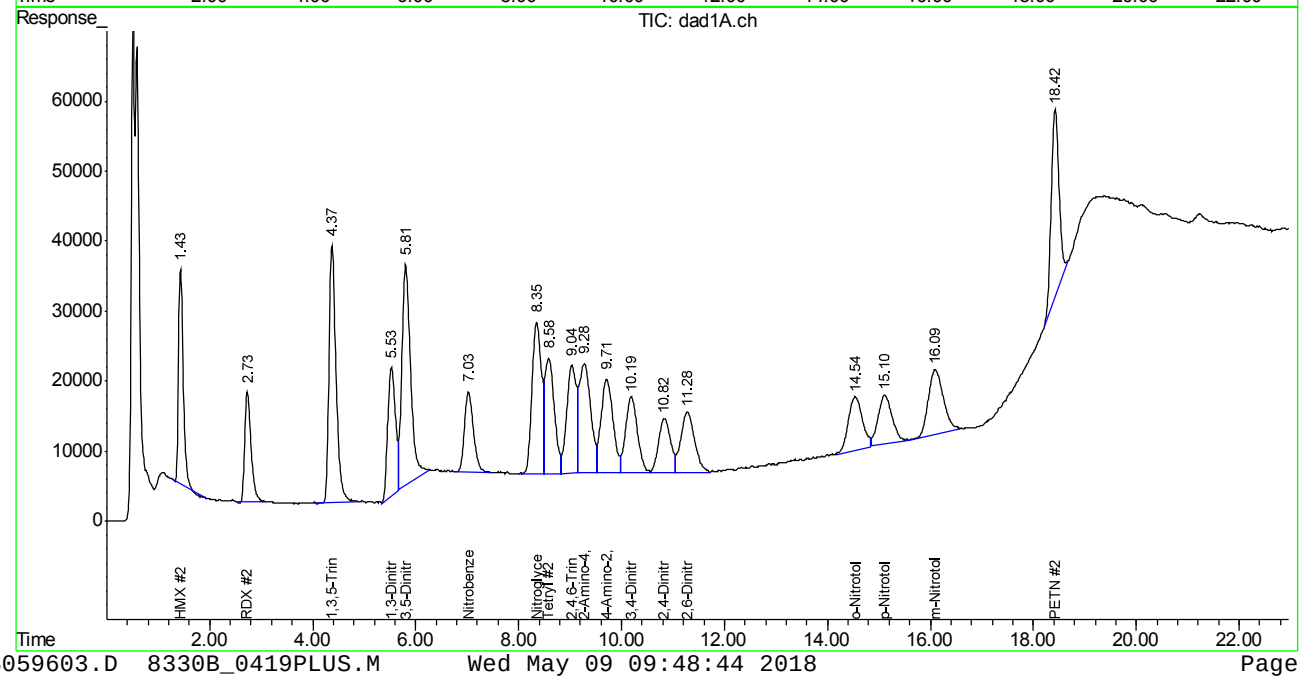
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1A.ch
Acq On : 08-May-2018, 12:31:10 Operator: evitam
Sample : op69921-ms Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 9:48 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

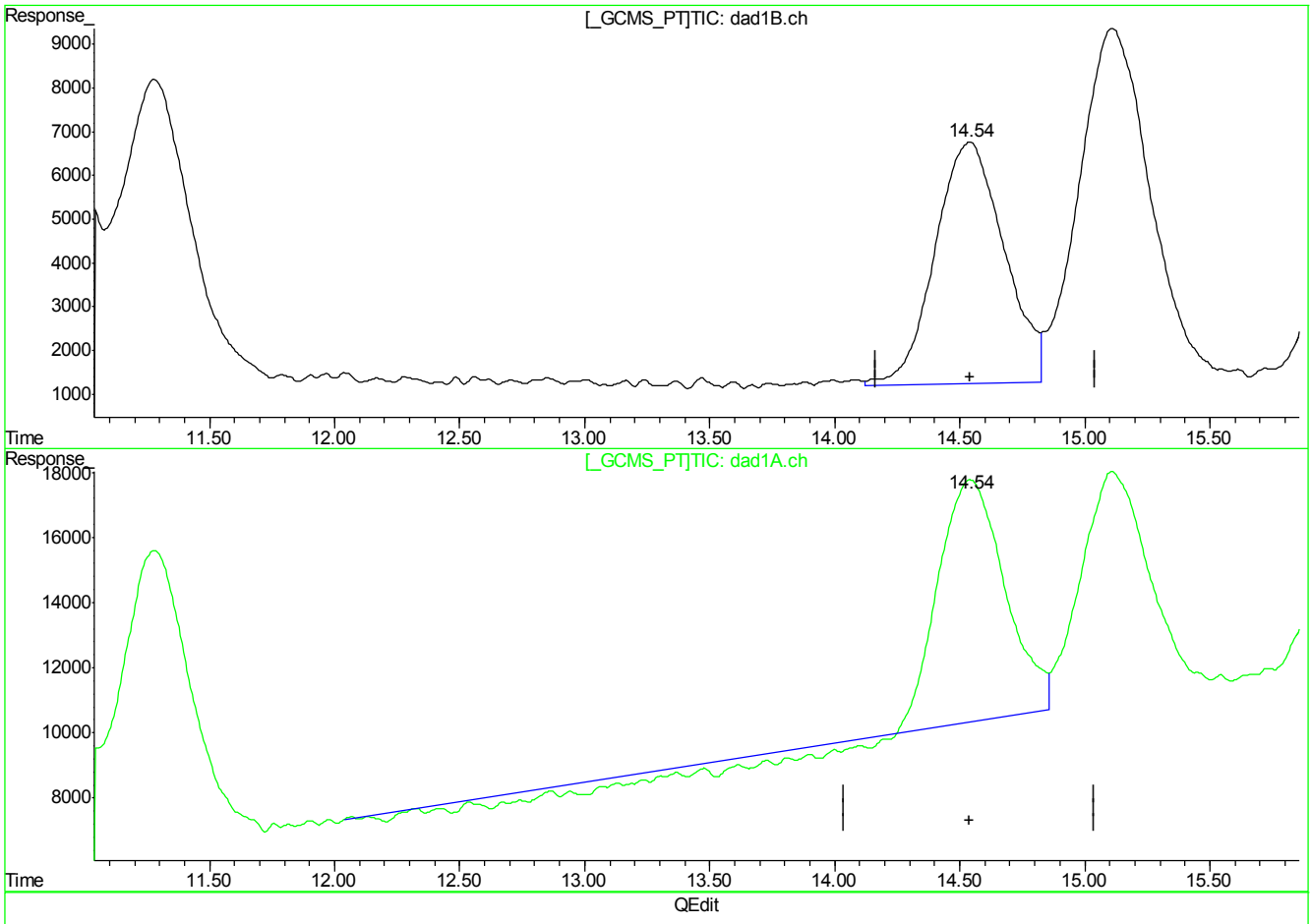
Sample Number:	OP69921-MS	**Method:**	SW846 8330B
Lab FileID:	BB059603.D	**Analyst approved:**	05/09/18 09:51 Evita Martinez
Injection Time:	05/08/18 12:31	**Supervisor approved:**	05/09/18 15:58 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	5.53	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	5.81	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.54	Poorly defined baseline
PETN	78-11-5	2	18.42	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1A.ch
Acq On : 08-May-2018, 12:31:10 Operator: evitam
Sample : op69921-ms Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 13:00 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.54min 422.518ppb

response 1055382

(18) o-Nitrotoluene #2

14.54min 328.996ppb

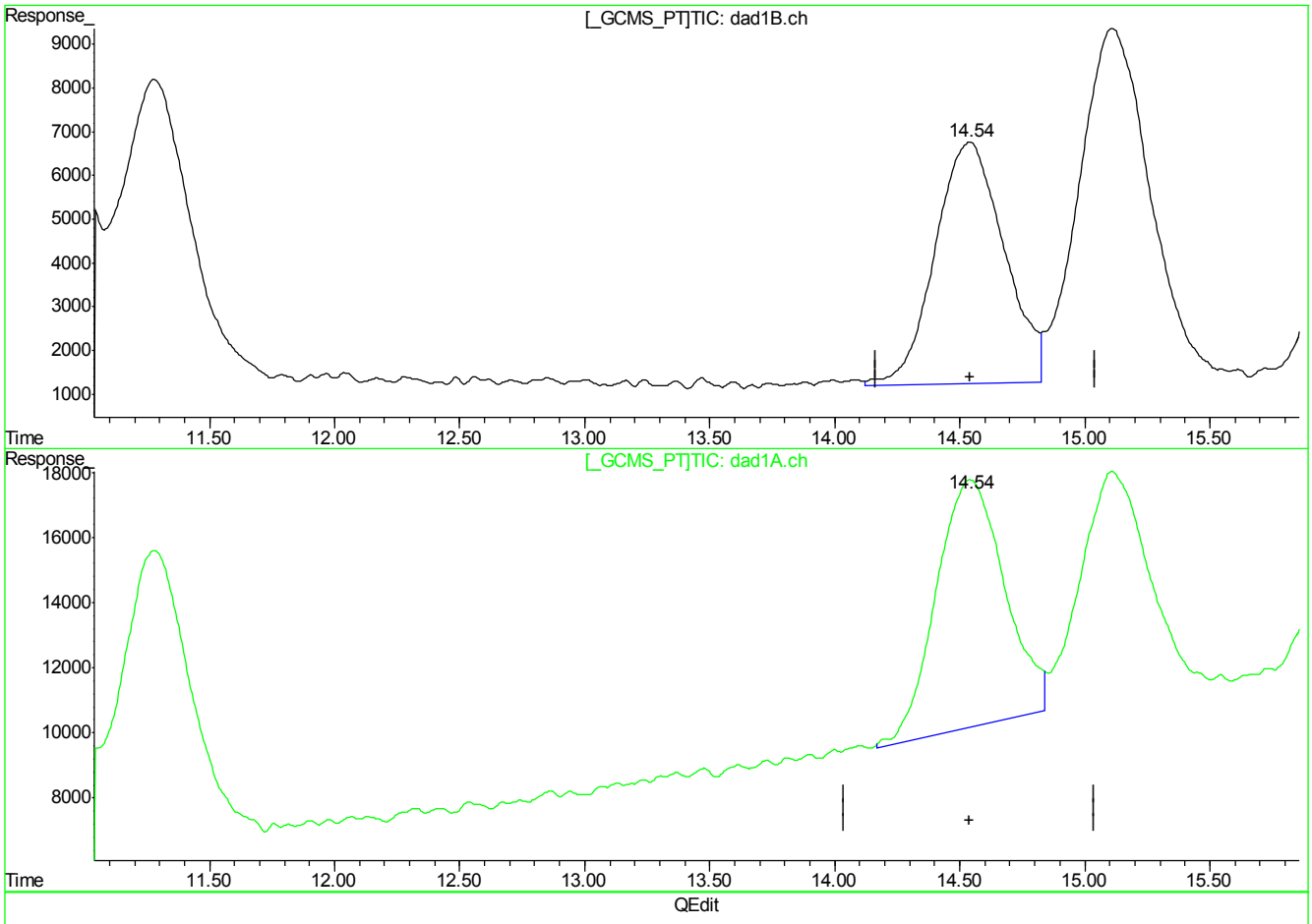
response 1077707

(+) = Expected Retention Time
BB059603.D 8330B_0419PLUS.M Tue May 08 14:09:45 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1A.ch
Acq On : 08-May-2018, 12:31:10 Operator: evitam
Sample : op69921-ms Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 13:00 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.54min 422.518ppb

response 1055382

(18) o-Nitrotoluene #2

14.54min 441.424ppb m

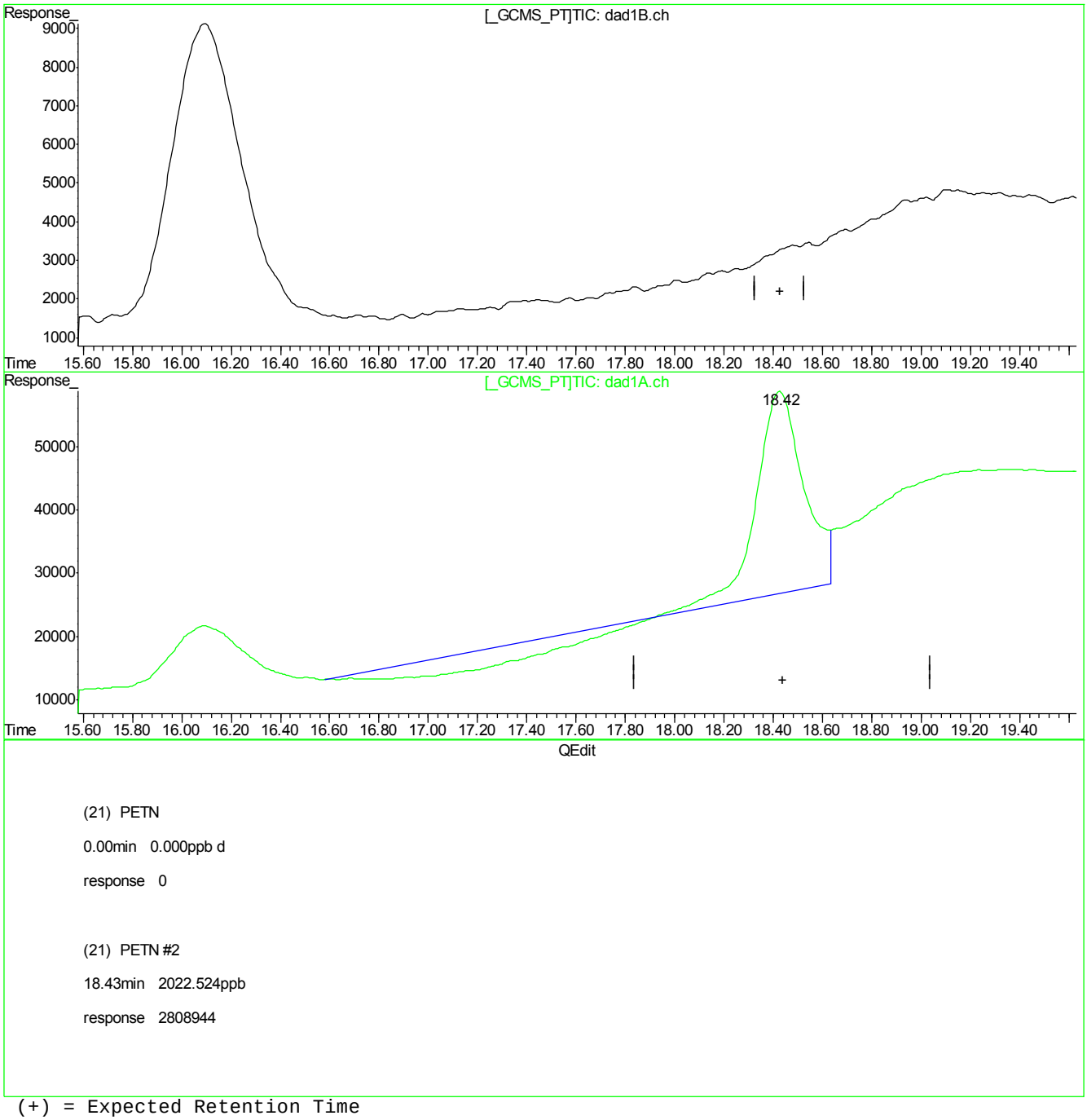
response 1445996

(+) = Expected Retention Time
BB059603.D 8330B_0419PLUS.M Tue May 08 14:09:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1A.ch
Acq On : 08-May-2018, 12:31:10 Operator: evitam
Sample : op69921-ms Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 13:00 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration

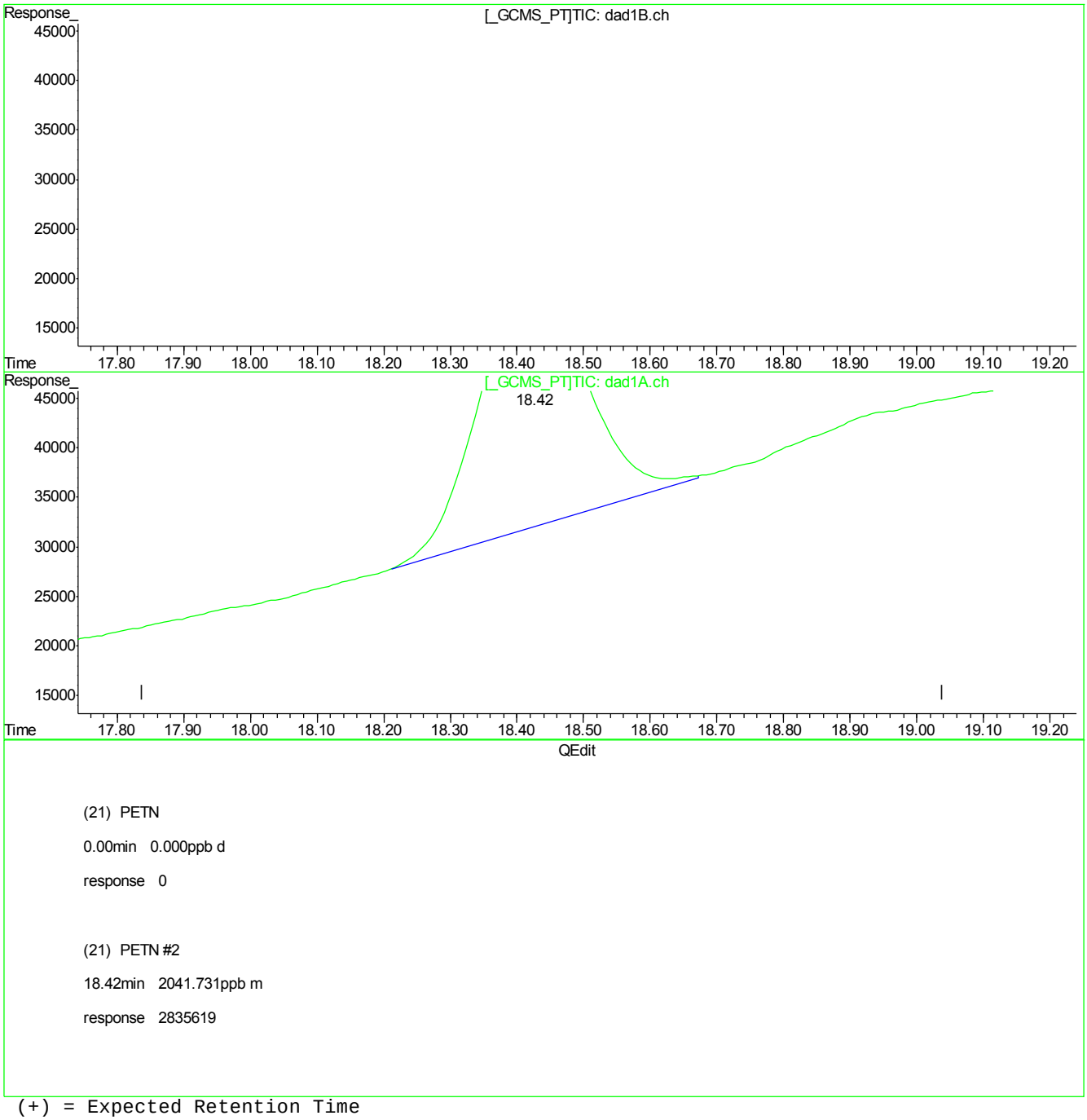


(+) = Expected Retention Time
BB059603.D 8330B_0419PLUS.M Tue May 08 14:09:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1A.ch
Acq On : 08-May-2018, 12:31:10 Operator: evitam
Sample : op69921-ms Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 13:00 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 2041.731ppb m

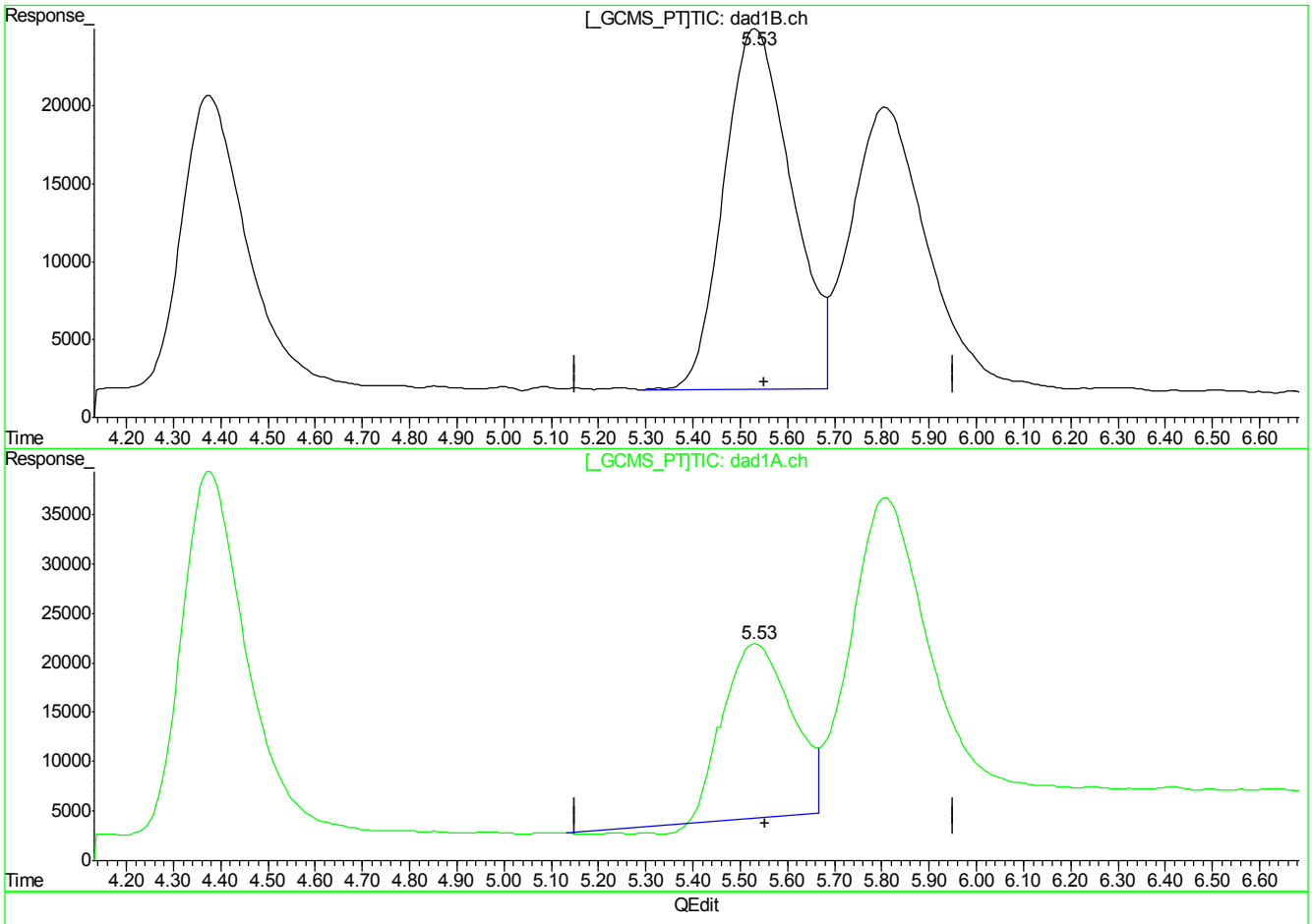
response 2835619

(+) = Expected Retention Time
BB059603.D 8330B_0419PLUS.M Tue May 08 14:10:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1A.ch
Acq On : 08-May-2018, 12:31:10 Operator: evitam
Sample : op69921-ms Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.53min 414.248ppb

response 2296581

(7) 1,3-Dinitrobenzene #2

5.53min 456.255ppb

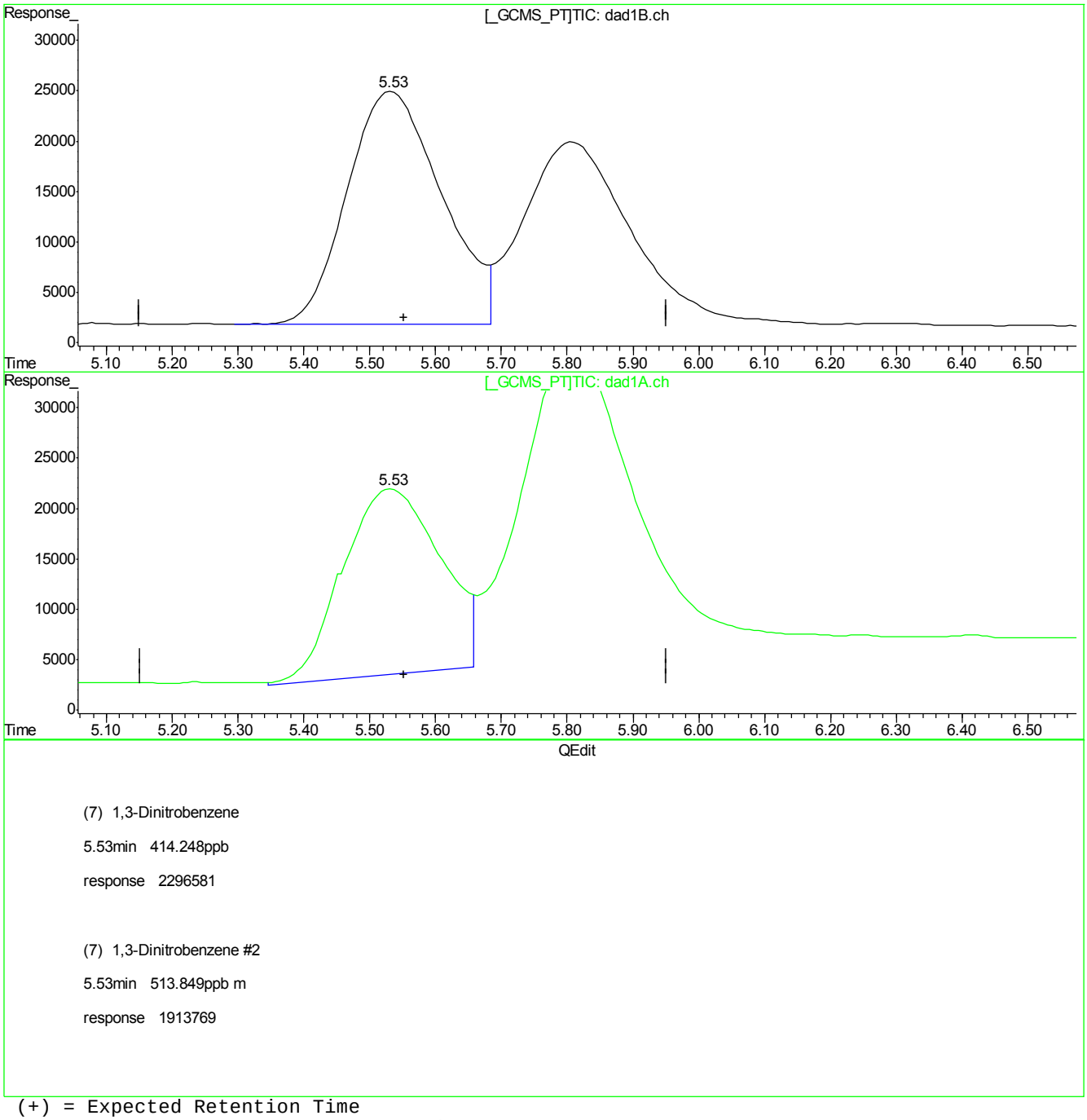
response 1699268

(+) = Expected Retention Time
BB059603.D 8330B_0419PLUS.M Wed May 09 09:48:02 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059603.D\dad1A.ch
Acq On : 08-May-2018, 12:31:10 Operator: evitam
Sample : op69921-ms Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059603.D 8330B_0419PLUS.M Wed May 09 09:48:08 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:16

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614609.D\dad1B.ch Vial: 31
Signal #2 : G:\DATA\0508RPB3\GG614609.D\dad1A.ch
Acq On : 08-May-2018, 12:55:25 Operator: evitam
Sample : op69920-ms Inst : G1315B
Misc : op69920,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:55 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.26	14.26	2566778	5313924	494.097	491.228
	Spiked Amount 500.000	Range 69 - 134		Recovery =		98.82%	98.25%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.40	5.40	1910243	1889817	589.238m	586.580m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.46	7.46	4697574	4706273	453.364	454.250
6)	RDX	7.91	7.91	2200392	2233892	461.862	470.972
7)	1,3-Dinitrobenze	9.94	9.94	6472868	5802821	452.431	454.493
8)	Nitrobenzene	10.90	10.90	4258748	5041218	451.262	544.355
9)	2,4,6-Trinitroto	11.67	11.67	4624484	6877370	456.320	524.395
10)	Nitroglycerin	0.00	12.41	0	8296855	N.D. d	2462.160
11)	Tetryl	12.93	12.92	3521612	6654318	434.560	472.425
13)	2,6-Dinitrotolue	14.63	14.62	3356075	4780614	469.407	471.180
14)	2,4-Dinitrotolue	15.34	15.34	5991012	4341727	457.012	456.132
15)	o-Nitrotoluene	16.88	16.88	2798674	4401438	484.485	510.393
16)	3,5-Dinitroanili	16.27	16.27	5315258	9013501	543.170	554.627
17)	p-Nitrotoluene	18.02	18.02	5446177	10100159	463.806	476.576
18)	4-Amino-2,6-Dini	18.02	18.02	5446177	10100159	463.806	475.190
19)	m-Nitrotoluene	19.25	19.25	2904127	4732855	492.611	486.699
20)	2-Amino-4,6-Dini	20.16	20.16	4323330	5765054	479.150	485.463
21)	PETN	0.00	21.77	0	7719632	N.D. d	2406.816m

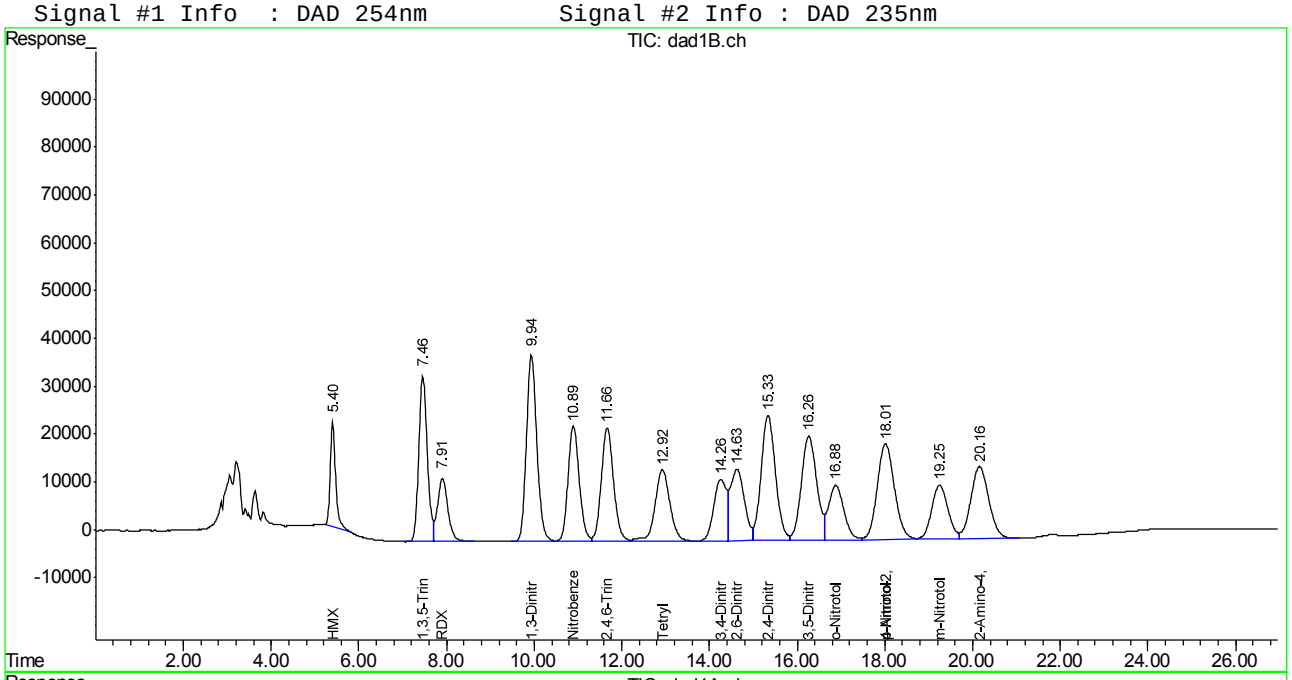
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614609.D 8330RPB.M_1113M.M Tue May 08 14:41:54 2018 Page 1

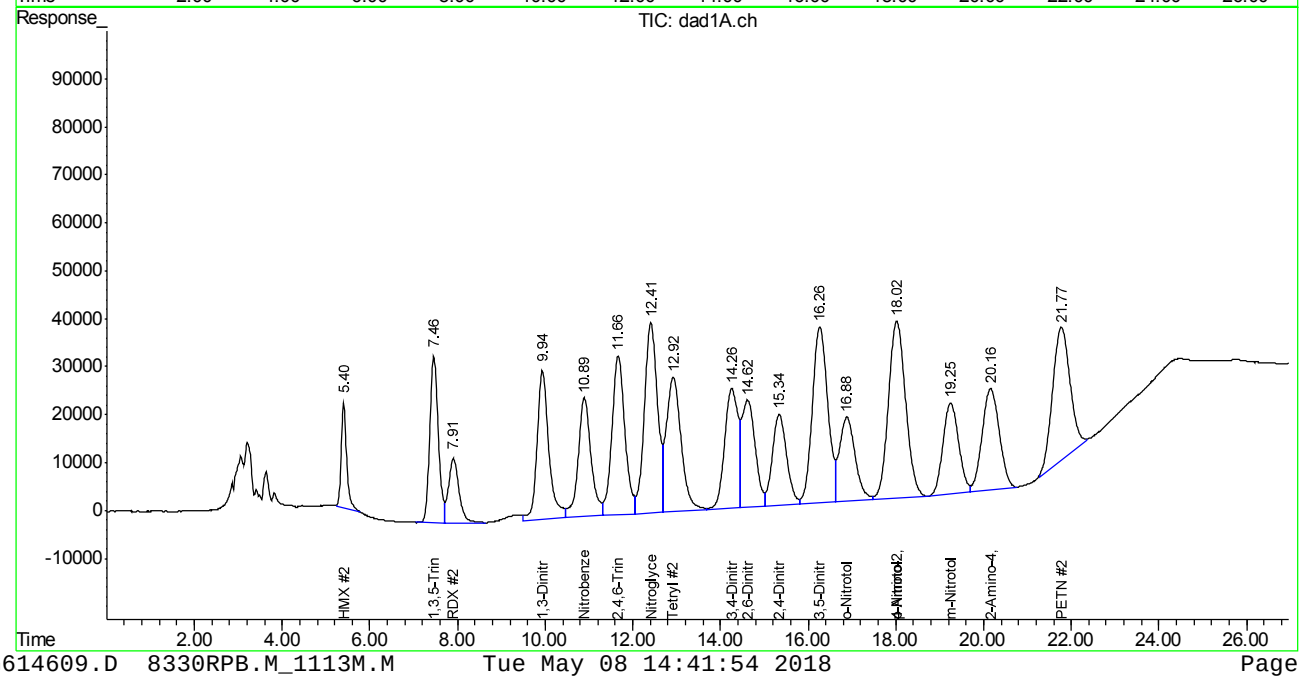
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614609.D\dad1B.ch Vial: 31
Signal #2 : G:\DATA\0508RPB3\GG614609.D\dad1A.ch
Acq On : 08-May-2018, 12:55:25 Operator: evitam
Sample : op69920-ms Inst : G1315B
Misc : op69920,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

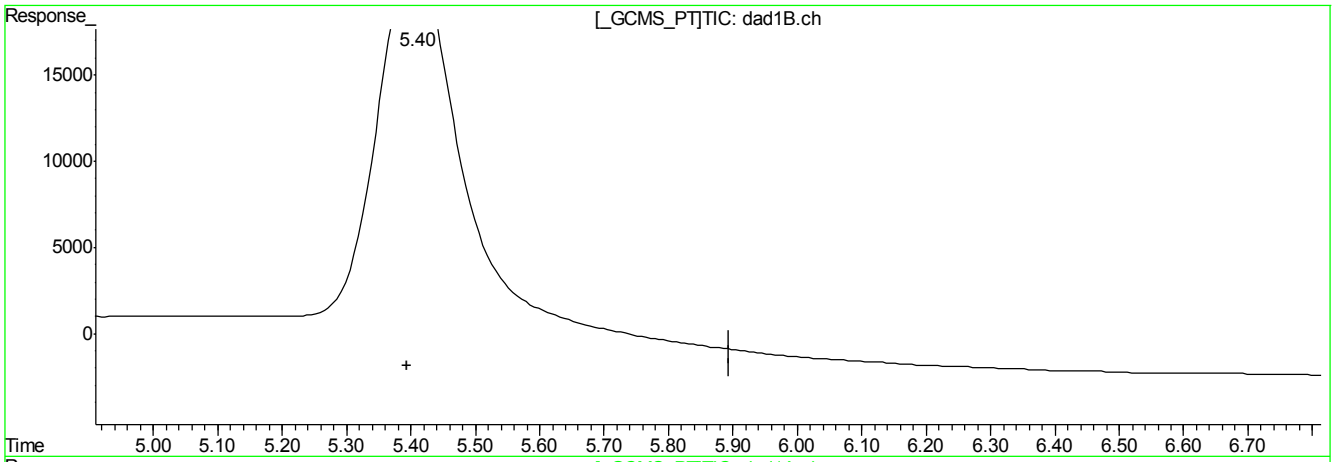
Sample Number:	OP69920-MS	**Method:**	SW846 8330B
Lab FileID:	GG614609.D	**Analyst approved:**	05/08/18 14:53 Evita Martinez
Injection Time:	05/08/18 12:55	**Supervisor approved:**	05/08/18 16:16 Mike Eger

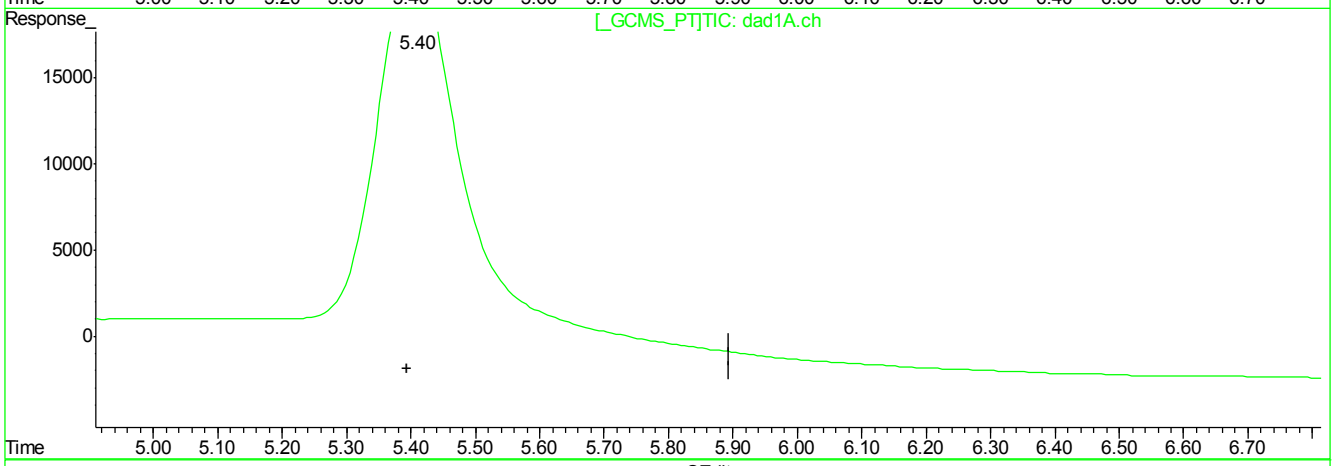
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.40	Poorly defined baseline
HMX	2691-41-0	2	5.40	Poorly defined baseline
PETN	78-11-5	2	21.77	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614609.D\dad1B.ch Vial: 31
Signal #2 : G:\DATA\0508RPB3\GG614609.D\dad1A.ch
Acq On : 08-May-2018, 12:55:25 Operator: evitam
Sample : op69920-ms Inst : G1315B
Misc : op69920,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.41min 688.275ppb

response 2231309

(2) HMX #2

5.41min 692.576ppb

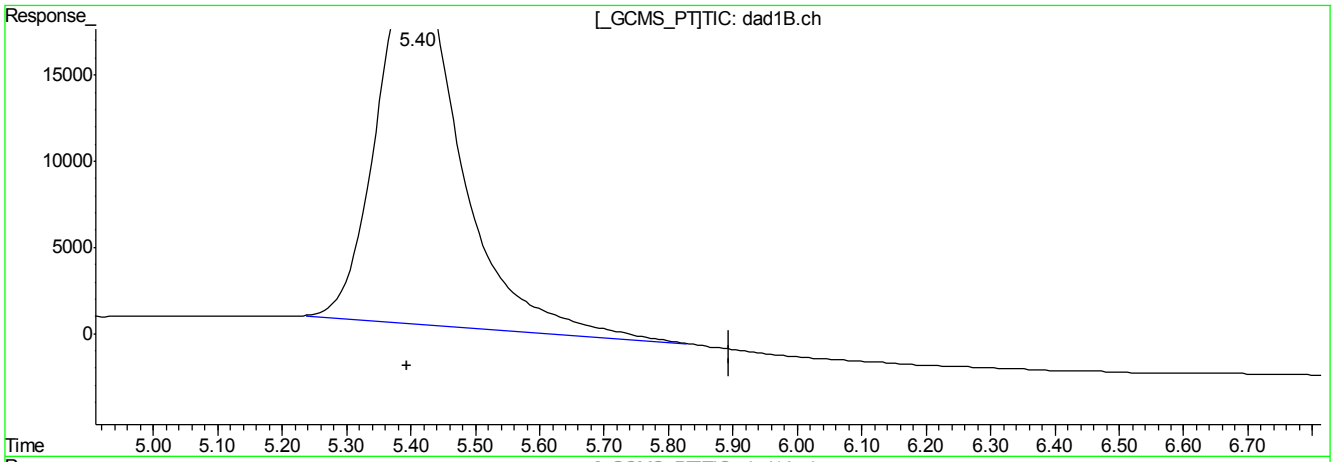
response 2231309

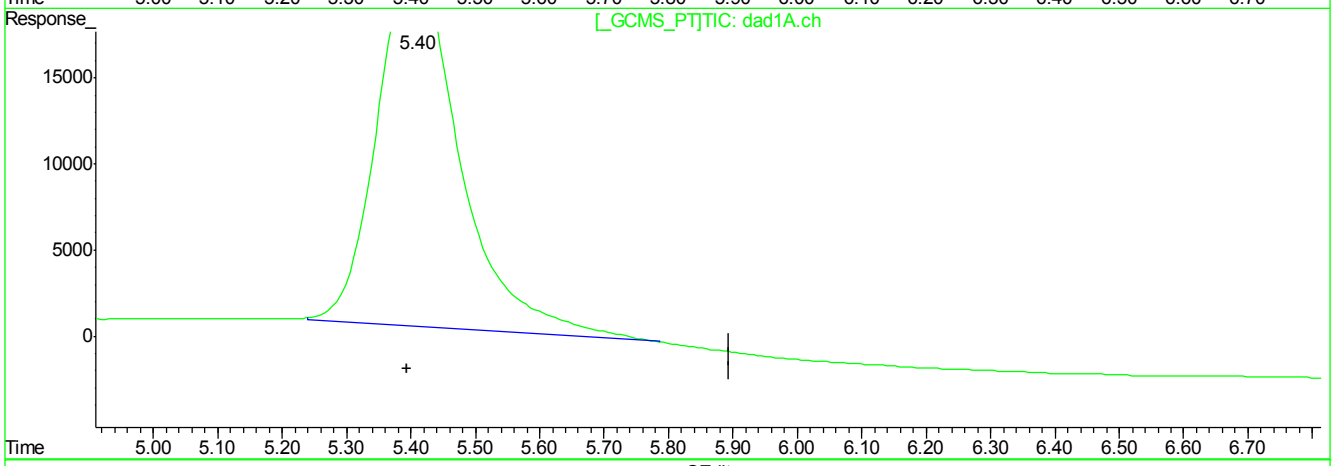
(+) = Expected Retention Time
GG614609.D 8330RPB.M_1113M.M Tue May 08 14:40:10 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614609.D\dad1B.ch Vial: 31
Signal #2 : G:\DATA\0508RPB3\GG614609.D\dad1A.ch
Acq On : 08-May-2018, 12:55:25 Operator: evitam
Sample : op69920-ms Inst : G1315B
Misc : op69920,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.40min 589.238ppb m

response 1910243

(2) HMX #2

5.40min 586.580ppb m

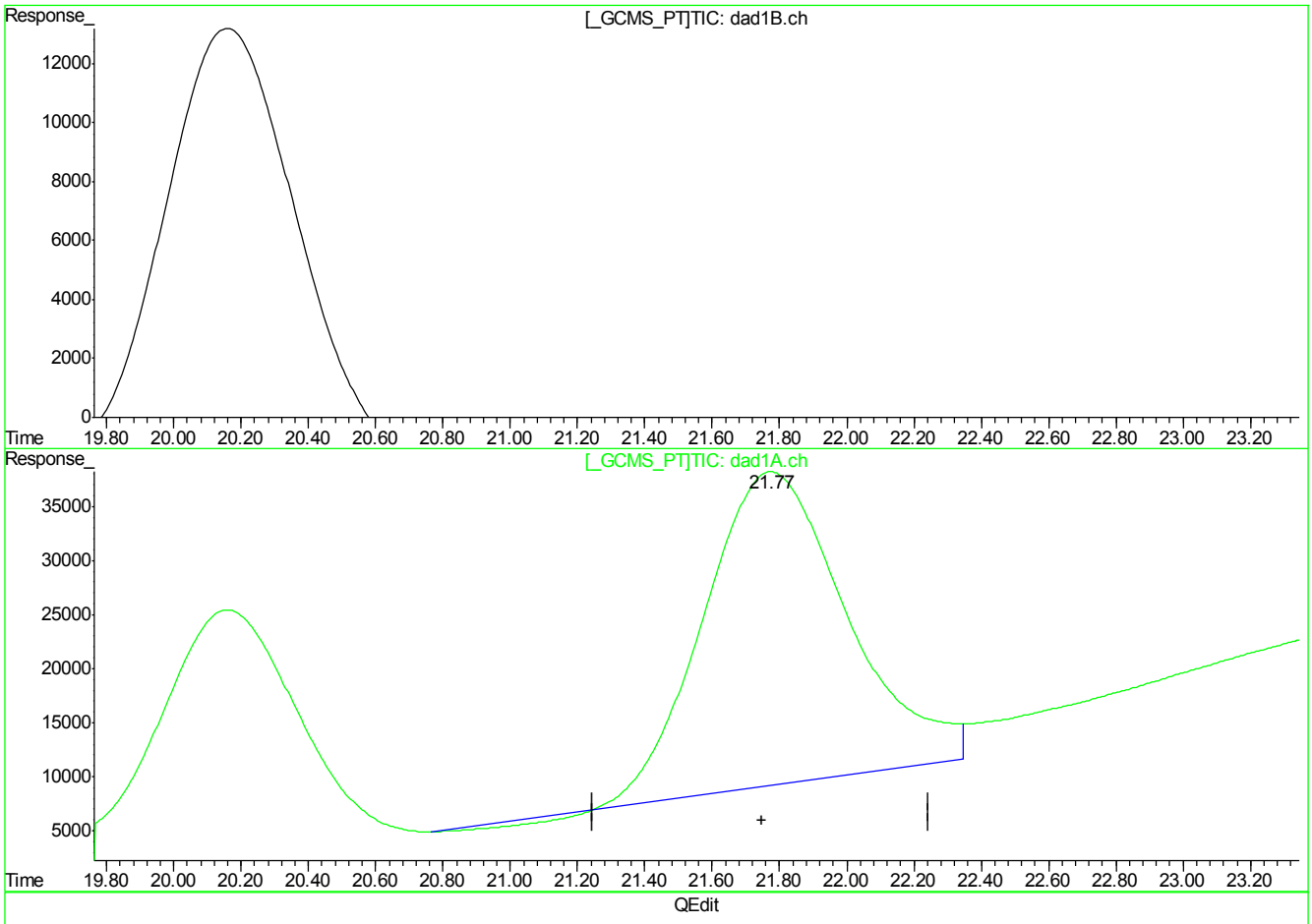
response 1889817

(+) = Expected Retention Time
GG614609.D 8330RPB.M_1113M.M Tue May 08 14:40:16 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614609.D\dad1B.ch Vial: 31
Signal #2 : G:\DATA\0508RPB3\GG614609.D\dad1A.ch
Acq On : 08-May-2018, 12:55:25 Operator: evitam
Sample : op69920-ms Inst : G1315B
Misc : op69920,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 2648.831ppb

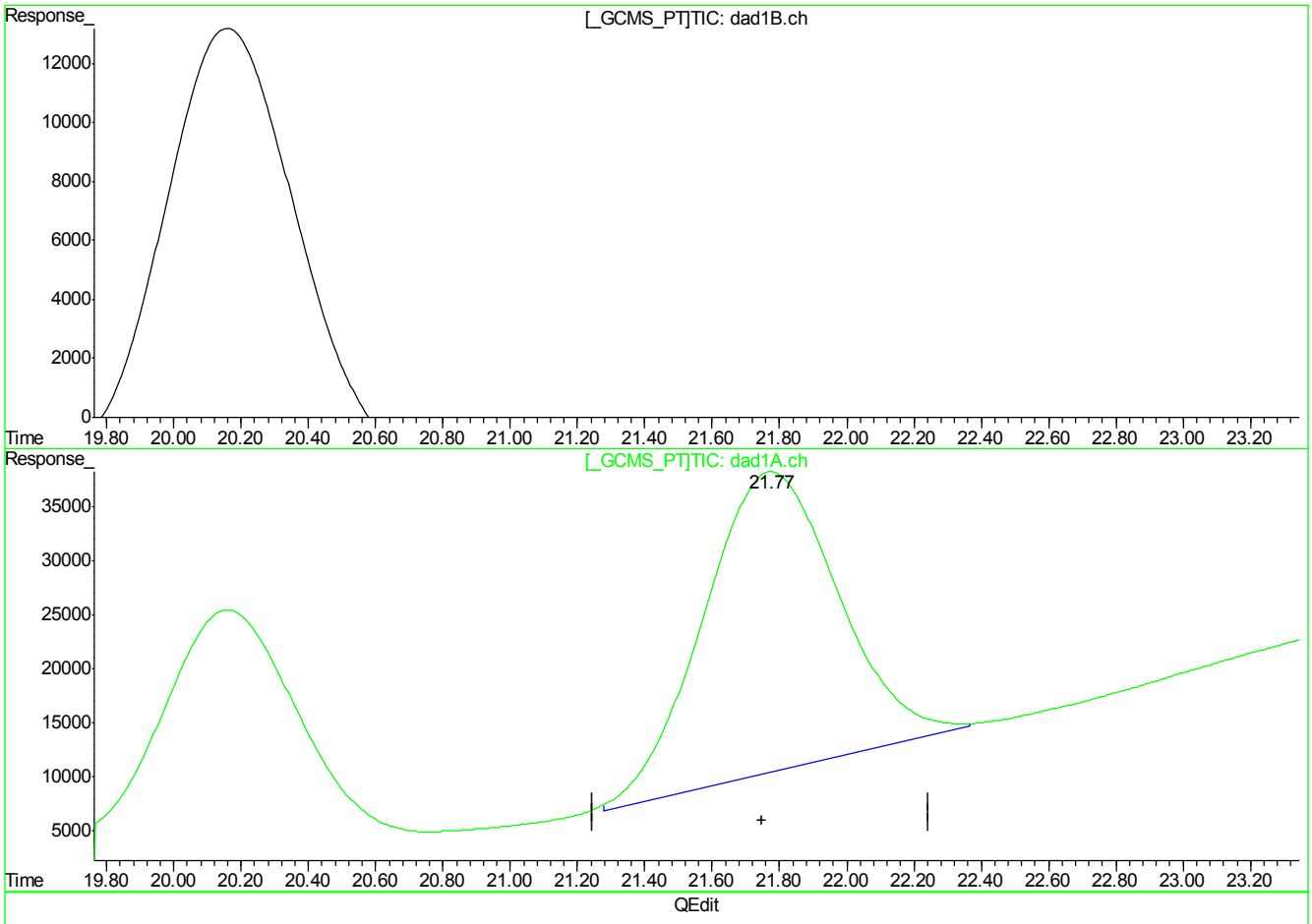
response 8495874

(+) = Expected Retention Time
GG614609.D 8330RPB.M_1113M.M Tue May 08 14:40:25 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614609.D\dad1B.ch Vial: 31
Signal #2 : G:\DATA\0508RPB3\GG614609.D\dad1A.ch
Acq On : 08-May-2018, 12:55:25 Operator: evitam
Sample : op69920-ms Inst : G1315B
Misc : op69920,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.77min 2406.816ppb m

response 7719632

(+) = Expected Retention Time
GG614609.D 8330RPB.M_1113M.M Tue May 08 14:40:29 2018

7.5.6.5

7

GG614609.D edits: PETN

FA53725

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/09/18 15:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1A.ch
Acq On : 08-May-2018, 13:01:09 Operator: evitam
Sample : op69921-msd Inst : G1315B
Misc : OP69921,gbb1729,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 14:10:19 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.22	10.22	1066696	1761353	398.660	373.583
	Spiked Amount 500.000	Range 69 - 134		Recovery =		79.73%	74.72%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.43	1.43	610566	1873484	326.488	368.594
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.73	2.73	843549	1353402	394.479	407.161
6)	1,3,5-Trinitrobe	4.38	4.38	1849727	3577088	425.098	428.492
7)	1,3-Dinitrobenze	5.54	5.54	2360536	1848534	425.784	496.334m
8)	3,5-Dinitroanili	5.82	5.82	2178518	3817051	445.470	510.383
9)	Nitrobenzene	7.04	7.04	1514303	1435304	415.583	432.862
10)	Nitroglycerin	0.00	8.36	0	2719890	N.D. d	2122.545
11)	Tetryl	8.62	8.61	1331284	2236657	452.344	430.642
12)	2,4,6-Trinitroto	9.06	9.06	1739281	2021767	412.137	446.037
13)	2-Amino-4,6-Dini	9.30	9.31	1593875	2483216	421.049	462.955
14)	4-Amino-2,6-Dini	9.74	9.74	1132942	2214409	432.417	427.339
16)	2,4-Dinitrotolue	10.85	10.86	2173240	1276181	413.084	432.130
17)	2,6-Dinitrotolue	11.30	11.31	1366391	1573580	395.337	460.834
18)	o-Nitrotoluene	14.56	14.56	1069682	1441817	428.243	440.148m
19)	p-Nitrotoluene	15.13	15.13	1656010	1350311	419.558	428.673
20)	m-Nitrotoluene	16.11	16.11	1572019	1963951	440.687	488.075
21)	PETN	0.00	18.43	0	2896574	N.D. d	2085.620m

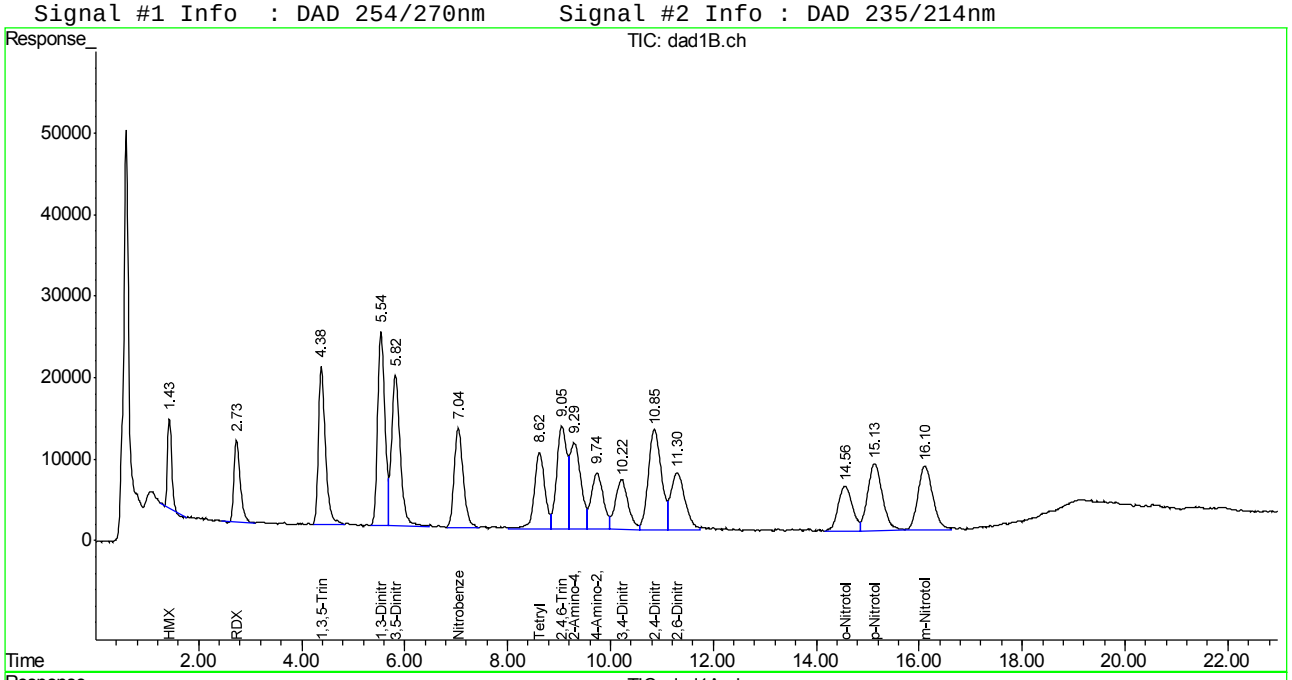
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059604.D 8330B_0419PLUS.M Wed May 09 09:48:45 2018 Page 1

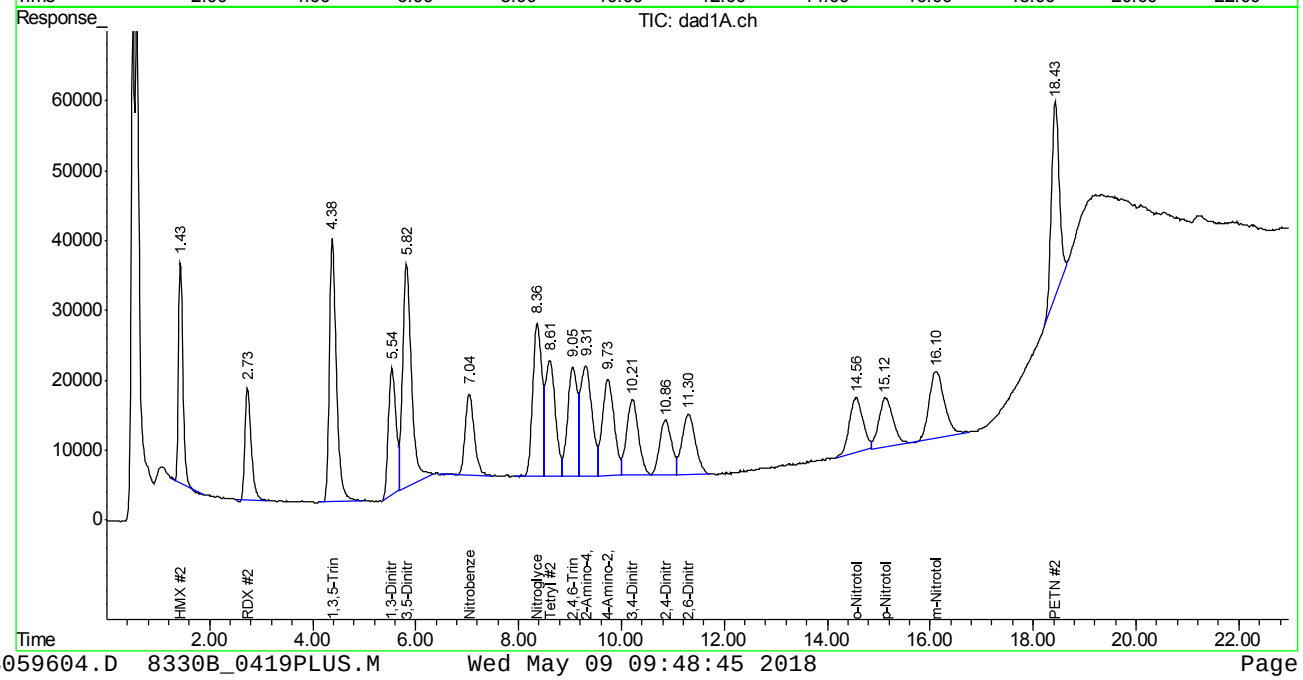
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1A.ch
Acq On : 08-May-2018, 13:01:09 Operator: evitam
Sample : op69921-msd Inst : G1315B
Misc : OP69921,gbb1729,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 9:48 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

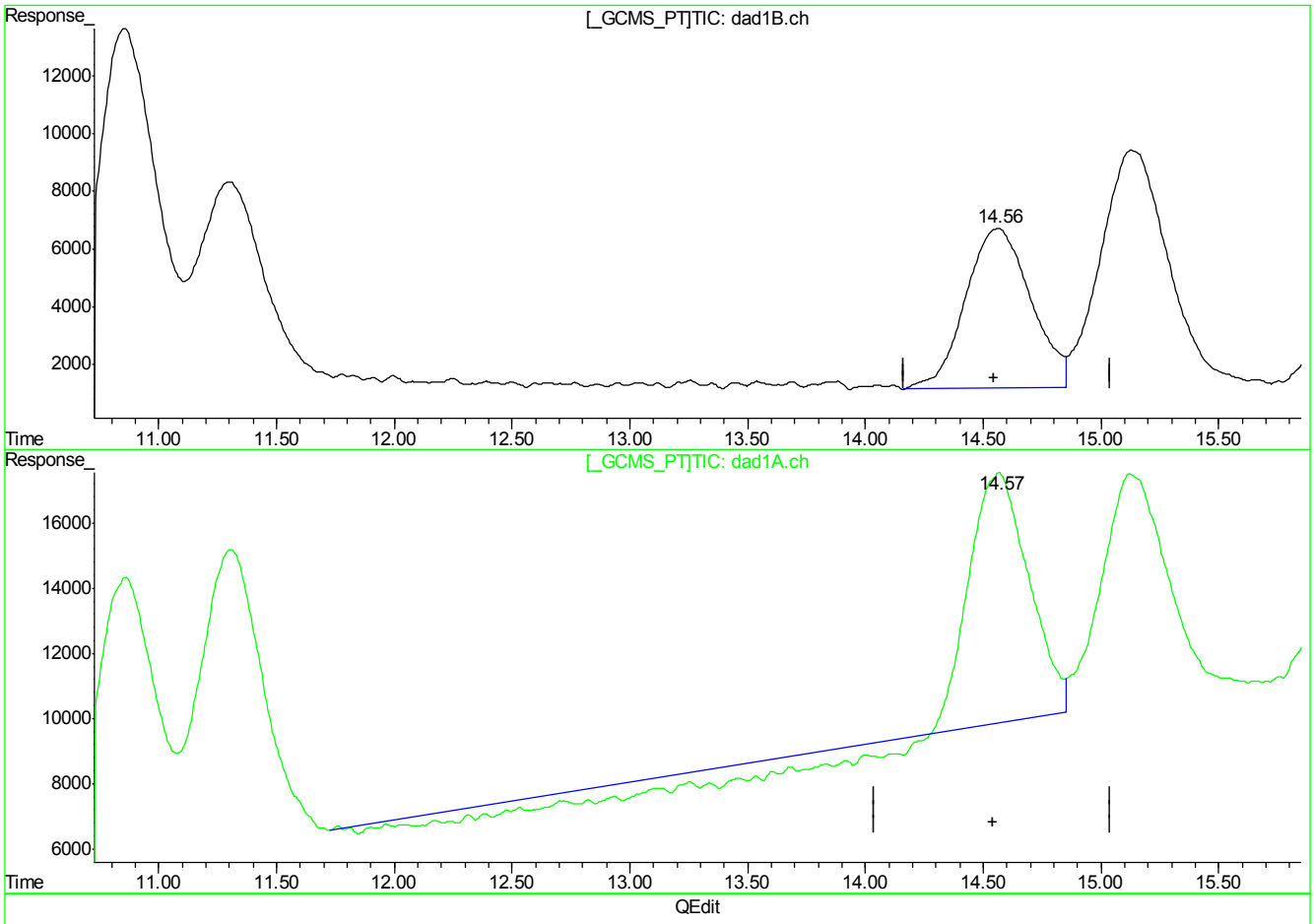
Sample Number:	OP69921-MSD	**Method:**	SW846 8330B
Lab FileID:	BB059604.D	**Analyst approved:**	05/09/18 09:51 Evita Martinez
Injection Time:	05/08/18 13:01	**Supervisor approved:**	05/09/18 15:58 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	5.54	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.56	Poorly defined baseline
PETN	78-11-5	2	18.43	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1A.ch
Acq On : 08-May-2018, 13:01:09 Operator: evitam
Sample : op69921-msd Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.56min 428.243ppb

response 1069682

(18) o-Nitrotoluene #2

14.56min 249.871ppb

response 818514

(+) = Expected Retention Time
BB059604.D 8330B_0419PLUS.M Tue May 08 14:10:39 2018

7.5.7.2

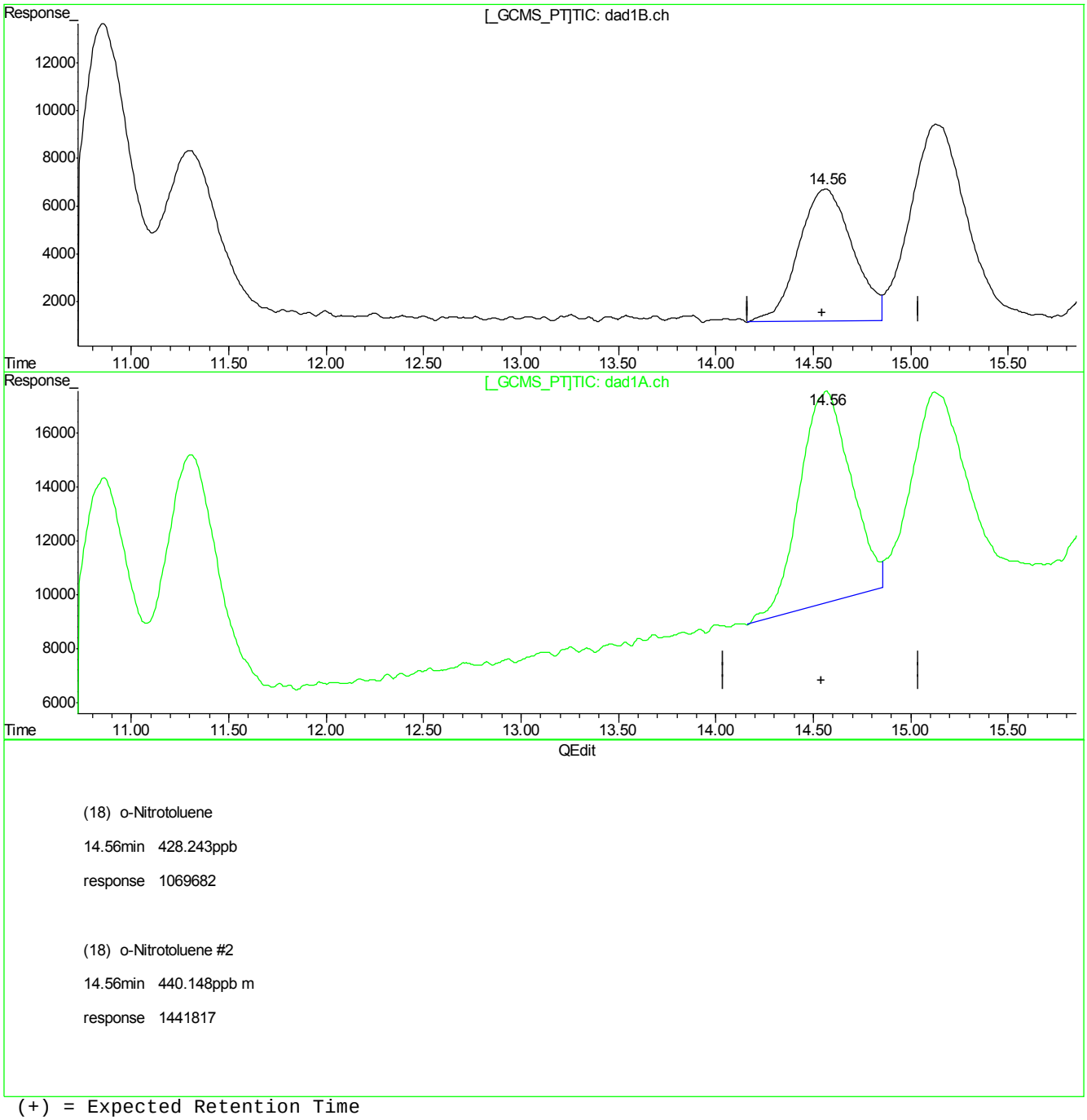
7

BB059604.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1A.ch
Acq On : 08-May-2018, 13:01:09 Operator: evitam
Sample : op69921-msd Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.56min 428.243ppb

response 1069682

(18) o-Nitrotoluene #2

14.56min 440.148ppb m

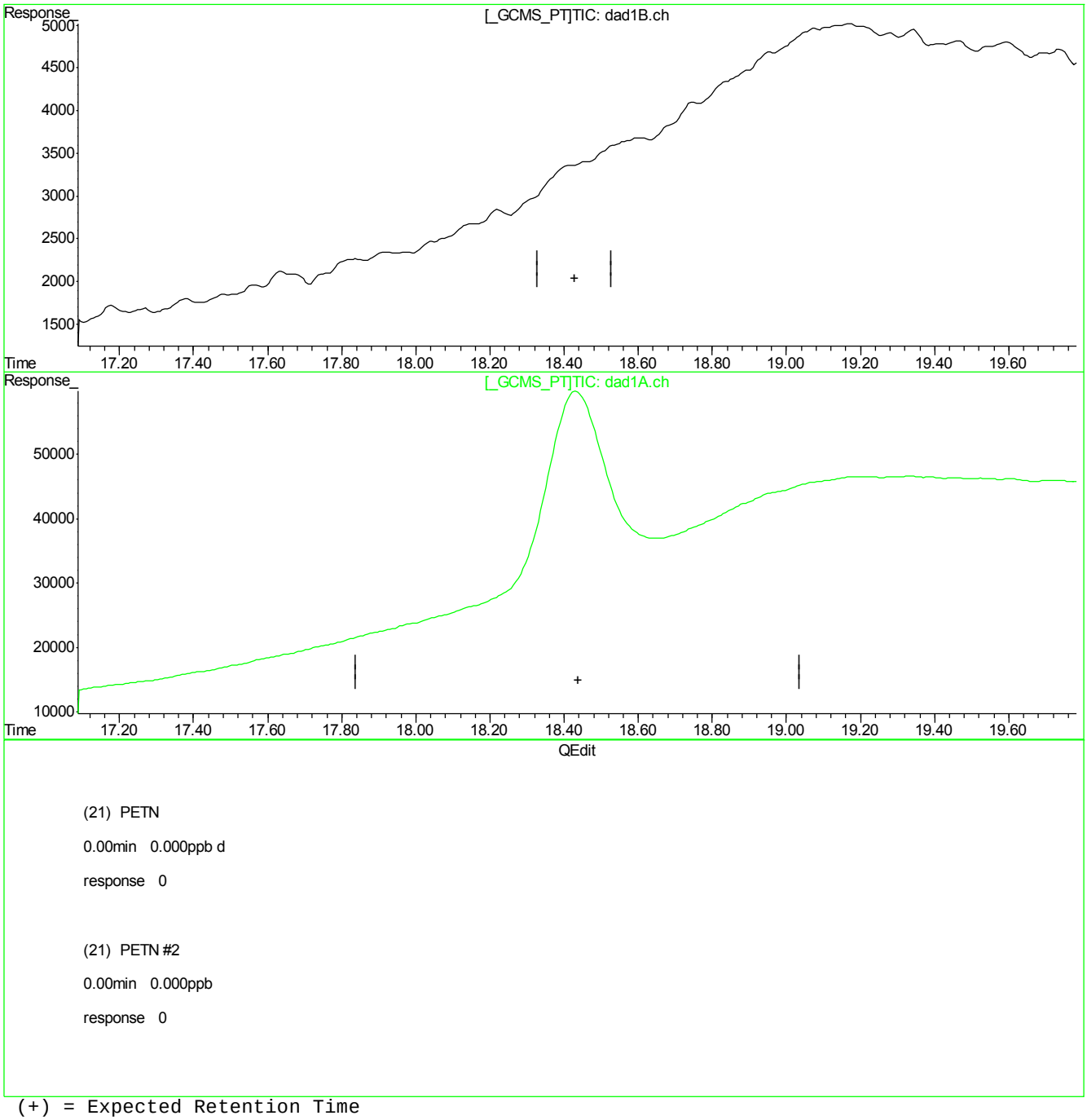
response 1441817

(+) = Expected Retention Time
BB059604.D 8330B_0419PLUS.M Tue May 08 14:10:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1A.ch
Acq On : 08-May-2018, 13:01:09 Operator: evitam
Sample : op69921-msd Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059604.D 8330B_0419PLUS.M Tue May 08 14:10:46 2018

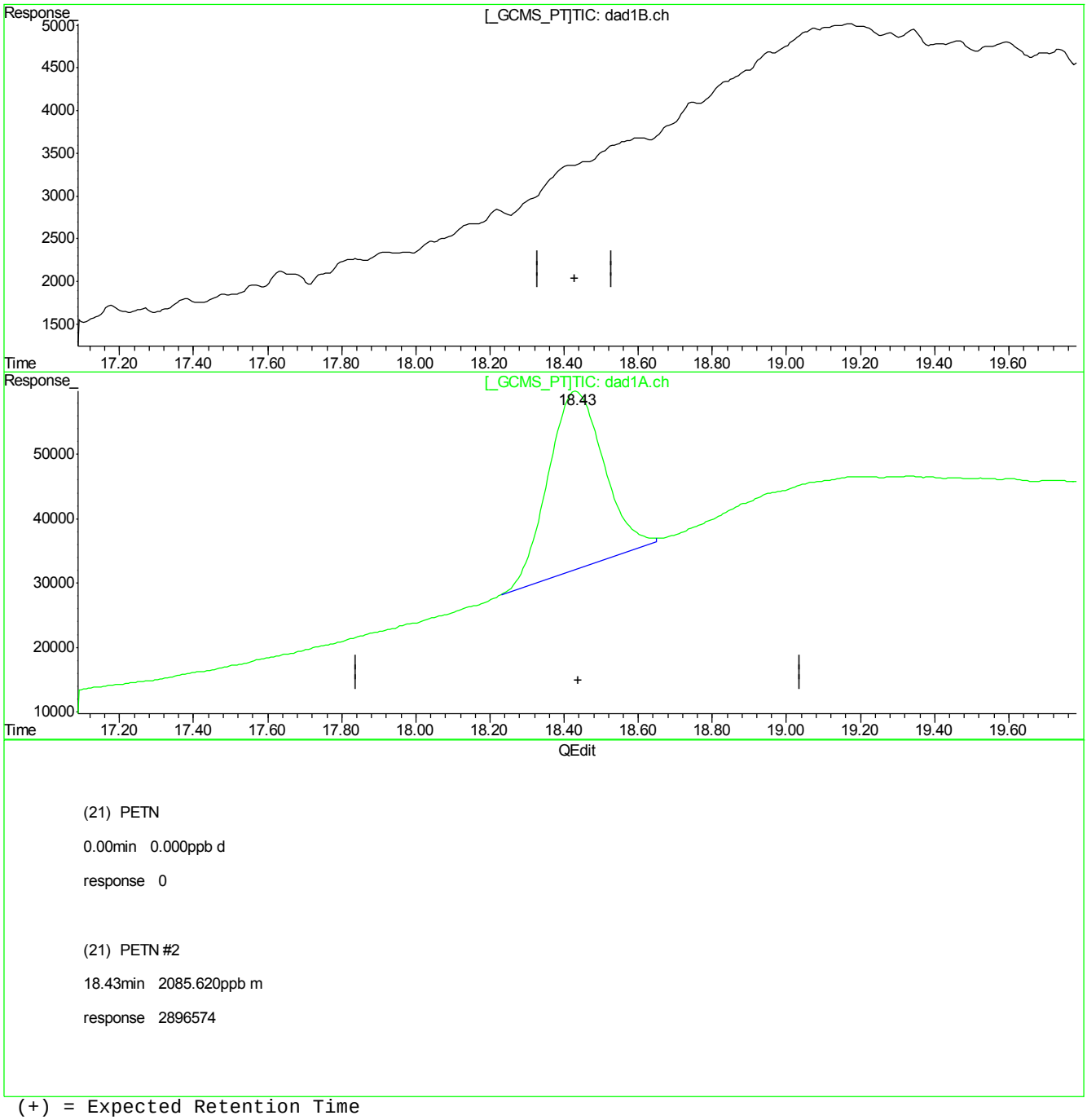
7.5.7.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1A.ch
Acq On : 08-May-2018, 13:01:09 Operator: evitam
Sample : op69921-msd Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration

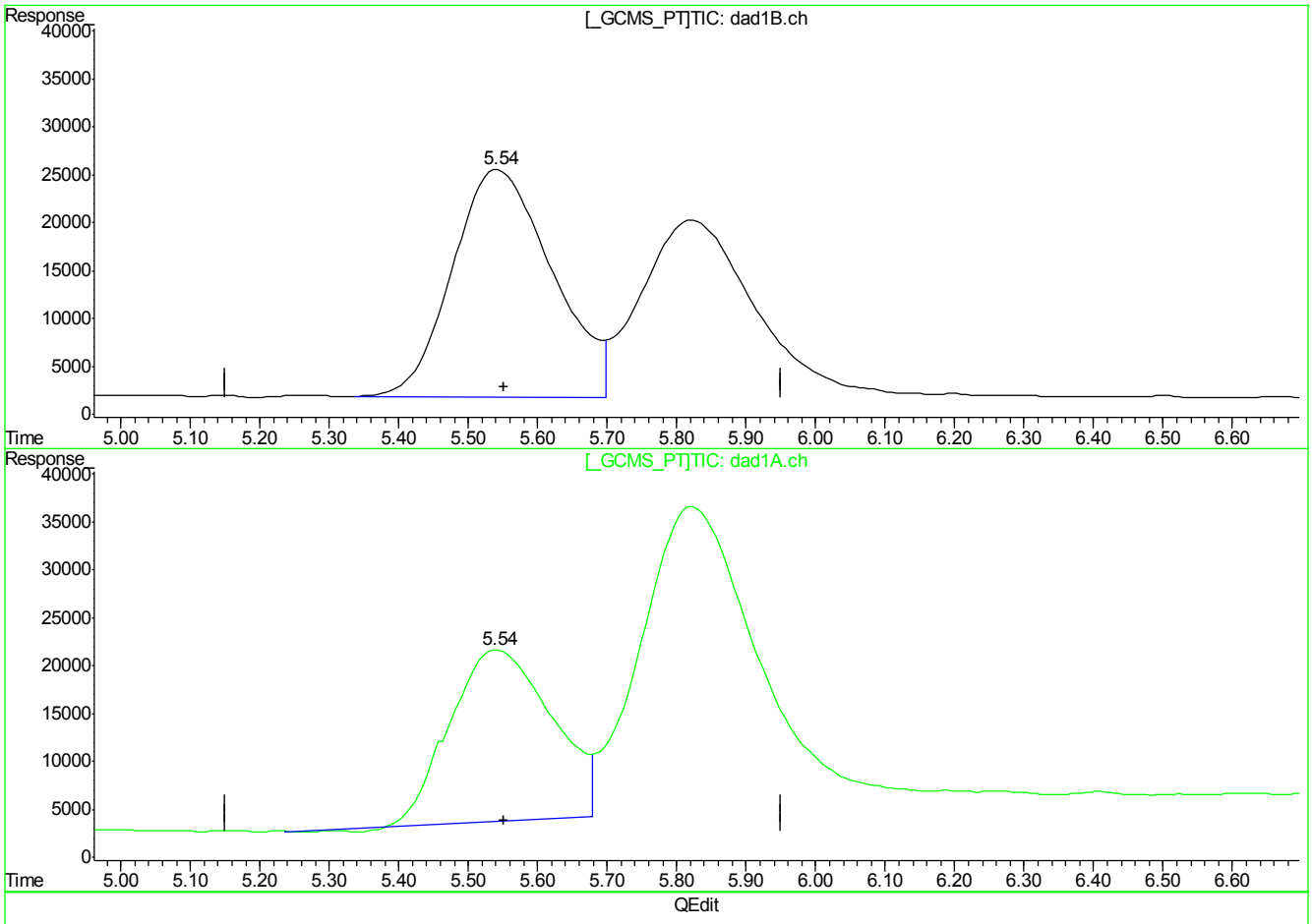


(+) = Expected Retention Time
BB059604.D 8330B_0419PLUS.M Tue May 08 14:10:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1A.ch
Acq On : 08-May-2018, 13:01:09 Operator: evitam
Sample : op69921-msd Inst : G1315B
Misc : OP69921,gbb1729,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.54min 425.784ppb

response 2360536

(7) 1,3-Dinitrobenzene #2

5.54min 484.598ppb

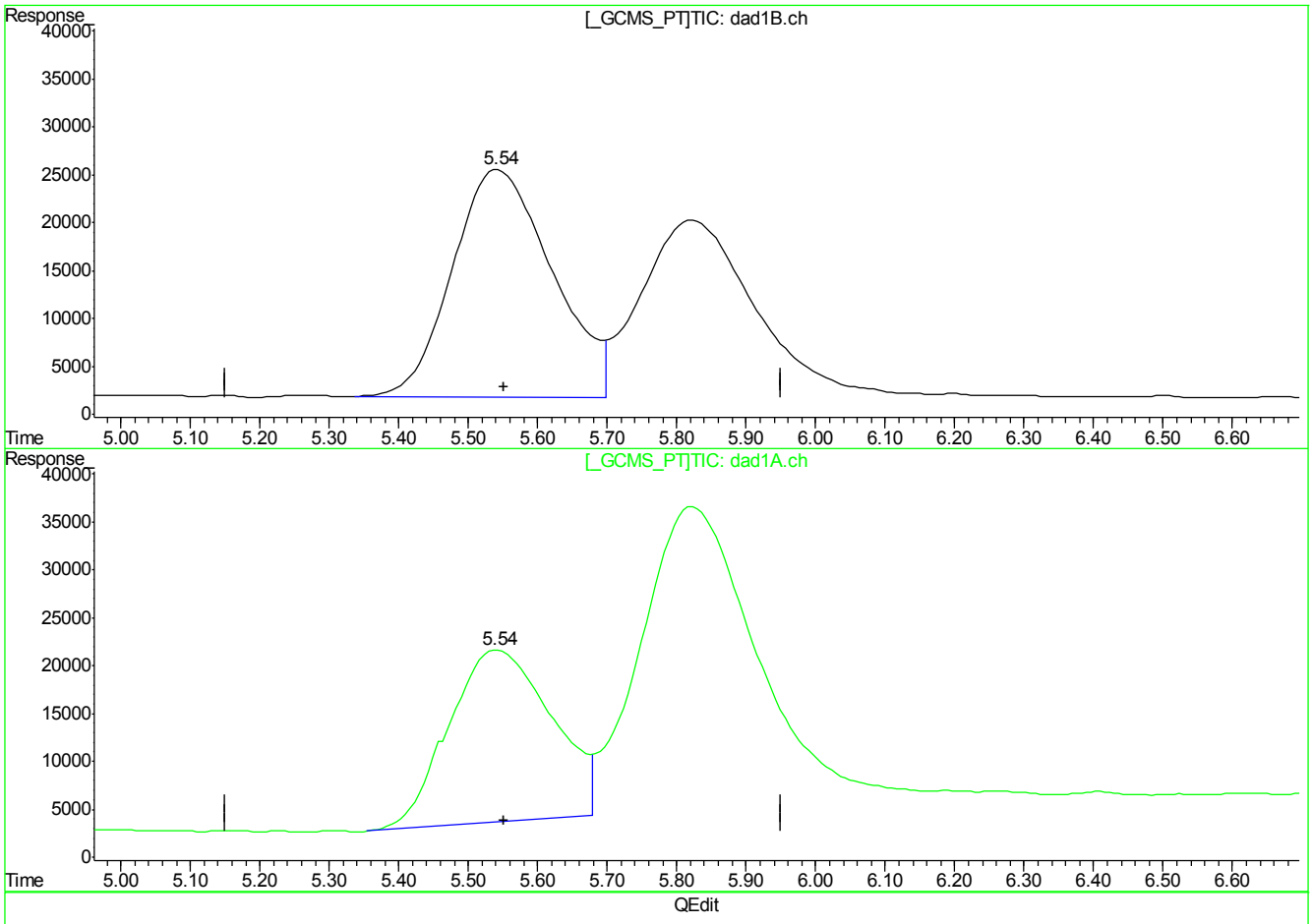
response 1804827

(+) = Expected Retention Time
BB059604.D 8330B_0419PLUS.M Wed May 09 09:48:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059604.D\dad1A.ch
Acq On : 08-May-2018, 13:01:09 Operator: evitam
Sample : op69921-msd Inst : G1315B
Misc : OP69921,gbb1729,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.54min 425.784ppb

response 2360536

(7) 1,3-Dinitrobenzene #2

5.54min 496.334ppb m

response 1848534

(+) = Expected Retention Time
BB059604.D 8330B_0419PLUS.M Wed May 09 09:48:32 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:16

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614610.D\dad1B.ch Vial: 32
Signal #2 : G:\DATA\0508RPB3\GG614610.D\dad1A.ch
Acq On : 08-May-2018, 13:24:52 Operator: evitam
Sample : op69920-msd Inst : G1315B
Misc : op69920,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:56 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.21	2588172	5357410	498.216	495.248
	Spiked Amount 500.000	Range 69 - 134		Recovery =		99.64%	99.05%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.38	5.38	1919556	1903375	592.111m	590.788m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	0.00	7.43	0	4846945	N.D. d	467.828
6)	RDX	7.87	7.87	2262491	2273816	474.897	479.390
7)	1,3-Dinitrobenze	9.91	9.91	6659178	6051679	465.453	474.830
8)	Nitrobenzene	10.87	10.87	4398279	5247146	466.047	566.591
9)	2,4,6-Trinitroto	11.63	11.63	4766829	7086345	470.365	540.329
10)	Nitroglycerin	0.00	12.37	0	8338651	N.D. d	2474.563
11)	Tetryl	12.89	12.88	3614931	6676098	446.075	473.984
13)	2,6-Dinitrotolue	14.60	14.59	3459782	4862559	483.912	479.256
14)	2,4-Dinitrotolue	15.30	15.31	6165714	4353598	470.339	457.392
15)	o-Nitrotoluene	16.85	16.85	2852904	4385275	493.873	508.519
16)	3,5-Dinitroanili	16.24	16.24	5461740	9115551	558.026	560.860
17)	p-Nitrotoluene	17.98	17.99	5605653	10555939	477.387	498.082
18)	4-Amino-2,6-Dini	17.98	17.99	5605653	10555939	477.387	496.634
19)	m-Nitrotoluene	19.22	19.22	3011673	4885004	510.854	502.345
20)	2-Amino-4,6-Dini	20.14	20.14	4465072	6070114	494.859	510.319
21)	PETN	0.00	21.75	0	7822306	N.D. d	2438.827m

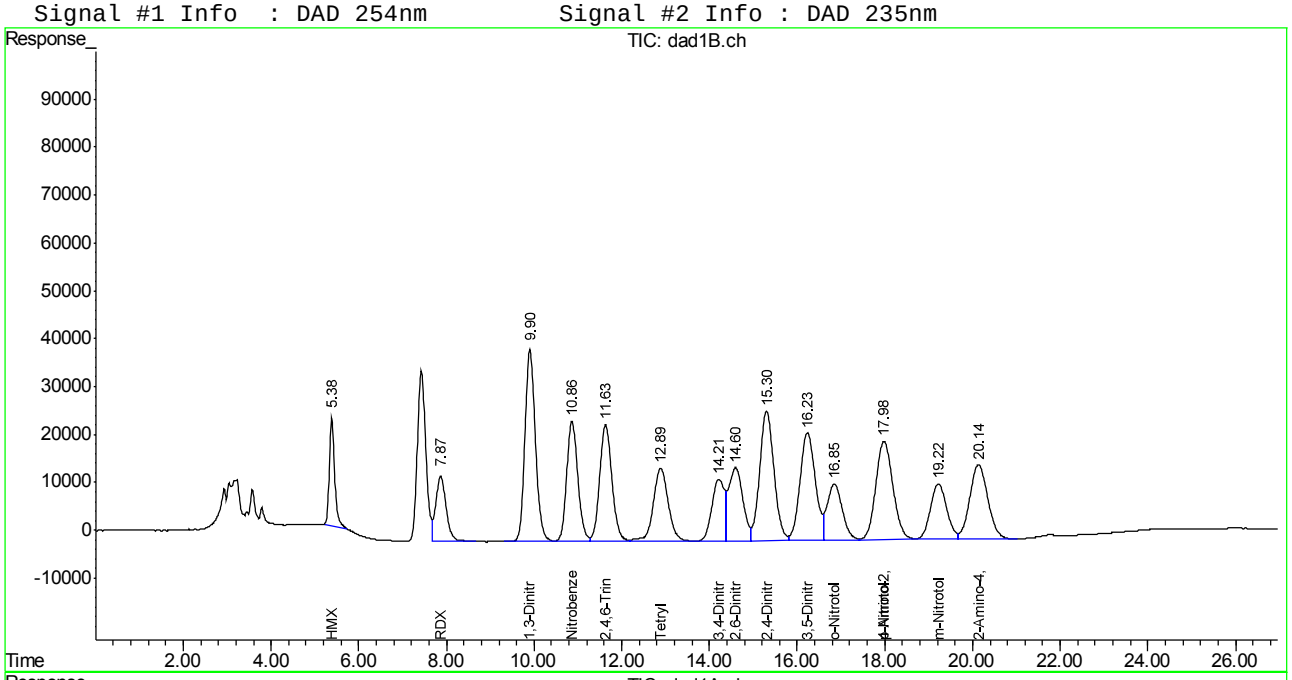
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614610.D 8330RPB.M_1113M.M Tue May 08 14:41:55 2018 Page 1

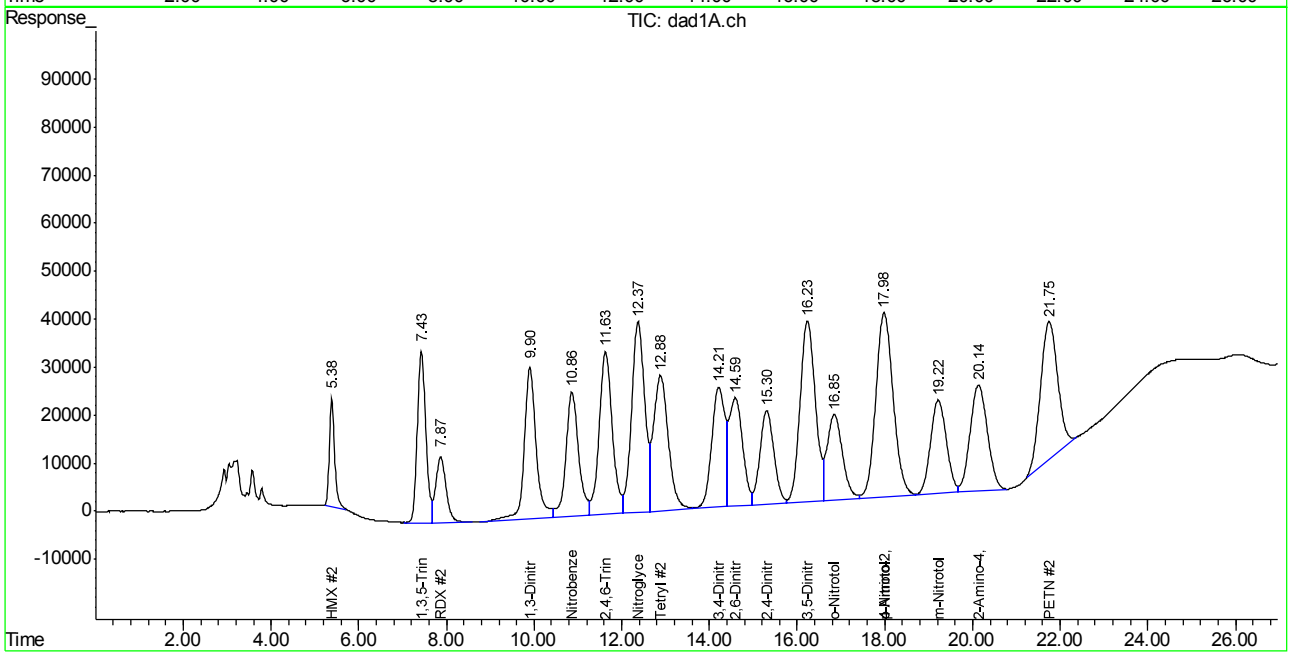
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614610.D\dad1B.ch Vial: 32
Signal #2 : G:\DATA\0508RPB3\GG614610.D\dad1A.ch
Acq On : 08-May-2018, 13:24:52 Operator: evitam
Sample : op69920-msd Inst : G1315B
Misc : op69920,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

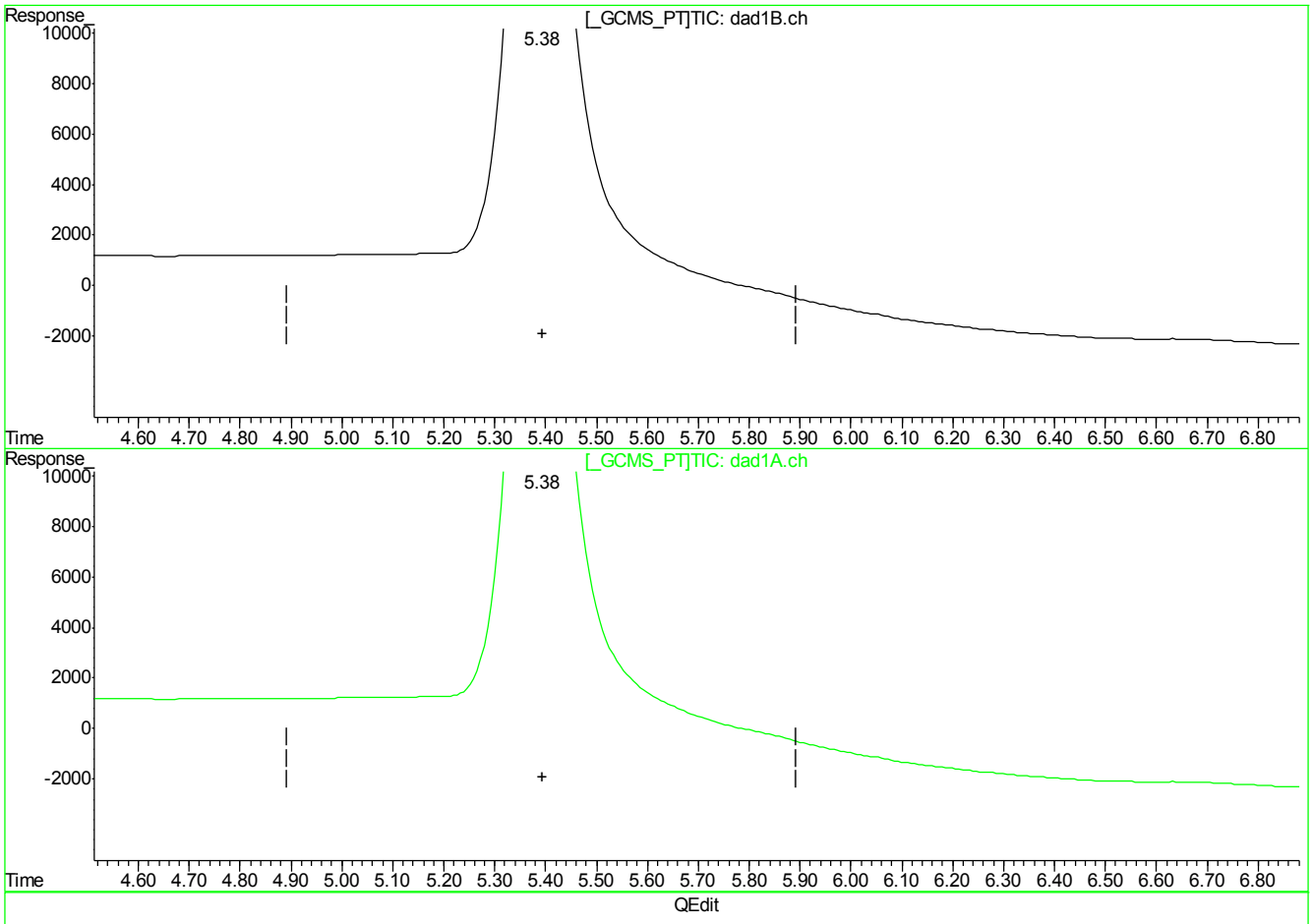
Sample Number:	OP69920-MSD	**Method:**	SW846 8330B
Lab FileID:	GG614610.D	**Analyst approved:**	05/08/18 14:53 Evita Martinez
Injection Time:	05/08/18 13:24	**Supervisor approved:**	05/08/18 16:16 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.38	Poorly defined baseline
HMX	2691-41-0	2	5.38	Poorly defined baseline
PETN	78-11-5	2	21.75	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614610.D\dad1B.ch Vial: 32
Signal #2 : G:\DATA\0508RPB3\GG614610.D\dad1A.ch
Acq On : 08-May-2018, 13:24:52 Operator: evitam
Sample : op69920-msd Inst : G1315B
Misc : op69920,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 589.831ppb

response 1912164

(2) HMX #2

5.39min 593.517ppb

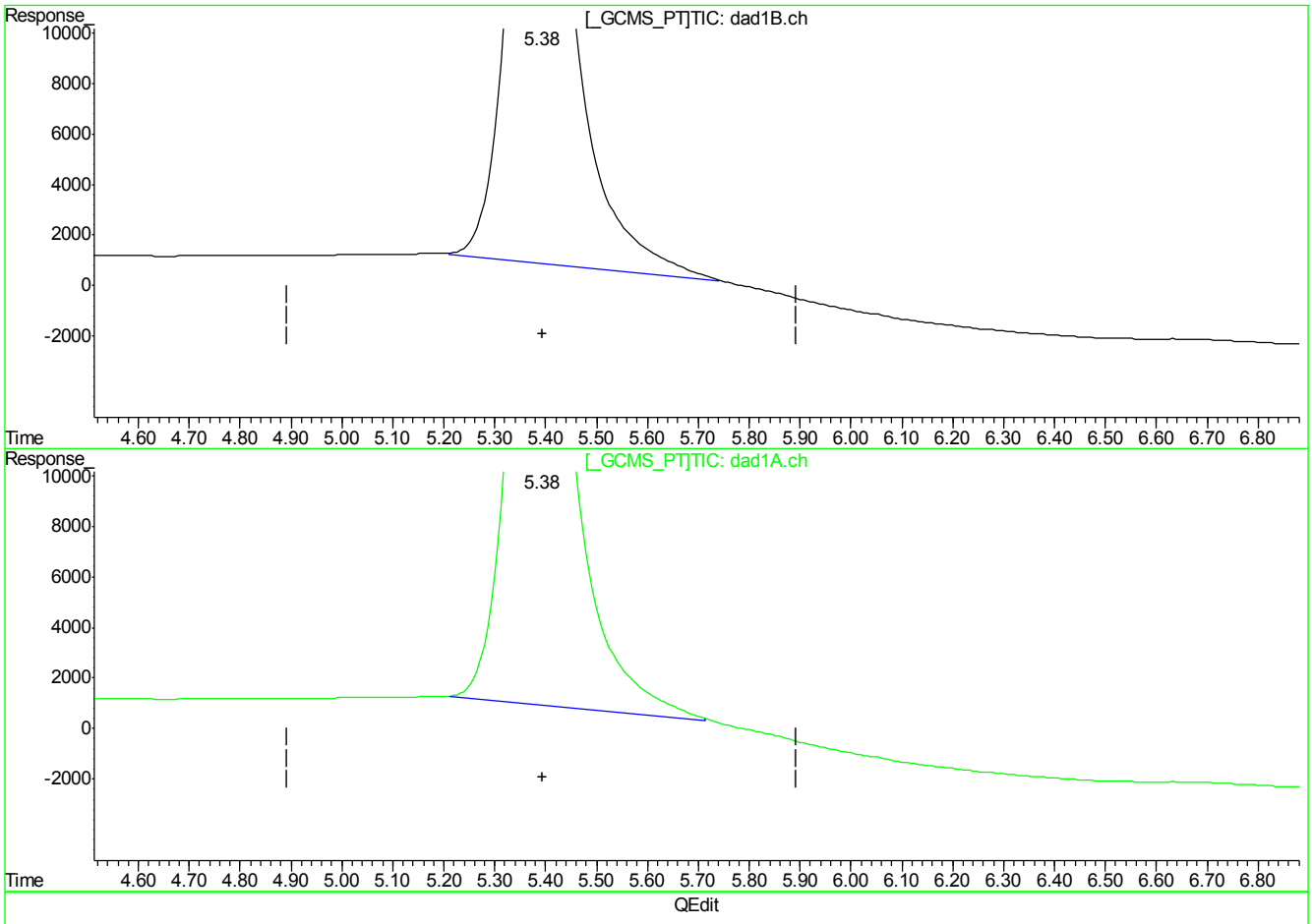
response 1912164

(+) = Expected Retention Time
GG614610.D 8330RPB.M_1113M.M Tue May 08 14:40:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614610.D\dad1B.ch Vial: 32
Signal #2 : G:\DATA\0508RPB3\GG614610.D\dad1A.ch
Acq On : 08-May-2018, 13:24:52 Operator: evitam
Sample : op69920-msd Inst : G1315B
Misc : op69920,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.38min 592.111ppb m

response 1919556

(2) HMX #2

5.38min 590.788ppb m

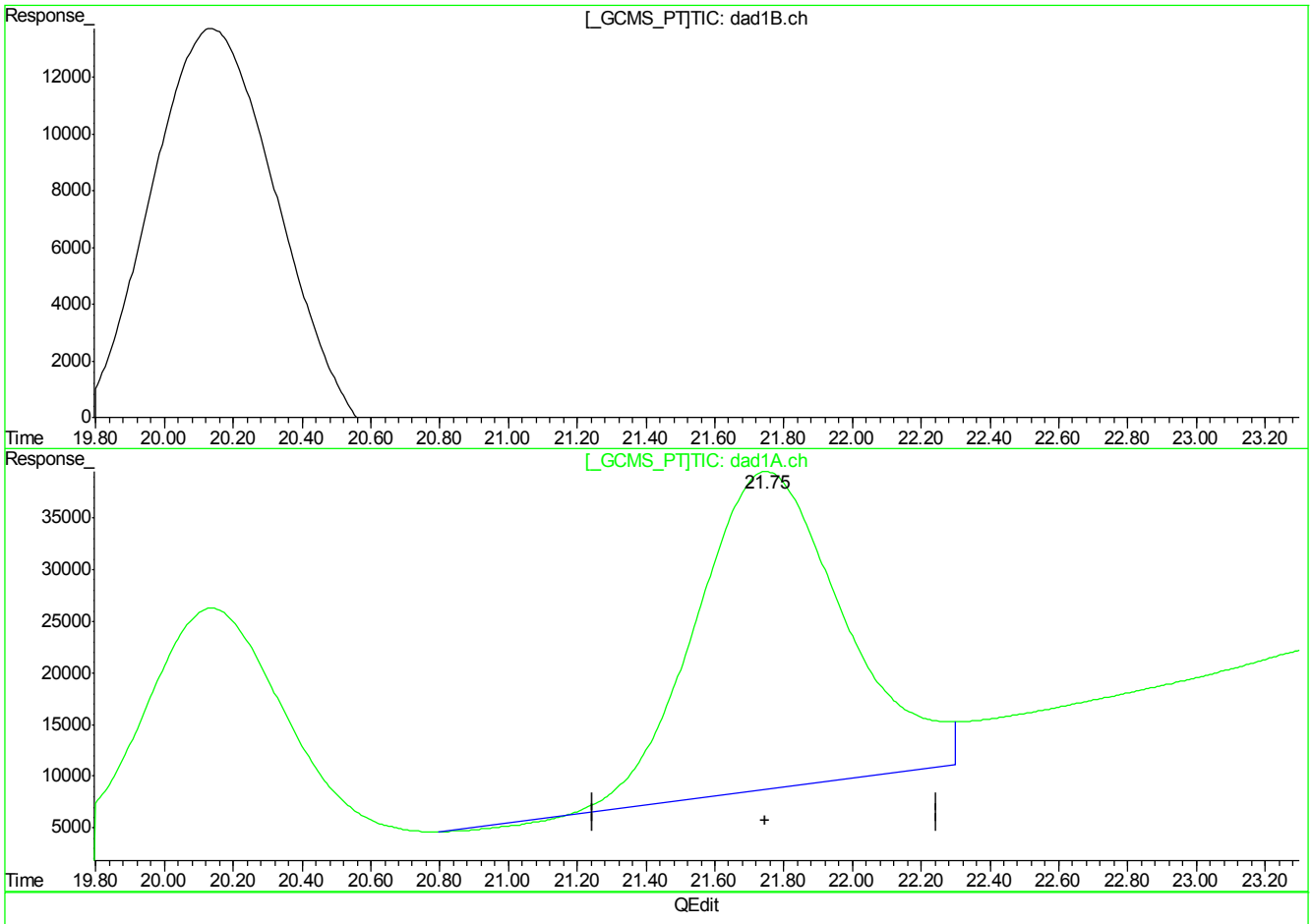
response 1903375

(+) = Expected Retention Time
GG614610.D 8330RPB.M_1113M.M Tue May 08 14:40:49 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614610.D\dad1B.ch Vial: 32
Signal #2 : G:\DATA\0508RPB3\GG614610.D\dad1A.ch
Acq On : 08-May-2018, 13:24:52 Operator: evitam
Sample : op69920-msd Inst : G1315B
Misc : op69920,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.75min 2840.228ppb

response 9109760

(+) = Expected Retention Time
GG614610.D 8330RPB.M_1113M.M Tue May 08 14:40:59 2018

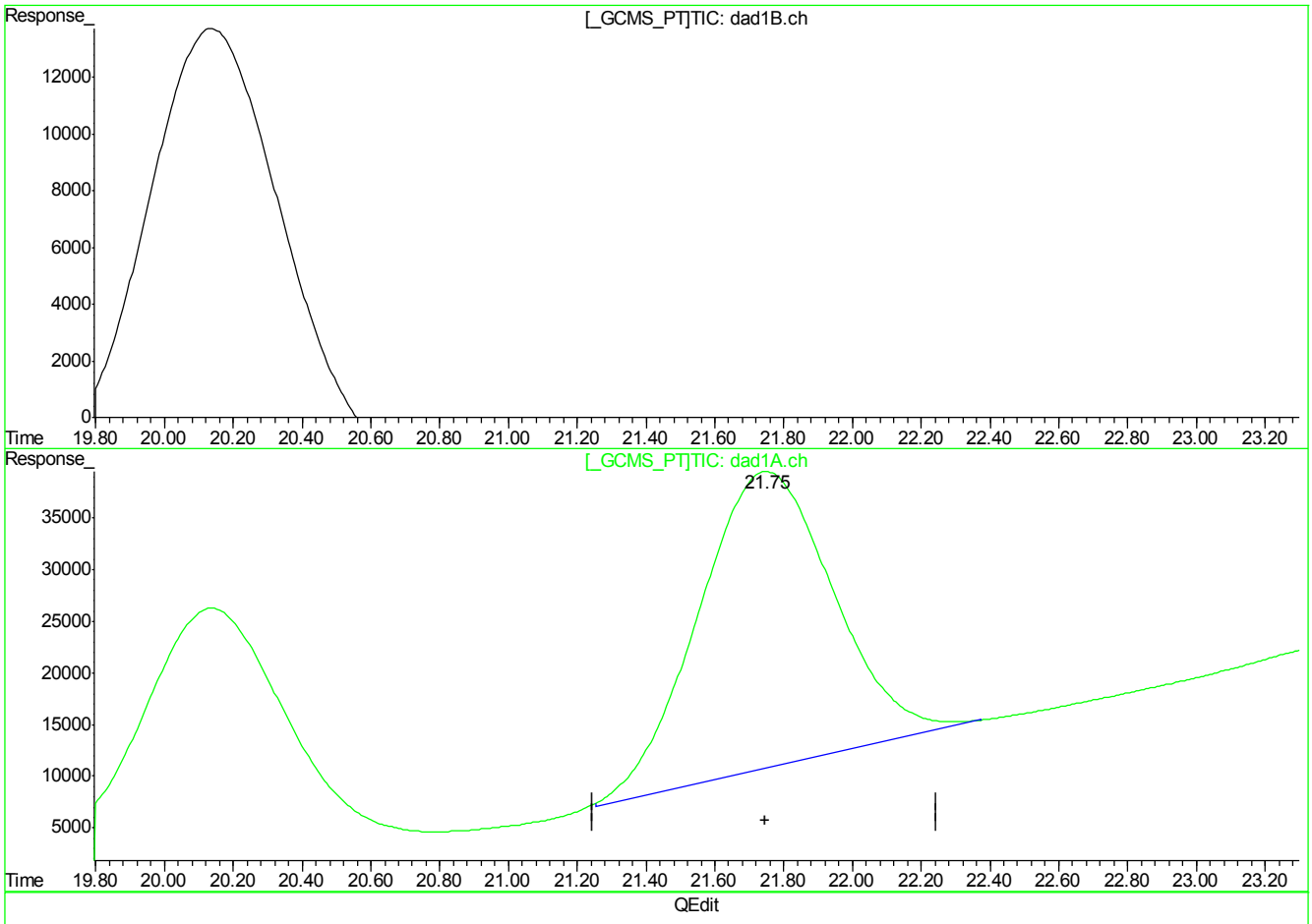
7.5.8.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614610.D\dad1B.ch Vial: 32
Signal #2 : G:\DATA\0508RPB3\GG614610.D\dad1A.ch
Acq On : 08-May-2018, 13:24:52 Operator: evitam
Sample : op69920-msd Inst : G1315B
Misc : op69920,Ggg2626,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.75min 2438.827ppb m

response 7822306

(+) = Expected Retention Time
GG614610.D 8330RPB.M_1113M.M Tue May 08 14:41:02 2018

7.5.8.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614632.D\dad1B.ch Vial: 55
Signal #2 : G:\DATA\0508RPB3\GG614632.D\dad1A.ch
Acq On : 09-May-2018, 01:48:11 Operator: evitam
Sample : op69945-ms Inst : G1315B
Misc : op69945,Ggg2626,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:14 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.24	2351844	4821406	452.723	445.699
	Spiked Amount 500.000	Range 69 - 134		Recovery =		90.54%	89.14%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1958902	1985057	604.247m	616.142m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.43	7.43	4597347	4602017	443.691	444.187
6)	RDX	7.88	7.88	2257463	2279235	473.841	480.532
7)	1,3-Dinitrobenze	9.92	9.92	6368340	5348411	445.125	417.551
8)	Nitrobenzene	10.88	10.88	4308997	4909309	456.587	530.111
9)	2,4,6-Trinitroto	11.65	11.65	4491233	6616692	443.171	504.519
10)	Nitroglycerin	0.00	12.39	0	9490251	N.D. d	2816.310
11)	Tetryl	12.91	12.90	3522135	6379266	434.624	452.748
13)	2,6-Dinitrotolue	14.62	14.61	3372674	4969337	471.729	489.780
14)	2,4-Dinitrotolue	15.32	15.32	5903081	4335486	450.305	455.469
15)	o-Nitrotoluene	16.87	16.87	2763148	3950915	478.335	458.150
16)	3,5-Dinitroanili	16.25	16.25	5120658	8674582	523.425	533.919
17)	p-Nitrotoluene	18.01	18.02	5171363	9488111	440.402	447.697
18)	4-Amino-2,6-Dini	18.01	18.02	5171363	9488111	440.402	446.395
19)	m-Nitrotoluene	19.25	19.26	2853110	4779724	483.958	491.518
20)	2-Amino-4,6-Dini	20.18	20.18	4161115	5611052	461.172	472.886
21)	PETN	0.00	21.80	0	7381806	N.D. d	2301.489m

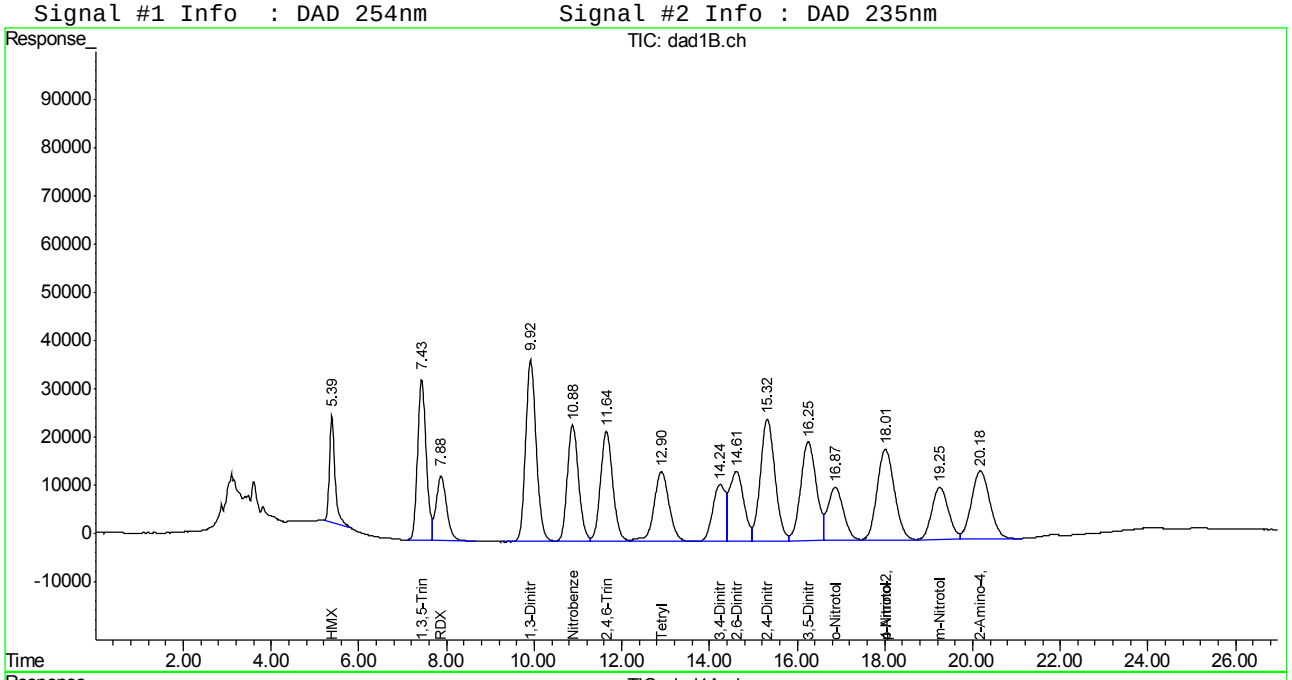
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614632.D 8330RPB.M_1113M.M Wed May 09 11:16:23 2018 Page 1

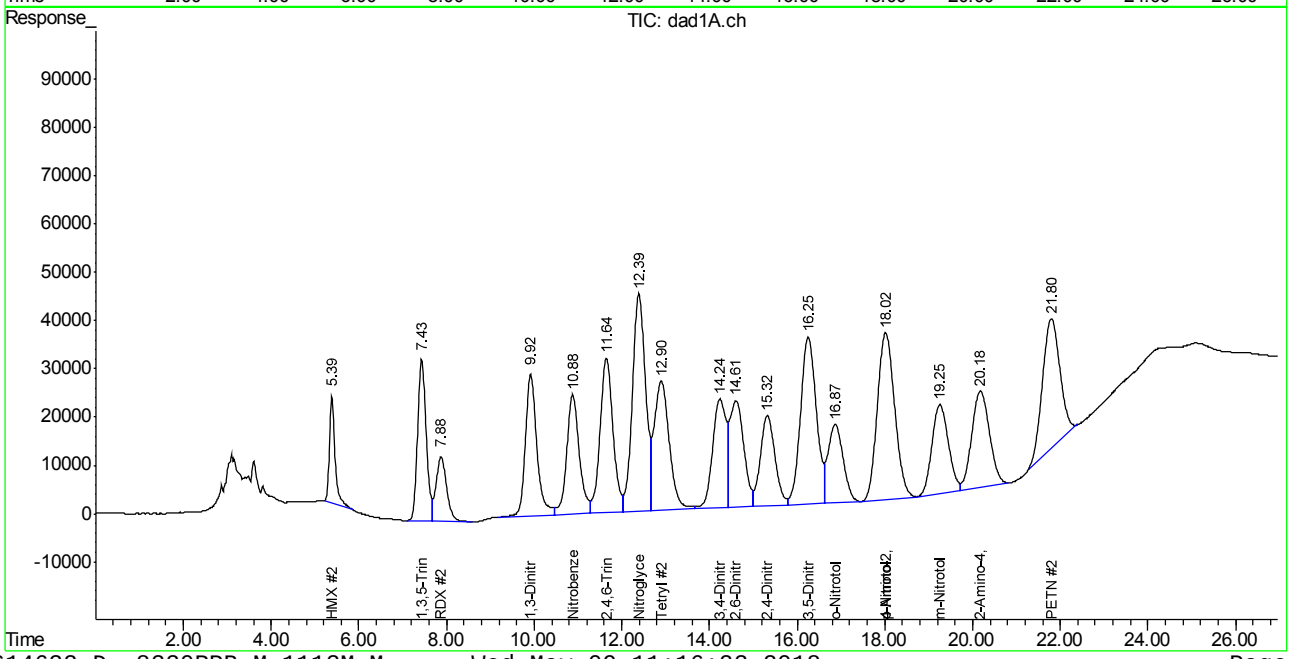
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614632.D\dad1B.ch Vial: 55
Signal #2 : G:\DATA\0508RPB3\GG614632.D\dad1A.ch
Acq On : 09-May-2018, 01:48:11 Operator: evitam
Sample : op69945-ms Inst : G1315B
Misc : op69945,Ggg2626,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:16 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

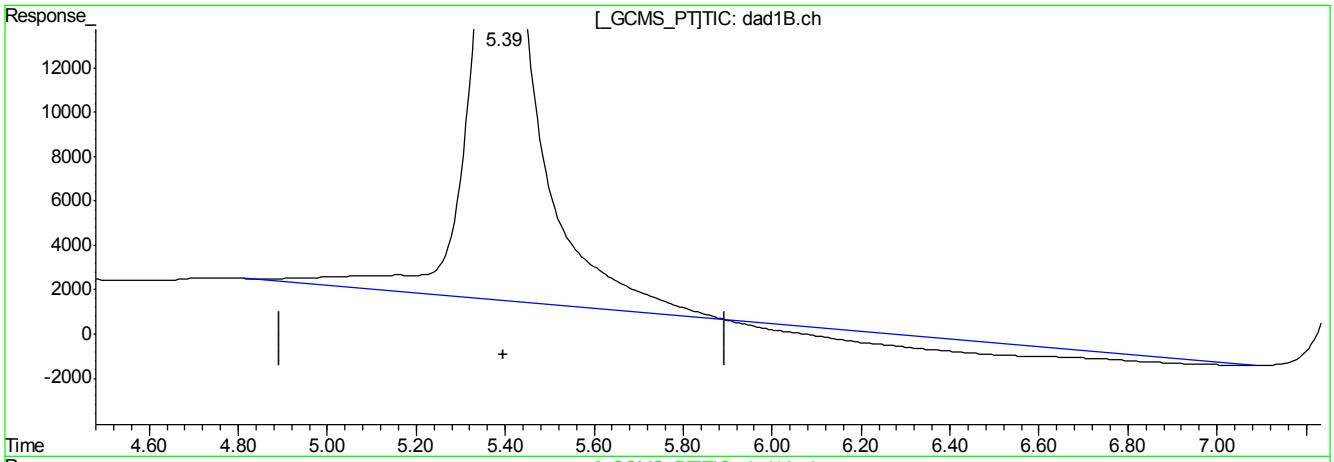
Sample Number:	OP69945-MS	**Method:**	SW846 8330B
Lab FileID:	GG614632.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 01:48	**Supervisor approved:**	05/09/18 15:34 Mike Eger

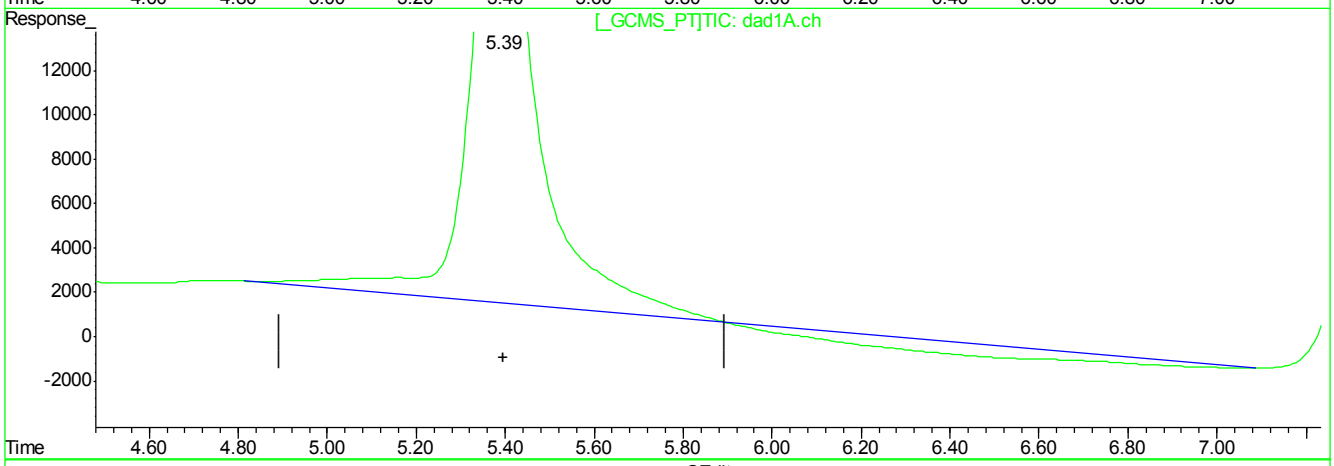
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
PETN	78-11-5	2	21.80	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614632.D\dad1B.ch Vial: 55
Signal #2 : G:\DATA\0508RPB3\GG614632.D\dad1A.ch
Acq On : 09-May-2018, 01:48:11 Operator: evitam
Sample : op6995-ms Inst : G1315B
Misc : op69945,Ggg2626,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.39min 629.413ppb

response 2040485

(2) HMX #2

5.39min 633.346ppb

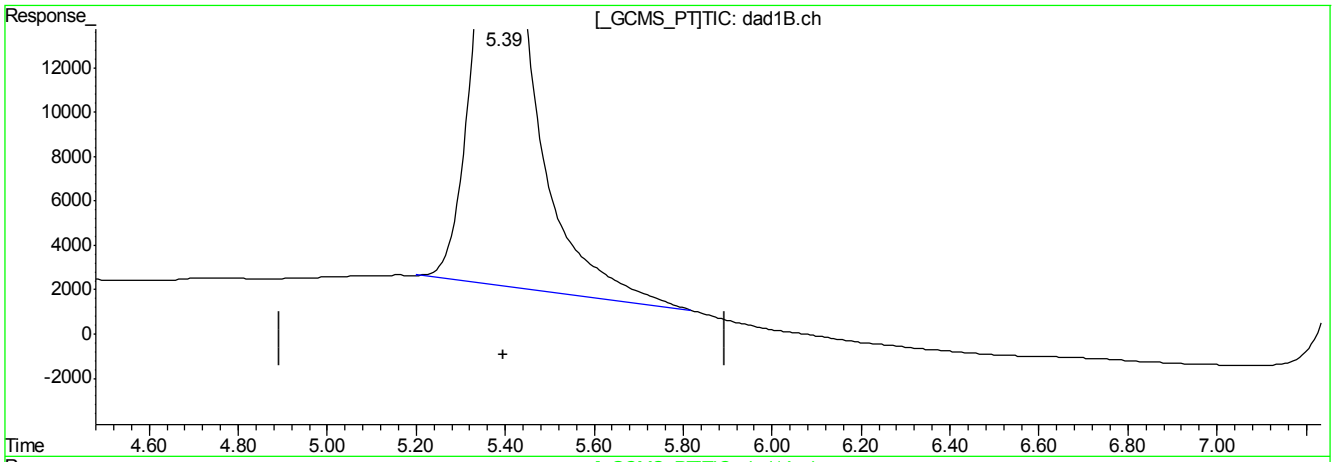
response 2040485

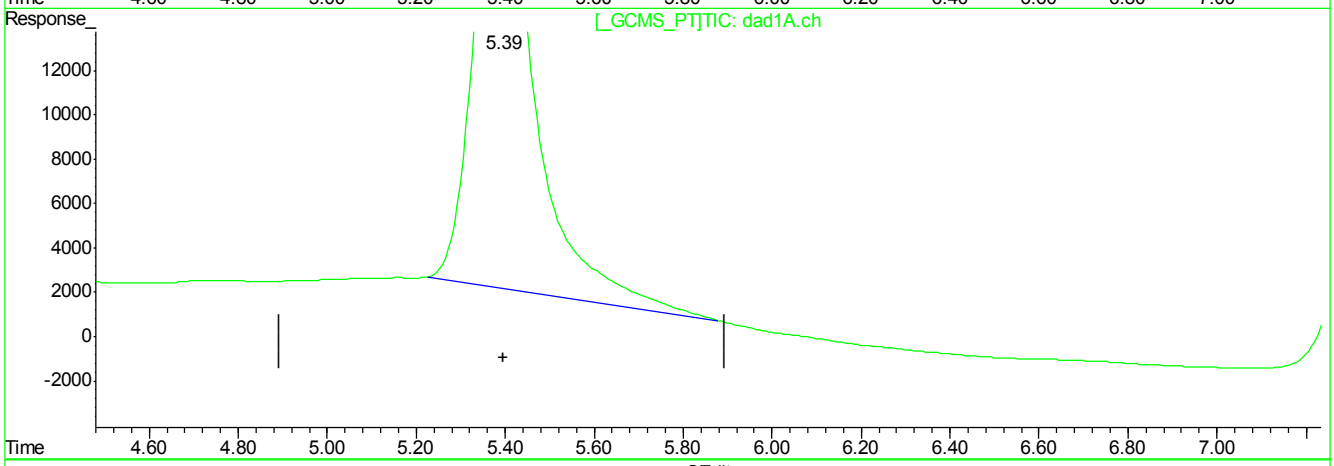
(+) = Expected Retention Time
GG614632.D 8330RPB.M_1113M.M Wed May 09 10:47:46 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614632.D\dad1B.ch Vial: 55
Signal #2 : G:\DATA\0508RPB3\GG614632.D\dad1A.ch
Acq On : 09-May-2018, 01:48:11 Operator: evitam
Sample : op6995-ms Inst : G1315B
Misc : op69945,Ggg2626,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.39min 604.247ppb m

response 1958902

(2) HMX #2

5.39min 616.142ppb m

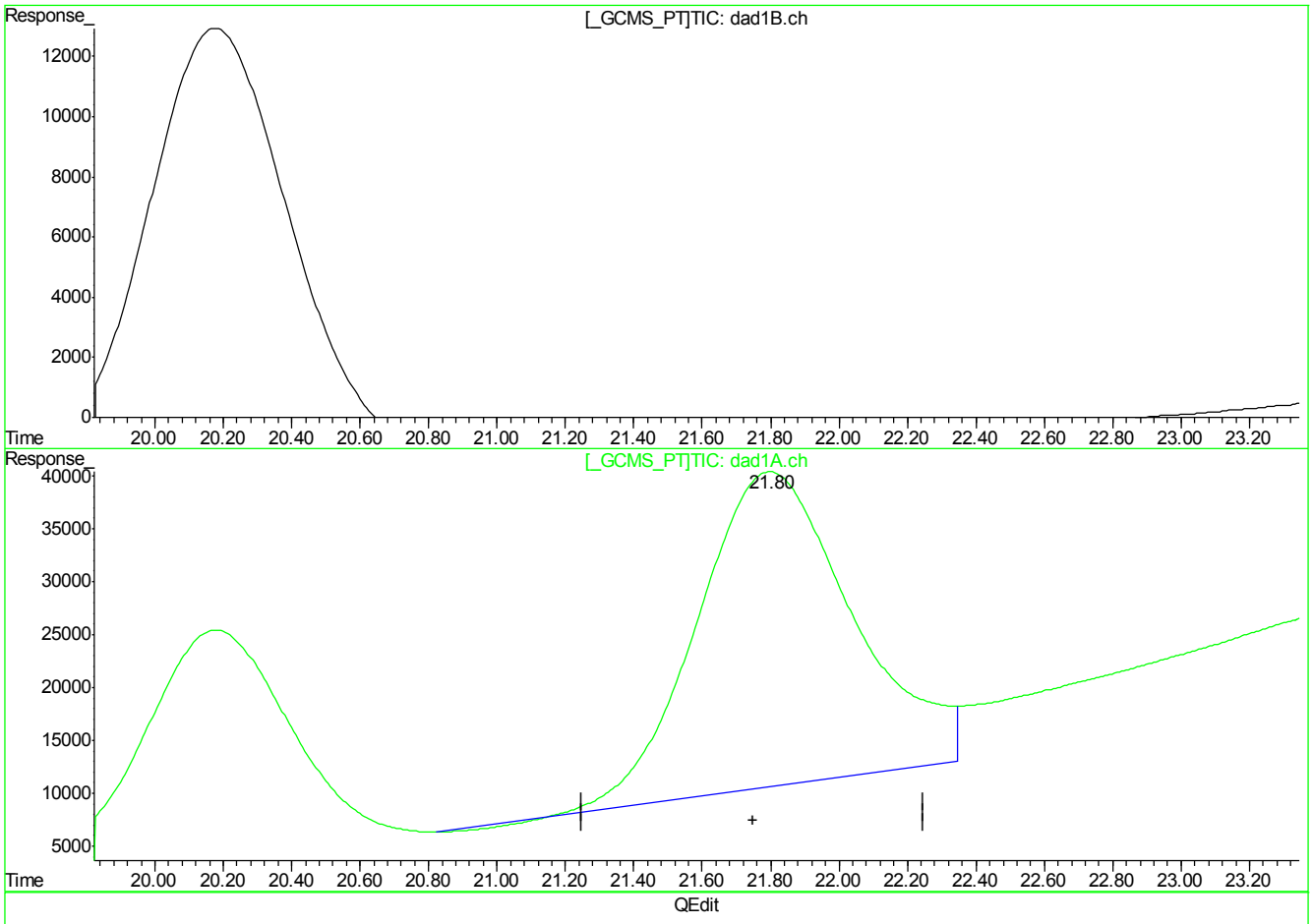
response 1985057

(+) = Expected Retention Time
GG614632.D 8330RPB.M_1113M.M Wed May 09 10:47:51 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614632.D\dad1B.ch Vial: 55
Signal #2 : G:\DATA\0508RPB3\GG614632.D\dad1A.ch
Acq On : 09-May-2018, 01:48:11 Operator: evitam
Sample : op6995-ms Inst : G1315B
Misc : op69945,Ggg2626,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.80min 2897.662ppb

response 9293977

(+) = Expected Retention Time
GG614632.D 8330RPB.M_1113M.M Wed May 09 10:47:55 2018

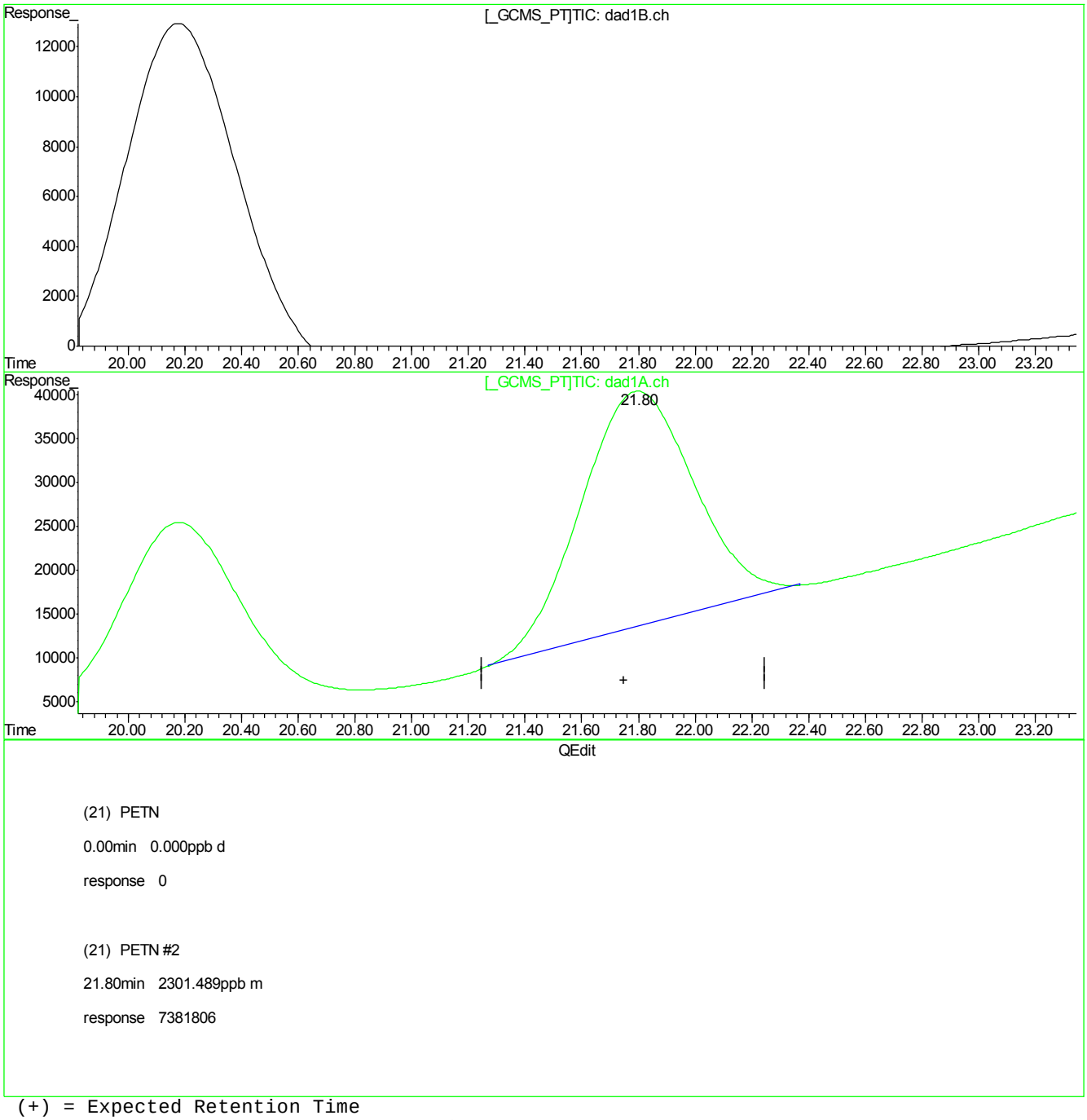
7.5.9.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614632.D\dad1B.ch Vial: 55
Signal #2 : G:\DATA\0508RPB3\GG614632.D\dad1A.ch
Acq On : 09-May-2018, 01:48:11 Operator: evitam
Sample : op6995-ms Inst : G1315B
Misc : op69945,Ggg2626,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614632.D 8330RPB.M_1113M.M Wed May 09 10:47:59 2018

7.5.9.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614633.D\dad1B.ch Vial: 56
Signal #2 : G:\DATA\0508RPB3\GG614633.D\dad1A.ch
Acq On : 09-May-2018, 02:17:40 Operator: evitam
Sample : op69945-msd Inst : G1315B
Misc : op69945,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.18	14.18	2424548	5327686	466.718	492.500
	Spiked Amount 500.000	Range 69 - 134		Recovery =		93.34%	98.50%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	2448471	2448471	755.261	759.981
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.42	7.42	4567957	4571957	440.855	441.286
6)	RDX	7.86	7.86	2267961	2287535	476.045	482.282
7)	1,3-Dinitrobenze	9.89	9.89	6372165	5554045	445.392	434.237
8)	Nitrobenzene	10.85	10.85	4278420	4706183	453.347	508.178
9)	2,4,6-Trinitroto	11.62	11.62	4483554	6686972	442.413	509.877
10)	Nitroglycerin	0.00	12.35	0	9654426	N.D. d	2865.030
11)	Tetryl	12.86	12.85	3520265	6566150	434.393	466.116
13)	2,6-Dinitrotolue	14.55	14.55	3333884	4912808	466.303	484.209
14)	2,4-Dinitrotolue	15.26	15.26	5903409	4305712	450.330	452.307
15)	o-Nitrotoluene	16.81	16.81	2766208	4018206	478.865	465.953
16)	3,5-Dinitroanili	16.20	16.20	5098783	8518006	521.205	524.349
17)	p-Nitrotoluene	17.94	17.95	5165376	9478641	439.892	447.250
18)	4-Amino-2,6-Dini	17.94	17.95	5165376	9478641	439.892	445.949
19)	m-Nitrotoluene	19.18	19.18	2883873	5102883	489.176	524.750
20)	2-Amino-4,6-Dini	20.10	20.10	4156614	5727863	460.673	482.428
21)	PETN	0.00	21.73	0	7633537	N.D. d	2379.973m

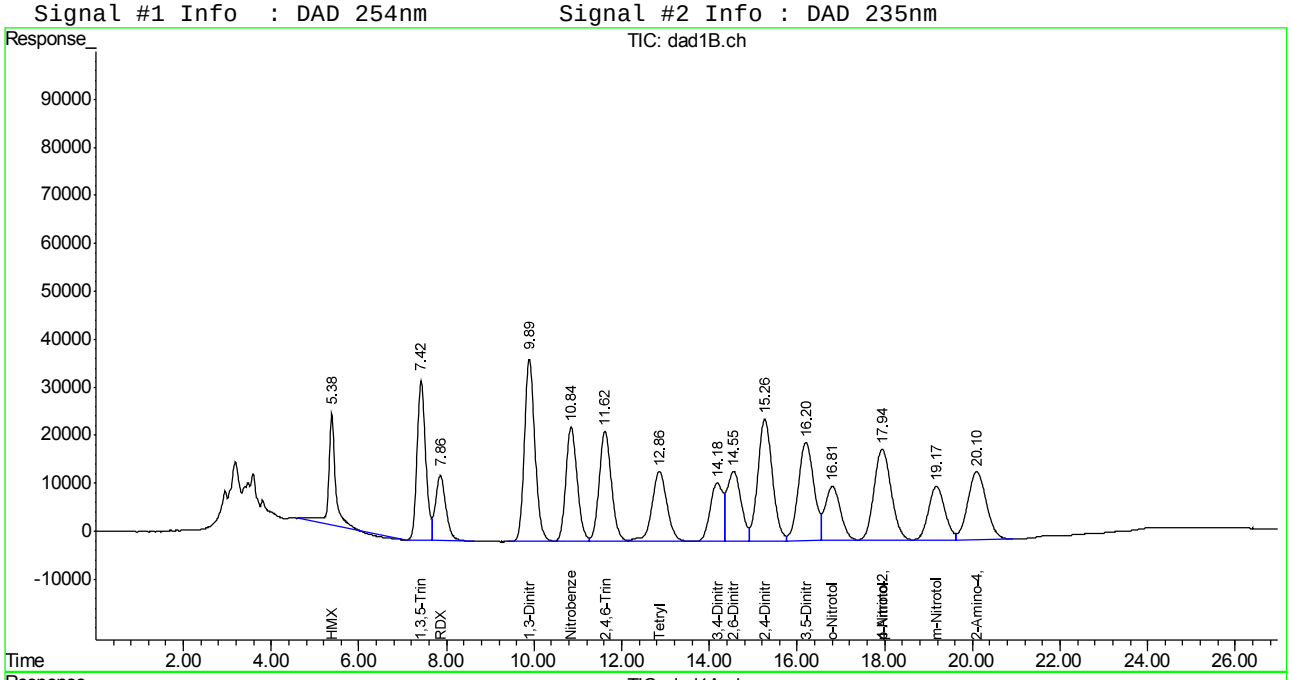
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614633.D 8330RPB.M_1113M.M Wed May 09 11:16:52 2018 Page 1

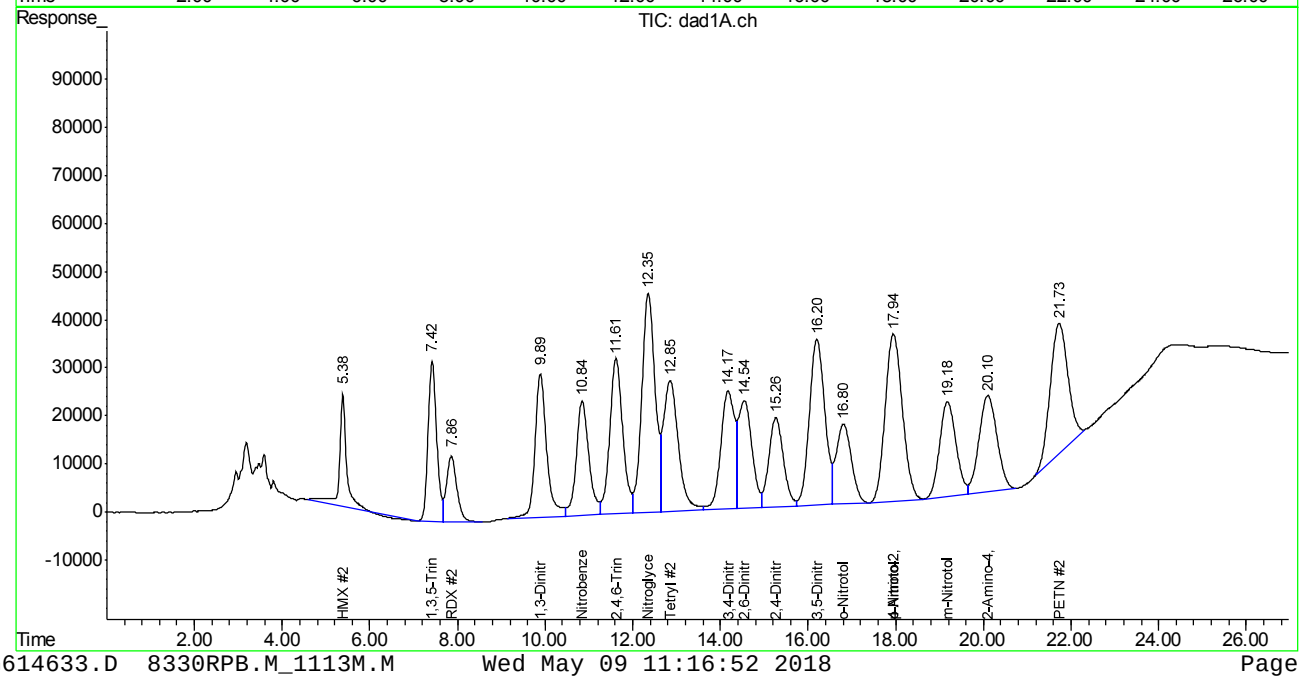
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614633.D\dad1B.ch Vial: 56
Signal #2 : G:\DATA\0508RPB3\GG614633.D\dad1A.ch
Acq On : 09-May-2018, 02:17:40 Operator: evitam
Sample : op69945-msd Inst : G1315B
Misc : op69945,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:16 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG614633.D 8330RPB.M_1113M.M Wed May 09 11:16:52 2018 Page 2

Manual Integration Approval Summary

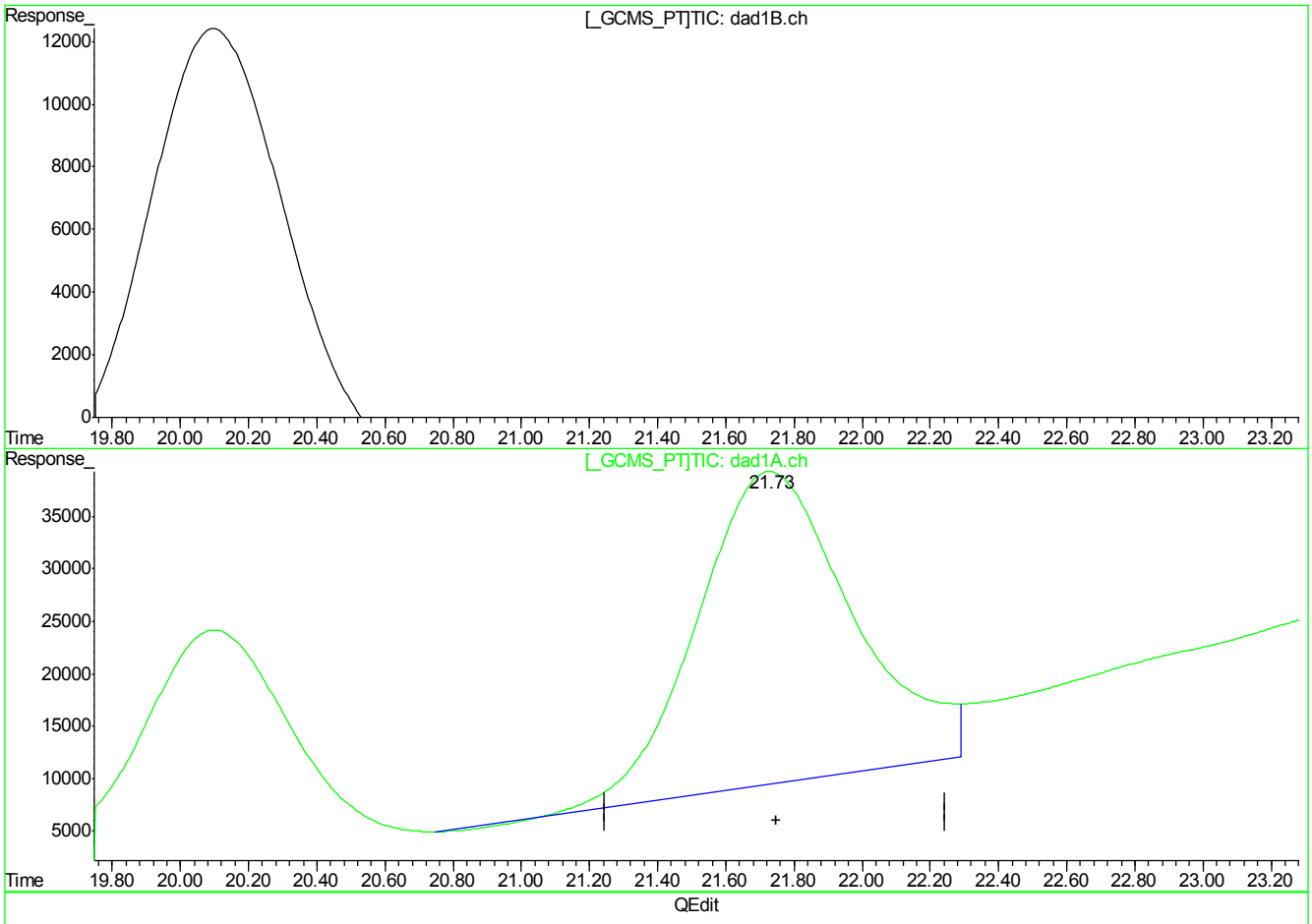
Sample Number:	OP69945-MSD	**Method:**	SW846 8330B
Lab FileID:	GG614633.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 02:17	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.73	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614633.D\dad1B.ch Vial: 56
Signal #2 : G:\DATA\0508RPB3\GG614633.D\dad1A.ch
Acq On : 09-May-2018, 02:17:40 Operator: evitam
Sample : op69945-msd Inst : G1315B
Misc : op69945,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.73min 2921.601ppb

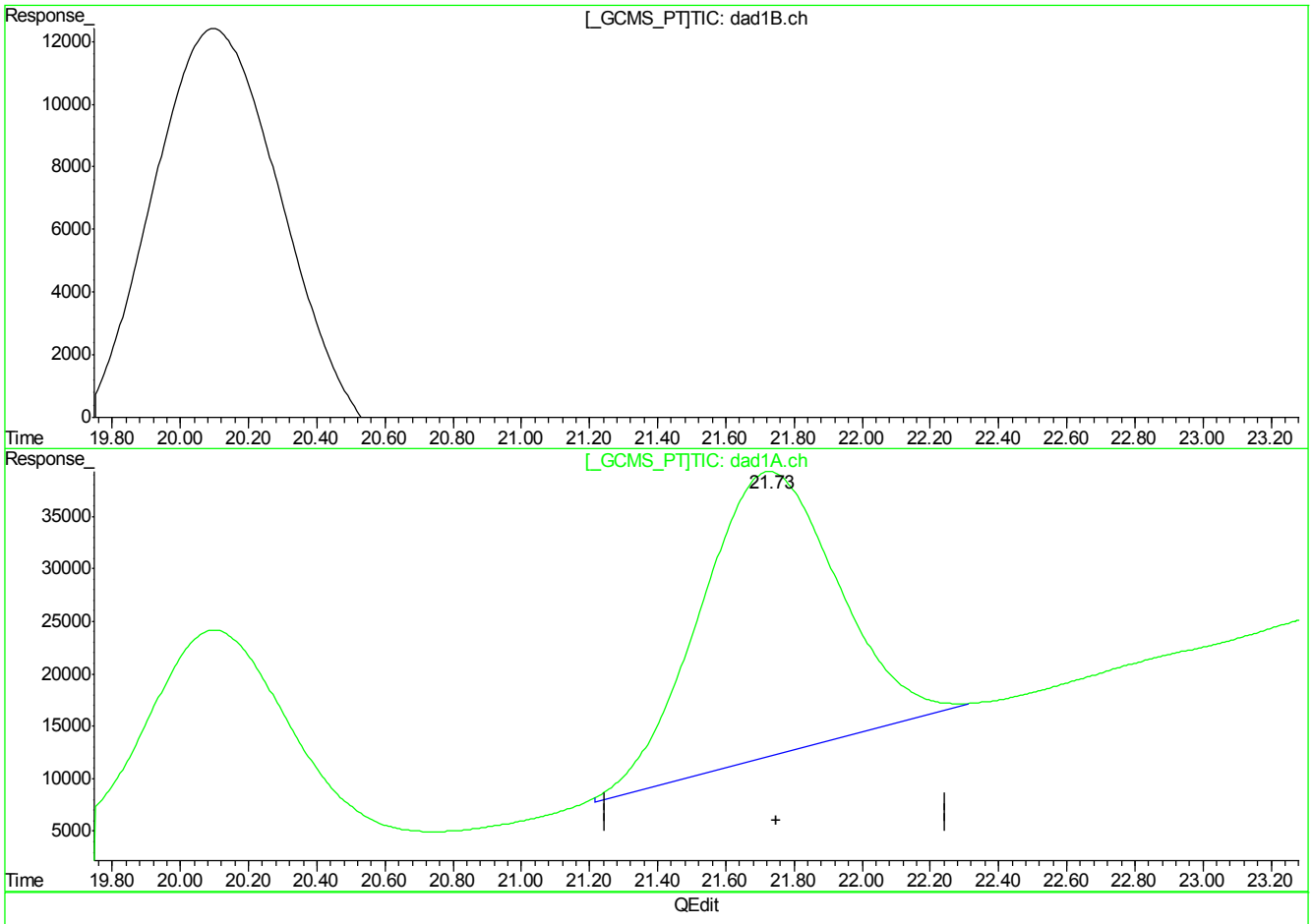
response 9370756

(+) = Expected Retention Time
GG614633.D 8330RPB.M_1113M.M Wed May 09 10:48:26 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614633.D\dad1B.ch Vial: 56
Signal #2 : G:\DATA\0508RPB3\GG614633.D\dad1A.ch
Acq On : 09-May-2018, 02:17:40 Operator: evitam
Sample : op69945-msd Inst : G1315B
Misc : op69945,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.73min 2379.973ppb m

response 7633537

(+) = Expected Retention Time
GG614633.D 8330RPB.M_1113M.M Wed May 09 10:48:29 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 12:05:20 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.22	2443561	5281077	470.378	488.192
	Spiked Amount 500.000	Range 69 - 134		Recovery =		94.08%	97.64%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.41	5.41	1892838	1915139	583.869m	594.440m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.45	7.45	4601730	4605963	444.114	444.568
6)	RDX	7.89	7.89	2291995	2311426	481.090	487.319
7)	1,3-Dinitrobenze	9.91	9.91	6374970	6238960	445.588	490.185
8)	Nitrobenzene	10.87	10.87	4346417	5115626	460.552	552.390
9)	2,4,6-Trinitroto	11.64	11.64	4536386	7124722	447.626	543.256
10)	Nitroglycerin	0.00	12.38	0	8337675	N.D. d	2474.273
11)	Tetryl	12.89	12.89	3377936	6375584	416.830	452.484
13)	2,6-Dinitrotolue	14.59	14.59	3324226	5074723	464.952	500.167
14)	2,4-Dinitrotolue	15.29	15.29	5899454	4769384	450.028	501.599
15)	o-Nitrotoluene	16.83	16.83	2901732	4693553	502.326	544.267
16)	3,5-Dinitroanili	16.22	16.22	5179110	9311419	529.357	572.820
17)	p-Nitrotoluene	17.96	17.97	5406666	10126625	460.441	477.825
18)	4-Amino-2,6-Dini	17.96	17.97	5406666	10126625	460.441	476.436
19)	m-Nitrotoluene	19.20	19.20	2951473	5177228	500.642	532.395
20)	2-Amino-4,6-Dini	20.12	20.13	4191864	5709288	464.579	480.911
21)	PETN	0.00	21.75	0	7720696	N.D. d	2407.147m

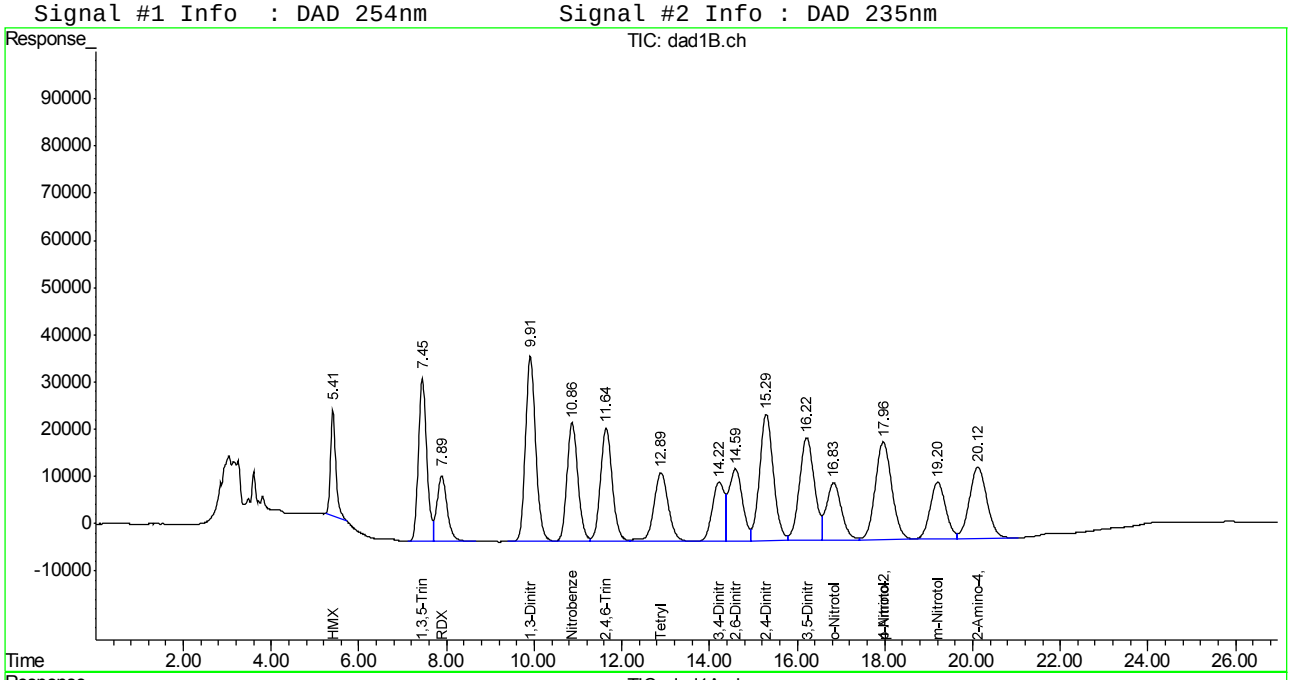
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:13:12 2018 Page 1

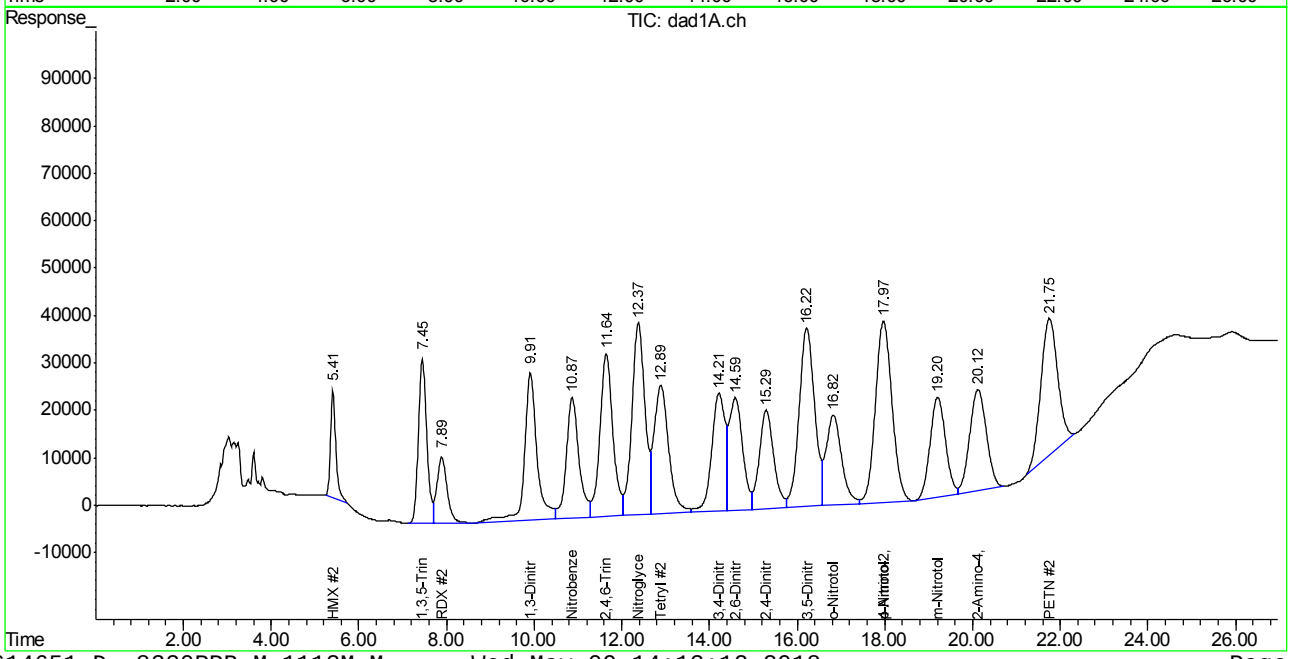
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

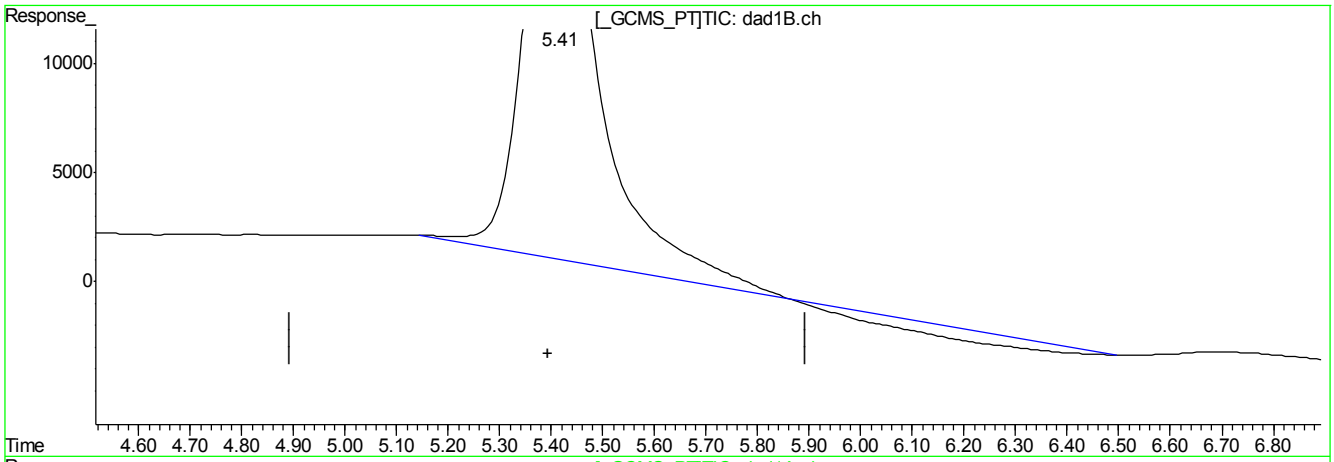
Sample Number:	OP69946-MS	**Method:**	SW846 8330B
Lab FileID:	GG614651.D	**Analyst approved:**	05/09/18 14:15 Evita Martinez
Injection Time:	05/09/18 11:10	**Supervisor approved:**	05/09/18 15:34 Mike Eger

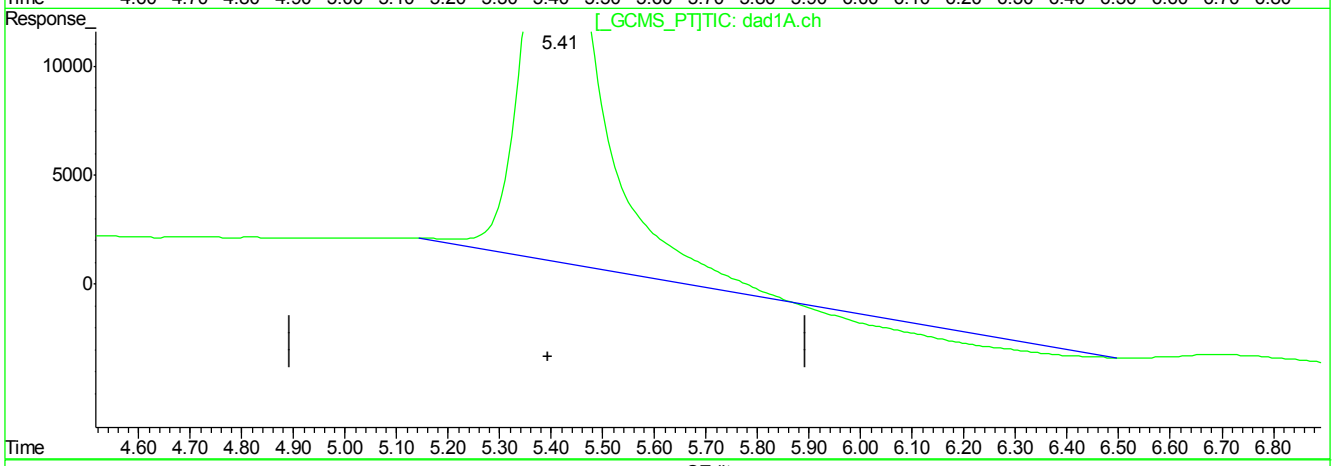
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.41	Poorly defined baseline
HMX	2691-41-0	2	5.41	Poorly defined baseline
PETN	78-11-5	2	21.75	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.41min 610.652ppb

response 1979664

(2) HMX #2

5.41min 614.468ppb

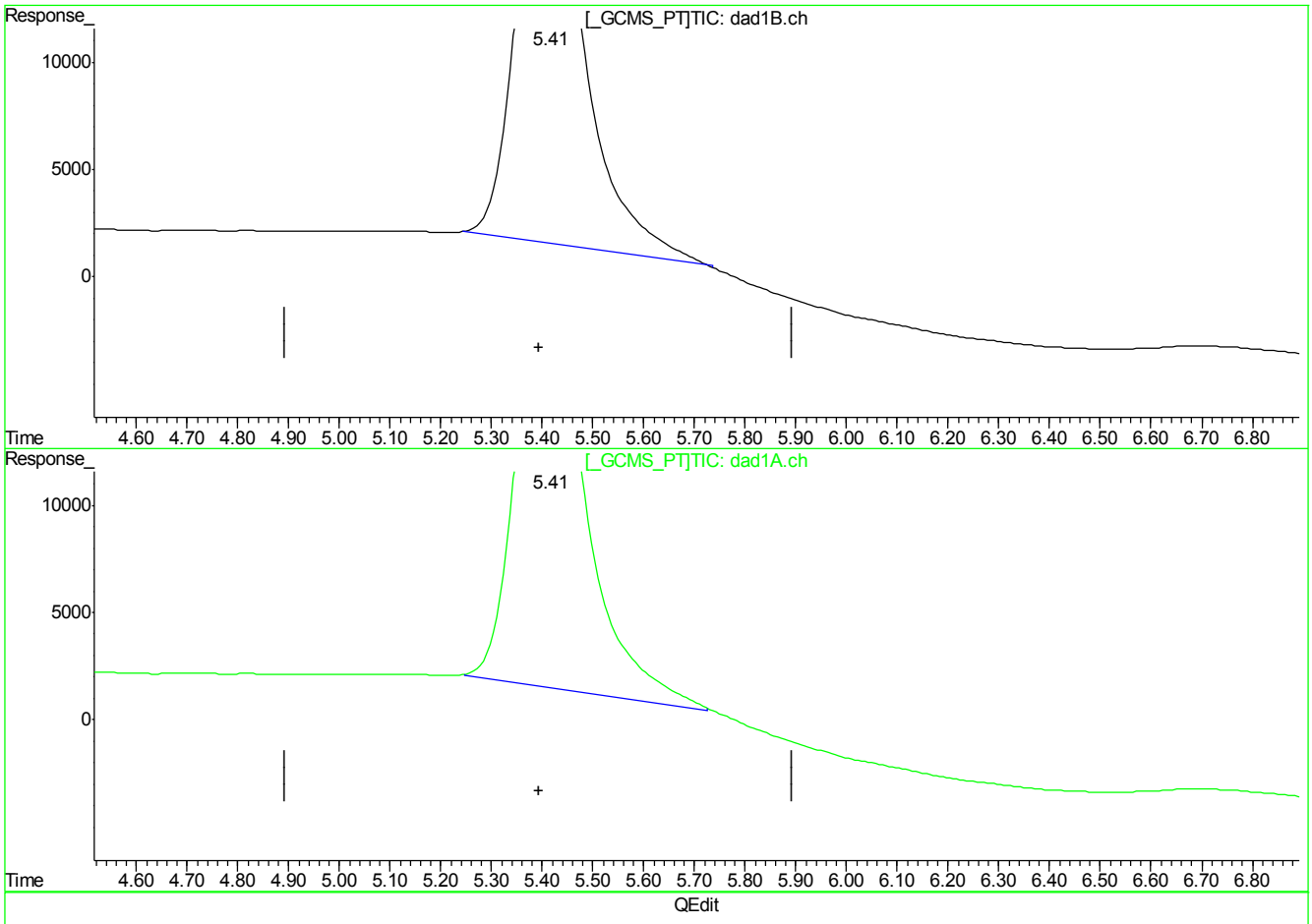
response 1979664

(+) = Expected Retention Time
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:11:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.41min 583.869ppb m

response 1892838

(2) HMX #2

5.41min 594.440ppb m

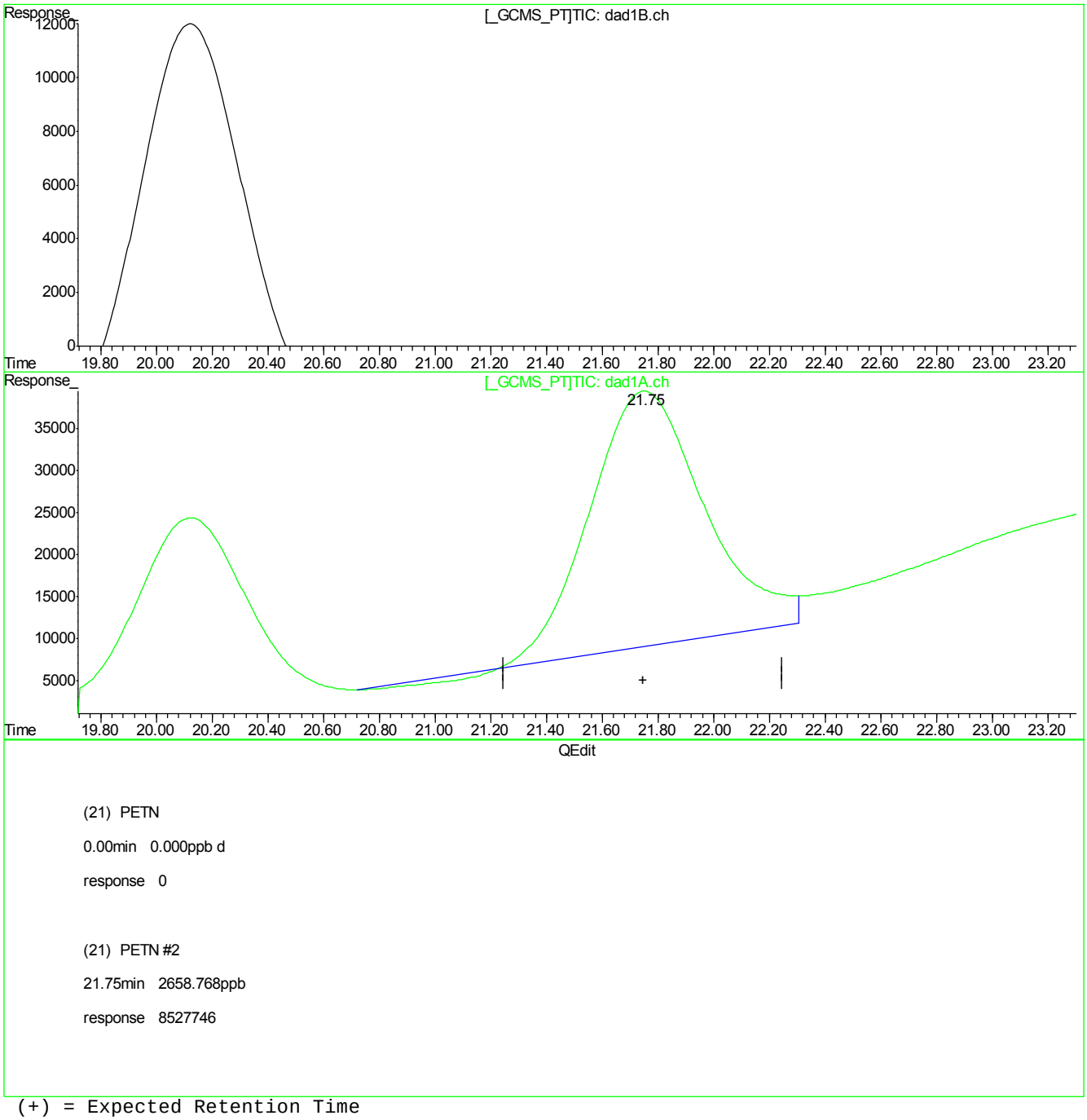
response 1915139

(+) = Expected Retention Time
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:11:15 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

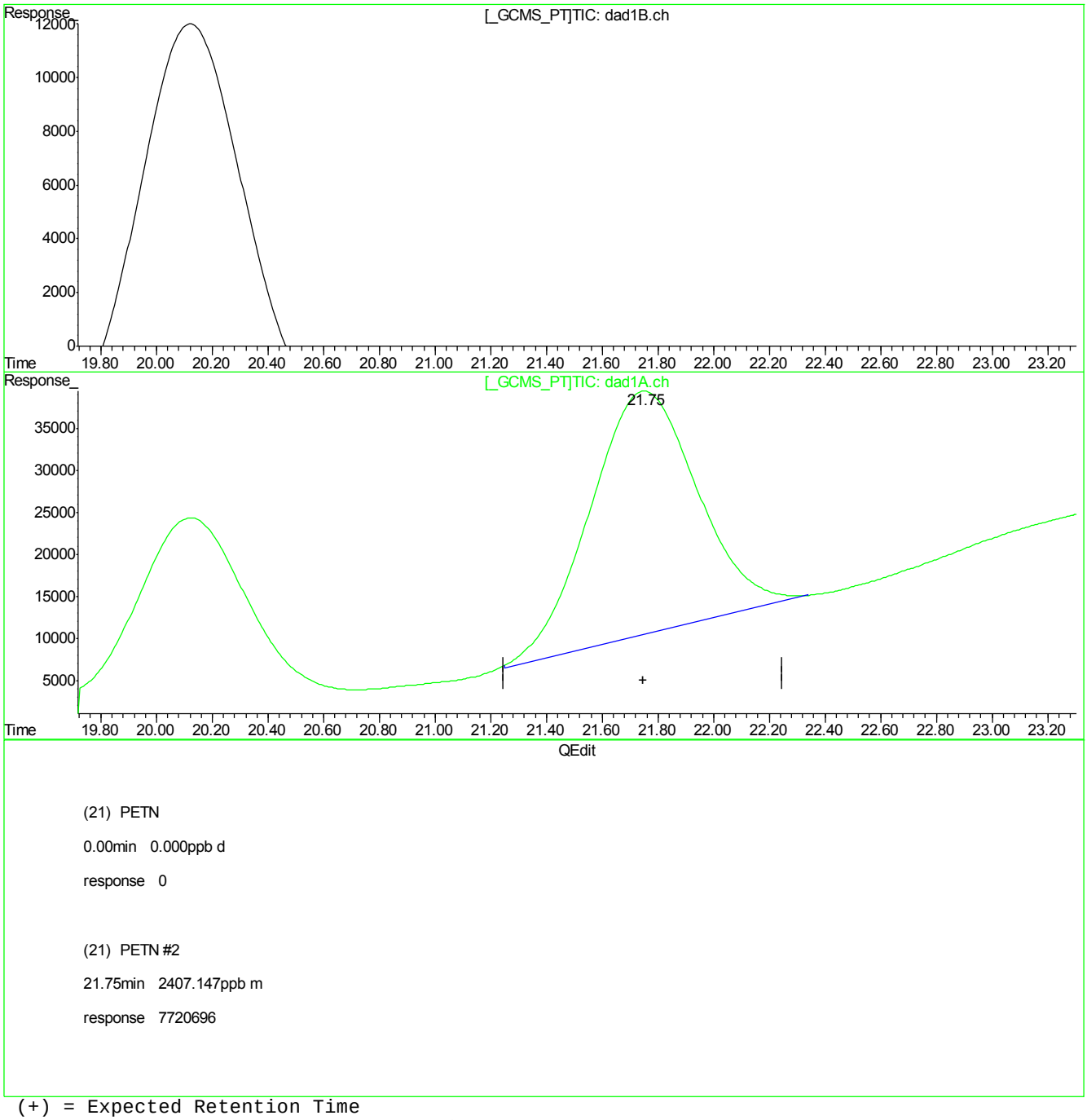


(+) = Expected Retention Time
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:11:31 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:11:36 2018

7.5.11.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 14:11:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.18	14.18	2425799	4749882	466.959	439.087
	Spiked Amount 500.000	Range 69 - 134		Recovery =		93.39%	87.82%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1939052	1954526	598.125m	606.665m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.43	7.43	4567244	4590392	440.786	443.065
6)	RDX	7.86	7.86	2311840	2430362	485.255	512.394
7)	1,3-Dinitrobenze	9.88	9.88	6354739	5041994	444.174	392.779
8)	Nitrobenzene	10.83	10.83	4341494	4751555	460.030	513.077
9)	2,4,6-Trinitroto	11.61	11.61	4486691	6586894	442.723	502.247
10)	Nitroglycerin	0.00	12.35	0	7785466	N.D. d	2310.401
11)	Tetryl	12.86	12.86	3383885	6392763	417.564	453.713
13)	2,6-Dinitrotolue	14.56	14.56	3277789	4668698	458.457	460.149
14)	2,4-Dinitrotolue	15.27	15.27	5861544	4413605	447.136	463.766
15)	o-Nitrotoluene	16.80	16.79	2868340	4419679	496.545	512.508
16)	3,5-Dinitroanili	16.19	16.19	5112413	8915190	522.588	548.621
17)	p-Nitrotoluene	17.93	17.94	5392993	9966210	459.276	470.256
18)	4-Amino-2,6-Dini	17.93	17.94	5392993	9966210	459.276	468.888
19)	m-Nitrotoluene	19.17	19.17	2913008	4830292	494.118	496.719
20)	2-Amino-4,6-Dini	20.09	20.09	4134012	5560852	458.168	468.782
21)	PETN	0.00	21.72	0	7481639	N.D. d	2332.614m

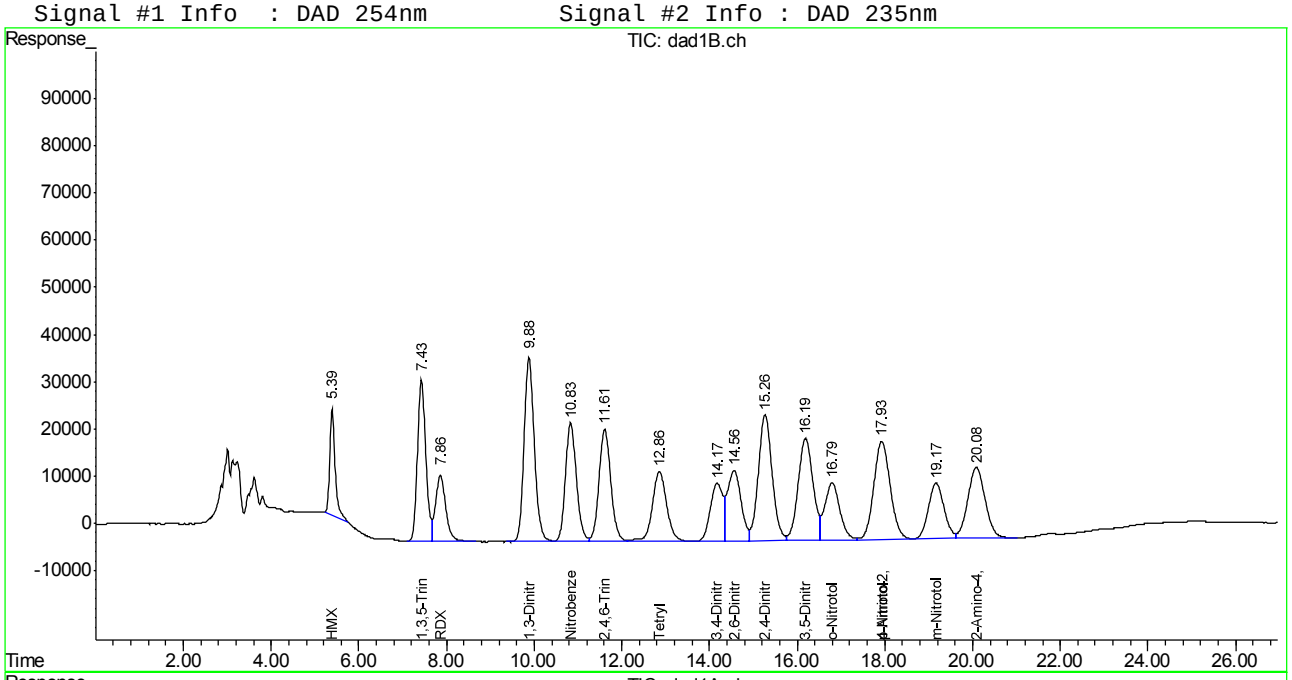
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:13:13 2018 Page 1

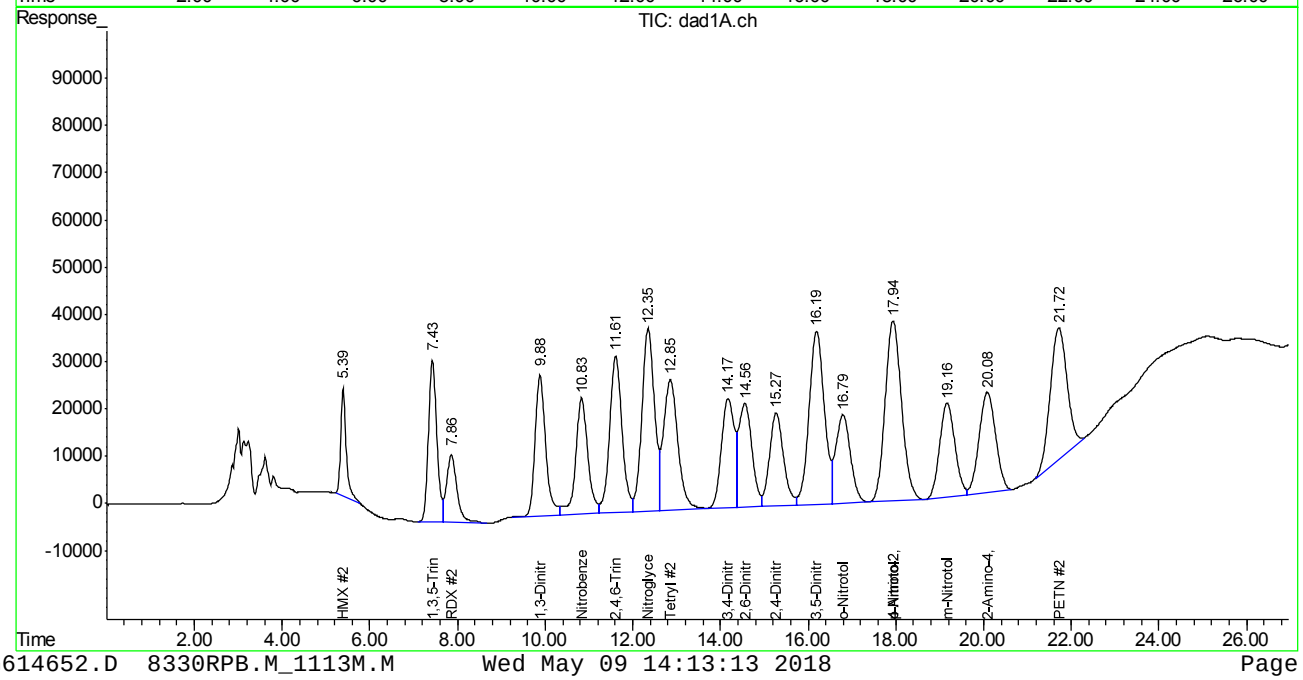
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

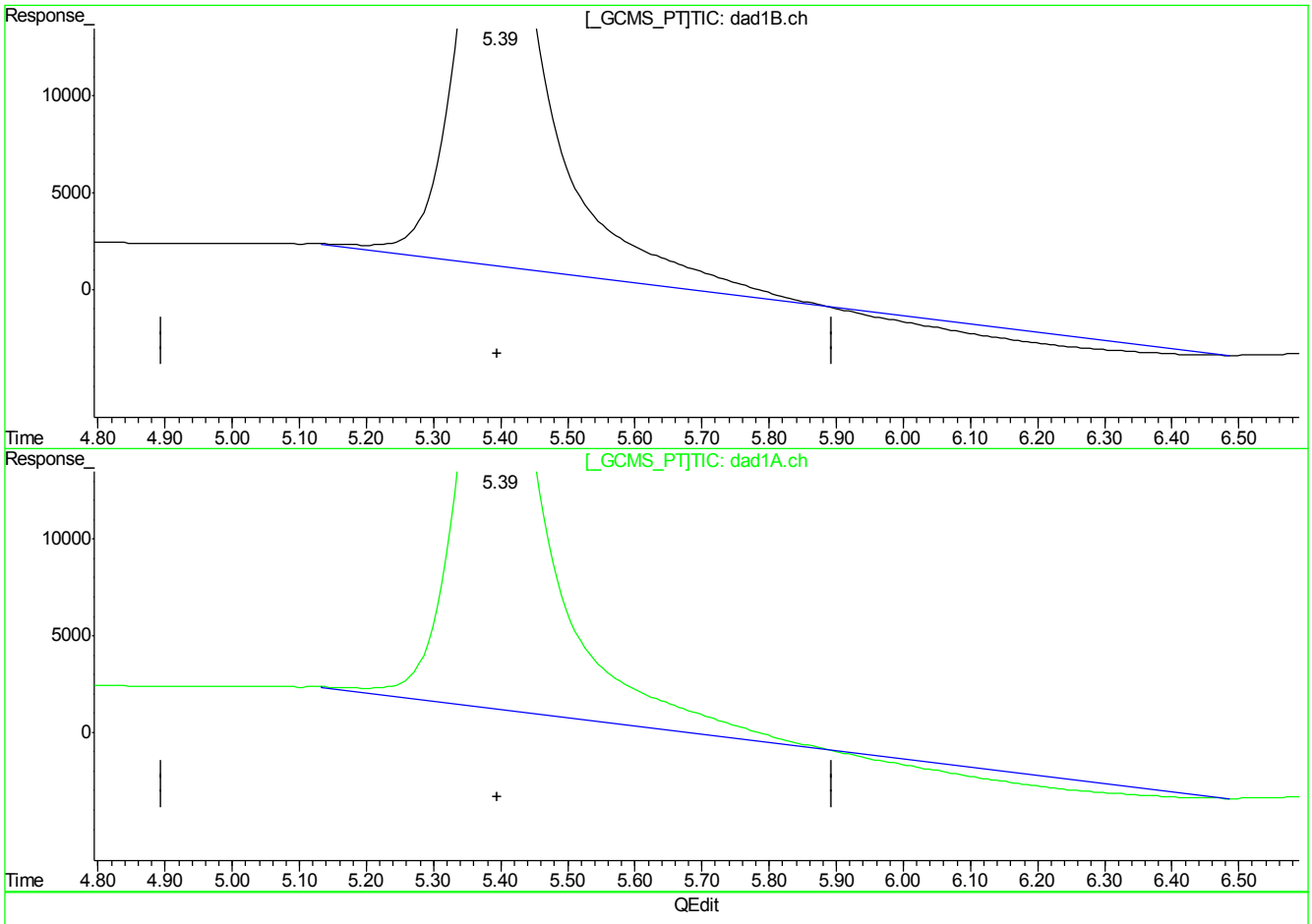
Sample Number:	OP69946-MSD	**Method:**	SW846 8330B
Lab FileID:	GG614652.D	**Analyst approved:**	05/09/18 14:15 Evita Martinez
Injection Time:	05/09/18 11:40	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
PETN	78-11-5	2	21.72	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 613.759ppb

response 1989737

(2) HMX #2

5.39min 617.594ppb

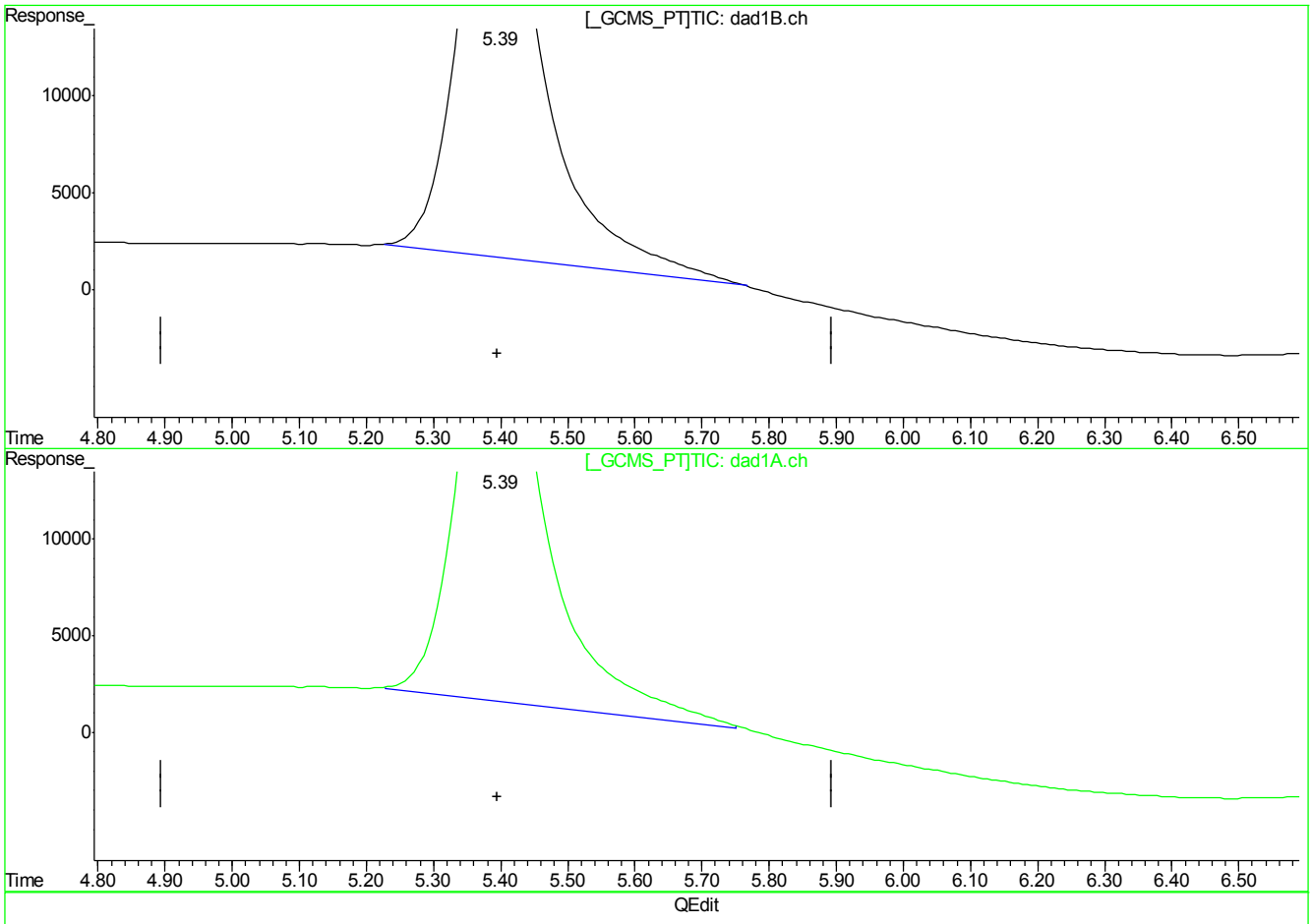
response 1989737

(+) = Expected Retention Time
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:11:55 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 598.125ppb m

response 1939052

(2) HMX #2

5.39min 606.665ppb m

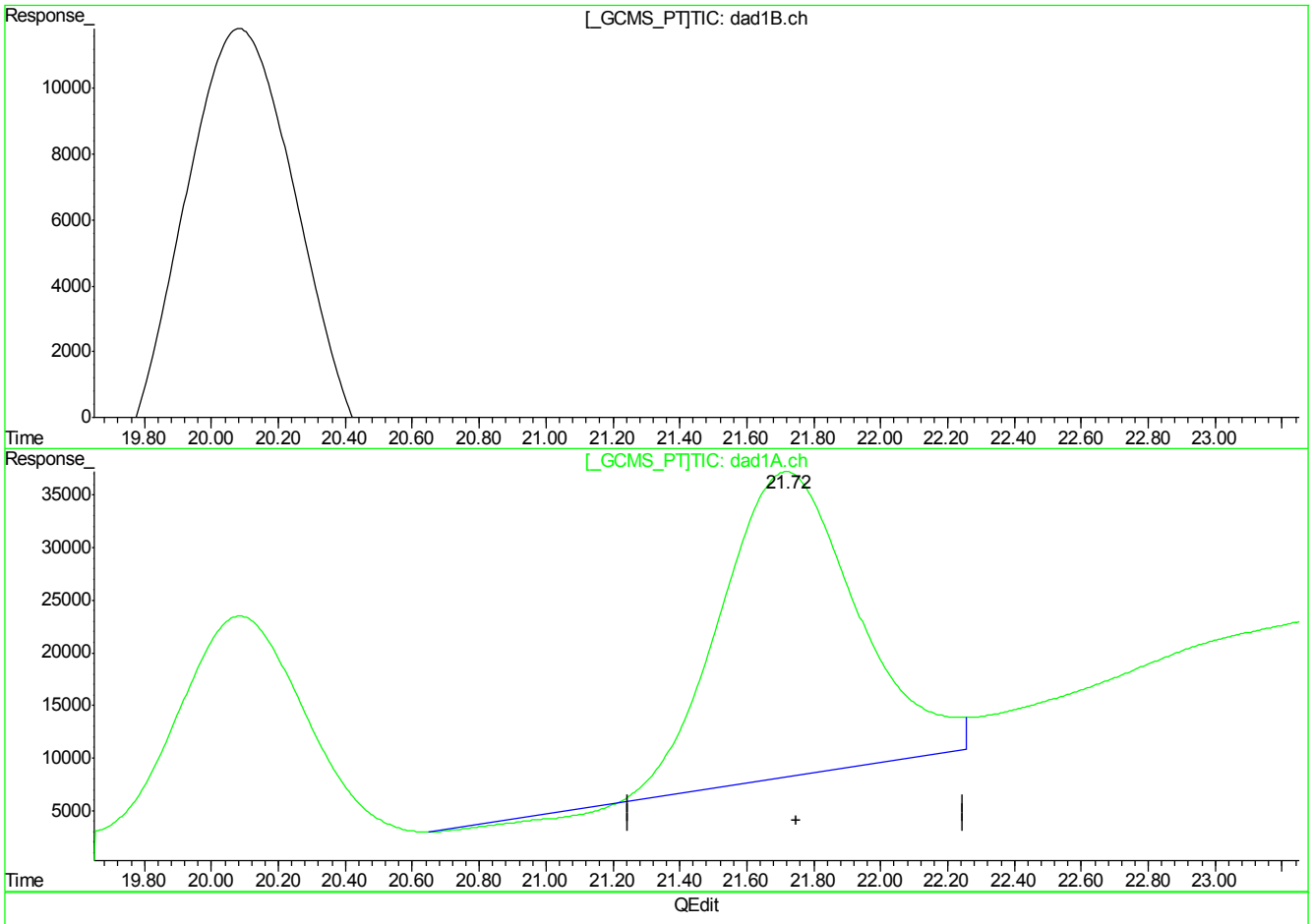
response 1954526

(+) = Expected Retention Time
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:12:01 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.72min 2505.671ppb

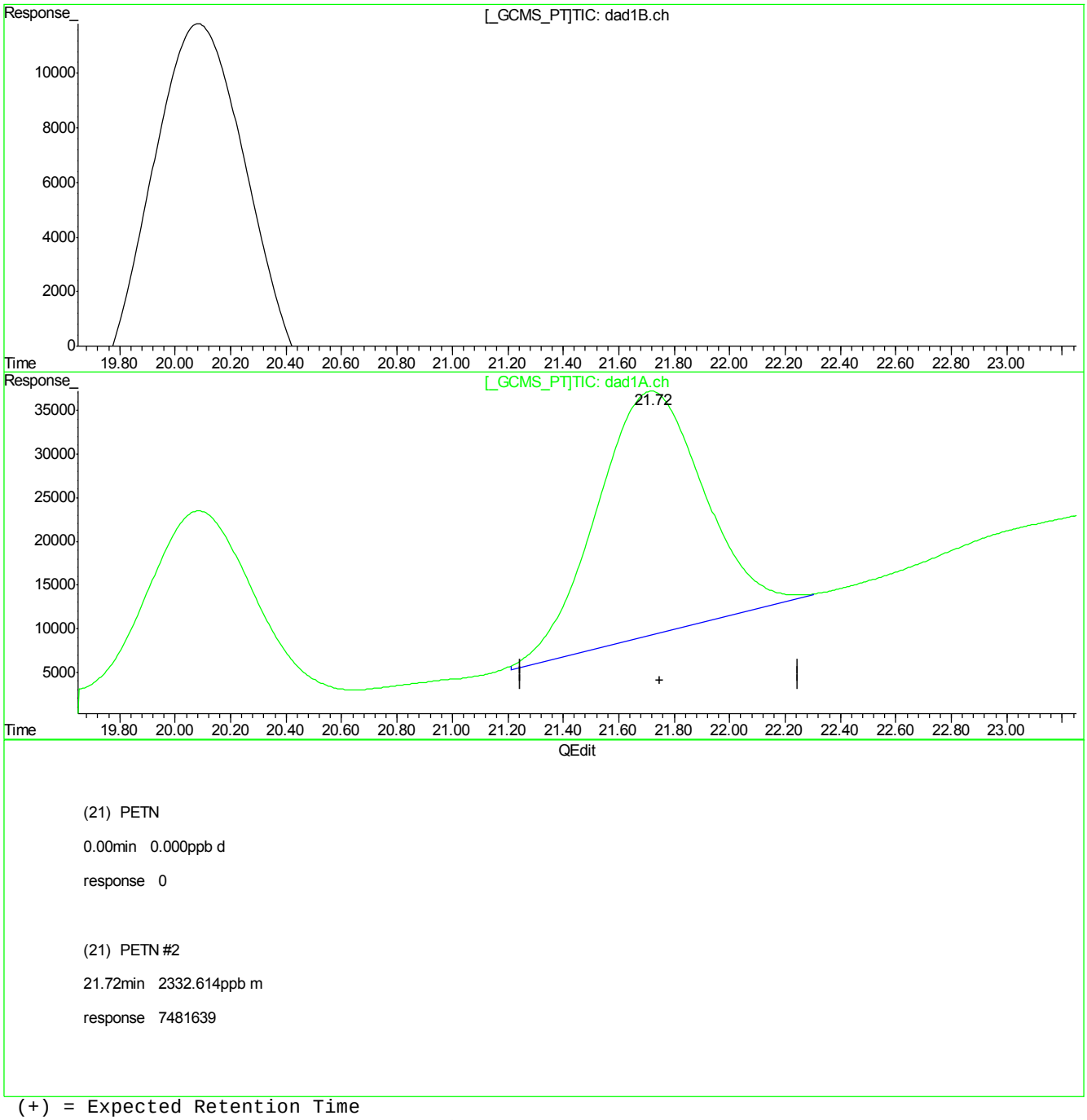
response 8036703

(+) = Expected Retention Time
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:12:13 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:12:19 2018

7.5.12.5
7

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614595.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\0507RPB3\GG614595.D\dad1A.ch
Acq On : 07-May-2018, 19:48:17 Operator: evitam
Sample : op69919-dup Inst : G1315B
Misc : op69919,Ggg2625,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:06:07 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.46	14.46	2600377	5185798	500.565	479.384
	Spiked Amount 500.000	Range 69 - 134		Recovery =		100.11%	95.88%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

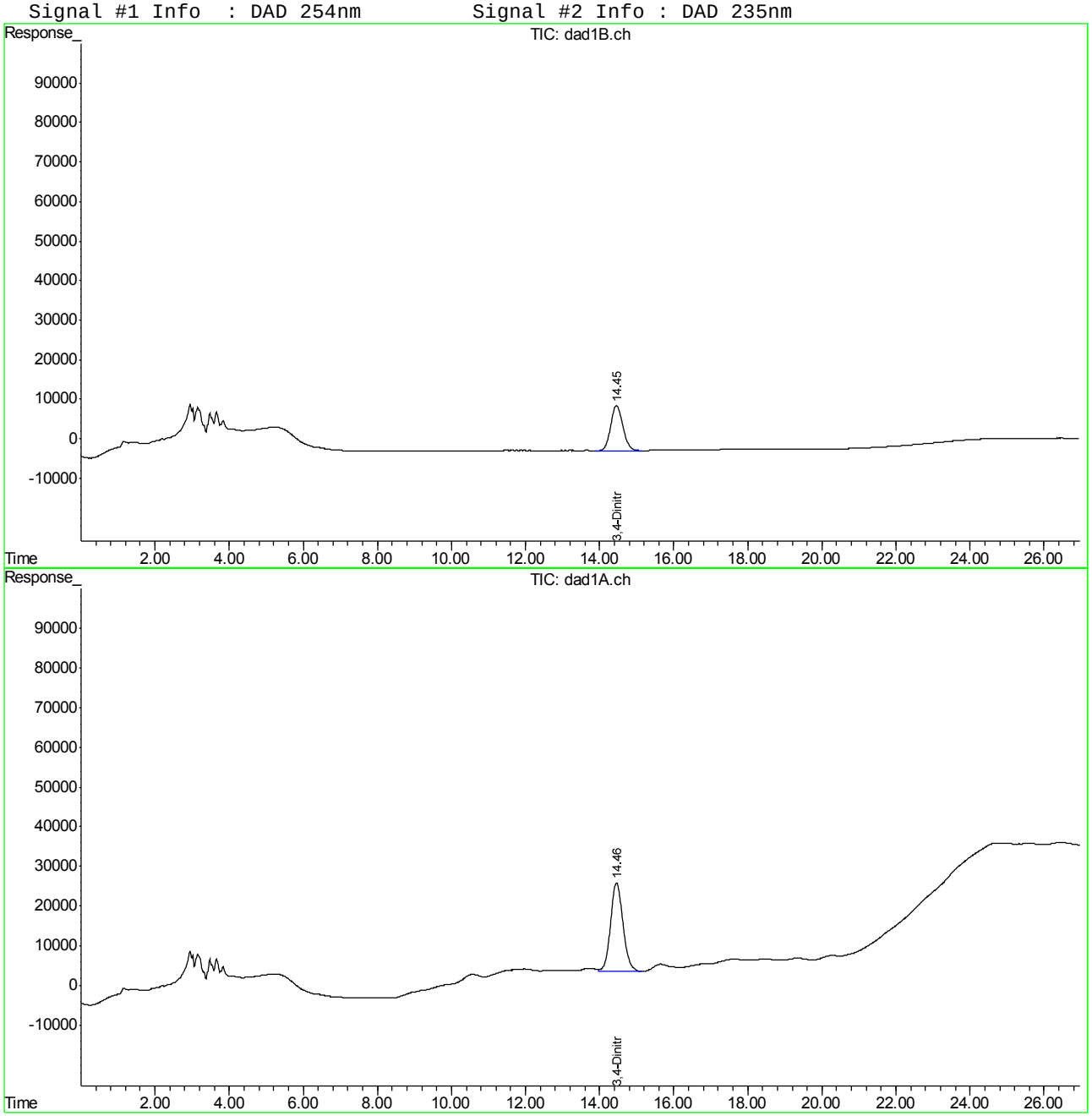
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614595.D 8330RPB.M_1113M.M Tue May 08 11:19:04 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614595.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\0507RPB3\GG614595.D\dad1A.ch
Acq On : 07-May-2018, 19:48:17 Operator: evitam
Sample : op69919-dup Inst : G1315B
Misc : op69919,Ggg2625,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614596.D\dad1B.ch Vial: 13
Signal #2 : G:\DATA\0507RPB3\GG614596.D\dad1A.ch
Acq On : 07-May-2018, 20:17:44 Operator: evitam
Sample : op69919-dup2 Inst : G1315B
Misc : op69919,Ggg2625,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:06:08 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.27	2602853	4966579	501.042	459.119
	Spiked Amount 500.000	Range 69 - 134		Recovery =		100.21%	91.82%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

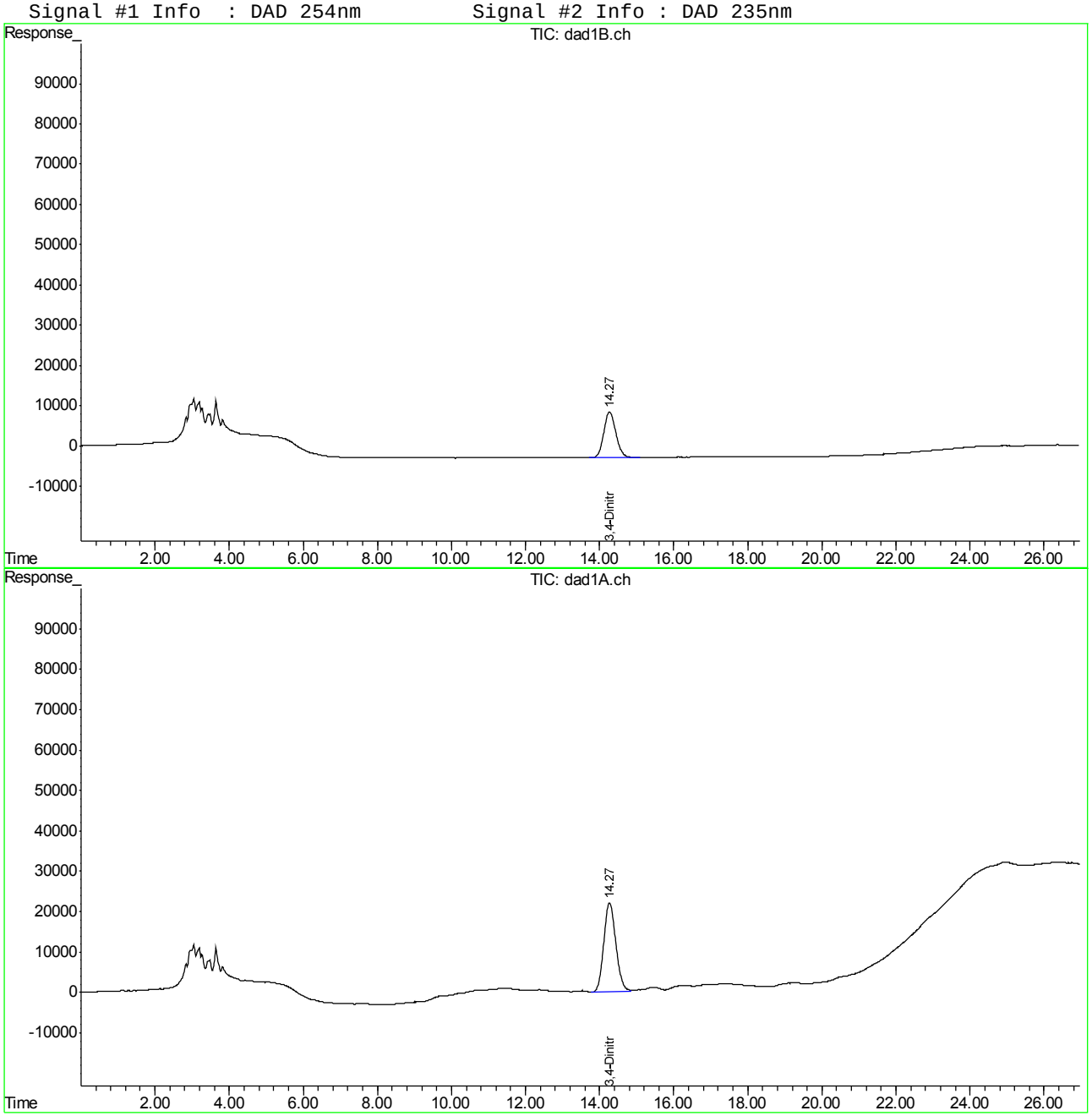
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614596.D 8330RPB.M_1113M.M Tue May 08 11:19:05 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614596.D\dad1B.ch Vial: 13
Signal #2 : G:\DATA\0507RPB3\GG614596.D\dad1A.ch
Acq On : 07-May-2018, 20:17:44 Operator: evitam
Sample : op69919-dup2 Inst : G1315B
Misc : op69919,Ggg2625,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059606.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059606.D\dad1A.ch
Acq On : 08-May-2018, 14:06:30 Operator: evitam
Sample : op69921-dup Inst : G1315B
Misc : OP69921,gbb1729,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 14:45:20 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.14	10.13	974404	1769271	364.168	375.263
	Spiked Amount 500.000	Range 69 - 134		Recovery =		72.83%	75.05%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

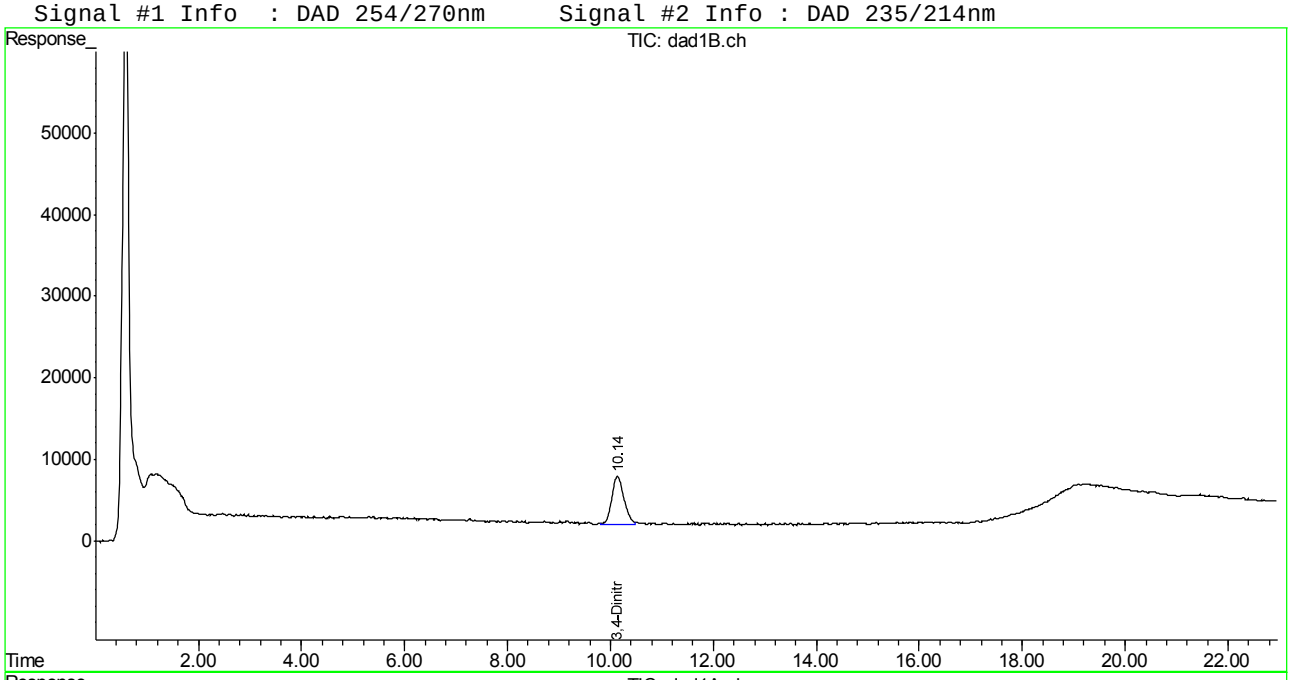
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059606.D 8330B_0419PLUS.M Wed May 09 09:30:54 2018 Page 1

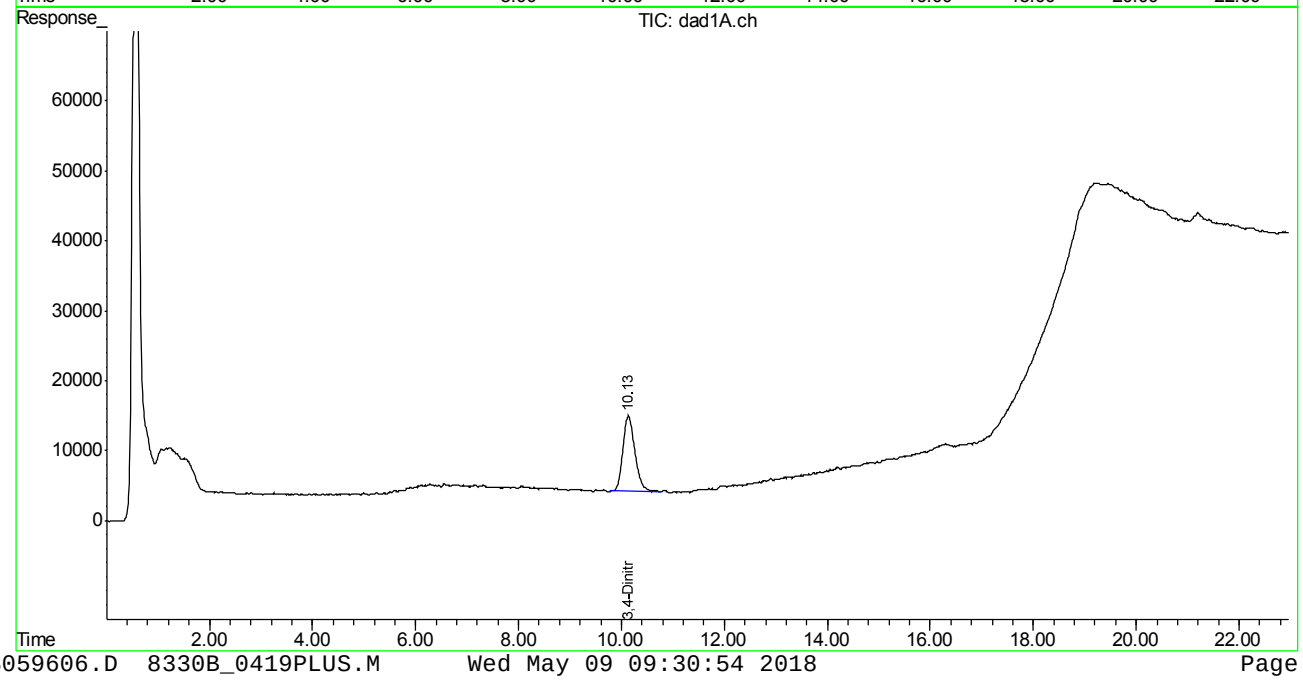
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059606.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059606.D\dad1A.ch
Acq On : 08-May-2018, 14:06:30 Operator: evitam
Sample : op69921-dup Inst : G1315B
Misc : OP69921,gbb1729,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 14:45 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059607.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059607.D\dad1A.ch
Acq On : 08-May-2018, 14:36:27 Operator: evitam
Sample : op69921-dup2 Inst : G1315B
Misc : OP69921,gbb1729,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 15:06:08 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.17	10.17	994621	1768945	371.723	375.194
	Spiked Amount 500.000	Range 69 - 134		Recovery =		74.34%	75.04%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

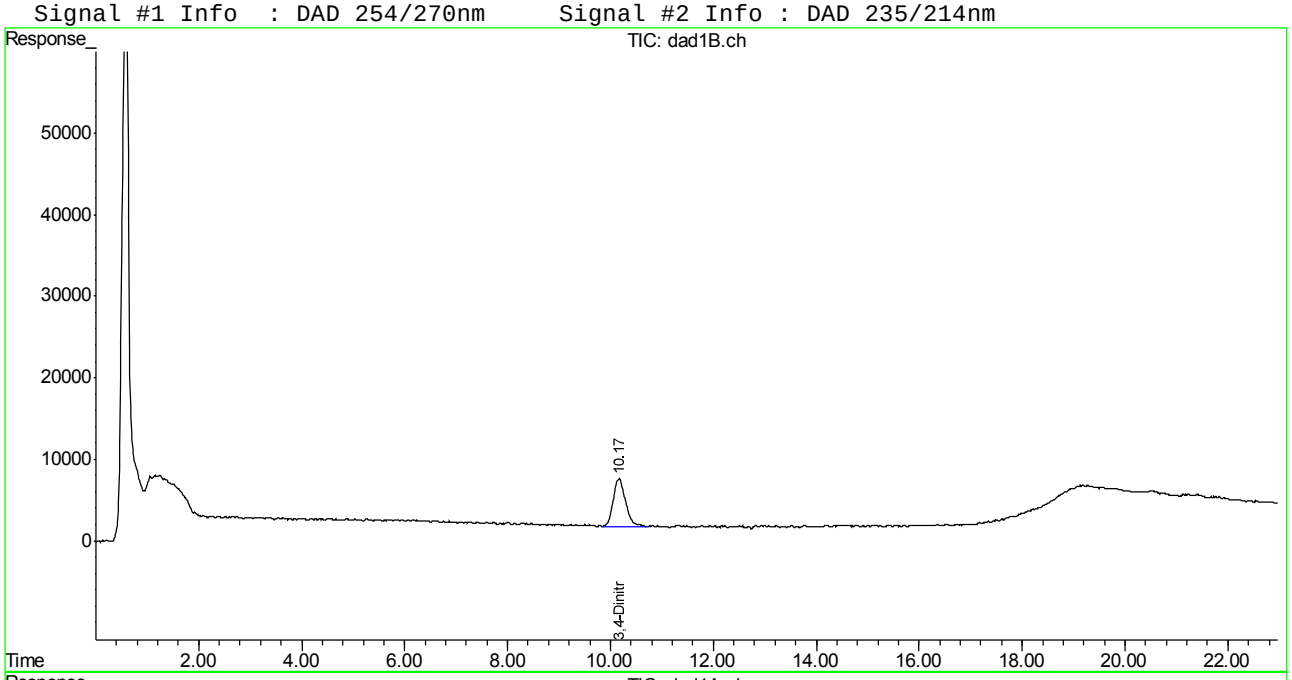
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059607.D 8330B_0419PLUS.M Wed May 09 09:30:55 2018 Page 1

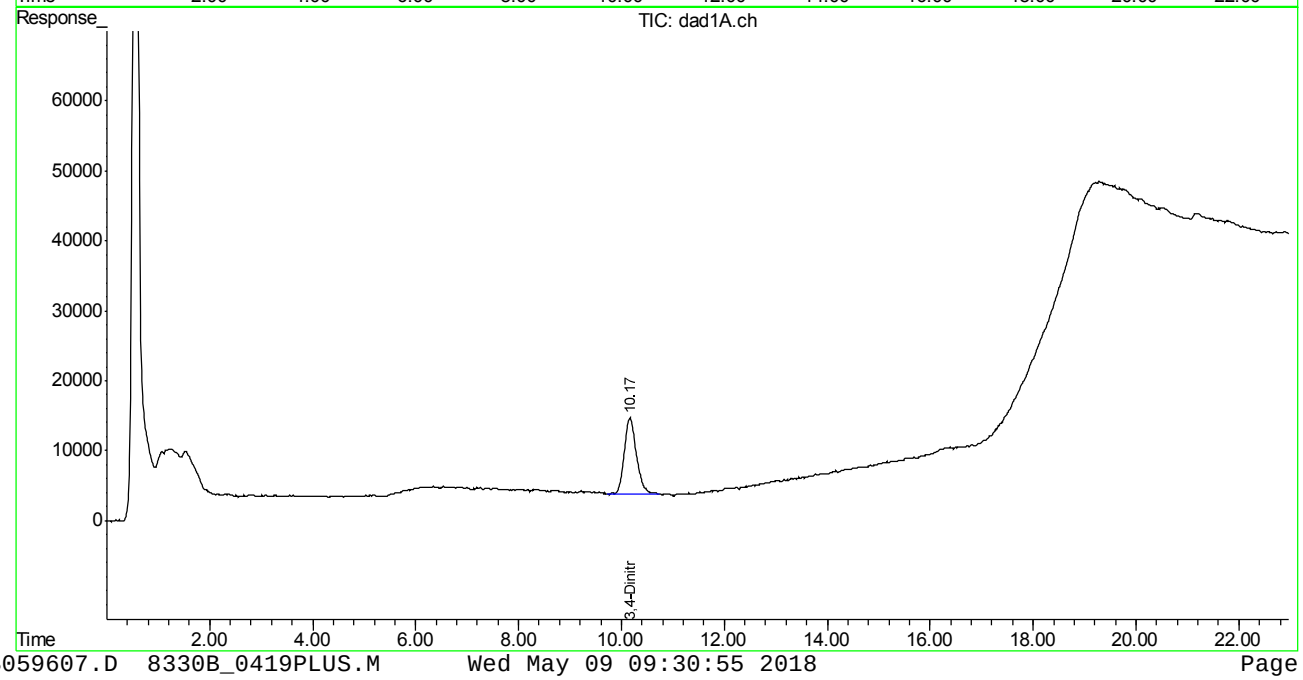
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059607.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059607.D\dad1A.ch
Acq On : 08-May-2018, 14:36:27 Operator: evitam
Sample : op69921-dup2 Inst : G1315B
Misc : OP69921,gbb1729,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 15:06 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059607.D 8330B_0419PLUS.M Wed May 09 09:30:55 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614615.D\dad1B.ch Vial: 35
Signal #2 : G:\DATA\0508RPB3\GG614615.D\dad1A.ch
Acq On : 08-May-2018, 17:27:24 Operator: evitam
Sample : op69920-dup Inst : G1315B
Misc : op69920,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:11:52 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2644453	5298491	509.050	489.802
	Spiked Amount 500.000	Range 69 - 134		Recovery =		101.81%	97.96%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

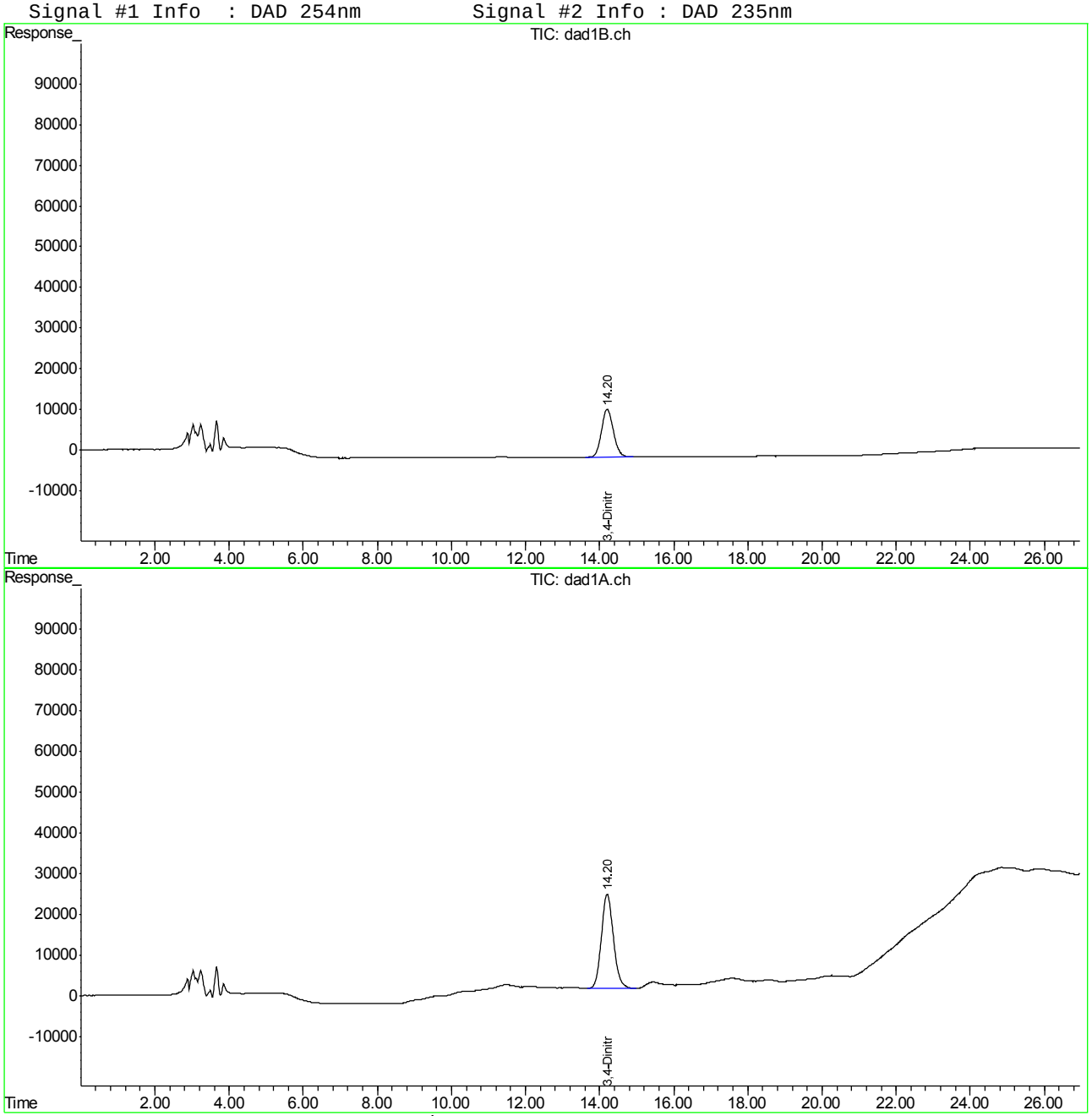
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614615.D 8330RPB.M_1113M.M Wed May 09 11:10:06 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614615.D\dad1B.ch Vial: 35
Signal #2 : G:\DATA\0508RPB3\GG614615.D\dad1A.ch
Acq On : 08-May-2018, 17:27:24 Operator: evitam
Sample : op69920-dup Inst : G1315B
Misc : op69920,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:24 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614615.D 8330RPB.M_1113M.M Wed May 09 11:10:06 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614616.D\dad1B.ch Vial: 36
Signal #2 : G:\DATA\0508RPB3\GG614616.D\dad1A.ch
Acq On : 08-May-2018, 17:56:53 Operator: evitam
Sample : op69920-dup2 Inst : G1315B
Misc : op69920,Ggg2626,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:11:58 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.22	2626839	5239654	505.659	484.363
	Spiked Amount 500.000	Range 69 - 134		Recovery =		101.13%	96.87%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

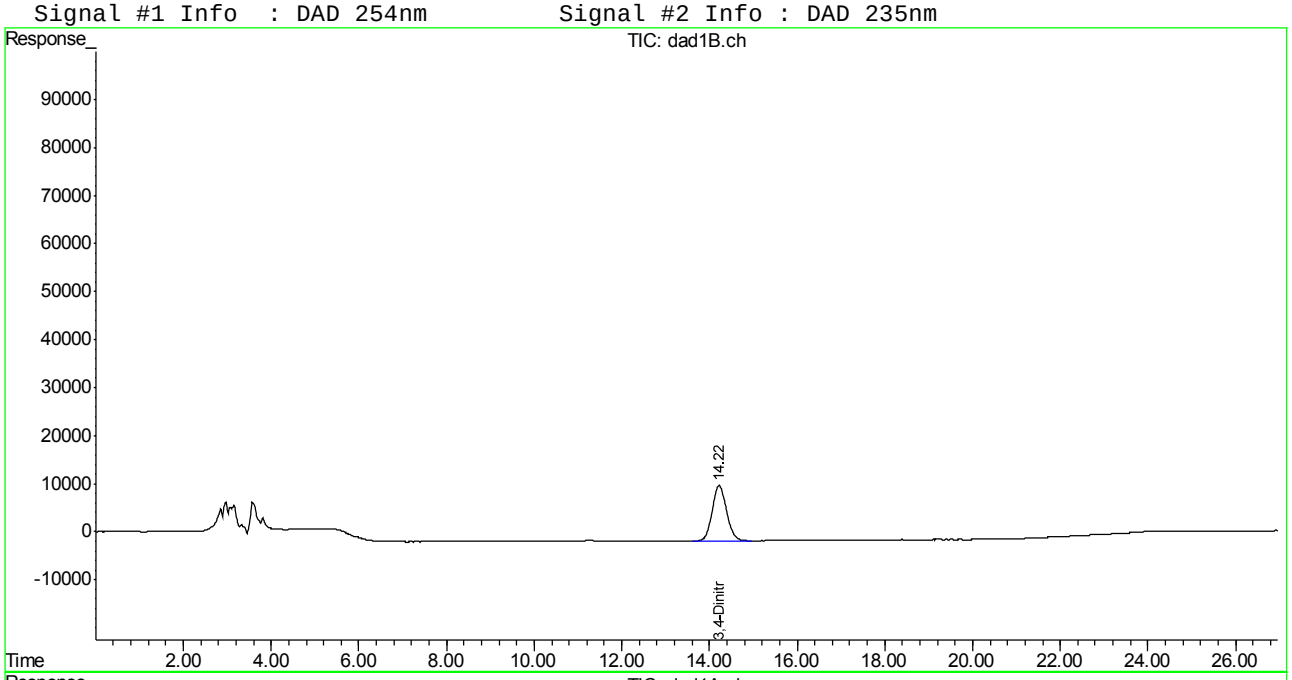
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614616.D 8330RPB.M_1113M.M Wed May 09 11:10:07 2018 Page 1

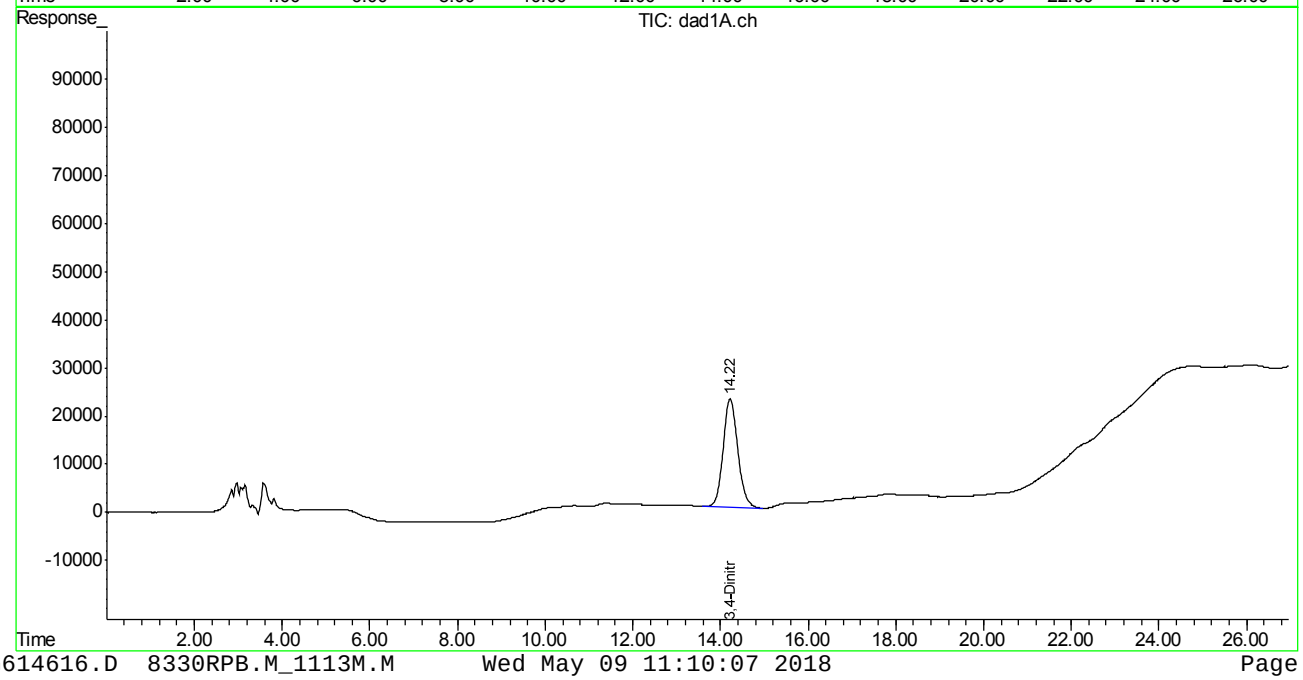
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614616.D\dad1B.ch Vial: 36
Signal #2 : G:\DATA\0508RPB3\GG614616.D\dad1A.ch
Acq On : 08-May-2018, 17:56:53 Operator: evitam
Sample : op69920-dup2 Inst : G1315B
Misc : op69920,Ggg2626,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:25 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614637.D\dad1B.ch Vial: 58
Signal #2 : G:\DATA\0508RPB3\GG614637.D\dad1A.ch
Acq On : 09-May-2018, 04:15:34 Operator: evitam
Sample : op69945-dup Inst : G1315B
Misc : op69945,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.17	14.17	2369965	4255579	456.211	393.393
	Spiked Amount 500.000	Range 69 - 134		Recovery =		91.24%	78.68%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

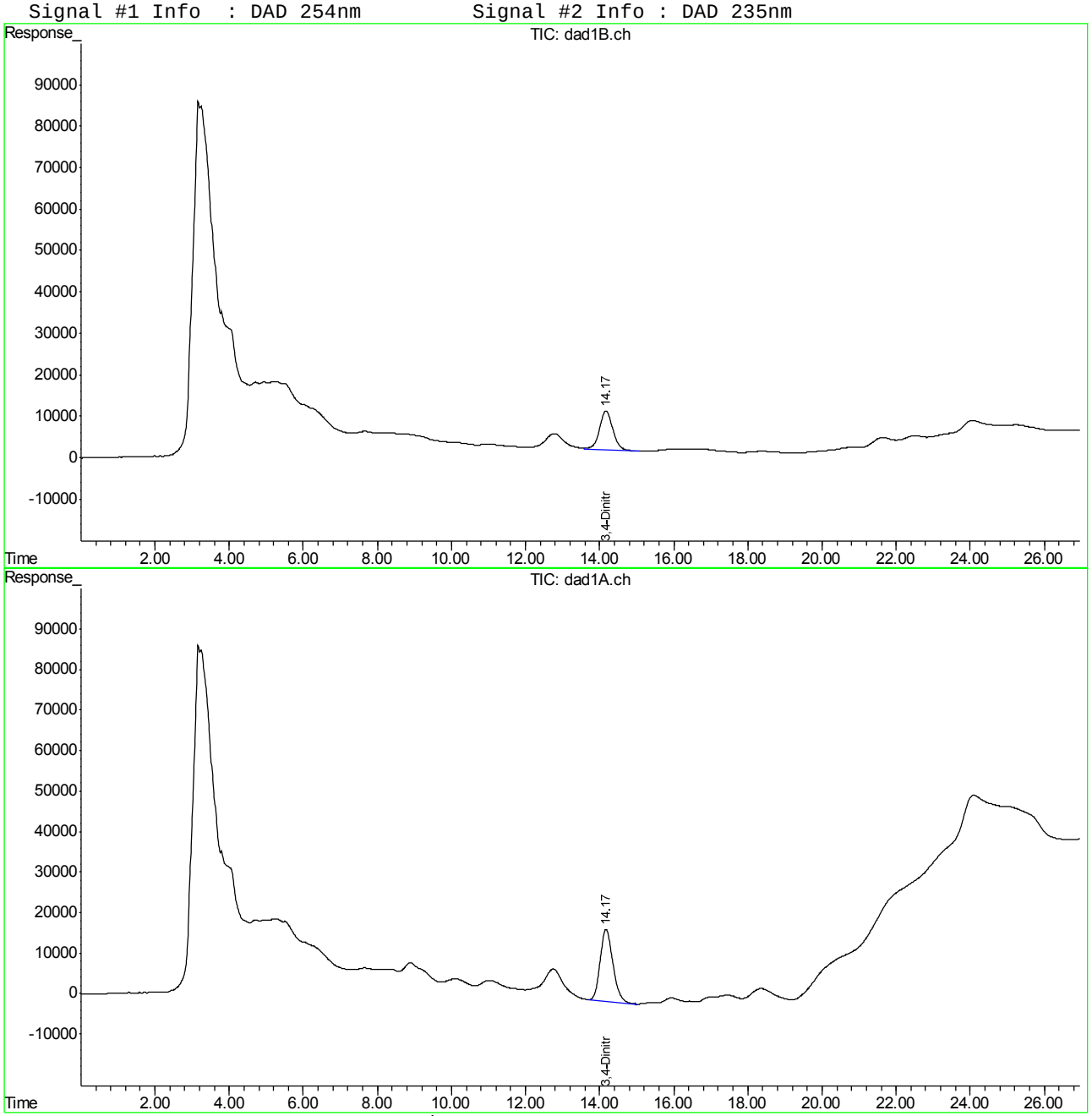
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614637.D 8330RPB.M_1113M.M Wed May 09 11:10:26 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614637.D\dad1B.ch Vial: 58
Signal #2 : G:\DATA\0508RPB3\GG614637.D\dad1A.ch
Acq On : 09-May-2018, 04:15:34 Operator: evitam
Sample : op69945-dup Inst : G1315B
Misc : op69945,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:54 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614637.D 8330RPB.M_1113M.M Wed May 09 11:10:26 2018 Page 2

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614638.D\dad1B.ch Vial: 59
Signal #2 : G:\DATA\0508RPB3\GG614638.D\dad1A.ch
Acq On : 09-May-2018, 04:45:01 Operator: evitam
Sample : op69945-dup2 Inst : G1315B
Misc : op69945,Ggg2626,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:20 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.19	14.19	2325209	4169273	447.596	385.415m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		89.52%	77.08%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

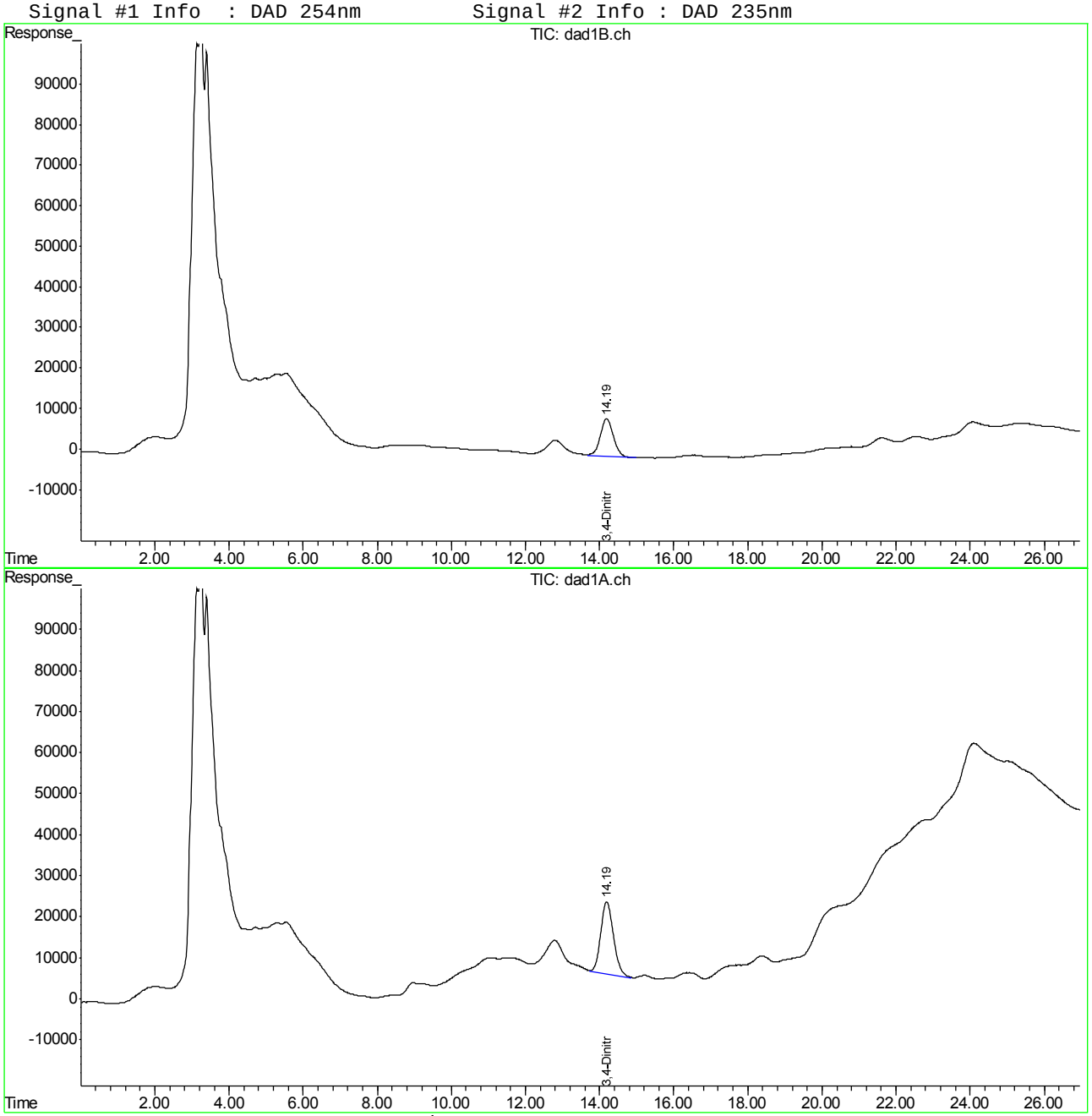
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614638.D 8330RPB.M_1113M.M Wed May 09 11:10:27 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614638.D\dad1B.ch Vial: 59
Signal #2 : G:\DATA\0508RPB3\GG614638.D\dad1A.ch
Acq On : 09-May-2018, 04:45:01 Operator: evitam
Sample : op69945-dup2 Inst : G1315B
Misc : op69945,Ggg2626,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:57 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

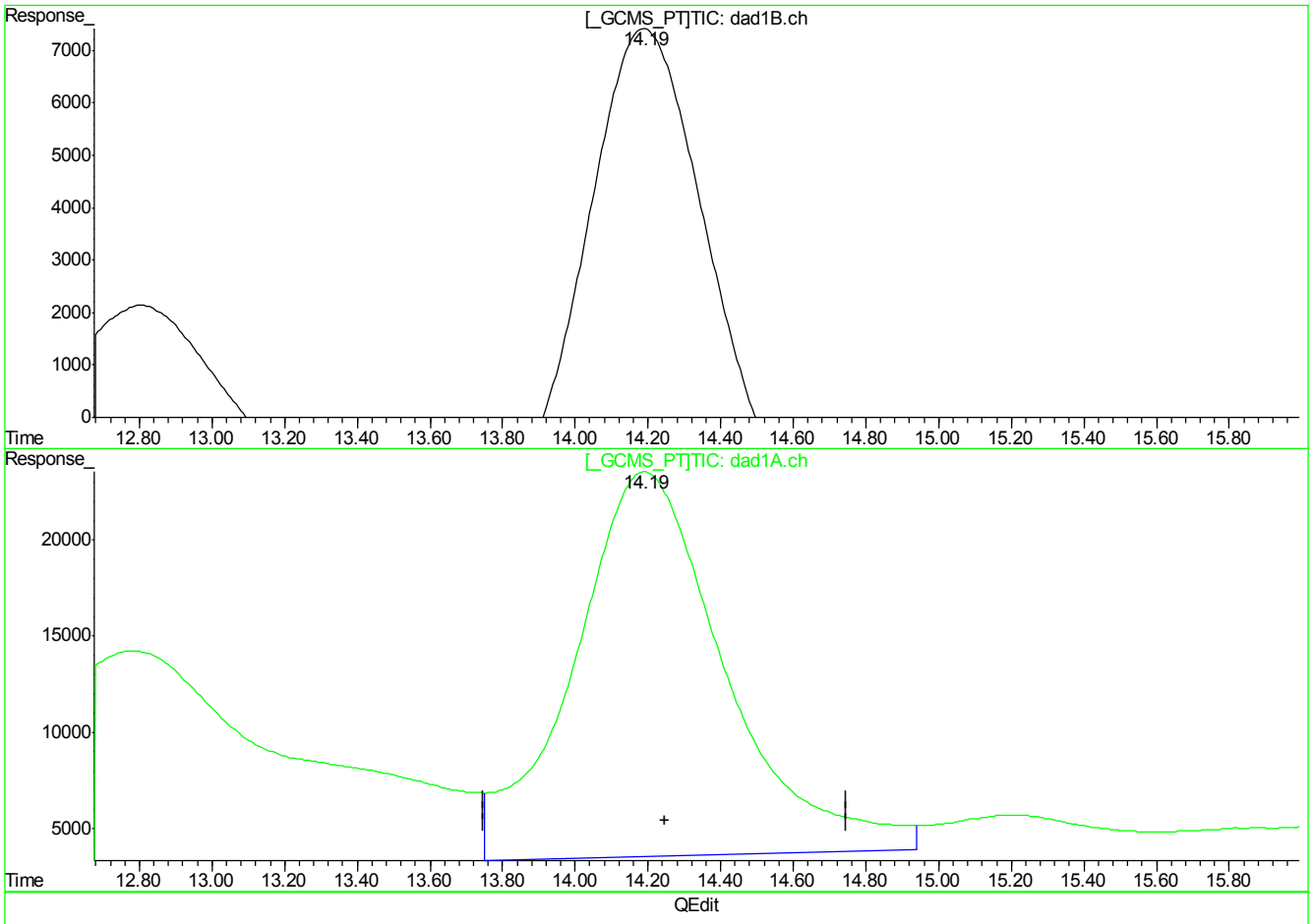
Sample Number:	OP69945-DUP2	**Method:**	SW846 8330B
Lab FileID:	GG614638.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 04:45	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.19	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614638.D\dad1B.ch Vial: 59
Signal #2 : G:\DATA\0508RPB3\GG614638.D\dad1A.ch
Acq On : 09-May-2018, 04:45:01 Operator: evitam
Sample : op6995-dup2 Inst : G1315B
Misc : op69945,Ggg2626,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.19min 447.596ppb

response 2325209

(12) 3,4-Dinitrotoluene #2 (S)

14.19min 534.005ppb

response 5776665

(+) = Expected Retention Time
GG614638.D 8330RPB.M_1113M.M Wed May 09 10:56:58 2018

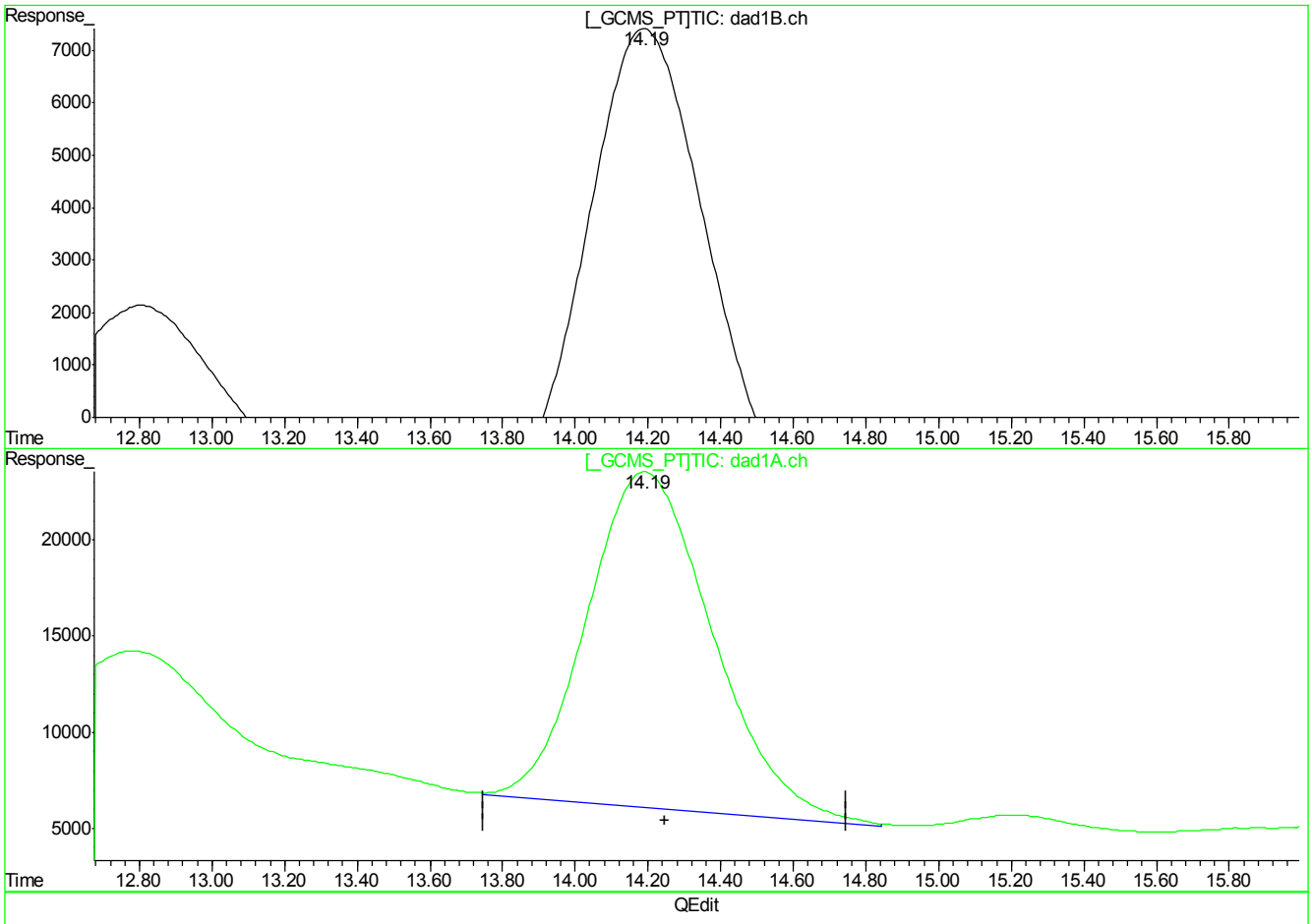
7.6.8.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614638.D\dad1B.ch Vial: 59
Signal #2 : G:\DATA\0508RPB3\GG614638.D\dad1A.ch
Acq On : 09-May-2018, 04:45:01 Operator: evitam
Sample : op6995-dup2 Inst : G1315B
Misc : op69945,Ggg2626,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.19min 447.596ppb

response 2325209

(12) 3,4-Dinitrotoluene #2 (S)

14.19min 385.415ppb m

response 4169273

(+) = Expected Retention Time
GG614638.D 8330RPB.M_1113M.M Wed May 09 10:57:01 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614656.D\dad1B.ch Vial: 73
Signal #2 : G:\DATA\0508RPB3\GG614656.D\dad1A.ch
Acq On : 09-May-2018, 13:37:57 Operator: evitam
Sample : op69946-dup Inst : G1315B
Misc : op69946,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.14	14.14	2486354	6018564	478.616	556.366
	Spiked Amount 500.000	Range 69 - 134		Recovery =		95.72%	111.27%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

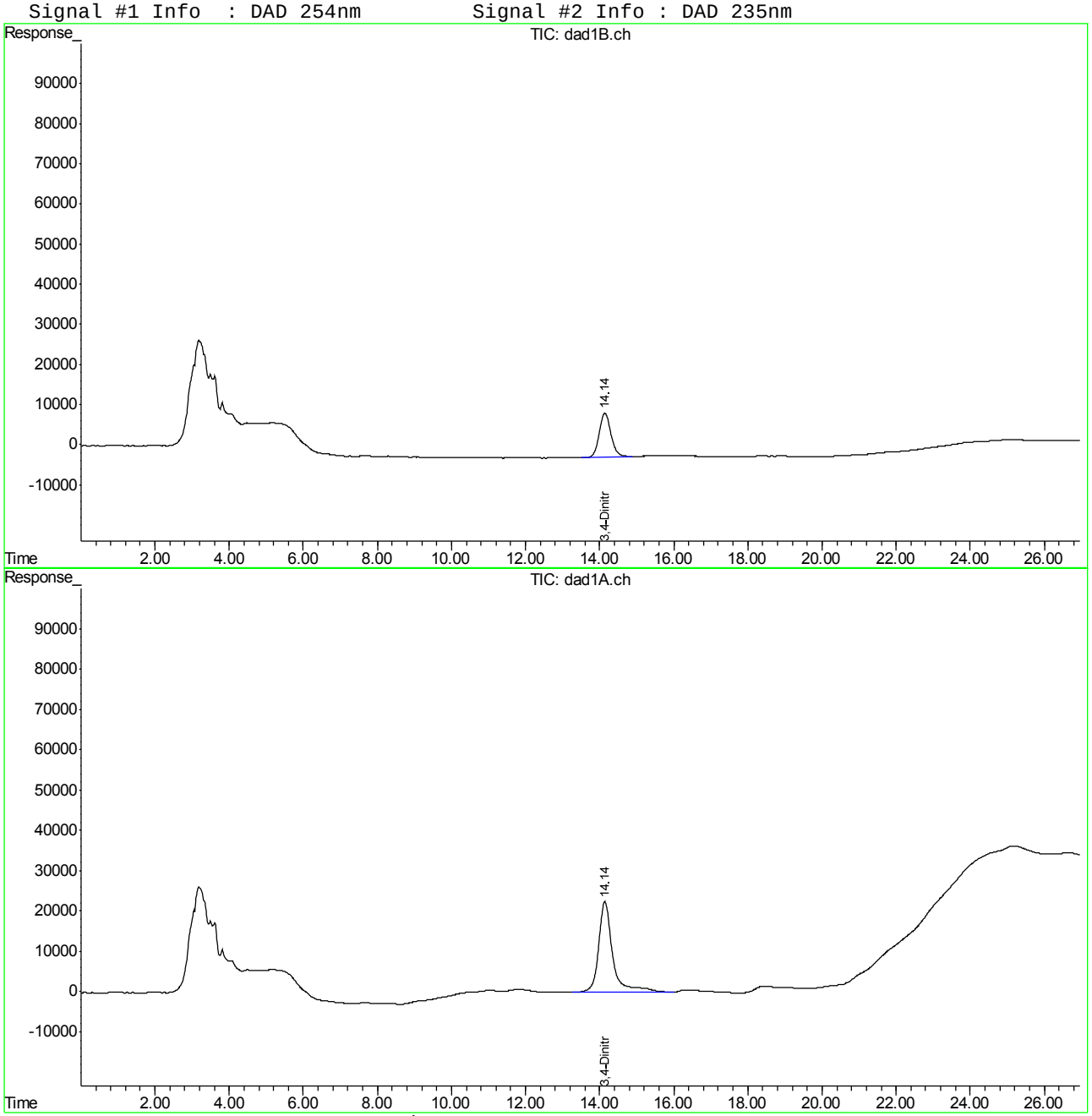
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614656.D 8330RPB.M_1113M.M Thu May 10 13:16:34 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614656.D\dad1B.ch Vial: 73
Signal #2 : G:\DATA\0508RPB3\GG614656.D\dad1A.ch
Acq On : 09-May-2018, 13:37:57 Operator: evitam
Sample : op69946-dup Inst : G1315B
Misc : op69946,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614656.D 8330RPB.M_1113M.M Thu May 10 13:16:34 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614657.D\dad1B.ch Vial: 74
Signal #2 : G:\DATA\0508RPB3\GG614657.D\dad1A.ch
Acq On : 09-May-2018, 14:07:29 Operator: evitam
Sample : op69946-dup2 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:33 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.15	14.15	2406011	4998452	463.150	462.065m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		92.63%	92.41%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

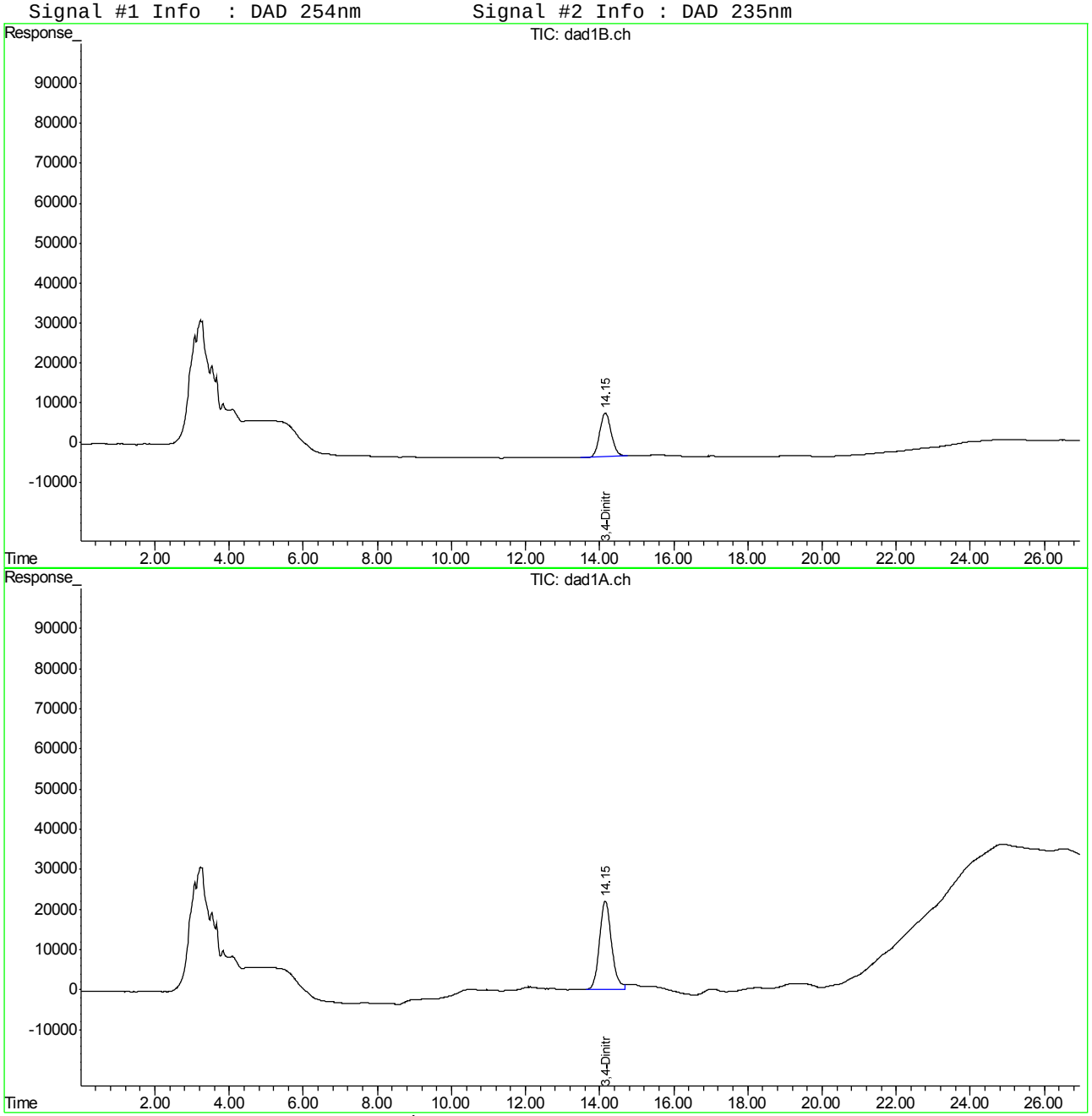
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614657.D 8330RPB.M_1113M.M Thu May 10 13:16:35 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614657.D\dad1B.ch Vial: 74
Signal #2 : G:\DATA\0508RPB3\GG614657.D\dad1A.ch
Acq On : 09-May-2018, 14:07:29 Operator: evitam
Sample : op69946-dup2 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

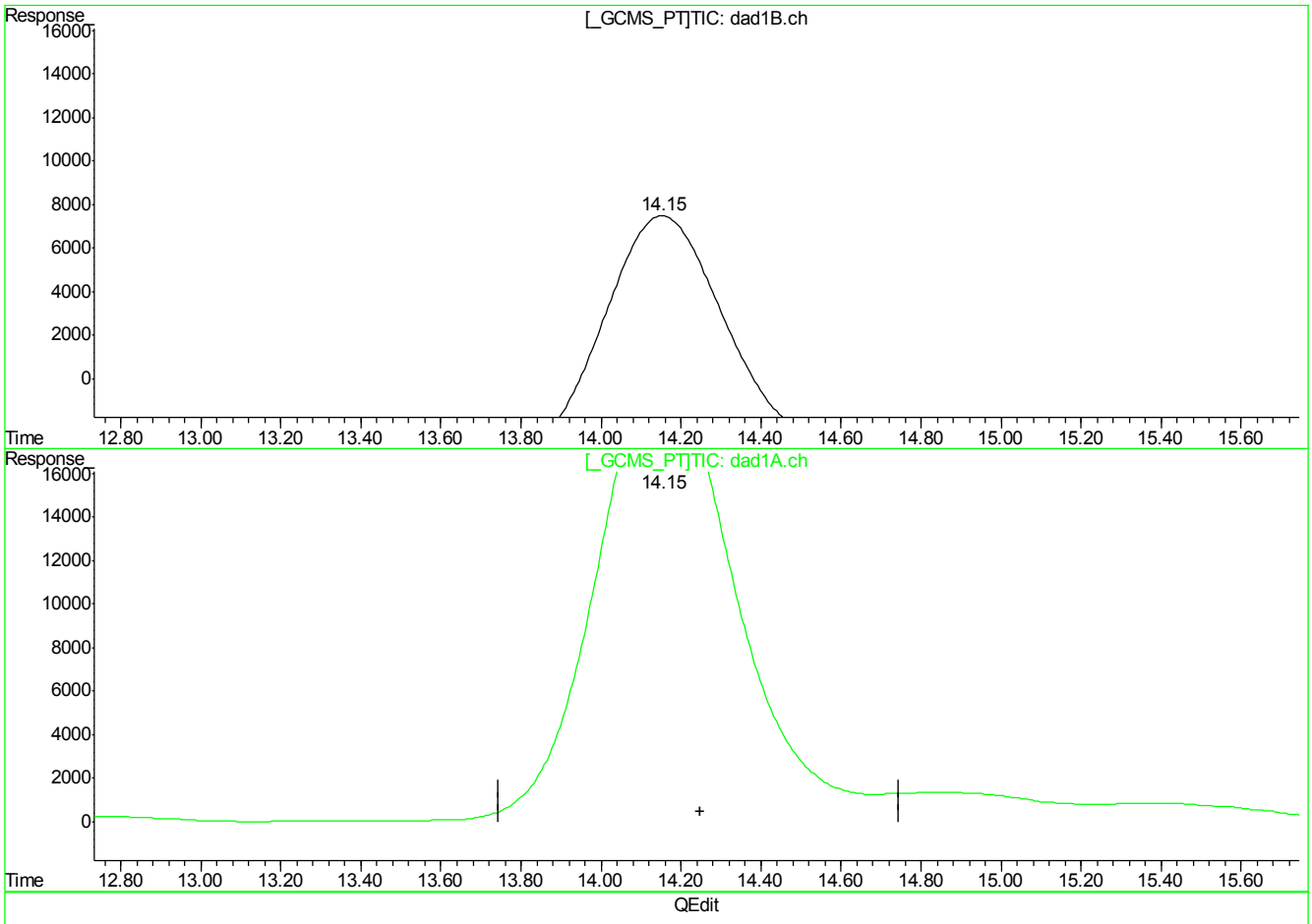
Sample Number:	OP69946-DUP2	**Method:**	SW846 8330B
Lab FileID:	GG614657.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 14:07	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.15	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614657.D\dad1B.ch Vial: 74
Signal #2 : G:\DATA\0508RPB3\GG614657.D\dad1A.ch
Acq On : 09-May-2018, 14:07:29 Operator: evitam
Sample : op69946-dup2 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.15min 463.150ppb

response 2406011

(12) 3,4-Dinitrotoluene #2 (S)

14.15min 648.069ppb

response 7010564

(+) = Expected Retention Time
GG614657.D 8330RPB.M_1113M.M Thu May 10 13:11:46 2018

7.6.10.2

7

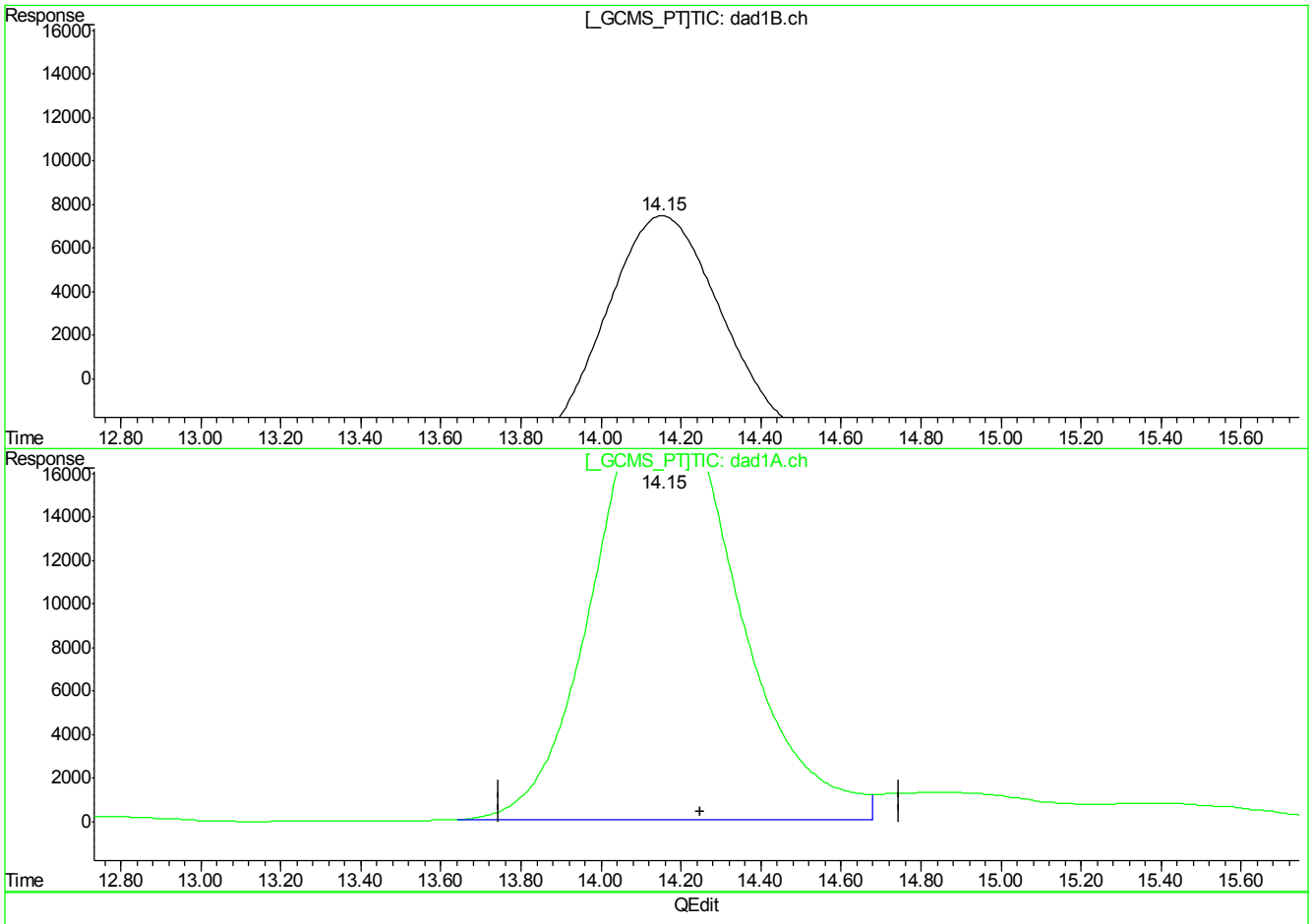
GG614657.D edits: 3,4-Dinitrotoluene

FA53725

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614657.D\dad1B.ch Vial: 74
Signal #2 : G:\DATA\0508RPB3\GG614657.D\dad1A.ch
Acq On : 09-May-2018, 14:07:29 Operator: evitam
Sample : op69946-dup2 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.15min 463.150ppb

response 2406011

(12) 3,4-Dinitrotoluene #2 (S)

14.15min 462.065ppb m

response 4998452

(+) = Expected Retention Time
GG614657.D 8330RPB.M_1113M.M Thu May 10 13:11:54 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:44 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.28	10.30	50941	95121	22.056	22.845m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	4.41%#	4.57%#
	Target Compounds						
1)	TNX	1.32	1.32	81134	121101	15.988	15.538
2)	HMX	1.44	1.44	31306	67296	16.059	12.805
3)	DNX	1.67	1.66	65656	83477	22.155m	17.466m
4)	MNX	2.21	2.20	59277	85161	19.065	18.169m
5)	RDX	2.78	2.78	45831	71397	19.752	19.064m
6)	1,3,5-Trinitrobe	4.41	4.41	100308	158806	20.299m	17.427m
7)	1,3-Dinitrobenze	5.59	5.60	102063	76764	16.722	19.482m
8)	3,5-Dinitroanili	5.88	5.89	94329	116035	20.575	14.714
9)	Nitrobenzene	7.10	7.09	75214	65624	19.715	18.304m
10)	Nitroglycerin	0.00	8.40	0	141549	N.D. d	106.959m
11)	Tetryl	8.63	8.68	93861	110112	29.498	21.477m
12)	2,4,6-Trinitroto	9.10	9.11	99127	75942	27.471	17.706m
13)	2-Amino-4,6-Dini	9.41	9.38	78176	111824	19.475	20.113m
14)	4-Amino-2,6-Dini	9.78	9.89	30840	86551	10.928	16.014m#
16)	2,4-Dinitrotolue	10.94	11.00	97322	51333	18.050	15.376m
17)	2,6-Dinitrotolue	11.43	11.44	74215	51922	22.573	13.240m#
18)	o-Nitrotoluene	14.67	14.68	47689	59648	19.100	16.353m
19)	p-Nitrotoluene	15.23	15.29	63838	42073	17.255m	13.295m
20)	m-Nitrotoluene	16.19	16.42	62788	64213	17.018m	14.807m
21)	PETN	0.00	18.50	0	151593	N.D. d	109.347m

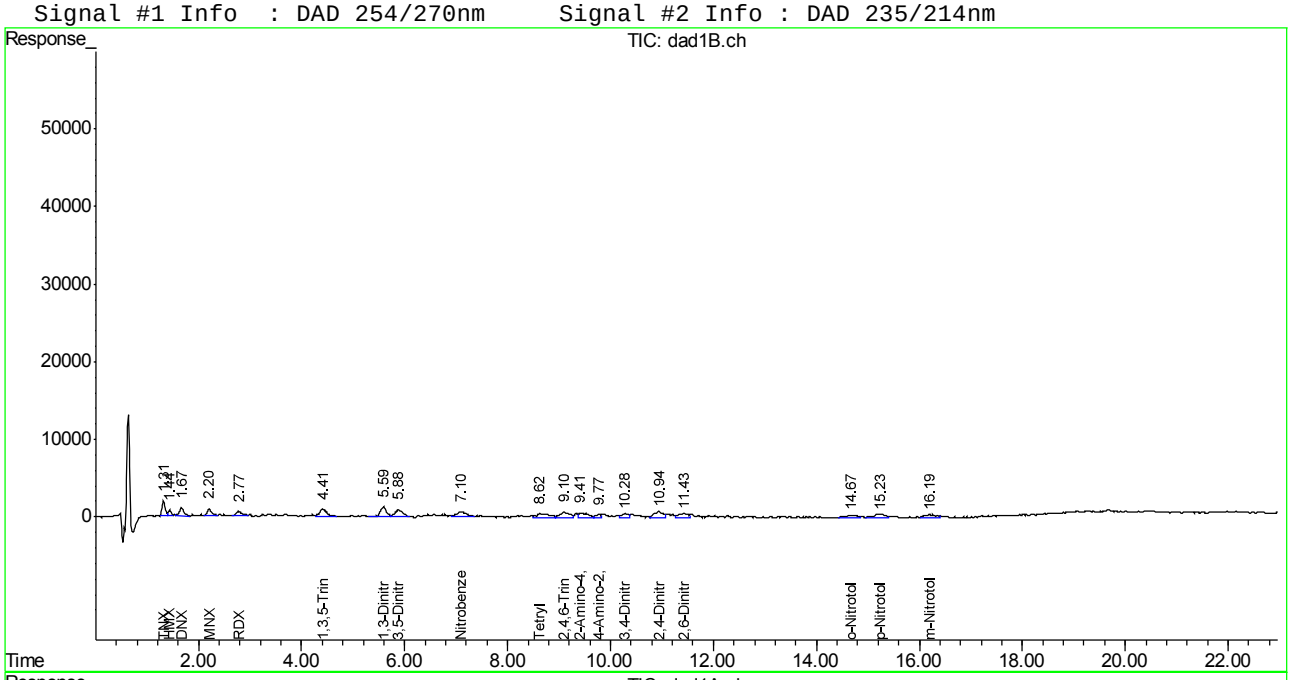
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059464.D 8330B_0419PLUS.M Fri Apr 20 08:01:18 2018 Page 1

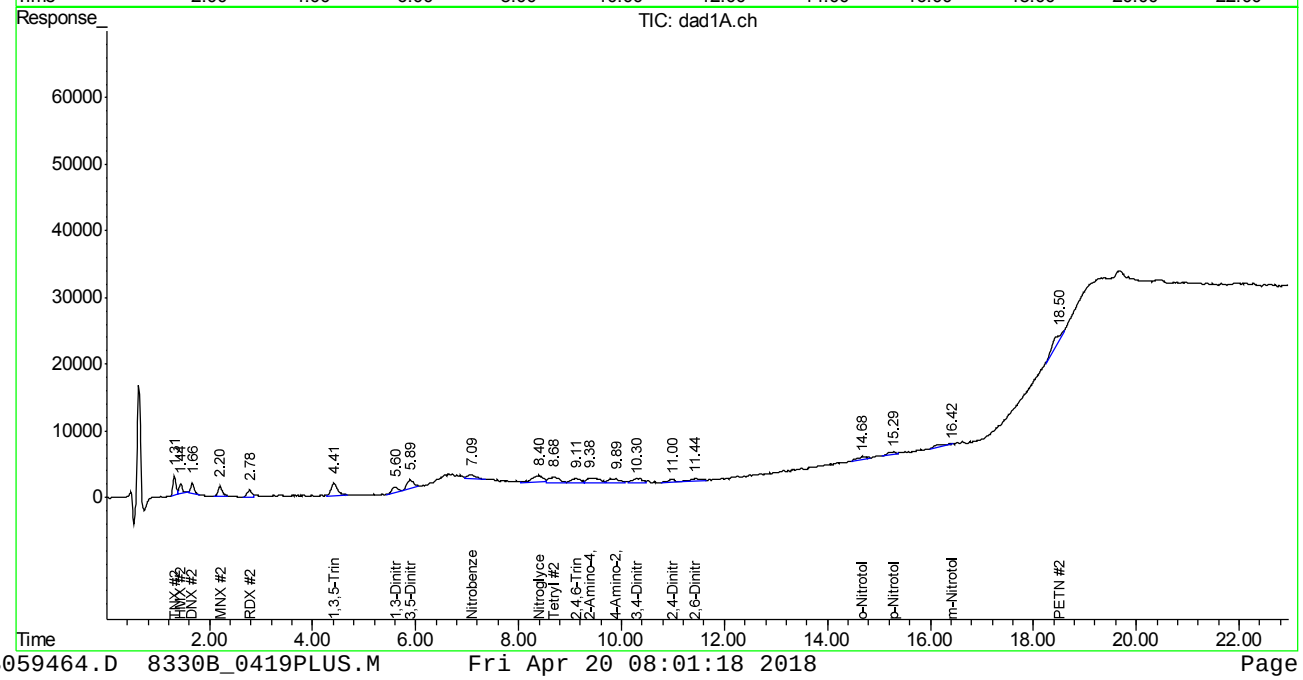
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:52 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

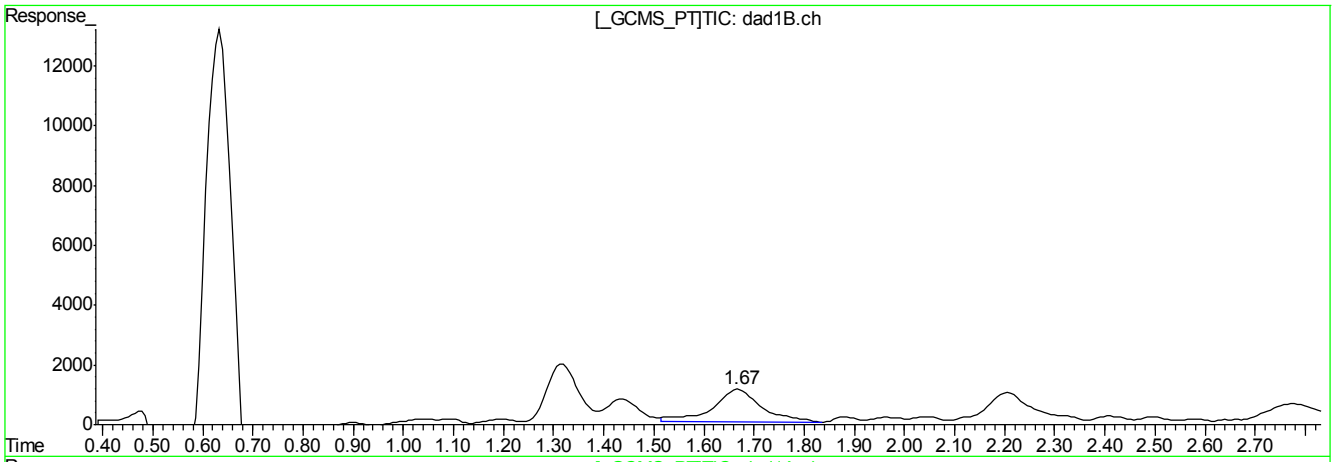
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059464.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 10:14	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
DNX		2	1.66	Poorly defined baseline
DNX		1	1.67	Poorly defined baseline
MNX		2	2.20	Poorly defined baseline
RDX	121-82-4	2	2.78	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.41	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.41	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.09	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.40	Poorly defined baseline
Tetryl	479-45-8	2	8.68	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.11	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.38	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	9.89	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.30	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.00	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.44	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.68	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	15.23	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.29	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	16.19	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.42	Poorly defined baseline
PETN	78-11-5	2	18.50	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 24.954ppb

response 73947

(3) DNX #2

1.44min 14.080ppb

response 67296

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:48:46 2018

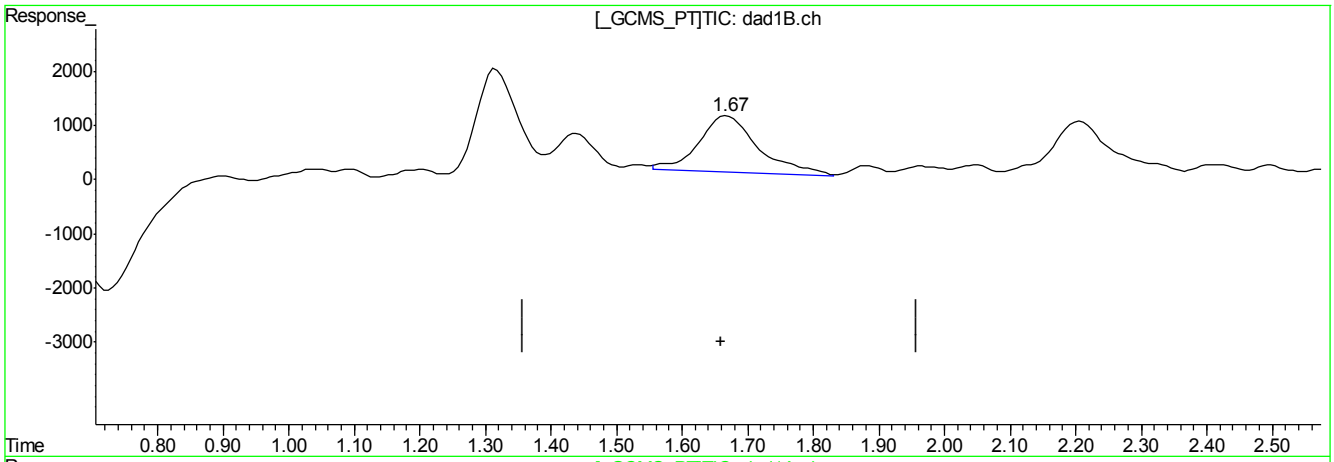
7.7.1.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 22.155ppb m

response 65656

(3) DNX #2

1.66min 17.466ppb m

response 83477

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:48:56 2018

7.7.1.3

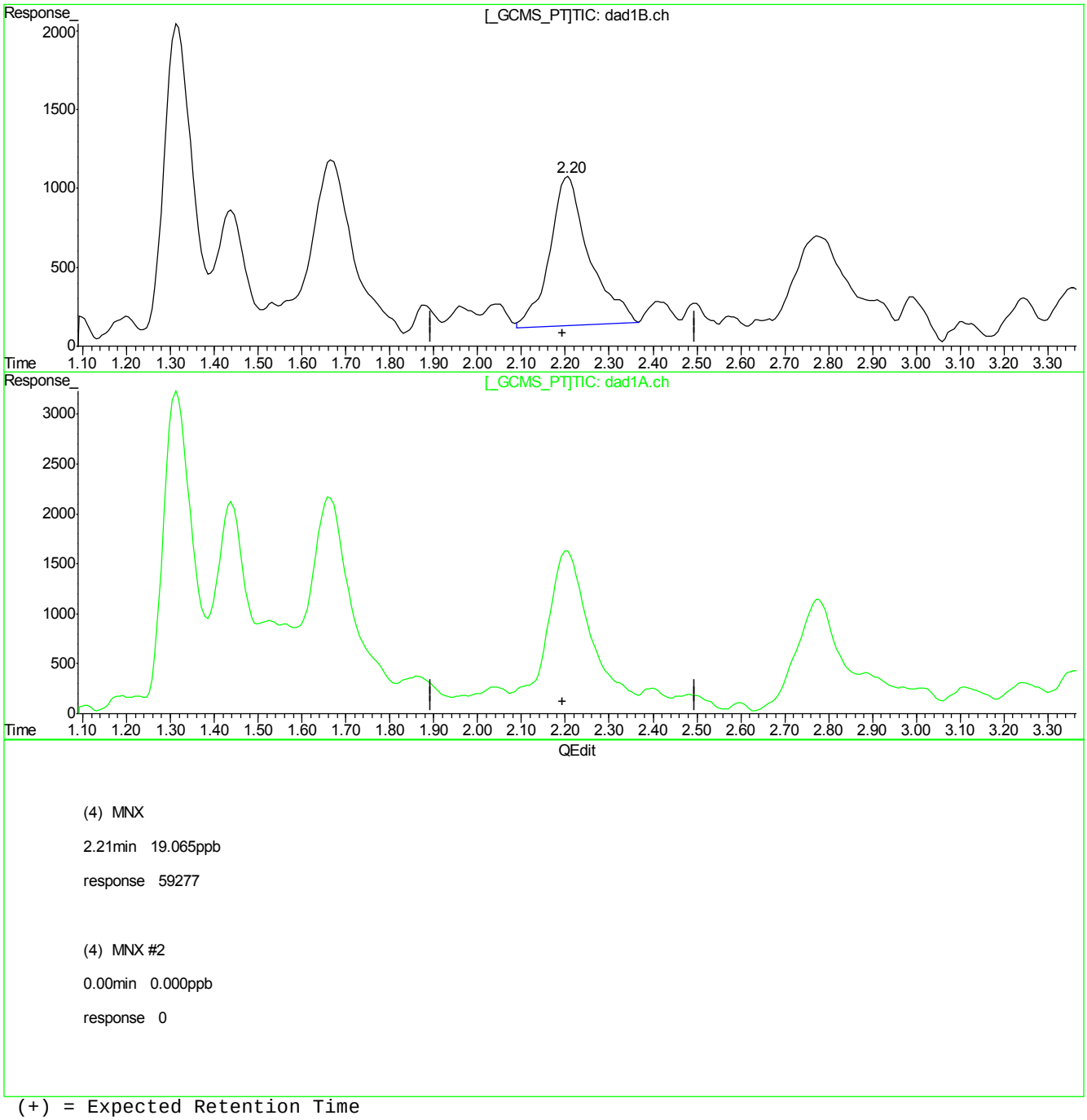
7

BB059464.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:01 2018

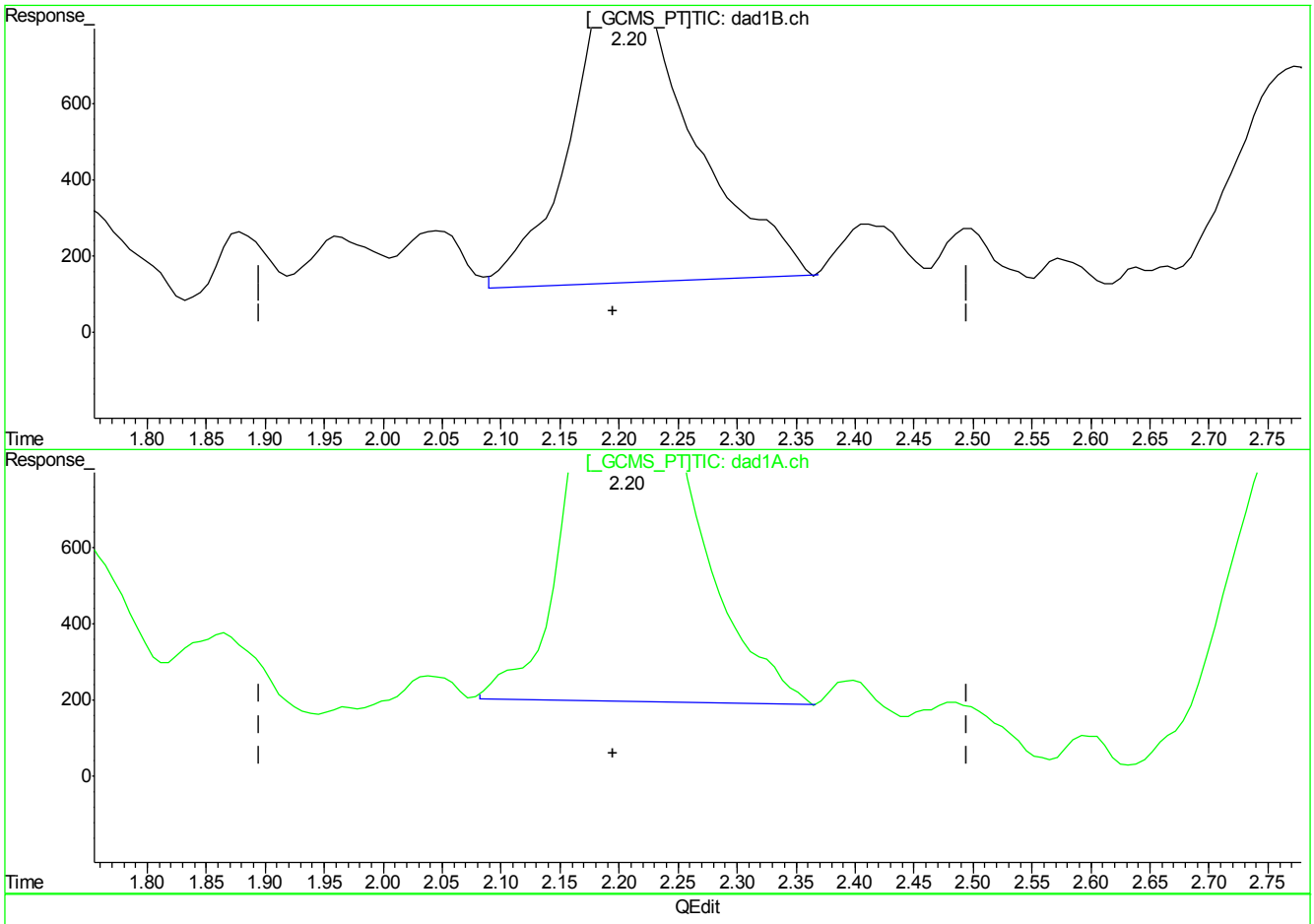
7.7.1.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(4) MNX

2.21min 19.065ppb

response 59277

(4) MNX #2

2.20min 18.169ppb m

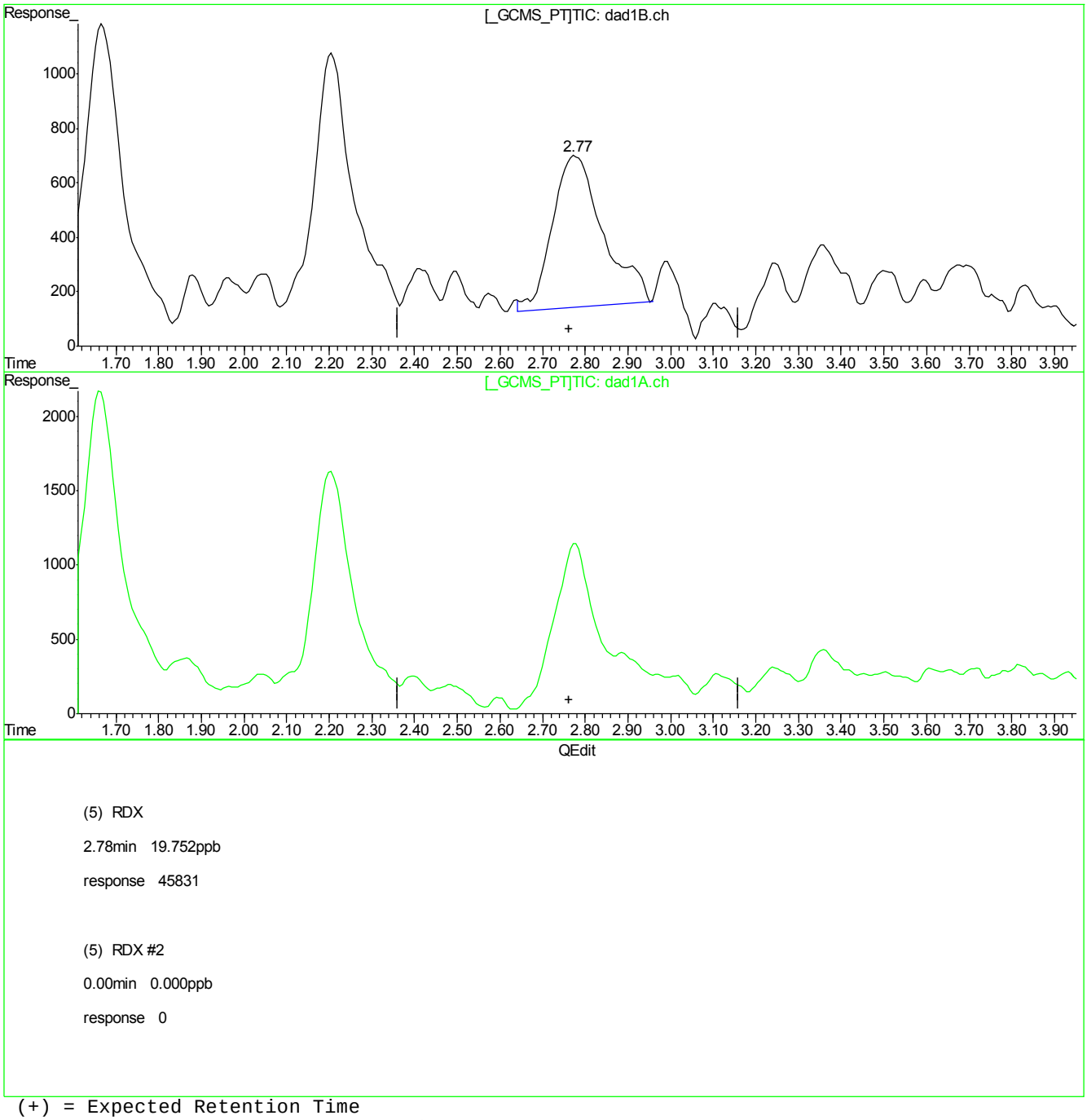
response 85161

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:06 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:09 2018

7.7.1.6

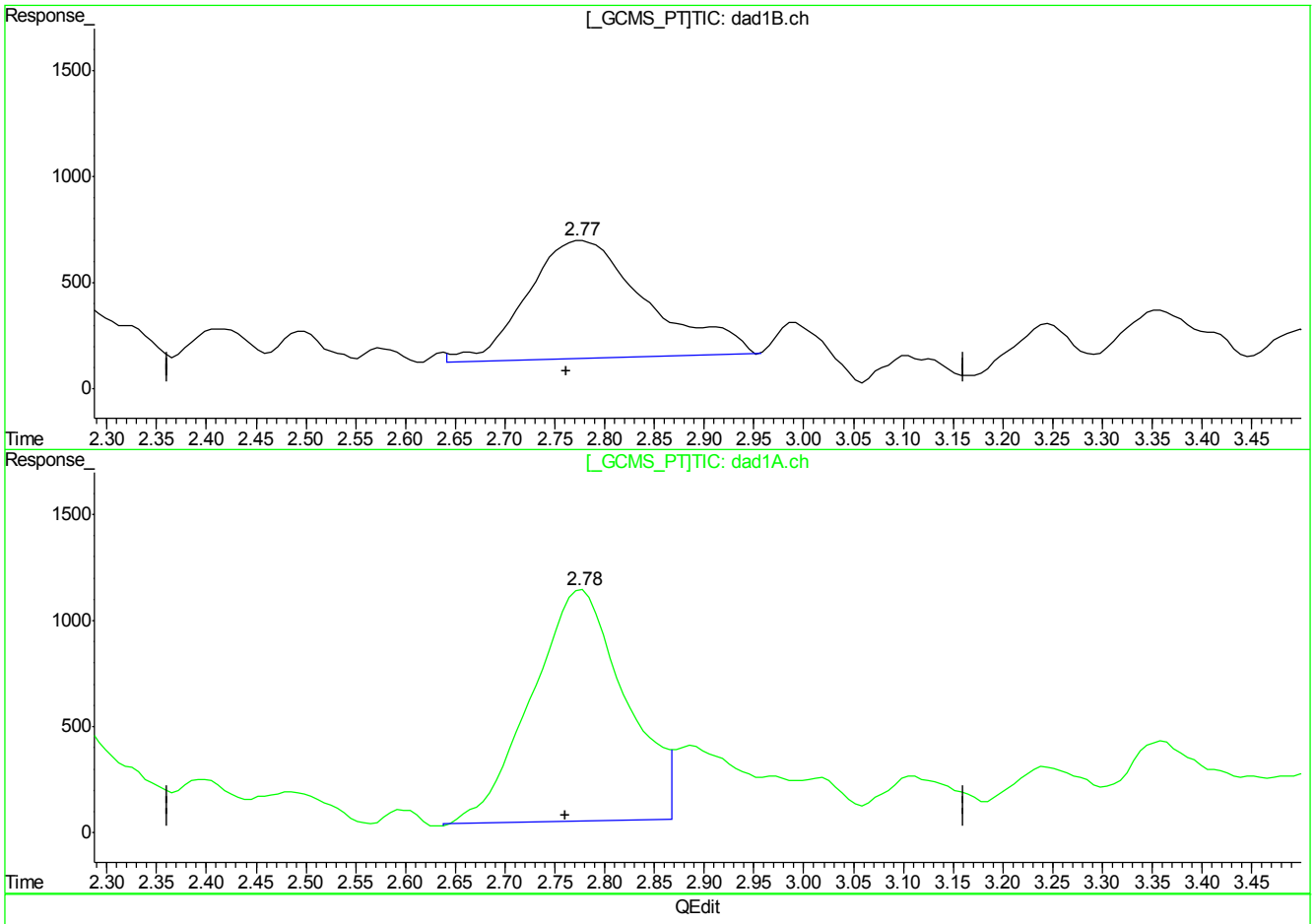
7

BB059464.D edits: RDX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(5) RDX

2.78min 19.752ppb

response 45831

(5) RDX #2

2.78min 19.064ppb m

response 71397

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:12 2018

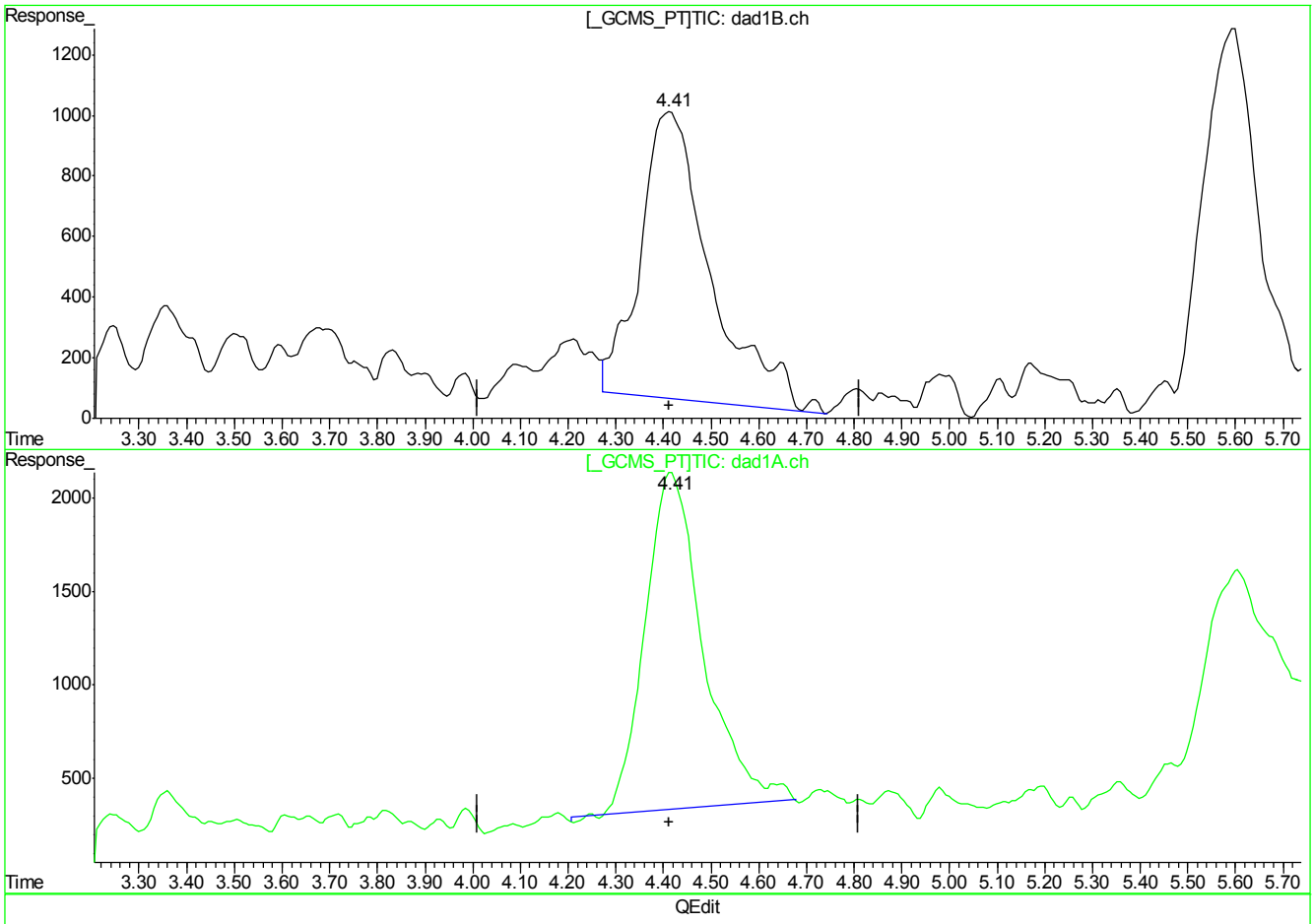
7.7.17

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(6) 1,3,5-Trinitrobenzene

4.41min 19.710ppb

response 97395

(6) 1,3,5-Trinitrobenzene #2

4.42min 16.806ppb

response 153155

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:15 2018

7.7.1.8

7

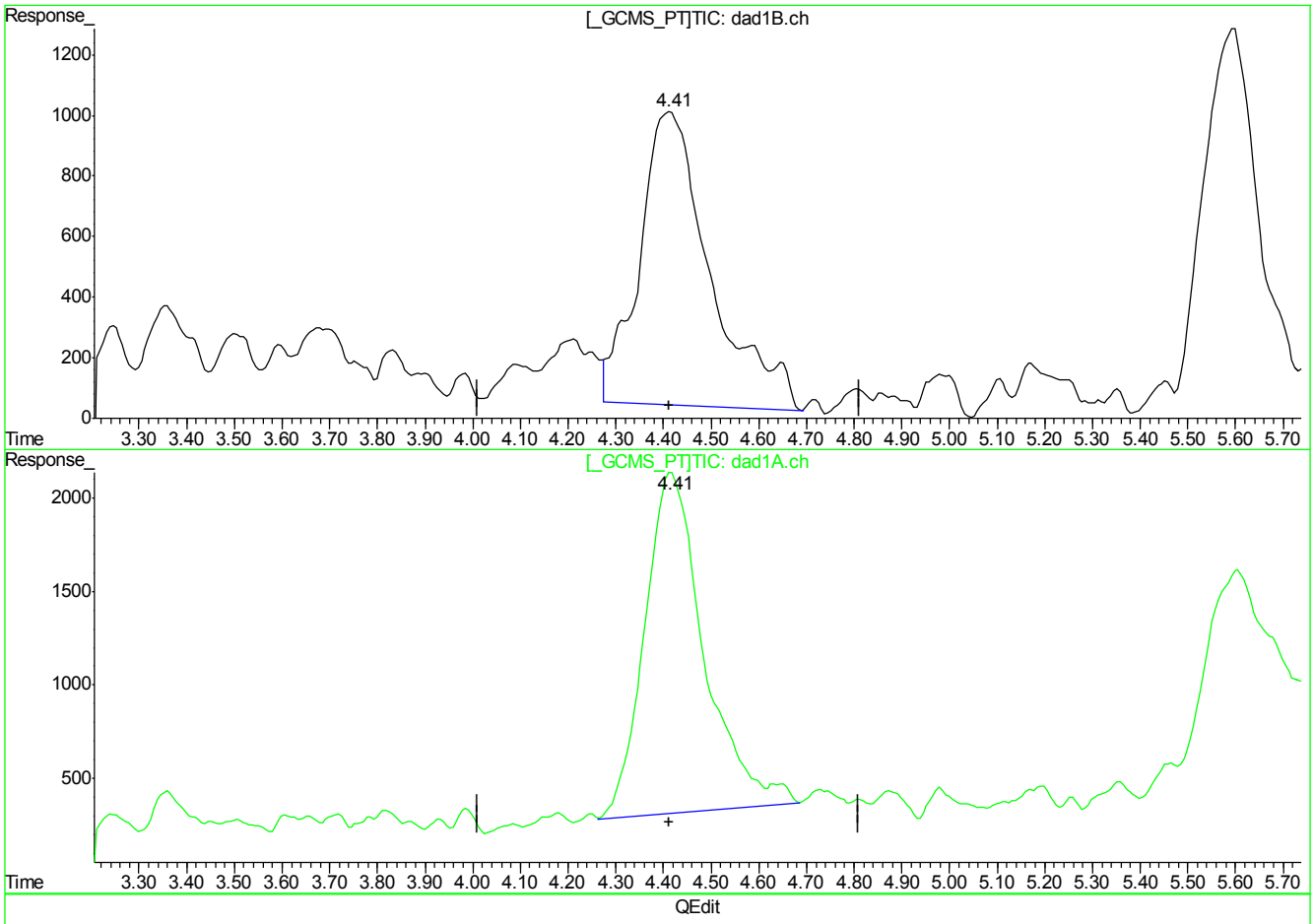
FA53725

BB059464.D edits: 1,3,5-Trinitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(6) 1,3,5-Trinitrobenzene

4.41min 20.299ppb m

response 100308

(6) 1,3,5-Trinitrobenzene #2

4.41min 17.427ppb m

response 158806

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:23 2018

7.7.19

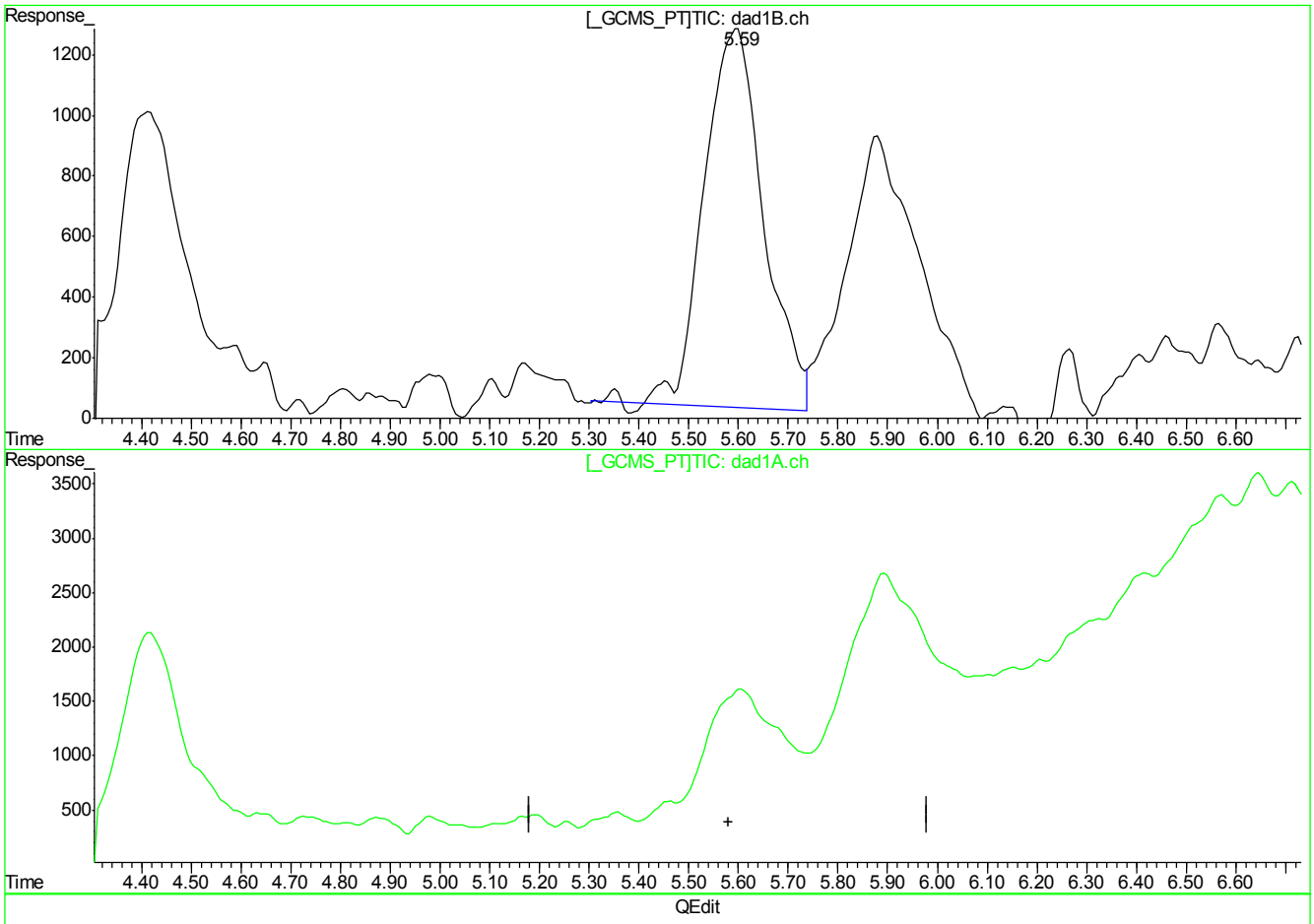
7

BB059464.D edits: 1,3,5-Trinitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 16.722ppb

response 102063

(7) 1,3-Dinitrobenzene #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:26 2018

7.7.1.10

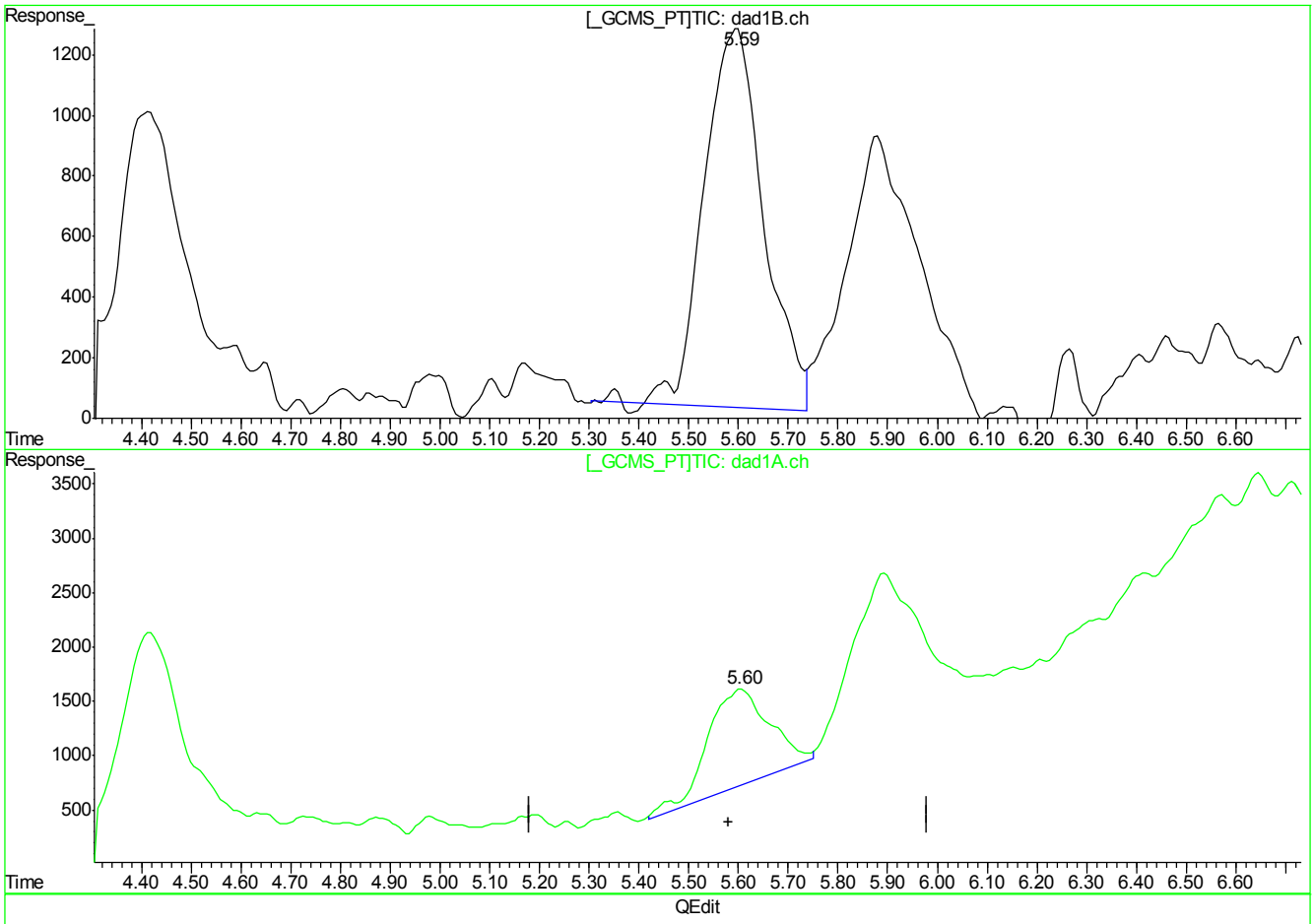
7

BB059464.D edits: 1,3-Dinitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 16.722ppb

response 102063

(7) 1,3-Dinitrobenzene #2

5.60min 19.482ppb m

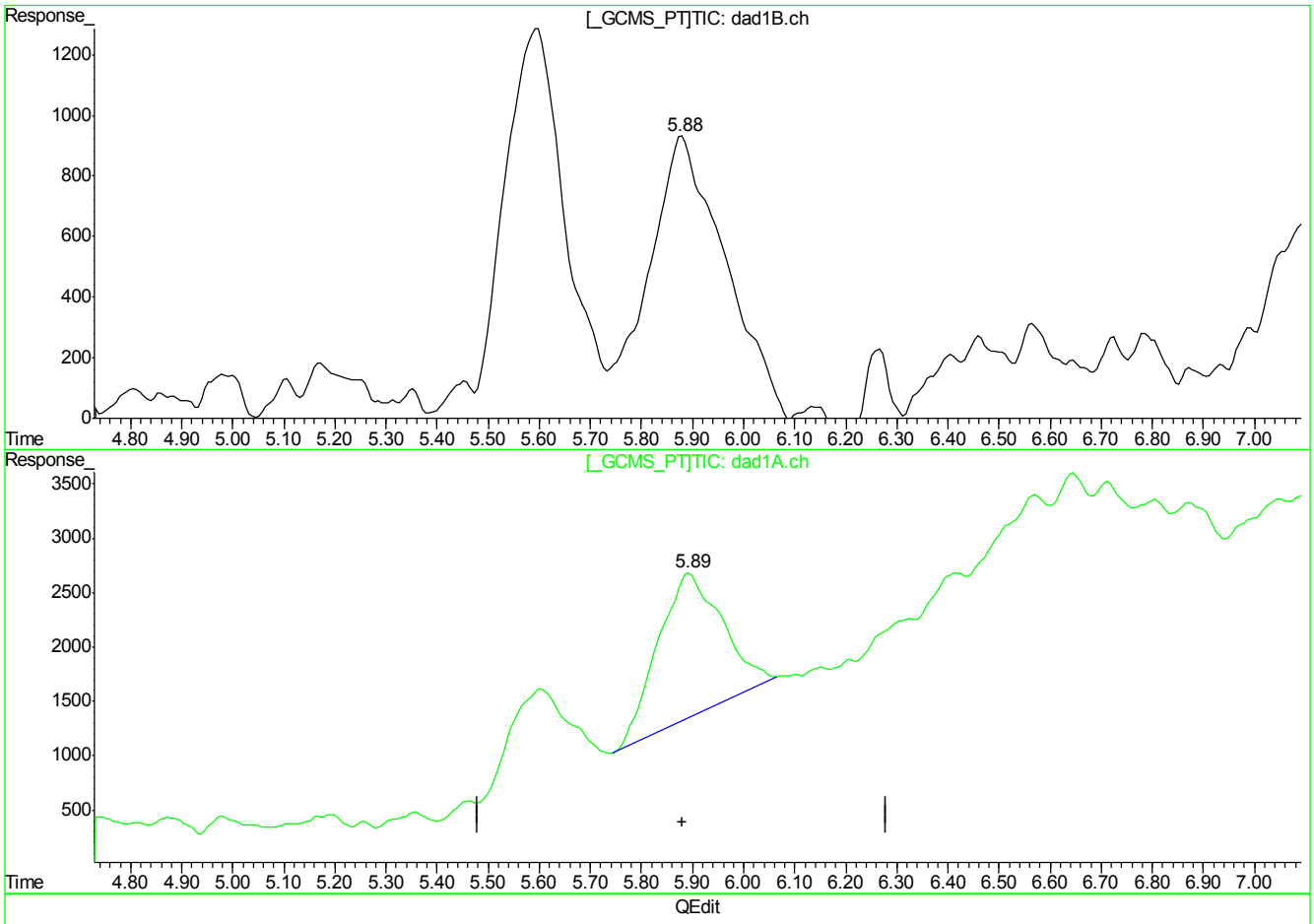
response 76764

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:30 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.88min 20.575ppb

response 94329

(8) 3,5-Dinitroaniline #2

5.89min 14.714ppb

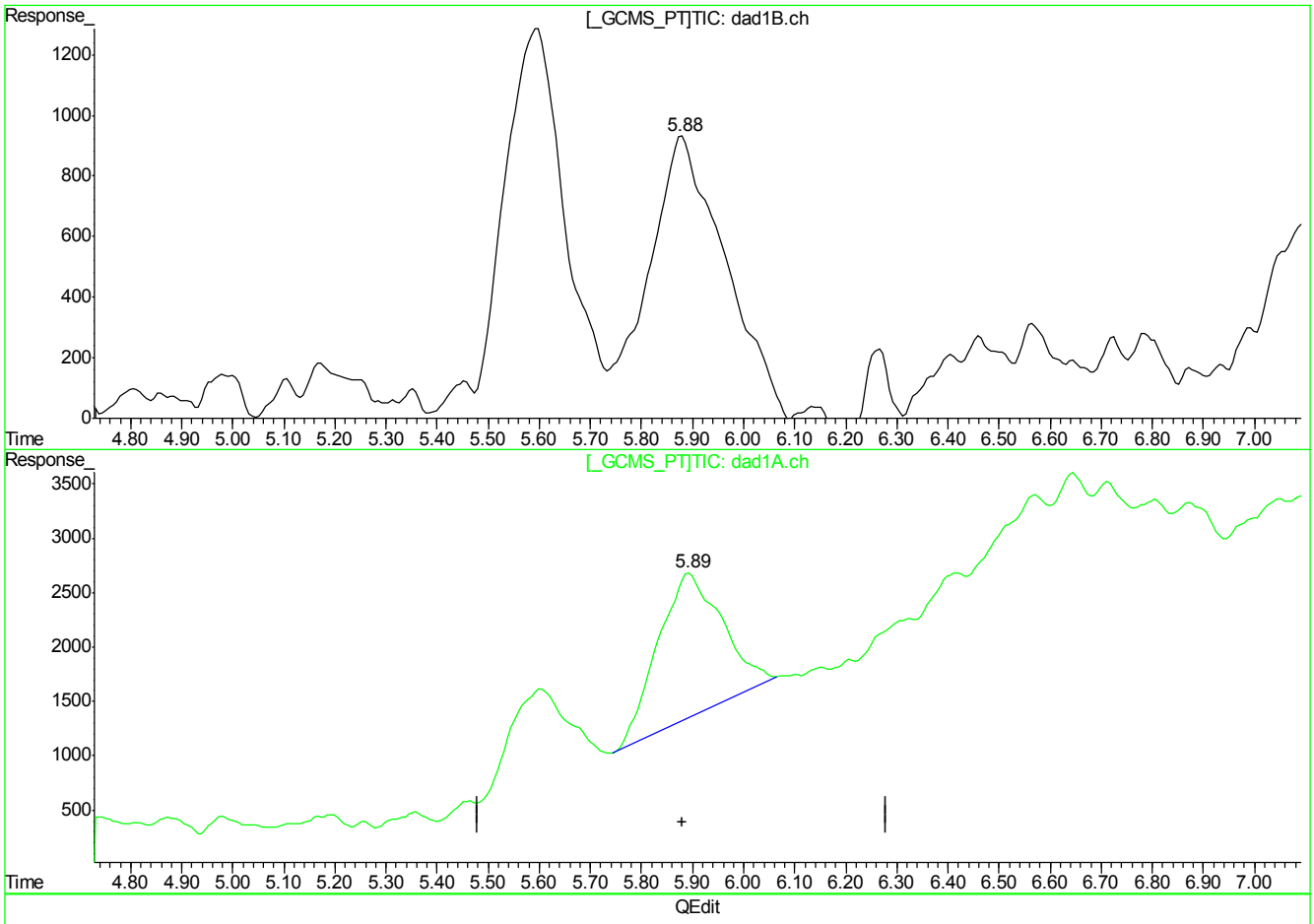
response 116035

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:32 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.88min 20.575ppb

response 94329

(8) 3,5-Dinitroaniline #2

5.89min 14.714ppb

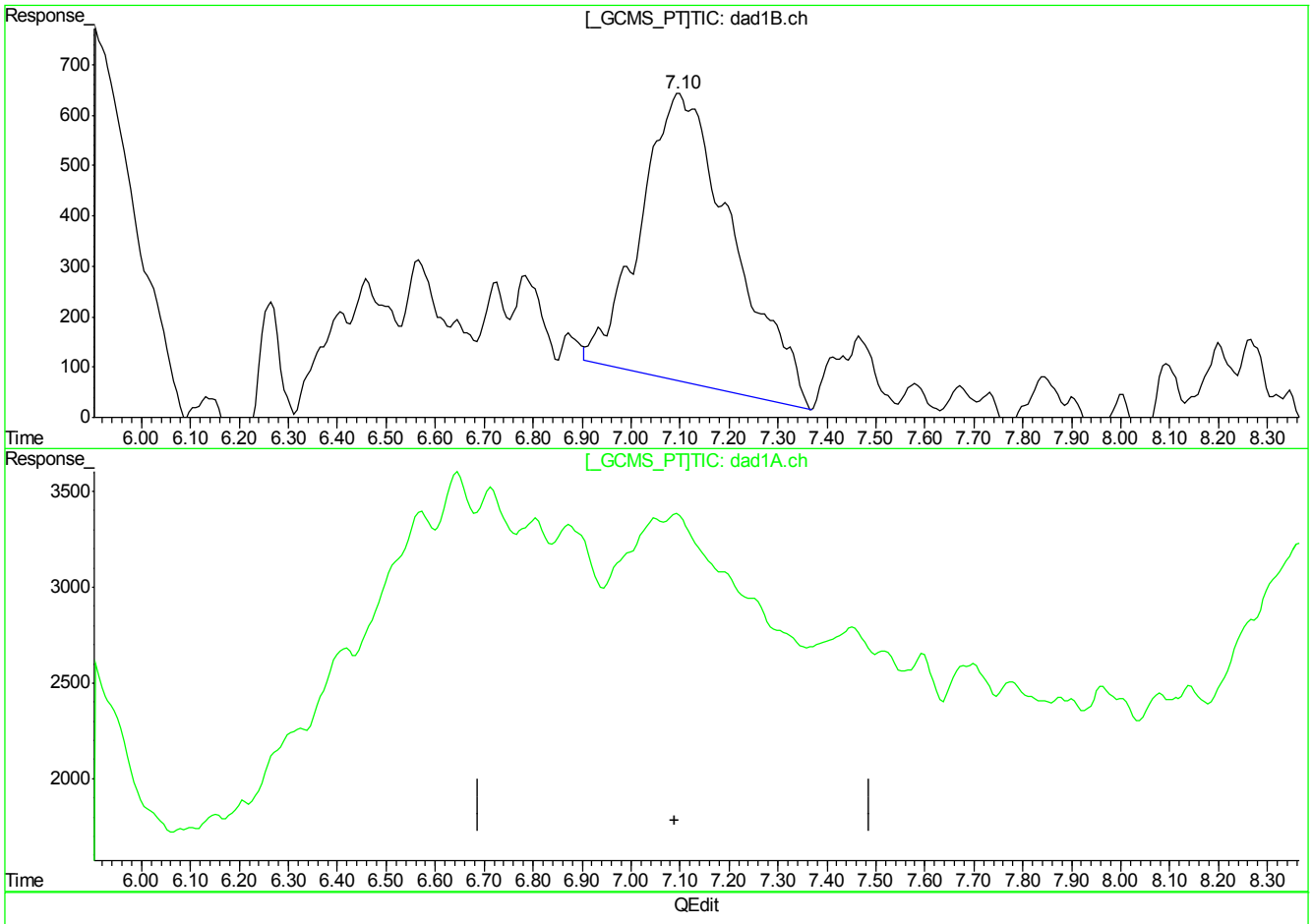
response 116035

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.10min 19.715ppb

response 75214

(9) Nitrobenzene #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:39 2018

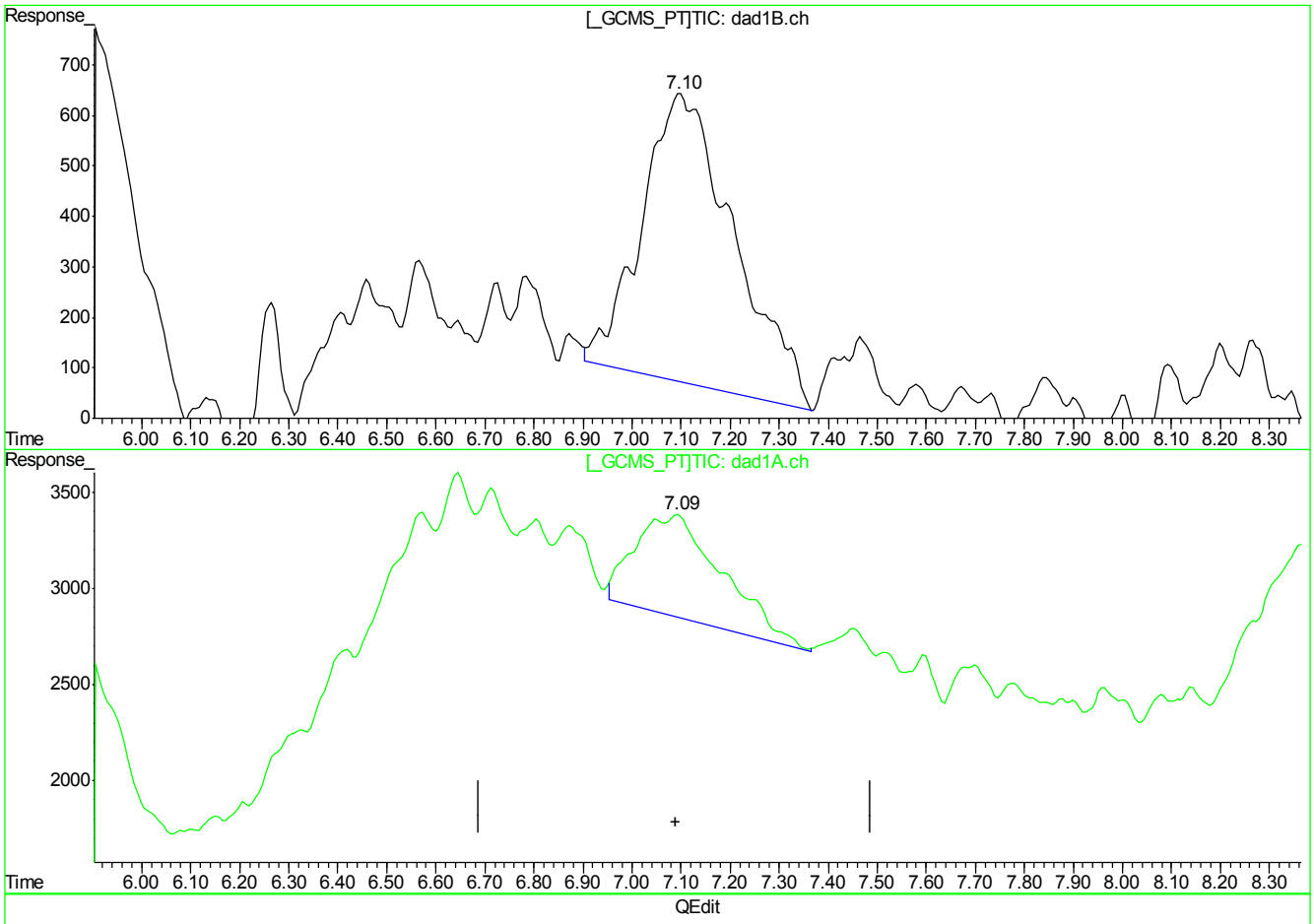
7.7.1.14

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.10min 19.715ppb

response 75214

(9) Nitrobenzene #2

7.09min 18.304ppb m

response 65624

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:43 2018

7.7.1.15

7

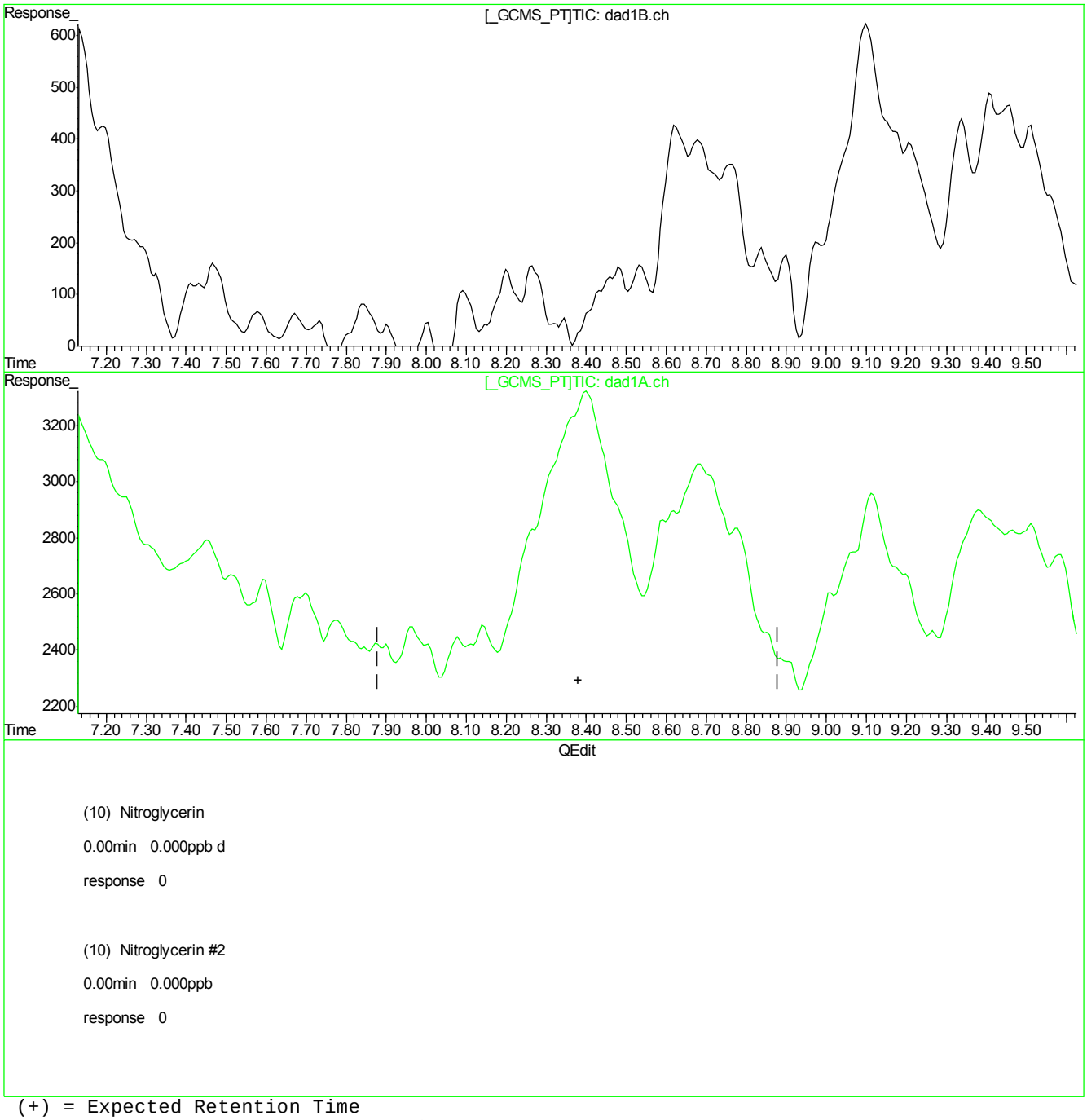
FA53725

BB059464.D edits: Nitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

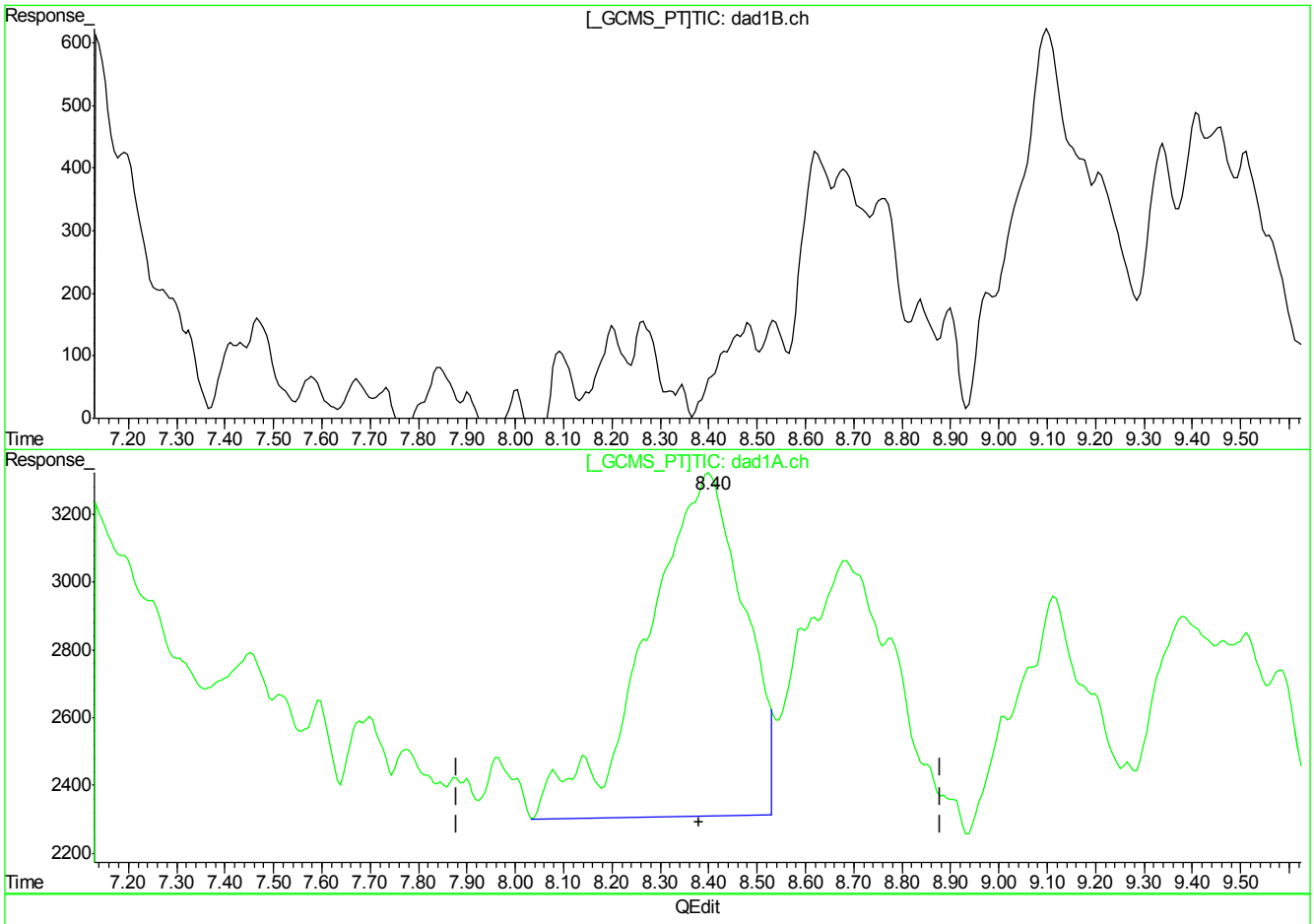


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:47 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.40min 106.959ppb m

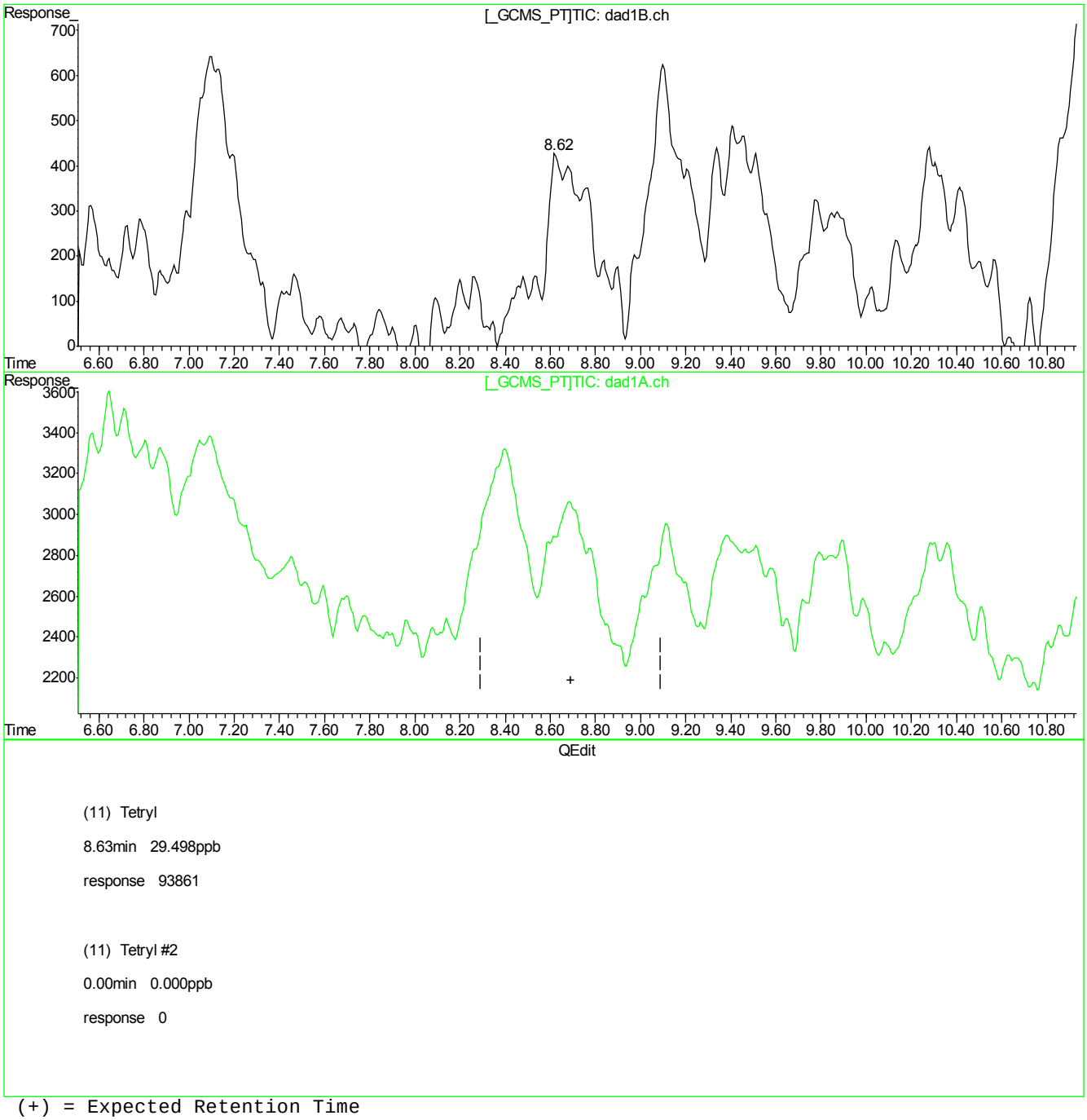
response 141549

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.63min 29.498ppb

response 93861

(11) Tetryl #2

0.00min 0.000ppb

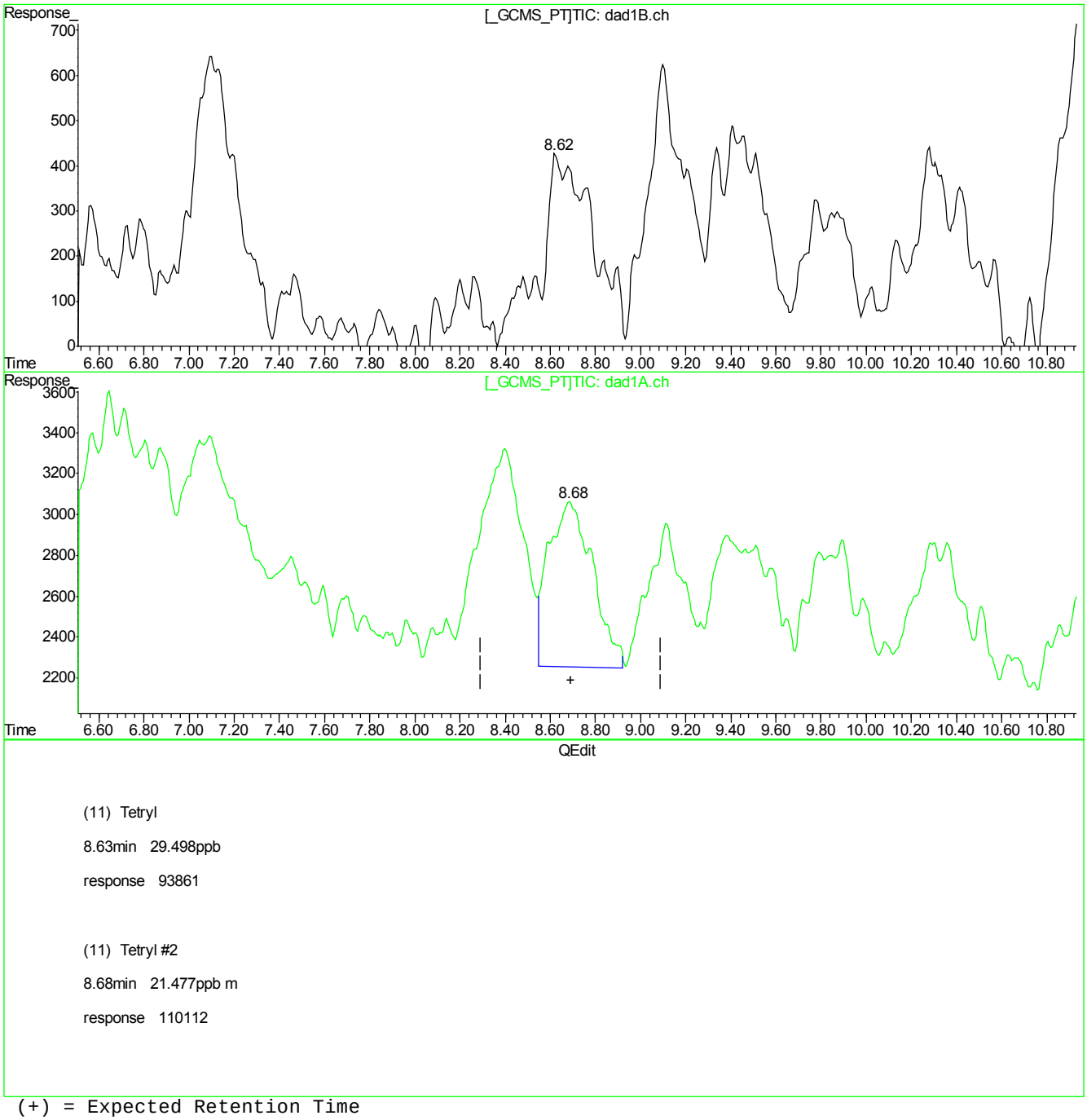
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.63min 29.498ppb

response 93861

(11) Tetryl #2

8.68min 21.477ppb m

response 110112

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:13 2018

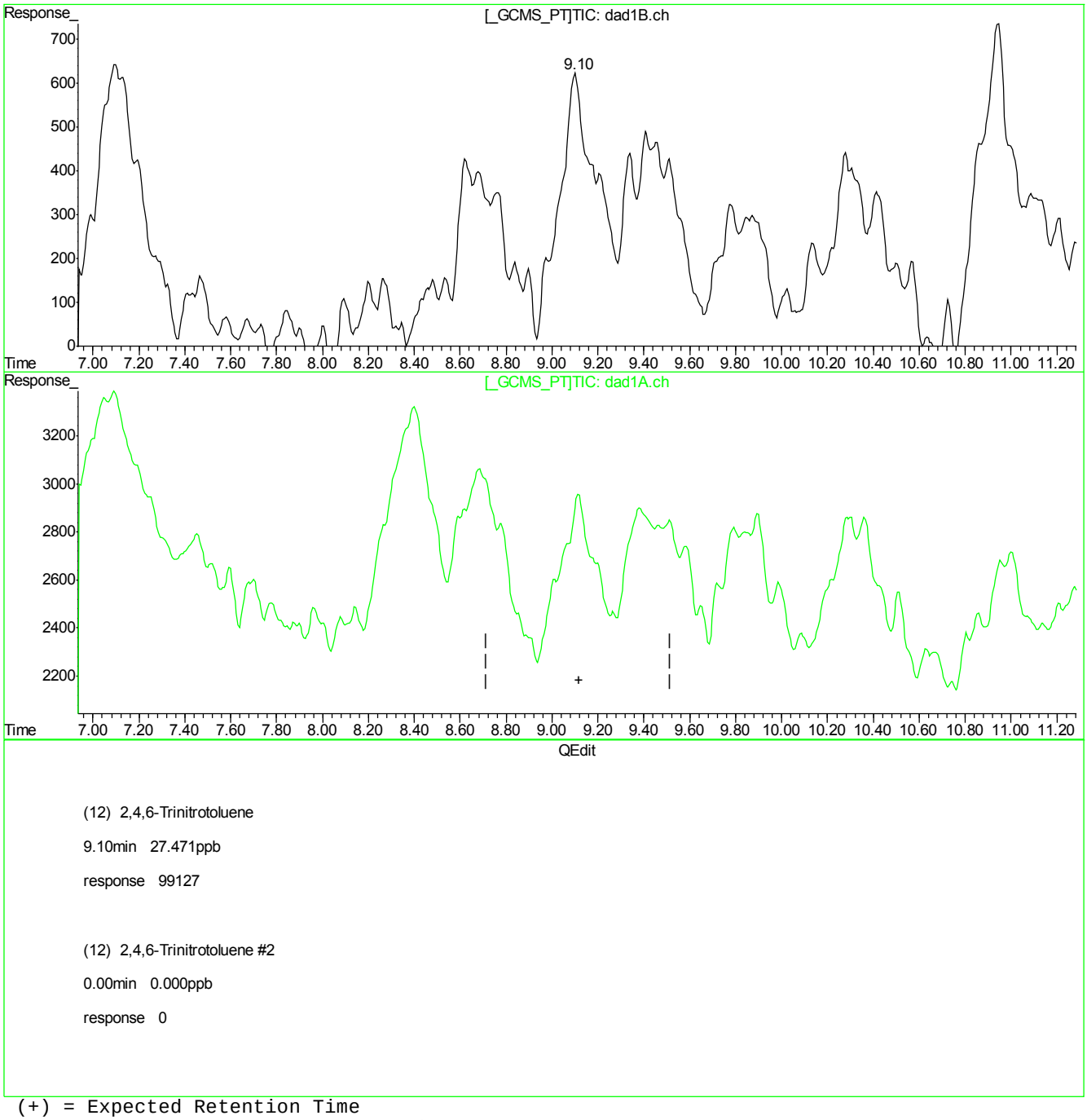
7.7.1.19

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

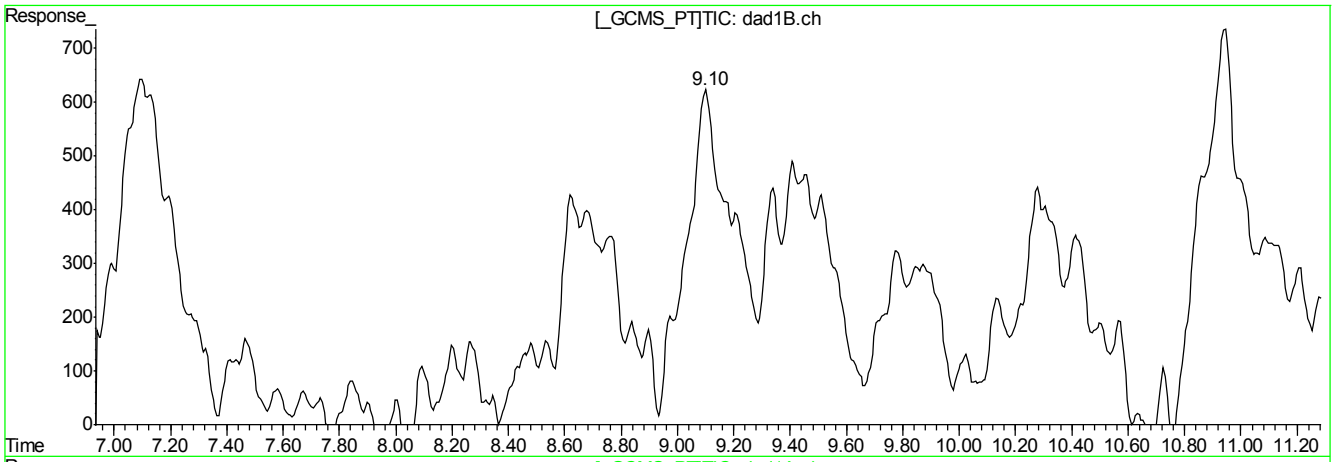


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.10min 27.471ppb

response 99127

(12) 2,4,6-Trinitrotoluene #2

9.11min 17.706ppb m

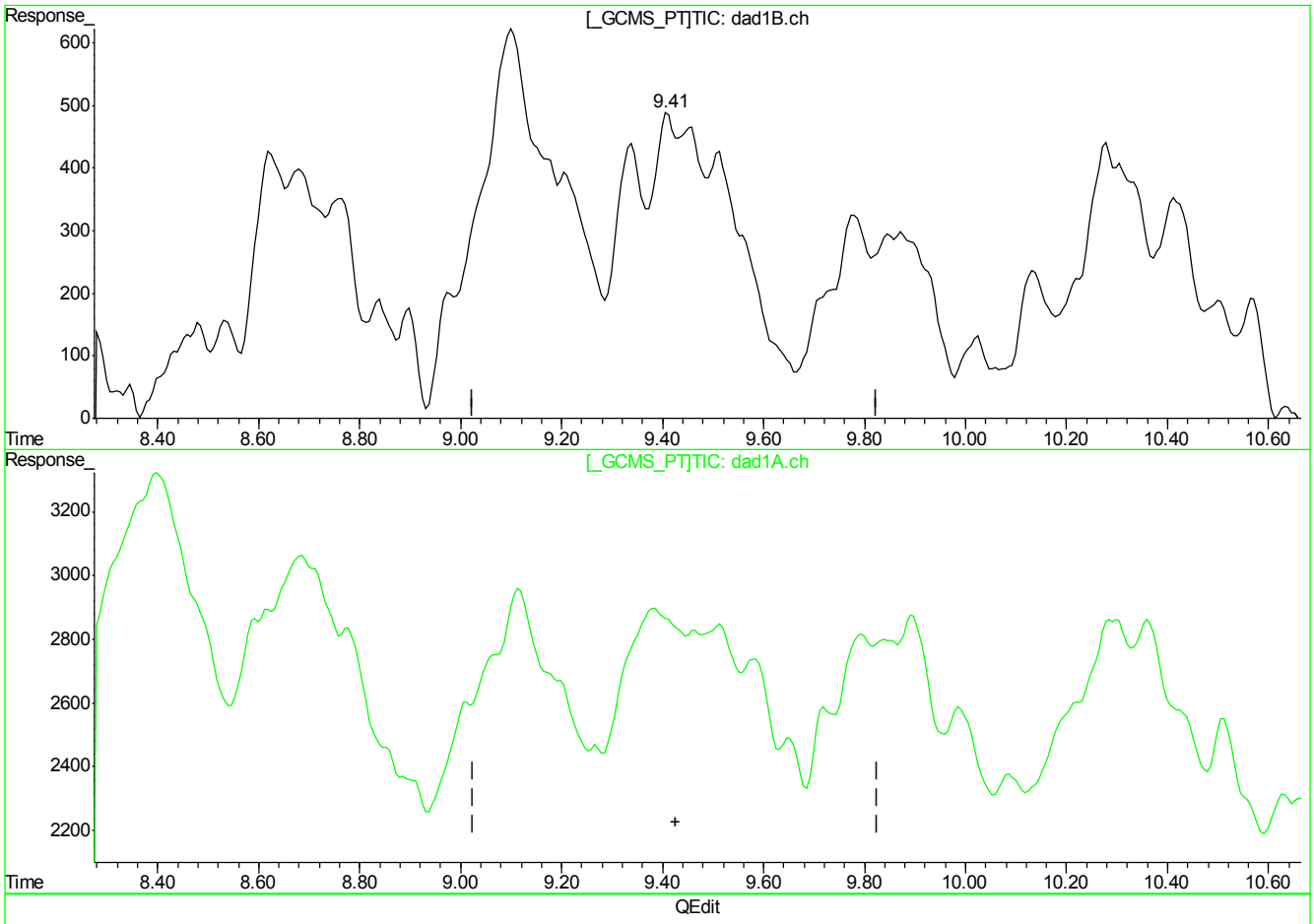
response 75942

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:23 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.41min 19.475ppb

response 78176

(13) 2-Amino-4,6-Dinitrotoluene #2

0.00min 0.000ppb

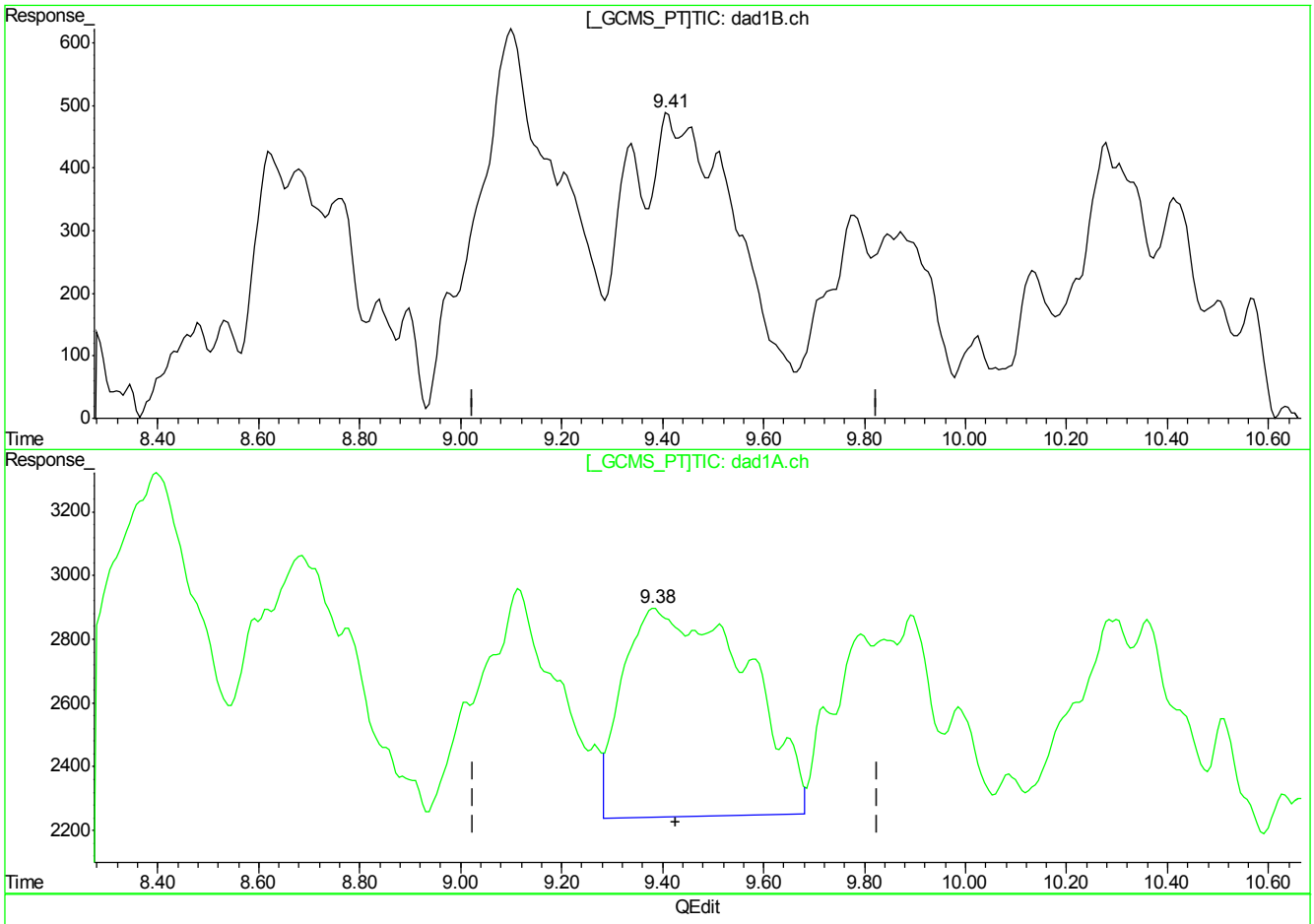
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.41min 19.475ppb

response 78176

(13) 2-Amino-4,6-Dinitrotoluene #2

9.38min 20.113ppb m

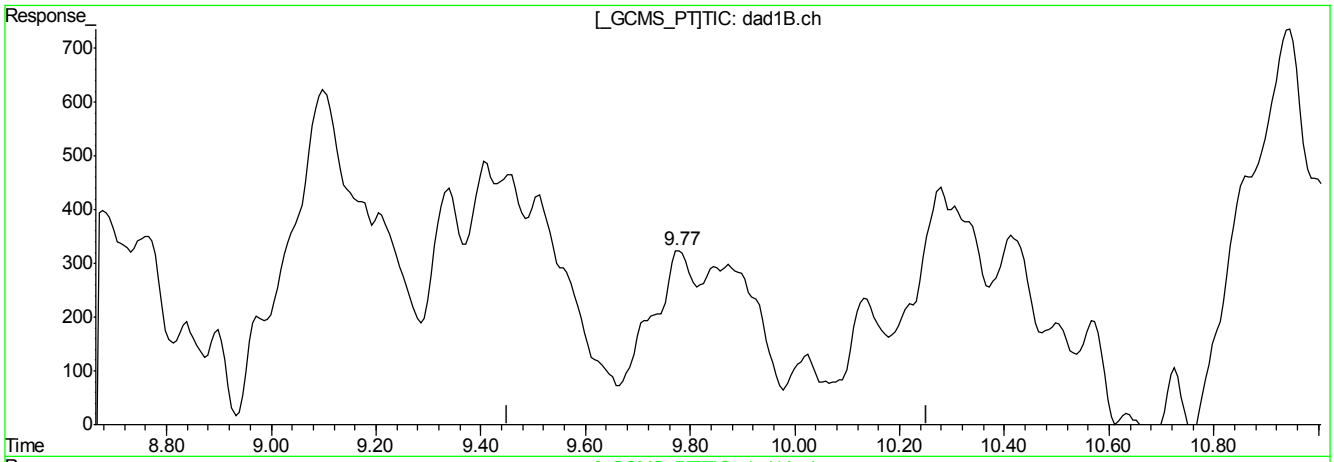
response 111824

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:31 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.78min 10.928ppb

response 30840

(14) 4-Amino-2,6-Dinitrotoluene #2

0.00min 0.000ppb

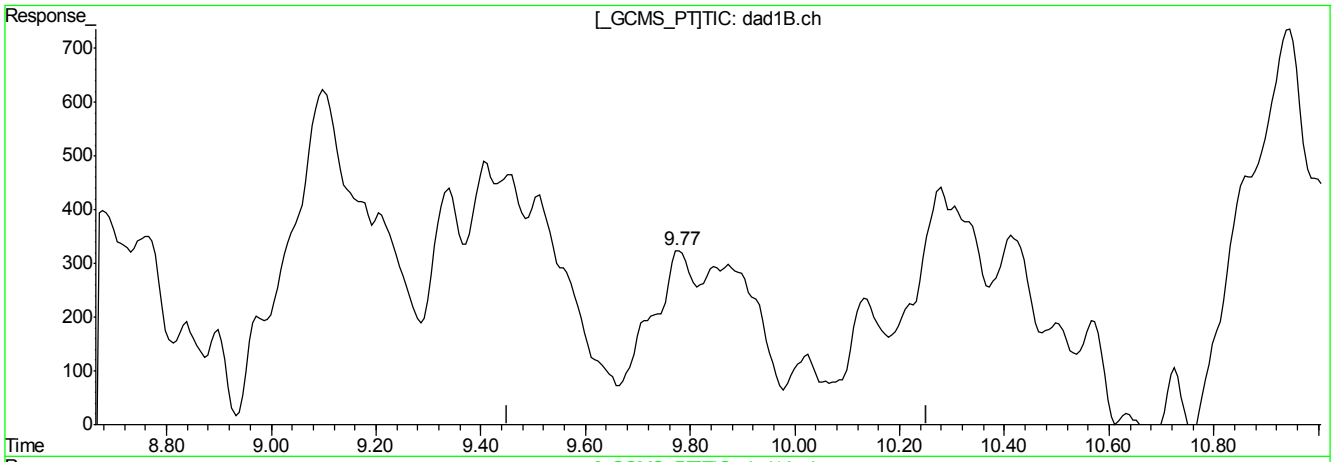
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.78min 10.928ppb

response 30840

(14) 4-Amino-2,6-Dinitrotoluene #2

9.89min 16.014ppb m

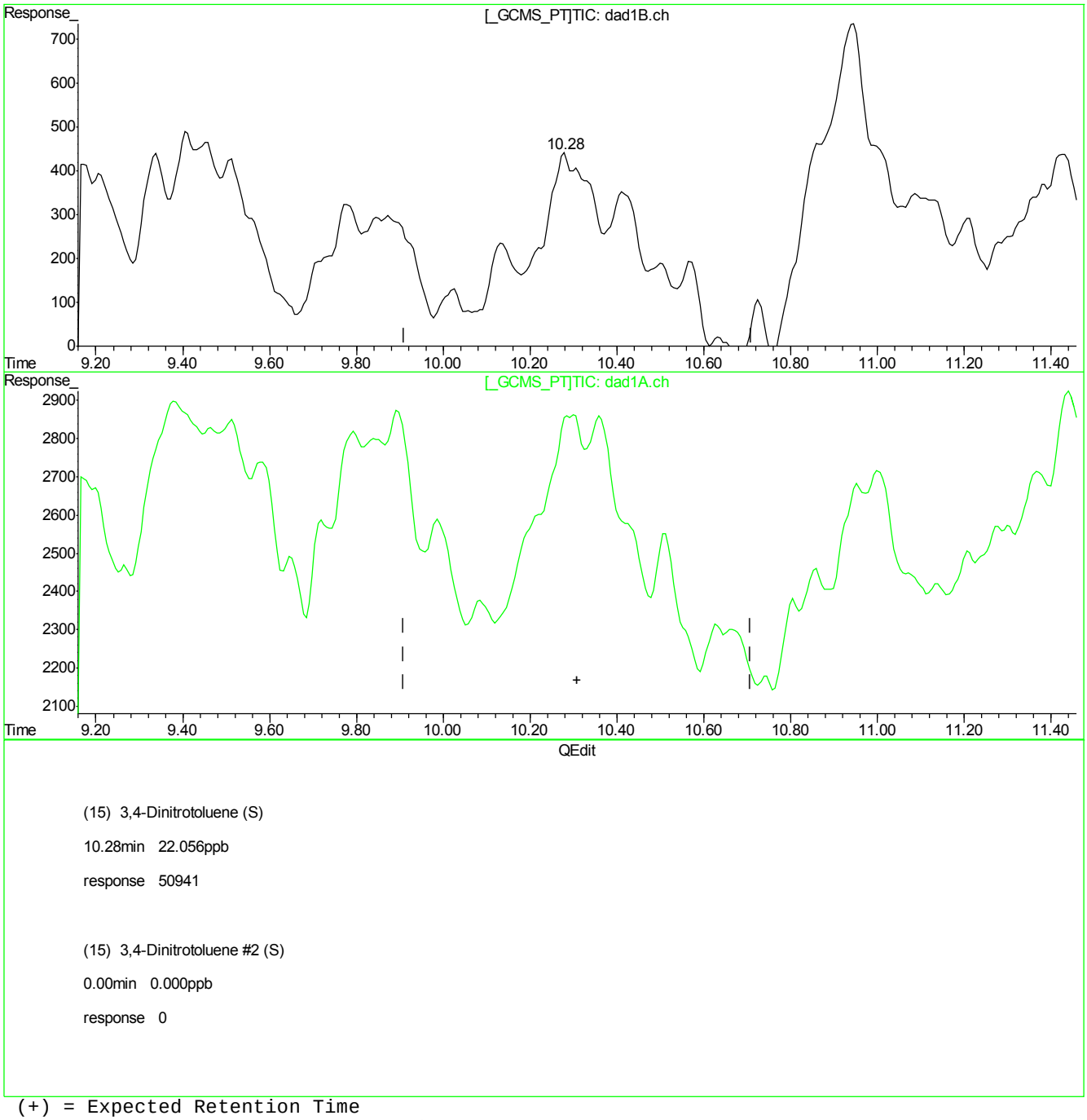
response 86551

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.28min 22.056ppb

response 50941

(15) 3,4-Dinitrotoluene #2 (S)

0.00min 0.000ppb

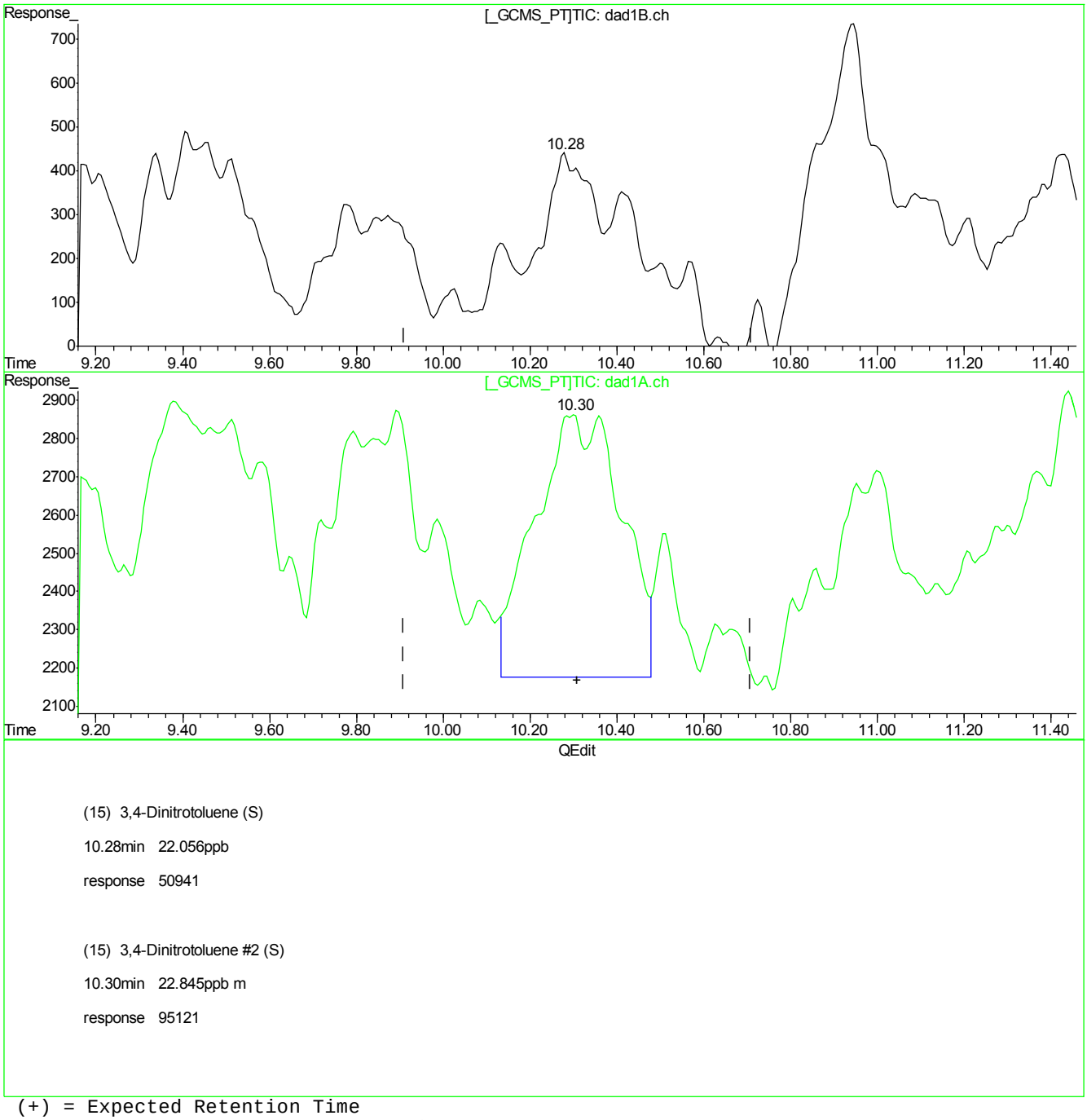
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.28min 22.056ppb

response 50941

(15) 3,4-Dinitrotoluene #2 (S)

10.30min 22.845ppb m

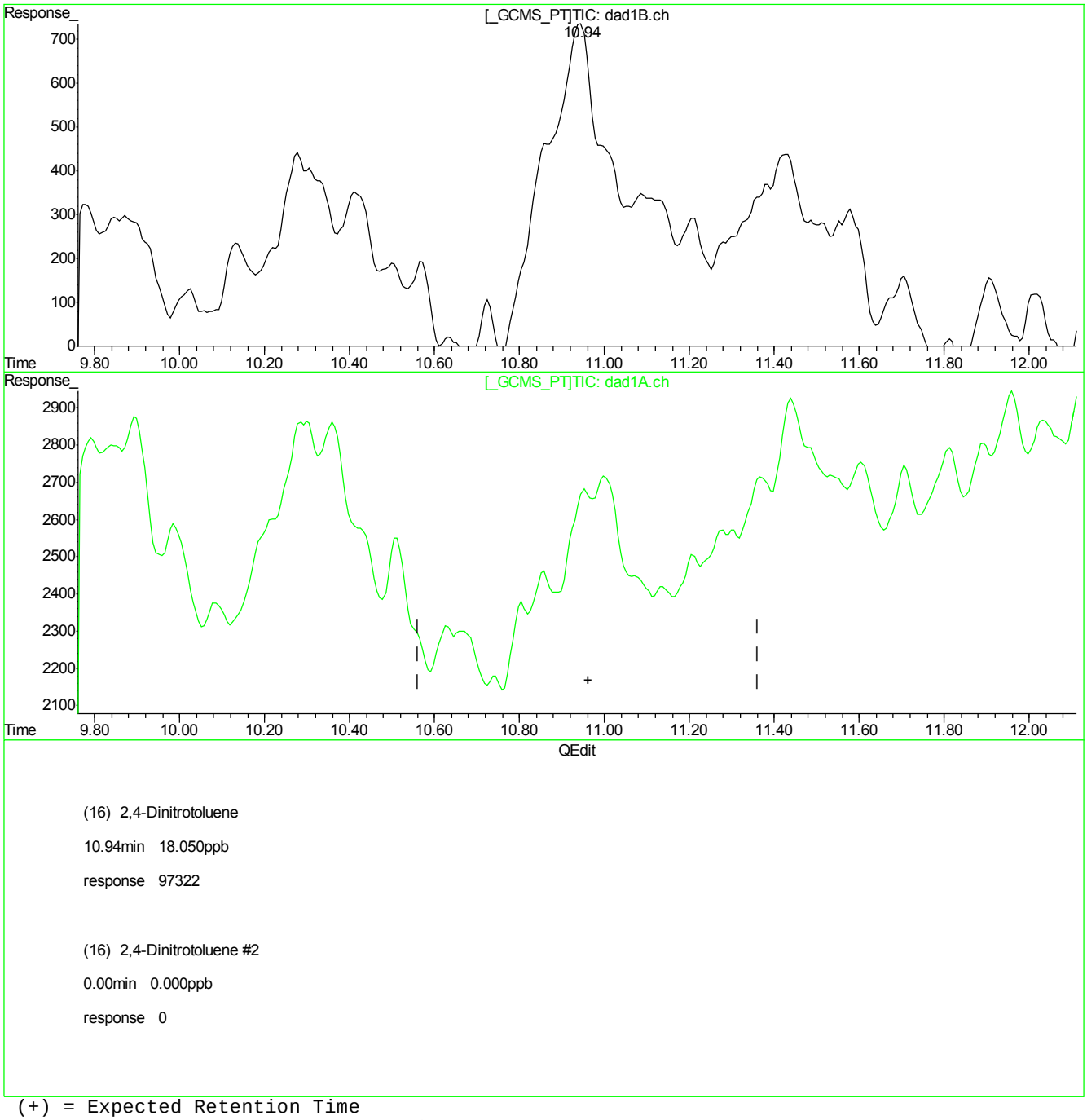
response 95121

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

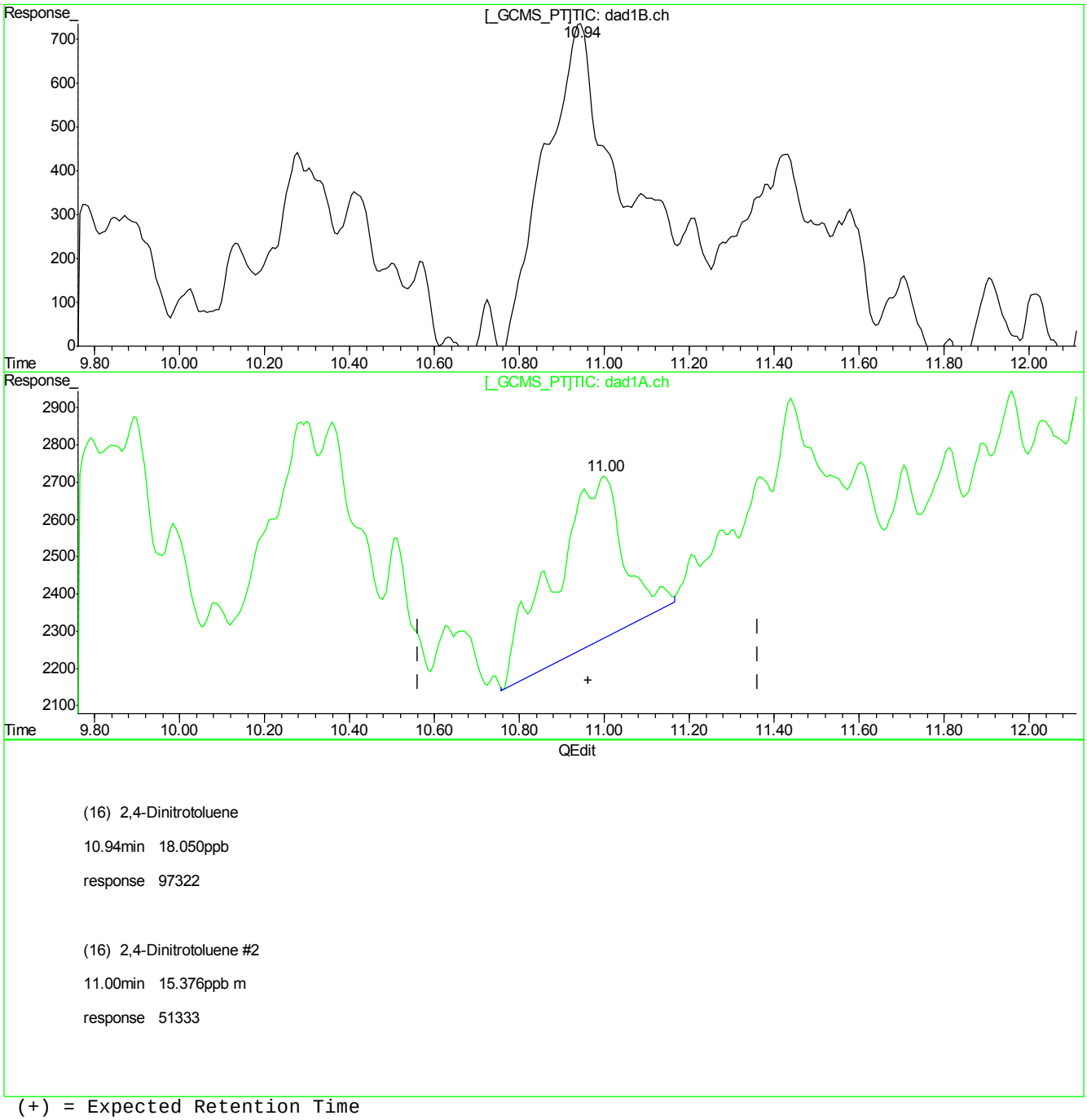


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

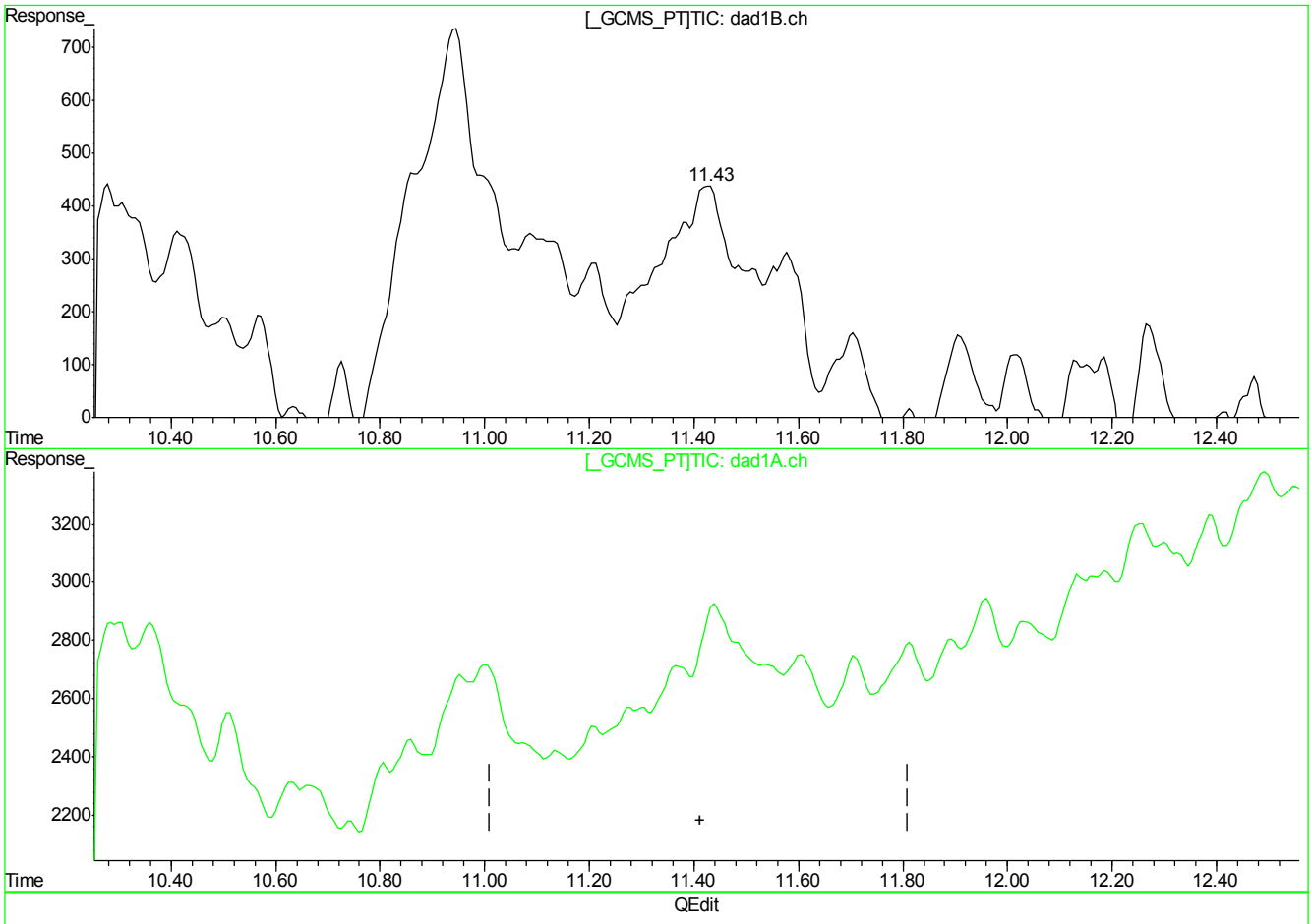


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:53 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.43min 22.573ppb

response 74215

(17) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:03 2018

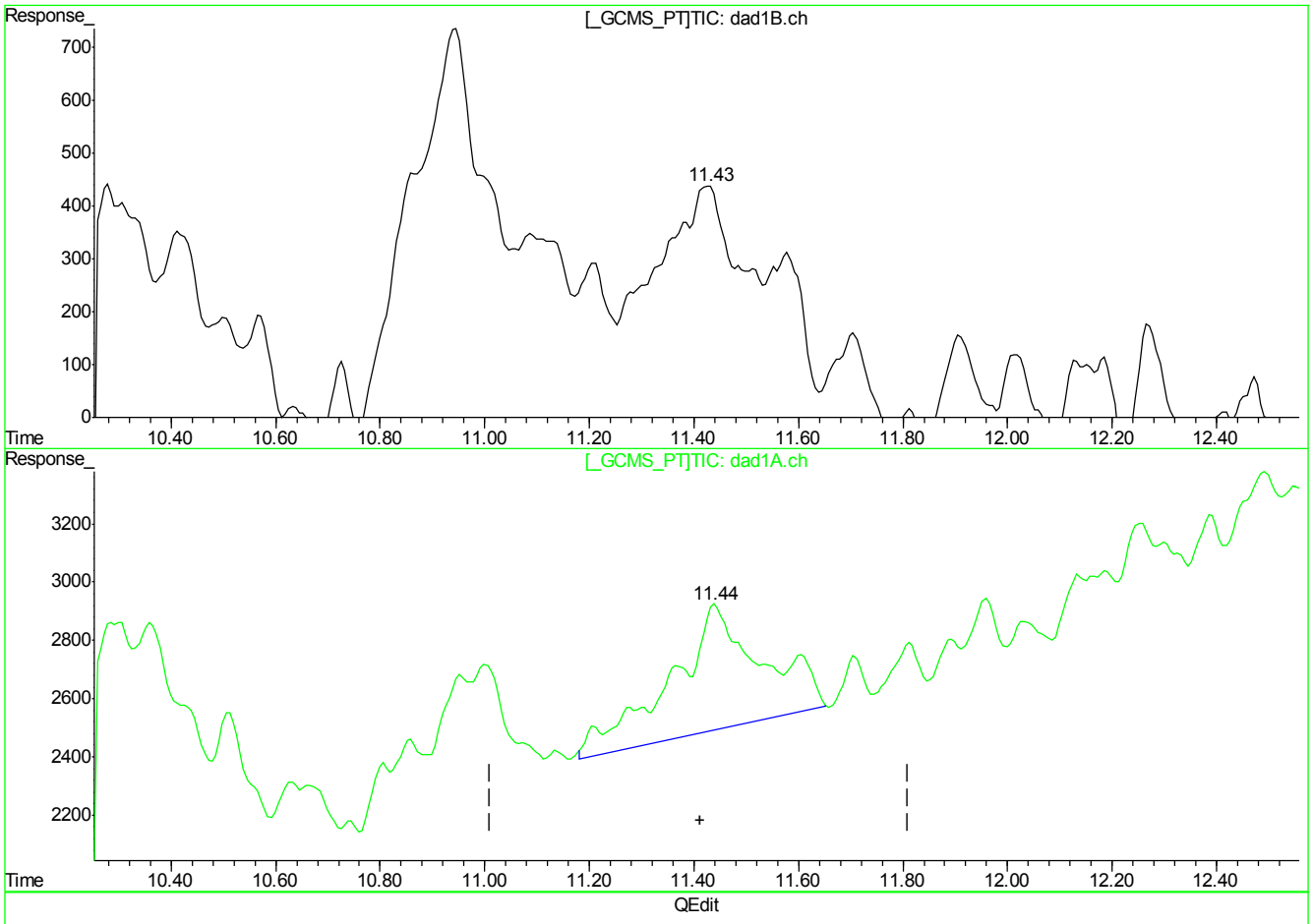
7.7.1.30

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.43min 22.573ppb

response 74215

(17) 2,6-Dinitrotoluene #2

11.44min 13.240ppb m

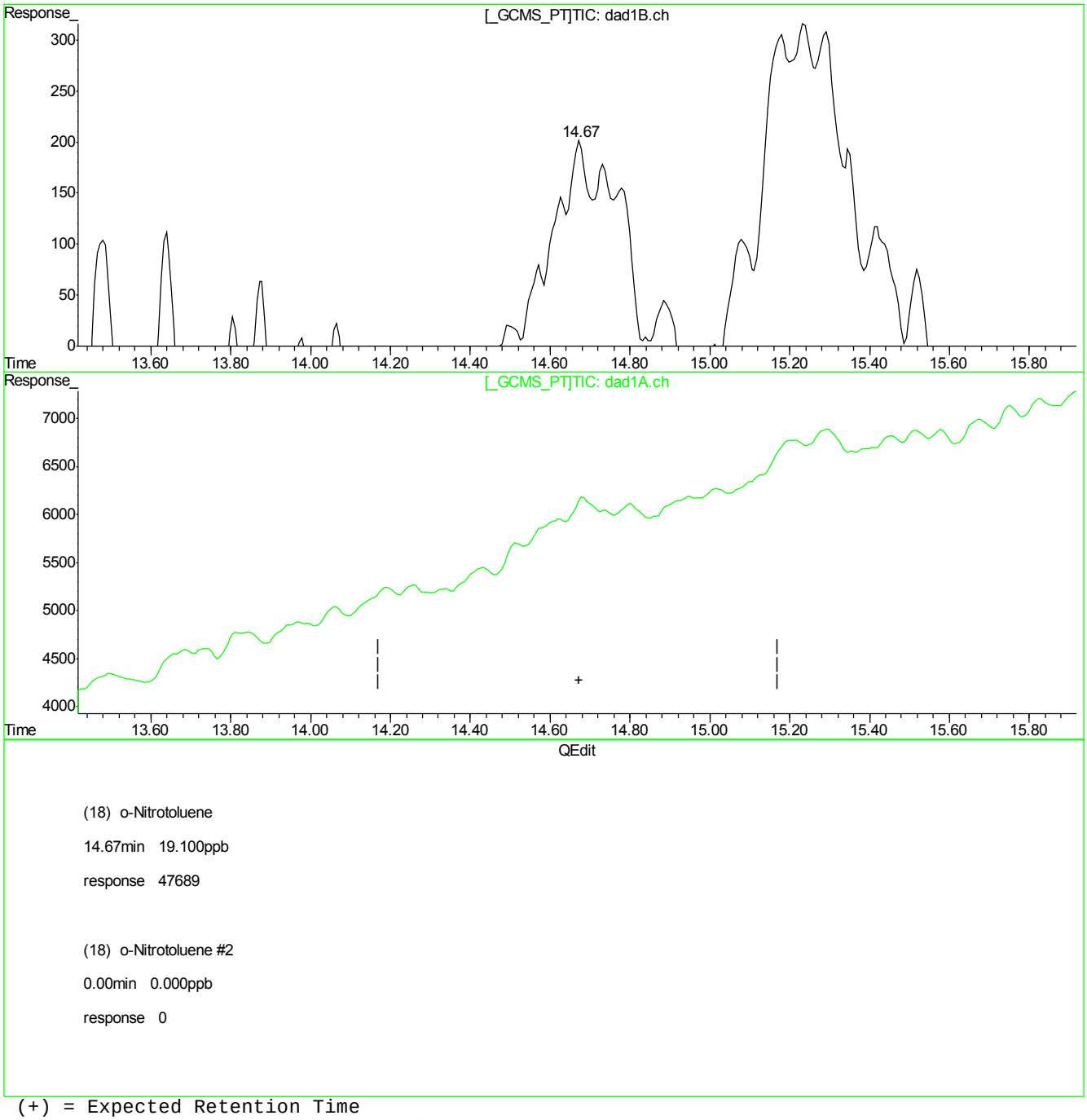
response 51922

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:07 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.67min 19.100ppb

response 47689

(18) o-Nitrotoluene #2

0.00min 0.000ppb

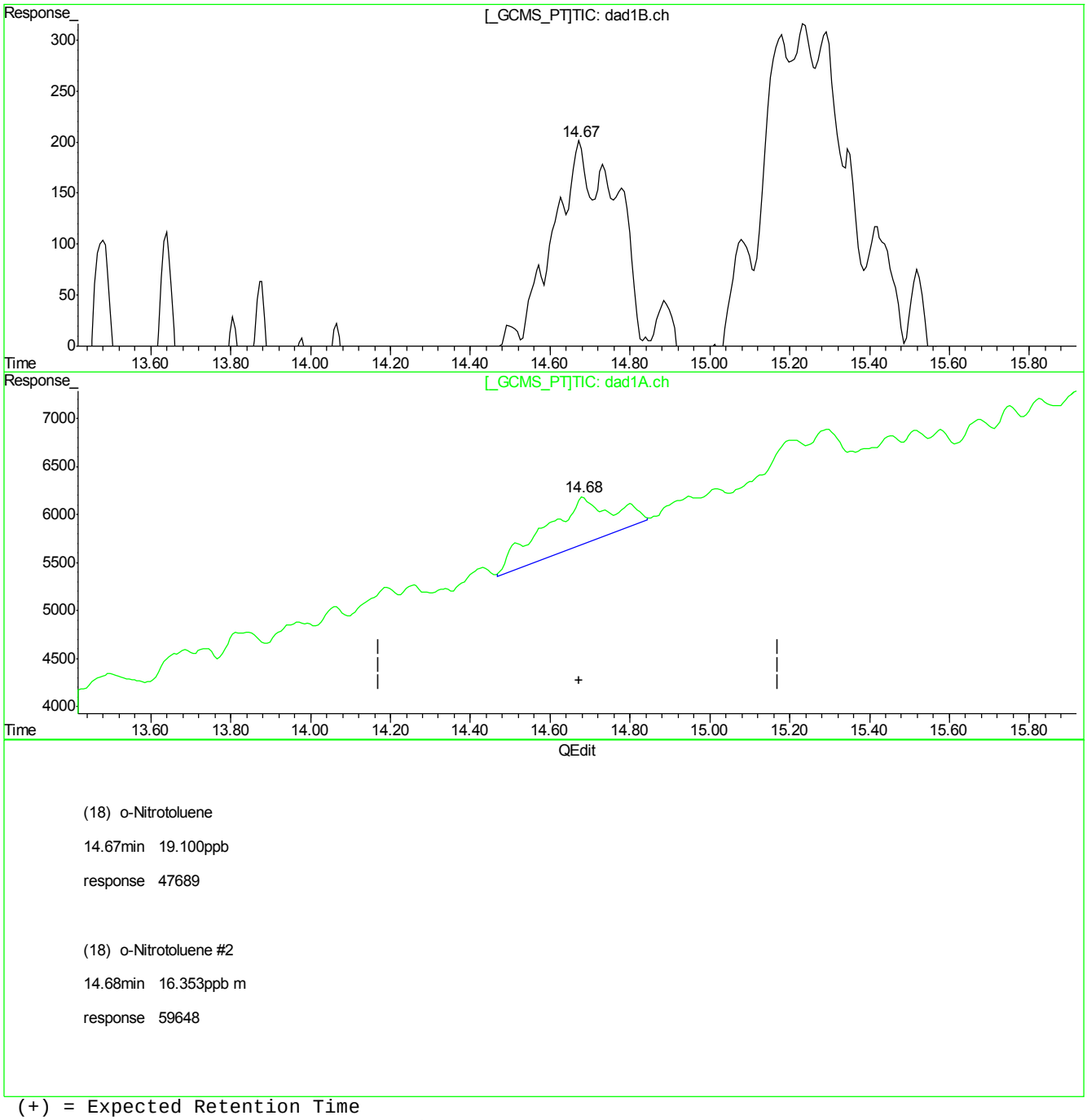
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.67min 19.100ppb

response 47689

(18) o-Nitrotoluene #2

14.68min 16.353ppb m

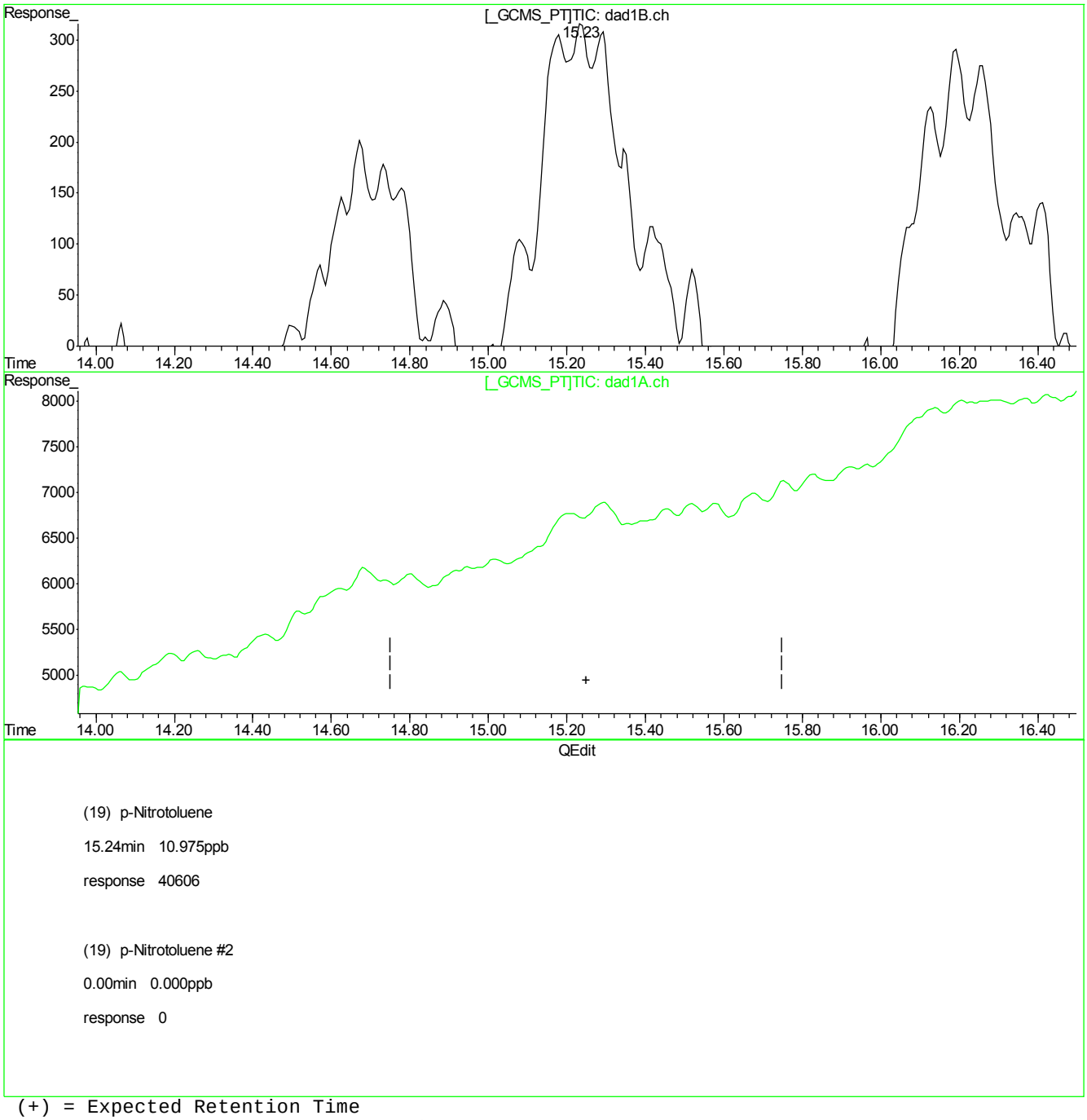
response 59648

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:14 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

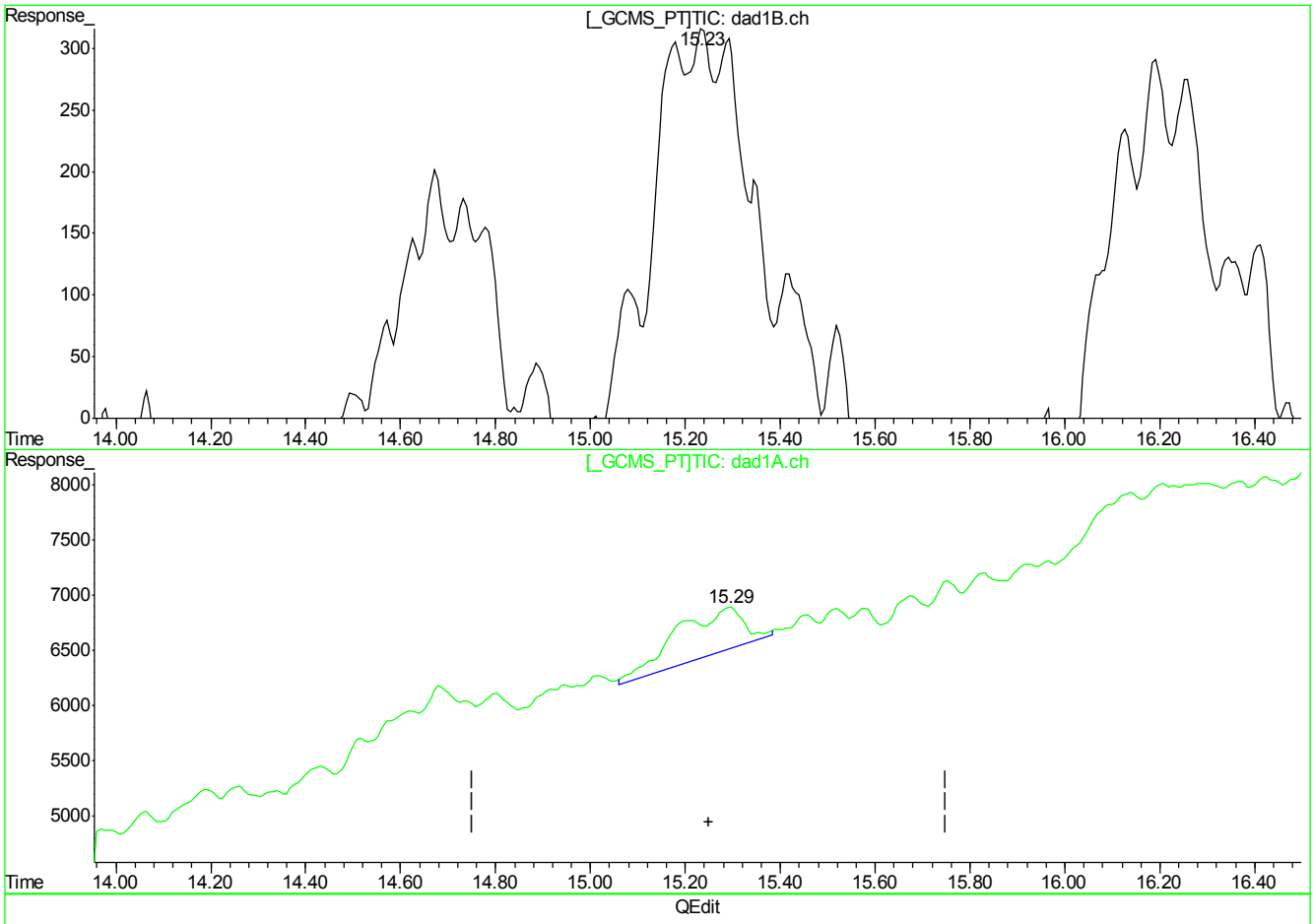


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:17 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.24min 10.975ppb

response 40606

(19) p-Nitrotoluene #2

15.29min 13.295ppb m

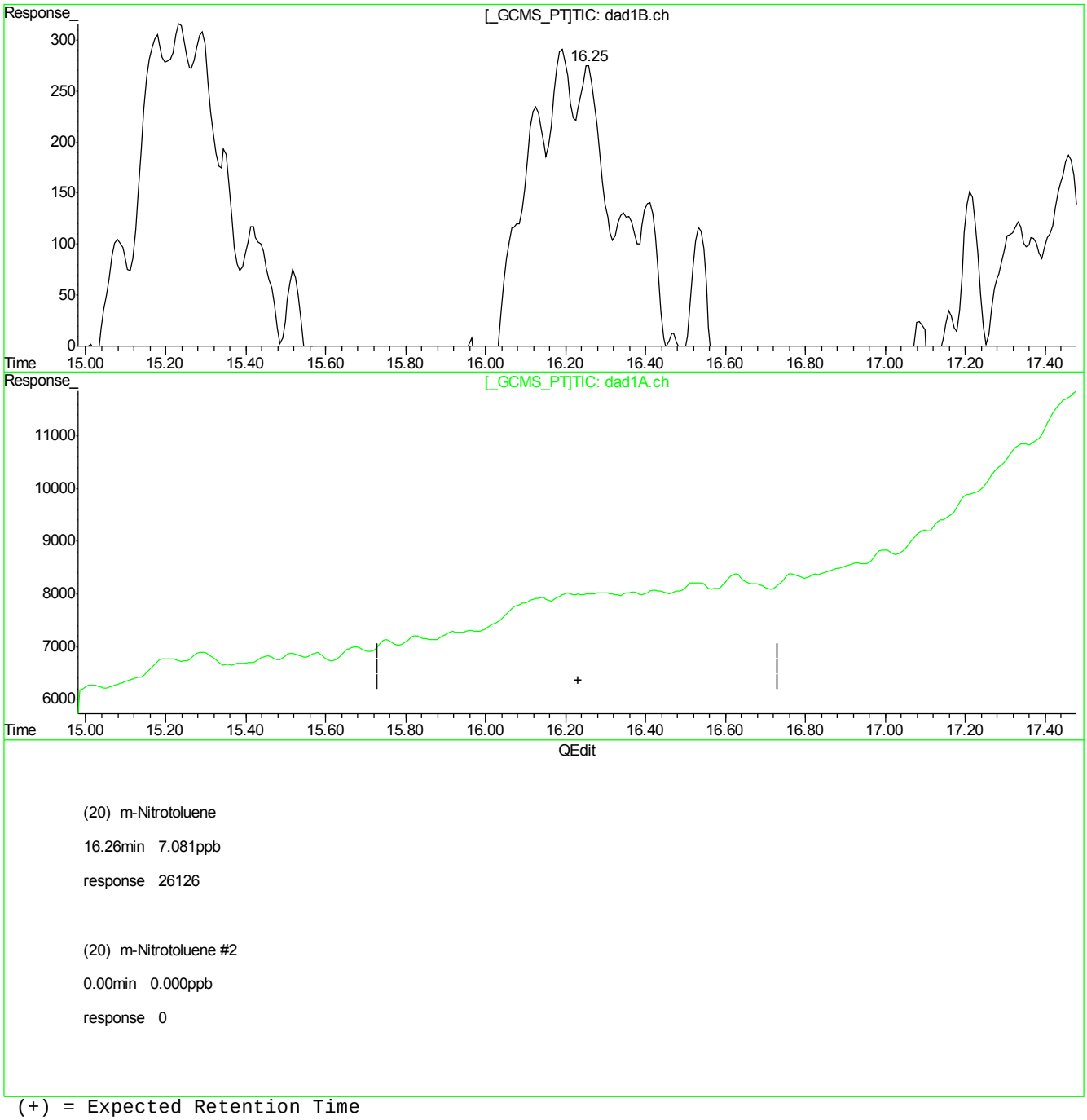
response 42073

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:20 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(20) m-Nitrotoluene

16.26min 7.081ppb

response 26126

(20) m-Nitrotoluene #2

0.00min 0.000ppb

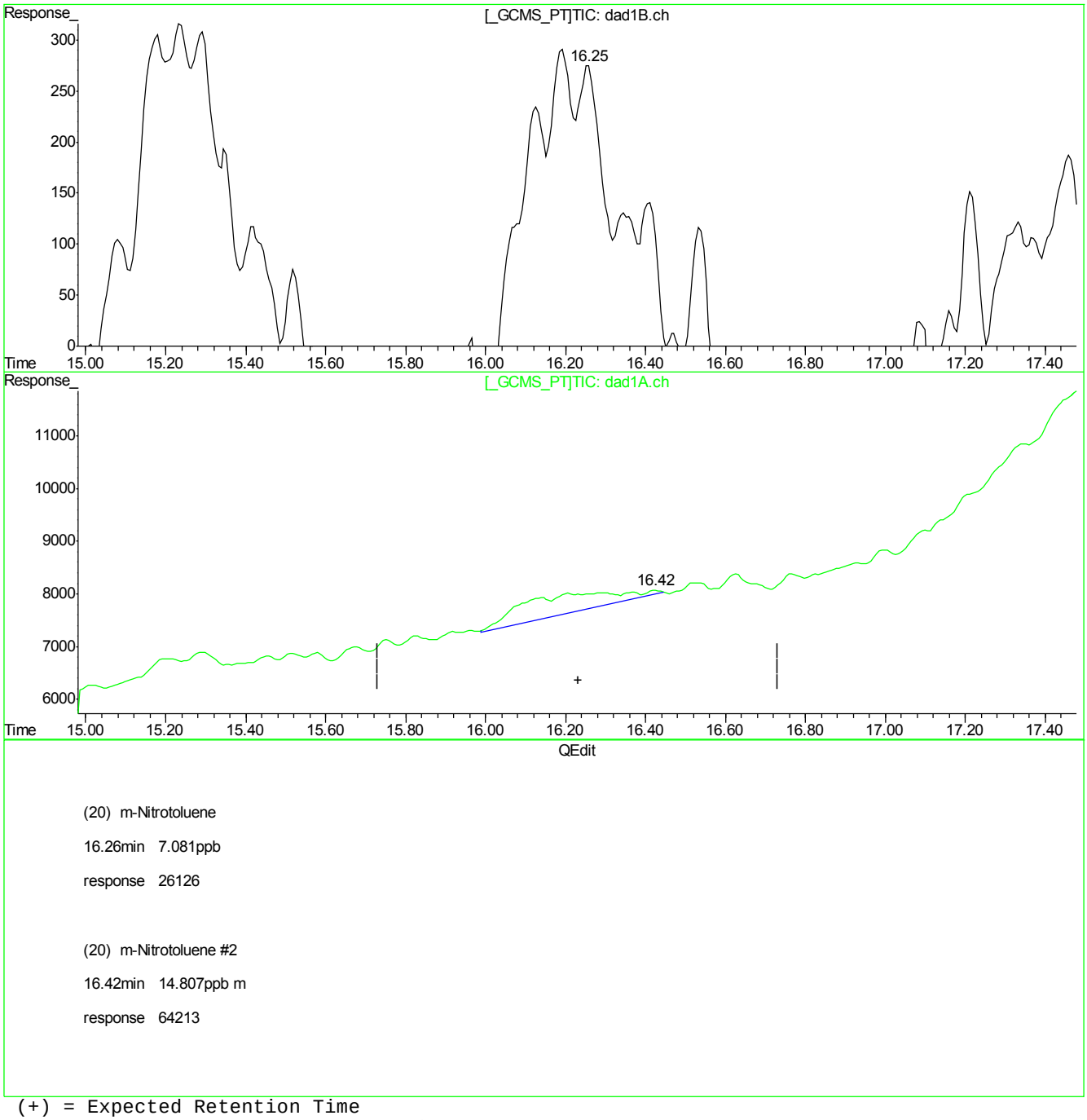
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

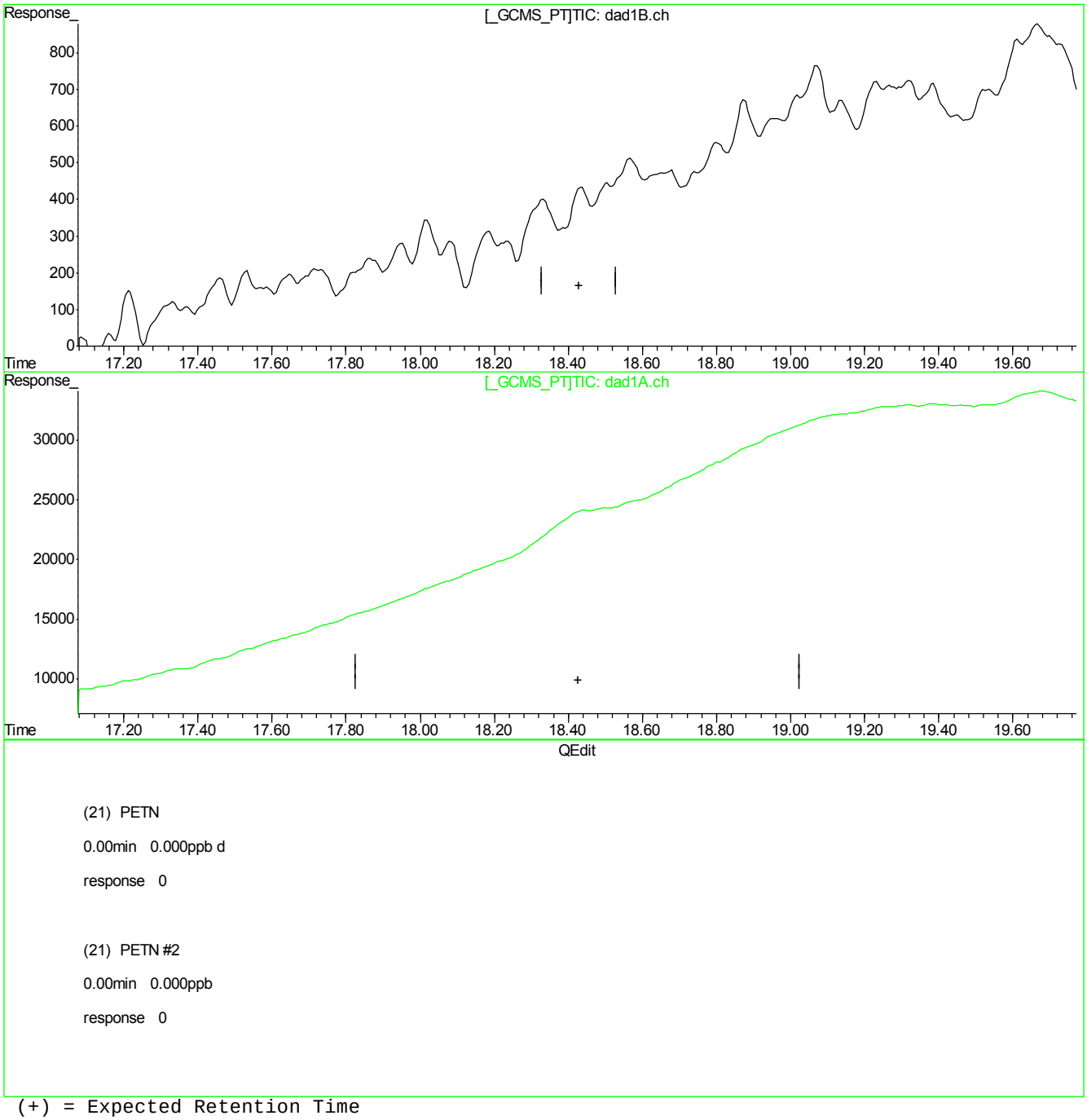


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

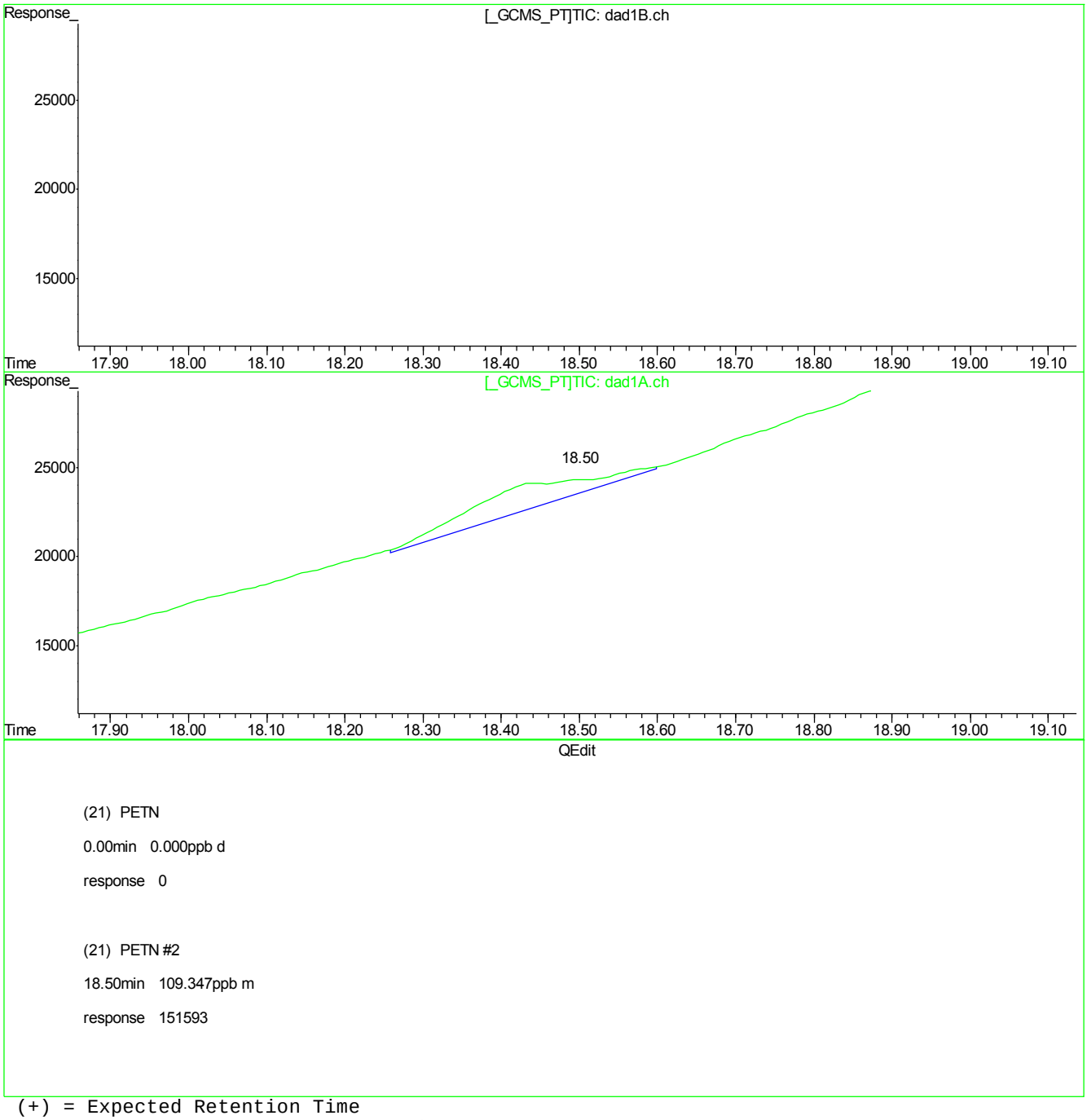


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:52:01 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:45 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.32	10.31	148252	250753	64.190m	60.222m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	12.84%#	12.04%#
	Target Compounds						
1)	TNX	1.31	1.31	271857	420352	53.572m	53.933m
2)	HMX	1.44	1.44	108610	310120	55.713	59.009m
3)	DNX	1.66	1.67	183097	332602	61.821m	69.640
4)	MNX	2.20	2.20	172151	244651	55.367	52.195
5)	RDX	2.77	2.77	118381	180480	51.055	48.190
6)	1,3,5-Trinitrobe	4.42	4.42	212484	449305	43.000	49.305
7)	1,3-Dinitrobenze	5.59	5.59	306521	180727	50.221	45.866m
8)	3,5-Dinitroanili	5.89	5.90	282156	374495	61.543	47.488
9)	Nitrobenzene	7.09	7.10	223213	181960	58.508	50.753
10)	Nitroglycerin	0.00	8.39	0	336203	N.D. d	254.046m
11)	Tetryl	8.73	8.71	187659	238575	58.975	46.534
12)	2,4,6-Trinitroto	9.13	9.12	247127	209769	68.486	48.907
13)	2-Amino-4,6-Dini	9.44	9.47	217984	202574	54.303	36.436
14)	4-Amino-2,6-Dini	9.87	9.85	171280	229722	60.694	42.505m
16)	2,4-Dinitrotolue	11.00	11.01	336433	150818	62.397	45.176m
17)	2,6-Dinitrotolue	11.39	11.46	219785	175853	66.850m	44.840m
18)	o-Nitrotoluene	14.68	14.67	157597	171653	63.119	47.060m
19)	p-Nitrotoluene	15.26	15.26	247116	168598	66.793	53.275m
20)	m-Nitrotoluene	16.24	16.30	222504	208312	60.309	48.036m
21)	PETN	0.00	18.44	0	340859	N.D. d	245.869m

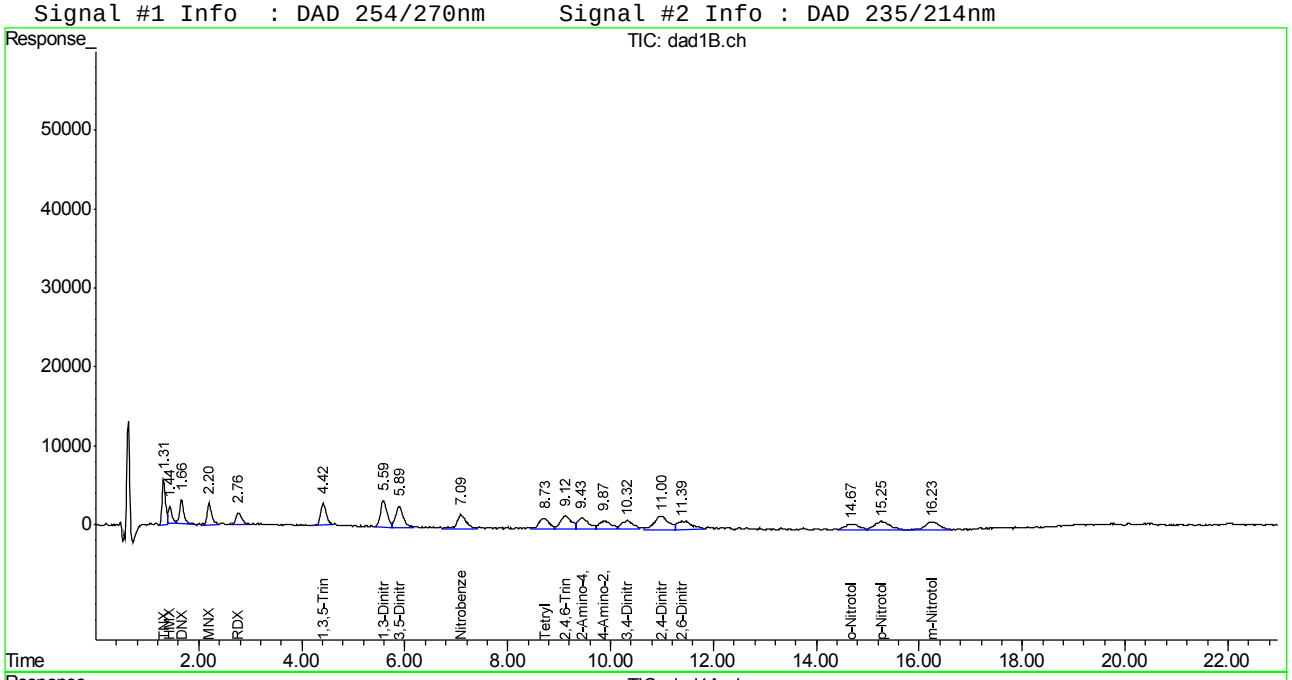
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059465.D 8330B_0419PLUS.M Fri Apr 20 08:01:19 2018 Page 1

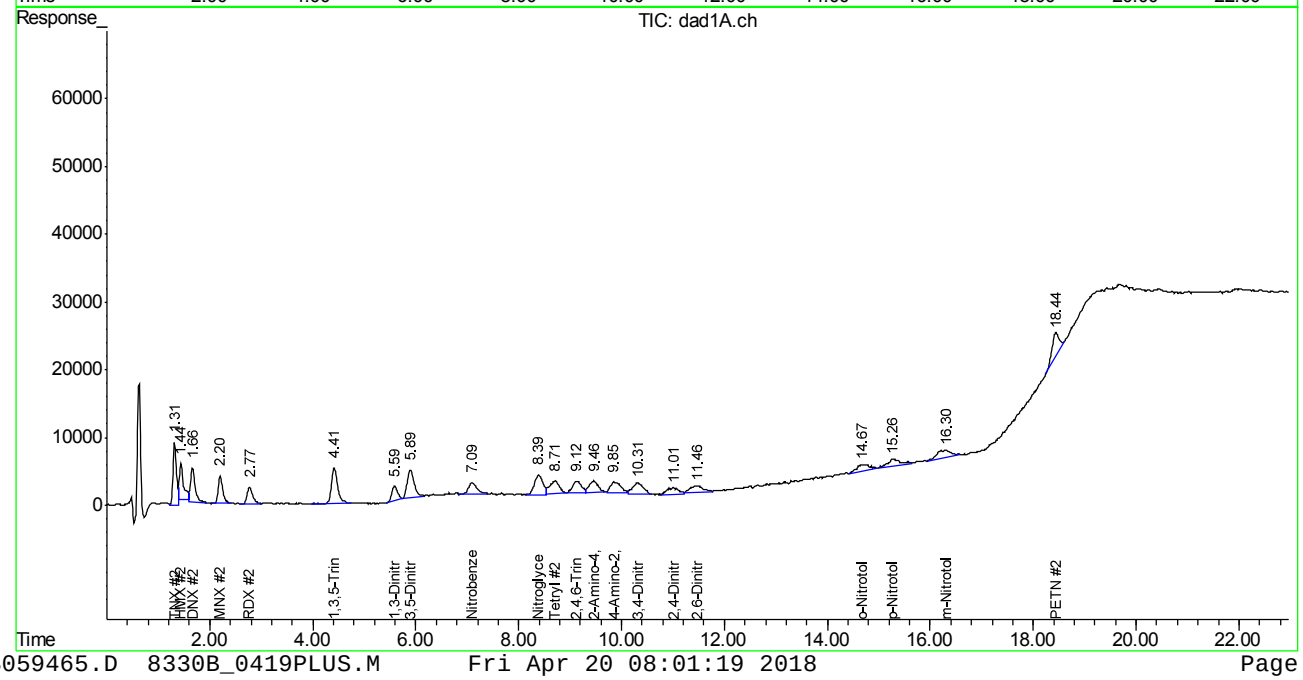
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:55 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

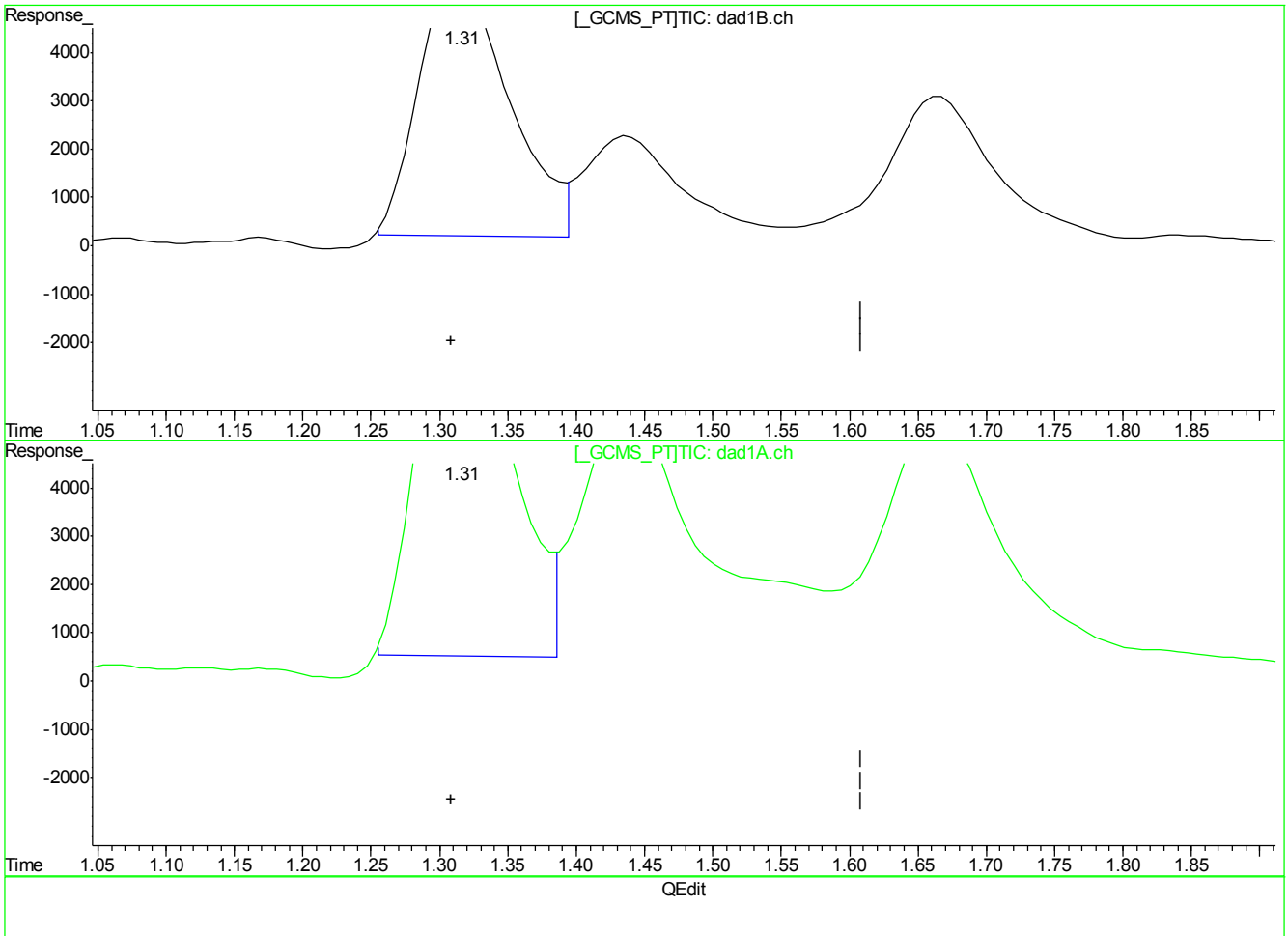
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059465.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 10:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.59	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.39	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	9.85	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.31	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.32	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.01	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.39	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.46	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.67	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.30	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 48.520ppb

response 246218

(1) TNX #2

1.32min 48.662ppb

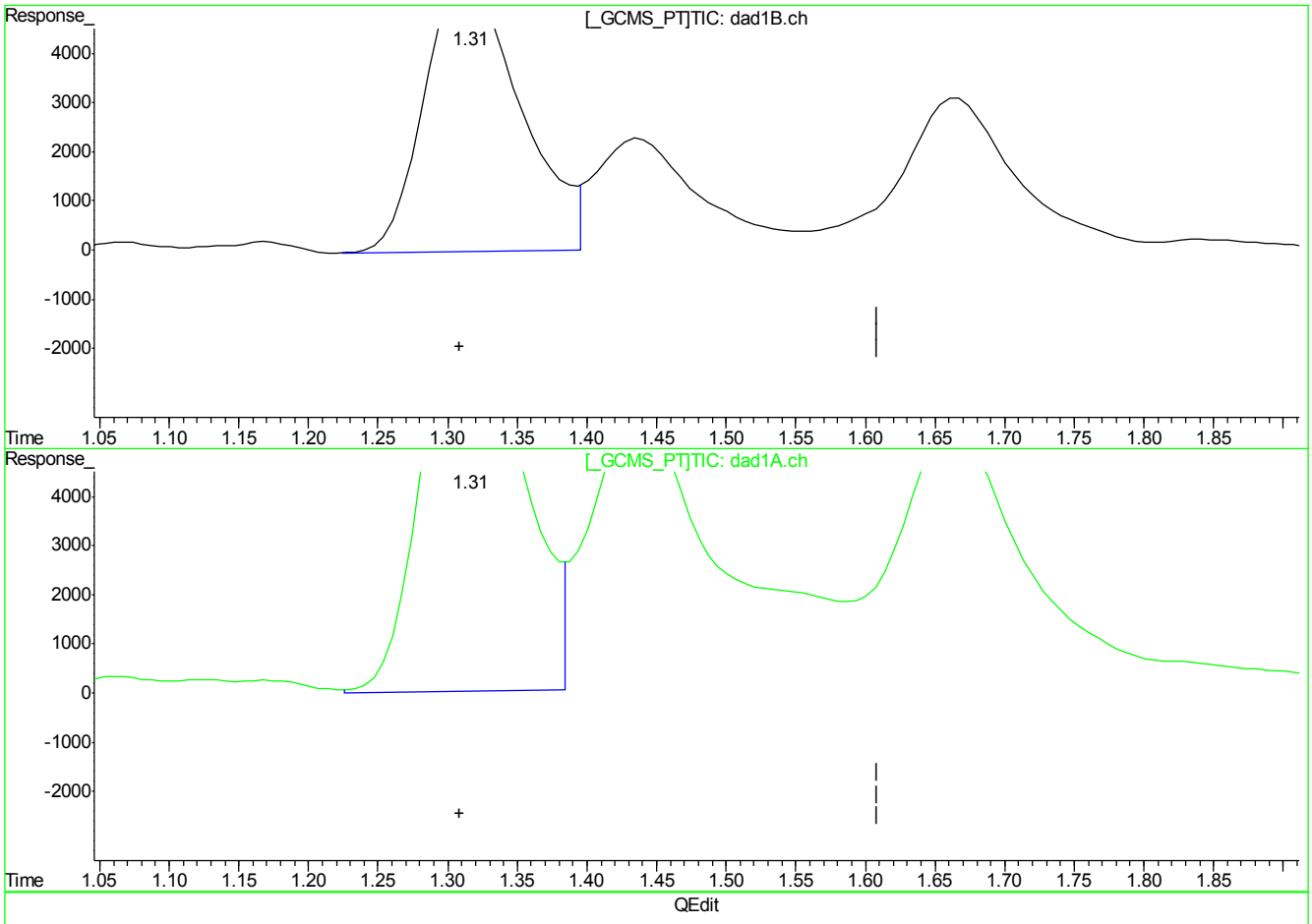
response 379265

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:52:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 53.572ppb m

response 271857

(1) TNX #2

1.31min 53.933ppb m

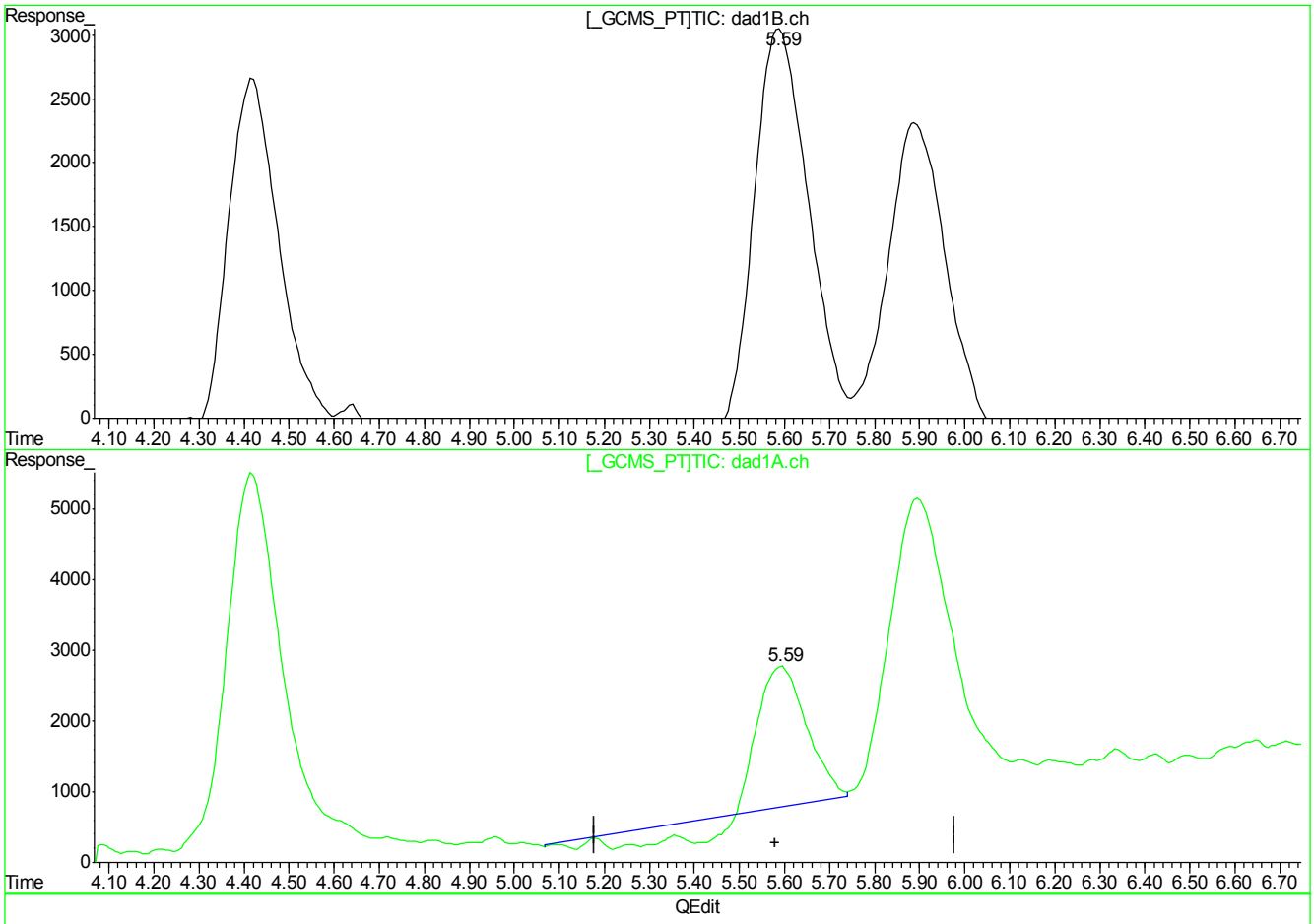
response 420352

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:52:24 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 50.221ppb

response 306521

(7) 1,3-Dinitrobenzene #2

5.59min 26.458ppb

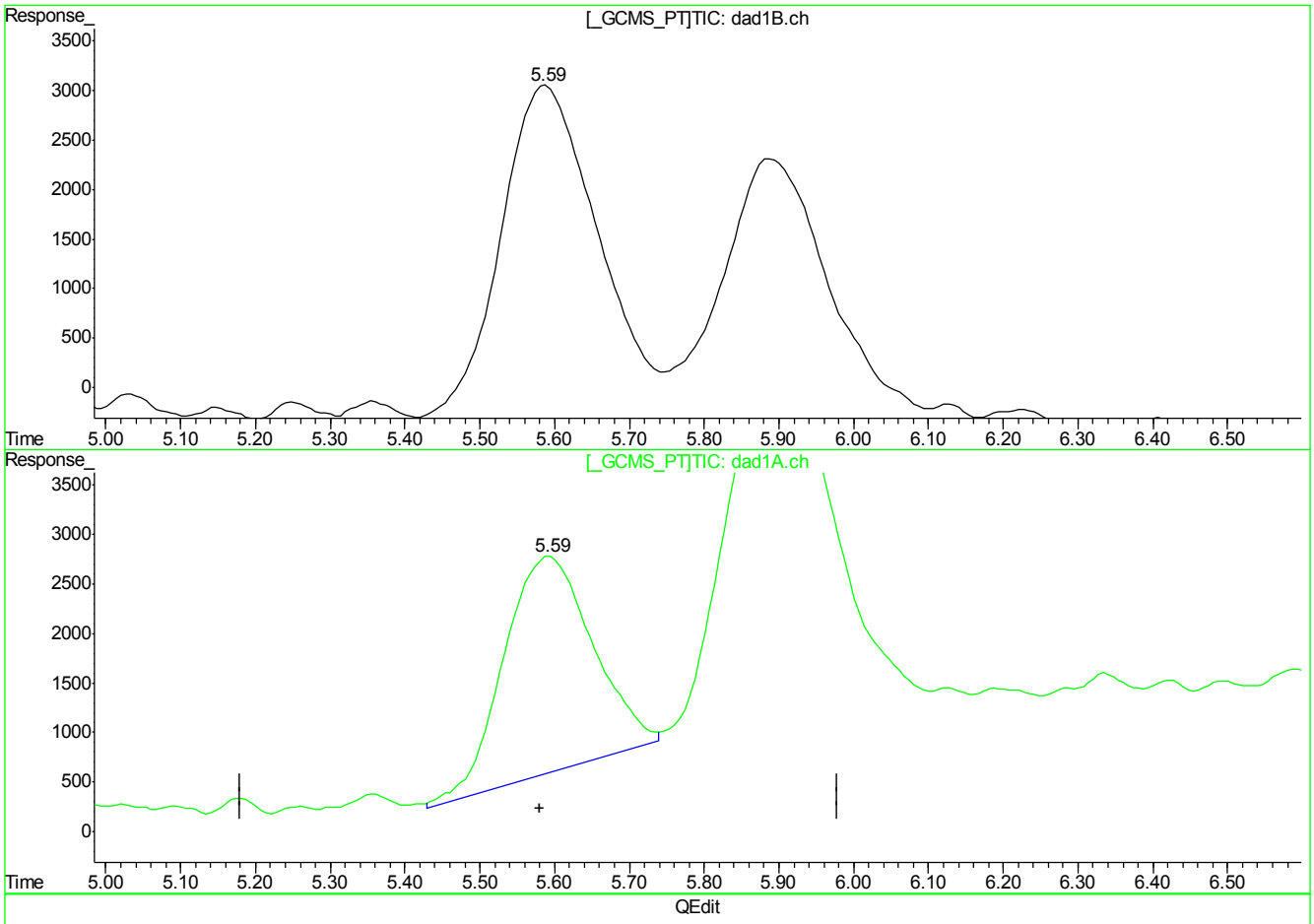
response 104252

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 50.221ppb

response 306521

(7) 1,3-Dinitrobenzene #2

5.59min 45.866ppb m

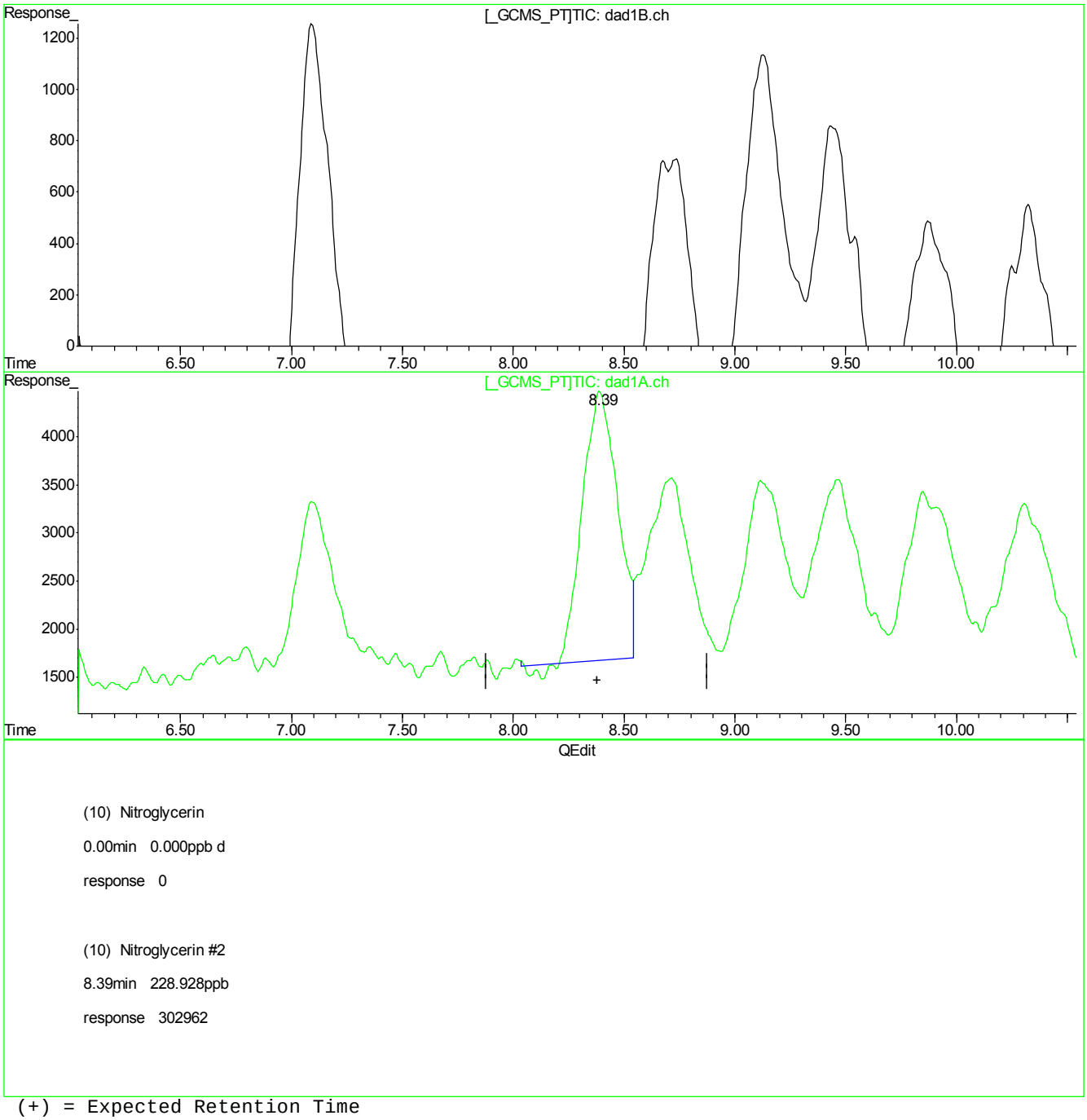
response 180727

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:21 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:28 2018

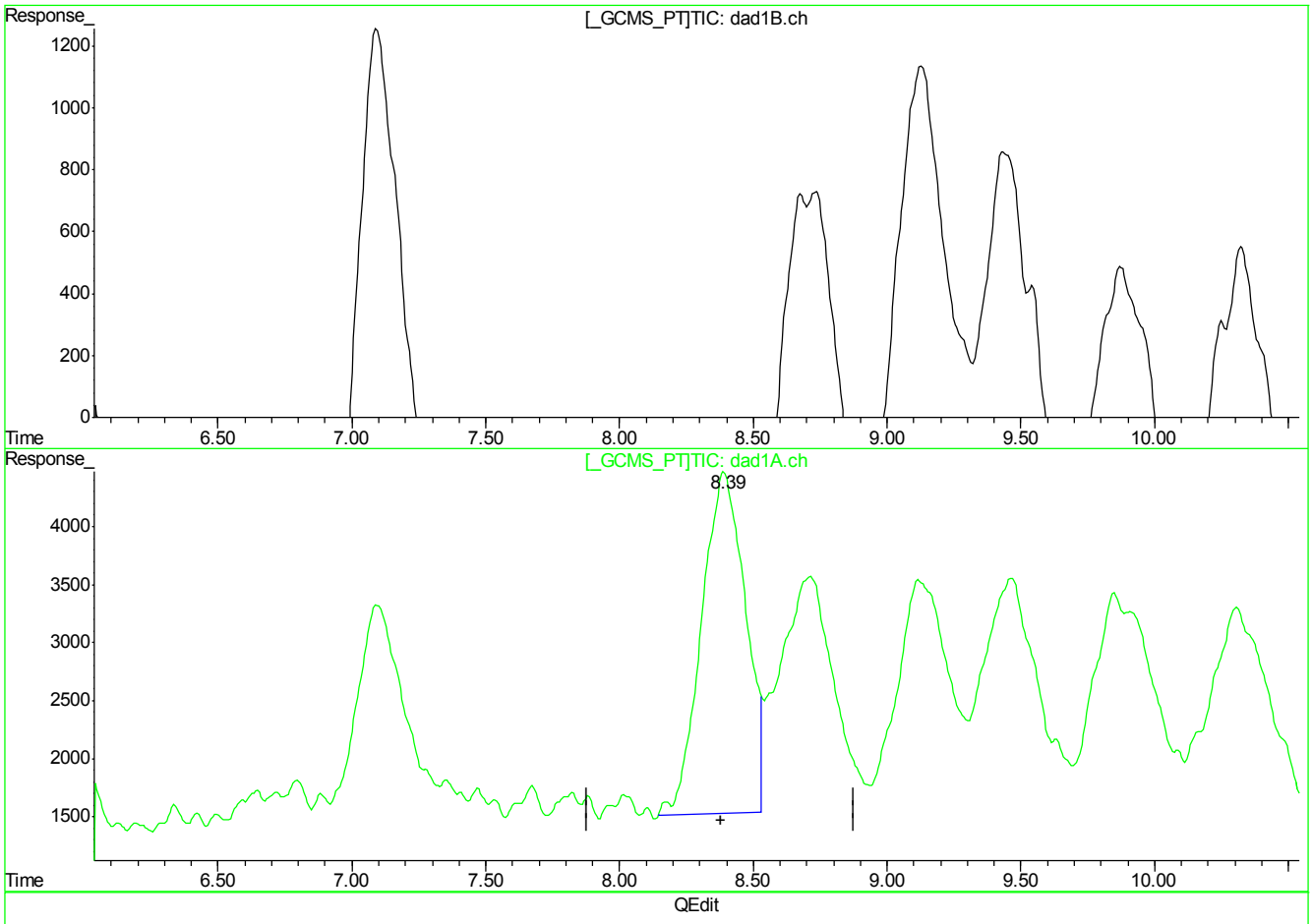
7.7.2.6

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.39min 254.046ppb m

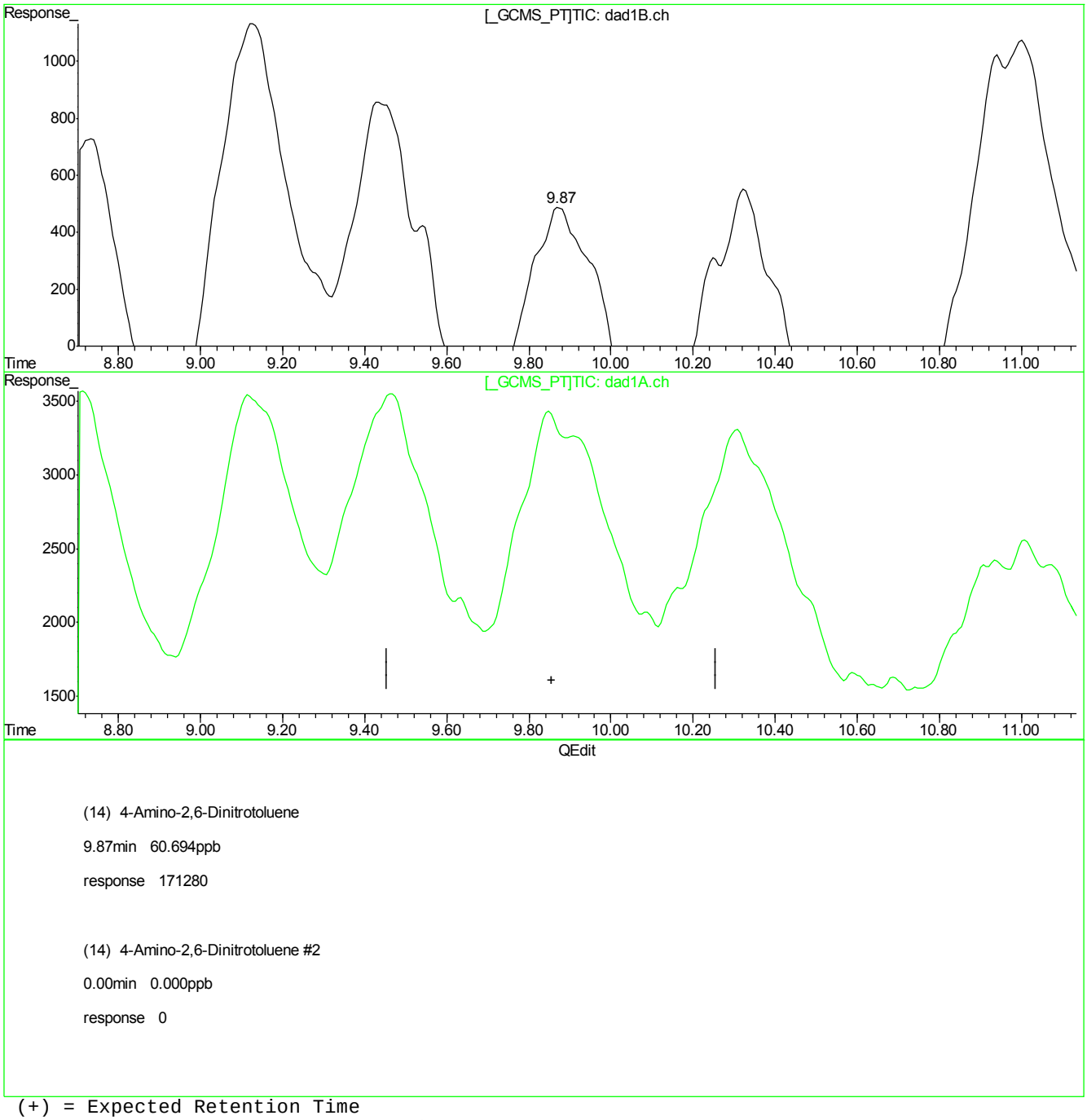
response 336203

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:32 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:04 2018

7.7.2.8

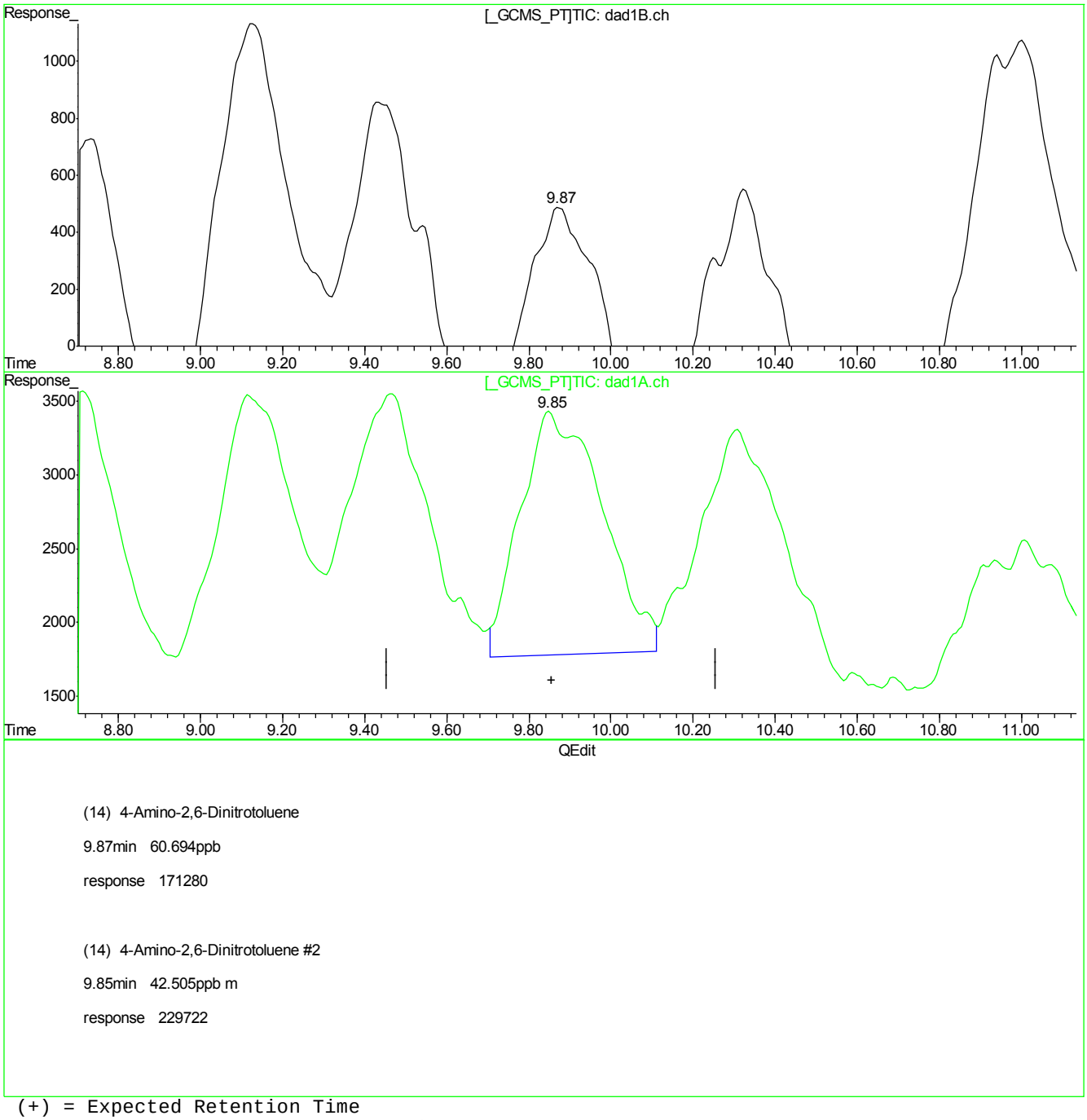
7

BB059465.D edits: 4-Amino-2,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.87min 60.694ppb

response 171280

(14) 4-Amino-2,6-Dinitrotoluene #2

9.85min 42.505ppb m

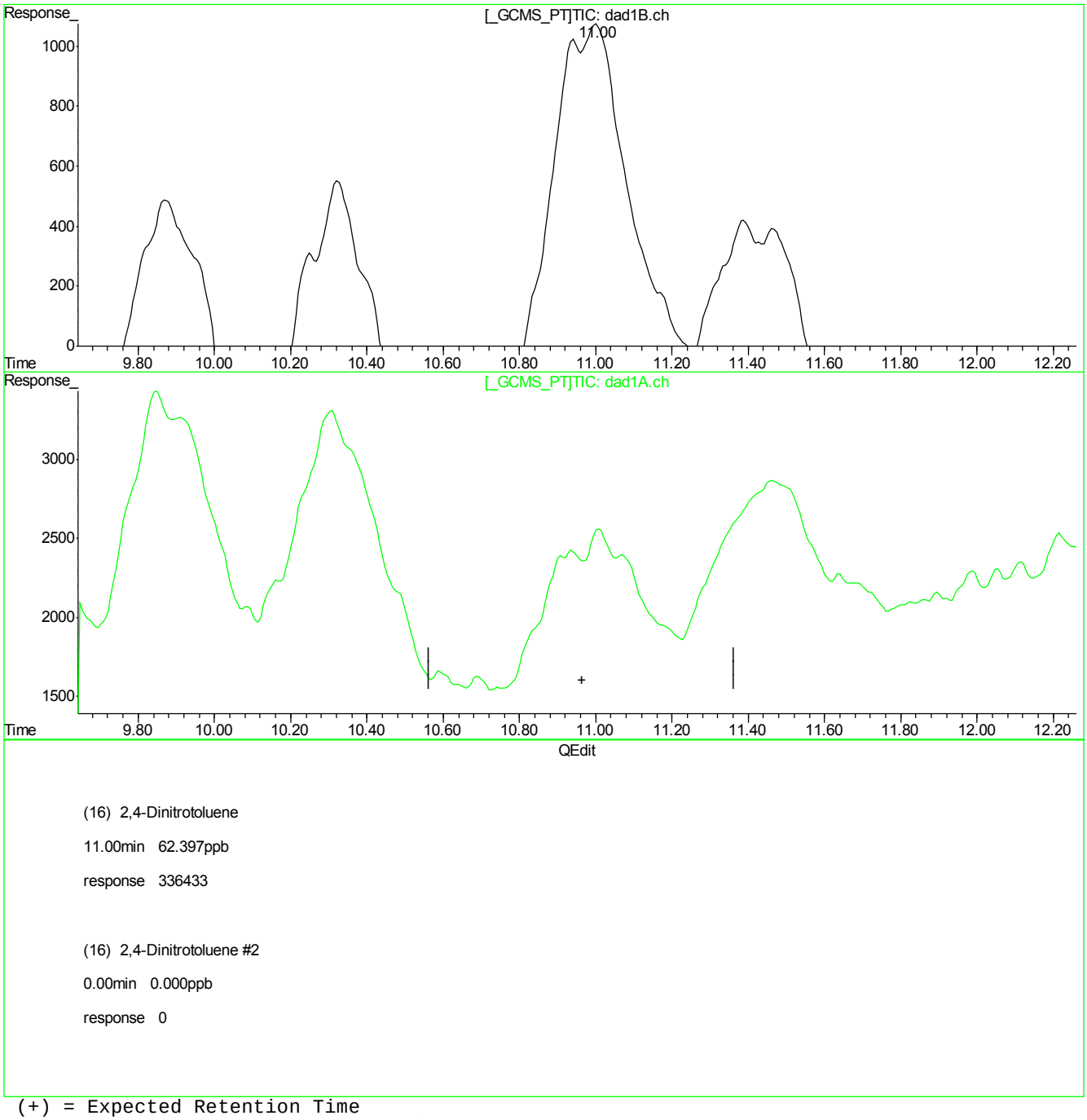
response 229722

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.00min 62.397ppb

response 336433

(16) 2,4-Dinitrotoluene #2

0.00min 0.000ppb

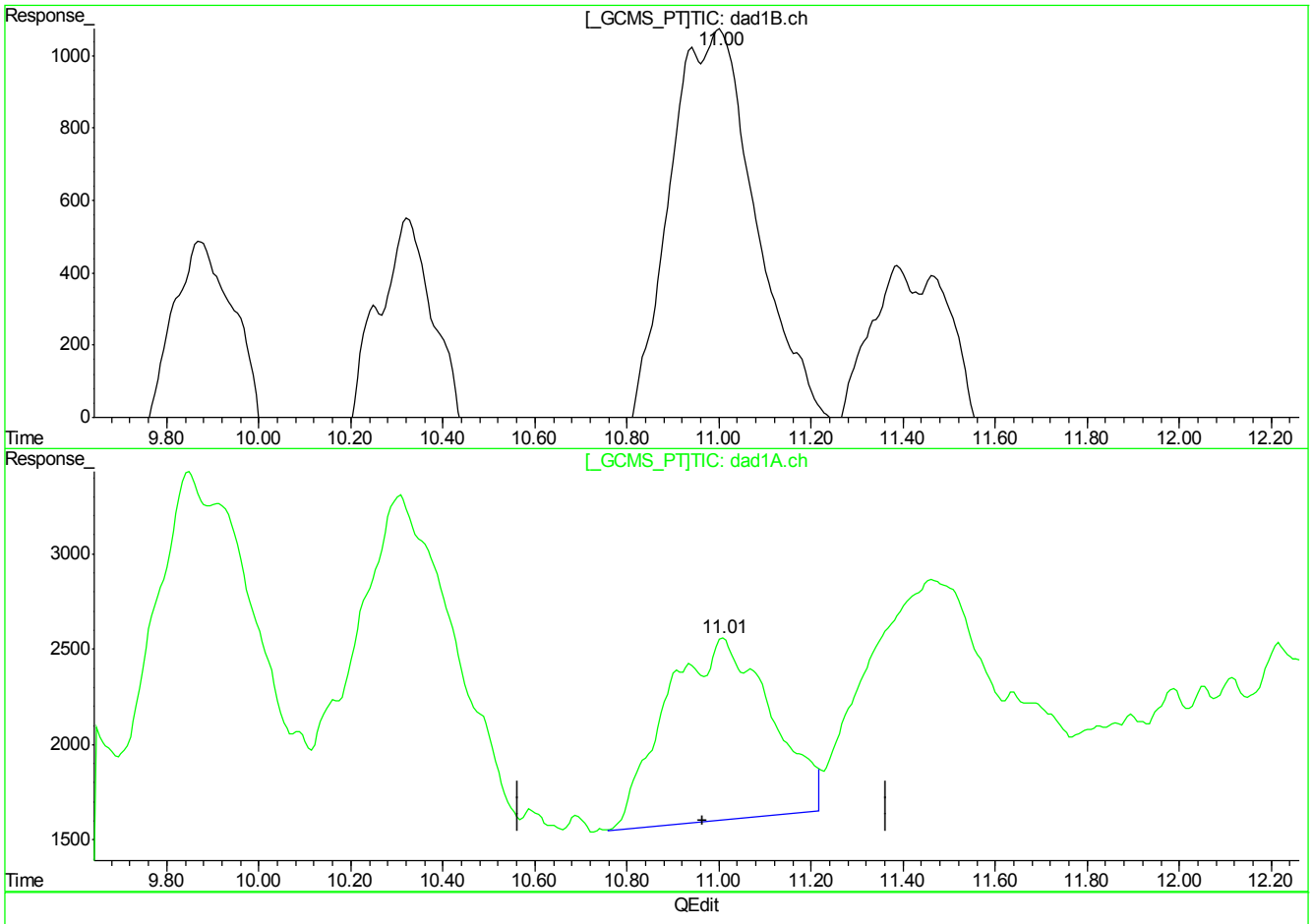
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.00min 62.397ppb

response 336433

(16) 2,4-Dinitrotoluene #2

11.01min 45.176ppb m

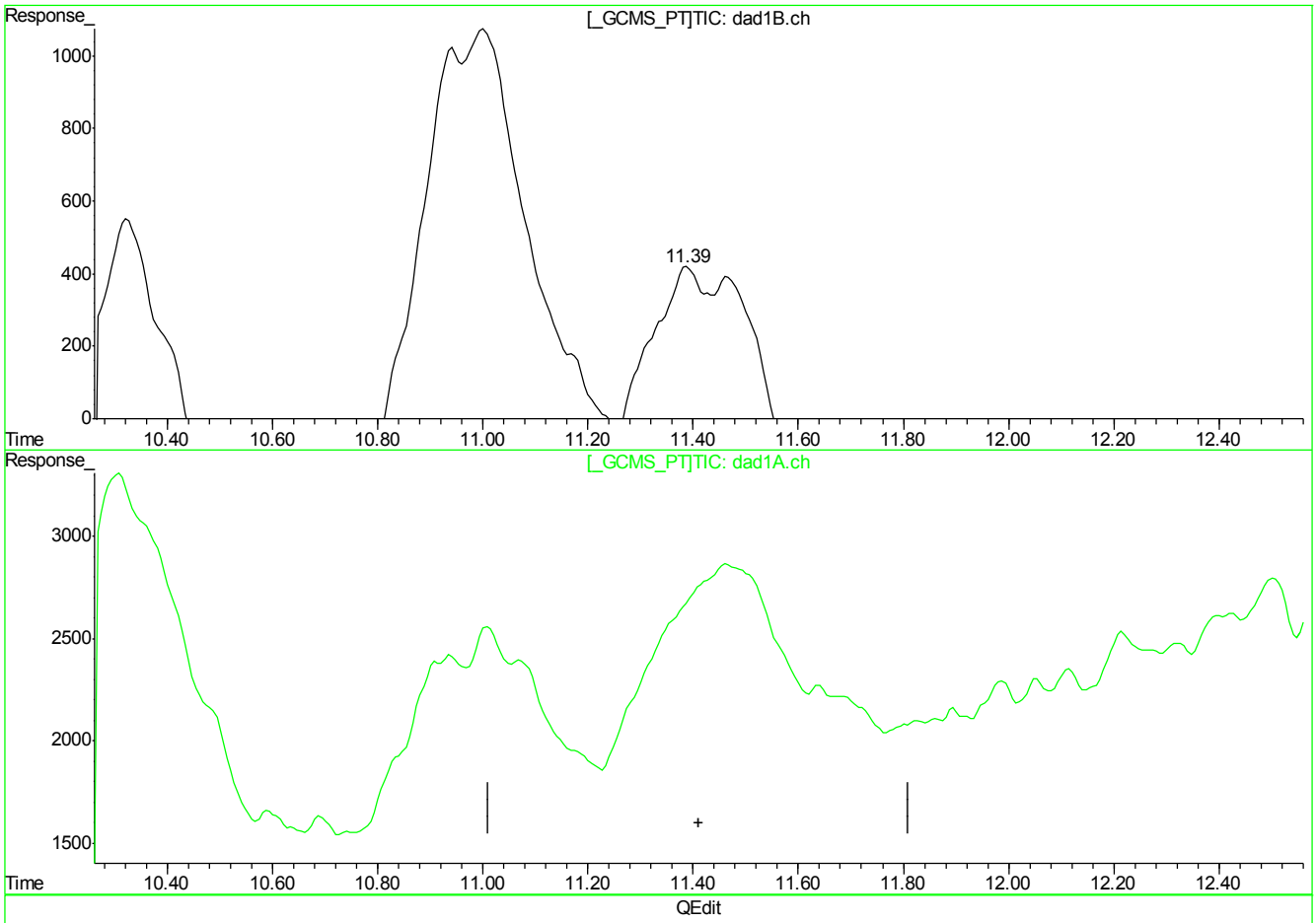
response 150818

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.39min 29.303ppb

response 96342

(17) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

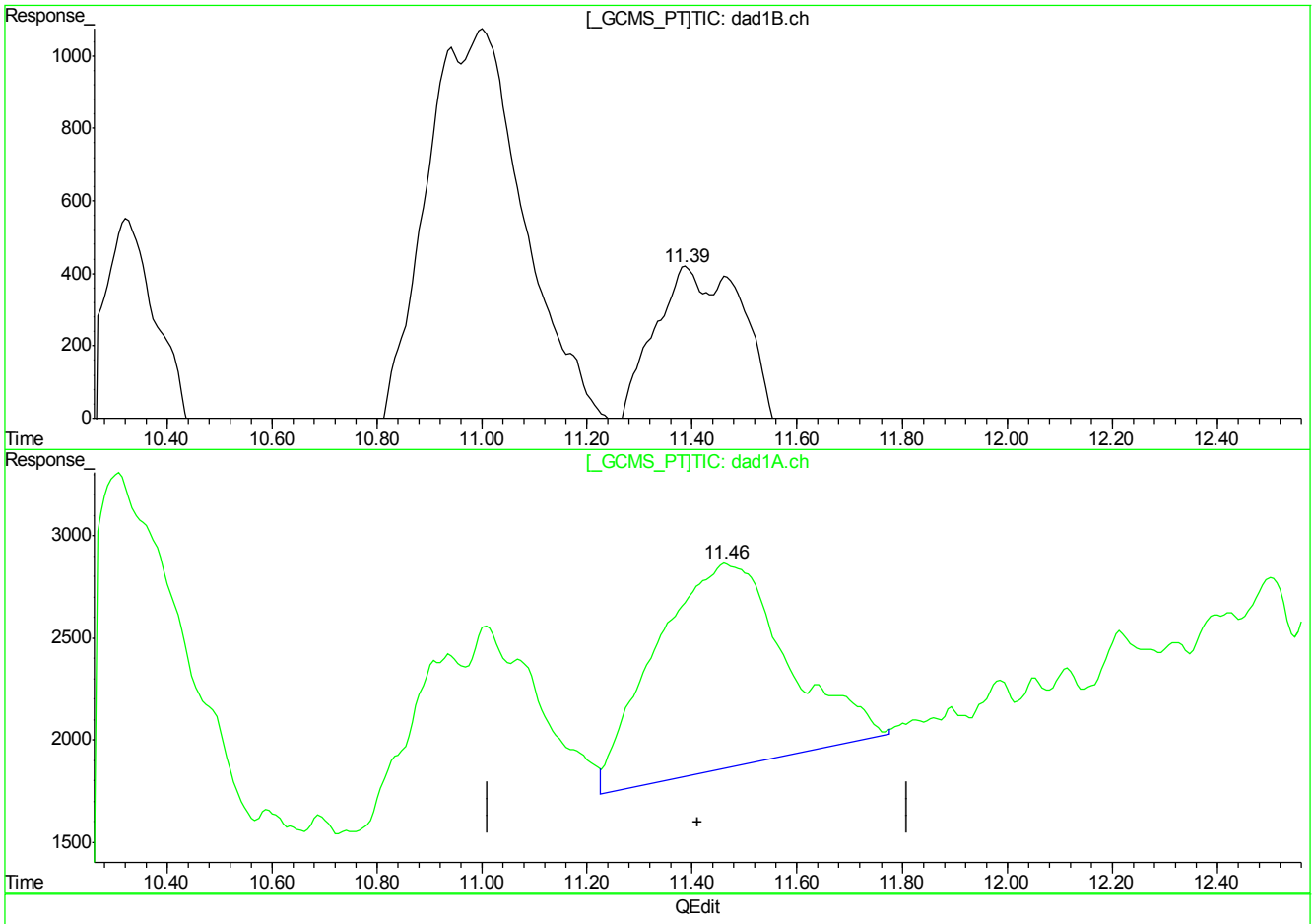
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:45 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.39min 29.303ppb

response 96342

(17) 2,6-Dinitrotoluene #2

11.46min 44.840ppb m

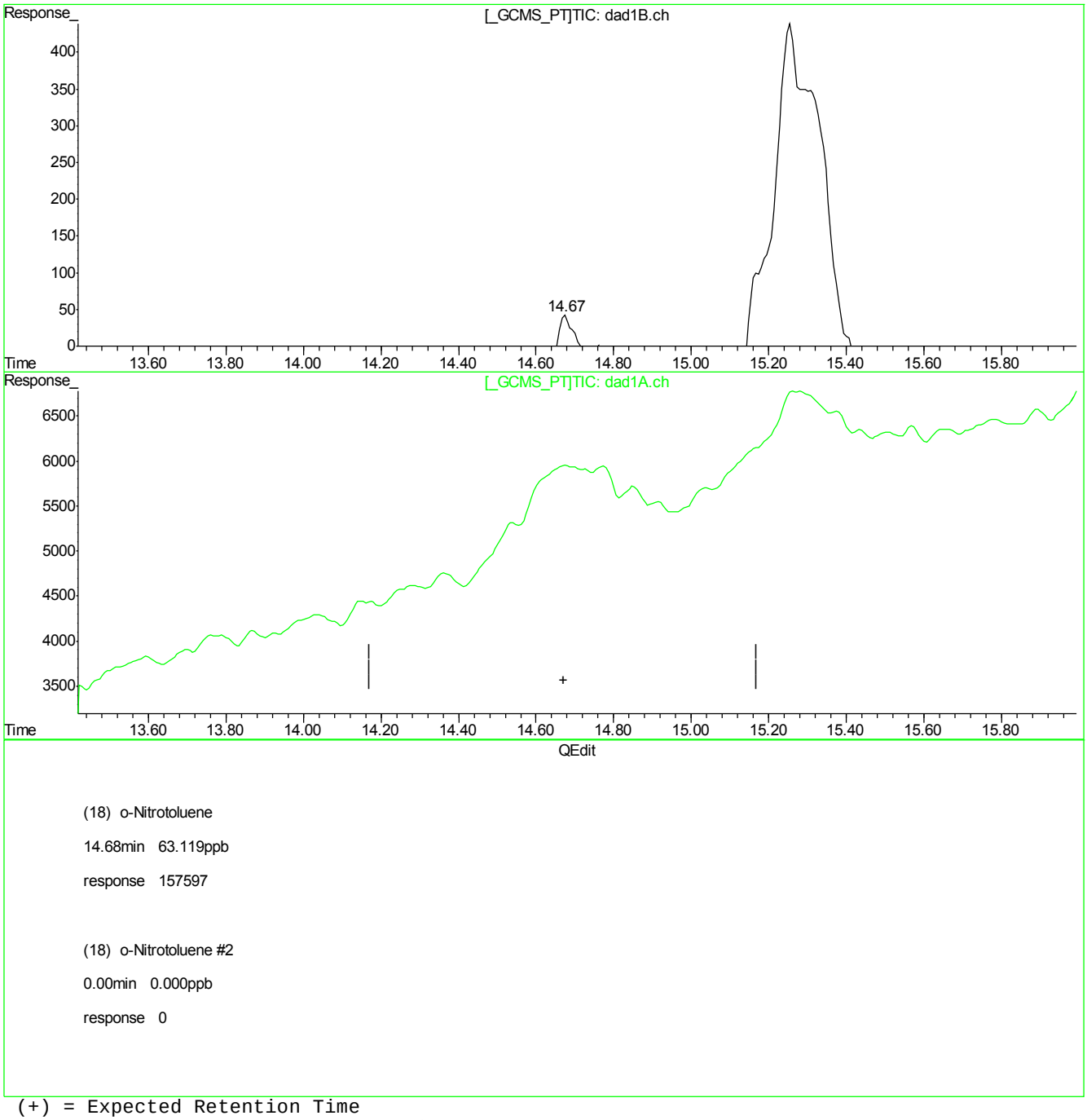
response 175853

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 63.119ppb

response 157597

(18) o-Nitrotoluene #2

0.00min 0.000ppb

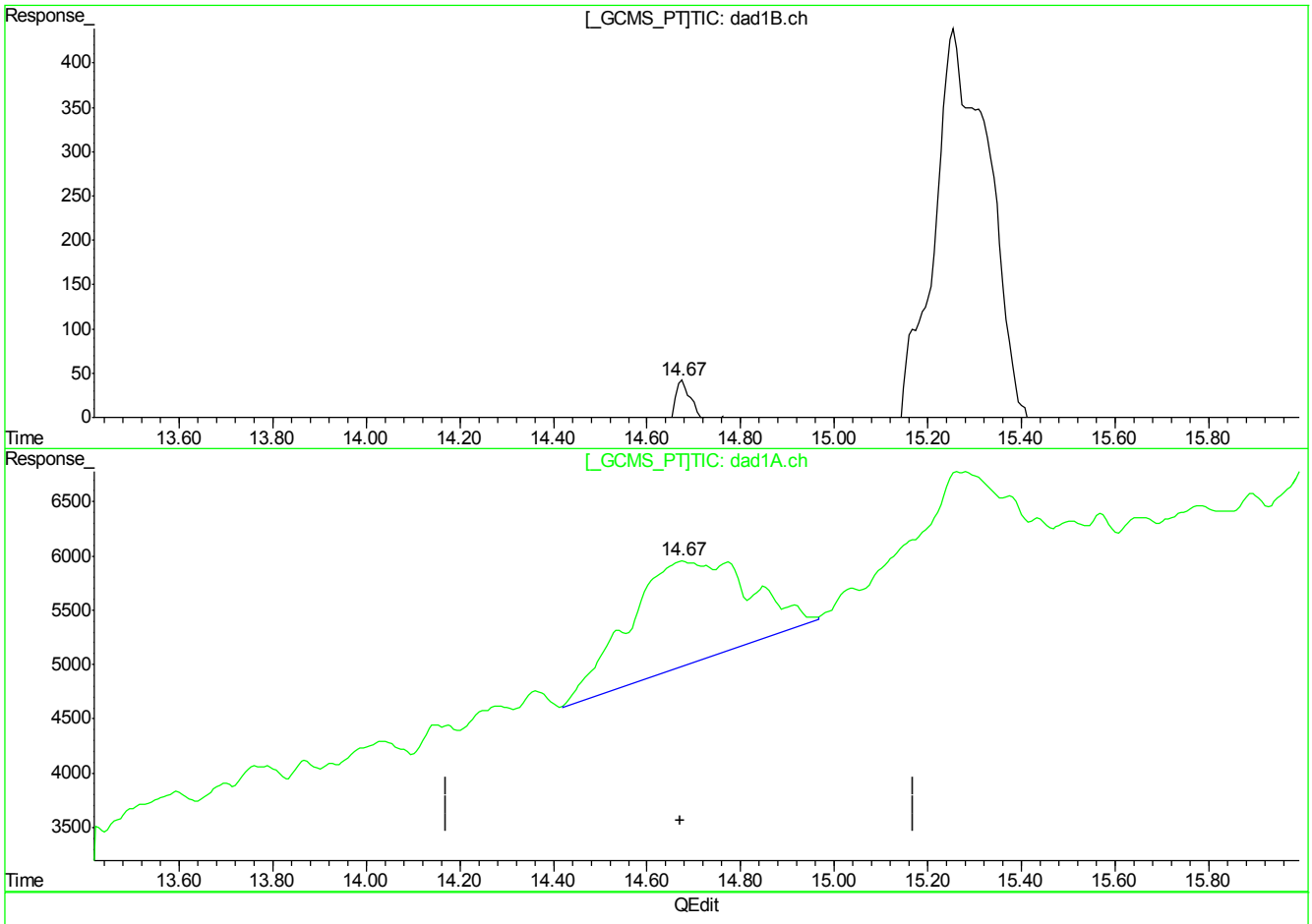
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 63.119ppb

response 157597

(18) o-Nitrotoluene #2

14.67min 47.060ppb m

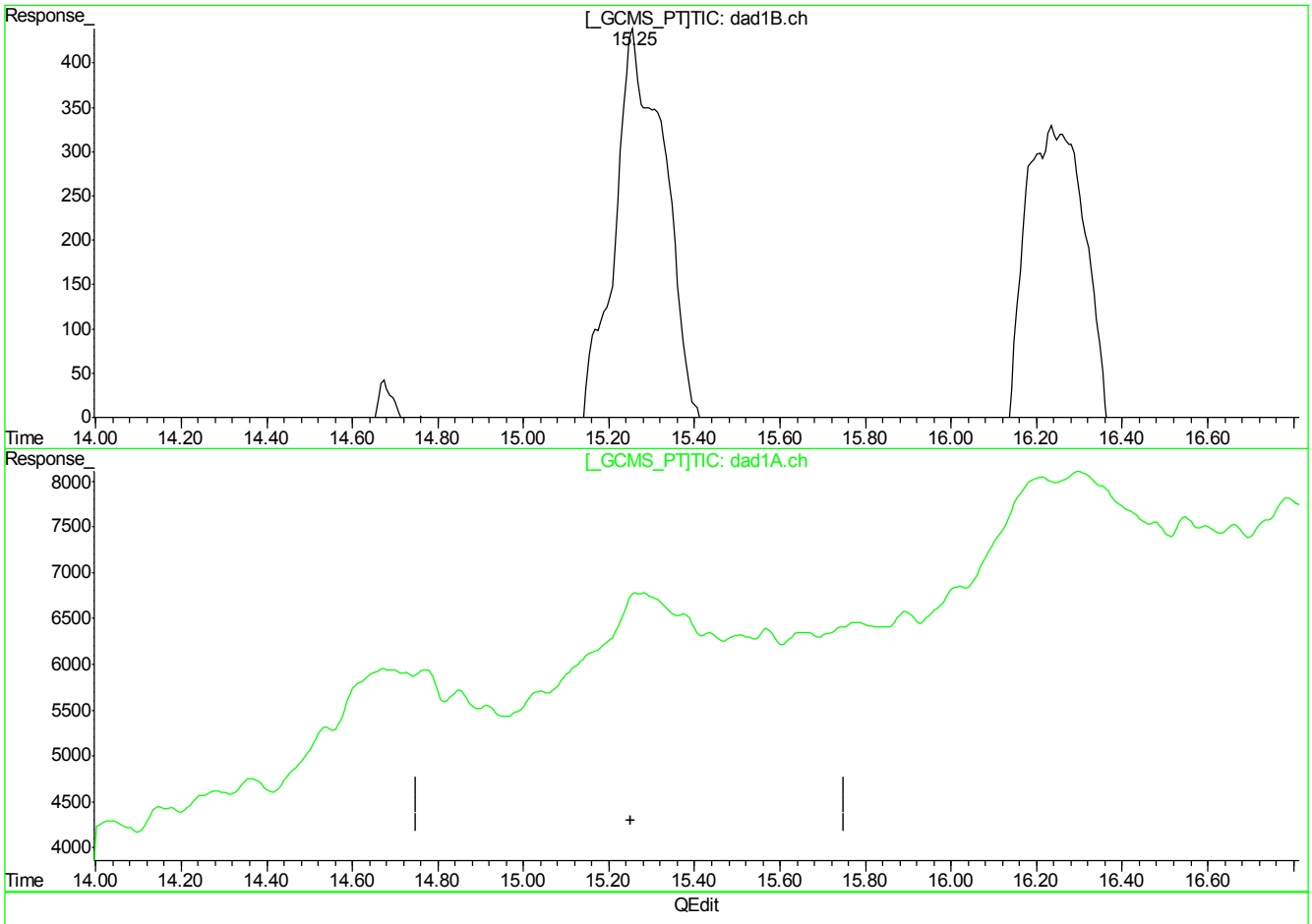
response 171653

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.26min 66.793ppb

response 247116

(19) p-Nitrotoluene #2

0.00min 0.000ppb

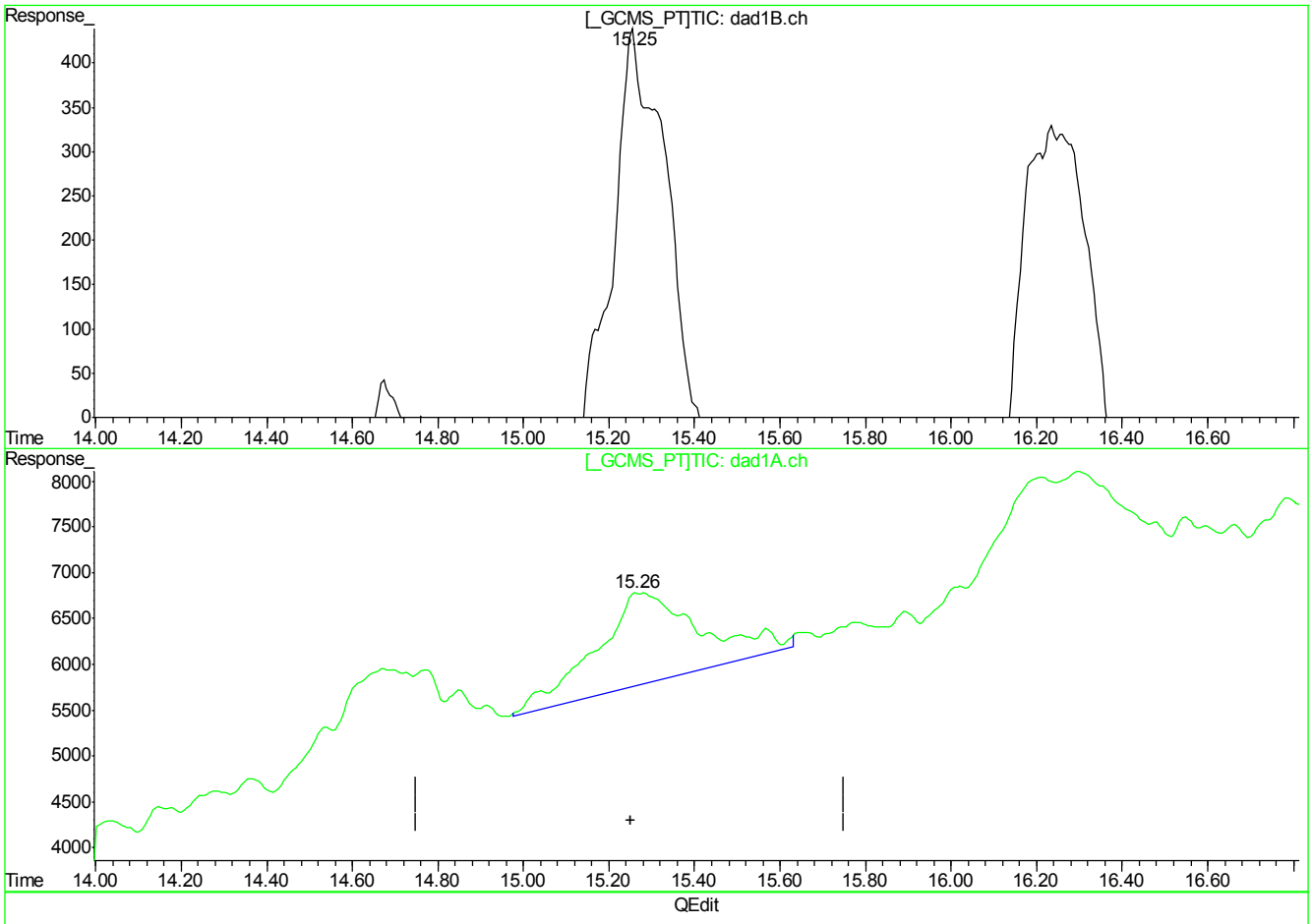
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:00 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.26min 66.793ppb

response 247116

(19) p-Nitrotoluene #2

15.26min 53.275ppb m

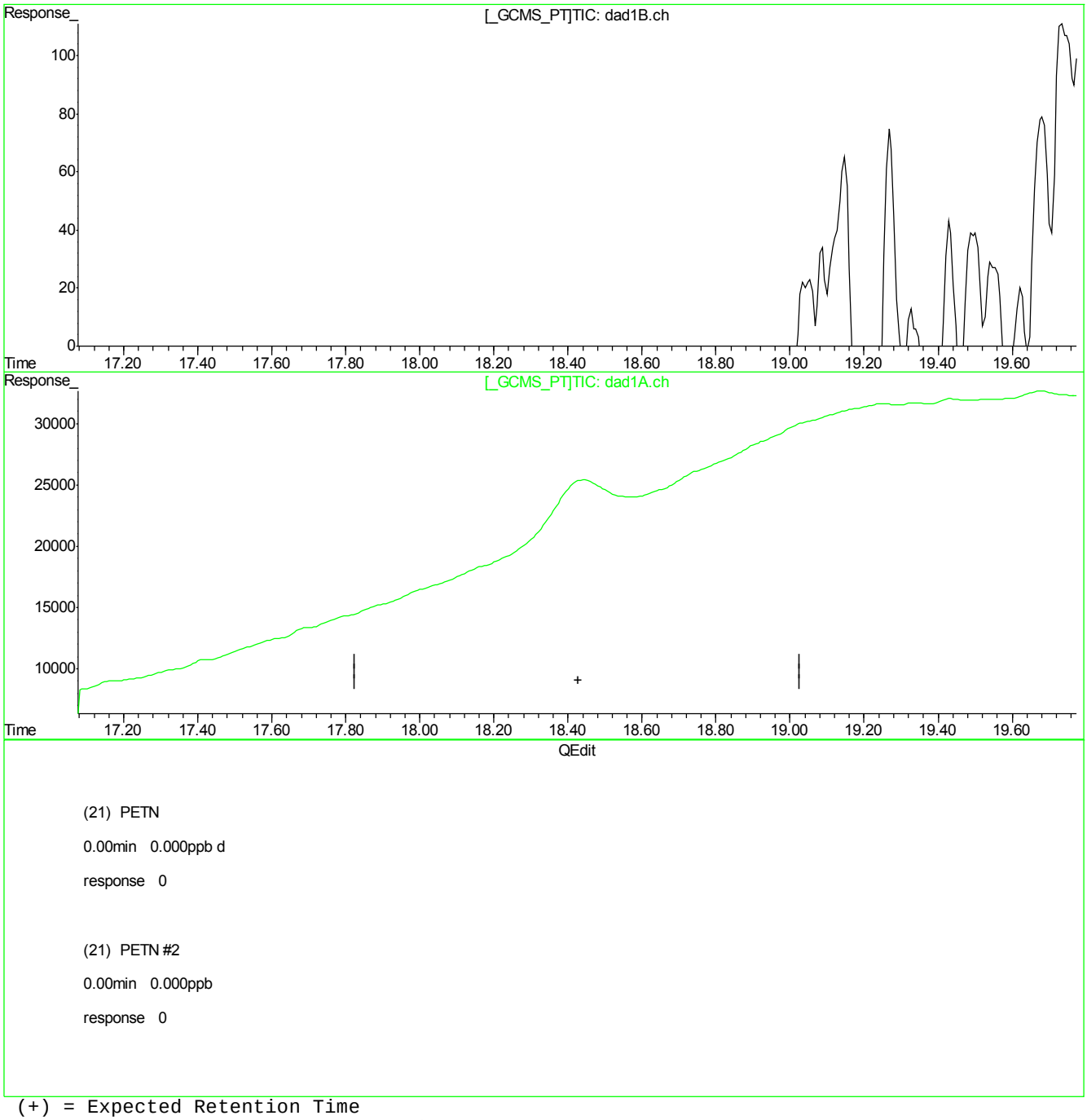
response 168598

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



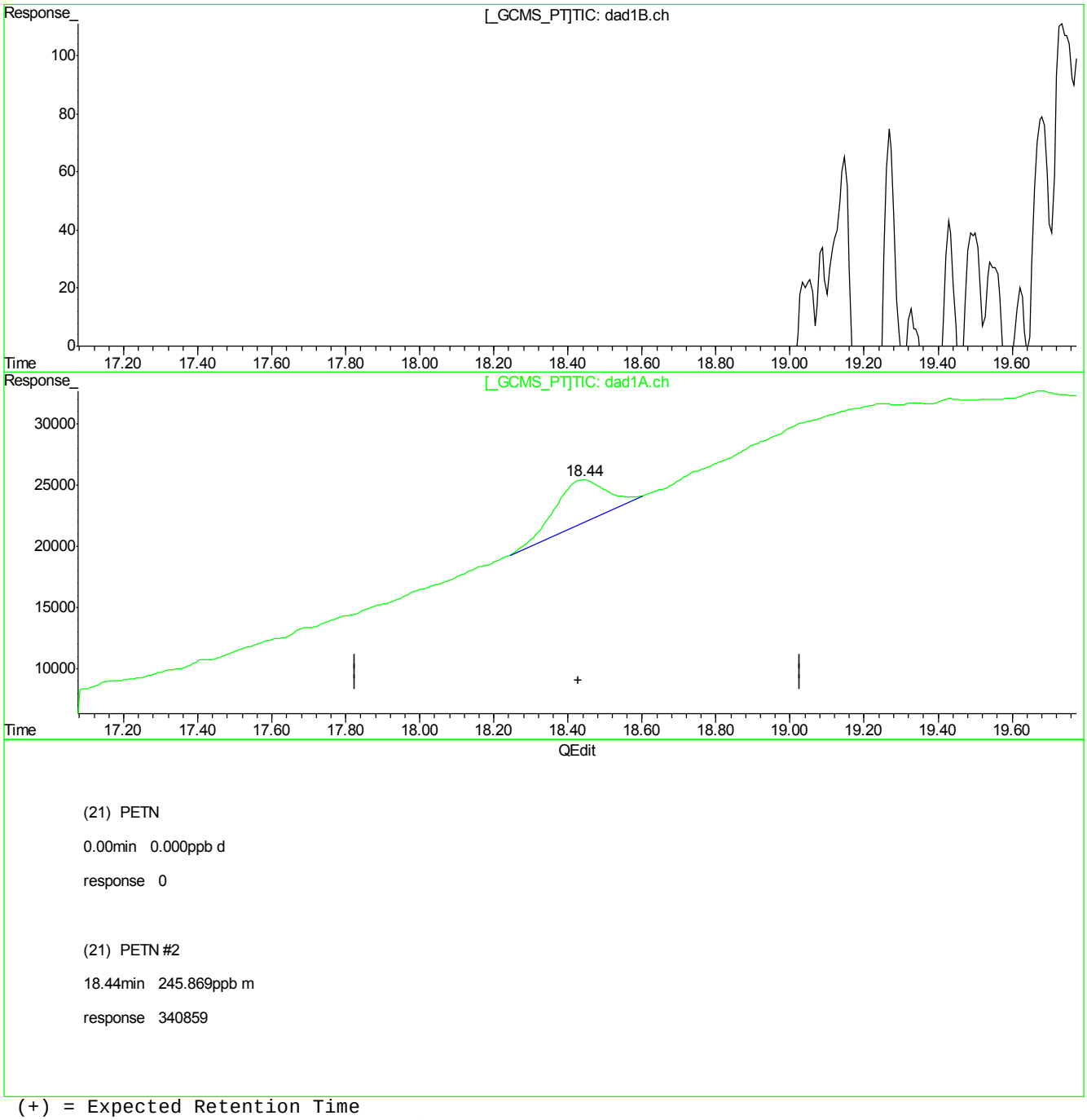
(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:13 2018

7.7.2.18
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:32 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:46 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.34	10.34	272485	542828	117.981	130.369
	Spiked Amount 500.000	Range 70 - 136		Recovery =		23.60%#	26.07%#
	Target Compounds						
1)	TNX	1.31	1.32	533635	818783	105.159m	105.054m
2)	HMX	1.44	1.44	199951	561154	102.567	106.775
3)	DNX	1.67	1.67	326904	529647	110.452	110.960
4)	MNX	2.21	2.21	342440	509252	110.134	108.645
5)	RDX	2.77	2.77	242339	360585	104.634	96.279
6)	1,3,5-Trinitrobe	4.42	4.42	437968	902443	88.631	99.030
7)	1,3-Dinitrobenze	5.60	5.60	610628	401941	100.046	102.007m
8)	3,5-Dinitroanili	5.90	5.90	521888	808560	113.832	102.530
9)	Nitrobenzene	7.11	7.10	384978	333931	100.909	93.141
10)	Nitroglycerin	0.00	8.39	0	685075	N.D. d	517.665
11)	Tetryl	8.72	8.71	328974	566940	103.386	110.581
12)	2,4,6-Trinitroto	9.13	9.13	419408	524069	116.230	122.186
13)	2-Amino-4,6-Dini	9.46	9.46	386042	611330	96.169	109.955
14)	4-Amino-2,6-Dini	9.87	9.88	297874	600015	105.554	111.019
16)	2,4-Dinitrotolue	10.99	11.00	523838	300231	97.154	89.931
17)	2,6-Dinitrotolue	11.46	11.45	325135	307361	98.893	78.373
18)	o-Nitrotoluene	14.68	14.68	278959	380286	111.725	104.258
19)	p-Nitrotoluene	15.27	15.28	436597	376793	118.008	119.062
20)	m-Nitrotoluene	16.27	16.26	376321	465946	102.001	107.445
21)	PETN	0.00	18.44	0	707738	N.D. d	510.508m

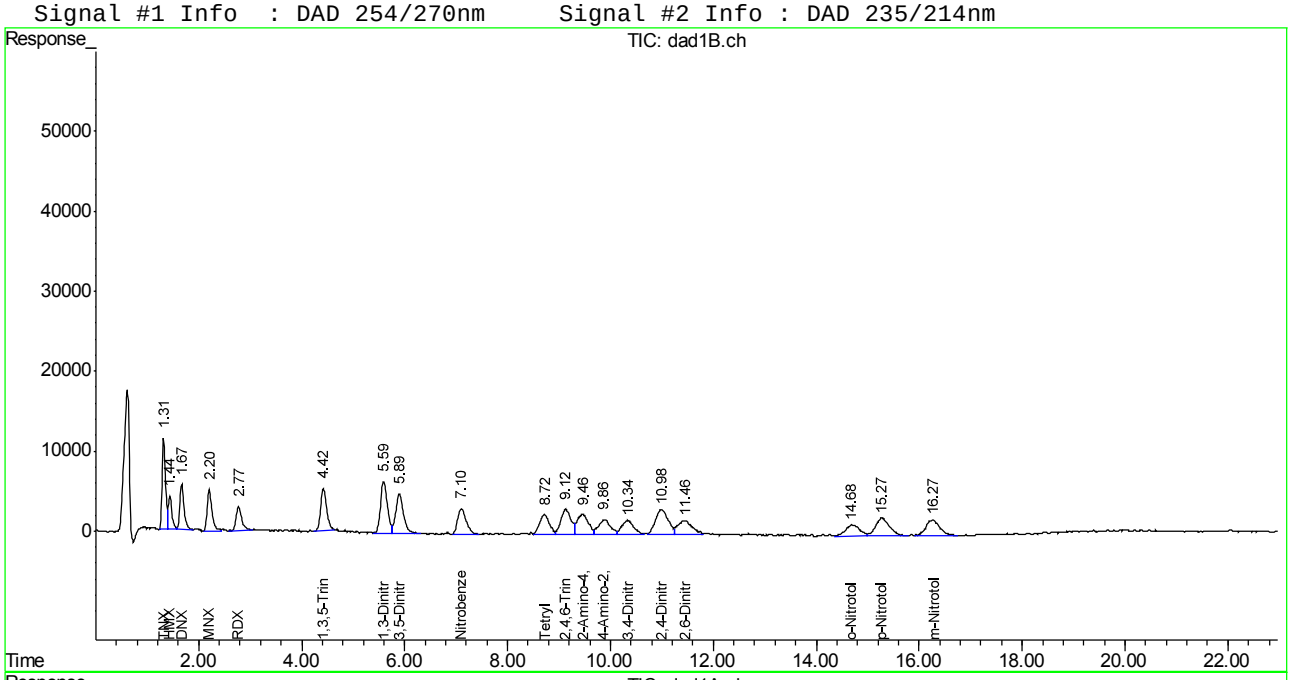
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059466.D 8330B_0419PLUS.M Fri Apr 20 08:01:20 2018 Page 1

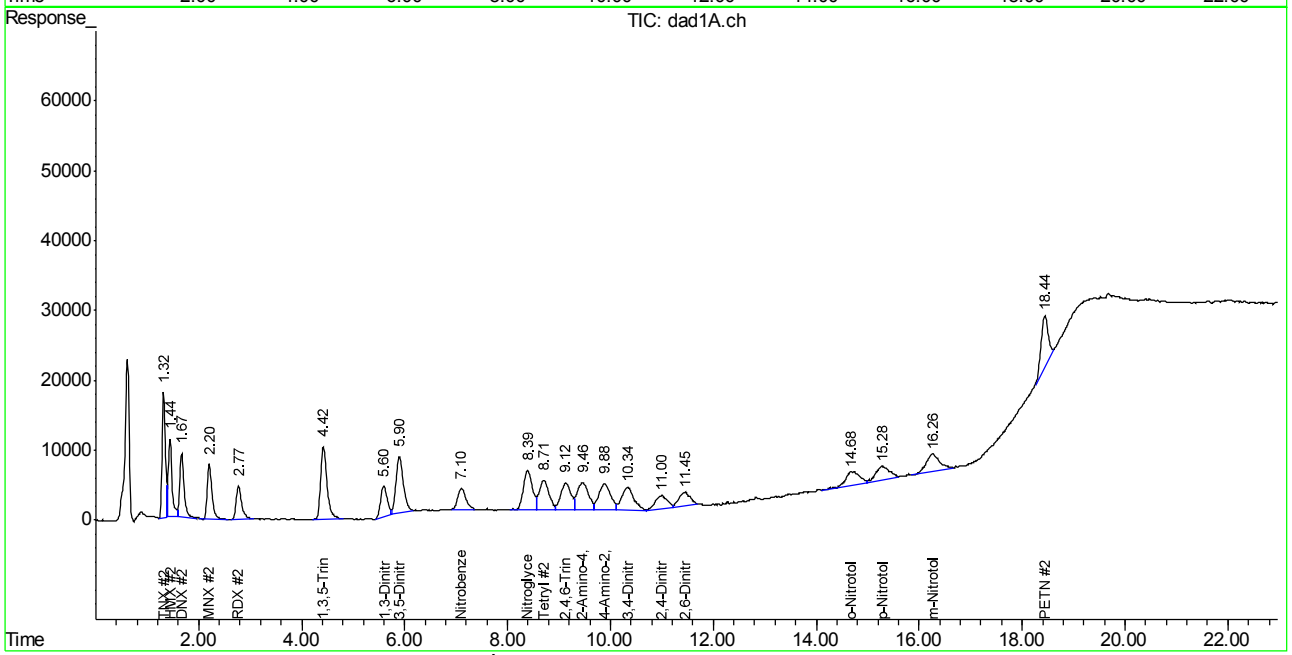
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:56 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

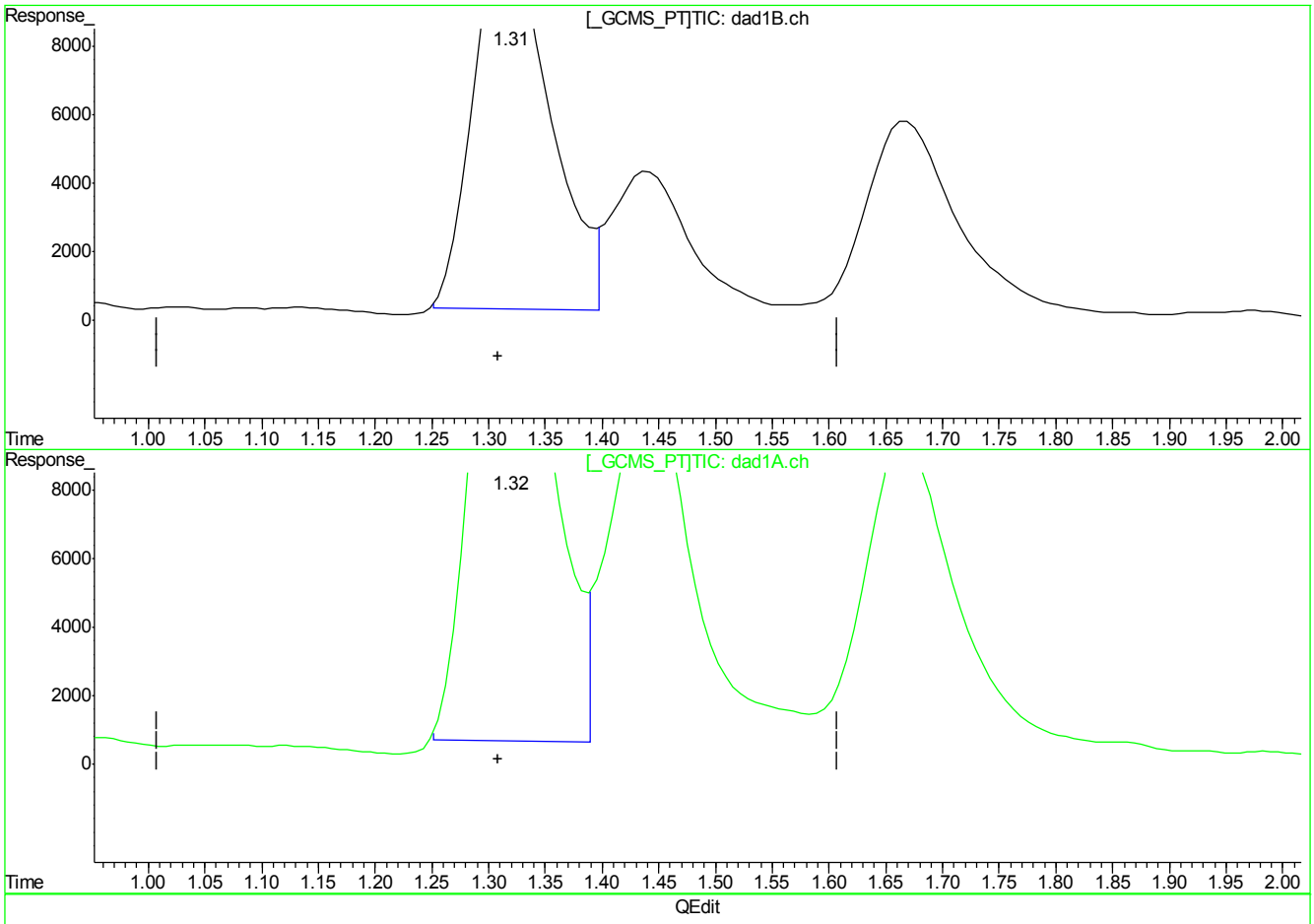
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059466.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 11:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 100.494ppb

response 509967

(1) TNX #2

1.32min 100.117ppb

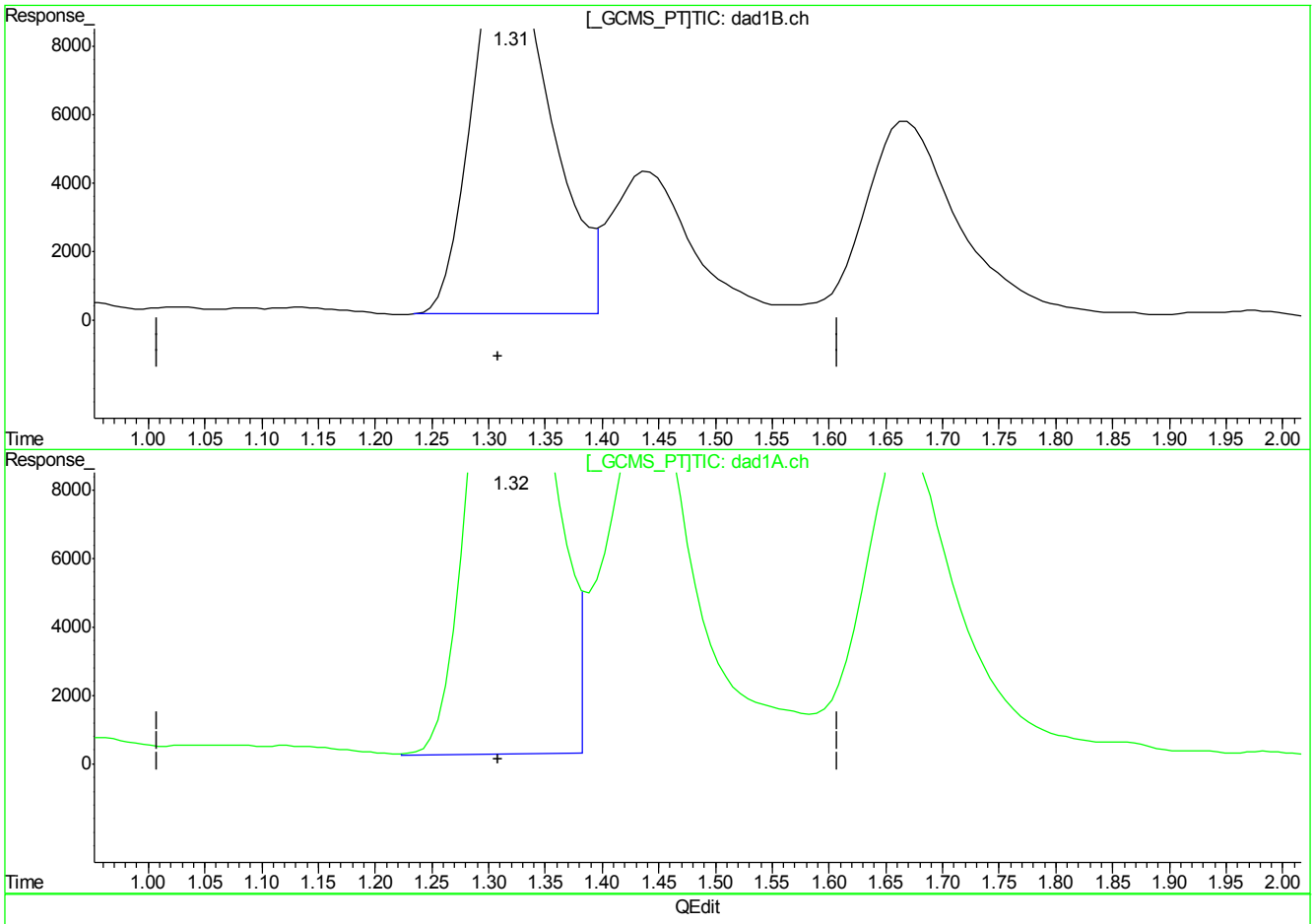
response 780302

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:55:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 105.159ppb m

response 533635

(1) TNX #2

1.32min 105.054ppb m

response 818783

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:55:48 2018

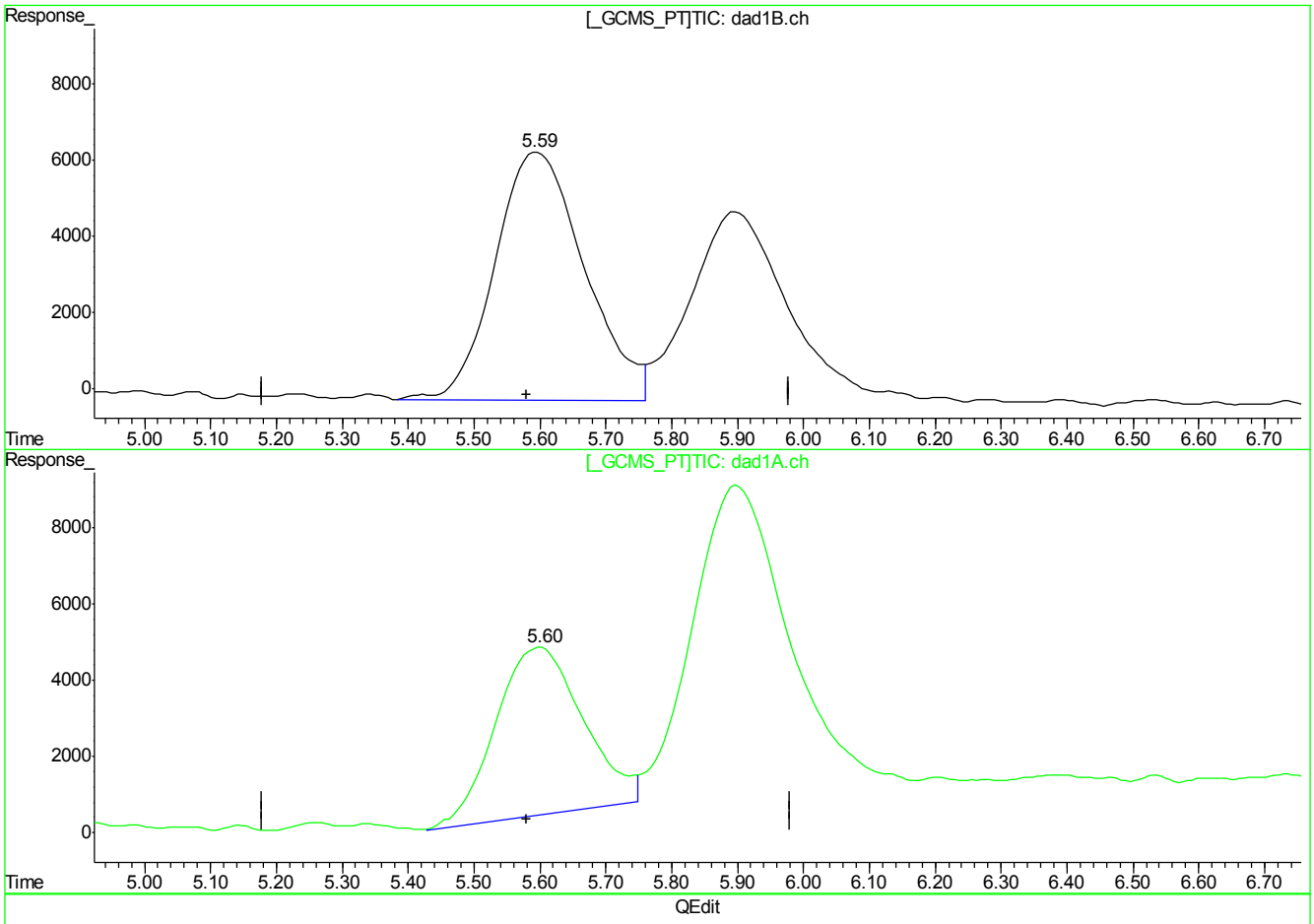
7.7.3.3

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 100.046ppb

response 610628

(7) 1,3-Dinitrobenzene #2

5.60min 102.007ppb m

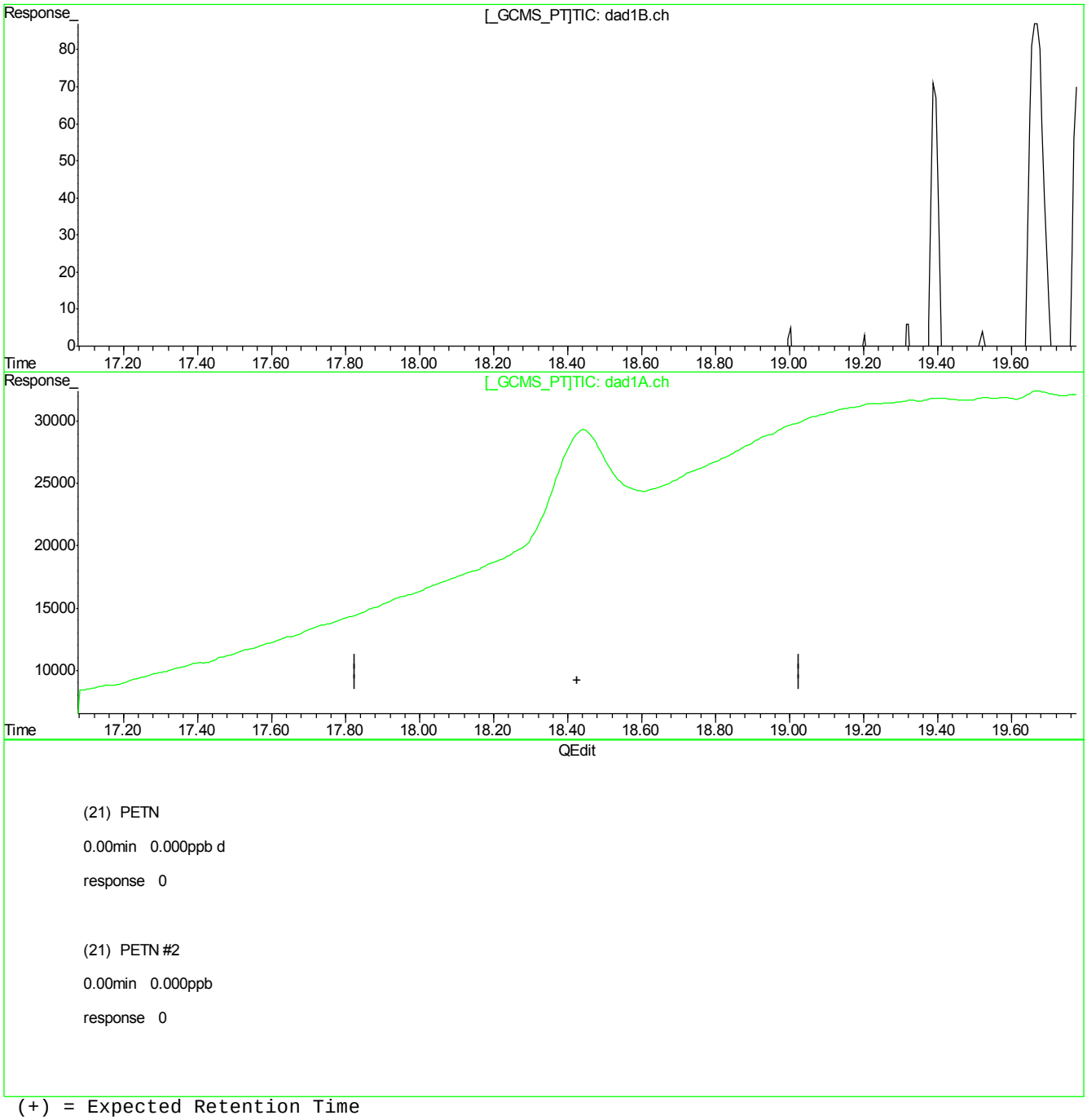
response 401941

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:22 2018

7.7.3.5

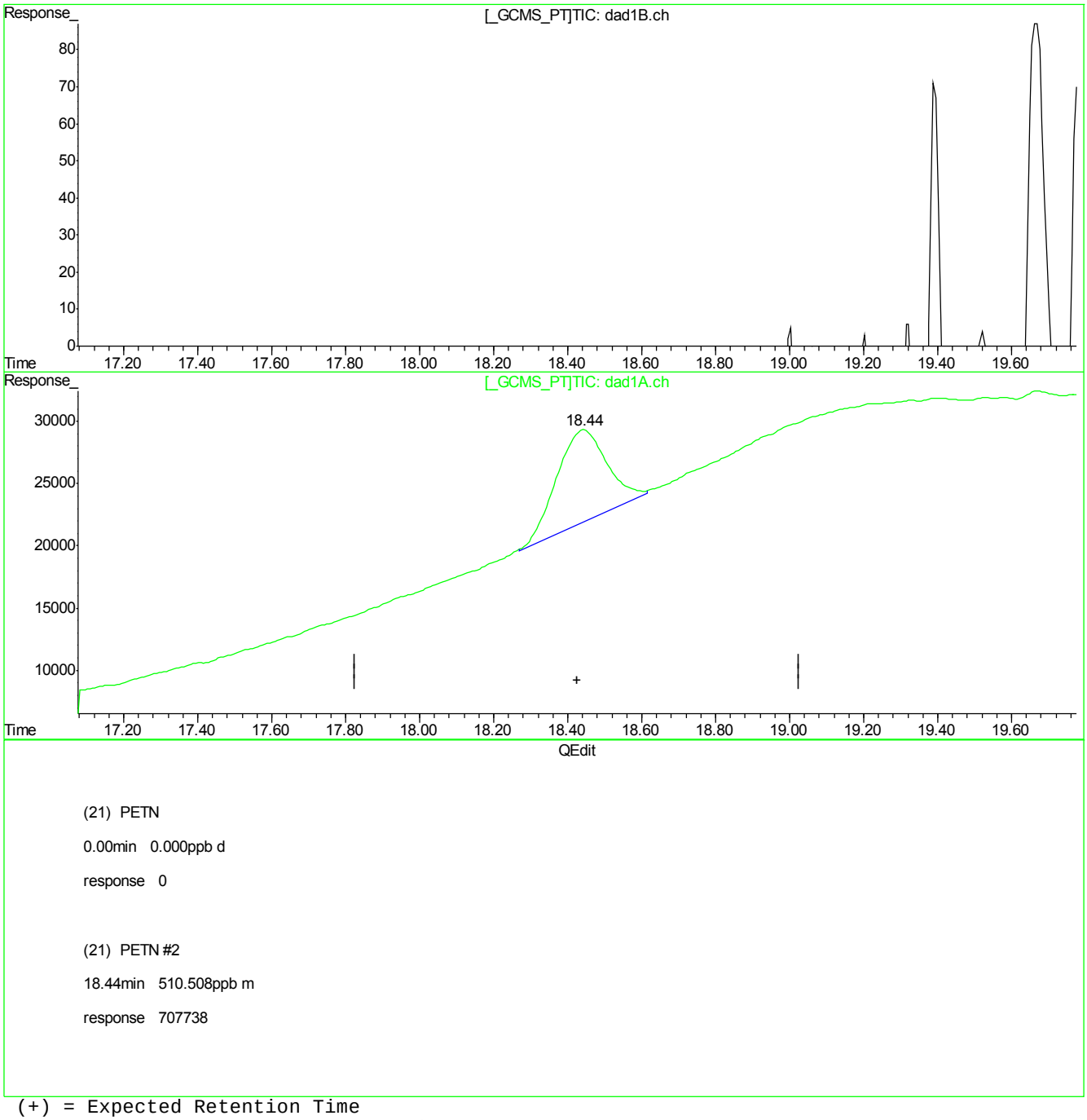
7

BB059466.D edits: PETN

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.44min 510.508ppb m

response 707738

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:25 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:47 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.33	10.34	574463	864172	248.731	207.544
	Spiked Amount 500.000	Range 70 - 136		Recovery =		49.75%#	41.51%#
	Target Compounds						
1)	TNX	1.32	1.32	973915	1447277	191.920m	185.693m
2)	HMX	1.44	1.44	353288	1034890	181.222	196.916
3)	DNX	1.67	1.67	557165	973975	188.461	204.311
4)	MNX	2.21	2.21	601874	917081	193.572	195.653
5)	RDX	2.77	2.77	404360	620985	174.855	165.808
6)	1,3,5-Trinitrobe	4.42	4.42	845691	1617161	171.142	177.459
7)	1,3-Dinitrobenze	5.60	5.60	1090649	713093	178.694	180.973m
8)	3,5-Dinitroanili	5.90	5.90	925462	1488930	201.858	188.806
9)	Nitrobenzene	7.11	7.11	707824	703995	185.532	196.361
10)	Nitroglycerin	0.00	8.39	0	1191118	N.D. d	900.047
11)	Tetryl	8.72	8.71	625180	1011909	196.474	197.371
12)	2,4,6-Trinitroto	9.14	9.13	813983	914451	225.578	213.203
13)	2-Amino-4,6-Dini	9.45	9.45	729629	1080997	181.762	194.431
14)	4-Amino-2,6-Dini	9.88	9.89	567927	1041527	201.249	192.711
16)	2,4-Dinitrotolue	10.99	10.98	1040801	553443	193.033	165.778
17)	2,6-Dinitrotolue	11.44	11.43	676914	698642	205.891	178.145
18)	o-Nitrotoluene	14.69	14.69	466779	677451	186.949	185.727
19)	p-Nitrotoluene	15.28	15.27	789495	685759	213.394	216.691
20)	m-Nitrotoluene	16.24	16.26	674661	822841	182.865	189.743
21)	PETN	0.00	18.44	0	1321717	N.D. d	953.386m

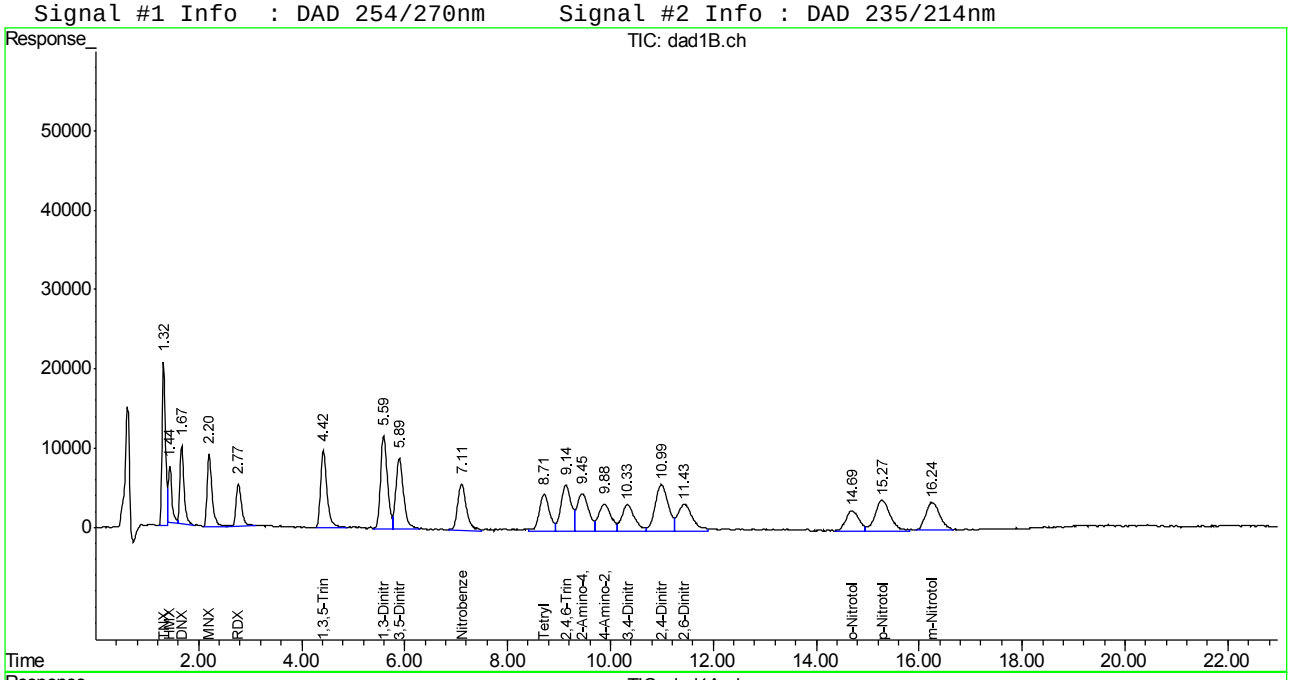
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059467.D 8330B_0419PLUS.M Fri Apr 20 08:01:21 2018 Page 1

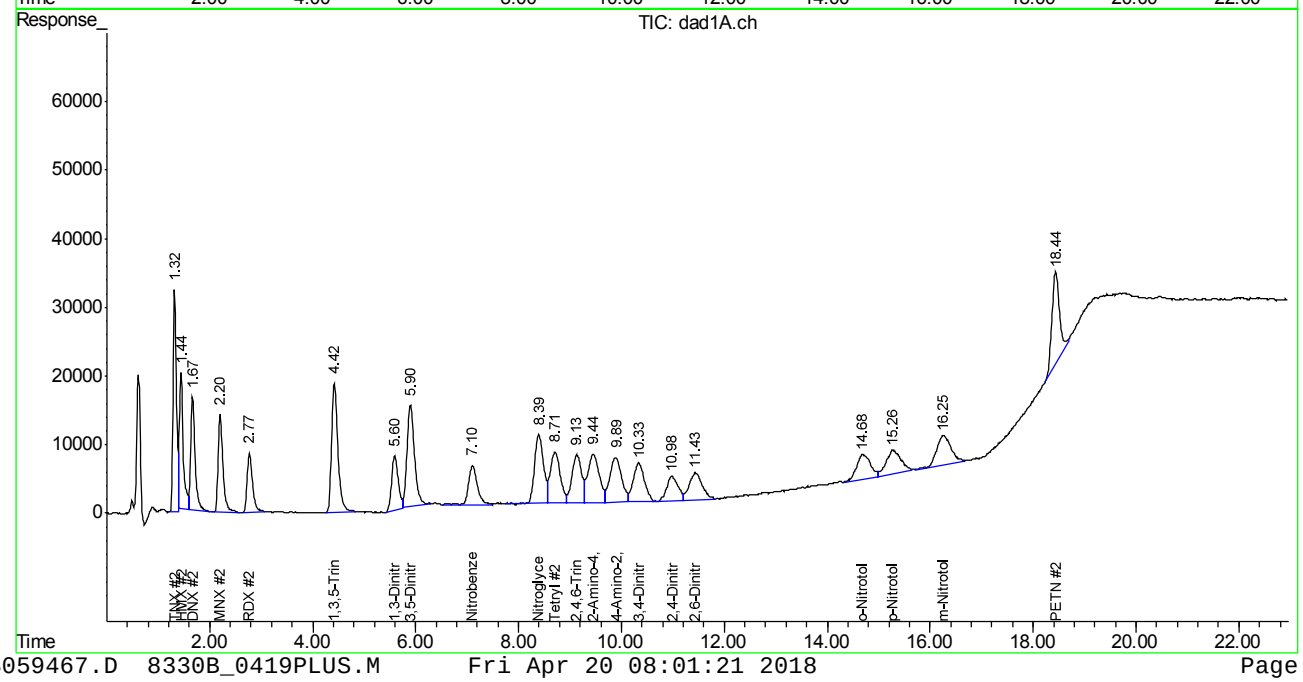
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:57 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

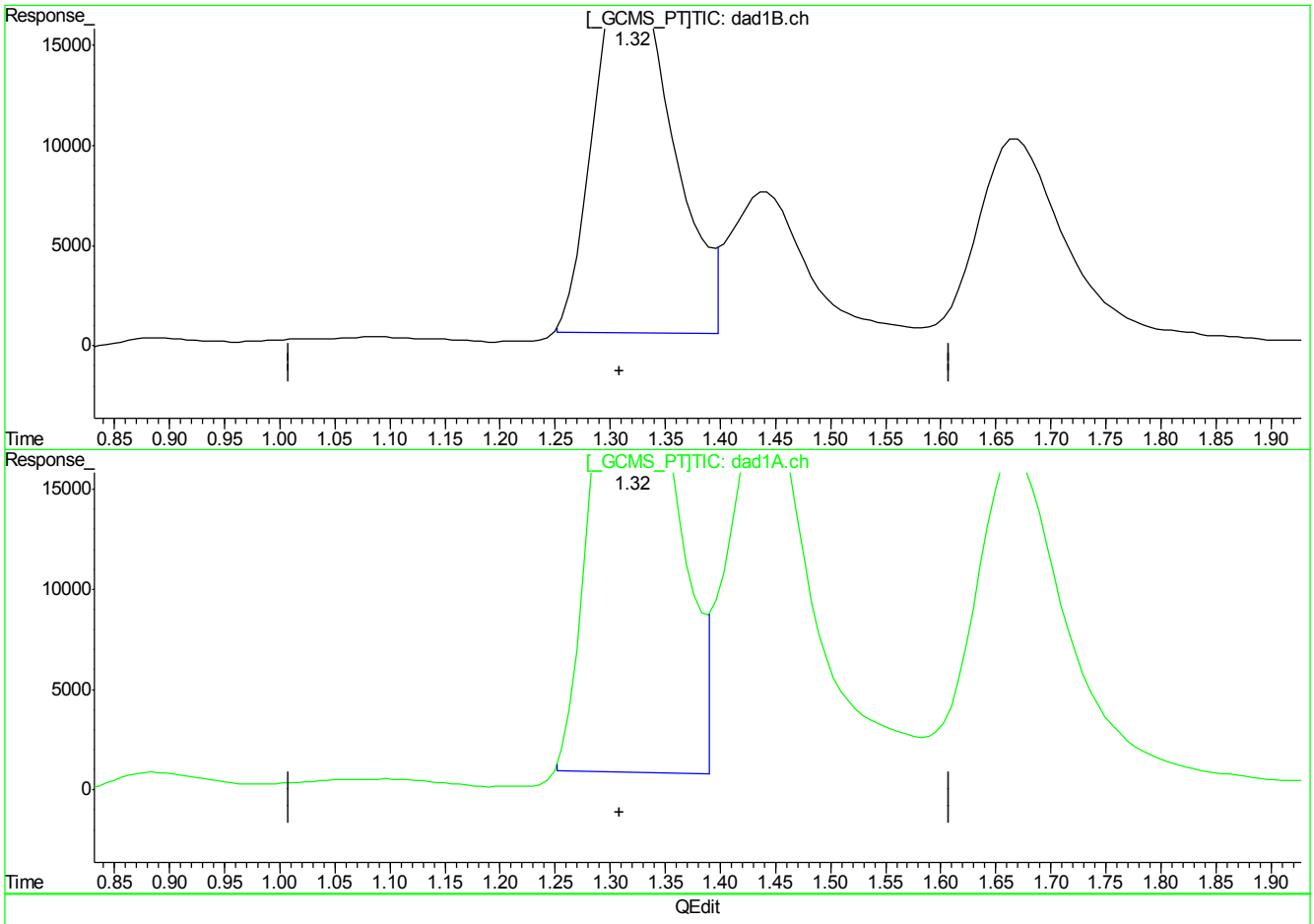
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059467.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 11:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.32	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 181.080ppb

response 918905

(1) TNX #2

1.32min 181.135ppb

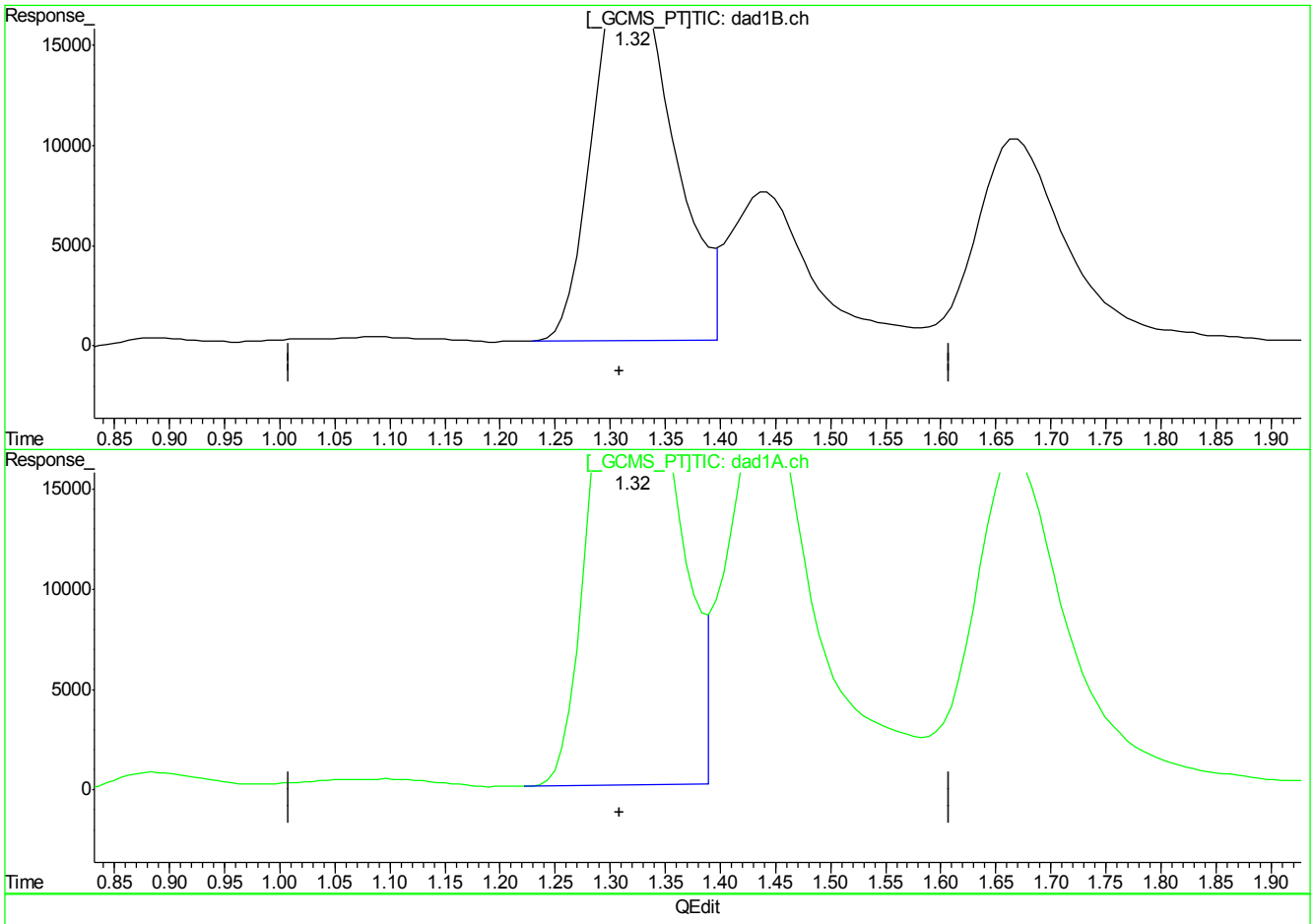
response 1411756

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 191.920ppb m

response 973915

(1) TNX #2

1.32min 185.693ppb m

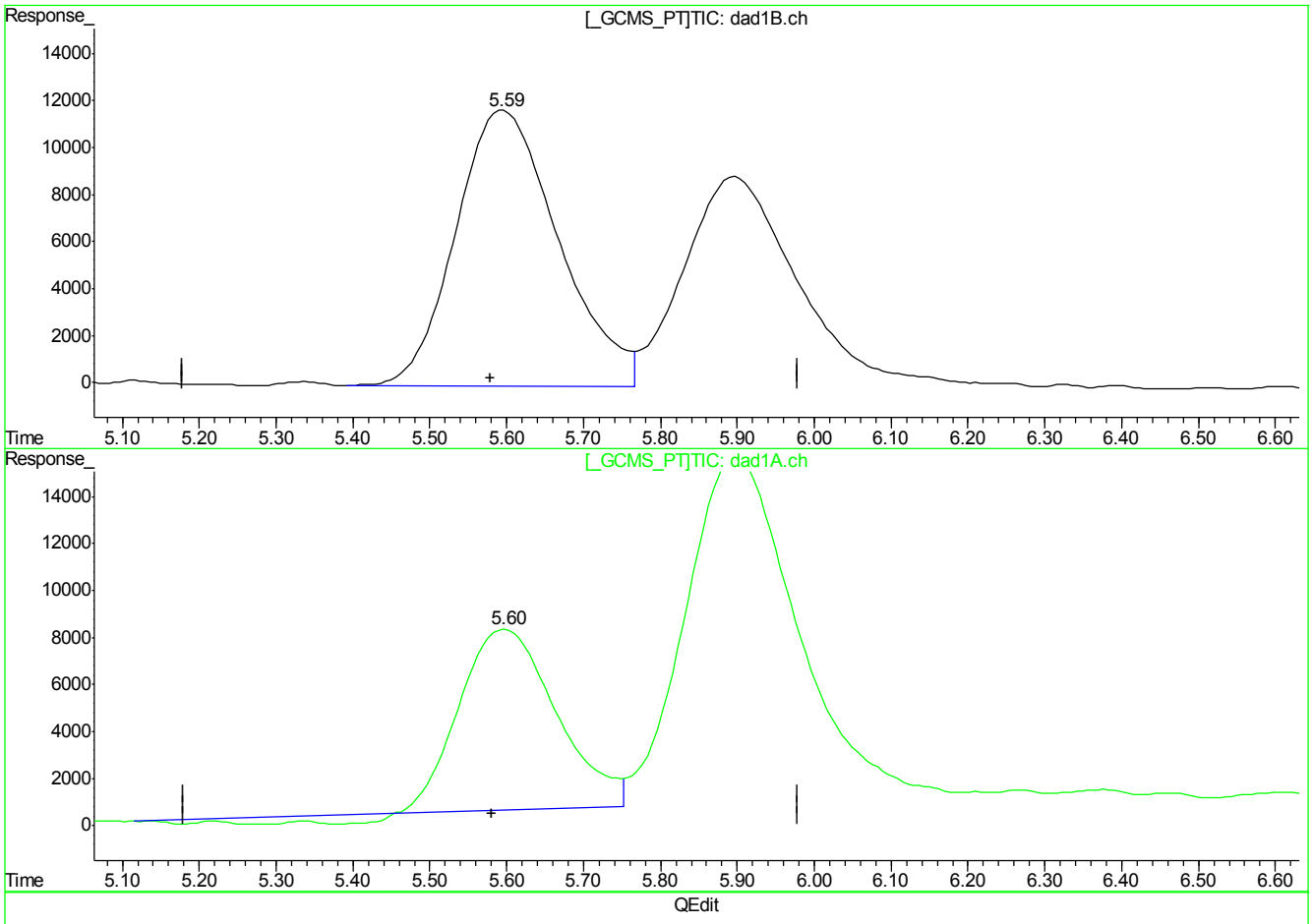
response 1447277

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 178.694ppb

response 1090649

(7) 1,3-Dinitrobenzene #2

5.60min 160.067ppb

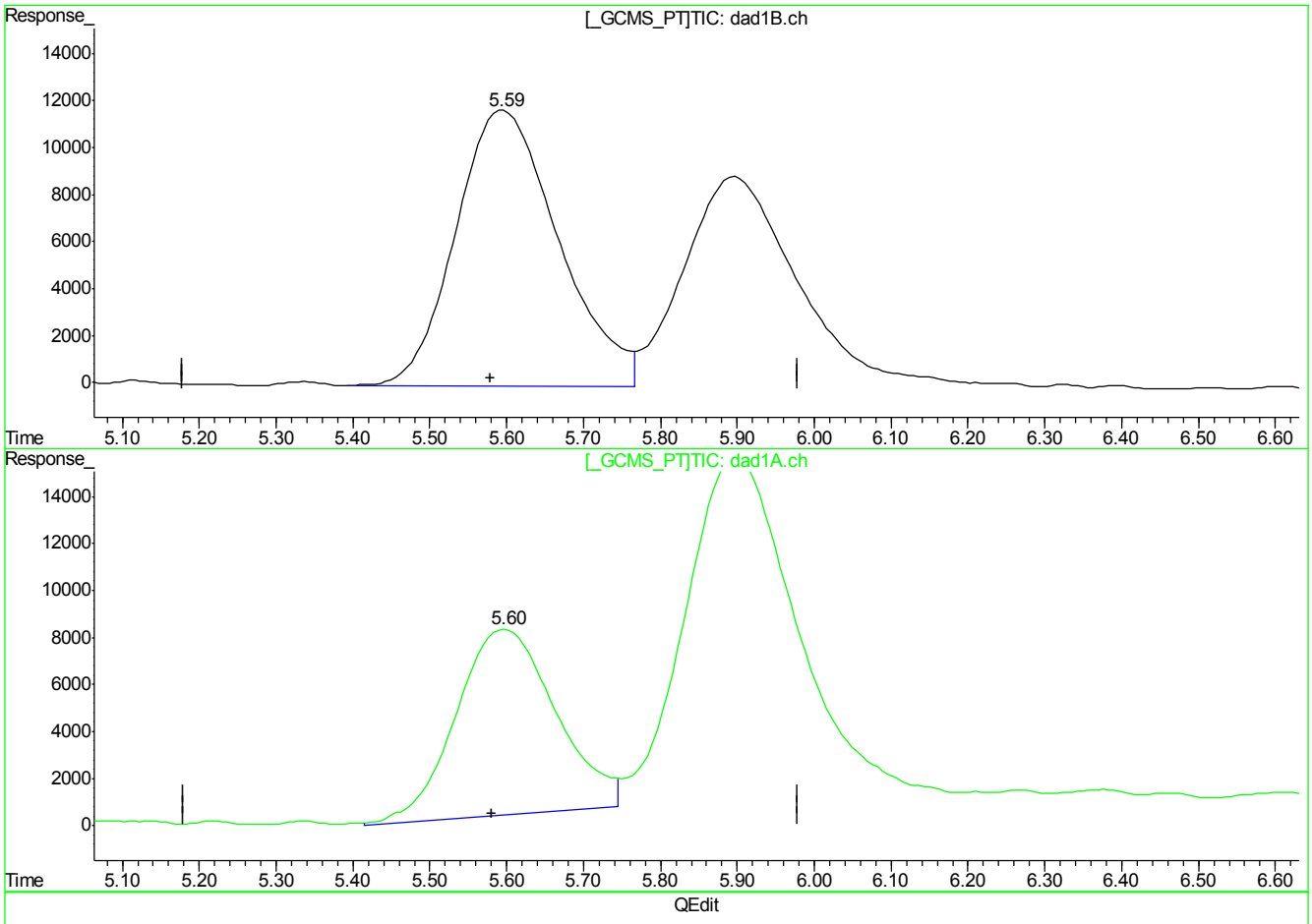
response 630718

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 178.694ppb

response 1090649

(7) 1,3-Dinitrobenzene #2

5.60min 180.973ppb m

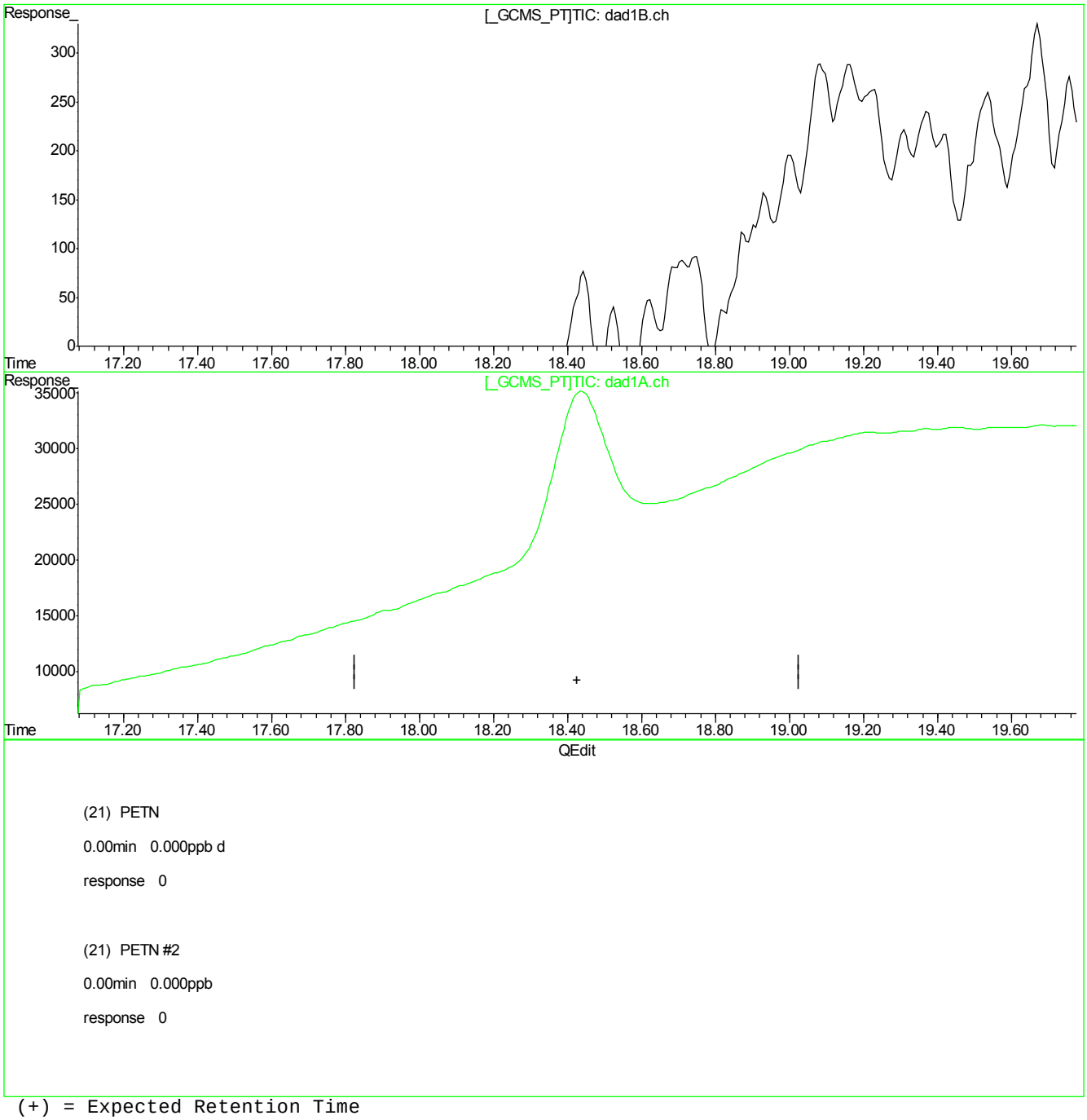
response 713093

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:54 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration

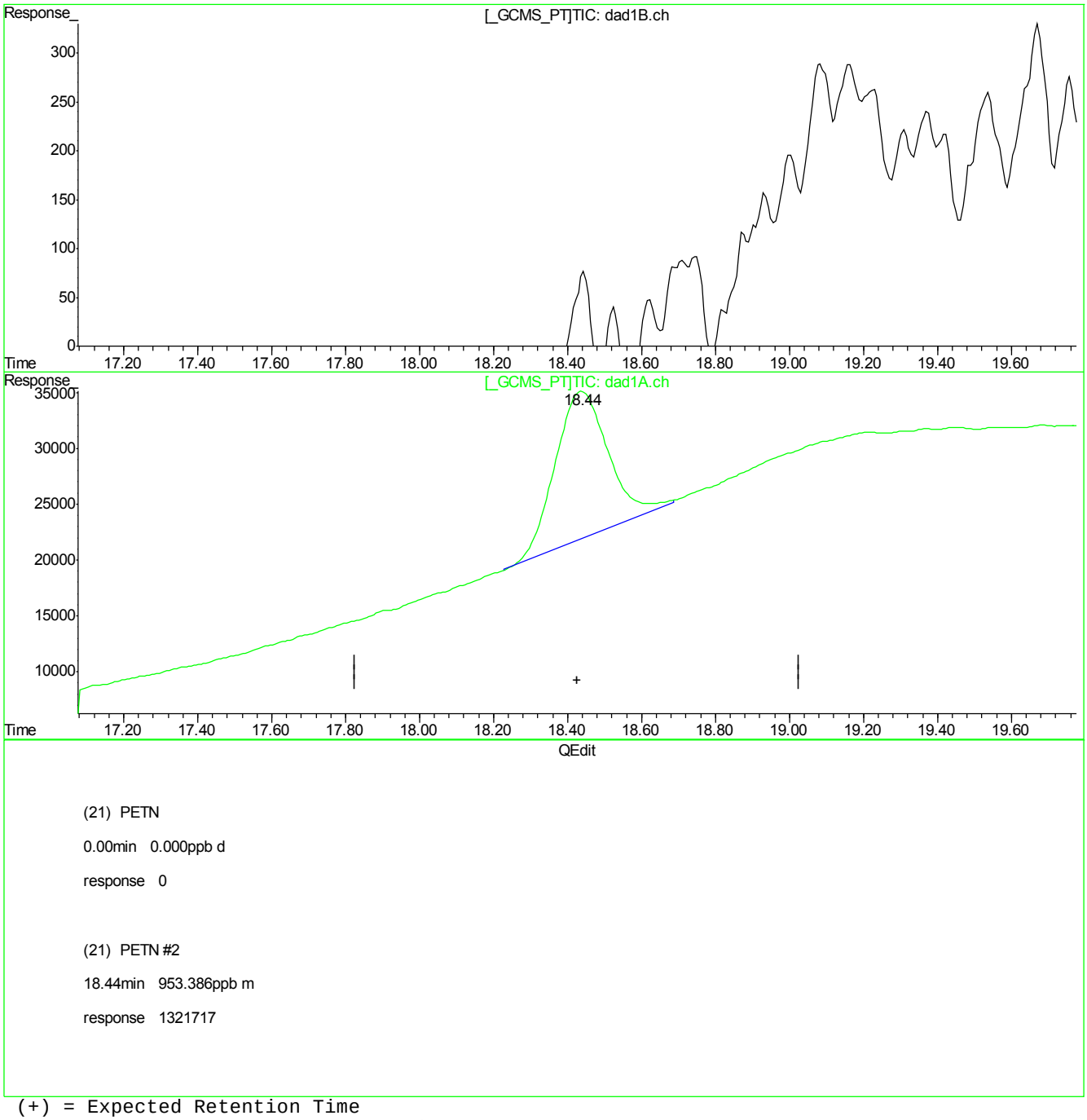


(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:57:05 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.44min 953.386ppb m

response 1321717

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:57:08 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:48 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.32	10.33	1313071	2197124	568.534	527.673
Spiked Amount	500.000	Range	70 - 136	Recovery	=	113.71%	105.53%
	Target Compounds						
1)	TNX	1.31	1.31	2377327	3647073	468.478m	467.938m
2)	HMX	1.44	1.44	935456	2491099	479.850m	473.999m
3)	DNX	1.66	1.66	1433691	2272296	487.028m	478.485m
4)	MNX	2.20	2.20	1478175	2286671	475.405	487.846
5)	RDX	2.77	2.77	990527	1568605	430.703	418.831
6)	1,3,5-Trinitrobe	4.42	4.42	2066563	4004610	418.208	439.446
7)	1,3-Dinitrobenze	5.59	5.59	2679478	1782018	439.010	452.251
8)	3,5-Dinitroanili	5.89	5.89	2324806	3781357	507.077	479.500
9)	Nitrobenzene	7.10	7.10	1671085	1562470	438.019	435.811
10)	Nitroglycerin	0.00	8.39	0	3052703	N.D. d	2306.721
11)	Tetryl	8.71	8.70	1483433	2538597	466.196	495.149
12)	2,4,6-Trinitroto	9.13	9.13	1921592	2303072	532.527	536.958
13)	2-Amino-4,6-Dini	9.45	9.44	1801766	2694209	448.848	484.588
14)	4-Amino-2,6-Dini	9.88	9.88	1344823	2643442	476.547	489.110
16)	2,4-Dinitrotolue	10.98	10.98	2496550	1473568	463.023	441.393
17)	2,6-Dinitrotolue	11.43	11.43	1615025	1831379	491.226	466.979
18)	o-Nitrotoluene	14.69	14.69	1143442	1552232	457.959	425.553m
19)	p-Nitrotoluene	15.27	15.27	1852819	1583340	500.801	500.315
20)	m-Nitrotoluene	16.24	16.24	1685984	1985596	456.981	457.869
21)	PETN	0.00	18.43	0	3450516	N.D. d	2488.940m

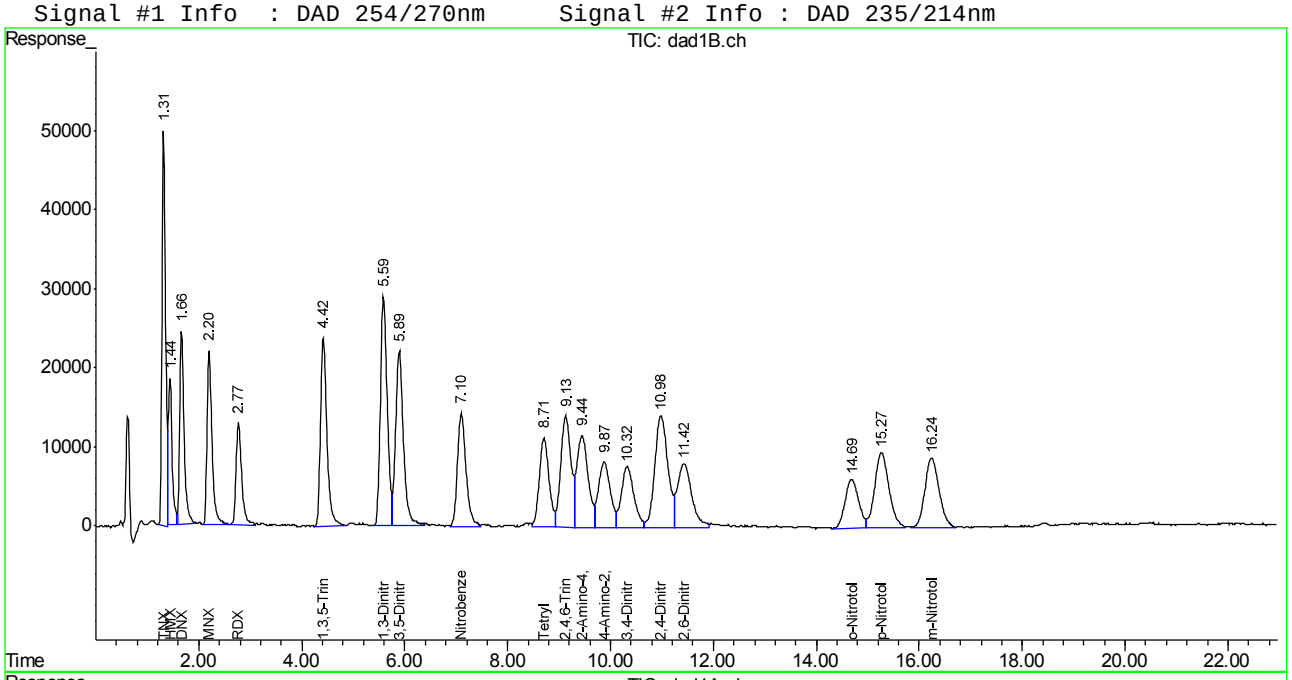
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059468.D 8330B_0419PLUS.M Fri Apr 20 08:01:22 2018 Page 1

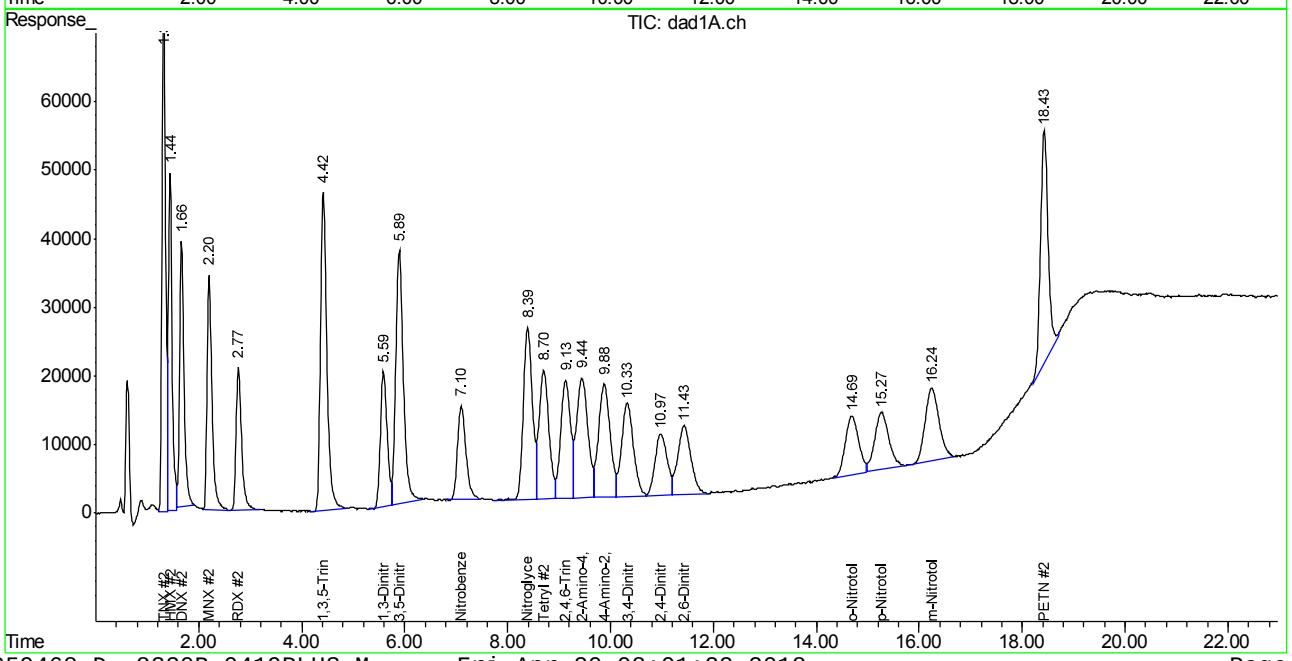
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:58 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

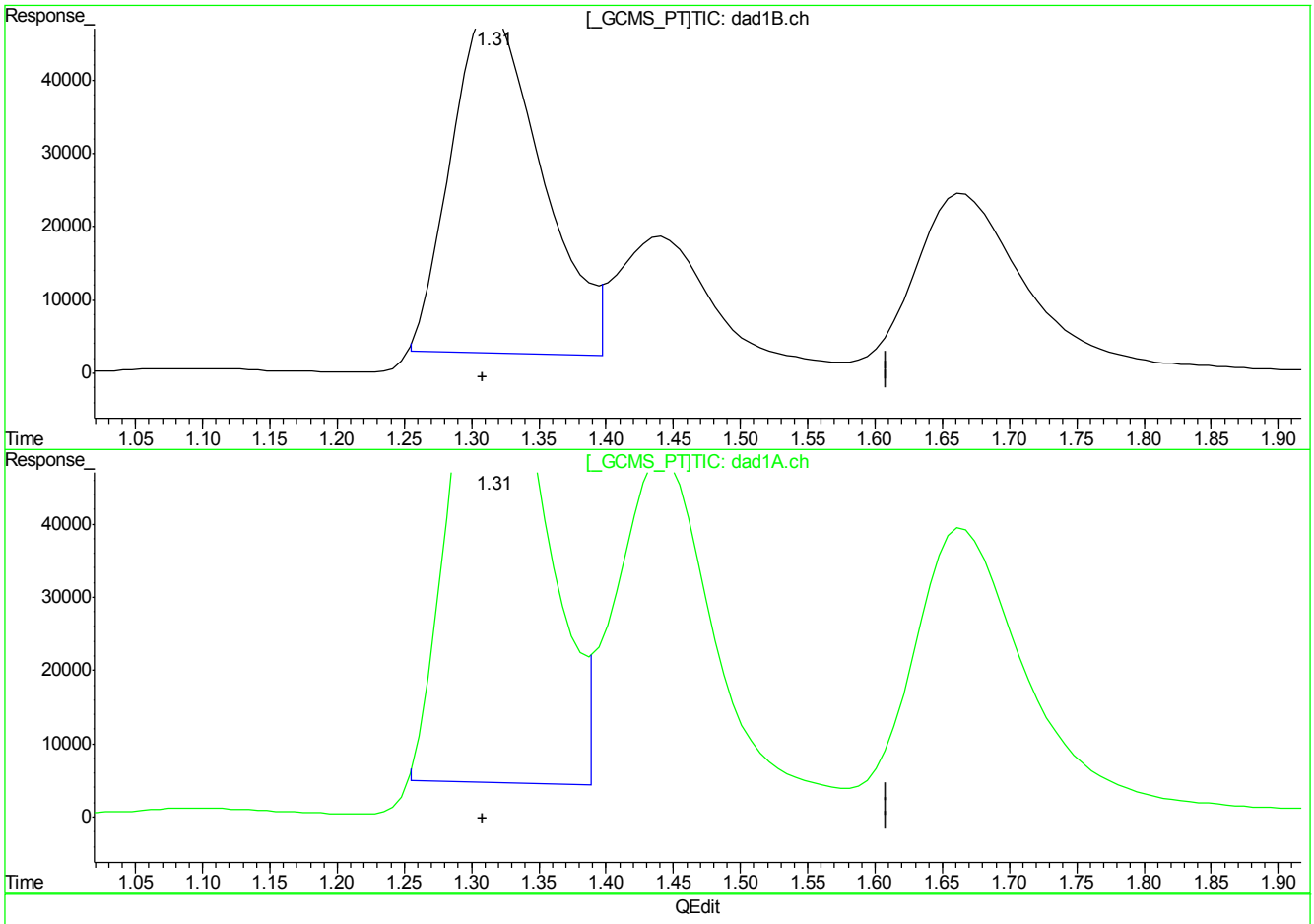
Sample Number:	GBB1722-ICC1722	**Method:**	SW846 8330B
Lab FileID:	BB059468.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 12:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.69	Poorly defined baseline
PETN	78-11-5	2	18.43	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 427.328ppb

response 2168509

(1) TNX #2

1.32min 423.577ppb

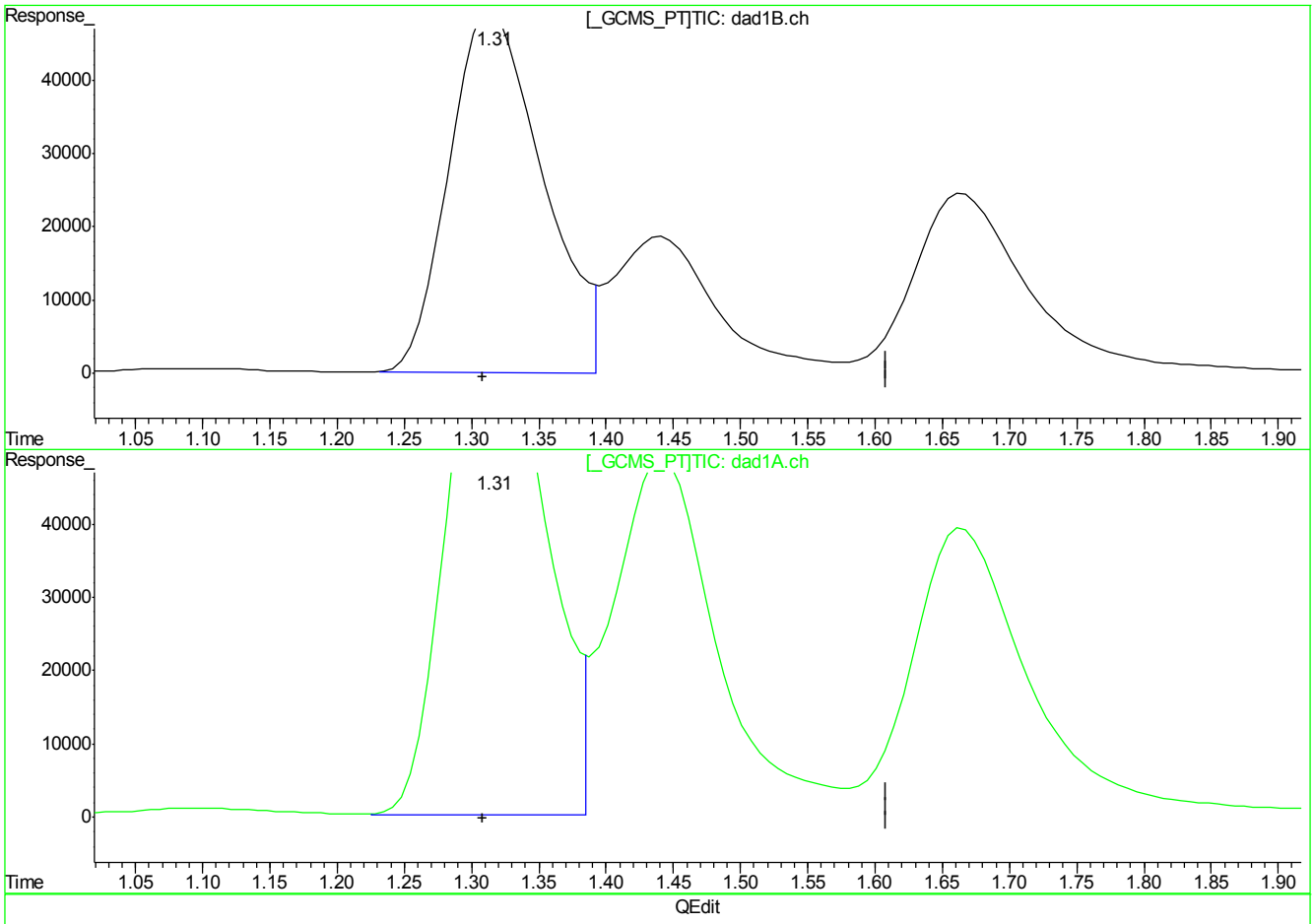
response 3301327

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:20 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 468.478ppb m

response 2377327

(1) TNX #2

1.31min 467.938ppb m

response 3647073

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:27 2018

7.7.5.3

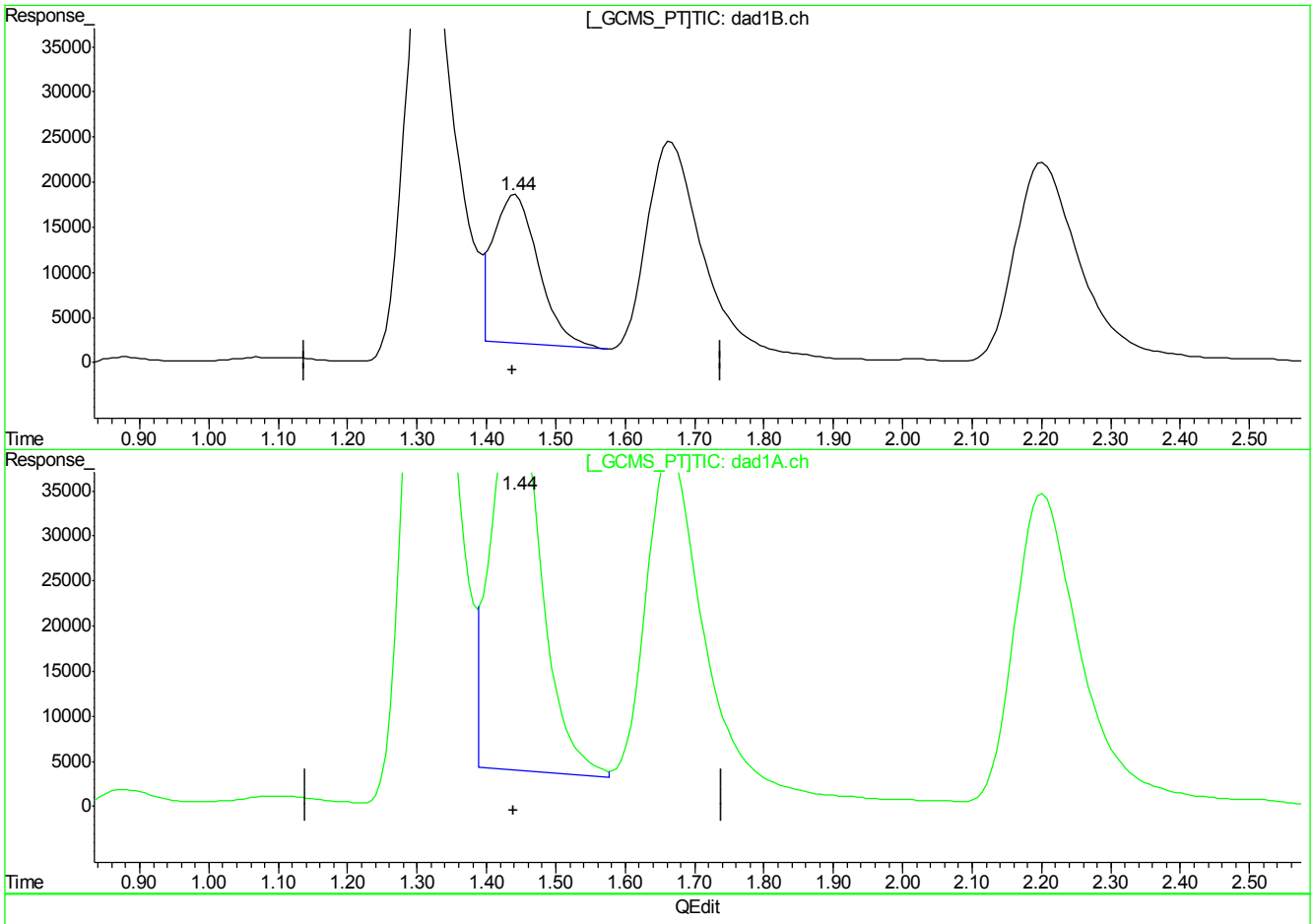
7

BB059468.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 394.488ppb

response 769046

(2) HMX #2

1.44min 414.745ppb

response 2179694

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:31 2018

7.7.5.4

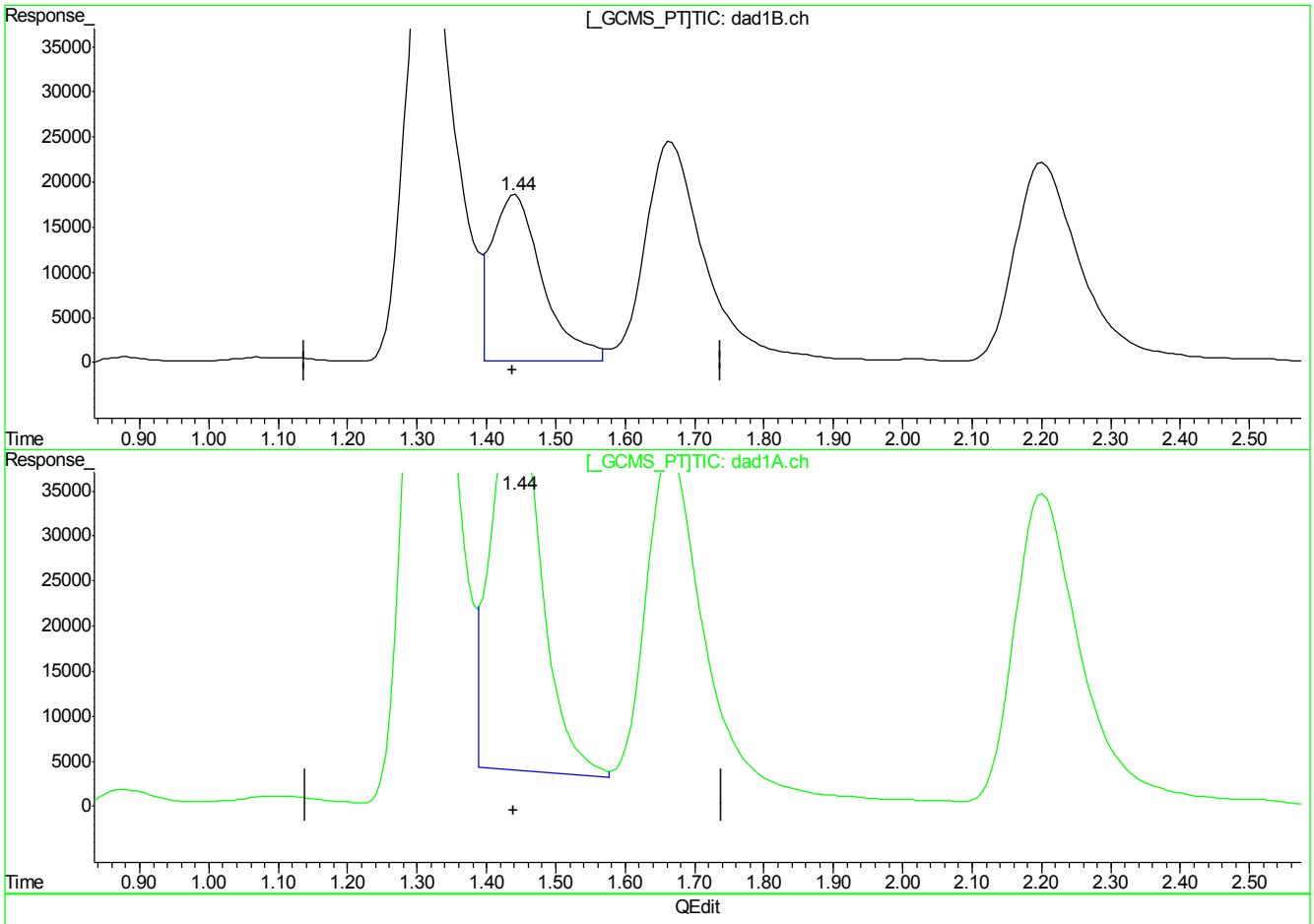
7

BB059468.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 479.850ppb m

response 935456

(2) HMX #2

1.44min 414.745ppb

response 2179694

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:38 2018

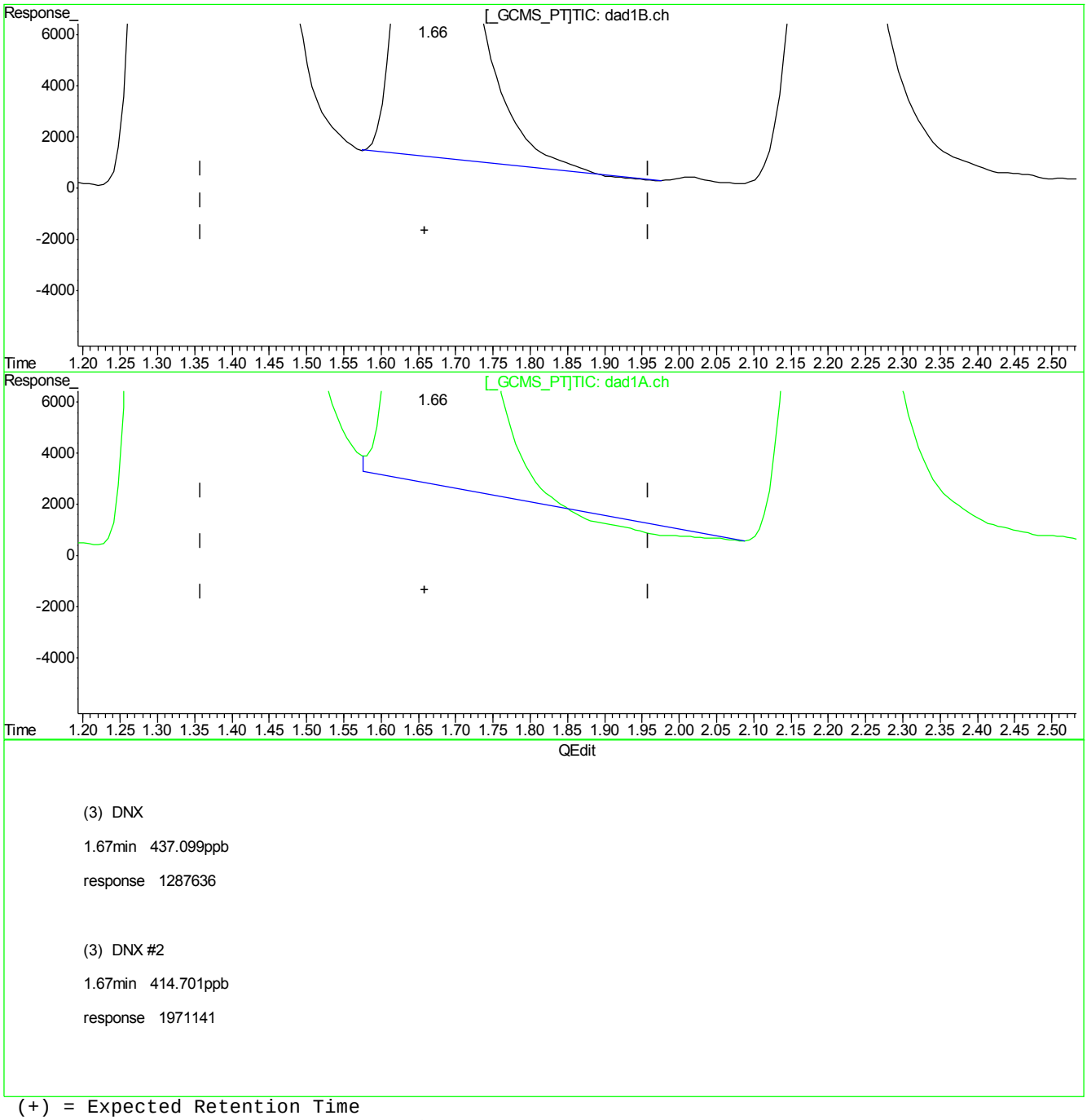
7.7.5.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



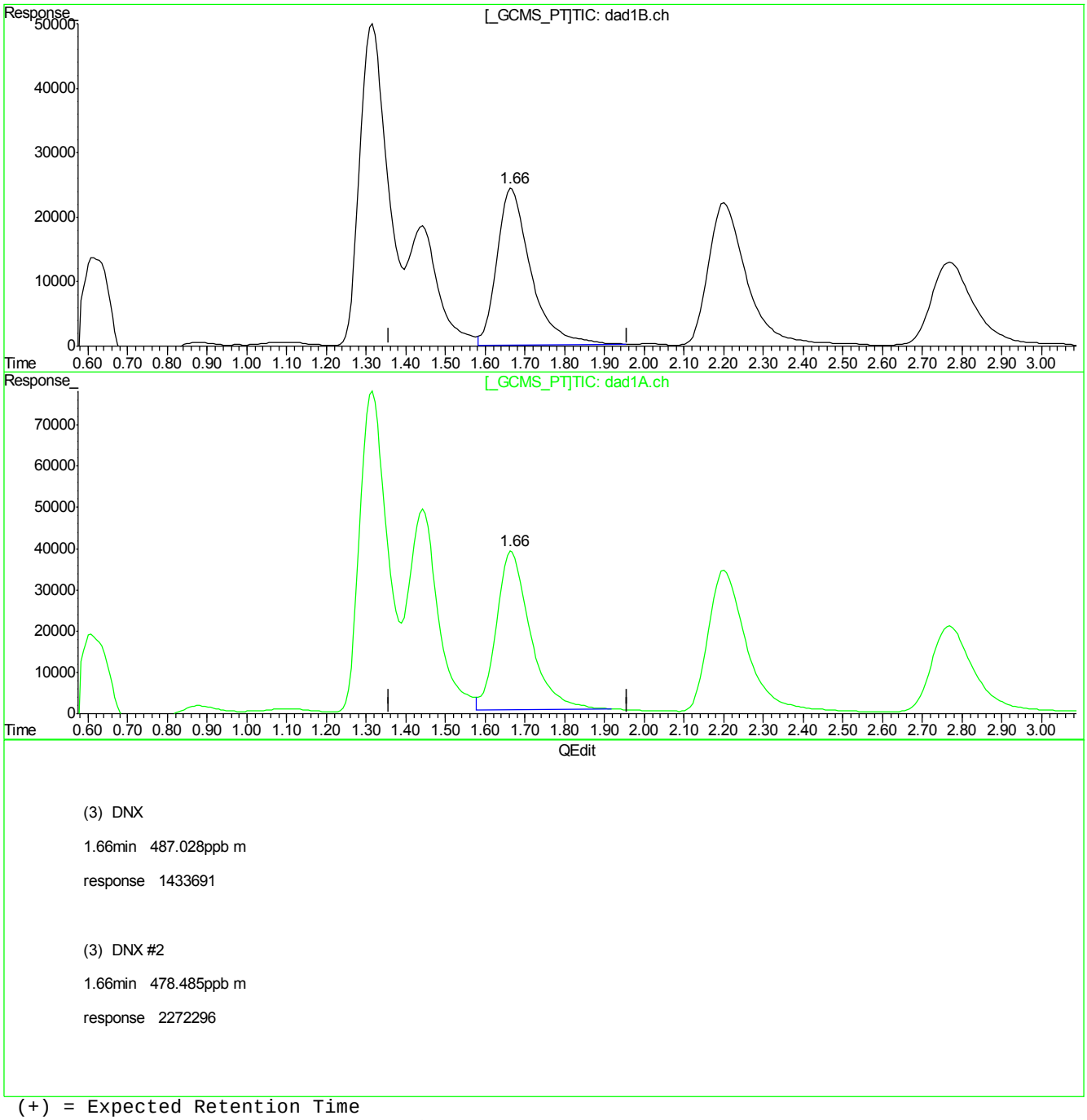
(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:55 2018

BB059468.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 487.028ppb m

response 1433691

(3) DNX #2

1.66min 478.485ppb m

response 2272296

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:13 2018

7.7.57

7

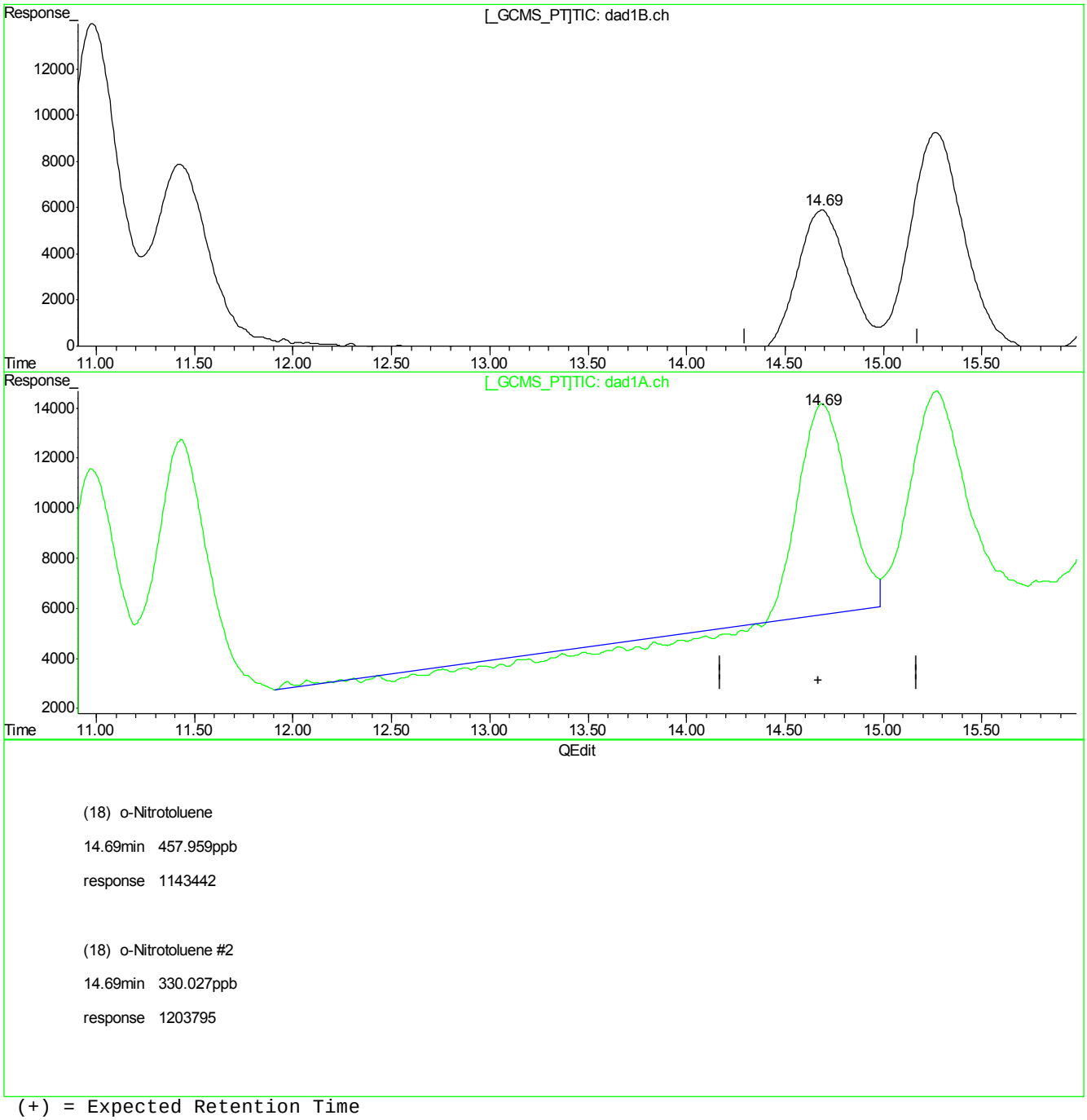
BB059468.D edits: DNX

FA53725

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 457.959ppb

response 1143442

(18) o-Nitrotoluene #2

14.69min 330.027ppb

response 1203795

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:29 2018

7.7.5.8

7

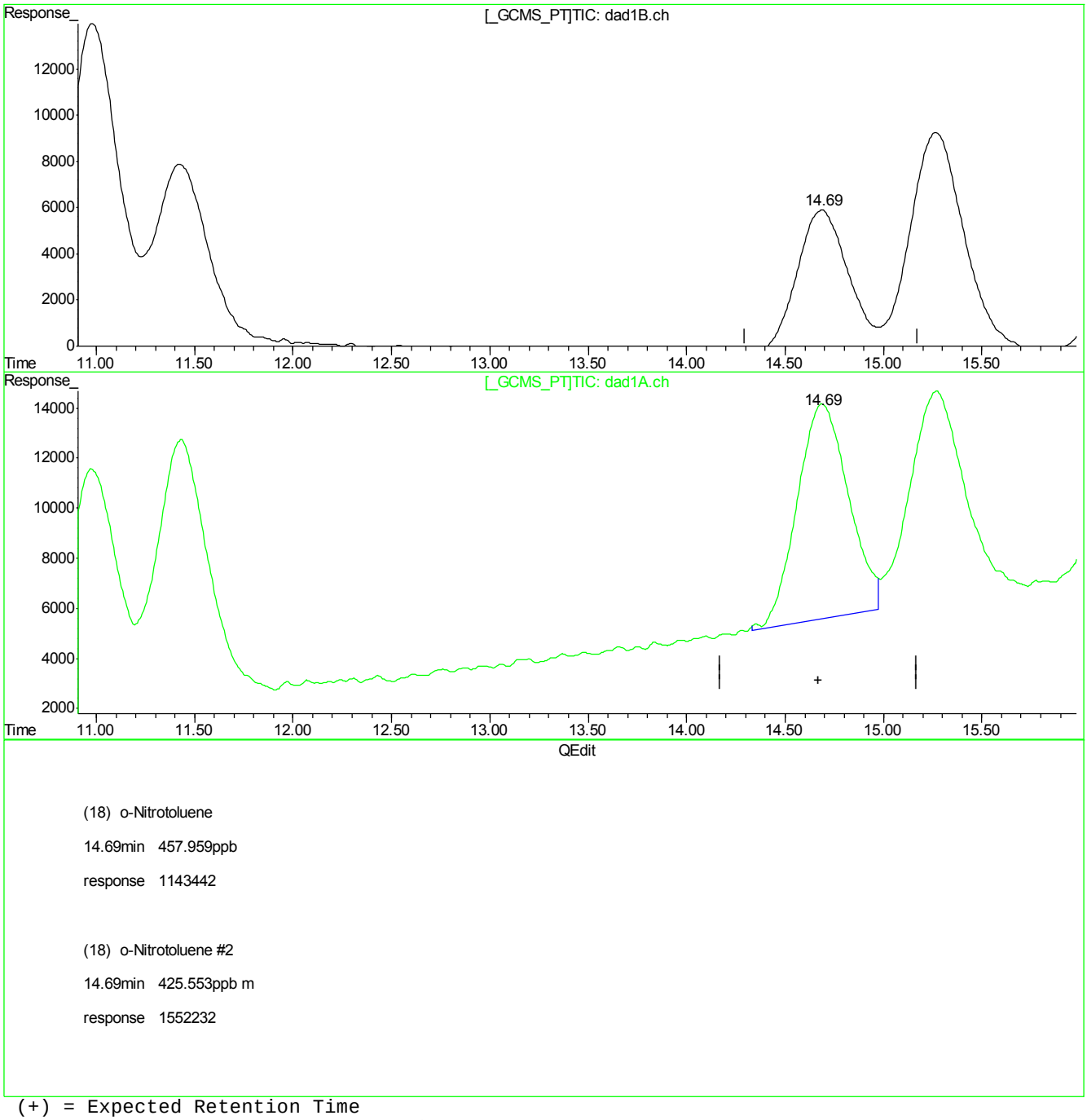
FA53725

BB059468.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 457.959ppb

response 1143442

(18) o-Nitrotoluene #2

14.69min 425.553ppb m

response 1552232

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:36 2018

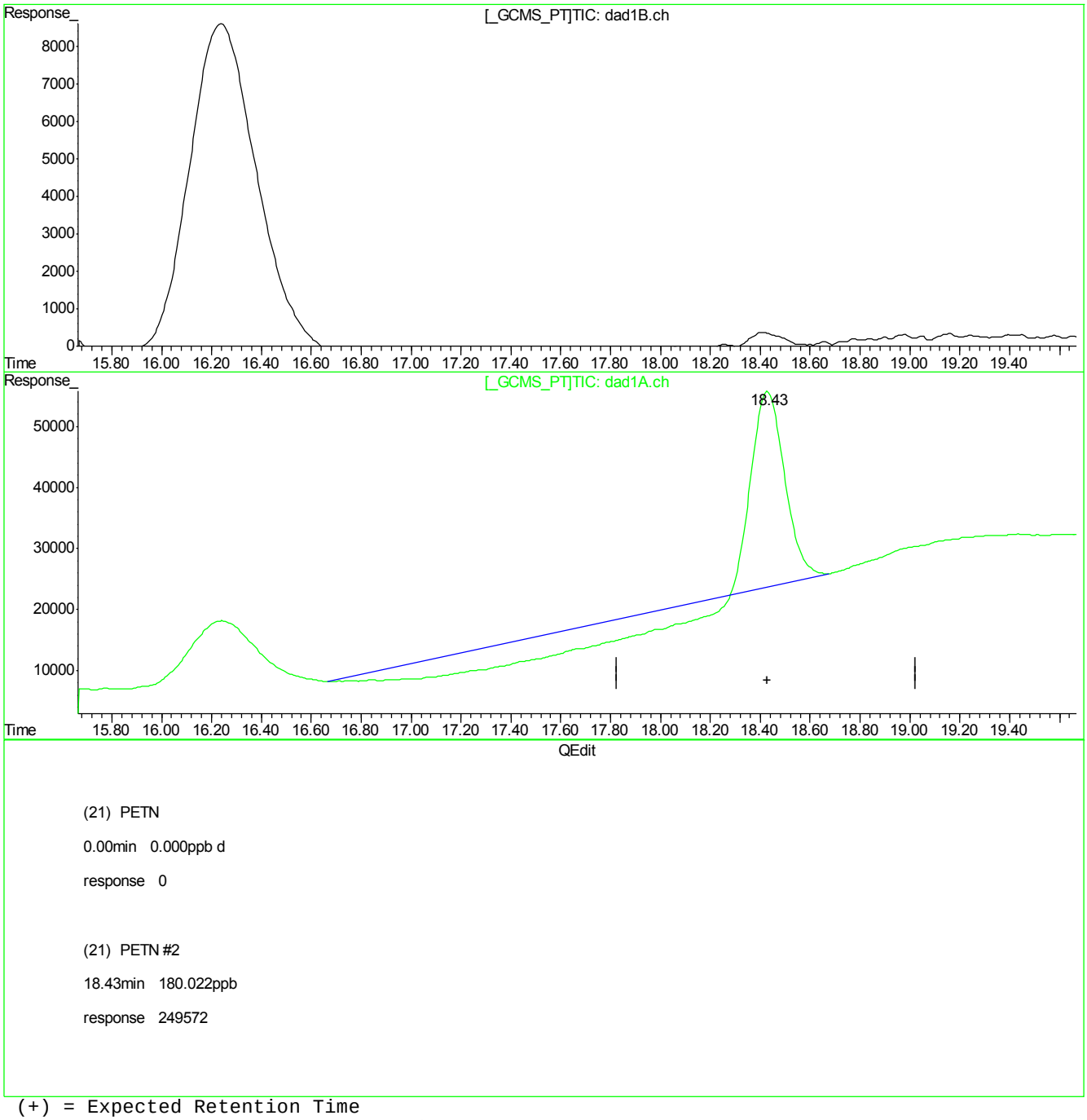
7.7.5.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 180.022ppb

response 249572

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:40 2018

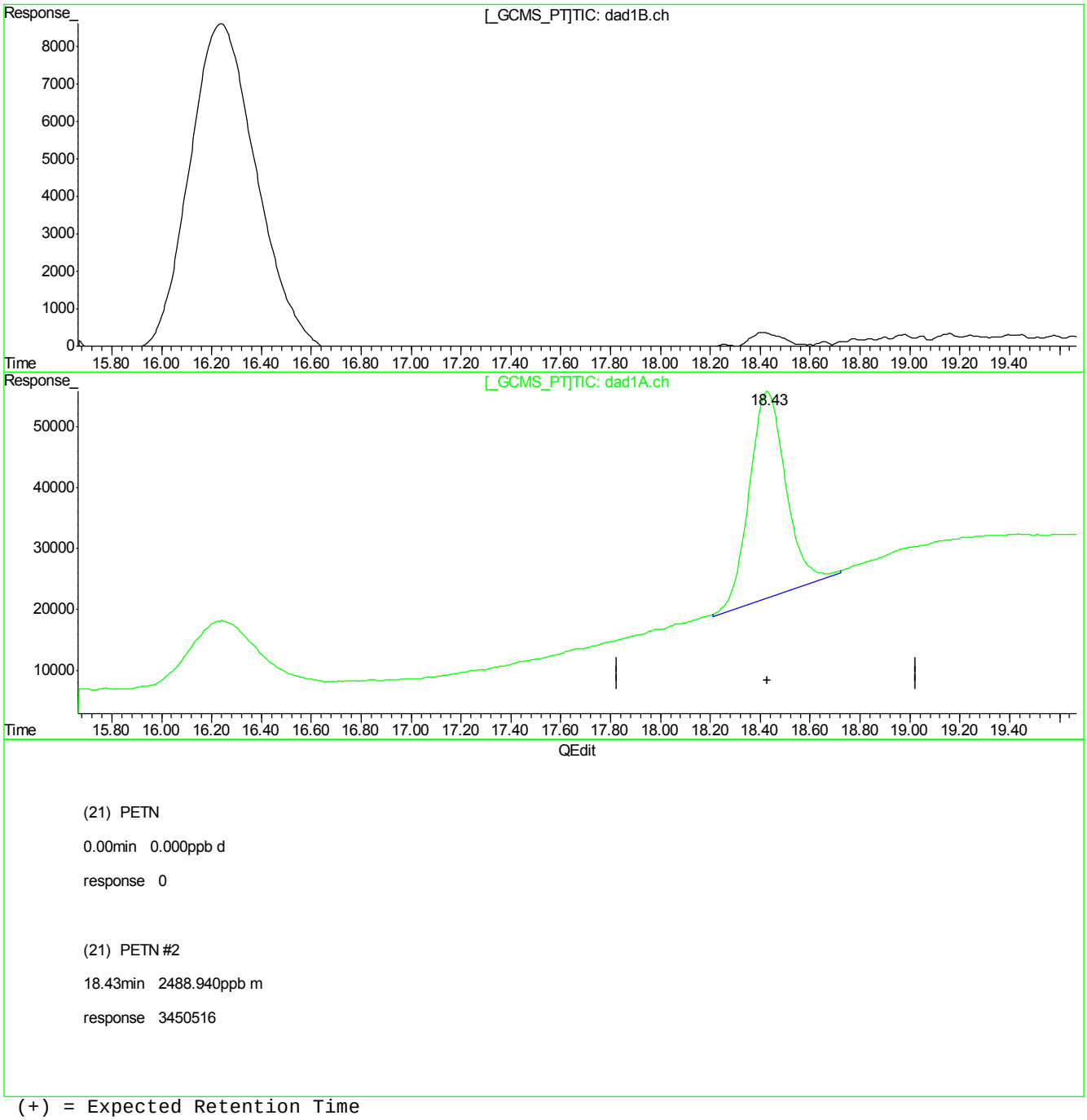
7.7.5.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:43 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:49 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.31	10.31	2452926	4465153	1062.069	1072.376
	Spiked Amount 500.000	Range 70 - 136		Recovery =		212.41%#	214.48%#
	Target Compounds						
1)	TNX	1.31	1.31	4711834	7502705	928.517m	962.635m
2)	HMX	1.44	1.44	1896985	5080506	973.074m	966.703m
3)	DNX	1.66	1.66	2865864	4744960	980.493m	1006.582m
4)	MNX	2.20	2.20	2935667	4563791	944.158	973.654
5)	RDX	2.76	2.76	1949428	3115738	855.536	831.929
6)	1,3,5-Trinitrobe	4.41	4.41	4162990	8095208	842.461	888.329
7)	1,3-Dinitrobenze	5.58	5.58	5312977	3567135	870.487	905.285
8)	3,5-Dinitroanili	5.88	5.88	4615207	7569126	1006.649	959.813
9)	Nitrobenzene	7.09	7.09	3234435	3092232	847.799	862.498
10)	Nitroglycerin	0.00	8.38	0	6065549	N.D. d	4583.325
11)	Tetryl	8.70	8.70	2900724	5089762	911.605	992.750
12)	2,4,6-Trinitroto	9.12	9.12	3740946	4634286	1036.721	1080.478
13)	2-Amino-4,6-Dini	9.43	9.43	3532796	5448944	880.074	980.062
14)	4-Amino-2,6-Dini	9.86	9.86	2590690	5369582	918.028	993.522
16)	2,4-Dinitrotolue	10.97	10.97	4825667	3112957	894.994	932.455
17)	2,6-Dinitrotolue	11.41	11.42	2946410	3691393	896.181	941.259
18)	o-Nitrotoluene	14.68	14.67	2268482	3070855	908.548	841.892m
19)	p-Nitrotoluene	15.26	15.26	3723769	3115857	1006.502	984.570
20)	m-Nitrotoluene	16.23	16.23	3438848	3990421	932.090	920.173
21)	PETN	0.00	18.43	0	6778199	N.D. d	4889.277m

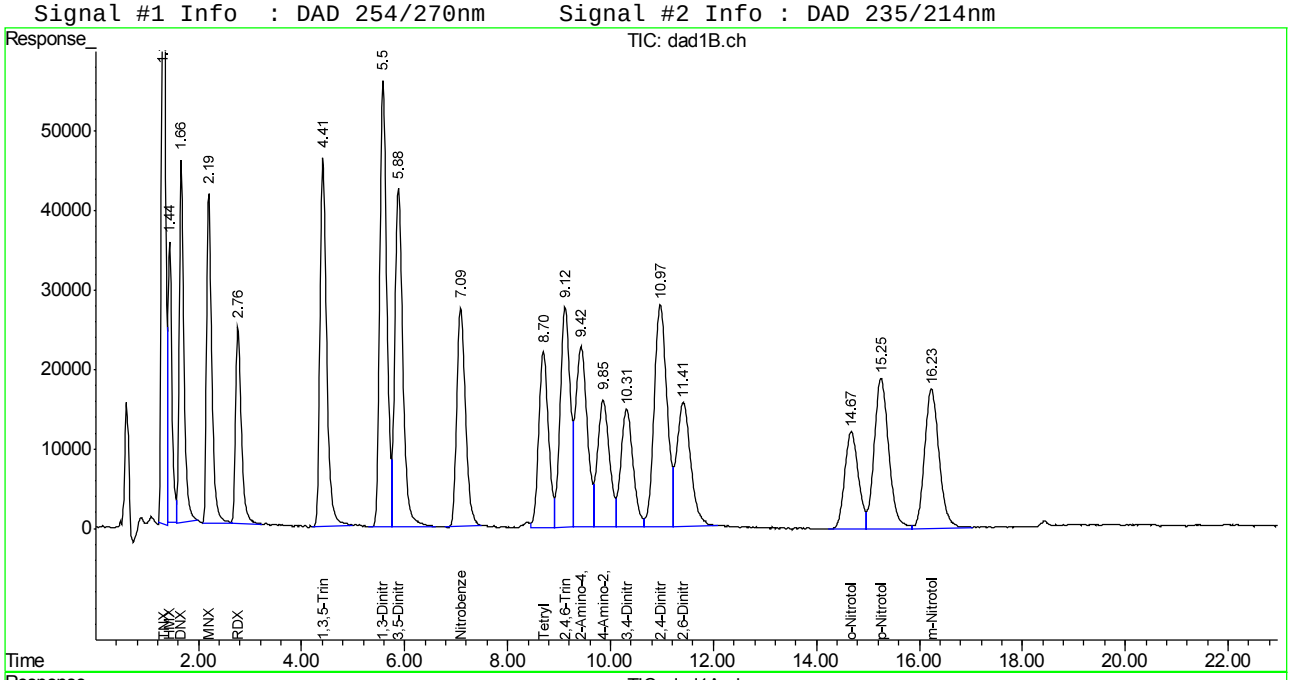
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059469.D 8330B_0419PLUS.M Fri Apr 20 08:01:23 2018 Page 1

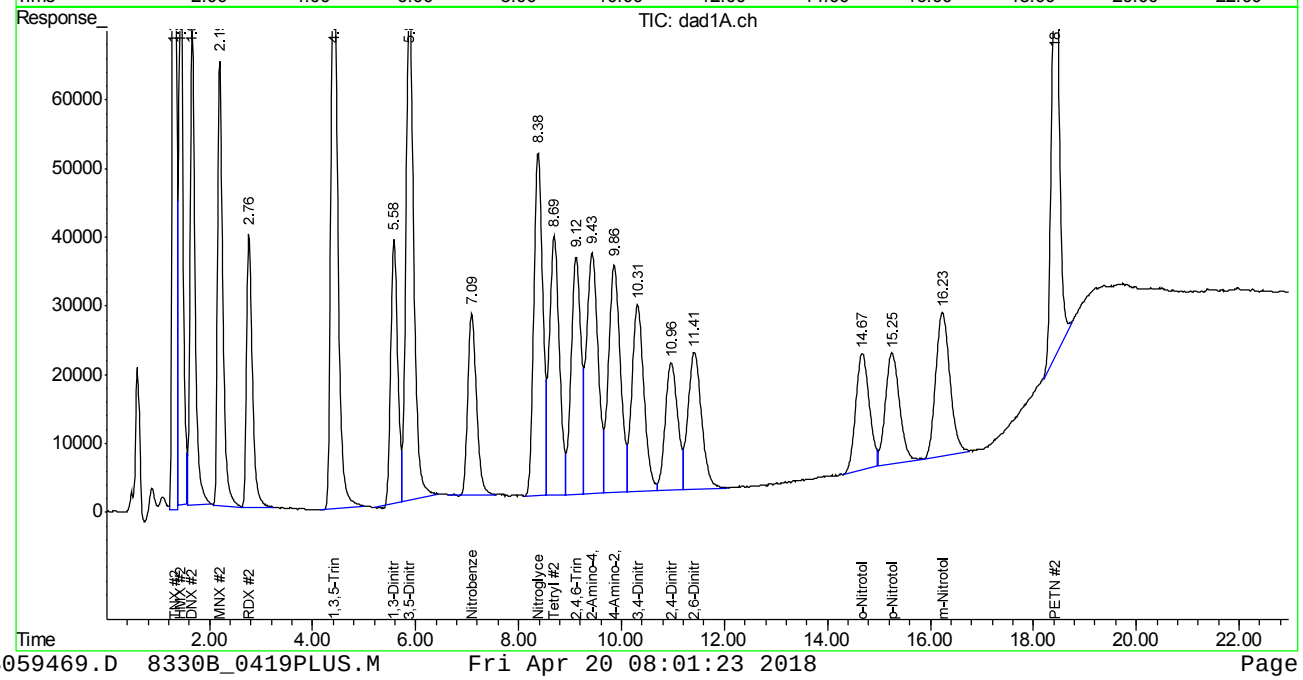
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:00 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

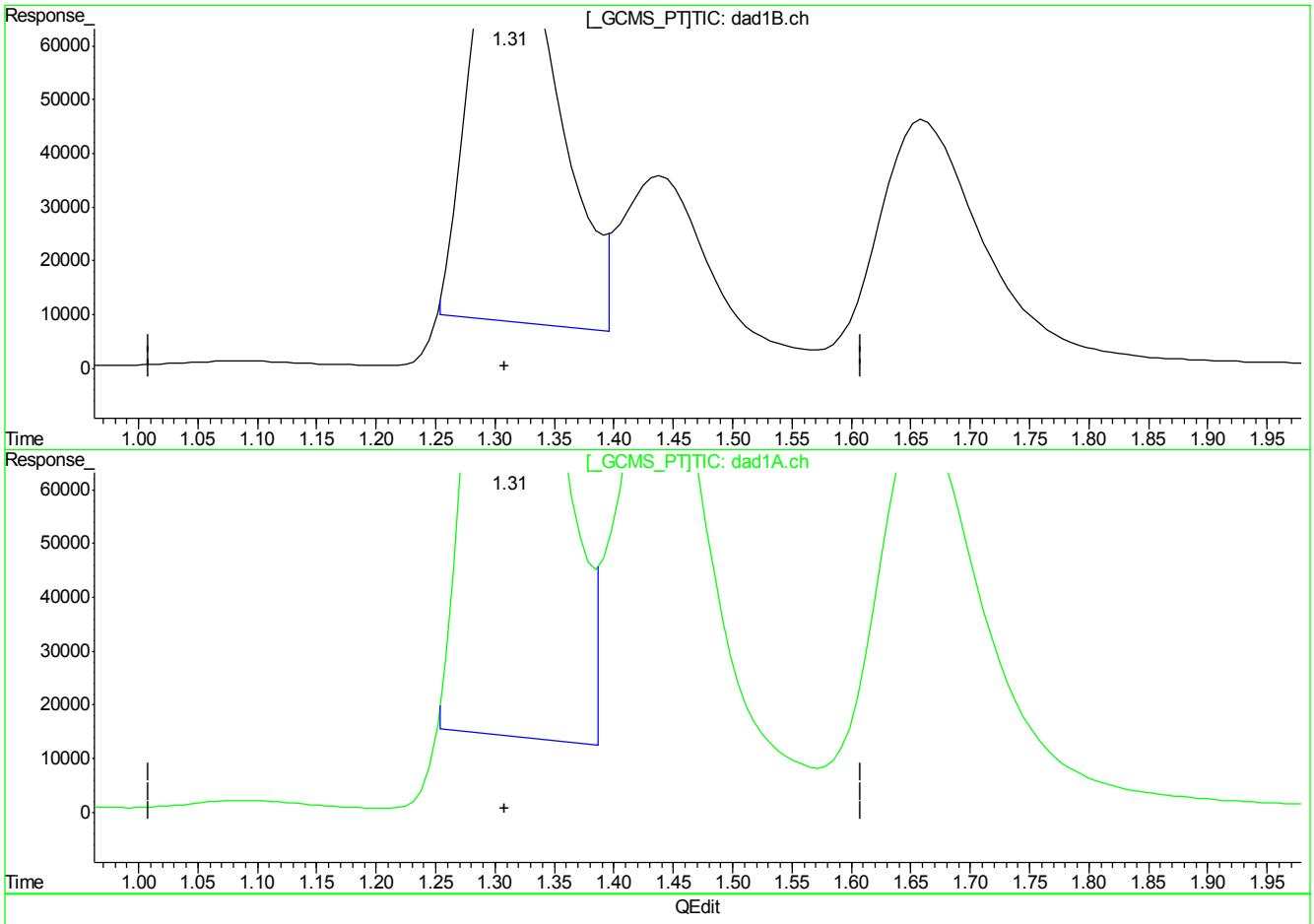
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059469.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 12:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.67	Poorly defined baseline
PETN	78-11-5	2	18.43	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 800.355ppb

response 4061464

(1) TNX #2

1.31min 788.203ppb

response 6143200

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:58:57 2018

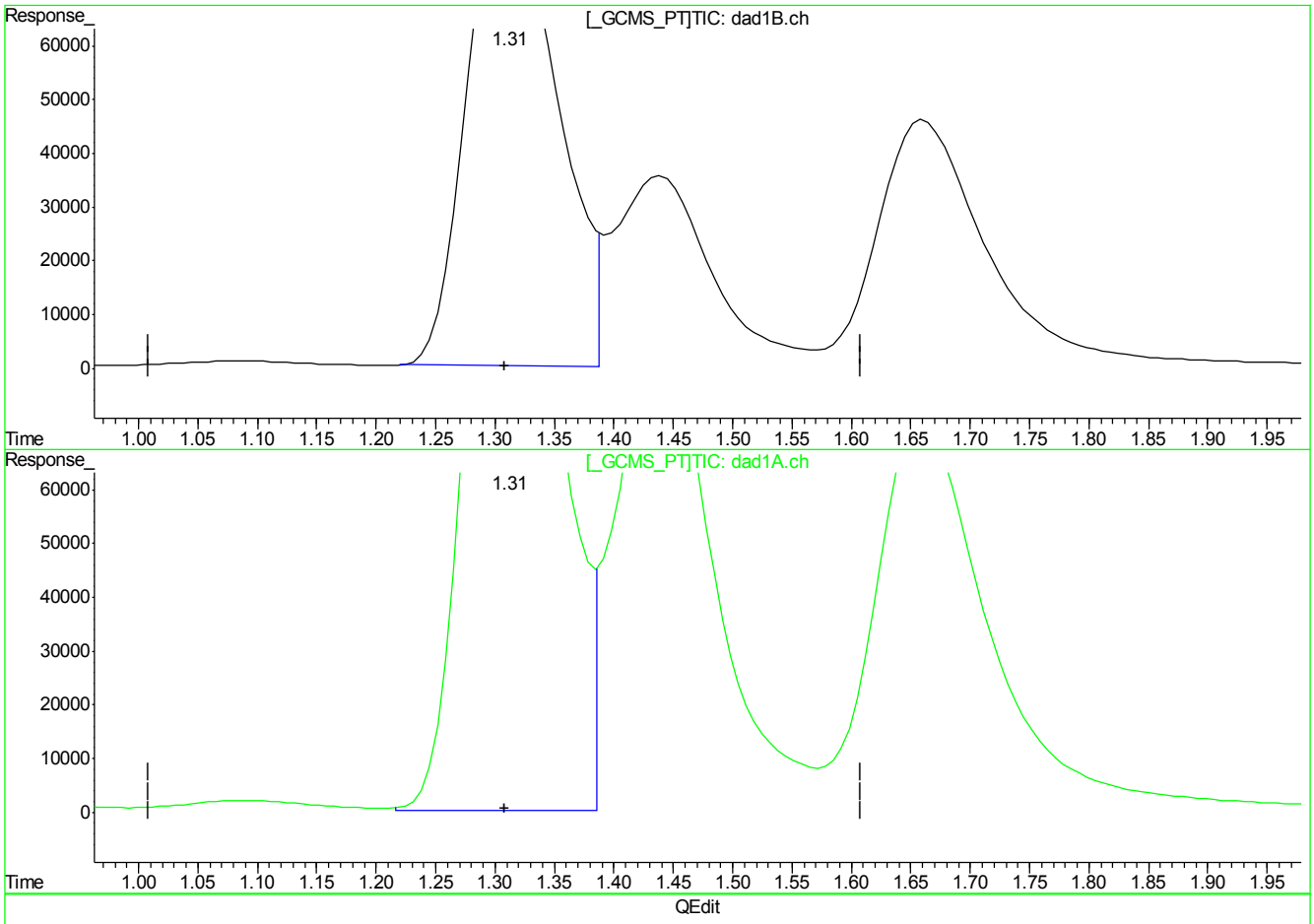
7.7.6.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 928.517ppb m

response 4711834

(1) TNX #2

1.31min 962.635ppb m

response 7502705

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:03 2018

7.7.6.3

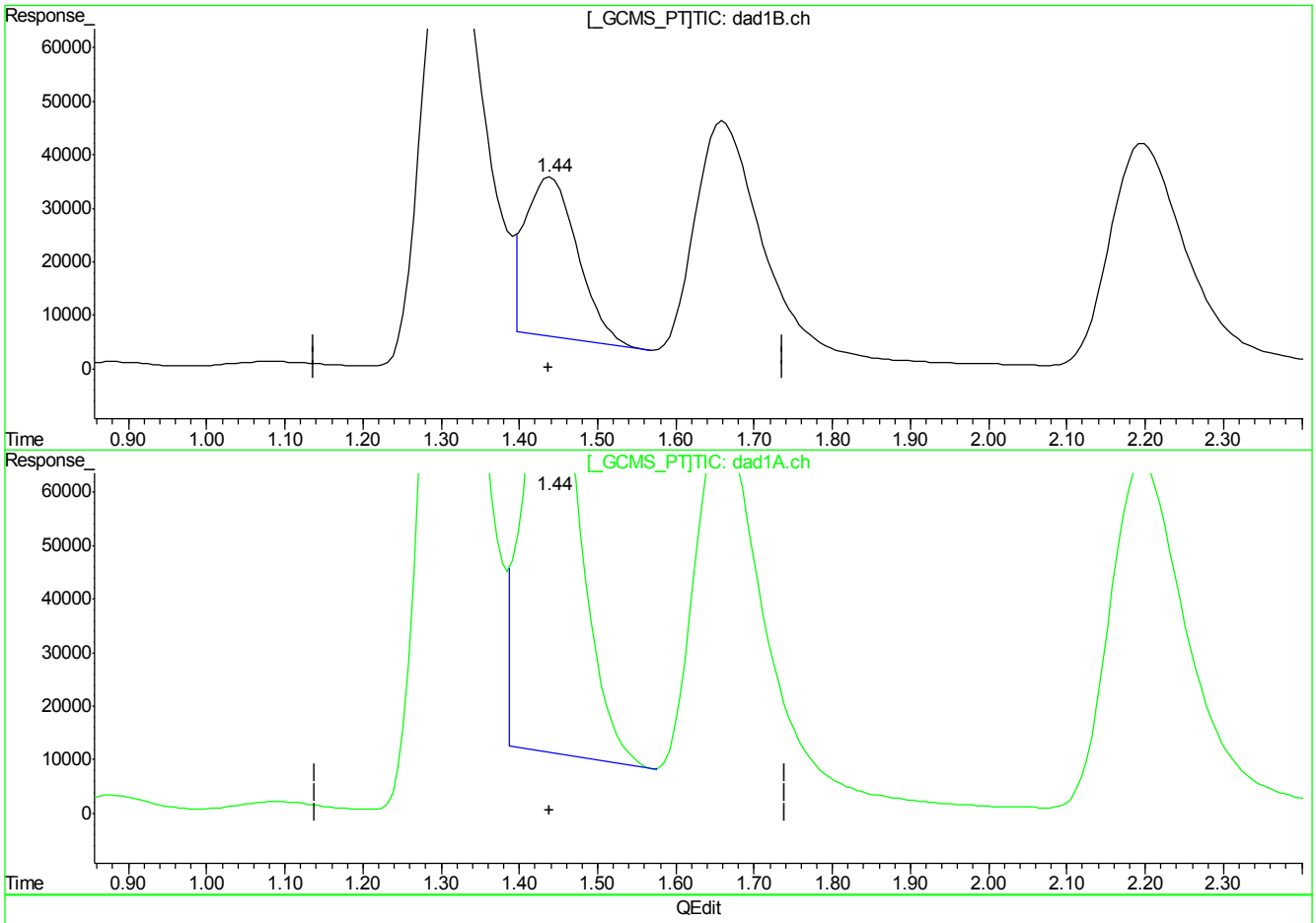
7

BB059469.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 726.666ppb

response 1416618

(2) HMX #2

1.44min 773.768ppb

response 4066540

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:06 2018

7.7.6.4

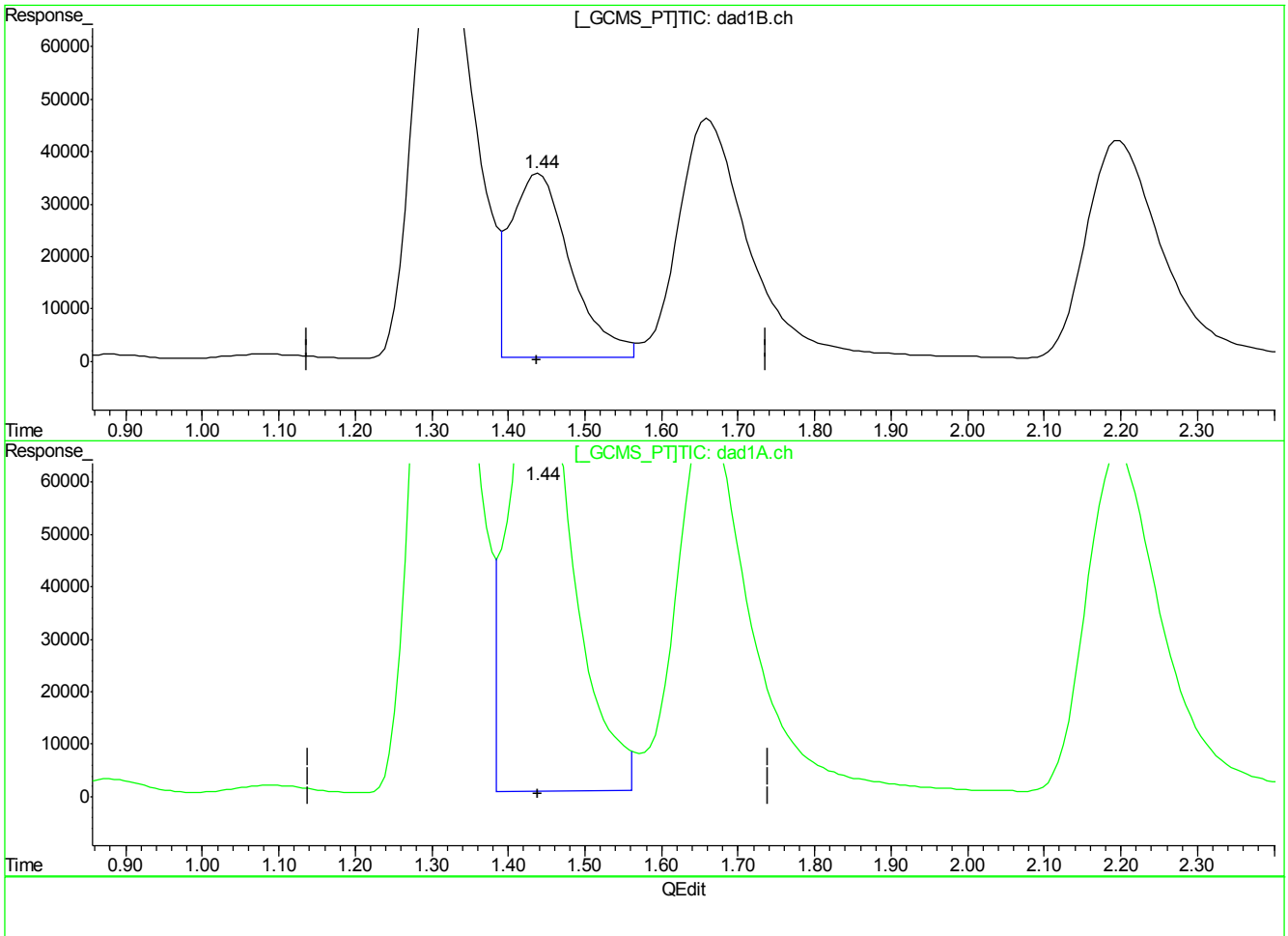
7

BB059469.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 973.074ppb m

response 1896985

(2) HMX #2

1.44min 966.703ppb m

response 5080506

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:30 2018

7.7.6.5

7

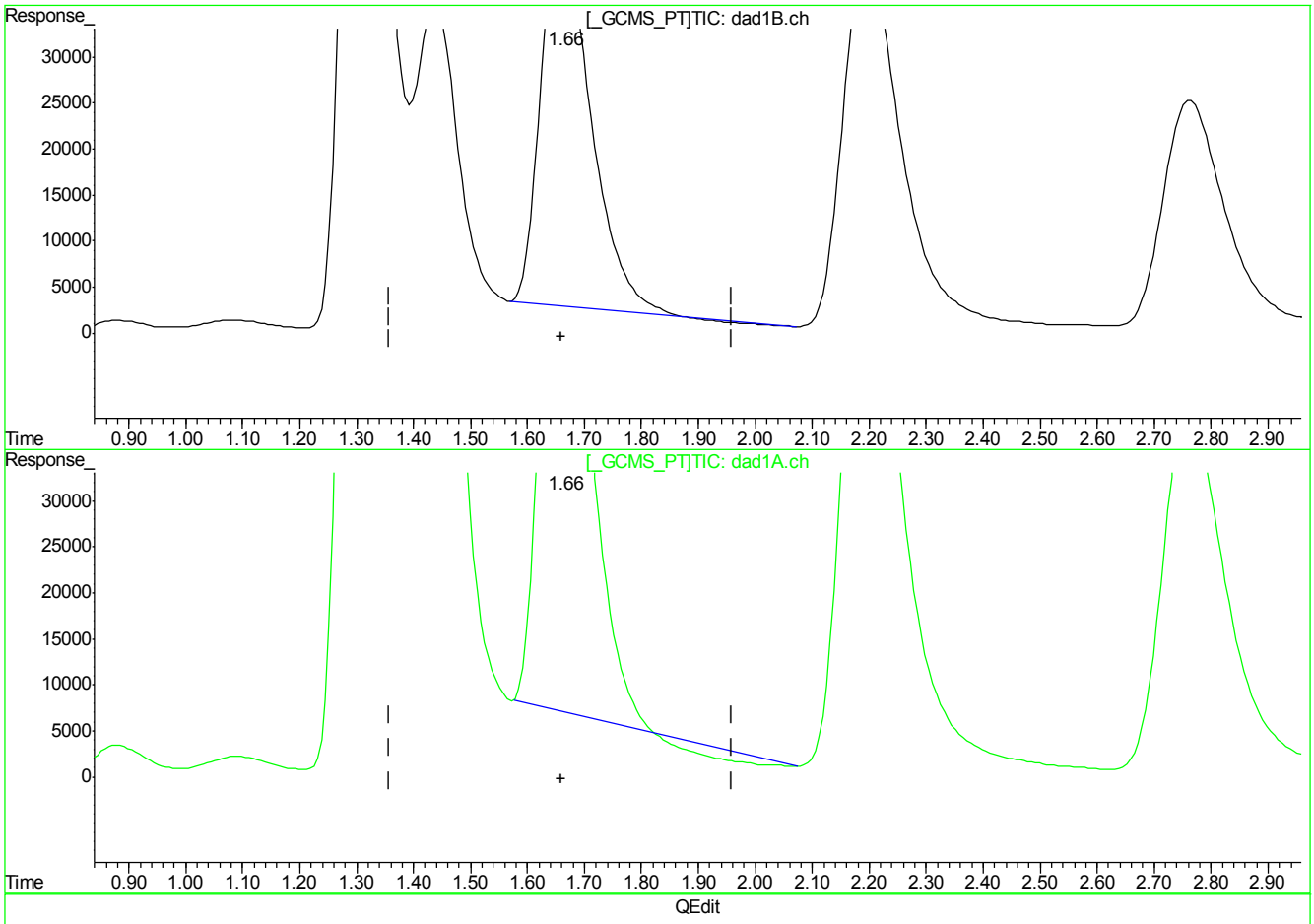
BB059469.D edits: HMX

FA53725

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 863.341ppb

response 2527721

(3) DNX #2

1.66min 781.314ppb

response 3694727

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:33 2018

7.7.6.9

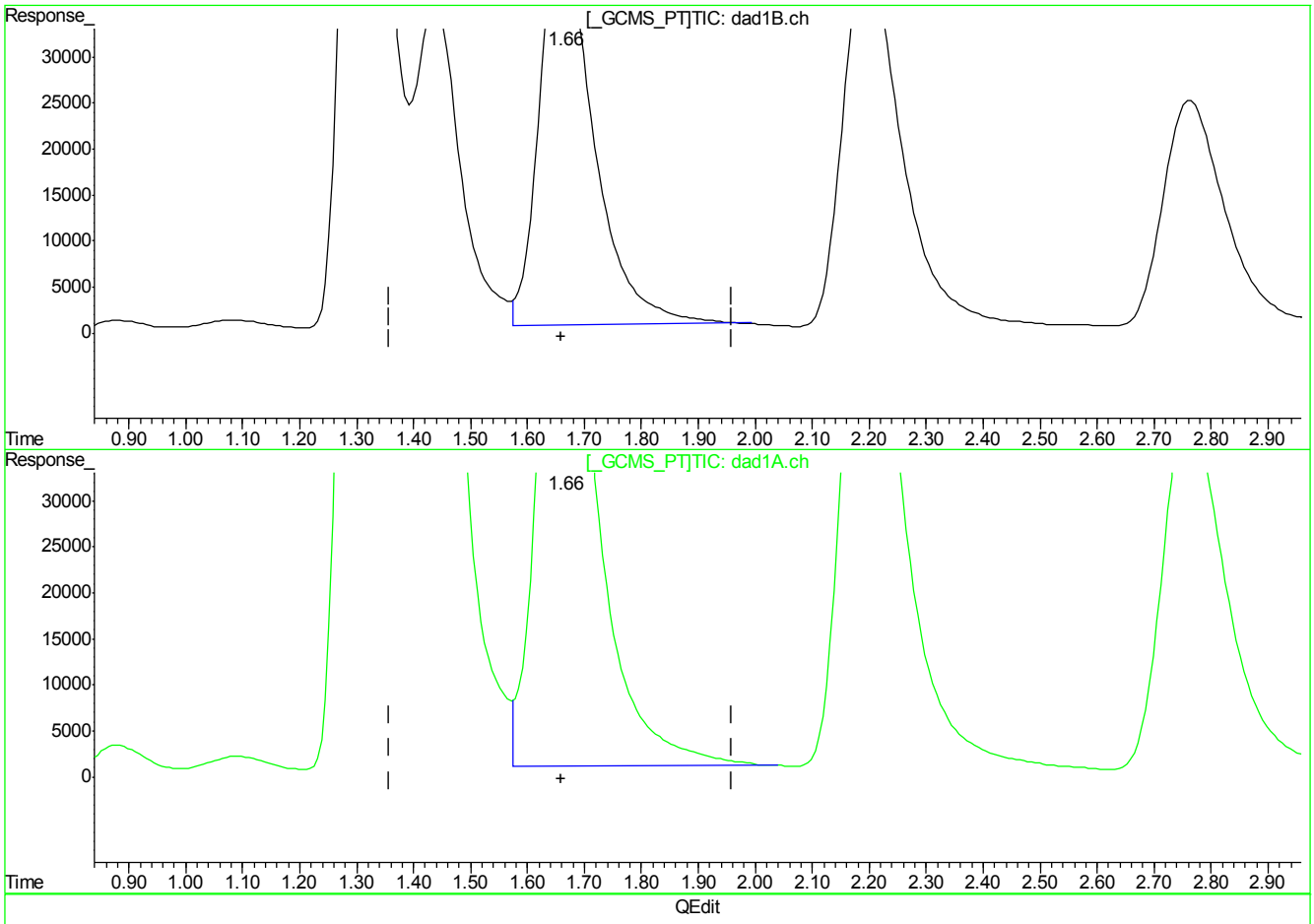
7

BB059469.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 980.493ppb m

response 2865864

(3) DNX #2

1.66min 1006.582ppb m

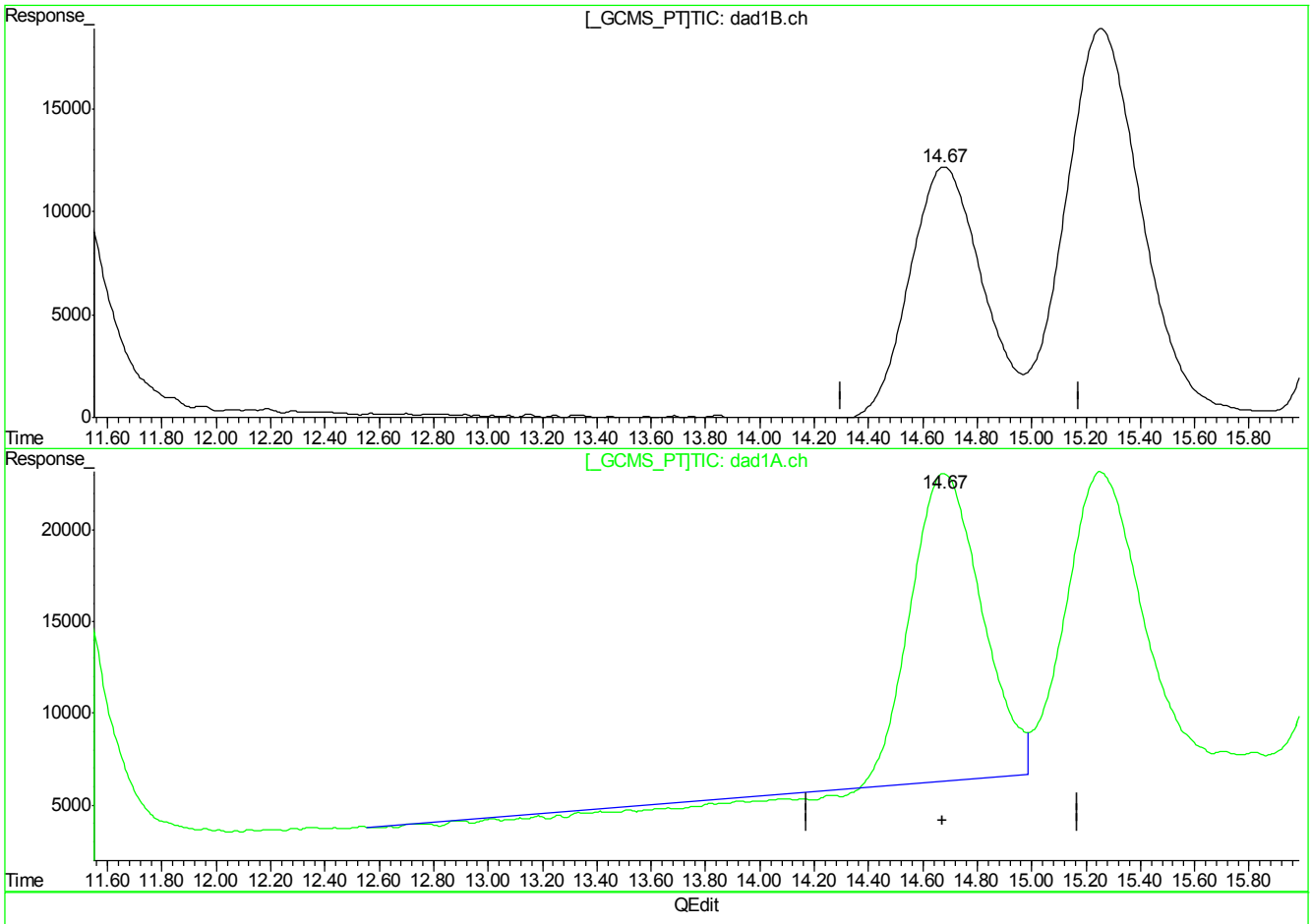
response 4744960

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 908.548ppb

response 2268482

(18) o-Nitrotoluene #2

14.68min 775.181ppb

response 2827520

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:02 2018

7.7.6.8

7

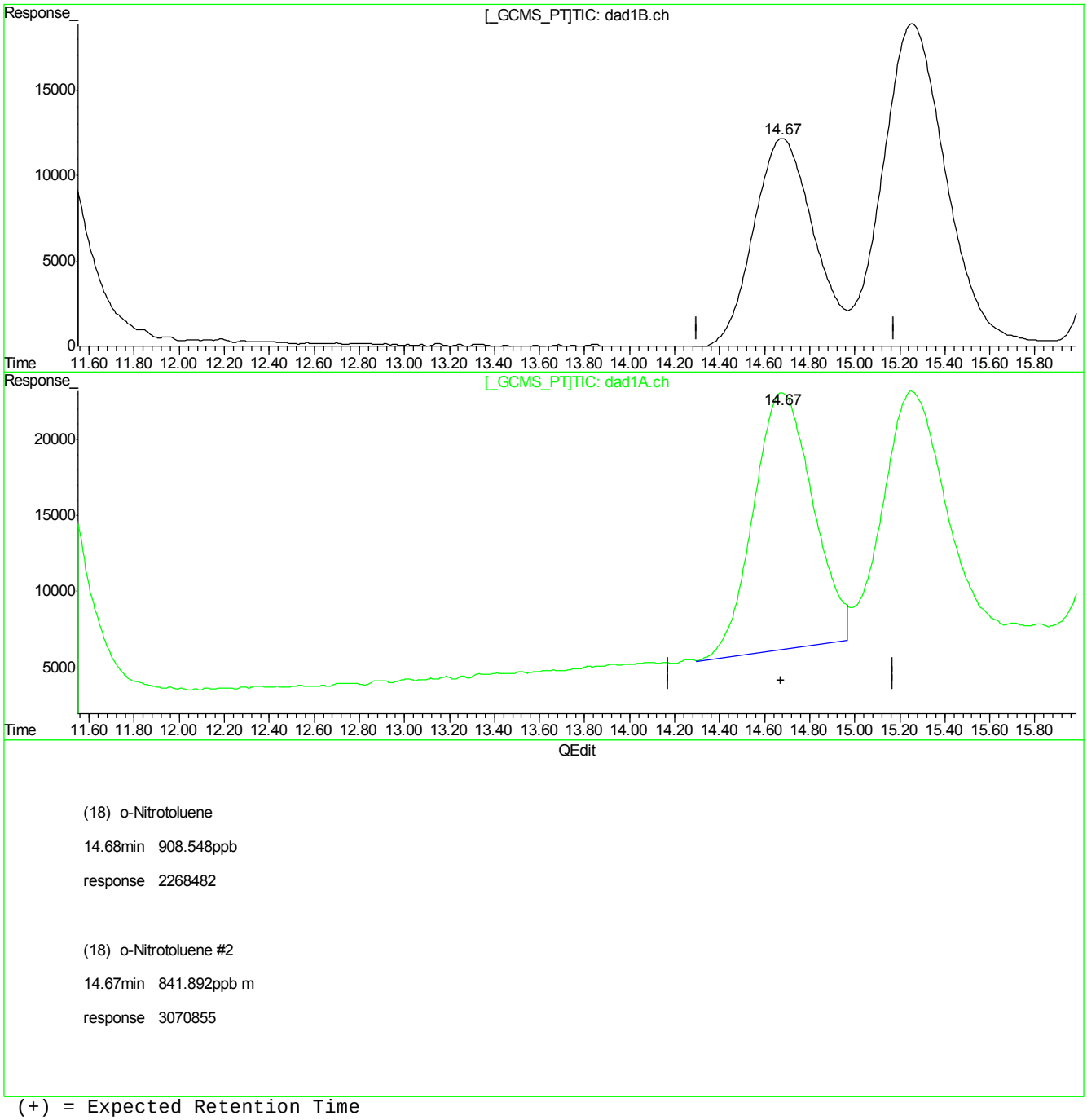
FA53725

BB059469.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 908.548ppb

response 2268482

(18) o-Nitrotoluene #2

14.67min 841.892ppb m

response 3070855

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:05 2018

7.7.6.9

7

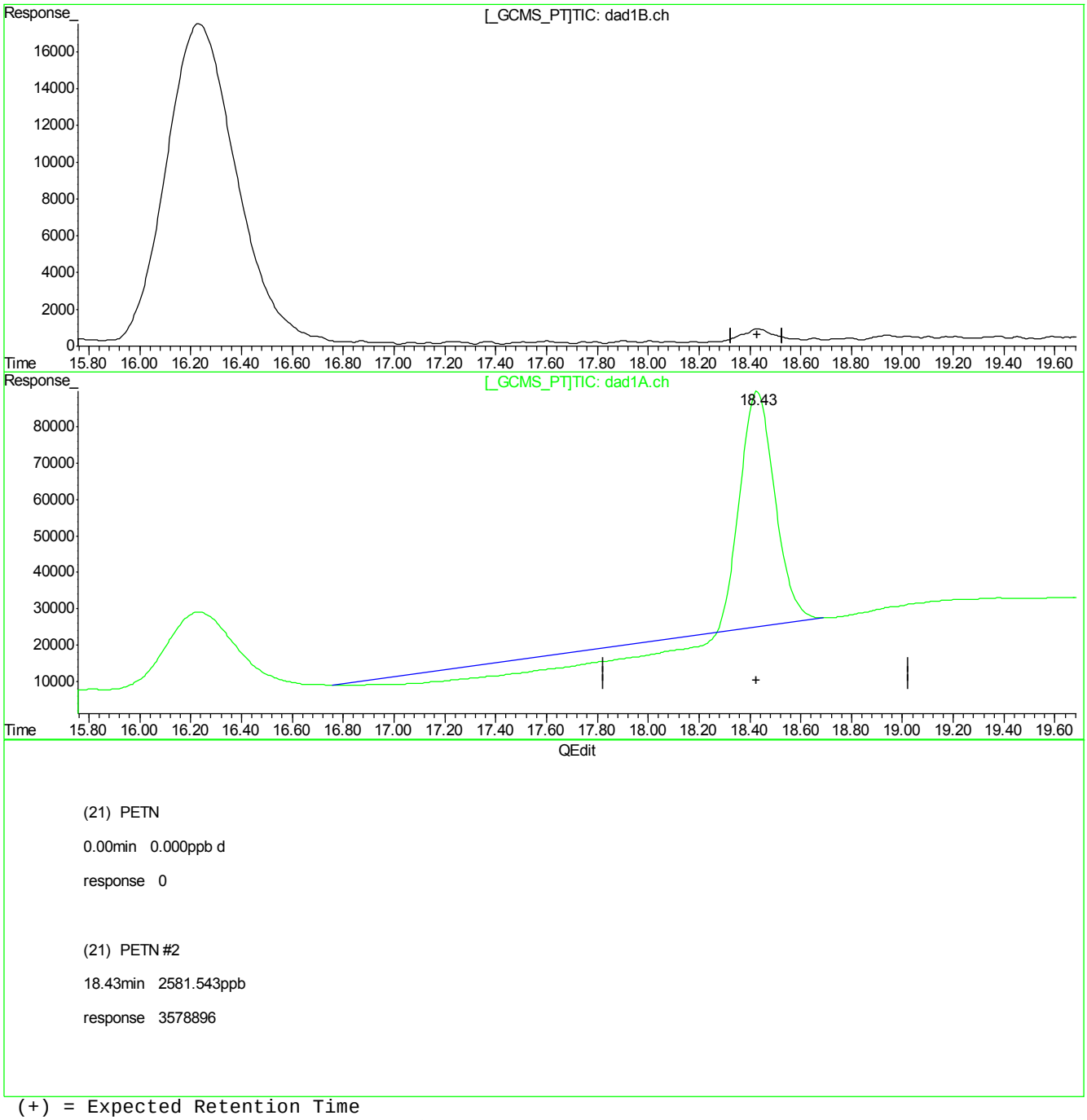
FA53725

BB059469.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 2581.543ppb

response 3578896

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:08 2018

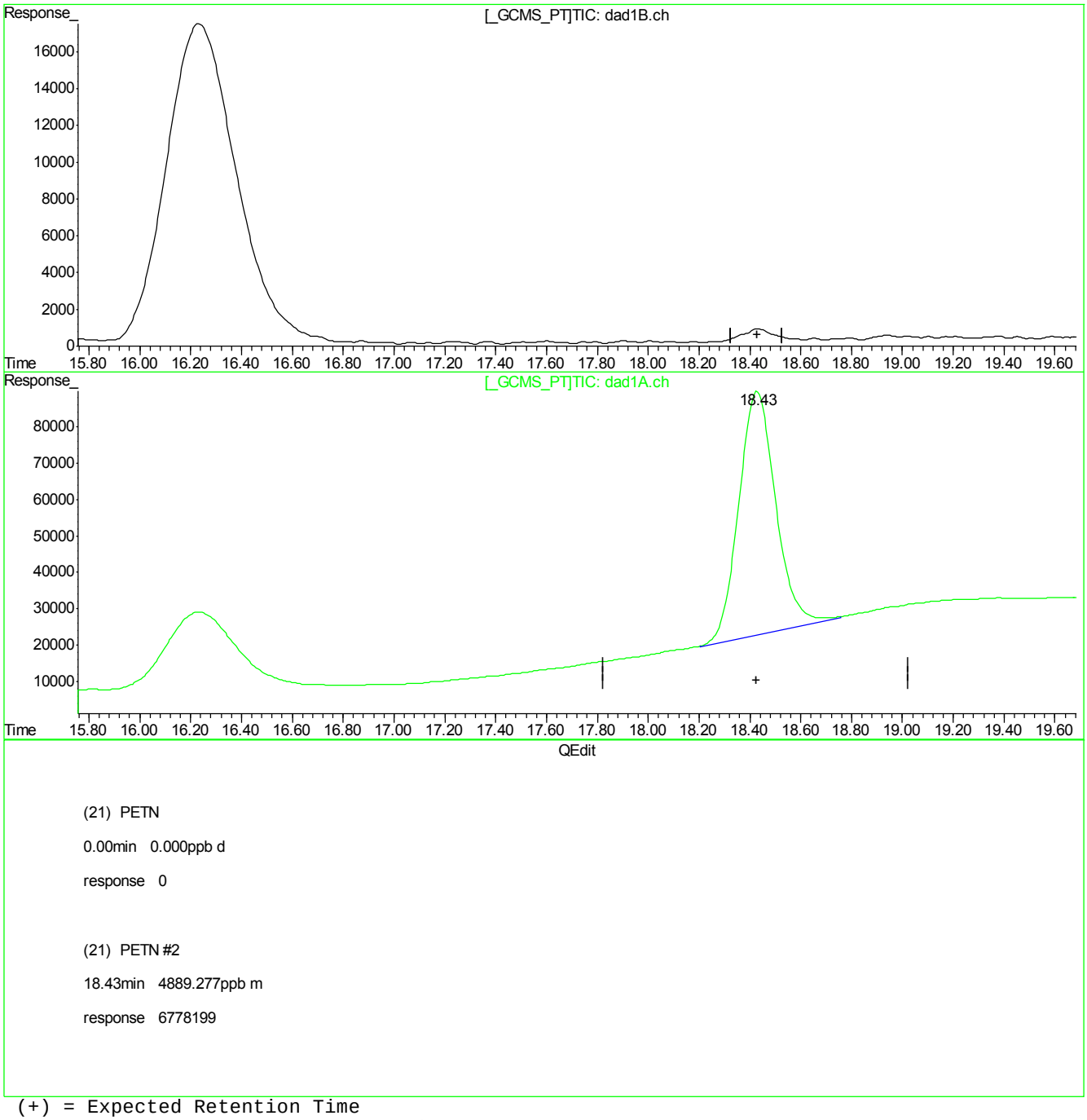
7.7.6.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 4889.277ppb m

response 6778199

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:11 2018

BB059470.D

Manual Integrations APPROVED (compounds with "m" flag)

Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:50 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.29	10.29	5083250	9247239	2200.948	2220.868
	Spiked Amount 500.000	Range 70 - 136		Recovery =		440.19%#	444.17%#
	Target Compounds						
1)	TNX	1.30	1.30	9211273	14491645	1815.179m	1859.350m
2)	HMX	1.43	1.44	3638718	10069253	1866.511m	1915.946m
3)	DNX	1.65	1.65	5892557	9584014	2047.638m	2063.804m
4)	MNX	2.19	2.19	5885974	9151830	1893.025	1952.481
5)	RDX	2.76	2.76	3867732	6249623	1730.557	1668.704
6)	1,3,5-Trinitrobe	4.41	4.41	8579482	16591008	1736.222	1820.617
7)	1,3-Dinitrobenze	5.57	5.57	10685649	7803739	1750.755	1980.456
8)	3,5-Dinitroanili	5.87	5.87	9524110	16795702	2077.357	2129.802
9)	Nitrobenzene	7.08	7.08	6632371	6428143	1738.453	1792.964
10)	Nitroglycerin	0.00	8.37	0	12142455	N.D. d	9175.233
11)	Tetryl	8.69	8.68	5845384	10366785	1837.017	2022.025
12)	2,4,6-Trinitroto	9.11	9.11	7588161	9366584	2102.893	2183.808
13)	2-Amino-4,6-Dini	9.40	9.40	7170099	11097154	1786.183	1995.964
14)	4-Amino-2,6-Dini	9.83	9.83	5374487	10973582	1904.486	2030.417
16)	2,4-Dinitrotolue	10.94	10.94	9942239	6519975	1843.940	1952.994
17)	2,6-Dinitrotolue	11.39	11.39	6550095	7736590	1992.279	1972.734
18)	o-Nitrotoluene	14.65	14.64	4539267	6298701	1818.018	1726.825m
19)	p-Nitrotoluene	15.23	15.22	7504319	6331384	2028.351	2000.634
20)	m-Nitrotoluene	16.20	16.20	6867225	8109895	1861.341	1870.104
21)	PETN	0.00	18.42	0	13694187	N.D. d	9877.944m

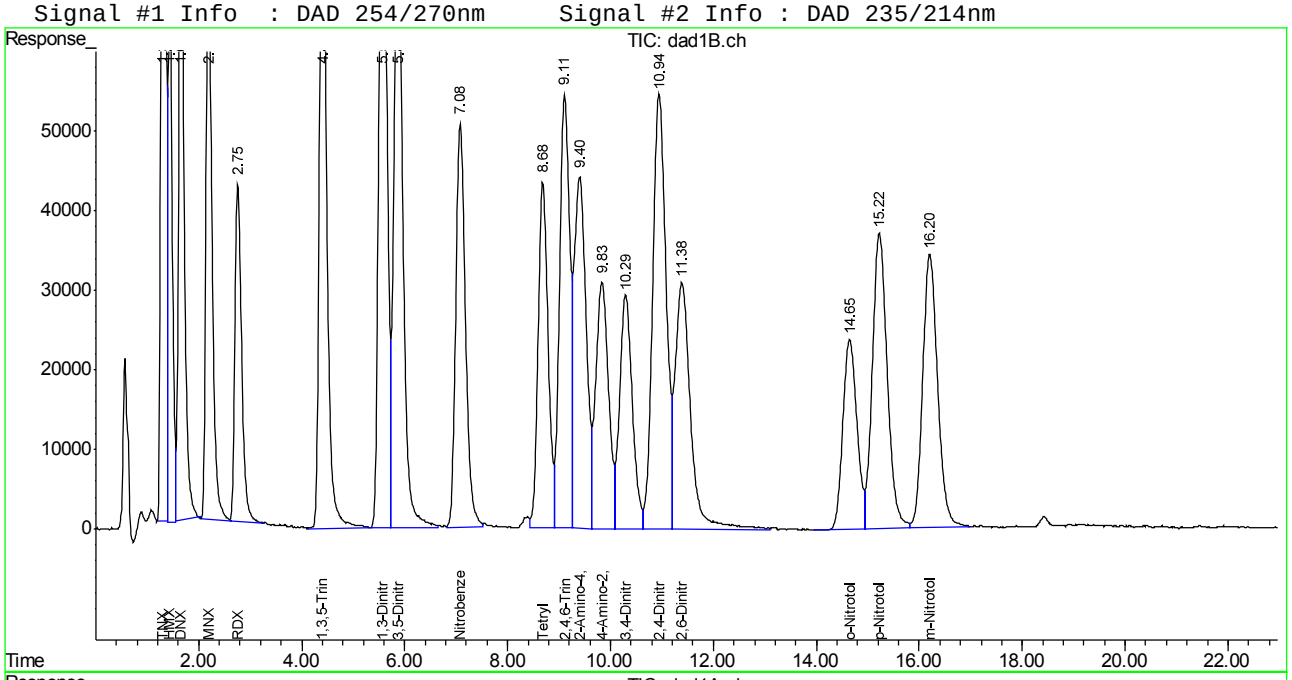
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059470.D 8330B_0419PLUS.M Fri Apr 20 08:01:24 2018 Page 1

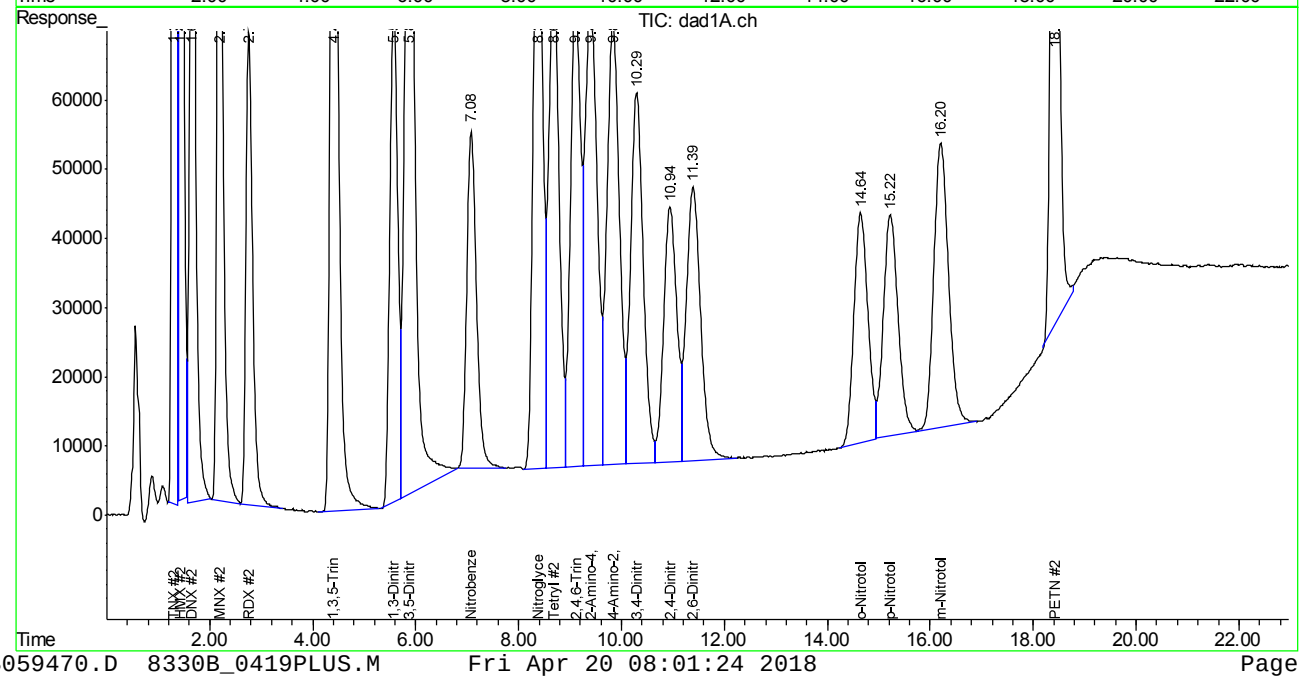
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:01 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

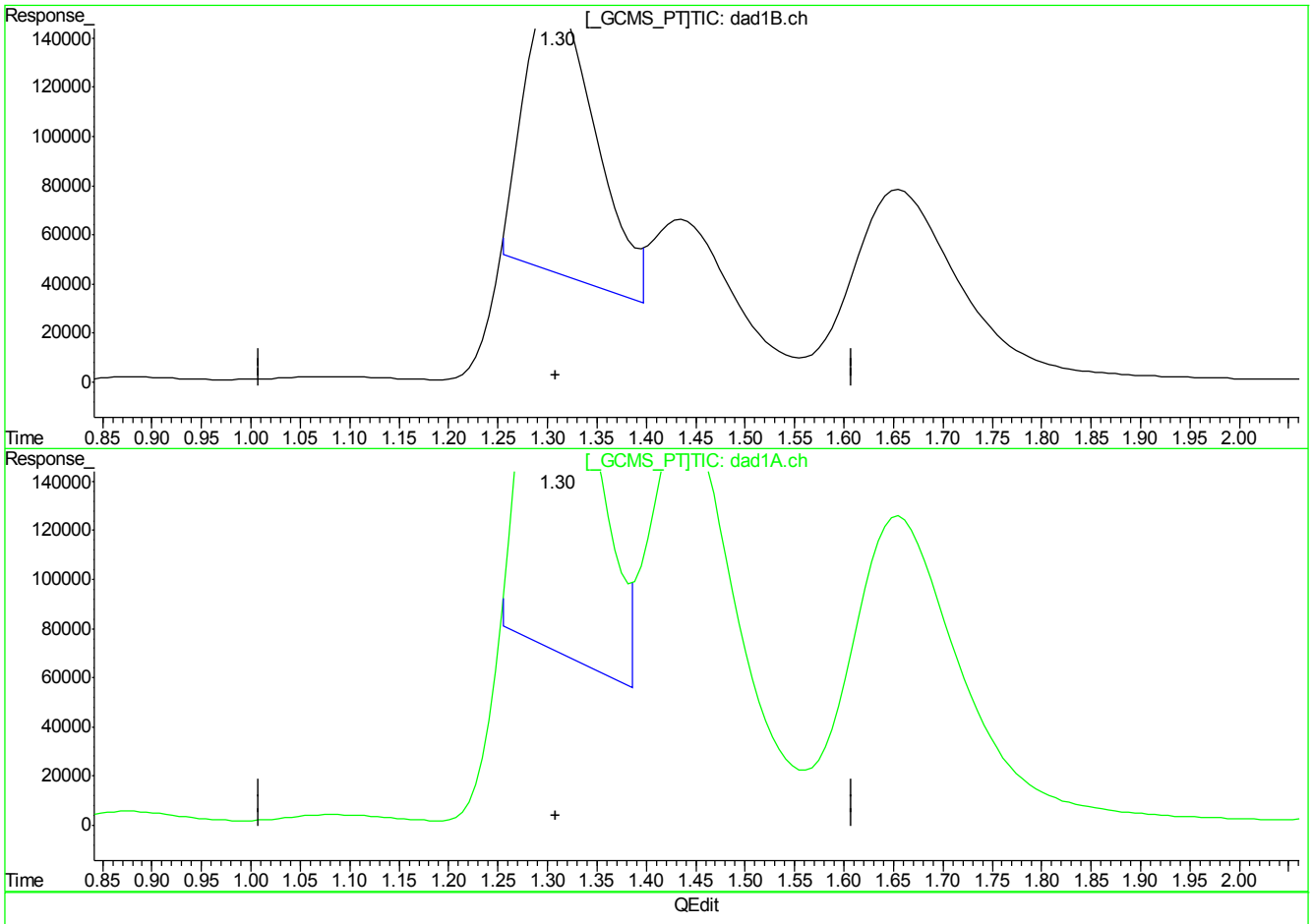
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059470.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 13:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.30	Poorly defined baseline
TNX		2	1.30	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.65	Poorly defined baseline
DNX		2	1.65	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.64	Poorly defined baseline
PETN	78-11-5	2	18.42	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 1109.709ppb

response 5631306

(1) TNX #2

1.31min 1083.207ppb

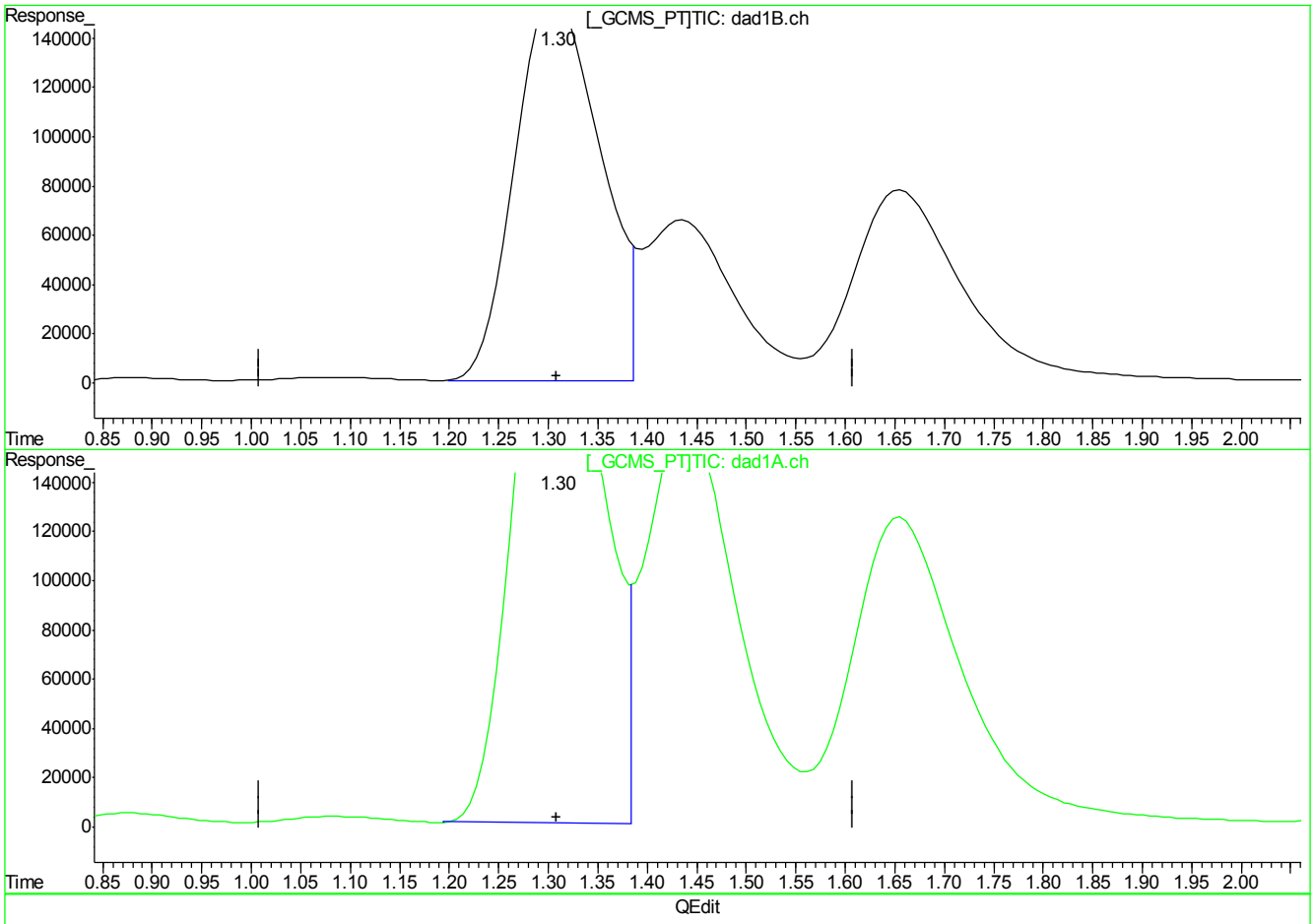
response 8442437

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(1) TNX

1.30min 1815.179ppb m

response 9211273

(1) TNX #2

1.30min 1859.350ppb m

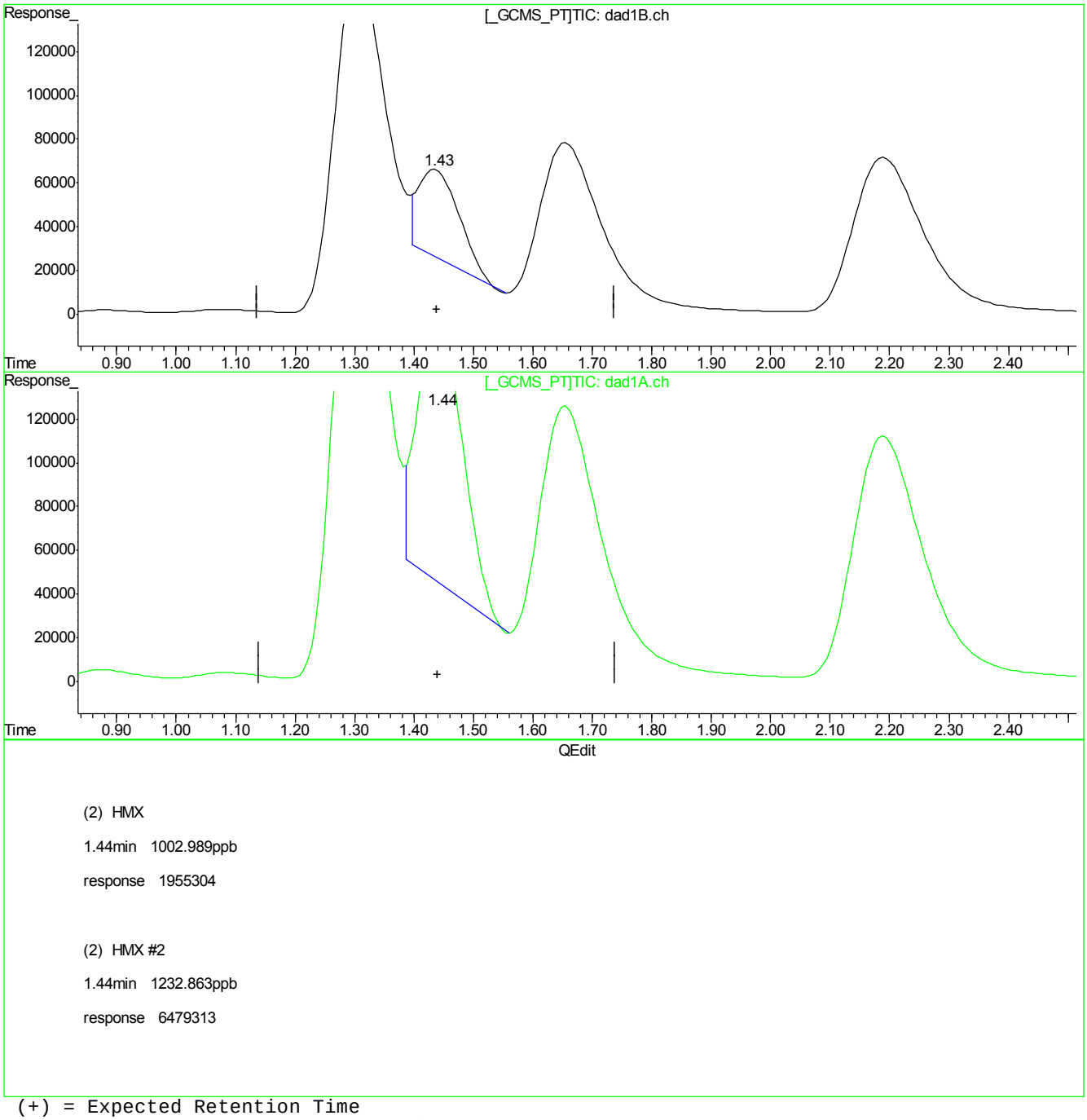
response 14491645

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 1002.989ppb

response 1955304

(2) HMX #2

1.44min 1232.863ppb

response 6479313

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:41 2018

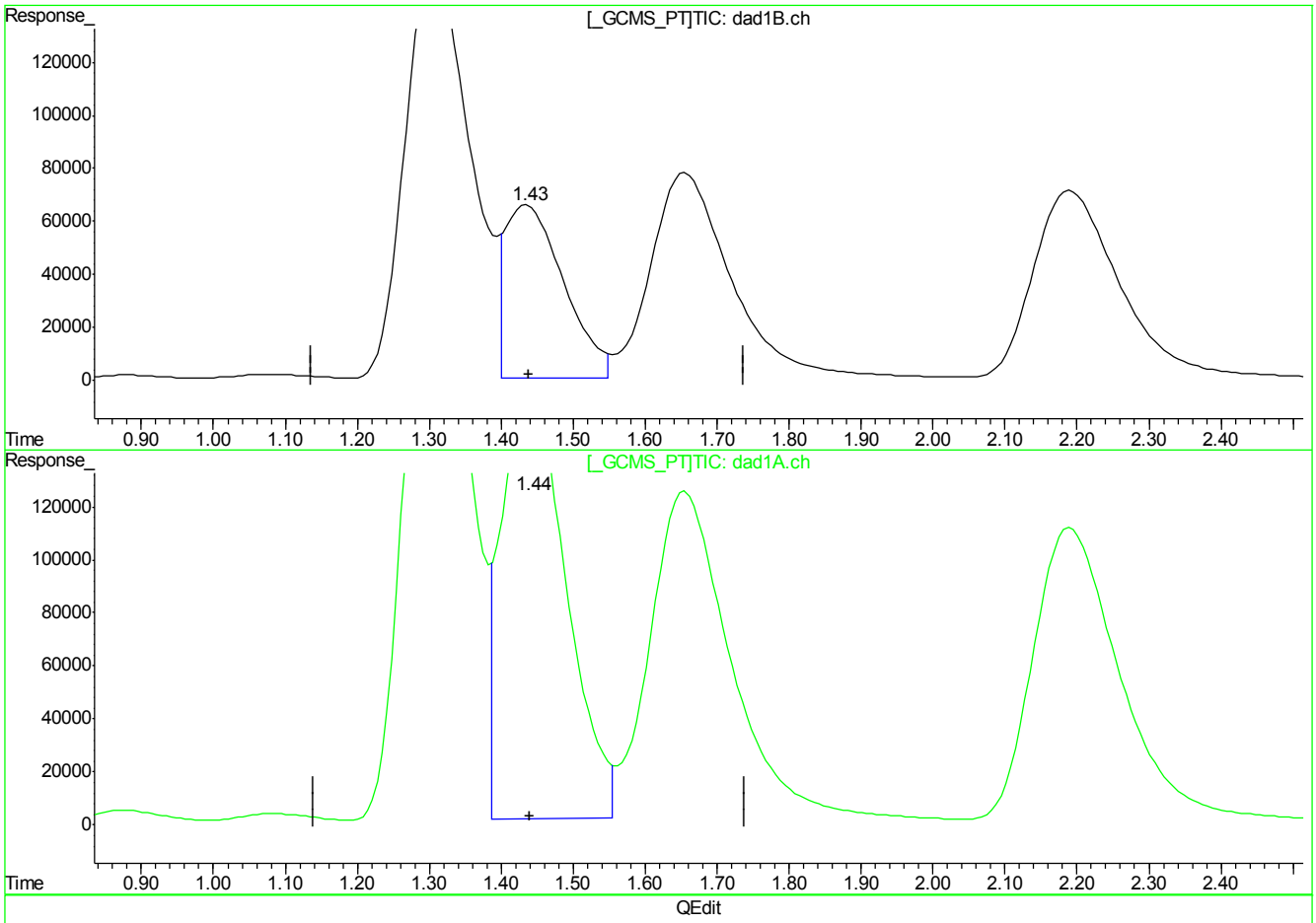
7.7.7.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(2) HMX

1.43min 1866.511ppb m

response 3638718

(2) HMX #2

1.44min 1915.946ppb m

response 10069253

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:03 2018

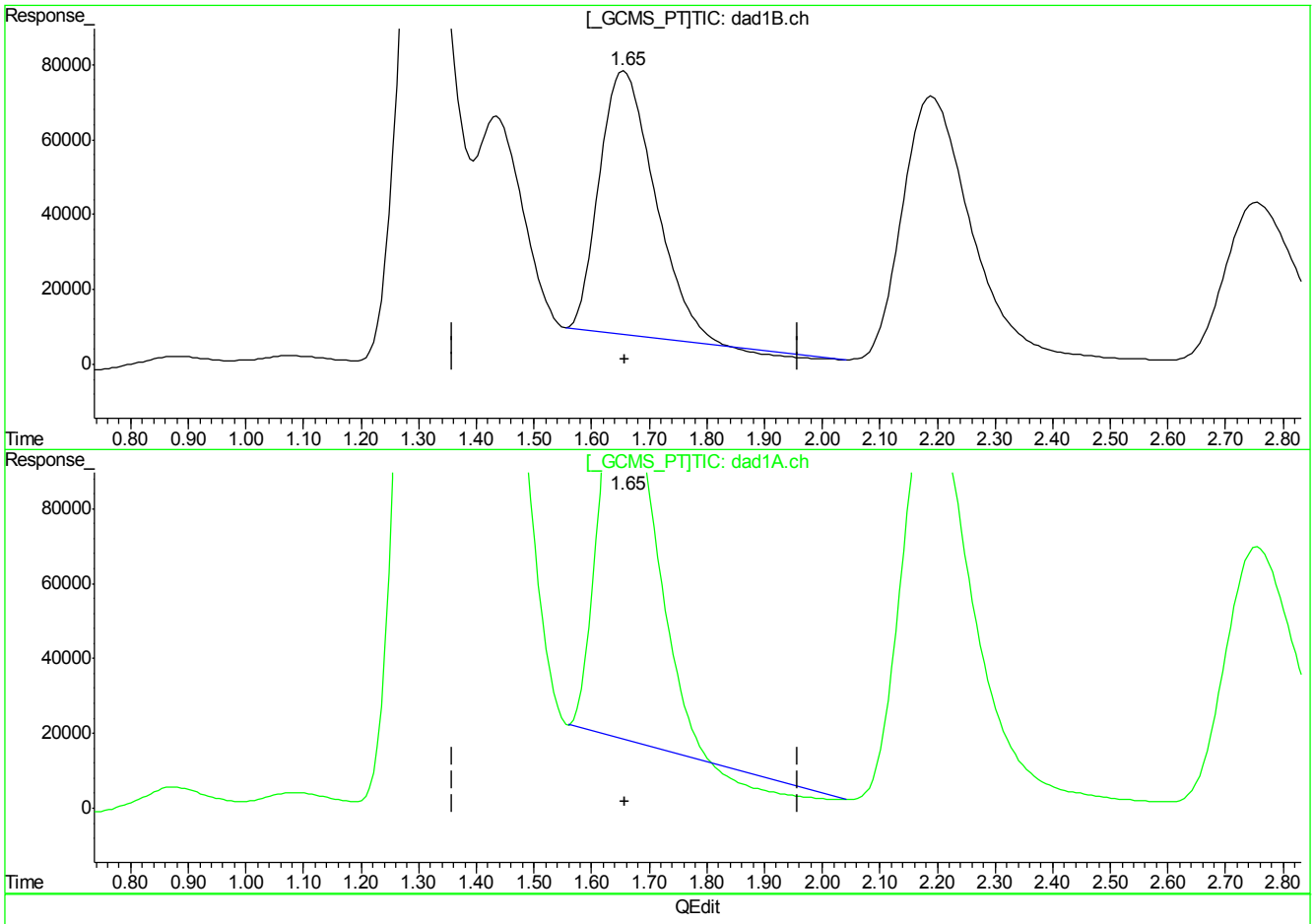
7.7.7.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 1610.843ppb

response 4665343

(3) DNX #2

1.66min 1430.253ppb

response 6701954

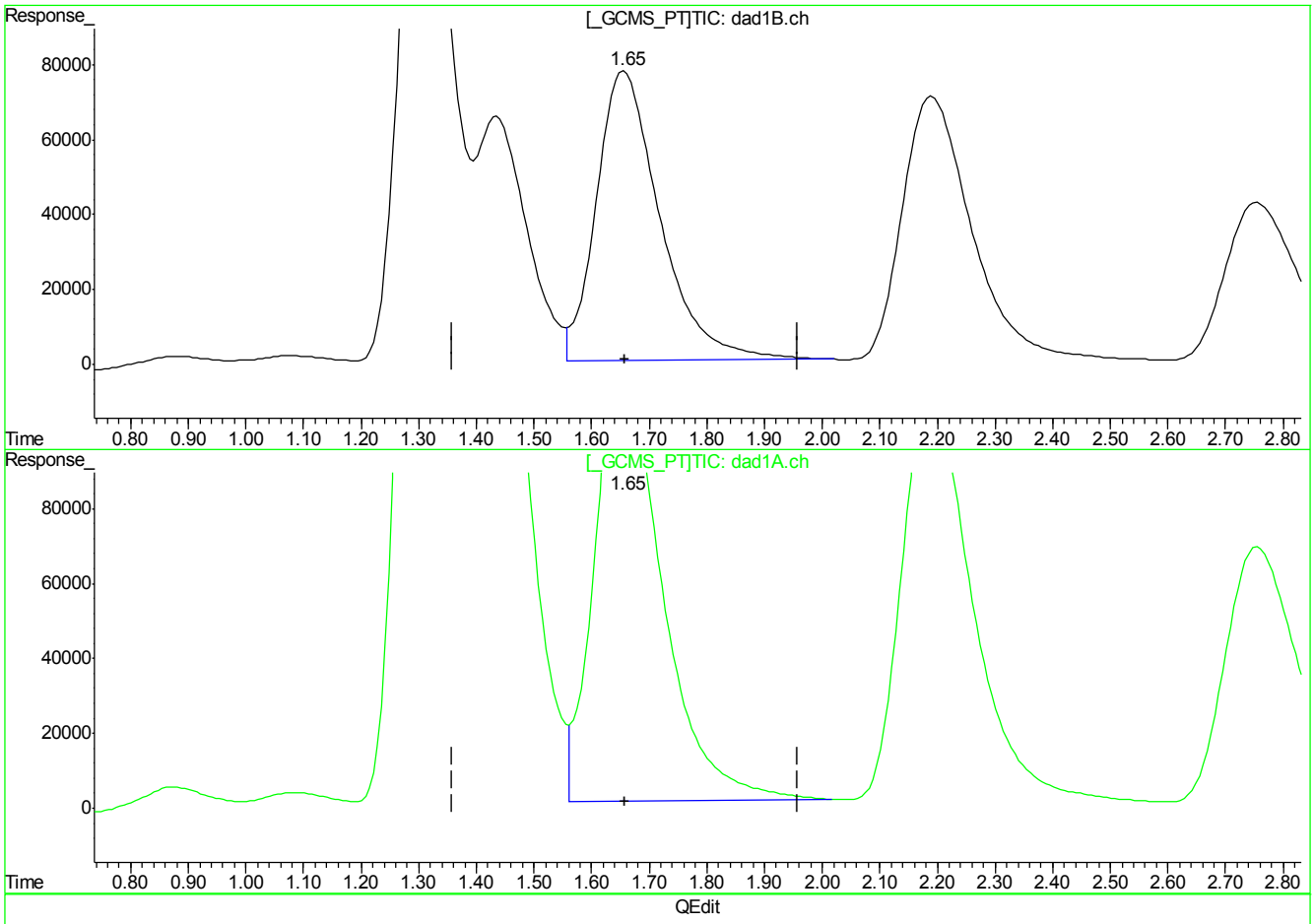
(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:06 2018

BB059470.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(3) DNX

1.65min 2047.638ppb m

response 5892557

(3) DNX #2

1.65min 2063.804ppb m

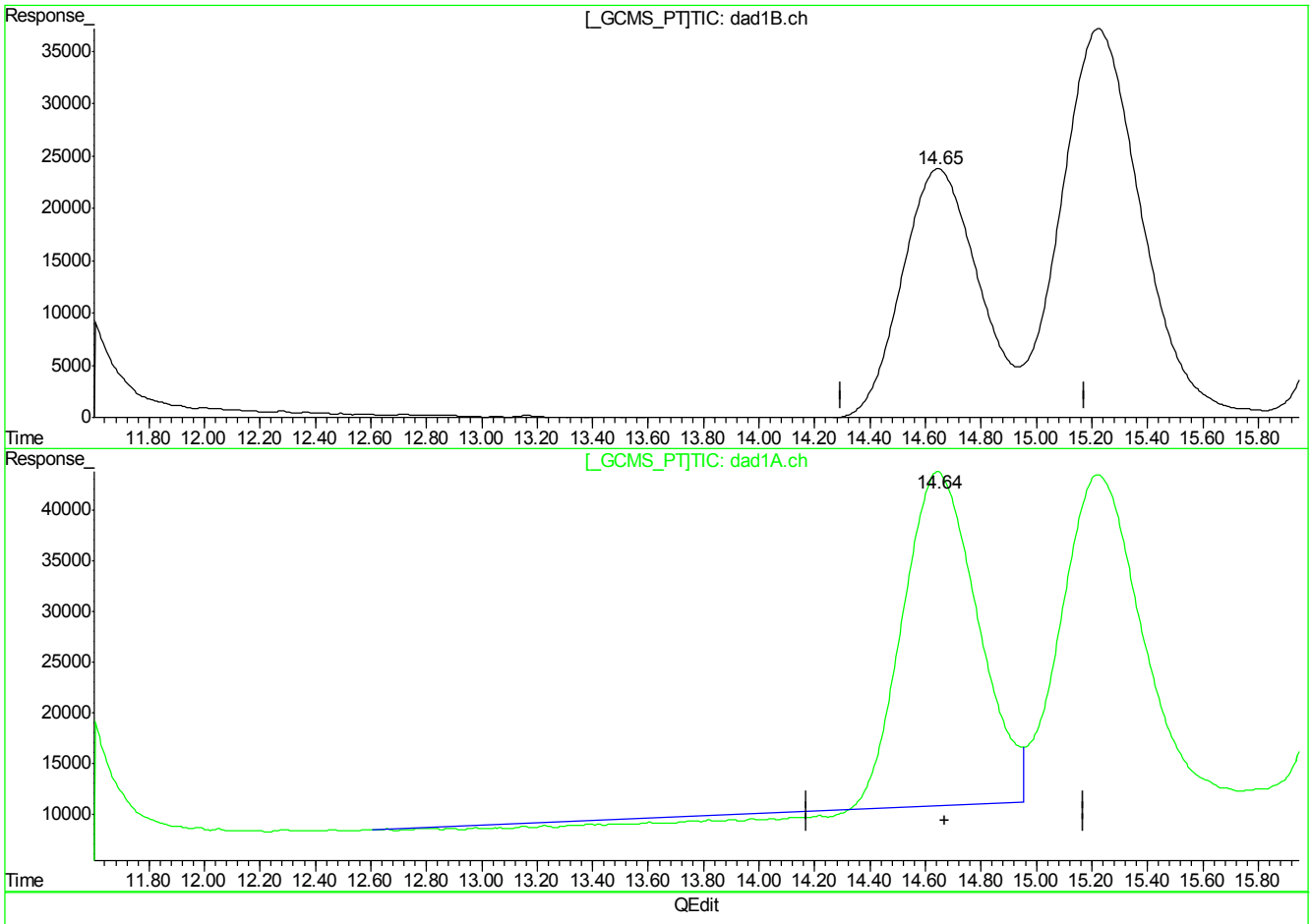
response 9584014

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.65min 1818.018ppb

response 4539267

(18) o-Nitrotoluene #2

14.65min 1563.768ppb

response 5703940

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:30 2018

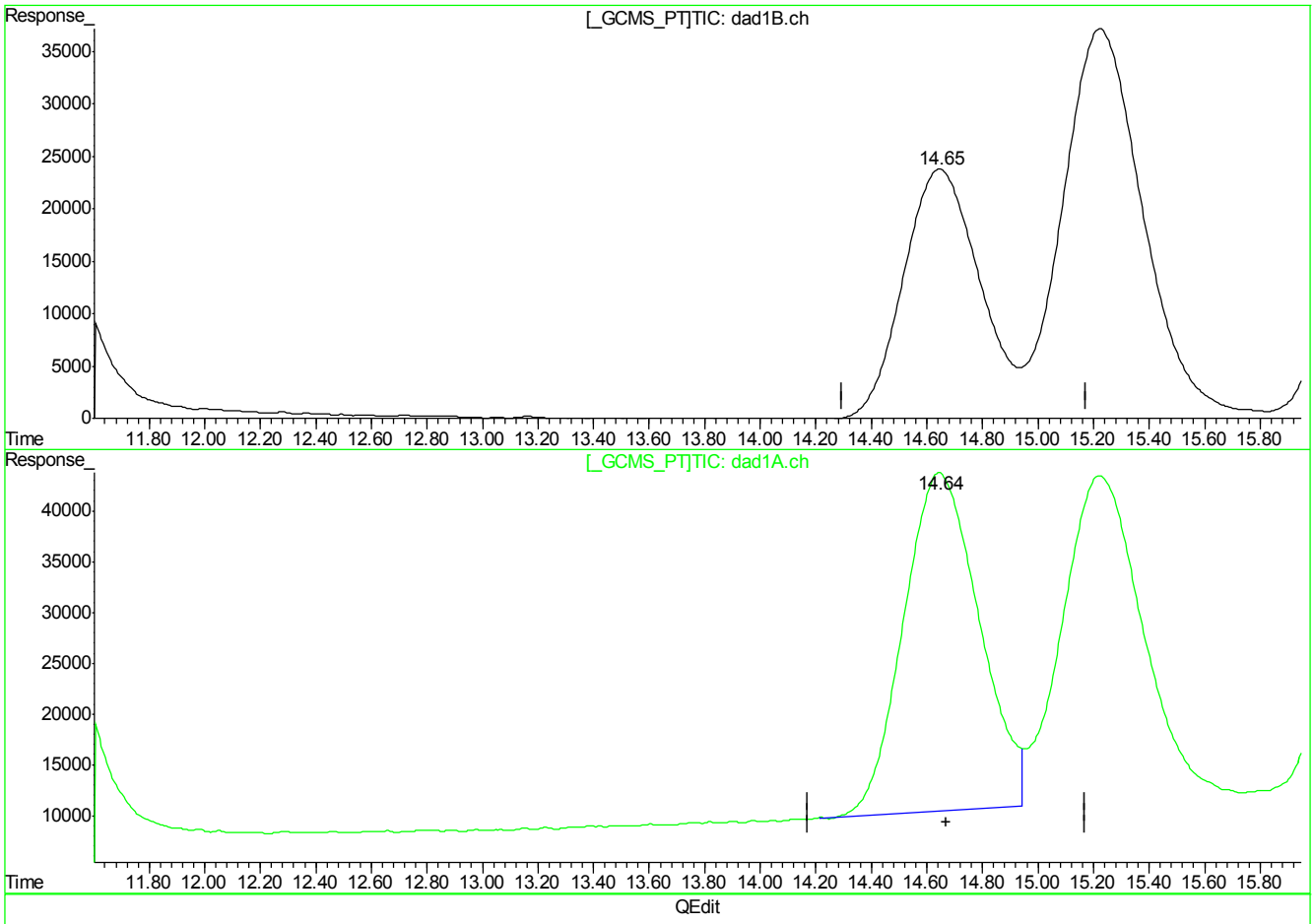
7.7.7.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.65min 1818.018ppb

response 4539267

(18) o-Nitrotoluene #2

14.64min 1726.825ppb m

response 6298701

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:34 2018

7.7.7.9

7

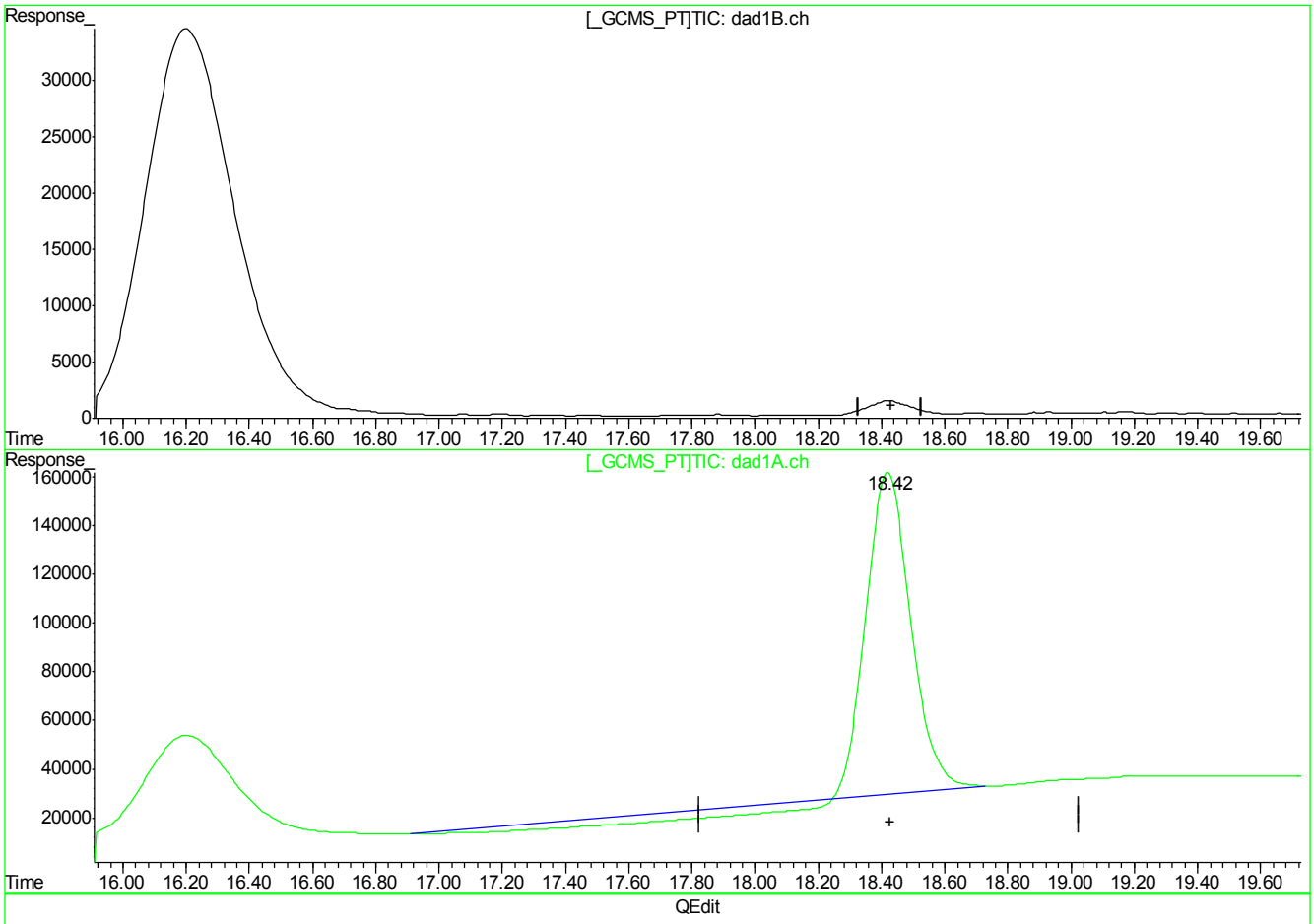
FA53725

BB059470.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 7800.062ppb

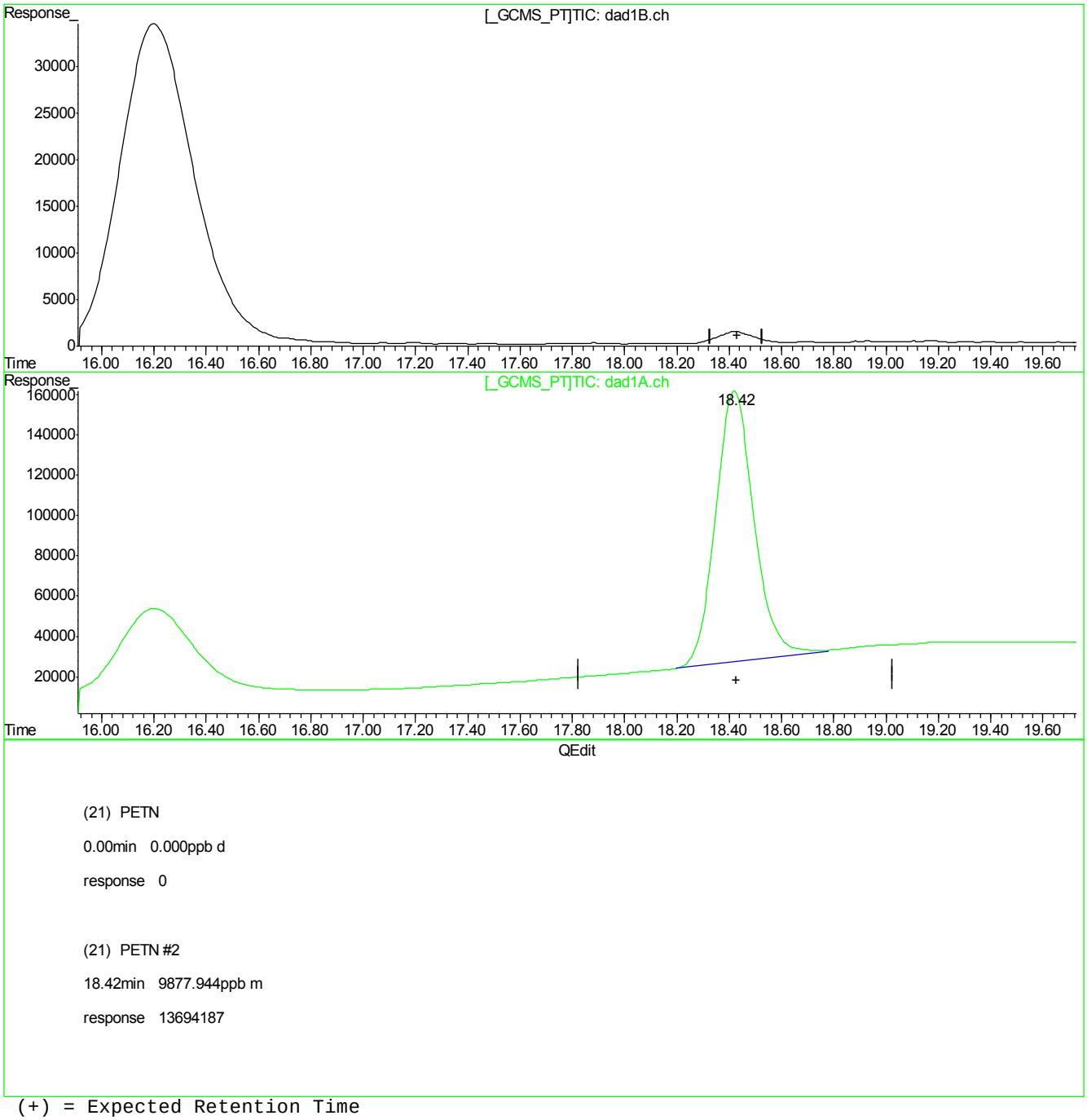
response 10813536

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 9877.944ppb m

response 13694187

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:42 2018

7.7.7.11

7

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10:27 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.31	1.31	2155539	3284215	446.785m	442.711m
2)	HMX	1.44	1.44	891952	2552992	476.953m	502.668m
3)	DNX	1.66	1.66	1290432	2187865	416.669m	466.541m
4)	MNX	2.20	2.20	1289423	2023915	416.410	435.357
5)	RDX	2.76	2.76	867810	1446810	405.824	435.262
6)	1,3,5-Trinitrobe	4.41	4.41	1916834	3674065	440.520	440.109
7)	1,3-Dinitrobenze	5.58	5.57	2298814	1577744	414.651	423.626m
8)	3,5-Dinitroanili	5.87	5.87	2197319	3639339	449.315	486.621
9)	Nitrobenzene	7.09	7.09	1561002	1457542	428.399	439.568
10)	Nitroglycerin	0.00	8.38	0	3011271	N.D. d	2349.932
11)	Tetryl	8.69	8.68	1316922	2243689	447.453	431.996
12)	2,4,6-Trinitroto	9.11	9.11	1546722	1951756	366.508	430.591
13)	2-Amino-4,6-Dini	9.41	9.42	1651187	2548623	436.189	475.149
14)	4-Amino-2,6-Dini	9.85	9.85	1245755	2592637	475.168	500.329
16)	2,4-Dinitrotolue	10.95	10.96	2209091	1353341	419.899	458.258
17)	2,6-Dinitrotolue	11.40	11.41	1413935	1713574	409.093	501.832
18)	o-Nitrotoluene	14.66	14.65	1040298	1453747	416.479	443.790m
19)	p-Nitrotoluene	15.24	15.25	1618644	1443654	410.091	458.274
20)	m-Nitrotoluene	16.22	16.22	1558816	1910959	436.986	474.905
21)	PETN	0.00	18.42	0	3478321	N.D. d	2504.495m

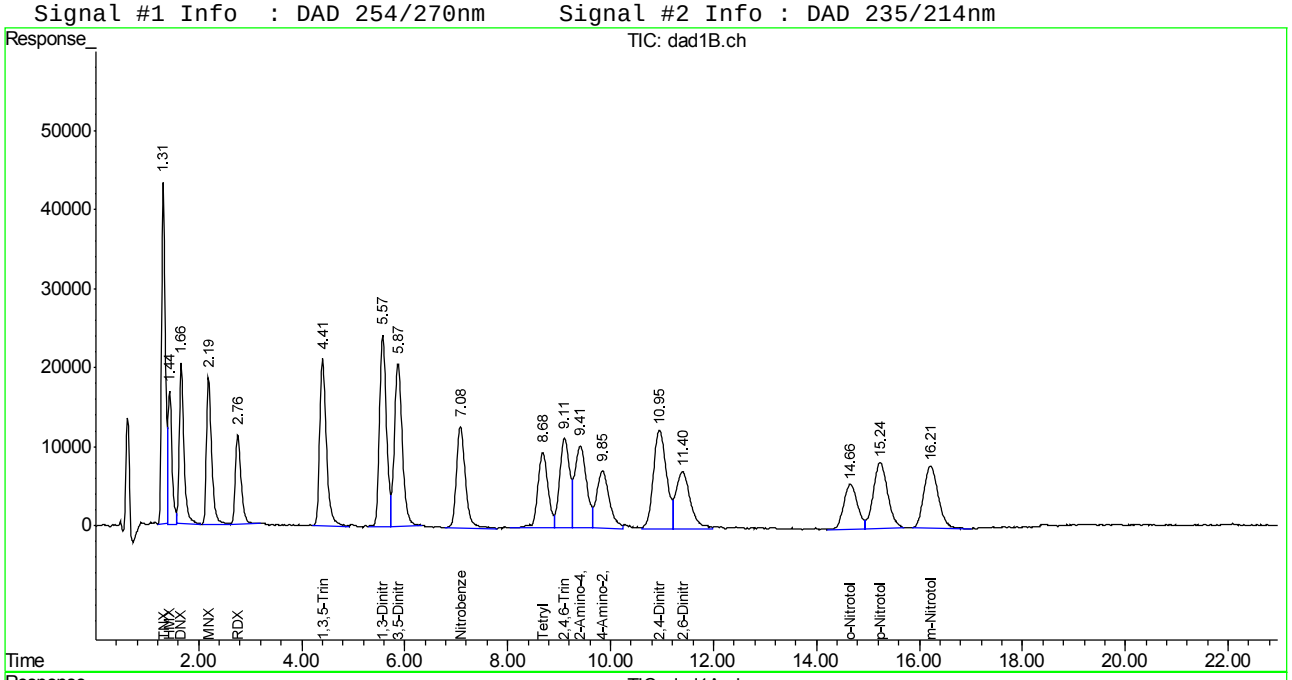
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059471.D 8330B_0419PLUS.M Mon Apr 23 08:16:05 2018 Page 1

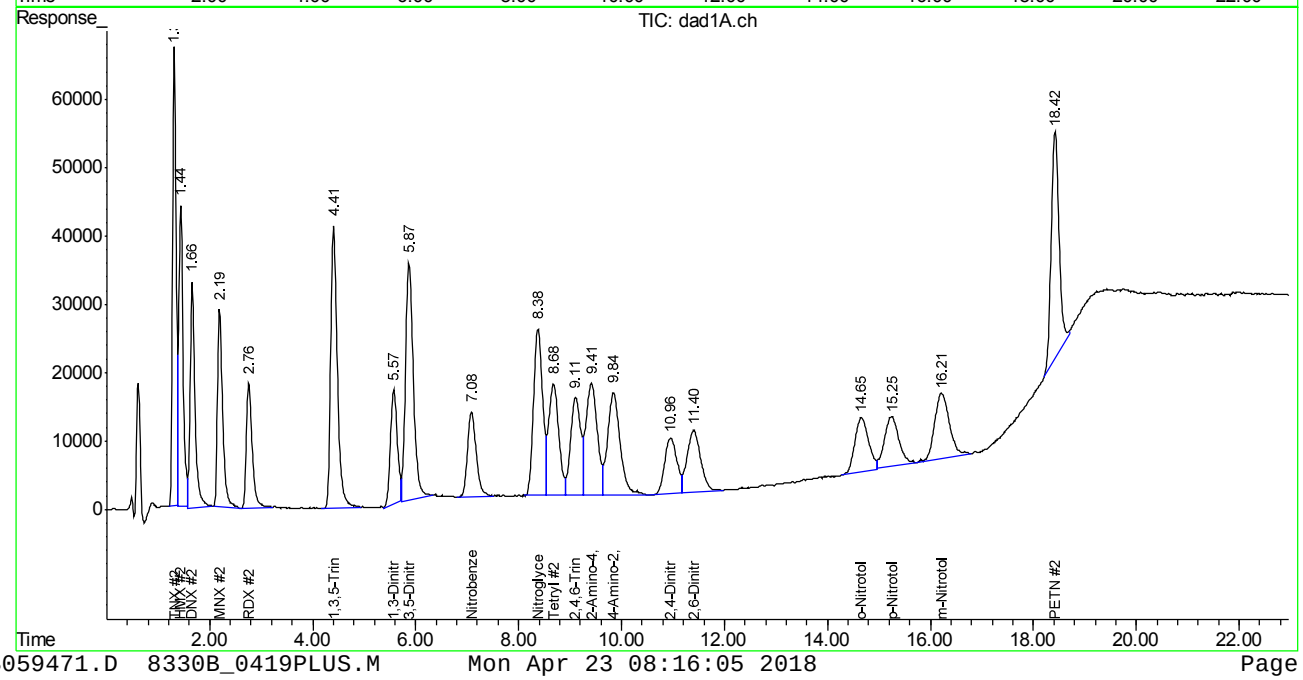
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:43 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

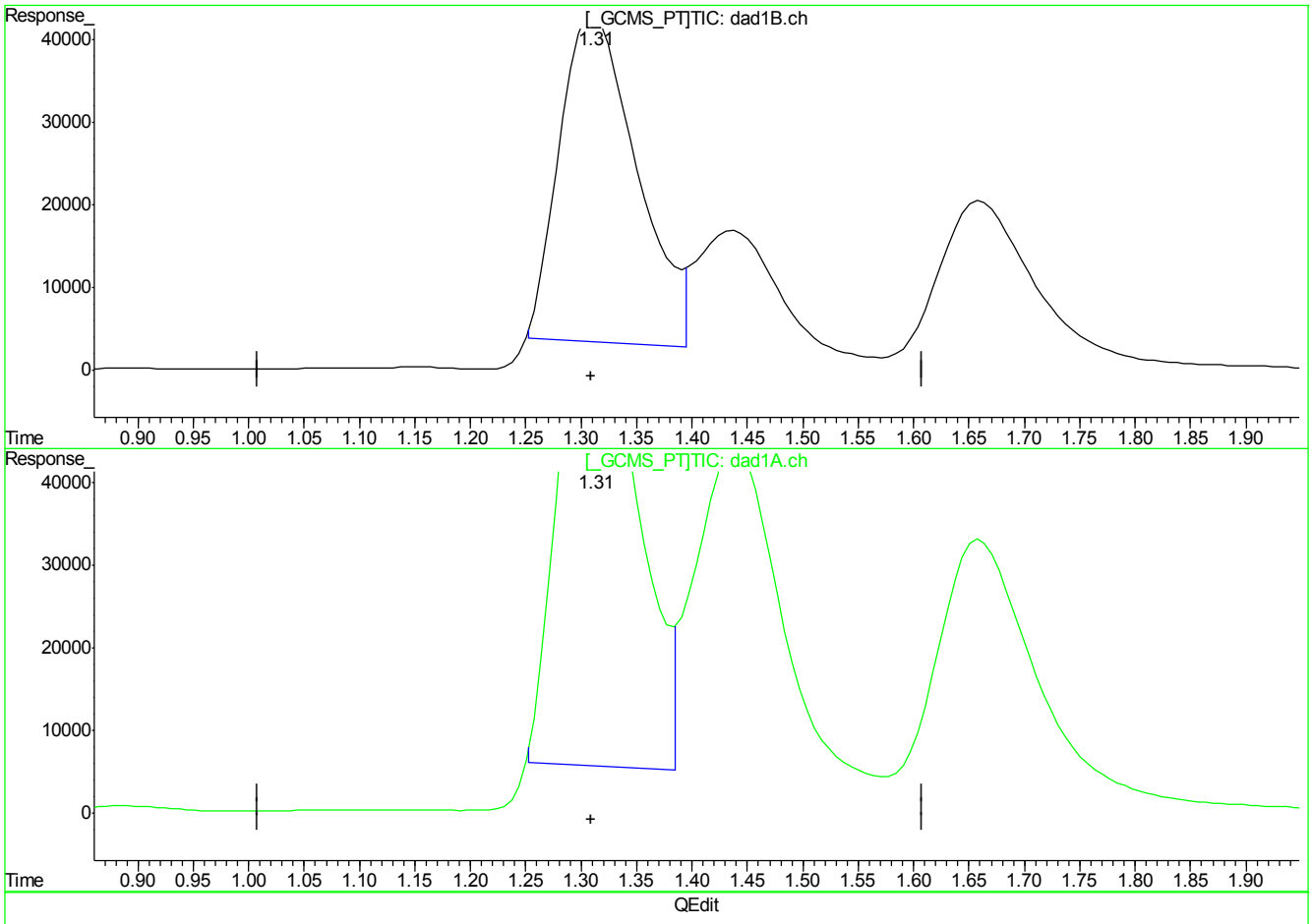
Sample Number:	GBB1722-ICV1722	**Method:**	SW846 8330B
Lab FileID:	BB059471.D	**Analyst approved:**	04/23/18 08:17 Evita Martinez
Injection Time:	04/19/18 13:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.57	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.65	Poorly defined baseline
PETN	78-11-5	2	18.42	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 394.963ppb

response 1905519

(1) TNX #2

1.31min 386.665ppb

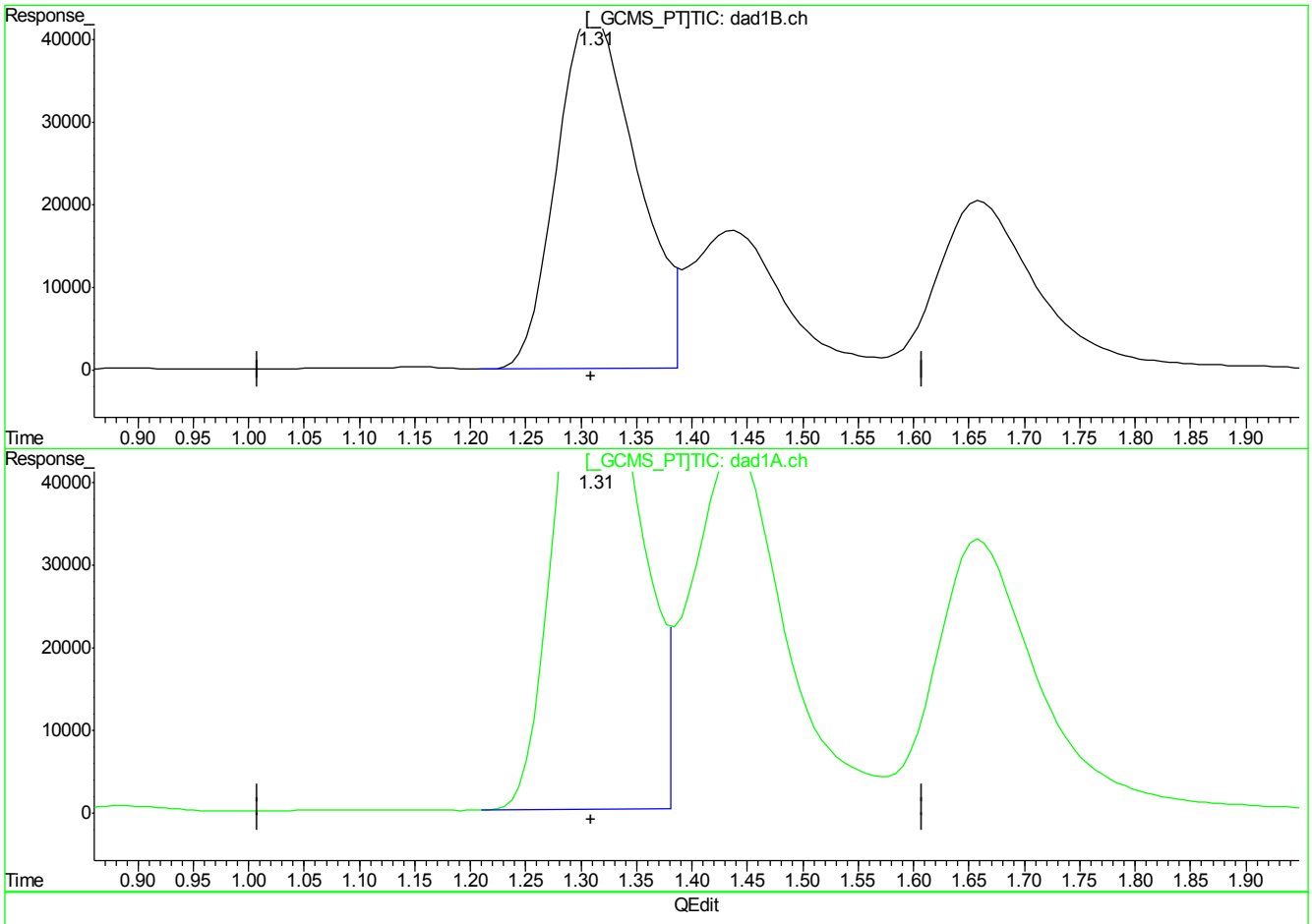
response 2868446

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:26 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 446.785ppb m

response 2155539

(1) TNX #2

1.31min 442.711ppb m

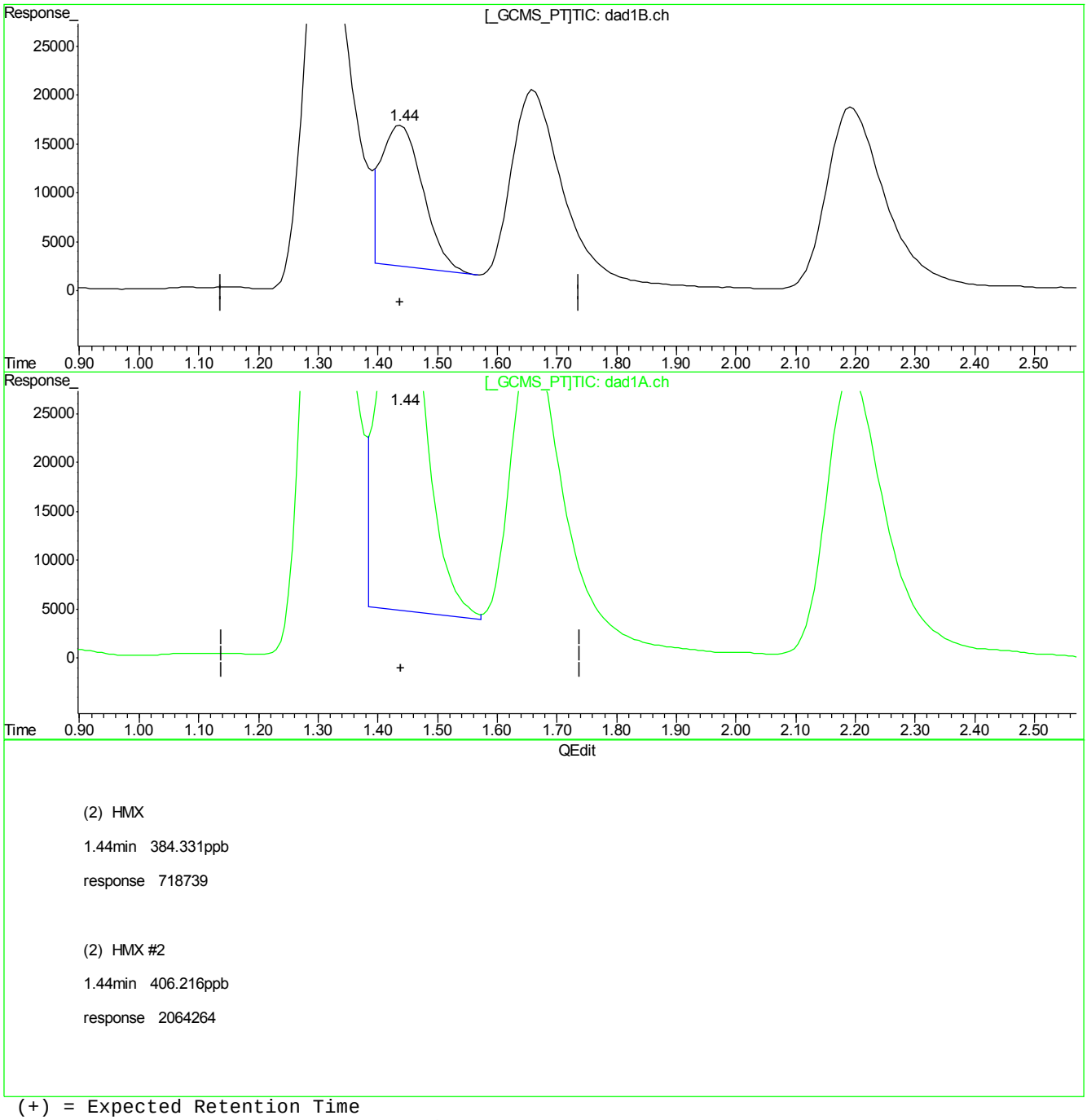
response 3284215

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 384.331ppb

response 718739

(2) HMX #2

1.44min 406.216ppb

response 2064264

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:41 2018

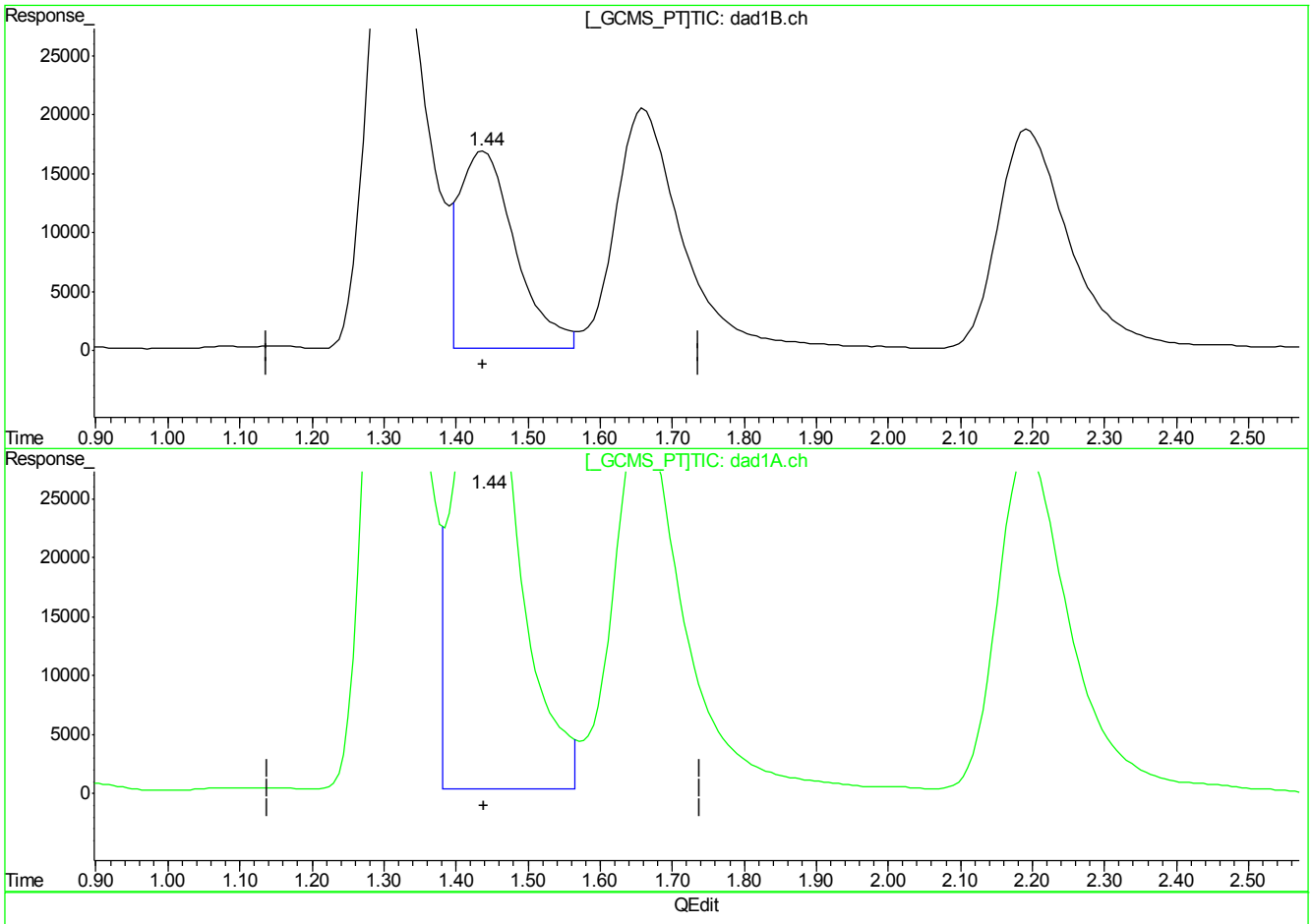
7.7.8.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 476.953ppb m

response 891952

(2) HMX #2

1.44min 502.668ppb m

response 2552992

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:10 2018

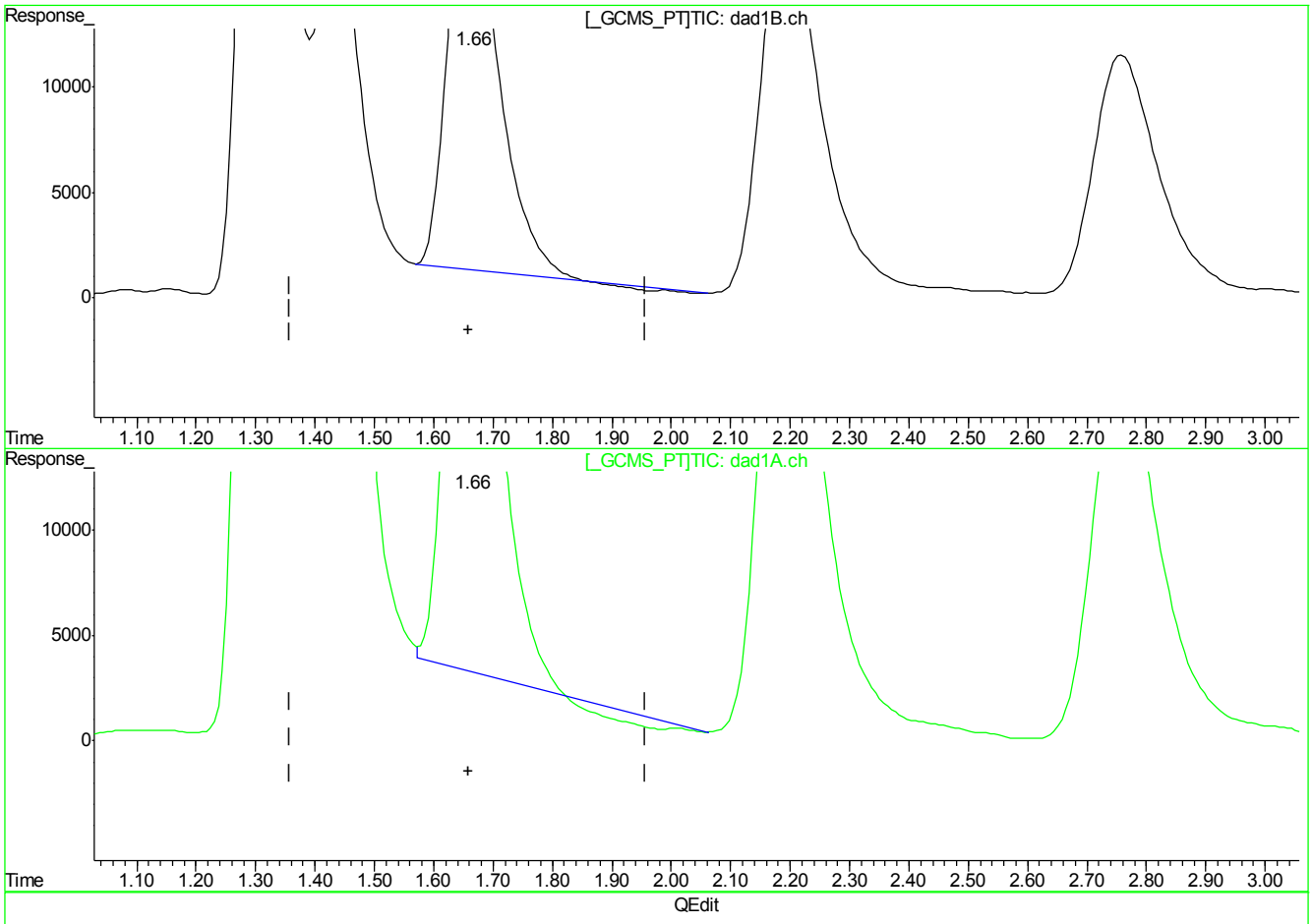
7.7.8.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 353.884ppb

response 1095983

(3) DNX #2

1.66min 351.062ppb

response 1643602

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:15 2018

7.7.8.9

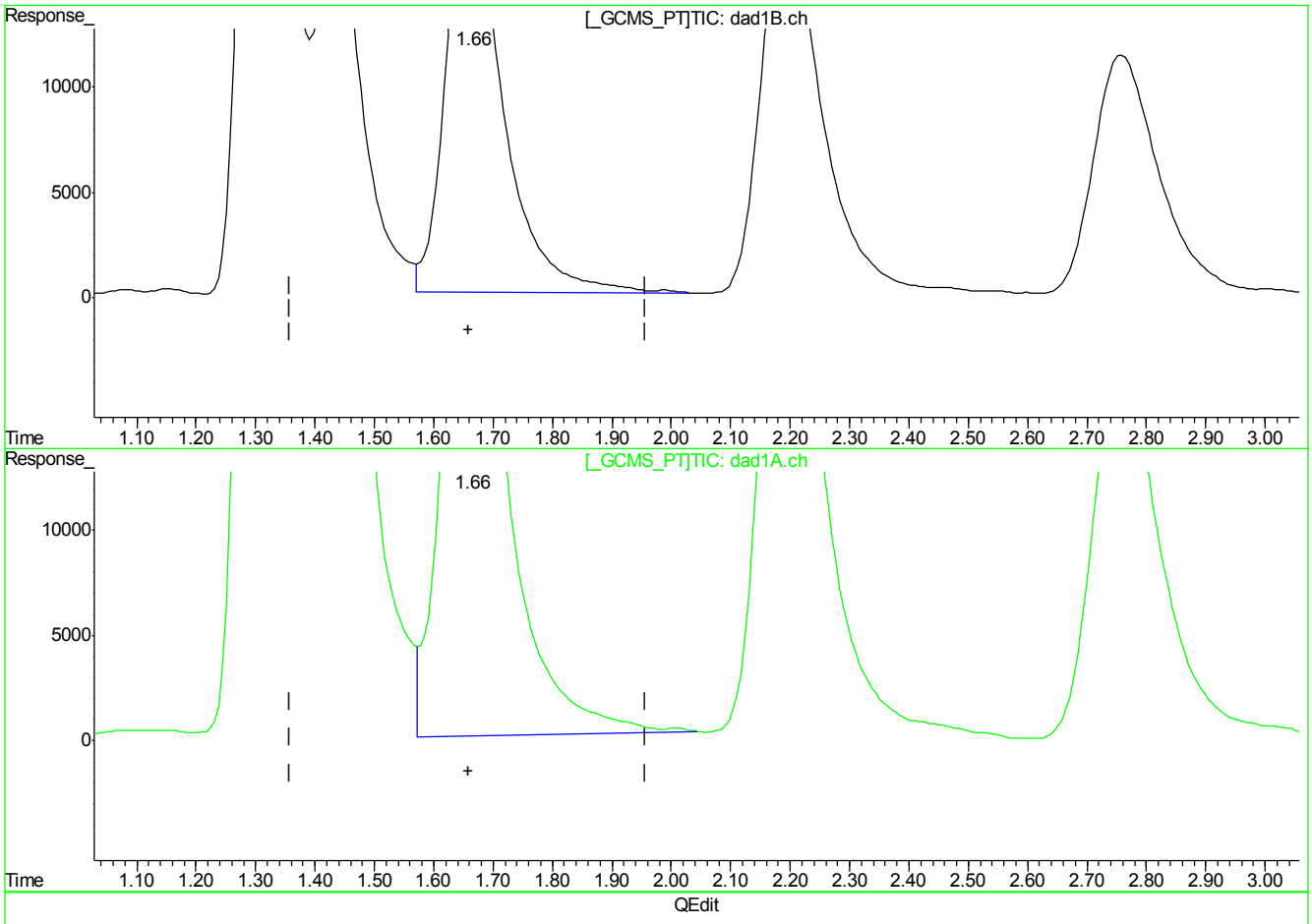
7

BB059471.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 416.669ppb m

response 1290432

(3) DNX #2

1.66min 466.541ppb m

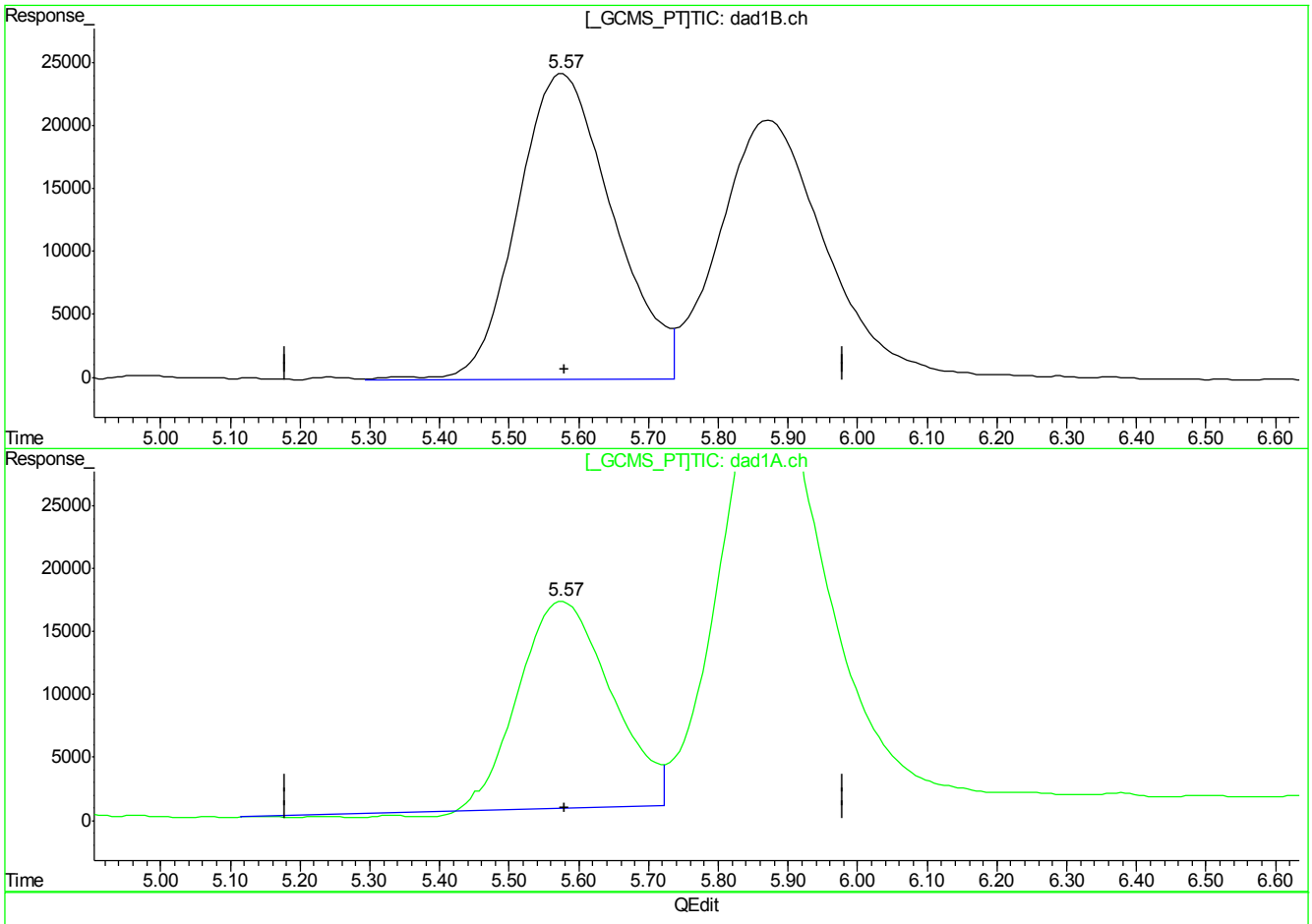
response 2187865

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.58min 414.651ppb

response 2298814

(7) 1,3-Dinitrobenzene #2

5.58min 399.114ppb

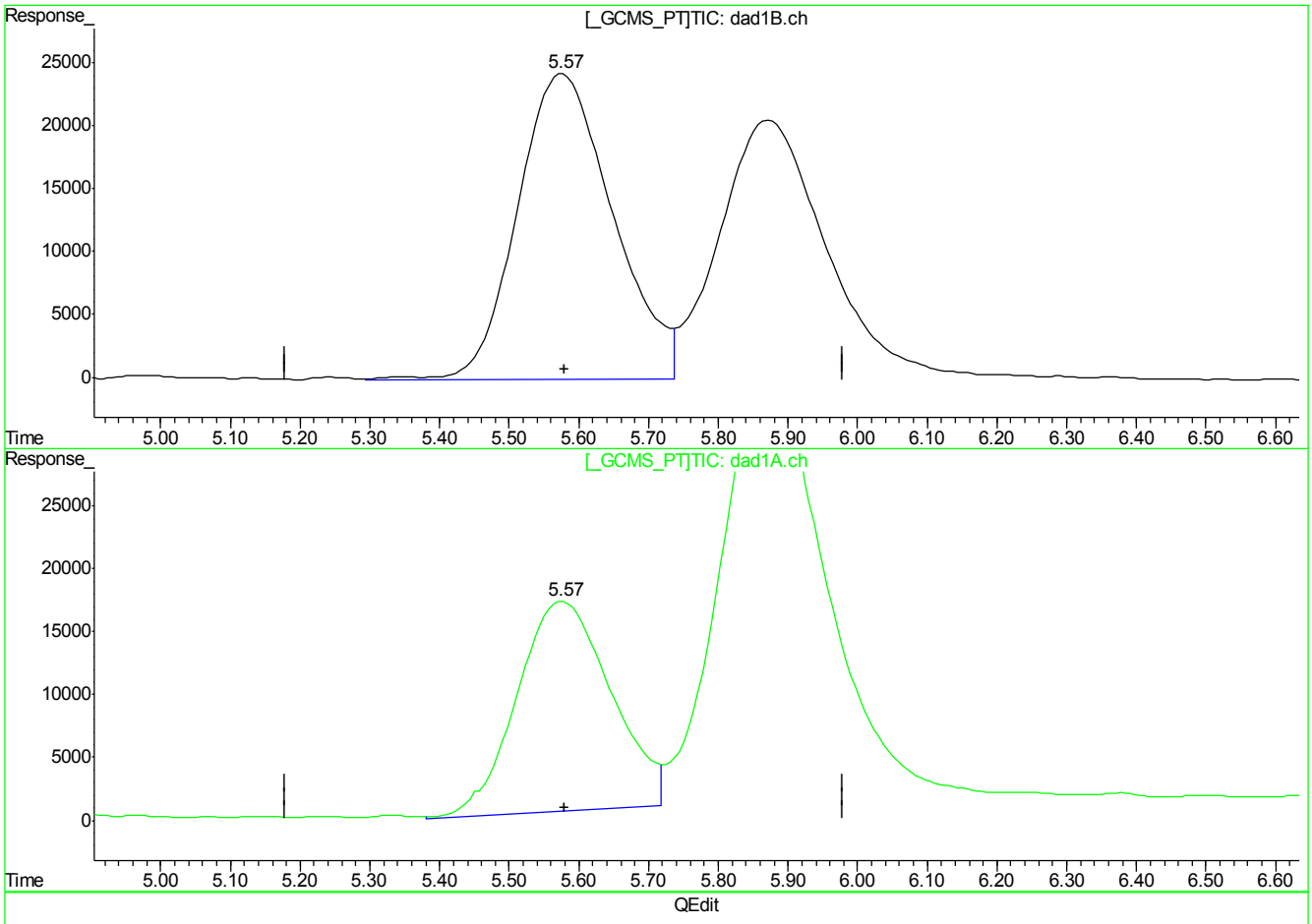
response 1486450

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:33 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.58min 414.651ppb

response 2298814

(7) 1,3-Dinitrobenzene #2

5.57min 423.626ppb m

response 1577744

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:37 2018

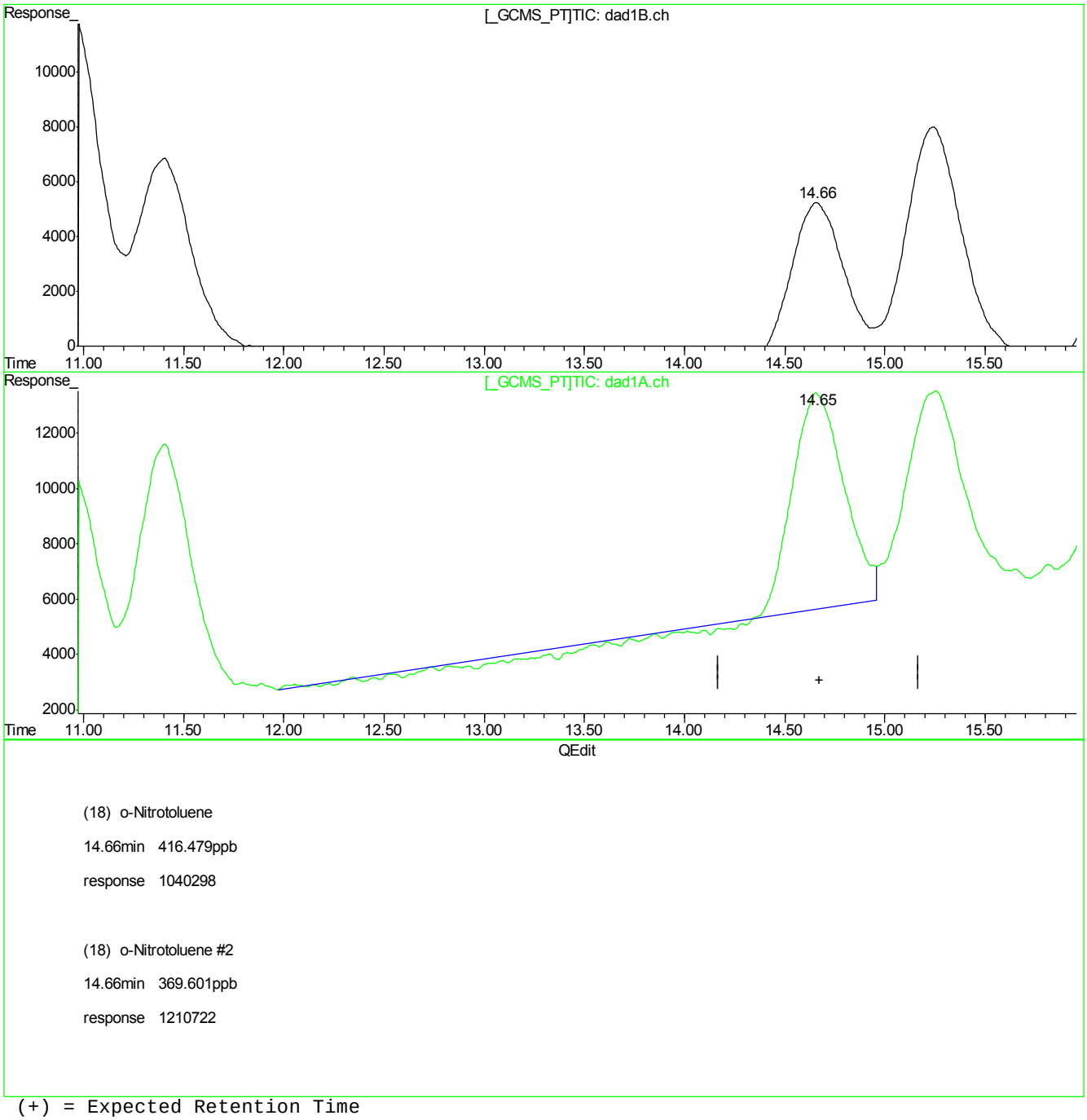
7.7.8.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.66min 416.479ppb

response 1040298

(18) o-Nitrotoluene #2

14.66min 369.601ppb

response 1210722

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:49 2018

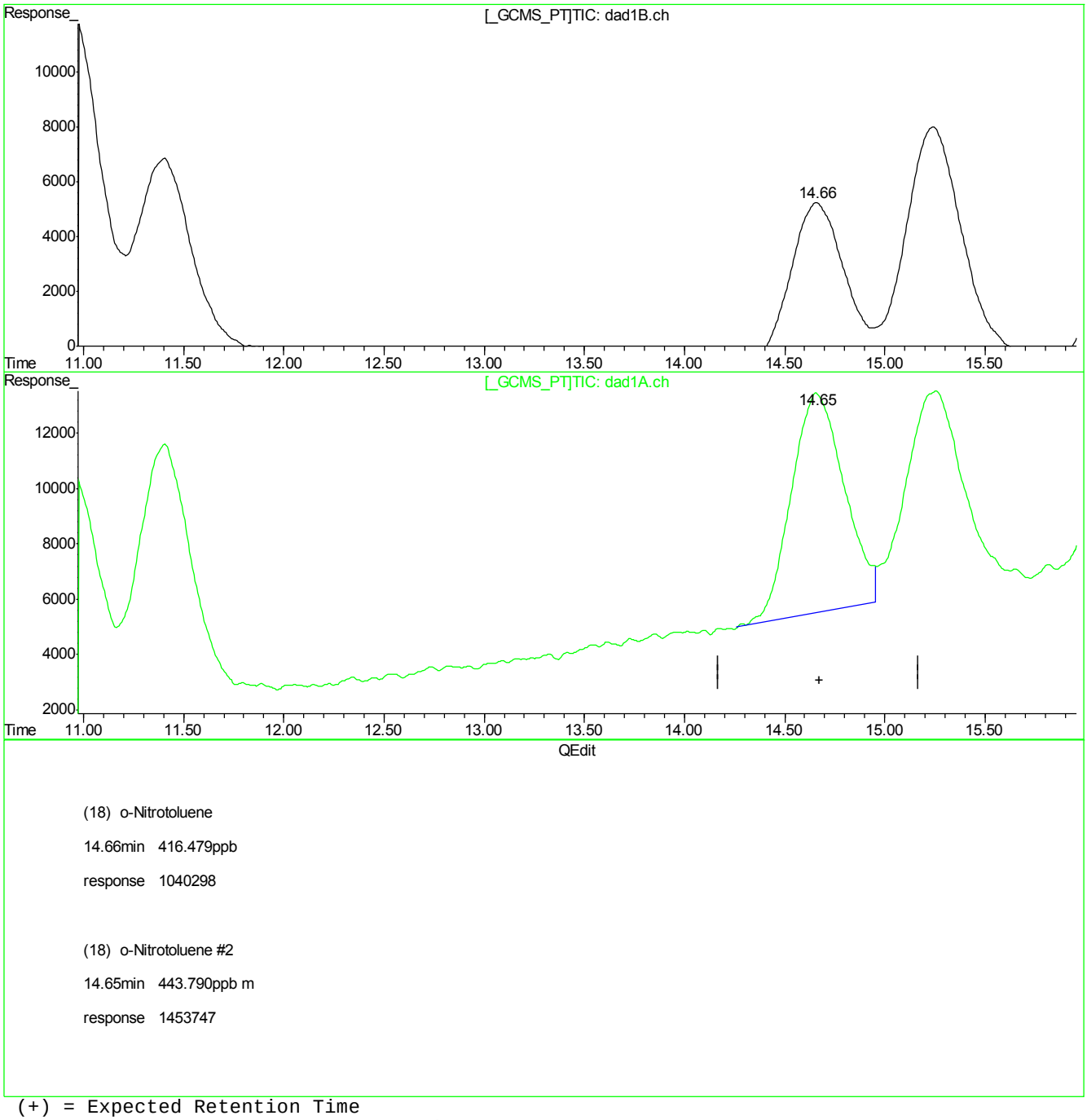
7.7.8.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.66min 416.479ppb

response 1040298

(18) o-Nitrotoluene #2

14.65min 443.790ppb m

response 1453747

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:53 2018

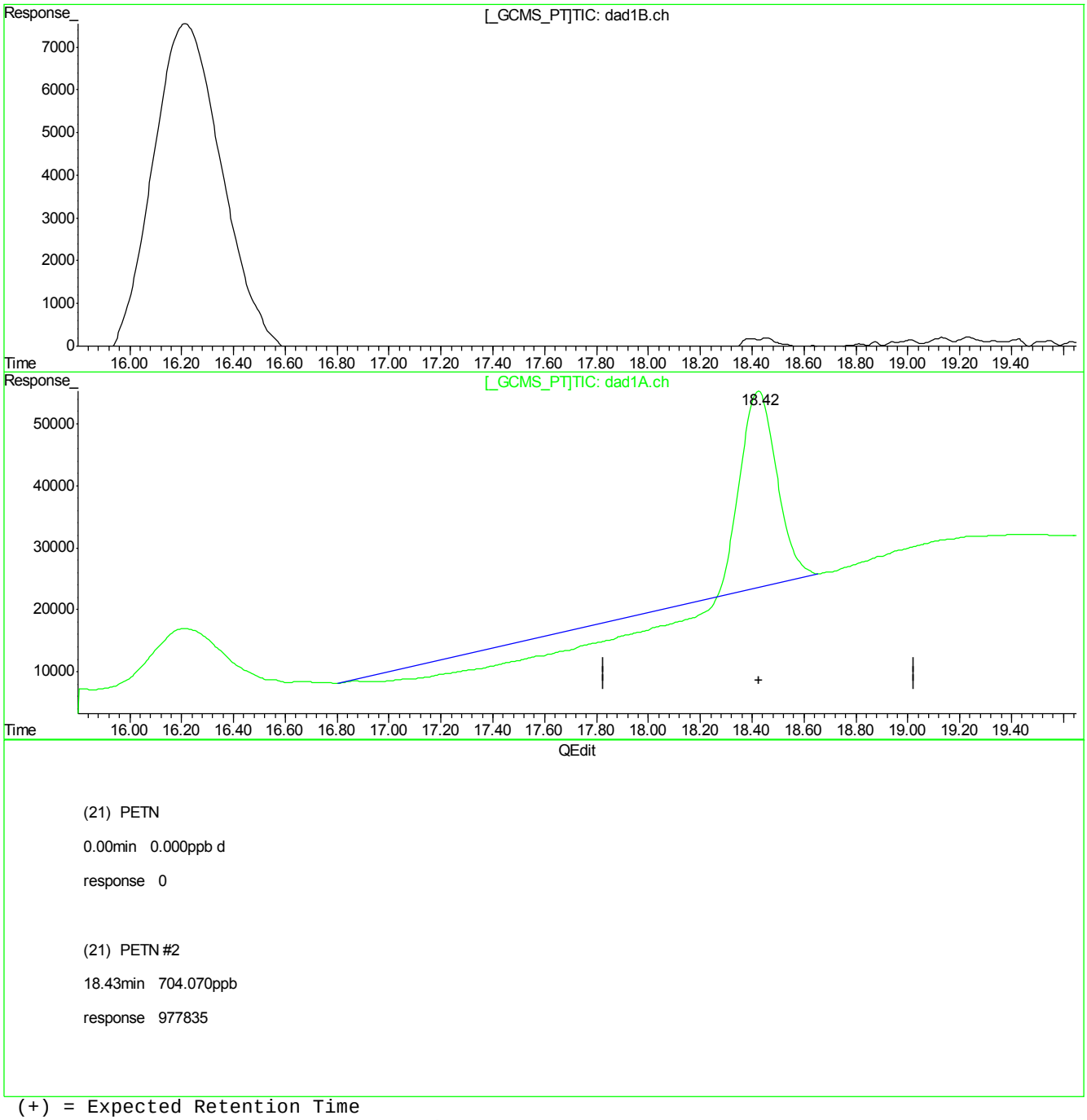
7.7.8.11

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 704.070ppb

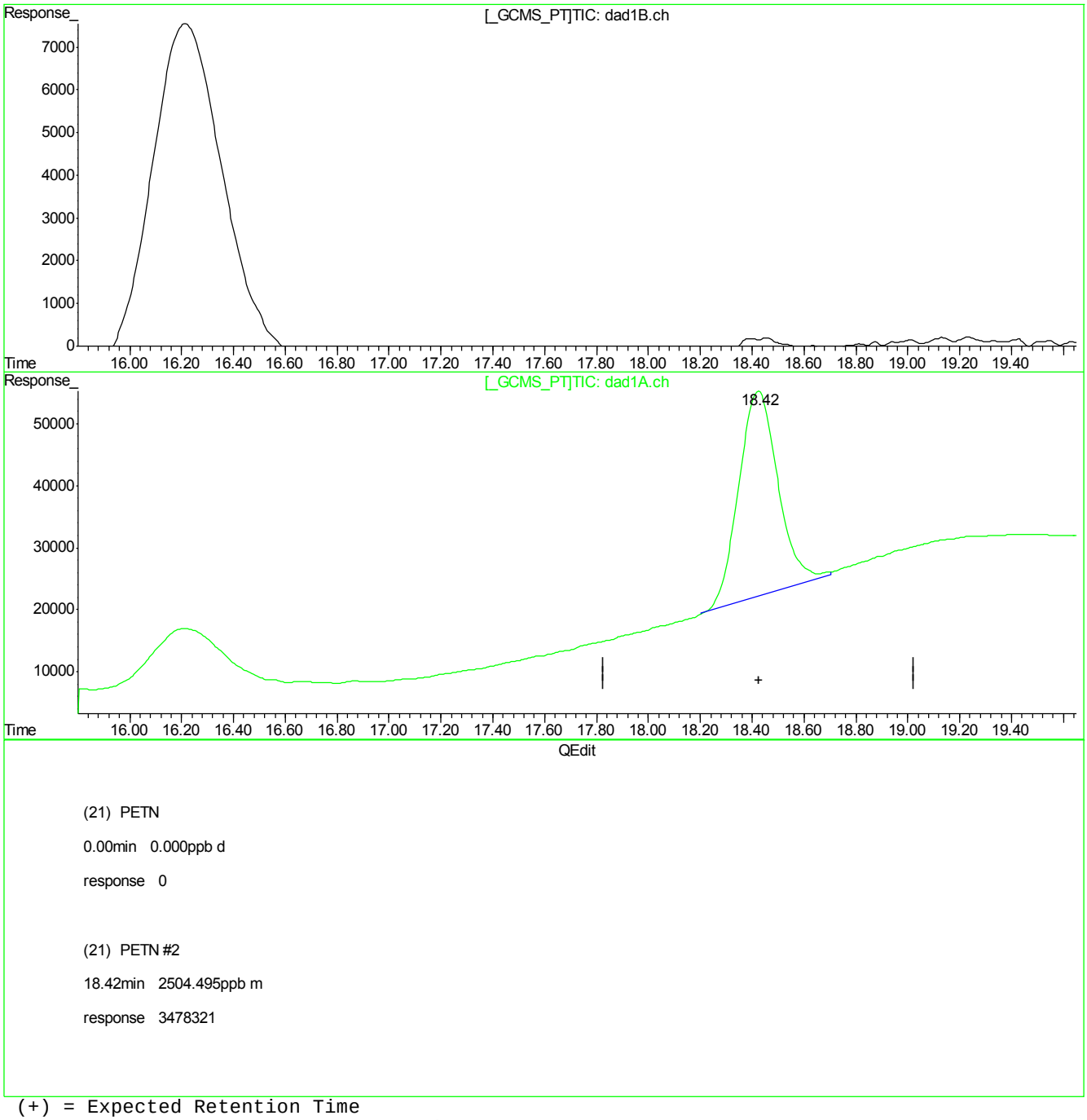
response 977835

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 2504.495ppb m

response 3478321

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:58 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/01/18 17:21

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 01 06:55:53 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.40	10.40	2533284	4429698	946.774	939.540
	Spiked Amount 500.000	Range 70 - 136		Recovery =		189.35%#	187.91%#
	Target Compounds						
1)	TNX	1.32	1.32	4899537	7136812	1015.541m	962.039m
2)	HMX	1.44	1.44	1693272	5190440	905.443m	1025.033m
3)	DNX	1.67	1.67	2953535	4763278	953.671m	1007.913m
4)	MNX	2.22	2.22	2956016	4601719	954.625	989.859
5)	RDX	2.79	2.79	1986095	3148175	928.782	947.105
6)	1,3,5-Trinitrobe	4.47	4.47	4166783	8158282	957.596	977.264
7)	1,3-Dinitrobenze	5.63	5.63	5347428	3580632	964.547	961.404
8)	3,5-Dinitroanili	5.93	5.93	4544658	7694753	929.306	1028.876
9)	Nitrobenzene	7.13	7.13	3338739	3232286	916.278	974.799
10)	Nitroglycerin	0.00	8.50	0	6033215	N.D. d	4708.193
11)	Tetryl	8.79	8.79	2921539	4967816	995.531	956.495
12)	2,4,6-Trinitroto	9.23	9.23	3709371	4466671	878.966	985.425
13)	2-Amino-4,6-Dini	9.50	9.50	3625721	5524577	957.795	1029.967
14)	4-Amino-2,6-Dini	9.93	9.93	2675305	5372490	1012.230	1036.788
16)	2,4-Dinitrotolue	11.06	11.07	4987383	3122820	947.990	1057.425
17)	2,6-Dinitrotolue	11.50	11.51	3055677	3734103	884.097	1093.558
18)	o-Nitrotoluene	14.73	14.73	2314707	3023776	926.683	923.079m
19)	p-Nitrotoluene	15.32	15.32	3733251	3176457	945.837	1007.048
20)	m-Nitrotoluene	16.30	16.29	3438523	4046017	963.927	1005.503
21)	PETN	0.00	18.54	0	6713644	N.D. d	4834.025m

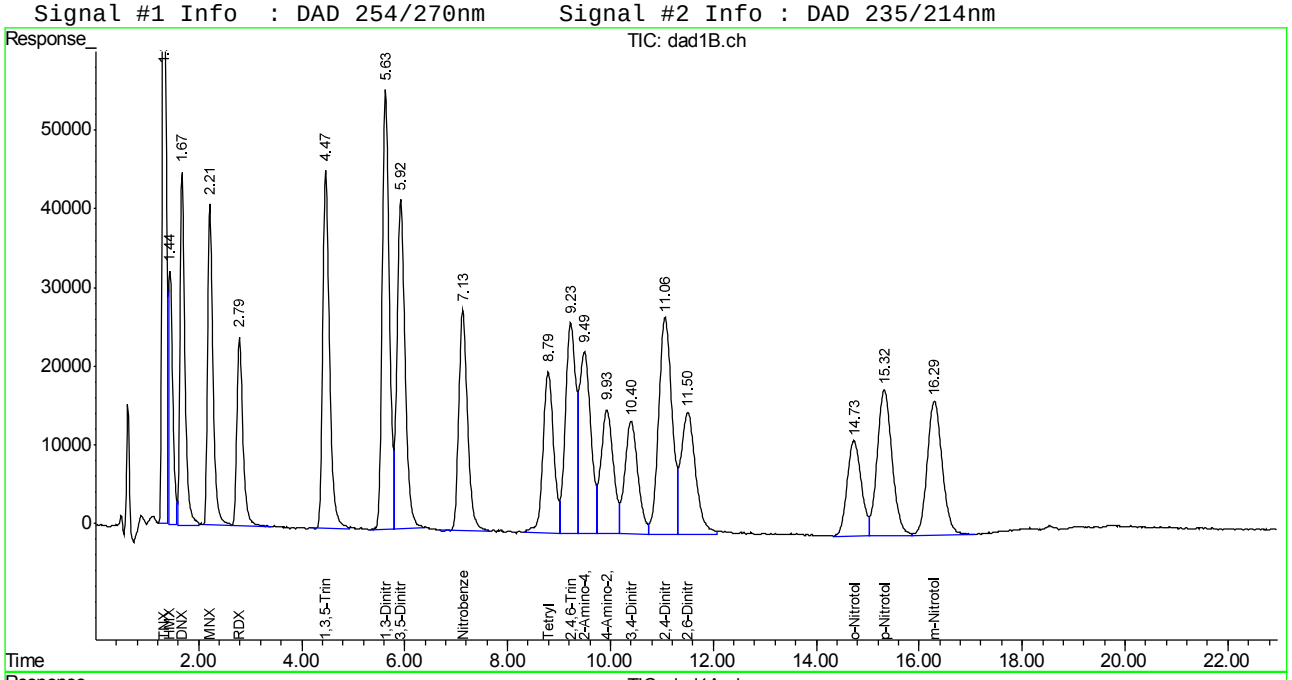
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059523.D 8330B_0419PLUS.M Tue May 01 08:37:14 2018 Page 1

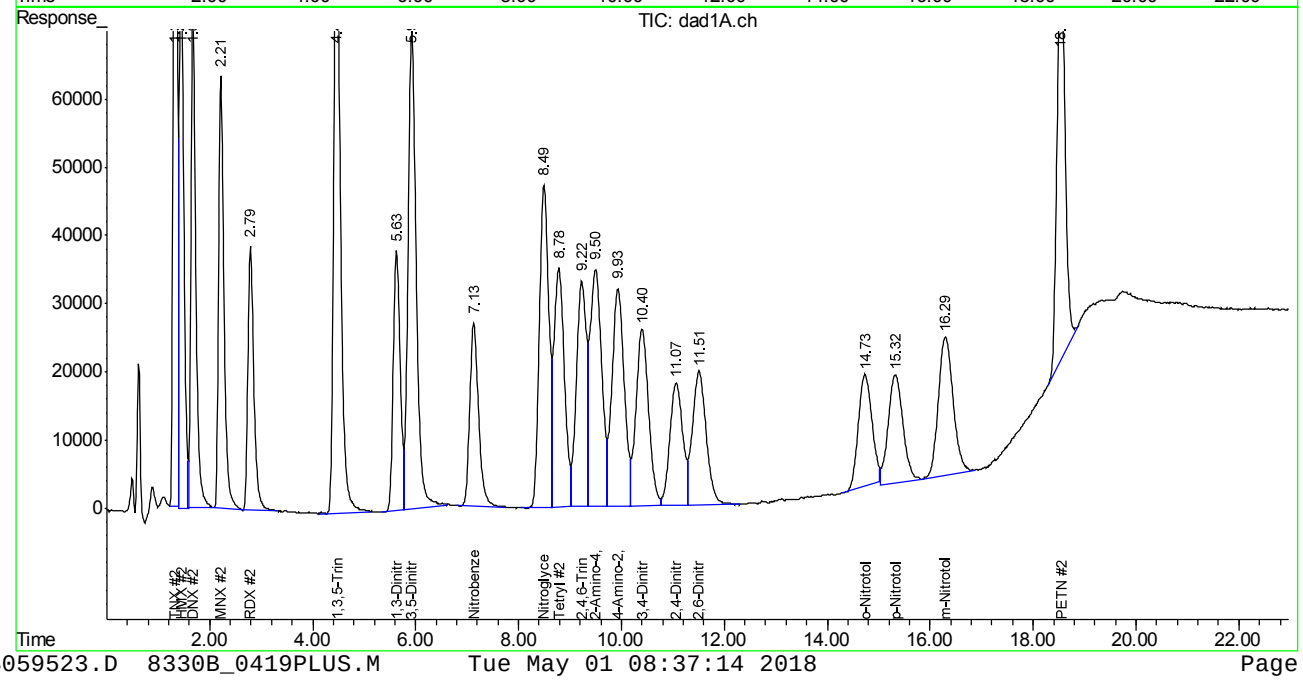
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 8:08 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

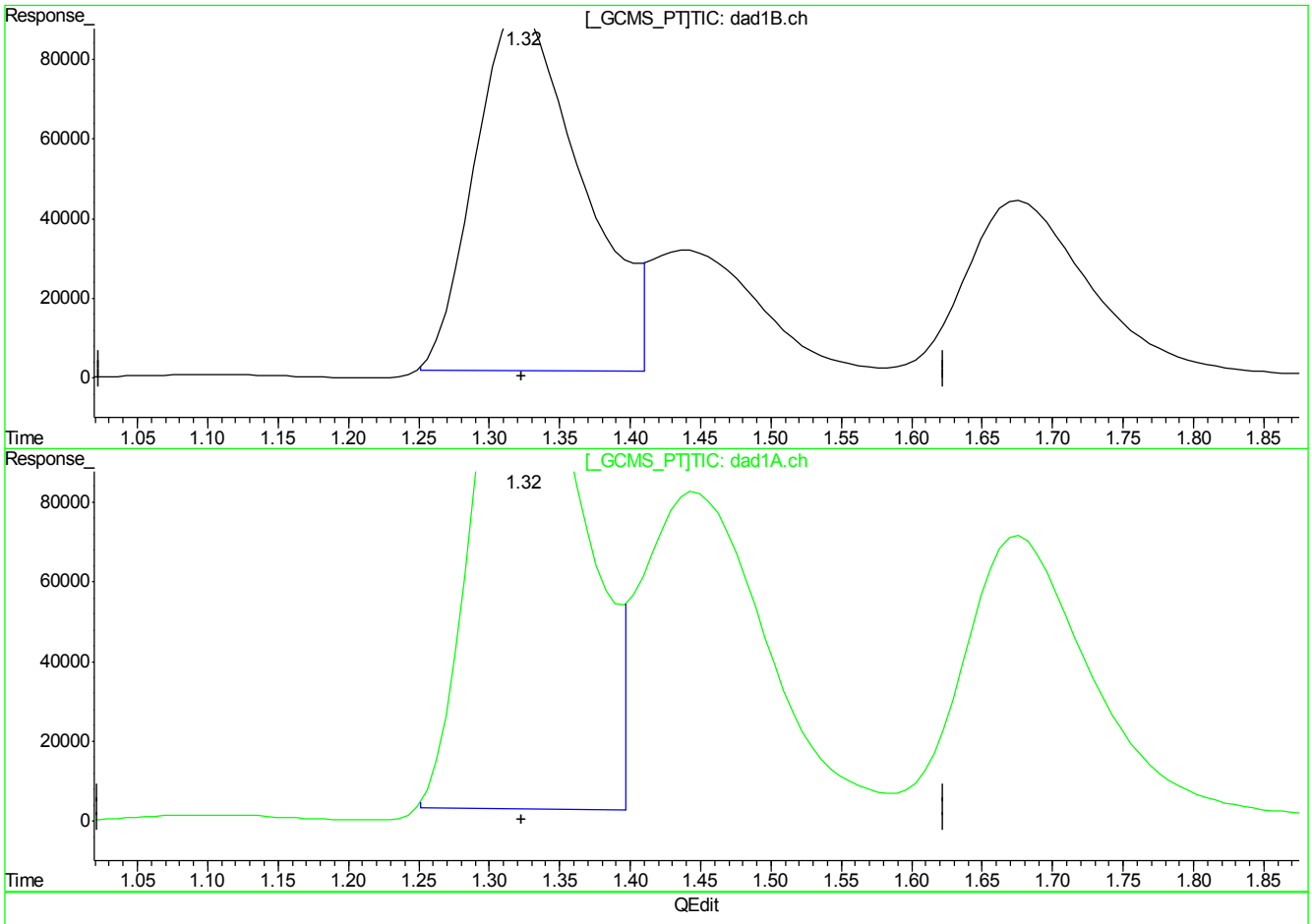
Sample Number:	GBB1726-CC1722	**Method:**	SW846 8330A
Lab FileID:	BB059523.D	**Analyst approved:**	05/01/18 08:46 Evita Martinez
Injection Time:	04/30/18 16:08	**Supervisor approved:**	05/01/18 17:21 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.32	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.67	Poorly defined baseline
DNX		2	1.67	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.73	Poorly defined baseline
PETN	78-11-5	2	18.54	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 976.526ppb

response 4711305

(1) TNX #2

1.32min 947.036ppb

response 7025512

(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:07:17 2018

7.7.9.2

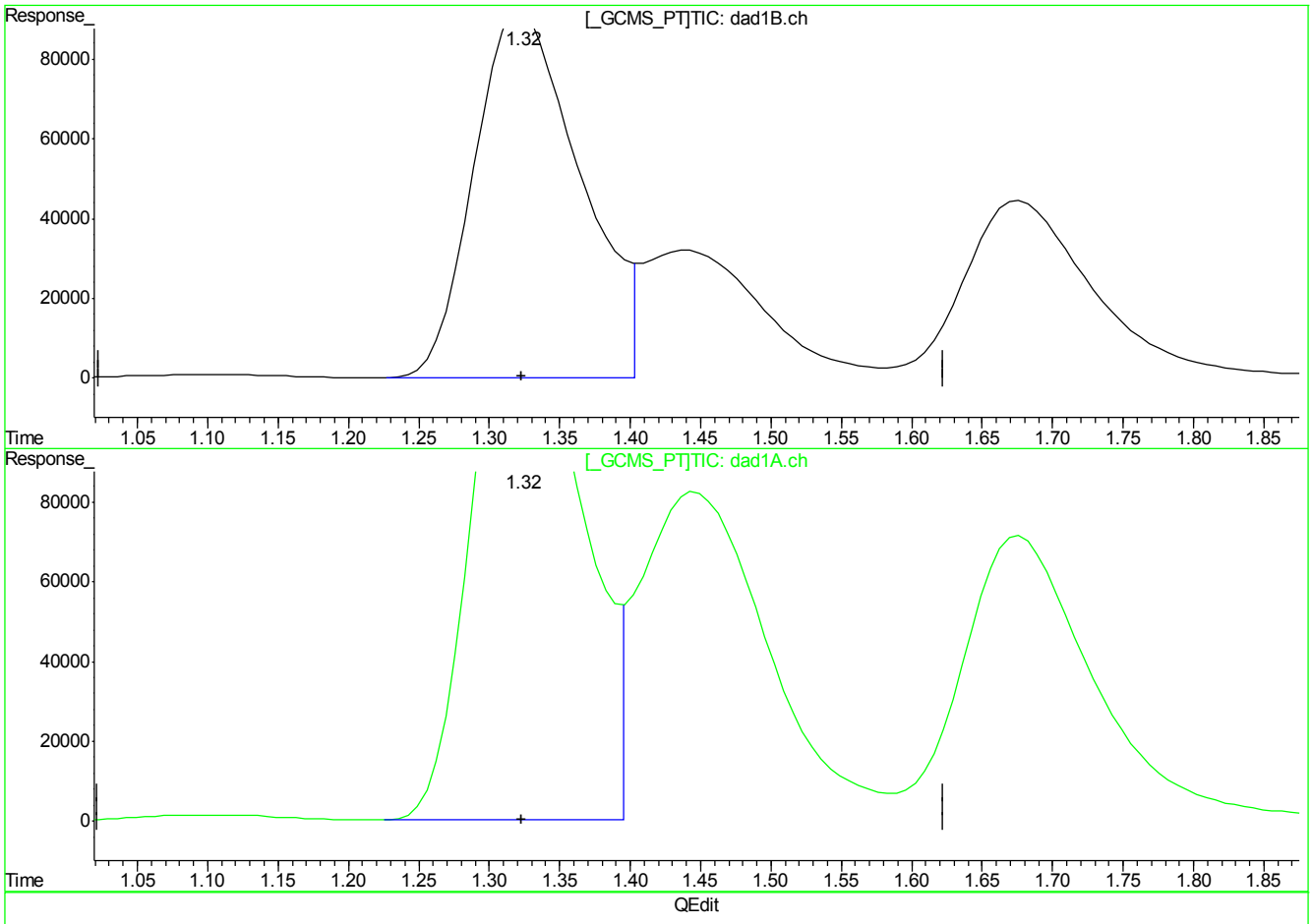
7

BB059523.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 1015.541ppb m

response 4899537

(1) TNX #2

1.32min 962.039ppb m

response 7136812

(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:07:29 2018

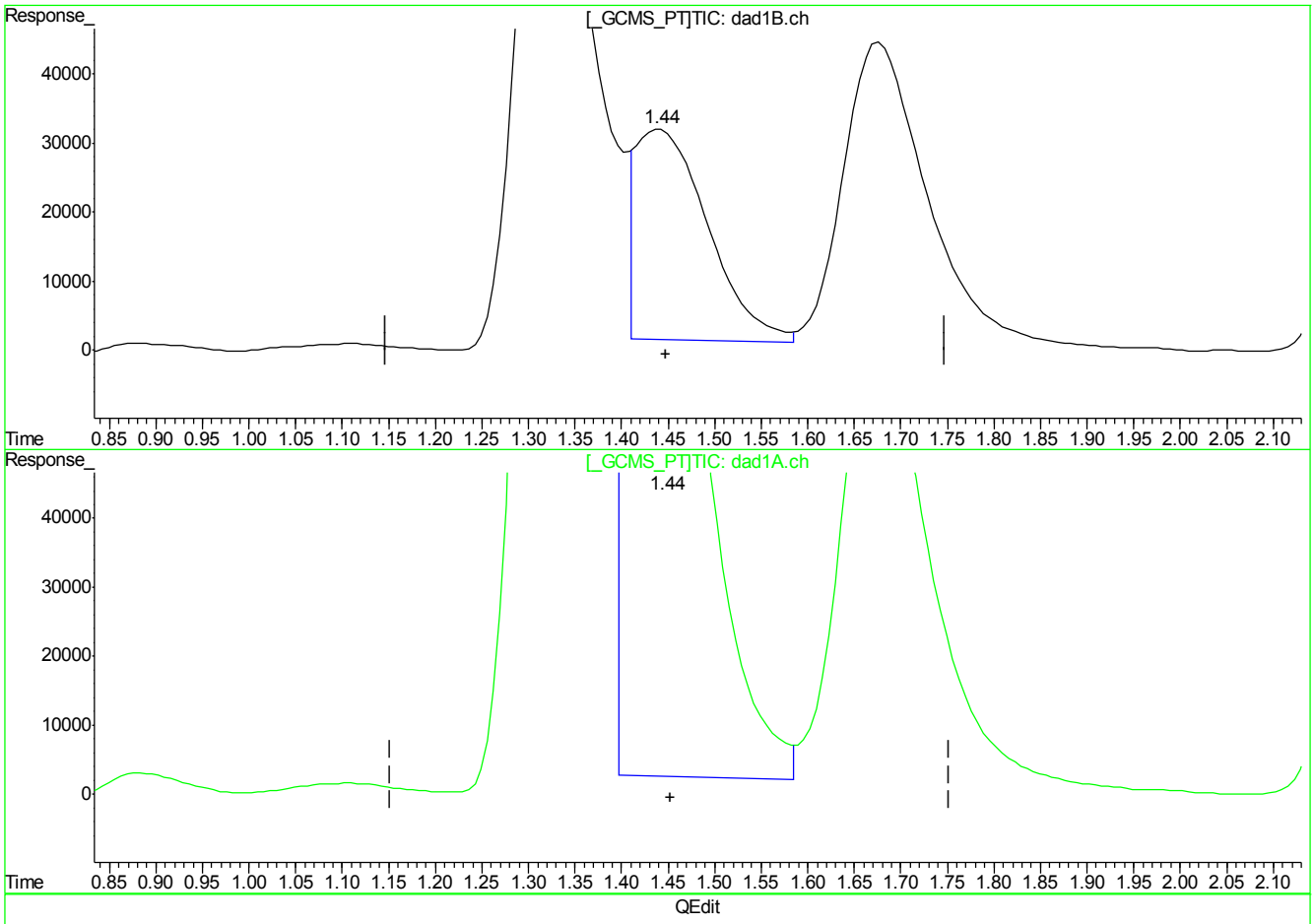
7.7.9.3

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 902.385ppb

response 1687553

(2) HMX #2

1.45min 972.322ppb

response 4925016

(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:07:32 2018

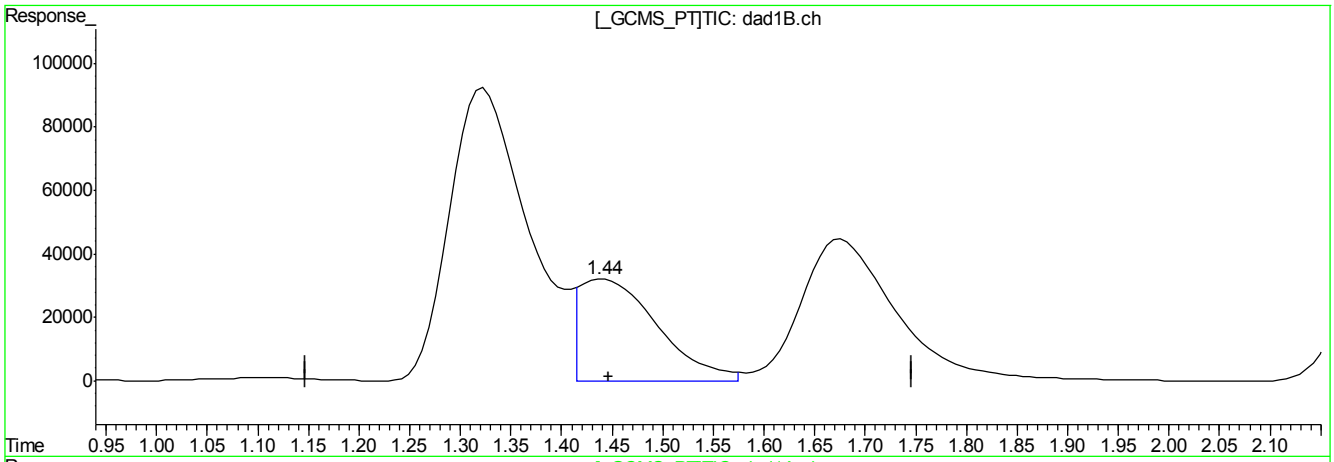
7.7.9.4

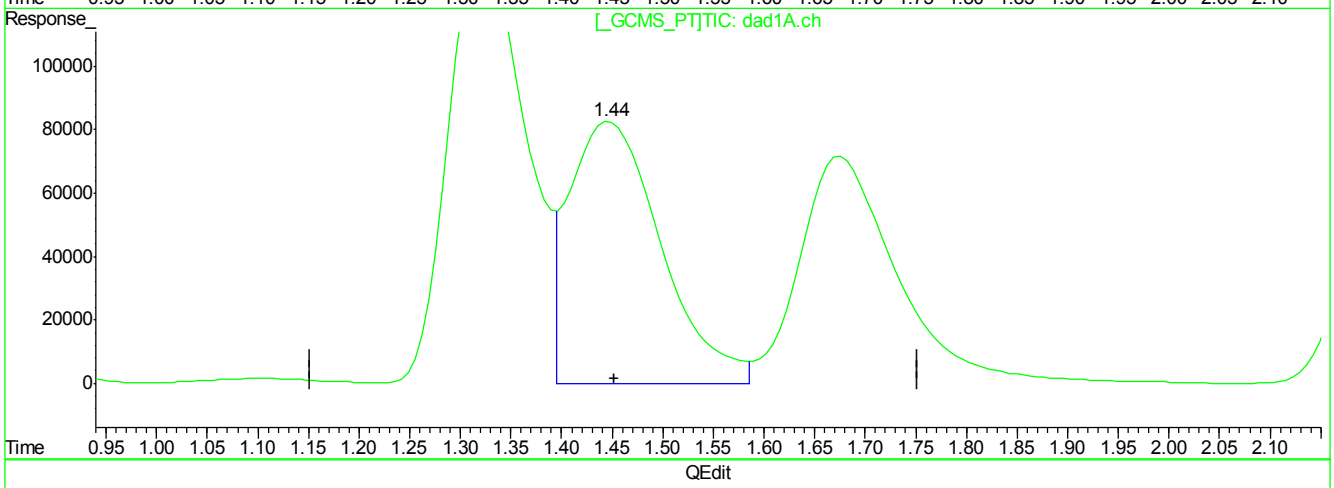
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.44min 905.443ppb m

response 1693272

(2) HMX #2

1.44min 1025.033ppb m

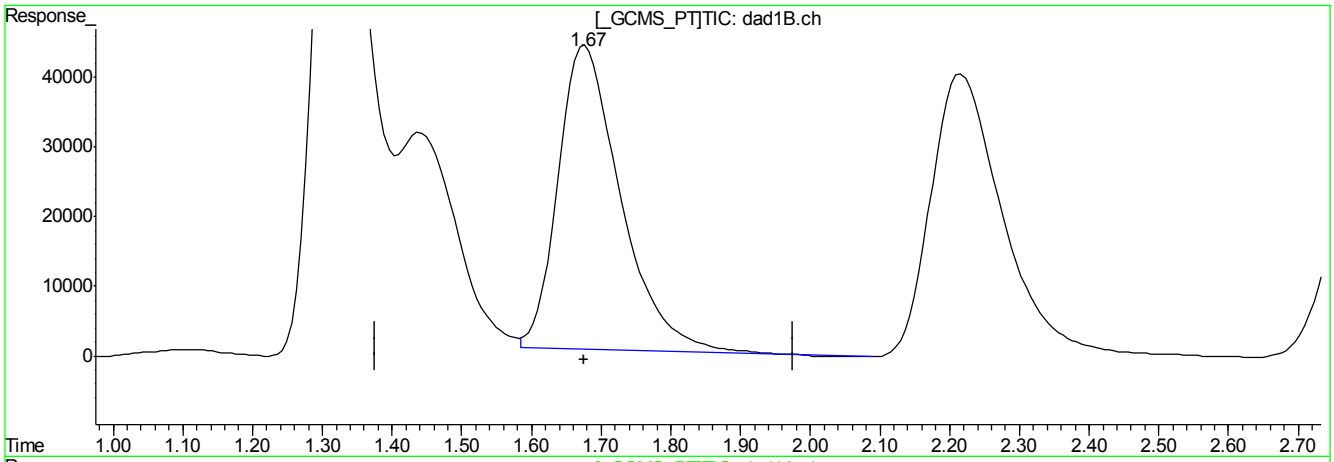
response 5190440

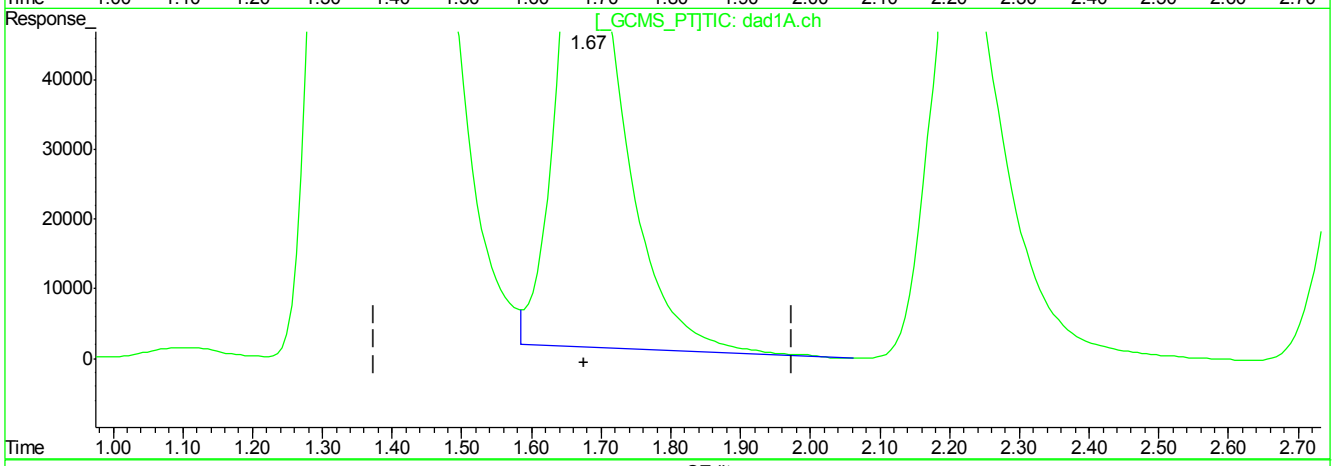
(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:07:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.68min 886.646ppb

response 2745957

(3) DNX #2

1.68min 950.203ppb

response 4486865

(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:07:59 2018

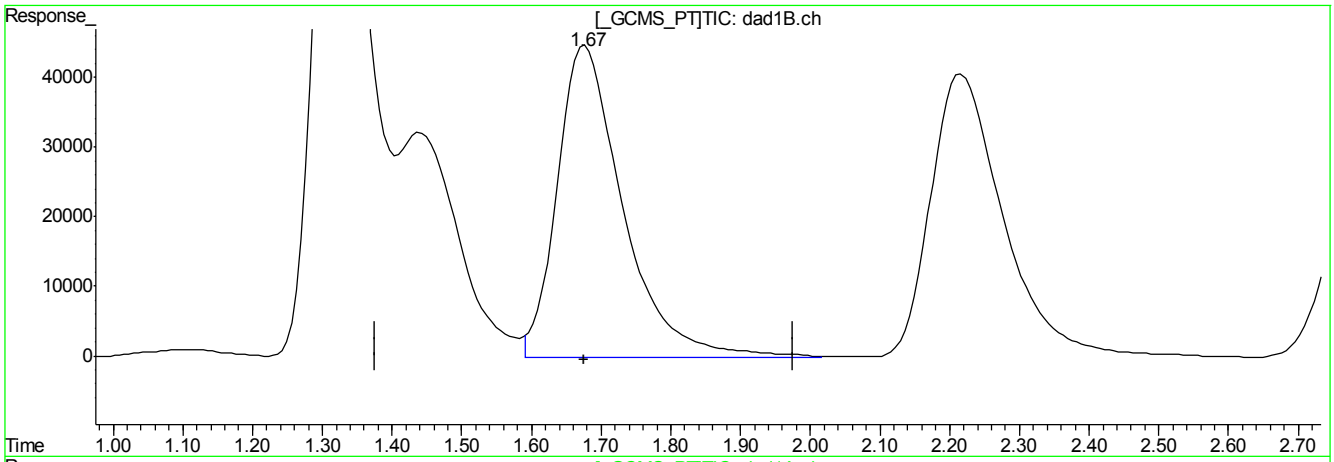
7.7.9.6

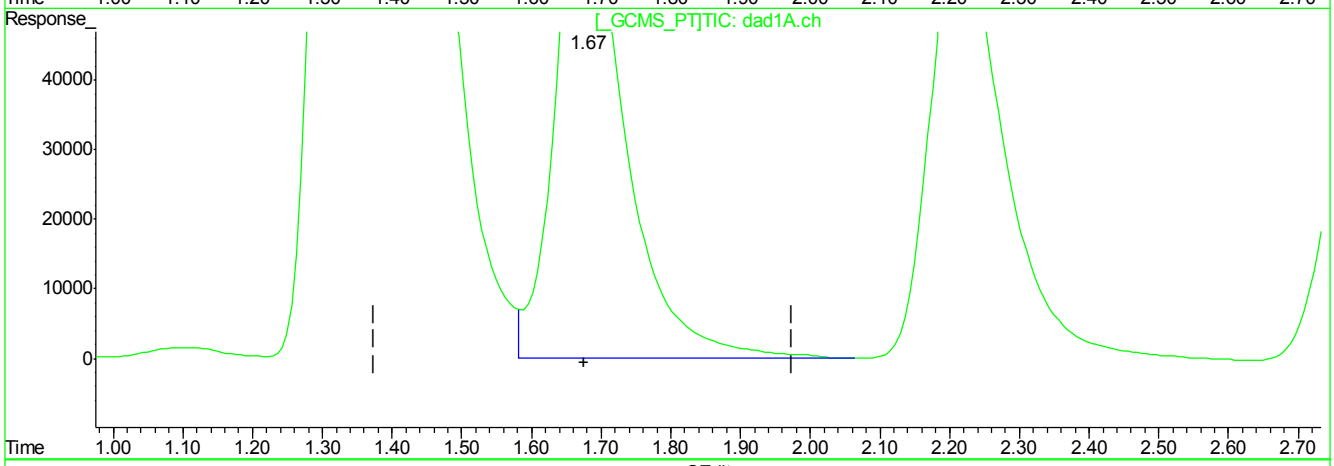
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.67min 953.671ppb m

response 2953535

(3) DNX #2

1.67min 1007.913ppb m

response 4763278

(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:08:19 2018

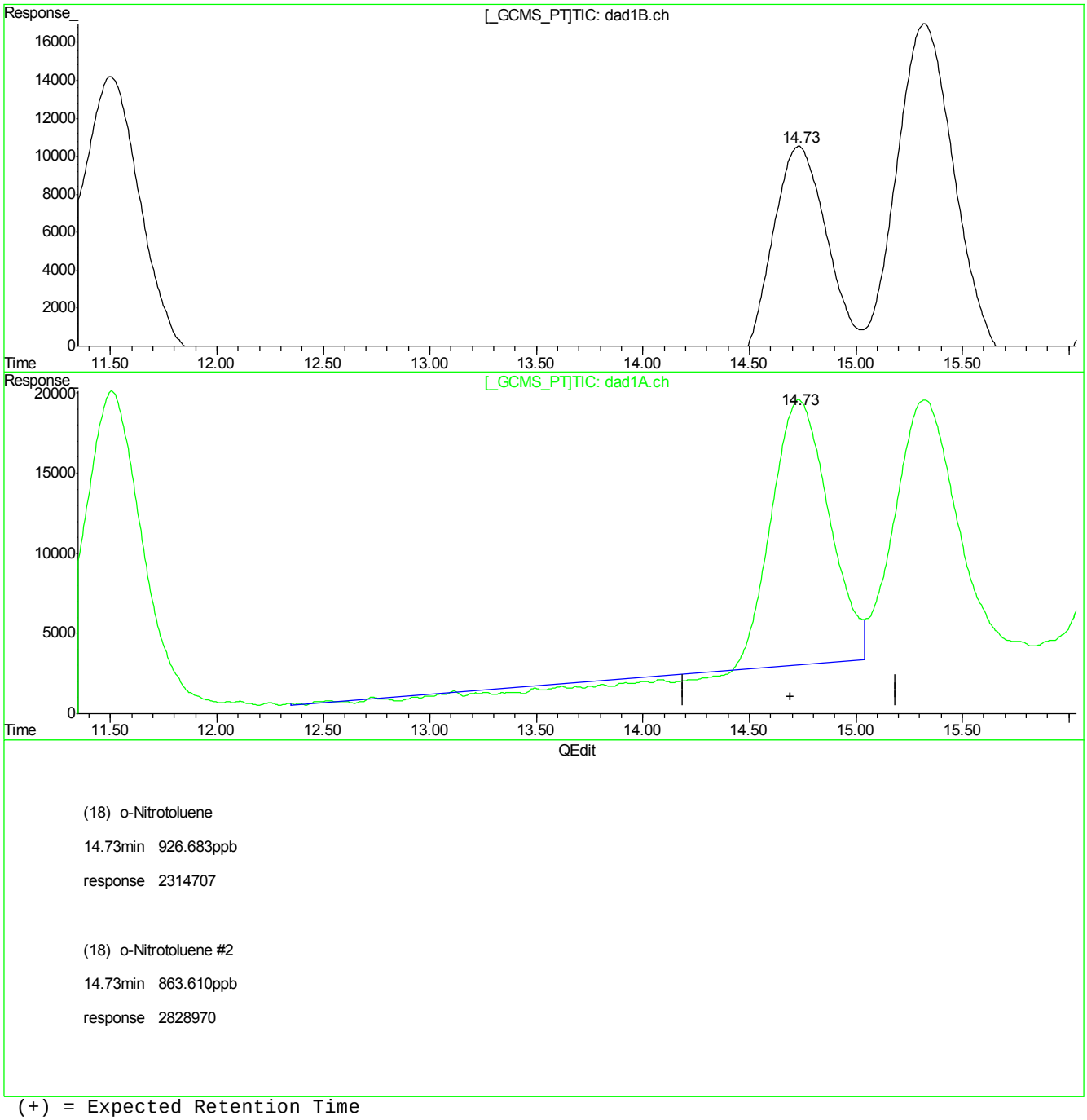
7.7.9.7

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.73min 926.683ppb

response 2314707

(18) o-Nitrotoluene #2

14.73min 863.610ppb

response 2828970

(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:08:31 2018

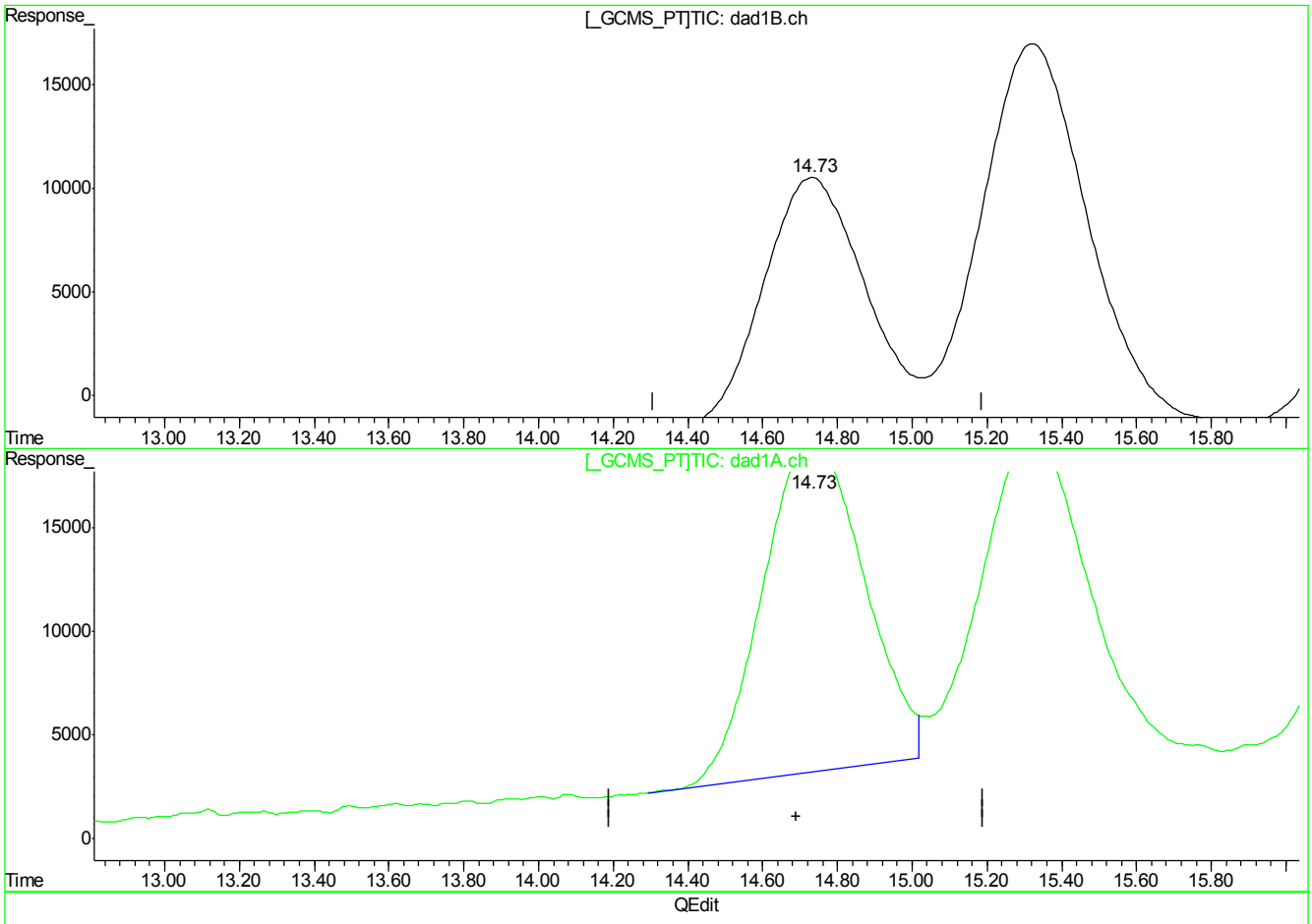
7.7.9.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.73min 926.683ppb

response 2314707

(18) o-Nitrotoluene #2

14.73min 923.079ppb m

response 3023776

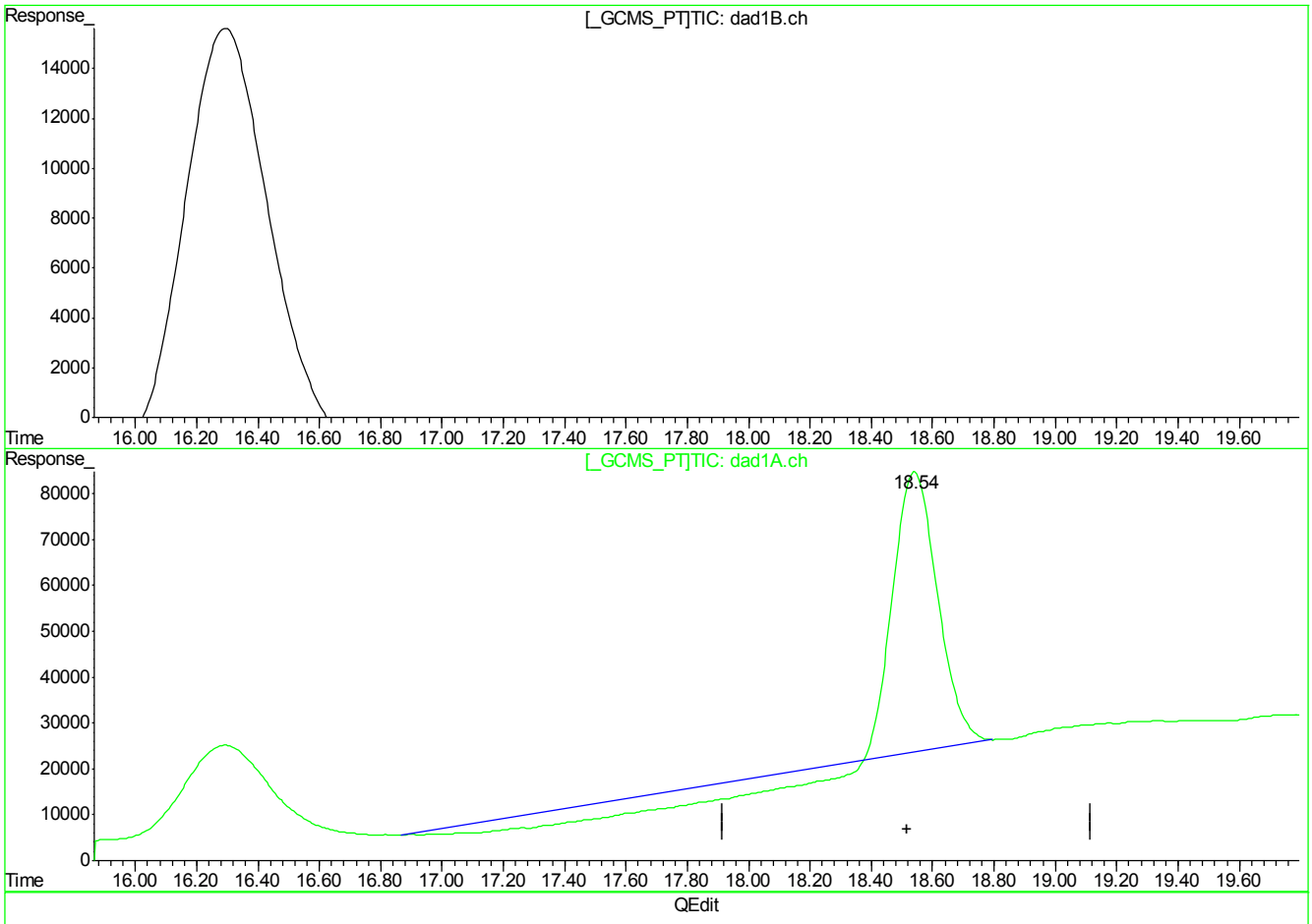
(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:08:42 2018

7.7.9.9

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.54min 2715.532ppb

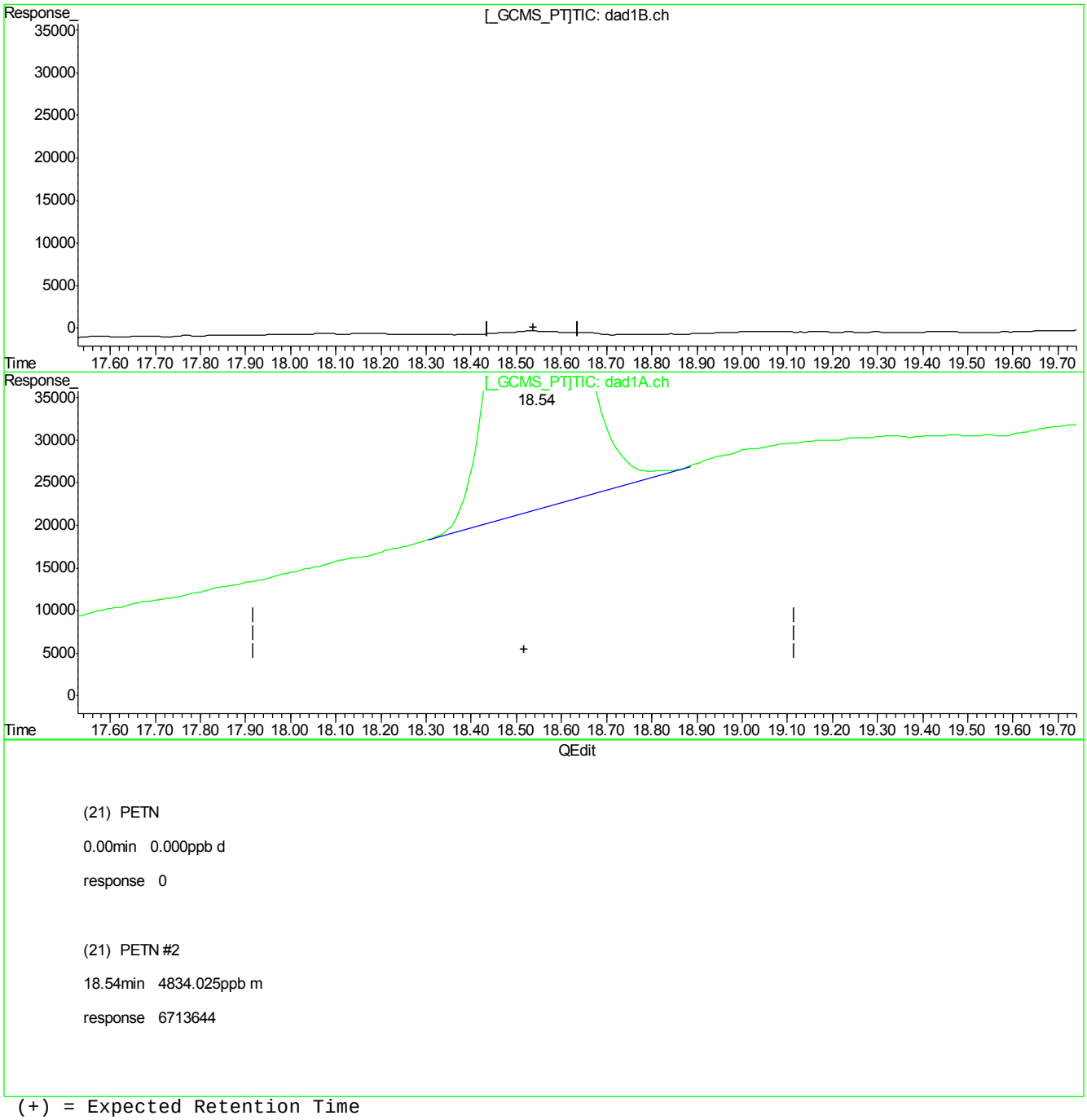
response 3771415

(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:08:51 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059523.D\dad1A.ch
Acq On : 30-Apr-2018, 16:08:32 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69811,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:55 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.54min 4834.025ppb m

response 6713644

(+) = Expected Retention Time
BB059523.D 8330B_0419PLUS.M Tue May 01 08:08:58 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/01/18 17:21

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 01 06:56:02 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.36	10.36	2493266	4418873	931.818	937.244
	Spiked Amount 500.000	Range 70 - 136		Recovery =		186.36%#	187.45%#
	Target Compounds						
1)	TNX	1.32	1.32	4790866	7412947	993.017m	999.262m
2)	HMX	1.44	1.45	1960257	4979784	1048.207m	983.196m
3)	DNX	1.67	1.67	2832068	4706722	914.451m	996.113m
4)	MNX	2.21	2.21	2991066	4571481	965.944	983.354
5)	RDX	2.78	2.78	2052287	3120879	959.736	938.893
6)	1,3,5-Trinitrobe	4.45	4.45	4174242	8062438	959.310	965.783
7)	1,3-Dinitrobenze	5.61	5.61	5300659	3589517	956.111	963.789
8)	3,5-Dinitroanili	5.91	5.91	4557842	7611564	932.002	1017.753
9)	Nitrobenzene	7.11	7.11	3326660	3241985	912.963	977.724
10)	Nitroglycerin	0.00	8.47	0	6058239	N.D. d	4727.721
11)	Tetryl	8.76	8.75	2877375	4955466	980.403	954.117
12)	2,4,6-Trinitroto	9.20	9.19	3755205	4473878	889.826	987.015
13)	2-Amino-4,6-Dini	9.45	9.46	3555266	5533794	939.183	1031.685
14)	4-Amino-2,6-Dini	9.89	9.89	2641250	5383621	999.535	1038.936
16)	2,4-Dinitrotolue	11.02	11.02	4906220	3104187	932.563	1051.115
17)	2,6-Dinitrotolue	11.46	11.46	3009843	3695651	870.836	1082.297
18)	o-Nitrotoluene	14.69	14.69	2296083	3109334	919.227	949.198m
19)	p-Nitrotoluene	15.27	15.27	3726035	3168331	944.009	1004.478
20)	m-Nitrotoluene	16.24	16.25	3409968	4051621	955.922	1006.895
21)	PETN	0.00	18.51	0	6577087	N.D. d	4735.699m

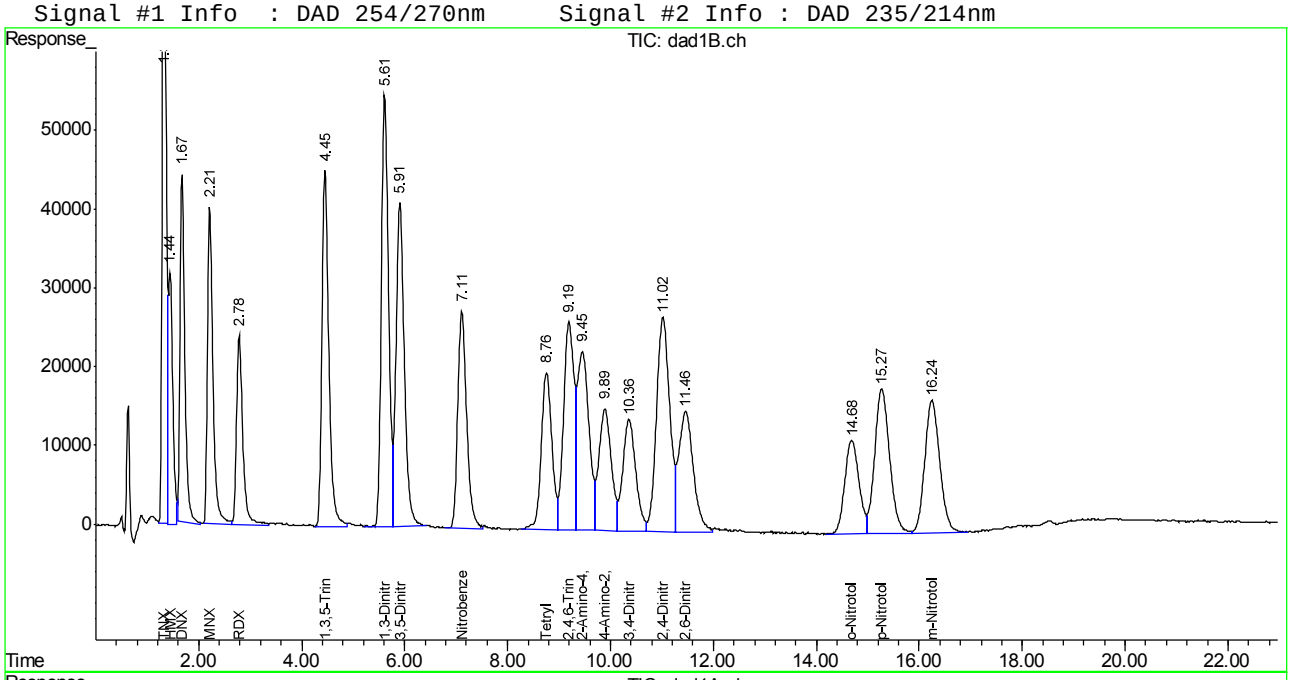
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059532.D 8330B_0419PLUS.M Tue May 01 08:37:22 2018 Page 1

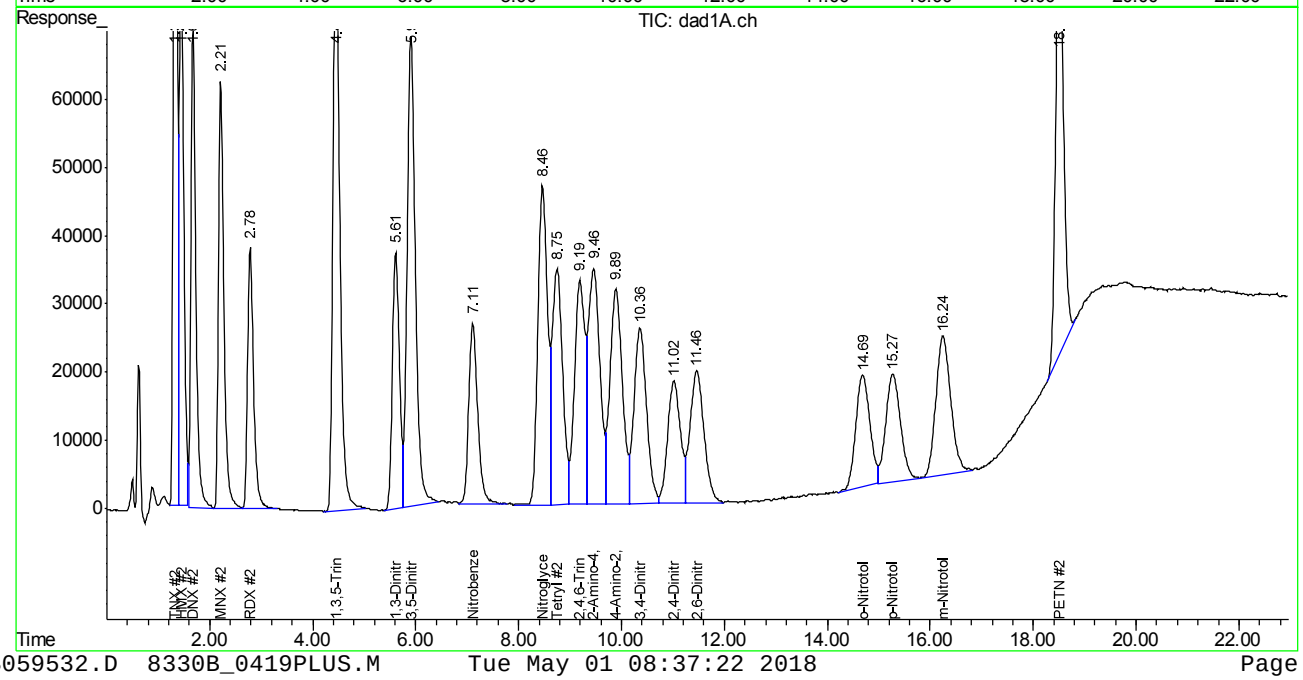
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 8:22 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

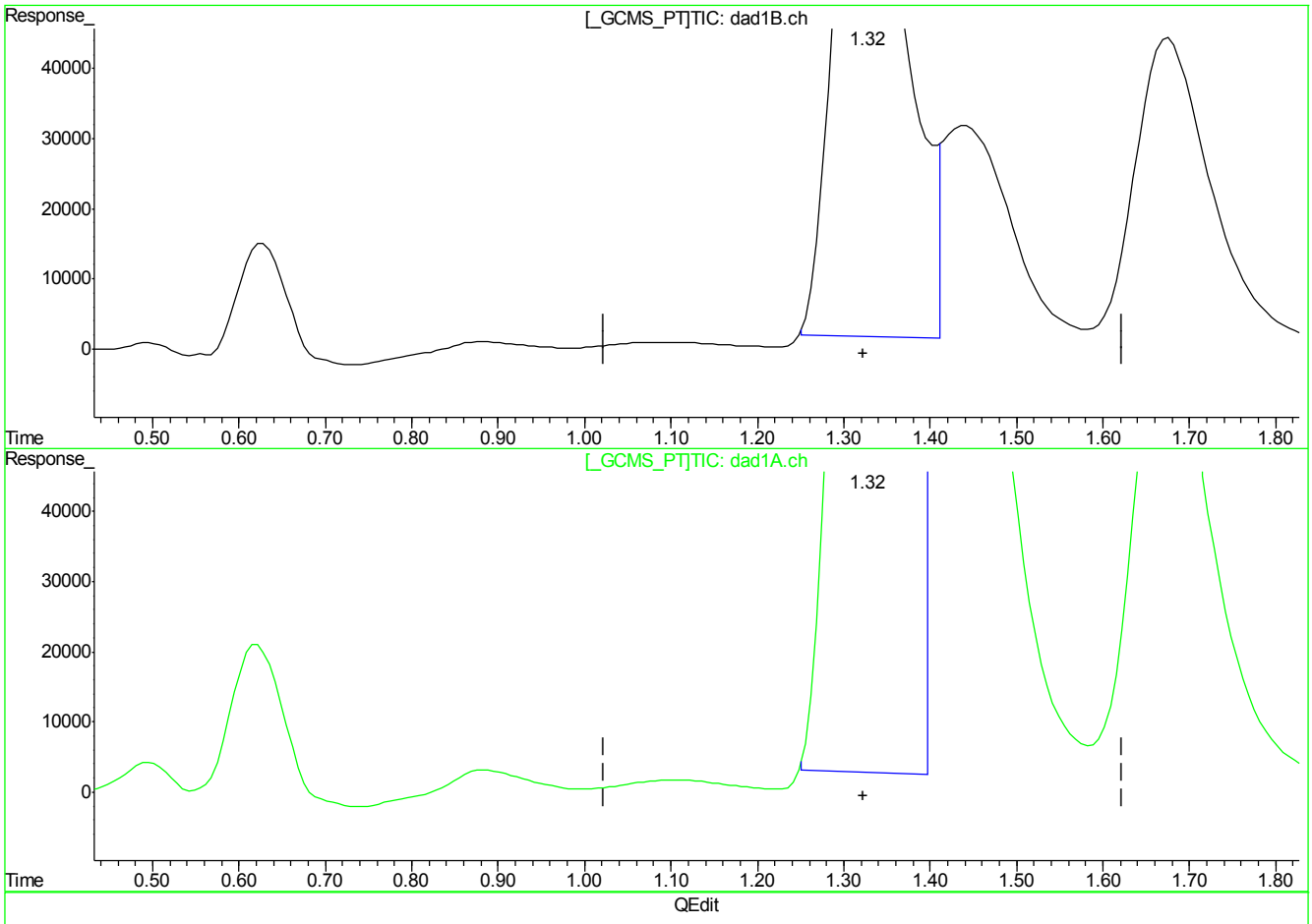
Sample Number:	GBB1726-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059532.D	**Analyst approved:**	05/01/18 08:46 Evita Martinez
Injection Time:	04/30/18 20:38	**Supervisor approved:**	05/01/18 17:21 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.32	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.45	Poorly defined baseline
DNX		1	1.67	Poorly defined baseline
DNX		2	1.67	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.69	Poorly defined baseline
PETN	78-11-5	2	18.51	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 976.423ppb

response 4710809

(1) TNX #2

1.32min 943.811ppb

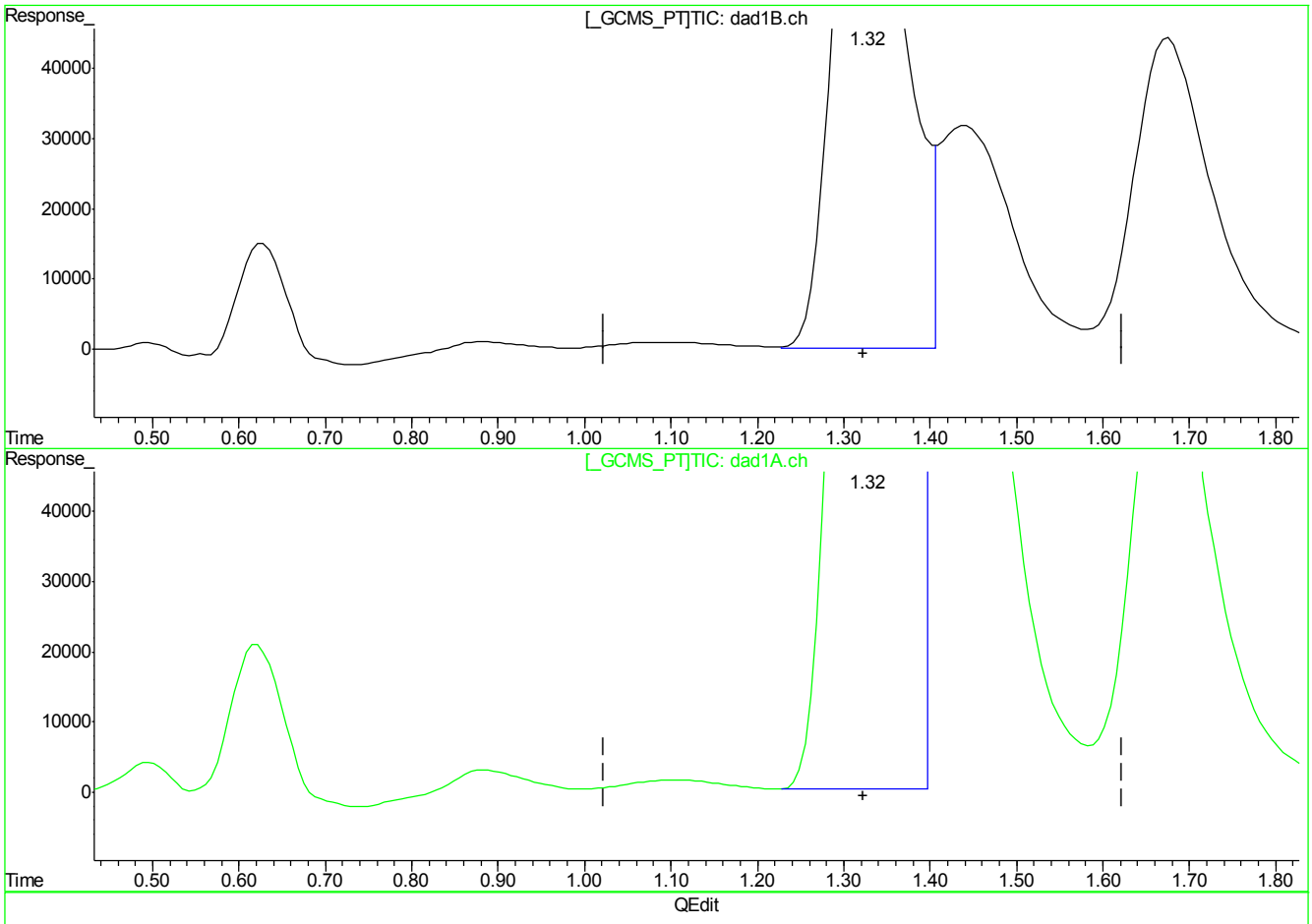
response 7001590

(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:21:17 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 993.017ppb m

response 4790866

(1) TNX #2

1.32min 999.262ppb m

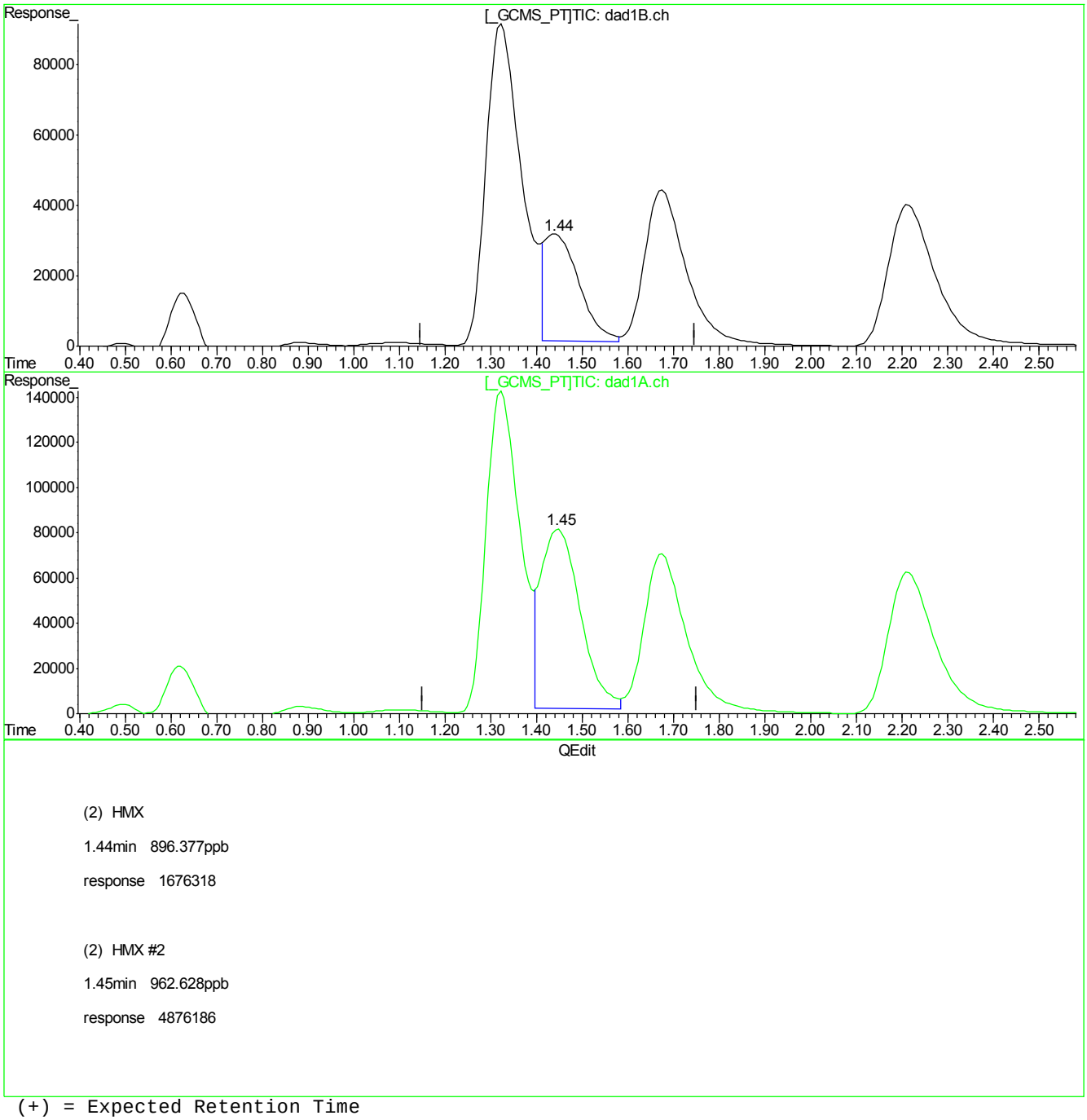
response 7412947

(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:21:30 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 896.377ppb

response 1676318

(2) HMX #2

1.45min 962.628ppb

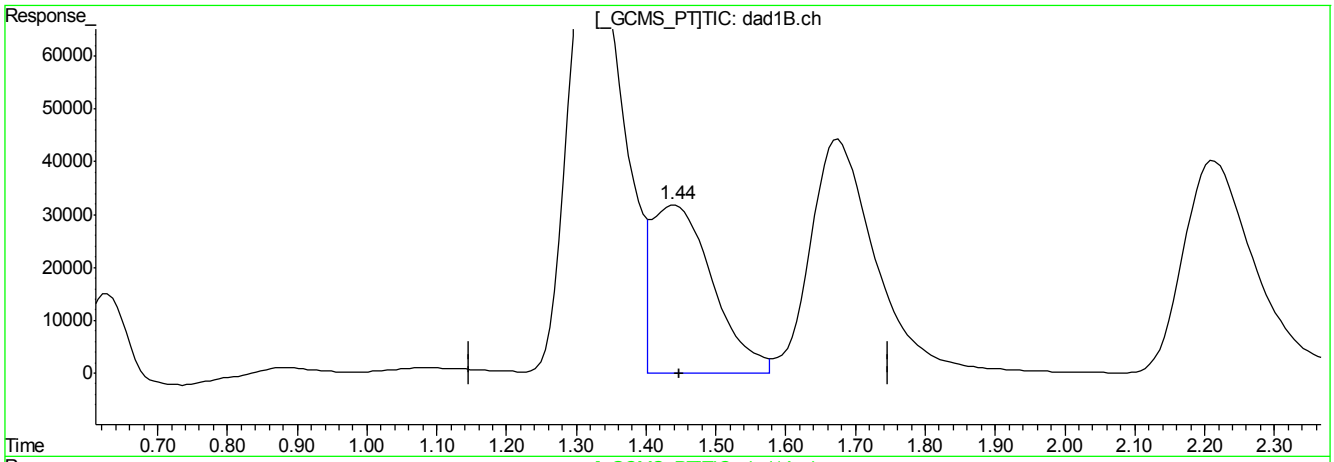
response 4876186

(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:21:33 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 1048.207ppb m

response 1960257

(2) HMX #2

1.45min 983.196ppb m

response 4979784

(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:21:56 2018

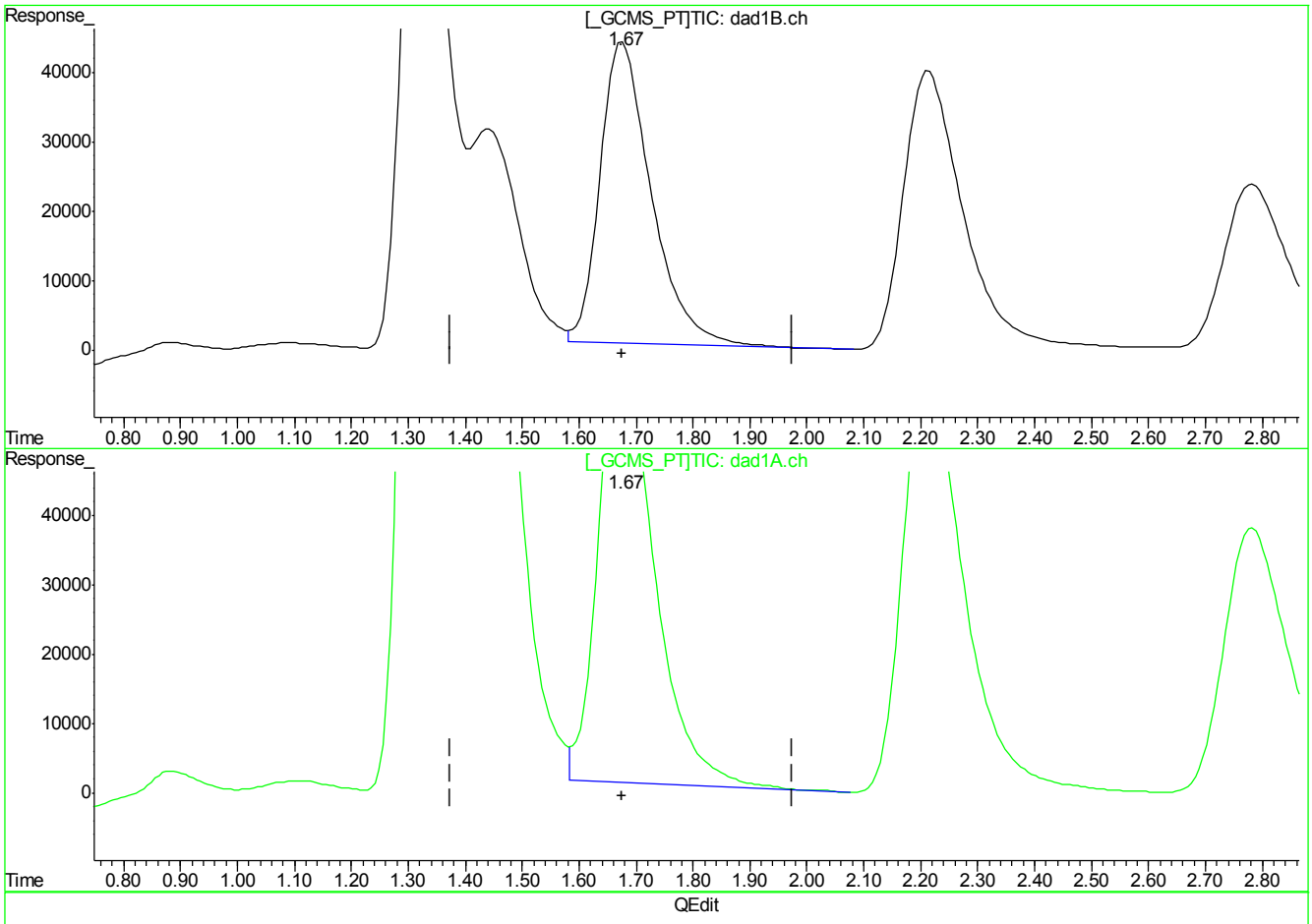
7.7.10.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(3) DNX

1.68min 878.877ppb

response 2721896

(3) DNX #2

1.68min 939.157ppb

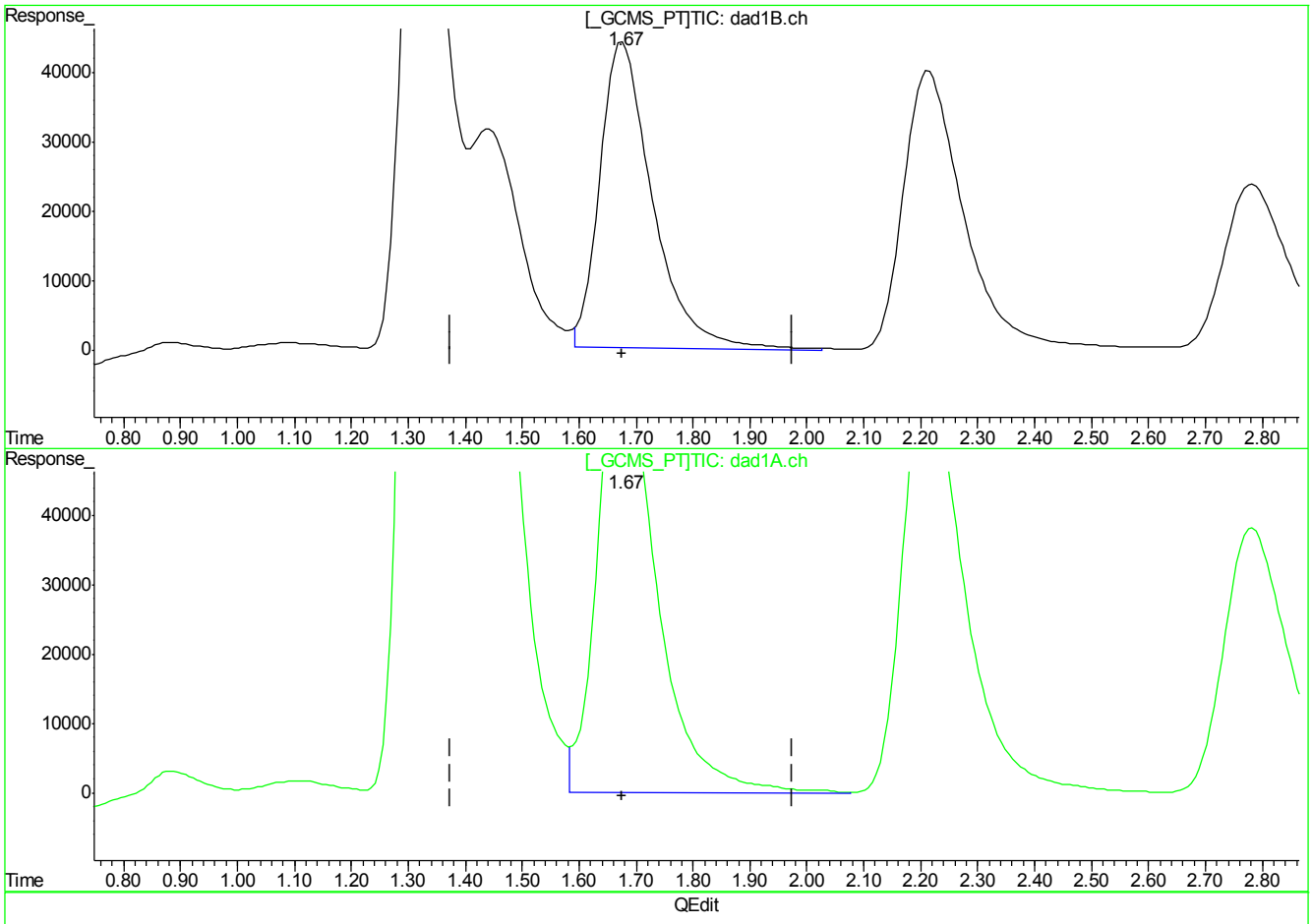
response 4434013

(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:21:59 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 914.451ppb m

response 2832068

(3) DNX #2

1.67min 996.113ppb m

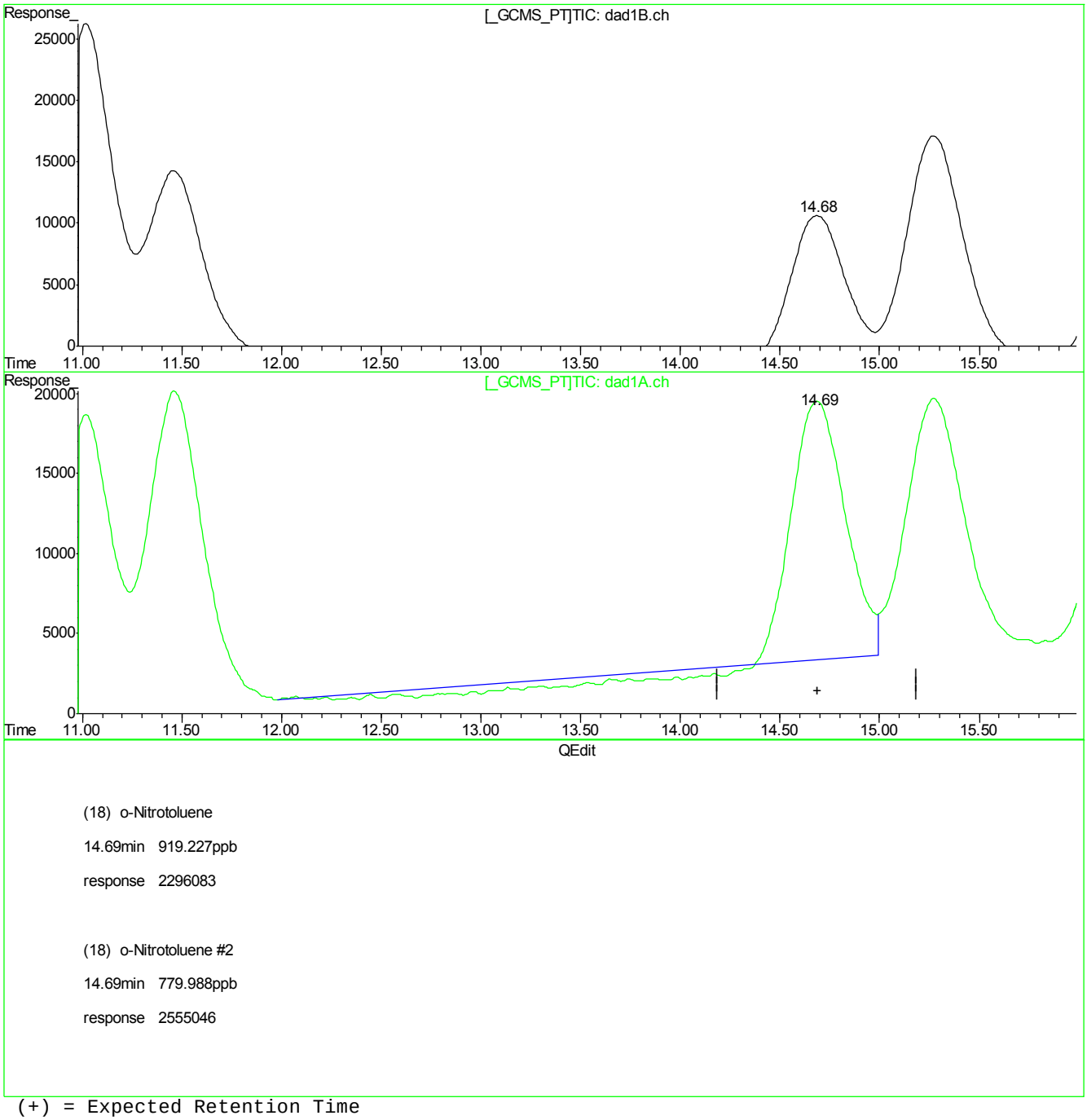
response 4706722

(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:22:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 919.227ppb

response 2296083

(18) o-Nitrotoluene #2

14.69min 779.988ppb

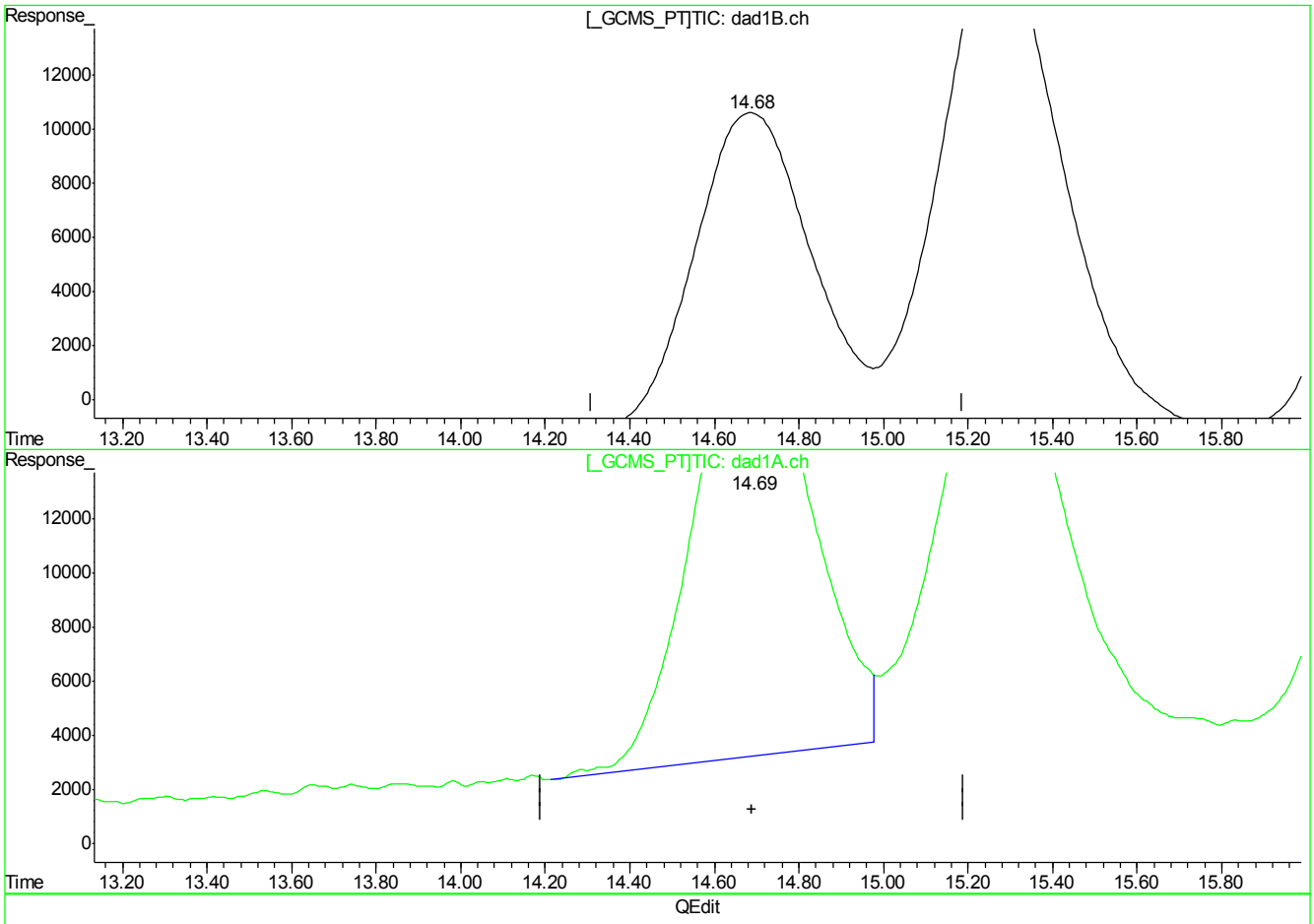
response 2555046

(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:22:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 919.227ppb

response 2296083

(18) o-Nitrotoluene #2

14.69min 949.198ppb m

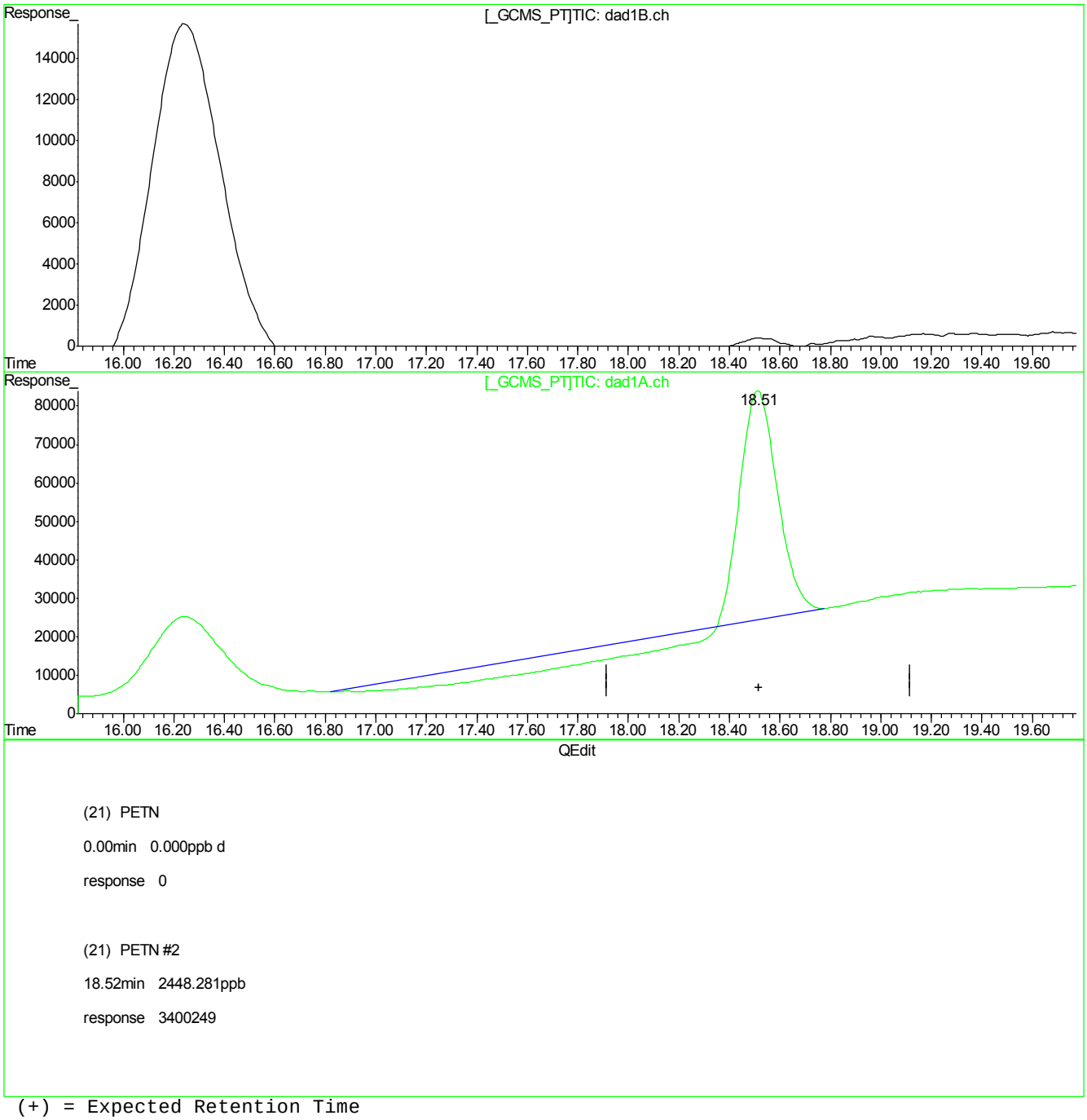
response 3109334

(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:22:32 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration

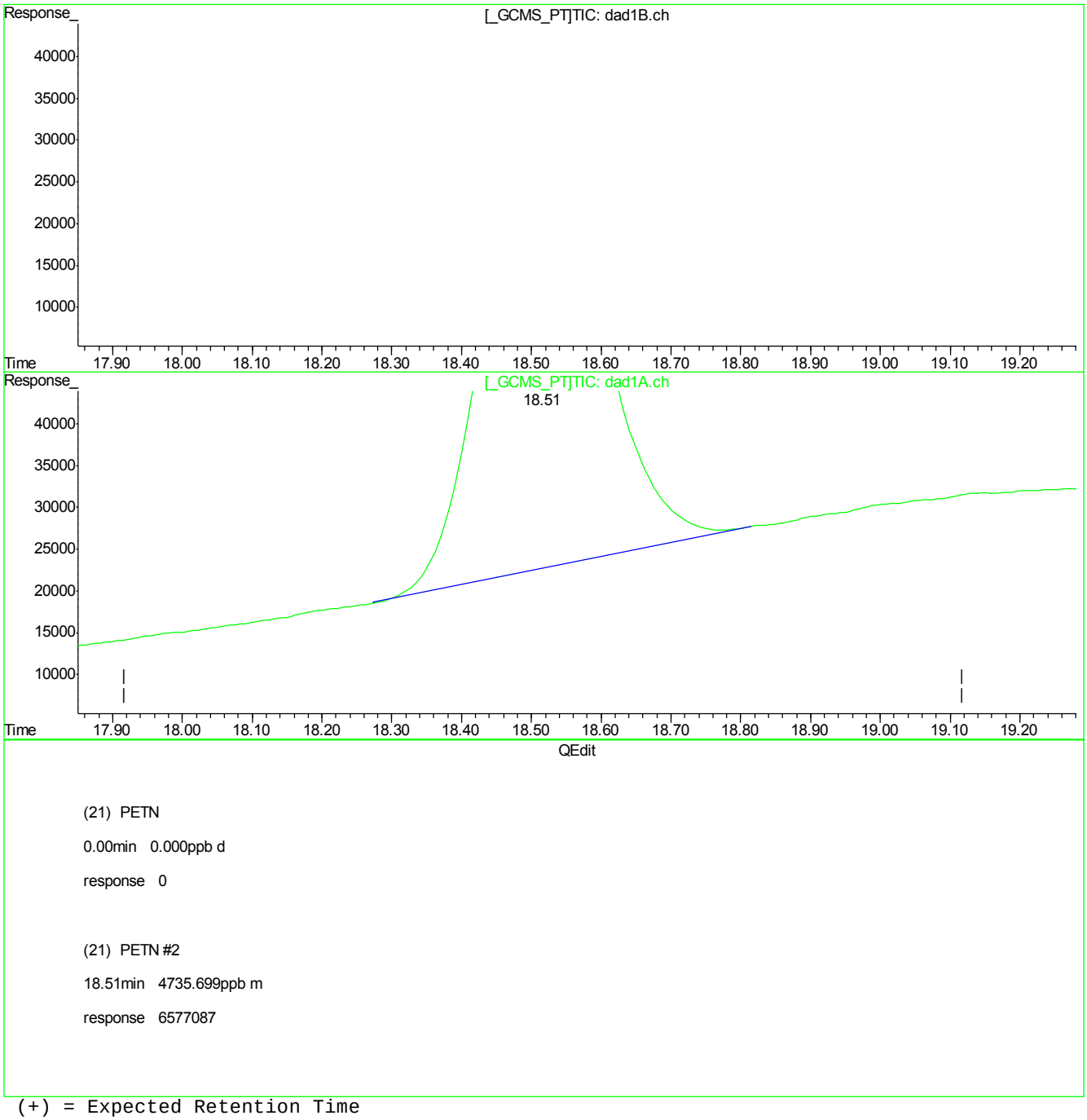


(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:22:35 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1726\BB059532.D\dad1A.ch
Acq On : 30-Apr-2018, 20:38:11 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69837,gbb1726,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 1 6:56 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 30 12:10:24 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059532.D 8330B_0419PLUS.M Tue May 01 08:22:41 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/09/18 15:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 08 10:28:27 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.19	10.19	2507105	4418422	936.990	937.148
	Spiked Amount 500.000	Range 70 - 136		Recovery =		187.40%#	187.43%#
	Target Compounds						
1)	TNX	1.30	1.30	4752823	7117525	985.132m	959.439m
2)	HMX	1.42	1.42	1817524	4869684	971.884m	961.337m
3)	DNX	1.65	1.65	2879524	4616062	929.774m	977.188m
4)	MNX	2.18	2.18	2881405	4467223	930.529	960.928
5)	RDX	2.74	2.74	1936983	3049435	905.815	917.400
6)	1,3,5-Trinitrobe	4.38	4.38	4098339	7921504	941.866	948.901
7)	1,3-Dinitrobenze	5.54	5.54	5246549	4153314	946.351	1115.170
8)	3,5-Dinitroanili	5.82	5.82	4554088	8222755	931.235	1099.476
9)	Nitrobenzene	7.03	7.03	3306057	3080962	907.308	929.162
10)	Nitroglycerin	0.00	8.34	0	5938545	N.D. d	4634.314
11)	Tetryl	8.61	8.60	2918105	4924924	994.354	948.236
12)	2,4,6-Trinitroto	9.04	9.04	3638947	4392708	862.278	969.107
13)	2-Amino-4,6-Dini	9.30	9.30	3579607	5451996	945.614	1016.435
14)	4-Amino-2,6-Dini	9.73	9.73	2633929	5318728	996.805	1026.413
16)	2,4-Dinitrotolue	10.83	10.83	4907236	3139767	932.756	1063.163
17)	2,6-Dinitrotolue	11.28	11.28	2973240	3650475	860.246	1069.067
18)	o-Nitrotoluene	14.52	14.52	2259765	3152896	904.688	962.496m
19)	p-Nitrotoluene	15.10	15.10	3681428	3064119	932.707	971.513
20)	m-Nitrotoluene	16.08	16.08	3399524	4012027	952.995	997.056
21)	PETN	0.00	18.40	0	6607042	N.D. d	4757.268m

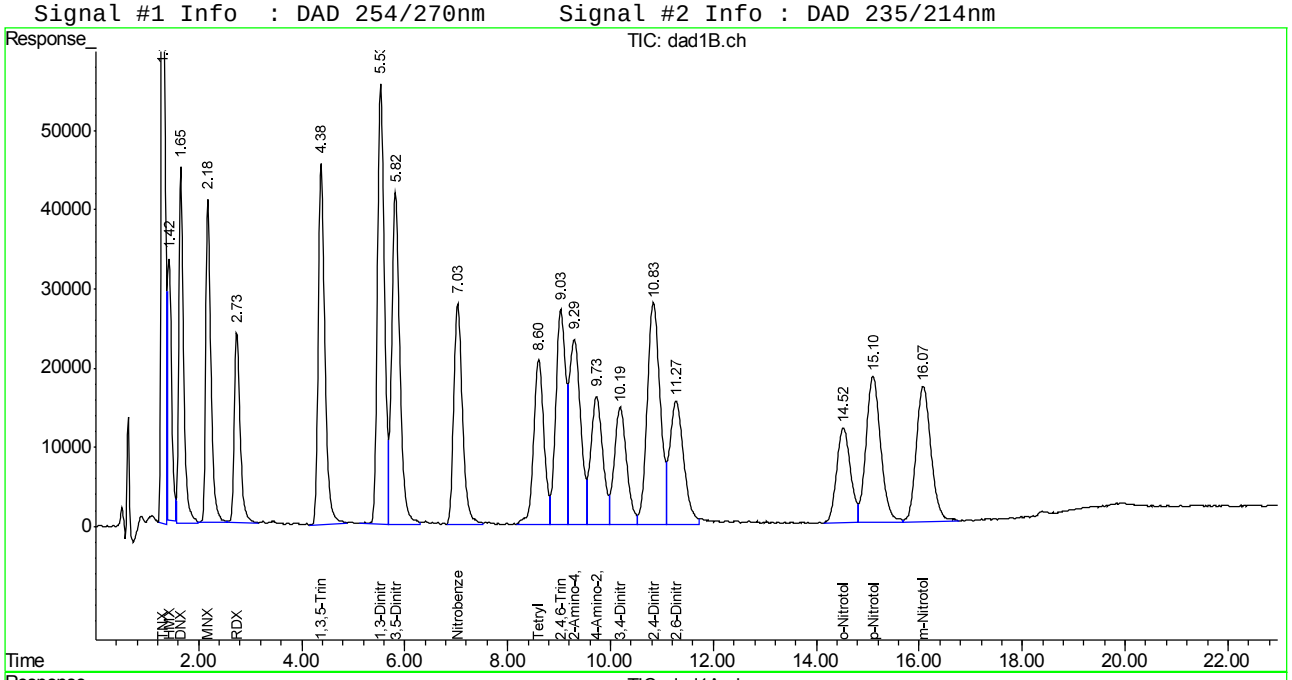
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059598.D 8330B_0419PLUS.M Tue May 08 14:11:56 2018 Page 1

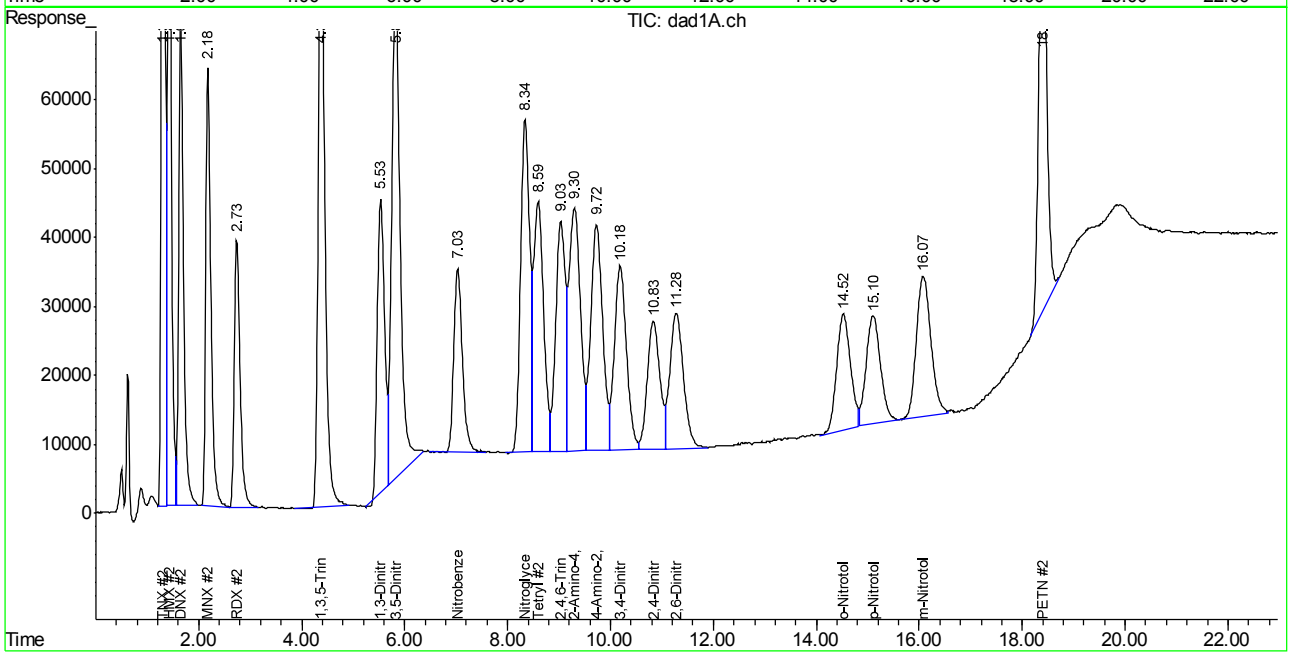
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 11:44 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

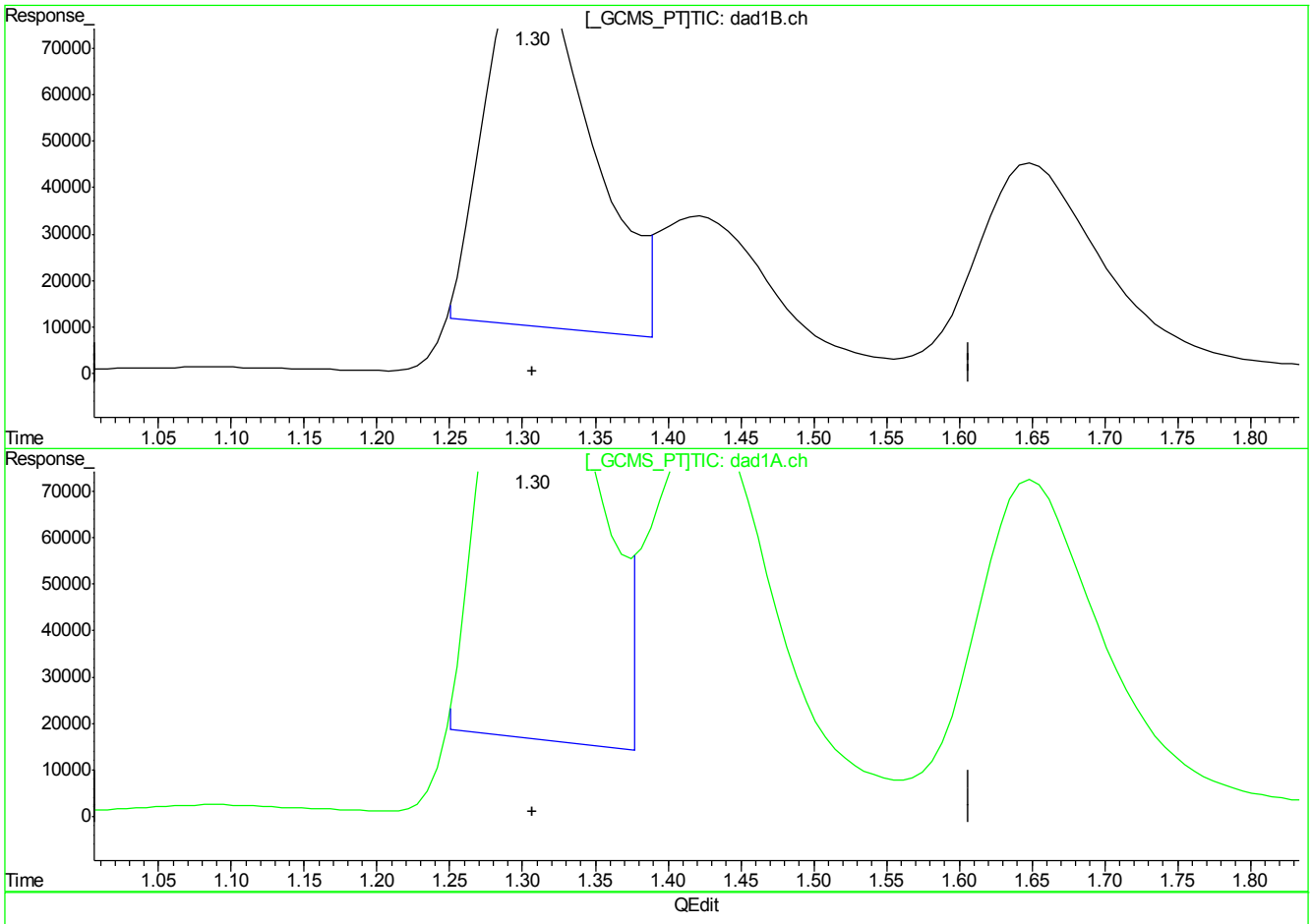
Sample Number:	GBB1729-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059598.D	**Analyst approved:**	05/08/18 14:20 Evita Martinez
Injection Time:	05/08/18 09:41	**Supervisor approved:**	05/09/18 15:58 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.30	Poorly defined baseline
TNX		2	1.30	Poorly defined baseline
HMX	2691-41-0	1	1.42	Poorly defined baseline
HMX	2691-41-0	2	1.42	Poorly defined baseline
DNX		1	1.65	Poorly defined baseline
DNX		2	1.65	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.52	Poorly defined baseline
PETN	78-11-5	2	18.40	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 812.963ppb

response 3922186

(1) TNX #2

1.31min 789.948ppb

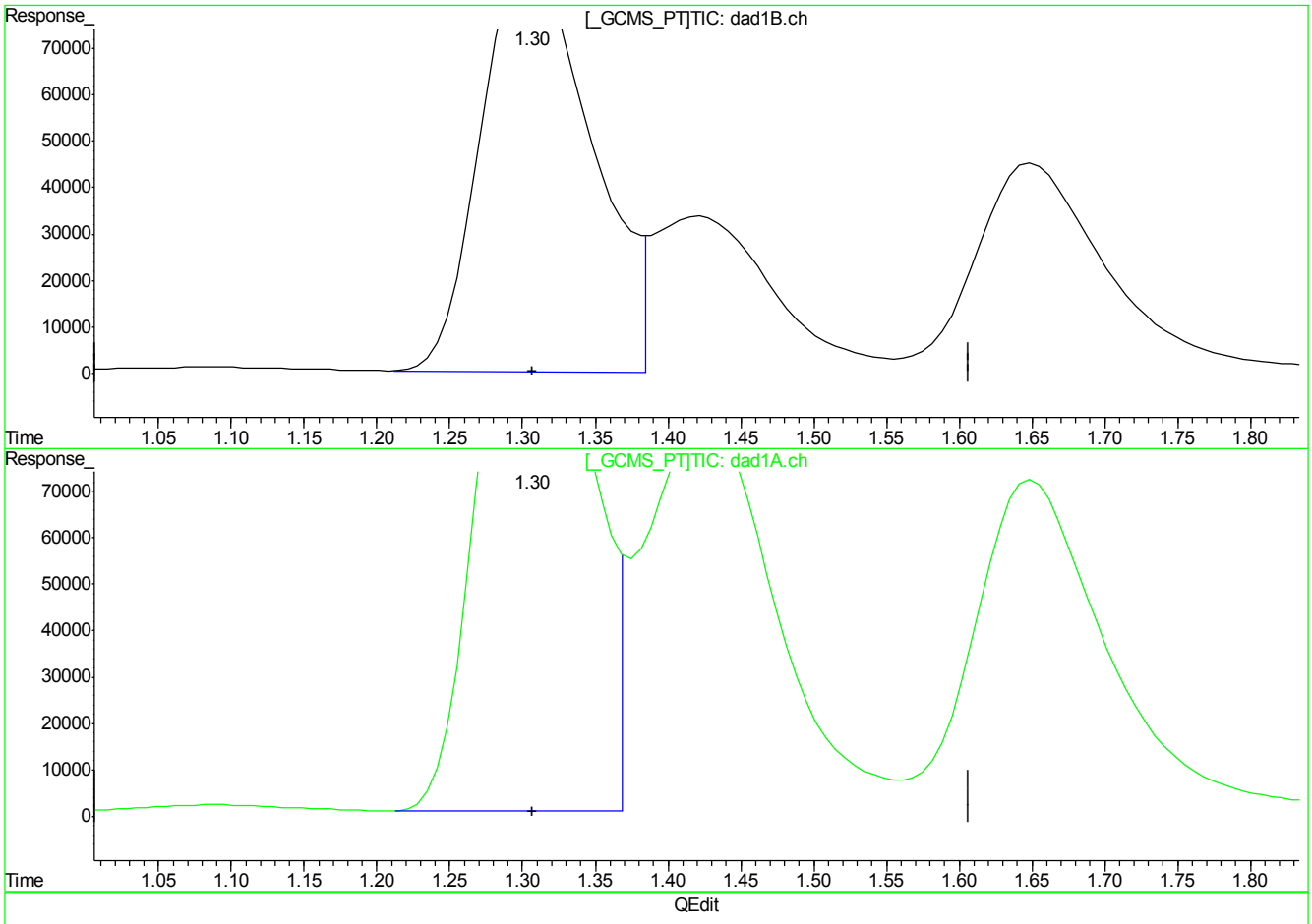
response 5860173

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:43:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(1) TNX

1.30min 985.132ppb m

response 4752823

(1) TNX #2

1.30min 959.439ppb m

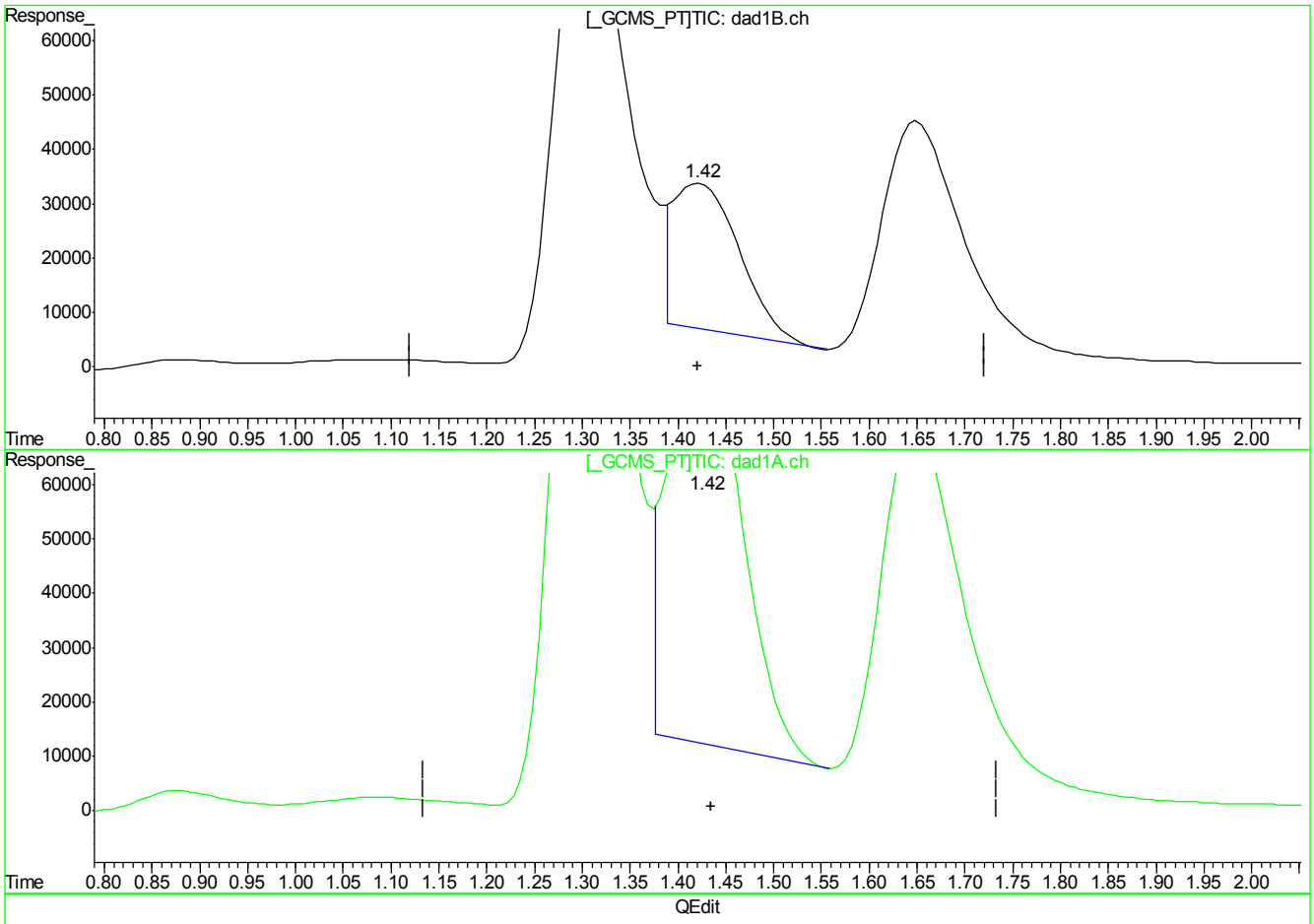
response 7117525

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:43:47 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(2) HMX

1.42min 717.724ppb

response 1342219

(2) HMX #2

1.43min 785.959ppb

response 3985312

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:43:50 2018

7.7.11.4

7

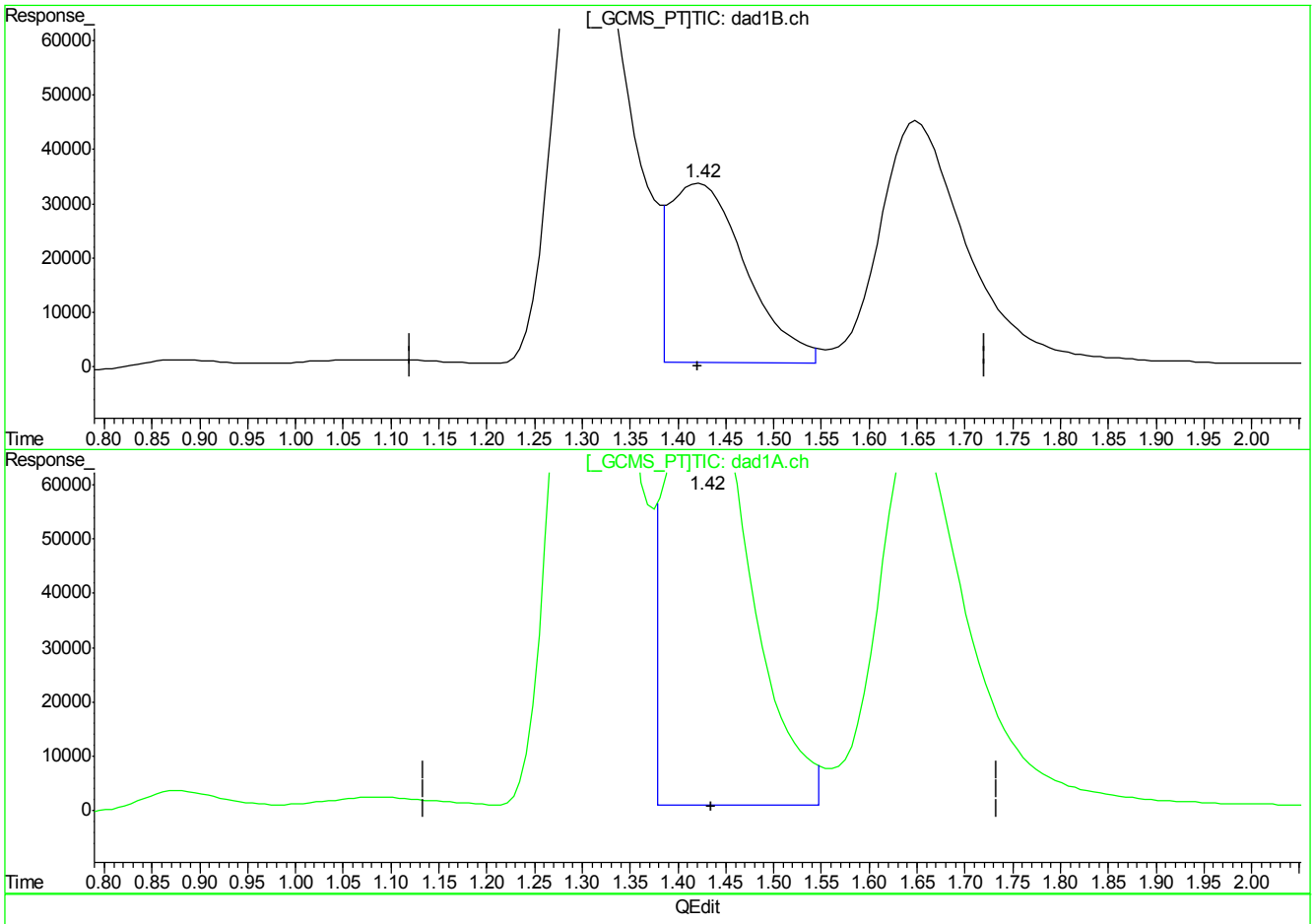
FA53725

BB059598.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(2) HMX

1.42min 971.884ppb m

response 1817524

(2) HMX #2

1.42min 961.337ppb m

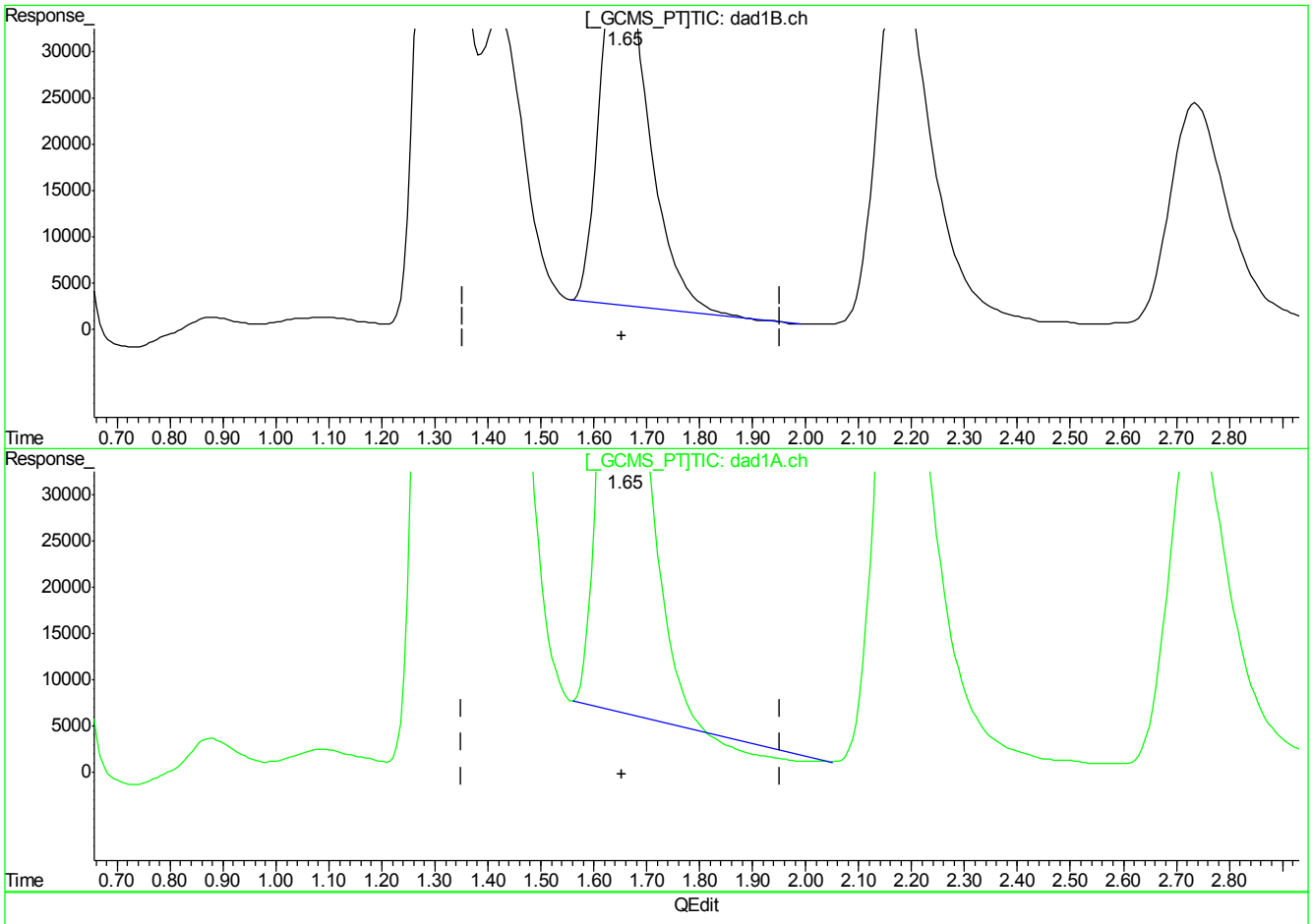
response 4869684

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:44:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(3) DNX

1.65min 813.386ppb

response 2519070

(3) DNX #2

1.65min 776.336ppb

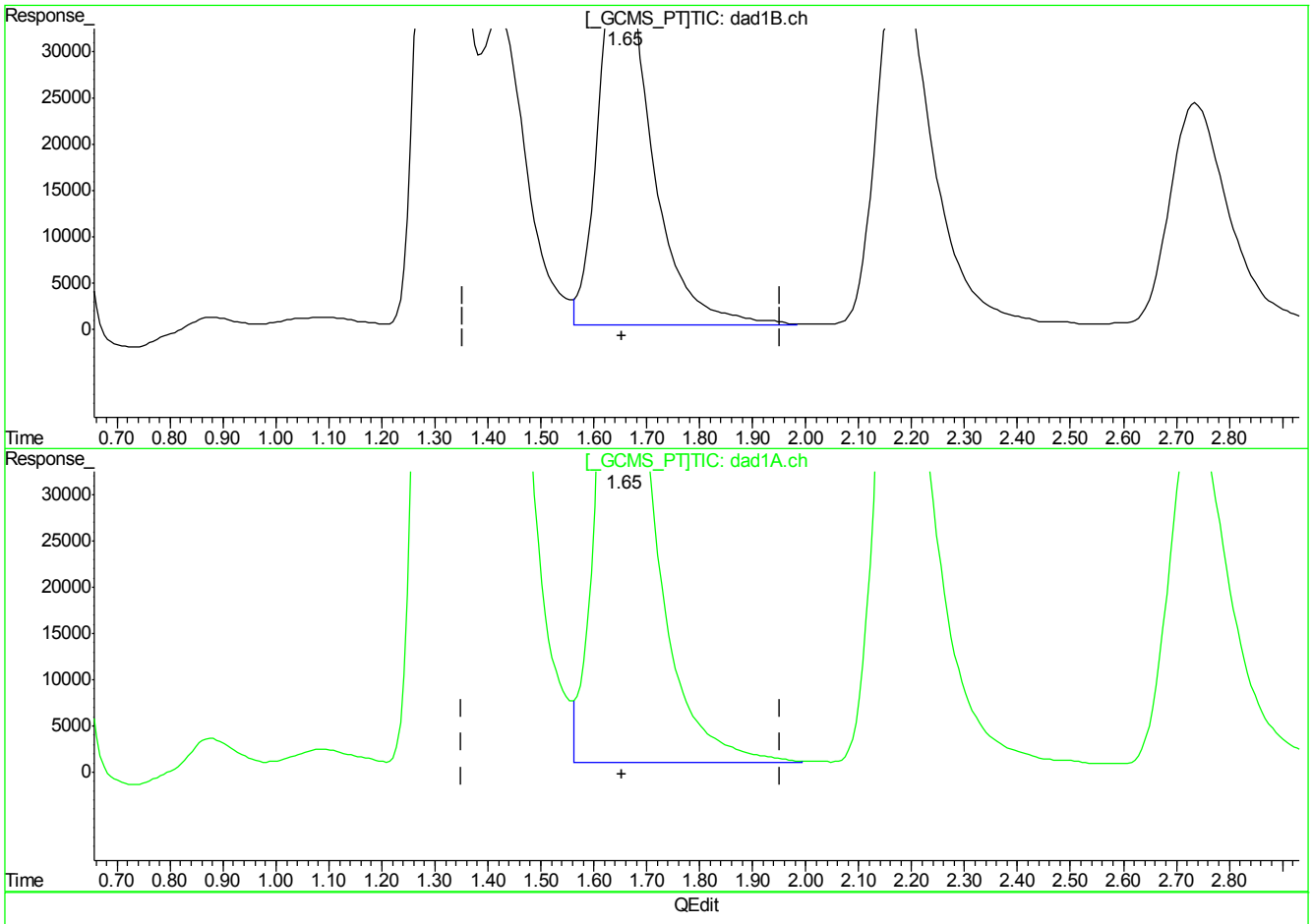
response 3656807

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:44:12 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(3) DNX

1.65min 929.774ppb m

response 2879524

(3) DNX #2

1.65min 977.188ppb m

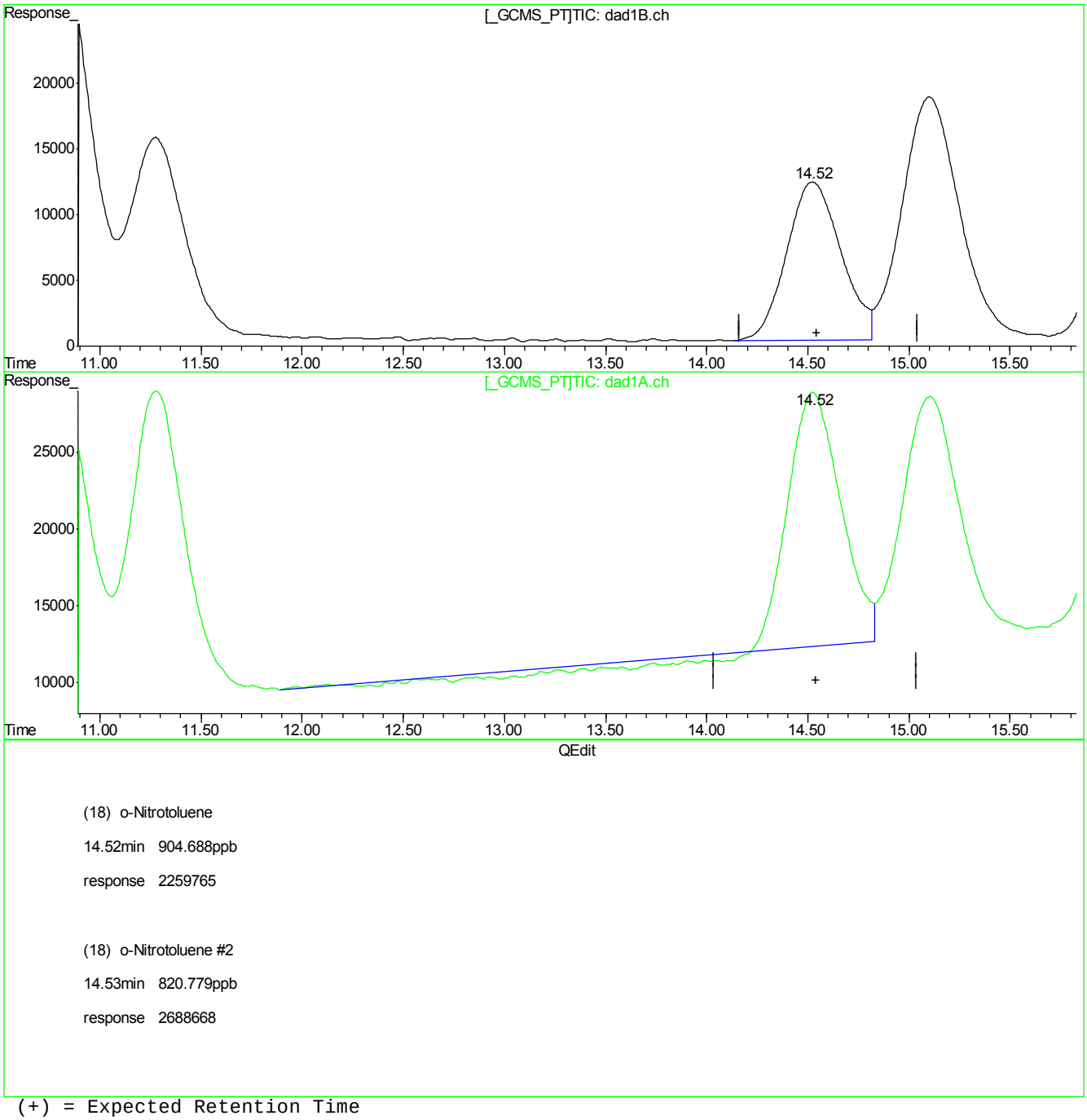
response 4616062

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:44:31 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.52min 904.688ppb

response 2259765

(18) o-Nitrotoluene #2

14.53min 820.779ppb

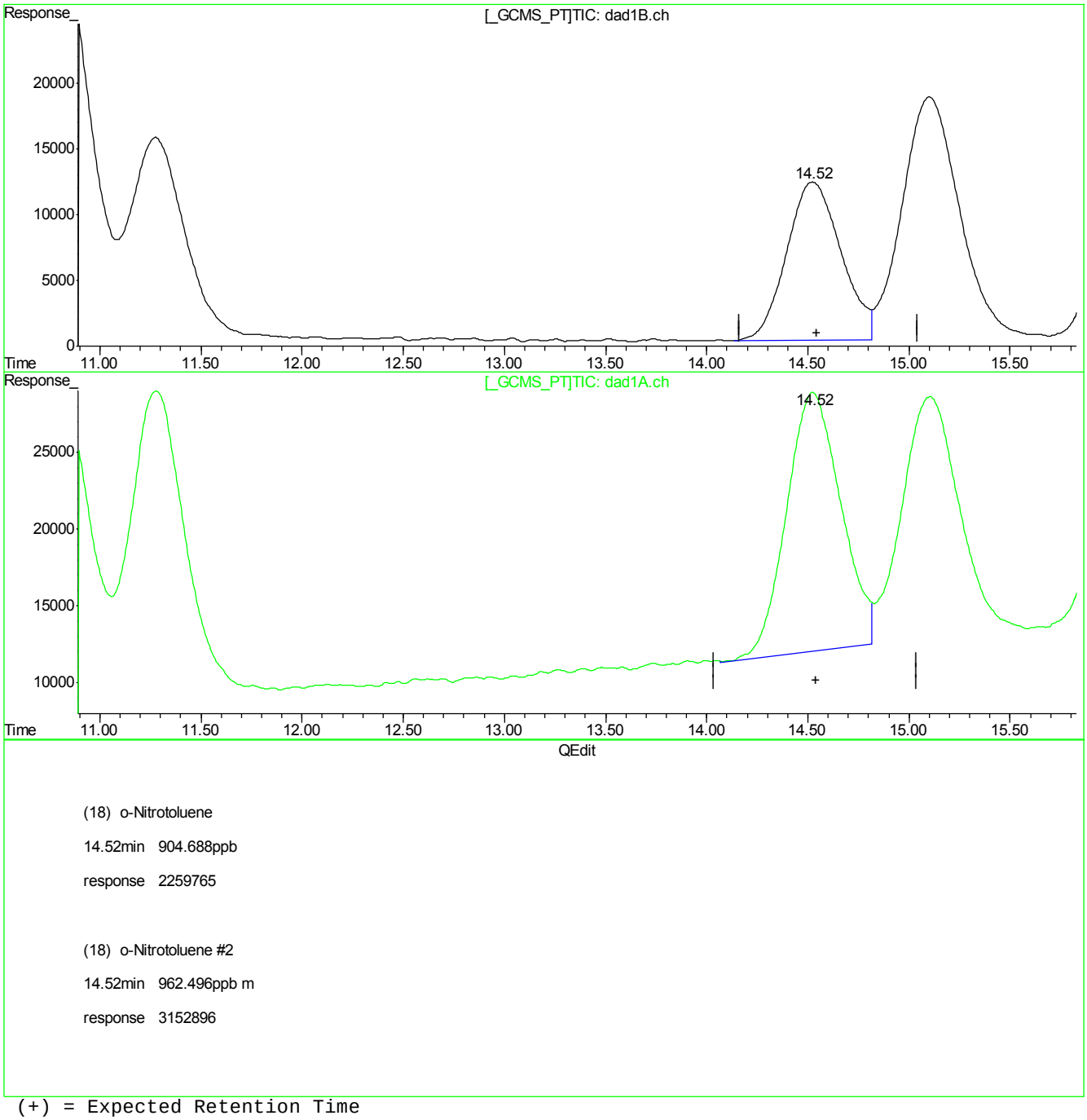
response 2688668

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:44:39 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.52min 904.688ppb

response 2259765

(18) o-Nitrotoluene #2

14.52min 962.496ppb m

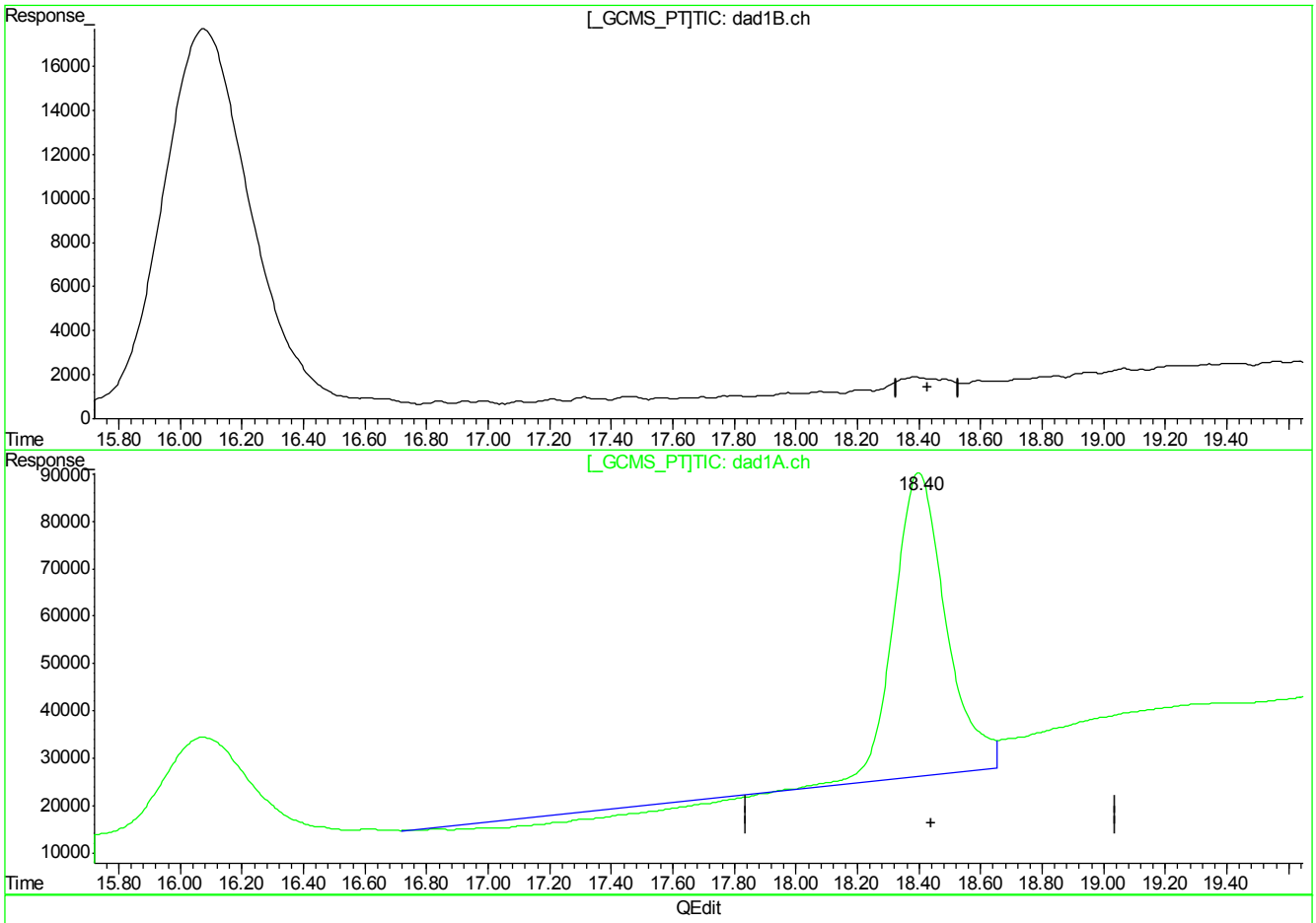
response 3152896

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:44:45 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.40min 4819.828ppb

response 6693927

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:44:48 2018

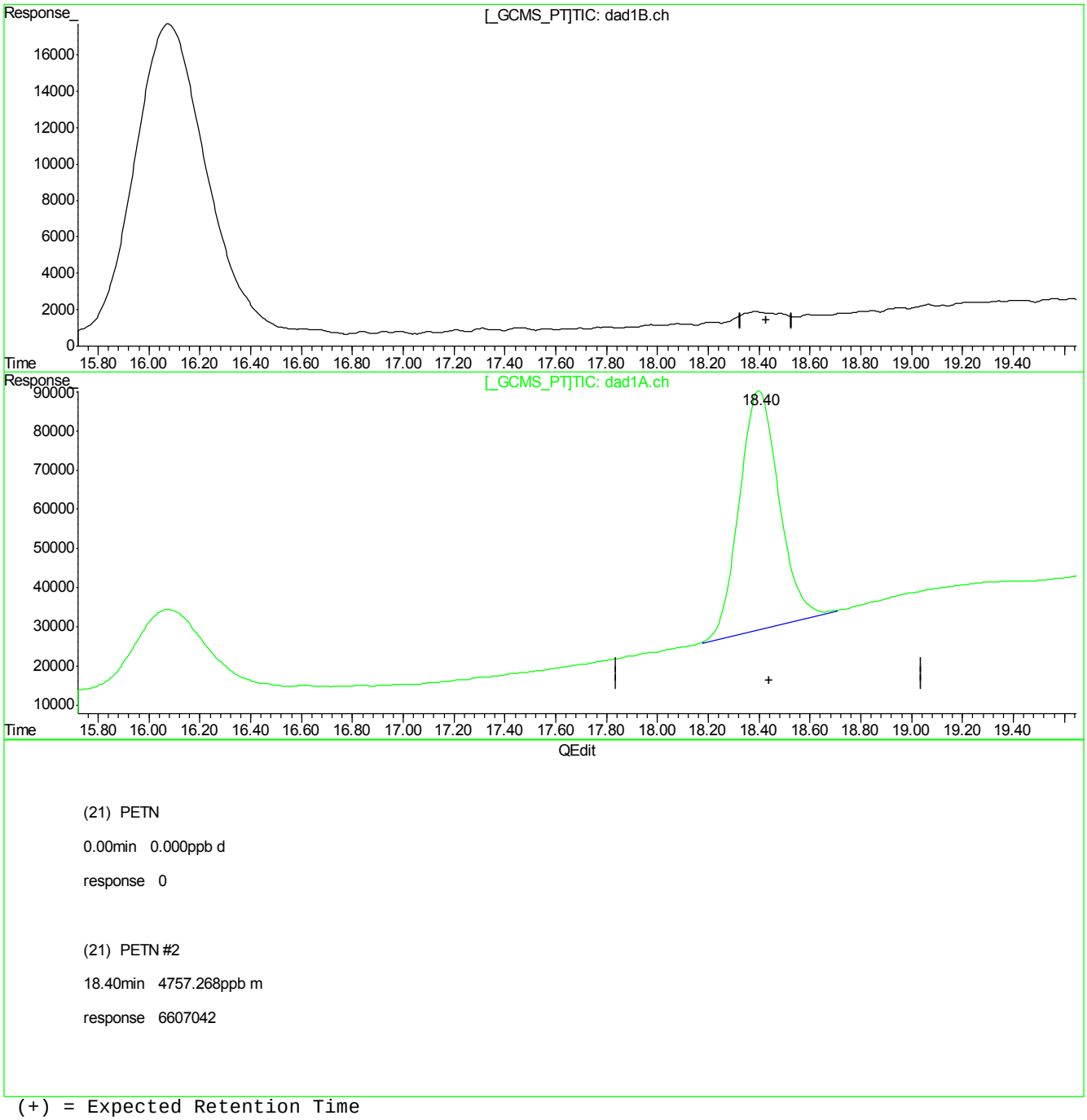
7.7.11.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059598.D\dad1A.ch
Acq On : 08-May-2018, 09:41:24 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1729,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:28 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 03 09:20:17 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.40min 4757.268ppb m

response 6607042

(+) = Expected Retention Time
BB059598.D 8330B_0419PLUS.M Tue May 08 11:44:51 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/09/18 15:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 09 07:47:17 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.20	10.20	2463666	4342510	920.755	921.047
	Spiked Amount 500.000	Range 69 - 134		Recovery =		184.15%#	184.21%#
	Target Compounds						
1)	TNX	1.30	1.30	4634131	7095529	960.530m	956.474m
2)	HMX	1.42	1.42	1856454	5029264	992.701m	993.021m
3)	DNX	1.64	1.64	2850197	4664083	920.305m	987.214m
4)	MNX	2.17	2.17	2911414	4537808	940.221	976.111
5)	RDX	2.73	2.73	1917150	3075698	896.540	925.301
6)	1,3,5-Trinitrobe	4.38	4.38	4109766	7989169	944.492	957.007
7)	1,3-Dinitrobenze	5.54	5.54	5244682	4239815	946.014	1138.395
8)	3,5-Dinitroanili	5.81	5.81	4588876	8273590	938.348	1106.273
9)	Nitrobenzene	7.03	7.03	3276948	3125481	899.320	942.589
10)	Nitroglycerin	0.00	8.35	0	5921907	N.D. d	4621.330
11)	Tetryl	8.60	8.59	2747412	4570286	935.901	879.955
12)	2,4,6-Trinitroto	9.04	9.04	3563503	4291675	844.401	946.818
13)	2-Amino-4,6-Dini	9.28	9.28	3587560	5538514	947.714	1032.565
14)	4-Amino-2,6-Dini	9.72	9.72	2645572	5285489	1001.146	1019.998
16)	2,4-Dinitrotolue	10.84	10.84	4899146	3125098	931.218	1058.196
17)	2,6-Dinitrotolue	11.28	11.29	2974591	3662069	860.636	1072.463
18)	o-Nitrotoluene	14.54	14.54	2260703	3198090	905.063	976.292
19)	p-Nitrotoluene	15.12	15.12	3633993	3169117	920.689	1004.726
20)	m-Nitrotoluene	16.10	16.10	3381979	3938970	948.076	978.900
21)	PETN	0.00	18.41	0	6668799	N.D. d	4801.735m

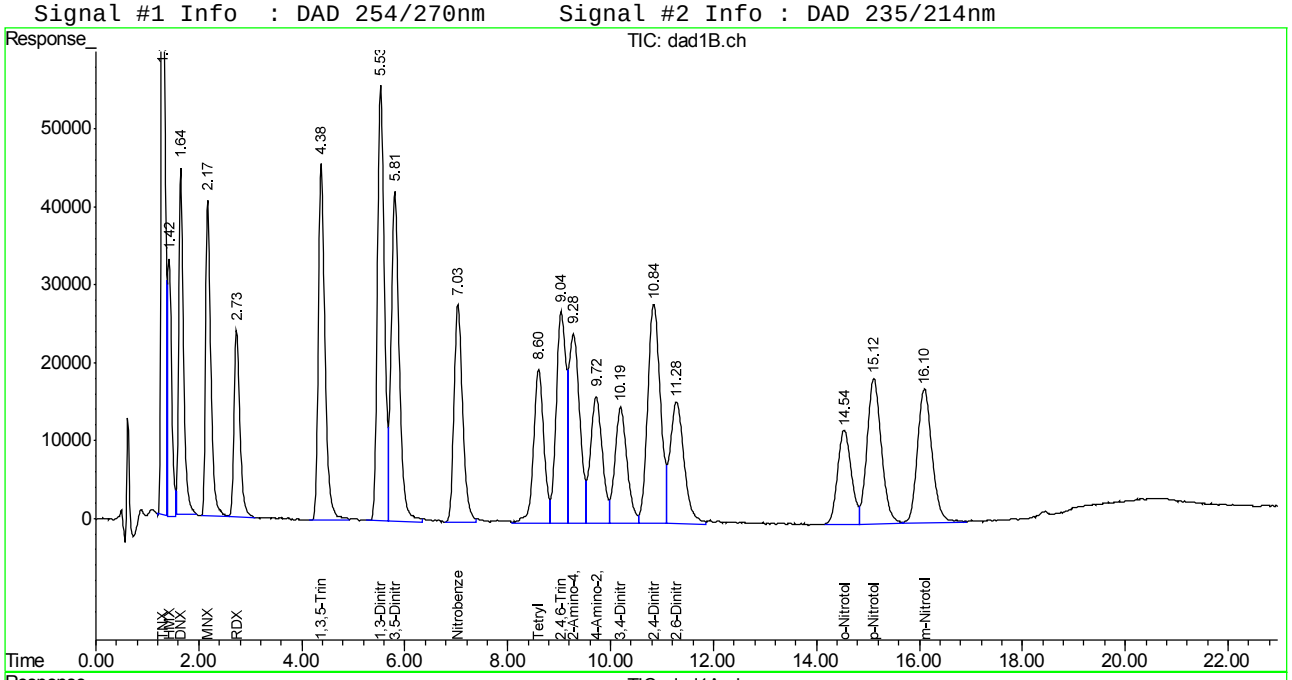
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059610.D 8330B_0419PLUS.M Wed May 09 09:30:57 2018 Page 1

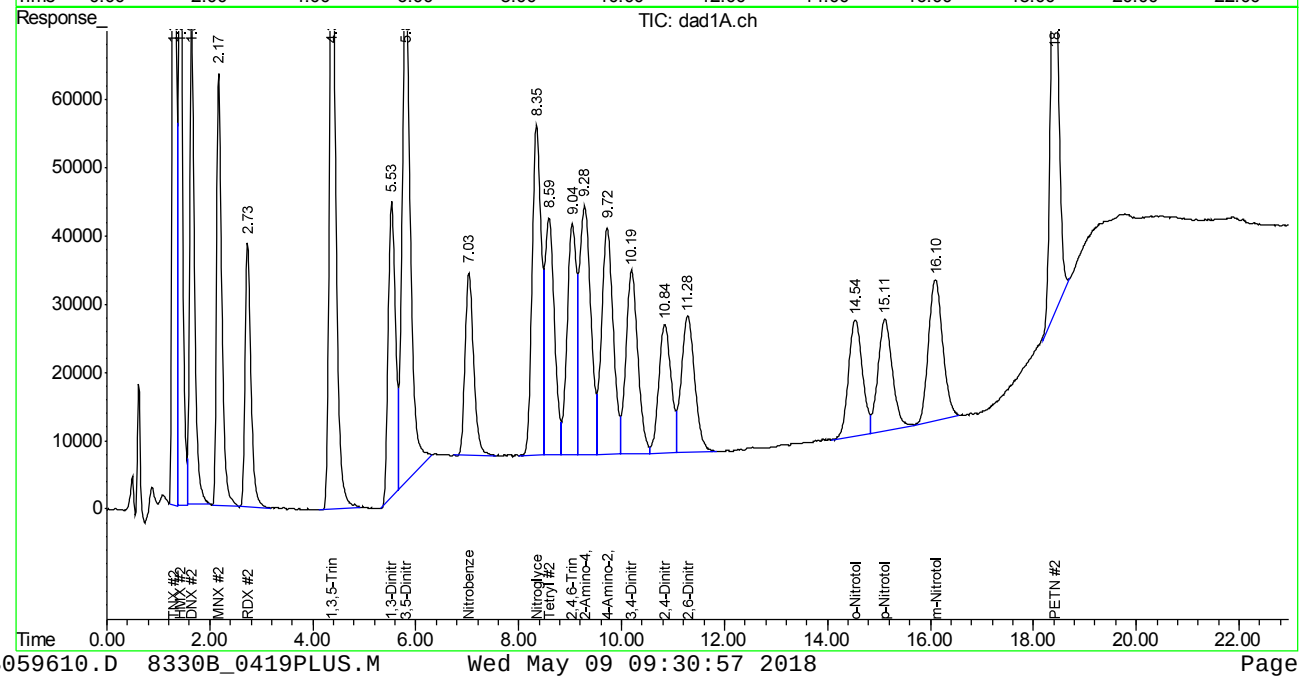
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:49 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

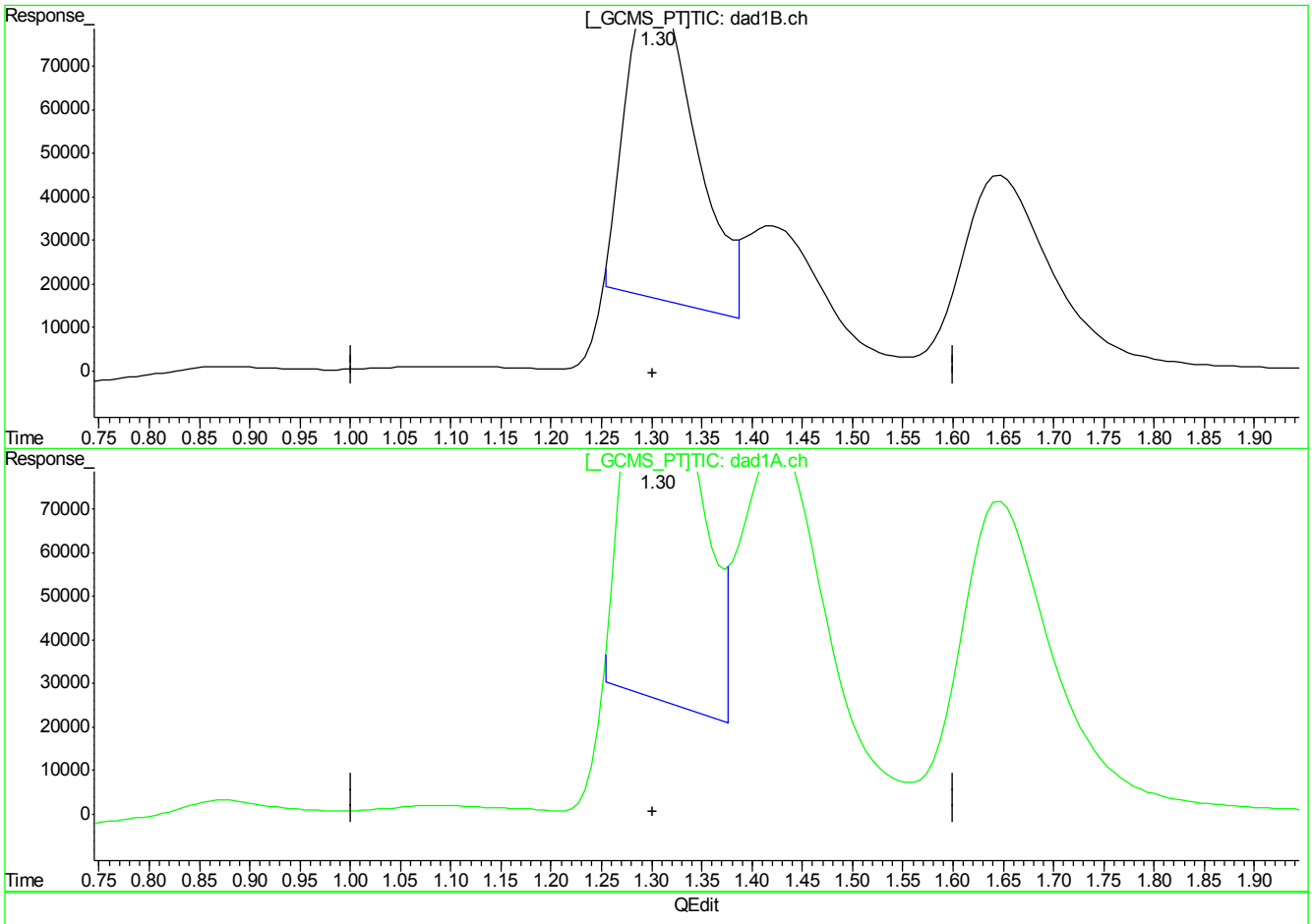
Sample Number:	GBB1729-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059610.D	**Analyst approved:**	05/09/18 09:42 Evita Martinez
Injection Time:	05/08/18 16:24	**Supervisor approved:**	05/09/18 15:58 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.30	Poorly defined baseline
TNX		2	1.30	Poorly defined baseline
HMX	2691-41-0	1	1.42	Poorly defined baseline
HMX	2691-41-0	2	1.42	Poorly defined baseline
DNX		1	1.64	Poorly defined baseline
DNX		2	1.64	Poorly defined baseline
PETN	78-11-5	2	18.41	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(1) TNX

1.30min 714.763ppb

response 3448413

(1) TNX #2

1.30min 696.720ppb

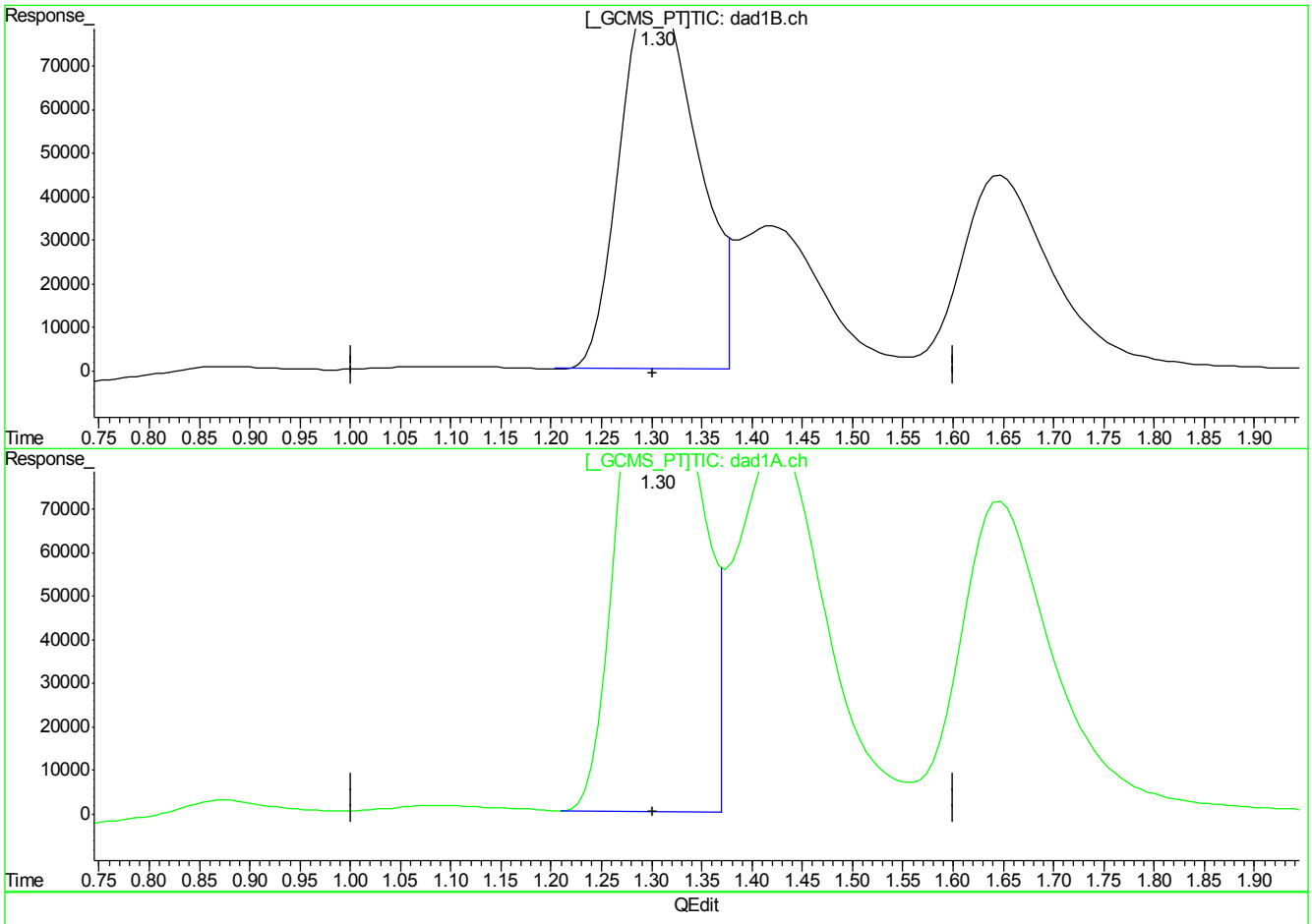
response 5168561

(+) = Expected Retention Time
BB059610.D 8330B_0419PLUS.M Wed May 09 07:48:07 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(1) TNX

1.30min 960.530ppb m

response 4634131

(1) TNX #2

1.30min 956.474ppb m

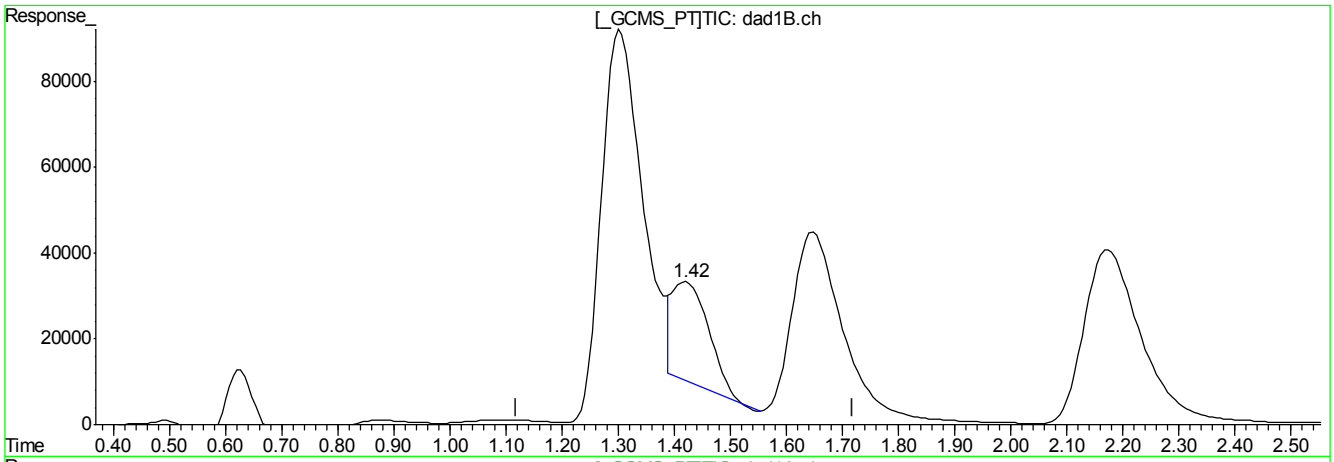
response 7095529

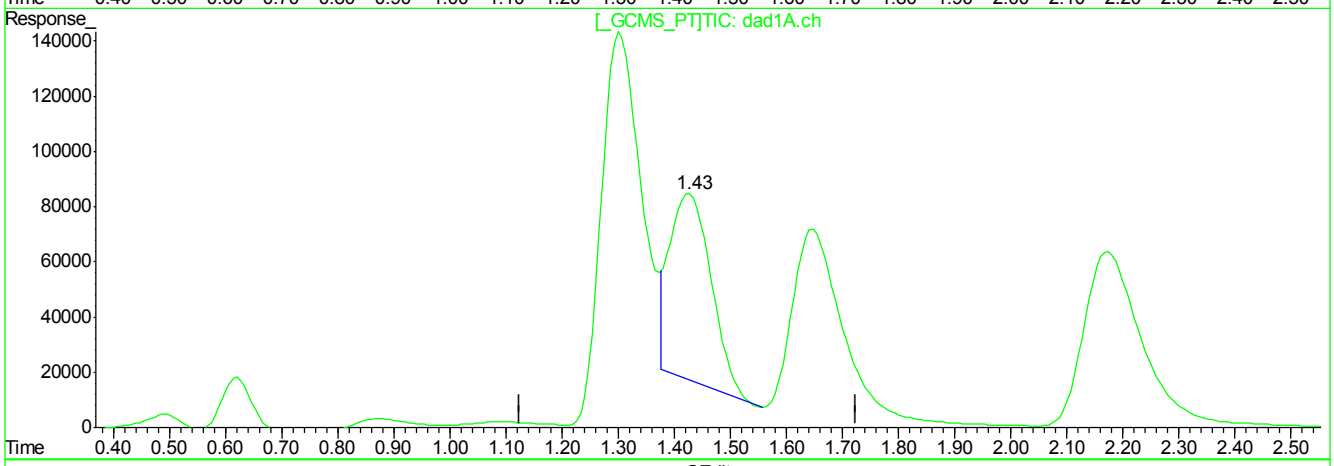
(+) = Expected Retention Time
BB059610.D 8330B_0419PLUS.M Wed May 09 07:48:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.42min 603.184ppb

response 1128016

(2) HMX #2

1.43min 710.773ppb

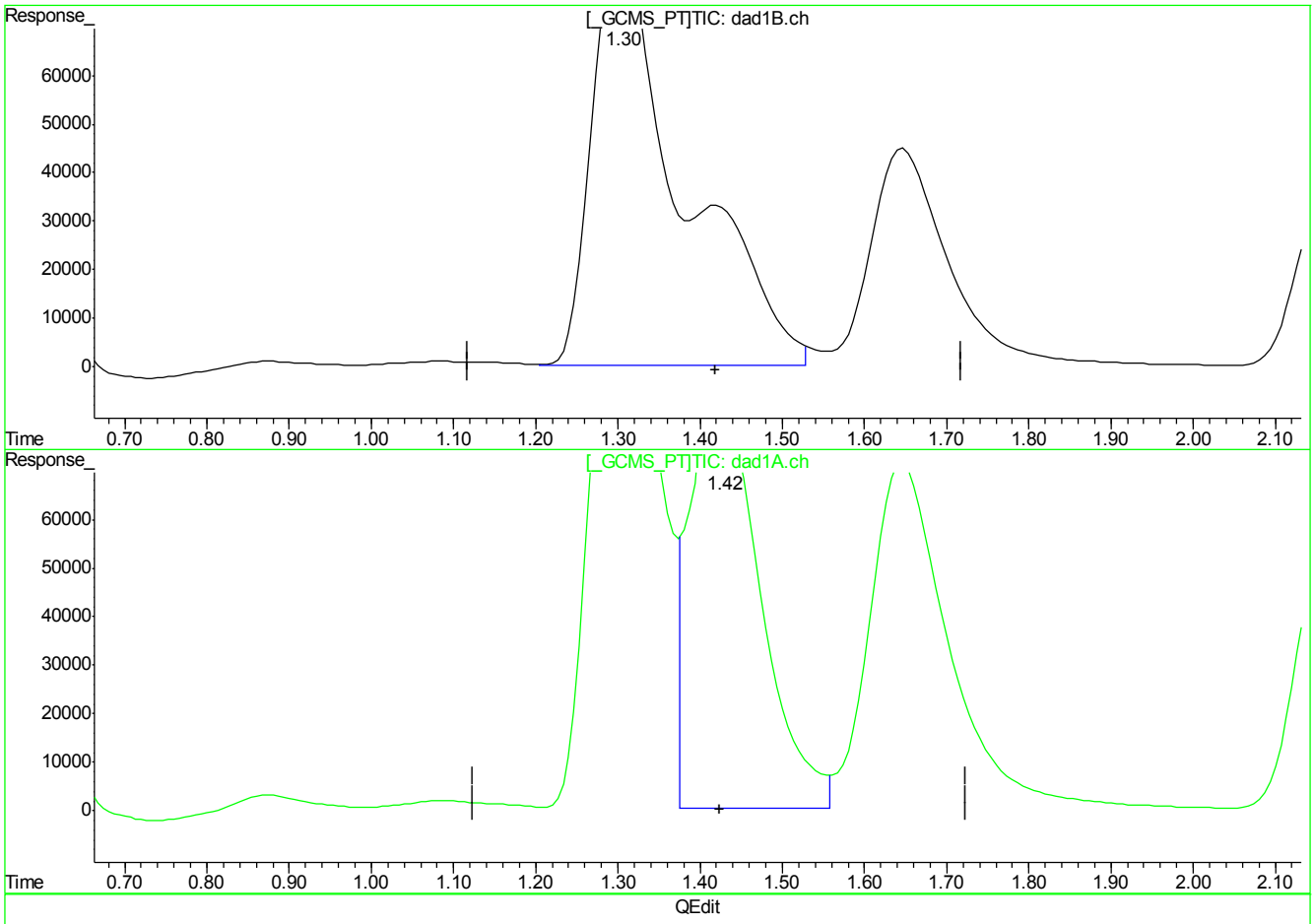
response 3605629

(+) = Expected Retention Time
BB059610.D 8330B_0419PLUS.M Wed May 09 07:48:21 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(2) HMX

1.30min 3546.783ppb m

response 6632854

(2) HMX #2

1.42min 993.021ppb m

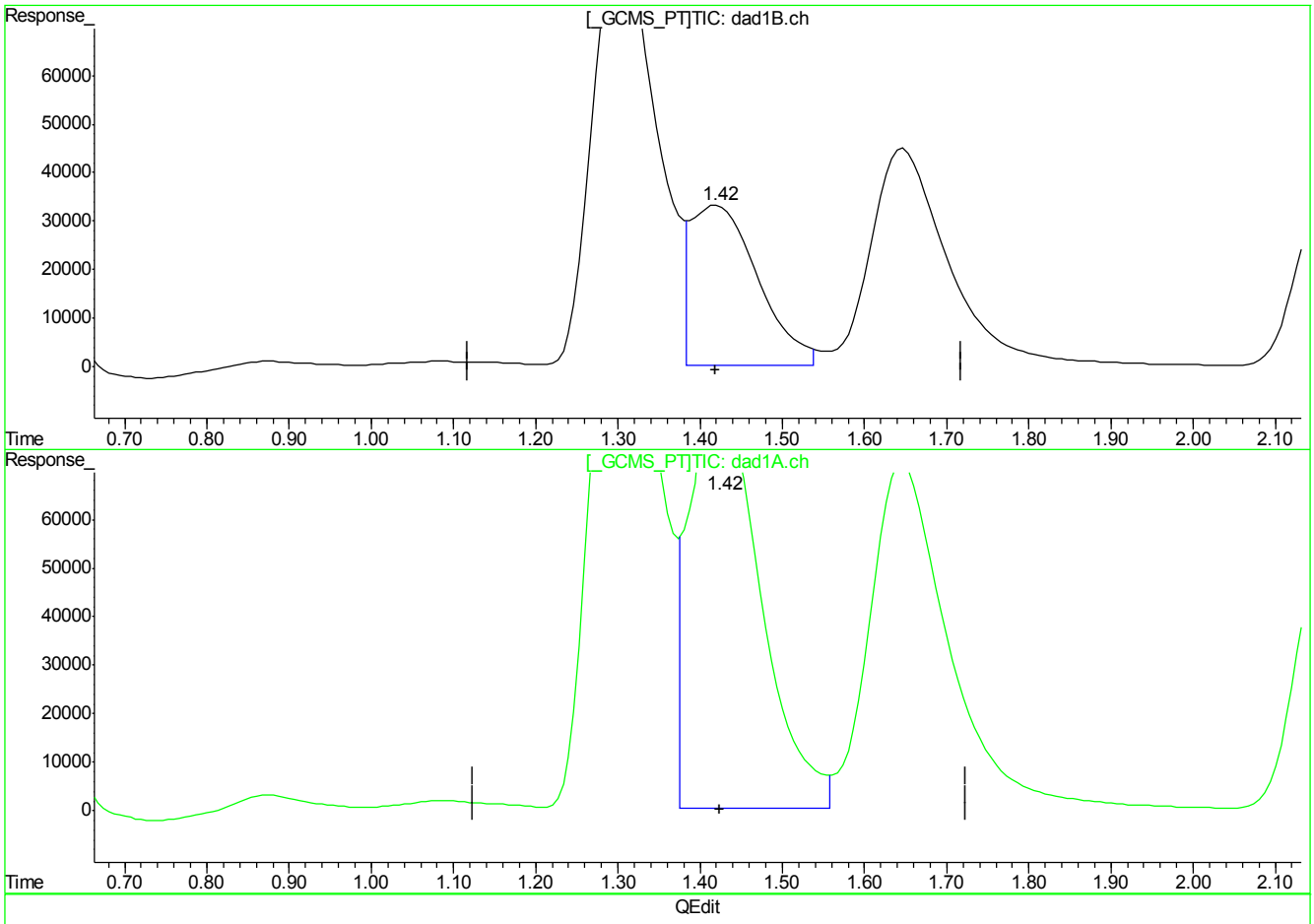
response 5029264

(+) = Expected Retention Time
BB059610.D 8330B_0419PLUS.M Wed May 09 07:48:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(2) HMX

1.42min 992.701ppb m

response 1856454

(2) HMX #2

1.42min 993.021ppb m

response 5029264

(+) = Expected Retention Time
BB059610.D 8330B_0419PLUS.M Wed May 09 07:49:06 2018

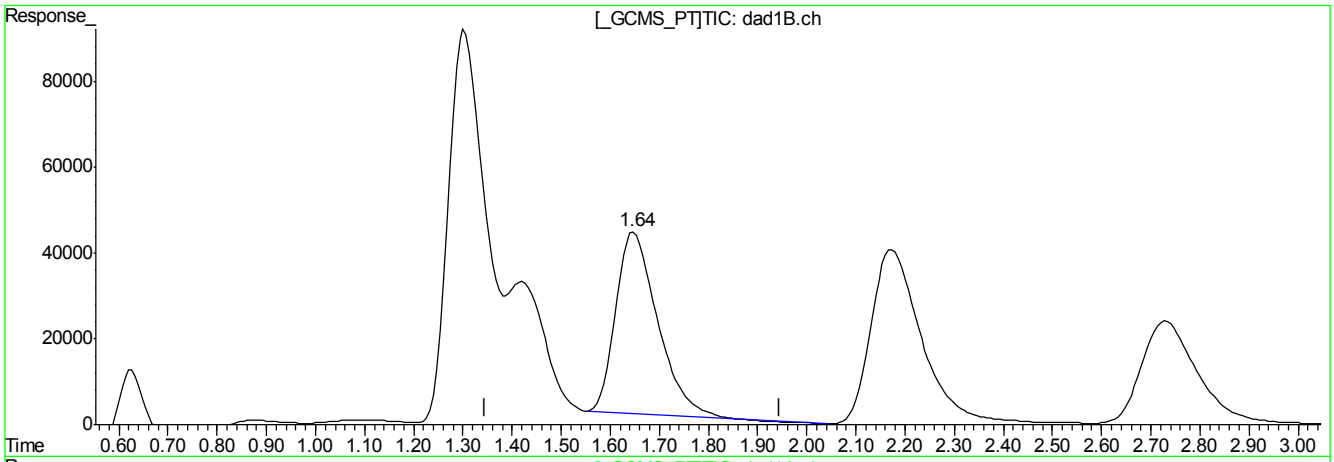
7.7.12.6

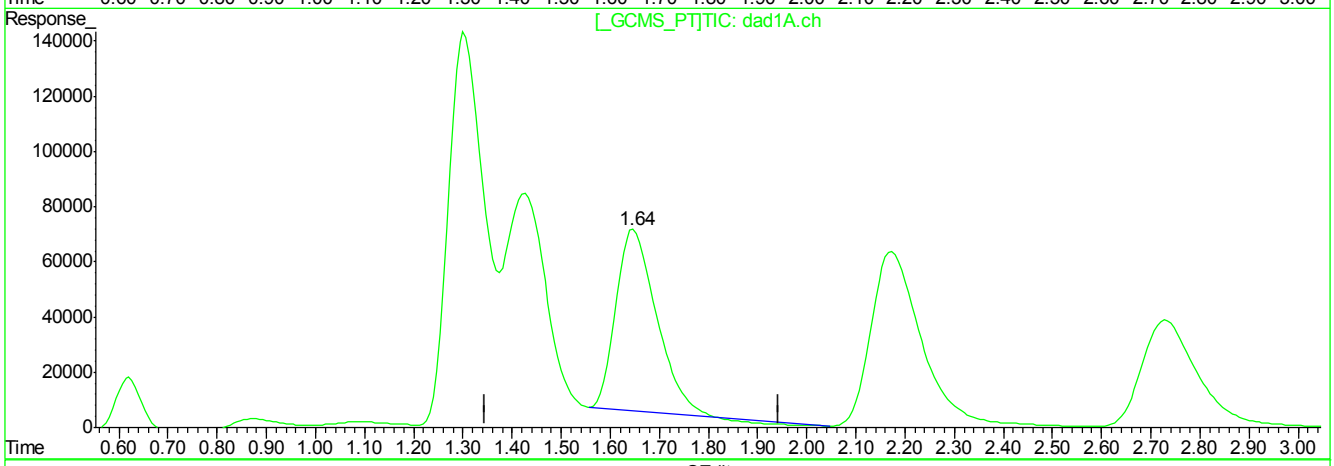
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.65min 805.118ppb

response 2493462

(3) DNX #2

1.65min 793.218ppb

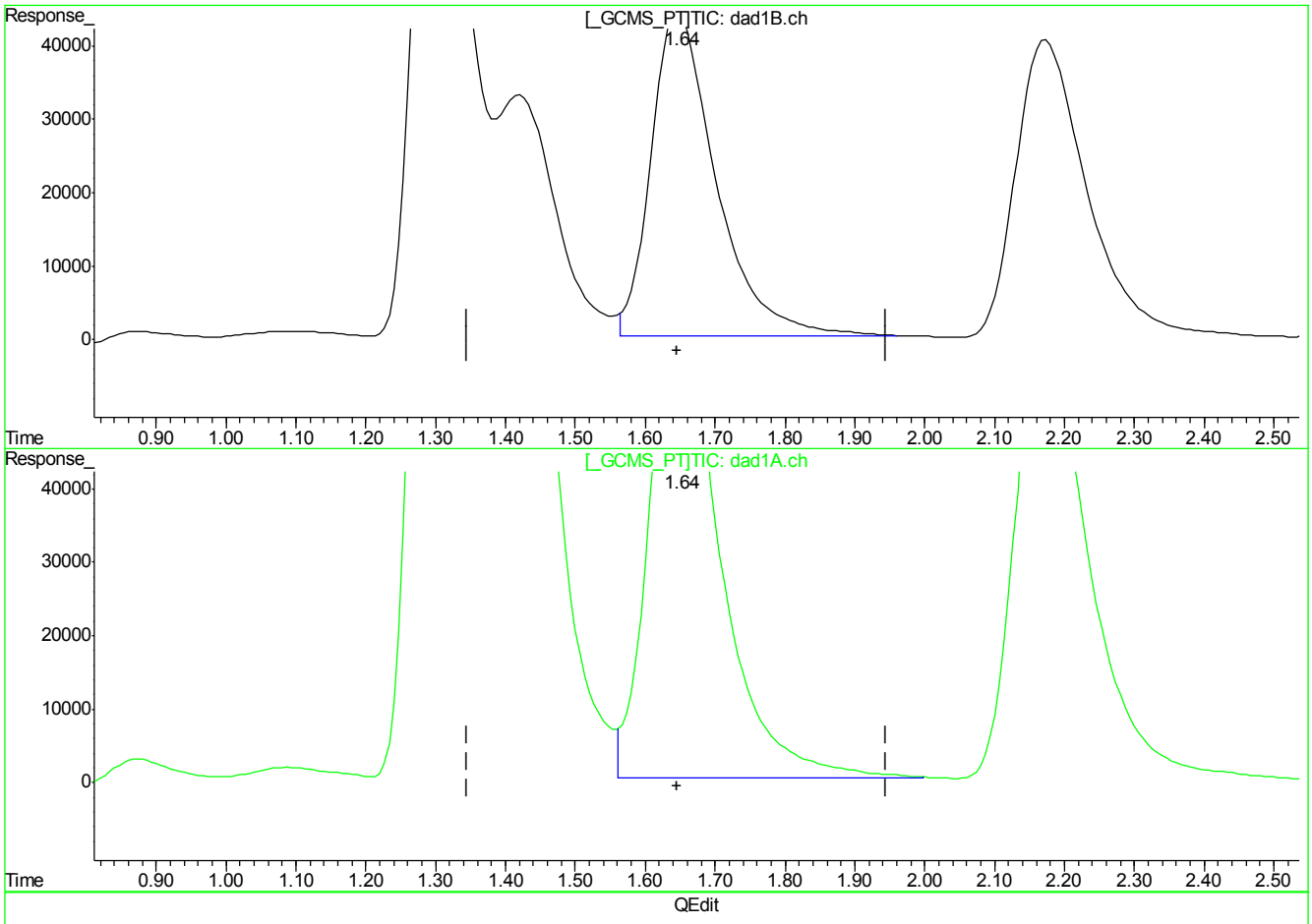
response 3737223

(+) = Expected Retention Time
BB059610.D 8330B_0419PLUS.M Wed May 09 07:49:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(3) DNX

1.64min 920.305ppb m

response 2850197

(3) DNX #2

1.64min 987.214ppb m

response 4664083

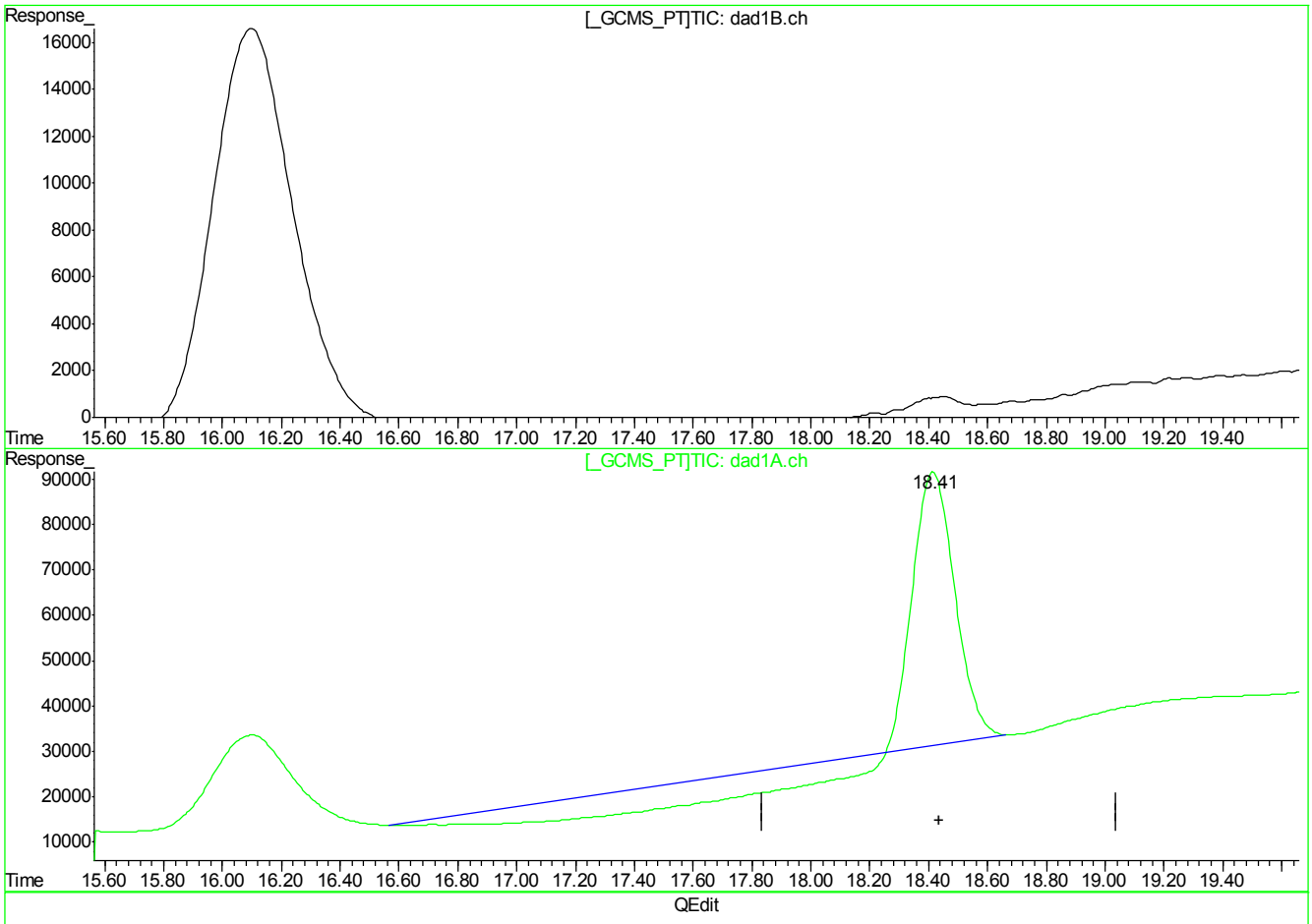
(+) = Expected Retention Time
BB059610.D 8330B_0419PLUS.M Wed May 09 07:49:25 2018

BB059610.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 1500.839ppb

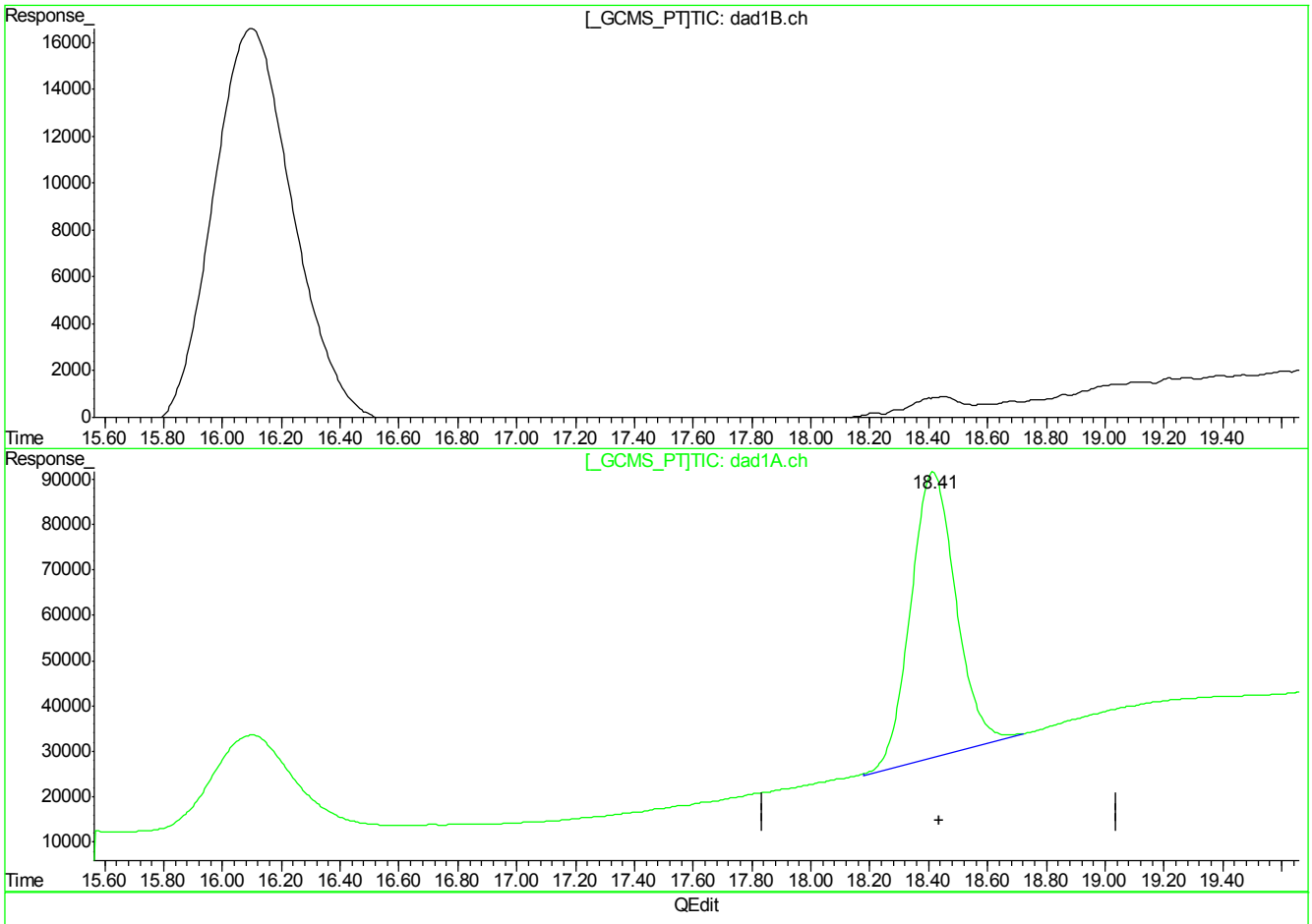
response 2084412

(+) = Expected Retention Time
BB059610.D 8330B_0419PLUS.M Wed May 09 07:49:46 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059610.D\dad1A.ch
Acq On : 08-May-2018, 16:24:14 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.41min 4801.735ppb m

response 6668799

(+) = Expected Retention Time
BB059610.D 8330B_0419PLUS.M Wed May 09 07:49:50 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 09 07:47:45 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.19	10.18	2433579	4306457	909.510	913.401
	Spiked Amount 500.000	Range 69 - 134		Recovery =		181.90%#	182.68%#
	Target Compounds						
1)	TNX	1.30	1.30	4443665	7096395	921.051m	956.591m
2)	HMX	1.42	1.42	1773896	5152915	948.555m	1017.579m
3)	DNX	1.64	1.64	2848090	4738578	919.624m	1002.760m
4)	MNX	2.17	2.17	2894428	4498601	934.735	967.677
5)	RDX	2.73	2.73	1904971	3074592	890.845	924.968
6)	1,3,5-Trinitrobe	4.37	4.37	4091832	8005028	940.371	958.906
7)	1,3-Dinitrobenze	5.53	5.53	5225140	4342627	942.490	1166.000
8)	3,5-Dinitroanili	5.80	5.80	4552978	8492777	931.008	1135.581
9)	Nitrobenzene	7.03	7.03	3243957	3076591	890.266	927.844
10)	Nitroglycerin	0.00	8.34	0	5872860	N.D. d	4583.055
11)	Tetryl	8.60	8.58	2716305	4548019	925.252	875.668
12)	2,4,6-Trinitroto	9.03	9.03	3555944	4255223	842.610	938.776
13)	2-Amino-4,6-Dini	9.27	9.27	3573481	5533411	943.995	1031.614
14)	4-Amino-2,6-Dini	9.71	9.71	2627562	5277009	994.431	1018.362
16)	2,4-Dinitrotolue	10.83	10.83	4884719	3116036	928.476	1055.128
17)	2,6-Dinitrotolue	11.28	11.28	2953827	3613527	854.629	1058.247
18)	o-Nitrotoluene	14.53	14.53	2251202	3054653	901.260	932.505m
19)	p-Nitrotoluene	15.11	15.11	3658755	3086469	926.963	978.583
20)	m-Nitrotoluene	16.09	16.09	3351982	3979869	939.667	989.064
21)	PETN	0.00	18.41	0	6681278	N.D. d	4810.720m

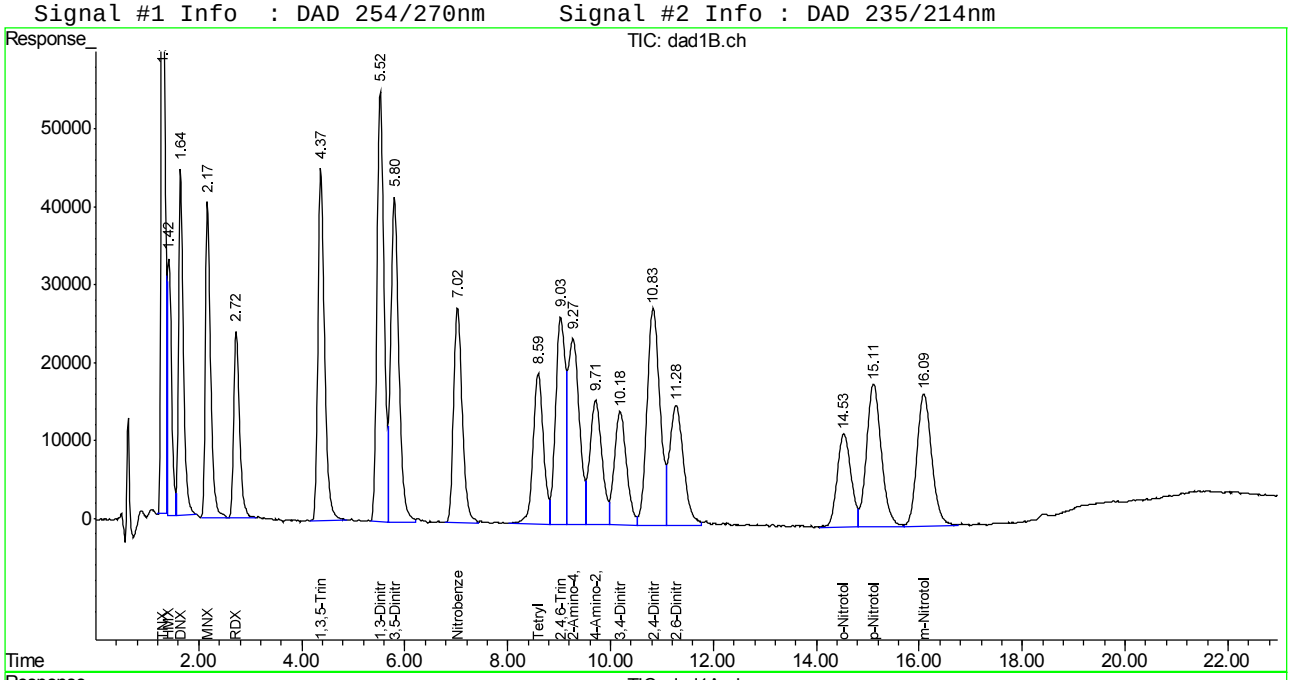
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059617.D 8330B_0419PLUS.M Wed May 09 09:31:03 2018 Page 1

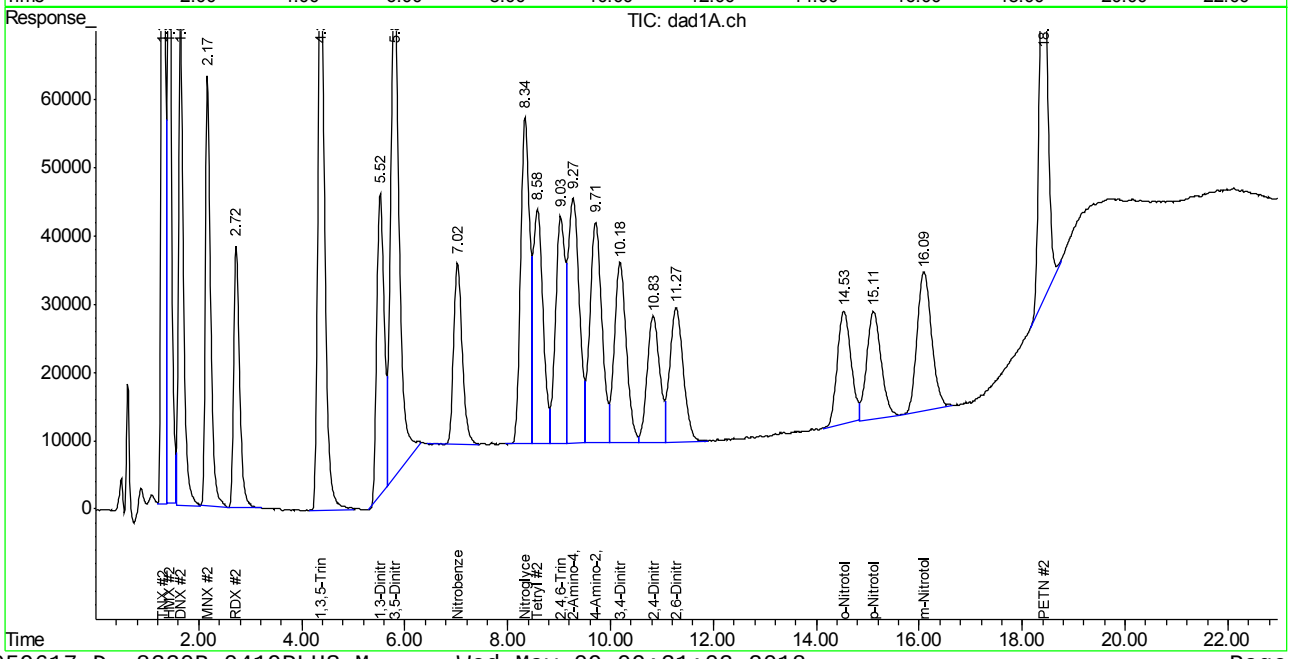
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:53 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

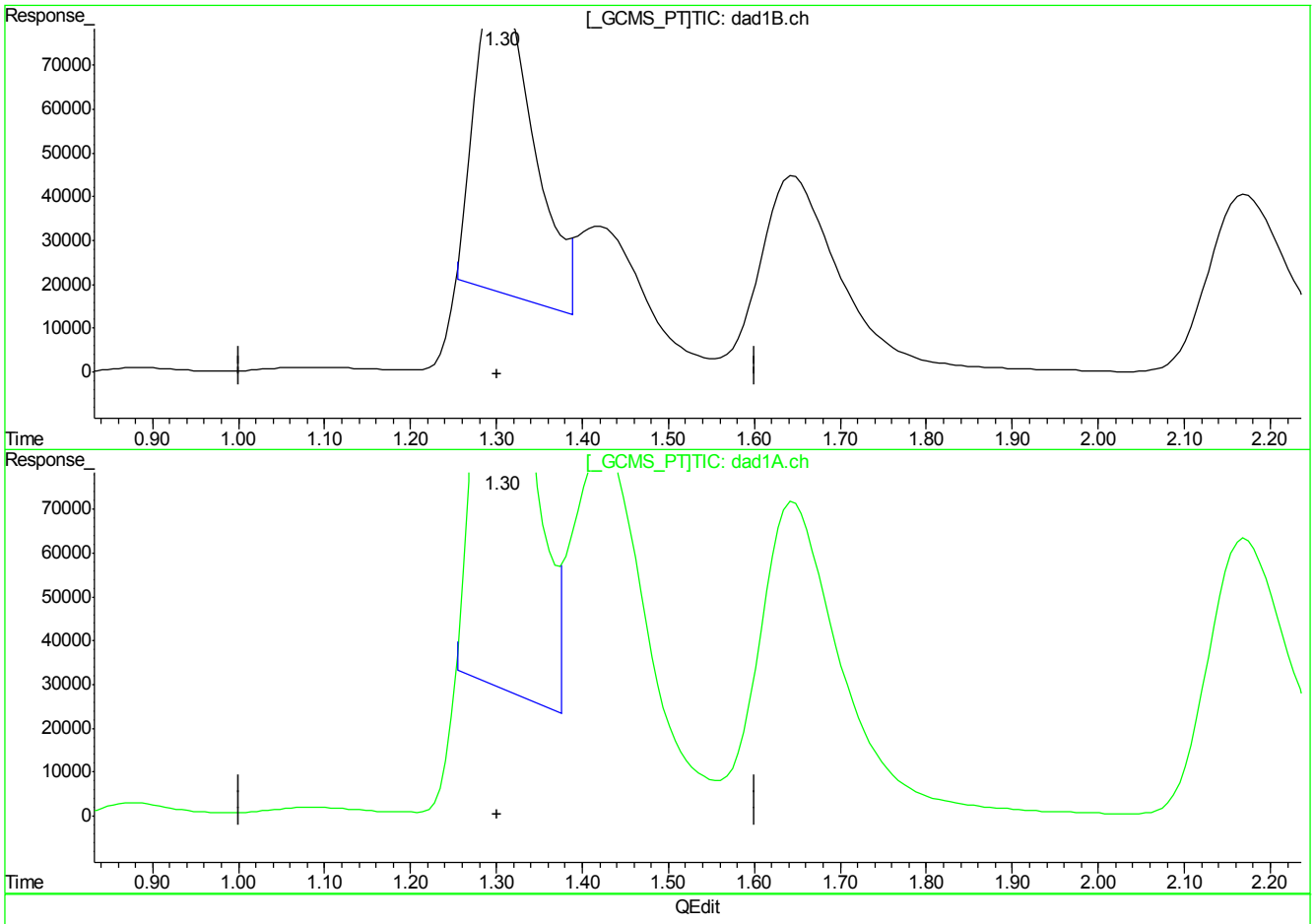
Sample Number:	GBB1729-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059617.D	**Analyst approved:**	05/09/18 09:42 Evita Martinez
Injection Time:	05/08/18 19:54	**Supervisor approved:**	05/09/18 15:58 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.30	Poorly defined baseline
TNX		2	1.30	Poorly defined baseline
HMX	2691-41-0	1	1.42	Poorly defined baseline
HMX	2691-41-0	2	1.42	Poorly defined baseline
DNX		1	1.64	Poorly defined baseline
DNX		2	1.64	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.53	Poorly defined baseline
PETN	78-11-5	2	18.41	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(1) TNX

1.30min 689.641ppb

response 3327211

(1) TNX #2

1.30min 666.137ppb

response 4941688

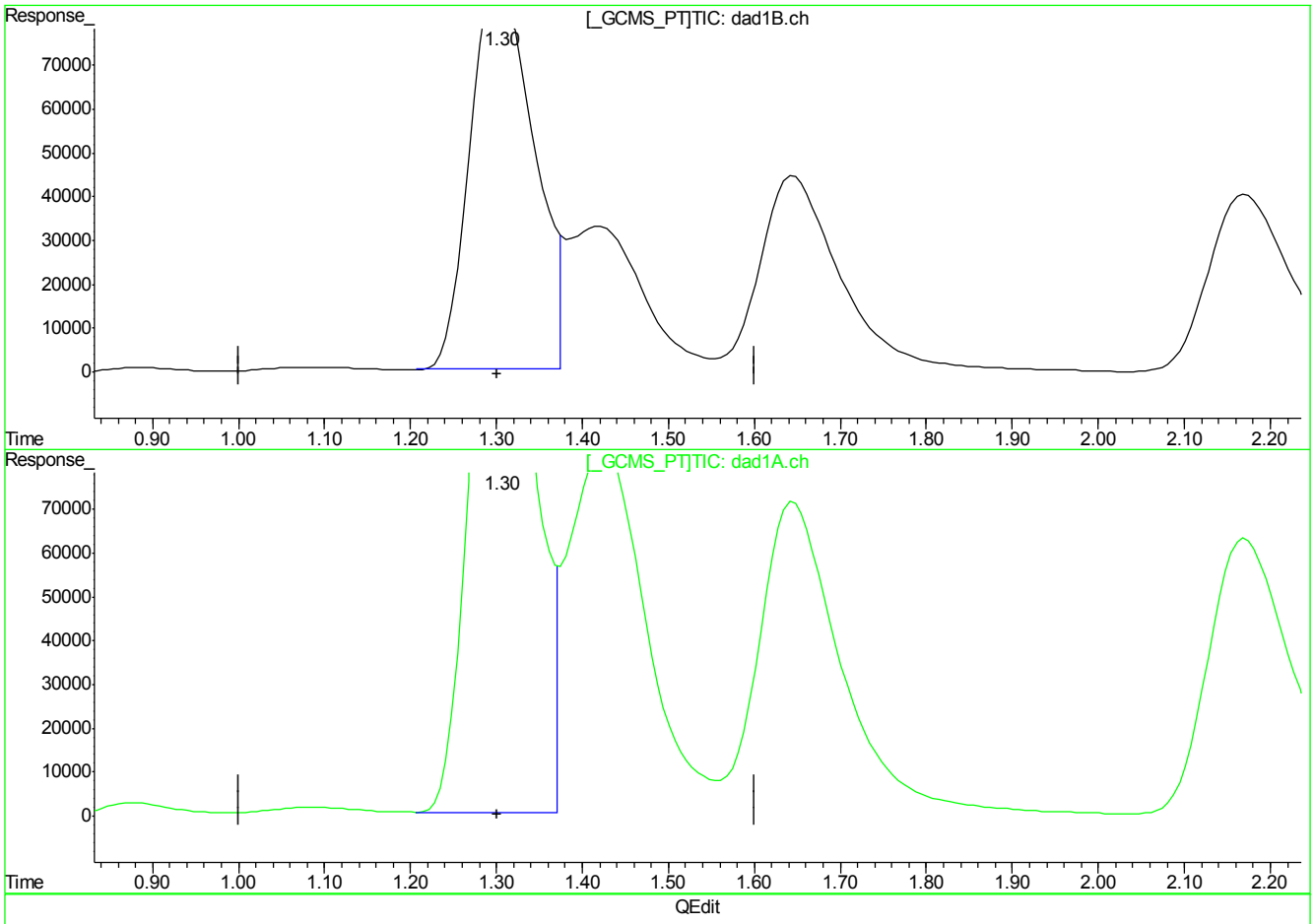
(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:51:56 2018

BB059617.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(1) TNX

1.30min 921.051ppb m

response 4443665

(1) TNX #2

1.30min 956.591ppb m

response 7096395

(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:52:06 2018

7.7.13.3

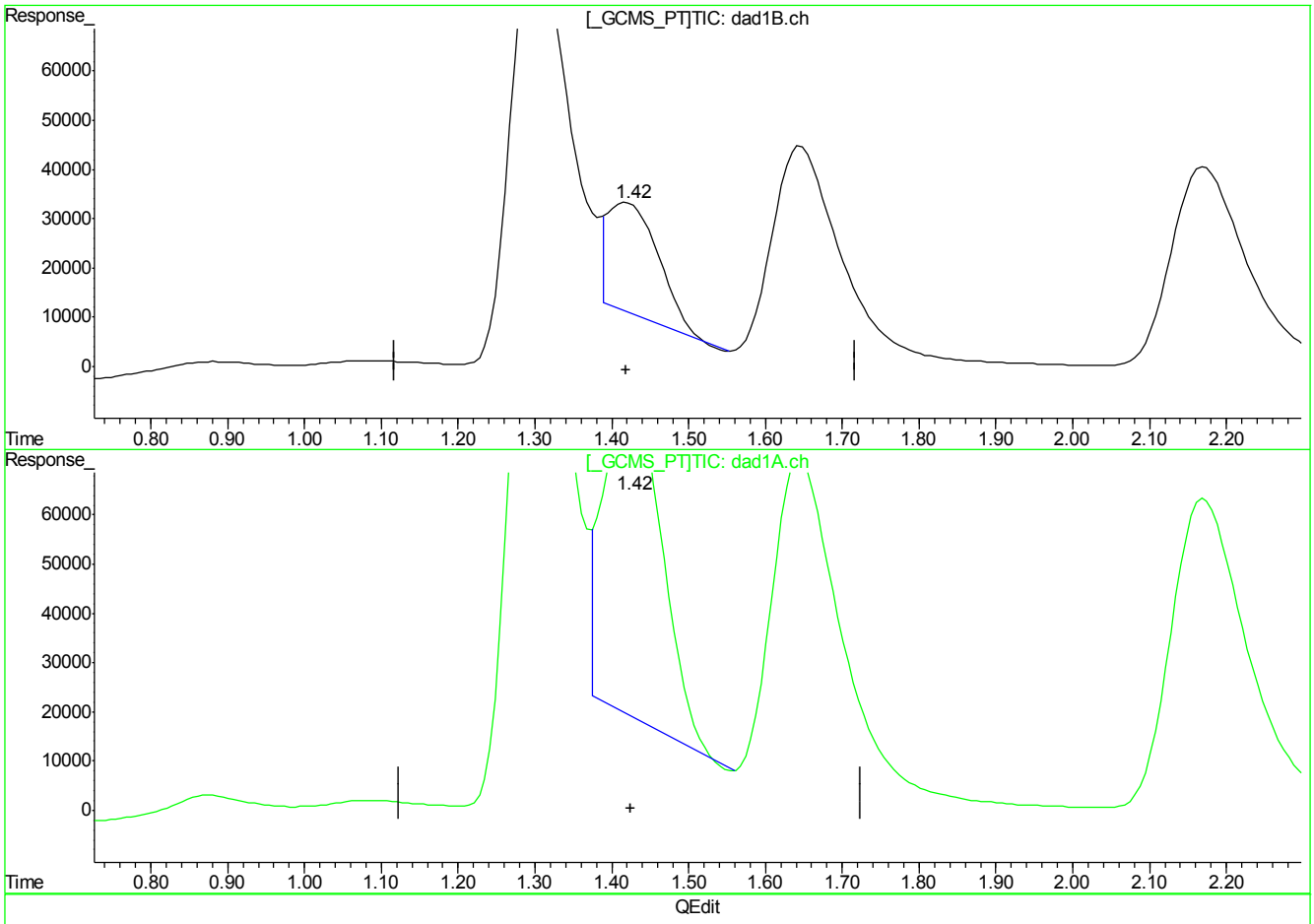
7

BB059617.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(2) HMX

1.42min 571.794ppb

response 1069315

(2) HMX #2

1.43min 680.643ppb

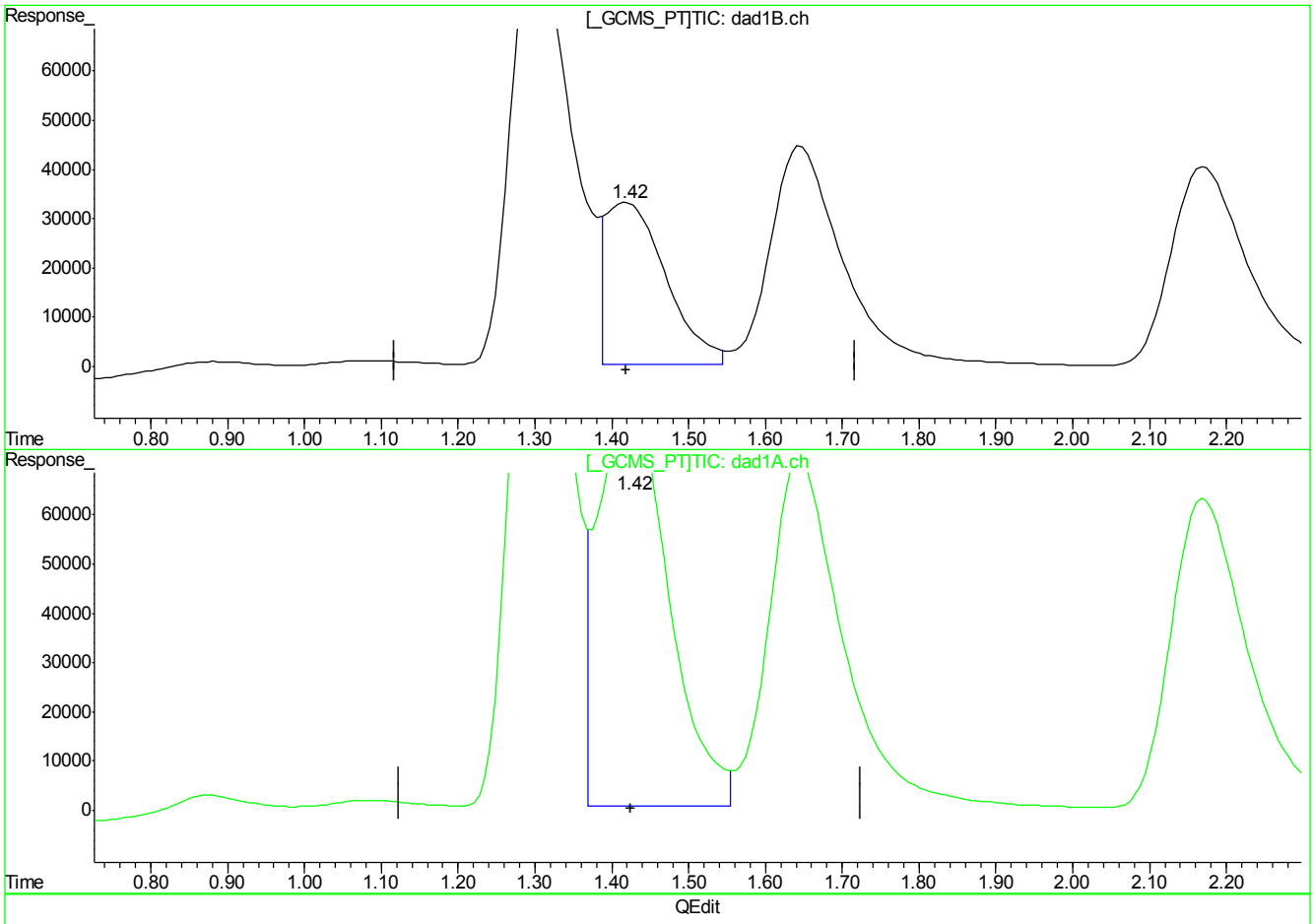
response 3453380

(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:52:09 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(2) HMX

1.42min 948.555ppb m

response 1773896

(2) HMX #2

1.42min 1017.579ppb m

response 5152915

(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:52:31 2018

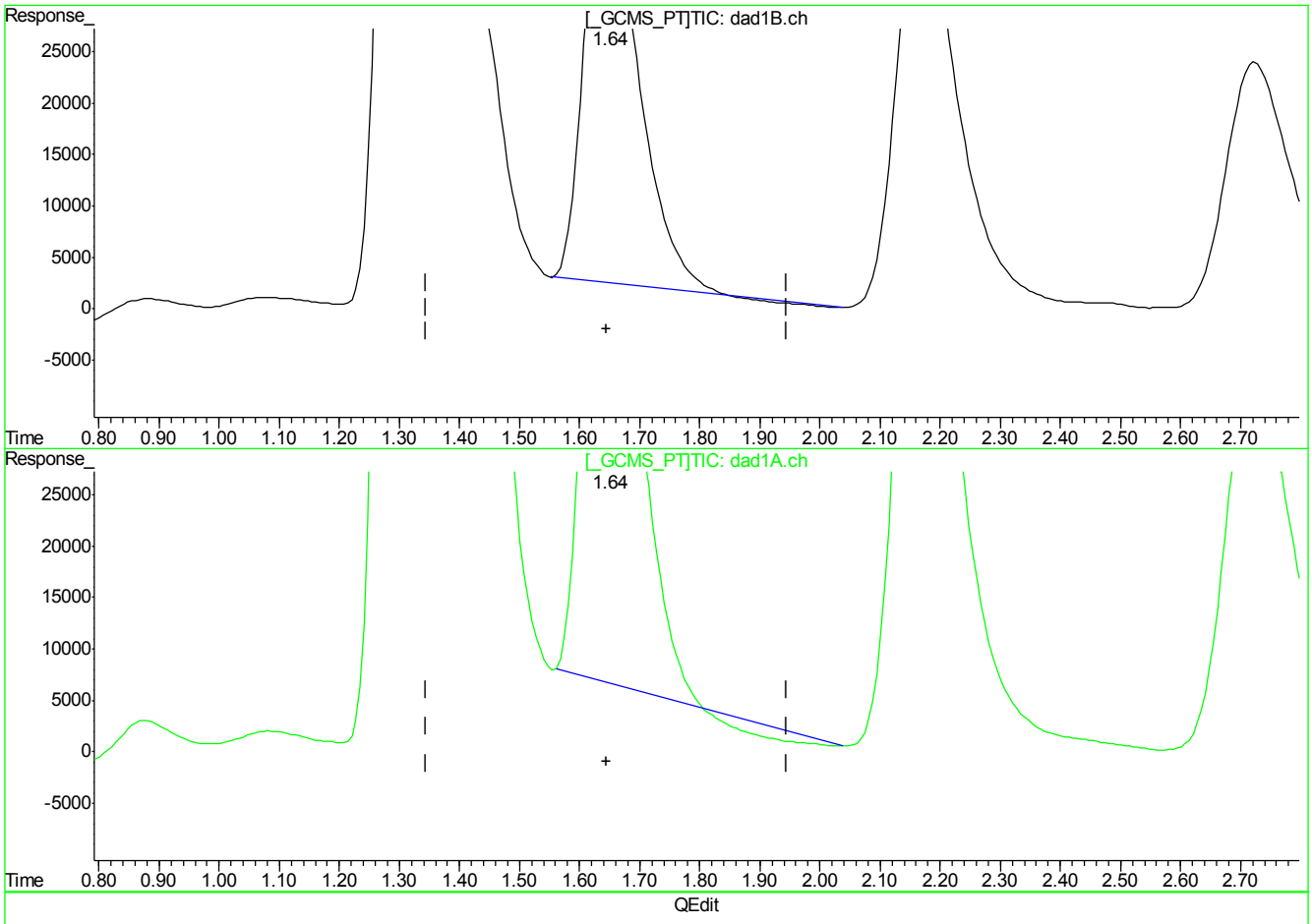
7.7.13.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(3) DNX

1.65min 813.352ppb

response 2518963

(3) DNX #2

1.65min 779.528ppb

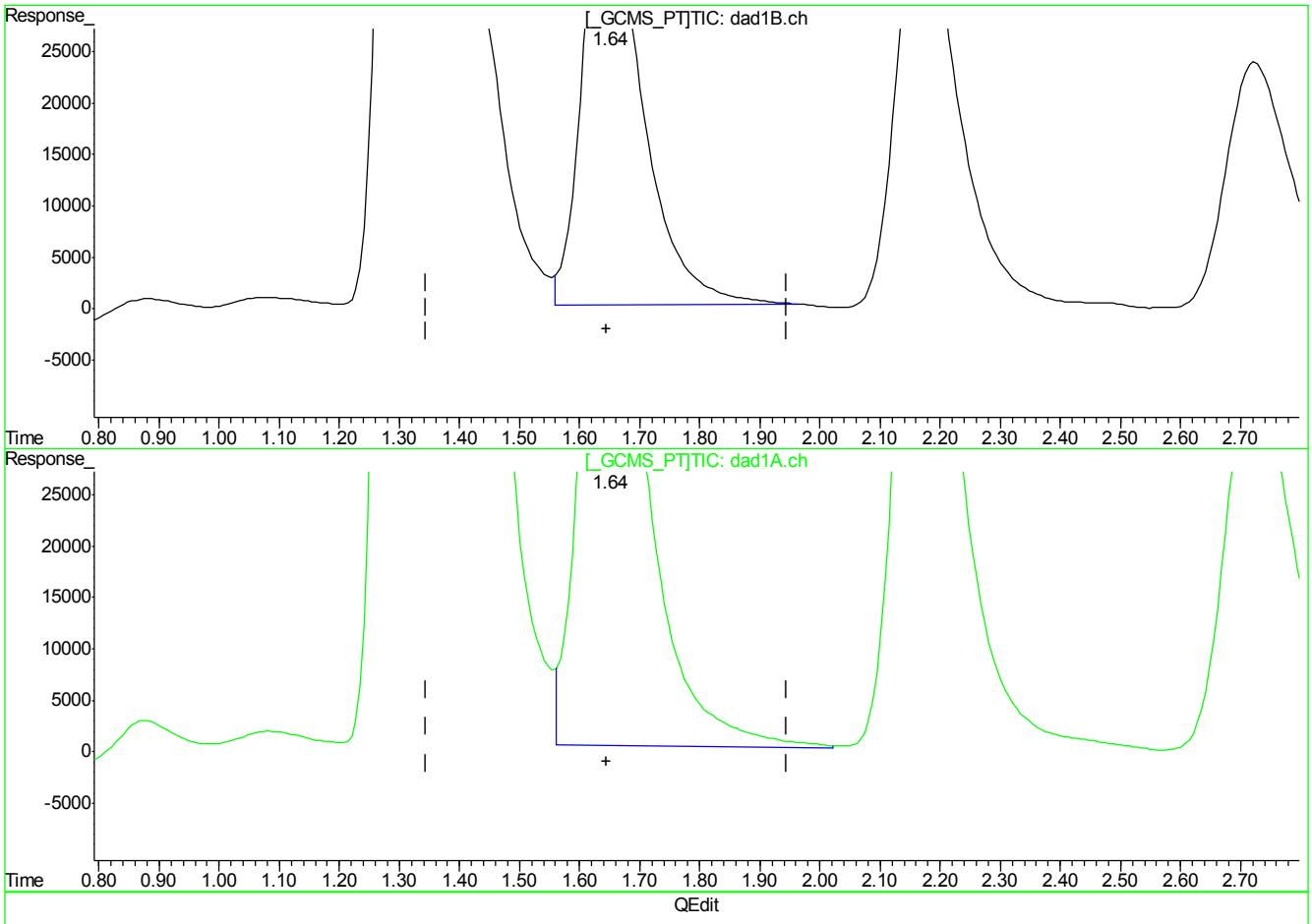
response 3672008

(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:52:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(3) DNX

1.64min 919.624ppb m

response 2848090

(3) DNX #2

1.64min 1002.760ppb m

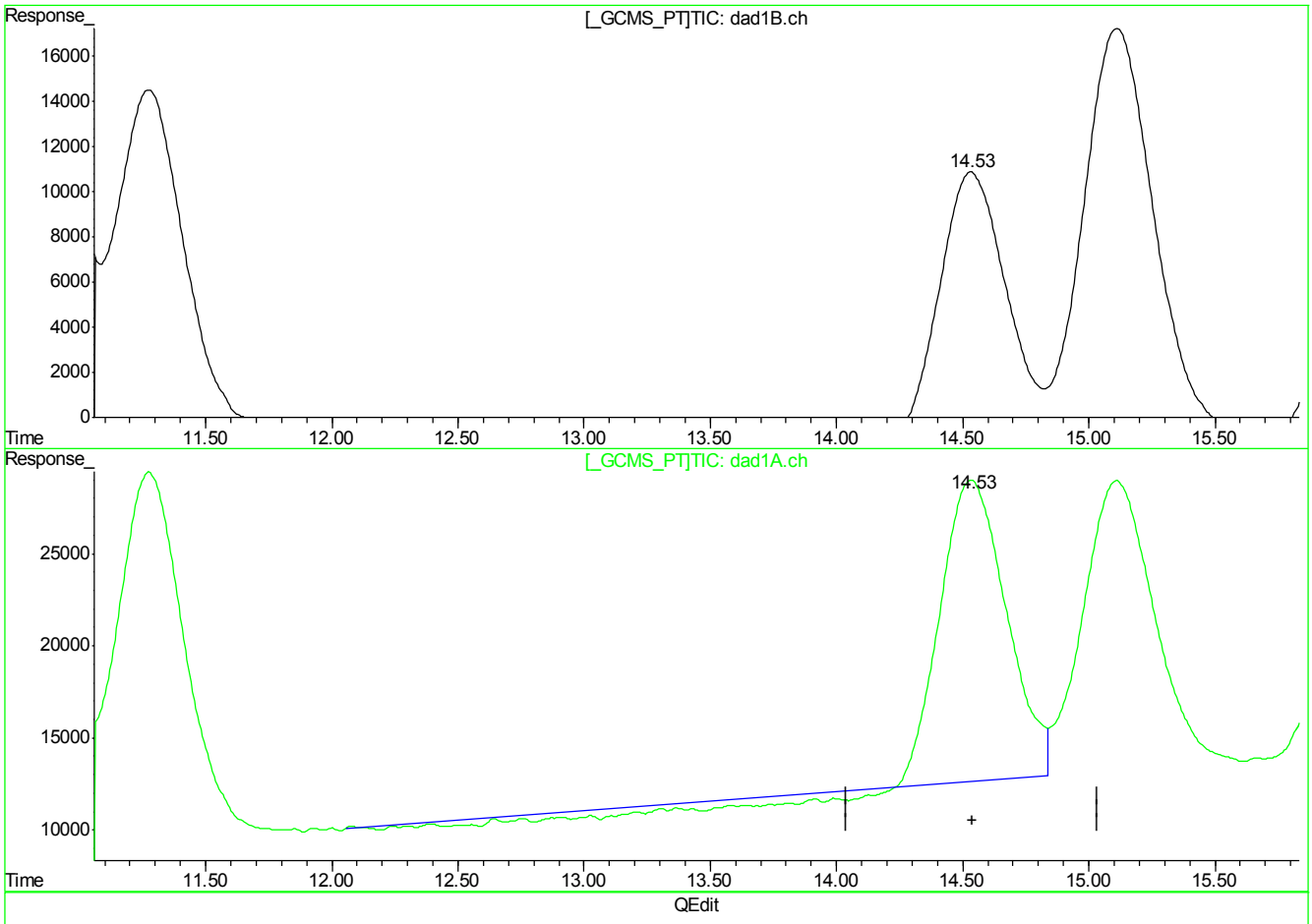
response 4738578

(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:52:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.53min 901.260ppb

response 2251202

(18) o-Nitrotoluene #2

14.53min 794.498ppb

response 2602577

(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:53:10 2018

7.7.13.8

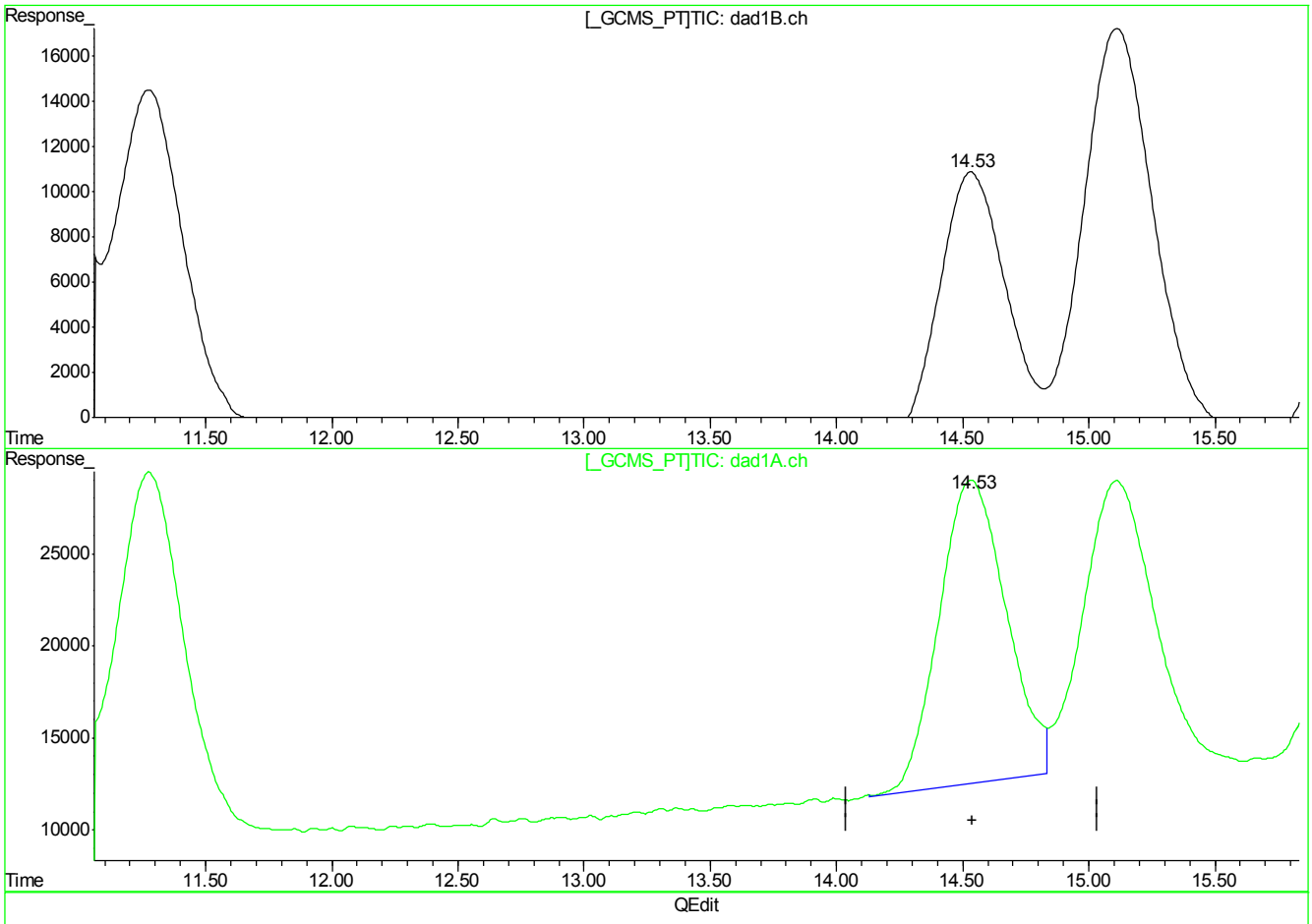
7

BB059617.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.53min 901.260ppb

response 2251202

(18) o-Nitrotoluene #2

14.53min 932.505ppb m

response 3054653

(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:53:13 2018

7.7.13.9

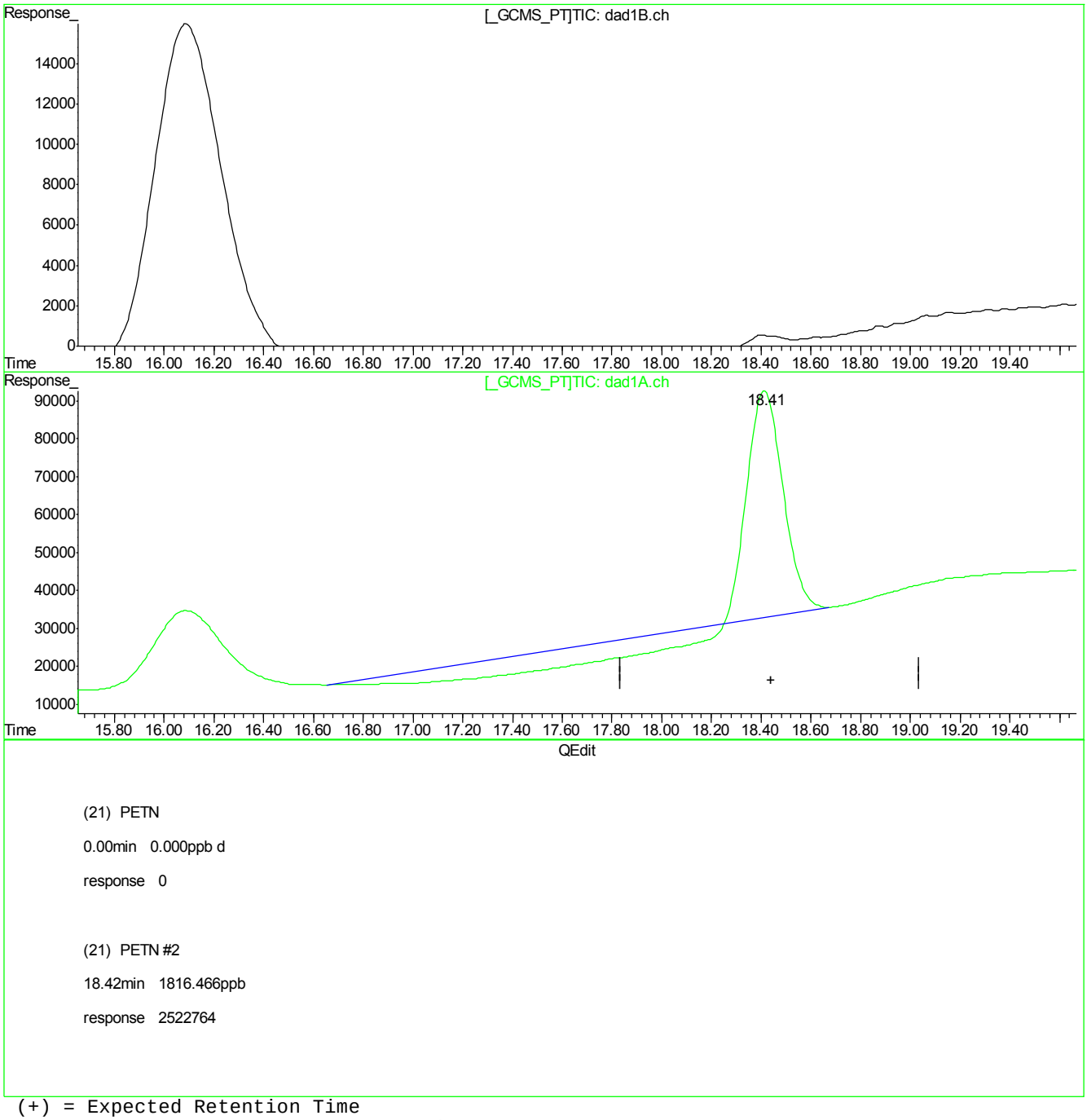
7

BB059617.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 1816.466ppb

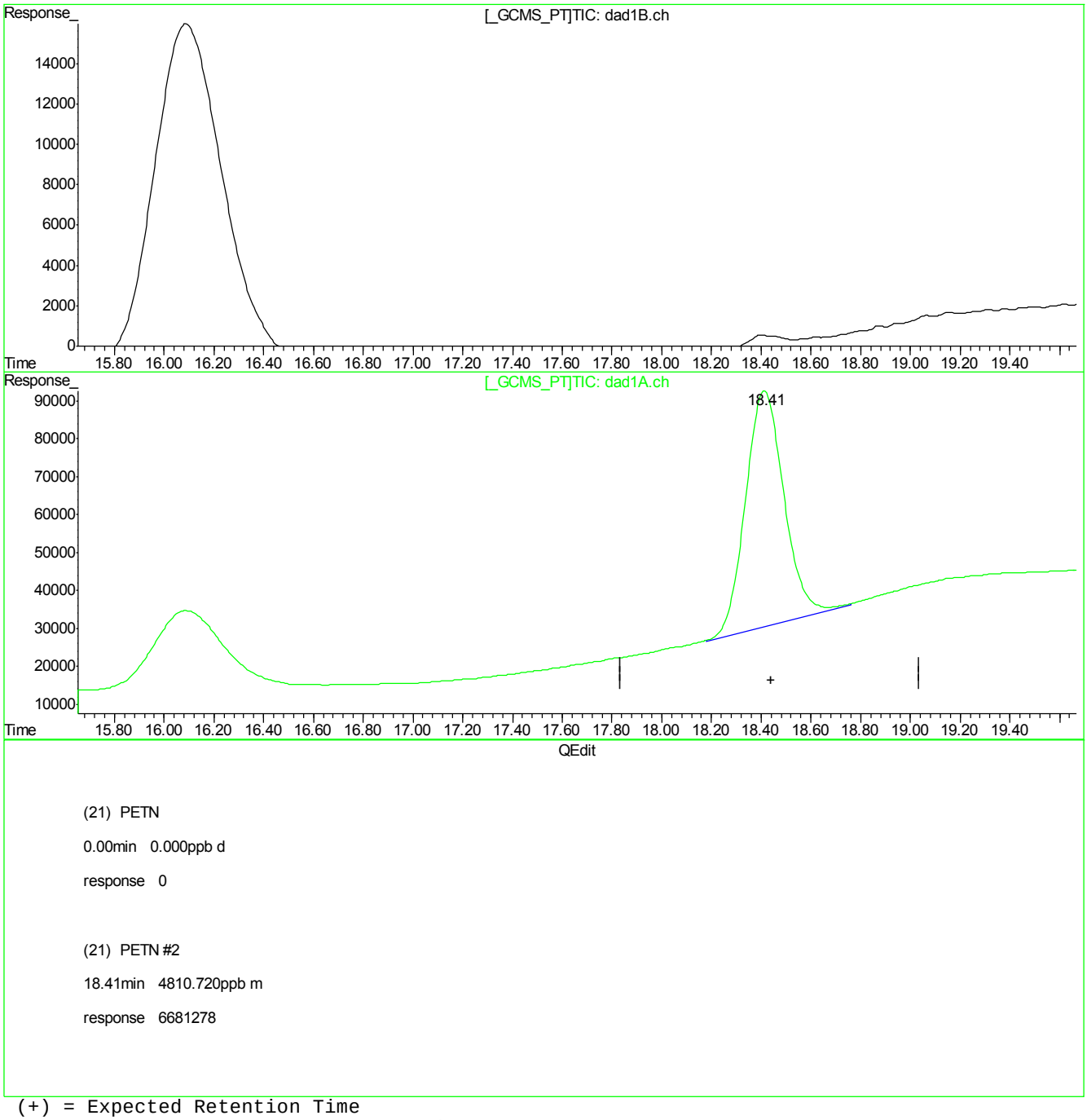
response 2522764

(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:53:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1729\BB059617.D\dad1A.ch
Acq On : 08-May-2018, 19:54:18 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69921,gbb1729,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 7:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 09 07:47:12 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059617.D 8330B_0419PLUS.M Wed May 09 07:53:19 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:57 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.58	14.60	98690	251786	16.740	20.083
	Spiked Amount 500.000	Range 70 - 136		Recovery =		3.35%#	4.02%#
	Target Compounds						
1)	TNX	5.00	5.00	270396	268585	32.146m	31.846m
2)	HMX	5.46	5.46	61139	65579	16.096m	17.142m
3)	DNX	5.58	5.58	151583	169136	23.094m	25.858m
4)	MNX	6.68	6.68	132741	132741	27.438	27.438
5)	1,3,5-Trinitrobe	7.55	7.55	208327	208327	20.402	20.410
6)	RDX	8.09	8.09	93105	93105	19.557	19.648
7)	1,3-Dinitrobenze	10.09	10.10	316123	176008	21.719	12.357m#
8)	Nitrobenzene	11.09	11.09	233656	184835	30.565	19.401m
9)	2,4,6-Trinitroto	11.89	11.89	254281	217868	24.940	13.900m#
10)	Nitroglycerin	0.00	12.72	0	268418	N.D. d	73.009m
11)	Tetryl	13.30	13.28	188129	499094	27.427	40.951m#
13)	2,6-Dinitrotolue	14.93	14.90	140836	174953	20.257	16.038
14)	2,4-Dinitrotolue	15.65	15.67	275037	489908	20.698	49.345 #
15)	o-Nitrotoluene	17.23	17.25	120053	171082	28.895	30.388
16)	3,5-Dinitroanili	16.68	16.68	287796	475677	27.156	26.561
17)	p-Nitrotoluene	18.42	18.46	235862	419386	20.499	19.889m
18)	4-Amino-2,6-Dini	18.42	18.46	235862	428039	20.499	20.299m
19)	m-Nitrotoluene	19.66	19.69	105739	204872	21.883	21.659
20)	2-Amino-4,6-Dini	20.68	20.83	168840	118490	17.600	8.755m#
21)	PETN	0.00	22.34	0	288256	N.D. d	88.948m

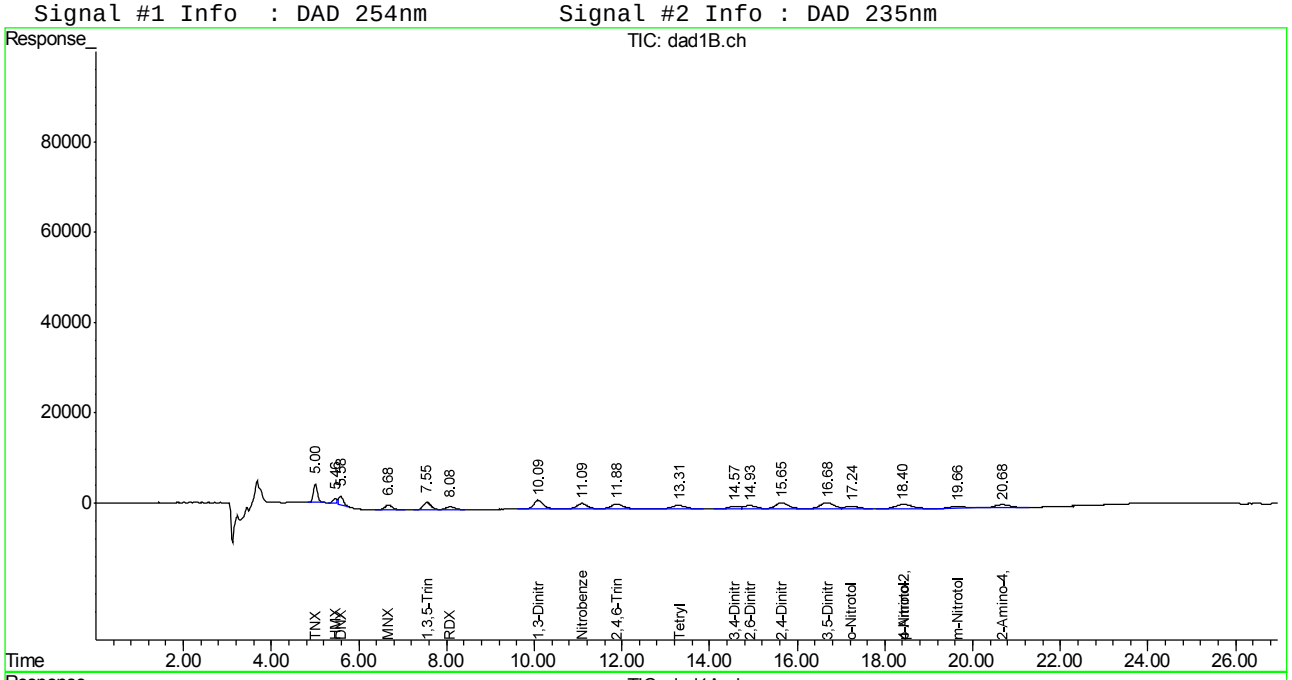
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 13:37:50 2017 Page 1

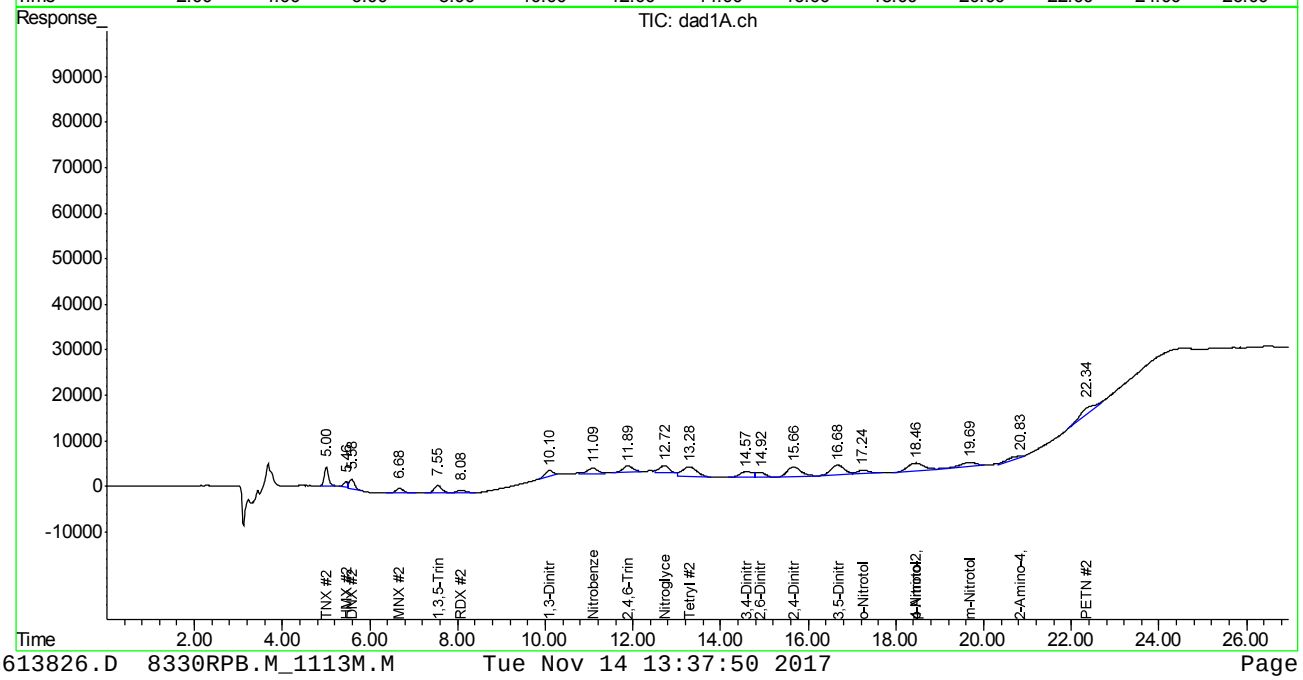
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:53 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

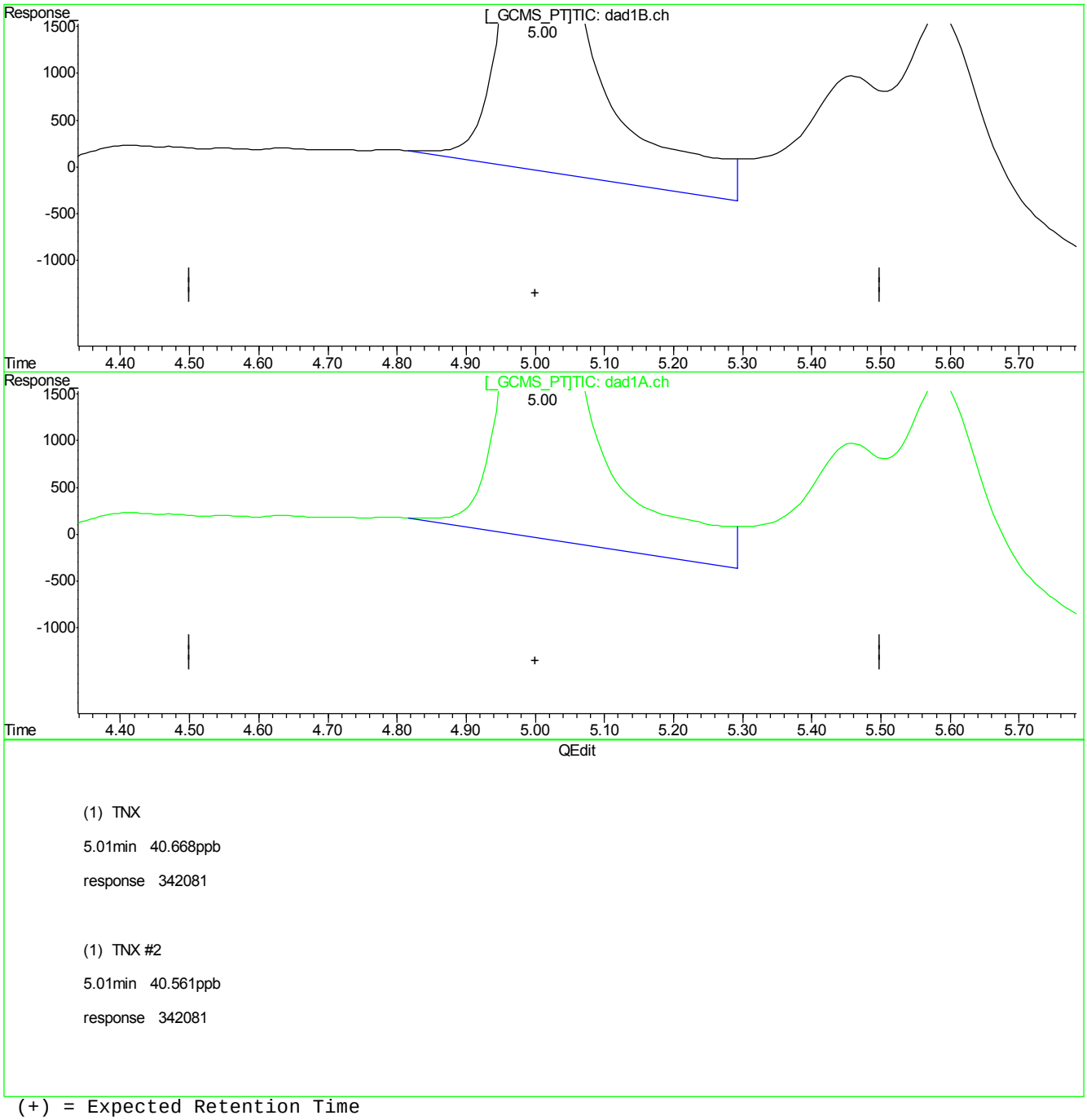
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613826.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 13:36	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.58	Poorly defined baseline
DNX		2	5.58	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.10	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.09	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.89	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.72	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.46	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.46	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.83	Poorly defined baseline
PETN	78-11-5	2	22.34	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(1) TNX

5.01min 40.668ppb

response 342081

(1) TNX #2

5.01min 40.561ppb

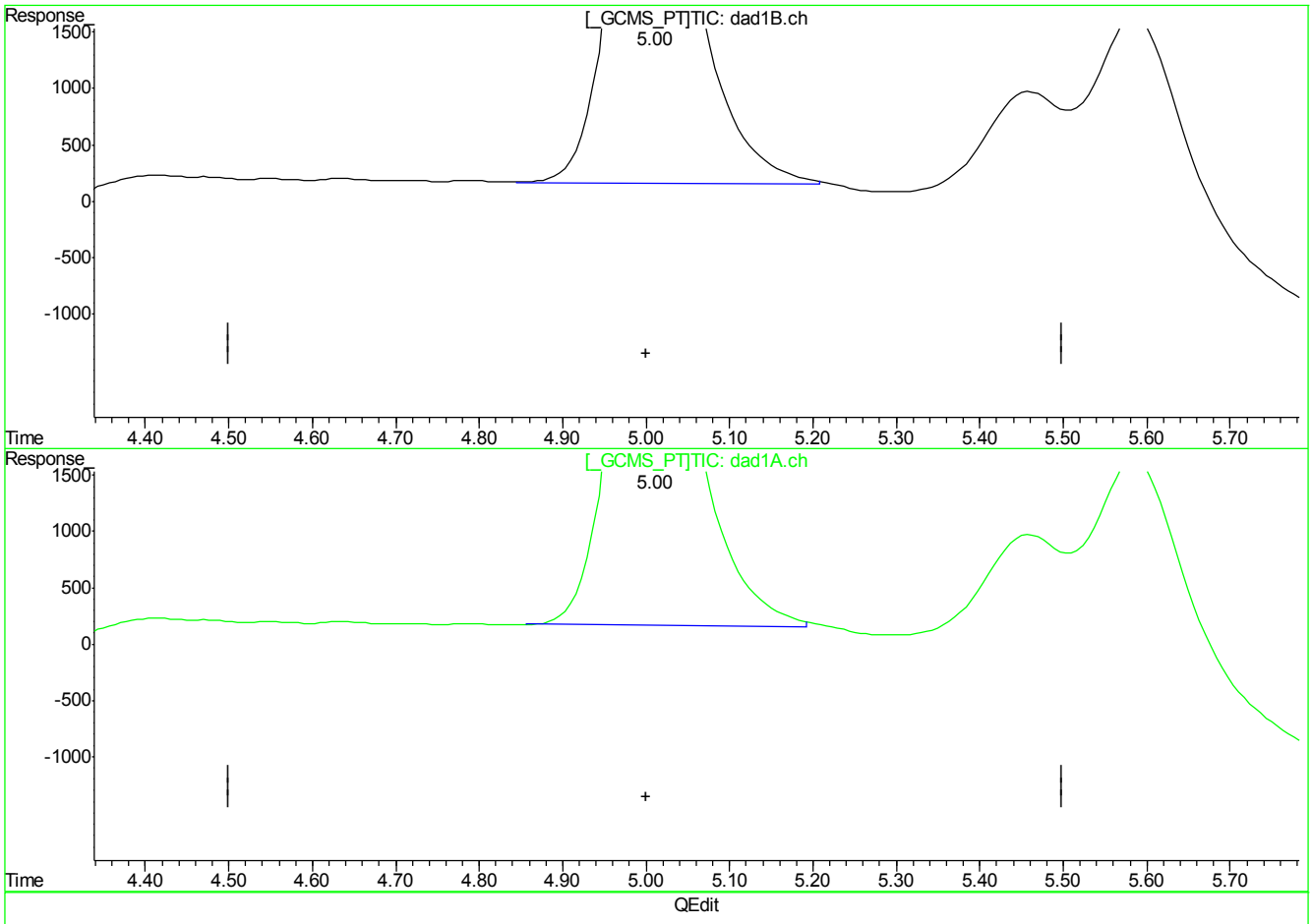
response 342081

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:24 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



QEdit

(1) TNX

5.00min 32.146ppb m

response 270396

(1) TNX #2

5.00min 31.846ppb m

response 268585

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:29 2017

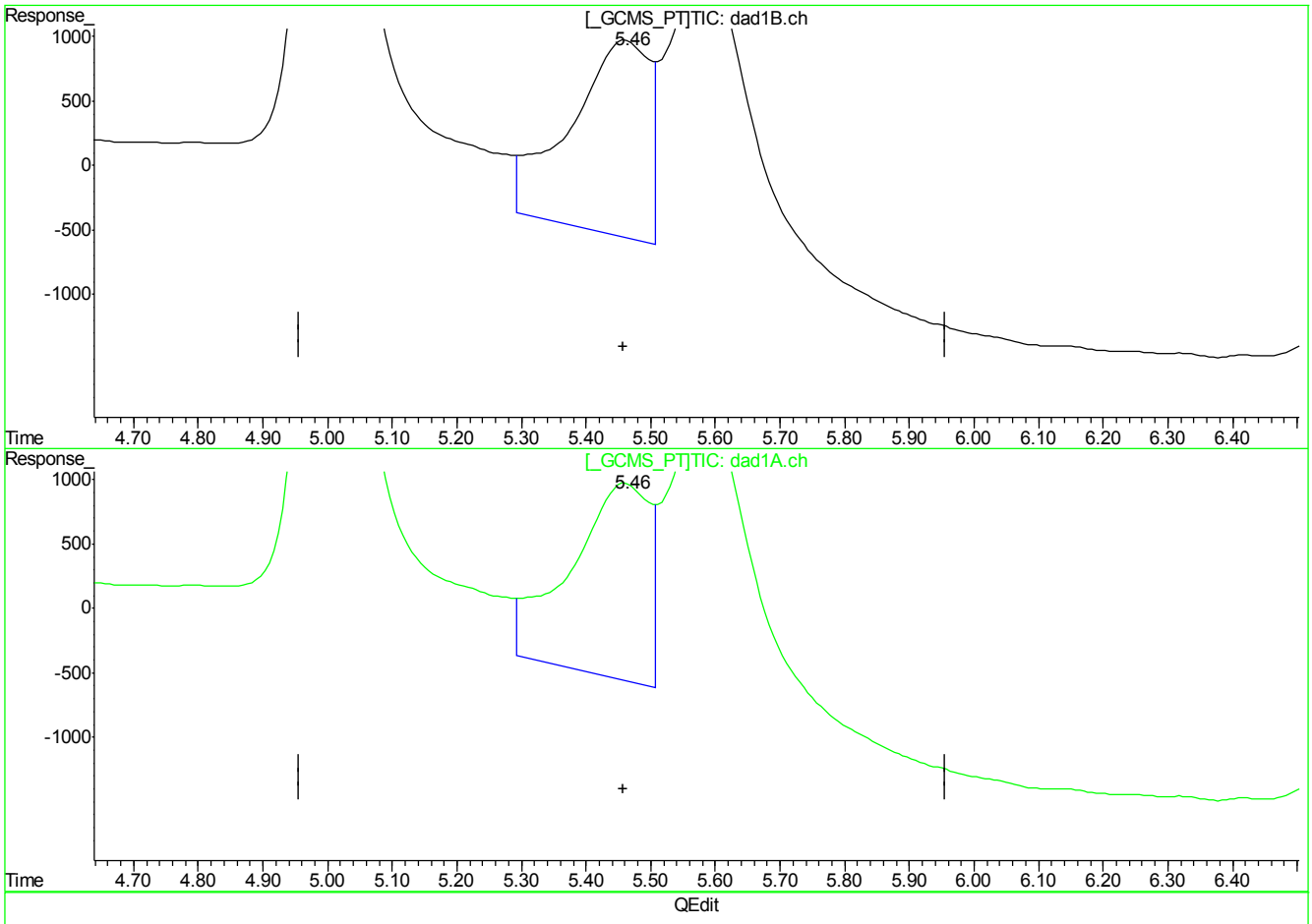
7.7.14.3

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 33.683ppb

response 127943

(2) HMX #2

5.46min 33.445ppb

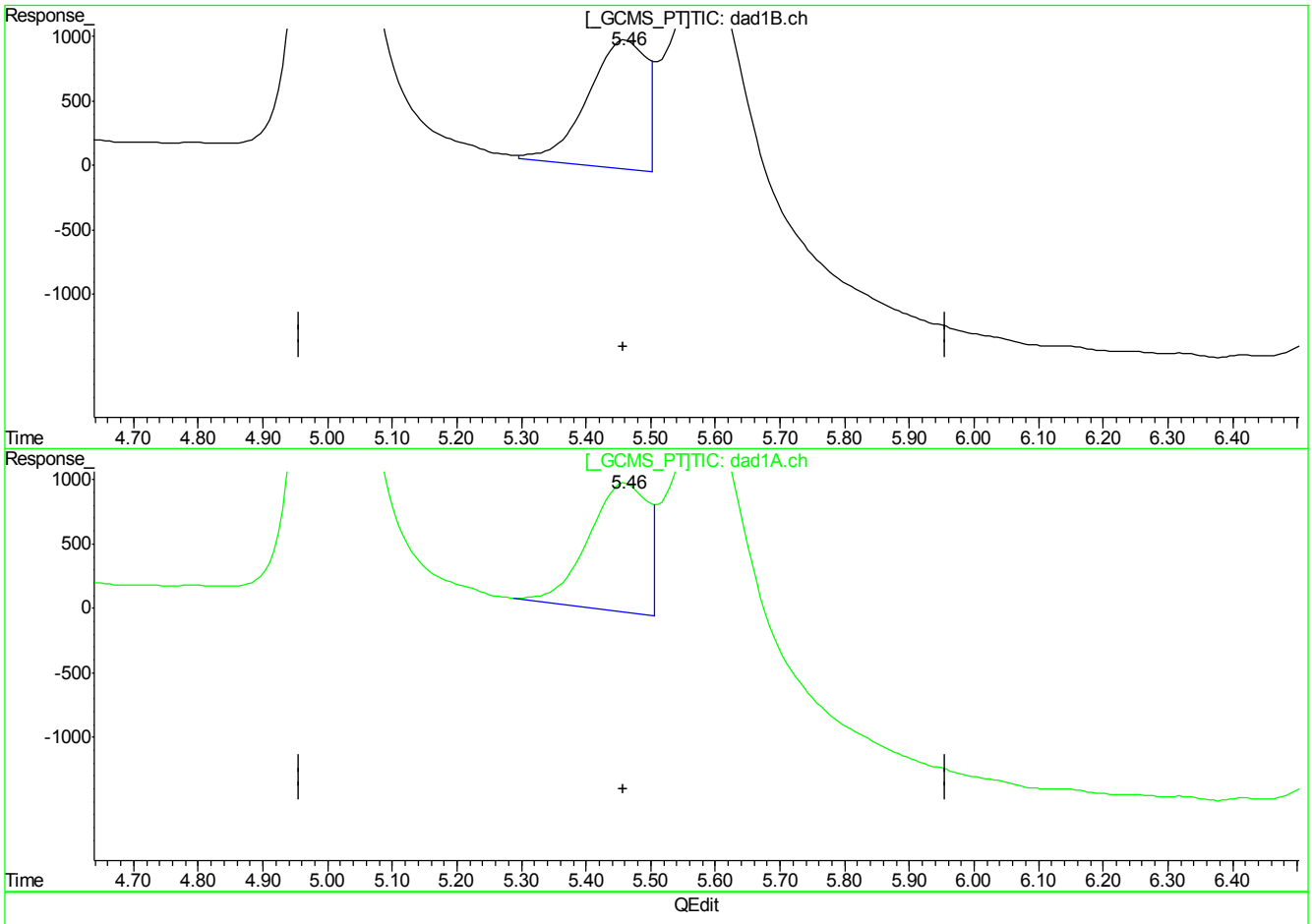
response 127943

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 16.096ppb m

response 61139

(2) HMX #2

5.46min 17.142ppb m

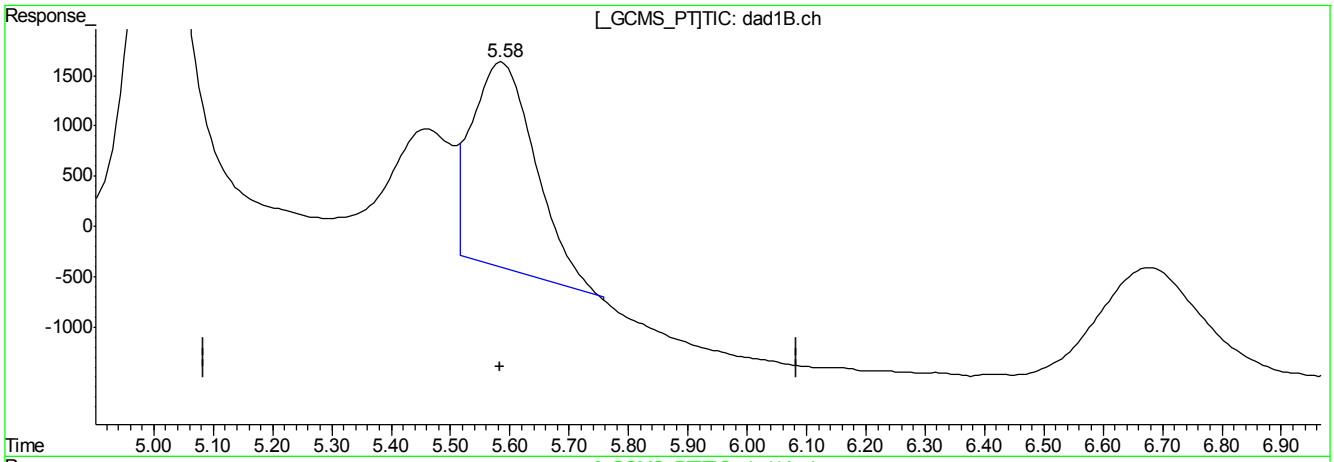
response 65579

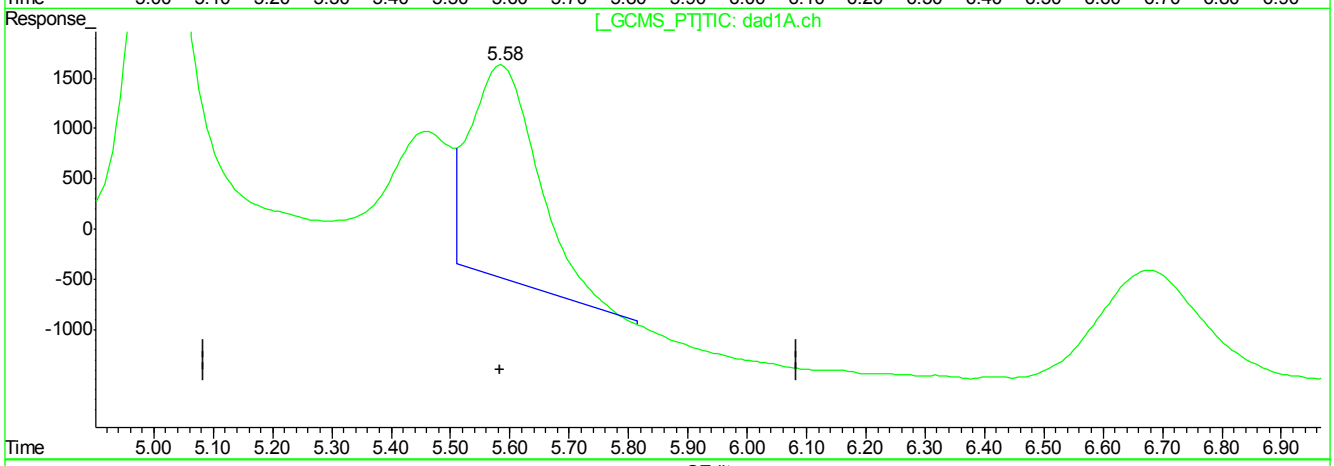
(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:39 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.58min 23.094ppb m

response 151583

(3) DNX #2

5.58min 25.858ppb m

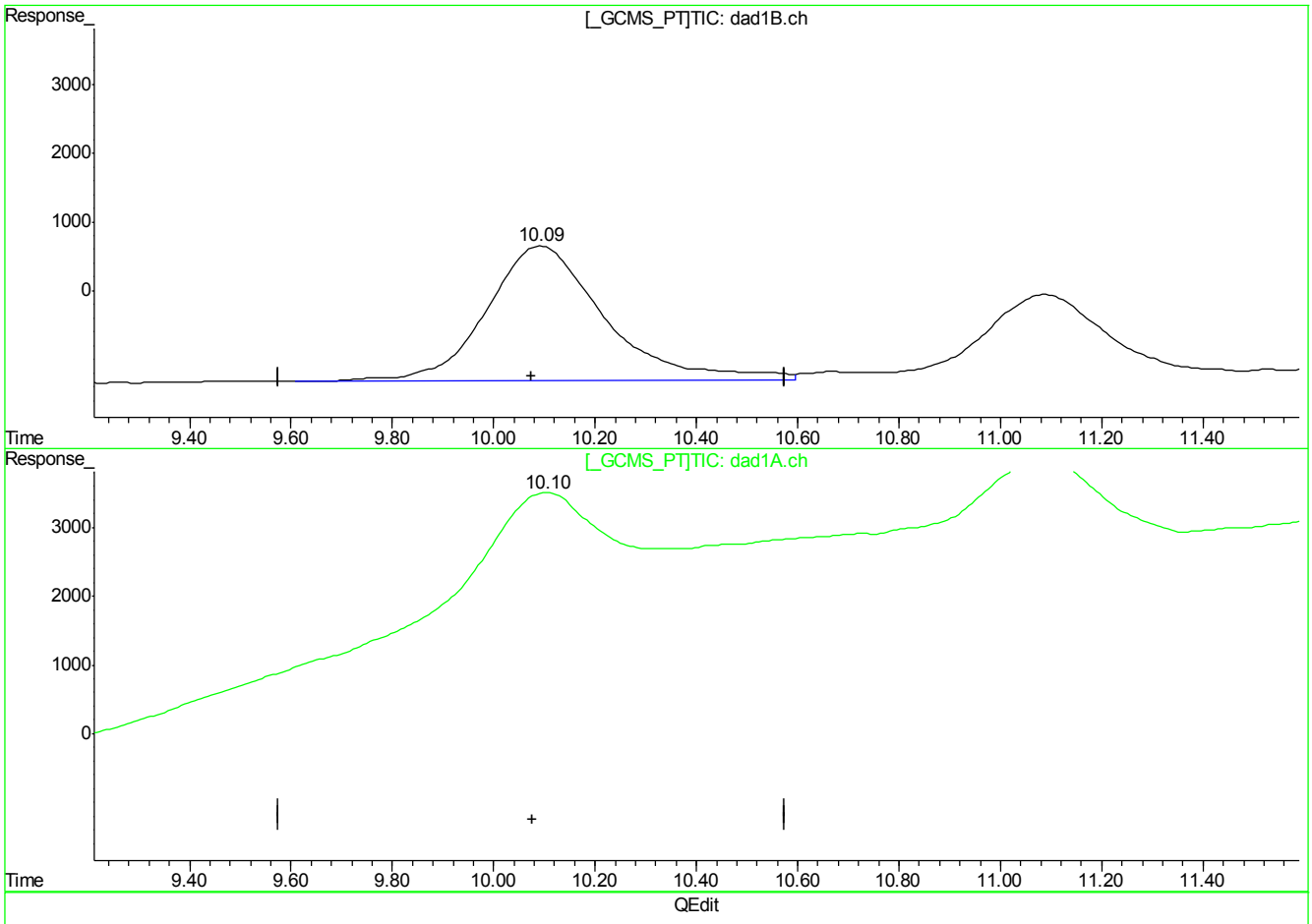
response 169136

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.11min 117.682ppb

response 1660323

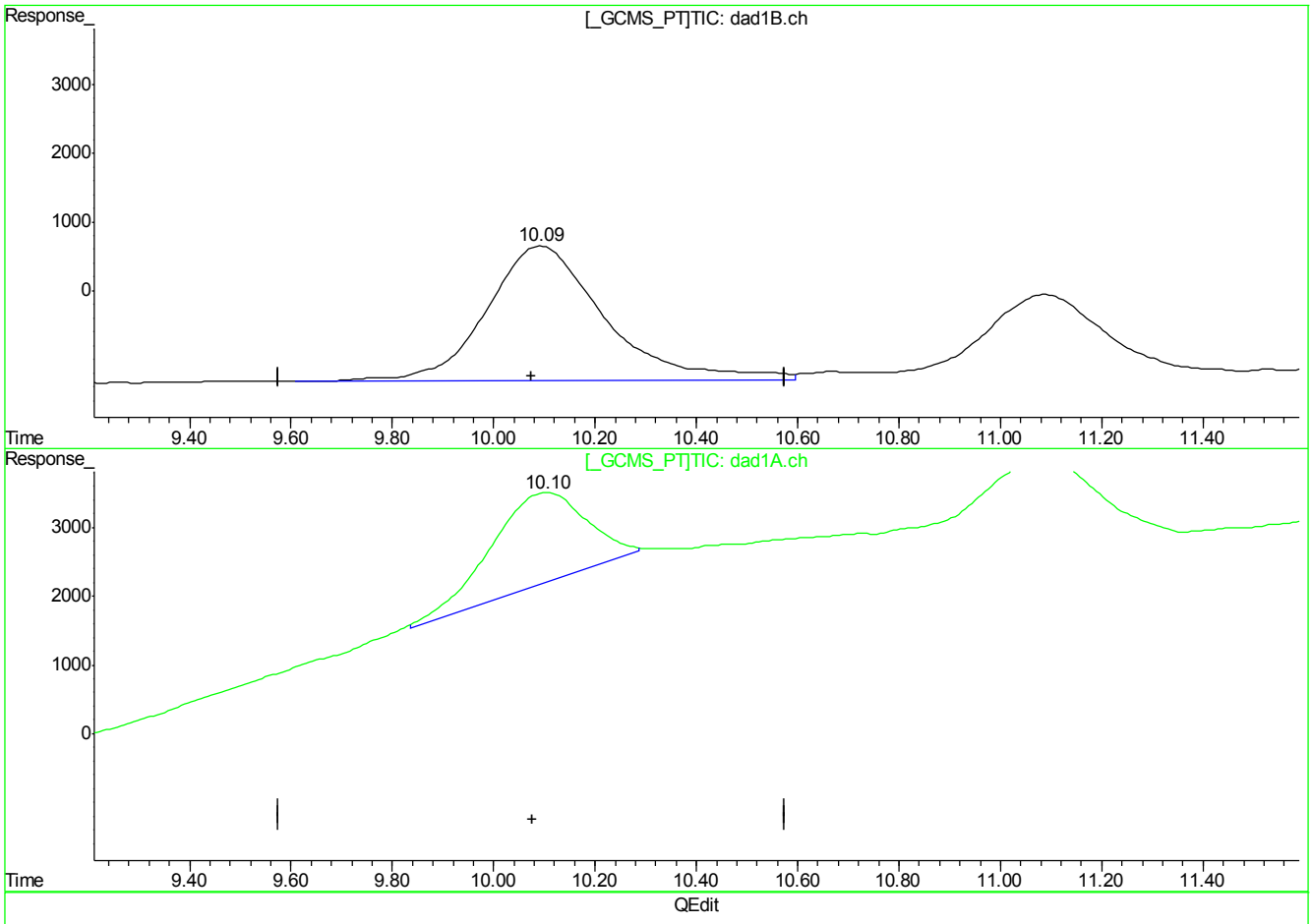
(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:01 2017

GG613826.D edits: 1,3-Dinitrobenzene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.10min 12.357ppb m

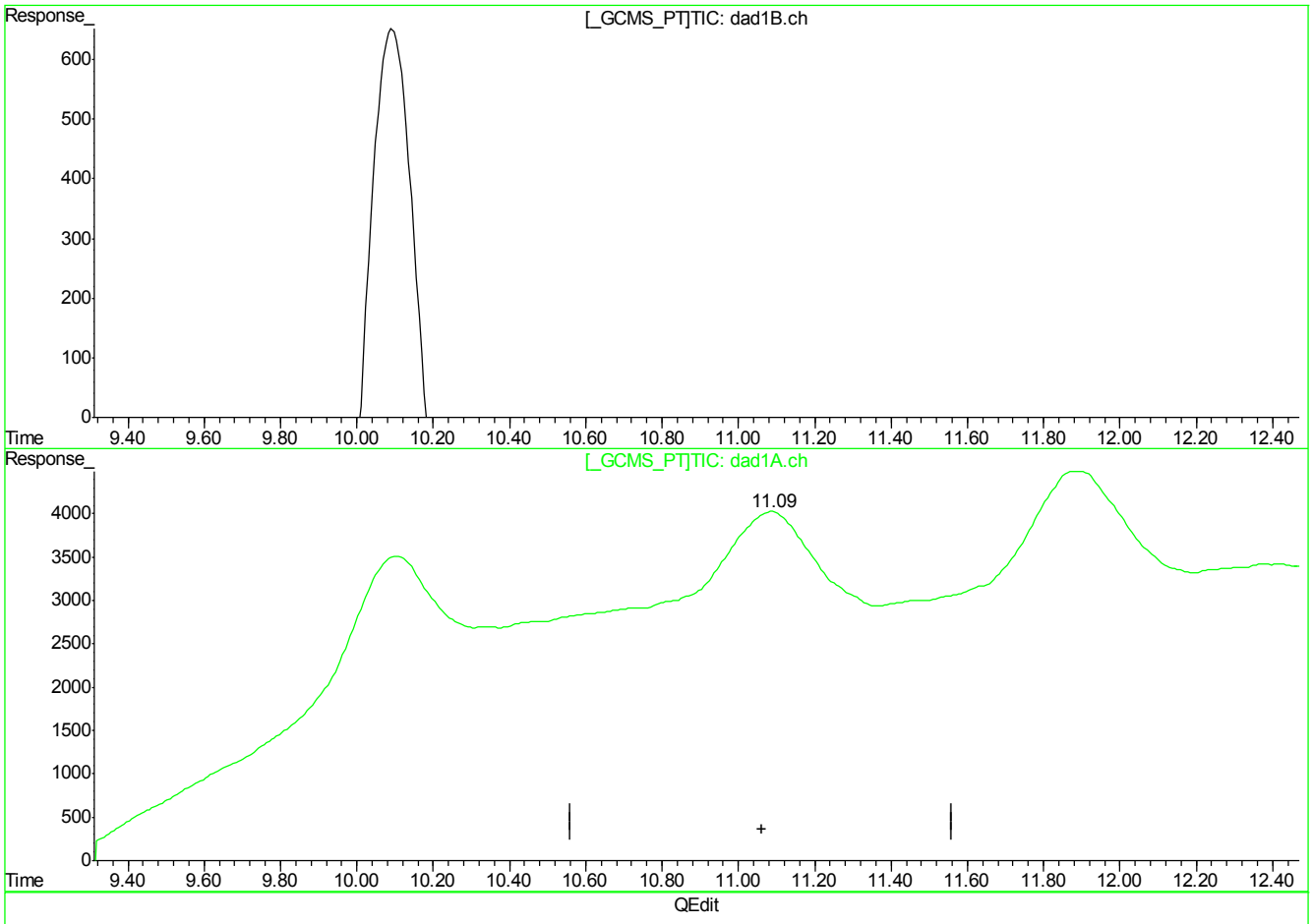
response 176008

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 206.853ppb

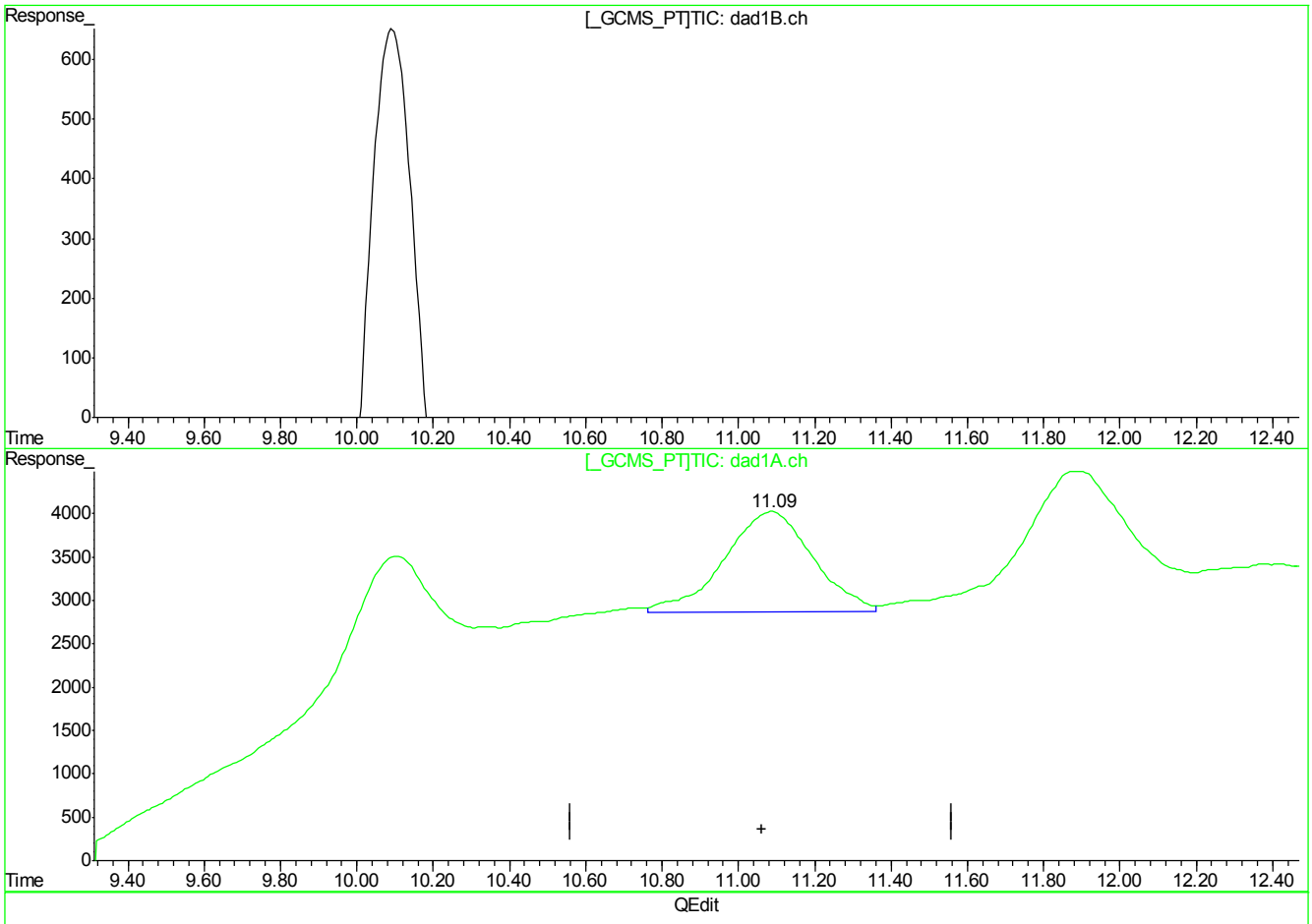
response 1961183

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 19.401ppb m

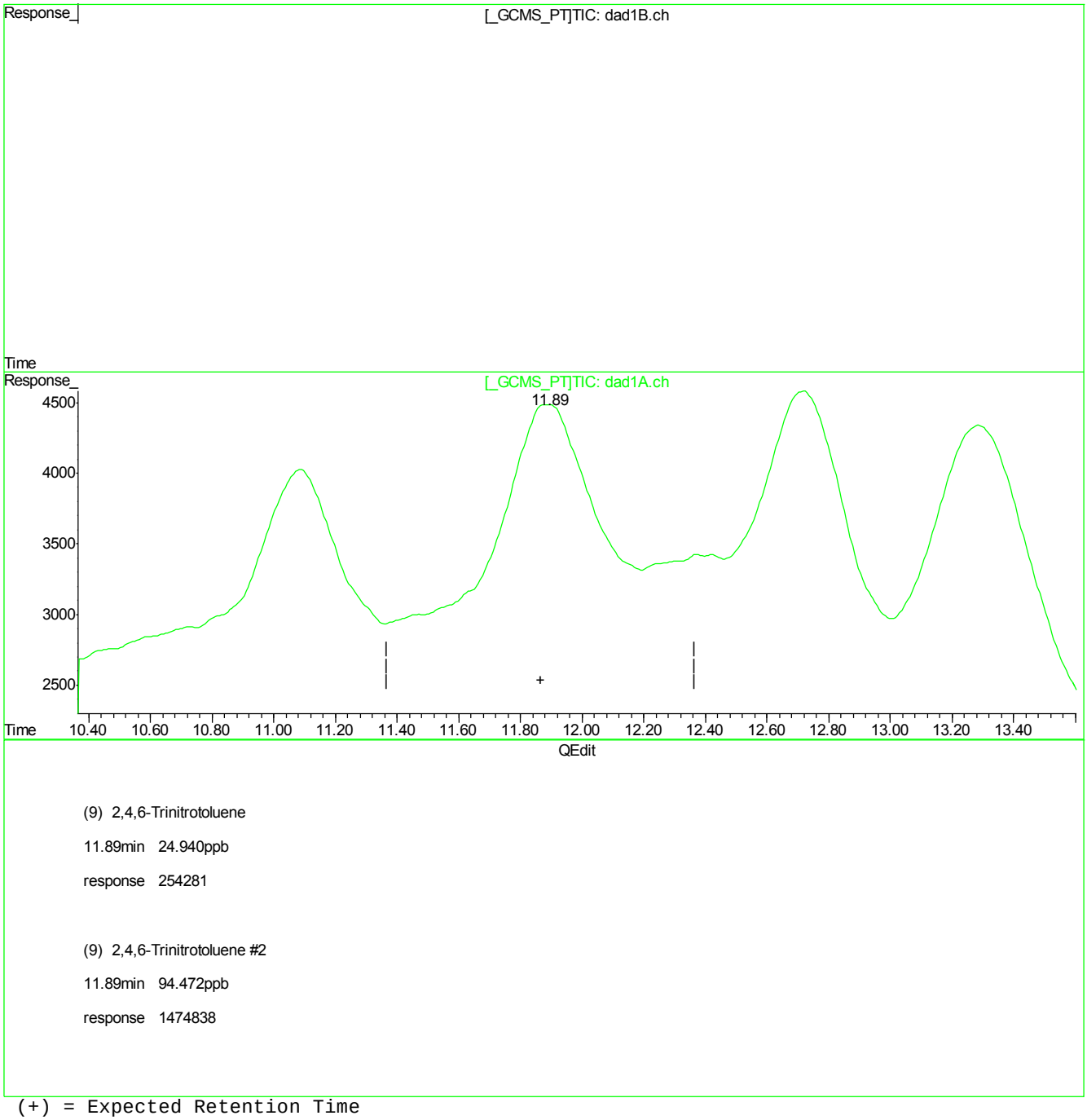
response 184835

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:15 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 94.472ppb

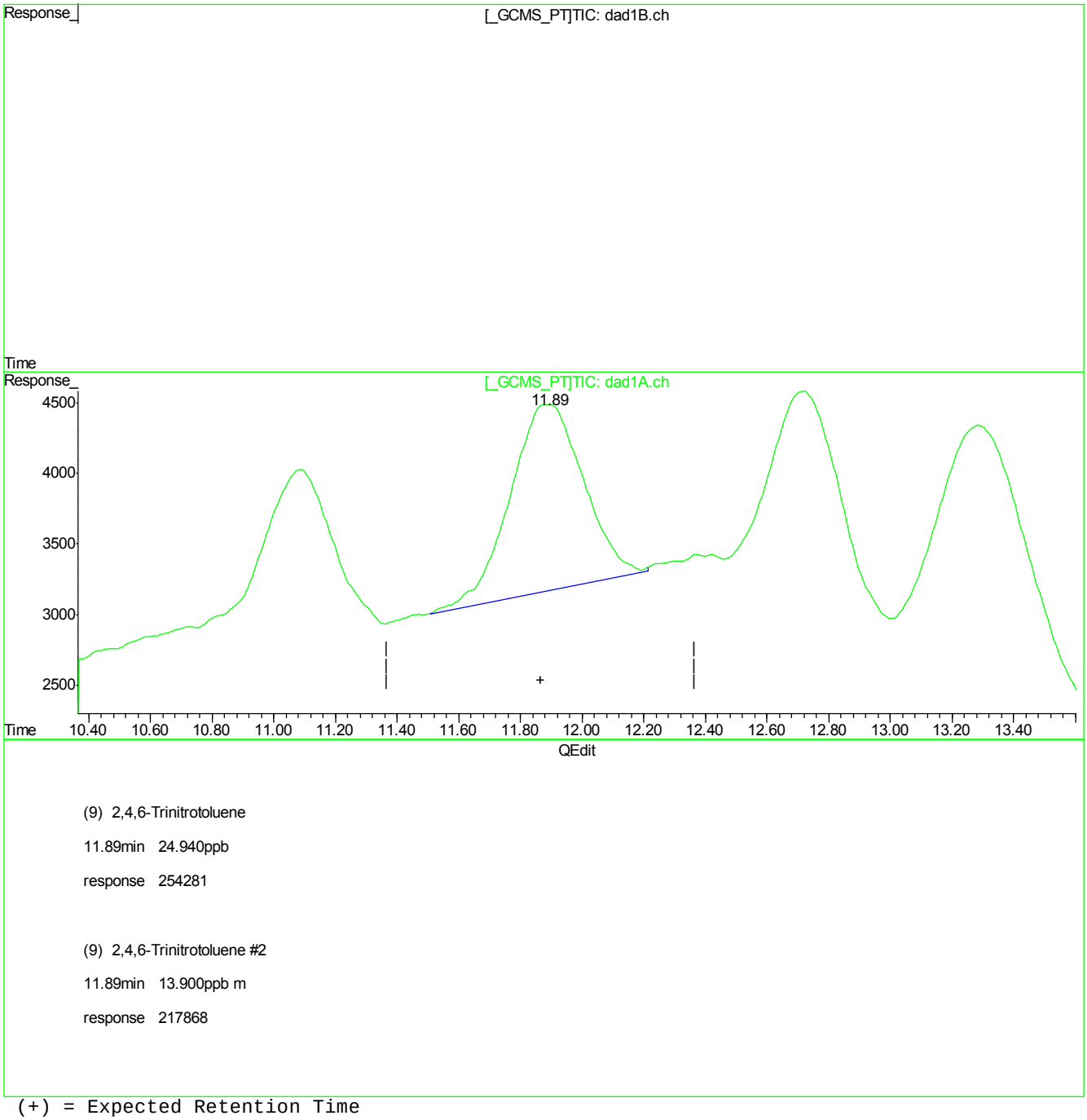
response 1474838

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:19 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 13.900ppb m

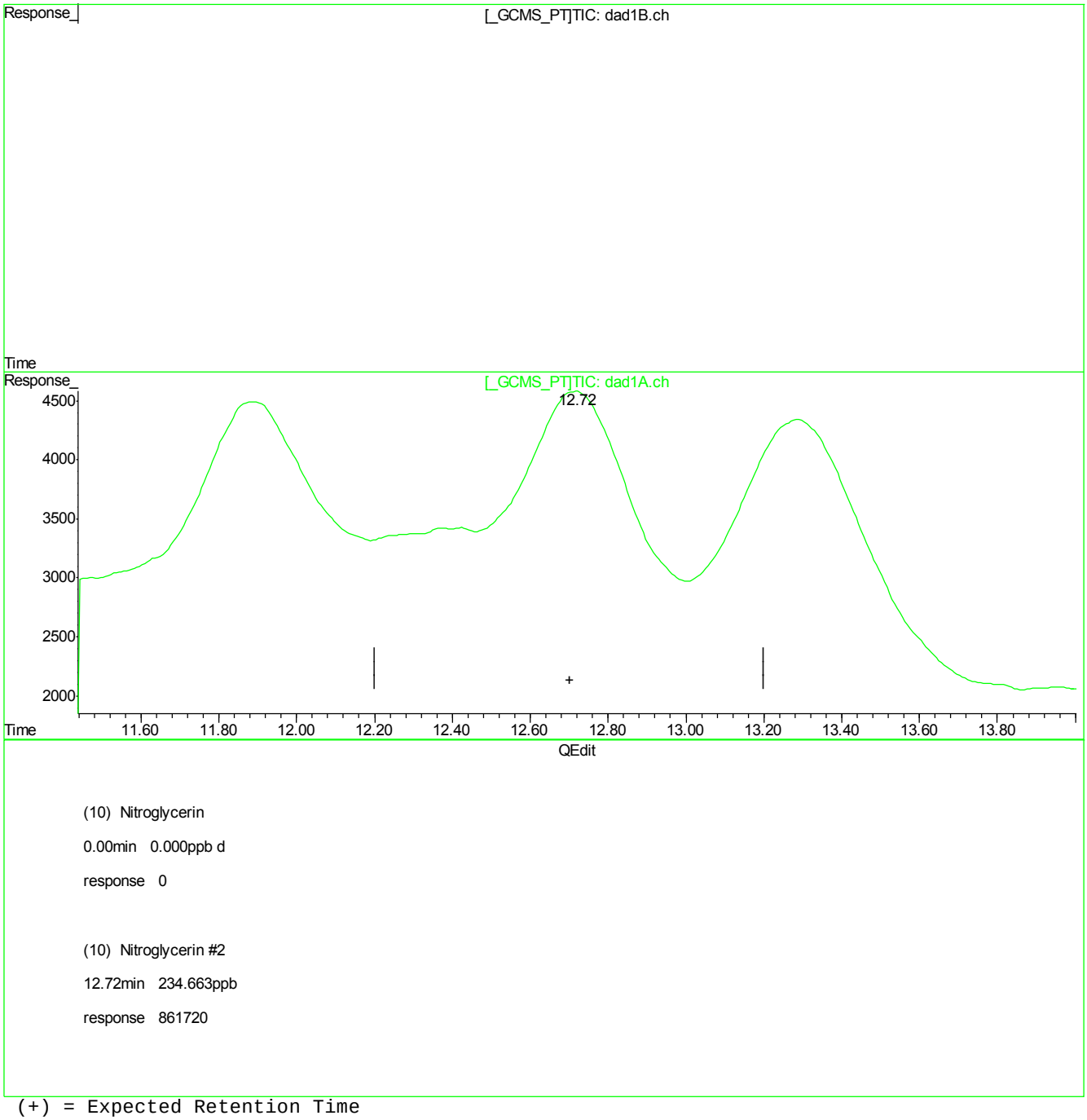
response 217868

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 234.663ppb

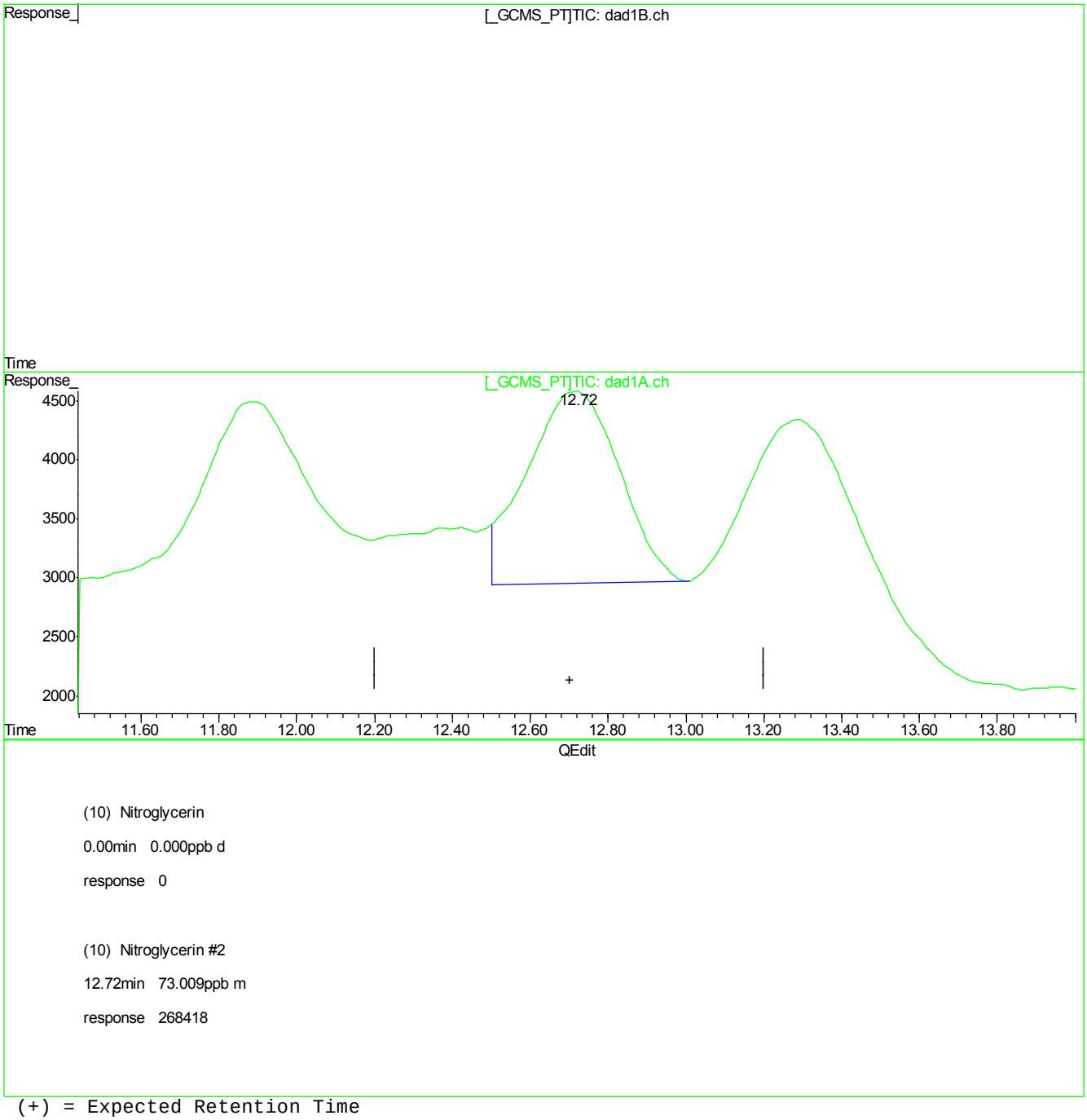
response 861720

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 73.009ppb m

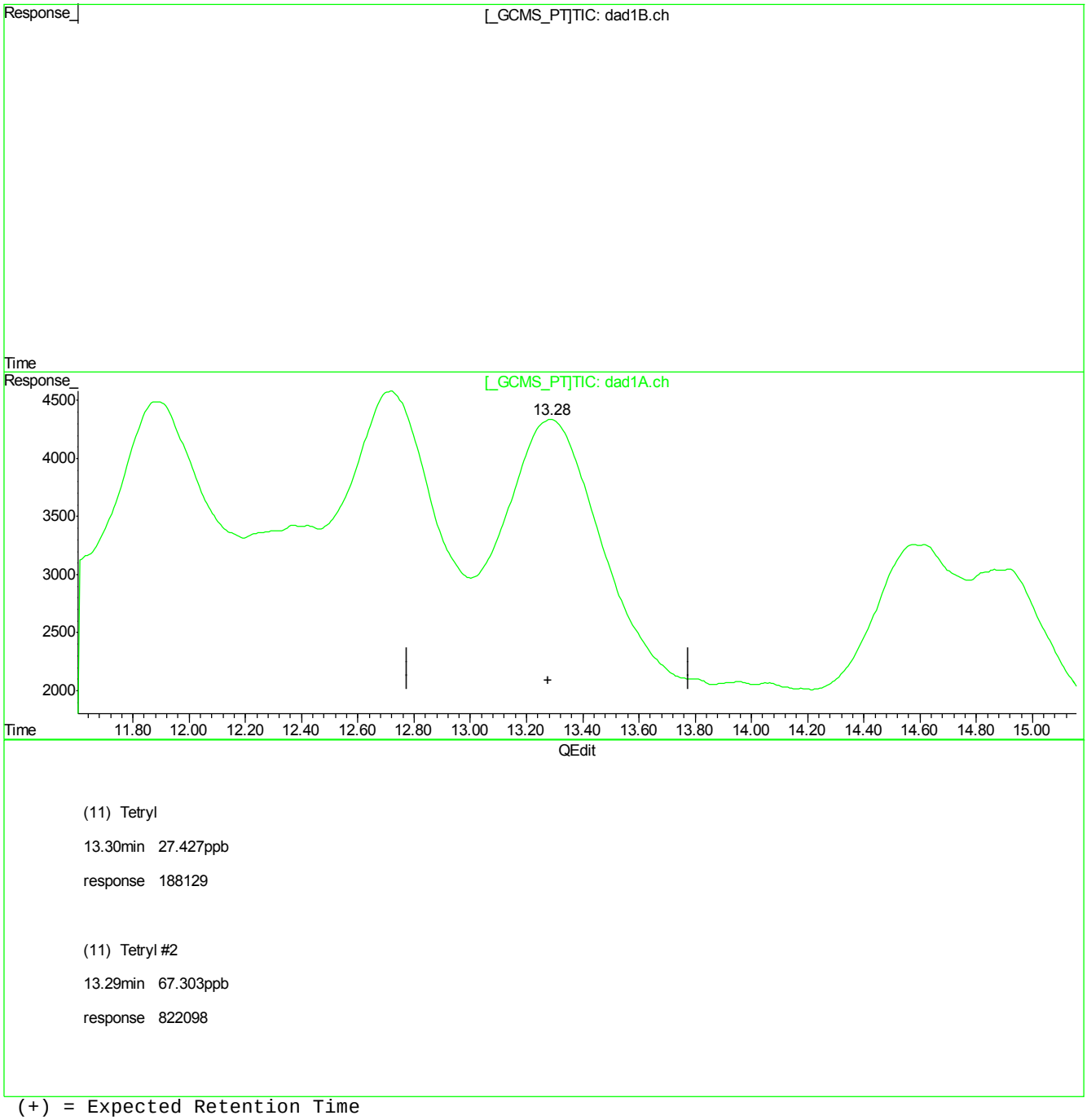
response 268418

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:31 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

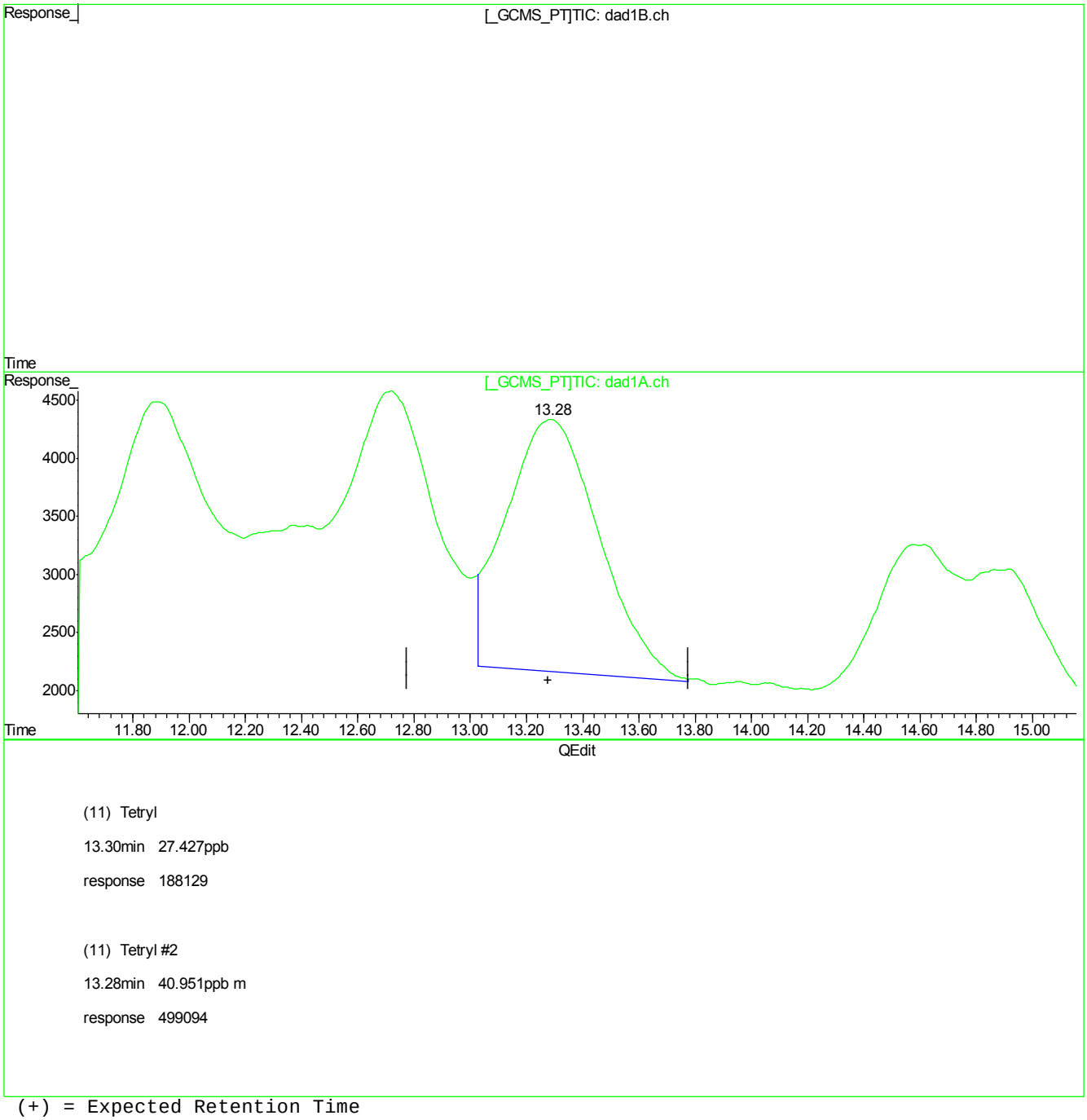


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

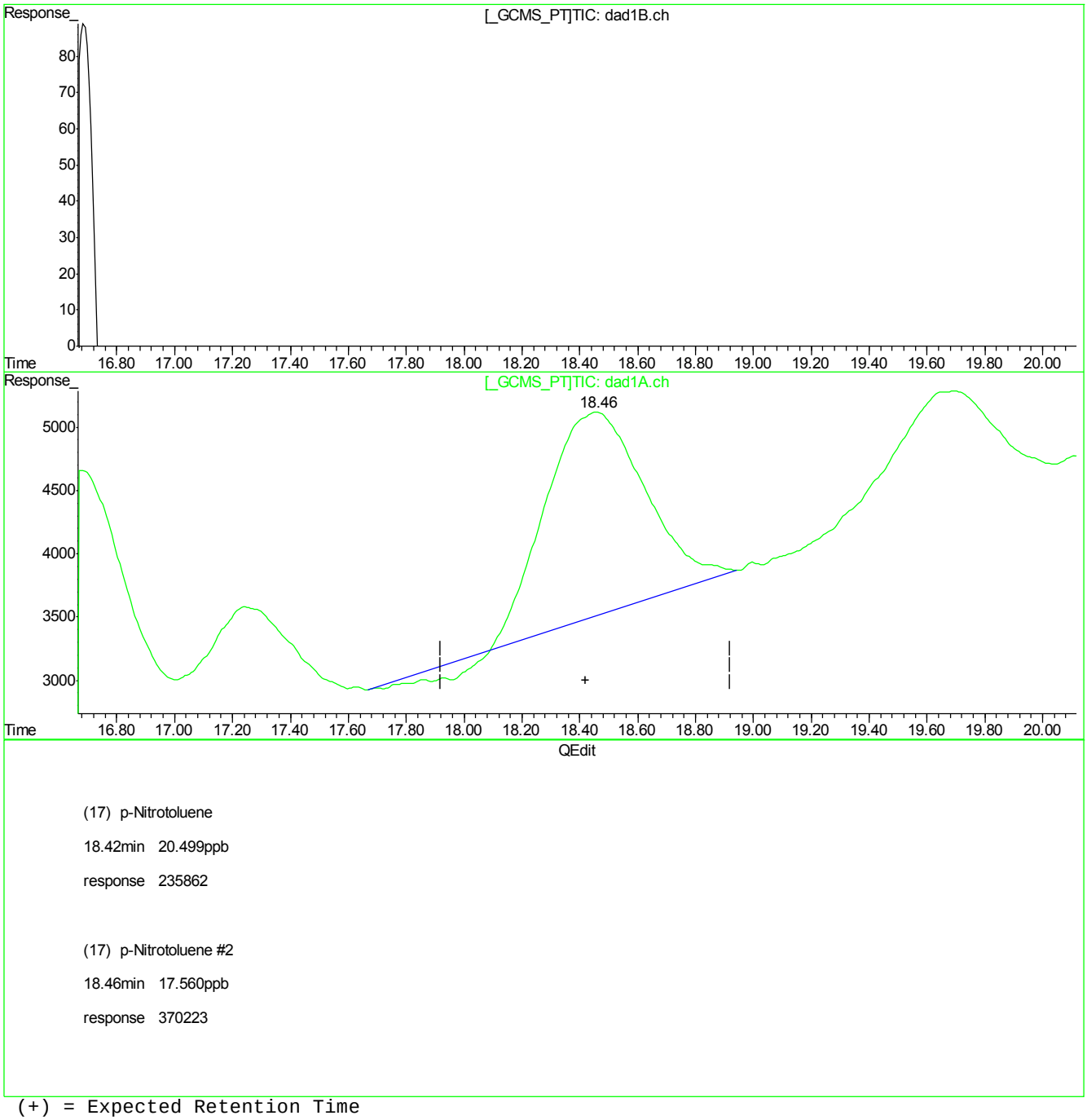


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:52:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 17.560ppb

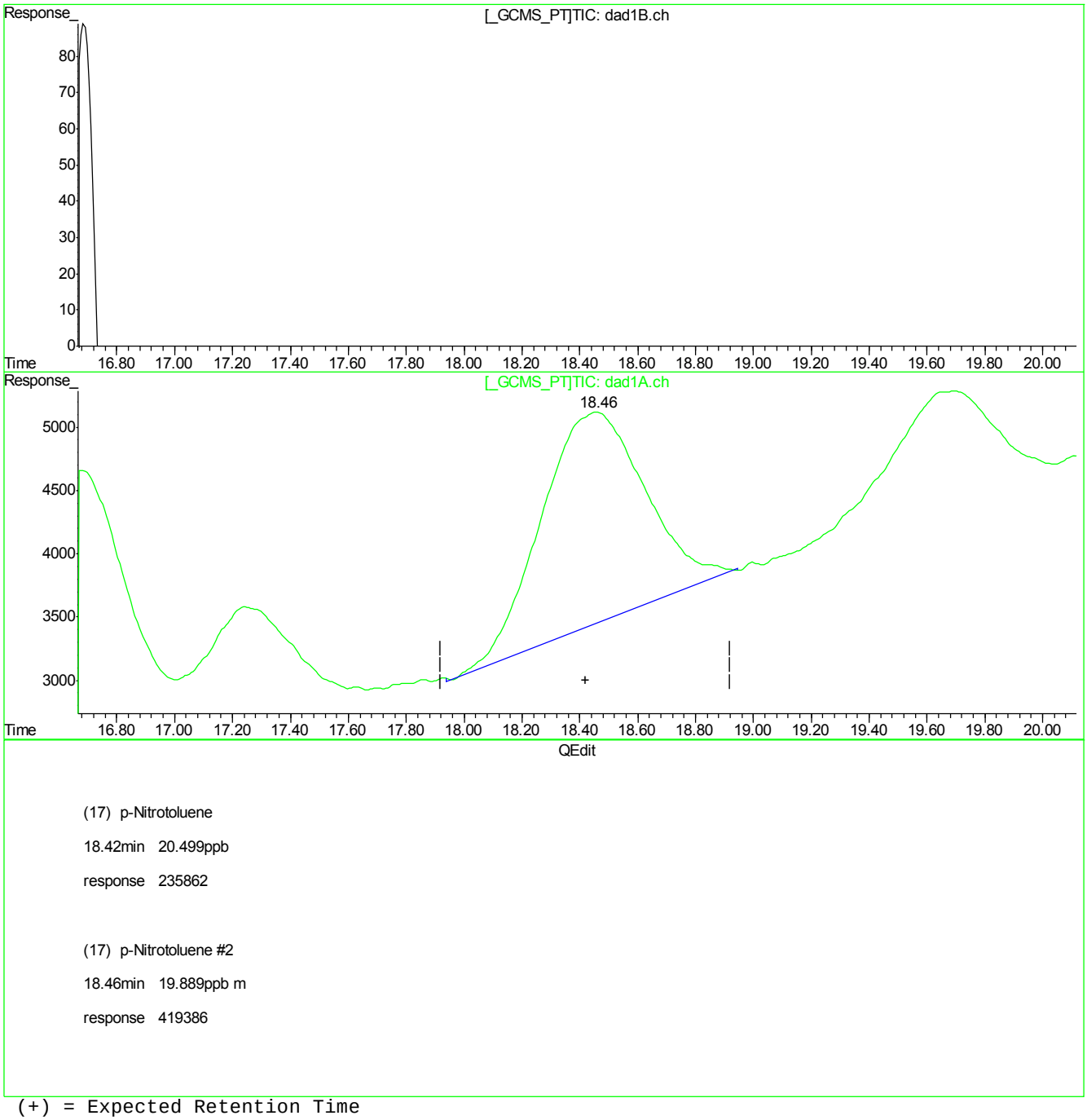
response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:26 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 19.889ppb m

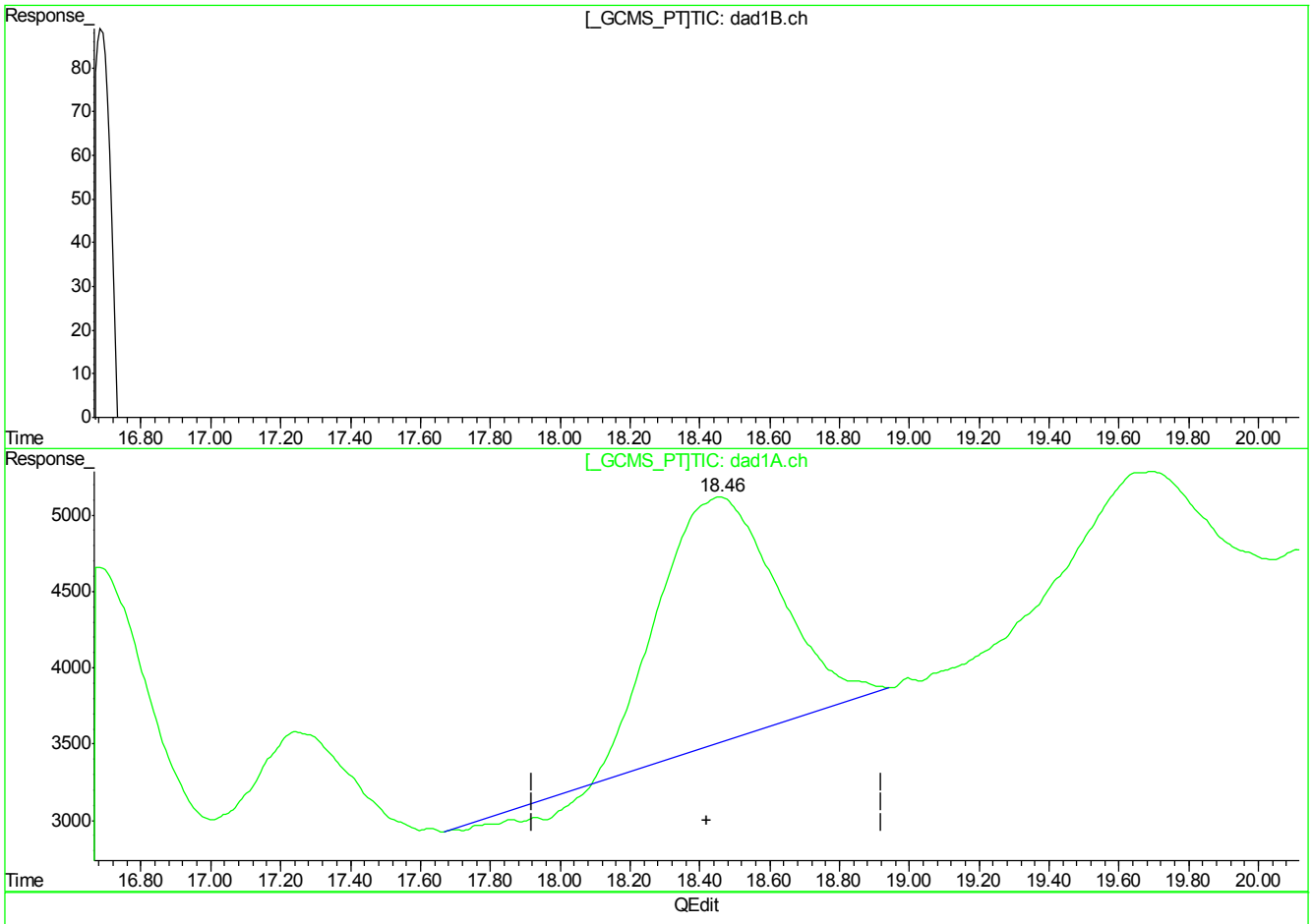
response 419386

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:29 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 17.560ppb

response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:32 2017

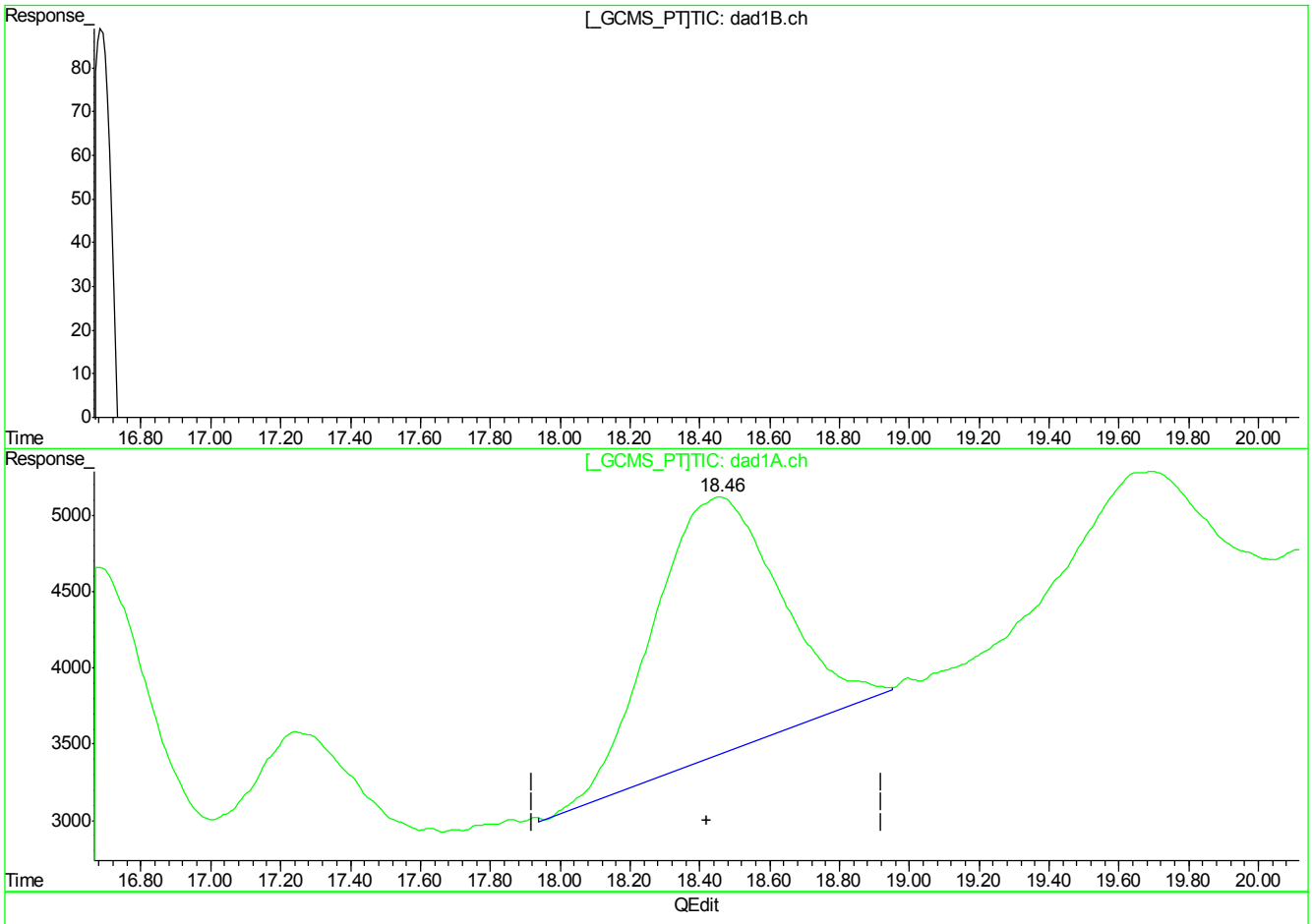
7.7.14.19

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 20.299ppb m

response 428039

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:35 2017

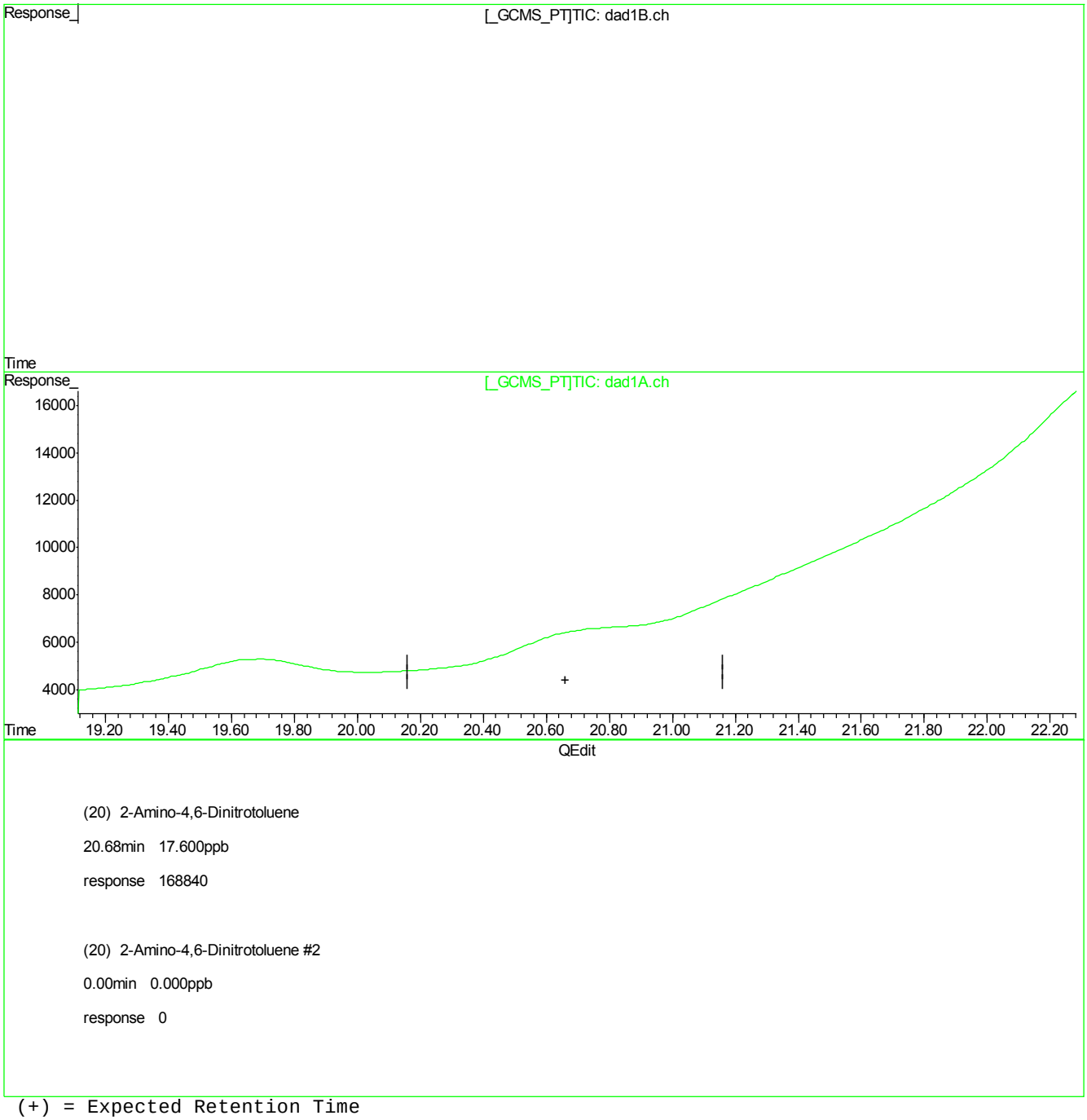
7.7.14.20

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:48 2017

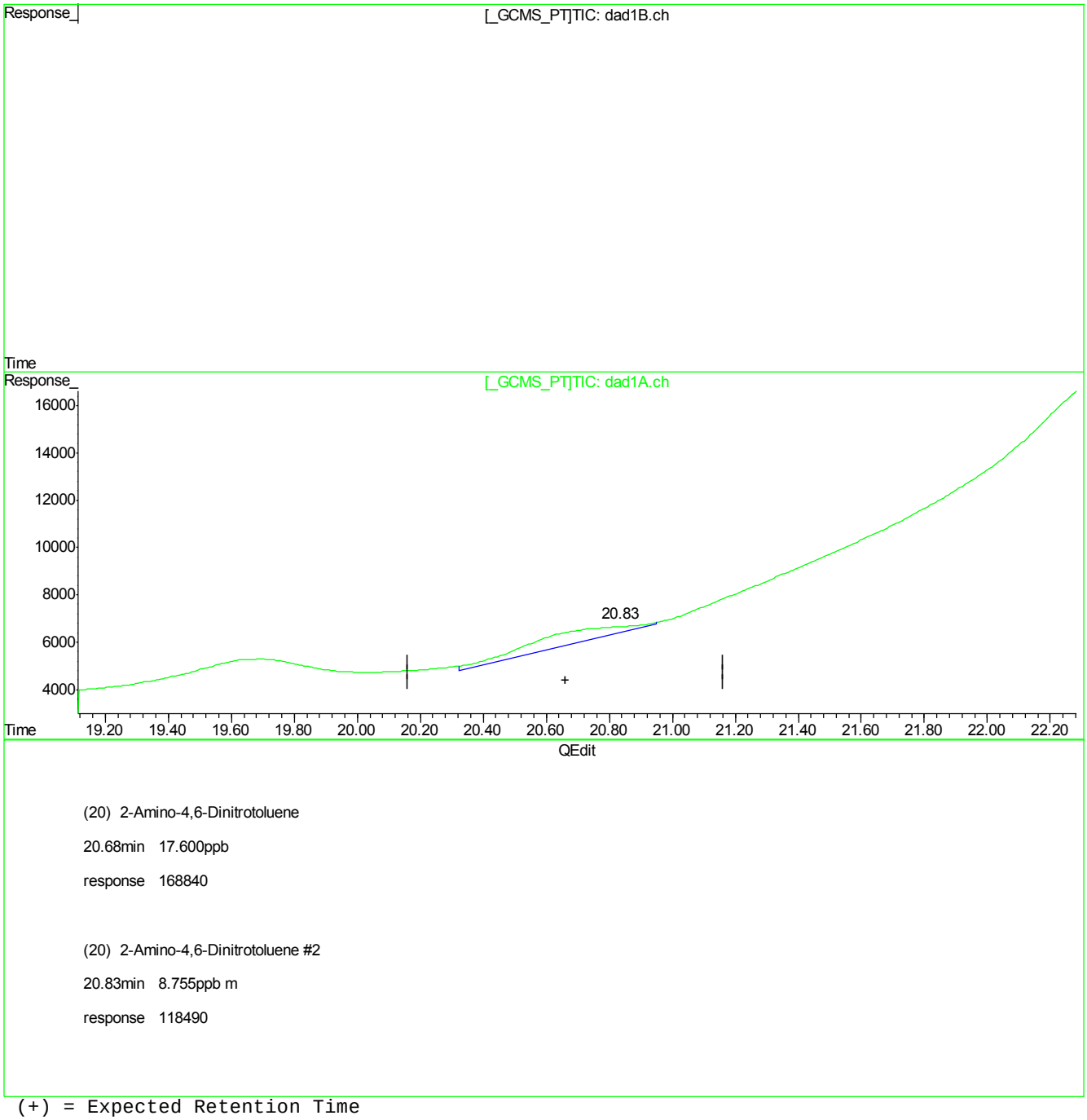
7.7.14.21
7

GG613826.D edits: 2-Amino-4,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.68min 17.600ppb

response 168840

(20) 2-Amino-4,6-Dinitrotoluene #2

20.83min 8.755ppb m

response 118490

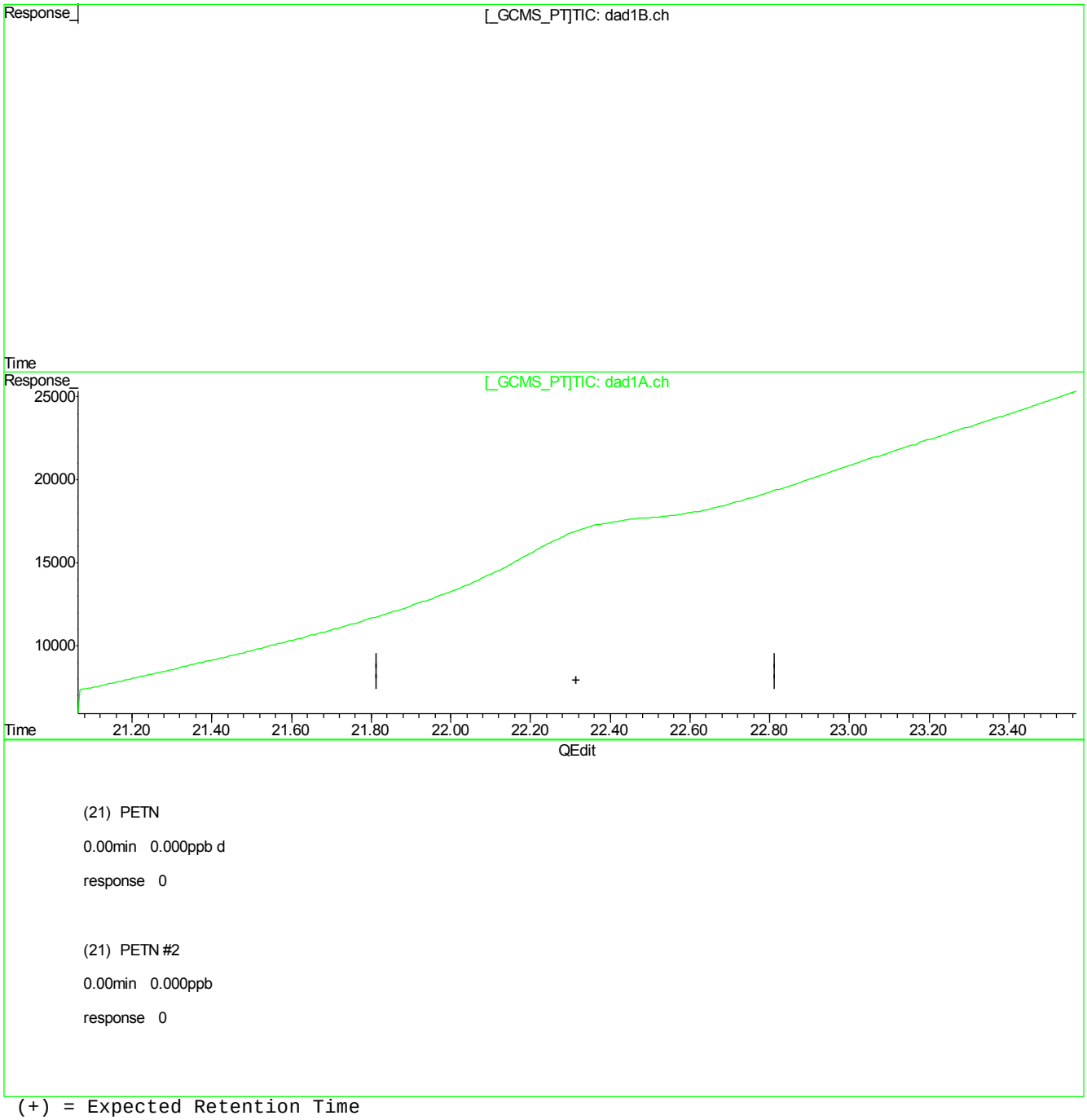
(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:52 2017

GG613826.D edits: 2-Amino-4,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

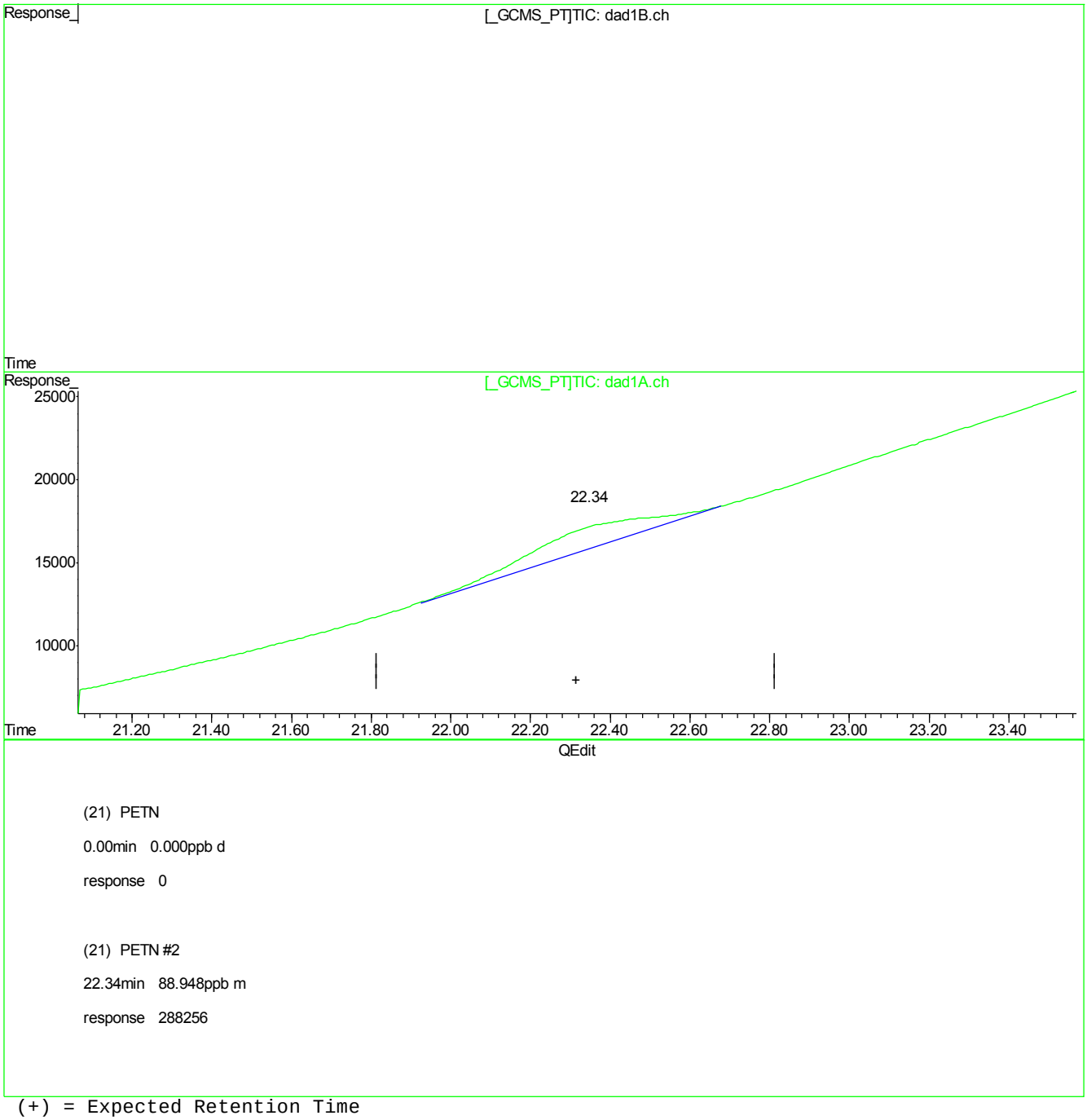


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:59 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.58	258823	507389	43.903	40.501m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		8.78%#	8.10%#
	Target Compounds						
1)	TNX	5.00	5.00	688634	692781	81.868m	82.143m
2)	HMX	5.46	5.46	164910	146764	43.415m	38.364m
3)	DNX	5.59	5.59	398344	366564	60.688m	56.040m
4)	MNX	6.67	6.67	346845	346845	71.694	71.694
5)	1,3,5-Trinitrobe	7.55	7.55	515904	514795	50.524	50.436
6)	RDX	8.08	8.08	237032	233498	49.790	49.276
7)	1,3-Dinitrobenze	10.08	10.08	693606	431067	47.654	30.312m
8)	Nitrobenzene	11.08	11.08	439122	444089	57.443	46.645m
9)	2,4,6-Trinitroto	11.88	11.87	493138	618562	48.367	39.514m
10)	Nitroglycerin	0.00	12.71	0	801043	N.D. d	218.113m
11)	Tetryl	13.28	13.27	407817	746662	59.454	61.159m
13)	2,6-Dinitrotolue	14.90	14.89	359440	552975	51.700	50.694m
14)	2,4-Dinitrotolue	15.63	15.65	660258	863855	49.688	86.988m#
15)	o-Nitrotoluene	17.23	17.24	284138	463485	67.838	81.127
16)	3,5-Dinitroanili	16.66	16.67	541983	858371	51.141	47.914
17)	p-Nitrotoluene	18.40	18.43	584278	976483	50.781	46.253
18)	4-Amino-2,6-Dini	18.40	18.43	584278	976483	50.781	46.253
19)	m-Nitrotoluene	19.66	19.66	285765	365933	58.777	38.687m
20)	2-Amino-4,6-Dini	20.66	20.66	440998	398969	45.970	29.479m
21)	PETN	0.00	22.39	0	664952	N.D. d	205.186m

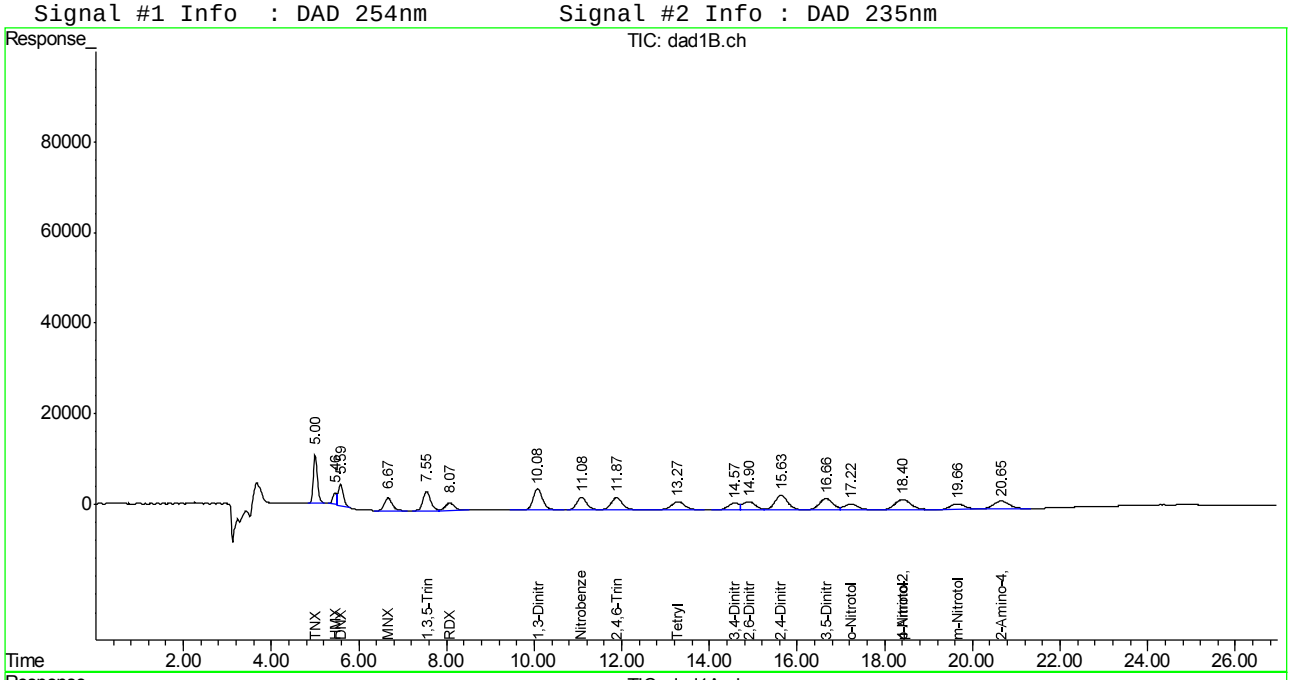
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 13:37:51 2017 Page 1

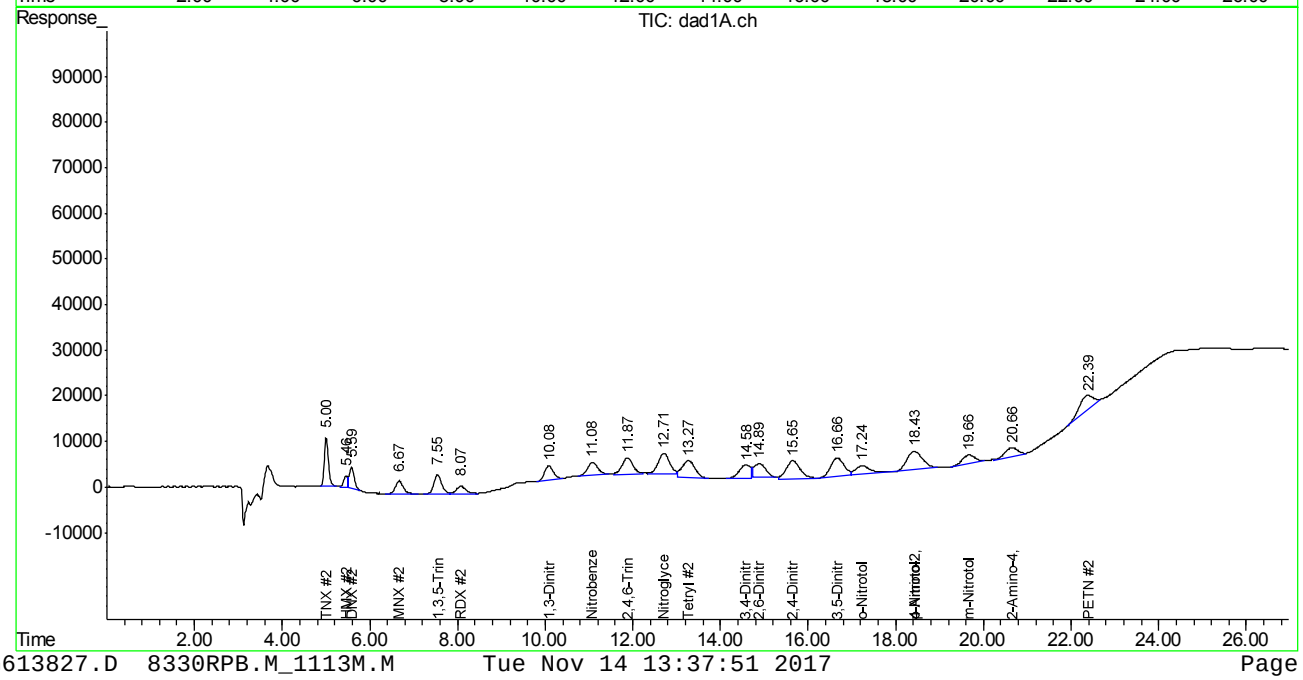
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:56 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

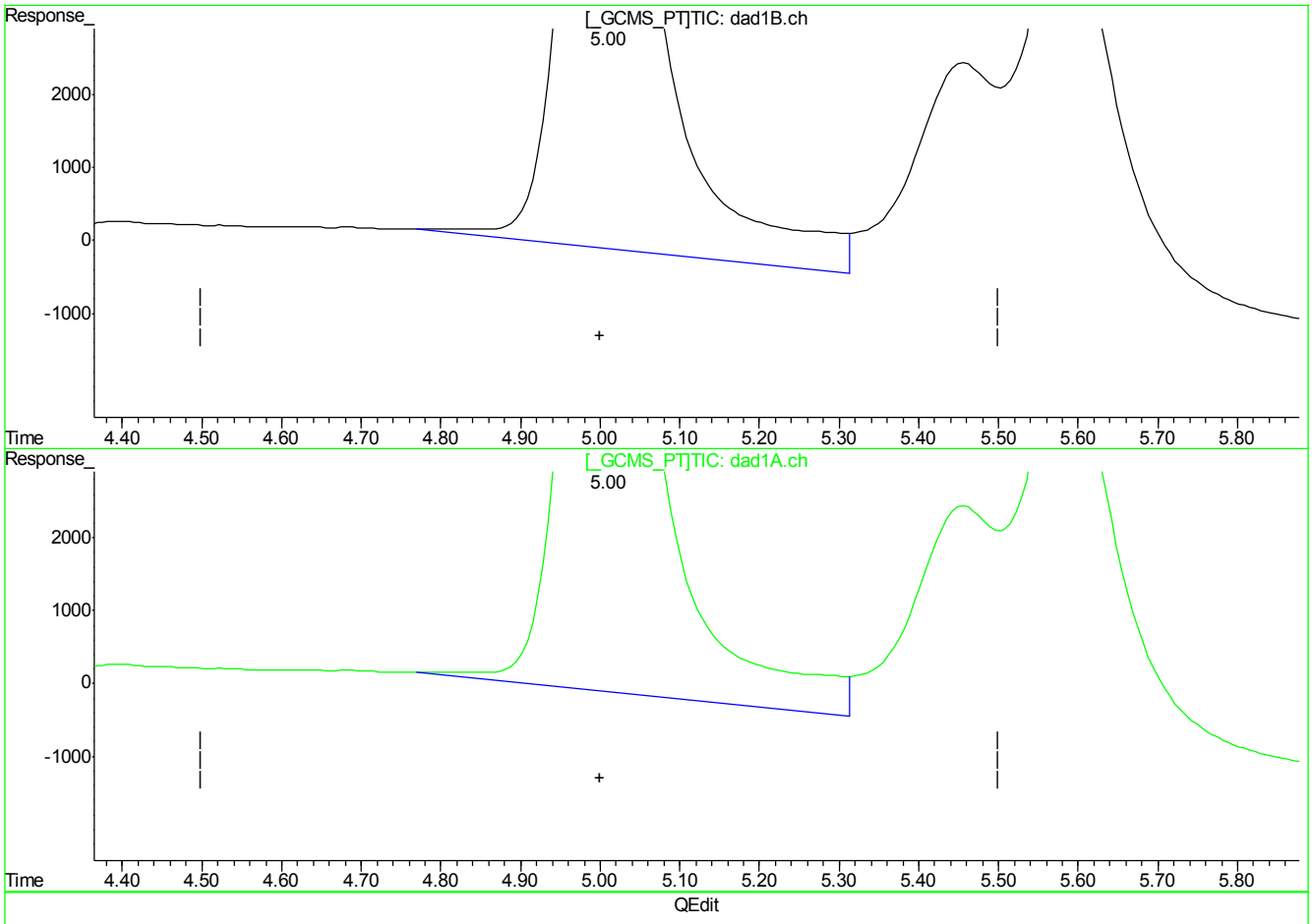
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613827.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:05	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.59	Poorly defined baseline
DNX		2	5.59	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.58	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.65	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.66	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.66	Poorly defined baseline
PETN	78-11-5	2	22.39	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.01min 93.407ppb

response 785694

(1) TNX #2

5.01min 93.160ppb

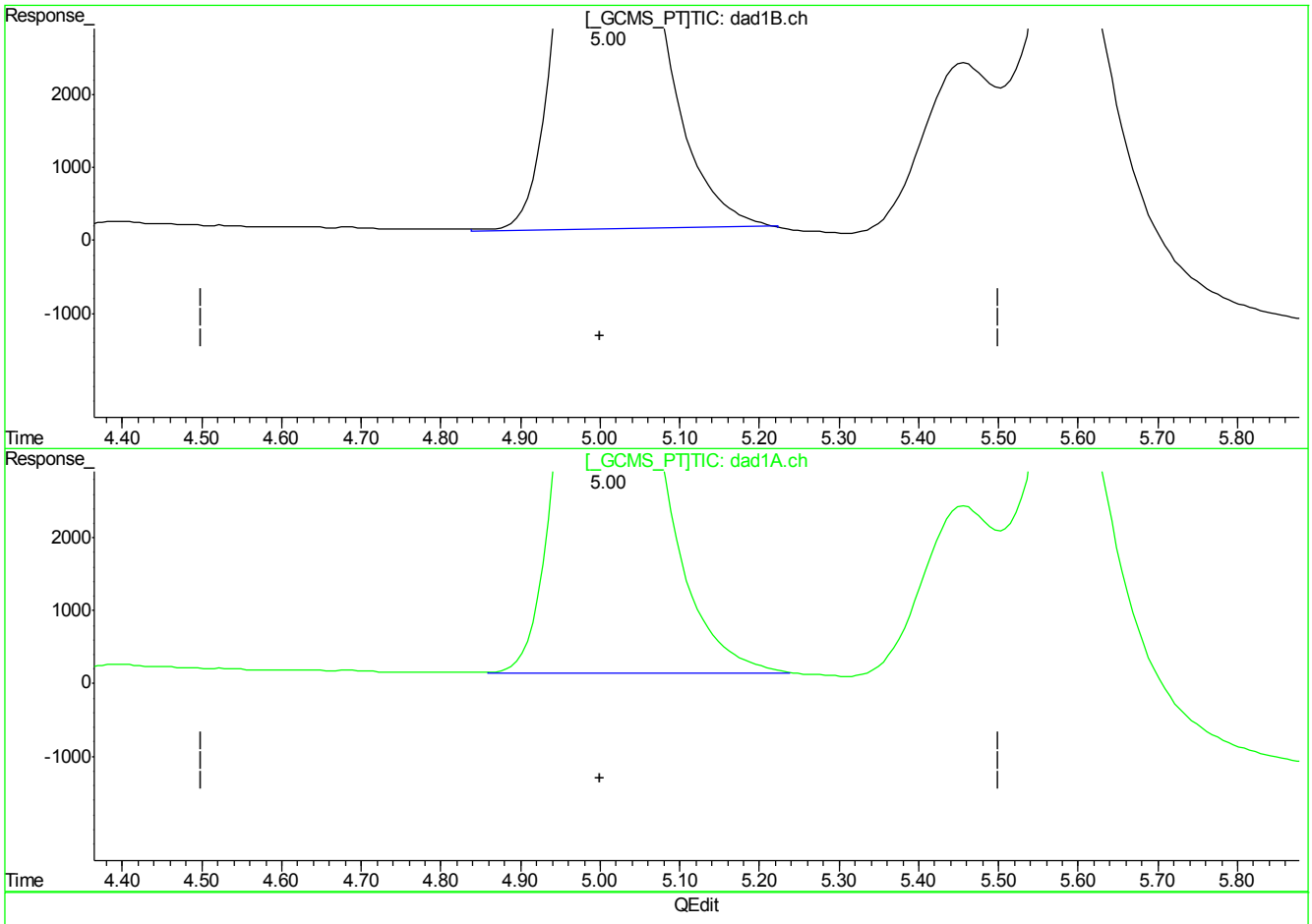
response 785694

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.00min 81.868ppb m

response 688634

(1) TNX #2

5.00min 82.143ppb m

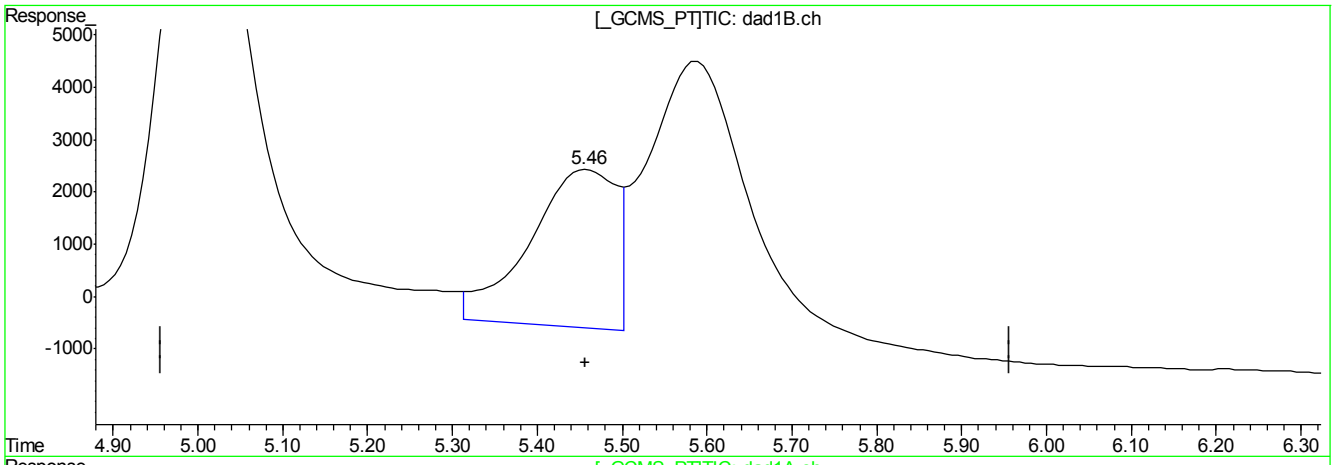
response 692781

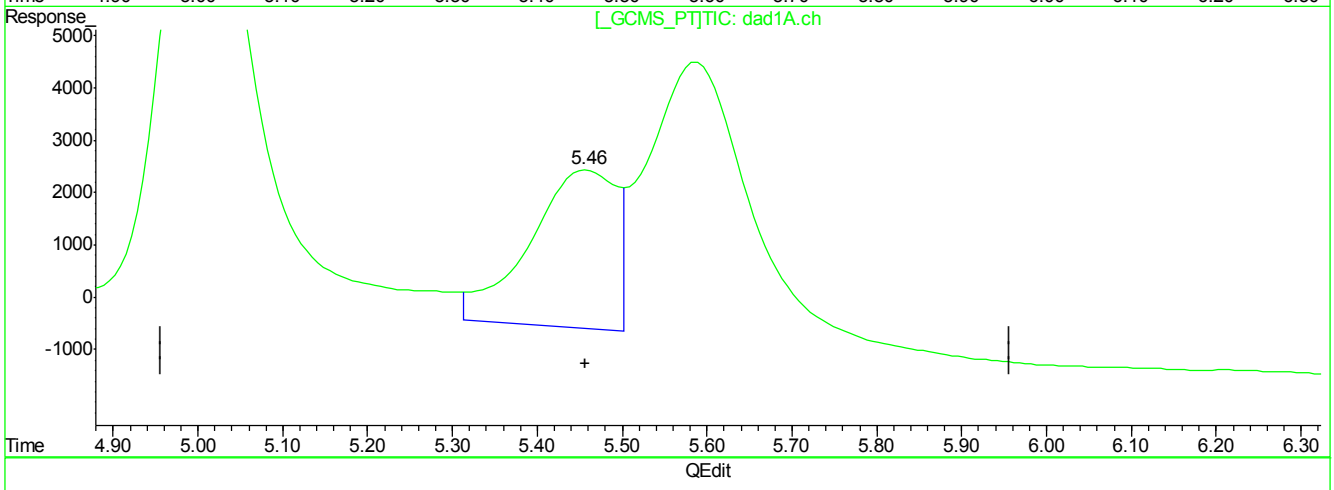
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:32 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.46min 55.811ppb

response 211996

(2) HMX #2

5.46min 55.416ppb

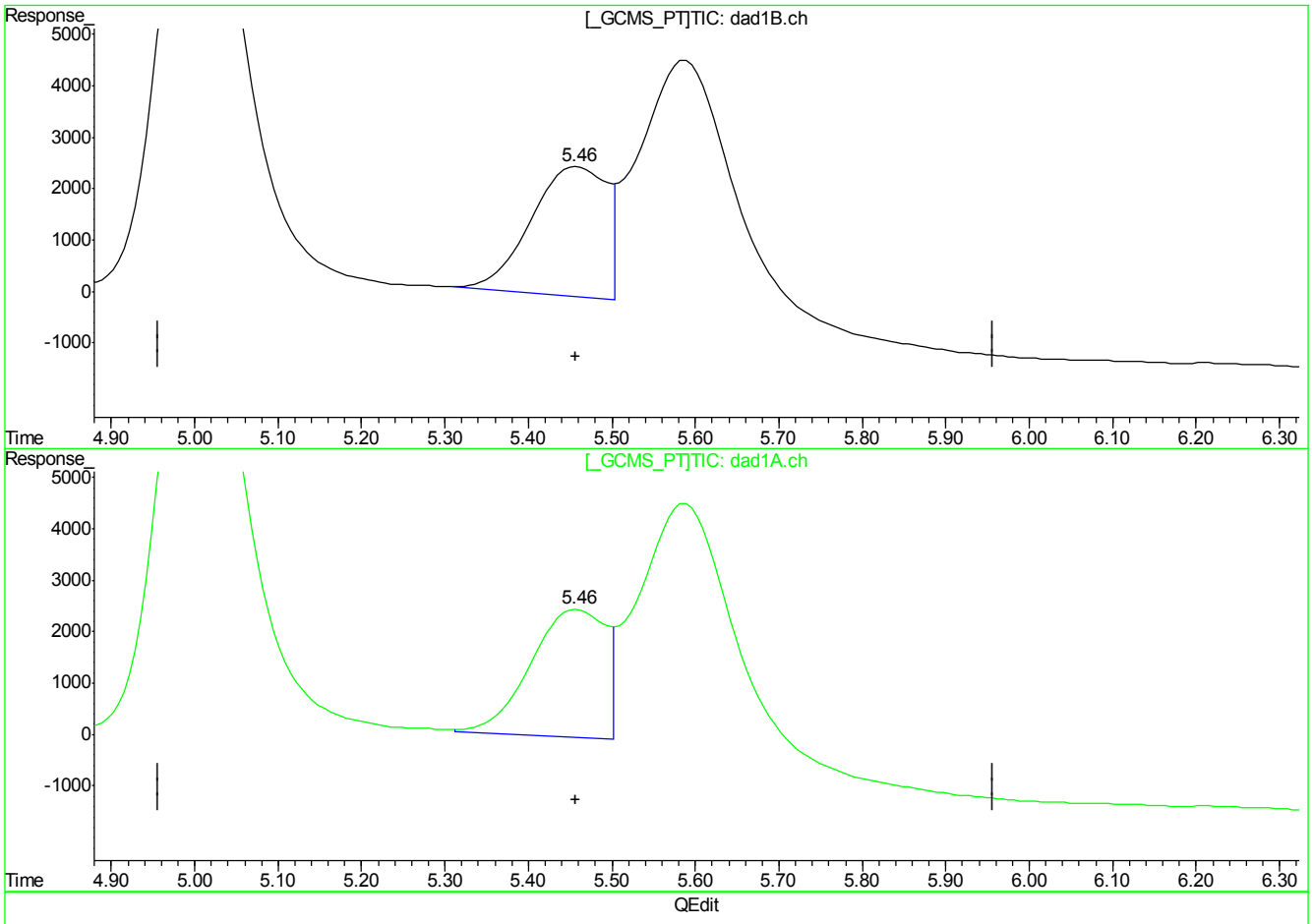
response 211996

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 43.415ppb m

response 164910

(2) HMX #2

5.46min 38.364ppb m

response 146764

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:41 2017

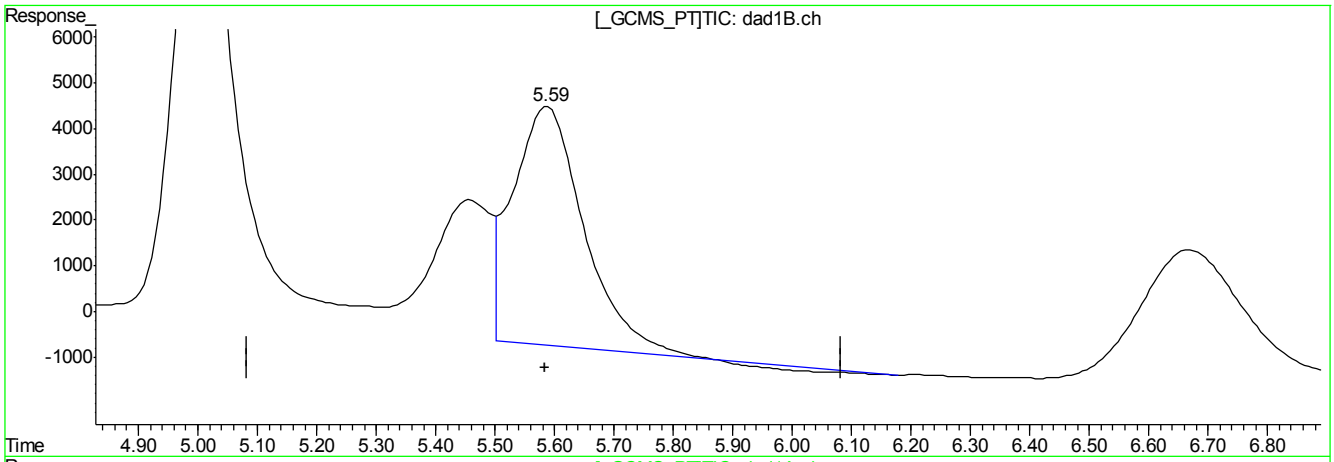
7.7.15.5

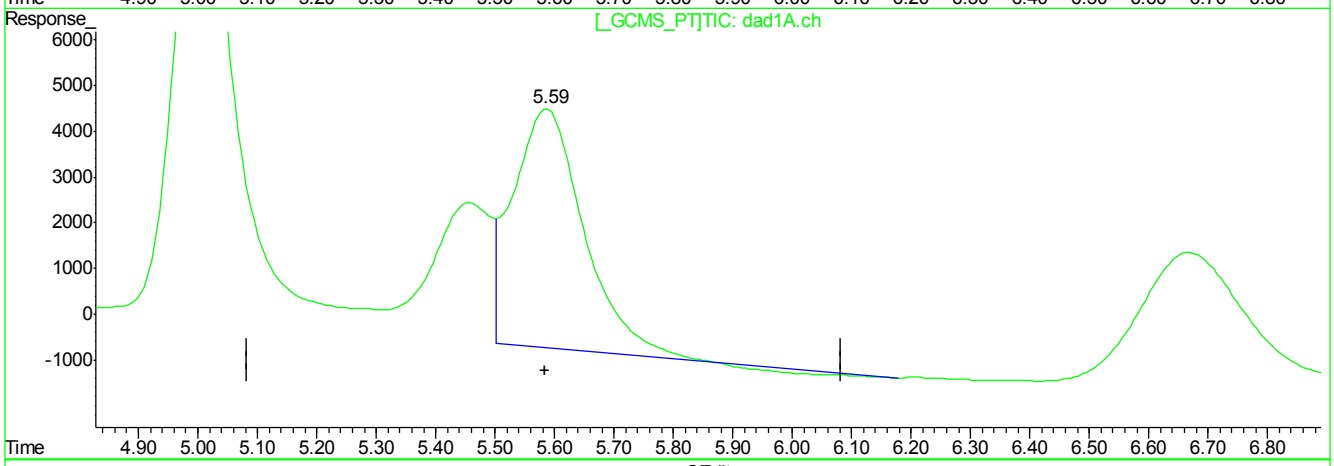
7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.59min 65.551ppb

response 430267

(3) DNX #2

5.59min 65.779ppb

response 430267

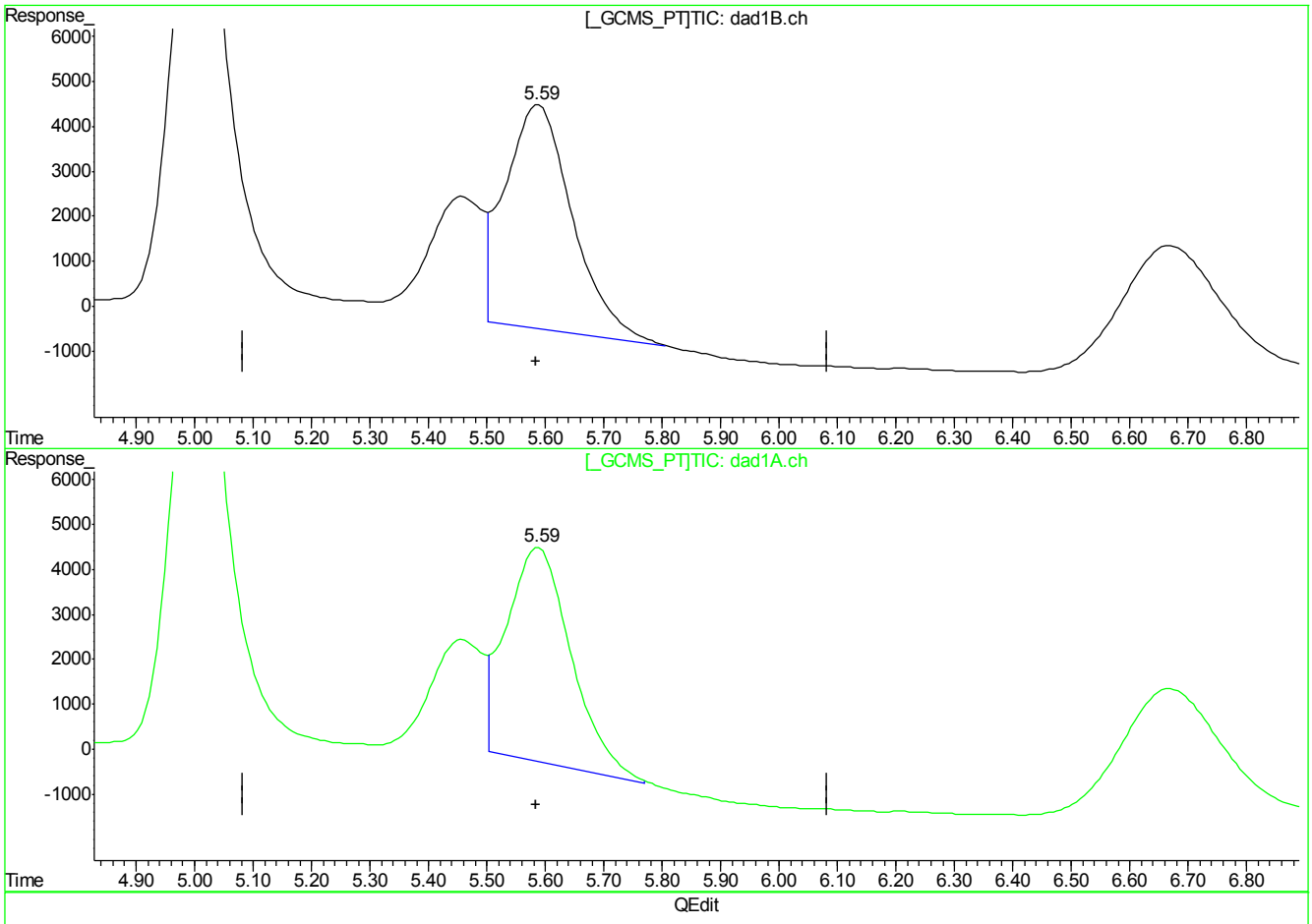
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:45 2017

GG613827.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(3) DNX

5.59min 60.688ppb m

response 398344

(3) DNX #2

5.59min 56.040ppb m

response 366564

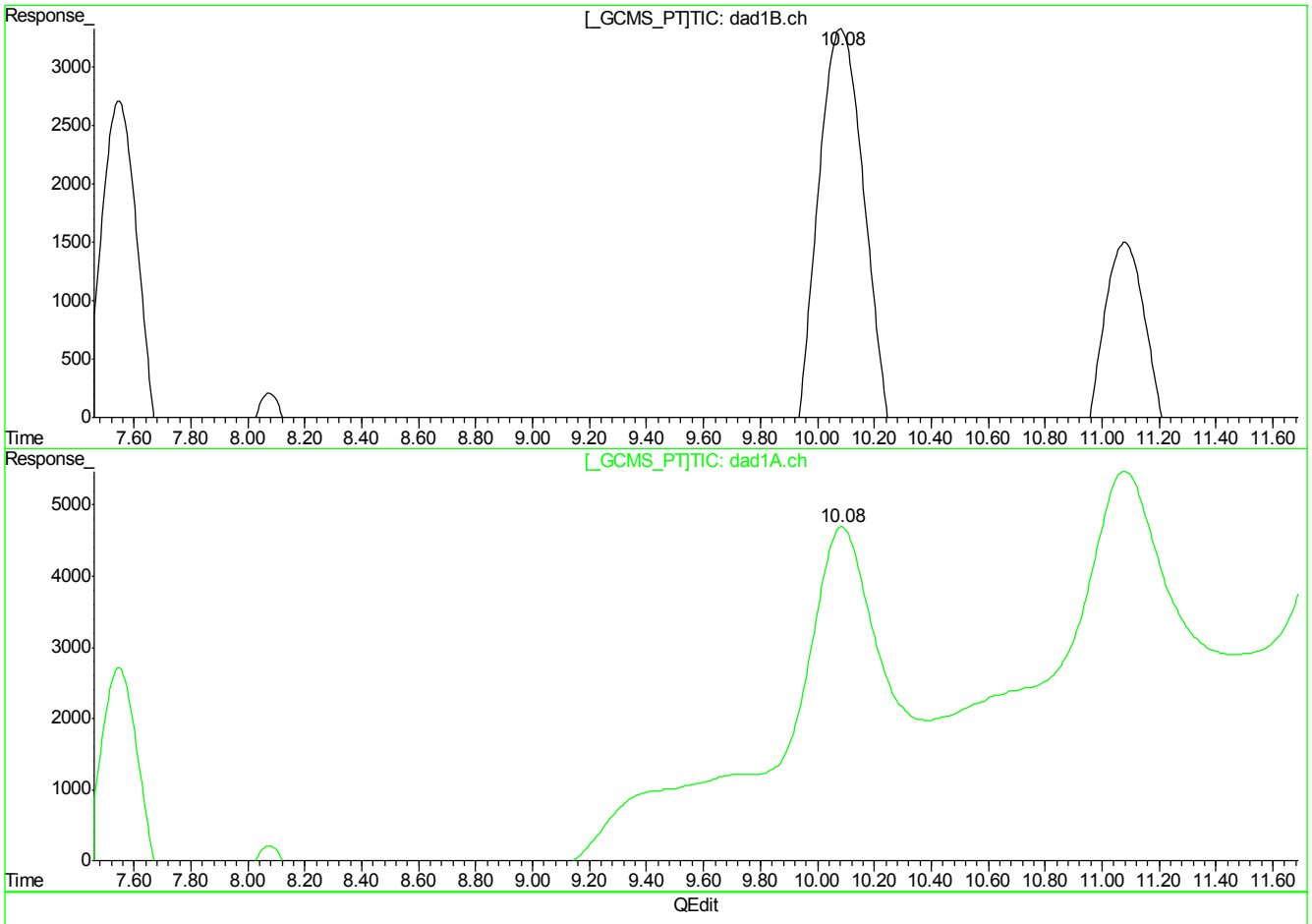
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:51 2017

GG613827.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.09min 151.649ppb

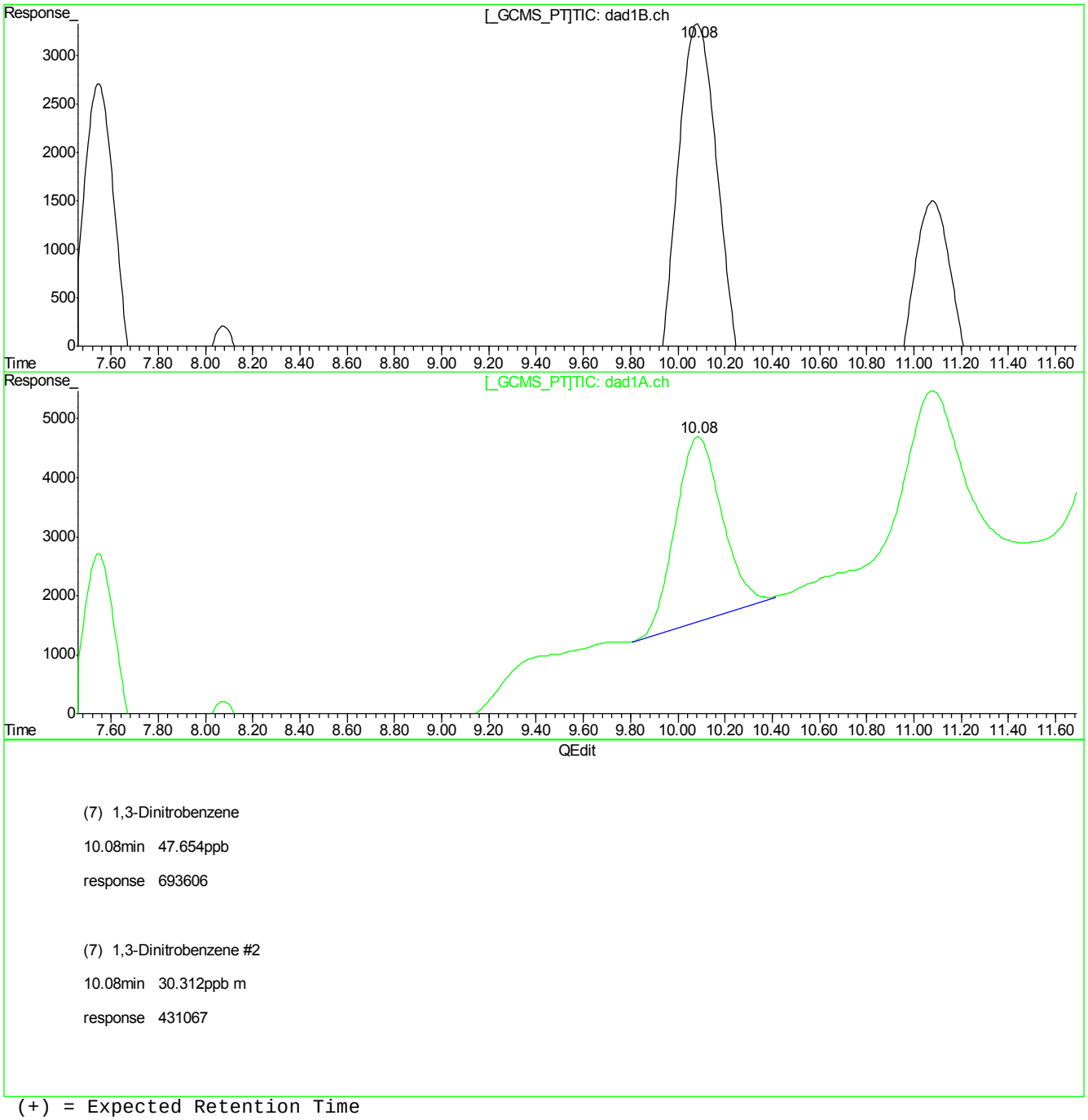
response 2132933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:00 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.08min 30.312ppb m

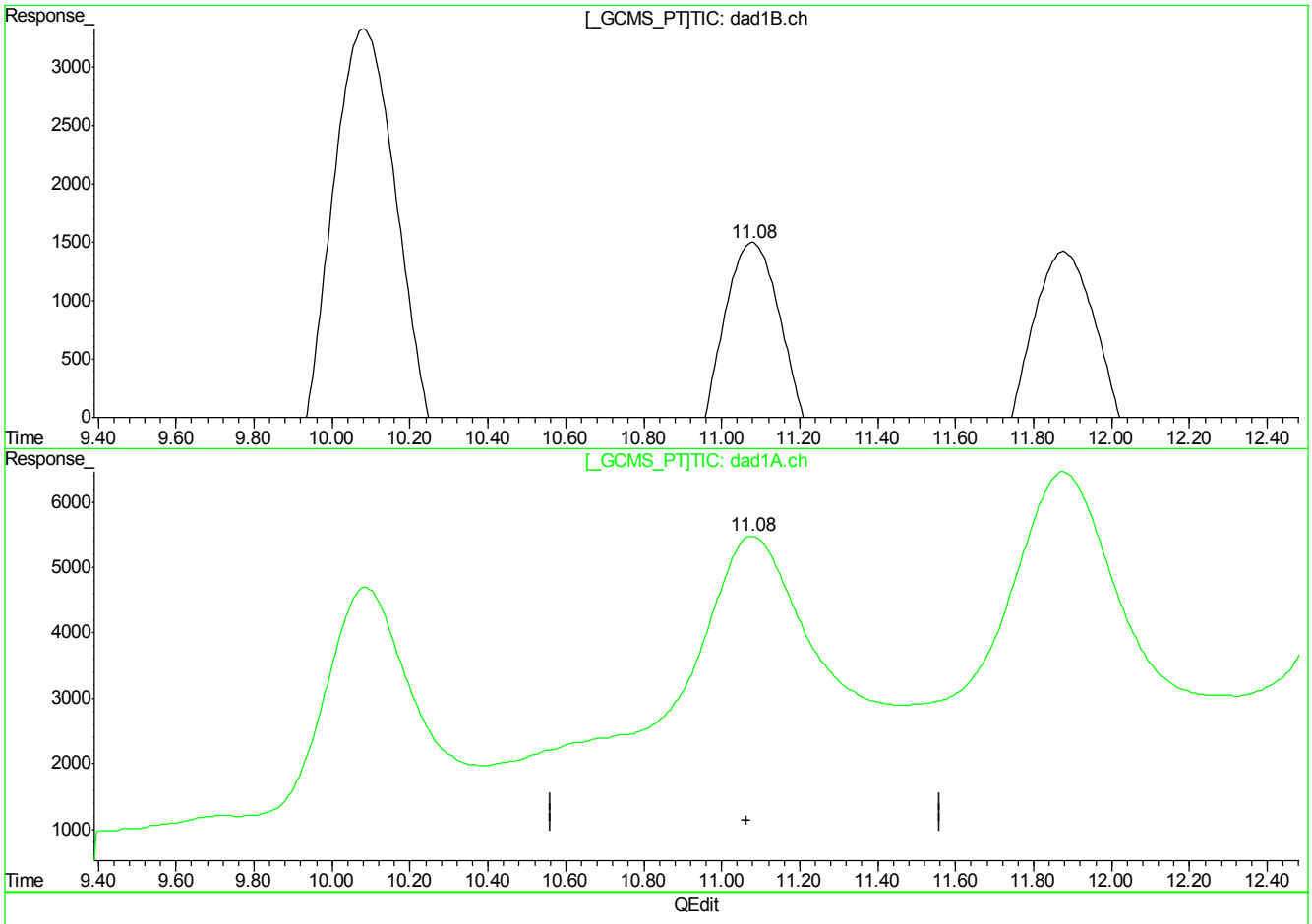
response 431067

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 240.311ppb

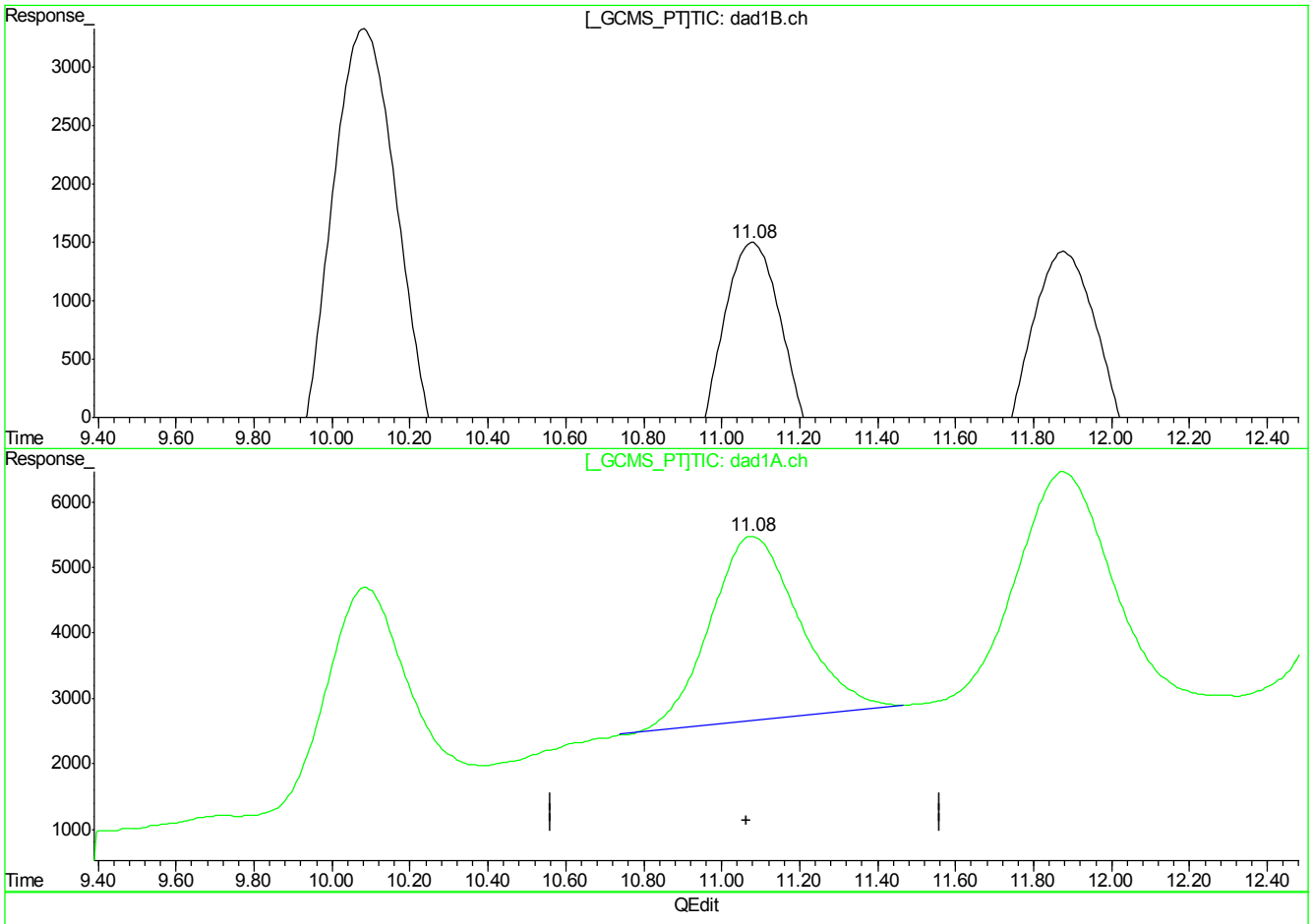
response 2276420

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 46.645ppb m

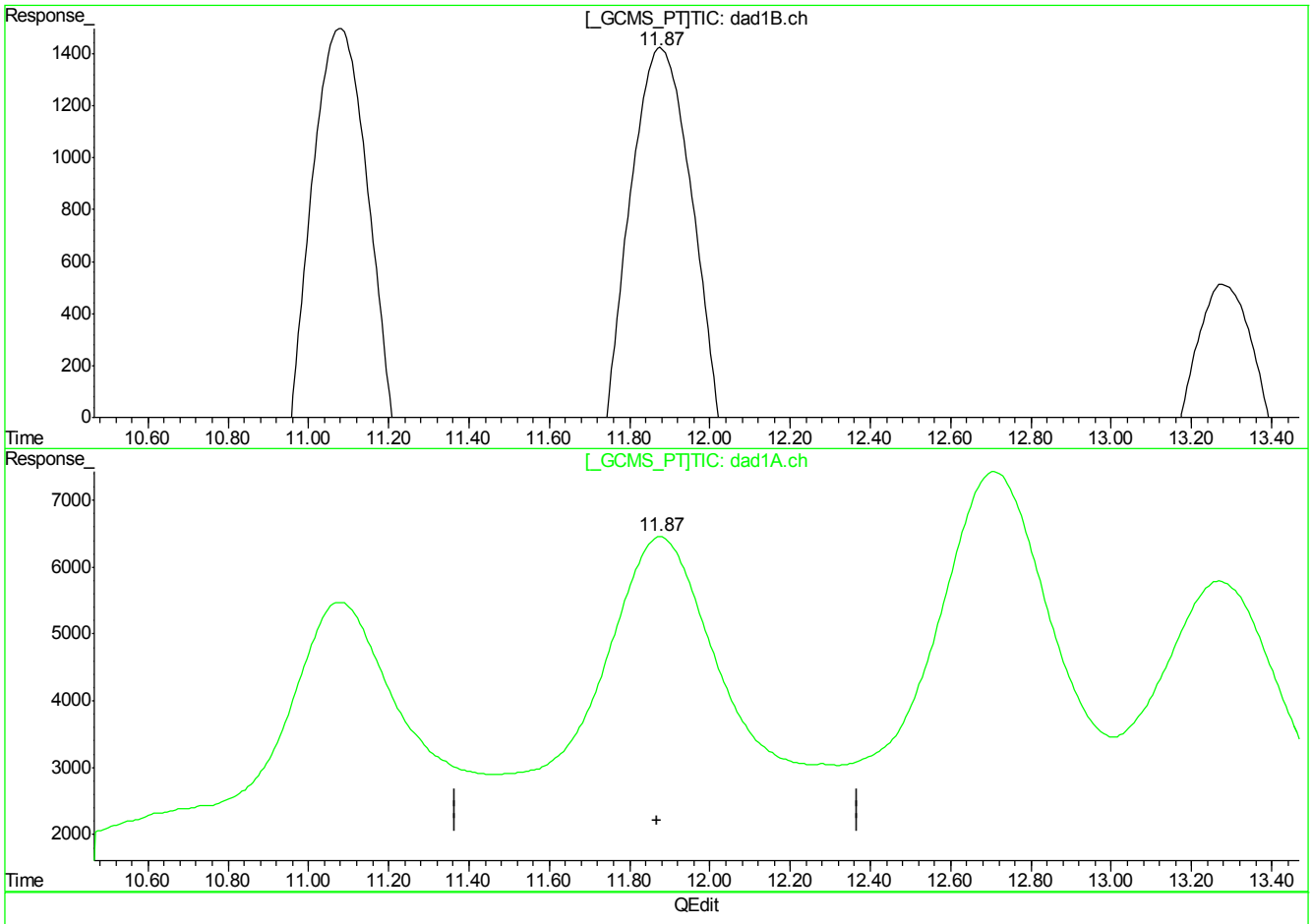
response 444089

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:13 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.88min 132.294ppb

response 2061411

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:16 2017

7.7.15.12

7

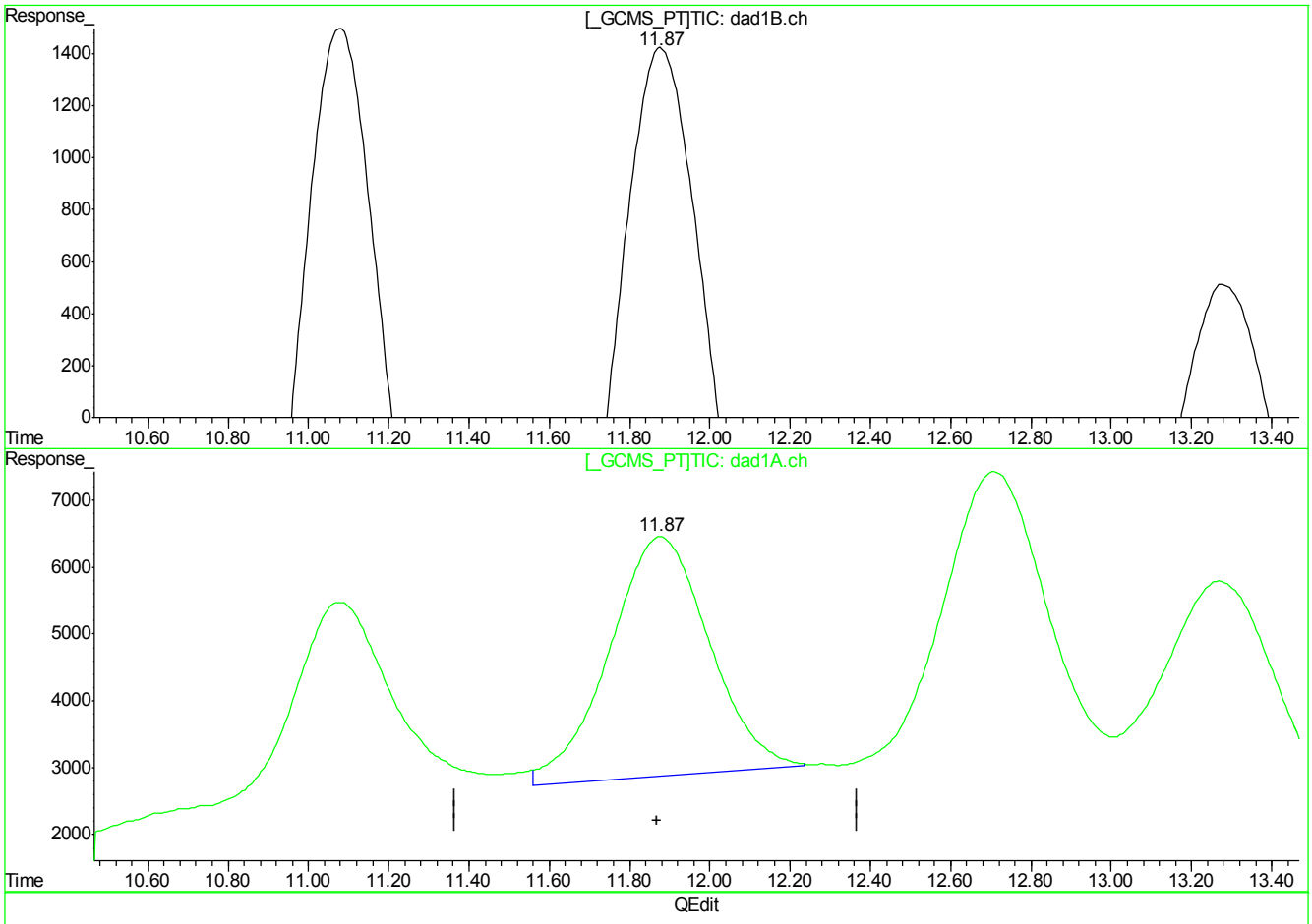
SGS FA53725

GG613827.D edits: 2,4,6-Trinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.87min 39.514ppb m

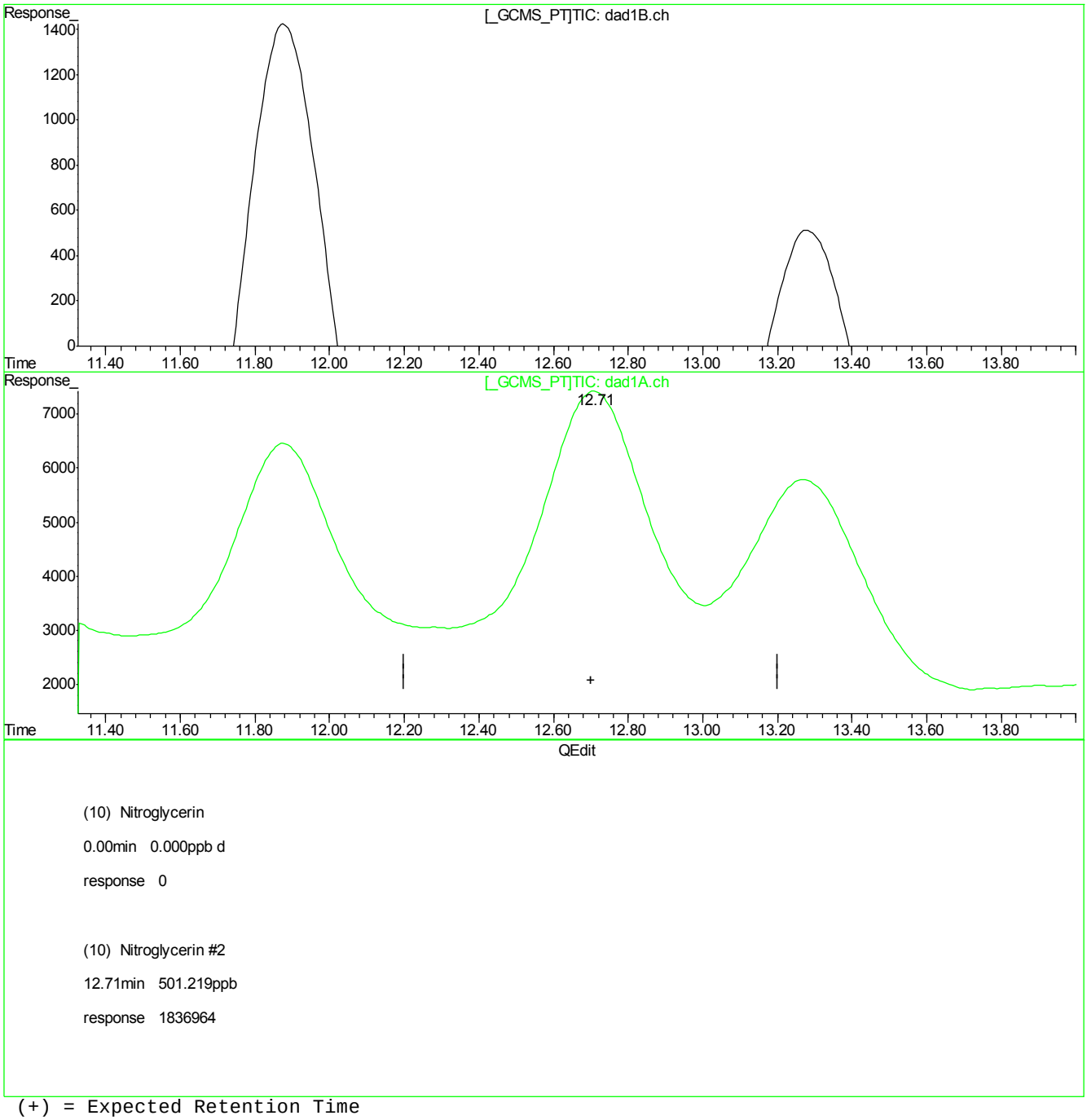
response 618562

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:20 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:23 2017

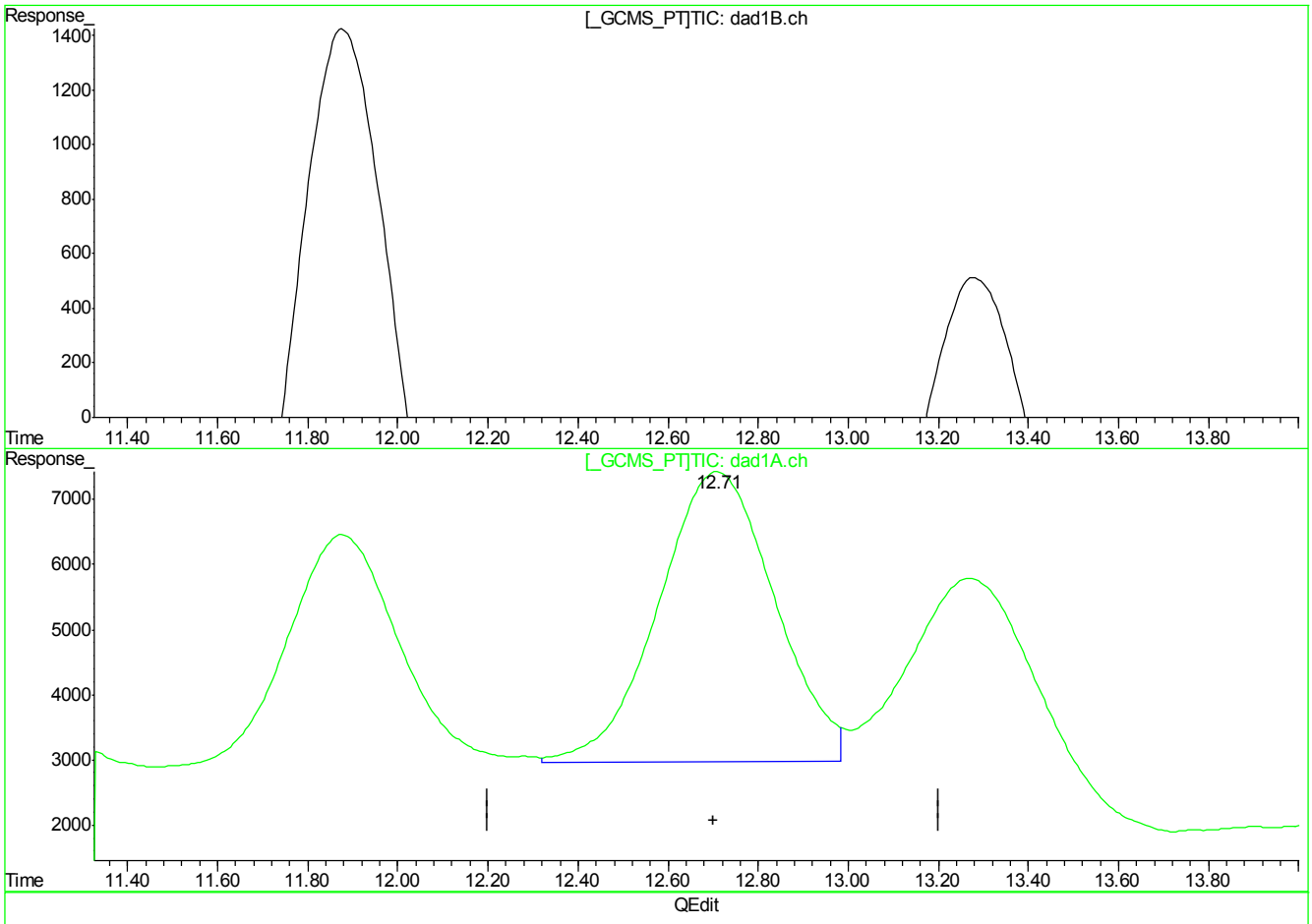
7.7.15.14

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.71min 218.113ppb m

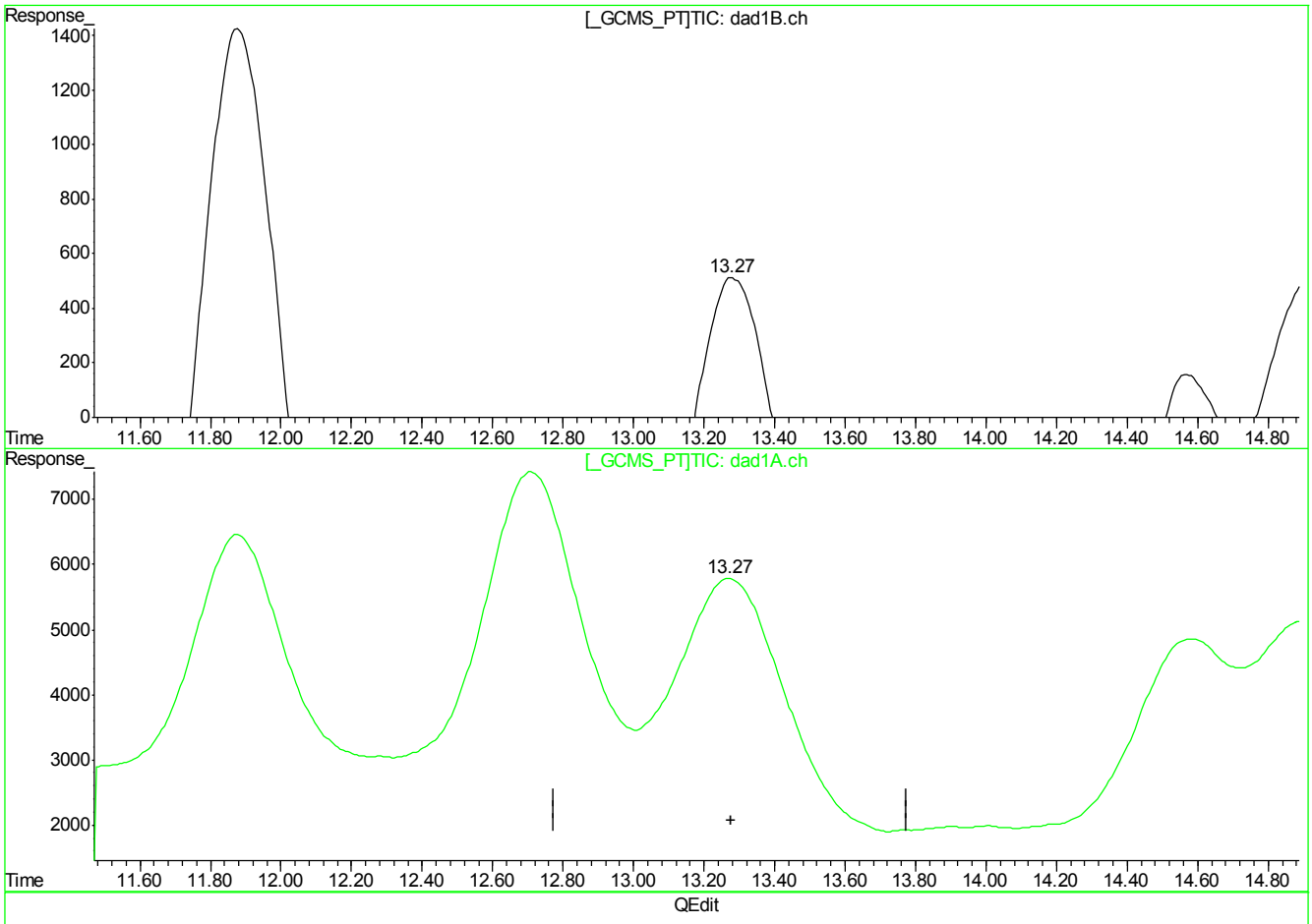
response 801043

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:27 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 109.642ppb

response 1344073

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:30 2017

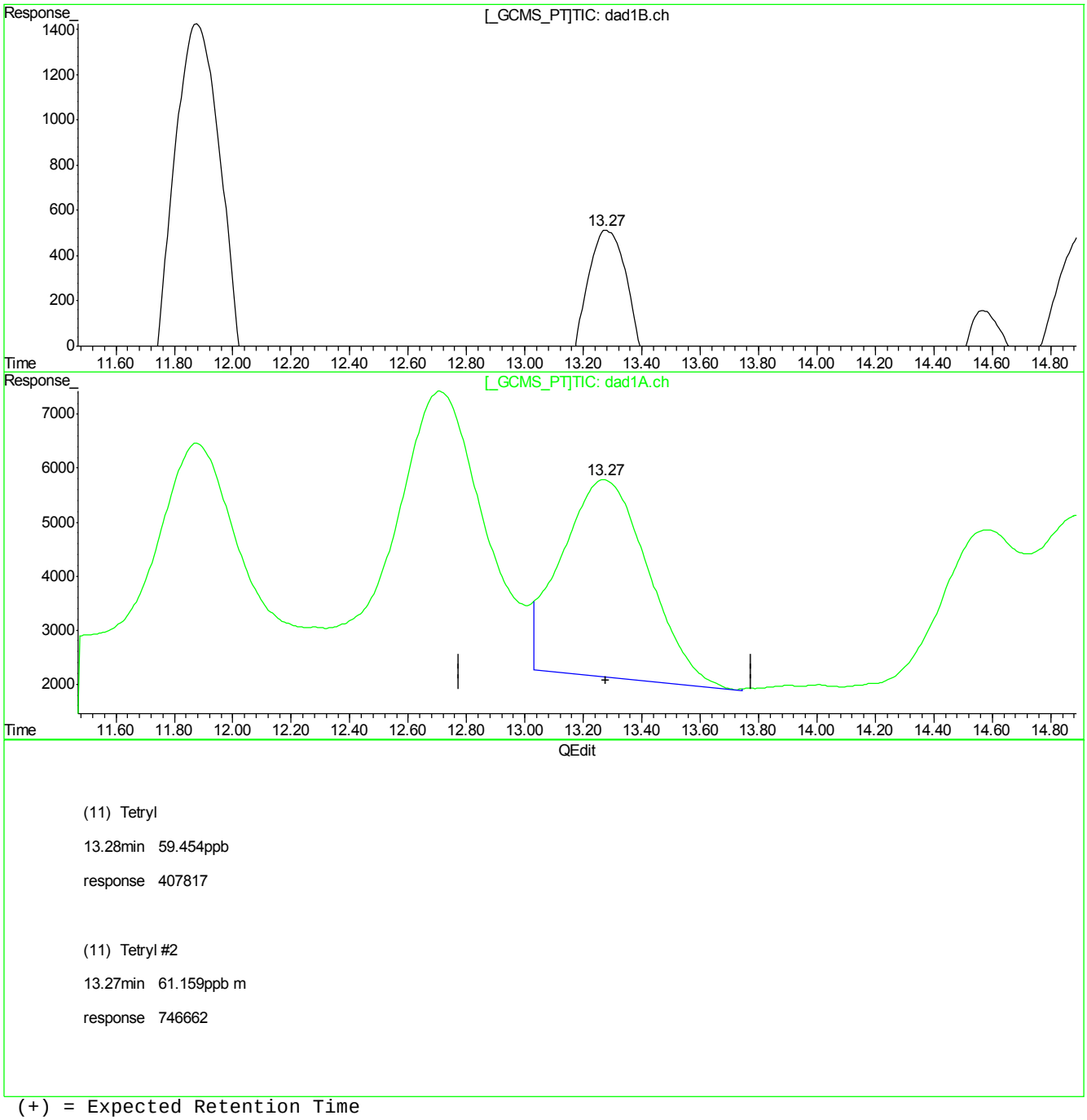
7.7.15.16

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 61.159ppb m

response 746662

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:33 2017

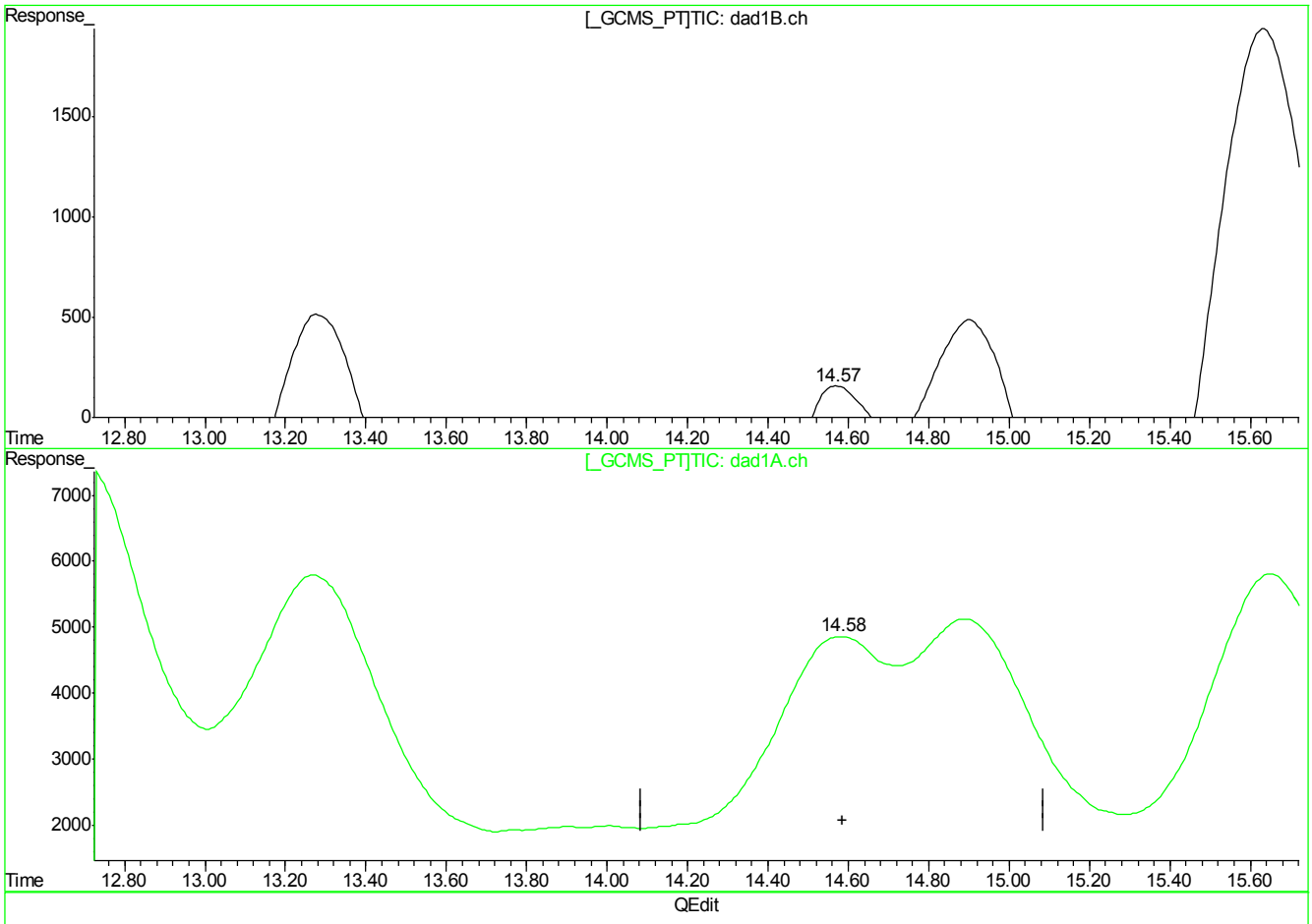
7.7.15.17

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 82.067ppb

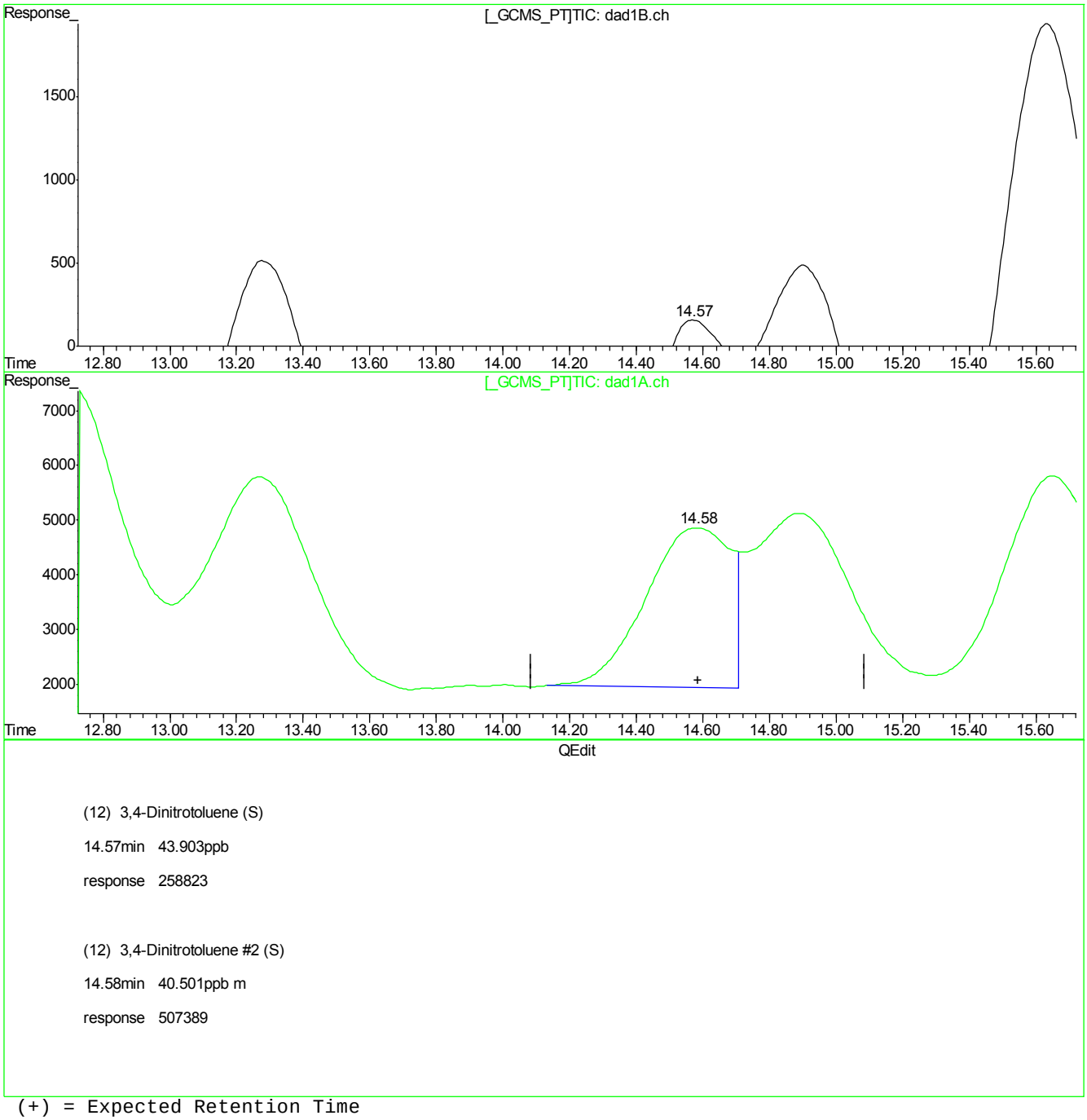
response 1026519

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:37 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 40.501ppb m

response 507389

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:40 2017

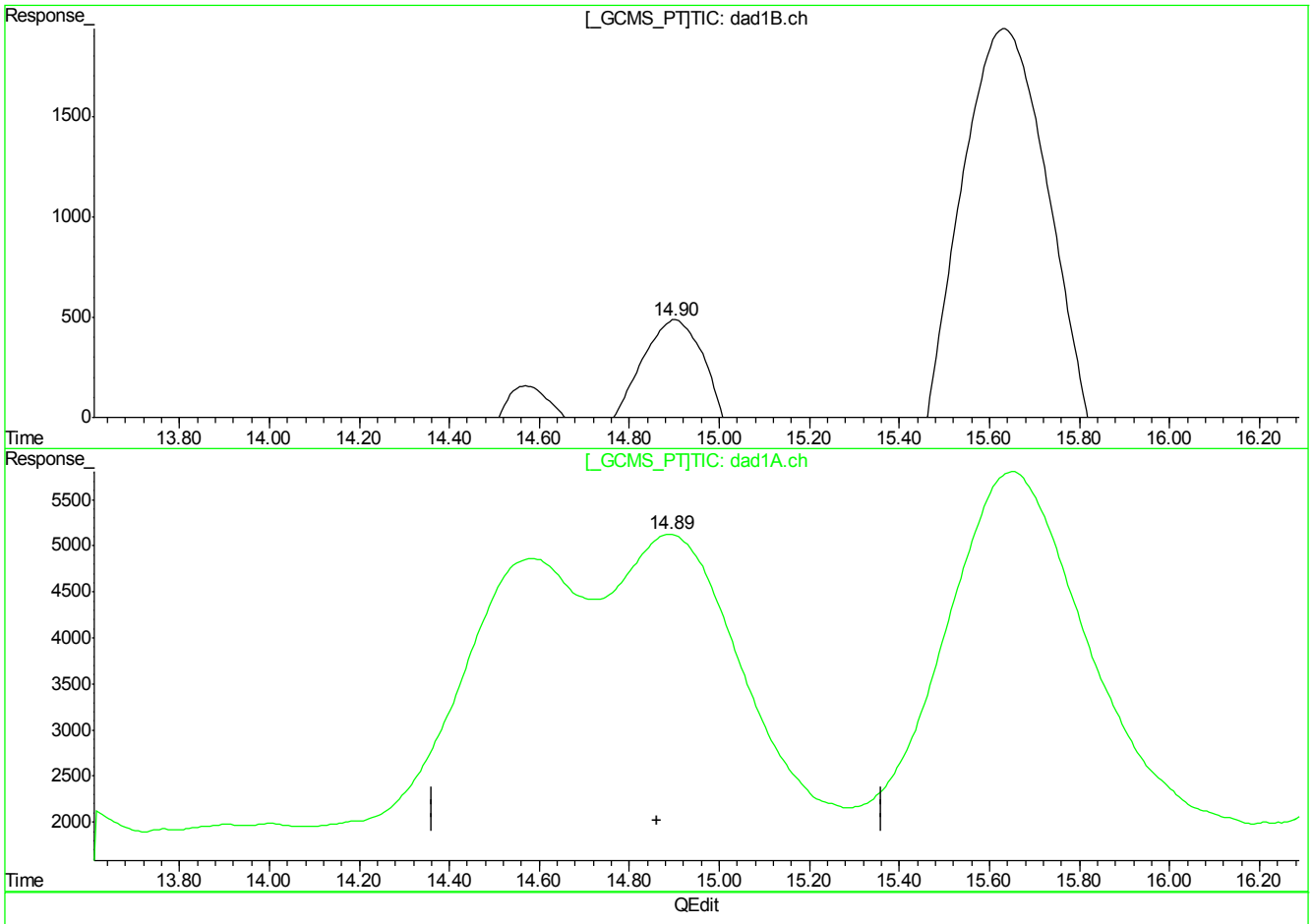
7.7.15.19

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 73.498ppb

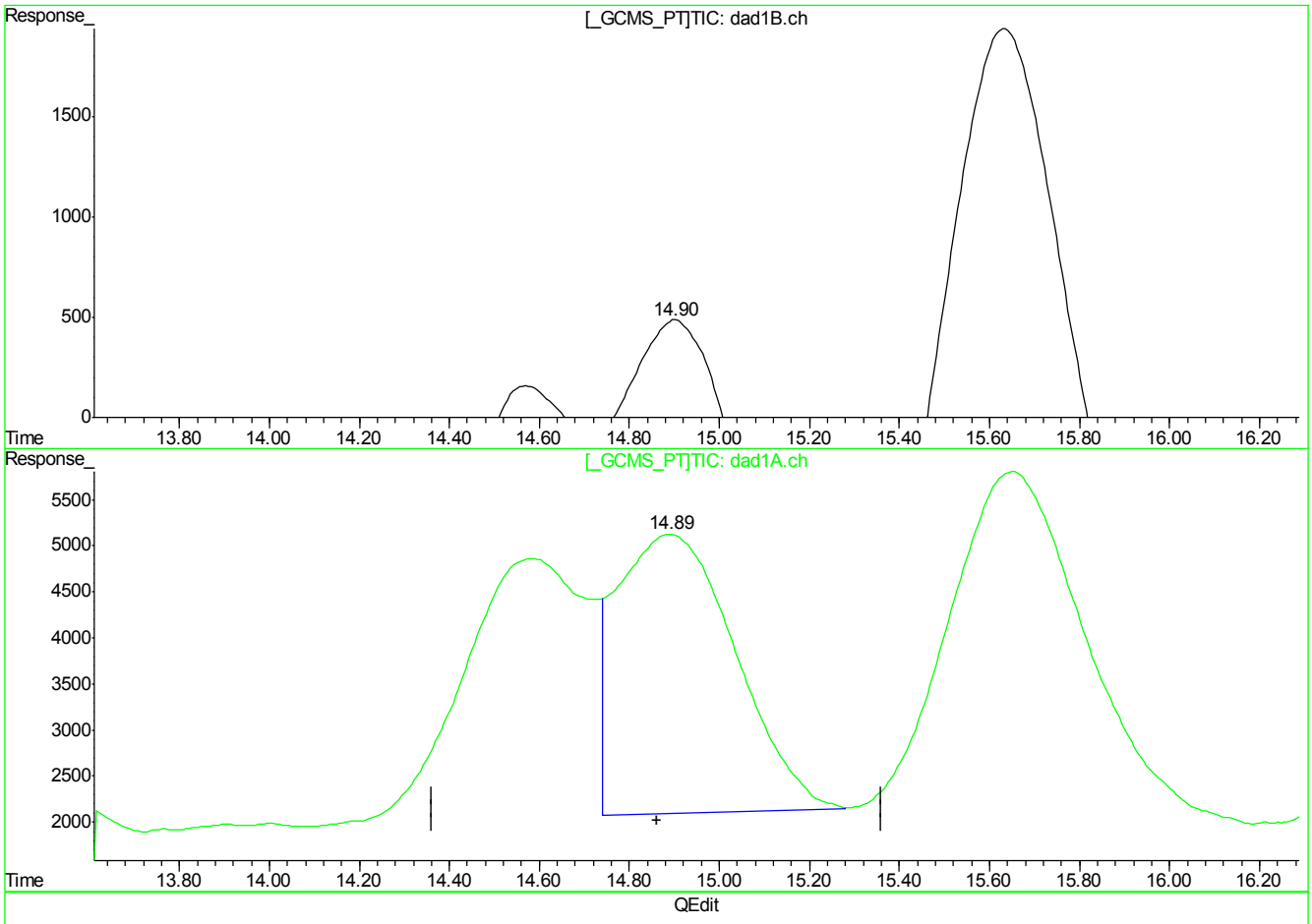
response 801693

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 50.694ppb m

response 552975

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:47 2017

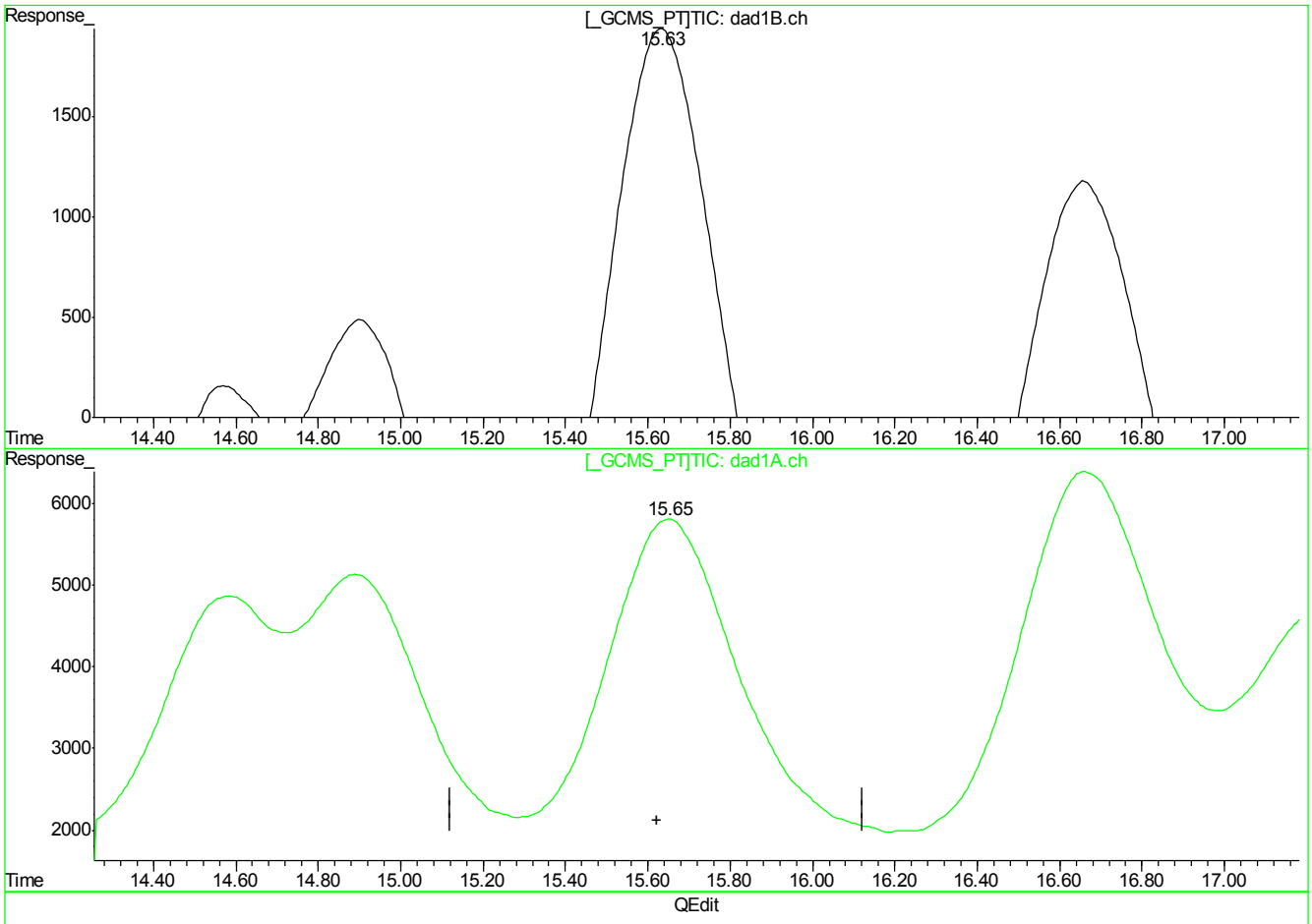
7.7.15.21

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 93.393ppb

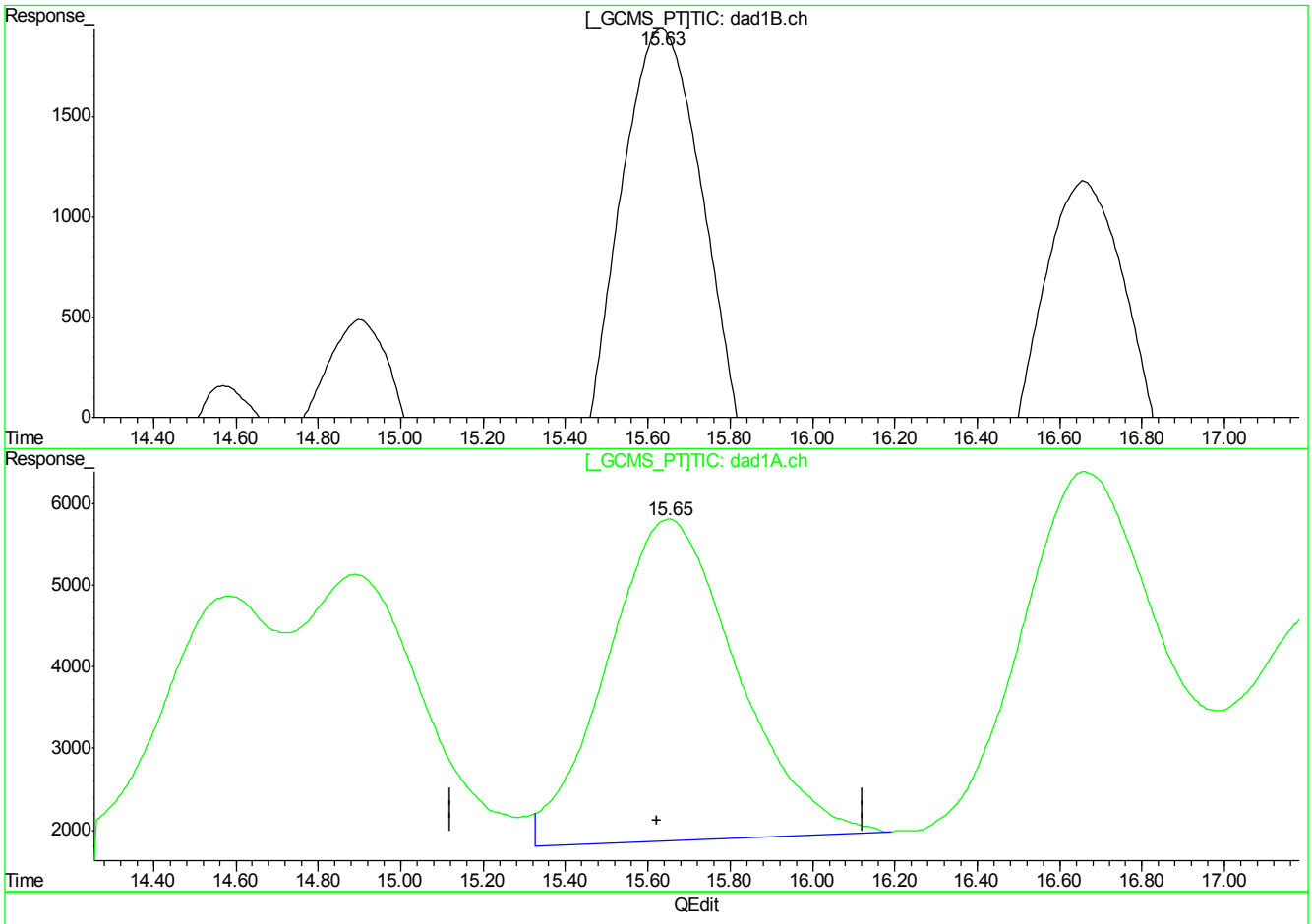
response 927502

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 86.988ppb m

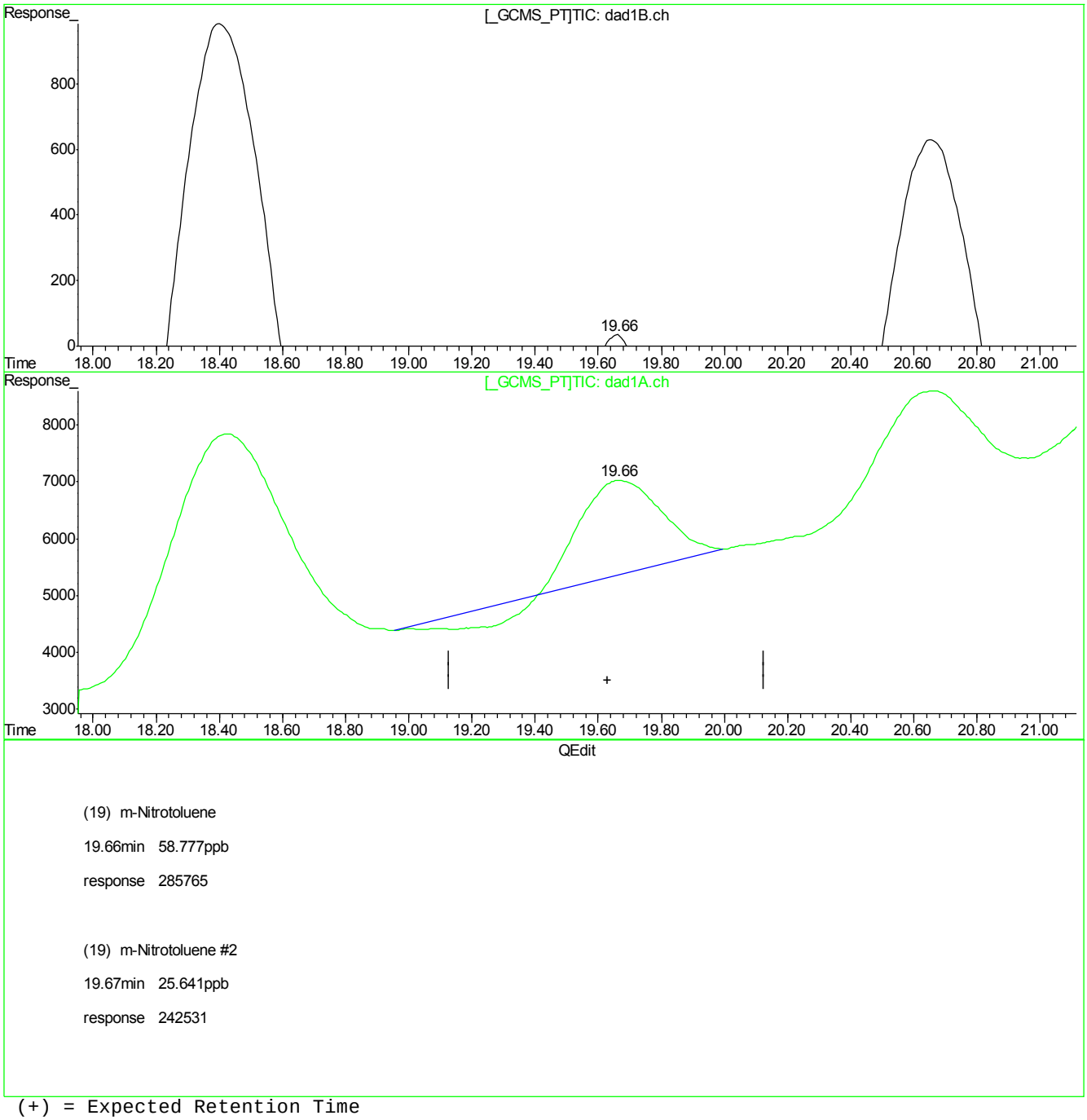
response 863855

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:53 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.67min 25.641ppb

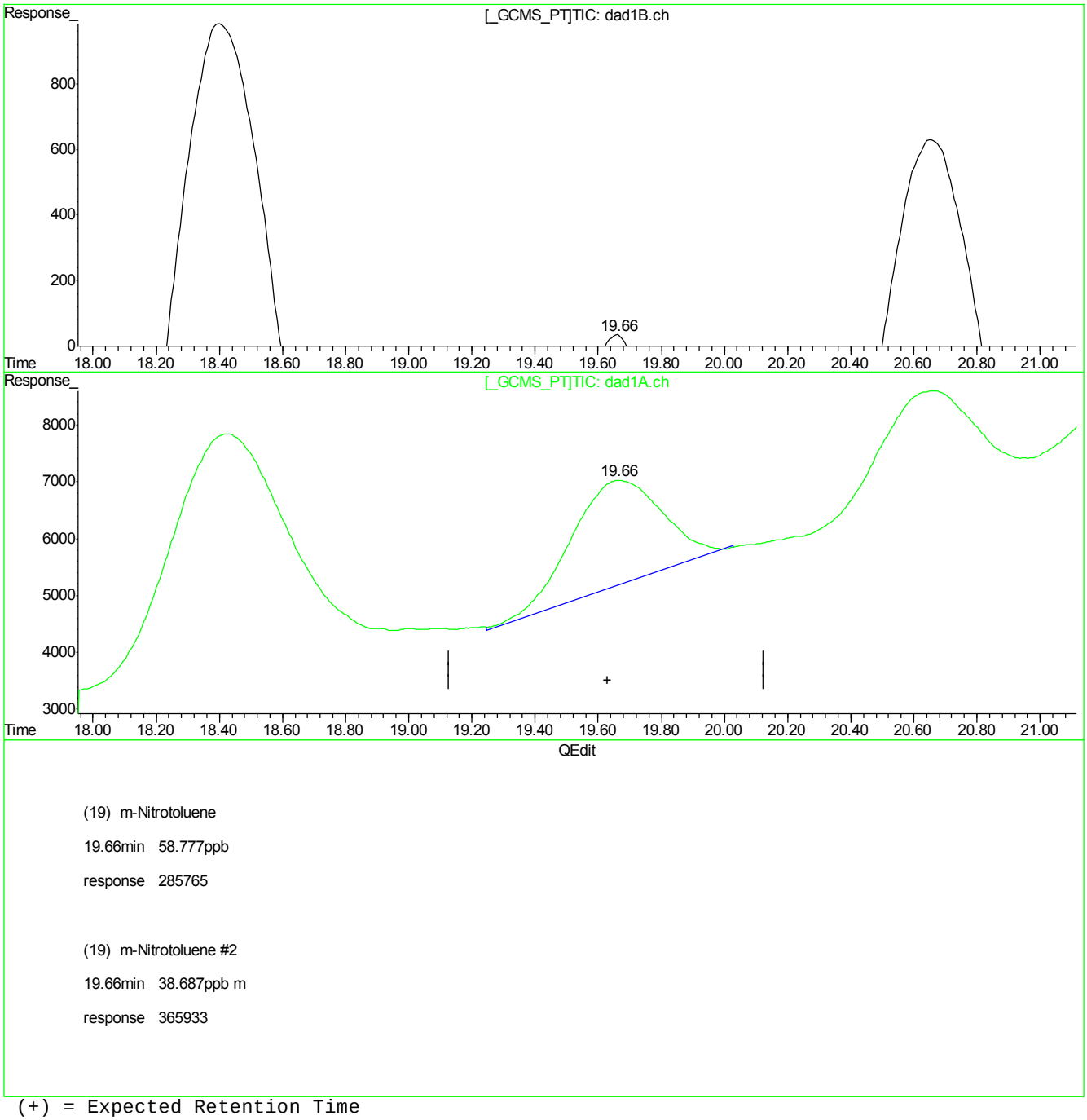
response 242531

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:01 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.66min 38.687ppb m

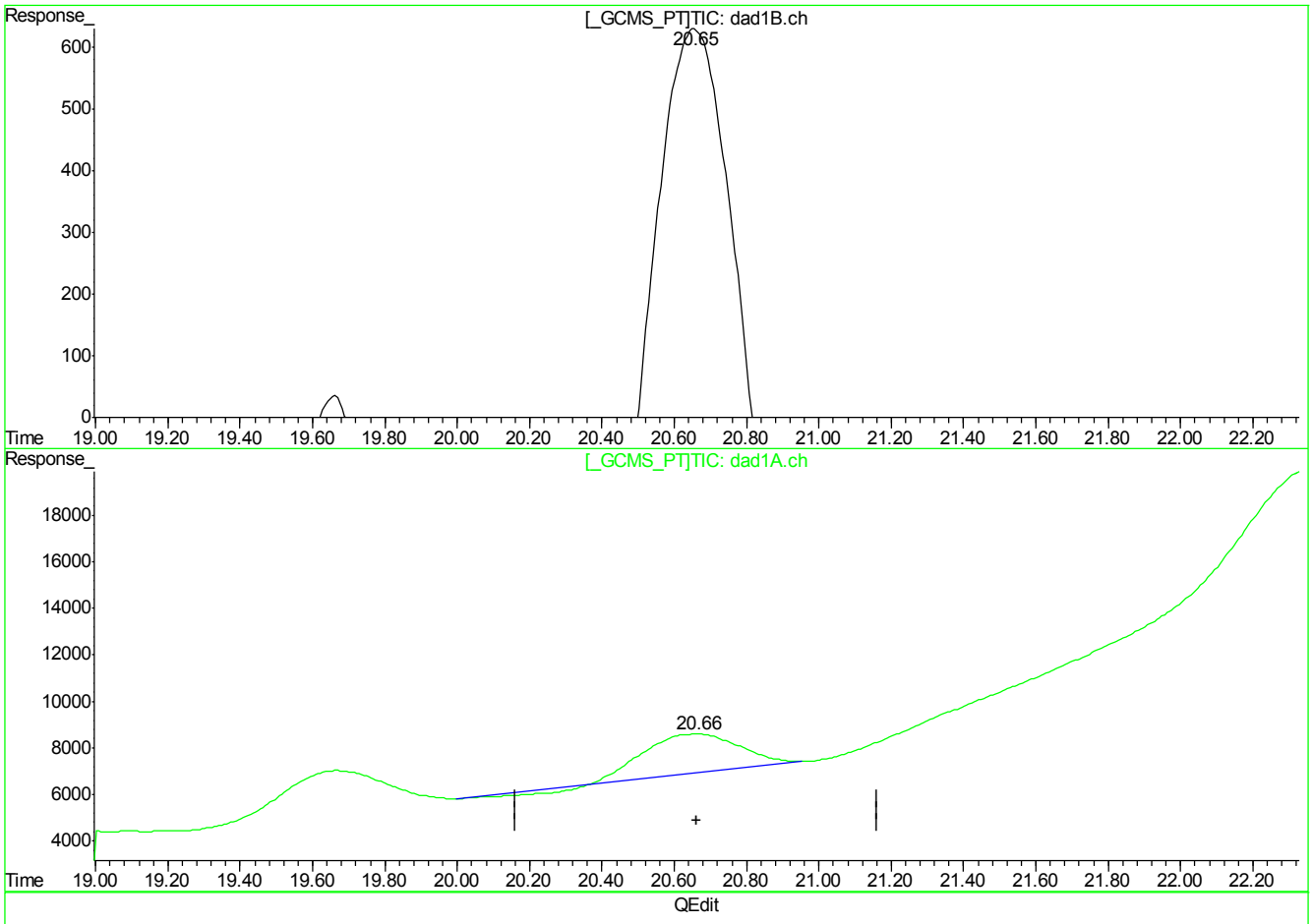
response 365933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 21.333ppb

response 288721

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:06 2017

7.7.15.26

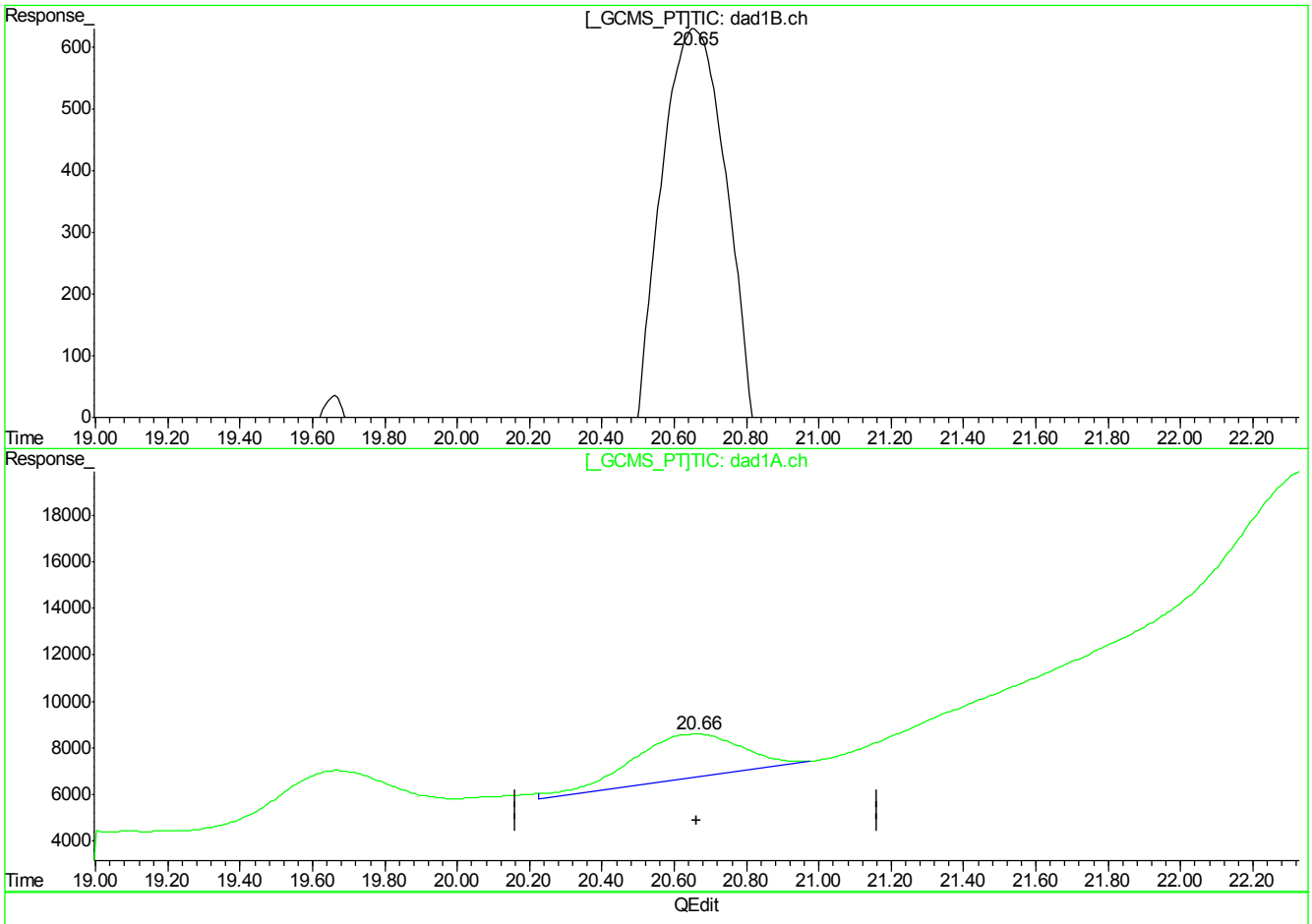
7

GG613827.D edits: 2-Amino-4,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 29.479ppb m

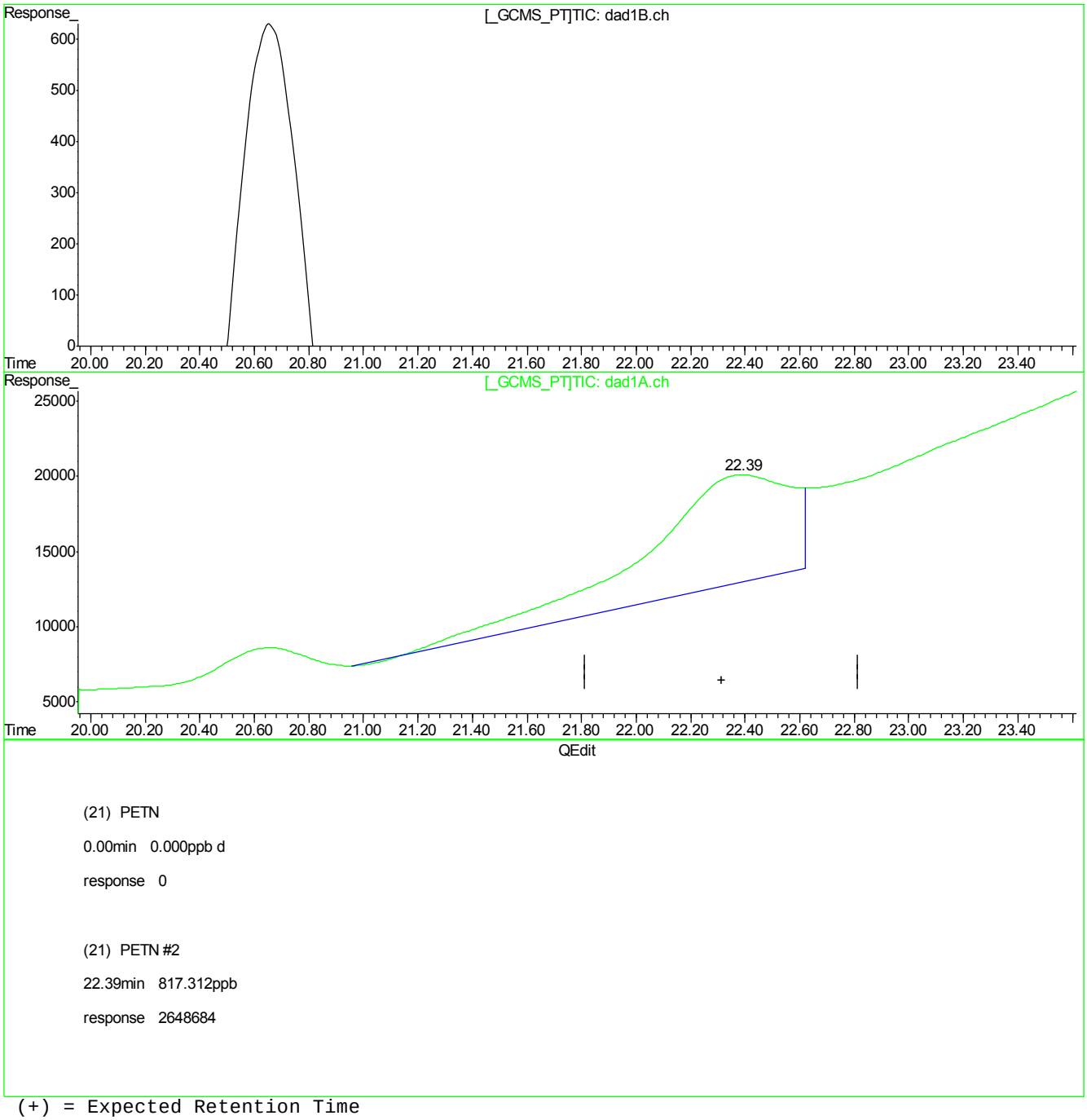
response 398969

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:09 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.39min 817.312ppb

response 2648684

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:12 2017

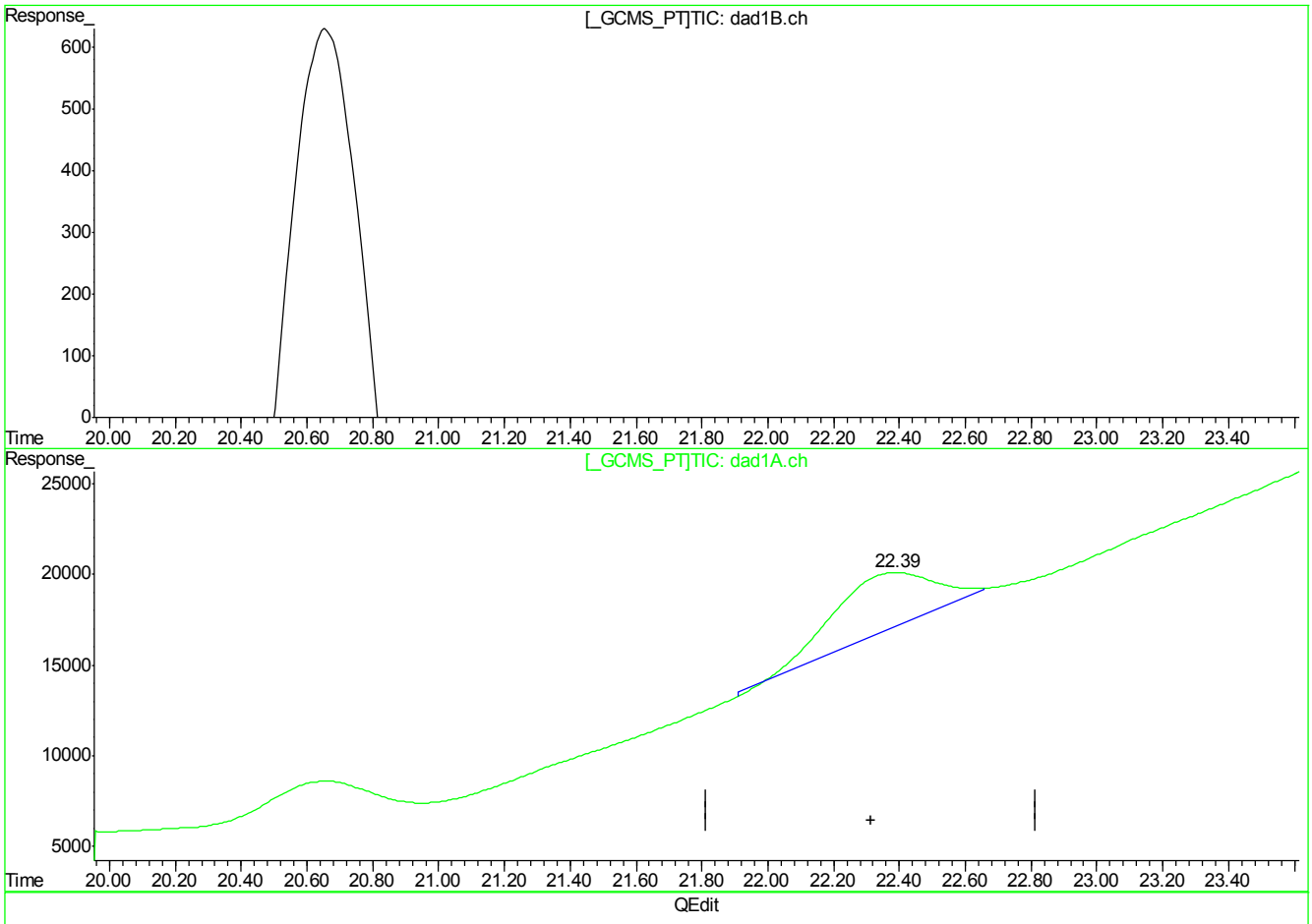
7.7.15.28

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.39min 205.186ppb m

response 664952

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:15 2017

7.7.15.29

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:59 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	539446	1021169	91.503	81.638m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		18.30%#	16.33%#
	Target Compounds						
1)	TNX	5.01	5.01	1509922	1509922	179.506	179.032
2)	HMX	5.46	5.46	376444	376444	99.104	98.403
3)	DNX	5.59	5.59	825106	825106	125.705	126.142
4)	MNX	6.66	6.66	719732	719732	148.771	148.771
5)	1,3,5-Trinitrobe	7.54	7.54	1066153	1062518	104.411	104.098
6)	RDX	8.07	8.07	494554	482286	103.884	101.779
7)	1,3-Dinitrobenze	10.08	10.08	1453602	1272574	99.869	89.971m
8)	Nitrobenzene	11.07	11.07	953891	901312	124.781	94.788m
9)	2,4,6-Trinitroto	11.87	11.87	1001781	1458021	98.255	93.389m
10)	Nitroglycerin	0.00	12.70	0	1702013	N.D. d	464.272m
11)	Tetryl	13.28	13.27	844790	1140150	123.159	93.137m
13)	2,6-Dinitrotolue	14.89	14.89	734094	996233	105.588	91.335m
14)	2,4-Dinitrotolue	15.62	15.63	1340479	1231048	100.879	123.933
15)	o-Nitrotoluene	17.22	17.22	599687	848130	141.042	145.750
16)	3,5-Dinitroanili	16.64	16.64	1075378	1750952	101.472	97.657
17)	p-Nitrotoluene	18.39	18.40	1208979	2157804	105.075	101.946
18)	4-Amino-2,6-Dini	18.39	18.40	1208979	2157804	105.075	101.946
19)	m-Nitrotoluene	19.64	19.64	613746	1029981	124.866	108.890
20)	2-Amino-4,6-Dini	20.64	20.66	902382	1031982	94.065	76.251
21)	PETN	0.00	22.33	0	1529945	N.D. d	472.100m

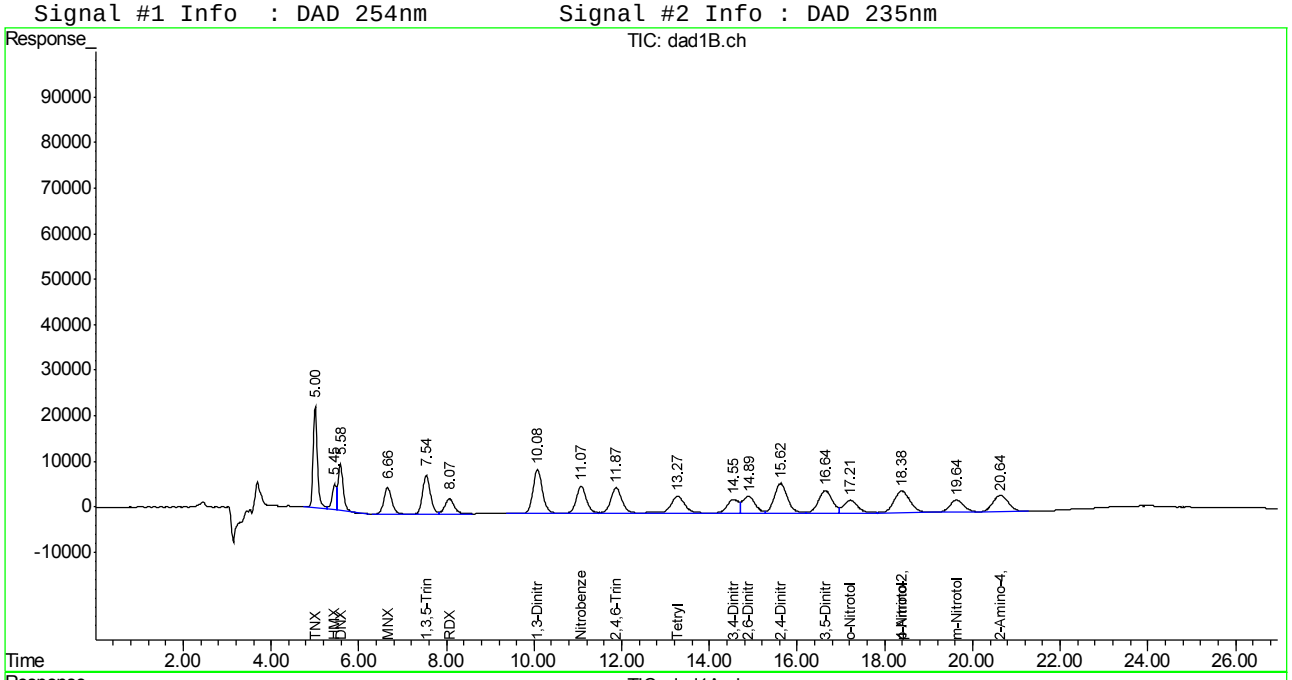
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 13:37:52 2017 Page 1

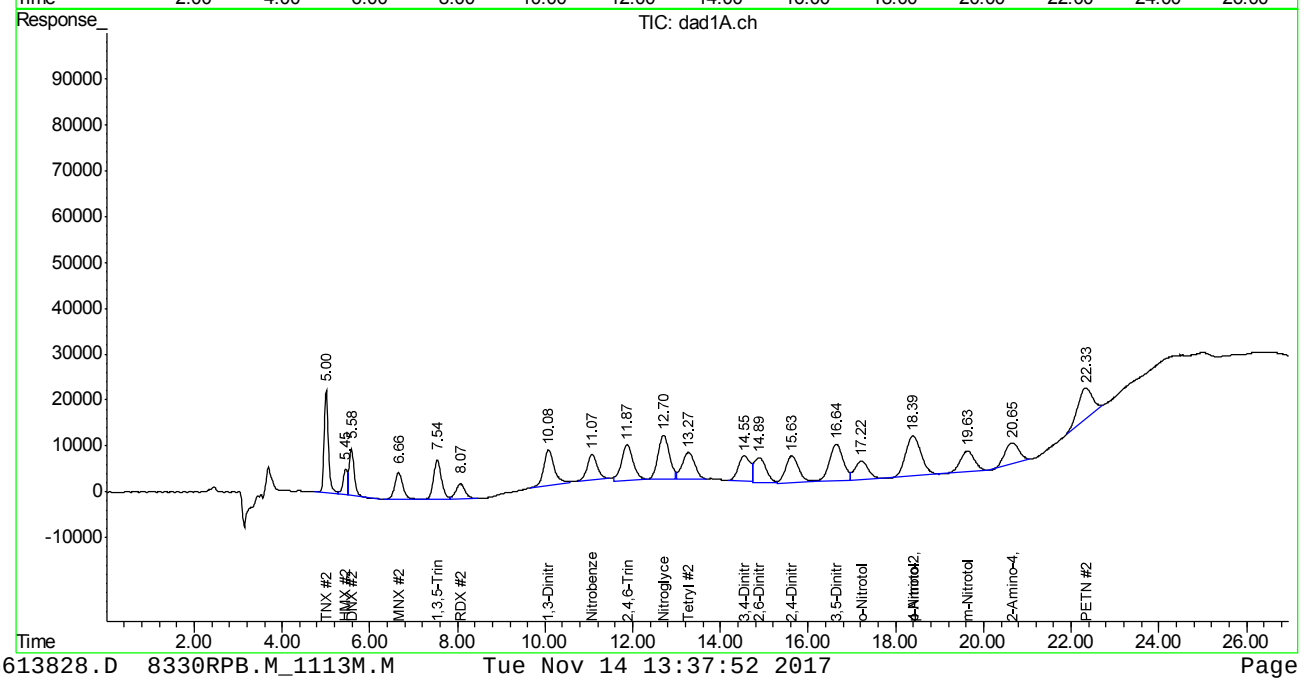
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

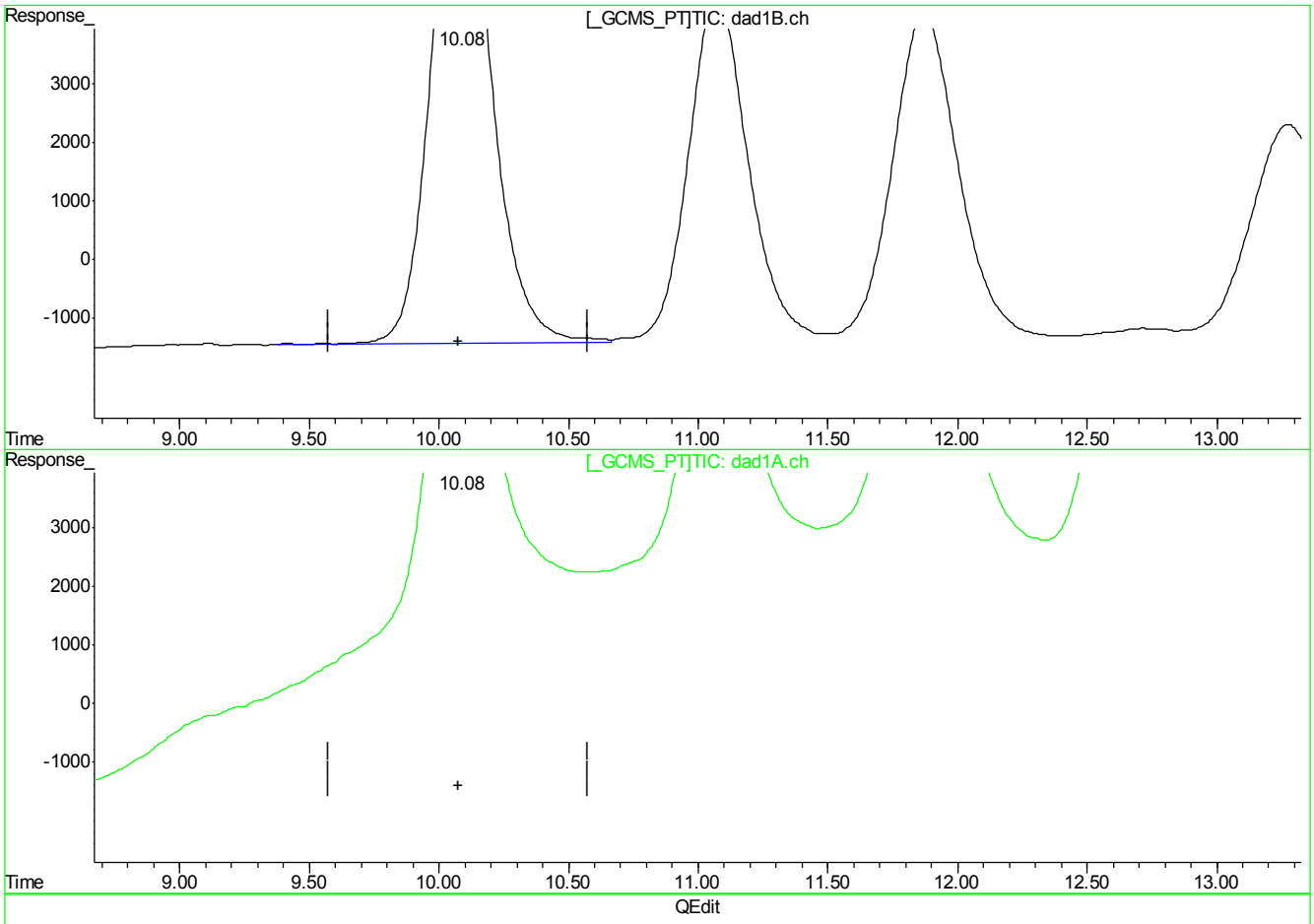
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613828.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:35	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.07	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.70	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.55	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 216.460ppb

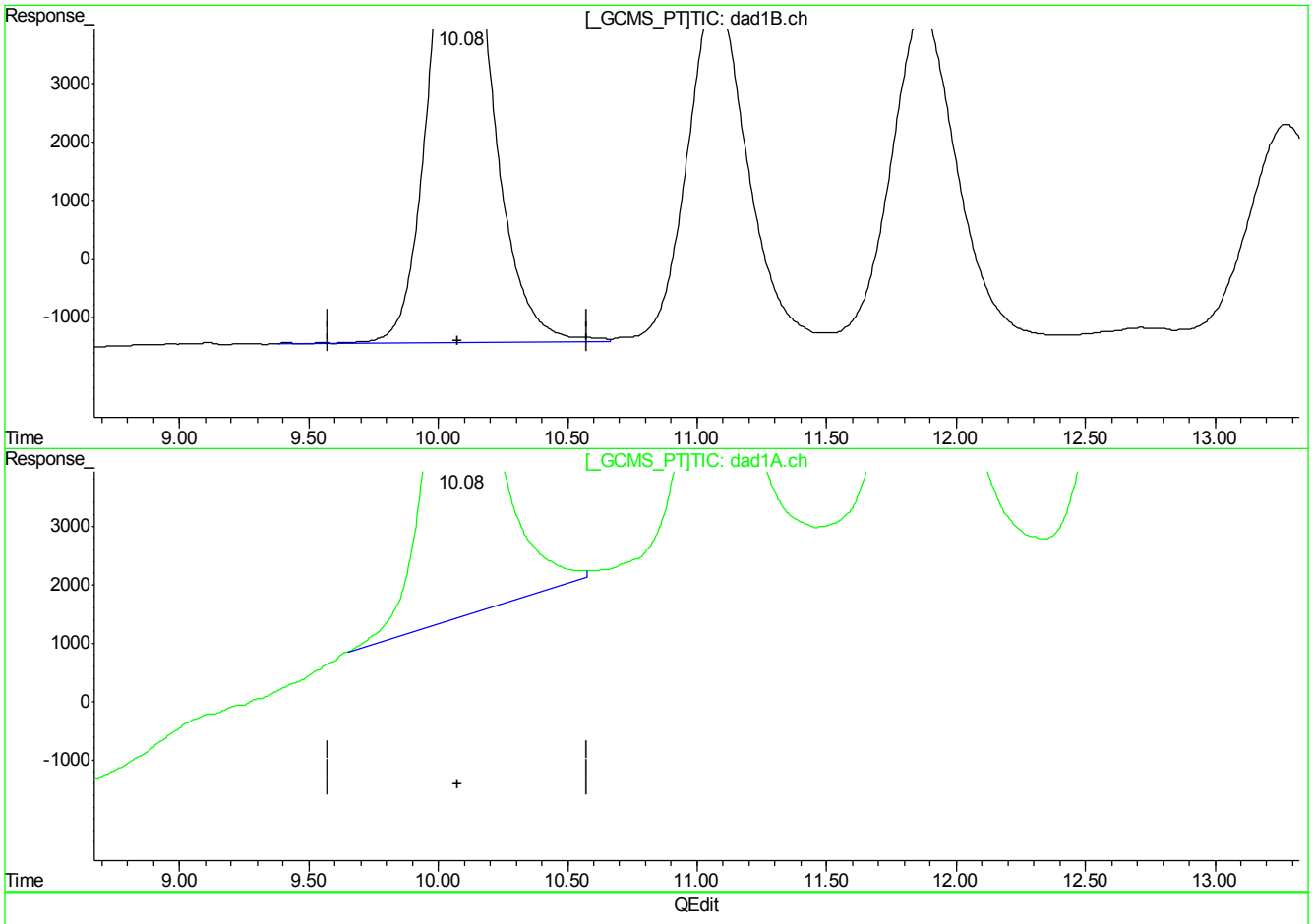
response 3026444

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 89.971ppb m

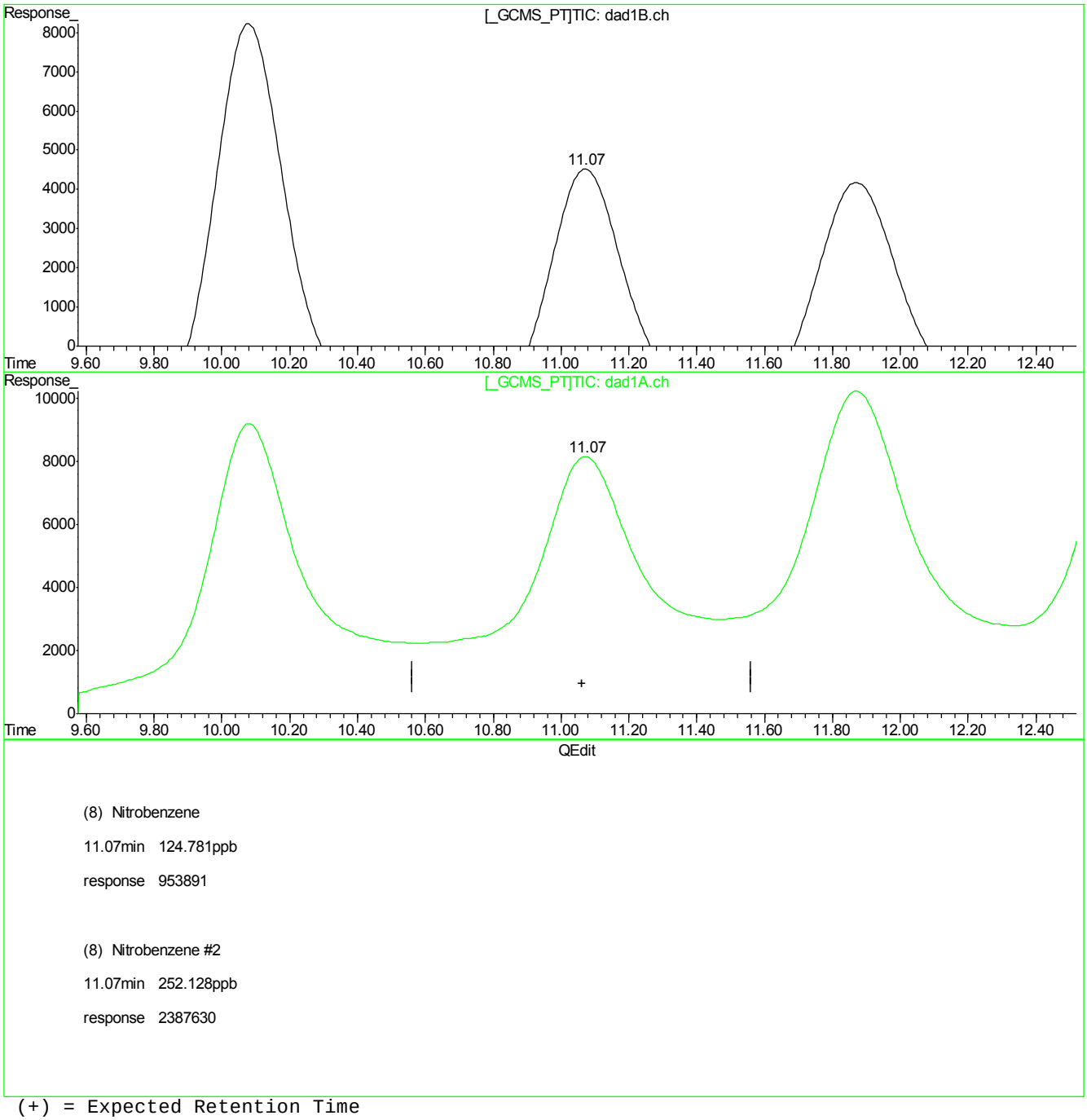
response 1272574

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:56 2017

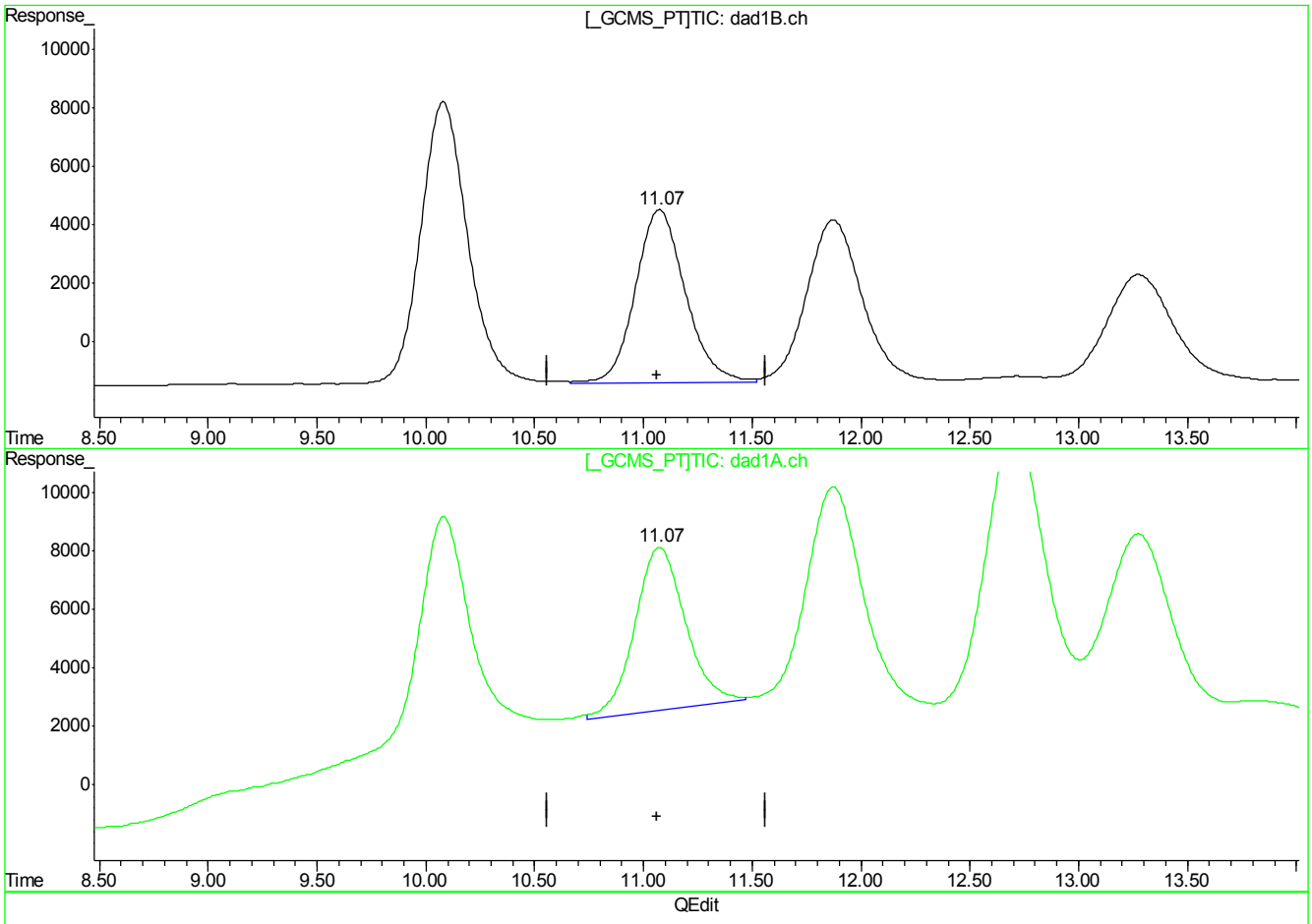
7.7.16.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.07min 124.781ppb

response 953891

(8) Nitrobenzene #2

11.07min 94.788ppb m

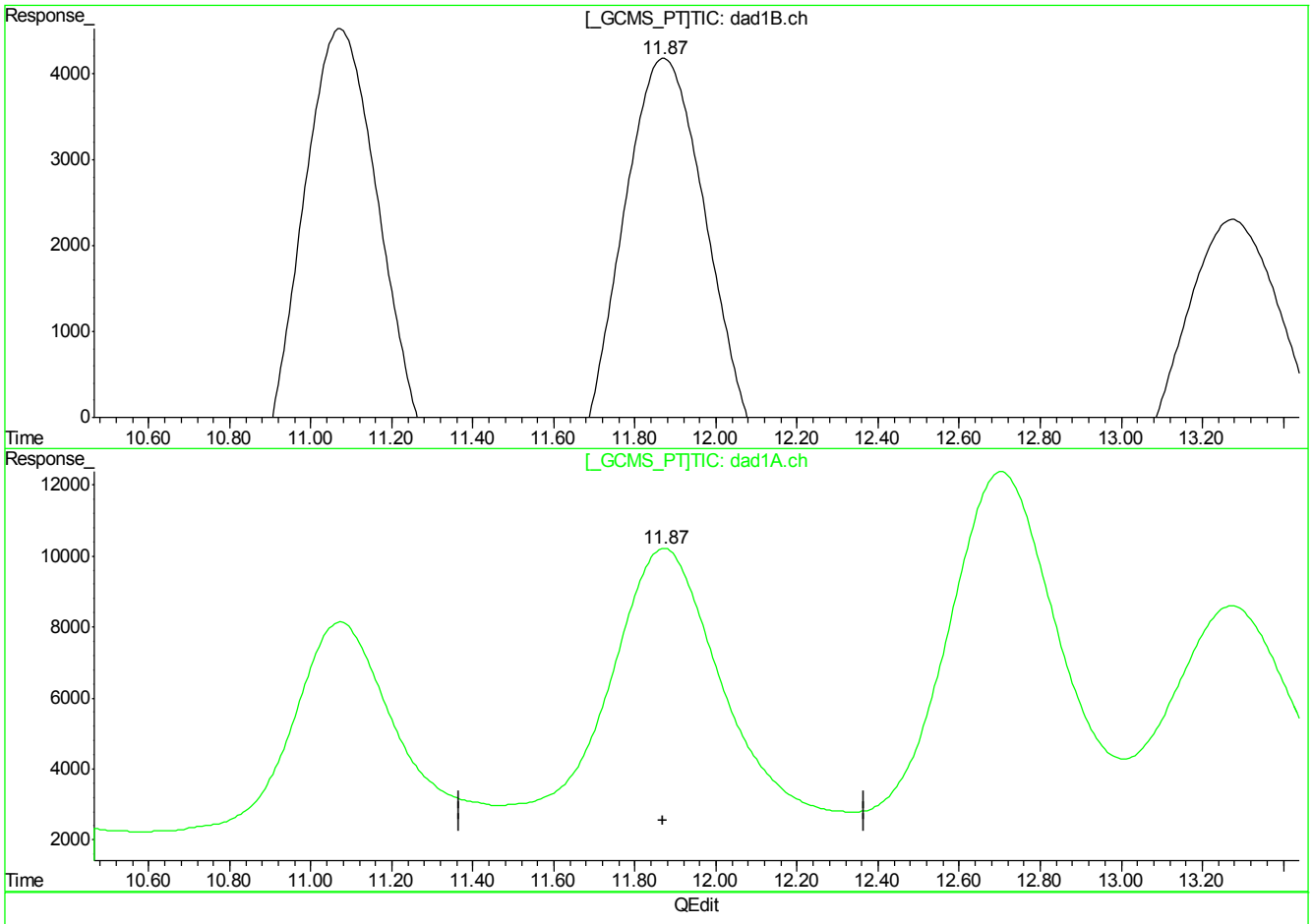
response 901312

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 174.293ppb

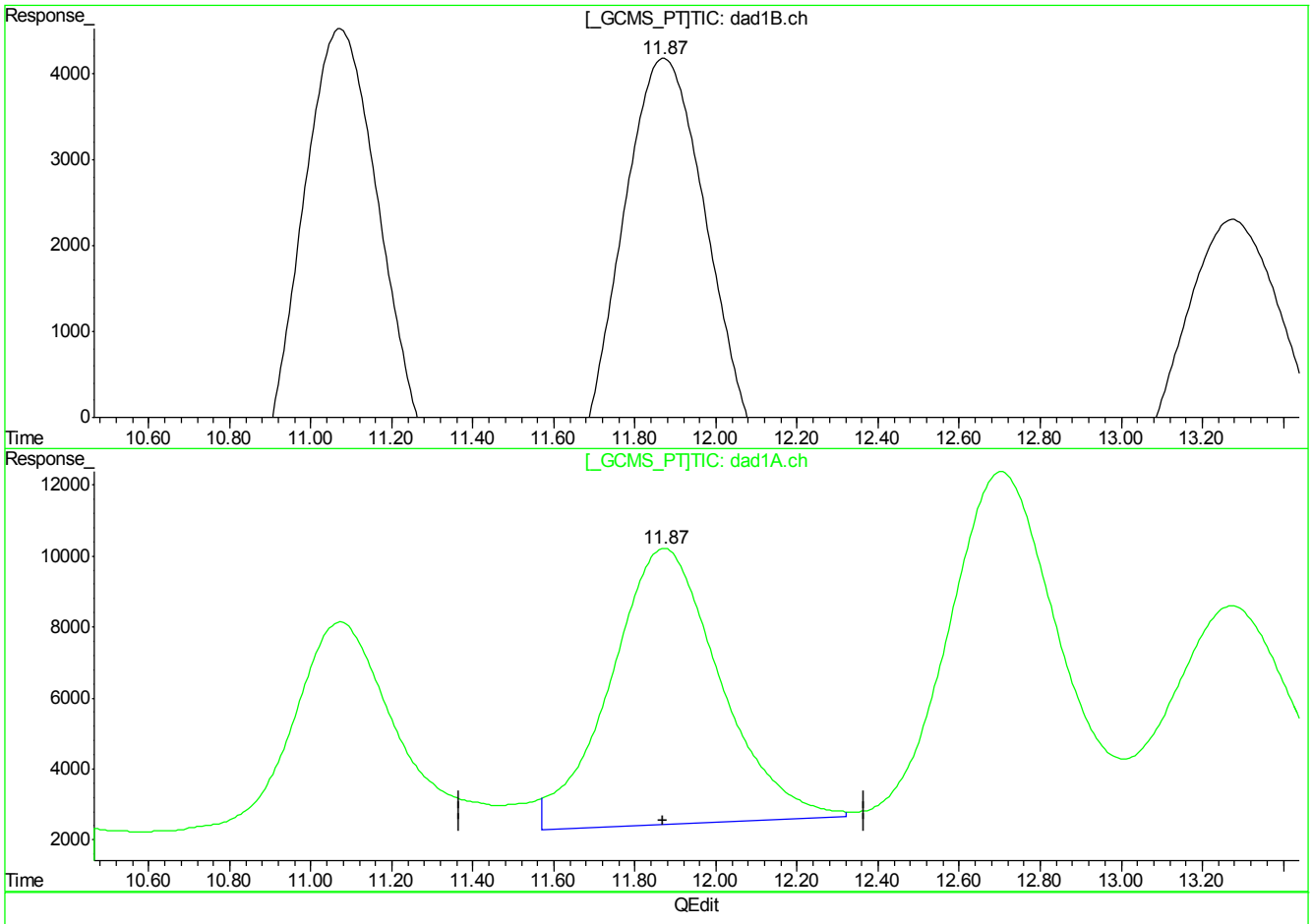
response 2710161

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:08 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 93.389ppb m

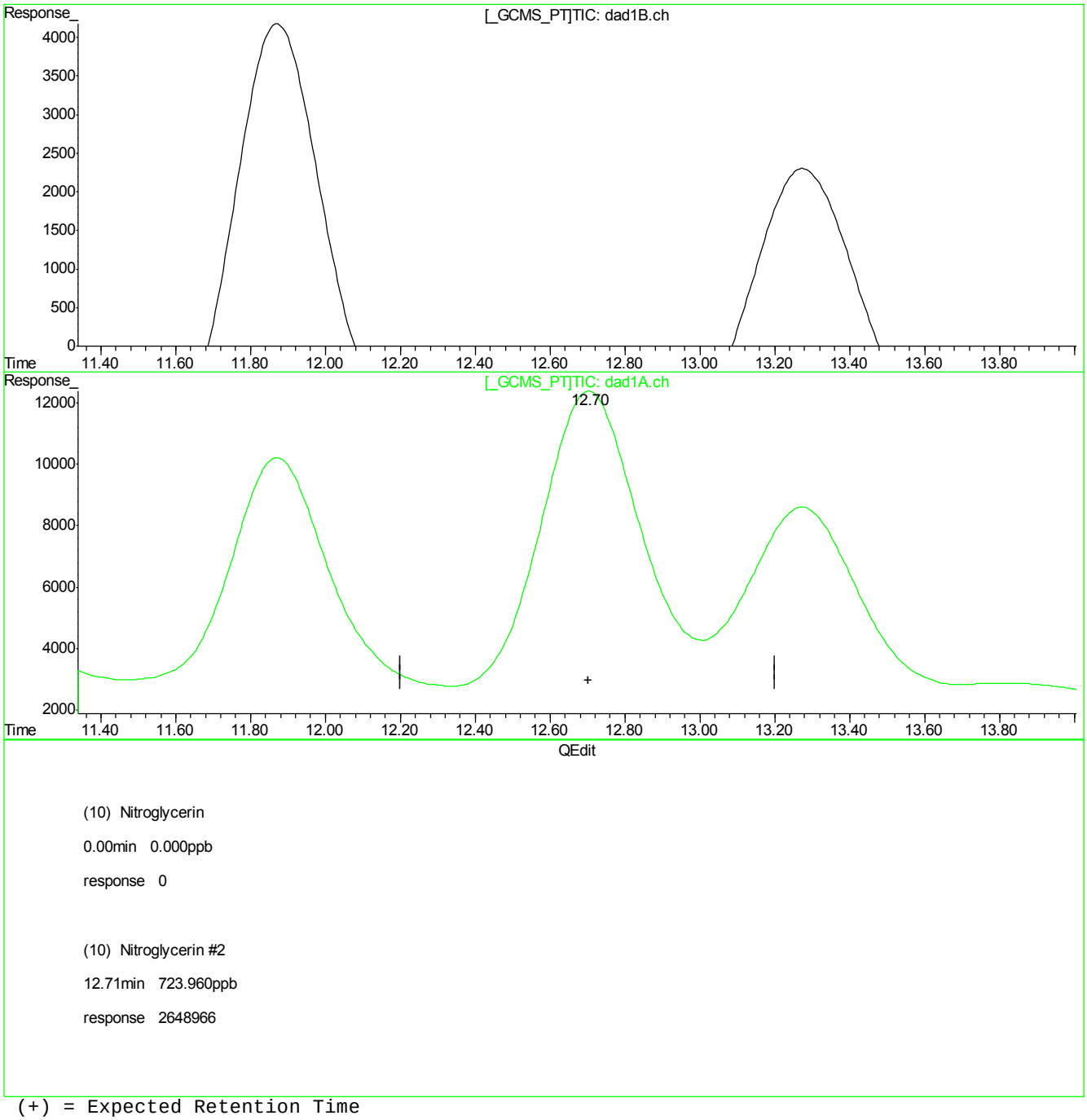
response 1458021

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



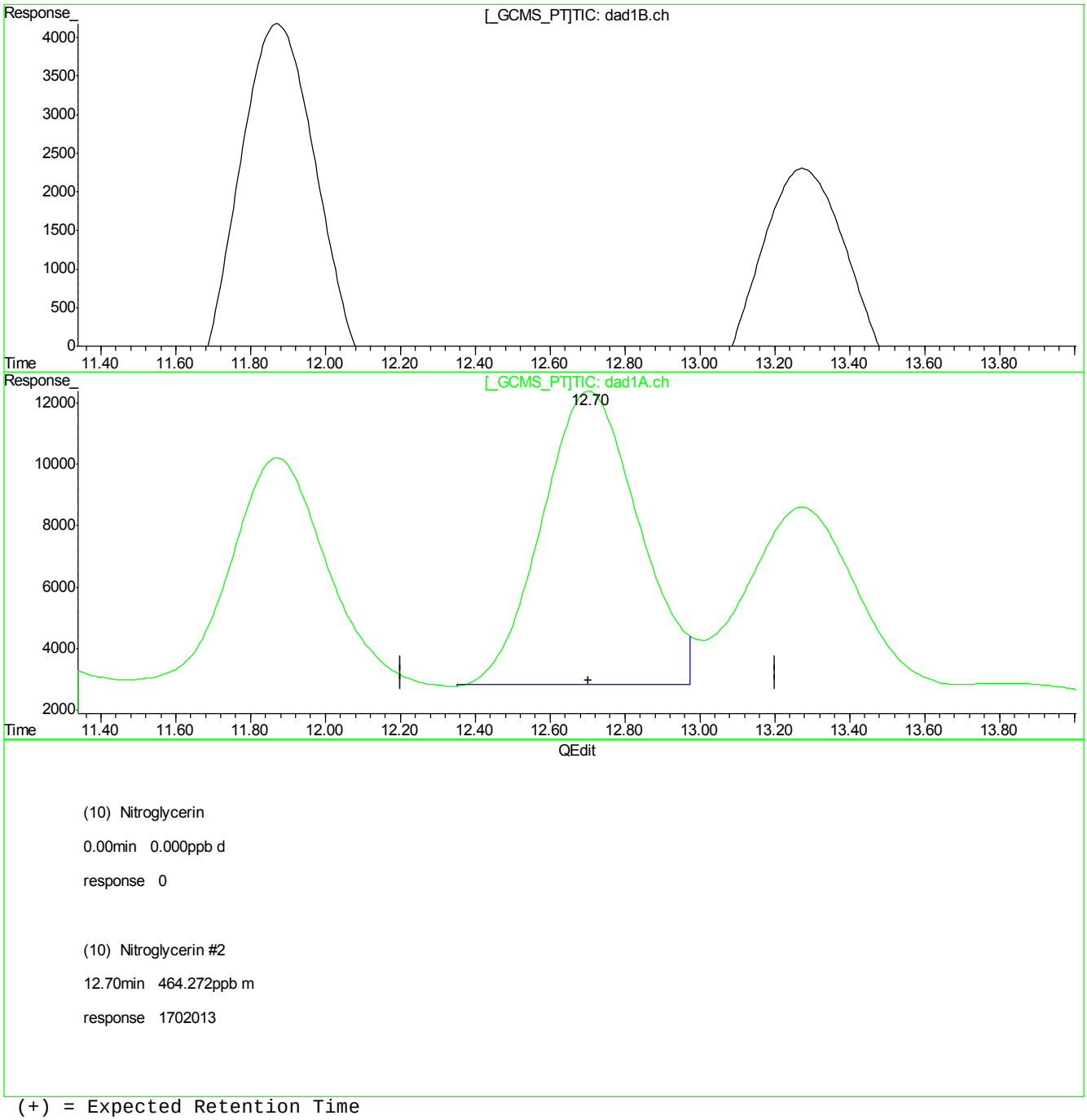
(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:14 2017

GG613828.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



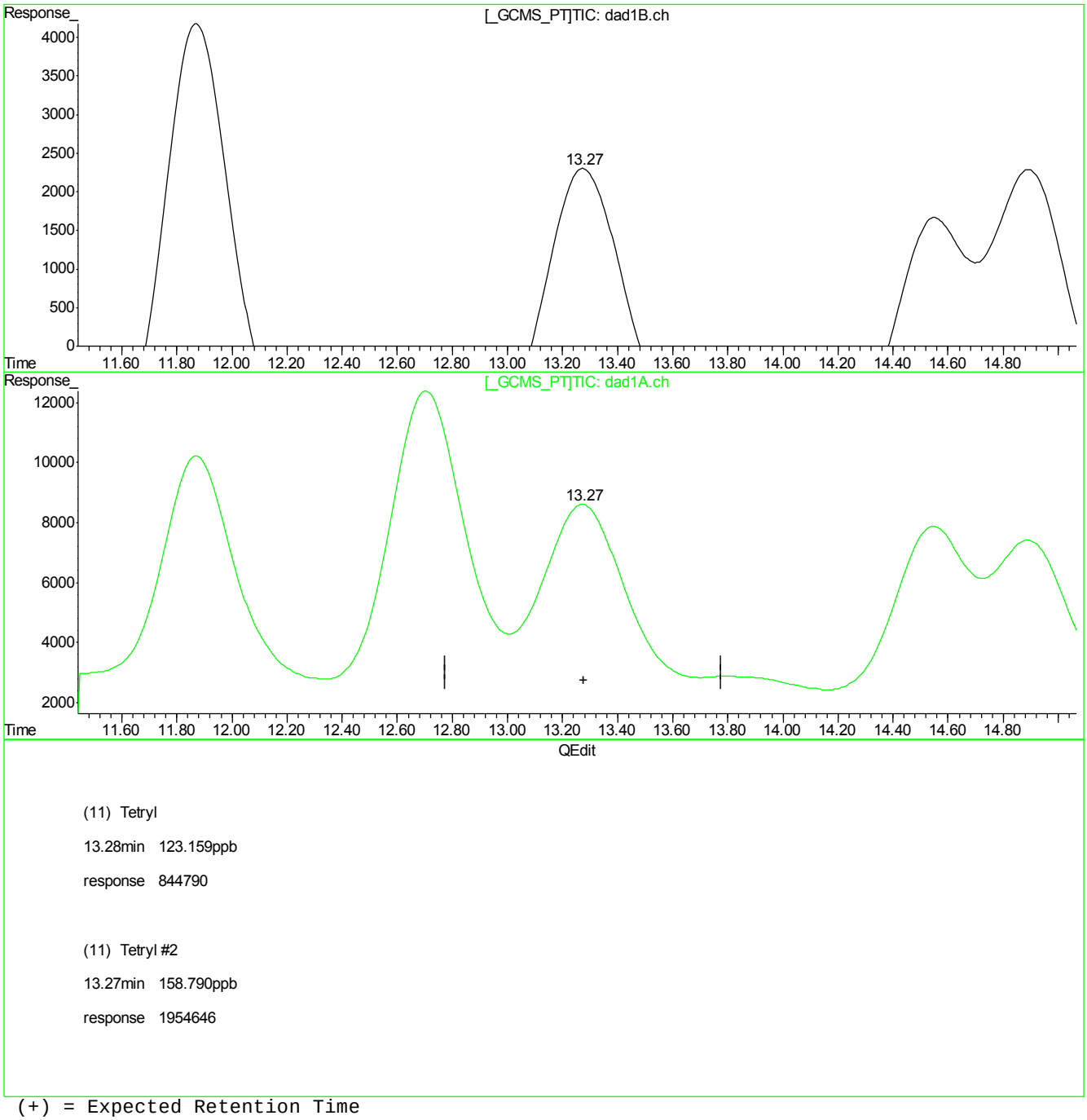
(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:20 2017

GG613828.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 158.790ppb

response 1954646

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:22 2017

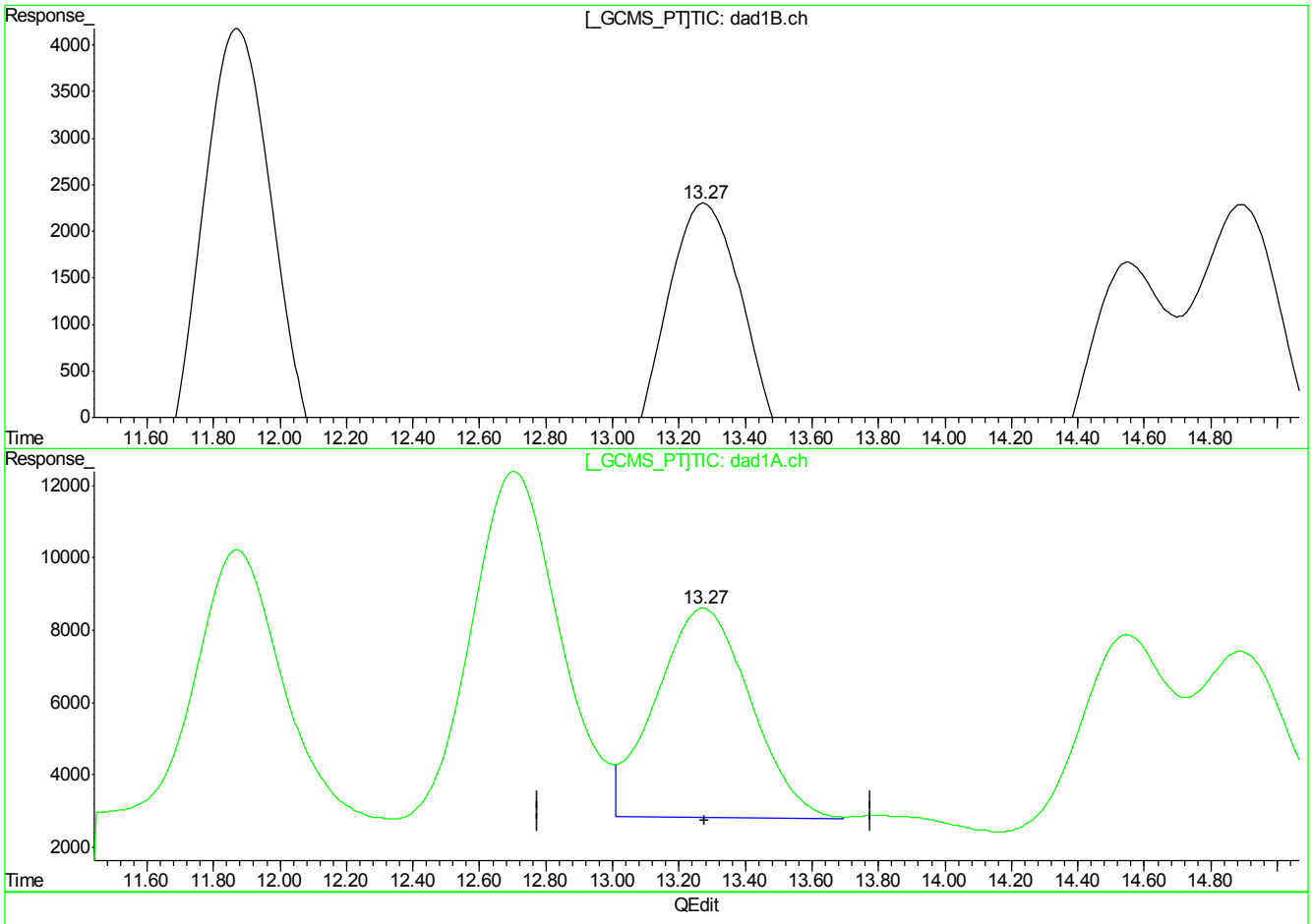
7.7.16.10

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 93.137ppb m

response 1140150

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:25 2017

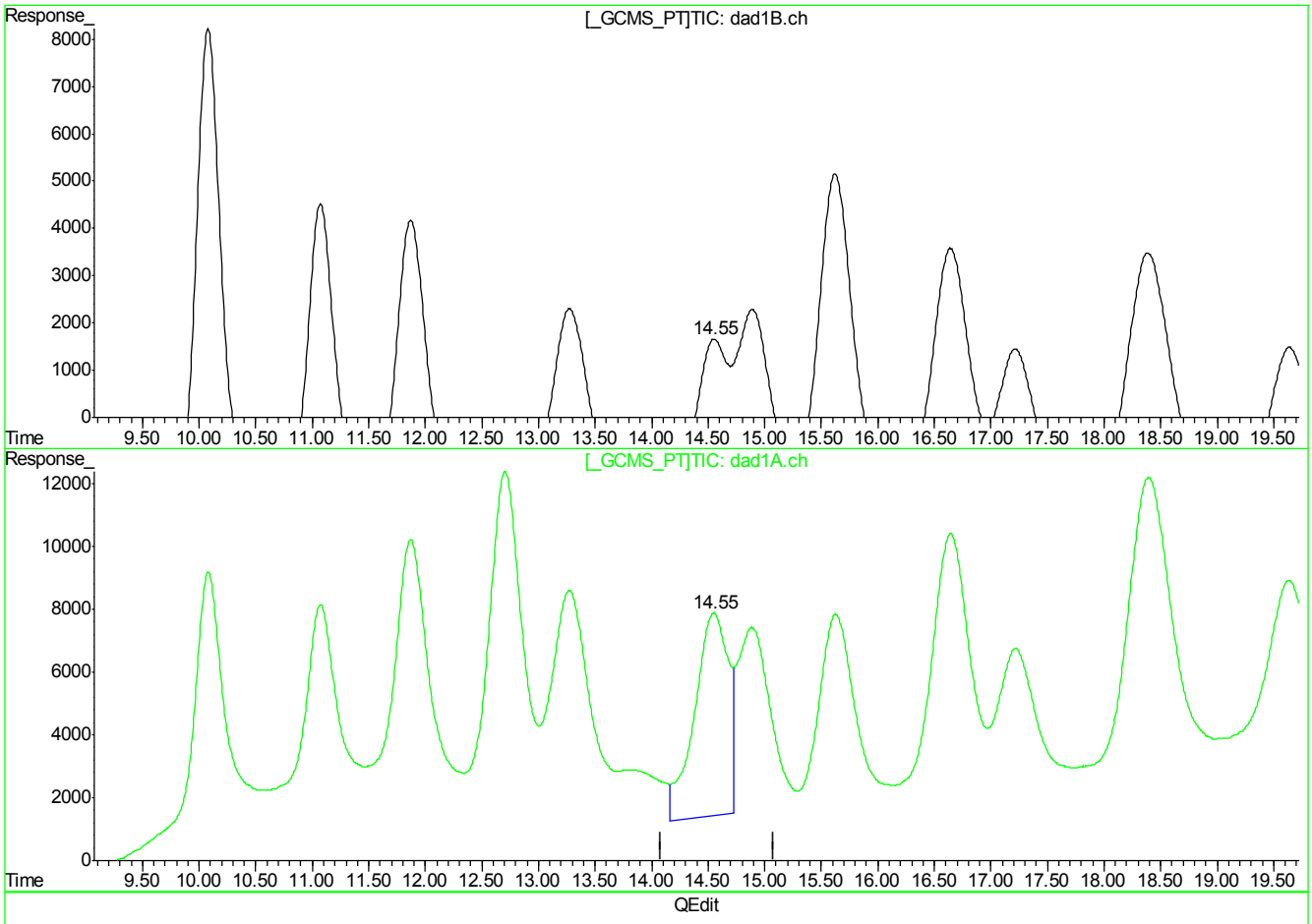
7.7.16.11

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 107.581ppb

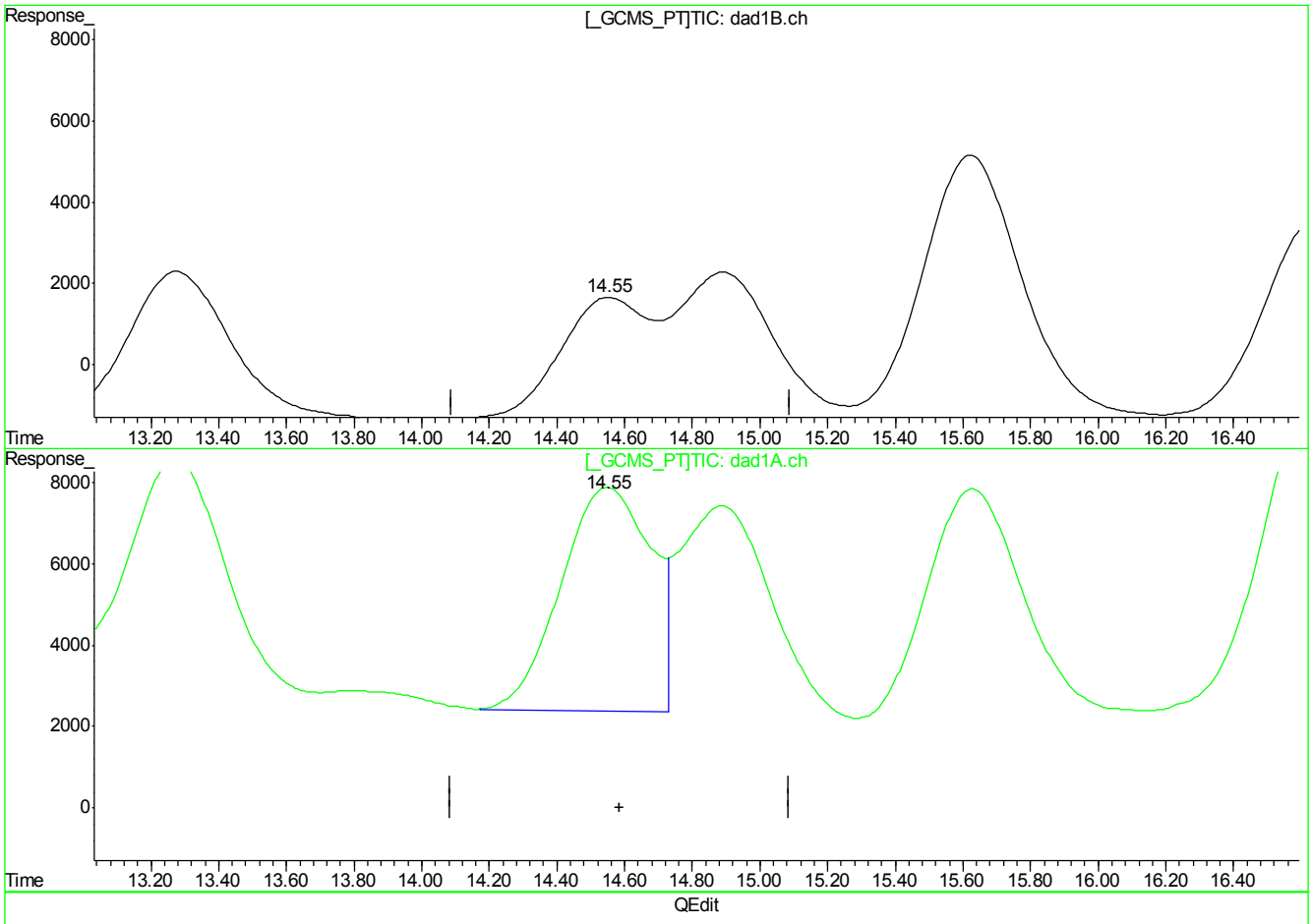
response 1344362

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 81.638ppb m

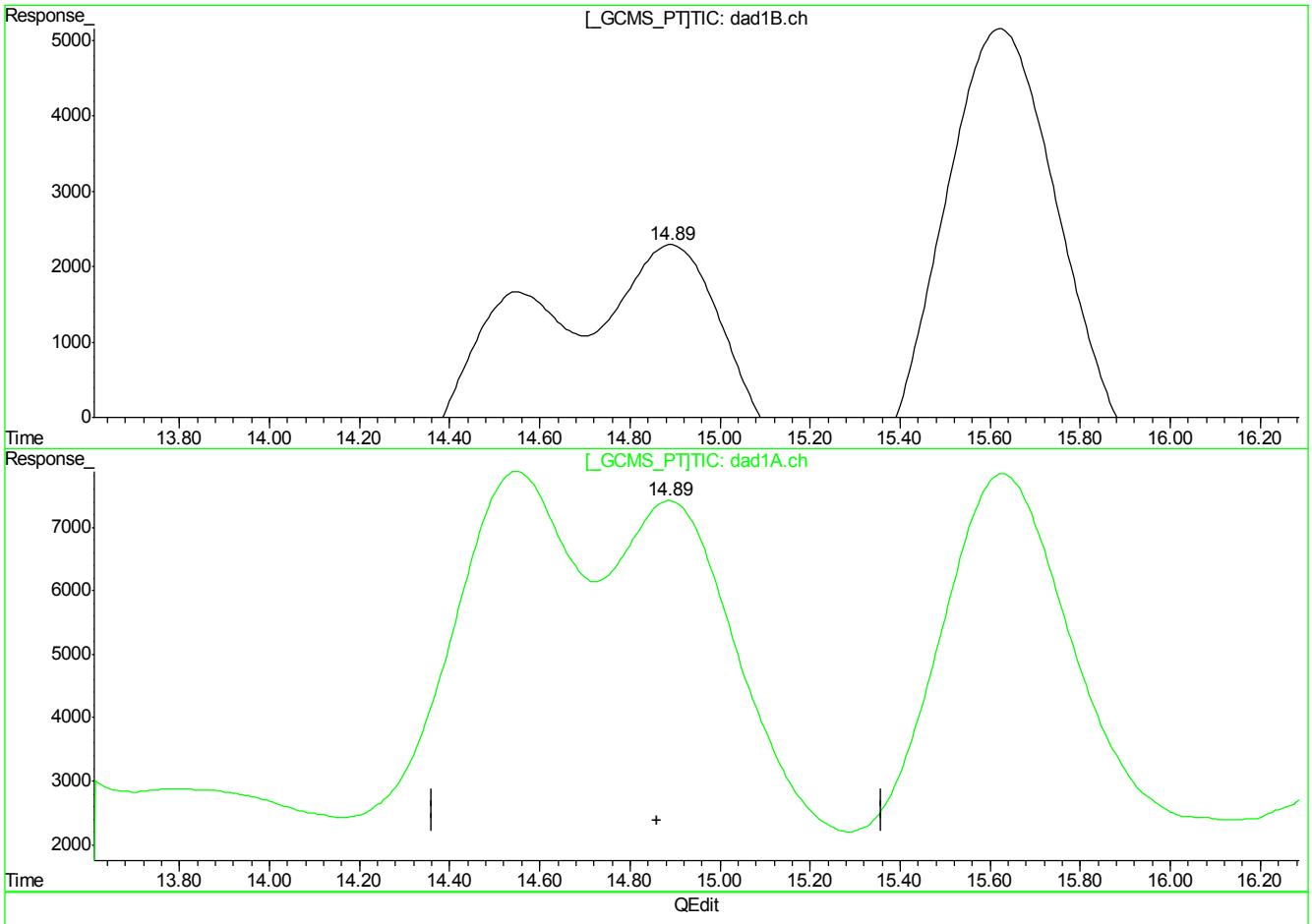
response 1021169

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:43 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 107.016ppb

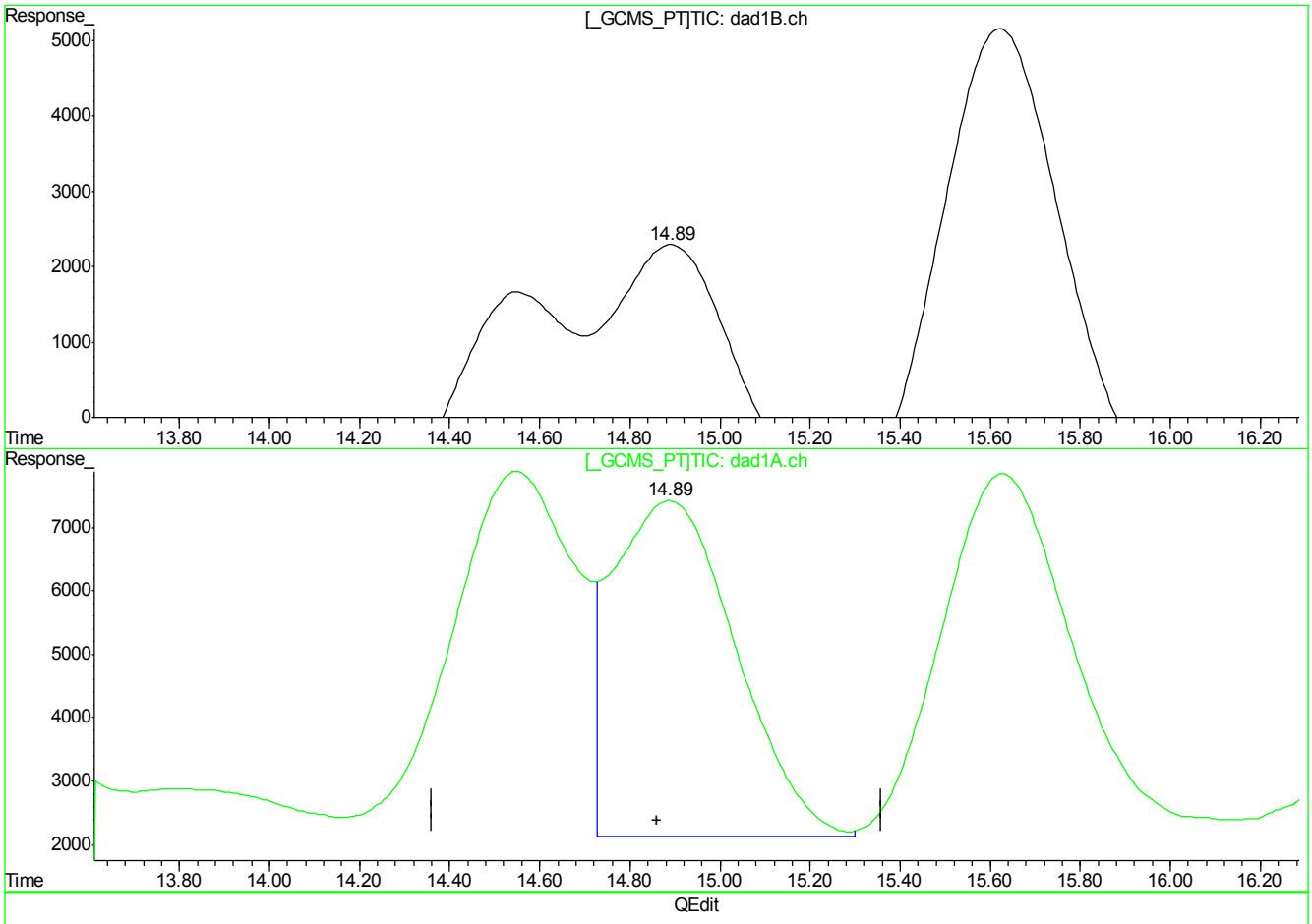
response 1167236

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 91.335ppb m

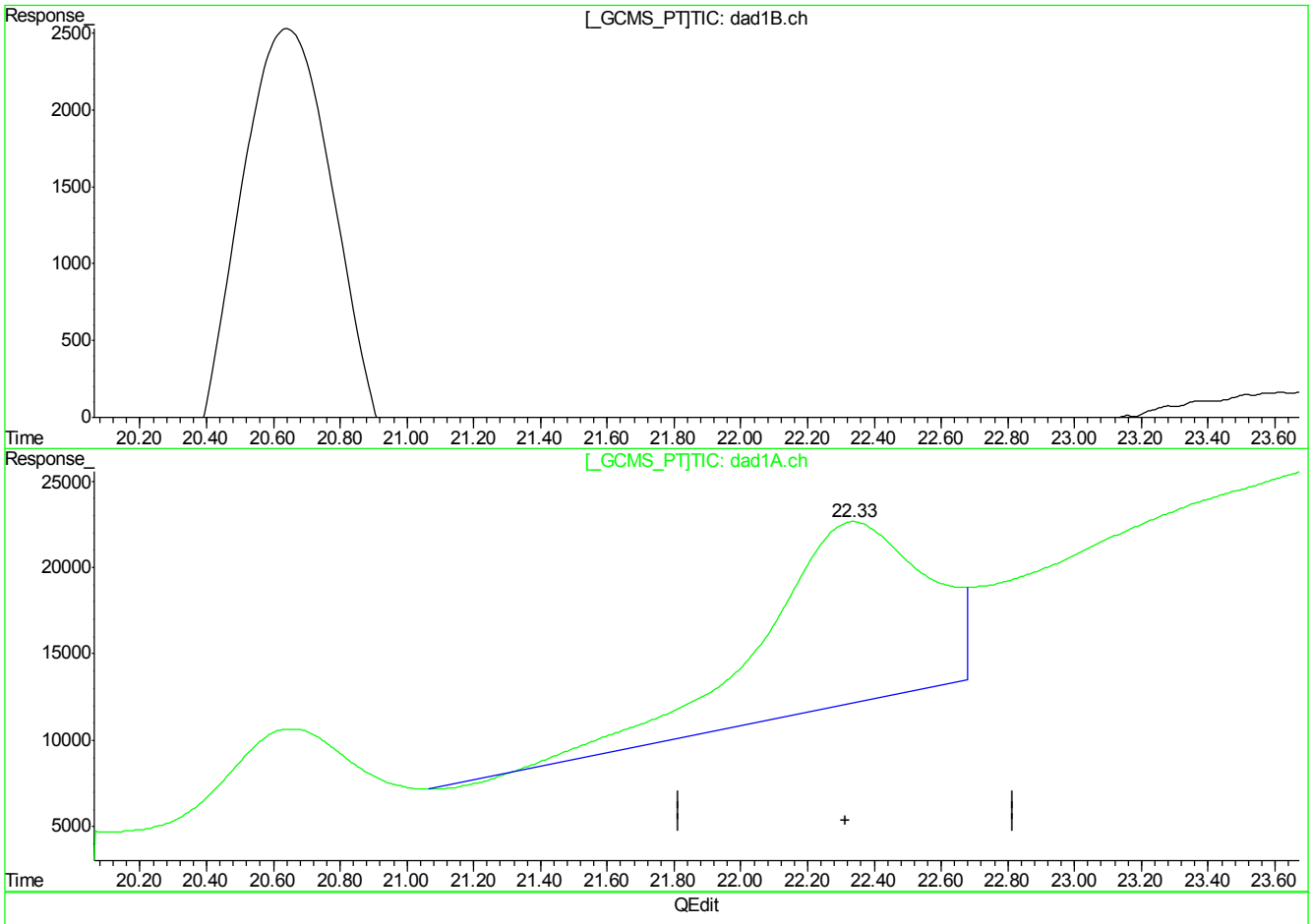
response 996233

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.34min 1088.398ppb

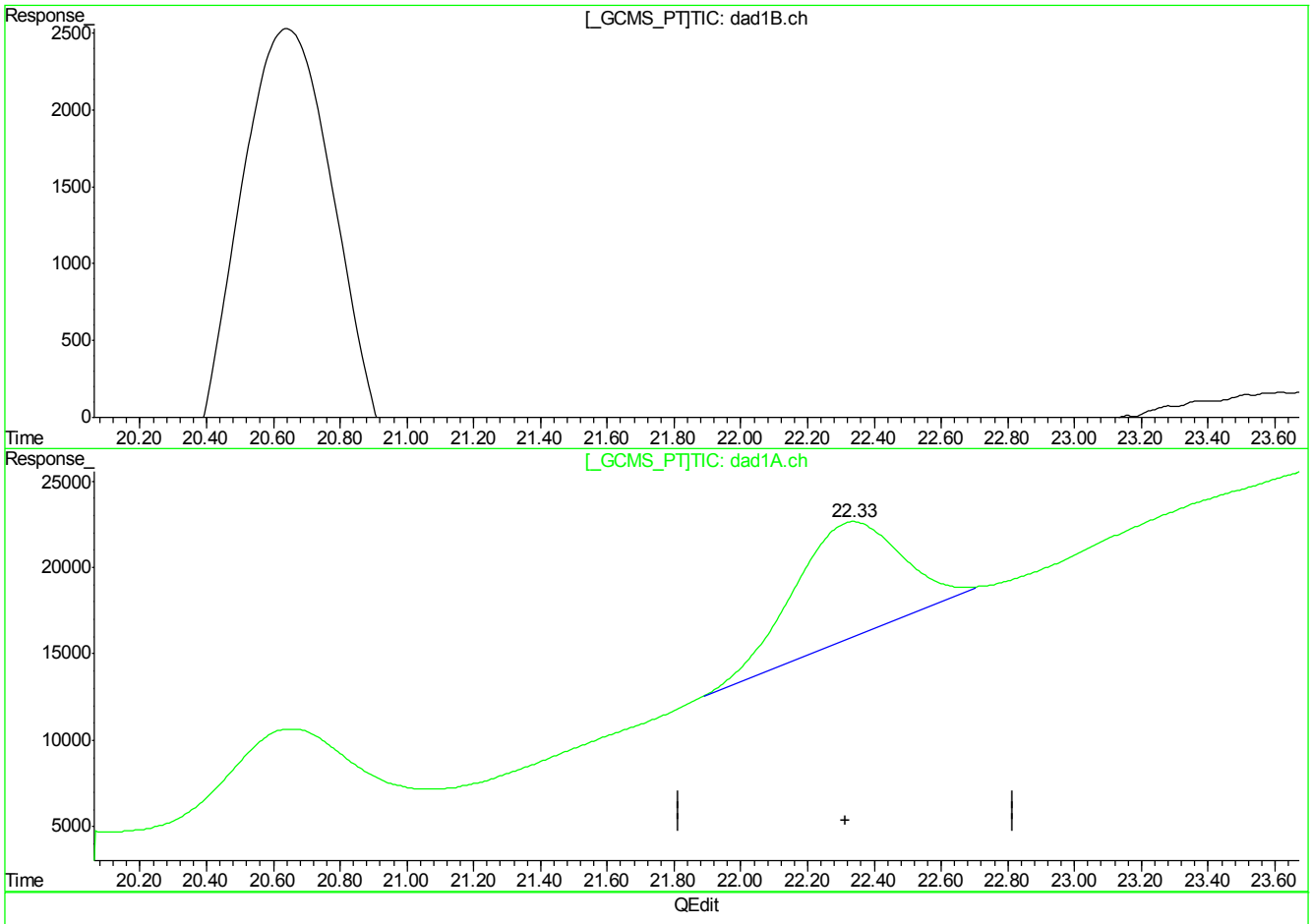
response 3527199

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:59 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 472.100ppb m

response 1529945

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:58:01 2017

7.7.16.17

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:00 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.56	1063491	2179380	180.394	174.846m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		36.08%#	34.97%#
	Target Compounds						
1)	TNX	5.01	5.01	2917600	2917600	346.858	345.941
2)	HMX	5.46	5.46	656713	656713	172.889	171.666
3)	DNX	5.59	5.59	1519481	1519481	231.493	232.298
4)	MNX	6.67	6.67	1443328	1443328	298.340	298.340
5)	1,3,5-Trinitrobe	7.55	7.55	2106246	2100950	206.269	205.837
6)	RDX	8.07	8.07	970188	952673	203.793	201.047
7)	1,3-Dinitrobenze	10.09	10.08	2896074	2285655	198.974	162.672m
8)	Nitrobenzene	11.08	11.08	1850780	1739643	242.105	183.374m
9)	2,4,6-Trinitroto	11.88	11.87	1988673	2595550	195.051	166.860m
10)	Nitroglycerin	0.00	12.71	0	3400685	N.D. d	930.820m
11)	Tetryl	13.29	13.28	1576705	2666776	229.863	215.610m
13)	2,6-Dinitrotolue	14.91	14.90	1464572	2076245	210.655	190.384m
14)	2,4-Dinitrotolue	15.63	15.64	2633670	2111724	198.199	212.468
15)	o-Nitrotoluene	17.23	17.23	1151278	1767333	264.153	291.713
16)	3,5-Dinitroanili	16.65	16.65	2062620	3445874	194.627	191.892
17)	p-Nitrotoluene	18.40	18.40	2368549	4400784	205.856	206.913
18)	4-Amino-2,6-Dini	18.40	18.40	2368549	4400784	205.856	206.913
19)	m-Nitrotoluene	19.65	19.65	1205775	2051289	240.727	216.863
20)	2-Amino-4,6-Dini	20.64	20.65	1852313	2259776	193.086	166.971
21)	PETN	0.00	22.33	0	3416410	N.D. d	1054.212m

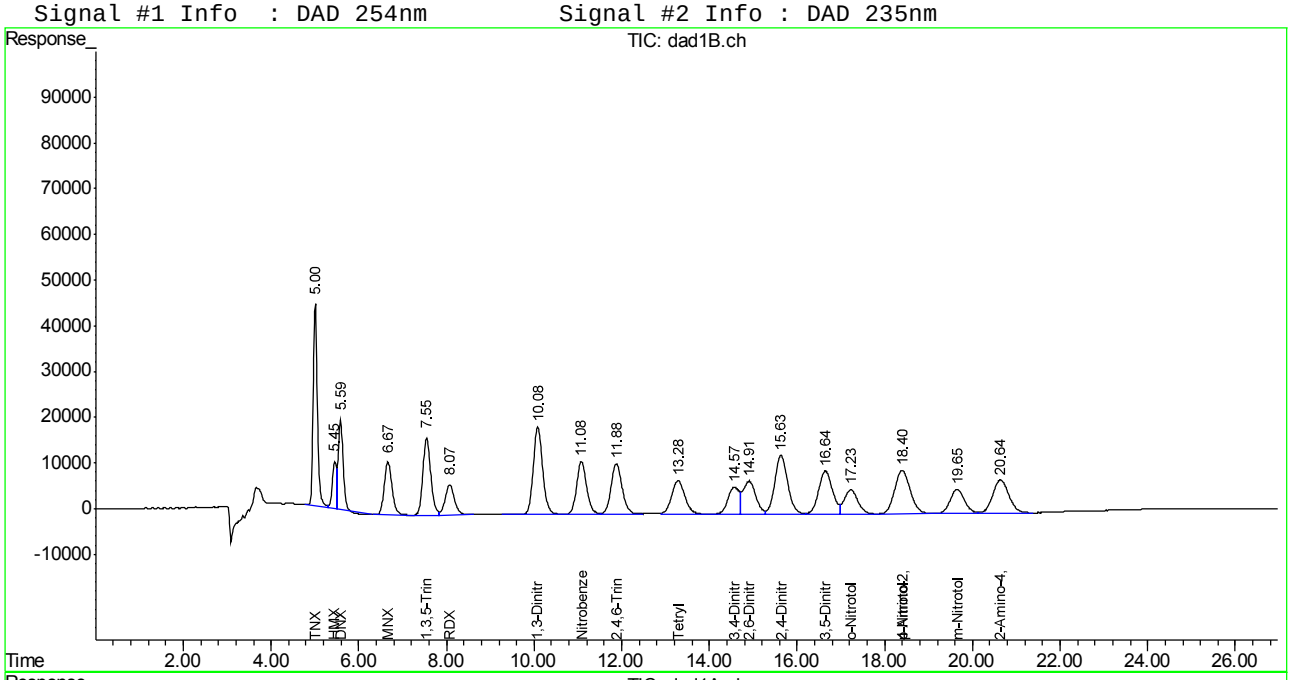
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 13:37:53 2017 Page 1

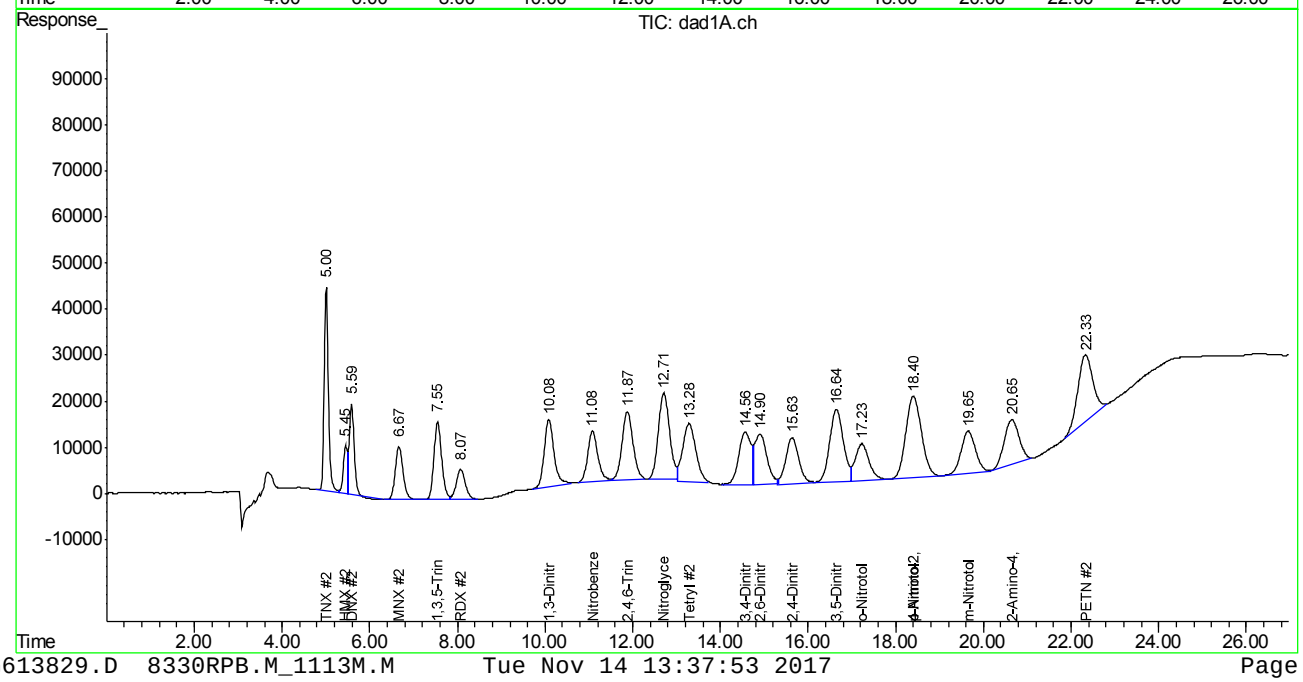
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

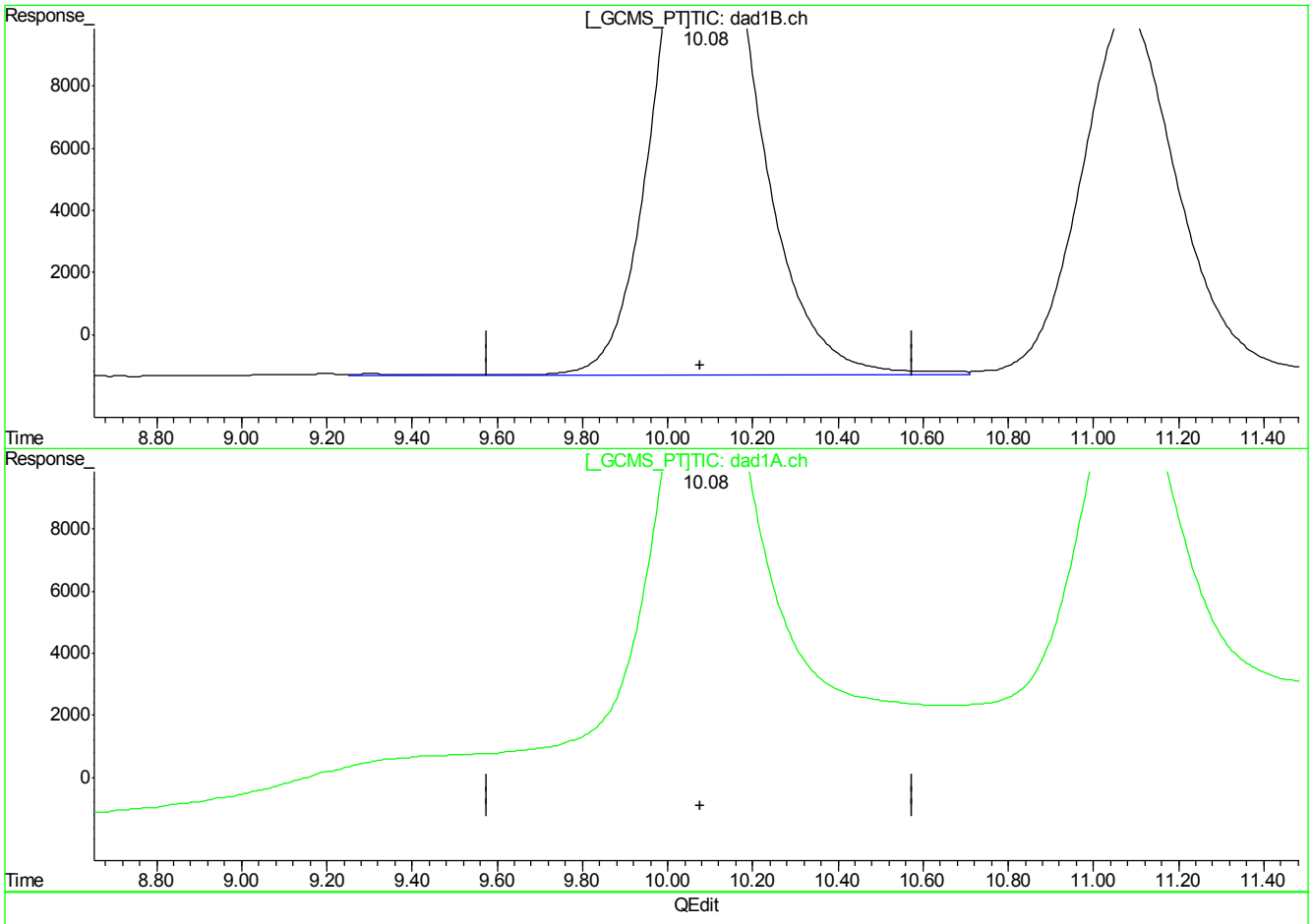
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613829.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:04	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.56	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.90	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.09min 292.876ppb

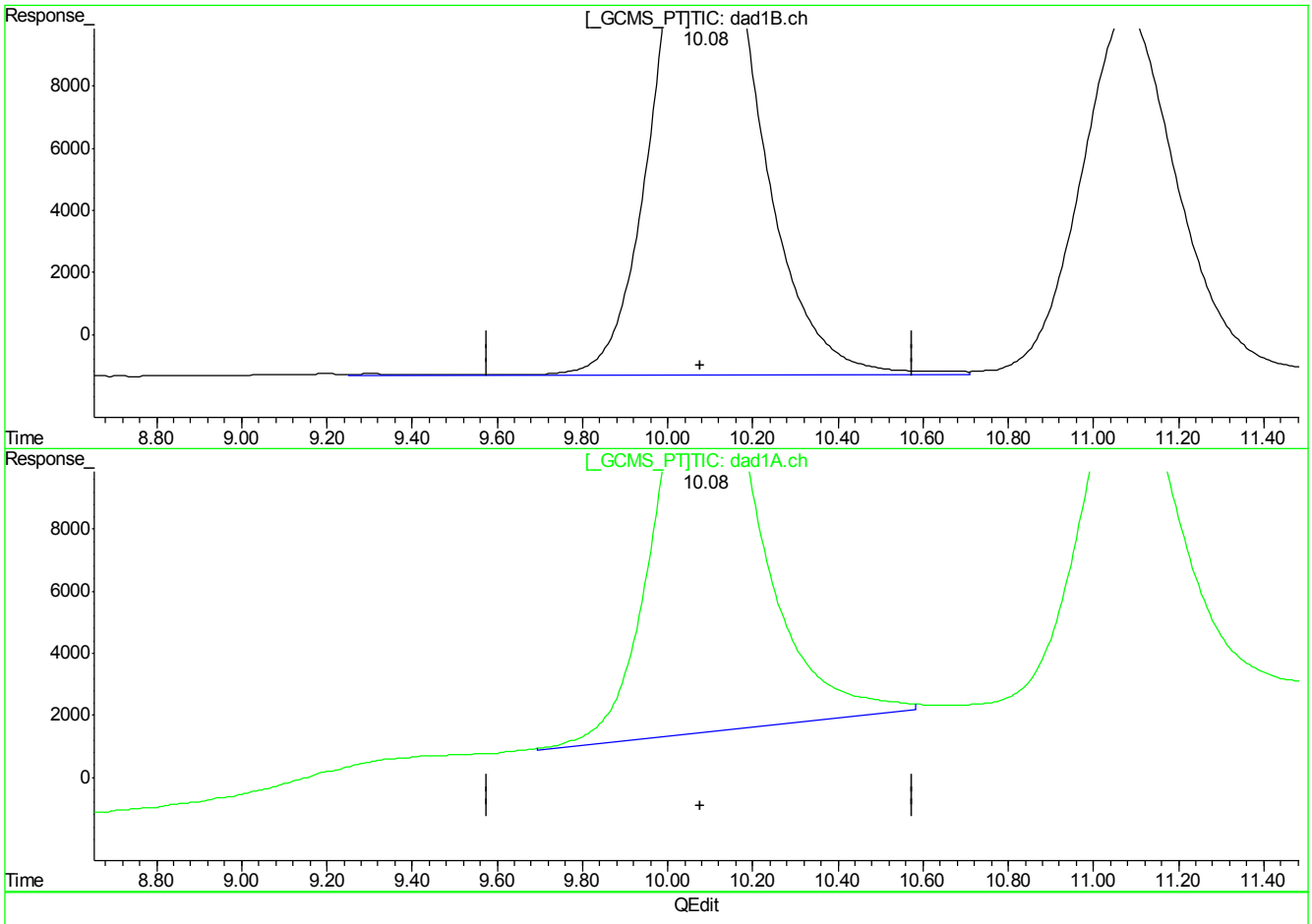
response 4066063

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:15 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.08min 162.672ppb m

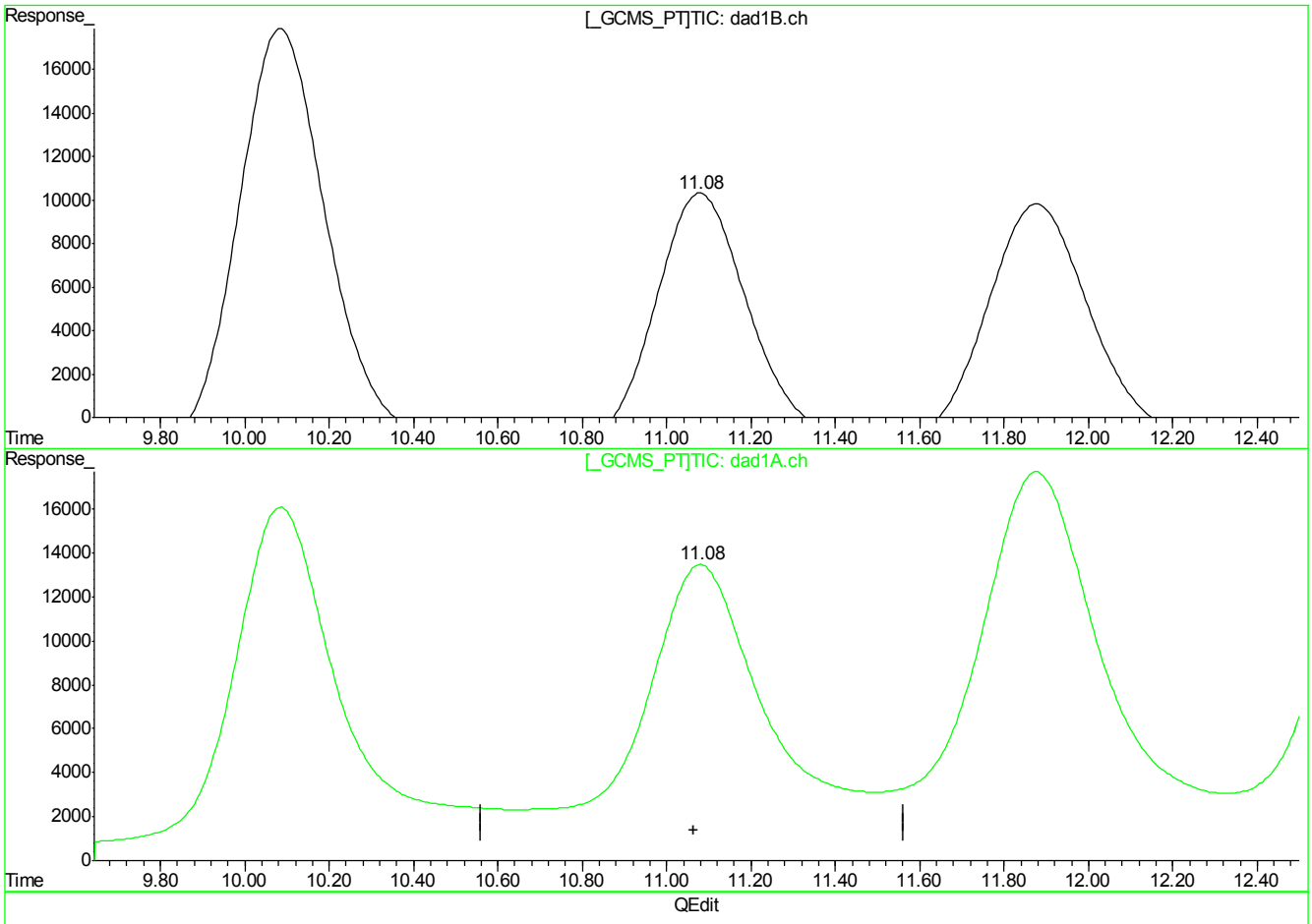
response 2285655

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 328.328ppb

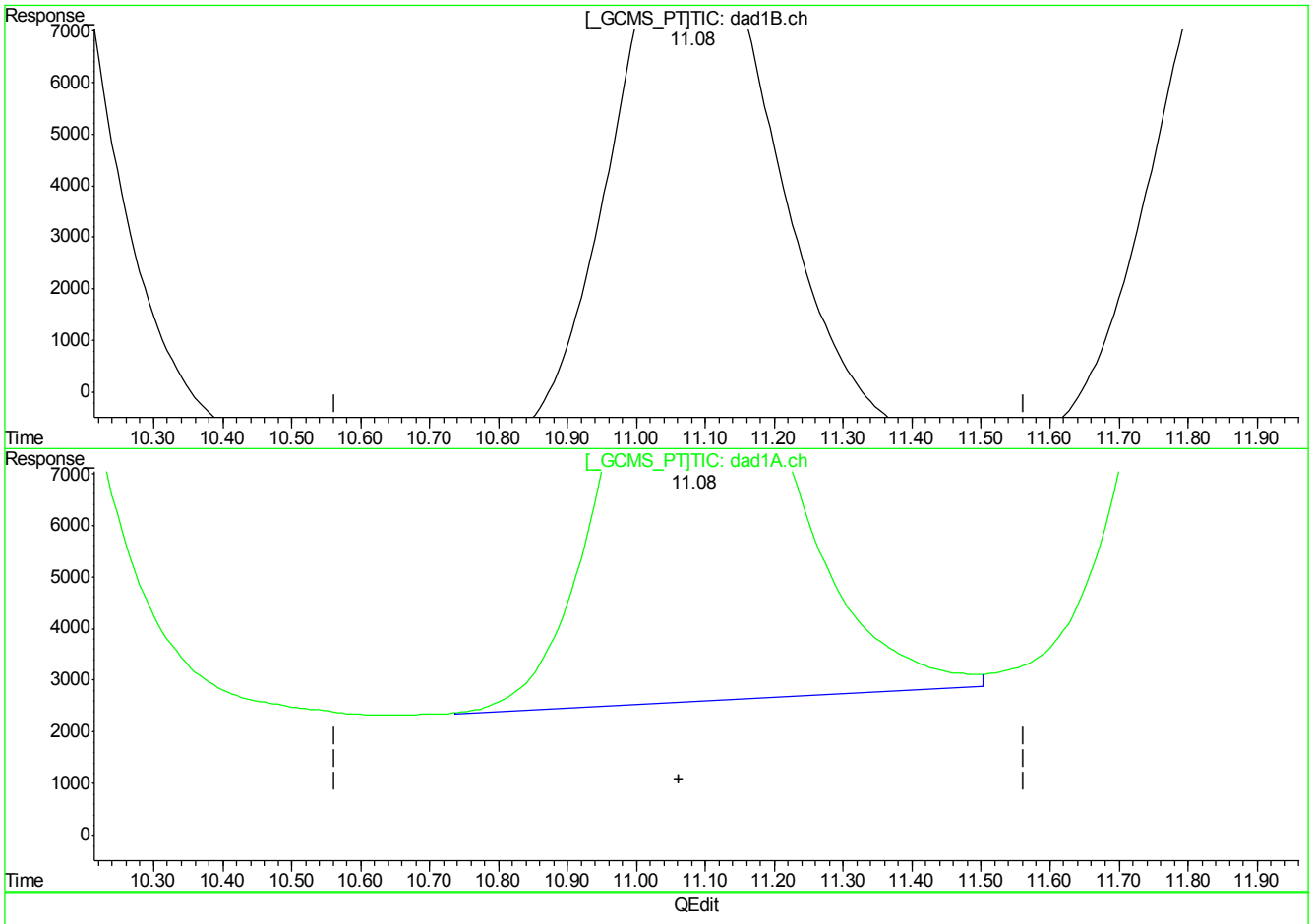
response 3103070

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:25 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 183.374ppb m

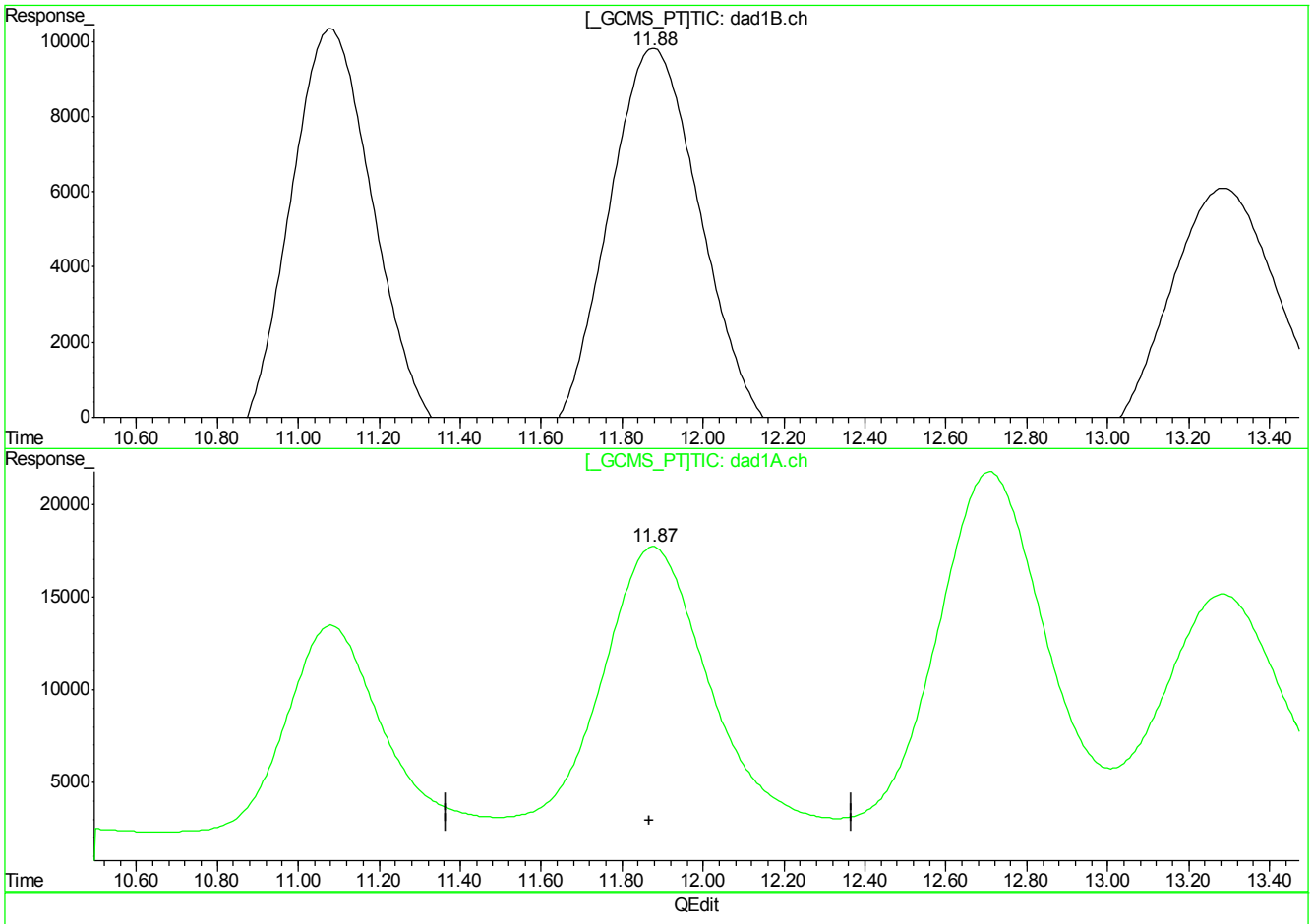
response 1739643

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:31 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.88min 253.581ppb

response 3927420

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:33 2017

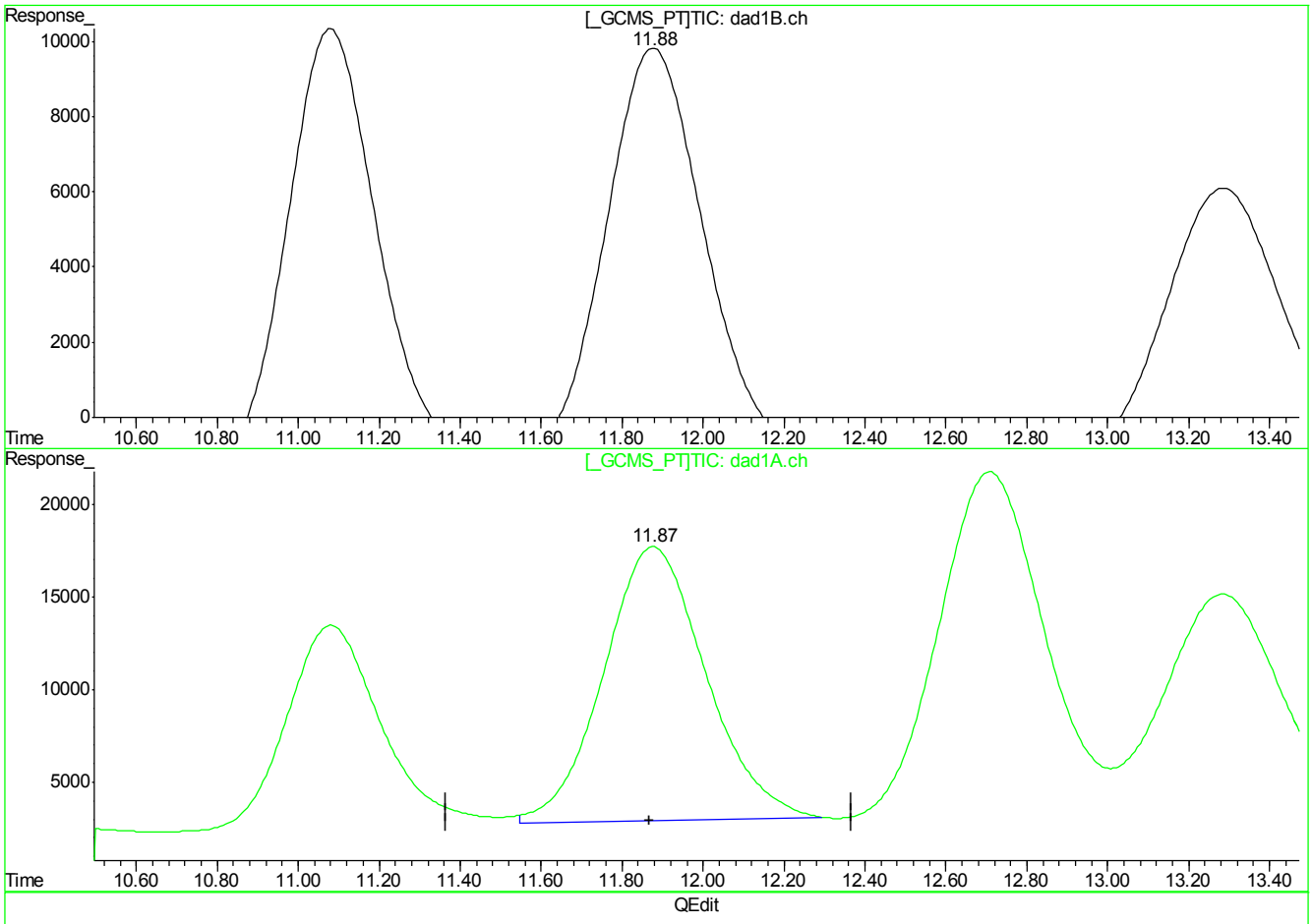
7.7.17.6

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.87min 166.860ppb m

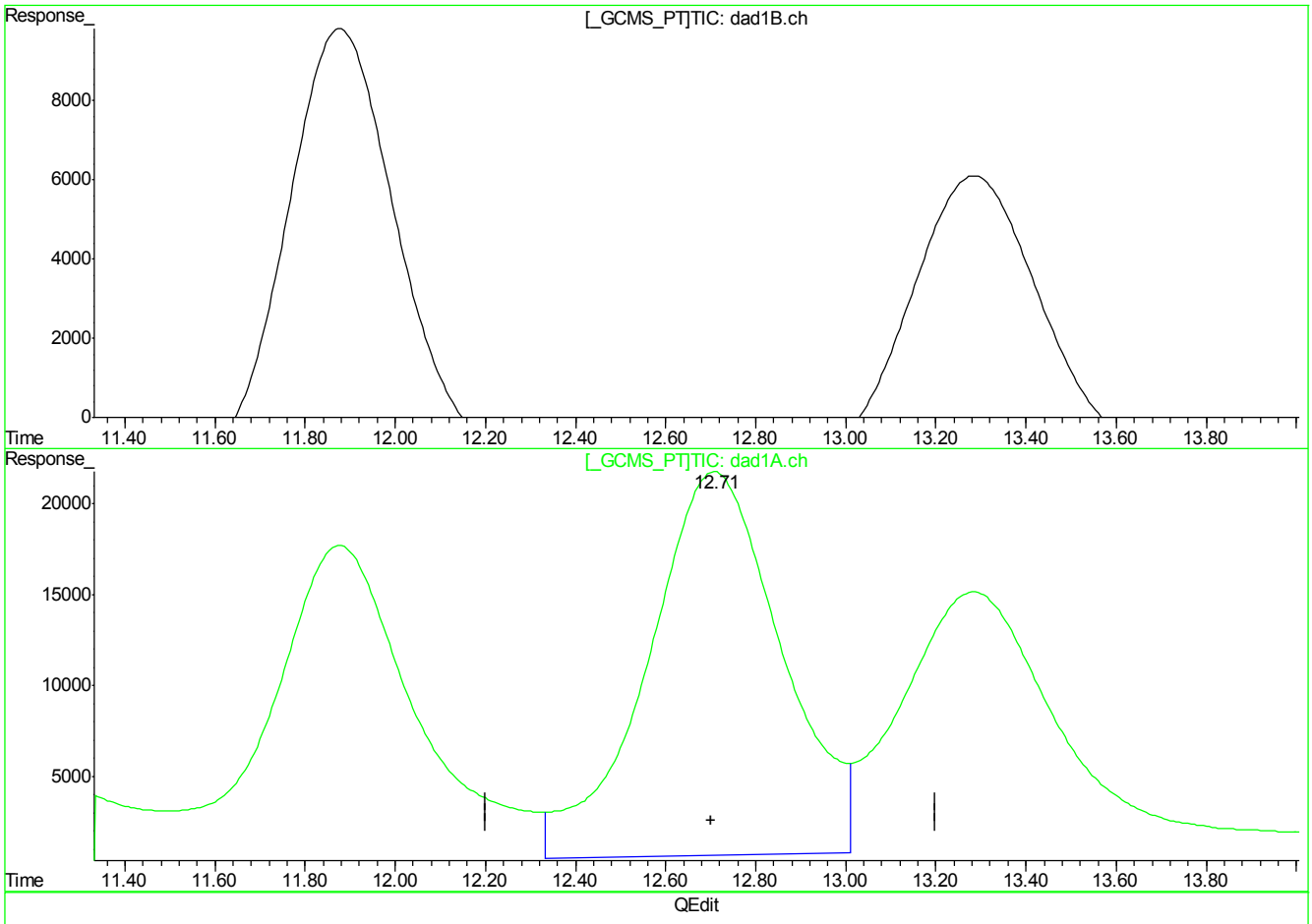
response 2595550

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 1189.969ppb

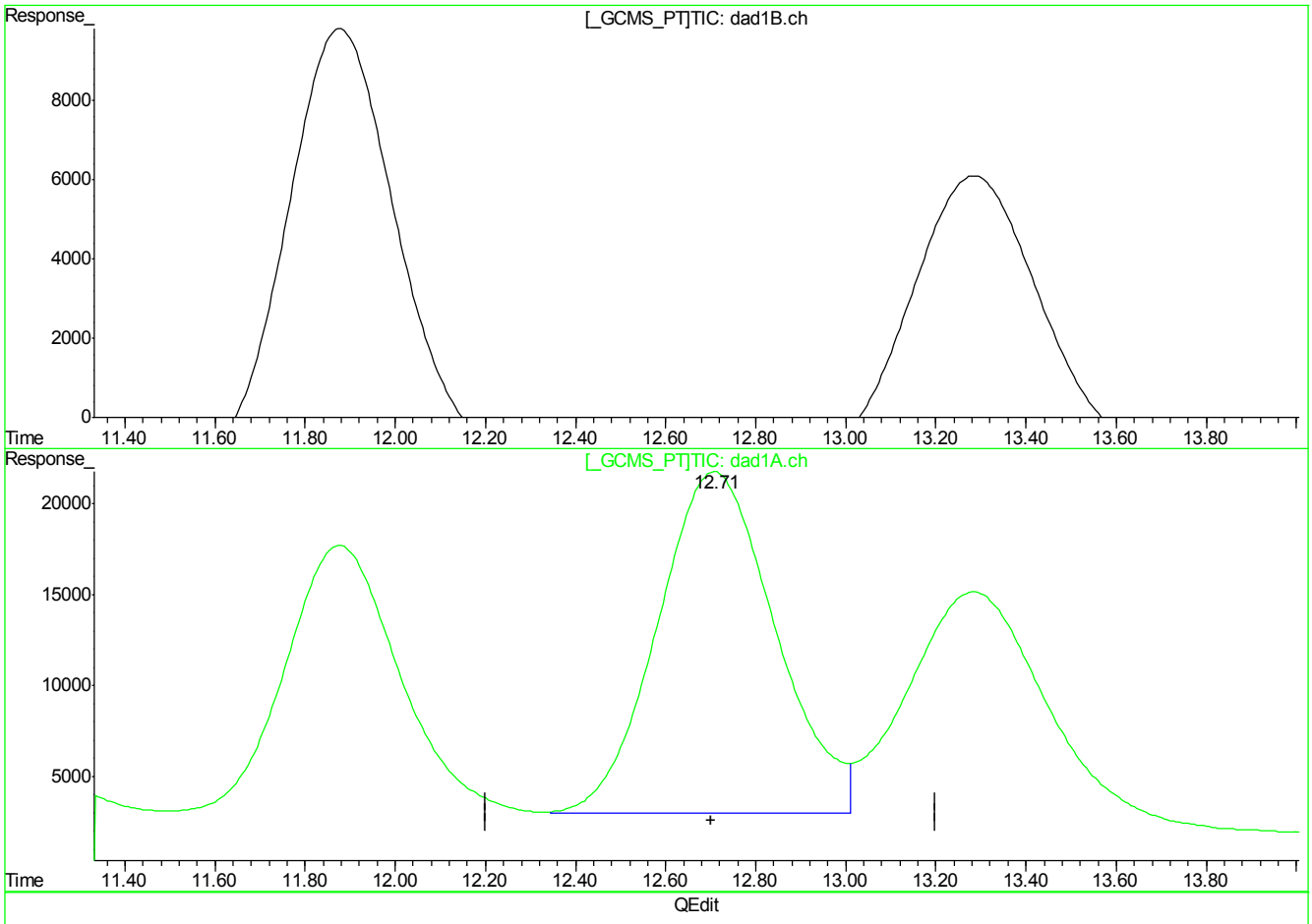
response 4339170

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:38 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 930.820ppb m

response 3400685

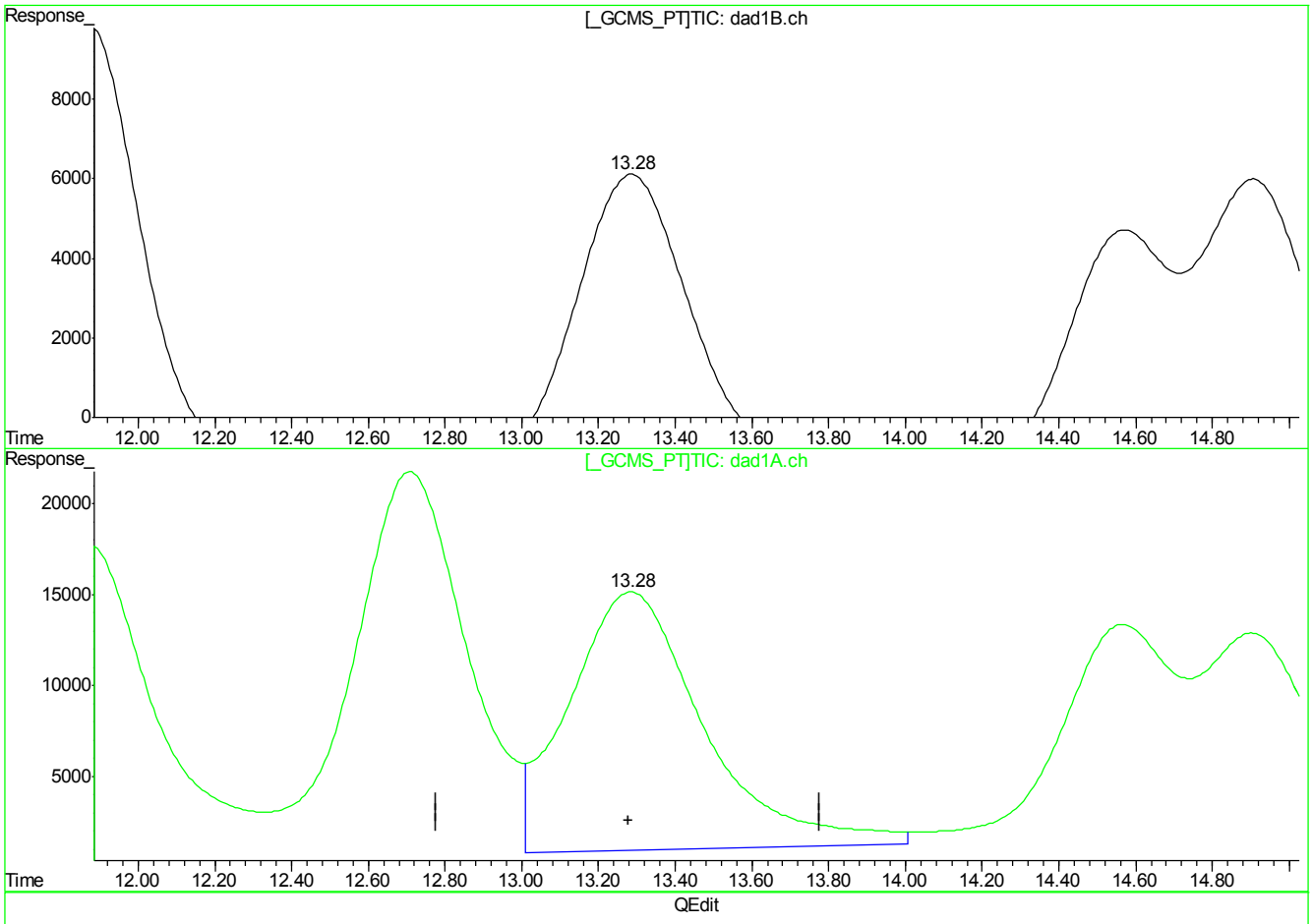
(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:42 2017

GG613829.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.29min 280.400ppb

response 3486939

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:48 2017

7.7.17.10

7

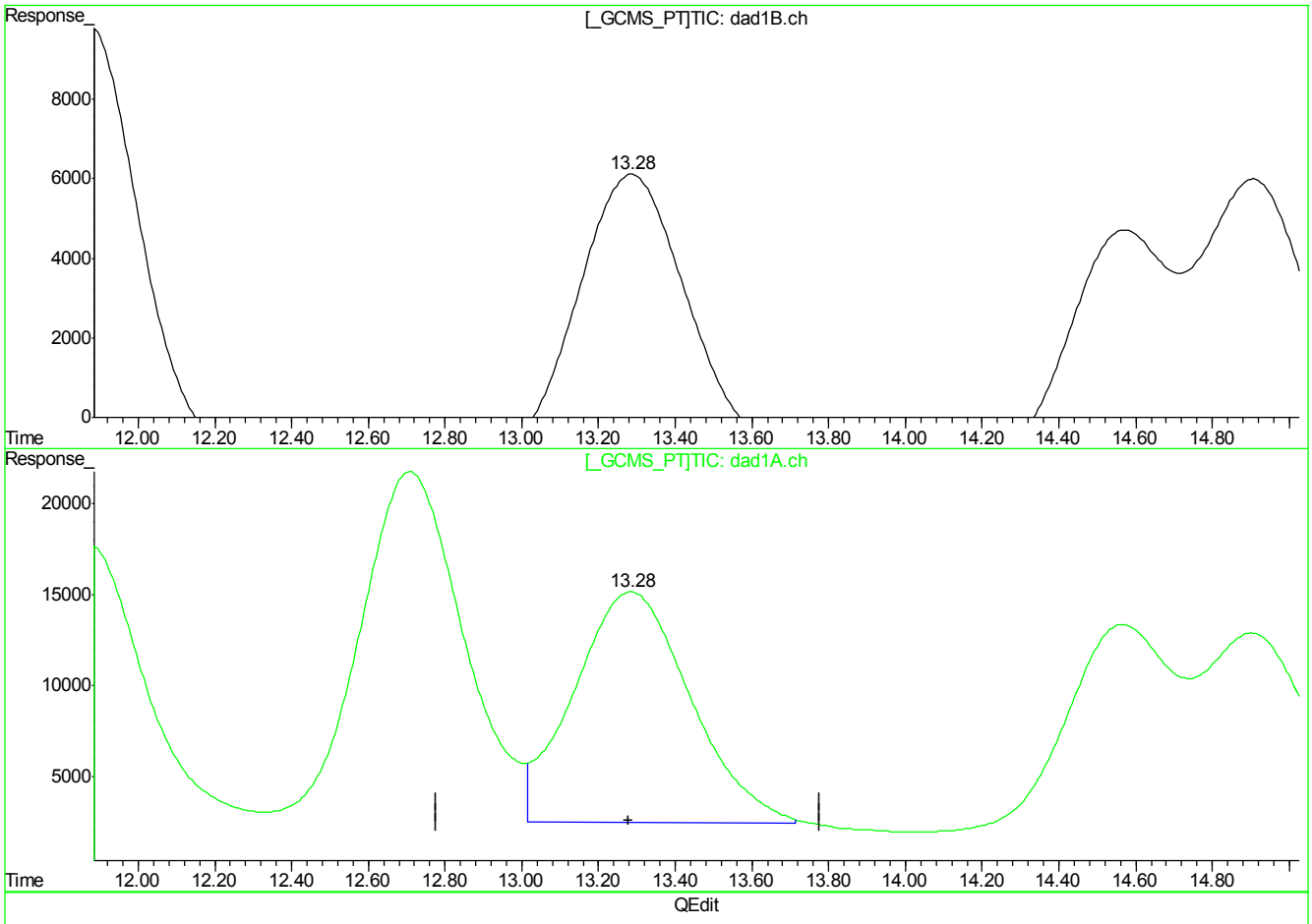
FA53725

GG613829.D edits: Tetryl

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.28min 215.610ppb m

response 2666776

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:51 2017

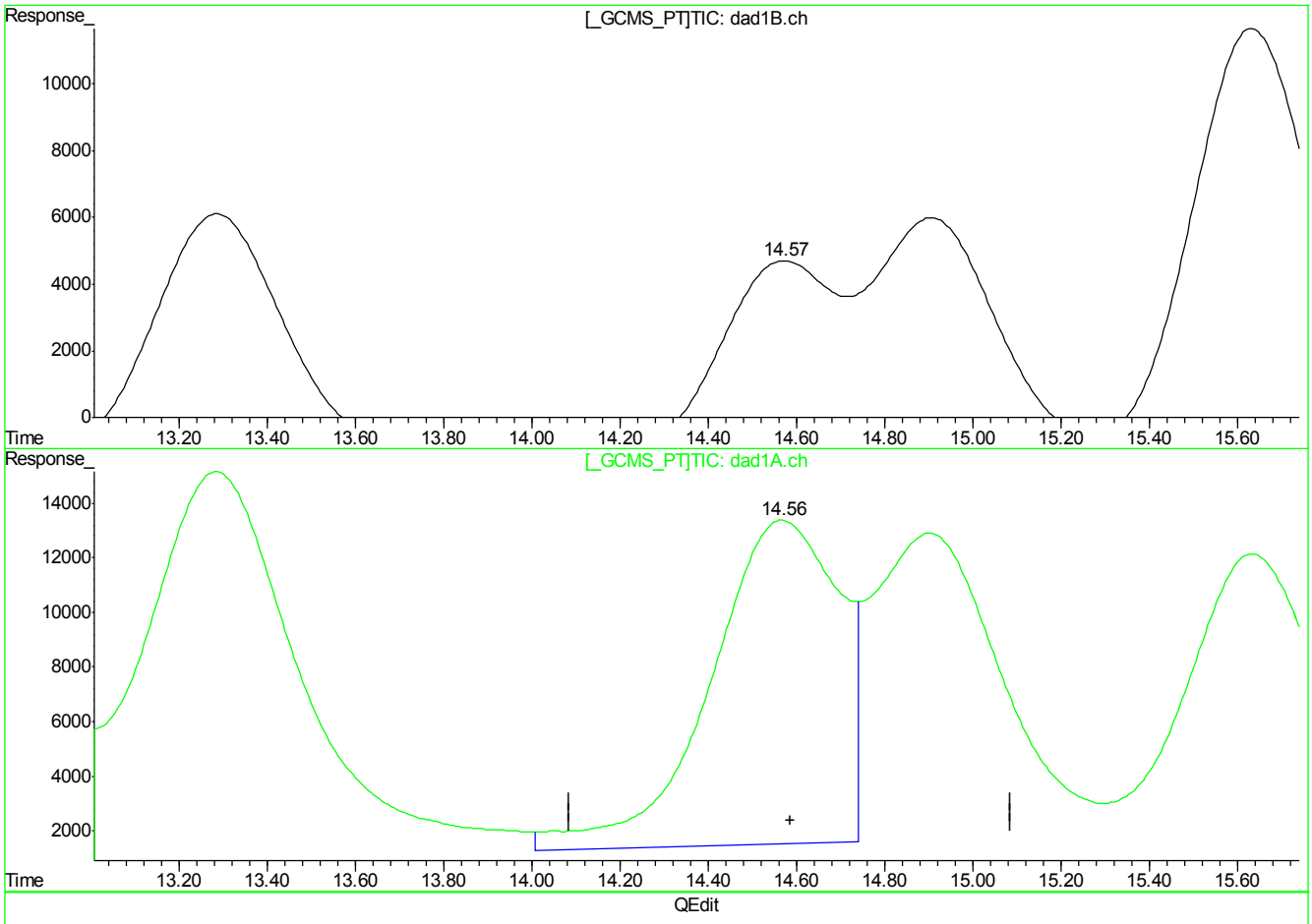
7.7.17.11

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.57min 192.743ppb

response 2400836

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:53 2017

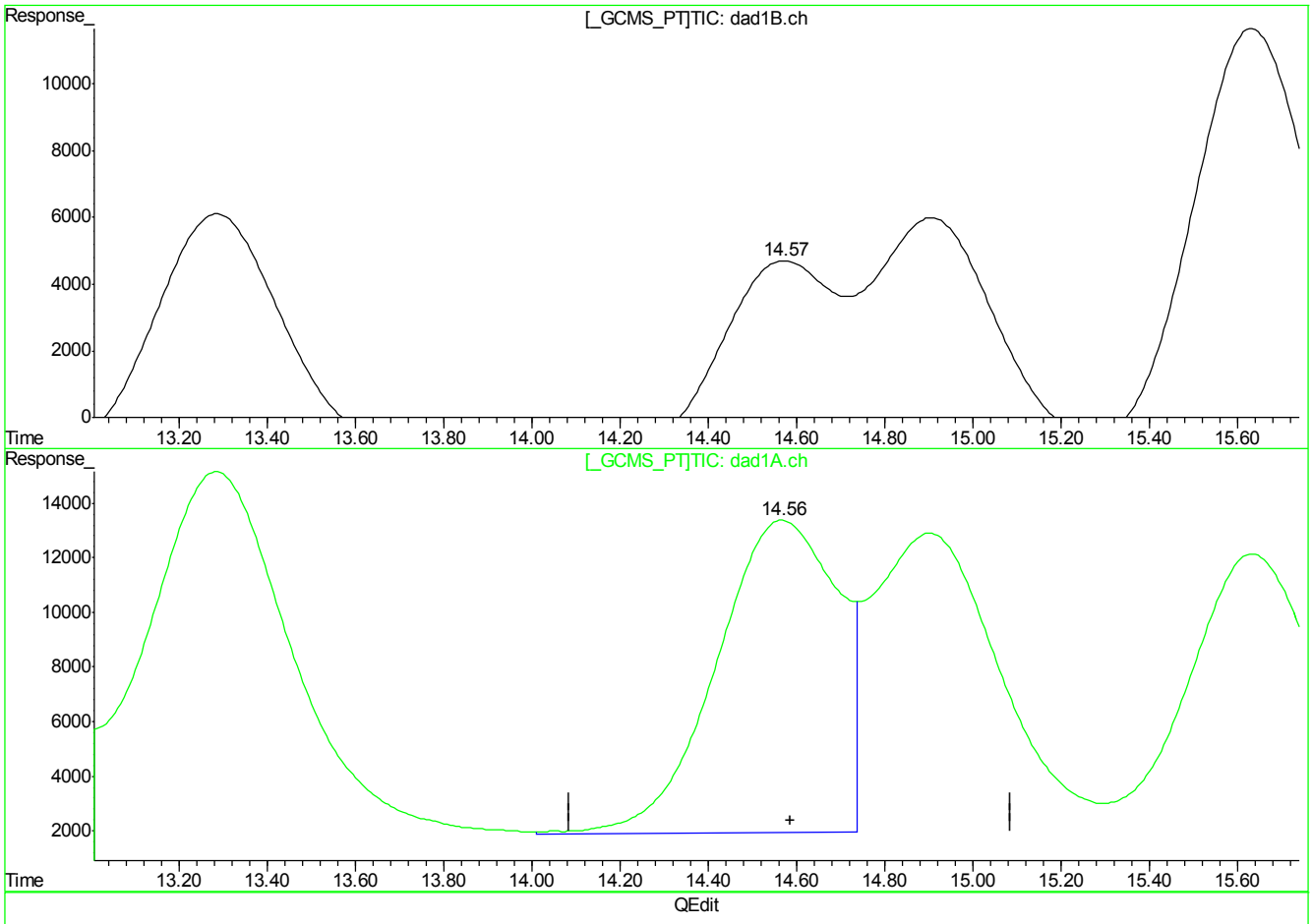
7.7.17.12

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.56min 174.846ppb m

response 2179380

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:57 2017

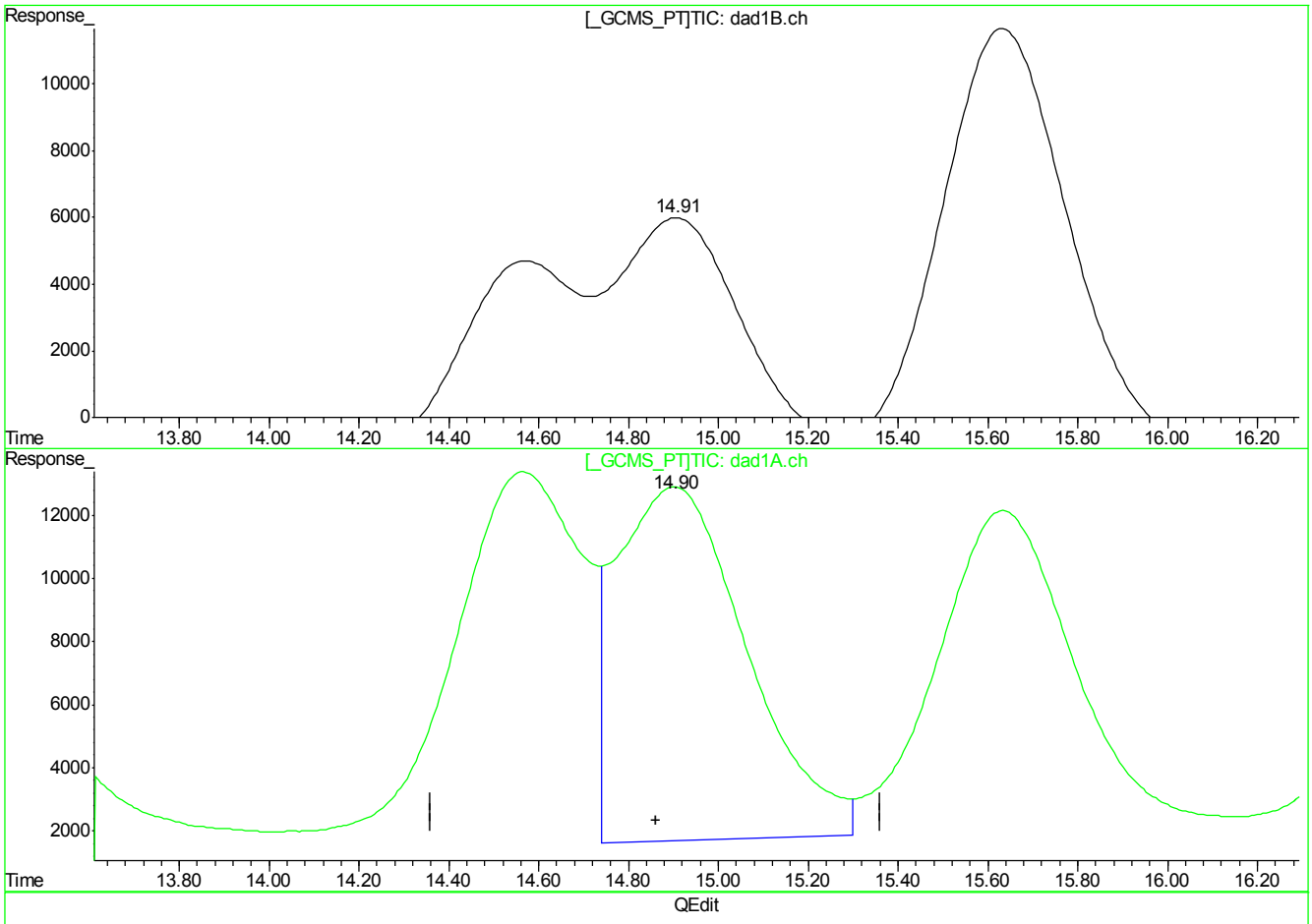
7.7.17.13

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 206.393ppb

response 2250772

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:58 2017

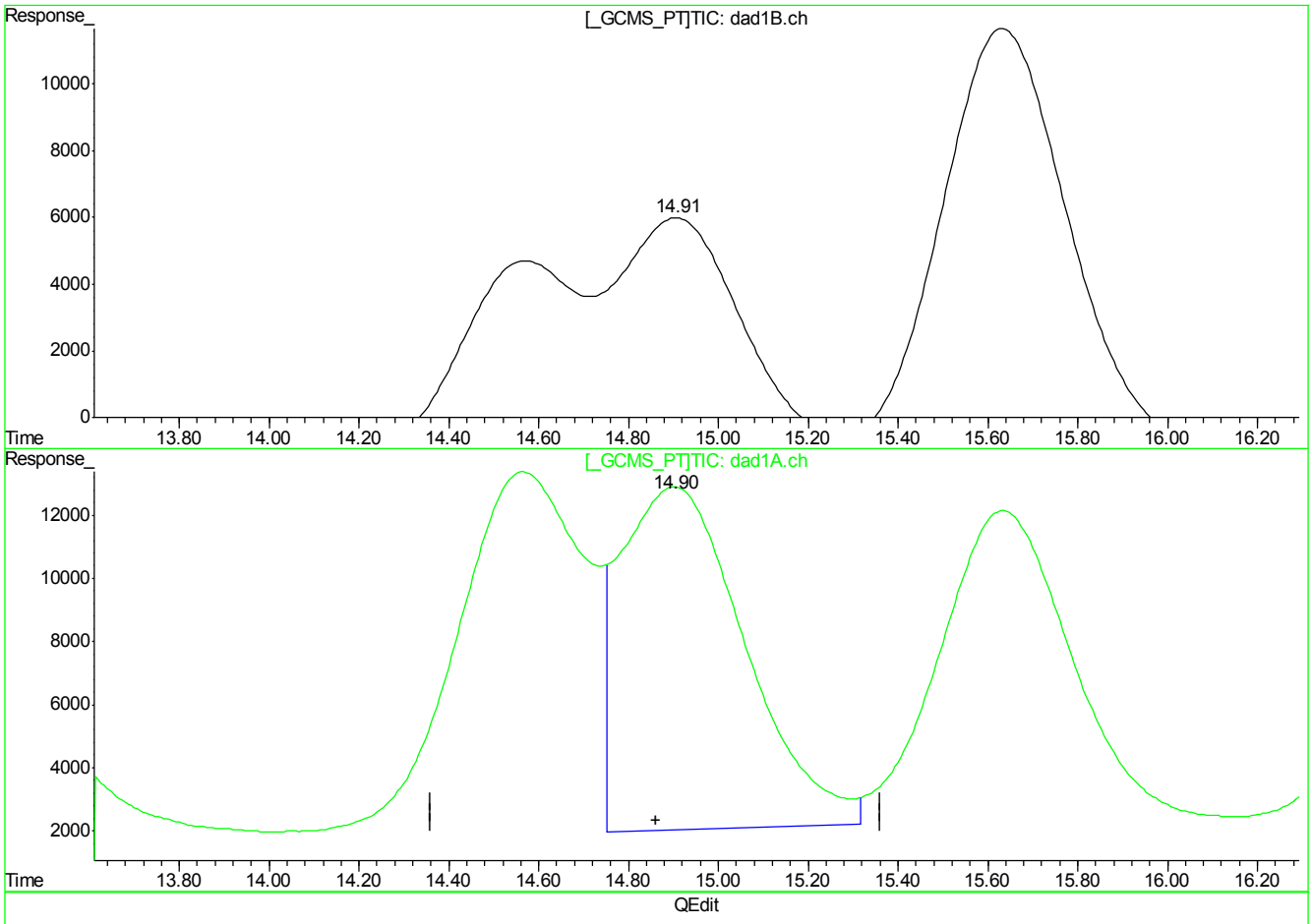
7.7.17.14

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 190.384ppb m

response 2076245

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:09 2017

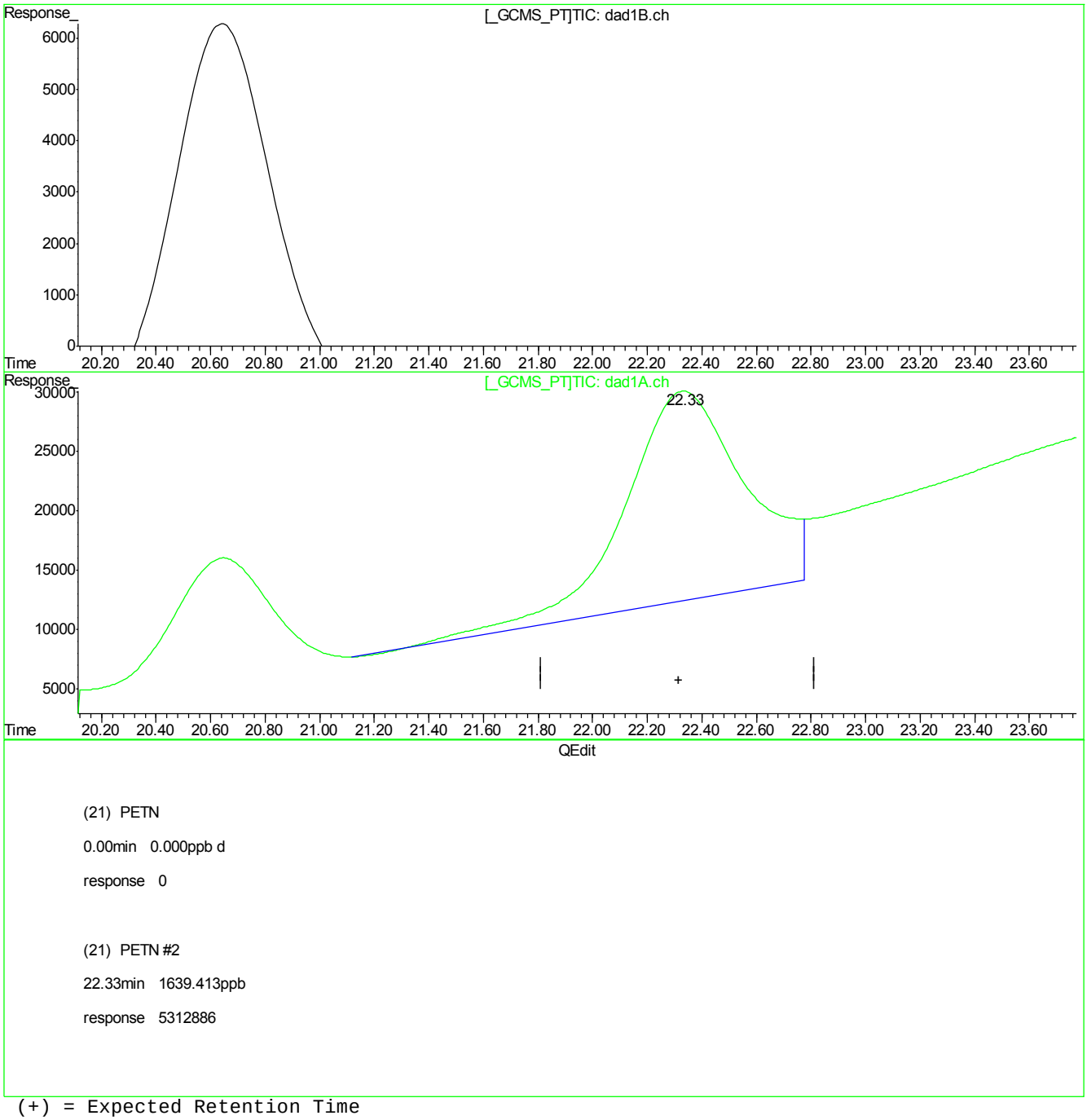
7.7.17.15

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:16 2017

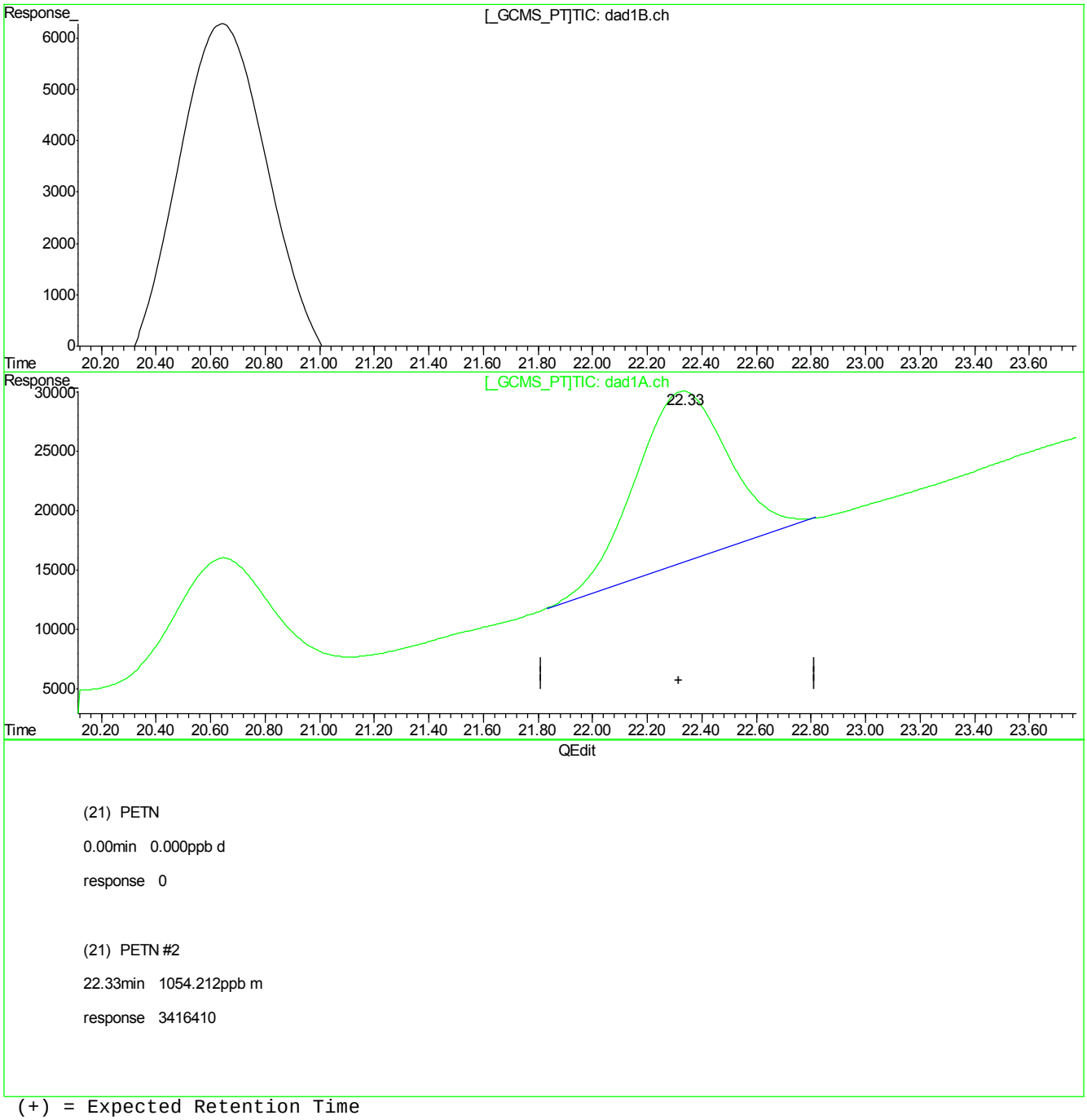
7.7.17.16

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:18 2017

7.7.17.17

7

GG613829.D edits: PETN

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:05 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.56	14.56	2566024	5307161	435.261	429.923
	Spiked Amount 500.000	Range 70 - 136		Recovery =		87.05%	85.98%
	Target Compounds						
1)	TNX	5.01	5.01	7178191	7178191	853.377	851.121
2)	HMX	5.46	5.46	1567471	1567471	412.659	409.740
3)	DNX	5.59	5.59	3839121	3839121	584.891	586.925
4)	MNX	6.66	6.66	3503085	3503085	724.097	724.097
5)	1,3,5-Trinitrobe	7.55	7.55	5075707	5076436	497.074	497.355
6)	RDX	8.07	8.07	2346451	2347827	492.885	495.472
7)	1,3-Dinitrobenze	10.08	10.08	6887672	6720081	473.215	493.198
8)	Nitrobenzene	11.08	11.08	4451511	5219104	582.312	555.512
9)	2,4,6-Trinitroto	11.88	11.88	4723401	7202241	463.275	470.131
10)	Nitroglycerin	0.00	12.71	0	9304341	N.D. d	2578.020
11)	Tetryl	13.28	13.28	3783586	7259516	551.597	570.016
13)	2,6-Dinitrotolue	14.90	14.90	3505597	5120931	504.224	469.790
14)	2,4-Dinitrotolue	15.63	15.63	6338975	4883124	477.045	490.411
15)	o-Nitrotoluene	17.22	17.22	2807950	4120241	603.576	623.959
16)	3,5-Dinitroanili	16.63	16.63	4900917	8015740	462.446	444.537
17)	p-Nitrotoluene	18.39	18.39	5738993	10601258	498.789	491.995
18)	4-Amino-2,6-Dini	18.39	18.39	5738993	10601258	498.789	491.995
19)	m-Nitrotoluene	19.65	19.65	2981905	4897585	565.664	517.775
20)	2-Amino-4,6-Dini	20.63	20.63	4541236	5876348	473.381	434.192
21)	PETN	0.00	22.30	0	8594642	N.D. d	2652.074m

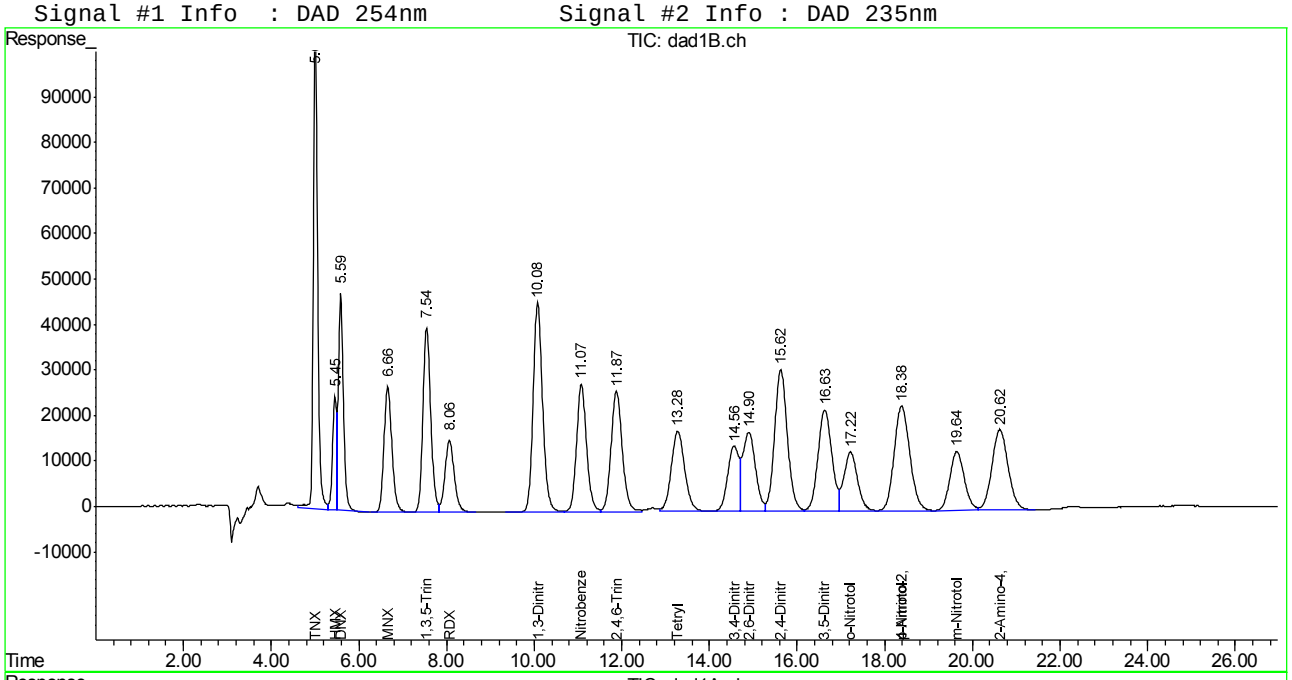
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:37:54 2017 Page 1

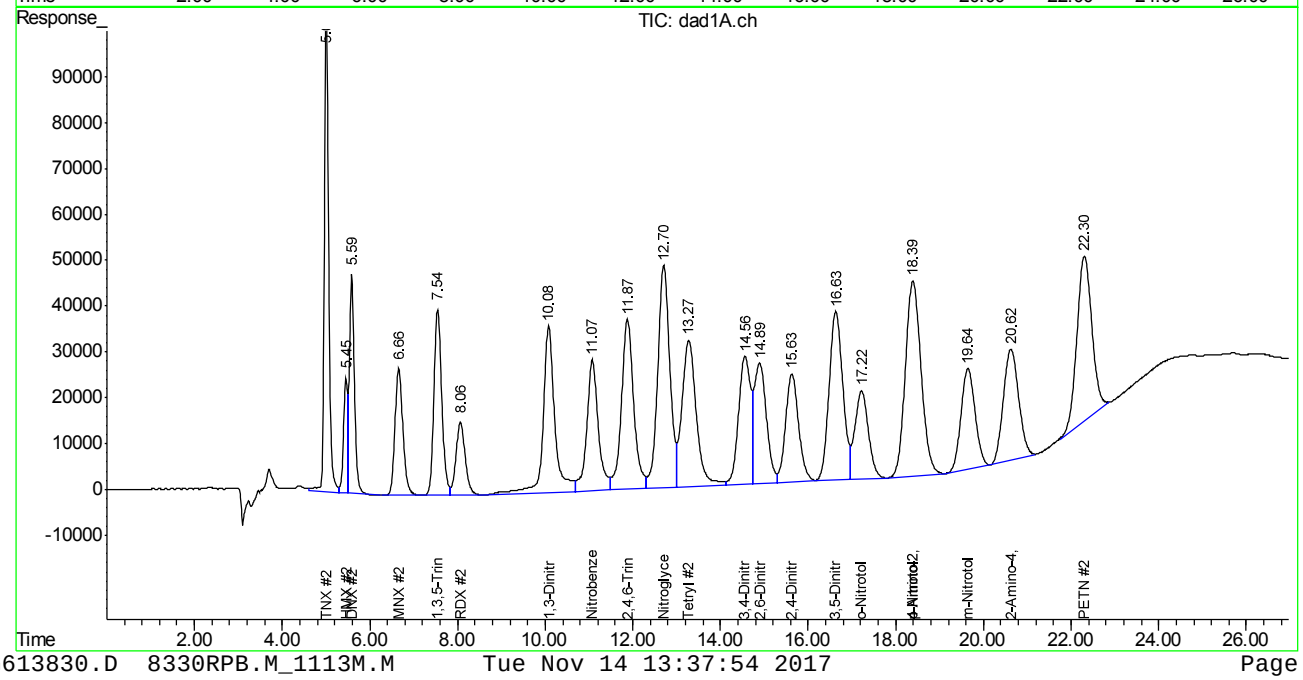
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

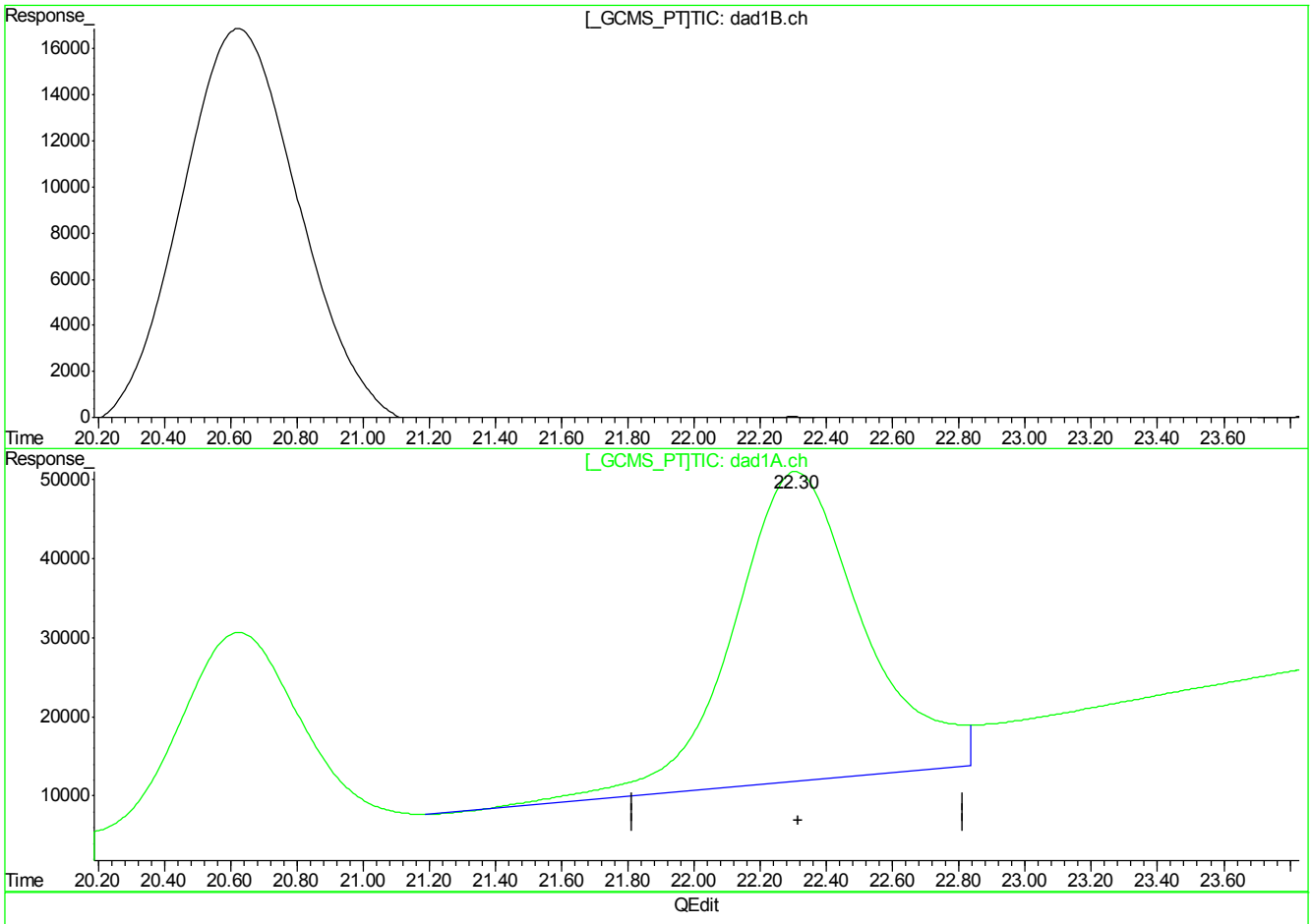
Sample Number:	GGG2571-ICC2571	**Method:**	SW846 8330A
Lab FileID:	GG613830.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:34	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.30	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 3296.542ppb

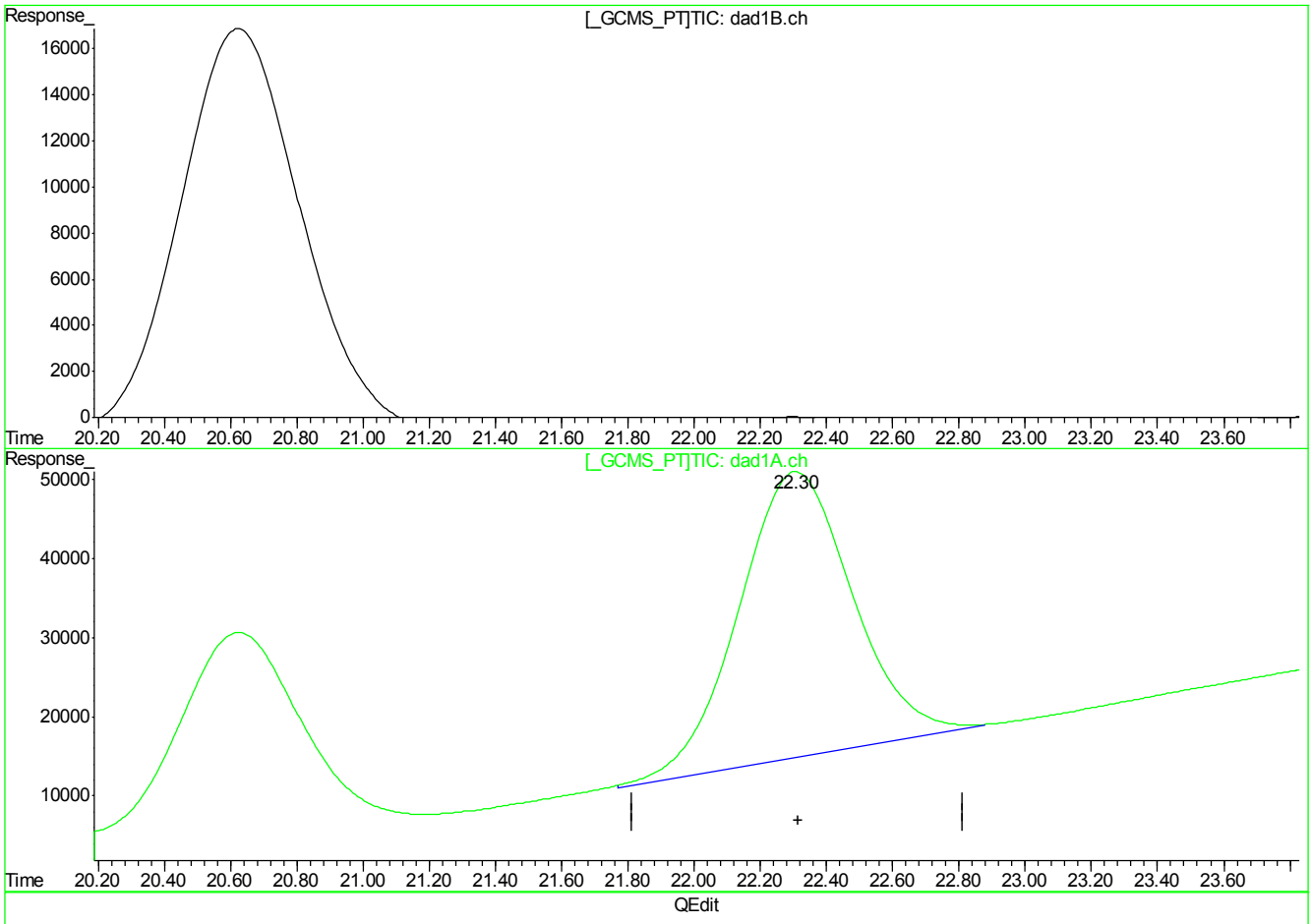
response 10683184

(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.30min 2652.074ppb m

response 8594642

(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:49 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:06 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	5134237	10563524	870.893	870.355
	Spiked Amount 500.000	Range 70 - 136		Recovery =		174.18%#	174.07%#
	Target Compounds						
1)	TNX	5.01	5.01	14095710	14095710	1675.764	1671.335
2)	HMX	5.45	5.45	3075086	3075086	809.559	803.833
3)	DNX	5.59	5.59	7555662	7555662	1151.106	1155.110
4)	MNX	6.66	6.66	7011708	7021085	1449.340	1451.278
5)	1,3,5-Trinitrobe	7.54	7.54	10137190	10160510	992.756	995.458
6)	RDX	8.06	8.06	4692682	4737484	985.724	999.772
7)	1,3-Dinitrobenze	10.08	10.08	13715413	12037357	942.312	920.589
8)	Nitrobenzene	11.07	11.07	8906160	9757665	1165.035	1052.303
9)	2,4,6-Trinitroto	11.87	11.87	9383167	13474808	920.308	899.133
10)	Nitroglycerin	0.00	12.70	0	18017203	N.D. d	5087.336
11)	Tetryl	13.27	13.26	7535288	13894482	1098.545	1049.997
13)	2,6-Dinitrotolue	14.89	14.89	6992017	10221713	1005.690	938.471
14)	2,4-Dinitrotolue	15.62	15.62	12638679	9128347	951.136	914.210
15)	o-Nitrotoluene	17.22	17.21	5638423	8443365	1108.003	1134.699
16)	3,5-Dinitroanili	16.62	16.62	9768472	16313142	921.745	898.051
17)	p-Nitrotoluene	18.38	18.38	11526542	21366781	1001.798	970.537
18)	4-Amino-2,6-Dini	18.38	18.38	11526542	21366781	1001.798	970.537
19)	m-Nitrotoluene	19.64	19.64	6023786	9889615	1061.910	1045.534
20)	2-Amino-4,6-Dini	20.62	20.62	9161666	12398036	955.017	916.067
21)	PETN	0.00	22.31	0	17345332	N.D. d	5352.300m

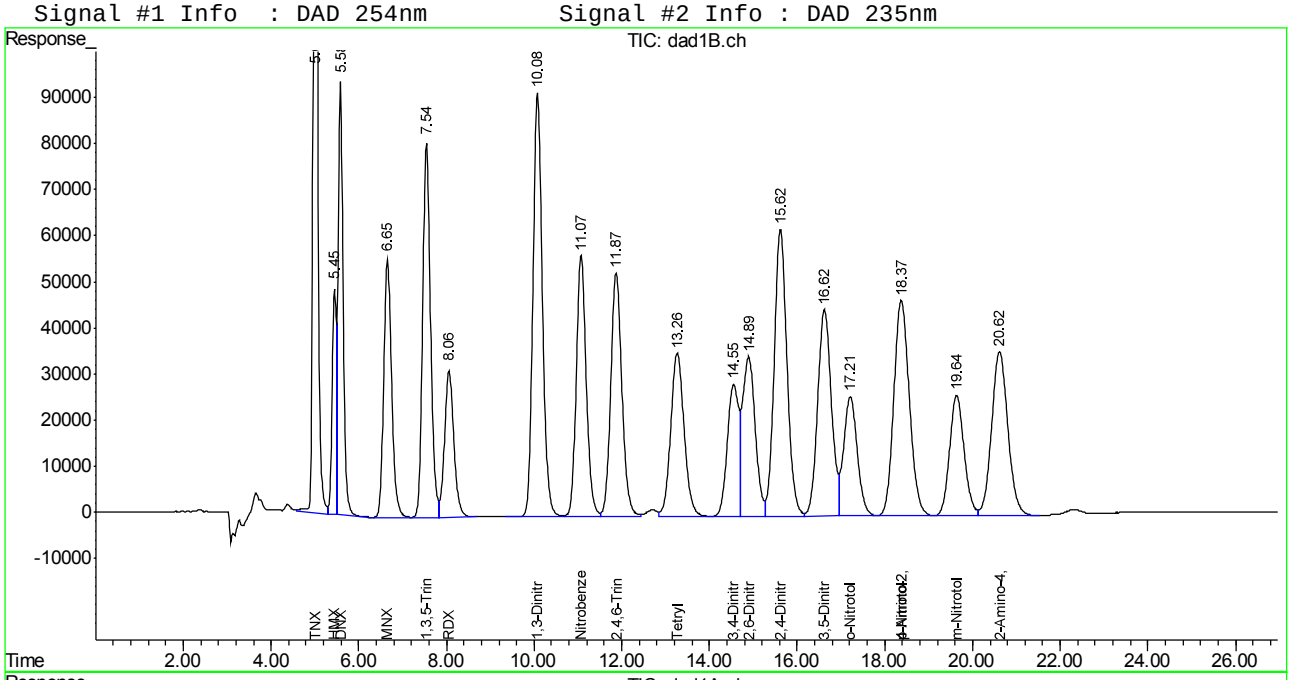
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 13:37:55 2017 Page 1

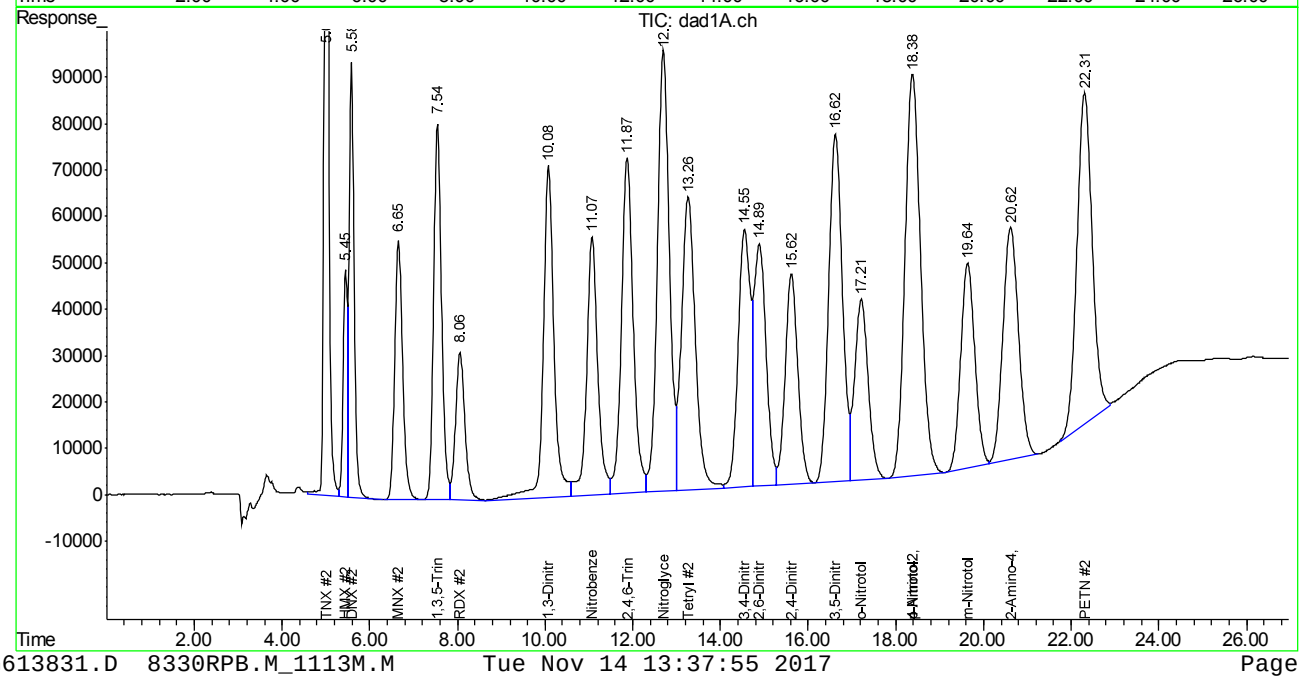
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

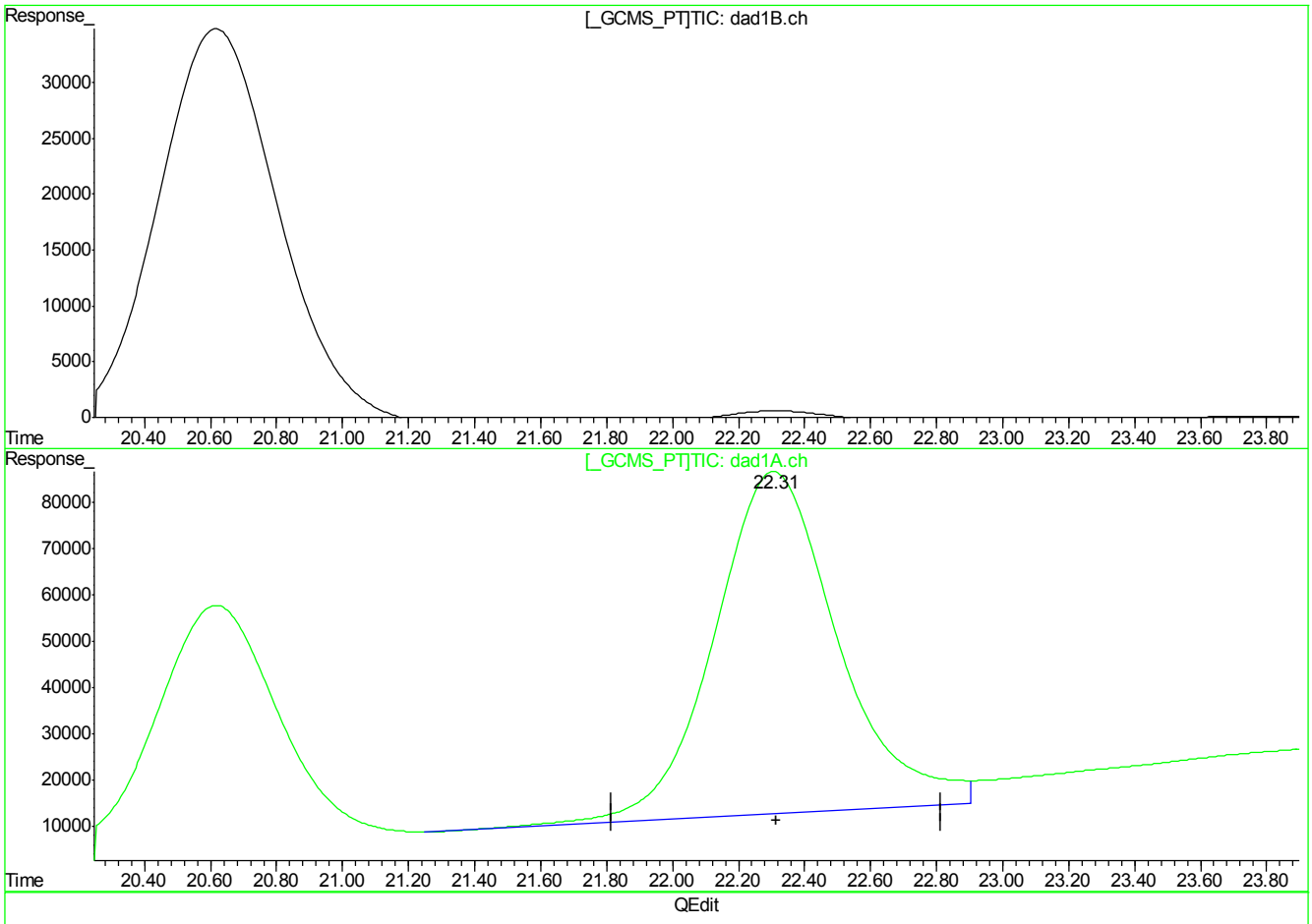
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613831.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:03	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.31	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 5907.912ppb

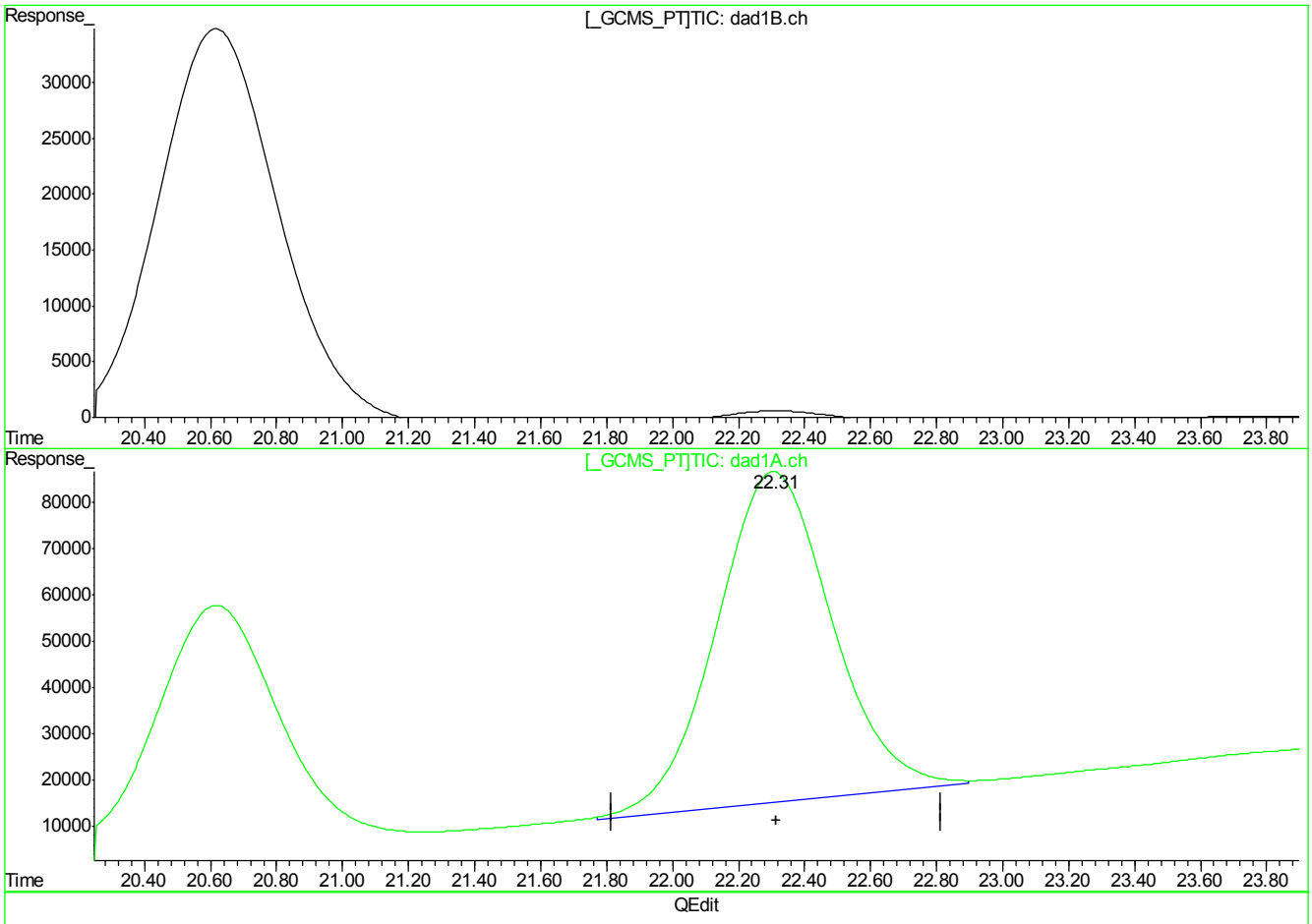
response 19145917

(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 5352.300ppb m

response 17345332

(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:10 2017

GG613832.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:07 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.57	10550046	21399713	1789.548	1831.472
	Spiked Amount 500.000	Range 70 - 136		Recovery =		357.91%#	366.29%#
	Target Compounds						
1)	TNX	5.01	5.01	28286611	28286611	3362.844	3353.956
2)	HMX	5.45	5.45	6160036	6160036	1621.715	1610.245
3)	DNX	5.59	5.59	15111963	15111963	2302.310	2310.317
4)	MNX	6.67	6.67	14319142	14379845	2959.807	2972.354
5)	1,3,5-Trinitrobe	7.55	7.55	20630748	20736361	2020.412	2031.609
6)	RDX	8.07	8.07	9542524	9714929	2004.461	2050.183
7)	1,3-Dinitrobenze	10.09	10.09	27925425	22088278	1918.604	1861.609
8)	Nitrobenzene	11.08	11.08	17989336	17591198	2353.226	1943.111
9)	2,4,6-Trinitroto	11.88	11.88	19144422	26204296	1877.700	1837.967
10)	Nitroglycerin	0.00	12.71	0	35699929	N.D. d	10513.714
11)	Tetryl	13.28	13.28	15460803	27450889	2253.980	1939.407
13)	2,6-Dinitrotolue	14.91	14.90	14299221	20816201	2056.715	1914.307
14)	2,4-Dinitrotolue	15.63	15.63	25833590	18399200	1944.131	1831.671
15)	o-Nitrotoluene	17.23	17.23	11486355	17079534	1968.871	1946.822
16)	3,5-Dinitroanili	16.63	16.63	19978063	33141066	1885.113	1798.231
17)	p-Nitrotoluene	18.40	18.40	23561706	43403899	2047.801	1893.857
18)	4-Amino-2,6-Dini	18.40	18.40	23561706	43403899	2047.801	1893.857
19)	m-Nitrotoluene	19.66	19.66	12222790	20535097	1919.977	2170.979
20)	2-Amino-4,6-Dini	20.63	20.63	18737965	26088409	1953.256	1927.623
21)	PETN	0.00	22.32	0	35262467	N.D. d	10881.043m

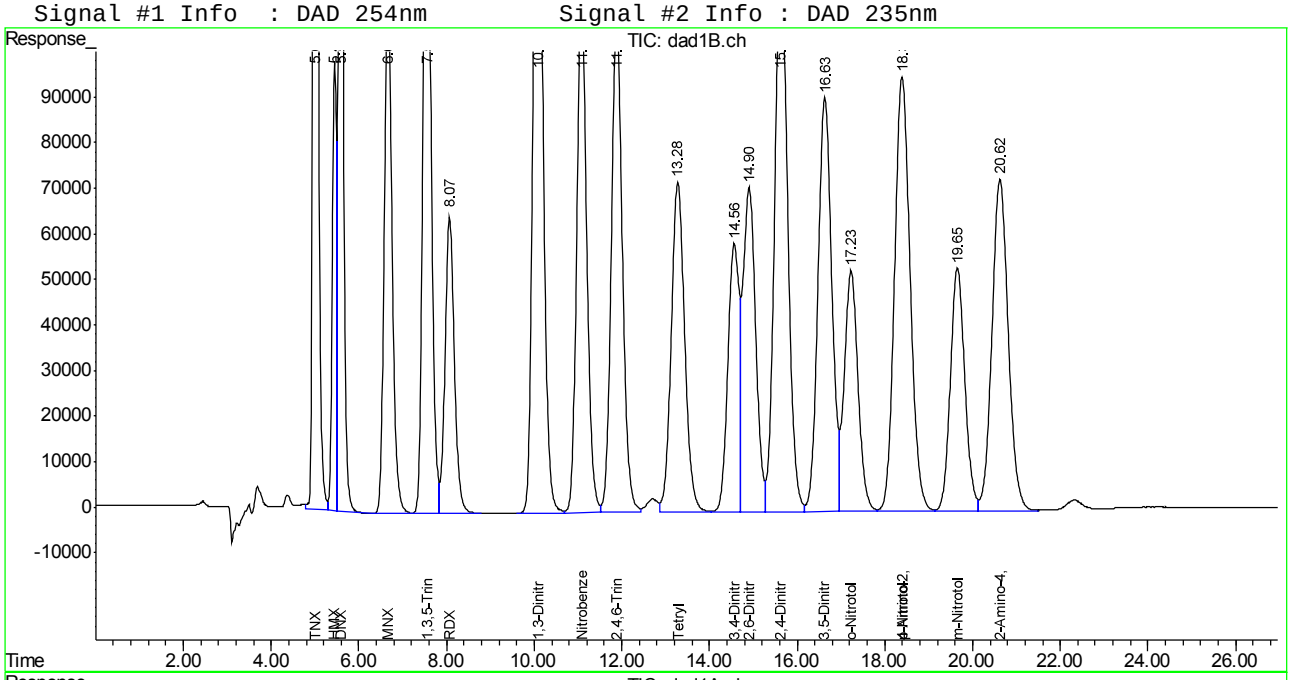
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 13:37:56 2017 Page 1

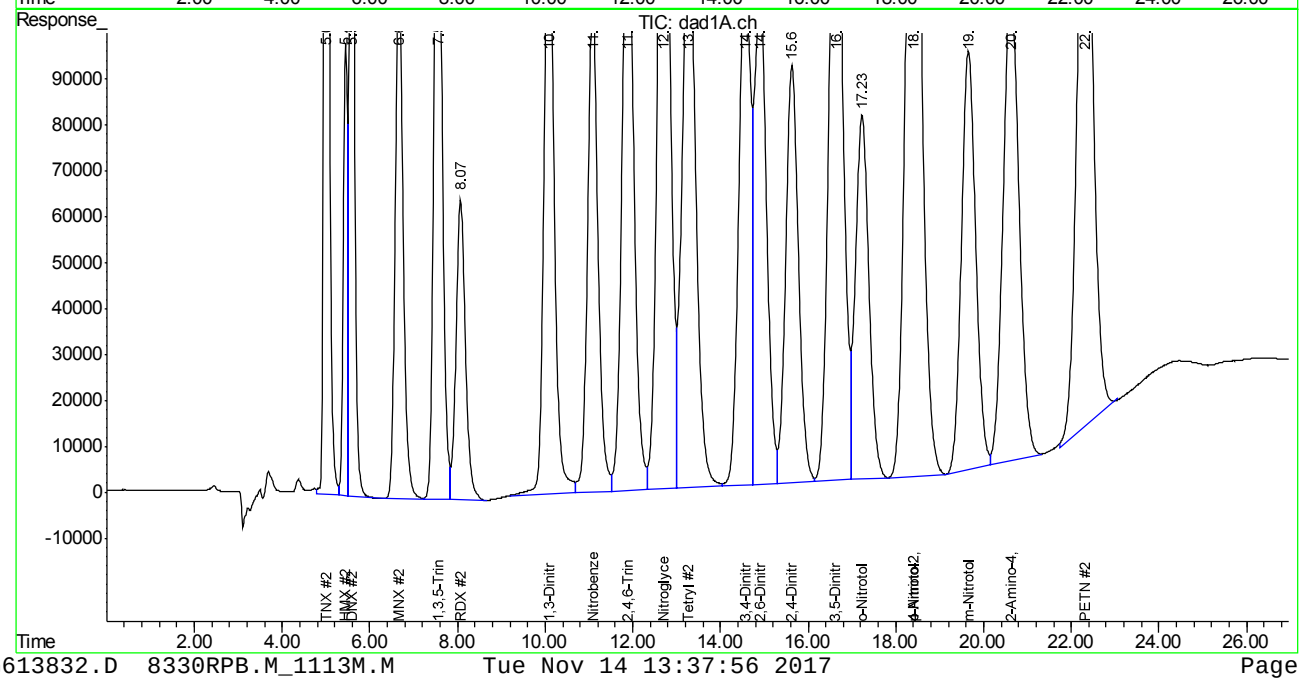
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

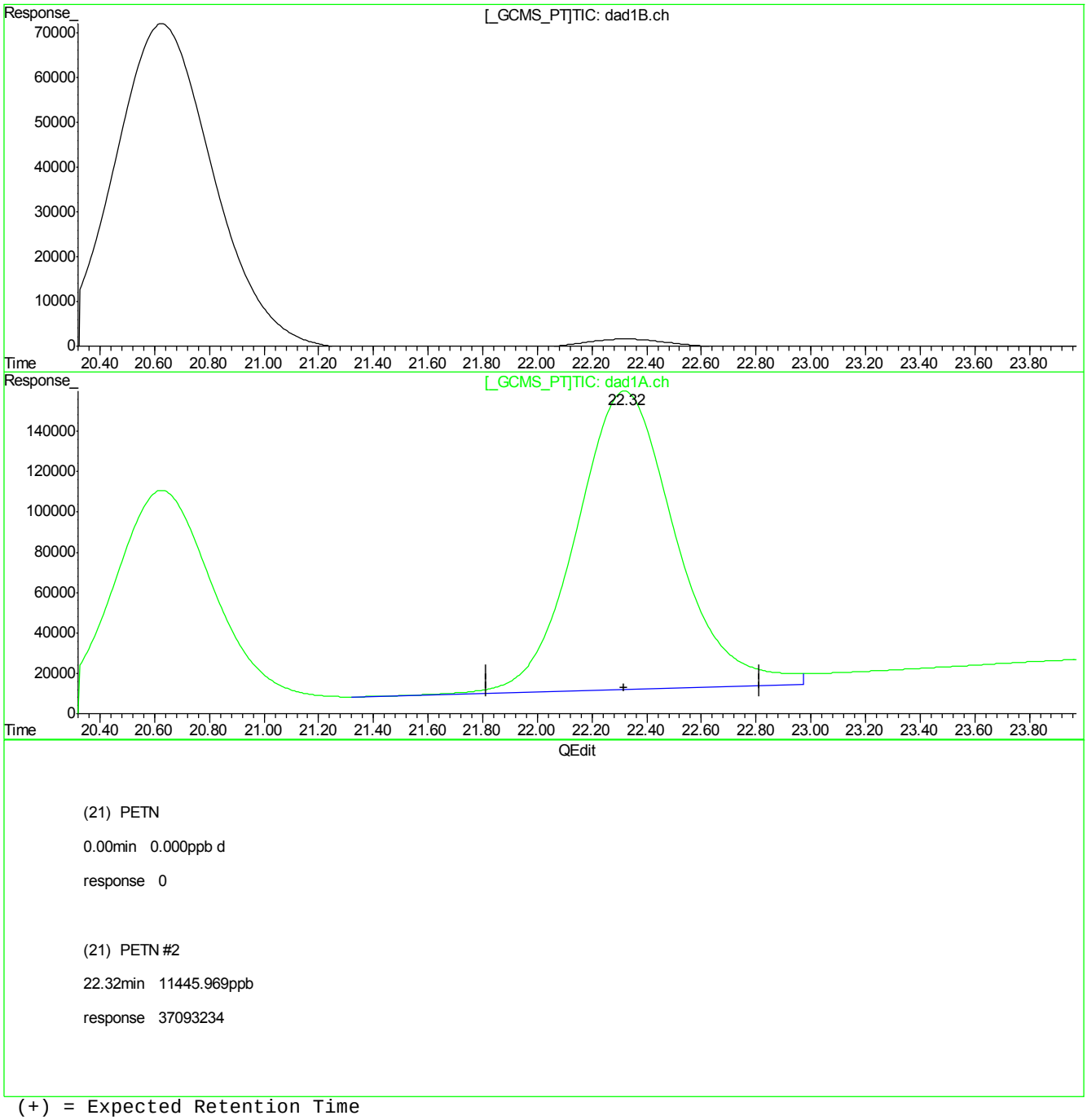
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613832.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:33	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.32	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration

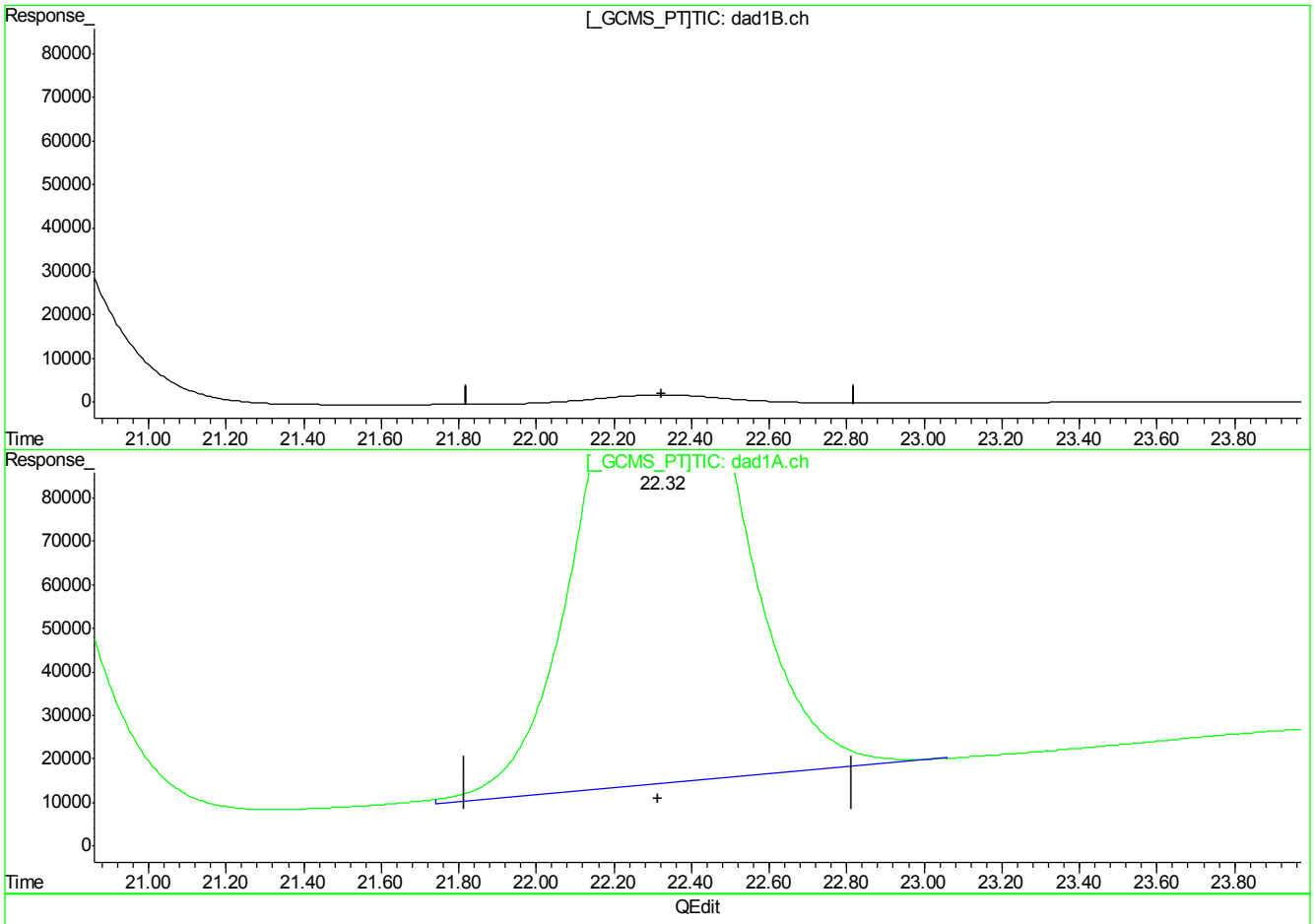


(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:30 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.32min 10881.043ppb m

response 35262467

(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:38 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15:22 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	5.00	5.00	4427614	4427614	311.255	311.279
2)	HMX	5.44	5.44	1660951	1660951	512.341	515.543
3)	DNX	5.57	5.57	3728715	3728715	481.707	479.565
4)	MNX	6.64	6.64	3500595	3500595	498.403	498.000
5)	1,3,5-Trinitrobe	7.53	7.53	5084566	5085276	490.713	490.831
6)	RDX	8.04	8.04	2404792	2408976	504.766	507.885
7)	1,3-Dinitrobenze	10.06	10.06	6578375	6672490	459.805	525.898
8)	Nitrobenzene	11.05	11.05	4554253	5345006	482.574	577.158
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	12.68	0	9322634	N.D. d	2766.568
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.89	14.89	3527390	5488834	493.369	540.982
14)	2,4-Dinitrotolue	15.60	15.60	6348698	4712292	484.298	495.523
15)	o-Nitrotoluene	17.20	17.20	2958205	4396320	512.102	509.800
16)	3,5-Dinitroanili	16.59	16.59	4689804	7872997	479.670	484.898
17)	p-Nitrotoluene	18.35	18.36	5769728	10811008	491.360	510.118
18)	4-Amino-2,6-Dini	18.35	18.36	5769728	10811008	491.360	508.634
19)	m-Nitrotoluene	19.62	19.62	3222471	5107269	546.610	525.201
20)	2-Amino-4,6-Dini	20.59	20.59	4643185	5903363	514.599	496.742
21)	PETN	0.00	22.29	0	9227376	N.D. d	2876.898m

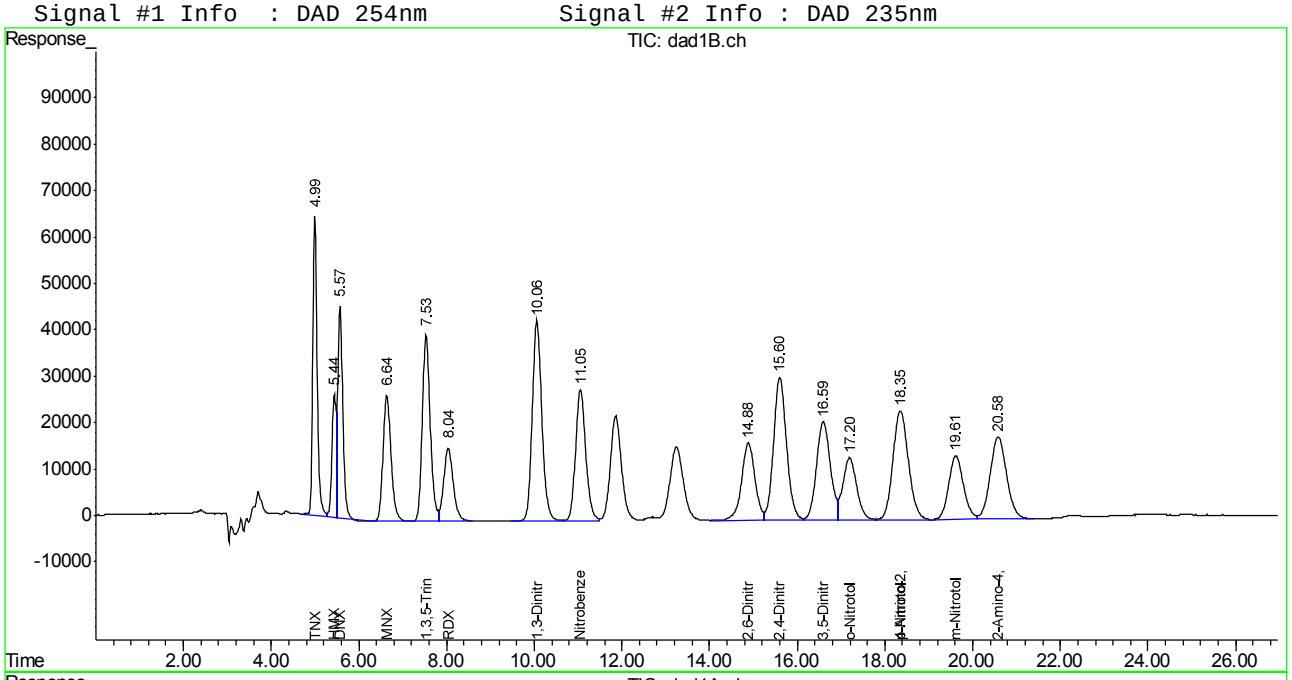
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 13:37:57 2017 Page 1

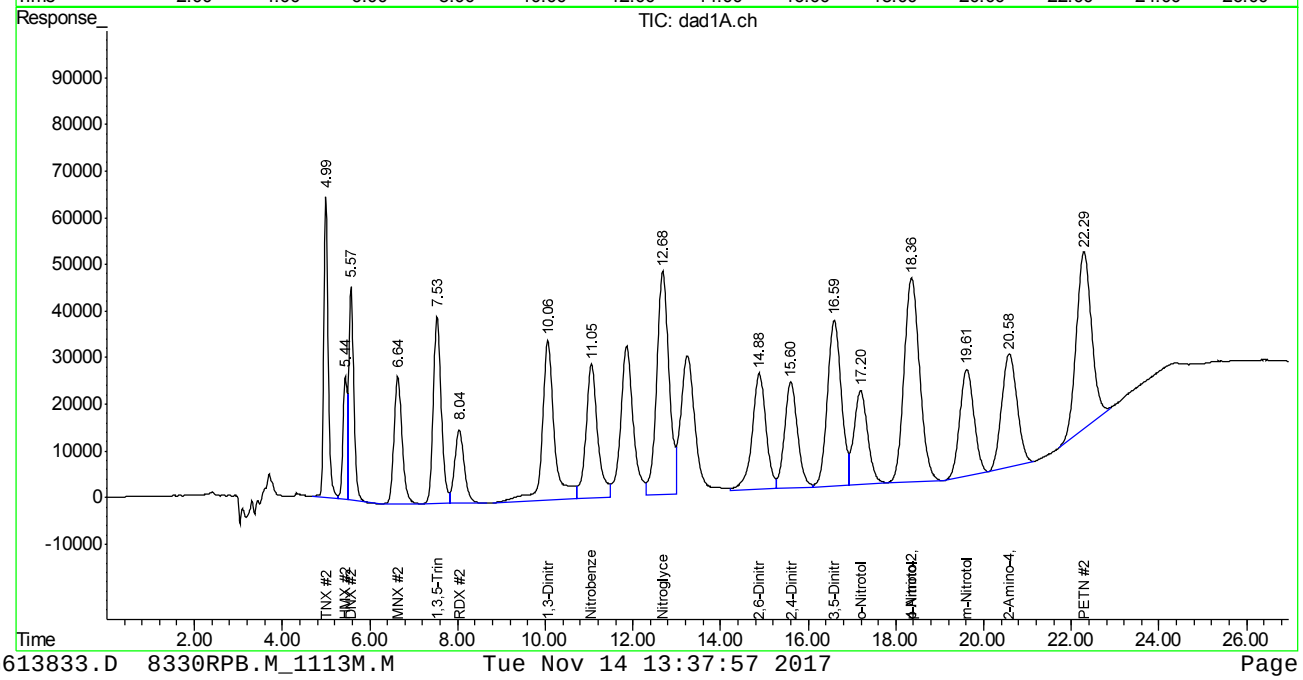
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

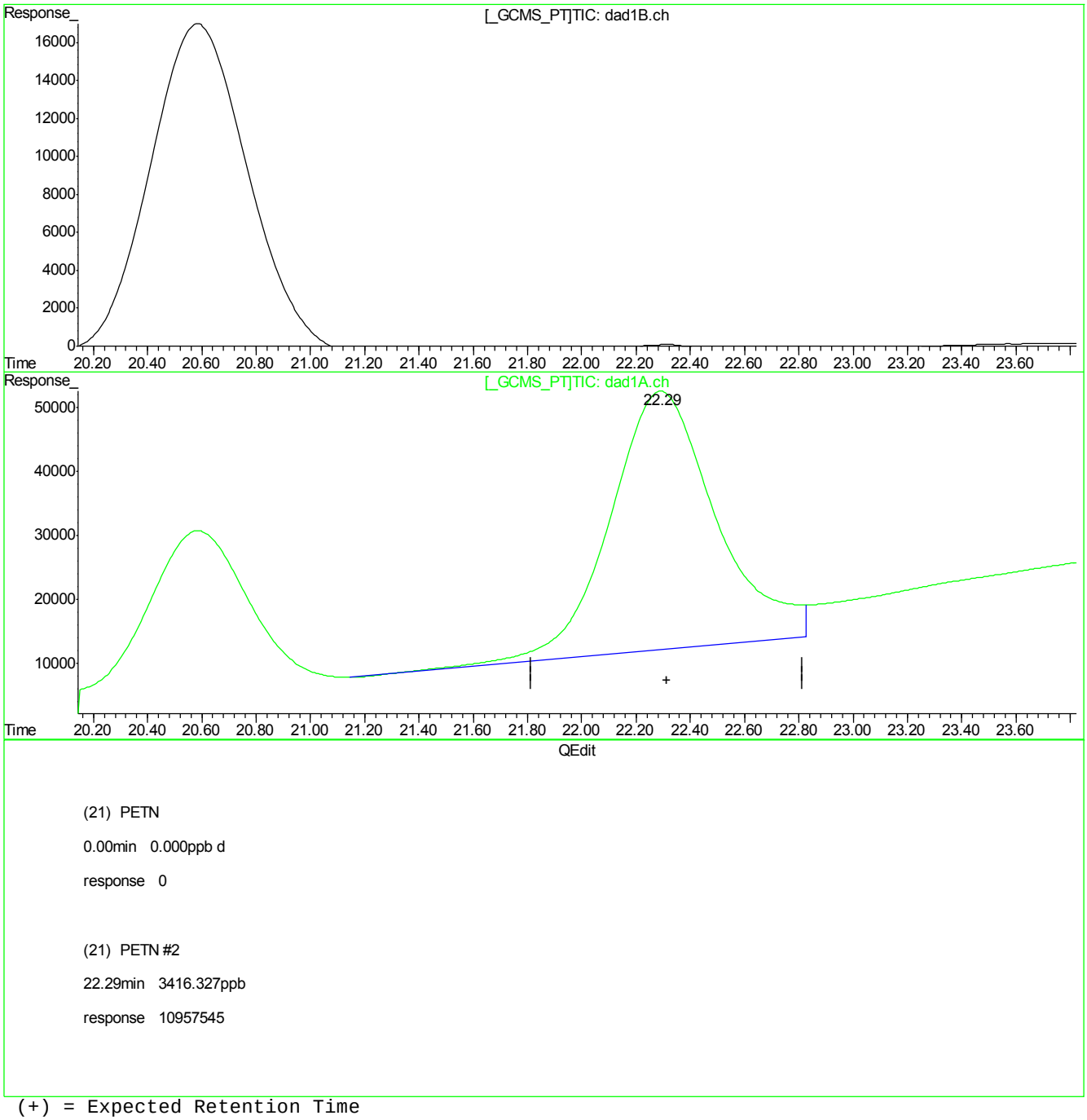
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613833.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 17:02	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.29	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

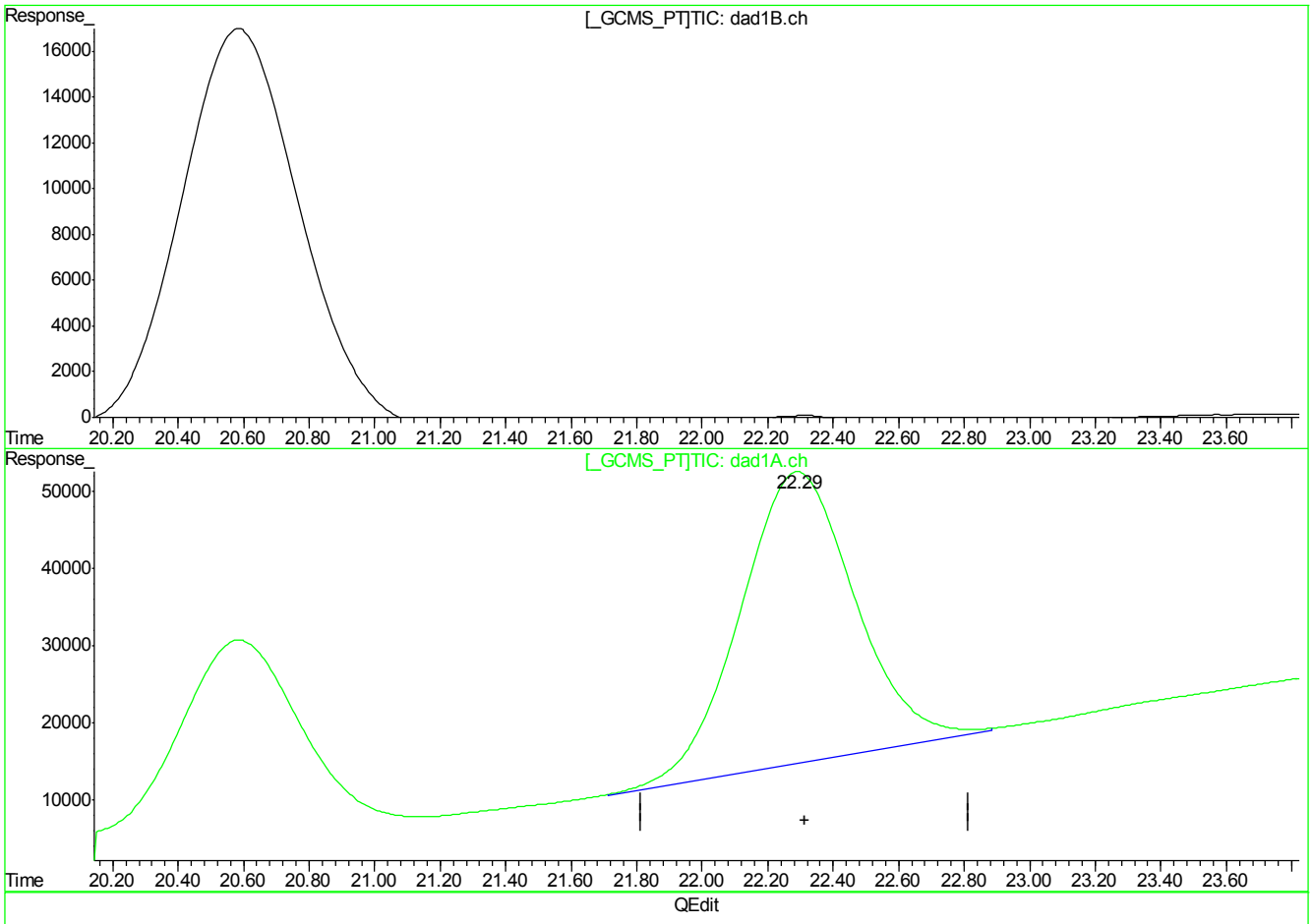


(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.29min 2876.898ppb m

response 9227376

(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:14 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:16:38 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	11.88	11.87	4812246	6368475	474.847	485.592m
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	13.27	13.27	4161106	7319038	513.472	520.034m
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

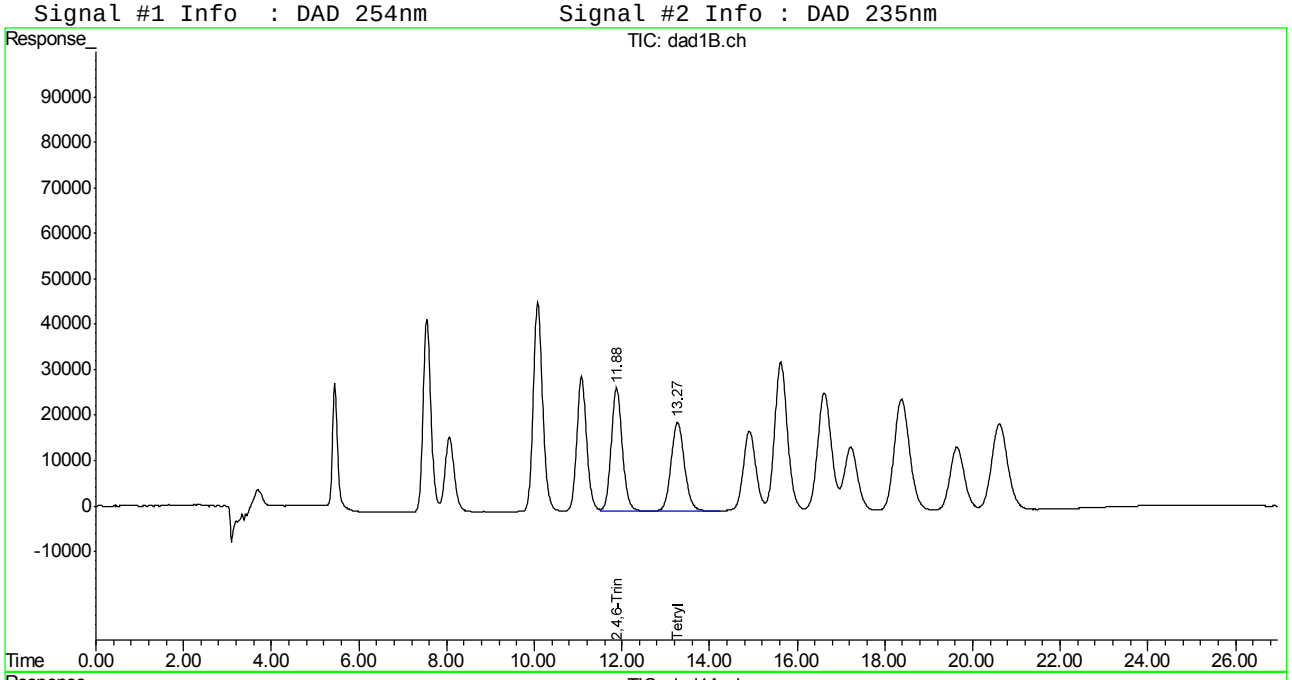
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:46:13 2017 Page 1

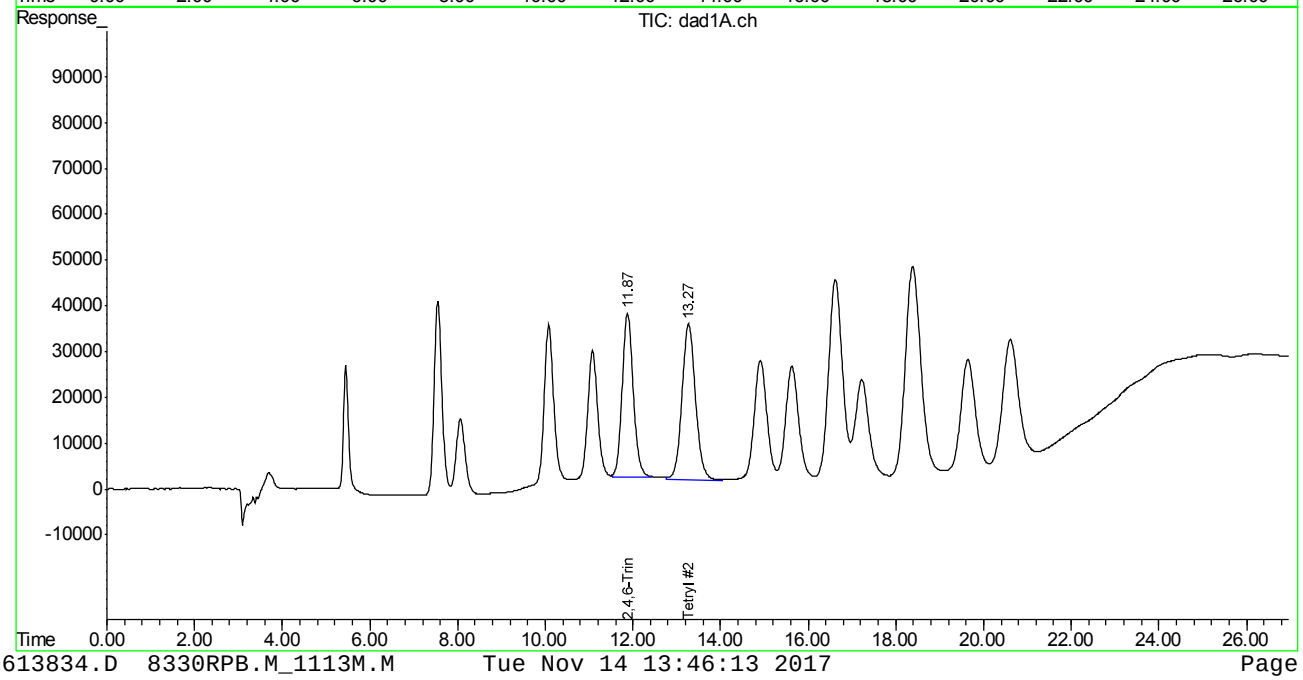
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 13:45 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

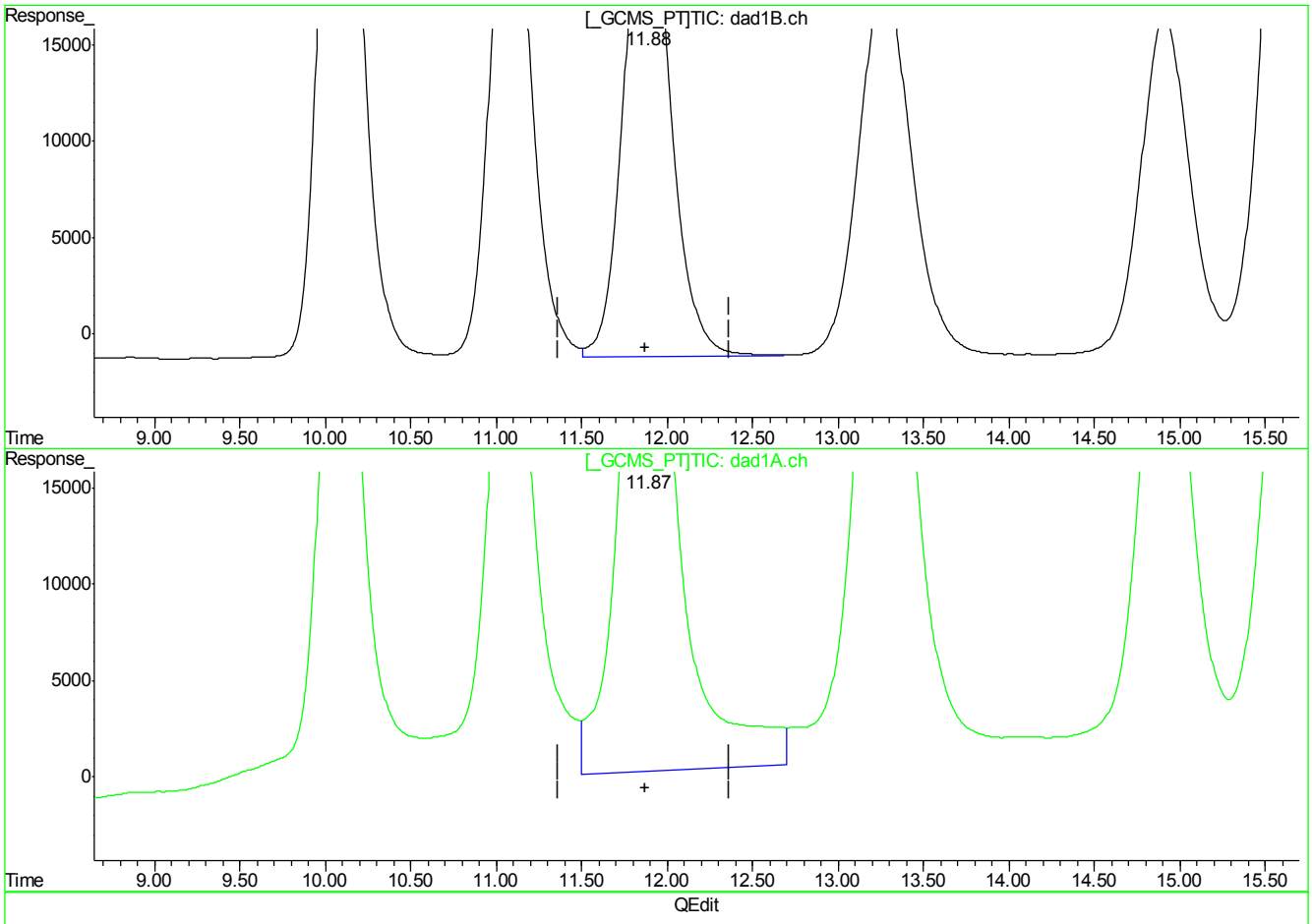
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613834.D	**Analyst approved:**	11/14/17 15:34 Evita Martinez
Injection Time:	11/13/17 17:32	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.88min 604.076ppb

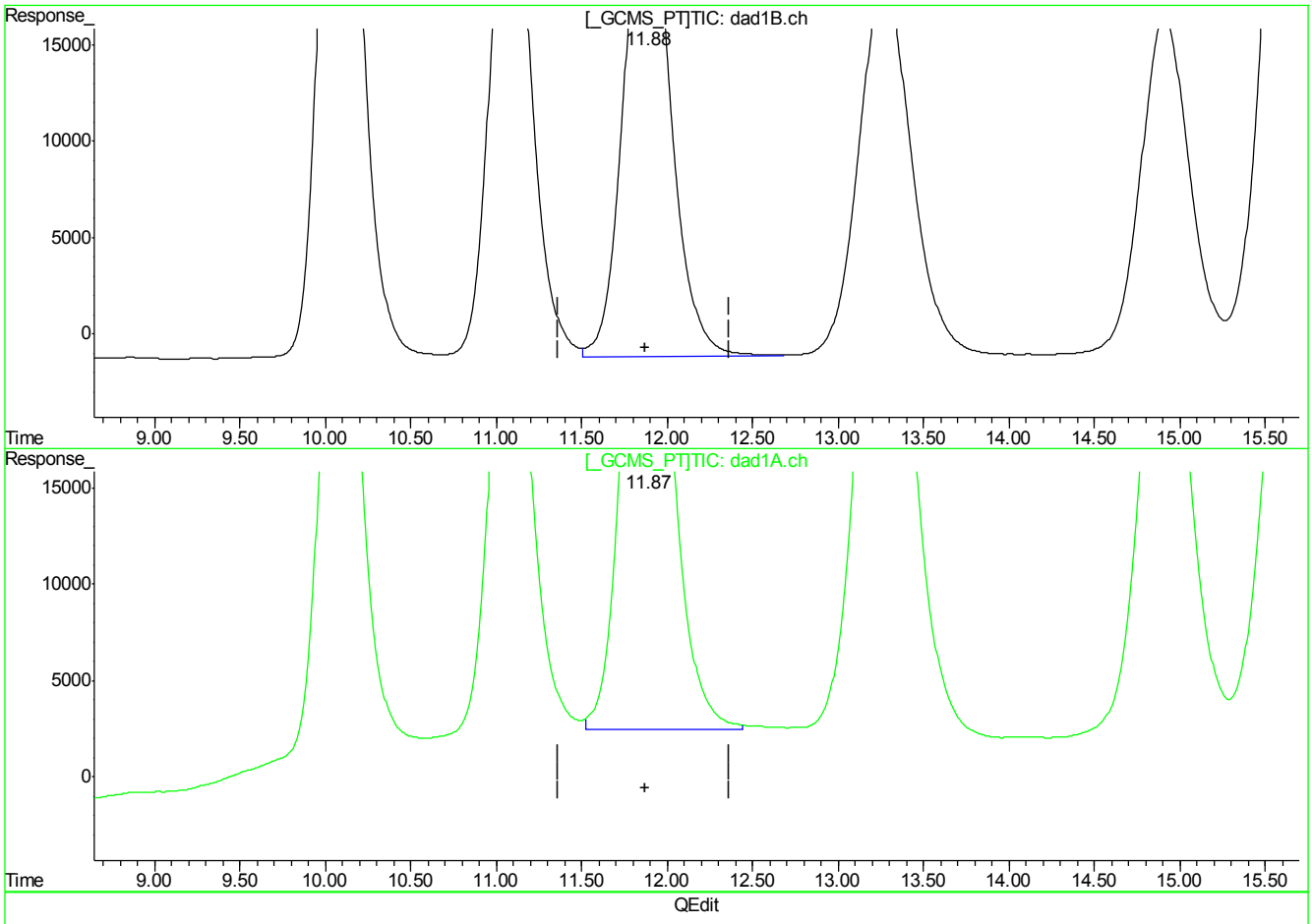
response 7922376

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.87min 485.592ppb m

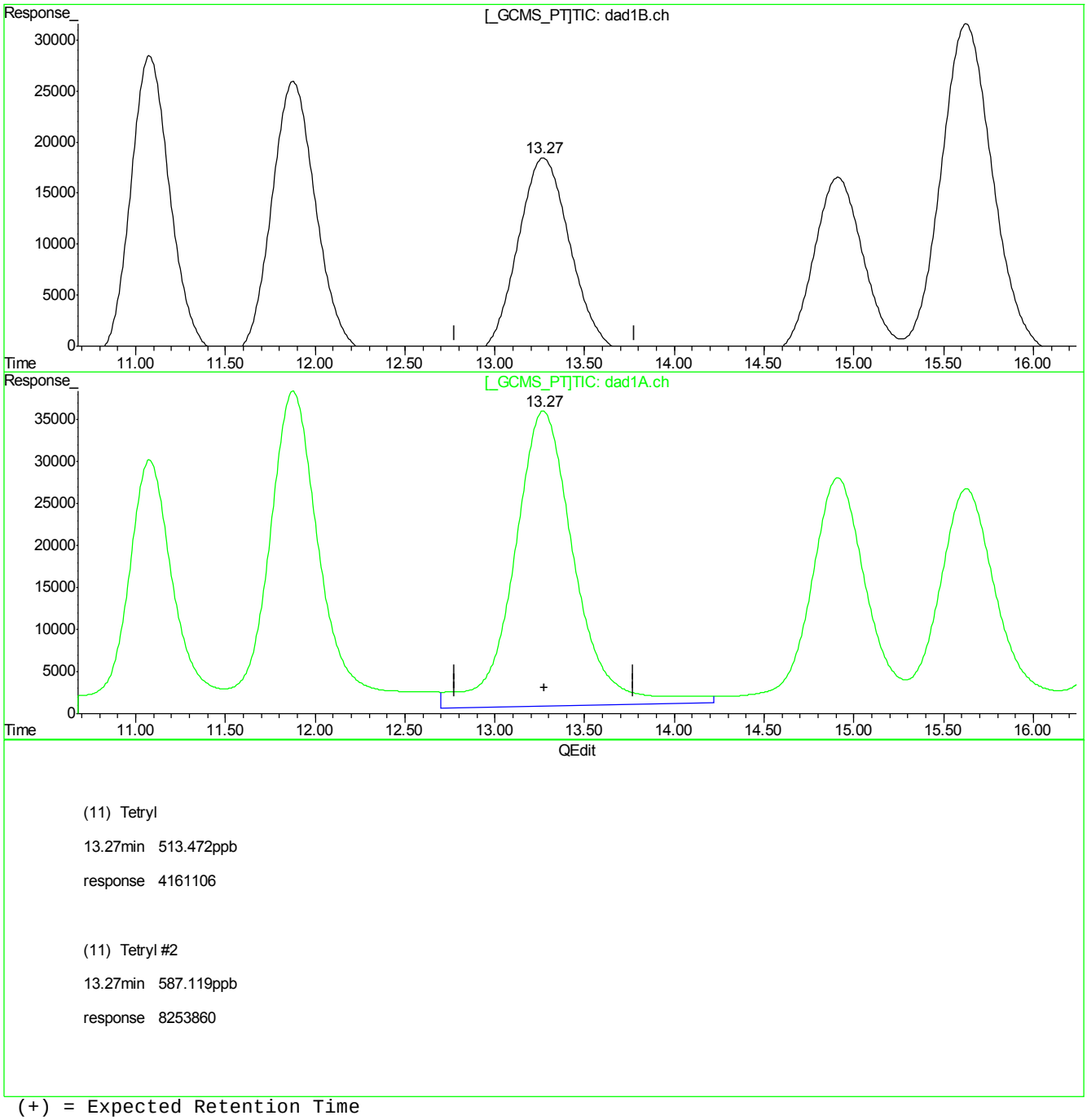
response 6368475

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 587.119ppb

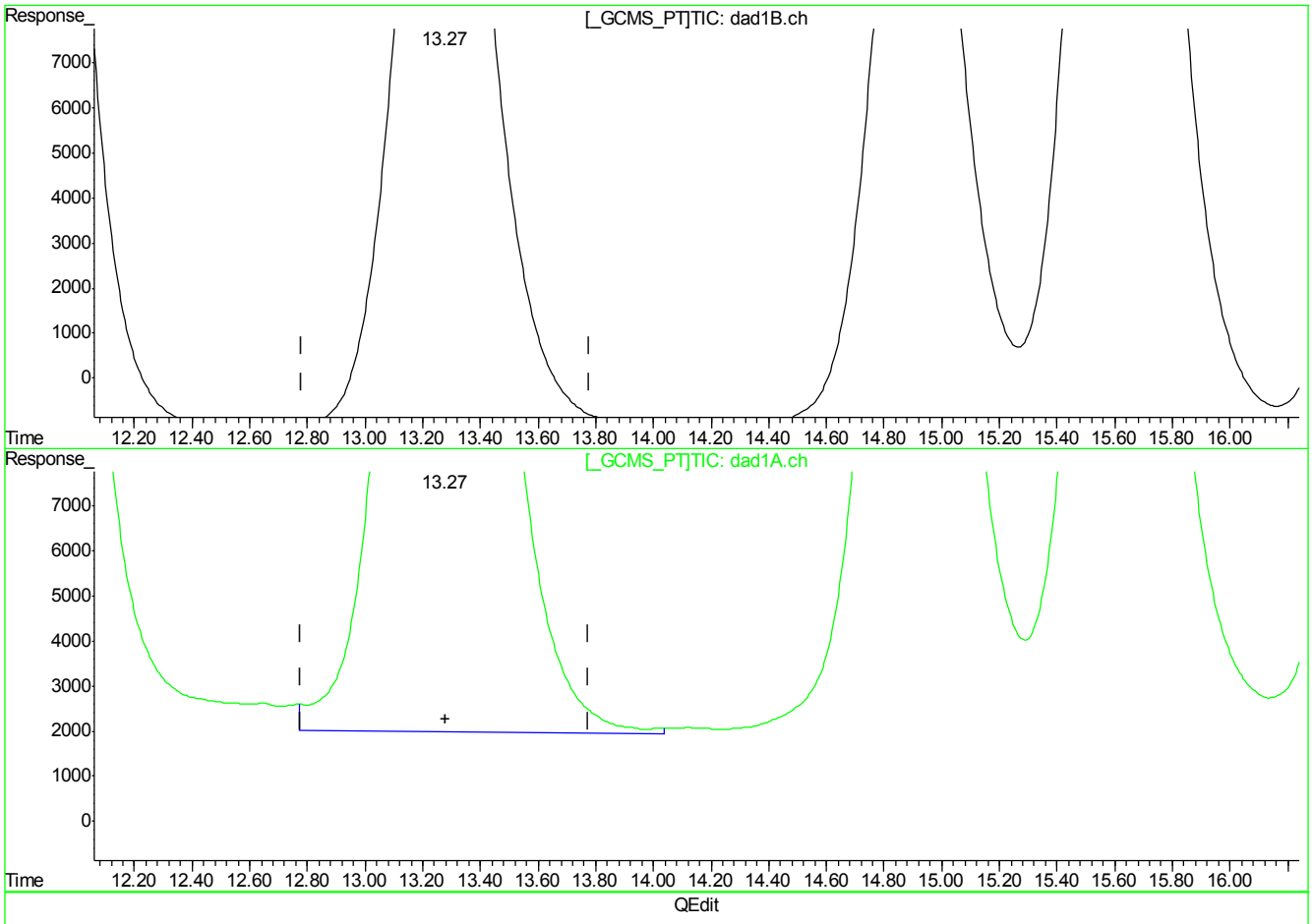
response 8253860

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:51 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 520.034ppb m

response 7319038

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:57 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/01/18 17:23

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0501RPB3\GG614527.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614527.D\dad1A.ch
Acq On : 01-May-2018, 09:54:02 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69539,Ggg2623,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 01 14:03:10 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.12	14.12	5585960	12403471	1075.281	1146.598
	Spiked Amount 500.000	Range 69 - 134		Recovery =		215.06%#	229.32%#
	Target Compounds						
1)	TNX	4.98	4.98	13399411	13399411	941.961	942.033
2)	HMX	5.37	5.37	3315966	3315966	1022.851	1029.243
3)	DNX	5.54	5.54	7912844	7912844	1022.249	1017.702
4)	MNX	6.53	6.53	7307132	7307132	1040.365	1039.525
5)	1,3,5-Trinitrobe	7.41	7.41	10142145	10138383	978.821	978.558
6)	RDX	7.86	7.86	4860110	4840805	1020.137	1020.589
7)	1,3-Dinitrobenze	9.88	9.88	14010541	11505873	979.288	941.326
8)	Nitrobenzene	10.82	10.82	9230189	9655094	978.042	1042.565
9)	2,4,6-Trinitroto	11.58	11.58	9861056	13926862	973.037	1061.915
10)	Nitroglycerin	0.00	12.30	0	17636813	N.D. d	5233.869
11)	Tetryl	12.82	12.82	7617100	14140927	939.934	1013.169
13)	2,6-Dinitrotolue	14.49	14.48	7254432	10781285	1014.662	1062.609
14)	2,4-Dinitrotolue	15.19	15.19	13073791	9935105	997.308	1058.827
15)	o-Nitrotoluene	16.68	16.68	5827795	8707913	1008.864	1009.774
16)	3,5-Dinitroanili	16.17	16.17	11164363	19151186	1131.796	1168.869
17)	p-Nitrotoluene	17.84	17.85	11942042	21700623	1017.005	1023.944
18)	4-Amino-2,6-Dini	17.84	17.85	11942042	21700623	1017.005	1020.967
19)	m-Nitrotoluene	19.03	19.03	6289809	10323358	1066.906	1061.593
20)	2-Amino-4,6-Dini	20.00	20.00	9403185	13175572	1042.144	1068.563
21)	PETN	0.00	21.52	0	17095329	N.D. d	5329.956m

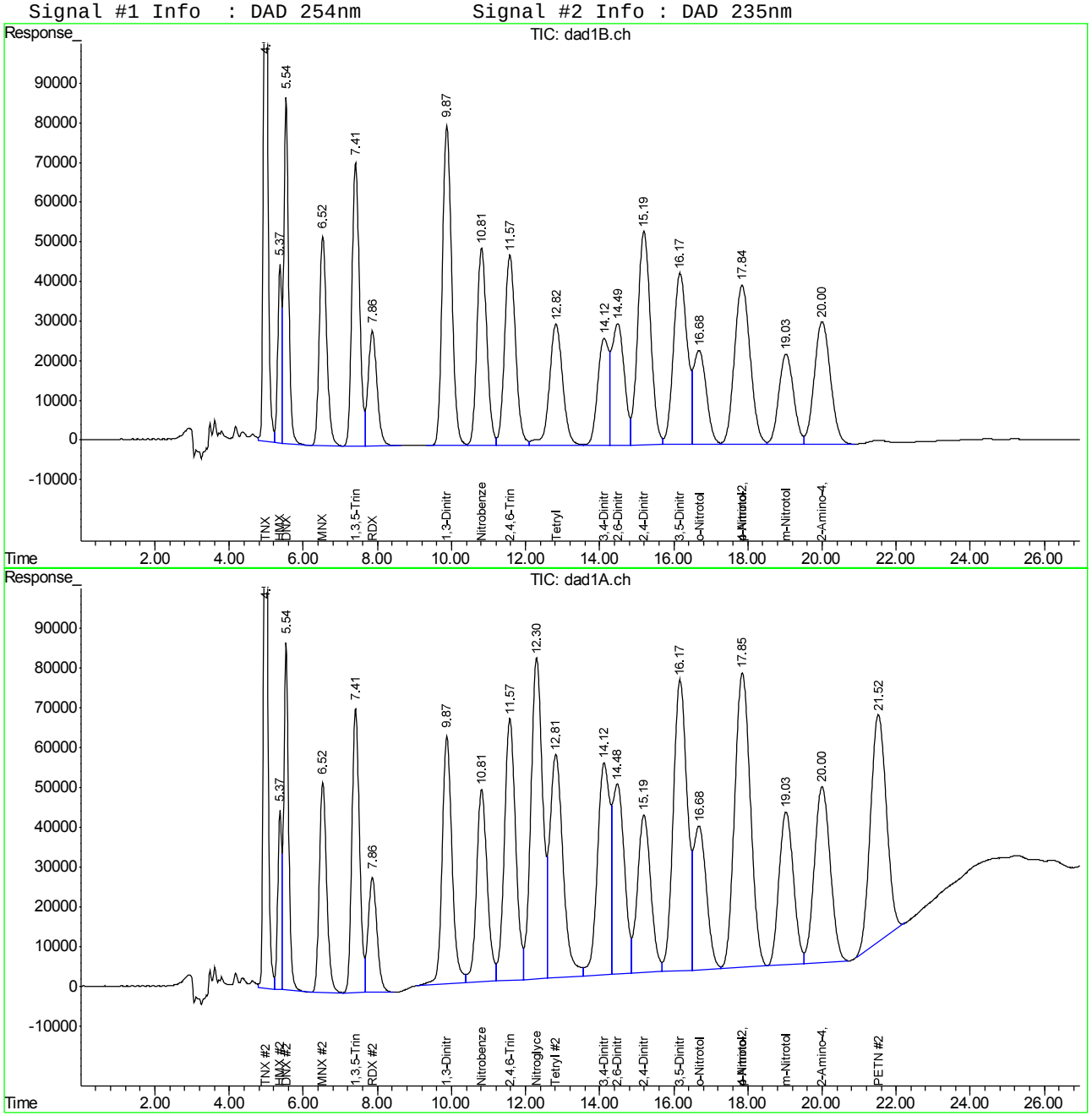
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614527.D 8330RPB.M_1113M.M Tue May 01 14:44:53 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0501RPB3\GG614527.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614527.D\dad1A.ch
Acq On : 01-May-2018, 09:54:02 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69539,Ggg2623,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 1 14:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



SGS FA53725

Manual Integration Approval Summary

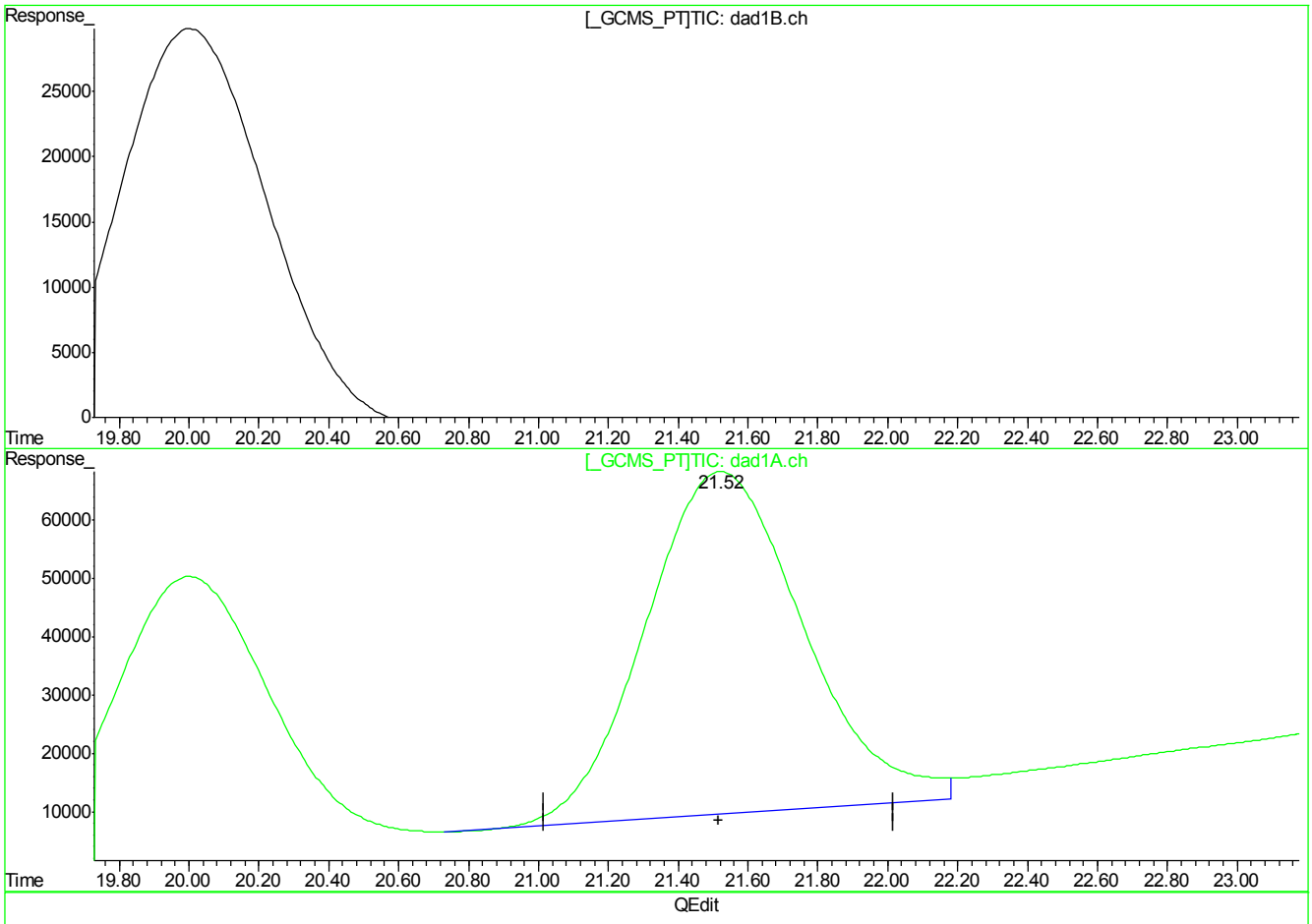
Sample Number:	GGG2623-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614527.D	**Analyst approved:**	05/01/18 14:50 Evita Martinez
Injection Time:	05/01/18 09:54	**Supervisor approved:**	05/01/18 17:23 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.52	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0501RPB3\GG614527.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614527.D\dad1A.ch
Acq On : 01-May-2018, 09:54:02 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69539,Ggg2623,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 1 14:03 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.52min 5724.890ppb

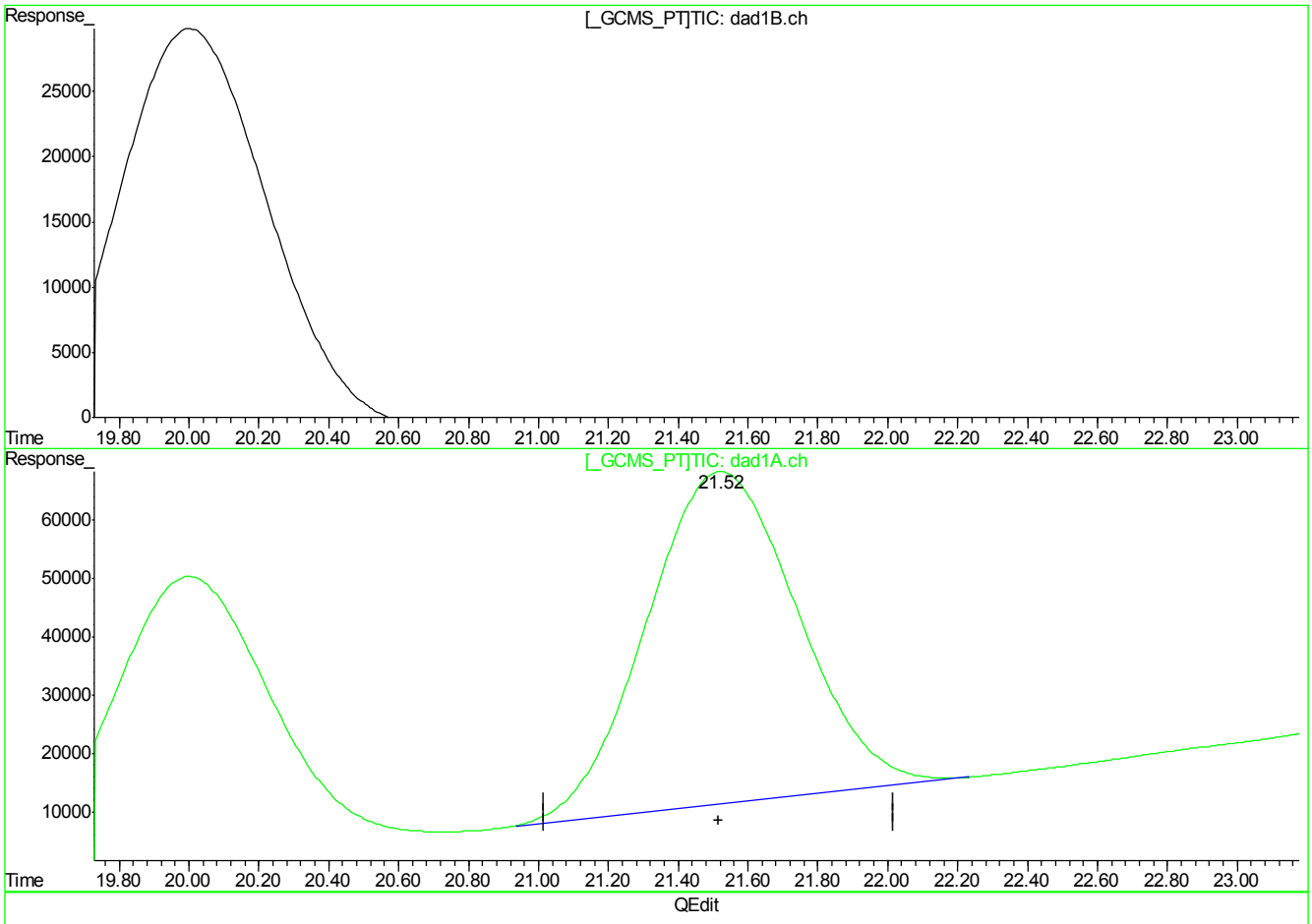
response 18362042

(+) = Expected Retention Time
GG614527.D 8330RPB.M_1113M.M Tue May 01 14:17:42 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0501RPB3\GG614527.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614527.D\dad1A.ch
Acq On : 01-May-2018, 09:54:02 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69539,Ggg2623,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 1 14:03 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.52min 5329.956ppb m

response 17095329

(+) = Expected Retention Time
GG614527.D 8330RPB.M_1113M.M Tue May 01 14:17:49 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/01/18 17:23

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0501RPB3\GG614535.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614535.D\dad1A.ch
Acq On : 01-May-2018, 13:49:45 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69837,Ggg2623,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 01 14:18:36 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.23	5591042	12159079	1076.259	1124.006
	Spiked Amount 500.000	Range 70 - 136		Recovery =		215.25%#	224.80%#
	Target Compounds						
1)	TNX	4.99	4.99	13455260	13455260	945.887	945.960
2)	HMX	5.39	5.39	3417668	3417668	1054.222	1060.810
3)	DNX	5.55	5.55	8090188	8090188	1045.160	1040.511
4)	MNX	6.54	6.54	7228711	7228711	1029.199	1028.368
5)	1,3,5-Trinitrobe	7.44	7.44	10079256	10081976	972.751	973.113
6)	RDX	7.89	7.89	4849663	4858895	1017.944	1024.403
7)	1,3-Dinitrobenze	9.92	9.92	14011243	11549642	979.337	945.246
8)	Nitrobenzene	10.87	10.87	9323460	9493676	987.925	1025.135
9)	2,4,6-Trinitroto	11.64	11.64	9787363	13672357	965.765	1042.509
10)	Nitroglycerin	0.00	12.38	0	17152850	N.D. d	5090.249
11)	Tetryl	12.91	12.91	7484523	13647920	923.574	977.249
13)	2,6-Dinitrotolue	14.60	14.59	7160701	10542608	1001.552	1039.085
14)	2,4-Dinitrotolue	15.31	15.31	12985000	9885490	990.535	1053.403
15)	o-Nitrotoluene	16.85	16.84	5944245	8816189	1029.023	1022.330
16)	3,5-Dinitroanili	16.27	16.27	10967903	18618044	1112.175	1136.811
17)	p-Nitrotoluene	18.00	18.01	11913186	21780993	1014.547	1027.737
18)	4-Amino-2,6-Dini	18.00	18.01	11913186	21780993	1014.547	1024.748
19)	m-Nitrotoluene	19.22	19.22	6307962	10456281	1069.985	1075.262
20)	2-Amino-4,6-Dini	20.18	20.18	9301366	13051942	1030.860	1059.166
21)	PETN	0.00	21.76	0	17089867	N.D. d	5328.254m

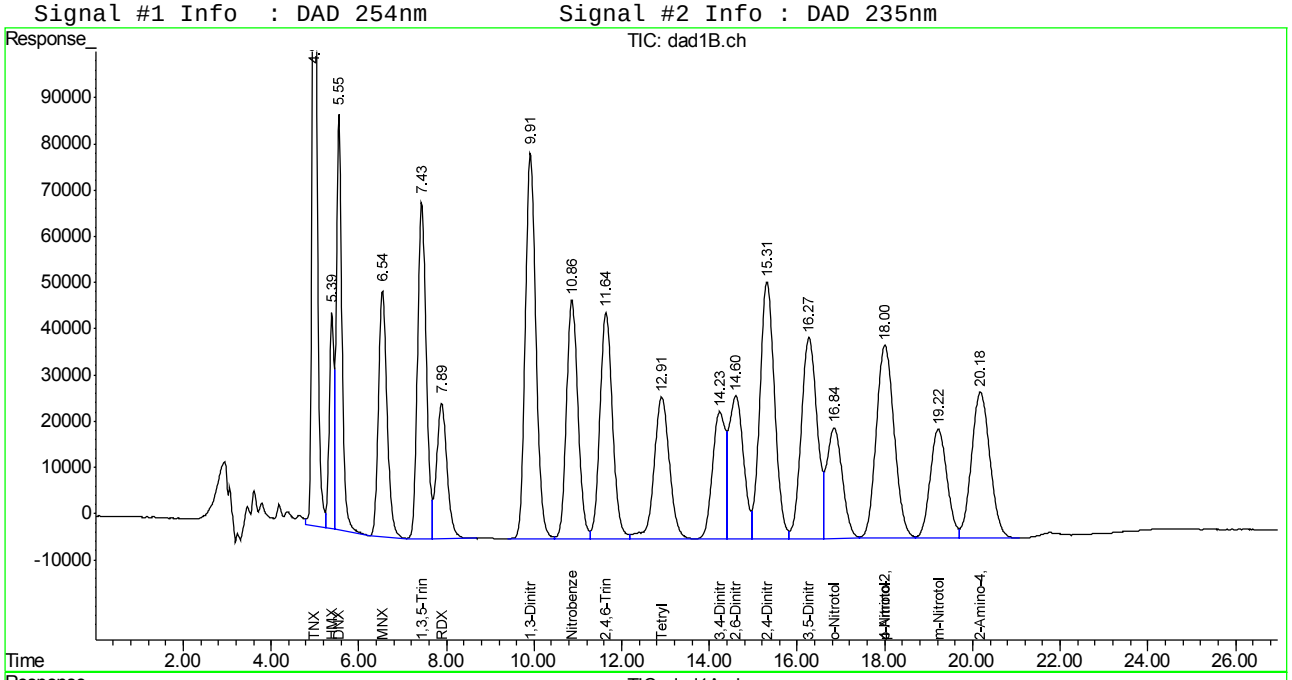
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614535.D 8330RPB.M_1113M.M Tue May 01 14:45:01 2018 Page 1

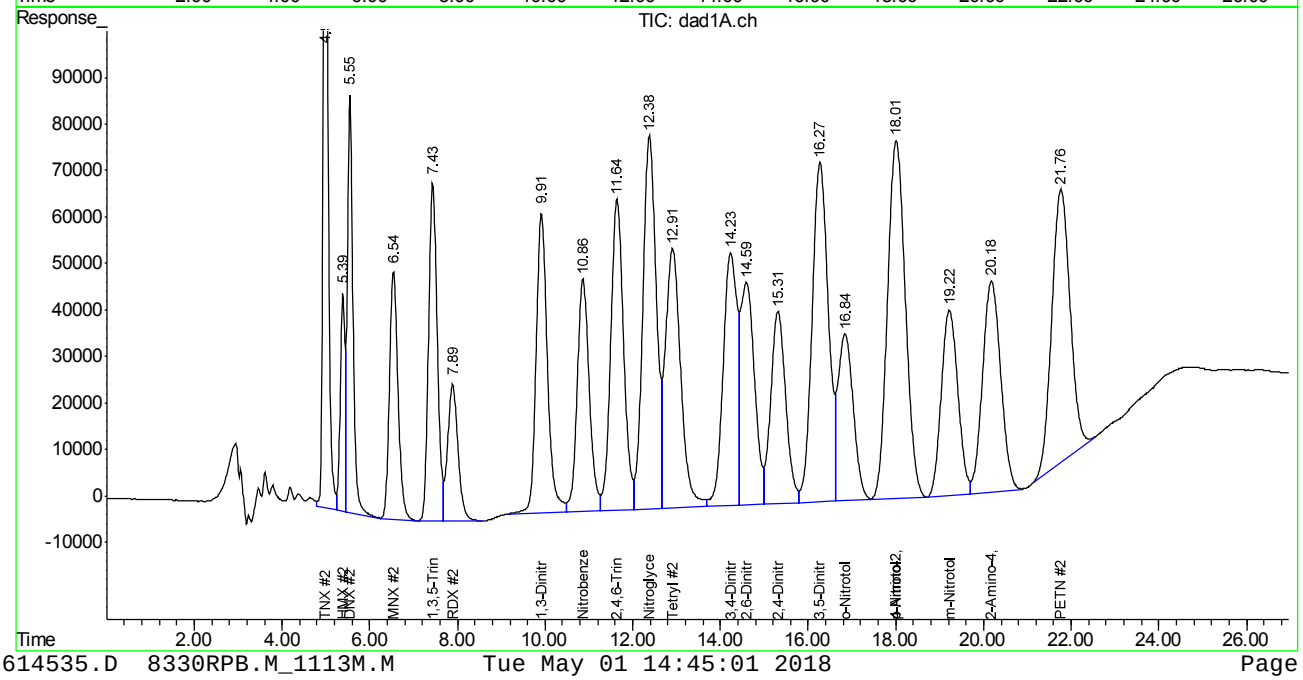
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0501RPB3\GG614535.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614535.D\dad1A.ch
Acq On : 01-May-2018, 13:49:45 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69837,Ggg2623,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 1 14:44 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

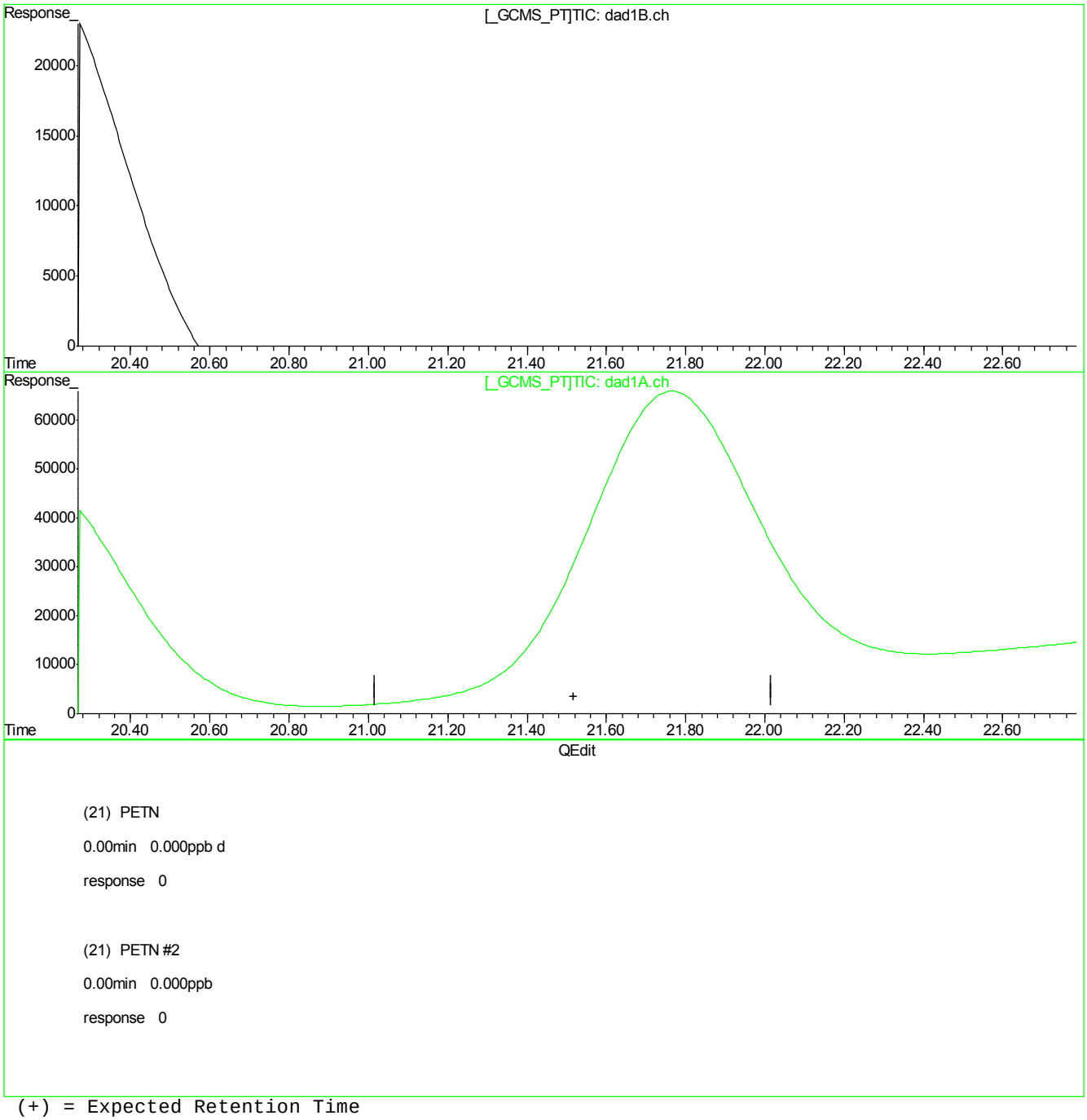
Sample Number:	GGG2623-ECC2571	**Method:**	SW846 8330B
Lab FileID:	GG614535.D	**Analyst approved:**	05/01/18 14:50 Evita Martinez
Injection Time:	05/01/18 13:49	**Supervisor approved:**	05/01/18 17:23 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.76	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0501RPB3\GG614535.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614535.D\dad1A.ch
Acq On : 01-May-2018, 13:49:45 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69837,Ggg2623,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 1 14:18 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration

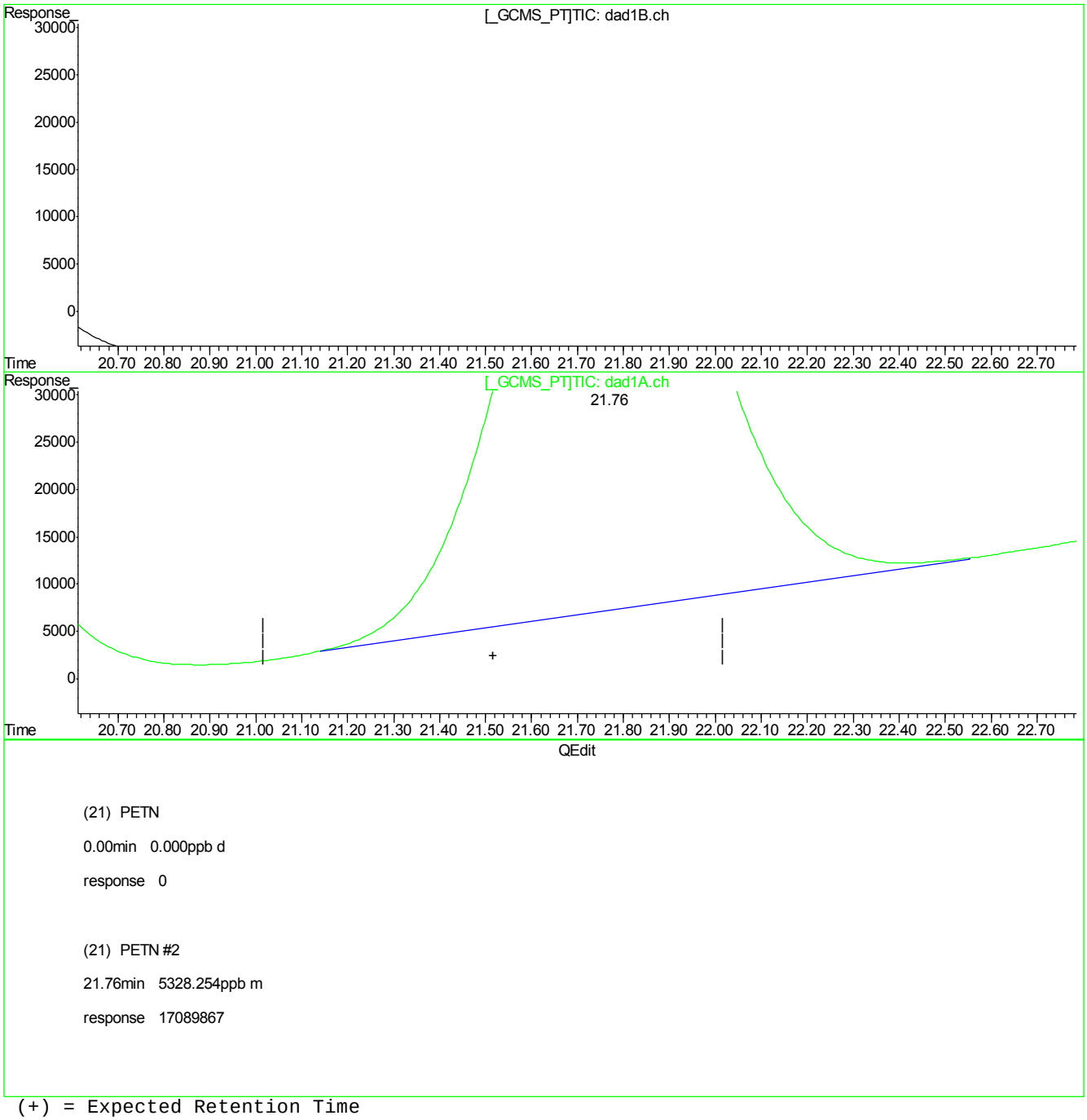


(+) = Expected Retention Time
GG614535.D 8330RPB.M_1113M.M Tue May 01 14:44:22 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0501RPB3\GG614535.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0501RPB3\GG614535.D\dad1A.ch
Acq On : 01-May-2018, 13:49:45 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69837,Ggg2623,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 1 14:18 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 01 14:03:03 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614535.D 8330RPB.M_1113M.M Tue May 01 14:44:26 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:15

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614586.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614586.D\dad1A.ch
Acq On : 07-May-2018, 15:23:02 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2625,5.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:05:58 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	5806852	13381877	1117.802	1237.044
	Spiked Amount 500.000	Range 69 - 134		Recovery =		223.56%#	247.41%#
	Target Compounds						
1)	TNX	5.00	5.00	13919340	13919340	978.512	978.586
2)	HMX	5.40	5.40	3487236	3487236	1075.681	1082.403
3)	DNX	5.56	5.56	8243705	8243705	1064.992	1060.256
4)	MNX	6.56	6.56	7524128	7524128	1071.260	1070.395
5)	1,3,5-Trinitrobe	7.45	7.45	10455171	10443207	1009.031	1007.979
6)	RDX	7.90	7.90	5043437	4979201	1058.617	1049.767
7)	1,3-Dinitrobenze	9.94	9.94	14519396	11736880	1014.855	962.050
8)	Nitrobenzene	10.90	10.90	9559117	10143709	1012.896	1095.326
9)	2,4,6-Trinitroto	11.67	11.67	10116744	14623335	998.267	1115.020
10)	Nitroglycerin	0.00	12.41	0	18396833	N.D. d	5459.411
11)	Tetryl	12.93	12.92	7706460	15272920	950.961	1095.813
13)	2,6-Dinitrotolue	14.63	14.62	7420881	11473215	1037.943	1130.806
14)	2,4-Dinitrotolue	15.33	15.33	13449101	10095412	1025.938	1076.364
15)	o-Nitrotoluene	16.88	16.88	6088941	8706950	1054.072	1009.662
16)	3,5-Dinitroanili	16.27	16.27	11378624	18987456	1153.183	1159.027
17)	p-Nitrotoluene	18.03	18.03	12298598	22499252	1047.369	1061.628
18)	4-Amino-2,6-Dini	18.03	18.03	12298598	22499252	1047.369	1058.540
19)	m-Nitrotoluene	19.26	19.26	6448797	10669944	1093.875	1097.234
20)	2-Amino-4,6-Dini	20.18	20.19	9659587	13270082	1070.561	1075.739
21)	PETN	0.00	21.77	0	17361589	N.D. d	5412.971m

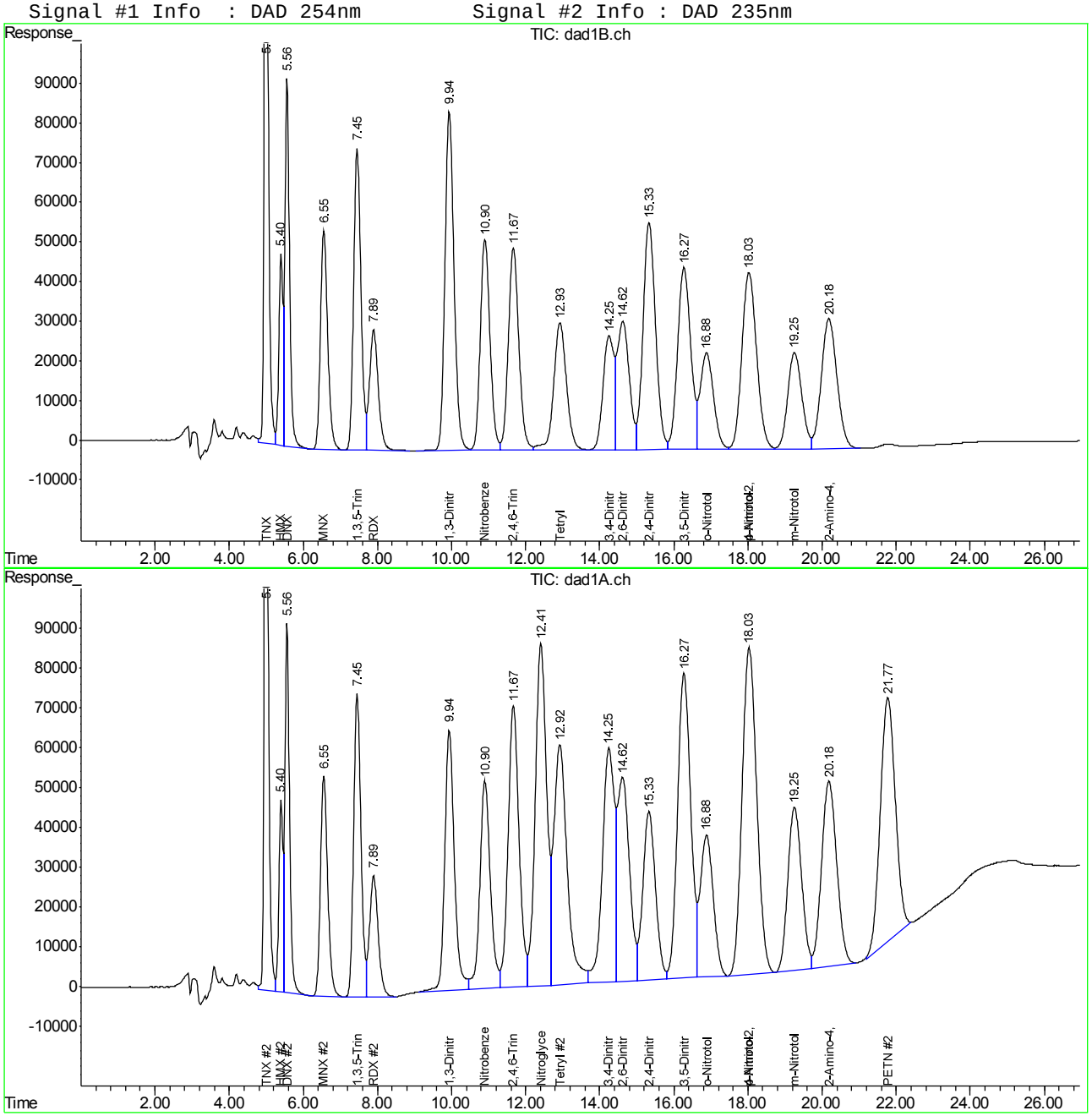
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614586.D 8330RPB.M_1113M.M Tue May 08 11:21:40 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614586.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614586.D\dad1A.ch
Acq On : 07-May-2018, 15:23:02 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2625,5.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:07 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



SGS FA53725

Manual Integration Approval Summary

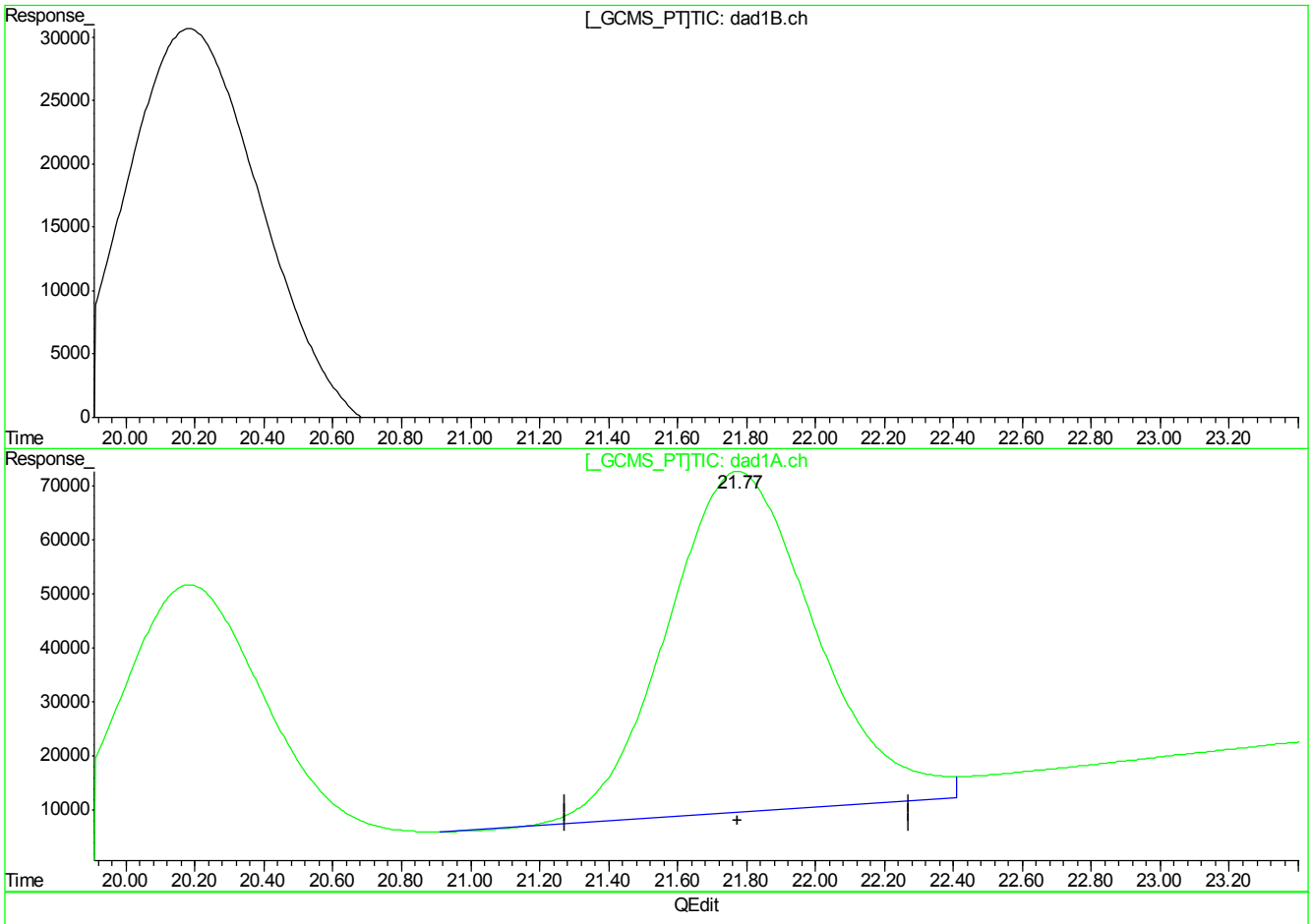
Sample Number:	GGG2625-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614586.D	**Analyst approved:**	05/08/18 11:23 Evita Martinez
Injection Time:	05/07/18 15:23	**Supervisor approved:**	05/08/18 16:15 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.77	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614586.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614586.D\dad1A.ch
Acq On : 07-May-2018, 15:23:02 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2625,5.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 5830.039ppb

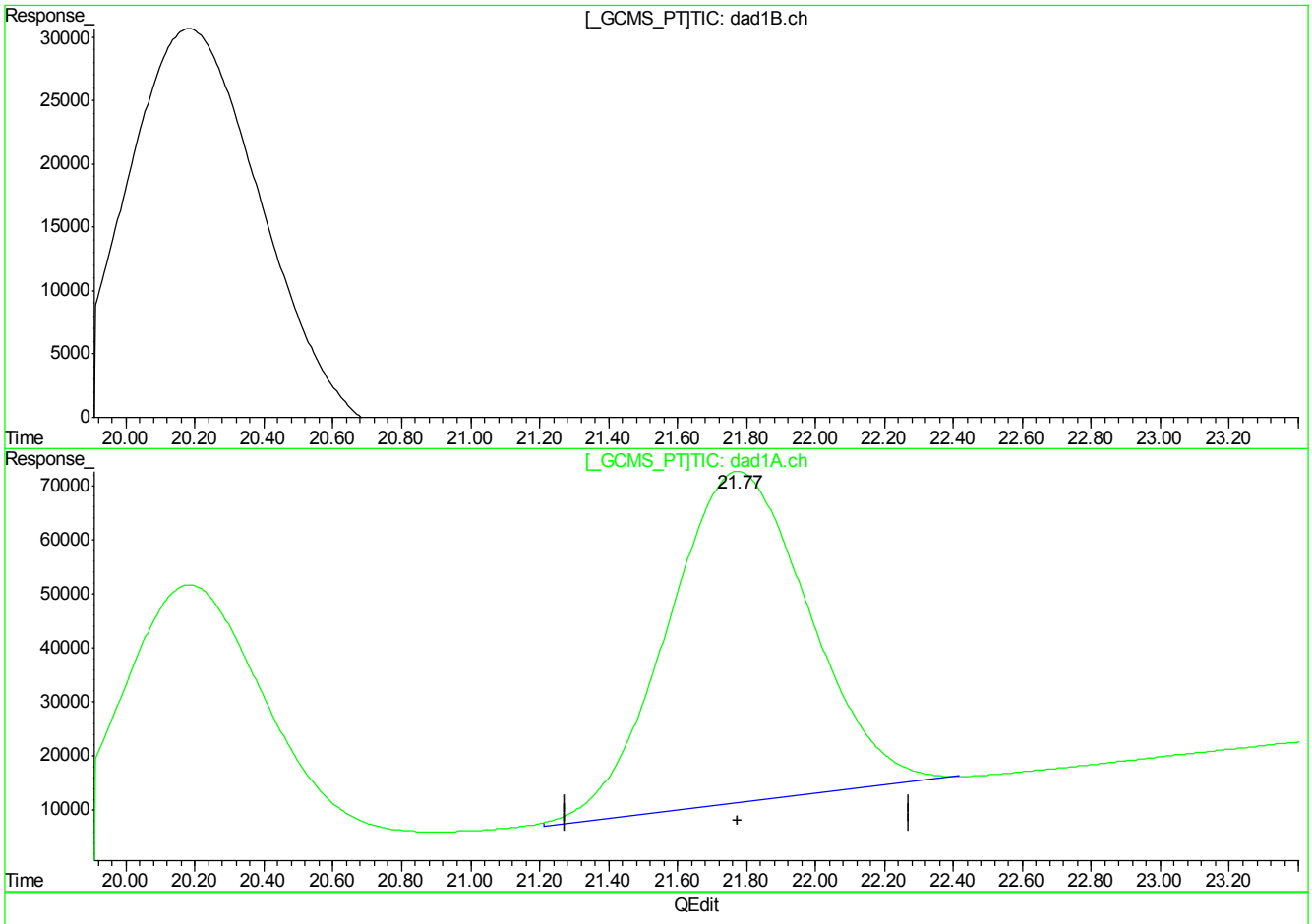
response 18699297

(+) = Expected Retention Time
GG614586.D 8330RPB.M_1113M.M Tue May 08 11:07:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614586.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614586.D\dad1A.ch
Acq On : 07-May-2018, 15:23:02 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2625,5.0,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.77min 5412.971ppb m

response 17361589

(+) = Expected Retention Time
GG614586.D 8330RPB.M_1113M.M Tue May 08 11:07:26 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:15

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614597.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614597.D\dad1A.ch
Acq On : 07-May-2018, 20:47:11 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 11:06:09 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	5729775	12646999	1102.965	1169.110
	Spiked Amount 500.000	Range 69 - 134		Recovery =		220.59%#	233.82%#
	Target Compounds						
1)	TNX	5.00	5.00	13675541	13675541	961.373	961.446
2)	HMX	5.41	5.41	3391106	3391106	1046.028	1052.565
3)	DNX	5.57	5.57	8245468	8245468	1065.220	1060.482
4)	MNX	6.54	6.54	7436739	7436739	1058.818	1057.963
5)	1,3,5-Trinitrobe	7.42	7.42	10350989	10350612	998.976	999.042
6)	RDX	7.87	7.87	4978373	4974721	1044.960	1048.823
7)	1,3-Dinitrobenze	9.90	9.90	14382209	11869657	1005.266	974.001
8)	Nitrobenzene	10.86	10.86	9513676	10086449	1008.081	1089.143
9)	2,4,6-Trinitroto	11.62	11.62	10048070	14307285	991.490	1090.922
10)	Nitroglycerin	0.00	12.36	0	18063316	N.D. d	5360.437
11)	Tetryl	12.88	12.87	7658853	14431844	945.086	1034.385
13)	2,6-Dinitrotolue	14.60	14.59	7394405	11570651	1034.240	1140.409
14)	2,4-Dinitrotolue	15.30	15.30	13370140	10771662	1019.914	1150.510
15)	o-Nitrotoluene	16.83	16.83	6084924	9642283	1053.376	1118.124
16)	3,5-Dinitroanili	16.27	16.27	11248556	19882038	1140.201	1212.773
17)	p-Nitrotoluene	17.99	18.00	12181597	22377841	1037.405	1055.899
18)	4-Amino-2,6-Dini	17.99	18.00	12181597	22377841	1037.405	1052.828
19)	m-Nitrotoluene	19.22	19.22	6404380	10729271	1086.340	1103.334
20)	2-Amino-4,6-Dini	20.18	20.18	9545353	13128445	1057.900	1064.982
21)	PETN	0.00	21.71	0	17132702	N.D. d	5341.609m

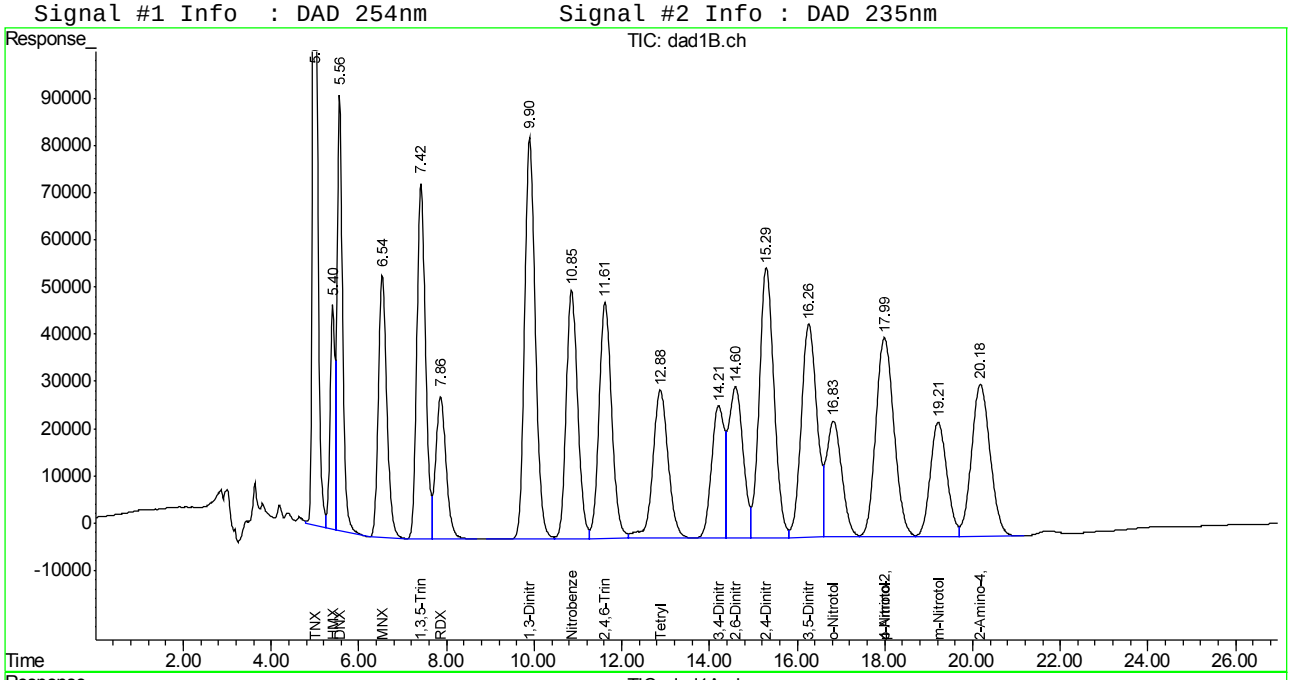
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614597.D 8330RPB.M_1113M.M Tue May 08 11:19:06 2018 Page 1

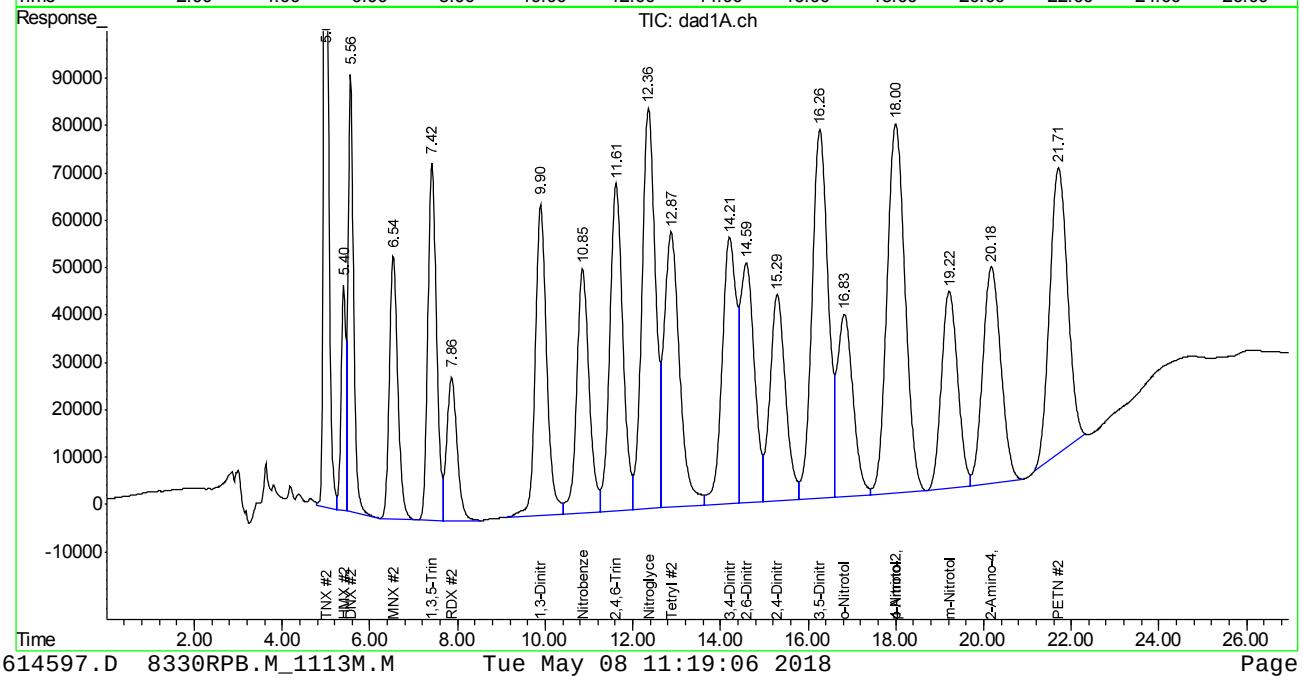
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0507RPB3\GG614597.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614597.D\dad1A.ch
Acq On : 07-May-2018, 20:47:11 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:18 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:05:40 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

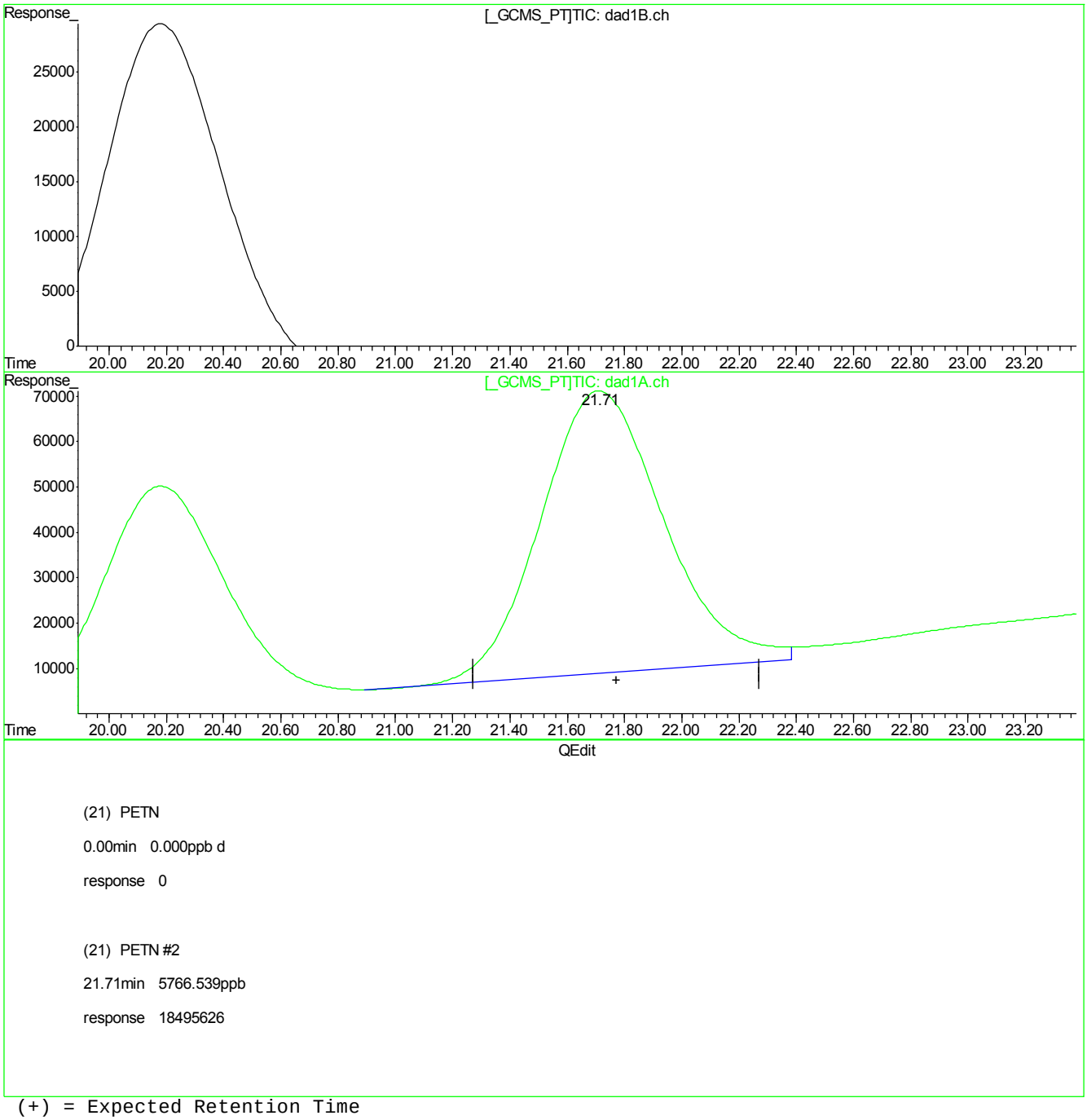
Sample Number:	GGG2625-ECC2571	**Method:**	SW846 8330B
Lab FileID:	GG614597.D	**Analyst approved:**	05/08/18 11:23 Evita Martinez
Injection Time:	05/07/18 20:47	**Supervisor approved:**	05/08/18 16:15 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.71	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614597.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614597.D\dad1A.ch
Acq On : 07-May-2018, 20:47:11 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:16:38 2018
Response via : Multiple Level Calibration

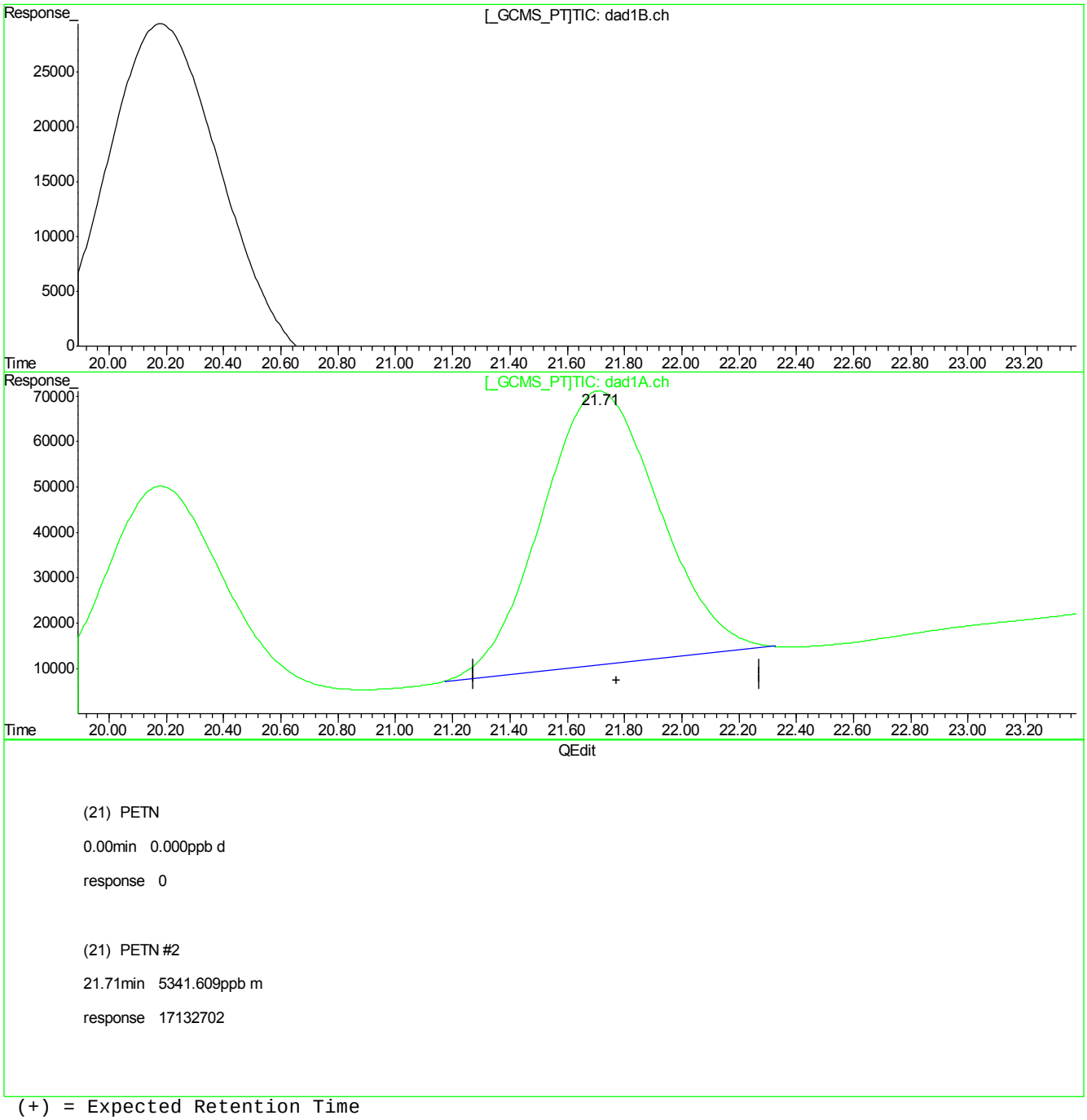


(+) = Expected Retention Time
GG614597.D 8330RPB.M_1113M.M Tue May 08 11:18:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0507RPB3\GG614597.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0507RPB3\GG614597.D\dad1A.ch
Acq On : 07-May-2018, 20:47:11 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69919,Ggg2625,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 11:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 11:16:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.71min 5341.609ppb m

response 17132702

(+) = Expected Retention Time
GG614597.D 8330RPB.M_1113M.M Tue May 08 11:18:21 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:16

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614602.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614602.D\dad1A.ch
Acq On : 08-May-2018, 09:29:06 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69919,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:32:25 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.26	14.25	5799368	12770715	1116.362	1180.547
	Spiked Amount 500.000	Range 69 - 134		Recovery =		223.27%#	236.11%#
	Target Compounds						
1)	TNX	4.99	4.99	13979316	13979316	982.728	982.803
2)	HMX	5.40	5.40	3478849	3478849	1073.094	1079.800
3)	DNX	5.56	5.56	8281697	8281697	1069.901	1065.142
4)	MNX	6.57	6.57	7531049	7551496	1072.245	1074.288
5)	1,3,5-Trinitrobe	7.45	7.45	10489829	10544438	1012.376	1017.750
6)	RDX	7.91	7.91	5128057	5300172	1076.379	1117.438
7)	1,3-Dinitrobenze	9.93	9.93	14480778	11398101	1012.155	931.687
8)	Nitrobenzene	10.90	10.90	9338930	9472042	989.564	1022.799
9)	2,4,6-Trinitroto	11.66	11.66	10134158	14146948	999.985	1078.696
10)	Nitroglycerin	0.00	12.40	0	17980234	N.D. d	5335.782
11)	Tetryl	12.93	12.92	7687504	14142577	948.622	1013.289
13)	2,6-Dinitrotolue	14.63	14.62	7420830	11322083	1037.936	1115.910
14)	2,4-Dinitrotolue	15.33	15.33	13470533	10523732	1027.573	1123.295
15)	o-Nitrotoluene	16.87	16.87	5994163	9177814	1037.664	1064.264
16)	3,5-Dinitroanili	16.30	16.30	11412705	19756203	1156.583	1205.217
17)	p-Nitrotoluene	18.03	18.04	12228286	22205913	1041.382	1047.786
18)	4-Amino-2,6-Dini	18.03	18.04	12228286	22205913	1041.382	1044.740
19)	m-Nitrotoluene	19.25	19.25	6325325	10311104	1072.931	1060.333
20)	2-Amino-4,6-Dini	20.21	20.21	9700569	13380015	1075.103	1084.079
21)	PETN	0.00	21.75	0	17547386	N.D. d	5470.898m

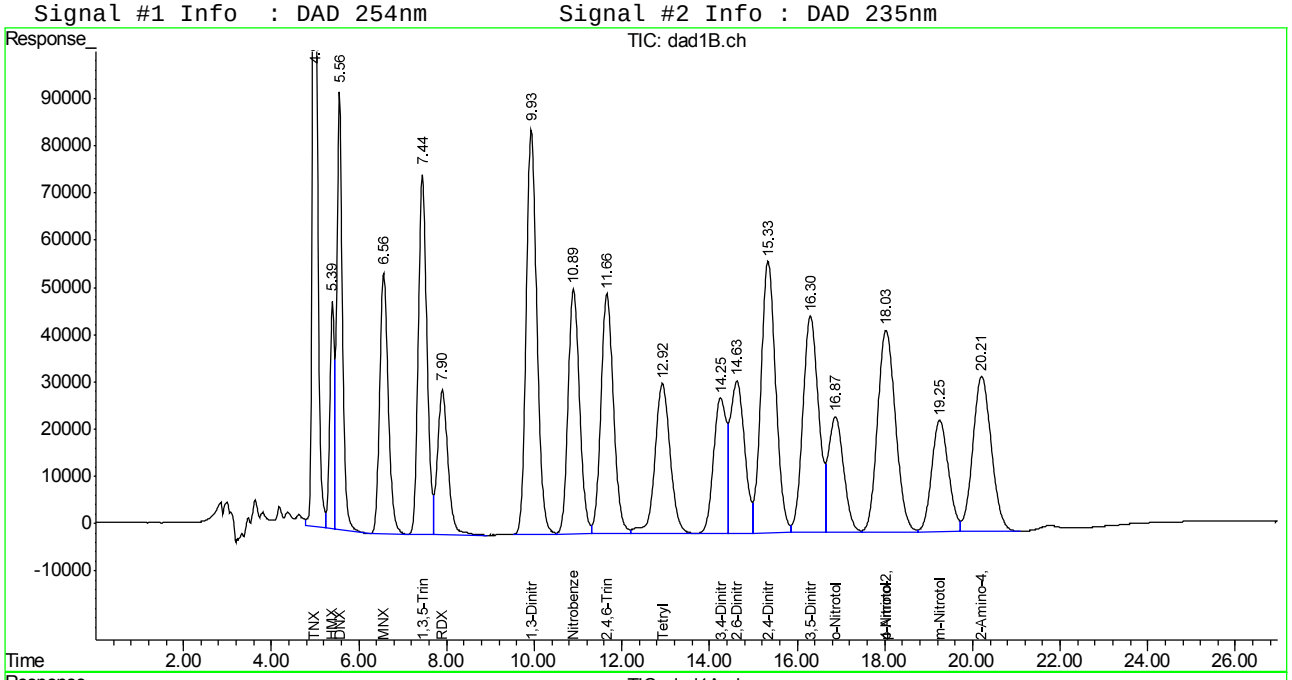
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614602.D 8330RPB.M_1113M.M Tue May 08 14:41:41 2018 Page 1

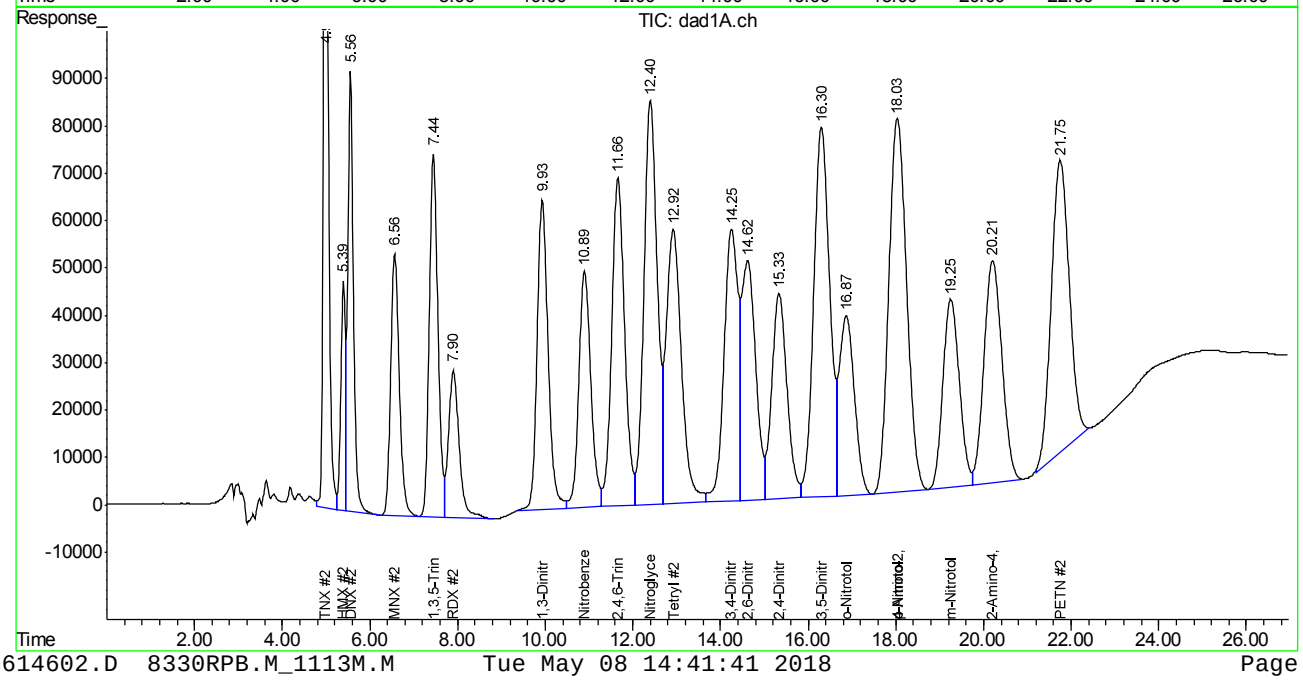
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614602.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614602.D\dad1A.ch
Acq On : 08-May-2018, 09:29:06 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69919,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

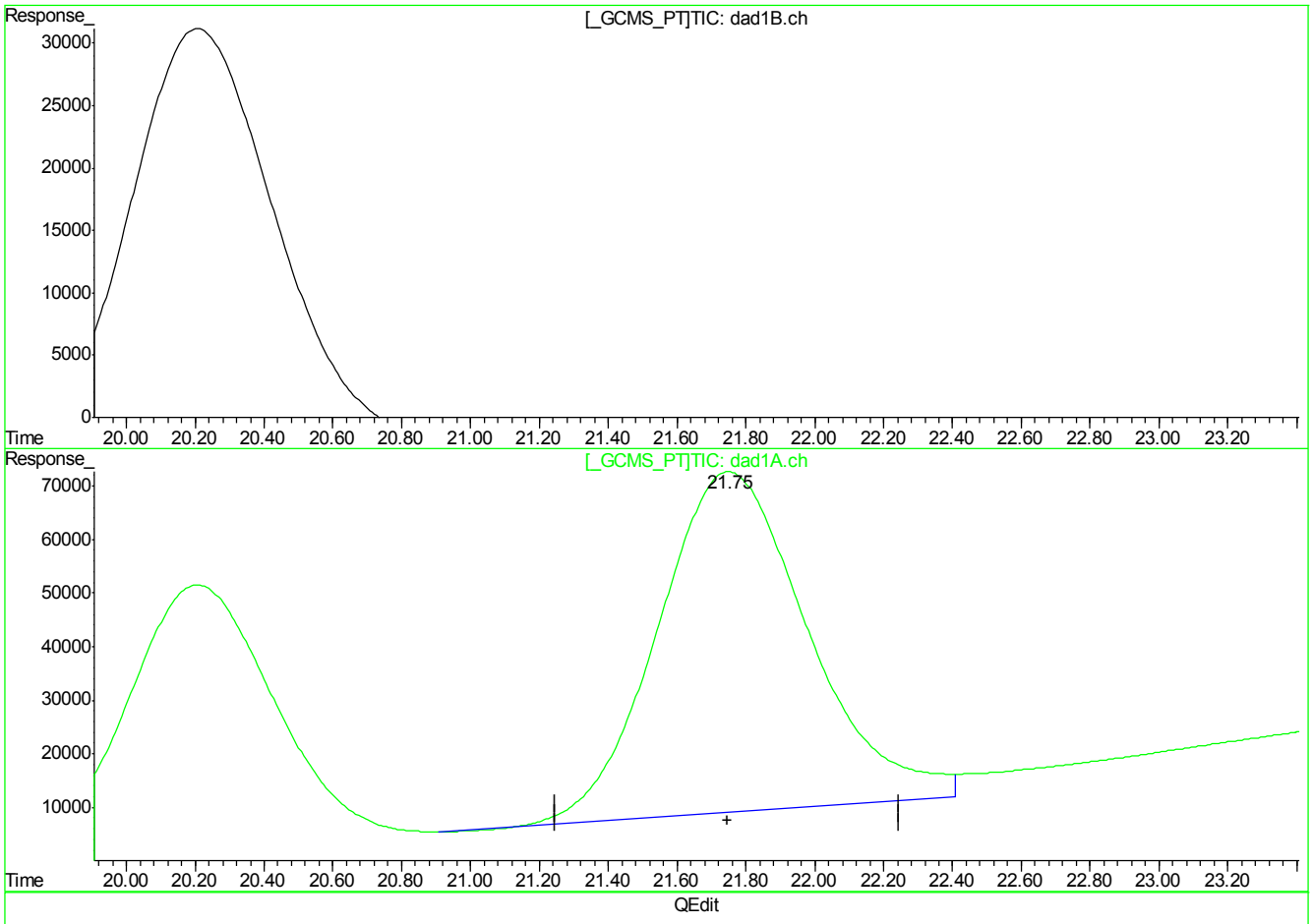
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614602.D	**Analyst approved:**	05/08/18 14:44 Evita Martinez
Injection Time:	05/08/18 09:29	**Supervisor approved:**	05/08/18 16:16 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.75	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614602.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614602.D\dad1A.ch
Acq On : 08-May-2018, 09:29:06 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69919,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.75min 5965.232ppb

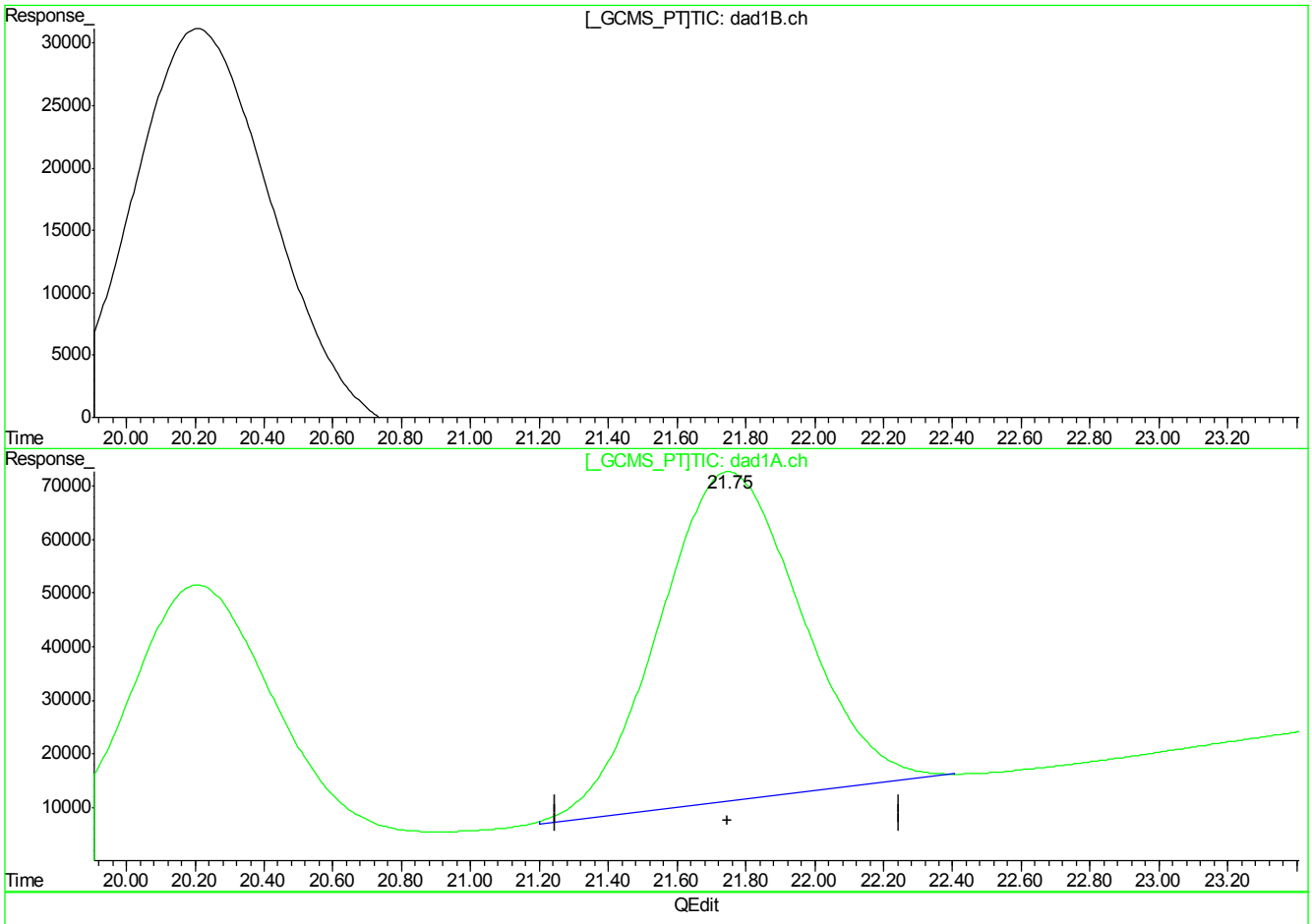
response 19132916

(+) = Expected Retention Time
GG614602.D 8330RPB.M_1113M.M Tue May 08 14:32:36 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614602.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614602.D\dad1A.ch
Acq On : 08-May-2018, 09:29:06 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69919,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.75min 5470.898ppb m

response 17547386

(+) = Expected Retention Time
GG614602.D 8330RPB.M_1113M.M Tue May 08 14:32:39 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/08/18 16:16

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614612.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614612.D\dad1A.ch
Acq On : 08-May-2018, 14:23:49 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 14:51:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.23	5947971	12781613	1144.967	1181.554
	Spiked Amount 500.000	Range 69 - 134		Recovery =		228.99%#	236.31%#
	Target Compounds						
1)	TNX	5.00	5.00	13946191	13946191	980.399	980.474
2)	HMX	5.40	5.40	3538595	3538595	1091.523	1098.344
3)	DNX	5.56	5.56	8230363	8230363	1063.269	1058.540
4)	MNX	6.55	6.55	7545748	7545748	1074.338	1073.470
5)	1,3,5-Trinitrobe	7.45	7.45	10473415	10485515	1010.792	1012.063
6)	RDX	7.89	7.89	5136365	5176053	1078.123	1091.270
7)	1,3-Dinitrobenze	9.93	9.93	14541493	11490840	1016.399	939.980
8)	Nitrobenzene	10.89	10.89	9433511	9761145	999.586	1054.017
9)	2,4,6-Trinitroto	11.66	11.66	10172526	14239876	1003.771	1085.782
10)	Nitroglycerin	0.00	12.40	0	18072395	N.D. d	5363.131
11)	Tetryl	12.91	12.91	7725033	14416323	953.253	1033.253
13)	2,6-Dinitrotolue	14.62	14.61	7328275	11203337	1024.990	1104.206
14)	2,4-Dinitrotolue	15.32	15.32	13454399	10486081	1026.342	1119.165
15)	o-Nitrotoluene	16.87	16.87	5995834	9110494	1037.954	1056.458
16)	3,5-Dinitroanili	16.24	16.24	11449545	19823792	1160.259	1209.276
17)	p-Nitrotoluene	17.99	18.00	12265462	22301903	1044.548	1052.316
18)	4-Amino-2,6-Dini	17.99	18.00	12265462	22301903	1044.548	1049.256
19)	m-Nitrotoluene	19.23	19.23	6373000	10860768	1081.018	1116.857
20)	2-Amino-4,6-Dini	20.13	20.13	9702393	13602886	1075.305	1100.962
21)	PETN	0.00	21.75	0	17969394	N.D. d	5602.471m

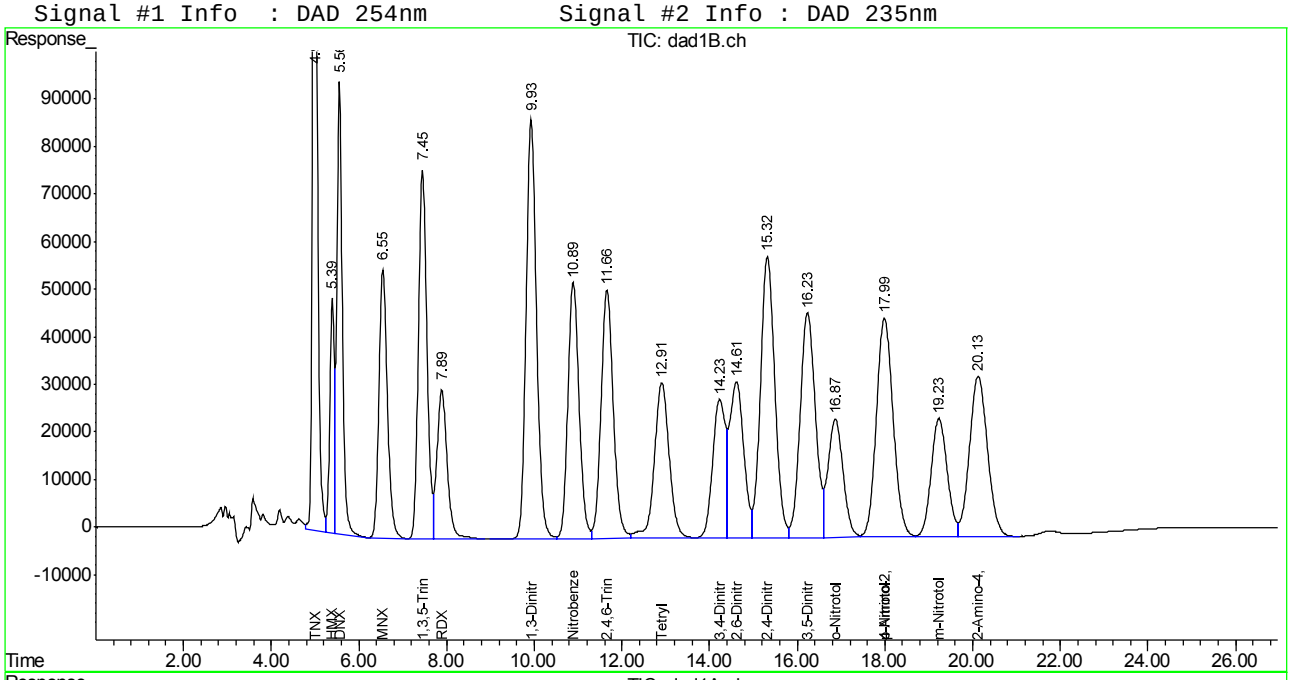
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614612.D 8330RPB.M_1113M.M Tue May 08 14:52:58 2018 Page 1

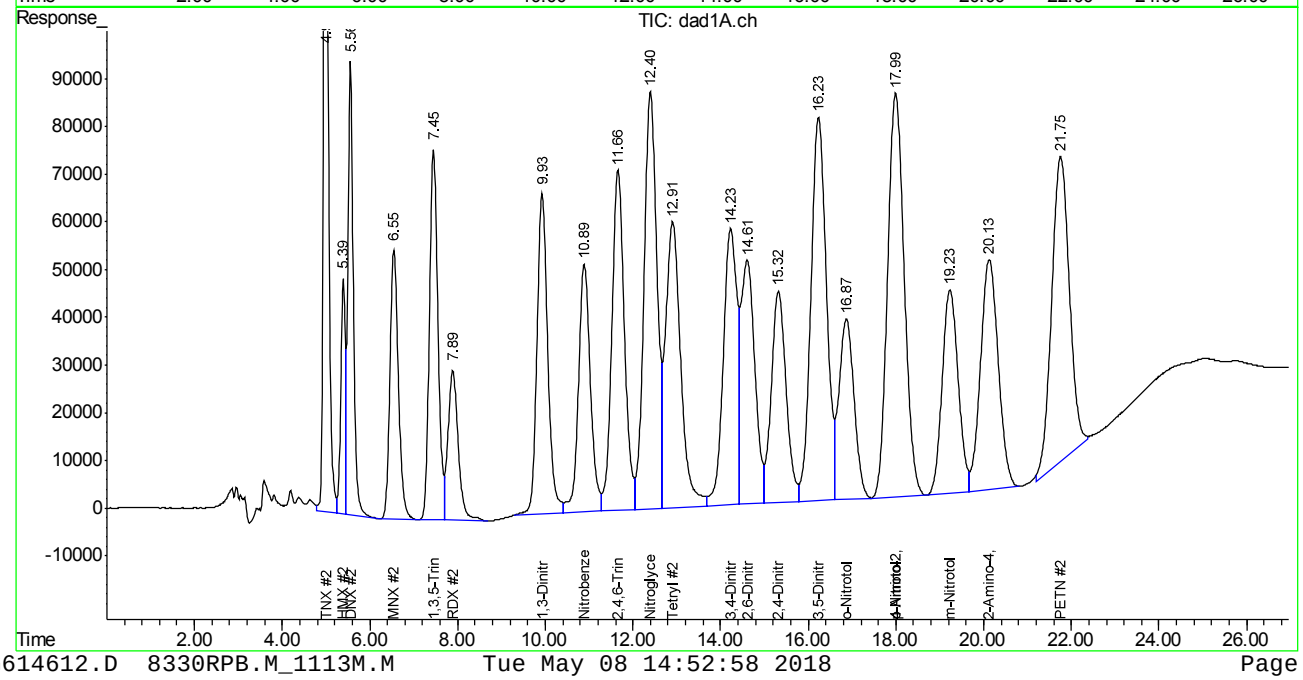
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614612.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614612.D\dad1A.ch
Acq On : 08-May-2018, 14:23:49 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:52 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

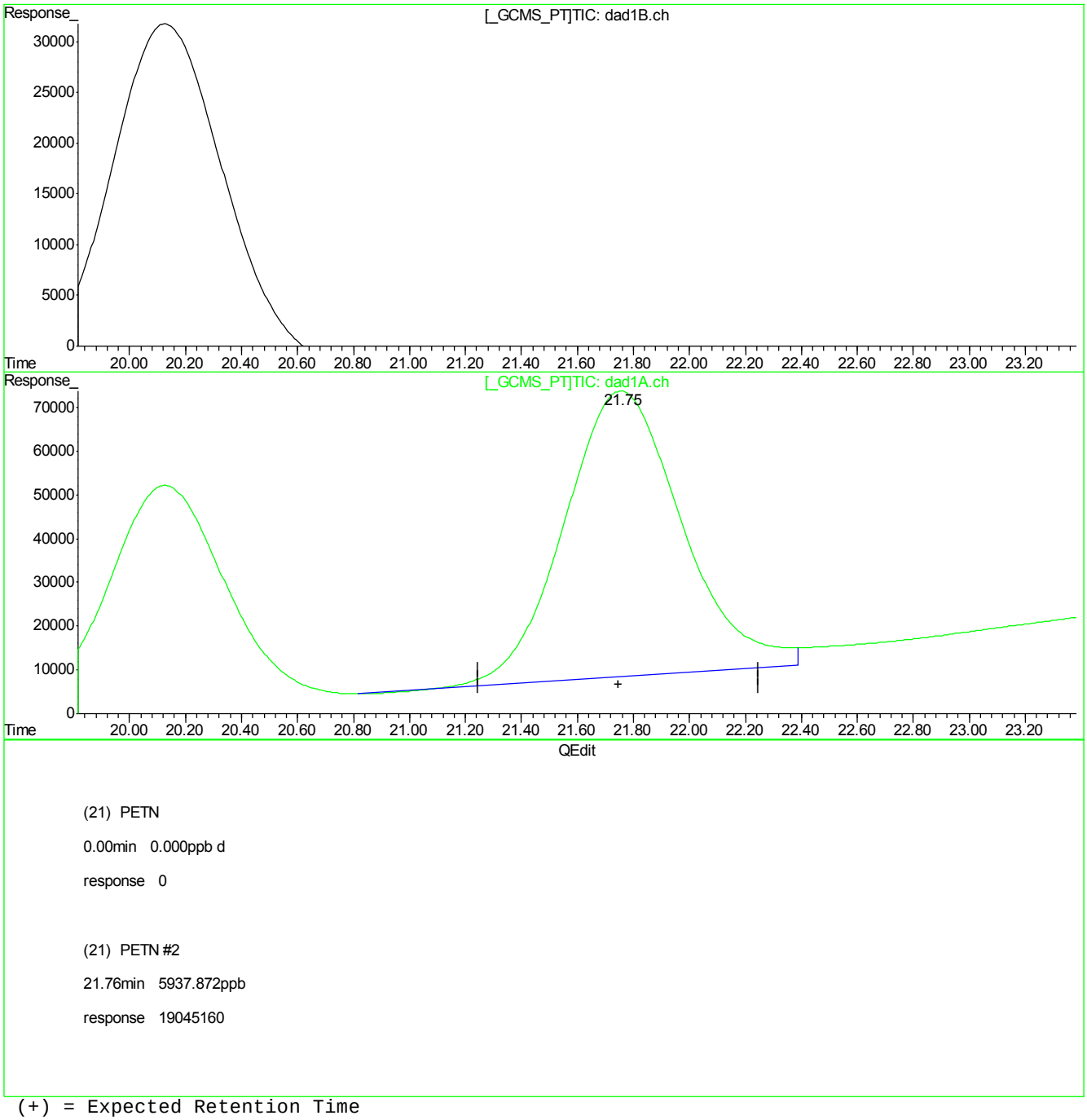
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614612.D	**Analyst approved:**	05/08/18 14:53 Evita Martinez
Injection Time:	05/08/18 14:23	**Supervisor approved:**	05/08/18 16:16 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.75	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614612.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614612.D\dad1A.ch
Acq On : 08-May-2018, 14:23:49 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

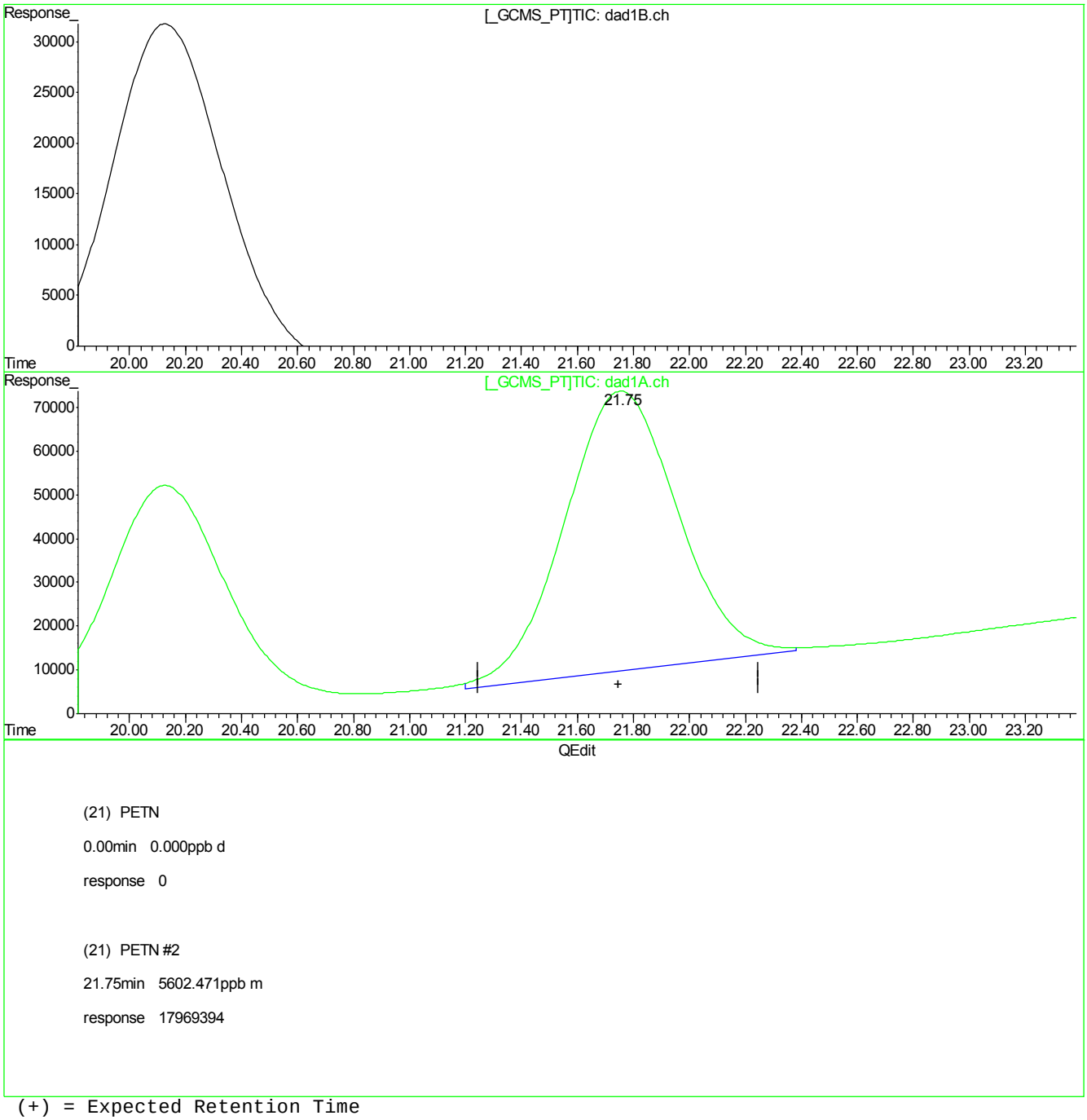


(+) = Expected Retention Time
GG614612.D 8330RPB.M_1113M.M Tue May 08 14:52:11 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614612.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614612.D\dad1A.ch
Acq On : 08-May-2018, 14:23:49 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 14:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614612.D 8330RPB.M_1113M.M Tue May 08 14:52:18 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614623.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614623.D\dad1A.ch
Acq On : 08-May-2018, 21:23:05 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.23	5942007	12599313	1143.819	1164.702
	Spiked Amount 500.000	Range 69 - 134		Recovery =		228.76%#	232.94%#
	Target Compounds						
1)	TNX	5.00	5.00	13863485	13863485	974.585	974.659
2)	HMX	5.41	5.41	3509570	3509570	1082.570	1089.335
3)	DNX	5.57	5.57	8171573	8171573	1055.674	1050.978
4)	MNX	6.56	6.56	7525690	7588006	1071.482	1079.482
5)	1,3,5-Trinitrobe	7.46	7.46	10400011	10518602	1003.707	1015.256
6)	RDX	7.90	7.90	5145464	5446080	1080.033	1148.199
7)	1,3-Dinitrobenze	9.93	9.93	14474371	11545510	1011.708	944.875
8)	Nitrobenzene	10.89	10.89	9393938	9374799	995.393	1012.299
9)	2,4,6-Trinitroto	11.66	11.66	10100904	13936641	996.704	1062.660
10)	Nitroglycerin	0.00	12.41	0	17906526	N.D. d	5313.908
11)	Tetryl	12.91	12.91	7654814	13927854	944.588	997.639
13)	2,6-Dinitrotolue	14.62	14.61	7255612	11015943	1014.827	1085.737
14)	2,4-Dinitrotolue	15.32	15.32	13358434	10529788	1019.022	1123.959
15)	o-Nitrotoluene	16.87	16.87	5950806	9477862	1030.159	1099.058
16)	3,5-Dinitroanili	16.23	16.23	11387641	20019908	1154.082	1221.049
17)	p-Nitrotoluene	17.98	17.98	12238753	22293837	1042.273	1051.935
18)	4-Amino-2,6-Dini	17.98	17.98	12238753	22293837	1042.273	1048.876
19)	m-Nitrotoluene	19.23	19.23	6323744	10528861	1072.662	1082.726
20)	2-Amino-4,6-Dini	20.13	20.13	9666536	13575613	1071.331	1098.898
21)	PETN	0.00	21.77	0	18011404	N.D. d	5615.569m

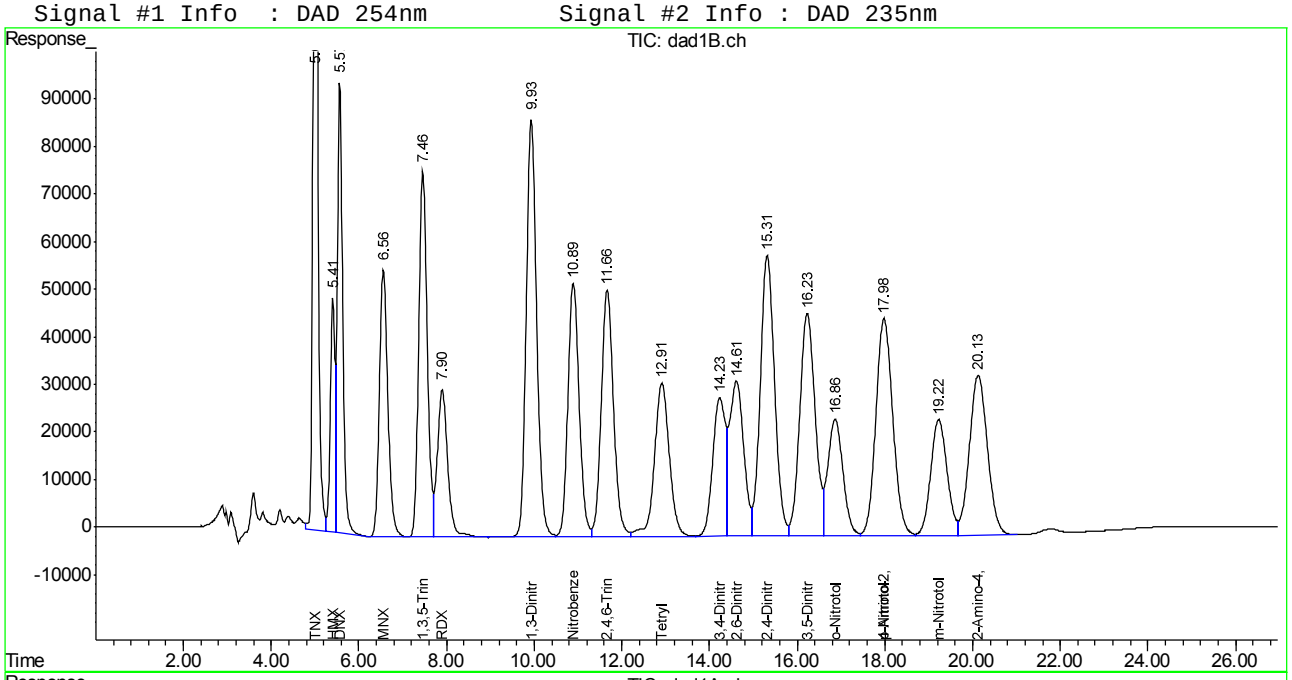
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614623.D 8330RPB.M_1113M.M Wed May 09 11:10:14 2018 Page 1

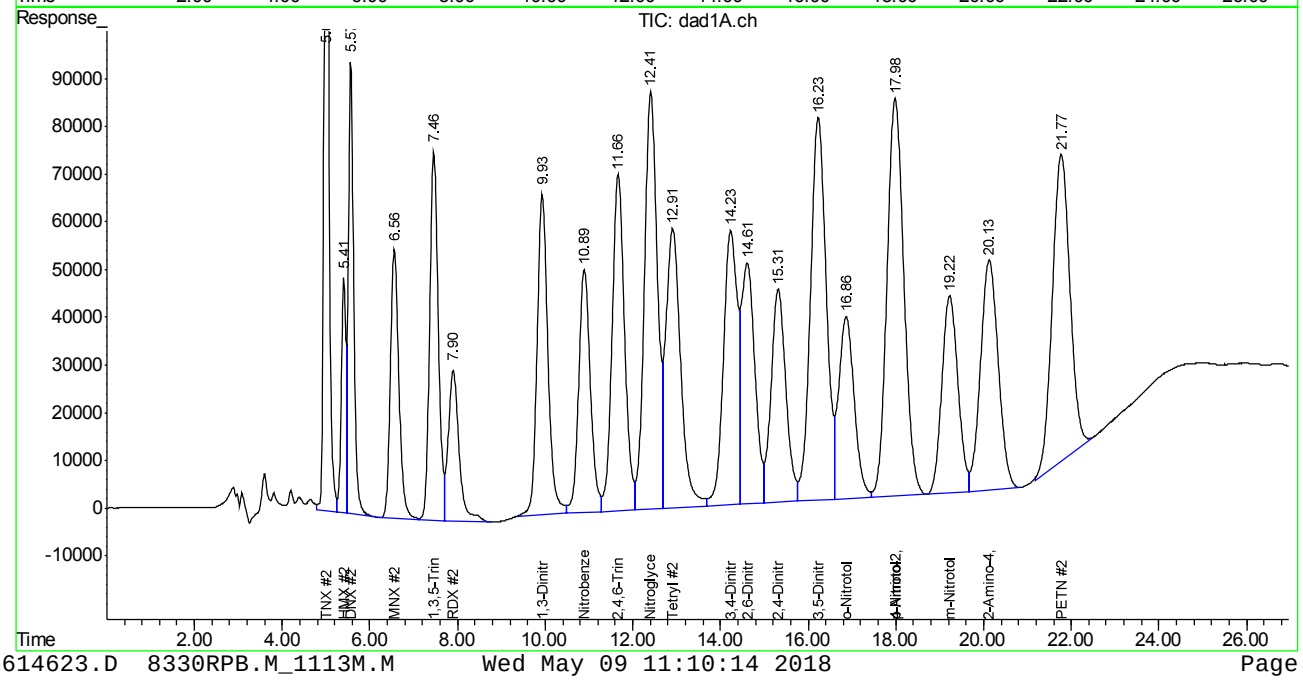
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614623.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614623.D\dad1A.ch
Acq On : 08-May-2018, 21:23:05 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

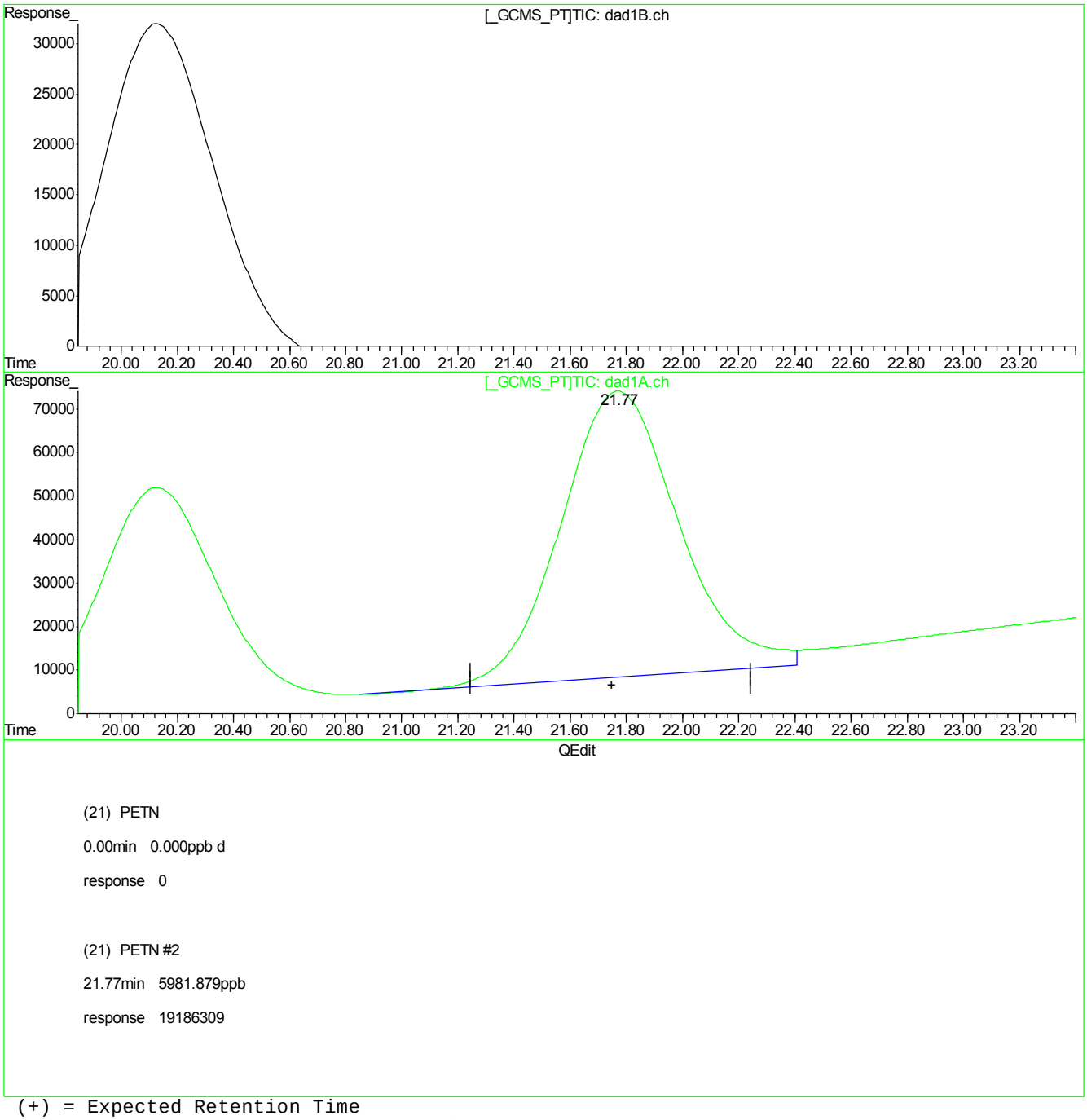
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614623.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/08/18 21:23	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.77	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614623.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614623.D\dad1A.ch
Acq On : 08-May-2018, 21:23:05 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614623.D 8330RPB.M_1113M.M Wed May 09 10:27:43 2018

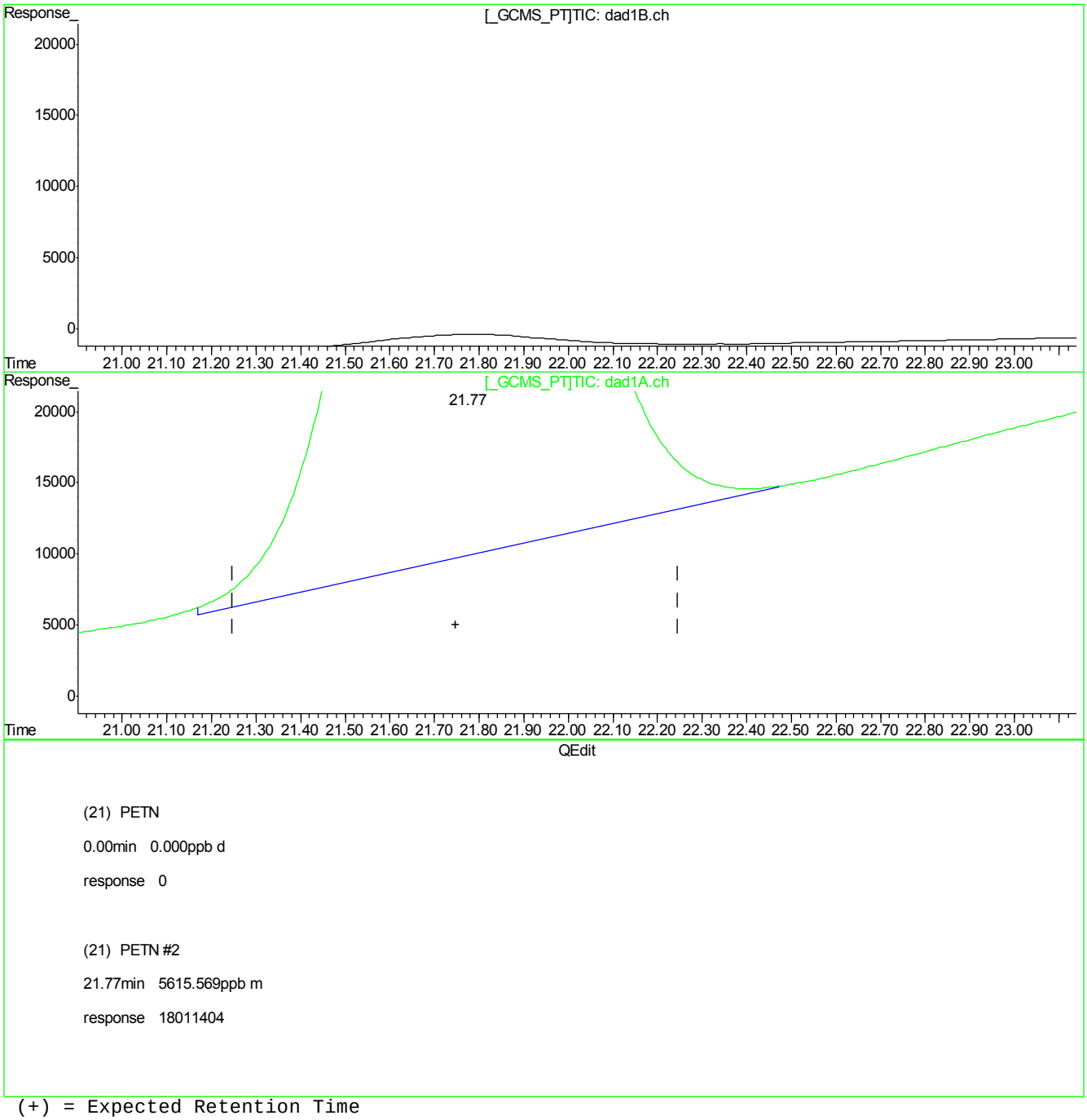
7.7.29.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614623.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614623.D\dad1A.ch
Acq On : 08-May-2018, 21:23:05 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69920,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614623.D 8330RPB.M_1113M.M Wed May 09 10:27:50 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 07:12:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.28	14.27	5820003	10952433	1120.334	1012.462m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		224.07%#	202.49%#
	Target Compounds						
1)	TNX	4.99	4.99	13923260	13923260	978.787	978.862
2)	HMX	5.40	5.40	3577279	3577279	1103.456	1110.351
3)	DNX	5.56	5.56	8910975	8910975	1151.196	1146.076
4)	MNX	6.56	6.56	7404122	7404122	1054.174	1053.322
5)	1,3,5-Trinitrobe	7.45	7.45	10245390	10269161	988.785	991.180
6)	RDX	7.91	7.91	4867793	4991648	1021.750	1052.391
7)	1,3-Dinitrobenze	9.95	9.95	14324894	11362144	1001.260	928.475m
8)	Nitrobenzene	10.91	10.91	9396385	10303552	995.652	1112.586m
9)	2,4,6-Trinitroto	11.69	11.68	10093779	14663862	996.000	1118.110m
10)	Nitroglycerin	0.00	12.43	0	17857098	N.D. d	5299.240m
11)	Tetryl	12.96	12.95	7649375	13355392	943.917	955.957m
13)	2,6-Dinitrotolue	14.65	14.65	7197066	10835631	1006.638	1067.965m
14)	2,4-Dinitrotolue	15.35	15.34	13179069	10049316	1005.339	1071.320m
15)	o-Nitrotoluene	16.90	16.90	5725949	8364516	991.233	969.954m
16)	3,5-Dinitroanili	16.29	16.29	11129578	18908945	1128.323	1154.306m
17)	p-Nitrotoluene	18.04	18.04	11892750	22851556	1012.807	1078.251
18)	4-Amino-2,6-Dini	18.04	18.04	11892750	22851556	1012.807	1075.116
19)	m-Nitrotoluene	19.27	19.27	6347551	10996201	1076.701	1130.784
20)	2-Amino-4,6-Dini	20.20	20.20	9980172	14272058	1106.091	1151.452
21)	PETN	0.00	21.80	0	17520305	N.D. d	5462.455m

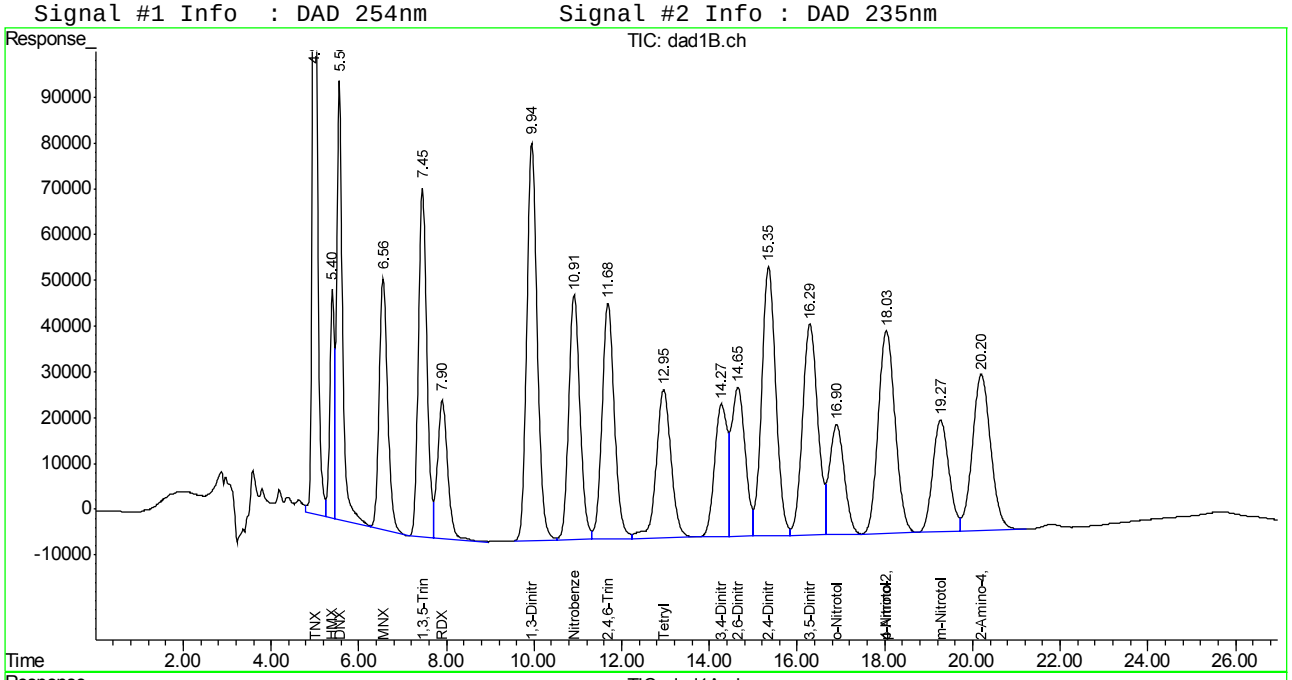
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614635.D 8330RPB.M_1113M.M Wed May 09 11:10:25 2018 Page 1

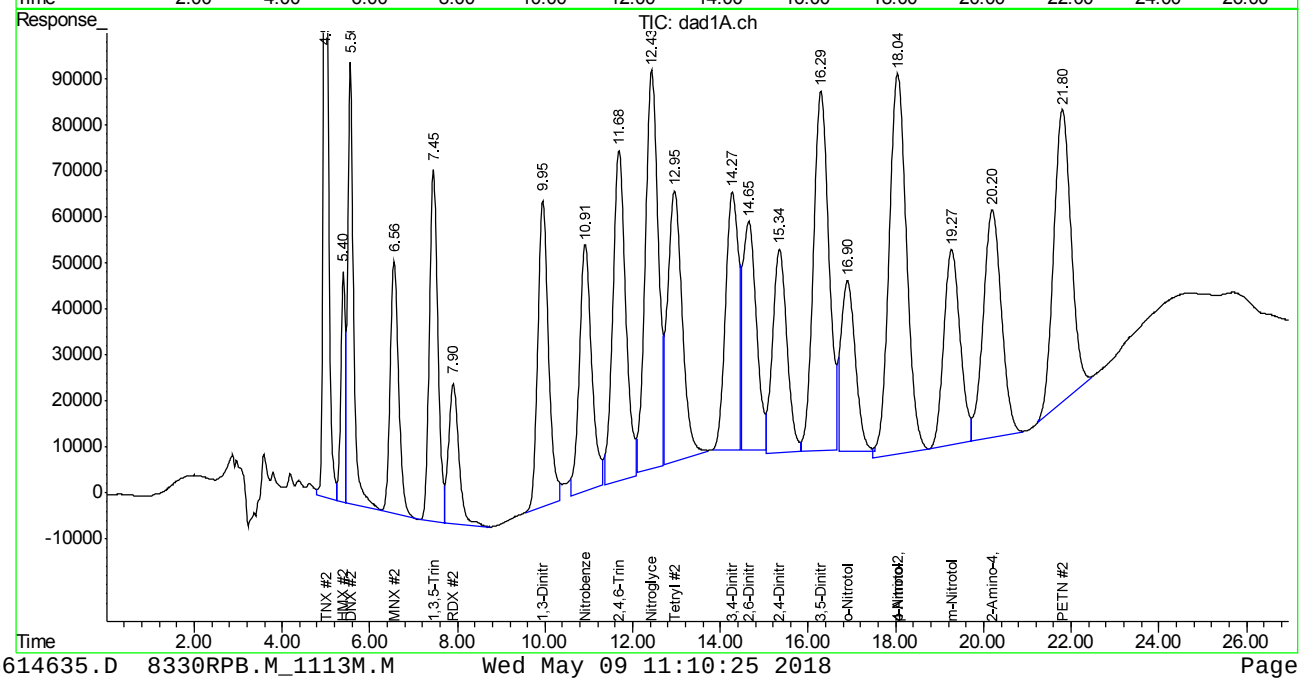
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:53 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

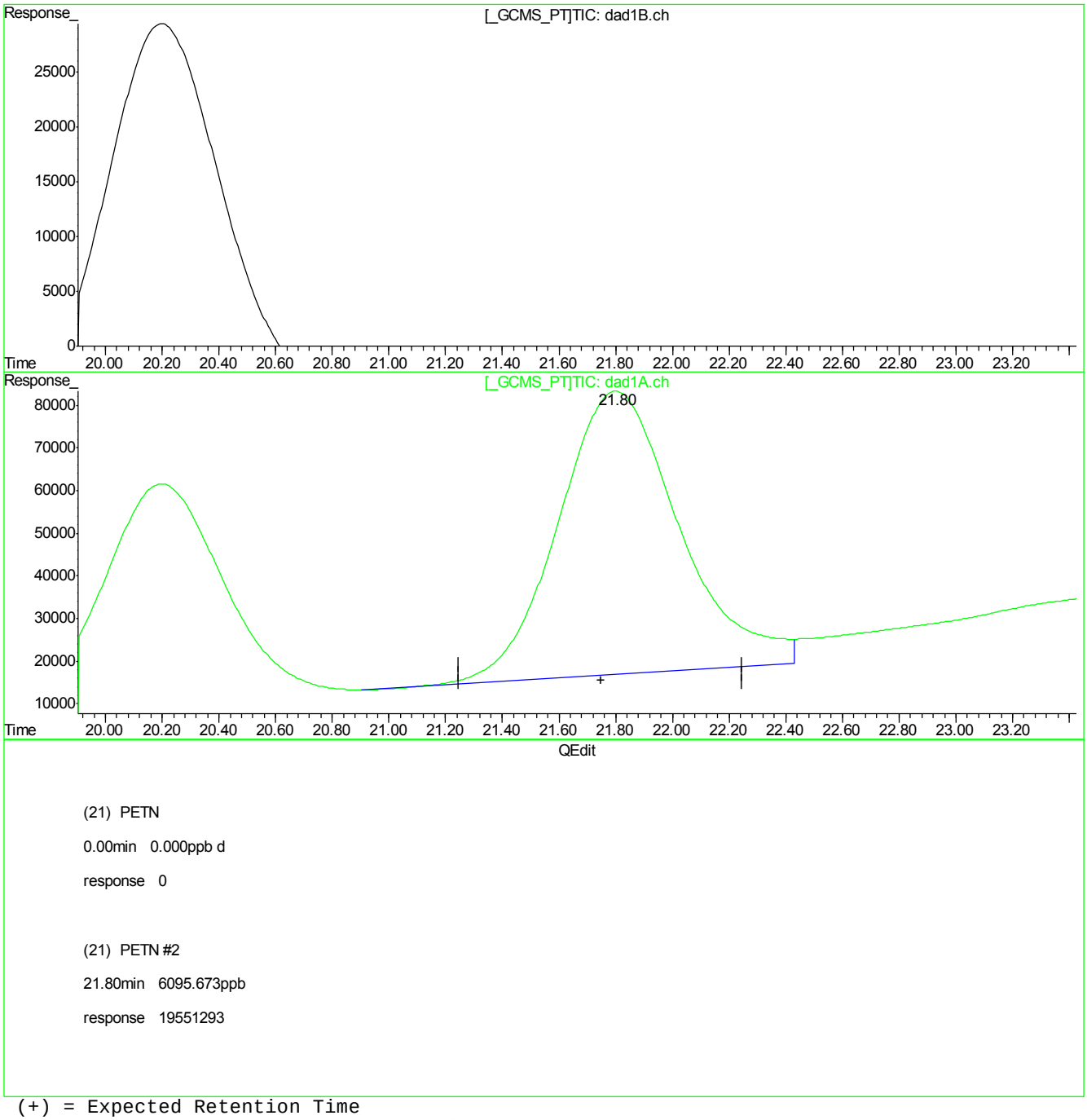
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614635.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 03:16	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	9.95	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.91	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.68	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.43	Poorly defined baseline
Tetryl	479-45-8	2	12.95	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.27	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.65	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.34	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.90	Poorly defined baseline
PETN	78-11-5	2	21.80	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:49:46 2018

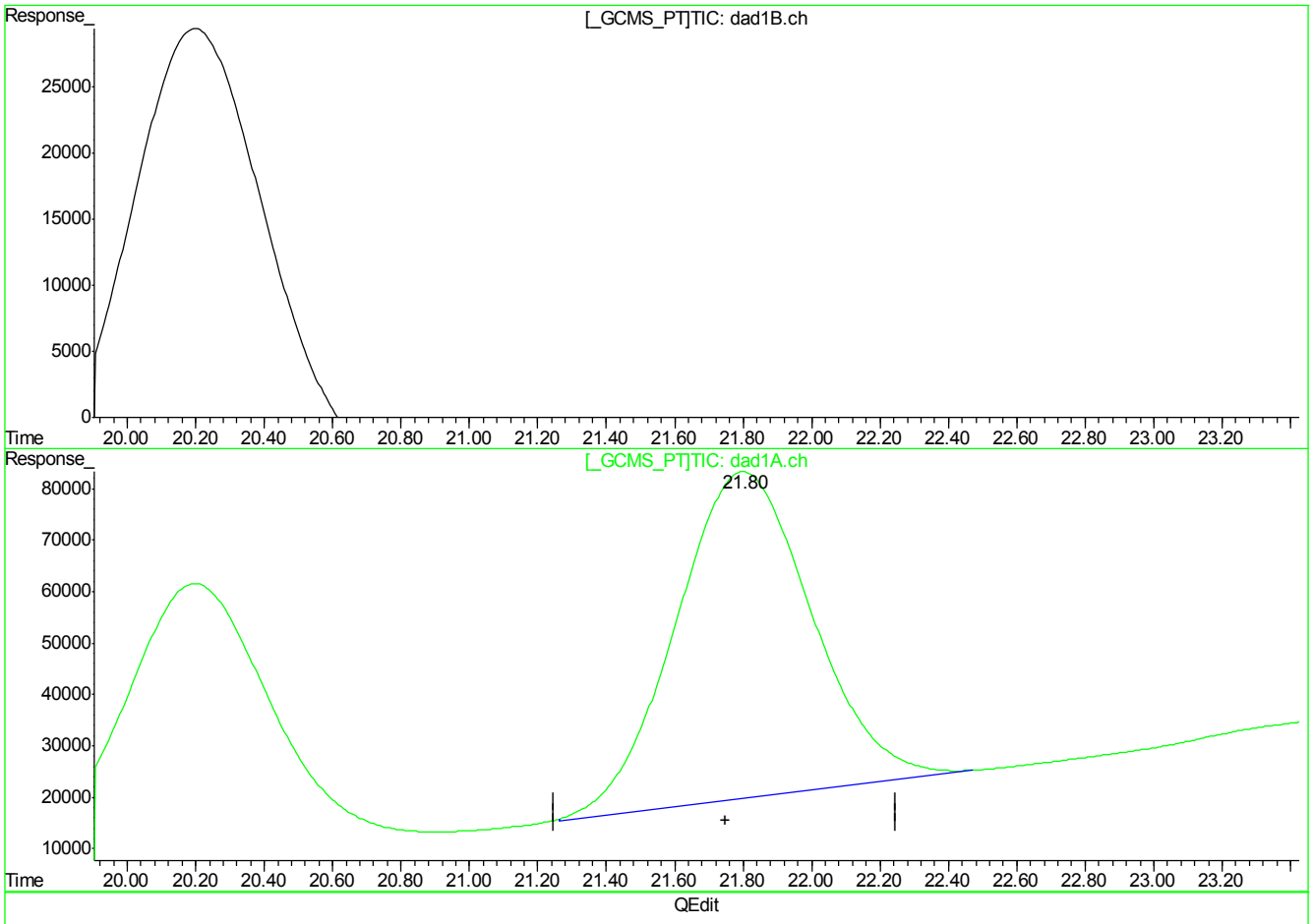
7.7.30.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 7:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.80min 5462.455ppb m

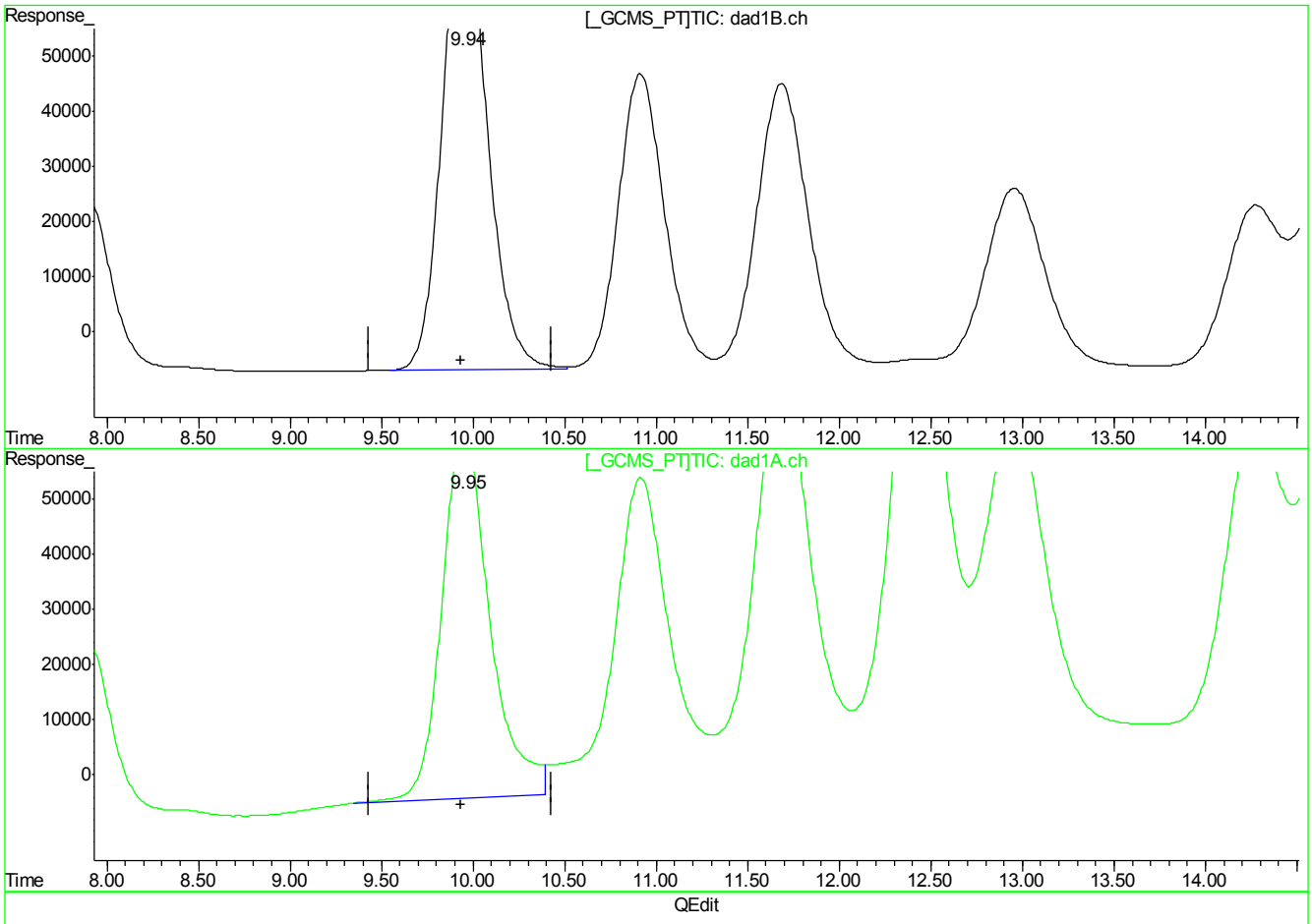
response 17520305

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:49:49 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.95min 1001.260ppb

response 14324894

(7) 1,3-Dinitrobenzene #2

9.95min 989.205ppb

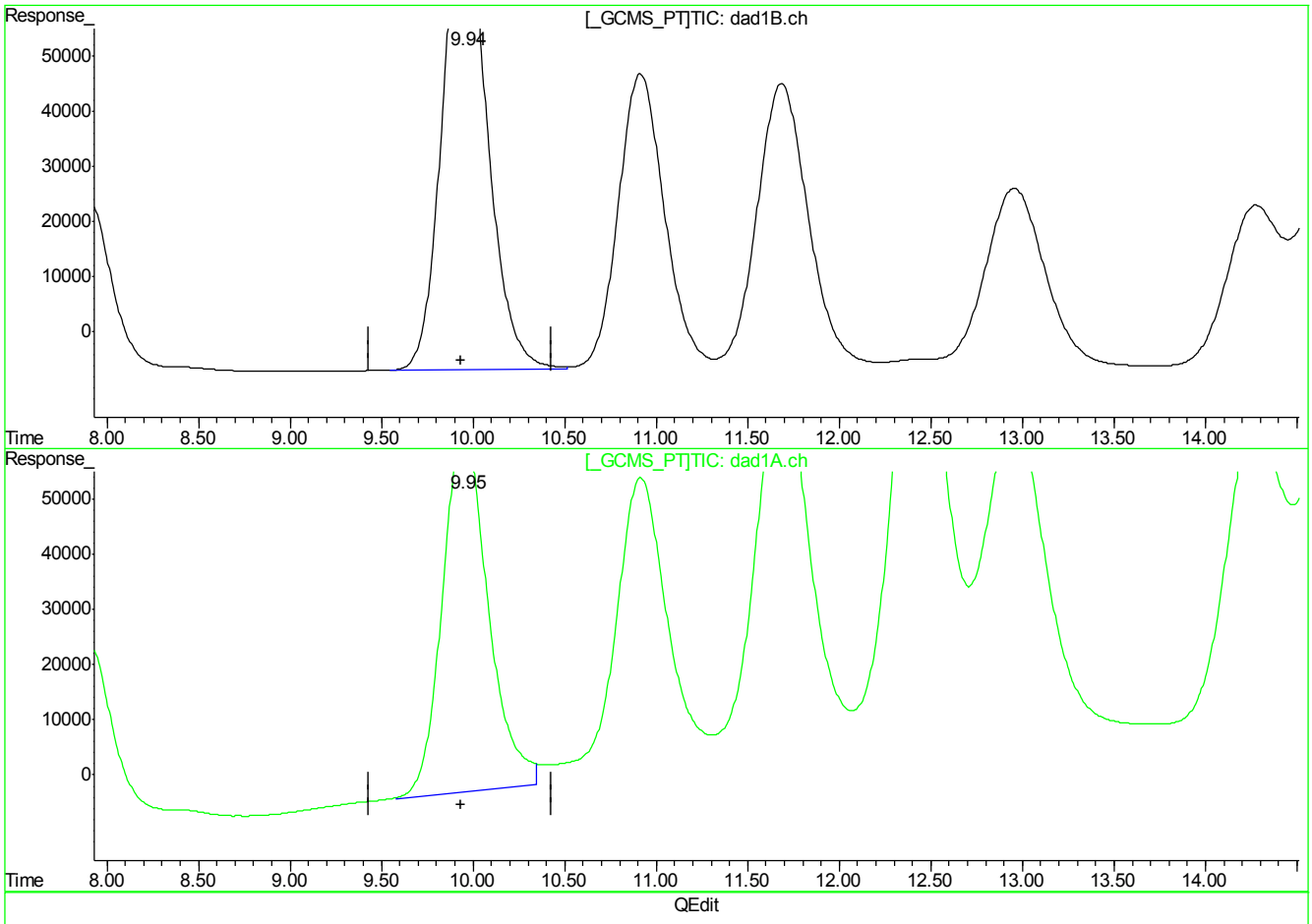
response 12038119

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:50:14 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.95min 1001.260ppb

response 14324894

(7) 1,3-Dinitrobenzene #2

9.95min 928.475ppb m

response 11362144

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:50:19 2018

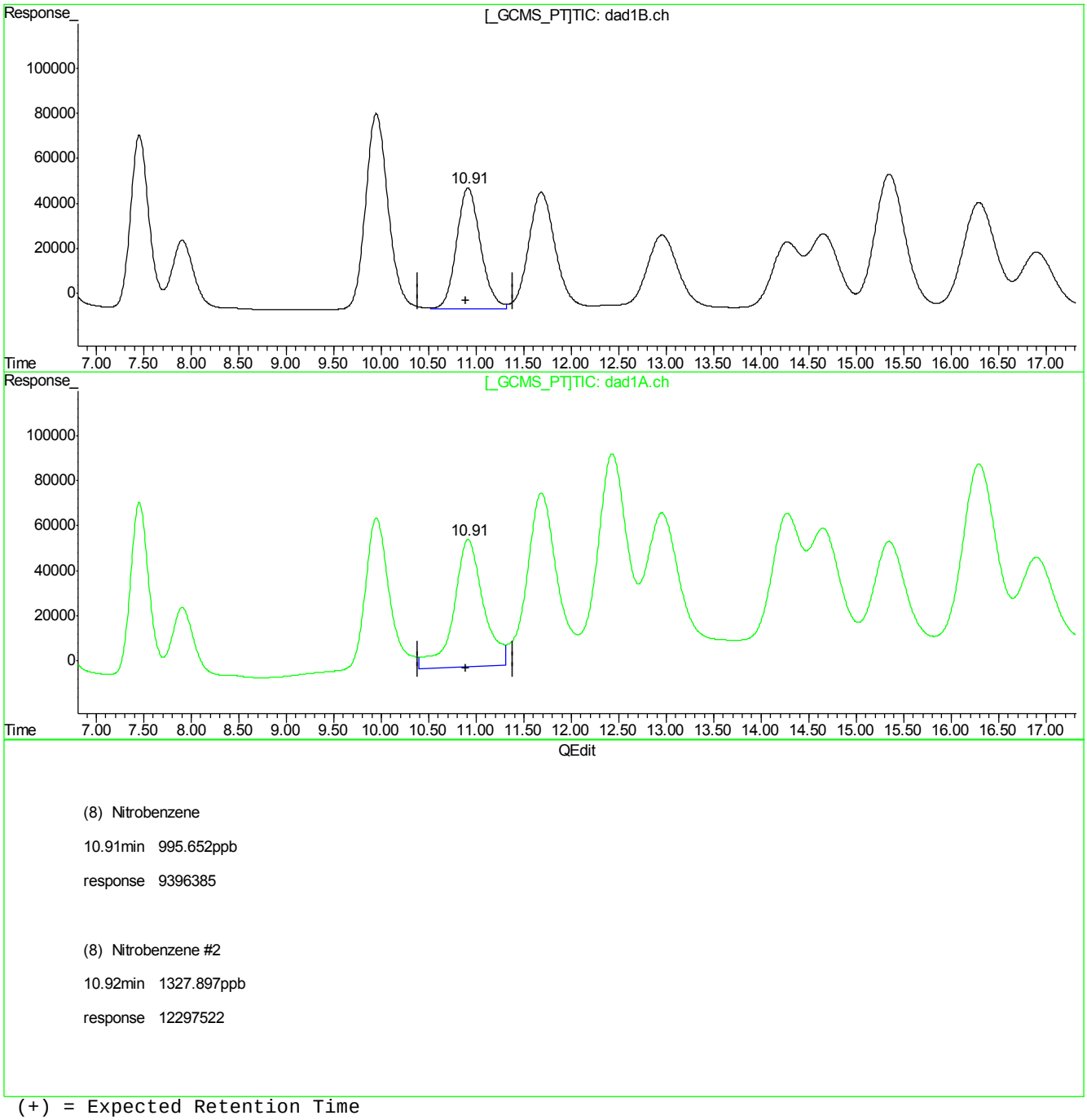
7.7.30.5

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.91min 995.652ppb

response 9396385

(8) Nitrobenzene #2

10.92min 1327.897ppb

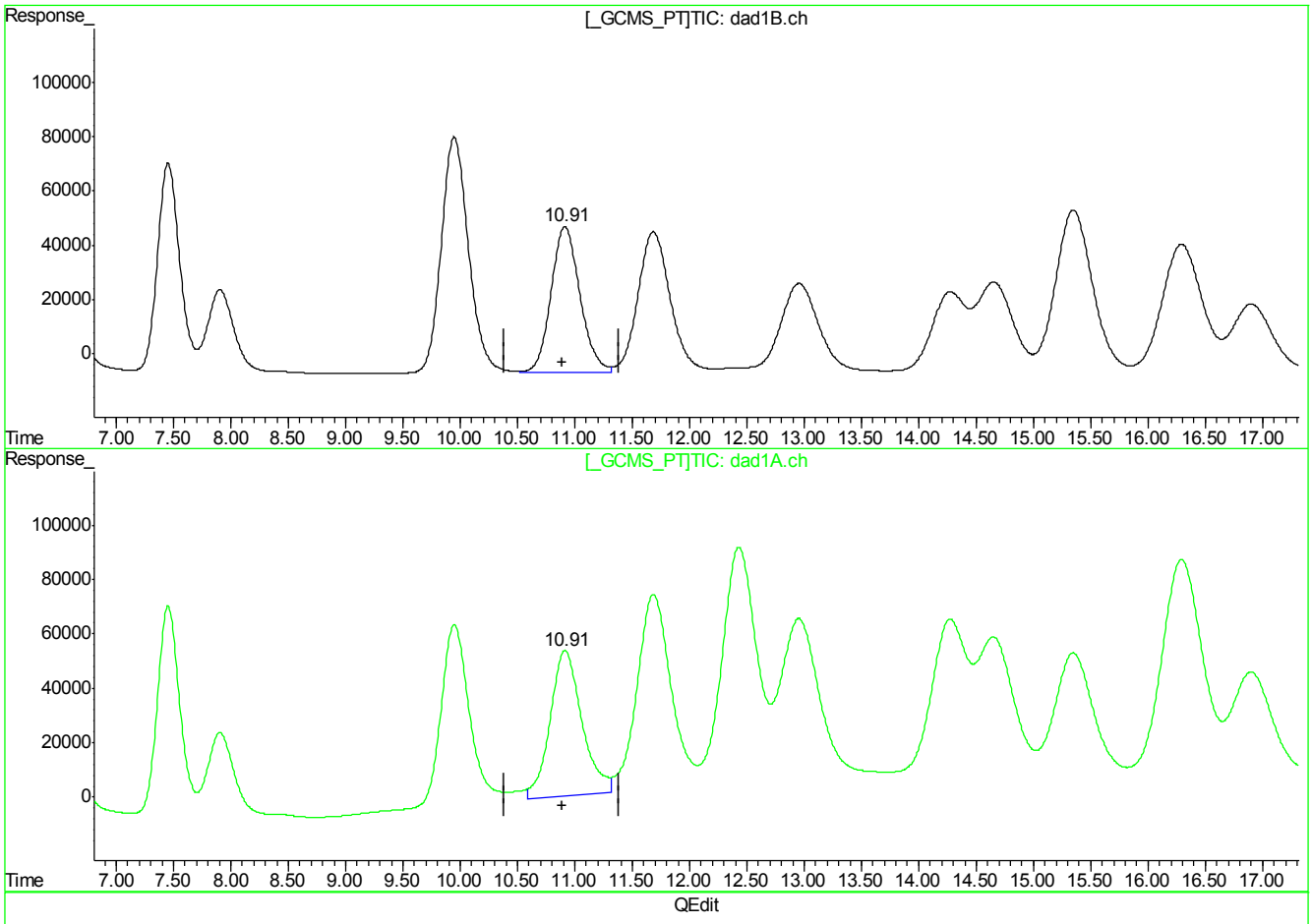
response 12297522

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:50:28 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.91min 995.652ppb

response 9396385

(8) Nitrobenzene #2

10.91min 1112.586ppb m

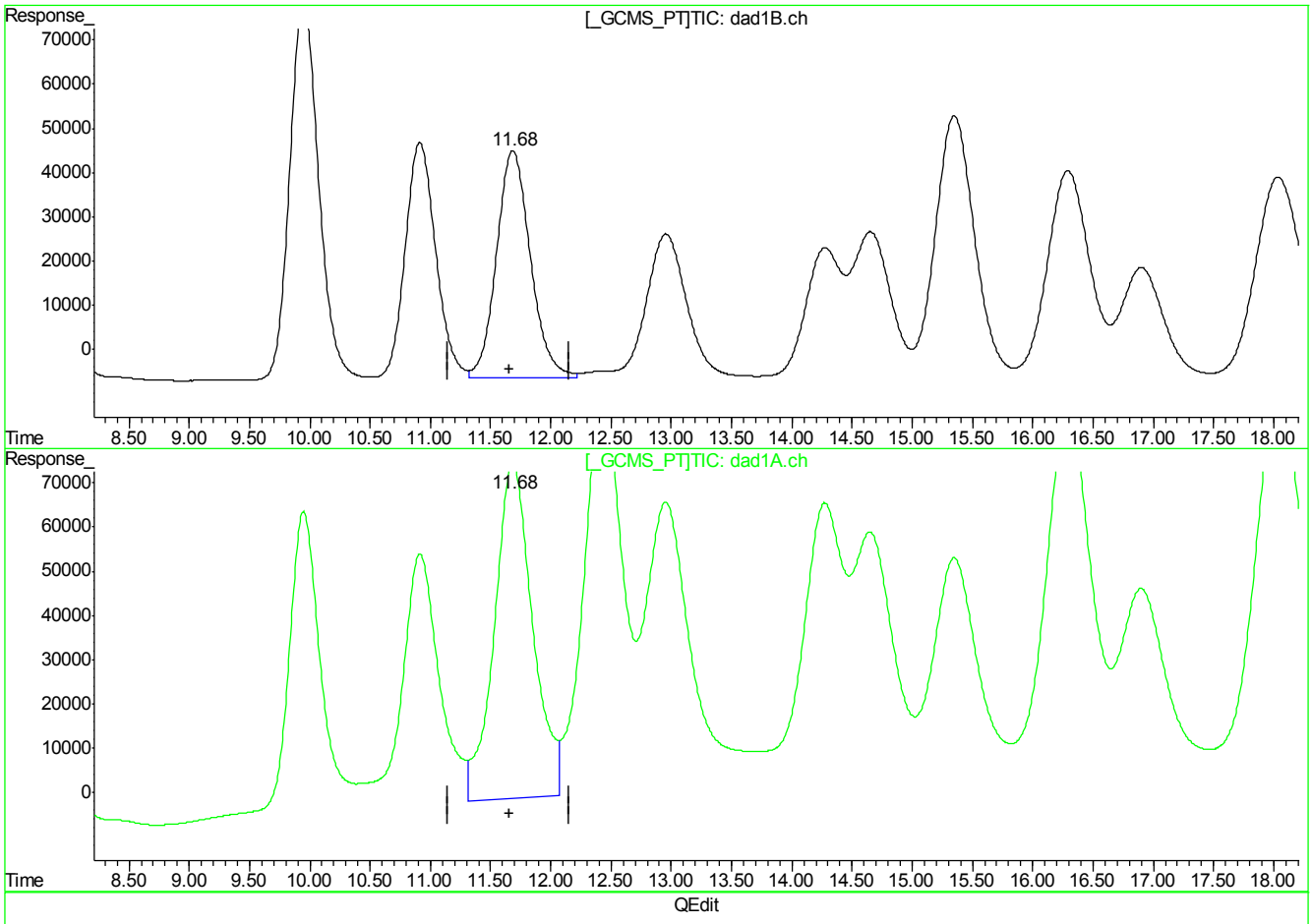
response 10303552

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:50:44 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.69min 996.000ppb

response 10093779

(9) 2,4,6-Trinitrotoluene #2

11.69min 1278.709ppb

response 16770087

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:51:02 2018

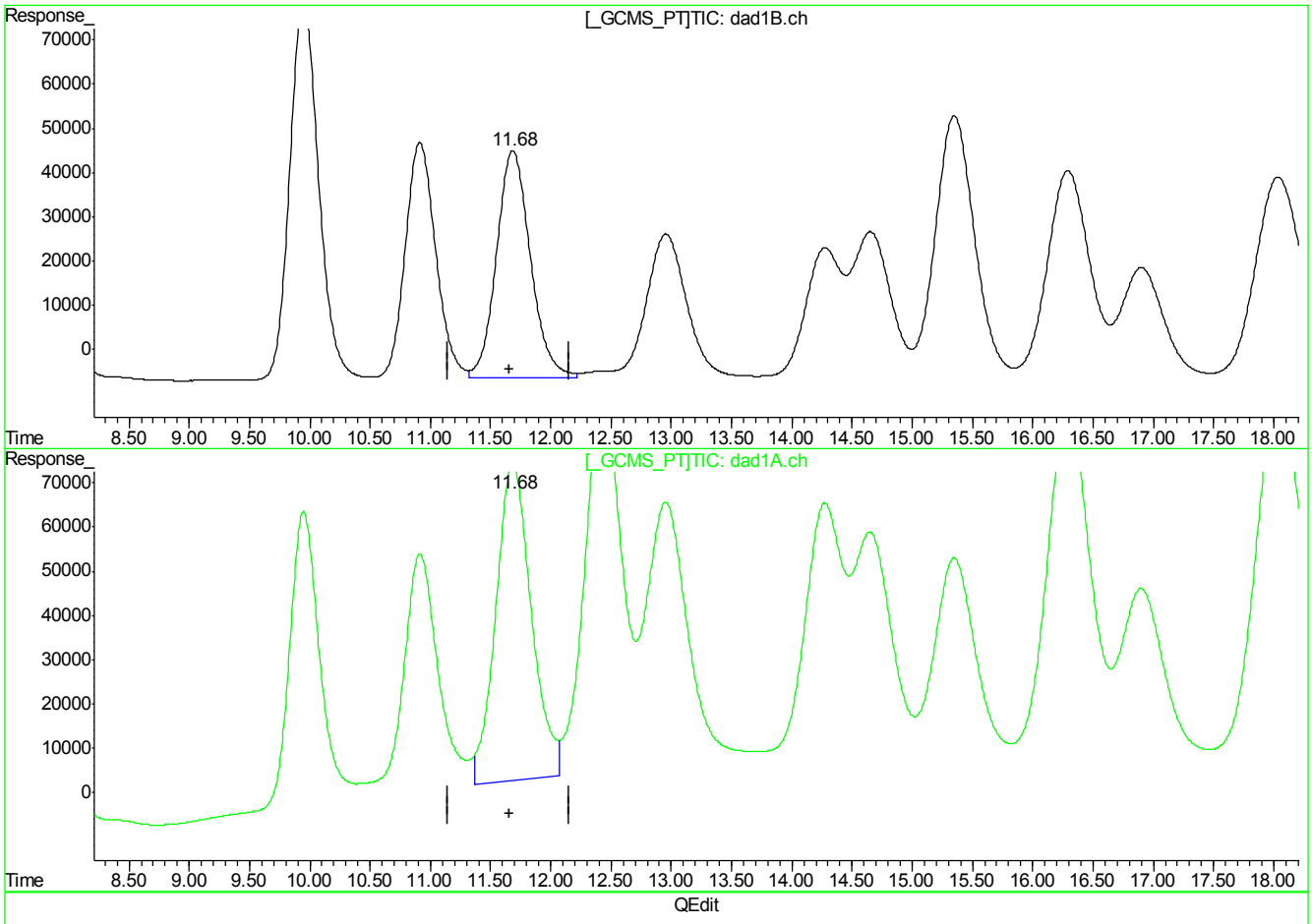
7.7.30.8

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.69min 996.000ppb

response 10093779

(9) 2,4,6-Trinitrotoluene #2

11.68min 1118.110ppb m

response 14663862

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:51:08 2018

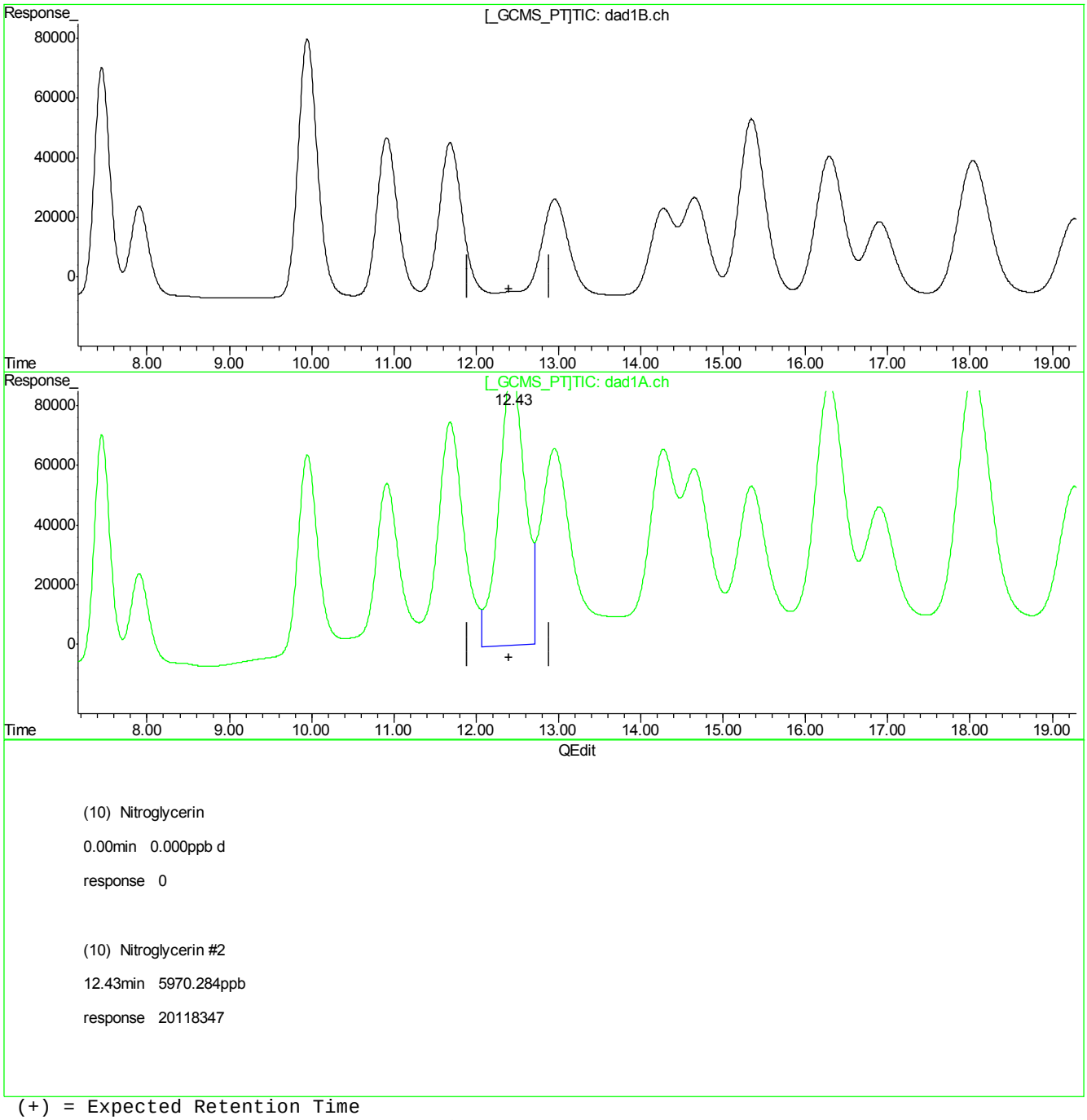
7.7.30.9

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.43min 5970.284ppb

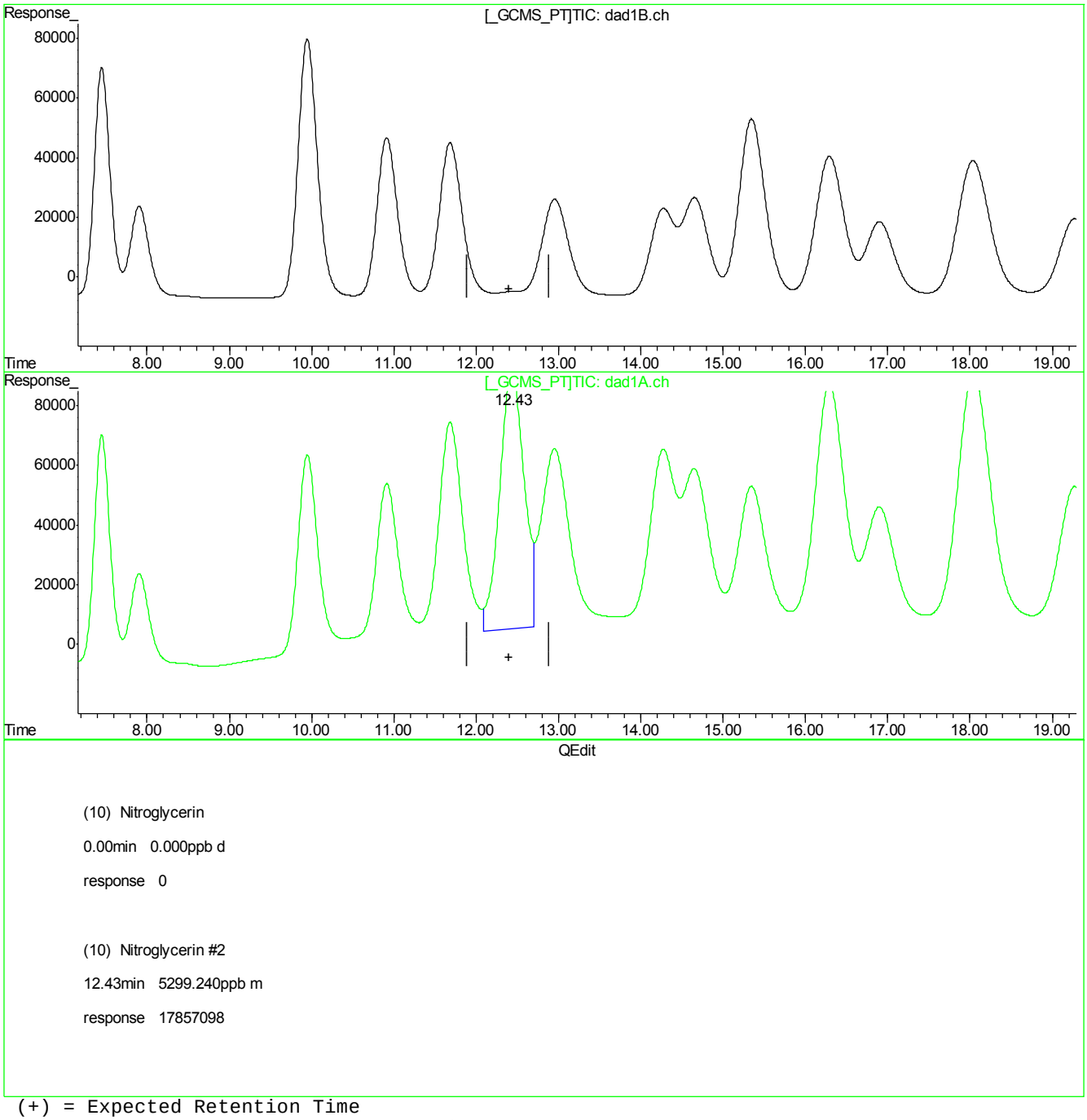
response 20118347

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:51:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.43min 5299.240ppb m

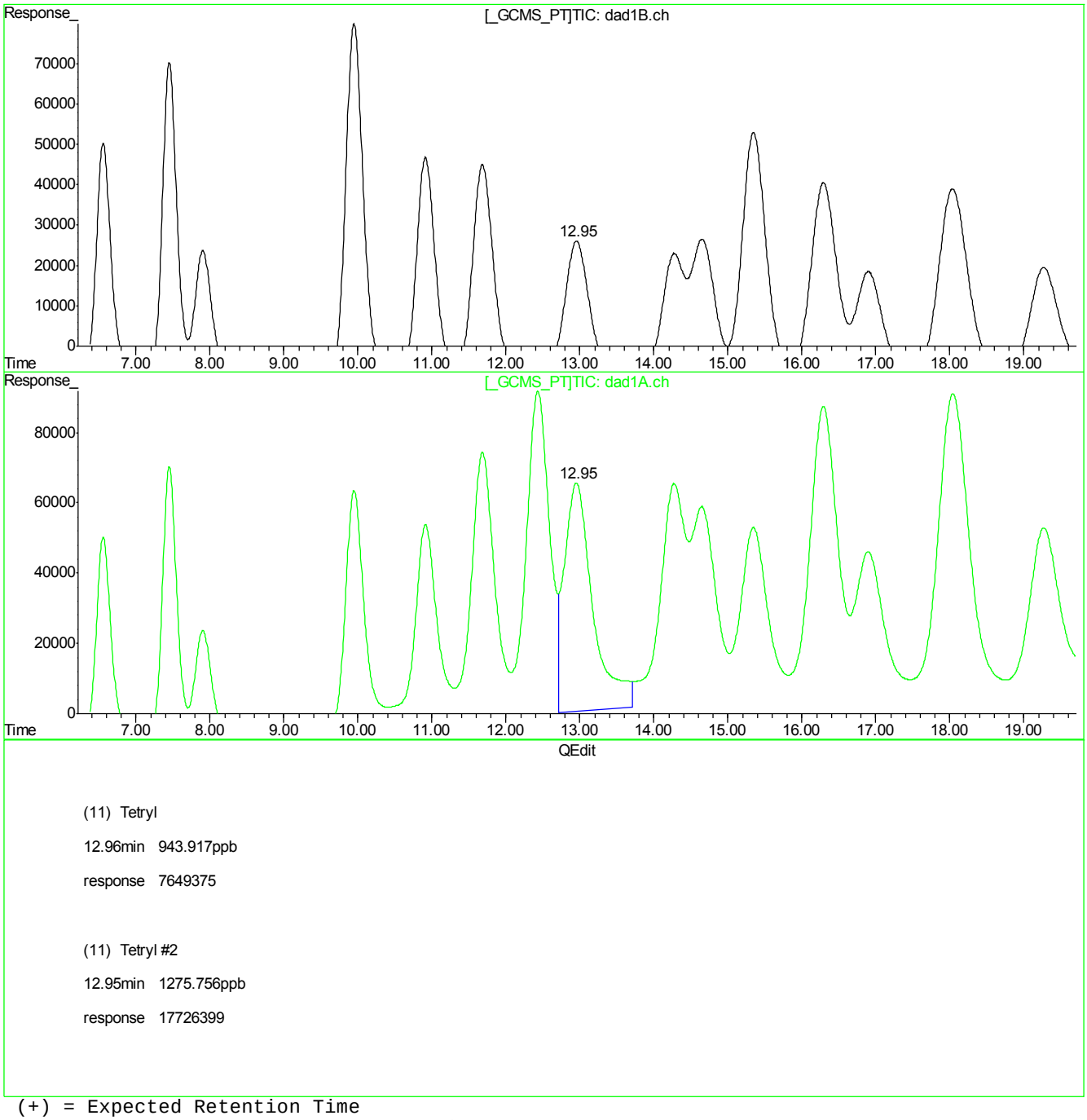
response 17857098

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:51:24 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(11) Tetryl

12.96min 943.917ppb

response 7649375

(11) Tetryl #2

12.95min 1275.756ppb

response 17726399

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:51:30 2018

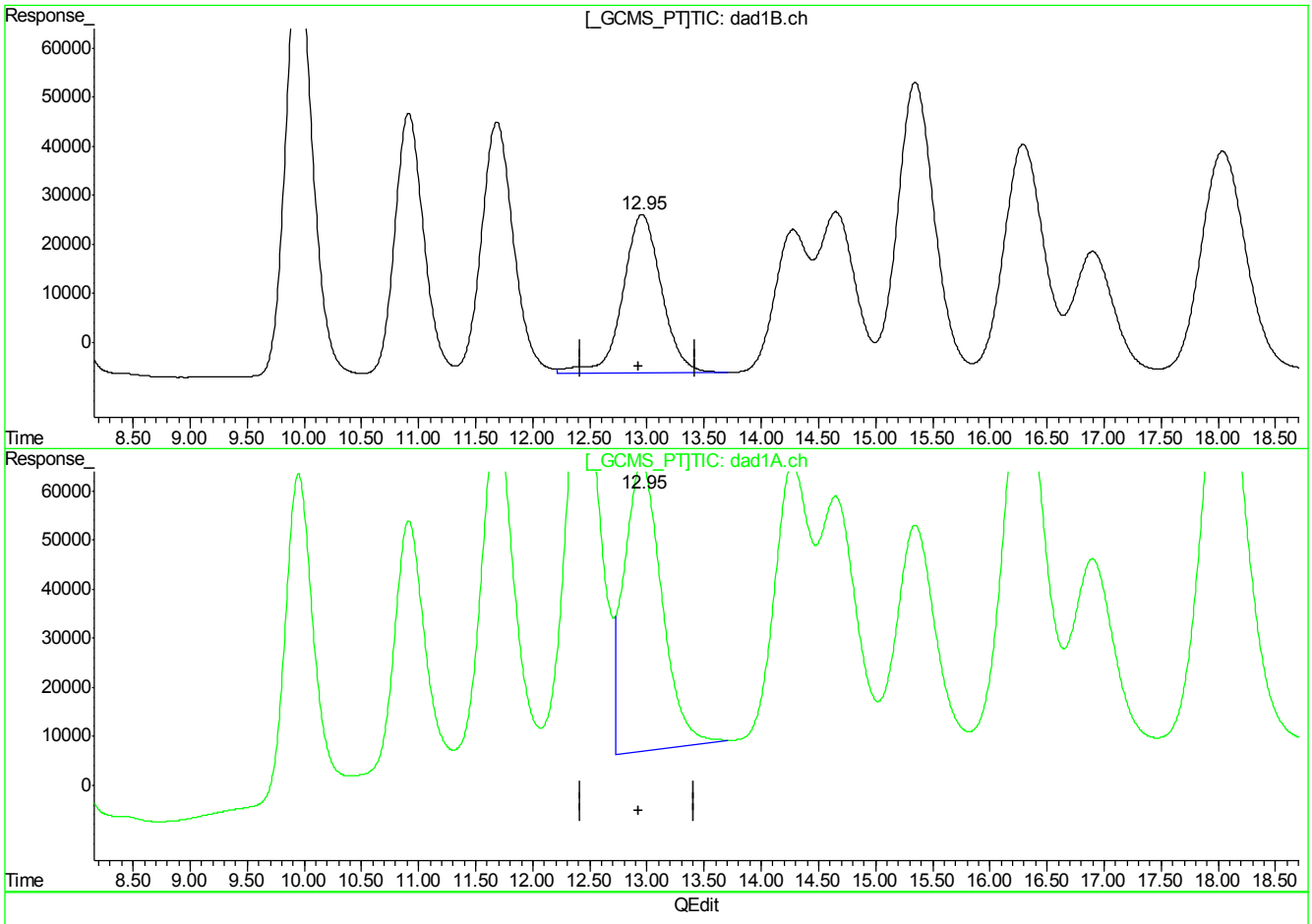
7.7.30.12

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(11) Tetryl

12.96min 943.917ppb

response 7649375

(11) Tetryl #2

12.95min 955.957ppb m

response 13355392

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:51:49 2018

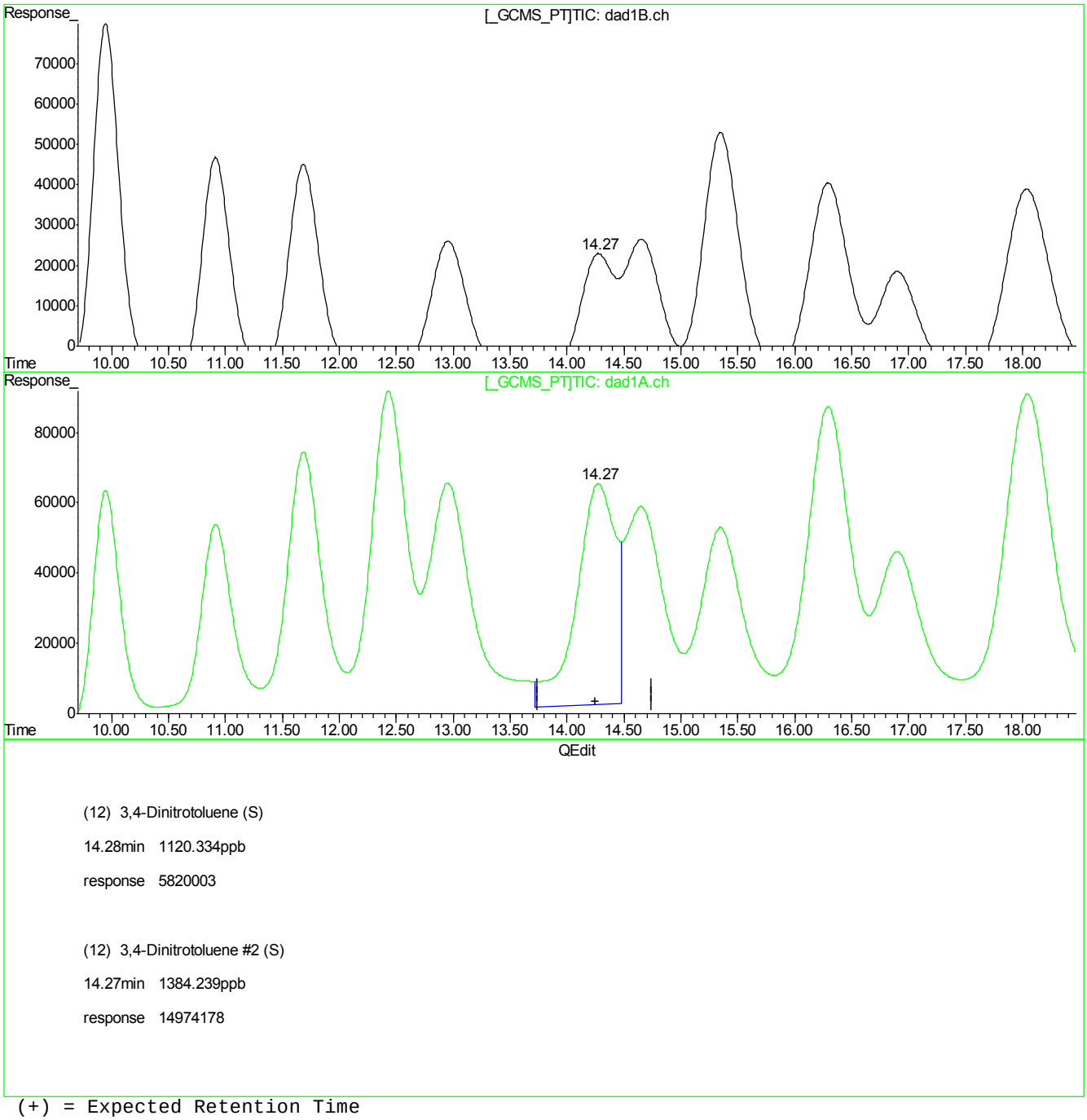
7.7.30.13

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.28min 1120.334ppb

response 5820003

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 1384.239ppb

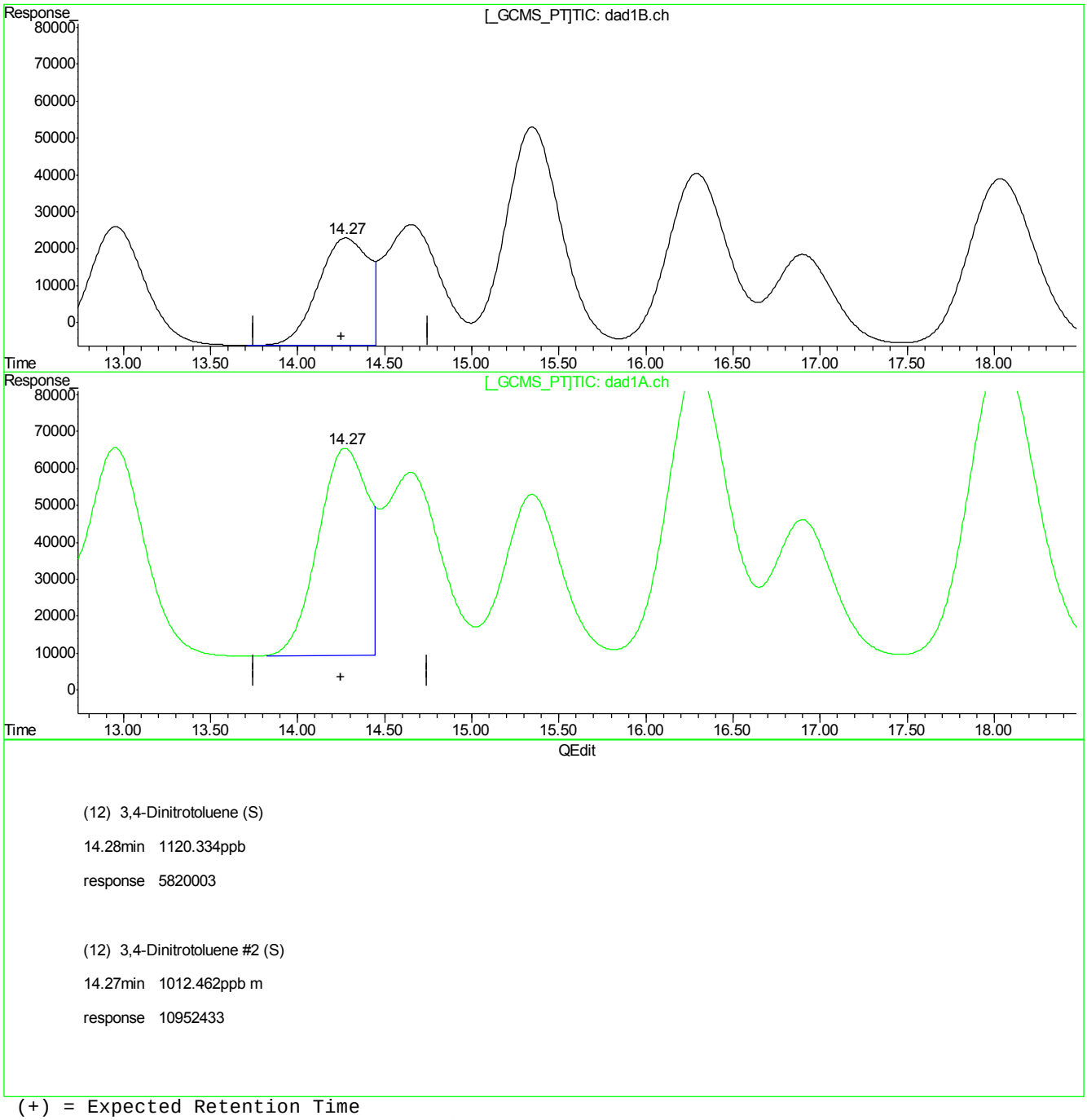
response 14974178

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:52:08 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.28min 1120.334ppb

response 5820003

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 1012.462ppb m

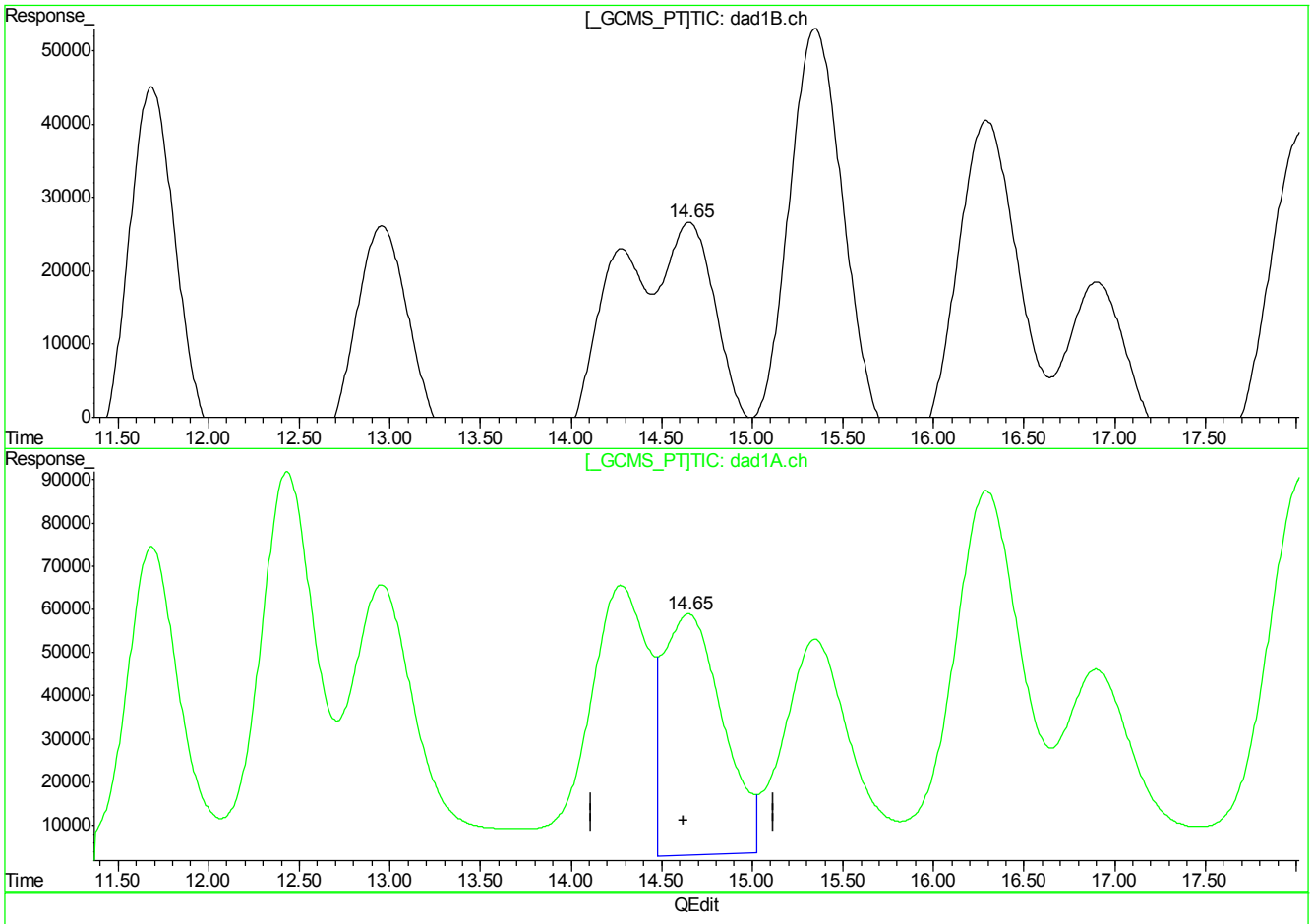
response 10952433

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:52:28 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.65min 1006.638ppb

response 7197066

(13) 2,6-Dinitrotoluene #2

14.65min 1250.139ppb

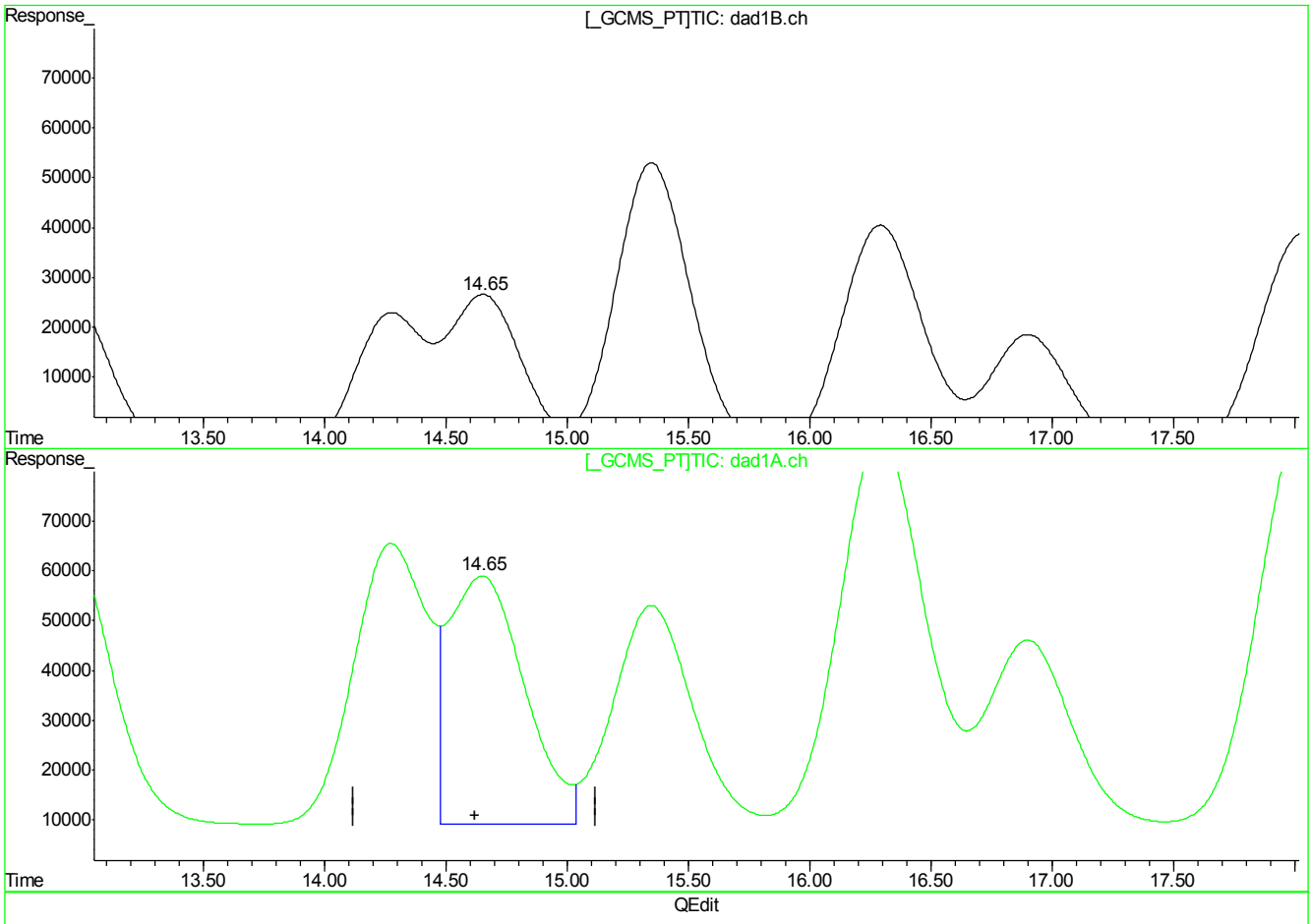
response 12683979

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:52:32 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.65min 1006.638ppb

response 7197066

(13) 2,6-Dinitrotoluene #2

14.65min 1067.965ppb m

response 10835631

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:52:43 2018

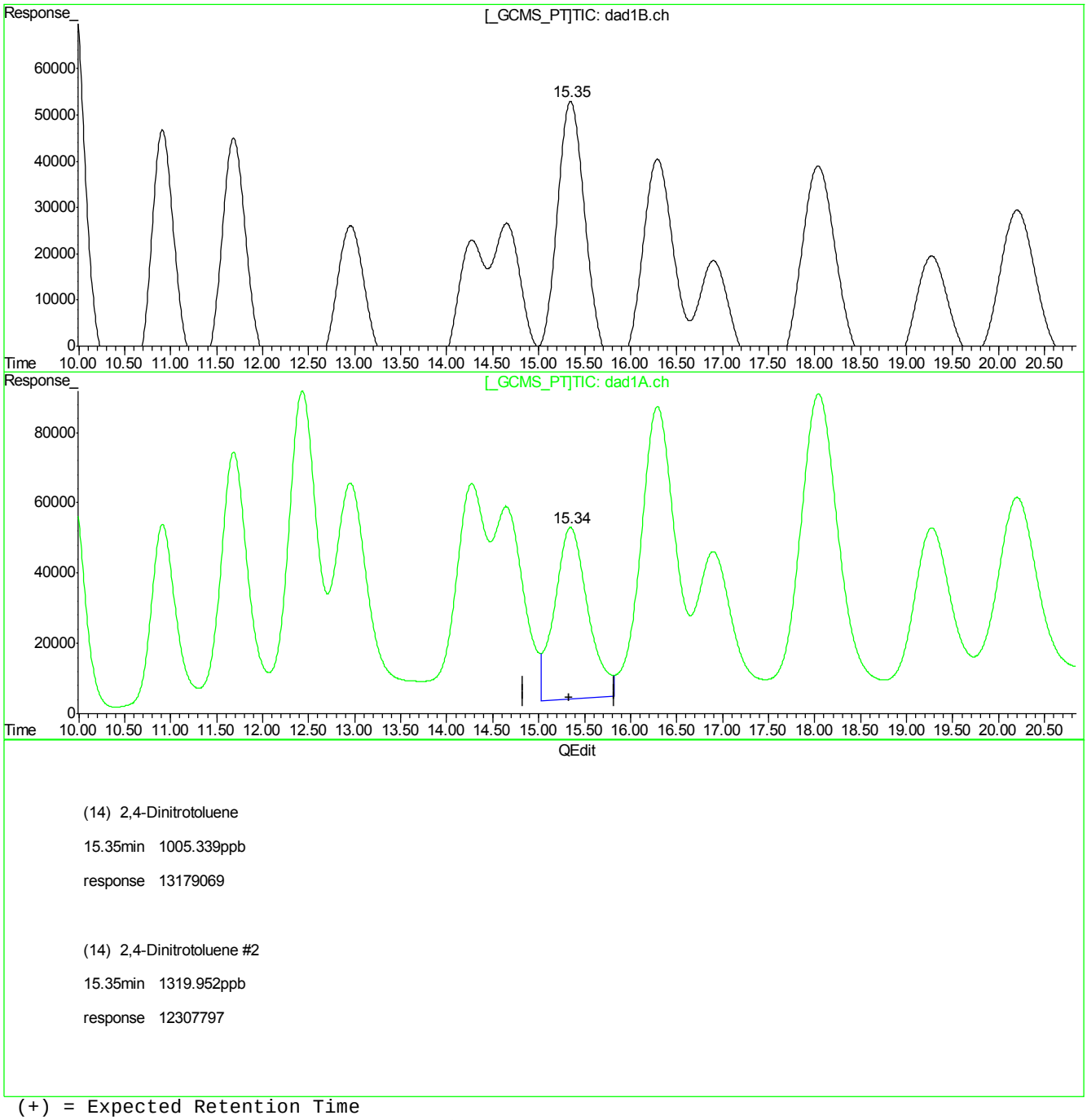
7.7.30.17

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.35min 1005.339ppb

response 13179069

(14) 2,4-Dinitrotoluene #2

15.35min 1319.952ppb

response 12307797

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:52:49 2018

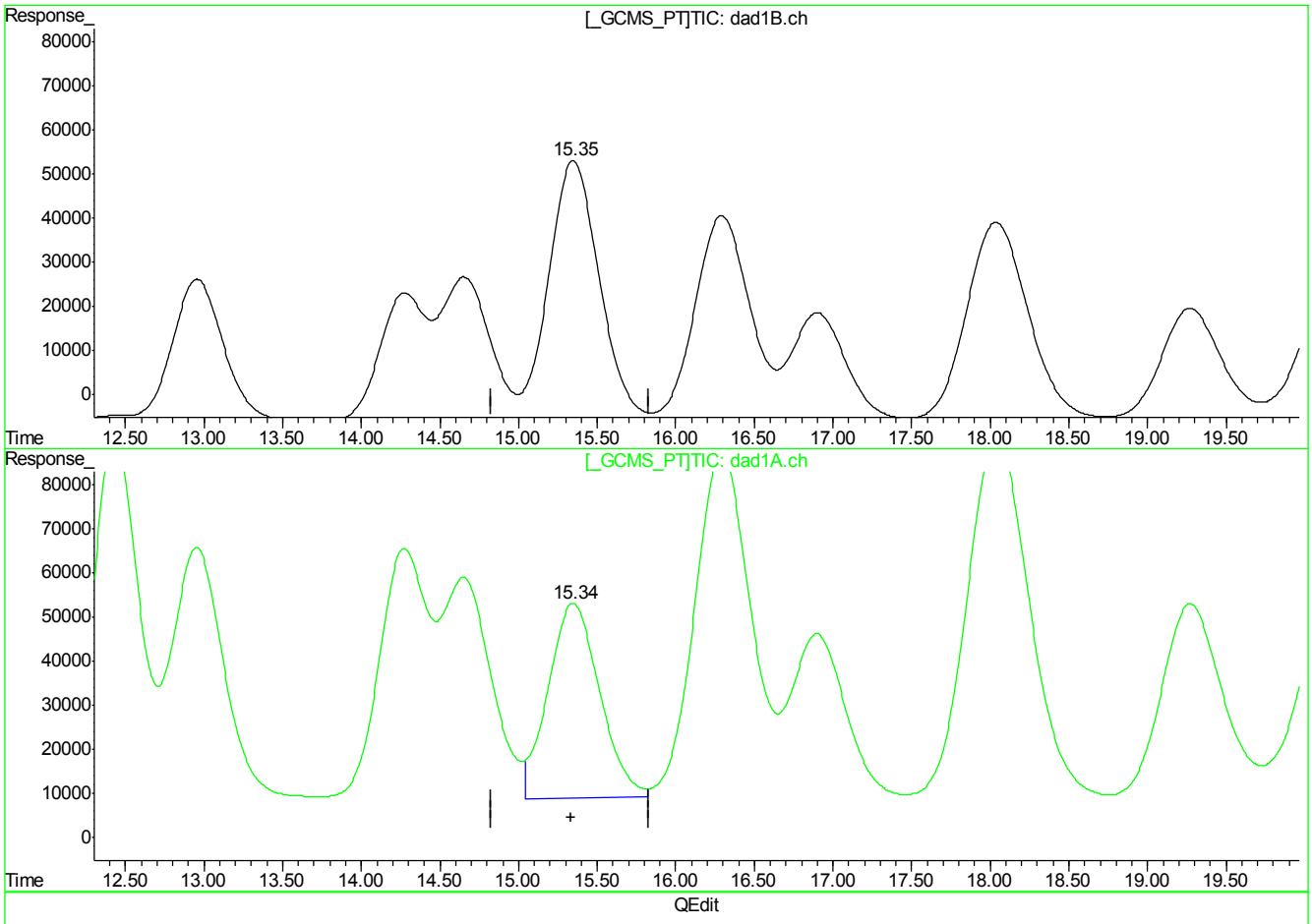
7.7.30.18

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.35min 1005.339ppb

response 13179069

(14) 2,4-Dinitrotoluene #2

15.34min 1071.320ppb m

response 10049316

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:52:56 2018

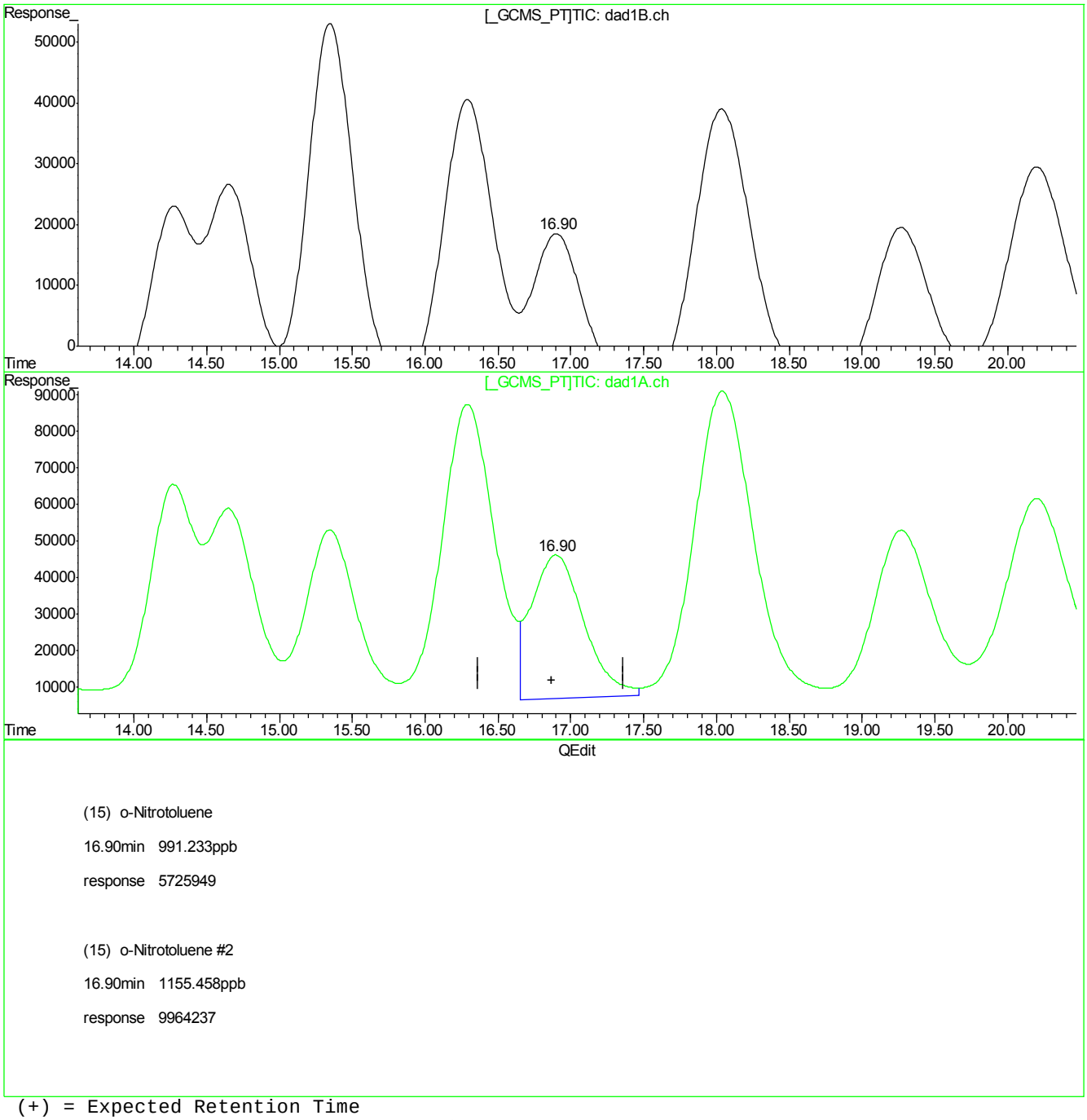
7.7.30.19

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.90min 991.233ppb

response 5725949

(15) o-Nitrotoluene #2

16.90min 1155.458ppb

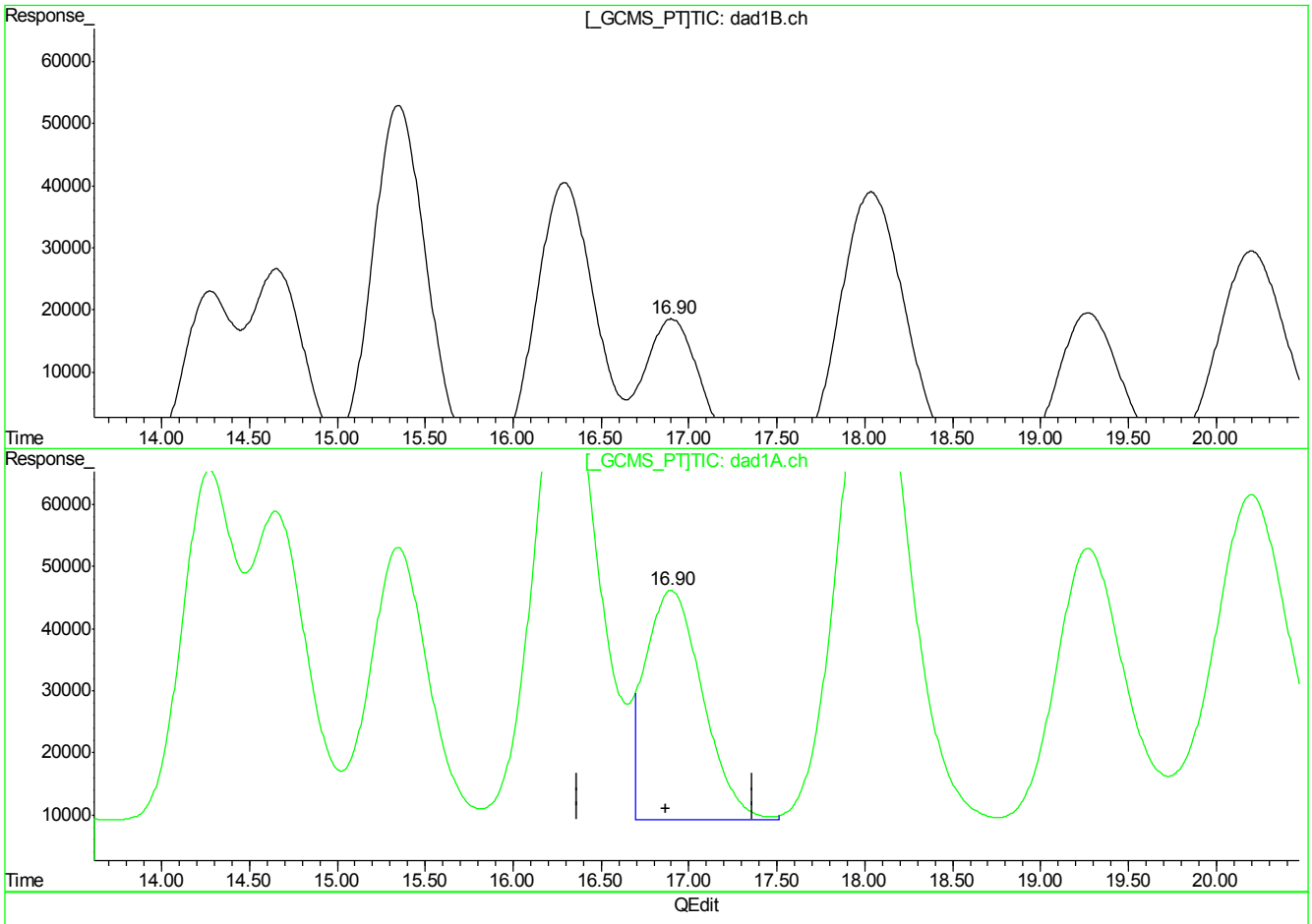
response 9964237

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:53:00 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.90min 991.233ppb

response 5725949

(15) o-Nitrotoluene #2

16.90min 969.954ppb m

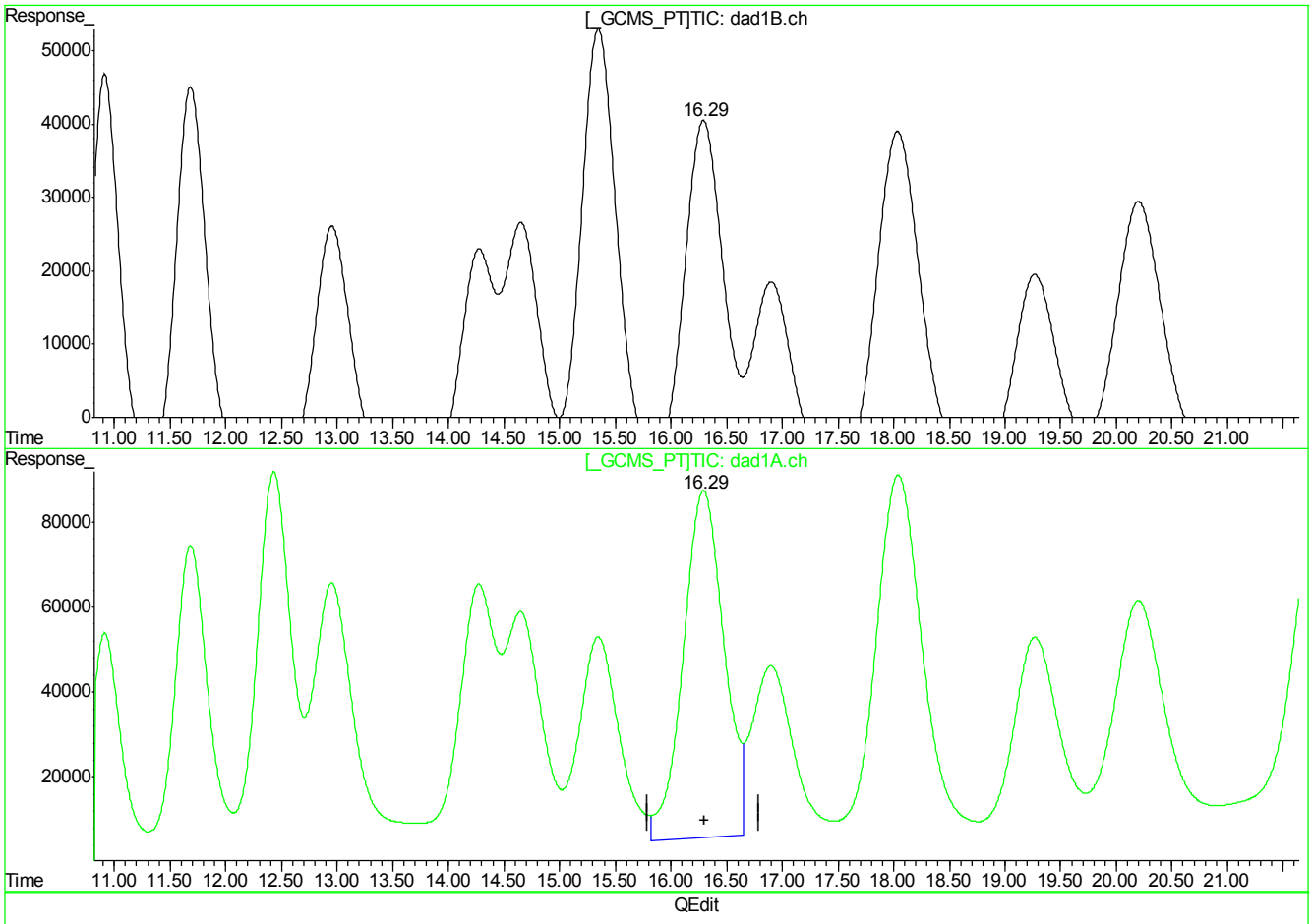
response 8364516

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:53:11 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.29min 1128.323ppb

response 11129578

(16) 3,5-Dinitroaniline #2

16.29min 1270.258ppb

response 20840241

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:53:16 2018

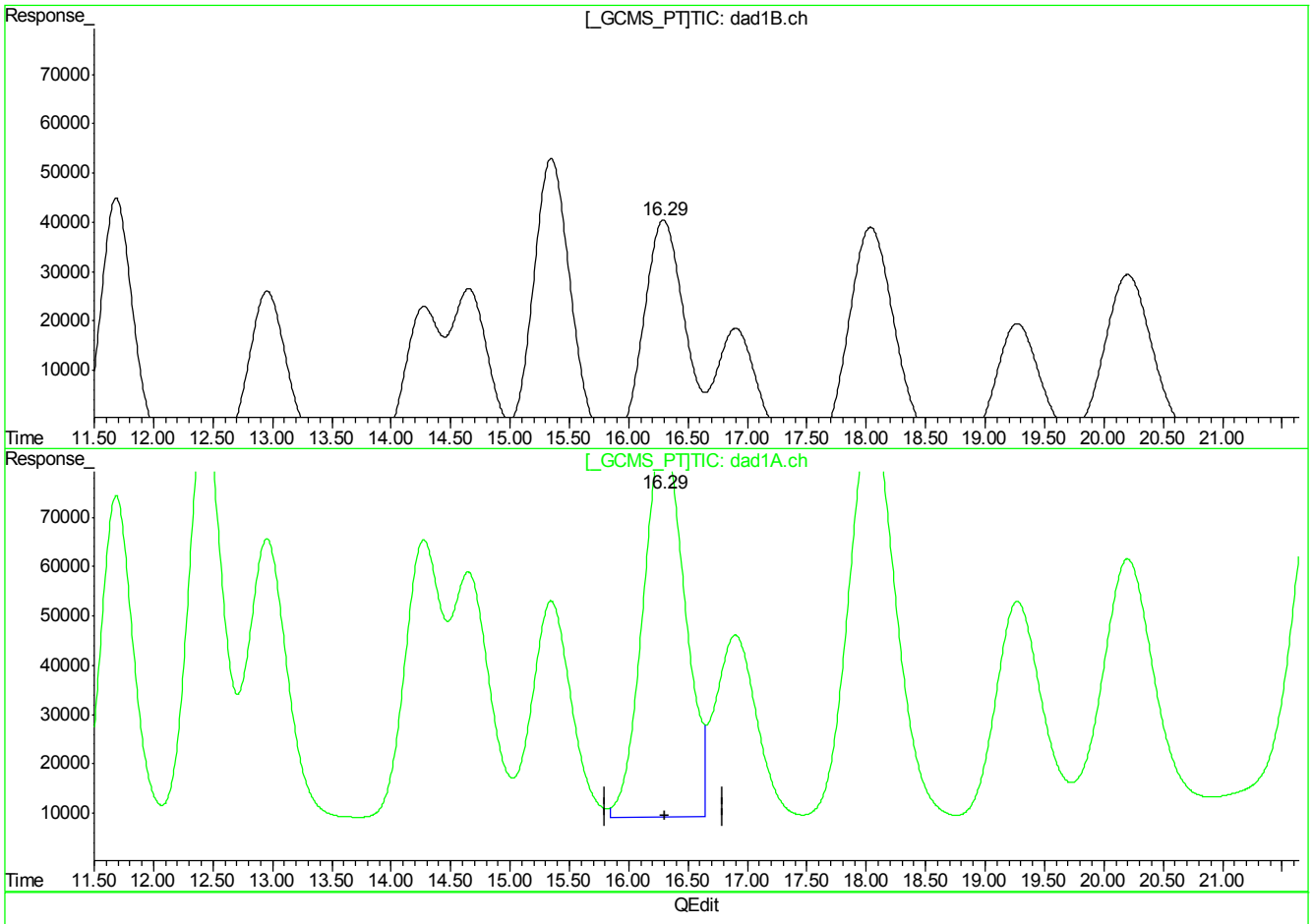
7.7.30.22

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614635.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614635.D\dad1A.ch
Acq On : 09-May-2018, 03:16:37 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.29min 1128.323ppb

response 11129578

(16) 3,5-Dinitroaniline #2

16.29min 1154.306ppb m

response 18908945

(+) = Expected Retention Time
GG614635.D 8330RPB.M_1113M.M Wed May 09 10:53:28 2018

7.7.30.23

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On : 09-May-2018, 08:11:13 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 10:17:48 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.22	5912114	12883459	1138.065	1190.969
	Spiked Amount 500.000	Range 69 - 134		Recovery =		227.61%#	238.19%#
	Target Compounds						
1)	TNX	4.99	4.99	14059852	14059852	988.389	988.465
2)	HMX	5.40	5.40	3633119	3633119	1120.680	1127.684
3)	DNX	5.56	5.56	8529858	8529858	1101.960	1097.059
4)	MNX	6.55	6.55	7365886	7365886	1048.730	1047.883
5)	1,3,5-Trinitrobe	7.44	7.44	10282364	10331189	992.353	997.167
6)	RDX	7.90	7.90	5083178	5312239	1066.959	1119.982
7)	1,3-Dinitrobenze	9.93	9.93	14221460	11562776	994.030	946.423
8)	Nitrobenzene	10.88	10.88	9254337	9782737	980.601	1056.348
9)	2,4,6-Trinitroto	11.65	11.65	9936123	14221674	980.444	1084.394
10)	Nitroglycerin	0.00	12.39	0	17677084	N.D. d	5245.820
11)	Tetryl	12.92	12.92	7468608	13745172	921.611	984.331
13)	2,6-Dinitrotolue	14.61	14.61	7066380	10853255	988.359	1069.702
14)	2,4-Dinitrotolue	15.32	15.32	13159782	10523234	1003.868	1123.240
15)	o-Nitrotoluene	16.85	16.85	5821147	9477220	1007.713	1098.983
16)	3,5-Dinitroanili	16.26	16.26	11174105	20046788	1132.768	1222.663
17)	p-Nitrotoluene	17.99	18.00	12050743	22209196	1026.262	1047.941
18)	4-Amino-2,6-Dini	17.99	18.00	12050743	22209196	1026.262	1044.894
19)	m-Nitrotoluene	19.22	19.22	6233808	10504103	1057.407	1080.180
20)	2-Amino-4,6-Dini	20.16	20.16	9544424	13624813	1057.797	1102.621
21)	PETN	0.00	21.75	0	17595706	N.D. d	5485.963m

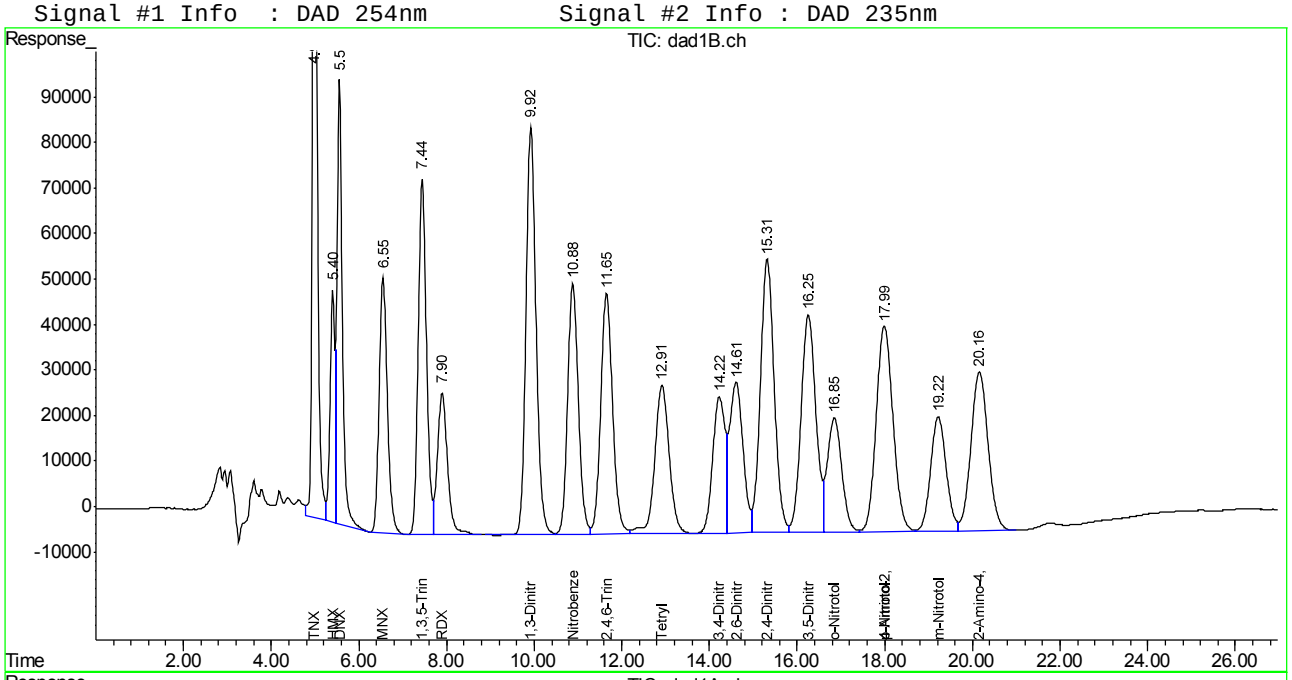
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614645.D 8330RPB.M_1113M.M Wed May 09 11:10:34 2018 Page 1

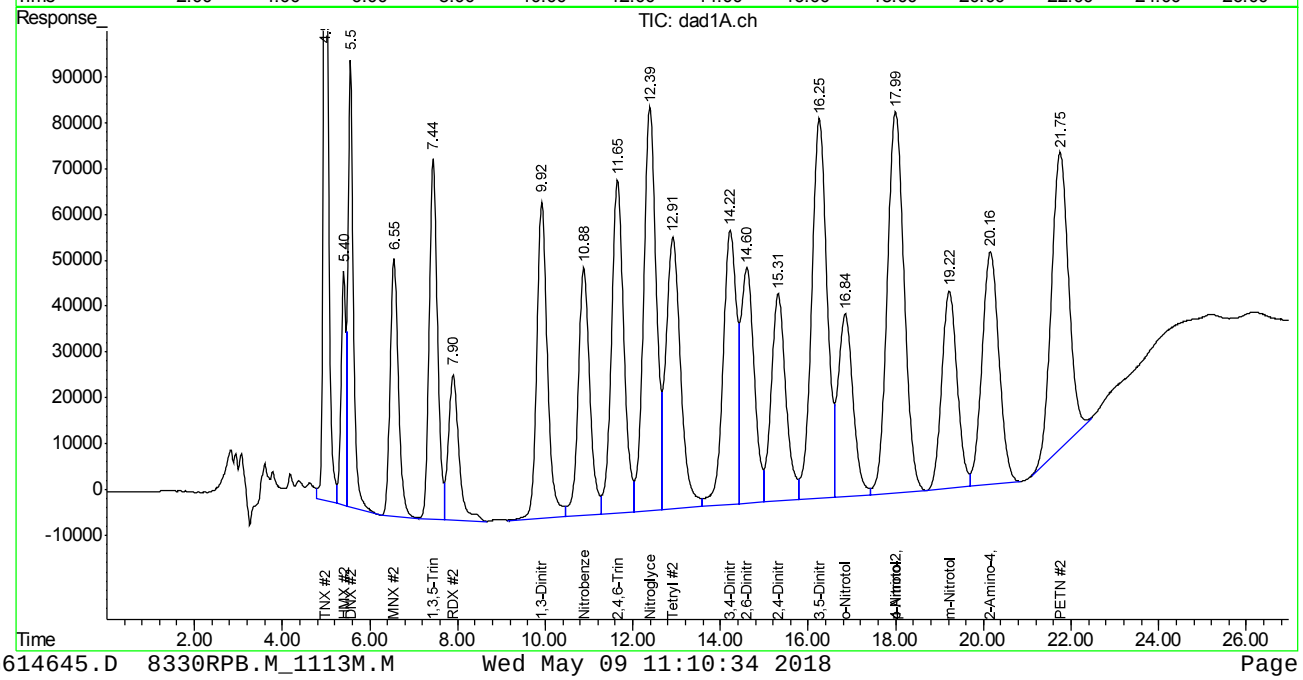
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On : 09-May-2018, 08:11:13 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:00 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

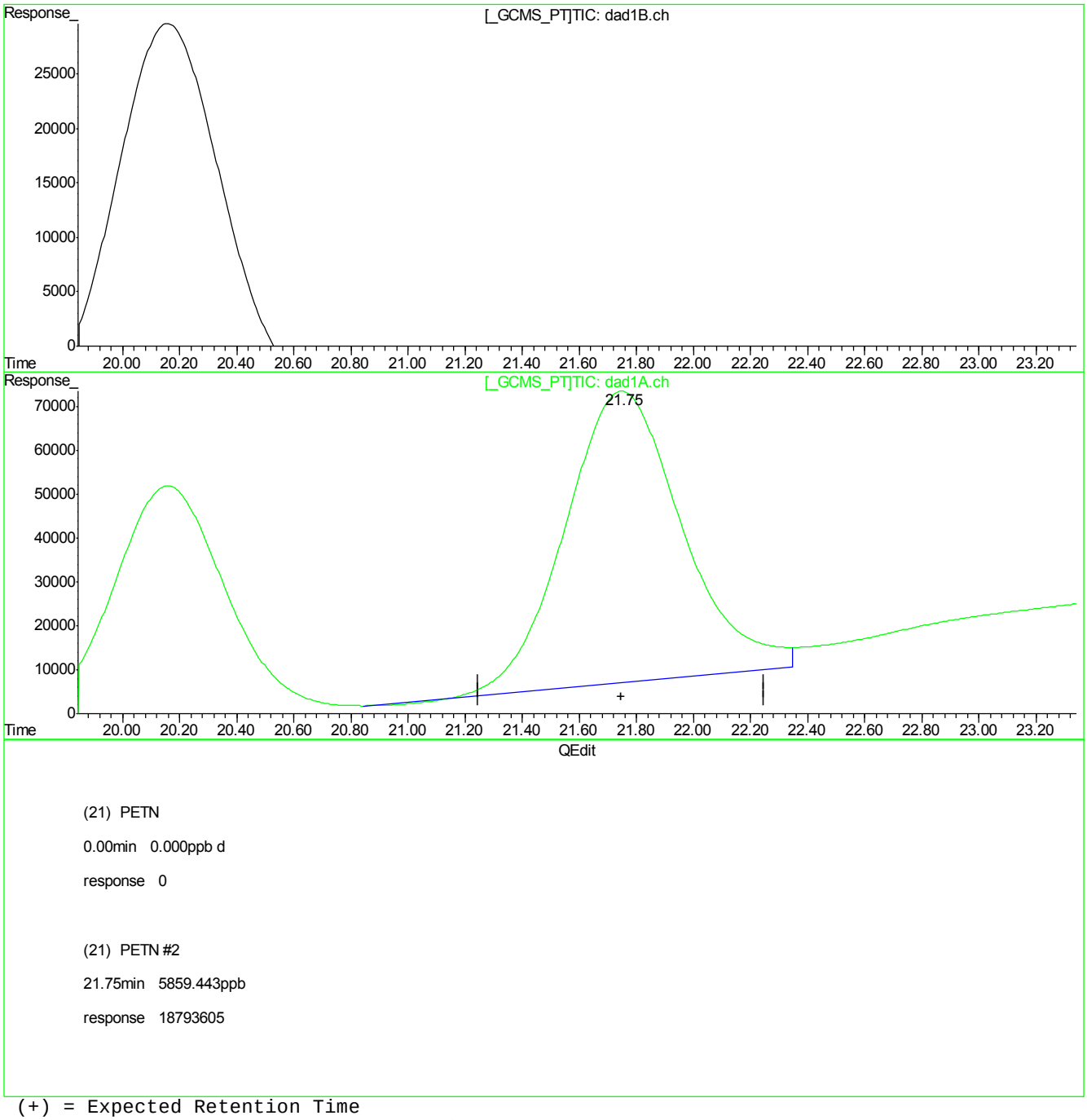
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614645.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 08:11	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.75	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On : 09-May-2018, 08:11:13 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

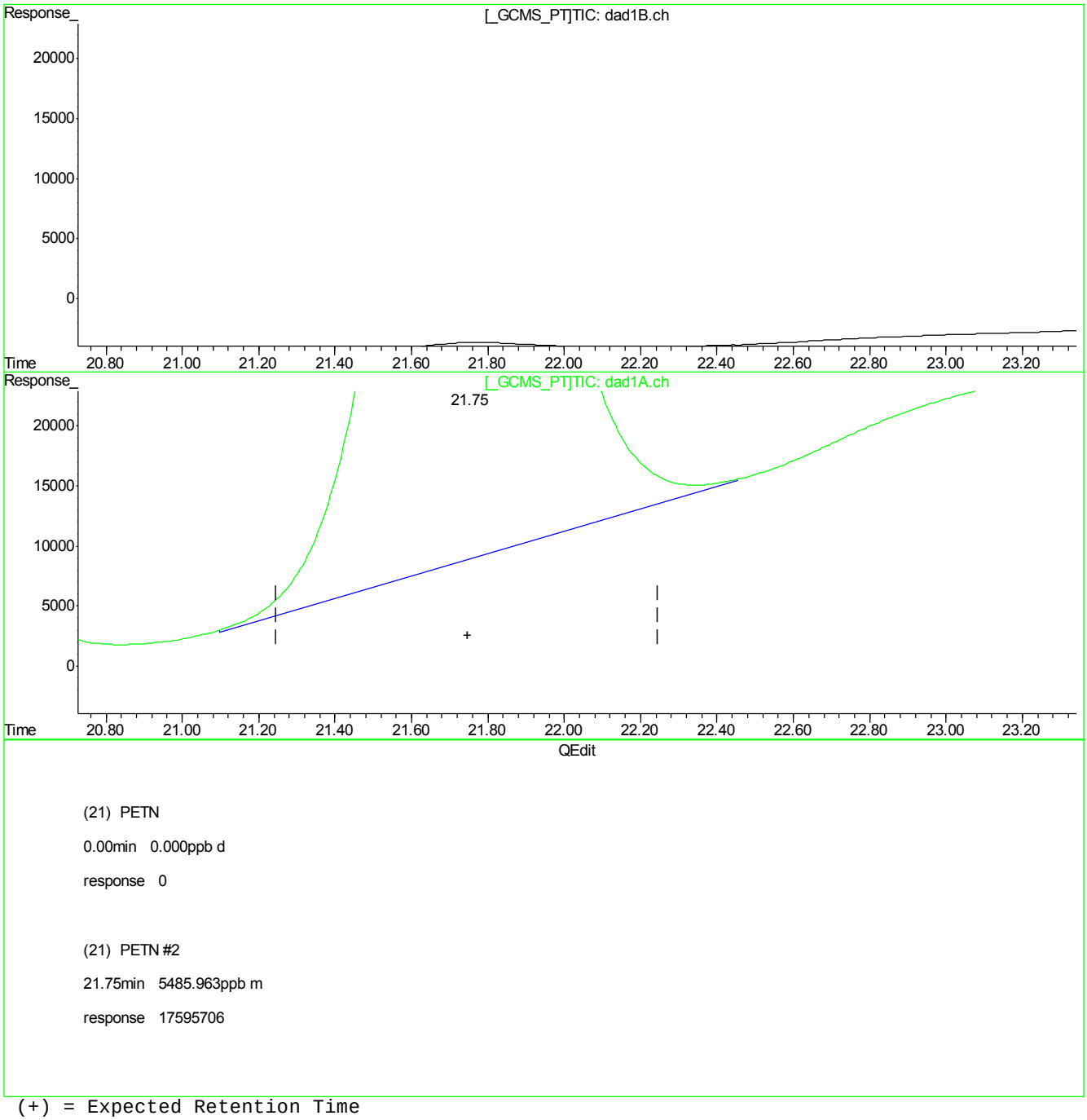


(+) = Expected Retention Time
GG614645.D 8330RPB.M_1113M.M Wed May 09 11:00:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On : 09-May-2018, 08:11:13 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614645.D 8330RPB.M_1113M.M Wed May 09 11:00:27 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On : 09-May-2018, 12:09:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 14:12:28 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.24	5912911	12753292	1138.218	1178.936
	Spiked Amount 500.000	Range 69 - 134		Recovery =		227.64%#	235.79%#
	Target Compounds						
1)	TNX	5.01	5.01	13843483	13843483	973.179	973.253
2)	HMX	5.42	5.42	3551036	3551036	1095.361	1102.206
3)	DNX	5.57	5.57	8289654	8289654	1070.928	1066.165
4)	MNX	6.57	6.57	7373826	7373826	1049.860	1049.013
5)	1,3,5-Trinitrobe	7.47	7.47	10155273	10155273	980.088	980.188
6)	RDX	7.91	7.91	4694565	4694565	985.389	989.757
7)	1,3-Dinitrobenze	9.93	9.93	14295732	11243159	999.221	917.861
8)	Nitrobenzene	10.89	10.89	9223069	9202091	977.288	993.650
9)	2,4,6-Trinitroto	11.67	11.67	9929038	14076994	979.745	1073.362
10)	Nitroglycerin	0.00	12.41	0	17730770	N.D. d	5261.751
11)	Tetryl	12.92	12.91	7514596	14009844	927.285	1003.614
13)	2,6-Dinitrotolue	14.62	14.61	7108683	11076485	994.276	1091.704
14)	2,4-Dinitrotolue	15.32	15.32	13173156	10534747	1004.888	1124.503
15)	o-Nitrotoluene	16.86	16.86	5781071	8851445	1000.775	1026.418
16)	3,5-Dinitroanili	16.24	16.24	11177295	19708529	1133.087	1202.354
17)	p-Nitrotoluene	17.99	17.99	11969362	21820286	1019.331	1029.591
18)	4-Amino-2,6-Dini	17.99	17.99	11969362	21820286	1019.331	1026.597
19)	m-Nitrotoluene	19.22	19.22	6204114	10732502	1052.370	1103.667
20)	2-Amino-4,6-Dini	20.14	20.14	9496702	13573689	1052.508	1098.752
21)	PETN	0.00	21.76	0	17903317	N.D. d	5581.870m

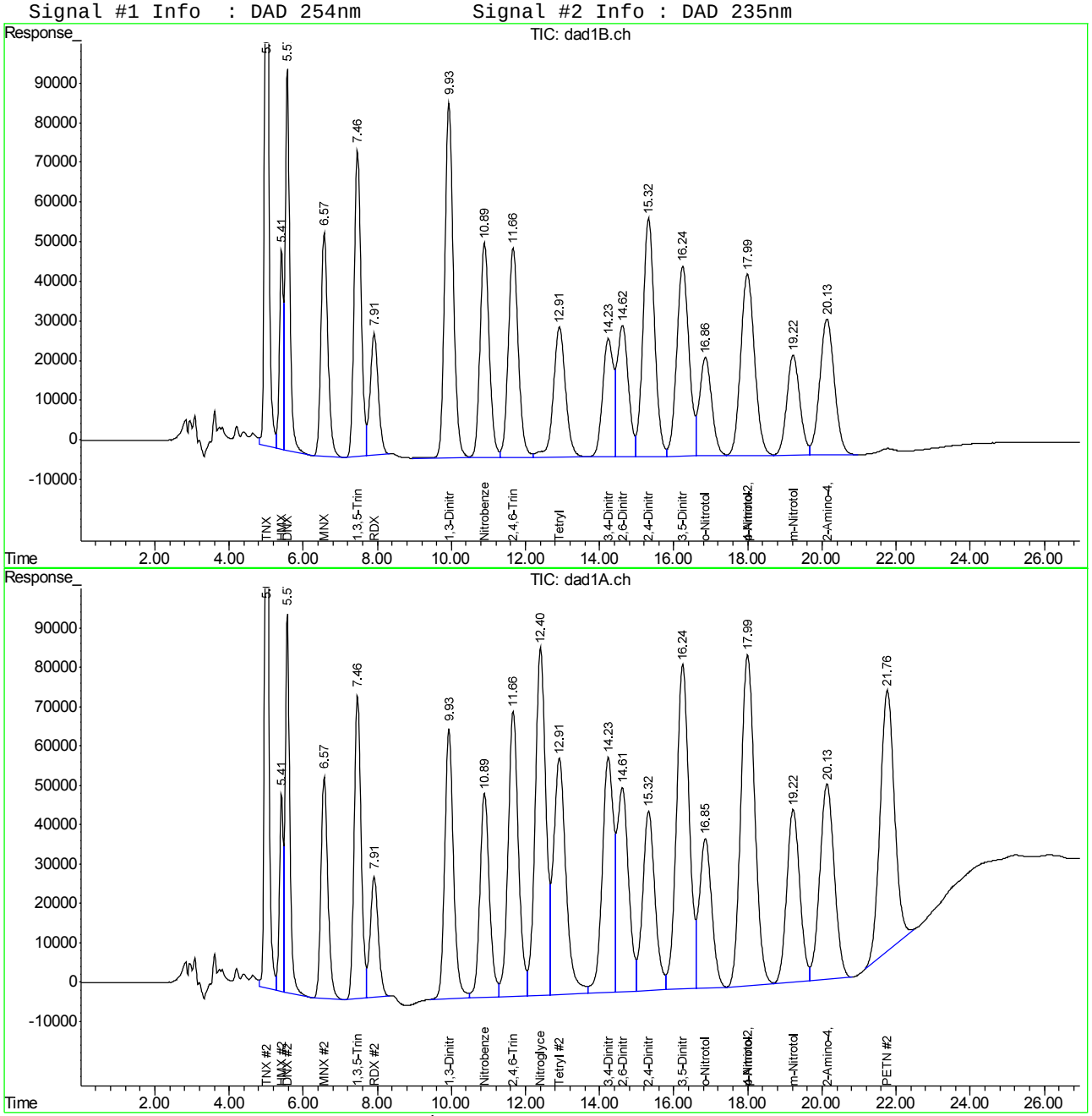
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614653.D 8330RPB.M_1113M.M Wed May 09 14:13:14 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On : 09-May-2018, 12:09:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

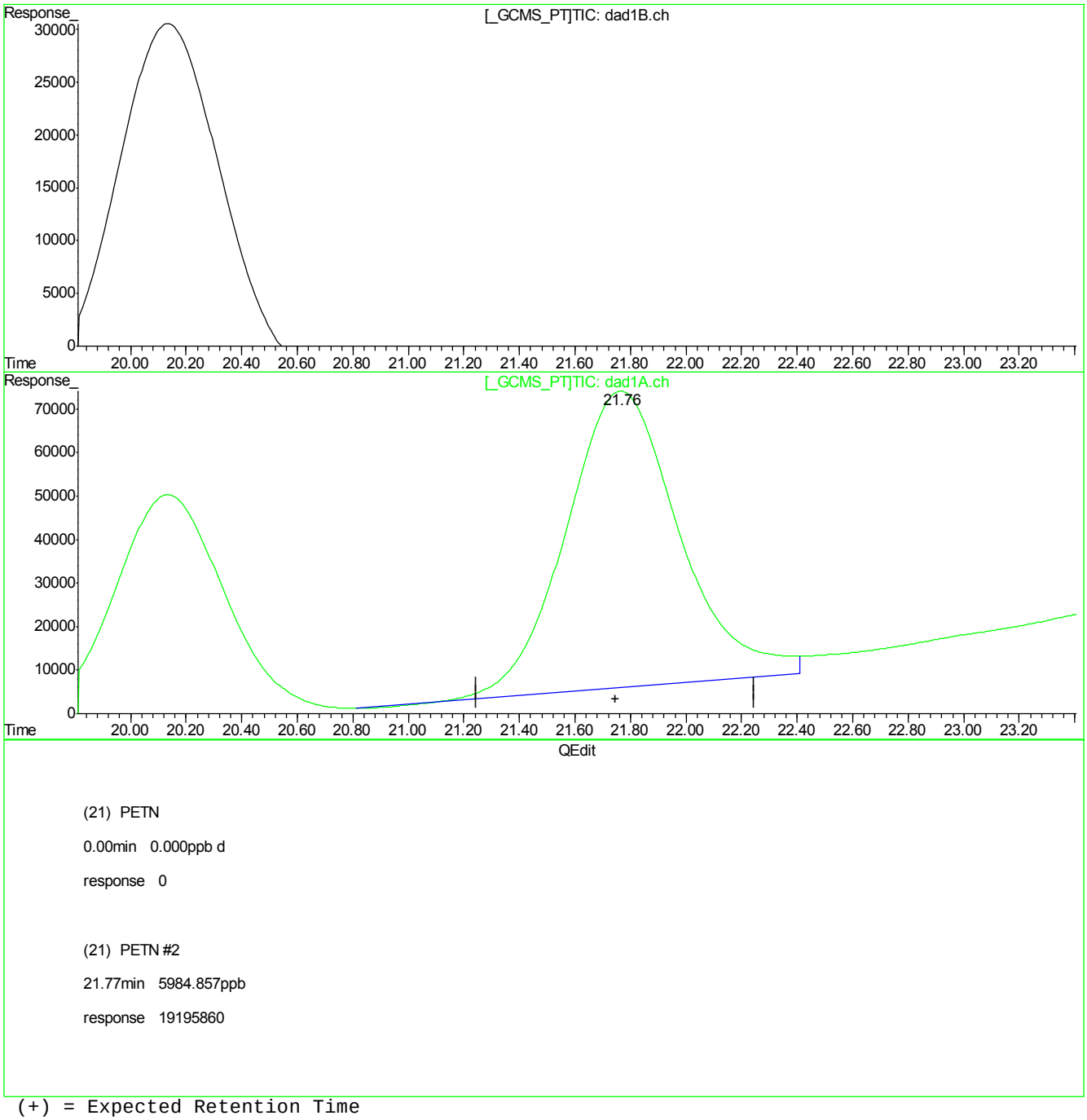
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614653.D	**Analyst approved:**	05/09/18 14:15 Evita Martinez
Injection Time:	05/09/18 12:09	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.76	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On : 09-May-2018, 12:09:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

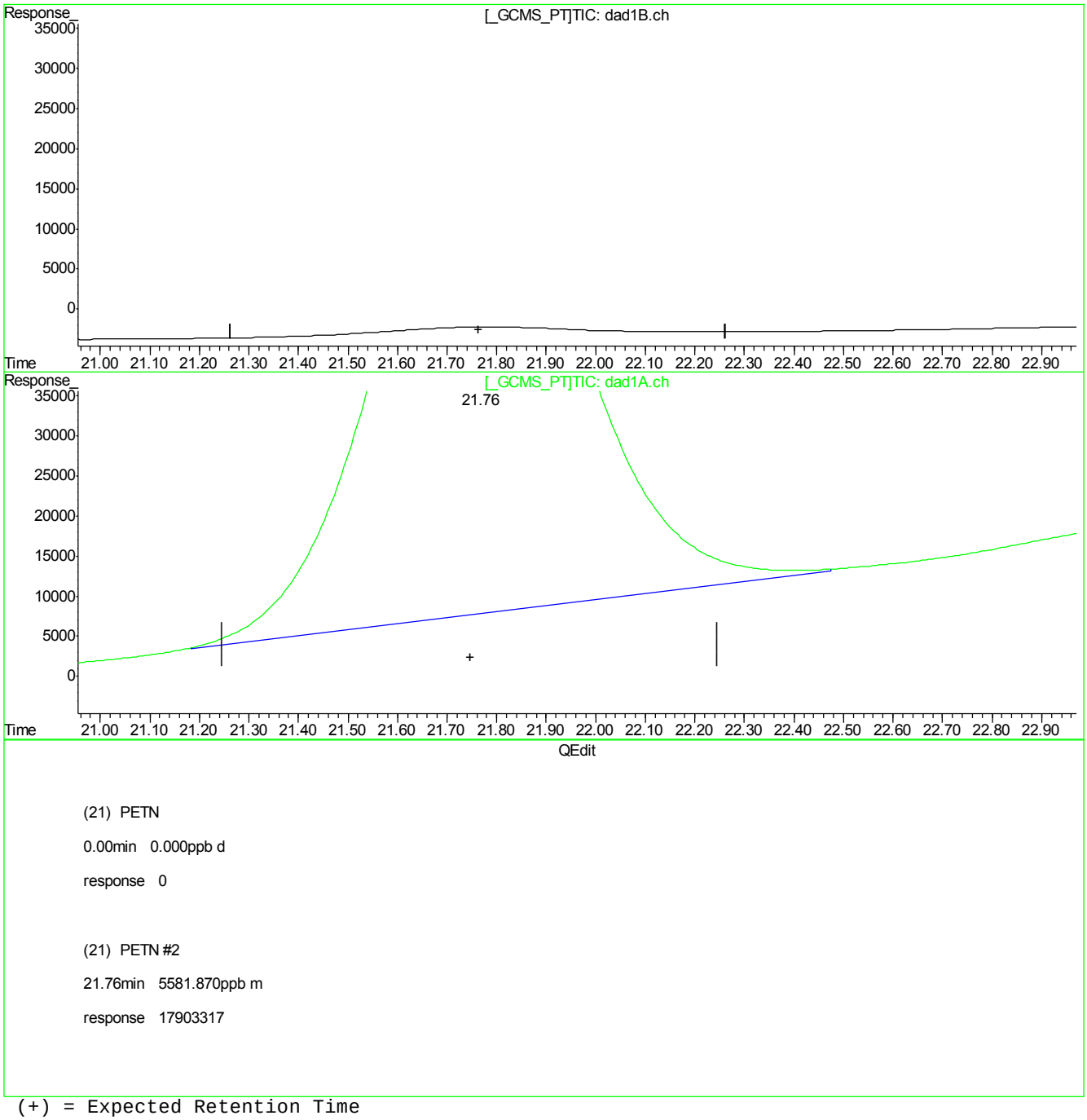


(+) = Expected Retention Time
GG614653.D 8330RPB.M_1113M.M Wed May 09 14:12:36 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On : 09-May-2018, 12:09:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614653.D 8330RPB.M_1113M.M Wed May 09 14:12:49 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On : 09-May-2018, 15:06:24 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:35 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.24	5855135	12770875	1127.096	1180.561
	Spiked Amount 500.000	Range 69 - 134		Recovery =		225.42%#	236.11%#
	Target Compounds						
1)	TNX	5.01	5.01	13844744	13844744	973.267	973.342
2)	HMX	5.42	5.42	3583920	3583920	1105.504	1112.413
3)	DNX	5.57	5.57	8335618	8335618	1076.866	1072.077
4)	MNX	6.57	6.57	7342770	7342770	1045.438	1044.594
5)	1,3,5-Trinitrobe	7.47	7.47	10124026	10124026	977.072	977.172
6)	RDX	7.91	7.91	4674127	4674127	981.099	985.448
7)	1,3-Dinitrobenze	9.94	9.94	14224795	11522388	994.263	942.805
8)	Nitrobenzene	10.90	10.90	9147695	9447832	969.301	1020.185
9)	2,4,6-Trinitroto	11.68	11.68	9823520	13764411	969.333	1049.528
10)	Nitroglycerin	0.00	12.42	0	17693217	N.D. d	5250.607
11)	Tetryl	12.92	12.92	7459021	14261927	920.428	1021.991
13)	2,6-Dinitrotolue	14.62	14.61	7144029	11253830	999.220	1109.183
14)	2,4-Dinitrotolue	15.32	15.32	13144620	10475034	1002.711	1117.953
15)	o-Nitrotoluene	16.86	16.86	5735856	8607302	992.948	998.107
16)	3,5-Dinitroanili	16.22	16.22	11153706	19403382	1130.732	1184.025
17)	p-Nitrotoluene	17.98	17.99	11947904	21894326	1017.504	1033.084
18)	4-Amino-2,6-Dini	17.98	17.99	11947904	21894326	1017.504	1030.080
19)	m-Nitrotoluene	19.23	19.22	6144559	10503489	1042.268	1080.116
20)	2-Amino-4,6-Dini	20.11	20.11	9470636	13531632	1049.620	1095.568
21)	PETN	0.00	21.78	0	17400047	N.D. d	5424.961m

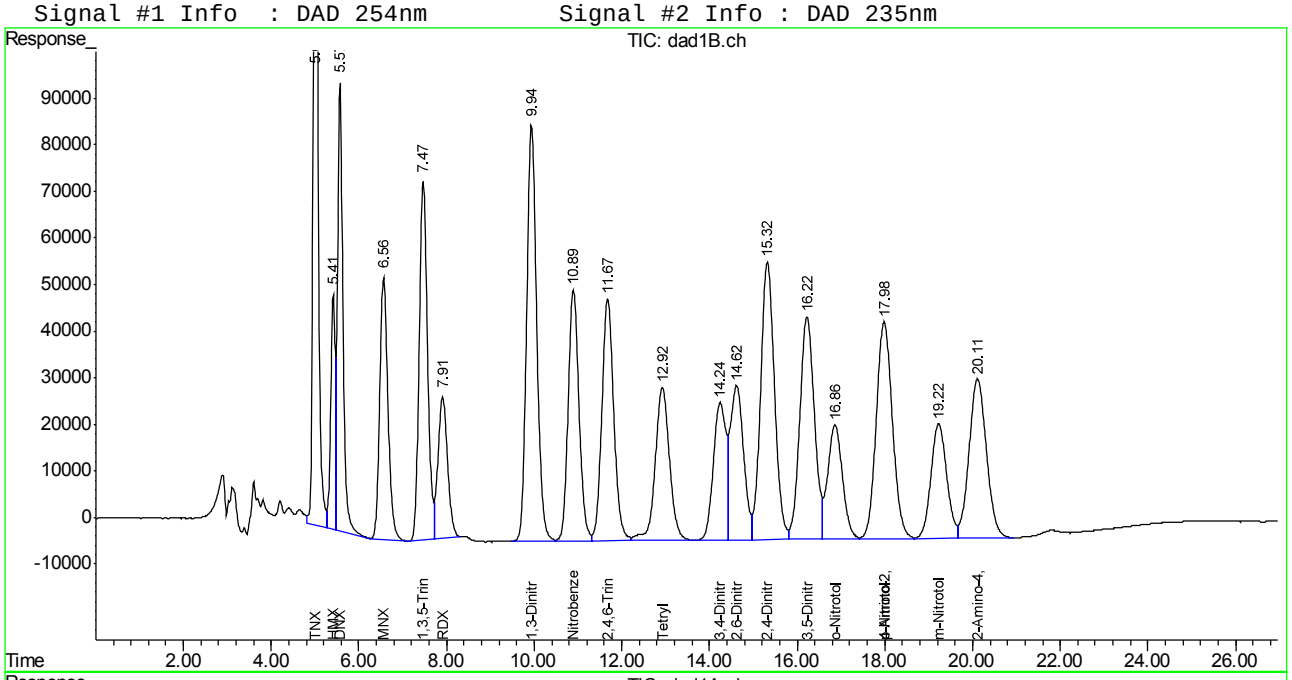
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614659.D 8330RPB.M_1113M.M Thu May 10 13:16:37 2018 Page 1

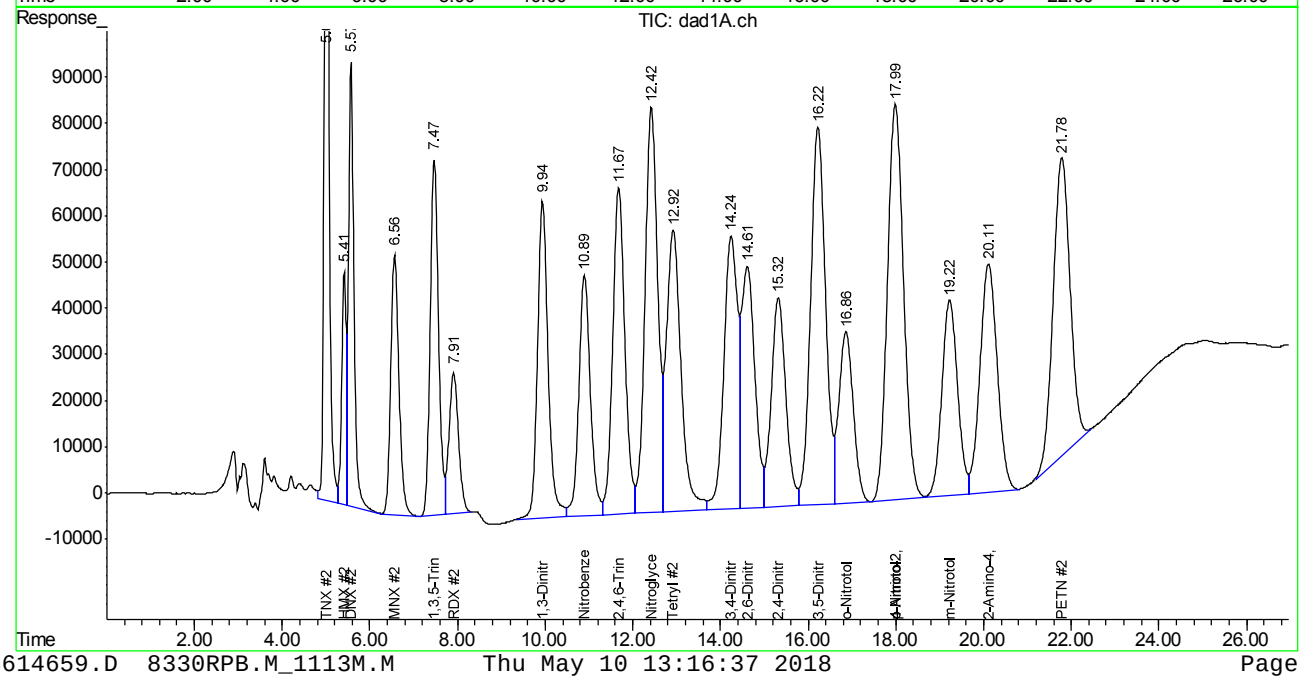
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On : 09-May-2018, 15:06:24 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

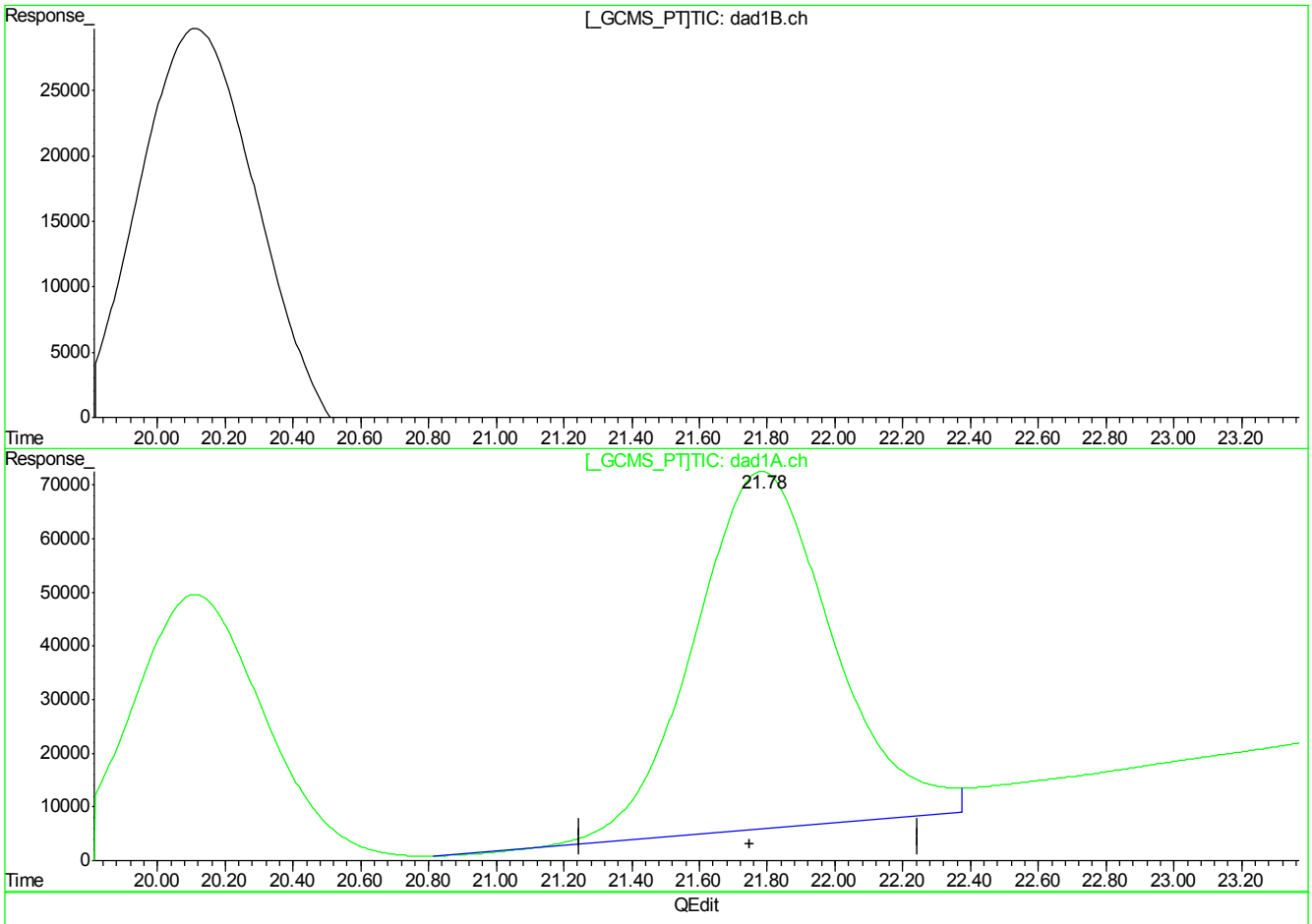
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614659.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 15:06	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.78	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On : 09-May-2018, 15:06:24 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.79min 5876.023ppb

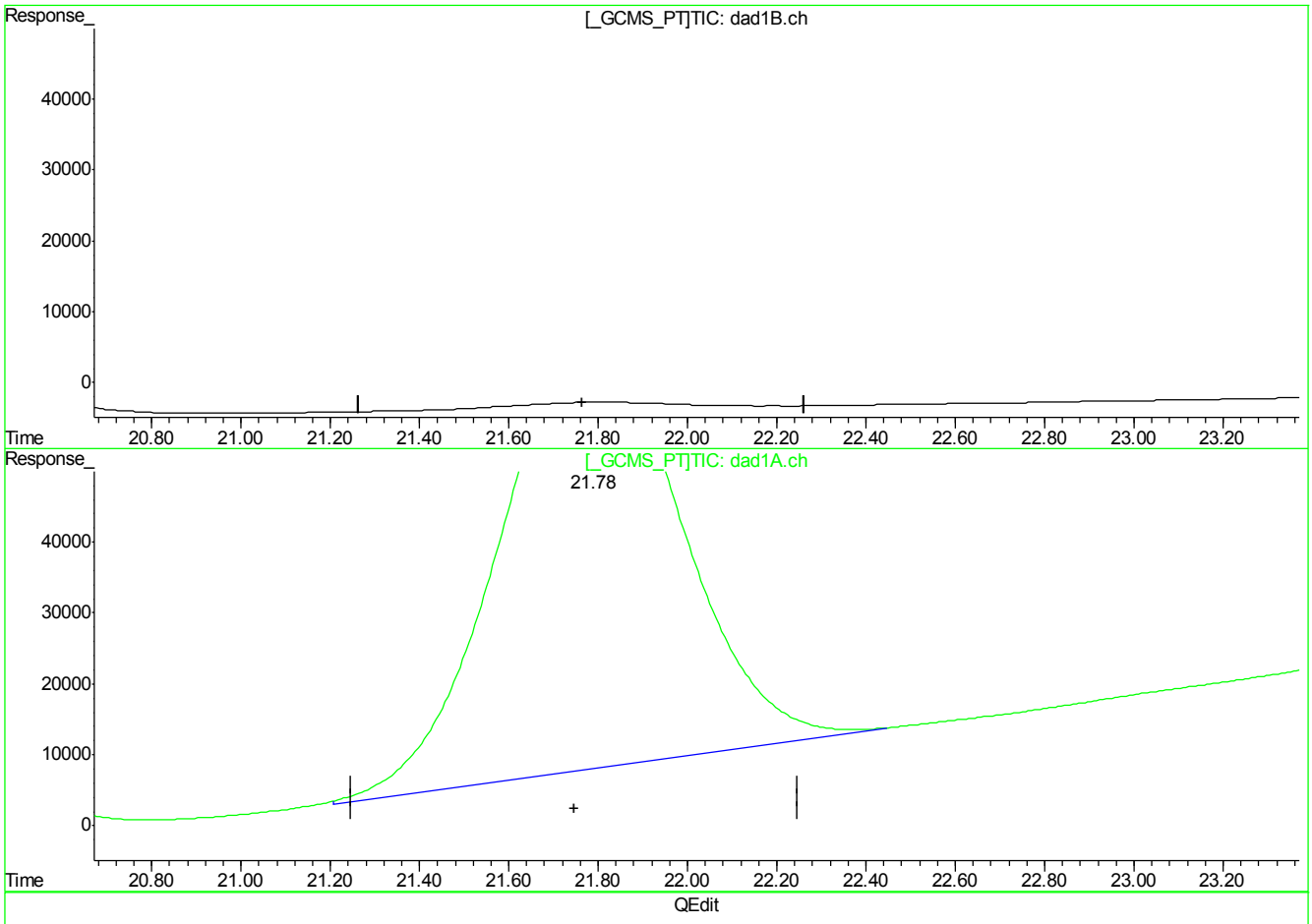
response 18846785

(+) = Expected Retention Time
GG614659.D 8330RPB.M_1113M.M Thu May 10 13:12:58 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On : 09-May-2018, 15:06:24 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 5424.961ppb m

response 17400047

(+) = Expected Retention Time
GG614659.D 8330RPB.M_1113M.M Thu May 10 13:13:04 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:43 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.28	14.28	5814212	12722829	1119.219	1176.120
	Spiked Amount 500.000	Range 69 - 134		Recovery =		223.84%#	235.22%#
	Target Compounds						
1)	TNX	5.02	5.02	13708350	13708350	963.679	963.753
2)	HMX	5.43	5.43	3472018	3472018	1070.987	1077.679
3)	DNX	5.59	5.59	8145720	8145720	1052.334	1047.653
4)	MNX	6.59	6.59	7341211	7341211	1045.217	1044.373
5)	1,3,5-Trinitrobe	7.49	7.49	10105100	10105100	975.245	975.345
6)	RDX	7.94	7.94	4654737	4654737	977.029	981.360
7)	1,3-Dinitrobenze	9.97	9.97	14260641	11303163	996.769	923.211
8)	Nitrobenzene	10.93	10.93	9074378	9033607	961.532	975.456
9)	2,4,6-Trinitroto	11.71	11.71	9796363	13782141	966.653	1050.880
10)	Nitroglycerin	0.00	12.45	0	17412224	N.D. d	5167.220
11)	Tetryl	12.97	12.96	7347961	13554843	906.723	970.472
13)	2,6-Dinitrotolue	14.66	14.66	7178335	11237646	1004.018	1107.588
14)	2,4-Dinitrotolue	15.37	15.37	13173963	10665689	1004.950	1138.873
15)	o-Nitrotoluene	16.91	16.91	5687076	8505355	984.504	986.285
16)	3,5-Dinitroanili	16.27	16.27	11098357	19310791	1125.205	1178.461
17)	p-Nitrotoluene	18.03	18.04	11860309	21532917	1010.044	1016.031
18)	4-Amino-2,6-Dini	18.03	18.04	11860309	21532917	1010.044	1013.077
19)	m-Nitrotoluene	19.27	19.27	6067948	10308268	1029.273	1060.041
20)	2-Amino-4,6-Dini	20.18	20.18	9418058	13383144	1043.792	1084.317
21)	PETN	0.00	21.82	0	17454368	N.D. d	5441.897m

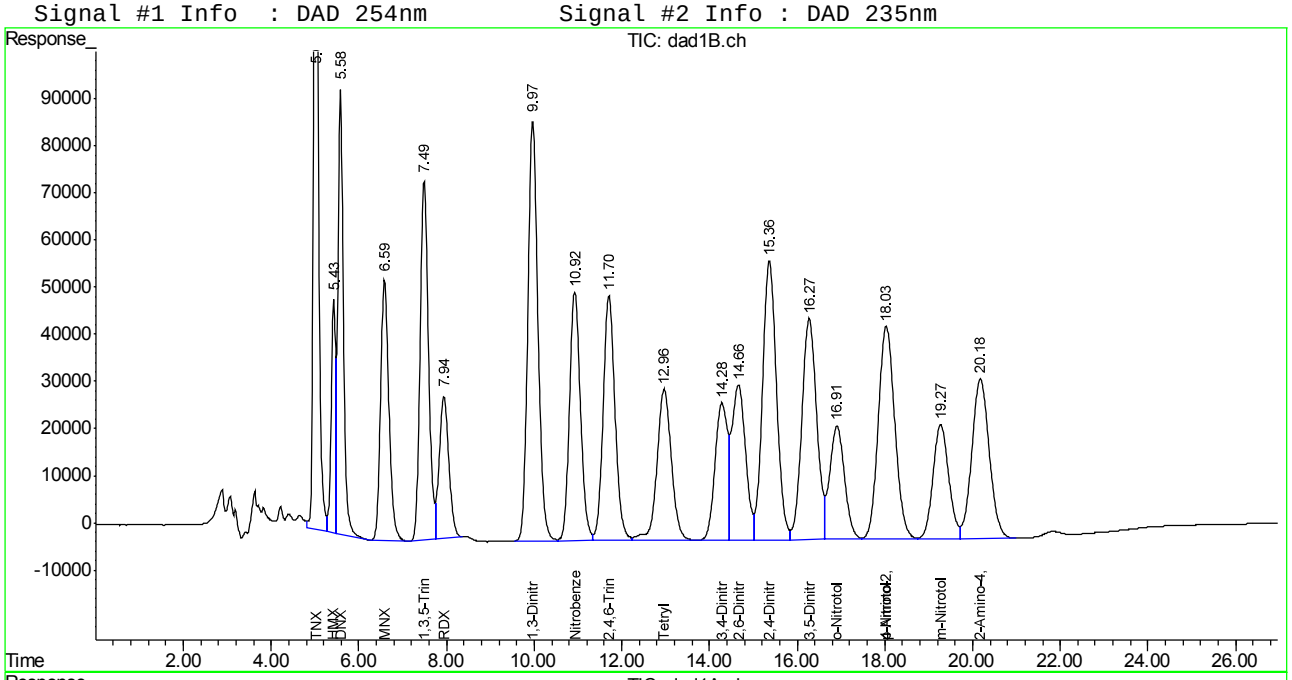
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614666.D 8330RPB.M_1113M.M Thu May 10 13:16:43 2018 Page 1

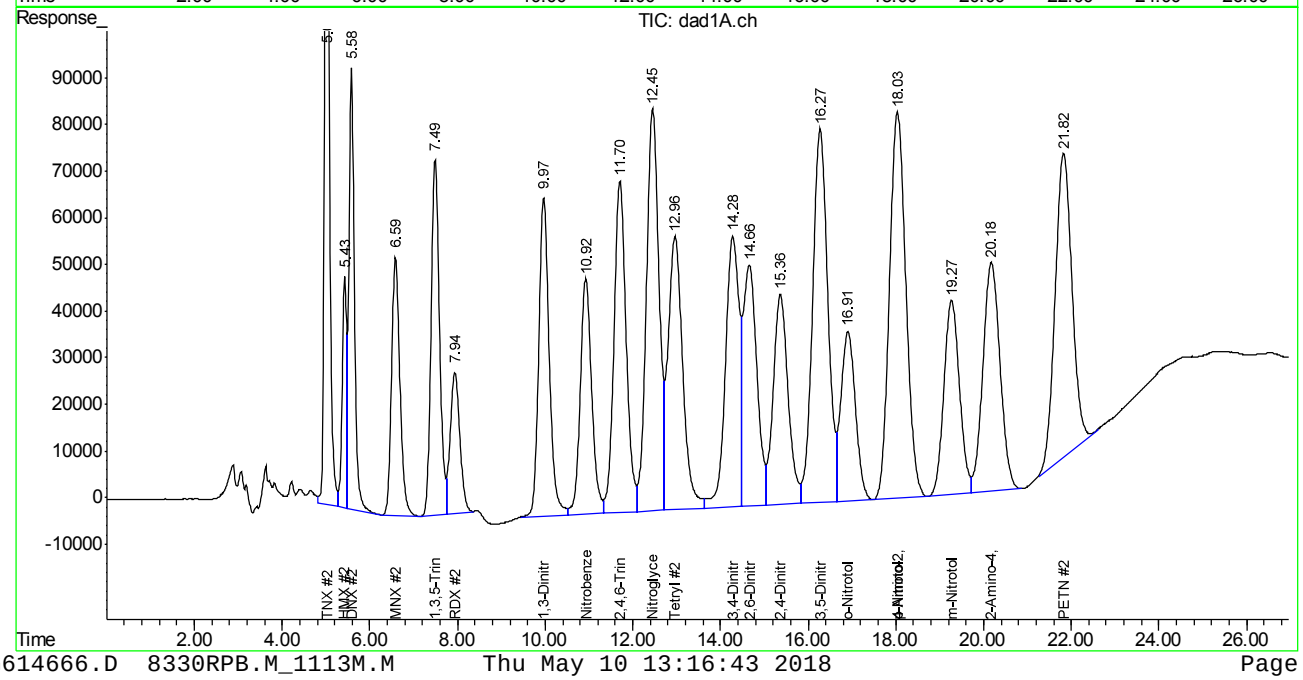
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

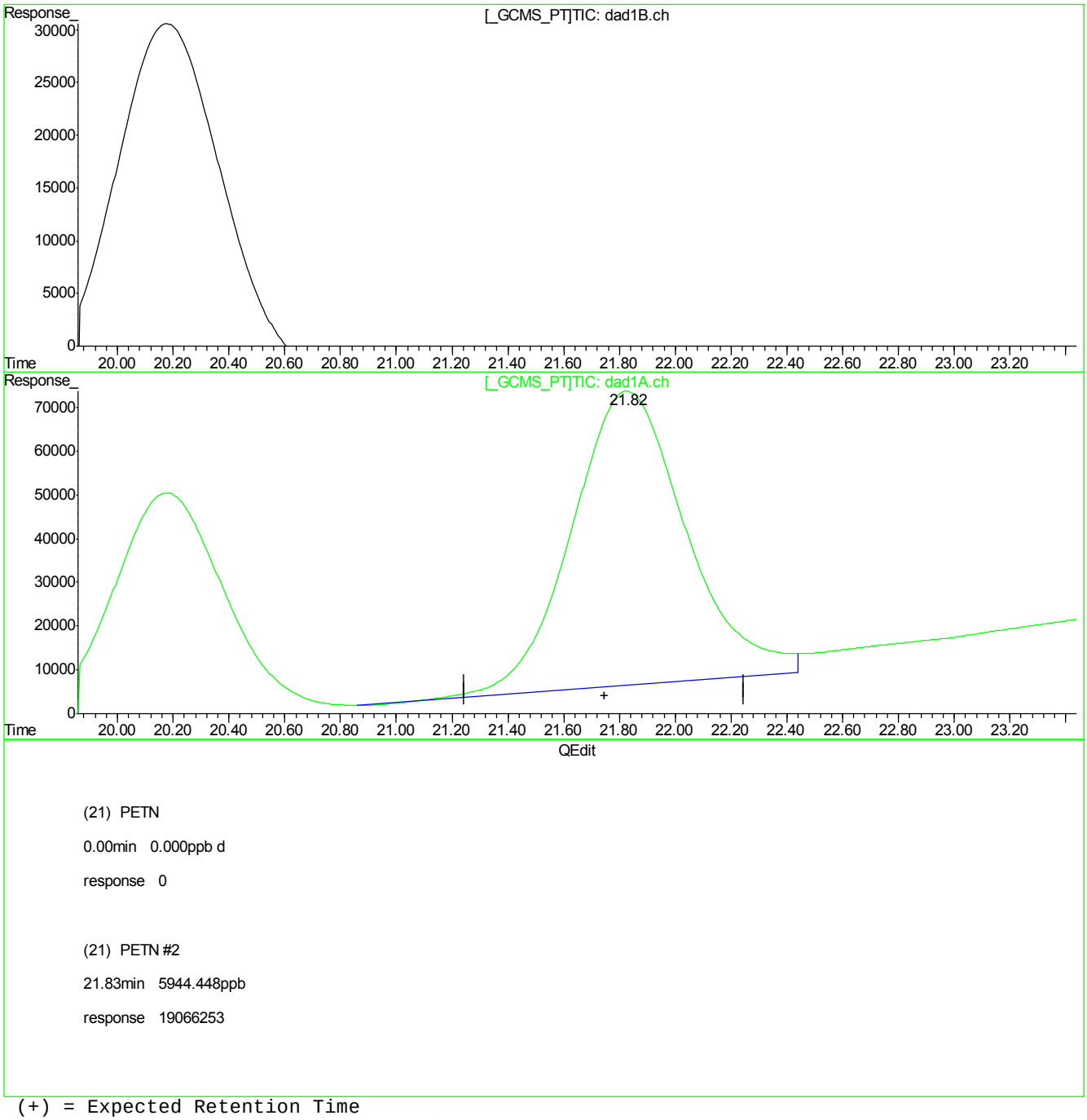
Sample Number:	GGG2626-ECC2571	**Method:**	SW846 8330B
Lab FileID:	GG614666.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 18:32	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.82	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

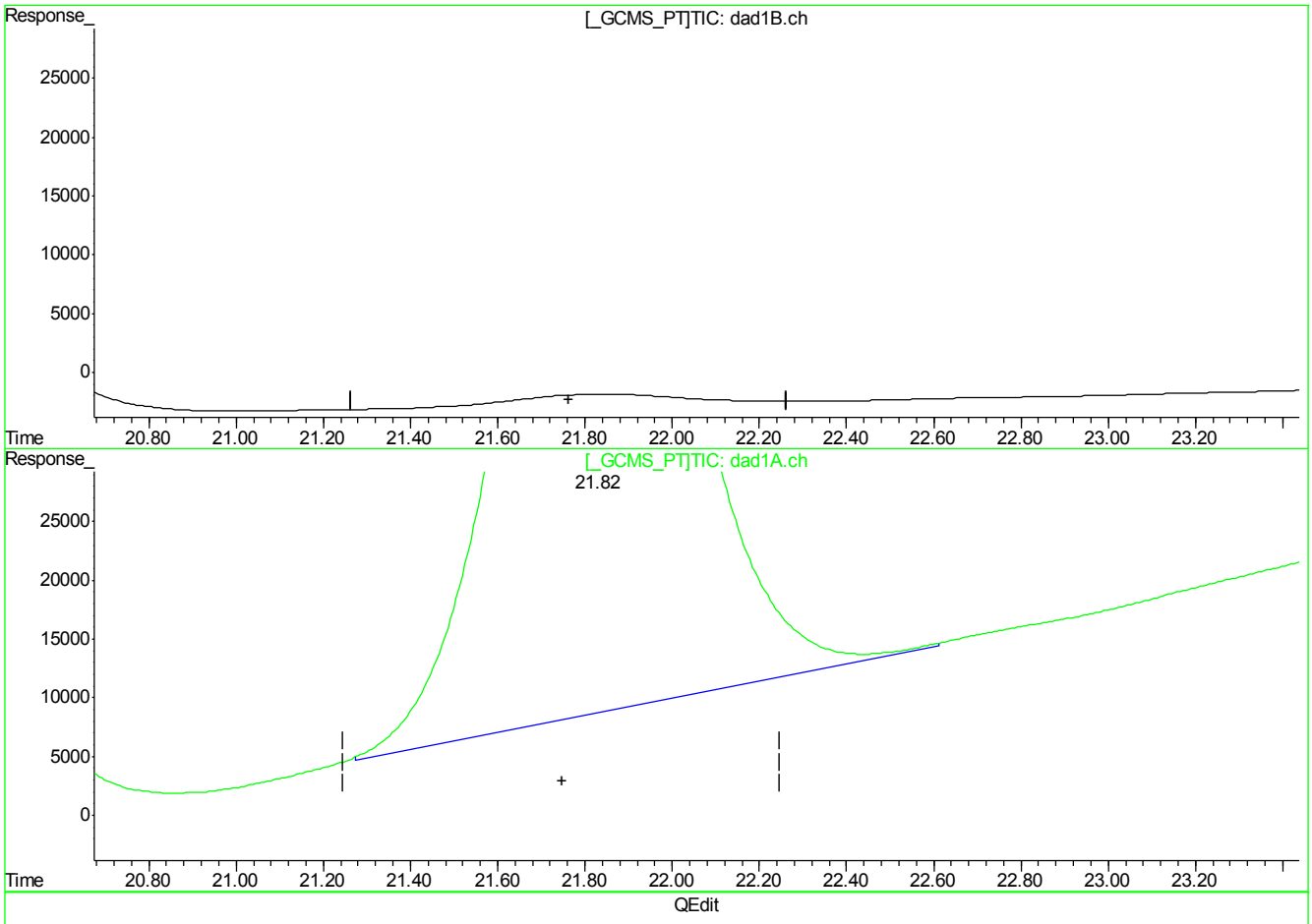


(+) = Expected Retention Time
GG614666.D 8330RPB.M_1113M.M Thu May 10 13:15:58 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.82min 5441.897ppb m

response 17454368

(+) = Expected Retention Time
GG614666.D 8330RPB.M_1113M.M Thu May 10 13:16:04 2018

SGS ACCUTEST-ORLANDO

DATE:	4/19/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 0329 plus
CALIB. DATE:	03/09/18
RUN BATCH: GBB	1722

ANALYST:	GW
ACETONITRILE LOT #:	3510
MEOH LOT #:	—
HEAD PRESSURE:	280

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059462	1	CCB	8330				ND
BB 63	20	test					✓
BB 64	21	IC 17122-20		LC1020	50+450		test
BB 65	22	| | -50			10+90	pii	carry past
BB 66	23	-100			25+75		
BB 67	24	↓ -200			50+50		
BB 68	25	icc -500			100+300		
BB 69	26	ic -1000			200+200		
BB 10	27	-2000			1X		
BB 11	28	icv -500		Evol LC991 LC990 Evol	20:25 :10uL	>1mL	
BB 12	29	↓ ↓ -500		E 6231	10/400	40X	no need
BB 13	3	op69647 bs		op69647	1X		✓
BB 14	4	↓ -mb					ND
BB 15	5	IAS319461					ND
BB 16	6	op69647 ms				pii	✓
BB 17	7	↓ -msd				↓	✓
BB 18	8	IAS319462					ND
BB 19	9	IGS33384-1					✓ RL@1X
BB 80	10	↓ -2			↓		✓ RL@1X
BB ↓ 81	26	CC1722-100 ↓	↓	LC1020	1:1	pii	✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: E. Maim

SGS ACCUTEST-ORLANDO

DATE:	4/19/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 0329 pkS
CALIB. DATE:	3/29/18
RUN BATCH: GBB	1722

ANALYST:	EM
ACETONITRILE LOT #:	3510
MEOH LOT #:	—
HEAD PRESSURE:	200

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059 182	1	CCB	8330	—	—		MD
BB 83	11	IQ33383		OP16647	1X		RR COK
BB 84	24	QC 1722-1000		QLC1020	1:1	EM 4/19/18 pkS	PASS
BB 85	71	E6249 spike		—			test only
BB 86	72	test spike stock		—			
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 06/16

Analyst's Signature: EMcAm

SGS ACCUTEST-ORLANDO

DATE:	4/20/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 04/19/18
CALIB. DATE:	4/19/18
RUN BATCH:	GBB 1726

ANALYST:	CM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	1479

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 05 9510	1	CCB	8330				NO
BB 11	2	CC1722-1000		LC1020	1:1	PII	pass
BB 12	3	OP69811 lbs		OP69811	1X	↓	
BB 13	4	↓ -MB					NO
BB 14	5	F9530741-1					NO
BB 15	6	OP69811-MS				PII	
BB 16	7	↓ -MSD					
BB 17	8	CC1722-1000		LC020	1:1	↓	pass
BB 18							
BB 19							
BB 20							
BB 21							
BB 22							
BB 23							
BB 24							
BB 25							
BB 26							
BB 27							
BB 28							
BB 29							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	5/9/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8338 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	833[illegible] 4Aplus.M
CALIB. DATE:	4/9/18
RUN BATCH: GBB	1729

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	300

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB059597	1	CCB	8330				ND
BB 98	2	CC1722-1000		LC020	1.1	pii	pdps
BB 99	3	op69421-PTI		op69921	K	pi	✓
BB 600	4	-BS				pii	✓
BB 01	5	-MB					ND
BB 02	6	FA53725.96					ND
BB 03	7	op69921-MS				pii	✓
BB 04	8	-MSD				pii	✓
BB 05	11	FA53725.92					ND
BB 06	12	op69921-dup					ND
BB 07	13	-dup2					ND
BB 08	16	FA53725.95					ND
BB 09	~~2~~	~~CC1722-1000~~		~~LC020~~	~~1.1~~	cab	ND
BB 10	~~12~~	~~CCB~~		LC020	1.1	CC1722-1000 pi	pdps
BB 11	1	CCB					ND
BB 12	17	FA53725.96		op69921	1K		ND
BB 13	22	-LCS					ND
BB 14	24	op69921-gb1					ND
BB 15	25	-gb2					ND
BB 16	26	-gb3					ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	5/8/18
COLUMN TYPE:	Extend-C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 HB
ACQ. METHOD:	8330B
PROC. METHOD:	8330 HB.pus-M
CALIB. DATE:	4/9/18
RUN BATCH: GBB	1729

ANALYST:	EH
ACETONITRILE LOT #:	35220
MEOH LOT #:	—
HEAD PRESSURE:	300

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059617	2	CC 1722-1000	8330	LC1020	1.1	pii	2025
BB 18	1	CCB					ND
BB 19	27	op69938-bs		op69938	1X	.	ND
BB 20	28	↓ -bsd				pii	✓
BB 21	29	1a43592-1					ND
BB 22	30	op69938-ms 1a43592-2					ND
BB 23	31	↓ -msd 1a43592-3					ND
BB 24	32	1a43592-2L6					ND
BB 25	33	—3				op69938-ms pii	✓
BB 26	34	—C		↓	↓	↓ -msd pii	—
BB 27	2	CCA22-1000		LC1020	1.1		✓ ccal ver and sgnd
BB 28	1	CCB					ND
BB 29	35	op69939-bs		op69951	1X	pii	✓
BB 30	36	↓ -ms					ND
BB 31	37	1a43463-2					ND
BB 32	38	op69939-ms				pii	✓
BB 33	39	↓ -msd					✓
BB 34	40	op69947-bs		op69947			✓
BB 35	41	↓ -ms					ND
BB ✓ 36	42	FA53895-1				pi	~~ND~~ ✓ CMS 5/9/18

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 06/16

Analyst's Signature:

SGS ACCUTEST-ORLANDO

DATE:	5/9/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 4/9 plus M
CALIB. DATE:	4/11/18
RUN BATCH: GBB	1729

ANALYST:	EM
ACETONITRILE LOT #:	380
MEOH LOT #:	—
HEAD PRESSURE:	800

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059037	2	CCA22-1000	8330	LC1090	1:1	PII	1,3dchl E3, 5dnit
BB 38	1	CCB					ND
BB 39	43	FAS3875-2		9E6947	1X		L
BB 40	44	-3					L
BB 41	45	FAS3937-1					ND
BB 42	46	-2					BR E10X
BB 43	47	9E6947-MS					↓
BB 44	48	-MSD					↓
BB 45	49						
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

5/10/18

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak. **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature:

SGS ACCUTEST-ORLANDO

DATE:	11/13/19
COLUMN TYPE:	Bres RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 4/6
ACQ. METHOD:	8330 RPB3
PROC. METHOD:	8330 RPB-1113
CALIB. DATE:	11/13/19
RUN BATCH: GGG	2571

ANALYST:	GM
ACETONITRILE LOT #:	343
MEOH LOT #:	171102
HEAD PRESSURE:	152

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 613824	1	CCb	8330	—			ND
GG 25	2	ICC25561000		LC9409	1:1		CCU ↑ Run accurate
GG 26	3	IC2571-20			50/450 50/450	pii	cum pass
GG 27	4	-50			10/390		
GG 28	5	-100			25/475		
GG 29	6	-200			50/450		
GG 30	7	ICC -500			100/300		
GG 31	8	IC -1000			200/200		
GG 32	9	-2000			1X		
GG 33	10	ICV -50		ES936/LC852 LC8611 & 5164	20:25 25:10	/mL	TNX/DW
GG 34	100	-500		E11098	40X		Hexyl & 246 TONB
GG 35	11	opb7519-mB		opb7519	1X		NB
GG 36	12	FAU8150-7cf					ND not needed
GG 37	13	FAU4005-1				pii	3,5 dini >40%
GG 38	14	-3					3,5 dini >40%
GG 39	15	-5					3,5 dini >40%
GG 40	16	opb64538-mB		opb7538			ND
GG 41	17	FAU8952-1Acf				pii	
GG 42	18	-2Acf				pii	
GG ✓ 43	19	opb7536-mB	✓	opb7536	✓		NP

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature:

SGS ACCUTEST-ORLANDO

DATE:	11/3/17
COLUMN TYPE:	Bives RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330 RPB -1113
CALIB. DATE:	11/3/17
RUN BATCH:	GGG 2571

ANALYST:	EM
ACETONITRILE LOT #:	343
MEOH LOT #:	171002
HEAD PRESSURE:	52

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 0138[illegible]	20	FA49040-1cf	8330	op67534	1X	pii	✓
GG 45	8	CC2571-1000		LC949	1:1	pii	PASS
GG 46	1	CCB					ND
GG 47	21	FA49040-1cf		op67534	8/400	50X pii	✓
GG 48	22	-2			1X		✓
GG 49	23	-2			10/400	4X	✓
GG 50	24	-3			1X	✓	✓
GG 51	25	-3			10/400	4X	R2 @ 10X
GG 52	26	-4			1X		✓
GG 53	27	-5			↓		TNT>40% 2,4dini
GG 54	28	-5			10/400	4X	✓
GG 55	29	FA49077-1		✓	1X		✓
GG 56	8	CC2571-1000		LC949	1:1	pii	PASS
GG 57	1	CCB					ND
GG 58	30	op67540-MB		op67540	1X		ND
GG 59	31	FA49042-1cf			↓		2Aminos 40%
GG 60	32	-1		↓	10/400	4X pii	✓
GG 61	33	op67576-MB		op67576	1X		ND
GG 62	34	FA49036-3cf					ND
GG 63	35	-10cf		↓	↓		ND
GG 64	8	CC2571-1000		LC949	1:1	pii	PASS

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	5/1/18
COLUMN TYPE:	Bond RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 BPBB
PROC. METHOD:	8330 BPB 1113
CALIB. DATE:	11/13/14
RUN BATCH: GGG	2023

ANALYST:	EM
ACETONITRILE LOT #:	350
MEOH LOT #:	—
HEAD PRESSURE:	156

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 14526	1	CCB	8330				ND
GG 27	2	CC 2571-100		LC1630	1:1	PII	pass
GG 28	3	OPR5811-MB		OPR5811	1x		ND
GG 29	4	FA53475-1cf					✓
GG 30	5	76-1 cf					✓
GG 31	6	-2 cf					✓
GG 32	7	-3cf					✓
GG 33	8	OPR5831-MB		OPR5837			ND
GG 34	9	FA53700-1cf					✓
GG 35	2	CCC 2571-100		LC1630	1:1	PII	pass
GG 36							
GG 37						NA QNO 5/1/18	
GG							
GG							
GG							
GG							
GG							
GG							
GG							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature: EMeans

SGS ACCUTEST-ORLANDO

DATE:	05/07/18
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330A/B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330RP 1113
CALIB. DATE:	11/13/17
RUN BATCH: GGG	2625

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	171

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG614572	1	ccb	8330	—			ND
GG 73	2	CC2571-1000	↓	LC1020	1:1		RT move RR
GG 74	3	OP69919-bs		OP69919	1X		↓
GG 75	4	↓ -pt1		↓	↓		
GG 76	5	↓ -mb					
GG 77	6	FA53725-1					
GG 78	7	OP69919-MS					
GG 79	8	↓ -msd					
GG 80	11	FA53725-31					
GG 81	12	OP69919-dup					
GG 82	13	↓ -dup2					
GG 83	16	FA53725-40		↓	↓		
GG 84	2	CC2571-1000		LC1020	1:1		
GG 85	1	ccb		—			
GG 86 ~~79~~		CC2571-1000		LC1020	1:1	pi	2020
GG 87 ~~93~~	5	FA53725-43		OP69919	1X		ND
GG 88 ~~34~~		OP69919-bs				pi	↓
GG 89 ~~45~~		NG050718 -mpt1				↓	↓
GG 90 ~~56~~		↓ -mb					ND
GG 91 ~~67~~		FA53725-1	↓	↓	↓		ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	05/07/18
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	1.00 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330 RP 1113
CALIB. DATE:	11/13/17
RUN BATCH: GGG	2625

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	171

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 614592	78	OP69919-MS	8330	OP69919	1x	pii	✓
GG 93	8/1	↓ -MSD	↓	↓	↓	pii	✓
GG 94	1/12	FA53725-31					ND
GG 95	1/13	OP69919-DUP					ND
GG 96	13	↓ -DUP2					ND
GG 97	2	ICC2571-1000		LC1020	1:1	pii	PASS
GG 98	1	CCb		—	—		RR machine stop
GG 99	16	FA53725-40		OP69919	1x		↓
GG 614600	21	↓ -S1	↓	↓	↓		
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature:

hplc3_gg_log.xls NF rev. 06/16

100 of 100

SGS ACCUTEST-ORLANDO

DATE:	05/08/18
COLUMN TYPE:	BDS RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 RP II B
CALIB. DATE:	11/18/17
RUN BATCH:	GGG 26026

ANALYST:	FI
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	233

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 614601	1	CCB	8330	→			ND
GG 02	2	CC2571-1000		LC1000	1:1	pii	PASS
GG 03	16	FA53725-46		op60919	1X		ND
GG 04	21	-51		↓			ND
GG 05	27	op60920-bs		op60920	1X	pii	✓
GG 06	28	↓ -PT1				pii	✓
GG 07	29	↓ -MS					ND
GG 08	30	FA53725-54					ND
GG 09	31	op60920-ms				pii	✓
GG 10	32	↓ -msd				pii	✓
GG 11	34	FA53725-56		↓	1X		ND
GG 12	2	CC2571-1000		LC1000	1:1	pii	PASS
GG 13	1	CCB		—	—	—	ND
GG 14	1	CCB		—	—	—	ND
GG 15	35	op60920-dup		op60920	1X		ND
GG 16	36	-dup2					ND
GG 17	39	FA53725-59					ND
GG 18	40	-60					ND
GG 19	45	-65					ND
GG 20	24	op6599 19-961					ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

SGS ACCUTEST-ORLANDO

DATE:	05/08/18
COLUMN TYPE:	2 Rtes RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 RP 11 13
CALIB. DATE:	11/13/17
RUN BATCH:	GGG 2626

ANALYST:	EM
ACETONITRILE LOT #:	3526
MEOH LOT #:	—
HEAD PRESSURE:	233

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 14624	25	op6919-gb4	8330	op6919	1		ND
GG 22	26	↓ -gb3		↓	↓		ND
GG 23	2	cc 2571-100		LC1020	1:1	pii	2nd signal 3-5 min ft
GG 24	1	CCB					ND
GG 25	48	op6920-gb1		op6920	1		ND
GG 26	49	↓ -gb2		↓	↓		ND
GG 27	50	↓ -gb3		↓	↓		ND
GG 28	51	op6995-gb5 MS		op6995	↓	pii	ND
GG 29	52	↓ -PT PT1		↓	↓	pii	✓
GG 30	53	↓ -MS BS		↓	↓	EM 5/9/18	ND ✓
GG 31	54	FAS3725-104		↓	↓		ND
GG 32	55	op6995-ms		↓	↓	pii	✓
GG 33	56	↓ -msd		↓	↓	pii	✓
GG 34	57	FAS3725-107		↓	↓		ND
GG 35	2	cc 2571-100		LC1020	1:1	pii	PASS
GG 36	1	CCB					ND
GG 37	58	op6995-dup		op6995	1		ND
GG 38	59	↓ -dup2		↓	↓		ND
GG 39	60	FAS3725-110		↓	↓		ND
GG 40	61	↓ 113		↓	↓		ND

5/9/18 EM

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	05/8/18
COLUMN TYPE:	BONESRP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A1B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 RP 11.13
CALIB. DATE:	11/13/17
RUN BATCH: GGG	2626

ANALYST:	EM
ACETONITRILE LOT #:	8526
MEOH LOT #:	—
HEAD PRESSURE:	233

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 61464l	62	FA53725-114	8330	OP69945	1X		ND
GG 42	63	OP 69945-gb1					ND
GG 43	64	-gb2					ND
GG 44	65	-gb3					ND
GG 45	2	CC2571-1000		LC1020	1.1	PII	PASS
GG 46	1	CCB				CMS 5/9/18	ND
GG 47	66	OP 69946-BS		OP69946	1X		✓
GG 48	67	-PT1					✓
GG 49	68	-MS					ND
GG 50							
GG 51							
GG 52							
GG 53							
GG 54							
GG 55							
GG 56							
GG 57							
GG 58							
GG 59							
GG 60							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: EM

SGS - ORLANDO

SPE LIQUID SAMPLE PREP REPORT

Date/Time Started: 04/29/18 0730 {mm/dd/yy 24:00}

Date/Time Finished: 04/30/18 0630 {mm/dd/yy 24:00}

Prep Method: (3535A) or 537 or 537MOD (circle)

Analytical Method: 8330B

Batch#: OP69837 Ext. By: MB Conc. By: ✓ Vialed By: DC

Sample ID	Bottle Number	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Manifold ID	Comments
OP 69837 MB	X	1000	6	N/A	250ul		10ml	N/A	
OP 69837 BS	X	1000	↓	↓	↓	25+25 250ul	↓	↓	
FA53700-1	1	1050							
FA53725-124	2	1060							
-125	2	1050							

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B, 537MOD (PFC) or Other_____ (circle)

Date/Time: 05/04/18 1500 (Started {mm/dd/yy 24:00})
Therm. ID: — Corr. Factor (±°C): —
Bath Temp. (High) °C : — {obs/corr}

Date/Time: 05/05/18 1000 (Finished {mm/dd/yy 24:00})
Ultrasonic Bath ID (8330A or 8332): —
Shaker Table ID (8330B): ST 1

Batch#: OP 69919 Ext. By: MB Vialed By: MB Balance ID: METTLER 1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69919 MB	X	10.00	1.25ml		50ml	
OP 69919 BS	X	10.00		125+125ul 1.25ml		
FA53725-1	1	10.14				
-2	1	10.04				
-3	1	10.11				
-31		10.10				
-32		10.07				
MB 05/03/18 -33		10.03				
-40		10.02				
-41		10.12				
-42		10.14				
-43		10.15				
-44		10.10				
MB 05/03/18 ~~-45~~1		10.05				
-52		10.01				
-53		10.16				
GRINDING BLANK	A	10.00				
↓	B	10.00				
	C	10.00				
				MB 05/04/18		
OP 69919 PT-1	X	~~6.000~~ 10.00	1.25ml		50ml	6.00
FA53725-1 MS	1	10.15		125+125ul 1.25ml		
-1 MSD	1	10.16		↓		
FA53725-31 DUP	1	10.12				
-31 TRP	1	10.11				

Comments:

Surr. ID: E6244B Conc: 20 ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB
Spk.1 ID: E6249 Conc: 20 ppm Exp. Date: 10/19/18 Inj. By: MB Ver. By MB
Spk.2 ID: 8937c Conc: 1000 ug/ml Exp. Date: 04/29/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 176139 Methanol Lot # — Water Lot# 180700 HPLC
Syringe Filter Lot# 12122030 Reagent # CS1 Reagent # —

Relinquished By: Date: 05/05/18
Accepted By: 700 Date: 5/7/18

NF 05/16 extsolid_exp 051616.xls

7.9.2 7

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B, 537MOD (PFC) or Other ___ (circle)

Date/Time: 05/04/18 1500 (Started {mm/dd/yy 24:00})

Therm. ID: ___ Corr. Factor (±°C): ___

Bath Temp. (High) °C : ___ / ___ {obs/corr}

Date/Time: 05/05/18 1000 (Finished {mm/dd/yy 24:00})

Ultrasonic Bath ID (8330A or 8332): ___

Shaker Table ID (8330B): ST1

Batch#: OP69920 Ext. By: MB Vialed By: MB Balance ID: METTLER 1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69920 MB	X	10.00	1.25ml		5.0 ml	
OP 69920 BS	X	10.00		1.25+1.25ml 1.25ml		
FA53725-54		10.12				
-55		10.17				
-56		10.01				
-57		10.10				
-58		10.13				
-59		10.11				
-60		10.06				
-61		10.14				
-62		10.06				
-63		10.10				
-64		10.04				
-65		10.08				
-66		10.03				
-67		10.08				
GRINDING BLANK	A	10.00				
	B	10.01				
↓	C	10.00	↓		↓	
					MB 05/04/18	
OP 69920 DT-1	X	~~10.00~~	1.25ml		5.0 ml	5.50
FA53725-54 MS		10.14		1.25+1.25ml 1.25ml		
-54 MSD		10.12		↓		
FA53725-56 DUP		10.10				
-56 TRP		10.13	↓		↓	

Comments:

Surr. ID: E6244C Conc: 20ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6249 8492C Conc: 20ppm 1000ug/ml Exp. Date: 10/19/18 04/29/19 Inj. By: MB Ver. By MB

Spk.2 ID: 8937C Conc: 1000ug/ml Exp. Date: 04/29/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 176139 Methanol Lot # ___ Water Lot# 180700 HPLC

Syringe Filter Lot# 121122030 Reagent # CS1 Reagent # ___

Relinquished By: [signature] Date: 05/05/18

Accepted By: [signature] Date: 5/7/18

NF 05/16 extsolid_exp 051616.xls

7.9.3

7

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B, 537MOD (PFC) or Other_____ (circle)

Date/Time: 05/04/18 1500 Started {mm/dd/yy 24:00}

Therm. ID: — Corr. Factor (±°C): —

Bath Temp. (High) °C : — / — {obs/corr}

Date/Time: 05/05/18 1000 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332): —

Shaker Table ID (8330B): ST1

Batch#: OP69921 Ext. By: MB Vialed By: MB Balance ID: METTLER 1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69921 MB	X	10.00	1.25ml		50 ml	
OP 69921 BS	X	10.00		105+125ml 1.25ml		
FA53725-89	1	10.01				
-90	1	10.15				
-91	1	10.10				
-92	1	10.16				
-93	1	10.13				
-94	1	10.08				
-95	1	10.10				
-96	1	10.09				
-97	1	10.13				
-98	1	10.01				
-99	1	10.11				
-100	1	10.17				
-101	1	10.11				
-102	1	10.10				
GRINDING BLANK	A	10.00				
↓	B	10.05				
	C	10.06				
						05/04/18
OP 69921 PT1	X	5.10.00	1.25ml		50 ml	
FA53725-89 MS	1	10.10		105+125ml 1.25ml		
-89 MSD	1	10.12				
FA53725-92 DUP	1	10.11				
-92 TRP	1	10.13				

MB 05/04/18

Comments:

Surr. ID: E6244 Conc: 20 ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6249 Conc: 20 ppm Exp. Date: 10/19/18 05/04/18 Inj. By: MB Ver. By MB

Spk.2 ID: 89937F Conc: 200 ug/ml 1000 ug/ml Exp. Date: 05/04/18 05/04/18 Inj. By: MB Ver. By MB

Acetonitrile Lot # 176139 Methanol Lot # — Water Lot# 180698 HPLC

Syringe Filter Lot# 121122030 Reagent # CS1 Reagent # —

Relinquished By: Date: 05/05/18

Accepted By: 800 Date: 5/7/18

NF 05/16 extsolid_exp 051616.xls

7.9.4

7

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B, 537MOD (PFC) or Other_____ (circle)

Date/Time: 05/07/18 1700 Started {mm/dd/yy 24:00}

Date/Time: 05/08/18 1100 Finished {mm/dd/yy 24:00}

Therm. ID:___ Corr. Factor (±°C):___

Bath Temp. (High) °C :___/___ {obs/corr}

Ultrasonic Bath ID (8330A or 8332):___

Shaker Table ID (8330B): ST 1

Batch#: OP69945 Ext. By: MB Vialed By: MB Balance ID: METTLER 1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69945 MB	X	10.00	1.25ml		50 ml	
OP 69945 BS	X	10.00		125+125ul 1.25ml		
FA53725-103	1	10.00				
-104	1	10.08				
-105	1	10.13				
-106	1	10.10				
-107	1	10.17				
-108	1	10.40				
-109	1	10.18				
-110	1	10.09				
-111	1	10.06				
-112	1	10.16				
-113	1	10.14				
-114	1	10.09				
-115	1	10.08				
-116	1	10.17				
GRINDING BLANK	A	10.10				
	B	10.00				
	C	10.01				
				05/08/18		
OP69945 PT-1	X	5.00	1.25ml	~~125+125ul 1.25ml~~ *	50 ml	
FA53725-104 MS	1	10.16		125+125ul 1.25ml		
-104 MSD	1	10.15		"		
FA53725-107 DUP	1	10.10				
-107 TRP	1	10.13				

* ms 05/07/18

Comments:

Surr. ID: E6244E Conc: 20 ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6249 Conc: 20 ppm Exp. Date: 10/19/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8937F Conc: 1000 ug/ml Exp. Date: 05/04/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 170845 Methanol Lot #___ Water Lot# 180700 HPLC

Syringe Filter Lot# 121122030 Reagent # CS1 Reagent #___

Relinquished By: Date: 05/08/18

Accepted By: 1430 Date: 5/8/18

NF 05/16 extsolid_exp 051616.xls

7.9.5

7

SGS ACCUTEST - ORLANDO

EXP/PFC SAMPLE PREP REPORT

Prep Method: 8330A, 8332, 8330B, 537MOD (PFC) or Other_____ (circle)

Date/Time: 05/07/18 1700 Started {mm/dd/yy 24:00}

Therm. ID: — Corr. Factor (±°C): —

Bath Temp. (High) °C: —/— {obs/corr}

Date/Time: 05/08/18 1100 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332): —

Shaker Table ID (8330B): ST1

Batch#: OP69946 Ext. By: MB Vialed By: MB Balance ID: METTLER1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69946 MB	X	10.00	1.25ml		50 ml	
OP 69946 BS	X	10.00		125+125ul 1.25ml		
FA53725-117	1	10.08				
-118	1	10.02				
-119	1	10.08				
-120	1	10.09				
-121	1	10.00				
FA53800-1	1	10.01				
-2	1	10.09				
-3	1	10.10				
-4	1	10.08				
-5	1	10.09				
-6	1	10.07				
-7	1	10.15				
-8	1	10.14				
-9	1	10.08				
-10	1	10.10				
GRINDING BLANK	A	10.01				
	B	10.00				
	C	10.03				
						MB 05/08/18
OP 69946 PT-1	X	5.00	1.25ml		50 ml	
FA53725-119 MS	1	10.03		125+125ul 1.25ml		
-119 MSD	1	10.05				
FA53800-1 DUP	1	10.10				
-1 TRP	1	10.08				

Comments:

Surr. ID: E624UF Conc: 20ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6249 Conc: 20ppm Exp. Date: 10/19/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8993 8937F Conc: 1000ug/ml Exp. Date: 05/04/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 170845 Methanol Lot # — Water Lot# 180700 HPLC

Syringe Filter Lot# 121122030 Reagent # CS1 Reagent # —

Relinquished By: [signature] Date: 05/08/18

Accepted By: [signature] 1430 Date: 5/8/18

NF 05/16 extsolid_exp 051616.xls

7.9.6

7

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14869
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:01	MA14869-STD1	1		STDA
10:05	MA14869-STD2	1		STDB
10:09	MA14869-STD3	1		STDC
10:12	MA14869-STD4	1		STDD
10:16	MA14869-HSTD1	1		
10:19	MA14869-ICV1	1		
10:24	MA14869-ICB1	1		
10:28	MA14869-CRIA1	1		
10:32	MA14869-CRIA2	1		
10:36	MA14869-ICSA1	1		
10:43	MA14869-ICSAB1	1		
10:46	MA14869-CCV1	1		
10:53	MA14869-CCB1	1		
10:57	ZZZZZZ	10		
11:01	ZZZZZZ	5		
11:05	ZZZZZZ	2		
11:24	ZZZZZZ	20		
11:28	ZZZZZZ	10		
11:33	MP33680-MB1	1		
11:37	MP33680-B1	1		
11:41	MA14869-CCV2	1		
11:45	MA14869-CCB2	1		
11:50	FA53663-8	1		(sample used for QC only; not part of login FA53725)
11:54	MP33680-D1	1		
11:59	MP33680-SD1	5		
12:03	MP33680-PS1	1		
12:08	MP33680-S1	1		
12:12	MP33680-S2	1		
12:16	ZZZZZZ	1		
12:20	ZZZZZZ	1		
12:25	ZZZZZZ	1		
12:29	ZZZZZZ	1		
12:34	MA14869-CCV3	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14869
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:38	MA14869-CCB3	1		
12:42	ZZZZZZ	1		
12:47	ZZZZZZ	1		
12:51	ZZZZZZ	1		
12:56	ZZZZZZ	1		
13:00	ZZZZZZ	1		
13:05	FA53725-122	1		
13:09	FA53725-123	1		
13:14	FA53725-124	1		
13:18	FA53725-125	1		
---------->	Last reportable sample/prep for job FA53725			
13:23	ZZZZZZ	1		
13:27	MA14869-CCV4	1		
13:31	MA14869-CCB4	1		
13:36	ZZZZZZ	1		
13:40	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:49	ZZZZZZ	1		
13:53	MP33683-MB1	1		
13:58	MP33683-B1	1		
14:02	FA53833-1	5		(sample used for QC only; not part of login FA53725)
14:07	MP33683-D1	5		
14:12	MP33683-SD1	25		
14:16	MP33683-PS1	5		
14:21	MA14869-CCV5	1		
14:25	MA14869-CCB5	1		
14:29	MP33683-S1	5		
14:34	MP33683-S2	5		
14:39	ZZZZZZ	5		
14:43	ZZZZZZ	5		
14:48	ZZZZZZ	5		
14:53	ZZZZZZ	5		
14:58	ZZZZZZ	5		
15:02	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14869
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:07	ZZZZZZ	5		
15:12	ZZZZZZ	5		
15:16	MA14869-CCV6	1		
15:20	MA14869-CCB6	1		
15:25	ZZZZZZ	5		
15:30	ZZZZZZ	5		
15:34	ZZZZZZ	5		
15:39	ZZZZZZ	5		
15:44	ZZZZZZ	5		
15:48	MA14869-CRIA3	1		
15:52	MA14869-ICSA2	1		
15:57	MA14869-ICSAB2	1		
16:02	MA14869-CCV7	1		
16:06	MA14869-CCB7	1		

----------> Last reportable CCB for job FA53725
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14869
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:01	MA14869-STD1	5509	38351	6369	2227
10:05	MA14869-STD2	5483	37989	6345	2141
10:09	MA14869-STD3	5246	36543	6262	1944
10:12	MA14869-STD4	5044	35418	6214	1779
10:16	MA14869-HSTD1	5084	35833	6220	1799
10:19	MA14869-ICV1	5249	36829	6300	1960
10:24	MA14869-ICB1	5484 R	38370 R	6435 R	2241 R
10:28	MA14869-CRIA1	5484	37950	6396	2204
10:32	MA14869-CRIA2			6322	
10:36	MA14869-ICSA1	4897	33102	6138	1745
10:43	MA14869-ICSAB1	4898	33156	6019	1713
10:46	MA14869-CCV1	5206	36426	6134	1934
10:53	MA14869-CCB1	5440	38073	6210	2214
10:57	ZZZZZZ	5340	36790	6245	2133
11:01	ZZZZZZ	5317	36389	6216	2113
11:05	ZZZZZZ	5261	36411	6231	2108
11:24	ZZZZZZ	6852	47518	8005	2191
11:28	ZZZZZZ	5022	34472	6073	1936
11:33	MP33680-MB1	5418	38395	6297	2212
11:37	MP33680-B1	5286	36576	6192	2054
11:41	MA14869-CCV2	5214	36240	6254	1948
11:45	MA14869-CCB2	5436	38301	6318	2233
11:50	FA53663-8	5143	35540	6146	2049
11:54	MP33680-D1	5105	35029	6077	2028
11:59	MP33680-SD1	5292	36954	6219	2156
12:03	MP33680-PS1	5162	35664	6194	2029
12:08	MP33680-S1	5170	35619	6228	1958
12:12	MP33680-S2	5189	35602	6194	1959
12:16	ZZZZZZ	5092	35340	6165	2009
12:20	ZZZZZZ	5263	36699	6357	2087
12:25	ZZZZZZ	5447	38630	6389	2219
12:29	ZZZZZZ	5371	37745	6345	2193
12:34	MA14869-CCV3	5227	36417	6361	1961

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14869
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:38	MA14869-CCB3	5488	38467	6343	2255
12:42	ZZZZZZ	5247	36338	6280	2090
12:47	ZZZZZZ	5371	37240	6356	2146
12:51	ZZZZZZ	5398	37360	6340	2150
12:56	ZZZZZZ	5362	36921	6255	2146
13:00	ZZZZZZ	5485	38567	6311	2249
13:05	FA53725-122	5411	37580	6310	2186
13:09	FA53725-123	5450	37817	6385	2203
13:14	FA53725-124	5394	37410	6320	2177
13:18	FA53725-125	5399	37628	6262	2190
13:23	ZZZZZZ	5158	35364	6196	2013
13:27	MA14869-CCV4	5286	36784	6283	1975
13:31	MA14869-CCB4	5510	38511	6396	2252
13:36	ZZZZZZ	5102	35059	6163	1996
13:40	ZZZZZZ	5171	35616	6158	2024
13:45	ZZZZZZ	5288	36458	6218	2100
13:49	ZZZZZZ	5276	36456	6119	2103
13:53	MP33683-MB1	5470	38512	6468	2255
13:58	MP33683-B1	5336	36914	6274	2080
14:02	FA53833-1	5091	34694	6271	1804
14:07	MP33683-D1	5082	34965	6279	1815
14:12	MP33683-SD1	5312	36623	6300	2076
14:16	MP33683-PS1	5105	34985	6256	1811
14:21	MA14869-CCV5	5168	36094	6183	1940
14:25	MA14869-CCB5	5481	38396	6319	2245
14:29	MP33683-S1	5052	34580	6215	1797
14:34	MP33683-S2	5044	34721	6275	1806
14:39	ZZZZZZ	5025	34448	6166	1854
14:43	ZZZZZZ	5035	34448	6190	1867
14:48	ZZZZZZ	5102	34888	6299	1869
14:53	ZZZZZZ	5016	34374	6225	1868
14:58	ZZZZZZ	4938	33737	6181	1811
15:02	ZZZZZZ	5033	34107	6161	1868

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14869
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:07	ZZZZZZ	5051	34983	6302	1857
15:12	ZZZZZZ	4829	32930	6083	1766
15:16	MA14869-CCV6	5274	36736	6266	1974
15:20	MA14869-CCB6	5517	38652	6367	2258
15:25	ZZZZZZ	5045	34849	6391	1779
15:30	ZZZZZZ	4905	33581	6157	1808
15:34	ZZZZZZ	4817	32702	6022	1781
15:39	ZZZZZZ	4775	32400	5987	1757
15:44	ZZZZZZ	5909	40967	7046	2085
15:48	MA14869-CRIA3	5495	38014	6275	2219
15:52	MA14869-ICSA2	4933	33256	6037	1768
15:57	MA14869-ICSAB2	4853	32808	5971	1717
16:02	MA14869-CCV7	5192	36050	6059	1933
16:06	MA14869-CCB7	5549	38521	6259	2256

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14869 Units: ug/l

Time: / Sample ID:			10:24 ICB1		10:53 CCB1		11:45 CCB2		12:38 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.400	<5.0	0.800	<5.0	-0.100	<5.0	0.400	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14869 Units: ug/l

Time: / Sample ID:			13:31 CCB4		14:25 CCB5		15:20 CCB6		16:06 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.100	<5.0	0.200	<5.0	0.500	<5.0	0.600	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14869 Units: ug/l

Time: / Sample ID: / Metal	ICV True	10:19 ICV1 Results	% Rec	CCV True	10:46 CCV1 Results	% Rec	CCV True	11:41 CCV2 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1890	94.5	2000	2010	100.5	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14869 Units: ug/l

Time: / Sample ID: / Metal	CCV True	12:34 CCV3 Results	% Rec	CCV True	13:27 CCV4 Results	% Rec	CCV True	14:21 CCV5 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2010	100.5	2000	2000	100.0	2000	2040	102.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14869 Units: ug/l

Time: / Sample ID: / Metal	CCV True	15:16 CCV6 Results	% Rec	CCV True	16:02 CCV7 Results	% Rec
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	2000	1980	99.0	2000	2030	101.5
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14869 Units: ug/l

Time:		10:16	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	3980	99.5
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14869 Units: ug/l

Time: / Sample ID: / Metal	CRI True	CRIA True	10:28 CRIA1 Results	% Rec	10:32 CRIA2 Results	% Rec	15:48 CRIA3 Results	% Rec
Aluminum	400	200	anr					
Antimony	10	5.0	anr					
Arsenic	20	10	anr					
Barium	400	200	anr					
Beryllium	10	5.0	anr					
Cadmium	10	5.0	anr					
Calcium	2000	1000	anr					
Chromium	20	10	anr					
Cobalt	100	50	anr					
Copper	50	25	anr					
Iron	600	300						
Lead	10	5.0	4.80	96.0			4.90	98.0
Magnesium	10000	5000	anr					
Manganese	30	15	anr					
Molybdenum	100	50	anr					
Nickel	80	40	anr					
Potassium	20000	10000	anr					
Selenium	20	10	anr					
Silver	20	10	anr					
Sodium	20000	10000	anr					
Strontium	20	10						
Thallium	20	10	anr					
Tin	100	50						
Titanium	20	10						
Vanadium	100	50	anr					
Zinc	40	20	anr					

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA050218M1.ICP Date Analyzed: 05/02/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14869 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:36 ICSA1 Results	% Rec	10:43 ICSAB1 Results	% Rec	15:52 ICSA2 Results	% Rec	15:57 ICSAB2 Results	% Rec
Aluminum	500000	500000	501000	100.2	512000	102.4	517000	103.4	513000	102.6
Antimony		1000	0.100		922	92.2	2.90		943	94.3
Arsenic		1000	0.400		986	98.6	0.400		1010	101.0
Barium		500	0.200		496	99.2	0.200		500	100.0
Beryllium		500	0.00		491	98.2	-0.100		480	96.0
Cadmium		1000	0.400		891	89.1	0.600		915	91.5
Calcium	500000	500000	460000	92.0	459000	91.8	452000	90.4	463000	92.6
Chromium		500	0.800		469	93.8	0.900		471	94.2
Cobalt		500	0.300		453	90.6	0.100		463	92.6
Copper		500	0.200		515	103.0	-1.30		523	104.6
Iron	200000	200000	178000	89.0	173000	86.5	172000	86.0	169000	84.5
Lead		1000	-0.100		914	91.4	-3.60		930	93.0
Magnesium	500000	500000	486000	97.2	497000	99.4	491000	98.2	498000	99.6
Manganese		500	1.00		483	96.6	0.900		496	99.2
Molybdenum		1000	0.900		836	83.6	0.700		853	85.3
Nickel		1000	-0.200		909	90.9	-0.500		934	93.4
Potassium			121		64.2		-15.3		-0.100	
Selenium		1000	0.00		887	88.7	-1.30		914	91.4
Silver		1000	-0.400		1060	106.0	0.00		1070	107.0
Sodium			134		121		108		124	
Strontium		1000	-0.400		939	93.9	0.00		961	96.1
Thallium		1000	1.80		866	86.6	-0.100		878	87.8
Tin		1000	-0.300		864	86.4	-1.10		891	89.1
Titanium		1000	-1.60		920	92.0	-1.70		942	94.2
Vanadium		500	0.300		464	92.8	0.500		469	93.8
Zinc		1000	-0.300		893	89.3	-0.300		931	93.1

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:25	MA14898-STD1	1		STDA
09:30	MA14898-STD2	1		STDB
09:33	MA14898-STD3	1		STDC
09:37	MA14898-STD4	1		STDD
09:40	MA14898-HSTD1	1		
09:44	MA14898-ICV1	1		
09:49	MA14898-ICB1	1		
09:53	MA14898-CRIA1	1		
09:57	MA14898-ICSA1	1		
10:04	MA14898-ICSAB1	1		
10:08	MA14898-CCV1	1		
10:14	MA14898-CCB1	1		
10:18	MP33734-MB1	5		
10:22	MP33734-B1	5		
10:27	FA53725-4	10		
10:31	MP33734-D1	10		
10:35	MP33734-D2	10		
10:40	MP33734-SD1	50		
10:44	MP33734-PS1	10		
10:48	MP33734-S1	10		
10:53	MP33734-S2	10		
10:57	FA53725-1A	10		
11:01	MA14898-CCV2	1		
11:06	MA14898-CCB2	1		
11:10	FA53725-7	10		
11:14	FA53725-10	10		
11:19	FA53725-13	10		
11:23	FA53725-16	10		
11:27	FA53725-19	10		
11:32	FA53725-20	10		
11:36	FA53725-25	10		
11:40	FA53725-28	10		
11:45	FA53725-37	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:49	FA53725-45	10		
11:54	MA14898-CCV3	1		
11:58	MA14898-CCB3	1		
12:02	FA53725-48	10		
12:07	FA53725-69	10		
12:11	FA53725-74	10		
12:15	FA53725-77	10		
12:20	FA53725-80	10		
12:24	FA53725-83	10		
12:28	FA53725-7	5		
12:33	FA53725-19	5		
12:37	FA53725-20	5		
12:41	FA53725-37	5		
12:46	MA14898-CCV4	1		
12:50	MA14898-CCB4	1		
12:54	MP33740-MB1	5		
12:59	MP33740-B1	5		
13:03	FA53725-31A	5		
13:07	MP33740-D1	5		
13:12	MP33740-D2	5		
13:16	MP33740-SD1	25		
13:20	MP33740-PS1	5		
13:25	MP33740-S1	5		
13:29	MP33740-S2	5		
13:33	FA53725-40A	5		
13:38	MA14898-CCV5	1		
13:42	MA14898-CCB5	1		
13:46	FA53725-43A	5		
13:51	FA53725-51A	5		
13:55	FA53725-54A	5		
13:59	FA53725-56A	5		
14:04	FA53725-60A	5		
14:08	FA53725-65A	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:13	FA53725-84	5		
14:17	FA53725-89A	5		
14:21	FA53725-92A	5		
14:26	FA53725-95A	5		
14:30	MA14898-CCV6	1		
14:34	MA14898-CCB6	1		
14:39	FA53725-96A	5		
14:43	ZZZZZZ	5		
14:47	ZZZZZZ	5		
14:52	ZZZZZZ	5		
14:56	ZZZZZZ	5		
15:00	ZZZZZZ	5		
15:05	MP33740-SD1	25		
---------->	Last reportable sample/prep for job FA53725			
15:09	MA14898-CRIA2	1		
15:14	MA14898-ICSA2	1		
15:18	MA14898-ICSAB2	1		
15:23	MA14898-CCV7	1		
15:27	MA14898-CCB7	1		
---------->	Last reportable CCB for job FA53725			
15:31	MA14898-CCV8	1		
15:35	MA14898-CCB8	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:25	MA14898-STD1	4867	26147	2358	1950
09:30	MA14898-STD2	4819	25666	2349	1921
09:33	MA14898-STD3	4679	25301	2323	1833
09:37	MA14898-STD4	4516	24964	2301	1738
09:40	MA14898-HSTD1	4508	24883	2307	1740
09:44	MA14898-ICV1	4647	25358	2327	1834
09:49	MA14898-ICB1	4786 R	25659 R	2308 R	1934 R
09:53	MA14898-CRIA1	4828	25493	2295	1946
09:57	MA14898-ICSA1	4366	23555	2198	1728
10:04	MA14898-ICSAB1	4300	23491	2176	1688
10:08	MA14898-CCV1	4591	24964	2251	1818
10:14	MA14898-CCB1	4757	25587	2282	1934
10:18	MP33734-MB1	4762	25411	2264	1926
10:22	MP33734-B1	4735	25319	2261	1926
10:27	FA53725-4	4781	25439	2301	1938
10:31	MP33734-D1	4781	25552	2318	1939
10:35	MP33734-D2	4786	25528	2305	1945
10:40	MP33734-SD1	4781	25745	2293	1948
10:44	MP33734-PS1	4763	25393	2300	1931
10:48	MP33734-S1	4737	25357	2266	1923
10:53	MP33734-S2	4711	25370	2276	1910
10:57	FA53725-1A	4742	25490	2278	1911
11:01	MA14898-CCV2	4551	24768	2223	1817
11:06	MA14898-CCB2	4732	25592	2288	1932
11:10	FA53725-7	4774	25625	2293	1933
11:14	FA53725-10	4802	25813	2317	1924
11:19	FA53725-13	4793	25787	2310	1926
11:23	FA53725-16	4755	25536	2315	1930
11:27	FA53725-19	4735	25452	2282	1939
11:32	FA53725-20	4725	25348	2259	1930
11:36	FA53725-25	4715	25374	2273	1929
11:40	FA53725-28	4729	25333	2268	1932
11:45	FA53725-37	4752	25435	2294	1931

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:49	FA53725-45	4752	25549	2289	1933
11:54	MA14898-CCV3	4576	24888	2236	1827
11:58	MA14898-CCB3	4721	25742	2264	1934
12:02	FA53725-48	4753	25521	2290	1947
12:07	FA53725-69	4735	25380	2284	1946
12:11	FA53725-74	4721	25527	2303	1936
12:15	FA53725-77	4743	25379	2264	1942
12:20	FA53725-80	4700	25320	2270	1933
12:24	FA53725-83	4682	25206	2253	1926
12:28	FA53725-7	4752	25335	2278	1905
12:33	FA53725-19	4666	24934	2223	1905
12:37	FA53725-20	4678	25107	2240	1903
12:41	FA53725-37	4687	25120	2262	1905
12:46	MA14898-CCV4	4524	24843	2230	1808
12:50	MA14898-CCB4	4712	25494	2267	1937
12:54	MP33740-MB1	4652	25095	2229	1897
12:59	MP33740-B1	4626	25007	2209	1892
13:03	FA53725-31A	4734	25290	2273	1913
13:07	MP33740-D1	4717	25271	2232	1918
13:12	MP33740-D2	4710	25326	2239	1906
13:16	MP33740-SD1	4722	25270	2275	1936
13:20	MP33740-PS1	4701	25392	2259	1892
13:25	MP33740-S1	4693	25174	2263	1893
13:29	MP33740-S2	4687	24993	2282	1894
13:33	FA53725-40A	4720	25422	2273	1905
13:38	MA14898-CCV5	4536	24987	2228	1815
13:42	MA14898-CCB5	4715	25580	2263	1936
13:46	FA53725-43A	4709	25358	2255	1906
13:51	FA53725-51A	4695	25356	2247	1915
13:55	FA53725-54A	4824	25825	2316	1911
13:59	FA53725-56A	4732	25428	2283	1917
14:04	FA53725-60A	4691	25190	2261	1907
14:08	FA53725-65A	4662	25084	2254	1896

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:13	FA53725-84	4679	25200	2251	1904
14:17	FA53725-89A	4692	25329	2271	1896
14:21	FA53725-92A	4699	25446	2262	1907
14:26	FA53725-95A	4715	25324	2277	1910
14:30	MA14898-CCV6	4543	24764	2242	1815
14:34	MA14898-CCB6	4712	25580	2274	1931
14:39	FA53725-96A	4712	25259	2256	1912
14:43	ZZZZZZ	4701	25189	2265	1899
14:47	ZZZZZZ	4670	25114	2268	1889
14:52	ZZZZZZ	4665	25134	2255	1891
14:56	ZZZZZZ	4679	25183	2250	1908
15:00	ZZZZZZ	4678	25242	2248	1909
15:05	MP33740-SD1	4726	25593	2279	1941
15:09	MA14898-CRIA2	4671	25431	2251	1921
15:14	MA14898-ICSA2	4236	23218	2150	1703
15:18	MA14898-ICSAB2	4198	22922	2132	1675
15:23	MA14898-CCV7	4487	24795	2218	1798
15:27	MA14898-CCB7	4659	25316	2247	1914
15:31	MA14898-CCV8	4483	24490	2203	1795
15:35	MA14898-CCB8	4652	25321	2259	1918

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

8.2.1
8

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14898 Units: ug/l

Time: / Sample ID:			09:49 ICB1		10:14 CCB1		11:06 CCB2		11:58 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	5.0	.2								
Cadmium	4.0	.2								
Calcium	5000	50								
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	-0.200	<20	-0.400	<20	-0.600	<20	0.500	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4								
Silver	10	.7								
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14898 Units: ug/l

Time: / Sample ID:			12:50 CCB4		13:42 CCB5		14:34 CCB6		15:27 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	5.0	.2								
Cadmium	4.0	.2								
Calcium	5000	50								
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	0.500	<20	-0.100	<20	0.200	<20	-0.300	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4								
Silver	10	.7								
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14898 Units: ug/l

Time: / Sample ID: / Metal	ICV True	09:44 ICV1 Results	% Rec	CCV True	10:08 CCV1 Results	% Rec	CCV True	11:01 CCV2 Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	2000	1950	97.5	2000	2020	101.0	2000	2040	102.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

8.2.3

8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14898 Units: ug/l

Time: / Sample ID: / Metal	CCV True	11:54 CCV3 Results	% Rec	CCV True	12:46 CCV4 Results	% Rec	CCV True	13:38 CCV5 Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	2000	2040	102.0	2000	2060	103.0	2000	2060	103.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

8.2.3

8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14898 Units: ug/l

Time:		14:30			15:23	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	2000	2060	103.0	2000	2100	105.0
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

8.2.3

8

HIGH STANDARD CHECK SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14898 Units: ug/l

Time:		09:40	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead	4000	4020	100.5
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium			
Silver			
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14898 Units: ug/l

Time: / Sample ID: / Metal	CRI True	CRIA True	09:53 CRIA1 Results	% Rec	15:09 CRIA2 Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10				
Barium	400	200				
Beryllium	10	5.0				
Cadmium	10	5.0				
Calcium	2000	1000				
Chromium	20	10				
Cobalt	100	50				
Copper	50	25				
Iron	600	300				
Lead	10	5.0	4.20	84.0	4.70	94.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000				
Selenium	20	10				
Silver	20	10				
Sodium	20000	10000				
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

8.2.5

8

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14898 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	09:57 ICSA1 Results	% Rec	10:04 ICSAB1 Results	% Rec	15:14 ICSA2 Results	% Rec	15:18 ICSAB2 Results	% Rec
Aluminum	500000	500000	515000	103.0	521000	104.2	530000HH	106.0	540000HH	108.0
Antimony		1000	1.90		1020	102.0	0.600		1070	107.0
Arsenic		1000	0.00		1080	108.0	-1.60		1130	113.0
Barium		500	0.200		518	103.6	-0.200		542	108.4
Beryllium		500	-0.600		501	100.2	-0.600		511	102.2
Cadmium		1000	0.00		960	96.0	1.00		1000	100.0
Calcium	500000	500000	467000	93.4	472000	94.4	476000H	95.2	480000H	96.0
Chromium		500	-0.800		489	97.8	-0.700		498	99.6
Cobalt		500	-0.900		489	97.8	-0.600		505	101.0
Copper		500	-0.900		532	106.4	-1.50		538	107.6
Iron	200000	200000	177000	88.5	182000	91.0	176000C	88.0	181000C	90.5
Lead		1000	0.500		970	97.0	-0.900		992	99.2
Magnesium	500000	500000	497000	99.4	504000	100.8	505000HH	101.0	514000HH	102.8
Manganese		500	-0.500		500	100.0	-0.200		519	103.8
Molybdenum		1000	-3.50		911	91.1	-4.20		936	93.6
Nickel		1000	-0.100		969	96.9	-0.100		986	98.6
Potassium			283		49.3		125		-5.60	
Selenium		1000	0.00		966	96.6	-4.00		1010	101.0
Silver		1000	0.300		1050	105.0	-0.100		1070HH	107.0
Sodium			193		164		110		118	
Strontium		1000	0.00		1010	101.0	0.00		1040	104.0
Thallium		1000	0.00		957	95.7	1.70		986	98.6
Tin		1000	-1.80		943	94.3	-2.20		967	96.7
Titanium		1000	-0.100		986	98.6	-0.200		1020	102.0
Vanadium		500	0.800		483	96.6	0.300		507	101.4
Zinc		1000	1.30		934	93.4	1.60		951	95.1

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:59	MA14907-STD1	1		STDA
09:03	MA14907-STD2	1		STDB
09:07	MA14907-STD3	1		STDC
09:11	MA14907-STD4	1		STDD
09:18	MA14907-HSTD1	1		
09:24	MA14907-ICV1	1		
09:31	MA14907-ICB1	1		
09:35	MA14907-CRIA1	1		
09:39	MA14907-CRIA2	1		
09:46	MA14907-ICSA1	1		
09:55	MA14907-ICSAB1	1		
10:03	MA14907-CCV1	1		
10:15	MA14907-CCB1	1		
10:20	MP33747-MB1	1		
10:24	MP33747-B1	1		
10:28	FA54170-4	5		(sample used for QC only; not part of login FA53725)
10:40	MP33747-D1	5		
10:45	MP33747-PS1	5		
10:55	MP33747-SD1	25		
11:00	MP33747-S1	5		
11:04	MP33747-S2	5		
11:08	ZZZZZZ	1		
11:13	MA14907-CCV2	1		
11:17	MA14907-CCB2	1		
11:21	ZZZZZZ	1		
11:25	MP33746-MB1	5		
11:29	MP33746-B1	5		
11:33	FA53725-34	5		
11:38	MP33746-D1	5		
11:42	MP33746-D2	5		
11:46	MP33746-SD1	25		
11:50	MP33746-PS1	5		
11:54	MP33746-S1	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:59	MP33746-S2	5		
12:03	MA14907-CCV3	1		
12:07	MA14907-CCB3	1		
12:11	FA53725-68	5		
---------->	Last reportable sample/prep for job FA53725			
12:15	ZZZZZZ	5		
12:19	ZZZZZZ	5		
12:23	ZZZZZZ	5		
12:27	ZZZZZZ	5		
12:32	ZZZZZZ	5		
12:36	ZZZZZZ	5		
12:40	ZZZZZZ	5		
12:47	ZZZZZZ	5		
12:51	ZZZZZZ	5		
12:55	MA14907-CCV4	1		
12:59	MA14907-CCB4	1		
13:24	MA14907-CCV5	1		
13:36	MA14907-CCB5	1		
13:39	MP33758-MB1	1		
13:44	MP33758-B1	1		
13:48	FA54232-1	5		(sample used for QC only; not part of login FA53725)
13:52	MP33758-D1	5		
13:56	MP33758-SD1	25		
14:00	MP33758-PS1	5		
14:04	MP33758-S1	5		
14:08	MP33758-S2	5		
14:13	ZZZZZZ	5		
14:17	ZZZZZZ	5		
14:21	MA14907-CCV6	1		
14:25	MA14907-CCB6	1		
14:29	ZZZZZZ	5		
14:33	ZZZZZZ	1		
14:37	ZZZZZZ	5		
14:42	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:46	ZZZZZZ	5		
14:50	ZZZZZZ	5		
14:54	ZZZZZZ	5		
14:59	ZZZZZZ	5		
15:03	ZZZZZZ	5		
15:07	ZZZZZZ	5		
15:11	MA14907-CCV7	1		
15:15	MA14907-CCB7	1		
15:20	ZZZZZZ	5		
15:24	ZZZZZZ	5		
15:28	ZZZZZZ	5		
15:32	ZZZZZZ	5		
15:37	ZZZZZZ	5		
15:41	ZZZZZZ	5		
15:45	ZZZZZZ	5		
15:49	MP33756-MB1	1		
15:54	MP33756-B1	1		
15:58	FA54229-1	1		(sample used for QC only; not part of login FA53725)
16:02	MA14907-CCV8	1		
16:06	MA14907-CCB8	1		
16:10	MP33756-D1	1		
16:15	MP33756-SD1	5		
16:19	MP33756-PS1	1		
16:23	MP33756-S1	1		
16:27	MP33756-S2	1		
16:31	ZZZZZZ	1		
16:35	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:44	ZZZZZZ	1		
16:48	ZZZZZZ	1		
16:52	MA14907-CCV9	1		
16:56	MA14907-CCB9	1		
17:00	MP33757-MB1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:05	MP33757-B1	1		
17:09	FA54160-1	1		(sample used for QC only; not part of login FA53725)
17:13	MP33757-D1	1		
17:17	MP33757-SD1	5		
17:22	MP33757-S1	1		
17:26	MP33757-S2	1		
17:30	ZZZZZZ	1		
17:34	ZZZZZZ	1		
17:38	ZZZZZZ	1		
17:43	MA14907-CCV10	1		
17:47	MA14907-CCB10	1		
17:51	FA54150-1L	1		(sample used for QC only; not part of login FA53725)
17:55	ZZZZZZ	1		
17:59	ZZZZZZ	1		
18:04	ZZZZZZ	1		
18:08	ZZZZZZ	1		
18:12	FA54199-1	1		(sample used for QC only; not part of login FA53725)
18:17	ZZZZZZ	1		
18:21	ZZZZZZ	1		
18:25	MP33757-D2	1		
18:29	MP33757-D3	1		
18:34	MA14907-CCV11	1		
18:38	MA14907-CCB11	1		
18:42	MP33757-D4	1		
18:46	MP33757-MB2	1		
18:51	MP33757-B2	1		
18:55	MP33757-MB3	1		
18:59	MP33757-B3	1		
19:03	MP33757-MB4	1		
19:07	MP33757-B4	1		
19:11	MP33739-MB1	1		
19:16	MP33739-B1	1		
19:20	FA54204-1	1		(sample used for QC only; not part of login FA53725)

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:24	MA14907-CCV12	1		
19:28	MA14907-CCB12	1		
19:32	MP33739-D1	1		
19:37	MP33739-SD1	5		
19:41	MP33739-PS1	1		
19:45	MP33739-S1	1		
19:49	MP33739-S2	1		
20:16	MA14907-CCV13	1		
20:20	MA14907-CCB13	1		
20:42	ZZZZZZ	1		
20:46	MA14907-CRIA3	1		
20:50	MA14907-ICSA2	1		
20:55	MA14907-ICSAB2	1		
20:59	MA14907-CCV14	1		
21:02	MA14907-CCB14	1		

----------> Last reportable CCB for job FA53725
Refer to raw data for calibration curve and standards.

8.3
8

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:59	MA14907-STD1	3107	23245	1518	1225
09:03	MA14907-STD2	3098	22994	1523	1163
09:07	MA14907-STD3	2941	21915	1488	1054
09:11	MA14907-STD4	2824	21292	1460	980
09:18	MA14907-HSTD1	2827	21766	1493	986
09:24	MA14907-ICV1	2914	22218	1499	1054
09:31	MA14907-ICB1	3022 R	22965 R	1494 R	1197 R
09:35	MA14907-CRIA1	3010			
09:39	MA14907-CRIA2	3000	23035	1518	1168
09:46	MA14907-ICSA1	2704	20734	1496	942
09:55	MA14907-ICSAB1	2610	20380	1461	910
10:03	MA14907-CCV1	2855	22382	1525	1048
10:15	MA14907-CCB1	3069	24206	1589	1234
10:20	MP33747-MB1	2949	23555	1537	1197
10:24	MP33747-B1	2877	22729	1518	1095
10:28	FA54170-4	2775	21844	1531	932
10:40	MP33747-D1	2840	22467	1558	922
10:45	MP33747-PS1	2732	21679	1509	915
10:55	MP33747-SD1	2797	22085	1475	1054
11:00	MP33747-S1	2890	22787	1586	943
11:04	MP33747-S2	2797	22288	1551	934
11:08	ZZZZZZ	2513	20315	1428	899
11:13	MA14907-CCV2	2811	22303	1514	1036
11:17	MA14907-CCB2	2898	22939	1477	1170
11:21	ZZZZZZ	2959	23531	1555	1141
11:25	MP33746-MB1	2922	23458	1516	1181
11:29	MP33746-B1	2855	22869	1480	1133
11:33	FA53725-34	2951	23109	1542	1123
11:38	MP33746-D1	2956	23206	1529	1122
11:42	MP33746-D2	2952	23098	1517	1119
11:46	MP33746-SD1	2936	23215	1530	1168
11:50	MP33746-PS1	2941	23162	1524	1116
11:54	MP33746-S1	2922	23040	1535	1097

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:59	MP33746-S2	2924	22944	1525	1092
12:03	MA14907-CCV3	2772	22442	1489	1027
12:07	MA14907-CCB3	2873	22884	1478	1170
12:11	FA53725-68	2901	23133	1517	1137
12:15	ZZZZZZ	2939	23644	1535	1115
12:19	ZZZZZZ	3067	24372	1609	1115
12:23	ZZZZZZ	2905	23211	1528	1115
12:27	ZZZZZZ	2882	23283	1512	1112
12:32	ZZZZZZ	2917	23547	1517	1119
12:36	ZZZZZZ	2927	23518	1536	1113
12:40	ZZZZZZ	2964	23778	1549	1103
12:47	ZZZZZZ	2928	23531	1534	1115
12:51	ZZZZZZ	2326	17908	1354	806
12:55	MA14907-CCV4	2784	22753	1544	1038
12:59	MA14907-CCB4	2872	23384	1507	1173
13:24	MA14907-CCV5	2753	22577	1529	1031
13:36	MA14907-CCB5	2836	22968	1499	1164
13:39	MP33758-MB1	2854	23440	1519	1175
13:44	MP33758-B1	2767	22488	1485	1070
13:48	FA54232-1	3044	24555	1633	1184
13:52	MP33758-D1	2894	23199	1539	1118
13:56	MP33758-SD1	2865	23072	1505	1150
14:00	MP33758-PS1	2921	23488	1565	1124
14:04	MP33758-S1	2865	22973	1548	1087
14:08	MP33758-S2	2880	22986	1525	1094
14:13	ZZZZZZ	2893	23216	1543	1120
14:17	ZZZZZZ	2846	23138	1533	1118
14:21	MA14907-CCV6	2790	22821	1534	1045
14:25	MA14907-CCB6	2849	23035	1491	1170
14:29	ZZZZZZ	2848	23086	1520	1112
14:33	ZZZZZZ	2885	23221	1556	1023
14:37	ZZZZZZ	2668	21615	1509	952
14:42	ZZZZZZ	3054	24728	1621	1145

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:46	ZZZZZZ	3136	25197	1655	1153
14:50	ZZZZZZ	3095	24705	1618	1146
14:54	ZZZZZZ	3385	27096	1788	1128
14:59	ZZZZZZ	3615	28939 !	1903 !	1166
15:03	ZZZZZZ	3157	25317	1659	1173
15:07	ZZZZZZ	3222	25661	1675	1181
15:11	MA14907-CCV7	2830	22759	1518	1069
15:15	MA14907-CCB7	2913	23219	1491	1203
15:20	ZZZZZZ	3267	25541	1674	1169
15:24	ZZZZZZ	3510	27358	1800	1175
15:28	ZZZZZZ	3541	27468	1808	1175
15:32	ZZZZZZ	3183	24704	1608	1178
15:37	ZZZZZZ	3385	25826	1688	1177
15:41	ZZZZZZ	3534	27070	1776	1168
15:45	ZZZZZZ	3744	28477	1891 !	1177
15:49	MP33756-MB1	2969	22908	1474	1208
15:54	MP33756-B1	2891	22412	1480	1110
15:58	FA54229-1	2905	22637	1492	1156
16:02	MA14907-CCV8	2920	22536	1513	1078
16:06	MA14907-CCB8	3053	23390	1508	1233
16:10	MP33756-D1	2938	22586	1486	1158
16:15	MP33756-SD1	2997	23130	1517	1209
16:19	MP33756-PS1	2916	22723	1511	1137
16:23	MP33756-S1	2897	22337	1506	1089
16:27	MP33756-S2	2895	21982	1479	1082
16:31	ZZZZZZ	2916	22129	1481	1137
16:35	ZZZZZZ	2876	21968	1480	1115
16:39	ZZZZZZ	2908	22325	1510	1130
16:44	ZZZZZZ	2972	22961	1580	1154
16:48	ZZZZZZ	2986	23018	1580	1169
16:52	MA14907-CCV9	2991	22949	1620	1104
16:56	MA14907-CCB9	3112	24107	1633	1267
17:00	MP33757-MB1	3066	24015	1594	1250

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
17:05	MP33757-B1	2944	22763	1557	1126
17:09	FA54160-1	2927	22566	1587	1129
17:13	MP33757-D1	2937	22605	1577	1126
17:17	MP33757-SD1	3060	23252	1581	1201
17:22	MP33757-S1	2964	22551	1607	1092
17:26	MP33757-S2	2964	22572	1595	1089
17:30	ZZZZZZ	2922	22307	1566	1109
17:34	ZZZZZZ	2958	22767	1606	1131
17:38	ZZZZZZ	2970	22685	1601	1137
17:43	MA14907-CCV10	3017	22904	1611	1109
17:47	MA14907-CCB10	3140	23851	1614	1265
17:51	FA54150-1L	2915	22134	1556	1105
17:55	ZZZZZZ	2918	22058	1548	1102
17:59	ZZZZZZ	2918	22145	1578	1104
18:04	ZZZZZZ	3033	23491	1592	1212
18:08	ZZZZZZ	3002	23234	1606	1186
18:12	FA54199-1	2893	22402	1599	1109
18:17	ZZZZZZ	2886	22279	1569	1109
18:21	ZZZZZZ	2927	22199	1567	1107
18:25	MP33757-D2	2949	22436	1581	1127
18:29	MP33757-D3	2890	22226	1580	1108
18:34	MA14907-CCV11	3018	23025	1616	1109
18:38	MA14907-CCB11	3139	23560	1596	1261
18:42	MP33757-D4	2899	22177	1572	1100
18:46	MP33757-MB2	3122	23731	1597	1259
18:51	MP33757-B2	3011	22824	1562	1143
18:55	MP33757-MB3	3095	23800	1601	1255
18:59	MP33757-B3	2988	22961	1560	1140
19:03	MP33757-MB4	2948	22539	1576	1134
19:07	MP33757-B4	2933	22361	1583	1090
19:11	MP33739-MB1	3157	24429	1632	1279
19:16	MP33739-B1	3015	22997	1588	1145
19:20	FA54204-1	2065	16151	1462	704 !

INTERNAL STANDARD SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
19:24	MA14907-CCV12	3022	24031	1742	1128
19:28	MA14907-CCB12	3175	25012	1758	1306
19:32	MP33739-D1	2023	15955	1464	693 !
19:37	MP33739-SD1	2586	20108	1649	936
19:41	MP33739-PS1	2084	16319	1471	701 !
19:45	MP33739-S1	2127	16537	1502	699 !
19:49	MP33739-S2	2123	16421	1491	695 !
20:16	MA14907-CCV13	3036	23843	1715	1124
20:20	MA14907-CCB13	3126	24393	1668	1272
20:42	ZZZZZZ	2816	21874	1620	1074
20:46	MA14907-CRIA3	3068	23969	1661	1227
20:50	MA14907-ICSA2	2709	21178	1617	963
20:55	MA14907-ICSAB2	2699	21141	1595	947
20:59	MA14907-CCV14	2974	23471	1671	1106
21:02	MA14907-CCB14	3087	24405	1652	1270

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

8.3.1
8

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			09:31 ICB1		10:15 CCB1		11:17 CCB2		12:07 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	-0.400	<5.0	0.100	<5.0	-0.500	<5.0	0.00	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			12:59 CCB4		13:36 CCB5		14:25 CCB6		15:15 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.300	<5.0	-0.300	<5.0	0.300	<5.0	0.00	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			16:06 CCB8		16:56 CCB9		17:47 CCB10		18:38 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.400	<5.0	-0.800	<5.0	-0.300	<5.0	0.100	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			19:28 CCB12		20:20 CCB13		21:02 CCB14	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	14	anr					
Antimony	6.0	1	anr					
Arsenic	10	1.3	anr					
Barium	200	1	anr					
Beryllium	4.0	.2	anr					
Cadmium	5.0	.2	anr					
Calcium	1000	50						
Chromium	10	1	anr					
Cobalt	50	.2	anr					
Copper	25	1	anr					
Iron	300	17	anr					
Lead	5.0	1	-0.700	<5.0	-0.700	<5.0	-1.20	<5.0
Magnesium	5000	35						
Manganese	15	.5	anr					
Molybdenum	50	.3	anr					
Nickel	40	.4	anr					
Potassium	10000	200						
Selenium	10	2.4	anr					
Silver	10	.7	anr					
Sodium	10000	500						
Strontium	10	.5						
Thallium	10	1.1	anr					
Tin	50	.9						
Titanium	10	.5						
Vanadium	50	.5	anr					
Zinc	20	3	anr					

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	ICV True	09:24 ICV1 Results	% Rec	CCV True	10:03 CCV1 Results	% Rec	CCV True	11:13 CCV2 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1950	97.5	2000	1930	96.5	2000	1930	96.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

8.3.3

8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	12:03 CCV3 Results	% Rec	CCV True	12:55 CCV4 Results	% Rec	CCV True	13:24 CCV5 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1930	96.5	2000	1900	95.0	2000	1950	97.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

8.3.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	14:21 CCV6 Results	% Rec	CCV True	15:11 CCV7 Results	% Rec	CCV True	16:02 CCV8 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1940	97.0	2000	1930	96.5	2000	1970	98.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

8.3.3
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	16:52 CCV9 Results	% Rec	CCV True	17:43 CCV10 Results	% Rec	CCV True	18:34 CCV11 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1960	98.0	2000	1960	98.0	2000	1950	97.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time:		19:24			20:16			20:59	
Sample ID:	CCV	CCV12		CCV	CCV13		CCV	CCV14	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1920	96.0	2000	1940	97.0	2000	1960	98.0
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

8.3.3

HIGH STANDARD CHECK SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14907 Units: ug/l

Time:		09:18	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	3950	98.8
Magnesium			
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

8.3.4

8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CRI True	CRIA True	09:35 CRIA1 Results	% Rec	09:39 CRIA2 Results	% Rec	20:46 CRIA3 Results	% Rec
Aluminum	400	200						
Antimony	10	5.0	anr					
Arsenic	20	10						
Barium	400	200						
Beryllium	10	5.0						
Cadmium	10	5.0						
Calcium	2000	1000						
Chromium	20	10						
Cobalt	100	50						
Copper	50	25						
Iron	600	300						
Lead	10	5.0			4.70	94.0	4.50	90.0
Magnesium	10000	5000						
Manganese	30	15						
Molybdenum	100	50						
Nickel	80	40						
Potassium	20000	10000						
Selenium	20	10						
Silver	20	10						
Sodium	20000	10000						
Strontium	20	10						
Thallium	20	10						
Tin	100	50						
Titanium	20	10						
Vanadium	100	50						
Zinc	40	20						

(*) Outside of QC limits
(anr) Analyte not requested

8.3.5

8

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	09:46 ICSA1 Results	% Rec	09:55 ICSAB1 Results	% Rec	20:50 ICSA2 Results	% Rec	20:55 ICSAB2 Results	% Rec
Aluminum	500000	500000	469000	93.8	476000	95.2	553000	110.6	556000	111.2
Antimony		1000	1.40		1050	105.0	4.90		1010	101.0
Arsenic		1000	-1.40		1120	112.0	1.50		1040	104.0
Barium		500	0.300		500	100.0	0.500		540	108.0
Beryllium		500	-0.200		481	96.2	-0.200		526	105.2
Cadmium		1000	0.00		930	93.0	-0.400		921	92.1
Calcium	500000	500000	431000	86.2	435000C	87.0	496000	99.2	499000	99.8
Chromium		500	-0.300		458	91.6	-0.400		515	103.0
Cobalt		500	0.00		478	95.6	-0.200		472	94.4
Copper		500	-0.800		527	105.4	-1.40		573	114.6
Iron	200000	200000	168000	84.0	175000	87.5	184000	92.0	188000	94.0
Lead		1000	0.200		937	93.7	-30.1*(a		918	91.8
Magnesium	500000	500000	478000	95.6	493000	98.6	505000	101.0	512000	102.4
Manganese		500	-0.100		480	96.0	-0.100		488	97.6
Molybdenum		1000	0.00		912	91.2	0.500		882	88.2
Nickel		1000	-0.400		985	98.5	0.700		899	89.9
Potassium			19.7		21.3		231		190	
Selenium		1000	0.00		1010	101.0	7.10		949	94.9
Silver		1000	-0.400		1010	101.0	-0.500		1030	103.0
Sodium			168		167		1490		1300	
Strontium		1000	0.100		963	96.3	-0.300		1080	108.0
Thallium		1000	0.00		933	93.3	-0.700		931	93.1
Tin		1000	0.500		974	97.4	0.700		848	84.8
Titanium		1000	0.300		935	93.5	0.600		988	98.8
Vanadium		500	-0.500		468	93.6	-0.200		468	93.6
Zinc		1000	-0.500		932	93.2	-1.80		894	89.4

(*) Outside of QC limits
(anr) Analyte not requested
(a) Possible instrument baseline drift.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33680
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/02/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3		
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50		
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1	0.20	<5.0
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200		
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP33680: FA53725-122, FA53725-123, FA53725-124, FA53725-125

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33680
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/02/18 05/02/18

Metal	FA53663-8 Original	DUP	RPD	QC Limits	FA53663-8 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	0.0	0.0	NC	0-20	0.0	472	500	94.4	80-120
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

Associated samples MP33680: FA53725-122, FA53725-123, FA53725-124, FA53725-125

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33680 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/02/18

Metal	FA53663-8 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	0.0	471	500	94.2	0.2	20
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP33680: FA53725-122, FA53725-123, FA53725-124, FA53725-125

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33680
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/02/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	468	500	93.6	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP33680: FA53725-122, FA53725-123, FA53725-124, FA53725-125

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33680
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/02/18

Metal	FA53663-8 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	0.00	0.00	NC	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP33680: FA53725-122, FA53725-123, FA53725-124, FA53725-125

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33680
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/02/18

Metal	Sample ml	Final ml	FA53663-8 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10			44.6	0.2	2.5	50	89.2	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33680: FA53725-122, FA53725-123, FA53725-124, FA53725-125

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33734
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/14/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	3.5		
Antimony	2.0	.1	.13		
Arsenic	1.0	.13	.2		
Barium	20	.1	.1		
Beryllium	0.50	.02	.05		
Cadmium	0.40	.02	.05		
Calcium	500	5	5		
Chromium	1.0	.1	.1		
Cobalt	5.0	.02	.05		
Copper	2.5	.1	.1		
Iron	30	1.7	1.7		
Lead	2.0	.1	.1	-0.024	<2.0
Magnesium	500	3.5	3.6		
Manganese	1.5	.05	.05		
Molybdenum	5.0	.03	.05		
Nickel	4.0	.04	.05		
Potassium	1000	20	20		
Selenium	2.0	.24	.24		
Silver	1.0	.07	.082		
Sodium	1000	50	50		
Strontium	1.0	.05	.05		
Thallium	1.0	.11	.11		
Tin	5.0	.09	.09		
Titanium	1.0	.05	.05		
Vanadium	5.0	.05	.05		
Zinc	2.0	.3	.3		

Associated samples MP33734: FA53725-4, FA53725-7, FA53725-10, FA53725-13, FA53725-16, FA53725-19, FA53725-1A, FA53725-20, FA53725-25, FA53725-28, FA53725-37, FA53725-45, FA53725-48, FA53725-69, FA53725-74, FA53725-77, FA53725-80, FA53725-83

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33734
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/14/18				05/14/18	
Metal	FA53725-4 Original	DUP	RPD	QC Limits	FA53725-4 Original	DUP	RPD	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	12.5	12.5	0.0	0-20	12.5	11.6	7.5	0-20
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33734: FA53725-4, FA53725-7, FA53725-10, FA53725-13, FA53725-16, FA53725-19, FA53725-1A, FA53725-20, FA53725-25, FA53725-28, FA53725-37, FA53725-45, FA53725-48, FA53725-69, FA53725-74, FA53725-77, FA53725-80, FA53725-83

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33734
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/14/18

Metal	FA53725-4 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	12.5	21.9	9.96	94.4	80-120
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP33734: FA53725-4, FA53725-7, FA53725-10, FA53725-13, FA53725-16, FA53725-19, FA53725-1A, FA53725-20, FA53725-25, FA53725-28, FA53725-37, FA53725-45, FA53725-48, FA53725-69, FA53725-74, FA53725-77, FA53725-80, FA53725-83

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33734
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/14/18

Metal	FA53725-4 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	12.5	22.5	10	100.0	2.7	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP33734: FA53725-4, FA53725-7, FA53725-10, FA53725-13, FA53725-16, FA53725-19, FA53725-1A, FA53725-20, FA53725-25, FA53725-28, FA53725-37, FA53725-45, FA53725-48, FA53725-69, FA53725-74, FA53725-77, FA53725-80, FA53725-83

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33734
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/14/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	10.1	10	101.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33734: FA53725-4, FA53725-7, FA53725-10, FA53725-13, FA53725-16, FA53725-19, FA53725-1A, FA53725-20, FA53725-25, FA53725-28, FA53725-37, FA53725-45, FA53725-48, FA53725-69, FA53725-74, FA53725-77, FA53725-80, FA53725-83

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33734
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/14/18

Metal	FA53725-4 Original	SDL 10:50%DIF		QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	630	604	4.2	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33734: FA53725-4, FA53725-7, FA53725-10, FA53725-13, FA53725-16, FA53725-19, FA53725-1A, FA53725-20, FA53725-25, FA53725-28, FA53725-37, FA53725-45, FA53725-48, FA53725-69, FA53725-74, FA53725-77, FA53725-80, FA53725-83

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33734
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/14/18

Metal	Sample ml	Final ml	FA53725-4 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	630.3	617.694	662.9	0.2	2.5	50	90.4	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33734: FA53725-4, FA53725-7, FA53725-10, FA53725-13, FA53725-16, FA53725-19, FA53725-1A, FA53725-20, FA53725-25, FA53725-28, FA53725-37, FA53725-45, FA53725-48, FA53725-69, FA53725-74, FA53725-77, FA53725-80, FA53725-83

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/15/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	3.5		
Antimony	2.0	.1	.13		
Arsenic	1.0	.13	.2		
Barium	20	.1	.1		
Beryllium	0.50	.02	.05		
Cadmium	0.40	.02	.05		
Calcium	500	5	5		
Chromium	1.0	.1	.1		
Cobalt	5.0	.02	.05		
Copper	2.5	.1	.1		
Iron	30	1.7	1.7		
Lead	2.0	.1	.1	-0.074	<2.0
Magnesium	500	3.5	3.6		
Manganese	1.5	.05	.05		
Molybdenum	5.0	.03	.05		
Nickel	4.0	.04	.05		
Potassium	1000	20	20		
Selenium	2.0	.24	.24		
Silver	1.0	.07	.082		
Sodium	1000	50	50		
Strontium	1.0	.05	.05		
Thallium	1.0	.11	.11		
Tin	5.0	.09	.09		
Titanium	1.0	.05	.05		
Vanadium	5.0	.05	.05		
Zinc	2.0	.3	.3		

Associated samples MP33740: FA53725-84, FA53725-31A, FA53725-40A, FA53725-43A, FA53725-51A, FA53725-54A, FA53725-56A, FA53725-60A, FA53725-65A, FA53725-89A, FA53725-92A, FA53725-95A, FA53725-96A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/15/18				05/15/18	
Metal	FA53725-31A Original	DUP	RPD	QC Limits	FA53725-31A Original	DUP	RPD	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	14.1	13.1	7.4	0-20	14.1	13.8	2.2	0-20
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33740: FA53725-84, FA53725-31A, FA53725-40A, FA53725-43A, FA53725-51A, FA53725-54A, FA53725-56A, FA53725-60A, FA53725-65A, FA53725-89A, FA53725-92A, FA53725-95A, FA53725-96A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/15/18

Metal	FA53725-31A Original MS		Spikelot MPFLICP2 % Rec		QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	14.1	25.1	9.92	110.9	80-120
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP33740: FA53725-84, FA53725-31A, FA53725-40A, FA53725-43A, FA53725-51A, FA53725-54A, FA53725-56A, FA53725-60A, FA53725-65A, FA53725-89A, FA53725-92A, FA53725-95A, FA53725-96A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/15/18

Metal	FA53725-31A Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	14.1	23.8	9.98	97.2	5.3	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP33740: FA53725-84, FA53725-31A, FA53725-40A, FA53725-43A, FA53725-51A, FA53725-54A, FA53725-56A, FA53725-60A, FA53725-65A, FA53725-89A, FA53725-92A, FA53725-95A, FA53725-96A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/15/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	10.8	10	108.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33740: FA53725-84, FA53725-31A, FA53725-40A, FA53725-43A, FA53725-51A, FA53725-54A, FA53725-56A, FA53725-60A, FA53725-65A, FA53725-89A, FA53725-92A, FA53725-95A, FA53725-96A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/15/18

Metal	FA53725-31A Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	717	664	7.4	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33740: FA53725-84, FA53725-31A, FA53725-40A, FA53725-43A, FA53725-51A, FA53725-54A, FA53725-56A, FA53725-60A, FA53725-65A, FA53725-89A, FA53725-92A, FA53725-95A, FA53725-96A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/15/18

Metal	Sample ml	Final ml	FA53725-31A Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	717.2	702.856	781.4	0.2	2.5	50	157.1*(a	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33740: FA53725-84, FA53725-31A, FA53725-40A, FA53725-43A, FA53725-51A, FA53725-54A, FA53725-56A, FA53725-60A, FA53725-65A, FA53725-89A, FA53725-92A, FA53725-95A, FA53725-96A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	3.5		
Antimony	2.0	.1	.13		
Arsenic	1.0	.13	.2		
Barium	20	.1	.1		
Beryllium	0.50	.02	.05		
Cadmium	0.40	.02	.05		
Calcium	500	5	5		
Chromium	1.0	.1	.1		
Cobalt	5.0	.02	.05		
Copper	2.5	.1	.1		
Iron	30	1.7	1.7		
Lead	2.0	.1	.1	-0.012	<2.0
Magnesium	500	3.5	3.6		
Manganese	1.5	.05	.05		
Molybdenum	5.0	.03	.05		
Nickel	4.0	.04	.05		
Potassium	1000	20	20		
Selenium	2.0	.24	.24		
Silver	1.0	.07	.082		
Sodium	1000	50	50		
Strontium	1.0	.05	.05		
Thallium	1.0	.11	.11		
Tin	5.0	.09	.09		
Titanium	1.0	.05	.05		
Vanadium	5.0	.05	.05		
Zinc	2.0	.3	.3		

Associated samples MP33746: FA53725-34, FA53725-68

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/16/18				05/16/18	
Metal	FA53725-34 Original	DUP	RPD	QC Limits	FA53725-34 Original	DUP	RPD	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	6.4	6.2	3.2	0-20	6.4	6.1	4.8	0-20
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33746: FA53725-34, FA53725-68

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	FA53725-34 Original MS		Spikelot MPFLICP2 % Rec		QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	6.4	16.1	9.94	97.5	80-120
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP33746: FA53725-34, FA53725-68

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	FA53725-34 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	6.4	17.8	9.96	114.5	10.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP33746: FA53725-34, FA53725-68

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	10	10	100.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33746: FA53725-34, FA53725-68

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/16/18

Metal	FA53725-34 Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	320	298	6.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33746: FA53725-34, FA53725-68

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53725
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/16/18

Metal	Sample ml	Final ml	FA53725-34 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	319.8	313.404	358.5	0.2	2.5	50	90.2	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33746: FA53725-34, FA53725-68

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14869,MA14898

Instrument Detection Limits

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14907

Instrument Linear Ranges

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14869,MA14898

Instrument Linear Ranges

Job Number: FA53725
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14907

Metals Analysis

Raw Data

Inst QC: MA14869

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/2/2018 10:01:41 Type: Cal
Method: 60102007_042011(v103) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0003**	**-.0056**	**-.0004**	**.0022**	**-.0003**	**.0024**	**-.0012**	**-.0009**	**-.0002**
Stddev	.0001	.0005	.0001	.0008	.0003	.0006	.0002	.0001	.0001
%RSD	46.68	9.039	18.20	36.65	100.9	23.70	15.49	8.780	54.96
#1	-.0002	-.0051	-.0003	.0015	.0001	.0028	-.0013	-.0008	-.0003
#2	-.0002	-.0058	-.0003	.0031	-.0005	.0017	-.0013	-.0008	-.0001
#3	-.0005	-.0061	-.0004	.0021	-.0005	.0027	-.0010	-.0010	-.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0041**	**.0017**	**-.0008**	**-.0002**	**.0004**	**.0014**	**.0014**	**-.0001**	**-.0012**
Stddev	.0001	.0003	.0017	.0003	.0000	.0002	.0017	.0002	.0006
%RSD	1.441	17.03	198.2	221.4	6.472	11.74	123.3	128.7	49.16
#1	.0041	.0020	.0001	-.0003	.0004	.0015	.0023	-.0003	-.0011
#2	.0040	.0015	.0002	-.0004	.0004	.0014	-.0006	.0000	-.0018
#3	.0041	.0015	-.0028	.0002	.0004	.0012	.0023	-.0001	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0003**	**.0000**	**.0032**	**.0004**	**.0007**	**.0020**	**-.0012**	**-.0003**	**.0015**
Stddev	.0003	.0002	.0000	.0001	.0004	.0002	.0003	.0001	.0001
%RSD	94.77	912.2	1.472	15.21	64.49	7.625	25.19	41.42	9.075
#1	.0002	.0000	.0031	.0004	.0011	.0022	-.0010	-.0002	.0014
#2	.0007	.0002	.0032	.0005	.0002	.0019	-.0015	-.0004	.0016
#3	.0001	-.0001	.0031	.0004	.0007	.0020	-.0011	-.0002	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2226.8**	**5509.3**	**38351.**	**6368.5**
Stddev	5.3	1.2	65.	18.2
%RSD	.23644	.02123	.16833	.28536
#1	2222.4	5510.2	38304.	6387.7
#2	2225.4	5508.0	38425.	6351.5
#3	2232.6	5509.6	38324.	6366.3

Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/2/2018 10:05:50 Type: Cal
Method: 60102007_042011(v103) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0286**	**1.173**	**.0792**	**4.382**	**4.134**	**2.594**	**2.537**	**1.332**	**.2101**
Stddev	.0008	.004	.0004	.020	.011	.005	.003	.001	.0012
%RSD	2.779	.3806	.5307	.4446	.2636	.1868	.1142	.0684	.5896
#1	.0280	1.173	.0788	4.364	4.123	2.595	2.535	1.332	.2115
#2	.0284	1.169	.0796	4.378	4.145	2.599	2.540	1.333	.2100
#3	.0295	1.178	.0790	4.403	4.133	2.590	2.535	1.331	.2090

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2893**	**1.482**	**.8762**	**.1847**	**1.326**	**.4429**	**3.560**	**.8484**	**.5623**
Stddev	.0002	.007	.0022	.0016	.005	.0010	.014	.0008	.0017
%RSD	.0731	.4720	.2531	.8797	.3866	.2328	.3846	.0978	.2964
#1	.2891	1.474	.8749	.1850	1.332	.4417	3.549	.8475	.5629
#2	.2895	1.484	.8748	.1830	1.323	.4437	3.555	.8487	.5604
#3	.2895	1.488	.8787	.1862	1.323	.4434	3.575	.8491	.5635

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1062**	**.0533**	**.1952**	**.1907**	**5.231**	**.7772**	**.1666**	**.3152**	**1.303**
Stddev	.0002	.0001	.0005	.0003	.009	.0008	.0002	.0007	.001
%RSD	.1706	.1728	.2529	.1489	.1657	.1036	.1389	.2328	.0663
#1	.1060	.0532	.1946	.1904	5.225	.7780	.1667	.3161	1.303
#2	.1062	.0534	.1956	.1910	5.241	.7764	.1668	.3149	1.304
#3	.1063	.0532	.1952	.1907	5.226	.7771	.1664	.3147	1.302

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2140.6**	**5482.8**	**37989.**	**6344.7**
Stddev	5.3	10.0	246.	6.9
%RSD	.24765	.18154	.64627	.10924
#1	2134.6	5476.9	37710.	6348.8
#2	2144.7	5477.3	38168.	6348.6
#3	2142.4	5494.3	38090.	6336.7

Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/2/2018 10:09:19 Type: Cal
Method: 60102007_042011(v103) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1154**	**4.790**	**.3370**	**17.90**	**17.01**	**10.42**	**10.37**	**5.441**	**.8530**
Stddev	.0005	.013	.0006	.03	.06	.05	.02	.007	.0068
%RSD	.4091	.2761	.1688	.1462	.3755	.4671	.2135	.1357	.8020
#1	.1151	4.790	.3374	17.92	17.06	10.46	10.36	5.440	.8451
#2	.1152	4.803	.3372	17.91	17.04	10.43	10.40	5.449	.8569
#3	.1160	4.777	.3363	17.87	16.94	10.36	10.35	5.434	.8570

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.181**	**5.755**	**3.577**	**.7459**	**5.344**	**1.896**	**14.43**	**3.452**	**2.390**
Stddev	.004	.027	.016	.0051	.034	.002	.04	.006	.003
%RSD	.3225	.4670	.4464	.6805	.6430	.0852	.2717	.1754	.1228
#1	1.183	5.779	3.594	.7499	5.320	1.895	14.47	3.450	2.387
#2	1.177	5.761	3.573	.7476	5.328	1.898	14.42	3.459	2.390
#3	1.184	5.726	3.563	.7402	5.383	1.897	14.39	3.448	2.393

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4477**	**.2240**	**.6392**	**.8059**	**22.28**	**3.286**	**.7103**	**1.339**	**5.339**
Stddev	.0011	.0004	.0015	.0037	.02	.013	.0022	.009	.015
%RSD	.2563	.1628	.2405	.4648	.0714	.3884	.3037	.6536	.2834
#1	.4468	.2244	.6374	.8052	22.29	3.276	.7079	1.328	5.341
#2	.4490	.2239	.6399	.8099	22.28	3.282	.7108	1.343	5.353
#3	.4472	.2237	.6402	.8025	22.26	3.301	.7121	1.345	5.323

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1944.3**	**5245.8**	**36543.**	**6261.6**
Stddev	1.9	3.2	111.	56.0
%RSD	.09553	.06097	.30400	.89458
#1	1944.9	5247.1	36654.	6249.8
#2	1945.8	5242.1	36544.	6212.4
#3	1942.2	5248.1	36432.	6322.5

Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/2/2018 10:12:31 Type: Cal
Method: 60102007_042011(v103) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2291**	**9.327**	**.6647**	**34.89**	**32.76**	**19.82**	**20.02**	**10.56**	**1.652**
Stddev	.0007	.020	.0021	.10	.07	.06	.01	.01	.007
%RSD	.3159	.2147	.3170	.2955	.2143	.2873	.0716	.0725	.4067
#1	.2284	9.349	.6651	34.92	32.82	19.88	20.02	10.55	1.652
#2	.2298	9.310	.6624	34.77	32.68	19.76	20.00	10.55	1.646
#3	.2289	9.322	.6666	34.97	32.77	19.81	20.03	10.57	1.659

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.302**	**11.03**	**6.891**	**1.430**	**10.10**	**3.681**	**27.70**	**6.661**	**4.828**
Stddev	.008	.02	.004	.007	.03	.005	.01	.016	.009
%RSD	.3558	.1955	.0617	.4766	.3170	.1372	.0532	.2392	.1944
#1	2.301	11.04	6.886	1.437	10.08	3.679	27.69	6.671	4.834
#2	2.311	11.01	6.892	1.424	10.14	3.677	27.69	6.642	4.833
#3	2.295	11.04	6.894	1.430	10.09	3.687	27.72	6.669	4.817

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.8847**	**.4426**	**1.277**	**1.534**	**42.17**	**6.281**	**1.424**	**2.578**	**10.23**
Stddev	.0031	.0011	.003	.005	.43	.013	.002	.011	.02
%RSD	.3480	.2400	.2255	.3062	1.012	.2082	.1514	.4135	.1859
#1	.8860	.4420	1.277	1.538	41.94	6.271	1.423	2.575	10.25
#2	.8812	.4420	1.275	1.529	41.91	6.277	1.427	2.570	10.22
#3	.8869	.4439	1.280	1.536	42.66	6.296	1.423	2.590	10.22

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1778.9**	**5044.3**	**35418.**	**6213.6**
Stddev	3.5	8.5	166.	30.0
%RSD	.19744	.16872	.46924	.48316
#1	1775.9	5040.8	35604.	6187.3
#2	1778.0	5054.1	35364.	6246.3
#3	1782.8	5038.2	35286.	6207.1

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/2/2018 10:16:03 Type: QC
Method: 60102007_042011(v103) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4904**	**78.41**	**3.951**	**3.935**	**3.926**	**77.91**	**3.904**	**3.910**	**3.901**
Stddev	.0029	.27	.011	.012	.013	.23	.007	.002	.014
%RSD	.5965	.3385	.2858	.3019	.3236	.2996	.1761	.0562	.3556
#1	.4874	78.64	3.944	3.938	3.935	78.18	3.897	3.907	3.895
#2	.4933	78.12	3.946	3.944	3.932	77.78	3.903	3.911	3.917
#3	.4905	78.48	3.964	3.921	3.912	77.77	3.911	3.911	3.891
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.901**	**78.05**	**78.52**	**77.93**	**3.864**	**3.926**	**78.19**	**3.909**	**3.983**
Stddev	.013	.16	.24	.29	.024	.002	.28	.007	.013
%RSD	.3414	.2035	.3083	.3737	.6157	.0377	.3550	.1926	.3217
#1	3.891	78.23	78.80	78.02	3.853	3.926	78.50	3.901	3.970
#2	3.897	77.93	78.41	77.60	3.849	3.925	78.11	3.910	3.985
#3	3.916	77.99	78.35	78.16	3.892	3.928	77.96	3.916	3.995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.952**	**3.945**	**3.894**	**3.910**	**3.855**	**3.898**	**3.969**	**3.910**	**3.911**
Stddev	.002	.008	.006	.011	.045	.009	.006	.012	.013
%RSD	.0618	.1970	.1530	.2850	1.169	.2288	.1527	.3016	.3394
#1	3.951	3.936	3.889	3.900	3.906	3.889	3.962	3.903	3.899
#2	3.955	3.950	3.901	3.908	3.838	3.907	3.972	3.924	3.909
#3	3.950	3.950	3.893	3.922	3.820	3.898	3.973	3.904	3.925
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA14869 page 5 of 108

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/2/2018 10:16:03 Type: QC
Method: 60102007_042011(v103) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1798.5**	**5083.6**	**35833.**	**6220.1**
Stddev	3.1	4.5	138.	49.6
%RSD	.17509	.08847	.38526	.79701
#1	1802.2	5088.4	35977.	6198.8
#2	1797.0	5083.1	35702.	6276.8
#3	1796.4	5079.4	35818.	6184.8

Raw Data MA14869 page 6 of 108

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/2/2018 10:19:44 Type: QC
Method: 60102007_042011(v103) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2270**	**39.85**	**1.929**	**1.955**	**1.969**	**39.36**	**1.941**	**1.959**	**1.929**
Stddev	.0014	.03	.005	.006	.006	.11	.004	.005	.007
%RSD	.5959	.0793	.2649	.2922	.2985	.2729	.2287	.2745	.3561
#1	.2265	39.81	1.928	1.960	1.976	39.47	1.936	1.955	1.934
#2	.2259	39.84	1.925	1.949	1.966	39.36	1.941	1.956	1.921
#3	.2285	39.88	1.935	1.957	1.966	39.25	1.945	1.965	1.932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.934**	**38.38**	**39.10**	**39.60**	**1.929**	**1.838**	**38.67**	**1.967**	**1.885**
Stddev	.007	.20	.09	.23	.005	.005	.10	.007	.003
%RSD	.3628	.5211	.2346	.5747	.2539	.2801	.2661	.3353	.1364
#1	1.926	38.60	39.18	39.59	1.928	1.834	38.69	1.962	1.885
#2	1.938	38.35	39.00	39.83	1.924	1.835	38.55	1.966	1.882
#3	1.938	38.20	39.11	39.38	1.934	1.844	38.75	1.975	1.888
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.941**	**1.930**	**.0971**	**1.989**	**1.927**	**1.933**	**1.966**	**1.871**	**1.947**
Stddev	.010	.012	.0008	.010	.006	.006	.003	.005	.003
%RSD	.5208	.6181	.8690	.5070	.3038	.3147	.1492	.2906	.1509
#1	1.934	1.930	.0972	1.980	1.924	1.930	1.963	1.870	1.943
#2	1.936	1.918	.0962	1.987	1.923	1.930	1.965	1.866	1.948
#3	1.952	1.942	.0979	2.000	1.934	1.940	1.969	1.877	1.949
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA14869 page 7 of 108

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/2/2018 10:19:44 Type: QC
Method: 60102007_042011(v103) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1959.5**	**5249.1**	**36829.**	**6299.5**
Stddev	3.2	19.6	115.	54.6
%RSD	.16543	.37360	.31212	.86629
#1	1961.5	5265.6	36886.	6261.8
#2	1961.2	5254.3	36697.	6274.6
#3	1955.7	5227.5	36905.	6362.1

Raw Data MA14869 page 8 of 108

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/2/2018 10:24:37 Type: QC
Method: 60102007_042011(v103) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0012**	**.0005**	**.0000**	**.0000**	**.0007**	**.0000**	**.0000**	**.0003**
Stddev	.0005	.0060	.0006	.0002	.0001	.0003	.000	.0001	.0003
%RSD	146.8	503.6	119.5	696.6	226.0	40.25	923.5	278.2	108.0
#1	.0006	.0025	.0011	-.0002	.0000	.0004	.0001	.0001	.0005
#2	.0007	.0064	.0000	.0001	.0001	.0007	-.0001	.0001	-.0001
#3	-.0003	-.0053	.0004	.0002	.0000	.0009	.0000	-.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0043**	**.0460**	**.0041**	**.0000**	F **.0016**	**.0174**	**.0001**	**.0004**
Stddev	.0005	.0011	.0196	.0167	.0000	.0005	.0076	.0001	.0002
%RSD	1579.	26.34	42.58	407.2	216.9	33.11	43.91	77.94	50.59
#1	.0004	.0036	.0265	.0233	.0000	.0021	.0107	.0001	.0005
#2	-.0005	.0056	.0656	-.0074	.0000	.0014	.0158	.0002	.0002
#3	.0001	.0037	.0458	-.0036	.0000	.0011	.0257	.0000	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0014**	**-.0007**	**.0005**	**.0001**	**.0000**	**.0008**	**.0004**	**.0001**	**.0000**
Stddev	.0010	.0011	.0003	.0004	.0001	.0001	.0009	.0002	.0000
%RSD	74.67	161.6	61.97	754.2	179.3	9.108	212.3	262.6	522.9
#1	-.0021	.0005	.0007	-.0002	.0001	.0008	.0003	.0002	.0000
#2	-.0019	-.0016	.0007	-.0001	.0000	.0009	.0013	.0003	.0000
#3	-.0002	-.0008	.0001	.0005	.0000	.0008	-.0004	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA14869 page 9 of 108

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/2/2018 10:24:37 Type: QC
Method: 60102007_042011(v103) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2241.2**	**5484.1**	**38370.**	**6435.3**
Stddev	2.8	9.0	44.	35.8
%RSD	.12531	.16345	.11343	.55564
#1	2238.3	5483.2	38385.	6394.2
#2	2243.9	5475.6	38404.	6452.3
#3	2241.3	5493.5	38321.	6459.3

Raw Data MA14869 page 10 of 108

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/2/2018 10:28:19 Type: QC
Method: 60102007_042011(v103) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0092**	**.1881**	**.0089**	**.1937**	**.0049**	**.9833**	**.0050**	**.0490**	**.0096**
Stddev	.0002	.0082	.0005	.0011	.0001	.0053	.0001	.0000	.0004
%RSD	2.560	4.384	5.662	.5717	1.703	.5368	1.564	.0944	4.156
#1	.0092	.1834	.0092	.1933	.0048	.9807	.0050	.0490	.0096
#2	.0095	.1833	.0093	.1949	.0049	.9798	.0050	.0490	.0093
#3	.0090	.1977	.0084	.1927	.0049	.9893	.0049	.0491	.0101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0249**	**9.671**	**4.847**	**.0151**	**.0451**	**9.604**	**.0400**	**.0048**	**.0047**
Stddev	.0001	.034	.034	.0001	.0002	.030	.0002	.0001	.0005
%RSD	.5347	.3513	.7077	.3899	.5182	.3163	.4210	2.112	10.04
#1	.0250	9.646	4.814	.0151	.0452	9.584	.0398	.0048	.0042
#2	.0250	9.657	4.883	.0150	.0448	9.639	.0402	.0046	.0050
#3	.0248	9.709	4.845	.0152	.0452	9.589	.0401	.0048	.0049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0085**	**.0089**	**.0490**	**.0094**	**.0094**	**.0084**	**.0466**	**.0196**
Stddev	.0015	.0002	.0001	.0000	.0001	.0008	.0003	.0001
%RSD	17.34	1.737	.1345	.2597	1.128	10.08	.7360	.4025
#1	.0093	.0089	.0490	.0094	.0093	.0078	.0466	.0196
#2	.0094	.0088	.0489	.0095	.0095	.0093	.0470	.0196
#3	.0068	.0091	.0489	.0094	.0094	.0079	.0463	.0197
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Raw Data MA14869 page 11 of 108

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/2/2018 10:28:19 Type: QC
Method: 60102007_042011(v103) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2203.5**	**5483.9**	**37950.**	**6396.3**
Stddev	2.1	9.2	94.	33.5
%RSD	.09493	.16845	.24867	.52404
#1	2203.8	5475.4	37846.	6415.1
#2	2201.3	5493.7	37975.	6416.3
#3	2205.4	5482.6	38030.	6357.6

Raw Data MA14869 page 12 of 108

9.1

6

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/2/2018 10:32:39 Type: QC
Method: 60102007_042011(v103) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Fe2599
Units	ppm
Avg	.2881
Stddev	.0025
%RSD	.8744
#1	.2863
#2	.2899
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_3710
Units	Cts/S
Avg	6321.7
Stddev	49.3
%RSD	.77946
#1	6356.5
#2	6286.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/2/2018 10:36:57 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	500.9	.0004	.0002	.0000	460.2	.0004	.0003	.0008
Stddev	.0002	4.8	.0009	.0001	.000	3.5	.0000	.0003	.0002
%RSD	61.99	.9568	212.0	60.45	540.2	.7602	11.66	89.86	31.32
#1	-.0005	495.9	-.0001	.0001	.0000	456.6	.0004	.0006	.0007
#2	-.0006	505.4	-.0001	.0001	.0000	460.3	.0004	.0001	.0010
#3	-.0001	501.4	.0015	.0004	.0000	463.6	.0004	.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	178.3	.1212	486.2	.0010	.0009	.1344	-.0002	-.0001
Stddev	.0005	1.1	.0319	4.1	.0001	.0002	.0023	.0004	.0023
%RSD	338.5	.6161	26.31	.8366	5.994	20.54	1.694	206.4	3109.
#1	-.0004	178.2	.1510	484.5	.0010	.0010	.1368	.0003	.0026
#2	.0002	177.2	.1248	483.2	.0009	.0007	.1341	-.0005	-.0014
#3	.0006	179.4	.0876	490.8	.0010	.0009	.1323	-.0003	-.0014
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0000	.0050	-.0003	-.0004	-.0016	.0018	.0003	-.0003
Stddev	.0011	.004	.0011	.0011	.0003	.0001	.0012	.0002	.0002
%RSD	803.1	19280.	21.89	317.1	63.40	8.632	66.98	59.59	58.85
#1	.0014	.0042	.0052	-.0007	-.0001	-.0016	.0006	.0004	-.0002
#2	-.0008	-.0013	.0039	.0009	-.0007	-.0015	.0030	.0001	-.0003
#3	-.0002	-.0030	.0060	-.0012	-.0005	-.0018	.0018	.0004	-.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/2/2018 10:36:57 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1744.9	4896.9	33102.	6137.9
Stddev	4.4	7.8	185.	54.3
%RSD	.25034	.15872	.55961	.88426
#1	1744.5	4904.3	32923.	6185.5
#2	1740.7	4888.8	33293.	6149.5
#3	1749.4	4897.7	33089.	6078.8

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/2/2018 10:43:06 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.063	511.9	.9857	.4964	.4910	458.8	.8914	.4531	.4689
Stddev	.003	11.5	.0035	.0010	.0009	7.8	.0009	.0003	.0014
%RSD	.2762	2.248	.3526	.2003	.1735	1.695	.0985	.0576	.3063
#1	1.066	511.0	.9860	.4975	.4909	467.6	.8924	.4532	.4696
#2	1.060	500.8	.9890	.4959	.4902	453.0	.8910	.4528	.4698
#3	1.062	523.8	.9820	.4957	.4919	455.8	.8907	.4533	.4673
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5146	172.6	.0642	496.6	.4834	.8361	.1209	.9094	.9142
Stddev	.0020	1.0	.0009	1.6	.0018	.0012	.0024	.0005	.0023
%RSD	.3892	.5578	1.466	.3125	.3677	.1416	1.986	.0544	.2477
#1	.5132	172.7	.0634	497.4	.4847	.8355	.1186	.9088	.9120
#2	.5169	171.6	.0639	494.8	.4841	.8354	.1234	.9097	.9166
#3	.5136	173.5	.0652	497.6	.4813	.8375	.1208	.9096	.9141
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9216	.8868	.1161	.8638	.9387	.9203	.8655	.4639	.8931
Stddev	.0030	.0008	.0004	.0015	.0043	.0023	.0073	.0015	.0003
%RSD	.3270	.0883	.3375	.1788	.4629	.2494	.8492	.3280	.0382
#1	.9231	.8873	.1162	.8622	.9428	.9226	.8624	.4653	.8934
#2	.9237	.8859	.1157	.8638	.9391	.9205	.8602	.4641	.8932
#3	.9182	.8872	.1164	.8653	.9341	.9180	.8739	.4623	.8928
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/2/2018 10:43:06 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1713.1	4898.3	33156.	6018.5
Stddev	6.3	8.2	112.	41.3
%RSD	.36638	.16725	.33922	.68661
#1	1712.0	4900.8	33129.	6014.6
#2	1719.9	4904.9	33059.	6061.6
#3	1707.5	4889.1	33279.	5979.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 10:46:51 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2515	41.00	2.043	2.038	2.037	41.52	2.068	2.054	2.041
Stddev	.0015	.13	.007	.002	.009	.10	.003	.004	.005
%RSD	.6020	.3187	.3374	.0832	.4482	.2377	.1572	.2149	.2362
#1	.2499	41.14	2.036	2.037	2.029	41.49	2.065	2.050	2.037
#2	.2529	40.88	2.045	2.037	2.035	41.45	2.070	2.054	2.047
#3	.2516	40.98	2.049	2.040	2.047	41.64	2.071	2.059	2.040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.029	40.87	40.96	41.54	2.090	2.061	40.95	2.068	2.013
Stddev	.007	.17	.17	.17	.006	.003	.13	.004	.004
%RSD	.3378	.4048	.4145	.4064	.2908	.1660	.3245	.2138	.1722
#1	2.027	40.79	40.91	41.70	2.094	2.057	40.84	2.063	2.017
#2	2.023	40.76	40.83	41.36	2.092	2.061	40.91	2.069	2.014
#3	2.036	41.06	41.15	41.56	2.083	2.064	41.10	2.072	2.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.033	2.043	1.975	2.096	2.092	2.079	2.020	2.065	2.090
Stddev	.009	.006	.007	.008	.002	.003	.002	.004	.004
%RSD	.4160	.3149	.3473	.3628	.0779	.1367	.0903	.2017	.1907
#1	2.025	2.037	1.970	2.087	2.091	2.082	2.022	2.064	2.086
#2	2.034	2.043	1.973	2.101	2.090	2.078	2.018	2.069	2.092
#3	2.041	2.049	1.983	2.100	2.093	2.077	2.021	2.061	2.093
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 10:46:51 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1934.1	5205.5	36426.	6133.6
Stddev	2.8	14.1	73.	24.9
%RSD	.14721	.27166	.19954	.40584
#1	1934.2	5221.6	36358.	6107.1
#2	1931.1	5199.8	36502.	6137.4
#3	1936.8	5195.1	36418.	6156.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 10:53:02 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0077	.0003	.0000	-.0001	.0079	.0000	.0001	.0001
Stddev	.0002	.0074	.0003	.000	.0001	.0011	.0001	.0001	.0003
%RSD	238.4	96.12	113.5	467.0	94.02	13.98	123.0	104.3	398.8
#1	-.0001	.0115	.0002	.0001	.0000	.0069	.0000	.0001	.0001
#2	.0001	.0123	.0000	.0000	-.0001	.0091	.0001	.0000	-.0002
#3	.0004	-.0008	.0006	-.0001	.0000	.0079	.0001	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0020	.0098	.0045	.0000	.0001	.0074	.0002	.0008
Stddev	.0001	.0010	.0066	.0084	.0000	.0003	.0061	.0002	.0007
%RSD	149.1	50.02	67.62	188.7	34.12	477.5	82.04	104.6	94.85
#1	-.0003	.0028	.0052	.0141	.0001	.0002	.0126	.0003	.0001
#2	.0000	.0023	.0174	-.0016	.0000	.0003	.0088	.0003	.0015
#3	.0000	.0009	.0069	.0009	.0000	-.0003	.0007	.0000	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0006	.0008	-.0001	-.0001	-.0001	.0004	-.0001	.0002
Stddev	.0002	.0018	.0003	.0001	.0001	.0001	.0002	.0001	.0000
%RSD	125.2	275.5	33.93	171.5	216.4	153.7	49.96	63.79	18.79
#1	-.0003	.0014	.0011	-.0001	.0000	-.0002	.0004	-.0001	.0001
#2	-.0003	-.0020	.0008	-.0002	-.0002	.0000	.0007	-.0002	.0002
#3	.0001	-.0013	.0005	.0001	.0000	-.0001	.0002	-.0001	.0001
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 10:53:02 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2213.8	5439.7	38073.	6210.2
Stddev	4.2	10.0	41.	29.6
%RSD	.18776	.18305	.10712	.47647
#1	2214.2	5428.3	38115.	6235.1
#2	2209.5	5444.0	38034.	6217.9
#3	2217.8	5446.8	38071.	6177.5

Zoom In Zoom Out

Sample Name: FA53729-3 Acquired: 5/2/2018 10:57:02 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0077	.0011	.1075	-.0001	227.5	-.0004	.0017	.0005
Stddev	.0010	.0520	.0038	.0021	.0008	1.0	.0002	.0005	.0020
%RSD	203.5	674.7	340.5	1.960	1169.	.4221	54.27	26.95	374.8
#1	.0015	.0677	.0051	.1096	.0006	227.8	-.0002	.0023	.0027
#2	.0002	-.0215	.0006	.1075	-.0009	228.2	-.0003	.0016	-.0011
#3	-.0003	-.0231	-.0024	.1054	.0001	226.4	-.0006	.0014	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0026	1.372	5.922	31.22	.0694	-.0026	341.7	.0041	.0008
Stddev	.0042	.022	.169	.23	.0002	.0013	.4	.0005	.0051
%RSD	158.1	1.612	2.854	.7483	.3436	47.99	.1066	12.64	625.6
#1	.0008	1.348	5.889	31.27	.0696	-.0032	341.9	.0047	.0064
#2	.0074	1.392	6.106	31.42	.0691	-.0012	341.9	.0037	-.0036
#3	-.0003	1.376	5.773	30.96	.0694	-.0035	341.3	.0039	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0089	3.579	-.0032	2.382	.0023	-.0057	.0023	.0043
Stddev	.0025	.0111	.009	.0007	.005	.0011	.0055	.0026	.0005
%RSD	615.4	125.3	.2516	22.44	.2160	45.72	96.50	114.1	10.85
#1	-.0010	.0212	3.584	-.0033	2.381	.0021	-.0008	.0036	.0047
#2	.0032	.0058	3.584	-.0024	2.378	.0035	-.0117	.0041	.0038
#3	-.0010	-.0004	3.569	-.0038	2.388	.0014	-.0046	-.0007	.0045

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2132.6	5340.4	36790.	6245.4
Stddev	5.3	6.9	31.	77.4
%RSD	.24914	.12986	.08445	1.2390
#1	2128.1	5334.2	36811.	6277.8
#2	2131.3	5347.9	36754.	6157.1
#3	2138.5	5339.1	36805.	6301.4

Zoom In Zoom Out

Sample Name: FA53729-4 Acquired: 5/2/2018 11:01:29 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0687	.0070	.0455	-.0003	74.57	-.0001	.0009	.0010
Stddev	.0011	.0367	.0038	.0004	.0001	.45	.0002	.0003	.0007
%RSD	417.6	53.42	54.59	.9755	52.52	.6061	249.1	36.58	67.25
#1	-.0002	.0868	.0051	.0455	-.0004	74.44	-.0004	.0006	.0010
#2	-.0006	.0265	.0045	.0451	-.0002	74.19	.0001	.0009	.0017
#3	.0016	.0928	.0114	.0459	-.0002	75.07	.0000	.0013	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0044	.3934	2.831	6.810	.0339	.0026	292.2	.0085	-.0012
Stddev	.0009	.0101	.079	.087	.0004	.0001	.2	.0007	.0029
%RSD	20.48	2.561	2.777	1.274	1.071	3.913	.0620	8.043	248.3
#1	.0039	.4051	2.874	6.886	.0336	.0025	292.3	.0082	.0021
#2	.0055	.3871	2.741	6.715	.0338	.0025	292.0	.0093	-.0023
#3	.0040	.3881	2.879	6.830	.0343	.0027	292.2	.0080	-.0033

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0056	-.0013	3.795	-.0023	.6576	.0003	.0006	.0034	.0037
Stddev	.0058	.0023	.015	.0023	.0008	.0005	.0038	.0010	.0002
%RSD	102.9	178.7	.4002	102.2	.1238	161.3	675.4	29.14	4.516
#1	-.0024	-.0014	3.778	-.0014	.6575	.0007	-.0025	.0044	.0039
#2	-.0123	.0011	3.801	-.0050	.6584	-.0003	-.0007	.0025	.0036
#3	-.0022	-.0036	3.806	-.0006	.6568	.0005	.0048	.0033	.0037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2112.9	5317.1	36389.	6216.0
Stddev	2.7	6.5	66.	55.2
%RSD	.12992	.12176	.18106	.88743
#1	2111.7	5324.2	36461.	6247.1
#2	2116.1	5315.5	36332.	6248.5
#3	2111.0	5311.5	36374.	6152.3

Zoom In Zoom Out

Sample Name: FA53729-8 Acquired: 5/2/2018 11:05:56 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.2063	.0058	.0257	.0000	52.20	-.0001	-.0001	.0017
Stddev	.0008	.0149	.0013	.0005	.000	.32	.0001	.0001	.0002
%RSD	303.8	7.219	22.87	1.821	372.8	.6069	111.8	86.12	10.68
#1	.0006	.2115	.0063	.0258	.0000	52.50	-.0001	-.0001	.0018
#2	-.0008	.1895	.0043	.0252	-.0001	52.24	-.0001	-.0001	.0017
#3	-.0005	.2179	.0069	.0261	.0000	51.87	.0000	.0000	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0007	.5788	1.468	1.929	.0135	.0010	86.93	.0009	.0012
Stddev	.0001	.0094	.055	.065	.0010	.0001	.55	.0001	.0006
%RSD	12.74	1.626	3.730	3.376	7.595	8.562	.6282	11.01	50.70
#1	.0007	.5867	1.524	1.857	.0146	.0009	87.49	.0010	.0005
#2	.0008	.5812	1.463	1.946	.0134	.0011	86.88	.0008	.0018
#3	.0006	.5684	1.415	1.984	.0125	.0009	86.40	.0008	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0009	-.0017	6.322	-.0006	.3955	.0008	-.0027	.0045	.0026
Stddev	.0020	.0032	.016	.0005	.0011	.0002	.0007	.0005	.0000
%RSD	219.2	183.5	.2554	70.60	.2720	25.67	26.33	11.68	1.474
#1	.0013	-.0036	6.338	-.0010	.3966	.0008	-.0021	.0040	.0025
#2	-.0016	.0019	6.323	-.0001	.3945	.0010	-.0025	.0050	.0026
#3	-.0025	-.0035	6.306	-.0008	.3955	.0006	-.0035	.0044	.0026

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2108.4	5260.8	36411.	6231.0
Stddev	3.3	5.9	87.	20.1
%RSD	.15585	.11250	.23907	.32216
#1	2105.4	5255.5	36351.	6210.1
#2	2107.9	5259.8	36511.	6232.7
#3	2111.9	5267.2	36371.	6250.1

Zoom In Zoom Out

Sample Name: FA53722-2 Acquired: 5/2/2018 11:10:23 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0005**	**21.51**	**.0100**	**.1138**	**.0012**	F **5118.**	**.0014**	**.0052**	**.2010**
Stddev	.0003	.41	.0048	.0006	.0009	56.	.0003	.0018	.0021
%RSD	55.79	1.895	47.76	.5016	76.12	1.087	19.18	34.51	1.033
#1	-.0008	21.73	.0064	.1143	.0002	5182.	.0017	.0068	.2000
#2	-.0002	21.75	.0154	.1131	.0018	5088.	.0012	.0055	.2034
#3	-.0006	21.03	.0082	.1139	.0015	5083.	.0012	.0032	.1996

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0085**	**11.48**	**1.915**	**47.86**	**.3333**	**-.0023**	**6.904**	**.0345**	**.0029**
Stddev	.0031	.05	.294	.13	.0034	.0016	.086	.0011	.0067
%RSD	36.32	.4180	15.34	.2698	1.017	70.52	1.238	3.098	233.7
#1	.0059	11.43	1.804	47.79	.3318	-.0040	7.002	.0357	.0060
#2	.0119	11.50	2.248	47.77	.3372	-.0008	6.863	.0341	.0074
#3	.0076	11.52	1.693	48.01	.3309	-.0021	6.846	.0337	-.0048

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0183**	**-.0471**	**3.549**	**.0099**	**9.913**	**.1016**	**-.0153**	**.1295**	**.0136**
Stddev	.0047	.0141	.020	.0022	.069	.0003	.0138	.0013	.0016
%RSD	25.46	30.02	.5498	22.75	.6984	.2967	90.08	.9714	11.44
#1	-.0148	-.0628	3.558	.0075	9.970	.1019	-.0183	.1309	.0118
#2	-.0236	-.0429	3.563	.0120	9.932	.1014	-.0002	.1285	.0145
#3	-.0166	-.0355	3.527	.0101	9.836	.1014	-.0272	.1290	.0144

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1915.6**	**5062.7**	**34645.**	**6234.6**
Stddev	3.2	6.0	98.	48.1
%RSD	.16837	.11916	.28165	.77093
#1	1912.5	5063.1	34627.	6231.7
#2	1918.9	5068.6	34558.	6188.0
#3	1915.3	5056.5	34750.	6284.0

Zoom In Zoom Out

Sample Name: FA53722-4 Acquired: 5/2/2018 11:14:56 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0020**	**23.32**	**.0139**	**.1088**	**.0014**	F **3880.**	**.0017**	**.0048**	**.2231**
Stddev	.0003	.04	.0027	.0008	.0004	36.	.0001	.0004	.0027
%RSD	13.15	.1691	19.34	.7612	30.51	.9333	5.678	8.704	1.206
#1	-.0024	23.37	.0109	.1078	.0010	3919.	.0016	.0046	.2236
#2	-.0018	23.29	.0149	.1094	.0014	3875.	.0018	.0046	.2254
#3	-.0019	23.30	.0160	.1091	.0019	3847.	.0018	.0053	.2201

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0084**	**11.27**	**1.716**	**54.00**	**.2511**	**.0007**	**7.643**	**.0316**	**.0061**
Stddev	.0006	.04	.082	.32	.0023	.0012	.012	.0005	.0039
%RSD	7.400	.3377	4.754	.5988	.9040	169.0	.1529	1.728	64.34
#1	.0076	11.23	1.765	54.38	.2523	.0019	7.640	.0321	.0036
#2	.0087	11.29	1.622	53.83	.2526	.0004	7.655	.0316	.0106
#3	.0087	11.30	1.761	53.81	.2485	-.0003	7.632	.0310	.0041

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0078**	**-.0365**	**3.063**	**.0155**	**7.975**	**.1292**	**-.0060**	**.1442**	**.0194**
Stddev	.0035	.0029	.001	.0017	.037	.0025	.0019	.0013	.0003
%RSD	44.62	7.852	.0334	10.67	.4707	1.907	32.28	.8934	1.349
#1	-.0050	-.0397	3.062	.0137	7.961	.1266	-.0038	.1435	.0191
#2	-.0117	-.0356	3.064	.0156	7.946	.1314	-.0074	.1457	.0196
#3	-.0067	-.0342	3.063	.0170	8.017	.1297	-.0067	.1434	.0194

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1824.4**	**5051.5**	**34698.**	**6287.7**
Stddev	3.8	11.4	374.	25.3
%RSD	.20972	.22487	1.0791	.40218
#1	1828.8	5064.7	34460.	6259.2
#2	1821.5	5044.7	34503.	6307.3
#3	1823.1	5045.3	35129.	6296.7

Zoom In Zoom Out

Sample Name: FA53722-6 Acquired: 5/2/2018 11:19:27 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0014**	**25.25**	**.0086**	**.1475**	**.0007**	F **5441.**	**.0011**	**.0059**	**.2211**
Stddev	.0035	.05	.0098	.0028	.0006	3.	.0003	.0005	.0016
%RSD	239.8	.2016	113.5	1.898	84.40	.0569	22.54	7.642	.7213
#1	.0012	25.29	.0011	.1506	.0013	5439.	.0013	.0064	.2216
#2	-.0054	25.28	.0050	.1451	.0001	5440.	.0008	.0058	.2193
#3	-.0001	25.20	.0197	.1469	.0006	5445.	.0013	.0055	.2224

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0079**	**12.85**	**1.946**	**53.14**	**.4142**	**-.0035**	**7.574**	**.0388**	**.0059**
Stddev	.0036	.11	.063	.19	.0016	.0010	.107	.0021	.0060
%RSD	45.09	.8254	3.241	.3575	.3919	28.32	1.414	5.527	100.9
#1	.0099	12.97	1.996	53.09	.4124	-.0031	7.698	.0398	.0080
#2	.0101	12.77	1.967	53.35	.4146	-.0046	7.512	.0403	.0106
#3	.0038	12.80	1.875	52.98	.4156	-.0028	7.512	.0364	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0113**	**-.0505**	**3.155**	**.0089**	**11.44**	**.1074**	**-.0201**	**.1420**	**.0115**
Stddev	.0048	.0078	.006	.0019	.02	.0039	.0121	.0035	.0003
%RSD	42.39	15.53	.1947	21.01	.1663	3.597	60.40	2.447	2.825
#1	-.0161	-.0537	3.148	.0089	11.46	.1056	-.0190	.1455	.0112
#2	-.0113	-.0416	3.157	.0108	11.42	.1048	-.0327	.1421	.0118
#3	-.0065	-.0563	3.160	.0071	11.43	.1118	-.0085	.1385	.0114

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1895.4**	**5023.8**	**34727.**	**6201.0**
Stddev	3.7	4.6	39.	28.2
%RSD	.19706	.09108	.11257	.45492
#1	1891.4	5021.7	34684.	6173.3
#2	1896.1	5020.6	34761.	6229.7
#3	1898.7	5029.1	34736.	6200.0

Zoom In Zoom Out

Sample Name: FA53783-1 Acquired: 5/2/2018 11:24:01 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0037**	**463.1**	**.0710**	**7.935**	**.0223**	**130.7**	**.0421**	**.0057**	**.8501**
Stddev	.0052	1.6	.0092	.019	.0010	.3	.0002	.0009	.0058
%RSD	139.4	.3500	12.95	.2392	4.301	.2002	.5033	16.49	.6873
#1	.0021	462.5	.0607	7.937	.0223	130.9	.0423	.0053	.8433
#2	-.0079	464.9	.0738	7.953	.0213	130.7	.0419	.0068	.8536
#3	-.0053	461.8	.0784	7.915	.0232	130.4	.0423	.0051	.8532

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0101**	**124.4**	**2.899**	**2.916**	**.2588**	**-.0118**	**32.08**	**.0414**	**.4643**
Stddev	.0013	.5	.354	.148	.0017	.0014	.07	.0004	.0091
%RSD	12.73	.3753	12.21	5.060	.6395	12.13	.2166	.9052	1.954
#1	.0088	124.6	3.102	2.815	.2583	-.0133	32.04	.0418	.4742
#2	.0113	124.6	2.490	2.847	.2606	-.0115	32.04	.0411	.4621
#3	.0102	123.8	3.106	3.085	.2574	-.0105	32.16	.0413	.4565

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0313**	**-.0118**	**3.368**	**.0164**	**18.10**	**1.642**	**-.0359**	**.3476**	**.1205**
Stddev	.0073	.0089	.026	.0053	.03	.010	.0087	.0014	.0008
%RSD	23.39	75.49	.7860	32.35	.1393	.6040	24.19	.4006	.6934
#1	-.0379	-.0221	3.369	.0125	18.08	1.634	-.0458	.3484	.1202
#2	-.0234	-.0064	3.394	.0142	18.13	1.654	-.0324	.3485	.1215
#3	-.0327	-.0069	3.341	.0224	18.10	1.640	-.0296	.3460	.1199

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2190.9**	**6852.0**	**47518.**	**8004.6**
Stddev	3.5	5.7	36.	43.6
%RSD	.16068	.08310	.07514	.54475
#1	2189.2	6845.6	47528.	8007.5
#2	2195.0	6853.9	47549.	7959.6
#3	2188.7	6856.5	47479.	8046.7

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: FA53797-1 Acquired: 5/2/2018 11:28:23 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0006**	**8.716**	**.0064**	**.1500**	**-.0008**	**4538.**	**.0005**	**.0020**	**.1181**
Stddev	.0041	.115	.0142	.0014	.0001	93.	.0006	.0007	.0036
%RSD	714.4	1.318	223.1	.9012	9.808	2.041	123.3	37.16	3.044
#1	.0038	8.584	.0145	.1496	-.0009	4504.	.0007	.0021	.1198
#2	-.0043	8.789	-.0101	.1515	-.0008	4468.	.0009	.0012	.1205
#3	-.0012	8.776	.0147	.1489	-.0007	4643.	-.0002	.0027	.1140

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0245**	**7.838**	**.3997**	**12.20**	**.0756**	**-.0057**	**7.693**	**.0147**	**.1262**
Stddev	.0012	.052	.1243	.07	.0009	.0026	.072	.0021	.0076
%RSD	4.849	.6686	31.09	.6079	1.149	45.17	.9329	14.03	5.998
#1	.0251	7.894	.3523	12.23	.0747	-.0029	7.722	.0145	.1185
#2	.0253	7.790	.5407	12.12	.0758	-.0063	7.611	.0128	.1266
#3	.0231	7.831	.3061	12.26	.0764	-.0079	7.745	.0169	.1336

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0098**	**-.0442**	**2.132**	**.0144**	**F 48.92**	**.1181**	**-.0090**	**.0212**	**.3800**
Stddev	.0091	.0255	.016	.0010	.64	.0032	.0029	.0019	.0007
%RSD	93.16	57.77	.7514	7.084	1.307	2.706	32.45	8.825	.1908
#1	-.0052	-.0697	2.144	.0141	48.25	.1149	-.0067	.0228	.3805
#2	-.0038	-.0442	2.114	.0136	49.00	.1180	-.0081	.0215	.3803
#3	-.0203	-.0186	2.138	.0155	49.52	.1213	-.0123	.0191	.3792

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1935.7**	**5021.7**	**34472.**	**6073.1**
Stddev	.4	5.5	105.	37.0
%RSD	.02220	.10919	.30557	.60926
#1	1935.2	5022.6	34356.	6096.7
#2	1935.9	5026.7	34500.	6092.3
#3	1935.9	5015.9	34562.	6030.5

Zoom In Zoom Out

Sample Name: MP33680-MB1 Acquired: 5/2/2018 11:33:03 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0082**	**-.0014**	**-.0001**	**-.0001**	**.0229**	**-.0001**	**-.0001**	**.0001**
Stddev	.0002	.0117	.0008	.0002	.0000	.0025	.0000	.0001	.0000
%RSD	100.6	142.5	59.62	154.7	46.60	10.91	32.23	79.31	46.60
#1	.0004	.0163	-.0012	-.0003	-.0001	.0238	-.0001	-.0001	.0001
#2	.0001	-.0052	-.0007	-.0001	-.0001	.0248	-.0001	.0000	.0001
#3	.0000	.0136	-.0023	.0000	-.0001	.0201	-.0001	-.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0061**	**-.0071**	**.0088**	**.0000**	**-.0009**	**.0078**	**.0001**	**.0002**
Stddev	.0001	.0014	.0100	.0072	.000	.0001	.0089	.0002	.0005
%RSD	29.85	23.37	140.7	81.94	69.09	13.31	113.0	314.2	264.5
#1	-.0003	-.0051	.0035	.0152	.0000	-.0009	.0133	-.0001	.0006
#2	-.0002	-.0055	-.0085	.0102	.0000	-.0009	-.0024	.0002	-.0003
#3	-.0002	-.0077	-.0164	.0010	-.0001	-.0007	.0126	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**-.0009**	**.0274**	**-.0006**	**.0002**	**-.0008**	**-.0014**	**.0001**	**.0004**
Stddev	.0012	.0011	.0001	.0002	.0000	.0000	.0004	.0002	.0000
%RSD	138.9	128.8	.5281	32.65	19.10	6.133	31.05	186.0	7.728
#1	-.0021	-.0010	.0275	-.0006	.0002	-.0007	-.0018	.0002	.0004
#2	.0003	-.0019	.0273	-.0008	.0002	-.0008	-.0014	-.0001	.0004
#3	-.0008	.0003	.0273	-.0004	.0002	-.0008	-.0009	.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP33680-MB1 Acquired: 5/2/2018 11:33:03 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2212.2**	**5418.1**	**38395.**	**6296.6**
Stddev	3.5	13.8	227.	72.8
%RSD	.15756	.25533	.59194	1.1560
#1	2213.0	5434.0	38132.	6231.6
#2	2215.2	5411.6	38524.	6375.2
#3	2208.3	5408.7	38528.	6283.0

Zoom In Zoom Out

Sample Name: MP33680-B1 Acquired: 5/2/2018 11:37:34 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0479**	**25.97**	**1.933**	**1.954**	**.0498**	**25.03**	**.0495**	**.4933**	**.1995**
Stddev	.0006	.04	.004	.005	.0005	.07	.0000	.0009	.0007
%RSD	1.178	.1692	.1924	.2398	1.059	.2936	.0652	.1876	.3379
#1	.0485	26.02	1.935	1.955	.0504	25.11	.0495	.4932	.1987
#2	.0478	25.94	1.935	1.949	.0496	25.03	.0496	.4942	.2001
#3	.0474	25.96	1.929	1.958	.0494	24.96	.0496	.4924	.1996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2460**	**25.12**	**24.55**	**24.41**	**.5148**	**.4778**	**24.59**	**.5155**	**.4678**
Stddev	.0011	.12	.08	.17	.0007	.0009	.06	.0009	.0002
%RSD	.4564	.4763	.3241	.6905	.1295	.1829	.2456	.1676	.0442
#1	.2472	25.23	24.64	24.41	.5155	.4786	24.66	.5164	.4677
#2	.2450	25.15	24.49	24.58	.5142	.4769	24.55	.5148	.4677
#3	.2459	24.99	24.52	24.25	.5147	.4779	24.56	.5153	.4681
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4864**	**1.896**	**.5212**	**.5180**	**.5120**	**.5145**	**1.853**	**.4806**	**.5026**
Stddev	.0011	.001	.0004	.0013	.0011	.0006	.003	.0016	.0011
%RSD	.2267	.0727	.0789	.2419	.2057	.1090	.1723	.3331	.2101
#1	.4855	1.894	.5216	.5181	.5131	.5149	1.852	.4788	.5029
#2	.4877	1.896	.5210	.5192	.5110	.5139	1.856	.4820	.5034
#3	.4861	1.897	.5209	.5167	.5119	.5147	1.850	.4810	.5014
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: MP33680-B1 Acquired: 5/2/2018 11:37:34 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2053.8	5286.3	36576.	6191.5
Stddev	2.5	7.9	101.	68.2
%RSD	.12191	.14888	.27692	1.1013
#1	2051.2	5278.6	36596.	6168.9
#2	2056.2	5294.4	36466.	6137.4
#3	2054.1	5286.0	36666.	6268.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 11:41:45 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2495	40.70	2.052	2.020	2.024	41.29	2.072	2.046	2.037
Stddev	.0006	.17	.005	.008	.005	.12	.000	.001	.011
%RSD	.2282	.4278	.2238	.3836	.2410	.2815	.0170	.0229	.5352
#1	.2494	40.56	2.052	2.017	2.018	41.21	2.073	2.047	2.042
#2	.2501	40.89	2.056	2.029	2.025	41.23	2.072	2.046	2.025
#3	.2490	40.64	2.047	2.015	2.028	41.42	2.072	2.047	2.045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.018	40.27	41.00	40.63	2.101	2.050	40.87	2.077	2.011
Stddev	.009	.07	.04	.33	.010	.001	.04	.001	.002
%RSD	.4700	.1671	.0901	.8001	.4884	.0645	.0980	.0566	.1142
#1	2.017	40.27	40.97	40.27	2.110	2.048	40.84	2.077	2.013
#2	2.027	40.34	40.99	40.89	2.089	2.050	40.92	2.079	2.011
#3	2.009	40.21	41.04	40.75	2.103	2.051	40.86	2.076	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.036	2.036	1.978	2.117	2.100	2.089	2.021	2.072	2.108
Stddev	.003	.006	.002	.003	.006	.005	.001	.006	.004
%RSD	.1441	.2824	.0780	.1229	.2743	.2626	.0482	.2769	.1816
#1	2.034	2.032	1.976	2.120	2.093	2.095	2.021	2.073	2.112
#2	2.035	2.033	1.978	2.115	2.104	2.085	2.020	2.065	2.106
#3	2.039	2.042	1.979	2.118	2.103	2.088	2.022	2.077	2.105
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 11:41:45 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1948.0	5213.7	36240.	6253.7
Stddev	2.9	4.9	176.	25.0
%RSD	.14918	.09324	.48532	.40033
#1	1945.5	5209.6	36113.	6247.8
#2	1947.4	5212.4	36441.	6281.2
#3	1951.2	5219.1	36167.	6232.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 11:45:55 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0011	.0001	.0000	.0000	.0046	.0001	.0002	.0000
Stddev	.0003	.0088	.0003	.0001	.0000	.0023	.0000	.0001	.0004
%RSD	329.5	788.6	331.2	1254.	77.32	51.25	39.68	52.19	918.8
#1	.0002	-.0052	.0005	.0001	.0001	.0019	.0000	.0001	-.0004
#2	.0003	.0090	-.0002	.0000	.0000	.0059	.0001	.0002	.0004
#3	-.0002	-.0072	.0000	.0000	.0000	.0059	.0001	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0045	.0083	-.0019	.0001	.0007	.0030	.0003	-.0001
Stddev	.000	.0020	.0155	.0095	.0000	.0004	.0037	.0000	.0003
%RSD	3031.	44.94	186.3	492.6	5.986	51.59	124.2	13.86	430.1
#1	.0001	.0065	.0125	-.0124	.0001	.0011	.0022	.0002	-.0003
#2	.0000	.0046	-.0088	.0060	.0001	.0006	-.0002	.0002	-.0002
#3	-.0001	.0024	.0213	.0006	.0001	.0004	.0071	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0007	.0008	-.0002	.0001	.0005	.0004	.0000	.0002
Stddev	.0003	.0010	.0003	.0003	.0000	.0001	.0009	.000	.0001
%RSD	116.6	146.5	40.00	152.9	56.34	30.91	193.9	373.7	63.53
#1	.0000	.0019	.0009	-.0003	.0001	.0006	.0008	.0000	.0001
#2	-.0006	.0002	.0011	.0001	.0000	.0005	-.0005	.0001	.0002
#3	-.0002	.0000	.0004	-.0003	.0001	.0003	.0010	-.0001	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 11:45:55 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2233.4**	**5436.2**	**38301.**	**6317.8**
Stddev	3.8	6.6	251.	60.5
%RSD	.16843	.12052	.65412	.95761
#1	2235.5	5441.2	38544.	6257.5
#2	2235.7	5428.7	38315.	6378.5
#3	2229.1	5438.6	38044.	6317.3

Raw Data MA14869 page 37 of 108

Zoom In Zoom Out

Sample Name: FA53663-8 Acquired: 5/2/2018 11:50:26 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0984**	**.0231**	**.0016**	**-.0001**	**79.83**	**-.0001**	**.0001**	**.0008**
Stddev	.0001	.0080	.0007	.0001	.0001	.17	.0000	.0000	.0001
%RSD	208.2	8.179	3.175	6.204	95.16	.2140	57.01	44.74	13.31
#1	-.0001	.1009	.0224	.0015	-.0001	80.01	-.0001	.0001	.0007
#2	-.0001	.1049	.0239	.0017	.0000	79.67	.0000	.0001	.0009
#3	.0001	.0894	.0230	.0015	.0000	79.80	-.0001	.0001	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0007**	**.0905**	**11.40**	**6.620**	**.1286**	**.0016**	**61.80**	**.0038**	**-.0007**
Stddev	.0002	.0032	.02	.055	.0006	.0003	.14	.0001	.0006
%RSD	37.31	3.519	.2030	.8244	.4451	20.99	.2335	2.974	88.56
#1	.0004	.0872	11.39	6.676	.1283	.0017	61.66	.0037	-.0010
#2	.0008	.0935	11.39	6.567	.1282	.0018	61.80	.0039	.0000
#3	.0008	.0908	11.43	6.616	.1292	.0012	61.95	.0037	-.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0009**	**-.0005**	**4.504**	**.0002**	**.1443**	**.0016**	**-.0010**	**.0003**	**.0014**
Stddev	.0002	.0016	.002	.0004	.0005	.0000	.0009	.0000	.0001
%RSD	19.45	345.0	.0390	230.7	.3489	2.052	91.39	11.33	4.852
#1	-.0007	-.0002	4.503	.0005	.1447	.0016	-.0005	.0003	.0013
#2	-.0010	-.0021	4.503	-.0002	.1437	.0016	-.0004	.0004	.0013
#3	-.0010	.0009	4.506	.0002	.1444	.0016	-.0020	.0003	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2048.8**	**5142.9**	**35540.**	**6145.7**
Stddev	3.8	6.0	152.	39.2
%RSD	.18506	.11581	.42794	.63814
#1	2044.4	5141.6	35631.	6103.7
#2	2051.1	5149.4	35626.	6152.2
#3	2050.8	5137.7	35365.	6181.3

Raw Data MA14869 page 38 of 108

Zoom In Zoom Out

Sample Name: MP33680-D1 Acquired: 5/2/2018 11:54:53 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0005**	**.0987**	**.0233**	**.0017**	**-.0001**	**81.26**	**.0000**	**.0001**	**.0008**
Stddev	.0002	.0023	.0003	.0001	.0000	.43	.000	.0001	.0003
%RSD	52.24	2.352	1.465	7.140	21.08	.5348	118.9	122.1	34.11
#1	.0007	.0972	.0230	.0016	-.0001	81.52	-.0001	.0000	.0006
#2	.0002	.1014	.0237	.0018	-.0001	81.50	.0000	.0002	.0008
#3	.0005	.0976	.0233	.0017	-.0001	80.76	.0000	.0000	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0008**	**.0876**	**11.60**	**6.703**	**.1296**	**.0011**	**62.78**	**.0036**	**-.0006**
Stddev	.0002	.0034	.11	.068	.0003	.0001	.48	.0003	.0004
%RSD	32.41	3.884	.9406	1.014	.2004	7.002	.7701	7.615	71.05
#1	.0006	.0877	11.71	6.775	.1293	.0010	63.31	.0039	-.0009
#2	.0006	.0910	11.61	6.694	.1298	.0011	62.68	.0034	-.0001
#3	.0010	.0842	11.49	6.640	.1298	.0012	62.36	.0034	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0005**	**.0002**	**4.530**	**-.0005**	**.1476**	**.0013**	**-.0027**	**.0001**	**.0015**
Stddev	.0010	.0005	.028	.0001	.0013	.0001	.0009	.0000	.0000
%RSD	213.7	229.8	.6158	17.96	.8843	10.61	31.35	75.61	1.854
#1	.0002	.0007	4.562	-.0006	.1490	.0014	-.0035	.0001	.0016
#2	-.0017	-.0002	4.517	-.0004	.1475	.0012	-.0028	.0000	.0015
#3	.0000	.0001	4.511	-.0005	.1464	.0012	-.0018	.0000	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2028.1**	**5105.0**	**35029.**	**6076.8**
Stddev	13.1	26.6	70.	51.9
%RSD	.64644	.52024	.19925	.85344
#1	2014.6	5076.0	35046.	6086.4
#2	2028.9	5111.0	34952.	6020.8
#3	2040.8	5128.1	35089.	6123.2

Raw Data MA14869 page 39 of 108

Zoom In Zoom Out

Sample Name: MP33680-SD1 Acquired: 5/2/2018 11:59:20 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0004**	**.1113**	**.0199**	**.0018**	**-.0004**	**88.40**	**-.0001**	**.0006**	**.0004**
Stddev	.0020	.0424	.0021	.0008	.0002	.71	.0001	.0002	.0013
%RSD	509.9	38.11	10.47	43.35	70.58	.8013	130.2	25.96	341.9
#1	.0003	.1192	.0206	.0009	-.0001	88.16	-.0002	.0008	-.0007
#2	-.0015	.1492	.0176	.0024	-.0005	87.85	.0000	.0005	.0001
#3	.0024	.0655	.0216	.0020	-.0005	89.20	.0000	.0006	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0015**	**.0583**	**12.42**	**7.267**	**.1416**	**-.0021**	**67.94**	**.0046**	**.0013**
Stddev	.0006	.0104	.07	.107	.0007	.0006	.30	.0003	.0018
%RSD	37.45	17.84	.5863	1.476	.5031	27.99	.4404	6.164	142.7
#1	.0015	.0504	12.34	7.214	.1408	-.0016	67.70	.0044	.0021
#2	.0009	.0701	12.49	7.196	.1420	-.0020	67.86	.0049	.0025
#3	.0020	.0545	12.43	7.390	.1421	-.0028	68.28	.0044	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0040**	**-.0007**	**4.920**	**-.0032**	**.1568**	**.0006**	**-.0130**	**.0008**	**.0019**
Stddev	.0035	.0055	.006	.0017	.0007	.0006	.0074	.0005	.0002
%RSD	87.49	766.6	.1172	54.23	.4745	102.4	57.04	61.25	8.976
#1	-.0077	.0018	4.919	-.0021	.1565	.0006	-.0059	.0014	.0018
#2	-.0034	.0031	4.926	-.0022	.1562	.0012	-.0207	.0004	.0018
#3	-.0008	-.0070	4.914	-.0052	.1576	.0000	-.0125	.0007	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2155.6**	**5292.0**	**36954.**	**6218.8**
Stddev	.9	5.3	268.	50.8
%RSD	.04238	.10065	.72524	.81680
#1	2155.8	5292.8	37262.	6256.6
#2	2154.6	5286.3	36784.	6238.7
#3	2156.4	5296.8	36814.	6161.1

Raw Data MA14869 page 40 of 108

9.1 9

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: MP33680-PS1 Acquired: 5/2/2018 12:03:46 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0485**	**2.558**	**.1287**	**.2499**	**.0497**	**82.60**	**.0495**	**.0497**	**.0500**
Stddev	.0002	.024	.0011	.0009	.0002	.45	.0001	.0002	.0004
%RSD	.5046	.9402	.8843	.3468	.3536	.5453	.2661	.3942	.8990
#1	.0486	2.578	.1297	.2495	.0496	82.91	.0493	.0496	.0499
#2	.0482	2.531	.1275	.2494	.0495	82.08	.0495	.0500	.0495
#3	.0486	2.564	.1290	.2509	.0499	82.81	.0496	.0496	.0504

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1008**	**2.966**	**21.03**	**11.35**	**.1751**	**.0949**	**69.73**	**.1062**	**.0446**
Stddev	.0012	.004	.08	.17	.0004	.0003	.08	.0002	.0010
%RSD	1.225	.1277	.3825	1.505	.2091	.3325	.1116	.2056	2.293
#1	.1011	2.963	21.07	11.49	.1748	.0949	69.81	.1061	.0435
#2	.1019	2.970	20.94	11.16	.1755	.0952	69.65	.1060	.0455
#3	.0995	2.964	21.09	11.41	.1752	.0946	69.74	.1064	.0447

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0986**	**.0932**	**4.460**	**.0496**	**.1918**	**.1042**	**.0904**	**.0498**	**.2525**
Stddev	.0014	.0008	.009	.0001	.0009	.0002	.0007	.0003	.0008
%RSD	1.456	.8449	.2071	.2298	.4624	.2201	.7528	.6109	.3168
#1	.0996	.0934	4.450	.0496	.1916	.1042	.0912	.0495	.2518
#2	.0993	.0924	4.462	.0495	.1909	.1044	.0900	.0501	.2524
#3	.0970	.0939	4.468	.0497	.1927	.1040	.0901	.0500	.2534

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2028.5**	**5162.0**	**35664.**	**6194.1**
Stddev	1.4	3.3	18.	64.5
%RSD	.06769	.06476	.05181	1.0409
#1	2030.0	5165.7	35653.	6142.2
#2	2027.6	5161.4	35653.	6266.3
#3	2027.7	5159.1	35685.	6173.8

Zoom In Zoom Out

Sample Name: MP33680-S1 Acquired: 5/2/2018 12:08:02 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0491**	**26.42**	**2.018**	**1.958**	**.0501**	**104.9**	**.0494**	**.4901**	**.1987**
Stddev	.0007	.10	.004	.004	.0001	.1	.0000	.0006	.0018
%RSD	1.389	.3644	.1879	.2139	.1294	.1368	.0974	.1221	.8967
#1	.0489	26.31	2.020	1.955	.0501	104.8	.0494	.4907	.2008
#2	.0498	26.49	2.014	1.963	.0502	104.9	.0493	.4896	.1976
#3	.0485	26.46	2.021	1.957	.0501	105.1	.0494	.4899	.1977

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2487**	**25.06**	**36.28**	**30.81**	**.6390**	**.4848**	F **86.26**	**.5161**	**.4723**
Stddev	.0008	.08	.08	.12	.0020	.0003	.11	.0004	.0010
%RSD	.3065	.3362	.2090	.3762	.3114	.0547	.1327	.0749	.2198
#1	.2481	24.98	36.36	30.68	.6413	.4847	86.38	.5162	.4733
#2	.2496	25.15	36.21	30.91	.6376	.4847	86.15	.5157	.4713
#3	.2484	25.05	36.29	30.83	.6382	.4851	86.25	.5164	.4723

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.4995**	**1.743**	**5.115**	**.5206**	**.6675**	**.5250**	**1.857**	**.4863**	**.5018**
Stddev	.0021	.003	.002	.0012	.0008	.0015	.003	.0029	.0009
%RSD	.4236	.1666	.0361	.2249	.1231	.2780	.1344	.5998	.1856
#1	.4975	1.745	5.116	.5218	.6682	.5265	1.857	.4886	.5027
#2	.4994	1.740	5.116	.5195	.6666	.5246	1.860	.4873	.5008
#3	.5017	1.744	5.113	.5206	.6678	.5237	1.855	.4830	.5020

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1957.8**	**5170.4**	**35619.**	**6228.2**
Stddev	7.9	18.3	111.	27.5
%RSD	.40109	.35298	.31184	.44142
#1	1949.7	5153.4	35492.	6237.0
#2	1958.4	5168.3	35673.	6197.4
#3	1965.3	5189.7	35693.	6250.2

Zoom In Zoom Out

Sample Name: MP33680-S2 Acquired: 5/2/2018 12:12:14 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0495**	**26.41**	**2.002**	**1.967**	**.0502**	**103.3**	**.0492**	**.4891**	**.2001**
Stddev	.0007	.11	.003	.010	.0004	.9	.0000	.0003	.0013
%RSD	1.428	.4029	.1723	.5183	.7003	.8767	.0345	.0680	.6389
#1	.0495	26.36	2.006	1.973	.0500	102.4	.0492	.4895	.1986
#2	.0488	26.33	2.000	1.956	.0501	103.3	.0492	.4891	.2009
#3	.0502	26.53	2.000	1.974	.0506	104.3	.0492	.4888	.2008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2481**	**25.13**	**36.13**	**30.71**	**.6350**	**.4798**	F **85.23**	**.5148**	**.4708**
Stddev	.0007	.23	.12	.40	.0016	.0005	.27	.0006	.0003
%RSD	.2630	.9185	.3230	1.299	.2453	.1091	.3154	.1226	.0561
#1	.2487	24.95	36.20	30.44	.6357	.4802	85.40	.5148	.4710
#2	.2474	25.06	35.99	30.52	.6361	.4800	84.92	.5142	.4710
#3	.2481	25.39	36.18	31.17	.6332	.4792	85.36	.5155	.4705

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.4979**	**1.750**	**4.991**	**.5140**	**.6590**	**.5203**	**1.854**	**.4875**	**.5003**
Stddev	.0010	.004	.010	.0007	.0012	.0014	.006	.0012	.0005
%RSD	.2017	.2534	.2007	.1454	.1886	.2751	.3078	.2440	.1052
#1	.4981	1.755	5.003	.5141	.6602	.5219	1.848	.4863	.5006
#2	.4968	1.748	4.985	.5131	.6577	.5200	1.857	.4875	.4997
#3	.4987	1.746	4.986	.5146	.6592	.5191	1.858	.4886	.5006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1959.2**	**5188.8**	**35602.**	**6194.4**
Stddev	1.6	14.4	66.	116.4
%RSD	.07982	.27742	.18650	1.8791
#1	1961.0	5179.9	35529.	6325.3
#2	1958.0	5205.4	35660.	6155.5
#3	1958.5	5181.1	35617.	6102.5

Zoom In Zoom Out

Sample Name: FA53786-4 Acquired: 5/2/2018 12:16:25 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0004**	**.0269**	**.0035**	**.1624**	**-.0001**	**155.5**	**-.0001**	**.0000**	**.0002**
Stddev	.0000	.0037	.0009	.0007	.0000	.6	.0001	.0001	.0001
%RSD	9.005	13.87	24.81	.4093	23.24	.3971	103.2	4564.	26.97
#1	.0004	.0311	.0026	.1629	-.0001	155.0	-.0001	.0001	.0002
#2	.0003	.0241	.0044	.1617	.0000	156.2	.0000	-.0001	.0003
#3	.0004	.0253	.0035	.1627	-.0001	155.3	-.0001	.0000	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**4.405**	**26.28**	**39.63**	**.1946**	**.0072**	**22.06**	**.0013**	**-.0004**
Stddev	.0001	.033	.09	.07	.0004	.0001	.01	.0001	.0007
%RSD	40.66	.7413	.3326	.1784	.2180	1.260	.0343	6.461	176.3
#1	.0005	4.408	26.31	39.59	.1950	.0073	22.05	.0013	-.0012
#2	.0002	4.371	26.18	39.72	.1942	.0072	22.06	.0013	.0000
#3	.0004	4.436	26.35	39.60	.1946	.0071	22.06	.0014	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0008**	**-.0024**	**2.196**	**-.0005**	**.5998**	**.0010**	**-.0003**	**.0003**	**.0092**
Stddev	.0007	.0023	.005	.0003	.0022	.0003	.0014	.0003	.0000
%RSD	93.17	96.03	.2420	51.77	.3634	26.05	492.9	88.66	.3315
#1	-.0014	-.0017	2.190	-.0006	.6002	.0008	.0013	.0006	.0092
#2	.0000	-.0050	2.200	-.0002	.6017	.0009	-.0006	.0001	.0092
#3	-.0011	-.0005	2.198	-.0007	.5974	.0013	-.0015	.0002	.0092

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2008.9**	**5092.1**	**35340.**	**6164.8**
Stddev	6.5	5.3	142.	41.5
%RSD	.32391	.10460	.40298	.67251
#1	2002.7	5090.9	35176.	6210.2
#2	2015.7	5097.9	35414.	6155.2
#3	2008.3	5087.4	35430.	6129.0

Zoom In Zoom Out

Sample Name: FA53788-1 Acquired: 5/2/2018 12:20:50 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	1.533	-.0002	.0604	.0001	37.98	.0003	.0023	.0028
Stddev	.0003	.014	.0005	.0002	.0001	.06	.0000	.0000	.0000
%RSD	252.1	.8782	245.2	.3017	40.36	.1532	15.51	1.158	1.097
#1	-.0002	1.542	.0003	.0605	.0002	38.00	.0002	.0024	.0029
#2	.0001	1.518	-.0001	.0605	.0001	37.91	.0003	.0024	.0028
#3	.0004	1.540	-.0007	.0602	.0001	38.02	.0003	.0023	.0028

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0207	.4041	3.236	5.964	.0029	.0003	46.81	.0042	.0008
Stddev	.0002	.0036	.008	.031	.0000	.0002	.07	.0002	.0006
%RSD	.8145	.8900	.2393	.5235	.4671	64.82	.1460	4.001	83.20
#1	.0209	.4012	3.243	5.947	.0029	.0005	46.88	.0043	.0003
#2	.0206	.4030	3.236	5.945	.0029	.0002	46.81	.0043	.0015
#3	.0205	.4081	3.227	6.000	.0029	.0002	46.75	.0040	.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0009	-.0003	4.121	-.0003	.2561	.0115	-.0014	.0212	.0370
Stddev	.0002	.0019	.014	.0001	.0002	.0005	.0005	.0001	.0002
%RSD	22.97	746.4	.3304	42.36	.0890	4.208	36.32	.6779	.6403
#1	-.0011	-.0004	4.106	-.0005	.2563	.0111	-.0019	.0213	.0368
#2	-.0010	.0017	4.126	-.0004	.2561	.0112	-.0014	.0210	.0370
#3	-.0007	-.0021	4.132	-.0002	.2559	.0120	-.0009	.0211	.0373

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2087.3	5262.9	36699.	6356.6
Stddev	4.9	7.8	65.	13.8
%RSD	.23551	.14866	.17713	.21712
#1	2092.8	5271.4	36694.	6355.0
#2	2083.2	5255.9	36637.	6371.2
#3	2085.9	5261.5	36767.	6343.7

Zoom In Zoom Out

Sample Name: FA53703-2 Acquired: 5/2/2018 12:25:15 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.5511	.0334	.0028	-.0001	12.60	.0000	.0000	.0015
Stddev	.0002	.0040	.0006	.0003	.0001	.04	.000	.000	.0001
%RSD	295300.	.7271	1.877	8.964	123.6	.3215	115.8	1510.	5.116
#1	.0002	.5514	.0336	.0031	-.0001	12.59	.0000	.0001	.0016
#2	-.0002	.5469	.0327	.0027	.0000	12.64	.0000	.0000	.0015
#3	.0000	.5549	.0340	.0027	-.0001	12.57	-.0001	-.0001	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0006	.9099	3.450	.4772	.0081	-.0004	3.438	.0005	.0001
Stddev	.0002	.0019	.024	.0075	.0000	.0001	.006	.0001	.0005
%RSD	23.33	.2102	.6929	1.562	.1548	20.44	.1806	10.36	478.8
#1	.0008	.9077	3.463	.4752	.0081	-.0003	3.443	.0005	.0006
#2	.0005	.9113	3.465	.4854	.0081	-.0005	3.439	.0004	.0001
#3	.0006	.9107	3.423	.4709	.0081	-.0004	3.431	.0005	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0010	.0004	3.618	-.0001	.0220	.0176	-.0010	.0009	.0060
Stddev	.0010	.0008	.002	.0001	.0000	.0004	.0012	.0001	.0000
%RSD	102.5	214.5	.0628	54.06	.2006	2.006	123.7	9.029	.2946
#1	-.0020	.0012	3.616	.0000	.0220	.0179	-.0019	.0009	.0060
#2	-.0009	.0000	3.620	-.0001	.0221	.0175	.0004	.0008	.0060
#3	.0000	-.0002	3.617	-.0002	.0220	.0172	-.0014	.0010	.0060

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2218.8	5446.7	38630.	6389.1
Stddev	5.8	11.4	62.	56.8
%RSD	.26280	.20919	.16073	.88944
#1	2222.6	5459.6	38651.	6450.7
#2	2221.7	5442.6	38679.	6338.6
#3	2212.1	5437.9	38560.	6378.1

Zoom In Zoom Out

Sample Name: FA53703-3 Acquired: 5/2/2018 12:29:41 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.4444	.0448	.0037	.0000	28.11	-.0001	.0001	.0008
Stddev	.0004	.0040	.0009	.0002	.000	.20	.0000	.0000	.0001
%RSD	148.3	.8933	2.095	5.946	250.5	.6979	23.79	35.06	9.938
#1	.0001	.4454	.0443	.0035	.0000	27.97	.0000	.0001	.0008
#2	-.0002	.4477	.0458	.0038	-.0001	28.34	-.0001	.0002	.0008
#3	-.0007	.4400	.0441	.0039	.0000	28.03	-.0001	.0001	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0009	.3425	2.847	1.392	.0059	.0009	2.253	.0004	.0003
Stddev	.0003	.0045	.018	.029	.0000	.0001	.005	.0000	.0003
%RSD	30.19	1.302	.6485	2.068	.4830	6.035	.2084	5.227	80.03
#1	.0009	.3383	2.864	1.400	.0059	.0009	2.252	.0004	.0001
#2	.0006	.3472	2.849	1.415	.0059	.0008	2.258	.0005	.0004
#3	.0011	.3419	2.827	1.360	.0058	.0010	2.248	.0004	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	-.0018	3.305	-.0005	.0549	.0136	-.0010	.0008	.0052
Stddev	.0002	.0009	.011	.0002	.0003	.0009	.0007	.0002	.0001
%RSD	34.66	51.57	.3236	42.50	.5183	6.463	70.55	26.21	1.807
#1	-.0006	-.0017	3.305	-.0006	.0549	.0138	-.0012	.0006	.0052
#2	-.0003	-.0009	3.294	-.0003	.0551	.0143	-.0002	.0009	.0053
#3	-.0007	-.0028	3.315	-.0006	.0546	.0126	-.0016	.0010	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2193.3	5370.5	37745.	6345.0
Stddev	1.7	3.8	66.	66.0
%RSD	.07758	.06992	.17606	1.0399
#1	2194.6	5371.6	37811.	6421.2
#2	2193.8	5366.4	37678.	6306.6
#3	2191.4	5373.7	37746.	6307.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 12:34:08 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2498	40.70	2.068	2.006	2.001	41.06	2.079	2.051	2.034
Stddev	.0018	.36	.026	.018	.023	.44	.023	.023	.013
%RSD	.7388	.8780	1.239	.8720	1.160	1.064	1.095	1.107	.6406
#1	.2491	40.87	2.081	2.013	2.014	41.28	2.091	2.064	2.034
#2	.2484	40.94	2.038	2.018	2.015	41.34	2.053	2.025	2.021
#3	.2519	40.29	2.084	1.986	1.974	40.56	2.094	2.064	2.047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.024	39.70	40.81	40.53	2.123	2.060	40.67	2.090	2.014
Stddev	.016	.46	.47	.28	.012	.026	.53	.023	.020
%RSD	.7840	1.155	1.144	.6930	.5727	1.278	1.292	1.102	1.013
#1	2.019	39.85	41.15	40.78	2.114	2.074	40.95	2.102	2.020
#2	2.011	40.06	40.99	40.58	2.118	2.029	41.00	2.064	1.991
#3	2.041	39.18	40.28	40.22	2.137	2.076	40.06	2.105	2.031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.052	2.052	1.998	2.130	2.108	2.111	2.024	2.085	2.119
Stddev	.024	.026	.023	.020	.021	.012	.017	.009	.022
%RSD	1.159	1.270	1.133	.9454	1.013	.5818	.8455	.4365	1.043
#1	2.064	2.068	2.011	2.140	2.120	2.102	2.031	2.081	2.129
#2	2.025	2.022	1.972	2.107	2.121	2.106	2.004	2.079	2.094
#3	2.068	2.066	2.011	2.144	2.084	2.125	2.036	2.095	2.134
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 12:34:08 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1960.6**	**5226.5**	**36417.**	**6361.3**
Stddev	18.6	54.5	141.	86.0
%RSD	.94728	1.0431	.38812	1.3525
#1	1952.8	5201.0	36477.	6324.7
#2	1981.8	5289.1	36518.	6299.7
#3	1947.2	5189.3	36255.	6459.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 12:38:18 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0075**	**.0001**	**.0002**	**.0001**	**.0045**	**.0001**	**.0002**	**.0002**
Stddev	.0004	.0092	.0006	.0001	.0001	.0013	.0000	.0001	.0002
%RSD	214.1	122.7	445.8	56.42	74.90	28.12	45.04	39.50	103.2
#1	.0005	.0126	-.0005	.0003	.0001	.0046	.0001	.0003	.0001
#2	.0002	.0130	.0002	.0001	.0001	.0032	.0000	.0001	.0004
#3	-.0002	-.0031	.0007	.0001	.0000	.0057	.0001	.0003	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0054**	**-.0068**	**-.0064**	**.0001**	**.0007**	**.0094**	**.0003**	**.0004**
Stddev	.0002	.0040	.0173	.0160	.0000	.0003	.0068	.0002	.0008
%RSD	138.8	74.09	253.4	250.7	21.74	51.85	72.82	53.23	173.5
#1	-.0001	.0091	-.0014	-.0027	.0001	.0010	.0052	.0005	-.0004
#2	.0003	.0061	.0071	.0075	.0001	.0007	.0172	.0002	.0009
#3	.0003	.0011	-.0261	-.0238	.0002	.0003	.0056	.0002	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**-.0008**	**.0007**	**.0000**	**.0000**	**.0006**	**.0007**	**.0001**	**.0002**
Stddev	.0008	.0005	.0005	.000	.0000	.0001	.0017	.0002	.0000
%RSD	91.51	56.43	73.91	373.3	570.9	19.77	246.2	115.3	4.127
#1	-.0011	-.0009	.0011	.0001	.0000	.0008	.0008	.0003	.0002
#2	-.0015	-.0003	.0008	-.0001	.0000	.0005	-.0011	.0000	.0002
#3	.0000	-.0013	.0001	-.0001	.0001	.0006	.0024	.0002	.0002
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 12:38:18 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2254.6**	**5488.3**	**38467.**	**6342.6**
Stddev	3.4	7.9	83.	20.5
%RSD	.15173	.14419	.21615	.32274
#1	2256.0	5479.2	38415.	6329.8
#2	2250.7	5493.5	38563.	6331.9
#3	2257.0	5492.1	38424.	6366.2

Zoom In Zoom Out

Sample Name: FA53703-4 Acquired: 5/2/2018 12:42:50 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.6392**	**.0043**	**.0205**	**.0000**	**52.28**	**.0000**	**.0001**	**.0026**
Stddev	.0005	.0108	.0004	.0002	.000	.18	.000	.0000	.0001
%RSD	336.6	1.696	10.07	.7820	285.3	.3460	3.705	21.43	3.652
#1	.0004	.6307	.0042	.0204	.0000	52.45	.0000	.0001	.0026
#2	-.0004	.6514	.0040	.0207	.0000	52.30	.0000	.0001	.0025
#3	.0004	.6355	.0048	.0205	.0000	52.09	.0000	.0001	.0026

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0003**	**.0475**	**9.968**	**3.332**	**.0040**	**-.0003**	**56.96**	**.0009**	**.0000**
Stddev	.0004	.0020	.065	.063	.0000	.0001	.21	.0002	.000
%RSD	143.5	4.227	.6535	1.898	.1875	33.71	.3631	22.59	646.7
#1	-.0002	.0487	10.01	3.384	.0040	-.0002	57.19	.0011	.0000
#2	.0004	.0486	9.893	3.351	.0040	-.0004	56.80	.0007	-.0003
#3	.0005	.0452	10.00	3.262	.0040	-.0004	56.90	.0009	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0012**	**.0009**	**1.215**	**-.0006**	**.0560**	**.0018**	**-.0004**	**.0027**	**.0086**
Stddev	.0008	.0007	.002	.0003	.0006	.0001	.0005	.0001	.0001
%RSD	61.69	77.45	.1537	47.84	1.053	8.476	108.7	2.542	.9042
#1	-.0013	.0013	1.213	-.0009	.0563	.0017	-.0001	.0027	.0086
#2	-.0005	.0013	1.216	-.0005	.0553	.0019	-.0002	.0028	.0087
#3	-.0020	.0001	1.215	-.0003	.0564	.0017	-.0010	.0027	.0085

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2089.8**	**5247.2**	**36338.**	**6280.0**
Stddev	2.0	5.5	185.	48.9
%RSD	.09596	.10443	.51004	.77897
#1	2090.7	5252.8	36288.	6266.6
#2	2087.5	5241.9	36543.	6239.2
#3	2091.2	5247.0	36183.	6334.3

Zoom In Zoom Out

Sample Name: FA53703-5 Acquired: 5/2/2018 12:47:17 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	1.585	.0026	.0109	.0000	8.611	.0000	.0001	.0025
Stddev	.0003	.004	.0004	.0002	.000	.056	.000	.0001	.0002
%RSD	202.5	.2650	16.87	1.709	69.50	.6497	21.54	122.4	7.108
#1	-.0001	1.580	.0028	.0110	.0000	8.673	.0000	.0002	.0024
#2	.0005	1.589	.0021	.0111	.0000	8.596	-.0001	.0001	.0027
#3	.0001	1.585	.0029	.0107	.0000	8.564	.0000	.0000	.0024

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0005	.1507	3.378	1.658	.0005	-.0007	39.16	.0010	.0001
Stddev	.0003	.0005	.017	.023	.0000	.0001	.11	.0000	.0004
%RSD	53.88	.3505	.4894	1.412	7.105	7.763	.2880	3.140	389.2
#1	.0007	.1509	3.385	1.684	.0005	-.0008	39.25	.0010	.0005
#2	.0002	.1500	3.390	1.652	.0006	-.0007	39.19	.0011	-.0004
#3	.0005	.1510	3.359	1.639	.0006	-.0007	39.03	.0011	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0002	.0003	1.650	-.0005	.0141	.0008	-.0014	.0041	.0022
Stddev	.0006	.0002	.004	.0001	.0000	.0001	.0007	.0003	.0001
%RSD	377.2	87.25	.2402	18.20	.0880	10.75	54.17	6.536	5.365
#1	-.0006	.0003	1.650	-.0005	.0141	.0008	-.0015	.0042	.0023
#2	-.0004	.0005	1.646	-.0004	.0141	.0008	-.0006	.0042	.0023
#3	.0005	.0000	1.654	-.0005	.0141	.0009	-.0020	.0038	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2145.8	5371.1	37240.	6355.6
Stddev	2.9	5.2	169.	51.0
%RSD	.13493	.09763	.45409	.80256
#1	2145.5	5375.4	37332.	6304.9
#2	2148.9	5365.3	37343.	6354.9
#3	2143.1	5372.6	37045.	6406.9

Zoom In Zoom Out

Sample Name: FA53703-6 Acquired: 5/2/2018 12:51:46 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	1.572	.0049	.0549	.0000	8.469	.0000	.0002	.0011
Stddev	.0003	.013	.0009	.0002	.0000	.017	.000	.0000	.0003
%RSD	700.7	.8022	17.52	.3262	476.8	.1995	797.1	20.06	23.61
#1	.0003	1.566	.0042	.0548	.0001	8.465	.0000	.0002	.0012
#2	-.0002	1.563	.0059	.0548	.0000	8.488	.0000	.0001	.0013
#3	.0001	1.586	.0047	.0551	.0000	8.455	.0000	.0001	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	.1985	6.096	1.051	.0002	-.0010	44.60	.0008	.0002
Stddev	.0001	.0033	.035	.035	.0000	.0000	.08	.0001	.0005
%RSD	169.5	1.649	.5796	3.348	3.152	4.345	.1714	14.71	255.4
#1	.0000	.1964	6.131	1.014	.0002	-.0010	44.67	.0007	-.0001
#2	.0002	.2022	6.096	1.054	.0002	-.0010	44.60	.0008	.0007
#3	.0000	.1967	6.060	1.085	.0002	-.0009	44.52	.0010	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	-.0013	1.703	-.0006	.0241	.0016	-.0015	.0018	.0013
Stddev	.0009	.0030	.001	.0002	.0002	.0003	.0004	.0002	.0001
%RSD	160.1	224.0	.0417	34.02	1.032	18.47	24.56	12.51	6.430
#1	-.0001	.0002	1.702	-.0004	.0241	.0015	-.0011	.0016	.0013
#2	-.0016	-.0048	1.702	-.0006	.0244	.0013	-.0018	.0020	.0012
#3	.0000	.0006	1.704	-.0008	.0239	.0019	-.0015	.0017	.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2150.0	5397.7	37360.	6339.5
Stddev	3.6	6.1	41.	31.6
%RSD	.16913	.11388	.10883	.49770
#1	2147.1	5391.0	37365.	6328.5
#2	2154.1	5403.1	37398.	6314.8
#3	2148.8	5398.9	37317.	6375.0

Zoom In Zoom Out

Sample Name: FA53703-7 Acquired: 5/2/2018 12:56:13 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.4229	.0000	.0149	-.0001	23.34	.0000	.0000	.0009
Stddev	.0003	.0136	.000	.0002	.0001	.06	.000	.000	.0000
%RSD	426.6	3.222	1394.	1.406	52.08	.2779	55.28	139.1	4.983
#1	-.0001	.4302	-.0002	.0148	-.0001	23.39	.0000	.0000	.0010
#2	.0003	.4312	.0002	.0148	-.0001	23.27	-.0001	-.0001	.0009
#3	-.0003	.4072	.0000	.0152	.0000	23.35	.0000	-.0001	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	.0614	4.401	2.466	.0072	-.0009	46.57	.0009	.0004
Stddev	.0002	.0021	.034	.006	.0001	.0001	.10	.0001	.0002
%RSD	139.7	3.398	.7678	.2606	.8706	7.742	.2195	10.19	65.30
#1	.0001	.0614	4.432	2.473	.0071	-.0009	46.68	.0010	.0005
#2	.0000	.0634	4.405	2.466	.0073	-.0010	46.48	.0008	.0004
#3	.0003	.0593	4.365	2.460	.0072	-.0010	46.55	.0008	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	-.0015	1.109	-.0004	.0363	.0042	-.0007	.0008	.0024
Stddev	.0004	.0008	.002	.0002	.0002	.0007	.0006	.0001	.0000
%RSD	86.99	51.17	.2088	55.11	.4427	17.10	84.79	11.96	1.384
#1	-.0003	-.0008	1.107	-.0003	.0362	.0041	-.0014	.0009	.0025
#2	-.0009	-.0014	1.112	-.0007	.0363	.0035	-.0003	.0009	.0024
#3	-.0002	-.0024	1.108	-.0004	.0365	.0049	-.0005	.0007	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2145.7	5361.7	36921.	6255.0
Stddev	6.2	9.3	50.	30.4
%RSD	.29066	.17301	.13635	.48672
#1	2141.1	5353.4	36959.	6221.3
#2	2143.2	5360.0	36864.	6263.3
#3	2152.8	5371.7	36941.	6280.5

Zoom In Zoom Out

Sample Name: FA53703-8 Acquired: 5/2/2018 13:00:41 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0127	-.0011	.0001	-.0001	.0145	-.0001	-.0001	.0002
Stddev	.0003	.0092	.0002	.0000	.0001	.0017	.0000	.0001	.0002
%RSD	202.1	71.97	22.90	49.83	76.50	11.49	28.47	198.1	76.66
#1	.0003	.0028	-.0009	.0001	.0000	.0133	-.0001	.0000	.0000
#2	.0003	.0145	-.0009	.0000	.0000	.0137	-.0001	.0000	.0003
#3	-.0002	.0209	-.0013	.0001	-.0001	.0164	-.0001	-.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	-.0089	.0138	.0110	.0000	-.0009	.0479	.0001	.0001
Stddev	.0003	.0018	.0334	.0024	.0000	.0001	.0043	.0001	.0004
%RSD	156.4	20.45	241.9	21.35	227.3	13.83	9.037	67.06	847.6
#1	-.0001	-.0108	-.0010	.0095	.0000	-.0010	.0503	.0002	.0005
#2	-.0005	-.0089	-.0096	.0138	.0000	-.0008	.0505	.0001	-.0003
#3	.0000	-.0071	.0521	.0098	.0000	-.0008	.0429	.0001	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0010	-.0011	.0488	-.0006	-.0001	-.0007	-.0006	.0002	.0015
Stddev	.0005	.0014	.0005	.0002	.0000	.0001	.0005	.0001	.0000
%RSD	44.93	129.0	.9442	39.97	20.50	8.761	92.09	76.19	2.826
#1	-.0012	-.0009	.0492	-.0009	-.0001	-.0006	-.0011	.0002	.0015
#2	-.0005	.0002	.0483	-.0006	-.0001	-.0007	.0000	.0000	.0015
#3	-.0014	-.0026	.0489	-.0004	-.0001	-.0008	-.0006	.0003	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2248.9	5485.1	38567.	6310.9
Stddev	1.8	6.5	165.	48.5
%RSD	.07966	.11853	.42880	.76915
#1	2247.6	5488.3	38418.	6357.8
#2	2251.0	5489.4	38745.	6260.9
#3	2248.2	5477.7	38539.	6314.1

Zoom In Zoom Out

Sample Name: FA53725-122 Acquired: 5/2/2018 13:05:12 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0509	-.0011	.0140	-.0001	37.42	-.0001	.0000	.0008
Stddev	.0001	.0050	.0011	.0001	.0000	.22	.0000	.000	.0003
%RSD	46.69	9.792	95.27	.7017	92.83	.5801	35.19	214.3	31.60
#1	.0001	.0479	-.0015	.0139	-.0001	37.44	-.0001	-.0001	.0006
#2	.0003	.0567	-.0019	.0140	-.0001	37.20	.0000	-.0001	.0007
#3	.0003	.0482	.0001	.0141	.0000	37.63	-.0001	.0001	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0017	.0128	.9437	9.123	.0216	-.0007	9.250	.0006	-.0001
Stddev	.0001	.0017	.0227	.138	.0001	.0001	.025	.0002	.0000
%RSD	5.131	13.59	2.410	1.509	.2930	20.12	.2694	36.67	65.95
#1	.0017	.0108	.9391	9.033	.0215	-.0005	9.254	.0003	.0000
#2	.0017	.0139	.9237	9.054	.0216	-.0008	9.224	.0006	-.0001
#3	.0018	.0136	.9684	9.282	.0215	-.0008	9.273	.0007	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	-.0001	5.322	-.0007	.6748	.0006	-.0010	-.0003	.0079
Stddev	.0005	.0019	.007	.0001	.0031	.0001	.0004	.0003	.0000
%RSD	86.30	1401.	.1393	18.02	.4641	8.405	40.97	114.1	.6177
#1	-.0001	.0019	5.331	-.0005	.6775	.0006	-.0012	.0001	.0079
#2	-.0006	-.0003	5.317	-.0008	.6714	.0006	-.0014	-.0005	.0079
#3	-.0011	-.0020	5.319	-.0007	.6754	.0007	-.0006	-.0004	.0079

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2185.6	5411.3	37580.	6309.6
Stddev	7.3	23.1	144.	90.2
%RSD	.33521	.42661	.38369	1.4298
#1	2177.2	5385.0	37578.	6348.0
#2	2189.2	5420.3	37437.	6374.2
#3	2190.5	5428.5	37725.	6206.5

Zoom In Zoom Out

Sample Name: FA53725-123 Acquired: 5/2/2018 13:09:39 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0151	-.0005	.0138	-.0001	37.03	-.0001	-.0001	.0002
Stddev	.000	.0109	.0005	.0001	.0000	.02	.0000	.0001	.0001
%RSD	293.5	72.39	117.0	.3726	77.31	.0452	50.93	85.30	60.56
#1	-.0001	.0083	.0000	.0137	-.0001	37.03	-.0001	.0000	.0001
#2	.0000	.0277	-.0011	.0138	-.0001	37.01	.0000	-.0001	.0003
#3	.0000	.0092	-.0003	.0138	.0000	37.05	.0000	-.0001	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0015	-.0052	.9420	8.986	.0082	-.0010	9.136	.0003	-.0004
Stddev	.0000	.0015	.0078	.027	.0000	.0001	.029	.0000	.0003
%RSD	2.742	28.11	.8311	.3018	.5208	12.51	.3122	10.41	72.16
#1	.0015	-.0056	.9392	8.972	.0083	-.0010	9.138	.0003	-.0001
#2	.0014	-.0063	.9509	9.018	.0082	-.0008	9.106	.0003	-.0006
#3	.0015	-.0035	.9360	8.969	.0083	-.0011	9.163	.0003	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0002	-.0012	5.284	-.0006	.6686	.0002	-.0019	.0000	.0037
Stddev	.0008	.0023	.016	.0002	.0030	.0001	.0010	.0001	.0000
%RSD	356.5	191.9	.2938	29.70	.4452	34.28	54.06	237.2	1.337
#1	-.0007	.0014	5.272	-.0008	.6719	.0001	-.0008	.0001	.0036
#2	-.0007	-.0031	5.278	-.0007	.6661	.0002	-.0022	.0001	.0037
#3	.0007	-.0020	5.302	-.0004	.6677	.0002	-.0029	.0000	.0037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2202.5	5450.2	37817.	6385.2
Stddev	3.7	9.9	200.	35.9
%RSD	.17014	.18149	.52805	.56268
#1	2205.1	5461.6	37993.	6426.5
#2	2198.2	5446.0	37600.	6367.9
#3	2204.2	5443.2	37858.	6361.2

Zoom In Zoom Out

Sample Name: FA53725-124 Acquired: 5/2/2018 13:14:06 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0150	-.0002	.0134	.0000	36.49	-.0001	.0000	.0005
Stddev	.0005	.0038	.0004	.0002	.000	.23	.0001	.000	.0000
%RSD	182.4	25.49	200.5	1.605	249.0	.6352	81.72	455.3	1.262
#1	.0002	.0106	-.0003	.0135	-.0001	36.63	.0000	-.0001	.0005
#2	.0007	.0176	.0002	.0134	.0001	36.22	.0000	.0000	.0005
#3	-.0002	.0167	-.0005	.0131	-.0001	36.61	-.0001	.0000	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0014	-.0038	.9560	8.810	.0054	-.0009	9.323	.0004	-.0003
Stddev	.0002	.0024	.0073	.076	.0000	.0001	.059	.0002	.0004
%RSD	15.38	64.61	.7625	.8677	.1861	12.58	.6362	41.86	127.3
#1	.0013	-.0017	.9621	8.867	.0054	-.0010	9.382	.0004	-.0004
#2	.0013	-.0065	.9580	8.723	.0054	-.0009	9.264	.0006	.0001
#3	.0017	-.0031	.9480	8.839	.0054	-.0008	9.322	.0003	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0008	-.0004	5.409	-.0003	.6700	.0004	-.0020	.0001	.0049
Stddev	.0001	.0017	.021	.0001	.0063	.0001	.0011	.0000	.0001
%RSD	18.33	467.2	.3789	42.03	.9442	17.46	56.17	53.91	1.039
#1	-.0009	-.0012	5.432	-.0002	.6757	.0004	-.0030	.0001	.0049
#2	-.0008	-.0016	5.393	-.0004	.6632	.0004	-.0023	.0001	.0049
#3	-.0006	.0016	5.403	-.0004	.6711	.0003	-.0008	.0000	.0048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2177.2	5393.7	37410.	6319.5
Stddev	16.6	29.8	154.	42.8
%RSD	.76407	.55184	.41167	.67756
#1	2158.0	5359.4	37412.	6342.6
#2	2186.3	5412.9	37255.	6345.8
#3	2187.3	5408.6	37563.	6270.1

Zoom In Zoom Out

Sample Name: FA53725-125 Acquired: 5/2/2018 13:18:34 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0068	-.0008	.0123	.0000	34.81	-.0001	.0000	.0005
Stddev	.0000	.0060	.0007	.0002	.000	.03	.0000	.000	.0001
%RSD	33.73	87.66	86.40	1.387	250.5	.0835	26.72	198.6	13.01
#1	-.0001	.0000	-.0009	.0122	.0000	34.81	-.0001	.0000	.0005
#2	-.0001	.0112	-.0015	.0125	.0000	34.78	-.0001	.0000	.0004
#3	-.0001	.0093	-.0001	.0121	-.0001	34.83	-.0001	-.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0007	-.0022	.9338	8.485	.0059	-.0010	9.162	.0004	-.0007
Stddev	.0001	.0031	.0035	.060	.0000	.0002	.036	.0001	.0003
%RSD	20.29	142.5	.3742	.7130	.1817	24.27	.3917	32.64	36.19
#1	.0006	-.0009	.9319	8.547	.0059	-.0007	9.124	.0003	-.0005
#2	.0009	-.0058	.9379	8.426	.0059	-.0011	9.195	.0004	-.0010
#3	.0007	.0001	.9318	8.482	.0059	-.0012	9.167	.0005	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0015	-.0003	5.242	-.0007	.6544	.0001	-.0013	-.0003	.0037
Stddev	.0004	.0008	.010	.0002	.0036	.0000	.0010	.0000	.0000
%RSD	26.09	316.5	.1860	34.81	.5570	25.50	78.70	9.368	.7156
#1	-.0019	-.0010	5.248	-.0006	.6507	.0001	-.0024	-.0002	.0037
#2	-.0011	-.0004	5.247	-.0009	.6545	.0001	-.0003	-.0003	.0037
#3	-.0015	.0006	5.231	-.0005	.6580	.0001	-.0013	-.0002	.0037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2189.6	5398.9	37628.	6261.9
Stddev	6.2	16.6	115.	55.3
%RSD	.28237	.30782	.30635	.88324
#1	2183.5	5379.8	37562.	6219.0
#2	2195.9	5406.9	37761.	6324.3
#3	2189.6	5410.0	37560.	6242.3

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: FA53728-1 Acquired: 5/2/2018 13:23:04 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**.0135**	**.0052**	**.1691**	**-.0001**	**135.3**	**.0000**	**.0009**	**.0006**
Stddev	.0005	.0046	.0013	.0007	.0001	.5	.0000	.0001	.0001
%RSD	167.3	34.24	25.81	.4306	104.2	.3707	2869.	8.878	19.27
#1	-.0001	.0185	.0063	.1696	.0000	135.5	.0000	.0010	.0004
#2	.0009	.0129	.0037	.1694	-.0001	135.7	-.0001	.0008	.0007
#3	.0001	.0093	.0055	.1683	-.0001	134.7	.0000	.0009	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0006**	**1.301**	**1.959**	**61.39**	**.2417**	**.0046**	F **90.05**	**.0065**	**-.0018**
Stddev	.0003	.006	.009	.02	.0016	.0001	.51	.0002	.0005
%RSD	51.13	.4416	.4497	.0271	.6435	2.586	.5623	2.466	29.04
#1	.0003	1.298	1.955	61.38	.2431	.0047	90.30	.0066	-.0022
#2	.0008	1.308	1.969	61.41	.2400	.0045	90.39	.0063	-.0012
#3	.0008	1.297	1.953	61.38	.2418	.0047	89.47	.0065	-.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0007**	**-.0016**	**9.274**	**-.0007**	**.8414**	**.0002**	**-.0029**	**-.0002**	**.0052**
Stddev	.0003	.0017	.005	.0002	.0031	.0001	.0005	.0001	.0000
%RSD	43.51	106.1	.0506	30.65	.3635	48.20	15.74	56.88	.2347
#1	-.0010	-.0017	9.271	-.0006	.8414	.0003	-.0032	-.0003	.0052
#2	-.0007	-.0033	9.279	-.0010	.8445	.0001	-.0030	-.0004	.0052
#3	-.0004	.0001	9.272	-.0006	.8383	.0003	-.0024	-.0001	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2013.1**	**5158.2**	**35364.**	**6196.2**
Stddev	4.0	15.2	255.	26.2
%RSD	.19821	.29379	.71983	.42241
#1	2009.5	5153.5	35122.	6208.4
#2	2012.5	5145.9	35629.	6166.2
#3	2017.4	5175.2	35341.	6214.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 13:27:30 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2475**	**40.65**	**2.043**	**2.006**	**2.002**	**40.97**	**2.059**	**2.035**	**2.011**
Stddev	.0009	.12	.004	.001	.002	.08	.006	.004	.002
%RSD	.3776	.3066	.2145	.0544	.0738	.1995	.3122	.1767	.1134
#1	.2475	40.66	2.047	2.005	2.002	41.02	2.061	2.035	2.012
#2	.2466	40.52	2.038	2.005	2.001	40.87	2.052	2.031	2.009
#3	.2485	40.76	2.045	2.007	2.004	41.02	2.065	2.038	2.013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.009**	**39.86**	**40.62**	**40.94**	**2.089**	**2.043**	**40.42**	**2.064**	**2.000**
Stddev	.005	.09	.14	.06	.003	.004	.07	.007	.002
%RSD	.2439	.2136	.3567	.1356	.1469	.1951	.1838	.3485	.1126
#1	2.007	39.85	40.77	40.92	2.090	2.043	40.48	2.063	2.002
#2	2.005	39.78	40.61	40.90	2.086	2.040	40.34	2.057	1.998
#3	2.014	39.95	40.49	41.00	2.092	2.048	40.45	2.071	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.030**	**2.034**	**1.972**	**2.102**	**2.087**	**2.079**	**2.005**	**2.051**	**2.096**
Stddev	.009	.004	.003	.012	.006	.001	.004	.005	.009
%RSD	.4179	.2233	.1427	.5770	.2903	.0676	.2241	.2313	.4467
#1	2.028	2.034	1.973	2.097	2.094	2.079	2.003	2.051	2.097
#2	2.022	2.030	1.968	2.093	2.082	2.077	2.010	2.047	2.086
#3	2.039	2.039	1.973	2.115	2.084	2.079	2.002	2.056	2.105
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 13:27:30 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1975.2**	**5286.2**	**36784.**	**6283.4**
Stddev	1.8	20.3	103.	20.3
%RSD	.09191	.38452	.28032	.32290
#1	1977.1	5296.4	36793.	6278.9
#2	1973.5	5299.4	36882.	6305.6
#3	1975.1	5262.8	36676.	6265.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 13:31:40 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0085**	**.0003**	**.0001**	**.0001**	**.0058**	**.0001**	**.0002**	**.0002**
Stddev	.0004	.0032	.0003	.0001	.0000	.0021	.0000	.0001	.0003
%RSD	300.1	37.04	78.10	98.77	34.09	35.84	22.08	66.82	135.3
#1	-.0002	.0052	.0006	.0000	.0001	.0066	.0002	.0003	.0003
#2	.0006	.0115	.0004	.0001	.0001	.0034	.0001	.0000	-.0001
#3	.0001	.0089	.0001	.0001	.0002	.0074	.0001	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0062**	**-.0164**	**.0018**	**.0002**	**.0006**	**.0085**	**.0003**	**.0001**
Stddev	.0004	.0036	.0179	.0145	.0000	.0003	.0051	.0001	.0004
%RSD	347.7	58.06	109.3	804.0	18.29	60.26	60.29	23.19	397.5
#1	.0005	.0097	-.0112	.0169	.0001	.0010	.0031	.0003	.0006
#2	.0001	.0064	-.0016	-.0121	.0002	.0004	.0132	.0002	-.0003
#3	-.0003	.0025	-.0364	.0006	.0002	.0003	.0091	.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**.0004**	**.0012**	**-.0004**	**.0001**	**.0007**	**-.0002**	**.0002**	**.0001**
Stddev	.0007	.0015	.0002	.0002	.0000	.0001	.0007	.0000	.0000
%RSD	78.51	377.3	20.33	53.58	33.20	17.78	327.7	16.83	10.26
#1	-.0004	.0018	.0010	-.0003	.0001	.0008	-.0008	.0002	.0001
#2	-.0006	.0006	.0011	-.0005	.0001	.0005	-.0005	.0002	.0001
#3	-.0018	-.0012	.0015	-.0002	.0000	.0006	.0006	.0002	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 13:31:40 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2251.8**	**5509.5**	**38511.**	**6396.0**
Stddev	1.6	8.0	152.	22.1
%RSD	.07163	.14531	.39586	.34475
#1	2250.2	5516.4	38518.	6419.0
#2	2253.4	5511.3	38356.	6394.0
#3	2251.8	5500.7	38661.	6375.1

Zoom In Zoom Out

Sample Name: FA53728-2 Acquired: 5/2/2018 13:36:12 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0310**	**.0074**	**.1732**	**.0000**	**138.7**	**.0000**	**.0010**	**.0006**
Stddev	.0004	.0033	.0005	.0002	.000	.8	.000	.0001	.0002
%RSD	617.8	10.61	7.432	.0957	924.7	.6109	110.3	8.076	40.09
#1	-.0004	.0296	.0069	.1731	.0000	138.9	-.0001	.0010	.0006
#2	.0004	.0286	.0080	.1730	.0000	137.7	.0000	.0011	.0004
#3	.0003	.0347	.0073	.1733	.0000	139.4	-.0001	.0010	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**1.511**	**2.008**	**62.75**	**.2474**	**.0052**	F **92.05**	**.0064**	**-.0015**
Stddev	.0001	.009	.025	.80	.0014	.0001	.41	.0002	.0009
%RSD	35.65	.5622	1.260	1.281	.5476	1.145	.4472	2.494	60.65
#1	.0005	1.518	2.037	62.44	.2490	.0052	92.48	.0066	-.0011
#2	.0002	1.501	1.997	62.15	.2468	.0051	91.66	.0062	-.0026
#3	.0003	1.513	1.991	63.67	.2464	.0053	92.02	.0065	-.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0015**	**-.0013**	**9.604**	**-.0006**	**.8644**	**.0005**	**-.0012**	**.0000**	**.0066**
Stddev	.0007	.0018	.012	.0003	.0043	.0001	.0012	.0001	.0001
%RSD	47.50	139.0	.1251	44.93	.4987	18.89	99.65	264.4	1.064
#1	-.0008	.0007	9.617	-.0003	.8648	.0005	-.0026	.0000	.0066
#2	-.0017	-.0018	9.594	-.0008	.8599	.0005	-.0006	-.0001	.0065
#3	-.0022	-.0027	9.601	-.0006	.8685	.0007	-.0004	.0002	.0066

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1995.6**	**5102.4**	**35059.**	**6163.1**
Stddev	4.5	18.9	77.	43.3
%RSD	.22668	.37110	.21912	.70318
#1	1990.8	5080.6	34997.	6168.2
#2	1999.7	5114.5	35035.	6203.6
#3	1996.3	5112.2	35145.	6117.4

Zoom In Zoom Out

Sample Name: FA53728-3 Acquired: 5/2/2018 13:40:39 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**.0388**	**.0003**	**.1180**	**.0000**	**121.0**	**.0000**	**.0001**	**.0048**
Stddev	.0004	.0113	.0010	.0003	.000	.2	.000	.0002	.0001
%RSD	246.0	29.03	325.4	.2418	1100.	.1916	111.3	254.5	3.051
#1	.0006	.0511	-.0008	.1176	.0000	121.1	.0000	.0001	.0048
#2	-.0001	.0361	.0012	.1182	-.0001	121.2	-.0001	-.0001	.0050
#3	.0000	.0291	.0006	.1180	.0001	120.8	.0000	.0002	.0047

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**.0330**	**1.477**	**51.76**	**.0600**	**.0034**	**68.89**	**.0038**	**-.0016**
Stddev	.0003	.0022	.019	.10	.0004	.0001	.02	.0001	.0002
%RSD	69.10	6.783	1.315	.1937	.7308	1.885	.0253	2.111	11.98
#1	.0003	.0338	1.493	51.73	.0605	.0035	68.88	.0038	-.0017
#2	.0002	.0305	1.455	51.87	.0600	.0034	68.88	.0038	-.0014
#3	.0008	.0348	1.482	51.68	.0596	.0033	68.91	.0039	-.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0011**	**-.0001**	**7.456**	**-.0007**	**.5479**	**.0006**	**-.0013**	**-.0002**	**.0071**
Stddev	.0007	.0012	.015	.0004	.0007	.0000	.0007	.0002	.0001
%RSD	65.23	1995.	.1967	56.11	.1257	2.999	55.04	74.52	.7730
#1	-.0004	.0013	7.452	-.0007	.5474	.0006	-.0020	-.0001	.0071
#2	-.0018	-.0004	7.444	-.0003	.5487	.0006	-.0006	-.0004	.0072
#3	-.0011	-.0011	7.472	-.0011	.5477	.0006	-.0012	-.0001	.0071

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2023.9**	**5170.7**	**35616.**	**6158.3**
Stddev	4.8	2.6	110.	39.4
%RSD	.23951	.05066	.30797	.63971
#1	2023.6	5173.7	35553.	6120.8
#2	2019.2	5169.2	35552.	6154.7
#3	2028.8	5169.2	35742.	6199.3

Zoom In Zoom Out

Sample Name: FA53740-1 Acquired: 5/2/2018 13:45:05 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**-.0056**	**.0020**	**.0905**	**-.0001**	**75.44**	**.0000**	**-.0002**	**.0132**
Stddev	.0002	.0087	.0005	.0002	.0000	.17	.000	.0001	.0002
%RSD	216.1	154.0	23.49	.2077	22.01	.2227	379.4	45.41	1.630
#1	-.0004	-.0152	.0022	.0904	.0000	75.63	.0000	-.0002	.0135
#2	.0000	-.0033	.0015	.0903	-.0001	75.32	.0000	-.0001	.0130
#3	.0000	.0017	.0023	.0907	-.0001	75.36	.0000	-.0001	.0132

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0003**	**.0006**	**2.328**	**15.41**	**.0067**	**.0260**	**45.43**	**-.0001**	**-.0022**
Stddev	.0001	.0017	.016	.13	.0000	.0001	.07	.0002	.0002
%RSD	39.13	292.3	.6909	.8349	.2982	.3436	.1620	288.4	8.803
#1	-.0004	.0020	2.344	15.49	.0067	.0260	45.43	-.0002	-.0020
#2	-.0003	.0010	2.328	15.26	.0067	.0260	45.51	-.0002	-.0023
#3	-.0002	-.0013	2.312	15.47	.0068	.0261	45.36	.0002	-.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0009**	**-.0003**	**11.25**	**-.0007**	**1.008**	**.0003**	**-.0019**	**.0058**	**.0555**
Stddev	.0008	.0005	.02	.0003	.003	.0001	.0015	.0002	.0001
%RSD	90.54	170.5	.1355	40.69	.3181	51.21	78.72	3.459	.2517
#1	-.0015	-.0004	11.25	-.0005	1.006	.0002	-.0009	.0056	.0553
#2	-.0012	.0002	11.23	-.0011	1.006	.0001	-.0037	.0060	.0554
#3	.0000	-.0006	11.26	-.0006	1.012	.0004	-.0012	.0059	.0556

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2100.4**	**5288.1**	**36458.**	**6217.8**
Stddev	8.6	6.9	63.	35.1
%RSD	.40828	.13027	.17221	.56447
#1	2092.2	5284.2	36401.	6188.7
#2	2099.5	5284.0	36525.	6207.9
#3	2109.3	5296.0	36446.	6256.7

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: FA53740-2 Acquired: 5/2/2018 13:49:32 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0012	.0022	.0921	.0000	76.74	-.0001	-.0002	.0138
Stddev	.0002	.0030	.0007	.0006	.000	.27	.0000	.0001	.0001
%RSD	195.6	249.5	33.14	.5979	87.96	.3470	57.64	31.89	.5586
#1	.0003	.0026	.0024	.0915	.0000	76.88	-.0001	-.0002	.0139
#2	-.0001	.0033	.0027	.0924	-.0001	76.91	-.0001	-.0002	.0137
#3	.0001	-.0022	.0013	.0925	-.0001	76.43	.0000	-.0001	.0138

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0003	-.0070	2.362	15.69	.0001	.0270	45.90	.0001	-.0020
Stddev	.0002	.0008	.022	.04	.0000	.0001	.09	.0001	.0003
%RSD	66.30	11.27	.9430	.2739	19.35	.2324	.1938	105.7	16.31
#1	-.0001	-.0063	2.385	15.72	.0001	.0270	45.94	.0000	-.0023
#2	-.0004	-.0079	2.341	15.71	.0001	.0269	45.97	.0002	-.0020
#3	-.0005	-.0068	2.359	15.64	.0002	.0271	45.80	.0000	-.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0007	11.61	-.0006	1.022	.0002	-.0014	.0057	.0217
Stddev	.0008	.0006	.05	.0002	.005	.0001	.0008	.0001	.0002
%RSD	118.3	94.75	.4270	35.72	.4932	57.82	58.65	1.717	.9186
#1	-.0015	.0005	11.55	-.0009	1.019	.0001	-.0010	.0057	.0215
#2	-.0007	.0001	11.64	-.0007	1.028	.0001	-.0024	.0056	.0217
#3	.0001	.0014	11.63	-.0004	1.020	.0003	-.0009	.0058	.0219

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2102.7	5276.1	36456.	6118.9
Stddev	2.2	15.5	73.	56.0
%RSD	.10612	.29307	.19934	.91488
#1	2103.0	5293.9	36527.	6057.5
#2	2100.4	5267.9	36382.	6131.9
#3	2104.8	5266.4	36460.	6167.2

Zoom In Zoom Out

Sample Name: MP33683-MB1 Acquired: 5/2/2018 13:53:59 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0174	-.0009	.0045	-.0001	.0832	.0000	.0001	.0009
Stddev	.0004	.0053	.0002	.0002	.0000	.0020	.000	.0000	.0000
%RSD	222.6	30.55	27.98	3.835	32.13	2.400	99.29	50.24	3.712
#1	.0001	.0192	-.0008	.0043	-.0001	.0810	-.0001	.0001	.0009
#2	-.0002	.0216	-.0007	.0047	-.0001	.0835	-.0001	.0001	.0009
#3	.0007	.0114	-.0012	.0044	-.0001	.0850	.0000	.0000	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0542	.0013	.0001	.0004	-.0008	.0235	.0005	.0004
Stddev	.0004	.0016	.0117	.0092	.0000	.0002	.0055	.0000	.0008
%RSD	69.23	3.000	888.2	12130.	4.740	21.38	23.57	6.095	208.6
#1	.0001	.0543	-.0048	-.0097	.0004	-.0010	.0290	.0005	.0006
#2	.0009	.0558	-.0061	.0086	.0004	-.0009	.0180	.0005	-.0005
#3	.0006	.0525	.0148	.0013	.0004	-.0006	.0235	.0005	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0001	.0199	.0178	.0006	F .0096	-.0015	.0001	.0028
Stddev	.0004	.0018	.0012	.0003	.0000	.0004	.0005	.0001	.0001
%RSD	42.41	1597.	6.186	1.946	3.634	4.307	33.17	78.81	1.821
#1	-.0006	-.0004	.0213	.0178	.0006	.0099	-.0019	.0001	.0028
#2	-.0008	.0021	.0197	.0182	.0006	.0091	-.0009	.0000	.0027
#3	-.0014	-.0014	.0188	.0175	.0006	.0097	-.0016	.0003	.0028
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0050			
Low Limit						-.0050			

Zoom In Zoom Out

Sample Name: MP33683-MB1 Acquired: 5/2/2018 13:53:59 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2254.8	5469.9	38512.	6468.0
Stddev	5.9	15.3	51.	36.2
%RSD	.26338	.27949	.13247	.55907
#1	2248.3	5455.2	38501.	6465.8
#2	2256.2	5468.9	38468.	6433.1
#3	2259.9	5485.7	38568.	6505.3

Zoom In Zoom Out

Sample Name: MP33683-B1 Acquired: 5/2/2018 13:58:31 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0476	25.68	1.919	1.947	.0490	24.87	.0492	.4900	.1985
Stddev	.0004	.16	.003	.009	.0002	.08	.0001	.0003	.0012
%RSD	.8048	.6127	.1281	.4511	.3864	.3375	.2270	.0607	.6232
#1	.0472	25.73	1.916	1.944	.0488	24.84	.0492	.4897	.1975
#2	.0474	25.81	1.921	1.957	.0492	24.97	.0491	.4900	.1998
#3	.0480	25.50	1.920	1.940	.0490	24.81	.0493	.4903	.1980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2445	24.80	24.45	23.98	.5100	.4740	24.44	.5128	.4618
Stddev	.0010	.14	.14	.15	.0005	.0009	.15	.0011	.0017
%RSD	.3980	.5679	.5716	.6075	.0960	.1877	.5973	.2194	.3638
#1	.2456	24.65	24.36	24.02	.5102	.4732	24.33	.5115	.4634
#2	.2440	24.93	24.61	24.10	.5103	.4740	24.61	.5135	.4601
#3	.2439	24.84	24.39	23.81	.5094	.4749	24.39	.5134	.4620
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4783	1.884	.4781	.5320	.5072	.5115	1.820	.4800	.4993
Stddev	.0015	.006	.0018	.0014	.0022	.0005	.005	.0019	.0006
%RSD	.3188	.3201	.3666	.2713	.4261	.1006	.2715	.4011	.1258
#1	.4771	1.877	.4764	.5307	.5083	.5111	1.826	.4811	.4989
#2	.4800	1.887	.4781	.5316	.5085	.5113	1.817	.4811	.4990
#3	.4779	1.887	.4799	.5336	.5047	.5121	1.818	.4778	.5000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: MP33683-B1 Acquired: 5/2/2018 13:58:31 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2079.6	5336.0	36914.	6273.5
Stddev	5.2	6.5	127.	57.6
%RSD	.25108	.12225	.34531	.91876
#1	2073.7	5343.4	36788.	6292.3
#2	2083.5	5331.4	36909.	6208.8
#3	2081.6	5333.1	37043.	6319.4

Zoom In Zoom Out

Sample Name: FA53833-1 Acquired: 5/2/2018 14:02:44 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	96.17	.0733	.1848	.0031	F 5013.	.0003	.0091	.3137
Stddev	.0023	.31	.0038	.0012	.0003	3.	.0001	.0004	.0014
%RSD	541.1	.3210	5.209	.6451	9.514	.0520	39.67	4.035	.4357
#1	-.0010	95.93	.0730	.1850	.0031	5016.	.0003	.0088	.3130
#2	.0021	96.05	.0772	.1836	.0028	5011.	.0004	.0090	.3129
#3	-.0023	96.52	.0696	.1860	.0033	5012.	.0002	.0095	.3153

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0965	63.28	1.233	19.42	1.219	-.0006	8.416	.0583	.1685
Stddev	.0024	.33	.106	.34	.007	.0003	.019	.0019	.0035
%RSD	2.482	.5146	8.629	1.744	.6184	44.45	.2226	3.318	2.089
#1	.0993	63.58	1.277	19.81	1.219	-.0005	8.425	.0585	.1725
#2	.0951	62.93	1.311	19.18	1.226	-.0008	8.429	.0564	.1672
#3	.0952	63.31	1.112	19.27	1.211	-.0003	8.395	.0602	.1659

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0033	-.0346	5.676	.0140	F 40.89	1.360	-.0089	.1207	.0556
Stddev	.0061	.0072	.181	.0005	.53	.035	.0038	.0022	.0003
%RSD	184.5	20.82	3.188	3.587	1.300	2.539	42.13	1.853	.4657
#1	-.0007	-.0420	5.884	.0146	41.19	1.366	-.0070	.1219	.0554
#2	-.0102	-.0342	5.591	.0136	41.21	1.323	-.0065	.1221	.0559
#3	.0011	-.0276	5.553	.0139	40.28	1.392	-.0133	.1182	.0555

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1804.0	5090.6	34694.	6271.2
Stddev	2.5	15.0	197.	45.6
%RSD	.13709	.29517	.56854	.72776
#1	1801.3	5099.2	34684.	6218.9
#2	1806.2	5099.4	34501.	6292.1
#3	1804.5	5073.3	34896.	6302.7

Zoom In Zoom Out

Sample Name: MP33683-D1 Acquired: 5/2/2018 14:07:25 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0014	85.75	.0846	.1654	.0026	F 5168.	.0008	.0078	.3169
Stddev	.0038	1.09	.0052	.0004	.0003	88.	.0002	.0003	.0027
%RSD	272.0	1.265	6.142	.2278	13.28	1.710	27.84	4.175	.8391
#1	-.0036	86.95	.0906	.1659	.0027	5270.	.0008	.0079	.3189
#2	-.0035	84.84	.0813	.1652	.0022	5110.	.0005	.0074	.3181
#3	.0030	85.46	.0818	.1652	.0028	5125.	.0010	.0080	.3139

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1544	53.26	1.068	18.62	1.456	-.0016	10.28	.0525	.2386
Stddev	.0016	.23	.045	.23	.003	.0010	.07	.0004	.0013
%RSD	1.033	.4410	4.222	1.253	.2131	61.81	.6689	.6698	.5434
#1	.1530	53.52	1.120	18.86	1.453	-.0027	10.36	.0521	.2381
#2	.1561	53.19	1.043	18.40	1.457	-.0009	10.28	.0527	.2401
#3	.1540	53.07	1.041	18.60	1.459	-.0011	10.22	.0527	.2377

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0043	-.0285	5.247	.0146	F 48.79	1.238	-.0148	.1046	.0829
Stddev	.0046	.0094	.165	.0009	1.03	.061	.0097	.0013	.0003
%RSD	106.0	33.15	3.140	6.304	2.112	4.920	65.32	1.200	.3778
#1	-.0081	-.0269	5.437	.0146	49.54	1.189	-.0159	.1056	.0830
#2	.0007	-.0200	5.164	.0155	49.22	1.220	-.0240	.1050	.0826
#3	-.0055	-.0386	5.141	.0137	47.62	1.306	-.0047	.1032	.0832

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1814.6	5082.2	34965.	6279.0
Stddev	7.7	5.4	89.	24.6
%RSD	.42583	.10640	.25342	.39181
#1	1820.8	5081.1	34867.	6256.3
#2	1817.0	5088.1	35038.	6275.7
#3	1805.9	5077.5	34990.	6305.1

Zoom In Zoom Out

Sample Name: MP33683-SD1 Acquired: 5/2/2018 14:12:05 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0029	95.21	.0674	.1808	.0028	5377.	-.0005	.0100	.3201
Stddev	.0024	.41	.0193	.0022	.0013	29.	.0004	.0016	.0075
%RSD	83.70	.4315	28.65	1.200	47.30	.5332	85.14	16.25	2.330
#1	-.0032	94.97	.0758	.1809	.0038	5410.	-.0005	.0095	.3194
#2	-.0052	94.98	.0453	.1786	.0013	5361.	-.0009	.0087	.3279
#3	-.0003	95.68	.0810	.1830	.0034	5360.	-.0001	.0118	.3130

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0923	63.57	1.093	20.59	1.240	-.0220	8.294	.0619	.1496
Stddev	.0032	.55	.539	.79	.008	.0028	.084	.0020	.0157
%RSD	3.483	.8657	49.38	3.854	.6789	12.70	1.010	3.160	10.46
#1	.0887	64.20	.7956	21.41	1.231	-.0249	8.363	.0640	.1665
#2	.0949	63.18	1.715	19.83	1.246	-.0215	8.201	.0615	.1356
#3	.0933	63.33	.7667	20.54	1.243	-.0194	8.319	.0601	.1468

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0176	-.0509	5.433	-.0033	41.21	1.416	-.0257	.1191	.0604
Stddev	.0168	.0395	.232	.0054	.01	.104	.0350	.0124	.0006
%RSD	95.56	77.65	4.266	163.7	.0285	7.334	135.9	10.42	.9402
#1	.0009	-.0870	5.685	-.0015	41.20	1.535	-.0536	.1289	.0605
#2	-.0318	-.0086	5.385	-.0094	41.21	1.367	.0135	.1051	.0609
#3	-.0218	-.0571	5.229	.0010	41.22	1.345	-.0370	.1233	.0598

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2076.1	5312.2	36623.	6299.9
Stddev	3.0	5.6	170.	36.2
%RSD	.14517	.10498	.46533	.57521
#1	2074.4	5307.1	36815.	6258.1
#2	2079.6	5318.2	36491.	6319.8
#3	2074.2	5311.3	36563.	6321.9

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: MP33683-PS1 Acquired: 5/2/2018 14:16:38 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0503	97.53	.1746	.4317	.0511	F 4915.	.0481	.0557	.3505
Stddev	.0010	.69	.0050	.0011	.0004	67.	.0003	.0005	.0015
%RSD	2.071	.7110	2.865	.2607	.8594	1.361	.5855	.8114	.4237
#1	.0512	98.04	.1695	.4317	.0514	4851.	.0480	.0552	.3522
#2	.0492	96.74	.1747	.4306	.0506	4910.	.0484	.0559	.3496
#3	.0505	97.81	.1795	.4329	.0513	4985.	.0479	.0561	.3496

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1969	64.32	11.66	23.87	1.237	.0898	18.53	.1533	.2126
Stddev	.0010	.11	.12	.33	.001	.0003	.01	.0007	.0017
%RSD	.5226	.1722	1.055	1.366	.0641	.3027	.0783	.4358	.7859
#1	.1960	64.36	11.71	23.63	1.236	.0899	18.54	.1526	.2115
#2	.1967	64.20	11.52	23.74	1.237	.0895	18.52	.1539	.2119
#3	.1980	64.41	11.74	24.24	1.237	.0900	18.52	.1533	.2146

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0865	.0667	4.736	.0646	F 39.85	1.366	.0815	.1647	.2968
Stddev	.0066	.0099	.029	.0006	.78	.011	.0087	.0002	.0012
%RSD	7.576	14.77	.6208	.9107	1.961	.8279	10.68	.1266	.3942
#1	.0816	.0618	4.763	.0646	39.79	1.353	.0908	.1648	.2955
#2	.0839	.0780	4.740	.0652	39.11	1.370	.0735	.1647	.2975
#3	.0940	.0602	4.705	.0640	40.66	1.375	.0802	.1644	.2975

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1811.4	5104.8	34985.	6255.9
Stddev	2.7	13.4	18.	85.1
%RSD	.15034	.26208	.05181	1.3611
#1	1811.5	5120.2	34986.	6305.0
#2	1814.1	5095.4	35002.	6305.1
#3	1808.7	5099.0	34966.	6157.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 14:21:15 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2541	41.50	2.090	2.042	2.044	41.99	2.104	2.078	2.040
Stddev	.0008	.30	.002	.009	.004	.15	.002	.002	.006
%RSD	.3304	.7126	.0809	.4499	.1922	.3591	.0876	.1101	.3201
#1	.2533	41.18	2.091	2.033	2.040	41.83	2.107	2.080	2.037
#2	.2540	41.55	2.088	2.042	2.048	42.03	2.103	2.077	2.048
#3	.2549	41.76	2.089	2.052	2.044	42.12	2.104	2.076	2.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.059	40.47	41.62	41.43	2.131	2.088	41.49	2.112	2.037
Stddev	.009	.05	.22	.13	.006	.001	.19	.004	.002
%RSD	.4240	.1204	.5327	.3152	.2774	.0410	.4656	.1883	.1131
#1	2.059	40.42	41.36	41.28	2.125	2.089	41.26	2.116	2.035
#2	2.051	40.52	41.76	41.49	2.134	2.087	41.60	2.108	2.036
#3	2.068	40.47	41.74	41.52	2.135	2.087	41.60	2.112	2.040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.078	2.081	2.017	2.152	2.145	2.131	2.044	2.097	2.145
Stddev	.005	.002	.003	.005	.013	.005	.009	.001	.002
%RSD	.2251	.0917	.1425	.2127	.6034	.2379	.4157	.0433	.0729
#1	2.083	2.081	2.020	2.156	2.130	2.129	2.036	2.096	2.147
#2	2.074	2.083	2.014	2.147	2.149	2.127	2.042	2.097	2.144
#3	2.078	2.079	2.017	2.153	2.155	2.137	2.053	2.098	2.146
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 14:21:15 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1940.1	5168.4	36094.	6182.5
Stddev	2.8	5.6	103.	23.6
%RSD	.14591	.10887	.28479	.38207
#1	1943.0	5161.9	36212.	6188.7
#2	1937.4	5171.8	36043.	6156.4
#3	1940.0	5171.6	36026.	6202.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 14:25:26 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0018	.0004	.0000	.0001	.0146	.0002	.0002	.0000
Stddev	.0003	.0074	.0003	.0002	.0000	.0025	.0000	.0001	.000
%RSD	112.1	410.5	92.15	3693000.	27.36	16.97	3.083	46.96	1440.
#1	.0005	.0083	.0007	.0002	.0001	.0166	.0002	.0002	.0004
#2	.0000	.0034	.0003	-.0001	.0001	.0153	.0002	.0001	-.0002
#3	.0001	-.0063	.0001	-.0001	.0002	.0118	.0002	.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0078	.0219	-.0041	.0002	.0007	.0052	.0003	.0002
Stddev	.0004	.0012	.0045	.0132	.0000	.0003	.0034	.0001	.0006
%RSD	1433.	15.39	20.50	320.5	9.770	36.60	66.05	42.15	269.1
#1	-.0004	.0069	.0262	-.0032	.0002	.0010	.0023	.0004	.0005
#2	.0005	.0091	.0173	.0086	.0002	.0007	.0089	.0003	-.0004
#3	.0000	.0073	.0221	-.0177	.0002	.0004	.0042	.0002	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0007	.0004	-.0004	.0002	.0004	.0006	.0000	.0002
Stddev	.0004	.0002	.0002	.0000	.0001	.0002	.0008	.0002	.0000
%RSD	260.2	25.62	59.09	5.055	43.90	43.86	140.7	556.2	18.31
#1	.0001	-.0008	.0005	-.0005	.0001	.0005	.0007	-.0002	.0002
#2	-.0002	-.0009	.0001	-.0004	.0002	.0006	.0013	.0002	.0002
#3	.0006	-.0005	.0005	-.0004	.0001	.0002	-.0003	.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 14:25:26 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2244.7**	**5481.0**	**38396.**	**6319.2**
Stddev	2.2	10.3	55.	24.2
%RSD	.09865	.18743	.14375	.38221
#1	2242.7	5469.2	38458.	6302.0
#2	2247.1	5486.5	38377.	6308.8
#3	2244.2	5487.3	38353.	6346.8

Zoom In Zoom Out

Sample Name: MP33683-S1 Acquired: 5/2/2018 14:29:57 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0362**	**99.19**	**1.924**	**1.991**	**.0478**	F **5154.**	**.0445**	**.4414**	**.4278**
Stddev	.0007	.82	.003	.017	.0006	83.	.0002	.0006	.0040
%RSD	2.000	.8269	.1357	.8386	1.196	1.603	.3578	.1456	.9458
#1	.0361	100.1	1.922	2.008	.0482	5247.	.0446	.4421	.4270
#2	.0355	99.02	1.923	1.990	.0480	5126.	.0443	.4412	.4242
#3	.0370	98.47	1.927	1.974	.0471	5088.	.0446	.4408	.4322

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3335**	**66.30**	**25.48**	**39.13**	**1.555**	**.3954**	**33.96**	**.4936**	**.6316**
Stddev	.0016	.64	.24	.16	.001	.0015	.15	.0009	.0029
%RSD	.4840	.9639	.9550	.4064	.0381	.3678	.4512	.1908	.4550
#1	.3353	66.81	25.76	39.31	1.555	.3967	34.14	.4946	.6289
#2	.3327	66.50	25.31	39.06	1.556	.3957	33.89	.4935	.6346
#3	.3324	65.58	25.36	39.02	1.555	.3939	33.86	.4927	.6313

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.2603**	**1.722**	**2.980**	**.4382**	F **47.83**	**1.290**	**1.639**	**.5346**	**.5070**
Stddev	.0087	.005	.005	.0010	.78	.004	.016	.0018	.0024
%RSD	3.361	.3222	.1717	.2342	1.624	.2847	.9484	.3398	.4652
#1	.2701	1.727	2.979	.4375	48.73	1.293	1.656	.5354	.5054
#2	.2572	1.716	2.986	.4394	47.43	1.291	1.625	.5326	.5058
#3	.2534	1.724	2.976	.4378	47.34	1.286	1.637	.5360	.5097

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1796.5**	**5052.3**	**34580.**	**6214.5**
Stddev	4.6	6.2	253.	52.4
%RSD	.25404	.12279	.73146	.84350
#1	1791.3	5049.7	34811.	6158.8
#2	1799.7	5047.9	34620.	6262.8
#3	1798.5	5059.4	34310.	6221.9

Zoom In Zoom Out

Sample Name: MP33683-S2 Acquired: 5/2/2018 14:34:35 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0401**	**95.97**	**1.915**	**2.012**	**.0476**	F **4775.**	**.0442**	**.4464**	**.4260**
Stddev	.0027	.92	.006	.012	.0010	138.	.0003	.0014	.0021
%RSD	6.815	.9570	.3254	.6036	2.035	2.890	.7558	.3039	.4833
#1	.0426	96.78	1.922	2.020	.0485	4745.	.0440	.4477	.4246
#2	.0404	96.16	1.910	2.018	.0475	4925.	.0440	.4464	.4283
#3	.0372	94.97	1.914	1.998	.0466	4654.	.0446	.4450	.4249

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3027**	**64.57**	**25.67**	**39.08**	**1.443**	**.4243**	**32.95**	**.5114**	**.5648**
Stddev	.0031	.42	.16	.49	.002	.0018	.11	.0010	.0040
%RSD	1.022	.6547	.6399	1.247	.1509	.4357	.3258	.2035	.7030
#1	.3027	64.89	25.82	39.29	1.444	.4258	33.06	.5126	.5668
#2	.2996	64.74	25.71	39.43	1.440	.4222	32.95	.5107	.5674
#3	.3058	64.09	25.49	38.52	1.444	.4250	32.84	.5109	.5602

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.3031**	**1.771**	**4.108**	**.4668**	F **42.13**	**1.446**	**1.703**	**.5263**	**.4842**
Stddev	.0059	.017	.034	.0016	.42	.017	.004	.0026	.0014
%RSD	1.933	.9671	.8195	.3396	1.008	1.175	.2168	.4927	.2878
#1	.3089	1.784	4.084	.4667	42.57	1.441	1.706	.5292	.4848
#2	.2972	1.752	4.147	.4653	42.10	1.464	1.705	.5241	.4826
#3	.3033	1.778	4.093	.4685	41.72	1.431	1.699	.5257	.4852

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1805.9**	**5044.4**	**34721.**	**6275.2**
Stddev	4.0	11.2	166.	78.8
%RSD	.22156	.22276	.47715	1.2560
#1	1805.8	5045.9	34778.	6318.6
#2	1809.9	5054.9	34850.	6184.2
#3	1801.9	5032.5	34534.	6322.7

Zoom In Zoom Out

Sample Name: FA53833-2 Acquired: 5/2/2018 14:39:11 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0024**	**21.55**	**.0241**	**.1025**	**.0002**	F **4302.**	**.0009**	**.0043**	**.1109**
Stddev	.0003	.27	.0067	.0006	.0004	40.	.0001	.0000	.0020
%RSD	12.24	1.264	27.69	.5522	181.0	.9404	12.11	.7244	1.796
#1	-.0024	21.86	.0265	.1027	.0007	4327.	.0010	.0042	.1086
#2	-.0021	21.44	.0292	.1019	.0001	4323.	.0009	.0043	.1120
#3	-.0027	21.36	.0165	.1030	-.0001	4255.	.0008	.0043	.1122

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0168**	**13.88**	**1.115**	**19.34**	**.2175**	**.0026**	**2.759**	**.0310**	**.0380**
Stddev	.0019	.09	.072	.07	.0007	.0003	.016	.0006	.0039
%RSD	11.29	.6148	6.460	.3616	.3285	12.91	.5875	1.994	10.30
#1	.0176	13.97	1.127	19.31	.2181	.0024	2.742	.0307	.0409
#2	.0182	13.81	1.180	19.42	.2175	.0024	2.763	.0306	.0336
#3	.0147	13.86	1.037	19.29	.2167	.0030	2.773	.0318	.0396

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0107**	**-.0309**	**5.712**	**.0136**	**15.19**	**.2219**	**-.0093**	**.0590**	**.0410**
Stddev	.0063	.0103	.221	.0008	.13	.0138	.0007	.0010	.0003
%RSD	58.50	33.43	3.862	5.611	.8501	6.227	7.262	1.631	.7572
#1	-.0036	-.0426	5.961	.0127	15.32	.2106	-.0086	.0592	.0407
#2	-.0154	-.0231	5.632	.0137	15.06	.2179	-.0094	.0598	.0412
#3	-.0132	-.0270	5.542	.0143	15.20	.2373	-.0100	.0579	.0412

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1854.4**	**5024.7**	**34448.**	**6165.8**
Stddev	8.2	8.4	204.	5.1
%RSD	.44181	.16787	.59228	.08224
#1	1844.9	5015.1	34556.	6165.3
#2	1858.3	5028.4	34574.	6171.1
#3	1859.8	5030.6	34212.	6161.0

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: FA53833-3 Acquired: 5/2/2018 14:43:54 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0010**	**23.08**	**.0429**	**.0895**	**.0005**	F **3980.**	**.0001**	**.0042**	**.1117**
Stddev	.0011	.05	.0047	.0007	.0002	26.	.0002	.0001	.0013
%RSD	106.5	.2261	10.98	.7910	40.34	.6549	332.6	1.808	1.189
#1	-.0001	23.03	.0447	.0903	.0007	3984.	.0001	.0042	.1132
#2	-.0007	23.13	.0376	.0889	.0004	4003.	-.0002	.0043	.1110
#3	-.0022	23.08	.0465	.0894	.0003	3952.	.0002	.0042	.1109

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0153**	**13.52**	**.8919**	**15.68**	**.2271**	**-.0004**	**4.054**	**.0266**	**.0365**
Stddev	.0025	.14	.0521	.11	.0016	.0011	.008	.0012	.0051
%RSD	16.19	1.009	5.844	.6959	.7139	250.7	.1911	4.678	13.97
#1	.0180	13.64	.9376	15.73	.2288	.0006	4.051	.0273	.0312
#2	.0146	13.56	.8351	15.55	.2256	-.0003	4.062	.0272	.0414
#3	.0132	13.37	.9029	15.75	.2268	-.0016	4.047	.0251	.0370

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0050**	**-.0281**	**3.478**	**.0118**	F **22.46**	**.2364**	**-.0154**	**.0542**	**.0249**
Stddev	.0028	.0015	.047	.0008	.07	.0018	.0034	.0022	.0002
%RSD	55.56	5.352	1.359	6.670	.3094	.7534	22.18	4.119	.9720
#1	-.0042	-.0264	3.523	.0127	22.41	.2371	-.0115	.0567	.0246
#2	-.0027	-.0288	3.483	.0112	22.42	.2377	-.0172	.0524	.0248
#3	-.0081	-.0291	3.429	.0115	22.54	.2343	-.0176	.0535	.0251

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1866.9**	**5034.7**	**34448.**	**6189.9**
Stddev	5.6	15.7	107.	26.3
%RSD	.29920	.31202	.31046	.42533
#1	1861.3	5016.7	34372.	6172.8
#2	1867.1	5045.7	34570.	6176.8
#3	1872.4	5041.8	34402.	6220.2

Zoom In Zoom Out

Sample Name: FA53833-4 Acquired: 5/2/2018 14:48:38 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0018**	**16.72**	**.0257**	**.0827**	**.0002**	F **4011.**	**.0005**	**.0045**	**.1154**
Stddev	.0015	.31	.0048	.0021	.0003	50.	.0002	.0003	.0015
%RSD	82.86	1.875	18.70	2.480	124.2	1.255	36.85	7.253	1.342
#1	-.0009	17.08	.0299	.0847	.0006	4069.	.0003	.0042	.1162
#2	-.0010	16.58	.0267	.0830	.0001	3987.	.0005	.0048	.1163
#3	-.0036	16.51	.0205	.0806	.0001	3977.	.0007	.0045	.1136

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0093**	**8.587**	**.7232**	**17.73**	**.1788**	**-.0002**	**3.906**	**.0282**	**.0298**
Stddev	.0025	.039	.1415	.13	.0001	.0007	.027	.0005	.0053
%RSD	26.33	.4572	19.56	.7396	.0641	314.4	.6988	1.885	17.81
#1	.0115	8.605	.7451	17.86	.1788	-.0006	3.930	.0277	.0245
#2	.0067	8.614	.5720	17.72	.1787	.0006	3.910	.0281	.0351
#3	.0098	8.542	.8524	17.60	.1789	-.0006	3.876	.0288	.0298

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0106**	**-.0376**	**3.551**	**.0115**	F **22.13**	**.1638**	**-.0119**	**.0514**	**.0263**
Stddev	.0027	.0023	.027	.0004	.40	.0023	.0053	.0010	.0006
%RSD	25.62	5.988	.7499	3.283	1.795	1.384	44.30	2.034	2.268
#1	-.0115	-.0382	3.535	.0112	22.58	.1612	-.0090	.0508	.0257
#2	-.0075	-.0395	3.535	.0120	21.83	.1648	-.0180	.0509	.0263
#3	-.0127	-.0351	3.581	.0115	21.98	.1654	-.0088	.0527	.0268

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1869.0**	**5101.5**	**34888.**	**6299.1**
Stddev	4.5	8.3	114.	25.9
%RSD	.24287	.16213	.32733	.41122
#1	1867.4	5108.0	35016.	6276.7
#2	1865.5	5092.2	34796.	6293.2
#3	1874.1	5104.4	34853.	6327.5

Zoom In Zoom Out

Sample Name: FA53833-5 Acquired: 5/2/2018 14:53:21 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**23.84**	**.0353**	**.0873**	**.0006**	F **3921.**	**.0004**	**.0040**	**.1564**
Stddev	.0027	.12	.0045	.0006	.0000	32.	.0001	.0006	.0012
%RSD	1931.	.5052	12.62	.7096	1.829	.8096	29.01	15.46	.7691
#1	.0013	23.98	.0308	.0880	.0006	3935.	.0004	.0033	.1551
#2	.0015	23.77	.0354	.0868	.0006	3942.	.0002	.0044	.1565
#3	-.0032	23.78	.0397	.0871	.0006	3884.	.0004	.0043	.1575

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0371**	**13.83**	**.6527**	**16.84**	**.5549**	**.0026**	**4.931**	**.0681**	**.0495**
Stddev	.0027	.08	.0273	.19	.0017	.0008	.066	.0006	.0020
%RSD	7.327	.5760	4.190	1.110	.3125	31.12	1.328	.8978	4.131
#1	.0364	13.89	.6657	16.96	.5563	.0019	4.993	.0683	.0502
#2	.0349	13.85	.6213	16.93	.5553	.0035	4.938	.0687	.0472
#3	.0402	13.74	.6712	16.62	.5529	.0023	4.863	.0675	.0511

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0142**	**-.0250**	**4.337**	**.0125**	F **25.37**	**.4031**	**-.0121**	**.0517**	**.0246**
Stddev	.0050	.0110	.031	.0017	.77	.0225	.0050	.0020	.0002
%RSD	34.90	43.82	.7201	13.96	3.037	5.580	41.31	3.835	.7420
#1	-.0196	-.0308	4.367	.0106	25.91	.3963	-.0148	.0524	.0249
#2	-.0099	-.0319	4.339	.0129	25.70	.4283	-.0063	.0532	.0245
#3	-.0130	-.0124	4.305	.0140	24.48	.3849	-.0150	.0495	.0245

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1868.1**	**5015.9**	**34374.**	**6225.3**
Stddev	2.0	5.1	176.	22.3
%RSD	.10929	.10185	.51127	.35786
#1	1867.8	5017.7	34195.	6229.4
#2	1866.2	5010.1	34379.	6201.3
#3	1870.2	5019.8	34547.	6245.2

Zoom In Zoom Out

Sample Name: FA53833-6 Acquired: 5/2/2018 14:58:03 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**-.0004**	**36.87**	**1.042**	**.2028**	**.0007**	F **5247.**	**.0013**	**.0083**
Stddev	.0014	.32	.006	.0020	.0001	57.	.0001	.0010
%RSD	343.1	.8562	.5724	.9844	19.45	1.084	10.76	11.55
#1	-.0015	37.10	1.045	.2031	.0006	5209.	.0012	.0081
#2	-.0009	37.00	1.035	.2046	.0008	5219.	.0014	.0074
#3	.0012	36.51	1.045	.2007	.0008	5312.	.0014	.0093

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**.1731**	**.0850**	**21.17**	**1.001**	**19.43**	**.7978**	**.0014**	**9.337**
Stddev	.0021	.0010	.02	.027	.15	.0073	.0002	.051
%RSD	1.240	1.172	.1075	2.680	.7559	.9132	14.38	.5505
#1	.1755	.0856	21.19	1.031	19.58	.7908	.0013	9.393
#2	.1713	.0839	21.17	.9819	19.44	.7973	.0014	9.324
#3	.1724	.0856	21.14	.9888	19.28	.8054	.0017	9.292

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**.0380**	**.1393**	**-.0058**	F **-.0589**	**3.592**	**.0160**	F **47.32**	**.6781**
Stddev	.0004	.0027	.0077	.0027	.042	.0014	.55	.0182
%RSD	1.040	1.947	131.9	4.594	1.155	8.919	1.167	2.685
#1	.0385	.1368	-.0123	-.0620	3.596	.0143	47.13	.6982
#2	.0379	.1390	-.0078	-.0570	3.631	.0170	47.94	.6627
#3	.0377	.1422	.0027	-.0577	3.548	.0166	46.88	.6734

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0111**	**.0731**	**.3513**
Stddev	.0092	.0013	.0005
%RSD	83.16	1.794	.1541
#1	-.0209	.0728	.3512
#2	-.0099	.0745	.3519
#3	-.0025	.0719	.3508

Zoom In Zoom Out

Sample Name: FA53833-6 Acquired: 5/2/2018 14:58:03 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1810.8	4937.5	33737.	6180.7
Stddev	2.9	5.3	100.	58.8
%RSD	.16133	.10808	.29741	.95180
#1	1809.2	4943.6	33634.	6240.5
#2	1814.2	4935.2	33835.	6178.8
#3	1809.0	4933.6	33743.	6122.8

Zoom In Zoom Out

Sample Name: FA53833-7 Acquired: 5/2/2018 15:02:43 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0021	20.47	.0395	.0828	.0005	F 4171.	.0003	.0045	.1005
Stddev	.0018	.21	.0029	.0010	.0001	54.	.0002	.0004	.0023
%RSD	85.95	1.017	7.385	1.236	13.12	1.283	91.84	8.687	2.261
#1	-.0036	20.70	.0374	.0840	.0005	4222.	.0003	.0045	.1021
#2	-.0025	20.40	.0428	.0821	.0006	4175.	.0005	.0041	.1014
#3	-.0001	20.30	.0382	.0823	.0005	4116.	.0000	.0049	.0979

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0139	12.80	.7756	25.55	.2204	-.0020	4.093	.0251	.0304
Stddev	.0005	.15	.0363	.51	.0007	.0000	.031	.0008	.0044
%RSD	3.450	1.182	4.680	1.981	.3135	1.242	.7492	3.096	14.32
#1	.0144	12.95	.8119	26.08	.2211	-.0020	4.124	.0246	.0255
#2	.0140	12.80	.7756	25.51	.2197	-.0021	4.091	.0246	.0320
#3	.0134	12.64	.7393	25.07	.2202	-.0021	4.062	.0260	.0338

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0079	-.0330	3.331	.0123	F 24.39	.2172	-.0101	.0625	.0219
Stddev	.0036	.0101	.070	.0011	.58	.0133	.0073	.0002	.0001
%RSD	45.78	30.51	2.117	8.949	2.385	6.138	72.39	.3533	.5595
#1	-.0056	-.0216	3.373	.0127	24.16	.2322	-.0020	.0623	.0220
#2	-.0120	-.0364	3.370	.0132	25.05	.2068	-.0161	.0627	.0218
#3	-.0060	-.0408	3.250	.0111	23.95	.2126	-.0123	.0626	.0220

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1867.6	5032.6	34107.	6160.8
Stddev	5.8	11.4	185.	31.2
%RSD	.31041	.22577	.54268	.50684
#1	1863.7	5026.6	34057.	6168.9
#2	1864.9	5025.5	34312.	6126.4
#3	1874.3	5045.7	33952.	6187.2

Zoom In Zoom Out

Sample Name: FA53833-8 Acquired: 5/2/2018 15:07:26 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0346	71.21	.1216	.4976	.0021	F 3942.	.3304	.0427	.9410
Stddev	.0023	.36	.0069	.0047	.0004	24.	.0006	.0001	.0016
%RSD	6.760	.5110	5.697	.9541	16.60	.6203	.1672	.3286	.1661
#1	.0365	71.49	.1182	.5030	.0018	3948.	.3305	.0426	.9428
#2	.0320	71.34	.1170	.4959	.0021	3915.	.3309	.0428	.9403
#3	.0353	70.80	.1296	.4940	.0025	3963.	.3298	.0427	.9398

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4034	56.68	2.893	20.31	1.737	.0758	12.28	.2043	14.81
Stddev	.0002	.42	.088	.08	.005	.0009	.08	.0005	.05
%RSD	.0377	.7489	3.031	.3921	.2840	1.183	.6732	.2499	.3482
#1	.4034	57.16	2.859	20.41	1.743	.0760	12.38	.2049	14.87
#2	.4035	56.36	2.993	20.28	1.736	.0749	12.24	.2042	14.80
#3	.4032	56.51	2.827	20.26	1.733	.0766	12.22	.2039	14.78

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0193	-.0195	3.329	.0336	F 53.32	1.446	-.0116	.3846	4.592
Stddev	.0046	.0091	.005	.0009	.74	.020	.0034	.0014	.004
%RSD	23.93	46.57	.1381	2.759	1.396	1.354	28.82	.3739	.0825
#1	.0240	-.0128	3.325	.0328	53.98	1.447	-.0153	.3851	4.596
#2	.0193	-.0159	3.334	.0334	53.46	1.426	-.0108	.3856	4.591
#3	.0147	-.0298	3.328	.0346	52.51	1.465	-.0088	.3829	4.588

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1856.8	5051.0	34983.	6301.5
Stddev	2.7	5.3	64.	40.9
%RSD	.14778	.10414	.18256	.64861
#1	1853.7	5056.7	35028.	6287.2
#2	1857.5	5050.0	35011.	6347.6
#3	1859.1	5046.3	34910.	6269.7

Zoom In Zoom Out

Sample Name: FA53833-9 Acquired: 5/2/2018 15:12:04 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0020	26.58	.1000	.1961	.0006	F 6348.	.0071	.0052	.2069
Stddev	.0013	.15	.0039	.0006	.0002	26.	.0004	.0003	.0018
%RSD	62.59	.5599	3.900	.2860	28.02	.4078	4.920	6.057	.8594
#1	-.0007	26.59	.1022	.1966	.0008	6377.	.0075	.0055	.2053
#2	-.0023	26.72	.0955	.1963	.0006	6335.	.0070	.0052	.2088
#3	-.0032	26.43	.1024	.1955	.0005	6330.	.0069	.0049	.2065

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1499	14.58	.6959	15.61	.4845	-.0010	24.46	.0203	.4735
Stddev	.0016	.10	.0457	.12	.0011	.0003	.08	.0008	.0053
%RSD	1.097	.6596	6.565	.7577	.2176	31.17	.3451	3.714	1.111
#1	.1480	14.62	.7197	15.73	.4839	-.0006	24.45	.0194	.4680
#2	.1511	14.47	.7248	15.49	.4838	-.0012	24.55	.0206	.4785
#3	.1505	14.65	.6433	15.59	.4857	-.0011	24.39	.0208	.4738

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0031	-.0479	2.774	.0122	F 94.06	.4127	-.0197	.0480	.0472
Stddev	.0056	.0106	.042	.0025	1.02	.0048	.0014	.0016	.0006
%RSD	181.9	22.15	1.526	20.78	1.082	1.172	7.278	3.303	1.305
#1	-.0081	-.0400	2.817	.0096	92.96	.4116	-.0198	.0474	.0468
#2	.0029	-.0599	2.773	.0124	94.27	.4180	-.0182	.0469	.0469
#3	-.0040	-.0436	2.732	.0147	94.96	.4086	-.0210	.0498	.0479

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1765.5	4828.6	32930.	6083.2
Stddev	4.8	7.3	56.	18.9
%RSD	.27332	.15166	.16930	.31129
#1	1764.7	4820.3	32919.	6069.0
#2	1761.1	4831.1	32881.	6104.7
#3	1770.6	4834.3	32991.	6076.0

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 15:16:41 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2461**	**40.70**	**2.023**	**1.999**	**1.979**	**40.75**	**2.041**	**2.020**	**1.988**
Stddev	.0006	.22	.001	.006	.010	.24	.001	.002	.006
%RSD	.2567	.5527	.0496	.3058	.5009	.5858	.0508	.1182	.3288
#1	.2468	40.70	2.024	1.997	1.973	40.71	2.041	2.018	1.992
#2	.2459	40.93	2.023	2.006	1.991	41.01	2.042	2.022	1.981
#3	.2455	40.48	2.022	1.995	1.974	40.53	2.040	2.018	1.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.007**	**39.19**	**40.87**	**40.63**	**2.077**	**2.034**	**40.59**	**2.048**	**1.979**
Stddev	.005	.23	.18	.21	.010	.002	.15	.003	.002
%RSD	.2708	.5847	.4392	.5131	.4962	.0926	.3771	.1498	.1185
#1	2.004	39.01	40.72	40.60	2.076	2.032	40.53	2.048	1.978
#2	2.003	39.45	41.07	40.85	2.067	2.034	40.77	2.051	1.978
#3	2.013	39.10	40.83	40.44	2.088	2.036	40.48	2.045	1.982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.018**	**2.012**	**1.953**	**2.083**	**2.090**	**2.073**	**1.988**	**2.039**	**2.082**
Stddev	.004	.006	.002	.004	.006	.009	.002	.012	.003
%RSD	.2127	.3068	.0998	.1949	.2746	.4587	.1034	.5702	.1372
#1	2.023	2.014	1.952	2.083	2.092	2.072	1.986	2.036	2.082
#2	2.017	2.006	1.955	2.087	2.094	2.064	1.990	2.029	2.085
#3	2.014	2.017	1.952	2.079	2.084	2.083	1.989	2.052	2.079
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 15:16:41 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1973.9**	**5273.5**	**36736.**	**6266.3**
Stddev	4.5	14.5	89.	75.3
%RSD	.22564	.27407	.24260	1.2017
#1	1971.1	5265.5	36719.	6275.1
#2	1971.5	5264.9	36832.	6187.0
#3	1979.0	5290.2	36656.	6336.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 15:20:53 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0188**	**.0005**	**.0002**	**.0001**	**.0205**	**.0001**	**.0003**	**.0003**
Stddev	.0001	.0125	.0009	.0002	.0000	.0007	.0000	.0000	.0001
%RSD	17.42	66.60	176.2	78.79	31.51	3.182	26.04	14.43	20.85
#1	.0005	.0157	.0000	.0003	.0002	.0210	.0001	.0003	.0002
#2	.0007	.0081	.0015	.0000	.0001	.0208	.0001	.0002	.0004
#3	.0006	.0326	-.0001	.0004	.0001	.0198	.0002	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0072**	**-.0126**	**-.0084**	**.0002**	**.0009**	**.0063**	**.0001**	**.0005**
Stddev	.0002	.0025	.0253	.0153	.0000	.0003	.0108	.0002	.0010
%RSD	45.99	34.98	200.2	182.5	24.44	31.99	170.5	127.2	206.2
#1	.0006	.0099	-.0283	-.0232	.0002	.0012	-.0054	.0001	.0012
#2	.0002	.0050	-.0261	-.0094	.0002	.0009	.0158	.0003	.0009
#3	.0004	.0066	.0165	.0074	.0001	.0007	.0085	.0000	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0010**	**-.0014**	**.0008**	**-.0005**	**.0003**	**.0004**	**.0007**	**.0001**	**.0003**
Stddev	.0001	.0004	.0002	.0003	.0000	.0001	.0010	.0002	.0000
%RSD	12.36	26.41	28.68	56.79	8.446	25.38	130.9	253.2	9.093
#1	-.0010	-.0015	.0008	-.0003	.0003	.0005	.0016	.0000	.0003
#2	-.0009	-.0018	.0006	-.0003	.0003	.0004	.0010	.0000	.0003
#3	-.0012	-.0010	.0011	-.0008	.0003	.0003	-.0003	.0003	.0003
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 15:20:53 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2258.2**	**5517.2**	**38652.**	**6367.4**
Stddev	4.2	12.7	212.	14.3
%RSD	.18403	.23012	.54914	.22524
#1	2260.2	5524.7	38834.	6383.9
#2	2253.5	5524.3	38703.	6358.0
#3	2261.1	5502.5	38419.	6360.3

Zoom In Zoom Out

Sample Name: FA53833-10 Acquired: 5/2/2018 15:25:23 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0011	114.0	.4182	.6498	.0035	F 4815.	.0317	.0156	.6262
Stddev	.0021	.1	.0032	.0026	.0001	44.	.0003	.0002	.0007
%RSD	198.8	.0932	.7766	.3938	2.415	.9093	.8634	1.485	.1118
#1	-.0014	113.9	.4216	.6504	.0034	4768.	.0317	.0157	.6257
#2	.0025	114.1	.4152	.6470	.0036	4824.	.0314	.0158	.6259
#3	.0021	113.9	.4178	.6520	.0035	4854.	.0320	.0153	.6270

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5063	71.34	1.939	19.03	2.083	.0149	11.69	.1070	13.86
Stddev	.0045	.20	.070	.18	.010	.0005	.01	.0008	.02
%RSD	.8848	.2752	3.588	.9567	.4598	3.240	.0773	.7671	.1652
#1	.5027	71.11	1.909	18.99	2.074	.0154	11.69	.1061	13.88
#2	.5113	71.48	1.889	19.23	2.084	.0149	11.70	.1075	13.87
#3	.5048	71.42	2.018	18.88	2.093	.0144	11.69	.1074	13.83

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0700	-.0287	3.628	.0270	F 50.58	1.593	-.0102	.3654	.4515
Stddev	.0049	.0070	.097	.0026	.87	.014	.0020	.0010	.0009
%RSD	6.943	24.49	2.672	9.506	1.718	.8913	19.58	.2838	.1947
#1	.0658	-.0236	3.563	.0242	49.58	1.606	-.0115	.3652	.4511
#2	.0753	-.0258	3.582	.0275	51.09	1.593	-.0079	.3665	.4525
#3	.0690	-.0367	3.740	.0293	51.08	1.578	-.0112	.3644	.4509

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1779.4	5044.7	34849.	6390.8
Stddev	4.6	12.1	104.	52.7
%RSD	.25645	.23953	.29748	.82394
#1	1775.7	5050.6	34772.	6447.8
#2	1784.5	5052.6	34808.	6343.9
#3	1778.1	5030.8	34966.	6380.6

Zoom In Zoom Out

Sample Name: FA53833-11 Acquired: 5/2/2018 15:30:03 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0126	36.99	.1123	.6237	.0006	F 5393.	.0442	.0124	.2593
Stddev	.0009	.17	.0061	.0071	.0004	38.	.0003	.0003	.0047
%RSD	7.500	.4555	5.392	1.130	66.65	.7068	.6001	2.771	1.799
#1	.0137	37.18	.1054	.6318	.0010	5432.	.0442	.0122	.2646
#2	.0120	36.84	.1169	.6191	.0002	5391.	.0444	.0128	.2574
#3	.0121	36.96	.1146	.6202	.0007	5356.	.0439	.0123	.2558

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1597	28.14	.8249	15.38	.5542	.0086	17.13	.0788	12.52
Stddev	.0000	.24	.0690	.11	.0040	.0003	.09	.0011	.03
%RSD	.0209	.8554	8.359	.6892	.7172	3.644	.5218	1.400	.2249
#1	.1597	28.37	.7747	15.40	.5570	.0089	17.19	.0778	12.55
#2	.1597	28.14	.9036	15.47	.5559	.0085	17.18	.0785	12.50
#3	.1597	27.89	.7965	15.26	.5496	.0083	17.03	.0800	12.50

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0937	-.0308	2.471	.0198	F 70.19	.6850	-.0155	.1458	.3099
Stddev	.0049	.0101	.023	.0010	.67	.0068	.0016	.0005	.0014
%RSD	5.258	32.72	.9341	5.267	.9498	.9924	10.53	.3745	.4659
#1	.0964	-.0192	2.497	.0187	69.61	.6925	-.0142	.1452	.3116
#2	.0967	-.0371	2.462	.0198	70.92	.6793	-.0149	.1459	.3090
#3	.0880	-.0360	2.454	.0208	70.03	.6831	-.0173	.1462	.3092

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1807.9	4905.4	33581.	6157.2
Stddev	.9	7.0	44.	24.1
%RSD	.05185	.14317	.13192	.39163
#1	1807.8	4897.9	33543.	6140.7
#2	1808.8	4906.5	33570.	6184.8
#3	1806.9	4911.8	33630.	6146.0

Zoom In Zoom Out

Sample Name: FA53833-12 Acquired: 5/2/2018 15:34:43 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0015	9.048	.0294	.1852	.0000	F 6065.	.0185	.0055	.1379
Stddev	.0015	.079	.0047	.0012	.0002	106.	.0002	.0007	.0018
%RSD	103.4	.8773	16.16	.6227	483.7	1.755	.9945	12.09	1.297
#1	.0032	9.137	.0323	.1858	-.0001	6173.	.0186	.0057	.1361
#2	.0005	8.984	.0319	.1860	.0000	5960.	.0186	.0048	.1397
#3	.0006	9.024	.0239	.1839	.0003	6062.	.0183	.0060	.1378

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0445	6.136	.8158	13.47	.1900	.0028	21.06	.0203	1.481
Stddev	.0010	.007	.1177	.15	.0004	.0001	.04	.0004	.009
%RSD	2.135	.1195	14.43	1.126	.1846	2.861	.2039	1.907	.6068
#1	.0448	6.142	.8460	13.62	.1904	.0028	21.11	.0202	1.492
#2	.0434	6.137	.6859	13.32	.1899	.0029	21.02	.0207	1.474
#3	.0453	6.128	.9154	13.48	.1898	.0028	21.05	.0199	1.479

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0015	-.0393	2.248	.0122	F 86.83	.2016	-.0117	.0358	.2239
Stddev	.0045	.0108	.015	.0022	.54	.0068	.0044	.0011	.0002
%RSD	301.1	27.54	.6771	17.71	.6261	3.368	38.01	3.163	.0996
#1	.0037	-.0473	2.265	.0140	86.66	.2047	-.0104	.0349	.2241
#2	-.0044	-.0270	2.239	.0128	87.44	.2063	-.0166	.0371	.2239
#3	-.0038	-.0438	2.239	.0098	86.39	.1938	-.0080	.0355	.2236

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1780.9	4817.1	32702.	6022.0
Stddev	1.3	1.2	59.	36.3
%RSD	.07208	.02485	.17912	.60346
#1	1780.5	4818.2	32768.	6008.3
#2	1782.3	4815.8	32656.	6063.3
#3	1779.8	4817.2	32681.	5994.6

Zoom In Zoom Out

Sample Name: FA53833-13 Acquired: 5/2/2018 15:39:25 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	5.260	.0234	.1547	-.0001	F 6744.	.0057	.0030	.1044
Stddev	.0010	.075	.0035	.0008	.0002	23.	.0003	.0007	.0014
%RSD	248.9	1.434	14.93	.5266	108.4	.3403	4.461	22.59	1.347
#1	.0007	5.173	.0246	.1549	-.0001	6727.	.0058	.0025	.1044
#2	-.0009	5.293	.0194	.1538	.0000	6734.	.0055	.0028	.1059
#3	-.0010	5.313	.0261	.1554	-.0003	6770.	.0059	.0038	.1031

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0249	3.494	.5919	14.99	.1090	.0003	28.25	.0158	.7187
Stddev	.0007	.039	.0979	.19	.0004	.0008	.19	.0011	.0121
%RSD	2.793	1.106	16.54	1.262	.3428	240.9	.6763	6.729	1.677
#1	.0256	3.530	.6678	15.18	.1094	.0012	28.41	.0170	.7326
#2	.0247	3.498	.6265	15.00	.1090	-.0004	28.29	.0151	.7109
#3	.0243	3.453	.4814	14.80	.1086	.0002	28.04	.0152	.7127

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0034	-.0475	1.437	.0111	F 113.9	.1537	-.0094	.0323	.0470
Stddev	.0021	.0095	.061	.0014	.8	.0062	.0066	.0007	.0005
%RSD	61.42	20.09	4.238	12.61	.6628	4.012	69.89	2.277	1.103
#1	-.0055	-.0469	1.503	.0102	114.2	.1480	-.0096	.0316	.0476
#2	-.0035	-.0382	1.426	.0127	113.1	.1603	-.0028	.0330	.0466
#3	-.0013	-.0572	1.383	.0103	114.5	.1527	-.0159	.0322	.0468

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1756.8	4774.7	32400.	5986.9
Stddev	2.9	3.4	90.	16.3
%RSD	.16518	.07209	.27791	.27171
#1	1757.8	4777.4	32495.	5979.4
#2	1759.0	4775.9	32315.	6005.6
#3	1753.5	4770.8	32390.	5975.8

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: FA53762-1 Acquired: 5/2/2018 15:44:06 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0019**	**385.8**	**.1207**	**3.202**	**.0116**	**106.1**	**-.0012**	**.2315**	**.7758**
Stddev	.0014	4.2	.0039	.033	.0001	1.4	.0006	.0008	.0024
%RSD	73.13	1.100	3.223	1.025	.8466	1.299	49.97	.3298	.3116
#1	-.0028	381.4	.1229	3.168	.0117	104.9	-.0006	.2324	.7781
#2	-.0003	386.4	.1162	3.203	.0115	105.8	-.0010	.2310	.7733
#3	-.0027	389.8	.1230	3.233	.0115	107.6	-.0018	.2311	.7761

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6184**	**512.6**	**47.38**	**123.3**	**10.88**	**.0111**	**3.708**	**.7087**	**.1976**
Stddev	.0049	6.2	.54	2.1	.05	.0002	.048	.0005	.0036
%RSD	.7901	1.218	1.137	1.680	.4654	1.679	1.299	.0704	1.823
#1	.6233	507.1	46.78	122.3	10.92	.0113	3.686	.7093	.1985
#2	.6135	511.3	47.54	122.0	10.91	.0111	3.675	.7084	.2007
#3	.6184	519.4	47.82	125.7	10.82	.0109	3.764	.7084	.1936

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0113**	**-.0197**	**5.617**	**.0209**	**1.037**	**10.18**	**.0023**	**1.201**	**1.329**
Stddev	.0067	.0073	.072	.0008	.009	.06	.0052	.005	.002
%RSD	59.48	37.35	1.279	4.017	.8717	.6042	230.0	.4031	.1819
#1	.0071	-.0245	5.603	.0213	1.028	10.22	.0077	1.206	1.327
#2	.0190	-.0112	5.694	.0215	1.037	10.20	-.0028	1.203	1.328
#3	.0077	-.0233	5.552	.0199	1.046	10.11	.0019	1.196	1.332

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2085.2**	**5908.6**	**40967.**	**7046.3**
Stddev	6.3	6.0	181.	186.7
%RSD	.30040	.10121	.44186	2.6490
#1	2078.6	5906.3	41173.	7205.7
#2	2091.1	5915.4	40900.	7092.3
#3	2085.8	5904.1	40830.	6841.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/2/2018 15:48:26 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0091**	**.1998**	**.0100**	**.1924**	**.0047**	**.9922**	**.0049**	**.0491**	**.0097**
Stddev	.0004	.0036	.0011	.0008	.0000	.0031	.0001	.0001	.0003
%RSD	3.925	1.812	11.20	.4301	1.005	.3171	1.108	.3029	3.523
#1	.0093	.1973	.0106	.1920	.0047	.9911	.0050	.0489	.0094
#2	.0092	.1982	.0107	.1919	.0048	.9897	.0049	.0491	.0101
#3	.0087	.2040	.0087	.1934	.0047	.9957	.0049	.0492	.0096

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0243**	**.2965**	**9.750**	**4.867**	**.0153**	**.0441**	**9.625**	**.0403**	**.0049**
Stddev	.0003	.0035	.019	.075	.0001	.0001	.021	.0000	.0003
%RSD	1.176	1.170	.1953	1.535	.8606	.2333	.2205	.0823	6.938
#1	.0245	.2989	9.772	4.783	.0151	.0442	9.646	.0403	.0052
#2	.0240	.2981	9.737	4.890	.0154	.0442	9.604	.0404	.0049
#3	.0244	.2926	9.741	4.927	.0153	.0440	9.623	.0403	.0045

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0030**	**.0079**	**.0083**	**.0487**	**.0097**	**.0098**	**.0082**	**.0467**	**.0203**
Stddev	.0005	.0009	.0004	.0001	.0001	.0002	.0011	.0002	.0002
%RSD	17.27	11.31	4.493	.1837	1.529	1.599	13.83	.3486	.7670
#1	.0035	.0069	.0079	.0486	.0096	.0099	.0083	.0469	.0203
#2	.0026	.0087	.0086	.0488	.0099	.0097	.0093	.0466	.0202
#3	.0028	.0081	.0082	.0487	.0097	.0097	.0070	.0467	.0205

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2218.7**	**5495.3**	**38014.**	**6275.3**
Stddev	1.9	13.8	77.	34.8
%RSD	.08413	.25064	.20213	.55388
#1	2217.4	5510.7	37957.	6314.6
#2	2217.8	5484.3	37984.	6262.7
#3	2220.8	5490.8	38101.	6248.6

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/2/2018 15:52:54 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**F 517.4**	**.0004**	**.0002**	**-.0001**	**451.9**	**.0006**	**.0001**	**.0009**
Stddev	.0001	14.2	.0002	.0000	.0001	13.9	.0001	.0001	.0006
%RSD	184.3	2.737	44.86	15.68	107.1	3.068	21.62	84.50	70.84
#1	.0001	525.5	.0002	.0002	-.0001	462.2	.0005	.0003	.0012
#2	.0000	525.7	.0005	.0002	.0000	457.4	.0006	.0001	.0002
#3	.0001	501.1	.0004	.0002	.0000	436.1	.0007	.0000	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0013**	**172.3**	**-.0153**	**490.8**	**.0009**	**.0007**	**.1077**	**-.0005**	**-.0036**
Stddev	.0002	1.1	.0245	5.7	.0000	.0008	.0060	.0001	.0027
%RSD	14.68	.6519	160.5	1.168	3.124	108.3	5.554	19.24	75.61
#1	-.0011	172.7	-.0083	495.1	.0009	.0017	.1041	-.0006	-.0052
#2	-.0015	173.2	-.0425	492.9	.0009	.0001	.1044	-.0006	-.0051
#3	-.0013	171.0	.0050	484.3	.0009	.0004	.1146	-.0004	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0029**	**-.0013**	**.0052**	**-.0011**	**.0000**	**-.0017**	**-.0001**	**.0005**	**-.0003**
Stddev	.0020	.0029	.0009	.0003	.0008	.0001	.0008	.0001	.0002
%RSD	71.13	222.0	18.36	27.93	1825.	4.180	572.3	29.42	54.36
#1	.0050	.0020	.0060	-.0010	-.0005	-.0016	-.0010	.0006	-.0002
#2	.0027	-.0026	.0042	-.0014	-.0003	-.0017	.0006	.0003	-.0005
#3	.0009	-.0033	.0053	-.0008	.0009	-.0017	.0000	.0005	-.0002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1767.9**	**4932.6**	**33256.**	**6037.3**
Stddev	3.0	7.6	139.	117.3
%RSD	.17141	.15345	.41807	1.9433
#1	1765.3	4939.8	33406.	5961.9
#2	1767.2	4933.3	33230.	5977.6
#3	1771.2	4924.7	33131.	6172.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/2/2018 15:57:32 Type: Unk
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**F 1.072**	**F 513.3**	**1.013**	**.5004**	**.4799**	**463.3**	**.9153**	**.4633**	**.4705**
Stddev	.004	2.6	.002	.0017	.0001	1.3	.0027	.0013	.0019
%RSD	.3496	.5005	.2155	.3319	.0232	.2806	.2951	.2851	.4075
#1	1.076	513.8	1.015	.4994	.4799	464.7	.9184	.4648	.4707
#2	1.069	510.4	1.013	.5023	.4800	462.1	.9145	.4629	.4723
#3	1.071	515.5	1.011	.4994	.4798	463.1	.9132	.4623	.4685

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5226**	**169.0**	**-.0001**	**498.0**	**.4962**	**.8532**	**.1235**	**.9335**	**.9300**
Stddev	.0019	.2	.0103	1.7	.0022	.0021	.0010	.0024	.0040
%RSD	.3699	.1210	11710.	.3449	.4517	.2439	.7853	.2588	.4320
#1	.5227	168.9	-.0118	496.8	.4983	.8556	.1239	.9363	.9344
#2	.5206	169.2	.0072	500.0	.4965	.8520	.1242	.9325	.9289
#3	.5244	168.9	.0043	497.3	.4938	.8521	.1224	.9317	.9266

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.9430**	**.9136**	**.1205**	**.8912**	**.9605**	**.9419**	**.8784**	**.4694**	**.9314**
Stddev	.0048	.0066	.0005	.0023	.0050	.0022	.0062	.0024	.0041
%RSD	.5083	.7262	.3900	.2566	.5238	.2286	.7063	.5024	.4363
#1	.9484	.9213	.1200	.8938	.9573	.9444	.8852	.4680	.9359
#2	.9393	.9095	.1209	.8903	.9663	.9408	.8773	.4721	.9306
#3	.9412	.9102	.1207	.8896	.9578	.9406	.8729	.4681	.9279

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1717.2**	**4853.4**	**32808.**	**5971.0**
Stddev	3.6	9.9	203.	40.3
%RSD	.21090	.20493	.61820	.67446
#1	1713.2	4842.0	32690.	5973.9
#2	1718.0	4860.3	32692.	5929.4
#3	1720.3	4857.9	33042.	6009.8

Inst QC: MA14869

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 16:02:03 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2538	42.17	2.078	2.081	2.036	41.88	2.090	2.077	2.047
Stddev	.0017	.07	.004	.010	.005	.11	.002	.002	.015
%RSD	.6560	.1567	.1925	.4622	.2238	.2535	.0986	.1074	.7497
#1	.2555	42.09	2.074	2.092	2.039	41.86	2.088	2.075	2.062
#2	.2539	42.21	2.081	2.077	2.031	41.78	2.092	2.079	2.032
#3	.2521	42.20	2.081	2.073	2.038	41.99	2.092	2.076	2.047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.070	40.57	42.25	42.01	2.129	2.093	41.92	2.093	2.033
Stddev	.005	.11	.23	.05	.009	.004	.21	.003	.003
%RSD	.2247	.2819	.5493	.1265	.4452	.1984	.4899	.1377	.1252
#1	2.070	40.70	42.46	42.03	2.138	2.088	42.14	2.090	2.034
#2	2.066	40.47	42.00	42.06	2.119	2.095	41.73	2.096	2.030
#3	2.075	40.55	42.28	41.96	2.131	2.096	41.88	2.093	2.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.071	2.075	2.006	2.120	2.157	2.127	2.042	2.088	2.121
Stddev	.006	.004	.004	.004	.002	.005	.007	.012	.002
%RSD	.3070	.1904	.1776	.1644	.0806	.2295	.3604	.5558	.1138
#1	2.064	2.078	2.001	2.117	2.158	2.129	2.044	2.099	2.118
#2	2.077	2.071	2.008	2.124	2.155	2.121	2.034	2.076	2.122
#3	2.072	2.075	2.007	2.121	2.156	2.131	2.048	2.087	2.122
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA14869 page 105 of 108

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/2/2018 16:02:03 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1932.5	5191.5	36050.	6058.8
Stddev	2.0	5.7	227.	34.6
%RSD	.10504	.10906	.62862	.57056
#1	1931.9	5196.9	35836.	6032.9
#2	1934.8	5185.6	36288.	6098.0
#3	1930.9	5191.9	36026.	6045.3

Raw Data MA14869 page 106 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 16:06:14 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0154	.0005	.0002	.0001	.0149	.0002	.0003	.0001
Stddev	.0002	.0079	.0002	.0001	.0000	.0015	.0001	.0001	.0001
%RSD	116.4	51.35	43.48	46.60	38.11	10.31	24.53	20.18	42.43
#1	.0000	.0068	.0003	.0001	.0001	.0143	.0002	.0003	.0002
#2	.0004	.0170	.0006	.0002	.0001	.0138	.0003	.0003	.0001
#3	.0002	.0224	.0007	.0003	.0001	.0167	.0003	.0004	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0084	-.0023	-.0037	.0002	.0009	.0048	.0004	.0006
Stddev	.0001	.0010	.0054	.0060	.0000	.0003	.0020	.0001	.0006
%RSD	82.14	11.65	235.7	159.2	8.550	32.64	41.18	12.75	106.5
#1	.0000	.0090	.0010	.0028	.0002	.0012	.0061	.0004	.0012
#2	.0002	.0073	.0006	-.0051	.0002	.0008	.0025	.0005	.0002
#3	.0002	.0089	-.0086	-.0089	.0002	.0006	.0056	.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	-.0002	.0005	-.0002	.0001	.0002	.0005	.0002	.0013
Stddev	.0002	.0013	.0002	.0002	.0001	.0001	.0005	.0001	.0001
%RSD	22.49	673.1	28.70	125.7	68.74	46.15	112.0	52.44	4.032
#1	-.0010	-.0010	.0004	-.0004	.0001	.0003	.0011	.0003	.0013
#2	-.0007	-.0009	.0007	.0001	.0001	.0001	.0003	.0002	.0012
#3	-.0006	.0013	.0006	-.0002	.0002	.0002	.0000	.0001	.0013
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Raw Data MA14869 page 107 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/2/2018 16:06:14 Type: QC
Method: 60102007_042011(v104) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2255.5	5548.5	38521.	6259.0
Stddev	8.1	5.2	219.	15.6
%RSD	.35761	.09437	.56909	.24868
#1	2264.8	5554.5	38284.	6273.0
#2	2251.9	5546.1	38560.	6242.3
#3	2249.9	5544.9	38717.	6261.7

Raw Data MA14869 page 108 of 108

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000010	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000078	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000005	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000078	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000007	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000003	0.000000	No
			Fe	-0.000010	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000139	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	0.000001	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000013	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000033	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000193	0.000000	No
			Fe	0.000056	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000003	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	-0.000000	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	0.000034	0.000000	No
			Ca	0.000008	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000031	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000054	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000011	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	-0.000017	0.000000	No
			Al	-0.000010	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000000	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000005	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	-0.000001	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000028	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.000295	0.482050	0.000000	1.000000
Al 396.152 { 85}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.005630	0.117509	0.000000	1.000000
As 189.042 {478}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.000355	0.166739	0.000000	1.000000
Ba 455.403 { 74}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.002244	8.793501	0.000000	1.000000
Be 313.042 {108}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.000291	8.290436	0.000000	1.000000
Ca 317.933 {106}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.002491	0.252475	0.000000	1.000000
Cd 226.502 {449}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.001155	5.057722	0.000000	1.000000
Co 228.616 {447}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.000850	2.663529	0.000000	1.000000
Cr 267.716 {126}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.000224	0.417969	0.000000	1.000000
Cu 324.754 {104}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.004095	0.580468	0.000000	1.000000
Fe 259.940 {130}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.001735	0.140478	0.000000	1.000000
In 230.606 {446}*	5/2/2018 10:41:33	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.000834	0.087276	0.000000	1.000000
Mg 279.079 {121}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.000146	0.018163	0.000000	1.000000
Mn 257.610 {131}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.000420	2.580279	0.000000	1.000000
Mo 202.030 {467}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.001355	0.925803	0.000000	1.000000
Na 589.592 { 57}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.001437	0.351395	0.000000	1.000000
Ni 231.604 {445}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.000124	1.686026	0.000000	1.000000
Pb 220.353 {453}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.001230	1.193675	0.000000	1.000000
Sb 206.833 {463}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.000328	0.221627	0.000000	1.000000
Se 196.090 {472}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.000016	0.110746	0.000000	1.000000
Si 212.412 {459}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.003198	0.323406	0.000000	1.000000
Sn 189.989 {477}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.000446	0.389172	0.000000	1.000000
Sr 407.771 { 83}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.000651	10.707477	0.000000	1.000000
Ti 334.941 {101}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.002027	1.590894	0.000000	1.000000
Tl 190.856 {477}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.001210	0.353405	0.000000	1.000000
V 292.402 {115}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	-0.000276	0.659836	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/2/2018 10:41:33	5/2/2018 10:15:52	Linear	1/Conc	0.001527	2.594050	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999990	0.000021	0.000472	0.001574	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999923	0.002358	0.009721	0.032403	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999896	0.000194	0.000843	0.002809	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999929	0.008426	0.000183	0.000609	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999850	0.011556	0.000061	0.000204	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999709	0.009806	0.002470	0.008233	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999867	0.006650	0.000045	0.000151	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999904	0.002972	0.000098	0.000325	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999892	0.000495	0.000309	0.001030	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999932	0.000543	0.000314	0.001047	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999694	0.005602	0.002164	0.007214	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999853	0.002410	0.025774	0.085913	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999801	0.000584	0.019828	0.066093	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999641	0.005569	0.000046	0.000154	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999821	0.001410	0.000153	0.000509	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999822	0.010691	0.006432	0.021441	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999864	0.002240	0.000157	0.000523	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999845	0.001697	0.000532	0.001773	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999910	0.000240	0.001035	0.003449	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999923	0.000110	0.001839	0.006129	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.998541	0.001408	0.000510	0.001700	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999729	0.000730	0.000318	0.001059	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999657	0.022611	0.000089	0.000296	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999761	0.002801	0.000123	0.000411	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999881	0.000441	0.000981	0.003270	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999811	0.001018	0.000261	0.000869	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999810	0.004071	0.000065	0.000216	OK.	1.000000	0.000000	1	0

Inst QC: MA14898

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/15/2018 9:25:52 Type: Cal
Method: 60102007_042011(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0004**	**-.0043**	**.0000**	**.0099**	**.0044**	**.0111**	**.0039**	**.0017**	**.0002**
Stddev	.0004	.0020	.000	.0021	.0014	.0010	.0009	.0007	.0001
%RSD	108.8	46.90	397.8	20.95	30.91	8.636	22.81	40.24	31.84
#1	-.0008	-.0055	.0002	.0075	.0029	.0100	.0036	.0017	.0001
#2	-.0001	-.0020	-.0002	.0110	.0053	.0115	.0049	.0025	.0003
#3	-.0002	-.0053	-.0001	.0112	.0052	.0118	.0032	.0011	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0087**	**.0059**	**-.0007**	**.0000**	**.0023**	**.0069**	**.0225**	**.0029**	**-.0018**
Stddev	.0000	.0004	.0043	.001	.0002	.0011	.0023	.0003	.0009
%RSD	.4353	6.254	590.7	1271.	9.220	16.38	10.39	10.74	48.91
#1	.0087	.0061	.0019	-.0006	.0022	.0082	.0199	.0031	-.0010
#2	.0087	.0062	.0016	.0001	.0022	.0067	.0244	.0031	-.0027
#3	.0088	.0055	-.0057	.0004	.0026	.0059	.0231	.0026	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0007**	**.0008**	**.0044**	**.0011**	**.0069**	**.0046**	**-.0017**	**-.0003**	**.0045**
Stddev	.0001	.0003	.0001	.0001	.0019	.0002	.0002	.0001	.0005
%RSD	20.31	36.95	2.881	12.04	27.72	3.442	11.75	52.53	11.61
#1	.0006	.0009	.0042	.0012	.0081	.0048	-.0018	-.0001	.0042
#2	.0009	.0011	.0044	.0012	.0078	.0045	-.0015	-.0004	.0050
#3	.0007	.0005	.0044	.0009	.0047	.0046	-.0018	-.0002	.0041

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1950.2**	**4866.7**	**26147.**	**2358.2**
Stddev	4.4	14.3	37.	14.0
%RSD	.22700	.29461	.14151	.59396
#1	1948.4	4868.3	26108.	2342.3
#2	1955.2	4880.2	26181.	2368.7
#3	1946.9	4851.6	26152.	2363.7

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/15/2018 9:30:19 Type: Cal
Method: 60102007_042011(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0332**	**1.478**	**.0948**	**4.884**	**3.872**	**2.973**	**2.500**	**1.288**	**.2158**
Stddev	.0006	.002	.0004	.011	.002	.004	.002	.001	.0007
%RSD	1.823	.1575	.4084	.2341	.0554	.1435	.0603	.1068	.3284
#1	.0339	1.479	.0948	4.893	3.871	2.974	2.502	1.288	.2153
#2	.0329	1.476	.0952	4.871	3.870	2.977	2.499	1.289	.2166
#3	.0327	1.480	.0944	4.887	3.874	2.969	2.500	1.286	.2156

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3239**	**1.400**	**1.013**	**.2780**	**1.424**	**.4567**	**4.036**	**.7046**	**.5081**
Stddev	.0003	.004	.005	.0020	.005	.0002	.024	.0015	.0007
%RSD	.0990	.3249	.4753	.7281	.3382	.0399	.5852	.2089	.1281
#1	.3236	1.396	1.010	.2779	1.420	.4567	4.028	.7029	.5074
#2	.3239	1.401	1.019	.2760	1.429	.4570	4.018	.7058	.5084
#3	.3242	1.405	1.010	.2800	1.423	.4566	4.063	.7050	.5085

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1093**	**.0717**	**.1948**	**.2048**	**5.650**	**.7338**	**.1545**	**.3028**	**1.420**
Stddev	.0006	.0004	.0004	.0000	.011	.0024	.0002	.0008	.001
%RSD	.5279	.5662	.2125	.0237	.1949	.3337	.1410	.2708	.0388
#1	.1097	.0714	.1944	.2048	5.640	.7360	.1546	.3024	1.420
#2	.1096	.0715	.1953	.2048	5.648	.7341	.1542	.3038	1.421
#3	.1087	.0722	.1948	.2049	5.662	.7312	.1546	.3023	1.420

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1921.3**	**4818.5**	**25666.**	**2348.8**
Stddev	3.8	5.8	145.	8.2
%RSD	.19675	.12129	.56457	.34919
#1	1917.6	4814.6	25810.	2351.8
#2	1921.0	4815.6	25520.	2355.1
#3	1925.2	4825.2	25668.	2339.6

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/15/2018 9:33:44 Type: Cal
Method: 60102007_042011(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1295**	**5.977**	**.3919**	**19.51**	**15.48**	**11.79**	**10.08**	**5.198**	**.8581**
Stddev	.0002	.030	.0014	.09	.07	.05	.03	.012	.0040
%RSD	.1785	.5006	.3500	.4719	.4440	.4060	.2886	.2289	.4700
#1	.1294	5.986	.3911	19.54	15.56	11.84	10.07	5.200	.8607
#2	.1294	6.002	.3935	19.59	15.46	11.79	10.11	5.209	.8601
#3	.1298	5.944	.3912	19.41	15.43	11.74	10.05	5.185	.8535

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.293**	**5.353**	**4.121**	**1.117**	**5.642**	**1.957**	**16.07**	**2.822**	**2.091**
Stddev	.004	.023	.018	.004	.015	.003	.06	.004	.004
%RSD	.3287	.4324	.4474	.3480	.2689	.1362	.3800	.1225	.1774
#1	1.296	5.379	4.141	1.122	5.643	1.958	16.11	2.823	2.087
#2	1.295	5.343	4.117	1.114	5.657	1.960	16.09	2.825	2.094
#3	1.288	5.337	4.105	1.116	5.627	1.954	16.00	2.818	2.092

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4485**	**.2916**	**.6093**	**.8724**	**23.58**	**3.054**	**.6524**	**1.291**	**5.677**
Stddev	.0008	.0004	.0021	.0027	.12	.004	.0022	.004	.012
%RSD	.1795	.1518	.3421	.3139	.4947	.1263	.3374	.2770	.2182
#1	.4491	.2915	.6099	.8715	23.60	3.055	.6535	1.287	5.674
#2	.4488	.2921	.6111	.8755	23.69	3.057	.6538	1.294	5.691
#3	.4476	.2912	.6070	.8703	23.46	3.049	.6499	1.290	5.667

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1833.4**	**4678.8**	**25301.**	**2323.1**
Stddev	2.2	11.5	93.	15.0
%RSD	.11973	.24531	.36621	.64666
#1	1834.6	4676.6	25295.	2305.8
#2	1830.8	4668.6	25211.	2332.9
#3	1834.7	4691.2	25396.	2330.5

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/15/2018 9:37:29 Type: Cal
Method: 60102007_042011(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2632**	**11.72**	**.7771**	**38.06**	**30.24**	**22.82**	**19.70**	**10.22**	**1.652**
Stddev	.0009	.09	.0028	.34	.27	.17	.04	.01	.006
%RSD	.3229	.7802	.3654	.8992	.8924	.7316	.1887	.1120	.3859
#1	.2623	11.81	.7743	38.32	30.41	22.97	19.66	10.21	1.646
#2	.2635	11.63	.7769	37.67	29.93	22.64	19.72	10.23	1.659
#3	.2639	11.73	.7800	38.20	30.38	22.86	19.72	10.23	1.652

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.552**	**10.31**	**8.079**	**2.169**	**10.85**	**3.802**	**31.10**	**5.524**	**4.187**
Stddev	.003	.07	.042	.020	.03	.007	.21	.001	.016
%RSD	.1236	.6676	.5237	.9064	.2734	.1822	.6893	.0223	.3719
#1	2.548	10.37	8.119	2.191	10.82	3.795	31.24	5.525	4.193
#2	2.554	10.24	8.035	2.153	10.88	3.803	30.86	5.522	4.199
#3	2.552	10.34	8.084	2.164	10.84	3.809	31.21	5.524	4.169

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.8922**	**.5752**	**1.393**	**1.684**	**45.76**	**5.930**	**1.307**	**2.481**	**11.03**
Stddev	.0041	.0017	.003	.001	.36	.015	.006	.009	.01
%RSD	.4603	.2913	.1832	.0390	.7926	.2494	.4637	.3824	.0724
#1	.8874	.5732	1.391	1.684	46.06	5.915	1.303	2.473	11.02
#2	.8946	.5759	1.395	1.684	45.36	5.944	1.314	2.491	11.03
#3	.8944	.5763	1.395	1.683	45.86	5.930	1.305	2.477	11.03

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1737.9**	**4516.2**	**24964.**	**2300.7**
Stddev	6.5	8.2	196.	13.2
%RSD	.37292	.18210	.78700	.57541
#1	1738.0	4525.1	25078.	2286.9
#2	1731.4	4509.0	24737.	2313.3
#3	1744.4	4514.4	25077.	2301.8

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/15/2018 9:40:56 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5033	80.14	4.015	3.998	3.962	79.07	3.985	3.991	3.954
Stddev	.0031	.38	.006	.020	.029	.46	.006	.004	.006
%RSD	.6124	.4698	.1435	.4913	.7440	.5845	.1530	.1125	.1634
#1	.5021	79.78	4.013	3.992	3.949	78.59	3.979	3.989	3.961
#2	.5009	80.53	4.010	4.020	3.996	79.52	3.983	3.987	3.948
#3	.5068	80.10	4.021	3.982	3.942	79.10	3.991	3.996	3.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.984	78.86	79.68	79.39	3.944	3.999	79.16	3.970	4.016
Stddev	.005	.70	.34	.60	.007	.009	.41	.003	.007
%RSD	.1237	.8926	.4325	.7517	.1709	.2233	.5227	.0845	.1731
#1	3.979	78.34	79.63	78.70	3.947	3.991	78.94	3.969	4.009
#2	3.984	79.66	80.05	79.71	3.936	3.997	79.64	3.967	4.018
#3	3.989	78.58	79.37	79.75	3.948	4.009	78.90	3.974	4.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.028	4.016	4.160	3.970	4.005	3.968	4.033	3.966	3.954
Stddev	.005	.011	.009	.001	.028	.004	.008	.009	.003
%RSD	.1135	.2604	.2138	.0214	.6880	.0949	.2067	.2360	.0797
#1	4.023	4.013	4.154	3.971	3.991	3.972	4.024	3.968	3.951
#2	4.028	4.006	4.157	3.970	4.036	3.964	4.034	3.956	3.953
#3	4.032	4.027	4.170	3.969	3.987	3.968	4.041	3.974	3.957
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA14898 page 5 of 108

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/15/2018 9:40:56 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1739.7	4508.1	24883.	2306.6
Stddev	3.1	3.7	133.	12.0
%RSD	.17553	.08181	.53457	.52097
#1	1736.7	4503.9	24735.	2314.9
#2	1739.5	4509.9	24922.	2312.0
#3	1742.8	4510.5	24993.	2292.8

Raw Data MA14898 page 6 of 108

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/15/2018 9:44:21 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2310	40.78	1.964	2.003	1.997	39.58	1.981	1.986	1.965
Stddev	.0014	.31	.004	.011	.009	.26	.003	.003	.007
%RSD	.6214	.7721	.1790	.5309	.4267	.6516	.1266	.1558	.3654
#1	.2325	41.09	1.964	2.005	2.004	39.80	1.980	1.987	1.970
#2	.2297	40.79	1.960	2.013	2.000	39.65	1.980	1.983	1.967
#3	.2308	40.46	1.967	1.992	1.987	39.30	1.984	1.989	1.957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.968	38.83	39.13	39.89	1.953	1.842	38.96	1.981	1.946
Stddev	.013	.30	.20	.26	.006	.003	.23	.003	.005
%RSD	.6708	.7720	.5099	.6597	.2861	.1734	.5802	.1445	.2540
#1	1.983	38.98	39.19	40.06	1.954	1.845	39.09	1.983	1.941
#2	1.964	39.04	39.29	40.02	1.958	1.838	39.09	1.978	1.948
#3	1.958	38.49	38.91	39.59	1.947	1.842	38.70	1.981	1.950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.976	1.970	.0973	1.971	1.937	1.954	2.010	1.887	1.975
Stddev	.007	.002	.0009	.004	.010	.006	.002	.003	.007
%RSD	.3561	.1157	.9508	.1864	.4983	.3198	.1024	.1491	.3466
#1	1.979	1.972	.0971	1.971	1.939	1.955	2.012	1.886	1.969
#2	1.968	1.968	.0966	1.967	1.946	1.959	2.011	1.890	1.974
#3	1.980	1.970	.0984	1.974	1.927	1.947	2.008	1.884	1.983
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA14898 page 7 of 108

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/15/2018 9:44:21 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1833.7	4646.9	25358.	2326.6
Stddev	4.1	15.4	93.	34.2
%RSD	.22618	.33032	.36869	1.4716
#1	1833.1	4643.2	25274.	2291.7
#2	1838.1	4663.8	25342.	2328.0
#3	1829.9	4633.8	25459.	2360.1

Raw Data MA14898 page 8 of 108

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/15/2018 9:49:38 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0181**	**.0001**	**-.0001**	**-.0004**	**-.0132**	**-.0004**	**-.0004**
Stddev	.0003	.0039	.0005	.0003	.0003	.0037	.0001	.0002
%RSD	76.96	21.38	629.5	308.3	74.37	27.83	27.62	55.83
#1	.0002	-.0171	.0006	-.0005	-.0004	-.0093	-.0004	-.0006
#2	.0002	-.0148	-.0005	.0000	-.0006	-.0166	-.0003	-.0002
#3	.0007	-.0223	.0001	.0002	-.0001	-.0139	-.0006	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0000**	**-.0166**	**.0435**	**-.0141**	**-.0004**	F **-.0016**	**-.0002**
Stddev	.0001	.000	.0007	.0333	.0358	.0000	.0009	.0092
%RSD	40.11	1118.	3.946	76.73	254.1	9.748	55.94	4512.
#1	-.0005	-.0002	-.0159	.0433	.0223	-.0004	-.0008	.0071
#2	-.0003	.0002	-.0169	.0102	-.0152	-.0004	-.0014	.0029
#3	-.0003	.0000	-.0171	.0769	-.0493	-.0005	-.0026	-.0106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**-.0002**	**-.0010**	**-.0008**	**-.0019**	**.0000**	**-.0004**	**.0000**
Stddev	.0001	.0005	.0005	.0008	.0010	.001	.0001	.000
%RSD	23.10	259.7	53.91	96.67	51.80	1866.	34.37	314.2
#1	-.0006	-.0006	-.0005	-.0012	-.0008	-.0001	-.0004	.0000
#2	-.0004	.0004	-.0009	.0001	-.0026	.0005	-.0006	.0001
#3	-.0005	-.0004	-.0016	-.0013	-.0023	-.0004	-.0003	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Raw Data MA14898 page 9 of 108

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/15/2018 9:49:38 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	**.0005**	**.0000**	**-.0005**
Stddev	.0020	.0003	.0001
%RSD	377.8	629.5	17.16
#1	-.0010	-.0001	-.0005
#2	-.0002	-.0001	-.0005
#3	.0029	.0004	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1933.8**	**4785.8**	**25659.**	**2308.1**
Stddev	6.6	14.5	157.	18.8
%RSD	.34169	.30396	.61322	.81501
#1	1941.3	4802.4	25668.	2291.6
#2	1929.2	4780.0	25498.	2304.2
#3	1930.7	4775.1	25812.	2328.6

Raw Data MA14898 page 10 of 108

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/15/2018 9:53:16 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0089**	**.1685**	**.0086**	**.2008**	**.0045**	**.9794**	F **.0040**	**.0483**	**.0100**
Stddev	.0002	.0083	.0010	.0010	.0000	.0082	.0000	.0001	.0002
%RSD	1.954	4.897	11.06	.5111	1.029	.8413	1.078	.2965	2.429
#1	.0090	.1653	.0075	.2002	.0044	.9699	.0040	.0482	.0099
#2	.0087	.1779	.0090	.2019	.0045	.9849	.0040	.0485	.0102
#3	.0090	.1623	.0093	.2001	.0045	.9833	.0039	.0484	.0098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.0050		
Range							-20.00%		

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0239**	**.2683**	**9.787**	**4.964**	**.0146**	**.0411**	**9.789**	**.0387**	**.0042**
Stddev	.0006	.0104	.113	.020	.0001	.0002	.035	.0002	.0009
%RSD	2.325	3.866	1.154	.3970	.6175	.4588	.3527	.4834	20.63
#1	.0245	.2735	9.695	4.950	.0147	.0409	9.758	.0385	.0048
#2	.0235	.2751	9.913	4.987	.0145	.0413	9.826	.0388	.0032
#3	.0236	.2564	9.752	4.956	.0146	.0412	9.783	.0389	.0046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0037**	**.0092**	**.0332**	**.0484**	**.0092**	F **.0080**	F **.0079**	**.0467**	**.0191**
Stddev	.0013	.0003	.0004	.0001	.0002	.0001	.0014	.0001	.0001
%RSD	33.95	2.752	1.245	.2414	2.086	1.179	17.52	.2902	.5250
#1	.0052	.0090	.0334	.0485	.0090	.0080	.0094	.0466	.0192
#2	.0031	.0090	.0327	.0483	.0093	.0079	.0077	.0469	.0190
#3	.0029	.0095	.0335	.0484	.0094	.0081	.0067	.0467	.0190
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
Value	.0050					.0100	.0100		
Range	-20.00%					-20.00%	-20.00%		

Raw Data MA14898 page 11 of 108

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/15/2018 9:53:16 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1945.8**	**4827.7**	**25493.**	**2294.7**
Stddev	7.2	12.8	72.	6.0
%RSD	.37174	.26467	.28264	.25941
#1	1949.4	4841.6	25501.	2301.5
#2	1937.4	4816.4	25418.	2292.3
#3	1950.4	4825.1	25561.	2290.4

Raw Data MA14898 page 12 of 108

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/15/2018 9:57:51 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	515.4	.0000	.0002	-.0006	467.0	.0000	-.0009
Stddev	.0004	2.9	.001	.0004	.0001	1.0	.0001	.0000
%RSD	125.2	.5597	11640.	233.2	22.30	.2217	536.6	3.232
#1	.0008	518.7	.0014	.0000	-.0004	467.5	.0001	-.0009
#2	.0000	513.4	-.0015	.0005	-.0007	465.8	.0000	-.0010
#3	.0002	514.1	.0000	-.0001	-.0005	467.6	.0000	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	-.0009	176.5	.2828	496.7	-.0005	F -.0035	.1931
Stddev	.0004	.0003	.7	.0655	2.1	.0000	.0001	.0194
%RSD	47.75	37.79	.3877	23.17	.4185	9.336	3.402	10.07
#1	-.0004	-.0012	177.2	.2245	499.1	-.0005	-.0036	.1934
#2	-.0010	-.0008	175.9	.3537	495.7	-.0006	-.0035	.1735
#3	-.0010	-.0006	176.4	.2702	495.3	-.0005	-.0034	.2124
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0005	.0019	.0000	.0165	F -.0018	.0000	-.0001
Stddev	.0001	.0019	.0026	.0035	.0013	.0005	.000	.0002
%RSD	181.7	360.4	133.7	9967.	7.753	28.81	578.3	390.1
#1	-.0001	.0018	-.0010	.0040	.0179	-.0018	.0000	.0002
#2	.0001	.0015	.0033	-.0012	.0154	-.0024	-.0001	-.0003
#3	-.0001	-.0017	.0036	-.0026	.0162	-.0013	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/15/2018 9:57:51 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0000	.0008	.0013
Stddev	.002	.0000	.0001
%RSD	11270.	5.031	6.536
#1	.0022	.0009	.0012
#2	-.0007	.0008	.0014
#3	-.0016	.0008	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1727.7	4366.4	23555.	2197.8
Stddev	1.1	3.6	128.	7.7
%RSD	.06083	.08290	.54143	.34901
#1	1726.6	4369.1	23699.	2199.4
#2	1727.8	4362.3	23506.	2204.6
#3	1728.7	4368.0	23459.	2189.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/15/2018 10:04:21 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.048	521.0	1.077	.5175	.5013	471.5	.9601	.4892	.4893
Stddev	.002	.8	.004	.0018	.0009	1.1	.0003	.0006	.0014
%RSD	.2125	.1515	.3878	.3552	.1745	.2380	.0293	.1204	.2817
#1	1.047	520.2	1.074	.5154	.5003	472.8	.9600	.4896	.4903
#2	1.050	521.7	1.075	.5182	.5017	471.1	.9604	.4895	.4877
#3	1.046	521.3	1.082	.5188	.5019	470.7	.9599	.4885	.4899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5323	181.6	.0493	503.9	.5003	.9109	.1637	.9692	.9700
Stddev	.0005	.8	.0272	1.3	.0009	.0014	.0101	.0021	.0012
%RSD	.0933	.4314	55.19	.2548	.1824	.1577	6.159	.2156	.1220
#1	.5325	180.7	.0637	504.1	.4993	.9126	.1534	.9714	.9695
#2	.5328	182.1	.0663	502.5	.5011	.9103	.1641	.9692	.9713
#3	.5318	182.0	.0179	505.1	.5005	.9099	.1735	.9672	.9690
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.023	.9659	.0427	.9433	1.006	.9864	.9568	.4825	.9339
Stddev	.003	.0043	.0002	.0030	.004	.0017	.0045	.0017	.0023
%RSD	.2724	.4450	.4449	.3187	.4522	.1724	.4674	.3517	.2429
#1	1.026	.9619	.0425	.9435	1.001	.9846	.9612	.4810	.9345
#2	1.021	.9654	.0428	.9462	1.010	.9866	.9522	.4843	.9357
#3	1.021	.9704	.0427	.9402	1.006	.9880	.9569	.4821	.9313
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/15/2018 10:04:21 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1687.5	4299.5	23491.	2175.7
Stddev	2.2	1.9	86.	13.2
%RSD	.13193	.04326	.36498	.60519
#1	1685.3	4299.5	23397.	2168.6
#2	1687.3	4297.6	23513.	2190.9
#3	1689.8	4301.4	23564.	2167.6

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 10:08:03 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2457	41.09	2.044	2.053	2.021	40.96	2.058	2.026	2.035
Stddev	.0008	.09	.005	.003	.003	.13	.004	.001	.003
%RSD	.3126	.2178	.2544	.1610	.1627	.3145	.1815	.0669	.1403
#1	.2462	41.19	2.039	2.056	2.023	40.98	2.058	2.028	2.037
#2	.2449	41.03	2.050	2.050	2.017	40.82	2.062	2.026	2.031
#3	.2462	41.04	2.043	2.053	2.022	41.07	2.055	2.025	2.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.973	40.62	40.73	40.84	2.062	2.044	40.96	2.008	2.016
Stddev	.003	.18	.16	.26	.001	.001	.02	.001	.004
%RSD	.1724	.4542	.3828	.6402	.0513	.0538	.0562	.0231	.2143
#1	1.977	40.76	40.68	40.71	2.062	2.045	40.97	2.008	2.015
#2	1.971	40.41	40.61	40.67	2.063	2.045	40.93	2.008	2.020
#3	1.972	40.70	40.91	41.14	2.061	2.043	40.97	2.008	2.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.036	2.030	1.818	2.043	2.052	2.055	2.012	2.079	2.024
Stddev	.002	.003	.003	.002	.007	.001	.009	.002	.002
%RSD	.1090	.1250	.1382	.1137	.3395	.0613	.4664	.1053	.0900
#1	2.037	2.031	1.821	2.043	2.059	2.057	2.013	2.081	2.024
#2	2.037	2.032	1.817	2.045	2.045	2.054	2.021	2.077	2.026
#3	2.033	2.027	1.816	2.041	2.051	2.055	2.002	2.080	2.023
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 10:08:03 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1818.4	4590.7	24964.	2251.3
Stddev	4.4	4.2	28.	20.1
%RSD	.24274	.09092	.11275	.89331
#1	1813.9	4585.9	24987.	2263.4
#2	1818.6	4593.1	24932.	2262.5
#3	1822.7	4593.1	24973.	2228.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 10:14:27 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0038	-.0007	-.0001	-.0004	-.0148	-.0007	-.0006
Stddev	.0002	.0108	.0006	.0003	.0001	.0052	.0000	.0001
%RSD	338.3	283.5	83.47	218.2	19.30	35.36	6.355	22.65
#1	-.0002	-.0043	-.0014	-.0005	-.0003	-.0107	-.0007	-.0007
#2	.0001	-.0143	-.0006	-.0001	-.0004	-.0206	-.0006	-.0005
#3	.0003	.0072	-.0002	.0002	-.0005	-.0130	-.0007	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0001	-.0140	-.0315	.0079	-.0003	F -.0025	-.0210
Stddev	.0003	.0001	.0038	.0305	.0236	.0001	.0008	.0135
%RSD	172.5	97.70	26.75	96.69	297.9	23.14	29.86	64.14
#1	-.0005	.0000	-.0099	-.0667	.0347	-.0003	-.0017	-.0337
#2	-.0001	.0000	-.0172	-.0147	-.0009	-.0003	-.0026	-.0068
#3	.0001	-.0001	-.0150	-.0131	-.0100	-.0002	-.0032	-.0226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	-.0004	-.0014	-.0016	-.0017	-.0006	-.0003	-.0005
Stddev	.0001	.0009	.0008	.0016	.0001	.0004	.0001	.0002
%RSD	11.83	252.9	60.38	104.2	8.056	69.23	34.24	37.54
#1	-.0009	-.0015	-.0015	-.0024	-.0017	-.0010	-.0005	-.0003
#2	-.0011	.0001	-.0021	-.0026	-.0019	-.0005	-.0003	-.0006
#3	-.0008	.0002	-.0005	.0003	-.0016	-.0002	-.0002	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 10:14:27 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0004	-.0002	-.0008
Stddev	.0010	.0004	.0000
%RSD	249.7	237.0	4.216
#1	.0006	.0002	-.0008
#2	.0013	-.0001	-.0008
#3	-.0007	-.0006	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1934.2	4756.8	25587.	2281.9
Stddev	6.9	12.6	188.	10.6
%RSD	.35568	.26547	.73390	.46318
#1	1935.3	4759.1	25764.	2270.5
#2	1940.4	4768.1	25606.	2283.7
#3	1926.8	4743.1	25390.	2291.4

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: MP33734-MB1 Acquired: 5/15/2018 10:18:22 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0075**	F **-.0059**	**-.0011**	F **-.0033**	**-.0046**	F **-.0061**	**-.0059**
Stddev	.0026	.0215	.0014	.0025	.0005	.0171	.0003	.0003
%RSD	316.6	288.4	24.19	228.4	13.88	368.7	4.461	5.487
#1	-.0022	.0312	-.0062	.0010	-.0037	.0048	-.0063	-.0057
#2	.0020	-.0108	-.0072	-.0004	-.0028	-.0243	-.0061	-.0057
#3	.0026	.0020	-.0043	-.0039	-.0034	.0057	-.0058	-.0062
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
High Limit			.0050		.0020		.0050	
Low Limit			-.0050		-.0020		-.0050	

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0038**	**.0012**	F **.2122**	**-.1703**	**-.0895**	**.0001**	F **-.0264**	**-.0821**
Stddev	.0016	.0023	.0227	.1535	.0778	.0004	.0008	.0359
%RSD	42.23	195.3	10.71	90.14	86.98	563.3	2.976	43.81
#1	-.0050	.0000	.2092	.0035	-.1544	-.0003	-.0255	-.0507
#2	-.0045	.0038	.2363	-.2873	-.0032	.0005	-.0265	-.0742
#3	-.0020	-.0003	.1912	-.2273	-.1108	.0000	-.0271	-.1213
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			.1500				.0250	
Low Limit			-.1500				-.0250	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0046**	**-.0012**	F **-.0052**	**-.0038**	**.0087**	F **.0643**	**-.0020**	F **-.0054**
Stddev	.0003	.0027	.0059	.0089	.0003	.0020	.0004	.0010
%RSD	7.331	218.5	114.0	230.4	3.539	3.058	21.85	17.81
#1	-.0046	-.0022	-.0104	-.0125	.0090	.0654	-.0025	-.0045
#2	-.0050	-.0033	-.0065	.0052	.0084	.0620	-.0017	-.0064
#3	-.0043	.0018	.0013	-.0042	.0088	.0654	-.0018	-.0054
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail
High Limit			.0025			.0250		.0050
Low Limit			-.0025			-.0250		-.0050

Zoom In Zoom Out

Sample Name: MP33734-MB1 Acquired: 5/15/2018 10:18:22 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F **-.0169**	**-.0021**	**-.0003**
Stddev	.0038	.0014	.0003
%RSD	22.69	66.88	83.68
#1	-.0147	-.0036	-.0002
#2	-.0147	-.0009	-.0001
#3	-.0213	-.0018	-.0006
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1925.7**	**4762.4**	**25411.**	**2263.6**
Stddev	2.2	10.6	171.	13.9
%RSD	.11368	.22347	.67191	.61621
#1	1923.9	4751.6	25518.	2259.2
#2	1925.1	4772.8	25214.	2279.2
#3	1928.2	4762.9	25500.	2252.4

Zoom In Zoom Out

Sample Name: MP33734-B1 Acquired: 5/15/2018 10:22:52 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0529**	**28.61**	**2.055**	**2.180**	**.0494**	**26.65**	**.0475**	**.5214**	**.2150**
Stddev	.0024	.14	.013	.007	.0007	.07	.0004	.0002	.0015
%RSD	4.547	.4794	.6318	.3242	1.416	.2597	.9144	.0406	.7070
#1	.0550	28.48	2.069	2.184	.0501	26.71	.0471	.5216	.2133
#2	.0502	28.61	2.044	2.184	.0491	26.67	.0480	.5212	.2161
#3	.0534	28.75	2.052	2.172	.0488	26.58	.0474	.5214	.2158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2547**	**27.35**	**25.52**	**26.89**	**.5517**	**.4561**	**26.42**	**.5327**	**.5050**
Stddev	.0017	.24	.17	.39	.0015	.0010	.18	.0028	.0010
%RSD	.6761	.8884	.6521	1.455	.2784	.2227	.6726	.5214	.1989
#1	.2536	27.56	25.72	26.98	.5525	.4569	26.43	.5295	.5061
#2	.2538	27.41	25.42	27.24	.5499	.4550	26.60	.5347	.5045
#3	.2567	27.09	25.43	26.47	.5527	.4565	26.24	.5337	.5043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5092**	**1.989**	**.3913**	**.5703**	**.5300**	**.5180**	**1.959**	**.5011**	**.5219**
Stddev	.0082	.008	.0044	.0012	.0020	.0024	.003	.0026	.0009
%RSD	1.614	.4009	1.130	.2100	.3846	.4674	.1393	.5195	.1645
#1	.5031	1.981	.3963	.5717	.5308	.5197	1.962	.4995	.5228
#2	.5185	1.997	.3895	.5697	.5315	.5152	1.957	.4997	.5211
#3	.5059	1.988	.3880	.5695	.5276	.5189	1.959	.5041	.5216
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33734-B1 Acquired: 5/15/2018 10:22:52 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1925.6**	**4734.5**	**25319.**	**2261.4**
Stddev	4.2	5.6	101.	10.4
%RSD	.22005	.11884	.39850	.45822
#1	1925.9	4740.3	25341.	2256.5
#2	1921.2	4729.0	25407.	2254.4
#3	1929.7	4734.1	25209.	2273.3

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-4 Acquired: 5/15/2018 10:27:10 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0023	276.5	.0243	1.583	.0018	48.32	-.0113	.0463	.4002
Stddev	.0018	1.9	.0050	.011	.0004	.33	.0007	.0010	.0016
%RSD	80.41	.6712	20.44	.6666	23.35	.6848	5.994	2.199	.4117
#1	.0033	274.4	.0289	1.571	.0023	47.94	-.0115	.0472	.3984
#2	.0002	277.9	.0190	1.591	.0016	48.54	-.0119	.0464	.4006
#3	.0033	277.2	.0249	1.588	.0015	48.49	-.0106	.0452	.4017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7074	217.8	17.58	19.87	1.904	-.0458	5.446	.2111	.6303
Stddev	.0025	1.0	.24	.20	.008	.0014	.125	.0050	.0089
%RSD	.3467	.4806	1.350	.9972	.4000	3.036	2.286	2.351	1.414
#1	.7092	216.6	17.72	19.65	1.898	-.0463	5.310	.2107	.6400
#2	.7046	218.4	17.31	20.00	1.912	-.0469	5.555	.2064	.6224
#3	.7084	218.4	17.72	19.98	1.901	-.0442	5.473	.2163	.6284

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0056	-.0242	7.619	.0600	.5104	5.955	-.0159	.5058	.4044
Stddev	.0150	.0152	.048	.0029	.0037	.043	.0063	.0030	.0011
%RSD	266.8	62.65	.6283	4.756	.7329	.7230	39.86	.5853	.2749
#1	-.0103	-.0132	7.667	.0633	.5064	5.920	-.0231	.5029	.4056
#2	.0076	-.0415	7.618	.0587	.5111	6.003	-.0114	.5088	.4043
#3	.0195	-.0179	7.571	.0580	.5138	5.941	-.0132	.5058	.4034

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1937.8	4781.0	25439.	2301.0
Stddev	5.8	5.3	79.	29.5
%RSD	.29903	.11087	.31090	1.2842
#1	1936.6	4786.2	25355.	2335.1
#2	1932.7	4775.6	25451.	2284.6
#3	1944.1	4781.3	25511.	2283.2

Zoom In Zoom Out

Sample Name: MP33734-D1 Acquired: 5/15/2018 10:31:30 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0009	279.2	.0203	1.562	-.0002	47.17	-.0115	.0464	.4050
Stddev	.0068	.9	.0054	.003	.0008	.23	.0001	.0014	.0024
%RSD	786.2	.3273	26.36	.1684	363.9	.4832	1.204	2.940	.6018
#1	.0024	279.9	.0222	1.562	-.0009	47.43	-.0116	.0477	.4078
#2	-.0087	278.2	.0244	1.560	-.0003	47.01	-.0113	.0465	.4033
#3	.0037	279.6	.0143	1.565	.0006	47.07	-.0115	.0450	.4038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6984	213.2	18.46	19.93	1.862	-.0473	5.380	.2161	.6252
Stddev	.0054	.8	.63	.35	.009	.0011	.051	.0021	.0071
%RSD	.7713	.3639	3.398	1.771	.4802	2.400	.9492	.9766	1.135
#1	.7008	214.0	18.55	19.79	1.872	-.0464	5.326	.2144	.6193
#2	.7022	213.0	17.79	20.33	1.856	-.0471	5.387	.2185	.6233
#3	.6922	212.5	19.03	19.67	1.858	-.0486	5.427	.2153	.6331

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0123	-.0356	10.66	.0644	.5020	6.058	-.0241	.5047	.3996
Stddev	.0092	.0083	.04	.0017	.0030	.028	.0064	.0035	.0014
%RSD	74.49	23.35	.4140	2.617	.5998	.4595	26.41	.6977	.3386
#1	.0103	-.0377	10.68	.0628	.5048	6.090	-.0304	.5069	.4011
#2	.0223	-.0426	10.70	.0642	.5023	6.047	-.0177	.5065	.3994
#3	.0043	-.0264	10.61	.0661	.4988	6.037	-.0241	.5006	.3984

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1939.2	4781.0	25552.	2318.4
Stddev	2.9	4.7	165.	16.3
%RSD	.15084	.09833	.64509	.70459
#1	1938.6	4786.3	25362.	2307.7
#2	1942.4	4777.3	25633.	2337.2
#3	1936.6	4779.3	25661.	2310.2

Zoom In Zoom Out

Sample Name: MP33734-D2 Acquired: 5/15/2018 10:35:50 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0023	280.4	.0238	1.552	.0012	47.02	-.0112	.0467	.4034
Stddev	.0061	2.4	.0063	.008	.0012	.35	.0001	.0025	.0006
%RSD	270.8	.8698	26.48	.5176	99.53	.7463	1.187	5.416	.1431
#1	-.0008	280.6	.0283	1.551	.0015	47.40	-.0113	.0446	.4027
#2	.0093	277.9	.0265	1.544	.0022	46.71	-.0110	.0461	.4036
#3	-.0017	282.8	.0166	1.560	-.0001	46.95	-.0113	.0495	.4038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6989	213.3	17.73	19.59	1.861	-.0496	5.394	.2141	.5836
Stddev	.0053	.9	.23	.85	.007	.0006	.056	.0008	.0155
%RSD	.7577	.4171	1.284	4.314	.3642	1.265	1.046	.3775	2.648
#1	.6986	213.3	17.75	19.96	1.860	-.0490	5.337	.2139	.5663
#2	.6937	212.3	17.95	18.62	1.855	-.0502	5.394	.2134	.5962
#3	.7043	214.1	17.49	20.19	1.869	-.0495	5.450	.2150	.5881

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0175	-.0208	10.26	.0662	.4982	6.090	-.0223	.4979	.4034
Stddev	.0163	.0240	.07	.0040	.0030	.028	.0049	.0024	.0009
%RSD	92.80	115.7	.6877	6.063	.5970	.4551	22.07	.4859	.2321
#1	.0058	-.0045	10.34	.0667	.5014	6.072	-.0251	.5004	.4023
#2	.0107	-.0483	10.21	.0699	.4955	6.077	-.0166	.4955	.4037
#3	.0361	-.0094	10.22	.0619	.4977	6.122	-.0252	.4979	.4041

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1945.0	4785.5	25528.	2305.4
Stddev	3.7	11.2	52.	22.2
%RSD	.18971	.23311	.20176	.96294
#1	1941.1	4780.3	25481.	2290.2
#2	1945.5	4798.3	25521.	2330.9
#3	1948.4	4777.8	25583.	2295.2

Zoom In Zoom Out

Sample Name: MP33734-SD1 Acquired: 5/15/2018 10:40:11 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0057	275.5	-.0508	1.576	-.0260	47.42	-.0578	-.0029	.3781
Stddev	.0016	2.5	.0320	.019	.0017	.41	.0028	.0021	.0193
%RSD	27.95	.9035	63.01	1.215	6.504	.8567	4.866	71.72	5.093
#1	.0045	275.8	-.0226	1.559	-.0276	47.04	-.0584	-.0026	.3657
#2	.0051	272.9	-.0856	1.573	-.0263	47.36	-.0602	-.0051	.3683
#3	.0075	277.9	-.0442	1.597	-.0243	47.85	-.0547	-.0010	.4003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7260	217.2	18.41	20.42	1.863	-.3068	4.179	.1653	.6037
Stddev	.0240	.7	1.18	1.04	.008	.0093	.911	.0156	.0537
%RSD	3.305	.3200	6.396	5.108	.4059	3.018	21.79	9.428	8.892
#1	.7139	216.5	19.50	19.96	1.857	-.3151	3.763	.1832	.6611
#2	.7537	217.9	17.16	19.68	1.872	-.3086	5.224	.1547	.5952
#3	.7105	217.2	18.57	21.61	1.860	-.2968	3.551	.1581	.5548

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0825	-.0895	8.770	-.0037	.4802	5.848	-.1453	.4757	.3621
Stddev	.0564	.0145	.110	.0115	.0128	.030	.0457	.0192	.0029
%RSD	68.37	16.25	1.258	308.9	2.665	.5199	31.45	4.031	.8033
#1	-.1476	-.0879	8.778	-.0006	.4774	5.855	-.0934	.4925	.3587
#2	-.0501	-.0758	8.876	.0059	.4690	5.815	-.1631	.4548	.3636
#3	-.0497	-.1048	8.656	-.0164	.4941	5.874	-.1794	.4799	.3639

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1948.0	4780.7	25745.	2292.9
Stddev	2.8	5.8	197.	16.8
%RSD	.14398	.12140	.76590	.73076
#1	1948.6	4781.0	25592.	2299.0
#2	1950.5	4786.4	25676.	2305.7
#3	1945.0	4774.8	25968.	2273.9

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: MP33734-PS1 Acquired: 5/15/2018 10:44:34 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0561	280.3	.1281	1.859	.0548	53.24	.0422	.0999	.4521
Stddev	.0015	.1	.0099	.005	.0012	.28	.0004	.0027	.0032
%RSD	2.720	.0344	7.719	.2654	2.225	.5281	.9170	2.703	.7060
#1	.0544	280.3	.1194	1.865	.0562	53.46	.0418	.0968	.4508
#2	.0572	280.4	.1261	1.856	.0543	52.92	.0425	.1010	.4557
#3	.0568	280.2	.1389	1.857	.0540	53.34	.0424	.1019	.4498

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.8151	219.8	28.52	25.30	1.940	.0468	15.96	.3182	.6629
Stddev	.0065	.7	.23	.45	.004	.0016	.18	.0007	.0104
%RSD	.7963	.3077	.8108	1.790	.2006	3.470	1.110	.2269	1.564
#1	.8122	219.9	28.74	25.25	1.942	.0454	15.94	.3178	.6743
#2	.8225	219.1	28.28	24.88	1.935	.0486	15.80	.3177	.6604
#3	.8105	220.5	28.55	25.78	1.943	.0463	16.15	.3190	.6540

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1177	.0805	9.531	.1161	.5615	6.133	.0845	.5576	.6662
Stddev	.0144	.0328	.018	.0029	.0041	.029	.0062	.0063	.0016
%RSD	12.23	40.77	.1913	2.492	.7236	.4673	7.378	1.137	.2461
#1	.1135	.1159	9.552	.1194	.5656	6.139	.0780	.5552	.6655
#2	.1058	.0511	9.523	.1146	.5574	6.158	.0904	.5527	.6650
#3	.1337	.0745	9.519	.1142	.5614	6.102	.0852	.5648	.6681

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1931.2	4762.8	25393.	2300.4
Stddev	4.2	5.3	141.	22.1
%RSD	.21953	.11101	.55484	.95996
#1	1932.8	4768.5	25525.	2310.9
#2	1934.4	4761.8	25408.	2315.2
#3	1926.4	4758.1	25245.	2275.0

Zoom In Zoom Out

Sample Name: MP33734-S1 Acquired: 5/15/2018 10:48:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0482	391.8	1.938	3.776	.0532	75.30	.0406	.5656	.6619
Stddev	.0048	1.2	.010	.023	.0009	.24	.0004	.0031	.0073
%RSD	9.986	.3177	.5295	.6196	1.746	.3132	.9710	.5561	1.110
#1	.0427	393.2	1.945	3.802	.0539	75.55	.0405	.5692	.6544
#2	.0504	391.2	1.943	3.768	.0537	75.27	.0410	.5638	.6691
#3	.0515	391.0	1.926	3.757	.0522	75.08	.0403	.5637	.6620

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.9583	246.7	43.81	47.24	2.435	.3732	31.41	.7977	1.099
Stddev	.0048	1.1	.41	.34	.004	.0037	.20	.0023	.021
%RSD	.5058	.4521	.9260	.7120	.1658	.9982	.6315	.2847	1.899
#1	.9635	248.0	43.94	47.61	2.438	.3774	31.55	.7968	1.119
#2	.9574	246.0	43.35	46.97	2.431	.3703	31.19	.8003	1.101
#3	.9539	246.1	44.13	47.14	2.437	.3719	31.50	.7960	1.078

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1723	1.840	11.44	.5261	1.048	6.698	1.893	1.019	.9204
Stddev	.0070	.007	.10	.0030	.003	.027	.008	.005	.0026
%RSD	4.093	.3708	.8562	.5626	.2894	.3964	.4378	.4552	.2866
#1	.1683	1.847	11.54	.5279	1.050	6.727	1.897	1.019	.9229
#2	.1804	1.842	11.44	.5227	1.049	6.693	1.900	1.014	.9208
#3	.1681	1.833	11.34	.5277	1.044	6.675	1.884	1.023	.9176

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1923.3	4737.0	25357.	2265.5
Stddev	4.9	3.3	145.	13.6
%RSD	.25237	.06936	.56987	.60142
#1	1920.2	4739.8	25362.	2249.7
#2	1920.8	4733.4	25499.	2273.4
#3	1928.9	4737.9	25210.	2273.3

Zoom In Zoom Out

Sample Name: MP33734-S2 Acquired: 5/15/2018 10:53:12 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0519	393.1	1.978	3.757	.0541	75.62	.0411	.5775	.6633
Stddev	.0049	1.8	.004	.018	.0019	.18	.0002	.0014	.0011
%RSD	9.413	.4517	.1982	.4672	3.591	.2381	.4323	.2491	.1604
#1	.0501	391.1	1.982	3.742	.0542	75.63	.0413	.5762	.6636
#2	.0481	394.2	1.974	3.752	.0522	75.44	.0409	.5772	.6621
#3	.0574	394.1	1.978	3.776	.0560	75.80	.0411	.5790	.6642

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.9635	248.4	43.94	47.54	2.463	.3849	31.71	.8127	1.125
Stddev	.0028	1.5	.32	.10	.006	.0011	.28	.0027	.004
%RSD	.2933	.5862	.7197	.2207	.2645	.2943	.8810	.3383	.3275
#1	.9639	247.4	44.21	47.64	2.469	.3861	31.75	.8133	1.122
#2	.9661	247.8	43.59	47.43	2.456	.3838	31.41	.8097	1.124
#3	.9605	250.1	44.03	47.55	2.463	.3848	31.96	.8151	1.129

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1869	1.911	12.56	.5472	1.050	6.991	1.944	1.030	.9350
Stddev	.0079	.021	.17	.0055	.004	.019	.005	.005	.0031
%RSD	4.211	1.075	1.316	1.010	.3478	.2777	.2555	.4583	.3265
#1	.1782	1.887	12.67	.5444	1.048	6.969	1.950	1.026	.9326
#2	.1936	1.921	12.63	.5536	1.048	7.004	1.942	1.031	.9339
#3	.1888	1.924	12.37	.5436	1.054	7.000	1.940	1.035	.9385

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1909.5	4711.4	25370.	2275.9
Stddev	3.8	9.1	75.	4.5
%RSD	.19978	.19282	.29444	.19877
#1	1911.1	4718.5	25296.	2270.7
#2	1912.3	4714.6	25370.	2278.8
#3	1905.2	4701.2	25446.	2278.2

Zoom In Zoom Out

Sample Name: FA53725-1A Acquired: 5/15/2018 10:57:31 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0042	334.2	.0355	4.167	.0030	140.4	-.0068	.0912	.6188
Stddev	.0037	1.3	.0014	.016	.0010	.7	.0001	.0022	.0096
%RSD	88.72	.3839	3.947	.3909	34.78	.4736	1.780	2.384	1.559
#1	-.0017	335.4	.0347	4.184	.0024	141.0	-.0069	.0887	.6273
#2	-.0025	334.5	.0371	4.164	.0042	140.3	-.0067	.0928	.6207
#3	-.0085	332.9	.0347	4.152	.0024	139.7	-.0069	.0920	.6083

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.065	316.8	25.35	37.78	8.385	-.0496	2.861	.3817	.9975
Stddev	.002	.7	.54	.34	.035	.0017	.107	.0002	.0076
%RSD	.1504	.2351	2.132	.9018	.4223	3.391	3.724	.0649	.7632
#1	1.065	317.5	25.75	37.39	8.424	-.0503	2.969	.3814	1.002
#2	1.063	316.8	25.57	37.90	8.375	-.0508	2.756	.3819	1.002
#3	1.066	316.0	24.73	38.04	8.356	-.0477	2.858	.3817	.9887

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0049	-.0305	10.96	.0665	1.679	10.95	-.0237	.7992	1.281
Stddev	.0019	.0117	.06	.0023	.003	.05	.0237	.0070	.006
%RSD	38.62	38.19	.5531	3.441	.1698	.4764	100.4	.8724	.4359
#1	-.0047	-.0174	10.96	.0673	1.680	11.00	-.0487	.8071	1.287
#2	-.0069	-.0346	11.01	.0683	1.676	10.95	-.0207	.7964	1.278
#3	-.0031	-.0396	10.89	.0639	1.681	10.90	-.0015	.7940	1.278

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1911.1	4742.2	25490.	2278.2
Stddev	6.7	9.3	43.	7.1
%RSD	.35147	.19653	.16842	.31129
#1	1904.9	4731.7	25442.	2270.1
#2	1910.2	4745.4	25504.	2282.5
#3	1918.2	4749.6	25524.	2282.2

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 11:01:51 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2466	41.74	2.075	2.072	2.036	41.39	2.092	2.050	2.058
Stddev	.0005	.55	.005	.016	.014	.25	.004	.004	.008
%RSD	.2040	1.311	.2623	.7637	.7005	.6094	.1928	.2110	.4049
#1	.2469	42.17	2.072	2.085	2.047	41.58	2.094	2.053	2.048
#2	.2469	41.92	2.072	2.076	2.041	41.49	2.088	2.045	2.063
#3	.2460	41.12	2.081	2.055	2.020	41.10	2.096	2.051	2.063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.990	40.70	41.14	41.25	2.097	2.064	41.38	2.020	2.039
Stddev	.004	.23	.31	.20	.003	.005	.32	.002	.002
%RSD	.1826	.5734	.7573	.4822	.1485	.2526	.7780	.0792	.0836
#1	1.989	40.76	41.43	41.34	2.094	2.064	41.64	2.022	2.041
#2	1.986	40.90	41.17	41.40	2.100	2.059	41.48	2.019	2.038
#3	1.993	40.45	40.81	41.03	2.096	2.069	41.02	2.020	2.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.069	2.062	1.847	2.061	2.069	2.087	2.035	2.115	2.041
Stddev	.007	.004	.005	.002	.011	.003	.003	.002	.004
%RSD	.3552	.2163	.2503	.0755	.5287	.1440	.1357	.1020	.1941
#1	2.075	2.060	1.847	2.060	2.077	2.085	2.034	2.114	2.041
#2	2.061	2.059	1.842	2.060	2.073	2.086	2.034	2.118	2.037
#3	2.071	2.068	1.852	2.063	2.056	2.090	2.039	2.114	2.045
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 11:01:51 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1817.2	4550.7	24768.	2223.1
Stddev	2.9	14.2	151.	22.7
%RSD	.16062	.31173	.60912	1.0213
#1	1820.5	4561.7	24679.	2210.6
#2	1815.5	4555.8	24683.	2209.4
#3	1815.5	4534.7	24942.	2249.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 11:06:03 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0114	.0004	.0000	-.0003	-.0121	-.0004	-.0005
Stddev	.000	.0195	.0004	.000	.0002	.0027	.0001	.0002
%RSD	908.1	171.9	91.02	2251.	70.06	22.50	37.96	48.23
#1	-.0003	.0097	.0005	.0000	-.0003	-.0093	-.0005	-.0007
#2	.0004	-.0149	.0007	.0002	-.0001	-.0147	-.0004	-.0004
#3	-.0003	-.0289	.0000	-.0002	-.0006	-.0123	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0005	-.0113	-.0101	.0160	-.0001	F -.0027	-.0223
Stddev	.0001	.0003	.0009	.0340	.0137	.0001	.0008	.0112
%RSD	19.30	62.51	8.300	335.2	85.49	80.56	27.66	50.00
#1	-.0004	.0005	-.0104	-.0475	.0133	.0000	-.0020	-.0203
#2	-.0006	.0008	-.0114	.0189	.0039	-.0001	-.0027	-.0123
#3	-.0005	.0002	-.0123	-.0018	.0308	-.0002	-.0035	-.0344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0006	-.0007	-.0012	-.0015	-.0006	-.0004	-.0003
Stddev	.0002	.0008	.0006	.0019	.0004	.0003	.0002	.0000
%RSD	74.69	138.7	88.63	152.4	26.87	51.33	48.56	10.16
#1	-.0005	-.0006	-.0015	-.0012	-.0014	-.0004	-.0005	-.0003
#2	-.0002	-.0013	-.0004	-.0032	-.0019	-.0009	-.0002	-.0004
#3	-.0001	.0002	-.0003	.0006	-.0011	-.0004	-.0005	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 11:06:03 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0008	.0000	-.0004
Stddev	.0018	.000	.0002
%RSD	212.8	1317.	47.42
#1	-.0025	.0002	-.0006
#2	-.0011	.0001	-.0003
#3	.0011	-.0003	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1932.1	4731.6	25592.	2287.7
Stddev	7.1	28.2	145.	18.8
%RSD	.36792	.59498	.56530	.81989
#1	1924.7	4706.8	25755.	2279.7
#2	1932.8	4762.2	25479.	2309.1
#3	1938.8	4726.0	25542.	2274.3

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-7 Acquired: 5/15/2018 11:10:32 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0056**	**279.2**	**.1026**	**.6466**	**.0065**	**16.05**	**-.0102**	**.0829**	**.6242**
Stddev	.0015	2.2	.0090	.0027	.0009	.15	.0005	.0013	.0049
%RSD	27.43	.7827	8.754	.4224	13.99	.9499	4.671	1.578	.7809
#1	-.0073	280.8	.0988	.6470	.0072	16.16	-.0107	.0843	.6221
#2	-.0048	276.7	.1128	.6437	.0069	15.87	-.0098	.0826	.6207
#3	-.0046	280.1	.0961	.6491	.0055	16.11	-.0102	.0817	.6298

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0970**	**263.1**	**27.68**	**36.78**	**1.049**	**-.0500**	**2.715**	**.3089**	**.0682**
Stddev	.0039	1.3	.33	.13	.003	.0025	.098	.0011	.0074
%RSD	3.987	.5083	1.203	.3408	.3091	4.949	3.598	.3438	10.87
#1	.1007	264.2	28.03	36.83	1.046	-.0527	2.828	.3078	.0673
#2	.0973	261.6	27.64	36.63	1.051	-.0478	2.652	.3099	.0760
#3	.0930	263.5	27.36	36.86	1.052	-.0497	2.667	.3091	.0612

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0018**	**-.0175**	**9.489**	**.0558**	**.2466**	**8.071**	**-.0248**	**.5547**	**.2974**
Stddev	.0024	.0082	.155	.0017	.0017	.004	.0121	.0038	.0025
%RSD	132.8	46.81	1.632	3.107	.6997	.0465	48.81	.6826	.8400
#1	-.0008	-.0247	9.641	.0560	.2465	8.073	-.0287	.5508	.2972
#2	-.0045	-.0086	9.494	.0574	.2450	8.072	-.0346	.5584	.2999
#3	.0000	-.0193	9.331	.0539	.2484	8.066	-.0113	.5549	.2950

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1933.3**	**4773.9**	**25625.**	**2292.7**
Stddev	5.1	6.0	26.	35.4
%RSD	.26531	.12607	.10185	1.5460
#1	1937.9	4770.1	25641.	2257.1
#2	1927.8	4770.7	25595.	2328.0
#3	1934.3	4780.8	25640.	2293.1

Zoom In Zoom Out

Sample Name: FA53725-10 Acquired: 5/15/2018 11:14:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0005**	**410.0**	**.0609**	**6.003**	**.0075**	**171.1**	**-.0047**	**.1256**	**.5993**
Stddev	.0051	.5	.0023	.010	.0003	.5	.0006	.0006	.0036
%RSD	1076.	.1159	3.851	.1734	4.531	.2748	11.93	.5116	.6022
#1	-.0009	409.5	.0636	5.994	.0076	171.3	-.0042	.1264	.5951
#2	-.0038	410.4	.0598	6.014	.0078	170.5	-.0046	.1253	.6012
#3	.0062	410.2	.0593	6.000	.0071	171.4	-.0053	.1252	.6015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**1.649**	**346.0**	**52.72**	**43.93**	**15.56**	**-.0485**	**3.325**	**.4089**	**11.95**
Stddev	.020	1.4	.24	.74	.01	.0006	.098	.0009	.01
%RSD	1.221	.4086	.4588	1.677	.0473	1.169	2.953	.2320	.1114
#1	1.626	344.7	52.57	43.15	15.56	-.0485	3.411	.4083	11.96
#2	1.659	345.8	52.59	44.01	15.56	-.0491	3.346	.4100	11.96
#3	1.662	347.5	52.99	44.62	15.55	-.0479	3.218	.4084	11.93

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0347**	**-.0328**	**9.232**	**.0589**	**2.338**	**7.835**	**-.0111**	**.7470**	**1.395**
Stddev	.0005	.0078	.102	.0045	.003	.009	.0099	.0027	.001
%RSD	1.553	23.80	1.104	7.599	.1065	.1163	88.70	.3678	.0668
#1	.0343	-.0411	9.334	.0542	2.337	7.825	-.0009	.7478	1.396
#2	.0345	-.0256	9.232	.0631	2.341	7.842	-.0118	.7440	1.394
#3	.0353	-.0316	9.130	.0593	2.336	7.840	-.0206	.7493	1.395

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1923.6**	**4801.5**	**25813.**	**2316.6**
Stddev	6.1	13.0	173.	5.2
%RSD	.31686	.27155	.67071	.22315
#1	1916.6	4788.6	25738.	2310.7
#2	1926.6	4814.7	25690.	2319.7
#3	1927.7	4801.2	26011.	2319.5

Zoom In Zoom Out

Sample Name: FA53725-13 Acquired: 5/15/2018 11:19:13 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0022**	**214.6**	**.0776**	**1.207**	**.0051**	**29.94**	**-.0013**	**.0871**	**.6949**
Stddev	.0061	1.0	.0097	.007	.0006	.06	.0006	.0015	.0049
%RSD	276.4	.4667	12.52	.6033	11.98	.1917	43.82	1.757	.7041
#1	.0037	213.4	.0741	1.198	.0048	30.00	-.0006	.0857	.6934
#2	.0074	215.2	.0702	1.212	.0059	29.91	-.0017	.0888	.7004
#3	-.0045	215.1	.0886	1.209	.0048	29.90	-.0016	.0868	.6910

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**3.749**	**290.8**	**25.82**	**37.76**	**3.739**	**-.0527**	**1.887**	**.4141**	**.9112**
Stddev	.008	1.3	.34	.12	.009	.0026	.151	.0049	.0030
%RSD	.2177	.4590	1.320	.3222	.2521	4.970	7.999	1.177	.3258
#1	3.759	289.4	25.75	37.84	3.747	-.0506	2.029	.4172	.9081
#2	3.745	290.9	26.19	37.62	3.742	-.0517	1.904	.4084	.9140
#3	3.744	292.0	25.52	37.83	3.728	-.0556	1.729	.4166	.9115

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0313**	**-.0250**	**8.622**	**.0622**	**.2841**	**7.722**	**-.0292**	**.5046**	**27.19**
Stddev	.0014	.0122	.097	.0013	.0025	.031	.0020	.0024	.07
%RSD	4.327	48.84	1.125	2.052	.8721	.4033	6.728	.4739	.2675
#1	.0317	-.0114	8.726	.0636	.2867	7.755	-.0277	.5027	27.25
#2	.0298	-.0288	8.607	.0612	.2836	7.720	-.0314	.5073	27.11
#3	.0325	-.0349	8.534	.0617	.2819	7.693	-.0284	.5039	27.22

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1925.6**	**4793.4**	**25787.**	**2309.8**
Stddev	8.0	7.8	109.	20.0
%RSD	.41749	.16238	.42444	.86621
#1	1922.2	4787.6	25781.	2316.6
#2	1919.9	4790.5	25681.	2325.4
#3	1934.8	4802.3	25899.	2287.2

Zoom In Zoom Out

Sample Name: FA53725-16 Acquired: 5/15/2018 11:23:32 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0810**	**253.9**	**.0868**	**2.442**	**.0047**	**65.34**	**-.0074**	**.0969**	**.4434**
Stddev	.0044	.7	.0115	.010	.0009	.05	.0005	.0018	.0041
%RSD	5.449	.2856	13.22	.4089	19.72	.0774	6.253	1.827	.9147
#1	.0855	254.1	.0835	2.431	.0056	65.35	-.0078	.0956	.4389
#2	.0807	253.1	.0774	2.445	.0049	65.29	-.0074	.0961	.4468
#3	.0767	254.5	.0996	2.451	.0038	65.39	-.0069	.0989	.4444

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6218**	**234.8**	**32.83**	**27.27**	**9.917**	**-.0527**	**1.879**	**.2231**	**3.831**
Stddev	.0025	1.7	.41	.27	.025	.0021	.118	.0035	.017
%RSD	.4070	.7329	1.242	.9733	.2573	4.051	6.274	1.549	.4313
#1	.6204	232.8	32.44	27.20	9.890	-.0548	1.856	.2242	3.816
#2	.6204	235.9	33.25	27.04	9.919	-.0505	1.775	.2193	3.830
#3	.6248	235.6	32.80	27.56	9.941	-.0528	2.007	.2259	3.849

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0113**	**-.0354**	**10.71**	**.0528**	**.9178**	**6.105**	**-.0209**	**.4808**	**1.104**
Stddev	.0052	.0045	.08	.0034	.0058	.006	.0206	.0013	.002
%RSD	46.09	12.70	.7057	6.494	.6369	.0934	98.77	.2711	.2191
#1	.0172	-.0394	10.74	.0525	.9111	6.105	-.0013	.4794	1.102
#2	.0073	-.0305	10.76	.0564	.9206	6.099	-.0424	.4819	1.104
#3	.0094	-.0362	10.62	.0495	.9217	6.110	-.0190	.4812	1.107

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1930.3**	**4755.4**	**25536.**	**2314.5**
Stddev	5.9	10.3	159.	5.2
%RSD	.30765	.21640	.62276	.22532
#1	1925.2	4750.0	25716.	2308.6
#2	1936.8	4767.2	25413.	2318.3
#3	1928.9	4748.8	25480.	2316.6

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-19 Acquired: 5/15/2018 11:27:52 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0031**	**188.0**	**.0270**	**.7603**	**-.0001**	**13.62**	**-.0094**	**.0458**	**.4767**
Stddev	.0049	.6	.0055	.0053	.0005	.10	.0003	.0008	.0068
%RSD	157.9	.3357	20.38	.6940	474.6	.7671	3.091	1.690	1.419
#1	.0003	187.3	.0275	.7661	-.0003	13.71	-.0096	.0452	.4832
#2	-.0009	188.6	.0321	.7591	-.0004	13.62	-.0095	.0456	.4771
#3	-.0087	188.2	.0212	.7558	.0005	13.51	-.0090	.0467	.4697

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6083**	**230.2**	**17.31**	**16.73**	**1.712**	**-.0518**	**2.412**	**.1983**	**.1875**
Stddev	.0073	1.0	.25	.17	.007	.0024	.043	.0031	.0106
%RSD	1.192	.4463	1.447	1.042	.4322	4.653	1.782	1.538	5.674
#1	.6049	230.2	17.24	16.82	1.720	-.0542	2.385	.2018	.1859
#2	.6167	231.3	17.59	16.53	1.712	-.0493	2.461	.1967	.1778
#3	.6035	229.2	17.11	16.84	1.705	-.0519	2.389	.1964	.1989

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0071**	**-.0291**	**9.225**	**.0527**	**.1702**	**9.262**	**-.0189**	**.5915**	**6.424**
Stddev	.0155	.0126	.234	.0027	.0008	.041	.0167	.0072	.029
%RSD	218.0	43.23	2.536	5.117	.4409	.4411	88.47	1.209	.4596
#1	-.0216	-.0269	9.452	.0555	.1710	9.295	-.0351	.5974	6.458
#2	.0093	-.0177	9.238	.0501	.1698	9.275	-.0198	.5835	6.412
#3	-.0090	-.0426	8.985	.0524	.1697	9.216	-.0017	.5935	6.403

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1938.5**	**4734.7**	**25452.**	**2281.9**
Stddev	5.7	5.0	34.	2.3
%RSD	.29440	.10587	.13397	.09865
#1	1931.9	4729.3	25424.	2284.5
#2	1940.8	4739.1	25490.	2280.6
#3	1942.6	4735.9	25442.	2280.7

Zoom In Zoom Out

Sample Name: FA53725-20 Acquired: 5/15/2018 11:32:14 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0043**	**198.0**	**.0270**	**.7670**	**.0003**	**13.27**	**-.0101**	**.0520**	**.5054**
Stddev	.0037	.5	.0027	.0082	.0006	.18	.0004	.0007	.0023
%RSD	85.81	.2629	10.17	1.073	222.4	1.355	4.100	1.342	.4599
#1	.0002	198.6	.0289	.7685	.0009	13.48	-.0096	.0526	.5037
#2	.0072	197.9	.0239	.7581	.0001	13.16	-.0104	.0512	.5045
#3	.0056	197.6	.0283	.7744	-.0002	13.17	-.0103	.0523	.5081

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4312**	**252.1**	**19.96**	**19.10**	**1.772**	**-.0518**	**3.083**	**.1988**	**.1678**
Stddev	.0068	2.2	.34	.13	.004	.0026	.083	.0019	.0122
%RSD	1.584	.8787	1.721	.6959	.2301	5.027	2.697	.9679	7.300
#1	.4381	254.6	20.30	19.21	1.776	-.0544	3.177	.2007	.1554
#2	.4312	251.1	19.98	19.13	1.768	-.0492	3.018	.1989	.1799
#3	.4244	250.6	19.61	18.95	1.771	-.0518	3.054	.1968	.1679

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0105**	**-.0386**	**9.075**	**.0554**	**.1668**	**9.681**	**-.0298**	**.6541**	**5.056**
Stddev	.0091	.0101	.220	.0037	.0009	.017	.0114	.0078	.036
%RSD	86.98	26.15	2.428	6.677	.5485	.1762	38.48	1.199	.7094
#1	-.0210	-.0280	9.316	.0513	.1670	9.698	-.0307	.6593	5.090
#2	-.0054	-.0480	9.025	.0584	.1676	9.664	-.0179	.6580	5.058
#3	-.0050	-.0397	8.884	.0567	.1658	9.683	-.0407	.6451	5.019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1930.1**	**4724.7**	**25348.**	**2258.9**
Stddev	5.2	12.1	26.	21.5
%RSD	.27041	.25561	.10125	.95261
#1	1926.7	4711.0	25337.	2239.2
#2	1927.5	4729.0	25377.	2281.9
#3	1936.1	4734.0	25329.	2255.5

Zoom In Zoom Out

Sample Name: FA53725-25 Acquired: 5/15/2018 11:36:35 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0018**	**139.7**	**.0220**	**.4064**	**-.0013**	**5.943**	**-.0123**	**.0256**	**.4005**
Stddev	.0043	1.9	.0013	.0042	.0001	.032	.0005	.0016	.0040
%RSD	235.6	1.334	5.797	1.030	7.948	.5321	4.290	6.335	1.002
#1	.0033	141.7	.0234	.4085	-.0012	5.944	-.0124	.0273	.4038
#2	-.0030	139.5	.0209	.4090	-.0013	5.974	-.0117	.0241	.4017
#3	.0051	138.0	.0217	.4016	-.0013	5.910	-.0127	.0253	.3960

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0970**	**174.7**	**13.53**	**11.68**	**.7498**	**-.0543**	**1.561**	**.1409**	**.2634**
Stddev	.0013	1.5	.25	.25	.0050	.0015	.134	.0041	.0074
%RSD	1.347	.8467	1.848	2.145	.6617	2.772	8.610	2.926	2.796
#1	.0972	176.3	13.80	11.43	.7555	-.0560	1.715	.1448	.2643
#2	.0957	174.1	13.30	11.70	.7469	-.0540	1.466	.1413	.2703
#3	.0983	173.5	13.50	11.93	.7470	-.0530	1.502	.1366	.2556

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0022**	**-.0335**	**8.230**	**.0557**	**.0899**	**6.506**	**-.0122**	**.4677**	**.5731**
Stddev	.0063	.0065	.234	.0014	.0025	.040	.0068	.0038	.0029
%RSD	285.1	19.30	2.840	2.591	2.807	.6131	55.29	.8225	.4977
#1	-.0058	-.0280	8.472	.0566	.0926	6.552	-.0156	.4721	.5762
#2	-.0059	-.0319	8.210	.0565	.0876	6.487	-.0166	.4664	.5728
#3	.0051	-.0406	8.006	.0541	.0896	6.479	-.0044	.4647	.5705

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1928.9**	**4715.3**	**25374.**	**2272.9**
Stddev	.5	1.1	137.	26.4
%RSD	.02601	.02292	.53813	1.1626
#1	1929.3	4715.9	25247.	2242.4
#2	1928.3	4714.1	25518.	2288.6
#3	1929.0	4716.0	25357.	2287.8

Zoom In Zoom Out

Sample Name: FA53725-28 Acquired: 5/15/2018 11:40:58 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0035**	**146.3**	**.0415**	**1.047**	**-.0028**	**34.22**	**-.0020**	**.0234**	**.3377**
Stddev	.0058	1.0	.0077	.006	.0009	.12	.0007	.0010	.0028
%RSD	165.8	.6621	18.42	.5643	30.96	.3419	36.27	4.465	.8382
#1	-.0009	145.6	.0354	1.047	-.0035	34.10	-.0014	.0229	.3386
#2	.0101	146.0	.0391	1.041	-.0030	34.25	-.0028	.0227	.3400
#3	.0014	147.4	.0501	1.053	-.0018	34.33	-.0019	.0246	.3346

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**1.123**	**187.1**	**17.55**	**18.45**	**2.626**	**-.0536**	**1.422**	**.1377**	**1.614**
Stddev	.003	.7	.25	.32	.006	.0013	.027	.0019	.006
%RSD	.2246	.3642	1.447	1.725	.2183	2.456	1.920	1.363	.4008
#1	1.126	186.6	17.38	18.17	2.633	-.0521	1.411	.1357	1.613
#2	1.121	186.8	17.84	18.80	2.623	-.0545	1.453	.1394	1.608
#3	1.123	187.9	17.43	18.38	2.623	-.0542	1.402	.1380	1.620

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0024**	**-.0327**	**9.396**	**.0606**	**.5112**	**5.287**	**-.0307**	**.4168**	**3.868**
Stddev	.0217	.0186	.081	.0028	.0017	.020	.0085	.0057	.006
%RSD	903.9	56.81	.8604	4.602	.3384	.3766	27.57	1.361	.1511
#1	.0127	-.0202	9.478	.0625	.5105	5.310	-.0369	.4133	3.871
#2	.0170	-.0541	9.393	.0574	.5099	5.278	-.0343	.4137	3.871
#3	-.0225	-.0239	9.316	.0619	.5131	5.274	-.0211	.4233	3.861

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1932.3**	**4729.1**	**25333.**	**2267.8**
Stddev	9.5	14.4	89.	18.9
%RSD	.49030	.30526	.35143	.83195
#1	1921.4	4712.9	25244.	2289.5
#2	1938.1	4733.7	25422.	2255.7
#3	1937.5	4740.6	25335.	2258.0

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-37 Acquired: 5/15/2018 11:45:17 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0038**	**210.7**	**.0345**	**.7583**	**-.0003**	**9.570**	**-.0113**	**.0398**	**.4390**
Stddev	.0006	1.5	.0049	.0073	.0014	.079	.0008	.0019	.0072
%RSD	16.25	.7199	14.29	.9614	394.3	.8297	7.168	4.804	1.642
#1	-.0033	212.0	.0367	.7667	.0007	9.660	-.0110	.0420	.4314
#2	-.0037	209.0	.0378	.7537	-.0019	9.512	-.0108	.0388	.4398
#3	-.0045	211.1	.0288	.7545	.0001	9.537	-.0123	.0387	.4458

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.8447**	**214.7**	**16.22**	**14.73**	**.9971**	**-.0532**	**1.534**	**.1559**	**.1980**
Stddev	.0033	.9	.24	.22	.0041	.0028	.066	.0026	.0100
%RSD	.3941	.4084	1.507	1.523	.4146	5.319	4.326	1.655	5.026
#1	.8464	215.6	16.50	14.61	.9950	-.0511	1.597	.1589	.2009
#2	.8468	213.8	16.07	14.99	1.002	-.0564	1.464	.1547	.1870
#3	.8409	214.6	16.07	14.60	.9945	-.0522	1.542	.1541	.2063

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0182**	**-.0178**	**7.785**	**.0546**	**.1427**	**6.283**	**-.0164**	**.4809**	**8.633**
Stddev	.0121	.0169	.078	.0046	.0018	.042	.0071	.0086	.028
%RSD	66.14	95.01	1.002	8.514	1.258	.6748	43.20	1.780	.3202
#1	-.0268	.0003	7.863	.0552	.1432	6.265	-.0208	.4879	8.664
#2	-.0044	-.0333	7.785	.0496	.1407	6.331	-.0082	.4834	8.610
#3	-.0234	-.0204	7.707	.0589	.1442	6.252	-.0202	.4714	8.625

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1931.3**	**4752.1**	**25435.**	**2293.7**
Stddev	4.1	7.9	204.	15.3
%RSD	.21168	.16647	.80078	.66812
#1	1930.8	4743.0	25483.	2280.4
#2	1927.4	4755.9	25212.	2290.3
#3	1935.6	4757.5	25611.	2310.5

Zoom In Zoom Out

Sample Name: FA53725-45 Acquired: 5/15/2018 11:49:39 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0009**	**207.0**	**.0513**	**.5751**	**.0008**	**10.45**	**-.0075**	**.0444**	**.5680**
Stddev	.0016	.6	.0071	.0011	.0006	.04	.0004	.0004	.0056
%RSD	170.6	.3057	13.86	.1958	81.19	.4281	5.809	.8007	.9869
#1	-.0006	206.5	.0433	.5754	.0004	10.40	-.0074	.0442	.5739
#2	.0008	206.8	.0568	.5738	.0015	10.47	-.0080	.0442	.5674
#3	.0025	207.7	.0539	.5760	.0004	10.48	-.0071	.0448	.5627

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1305**	**243.9**	**19.26**	**20.54**	**1.903**	**-.0518**	**1.671**	**.1974**	**.2512**
Stddev	.0033	.5	.59	.08	.008	.0012	.080	.0016	.0091
%RSD	2.506	.2061	3.044	.3907	.4354	2.379	4.812	.8330	3.641
#1	.1270	243.4	18.58	20.45	1.908	-.0509	1.759	.1983	.2543
#2	.1310	244.3	19.61	20.60	1.907	-.0532	1.652	.1955	.2585
#3	.1335	244.2	19.58	20.57	1.893	-.0512	1.601	.1985	.2409

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0044**	**-.0349**	**7.862**	**.0524**	**.1503**	**6.789**	**-.0222**	**.5250**	**.2708**
Stddev	.0188	.0118	.044	.0039	.0028	.023	.0214	.0041	.0001
%RSD	429.4	33.71	.5615	7.357	1.880	.3451	96.27	.7843	.0490
#1	-.0186	-.0267	7.898	.0536	.1523	6.811	-.0468	.5277	.2708
#2	-.0116	-.0296	7.875	.0482	.1470	6.793	-.0116	.5270	.2709
#3	.0170	-.0484	7.812	.0556	.1515	6.764	-.0082	.5203	.2706

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1932.9**	**4752.3**	**25549.**	**2288.8**
Stddev	1.3	4.2	163.	9.0
%RSD	.06612	.08745	.63920	.39333
#1	1931.9	4754.0	25578.	2299.2
#2	1932.4	4755.3	25373.	2283.0
#3	1934.3	4747.6	25696.	2284.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 11:54:00 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2455**	**41.44**	**2.072**	**2.069**	**2.033**	**41.25**	**2.087**	**2.043**	**2.054**
Stddev	.0009	.05	.004	.007	.006	.08	.001	.001	.011
%RSD	.3603	.1269	.2118	.3399	.3132	.1833	.0535	.0692	.5341
#1	.2450	41.41	2.069	2.068	2.040	41.33	2.087	2.041	2.042
#2	.2450	41.50	2.077	2.076	2.030	41.20	2.087	2.043	2.063
#3	.2465	41.41	2.071	2.062	2.028	41.21	2.089	2.044	2.057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.985**	**40.50**	**40.85**	**41.29**	**2.093**	**2.057**	**41.26**	**2.013**	**2.035**
Stddev	.006	.07	.04	.12	.007	.002	.11	.002	.004
%RSD	.3092	.1636	.0867	.3008	.3163	.1182	.2644	.0764	.2123
#1	1.992	40.56	40.87	41.41	2.086	2.054	41.37	2.013	2.040
#2	1.981	40.43	40.81	41.16	2.097	2.058	41.24	2.011	2.032
#3	1.982	40.51	40.87	41.31	2.097	2.059	41.15	2.014	2.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.066**	**2.064**	**1.844**	**2.054**	**2.059**	**2.089**	**2.037**	**2.118**	**2.030**
Stddev	.005	.007	.000	.002	.004	.004	.007	.006	.001
%RSD	.2627	.3266	.0098	.0909	.1944	.1899	.3639	.2866	.0705
#1	2.067	2.056	1.844	2.055	2.058	2.085	2.032	2.114	2.029
#2	2.060	2.065	1.844	2.054	2.063	2.093	2.046	2.115	2.029
#3	2.071	2.069	1.844	2.052	2.055	2.089	2.034	2.125	2.031
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 11:54:00 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1827.2**	**4575.7**	**24888.**	**2236.3**
Stddev	5.4	3.9	166.	28.5
%RSD	.29396	.08475	.66620	1.2736
#1	1821.1	4571.9	25078.	2222.9
#2	1829.4	4579.7	24814.	2269.0
#3	1831.2	4575.5	24772.	2217.0

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 11:58:10 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0129	-.0002	-.0003	-.0002	-.0131	-.0004	-.0005
Stddev	.0006	.0164	.0005	.0003	.0001	.0031	.0002	.0001
%RSD	248.7	127.2	207.2	88.99	41.52	23.55	40.22	22.59
#1	-.0005	-.0114	.0001	-.0002	-.0001	-.0133	-.0006	-.0006
#2	.0008	.0027	-.0007	-.0002	-.0003	-.0099	-.0004	-.0004
#3	.0004	-.0299	-.0001	-.0007	-.0003	-.0161	-.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0006	-.0122	-.0066	.0172	-.0002	F -.0030	-.0218
Stddev	.0001	.0001	.0047	.0383	.0066	.0000	.0005	.0129
%RSD	112.7	20.50	38.67	582.1	38.06	22.51	18.46	59.18
#1	.0001	.0007	-.0077	-.0354	.0100	-.0002	-.0024	-.0074
#2	.0001	.0005	-.0171	-.0212	.0190	-.0002	-.0030	-.0258
#3	.0000	.0005	-.0117	.0369	.0227	-.0001	-.0035	-.0322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0005	-.0016	.0005	-.0017	-.0006	-.0002	-.0008
Stddev	.0004	.0009	.0005	.0016	.0004	.0005	.0001	.0003
%RSD	100.3	185.5	32.95	296.9	20.86	82.48	70.96	34.13
#1	-.0007	.0001	-.0020	-.0006	-.0014	-.0009	-.0002	-.0009
#2	-.0007	-.0002	-.0019	.0024	-.0016	.0000	-.0003	-.0005
#3	.0001	.0015	-.0010	-.0001	-.0021	-.0008	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 11:58:10 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0006	.0000	-.0005
Stddev	.0004	.001	.0002
%RSD	72.22	1335.	33.55
#1	-.0006	.0002	-.0007
#2	-.0010	.0003	-.0005
#3	-.0002	-.0006	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1933.8	4721.3	25742.	2263.9
Stddev	2.1	8.7	125.	13.5
%RSD	.10783	.18348	.48589	.59489
#1	1933.2	4711.9	25848.	2248.3
#2	1932.0	4723.0	25773.	2271.5
#3	1936.1	4728.9	25604.	2271.8

Zoom In Zoom Out

Sample Name: FA53725-48 Acquired: 5/15/2018 12:02:39 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0052	180.8	.0125	1.353	-.0018	22.22	-.0098	.0296	.3238
Stddev	.0018	.2	.0037	.004	.0009	.09	.0001	.0016	.0040
%RSD	33.42	.1377	29.88	.2603	50.35	.4184	1.522	5.488	1.244
#1	.0032	181.0	.0089	1.352	-.0008	22.16	-.0097	.0281	.3216
#2	.0064	180.5	.0122	1.356	-.0026	22.33	-.0100	.0313	.3214
#3	.0062	180.9	.0163	1.349	-.0021	22.18	-.0098	.0294	.3285

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5224	198.6	14.03	12.85	3.532	-.0448	1.381	.1940	2.042
Stddev	.0016	.2	.55	.11	.009	.0034	.125	.0017	.009
%RSD	.3128	.1114	3.895	.8229	.2439	7.548	9.020	.8614	.4242
#1	.5209	198.7	13.94	12.78	3.532	-.0431	1.470	.1931	2.032
#2	.5221	198.3	14.61	12.81	3.540	-.0426	1.239	.1930	2.047
#3	.5241	198.7	13.53	12.97	3.523	-.0487	1.435	.1960	2.046

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0075	-.0223	9.626	.0580	.4592	5.183	-.0108	.5322	2.592
Stddev	.0011	.0088	.110	.0028	.0012	.026	.0140	.0032	.015
%RSD	14.02	39.21	1.140	4.810	.2571	.5041	128.9	.6042	.5800
#1	-.0065	-.0129	9.752	.0558	.4579	5.212	-.0017	.5294	2.606
#2	-.0075	-.0302	9.577	.0571	.4598	5.177	-.0269	.5357	2.576
#3	-.0086	-.0239	9.549	.0612	.4600	5.160	-.0039	.5315	2.595

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1946.6	4752.5	25521.	2290.1
Stddev	3.0	16.0	70.	7.3
%RSD	.15505	.33598	.27565	.31729
#1	1943.9	4734.3	25489.	2298.3
#2	1945.9	4764.3	25602.	2284.5
#3	1949.9	4758.7	25473.	2287.6

Zoom In Zoom Out

Sample Name: FA53725-69 Acquired: 5/15/2018 12:07:00 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0017	136.9	.0344	.4833	-.0004	9.051	-.0116	.0191	.3248
Stddev	.0060	.7	.0110	.0028	.0012	.027	.0001	.0011	.0023
%RSD	363.3	.4774	32.11	.5744	339.6	.2977	.5556	5.913	.7073
#1	-.0062	136.6	.0408	.4843	-.0012	9.043	-.0115	.0196	.3236
#2	-.0039	137.6	.0216	.4855	.0010	9.082	-.0116	.0178	.3233
#3	.0051	136.4	.0407	.4802	-.0009	9.030	-.0116	.0199	.3274

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	4.031	153.6	13.50	11.68	.7856	-.0533	1.013	-.1031	9.586
Stddev	.014	.7	.36	.41	.0012	.0022	.089	.0008	.067
%RSD	.3462	.4825	2.655	3.471	.1536	4.119	8.788	.7857	.6934
#1	4.044	153.4	13.45	11.75	.7849	-.0546	.9121	.1023	9.652
#2	4.032	154.5	13.16	12.05	.7850	-.0545	1.080	.1031	9.588
#3	4.016	153.1	13.87	11.25	.7870	-.0508	1.047	.1039	9.519

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1567	-.0140	8.340	.0639	.1702	4.780	-.0226	.3573	.6499
Stddev	.0101	.0068	.188	.0040	.0012	.014	.0078	.0018	.0031
%RSD	6.463	48.38	2.256	6.195	.7021	.2824	34.45	.4950	.4813
#1	.1512	-.0102	8.450	.0652	.1697	4.795	-.0274	.3558	.6516
#2	.1505	-.0218	8.446	.0595	.1716	4.769	-.0267	.3593	.6518
#3	.1684	-.0099	8.122	.0671	.1694	4.777	-.0136	.3570	.6463

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1946.1	4735.3	25380.	2284.1
Stddev	5.6	3.3	93.	7.6
%RSD	.28853	.06937	.36757	.33259
#1	1942.4	4732.7	25477.	2292.8
#2	1943.3	4734.2	25291.	2280.7
#3	1952.6	4739.0	25373.	2278.8

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-74 Acquired: 5/15/2018 12:11:21 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0064**	**166.9**	**.0497**	**.5075**	**.0003**	**5.220**	**-.0124**	**.0355**	**.4060**
Stddev	.0048	.9	.0021	.0041	.0016	.038	.0008	.0005	.0026
%RSD	75.11	.5195	4.180	.7996	479.1	.7304	6.851	1.548	.6501
#1	-.0012	167.8	.0477	.5122	.0021	5.252	-.0115	.0352	.4052
#2	-.0073	166.7	.0519	.5051	-.0010	5.178	-.0132	.0351	.4038
#3	-.0106	166.1	.0495	.5053	.0000	5.229	-.0124	.0361	.4089

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**4.421**	**172.2**	**16.39**	**16.41**	**.5730**	**-.0542**	**1.356**	**.1426**	**19.16**
Stddev	.012	.4	.14	.19	.0031	.0012	.063	.0023	.08
%RSD	.2703	.2599	.8599	1.172	.5387	2.221	4.643	1.587	.4397
#1	4.435	172.7	16.47	16.56	.5751	-.0552	1.428	.1416	19.24
#2	4.416	172.2	16.47	16.49	.5744	-.0545	1.310	.1452	19.17
#3	4.413	171.8	16.22	16.20	.5694	-.0528	1.330	.1410	19.07

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.2334**	**-.0277**	**7.897**	**.0601**	**.1883**	**5.220**	**-.0137**	**.3822**	**1.182**
Stddev	.0106	.0204	.133	.0027	.0008	.015	.0041	.0021	.000
%RSD	4.527	73.44	1.689	4.441	.4107	.2879	30.24	.5570	.0227
#1	.2245	-.0411	8.037	.0632	.1885	5.229	-.0169	.3842	1.182
#2	.2450	-.0379	7.881	.0586	.1889	5.228	-.0151	.3799	1.182
#3	.2305	-.0043	7.772	.0585	.1874	5.202	-.0090	.3824	1.182

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1935.5**	**4720.9**	**25527.**	**2302.5**
Stddev	6.0	10.9	136.	24.7
%RSD	.31247	.23087	.53154	1.0740
#1	1941.9	4727.7	25605.	2305.6
#2	1929.9	4708.4	25605.	2325.5
#3	1934.7	4726.8	25370.	2276.3

Zoom In Zoom Out

Sample Name: FA53725-77 Acquired: 5/15/2018 12:15:43 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0029**	**211.8**	**-.0048**	**1.918**	**-.0010**	**51.52**	**-.0074**	**.0313**	**.3469**
Stddev	.0078	1.8	.0078	.011	.0001	.28	.0009	.0021	.0017
%RSD	269.8	.8468	160.0	.5591	7.398	.5374	12.01	6.713	.4887
#1	.0116	210.5	-.0123	1.910	-.0010	51.47	-.0079	.0311	.3462
#2	.0006	213.8	.0032	1.930	-.0009	51.82	-.0064	.0293	.3458
#3	-.0036	211.0	-.0054	1.915	-.0010	51.27	-.0080	.0335	.3489

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**1.169**	**212.6**	**18.68**	**18.98**	**3.872**	**-.0511**	**1.598**	**.2073**	**1.933**
Stddev	.008	.5	.34	.35	.009	.0017	.120	.0010	.012
%RSD	.7066	.2291	1.816	1.828	.2228	3.371	7.526	.4893	.5993
#1	1.178	212.4	18.30	19.25	3.872	-.0522	1.726	.2072	1.946
#2	1.169	213.1	18.94	19.11	3.881	-.0491	1.487	.2064	1.928
#3	1.161	212.2	18.81	18.59	3.864	-.0520	1.581	.2084	1.924

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0005**	**-.0362**	**10.27**	**.0671**	**.7693**	**7.220**	**-.0270**	**.5298**	**4.520**
Stddev	.0114	.0082	.06	.0055	.0044	.015	.0118	.0013	.004
%RSD	2469.	22.70	.6129	8.260	.5780	.2078	43.63	.2398	.1000
#1	.0003	-.0268	10.22	.0686	.7647	7.221	-.0143	.5305	4.518
#2	.0106	-.0421	10.34	.0717	.7736	7.234	-.0291	.5306	4.526
#3	-.0123	-.0396	10.25	.0609	.7696	7.205	-.0376	.5284	4.518

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1941.5**	**4743.3**	**25379.**	**2264.2**
Stddev	5.6	1.9	183.	17.4
%RSD	.28980	.03935	.71932	.76799
#1	1940.6	4745.0	25170.	2262.3
#2	1936.3	4741.3	25462.	2247.9
#3	1947.5	4743.7	25506.	2282.5

Zoom In Zoom Out

Sample Name: FA53725-80 Acquired: 5/15/2018 12:20:03 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0031**	**191.1**	**.0069**	**.8551**	**-.0032**	**19.78**	**-.0124**	**.0136**	**.2841**
Stddev	.0020	2.2	.0135	.0077	.0019	.14	.0008	.0007	.0041
%RSD	65.73	1.148	195.6	.8972	61.13	.7107	6.848	5.014	1.441
#1	.0008	193.3	.0060	.8636	-.0021	19.95	-.0121	.0139	.2885
#2	.0039	190.9	.0208	.8532	-.0020	19.70	-.0133	.0141	.2834
#3	.0046	188.9	-.0061	.8486	-.0054	19.71	-.0117	.0128	.2804

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**3.711**	**188.1**	**13.39**	**13.33**	**1.081**	**-.0539**	**1.547**	**.1438**	**10.19**
Stddev	.016	1.1	.26	.08	.003	.0005	.102	.0034	.10
%RSD	.4305	.5997	1.907	.6298	.3075	.8627	6.588	2.386	.9712
#1	3.725	189.2	13.68	13.36	1.083	-.0539	1.448	.1424	10.29
#2	3.713	188.2	13.23	13.39	1.083	-.0534	1.652	.1477	10.19
#3	3.693	186.9	13.25	13.23	1.077	-.0543	1.540	.1413	10.09

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0379**	**-.0313**	**10.91**	**.0594**	**.2992**	**6.825**	**-.0123**	**.4837**	**.6461**
Stddev	.0108	.0092	.34	.0033	.0027	.059	.0096	.0044	.0047
%RSD	28.39	29.50	3.108	5.602	.8913	.8587	77.86	.9083	.7290
#1	.0424	-.0382	11.21	.0626	.3021	6.887	-.0191	.4870	.6511
#2	.0256	-.0348	10.98	.0595	.2987	6.820	-.0165	.4854	.6454
#3	.0456	-.0208	10.54	.0560	.2968	6.770	-.0014	.4787	.6418

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1933.4**	**4700.1**	**25320.**	**2269.7**
Stddev	5.1	14.0	93.	13.9
%RSD	.26295	.29719	.36782	.61067
#1	1939.3	4714.6	25425.	2279.6
#2	1931.0	4699.0	25247.	2275.6
#3	1930.0	4686.7	25287.	2253.8

Zoom In Zoom Out

Sample Name: FA53725-83 Acquired: 5/15/2018 12:24:25 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0037**	**170.4**	**.0153**	**.9486**	**-.0024**	**17.94**	**-.0124**	**.0167**	**.2676**
Stddev	.0046	1.6	.0008	.0079	.0008	.12	.0002	.0015	.0039
%RSD	124.2	.9522	5.410	.8285	33.42	.6856	1.767	8.882	1.448
#1	-.0004	171.0	.0162	.9528	-.0015	17.97	-.0126	.0171	.2708
#2	.0028	171.7	.0145	.9535	-.0030	18.05	-.0121	.0150	.2633
#3	.0087	168.6	.0154	.9395	-.0026	17.81	-.0124	.0179	.2686

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**5.391**	**166.0**	**12.21**	**11.50**	**.9751**	**-.0546**	**1.405**	**.1402**	**8.766**
Stddev	.015	1.5	.11	.26	.0022	.0013	.129	.0029	.008
%RSD	.2776	.9326	.9349	2.278	.2291	2.296	9.187	2.042	.0875
#1	5.393	166.6	12.11	11.23	.9736	-.0537	1.256	.1376	8.768
#2	5.375	167.1	12.33	11.52	.9740	-.0560	1.479	.1397	8.758
#3	5.405	164.2	12.18	11.75	.9777	-.0541	1.479	.1433	8.773

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.2030**	**-.0262**	**10.39**	**.0619**	**.3844**	**6.344**	**-.0257**	**.4456**	**.9816**
Stddev	.0092	.0052	.07	.0015	.0044	.017	.0076	.0025	.0025
%RSD	4.535	19.99	.6943	2.461	1.137	.2712	29.46	.5625	.2527
#1	.1933	-.0323	10.43	.0608	.3848	6.336	-.0281	.4433	.9790
#2	.2041	-.0236	10.42	.0637	.3885	6.332	-.0317	.4483	.9817
#3	.2116	-.0228	10.30	.0613	.3798	6.364	-.0172	.4454	.9840

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1925.7**	**4682.2**	**25206.**	**2253.1**
Stddev	4.1	14.6	104.	27.0
%RSD	.21126	.31191	.41313	1.1987
#1	1921.0	4686.6	25325.	2244.3
#2	1928.0	4665.9	25129.	2231.5
#3	1928.1	4694.1	25165.	2283.4

Zoom In Zoom Out

Sample Name: FA53725-7 Acquired: 5/15/2018 12:28:48 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0010**	**292.0**	**.1104**	**.6697**	**.0088**	**16.58**	**-.0051**	**.0885**	**.6447**
Stddev	.0024	.7	.0054	.0021	.0009	.06	.0003	.0004	.0036
%RSD	246.4	.2269	4.893	.3156	9.742	.3370	4.943	.4183	.5523
#1	-.0032	291.9	.1052	.6674	.0085	16.64	-.0049	.0886	.6482
#2	.0015	291.4	.1159	.6701	.0082	16.53	-.0049	.0888	.6449
#3	-.0012	292.7	.1101	.6716	.0098	16.57	-.0054	.0881	.6411

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1024**	**269.0**	**28.93**	**38.09**	**1.087**	**-.0236**	**2.894**	**.3176**	**.0792**
Stddev	.0038	.9	.25	.19	.004	.0002	.032	.0005	.0046
%RSD	3.709	.3264	.8617	.5113	.3527	.9094	1.091	.1429	5.781
#1	.1014	269.8	29.11	38.30	1.090	-.0237	2.862	.3180	.0820
#2	.1066	269.1	29.02	37.91	1.089	-.0233	2.925	.3177	.0817
#3	.0992	268.0	28.64	38.07	1.083	-.0237	2.896	.3171	.0739

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0025**	**-.0147**	**9.376**	**.0621**	**.2588**	**8.488**	**-.0062**	**.5812**	**.3037**
Stddev	.0087	.0112	.035	.0025	.0007	.035	.0041	.0038	.0021
%RSD	354.6	76.22	.3691	3.975	.2574	.4104	65.22	.6490	.6931
#1	.0057	-.0144	9.412	.0621	.2581	8.509	-.0094	.5845	.3060
#2	-.0015	-.0037	9.343	.0646	.2594	8.507	-.0077	.5821	.3034
#3	-.0116	-.0261	9.372	.0597	.2590	8.448	-.0017	.5771	.3018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1904.6**	**4752.4**	**25335.**	**2277.5**
Stddev	5.8	3.6	35.	17.9
%RSD	.30666	.07506	.13955	.78665
#1	1904.4	4748.3	25298.	2258.0
#2	1898.9	4753.9	25339.	2293.2
#3	1910.6	4755.0	25369.	2281.4

Zoom In Zoom Out

Sample Name: FA53725-19 Acquired: 5/15/2018 12:33:07 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**195.6**	**.0344**	**.7849**	**.0043**	**14.18**	**-.0036**	**.0524**	**.4886**
Stddev	.0035	2.8	.0041	.0089	.0011	.09	.0002	.0009	.0031
%RSD	1166.	1.410	11.91	1.130	24.59	.6291	6.592	1.720	.6367
#1	.0004	198.6	.0342	.7943	.0042	14.29	-.0039	.0530	.4922
#2	-.0033	195.0	.0387	.7834	.0054	14.15	-.0034	.0528	.4868
#3	.0038	193.2	.0305	.7768	.0033	14.12	-.0036	.0514	.4869

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6244**	**235.1**	**18.52**	**17.34**	**1.752**	**-.0188**	**2.816**	**.2061**	**.1944**
Stddev	.0042	2.6	.23	.08	.006	.0010	.083	.0018	.0042
%RSD	.6702	1.105	1.235	.4483	.3564	5.404	2.957	.8912	2.181
#1	.6205	237.5	18.65	17.36	1.758	-.0189	2.871	.2081	.1986
#2	.6288	235.3	18.26	17.42	1.752	-.0178	2.857	.2047	.1946
#3	.6240	232.4	18.66	17.26	1.746	-.0198	2.721	.2054	.1901

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0032**	**-.0224**	**10.13**	**.0616**	**.1816**	**9.701**	**-.0120**	**.6138**	**6.465**
Stddev	.0067	.0046	.02	.0015	.0021	.044	.0037	.0044	.046
%RSD	213.8	20.71	.1555	2.380	1.172	.4556	30.73	.7185	.7181
#1	.0006	-.0187	10.15	.0633	.1840	9.738	-.0132	.6172	6.517
#2	.0108	-.0276	10.13	.0608	.1809	9.713	-.0150	.6154	6.451
#3	-.0019	-.0209	10.12	.0607	.1799	9.652	-.0079	.6088	6.428

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1905.0**	**4665.6**	**24934.**	**2223.4**
Stddev	6.0	7.9	71.	12.2
%RSD	.31388	.16826	.28573	.54802
#1	1900.4	4662.6	24929.	2209.9
#2	1911.8	4674.5	24865.	2226.8
#3	1902.9	4659.7	25007.	2233.5

Zoom In Zoom Out

Sample Name: FA53725-20 Acquired: 5/15/2018 12:37:27 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**194.0**	**.0336**	**.7616**	**.0035**	**13.19**	**-.0032**	**.0579**	**.5013**
Stddev	.0005	2.0	.0030	.0059	.0003	.14	.0002	.0005	.0026
%RSD	171.7	1.006	9.056	.7787	9.535	1.085	7.203	.8371	.5152
#1	-.0008	196.3	.0365	.7649	.0039	13.35	-.0030	.0579	.4991
#2	-.0002	193.2	.0304	.7652	.0033	13.16	-.0035	.0574	.5007
#3	.0002	192.6	.0339	.7548	.0034	13.07	-.0032	.0583	.5042

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4256**	**245.2**	**19.44**	**18.30**	**1.748**	**-.0198**	**3.262**	**.2056**	**.1744**
Stddev	.0019	1.9	.36	.20	.007	.0009	.095	.0009	.0048
%RSD	.4406	.7608	1.858	1.109	.4268	4.303	2.908	.4385	2.748
#1	.4258	247.2	19.72	18.49	1.755	-.0189	3.371	.2048	.1799
#2	.4236	244.9	19.58	18.32	1.748	-.0205	3.222	.2055	.1711
#3	.4274	243.5	19.04	18.09	1.741	-.0200	3.194	.2066	.1722

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0047**	**-.0150**	**9.087**	**.0615**	**.1671**	**9.709**	**-.0100**	**.6597**	**5.006**
Stddev	.0037	.0063	.118	.0012	.0035	.023	.0034	.0039	.009
%RSD	77.42	41.76	1.294	2.020	2.087	.2377	33.67	.5918	.1880
#1	.0073	-.0218	9.153	.0625	.1706	9.732	-.0137	.6624	5.014
#2	.0005	-.0136	9.157	.0620	.1637	9.686	-.0090	.6615	5.009
#3	.0064	-.0095	8.952	.0601	.1672	9.709	-.0072	.6552	4.996

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1902.6**	**4678.4**	**25107.**	**2240.3**
Stddev	6.6	6.7	178.	28.1
%RSD	.34850	.14238	.70775	1.2547
#1	1897.2	4674.3	24966.	2212.4
#2	1900.6	4674.7	25049.	2239.7
#3	1910.0	4686.0	25307.	2268.6

Zoom In Zoom Out

Sample Name: FA53725-37 Acquired: 5/15/2018 12:41:47 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**216.5**	**.0478**	**.7847**	**.0038**	**10.16**	**-.0048**	**.0465**	**.4567**
Stddev	.0012	1.9	.0031	.0019	.0009	.16	.0002	.0001	.0021
%RSD	818.3	.8645	6.577	.2439	23.19	1.574	3.811	.1950	.4701
#1	-.0013	218.4	.0442	.7865	.0048	10.34	-.0050	.0464	.4592
#2	.0011	216.3	.0500	.7849	.0033	10.09	-.0047	.0465	.4552
#3	-.0002	214.7	.0492	.7827	.0033	10.05	-.0046	.0465	.4558

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.8612**	**217.2**	**17.10**	**14.88**	**1.024**	**-.0206**	**1.814**	**.1619**	**.2019**
Stddev	.0024	1.3	.12	.41	.006	.0008	.044	.0020	.0042
%RSD	.2803	.6201	.6937	2.769	.5713	3.878	2.401	1.231	2.074
#1	.8588	218.4	17.18	15.28	1.029	-.0214	1.833	.1642	.1989
#2	.8637	217.4	17.17	14.91	1.027	-.0198	1.765	.1608	.2067
#3	.8612	215.7	16.97	14.46	1.018	-.0206	1.846	.1608	.2000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**-.0180**	**8.510**	**.0649**	**.1511**	**6.574**	**-.0186**	**.5014**	**8.719**
Stddev	.0047	.0085	.063	.0020	.0014	.028	.0020	.0054	.030
%RSD	539.7	47.40	.7342	3.086	.9506	.4212	10.75	1.067	.3494
#1	.0036	-.0230	8.553	.0654	.1527	6.583	-.0185	.5049	8.753
#2	-.0046	-.0081	8.538	.0666	.1506	6.596	-.0167	.5041	8.706
#3	.0036	-.0229	8.438	.0627	.1499	6.543	-.0207	.4953	8.696

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1905.1**	**4687.1**	**25120.**	**2262.4**
Stddev	2.6	9.8	104.	19.7
%RSD	.13579	.20840	.41339	.86916
#1	1906.2	4696.9	25023.	2239.7
#2	1902.1	4677.3	25108.	2274.2
#3	1906.9	4687.2	25229.	2273.4

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 12:46:07 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2467	41.95	2.105	2.093	2.035	41.49	2.116	2.063	2.058
Stddev	.0016	.19	.003	.015	.011	.19	.004	.002	.007
%RSD	.6374	.4589	.1290	.7106	.5322	.4667	.1648	.0713	.3666
#1	.2481	42.15	2.108	2.103	2.043	41.60	2.120	2.065	2.066
#2	.2450	41.94	2.106	2.100	2.038	41.59	2.113	2.062	2.055
#3	.2470	41.76	2.103	2.076	2.023	41.26	2.115	2.062	2.052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.000	40.50	41.15	41.40	2.110	2.076	41.61	2.027	2.058
Stddev	.005	.18	.11	.32	.010	.001	.16	.003	.004
%RSD	.2759	.4563	.2773	.7671	.4629	.0658	.3895	.1217	.1946
#1	2.005	40.68	41.23	41.46	2.119	2.077	41.73	2.029	2.062
#2	1.994	40.50	41.20	41.68	2.110	2.074	41.66	2.024	2.054
#3	2.001	40.31	41.02	41.05	2.100	2.076	41.43	2.028	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.091	2.096	1.871	2.072	2.086	2.109	2.057	2.137	2.049
Stddev	.001	.005	.003	.004	.016	.006	.004	.007	.003
%RSD	.0479	.2277	.1429	.1963	.7496	.2889	.1882	.3385	.1231
#1	2.091	2.092	1.869	2.076	2.091	2.116	2.053	2.145	2.049
#2	2.091	2.094	1.869	2.070	2.098	2.104	2.059	2.135	2.052
#3	2.089	2.101	1.874	2.069	2.068	2.106	2.060	2.131	2.047
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 12:46:07 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1808.4	4524.3	24843.	2230.4
Stddev	3.3	10.1	205.	12.5
%RSD	.18001	.22332	.82587	.56169
#1	1805.6	4517.7	24823.	2222.4
#2	1812.0	4536.0	24648.	2224.0
#3	1807.7	4519.3	25057.	2244.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 12:50:18 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0232	-.0004	.0002	-.0002	-.0115	-.0006	-.0006
Stddev	.0000	.0059	.0002	.0005	.0001	.0059	.0001	.0001
%RSD	6.794	25.31	55.44	208.0	30.51	51.17	22.02	21.24
#1	.0001	-.0291	-.0007	-.0001	-.0002	-.0057	-.0007	-.0007
#2	.0001	-.0174	-.0003	.0008	-.0002	-.0175	-.0006	-.0007
#3	.0001	-.0232	-.0003	.0000	-.0003	-.0112	-.0005	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0004	-.0184	-.0151	.0075	-.0003	F -.0030	-.0299
Stddev	.000	.0004	.0046	.0200	.0190	.0000	.0007	.0111
%RSD	345.4	85.56	25.26	132.8	253.7	.7341	21.89	37.03
#1	-.0001	.0001	-.0140	.0069	.0261	-.0003	-.0022	-.0367
#2	.0000	.0004	-.0179	-.0199	.0082	-.0003	-.0032	-.0171
#3	.0000	.0008	-.0233	-.0323	-.0119	-.0003	-.0035	-.0358
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0005	-.0010	-.0016	-.0014	-.0009	-.0003	-.0008
Stddev	.0003	.0012	.0003	.0020	.0002	.0004	.0001	.0000
%RSD	61.67	239.6	33.42	125.2	15.19	44.33	46.15	5.942
#1	-.0008	.0006	-.0008	-.0009	-.0015	-.0013	-.0001	-.0007
#2	-.0007	-.0008	-.0014	-.0037	-.0012	-.0011	-.0004	-.0008
#3	-.0002	.0017	-.0008	.0000	-.0016	-.0005	-.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 12:50:18 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0006	-.0002	-.0006
Stddev	.0008	.0001	.0002
%RSD	141.7	64.28	34.13
#1	-.0004	-.0003	-.0008
#2	-.0014	-.0001	-.0008
#3	.0002	-.0003	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1936.7	4712.4	25494.	2267.1
Stddev	10.9	20.2	183.	25.8
%RSD	.56022	.42808	.71763	1.1367
#1	1925.8	4689.5	25387.	2295.0
#2	1936.7	4727.6	25705.	2262.0
#3	1947.5	4720.0	25390.	2244.3

SGS FA53725

Zoom In Zoom Out

Sample Name: MP33740-MB1 Acquired: 5/15/2018 12:54:47 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	-.0435	F -.0129	-.0001	F -.0035	-.0260	F -.0058	-.0055
Stddev	.0006	.0191	.0041	.0009	.0001	.0147	.0005	.0002
%RSD	63.94	43.81	31.62	1333.	3.790	56.64	8.266	4.173
#1	-.0013	-.0593	-.0169	.0006	-.0036	-.0148	-.0063	-.0053
#2	-.0002	-.0223	-.0088	-.0011	-.0034	-.0427	-.0056	-.0055
#3	-.0011	-.0489	-.0130	.0004	-.0034	-.0204	-.0054	-.0058
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
High Limit			.0050		.0020		.0050	
Low Limit			-.0050		-.0020		-.0050	

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0016	.0005	-.0211	-.0308	-.0398	-.0010	F -.0279	-.1857
Stddev	.0030	.0004	.0077	.3295	.1952	.0001	.0010	.0743
%RSD	187.2	84.20	36.75	1071.	489.8	12.36	3.645	40.05
#1	-.0023	.0003	-.0222	-.4030	.0148	-.0009	-.0267	-.1686
#2	-.0042	.0009	-.0128	.2232	.1222	-.0011	-.0284	-.1213
#3	.0017	.0002	-.0282	.0875	-.2565	-.0012	-.0285	-.2670
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0250	
Low Limit							-.0250	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0047	F -.0037	F -.0027	-.0026	.0209	F .0640	-.0030	F -.0059
Stddev	.0009	.0032	.0060	.0070	.0065	.0012	.0007	.0006
%RSD	19.08	87.80	220.6	264.8	30.87	1.889	23.86	10.60
#1	-.0048	-.0019	-.0065	.0034	.0278	.0644	-.0023	-.0062
#2	-.0037	-.0018	-.0058	-.0103	.0150	.0650	-.0037	-.0062
#3	-.0055	-.0074	.0042	-.0010	.0199	.0627	-.0031	-.0051
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail
High Limit		.0025	.0025			.0250		.0050
Low Limit		-.0025	-.0025			-.0250		-.0050

Zoom In Zoom Out

Sample Name: MP33740-MB1 Acquired: 5/15/2018 12:54:47 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0093	-.0037	-.0016
Stddev	.0089	.0011	.0002
%RSD	95.24	30.19	10.67
#1	-.0189	-.0047	-.0017
#2	-.0077	-.0039	-.0015
#3	-.0014	-.0025	-.0018
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1897.0	4652.4	25095.	2229.4
Stddev	4.0	13.4	24.	20.4
%RSD	.20953	.28885	.09584	.91430
#1	1893.5	4637.9	25076.	2217.1
#2	1901.3	4655.0	25088.	2252.9
#3	1896.1	4664.4	25122.	2218.2

Zoom In Zoom Out

Sample Name: MP33740-B1 Acquired: 5/15/2018 12:59:18 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0517	30.59	2.185	2.318	.0536	28.51	.0506	.5499	.2270
Stddev	.0018	.25	.010	.001	.0005	.16	.0004	.0028	.0032
%RSD	3.385	.8020	.4548	.0595	.9764	.5546	.8796	.5152	1.410
#1	.0499	30.64	2.196	2.319	.0538	28.35	.0503	.5531	.2289
#2	.0533	30.80	2.184	2.317	.0530	28.67	.0503	.5478	.2287
#3	.0521	30.32	2.176	2.319	.0540	28.51	.0511	.5488	.2233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2743	29.02	27.24	28.17	.5871	.4833	28.12	.5587	.5378
Stddev	.0028	.18	.24	.17	.0011	.0031	.04	.0043	.0062
%RSD	1.022	.6150	.8716	.5957	.1916	.6385	.1495	.7750	1.162
#1	.2775	28.96	27.00	27.98	.5878	.4866	28.08	.5635	.5449
#2	.2727	28.88	27.48	28.27	.5858	.4827	28.16	.5572	.5352
#3	.2726	29.22	27.25	28.26	.5876	.4805	28.11	.5553	.5332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5320	2.121	.4965	.5986	.5632	.5602	2.077	.5382	.5500
Stddev	.0040	.020	.0151	.0026	.0007	.0014	.004	.0018	.0007
%RSD	.7520	.9401	3.041	.4284	.1320	.2497	.1748	.3382	.1299
#1	.5346	2.137	.4873	.6011	.5630	.5617	2.080	.5364	.5508
#2	.5340	2.128	.4884	.5960	.5626	.5600	2.073	.5400	.5494
#3	.5274	2.099	.5140	.5988	.5641	.5589	2.078	.5384	.5498
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33740-B1 Acquired: 5/15/2018 12:59:18 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1892.0	4625.7	25007.	2209.0
Stddev	3.3	8.0	64.	14.8
%RSD	.17325	.17292	.25759	.66989
#1	1893.3	4627.9	24962.	2223.1
#2	1894.4	4632.4	25081.	2193.6
#3	1888.2	4616.9	24978.	2210.2

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-31A Acquired: 5/15/2018 13:03:36 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0016**	**254.9**	**.0531**	**.7940**	**.0029**	**28.99**	**-.0048**	**.0350**	**.4334**
Stddev	.0022	1.5	.0038	.0049	.0005	.13	.0004	.0013	.0018
%RSD	138.5	.5795	7.243	.6138	17.77	.4564	9.268	3.756	.4174
#1	-.0035	253.6	.0566	.7893	.0031	28.84	-.0049	.0341	.4316
#2	-.0021	256.5	.0537	.7990	.0023	29.09	-.0043	.0365	.4334
#3	.0008	254.5	.0490	.7935	.0032	29.04	-.0052	.0344	.4353

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3948**	**259.1**	**19.63**	**17.92**	**1.492**	**-.0129**	**2.400**	**.1992**	**.7172**
Stddev	.0007	1.4	.05	.15	.003	.0007	.055	.0016	.0087
%RSD	.1809	.5503	.2398	.8621	.2062	5.524	2.292	.8205	1.210
#1	.3950	257.6	19.58	18.08	1.494	-.0129	2.350	.1974	.7186
#2	.3954	260.5	19.67	17.77	1.488	-.0121	2.459	.1997	.7080
#3	.3940	259.2	19.64	17.91	1.492	-.0135	2.390	.2006	.7252

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0102**	**-.0138**	**5.163**	**.0605**	**.4658**	**6.612**	**-.0096**	**.6798**	**1.640**
Stddev	.0080	.0032	.006	.0022	.0042	.008	.0029	.0014	.003
%RSD	78.88	23.08	.1125	3.559	.8983	.1251	30.28	.2076	.1768
#1	.0147	-.0173	5.163	.0621	.4621	6.621	-.0063	.6787	1.642
#2	.0149	-.0131	5.169	.0581	.4704	6.606	-.0116	.6814	1.636
#3	.0009	-.0110	5.157	.0614	.4649	6.608	-.0110	.6792	1.641

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1912.7**	**4733.9**	**25290.**	**2273.4**
Stddev	10.7	11.1	91.	18.1
%RSD	.55693	.23414	.36151	.79737
#1	1904.4	4723.8	25186.	2288.4
#2	1924.7	4745.7	25332.	2253.3
#3	1909.0	4732.1	25353.	2278.6

Zoom In Zoom Out

Sample Name: MP33740-D1 Acquired: 5/15/2018 13:07:57 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**243.5**	**.0466**	**.7632**	**.0027**	**28.00**	**-.0054**	**.0329**	**.4168**
Stddev	.0014	.3	.0032	.0024	.0005	.11	.0002	.0003	.0068
%RSD	792.0	.1061	6.948	.3191	20.16	.3773	2.894	.9478	1.624
#1	-.0001	243.4	.0440	.7628	.0032	28.11	-.0053	.0327	.4182
#2	-.0016	243.4	.0502	.7658	.0027	27.90	-.0056	.0328	.4227
#3	.0012	243.8	.0456	.7610	.0021	27.98	-.0053	.0333	.4094

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3799**	**249.7**	**18.93**	**17.26**	**1.424**	**-.0147**	**2.353**	**.1787**	**.6590**
Stddev	.0020	.8	.25	.17	.001	.0003	.032	.0023	.0105
%RSD	.5310	.3059	1.329	.9956	.0865	2.143	1.371	1.289	1.596
#1	.3822	249.7	18.81	17.42	1.423	-.0149	2.377	.1804	.6711
#2	.3787	248.9	18.76	17.27	1.425	-.0144	2.365	.1760	.6527
#3	.3787	250.4	19.22	17.08	1.424	-.0150	2.316	.1796	.6531

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0056**	**-.0164**	**4.394**	**.0558**	**.4539**	**5.751**	**-.0112**	**.6479**	**1.554**
Stddev	.0024	.0087	.030	.0008	.0009	.017	.0019	.0013	.009
%RSD	41.93	53.01	.6949	1.472	.1889	.2875	16.78	.1999	.5541
#1	.0029	-.0095	4.425	.0567	.4548	5.767	-.0134	.6489	1.564
#2	.0065	-.0262	4.392	.0551	.4531	5.752	-.0099	.6465	1.548
#3	.0074	-.0135	4.364	.0556	.4537	5.734	-.0104	.6485	1.551

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1917.5**	**4716.9**	**25271.**	**2232.0**
Stddev	9.8	11.2	27.	25.5
%RSD	.51002	.23777	.10845	1.1422
#1	1914.0	4721.6	25262.	2208.9
#2	1928.5	4725.0	25302.	2259.4
#3	1909.9	4704.1	25250.	2227.7

Zoom In Zoom Out

Sample Name: MP33740-D2 Acquired: 5/15/2018 13:12:16 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0012**	**249.9**	**.0494**	**.7853**	**.0026**	**28.53**	**-.0048**	**.0345**	**.4248**
Stddev	.0030	1.5	.0024	.0033	.0005	.17	.0003	.0006	.0040
%RSD	252.3	.5900	4.781	.4191	20.14	.5997	5.644	1.737	.9372
#1	.0017	249.3	.0495	.7841	.0020	28.63	-.0048	.0338	.4235
#2	-.0043	248.8	.0518	.7829	.0031	28.33	-.0051	.0346	.4217
#3	-.0009	251.6	.0470	.7891	.0025	28.62	-.0045	.0350	.4293

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3970**	**256.8**	**19.44**	**17.72**	**1.479**	**-.0154**	**2.353**	**.1847**	**.7005**
Stddev	.0015	.4	.18	.28	.003	.0007	.038	.0014	.0074
%RSD	.3698	.1391	.9336	1.575	.2081	4.238	1.609	.7599	1.062
#1	.3968	257.1	19.53	17.52	1.483	-.0159	2.309	.1838	.7082
#2	.3986	256.4	19.56	17.59	1.477	-.0157	2.375	.1839	.7001
#3	.3956	256.8	19.23	18.04	1.478	-.0147	2.374	.1863	.6934

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0097**	**-.0212**	**5.068**	**.0596**	**.4630**	**6.194**	**-.0082**	**.6677**	**1.642**
Stddev	.0055	.0027	.007	.0022	.0043	.019	.0008	.0019	.002
%RSD	56.59	12.65	.1414	3.685	.9209	.3078	9.419	.2793	.1110
#1	.0060	-.0207	5.061	.0601	.4603	6.215	-.0074	.6689	1.640
#2	.0071	-.0241	5.070	.0614	.4609	6.178	-.0083	.6656	1.643
#3	.0161	-.0189	5.075	.0572	.4679	6.189	-.0090	.6687	1.644

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1906.0**	**4710.3**	**25326.**	**2239.0**
Stddev	2.2	9.2	102.	11.5
%RSD	.11742	.19503	.40218	.51142
#1	1903.4	4717.9	25369.	2225.8
#2	1907.5	4712.9	25399.	2244.1
#3	1907.0	4700.1	25210.	2247.0

Zoom In Zoom Out

Sample Name: MP33740-SD1 Acquired: 5/15/2018 13:16:36 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0075**	**570.3**	**.0884**	**1.762**	**-.0017**	**66.10**	**-.0287**	**.0588**	**.9614**
Stddev	.0107	2.1	.0066	.020	.0040	.10	.0011	.0042	.0098
%RSD	142.0	.3736	7.508	1.113	232.5	.1535	3.893	7.136	1.019
#1	.0187	571.9	.0815	1.778	-.0026	66.08	-.0290	.0541	.9682
#2	-.0025	567.9	.0889	1.740	-.0052	66.00	-.0275	.0620	.9659
#3	.0063	571.0	.0948	1.769	.0027	66.21	-.0297	.0603	.9502

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.8676**	**582.3**	**43.19**	**39.36**	**3.335**	**-.1217**	**6.018**	**.4037**	**1.534**
Stddev	.0151	.5	.24	1.26	.013	.0025	.119	.0043	.003
%RSD	1.740	.0889	.5571	3.208	.3739	2.043	1.978	1.053	.2078
#1	.8844	582.9	43.39	37.96	3.349	-.1191	5.884	.4080	1.537
#2	.8552	581.9	42.92	39.70	3.333	-.1221	6.112	.4035	1.531
#3	.8631	582.2	43.25	40.41	3.324	-.1240	6.057	.3995	1.533

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0151**	**-.0928**	**11.98**	**.1065**	**1.047**	**14.52**	**-.0401**	**1.492**	**3.685**
Stddev	.0243	.0488	.04	.0024	.004	.06	.0066	.008	.015
%RSD	161.2	52.55	.3229	2.282	.3523	.3876	16.44	.5653	.4119
#1	.0067	-.1480	12.02	.1050	1.043	14.55	-.0440	1.495	3.702
#2	-.0412	-.0752	11.97	.1093	1.048	14.55	-.0437	1.499	3.673
#3	-.0107	-.0553	11.95	.1051	1.050	14.45	-.0325	1.483	3.681

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1935.5**	**4721.5**	**25270.**	**2274.8**
Stddev	3.5	5.9	166.	20.6
%RSD	.18205	.12400	.65615	.90364
#1	1934.4	4716.0	25149.	2280.1
#2	1932.7	4727.6	25202.	2292.2
#3	1939.4	4720.9	25459.	2252.1

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: MP33740-PS1 Acquired: 5/15/2018 13:20:58 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0498**	**263.0**	**.1610**	**1.079**	**.0557**	**34.80**	**.0477**	**.0878**	**.4984**
Stddev	.0032	2.3	.0001	.008	.0015	.22	.0001	.0003	.0015
%RSD	6.463	.8892	.0821	.7067	2.713	.6218	.1668	.3895	.3017
#1	.0499	265.7	.1610	1.088	.0575	35.05	.0477	.0880	.5001
#2	.0531	262.0	.1612	1.075	.0548	34.68	.0478	.0874	.4976
#3	.0466	261.4	.1610	1.074	.0550	34.67	.0477	.0880	.4974

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5115**	**268.1**	**30.25**	**23.66**	**1.565**	**.0813**	**13.05**	**.2994**	**.7814**
Stddev	.0039	2.1	.15	.26	.004	.0014	.11	.0017	.0034
%RSD	.7530	.7957	.5085	1.116	.2688	1.727	.8726	.5664	.4311
#1	.5154	270.5	30.23	23.95	1.566	.0797	13.18	.2978	.7835
#2	.5077	267.0	30.11	23.58	1.569	.0822	13.00	.2993	.7775
#3	.5114	266.7	30.42	23.44	1.561	.0820	12.96	.3012	.7831

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1129**	**.0803**	**5.467**	**.1116**	**.5308**	**6.873**	**.0903**	**.7430**	**1.929**
Stddev	.0031	.0160	.006	.0031	.0050	.013	.0026	.0009	.001
%RSD	2.702	19.98	.1157	2.772	.9364	.1828	2.866	.1146	.0560
#1	.1158	.0878	5.472	.1101	.5355	6.885	.0927	.7432	1.928
#2	.1097	.0619	5.460	.1095	.5314	6.874	.0908	.7437	1.928
#3	.1132	.0912	5.469	.1152	.5256	6.860	.0876	.7421	1.930

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1892.4**	**4701.2**	**25392.**	**2259.0**
Stddev	5.0	8.1	68.	17.9
%RSD	.26432	.17125	.26609	.79080
#1	1888.9	4697.2	25396.	2238.7
#2	1890.2	4695.8	25458.	2272.1
#3	1898.1	4710.4	25323.	2266.3

Zoom In Zoom Out

Sample Name: MP33740-S1 Acquired: 5/15/2018 13:25:18 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0525**	**362.3**	**2.054**	**3.082**	**.0587**	**58.61**	**.0496**	**.5816**	**.7119**
Stddev	.0017	3.2	.011	.031	.0013	.54	.0004	.0029	.0048
%RSD	3.299	.8852	.5173	1.019	2.277	.9252	.8292	.4968	.6758
#1	.0537	365.1	2.066	3.113	.0594	59.04	.0500	.5845	.7175
#2	.0532	362.9	2.048	3.083	.0596	58.80	.0492	.5814	.7088
#3	.0505	358.8	2.048	3.051	.0572	58.00	.0497	.5787	.7096

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6890**	**302.5**	**46.89**	**46.85**	**2.123**	**.3830**	**30.19**	**.8039**	**1.266**
Stddev	.0087	1.7	.35	.96	.026	.0020	.25	.0036	.021
%RSD	1.263	.5599	.7470	2.053	1.227	.5175	.8396	.4423	1.635
#1	.6977	303.8	47.25	47.67	2.151	.3852	30.42	.8080	1.289
#2	.6891	303.1	46.88	47.10	2.119	.3825	30.23	.8015	1.260
#3	.6803	300.6	46.55	45.79	2.100	.3813	29.92	.8021	1.249

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1270**	**1.976**	**6.011**	**.5103**	**.9996**	**6.609**	**2.024**	**1.250**	**2.272**
Stddev	.0036	.005	.023	.0051	.0065	.074	.014	.014	.012
%RSD	2.851	.2591	.3807	.9970	.6532	1.126	.6768	1.153	.5120
#1	.1240	1.980	6.038	.5160	1.006	6.690	2.039	1.266	2.286
#2	.1260	1.970	5.999	.5087	1.001	6.592	2.012	1.247	2.265
#3	.1310	1.978	5.997	.5062	.9926	6.544	2.020	1.238	2.266

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1892.7**	**4692.7**	**25174.**	**2262.9**
Stddev	5.0	3.5	163.	18.6
%RSD	.26352	.07386	.64583	.82209
#1	1887.6	4694.2	25002.	2256.2
#2	1892.9	4695.1	25193.	2283.9
#3	1897.6	4688.7	25326.	2248.6

Zoom In Zoom Out

Sample Name: MP33740-S2 Acquired: 5/15/2018 13:29:36 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0476**	**342.5**	**1.967**	**2.953**	**.0567**	**56.05**	**.0472**	**.5520**	**.6752**
Stddev	.0035	1.5	.010	.026	.0002	.41	.0007	.0049	.0064
%RSD	7.432	.4377	.5117	.8920	.3249	.7288	1.481	.8824	.9496
#1	.0435	344.1	1.973	2.977	.0569	56.50	.0480	.5560	.6807
#2	.0495	342.4	1.973	2.956	.0566	55.94	.0469	.5535	.6769
#3	.0498	341.1	1.956	2.925	.0565	55.70	.0466	.5466	.6682

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6512**	**287.2**	**44.87**	**44.42**	**2.009**	**.4014**	**28.89**	**.7540**	**1.191**
Stddev	.0093	2.4	.27	.54	.022	.0025	.23	.0053	.011
%RSD	1.424	.8397	.6025	1.216	1.104	.6225	.8096	.7064	.9337
#1	.6586	289.6	45.07	45.05	2.027	.4043	29.16	.7592	1.199
#2	.6542	287.2	44.97	44.10	2.015	.4003	28.80	.7543	1.195
#3	.6408	284.8	44.56	44.12	1.984	.3997	28.72	.7486	1.178

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1186**	**1.882**	**5.284**	**.5274**	**.9990**	**6.395**	**1.924**	**1.183**	**2.162**
Stddev	.0032	.016	.022	.0036	.0067	.063	.017	.010	.017
%RSD	2.670	.8468	.4088	.6807	.6745	.9892	.8909	.8655	.7982
#1	.1155	1.893	5.306	.5313	1.004	6.454	1.925	1.193	2.176
#2	.1218	1.889	5.283	.5266	1.002	6.402	1.940	1.184	2.166
#3	.1184	1.864	5.263	.5242	.9913	6.328	1.906	1.173	2.143

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1893.5**	**4687.1**	**24993.**	**2282.3**
Stddev	5.2	8.1	79.	3.9
%RSD	.27348	.17212	.31458	.17283
#1	1891.6	4696.4	24902.	2285.2
#2	1889.6	4683.2	25040.	2277.9
#3	1899.4	4681.8	25037.	2284.0

Zoom In Zoom Out

Sample Name: FA53725-40A Acquired: 5/15/2018 13:33:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**221.0**	**.0276**	**1.486**	**.0031**	**36.44**	**-.0044**	**.0438**	**.3773**
Stddev	.0008	.4	.0032	.003	.0010	.14	.0004	.0006	.0048
%RSD	518.3	.1610	11.78	.1707	33.71	.3755	9.140	1.329	1.272
#1	-.0009	220.5	.0261	1.483	.0022	36.60	-.0043	.0436	.3822
#2	.0006	221.1	.0313	1.487	.0042	36.41	-.0049	.0445	.3772
#3	-.0002	221.2	.0253	1.488	.0028	36.33	-.0041	.0434	.3726

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.9443**	**232.5**	**17.00**	**16.71**	**4.026**	**-.0181**	**2.070**	**.2031**	**3.075**
Stddev	.0042	.8	.30	.19	.014	.0004	.029	.0013	.014
%RSD	.4452	.3355	1.744	1.126	.3444	2.295	1.421	.6503	.4640
#1	.9473	232.7	16.87	16.56	4.037	-.0182	2.058	.2026	3.088
#2	.9460	233.2	16.78	16.65	4.030	-.0184	2.048	.2046	3.076
#3	.9395	231.6	17.33	16.92	4.010	-.0176	2.103	.2022	3.060

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0151**	**-.0181**	**5.265**	**.0651**	**.6561**	**5.119**	**-.0088**	**.6186**	**.9297**
Stddev	.0045	.0090	.016	.0009	.0023	.017	.0098	.0030	.0035
%RSD	29.78	49.71	.2964	1.401	.3513	.3394	111.1	.4878	.3811
#1	.0194	-.0081	5.281	.0645	.6554	5.134	-.0176	.6217	.9318
#2	.0154	-.0208	5.250	.0661	.6586	5.124	-.0104	.6183	.9316
#3	.0104	-.0255	5.265	.0646	.6541	5.100	.0017	.6157	.9256

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1905.3**	**4720.3**	**25422.**	**2272.7**
Stddev	3.6	7.4	86.	11.0
%RSD	.18640	.15709	.33662	.48573
#1	1901.8	4723.3	25374.	2275.0
#2	1905.3	4725.8	25520.	2260.7
#3	1908.9	4711.9	25371.	2282.4

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 13:38:14 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2465	41.97	2.100	2.102	2.053	41.64	2.116	2.064	2.055
Stddev	.0004	.23	.003	.003	.009	.12	.005	.004	.011
%RSD	.1787	.5410	.1620	.1185	.4366	.2932	.2288	.1787	.5196
#1	.2470	41.98	2.104	2.105	2.053	41.64	2.120	2.067	2.067
#2	.2463	42.19	2.099	2.100	2.062	41.76	2.117	2.065	2.047
#3	.2463	41.73	2.098	2.101	2.044	41.52	2.111	2.059	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.988	40.50	41.47	41.54	2.110	2.072	41.86	2.025	2.060
Stddev	.004	.18	.13	.20	.013	.004	.07	.004	.004
%RSD	.2190	.4543	.3044	.4879	.5976	.1728	.1585	.1932	.2040
#1	1.984	40.30	41.55	41.50	2.125	2.075	41.92	2.027	2.061
#2	1.988	40.67	41.52	41.76	2.101	2.072	41.88	2.028	2.055
#3	1.993	40.52	41.32	41.36	2.105	2.068	41.79	2.021	2.063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.094	2.088	1.876	2.072	2.084	2.107	2.055	2.140	2.043
Stddev	.004	.004	.005	.004	.005	.009	.006	.006	.005
%RSD	.1824	.1740	.2472	.2105	.2290	.4083	.2898	.2914	.2593
#1	2.093	2.088	1.881	2.075	2.081	2.117	2.057	2.146	2.046
#2	2.098	2.092	1.875	2.073	2.089	2.102	2.048	2.134	2.046
#3	2.090	2.085	1.872	2.067	2.081	2.102	2.059	2.141	2.037
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 13:38:14 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1815.1	4535.8	24987.	2228.3
Stddev	3.4	7.0	125.	13.0
%RSD	.18629	.15541	.49840	.58532
#1	1814.7	4532.1	24925.	2237.5
#2	1818.6	4531.4	25130.	2213.3
#3	1811.9	4543.9	24906.	2233.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 13:42:25 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0027	-.0009	.0001	.0000	-.0077	-.0004	-.0005
Stddev	.0002	.0017	.0004	.0003	.000	.0015	.0001	.0001
%RSD	317.0	62.41	49.58	361.7	372.0	19.26	34.85	16.66
#1	-.0003	-.0013	-.0004	-.0002	.0000	-.0063	-.0003	-.0006
#2	.0000	-.0045	-.0012	.0004	.0001	-.0076	-.0005	-.0005
#3	.0001	-.0022	-.0010	.0000	-.0001	-.0093	-.0005	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0007	-.0104	.0092	-.0011	-.0001	F -.0028	-.0282
Stddev	.0003	.0004	.0032	.0500	.0102	.0001	.0007	.0049
%RSD	159.8	59.07	30.42	543.3	941.1	118.1	25.00	17.25
#1	.0000	.0012	-.0067	.0601	.0101	-.0002	-.0021	-.0229
#2	-.0001	.0006	-.0121	.0074	-.0035	-.0001	-.0028	-.0293
#3	-.0005	.0004	-.0123	-.0399	-.0098	.0000	-.0035	-.0324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0001	-.0012	.0008	.0001	-.0008	-.0001	-.0005
Stddev	.0002	.0009	.0017	.0010	.0010	.0004	.0001	.0002
%RSD	31.06	1676.	147.9	131.5	1263.	43.93	105.0	42.22
#1	-.0006	.0004	-.0002	.0018	.0012	-.0005	-.0001	-.0003
#2	-.0004	.0005	-.0031	.0008	-.0004	-.0007	-.0002	-.0006
#3	-.0007	-.0011	-.0001	-.0003	-.0006	-.0012	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 13:42:25 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0003	-.0004	-.0005
Stddev	.0013	.0003	.0001
%RSD	440.2	85.65	11.21
#1	.0011	-.0006	-.0006
#2	-.0005	-.0005	-.0004
#3	-.0015	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1936.3	4715.2	25580.	2263.4
Stddev	6.5	5.5	111.	3.8
%RSD	.33480	.11757	.43474	.16736
#1	1936.3	4711.9	25703.	2267.0
#2	1929.8	4712.1	25486.	2259.4
#3	1942.8	4721.6	25551.	2263.7

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-43A Acquired: 5/15/2018 13:46:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**186.8**	**.0469**	**.9498**	**.0033**	**32.23**	**-.0049**	**.0359**	**.3785**
Stddev	.0021	1.0	.0062	.0021	.0007	.00	.0005	.0008	.0040
%RSD	1405.	.5337	13.28	.2239	20.09	.0152	9.422	2.148	1.061
#1	-.0025	186.2	.0443	.9513	.0040	32.24	-.0053	.0351	.3770
#2	.0009	186.2	.0540	.9508	.0031	32.24	-.0044	.0360	.3831
#3	.0012	187.9	.0423	.9474	.0027	32.23	-.0049	.0366	.3755

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**2.306**	**251.8**	**17.32**	**13.35**	**2.277**	**-.0141**	**2.970**	**.1351**	**11.96**
Stddev	.009	.5	.24	.05	.005	.0003	.092	.0016	.03
%RSD	.4137	.2116	1.366	.3609	.2094	2.456	3.085	1.152	.2451
#1	2.305	252.4	17.34	13.32	2.281	-.0143	3.075	.1333	11.95
#2	2.316	251.3	17.07	13.41	2.279	-.0137	2.925	.1358	11.94
#3	2.297	251.8	17.55	13.32	2.272	-.0142	2.909	.1361	11.99

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0500**	**-.0261**	**5.191**	**.0684**	**.9713**	**3.752**	**-.0129**	**.7062**	**.4461**
Stddev	.0020	.0042	.018	.0013	.0030	.005	.0037	.0060	.0004
%RSD	3.932	15.98	.3527	1.857	.3092	.1446	28.45	.8564	.0812
#1	.0507	-.0229	5.212	.0698	.9679	3.754	-.0126	.7114	.4459
#2	.0515	-.0245	5.183	.0677	.9726	3.757	-.0167	.7075	.4465
#3	.0478	-.0308	5.178	.0675	.9734	3.746	-.0094	.6996	.4459

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1905.5**	**4709.1**	**25358.**	**2255.4**
Stddev	6.9	4.6	70.	8.2
%RSD	.35966	.09853	.27423	.36256
#1	1911.9	4711.9	25332.	2259.0
#2	1906.3	4711.6	25436.	2246.1
#3	1898.3	4703.7	25304.	2261.2

Zoom In Zoom Out

Sample Name: FA53725-51A Acquired: 5/15/2018 13:51:16 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0021**	**161.3**	**.0218**	**1.278**	**.0005**	**46.01**	**.0003**	**.0222**	**.2390**
Stddev	.0005	1.1	.0006	.005	.0008	.19	.0003	.0004	.0016
%RSD	24.16	.6701	2.688	.3573	159.4	.4214	82.23	1.895	.6725
#1	.0020	160.3	.0216	1.274	-.0002	46.22	.0006	.0227	.2379
#2	.0016	161.1	.0214	1.277	.0013	45.97	.0003	.0219	.2409
#3	.0026	162.5	.0225	1.283	.0004	45.84	.0001	.0221	.2383

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.9462**	**181.0**	**16.33**	**15.23**	**2.493**	**-.0201**	**2.415**	**.1497**	**2.429**
Stddev	.0041	.5	.17	.17	.009	.0005	.043	.0008	.015
%RSD	.4383	.2613	1.036	1.148	.3464	2.560	1.798	.5107	.6308
#1	.9507	180.7	16.41	15.05	2.497	-.0199	2.374	.1499	2.438
#2	.9456	181.5	16.13	15.40	2.499	-.0197	2.409	.1504	2.439
#3	.9424	180.7	16.43	15.24	2.483	-.0207	2.461	.1489	2.412

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0091**	**-.0170**	**4.267**	**.0579**	**.6221**	**5.264**	**-.0091**	**.4594**	**.4318**
Stddev	.0028	.0117	.034	.0014	.0035	.010	.0028	.0030	.0021
%RSD	30.29	68.71	.7870	2.403	.5668	.1883	31.25	.6556	.4769
#1	.0103	-.0179	4.300	.0587	.6215	5.267	-.0107	.4627	.4341
#2	.0110	-.0049	4.267	.0587	.6259	5.272	-.0107	.4584	.4313
#3	.0059	-.0283	4.233	.0563	.6189	5.253	-.0058	.4570	.4300

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1914.8**	**4695.4**	**25356.**	**2247.1**
Stddev	4.3	6.5	18.	7.5
%RSD	.22620	.13898	.07125	.33597
#1	1914.3	4688.8	25377.	2249.5
#2	1910.7	4695.7	25342.	2253.1
#3	1919.4	4701.8	25350.	2238.6

Zoom In Zoom Out

Sample Name: FA53725-54A Acquired: 5/15/2018 13:55:36 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0031**	**235.2**	**.0957**	**.6757**	**.0086**	**16.62**	**-.0054**	**.0515**	**.5906**
Stddev	.0006	.4	.0034	.0031	.0007	.05	.0003	.0001	.0007
%RSD	20.64	.1540	3.584	.4553	8.291	.2799	4.939	.1473	.1175
#1	-.0024	235.5	.0939	.6792	.0093	16.63	-.0053	.0515	.5900
#2	-.0037	234.8	.0936	.6739	.0086	16.57	-.0052	.0514	.5914
#3	-.0032	235.2	.0997	.6739	.0079	16.67	-.0057	.0515	.5905

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4170**	**306.1**	**29.31**	**29.57**	**1.387**	**-.0181**	**3.630**	**.2167**	**2.682**
Stddev	.0011	.6	.18	.11	.003	.0014	.082	.0008	.003
%RSD	.2628	.2055	.6173	.3839	.2101	7.835	2.244	.3503	.1273
#1	.4176	306.6	29.17	29.70	1.384	-.0179	3.583	.2165	2.686
#2	.4157	305.4	29.51	29.48	1.390	-.0168	3.724	.2175	2.681
#3	.4177	306.4	29.24	29.53	1.387	-.0196	3.583	.2160	2.680

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0108**	**-.0334**	**5.042**	**.0604**	**.2562**	**5.514**	**-.0076**	**.6800**	**.7191**
Stddev	.0013	.0079	.011	.0017	.0014	.003	.0035	.0007	.0021
%RSD	12.07	23.49	.2171	2.755	.5597	.0448	45.84	.1090	.2949
#1	.0118	-.0350	5.052	.0616	.2577	5.516	-.0048	.6808	.7215
#2	.0112	-.0404	5.042	.0611	.2548	5.516	-.0115	.6799	.7177
#3	.0093	-.0249	5.031	.0585	.2562	5.512	-.0066	.6794	.7181

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1911.3**	**4823.5**	**25825.**	**2316.4**
Stddev	2.8	5.3	88.	24.1
%RSD	.14643	.11054	.33966	1.0390
#1	1908.6	4817.3	25909.	2312.4
#2	1914.2	4826.7	25831.	2342.2
#3	1911.3	4826.4	25734.	2294.5

Zoom In Zoom Out

Sample Name: FA53725-56A Acquired: 5/15/2018 13:59:58 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**248.0**	**.0432**	**1.017**	**.0029**	**7.109**	**-.0061**	**.0355**	**.5023**
Stddev	.0022	1.6	.0085	.007	.0008	.035	.0002	.0003	.0050
%RSD	620.0	.6647	19.62	.6586	27.41	.4976	3.019	.8827	.9934
#1	.0002	249.8	.0418	1.023	.0022	7.148	-.0061	.0354	.5029
#2	.0016	247.4	.0355	1.018	.0028	7.101	-.0063	.0359	.4970
#3	-.0028	246.7	.0522	1.010	.0038	7.078	-.0059	.0353	.5069

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1540**	**227.9**	**11.84**	**12.55**	**.4253**	**-.0200**	**2.774**	**.1621**	**1.011**
Stddev	.0010	1.4	.10	.24	.0012	.0006	.051	.0003	.006
%RSD	.6375	.6296	.8025	1.928	.2914	2.811	1.848	.2033	.5595
#1	.1543	229.4	11.88	12.44	.4266	-.0199	2.748	.1625	1.016
#2	.1530	226.6	11.73	12.83	.4249	-.0206	2.740	.1620	1.005
#3	.1549	227.6	11.91	12.39	.4243	-.0195	2.833	.1619	1.011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0038**	**-.0160**	**5.273**	**.0611**	**.1511**	**4.729**	**-.0066**	**.5718**	**.1259**
Stddev	.0040	.0069	.030	.0022	.0013	.003	.0063	.0025	.0003
%RSD	105.7	43.23	.5637	3.653	.8426	.0717	95.51	.4345	.2492
#1	.0007	-.0220	5.303	.0631	.1516	4.730	-.0097	.5732	.1260
#2	-.0051	-.0084	5.273	.0587	.1520	4.732	.0007	.5690	.1261
#3	-.0069	-.0177	5.243	.0614	.1496	4.725	-.0106	.5733	.1255

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1917.3**	**4732.2**	**25428.**	**2282.8**
Stddev	2.5	1.9	55.	9.7
%RSD	.12917	.04092	.21608	.42498
#1	1915.8	4733.7	25403.	2273.1
#2	1920.2	4730.0	25491.	2282.6
#3	1916.0	4732.8	25391.	2292.5

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-60A Acquired: 5/15/2018 14:04:19 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0039**	**156.0**	**.0532**	**.6783**	**.0023**	**21.53**	**-.0019**	**.0268**	**.3907**
Stddev	.0015	.7	.0034	.0040	.0005	.06	.0004	.0004	.0019
%RSD	38.69	.4402	6.419	.5969	21.79	.2612	22.07	1.582	.4927
#1	.0022	156.8	.0524	.6825	.0025	21.59	-.0023	.0267	.3886
#2	.0043	155.6	.0569	.6780	.0018	21.52	-.0016	.0272	.3924
#3	.0050	155.6	.0502	.6744	.0028	21.48	-.0017	.0264	.3909

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1086**	**180.7**	**22.86**	**20.01**	**1.571**	**-.0215**	**2.712**	**.1373**	**.2779**
Stddev	.0029	.5	.31	.13	.005	.0011	.062	.0032	.0006
%RSD	2.697	.2947	1.337	.6682	.3143	5.024	2.275	2.343	.2057
#1	.1108	180.9	23.20	19.92	1.574	-.0227	2.774	.1388	.2773
#2	.1097	180.1	22.78	19.96	1.574	-.0213	2.651	.1336	.2780
#3	.1053	181.2	22.61	20.17	1.565	-.0206	2.711	.1394	.2785

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0053**	**-.0118**	**4.843**	**.0598**	**.2941**	**5.290**	**-.0116**	**.4070**	**.2331**
Stddev	.0058	.0021	.006	.0005	.0004	.012	.0038	.0023	.0004
%RSD	108.8	18.05	.1322	.8863	.1457	.2181	32.91	.5741	.1570
#1	.0119	-.0136	4.848	.0599	.2945	5.289	-.0095	.4082	.2330
#2	.0016	-.0095	4.836	.0592	.2942	5.301	-.0160	.4084	.2329
#3	.0024	-.0125	4.843	.0603	.2937	5.278	-.0094	.4043	.2336

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1906.6**	**4690.5**	**25190.**	**2260.9**
Stddev	4.9	11.1	82.	12.8
%RSD	.25758	.23651	.32646	.56498
#1	1901.0	4681.9	25122.	2249.2
#2	1909.8	4703.0	25168.	2274.5
#3	1909.1	4686.6	25281.	2258.8

Zoom In Zoom Out

Sample Name: FA53725-65A Acquired: 5/15/2018 14:08:40 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0028**	**177.9**	**.0458**	**.5021**	**.0017**	**14.04**	**-.0058**	**.0277**	**.3880**
Stddev	.0009	.9	.0034	.0023	.0000	.07	.0003	.0005	.0019
%RSD	31.60	.4795	7.501	.4587	1.223	.4980	4.388	1.657	.4791
#1	-.0036	177.2	.0461	.4994	.0017	14.10	-.0060	.0275	.3901
#2	-.0019	177.7	.0422	.5034	.0017	13.96	-.0059	.0283	.3871
#3	-.0028	178.9	.0490	.5034	.0017	14.07	-.0055	.0275	.3867

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0775**	**219.3**	**19.52**	**15.41**	**.8518**	**-.0176**	**2.833**	**.1463**	**.1501**
Stddev	.0014	1.2	.18	.03	.0053	.0011	.040	.0023	.0070
%RSD	1.793	.5630	.9255	.1957	.6270	6.341	1.393	1.559	4.666
#1	.0782	219.2	19.32	15.41	.8552	-.0163	2.856	.1487	.1428
#2	.0784	218.1	19.57	15.44	.8547	-.0183	2.788	.1460	.1568
#3	.0759	220.5	19.67	15.38	.8457	-.0182	2.857	.1442	.1506

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0064**	**-.0175**	**5.186**	**.0658**	**.1607**	**6.494**	**-.0140**	**.5552**	**.1559**
Stddev	.0039	.0033	.007	.0011	.0013	.041	.0072	.0048	.0012
%RSD	61.19	18.71	.1268	1.706	.8001	.6263	51.42	.8594	.7711
#1	-.0051	-.0137	5.193	.0654	.1593	6.531	-.0096	.5605	.1548
#2	-.0108	-.0196	5.179	.0671	.1611	6.501	-.0222	.5539	.1556
#3	-.0033	-.0192	5.186	.0650	.1618	6.451	-.0101	.5513	.1572

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1896.2**	**4662.2**	**25084.**	**2253.5**
Stddev	4.4	2.7	88.	4.4
%RSD	.23269	.05696	.34886	.19640
#1	1894.8	4661.8	25028.	2249.8
#2	1892.7	4659.8	25185.	2258.4
#3	1901.2	4665.0	25038.	2252.4

Zoom In Zoom Out

Sample Name: FA53725-84 Acquired: 5/15/2018 14:13:03 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0007**	**182.4**	**.0226**	**1.023**	**.0020**	**20.37**	**-.0061**	**.0240**	**.2701**
Stddev	.0030	.5	.0067	.004	.0003	.10	.0005	.0004	.0017
%RSD	435.3	.2992	29.50	.4124	16.75	.4908	8.331	1.595	.6239
#1	-.0016	182.6	.0194	1.027	.0023	20.48	-.0058	.0245	.2705
#2	-.0003	181.8	.0302	1.025	.0020	20.32	-.0066	.0237	.2715
#3	.0040	182.9	.0182	1.019	.0016	20.29	-.0057	.0239	.2682

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**4.730**	**177.2**	**13.14**	**11.79**	**1.027**	**-.0204**	**2.117**	**.1457**	**10.01**
Stddev	.019	.7	.26	.09	.004	.0009	.052	.0009	.06
%RSD	.4043	.3808	1.964	.8005	.4293	4.541	2.479	.6441	.5513
#1	4.751	177.3	13.29	11.90	1.032	-.0200	2.177	.1462	10.03
#2	4.728	177.8	12.85	11.71	1.024	-.0215	2.093	.1462	10.04
#3	4.713	176.4	13.30	11.77	1.025	-.0198	2.081	.1446	9.944

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1468**	**-.0104**	**4.628**	**.0747**	**.3944**	**6.109**	**-.0154**	**.4664**	**.8548**
Stddev	.0052	.0055	.023	.0027	.0018	.031	.0053	.0025	.0049
%RSD	3.535	52.51	.4874	3.678	.4659	.5007	34.60	.5366	.5728
#1	.1510	-.0165	4.649	.0731	.3954	6.144	-.0198	.4664	.8586
#2	.1485	-.0060	4.631	.0778	.3923	6.093	-.0095	.4640	.8565
#3	.1410	-.0087	4.605	.0731	.3956	6.090	-.0169	.4690	.8493

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1904.4**	**4679.3**	**25200.**	**2251.0**
Stddev	5.1	9.3	162.	4.1
%RSD	.26966	.19823	.64470	.18256
#1	1909.8	4689.8	25371.	2246.4
#2	1899.6	4676.1	25181.	2254.3
#3	1903.8	4672.1	25047.	2252.4

Zoom In Zoom Out

Sample Name: FA53725-89A Acquired: 5/15/2018 14:17:24 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0004**	**259.0**	**.0198**	**2.056**	**.0036**	**46.52**	**-.0020**	**.0447**	**.3402**
Stddev	.0014	1.0	.0053	.005	.0002	.11	.0002	.0006	.0023
%RSD	334.9	.3898	26.80	.2562	6.355	.2281	8.290	1.287	.6661
#1	.0020	260.1	.0217	2.062	.0033	46.64	-.0021	.0448	.3428
#2	-.0008	258.1	.0138	2.052	.0038	46.50	-.0018	.0441	.3385
#3	.0001	258.8	.0238	2.054	.0037	46.43	-.0020	.0452	.3392

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2057**	**217.8**	**21.58**	**19.86**	**3.753**	**-.0208**	**1.986**	**.2194**	**.2166**
Stddev	.0018	1.2	.29	.21	.004	.0005	.025	.0013	.0038
%RSD	.8580	.5333	1.325	1.069	.0927	2.265	1.246	.6004	1.752
#1	.2071	218.9	21.40	19.93	3.756	-.0203	1.966	.2206	.2165
#2	.2063	216.6	21.43	20.03	3.754	-.0208	1.977	.2197	.2128
#3	.2037	217.9	21.91	19.62	3.749	-.0213	2.013	.2180	.2204

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0046**	**-.0096**	**5.913**	**.0597**	**.6154**	**6.807**	**-.0096**	**.5241**	**.2733**
Stddev	.0062	.0054	.006	.0019	.0039	.016	.0053	.0023	.0013
%RSD	133.6	56.86	.0951	3.103	.6282	.2323	55.30	.4436	.4878
#1	-.0105	-.0087	5.914	.0578	.6192	6.823	-.0128	.5228	.2720
#2	.0019	-.0154	5.918	.0599	.6115	6.807	-.0035	.5268	.2732
#3	-.0053	-.0046	5.907	.0614	.6154	6.792	-.0127	.5227	.2747

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1896.2**	**4691.6**	**25329.**	**2270.6**
Stddev	4.2	7.0	27.	10.9
%RSD	.21925	.14951	.10577	.47796
#1	1891.6	4685.3	25350.	2268.5
#2	1899.6	4699.1	25339.	2261.0
#3	1897.5	4690.4	25299.	2282.4

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-92A Acquired: 5/15/2018 14:21:46 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	208.0	.0221	1.380	.0017	42.79	.0032	.0328	.3022
Stddev	.0019	.5	.0013	.007	.0007	.26	.0002	.0004	.0016
%RSD	828.3	.2371	5.894	.5142	38.78	.6165	6.588	1.080	.5332
#1	-.0019	208.5	.0214	1.383	.0024	42.99	.0032	.0324	.3005
#2	.0010	207.9	.0236	1.385	.0014	42.89	.0034	.0329	.3038
#3	.0016	207.6	.0213	1.372	.0012	42.49	.0030	.0331	.3022

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2319	192.9	21.17	18.58	3.029	-.0216	2.443	.1824	.3561
Stddev	.0033	1.0	.28	.16	.003	.0012	.086	.0007	.0037
%RSD	1.424	.5089	1.318	.8403	.0960	5.644	3.528	.4013	1.036
#1	.2332	194.0	21.37	18.48	3.027	-.0231	2.482	.1816	.3582
#2	.2344	192.5	21.28	18.76	3.027	-.0210	2.503	.1825	.3583
#3	.2282	192.1	20.85	18.51	3.032	-.0208	2.344	.1831	.3518

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0016	-.0131	5.316	.0558	.5127	5.543	-.0116	.4512	.6185
Stddev	.0002	.0033	.014	.0025	.0032	.002	.0048	.0040	.0028
%RSD	14.06	25.40	.2579	4.441	.6160	.0380	41.32	.8841	.4575
#1	-.0019	-.0153	5.330	.0544	.5164	5.544	-.0065	.4466	.6212
#2	-.0014	-.0147	5.315	.0544	.5110	5.540	-.0123	.4532	.6156
#3	-.0016	-.0093	5.303	.0587	.5108	5.544	-.0161	.4538	.6188

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1907.4	4698.8	25446.	2262.0
Stddev	6.0	15.1	201.	6.7
%RSD	.31226	.32211	.78979	.29646
#1	1904.3	4685.5	25656.	2255.1
#2	1914.3	4715.3	25255.	2262.4
#3	1903.7	4695.7	25427.	2268.5

Zoom In Zoom Out

Sample Name: FA53725-95A Acquired: 5/15/2018 14:26:08 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0039	228.0	.0149	1.391	.0025	30.29	.0074	.0337	.3283
Stddev	.0009	1.1	.0075	.010	.0006	.15	.0009	.0002	.0018
%RSD	23.19	.4938	50.69	.7260	26.26	.5095	11.48	.7130	.5453
#1	.0039	226.9	.0225	1.382	.0024	30.17	.0084	.0335	.3281
#2	.0047	229.2	.0145	1.402	.0031	30.46	.0069	.0340	.3301
#3	.0030	227.8	.0075	1.388	.0018	30.24	.0069	.0337	.3266

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3625	216.7	18.00	17.43	2.903	-.0206	2.318	.2111	.3032
Stddev	.0025	.9	.38	.13	.003	.0008	.045	.0016	.0072
%RSD	.6766	.4189	2.115	.7660	.1180	3.822	1.932	.7653	2.360
#1	.3625	215.8	17.66	17.27	2.906	-.0198	2.342	.2126	.3100
#2	.3601	217.6	18.41	17.48	2.903	-.0213	2.345	.2113	.3037
#3	.3650	216.6	17.93	17.52	2.899	-.0207	2.266	.2094	.2958

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0014	-.0112	5.775	.0613	.4125	6.663	-.0124	.5159	.8187
Stddev	.0075	.0048	.052	.0012	.0011	.005	.0033	.0038	.0063
%RSD	526.9	42.57	.9035	1.897	.2782	.0737	26.92	.7277	.7737
#1	.0085	-.0146	5.824	.0627	.4118	6.665	-.0161	.5177	.8245
#2	.0021	-.0058	5.779	.0605	.4138	6.657	-.0096	.5116	.8196
#3	-.0064	-.0133	5.720	.0608	.4120	6.666	-.0115	.5184	.8119

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1909.9	4714.8	25324.	2276.6
Stddev	4.9	11.9	139.	21.1
%RSD	.25699	.25162	.54894	.92468
#1	1906.3	4706.0	25168.	2300.3
#2	1907.8	4710.0	25373.	2260.1
#3	1915.5	4728.3	25433.	2269.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 14:30:29 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2467	41.61	2.098	2.093	2.042	41.44	2.112	2.064	2.057
Stddev	.0005	.27	.003	.009	.006	.23	.001	.003	.003
%RSD	.2125	.6563	.1434	.4313	.2960	.5668	.0649	.1535	.1194
#1	.2473	41.45	2.100	2.088	2.035	41.25	2.113	2.065	2.060
#2	.2463	41.44	2.094	2.088	2.044	41.37	2.112	2.066	2.055
#3	.2465	41.92	2.100	2.104	2.047	41.70	2.110	2.060	2.058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.991	40.45	41.36	41.21	2.112	2.077	41.73	2.031	2.057
Stddev	.007	.38	.17	.20	.005	.002	.07	.005	.005
%RSD	.3703	.9346	.4113	.4776	.2167	.1070	.1773	.2664	.2558
#1	2.000	40.16	41.24	41.08	2.118	2.077	41.76	2.032	2.051
#2	1.988	40.31	41.29	41.11	2.110	2.079	41.65	2.036	2.060
#3	1.986	40.88	41.56	41.44	2.109	2.075	41.79	2.026	2.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.095	2.092	1.876	2.075	2.074	2.107	2.058	2.145	2.044
Stddev	.003	.005	.002	.004	.009	.003	.005	.008	.005
%RSD	.1620	.2300	.1175	.2056	.4331	.1633	.2591	.3584	.2316
#1	2.094	2.092	1.877	2.073	2.066	2.110	2.053	2.150	2.041
#2	2.091	2.088	1.876	2.073	2.071	2.103	2.057	2.148	2.049
#3	2.098	2.097	1.873	2.080	2.084	2.107	2.063	2.136	2.041
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 14:30:29 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1815.2	4542.7	24764.	2242.4
Stddev	5.1	3.3	115.	7.6
%RSD	.28108	.07330	.46382	.34029
#1	1821.1	4542.9	24634.	2247.7
#2	1813.1	4545.9	24851.	2245.9
#3	1811.6	4539.3	24807.	2233.7

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 14:34:39 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0202	-.0003	.0003	-.0001	-.0102	-.0006	-.0006
Stddev	.0002	.0050	.0011	.0001	.0002	.0013	.0001	.0000
%RSD	85.49	24.80	399.8	37.85	385.0	13.01	9.730	2.347
#1	.0003	-.0237	-.0014	.0004	.0001	-.0090	-.0006	-.0006
#2	.0000	-.0225	.0006	.0002	.0000	-.0100	-.0006	-.0006
#3	.0005	-.0145	.0000	.0002	-.0003	-.0116	-.0007	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0003	-.0083	-.0599	.0110	-.0001	F -.0031	-.0351
Stddev	.0002	.0001	.0046	.0152	.0102	.0000	.0009	.0109
%RSD	270.8	41.78	55.90	25.41	93.05	21.06	29.36	31.16
#1	-.0004	.0003	-.0041	-.0733	.0006	-.0002	-.0021	-.0438
#2	.0001	.0005	-.0074	-.0434	.0211	-.0001	-.0034	-.0228
#3	.0000	.0002	-.0132	-.0630	.0113	-.0001	-.0039	-.0387
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0002	-.0008	-.0017	.0001	-.0007	.0000	-.0003
Stddev	.0001	.0008	.0011	.0008	.0007	.0002	.000	.0002
%RSD	16.99	448.3	147.3	45.39	872.1	25.53	231.5	67.38
#1	-.0006	.0009	-.0017	-.0010	.0008	-.0007	-.0001	-.0001
#2	-.0006	-.0006	.0005	-.0016	.0001	-.0009	-.0001	-.0004
#3	-.0005	.0002	-.0011	-.0025	-.0007	-.0005	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 14:34:39 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0001	-.0001	-.0006
Stddev	.0008	.0002	.0001
%RSD	1456.	197.7	8.462
#1	.0008	-.0003	-.0006
#2	-.0004	.0001	-.0007
#3	-.0006	-.0001	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1931.0	4711.9	25580.	2273.6
Stddev	8.0	5.2	160.	7.1
%RSD	.41192	.11080	.62672	.31181
#1	1922.6	4707.4	25520.	2278.4
#2	1931.9	4710.8	25762.	2277.0
#3	1938.5	4717.6	25458.	2265.5

Zoom In Zoom Out

Sample Name: FA53725-96A Acquired: 5/15/2018 14:39:09 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0031	215.9	.0164	1.283	.0016	27.75	.0054	.0305	.3130
Stddev	.0035	.7	.0043	.003	.0004	.02	.0002	.0007	.0015
%RSD	114.5	.3394	26.21	.2171	27.22	.0663	4.357	2.232	.4817
#1	-.0001	216.7	.0211	1.284	.0012	27.75	.0056	.0309	.3142
#2	.0069	215.4	.0157	1.285	.0021	27.73	.0055	.0297	.3113
#3	.0024	215.5	.0125	1.279	.0016	27.77	.0052	.0308	.3134

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4102	202.9	17.50	16.47	2.701	-.0169	2.085	.1994	.2853
Stddev	.0021	.6	.51	.31	.005	.0004	.030	.0036	.0048
%RSD	.5235	.2881	2.924	1.870	.1840	2.457	1.441	1.783	1.675
#1	.4124	203.5	17.36	16.80	2.705	-.0165	2.053	.2032	.2897
#2	.4102	202.4	18.06	16.39	2.701	-.0169	2.090	.1990	.2802
#3	.4081	202.8	17.06	16.20	2.695	-.0174	2.112	.1961	.2859

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0073	-.0150	5.360	.0591	.3798	5.989	-.0045	.4744	.6477
Stddev	.0050	.0069	.050	.0012	.0033	.027	.0012	.0034	.0045
%RSD	69.24	45.66	.9242	2.020	.8759	.4456	25.95	.7245	.6967
#1	-.0017	-.0076	5.412	.0600	.3810	6.017	-.0032	.4765	.6525
#2	-.0115	-.0211	5.357	.0595	.3823	5.986	-.0054	.4763	.6470
#3	-.0087	-.0163	5.313	.0577	.3760	5.963	-.0048	.4705	.6436

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1912.1	4711.8	25259.	2256.0
Stddev	.6	1.3	105.	14.2
%RSD	.03122	.02724	.41525	.62750
#1	1911.4	4710.7	25379.	2239.7
#2	1912.2	4711.5	25186.	2265.8
#3	1912.6	4713.2	25210.	2262.3

Zoom In Zoom Out

Sample Name: FA53800-4A Acquired: 5/15/2018 14:43:32 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	254.2	.0221	3.593	.0036	116.1	-.0018	.0505	.3695
Stddev	.0018	1.5	.0056	.036	.0004	1.6	.0005	.0011	.0051
%RSD	1840.	.5832	25.10	1.004	11.40	1.344	30.77	2.110	1.384
#1	-.0016	255.6	.0196	3.618	.0040	117.5	-.0012	.0518	.3754
#2	.0019	254.2	.0182	3.608	.0032	116.4	-.0022	.0500	.3669
#3	-.0005	252.7	.0285	3.551	.0035	114.5	-.0020	.0499	.3663

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2105	241.4	21.38	30.15	6.951	-.0182	2.635	.2461	.8159
Stddev	.0044	2.5	.14	.35	.077	.0009	.062	.0034	.0163
%RSD	2.093	1.021	.6566	1.152	1.105	4.722	2.361	1.391	2.000
#1	.2151	242.8	21.55	30.41	7.029	-.0176	2.652	.2496	.8312
#2	.2100	242.7	21.30	30.29	6.949	-.0192	2.686	.2460	.8178
#3	.2063	238.5	21.31	29.76	6.875	-.0178	2.566	.2428	.7987

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0023	-.0222	5.925	.0615	1.615	7.349	-.0101	.6167	.2900
Stddev	.0026	.0125	.091	.0015	.015	.079	.0009	.0055	.0030
%RSD	117.5	56.21	1.536	2.433	.9377	1.080	8.910	.8960	1.042
#1	.0000	-.0322	6.011	.0618	1.622	7.432	-.0095	.6223	.2932
#2	-.0052	-.0082	5.935	.0628	1.626	7.339	-.0111	.6166	.2895
#3	-.0016	-.0260	5.830	.0599	1.598	7.275	-.0097	.6112	.2872

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1898.6	4701.4	25189.	2265.3
Stddev	4.5	12.3	128.	24.4
%RSD	.23561	.26254	.50980	1.0781
#1	1895.3	4691.5	25089.	2239.6
#2	1896.9	4697.5	25143.	2268.0
#3	1903.7	4715.2	25334.	2288.2

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53800-7A Acquired: 5/15/2018 14:47:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**249.1**	**.0235**	**3.452**	**.0030**	**121.6**	**-.0010**	**.0514**	**.3425**
Stddev	.0031	2.9	.0025	.036	.0004	1.3	.0002	.0011	.0048
%RSD	926.8	1.166	10.85	1.055	14.69	1.079	16.96	2.152	1.399
#1	-.0039	252.2	.0264	3.487	.0035	122.9	-.0012	.0525	.3463
#2	.0010	248.6	.0217	3.453	.0026	121.8	-.0008	.0514	.3440
#3	.0018	246.4	.0223	3.415	.0028	120.3	-.0011	.0503	.3371

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1838**	**223.5**	**21.93**	**27.57**	**7.356**	**-.0197**	**2.636**	**.2518**	**.6409**
Stddev	.0032	3.2	.33	.40	.028	.0004	.049	.0038	.0183
%RSD	1.764	1.451	1.527	1.458	.3785	2.226	1.839	1.492	2.857
#1	.1843	226.7	22.01	28.01	7.383	-.0192	2.581	.2552	.6613
#2	.1867	223.8	22.22	27.50	7.356	-.0199	2.652	.2524	.6259
#3	.1803	220.2	21.56	27.22	7.327	-.0200	2.674	.2477	.6355

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0011**	**-.0097**	**5.806**	**.0522**	**1.601**	**6.506**	**-.0059**	**.5666**	**.3100**
Stddev	.0062	.0109	.086	.0005	.016	.029	.0064	.0029	.0045
%RSD	565.8	112.1	1.478	1.017	1.001	.4458	108.7	.5131	1.463
#1	.0078	.0022	5.894	.0517	1.617	6.535	-.0077	.5693	.3148
#2	-.0043	-.0191	5.800	.0527	1.601	6.505	.0012	.5669	.3095
#3	-.0003	-.0122	5.723	.0523	1.585	6.477	-.0113	.5635	.3058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1888.6**	**4669.7**	**25114.**	**2267.8**
Stddev	5.5	6.6	157.	18.8
%RSD	.29121	.14166	.62395	.82809
#1	1885.5	4672.1	25205.	2251.1
#2	1894.9	4674.7	25205.	2288.1
#3	1885.3	4662.2	24933.	2264.0

Zoom In Zoom Out

Sample Name: FA53800-8A Acquired: 5/15/2018 14:52:15 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0040**	**234.6**	**.0216**	**3.305**	**.0022**	**128.4**	**-.0009**	**.0499**	**.3287**
Stddev	.0035	.7	.0043	.027	.0006	.3	.0003	.0002	.0015
%RSD	88.98	.2810	20.08	.8172	28.76	.2432	37.35	.3693	.4692
#1	.0070	235.0	.0179	3.319	.0025	128.7	-.0005	.0497	.3290
#2	.0047	234.9	.0205	3.322	.0026	128.3	-.0012	.0499	.3301
#3	.0001	233.8	.0264	3.273	.0014	128.1	-.0011	.0500	.3271

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1673**	**210.5**	**20.93**	**27.03**	**7.253**	**-.0201**	**2.264**	**.2433**	**.6473**
Stddev	.0022	.5	.33	.09	.020	.0014	.024	.0019	.0059
%RSD	1.288	.2588	1.553	.3255	.2790	6.806	1.063	.7692	.9041
#1	.1688	210.4	21.02	26.94	7.272	-.0196	2.286	.2455	.6500
#2	.1648	210.0	21.20	27.04	7.255	-.0216	2.269	.2425	.6406
#3	.1682	211.1	20.57	27.11	7.232	-.0190	2.238	.2420	.6514

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0032**	**-.0152**	**5.993**	**.0563**	**1.671**	**6.357**	**-.0089**	**.5377**	**.3125**
Stddev	.0048	.0168	.020	.0014	.005	.025	.0032	.0046	.0014
%RSD	150.9	110.0	.3282	2.528	.3201	.3912	36.06	.8523	.4521
#1	.0078	-.0279	6.015	.0551	1.677	6.386	-.0097	.5369	.3142
#2	-.0018	-.0216	5.987	.0560	1.670	6.342	-.0117	.5336	.3117
#3	.0036	.0038	5.976	.0579	1.667	6.343	-.0054	.5426	.3117

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1891.1**	**4664.7**	**25134.**	**2255.0**
Stddev	.9	8.2	174.	14.2
%RSD	.04664	.17504	.69319	.62864
#1	1892.1	4663.7	25132.	2269.9
#2	1890.6	4657.1	24960.	2253.3
#3	1890.5	4673.3	25309.	2241.7

Zoom In Zoom Out

Sample Name: FA53800-16A Acquired: 5/15/2018 14:56:37 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.1078**	**168.7**	**.0242**	**.8755**	**.0014**	**22.85**	**.0044**	**.0240**	**.2567**
Stddev	.0018	1.0	.0031	.0092	.0003	.07	.0005	.0005	.0008
%RSD	1.675	.6192	12.86	1.047	25.18	.3185	12.00	2.118	.3305
#1	.1097	169.9	.0270	.8850	.0018	22.91	.0050	.0243	.2560
#2	.1075	168.4	.0208	.8747	.0013	22.77	.0042	.0243	.2577
#3	.1061	167.9	.0247	.8668	.0011	22.86	.0040	.0234	.2565

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2311**	**190.5**	**14.68**	**15.23**	**1.723**	**-.0217**	**2.103**	**.1722**	**.3523**
Stddev	.0015	1.0	.31	.22	.009	.0002	.064	.0014	.0114
%RSD	.6501	.5071	2.087	1.459	.5018	.7238	3.046	.7907	3.223
#1	.2325	191.6	14.99	15.43	1.731	-.0216	2.154	.1737	.3652
#2	.2312	190.3	14.38	15.26	1.723	-.0216	2.124	.1719	.3477
#3	.2295	189.7	14.66	14.99	1.714	-.0219	2.031	.1711	.3440

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0007**	**-.0209**	**5.368**	**.0774**	**.2904**	**5.745**	**-.0159**	**.4551**	**.3521**
Stddev	.0001	.0079	.083	.0027	.0012	.033	.0085	.0044	.0040
%RSD	20.86	37.87	1.543	3.483	.4240	.5751	53.71	.9628	1.139
#1	.0008	-.0180	5.459	.0791	.2918	5.777	-.0107	.4593	.3565
#2	.0005	-.0149	5.350	.0789	.2899	5.745	-.0112	.4554	.3514
#3	.0007	-.0299	5.297	.0743	.2895	5.711	-.0257	.4506	.3485

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1907.7**	**4678.5**	**25183.**	**2250.0**
Stddev	4.2	2.4	200.	29.1
%RSD	.21991	.05143	.79278	1.2915
#1	1912.2	4677.5	25405.	2261.2
#2	1903.8	4676.8	25019.	2271.9
#3	1907.2	4681.3	25124.	2217.0

Zoom In Zoom Out

Sample Name: FA53800-17A Acquired: 5/15/2018 15:00:59 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0385**	**163.9**	**.0243**	**.9286**	**.0007**	**23.52**	**.0056**	**.0251**	**.2586**
Stddev	.0042	1.2	.0015	.0067	.0004	.15	.0003	.0001	.0023
%RSD	10.80	.7516	6.092	.7171	52.22	.6467	4.591	.4118	.8898
#1	.0339	164.9	.0250	.9349	.0003	23.68	.0054	.0250	.2563
#2	.0421	162.5	.0226	.9216	.0009	23.38	.0054	.0252	.2609
#3	.0393	164.3	.0253	.9293	.0009	23.49	.0059	.0252	.2586

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2502**	**189.8**	**14.04**	**15.48**	**1.802**	**-.0220**	**1.923**	**.1820**	**.4080**
Stddev	.0027	.9	.13	.24	.001	.0010	.013	.0021	.0032
%RSD	1.074	.4974	.9109	1.561	.0424	4.354	.6888	1.133	.7957
#1	.2507	190.4	14.16	15.70	1.802	-.0224	1.928	.1841	.4099
#2	.2473	188.7	14.06	15.22	1.801	-.0209	1.909	.1800	.4099
#3	.2526	190.3	13.90	15.51	1.802	-.0227	1.934	.1820	.4043

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0048**	**-.0122**	**5.496**	**.0857**	**.2931**	**5.454**	**-.0115**	**.4655**	**.3848**
Stddev	.0088	.0045	.020	.0009	.0011	.004	.0060	.0050	.0005
%RSD	183.5	37.14	.3591	1.030	.3638	.0641	52.28	1.076	.1316
#1	.0122	-.0138	5.514	.0847	.2943	5.458	-.0046	.4707	.3844
#2	.0071	-.0071	5.475	.0860	.2923	5.451	-.0159	.4649	.3845
#3	-.0049	-.0157	5.498	.0863	.2927	5.453	-.0139	.4608	.3853

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1908.7**	**4678.1**	**25242.**	**2248.4**
Stddev	5.7	14.0	58.	24.3
%RSD	.30052	.29926	.22861	1.0795
#1	1907.2	4662.6	25246.	2220.5
#2	1903.9	4681.7	25298.	2264.4
#3	1915.1	4690.0	25183.	2260.4

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: MP33740-SD1 Acquired: 5/15/2018 15:05:21 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0044**	**280.5**	**-.0005**	**.9259**	**-.0088**	**28.09**	**-.0294**	**.0140**	**.4467**
Stddev	.0056	1.4	.0018	.0109	.0012	.09	.0003	.0042	.0077
%RSD	126.2	.5029	326.5	1.178	13.79	.3255	.9185	29.94	1.713
#1	-.0006	278.9	.0008	.9239	-.0083	27.99	-.0295	.0173	.4516
#2	.0034	281.6	-.0026	.9162	-.0080	28.16	-.0290	.0155	.4379
#3	.0104	280.9	.0001	.9377	-.0102	28.11	-.0295	.0093	.4507

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3803**	**257.3**	**23.97**	**17.95**	**1.474**	**-.1430**	**3.021**	**.1911**	**.6642**
Stddev	.0062	2.1	1.40	.62	.005	.0040	.242	.0089	.0150
%RSD	1.634	.8298	5.835	3.434	.3218	2.824	8.022	4.664	2.257
#1	.3740	255.0	22.39	18.09	1.479	-.1473	3.123	.1901	.6647
#2	.3864	257.8	25.05	18.49	1.470	-.1393	3.197	.2004	.6789
#3	.3805	259.2	24.46	17.28	1.472	-.1423	2.745	.1827	.6489

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0468**	**-.0812**	**69.89**	**.0222**	**.4614**	**8.440**	**-.0727**	**.6624**	**1.597**
Stddev	.0252	.0528	1.76	.0007	.0039	.092	.0287	.0086	.004
%RSD	53.94	65.07	2.521	3.244	.8416	1.085	39.42	1.304	.2261
#1	-.0305	-.1279	71.85	.0214	.4570	8.526	-.0396	.6570	1.601
#2	-.0758	-.0238	68.43	.0227	.4643	8.344	-.0894	.6579	1.597
#3	-.0339	-.0918	69.39	.0224	.4630	8.451	-.0891	.6724	1.594

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1941.0**	**4726.0**	**25593.**	**2279.1**
Stddev	6.2	18.5	177.	15.4
%RSD	.32043	.39086	.69061	.67552
#1	1940.0	4717.3	25410.	2296.4
#2	1935.3	4713.4	25763.	2266.8
#3	1947.7	4747.2	25608.	2274.1

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/15/2018 15:09:47 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0098**	**.1777**	**.0089**	**.2085**	**.0045**	**1.007**	**.0041**	**.0501**	**.0094**
Stddev	.0007	.0115	.0017	.0010	.0000	.009	.0001	.0001	.0003
%RSD	7.203	6.484	18.59	.4725	.3296	.9065	1.450	.2612	3.457
#1	.0094	.1687	.0089	.2080	.0045	1.014	.0041	.0502	.0095
#2	.0094	.1737	.0073	.2096	.0045	1.010	.0042	.0501	.0090
#3	.0106	.1907	.0106	.2079	.0045	.9965	.0041	.0499	.0097

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0248**	**.2792**	**10.04**	**5.078**	**.0151**	**.0410**	**10.11**	**.0398**	**.0047**
Stddev	.0003	.0045	.06	.046	.0000	.0003	.01	.0003	.0013
%RSD	1.336	1.611	.5792	.9051	.1054	.7413	.1069	.8702	27.13
#1	.0244	.2815	10.08	5.117	.0151	.0412	10.10	.0402	.0049
#2	.0251	.2820	10.06	5.027	.0151	.0411	10.10	.0395	.0058
#3	.0248	.2740	9.969	5.091	.0151	.0406	10.12	.0397	.0033

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0034**	**.0093**	**.0381**	**.0493**	**.0094**	**.0081**	**.0072**	**.0487**	**.0196**
Stddev	.0011	.0005	.0007	.0003	.0001	.0002	.0027	.0004	.0001
%RSD	31.56	5.658	1.897	.6412	1.202	2.486	37.70	.8148	.3529
#1	.0028	.0088	.0389	.0490	.0093	.0082	.0095	.0490	.0196
#2	.0028	.0098	.0379	.0494	.0093	.0083	.0080	.0483	.0197
#3	.0047	.0093	.0375	.0496	.0095	.0079	.0042	.0488	.0197

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1921.0**	**4671.0**	**25431.**	**2251.4**
Stddev	4.7	2.8	135.	19.2
%RSD	.24705	.06086	.53032	.85460
#1	1918.1	4668.4	25586.	2229.7
#2	1926.5	4674.0	25365.	2266.3
#3	1918.5	4670.5	25342.	2258.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/15/2018 15:14:14 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**F 530.0**	**-.0016**	**-.0002**	**-.0006**	**475.6**	**.0010**	**-.0006**	**-.0007**
Stddev	.0006	3.3	.0007	.0001	.0001	2.1	.0001	.0000	.0003
%RSD	513.1	.6178	46.09	36.49	13.84	.4451	13.71	4.739	41.67
#1	.0003	528.4	-.0018	-.0002	-.0006	477.1	.0012	-.0006	-.0007
#2	.0002	533.8	-.0023	-.0001	-.0006	473.2	.0010	-.0006	-.0010
#3	-.0008	527.8	-.0008	-.0002	-.0007	476.5	.0009	-.0007	-.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0015**	**176.4**	**.1254**	**F 504.6**	**-.0002**	**-.0042**	**.1100**	**-.0001**	**-.0009**
Stddev	.0010	.9	.0386	2.7	.0001	.0003	.0032	.0003	.0005
%RSD	66.89	.5021	30.74	.5298	32.45	7.974	2.918	199.4	63.41
#1	-.0023	176.1	.1678	503.6	-.0002	-.0038	.1066	.0000	-.0003
#2	-.0004	177.4	.0923	507.6	-.0001	-.0042	.1103	.0000	-.0014
#3	-.0018	175.7	.1162	502.6	-.0002	-.0045	.1130	-.0005	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0006**	**-.0040**	**.0191**	**-.0022**	**.0000**	**-.0002**	**.0017**	**.0003**	**.0016**
Stddev	.0012	.0035	.0016	.0005	.000	.0002	.0010	.0004	.0000
%RSD	223.5	87.00	8.274	22.35	3276.	92.90	57.01	106.3	2.441
#1	-.0004	-.0001	.0208	-.0020	-.0002	.0000	.0008	.0002	.0016
#2	.0001	-.0068	.0185	-.0018	.0004	-.0002	.0028	.0008	.0017
#3	.0020	-.0053	.0178	-.0027	-.0002	-.0003	.0016	.0000	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1702.7**	**4236.0**	**23218.**	**2149.7**
Stddev	4.8	11.4	108.	5.6
%RSD	.27948	.26852	.46413	.25880
#1	1707.6	4233.5	23115.	2145.0
#2	1698.1	4226.2	23210.	2148.2
#3	1702.3	4248.5	23330.	2155.8

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/15/2018 15:18:46 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**F 1.074**	**F 539.9**	**1.133**	**.5416**	**.5113**	**479.6**	**1.003**	**.5045**	**.4975**
Stddev	.003	2.3	.001	.0014	.0027	6.4	.001	.0007	.0006
%RSD	.2572	.4203	.0726	.2561	.5238	1.325	.0909	.1312	.1182
#1	1.073	537.3	1.132	.5402	.5094	473.1	1.003	.5045	.4981
#2	1.072	540.7	1.134	.5417	.5144	485.8	1.003	.5052	.4974
#3	1.077	541.7	1.133	.5429	.5102	480.0	1.002	.5038	.4969

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5384**	**181.3**	**-.0056**	**F 513.5**	**.5192**	**.9355**	**.1176**	**.9859**	**.9924**
Stddev	.0013	.5	.0038	4.2	.0015	.0007	.0010	.0025	.0021
%RSD	.2449	.2873	68.76	.8264	.2858	.0695	.8909	.2516	.2081
#1	.5373	180.8	-.0046	508.7	.5209	.9358	.1187	.9884	.9948
#2	.5381	181.9	-.0023	516.7	.5187	.9348	.1175	.9860	.9909
#3	.5398	181.3	-.0098	515.0	.5181	.9360	.1166	.9834	.9916

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**1.074**	**1.009**	**.0460**	**.9673**	**1.035**	**1.024**	**.9864**	**.5065**	**.9505**
Stddev	.002	.004	.0030	.0036	.003	.001	.0032	.0020	.0026
%RSD	.1820	.4146	6.502	.3715	.3041	.1276	.3276	.3945	.2767
#1	1.072	1.010	.0442	.9681	1.031	1.023	.9900	.5074	.9524
#2	1.076	1.005	.0444	.9703	1.036	1.025	.9854	.5079	.9516
#3	1.074	1.013	.0495	.9633	1.037	1.023	.9837	.5042	.9475

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1674.5**	**4197.5**	**22922.**	**2131.5**
Stddev	5.3	11.0	22.	14.4
%RSD	.31545	.26236	.09806	.67713
#1	1668.5	4186.4	22899.	2147.3
#2	1676.6	4197.6	22944.	2119.0
#3	1678.5	4208.4	22922.	2128.3

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 15:23:05 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2526	42.44	2.154	2.150	2.092	42.35	2.166	2.109	2.078
Stddev	.0013	.01	.005	.004	.007	.05	.002	.002	.005
%RSD	.5291	.0192	.2225	.1870	.3256	.1224	.0990	.1024	.2315
#1	.2521	42.45	2.148	2.153	2.086	42.36	2.163	2.110	2.082
#2	.2541	42.44	2.157	2.151	2.099	42.40	2.167	2.111	2.073
#3	.2515	42.44	2.156	2.145	2.091	42.30	2.166	2.107	2.079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.024	40.95	42.52	41.78	2.144	2.122	42.72	2.066	2.104
Stddev	.009	.02	.17	.10	.005	.003	.11	.004	.004
%RSD	.4517	.0514	.4082	.2355	.2221	.1346	.2516	.1814	.2011
#1	2.018	40.93	42.50	41.70	2.148	2.119	42.70	2.071	2.099
#2	2.035	40.93	42.71	41.76	2.139	2.125	42.84	2.064	2.107
#3	2.020	40.97	42.36	41.89	2.146	2.121	42.62	2.065	2.105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.149	2.143	1.919	2.114	2.120	2.146	2.103	2.188	2.078
Stddev	.003	.005	.007	.004	.008	.001	.005	.008	.002
%RSD	.1410	.2237	.3759	.1979	.3597	.0373	.2291	.3708	.0958
#1	2.147	2.139	1.922	2.118	2.120	2.147	2.098	2.195	2.080
#2	2.148	2.148	1.910	2.110	2.128	2.146	2.108	2.179	2.076
#3	2.153	2.140	1.923	2.113	2.113	2.146	2.104	2.189	2.078
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA14898 page 105 of 108

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 15:23:05 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1798.4	4487.2	24795.	2218.2
Stddev	2.7	5.2	140.	6.8
%RSD	.15042	.11590	.56619	.30436
#1	1801.3	4492.6	24716.	2218.5
#2	1798.0	4482.3	24957.	2224.8
#3	1796.0	4486.5	24712.	2211.3

Raw Data MA14898 page 106 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 15:27:17 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0011	-.0006	.0004	.0000	.0181	-.0006	-.0006
Stddev	.0003	.0079	.0006	.0003	.000	.0036	.0002	.0001
%RSD	93.56	714.5	108.3	77.04	719.6	20.12	24.42	14.82
#1	.0007	-.0041	.0001	.0002	-.0001	.0150	-.0005	-.0005
#2	.0001	.0101	-.0010	.0002	.0001	.0171	-.0007	-.0007
#3	.0002	-.0027	-.0009	.0008	.0000	.0221	-.0007	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0014	-.0047	-.0197	.0277	.0002	F -.0030	-.0190
Stddev	.0009	.0001	.0031	.0367	.0118	.0001	.0011	.0070
%RSD	638.3	6.033	67.40	185.7	42.63	36.85	35.24	36.75
#1	-.0008	.0014	-.0077	.0222	.0146	.0001	-.0019	-.0153
#2	.0008	.0015	-.0049	-.0356	.0375	.0003	-.0032	-.0146
#3	-.0004	.0013	-.0014	-.0458	.0309	.0002	-.0040	-.0271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0003	-.0002	-.0010	-.0004	F -.0011	.0000	-.0001
Stddev	.0003	.0007	.0003	.0008	.0005	.0003	.000	.0001
%RSD	61.35	198.6	115.0	80.28	123.7	30.37	749.4	72.80
#1	-.0002	-.0005	-.0004	-.0003	.0000	-.0007	.0000	-.0001
#2	-.0006	.0004	-.0003	-.0019	-.0010	-.0014	-.0003	.0000
#3	-.0008	-.0009	.0001	-.0008	-.0003	-.0013	.0003	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Raw Data MA14898 page 107 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 15:27:17 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0009	.0003	-.0005
Stddev	.0014	.0000	.0002
%RSD	161.1	6.439	35.81
#1	-.0010	.0003	-.0003
#2	.0006	.0003	-.0005
#3	-.0021	.0003	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1913.8	4659.3	25316.	2247.2
Stddev	4.0	9.4	10.	8.3
%RSD	.21054	.20183	.03834	.36866
#1	1910.5	4657.8	25321.	2256.7
#2	1912.5	4650.7	25305.	2243.5
#3	1918.3	4669.4	25323.	2241.3

Raw Data MA14898 page 108 of 108

92
9

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000010	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000060	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000005	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000056	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000007	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000003	0.000000	No
			Fe	-0.000010	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000139	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	0.000001	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000013	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000059	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000193	0.000000	No
			Fe	0.000215	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000003	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	-0.000000	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	0.000092	0.000000	No
			Ca	0.000008	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000031	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000052	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000019	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	-0.000029	0.000000	No
			Al	-0.000010	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000000	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000005	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	-0.000001	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000028	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000368	0.550338	0.000000	1.000000
Al 396.152 { 85}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.004250	0.147325	0.000000	1.000000
As 189.042 {478}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000046	0.194729	0.000000	1.000000
Ba 455.403 { 74}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.010009	9.603884	0.000000	1.000000
Be 313.042 {108}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.004514	7.625208	0.000000	1.000000
Ca 317.933 {106}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.011176	0.288865	0.000000	1.000000
Cd 226.502 {449}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.003941	4.957916	0.000000	1.000000
Co 228.616 {447}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.001749	2.567100	0.000000	1.000000
Cr 267.716 {126}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.000200	0.419423	0.000000	1.000000
Cu 324.754 {104}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.008731	0.639365	0.000000	1.000000
Fe 259.940 {130}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.006009	0.131139	0.000000	1.000000
In 230.606 {446}*	5/15/2018 10:04:03	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000728	0.101657	0.000000	1.000000
Mg 279.079 {121}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000034	0.027421	0.000000	1.000000
Mn 257.610 {131}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.002383	2.755078	0.000000	1.000000
Mo 202.030 {467}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.006907	0.953406	0.000000	1.000000
Na 589.592 { 57}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.022573	0.393384	0.000000	1.000000
Ni 231.604 {445}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.002933	1.391427	0.000000	1.000000
Pb 220.353 {453}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.001764	1.038209	0.000000	1.000000
Sb 206.833 {463}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.000736	0.223207	0.000000	1.000000
Se 196.090 {472}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.000833	0.143826	0.000000	1.000000
Si 212.412 {459}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.004374	0.336076	0.000000	1.000000
Sn 189.989 {477}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.001096	0.424263	0.000000	1.000000
Sr 407.771 { 83}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.006846	11.522143	0.000000	1.000000
Ti 334.941 {101}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.004639	1.493405	0.000000	1.000000
Tl 190.856 {477}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.001686	0.325060	0.000000	1.000000
V 292.402 {115}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000259	0.635243	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.004483	2.785366	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999960	0.000047	0.000657	0.002192	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999958	0.002177	0.015826	0.052755	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999968	0.000126	0.000927	0.003090	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999928	0.009304	0.000335	0.001117	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999934	0.007057	0.000125	0.000418	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999868	0.007568	0.004289	0.014295	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999946	0.004173	0.000058	0.000194	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999972	0.001544	0.000127	0.000424	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999818	0.000644	0.000472	0.001574	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999984	0.000286	0.000464	0.001548	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999694	0.005230	0.004738	0.015792	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999958	0.001494	0.046014	0.153381	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999901	0.000622	0.028165	0.093882	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999799	0.004453	0.000071	0.000236	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999791	0.001570	0.000193	0.000642	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999877	0.009928	0.011521	0.038403	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999951	0.001110	0.000239	0.000796	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999976	0.000585	0.000731	0.002437	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999972	0.000135	0.001325	0.004416	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999973	0.000085	0.001841	0.006137	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.997443	0.001939	0.000622	0.002074	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999806	0.000672	0.000373	0.001244	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999888	0.013927	0.000164	0.000548	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999891	0.001774	0.000213	0.000710	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999926	0.000320	0.001300	0.004333	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999788	0.001041	0.000434	0.001446	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999904	0.003114	0.000077	0.000258	OK.	1.000000	0.000000	1	0

Inst QC: MA14907

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/17/2018 8:59:38 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	-.0058	-.0008	.0551	.0005	.0092	-.0001	.0004	.0002
Stddev	.0002	.0016	.0001	.0038	.0010	.0009	.0001	.0001	.0000
%RSD	167.3	27.45	9.856	6.805	180.8	10.05	81.67	35.45	10.95
#1	-.0001	-.0059	-.0009	.0584	.0015	.0085	-.0001	.0004	.0002
#2	.0003	-.0041	-.0007	.0511	.0005	.0088	.0000	.0003	.0002
#3	.0002	-.0073	-.0008	.0559	-.0004	.0103	-.0001	.0005	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0028	.0030	-.0025	-.0015	.0003	.0017	-.0201	-.0001	.0023
Stddev	.0001	.0002	.0088	.0003	.0001	.0000	.0076	.0002	.0002
%RSD	4.192	5.151	350.3	21.97	26.23	2.219	37.73	136.7	6.573
#1	.0028	.0031	.0033	-.0014	.0003	.0017	-.0260	-.0003	.0023
#2	.0026	.0028	.0018	-.0012	.0002	.0017	-.0115	.0001	.0024
#3	.0028	.0030	-.0126	-.0018	.0003	.0016	-.0228	-.0002	.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0001	-.0007	.0043	.0005	.0010	.0022	-.0034	-.0002	.0024
Stddev	.0001	.0001	.0001	.0000	.0006	.0001	.0006	.0001	.0003
%RSD	128.1	14.54	2.726	4.286	52.84	3.362	16.11	80.80	10.93
#1	-.0001	-.0007	.0044	.0005	.0016	.0022	-.0033	.0000	.0025
#2	-.0002	-.0007	.0043	.0005	.0009	.0021	-.0029	-.0002	.0026
#3	.0000	-.0006	.0042	.0005	.0006	.0022	-.0040	-.0003	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1225.1	3107.0	23245.	1518.1
Stddev	3.2	.8	70.	12.4
%RSD	.26256	.02640	.30050	.81711
#1	1224.5	3106.9	23314.	1516.0
#2	1228.6	3106.3	23247.	1506.8
#3	1222.3	3107.9	23175.	1531.4

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/17/2018 9:03:44 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0345	1.834	.1092	6.498	4.688	2.891	2.587	1.296	.2345	.4251
Stddev	.0000	.008	.0001	.047	.017	.012	.001	.002	.0009	.0005
%RSD	.0987	.4553	.0555	.7229	.3655	.4141	.0371	.1679	.3778	.1121
#1	.0345	1.829	.1092	6.551	4.704	2.902	2.588	1.298	.2353	.4249
#2	.0346	1.829	.1091	6.461	4.670	2.878	2.587	1.294	.2335	.4248
#3	.0345	1.844	.1091	6.483	4.689	2.893	2.587	1.296	.2346	.4256

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.389	3.240	.3035	1.334	.6382	9.047	.7391	.6368	.1340	.0794
Stddev	.002	.018	.0020	.002	.0013	.020	.0002	.0045	.0006	.0001
%RSD	.0648	.5426	.6632	.1103	.2039	.2164	.0308	.7123	.4505	.1689
#1	2.388	3.261	.3051	1.332	.6369	9.035	.7391	.6393	.1335	.0793
#2	2.388	3.232	.3041	1.335	.6381	9.037	.7390	.6316	.1346	.0795
#3	2.391	3.229	.3012	1.335	.6395	9.070	.7394	.6396	.1337	.0795

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2403	.2500	9.671	1.020	.3161	.3471	1.533
Stddev	.0003	.0003	.030	.001	.0005	.0007	.002
%RSD	.1286	.1153	.3069	.0562	.1507	.2103	.0989
#1	.2407	.2502	9.687	1.020	.3155	.3469	1.535
#2	.2402	.2502	9.637	1.020	.3162	.3464	1.533
#3	.2400	.2497	9.690	1.021	.3164	.3479	1.532

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1163.2	3097.6	22994.	1522.7
Stddev	2.6	2.0	47.	12.5
%RSD	.21928	.06484	.20245	.81962
#1	1162.5	3097.3	22999.	1522.8
#2	1166.1	3095.8	23037.	1510.2
#3	1161.1	3099.8	22945.	1535.1

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/17/2018 9:07:04 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1357	7.342	.4478	25.90	18.75	11.36	10.27	5.120	.9318	1.705
Stddev	.0009	.035	.0007	.07	.08	.09	.01	.002	.0048	.007
%RSD	.6983	.4767	.1460	.2689	.4386	.7560	.0854	.0405	.5114	.4205
#1	.1356	7.382	.4478	25.95	18.85	11.45	10.28	5.122	.9288	1.713
#2	.1347	7.328	.4484	25.82	18.73	11.37	10.27	5.121	.9294	1.699
#3	.1366	7.316	.4471	25.93	18.69	11.28	10.26	5.118	.9373	1.705

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.167	13.08	1.195	5.347	2.698	36.37	2.910	2.610	.5445	.3241
Stddev	.045	.06	.004	.047	.003	.18	.002	.004	.0012	.0004
%RSD	.4887	.4365	.3513	.8718	.1066	.4892	.0562	.1493	.2159	.1248
#1	9.208	13.15	1.199	5.344	2.695	36.53	2.908	2.614	.5433	.3236
#2	9.174	13.05	1.193	5.302	2.700	36.41	2.911	2.607	.5444	.3244
#3	9.119	13.05	1.191	5.395	2.700	36.18	2.911	2.608	.5457	.3242

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.274	1.035	40.71	4.293	1.289	1.458	6.070
Stddev	.001	.001	.15	.032	.003	.003	.006
%RSD	.0786	.1095	.3778	.7331	.2283	.2179	.1041
#1	1.274	1.034	40.84	4.294	1.291	1.461	6.077
#2	1.273	1.037	40.75	4.262	1.285	1.455	6.066
#3	1.275	1.035	40.54	4.325	1.290	1.457	6.067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1054.0	2940.9	21915.	1488.0
Stddev	1.3	1.8	106.	6.3
%RSD	.12185	.06277	.48477	.42219
#1	1054.3	2943.0	22000.	1480.7
#2	1055.2	2940.5	21949.	1491.7
#3	1052.6	2939.3	21796.	1491.5

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/17/2018 9:11:08 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2829	14.86	.9178	52.17	37.14	22.69	20.36	10.20	1.851	3.454
Stddev	.0014	.08	.0020	.22	.14	.10	.04	.03	.016	.012
%RSD	.5115	.5177	.2232	.4146	.3844	.4192	.2206	.2476	.8866	.3477
#1	.2834	14.84	.9197	52.21	37.09	22.67	20.41	10.22	1.862	3.453
#2	.2840	14.80	.9182	51.94	37.03	22.60	20.34	10.19	1.859	3.467
#3	.2813	14.95	.9156	52.37	37.30	22.79	20.33	10.17	1.832	3.443

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	18.14	26.81	2.424	10.63	5.352	73.69	5.799	5.320	1.112	.6606
Stddev	.07	.12	.010	.08	.013	.32	.015	.024	.003	.0022
%RSD	.3726	.4345	.4230	.7427	.2442	.4374	.2659	.4417	.3054	.3266
#1	18.11	26.78	2.423	10.66	5.367	73.53	5.817	5.342	1.116	.6627
#2	18.09	26.71	2.415	10.68	5.348	73.47	5.789	5.323	1.111	.6584
#3	18.22	26.94	2.435	10.54	5.341	74.06	5.791	5.295	1.109	.6606

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.739	2.050	80.07	8.540	2.599	2.905	12.02
Stddev	.005	.004	.34	.046	.014	.014	.02
%RSD	.2945	.1830	.4185	.5432	.5323	.4838	.1580
#1	1.745	2.055	79.77	8.561	2.613	2.908	12.04
#2	1.739	2.049	80.00	8.572	2.597	2.918	12.00
#3	1.735	2.047	80.43	8.487	2.586	2.890	12.01

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	979.65	2823.7	21292.	1459.6
Stddev	3.43	6.1	151.	7.0
%RSD	.35033	.21516	.71149	.48166
#1	975.94	2816.9	21238.	1458.4
#2	980.32	2828.7	21174.	1467.1
#3	982.70	2825.5	21463.	1453.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/17/2018 9:18:31 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4952	77.03	4.024	3.904	3.862	76.76	3.912	3.924	3.806	3.913
Stddev	.0016	.71	.004	.018	.025	.46	.003	.005	.006	.010
%RSD	.3326	.9225	.1046	.4573	.6433	.6049	.0744	.1327	.1674	.2504
#1	.4936	77.84	4.028	3.924	3.890	77.30	3.915	3.924	3.813	3.924
#2	.4969	76.52	4.021	3.894	3.853	76.51	3.914	3.930	3.804	3.908
#3	.4951	76.74	4.022	3.892	3.842	76.47	3.909	3.919	3.801	3.906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.19	78.44	77.70	3.873	3.958	77.37	3.969	3.953	4.014	4.029
Stddev	.28	.49	.09	.011	.006	.60	.003	.004	.009	.006
%RSD	.3692	.6278	.1167	.2930	.1604	.7718	.0854	.1000	.2220	.1447
#1	77.49	78.99	77.80	3.860	3.951	78.06	3.967	3.950	4.019	4.033
#2	77.15	78.24	77.62	3.875	3.963	77.02	3.973	3.957	4.020	4.030
#3	76.92	78.07	77.68	3.883	3.960	77.02	3.968	3.952	4.004	4.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.455	3.995	3.867	3.881	3.948	3.917	3.913
Stddev	.001	.004	.026	.002	.002	.011	.005
%RSD	.0345	.1112	.6654	.0604	.0541	.2830	.1264
#1	3.454	4.000	3.897	3.882	3.948	3.909	3.911
#2	3.455	3.994	3.855	3.884	3.945	3.912	3.919
#3	3.457	3.992	3.851	3.879	3.949	3.929	3.910
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/17/2018 9:18:31 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	985.76	2827.2	21766.	1492.8
Stddev	.77	6.8	13.	6.3
%RSD	.07828	.24108	.06181	.42116
#1	985.54	2820.4	21767.	1486.9
#2	985.13	2827.2	21779.	1492.2
#3	986.62	2834.0	21752.	1499.4

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2018 9:24:45 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2291	39.75	1.995	1.984	1.985	38.92	1.988	2.014	1.933	1.968
Stddev	.0004	.24	.004	.015	.009	.24	.001	.002	.003	.001
%RSD	.1564	.6097	.1751	.7313	.4590	.6283	.0481	.0805	.1372	.0648
#1	.2293	40.02	1.995	2.001	1.996	39.19	1.987	2.013	1.933	1.969
#2	.2287	39.56	1.999	1.980	1.978	38.71	1.988	2.016	1.931	1.968
#3	.2293	39.67	1.992	1.973	1.982	38.86	1.989	2.013	1.936	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.50	38.86	39.67	1.925	1.872	38.22	2.028	1.951	2.000	2.005
Stddev	.07	.30	.06	.001	.003	.24	.003	.002	.005	.001
%RSD	.1845	.7603	.1549	.0279	.1400	.6287	.1303	.1126	.2618	.0703
#1	38.58	39.20	39.60	1.924	1.869	38.50	2.030	1.953	2.002	2.004
#2	38.46	38.74	39.67	1.925	1.873	38.09	2.028	1.949	2.004	2.006
#3	38.46	38.65	39.73	1.925	1.873	38.08	2.025	1.952	1.994	2.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0452	2.039	1.906	1.921	2.020	1.885	1.995
Stddev	.0006	.004	.011	.001	.002	.004	.001
%RSD	1.252	.2211	.5979	.0424	.1139	.2129	.0692
#1	.0459	2.045	1.919	1.922	2.020	1.885	1.996
#2	.0450	2.037	1.898	1.921	2.022	1.881	1.995
#3	.0448	2.037	1.900	1.920	2.017	1.889	1.993
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2018 9:24:45 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1054.4	2914.0	22218.	1499.4
Stddev	1.6	3.1	41.	4.0
%RSD	.14891	.10695	.18350	.26683
#1	1053.4	2912.8	22224.	1503.0
#2	1053.5	2911.7	22255.	1500.0
#3	1056.2	2917.6	22174.	1495.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/17/2018 9:31:26 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0109	.0007	-.0001	.0000	.0012	.0001	.0001	.0001
Stddev	.0007	.0037	.0007	.0001	.0001	.0043	.0000	.0001	.0003
%RSD	292.7	33.87	98.38	39.10	2771.	346.7	22.97	74.39	245.9
#1	-.0011	.0099	.0000	-.0001	.0002	.0061	.0001	.0001	-.0002
#2	.0001	.0077	.0014	-.0001	-.0001	-.0022	.0001	.0000	.0003
#3	.0002	.0149	.0008	-.0002	-.0001	-.0002	.0001	.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0043	.0161	.0353	.0000	F.0016	.0202	.0003	-.0004
Stddev	.0001	.0022	.0166	.0276	.0001	.0003	.0064	.0001	.0011
%RSD	17.69	51.03	103.0	78.29	141.7	17.45	31.81	50.77	285.1
#1	.0003	.0067	.0343	.0523	.0000	.0019	.0134	.0003	.0004
#2	.0004	.0025	.0124	.0034	.0001	.0017	.0262	.0001	-.0017
#3	.0005	.0036	.0017	.0502	.0000	.0013	.0211	.0004	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0017	.0003	.0007	.0001	.0007	.0005	.0001	.0002
Stddev	.0017	.0011	.0002	.0003	.0000	.0002	.0004	.0000	.0000
%RSD	472.8	62.85	71.19	36.27	39.21	22.62	76.21	54.54	14.99
#1	.0022	.0011	.0006	.0010	.0002	.0006	.0004	.0001	.0001
#2	-.0013	.0029	.0002	.0007	.0001	.0009	.0009	.0001	.0002
#3	.0003	.0010	.0002	.0005	.0001	.0006	.0002	.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/17/2018 9:31:26 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1197.4	3021.5	22965.	1494.2
Stddev	2.8	6.0	135.	6.8
%RSD	.23313	.19876	.58619	.45565
#1	1195.1	3026.3	22880.	1501.3
#2	1196.4	3014.8	23120.	1493.3
#3	1200.5	3023.4	22894.	1487.8

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 9:35:35 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Sb2068
Units	ppm
Avg	F.0060
Stddev	.0019
%RSD	30.92
#1	.0080
#2	.0057
#3	.0043
Check ?	Chk Fail
Value	.0050
Range	20.00%

Int. Std.	Y_2243
Units	Cts/S
Avg	3009.5
Stddev	1.9
%RSD	.06419
#1	3011.5
#2	3009.3
#3	3007.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 9:39:29 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087	.2088	.0103	.1964	.0049	.9658	.0051	.0512	.0096	.0254
Stddev	.0005	.0209	.0004	.0017	.0000	.0049	.0000	.0002	.0001	.0002
%RSD	5.347	10.03	3.952	.8506	.6616	.5071	.5138	.4076	.6820	.8978
#1	.0088	.2326	.0103	.1978	.0048	.9682	.0051	.0510	.0096	.0252
#2	.0081	.1935	.0099	.1945	.0049	.9691	.0051	.0511	.0097	.0254
#3	.0091	.2001	.0107	.1969	.0049	.9602	.0052	.0514	.0096	.0257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2887	9.496	4.912	.0148	.0476	9.338	.0422	.0047	.0116	.0302
Stddev	.0030	.079	.028	.0001	.0002	.044	.0002	.0006	.0027	.0004
%RSD	1.035	.8364	.5735	.4530	.5195	.4702	.4076	12.85	23.19	1.414
#1	.2917	9.557	4.905	.0147	.0477	9.366	.0421	.0052	.0145	.0300
#2	.2858	9.406	4.943	.0148	.0473	9.288	.0424	.0040	.0108	.0307
#3	.2886	9.526	4.888	.0148	.0478	9.362	.0422	.0048	.0094	.0300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value										
Range										

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0528	.0095	.0094	.0101	.0469	.0204
Stddev	.0005	.0001	.0002	.0009	.0003	.0001
%RSD	1.019	1.103	2.089	9.116	.6971	.2913
#1	.0533	.0096	.0095	.0090	.0472	.0204
#2	.0522	.0094	.0092	.0108	.0466	.0204
#3	.0529	.0094	.0096	.0103	.0469	.0205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 9:39:29 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1168.1	3000.3	23035.	1518.3
Stddev	1.2	6.8	86.	2.3
%RSD	.10333	.22582	.37375	.15137
#1	1166.7	2993.0	23053.	1520.7
#2	1168.5	3001.6	23111.	1516.2
#3	1169.0	3006.3	22942.	1517.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 9:46:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	469.4	-.0014	.0003	-.0002	430.7	.0000	.0000	-.0003	-.0008
Stddev	.0001	2.6	.0019	.0002	.0000	2.5	.000	.0002	.0003	.0003
%RSD	27.52	.5502	134.4	77.82	17.03	.5814	1867.	564.0	93.22	30.96
#1	-.0005	471.5	-.0031	.0001	-.0002	431.9	.0000	.0002	-.0006	-.0009
#2	-.0004	470.1	-.0019	.0003	-.0001	432.4	-.0002	.0001	-.0002	-.0006
#3	-.0003	466.5	.0007	.0005	-.0002	427.9	.0002	-.0002	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	168.4	.0197	478.2	-.0001	.0000	.1675	-.0004	.0002	.0014	.0000
Stddev	.9	.0201	2.0	.0001	.0003	.0082	.0003	.0014	.0008	.004
%RSD	.5145	102.2	.4283	102.7	820.0	4.908	81.01	841.5	54.95	21670.
#1	168.4	.0100	478.0	-.0001	.0003	.1609	-.0007	-.0013	.0013	.0038
#2	169.3	.0427	480.3	.0000	-.0002	.1767	-.0004	.0002	.0021	-.0008
#3	167.5	.0062	476.2	-.0001	.0000	.1649	-.0001	.0015	.0006	-.0031
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0188	.0005	.0001	.0003	.0000	-.0005	-.0005
Stddev	.0009	.0008	.0000	.0001	.0014	.0000	.0002
%RSD	4.622	161.5	45.20	32.36	20870.	7.115	36.96
#1	.0182	.0003	.0000	.0003	-.0004	-.0004	-.0004
#2	.0198	.0014	.0001	.0004	-.0012	-.0005	-.0007
#3	.0184	-.0002	.0001	.0003	.0015	-.0005	-.0005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 9:46:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	942.09	2704.0	20734.	1495.8
Stddev	2.20	3.7	36.	10.1
%RSD	.23308	.13555	.17359	.67651
#1	943.86	2707.7	20736.	1497.9
#2	939.64	2703.9	20770.	1484.7
#3	942.79	2700.4	20698.	1504.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2018 9:55:45 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.013	475.8	1.118	.4997	.4812	434.9	.9304	.4780	.4579	.5272
Stddev	.010	2.8	.003	.0007	.0018	2.2	.0013	.0010	.0020	.0028
%RSD	1.007	.5929	.2559	.1355	.3839	.5139	.1380	.2196	.4272	.5346
#1	1.023	479.0	1.116	.5002	.4832	437.4	.9289	.4768	.4601	.5290
#2	1.012	473.8	1.121	.4989	.4796	433.0	.9313	.4788	.4563	.5287
#3	1.003	474.6	1.116	.5001	.4807	434.3	.9310	.4782	.4574	.5240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	175.3	.0213	493.3	.4804	.9122	.1671	.9852	.9373	1.049	1.013
Stddev	1.0	.0138	2.4	.0050	.0023	.0041	.0011	.0037	.002	.005
%RSD	.5646	64.88	.4774	1.035	.2467	2.446	.1100	.3995	.1420	.4732
#1	176.3	.0338	495.3	.4860	.9102	.1673	.9845	.9383	1.048	1.018
#2	174.4	.0065	490.7	.4784	.9117	.1711	.9847	.9332	1.051	1.012
#3	175.2	.0236	493.8	.4767	.9146	.1629	.9865	.9405	1.049	1.008
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0244	.9741	.9626	.9348	.9331	.4682	.9315
Stddev	.0016	.0038	.0044	.0062	.0022	.0022	.0012
%RSD	6.704	.3851	.4520	.6604	.2397	.4678	.1244
#1	.0225	.9699	.9666	.9416	.9352	.4702	.9306
#2	.0255	.9772	.9580	.9333	.9308	.4685	.9310
#3	.0251	.9751	.9630	.9295	.9333	.4659	.9328
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2018 9:55:45 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	909.79	2609.5	20380.	1461.0
Stddev	2.58	1.5	152.	4.1
%RSD	.28358	.05905	.74730	.28003
#1	907.94	2609.3	20207.	1459.6
#2	912.74	2611.1	20440.	1465.7
#3	908.70	2608.1	20493.	1457.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 10:03:35 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2423	36.66	2.052	1.951	1.916	36.96	1.997	2.007	1.887	1.948
Stddev	.0009	.24	.006	.014	.011	.22	.002	.004	.002	.006
%RSD	.3867	.6510	.2980	.7168	.5541	.5896	.1137	.1897	.1290	.2945
#1	.2416	36.50	2.058	1.945	1.911	36.80	2.000	2.007	1.888	1.955
#2	.2419	36.94	2.046	1.967	1.929	37.21	1.998	2.010	1.884	1.944
#3	.2434	36.56	2.052	1.941	1.910	36.86	1.995	2.003	1.887	1.945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.54	38.06	38.29	1.965	2.055	37.06	2.068	1.932	2.046	2.061
Stddev	.10	.31	.11	.007	.004	.19	.003	.003	.008	.006
%RSD	.2680	.8090	.2814	.3447	.1755	.5235	.1371	.1470	.4088	.3124
#1	38.47	37.88	38.21	1.957	2.055	36.91	2.069	1.933	2.049	2.069
#2	38.66	38.41	38.42	1.966	2.059	37.28	2.071	1.928	2.052	2.056
#3	38.50	37.88	38.26	1.971	2.052	36.99	2.065	1.933	2.037	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.656	2.117	1.921	1.961	1.967	2.000	2.001
Stddev	.005	.002	.011	.005	.002	.003	.001
%RSD	.1981	.0871	.5824	.2334	.0943	.1443	.0248
#1	2.660	2.117	1.914	1.957	1.969	2.002	2.001
#2	2.657	2.115	1.933	1.962	1.965	1.997	2.001
#3	2.650	2.118	1.914	1.966	1.967	2.001	2.001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 10:03:35 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1048.4	2854.7	22382.	1525.3
Stddev	.7	2.6	64.	6.5
%RSD	.06775	.09026	.28766	.42363
#1	1048.9	2853.4	22452.	1531.6
#2	1048.8	2852.9	22367.	1518.7
#3	1047.6	2857.6	22326.	1525.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 10:15:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0159	.0004	-.0004	.0000	.0020	.0001	.0000	-.0001	.0002
Stddev	.0003	.0060	.0005	.0004	.0001	.0007	.0000	.0001	.0003	.0003
%RSD	184.0	37.53	140.6	107.8	661.0	33.92	13.84	491.4	383.2	150.4
#1	-.0005	.0223	.0010	.0000	-.0001	.0013	.0001	.0000	.0003	.0006
#2	.0001	.0105	.0000	-.0003	.0001	.0026	.0001	.0001	-.0002	-.0001
#3	-.0001	.0148	.0001	-.0009	.0001	.0019	.0001	-.0001	-.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0031	.0076	.0341	.0001	-.0004	.0016	.0003	.0001	.0010	.0016
Stddev	.0032	.0119	.0120	.0000	.0001	.0028	.0002	.0005	.0019	.0017
%RSD	101.6	157.4	35.14	14.75	22.12	171.5	54.60	462.7	183.7	102.9
#1	-.0039	-.0026	.0206	.0001	-.0003	.0020	.0001	.0004	.0014	.0036
#2	.0004	.0046	.0433	.0001	-.0005	.0043	.0005	.0004	-.0010	.0007
#3	-.0058	.0207	.0384	.0001	-.0005	-.0013	.0003	-.0004	.0027	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0001	.0001	-.0001	.0007	.0002	.0001
Stddev	.0003	.0001	.0001	.0001	.0009	.0004	.0001
%RSD	440.5	188.6	76.29	38.72	130.5	182.1	46.57
#1	-.0001	.0001	.0000	-.0002	.0013	-.0002	.0001
#2	.0002	-.0001	.0002	-.0001	.0011	.0003	.0001
#3	-.0003	.0002	.0001	-.0001	-.0003	.0005	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 10:15:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1233.7	3069.1	24206.	1588.6
Stddev	1.3	3.7	106.	4.8
%RSD	.10263	.12057	.43724	.30374
#1	1234.2	3065.1	24166.	1586.0
#2	1234.6	3072.4	24126.	1594.1
#3	1232.3	3069.9	24326.	1585.6

Zoom In Zoom Out

Sample Name: MP33747-MB1 Acquired: 5/17/2018 10:20:20 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0350	.0002	-.0004	-.0001	.0321	-.0001	-.0002	.0001
Stddev	.0003	.0090	.0010	.0002	.0001	.0084	.0000	.0002	.0002
%RSD	77.11	25.69	431.2	56.03	73.69	26.11	54.92	103.1	388.2
#1	-.0004	.0266	-.0004	-.0003	-.0002	.0283	-.0001	.0000	.0000
#2	-.0006	.0445	.0013	-.0006	-.0001	.0417	.0000	-.0001	.0003
#3	-.0001	.0341	-.0002	-.0002	.0000	.0262	-.0001	-.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0191	.0372	.0758	.0004	-.0003	.0190	.0003	.0003
Stddev	.0001	.0037	.0121	.0244	.0001	.0001	.0030	.0001	.0005
%RSD	23.09	19.35	32.54	32.16	13.51	39.58	15.97	40.13	143.0
#1	.0006	.0160	.0290	.0653	.0004	-.0003	.0186	.0002	-.0002
#2	.0005	.0231	.0316	.0585	.0004	-.0002	.0162	.0005	.0006
#3	.0004	.0181	.0511	.1037	.0005	-.0004	.0222	.0003	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0021	.0166	F.0269	.0001	.0003	-.0016	-.0001	.0032
Stddev	.0013	.0030	.0003	.0004	.0000	.0000	.0006	.0002	.0000
%RSD	175.6	142.5	1.902	1.602	35.86	12.49	34.18	105.5	1.311
#1	.0019	.0036	.0165	.0270	.0001	.0003	-.0023	-.0003	.0032
#2	.0010	-.0013	.0170	.0272	.0001	.0003	-.0013	.0000	.0032
#3	-.0007	.0041	.0163	.0264	.0002	.0002	-.0013	-.0002	.0033
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Zoom In Zoom Out

Sample Name: MP33747-MB1 Acquired: 5/17/2018 10:20:20 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1197.1	2949.1	23555.	1536.5
Stddev	4.3	1.7	125.	16.0
%RSD	.35584	.05736	.53008	1.0425
#1	1192.5	2948.9	23533.	1522.2
#2	1198.1	2947.4	23689.	1553.8
#3	1200.8	2950.8	23442.	1533.5

Zoom In Zoom Out

Sample Name: MP33747-B1 Acquired: 5/17/2018 10:24:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0496	24.07	2.028	1.967	.0488	22.99	.0496	.5061	.1900	.2492
Stddev	.0005	.05	.008	.013	.0004	.13	.0000	.0016	.0006	.0005
%RSD	.9670	.2278	.4054	.6792	.7372	.5484	.0482	.3253	.3146	.2083
#1	.0491	24.03	2.019	1.964	.0492	23.06	.0496	.5042	.1901	.2487
#2	.0501	24.13	2.035	1.981	.0485	23.07	.0496	.5067	.1906	.2492
#3	.0496	24.05	2.028	1.955	.0487	22.85	.0496	.5074	.1894	.2498
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.66	23.13	23.42	.4919	.4799	22.58	.5354	.4685	.5102	2.003
Stddev	.09	.13	.27	.0007	.0009	.07	.0014	.0013	.0028	.006
%RSD	.3613	.5455	1.133	.1457	.1979	.3256	.2545	.2743	.5411	.3005
#1	24.67	23.12	23.51	.4923	.4789	22.58	.5339	.4675	.5072	1.997
#2	24.74	23.27	23.62	.4923	.4799	22.65	.5361	.4681	.5107	2.009
#3	24.57	23.01	23.12	.4911	.4808	22.50	.5364	.4700	.5127	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3647	.5406	.4731	.4769	1.881	.4745	.4963
Stddev	.0018	.0021	.0007	.0009	.002	.0003	.0018
%RSD	.4856	.3891	.1438	.1901	.0972	.0649	.3591
#1	.3630	.5382	.4724	.4762	1.880	.4744	.4948
#2	.3665	.5420	.4736	.4766	1.883	.4749	.4958
#3	.3644	.5416	.4734	.4779	1.879	.4743	.4982
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33747-B1 Acquired: 5/17/2018 10:24:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1095.4	2877.1	22729.	1518.1
Stddev	1.6	1.6	49.	13.9
%RSD	.14149	.05537	.21677	.91380
#1	1094.1	2878.7	22704.	1504.0
#2	1097.1	2877.0	22697.	1518.6
#3	1095.0	2875.5	22786.	1531.8

Zoom In Zoom Out

Sample Name: FA54170-4 Acquired: 5/17/2018 10:28:37 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0030	85.61	4.322	.2506	.0027	F4659.	.0015	.0057	.3120
Stddev	.0021	.33	.011	.0007	.0002	42.	.0003	.0004	.0019
%RSD	69.58	.3883	.2566	.2808	6.792	.9005	18.88	6.613	.5996
#1	-.0006	85.77	4.318	.2509	.0025	4611.	.0012	.0061	.3142
#2	-.0044	85.84	4.314	.2511	.0029	4677.	.0015	.0054	.3107
#3	-.0041	85.23	4.335	.2498	.0027	4689.	.0017	.0056	.3112

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3423	49.84	1.522	14.16	2.506	-.0032	13.49	.0490	.4427
Stddev	.0019	.22	.058	.20	.019	.0007	.03	.0005	.0012
%RSD	.5599	.4330	3.808	1.377	.7610	22.10	.2272	.9734	.2770
#1	.3441	50.07	1.455	14.17	2.512	-.0025	13.52	.0484	.4431
#2	.3425	49.80	1.552	14.35	2.521	-.0039	13.48	.0493	.4413
#3	.3403	49.64	1.558	13.96	2.484	-.0032	13.46	.0492	.4436

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0250	.0107	23.79	.0253	F71.23	1.176	-.0121	.1003	.1919
Stddev	.0065	.0114	.07	.0018	.94	.002	.0045	.0016	.0009
%RSD	26.19	106.2	.2803	7.309	1.326	.2018	36.92	1.609	.4911
#1	.0217	.0030	23.78	.0232	72.19	1.174	-.0169	.1019	.1912
#2	.0207	.0053	23.73	.0266	71.19	1.176	-.0111	.1002	.1914
#3	.0325	.0237	23.86	.0261	70.30	1.178	-.0082	.0987	.1929

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	931.94	2774.6	21844.	1530.5
Stddev	1.58	8.1	167.	3.4
%RSD	.16985	.29101	.76645	.22444
#1	932.26	2774.6	21765.	1526.6
#2	933.34	2782.7	21731.	1532.0
#3	930.22	2766.6	22037.	1533.0

Zoom In Zoom Out

Sample Name: MP33747-D1 Acquired: 5/17/2018 10:40:34 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	139.4	5.659	.3328	.0048	F4190.	.0024	.0092	.4475
Stddev	.0007	.9	.008	.0020	.0004	60.	.0003	.0005	.0017
%RSD	107.9	.6196	.1457	.5981	8.626	1.437	11.23	5.893	.3790
#1	-.0011	140.1	5.658	.3345	.0053	4210.	.0024	.0086	.4484
#2	.0001	139.6	5.668	.3333	.0047	4238.	.0022	.0094	.4486
#3	-.0009	138.4	5.651	.3306	.0045	4122.	.0027	.0096	.4455

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4718	73.15	2.163	18.14	2.624	-.0047	13.24	.0797	.6435
Stddev	.0019	.36	.043	.26	.007	.0005	.11	.0014	.0031
%RSD	.3968	.4878	1.980	1.455	.2557	11.74	.8005	1.813	.4833
#1	.4696	73.32	2.212	18.32	2.631	-.0046	13.21	.0814	.6405
#2	.4729	73.38	2.131	18.26	2.624	-.0041	13.36	.0789	.6434
#3	.4728	72.74	2.146	17.83	2.618	-.0052	13.15	.0788	.6467

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0247	.0159	31.42	.0251	F56.98	1.848	-.0199	.1427	.2544
Stddev	.0034	.0134	.04	.0023	.61	.023	.0101	.0006	.0010
%RSD	13.68	84.32	.1322	9.245	1.063	1.229	50.76	.4070	.3888
#1	.0235	.0149	31.42	.0239	56.81	1.875	-.0288	.1420	.2553
#2	.0221	.0031	31.37	.0278	57.66	1.837	-.0089	.1429	.2533
#3	.0286	.0299	31.46	.0236	56.49	1.834	-.0219	.1431	.2547

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	921.65	2840.1	22467.	1557.5
Stddev	1.24	6.7	26.	2.8
%RSD	.13433	.23679	.11627	.17922
#1	920.45	2832.4	22440.	1557.2
#2	922.93	2843.2	22468.	1554.9
#3	921.58	2844.8	22492.	1560.5

Zoom In Zoom Out

Sample Name: MP33747-PS1 Acquired: 5/17/2018 10:45:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.2342	452.6	22.58	2.572	.2627	F23380.	.2521	.2694
Stddev	.0062	3.6	.02	.016	.0012	59.	.0010	.0023
%RSD	2.664	.8047	.0942	.6279	.4474	.2529	.4081	.8534
#1	.2290	448.7	22.61	2.560	.2637	23380.	.2520	.2713
#2	.2326	456.0	22.56	2.591	.2630	23320.	.2511	.2701
#3	.2411	453.2	22.58	2.566	.2614	23440.	.2531	.2668

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	1.810	2.276	267.7	60.51	94.55	12.78	.4504	118.5
Stddev	.007	.010	1.3	.68	.68	.01	.0058	.8
%RSD	.3764	.4214	.4881	1.130	.7143	.0807	1.285	.6939
#1	1.817	2.273	267.1	59.86	94.17	12.79	.4438	117.8
#2	1.809	2.268	269.2	61.22	95.33	12.77	.4532	119.4
#3	1.803	2.286	266.9	60.44	94.15	12.78	.4543	118.3

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.7749	2.497	.6681	.5804	136.2	.3792	F357.4	9.094
Stddev	.0062	.012	.0248	.0568	.5	.0077	2.1	.098
%RSD	.8031	.4860	3.710	9.785	.4032	2.023	.5865	1.082
#1	.7765	2.507	.6787	.5617	136.2	.3707	357.3	9.097
#2	.7803	2.483	.6858	.6442	136.8	.3814	355.4	8.994
#3	.7681	2.500	.6398	.5354	135.7	.3856	359.6	9.191

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.4014	.7591	2.213
Stddev	.0111	.0026	.006
%RSD	2.775	.3475	.2714
#1	.4037	.7570	2.212
#2	.4112	.7582	2.208
#3	.3893	.7620	2.220

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33747-PS1 Acquired: 5/17/2018 10:45:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	915.37	2732.3	21679.	1509.1
Stddev	1.62	5.4	51.	12.0
%RSD	.17745	.19653	.23737	.79685
#1	913.51	2728.5	21655.	1522.9
#2	916.05	2738.5	21643.	1503.3
#3	916.53	2730.0	21738.	1501.1

Zoom In Zoom Out

Sample Name: MP33747-PS1 Acquired: 5/17/2018 10:45:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0468	90.53	4.517	.5145	.0525	F4676.	.0504	.0539	.3619
Stddev	.0012	.73	.004	.0032	.0002	12.	.0002	.0005	.0014
%RSD	2.664	.8047	.0942	.6279	.4474	.2529	.4081	.8534	.3764
#1	.0458	89.75	4.521	.5120	.0527	4676.	.0504	.0543	.3633
#2	.0465	91.19	4.513	.5181	.0526	4664.	.0502	.0540	.3618
#3	.0482	90.64	4.517	.5133	.0523	4688.	.0506	.0534	.3606

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4551	53.55	12.10	18.91	2.556	.0901	23.70	.1550	.4994
Stddev	.0019	.26	.14	.14	.002	.0012	.16	.0012	.0024
%RSD	.4214	.4881	1.130	.7143	.0807	1.285	.6939	.8031	.4860
#1	.4546	53.41	11.97	18.83	2.559	.0888	23.56	.1553	.5013
#2	.4535	53.85	12.24	19.07	2.555	.0906	23.88	.1561	.4966
#3	.4573	53.38	12.09	18.83	2.555	.0909	23.66	.1536	.5001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1336	.1161	27.24	.0758	F71.49	1.819	.0803	.1518	.4427
Stddev	.0050	.0114	.11	.0015	.42	.020	.0022	.0005	.0012
%RSD	3.710	9.785	.4032	2.023	.5865	1.082	2.775	.3475	.2714
#1	.1357	.1123	27.24	.0741	71.46	1.819	.0807	.1514	.4423
#2	.1372	.1288	27.35	.0763	71.08	1.799	.0822	.1516	.4417
#3	.1280	.1071	27.14	.0771	71.92	1.838	.0779	.1524	.4440

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	915.37	2732.3	21679.	1509.1
Stddev	1.62	5.4	51.	12.0
%RSD	.17745	.19653	.23737	.79685
#1	913.51	2728.5	21655.	1522.9
#2	916.05	2738.5	21643.	1503.3
#3	916.53	2730.0	21738.	1501.1

Zoom In Zoom Out

Sample Name: MP33747-SD1 Acquired: 5/17/2018 10:55:52 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0012	87.08	4.281	.2477	.0022	4967.	.0009	.0046	.3259	.3860
Stddev	.0035	1.40	.026	.0076	.0030	37.	.0007	.0061	.0073	.0031
%RSD	288.4	1.608	.5969	3.058	132.5	.7492	80.82	132.6	2.245	.8076
#1	-.0036	85.46	4.261	.2417	-.0006	4925.	.0009	.0002	.3184	.3864
#2	.0028	87.84	4.310	.2452	.0020	4994.	.0015	.0116	.3262	.3889
#3	-.0028	87.93	4.272	.2562	.0053	4984.	.0002	.0021	.3330	.3827

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	51.80	1.337	13.66	2.615	-.0361	13.47	.0502	.4550	.0342	.0645
Stddev	.18	.413	1.15	.015	.0038	.23	.0020	.0221	.0163	.0303
%RSD	.3472	30.87	8.388	.5741	10.46	1.705	4.001	4.857	47.52	46.98
#1	51.68	1.659	12.61	2.630	-.0317	13.22	.0485	.4714	.0230	.0870
#2	51.72	.8719	13.49	2.615	-.0380	13.67	.0524	.4298	.0268	.0766
#3	52.01	1.481	14.88	2.600	-.0385	13.51	.0497	.4637	.0529	.0300

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	27.56	.0332	73.34	1.909	-.0352	.0967	.2023
Stddev	.12	.0063	.34	.099	.0331	.0062	.0016
%RSD	.4456	18.85	.4627	5.185	93.95	6.428	.8091
#1	27.47	.0393	72.95	1.856	-.0719	.0983	.2041
#2	27.52	.0336	73.55	1.848	-.0257	.0898	.2017
#3	27.70	.0268	73.52	2.023	-.0079	.1019	.2010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1054.2	2796.9	22085.	1475.1
Stddev	1.5	7.9	100.	10.9
%RSD	.14400	.28241	.45437	.73833
#1	1053.3	2788.6	21998.	1487.6
#2	1053.2	2797.9	22062.	1468.5
#3	1055.9	2804.3	22195.	1469.1

Zoom In Zoom Out

Sample Name: MP33747-S1 Acquired: 5/17/2018 11:00:06 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0395	157.4	6.811	2.049	.0467	F4025.	.0430	.4258	.6259
Stddev	.0013	.7	.029	.007	.0004	29.	.0001	.0004	.0028
%RSD	3.311	.4540	.4180	.3280	.8538	.7139	.1766	.0990	.4526
#1	.0387	158.2	6.780	2.056	.0469	4019.	.0431	.4262	.6292
#2	.0410	157.0	6.815	2.047	.0470	4056.	.0430	.4254	.6243
#3	.0389	156.9	6.837	2.043	.0463	3999.	.0430	.4259	.6243

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6246	95.26	24.95	37.58	2.624	.3638	35.78	.5140	1.001
Stddev	.0022	.28	.11	.18	.012	.0001	.21	.0017	.010
%RSD	.3460	.2899	.4285	.4833	.4739	.0255	.5798	.3322	1.007
#1	.6248	95.44	25.00	37.38	2.611	.3637	35.91	.5126	.9969
#2	.6223	95.40	25.02	37.65	2.625	.3638	35.89	.5135	.9928
#3	.6267	94.94	24.83	37.72	2.636	.3639	35.54	.5159	1.012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4054	1.806	27.02	.4125	F57.98	2.151	1.710	.5488	.6410
Stddev	.0074	.007	.08	.0021	1.17	.006	.011	.0022	.0002
%RSD	1.832	.4037	.2879	.4977	2.024	.2653	.6152	.4067	.0349
#1	.4003	1.798	26.95	.4109	59.19	2.145	1.711	.5469	.6412
#2	.4019	1.810	27.00	.4119	56.85	2.152	1.719	.5513	.6411
#3	.4139	1.811	27.10	.4149	57.89	2.156	1.699	.5484	.6408

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	942.70	2889.7	22787.	1585.5
Stddev	2.98	6.1	54.	11.4
%RSD	.31631	.21253	.23650	.71638
#1	939.43	2894.7	22848.	1575.0
#2	943.38	2891.7	22765.	1584.1
#3	945.28	2882.9	22747.	1597.5

Zoom In Zoom Out

Sample Name: MP33747-S2 Acquired: 5/17/2018 11:04:26 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0418	123.0	6.331	2.075	.0469	F4649.	.0449	.4400	.4944
Stddev	.0011	.2	.013	.009	.0008	7.	.0003	.0009	.0017
%RSD	2.526	.1868	.1995	.4244	1.809	.1427	.7005	.2088	.3403
#1	.0425	122.9	6.329	2.075	.0460	4653.	.0446	.4411	.4924
#2	.0423	122.7	6.319	2.066	.0470	4652.	.0452	.4394	.4950
#3	.0406	123.2	6.344	2.083	.0477	4641.	.0450	.4396	.4956

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5625	74.27	24.77	38.35	2.421	.3893	33.44	.5176	.9373
Stddev	.0014	.12	.09	.09	.007	.0012	.04	.0014	.0019
%RSD	.2564	.1568	.3441	.2429	.2960	.3047	.1313	.2624	.2028
#1	.5630	74.38	24.83	38.40	2.413	.3890	33.48	.5184	.9387
#2	.5609	74.15	24.80	38.24	2.424	.3883	33.40	.5160	.9381
#3	.5637	74.26	24.67	38.41	2.426	.3906	33.44	.5184	.9352

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4332	1.898	27.17	.4555	F56.41	1.749	1.736	.5339	.6191
Stddev	.0049	.017	.05	.0019	.59	.012	.008	.0023	.0009
%RSD	1.141	.8895	.1735	.4240	1.043	.6791	.4440	.4292	.1412
#1	.4356	1.917	27.22	.4575	57.07	1.763	1.727	.5318	.6184
#2	.4275	1.884	27.12	.4554	55.95	1.744	1.741	.5363	.6188
#3	.4365	1.892	27.19	.4536	56.20	1.741	1.740	.5334	.6201

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	933.96	2796.5	22288.	1551.0
Stddev	1.80	3.8	32.	8.3
%RSD	.19284	.13581	.14452	.53536
#1	932.11	2794.0	22306.	1541.4
#2	934.06	2800.8	22251.	1556.6
#3	935.71	2794.6	22307.	1554.9

Zoom In Zoom Out

Sample Name: FA54005-1 Acquired: 5/17/2018 11:08:47 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	1.772	-.0035	.0604	.0000	F1228.	-.0001	.0007	.0012
Stddev	.0006	.030	.0010	.0007	.000	18.	.0001	.0001	.0002
%RSD	106.3	1.714	27.93	1.158	131.8	1.440	94.09	9.143	20.21
#1	-.0011	1.742	-.0046	.0605	-.0001	1208.	-.0001	.0007	.0011
#2	.0001	1.771	-.0030	.0596	-.0001	1242.	.0000	.0008	.0010
#3	-.0008	1.802	-.0029	.0610	.0000	1233.	-.0001	.0006	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1236	.9161	.5840	3.093	.0666	-.0008	1.748	.0084	.0015
Stddev	.0003	.0092	.0165	.035	.0001	.0001	.010	.0003	.0014
%RSD	.2104	1.000	2.817	1.147	.1058	8.301	.5644	3.415	94.77
#1	.1239	.9225	.5912	3.121	.0666	-.0008	1.738	.0086	.0016
#2	.1234	.9056	.5956	3.106	.0665	-.0007	1.747	.0080	.0028
#3	.1236	.9203	.5652	3.053	.0667	-.0008	1.758	.0085	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0018	.0018	.9944	.0243	F7.577	.1124	-.0051	.0096	.0099
Stddev	.0013	.0021	.0024	.0005	.026	.0004	.0022	.0003	.0001
%RSD	74.62	114.0	.2436	2.243	.3448	.3483	42.85	3.193	1.323
#1	.0032	-.0001	.9917	.0249	7.566	.1120	-.0052	.0099	.0100
#2	.0016	.0041	.9949	.0241	7.559	.1125	-.0072	.0093	.0099
#3	.0005	.0015	.9965	.0238	7.607	.1128	-.0028	.0097	.0098

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	898.99	2512.8	20315.	1427.7
Stddev	2.68	4.5	18.	7.9
%RSD	.29799	.17746	.08672	.55395
#1	896.22	2507.8	20297.	1436.0
#2	901.57	2514.1	20314.	1420.3
#3	899.18	2516.4	20332.	1426.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 11:13:08 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2457	36.32	2.090	1.945	1.893	36.50	2.007	2.025	1.873	1.963
Stddev	.0007	.14	.002	.013	.009	.16	.002	.002	.007	.005
%RSD	.2801	.3821	.1018	.6802	.4680	.4325	.1081	.0841	.3746	.2648
#1	.2464	36.48	2.088	1.940	1.892	36.62	2.009	2.026	1.870	1.968
#2	.2457	36.21	2.089	1.935	1.885	36.32	2.005	2.023	1.880	1.962
#3	.2450	36.28	2.092	1.960	1.903	36.55	2.007	2.025	1.867	1.958

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.25	38.16	37.56	1.983	2.083	36.94	2.097	1.931	2.081	2.102
Stddev	.14	.14	.14	.007	.003	.21	.001	.005	.003	.002
%RSD	.3615	.3683	.3832	.3502	.1649	.5702	.0514	.2756	.1271	.1022
#1	38.31	38.17	37.58	1.981	2.079	37.17	2.098	1.937	2.081	2.103
#2	38.09	38.01	37.41	1.990	2.085	36.76	2.096	1.926	2.084	2.102
#3	38.35	38.29	37.69	1.977	2.085	36.90	2.098	1.930	2.079	2.099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.707	2.151	1.918	1.978	1.981	2.015	2.010
Stddev	.001	.002	.009	.005	.000	.001	.002
%RSD	.0341	.1069	.4458	.2711	.0089	.0566	.0876
#1	2.708	2.153	1.920	1.978	1.981	2.014	2.011
#2	2.706	2.149	1.909	1.983	1.982	2.016	2.008
#3	2.708	2.152	1.926	1.972	1.981	2.015	2.010

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 11:13:08 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1036.3	2811.3	22303.	1514.1
Stddev	1.4	3.7	63.	4.6
%RSD	.13594	.12986	.28063	.30332
#1	1035.5	2815.2	22368.	1512.6
#2	1035.6	2810.6	22243.	1519.3
#3	1038.0	2808.0	22297.	1510.5

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 11:17:06 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0088	-.0004	.0000	.0001	.0010	.0001	.0000	.0001
Stddev	.0004	.0126	.0006	.000	.0001	.0028	.0000	.000	.0002
%RSD	124.3	142.2	146.9	142.1	113.6	273.1	62.14	429.5	303.5
#1	.0004	.0182	-.0001	.0000	.0003	.0028	.0001	.0001	.0002
#2	-.0001	-.0055	.0000	-.0001	.0001	-.0022	.0000	.0000	.0002
#3	.0006	.0138	-.0010	.0000	.0000	.0024	.0001	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0122	.0078	.0180	.0001	F.0022	.0263	.0001	-.0005
Stddev	.0002	.0069	.0356	.0224	.0000	.0007	.0011	.0001	.0005
%RSD	11.64	56.61	455.9	124.0	76.54	32.04	4.301	113.3	113.8
#1	.0017	.0200	-.0161	.0024	.0001	.0030	.0261	.0002	-.0001
#2	.0014	.0094	-.0092	.0080	.0000	.0019	.0275	.0002	-.0010
#3	.0017	.0071	.0487	.0437	.0001	.0016	.0253	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0019	.0048	.0007	.0002	.0011	.0001	.0000	-.0002
Stddev	.0021	.0013	.0046	.0001	.0001	.0002	.0010	.000	.0001
%RSD	449.8	66.80	95.95	10.54	62.27	13.22	1135.	10710.	36.41
#1	.0017	.0028	.0023	.0007	.0001	.0013	.0004	-.0003	-.0003
#2	-.0019	.0005	.0101	.0008	.0003	.0011	-.0010	.0001	-.0001
#3	.0016	.0024	.0020	.0006	.0002	.0010	.0009	.0002	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 11:17:06 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1169.7	2898.0	22939.	1476.8
Stddev	.6	3.4	63.	3.3
%RSD	.05138	.11733	.27587	.22648
#1	1169.1	2901.5	22960.	1473.3
#2	1169.6	2894.8	22868.	1477.0
#3	1170.3	2897.6	22989.	1480.0

Zoom In Zoom Out

Sample Name: FA54112-4 Acquired: 5/17/2018 11:21:23 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	14.88	.0151	.2872	.0003	29.34	.0002	.0014	.0222	.0075
Stddev	.0006	.14	.0013	.0022	.0000	.24	.0000	.0001	.0001	.0003
%RSD	454.9	.9176	8.867	.7651	17.17	.8028	25.75	4.589	.6247	3.799
#1	.0007	15.02	.0167	.2884	.0002	29.53	.0001	.0015	.0223	.0074
#2	-.0004	14.75	.0141	.2846	.0003	29.08	.0002	.0014	.0221	.0073
#3	.0000	14.87	.0147	.2885	.0003	29.41	.0002	.0015	.0222	.0078

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	32.49	.8359	.8932	.0340	.0172	.7625	.0058	.0390	.0013	.0038
Stddev	.22	.0383	.0468	.0002	.0001	.0113	.0002	.0009	.0021	.0014
%RSD	.6913	4.581	5.242	.5307	.8458	1.487	3.108	2.352	159.6	36.30
#1	32.72	.8798	.8997	.0341	.0172	.7723	.0059	.0380	.0014	.0050
#2	32.27	.8094	.9365	.0341	.0173	.7650	.0056	.0398	.0033	.0042
#3	32.48	.8186	.8435	.0338	.0170	.7501	.0059	.0391	-.0008	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.485	.0261	.2277	.2446	.0003	.0342	.1390
Stddev	.003	.0002	.0016	.0006	.0012	.0002	.0003
%RSD	.1236	.6664	.7004	.2605	440.1	.5251	.1976
#1	2.481	.0260	.2291	.2447	-.0009	.0342	.1387
#2	2.487	.0260	.2259	.2451	.0015	.0340	.1392
#3	2.486	.0263	.2279	.2439	.0002	.0344	.1392

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1141.1	2958.8	23531.	1554.6
Stddev	1.8	.9	45.	14.1
%RSD	.15810	.03048	.19182	.90688
#1	1139.1	2958.8	23486.	1538.7
#2	1141.6	2957.8	23531.	1565.6
#3	1142.7	2959.6	23576.	1559.5

Zoom In Zoom Out

Sample Name: MP33746-MB1 Acquired: 5/17/2018 11:25:33 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	F.1435	-.0006	-.0009	-.0002	.0915	-.0003	-.0003	.0003
Stddev	.0016	.0744	.0050	.0013	.0003	.0088	.0003	.0002	.0011
%RSD	227.5	51.86	797.5	141.6	134.4	9.662	111.7	66.79	394.9
#1	-.0005	.2148	-.0055	-.0024	-.0003	.1004	-.0003	-.0006	.0001
#2	-.0025	.0663	-.0007	-.0007	-.0004	.0827	.0001	-.0003	.0015
#3	.0008	.1494	.0044	.0003	.0001	.0914	-.0005	-.0002	-.0007
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.1000							
Low Limit		-.1000							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025	.1255	.0772	.0653	.0018	-.0038	.1166	.0013	-.0006
Stddev	.0012	.0025	.0566	.0670	.0002	.0009	.0592	.0010	.0001
%RSD	49.80	1.960	73.27	102.6	13.51	23.24	50.79	77.90	14.84
#1	.0033	.1242	.0342	.1268	.0020	-.0028	.1089	.0011	-.0007
#2	.0032	.1241	.1413	-.0061	.0015	-.0039	.1793	.0004	-.0005
#3	.0011	.1284	.0561	.0753	.0018	-.0046	.0616	.0023	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0065	F.0074	.0336	F.0747	.0005	.0012	-.0031	.0003	.0080
Stddev	.0051	.0101	.0055	.0005	.0004	.0008	.0056	.0005	.0001
%RSD	78.95	136.4	16.32	.6547	76.99	65.92	179.5	189.2	1.176
#1	.0077	-.0021	.0378	.0751	.0002	.0016	-.0051	.0008	.0081
#2	.0009	.0063	.0356	.0742	.0003	.0003	-.0075	-.0002	.0079
#3	.0109	.0181	.0274	.0748	.0009	.0017	.0032	.0002	.0080
Check ?	Chk Fail	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0025	.0050		.0250					
Low Limit	-.0025	-.0050		-.0250					

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33746-MB1 Acquired: 5/17/2018 11:25:33 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1180.7	2921.7	23458.	1516.1
Stddev	1.2	1.7	141.	24.2
%RSD	.10211	.05691	.59997	1.5930
#1	1180.2	2920.5	23379.	1518.6
#2	1179.8	2921.1	23374.	1539.0
#3	1182.1	2923.6	23620.	1490.8

Zoom In Zoom Out

Sample Name: MP33746-B1 Acquired: 5/17/2018 11:29:51 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0560	26.31	2.208	2.149	.0519	25.16	.0542	.5600	.2058
Stddev	.0040	.17	.001	.023	.0002	.13	.0004	.0009	.0003
%RSD	7.175	.6469	.0443	1.085	.4373	.5336	.7342	.1638	.1699
#1	.0600	26.21	2.209	2.169	.0520	25.31	.0539	.5609	.2054
#2	.0561	26.21	2.207	2.123	.0516	25.05	.0546	.5591	.2060
#3	.0520	26.50	2.208	2.155	.0521	25.12	.0539	.5602	.2060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2730	27.29	25.39	26.27	.5486	.5275	24.81	F.6030	.4995
Stddev	.0004	.10	.31	.64	.0015	.0012	.23	.0031	.0018
%RSD	.1567	.3682	1.225	2.449	.2803	.2226	.9424	.5069	.3616
#1	.2733	27.29	25.48	26.40	.5469	.5285	24.83	.6043	.4999
#2	.2725	27.18	25.05	25.57	.5490	.5262	24.56	.6053	.5011
#3	.2733	27.38	25.65	26.84	.5499	.5278	25.03	.5995	.4976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value								.5000	
Range								20.00%	

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5620	2.210	.3976	F.6587	.5196	.5274	2.045	.5172	.5483
Stddev	.0037	.010	.0020	.0020	.0020	.0021	.004	.0017	.0013
%RSD	.6620	.4481	.5047	.3002	.3834	.4004	.1802	.3294	.2451
#1	.5603	2.212	.3967	.6600	.5206	.5251	2.047	.5171	.5498
#2	.5594	2.219	.3962	.6596	.5173	.5280	2.041	.5155	.5472
#3	.5663	2.200	.3999	.6564	.5209	.5292	2.048	.5189	.5480
Check ?	Chk Pass	Chk Pass	None	Chk Fail	None	None	Chk Pass	Chk Pass	Chk Pass
Value				.5000					
Range				20.00%					

Zoom In Zoom Out

Sample Name: MP33746-B1 Acquired: 5/17/2018 11:29:51 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1133.4	2854.6	22869.	1480.1
Stddev	.5	7.2	23.	4.7
%RSD	.04028	.25382	.09969	.32012
#1	1132.9	2852.0	22894.	1476.4
#2	1133.7	2849.0	22851.	1478.5
#3	1133.6	2862.8	22861.	1485.5

Zoom In Zoom Out

Sample Name: FA53725-34 Acquired: 5/17/2018 11:33:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0041	288.0	.0657	.5624	.0049	5.402	-.0007	.0316	.4346	.2107
Stddev	.0014	.9	.0016	.0028	.0010	.042	.0002	.0002	.0029	.0025
%RSD	34.79	.3156	2.363	.5033	20.31	.7695	34.21	.7617	.6781	1.196
#1	.0056	287.2	.0674	.5592	.0044	5.439	-.0008	.0317	.4337	.2134
#2	.0027	287.8	.0644	.5646	.0060	5.357	-.0008	.0317	.4323	.2085
#3	.0042	289.0	.0654	.5635	.0042	5.409	-.0004	.0313	.4380	.2101

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	272.9	11.22	15.89	.5086	.0114	1.894	.1952	.3198	.0101	.0184
Stddev	.6	.18	.40	.0007	.0006	.080	.0010	.0019	.0024	.0023
%RSD	.2206	1.567	2.514	.1474	5.577	4.246	.5359	.6004	23.22	12.67
#1	272.9	11.03	15.54	.5080	.0108	1.866	.1958	.3185	.0077	.0206
#2	272.3	11.37	16.32	.5084	.0114	1.831	.1958	.3220	.0102	.0188
#3	273.5	11.27	15.82	.5094	.0121	1.985	.1940	.3189	.0124	.0159

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.432	.0758	.1048	5.354	-.0018	.7049	.6032
Stddev	.061	.0023	.0010	.013	.0034	.0026	.0003
%RSD	.7286	3.018	.9389	.2395	184.0	.3742	.0440
#1	8.361	.0781	.1041	5.348	.0007	.7071	.6035
#2	8.473	.0735	.1044	5.345	-.0006	.7019	.6031
#3	8.461	.0759	.1060	5.368	-.0057	.7055	.6030

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1122.5	2951.3	23109.	1541.7
Stddev	1.3	4.2	45.	6.4
%RSD	.11460	.14224	.19335	.41826
#1	1121.4	2950.1	23074.	1549.0
#2	1123.9	2947.8	23159.	1536.8
#3	1122.2	2955.9	23093.	1539.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33746-D1 Acquired: 5/17/2018 11:38:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	287.5	.0635	.5652	.0046	5.387	-.0004	.0316	.4334	.2111
Stddev	.0027	1.4	.0060	.0018	.0005	.071	.0003	.0010	.0001	.0022
%RSD	43.69	.5012	9.412	.3207	11.93	1.323	62.06	3.109	.0169	1.065
#1	.0081	289.1	.0676	.5646	.0044	5.438	-.0007	.0306	.4335	.2128
#2	.0071	287.0	.0664	.5638	.0042	5.418	-.0004	.0326	.4334	.2119
#3	.0031	286.3	.0567	.5672	.0052	5.305	-.0002	.0317	.4334	.2086

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	275.6	11.33	16.35	.5090	.0115	1.883	.1910	.3152	.0069	.0071
Stddev	1.6	.04	.04	.0038	.0012	.015	.0014	.0020	.0027	.0102
%RSD	.5729	.3386	.2505	.7379	10.62	.7793	.7579	.6437	38.77	145.0
#1	277.2	11.37	16.38	.5119	.0127	1.878	.1915	.3152	.0095	.0017
#2	275.3	11.29	16.31	.5104	.0114	1.871	.1893	.3132	.0042	.0188
#3	274.1	11.34	16.37	.5048	.0103	1.899	.1921	.3172	.0069	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.887	.0733	.1055	5.325	.0021	.7039	.6029
Stddev	.003	.0018	.0011	.021	.0053	.0033	.0008
%RSD	.0408	2.437	1.068	.3957	256.0	.4713	.1327
#1	7.890	.0712	.1068	5.347	.0081	.7043	.6028
#2	7.884	.0745	.1050	5.322	-.0012	.7071	.6021
#3	7.886	.0742	.1047	5.305	-.0007	.7005	.6037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1121.9	2955.8	23206.	1528.6
Stddev	1.1	2.2	156.	7.1
%RSD	.09653	.07334	.67284	.46309
#1	1122.5	2956.7	23054.	1521.1
#2	1122.5	2957.3	23197.	1535.2
#3	1120.7	2953.3	23366.	1529.5

Zoom In Zoom Out

Sample Name: MP33746-D2 Acquired: 5/17/2018 11:42:21 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	273.3	.0627	.5317	.0045	5.166	-.0009	.0293	.4059	.2011
Stddev	.0005	1.1	.0039	.0013	.0001	.064	.0002	.0003	.0037	.0012
%RSD	8.575	.4109	6.261	.2522	2.087	1.245	17.44	1.138	.9010	.5813
#1	.0056	274.4	.0625	.5329	.0046	5.192	-.0008	.0297	.4034	.2023
#2	.0062	272.1	.0667	.5303	.0046	5.092	-.0009	.0293	.4042	.2010
#3	.0066	273.4	.0589	.5320	.0044	5.213	-.0011	.0290	.4101	.2000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	258.5	10.68	15.10	.4755	.0096	1.793	.1797	.3043	.0043	.0184
Stddev	.8	.11	.26	.0028	.0005	.034	.0015	.0015	.0054	.0059
%RSD	.3025	.9955	1.751	.5904	5.638	1.883	.8178	.4977	126.2	32.34
#1	259.3	10.78	15.00	.4728	.0097	1.813	.1795	.3058	.0077	.0129
#2	257.7	10.57	14.89	.4752	.0100	1.754	.1812	.3042	.0070	.0247
#3	258.6	10.68	15.40	.4784	.0090	1.812	.1783	.3028	-.0019	.0176

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.315	.0684	.0988	5.127	.0051	.6544	.5641
Stddev	.006	.0008	.0008	.023	.0058	.0009	.0015
%RSD	.0832	1.191	.7667	.4428	113.1	.1390	.2591
#1	7.311	.0682	.0997	5.117	.0114	.6552	.5656
#2	7.311	.0694	.0984	5.110	.0000	.6548	.5640
#3	7.322	.0678	.0984	5.153	.0040	.6534	.5626

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.8	2952.1	23098.	1517.2
Stddev	2.9	5.0	133.	12.2
%RSD	.26331	.17042	.57710	.80610
#1	1115.4	2947.1	23119.	1505.0
#2	1120.2	2952.0	23219.	1529.5
#3	1120.8	2957.2	22955.	1517.0

Zoom In Zoom Out

Sample Name: MP33746-SD1 Acquired: 5/17/2018 11:46:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	279.4	.0670	.5243	.0003	5.663	-.0021	.0304	.4095	.2068
Stddev	.0171	2.1	.0056	.0063	.0039	.091	.0002	.0005	.0031	.0082
%RSD	279.5	.7538	8.402	1.198	1322.	1.609	9.561	1.529	.7590	3.942
#1	-.0096	280.1	.0732	.5315	.0036	5.758	-.0019	.0308	.4126	.2009
#2	.0244	277.0	.0659	.5206	.0013	5.654	-.0021	.0304	.4064	.2035
#3	.0037	281.1	.0621	.5206	-.0040	5.576	-.0023	.0299	.4096	.2161

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	266.4	10.36	15.38	.4924	-.0116	1.953	.1948	.2980	.0027	.0610
Stddev	2.0	.34	.17	.0041	.0046	.094	.0019	.0109	.0518	.0425
%RSD	.7587	3.240	1.135	.8400	39.29	4.813	.9502	3.645	1892.	69.73
#1	267.4	10.44	15.20	.4967	-.0148	1.855	.1939	.3010	.0418	.0428
#2	264.0	10.66	15.55	.4884	-.0136	1.961	.1937	.3070	-.0561	.1096
#3	267.6	9.996	15.38	.4920	-.0064	2.042	.1970	.2859	.0225	.0306

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.567	.0641	.1015	5.109	-.0166	.6692	.5953
Stddev	.009	.0005	.0036	.034	.0043	.0063	.0021
%RSD	.1184	.7533	3.522	.6742	25.88	.9392	.3507
#1	7.557	.0641	.1020	5.146	-.0178	.6657	.5934
#2	7.571	.0636	.0978	5.103	-.0118	.6764	.5950
#3	7.573	.0646	.1049	5.078	-.0201	.6654	.5976

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1167.8	2936.1	23215.	1529.9
Stddev	2.2	3.7	118.	19.3
%RSD	.18930	.12663	.50910	1.2647
#1	1165.8	2940.4	23085.	1548.5
#2	1170.2	2934.5	23243.	1531.3
#3	1167.4	2933.4	23316.	1509.9

Zoom In Zoom Out

Sample Name: MP33746-PS1 Acquired: 5/17/2018 11:50:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0539	281.2	.1720	.7987	.0532	9.962	.0494	.0823	.4626	.3019
Stddev	.0015	1.6	.0012	.0028	.0016	.046	.0005	.0012	.0030	.0009
%RSD	2.772	.5801	.6880	.3461	2.946	.4608	1.102	1.480	.6407	.3046
#1	.0556	282.6	.1734	.8016	.0549	9.977	.0488	.0826	.4615	.3024
#2	.0532	281.5	.1711	.7984	.0529	9.999	.0494	.0810	.4660	.3025
#3	.0528	279.4	.1716	.7961	.0519	9.911	.0499	.0834	.4604	.3008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	266.8	20.34	20.58	.5355	.1068	11.00	.2966	.3585	.1145	.1249
Stddev	1.9	.18	.13	.0026	.0003	.04	.0019	.0015	.0041	.0054
%RSD	.6955	.8840	.6248	.4802	.2846	.3688	.6334	.4233	3.549	4.284
#1	268.9	20.54	20.66	.5379	.1071	11.05	.2961	.3602	.1180	.1213
#2	266.0	20.30	20.43	.5358	.1067	11.00	.2987	.3576	.1154	.1224
#3	265.4	20.18	20.65	.5327	.1065	10.97	.2951	.3576	.1101	.1311

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.462	.1256	.1501	5.263	.0985	.7228	.8309
Stddev	.036	.0014	.0012	.013	.0076	.0034	.0031
%RSD	.4265	1.119	.8199	.2542	7.712	.4652	.3781
#1	8.439	.1264	.1513	5.278	.0900	.7261	.8290
#2	8.445	.1239	.1501	5.260	.1009	.7229	.8291
#3	8.504	.1263	.1489	5.252	.1046	.7194	.8345

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1115.5	2940.5	23162.	1523.5
Stddev	3.3	9.1	73.	10.1
%RSD	.29792	.30824	.31662	.66461
#1	1112.2	2945.8	23089.	1514.1
#2	1118.9	2945.5	23162.	1522.2
#3	1115.3	2930.0	23236.	1534.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33746-S1 Acquired: 5/17/2018 11:54:58 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0566	399.8	2.035	2.628	.0557	30.01	.0508	.5696	.6771	.4814
Stddev	.0030	2.0	.002	.014	.0011	.05	.0003	.0005	.0019	.0027
%RSD	5.338	.5056	.0849	.5179	2.058	.1650	.6294	.0919	.2736	.5652
#1	.0596	399.6	2.035	2.643	.0570	29.97	.0508	.5691	.6779	.4833
#2	.0565	397.9	2.033	2.619	.0553	30.00	.0511	.5702	.6750	.4783
#3	.0536	401.9	2.037	2.621	.0548	30.06	.0505	.5696	.6784	.4825

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	310.6	35.37	41.98	1.055	.4176	25.49	.8362	.8123	.1349	2.015
Stddev	.7	.21	.32	.008	.0004	.11	.0008	.0087	.0054	.012
%RSD	.2338	.5817	.7531	.7706	.1028	.4299	.1015	1.073	3.985	.6043
#1	311.0	35.52	42.34	1.058	.4175	25.55	.8359	.8038	.1384	2.025
#2	309.8	35.14	41.80	1.045	.4172	25.36	.8372	.8119	.1287	2.001
#3	311.1	35.47	41.80	1.060	.4180	25.55	.8356	.8212	.1377	2.017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.764	.5939	.6115	5.395	2.001	1.228	1.152
Stddev	.011	.0006	.0012	.023	.005	.001	.003
%RSD	.1100	.1011	.1914	.4283	.2412	.0933	.2294
#1	9.761	.5943	.6128	5.401	1.998	1.230	1.152
#2	9.776	.5941	.6113	5.370	1.998	1.228	1.150
#3	9.755	.5932	.6105	5.415	2.006	1.227	1.155

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1097.2	2922.3	23040.	1534.7
Stddev	2.8	5.0	19.	4.7
%RSD	.25187	.17187	.08282	.30663
#1	1097.4	2916.5	23042.	1533.1
#2	1099.8	2924.7	23059.	1540.0
#3	1094.3	2925.6	23021.	1531.0

Zoom In Zoom Out

Sample Name: MP33746-S2 Acquired: 5/17/2018 11:59:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0644	437.8	2.219	2.931	.0624	33.10	.0546	.6185	.7468	.5250
Stddev	.0028	2.4	.004	.010	.0004	.32	.0003	.0020	.0046	.0020
%RSD	4.356	.5537	.1765	.3549	.6481	.9652	.6412	.3304	.6135	.3839
#1	.0639	438.9	2.219	2.943	.0623	33.14	.0543	.6204	.7484	.5268
#2	.0674	439.6	2.215	2.924	.0628	33.40	.0550	.6187	.7504	.5228
#3	.0619	435.1	2.223	2.926	.0620	32.76	.0545	.6163	.7417	.5252

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	343.1	39.16	46.23	1.154	.4584	28.23	.9041	.8936	.1378	2.194
Stddev	1.1	.22	.24	.008	.0026	.15	.0037	.0071	.0059	.017
%RSD	.3335	.5663	.5286	.7261	.5643	.5316	.4083	.7973	4.293	.7943
#1	343.7	39.41	46.43	1.161	.4602	28.26	.9075	.9002	.1442	2.213
#2	343.9	39.01	46.32	1.156	.4597	28.37	.9047	.8946	.1325	2.190
#3	341.8	39.05	45.96	1.145	.4555	28.07	.9002	.8861	.1367	2.179

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.586	.6421	.6777	5.933	2.183	1.345	1.247
Stddev	.117	.0007	.0034	.024	.010	.005	.003
%RSD	1.361	.1030	.4982	.4063	.4514	.3834	.2161
#1	8.701	.6418	.6795	5.956	2.194	1.347	1.250
#2	8.590	.6428	.6798	5.936	2.177	1.349	1.246
#3	8.467	.6416	.6738	5.908	2.177	1.339	1.245

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1091.9	2924.2	22944.	1525.4
Stddev	.4	3.3	142.	8.2
%RSD	.04107	.11236	.61966	.53970
#1	1091.6	2927.3	22879.	1533.5
#2	1092.4	2924.7	22846.	1517.0
#3	1091.7	2920.8	23107.	1525.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:03:04 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2465	F35.70	2.114	1.939	1.885	36.17	2.013	2.030	1.833
Stddev	.0008	.16	.001	.001	.005	.09	.004	.002	.011
%RSD	.3403	.4452	.0456	.0509	.2729	.2437	.1934	.1149	.5802
#1	.2463	35.60	2.115	1.940	1.887	36.15	2.016	2.032	1.827
#2	.2457	35.62	2.113	1.938	1.880	36.10	2.009	2.028	1.827
#3	.2474	35.88	2.115	1.939	1.890	36.27	2.015	2.031	1.846
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		40.00							
Range		-10.00%							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.950	38.34	38.05	37.99	1.984	2.102	36.53	2.131	1.930
Stddev	.003	.14	.08	.07	.009	.005	.07	.003	.007
%RSD	.1361	.3664	.2140	.1798	.4539	.2562	.1995	.1509	.3831
#1	1.951	38.24	38.02	38.06	1.987	2.098	36.55	2.132	1.937
#2	1.947	38.27	37.99	37.93	1.974	2.101	36.44	2.128	1.922
#3	1.951	38.50	38.14	37.98	1.992	2.108	36.58	2.134	1.930
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.105	2.139	2.737	2.199	1.901	1.973	1.981	2.020	2.022
Stddev	.005	.004	.002	.006	.009	.007	.004	.006	.006
%RSD	.2462	.1900	.0876	.2730	.4549	.3765	.2247	.3118	.2852
#1	2.108	2.143	2.735	2.205	1.897	1.977	1.985	2.023	2.027
#2	2.099	2.138	2.736	2.193	1.895	1.964	1.976	2.013	2.016
#3	2.107	2.135	2.740	2.200	1.911	1.978	1.982	2.025	2.022
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:03:04 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1027.0	2772.0	22442.	1488.8
Stddev	3.6	5.9	110.	5.6
%RSD	.35149	.21404	.48906	.37482
#1	1024.2	2769.6	22408.	1494.1
#2	1031.1	2778.8	22564.	1489.3
#3	1025.7	2767.7	22353.	1482.9

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:07:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0079	-.0001	-.0002	.0000	.0006	.0001	.0000	.0000
Stddev	.0004	.0106	.0003	.0000	.0002	.0079	.0000	.000	.0001
%RSD	141.5	134.0	277.2	22.96	713.2	1389.	23.94	409.5	644.4
#1	.0007	-.0033	.0001	-.0002	-.0001	.0096	.0001	.0000	.0000
#2	.0004	.0093	.0000	-.0001	-.0001	-.0044	.0001	.0001	-.0001
#3	-.0002	.0178	-.0004	-.0002	.0002	-.0035	.0001	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0164	-.0144	.0331	.0001	F .0021	.0151	.0002	.0000
Stddev	.0002	.0060	.0038	.0705	.0000	.0008	.0004	.0001	.000
%RSD	14.44	36.77	26.37	213.4	20.41	37.30	2.701	62.15	1799.
#1	.0015	.0220	-.0185	-.0186	.0001	.0030	.0156	.0002	-.0002
#2	.0014	.0100	-.0137	.0044	.0001	.0019	.0149	.0004	.0002
#3	.0011	.0171	-.0110	.1134	.0000	.0015	.0148	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0010	.0017	.0006	.0002	.0011	.0004	.0000	-.0001
Stddev	.0005	.0005	.0006	.0003	.0001	.0002	.0007	.000	.0001
%RSD	62.66	50.77	32.67	41.50	55.74	16.04	181.8	3183.	114.1
#1	.0007	.0012	.0018	.0009	.0003	.0013	-.0001	.0004	-.0001
#2	.0013	.0004	.0022	.0004	.0001	.0010	.0000	-.0003	-.0002
#3	.0003	.0014	.0011	.0006	.0002	.0009	.0012	-.0001	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:07:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1169.5	2873.2	22884.	1477.8
Stddev	2.6	.8	154.	4.2
%RSD	.21996	.02798	.67381	.28552
#1	1172.0	2873.9	22758.	1474.6
#2	1166.8	2873.5	22838.	1476.3
#3	1169.6	2872.3	23056.	1482.6

Zoom In Zoom Out

Sample Name: FA53725-68 Acquired: 5/17/2018 12:11:19 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0037	114.2	.0487	.4396	.0035	8.346	.0005	.0270	.2696	3.953
Stddev	.0013	.5	.0039	.0011	.0002	.019	.0002	.0008	.0029	.019
%RSD	36.19	.4299	7.925	.2514	7.104	.2228	45.14	2.952	1.077	.4753
#1	.0024	114.7	.0511	.4387	.0037	8.324	.0006	.0276	.2668	3.973
#2	.0036	113.9	.0507	.4408	.0036	8.358	.0005	.0261	.2726	3.936
#3	.0050	113.8	.0443	.4392	.0032	8.354	.0002	.0274	.2694	3.949

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	135.9	13.03	10.42	.6790	.0058	1.208	.1125	9.005	.1306	.0107
Stddev	.2	.10	.11	.0054	.0003	.037	.0010	.020	.0028	.0091
%RSD	.1424	.8040	1.056	.7912	5.444	3.096	.9158	.2198	2.167	85.16
#1	135.9	13.14	10.40	.6837	.0061	1.167	.1121	8.994	.1326	.0023
#2	135.8	13.04	10.54	.6731	.0055	1.239	.1136	8.994	.1320	.0095
#3	136.2	12.93	10.32	.6802	.0057	1.219	.1117	9.028	.1274	.0204

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.893	.0842	.1632	3.728	.0014	.3235	.6619
Stddev	.022	.0004	.0007	.025	.0037	.0021	.0012
%RSD	.3220	.4751	.4177	.6711	267.4	.6621	.1739
#1	6.918	.0839	.1637	3.747	-.0019	.3251	.6610
#2	6.883	.0840	.1636	3.700	.0006	.3211	.6615
#3	6.877	.0846	.1625	3.737	.0055	.3244	.6632

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1137.3	2900.5	23133.	1516.5
Stddev	2.8	8.7	67.	1.7
%RSD	.24368	.29914	.28987	.11360
#1	1134.6	2891.0	23056.	1515.2
#2	1140.1	2908.0	23177.	1515.9
#3	1137.4	2902.6	23166.	1518.5

Zoom In Zoom Out

Sample Name: FA53801-7 Acquired: 5/17/2018 12:15:30 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0066	227.8	.0511	1.883	.0067	56.70	.0042	.0641	.4308	.2929
Stddev	.0008	.6	.0019	.017	.0009	.07	.0004	.0008	.0008	.0009
%RSD	12.64	.2724	3.785	.9080	13.40	.1300	9.684	1.288	.1869	.3138
#1	.0061	228.5	.0533	1.887	.0075	56.62	.0039	.0646	.4310	.2933
#2	.0075	227.4	.0505	1.897	.0057	56.72	.0046	.0645	.4315	.2918
#3	.0061	227.5	.0496	1.864	.0067	56.77	.0040	.0631	.4299	.2935

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	232.6	22.78	21.98	5.101	.0079	2.199	.2618	1.068	.0138	.0135
Stddev	.6	.17	.14	.023	.0007	.018	.0018	.006	.0028	.0058
%RSD	.2623	.7250	.6282	.4448	8.548	.8345	.6700	.5333	20.63	43.22
#1	233.3	22.82	21.84	5.081	.0083	2.200	.2635	1.067	.0161	.0085
#2	232.1	22.92	21.99	5.125	.0071	2.216	.2600	1.063	.0106	.0121
#3	232.5	22.60	22.11	5.095	.0083	2.180	.2617	1.074	.0145	.0200

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.475	.0750	.6720	5.899	.0062	.5946	.3416
Stddev	.047	.0015	.0022	.026	.0052	.0042	.0010
%RSD	.5563	1.935	.3329	.4401	83.52	.7019	.2882
#1	8.444	.0749	.6743	5.884	.0005	.5994	.3410
#2	8.530	.0765	.6699	5.929	.0075	.5917	.3410
#3	8.453	.0736	.6717	5.884	.0107	.5927	.3427

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1114.9	2939.0	23644.	1535.0
Stddev	2.2	2.0	103.	11.3
%RSD	.19330	.06875	.43598	.73531
#1	1113.2	2939.5	23748.	1547.9
#2	1117.3	2940.7	23542.	1529.8
#3	1114.2	2936.8	23640.	1527.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA53801-10 Acquired: 5/17/2018 12:19:38 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0056	187.9	.1521	1.241	.0102	29.38	.0122	.1447	.5356	.2195
Stddev	.0015	1.0	.0045	.007	.0004	.12	.0001	.0012	.0016	.0014
%RSD	26.75	.5391	2.981	.6011	4.266	.4204	.7011	.8204	.3016	.6413
#1	.0056	189.0	.1573	1.240	.0097	29.52	.0123	.1450	.5366	.2211
#2	.0071	187.5	.1489	1.249	.0105	29.32	.0121	.1433	.5337	.2185
#3	.0041	187.1	.1501	1.234	.0104	29.30	.0122	.1456	.5364	.2190

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	287.2	42.93	46.66	4.654	.0020	2.039	.4830	.4362	.0051	.0082
Stddev	.5	.16	.32	.007	.0008	.025	.0014	.0038	.0050	.0093
%RSD	.1828	.3661	.6852	.1504	39.91	1.227	.2887	.8771	99.17	113.1
#1	287.8	43.11	46.49	4.653	.0016	2.033	.4829	.4384	.0105	-.0009
#2	286.9	42.89	47.03	4.648	.0016	2.067	.4816	.4318	.0005	.0176
#3	287.0	42.80	46.47	4.661	.0030	2.018	.4844	.4384	.0043	.0079

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.039	.0639	.4501	7.223	.0016	.5613	.5588
Stddev	.009	.0033	.0028	.011	.0035	.0016	.0006
%RSD	.1264	5.213	.6213	.1495	212.4	.2784	.1083
#1	7.034	.0636	.4491	7.225	.0018	.5602	.5582
#2	7.033	.0674	.4532	7.211	.0050	.5631	.5588
#3	7.049	.0608	.4479	7.232	-.0019	.5607	.5594

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1115.1	3067.2	24372.	1608.7
Stddev	2.0	4.8	48.	7.2
%RSD	.18369	.15490	.19776	.44717
#1	1117.2	3067.3	24332.	1601.9
#2	1115.0	3071.9	24426.	1616.2
#3	1113.1	3062.4	24358.	1607.9

Zoom In Zoom Out

Sample Name: FA53801-13 Acquired: 5/17/2018 12:23:46 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0062	206.9	.1096	1.331	.0065	21.85	.0064	.0627	.4022	.8627
Stddev	.0009	1.3	.0053	.006	.0009	.07	.0001	.0008	.0025	.0031
%RSD	14.52	.6461	4.809	.4554	13.28	.3056	2.063	1.314	.6236	.3650
#1	.0055	208.4	.1035	1.336	.0067	21.80	.0065	.0626	.3993	.8663
#2	.0072	206.4	.1128	1.334	.0071	21.93	.0062	.0619	.4037	.8614
#3	.0059	205.8	.1124	1.325	.0055	21.83	.0064	.0635	.4036	.8604

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	232.5	25.65	27.85	2.169	.0044	1.778	.2493	3.288	.0230	.0203
Stddev	.5	.05	.14	.006	.0003	.037	.0008	.005	.0081	.0030
%RSD	.2120	.2076	.5120	.2783	7.981	2.056	.3289	.1448	35.26	14.87
#1	233.1	25.60	28.01	2.173	.0045	1.819	.2485	3.293	.0138	.0193
#2	232.3	25.70	27.73	2.171	.0046	1.766	.2501	3.283	.0260	.0237
#3	232.1	25.65	27.81	2.162	.0040	1.749	.2493	3.288	.0291	.0180

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.872	.0683	.3741	5.765	.0069	.5070	.8800
Stddev	.030	.0017	.0028	.011	.0006	.0006	.0002
%RSD	.4415	2.416	.7362	.1933	9.161	.1097	.0192
#1	6.896	.0670	.3766	5.774	.0062	.5076	.8798
#2	6.882	.0701	.3744	5.768	.0069	.5067	.8801
#3	6.838	.0677	.3712	5.752	.0075	.5067	.8799

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1114.9	2905.2	23211.	1527.7
Stddev	3.5	5.9	58.	9.2
%RSD	.31439	.20237	.24865	.60080
#1	1110.9	2900.8	23166.	1531.9
#2	1116.5	2903.0	23191.	1517.1
#3	1117.3	2911.9	23276.	1533.9

Zoom In Zoom Out

Sample Name: FA53801-16 Acquired: 5/17/2018 12:27:54 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0107	223.7	.0420	2.162	.0046	64.32	.0335	.0507	.3523	2.548
Stddev	.0016	.8	.0050	.018	.0005	.40	.0006	.0011	.0023	.015
%RSD	15.12	.3448	11.83	.8121	10.06	.6232	1.830	2.227	.6580	.5673
#1	.0122	223.3	.0452	2.163	.0046	64.37	.0339	.0520	.3498	2.535
#2	.0090	223.2	.0445	2.179	.0041	63.89	.0338	.0500	.3544	2.563
#3	.0108	224.6	.0363	2.144	.0051	64.69	.0328	.0501	.3525	2.546

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	240.0	22.25	21.83	4.909	.0071	2.147	.2720	3.741	.0157	.0165
Stddev	.8	.15	.11	.067	.0002	.010	.0015	.011	.0039	.0116
%RSD	.3327	.6891	.4999	1.361	3.378	.4625	.5620	.2950	24.71	70.04
#1	239.7	22.24	21.95	4.861	.0071	2.136	.2733	3.749	.0134	.0293
#2	239.5	22.40	21.74	4.986	.0074	2.154	.2703	3.729	.0202	.0068
#3	241.0	22.10	21.80	4.881	.0069	2.152	.2723	3.747	.0136	.0134

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.819	.0825	.9665	6.116	-.0024	.5395	1.210
Stddev	.142	.0026	.0004	.065	.0034	.0034	.004
%RSD	1.820	3.162	.0454	1.054	140.4	.6218	.2851
#1	7.983	.0845	.9664	6.076	.0015	.5379	1.213
#2	7.744	.0795	.9661	6.191	-.0042	.5434	1.206
#3	7.729	.0833	.9669	6.082	-.0046	.5373	1.212

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1112.1	2882.4	23283.	1512.4
Stddev	2.1	6.6	217.	4.0
%RSD	.18616	.22795	.92998	.26554
#1	1111.4	2883.3	23413.	1507.9
#2	1114.4	2888.5	23033.	1515.6
#3	1110.4	2875.5	23403.	1513.7

Zoom In Zoom Out

Sample Name: FA53801-19 Acquired: 5/17/2018 12:32:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0118	223.4	.0392	2.025	.0051	57.97	.0575	.0578	.3600	4.204
Stddev	.0016	.3	.0022	.010	.0000	.33	.0006	.0003	.0016	.007
%RSD	13.19	.1445	5.562	.5108	.7202	.5649	1.032	.4496	.4557	.1790
#1	.0128	223.4	.0380	2.031	.0051	58.33	.0568	.0581	.3611	4.204
#2	.0100	223.1	.0417	2.013	.0051	57.70	.0579	.0578	.3581	4.212
#3	.0127	223.7	.0379	2.032	.0052	57.88	.0579	.0576	.3606	4.197

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	228.8	20.75	21.82	5.226	.0069	2.581	.2670	6.422	.0323	.0160
Stddev	1.1	.06	.24	.012	.0001	.029	.0008	.034	.0003	.0043
%RSD	.5020	.2956	1.113	.2258	1.394	1.106	.2955	.5313	.8163	27.15
#1	230.0	20.77	22.06	5.219	.0069	2.596	.2661	6.383	.0322	.0166
#2	227.7	20.68	21.57	5.239	.0068	2.548	.2676	6.446	.0321	.0200
#3	228.6	20.80	21.84	5.219	.0069	2.599	.2674	6.437	.0326	.0114

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.315	.0926	.7251	5.438	.0055	.4853	3.284
Stddev	.024	.0023	.0034	.009	.0026	.0006	.002
%RSD	.3295	2.486	.4650	.1659	47.16	.1318	.0739
#1	7.328	.0937	.7281	5.446	.0067	.4851	3.284
#2	7.287	.0900	.7215	5.439	.0072	.4860	3.286
#3	7.330	.0942	.7258	5.428	.0025	.4848	3.281

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.6	2916.9	23547.	1516.8
Stddev	.6	11.0	44.	19.8
%RSD	.05563	.37756	.18483	1.3076
#1	1119.3	2906.0	23507.	1495.4
#2	1118.0	2928.0	23593.	1534.6
#3	1118.4	2916.8	23541.	1520.3

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA53801-23 Acquired: 5/17/2018 12:36:08 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0051	226.0	.0535	1.829	.0066	55.75	.0046	.0635	.4142	.2462
Stddev	.0012	.5	.0023	.011	.0001	.04	.0004	.0009	.0012	.0033
%RSD	23.55	.2100	4.303	.6069	1.440	.0724	9.217	1.415	.2822	1.350
#1	.0054	226.1	.0550	1.821	.0065	55.80	.0051	.0641	.4139	.2499
#2	.0062	226.3	.0508	1.842	.0067	55.73	.0042	.0639	.4133	.2434
#3	.0038	225.4	.0546	1.824	.0066	55.73	.0044	.0624	.4155	.2454

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	225.0	22.49	21.68	5.051	.0060	2.128	.2569	1.002	.0104	.0190
Stddev	1.1	.17	.18	.028	.0003	.051	.0004	.004	.0053	.0018
%RSD	.4876	.7443	.8096	.5445	5.576	2.397	.1716	.4367	51.24	9.370
#1	225.2	22.39	21.84	5.025	.0058	2.088	.2573	.9978	.0133	.0187
#2	226.0	22.69	21.71	5.049	.0057	2.111	.2564	1.001	.0136	.0209
#3	223.9	22.41	21.49	5.080	.0063	2.186	.2570	1.006	.0042	.0174

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.648	.0784	.6718	5.677	-.0024	.5812	.3123
Stddev	.056	.0021	.0030	.013	.0027	.0026	.0011
%RSD	.6458	2.674	.4402	.2230	111.2	.4454	.3595
#1	8.698	.0796	.6687	5.666	-.0007	.5782	.3134
#2	8.658	.0796	.6745	5.675	-.0010	.5830	.3111
#3	8.588	.0760	.6723	5.691	-.0055	.5823	.3124

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1112.9	2926.7	23518.	1536.0
Stddev	1.8	6.5	141.	5.7
%RSD	.16149	.22263	.60023	.36986
#1	1111.2	2919.8	23671.	1535.2
#2	1112.6	2927.4	23491.	1530.8
#3	1114.8	2932.8	23393.	1542.0

Zoom In Zoom Out

Sample Name: FA53896-1 Acquired: 5/17/2018 12:40:16 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0234	341.4	.0481	4.643	.0081	144.0	.0270	.0925	.4600	.5966
Stddev	.0027	1.0	.0055	.025	.0006	.9	.0001	.0006	.0005	.0023
%RSD	11.67	.3042	11.51	.5475	7.663	.6395	.5375	.6383	.1076	.3803
#1	.0266	340.4	.0510	4.617	.0085	143.5	.0269	.0920	.4595	.5976
#2	.0216	342.5	.0417	4.668	.0083	145.1	.0270	.0923	.4599	.5983
#3	.0221	341.4	.0516	4.644	.0074	143.5	.0272	.0932	.4605	.5940

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	287.2	25.02	35.10	10.72	.0088	2.978	.4061	.6337	.0116	.0170
Stddev	.8	.17	.22	.06	.0003	.019	.0016	.0016	.0043	.0099
%RSD	.2883	.6750	.6344	.5141	3.462	.6431	.3840	.2464	36.93	58.59
#1	286.4	25.09	34.87	10.73	.0087	2.956	.4047	.6335	.0165	.0117
#2	288.1	25.15	35.31	10.65	.0086	2.985	.4059	.6322	.0097	.0284
#3	287.1	24.83	35.13	10.76	.0092	2.992	.4078	.6353	.0086	.0107

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.837	.0757	1.901	7.788	.0008	.6509	.6610
Stddev	.022	.0005	.002	.017	.0019	.0020	.0035
%RSD	.2838	.5968	.1007	.2156	235.1	.3127	.5309
#1	7.824	.0761	1.902	7.782	-.0014	.6487	.6576
#2	7.824	.0752	1.902	7.776	.0018	.6514	.6609
#3	7.863	.0759	1.899	7.807	.0021	.6527	.6646

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1103.3	2964.3	23778.	1548.6
Stddev	.6	2.2	19.	15.1
%RSD	.05695	.07419	.08101	.97546
#1	1103.4	2962.4	23764.	1564.8
#2	1102.7	2966.7	23770.	1534.9
#3	1104.0	2963.7	23800.	1546.2

Zoom In Zoom Out

Sample Name: FA53896-4 Acquired: 5/17/2018 12:47:18 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0114	231.5	.0387	3.243	.0043	97.17	.0100	.0601	.3505	.2296
Stddev	.0014	1.0	.0028	.013	.0002	.40	.0001	.0004	.0034	.0010
%RSD	11.91	.4509	7.243	.4145	3.925	.4162	1.216	.6464	.9724	.4145
#1	.0127	232.7	.0419	3.258	.0044	97.52	.0100	.0596	.3540	.2305
#2	.0116	231.0	.0374	3.237	.0045	97.25	.0101	.0601	.3501	.2286
#3	.0100	230.7	.0367	3.233	.0041	96.73	.0098	.0604	.3473	.2298

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	219.1	22.78	26.02	7.294	.0056	2.363	.2790	.5020	.0046	.0129
Stddev	.7	.13	.11	.026	.0007	.007	.0014	.0009	.0009	.0070
%RSD	.3225	.5745	.4038	.3588	12.88	.3195	.4893	.1833	18.89	54.42
#1	219.5	22.93	25.98	7.310	.0051	2.354	.2789	.5020	.0044	.0110
#2	219.6	22.73	26.14	7.263	.0053	2.366	.2777	.5011	.0038	.0071
#3	218.3	22.69	25.95	7.308	.0064	2.368	.2805	.5030	.0055	.0207

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.952	.0747	1.218	5.848	.0027	.5008	.3777
Stddev	.009	.0007	.006	.013	.0032	.0007	.0012
%RSD	.1091	.9967	.5219	.2170	116.7	.1360	.3058
#1	7.958	.0754	1.220	5.849	-.0010	.5002	.3790
#2	7.956	.0739	1.224	5.834	.0047	.5007	.3768
#3	7.942	.0749	1.211	5.860	.0045	.5016	.3774

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1115.4	2927.6	23531.	1534.0
Stddev	2.8	7.4	39.	11.3
%RSD	.25481	.25321	.16713	.73706
#1	1112.2	2920.7	23487.	1521.8
#2	1116.5	2926.7	23562.	1536.2
#3	1117.6	2935.4	23546.	1544.1

Zoom In Zoom Out

Sample Name: FA54114-1 Acquired: 5/17/2018 12:51:29 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0219	2.184	.0044	.1254	-.0003	101.9	.1458	.0209	.0375
Stddev	.0023	.047	.0006	.0009	.0005	.2	.0005	.0008	.0021
%RSD	10.75	2.171	13.38	.7368	196.4	.1500	.3582	3.947	5.479
#1	.0196	2.140	.0046	.1249	-.0009	101.9	.1461	.0202	.0367
#2	.0243	2.177	.0038	.1265	.0001	102.0	.1462	.0206	.0359
#3	.0217	2.234	.0049	.1249	.0000	101.7	.1452	.0218	.0398

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6891	.8277	78.17	62.55	1.483	.2012	F7609.	.3521	.0180
Stddev	.0038	.0239	.02	.12	.004	.0010	443.	.0019	.0066
%RSD	.5490	2.884	.0293	.1929	.2605	.4995	5.822	.5336	36.63
#1	.6935	.8509	78.15	62.43	1.487	.2023	7932.	.3500	.0115
#2	.6869	.8290	78.16	62.56	1.482	.2004	7790.	.3536	.0180
#3	.6869	.8032	78.19	62.67	1.480	.2009	7104.	.3528	.0247

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0054	.0112	5.985	.0252	1.614	.0253	-.0163	.0122	.4395
Stddev	.0065	.0109	.005	.0021	.002	.0004	.0057	.0006	.0007
%RSD	120.2	97.21	.0879	8.186	.1446	1.693	34.84	5.283	.1496
#1	-.0020	.0031	5.984	.0230	1.614	.0257	-.0176	.0116	.4397
#2	.0103	.0069	5.979	.0271	1.617	.0255	-.0101	.0121	.4388
#3	.0080	.0236	5.990	.0255	1.612	.0249	-.0212	.0128	.4401

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	805.53	2325.6	17908.	1354.1
Stddev	3.04	2.0	55.	7.1
%RSD	.37688	.08764	.30842	.52457
#1	802.68	2323.3	17875.	1360.3
#2	808.72	2327.1	17879.	1346.3
#3	805.20	2326.5	17972.	1355.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:55:49 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2437	F35.48	2.103	1.945	1.873	F35.65	1.991	2.016	1.809
Stddev	.0012	.22	.003	.018	.015	.29	.006	.004	.005
%RSD	.4770	.6095	.1415	.9063	.8103	.8151	.2934	.2021	.3017
#1	.2449	35.61	2.100	1.957	1.887	35.84	1.985	2.012	1.814
#2	.2426	35.59	2.105	1.953	1.876	35.79	1.992	2.017	1.803
#3	.2436	35.23	2.104	1.924	1.857	35.31	1.996	2.020	1.810
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value		40.00				40.00			
Range		-10.00%				-10.00%			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.955	37.78	37.52	37.15	1.944	2.091	F34.16	2.111	1.901
Stddev	.009	.21	.24	.31	.012	.008	.16	.006	.001
%RSD	.4751	.5641	.6490	.8355	.6180	.3691	.4614	.3015	.0579
#1	1.962	37.98	37.66	37.49	1.950	2.084	34.24	2.104	1.900
#2	1.944	37.81	37.65	37.08	1.930	2.090	34.27	2.111	1.901
#3	1.958	37.56	37.23	36.88	1.952	2.100	33.98	2.117	1.902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							40.00		
Range							-10.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.107	2.125	2.735	2.178	1.896	1.947	1.961	1.987	1.990
Stddev	.002	.005	.003	.010	.014	.009	.005	.004	.008
%RSD	.0865	.2152	.0995	.4536	.7572	.4466	.2809	.1900	.4230
#1	2.109	2.124	2.734	2.170	1.906	1.952	1.955	1.992	1.981
#2	2.106	2.121	2.733	2.177	1.902	1.937	1.962	1.985	1.992
#3	2.107	2.130	2.738	2.189	1.879	1.953	1.966	1.985	1.998
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:55:49 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1037.7	2784.3	22753.	1544.1
Stddev	1.5	7.9	70.	17.7
%RSD	.14041	.28412	.30915	1.1469
#1	1039.3	2792.4	22681.	1523.7
#2	1036.5	2783.7	22822.	1554.1
#3	1037.2	2776.6	22757.	1554.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:59:46 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0093	.0002	-.0002	.0000	.0009	.0001	-.0001	.0003
Stddev	.0001	.0133	.0002	.0003	.0002	.0049	.0000	.0001	.0003
%RSD	76.24	143.5	142.0	139.6	2794.	569.2	29.19	104.9	82.80
#1	.0000	.0002	-.0001	-.0003	.0000	.0041	.0001	-.0001	.0005
#2	-.0002	.0246	.0002	-.0006	-.0001	-.0048	.0000	-.0001	.0000
#3	-.0003	.0031	.0004	.0001	.0002	.0033	.0000	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0171	.0354	.0464	.0001	F.0024	.1519	.0004	.0003
Stddev	.0001	.0099	.0074	.0167	.0000	.0010	.0060	.0000	.0002
%RSD	7.619	57.96	20.93	35.97	63.40	41.56	3.926	10.43	86.59
#1	.0016	.0286	.0356	.0592	.0001	.0035	.1559	.0004	.0001
#2	.0016	.0107	.0427	.0275	.0000	.0024	.1548	.0003	.0002
#3	.0014	.0122	.0279	.0525	.0001	.0015	.1451	.0004	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0012	.0014	.0003	.0001	.0015	.0019	-.0001	-.0001
Stddev	.0012	.0007	.0004	.0002	.0002	.0001	.0005	.0001	.0001
%RSD	139.0	53.07	30.65	55.08	117.9	9.692	27.07	95.15	85.65
#1	-.0004	.0006	.0012	.0005	.0002	.0017	.0015	.0000	-.0002
#2	.0019	.0019	.0019	.0003	.0003	.0014	.0025	-.0001	-.0001
#3	.0011	.0013	.0011	.0002	.0000	.0014	.0016	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:59:46 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1173.1	2872.1	23384.	1506.9
Stddev	3.6	4.4	72.	6.0
%RSD	.30314	.15180	.30907	.39829
#1	1168.9	2867.1	23360.	1511.7
#2	1175.2	2875.0	23327.	1500.2
#3	1175.0	2874.2	23466.	1508.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 13:24:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2437	38.99	1.977	1.981	1.990	39.26	1.989	1.988	1.990	1.984
Stddev	.0023	.22	.006	.003	.002	.27	.002	.001	.009	.002
%RSD	.9616	.5711	.3040	.1602	.1141	.6919	.0908	.0728	.4641	.0999
#1	.2446	39.21	1.977	1.985	1.992	39.49	1.987	1.988	1.983	1.985
#2	.2455	39.01	1.972	1.979	1.990	39.33	1.989	1.987	2.000	1.985
#3	.2411	38.76	1.984	1.980	1.988	38.96	1.991	1.990	1.986	1.982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.72	39.10	39.21	2.009	2.013	39.12	2.003	1.950	1.970	1.988
Stddev	.14	.14	.15	.014	.002	.26	.002	.005	.002	.002
%RSD	.3629	.3455	.3902	.7141	.1103	.6590	.1150	.2784	.1140	.1046
#1	39.88	39.22	39.38	2.006	2.012	39.37	2.001	1.944	1.969	1.990
#2	39.63	39.12	39.14	2.024	2.011	39.13	2.002	1.954	1.968	1.986
#3	39.64	38.96	39.10	1.996	2.015	38.86	2.005	1.952	1.972	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.563	2.025	2.009	2.013	1.971	2.017	1.993
Stddev	.005	.005	.005	.012	.003	.004	.004
%RSD	.1870	.2606	.2452	.6020	.1661	.1877	.2103
#1	2.562	2.021	2.014	2.007	1.968	2.021	1.988
#2	2.558	2.022	2.010	2.026	1.974	2.017	1.993
#3	2.568	2.031	2.004	2.004	1.970	2.013	1.997
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 13:24:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1030.9	2752.7	22577.	1528.8
Stddev	1.6	3.0	106.	13.0
%RSD	.15375	.10932	.46817	.85091
#1	1032.6	2753.7	22556.	1513.8
#2	1029.5	2755.0	22484.	1537.6
#3	1030.4	2749.3	22692.	1534.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 13:36:14 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0020	-.0002	.0003	.0001	.0085	.0001	.0000	.0003
Stddev	.0002	.0177	.0003	.0002	.0001	.0028	.0000	.0001	.0003
%RSD	119.9	901.9	142.0	77.73	199.3	32.84	60.80	421.8	100.7
#1	.0004	.0048	.0001	.0005	.0001	.0053	.0000	.0001	.0007
#2	.0000	.0180	-.0004	.0000	.0002	.0105	.0001	.0000	.0002
#3	.0002	-.0170	-.0004	.0003	-.0001	.0096	.0001	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0102	.0071	.0053	.0001	F.0014	-.0525	.0003	-.0003
Stddev	.0001	.0030	.0160	.0594	.0001	.0002	.0060	.0002	.0005
%RSD	27.43	29.94	225.3	1130.	47.84	15.24	11.52	52.43	158.4
#1	.0005	.0082	.0098	.0410	.0001	.0016	-.0482	.0002	-.0003
#2	.0005	.0087	.0216	.0381	.0002	.0015	-.0498	.0005	.0002
#3	.0003	.0137	-.0101	-.0633	.0001	.0012	-.0594	.0002	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	.0005	.0007	.0002	.0008	.0012	.0001	.0000
Stddev	.0005	.0011	.0001	.0003	.0001	.0001	.0008	.0003	.000
%RSD	2166.	1344.	25.55	36.94	45.51	16.06	62.53	279.5	157.0
#1	.0003	.0004	.0006	.0006	.0003	.0009	.0008	-.0001	-.0001
#2	-.0006	.0010	.0004	.0010	.0001	.0007	.0021	.0000	.0000
#3	.0003	-.0011	.0004	.0005	.0003	.0007	.0008	.0004	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 13:36:14 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1163.8	2835.9	22968.	1499.1
Stddev	1.9	4.4	55.	7.7
%RSD	.16241	.15594	.23981	.51316
#1	1164.2	2836.4	22913.	1490.2
#2	1161.8	2831.2	23024.	1503.4
#3	1165.5	2840.0	22968.	1503.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33758-MB1 Acquired: 5/17/2018 13:39:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0222	-.0016	.0003	.0000	.0277	.0000	-.0002	.0008
Stddev	.0002	.0127	.0005	.0002	.000	.0009	.000	.0000	.0002
%RSD	38.87	56.99	31.95	73.44	351.0	3.160	107.2	7.031	28.56
#1	-.0003	.0141	-.0019	.0001	.0001	.0281	.0000	-.0002	.0008
#2	-.0006	.0158	-.0018	.0005	.0000	.0267	.0000	-.0002	.0006
#3	-.0008	.0368	-.0010	.0004	-.0002	.0283	.0000	-.0002	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0268	.0312	.0596	.0011	.0005	-.0447	.0004	-.0005
Stddev	.0002	.0026	.0159	.0180	.0000	.0001	.0096	.0001	.0005
%RSD	21.80	9.868	50.97	30.23	2.719	17.18	21.50	14.39	86.12
#1	-.0011	.0295	.0235	.0398	.0011	.0006	-.0553	.0004	-.0008
#2	-.0008	.0267	.0207	.0639	.0011	.0004	-.0366	.0004	.0000
#3	-.0008	.0242	.0496	.0751	.0012	.0005	-.0421	.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0021	.0152	F.0272	.0001	.0008	.0003	-.0001	.0023
Stddev	.0010	.0015	.0002	.0004	.0000	.0000	.0008	.0001	.0001
%RSD	1710.	72.07	1.169	1.342	25.33	3.834	258.1	140.7	2.252
#1	-.0010	.0036	.0151	.0273	.0001	.0008	.0002	.0000	.0024
#2	.0005	.0019	.0152	.0267	.0001	.0008	-.0004	-.0001	.0023
#3	.0007	.0007	.0154	.0274	.0001	.0008	.0012	-.0001	.0023
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Zoom In Zoom Out

Sample Name: MP33758-MB1 Acquired: 5/17/2018 13:39:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1174.8	2853.8	23440.	1518.6
Stddev	.7	2.9	59.	6.8
%RSD	.06349	.10032	.25382	.44882
#1	1175.7	2851.1	23431.	1517.1
#2	1174.3	2856.8	23385.	1512.6
#3	1174.5	2853.6	23503.	1526.0

Zoom In Zoom Out

Sample Name: MP33758-B1 Acquired: 5/17/2018 13:44:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0512	26.64	1.981	2.062	.0526	25.31	.0506	.5129	.2100	.2593
Stddev	.0002	.11	.001	.010	.0002	.16	.0000	.0005	.0011	.0004
%RSD	.4523	.3973	.0230	.4733	.3894	.6302	.0603	.1041	.5249	.1430
#1	.0510	26.55	1.981	2.056	.0525	25.23	.0506	.5123	.2106	.2589
#2	.0510	26.75	1.981	2.073	.0524	25.49	.0506	.5130	.2106	.2595
#3	.0514	26.61	1.982	2.057	.0528	25.20	.0506	.5133	.2087	.2596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.21	24.53	24.98	.5214	.4798	24.88	.5283	.4873	.4888	1.965
Stddev	.10	.09	.10	.0029	.0012	.11	.0017	.0023	.0065	.004
%RSD	.3784	.3607	.4055	.5529	.2479	.4529	.3294	.4697	1.329	.1843
#1	26.17	24.48	25.09	.5191	.4785	24.84	.5266	.4898	.4817	1.961
#2	26.32	24.63	24.89	.5246	.4806	25.01	.5301	.4852	.4904	1.968
#3	26.13	24.47	24.95	.5203	.4805	24.79	.5282	.4869	.4944	1.966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3633	.5263	.5031	.5057	1.934	.4923	.5063
Stddev	.0003	.0021	.0005	.0027	.007	.0020	.0012
%RSD	.0827	.3942	.1082	.5311	.3879	.4021	.2297
#1	.3630	.5243	.5029	.5040	1.941	.4940	.5053
#2	.3635	.5284	.5037	.5088	1.926	.4928	.5076
#3	.3635	.5263	.5027	.5043	1.934	.4901	.5060
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33758-B1 Acquired: 5/17/2018 13:44:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1070.1	2766.8	22488.	1485.1
Stddev	3.9	7.5	30.	9.9
%RSD	.36352	.27060	.13362	.66611
#1	1065.6	2768.6	22469.	1485.5
#2	1071.9	2758.6	22472.	1475.0
#3	1072.7	2773.3	22522.	1494.8

Zoom In Zoom Out

Sample Name: FA54232-1 Acquired: 5/17/2018 13:48:17 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0040	115.4	.0329	.6397	.0011	71.44	-.0014	.1706	3.104	1.329
Stddev	.0032	1.0	.0031	.0023	.0008	.59	.0001	.0008	.007	.001
%RSD	80.03	.8382	9.419	.3643	67.62	.8247	8.132	.4880	.2384	.0989
#1	.0015	115.2	.0352	.6424	.0020	71.15	-.0012	.1715	3.106	1.328
#2	.0030	114.6	.0341	.6386	.0008	71.05	-.0014	.1701	3.096	1.329
#3	.0076	116.5	.0294	.6382	.0006	72.12	-.0014	.1701	3.111	1.331

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	471.7	1.780	30.60	4.778	.2643	1.785	1.775	.0914	.0308	.0137
Stddev	2.7	.050	.28	.027	.0005	.053	.002	.0029	.0147	.0038
%RSD	.5636	2.832	.9211	.5708	.2026	2.971	.0925	3.154	47.92	27.85
#1	470.7	1.803	30.72	4.765	.2649	1.846	1.773	.0909	.0469	.0103
#2	469.8	1.723	30.28	4.810	.2642	1.750	1.776	.0945	.0274	.0179
#3	474.8	1.815	30.81	4.760	.2638	1.759	1.774	.0888	.0180	.0129

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.286	.0476	.2762	4.060	.0156	.4988	.6627
Stddev	.180	.0013	.0032	.111	.0043	.0011	.0011
%RSD	1.944	2.786	1.174	2.739	27.77	.2168	.1664
#1	9.494	.0462	.2761	3.960	.0159	.4976	.6621
#2	9.196	.0480	.2795	4.042	.0198	.4991	.6621
#3	9.168	.0487	.2730	4.180	.0112	.4997	.6640

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1183.7	3044.3	24555.	1633.3
Stddev	1.3	8.2	128.	14.3
%RSD	.11133	.27018	.52045	.87275
#1	1185.1	3035.0	24588.	1638.9
#2	1182.5	3050.4	24414.	1643.9
#3	1183.5	3047.7	24663.	1617.1

Zoom In Zoom Out

Sample Name: MP33758-D1 Acquired: 5/17/2018 13:52:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0055	128.7	.0364	.7080	.0006	78.61	-.0020	.1846	3.158	1.528
Stddev	.0007	.9	.0044	.0032	.0004	.53	.0003	.0013	.033	.005
%RSD	13.14	.6996	12.15	.4481	55.95	.6701	15.41	.7043	1.046	.3126
#1	.0062	129.6	.0365	.7112	.0009	79.07	-.0024	.1834	3.122	1.526
#2	.0056	128.8	.0408	.7081	.0008	78.74	-.0018	.1845	3.187	1.534
#3	.0048	127.8	.0320	.7048	.0002	78.04	-.0020	.1860	3.164	1.525

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	533.9	1.644	33.62	5.212	.2679	1.871	1.792	.1047	.0135	.0102
Stddev	3.5	.146	.30	.044	.0011	.074	.005	.0056	.0046	.0046
%RSD	.6483	8.907	.8964	.8395	.3936	3.969	.2545	5.318	33.87	45.09
#1	536.8	1.703	33.87	5.162	.2690	1.942	1.797	.1088	.0088	.0057
#2	534.7	1.753	33.71	5.242	.2670	1.794	1.791	.1070	.0179	.0100
#3	530.1	1.478	33.28	5.232	.2677	1.877	1.788	.0984	.0136	.0149

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.813	.0524	.2849	4.366	.0110	.5568	.7530
Stddev	.151	.0018	.0009	.040	.0028	.0037	.0006
%RSD	1.535	3.488	.3099	.9246	25.74	.6648	.0841
#1	9.838	.0508	.2859	4.327	.0079	.5525	.7530
#2	9.949	.0544	.2843	4.363	.0134	.5592	.7524
#3	9.651	.0519	.2845	4.407	.0117	.5586	.7536

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.4	2894.3	23199.	1539.2
Stddev	1.8	6.5	143.	13.1
%RSD	.16354	.22599	.61612	.85359
#1	1117.2	2889.1	23363.	1530.0
#2	1120.5	2901.6	23108.	1533.4
#3	1117.4	2892.1	23124.	1554.2

Zoom In Zoom Out

Sample Name: MP33758-SD1 Acquired: 5/17/2018 13:56:30 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0058	123.9	.0134	.6888	-.0010	77.38	-.0044	.1838	3.351	1.424
Stddev	.0065	1.2	.0141	.0082	.0022	.42	.0012	.0045	.014	.002
%RSD	111.1	.9618	104.9	1.192	222.3	.5484	28.02	2.432	.4039	.1408
#1	-.0013	125.0	.0297	.6932	.0015	77.87	-.0059	.1801	3.367	1.425
#2	.0073	124.0	.0052	.6938	-.0022	77.17	-.0039	.1887	3.341	1.422
#3	.0115	122.6	.0054	.6793	-.0022	77.10	-.0036	.1825	3.347	1.426

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	519.8	1.521	34.40	5.161	.2745	.2165	1.934	.0917	.0314	.0339
Stddev	3.1	.633	1.34	.031	.0031	.0539	.012	.0106	.0168	.0387
%RSD	.5987	41.63	3.881	.5941	1.140	24.87	.6352	11.58	53.66	114.0
#1	523.4	.9156	35.50	5.161	.2720	.1710	1.925	.0920	.0174	-.0093
#2	518.4	1.469	32.92	5.131	.2736	.2760	1.928	.1021	.0501	.0458
#3	517.6	2.179	34.79	5.192	.2780	.2026	1.948	.0809	.0266	.0653

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.708	.0568	.3044	4.181	.0082	.5322	.7152
Stddev	.351	.0021	.0081	.059	.0090	.0052	.0020
%RSD	3.620	3.625	2.657	1.406	109.6	.9722	.2728
#1	9.983	.0545	.2965	4.245	.0105	.5320	.7131
#2	9.829	.0583	.3127	4.128	-.0017	.5271	.7155
#3	9.312	.0577	.3040	4.172	.0159	.5375	.7169

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1150.4	2865.4	23072.	1504.8
Stddev	1.3	6.7	33.	14.3
%RSD	.11412	.23432	.14102	.94887
#1	1148.9	2866.3	23055.	1488.3
#2	1150.8	2871.6	23051.	1513.4
#3	1151.4	2858.3	23109.	1512.6

Zoom In Zoom Out

Sample Name: MP33758-PS1 Acquired: 5/17/2018 14:00:43 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0494	136.5	.1340	.9959	.0513	88.13	.0469	.2473	3.684	1.648
Stddev	.0019	.4	.0038	.0086	.0008	.26	.0003	.0007	.012	.003
%RSD	3.927	.3206	2.807	.8649	1.614	.2908	.7146	.2800	.3360	.1961
#1	.0506	136.2	.1347	1.003	.0523	87.84	.0469	.2467	3.696	1.649
#2	.0472	137.0	.1373	.9985	.0510	88.27	.0466	.2481	3.671	1.650
#3	.0505	136.3	.1299	.9862	.0508	88.29	.0473	.2472	3.685	1.644

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	550.3	11.30	40.30	5.575	.3946	11.66	2.146	.1545	.1010	.1062
Stddev	.8	.03	.50	.020	.0010	.02	.007	.0028	.0030	.0022
%RSD	.1496	.2497	1.229	.3612	.2519	.1857	.3071	1.823	2.995	2.103
#1	549.9	11.30	39.77	5.574	.3951	11.67	2.142	.1562	.1039	.1079
#2	551.2	11.32	40.38	5.596	.3935	11.67	2.142	.1512	.1012	.1069
#3	549.7	11.27	40.75	5.555	.3953	11.64	2.154	.1560	.0979	.1037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.58	.1034	.3662	4.766	.1060	.6259	1.012
Stddev	.18	.0007	.0008	.059	.0035	.0013	.002
%RSD	1.743	.6460	.2213	1.228	3.307	.2030	.2223
#1	10.60	.1027	.3663	4.827	.1100	.6257	1.012
#2	10.75	.1039	.3669	4.711	.1044	.6247	1.010
#3	10.39	.1037	.3653	4.760	.1036	.6272	1.015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1124.1	2920.7	23488.	1565.0
Stddev	3.2	7.0	48.	8.5
%RSD	.28472	.23848	.20429	.54493
#1	1121.1	2920.0	23536.	1555.2
#2	1127.5	2928.0	23440.	1569.9
#3	1123.9	2914.1	23487.	1570.0

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33758-S1 Acquired: 5/17/2018 14:04:50 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0611	213.3	2.023	2.962	.0540	147.5	.0499	.7692	3.875	2.105
Stddev	.0012	.9	.009	.015	.0011	1.1	.0008	.0006	.035	.010
%RSD	1.905	.4388	.4500	.5129	1.994	.7352	1.664	.0816	.9162	.4808
#1	.0617	214.4	2.028	2.979	.0540	148.7	.0493	.7692	3.911	2.116
#2	.0618	212.6	2.029	2.949	.0551	146.5	.0509	.7685	3.840	2.103
#3	.0598	212.9	2.012	2.957	.0529	147.4	.0497	.7698	3.875	2.096

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	709.4	27.05	76.30	7.935	.7847	29.00	2.597	.6282	.1021	1.989
Stddev	3.9	.13	.33	.062	.0012	.14	.002	.0029	.0042	.019
%RSD	.5462	.4824	.4296	.7869	.1518	.4882	.0771	.4678	4.147	.9510
#1	713.7	27.19	76.68	7.990	.7848	29.15	2.595	.6264	.0981	2.001
#2	706.2	26.94	76.10	7.867	.7858	28.86	2.599	.6316	.1065	1.998
#3	708.3	27.00	76.12	7.948	.7834	29.00	2.596	.6265	.1017	1.967

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.18	.5408	.8698	5.865	2.025	1.259	1.488
Stddev	.05	.0018	.0060	.019	.006	.006	.004
%RSD	.4281	.3410	.6943	.3250	.3109	.5036	.2460
#1	12.13	.5393	.8765	5.876	2.018	1.266	1.489
#2	12.23	.5429	.8647	5.843	2.026	1.254	1.484
#3	12.18	.5403	.8683	5.877	2.030	1.256	1.491

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1087.4	2865.0	22973.	1547.5
Stddev	3.1	6.9	218.	9.9
%RSD	.28781	.24063	.94835	.63806
#1	1083.7	2858.1	22790.	1536.3
#2	1089.1	2864.8	23214.	1555.0
#3	1089.2	2871.9	22914.	1551.3

Zoom In Zoom Out

Sample Name: MP33758-S2 Acquired: 5/17/2018 14:08:55 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0576	186.8	1.954	2.725	.0528	124.7	.0476	.6981	2.760	1.831
Stddev	.0008	.8	.010	.002	.0014	.1	.0004	.0010	.008	.008
%RSD	1.397	.4223	.4954	.0622	2.734	.0858	.7542	.1476	.2859	.4500
#1	.0571	187.6	1.943	2.727	.0539	124.8	.0480	.6969	2.764	1.840
#2	.0585	186.0	1.959	2.724	.0533	124.7	.0474	.6989	2.751	1.829
#3	.0571	186.9	1.961	2.725	.0512	124.6	.0473	.6985	2.765	1.824

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	615.7	26.05	67.54	6.635	.6719	27.37	1.935	.5995	.1007	1.918
Stddev	.9	.06	.47	.004	.0017	.15	.002	.0029	.0012	.011
%RSD	.1470	.2466	.6957	.0640	.2566	.5509	.1032	.4776	1.208	.5699
#1	616.5	26.13	67.07	6.640	.6700	27.54	1.934	.6017	.1019	1.907
#2	614.7	26.03	68.01	6.633	.6735	27.25	1.937	.5963	.1007	1.919
#3	615.9	26.00	67.54	6.632	.6721	27.34	1.934	.6006	.0994	1.929

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.35	.5250	.8040	5.035	1.961	1.117	1.285
Stddev	.08	.0043	.0018	.057	.009	.004	.003
%RSD	.7573	.8177	.2204	1.130	.4758	.3575	.2627
#1	10.44	.5216	.8051	4.992	1.956	1.113	1.281
#2	10.30	.5236	.8019	5.099	1.954	1.121	1.288
#3	10.31	.5299	.8048	5.012	1.971	1.115	1.286

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1094.0	2880.2	22986.	1524.6
Stddev	1.2	5.6	31.	2.5
%RSD	.10957	.19277	.13524	.16480
#1	1095.3	2882.0	22951.	1521.8
#2	1093.1	2874.0	23004.	1526.7
#3	1093.5	2884.6	23005.	1525.4

Zoom In Zoom Out

Sample Name: FA54232-2 Acquired: 5/17/2018 14:13:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0017	92.27	.0193	.4361	.0007	157.2	.0004	.0694	1.540	.4246
Stddev	.0011	.28	.0040	.0022	.0001	.2	.0002	.0007	.012	.0025
%RSD	61.35	.2983	20.60	.5147	14.09	.1362	36.63	.9535	.7491	.5859
#1	.0021	91.98	.0224	.4336	.0007	157.0	.0006	.0702	1.527	.4268
#2	.0026	92.52	.0148	.4380	.0007	157.3	.0004	.0689	1.542	.4251
#3	.0005	92.30	.0207	.4366	.0008	157.4	.0003	.0691	1.550	.4219

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	219.2	1.377	19.20	2.756	.0991	1.302	.8213	.1492	.0085	.0114
Stddev	.3	.127	.22	.011	.0013	.035	.0060	.0021	.0039	.0089
%RSD	.1403	9.251	1.128	.3981	1.344	2.727	.7291	1.387	46.34	78.21
#1	219.6	1.388	19.28	2.751	.1006	1.301	.8269	.1473	.0053	.0040
#2	219.0	1.498	18.95	2.749	.0983	1.267	.8150	.1514	.0129	.0088
#3	219.1	1.244	19.36	2.769	.0984	1.338	.8221	.1490	.0073	.0213

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.29	.0429	.5974	3.055	.0095	.2546	.8177
Stddev	.43	.0012	.0035	.061	.0082	.0031	.0014
%RSD	2.997	2.864	.5802	2.005	85.94	1.216	.1710
#1	14.08	.0415	.5976	3.068	.0104	.2576	.8193
#2	14.01	.0436	.5939	3.109	.0172	.2548	.8170
#3	14.78	.0436	.6008	2.988	.0009	.2514	.8168

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1119.5	2892.5	23216.	1542.5
Stddev	.8	2.7	83.	6.8
%RSD	.07097	.09389	.35724	.43801
#1	1120.1	2890.3	23245.	1546.8
#2	1119.8	2895.6	23281.	1534.7
#3	1118.6	2891.7	23123.	1545.9

Zoom In Zoom Out

Sample Name: FA54232-3 Acquired: 5/17/2018 14:17:11 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0043	163.6	.0235	.7968	.0006	79.75	.0004	.1801	4.266	.9422
Stddev	.0006	.9	.0042	.0067	.0003	.36	.0003	.0013	.018	.0026
%RSD	13.96	.5537	17.74	.8427	46.93	.4504	94.96	.7198	.4204	.2744
#1	.0044	162.6	.0189	.7890	.0005	79.34	.0007	.1795	4.263	.9405
#2	.0049	164.2	.0245	.8007	.0004	79.92	.0000	.1792	4.250	.9452
#3	.0037	164.1	.0271	.8006	.0009	79.99	.0004	.1816	4.285	.9410

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	457.1	2.415	36.40	5.296	.2810	2.352	2.311	.0895	.0038	.0157
Stddev	1.7	.023	.16	.033	.0004	.051	.003	.0009	.0020	.0066
%RSD	.3609	.9555	.4284	.6173	.1327	2.178	.1295	1.011	52.63	42.28
#1	455.2	2.440	36.24	5.275	.2807	2.318	2.308	.0886	.0055	.0093
#2	458.1	2.396	36.56	5.279	.2810	2.327	2.314	.0894	.0016	.0153
#3	458.1	2.409	36.41	5.334	.2814	2.411	2.312	.0904	.0043	.0226

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.95	.0468	.3563	4.739	.0084	.5141	.6945
Stddev	.15	.0007	.0026	.055	.0018	.0023	.0027
%RSD	1.052	1.598	.7356	1.154	21.95	.4423	.3947
#1	14.04	.0476	.3534	4.763	.0096	.5115	.6928
#2	13.78	.0461	.3584	4.778	.0063	.5152	.6931
#3	14.03	.0469	.3572	4.676	.0093	.5156	.6977

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.3	2846.1	23138.	1532.7
Stddev	2.2	3.6	63.	6.9
%RSD	.19566	.12749	.27300	.45277
#1	1115.9	2842.0	23162.	1535.3
#2	1120.3	2849.0	23186.	1538.0
#3	1118.6	2847.4	23067.	1524.9

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 14:21:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2428	38.30	1.962	1.955	1.962	38.79	1.979	1.971	1.982	1.954
Stddev	.0004	.21	.004	.006	.005	.18	.004	.002	.014	.003
%RSD	.1674	.5436	.2310	.2967	.2808	.4632	.1794	.0964	.7176	.1329
#1	.2424	38.45	1.957	1.949	1.966	38.93	1.975	1.969	1.983	1.957
#2	.2429	38.06	1.964	1.959	1.955	38.59	1.979	1.971	1.967	1.952
#3	.2432	38.39	1.965	1.958	1.963	38.85	1.982	1.973	1.995	1.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.30	38.66	39.14	2.016	1.992	38.99	1.994	1.937	1.951	1.970
Stddev	.18	.03	.10	.016	.006	.18	.004	.004	.003	.006
%RSD	.4673	.0663	.2453	.7948	.2804	.4612	.2266	.2053	.1666	.3027
#1	39.45	38.69	39.19	2.014	1.986	39.16	1.990	1.933	1.951	1.977
#2	39.10	38.64	39.03	2.001	1.992	38.80	1.993	1.936	1.947	1.967
#3	39.37	38.65	39.20	2.033	1.997	39.01	1.999	1.941	1.953	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.537	2.026	1.973	2.004	1.952	2.009	1.993
Stddev	.003	.005	.009	.012	.002	.010	.005
%RSD	.1074	.2598	.4308	.5897	.0860	.4994	.2601
#1	2.534	2.020	1.979	2.007	1.951	2.007	1.987
#2	2.539	2.026	1.963	1.992	1.952	2.000	1.996
#3	2.538	2.031	1.975	2.015	1.954	2.020	1.996
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 14:21:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1044.5	2789.8	22821.	1533.7
Stddev	3.5	8.0	66.	9.2
%RSD	.33234	.28708	.28967	.59756
#1	1048.5	2799.0	22780.	1523.1
#2	1042.6	2785.9	22897.	1539.9
#3	1042.4	2784.4	22785.	1537.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 14:25:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0036	-.0008	.0003	.0002	.0052	.0000	.0000	.0004
Stddev	.0002	.0182	.0011	.0003	.0001	.0045	.0001	.000	.0005
%RSD	182.4	501.3	138.3	106.0	74.86	86.71	194.3	128.9	126.6
#1	-.0001	-.0244	.0004	.0001	.0003	.0082	.0001	-.0001	.0009
#2	.0002	.0098	-.0011	.0002	.0001	.0074	.0001	-.0001	.0005
#3	.0003	.0037	-.0016	.0006	.0002	.0000	.0000	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0271	.0000	.0234	.0002	F.0025	-.0846	.0001	.0003
Stddev	.0001	.0093	.0327	.0099	.0001	.0008	.0087	.0001	.0003
%RSD	32.33	34.51	66370.	42.38	53.93	31.94	10.31	70.47	86.24
#1	.0005	.0368	.0374	.0120	.0002	.0033	-.0775	.0002	.0006
#2	.0003	.0261	-.0133	.0277	.0001	.0025	-.0944	.0000	.0003
#3	.0004	.0182	-.0239	.0304	.0001	.0017	-.0820	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0019	.0008	.0004	.0002	.0014	.0007	-.0001	.0000
Stddev	.0012	.0010	.0003	.0004	.0001	.0003	.0010	.0004	.0000
%RSD	221.6	54.47	37.74	99.38	35.53	21.27	140.3	398.4	173.9
#1	.0005	.0028	.0006	.0004	.0002	.0016	.0019	-.0005	.0001
#2	-.0006	.0008	.0005	.0008	.0002	.0015	.0001	.0002	.0000
#3	.0018	.0019	.0011	.0000	.0001	.0011	.0002	.0000	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 14:25:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1170.0	2849.3	23035.	1490.5
Stddev	.6	6.3	71.	7.4
%RSD	.05265	.22033	.30731	.49568
#1	1170.3	2843.7	22957.	1498.9
#2	1169.3	2848.1	23052.	1487.0
#3	1170.5	2856.1	23096.	1485.5

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54232-4 Acquired: 5/17/2018 14:29:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0064	124.3	.0252	.6212	.0006	128.0	.0003	.2244	7.360	1.270
Stddev	.0008	.7	.0029	.0057	.0003	.8	.0003	.0006	.052	.005
%RSD	12.83	.5753	11.49	.9137	54.11	.6399	99.72	.2794	.7117	.4362
#1	.0059	123.5	.0272	.6147	.0002	127.1	.0005	.2242	7.414	1.275
#2	.0074	124.4	.0265	.6237	.0008	128.1	.0006	.2239	7.355	1.269
#3	.0060	124.9	.0219	.6251	.0009	128.7	.0000	.2251	7.310	1.264

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	482.8	2.780	36.27	5.505	.4557	2.562	3.932	.1301	-.0039	.0108
Stddev	3.0	.115	.55	.037	.0022	.013	.008	.0021	.0053	.0150
%RSD	.6275	4.141	1.524	.6760	.4724	.5153	.2149	1.581	136.9	138.8
#1	479.7	2.679	35.64	5.548	.4580	2.576	3.934	.1285	-.0029	.0064
#2	485.7	2.755	36.67	5.490	.4554	2.562	3.940	.1295	-.0097	.0276
#3	482.9	2.905	36.50	5.478	.4537	2.549	3.923	.1324	.0009	-.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.53	.0510	.4697	5.021	.0146	.5447	1.217
Stddev	.11	.0009	.0003	.079	.0074	.0027	.004
%RSD	.7347	1.694	.0741	1.574	50.70	.5045	.3083
#1	15.41	.0515	.4701	5.025	.0224	.5478	1.218
#2	15.53	.0500	.4694	5.097	.0077	.5427	1.219
#3	15.64	.0514	.4697	4.940	.0138	.5436	1.212

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1111.9	2847.5	23086.	1520.1
Stddev	.6	8.8	187.	2.4
%RSD	.05028	.30899	.81011	.15939
#1	1112.3	2841.2	22871.	1518.6
#2	1111.3	2843.9	23206.	1522.9
#3	1112.1	2857.6	23182.	1518.8

Zoom In Zoom Out

Sample Name: FA54233-1 Acquired: 5/17/2018 14:33:41 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	19.88	.0056	.3723	.0006	314.5	.0036	.0113	.1501	.1062
Stddev	.001	.03	.0003	.0028	.0001	.3	.0000	.0002	.0010	.0008
%RSD	12190.	.1464	5.489	.7395	12.53	.1069	1.133	1.459	.6924	.7512
#1	-.0006	19.85	.0059	.3731	.0006	314.5	.0036	.0111	.1491	.1069
#2	.0002	19.87	.0054	.3745	.0006	314.9	.0036	.0114	.1511	.1054
#3	.0004	19.91	.0055	.3692	.0005	314.2	.0037	.0113	.1502	.1065

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	38.26	.3485	2.815	.3784	.0084	2.804	.0781	.2806	.0006	.0041
Stddev	.09	.0243	.080	.0017	.0001	.013	.0003	.0020	.0008	.0022
%RSD	.2342	6.965	2.829	.4433	1.754	.4498	.4128	.7172	126.5	53.17
#1	38.37	.3261	2.892	.3780	.0083	2.794	.0778	.2828	.0012	.0016
#2	38.21	.3743	2.821	.3770	.0085	2.818	.0784	.2803	-.0003	.0053
#3	38.21	.3453	2.733	.3802	.0085	2.800	.0781	.2788	.0008	.0054

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.348	.0252	1.226	.6743	-.0015	.0415	.7363
Stddev	.001	.0002	.004	.0018	.0009	.0002	.0017
%RSD	.0715	.8786	.3245	.2709	62.26	.5779	.2318
#1	1.347	.0250	1.224	.6745	-.0010	.0418	.7347
#2	1.349	.0255	1.231	.6724	-.0025	.0414	.7381
#3	1.348	.0252	1.224	.6760	-.0009	.0413	.7360

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1022.7	2885.0	23221.	1555.7
Stddev	2.7	3.7	80.	13.6
%RSD	.26614	.12888	.34502	.87637
#1	1019.6	2885.7	23286.	1551.2
#2	1024.8	2881.0	23245.	1544.9
#3	1023.8	2888.4	23131.	1571.0

Zoom In Zoom Out

Sample Name: FA54170-2 Acquired: 5/17/2018 14:37:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0025	22.92	.0328	.0964	.0007	F5065.	.0003	.0020	.1104
Stddev	.0006	.25	.0059	.0006	.0005	43.	.0002	.0009	.0011
%RSD	24.81	1.080	18.05	.5759	73.23	.8485	54.53	44.05	.9998
#1	-.0027	22.73	.0281	.0958	.0001	5103.	.0004	.0030	.1093
#2	-.0018	22.82	.0394	.0969	.0012	5019.	.0005	.0018	.1105
#3	-.0030	23.20	.0308	.0965	.0009	5073.	.0001	.0012	.1115

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0169	12.53	1.218	16.92	.3182	-.0030	8.642	.0283	.0751
Stddev	.0010	.08	.049	.11	.0024	.0005	.111	.0008	.0023
%RSD	6.051	.6543	3.996	.6709	.7591	17.04	1.286	2.808	3.048
#1	.0174	12.51	1.198	16.80	.3209	-.0035	8.524	.0274	.0776
#2	.0158	12.46	1.183	17.03	.3174	-.0025	8.659	.0284	.0732
#3	.0177	12.62	1.274	16.93	.3162	-.0030	8.744	.0290	.0744

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0106	-.0109	12.06	.0245	F45.74	.3175	-.0123	.0561	.0846
Stddev	.0042	.0042	.01	.0012	.21	.0027	.0057	.0018	.0012
%RSD	39.87	38.41	.0788	4.737	.4502	.8623	46.01	3.283	1.466
#1	.0150	-.0149	12.06	.0252	45.53	.3192	-.0123	.0572	.0832
#2	.0065	-.0112	12.05	.0251	45.75	.3190	-.0180	.0570	.0850
#3	.0103	-.0066	12.06	.0231	45.94	.3143	-.0067	.0540	.0856

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	952.44	2668.3	21615.	1509.3
Stddev	1.29	.2	156.	11.0
%RSD	.13537	.00599	.72363	.72888
#1	951.22	2668.4	21437.	1501.7
#2	952.29	2668.4	21673.	1521.9
#3	953.79	2668.1	21733.	1504.2

Zoom In Zoom Out

Sample Name: FA54241-1 Acquired: 5/17/2018 14:42:13 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0021	95.26	.0385	1.415	.0027	34.91	.0076	.0133	.1531	.2418
Stddev	.0008	.50	.0033	.004	.0002	.11	.0002	.0004	.0005	.0021
%RSD	39.81	.5277	8.567	.2563	8.214	.3181	2.506	2.778	.3398	.8750
#1	.0029	95.45	.0347	1.418	.0025	34.94	.0077	.0129	.1525	.2436
#2	.0012	95.63	.0402	1.411	.0027	35.00	.0078	.0136	.1534	.2424
#3	.0021	94.69	.0406	1.416	.0029	34.78	.0074	.0134	.1534	.2395

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	66.63	2.734	6.041	2.785	.0026	.5353	.0519	.8424	.0063	-.0039
Stddev	.31	.046	.182	.008	.0006	.0603	.0005	.0049	.0070	.0030
%RSD	.4589	1.691	3.013	.2924	22.92	11.25	.9213	.5776	111.5	77.42
#1	66.96	2.787	6.072	2.781	.0031	.5202	.0513	.8392	.0112	-.0035
#2	66.58	2.702	5.846	2.779	.0020	.4841	.0521	.8401	.0093	-.0072
#3	66.36	2.713	6.206	2.794	.0028	.6017	.0522	.8480	-.0017	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.224	.0651	.4067	.6708	.0011	.1137	3.093
Stddev	.005	.0010	.0008	.0012	.0057	.0016	.004
%RSD	.2193	1.518	.1855	.1855	507.8	1.405	.1288
#1	2.222	.0647	.4076	.6694	-.0043	.1148	3.092
#2	2.230	.0662	.4063	.6713	.0005	.1145	3.090
#3	2.221	.0644	.4062	.6717	.0072	.1119	3.097

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1145.0	3054.3	24728.	1620.6
Stddev	2.9	4.9	91.	11.7
%RSD	.25694	.15898	.36632	.72099
#1	1143.5	3055.4	24658.	1632.2
#2	1148.3	3048.9	24696.	1608.9
#3	1143.0	3058.4	24831.	1620.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-2 Acquired: 5/17/2018 14:46:25 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	121.3	.0172	.8207	.0028	8.416	-.0006	.0108	.0860	.0334
Stddev	.0021	.7	.0016	.0014	.0004	.036	.0002	.0003	.0012	.0010
%RSD	149.8	.5699	9.183	.1734	15.29	.4266	31.98	2.327	1.399	2.857
#1	-.0010	120.6	.0190	.8216	.0026	8.399	-.0007	.0108	.0858	.0345
#2	.0021	121.9	.0162	.8191	.0033	8.457	-.0004	.0106	.0873	.0329
#3	.0031	121.3	.0164	.8215	.0025	8.392	-.0007	.0111	.0849	.0328

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	51.64	2.156	4.447	2.416	-.0013	.1044	.0449	.0730	.0034	.0006
Stddev	.14	.099	.268	.021	.0005	.0172	.0005	.0017	.0026	.0088
%RSD	.2808	4.586	6.017	.8847	38.84	16.46	1.107	2.356	76.67	1457.
#1	51.53	2.051	4.180	2.407	-.0008	.1032	.0444	.0736	.0064	-.0001
#2	51.81	2.171	4.716	2.401	-.0013	.1222	.0454	.0711	.0022	-.0079
#3	51.59	2.247	4.445	2.441	-.0018	.0879	.0451	.0744	.0016	.0098

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.053	.0271	.4466	.8380	.0008	.0962	.1042
Stddev	.006	.0020	.0018	.0075	.0051	.0010	.0004
%RSD	.3061	7.478	.3984	.8987	642.6	1.070	.3873
#1	2.051	.0250	.4447	.8331	.0064	.0954	.1039
#2	2.048	.0290	.4482	.8342	-.0035	.0974	.1047
#3	2.060	.0273	.4468	.8467	-.0006	.0959	.1042

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1152.9	3135.5	25197.	1654.9
Stddev	2.6	7.0	152.	10.9
%RSD	.22740	.22189	.60464	.65762
#1	1153.7	3134.2	25279.	1644.2
#2	1149.9	3129.3	25290.	1654.6
#3	1154.9	3143.0	25021.	1666.0

Zoom In Zoom Out

Sample Name: FA54241-3 Acquired: 5/17/2018 14:50:40 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	187.0	.0225	1.220	.0037	10.01	-.0009	.0081	.1757	.0424
Stddev	.0004	.8	.0027	.007	.0002	.02	.0002	.0004	.0018	.0012
%RSD	161.3	.4455	12.19	.6076	5.817	.2401	27.26	4.654	1.041	2.751
#1	.0004	187.9	.0203	1.223	.0038	10.02	-.0006	.0080	.1769	.0437
#2	.0006	186.2	.0255	1.212	.0038	10.02	-.0009	.0078	.1736	.0415
#3	-.0002	186.9	.0216	1.226	.0034	9.979	-.0011	.0085	.1767	.0420

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	88.36	3.546	6.202	.2926	.0018	-.2211	.0670	.1070	.0008	.0058
Stddev	.21	.092	.309	.0002	.0004	.0178	.0004	.0028	.0039	.0087
%RSD	.2373	2.605	4.978	.0725	24.46	8.029	.6127	2.584	460.7	149.6
#1	88.39	3.440	6.542	.2927	.0021	-.2189	.0674	.1083	-.0036	.0107
#2	88.14	3.608	5.940	.2924	.0013	-.2399	.0666	.1039	.0034	.0110
#3	88.56	3.590	6.124	.2928	.0021	-.2046	.0668	.1089	.0028	-.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.75	.0293	.8179	1.836	-.0016	.1762	.1227
Stddev	.12	.0009	.0026	.006	.0021	.0009	.0010
%RSD	1.120	2.953	.3142	.3519	129.8	.4922	.7896
#1	10.73	.0295	.8201	1.837	-.0012	.1764	.1226
#2	10.87	.0283	.8151	1.841	-.0038	.1753	.1217
#3	10.63	.0300	.8186	1.829	.0003	.1770	.1237

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1146.1	3094.7	24705.	1617.6
Stddev	1.0	16.3	58.	5.8
%RSD	.08676	.52747	.23280	.35574
#1	1146.7	3090.0	24643.	1612.6
#2	1144.9	3112.8	24757.	1623.9
#3	1146.6	3081.2	24716.	1616.3

Zoom In Zoom Out

Sample Name: FA54241-4 Acquired: 5/17/2018 14:54:55 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0018	288.9	.0614	2.715	.0043	9.739	-.0015	.0064	.3710	.0457
Stddev	.0018	1.5	.0071	.008	.0003	.071	.0004	.0007	.0037	.0015
%RSD	98.03	.5093	11.54	.2861	7.442	.7342	27.68	11.33	.9970	3.289
#1	-.0001	289.2	.0545	2.712	.0042	9.821	-.0020	.0072	.3741	.0470
#2	.0021	290.2	.0687	2.724	.0040	9.712	-.0014	.0064	.3719	.0440
#3	.0035	287.3	.0609	2.710	.0046	9.685	-.0012	.0057	.3669	.0461

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	199.1	3.818	7.465	.0996	.0071	-.2217	.0735	.3239	.0030	.0021
Stddev	.8	.020	.320	.0009	.0014	.0364	.0013	.0038	.0041	.0039
%RSD	.4104	.5165	4.284	.8898	19.12	16.44	1.788	1.170	135.9	190.8
#1	199.4	3.837	7.137	.0996	.0071	-.2587	.0748	.3199	.0074	.0061
#2	199.7	3.819	7.776	.1005	.0085	-.1858	.0722	.3274	.0022	-.0018
#3	198.2	3.798	7.480	.0987	.0058	-.2206	.0737	.3245	-.0006	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.584	.0369	2.355	1.569	-.0107	.5079	.1195
Stddev	.030	.0016	.007	.026	.0048	.0024	.0008
%RSD	.6492	4.302	.2936	1.690	45.15	.4690	.6682
#1	4.581	.0369	2.358	1.574	-.0114	.5106	.1189
#2	4.556	.0385	2.361	1.592	-.0055	.5060	.1192
#3	4.615	.0353	2.347	1.540	-.0151	.5071	.1204

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1128.4	3385.1	27096.	1787.5
Stddev	1.5	2.3	180.	15.7
%RSD	.13685	.06918	.66248	.87767
#1	1127.6	3386.0	27077.	1785.9
#2	1127.4	3382.5	26928.	1772.6
#3	1130.2	3386.9	27285.	1803.9

Zoom In Zoom Out

Sample Name: FA54241-5 Acquired: 5/17/2018 14:59:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	258.5	.0433	3.190	.0047	8.312	-.0010	.0058	.3183	.0346
Stddev	.0014	2.1	.0022	.017	.0003	.066	.0001	.0005	.0032	.0010
%RSD	113.4	.8189	4.974	.5294	6.297	.7992	12.72	8.515	1.016	2.891
#1	.0027	260.6	.0421	3.204	.0050	8.387	-.0011	.0064	.3213	.0335
#2	.0011	258.7	.0458	3.194	.0048	8.260	-.0011	.0054	.3186	.0353
#3	-.0001	256.3	.0421	3.171	.0044	8.288	-.0009	.0057	.3149	.0351

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	98.93	3.391	6.926	.0840	.0007	-.2332	.0642	.3233	.0029	.0088
Stddev	.35	.101	.122	.0010	.0003	.0128	.0010	.0051	.0023	.0054
%RSD	.3582	2.963	1.754	1.246	47.49	5.509	1.550	1.584	79.32	61.11
#1	99.20	3.493	6.812	.0852	.0004	-.2204	.0646	.3217	.0056	.0142
#2	99.06	3.387	7.054	.0831	.0010	-.2460	.0649	.3290	.0017	.0035
#3	98.53	3.292	6.913	.0839	.0005	-.2332	.0631	.3192	.0015	.0086

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.965	.0328	2.789	2.038	-.0047	.2854	.1011
Stddev	.161	.0010	.008	.027	.0033	.0005	.0008
%RSD	1.795	3.198	.2830	1.316	71.52	.1675	.7879
#1	8.824	.0330	2.795	2.038	-.0012	.2856	.1013
#2	8.930	.0316	2.791	2.011	-.0050	.2848	.1018
#3	9.140	.0337	2.780	2.065	-.0078	.2857	.1002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1166.2	3614.5	28939.	1903.2
Stddev	1.2	3.7	130.	17.0
%RSD	.10125	.10339	.44780	.89169
#1	1166.7	3618.8	28808.	1892.2
#2	1164.9	3612.8	28943.	1894.5
#3	1167.1	3612.0	29067.	1922.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-6 Acquired: 5/17/2018 15:03:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0036	121.8	.0245	1.765	.0035	28.26	.0027	.0119	.1550	.1924
Stddev	.0009	.5	.0015	.007	.0003	.17	.0001	.0001	.0019	.0007
%RSD	24.44	.4501	5.948	.4158	7.775	.6142	1.905	.7738	1.212	.3612
#1	.0026	121.7	.0252	1.770	.0031	28.43	.0027	.0119	.1539	.1931
#2	.0040	121.3	.0254	1.756	.0036	28.08	.0027	.0118	.1572	.1925
#3	.0042	122.4	.0228	1.768	.0036	28.26	.0028	.0120	.1540	.1917

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	90.89	3.203	4.819	5.001	-.0002	.2788	.0565	1.013	.0089	.0102
Stddev	.48	.129	.023	.040	.0004	.0338	.0006	.011	.0025	.0100
%RSD	.5252	4.012	.4696	.8056	176.7	12.12	1.123	1.065	28.09	97.67
#1	91.44	3.140	4.845	5.048	.0002	.3179	.0569	1.004	.0117	.0120
#2	90.55	3.119	4.802	4.976	-.0002	.2583	.0558	1.025	.0069	.0191
#3	90.69	3.351	4.811	4.980	-.0006	.2604	.0569	1.010	.0082	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.444	.1392	.5900	.7356	.0033	.0962	2.008
Stddev	.007	.0014	.0011	.0057	.0066	.0012	.005
%RSD	.2885	1.018	.1832	.7725	203.2	1.246	.2375
#1	2.449	.1408	.5888	.7422	.0079	.0969	2.006
#2	2.436	.1385	.5907	.7317	-.0043	.0949	2.014
#3	2.448	.1382	.5905	.7331	.0061	.0970	2.005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1172.6	3156.7	25317.	1658.6
Stddev	2.9	7.6	94.	14.3
%RSD	.24746	.23979	.36952	.86238
#1	1173.3	3149.0	25210.	1642.2
#2	1169.5	3157.1	25381.	1668.6
#3	1175.2	3164.1	25361.	1664.9

Zoom In Zoom Out

Sample Name: FA54241-7 Acquired: 5/17/2018 15:07:36 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	137.7	.0153	.8842	.0033	8.773	-.0005	.0094	.1122	.0403
Stddev	.001	.4	.0021	.0073	.0002	.039	.0002	.0006	.0020	.0002
%RSD	8999.	.2998	13.97	.8220	7.472	.4400	42.39	5.885	1.801	.4919
#1	-.0008	137.4	.0155	.8762	.0036	8.734	-.0007	.0100	.1122	.0406
#2	-.0005	137.6	.0174	.8860	.0031	8.775	-.0003	.0093	.1102	.0403
#3	.0012	138.2	.0131	.8903	.0032	8.811	-.0006	.0089	.1143	.0402

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	58.52	2.277	4.569	2.673	-.0016	-.2357	.0485	.1203	.0027	.0097
Stddev	.13	.128	.138	.009	.0004	.0197	.0008	.0045	.0038	.0088
%RSD	.2143	5.615	3.023	.3442	21.91	8.354	1.724	3.722	140.4	91.37
#1	58.55	2.152	4.423	2.684	-.0014	-.2216	.0488	.1254	.0049	.0028
#2	58.38	2.408	4.588	2.666	-.0020	-.2272	.0476	.1177	.0049	.0065
#3	58.63	2.271	4.698	2.670	-.0014	-.2582	.0492	.1176	-.0017	.0197

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.45	.0279	.5032	1.725	-.0034	.1111	.1329
Stddev	.14	.0008	.0019	.041	.0021	.0008	.0004
%RSD	1.215	2.738	.3717	2.386	63.20	.7646	.3003
#1	11.61	.0283	.5047	1.752	-.0052	.1115	.1333
#2	11.40	.0285	.5011	1.678	-.0040	.1101	.1328
#3	11.34	.0271	.5037	1.745	-.0010	.1117	.1325

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1180.7	3221.5	25661.	1675.4
Stddev	2.5	5.4	35.	3.7
%RSD	.20885	.16802	.13679	.22292
#1	1178.2	3217.6	25624.	1679.6
#2	1183.1	3219.2	25694.	1674.3
#3	1180.7	3227.7	25664.	1672.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 15:11:50 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2420	39.90	1.941	1.995	2.011	40.32	1.985	1.975	2.032	1.978
Stddev	.0003	.14	.007	.007	.012	.27	.004	.002	.007	.007
%RSD	.1419	.3387	.3404	.3340	.5750	.6749	.2095	.1089	.3633	.3620
#1	.2418	40.02	1.940	2.001	2.024	40.60	1.984	1.975	2.034	1.984
#2	.2424	39.94	1.934	1.988	2.005	40.31	1.981	1.973	2.038	1.980
#3	.2419	39.76	1.948	1.997	2.002	40.05	1.989	1.977	2.024	1.970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.11	39.59	39.76	2.012	1.983	40.34	1.967	1.927	1.930	1.939
Stddev	.22	.17	.29	.005	.007	.24	.004	.002	.001	.004
%RSD	.5545	.4307	.7344	.2521	.3582	.6063	.1818	.1010	.0647	.2063
#1	40.37	39.78	40.10	2.013	1.979	40.58	1.968	1.928	1.931	1.941
#2	40.03	39.47	39.60	2.017	1.979	40.35	1.962	1.925	1.929	1.935
#3	39.95	39.51	39.59	2.007	1.991	40.09	1.969	1.929	1.931	1.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.509	1.989	2.024	2.012	1.929	2.012	1.997
Stddev	.005	.008	.008	.006	.001	.004	.003
%RSD	.2085	.4004	.3867	.3147	.0276	.1902	.1727
#1	2.512	1.987	2.033	2.017	1.929	2.011	1.998
#2	2.503	1.982	2.021	2.015	1.929	2.016	1.993
#3	2.513	1.997	2.018	2.005	1.930	2.008	2.000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 15:11:50 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1069.4	2829.8	22759.	1518.0
Stddev	1.9	10.2	54.	14.1
%RSD	.17744	.35994	.23507	.92928
#1	1067.9	2832.0	22802.	1502.5
#2	1071.5	2838.7	22699.	1521.3
#3	1068.7	2818.7	22776.	1530.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 15:15:47 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0043	.0002	.0004	.0003	.0094	.0001	.0000	.0005
Stddev	.0004	.0255	.0006	.0002	.0001	.0030	.0000	.0001	.0001
%RSD	367.9	587.7	400.8	58.09	57.10	31.80	38.52	293.5	13.96
#1	.0003	-.0086	.0004	.0005	.0003	.0129	.0001	-.0001	.0004
#2	-.0003	-.0275	.0006	.0001	.0004	.0079	.0001	.0000	.0005
#3	-.0004	.0230	-.0006	.0006	.0001	.0075	.0001	.0002	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0265	-.0134	.0281	.0002	F.0026	-.0904	.0002	.0000
Stddev	.0002	.0095	.0289	.0032	.0001	.0010	.0059	.0002	.001
%RSD	188.3	35.78	216.2	11.28	33.98	38.40	6.573	101.0	3231.
#1	.0001	.0365	-.0032	.0283	.0002	.0037	-.0840	.0003	.0003
#2	-.0002	.0253	-.0460	.0249	.0002	.0026	-.0915	.0000	.0003
#3	-.0002	.0177	.0091	.0312	.0001	.0016	-.0958	.0003	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0008	.0009	.0007	.0002	.0012	F.0020	.0000	.0001
Stddev	.0004	.0003	.0005	.0001	.0001	.0002	.0010	.000	.0000
%RSD	69.43	40.07	58.11	21.21	57.02	18.16	50.44	2699.	33.32
#1	.0006	.0010	.0015	.0008	.0003	.0014	.0019	-.0001	.0001
#2	.0010	.0010	.0007	.0005	.0003	.0012	.0031	.0002	.0001
#3	.0002	.0004	.0005	.0007	.0001	.0010	.0011	-.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 15:15:47 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1203.1	2912.6	23219.	1491.3
Stddev	2.9	8.5	44.	1.5
%RSD	.24499	.29116	.18884	.10048
#1	1201.1	2904.3	23177.	1492.2
#2	1201.8	2912.3	23216.	1492.1
#3	1206.5	2921.2	23265.	1489.6

Zoom In Zoom Out

Sample Name: FA54241-8 Acquired: 5/17/2018 15:20:06 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0010	217.8	.0311	1.951	.0052	15.21	-.0018	.0084	.2374	.0407
Stddev	.0013	1.6	.0039	.019	.0004	.12	.0002	.0000	.0008	.0011
%RSD	133.3	.7193	12.60	.9575	6.887	.7893	12.92	.2401	.3421	2.602
#1	.0004	218.2	.0328	1.948	.0049	15.30	-.0020	.0085	.2372	.0414
#2	.0025	219.1	.0266	1.972	.0056	15.26	-.0018	.0084	.2383	.0412
#3	.0001	216.1	.0338	1.935	.0053	15.08	-.0016	.0084	.2367	.0395

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	119.2	3.724	6.185	.2139	.0041	-.1649	.0638	.1761	.0074	.0092
Stddev	.4	.044	.271	.0006	.0004	.0225	.0009	.0033	.0045	.0004
%RSD	.3150	1.194	4.375	.3036	10.06	13.62	1.380	1.865	60.33	4.633
#1	119.2	3.766	6.121	.2146	.0040	-.1899	.0629	.1736	.0115	.0090
#2	119.6	3.728	5.952	.2139	.0045	-.1465	.0639	.1749	.0082	.0096
#3	118.9	3.677	6.482	.2133	.0037	-.1583	.0646	.1798	.0026	.0088

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.238	.0320	1.445	1.575	.0022	.2653	.1046
Stddev	.034	.0023	.005	.029	.0027	.0025	.0002
%RSD	.6563	7.192	.3428	1.845	121.5	.9583	.1578
#1	5.207	.0346	1.446	1.608	.0005	.2625	.1044
#2	5.232	.0309	1.450	1.551	.0053	.2675	.1046
#3	5.275	.0305	1.440	1.566	.0008	.2658	.1048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1168.6	3266.5	25541.	1673.6
Stddev	1.2	2.7	168.	15.6
%RSD	.10343	.08275	.65715	.93507
#1	1168.9	3265.1	25383.	1657.7
#2	1169.7	3264.7	25523.	1674.0
#3	1167.3	3269.6	25717.	1689.0

Zoom In Zoom Out

Sample Name: FA54241-9 Acquired: 5/17/2018 15:24:21 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	248.3	.0360	2.705	.0035	9.045	-.0019	.0054	.3432	.0285
Stddev	.0015	1.3	.0010	.003	.0004	.049	.0001	.0003	.0021	.0012
%RSD	123.2	.5268	2.903	.0960	10.41	.5387	5.113	5.847	.6261	4.355
#1	.0006	249.7	.0356	2.707	.0035	9.097	-.0018	.0058	.3410	.0274
#2	.0002	247.9	.0352	2.702	.0039	9.035	-.0020	.0052	.3453	.0298
#3	.0029	247.2	.0372	2.705	.0032	9.001	-.0020	.0053	.3432	.0282

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	114.2	2.831	5.521	.0759	.0036	-.2881	.0586	.2877	-.0027	.0093
Stddev	.3	.070	.248	.0002	.0008	.0140	.0004	.0005	.0050	.0066
%RSD	.2395	2.489	4.490	.2081	23.76	4.862	.6544	.1881	188.1	71.32
#1	114.1	2.909	5.240	.0760	.0033	-.2823	.0582	.2876	.0009	.0115
#2	114.0	2.772	5.707	.0757	.0045	-.2779	.0589	.2882	-.0084	.0145
#3	114.5	2.812	5.617	.0759	.0029	-.3041	.0587	.2871	-.0005	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.722	.0310	2.361	1.449	-.0011	.3265	.0858
Stddev	.004	.0007	.005	.006	.0046	.0007	.0004
%RSD	.1023	2.314	.1952	.3970	414.1	.2029	.4546
#1	3.724	.0304	2.366	1.446	-.0051	.3267	.0860
#2	3.717	.0318	2.361	1.444	-.0022	.3257	.0860
#3	3.724	.0309	2.357	1.455	.0039	.3270	.0853

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1175.2	3510.3	27358.	1799.8
Stddev	3.9	4.9	105.	12.5
%RSD	.32865	.14026	.38224	.69631
#1	1179.6	3504.6	27340.	1785.3
#2	1172.2	3513.2	27471.	1806.3
#3	1173.9	3513.1	27264.	1807.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-10 Acquired: 5/17/2018 15:28:37 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	216.3	.0348	2.645	.0038	6.639	-.0018	.0034	.3309	.0299
Stddev	.0017	.6	.0042	.004	.0005	.022	.0001	.0003	.0009	.0009
%RSD	232.3	.2564	12.03	.1674	13.01	.3279	7.577	9.685	.2721	3.117
#1	.0013	216.9	.0318	2.641	.0038	6.662	-.0018	.0030	.3319	.0288
#2	.0021	216.1	.0396	2.644	.0043	6.618	-.0018	.0036	.3302	.0304
#3	-.0012	215.9	.0331	2.650	.0033	6.639	-.0016	.0036	.3305	.0305

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	105.2	2.737	4.441	.0536	.0020	-.3097	.0459	.2610	-.0031	.0064
Stddev	.1	.111	.124	.0004	.0007	.0367	.0004	.0050	.0048	.0044
%RSD	.0664	4.052	2.800	.6946	36.71	11.86	.9121	1.928	154.4	68.15
#1	105.2	2.864	4.341	.0538	.0021	-.2950	.0457	.2586	.0006	.0054
#2	105.2	2.658	4.402	.0532	.0012	-.3515	.0456	.2668	-.0014	.0027
#3	105.1	2.689	4.580	.0538	.0026	-.2827	.0464	.2576	-.0085	.0112

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.214	.0304	2.293	1.490	-.0025	.3488	.0703
Stddev	.032	.0018	.005	.019	.0016	.0021	.0004
%RSD	.6108	5.848	.2004	1.304	63.70	.5923	.5506
#1	5.241	.0302	2.299	1.484	-.0043	.3504	.0700
#2	5.179	.0287	2.291	1.511	-.0011	.3496	.0708
#3	5.222	.0323	2.291	1.474	-.0022	.3465	.0702

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1174.9	3540.7	27468.	1807.7
Stddev	2.2	4.3	119.	11.1
%RSD	.18798	.12120	.43246	.61621
#1	1173.5	3537.0	27605.	1804.7
#2	1173.7	3545.4	27400.	1798.3
#3	1177.4	3539.7	27399.	1820.0

Zoom In Zoom Out

Sample Name: FA54241-11 Acquired: 5/17/2018 15:32:52 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	105.5	.0721	1.263	.0054	21.62	-.0003	.0483	.1942	.2415
Stddev	.0010	.2	.0020	.004	.0004	.12	.0002	.0005	.0023	.0011
%RSD	70.27	.1710	2.736	.3385	6.621	.5769	53.06	1.016	1.207	.4377
#1	.0026	105.5	.0699	1.263	.0051	21.76	-.0005	.0479	.1917	.2424
#2	.0010	105.4	.0737	1.259	.0058	21.53	-.0002	.0488	.1963	.2403
#3	.0007	105.7	.0728	1.268	.0053	21.56	-.0004	.0481	.1946	.2416

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	174.2	3.613	5.610	1.726	.0113	.4187	.1264	1.858	.0059	.0135
Stddev	.3	.123	.076	.006	.0004	.0495	.0008	.007	.0019	.0044
%RSD	.1619	3.403	1.360	.3624	3.648	11.83	.6064	.3582	33.22	32.82
#1	174.5	3.588	5.663	1.729	.0118	.4033	.1256	1.862	.0076	.0086
#2	174.2	3.505	5.643	1.718	.0112	.3787	.1267	1.850	.0038	.0144
#3	173.9	3.747	5.522	1.730	.0110	.4741	.1271	1.862	.0062	.0173

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.941	.0364	.6987	2.161	.0028	.2012	.6759
Stddev	.007	.0007	.0011	.009	.0055	.0002	.0014
%RSD	.0740	1.807	.1615	.3967	196.2	.0917	.2040
#1	8.944	.0371	.7000	2.167	.0023	.2014	.6747
#2	8.945	.0358	.6981	2.151	-.0024	.2011	.6756
#3	8.933	.0363	.6980	2.164	.0086	.2012	.6774

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1177.6	3183.3	24704.	1607.5
Stddev	2.2	.6	28.	6.2
%RSD	.18996	.01940	.11337	.38747
#1	1175.4	3182.7	24700.	1603.7
#2	1179.9	3183.3	24734.	1604.1
#3	1177.6	3183.9	24678.	1614.7

Zoom In Zoom Out

Sample Name: FA54241-12 Acquired: 5/17/2018 15:37:03 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	233.4	.0388	2.077	.0055	15.42	-.0024	.0091	.2967	.0406
Stddev	.0022	1.1	.0013	.005	.0006	.12	.0001	.0007	.0033	.0006
%RSD	165.4	.4722	3.302	.2448	10.71	.8090	3.920	7.189	1.112	1.463
#1	.0016	232.7	.0401	2.080	.0050	15.28	-.0023	.0087	.2931	.0406
#2	-.0010	232.9	.0387	2.071	.0053	15.46	-.0024	.0088	.2996	.0412
#3	.0035	234.7	.0375	2.080	.0061	15.52	-.0025	.0099	.2974	.0400

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	141.4	4.731	6.926	.4633	.0010	-.1325	.0679	.2335	.0044	-.0003
Stddev	.4	.099	.456	.0044	.0004	.0604	.0008	.0057	.0037	.0040
%RSD	.3070	2.090	6.582	.9540	36.08	45.61	1.157	2.454	85.47	1232.
#1	140.9	4.816	6.467	.4583	.0014	-.1255	.0675	.2325	.0006	-.0046
#2	141.4	4.754	7.378	.4649	.0011	-.0759	.0675	.2284	.0044	.0032
#3	141.8	4.622	6.934	.4667	.0006	-.1961	.0688	.2397	.0081	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.321	.0327	1.679	1.329	-.0010	.3123	.1705
Stddev	.006	.0013	.006	.004	.0006	.0020	.0004
%RSD	.1852	4.065	.3342	.3344	67.63	.6363	.2094
#1	3.315	.0321	1.673	1.334	-.0009	.3101	.1704
#2	3.327	.0318	1.679	1.326	-.0017	.3140	.1702
#3	3.320	.0342	1.684	1.326	-.0004	.3127	.1708

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1176.8	3385.3	25826.	1687.6
Stddev	2.7	3.2	93.	6.4
%RSD	.23152	.09518	.35907	.38130
#1	1174.0	3383.4	25923.	1695.0
#2	1179.4	3383.4	25739.	1683.7
#3	1177.1	3389.0	25815.	1684.1

Zoom In Zoom Out

Sample Name: FA54241-13 Acquired: 5/17/2018 15:41:17 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	255.6	.0509	2.794	.0052	15.53	-.0032	.0061	.3572	.0361
Stddev	.0020	1.2	.0005	.004	.0006	.10	.0002	.0002	.0025	.0002
%RSD	444.8	.4582	1.035	.1334	10.86	.6293	6.913	3.185	.7055	.6427
#1	-.0018	256.9	.0506	2.791	.0046	15.64	-.0029	.0058	.3601	.0359
#2	.0013	255.0	.0516	2.798	.0057	15.46	-.0033	.0062	.3554	.0363
#3	.0019	254.8	.0507	2.795	.0052	15.49	-.0032	.0062	.3561	.0360

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	168.2	4.462	7.421	.1021	.0044	-.2383	.0567	.2997	-.0031	.0137
Stddev	.9	.030	.319	.0006	.0006	.0067	.0012	.0017	.0064	.0054
%RSD	.5158	.6700	4.299	.6362	14.93	2.806	2.100	.5774	207.8	39.33
#1	169.0	4.476	7.178	.1028	.0051	-.2310	.0575	.2978	.0025	.0137
#2	168.2	4.428	7.782	.1015	.0040	-.2399	.0572	.3010	-.0017	.0191
#3	167.3	4.482	7.304	.1019	.0039	-.2441	.0553	.3004	-.0100	.0083

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.985	.0309	2.453	1.281	-.0041	.3860	.0941
Stddev	.019	.0004	.008	.008	.0039	.0018	.0002
%RSD	.6427	1.444	.3387	.6557	95.14	.4717	.2355
#1	2.990	.0314	2.462	1.289	-.0052	.3850	.0943
#2	2.964	.0309	2.447	1.273	-.0074	.3881	.0939
#3	3.001	.0305	2.449	1.282	.0002	.3848	.0942

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1168.0	3534.2	27070.	1776.4
Stddev	3.4	1.4	69.	20.3
%RSD	.29443	.03937	.25499	1.1440
#1	1165.5	3534.2	26995.	1764.2
#2	1166.6	3532.7	27083.	1765.0
#3	1171.9	3535.5	27132.	1799.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-14 Acquired: 5/17/2018 15:45:31 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0016	230.4	.0440	3.523	.0049	5.547	-.0026	.0036	.2861	.0256
Stddev	.0016	.1	.0061	.012	.0005	.029	.0002	.0007	.0014	.0009
%RSD	99.63	.0442	13.96	.3447	9.488	.5220	7.481	18.37	.4756	3.400
#1	-.0025	230.3	.0510	3.529	.0052	5.579	-.0028	.0032	.2861	.0266
#2	-.0026	230.5	.0411	3.509	.0052	5.537	-.0024	.0033	.2847	.0251
#3	.0002	230.4	.0398	3.531	.0044	5.523	-.0026	.0044	.2874	.0252

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	120.0	3.301	4.337	.0519	.0007	-.3421	.0388	.3428	.0015	.0117
Stddev	.2	.110	.178	.0005	.0003	.0203	.0007	.0023	.0046	.0113
%RSD	.1622	3.326	4.116	.8985	38.33	5.943	1.693	.6798	306.8	97.05
#1	120.2	3.423	4.503	.0515	.0004	-.3559	.0392	.3406	-.0001	.0167
#2	119.8	3.272	4.148	.0524	.0007	-.3517	.0391	.3452	-.0021	-.0013
#3	119.9	3.209	4.361	.0519	.0009	-.3188	.0380	.3427	.0067	.0197

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.752	.0312	3.157	1.190	-.0067	.2202	.0595
Stddev	.039	.0017	.002	.005	.0047	.0018	.0000
%RSD	1.032	5.424	.0685	.4067	70.34	.8134	.0642
#1	3.788	.0319	3.159	1.184	-.0100	.2199	.0595
#2	3.756	.0324	3.155	1.191	-.0013	.2186	.0595
#3	3.711	.0292	3.157	1.193	-.0087	.2221	.0595

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1177.0	3744.0	28477.	1890.8
Stddev	2.0	4.0	92.	18.1
%RSD	.16905	.10603	.32461	.95606
#1	1176.1	3743.2	28544.	1871.6
#2	1179.3	3748.3	28516.	1893.5
#3	1175.6	3740.5	28372.	1907.4

Zoom In Zoom Out

Sample Name: MP33756-MB1 Acquired: 5/17/2018 15:49:48 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0032	-.0014	.0006	-.0002	.0140	-.0001	-.0002	.0004
Stddev	.0004	.0085	.0009	.0002	.0002	.0028	.0000	.0001	.0003
%RSD	129.0	261.8	66.57	33.21	73.44	19.98	32.90	72.22	79.70
#1	-.0008	.0001	-.0007	.0004	-.0003	.0110	-.0001	-.0001	.0001
#2	.0000	-.0032	-.0024	.0007	.0000	.0165	-.0001	-.0001	.0004
#3	-.0001	.0128	-.0011	.0008	-.0004	.0146	.0000	-.0003	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0230	.0082	.0022	.0631	.0001	-.0006	-.0974	-.0002	.0011
Stddev	.0003	.0014	.0415	.0083	.0000	.0000	.0036	.0001	.0004
%RSD	1.276	16.73	1911.	13.16	31.85	6.665	3.726	47.83	34.11
#1	.0233	.0070	-.0317	.0613	.0001	-.0005	-.1015	-.0002	.0015
#2	.0228	.0097	.0485	.0721	.0001	-.0006	-.0954	-.0002	.0008
#3	.0229	.0078	-.0103	.0558	.0001	-.0006	-.0951	-.0001	.0010
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0125								
Low Limit	-.0125								

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0003	.0207	.0000	.0000	-.0002	-.0012	-.0001	F.0154
Stddev	.0010	.0011	.0004	.000	.0001	.0001	.0001	.0001	.0001
%RSD	128.0	444.8	1.746	1924.	20660.	37.48	10.66	45.71	.5958
#1	.0011	-.0008	.0203	.0000	-.0001	-.0001	-.0012	-.0002	.0155
#2	-.0003	.0002	.0210	.0003	-.0001	-.0003	-.0011	-.0001	.0155
#3	.0015	.0014	.0208	-.0004	.0002	-.0002	-.0013	-.0001	.0153
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit									.0100
Low Limit									-.0100

Zoom In Zoom Out

Sample Name: MP33756-MB1 Acquired: 5/17/2018 15:49:48 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1208.0	2968.7	22908.	1474.1
Stddev	5.4	10.7	62.	6.4
%RSD	.45031	.35958	.27011	.43216
#1	1202.7	2957.7	22936.	1479.6
#2	1207.8	2969.2	22951.	1467.1
#3	1213.6	2979.0	22837.	1475.5

Zoom In Zoom Out

Sample Name: MP33756-B1 Acquired: 5/17/2018 15:54:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0501	28.13	1.878	2.081	.0536	26.69	.0499	.5043	.2199	.2596
Stddev	.0007	.20	.002	.028	.0004	.17	.0001	.0005	.0010	.0006
%RSD	1.395	.7252	.1197	1.343	.6669	.6328	.1863	.1045	.4356	.2174
#1	.0494	27.95	1.876	2.055	.0532	26.55	.0500	.5038	.2193	.2597
#2	.0508	28.35	1.878	2.111	.0537	26.88	.0499	.5048	.2210	.2602
#3	.0502	28.08	1.881	2.078	.0538	26.64	.0499	.5042	.2194	.2590
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.57	25.06	25.35	.5135	.4637	26.11	.5003	.4845	.4793	1.852
Stddev	.17	.24	.25	.0022	.0015	.15	.0004	.0017	.0019	.005
%RSD	.6227	.9744	.9934	.4209	.3198	.5744	.0835	.3528	.3954	.2809
#1	26.40	24.87	25.07	.5142	.4620	26.01	.4999	.4826	.4791	1.854
#2	26.73	25.33	25.54	.5153	.4644	26.28	.5007	.4855	.4812	1.846
#3	26.58	24.98	25.45	.5111	.4646	26.03	.5004	.4856	.4774	1.856
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3715	.4723	.5193	.5046	1.894	.4842	.5021
Stddev	.0016	.0014	.0050	.0019	.003	.0005	.0009
%RSD	.4210	.2904	.9638	.3747	.1727	.1020	.1700
#1	.3697	.4707	.5146	.5047	1.895	.4838	.5015
#2	.3721	.4731	.5245	.5064	1.890	.4841	.5031
#3	.3726	.4730	.5189	.5026	1.896	.4847	.5018
Check ?	None	Chk Pass	None	None	Chk Pass	Chk PassChk Pass	
Value							
Range							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33756-B1 Acquired: 5/17/2018 15:54:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1110.3	2891.2	22412.	1480.2
Stddev	1.2	.4	43.	5.9
%RSD	.10836	.01352	.19122	.39847
#1	1109.3	2891.6	22378.	1485.2
#2	1111.6	2890.8	22398.	1473.7
#3	1109.9	2891.1	22460.	1481.7

Zoom In Zoom Out

Sample Name: FA54229-1 Acquired: 5/17/2018 15:58:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2236	.0003	.0167	-.0002	63.11	-.0001	-.0003	.0010	-.0008
Stddev	.0006	.0096	.0009	.0003	.0001	.38	.0001	.0001	.0002	.0002
%RSD	956.8	4.301	344.8	2.074	32.44	.6030	67.71	57.39	17.68	19.33
#1	-.0005	.2196	.0007	.0169	-.0003	63.21	-.0001	-.0001	.0010	-.0010
#2	.0000	.2346	-.0008	.0163	-.0001	62.69	-.0001	-.0004	.0012	-.0007
#3	.0007	.2166	.0009	.0169	-.0002	63.42	.0000	-.0003	.0009	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0509	1.651	4.056	.0205	.0018	6.158	.0006	.0015	.0014	.0029
Stddev	.0025	.031	.031	.0001	.0001	.067	.0002	.0000	.0021	.0018
%RSD	4.952	1.897	.7571	.4802	7.387	1.088	29.48	2.391	147.2	60.78
#1	.0531	1.654	4.089	.0206	.0017	6.186	.0004	.0016	.0006	.0016
#2	.0482	1.618	4.028	.0205	.0019	6.082	.0007	.0016	.0038	.0050
#3	.0516	1.681	4.051	.0205	.0017	6.207	.0005	.0015	-.0002	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.422	-.0002	.2626	.0170	.0007	.0095	.0102
Stddev	.014	.0003	.0021	.0021	.0007	.0002	.0001
%RSD	.2629	151.5	.7909	12.49	113.8	2.144	1.005
#1	5.417	.0001	.2623	.0155	.0009	.0093	.0102
#2	5.412	-.0003	.2607	.0161	.0012	.0094	.0101
#3	5.438	-.0004	.2648	.0195	-.0002	.0097	.0103

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1155.8	2905.0	22637.	1491.6
Stddev	1.7	9.6	107.	11.5
%RSD	.14731	.33122	.47223	.77118
#1	1154.4	2900.4	22539.	1481.0
#2	1157.7	2916.0	22621.	1503.8
#3	1155.4	2898.5	22751.	1490.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:02:27 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2423	42.51	1.875	2.029	2.082	42.73	1.994	1.973	2.140	2.016
Stddev	.0013	.17	.002	.004	.005	.17	.003	.003	.009	.005
%RSD	.5542	.4078	.0780	.1998	.2601	.3911	.1443	.1260	.4224	.2527
#1	.2424	42.49	1.876	2.033	2.077	42.63	1.992	1.971	2.146	2.020
#2	.2435	42.35	1.874	2.025	2.080	42.63	1.997	1.976	2.145	2.016
#3	.2409	42.70	1.875	2.028	2.088	42.92	1.992	1.972	2.130	2.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.15	40.61	40.69	2.017	1.955	42.45	1.900	1.971	1.886	1.874
Stddev	.18	.03	.14	.015	.004	.26	.003	.005	.001	.002
%RSD	.4402	.0838	.3350	.7364	.1825	.6024	.1706	.2575	.0643	.0820
#1	41.01	40.60	40.68	2.023	1.951	42.28	1.899	1.972	1.886	1.874
#2	41.09	40.59	40.84	2.029	1.957	42.32	1.904	1.966	1.887	1.873
#3	41.35	40.65	40.56	2.001	1.957	42.74	1.897	1.976	1.885	1.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.427	1.891	2.102	2.045	1.958	2.015	1.994
Stddev	.002	.003	.006	.011	.007	.003	.006
%RSD	.0632	.1698	.2910	.5211	.3418	.1281	.3228
#1	2.429	1.890	2.097	2.048	1.959	2.017	1.989
#2	2.426	1.895	2.101	2.053	1.951	2.017	2.002
#3	2.426	1.889	2.109	2.033	1.964	2.012	1.992
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:02:27 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1078.2	2919.6	22536.	1513.3
Stddev	.8	7.7	131.	3.7
%RSD	.07586	.26237	.58012	.24633
#1	1078.1	2923.3	22473.	1509.0
#2	1079.1	2910.8	22448.	1515.0
#3	1077.4	2924.7	22686.	1515.9

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:06:25 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0006	.0000	.0006	.0001	.0022	.0000	.0001	.0002
Stddev	.0003	.0006	.0006	.0004	.0002	.0030	.000	.0002	.0005
%RSD	59.18	105.5	1381.	71.79	284.8	139.4	1241.	215.5	227.0
#1	-.0006	.0006	.0007	.0002	.0000	.0047	.0000	.0000	.0002
#2	-.0008	.0012	-.0005	.0011	.0003	.0030	-.0001	-.0001	-.0003
#3	-.0002	-.0001	.0000	.0005	-.0001	-.0012	.0001	.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0169	.0144	.0432	.0001	F .0028	-.0848	.0000	.0004
Stddev	.0001	.0054	.0246	.0353	.0001	.0009	.0144	.0001	.0006
%RSD	8.887	31.78	171.1	81.74	88.37	31.18	17.03	4389.	150.8
#1	-.0012	.0192	.0020	.0817	.0001	.0037	-.0690	-.0001	.0010
#2	-.0011	.0208	-.0015	.0122	.0000	.0027	-.0973	.0002	.0005
#3	-.0011	.0108	.0427	.0357	.0000	.0020	-.0882	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0007	-.0004	.0002	.0001	.0009	.0020	.0000	.0002
Stddev	.0005	.0011	.0002	.0005	.0000	.0001	.0003	.000	.0001
%RSD	132.8	159.7	43.30	222.0	50.62	7.541	13.93	587.2	36.40
#1	-.0001	.0013	-.0005	.0007	.0001	.0010	.0020	-.0002	.0001
#2	.0003	-.0006	-.0002	.0002	.0000	.0009	.0017	.0000	.0002
#3	.0009	.0013	-.0004	-.0003	.0001	.0008	.0023	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:06:25 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1233.4	3052.9	23390.	1508.4
Stddev	2.0	5.7	125.	4.9
%RSD	.15971	.18579	.53335	.32588
#1	1235.7	3050.2	23505.	1504.0
#2	1232.6	3049.1	23407.	1507.4
#3	1232.1	3059.5	23258.	1513.7

Zoom In Zoom Out

Sample Name: MP33756-D1 Acquired: 5/17/2018 16:10:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.2246	-.0004	.0163	.0000	63.39	-.0001	-.0001	.0012	-.0009
Stddev	.0007	.0110	.0002	.0002	.0001	.27	.0001	.0001	.0005	.0002
%RSD	160.0	4.903	40.04	.9732	296.8	.4272	145.4	111.4	43.79	24.38
#1	-.0012	.2121	-.0006	.0163	-.0001	63.20	.0000	-.0001	.0006	-.0006
#2	-.0004	.2286	-.0003	.0161	.0001	63.27	-.0001	.0000	.0017	-.0010
#3	.0003	.2330	-.0003	.0165	.0001	63.70	-.0001	.0000	.0014	-.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0519	1.640	4.011	.0203	.0023	6.190	.0004	.0014	.0022	.0016
Stddev	.0080	.010	.002	.0002	.0003	.023	.0001	.0003	.0004	.0007
%RSD	15.36	.6209	.0400	.8514	14.09	.3731	15.64	23.14	19.57	44.49
#1	.0610	1.648	4.013	.0201	.0026	6.189	.0004	.0011	.0019	.0020
#2	.0478	1.629	4.009	.0204	.0022	6.168	.0005	.0017	.0020	.0020
#3	.0468	1.644	4.010	.0204	.0020	6.214	.0003	.0013	.0027	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.379	-.0002	.2620	.0193	.0004	.0093	.0100
Stddev	.013	.0002	.0009	.0001	.0006	.0000	.0000
%RSD	.2408	104.0	.3283	.6681	150.8	.3968	.1427
#1	5.390	-.0005	.2621	.0194	.0003	.0094	.0100
#2	5.364	.0000	.2610	.0192	-.0002	.0093	.0100
#3	5.382	-.0002	.2627	.0194	.0010	.0093	.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1158.3	2937.7	22586.	1486.4
Stddev	2.9	7.1	148.	7.2
%RSD	.24618	.24171	.65664	.48120
#1	1155.5	2930.7	22666.	1490.5
#2	1158.3	2944.9	22415.	1490.7
#3	1161.2	2937.4	22677.	1478.2

Zoom In Zoom Out

Sample Name: MP33756-SD1 Acquired: 5/17/2018 16:15:00 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0009	.2107	-.0038	.0182	-.0004	65.32	-.0005	-.0002	.0020	-.0015
Stddev	.0006	.0249	.0043	.0012	.0003	.23	.0004	.0005	.0014	.0007
%RSD	66.24	11.79	112.6	6.387	80.76	.3488	82.06	322.1	69.43	48.10
#1	-.0002	.2252	-.0011	.0196	-.0006	65.50	-.0007	.0004	.0030	-.0023
#2	-.0013	.1820	-.0016	.0175	.0000	65.40	.0000	-.0006	.0004	-.0014
#3	-.0012	.2249	-.0088	.0176	-.0005	65.06	-.0006	-.0003	.0027	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0533	1.663	4.208	.0221	.0005	5.812	-.0008	.0015	.0004	-.0070
Stddev	.0208	.173	.137	.0002	.0004	.040	.0003	.0043	.0044	.0089
%RSD	38.95	10.44	3.264	.9666	93.17	.6949	37.83	294.0	990.5	127.0
#1	.0696	1.779	4.271	.0220	.0000	5.775	-.0007	-.0017	-.0007	.0032
#2	.0299	1.463	4.303	.0223	.0005	5.805	-.0006	.0064	.0053	-.0134
#3	.0604	1.745	4.051	.0220	.0008	5.855	-.0012	-.0003	-.0033	-.0107

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.457	-.0007	.2669	.0159	.0015	.0089	.0109
Stddev	.010	.0009	.0015	.0029	.0017	.0005	.0003
%RSD	.1808	130.4	.5656	17.94	114.7	5.540	2.531
#1	5.447	.0003	.2674	.0187	-.0005	.0094	.0106
#2	5.467	-.0011	.2681	.0160	.0024	.0086	.0108
#3	5.458	-.0013	.2652	.0130	.0026	.0086	.0111

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1208.5	2997.0	23130.	1516.7
Stddev	1.2	5.6	23.	9.0
%RSD	.10295	.18787	.10061	.59031
#1	1207.8	2996.1	23137.	1510.8
#2	1210.0	3003.1	23105.	1512.2
#3	1207.8	2991.9	23150.	1527.0

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33756-PS1 Acquired: 5/17/2018 16:19:19 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0443	2.801	.0960	.2714	.0521	66.38	.0482	.0486	.0527	.1006
Stddev	.0005	.013	.0002	.0017	.0001	.23	.0001	.0002	.0005	.0003
%RSD	1.025	.4620	.2096	.6396	.2761	.3516	.1978	.3503	.9272	.2971
#1	.0446	2.809	.0960	.2733	.0521	66.58	.0483	.0488	.0532	.1003
#2	.0446	2.786	.0958	.2699	.0523	66.12	.0481	.0484	.0528	.1008
#3	.0438	2.808	.0962	.2711	.0520	66.43	.0481	.0487	.0522	.1008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.051	11.48	8.898	.0688	.0913	16.16	.0962	.0461	.0926	.0884
Stddev	.015	.08	.041	.0007	.0004	.07	.0001	.0005	.0005	.0003
%RSD	.4883	.6779	.4583	1.046	.4174	.4358	.1243	1.087	.5756	.2923
#1	3.053	11.56	8.917	.0693	.0917	16.22	.0962	.0465	.0927	.0887
#2	3.035	11.41	8.851	.0691	.0910	16.08	.0962	.0463	.0931	.0882
#3	3.065	11.46	8.925	.0680	.0911	16.17	.0960	.0455	.0921	.0885

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.334	.0451	.3061	.1170	.0906	.0566	.2500
Stddev	.016	.0006	.0008	.0017	.0005	.0002	.0005
%RSD	.2978	1.277	.2501	1.419	.5700	.3920	.1930
#1	5.349	.0450	.3069	.1187	.0909	.0565	.2505
#2	5.336	.0457	.3054	.1169	.0908	.0569	.2498
#3	5.317	.0445	.3059	.1154	.0900	.0565	.2496

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1136.7	2915.8	22723.	1511.0
Stddev	2.0	8.9	98.	10.5
%RSD	.17997	.30380	.43230	.69459
#1	1134.3	2906.9	22670.	1501.4
#2	1137.8	2915.8	22662.	1522.2
#3	1137.9	2924.7	22836.	1509.4

Zoom In Zoom Out

Sample Name: MP33756-S1 Acquired: 5/17/2018 16:23:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0488	28.22	1.838	2.050	.0527	87.93	.0482	.4861	.2157	.2541
Stddev	.0004	.09	.010	.014	.0004	.18	.0001	.0004	.0004	.0008
%RSD	.7235	.3251	.5480	.6824	.7444	.2090	.2904	.0914	.1942	.3309
#1	.0488	28.12	1.846	2.052	.0526	87.89	.0482	.4856	.2161	.2541
#2	.0484	28.24	1.827	2.063	.0531	88.13	.0481	.4861	.2158	.2533
#3	.0491	28.30	1.842	2.035	.0523	87.76	.0484	.4865	.2152	.2550

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.00	26.41	28.47	.5145	.4519	32.01	.4777	.4770	.4695	1.799
Stddev	.13	.10	.22	.0016	.0005	.03	.0011	.0012	.0023	.003
%RSD	.5042	.3686	.7604	.3016	.1188	.0853	.2207	.2588	.4856	.1634
#1	25.96	26.39	28.61	.5128	.4518	31.98	.4777	.4776	.4706	1.798
#2	26.14	26.51	28.58	.5158	.4514	32.04	.4766	.4756	.4669	1.796
#3	25.88	26.32	28.22	.5150	.4525	32.01	.4787	.4779	.4711	1.802

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.723	.4507	.7662	.5068	1.856	.4808	.4926
Stddev	.018	.0023	.0028	.0015	.004	.0010	.0011
%RSD	.3099	.5054	.3707	.3024	.2208	.2052	.2321
#1	5.739	.4517	.7651	.5058	1.853	.4817	.4918
#2	5.704	.4481	.7694	.5059	1.854	.4810	.4921
#3	5.727	.4523	.7641	.5085	1.861	.4797	.4939

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1088.9	2896.6	22337.	1506.3
Stddev	1.1	5.1	77.	10.9
%RSD	.10240	.17593	.34623	.72558
#1	1087.6	2891.4	22343.	1493.7
#2	1089.6	2901.6	22257.	1512.2
#3	1089.5	2896.9	22411.	1513.0

Zoom In Zoom Out

Sample Name: MP33756-S2 Acquired: 5/17/2018 16:27:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0501	29.42	1.872	2.130	.0550	90.51	.0492	.4982	.2236	.2621
Stddev	.0002	.19	.002	.006	.0003	.67	.0003	.0006	.0019	.0015
%RSD	.4542	.6592	.0834	.2832	.4814	.7366	.5093	.1246	.8716	.5843
#1	.0500	29.61	1.873	2.135	.0553	91.01	.0491	.4975	.2247	.2632
#2	.0504	29.23	1.870	2.131	.0547	89.75	.0491	.4987	.2248	.2628
#3	.0500	29.42	1.873	2.123	.0551	90.76	.0495	.4985	.2214	.2603

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.99	27.27	29.45	.5319	.4629	33.23	.4885	.4907	.4791	1.834
Stddev	.16	.08	.18	.0033	.0015	.28	.0012	.0011	.0015	.001
%RSD	.5944	.2841	.6206	.6154	.3146	.8477	.2489	.2140	.3163	.0750
#1	27.11	27.36	29.65	.5339	.4612	33.38	.4872	.4896	.4791	1.835
#2	26.81	27.21	29.29	.5335	.4638	32.90	.4886	.4916	.4807	1.834
#3	27.04	27.24	29.42	.5281	.4637	33.40	.4896	.4911	.4777	1.833

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.774	.4580	.7917	.5264	1.909	.4955	.5029
Stddev	.005	.0007	.0057	.0015	.009	.0017	.0010
%RSD	.0919	.1473	.7162	.2852	.4474	.3494	.1922
#1	5.768	.4588	.7960	.5256	1.900	.4970	.5019
#2	5.775	.4576	.7853	.5255	1.912	.4960	.5032
#3	5.778	.4576	.7938	.5282	1.916	.4936	.5037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1081.9	2894.9	21982.	1479.2
Stddev	3.9	5.3	110.	8.2
%RSD	.36414	.18406	.49989	.55577
#1	1086.5	2901.0	21948.	1470.3
#2	1079.4	2892.0	21892.	1481.0
#3	1079.9	2891.6	22104.	1486.4

Zoom In Zoom Out

Sample Name: FA54229-2 Acquired: 5/17/2018 16:31:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.2483	.0004	.0169	-.0002	72.33	-.0001	-.0001	.0010	-.0005
Stddev	.0001	.0235	.0014	.0001	.0001	.32	.0000	.0001	.0002	.0003
%RSD	14.11	9.464	356.3	.8687	44.19	.4377	24.72	90.68	25.13	51.94
#1	-.0006	.2438	-.0003	.0170	-.0003	72.65	-.0001	-.0002	.0012	-.0004
#2	-.0006	.2737	.0020	.0168	-.0001	72.02	.0000	.0000	.0009	-.0003
#3	-.0008	.2273	-.0005	.0167	-.0002	72.31	-.0001	-.0001	.0008	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1677	13.08	13.08	.0101	.0025	8.765	.0001	.0015	.0019	.0030
Stddev	.0062	.04	.01	.0000	.0001	.008	.0001	.0005	.0013	.0022
%RSD	3.705	.3026	.0889	.2185	2.547	.0914	184.3	29.51	68.68	72.83
#1	.1746	13.13	13.08	.0101	.0025	8.774	-.0001	.0018	.0016	.0047
#2	.1624	13.06	13.09	.0101	.0024	8.758	.0001	.0018	.0034	.0036
#3	.1662	13.06	13.07	.0102	.0025	8.763	.0001	.0010	.0008	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.688	-.0002	.9468	.0274	.0008	.0088	.0181
Stddev	.014	.0002	.0032	.0020	.0007	.0002	.0000
%RSD	.2435	112.7	.3337	7.165	92.66	2.453	.0773
#1	5.686	-.0003	.9504	.0296	.0000	.0088	.0181
#2	5.674	-.0002	.9453	.0259	.0013	.0086	.0181
#3	5.702	.0000	.9447	.0266	.0011	.0090	.0181

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1137.0	2916.4	22129.	1480.5
Stddev	1.3	6.1	113.	11.4
%RSD	.11614	.20821	.50940	.76678
#1	1135.8	2917.5	22126.	1470.0
#2	1138.4	2921.8	22017.	1492.5
#3	1136.8	2909.8	22243.	1479.0

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54239-1 Acquired: 5/17/2018 16:35:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0034	.0022	.0969	.0000	83.03	-.0001	-.0003	.0147	-.0018
Stddev	.0006	.0068	.0013	.0007	.000	.40	.0000	.0002	.0001	.0002
%RSD	740.5	202.3	62.47	.6762	272.5	.4817	77.54	55.75	.8957	8.625
#1	.0001	.0080	.0006	.0962	-.0001	82.96	.0000	-.0001	.0146	-.0016
#2	-.0006	-.0044	.0027	.0973	.0000	82.66	-.0001	-.0004	.0148	-.0018
#3	.0007	.0065	.0032	.0973	.0000	83.45	.0000	-.0003	.0145	-.0020

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0064	2.437	16.24	.0059	.0240	49.69	-.0005	.0020	.0008	.0027
Stddev	.0017	.018	.14	.0001	.0002	.21	.0003	.0007	.0008	.0025
%RSD	26.32	.7458	.8785	.8862	.6332	.4196	50.30	32.74	105.6	91.43
#1	.0045	2.417	16.10	.0059	.0238	49.65	-.0005	.0013	.0000	.0012
#2	.0078	2.441	16.24	.0060	.0240	49.51	-.0007	.0027	.0006	.0013
#3	.0070	2.452	16.39	.0059	.0241	49.92	-.0002	.0022	.0016	.0055

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.816	.0001	1.063	.0014	-.0006	.0053	.0482
Stddev	.018	.0004	.005	.0002	.0003	.0001	.0001
%RSD	.1986	631.9	.4854	11.59	54.69	2.105	.1761
#1	8.805	-.0004	1.060	.0013	-.0002	.0054	.0483
#2	8.807	.0004	1.060	.0016	-.0006	.0052	.0481
#3	8.837	.0001	1.069	.0013	-.0008	.0053	.0481

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1114.5	2876.3	21968.	1479.9
Stddev	4.3	4.9	88.	13.4
%RSD	.38375	.16919	.40091	.90652
#1	1109.9	2870.7	21911.	1475.6
#2	1118.3	2879.5	21923.	1494.9
#3	1115.3	2878.6	22069.	1469.1

Zoom In Zoom Out

Sample Name: FA54239-2 Acquired: 5/17/2018 16:39:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0068	.0029	.1017	.0000	85.10	.0000	-.0003	.0162	-.0017
Stddev	.0004	.0026	.0013	.0004	.000	.20	.000	.0001	.0004	.0002
%RSD	99.27	37.49	44.17	.3796	884.4	.2314	45.69	23.00	2.716	10.31
#1	-.0009	.0039	.0043	.1017	-.0003	85.19	-.0001	-.0004	.0158	-.0019
#2	-.0003	.0083	.0019	.1021	.0002	85.24	-.0001	-.0003	.0166	-.0018
#3	-.0001	.0084	.0024	.1013	.0001	84.87	.0000	-.0003	.0162	-.0015

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0013	2.482	16.36	.0000	.0248	50.96	-.0003	.0018	.0008	.0028
Stddev	.0021	.024	.03	.000	.0002	.04	.0001	.0002	.0003	.0015
%RSD	158.0	.9516	.1796	108.8	.9751	.0720	50.39	10.49	32.64	52.26
#1	.0004	2.457	16.40	.0000	.0251	51.00	-.0001	.0020	.0011	.0045
#2	-.0007	2.504	16.35	.0000	.0247	50.97	-.0004	.0017	.0006	.0020
#3	-.0036	2.487	16.35	.0000	.0246	50.93	-.0003	.0016	.0008	.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.205	-.0006	1.090	.0013	.0001	.0057	.0113
Stddev	.016	.0003	.002	.0000	.0012	.0002	.0001
%RSD	.1715	50.50	.1455	2.144	1539.	4.085	.5616
#1	9.221	-.0007	1.091	.0013	-.0012	.0060	.0113
#2	9.189	-.0008	1.092	.0012	.0004	.0058	.0114
#3	9.205	-.0003	1.089	.0013	.0011	.0055	.0113

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1129.7	2908.4	22325.	1510.3
Stddev	2.8	6.2	32.	14.4
%RSD	.24561	.21168	.14360	.95406
#1	1127.8	2902.0	22298.	1496.6
#2	1128.5	2908.9	22360.	1509.1
#3	1132.9	2914.3	22317.	1525.4

Zoom In Zoom Out

Sample Name: FA54236-1 Acquired: 5/17/2018 16:44:15 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	4.961	.0018	.1500	.0000	66.77	.0030	.0052	.0272	.2090
Stddev	.0003	.026	.0010	.0006	.0000	.17	.0001	.0001	.0004	.0007
%RSD	2665.	.5296	51.94	.4271	183.5	.2609	2.628	1.914	1.584	.3411
#1	-.0004	4.991	.0016	.1508	.0000	66.92	.0030	.0051	.0267	.2097
#2	.0003	4.943	.0029	.1496	.0001	66.81	.0031	.0053	.0275	.2089
#3	.0001	4.948	.0010	.1498	.0000	66.58	.0029	.0052	.0274	.2083

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	9.124	11.42	4.676	.1707	.0274	21.30	.0226	.2044	.0125	.0026
Stddev	.041	.07	.028	.0013	.0001	.04	.0002	.0010	.0007	.0013
%RSD	.4540	.6387	.5969	.7811	.3308	.2001	.7991	.4684	5.603	48.72
#1	9.171	11.50	4.647	.1715	.0274	21.34	.0226	.2034	.0117	.0038
#2	9.104	11.38	4.703	.1691	.0274	21.26	.0228	.2052	.0126	.0027
#3	9.096	11.37	4.678	.1714	.0273	21.31	.0225	.2046	.0131	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.404	.0133	.2242	.0875	-.0005	.0116	1.389
Stddev	.055	.0004	.0012	.0015	.0012	.0002	.002
%RSD	2.305	3.237	.5140	1.667	213.6	2.049	.1178
#1	2.456	.0133	.2250	.0861	-.0019	.0116	1.389
#2	2.410	.0138	.2229	.0890	-.0002	.0113	1.387
#3	2.345	.0129	.2247	.0875	.0004	.0118	1.390

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1153.7	2972.0	22961.	1580.0
Stddev	.6	9.4	80.	10.7
%RSD	.05127	.31646	.34814	.67824
#1	1153.7	2961.6	22883.	1572.9
#2	1153.1	2974.5	23043.	1574.8
#3	1154.3	2979.9	22958.	1592.3

Zoom In Zoom Out

Sample Name: FA54236-2 Acquired: 5/17/2018 16:48:26 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	2.120	-.0001	.1147	-.0001	53.41	.0021	.0023	.0121	.0985
Stddev	.0002	.041	.0005	.0010	.0001	.15	.0000	.0001	.0003	.0003
%RSD	88.50	1.919	592.2	.8911	96.30	.2720	1.697	2.231	2.599	.3396
#1	-.0001	2.120	.0005	.1157	-.0001	53.35	.0020	.0023	.0118	.0982
#2	-.0003	2.162	-.0004	.1146	.0000	53.58	.0021	.0023	.0124	.0988
#3	-.0001	2.080	-.0004	.1137	-.0001	53.31	.0020	.0024	.0121	.0983

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.744	8.515	5.146	.0799	.0351	18.87	.0117	.0873	.0106	.0012
Stddev	.023	.056	.025	.0001	.0001	.06	.0002	.0001	.0010	.0013
%RSD	.6170	.6540	.4964	.1125	.2804	.2984	1.689	.1243	9.001	106.9
#1	3.736	8.558	5.121	.0798	.0352	18.87	.0115	.0872	.0097	.0025
#2	3.770	8.536	5.146	.0800	.0350	18.93	.0117	.0874	.0116	-.0001
#3	3.725	8.452	5.172	.0800	.0350	18.82	.0119	.0873	.0106	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.688	.0056	.1998	.0430	.0000	.0053	.6832
Stddev	.020	.0005	.0007	.0021	.0008	.0002	.0015
%RSD	1.182	9.507	.3615	4.988	1855.	2.952	.2184
#1	1.711	.0059	.2000	.0408	.0008	.0051	.6846
#2	1.678	.0059	.2004	.0431	-.0001	.0054	.6832
#3	1.674	.0050	.1990	.0450	-.0007	.0053	.6817

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1168.5	2985.9	23018.	1579.6
Stddev	1.2	11.1	30.	5.8
%RSD	.10079	.37119	.13034	.36834
#1	1167.4	2973.4	23052.	1575.0
#2	1168.3	2990.1	23001.	1586.1
#3	1169.8	2994.3	23000.	1577.5

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:52:40 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2437	43.42	1.866	2.063	2.119	43.34	1.982	1.973	2.166	2.068
Stddev	.0025	.34	.005	.005	.012	.32	.002	.004	.016	.010
%RSD	1.006	.7892	.2571	.2525	.5711	.7357	.1062	.1819	.7439	.4785
#1	.2410	43.74	1.865	2.066	2.127	43.56	1.980	1.972	2.164	2.060
#2	.2457	43.06	1.862	2.057	2.105	42.97	1.981	1.970	2.183	2.079
#3	.2446	43.47	1.871	2.067	2.125	43.47	1.984	1.977	2.151	2.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.38	40.91	40.21	2.019	1.956	43.22	1.870	1.961	1.903	1.875
Stddev	.26	.16	.26	.017	.008	.29	.007	.006	.004	.007
%RSD	.6387	.3844	.6485	.8404	.4042	.6741	.3835	.2914	.1925	.3542
#1	41.52	41.05	40.50	2.008	1.950	43.43	1.871	1.955	1.904	1.879
#2	41.07	40.74	40.01	2.038	1.953	42.89	1.863	1.966	1.899	1.867
#3	41.54	40.94	40.12	2.010	1.965	43.35	1.877	1.961	1.906	1.878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.454	1.846	2.155	2.074	1.964	2.008	1.948
Stddev	.006	.007	.012	.014	.005	.004	.003
%RSD	.2422	.3585	.5434	.6715	.2354	.2113	.1316
#1	2.457	1.848	2.161	2.066	1.959	2.005	1.946
#2	2.447	1.838	2.141	2.090	1.965	2.013	1.946
#3	2.458	1.851	2.162	2.066	1.968	2.007	1.950
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:52:40 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1104.0	2991.2	22949.	1620.3
Stddev	.6	7.5	147.	14.5
%RSD	.05813	.24916	.63880	.89551
#1	1103.7	2988.5	23059.	1605.2
#2	1104.7	2999.6	22782.	1634.2
#3	1103.6	2985.5	23006.	1621.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:56:38 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0105	.0002	.0000	.0001	.0047	.0000	.0001	.0003
Stddev	.0002	.0120	.0013	.0002	.0001	.0042	.0000	.0001	.0002
%RSD	164.0	114.4	684.4	3741.	63.35	91.18	88.19	98.55	53.89
#1	-.0001	-.0033	.0016	.0003	.0001	.0028	.0001	.0001	.0004
#2	-.0004	.0179	-.0008	-.0001	.0002	.0017	.0000	.0003	.0005
#3	.0001	.0168	-.0003	-.0002	.0001	.0095	.0000	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0176	.0289	.0316	.0001	F.0029	-.0780	-.0001	-.0008
Stddev	.0003	.0023	.0140	.0266	.0001	.0009	.0020	.0002	.0007
%RSD	23.60	13.17	48.28	84.26	109.0	30.33	2.504	318.9	93.42
#1	-.0012	.0202	.0195	.0489	.0002	.0038	-.0765	-.0002	-.0015
#2	-.0012	.0160	.0450	.0009	.0001	.0028	-.0772	.0002	-.0001
#3	-.0008	.0165	.0223	.0448	.0000	.0020	-.0802	-.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	F.0023	.0011	.0006	.0001	.0010	.0017	.0002	.0002
Stddev	.0007	.0009	.0004	.0002	.0000	.0001	.0003	.0002	.0000
%RSD	133.4	37.71	36.42	31.12	32.18	8.122	20.05	96.27	11.62
#1	.0011	.0033	.0015	.0007	.0002	.0011	.0019	.0003	.0002
#2	-.0002	.0016	.0008	.0004	.0001	.0010	.0019	.0002	.0002
#3	.0006	.0021	.0009	.0006	.0001	.0009	.0013	.0000	.0002
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:56:38 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1267.3	3111.5	24107.	1633.1
Stddev	1.5	4.6	43.	10.9
%RSD	.11570	.14705	.17815	.66872
#1	1266.7	3114.2	24057.	1635.5
#2	1266.3	3106.2	24130.	1621.1
#3	1269.0	3114.0	24133.	1642.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-MB1 Acquired: 5/17/2018 17:00:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0002	-.0015	.0004	-.0001	.0131	-.0001	-.0002	.0003	-.0013
Stddev	.0001	.0120	.0006	.0000	.0002	.0043	.0000	.0001	.0004	.0000
%RSD	53.14	5452.	40.16	13.87	183.1	32.54	31.16	55.85	139.2	3.190
#1	-.0003	-.0092	-.0017	.0004	-.0001	.0103	-.0001	-.0003	.0007	-.0012
#2	-.0002	-.0039	-.0020	.0003	-.0003	.0110	-.0001	-.0001	.0003	-.0013
#3	-.0001	.0137	-.0008	.0003	.0001	.0180	-.0001	-.0001	-.0001	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156	.0114	.0339	.0003	.0004	-.0687	-.0001	.0006	.0003	.0028
Stddev	.0037	.0150	.0241	.0000	.0002	.0101	.0002	.0003	.0005	.0012
%RSD	23.53	131.7	71.19	6.128	37.80	14.67	425.3	52.32	151.7	41.01
#1	.0167	.0093	.0111	.0002	.0006	-.0702	.0002	.0007	-.0002	.0036
#2	.0186	.0274	.0592	.0003	.0003	-.0580	-.0001	.0002	.0004	.0034
#3	.0115	-.0025	.0315	.0003	.0004	-.0780	-.0003	.0008	.0007	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0221	.0000	.0000	.0000	-.0006	-.0001	.0013
Stddev	.0003	.0003	.0000	.0001	.0005	.0001	.0001
%RSD	1.299	596.6	107.5	6855.	74.87	100.9	4.701
#1	.0219	.0001	.0001	.0001	-.0012	-.0003	.0013
#2	.0224	.0003	.0000	.0000	-.0003	-.0001	.0014
#3	.0219	-.0003	.0001	-.0001	-.0004	.0000	.0013
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33757-MB1 Acquired: 5/17/2018 17:00:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1249.8	3066.0	24015.	1593.6
Stddev	1.8	5.0	60.	5.8
%RSD	.14621	.16456	.25131	.36094
#1	1247.7	3060.3	23959.	1587.1
#2	1250.9	3069.6	24007.	1595.3
#3	1250.9	3068.2	24079.	1598.2

Zoom In Zoom Out

Sample Name: MP33757-B1 Acquired: 5/17/2018 17:05:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0498	29.30	1.878	2.146	.0556	27.50	.0502	.5094	.2243	.2668
Stddev	.0006	.34	.007	.015	.0005	.28	.0003	.0018	.0016	.0015
%RSD	1.185	1.168	.3819	.6917	.9570	1.021	.5677	.3583	.6953	.5483
#1	.0502	29.27	1.876	2.155	.0555	27.40	.0501	.5082	.2258	.2678
#2	.0492	28.97	1.885	2.129	.0551	27.28	.0505	.5115	.2245	.2652
#3	.0502	29.65	1.871	2.154	.0561	27.81	.0499	.5084	.2227	.2675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.10	25.51	25.47	.5107	.4664	27.04	.4955	.4884	.4855	1.861
Stddev	.16	.21	.15	.0011	.0017	.28	.0011	.0018	.0012	.009
%RSD	.5924	.8157	.5775	.2182	.3698	1.035	.2185	.3642	.2423	.4802
#1	27.04	25.61	25.49	.5119	.4651	26.95	.4946	.4870	.4844	1.856
#2	26.98	25.27	25.31	.5103	.4684	26.82	.4967	.4904	.4854	1.872
#3	27.29	25.65	25.60	.5098	.4658	27.35	.4952	.4879	.4867	1.856
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3775	.4587	.5377	.5086	1.920	.4851	.4966
Stddev	.0016	.0010	.0036	.0015	.007	.0021	.0014
%RSD	.4152	.2082	.6752	.2889	.3866	.4410	.2820
#1	.3758	.4587	.5373	.5103	1.911	.4869	.4953
#2	.3789	.4597	.5342	.5075	1.924	.4856	.4981
#3	.3777	.4578	.5415	.5081	1.924	.4827	.4964
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33757-B1 Acquired: 5/17/2018 17:05:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1125.9	2943.6	22763.	1557.1
Stddev	1.5	9.4	170.	8.9
%RSD	.13096	.31874	.74881	.57225
#1	1127.2	2942.8	22635.	1567.2
#2	1124.3	2934.6	22697.	1553.9
#3	1126.0	2953.3	22956.	1550.3

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54160-1 Acquired: 5/17/2018 17:09:16 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.0107	-.0007	.0086	-.0002	7.343	.0000	.0006	.0012
Stddev	.0001	.0095	.0004	.0003	.0001	.029	.000	.0001	.0003
%RSD	20.27	88.34	52.03	3.846	74.23	.3921	155.0	17.77	23.76
#1	-.0007	.0016	-.0005	.0087	-.0002	7.336	-.0001	.0006	.0010
#2	-.0007	.0206	-.0005	.0083	.0000	7.375	.0000	.0006	.0016
#3	-.0005	.0100	-.0011	.0089	-.0002	7.318	.0000	.0008	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0027	.0697	7.086	1.818	.0260	.0005	F162.6	.0056	.0006
Stddev	.0006	.0069	.043	.043	.0001	.0003	.8	.0002	.0008
%RSD	23.63	9.933	.6039	2.365	.2938	62.29	.5169	2.833	138.6
#1	.0034	.0776	7.135	1.846	.0259	.0006	163.2	.0057	.0004
#2	.0021	.0664	7.058	1.840	.0260	.0006	163.0	.0056	-.0001
#3	.0026	.0650	7.065	1.769	.0260	.0001	161.7	.0054	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0036	.1640	.0010	.0077	.0005	.0001	-.0004	.0618
Stddev	.0006	.0007	.0095	.0003	.0001	.0000	.0007	.0000	.0001
%RSD	72.24	19.15	5.773	32.09	.9552	6.680	896.4	10.68	.1855
#1	.0004	.0028	.1576	.0012	.0077	.0005	.0008	-.0003	.0618
#2	.0006	.0040	.1595	.0013	.0076	.0005	-.0005	-.0003	.0617
#3	.0016	.0039	.1749	.0007	.0078	.0006	.0000	-.0004	.0620

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1128.8	2926.7	22566.	1587.4
Stddev	3.4	4.7	72.	2.4
%RSD	.30306	.16037	.31958	.15362
#1	1125.1	2921.3	22577.	1587.6
#2	1129.4	2929.8	22490.	1589.8
#3	1131.8	2929.1	22633.	1584.9

Zoom In Zoom Out

Sample Name: MP33757-D1 Acquired: 5/17/2018 17:13:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0229	-.0010	.0085	-.0001	7.335	-.0001	.0005	.0012
Stddev	.0005	.0127	.0001	.0003	.0000	.012	.0000	.0001	.0006
%RSD	121.5	55.61	13.33	3.017	40.27	.1656	26.82	13.12	44.82
#1	-.0004	.0188	-.0011	.0086	-.0001	7.346	-.0001	.0006	.0010
#2	.0001	.0371	-.0008	.0086	.0000	7.336	-.0001	.0005	.0019
#3	-.0009	.0127	-.0009	.0082	-.0001	7.322	-.0001	.0005	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0028	.0585	7.079	1.822	.0259	.0002	F160.7	.0054	.0001
Stddev	.0004	.0021	.032	.043	.0001	.0000	.7	.0002	.0004
%RSD	13.94	3.593	.4532	2.336	.1991	3.988	.4498	3.365	397.7
#1	.0033	.0605	7.062	1.792	.0259	.0002	161.5	.0052	-.0003
#2	.0025	.0563	7.059	1.871	.0259	.0002	160.7	.0055	.0000
#3	.0027	.0587	7.116	1.802	.0258	.0002	160.1	.0056	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0015	.1581	.0013	.0075	.0002	-.0001	.0001	.0614
Stddev	.0014	.0019	.0045	.0003	.0001	.0001	.0012	.0003	.0002
%RSD	160.6	129.7	2.815	23.89	1.084	39.73	1506.	208.4	.2529
#1	.0025	.0033	.1632	.0014	.0076	.0003	-.0001	.0004	.0614
#2	-.0002	-.0004	.1556	.0015	.0075	.0001	.0012	.0001	.0612
#3	.0003	.0015	.1555	.0009	.0074	.0002	-.0013	-.0001	.0615

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1125.9	2936.9	22605.	1576.7
Stddev	4.1	3.3	42.	10.0
%RSD	.36120	.11339	.18413	.63496
#1	1121.3	2936.6	22557.	1572.1
#2	1128.8	2933.8	22622.	1588.2
#3	1127.7	2940.4	22635.	1569.9

Zoom In Zoom Out

Sample Name: MP33757-SD1 Acquired: 5/17/2018 17:17:50 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0033	.0332	.0007	.0083	-.0011	7.803	-.0007	-.0001	.0009	.0029
Stddev	.0011	.0787	.0039	.0009	.0008	.068	.0002	.0002	.0021	.0006
%RSD	34.19	237.2	584.5	11.10	74.25	.8730	22.99	286.6	223.4	19.15
#1	-.0033	-.0577	-.0005	.0076	-.0009	7.749	-.0008	.0002	.0010	.0025
#2	-.0022	.0786	.0050	.0094	-.0020	7.781	-.0005	-.0002	.0029	.0027
#3	-.0045	.0785	-.0025	.0080	-.0004	7.880	-.0007	-.0003	-.0012	.0035

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0625	7.321	1.921	.0277	-.0024	171.3	.0050	-.0003	.0065	.0037
Stddev	.0108	.074	.226	.0000	.0007	.5	.0005	.0026	.0036	.0047
%RSD	17.27	1.013	11.75	.0913	27.86	.3199	10.08	850.7	54.64	128.2
#1	.0503	7.281	1.662	.0277	-.0018	171.0	.0048	.0027	.0029	.0063
#2	.0667	7.276	2.028	.0277	-.0024	170.9	.0046	-.0015	.0100	-.0018
#3	.0706	7.407	2.074	.0277	-.0031	171.9	.0056	-.0021	.0067	.0064

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1645	.0021	.0087	-.0011	.0005	-.0016	.0661
Stddev	.0046	.0011	.0002	.0005	.0050	.0003	.0005
%RSD	2.806	50.34	1.836	45.76	1081.	21.17	.7131
#1	.1636	.0016	.0088	-.0006	.0055	-.0013	.0666
#2	.1694	.0014	.0085	-.0016	.0003	-.0015	.0658
#3	.1603	.0033	.0088	-.0010	-.0045	-.0020	.0658

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1201.0	3059.5	23252.	1581.1
Stddev	4.0	4.5	93.	9.5
%RSD	.32984	.14553	.40187	.60077
#1	1197.0	3055.6	23186.	1587.2
#2	1204.9	3064.3	23211.	1570.2
#3	1201.1	3058.7	23359.	1585.9

Zoom In Zoom Out

Sample Name: MP33757-S1 Acquired: 5/17/2018 17:22:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0501	28.65	1.837	2.067	.0539	33.66	.0478	.4842	.2186
Stddev	.0009	.20	.005	.012	.0004	.31	.0002	.0009	.0003
%RSD	1.790	.7000	.2896	.5583	.6790	.9253	.3619	.1816	.1526
#1	.0493	28.58	1.843	2.056	.0542	33.63	.0480	.4850	.2185
#2	.0499	28.49	1.832	2.066	.0535	33.36	.0477	.4844	.2183
#3	.0511	28.87	1.835	2.079	.0540	33.98	.0477	.4833	.2189

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2664	26.44	31.85	26.03	.5183	.4463	F180.6	.4734	.4740
Stddev	.0007	.18	.16	.18	.0014	.0008	.8	.0011	.0028
%RSD	.2747	.6690	.5063	.6836	.2688	.1759	.4595	.2278	.5864
#1	.2655	26.35	31.77	25.85	.5170	.4471	181.1	.4746	.4723
#2	.2668	26.33	31.75	26.02	.5182	.4465	179.6	.4732	.4772
#3	.2668	26.65	32.04	26.20	.5197	.4455	181.0	.4724	.4725

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4718	1.851	.4983	.4318	.5292	.4959	1.847	.4672	.5320
Stddev	.0024	.002	.0012	.0012	.0025	.0020	.002	.0014	.0009
%RSD	.5045	.1261	.2358	.2887	.4802	.4075	.1234	.2957	.1622
#1	.4743	1.853	.4987	.4327	.5293	.4939	1.847	.4676	.5330
#2	.4695	1.851	.4970	.4323	.5266	.4960	1.844	.4656	.5314
#3	.4717	1.848	.4992	.4304	.5316	.4979	1.849	.4682	.5316

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1091.9	2964.3	22551.	1606.5
Stddev	1.4	8.8	105.	12.0
%RSD	.13047	.29557	.46466	.74724
#1	1092.0	2955.2	22539.	1604.5
#2	1090.4	2964.9	22662.	1619.4
#3	1093.2	2972.7	22454.	1595.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-S2 Acquired: 5/17/2018 17:26:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0497	28.84	1.858	2.096	.0547	34.18	.0485	.4916	.2215
Stddev	.0002	.17	.004	.005	.0001	.16	.0001	.0006	.0022
%RSD	.3278	.5773	.2088	.2631	.1909	.4551	.1258	.1246	1.015
#1	.0495	28.77	1.853	2.092	.0549	34.01	.0484	.4909	.2197
#2	.0499	29.04	1.859	2.093	.0547	34.32	.0485	.4921	.2240
#3	.0497	28.73	1.860	2.102	.0547	34.19	.0486	.4918	.2207

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2688	26.78	32.33	26.37	.5220	.4552	F184.9	.4788	.4842
Stddev	.0008	.09	.04	.22	.0027	.0014	1.0	.0009	.0017
%RSD	.3050	.3490	.1318	.8482	.5154	.2966	.5403	.1781	.3477
#1	.2679	26.69	32.30	26.13	.5193	.4537	184.7	.4778	.4842
#2	.2695	26.88	32.30	26.41	.5246	.4563	186.0	.4794	.4825
#3	.2691	26.77	32.38	26.57	.5221	.4556	184.1	.4792	.4859

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4774	1.868	.5111	.4388	.5396	.5033	1.873	.4741	.5418
Stddev	.0034	.004	.0024	.0012	.0023	.0031	.005	.0003	.0003
%RSD	.7204	.2374	.4615	.2690	.4207	.6062	.2739	.0725	.0600
#1	.4735	1.863	.5113	.4382	.5376	.5005	1.868	.4737	.5414
#2	.4799	1.872	.5087	.4380	.5420	.5066	1.874	.4743	.5420
#3	.4787	1.870	.5134	.4401	.5392	.5027	1.878	.4744	.5418

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1088.6	2964.3	22572.	1594.7
Stddev	1.2	3.0	69.	4.2
%RSD	.11124	.10007	.30412	.26079
#1	1088.8	2963.7	22604.	1599.3
#2	1089.7	2961.7	22493.	1593.5
#3	1087.3	2967.5	22619.	1591.3

Zoom In Zoom Out

Sample Name: FA54190-1L Acquired: 5/17/2018 17:30:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0177	-.0014	.0569	-.0001	53.77	.0003	.0006	.0006
Stddev	.0005	.0031	.0019	.0005	.0002	.16	.0000	.0000	.0001
%RSD	145.3	17.66	130.8	.8344	195.9	.2975	15.53	6.243	19.49
#1	.0000	.0153	-.0031	.0567	-.0001	53.78	.0003	.0006	.0006
#2	-.0001	.0165	.0005	.0574	.0001	53.92	.0003	.0007	.0008
#3	-.0009	.0212	-.0017	.0565	-.0002	53.61	.0004	.0006	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0005	.0089	.7200	.5418	.0880	-.0002	F168.7	.0002	.0012
Stddev	.0001	.0045	.0178	.0225	.0003	.0001	1.0	.0002	.0003
%RSD	30.30	50.63	2.476	4.151	.3094	39.10	.5932	86.89	26.57
#1	-.0003	.0140	.7405	.5465	.0878	-.0001	168.8	.0002	.0016
#2	-.0006	.0052	.7121	.5617	.0883	-.0003	169.7	.0001	.0009
#3	-.0005	.0076	.7076	.5174	.0879	-.0003	167.7	.0004	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0017	.1563	.0000	.2033	.0012	.0010	.0000	.0177
Stddev	.0007	.0007	.0005	.000	.0003	.0001	.0016	.000	.0002
%RSD	75.48	39.85	.3377	325.7	.1583	9.185	156.1	675.2	.9022
#1	.0018	.0025	.1558	-.0002	.2035	.0013	.0012	-.0002	.0175
#2	.0004	.0012	.1561	.0001	.2035	.0011	-.0007	.0003	.0178
#3	.0007	.0014	.1568	-.0001	.2030	.0013	.0026	-.0003	.0178

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1108.8	2921.9	22307.	1565.9
Stddev	1.7	5.2	86.	5.6
%RSD	.15285	.17785	.38520	.35849
#1	1107.0	2916.3	22401.	1559.7
#2	1108.9	2926.5	22232.	1570.7
#3	1110.4	2922.9	22289.	1567.2

Zoom In Zoom Out

Sample Name: FA54165-1 Acquired: 5/17/2018 17:34:26 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.3596	-.0006	.0129	.0000	.6942	-.0001	.0003	.0013
Stddev	.0005	.0212	.0005	.0001	.0001	.0092	.0001	.0000	.0004
%RSD	123.2	5.899	81.50	.8826	881.9	1.329	60.81	14.62	29.39
#1	.0001	.3358	-.0007	.0129	.0000	.6838	-.0001	.0003	.0009
#2	-.0010	.3766	-.0010	.0129	.0001	.7016	.0000	.0003	.0012
#3	-.0004	.3663	-.0001	.0127	.0000	.6970	-.0001	.0004	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	1.090	.3767	.0993	.0188	-.0004	F164.4	.0024	.0000
Stddev	.0002	.005	.0106	.0277	.0001	.0001	.8	.0000	.0004
%RSD	66.86	.4333	2.806	27.91	.7319	12.25	.4998	1.251	1375.
#1	-.0004	1.094	.3650	.0699	.0188	-.0004	164.7	.0023	.0000
#2	-.0002	1.091	.3798	.1249	.0187	-.0005	165.1	.0024	.0004
#3	-.0001	1.085	.3855	.1031	.0189	-.0004	163.5	.0024	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0010	.0037	.1717	.0003	.0036	.0004	-.0012	.0000	.0066
Stddev	.0009	.0007	.0018	.0003	.0001	.0001	.0007	.000	.0000
%RSD	93.32	20.25	1.036	110.1	3.340	17.37	54.12	140.6	.6962
#1	.0021	.0042	.1713	-.0001	.0035	.0004	-.0009	.0000	.0066
#2	.0005	.0028	.1737	.0006	.0037	.0004	-.0008	.0000	.0065
#3	.0004	.0040	.1702	.0004	.0035	.0005	-.0020	-.0001	.0066

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1131.4	2958.3	22767.	1605.7
Stddev	3.2	6.8	34.	7.2
%RSD	.27865	.22885	.15131	.45037
#1	1133.9	2965.7	22737.	1599.6
#2	1127.9	2957.0	22761.	1603.9
#3	1132.6	2952.3	22805.	1613.7

Zoom In Zoom Out

Sample Name: FA54166-1 Acquired: 5/17/2018 17:38:45 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.2068	-.0013	.0095	-.0002	.4966	-.0001	.0000	.0007
Stddev	.0000	.0062	.0001	.0001	.0000	.0091	.0000	.000	.0005
%RSD	2.297	2.975	11.25	1.252	10.95	1.834	25.93	1090.	65.93
#1	-.0007	.2001	-.0012	.0094	-.0002	.4923	-.0001	-.0001	.0012
#2	-.0007	.2080	-.0013	.0096	-.0002	.5071	-.0001	.0001	.0002
#3	-.0007	.2123	-.0015	.0096	-.0002	.4905	-.0001	-.0001	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0041	.7856	.3469	.0486	.0131	-.0005	F160.2	.0010	.0003
Stddev	.0002	.0103	.0239	.0380	.0002	.0001	.8	.0000	.0005
%RSD	5.209	1.310	6.881	78.11	1.313	14.01	.5015	3.998	156.1
#1	.0040	.7784	.3199	.0048	.0132	-.0005	160.5	.0010	-.0002
#2	.0043	.7974	.3553	.0705	.0131	-.0004	160.8	.0010	.0009
#3	.0039	.7811	.3654	.0706	.0129	-.0005	159.3	.0010	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	.0018	.1459	.0001	.0025	-.0003	-.0008	-.0004	.0087
Stddev	.0004	.0010	.0012	.0002	.0000	.0002	.0003	.0002	.0001
%RSD	27.52	55.17	.8399	285.9	1.828	51.92	38.65	53.29	1.049
#1	.0017	.0015	.1448	.0002	.0025	-.0001	-.0006	-.0006	.0086
#2	.0010	.0029	.1472	.0002	.0025	-.0003	-.0007	-.0002	.0088
#3	.0012	.0010	.1458	-.0002	.0024	-.0004	-.0012	-.0005	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1137.3	2970.1	22685.	1601.3
Stddev	2.4	9.7	40.	4.6
%RSD	.21510	.32810	.17443	.28759
#1	1135.8	2960.2	22655.	1606.6
#2	1136.1	2970.4	22730.	1598.6
#3	1140.2	2979.6	22670.	1598.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 17:43:05 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2441	43.59	1.852	2.035	2.114	43.46	1.977	1.966	2.178	2.065
Stddev	.0007	.22	.009	.016	.013	.18	.002	.003	.010	.001
%RSD	.2762	.4991	.5145	.7914	.6045	.4087	.1006	.1703	.4686	.0283
#1	.2435	43.44	1.841	2.027	2.108	43.35	1.974	1.962	2.188	2.065
#2	.2449	43.49	1.855	2.025	2.106	43.36	1.978	1.967	2.168	2.065
#3	.2441	43.84	1.860	2.054	2.129	43.66	1.978	1.968	2.177	2.064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.63	40.59	40.18	2.027	1.949	42.68	1.863	1.964	1.893	1.868
Stddev	.12	.22	.31	.003	.006	.26	.004	.008	.008	.009
%RSD	.2983	.5446	.7800	.1279	.2865	.6095	.2253	.3857	.4002	.4779
#1	41.60	40.45	40.03	2.024	1.942	42.66	1.859	1.969	1.885	1.859
#2	41.53	40.47	39.97	2.027	1.951	42.43	1.867	1.955	1.900	1.871
#3	41.77	40.85	40.54	2.029	1.952	42.95	1.864	1.968	1.894	1.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.423	1.829	2.155	2.080	1.962	2.007	1.947
Stddev	.006	.006	.013	.002	.006	.004	.001
%RSD	.2652	.3505	.5891	.0746	.2936	.2199	.0273
#1	2.416	1.822	2.153	2.080	1.964	2.005	1.947
#2	2.428	1.835	2.144	2.082	1.956	2.003	1.947
#3	2.426	1.830	2.169	2.079	1.967	2.011	1.948
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 17:43:05 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1109.0	3016.5	22904.	1610.6
Stddev	2.0	4.2	46.	10.0
%RSD	.17643	.13811	.20173	.62230
#1	1106.8	3021.1	22851.	1618.5
#2	1110.7	3012.9	22935.	1599.4
#3	1109.4	3015.5	22925.	1614.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 17:47:03 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0085	-.0003	.0004	.0001	.0045	.0001	.0001	.0006
Stddev	.0002	.0158	.0017	.0002	.0001	.0046	.0000	.0000	.0001
%RSD	292.7	185.2	495.4	50.99	219.4	101.5	17.92	58.40	22.17
#1	-.0001	.0015	-.0006	.0003	.0001	.0001	.0001	.0000	.0005
#2	.0002	.0266	.0015	.0006	.0002	.0042	.0001	.0001	.0007
#3	.0000	-.0025	-.0019	.0002	-.0001	.0093	.0001	.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	.0220	.0043	.0416	.0001	F.0031	-.0327	.0001	-.0003
Stddev	.0002	.0056	.0202	.0228	.0000	.0008	.0080	.0001	.0003
%RSD	19.51	25.34	474.4	54.83	30.81	27.39	24.37	156.2	101.8
#1	-.0012	.0284	.0244	.0666	.0001	.0039	-.0359	.0000	-.0001
#2	-.0009	.0196	.0043	.0364	.0001	.0030	-.0236	.0000	-.0006
#3	-.0009	.0181	-.0159	.0219	.0002	.0023	-.0386	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0007	.0000	.0003	.0003	.0013	F.0021	.0002	.0003
Stddev	.0003	.0005	.000	.0002	.0001	.0002	.0002	.0000	.0000
%RSD	242.1	71.31	774.0	55.94	35.12	13.31	7.453	22.40	10.91
#1	-.0001	.0002	-.0001	.0001	.0003	.0015	.0023	.0001	.0003
#2	.0000	.0012	.0001	.0005	.0004	.0013	.0021	.0001	.0003
#3	.0005	.0007	-.0001	.0004	.0002	.0012	.0020	.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 17:47:03 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1265.4	3140.3	23851.	1613.7
Stddev	1.5	4.1	79.	9.5
%RSD	.11481	.12993	.32982	.58728
#1	1264.0	3140.2	23897.	1605.2
#2	1266.9	3136.3	23896.	1624.0
#3	1265.3	3144.4	23761.	1611.9

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54150-1L Acquired: 5/17/2018 17:51:21 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0072	-.0014	.0811	-.0001	81.68	.0000	-.0001	.0004
Stddev	.0004	.0132	.0010	.0003	.0002	.54	.000	.0001	.0004
%RSD	660.8	184.4	70.92	.3450	323.4	.6621	77.27	52.64	105.7
#1	-.0003	-.0068	-.0015	.0808	.0000	81.21	.0000	-.0001	.0003
#2	-.0003	.0087	-.0003	.0811	.0001	81.56	.0000	-.0002	.0008
#3	.0004	.0195	-.0023	.0813	-.0003	82.28	.0000	-.0001	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	.0021	.9168	3.410	.0707	.0003	F155.8	.0004	.0003
Stddev	.0002	.0033	.0263	.039	.0004	.0003	.7	.0002	.0007
%RSD	15.82	153.8	2.869	1.140	.5786	78.38	.4326	51.27	207.9
#1	-.0010	.0043	.8937	3.371	.0702	.0006	155.5	.0004	.0008
#2	-.0014	-.0016	.9112	3.410	.0711	.0003	155.3	.0006	.0008
#3	-.0012	.0036	.9454	3.448	.0707	.0001	156.6	.0002	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0027	.4578	.0000	.2223	.0017	.0000	.0009	.0028
Stddev	.0008	.0015	.0014	.0002	.0002	.0000	.001	.0002	.0001
%RSD	72.63	56.09	.3017	1025.	.0932	2.203	5070.	19.82	2.918
#1	.0005	.0045	.4574	.0002	.2221	.0018	-.0009	.0010	.0027
#2	.0019	.0015	.4566	.0001	.2222	.0017	-.0006	.0007	.0029
#3	.0008	.0022	.4593	-.0002	.2225	.0017	.0014	.0011	.0028

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1104.7	2915.3	22134.	1556.1
Stddev	4.4	1.9	32.	14.0
%RSD	.39403	.06600	.14435	.90279
#1	1101.1	2913.9	22164.	1568.7
#2	1103.5	2914.4	22137.	1558.7
#3	1109.5	2917.5	22100.	1541.0

Zoom In Zoom Out

Sample Name: FA54150-2L Acquired: 5/17/2018 17:55:37 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	-.0042	-.0019	.0881	-.0001	86.99	-.0001	-.0001	.0008
Stddev	.0004	.0079	.0004	.0003	.0001	.69	.0000	.0001	.0004
%RSD	89.91	188.9	19.99	.3065	89.03	.7883	14.24	228.9	47.20
#1	-.0009	-.0006	-.0018	.0878	-.0002	86.33	-.0001	-.0001	.0004
#2	-.0002	.0013	-.0022	.0884	-.0001	87.70	-.0001	-.0002	.0011
#3	-.0002	-.0133	-.0015	.0882	.0000	86.95	-.0001	.0001	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	-.0061	.8754	2.750	.0557	-.0002	F156.3	.0001	.0010
Stddev	.0004	.0037	.0203	.023	.0004	.0001	1.0	.0001	.0003
%RSD	29.22	59.99	2.324	.8426	.6757	54.74	.6540	107.1	33.42
#1	-.0009	-.0095	.8584	2.762	.0555	-.0001	155.5	.0000	.0013
#2	-.0016	-.0022	.8979	2.765	.0555	-.0002	157.5	.0002	.0011
#3	-.0012	-.0067	.8699	2.724	.0561	-.0003	156.1	.0002	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0025	.4699	-.0001	.1520	.0013	-.0013	.0005	.0013
Stddev	.0014	.0007	.0018	.0003	.0010	.0000	.0011	.0002	.0001
%RSD	137.1	28.64	.3879	314.3	.6792	2.036	84.20	43.01	7.714
#1	.0009	.0023	.4711	.0001	.1508	.0013	-.0011	.0008	.0012
#2	.0026	.0033	.4678	-.0004	.1527	.0013	-.0024	.0004	.0014
#3	-.0003	.0019	.4706	.0000	.1524	.0013	-.0003	.0004	.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1101.5	2918.4	22058.	1548.3
Stddev	2.2	7.6	62.	5.3
%RSD	.19764	.26177	.28117	.34051
#1	1101.8	2910.7	22115.	1550.8
#2	1099.2	2926.0	22066.	1542.3
#3	1103.5	2918.6	21992.	1551.9

Zoom In Zoom Out

Sample Name: FA54150-3L Acquired: 5/17/2018 17:59:53 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0027	-.0012	.0643	-.0001	83.30	-.0001	-.0002	.0038
Stddev	.0002	.0210	.0006	.0006	.0002	.70	.0000	.0001	.0003
%RSD	34.16	765.7	51.86	.9180	194.3	.8398	61.53	65.89	8.609
#1	-.0010	-.0170	-.0018	.0640	.0000	83.41	.0000	-.0002	.0041
#2	-.0005	.0248	-.0005	.0650	-.0004	83.94	-.0001	-.0001	.0035
#3	-.0006	.0004	-.0014	.0639	.0000	82.55	-.0001	-.0003	.0038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	-.0052	1.073	2.881	.0286	-.0002	F155.2	.0003	.0012
Stddev	.0003	.0032	.009	.062	.0002	.0001	1.5	.0000	.0006
%RSD	26.69	61.13	.8094	2.148	.6460	46.96	.9528	8.406	55.61
#1	-.0015	-.0068	1.077	2.931	.0284	-.0001	155.9	.0003	.0011
#2	-.0009	-.0073	1.063	2.900	.0286	-.0003	156.2	.0003	.0005
#3	-.0012	-.0015	1.079	2.812	.0287	-.0002	153.5	.0003	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0023	1.900	-.0001	.1969	.0012	-.0007	.0011	.0015
Stddev	.0003	.0007	.004	.0005	.0015	.0001	.0007	.0003	.0001
%RSD	33.96	32.15	.2040	329.8	.7760	10.74	105.1	29.40	4.314
#1	.0012	.0020	1.897	-.0003	.1973	.0012	-.0002	.0015	.0014
#2	.0010	.0031	1.899	.0004	.1981	.0014	-.0003	.0010	.0014
#3	.0006	.0017	1.904	-.0005	.1952	.0011	-.0015	.0008	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1103.8	2918.1	22145.	1578.3
Stddev	3.1	1.1	102.	11.6
%RSD	.28203	.03601	.46171	.73319
#1	1101.4	2918.7	22257.	1569.9
#2	1102.8	2916.9	22122.	1573.6
#3	1107.3	2918.7	22056.	1591.5

Zoom In Zoom Out

Sample Name: FA54150-4L Acquired: 5/17/2018 18:04:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.0000	-.0015	.0160	.0000	18.15	-.0001	.0000	.0036	-.0006
Stddev	.0004	.015	.0002	.0002	.0001	.05	.0001	.000	.0002	.0001
%RSD	73.03	50620.	13.04	1.558	658.1	.2964	68.15	667.6	4.302	22.33
#1	-.0009	.0033	-.0014	.0160	.0001	18.10	-.0001	.0001	.0035	-.0008
#2	-.0006	-.0159	-.0018	.0162	.0000	18.20	-.0001	.0000	.0038	-.0006
#3	-.0001	.0125	-.0015	.0157	.0000	18.16	.0000	-.0001	.0035	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0343	1.266	3.010	.0069	.0014	16.49	.0001	.0005	.0008	.0007
Stddev	.0035	.013	.047	.0001	.0001	.08	.0000	.0007	.0012	.0022
%RSD	10.19	1.055	1.565	1.600	9.664	.4770	7.351	149.2	138.4	327.7
#1	.0303	1.260	3.054	.0070	.0015	16.48	.0001	.0013	.0010	.0019
#2	.0368	1.257	2.961	.0068	.0013	16.57	.0001	.0000	-.0004	-.0018
#3	.0358	1.281	3.016	.0068	.0013	16.41	.0001	.0001	.0019	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7951	-.0001	.1644	.0006	-.0005	.0012	.0036
Stddev	.0026	.0000	.0003	.0001	.0009	.0001	.0001
%RSD	.3287	21.27	.1874	22.14	178.1	11.36	2.257
#1	.7922	-.0001	.1641	.0008	.0005	.0010	.0036
#2	.7960	-.0001	.1647	.0007	-.0013	.0013	.0037
#3	.7972	-.0001	.1644	.0005	-.0007	.0011	.0036

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1211.6	3032.5	23491.	1591.9
Stddev	4.9	7.7	188.	14.3
%RSD	.40827	.25381	.80237	.89632
#1	1206.0	3026.5	23289.	1575.6
#2	1213.6	3029.7	23662.	1598.7
#3	1215.2	3041.1	23521.	1601.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54150-5L Acquired: 5/17/2018 18:08:27 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0278	-.0011	.0170	-.0001	50.05	-.0001	-.0001	.0052	-.0007
Stddev	.0003	.0063	.0006	.0004	.0001	.30	.0001	.0001	.0004	.0002
%RSD	104.0	22.73	57.96	2.414	162.8	.6067	61.00	54.73	8.046	35.10
#1	-.0006	.0293	-.0013	.0168	-.0002	49.86	.0000	-.0001	.0056	-.0007
#2	-.0004	.0208	-.0004	.0175	.0000	50.40	-.0002	-.0001	.0053	-.0009
#3	.0000	.0332	-.0016	.0169	.0000	49.88	-.0001	-.0002	.0048	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0058	1.758	7.098	.0104	.0018	17.19	-.0001	.0009	.0008	.0031
Stddev	.0028	.019	.028	.0001	.0002	.09	.0001	.0009	.0012	.0012
%RSD	48.84	1.101	.3972	.8530	9.382	.5325	126.2	104.7	155.8	39.87
#1	.0033	1.737	7.102	.0105	.0017	17.12	-.0001	.0019	-.0006	.0019
#2	.0089	1.775	7.123	.0104	.0020	17.30	-.0001	.0006	.0017	.0029
#3	.0052	1.761	7.068	.0104	.0017	17.17	.0000	.0001	.0012	.0044

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7871	.0001	.3403	.0010	.0000	.0006	.0016
Stddev	.0005	.0003	.0022	.0001	.001	.0003	.0001
%RSD	.0661	494.6	.6421	7.767	1910.	49.01	4.759
#1	.7871	-.0002	.3399	.0010	.0008	.0008	.0015
#2	.7865	.0001	.3427	.0011	-.0005	.0008	.0017
#3	.7876	.0003	.3384	.0009	-.0005	.0003	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1185.9	3002.4	23234.	1605.8
Stddev	3.4	7.8	157.	8.2
%RSD	.28924	.26022	.67636	.51363
#1	1182.2	2994.1	23159.	1613.8
#2	1189.0	3009.6	23414.	1597.4
#3	1186.4	3003.5	23128.	1606.1

Zoom In Zoom Out

Sample Name: FA54199-1 Acquired: 5/17/2018 18:12:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.4129	-.0023	.7423	.0000	186.3	-.0001	-.0002	.0003	-.0014
Stddev	.0002	.0110	.0007	.0012	.000	.6	.0001	.0001	.0003	.0003
%RSD	48.68	2.658	28.58	.1582	268.2	.3248	75.47	56.53	107.8	18.14
#1	-.0007	.4013	-.0019	.7427	.0000	185.8	-.0002	-.0003	-.0001	-.0016
#2	-.0003	.4143	-.0031	.7410	.0000	187.0	-.0001	-.0001	.0005	-.0015
#3	-.0004	.4232	-.0020	.7432	-.0001	186.1	.0000	-.0004	.0004	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0025	16.77	.0166	.0001	-.0008	48.52	-.0003	.0010	.0010	.0025
Stddev	.0030	.05	.0414	.0001	.0002	.13	.0001	.0004	.0002	.0011
%RSD	122.7	.2865	249.8	74.98	22.02	.2778	23.98	42.82	22.39	44.12
#1	.0006	16.80	.0626	.0001	-.0010	48.49	-.0002	.0006	.0008	.0018
#2	-.0025	16.78	-.0179	.0000	-.0006	48.66	-.0003	.0009	.0012	.0019
#3	-.0055	16.71	.0051	.0001	-.0008	48.39	-.0003	.0015	.0009	.0038

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0811	.0001	.8257	.0013	-.0007	.0002	.0006
Stddev	.0008	.0003	.0015	.0001	.0003	.0003	.0000
%RSD	.9378	482.6	.1803	8.577	42.25	160.4	1.333
#1	.0820	.0001	.8245	.0013	-.0008	-.0001	.0006
#2	.0805	-.0002	.8252	.0014	-.0004	.0003	.0006
#3	.0809	.0003	.8273	.0012	-.0009	.0004	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1109.3	2892.7	22402.	1599.2
Stddev	1.1	6.9	57.	12.9
%RSD	.10344	.23708	.25530	.80497
#1	1108.1	2894.1	22374.	1607.6
#2	1109.4	2885.2	22467.	1584.4
#3	1110.4	2898.7	22363.	1605.6

Zoom In Zoom Out

Sample Name: FA54116-1 Acquired: 5/17/2018 18:17:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0506	-.0019	.5690	-.0001	257.1	-.0001	-.0002	.0009	-.0010
Stddev	.0003	.0311	.0008	.0018	.0000	1.1	.0000	.0001	.0003	.0002
%RSD	90.35	61.39	44.36	.3099	45.12	.4173	17.00	46.84	36.87	23.54
#1	-.0001	.0830	-.0012	.5705	-.0001	256.1	-.0001	-.0002	.0013	-.0009
#2	-.0002	.0211	-.0028	.5671	-.0001	257.1	-.0001	-.0001	.0008	-.0012
#3	-.0006	.0476	-.0017	.5695	-.0001	258.2	-.0001	-.0002	.0006	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0053	2.170	.0290	.0000	-.0003	9.361	-.0003	.0008	.0007	.0052
Stddev	.0044	.029	.0445	.0001	.0002	.043	.0001	.0005	.0011	.0009
%RSD	82.77	1.318	153.5	587.0	78.87	.4605	27.29	68.54	150.1	16.37
#1	-.0002	2.166	-.0206	.0001	-.0002	9.320	-.0004	.0013	.0006	.0052
#2	-.0079	2.144	.0655	-.0001	-.0001	9.356	-.0003	.0008	-.0003	.0044
#3	-.0078	2.200	.0421	.0000	-.0006	9.406	-.0002	.0002	.0019	.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0857	.0001	.3577	.0011	-.0007	-.0003	.0016
Stddev	.0040	.0001	.0008	.0000	.0011	.0002	.0000
%RSD	4.715	74.01	.2361	4.137	152.5	83.25	1.637
#1	.0844	.0000	.3569	.0012	-.0020	.0000	.0016
#2	.0824	.0001	.3576	.0011	.0002	-.0004	.0015
#3	.0902	.0001	.3586	.0011	-.0005	-.0003	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1109.3	2886.1	22279.	1569.4
Stddev	2.2	6.8	27.	8.6
%RSD	.19629	.23586	.11961	.54838
#1	1107.4	2882.7	22260.	1572.2
#2	1111.7	2881.7	22268.	1559.8
#3	1108.8	2894.0	22309.	1576.3

Zoom In Zoom Out

Sample Name: FA54233-1L Acquired: 5/17/2018 18:21:18 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0027	-.0018	.0612	-.0001	80.42	.0001	-.0001	.0006
Stddev	.0005	.0137	.0010	.0007	.0001	.57	.0000	.0000	.0002
%RSD	97.01	514.8	55.28	1.121	127.6	.7111	59.98	29.40	26.22
#1	.0000	-.0130	-.0028	.0604	-.0001	79.83	.0001	-.0001	.0005
#2	-.0006	.0121	-.0008	.0617	-.0002	80.45	.0001	-.0001	.0008
#3	-.0009	.0089	-.0018	.0615	.0000	80.97	.0000	-.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0011	-.0026	.3013	.3114	.0077	-.0009	F154.8	-.0003	.0004
Stddev	.0002	.0006	.0220	.0320	.0001	.0001	1.0	.0004	.0004
%RSD	15.18	23.18	7.301	10.27	.7915	15.47	.6527	141.6	93.90
#1	-.0011	-.0027	.2832	.2840	.0077	-.0007	153.7	-.0007	.0007
#2	-.0009	-.0032	.2950	.3037	.0078	-.0009	155.5	.0000	.0006
#3	-.0012	-.0020	.3258	.3465	.0077	-.0010	155.3	-.0001	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0026	.0837	.0001	.1712	.0013	-.0003	.0000	.0156
Stddev	.0008	.0011	.0034	.0003	.0014	.0000	.0007	.000	.0000
%RSD	215.2	40.41	4.014	529.5	.8203	1.722	260.5	1843.	.2095
#1	.0004	.0014	.0876	-.0001	.1696	.0013	-.0011	.0000	.0157
#2	-.0004	.0035	.0819	-.0001	.1717	.0013	.0002	.0002	.0156
#3	.0011	.0030	.0816	.0004	.1723	.0012	.0001	-.0002	.0157

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1106.8	2926.5	22199.	1567.4
Stddev	2.2	10.4	124.	15.3
%RSD	.20113	.35578	.55881	.97344
#1	1108.0	2918.5	22337.	1576.6
#2	1108.2	2938.3	22095.	1575.8
#3	1104.2	2922.6	22166.	1549.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-D2 Acquired: 5/17/2018 18:25:36 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0060	-.0009	.0084	-.0001	7.298	-.0001	.0006	.0009
Stddev	.0001	.0152	.0006	.0001	.0003	.051	.0000	.0002	.0001
%RSD	16.27	252.1	66.24	.7078	287.9	.7049	26.21	28.92	17.42
#1	-.0004	-.0115	-.0016	.0084	-.0002	7.269	-.0001	.0006	.0007
#2	-.0005	.0149	-.0004	.0084	-.0002	7.358	-.0001	.0004	.0009
#3	-.0004	.0146	-.0007	.0083	.0002	7.268	-.0002	.0007	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0022	.0491	6.626	1.634	.0255	-.0002	F 158.6	.0051	-.0002
Stddev	.0001	.0029	.037	.013	.0003	.0002	.7	.0000	.0003
%RSD	5.031	5.825	.5613	.7636	1.164	122.0	.4395	.9429	142.8
#1	.0023	.0495	6.616	1.639	.0252	-.0002	158.8	.0051	-.0005
#2	.0022	.0518	6.667	1.644	.0258	-.0004	159.1	.0051	.0001
#3	.0021	.0461	6.595	1.620	.0254	.0001	157.8	.0052	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0031	.1484	.0009	.0076	.0001	-.0012	.0000	.0604
Stddev	.0005	.0007	.0006	.0003	.0001	.0001	.0003	.0005	.0002
%RSD	59.36	22.96	.3832	33.04	1.795	115.4	26.49	3779.	.3839
#1	.0013	.0024	.1480	.0012	.0074	.0002	-.0016	-.0002	.0606
#2	.0005	.0038	.1482	.0009	.0076	.0001	-.0009	-.0004	.0601
#3	.0005	.0029	.1491	.0006	.0077	.0000	-.0011	.0006	.0604

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1126.8	2949.4	22436.	1581.0
Stddev	1.7	6.0	109.	5.2
%RSD	.14813	.20321	.48511	.33084
#1	1125.7	2942.8	22537.	1578.5
#2	1126.0	2951.0	22321.	1577.4
#3	1128.7	2954.5	22451.	1587.0

Zoom In Zoom Out

Sample Name: MP33757-D3 Acquired: 5/17/2018 18:29:54 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.4022	-.0018	.7382	.0000	187.2	-.0001	-.0001	.0004	-.0014
Stddev	.0003	.0178	.0005	.0038	.000	.5	.0000	.0000	.0001	.0003
%RSD	124.6	4.417	25.31	.5083	66.61	.2429	15.07	33.49	29.86	19.80
#1	.0001	.4153	-.0023	.7416	.0000	187.5	-.0001	-.0002	.0005	-.0013
#2	-.0004	.3820	-.0014	.7387	.0000	187.5	-.0001	-.0001	.0004	-.0012
#3	-.0005	.4093	-.0017	.7342	-.0001	186.7	-.0001	-.0001	.0003	-.0017

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0011	16.70	.0196	.0000	-.0007	48.23	-.0003	.0005	.0016	.0005
Stddev	.0019	.06	.0108	.0000	.0001	.18	.0002	.0008	.0008	.0011
%RSD	173.1	.3713	54.87	226.3	7.903	.3789	74.62	167.2	52.73	212.2
#1	-.0024	16.74	.0280	.0000	-.0006	48.41	-.0002	.0013	.0020	-.0007
#2	-.0020	16.73	.0234	.0000	-.0007	48.23	-.0006	.0006	.0006	.0011
#3	.0011	16.63	.0075	.0001	-.0008	48.05	-.0002	-.0004	.0021	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0803	-.0002	.8248	.0011	-.0019	.0001	.0018
Stddev	.0011	.0002	.0014	.0001	.0004	.0002	.0000
%RSD	1.423	107.3	.1732	6.501	23.45	297.8	1.711
#1	.0795	-.0005	.8265	.0012	-.0019	.0002	.0018
#2	.0816	.0000	.8240	.0012	-.0023	-.0002	.0018
#3	.0798	-.0001	.8240	.0010	-.0014	.0002	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1108.2	2890.0	22226.	1580.0
Stddev	1.5	4.6	47.	5.4
%RSD	.13942	.16076	.21106	.34310
#1	1107.0	2886.9	22173.	1580.5
#2	1109.9	2887.9	22264.	1574.3
#3	1107.7	2895.4	22240.	1585.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 18:34:11 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2412	43.44	1.842	2.053	2.116	43.47	1.968	1.957	2.165	2.049
Stddev	.0013	.27	.004	.014	.013	.34	.003	.003	.009	.003
%RSD	.5362	.6143	.2455	.6999	.6275	.7856	.1572	.1488	.4353	.1386
#1	.2426	43.28	1.839	2.043	2.108	43.28	1.964	1.954	2.176	2.047
#2	.2410	43.75	1.847	2.070	2.132	43.87	1.970	1.959	2.160	2.052
#3	.2400	43.30	1.841	2.047	2.109	43.27	1.969	1.957	2.159	2.048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.37	40.75	40.16	2.001	1.938	42.77	1.852	1.954	1.875	1.853
Stddev	.20	.33	.46	.014	.005	.28	.004	.005	.003	.010
%RSD	.4727	.7980	1.144	.7037	.2639	.6521	.2297	.2736	.1654	.5294
#1	41.24	40.64	39.89	2.017	1.932	42.74	1.848	1.951	1.874	1.849
#2	41.60	41.11	40.69	1.997	1.939	43.06	1.851	1.951	1.879	1.847
#3	41.28	40.49	39.90	1.990	1.942	42.51	1.857	1.960	1.873	1.865
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.405	1.820	2.151	2.056	1.949	1.994	1.942
Stddev	.004	.003	.011	.009	.007	.004	.004
%RSD	.1561	.1817	.5083	.4485	.3542	.2079	.1998
#1	2.401	1.817	2.145	2.064	1.948	1.998	1.938
#2	2.409	1.824	2.163	2.058	1.943	1.990	1.943
#3	2.404	1.820	2.144	2.046	1.957	1.993	1.946
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 18:34:11 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1108.9	3018.4	23025.	1615.8
Stddev	3.0	4.8	128.	24.0
%RSD	.27025	.15848	.55436	1.4836
#1	1109.6	3023.8	22879.	1627.8
#2	1111.6	3015.0	23085.	1588.2
#3	1105.7	3016.3	23112.	1631.4

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 18:38:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0138	.0001	.0006	.0001	.0075	.0001	.0000	.0006
Stddev	.0003	.0076	.0008	.0002	.0000	.0041	.0001	.0001	.0001
%RSD	48.91	54.89	578.5	41.03	34.00	55.26	56.79	314.4	14.03
#1	-.0006	.0054	.0004	.0008	.0001	.0115	.0002	.0000	.0006
#2	-.0009	.0200	.0007	.0003	.0001	.0032	.0001	.0001	.0006
#3	-.0003	.0160	-.0007	.0007	.0001	.0077	.0001	.0000	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0013	.0240	.0376	.0419	.0001	F.0032	-.0381	-.0002	.0001
Stddev	.0002	.0052	.0314	.0269	.0000	.0011	.0125	.0002	.0003
%RSD	15.31	21.69	83.61	64.13	33.59	34.58	32.69	139.3	272.5
#1	-.0011	.0299	.0413	.0594	.0002	.0044	-.0239	-.0004	.0003
#2	-.0014	.0215	.0045	.0555	.0002	.0032	-.0470	-.0001	.0002
#3	-.0015	.0204	.0670	.0110	.0001	.0021	-.0435	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0011	.0001	.0004	.0003	.0015	.0015	.0000	.0002
Stddev	.0006	.0009	.0004	.0002	.0001	.0001	.0002	.0001	.0000
%RSD	66.96	84.68	252.6	44.42	30.68	6.453	12.18	203.6	14.52
#1	.0003	.0021	.0005	.0005	.0003	.0015	.0017	.0000	.0002
#2	.0008	.0010	.0002	.0004	.0003	.0016	.0015	.0002	.0002
#3	.0014	.0002	-.0002	.0002	.0005	.0014	.0013	.0000	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 18:38:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1261.1	3139.4	23560.	1596.2
Stddev	1.2	6.1	100.	16.1
%RSD	.09617	.19451	.42595	1.0101
#1	1262.4	3146.0	23514.	1579.0
#2	1260.1	3138.1	23492.	1611.0
#3	1260.9	3134.0	23676.	1598.4

Zoom In Zoom Out

Sample Name: MP33757-D4 Acquired: 5/17/2018 18:42:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.0167	-.0009	.0817	.0000	81.59	.0000	-.0001	.0010
Stddev	.0005	.0016	.0002	.0008	.000	.29	.000	.0001	.0006
%RSD	84.37	9.286	17.72	.9791	766.6	.3561	70.30	61.91	56.74
#1	-.0001	.0151	-.0010	.0810	.0001	81.35	.0000	-.0001	.0004
#2	-.0012	.0168	-.0010	.0825	.0000	81.91	-.0001	-.0001	.0015
#3	-.0006	.0182	-.0007	.0815	-.0001	81.50	.0000	-.0002	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0008	.0018	.9138	3.370	.0714	.0004	F156.2	.0002	.0003
Stddev	.0002	.0039	.0208	.034	.0003	.0001	.2	.0001	.0001
%RSD	24.63	218.8	2.276	1.009	.3941	36.07	.1554	43.74	32.41
#1	-.0008	.0017	.8900	3.350	.0717	.0004	156.1	.0003	.0004
#2	-.0010	.0058	.9286	3.410	.0713	.0005	156.5	.0002	.0002
#3	-.0006	-.0021	.9228	3.351	.0712	.0002	156.0	.0001	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0000	.0025	.4646	-.0001	.2241	.0018	-.0001	.0009	.0025
Stddev	.0003	.0016	.0014	.0002	.0009	.0001	.0015	.0001	.0001
%RSD	760.4	65.00	.3099	128.7	.3847	3.135	1035.	12.55	3.827
#1	.0003	.0041	.4652	-.0003	.2237	.0017	-.0004	.0010	.0026
#2	.0002	.0010	.4656	.0000	.2251	.0018	-.0015	.0008	.0025
#3	-.0003	.0023	.4629	-.0001	.2235	.0018	.0015	.0008	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1099.6	2898.9	22177.	1571.5
Stddev	5.0	4.6	56.	14.9
%RSD	.45563	.15821	.25083	.94895
#1	1093.8	2893.9	22115.	1585.9
#2	1102.0	2900.0	22197.	1556.1
#3	1103.0	2902.9	22220.	1572.5

Zoom In Zoom Out

Sample Name: MP33757-MB2 Acquired: 5/17/2018 18:46:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	-.0011	-.0008	.0000	-.0002	.0128	-.0001	-.0001	.0002	-.0012
Stddev	.0001	.0193	.0013	.001	.0001	.0044	.0000	.0001	.0001	.0002
%RSD	9.523	1691.	162.0	2020.	38.78	34.00	23.57	103.9	35.42	17.88
#1	-.0007	.0212	.0007	.0005	-.0002	.0133	-.0001	-.0002	.0002	-.0010
#2	-.0008	-.0129	-.0017	-.0002	-.0002	.0169	-.0001	.0000	.0002	-.0011
#3	-.0009	-.0117	-.0014	-.0004	-.0001	.0082	-.0001	-.0001	.0003	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0048	.0182	.0383	.0000	-.0003	-.0044	-.0002	-.0005	.0005	.0012
Stddev	.0012	.0132	.0044	.000	.0001	.0060	.0002	.0005	.0005	.0003
%RSD	24.86	72.36	11.48	152.8	22.19	137.5	133.0	98.52	99.82	23.20
#1	-.0036	.0033	.0430	-.0001	-.0004	.0026	.0000	.0000	.0001	.0010
#2	-.0060	.0282	.0342	.0000	-.0003	-.0076	-.0004	-.0004	.0011	.0015
#3	-.0047	.0231	.0377	.0000	-.0004	-.0081	-.0001	-.0010	.0004	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0198	.0001	.0001	-.0003	-.0006	-.0002	.0012
Stddev	.0006	.0001	.0001	.0000	.0007	.0000	.0001
%RSD	2.940	92.19	108.4	19.03	118.3	17.08	8.636
#1	.0197	.0000	.0000	-.0002	-.0010	-.0002	.0011
#2	.0192	.0001	.0000	-.0002	.0002	-.0002	.0013
#3	.0204	.0003	.0003	-.0003	-.0011	-.0002	.0012
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-MB2 Acquired: 5/17/2018 18:46:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1258.7	3122.3	23731.	1597.2
Stddev	5.4	12.9	98.	13.3
%RSD	.42727	.41249	.41468	.83227
#1	1253.0	3107.5	23800.	1583.2
#2	1263.7	3131.4	23774.	1609.7
#3	1259.4	3127.9	23618.	1598.8

Zoom In Zoom Out

Sample Name: MP33757-B2 Acquired: 5/17/2018 18:51:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0490	28.97	1.797	2.068	.0545	27.21	.0485	.4915	.2214	.2611
Stddev	.0001	.19	.003	.009	.0003	.18	.0001	.0002	.0010	.0008
%RSD	.1897	.6429	.1850	.4560	.4824	.6521	.2722	.0379	.4393	.3111
#1	.0489	28.96	1.795	2.059	.0547	27.22	.0485	.4914	.2223	.2620
#2	.0490	29.15	1.801	2.078	.0545	27.39	.0483	.4914	.2204	.2604
#3	.0491	28.78	1.796	2.068	.0542	27.03	.0486	.4917	.2215	.2607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.65	24.93	24.84	.5000	.4516	26.53	.4746	.4726	.4665	1.799
Stddev	.13	.12	.07	.0040	.0004	.14	.0003	.0026	.0012	.004
%RSD	.4977	.4679	.2793	.7960	.0869	.5196	.0528	.5458	.2472	.2165
#1	26.60	24.93	24.81	.5044	.4515	26.55	.4748	.4756	.4676	1.797
#2	26.80	25.04	24.79	.4968	.4512	26.65	.4743	.4717	.4667	1.796
#3	26.55	24.81	24.92	.4988	.4520	26.38	.4748	.4707	.4653	1.803
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3586	.4372	.5285	.5014	1.861	.4707	.4794
Stddev	.0015	.0009	.0023	.0019	.003	.0019	.0006
%RSD	.4125	.2065	.4412	.3788	.1679	.3992	.1334
#1	.3594	.4362	.5280	.5033	1.864	.4728	.4801
#2	.3569	.4380	.5310	.4995	1.858	.4696	.4791
#3	.3594	.4375	.5265	.5014	1.862	.4696	.4789
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33757-B2 Acquired: 5/17/2018 18:51:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1143.2	3010.7	22824.	1561.7
Stddev	3.6	4.4	117.	8.1
%RSD	.31878	.14752	.51274	.51582
#1	1139.7	3006.9	22689.	1565.4
#2	1143.0	3009.8	22889.	1552.4
#3	1146.9	3015.6	22894.	1567.2

Zoom In Zoom Out

Sample Name: MP33757-MB3 Acquired: 5/17/2018 18:55:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0044	-.0015	.0001	-.0001	.0046	-.0001	-.0002	.0002	-.0014
Stddev	.0001	.0169	.0003	.0001	.0001	.0056	.0000	.0001	.0003	.0003
%RSD	32.15	384.0	16.83	67.95	187.1	121.2	19.86	32.65	148.5	19.46
#1	-.0003	.0136	-.0016	.0001	.0001	.0108	-.0001	-.0002	.0002	-.0016
#2	-.0002	-.0199	-.0012	.0003	-.0001	-.0002	-.0001	-.0002	-.0001	-.0011
#3	-.0002	-.0069	-.0016	.0001	-.0002	.0033	-.0001	-.0001	.0006	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071	-.0045	.0362	.0000	-.0001	-.0444	-.0003	.0001	.0010	.0011
Stddev	.0011	.0137	.0294	.000	.0001	.0066	.0001	.0008	.0011	.0015
%RSD	15.61	306.1	81.25	336.4	223.4	14.94	23.10	1000.	103.6	136.0
#1	.0064	.0033	.0681	.0000	.0001	-.0368	-.0003	.0004	.0012	.0017
#2	.0084	.0036	.0303	.0000	-.0001	-.0484	-.0004	-.0008	.0020	.0023
#3	.0066	-.0203	.0102	.0000	-.0002	-.0481	-.0003	.0006	-.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0193	-.0003	.0000	-.0001	.0000	.0000	.0011
Stddev	.0003	.0002	.0000	.0001	.0009	.000	.0001
%RSD	1.354	71.52	35.54	83.60	17120.	1047.	9.286
#1	.0190	-.0001	.0000	.0000	.0004	.0001	.0009
#2	.0194	-.0002	.0001	-.0001	.0006	-.0005	.0011
#3	.0194	-.0005	.0000	-.0001	-.0010	.0003	.0011
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33757-MB3 Acquired: 5/17/2018 18:55:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1255.4	3094.6	23800.	1600.8
Stddev	1.1	3.9	37.	10.6
%RSD	.08745	.12501	.15364	.66072
#1	1255.4	3090.3	23793.	1611.9
#2	1254.3	3095.8	23840.	1599.9
#3	1256.5	3097.8	23768.	1590.8

Zoom In Zoom Out

Sample Name: MP33757-B3 Acquired: 5/17/2018 18:59:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0495	29.04	1.859	2.108	.0548	27.36	.0497	.5031	.2235	.2631
Stddev	.0001	.07	.004	.003	.0003	.06	.0001	.0010	.0010	.0009
%RSD	.1701	.2538	.1941	.1375	.5826	.2352	.2975	.1994	.4309	.3561
#1	.0494	29.07	1.855	2.110	.0548	27.33	.0495	.5020	.2225	.2621
#2	.0496	28.95	1.859	2.110	.0552	27.32	.0498	.5035	.2244	.2635
#3	.0495	29.09	1.862	2.105	.0546	27.43	.0498	.5039	.2236	.2638
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.87	25.24	25.28	.5063	.4631	26.63	.4895	.4836	.4797	1.839
Stddev	.07	.07	.06	.0035	.0014	.10	.0011	.0007	.0025	.005
%RSD	.2473	.2595	.2192	.6982	.3000	.3620	.2238	.1372	.5300	.2746
#1	26.80	25.30	25.23	.5023	.4615	26.71	.4883	.4843	.4796	1.835
#2	26.87	25.17	25.34	.5091	.4641	26.52	.4901	.4831	.4772	1.836
#3	26.93	25.24	25.27	.5073	.4636	26.66	.4902	.4833	.4823	1.845
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3711	.4566	.5338	.5075	1.904	.4795	.4931
Stddev	.0006	.0017	.0008	.0039	.007	.0012	.0017
%RSD	.1517	.3627	.1533	.7742	.3519	.2515	.3476
#1	.3705	.4547	.5329	.5030	1.904	.4784	.4912
#2	.3712	.4576	.5339	.5105	1.897	.4794	.4941
#3	.3716	.4576	.5345	.5088	1.910	.4808	.4941
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33757-B3 Acquired: 5/17/2018 18:59:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1139.6	2987.8	22961.	1560.4
Stddev	.8	3.2	80.	2.6
%RSD	.07436	.10684	.34779	.16414
#1	1139.0	2989.2	23050.	1560.0
#2	1140.6	2990.0	22894.	1558.1
#3	1139.4	2984.1	22940.	1563.2

Zoom In Zoom Out

Sample Name: MP33757-MB4 Acquired: 5/17/2018 19:03:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0103	-.0011	.0014	-.0001	.0607	-.0001	-.0001	.0002
Stddev	.0003	.0031	.0002	.0002	.0001	.0027	.0001	.0000	.0003
%RSD	99.89	29.53	14.75	12.64	94.44	4.485	85.99	23.05	170.3
#1	-.0006	.0079	-.0013	.0012	-.0001	.0633	-.0002	-.0001	.0001
#2	-.0002	.0094	-.0012	.0013	-.0001	.0579	-.0001	-.0002	.0006
#3	-.0001	.0138	-.0010	.0015	.0000	.0610	.0000	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0179	.2527	.0237	.0006	-.0002	F155.2	-.0002	-.0001
Stddev	.0002	.0018	.0088	.0053	.0000	.0001	.3	.0000	.0007
%RSD	21.27	10.20	3.487	22.33	5.911	60.71	.1617	15.75	692.7
#1	-.0014	.0195	.2594	.0209	.0006	-.0001	154.9	-.0002	.0000
#2	-.0010	.0184	.2427	.0298	.0006	-.0003	155.4	-.0002	.0005
#3	-.0010	.0159	.2561	.0204	.0006	-.0002	155.2	-.0002	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0032	.0379	.0003	.0016	.0000	.0004	-.0001	.0032
Stddev	.0006	.0009	.0019	.0002	.0001	.000	.0007	.0002	.0001
%RSD	205.8	29.29	4.981	78.48	6.447	4742.	153.2	154.2	2.491
#1	.0004	.0027	.0391	.0001	.0016	.0000	.0003	.0000	.0031
#2	-.0009	.0026	.0389	.0002	.0017	.0001	-.0001	-.0003	.0033
#3	-.0004	.0042	.0357	.0006	.0015	-.0001	.0012	-.0001	.0032
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-MB4 Acquired: 5/17/2018 19:03:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1134.1	2947.8	22539.	1575.7
Stddev	1.5	6.3	204.	13.2
%RSD	.13510	.21326	.90398	.83882
#1	1133.2	2950.8	22732.	1587.8
#2	1133.3	2940.5	22326.	1561.6
#3	1135.9	2952.0	22559.	1577.6

Zoom In Zoom Out

Sample Name: MP33757-B4 Acquired: 5/17/2018 19:07:43 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0512	28.92	1.899	2.101	.0547	27.15	.0496	.4994	.2234
Stddev	.0006	.11	.001	.006	.0001	.03	.0002	.0006	.0014
%RSD	1.090	.3827	.0731	.2793	.2076	.1286	.3108	.1228	.6235
#1	.0518	28.88	1.900	2.108	.0546	27.13	.0497	.4999	.2220
#2	.0510	28.84	1.897	2.100	.0548	27.13	.0494	.4987	.2248
#3	.0508	29.05	1.898	2.096	.0548	27.19	.0496	.4995	.2235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2666	27.01	25.91	24.92	.5126	.4641	F180.5	.4877	.4883
Stddev	.0012	.09	.04	.20	.0025	.0008	.2	.0008	.0017
%RSD	.4528	.3347	.1711	.8142	.4897	.1734	.1369	.1539	.3448
#1	.2675	26.91	25.92	24.91	.5121	.4636	180.2	.4885	.4898
#2	.2671	27.07	25.96	24.71	.5153	.4650	180.5	.4870	.4865
#3	.2653	27.06	25.87	25.12	.5104	.4636	180.7	.4877	.4886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4866	1.910	.3924	.4519	.5352	.5149	1.893	.4831	.4961
Stddev	.0014	.009	.0014	.0006	.0018	.0017	.002	.0006	.0006
%RSD	.2826	.4994	.3673	.1392	.3277	.3311	.1070	.1273	.1295
#1	.4851	1.905	.3936	.4525	.5332	.5149	1.891	.4827	.4963
#2	.4871	1.921	.3908	.4520	.5366	.5166	1.895	.4838	.4966
#3	.4877	1.904	.3928	.4512	.5357	.5132	1.892	.4829	.4953
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33757-B4 Acquired: 5/17/2018 19:07:43 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1089.6	2933.0	22361.	1582.9
Stddev	2.4	8.8	101.	8.6
%RSD	.21980	.30168	.45077	.54150
#1	1087.0	2923.7	22376.	1588.2
#2	1091.7	2933.9	22254.	1587.6
#3	1090.1	2941.3	22454.	1573.0

Zoom In Zoom Out

Sample Name: MP33739-MB1 Acquired: 5/17/2018 19:11:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0040	-.0014	.0001	-.0001	.0056	-.0001	-.0002	.0000	-.0016
Stddev	.0002	.0156	.0005	.0002	.0001	.0040	.0000	.0001	.0004	.0001
%RSD	34.65	385.3	38.51	316.7	109.6	71.16	23.90	70.41	873.7	7.295
#1	-.0008	-.0139	-.0017	-.0001	.0000	.0053	-.0001	-.0003	-.0002	-.0015
#2	-.0008	.0133	-.0008	.0003	-.0002	.0018	-.0001	.0000	-.0001	-.0016
#3	-.0004	.0128	-.0017	.0000	.0000	.0097	-.0001	-.0003	.0005	-.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075	.0208	.0410	.0000	-.0002	.0148	-.0001	-.0004	.0003	.0023
Stddev	.0008	.0386	.0123	.0000	.0000	.0059	.0002	.0005	.0012	.0007
%RSD	10.43	185.3	30.01	59.75	22.65	39.78	141.9	124.2	345.4	30.62
#1	.0071	-.0012	.0304	.0000	-.0002	.0209	.0000	-.0003	.0002	.0019
#2	.0084	.0654	.0545	.0000	-.0001	.0141	-.0001	.0000	-.0008	.0031
#3	.0069	-.0018	.0381	.0000	-.0002	.0092	-.0003	-.0010	.0016	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0196	.0002	.0000	-.0002	.0013	.0000	.0017
Stddev	.0005	.0001	.000	.0000	.0007	.0003	.0000
%RSD	2.310	45.26	131.7	10.41	52.93	1354.	1.292
#1	.0193	.0002	-.0001	-.0002	.0005	.0003	.0016
#2	.0201	.0001	.0000	-.0002	.0017	.0000	.0017
#3	.0194	.0003	.0000	-.0002	.0017	-.0002	.0016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33739-MB1 Acquired: 5/17/2018 19:11:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1279.1	3156.9	24429.	1632.2
Stddev	2.4	10.4	116.	9.0
%RSD	.18919	.32958	.47331	.55188
#1	1278.3	3156.6	24300.	1635.6
#2	1277.2	3146.7	24524.	1639.0
#3	1281.8	3167.5	24463.	1622.0

Zoom In Zoom Out

Sample Name: MP33739-B1 Acquired: 5/17/2018 19:16:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0502	28.99	1.857	2.136	.0556	27.14	.0501	.5077	.2275	.2683
Stddev	.0007	.10	.004	.005	.0001	.07	.0002	.0011	.0006	.0006
%RSD	1.477	.3524	.2279	.2363	.2254	.2763	.3988	.2096	.2813	.2107
#1	.0506	28.89	1.859	2.139	.0555	27.05	.0502	.5081	.2281	.2678
#2	.0493	28.99	1.852	2.130	.0557	27.18	.0499	.5065	.2277	.2683
#3	.0506	29.09	1.860	2.139	.0557	27.18	.0502	.5084	.2268	.2689
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.69	25.07	24.92	.5141	.4686	26.47	.4923	.4906	.4827	1.845
Stddev	.09	.02	.16	.0022	.0008	.06	.0016	.0005	.0015	.005
%RSD	.3372	.0823	.6405	.4298	.1761	.2395	.3239	.0943	.3045	.2703
#1	26.59	25.06	24.78	.5151	.4680	26.40	.4925	.4903	.4836	1.851
#2	26.74	25.06	25.09	.5116	.4683	26.53	.4906	.4912	.4810	1.841
#3	26.75	25.09	24.91	.5157	.4696	26.47	.4938	.4905	.4834	1.843
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3565	.4578	.5444	.5177	1.931	.4852	.4967
Stddev	.0011	.0017	.0014	.0006	.005	.0010	.0010
%RSD	.3079	.3750	.2603	.1111	.2714	.2055	.2091
#1	.3559	.4587	.5431	.5183	1.926	.4861	.4976
#2	.3559	.4558	.5441	.5171	1.933	.4841	.4956
#3	.3578	.4589	.5459	.5178	1.936	.4852	.4970
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33739-B1 Acquired: 5/17/2018 19:16:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1145.4	3015.1	22997.	1588.2
Stddev	2.2	4.8	96.	4.4
%RSD	.19291	.16082	.41817	.27753
#1	1145.9	3009.5	22926.	1589.1
#2	1143.0	3018.3	23106.	1583.4
#3	1147.3	3017.4	22959.	1592.1

Zoom In Zoom Out

Sample Name: FA54204-1 Acquired: 5/17/2018 19:20:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.0648	-.0015	.0139	-.0001	288.4	-.0002	.0001	.0009
Stddev	.0004	.0068	.0014	.0003	.0001	1.3	.0000	.0002	.0002
%RSD	20.39	10.49	88.49	1.841	95.14	.4568	12.64	169.9	17.74
#1	-.0018	.0582	-.0003	.0142	-.0002	287.6	-.0002	.0000	.0007
#2	-.0014	.0644	-.0030	.0137	.0000	287.6	-.0001	.0003	.0010
#3	-.0021	.0718	-.0013	.0138	-.0002	289.9	-.0002	.0000	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0537	.1505	F255.2	F802.1	.0014	.0071	F1309.	.0100	.0008
Stddev	.0002	.0024	1.3	4.5	.0001	.0002	101.	.0004	.0014
%RSD	.4334	1.577	.4948	.5655	4.909	3.269	7.686	3.722	165.0
#1	.0538	.1524	254.8	799.3	.0014	.0072	1425.	.0104	-.0007
#2	.0534	.1478	254.2	799.6	.0013	.0073	1262.	.0098	.0015
#3	.0538	.1514	256.6	807.3	.0014	.0068	1241.	.0097	.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0041	.0043	2.905	-.0003	F6.561	.0018	-.0027	.0416	.0196
Stddev	.0011	.0028	.006	.0001	.013	.0000	.0017	.0007	.0001
%RSD	26.77	65.82	.2107	41.99	.1999	1.114	63.72	1.766	.4890
#1	.0053	.0047	2.912	-.0003	6.548	.0018	-.0028	.0408	.0196
#2	.0038	.0013	2.905	-.0002	6.574	.0018	-.0009	.0422	.0195
#3	.0032	.0068	2.900	-.0005	6.560	.0018	-.0043	.0419	.0196

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	703.55	2064.6	16151.	1461.6
Stddev	1.34	4.1	61.	12.6
%RSD	.19102	.19961	.37813	.86450
#1	702.29	2061.0	16188.	1461.3
#2	704.97	2063.8	16184.	1474.4
#3	703.39	2069.1	16080.	1449.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 19:24:26 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2428	42.23	1.887	2.045	2.072	41.77	1.952	1.965	2.084	2.089
Stddev	.0016	.15	.004	.018	.016	.22	.002	.002	.012	.002
%RSD	.6425	.3548	.2372	.9012	.7706	.5310	.1138	.0835	.5818	.0880
#1	.2437	42.30	1.885	2.045	2.077	41.92	1.953	1.966	2.091	2.091
#2	.2437	42.06	1.892	2.026	2.054	41.52	1.949	1.963	2.091	2.089
#3	.2410	42.33	1.883	2.063	2.085	41.88	1.952	1.965	2.070	2.087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.59	39.59	38.76	1.967	1.965	36.86	1.868	1.921	1.951	1.915
Stddev	.14	.25	.24	.015	.004	.37	.003	.004	.001	.003
%RSD	.3373	.6428	.6232	.7821	.1978	.9985	.1473	.2148	.0621	.1722
#1	40.71	39.64	38.85	1.972	1.961	36.58	1.871	1.923	1.952	1.913
#2	40.44	39.32	38.49	1.980	1.965	36.73	1.866	1.916	1.950	1.919
#3	40.62	39.83	38.96	1.950	1.969	37.28	1.866	1.924	1.952	1.912
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.498	1.840	2.131	2.047	1.949	1.971	1.888
Stddev	.003	.003	.010	.012	.002	.006	.002
%RSD	.1040	.1697	.4844	.5640	.0931	.2900	.0951
#1	2.499	1.843	2.138	2.050	1.949	1.975	1.890
#2	2.499	1.842	2.119	2.056	1.951	1.974	1.886
#3	2.495	1.837	2.136	2.034	1.948	1.964	1.887
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 19:24:26 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1128.4	3022.4	24031.	1741.5
Stddev	1.7	2.6	173.	19.9
%RSD	.14814	.08492	.71821	1.1404
#1	1128.2	3019.8	23991.	1729.9
#2	1130.2	3022.4	23881.	1764.5
#3	1126.9	3024.9	24220.	1730.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 19:28:24 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0111	.0001	-.0002	.0001	.0062	.0002	.0000	.0001
Stddev	.0005	.0084	.0006	.0004	.0001	.0035	.0000	.0001	.0003
%RSD	92.22	75.60	842.4	179.8	62.66	57.27	13.72	110.7	246.2
#1	-.0003	.0184	.0007	-.0003	.0001	.0033	.0002	.0000	.0004
#2	-.0002	.0131	-.0001	-.0005	.0003	.0101	.0001	.0000	.0001
#3	-.0011	.0019	-.0004	.0002	.0001	.0051	.0002	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0252	.0642	.0424	.0002	F.0032	.2376	.0001	-.0007
Stddev	.0001	.0075	.0104	.0251	.0000	.0010	.0014	.0002	.0004
%RSD	11.74	29.61	16.26	59.21	14.57	30.01	.5837	182.9	52.21
#1	-.0009	.0268	.0721	.0186	.0002	.0042	.2372	.0003	-.0003
#2	-.0011	.0318	.0524	.0399	.0003	.0032	.2365	.0001	-.0010
#3	-.0012	.0171	.0681	.0686	.0002	.0023	.2392	-.0001	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	F.0021	.0003	.0004	.0003	.0014	F.0021	.0001	.0003
Stddev	.0009	.0007	.0003	.0003	.0000	.0002	.0003	.0001	.0000
%RSD	83.34	31.62	99.14	64.38	11.83	10.97	13.66	37.40	13.97
#1	.0020	.0018	.0002	.0006	.0004	.0015	.0018	.0001	.0003
#2	.0008	.0028	.0000	.0006	.0003	.0014	.0024	.0002	.0003
#3	.0003	.0017	.0006	.0001	.0003	.0012	.0020	.0001	.0003
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.0020					.0020		
Low Limit		-.0020					-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 19:28:24 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1305.9	3174.7	25012.	1758.3
Stddev	1.1	6.1	115.	6.3
%RSD	.08073	.19083	.45967	.35824
#1	1307.1	3171.3	24992.	1753.5
#2	1305.4	3181.7	24908.	1755.9
#3	1305.1	3171.1	25135.	1765.4

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33739-D1 Acquired: 5/17/2018 19:32:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0011	.0770	-.0017	.0145	.0000	290.1	-.0002	.0000	.0008
Stddev	.0009	.0107	.0010	.0004	.000	2.9	.0001	.0001	.0004
%RSD	84.92	13.91	62.86	2.928	1825.	1.017	29.64	738.7	45.77
#1	-.0020	.0684	-.0009	.0149	.0001	291.0	-.0001	.0000	.0005
#2	-.0010	.0735	-.0012	.0144	-.0001	292.5	-.0002	-.0001	.0008
#3	-.0002	.0890	-.0028	.0141	.0000	286.8	-.0002	.0001	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0549	.1518	F275.4	F807.9	.0014	.0078	F1158.	.0102	.0011
Stddev	.0001	.0068	2.2	7.9	.0001	.0001	104.	.0004	.0020
%RSD	.2247	4.468	.8143	.9820	9.533	1.023	8.966	3.688	185.8
#1	.0548	.1440	276.9	810.0	.0014	.0078	1261.	.0098	-.0011
#2	.0549	.1551	276.4	814.5	.0013	.0077	1159.	.0103	.0029
#3	.0551	.1563	272.8	799.1	.0016	.0078	1053.	.0106	.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0037	.0029	2.999	-.0002	F6.676	.0020	-.0035	.0421	.0195
Stddev	.0008	.0011	.008	.0005	.029	.0002	.0012	.0005	.0001
%RSD	20.87	37.48	.2779	250.1	.4279	8.042	34.85	1.188	.5625
#1	.0043	.0016	2.990	-.0007	6.679	.0021	-.0047	.0415	.0196
#2	.0028	.0037	3.006	.0002	6.703	.0019	-.0022	.0424	.0194
#3	.0040	.0034	3.000	-.0001	6.646	.0022	-.0038	.0423	.0195

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	692.75	2023.0	15955.	1464.2
Stddev	1.81	2.9	86.	23.7
%RSD	.26058	.14322	.53994	1.6163
#1	691.15	2022.8	16021.	1453.1
#2	692.39	2020.3	15986.	1448.1
#3	694.70	2026.0	15858.	1491.3

Zoom In Zoom Out

Sample Name: MP33739-SD1 Acquired: 5/17/2018 19:37:08 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.0607	-.0043	.0119	-.0002	303.8	-.0005	-.0007	.0052
Stddev	.0010	.0519	.0077	.0007	.0003	1.0	.0002	.0003	.0010
%RSD	57.16	85.39	180.3	5.972	135.6	.3373	30.52	46.71	18.65
#1	-.0018	.0626	-.0126	.0120	-.0001	303.1	-.0007	-.0005	.0058
#2	-.0028	.1116	-.0028	.0112	.0000	303.3	-.0005	-.0011	.0057
#3	-.0008	.0080	.0026	.0126	-.0006	305.0	-.0004	-.0006	.0041

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0511	.1466	280.2	819.8	.0021	.0045	F3569.	.0097	.0048
Stddev	.0016	.0045	.6	4.0	.0002	.0008	90.	.0005	.0046
%RSD	3.182	3.088	.2290	.4844	7.707	17.96	2.536	5.554	95.23
#1	.0528	.1490	280.9	816.5	.0020	.0038	3552.	.0098	.0094
#2	.0508	.1495	279.8	818.5	.0023	.0054	3666.	.0092	.0050
#3	.0496	.1414	279.9	824.2	.0020	.0043	3488.	.0103	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0026	2.706	-.0022	6.557	.0079	-.0052	.0432	.0214
Stddev	.0030	.0023	.005	.0018	.011	.0007	.0004	.0003	.0003
%RSD	133.8	88.45	.1787	81.61	.1744	8.564	7.909	.7235	1.466
#1	-.0004	.0007	2.702	-.0002	6.559	.0084	-.0049	.0436	.0217
#2	.0055	.0019	2.706	-.0029	6.545	.0071	-.0057	.0430	.0215
#3	.0017	.0052	2.711	-.0037	6.568	.0081	-.0051	.0431	.0211

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	935.74	2585.5	20108.	1648.7
Stddev	.83	2.7	77.	1.6
%RSD	.08835	.10587	.38448	.09962
#1	935.04	2582.9	20057.	1650.6
#2	935.52	2585.1	20197.	1648.0
#3	936.65	2588.3	20070.	1647.6

Zoom In Zoom Out

Sample Name: MP33739-PS1 Acquired: 5/17/2018 19:41:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0571	2.757	.1107	.2705	.0490	288.0	.0421	.0422	.0490
Stddev	.0009	.009	.0003	.0004	.0001	1.0	.0001	.0000	.0006
%RSD	1.661	.3291	.2349	.1376	.2815	.3510	.1640	.1152	1.306
#1	.0571	2.753	.1109	.2703	.0491	287.8	.0421	.0422	.0496
#2	.0581	2.768	.1104	.2709	.0488	287.1	.0422	.0422	.0491
#3	.0562	2.751	.1106	.2702	.0490	289.1	.0422	.0423	.0483

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1741	2.901	F283.5	F785.3	.0476	.0907	F1022.	.0892	.0446
Stddev	.0015	.016	.1	1.7	.0006	.0003	69.	.0003	.0015
%RSD	.8437	.5641	.0439	.2127	1.167	.2813	6.721	.3819	3.345
#1	.1724	2.920	283.6	785.9	.0481	.0905	1095.	.0888	.0436
#2	.1750	2.894	283.4	783.5	.0478	.0906	959.7	.0894	.0437
#3	.1748	2.890	283.5	786.6	.0470	.0910	1009.	.0893	.0463

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1130	.1094	2.852	.0362	F6.539	.0983	.0779	.0845	.2290
Stddev	.0019	.0034	.017	.0006	.010	.0007	.0010	.0005	.0011
%RSD	1.646	3.134	.5933	1.685	.1496	.7263	1.301	.6170	.4669
#1	.1143	.1133	2.866	.0356	6.550	.0984	.0770	.0849	.2278
#2	.1109	.1068	2.833	.0368	6.531	.0990	.0790	.0846	.2298
#3	.1138	.1081	2.857	.0364	6.535	.0975	.0778	.0839	.2294

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	701.27	2083.6	16319.	1471.3
Stddev	2.43	9.4	112.	9.0
%RSD	.34626	.44976	.68732	.60876
#1	700.19	2074.4	16262.	1463.6
#2	704.05	2093.1	16248.	1481.1
#3	699.58	2083.4	16449.	1469.2

Zoom In Zoom Out

Sample Name: MP33739-S1 Acquired: 5/17/2018 19:45:51 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0630	24.21	2.165	2.120	.0513	303.1	.0438	.4368	.2012
Stddev	.0003	.12	.005	.004	.0001	1.0	.0000	.0008	.0007
%RSD	.4936	.5056	.2538	.2112	.1364	.3322	.1115	.1910	.3529
#1	.0628	24.32	2.159	2.122	.0514	304.0	.0438	.4370	.2005
#2	.0634	24.08	2.168	2.115	.0513	302.0	.0438	.4358	.2019
#3	.0629	24.22	2.169	2.124	.0512	303.3	.0439	.4374	.2014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3577	19.93	F295.7	F793.6	.4667	.4407	F1015.	.4195	.4613
Stddev	.0010	.06	1.8	2.7	.0029	.0013	11.	.0010	.0020
%RSD	.2770	.2934	.6031	.3375	.6197	.2938	1.070	.2350	.4426
#1	.3566	19.96	296.9	791.1	.4637	.4394	1021.	.4186	.4612
#2	.3584	19.86	293.7	793.3	.4694	.4408	1021.	.4194	.4593
#3	.3582	19.96	296.6	796.4	.4670	.4419	1002.	.4205	.4634

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5625	2.188	3.218	.3795	F7.069	.4933	1.729	.4912	.4484
Stddev	.0037	.004	.009	.0011	.027	.0032	.012	.0022	.0020
%RSD	.6490	.1976	.2905	.3006	.3785	.6473	.6866	.4484	.4494
#1	.5584	2.183	3.208	.3807	7.092	.4897	1.718	.4887	.4488
#2	.5643	2.191	3.227	.3785	7.040	.4957	1.727	.4922	.4463
#3	.5650	2.191	3.218	.3792	7.076	.4946	1.741	.4927	.4503

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	698.71	2126.8	16537.	1502.1
Stddev	3.04	3.2	56.	5.7
%RSD	.43567	.15209	.33592	.37854
#1	701.45	2130.0	16601.	1495.6
#2	695.44	2123.5	16498.	1504.5
#3	699.24	2127.1	16513.	1506.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33739-S2 Acquired: 5/17/2018 19:49:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0626	30.91	2.169	2.163	.0524	314.4	.0439	.4375	.2035
Stddev	.0004	.22	.006	.013	.0001	2.5	.0001	.0016	.0011
%RSD	.6816	.6956	.2858	.6051	.2719	.8012	.1941	.3597	.5496
#1	.0631	30.72	2.174	2.148	.0523	313.0	.0439	.4384	.2027
#2	.0625	30.87	2.170	2.170	.0523	313.0	.0439	.4384	.2030
#3	.0623	31.14	2.162	2.172	.0525	317.4	.0438	.4357	.2048

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3617	25.41	F309.5	F810.1	.4690	.4401	F1004.	.4204	.4656
Stddev	.0007	.17	1.9	7.6	.0029	.0013	32.	.0014	.0008
%RSD	.2026	.6829	.6236	.9439	.6214	.2904	3.211	.3354	.1677
#1	.3615	25.33	308.0	805.1	.4721	.4409	1040.	.4211	.4662
#2	.3611	25.29	308.8	806.3	.4687	.4409	977.0	.4212	.4648
#3	.3625	25.61	311.7	818.9	.4663	.4387	995.7	.4187	.4659

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5657	2.196	3.253	.3779	F7.215	.4949	1.736	.4933	.4477
Stddev	.0009	.005	.008	.0019	.035	.0023	.008	.0009	.0023
%RSD	.1666	.2371	.2323	.5126	.4879	.4558	.4379	.1846	.5102
#1	.5650	2.191	3.259	.3800	7.189	.4975	1.735	.4923	.4487
#2	.5668	2.195	3.254	.3775	7.201	.4939	1.744	.4941	.4493
#3	.5655	2.202	3.244	.3761	7.255	.4933	1.729	.4934	.4451

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	695.36	2122.9	16421.	1491.0
Stddev	2.57	7.5	47.	17.3
%RSD	.36922	.35533	.28673	1.1577
#1	693.92	2116.5	16373.	1495.3
#2	693.83	2121.0	16424.	1505.7
#3	698.32	2131.2	16467.	1472.0

Zoom In Zoom Out

Sample Name: FA54204-2 Acquired: 5/17/2018 19:54:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0010	.0574	-.0016	.0129	.0000	229.2	-.0001	.0000	.0008
Stddev	.0004	.0114	.0006	.0002	.000	1.0	.0001	.000	.0005
%RSD	46.40	19.93	34.76	1.932	961.2	.4203	55.33	72.13	59.71
#1	-.0008	.0561	-.0022	.0130	.0001	229.7	-.0001	.0000	.0003
#2	-.0006	.0467	-.0011	.0126	-.0002	229.8	-.0001	.0000	.0009
#3	-.0015	.0695	-.0015	.0131	.0000	228.1	-.0002	.0000	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1740	.1252	F223.6	F621.0	.0032	.0054	F962.6	.0088	-.0004
Stddev	.0006	.0037	1.7	1.7	.0001	.0003	42.0	.0001	.0008
%RSD	.3680	2.942	.7495	.2806	3.267	4.981	4.363	1.155	186.9
#1	.1735	.1222	224.8	622.1	.0032	.0057	1005.	.0087	-.0014
#2	.1747	.1241	224.2	621.9	.0033	.0051	921.3	.0088	.0000
#3	.1737	.1293	221.7	619.0	.0031	.0054	961.2	.0089	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0028	.0026	2.238	-.0007	F5.231	.0020	-.0023	.0488	.0238
Stddev	.0014	.0011	.005	.0004	.033	.0001	.0012	.0004	.0001
%RSD	50.76	41.14	.2444	58.06	.6236	5.942	51.39	.8853	.5556
#1	.0033	.0017	2.244	-.0002	5.237	.0021	-.0010	.0485	.0238
#2	.0012	.0038	2.233	-.0010	5.261	.0019	-.0034	.0493	.0239
#3	.0039	.0022	2.237	-.0009	5.197	.0019	-.0025	.0487	.0237

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	746.14	2184.1	16854.	1532.0
Stddev	2.26	7.7	68.	9.9
%RSD	.30263	.35408	.40409	.64765
#1	743.53	2175.4	16852.	1522.6
#2	747.37	2190.1	16788.	1531.0
#3	747.51	2186.7	16924.	1542.4

Zoom In Zoom Out

Sample Name: FA54204-3 Acquired: 5/17/2018 19:58:34 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0019	.1247	-.0010	.0130	-.0001	288.5	-.0001	.0001	.0012
Stddev	.0002	.0063	.0008	.0003	.0001	1.8	.0000	.0001	.0005
%RSD	8.243	5.063	78.18	2.524	85.84	.6158	26.43	102.3	43.48
#1	-.0018	.1236	-.0019	.0134	.0000	290.4	-.0001	.0002	.0017
#2	-.0018	.1315	-.0005	.0128	-.0001	286.8	-.0001	.0001	.0011
#3	-.0021	.1190	-.0006	.0128	-.0002	288.3	-.0001	.0000	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0676	.2342	F286.7	F790.6	.0037	.0070	F848.3	.0104	.0037
Stddev	.0006	.0042	1.7	3.8	.0002	.0002	24.4	.0001	.0009
%RSD	.8920	1.787	.5825	.4761	4.927	2.241	2.879	.8052	23.44
#1	.0678	.2369	288.6	793.6	.0035	.0071	859.0	.0104	.0044
#2	.0669	.2294	285.9	786.4	.0039	.0070	820.4	.0103	.0041
#3	.0681	.2363	285.5	792.0	.0036	.0068	865.6	.0105	.0027

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0014	3.133	-.0003	F6.648	.0028	-.0031	.0348	.0249
Stddev	.0016	.0040	.010	.0002	.027	.0001	.0009	.0005	.0001
%RSD	70.71	294.5	.3207	70.56	.4123	3.483	29.72	1.561	.6014
#1	.0005	-.0005	3.122	-.0001	6.679	.0029	-.0025	.0351	.0248
#2	.0028	-.0014	3.136	-.0004	6.637	.0028	-.0026	.0352	.0248
#3	.0035	.0060	3.142	-.0005	6.628	.0027	-.0041	.0342	.0250

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	702.91	2076.1	16253.	1506.7
Stddev	3.49	1.6	69.	11.5
%RSD	.49636	.07616	.42230	.76202
#1	706.23	2077.2	16294.	1495.1
#2	699.27	2074.3	16174.	1518.0
#3	703.24	2076.8	16292.	1507.1

Zoom In Zoom Out

Sample Name: FA54204-4 Acquired: 5/17/2018 20:02:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0017	.2681	-.0028	.0137	.0000	290.0	-.0002	.0003	.0020
Stddev	.0005	.0087	.0009	.0002	.000	.7	.0001	.0001	.0001
%RSD	28.23	3.255	32.37	1.790	688.4	.2549	37.40	44.15	4.854
#1	-.0019	.2592	-.0038	.0136	.0000	290.4	-.0001	.0003	.0020
#2	-.0022	.2766	-.0024	.0134	-.0002	289.1	-.0002	.0003	.0021
#3	-.0012	.2686	-.0021	.0139	.0001	290.4	-.0002	.0001	.0019

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0862	.4054	F292.9	F803.1	.0053	.0068	F857.5	.0157	.0062
Stddev	.0007	.0034	.6	1.7	.0001	.0001	16.0	.0002	.0008
%RSD	.8242	.8367	.1932	.2125	1.110	.9354	1.862	1.070	13.67
#1	.0861	.4087	293.5	804.6	.0052	.0068	859.8	.0159	.0063
#2	.0869	.4019	292.9	801.3	.0053	.0069	840.5	.0156	.0053
#3	.0855	.4056	292.4	803.4	.0052	.0068	872.2	.0157	.0070

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0046	3.458	-.0002	F6.813	.0061	-.0037	.0423	.0327
Stddev	.0008	.0028	.021	.0005	.014	.0001	.0014	.0004	.0001
%RSD	44.34	60.33	.5930	243.3	.2014	2.244	37.04	.8318	.3655
#1	.0013	.0071	3.478	-.0007	6.828	.0060	-.0053	.0419	.0326
#2	.0029	.0049	3.437	.0001	6.803	.0062	-.0032	.0425	.0328
#3	.0016	.0016	3.460	.0000	6.807	.0062	-.0027	.0426	.0326

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	691.51	2022.7	16163.	1503.9
Stddev	2.21	13.7	127.	5.4
%RSD	.31929	.67813	.78371	.35825
#1	689.13	2008.3	16166.	1498.7
#2	693.48	2035.6	16035.	1509.5
#3	691.93	2024.2	16288.	1503.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54204-5 Acquired: 5/17/2018 20:07:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.1865	-.0023	.0132	-.0001	289.0	-.0002	.0001	.0014
Stddev	.0004	.0041	.0006	.0001	.0001	.8	.0001	.0001	.0004
%RSD	23.02	2.218	25.85	1.127	107.7	.2930	34.11	140.4	26.70
#1	-.0013	.1893	-.0021	.0133	-.0001	289.9	-.0001	.0000	.0015
#2	-.0021	.1817	-.0029	.0130	-.0002	288.8	-.0002	.0001	.0010
#3	-.0020	.1884	-.0018	.0133	.0000	288.3	-.0001	.0001	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0799	.2914	F290.0	F803.8	.0044	.0069	F871.1	.0125	.0053
Stddev	.0006	.0055	1.5	.9	.0001	.0000	10.5	.0004	.0005
%RSD	.6961	1.893	.5323	.1107	1.290	.7011	1.211	3.582	9.300
#1	.0794	.2978	291.1	803.9	.0045	.0069	871.9	.0125	.0053
#2	.0798	.2886	288.2	804.7	.0044	.0068	860.1	.0120	.0048
#3	.0805	.2879	290.6	802.9	.0044	.0069	881.2	.0129	.0057

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0042	3.294	-.0003	F6.732	.0045	-.0038	.0360	.0286
Stddev	.0010	.0032	.006	.0007	.022	.0003	.0015	.0004	.0002
%RSD	44.96	75.50	.1933	224.6	.3322	7.572	39.38	1.010	.8681
#1	.0015	.0041	3.301	.0005	6.758	.0041	-.0054	.0359	.0284
#2	.0033	.0075	3.295	-.0005	6.717	.0045	-.0025	.0364	.0288
#3	.0017	.0011	3.288	-.0009	6.722	.0048	-.0034	.0357	.0287

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	695.75	2048.6	16123.	1502.3
Stddev	.97	3.8	22.	5.1
%RSD	.13947	.18666	.13447	.33816
#1	695.04	2045.0	16139.	1497.4
#2	695.36	2048.2	16098.	1501.9
#3	696.86	2052.6	16130.	1507.5

Zoom In Zoom Out

Sample Name: FA54204-6 Acquired: 5/17/2018 20:11:48 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0014	.0902	-.0025	.0125	-.0001	279.5	-.0001	.0002	.0011
Stddev	.0003	.0230	.0004	.0003	.0000	1.4	.0001	.0001	.0002
%RSD	21.29	25.49	16.67	2.176	45.86	.5081	65.87	76.03	20.01
#1	-.0017	.0999	-.0024	.0123	-.0001	280.5	-.0001	.0003	.0010
#2	-.0012	.0640	-.0022	.0125	.0000	280.1	-.0002	.0001	.0010
#3	-.0012	.1068	-.0030	.0128	-.0001	277.9	-.0001	.0000	.0014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0831	.2342	F281.7	F779.6	.0034	.0068	F881.0	.0094	.0070
Stddev	.0010	.0036	1.1	1.5	.0000	.0002	10.6	.0001	.0001
%RSD	1.194	1.526	.3951	.1987	1.026	2.709	1.207	1.184	1.313
#1	.0820	.2301	281.2	779.7	.0034	.0068	874.4	.0093	.0069
#2	.0832	.2362	280.9	781.1	.0034	.0071	893.3	.0095	.0069
#3	.0840	.2364	283.0	778.0	.0035	.0067	875.4	.0095	.0071

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0025	.0016	3.021	-.0004	F6.486	.0019	-.0018	.0355	.0249
Stddev	.0006	.0017	.007	.0001	.015	.0001	.0028	.0004	.0001
%RSD	23.42	104.2	.2245	33.58	.2373	7.182	155.8	1.085	.2035
#1	.0031	.0018	3.022	-.0005	6.470	.0018	-.0049	.0353	.0250
#2	.0023	-.0002	3.027	-.0003	6.487	.0020	-.0007	.0360	.0249
#3	.0020	.0033	3.014	-.0004	6.501	.0017	.0003	.0353	.0249

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	708.17	2074.2	16429.	1504.7
Stddev	1.29	3.7	100.	8.1
%RSD	.18271	.17810	.60768	.54108
#1	709.63	2073.1	16539.	1497.9
#2	707.73	2071.3	16345.	1502.4
#3	707.16	2078.4	16402.	1513.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:16:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2435	42.94	1.865	2.085	2.095	42.67	1.961	1.969	2.124
Stddev	.0018	.16	.002	.012	.009	.03	.004	.002	.002
%RSD	.7549	.3694	.0824	.5810	.4396	.0672	.2156	.0851	.0739
#1	.2456	42.78	1.864	2.073	2.085	42.65	1.956	1.967	2.123
#2	.2424	43.10	1.863	2.085	2.095	42.70	1.963	1.969	2.126
#3	.2425	42.95	1.866	2.097	2.104	42.65	1.964	1.970	2.124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.106	41.41	40.71	39.16	1.976	1.964	F35.01	1.855	1.938
Stddev	.008	.14	.15	.05	.012	.008	.40	.004	.002
%RSD	.3896	.3476	.3694	.1223	.6112	.4091	1.135	.2192	.1214
#1	2.115	41.28	40.54	39.14	1.990	1.954	34.55	1.851	1.936
#2	2.100	41.56	40.80	39.12	1.968	1.967	35.24	1.857	1.940
#3	2.102	41.40	40.80	39.21	1.970	1.969	35.24	1.858	1.938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							40.00		
Range							-10.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.934	1.894	2.473	1.813	2.171	2.064	1.959	1.980	1.898
Stddev	.002	.004	.002	.002	.003	.010	.003	.003	.006
%RSD	.0779	.2263	.0658	.1120	.1535	.4670	.1439	.1631	.3088
#1	1.935	1.889	2.471	1.811	2.168	2.075	1.958	1.983	1.892
#2	1.935	1.894	2.474	1.815	2.171	2.060	1.963	1.980	1.898
#3	1.932	1.898	2.474	1.814	2.174	2.058	1.957	1.976	1.904
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:16:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1123.6	3035.5	23843.	1714.9
Stddev	3.0	9.8	63.	6.5
%RSD	.26341	.32294	.26263	.37910
#1	1125.4	3046.6	23774.	1709.4
#2	1120.1	3028.2	23859.	1713.3
#3	1125.1	3031.5	23896.	1722.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 20:20:12 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0142	-.0013	.0000	.0000	.0040	-.0001	-.0001	.0005
Stddev	.0002	.0093	.0007	.0002	.000	.0029	.0000	.0001	.0003
%RSD	40.15	65.35	58.86	495.9	2960.	72.56	34.54	101.7	61.11
#1	-.0007	.0246	-.0013	.0002	.0001	.0050	.0000	.0000	.0007
#2	-.0003	.0108	-.0005	.0001	-.0001	.0007	-.0001	-.0002	.0001
#3	-.0004	.0071	-.0020	-.0002	.0000	.0064	-.0001	-.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0290	.1302	.0504	.0000	F.0029	.8274	-.0001	-.0007
Stddev	.0001	.0067	.0108	.0320	.0000	.0010	.0199	.0002	.0002
%RSD	39.06	23.13	8.335	63.55	195.1	35.36	2.410	343.2	35.62
#1	.0002	.0362	.1368	.0612	.0000	.0040	.8486	-.0001	-.0005
#2	.0003	.0277	.1176	.0756	.0000	.0028	.8245	-.0002	-.0006
#3	.0004	.0230	.1361	.0144	.0000	.0019	.8090	.0002	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0014	.0008	.0003	.0000	.0015	.0014	-.0003	.0000
Stddev	.0005	.0021	.0005	.0001	.0001	.0002	.0006	.0002	.000
%RSD	26.84	146.9	61.65	42.23	236.6	15.04	45.48	59.74	118.9
#1	.0013	.0038	.0003	.0002	.0000	.0017	.0017	-.0002	-.0001
#2	.0019	.0006	.0007	.0004	.0001	.0016	.0006	-.0004	.0000
#3	.0022	-.0001	.0013	.0003	.0000	.0013	.0018	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 20:20:12 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1271.6	3126.2	24393.	1667.6
Stddev	1.5	10.1	91.	16.7
%RSD	.11606	.32342	.37261	1.0013
#1	1269.9	3114.8	24448.	1654.9
#2	1272.4	3129.5	24288.	1661.4
#3	1272.5	3134.2	24444.	1686.5

Zoom In Zoom Out

Sample Name: FA54204-7 Acquired: 5/17/2018 20:24:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0012	.0557	-.0016	.0142	.0000	294.3	-.0001	-.0001	.0006
Stddev	.0003	.0184	.0005	.0003	.0001	2.1	.0001	.0003	.0006
%RSD	23.38	33.01	29.69	2.004	1874.	.7246	60.14	450.4	94.37
#1	-.0009	.0723	-.0014	.0139	-.0001	293.1	-.0002	.0000	.0007
#2	-.0014	.0588	-.0012	.0143	.0001	292.9	.0000	-.0004	.0000
#3	-.0011	.0359	-.0021	.0145	.0000	296.7	-.0002	.0002	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0449	.0942	F291.8	F803.6	.0010	.0072	F1123.	.0074	.0007
Stddev	.0007	.0061	2.0	6.8	.0000	.0002	48.	.0001	.0006
%RSD	1.645	6.510	.6984	.8476	.8680	3.180	4.280	1.866	84.30
#1	.0441	.0965	289.5	799.2	.0010	.0074	1177.	.0074	.0008
#2	.0452	.0988	292.4	800.1	.0011	.0073	1086.	.0076	.0001
#3	.0455	.0872	293.4	811.4	.0010	.0070	1105.	.0073	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0014	.0040	2.920	-.0006	F6.736	.0013	-.0023	.0352	.0156
Stddev	.0006	.0009	.014	.0003	.056	.0002	.0012	.0003	.0001
%RSD	40.69	21.12	.4662	47.32	.8297	16.14	53.67	.9497	.3315
#1	.0019	.0047	2.906	-.0003	6.677	.0015	-.0036	.0351	.0156
#2	.0016	.0031	2.933	-.0005	6.742	.0013	-.0023	.0356	.0157
#3	.0008	.0043	2.921	-.0008	6.788	.0011	-.0011	.0350	.0156

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	694.05	2046.4	15911.	1446.9
Stddev	.47	5.6	44.	14.5
%RSD	.06827	.27415	.27451	1.0019
#1	694.06	2048.9	15962.	1440.2
#2	694.53	2039.9	15887.	1463.5
#3	693.58	2050.3	15885.	1437.0

Zoom In Zoom Out

Sample Name: FA54204-8 Acquired: 5/17/2018 20:28:58 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.0127	-.0021	.0146	-.0002	299.7	-.0001	-.0003	.0005
Stddev	.0003	.0198	.0004	.0001	.0001	.8	.0001	.0001	.0003
%RSD	15.33	155.8	18.41	.8873	72.21	.2706	53.96	41.13	69.72
#1	-.0021	.0038	-.0026	.0145	-.0001	300.1	-.0002	-.0004	.0008
#2	-.0016	-.0010	-.0021	.0146	-.0003	298.7	.0000	-.0003	.0002
#3	-.0017	.0354	-.0018	.0148	-.0001	300.1	-.0001	-.0002	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0022	.0256	F309.8	F844.4	.0019	.0071	F934.8	.0004	-.0003
Stddev	.0004	.0030	.2	.9	.0000	.0004	83.5	.0005	.0001
%RSD	18.93	11.61	.0696	.1063	1.584	5.192	8.931	129.1	22.46
#1	.0019	.0270	309.8	843.5	.0019	.0073	1031.	.0005	-.0004
#2	.0021	.0222	310.1	845.3	.0019	.0067	895.5	.0009	-.0004
#3	.0027	.0276	309.7	844.5	.0019	.0074	878.1	-.0002	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0026	.0032	3.607	-.0006	F7.688	-.0007	-.0035	.0028	.0127
Stddev	.0010	.0009	.007	.0004	.017	.0001	.0011	.0001	.0000
%RSD	38.84	27.35	.2063	59.42	.2161	15.95	30.98	3.140	.2523
#1	.0034	.0034	3.613	-.0011	7.699	-.0008	-.0022	.0029	.0127
#2	.0029	.0022	3.610	-.0005	7.669	-.0006	-.0042	.0027	.0127
#3	.0015	.0039	3.599	-.0004	7.696	-.0007	-.0039	.0027	.0127

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	680.57	1996.2	15913.	1476.6
Stddev	4.63	7.8	41.	5.4
%RSD	.68071	.39142	.25557	.36641
#1	675.41	1990.1	15959.	1471.5
#2	681.92	1993.4	15881.	1476.0
#3	684.37	2005.0	15899.	1482.2

Zoom In Zoom Out

Sample Name: FA54204-9 Acquired: 5/17/2018 20:33:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0016	.0083	.0021	.0149	-.0001	262.2	-.0002	-.0001	.0015
Stddev	.0008	.0123	.0013	.0003	.0000	1.0	.0001	.0001	.0004
%RSD	49.90	149.2	60.87	2.128	5.703	.3751	36.93	111.9	23.94
#1	-.0026	-.0043	.0007	.0146	-.0001	261.4	-.0002	-.0001	.0016
#2	-.0011	.0203	.0031	.0152	-.0001	263.3	-.0001	.0000	.0018
#3	-.0012	.0088	.0025	.0148	-.0001	262.0	-.0002	-.0001	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0009	.0712	F265.9	F725.7	.0043	.0081	F898.6	.0053	.0026
Stddev	.0000	.0053	2.5	5.1	.0001	.0001	26.4	.0003	.0007
%RSD	3.304	7.476	.9527	.7090	1.418	1.116	2.940	6.184	28.45
#1	-.0009	.0659	266.1	720.1	.0044	.0081	915.0	.0050	.0027
#2	-.0009	.0766	268.3	730.2	.0044	.0080	912.7	.0052	.0033
#3	-.0009	.0710	263.2	726.9	.0043	.0082	868.1	.0057	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0044	.0040	2.949	-.0003	F7.281	.0001	-.0035	.0021	.0936
Stddev	.0012	.0028	.013	.0002	.061	.0002	.0006	.0005	.0004
%RSD	26.21	71.05	.4491	64.42	.8371	177.8	17.35	22.51	.4300
#1	.0049	.0017	2.940	-.0003	7.314	.0002	-.0042	.0020	.0937
#2	.0052	.0071	2.943	-.0001	7.318	-.0001	-.0030	.0017	.0940
#3	.0031	.0030	2.964	-.0005	7.210	.0002	-.0033	.0026	.0932

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	714.46	2086.7	16348.	1505.5
Stddev	1.50	4.2	41.	16.6
%RSD	.20930	.20073	.25111	1.1012
#1	714.27	2087.7	16395.	1523.6
#2	713.07	2090.4	16329.	1501.8
#3	716.04	2082.2	16320.	1491.0

Zoom In Zoom Out

Sample Name: FA54204-10 Acquired: 5/17/2018 20:37:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.1639	.0075	.0326	-.0001	67.38	-.0001	.0005	.0019
Stddev	.0002	.0118	.0009	.0002	.0000	.38	.0000	.0001	.0008
%RSD	58.76	7.206	12.53	.5233	56.89	.5710	33.58	28.20	43.99
#1	.0001	.1705	.0065	.0327	.0000	67.07	-.0001	.0004	.0027
#2	.0004	.1708	.0082	.0327	.0000	67.81	-.0001	.0004	.0010
#3	.0004	.1502	.0080	.0324	-.0001	67.25	-.0001	.0006	.0021

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0051	.2060	28.69	54.82	.0412	.0118	F390.2	.0181	.0012
Stddev	.0004	.0032	.17	.15	.0004	.0001	18.8	.0003	.0006
%RSD	7.406	1.530	.5804	.2734	.9035	.5979	4.819	1.474	47.97
#1	.0053	.2079	28.66	54.70	.0416	.0118	368.8	.0184	.0006
#2	.0053	.2078	28.87	54.99	.0411	.0117	398.0	.0178	.0018
#3	.0047	.2024	28.54	54.78	.0409	.0117	403.9	.0180	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0675	.0026	2.201	.0003	.4760	.0020	-.0018	.1228	.0404
Stddev	.0010	.0016	.002	.0004	.0027	.0002	.0006	.0004	.0001
%RSD	1.436	61.73	.1083	138.7	.5773	11.98	35.48	.2939	.2653
#1	.0664	.0035	2.203	-.0001	.4771	.0022	-.0024	.1232	.0402
#2	.0678	.0035	2.201	.0007	.4780	.0021	-.0017	.1225	.0404
#3	.0682	.0007	2.198	.0003	.4728	.0017	-.0012	.1227	.0404

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1000.2	2745.5	21077.	1600.3
Stddev	1.5	5.4	160.	5.7
%RSD	.15041	.19613	.76089	.35735
#1	1000.7	2739.7	20935.	1602.9
#2	998.46	2746.4	21044.	1593.7
#3	1001.3	2750.4	21251.	1604.2

Zoom In Zoom Out

Sample Name: FA54150-4 Acquired: 5/17/2018 20:42:14 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.1737	.0001	.1481	.0000	178.7	.0000	.0007	.0321
Stddev	.0004	.0150	.0002	.0007	.000	1.3	.0000	.0001	.0003
%RSD	81.47	8.639	159.8	.4538	136.6	.7060	214.9	17.97	1.060
#1	-.0007	.1896	.0003	.1484	.0000	178.0	.0000	.0008	.0324
#2	-.0007	.1715	-.0001	.1487	.0000	180.2	.0000	.0006	.0322
#3	.0000	.1598	.0001	.1474	.0000	178.0	.0000	.0009	.0317

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0041	.0826	14.19	28.75	.0725	.0190	F127.9	.0020	.0010
Stddev	.0003	.0020	.07	.25	.0003	.0001	2.6	.0003	.0004
%RSD	8.146	2.421	.5180	.8584	.4638	.5507	2.066	12.26	35.40
#1	.0045	.0823	14.15	28.79	.0724	.0190	125.0	.0020	.0012
#2	.0039	.0808	14.27	28.98	.0729	.0189	130.2	.0023	.0006
#3	.0038	.0847	14.15	28.49	.0723	.0191	128.5	.0018	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0020	.0048	8.292	.0000	1.701	.0026	-.0006	.0098	.0216
Stddev	.0002	.0002	.002	.0002	.010	.0001	.0004	.0000	.0002
%RSD	9.024	4.332	.0208	843.0	.5704	4.909	75.90	.2805	.9188
#1	.0019	.0049	8.290	.0002	1.695	.0026	-.0011	.0098	.0215
#2	.0019	.0046	8.292	-.0001	1.713	.0028	-.0004	.0098	.0215
#3	.0022	.0049	8.294	.0000	1.697	.0025	-.0003	.0097	.0219

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1074.0	2816.1	21874.	1619.5
Stddev	2.2	3.4	70.	18.8
%RSD	.20927	.11898	.31825	1.1620
#1	1071.4	2812.3	21873.	1624.2
#2	1075.7	2818.2	21805.	1598.8
#3	1074.9	2818.0	21944.	1635.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 20:46:30 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0087	.2137	.0089	.2143	.0055	1.125	.0051	.0520	.0114	.0262
Stddev	.0004	.0014	.0005	.0010	.0001	.010	.0000	.0002	.0002	.0003
%RSD	4.430	.6316	5.299	.4773	2.697	.9110	.2094	.4611	1.444	1.167
#1	.0088	.2126	.0092	.2131	.0054	1.121	.0051	.0518	.0113	.0259
#2	.0083	.2152	.0091	.2147	.0053	1.118	.0051	.0522	.0115	.0263
#3	.0091	.2134	.0084	.2150	.0056	1.137	.0051	.0522	.0112	.0264

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3189	10.47	5.116	.0154	.0472	10.17	.0399	.0045	.0050	.0107
Stddev	.0029	.09	.032	.0001	.0001	.05	.0003	.0006	.0006	.0023
%RSD	.9163	.8667	.6264	.6516	.1344	.4748	.7060	14.21	12.41	21.90
#1	.3172	10.37	5.079	.0154	.0473	10.13	.0398	.0053	.0056	.0100
#2	.3173	10.49	5.136	.0154	.0472	10.15	.0397	.0043	.0044	.0133
#3	.3223	10.55	5.134	.0153	.0472	10.22	.0402	.0040	.0052	.0088

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0324	.0484	.0109	.0098	.0104	.0483	.0203
Stddev	.0003	.0003	.0000	.0001	.0016	.0002	.0002
%RSD	1.077	.5657	.3928	.7702	15.06	.4389	.7516
#1	.0326	.0487	.0109	.0097	.0105	.0484	.0204
#2	.0326	.0481	.0108	.0099	.0088	.0480	.0202
#3	.0320	.0485	.0109	.0098	.0119	.0484	.0202

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1226.9	3068.2	23969.	1660.8
Stddev	3.9	4.0	86.	22.8
%RSD	.31724	.13032	.35954	1.3710
#1	1223.8	3072.6	23979.	1670.6
#2	1231.3	3067.3	23877.	1677.0
#3	1225.6	3064.7	24049.	1634.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 20:50:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0005	F552.6	.0015	.0005	-.0002	495.9	-.0004	-.0002
Stddev	.0005	3.1	.0016	.0002	.0001	3.4	.0002	.0001
%RSD	113.3	.5624	105.7	34.70	55.84	.6783	49.78	23.75
#1	.0001	555.5	.0008	.0004	-.0003	498.9	-.0006	-.0003
#2	-.0010	553.1	.0004	.0005	-.0001	496.6	-.0003	-.0002
#3	-.0005	549.3	.0034	.0007	-.0002	492.3	-.0003	-.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	-.0004	-.0014	183.5	.2308	F505.1	-.0001	.0005	1.485
Stddev	.0002	.0003	1.0	.0175	2.7	.0000	.0001	.032
%RSD	57.07	20.68	.5292	7.589	.5272	46.60	22.11	2.172
#1	-.0002	-.0017	184.2	.2476	507.6	-.0001	.0006	1.454
#2	-.0006	-.0011	183.9	.2127	505.5	.0000	.0005	1.485
#3	-.0004	-.0014	182.4	.2322	502.3	-.0001	.0004	1.518

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0007	F-.0301	.0049	.0071	.0182	.0007	-.0003	.0006
Stddev	.0003	.0019	.0029	.0024	.0012	.0007	.0001	.0001
%RSD	48.73	6.398	59.57	34.47	6.630	91.85	20.83	13.42
#1	.0010	-.0306	.0080	.0091	.0172	.0014	-.0003	.0005
#2	.0005	-.0318	.0023	.0044	.0195	.0001	-.0003	.0007
#3	.0004	-.0280	.0043	.0078	.0180	.0007	-.0002	.0006

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	-.0002	-.0018
Stddev	.0035	.0002	.0001
%RSD	472.3	84.84	6.845
#1	.0005	-.0002	-.0018
#2	.0019	.0000	-.0020
#3	-.0046	-.0004	-.0018

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 20:50:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	963.27	2709.4	21178.	1617.3
Stddev	1.68	1.8	76.	13.3
%RSD	.17471	.06758	.35931	.82399
#1	961.37	2707.4	21101.	1603.9
#2	964.59	2710.9	21180.	1617.5
#3	963.84	2710.0	21253.	1630.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2018 20:55:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.031	F555.6	1.040	.5398	.5259	498.6	.9211	.4719	.5152
Stddev	.002	3.4	.003	.0029	.0044	4.1	.0022	.0010	.0036
%RSD	.1495	.6065	.2802	.5318	.8401	.8171	.2351	.2179	.6985
#1	1.032	556.2	1.039	.5386	.5267	498.9	.9230	.4718	.5130
#2	1.029	552.0	1.038	.5377	.5212	494.5	.9188	.4709	.5133
#3	1.030	558.6	1.043	.5431	.5299	502.6	.9217	.4730	.5194

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5734	187.9	.1900	F512.3	.4884	.8819	1.297	.8994	.9178
Stddev	.0026	1.4	.0244	4.3	.0014	.0014	.020	.0012	.0034
%RSD	.4525	.7396	12.83	.8302	.2882	.1628	1.519	.1284	.3752
#1	.5764	187.7	.1965	511.7	.4883	.8827	1.316	.9004	.9207
#2	.5716	186.7	.2105	508.4	.4871	.8802	1.277	.8981	.9187
#3	.5723	189.4	.1630	516.9	.4899	.8828	1.297	.8995	.9140

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.007	.9494	.0215	.8481	1.081	.9882	.9314	.4682	.8939
Stddev	.001	.0061	.0004	.0013	.007	.0038	.0028	.0010	.0026
%RSD	.0998	.6409	1.995	.1540	.6455	.3879	.2956	.2144	.2948
#1	1.007	.9541	.0212	.8491	1.081	.9910	.9335	.4680	.8963
#2	1.008	.9425	.0220	.8466	1.073	.9839	.9324	.4673	.8911
#3	1.006	.9515	.0214	.8486	1.087	.9898	.9283	.4693	.8943

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	946.85	2698.6	21141.	1594.5
Stddev	.82	6.5	69.	16.2
%RSD	.08695	.23959	.32415	1.0134
#1	946.15	2692.6	21164.	1597.6
#2	946.64	2705.4	21195.	1608.8
#3	947.76	2697.9	21064.	1577.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:59:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2485	42.79	1.912	2.077	2.093	42.67	1.990	2.000	2.133	2.132
Stddev	.0003	.16	.000	.012	.011	.15	.001	.002	.006	.006
%RSD	.1254	.3730	.0167	.5968	.5441	.3594	.0523	.0832	.2798	.2753
#1	.2482	42.62	1.912	2.064	2.081	42.50	1.991	2.001	2.139	2.137
#2	.2488	42.83	1.913	2.077	2.094	42.70	1.989	1.998	2.130	2.126
#3	.2484	42.93	1.913	2.089	2.104	42.80	1.989	2.001	2.128	2.134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.74	40.86	39.47	2.014	2.003	39.93	1.907	1.964	1.978	1.943
Stddev	.15	.17	.28	.001	.002	.11	.002	.006	.003	.002
%RSD	.3481	.4218	.7130	.0508	.0883	.2760	.1205	.3099	.1301	.1027
#1	41.64	40.69	39.15	2.015	2.001	39.82	1.910	1.960	1.975	1.945
#2	41.68	40.86	39.61	2.014	2.003	39.91	1.905	1.961	1.981	1.943
#3	41.91	41.03	39.66	2.013	2.005	40.04	1.907	1.971	1.978	1.941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.529	1.878	2.173	2.094	1.991	2.015	1.935
Stddev	.001	.004	.008	.002	.002	.003	.003
%RSD	.0279	.1856	.3826	.1113	.0925	.1513	.1339
#1	2.529	1.882	2.166	2.096	1.992	2.015	1.938
#2	2.530	1.875	2.171	2.093	1.989	2.017	1.933
#3	2.528	1.877	2.182	2.091	1.991	2.011	1.935
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:59:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1105.8	2974.2	23471.	1670.5
Stddev	1.5	4.4	82.	3.0
%RSD	.14010	.14800	.35072	.18256
#1	1106.3	2969.3	23379.	1673.9
#2	1107.0	2975.4	23498.	1669.7
#3	1104.0	2977.8	23537.	1667.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 21:02:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0165	-.0005	-.0001	.0001	.0162	.0000	.0000
Stddev	.0003	.0070	.0006	.0001	.0000	.0068	.000	.000
%RSD	44.45	42.40	123.1	110.0	43.82	42.32	66.45	225.2
#1	-.0006	.0160	.0002	.0000	.0001	.0230	.0000	.0000
#2	-.0005	.0098	-.0006	.0000	.0002	.0093	.0000	.0000
#3	-.0011	.0238	-.0009	-.0001	.0001	.0162	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0004	.0458	.0311	.0210	.0001	F.0031	.3191
Stddev	.0003	.0002	.0097	.0203	.0253	.0000	.0010	.0050
%RSD	69.62	42.40	21.14	65.30	120.3	26.80	31.64	1.553
#1	.0009	.0006	.0547	.0219	.0493	.0001	.0040	.3242
#2	.0002	.0003	.0472	.0544	.0007	.0001	.0030	.3143
#3	.0004	.0004	.0355	.0170	.0130	.0001	.0021	.3188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F-.0012	.0013	.0007	.0010	.0004	.0003	.0015
Stddev	.000	.0004	.0007	.0011	.0001	.0002	.0000	.0002
%RSD	138.8	36.80	56.55	160.9	14.38	52.79	15.46	16.43
#1	-.0001	-.0012	.0021	.0017	.0012	.0006	.0004	.0017
#2	-.0001	-.0016	.0011	-.0005	.0009	.0004	.0003	.0015
#3	.0000	-.0007	.0007	.0008	.0009	.0002	.0003	.0012
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 21:02:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0012	.0001	-.0001
Stddev	.0005	.0001	.0001
%RSD	46.46	224.3	77.35
#1	.0016	.0002	.0000
#2	.0013	-.0001	-.0001
#3	.0006	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1270.1	3087.0	24405.	1652.0
Stddev	3.2	7.7	89.	22.1
%RSD	.25076	.24796	.36414	1.3359
#1	1268.9	3082.5	24447.	1642.2
#2	1267.7	3095.9	24466.	1636.6
#3	1273.7	3082.7	24303.	1677.3

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	V	-0.009834	0.000000	No
			Fe	0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.035224	0.000000	No
As 189.042 {478}	☒	5	Fe	-0.000108	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000003	0.000000	No
Be 313.042 {108}	☒	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000110	0.000000	No
			Ca	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Ti	0.000000	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000008	0.000000	No
Cr 267.716 {126}	☒	3	Al	0.000007	0.000000	No
			Fe	-0.000017	0.000000	No
			Ca	0.000004	0.000000	No
Cu 324.754 {104}	☒	10	Fe	-0.000144	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000006	0.000000	No
			Mg	0.000005	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000015	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000026	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	☒	9	Al	0.000292	0.000000	No
			Fe	-0.000093	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000016	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000002	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000018	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000033	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000058	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000008	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000008	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000016	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000024	0.000000	No
			As	0.001128	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000147	0.604393	0.000000	1.000000
Al 396.152 { 85}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.005795	0.184722	0.000000	1.000000
As 189.042 {478}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000799	0.227780	0.000000	1.000000
Ba 455.403 { 74}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.055079	12.983623	0.000000	1.000000
Be 313.042 {108}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000563	9.319704	0.000000	1.000000
Ca 317.933 {106}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.009238	0.283971	0.000000	1.000000
Cd 226.502 {449}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000041	5.098499	0.000000	1.000000
Co 228.616 {447}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000395	2.550486	0.000000	1.000000
Cr 267.716 {126}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000236	0.464133	0.000000	1.000000
Cu 324.754 {104}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002750	0.860648	0.000000	1.000000
Fe 259.940 {130}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.003063	0.228356	0.000000	1.000000
In 230.606 {446}*	5/17/2018 9:54:41	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.002601	0.331886	0.000000	1.000000
Mg 279.079 {121}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.001469	0.030205	0.000000	1.000000
Mn 257.610 {131}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000298	2.662660	0.000000	1.000000
Mo 202.030 {467}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.001656	1.336353	0.000000	1.000000
Na 589.592 { 57}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.020229	0.916647	0.000000	1.000000
Ni 231.604 {445}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000125	1.454289	0.000000	1.000000
Pb 220.353 {453}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002265	1.311182	0.000000	1.000000
Sb 206.833 {463}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000093	0.276434	0.000000	1.000000
Se 196.090 {472}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000661	0.164017	0.000000	1.000000
Si 212.412 {459}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.004325	0.489271	0.000000	1.000000
Sn 189.989 {477}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000518	0.512949	0.000000	1.000000
Sr 407.771 { 83}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000803	20.045498	0.000000	1.000000
Ti 334.941 {101}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002144	2.130722	0.000000	1.000000
Tl 190.856 {477}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.003439	0.674963	0.000000	1.000000
V 292.402 {115}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000176	0.730827	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002437	3.015344	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999812	0.000109	0.000525	0.001751	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999984	0.001662	0.015793	0.052643	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999899	0.000260	0.000942	0.003141	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999990	0.004564	0.000317	0.001057	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999989	0.003573	0.000139	0.000462	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999991	0.001982	0.005364	0.017880	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999986	0.002187	0.000061	0.000204	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999990	0.000928	0.000132	0.000440	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999992	0.000153	0.000391	0.001303	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999971	0.000522	0.000328	0.001093	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999905	0.005067	0.003868	0.012893	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999919	0.006825	0.025731	0.085771	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999977	0.000333	0.034685	0.115616	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999996	0.000626	0.000059	0.000196	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999901	0.001516	0.000159	0.000530	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999979	0.009603	0.008501	0.028336	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999986	0.000612	0.000226	0.000755	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999906	0.001452	0.000675	0.002249	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999925	0.000271	0.001212	0.004042	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999944	0.000139	0.001959	0.006531	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.983584	0.007368	0.000485	0.001617	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999960	0.000371	0.000354	0.001179	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999916	0.020976	0.000124	0.000412	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999916	0.002223	0.000137	0.000458	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999987	0.000270	0.000891	0.002969	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999926	0.000709	0.000329	0.001097	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999982	0.001478	0.000078	0.000258	OK.	1.000000	0.000000	1	0

SGS Accutest - Orlando **Metals Digestion Log Water**

Method of digestion(circle one): (SW846-3010A) / SW846-3005A / EPA 200.7 / EPA 200.8 / SM3030C

MP #: 33680

Prep Date/Time (mm/dd/yy 24:00): 05/02/18 0800

HotBlock I.D. 9

Thermometer I.D. 6071

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 92 / 91

pH paper lot# 230315

Volume

Spk. Sol. [A]	Used(ml)	Pipette #
ACC 1062	0.5	KU15244
ACC 1051	0.25	KU15244
MET5979	0.25	KU15244

Dig. Tube Lot#: MP3088

Added [B]: HNO_3 HCL

Lot# 0000187388 0000189306

Sample #		Initial Volume(ml)	pH<2	Final Volume(ml)	Comments
Method Blank(MB)		50.0	N/A	50.0	
Spike Blank(SB)			N/A		
Matrix Spike(MS)			✓		
Matrix Spike Dup(MSD)			✓		
Duplicate(DUP)			✓		
1 QC [C] FA 53663-8	[D] 1		✓		
2 FA 53786-4	12		✓		
3 FA 53788-1	6		✓		
4 FA 53703-2	1		✓		
5 -3			✓		
6 -4			✓		
7 -5			✓		
8 -6			✓		
9 -7			✓		
10 -8			✓		
11 FA53725-122			✓		
12 -123			✓		
13 -124			✓		
14 -125	↓		✓		
15 FA53728-1	4		✓		
16 -2			✓		
17 -3	↓		✓		
18 FA53740-1	7		✓		
19 -2	7	↓	✓	↓	
20					
21 [E] 05-02-18 IT					
22 [E]					
23 [E]					
24 [E]					

Analyst: Y.M Date: 05-02-18

QC Review: Date: 05-02-18

A Used for SB, MS, MSD

B For reagent volumes used consult SOP MET 103, current revision

C Parent sample used to prepare MS, MSD, DUP

D Bottle Number

E Additional matrix QC

5g dry sieve
DOD

SGS Accutest - Orlando — Metals Digestion Log Soil

MP #: 33734

Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 05/14/18 08:30
HotBlock I.D. 9
Thermometer I.D. 213
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 94 / 93
Balance I.D. ADVPR03

Spk. Sol. A	Volume Used(ml)	Pipette #
ACC1062	1.0	19
ACC1051	0.5	19
MET0015	0.5	19

Filter Lot#: 170112102
Dig. Tube Lot# WC1054

Added B:

H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot# ★ ~~172493~~ 177290	0000187388	0000189306	23430173

Sample #		D	Wt., g	Final Volume(ml)	Comments
Method Blank(MB)			5.0	100.0	① 5x reagents used
Spike Blank(SB)			↓		
Matrix Spike(MS)			5.02		
Matrix Spike Dup(MSD)			5.00		
Duplicate(DUP)			5.00		
1 ~~QC~~ C	D2-FA53725-4	1	5.02		
2 QC C	- FA53725-4	↓	5.06		
3	-1A	2	5.06		② Brown fumes
4	-7	1	5.05		
5	-10		5.05		
6	-13		5.06		
7	-16		5.03		
8	-19		5.07		
9	-20		5.09		
10	-25		5.00		
11	-28		5.00		
12	-37		5.00		
13	-45		5.04		
14	-48		5.04		
15	-69		5.04		
16	-74		5.03		
17	-77		5.02		
18	-80		5.01		②
19	-83		5.09		
20					
21 E					
22 E		JC	05/14/18		
23 E					
24 E					

Analyst: Jordan Curry Date: 05/14/18

QC Review: Date: 5.14.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog 0316.xls

Rev 03/04/16 DM

33 of 100

★ JC 05/14/18

9.4.2 9

5g dry sieve
DOD

SGS Accutest - Orlando Metals Digestion Log Soil

MP #: 33740 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 05/15/18 0855
HotBlock I.D. 9
Thermometer I.D. 204
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 82 / 81
Balance I.D. ADVPRO6

Spk. Sol. A	Volume Used(ml)	Pipette #
ACC 1062	1.0	KU15244
ACC 1051	0.5	KU15244
MET 6015	0.5	KU15244

Filter Lot#: 170112102
Dig. Tube Lot# 1605323

Added B:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	177290	000018 7388	000018 9306	23430173

Sample #		Wt., g	Final Volume(ml)	Comments
Method Blank(MB)		5.0	100	
Spike Blank(SB)		↓	↓	
Matrix Spike(MS)		5.04		
Matrix Spike Dup(MSD)		5.01		
Duplicate(DUP)		5.02		
1 ~~QC~~ ~~B2~~ FA53725-31A	D 2	5.08		
2 QC - FA53725-31A	↓	5.08		
3 -40A		5.02		
4 -43A		5.07		
5 -51A ~~-57A~~		5.05		
6 -54A		5.07		
7 -56A		5.08		
8 -60A		5.10		
9 -65A	↓	5.09		
10 -84	1	5.08		
11 -89A	2	5.03		
12 -92A	↓	5.02		
13 -95A		5.03		
14 -96A	↓	5.03		
15 FA53800 -4A	1	5.01		
16 -7A	↓	5.04		
17 -8A	↓	5.03		
18 -16A	2	5.03		
19 -17A	2	5.03	↓	
20				
21 E				
22 E 05-15-18 IT				
23 E				
24 E				

Analyst: [signature] Date: 05-15-18

QC Review: [signature] Date: 05-15-18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog 0316.xls Rev 03/04/16 DM

JC 05/14,

5g dry sieve DOD (MS)

SGS Accutest - Orlando Metals Digestion Log Soil

MP #: 33746 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 05/16/18 08:00
HotBlock I.D. 9
Thermometer I.D. 213
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 94 / 93
Balance I.D. ADVPRO3

Spk. Sol. [A]	Volume Used(ml)	Pipette #
ACC18062	1.0	19
ACC18051	0.5	19
MET6015	0.5	19

Filter Lot#: 170112102
Dig. Tube Lot#: MP3988

Added [B]:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	177290	000018738	000018930	23430173

Sample #		Wt., g	Final Volume(ml)	Comments
Method Blank(MB)		5.0	100.0	① 5x reagents used
Spike Blank(SB)		↓	↓	↓
Matrix Spike(MS)		5.03		
Matrix Spike Dup(MSD)		5.02		
Duplicate(DUP)		5.08		
1 QC[C] D2-FA53725-34	1	5.02		
2 QC[C] FA53725-34 -68	1	5.00		
3 ↓ -68	1	5.01		
4 FA53801 -7		5.06		
5 -10		5.01		
6 -13		5.02		
7 -16		5.03		
8 -19		5.01		
9 ↓ -23	↓	5.00		
10 FA53896 -1	2	5.05		
11 ↓ -4	2	5.02	↓	↓
12				
13				
14				
15				
16				
17		JC		
18			05/16/18	
19				
20				
21 [E]				
22 [E]				
23 [E]				
24 [E]				

Analyst: [signature] Date: 05-16-18

QC Review: [signature] Date: 5.17.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

* JC 05/16/18

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kemron Environmental Services, Inc

Ft Ord; CA

07202.2001

SGS Job Number: FA53725A

Sampling Date: 04/26/18

Report to:

Kemron Environmental Services, Inc
4522 Joe Lloyd Way
Monterey, CA 93944
EDawson@GilbaneCo.com; TBeer@GilbaneCo.com

ATTN: Evenlyn Dawson

Total number of pages in report: 142

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **5**
Section 4: Sample Results **6**
4.1: FA53725-59A: 31-28SC0000 7
Section 5: Misc. Forms **8**
5.1: Chain of Custody 9
5.2: QC Evaluation: DOD QSM5 Limits 11
Section 6: Metals Analysis - QC Data Summaries **12**
6.1: Inst QC MA14924: Pb 13
6.2: Inst QC MA14926: Pb 37
6.3: Prep QC MP33784: Pb 54
6.4: IDL and Linear Range Summaries 61
Section 7: Metals Analysis - Raw Data **65**
7.1: Raw Data MA14924 66
7.2: Raw Data MA14926 111
7.3: Prep Logs 142

SGS North America Inc.

Sample Summary

Kemron Environmental Services, Inc

Job No: FA53725A

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA53725-59A	04/26/18	13:12	FPBL	04/28/18	SO	Soil	31-28SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Kemron Environmental Services, Inc **Job No:** FA53725A

Site: Ft Ord; CA **Report Date:** 5/25/2018 3:39:35 PM

1 Sample(s) were collected on 04/26/2018 and were received at SGS North America Inc - Orlando on 04/28/2018 properly preserved, at 4.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA53725A. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals Analysis By Method SW846 6010C

Matrix: SO **Batch ID:** MP33784

Sample(s) FA53725-59ADUP, FA53725-59AMS, FA53725-59AMSD, FA53725-59APS, FA53725-59ASDL were used as the QC samples for metals.

FA53725-59A for Lead: Sample dilution required due to difficult matrix.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA53725A
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/26/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53725-59A	**31-28SC0000**					
Lead [a]		7.8	2.0	0.40	mg/kg	SW846 6010C

(a) Sample dilution required due to difficult matrix.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	31-28SC0000		
Lab Sample ID:	FA53725-59A	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	7.8	2.0	0.40	0.099	mg/kg	5	05/24/18	05/24/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14924
(2) Prep QC Batch: MP33784

(a) Sample was dried prior to analysis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

FA53725A

CHAIN-OF-CUSTODY RECORD

COC # 042618-05

~~FA53801~~

Gilbane

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
B	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	8	13					
154	28-03SC0000Q (23)	SO	4-26-18	0915	KL/MB		X		X	28-03	FD1	0	0	√Run ~~Lead aliquot~~
155	28-03SC0001Q (24)	SO	"	0937	"		X		X	28-03	FD1	0	0	HOLD ~~for previously~~ JB
156	28-03SC0002Q (25)	SO	"	1006	"		X		X	28-03	FD1	0	0	HOLD ~~explosives sample~~
-59A 157	31-28SC0000	SO	4-26-18	1310	TB/KL		X			31-28	NI	0	0	√Run
158	31-28SC0000Q	SO	"	1315	"		X			31-28	FD1	0	0	√Run
159	31-28SC0001	SO	"	1330	"		X			31-28	NI	0	0	Lead aliquot
160	31-28SC0001Q	SO	"	1333	"		X			31-28	FD1	0	0	for previously HOLD
161	31-28SC0002	SO	"	1350	"		X			31-28	NI	0	0	submitted HOLD
162	31-28SC0002Q	SO	"	1354	"		X			31-28	FD1	0	0	explosives HOLD

Cooler # | Turnaround Time: 14 Days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J Beer	4-26-18	1645	FedEx	4-26-18	1645
Fed Ex					

Shipping Date / Carrier / Airbill Number: 8133 7208 3500

Received by Laboratory *(Signature, Date, Time)* **& condition:** 04/28/18 945

ENV.COC_Record
April 13, 2018

Page Two of 18 — 5 of 5

FA53725A: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FA53725 **Client:** GILBANE **Project:** BRA KEMRON SOIL SAMPLING

Date / Time Received: 4/26/2018 9:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** 1015923873760003281100780684030524

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 5

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6); Cooler 2: (3.8); Cooler 3: (3.6); Cooler 4: (3.4); Cooler 5: (19.8);

Cooler Temps (Corrected) °C: Cooler 1: (4.0); Cooler 2: (4.2); Cooler 3: (4.0); Cooler 4: (3.8); Cooler 5: (20.2);

Cooler Information	Y	N
1. Custody Seals Present	☑	☐
2. Custody Seals Intact	☑	☐
3. Temp criteria achieved	☑	☐
4. Cooler temp verification	IR Gun	
5. Cooler media	Ice (Bag)	

Trip Blank Information	Y	N	N/A
1. Trip Blank present / cooler	☐	☐	☑
2. Trip Blank listed on COC	☐	☐	☑
	W	**S**	**N/A**
3. Type Of TB Received	☐	☐	☑

Sample Information	Y	N	N/A
1. Sample labels present on bottles	☑	☐	
2. Samples preserved properly	☑	☐	
3. Sufficient volume/containers recvd for analysis:	☑	☐	
4. Condition of sample	Intact		
5. Sample recvd within HT	☑	☐	
6. Dates/Times/IDs on COC match Sample Label	☑	☐	
7. VOCs have headspace	☐	☐	☑
8. Bottles received for unspecified tests	☐	☑	
9. Compositing instructions clear	☐	☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐	☐	☑
11. % Solids Jar received?	☐	☐	☑
12. Residual Chlorine Present?	☐	☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 4/26/2018 9:30:00 AM Reviewer: SP Date: 4/26/2018

FA53725A: Chain of Custody
Page 2 of 2

QC Evaluation: DOD QSM5 Limits

Job Number: FA53725A
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/26/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP33784	SW846 6010C						
MP33784-B1	7439-92-1	Lead	BSP	REC	103	%	81-112
MP33784-S1	7439-92-1	Lead	MS	REC	100.8	%	81-112
MP33784-S2	7439-92-1	Lead	MSD	REC	101.8	%	81-112
MP33784-S2	7439-92-1	Lead	MSD	RPD	.6	%	20
MP33784-D1	7439-92-1	Lead	DUP	RPD	9.4	%	20
MP33784-D2	7439-92-1	Lead	DUP	RPD	6.6	%	20

* Sample used for QC is not from job FA53725A

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:33	MA14924-STD1	1		STDA
09:37	MA14924-STD2	1		STDB
09:40	MA14924-STD3	1		STDC
09:46	MA14924-STD4	1		STDC
09:50	MA14924-STD5	1		STDD
09:54	MA14924-HSTD1	1		
10:00	MA14924-ICV1	1		
10:08	MA14924-ICB1	1		
10:12	MA14924-CRIA1	1		
10:22	MA14924-ICSA1	1		
10:33	MA14924-ICSAB1	1		
10:41	MA14924-CCV1	1		
10:56	MA14924-CCB1	1		
11:45	MA14924-CCV2	1		
11:51	MA14924-CCB2	1		
11:59	ZZZZZZ	50		
12:04	ZZZZZZ	10		
12:08	MP33785-MB1	1		
12:12	MP33785-B1	1		
12:16	FA54390-1	5		(sample used for QC only; not part of login FA53725A)
12:21	MP33785-D1	5		
12:25	MP33785-SD1	25		
12:30	MP33785-PS1	5		
12:34	MP33785-S1	5		
12:38	MP33785-S2	5		
12:43	MA14924-CCV3	1		
12:47	MA14924-CCB3	1		
12:51	ZZZZZZ	5		
12:55	ZZZZZZ	1		
13:00	ZZZZZZ	1		
13:04	ZZZZZZ	1		
13:08	ZZZZZZ	1		
13:12	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:17	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:34	MA14924-CCV4	1		
13:38	MA14924-CCB4	1		
14:00	MA14924-CCV5	1		
14:09	MA14924-CCB5	1		
14:13	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:21	ZZZZZZ	1		
14:26	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:34	ZZZZZZ	1		
14:38	ZZZZZZ	1		
14:43	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:56	MA14924-CCV6	1		
15:00	MA14924-CCB6	1		
15:04	MP33784-B1	5		
15:08	FA53725-59A	5		
15:12	MP33784-D1	5		
15:17	MP33784-D2	5		
15:21	MP33784-SD1	25		
15:25	MP33784-PS1	5		
15:29	MP33784-S1	5		
15:33	MP33784-S2	5		
---------->	Last reportable sample/prep for job FA53725A			
15:38	MP33788-MB1	1		
15:42	MP33788-B1	1		
15:46	MA14924-CCV7	1		
15:50	MA14924-CCB7	1		
15:54	FA54294-44	5		(sample used for QC only; not part of login FA53725A)
15:59	MP33788-D1	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:03	MP33788-SD1	25		
16:07	MP33788-PS1	1		
16:11	MP33788-S1	5		
16:16	MP33788-S2	5		
16:20	ZZZZZZ	5		
16:24	ZZZZZZ	5		
16:28	ZZZZZZ	5		
16:33	ZZZZZZ	5		
16:37	MA14924-CCV8	1		
16:41	MA14924-CCB8	1		
16:45	ZZZZZZ	5		
16:49	ZZZZZZ	5		
16:54	ZZZZZZ	5		
16:58	ZZZZZZ	5		
17:02	ZZZZZZ	5		
17:06	ZZZZZZ	5		
17:11	ZZZZZZ	5		
17:15	ZZZZZZ	5		
17:19	ZZZZZZ	5		
17:23	ZZZZZZ	5		
17:28	MA14924-CCV9	1		
17:32	MA14924-CCB9	1		
17:36	ZZZZZZ	5		
17:40	ZZZZZZ	5		
17:44	ZZZZZZ	5		
17:49	ZZZZZZ	5		
17:57	MP33789-MB1	1		
18:02	MP33789-B1	1		
18:06	FA54294-64	5		(sample used for QC only; not part of login FA53725A)
18:10	MP33789-D1	5		
18:14	MP33789-SD1	25		
18:18	MA14924-CCV10	1		
18:22	MA14924-CCB10	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:27	MP33789-PS1	5		
18:31	MP33789-S1	5		
18:35	MP33789-S2	5		
18:39	ZZZZZZ	5		
18:44	ZZZZZZ	5		
18:48	ZZZZZZ	5		
18:52	ZZZZZZ	5		
18:56	ZZZZZZ	1		
19:00	ZZZZZZ	1		
19:05	ZZZZZZ	1		
19:09	MA14924-CCV11	1		
19:13	MA14924-CCB11	1		
19:17	ZZZZZZ	5		
19:22	ZZZZZZ	5		
19:26	ZZZZZZ	5		
19:34	MA14924-CRIA2	1		
19:39	MA14924-ICSA2	1		
19:43	MA14924-ICSAB2	1		
19:47	MA14924-CCV12	1		
19:51	MA14924-CCB12	1		

----------> Last reportable CCB for job FA53725A
Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Element: Dilution	Pb	
09:54	MA14924-HSTD1	1	X	
10:00	MA14924-ICV1	1	X	
10:08	MA14924-ICB1	1	X	
10:12	MA14924-CRIA1	1	X	
10:22	MA14924-ICSA1	1	X	
10:33	MA14924-ICSAB1	1	X	
10:41	MA14924-CCV1	1	X	
10:56	MA14924-CCB1	1	X	
11:45	MA14924-CCV2	1	X	
11:51	MA14924-CCB2	1	X	
11:59	ZZZZZZ	50		
12:04	ZZZZZZ	10		
12:08	MP33785-MB1	1	X	
12:12	MP33785-B1	1	X	
12:16	FA54390-1	5		(a)
12:21	MP33785-D1	5	X	
12:25	MP33785-SD1	25	X	
12:30	MP33785-PS1	5	X	
12:34	MP33785-S1	5	X	
12:38	MP33785-S2	5	X	
12:43	MA14924-CCV3	1	X	
12:47	MA14924-CCB3	1	X	
12:51	ZZZZZZ	5		
12:55	ZZZZZZ	1		
13:00	ZZZZZZ	1		
13:04	ZZZZZZ	1		
13:08	ZZZZZZ	1		
13:12	ZZZZZZ	1		
13:17	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:34	MA14924-CCV4	1	X	
		Element:	Pb	

REPORTED ELEMENTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Element: Dilution	Pb	
13:38	MA14924-CCB4	1	X	
14:00	MA14924-CCV5	1	X	
14:09	MA14924-CCB5	1	X	
14:13	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:21	ZZZZZZ	1		
14:26	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:34	ZZZZZZ	1		
14:38	ZZZZZZ	1		
14:43	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:56	MA14924-CCV6	1	X	
15:00	MA14924-CCB6	1	X	
15:04	MP33784-B1	5	X	
15:08	FA53725-59A	5	X	
15:12	MP33784-D1	5	X	
15:17	MP33784-D2	5	X	
15:21	MP33784-SD1	25	X	
15:25	MP33784-PS1	5	X	
15:29	MP33784-S1	5	X	
15:33	MP33784-S2	5	X	
15:38	MP33788-MB1	1		
15:42	MP33788-B1	1		
15:46	MA14924-CCV7	1	X	
15:50	MA14924-CCB7	1	X	
15:54	FA54294-44	5		(a)
15:59	MP33788-D1	5		
16:03	MP33788-SD1	25		
16:07	MP33788-PS1	1		
16:11	MP33788-S1	5		
16:16	MP33788-S2	5		
16:20	ZZZZZZ	5		
		Element: Dilution	Pb	

REPORTED ELEMENTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Element: Dilution	P b	
16:24	ZZZZZZ	5		
16:28	ZZZZZZ	5		
16:33	ZZZZZZ	5		
16:37	MA14924-CCV8	1	X	
16:41	MA14924-CCB8	1	X	
16:45	ZZZZZZ	5		
16:49	ZZZZZZ	5		
16:54	ZZZZZZ	5		
16:58	ZZZZZZ	5		
17:02	ZZZZZZ	5		
17:06	ZZZZZZ	5		
17:11	ZZZZZZ	5		
17:15	ZZZZZZ	5		
17:19	ZZZZZZ	5		
17:23	ZZZZZZ	5		
17:28	MA14924-CCV9	1	X	
17:32	MA14924-CCB9	1	X	
17:36	ZZZZZZ	5		
17:40	ZZZZZZ	5		
17:44	ZZZZZZ	5		
17:49	ZZZZZZ	5		
17:57	MP33789-MB1	1	X	
18:02	MP33789-B1	1	X	
18:06	FA54294-64	5		(a)
18:10	MP33789-D1	5	X	
18:14	MP33789-SD1	25	X	
18:18	MA14924-CCV10	1	X	
18:22	MA14924-CCB10	1	X	
18:27	MP33789-PS1	5	X	
18:31	MP33789-S1	5	X	
18:35	MP33789-S2	5	X	
18:39	ZZZZZZ	5		
18:44	ZZZZZZ	5		
		Element:	P b	

REPORTED ELEMENTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Element: Dilution	P b
18:48	ZZZZZZ	5	
18:52	ZZZZZZ	5	
18:56	ZZZZZZ	1	
19:00	ZZZZZZ	1	
19:05	ZZZZZZ	1	
19:09	MA14924-CCV11	1	X
19:13	MA14924-CCB11	1	X
19:17	ZZZZZZ	5	
19:22	ZZZZZZ	5	
19:26	ZZZZZZ	5	
19:34	MA14924-CRIA2	1	X
19:39	MA14924-ICSA2	1	X
19:43	MA14924-ICSAB2	1	X
19:47	MA14924-CCV12	1	X
19:51	MA14924-CCB12	1	X

(a) Sample used for QC only; not part of login FA53725A.

Element: P
b

INTERNAL STANDARD SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:33	MA14924-STD1	1502	16581	1949	761
09:37	MA14924-STD2	1466	16168	1950	720
09:40	MA14924-STD3	1414	15759	1936	668
09:46	MA14924-STD4	1399	15776	1949	663
09:50	MA14924-STD5	1345	15386	1917	619
09:54	MA14924-HSTD1	1337	15382	1926	617
10:00	MA14924-ICV1	1370	15707	1935	655
10:08	MA14924-ICB1	1445 R	16560 R	1971 R	747 R
10:12	MA14924-CRIA1	1427	16392	1970	727
10:22	MA14924-ICSA1	1216	14100	1887	564
10:33	MA14924-ICSAB1	1201	14193	1904	555
10:41	MA14924-CCV1	1317	15755	1972	647
10:56	MA14924-CCB1	1381	16766	2000	736
11:45	MA14924-CCV2	1284	15792	1983	638
11:51	MA14924-CCB2	1356	16654	2004	728
11:59	ZZZZZZ	1314	16186	2001	689
12:04	ZZZZZZ	1588	19462	2409	720
12:08	MP33785-MB1	1351	16897	2012	733
12:12	MP33785-B1	1307	15948	1986	672
12:16	FA54390-1	1106	13202	1837	507
12:21	MP33785-D1	1112	13181	1845	510
12:25	MP33785-SD1	1256	15008	1936	612
12:30	MP33785-PS1	1107	13078	1825	503
12:34	MP33785-S1	1122	13118	1815	502
12:38	MP33785-S2	1120	13126	1808	499
12:43	MA14924-CCV3	1313	15599	1943	640
12:47	MA14924-CCB3	1404	16414	1957	732
12:51	ZZZZZZ	1169	13522	1824	536
12:55	ZZZZZZ	1252	14797	1853	616
13:00	ZZZZZZ	1268	14882	1856	625
13:04	ZZZZZZ	1270	14764	1865	622
13:08	ZZZZZZ	1311	15160	1882	650
13:12	ZZZZZZ	1285	14816	1862	629

INTERNAL STANDARD SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:17	ZZZZZZ	1319	15284	1881	662
13:21	ZZZZZZ	1425	16361	1932	740
13:25	ZZZZZZ	1274	14736	1881	598
13:29	ZZZZZZ	1225	14455	1877	562
13:34	MA14924-CCV4	1349	15706	1923	649
13:38	MA14924-CCB4	1422	16502	1950	739
14:00	MA14924-CCV5	1338	15549	1924	645
14:09	MA14924-CCB5	1412	16441	1948	738
14:13	ZZZZZZ	1217	14453	1890	561
14:17	ZZZZZZ	1196	14213	1842	568
14:21	ZZZZZZ	1240	14527	1905	567
14:26	ZZZZZZ	1208	13970	1857	552
14:30	ZZZZZZ	1248	14502	1884	556
14:34	ZZZZZZ	1384	16097	2053	592
14:38	ZZZZZZ	1204	14173	1835	572
14:43	ZZZZZZ	1273	14773	1926	589
14:47	ZZZZZZ	1192	14205	1837	573
14:56	MA14924-CCV6	1349	15721	1950	652
15:00	MA14924-CCB6	1428	16513	1975	744
15:04	MP33784-B1	1404	16175	1952	723
15:08	FA53725-59A	1417	16141	1969	717
15:12	MP33784-D1	1417	16223	1979	718
15:17	MP33784-D2	1428	16150	1970	720
15:21	MP33784-SD1	1445	16384	1966	741
15:25	MP33784-PS1	1432	15969	1947	713
15:29	MP33784-S1	1425	15872	1953	703
15:33	MP33784-S2	1425	15852	1948	701
15:38	MP33788-MB1	1429	16487	1964	750
15:42	MP33788-B1	1379	15636	1932	685
15:46	MA14924-CCV7	1380	15430	1916	654
15:50	MA14924-CCB7	1454	16358	1955	749
15:54	FA54294-44	1521	17124	2088	733
15:59	MP33788-D1	1537	17100	2104	733

INTERNAL STANDARD SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:03	MP33788-SD1	1467	16469	1986	745
16:07	MP33788-PS1	No results reported for the elements associated with this internal standard.			
16:11	MP33788-S1	1539	17269	2140	714
16:16	MP33788-S2	1517	16943	2120	707
16:20	ZZZZZZ	1541	17381	2136	730
16:24	ZZZZZZ	1512	17065	2106	729
16:28	ZZZZZZ	1668	18499	2333	713
16:33	ZZZZZZ	1689	18742	2363	713
16:37	MA14924-CCV8	1364	15481	1946	653
16:41	MA14924-CCB8	1439	16409	1977	747
16:45	ZZZZZZ	1572	17822	2207	716
16:49	ZZZZZZ	1572	17786	2217	727
16:54	ZZZZZZ	1610	18113	2260	715
16:58	ZZZZZZ	1687	18937	2382	716
17:02	ZZZZZZ	1673	18876	2358	718
17:06	ZZZZZZ	1572	17821	2199	723
17:11	ZZZZZZ	1522	17188	2108	732
17:15	ZZZZZZ	1895 !	21307 !	2708 !	710
17:19	ZZZZZZ	1878 !	21246 !	2666 !	713
17:23	ZZZZZZ	1936 !	21825 !	2745 !	713
17:28	MA14924-CCV9	1354	15463	1953	650
17:32	MA14924-CCB9	1429	16382	1983	744
17:36	ZZZZZZ	1531	17368	2156	727
17:40	ZZZZZZ	1529	17210	2166	724
17:44	ZZZZZZ	1674	18898	2376	713
17:49	ZZZZZZ	1837 !	20752 !	2614 !	714
17:57	MP33789-MB1	1414	16463	2012	747
18:02	MP33789-B1	1368	15755	1988	690
18:06	FA54294-64	1548	17641	2195	733
18:10	MP33789-D1	1531	17591	2183	733
18:14	MP33789-SD1	1462	16764	2050	751
18:18	MA14924-CCV10	1353	15618	1985	653
18:22	MA14924-CCB10	1436	16613	2019	751

INTERNAL STANDARD SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14924
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:27	MP33789-PS1	1536	17525	2198	726
18:31	MP33789-S1	1533	17540	2229	712
18:35	MP33789-S2	1518	17389	2210	711
18:39	ZZZZZZ	1503	17302	2150	733
18:44	ZZZZZZ	1581	17971	2276	721
18:48	ZZZZZZ	1716	19778	2505 !	718
18:52	ZZZZZZ	1787	20373	2607 !	723
18:56	ZZZZZZ	1307	15796	1989	682
19:00	ZZZZZZ	1398	16506	2093	745
19:05	ZZZZZZ	1420	16713	2130	711
19:09	MA14924-CCV11	1344	15607	1995	650
19:13	MA14924-CCB11	1421	16637	2060	747
19:17	ZZZZZZ	1513	17667	2226	723
19:22	ZZZZZZ	1537	17904	2259	727
19:26	ZZZZZZ	1721	19682	2517 !	715
19:34	MA14924-CRIA2	1423	16283	2011	730
19:39	MA14924-ICSA2	1210	13950	1888	562
19:43	MA14924-ICSAB2	1224	14096	1909	560
19:47	MA14924-CCV12	1351	15635	1988	653
19:51	MA14924-CCB12	1435	16724	2040	752

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14924 Units: ug/l

Time: / Sample ID:			10:08 ICB1		10:56 CCB1		11:51 CCB2		12:47 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	-0.200	<5.0	0.00	<5.0	-0.300	<5.0	-0.400	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14924 Units: ug/l

Time: / Sample ID:			13:38 CCB4		14:09 CCB5		15:00 CCB6		15:50 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.100	<5.0	0.500	<5.0	0.900	<5.0	0.400	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14924 Units: ug/l

Time: / Sample ID:			16:41 CCB8		17:32 CCB9		18:22 CCB10		19:13 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.700	<5.0	0.400	<5.0	0.100	<5.0	1.00	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14924 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	19:51 CCB12 raw	final
Aluminum	200	14	anr	
Antimony	6.0	1	anr	
Arsenic	10	1.3	anr	
Barium	200	1	anr	
Beryllium	4.0	.2	anr	
Cadmium	5.0	.2	anr	
Calcium	1000	50		
Chromium	10	1	anr	
Cobalt	50	.2	anr	
Copper	25	1	anr	
Iron	300	17	anr	
Lead	5.0	1	0.400	<5.0
Magnesium	5000	35		
Manganese	15	.5	anr	
Molybdenum	50	.3	anr	
Nickel	40	.4	anr	
Potassium	10000	200		
Selenium	10	2.4	anr	
Silver	10	.7	anr	
Sodium	10000	500	anr	
Strontium	10	.5		
Thallium	10	1.1	anr	
Tin	50	.9	anr	
Titanium	10	.5		
Vanadium	50	.5	anr	
Zinc	20	3	anr	

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14924 Units: ug/l

Time: / Sample ID: / Metal	ICV True	10:00 ICV1 Results	% Rec	CCV True	10:41 CCV1 Results	% Rec	CCV True	11:45 CCV2 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1970	98.5	2000	1940	97.0	2000	1990	99.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14924 Units: ug/l

Time:		12:43			13:34			14:00	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2030	101.5	2000	2050	102.5	2000	2000	100.0
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14924 Units: ug/l

Time:		14:56			15:46			16:37	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1980	99.0	2000	2020	101.0	2000	2000	100.0
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14924 Units: ug/l

Time:		17:28			18:18			19:09	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2000	100.0	2000	1990	99.5	2000	1990	99.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14924 Units: ug/l

Time:		19:47	
Sample ID:	CCV	CCV12	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	2000	1990	99.5
Magnesium			
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin	anr		
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14924 Units: ug/l

Time:		09:54	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	4020	100.5
Magnesium			
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin	anr		
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14924 Units: ug/l

Time:			10:12		19:34	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	anr			
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	anr			
Cobalt	100	50	anr			
Copper	50	25	anr			
Iron	600	300	anr			
Lead	10	5.0	4.20	84.0	5.00	100.0
Magnesium	10000	5000				
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50	anr			
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	anr			

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB052418M1.ICP Date Analyzed: 05/24/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14924 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:22 ICSA1 Results	% Rec	10:33 ICSAB1 Results	% Rec	19:39 ICSA2 Results	% Rec	19:43 ICSAB2 Results	% Rec
Aluminum	500000	500000	509000	101.8	503000	100.6	550000	110.0	548000	109.6
Antimony		1000	-2.00		1030	103.0	-0.400		978	97.8
Arsenic		1000	-0.300		1100	110.0	-0.600		1040	104.0
Barium		500	0.600		514	102.8	0.800		518	103.6
Beryllium		500	0.00		491	98.2	0.00		515	103.0
Cadmium		1000	0.00		941	94.1	-1.00		936	93.6
Calcium	500000	500000	474000	94.8	473000	94.6	457000	91.4	463000	92.6
Chromium		500	-0.100		466	93.2	0.100		502	100.4
Cobalt		500	-0.400		485	97.0	-0.400		480	96.0
Copper		500	1.10		560	112.0	1.00		587	117.4
Iron	200000	200000	180000	90.0	177000	88.5	186000	93.0	186000	93.0
Lead		1000	0.00		944	94.4	-11.1*(a		950	95.0
Magnesium	500000	500000	526000	105.2	518000	103.6	527000	105.4	527000	105.4
Manganese		500	0.200		487	97.4	0.100		498	99.6
Molybdenum		1000	-0.900		887	88.7	1.60		850	85.0
Nickel		1000	0.00		985	98.5	0.500		934	93.4
Potassium			-14.4		-22.7		-29.4		-18.3	
Selenium		1000	-2.00		982	98.2	1.30		942	94.2
Silver		1000	0.800		1040	104.0	0.600		1050	105.0
Sodium			103		115		50.1		69.5	
Strontium		1000	-0.700		946	94.6	1.60		983	98.3
Thallium		1000	0.00		905	90.5	4.20		897	89.7
Tin		1000	0.900		946	94.6	1.60		857	85.7
Titanium		1000	0.200		930	93.0	0.900		956	95.6
Vanadium		500	-0.300		476	95.2	0.500		475	95.0
Zinc		1000	-1.00		929	92.9	-1.90		907	90.7

(*) Outside of QC limits
(anr) Analyte not requested
(a) Possible instrument baseline drift.

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14926
Parameters: Pb

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	10:28	MA14926-STD1	1		STDA
	10:31	MA14926-STD2	1		STDB
	10:34	MA14926-STD3	1		STDC
	10:38	MA14926-STD4	1		STDD
	10:41	MA14926-HSTD1	1		
	10:44	MA14926-ICV1	1		
	10:50	MA14926-ICB1	1		
	10:54	MA14926-CRIA1	1		
	10:58	MA14926-ICSA1	1		
	11:03	MA14926-ICSAB1	1		
	11:09	MA14926-CCV1	1		
	11:14	MA14926-CCB1	1		
	11:27	MP33784-MB1	5		
---------->	Last reportable sample/prep for job FA53725A				
	11:31	ZZZZZZ	10		
	11:36	ZZZZZZ	5		
	11:40	MP33793-MB1	1		
	11:45	MP33793-B1	1		
	11:49	FA54350-7L	1		(sample used for QC only; not part of login FA53725A)
	11:53	MP33793-D1	1		
	11:58	MP33793-SD1	5		
	12:03	MP33793-S1	1		
	12:07	MA14926-CCV2	1		
	12:11	MA14926-CCB2	1		
	12:16	MP33793-S2	1		
	12:20	FA54350-1L	1		(sample used for QC only; not part of login FA53725A)
	12:25	ZZZZZZ	1		
	12:29	ZZZZZZ	1		
	12:34	ZZZZZZ	1		
	12:39	ZZZZZZ	1		
	12:43	ZZZZZZ	1		
	12:48	ZZZZZZ	1		
	12:52	ZZZZZZ	1		
	12:57	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14926
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:02	MA14926-CCV3	1		
13:06	MA14926-CCB3	1		
13:10	ZZZZZZ	1		
13:15	ZZZZZZ	1		
13:20	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:29	MP33793-D2	1		
13:34	MP33793-MB2	1		
13:38	MP33793-B2	1		
13:43	MP33793-MB3	1		
13:48	MP33793-B3	1		
13:52	MP33796-MB1	1		
13:56	MA14926-CCV4	1		
14:01	MA14926-CCB4	1		
14:05	MP33796-B1	1		
14:09	FA54440-1	5		(sample used for QC only; not part of login FA53725A)
14:14	MP33796-D1	5		
14:18	MP33796-SD1	25		
14:23	MP33796-PS1	5		
14:27	MP33796-S1	5		
14:31	MP33796-S2	5		
14:36	ZZZZZZ	5		
14:40	ZZZZZZ	5		
14:45	ZZZZZZ	5		
14:49	MA14926-CCV5	1		
14:53	MA14926-CCB5	1		
14:58	ZZZZZZ	5		
15:02	ZZZZZZ	5		
15:07	ZZZZZZ	5		
15:11	ZZZZZZ	5		
15:16	ZZZZZZ	5		
15:20	ZZZZZZ	5		
15:25	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14926
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:29	ZZZZZZ	5		
15:34	ZZZZZZ	5		
15:38	ZZZZZZ	5		
15:42	MA14926-CCV6	1		
15:47	MA14926-CCB6	1		
15:51	ZZZZZZ	5		
15:56	ZZZZZZ	5		
16:05	ZZZZZZ	5		
16:09	ZZZZZZ	5		
16:14	MA14926-CRIA2	1		
16:18	MA14926-ICSA2	1		
16:23	MA14926-ICSAB2	1		
16:27	MA14926-CCV7	1		
16:31	MA14926-CCB7	1		

----------> Last reportable CCB for job FA53725A
Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14926
Parameters: Pb

Time	Sample Description	Element: Dilution	Pb	
10:41	MA14926-HSTD1	1	X	
10:44	MA14926-ICV1	1	X	
10:50	MA14926-ICB1	1	X	
10:54	MA14926-CRIA1	1	X	
10:58	MA14926-ICSA1	1	X	
11:03	MA14926-ICSAB1	1	X	
11:09	MA14926-CCV1	1	X	
11:14	MA14926-CCB1	1	X	
11:27	MP33784-MB1	5	X	
11:31	ZZZZZZ	10		
11:36	ZZZZZZ	5		
11:40	MP33793-MB1	1	X	
11:45	MP33793-B1	1	X	
11:49	FA54350-7L	1	X	(a)
11:53	MP33793-D1	1	X	
11:58	MP33793-SD1	5	X	
12:03	MP33793-S1	1	X	
12:07	MA14926-CCV2	1	X	
12:11	MA14926-CCB2	1	X	
12:16	MP33793-S2	1	X	
12:20	FA54350-1L	1	X	(a)
12:25	ZZZZZZ	1		
12:29	ZZZZZZ	1		
12:34	ZZZZZZ	1		
12:39	ZZZZZZ	1		
12:43	ZZZZZZ	1		
12:48	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:57	ZZZZZZ	1		
13:02	MA14926-CCV3	1	X	
13:06	MA14926-CCB3	1	X	
13:10	ZZZZZZ	1		
13:15	ZZZZZZ	1		
		Element:	Pb	

REPORTED ELEMENTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14926
Parameters: Pb

Time	Sample Description	Element: Dilution	Pb	
13:20	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:29	MP33793-D2	1	X	
13:34	MP33793-MB2	1	X	
13:38	MP33793-B2	1	X	
13:43	MP33793-MB3	1	X	
13:48	MP33793-B3	1	X	
13:52	MP33796-MB1	1		
13:56	MA14926-CCV4	1	X	
14:01	MA14926-CCB4	1	X	
14:05	MP33796-B1	1		
14:09	FA54440-1	5		(a)
14:14	MP33796-D1	5		
14:18	MP33796-SD1	25		
14:23	MP33796-PS1	5		
14:27	MP33796-S1	5		
14:31	MP33796-S2	5		
14:36	ZZZZZZ	5		
14:40	ZZZZZZ	5		
14:45	ZZZZZZ	5		
14:49	MA14926-CCV5	1	X	
14:53	MA14926-CCB5	1	X	
14:58	ZZZZZZ	5		
15:02	ZZZZZZ	5		
15:07	ZZZZZZ	5		
15:11	ZZZZZZ	5		
15:16	ZZZZZZ	5		
15:20	ZZZZZZ	5		
15:25	ZZZZZZ	5		
15:29	ZZZZZZ	5		
15:34	ZZZZZZ	5		
15:38	ZZZZZZ	5		
15:42	MA14926-CCV6	1	X	
		Element:	Pb	

REPORTED ELEMENTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14926
Parameters: Pb

Time	Sample Description	Element: Dilution	P b
15:47	MA14926-CCB6	1	X
15:51	ZZZZZZ	5	
15:56	ZZZZZZ	5	
16:05	ZZZZZZ	5	
16:09	ZZZZZZ	5	
16:14	MA14926-CRIA2	1	X
16:18	MA14926-ICSA2	1	X
16:23	MA14926-ICSAB2	1	X
16:27	MA14926-CCV7	1	X
16:31	MA14926-CCB7	1	X

(a) Sample used for QC only; not part of login FA53725A.

	Element:	P b

INTERNAL STANDARD SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14926
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:28	MA14926-STD1	3753	29357	6087	1963
10:31	MA14926-STD2	3717	28997	6094	1882
10:34	MA14926-STD3	3585	27985	5983	1722
10:38	MA14926-STD4	3480	27210	5862	1607
10:41	MA14926-HSTD1	3489	27065	5905	1606
10:44	MA14926-ICV1	3584	27880	5909	1724
10:50	MA14926-ICB1	3727 R	29158 R	6023 R	1971 R
10:54	MA14926-CRIA1	3704	28700	5940	1933
10:58	MA14926-ICSA1	3299	24755	5650	1517
11:03	MA14926-ICSAB1	3291	24946	5654	1493
11:09	MA14926-CCV1	3553	27710	5917	1727
11:14	MA14926-CCB1	3702	29051	6009	1972
11:27	MP33784-MB1	3674	28945	6012	1946
11:31	ZZZZZZ	4256	33281	6986	1922
11:36	ZZZZZZ	4242	32925	7002	1886
11:40	MP33793-MB1	3681	29078	5959	1970
11:45	MP33793-B1	3566	27759	5931	1802
11:49	FA54350-7L	3450	26533	5845	1749
11:53	MP33793-D1	3440	26504	5843	1746
11:58	MP33793-SD1	3583	27939	5944	1879
12:03	MP33793-S1	3423	26644	5891	1683
12:07	MA14926-CCV2	3487	27326	5908	1710
12:11	MA14926-CCB2	3644	28776	6017	1957
12:16	MP33793-S2	3431	26548	5851	1684
12:20	FA54350-1L	3436	26682	5879	1758
12:25	ZZZZZZ	3475	26720	5857	1772
12:29	ZZZZZZ	3488	26767	5893	1780
12:34	ZZZZZZ	3420	26522	5869	1750
12:39	ZZZZZZ	3462	26777	5868	1777
12:43	ZZZZZZ	3403	26372	5828	1743
12:48	ZZZZZZ	3413	26381	5862	1744
12:52	ZZZZZZ	3398	26415	5895	1747
12:57	ZZZZZZ	3414	26458	5861	1747

INTERNAL STANDARD SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14926
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:02	MA14926-CCV3	3460	27158	5874	1700
13:06	MA14926-CCB3	3604	28680	6024	1946
13:10	ZZZZZZ	3388	26222	5889	1735
13:15	ZZZZZZ	3389	26333	5835	1737
13:20	ZZZZZZ	3375	26196	5786	1735
13:24	ZZZZZZ	3409	26403	5827	1746
13:29	MP33793-D2	3426	26467	5876	1760
13:34	MP33793-MB2	3458	26569	5802	1793
13:38	MP33793-B2	3437	26671	5866	1718
13:43	MP33793-MB3	3464	26695	5882	1796
13:48	MP33793-B3	3439	26762	5880	1718
13:52	MP33796-MB1	3612	28879	6042	1955
13:56	MA14926-CCV4	3479	27388	5908	1712
14:01	MA14926-CCB4	3602	28648	5992	1940
14:05	MP33796-B1	3509	27491	5930	1796
14:09	FA54440-1	3655	29056	6162	1871
14:14	MP33796-D1	3669	29037	6119	1874
14:18	MP33796-SD1	3588	28506	6042	1919
14:23	MP33796-PS1	3667	29028	6228	1881
14:27	MP33796-S1	3643	28859	6226	1840
14:31	MP33796-S2	3669	29000	6300	1831
14:36	ZZZZZZ	4144	32605	6973	1869
14:40	ZZZZZZ	4466	34986	7587 !	1855
14:45	ZZZZZZ	4535	35564	7702 !	1861
14:49	MA14926-CCV5	3386	26766	5873	1685
14:53	MA14926-CCB5	3558	28366	5934	1936
14:58	ZZZZZZ	4439	34933	7578 !	1862
15:02	ZZZZZZ	3557	28125	6144	1832
15:07	ZZZZZZ	3880	30598	6496	1902
15:11	ZZZZZZ	3951	31053	6634	1885
15:16	ZZZZZZ	3802	29913	6427	1848
15:20	ZZZZZZ	3912	30930	6558	1903
15:25	ZZZZZZ	3963	31026	6586	1876

INTERNAL STANDARD SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14926
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:29	ZZZZZZ	4033	31673	6686	1897
15:34	ZZZZZZ	4541	35497	7573 !	1875
15:38	ZZZZZZ	3775	29876	6290	1892
15:42	MA14926-CCV6	3433	27026	5819	1699
15:47	MA14926-CCB6	3594	28365	5883	1944
15:51	ZZZZZZ	4418	34437	7280	1881
15:56	ZZZZZZ	4431	34707	7290	1910
16:05	ZZZZZZ	3784	29903	6307	1888
16:09	ZZZZZZ	4156	32332	6799	1897
16:14	MA14926-CRIA2	3611	28100	5861	1915
16:18	MA14926-ICSA2	3221	24249	5536	1504
16:23	MA14926-ICSAB2	3238	24673	5581	1490
16:27	MA14926-CCV7	3503	27330	5736	1714
16:31	MA14926-CCB7	3652	28612	5851	1957

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14926 Units: ug/l

Time: / Sample ID:			10:50 ICB1		11:14 CCB1		12:11 CCB2		13:06 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2								
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	-0.500	<20	-0.500	<20	-0.400	<20	-0.500	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14926 Units: ug/l

Time: / Sample ID:			14:01 CCB4		14:53 CCB5		15:47 CCB6		16:31 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2								
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	-0.300	<20	-0.400	<20	-0.200	<20	-0.300	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14926 Units: ug/l

Time:		10:44			11:09			12:07	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	2000	1970	98.5	2000	2000	100.0	2000	2020	101.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14926 Units: ug/l

Time: / Sample ID: / Metal	CCV True	13:02 CCV3 Results	% Rec	CCV True	13:56 CCV4 Results	% Rec	CCV True	14:49 CCV5 Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	2000	2040	102.0	2000	2030	101.5	2000	2040	102.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14926 Units: ug/l

Time:		15:42			16:27	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic	anr					
Barium	anr					
Beryllium						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	2000	2040	102.0	2000	2030	101.5
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14926 Units: ug/l

Time:		10:41	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic	anr		
Barium	anr		
Beryllium			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper			
Iron			
Lead	4000	4020	100.5
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14926 Units: ug/l

Time:			10:54		16:14	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0				
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	anr			
Cobalt	100	50				
Copper	50	25				
Iron	600	300				
Lead	10	5.0	4.30	86.0	4.60	92.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000				
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA052518M1.ICP Date Analyzed: 05/25/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14926 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:58 ICSA1 Results	% Rec	11:03 ICSAB1 Results	% Rec	16:18 ICSA2 Results	% Rec	16:23 ICSAB2 Results	% Rec
Aluminum	500000	500000	524000	104.8	525000	105.0	522000	104.4	526000	105.2
Antimony		1000	0.400		971	97.1	-0.300		996	99.6
Arsenic		1000	-0.500		1040	104.0	-0.400		1070	107.0
Barium		500	0.300		512	102.4	0.500		512	102.4
Beryllium		500	0.00		516	103.2	0.00		512	102.4
Cadmium		1000	0.00		948	94.8	1.40		973	97.3
Calcium	500000	500000	472000	94.4	480000	96.0	476000	95.2	478000	95.6
Chromium		500	-0.300		500	100.0	-0.200		502	100.4
Cobalt		500	0.100		481	96.2	0.100		488	97.6
Copper		500	0.00		550	110.0	-0.700		551	110.2
Iron	200000	200000	185000	92.5	187000	93.5	181000	90.5	182000	91.0
Lead		1000	0.00		982	98.2	3.00		998	99.8
Magnesium	500000	500000	531000	106.2	530000	106.0	510000	102.0	509000	101.8
Manganese		500	0.200		509	101.8	0.500		521	104.2
Molybdenum		1000	1.20		841	84.1	0.700		853	85.3
Nickel		1000	0.00		968	96.8	-0.200		999	99.9
Potassium			2.80		-30.5		-25.0		-27.3	
Selenium		1000	0.00		932	93.2	-3.50		955	95.5
Silver		1000	0.100		1110	111.0	-0.100		1120	112.0
Sodium			109		90.0		116		120	
Strontium		1000	-0.700		936	93.6	-1.40		925	92.5
Thallium		1000	1.10		909	90.9	-1.80		925	92.5
Tin		1000	0.500		886	88.6	1.10		896	89.6
Titanium		1000	1.30		946	94.6	1.00		972	97.2
Vanadium		500	0.00		488	97.6	-0.300		500	100.0
Zinc		1000	0.700		951	95.1	3.20		993	99.3

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33784
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/24/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	3.5		
Antimony	2.0	.1	.13		
Arsenic	1.0	.13	.2		
Barium	20	.1	.1		
Beryllium	0.50	.02	.05		
Cadmium	0.40	.02	.05		
Calcium	500	5	5		
Chromium	1.0	.1	.1		
Cobalt	5.0	.02	.05		
Copper	2.5	.1	.1		
Iron	30	1.7	1.7		
Lead	2.0	.1	.1	-0.020	<2.0
Magnesium	500	3.5	3.6		
Manganese	1.5	.05	.05		
Molybdenum	5.0	.03	.05		
Nickel	4.0	.04	.05		
Potassium	1000	20	20		
Selenium	2.0	.24	.24		
Silver	1.0	.07	.082		
Sodium	1000	50	50		
Strontium	1.0	.05	.05		
Thallium	1.0	.11	.11		
Tin	5.0	.09	.09		
Titanium	1.0	.05	.05		
Vanadium	5.0	.05	.05		
Zinc	2.0	.3	.3		

Associated samples MP33784: FA53725-59A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33784
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/24/18				05/24/18	
Metal	FA53725-59A Original	DUP	RPD	QC Limits	FA53725-59A Original	DUP	RPD	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	7.8	7.1 (a)	9.4	0-20	7.8	7.3 (a)	6.6	0-20
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33784: FA53725-59A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33784
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/24/18

Metal	FA53725-59A Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	7.8	17.8 (a) 9.92	100.8	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33784: FA53725-59A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33784 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/24/18

Metal	FA53725-59A Original MSD	Spikelot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	7.8	17.9 (a) 9.92 101.8	0.6	20
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33784: FA53725-59A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33784 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/24/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	10.3	10	103.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33784: FA53725-59A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33784 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 05/24/18

Metal	FA53725-59A Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	393	383	2.4	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33784: FA53725-59A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53725A
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33784 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 05/24/18

Metal	Sample ml	Final ml	FA53725-59A Raw	FA53725-59A Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	392.5	384.65	425.9	0.2	2.5	50	82.5	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33784: FA53725-59A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA53725A
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14926

Instrument Detection Limits

Job Number: FA53725A
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14924

Instrument Linear Ranges

Job Number: FA53725A
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14926

Instrument Linear Ranges

Job Number: FA53725A
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14924

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/24/2018 9:33:08 Type: Cal
Method: 60102007_041712(v229) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0003	-.0013	-.0013	.0267	-.0006	.0036	-.0002	-.0001	.0001
Stddev	.0002	.0010	.0002	.0014	.0012	.0008	.0001	.0004	.0000
%RSD	63.61	79.23	13.67	5.108	207.4	21.19	71.47	324.5	38.33
#1	-.0005	-.0007	-.0013	.0280	-.0005	.0032	-.0002	.0003	.0001
#2	-.0004	-.0006	-.0014	.0268	.0006	.0044	.0000	-.0002	.0002
#3	-.0001	-.0025	-.0011	.0253	-.0019	.0030	-.0003	-.0005	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0042	.0027	.0011	-.0001	.0001	.0049	.0009	-.0003	.0027
Stddev	.0002	.0008	.0047	.0002	.0001	.0004	.0059	.0004	.0005
%RSD	3.732	28.32	410.5	153.4	88.63	7.454	624.3	148.1	17.83
#1	.0043	.0036	.0006	-.0002	.0003	.0053	.0041	-.0001	.0022
#2	.0040	.0025	-.0033	.0001	.0001	.0049	-.0058	.0000	.0027
#3	.0042	.0022	.0060	-.0003	.0001	.0046	.0046	-.0007	.0032

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	.0004	.0062	.0006	.0002	.0024	-.0030	-.0002	.0008
Stddev	.0005	.0002	.0003	.0001	.0011	.0002	.0003	.0001	.0002
%RSD	2513.	49.03	5.552	20.82	701.4	8.619	9.390	47.17	29.22
#1	.0004	.0005	.0060	.0007	-.0008	.0025	-.0033	-.0003	.0010
#2	-.0005	.0002	.0066	.0006	.0000	.0026	-.0028	-.0002	.0007
#3	.0001	.0004	.0061	.0005	.0013	.0022	-.0028	-.0001	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	760.61	1502.4	16581.	1949.3
Stddev	1.65	3.5	55.	13.1
%RSD	.21752	.23430	.32963	.67429
#1	761.59	1503.0	16518.	1949.0
#2	761.53	1498.6	16619.	1962.6
#3	758.70	1505.6	16606.	1936.3

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/24/2018 9:37:06 Type: Cal
Method: 60102007_041712(v229) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0333	1.676	.1101	6.522	4.280	2.084	2.234	1.300	.1626	.4662
Stddev	.0002	.007	.0002	.020	.007	.010	.008	.003	.0003	.0027
%RSD	.6698	.4263	.2102	.3051	.1694	.4987	.3646	.2525	.1539	.5823
#1	.0332	1.683	.1099	6.545	4.288	2.091	2.225	1.296	.1629	.4682
#2	.0335	1.676	.1104	6.511	4.279	2.072	2.236	1.302	.1626	.4674
#3	.0331	1.669	.1101	6.509	4.274	2.089	2.241	1.302	.1624	.4631

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.947	2.762	.1983	1.042	.7130	8.280	.7458	.4273	.1631	.0841
Stddev	.004	.009	.0011	.004	.0033	.050	.0031	.0026	.0007	.0008
%RSD	.1849	.3456	.5363	.4301	.4658	.5986	.4147	.6173	.4366	.9034
#1	1.951	2.770	.1994	1.039	.7092	8.329	.7425	.4244	.1627	.0839
#2	1.947	2.765	.1973	1.047	.7142	8.282	.7462	.4277	.1626	.0849
#3	1.944	2.752	.1981	1.041	.7155	8.230	.7486	.4296	.1639	.0834

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3092	.2326	9.819	.9530	.2484	.2954	1.044
Stddev	.0006	.0016	.034	.0049	.0027	.0006	.005
%RSD	.2090	.6844	.3487	.5190	1.079	.2031	.4672
#1	.3096	.2308	9.858	.9529	.2454	.2958	1.038
#2	.3085	.2335	9.807	.9581	.2495	.2956	1.047
#3	.3095	.2335	9.793	.9482	.2504	.2947	1.047

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	720.35	1466.3	16168.	1950.2
Stddev	2.69	4.5	52.	5.2
%RSD	.37279	.30437	.32322	.26472
#1	723.40	1471.4	16138.	1947.8
#2	719.32	1464.3	16138.	1956.1
#3	718.33	1463.2	16228.	1946.6

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/24/2018 9:40:22 Type: Cal
Method: 60102007_041712(v229) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1278	6.564	.4486	25.72	16.77	8.049	8.654	5.021	.6313	1.837
Stddev	.0006	.027	.0005	.08	.07	.042	.014	.007	.0009	.003
%RSD	.4913	.4060	.1110	.3197	.3920	.5210	.1629	.1343	.1394	.1394
#1	.1285	6.594	.4491	25.81	16.84	8.093	8.638	5.014	.6312	1.837
#2	.1275	6.553	.4481	25.68	16.72	8.010	8.658	5.022	.6323	1.835
#3	.1273	6.544	.4487	25.66	16.74	8.042	8.666	5.028	.6305	1.840

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.274	10.97	.7765	4.026	2.937	32.64	2.884	1.710	.6509	.3341
Stddev	.015	.05	.0048	.010	.010	.13	.003	.012	.0014	.0025
%RSD	.2007	.4152	.6181	.2429	.3429	.3840	.1130	.6983	.2083	.7402
#1	7.291	11.02	.7820	4.035	2.927	32.78	2.880	1.696	.6494	.3369
#2	7.265	10.94	.7742	4.016	2.937	32.55	2.886	1.715	.6520	.3335
#3	7.266	10.95	.7732	4.029	2.947	32.58	2.885	1.718	.6515	.3320

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.139	.9566	40.37	.0074	.9981	1.203	4.051
Stddev	.001	.0005	.10	.0000	.0024	.001	.013
%RSD	.0983	.0493	.2415	.5447	.2423	.0824	.3075
#1	1.139	.9569	40.49	.0074	.9958	1.202	4.042
#2	1.140	.9560	40.32	.0074	1.001	1.204	4.046
#3	1.138	.9568	40.32	.0073	.9980	1.202	4.066

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	667.69	1413.6	15759.	1935.7
Stddev	2.61	.4	9.	13.2
%RSD	.39139	.02685	.05879	.68336
#1	670.47	1413.5	15756.	1921.0
#2	667.33	1414.0	15770.	1946.6
#3	665.29	1413.2	15752.	1939.4

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/24/2018 9:46:37 Type: Cal
Method: 60102007_041712(v229) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1264	6.496	.4495	25.76	16.59	7.952	8.645	5.034	.6254	1.829
Stddev	.0002	.037	.0013	.16	.09	.035	.003	.001	.0024	.006
%RSD	.1899	.5647	.2982	.6369	.5180	.4399	.0324	.0182	.3869	.3190
#1	.1264	6.455	.4480	25.74	16.53	7.936	8.642	5.035	.6279	1.835
#2	.1267	6.527	.4500	25.93	16.69	7.992	8.648	5.035	.6251	1.828
#3	.1262	6.505	.4505	25.61	16.55	7.928	8.645	5.033	.6231	1.823

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.156	10.95	.7643	3.978	2.939	32.48	2.886	1.707	.6522	.3335
Stddev	.035	.06	.0030	.014	.005	.14	.005	.003	.0018	.0014
%RSD	.4858	.5906	.3949	.3543	.1874	.4168	.1754	.1797	.2703	.4157
#1	7.124	10.91	.7623	3.982	2.933	32.35	2.887	1.706	.6504	.3334
#2	7.193	11.02	.7678	3.990	2.943	32.62	2.890	1.710	.6524	.3350
#3	7.151	10.91	.7628	3.962	2.942	32.48	2.880	1.704	.6539	.3322

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.147	.9599	40.23	3.866	.9938	1.199	4.036
Stddev	.001	.0023	.20	.011	.0024	.003	.003
%RSD	.0902	.2356	.5078	.2847	.2464	.2291	.0649
#1	1.146	.9621	40.08	3.874	.9912	1.201	4.034
#2	1.146	.9576	40.47	3.871	.9961	1.199	4.039
#3	1.148	.9601	40.16	3.853	.9940	1.196	4.035

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	662.95	1398.7	15776.	1948.6
Stddev	.70	1.1	61.	5.7
%RSD	.10606	.08201	.38973	.29360
#1	662.34	1397.4	15718.	1950.7
#2	662.78	1399.2	15771.	1942.2
#3	663.72	1399.5	15840.	1953.0

Zoom In Zoom Out

Sample Name: HighStd Acquired: 5/24/2018 9:50:10 Type: Cal
Method: 60102007_041712(v229) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2631	13.25	.9117	51.35	32.58	16.00	16.94	9.908	1.218	3.671
Stddev	.0008	.09	.0031	.26	.19	.03	.03	.017	.012	.012
%RSD	.3101	.6906	.3376	.5097	.5918	.1940	.1796	.1722	1.005	.3321
#1	.2635	13.17	.9100	51.10	32.37	15.97	16.97	9.921	1.229	3.664
#2	.2622	13.24	.9152	51.33	32.63	16.04	16.95	9.915	1.205	3.664
#3	.2637	13.35	.9097	51.62	32.74	16.01	16.91	9.889	1.220	3.685

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	14.18	22.51	1.570	7.763	5.772	66.49	5.647	3.434	1.323	.6731
Stddev	.05	.13	.004	.048	.006	.49	.011	.010	.003	.0033
%RSD	.3401	.5704	.2472	.6221	.1071	.7319	.1859	.2863	.2507	.4940
#1	14.12	22.42	1.567	7.814	5.773	66.21	5.657	3.436	1.324	.6733
#2	14.19	22.45	1.574	7.717	5.778	66.20	5.647	3.424	1.326	.6764
#3	14.22	22.66	1.570	7.758	5.765	67.05	5.636	3.443	1.320	.6697

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.180	1.873	78.50	7.519	1.973	2.368	7.895
Stddev	.003	.003	.37	.026	.001	.011	.029
%RSD	.1526	.1733	.4684	.3468	.0384	.4764	.3725
#1	2.176	1.874	78.17	7.541	1.972	2.378	7.922
#2	2.183	1.876	78.44	7.490	1.973	2.356	7.899
#3	2.180	1.870	78.90	7.525	1.974	2.370	7.864

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	618.65	1345.4	15386.	1917.2
Stddev	.48	1.9	66.	7.5
%RSD	.07757	.14453	.42682	.39019
#1	618.68	1345.8	15327.	1924.7
#2	619.12	1343.3	15457.	1909.7
#3	618.16	1347.2	15374.	1917.2

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/24/2018 9:54:18 Type: QC
Method: 60102007_041712(v229) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5047	80.19	4.036	3.993	3.952	79.63	3.968	3.979	3.939	4.010
Stddev	.0008	.46	.001	.009	.012	.13	.003	.003	.005	.005
%RSD	.1676	.5729	.0225	.2349	.2955	.1608	.0774	.0633	.1324	.1283
#1	.5044	80.18	4.037	3.996	3.948	79.55	3.969	3.979	3.941	4.012
#2	.5040	79.74	4.035	3.983	3.944	79.78	3.970	3.982	3.943	4.004
#3	.5056	80.66	4.037	4.001	3.966	79.56	3.965	3.977	3.933	4.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.97	80.65	80.42	3.937	4.009	80.33	3.973	4.016	4.052	4.034
Stddev	.12	.25	.22	.003	.006	.39	.006	.006	.000	.010
%RSD	.1537	.3113	.2743	.0783	.1421	.4849	.1494	.1579	.0103	.2565
#1	78.88	80.62	80.19	3.937	4.005	80.38	3.968	4.021	4.052	4.039
#2	78.91	80.42	80.63	3.940	4.008	79.92	3.971	4.009	4.052	4.022
#3	79.11	80.91	80.46	3.934	4.016	80.69	3.979	4.019	4.053	4.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.930	3.974	3.963	3.953	3.988	3.989	3.953
Stddev	.000	.004	.015	.003	.007	.003	.002
%RSD	.0064	.1047	.3701	.0800	.1743	.0783	.0583
#1	3.930	3.975	3.960	3.956	3.986	3.989	3.952
#2	3.930	3.978	3.949	3.953	3.982	3.992	3.956
#3	3.930	3.970	3.978	3.950	3.995	3.986	3.952
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/24/2018 9:54:18 Type: QC
Method: 60102007_041712(v229) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	616.65	1336.5	15382.	1925.8
Stddev	1.12	.6	22.	5.1
%RSD	.18172	.04860	.14555	.26628
#1	615.79	1336.1	15400.	1931.7
#2	617.92	1336.1	15357.	1922.4
#3	616.25	1337.2	15391.	1923.3

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/24/2018 10:00:11 Type: QC
Method: 60102007_041712(v229) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2330	41.03	2.001	2.035	2.033	40.20	2.009	2.035	1.981	2.003
Stddev	.0010	.32	.006	.004	.014	.10	.002	.003	.016	.010
%RSD	.4106	.7787	.2876	.2042	.6920	.2459	.1004	.1543	.8249	.4847
#1	.2329	41.39	1.994	2.040	2.048	40.31	2.010	2.036	1.979	2.014
#2	.2341	40.80	2.003	2.034	2.020	40.16	2.007	2.031	1.998	1.999
#3	.2322	40.88	2.005	2.031	2.032	40.12	2.010	2.036	1.966	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.34	39.95	40.10	1.955	1.893	39.39	2.042	1.967	2.010	2.015
Stddev	.34	.17	.21	.016	.004	.34	.001	.010	.007	.007
%RSD	.8609	.4281	.5327	.8345	.2052	.8509	.0505	.4876	.3439	.3379
#1	39.72	40.14	40.34	1.952	1.889	39.77	2.041	1.978	2.006	2.023
#2	39.07	39.88	39.93	1.973	1.892	39.15	2.043	1.962	2.007	2.009
#3	39.23	39.82	40.03	1.940	1.897	39.25	2.042	1.961	2.018	2.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0440	2.025	1.961	1.953	2.043	1.913	2.004
Stddev	.0013	.003	.012	.012	.014	.006	.004
%RSD	2.864	.1670	.6057	.5963	.6969	.3301	.2159
#1	.0432	2.022	1.975	1.958	2.059	1.910	2.008
#2	.0435	2.028	1.953	1.962	2.032	1.920	2.000
#3	.0455	2.027	1.956	1.940	2.038	1.908	2.003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/24/2018 10:00:11 Type: QC
Method: 60102007_041712(v229) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	654.68	1369.5	15707.	1935.0
Stddev	2.31	1.6	95.	15.4
%RSD	.35354	.11912	.60301	.79412
#1	652.01	1369.9	15752.	1919.0
#2	656.03	1370.9	15598.	1949.6
#3	656.00	1367.7	15771.	1936.5

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/24/2018 10:08:33 Type: QC
Method: 60102007_041712(v229) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0011	.0000	-.0001	.0000	-.0066	.0000	-.0002
Stddev	.0002	.0033	.0007	.0002	.0001	.0049	.0001	.0001
%RSD	151.9	302.0	1858.	113.3	124.5	74.08	670.5	67.01
#1	.0002	.0003	.0008	-.0001	.0001	-.0104	.0001	-.0002
#2	.0004	.0013	-.0005	-.0003	.0000	-.0082	.0000	.0000
#3	-.0001	-.0049	-.0002	.0000	.0001	-.0011	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0002	-.0045	-.0232	-.0216	.0000	F-.0015	.0059
Stddev	.0003	.0002	.0040	.0197	.0550	.000	.0001	.0059
%RSD	211.5	99.36	88.18	84.84	254.4	404.5	9.580	99.36
#1	.0001	.0003	-.0003	-.0093	.0415	.0000	-.0014	.0125
#2	.0000	.0002	-.0051	-.0146	-.0474	.0000	-.0015	.0011
#3	-.0005	.0000	-.0081	-.0458	-.0591	-.0001	-.0017	.0041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0002	.0010	-.0018	-.0011	-.0002	.0000	-.0004
Stddev	.0001	.0007	.0005	.0032	.0007	.0001	.0001	.0002
%RSD	107.1	279.2	50.34	173.1	63.81	52.20	367.9	45.34
#1	-.0002	.0000	.0005	.0013	-.0010	-.0001	.0000	-.0003
#2	-.0001	-.0010	.0014	-.0017	-.0018	-.0001	.0000	-.0003
#3	.0000	.0003	.0010	-.0051	-.0004	-.0003	.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/24/2018 10:08:33 Type: QC
Method: 60102007_041712(v229) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0007	.0000	-.0001
Stddev	.0007	.000	.0001
%RSD	99.47	427.3	71.18
#1	-.0014	.0001	.0000
#2	.0001	-.0001	-.0001
#3	-.0009	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	747.20	1444.5	16560.	1970.6
Stddev	1.47	3.1	131.	8.5
%RSD	.19621	.21702	.79016	.43165
#1	748.69	1440.9	16444.	1964.5
#2	747.13	1446.7	16702.	1966.9
#3	745.76	1445.8	16535.	1980.3

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/24/2018 10:12:42 Type: QC
Method: 60102007_041712(v229) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091	.2041	.0096	.1984	.0050	.9933	.0050	.0503	.0096	.0242
Stddev	.0003	.0034	.0006	.0002	.0001	.0041	.0001	.0002	.0001	.0001
%RSD	3.143	1.644	6.319	.1162	1.363	.4157	1.188	.3780	1.144	.5007
#1	.0088	.2020	.0097	.1987	.0050	.9939	.0051	.0501	.0096	.0241
#2	.0092	.2079	.0089	.1985	.0050	.9971	.0050	.0503	.0095	.0244
#3	.0094	.2023	.0101	.1982	.0049	.9889	.0050	.0504	.0097	.0242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2935	9.457	4.748	.0149	.0449	9.328	.0413	.0042	.0048	.0093
Stddev	.0003	.028	.045	.0001	.0004	.020	.0001	.0002	.0007	.0010
%RSD	.1031	.2955	.9554	.7855	.9169	.2177	.3076	3.678	14.62	10.93
#1	.2932	9.487	4.697	.0148	.0454	9.350	.0414	.0044	.0041	.0085
#2	.2935	9.453	4.785	.0150	.0448	9.322	.0412	.0042	.0055	.0104
#3	.2938	9.431	4.761	.0148	.0446	9.310	.0413	.0040	.0047	.0089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0322	.0508	.0098	.0091	.0088	.0465	.0207
Stddev	.0003	.0004	.0001	.0001	.0008	.0007	.0001
%RSD	.8035	.8702	.9809	.9167	8.637	1.456	.4365
#1	.0319	.0512	.0099	.0090	.0097	.0469	.0207
#2	.0324	.0503	.0098	.0091	.0086	.0468	.0206
#3	.0323	.0509	.0097	.0092	.0082	.0457	.0208
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/24/2018 10:12:42 Type: QC
Method: 60102007_041712(v229) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	727.10	1426.6	16392.	1969.5
Stddev	1.76	.4	17.	6.7
%RSD	.24215	.02508	.10660	.34216
#1	725.25	1426.5	16381.	1972.8
#2	728.76	1426.3	16382.	1961.8
#3	727.30	1427.0	16412.	1974.0

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/24/2018 10:22:31 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	509.3	-.0003	.0006	.0000	474.2	.0000	-.0004	-.0001	.0011
Stddev	.0003	1.2	.0007	.0001	.0000	1.3	.0002	.0003	.0004	.0002
%RSD	43.16	.2341	283.2	11.53	159.2	.2820	360.5	80.95	590.5	20.95
#1	.0007	510.3	-.0008	.0005	.0000	475.6	.0002	-.0007	-.0005	.0013
#2	.0005	508.0	-.0006	.0006	.0000	472.9	-.0001	-.0001	.0003	.0013
#3	.0012	509.7	.0006	.0006	.0001	474.2	.0001	-.0003	.0000	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.2	-.0144	526.1	.0002	-.0009	.1029	.0000	.0000	-.0020	-.0020
Stddev	.5	.0223	1.3	.0001	.0003	.0028	.000	.0025	.0027	.0048
%RSD	.2832	154.3	.2524	42.90	36.79	2.725	1491.	55810.	139.3	246.0
#1	180.7	-.0359	527.4	.0002	-.0006	.1055	-.0001	-.0012	-.0051	-.0063
#2	179.7	-.0160	524.8	.0001	-.0008	.1033	.0003	.0029	-.0005	.0032
#3	180.1	.0086	526.2	.0001	-.0013	.1000	-.0002	-.0017	-.0003	-.0028
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0093	.0009	-.0007	.0002	.0000	-.0003	-.0010
Stddev	.0015	.0005	.0001	.0001	.002	.0005	.0002
%RSD	15.80	52.90	8.370	47.31	16620.	143.5	17.89
#1	.0085	.0005	-.0007	.0002	-.0016	-.0007	-.0009
#2	.0109	.0009	-.0006	.0003	-.0002	.0002	-.0008
#3	.0083	.0015	-.0007	.0001	.0017	-.0005	-.0012
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/24/2018 10:22:31 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	563.90	1215.9	14100.	1886.7
Stddev	1.64	6.3	18.	4.3
%RSD	.29094	.51708	.12667	.22569
#1	562.05	1210.3	14081.	1882.6
#2	564.50	1222.7	14102.	1891.1
#3	565.16	1214.8	14117.	1886.4

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/24/2018 10:33:24 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.036	502.6	1.097	.5136	.4909	473.2	.9411	.4845	.4656	.5601
Stddev	.005	3.8	.003	.0035	.0023	1.4	.0033	.0005	.0033	.0017
%RSD	.4727	.7580	.2580	.6846	.4619	.2930	.3519	.1128	.7068	.3067
#1	1.037	499.9	1.094	.5143	.4894	472.9	.9400	.4847	.4657	.5600
#2	1.040	507.0	1.098	.5167	.4935	474.7	.9385	.4839	.4689	.5619
#3	1.030	501.0	1.099	.5098	.4897	472.0	.9448	.4849	.4623	.5585
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	177.4	-.0227	518.4	.4865	.8870	.1147	.9852	.9438	1.026	.9824
Stddev	.8	.0177	1.4	.0046	.0029	.0036	.0011	.0106	.002	.0056
%RSD	.4413	78.06	.2716	.9473	.3218	3.173	.1116	1.126	.2055	.5684
#1	177.0	-.0023	517.4	.4864	.8849	.1106	.9847	.9529	1.026	.9834
#2	178.3	-.0344	520.0	.4912	.8858	.1176	.9844	.9322	1.028	.9763
#3	176.9	-.0315	517.9	.4820	.8902	.1157	.9864	.9464	1.024	.9874
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0216	.9455	.9456	.9302	.9050	.4757	.9286
Stddev	.0018	.0026	.0073	.0081	.0054	.0013	.0031
%RSD	8.554	.2743	.7677	.8747	.5968	.2648	.3323
#1	.0218	.9429	.9464	.9331	.9093	.4766	.9299
#2	.0197	.9456	.9524	.9365	.8989	.4762	.9251
#3	.0234	.9481	.9380	.9210	.9067	.4742	.9308
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/24/2018 10:33:24 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	554.93	1200.5	14193.	1903.6
Stddev	1.81	2.0	69.	3.3
%RSD	.32614	.16699	.48402	.17394
#1	552.92	1202.7	14182.	1907.3
#2	555.41	1198.7	14131.	1900.9
#3	556.44	1200.2	14267.	1902.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 10:41:41 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2424	37.70	2.075	2.031	1.960	39.68	2.029	2.042	1.918	1.985
Stddev	.0031	.13	.005	.007	.006	.11	.003	.003	.008	.011
%RSD	1.263	.3486	.2517	.3338	.3041	.2712	.1322	.1408	.4081	.5638
#1	.2458	37.81	2.069	2.028	1.965	39.77	2.028	2.040	1.927	1.996
#2	.2398	37.74	2.075	2.039	1.960	39.56	2.028	2.040	1.915	1.973
#3	.2418	37.56	2.080	2.026	1.954	39.70	2.032	2.045	1.912	1.985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.77	39.01	38.37	1.971	2.074	38.06	2.094	1.941	2.074	2.082
Stddev	.19	.08	.18	.019	.003	.14	.000	.006	.002	.001
%RSD	.4832	.1980	.4658	.9528	.1533	.3769	.0186	.3259	.1079	.0682
#1	38.98	38.99	38.54	1.993	2.073	38.04	2.094	1.933	2.072	2.082
#2	38.70	39.10	38.18	1.959	2.072	38.22	2.094	1.944	2.073	2.084
#3	38.62	38.95	38.38	1.961	2.077	37.93	2.093	1.945	2.076	2.081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.151	2.135	1.996	1.992	1.985	2.014	2.014
Stddev	.003	.004	.007	.017	.003	.006	.004
%RSD	.1252	.1863	.3540	.8525	.1297	.3066	.1838
#1	2.150	2.136	2.000	2.010	1.987	2.020	2.011
#2	2.154	2.138	2.000	1.976	1.982	2.015	2.014
#3	2.150	2.131	1.988	1.989	1.987	2.007	2.018
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 10:41:41 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	646.52	1317.2	15755.	1972.0
Stddev	.67	1.7	96.	12.4
%RSD	.10384	.12712	.60668	.62711
#1	647.18	1315.3	15647.	1964.4
#2	645.84	1318.3	15791.	1986.3
#3	646.54	1318.1	15828.	1965.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 10:56:28 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0041	.0011	-.0002	.0001	.0016	.0001	.0000
Stddev	.0003	.0029	.0010	.0001	.0000	.0028	.0001	.000
%RSD	53.93	69.29	92.51	50.36	48.49	177.4	55.78	582.2
#1	.0005	.0072	.0022	-.0002	.0002	.0016	.0002	.0001
#2	.0003	.0016	.0004	-.0001	.0001	.0043	.0001	-.0001
#3	.0009	.0036	.0006	-.0003	.0001	-.0012	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0007	-.0009	-.0054	-.0142	.0001	F-.0022	.0089
Stddev	.0001	.0001	.0051	.0094	.0091	.0001	.0002	.0004
%RSD	230.1	14.71	546.8	175.7	64.04	46.41	11.05	4.442
#1	-.0001	.0006	.0050	.0053	-.0168	.0001	-.0024	.0091
#2	.0000	.0008	-.0045	-.0126	-.0216	.0001	-.0023	.0084
#3	.0002	.0007	-.0033	-.0088	-.0041	.0002	-.0019	.0090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0000	.0010	-.0004	-.0006	-.0002	.0001	-.0006
Stddev	.0002	.000	.0009	.0034	.0003	.0002	.0000	.0001
%RSD	118.0	8099.	98.12	851.7	53.36	105.6	14.64	13.89
#1	.0003	.0003	.0004	-.0020	-.0003	-.0001	.0002	-.0005
#2	-.0001	.0002	.0005	-.0027	-.0005	-.0004	.0001	-.0006
#3	.0004	-.0005	.0021	.0035	-.0010	.0000	.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 10:56:28 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0016	.0000	.0002
Stddev	.0009	.0002	.0001
%RSD	57.72	877.6	61.86
#1	-.0007	.0002	.0000
#2	-.0026	.0000	.0002
#3	-.0015	-.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	736.21	1381.0	16766.	1999.9
Stddev	.81	6.7	79.	11.1
%RSD	.10939	.48617	.47265	.55633
#1	735.46	1388.2	16733.	1988.0
#2	736.10	1374.9	16857.	2001.7
#3	737.06	1379.8	16709.	2010.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 11:45:02 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2450	39.67	1.986	2.007	2.024	39.89	2.019	2.014	2.022	2.000
Stddev	.0016	.41	.005	.007	.011	.15	.004	.005	.012	.002
%RSD	.6512	1.022	.2742	.3414	.5277	.3643	.2052	.2642	.5673	.1185
#1	.2466	40.06	1.992	2.015	2.035	39.72	2.021	2.018	2.034	2.002
#2	.2434	39.25	1.981	2.002	2.013	39.96	2.015	2.008	2.012	1.998
#3	.2448	39.68	1.985	2.004	2.025	39.99	2.022	2.016	2.019	2.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.19	39.42	39.33	2.022	2.033	39.62	2.019	1.987	1.983	1.995
Stddev	.21	.27	.21	.016	.005	.41	.005	.010	.008	.009
%RSD	.5304	.6905	.5301	.7738	.2634	1.038	.2717	.4926	.4028	.4700
#1	40.41	39.72	39.46	2.039	2.037	40.07	2.024	1.976	1.992	2.000
#2	39.98	39.21	39.09	2.009	2.027	39.26	2.013	1.993	1.979	1.984
#3	40.18	39.32	39.43	2.017	2.033	39.54	2.021	1.993	1.978	2.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.052	2.028	2.042	2.046	1.997	2.013	2.018
Stddev	.008	.006	.011	.013	.007	.003	.001
%RSD	.4059	.3003	.5430	.6553	.3670	.1570	.0401
#1	2.059	2.035	2.054	2.061	1.990	2.016	2.018
#2	2.043	2.023	2.032	2.037	1.997	2.010	2.017
#3	2.055	2.025	2.040	2.039	2.005	2.015	2.018
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 11:45:02 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	638.04	1283.5	15792.	1983.2
Stddev	2.38	5.7	84.	.9
%RSD	.37364	.44317	.53004	.04673
#1	639.89	1279.2	15733.	1983.4
#2	638.87	1289.9	15888.	1982.2
#3	635.35	1281.4	15756.	1984.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 11:51:05 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0010	.0001	.0004	.0003	.0028	.0003	.0002	.0001
Stddev	.0001	.0035	.0011	.0001	.0000	.0035	.0000	.0001	.0002
%RSD	32.16	361.6	741.5	23.03	4.843	124.6	3.922	25.51	174.5
#1	.0003	-.0005	-.0010	.0003	.0003	-.0011	.0003	.0003	-.0001
#2	.0001	.0049	.0012	.0005	.0003	.0038	.0003	.0003	.0003
#3	.0002	-.0015	.0003	.0004	.0003	.0057	.0003	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0135	.0036	.0080	.0002	F.0020	.0105	.0003	-.0003
Stddev	.0004	.0033	.0176	.0561	.0000	.0004	.0032	.0002	.0010
%RSD	326.8	24.39	491.5	698.1	15.12	18.37	30.43	65.74	328.8
#1	.0002	.0144	-.0018	.0632	.0002	.0024	.0123	.0001	-.0002
#2	-.0001	.0162	-.0107	.0099	.0001	.0018	.0125	.0003	-.0013
#3	-.0005	.0098	.0233	-.0489	.0002	.0018	.0068	.0006	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0025	.0004	.0014	.0004	.0003	.0008	.0013	.0002	.0002
Stddev	.0012	.0008	.0010	.0001	.0000	.0001	.0013	.0002	.0002
%RSD	48.14	226.8	69.54	37.13	6.323	17.16	97.08	122.2	71.02
#1	.0029	-.0003	.0005	.0004	.0003	.0010	.0020	.0001	.0004
#2	.0034	.0001	.0024	.0002	.0003	.0007	.0020	.0005	.0001
#3	.0011	.0012	.0013	.0005	.0003	.0007	-.0002	.0000	.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 11:51:05 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	727.77	1356.1	16654.	2004.4
Stddev	1.61	5.8	61.	16.5
%RSD	.22070	.42805	.36572	.82554
#1	725.97	1349.9	16602.	2019.3
#2	728.30	1356.9	16639.	2007.4
#3	729.05	1361.4	16721.	1986.6

Zoom In Zoom Out

Sample Name: FA54267-2F Acquired: 5/24/2018 11:59:58 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0118	.1701	-.0236	.0106	.0062	440.9	.0027	-.0062	-.0257	.0024
Stddev	.0172	.5571	.0734	.0113	.0029	1.2	.0019	.0015	.0119	.0028
%RSD	145.6	327.5	310.7	106.2	47.33	.2812	68.98	24.18	46.21	117.6
#1	.0058	.1478	-.0609	.0233	.0061	442.1	.0015	-.0079	-.0227	.0002
#2	-.0127	.7380	.0609	.0018	.0092	440.8	.0048	-.0054	-.0388	.0015
#3	-.0285	-.3755	-.0709	.0067	.0033	439.7	.0017	-.0053	-.0156	.0056

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.394	10.45	645.8	1.899	-.0221	2512.	-.0027	.0865	-.0073	.1128
Stddev	.095	1.35	.4	.006	.0007	3.	.0095	.0467	.0267	.0138
%RSD	1.482	12.86	.0609	.2981	3.109	.1211	356.2	54.01	368.1	12.23
#1	6.309	9.012	645.7	1.897	-.0224	2509.	.0046	.0358	-.0268	.1260
#2	6.378	11.67	646.2	1.906	-.0213	2515.	.0009	.1278	-.0182	.0985
#3	6.496	10.68	645.5	1.895	-.0226	2512.	-.0134	.0959	.0232	.1139

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.952	-.0306	6.206	.0278	.0544	.0037	.0176
Stddev	.008	.0277	.012	.0093	.0438	.0147	.0037
%RSD	.1619	90.59	.1970	33.30	80.61	397.6	20.81
#1	4.943	-.0620	6.197	.0174	.0055	-.0128	.0141
#2	4.952	-.0205	6.200	.0307	.0673	.0154	.0173
#3	4.959	-.0093	6.220	.0353	.0903	.0085	.0214

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	688.74	1314.3	16186.	2001.4
Stddev	1.20	3.3	63.	8.1
%RSD	.17391	.25178	.38801	.40346
#1	689.48	1317.2	16243.	1993.3
#2	687.36	1310.7	16118.	2009.4
#3	689.38	1314.9	16197.	2001.4

Zoom In Zoom Out

Sample Name: FA54294-20 Acquired: 5/24/2018 12:04:15 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_2243)
Avg	.0001	286.6	.0458	5.148	.0079	8.630	-.0032	.0090	.4503	.0157
Stddev	.0039	1.1	.0012	.001	.0007	.039	.0003	.0009	.0045	.0030
%RSD	3755.	.3680	2.706	.0260	8.526	.4485	8.114	10.08	1.001	19.10
#1	.0013	286.7	.0450	5.148	.0086	8.642	-.0035	.0089	.4554	.0142
#2	-.0043	285.5	.0473	5.149	.0073	8.586	-.0030	.0100	.4485	.0137
#3	.0033	287.6	.0453	5.147	.0077	8.661	-.0031	.0082	.4469	.0191

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	123.9	3.399	7.609	.0690	-.0012	.2391	.0493	.3506	-.0199	-.0007
Stddev	.4	.253	.559	.0008	.0030	.0696	.0017	.0085	.0029	.0110
%RSD	.3057	7.437	7.349	1.089	247.5	29.10	3.513	2.421	14.67	1487.
#1	123.6	3.227	7.650	.0692	.0019	.3026	.0492	.3507	-.0186	-.0059
#2	123.8	3.281	7.030	.0681	-.0014	.2500	.0510	.3590	-.0233	.0119
#3	124.3	3.689	8.146	.0696	-.0041	.1647	.0476	.3421	-.0179	-.0082

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.225	.0279	4.368	.9790	-.0003	.3522	.0962
Stddev	.017	.0033	.012	.0073	.0085	.0044	.0008
%RSD	.5362	11.95	.2722	.7495	2497.	1.251	.8544
#1	3.215	.0283	4.381	.9809	.0000	.3556	.0953
#2	3.215	.0244	4.365	.9708	.0080	.3536	.0967
#3	3.245	.0310	4.358	.9851	-.0090	.3472	.0967

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	720.33	1588.0	19462.	2408.5
Stddev	1.53	2.7	79.	10.3
%RSD	.21209	.16892	.40477	.42804
#1	719.88	1586.8	19468.	2410.0
#2	722.03	1591.1	19538.	2418.0
#3	719.08	1586.1	19381.	2397.5

Zoom In Zoom Out

Sample Name: MP33785-MB1 Acquired: 5/24/2018 12:08:29 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0097	-.0018	.0000	-.0001	.0091	.0000	.0000	-.0004	-.0008
Stddev	.0001	.0087	.0007	.0002	.0001	.0038	.000	.000	.0001	.0001
%RSD	152.3	89.01	39.96	669.0	75.01	42.10	310.1	3157.	15.07	7.473
#1	.0000	.0036	-.0025	-.0001	-.0002	.0048	.0000	-.0001	-.0005	-.0008
#2	.0000	.0060	-.0019	-.0001	.0000	.0120	-.0001	-.0001	-.0004	-.0007
#3	.0002	.0197	-.0011	.0003	-.0001	.0106	.0000	.0001	-.0004	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0150	.0042	.0239	.0001	-.0003	.0046	-.0001	-.0006	.0007	.0023
Stddev	.0049	.0192	.0405	.0000	.0001	.0033	.0002	.0005	.0003	.0010
%RSD	33.09	453.0	169.3	10.88	48.07	72.40	193.4	87.10	36.07	40.83
#1	.0199	-.0152	.0410	.0001	-.0002	.0008	.0000	-.0002	.0010	.0015
#2	.0149	.0233	-.0223	.0001	-.0004	.0066	-.0003	-.0012	.0007	.0022
#3	.0100	.0047	.0530	.0001	-.0002	.0065	.0000	-.0003	.0005	.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0222	.0000	.0001	-.0001	-.0022	-.0002	.0017
Stddev	.0003	.0008	.0000	.0000	.0003	.0003	.0002
%RSD	1.505	3023.	51.77	28.04	14.21	198.4	9.991
#1	.0226	-.0008	.0001	.0000	-.0024	-.0004	.0018
#2	.0219	.0002	.0001	-.0001	-.0023	.0002	.0017
#3	.0221	.0007	.0000	-.0001	-.0018	-.0003	.0015
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33785-MB1 Acquired: 5/24/2018 12:08:29 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	732.81	1351.4	16897.	2011.7
Stddev	2.96	2.8	31.	9.3
%RSD	.40346	.20899	.18432	.46105
#1	730.40	1348.5	16863.	2022.0
#2	736.11	1351.7	16907.	2004.1
#3	731.92	1354.1	16923.	2009.1

Zoom In Zoom Out

Sample Name: MP33785-B1 Acquired: 5/24/2018 12:12:49 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0499	26.51	1.924	2.023	.0514	24.93	.0493	.5048	.2057	.2529
Stddev	.0005	.12	.003	.002	.0002	.12	.0001	.0012	.0011	.0002
%RSD	1.101	.4533	.1549	.0725	.4655	.4687	.1930	.2451	.5161	.0665
#1	.0504	26.54	1.924	2.021	.0517	25.06	.0492	.5035	.2052	.2527
#2	.0493	26.61	1.927	2.024	.0514	24.85	.0494	.5059	.2050	.2528
#3	.0499	26.38	1.921	2.023	.0512	24.86	.0493	.5049	.2069	.2531
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.97	24.33	24.29	.5100	.4839	24.57	.5158	.4788	.4912	1.898
Stddev	.08	.06	.09	.0051	.0005	.05	.0007	.0016	.0039	.006
%RSD	.3261	.2591	.3707	1.001	.0959	.1843	.1372	.3294	.7929	.3167
#1	26.06	24.31	24.29	.5115	.4839	24.55	.5166	.4806	.4902	1.893
#2	25.96	24.39	24.38	.5043	.4844	24.62	.5156	.4776	.4954	1.905
#3	25.89	24.27	24.20	.5142	.4835	24.54	.5152	.4781	.4878	1.896
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4764	.4959	.5105	.5072	1.880	.4792	.4967
Stddev	.0017	.0012	.0014	.0033	.007	.0017	.0006
%RSD	.3543	.2473	.2681	.6529	.3512	.3555	.1138
#1	.4750	.4969	.5119	.5089	1.877	.4789	.4962
#2	.4782	.4963	.5103	.5034	1.888	.4776	.4967
#3	.4760	.4945	.5092	.5093	1.875	.4810	.4973
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33785-B1 Acquired: 5/24/2018 12:12:49 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	671.70	1306.6	15948.	1986.0
Stddev	.57	1.8	78.	8.7
%RSD	.08539	.13484	.49181	.43742
#1	671.09	1305.8	15860.	1977.8
#2	671.77	1305.4	16010.	1985.1
#3	672.23	1308.6	15974.	1995.1

Zoom In Zoom Out

Sample Name: FA54390-1 Acquired: 5/24/2018 12:16:53 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0020	.2110	.8404	.0165	-.0004	921.0	.0002	-.0001	.0065
Stddev	.0024	.0413	.0040	.0010	.0005	6.7	.0002	.0004	.0016
%RSD	123.5	19.56	.4801	6.349	129.2	.7324	78.95	428.0	24.24
#1	.0038	.2033	.8380	.0174	-.0008	920.0	.0002	.0001	.0076
#2	-.0008	.2555	.8381	.0153	.0001	914.8	.0004	-.0005	.0072
#3	.0028	.1741	.8450	.0168	-.0003	928.2	.0001	.0002	.0047

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0014	.1462	57.93	83.73	.0030	.2272	F9638.	.0005	.0187
Stddev	.0006	.0134	.36	.35	.0002	.0006	192.	.0011	.0070
%RSD	44.72	9.131	.6267	.4145	7.061	.2735	1.996	219.1	37.15
#1	.0017	.1547	57.56	84.01	.0033	.2278	9801.	.0009	.0112
#2	.0007	.1308	57.95	83.34	.0030	.2266	9426.	-.0008	.0250
#3	.0018	.1531	58.29	83.85	.0028	.2271	9688.	.0014	.0199

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0038	.4846	3.275	-.0068	14.23	.0109	-.0071	.1499	.0043
Stddev	.0053	.0143	.010	.0018	.01	.0001	.0103	.0016	.0010
%RSD	139.0	2.952	.3082	26.64	.1010	.4876	145.1	1.093	23.57
#1	-.0023	.4712	3.287	-.0081	14.21	.0108	.0022	.1481	.0054
#2	.0073	.4996	3.269	-.0076	14.24	.0109	-.0182	.1513	.0036
#3	.0064	.4830	3.269	-.0047	14.24	.0109	-.0053	.1503	.0037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	506.56	1105.8	13202.	1837.3
Stddev	.83	.4	77.	17.1
%RSD	.16438	.03641	.57956	.93193
#1	507.32	1106.0	13280.	1830.8
#2	505.67	1106.2	13127.	1856.8
#3	506.69	1105.4	13198.	1824.4

Zoom In Zoom Out

Sample Name: MP33785-D1 Acquired: 5/24/2018 12:21:16 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	.1837	.7759	.0152	-.0004	852.1	-.0002	.0002	.0090
Stddev	.0023	.0454	.0035	.0006	.0003	1.8	.0002	.0008	.0034
%RSD	309.3	24.72	.4538	4.192	67.41	.2085	93.88	324.5	38.04
#1	-.0012	.1377	.7774	.0156	-.0004	853.5	-.0001	.0004	.0094
#2	.0033	.2285	.7784	.0145	-.0006	852.8	-.0001	.0009	.0123
#3	.0001	.1849	.7719	.0156	-.0001	850.1	-.0005	-.0006	.0054

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0016	.0960	54.72	77.72	.0021	.2121	F8344.	.0002	.0178
Stddev	.0004	.0279	.48	.48	.0002	.0013	165.	.0010	.0107
%RSD	22.92	29.09	.8738	.6156	10.91	.6100	1.972	474.4	60.10
#1	.0014	.0690	54.23	77.35	.0023	.2124	8432.	-.0009	.0175
#2	.0013	.0942	54.74	78.26	.0019	.2132	8447.	.0009	.0073
#3	.0020	.1248	55.19	77.55	.0023	.2107	8155.	.0006	.0287

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0059	.4402	2.999	-.0067	13.42	.0093	-.0074	.1417	.0048
Stddev	.0083	.0054	.014	.0018	.06	.0013	.0164	.0021	.0007
%RSD	140.9	1.218	.4605	27.34	.4735	14.41	221.2	1.499	14.84
#1	.0007	.4443	3.001	-.0088	13.35	.0102	-.0175	.1439	.0053
#2	.0155	.4341	2.985	-.0053	13.44	.0078	.0115	.1416	.0040
#3	.0015	.4422	3.012	-.0060	13.47	.0100	-.0162	.1397	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	510.12	1111.8	13181.	1845.3
Stddev	1.02	3.2	47.	4.6
%RSD	.19922	.28350	.35483	.25185
#1	508.96	1109.3	13141.	1849.2
#2	510.86	1115.3	13169.	1840.2
#3	510.54	1110.7	13232.	1846.6

Zoom In Zoom Out

Sample Name: MP33785-SD1 Acquired: 5/24/2018 12:25:40 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0023	.0893	.7101	.0182	-.0007	881.4	-.0015	.0006
Stddev	.0070	.1099	.0222	.0019	.0019	3.2	.0008	.0001
%RSD	298.8	123.0	3.125	10.39	251.0	.3576	57.03	21.87
#1	-.0089	.1809	.6859	.0203	.0013	878.8	-.0014	.0005
#2	-.0031	.1196	.7148	.0165	-.0024	884.9	-.0007	.0007
#3	.0050	-.0325	.7295	.0179	-.0012	880.4	-.0024	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0068	.0070	.0442	49.56	79.21	.0018	.2035	F10090.
Stddev	.0057	.0052	.0527	.26	.90	.0009	.0033	152.
%RSD	82.85	74.79	119.1	.5206	1.132	47.11	1.608	1.508
#1	.0104	.0097	.0599	49.54	78.17	.0012	.2003	9931.
#2	.0003	.0010	-.0145	49.83	79.70	.0015	.2033	10230.
#3	.0099	.0102	.0873	49.31	79.75	.0028	.2069	10100.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0031	.0558	.0124	.3929	2.942	-.0231	13.78	.0305
Stddev	.0062	.0243	.0182	.0218	.027	.0104	.05	.0017
%RSD	203.2	43.56	146.3	5.542	.9266	44.87	.3538	5.544
#1	.0101	.0280	.0010	.4031	2.920	-.0157	13.81	.0293
#2	.0008	.0733	.0335	.4077	2.972	-.0349	13.81	.0324
#3	-.0017	.0660	.0028	.3679	2.933	-.0186	13.73	.0297

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0039	.1382	.0148
Stddev	.0201	.0044	.0039
%RSD	511.3	3.155	26.06
#1	.0068	.1381	.0173
#2	-.0271	.1427	.0104
#3	.0085	.1339	.0168

Zoom In Zoom Out

Sample Name: MP33785-SD1 Acquired: 5/24/2018 12:25:40 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	611.59	1256.0	15008.	1935.6
Stddev	1.32	.2	11.	9.5
%RSD	.21657	.01541	.07250	.48909
#1	611.24	1255.8	15020.	1933.1
#2	613.05	1256.1	15000.	1927.7
#3	610.47	1256.1	15004.	1946.1

Zoom In Zoom Out

Sample Name: MP33785-PS1 Acquired: 5/24/2018 12:30:06 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0577	3.011	.9818	.2828	.0524	947.7	.0491	.0473	.0613
Stddev	.0012	.063	.0038	.0014	.0004	3.5	.0004	.0004	.0034
%RSD	2.011	2.101	.3856	.5111	.7507	.3644	.7750	.9299	5.547
#1	.0564	3.076	.9781	.2828	.0522	944.2	.0494	.0470	.0575
#2	.0581	2.950	.9818	.2814	.0520	947.8	.0493	.0471	.0641
#3	.0587	3.008	.9856	.2842	.0528	951.1	.0487	.0478	.0622

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1165	3.150	73.73	91.37	.0538	.3235	F9129.	.0935	.0654
Stddev	.0001	.025	.60	1.17	.0005	.0021	218.	.0023	.0073
%RSD	.0744	.7880	.8116	1.282	.9679	.6595	2.390	2.424	11.22
#1	.1164	3.137	73.06	90.14	.0534	.3217	9374.	.0912	.0736
#2	.1165	3.178	73.90	91.49	.0543	.3230	8954.	.0934	.0629
#3	.1166	3.134	74.22	92.47	.0536	.3258	9059.	.0957	.0596

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1213	.5910	3.375	.0430	15.02	.1130	.0774	.2066	.2567
Stddev	.0122	.0191	.025	.0024	.08	.0010	.0061	.0011	.0007
%RSD	10.10	3.240	.7409	5.556	.5291	.8912	7.842	.5240	.2631
#1	.1278	.5979	3.355	.0446	14.94	.1127	.0761	.2055	.2560
#2	.1071	.5694	3.367	.0442	15.04	.1122	.0840	.2077	.2570
#3	.1288	.6058	3.403	.0403	15.09	.1141	.0721	.2065	.2573

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	502.52	1107.2	13078.	1824.7
Stddev	1.25	3.4	19.	8.0
%RSD	.24775	.30345	.14576	.43781
#1	502.84	1109.4	13060.	1832.1
#2	501.15	1109.0	13075.	1825.9
#3	503.58	1103.4	13098.	1816.2

Zoom In Zoom Out

Sample Name: MP33785-S1 Acquired: 5/24/2018 12:34:29 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0610	29.21	2.994	2.080	.0528	933.6	.0482	.4740	.2221
Stddev	.0013	.29	.014	.000	.0006	2.5	.0007	.0016	.0042
%RSD	2.137	.9933	.4755	.0117	1.224	.2666	1.461	.3408	1.909
#1	.0620	29.54	2.997	2.080	.0529	930.8	.0475	.4726	.2191
#2	.0615	29.09	3.007	2.080	.0522	934.4	.0482	.4757	.2203
#3	.0596	29.00	2.979	2.080	.0535	935.6	.0489	.4736	.2270

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2822	26.61	89.25	108.2	.5218	.6902	F8343.	.4695	.5266
Stddev	.0006	.08	.18	.5	.0048	.0005	175.	.0010	.0112
%RSD	.2169	.2991	.2004	.4326	.9132	.0736	2.094	.2232	2.121
#1	.2826	26.64	89.45	108.0	.5165	.6897	8486.	.4703	.5140
#2	.2815	26.67	89.10	107.9	.5232	.6907	8395.	.4700	.5354
#3	.2825	26.52	89.19	108.8	.5257	.6903	8148.	.4683	.5304

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5450	2.654	3.665	.4559	15.07	.5209	1.844	.6344	.5015
Stddev	.0065	.005	.010	.0037	.09	.0040	.032	.0021	.0014
%RSD	1.185	.1759	.2803	.8204	.5968	.7602	1.716	.3254	.2798
#1	.5401	2.651	3.676	.4566	15.17	.5169	1.808	.6342	.5002
#2	.5425	2.660	3.663	.4518	15.05	.5208	1.858	.6365	.5030
#3	.5523	2.652	3.656	.4592	15.00	.5248	1.867	.6324	.5013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	501.77	1122.1	13118.	1815.3
Stddev	1.72	3.0	4.	5.9
%RSD	.34275	.27055	.03380	.32489
#1	502.36	1118.7	13117.	1808.5
#2	499.83	1122.9	13123.	1819.2
#3	503.12	1124.6	13115.	1818.3

Zoom In Zoom Out

Sample Name: MP33785-S2 Acquired: 5/24/2018 12:38:49 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0615	30.25	3.111	2.152	.0555	963.3	.0492	.4881	.2318
Stddev	.0018	.13	.013	.005	.0007	1.3	.0002	.0021	.0009
%RSD	3.004	.4329	.4255	.2488	1.328	.1303	.3385	.4351	.3799
#1	.0620	30.27	3.125	2.158	.0556	962.9	.0493	.4900	.2310
#2	.0595	30.11	3.099	2.149	.0548	964.7	.0490	.4858	.2328
#3	.0631	30.37	3.110	2.149	.0562	962.3	.0492	.4885	.2317

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2915	27.49	92.51	112.0	.5370	.7074	F8494.	.4868	.5463
Stddev	.0017	.13	.18	.1	.0013	.0043	205.	.0047	.0083
%RSD	.5999	.4815	.1905	.0970	.2399	.6072	2.414	.9694	1.525
#1	.2909	27.47	92.45	111.9	.5368	.7095	8671.	.4815	.5367
#2	.2934	27.63	92.37	111.9	.5358	.7025	8541.	.4884	.5514
#3	.2900	27.37	92.71	112.1	.5384	.7103	8269.	.4905	.5507

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5599	2.767	3.742	.4614	15.52	.5312	1.894	.6512	.5155
Stddev	.0082	.016	.022	.0049	.04	.0019	.005	.0042	.0028
%RSD	1.466	.5919	.5997	1.066	.2810	.3537	.2729	.6491	.5401
#1	.5504	2.771	3.757	.4598	15.57	.5332	1.900	.6559	.5186
#2	.5642	2.749	3.716	.4575	15.49	.5294	1.892	.6477	.5133
#3	.5650	2.781	3.753	.4669	15.49	.5310	1.890	.6499	.5145

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	499.02	1119.7	13126.	1808.3
Stddev	.64	4.8	51.	4.6
%RSD	.12805	.42933	.38477	.25293
#1	498.87	1117.4	13077.	1809.0
#2	498.47	1125.2	13124.	1803.5
#3	499.72	1116.4	13178.	1812.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 12:43:10 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2456	41.96	1.933	2.025	2.090	39.63	2.024	2.016	2.124	2.044
Stddev	.0007	.20	.012	.007	.005	.02	.004	.007	.010	.014
%RSD	.2793	.4813	.6099	.3435	.2628	.0605	.1923	.3260	.4566	.6587
#1	.2464	42.14	1.947	2.030	2.096	39.62	2.028	2.023	2.130	2.059
#2	.2450	41.74	1.926	2.017	2.085	39.66	2.020	2.010	2.128	2.033
#3	.2455	42.01	1.927	2.028	2.091	39.62	2.022	2.015	2.113	2.040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.28	40.40	40.11	2.048	2.013	38.96	1.970	2.025	1.950	1.944
Stddev	.12	.16	.04	.002	.005	.24	.006	.015	.010	.013
%RSD	.2824	.3896	.0943	.0817	.2424	.6051	.2868	.7606	.4961	.6859
#1	41.40	40.55	40.07	2.049	2.016	38.98	1.976	2.017	1.961	1.959
#2	41.27	40.24	40.15	2.046	2.007	38.71	1.964	2.043	1.947	1.932
#3	41.17	40.42	40.12	2.048	2.014	39.19	1.969	2.016	1.943	1.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.006	1.948	2.111	2.091	2.032	2.023	2.007
Stddev	.009	.015	.009	.006	.011	.008	.003
%RSD	.4365	.7644	.4288	.3054	.5392	.4084	.1240
#1	2.016	1.964	2.120	2.095	2.020	2.032	2.009
#2	1.998	1.936	2.102	2.084	2.042	2.022	2.004
#3	2.004	1.943	2.112	2.094	2.034	2.015	2.008
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 12:43:10 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	639.94	1313.2	15599.	1943.2
Stddev	2.58	9.2	60.	3.5
%RSD	.40240	.70040	.38485	.18214
#1	641.78	1302.9	15531.	1944.7
#2	637.00	1320.6	15626.	1939.1
#3	641.04	1316.1	15642.	1945.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 12:47:08 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0090	.0007	.0005	.0003	.0082	.0003	.0004	.0002
Stddev	.0005	.0156	.0000	.0000	.0001	.0023	.0000	.0000	.0001
%RSD	349.3	173.0	3.341	6.499	35.13	27.75	9.948	10.33	54.71
#1	-.0001	.0197	.0007	.0005	.0002	.0105	.0003	.0003	.0001
#2	-.0006	.0161	.0006	.0005	.0003	.0080	.0003	.0004	.0002
#3	.0003	-.0089	.0007	.0004	.0003	.0059	.0003	.0004	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0257	.0462	-.0181	.0003	F.0027	.2386	.0001	-.0004
Stddev	.0001	.0023	.0147	.0104	.0001	.0008	.0020	.0002	.0004
%RSD	48.66	8.760	31.88	57.29	29.23	30.16	.8373	142.2	97.58
#1	-.0001	.0281	.0539	-.0140	.0002	.0036	.2394	-.0001	.0000
#2	-.0003	.0256	.0555	-.0104	.0004	.0025	.2363	.0002	-.0007
#3	-.0002	.0236	.0292	-.0299	.0003	.0020	.2400	.0003	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0027	F.0028	.0013	.0002	.0003	.0012	-.0004	.0001	.0003
Stddev	.0006	.0014	.0003	.0002	.0000	.0002	.0009	.0003	.0002
%RSD	22.19	49.10	23.76	103.8	7.526	17.06	242.3	576.5	62.85
#1	.0021	.0012	.0011	.0004	.0003	.0014	.0007	.0005	.0001
#2	.0029	.0034	.0016	.0000	.0004	.0011	-.0008	-.0001	.0004
#3	.0032	.0038	.0011	.0001	.0004	.0011	-.0011	-.0002	.0005
Check ?	Chk Fail	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020	.0020							
Low Limit	-.0020	-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 12:47:08 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	732.35	1404.0	16414.	1957.3
Stddev	1.98	1.8	24.	11.5
%RSD	.26984	.12524	.14541	.58784
#1	730.07	1402.2	16406.	1949.5
#2	733.47	1405.7	16441.	1951.8
#3	733.52	1404.1	16396.	1970.5

Zoom In Zoom Out

Sample Name: FA54390-2 Acquired: 5/24/2018 12:51:26 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0010	.8042	.1494	.0166	-.0001	813.5	-.0003	.0003	.0103
Stddev	.0016	.0615	.0027	.0007	.0001	1.6	.0004	.0006	.0004
%RSD	157.6	7.646	1.820	4.308	138.7	.1994	121.4	196.2	4.356
#1	.0005	.7363	.1507	.0171	.0000	813.1	-.0007	.0006	.0100
#2	.0027	.8561	.1512	.0158	-.0002	815.3	-.0002	.0008	.0108
#3	-.0003	.8202	.1463	.0169	-.0001	812.1	.0000	-.0004	.0101

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.4238	43.05	280.7	.0115	.0575	F6213.	.0008	.0183
Stddev	.0016	.0331	.16	1.3	.0008	.0010	52.	.0005	.0027
%RSD	1320.	7.810	.3701	.4806	6.749	1.751	.8437	65.94	14.76
#1	.0010	.3883	42.88	279.4	.0124	.0567	6269.	.0007	.0188
#2	.0006	.4539	43.09	280.7	.0111	.0572	6207.	.0003	.0207
#3	-.0019	.4293	43.19	282.1	.0110	.0586	6164.	.0013	.0154

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0055	.3022	4.177	-.0038	14.36	.0290	-.0125	.0745	.0158
Stddev	.0046	.0106	.012	.0027	.06	.0034	.0024	.0007	.0009
%RSD	84.47	3.521	.2794	72.76	.4151	11.58	19.48	.9622	5.538
#1	.0023	.3120	4.164	-.0025	14.34	.0313	-.0107	.0751	.0164
#2	.0108	.3039	4.179	-.0019	14.31	.0306	-.0153	.0737	.0148
#3	.0034	.2909	4.188	-.0069	14.42	.0251	-.0116	.0747	.0161

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	535.54	1168.9	13522.	1823.5
Stddev	.85	3.0	16.	3.3
%RSD	.15920	.25655	.11932	.18257
#1	535.99	1172.3	13505.	1827.2
#2	536.07	1167.1	13537.	1822.7
#3	534.55	1167.2	13524.	1820.7

Zoom In Zoom Out

Sample Name: FA54274-12F Acquired: 5/24/2018 12:55:50 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0340	-.0041	.1090	.0000	180.7	.0001	-.0001	.0035
Stddev	.0002	.0059	.0010	.0002	.000	.9	.0001	.0001	.0005
%RSD	134.8	17.26	23.47	.1955	354.7	.5029	105.3	71.37	14.99
#1	-.0003	.0314	-.0049	.1092	.0000	179.8	.0002	-.0001	.0032
#2	-.0003	.0299	-.0043	.1091	.0000	181.6	.0002	-.0001	.0031
#3	.0001	.0407	-.0030	.1088	.0000	180.7	.0000	-.0002	.0041

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0035	.0080	6.253	58.13	.0194	.0016	F155.6	.0001	.0025
Stddev	.0002	.0048	.006	.35	.0001	.0001	1.1	.0002	.0002
%RSD	5.844	60.59	.0900	.5940	.6531	6.392	.7210	110.5	6.890
#1	.0035	.0089	6.259	58.02	.0195	.0016	155.0	.0000	.0024
#2	.0036	.0027	6.251	58.52	.0193	.0018	156.8	.0003	.0027
#3	.0032	.0122	6.248	57.86	.0194	.0016	154.8	.0001	.0026

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0028	.0070	9.604	.0000	1.837	.0016	-.0035	.0050	.0072
Stddev	.0007	.0026	.019	.000	.003	.0001	.0011	.0000	.0002
%RSD	25.61	37.00	.1941	1610.	.1750	8.336	31.90	.7238	2.275
#1	.0035	.0058	9.583	.0000	1.836	.0017	-.0035	.0050	.0073
#2	.0028	.0099	9.614	.0003	1.841	.0017	-.0024	.0050	.0070
#3	.0021	.0052	9.616	-.0004	1.836	.0014	-.0047	.0050	.0073

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	616.02	1252.0	14797.	1853.4
Stddev	1.41	.9	40.	8.7
%RSD	.22928	.07283	.27346	.46947
#1	614.47	1252.5	14752.	1854.7
#2	617.24	1252.5	14828.	1844.1
#3	616.35	1250.9	14812.	1861.3

Zoom In Zoom Out

Sample Name: FA54320-2F Acquired: 5/24/2018 13:00:05 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0706	-.0026	.0697	-.0001	154.3	.0002	-.0002	.0035
Stddev	.0002	.0101	.0006	.0004	.0001	1.0	.0000	.0002	.0003
%RSD	543.2	14.38	21.63	.5134	171.3	.6329	24.36	95.77	7.256
#1	.0001	.0589	-.0021	.0693	-.0002	153.5	.0002	-.0003	.0038
#2	-.0001	.0752	-.0032	.0700	.0000	155.4	.0001	.0000	.0033
#3	.0001	.0775	-.0025	.0698	.0000	153.9	.0002	-.0004	.0033

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	.0139	4.657	46.09	.0026	.0016	F158.8	-.0002	.0035
Stddev	.0003	.0046	.034	.34	.0001	.0002	.7	.0002	.0003
%RSD	1363.	33.35	.7250	.7270	2.090	13.43	.4536	86.83	9.118
#1	.0003	.0121	4.674	45.94	.0026	.0016	159.0	-.0003	.0037
#2	-.0002	.0192	4.678	46.48	.0025	.0018	159.4	-.0002	.0031
#3	.0000	.0105	4.618	45.87	.0026	.0014	158.0	.0000	.0036

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0021	.0044	9.733	-.0001	1.398	.0017	-.0022	.0050	.0058
Stddev	.0009	.0001	.004	.0008	.006	.0001	.0008	.0001	.0000
%RSD	43.31	2.510	.0388	1374.	.4478	3.718	36.88	2.346	.7877
#1	.0032	.0046	9.735	-.0010	1.399	.0017	-.0013	.0049	.0059
#2	.0018	.0044	9.736	.0001	1.403	.0018	-.0025	.0049	.0058
#3	.0015	.0043	9.729	.0007	1.391	.0017	-.0027	.0051	.0058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	625.00	1268.3	14882.	1855.8
Stddev	1.80	2.0	31.	13.9
%RSD	.28766	.15856	.21131	.74921
#1	622.99	1268.9	14851.	1855.5
#2	626.45	1266.0	14880.	1842.1
#3	625.56	1269.9	14914.	1869.9

Zoom In Zoom Out

Sample Name: FA54320-4F Acquired: 5/24/2018 13:04:19 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0383	.0031	.0927	.0000	187.9	.0002	.0001	.0005
Stddev	.0003	.0013	.0009	.0008	.000	1.3	.0001	.0001	.0002
%RSD	61.50	3.500	30.05	.9166	1789.	.6892	42.15	213.6	48.29
#1	-.0004	.0379	.0027	.0918	-.0001	186.6	.0001	.0002	.0004
#2	-.0002	.0398	.0024	.0935	.0000	189.2	.0002	.0000	.0008
#3	-.0007	.0372	.0042	.0928	.0000	187.9	.0003	.0000	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0012	.0019	4.174	53.67	.8486	.0028	F139.0	.0041	.0037
Stddev	.0000	.0049	.050	.24	.0056	.0001	.7	.0003	.0005
%RSD	4.054	261.6	1.191	.4484	.6564	5.169	.5273	6.827	13.66
#1	.0012	-.0033	4.144	53.43	.8549	.0028	138.3	.0042	.0034
#2	.0013	.0063	4.232	53.91	.8445	.0029	138.9	.0043	.0043
#3	.0012	.0025	4.147	53.66	.8463	.0027	139.8	.0037	.0034

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0037	10.09	-.0001	1.648	.0013	-.0038	.0034	.0162
Stddev	.0011	.0015	.02	.0005	.007	.0000	.0018	.0002	.0003
%RSD	114.7	39.42	.2019	880.7	.4108	2.694	45.99	5.893	2.128
#1	.0007	.0050	10.10	.0005	1.641	.0013	-.0051	.0032	.0160
#2	.0021	.0021	10.06	-.0004	1.651	.0013	-.0018	.0036	.0160
#3	.0000	.0041	10.10	-.0002	1.653	.0013	-.0045	.0033	.0166

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	621.57	1269.5	14764.	1864.8
Stddev	2.61	2.7	82.	8.1
%RSD	.42048	.21089	.55327	.43530
#1	624.01	1267.0	14677.	1871.5
#2	621.88	1272.3	14776.	1855.8
#3	618.81	1269.3	14839.	1867.2

Zoom In Zoom Out

Sample Name: FA54320-5F Acquired: 5/24/2018 13:08:34 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.1079	-.0020	.0935	.0000	107.3	.0002	-.0001	.0043
Stddev	.0003	.0050	.0008	.0003	.0000	.1	.0000	.0001	.0005
%RSD	248.4	4.652	42.03	.3366	27900.	.1134	26.53	63.68	11.77
#1	-.0003	.1134	-.0017	.0933	.0000	107.2	.0002	-.0001	.0037
#2	-.0003	.1068	-.0013	.0938	.0000	107.4	.0002	.0000	.0047
#3	.0002	.1036	-.0029	.0932	.0000	107.3	.0001	-.0002	.0044

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0028	.0111	4.528	29.27	.0039	.0031	F84.38	.0015	.0031
Stddev	.0002	.0027	.033	.09	.0001	.0001	.69	.0002	.0022
%RSD	8.893	24.40	.7311	.2998	1.428	3.578	.8168	14.85	71.86
#1	.0029	.0081	4.505	29.22	.0039	.0032	84.33	.0013	.0056
#2	.0025	.0121	4.566	29.37	.0038	.0031	85.09	.0016	.0015
#3	.0030	.0133	4.513	29.22	.0039	.0030	83.72	.0017	.0022

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0025	.0048	7.023	-.0005	.9847	.0014	-.0035	.0070	.0421
Stddev	.0009	.0013	.033	.0005	.0072	.0000	.0011	.0005	.0001
%RSD	37.63	27.89	.4657	102.7	.7315	3.475	30.59	6.886	.2866
#1	.0018	.0035	7.055	-.0001	.9813	.0014	-.0027	.0069	.0419
#2	.0021	.0047	7.024	-.0012	.9930	.0014	-.0047	.0065	.0422
#3	.0036	.0062	6.990	-.0003	.9799	.0015	-.0030	.0075	.0421

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	650.23	1310.7	15160.	1882.3
Stddev	2.28	8.2	72.	6.2
%RSD	.35000	.62629	.47172	.33194
#1	647.87	1301.9	15208.	1882.8
#2	650.41	1311.9	15078.	1875.8
#3	652.41	1318.2	15195.	1888.2

Zoom In Zoom Out

Sample Name: FA54320-11F Acquired: 5/24/2018 13:12:49 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0438	.0063	.0837	-.0001	164.0	.0001	.0004	.0010
Stddev	.0001	.0043	.0012	.0003	.0001	.8	.0000	.0001	.0003
%RSD	26.50	9.851	19.32	.3139	64.36	.4728	46.73	28.87	27.93
#1	-.0005	.0474	.0068	.0835	-.0002	164.2	.0000	.0004	.0008
#2	-.0004	.0390	.0049	.0835	.0000	163.2	.0001	.0002	.0013
#3	-.0007	.0449	.0073	.0840	-.0001	164.7	.0001	.0004	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0131	.0099	3.655	48.27	.8168	.0025	F124.4	.0092	.0052
Stddev	.0004	.0023	.003	.25	.0038	.0001	1.3	.0002	.0008
%RSD	3.167	23.39	.0861	.5093	.4617	3.877	1.038	1.944	15.67
#1	.0129	.0093	3.652	48.35	.8172	.0025	125.8	.0092	.0043
#2	.0127	.0124	3.658	47.99	.8128	.0023	124.1	.0094	.0053
#3	.0135	.0079	3.654	48.46	.8203	.0025	123.2	.0090	.0060

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0015	.0046	10.12	-.0005	1.431	.0015	-.0026	.0024	.0287
Stddev	.0008	.0006	.01	.0007	.009	.0001	.0018	.0004	.0002
%RSD	50.75	12.27	.0516	127.8	.6214	10.21	67.91	18.16	.6146
#1	.0020	.0048	10.12	-.0008	1.441	.0013	-.0015	.0021	.0289
#2	.0019	.0039	10.13	.0002	1.427	.0016	-.0047	.0022	.0285
#3	.0006	.0049	10.12	-.0009	1.425	.0015	-.0017	.0029	.0287

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	628.85	1284.5	14816.	1861.9
Stddev	1.27	2.1	59.	14.9
%RSD	.20189	.15974	.39497	.80217
#1	627.40	1283.2	14770.	1847.9
#2	629.40	1283.4	14882.	1877.7
#3	629.76	1286.9	14796.	1860.2

Zoom In Zoom Out

Sample Name: FA54359-1 Acquired: 5/24/2018 13:17:03 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.0271	-.0016	.0792	.0000	122.7	.0000	-.0003	.0012	-.0008
Stddev	.0003	.0161	.0007	.0003	.0001	.6	.0001	.0001	.0002	.0003
%RSD	35.28	59.44	42.21	.3420	1132.	.5007	302.3	37.26	13.93	35.27
#1	-.0005	.0194	-.0023	.0789	-.0001	122.3	-.0001	-.0002	.0011	-.0009
#2	-.0007	.0163	-.0016	.0791	.0001	122.4	.0000	-.0003	.0014	-.0005
#3	-.0010	.0456	-.0009	.0795	.0000	123.4	.0001	-.0004	.0011	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0105	2.464	50.61	.0002	.0013	10.40	-.0003	.0026	.0021	.0052
Stddev	.0024	.024	.35	.0001	.0001	.04	.0003	.0012	.0005	.0007
%RSD	22.75	.9893	.6965	49.38	11.66	.3492	112.4	47.98	24.56	13.18
#1	.0088	2.445	50.47	.0002	.0014	10.40	-.0003	.0035	.0020	.0045
#2	.0096	2.455	50.34	.0001	.0014	10.36	.0001	.0012	.0016	.0054
#3	.0133	2.491	51.01	.0004	.0011	10.44	-.0006	.0030	.0026	.0059

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.373	-.0001	.4562	.0017	-.0016	.0016	.0015
Stddev	.006	.0005	.0019	.0000	.0009	.0003	.0001
%RSD	.0901	610.1	.4186	2.464	54.49	16.99	9.586
#1	6.379	-.0007	.4546	.0017	-.0025	.0015	.0016
#2	6.368	.0002	.4556	.0017	-.0007	.0019	.0013
#3	6.371	.0002	.4583	.0016	-.0016	.0014	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	661.87	1319.1	15284.	1881.4
Stddev	1.36	1.1	64.	10.0
%RSD	.20503	.08294	.41761	.53188
#1	660.36	1317.8	15214.	1885.6
#2	662.98	1319.7	15339.	1888.6
#3	662.28	1319.7	15299.	1869.9

Zoom In Zoom Out

Sample Name: FA54359-2 Acquired: 5/24/2018 13:21:18 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0040	-.0015	.0006	.0000	.0671	.0000	-.0001	-.0003	.0001
Stddev	.0003	.0073	.0014	.0001	.0000	.0051	.0001	.0002	.0002	.0002
%RSD	71.37	185.8	93.49	16.21	257.2	7.604	141.0	258.9	65.89	142.5
#1	-.0008	.0054	-.0015	.0006	.0001	.0623	.0000	-.0002	-.0001	.0003
#2	-.0003	-.0040	-.0028	.0005	.0000	.0666	.0001	.0001	-.0003	.0001
#3	-.0002	.0105	-.0001	.0007	.0000	.0725	.0000	.0000	-.0004	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0012	.0237	.0257	.0004	-.0007	.2013	.0002	.0003	.0020	.0007
Stddev	.0021	.0126	.0093	.0000	.0001	.0015	.0002	.0014	.0007	.0014
%RSD	169.2	53.29	36.19	11.99	14.56	.7310	106.0	454.0	34.49	202.5
#1	.0033	.0265	.0320	.0004	-.0006	.2016	.0004	.0015	.0023	-.0009
#2	.0011	.0099	.0150	.0003	-.0007	.1997	.0000	-.0012	.0012	.0017
#3	-.0008	.0346	.0300	.0004	-.0008	.2026	.0002	.0006	.0024	.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0425	.0003	.0004	.0000	-.0022	.0001	.0040
Stddev	.0007	.0003	.0001	.0001	.0025	.0001	.0001
%RSD	1.616	115.0	15.84	591.8	116.7	49.68	1.837
#1	.0431	.0006	.0004	-.0001	-.0021	.0002	.0040
#2	.0418	.0001	.0005	.0001	.0003	.0001	.0040
#3	.0426	.0000	.0003	.0001	-.0047	.0002	.0039

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	740.40	1424.8	16361.	1932.3
Stddev	1.47	2.4	41.	8.9
%RSD	.19859	.16867	.24960	.46134
#1	738.73	1422.0	16362.	1935.9
#2	741.51	1426.7	16401.	1938.9
#3	740.95	1425.6	16319.	1922.2

Zoom In Zoom Out

Sample Name: FA54359-3 Acquired: 5/24/2018 13:25:38 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0021	85.78	.0649	.0023	.0034	118.2	.1760	.1306	.0125
Stddev	.0004	.20	.0013	.0000	.0001	.9	.0005	.0007	.0003
%RSD	17.85	.2379	1.979	1.416	2.000	.7840	.3030	.5652	2.583
#1	.0018	85.58	.0647	.0023	.0034	117.3	.1767	.1313	.0128
#2	.0020	85.76	.0662	.0023	.0034	118.2	.1757	.1299	.0122
#3	.0025	85.99	.0636	.0022	.0033	119.1	.1758	.1307	.0124

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0275	.6797	38.68	216.9	F8.651	.0193	F206.1	.9173	-.0040
Stddev	.0004	.0059	.11	1.5	.035	.0004	2.8	.0015	.0015
%RSD	1.528	.8715	.2949	.6926	.4036	2.075	1.363	.1633	36.56
#1	.0270	.6865	38.55	216.3	8.689	.0190	202.9	.9190	-.0042
#2	.0276	.6761	38.73	215.9	8.643	.0198	207.2	.9165	-.0053
#3	.0279	.6764	38.77	218.6	8.620	.0191	208.2	.9163	-.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0017	.0287	29.35	-.0001	.1776	.0018	-.0013	.1898	1.636
Stddev	.0013	.0030	.10	.0008	.0005	.0002	.0005	.0013	.001
%RSD	78.89	10.51	.3261	722.2	.2567	10.80	43.94	.6683	.0412
#1	.0023	.0321	29.46	.0002	.1771	.0020	-.0015	.1885	1.636
#2	.0002	.0266	29.30	-.0010	.1776	.0016	-.0016	.1911	1.635
#3	.0026	.0273	29.30	.0005	.1781	.0019	-.0006	.1896	1.635

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	598.26	1274.4	14736.	1881.2
Stddev	2.80	6.5	43.	6.8
%RSD	.46843	.50768	.28994	.35916
#1	596.00	1266.9	14744.	1888.1
#2	601.39	1277.9	14690.	1881.0
#3	597.39	1278.3	14775.	1874.6

Zoom In Zoom Out

Sample Name: FA54359-4 Acquired: 5/24/2018 13:29:54 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0031	136.0	.0816	.0177	.0043	F571.3	.3905	.1432	.0409
Stddev	.0004	.4	.0019	.0000	.0001	2.0	.0011	.0003	.0008
%RSD	11.81	.2877	2.368	.2275	1.192	.3466	.2919	.2177	1.975
#1	.0035	136.1	.0834	.0176	.0043	570.4	.3917	.1435	.0415
#2	.0028	136.4	.0795	.0177	.0043	569.9	.3894	.1433	.0400
#3	.0029	135.6	.0819	.0177	.0044	573.5	.3903	.1429	.0412

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0171	140.5	F106.1	226.8	F6.116	.0140	F197.0	.9174	.0397
Stddev	.0002	.1	.4	.8	.036	.0003	1.6	.0025	.0006
%RSD	1.394	.1054	.3372	.3496	.5845	2.042	.8336	.2688	1.436
#1	.0169	140.6	105.8	226.1	6.133	.0137	195.2	.9198	.0392
#2	.0170	140.3	106.5	226.5	6.140	.0142	198.3	.9174	.0395
#3	.0173	140.5	106.0	227.6	6.075	.0142	197.6	.9149	.0403

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0002	.0083	33.29	.0004	1.825	.0006	.0070	.3048	3.736
Stddev	.0017	.0022	.08	.0002	.006	.0002	.0014	.0005	.007
%RSD	737.0	27.14	.2329	57.07	.3519	38.88	19.84	.1669	.1980
#1	.0004	.0084	33.38	.0001	1.823	.0008	.0061	.3044	3.744
#2	-.0021	.0059	33.24	.0005	1.832	.0004	.0086	.3054	3.734
#3	.0011	.0104	33.26	.0004	1.820	.0007	.0063	.3048	3.730

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	562.04	1225.4	14455.	1877.3
Stddev	1.69	4.4	42.	6.4
%RSD	.30141	.35827	.29232	.33990
#1	562.70	1220.5	14426.	1873.7
#2	560.12	1226.9	14435.	1884.7
#3	563.31	1229.0	14503.	1873.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 13:34:09 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2449	42.63	1.913	2.040	2.130	40.42	2.030	2.012	2.172	2.040
Stddev	.0002	.08	.008	.006	.005	.07	.007	.007	.014	.005
%RSD	.0941	.1882	.4154	.3126	.2386	.1789	.3641	.3565	.6563	.2397
#1	.2448	42.60	1.904	2.044	2.129	40.34	2.022	2.005	2.175	2.034
#2	.2452	42.57	1.915	2.033	2.126	40.45	2.031	2.013	2.156	2.044
#3	.2448	42.72	1.919	2.044	2.136	40.47	2.036	2.019	2.184	2.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.08	40.92	41.06	2.062	1.998	41.42	1.950	2.046	1.921	1.913
Stddev	.08	.09	.23	.011	.012	.22	.006	.002	.005	.013
%RSD	.1884	.2278	.5550	.5522	.5844	.5329	.3036	.1007	.2632	.6631
#1	42.04	40.90	41.10	2.064	1.986	41.26	1.946	2.045	1.919	1.903
#2	42.04	40.84	40.81	2.050	1.999	41.32	1.947	2.049	1.918	1.909
#3	42.17	41.03	41.26	2.072	2.009	41.67	1.957	2.045	1.927	1.928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.996	1.934	2.129	2.096	2.037	2.038	2.032
Stddev	.005	.008	.008	.007	.005	.009	.005
%RSD	.2592	.4336	.3624	.3296	.2352	.4397	.2383
#1	1.994	1.929	2.127	2.091	2.033	2.045	2.027
#2	1.993	1.929	2.122	2.093	2.035	2.028	2.034
#3	2.002	1.944	2.137	2.104	2.042	2.041	2.036
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 13:34:09 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	649.40	1348.5	15706.	1922.9
Stddev	1.66	7.9	84.	5.8
%RSD	.25609	.58477	.53702	.30067
#1	651.13	1355.3	15739.	1927.7
#2	649.25	1350.2	15768.	1924.6
#3	647.81	1339.9	15610.	1916.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 13:38:06 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0078	.0003	.0006	.0004	.0114	.0003	.0003	-.0002
Stddev	.0004	.0066	.0013	.0000	.0001	.0040	.0000	.0001	.0004
%RSD	235.0	84.12	454.5	4.419	14.67	35.33	12.36	34.19	288.0
#1	-.0001	.0079	-.0003	.0006	.0003	.0155	.0003	.0004	.0004
#2	.0002	.0012	.0017	.0006	.0004	.0075	.0003	.0002	-.0004
#3	-.0006	.0143	-.0006	.0006	.0003	.0112	.0004	.0003	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0331	.0318	-.0178	.0004	F.0027	.1021	.0001	.0001
Stddev	.0001	.0059	.0096	.0386	.0000	.0007	.0049	.0001	.0005
%RSD	100.4	17.75	30.11	217.0	12.21	25.44	4.808	116.0	762.2
#1	.0000	.0380	.0261	.0145	.0004	.0034	.1048	.0002	.0004
#2	-.0001	.0346	.0264	-.0606	.0004	.0027	.1051	.0001	.0002
#3	-.0003	.0266	.0428	-.0073	.0004	.0021	.0964	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0026	.0010	.0032	.0005	.0004	.0018	.0003	.0003	.0004
Stddev	.0021	.0020	.0007	.0005	.0001	.0002	.0006	.0002	.0001
%RSD	81.92	210.5	21.97	108.0	17.36	10.44	184.2	63.84	13.03
#1	.0028	.0029	.0038	.0005	.0004	.0020	-.0003	.0005	.0004
#2	.0004	.0011	.0024	.0009	.0003	.0016	.0010	.0001	.0004
#3	.0046	-.0011	.0033	.0000	.0005	.0018	.0003	.0003	.0005
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 13:38:06 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	739.42	1422.3	16502.	1949.9
Stddev	.55	3.3	39.	8.0
%RSD	.07394	.23274	.23767	.41014
#1	739.68	1418.5	16458.	1955.2
#2	738.79	1424.5	16531.	1953.8
#3	739.79	1424.0	16518.	1940.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 14:00:39 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2445	39.78	1.993	2.013	2.034	39.96	2.028	2.021	2.046	1.996
Stddev	.0004	.11	.006	.011	.005	.11	.005	.005	.008	.006
%RSD	.1697	.2748	.3006	.5428	.2323	.2770	.2657	.2502	.3806	.2898
#1	.2447	39.66	1.995	2.017	2.031	39.83	2.026	2.019	2.050	2.002
#2	.2440	39.87	1.997	2.021	2.039	40.01	2.035	2.027	2.037	1.991
#3	.2447	39.81	1.986	2.001	2.031	40.03	2.025	2.017	2.052	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.37	39.55	39.46	2.030	2.034	39.76	2.019	1.995	1.984	1.989
Stddev	.14	.06	.19	.011	.003	.04	.006	.009	.002	.007
%RSD	.3454	.1433	.4787	.5532	.1618	.0976	.2849	.4715	.1090	.3393
#1	40.27	39.52	39.41	2.032	2.030	39.77	2.019	1.998	1.985	1.997
#2	40.32	39.61	39.67	2.018	2.036	39.71	2.024	1.985	1.981	1.987
#3	40.53	39.51	39.30	2.040	2.035	39.79	2.013	2.003	1.985	1.984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.047	2.030	2.050	2.049	2.004	2.025	2.028
Stddev	.005	.007	.004	.011	.005	.003	.003
%RSD	.2333	.3669	.2162	.5226	.2487	.1265	.1361
#1	2.043	2.030	2.048	2.052	2.003	2.026	2.026
#2	2.052	2.038	2.055	2.037	1.999	2.022	2.031
#3	2.045	2.023	2.047	2.058	2.009	2.027	2.026
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 14:00:39 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	645.45	1337.8	15549.	1923.9
Stddev	1.72	3.3	68.	6.5
%RSD	.26693	.24967	.43452	.33920
#1	644.21	1337.0	15509.	1931.2
#2	647.42	1334.9	15627.	1921.8
#3	644.72	1341.4	15511.	1918.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 14:09:31 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0065	.0003	.0003	.0002	.0070	.0001	.0000	.0005
Stddev	.0002	.0096	.0007	.0002	.0001	.0021	.0001	.0001	.0003
%RSD	116.4	146.8	238.8	66.47	85.70	30.70	62.75	3582.	60.36
#1	.0000	-.0046	-.0001	.0001	.0003	.0075	.0001	.0001	.0008
#2	.0004	.0019	-.0001	.0006	.0001	.0046	.0000	-.0001	.0002
#3	.0002	-.0170	.0010	.0003	.0001	.0088	.0001	.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0070	-.0100	-.0039	.0001	F.0013	-.0304	.0003	.0005
Stddev	.0001	.0024	.0079	.0084	.0000	.0003	.0009	.0002	.0003
%RSD	59.74	34.00	78.93	216.9	31.57	22.70	2.954	56.13	58.95
#1	-.0001	.0052	-.0026	.0035	.0001	.0016	-.0312	.0002	.0005
#2	-.0004	.0097	-.0091	-.0131	.0001	.0010	-.0306	.0002	.0008
#3	-.0002	.0060	-.0182	-.0021	.0000	.0012	-.0294	.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0002	.0002	.0001	.0001	.0006	.0001	.0003	.0000
Stddev	.0013	.0030	.0004	.0005	.0001	.0002	.0010	.0003	.0000
%RSD	136.8	1448.	235.1	833.5	44.92	28.51	1679.	104.7	104.4
#1	-.0005	.0019	.0006	.0000	.0001	.0005	.0002	.0002	.0000
#2	.0015	-.0036	.0001	.0005	.0001	.0008	-.0010	.0007	.0001
#3	.0019	.0011	-.0002	-.0004	.0001	.0004	.0010	.0001	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 14:09:31 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	737.90	1411.7	16441.	1948.1
Stddev	1.64	2.0	38.	15.7
%RSD	.22180	.14090	.23216	.80333
#1	738.51	1413.8	16398.	1948.9
#2	736.04	1409.8	16470.	1963.4
#3	739.14	1411.7	16456.	1932.1

Zoom In Zoom Out

Sample Name: FA54359-5 Acquired: 5/24/2018 14:13:15 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0030	128.5	.0819	.0171	.0043	F567.8	.3957	.1441	.0384
Stddev	.0007	.4	.0013	.0001	.0001	3.4	.0010	.0001	.0004
%RSD	24.01	.3501	1.574	.3423	1.601	.6073	.2488	.1022	1.142
#1	.0022	128.4	.0812	.0171	.0042	563.8	.3968	.1443	.0388
#2	.0035	128.9	.0834	.0170	.0044	570.0	.3949	.1441	.0380
#3	.0034	128.0	.0811	.0171	.0043	569.7	.3954	.1440	.0384

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0168	133.3	F103.0	219.5	F5.928	.0159	F190.1	.9615	.0402
Stddev	.0002	.5	.3	1.1	.020	.0007	1.5	.0042	.0016
%RSD	1.110	.3886	.3165	.4854	.3318	4.116	.7699	.4412	4.044
#1	.0171	132.8	102.8	218.3	5.950	.0160	190.3	.9649	.0383
#2	.0167	133.8	103.4	220.2	5.919	.0165	191.5	.9567	.0410
#3	.0167	133.4	102.9	220.1	5.914	.0152	188.6	.9628	.0412

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	.0122	34.69	.0005	1.787	.0018	.0057	.3021	3.790
Stddev	.0017	.0010	.11	.0006	.004	.0001	.0030	.0010	.009
%RSD	321.8	8.261	.3151	125.4	.2327	7.029	53.76	.3149	.2443
#1	-.0023	.0131	34.72	.0009	1.785	.0019	.0022	.3023	3.799
#2	.0012	.0123	34.56	-.0002	1.792	.0019	.0076	.3010	3.780
#3	-.0005	.0111	34.78	.0007	1.784	.0017	.0072	.3029	3.792

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	560.60	1216.8	14453.	1890.4
Stddev	1.89	4.2	42.	10.1
%RSD	.33776	.34363	.28937	.53445
#1	558.41	1214.1	14451.	1898.2
#2	561.71	1221.6	14412.	1879.0
#3	561.67	1214.7	14496.	1893.9

Zoom In Zoom Out

Sample Name: FA54359-6 Acquired: 5/24/2018 14:17:32 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0591	.0168	.1279	.0001	246.3	.0004	-.0006	.0015
Stddev	.0004	.0037	.0002	.0013	.0001	.6	.0001	.0001	.0006
%RSD	395.9	6.276	1.009	1.009	133.0	.2333	15.78	17.07	40.05
#1	.0005	.0633	.0166	.1292	.0000	246.4	.0004	-.0007	.0008
#2	-.0003	.0575	.0170	.1267	.0002	245.7	.0003	-.0005	.0019
#3	.0001	.0564	.0168	.1277	.0000	246.9	.0003	-.0006	.0018

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0037	.0376	54.28	190.5	.2355	.0094	F503.5	.0105	.0069
Stddev	.0004	.0136	.33	.4	.0022	.0000	3.4	.0005	.0011
%RSD	11.15	36.08	.6166	.2264	.9271	.3961	.6795	4.410	15.88
#1	.0041	.0523	54.62	191.0	.2379	.0094	502.8	.0110	.0057
#2	.0033	.0348	53.95	190.2	.2347	.0093	507.2	.0104	.0078
#3	.0037	.0256	54.27	190.2	.2337	.0094	500.4	.0100	.0072

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0027	.0147	26.02	.0000	.8000	.0015	-.0006	.0147	.0022
Stddev	.0010	.0017	.07	.000	.0048	.0001	.0006	.0005	.0004
%RSD	34.62	11.76	.2822	917.4	.5984	6.978	113.9	3.461	17.06
#1	.0030	.0164	26.04	.0003	.8046	.0016	-.0013	.0152	.0026
#2	.0017	.0129	26.08	-.0001	.7951	.0014	-.0004	.0149	.0021
#3	.0035	.0149	25.93	-.0004	.8003	.0014	.0000	.0142	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	567.99	1195.9	14213.	1842.0
Stddev	.54	4.5	59.	6.5
%RSD	.09550	.37233	.41211	.35077
#1	568.03	1193.8	14147.	1834.5
#2	567.44	1192.9	14233.	1845.1
#3	568.52	1201.0	14259.	1846.2

Zoom In Zoom Out

Sample Name: FA54359-7 Acquired: 5/24/2018 14:21:55 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0025	138.0	.0599	.0563	.0041	436.1	.3991	.1024	.0305
Stddev	.0004	.5	.0011	.0006	.0002	1.9	.0004	.0006	.0002
%RSD	16.61	.3769	1.865	1.144	3.679	.4373	.1061	.5380	.7708
#1	.0021	138.4	.0608	.0561	.0040	437.2	.3993	.1021	.0308
#2	.0026	138.1	.0587	.0570	.0043	437.3	.3986	.1020	.0304
#3	.0029	137.4	.0603	.0557	.0040	433.9	.3994	.1030	.0303

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0525	76.21	F126.8	175.3	F4.700	.0124	F181.5	.7424	.0178
Stddev	.0002	.34	.8	.8	.020	.0005	2.9	.0019	.0005
%RSD	.4482	.4510	.6337	.4454	.4170	3.683	1.625	.2589	2.702
#1	.0526	76.55	126.5	175.6	4.719	.0129	184.1	.7410	.0180
#2	.0528	76.21	127.7	175.8	4.702	.0120	182.1	.7417	.0181
#3	.0523	75.87	126.1	174.4	4.680	.0123	178.3	.7446	.0172

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0086	32.23	.0002	1.582	.0057	.0049	.2850	2.795
Stddev	.0007	.0022	.04	.0013	.006	.0001	.0033	.0020	.008
%RSD	85.60	25.03	.1397	597.2	.3528	1.896	66.73	.6974	.2702
#1	.0013	.0093	32.24	-.0010	1.583	.0056	.0025	.2855	2.787
#2	.0012	.0104	32.19	.0016	1.587	.0058	.0086	.2866	2.795
#3	.0000	.0062	32.27	.0000	1.576	.0056	.0035	.2828	2.802

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	567.47	1240.2	14527.	1904.6
Stddev	.80	1.0	71.	17.2
%RSD	.14034	.08145	.48853	.90045
#1	567.34	1239.8	14460.	1889.2
#2	568.33	1241.4	14521.	1901.4
#3	566.75	1239.5	14601.	1923.1

Zoom In Zoom Out

Sample Name: FA54359-8 Acquired: 5/24/2018 14:26:12 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0053	115.4	.1549	.0050	.0074	F568.6	.7144	.1278	.0282
Stddev	.0008	1.4	.0013	.0001	.0003	5.5	.0005	.0002	.0016
%RSD	16.17	1.193	.8149	2.926	3.448	.9729	.0689	.1736	5.617
#1	.0046	114.1	.1552	.0050	.0072	562.5	.7139	.1276	.0277
#2	.0062	115.3	.1559	.0051	.0077	570.1	.7144	.1278	.0300
#3	.0049	116.8	.1535	.0049	.0074	573.3	.7149	.1280	.0269

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0074	46.46	F89.61	243.0	F7.778	.0146	F258.8	1.390	.0100
Stddev	.0002	.51	.97	2.8	.351	.0001	2.3	.001	.0008
%RSD	2.822	1.097	1.081	1.145	4.510	.6100	.8816	.0835	8.262
#1	.0072	45.91	88.80	240.0	7.603	.0147	256.5	1.389	.0093
#2	.0076	46.55	89.35	243.5	8.182	.0146	259.0	1.391	.0109
#3	.0073	46.91	90.69	245.5	7.550	.0147	261.0	1.390	.0098

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0012	.0082	34.15	.0005	.8098	.0063	.0041	.5225	F6.622
Stddev	.0014	.0044	.04	.0005	.0073	.0004	.0029	.0234	.021
%RSD	112.9	53.72	.1169	100.4	.9000	6.965	70.08	4.482	.3207
#1	-.0028	.0130	34.19	.0003	.8030	.0059	.0015	.5095	6.599
#2	-.0008	.0044	34.14	.0011	.8088	.0068	.0072	.5495	6.625
#3	-.0001	.0071	34.11	.0001	.8175	.0061	.0037	.5084	6.641

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	552.13	1207.5	13970.	1857.3
Stddev	.77	2.3	540.	11.5
%RSD	.13940	.19189	3.8652	.62007
#1	552.36	1205.0	14214.	1870.2
#2	551.27	1207.8	13352.	1853.6
#3	552.75	1209.6	14346.	1848.1

Zoom In Zoom Out

Sample Name: FA54359-9 Acquired: 5/24/2018 14:30:29 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0041	250.8	.0846	.0246	.0073	F505.5	.5516	.0860	.0275
Stddev	.0004	.4	.0006	.0002	.0001	2.7	.0031	.0001	.0006
%RSD	10.31	.1551	.7145	.6633	1.655	.5277	.5621	.1451	2.050
#1	.0044	250.8	.0839	.0244	.0072	507.3	.5481	.0859	.0278
#2	.0036	250.4	.0851	.0247	.0073	506.8	.5527	.0860	.0279
#3	.0042	251.2	.0847	.0247	.0075	502.4	.5539	.0862	.0269

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0240	125.7	F194.2	163.2	3.893	.0149	F251.7	1.079	.0190
Stddev	.0003	.1	.4	.3	.012	.0004	1.2	.003	.0011
%RSD	1.212	.0457	.1940	.1648	.3054	2.599	.4790	.2611	5.743
#1	.0237	125.7	194.6	163.1	3.893	.0146	250.5	1.076	.0182
#2	.0239	125.7	194.1	163.5	3.881	.0147	252.9	1.078	.0202
#3	.0243	125.6	193.9	163.0	3.905	.0153	251.7	1.082	.0186

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0002	.0069	25.87	.0010	.7259	.0048	.0077	.4406	F5.217
Stddev	.0031	.0013	.06	.0004	.0018	.0001	.0010	.0007	.028
%RSD	1599.	19.01	.2290	38.20	.2469	2.333	13.67	.1489	.5297
#1	.0004	.0083	25.81	.0006	.7240	.0048	.0066	.4404	5.188
#2	-.0029	.0058	25.92	.0013	.7275	.0049	.0087	.4413	5.220
#3	.0031	.0065	25.89	.0010	.7263	.0047	.0076	.4400	5.243

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	556.09	1248.0	14502.	1884.3
Stddev	1.18	2.6	47.	6.7
%RSD	.21193	.21227	.32071	.35311
#1	554.79	1250.5	14484.	1876.9
#2	557.09	1245.2	14555.	1886.1
#3	556.40	1248.1	14468.	1889.9

Zoom In Zoom Out

Sample Name: FA54359-10 Acquired: 5/24/2018 14:34:45 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0013	67.28	.0106	.0517	.0021	266.4	.3712	.0832	.0875
Stddev	.0005	.35	.0007	.0003	.0000	.9	.0009	.0000	.0014
%RSD	38.96	.5149	6.592	.6579	1.370	.3433	.2341	.0323	1.565
#1	.0018	67.35	.0111	.0521	.0021	266.3	.3703	.0832	.0880
#2	.0010	67.59	.0109	.0517	.0022	267.3	.3721	.0831	.0859
#3	.0010	66.90	.0098	.0514	.0021	265.5	.3711	.0832	.0885

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0470	39.66	63.21	123.9	3.330	.0025	F146.4	.7520	.0164
Stddev	.0000	.23	.35	.6	.014	.0003	.6	.0027	.0004
%RSD	.0874	.5847	.5569	.5139	.4238	11.78	.3965	.3615	2.698
#1	.0470	39.68	63.42	123.9	3.342	.0027	146.0	.7489	.0167
#2	.0470	39.88	63.42	124.6	3.315	.0022	147.1	.7532	.0159
#3	.0470	39.42	62.81	123.3	3.335	.0027	146.1	.7539	.0167

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0021	.0044	25.08	.0012	.2837	.1984	.0007	.1435	F4.426
Stddev	.0019	.0030	.06	.0003	.0018	.0082	.0027	.0010	.014
%RSD	91.52	67.03	.2231	22.68	.6269	4.133	354.9	.6943	.3161
#1	.0000	.0013	25.02	.0011	.2848	.1985	.0021	.1445	4.410
#2	.0037	.0047	25.13	.0015	.2848	.1901	.0024	.1425	4.431
#3	.0027	.0073	25.09	.0010	.2817	.2065	-.0023	.1436	4.436

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	591.82	1383.5	16097.	2053.4
Stddev	.84	4.0	34.	9.0
%RSD	.14219	.29078	.21191	.43880
#1	591.63	1387.0	16087.	2048.5
#2	591.09	1379.1	16135.	2047.9
#3	592.74	1384.2	16069.	2063.8

Zoom In Zoom Out

Sample Name: FA54359-11 Acquired: 5/24/2018 14:38:53 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	1.341	.0011	.0160	.0001	F522.7	.0170	.0128	.0033
Stddev	.0002	.005	.0008	.0001	.0001	3.1	.0002	.0002	.0004
%RSD	303.9	.3631	78.71	.7619	66.63	.5995	.9251	1.450	11.11
#1	-.0001	1.346	.0014	.0158	.0001	520.2	.0169	.0131	.0037
#2	-.0003	1.336	.0017	.0160	.0001	521.8	.0169	.0127	.0030
#3	.0002	1.341	.0001	.0160	.0002	526.2	.0172	.0128	.0032

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0037	.4720	12.75	137.7	1.981	.0065	F234.1	.0735	.0053
Stddev	.0001	.0052	.04	.6	.011	.0001	1.5	.0003	.0009
%RSD	2.661	1.101	.2776	.4496	.5319	1.760	.6602	.4276	16.93
#1	.0037	.4748	12.71	137.2	1.993	.0064	235.6	.0733	.0046
#2	.0038	.4660	12.77	137.5	1.972	.0067	234.1	.0735	.0050
#3	.0036	.4752	12.77	138.4	1.978	.0065	232.5	.0739	.0063

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0139	23.51	-.0005	.7264	.0252	-.0042	.0440	.0408
Stddev	.0014	.0020	.07	.0002	.0018	.0006	.0014	.0003	.0001
%RSD	72.81	14.20	.3090	33.00	.2410	2.506	32.71	.7421	.2570
#1	.0023	.0162	23.45	-.0006	.7284	.0245	-.0033	.0439	.0408
#2	.0030	.0126	23.49	-.0006	.7252	.0255	-.0057	.0437	.0407
#3	.0004	.0130	23.59	-.0003	.7255	.0257	-.0034	.0443	.0409

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	572.49	1204.2	14173.	1834.6
Stddev	.68	2.5	54.	7.2
%RSD	.11872	.20581	.38115	.38993
#1	572.25	1206.8	14112.	1831.2
#2	573.25	1203.8	14213.	1842.8
#3	571.96	1201.9	14195.	1829.8

Zoom In Zoom Out

Sample Name: FA54359-12 Acquired: 5/24/2018 14:43:16 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0014	3.399	.1066	.0025	.0004	296.4	.1361	.0743	.0111
Stddev	.0004	.021	.0012	.0001	.0001	2.2	.0000	.0004	.0006
%RSD	28.50	.6320	1.149	5.174	24.37	.7548	.0165	.4769	5.328
#1	.0018	3.390	.1070	.0025	.0005	295.8	.1361	.0740	.0107
#2	.0010	3.384	.1053	.0026	.0004	294.6	.1361	.0741	.0117
#3	.0015	3.424	.1076	.0023	.0003	298.9	.1361	.0747	.0108

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0329	.6847	18.50	256.0	F7.620	.0034	F124.0	.6890	.0112
Stddev	.0000	.0058	.09	2.1	.014	.0002	.8	.0010	.0016
%RSD	.0733	.8436	.5129	.8164	.1806	7.195	.6606	.1394	14.04
#1	.0329	.6781	18.45	255.2	7.614	.0034	123.7	.6880	.0130
#2	.0329	.6872	18.44	254.5	7.636	.0032	123.4	.6890	.0106
#3	.0329	.6888	18.61	258.4	7.611	.0037	124.9	.6899	.0100

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	.0060	48.34	.0000	.1909	.0027	-.0017	.1363	1.716
Stddev	.0015	.0027	.10	.000	.0009	.0003	.0023	.0003	.005
%RSD	109.3	45.64	.2130	766.9	.4911	9.255	135.5	.2182	.2741
#1	.0023	.0091	48.24	-.0001	.1906	.0025	-.0043	.1363	1.714
#2	.0020	.0039	48.33	-.0003	.1902	.0030	-.0009	.1360	1.712
#3	-.0003	.0049	48.45	.0003	.1920	.0027	.0001	.1365	1.721

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	588.96	1273.1	14773.	1926.0
Stddev	1.65	.9	10.	16.1
%RSD	.27950	.07038	.06872	.83557
#1	587.20	1273.4	14762.	1923.5
#2	590.46	1273.7	14781.	1943.1
#3	589.21	1272.1	14777.	1911.2

Zoom In Zoom Out

Sample Name: FA54359-13 Acquired: 5/24/2018 14:47:27 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0012	4.040	.0124	.0094	.0008	384.9	.0144	.0949	.0089
Stddev	.0005	.022	.0008	.0000	.0001	2.1	.0001	.0001	.0001
%RSD	40.33	.5548	6.607	.2131	15.98	.5384	.5659	.1433	1.008
#1	.0016	4.060	.0129	.0094	.0009	383.6	.0143	.0949	.0089
#2	.0012	4.015	.0115	.0094	.0009	383.8	.0144	.0951	.0088
#3	.0007	4.044	.0129	.0095	.0007	387.3	.0144	.0948	.0089

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0036	1.047	11.20	449.5	F27.08	.0033	F113.8	.4851	.0095
Stddev	.0002	.011	.04	1.3	.38	.0001	.5	.0007	.0007
%RSD	5.435	1.072	.3820	.2938	1.401	4.299	.4319	.1361	7.281
#1	.0034	1.041	11.23	449.1	27.43	.0031	114.3	.4858	.0087
#2	.0038	1.040	11.15	448.4	27.13	.0033	113.4	.4845	.0098
#3	.0034	1.060	11.22	451.0	26.68	.0034	113.7	.4852	.0099

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0016	.0095	31.57	-.0003	.1890	.0412	-.0025	.0312	.0458
Stddev	.0018	.0039	.16	.0003	.0005	.0040	.0040	.0005	.0001
%RSD	109.9	41.16	.5112	84.17	.2608	9.691	164.6	1.515	.2411
#1	.0024	.0061	31.75	.0000	.1893	.0458	-.0028	.0315	.0459
#2	.0028	.0085	31.53	-.0006	.1892	.0391	-.0063	.0315	.0456
#3	-.0004	.0137	31.44	-.0004	.1884	.0387	.0017	.0307	.0458

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	572.76	1191.6	14205.	1836.8
Stddev	.38	5.9	52.	5.8
%RSD	.06658	.49888	.36334	.31571
#1	572.43	1185.2	14148.	1840.3
#2	573.18	1192.5	14220.	1840.0
#3	572.66	1196.9	14248.	1830.1

Zoom In Zoom Out

Sample Name: MP33784-MB1 Acquired: 5/24/2018 14:51:49 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0634	F-.0076	.0002	.0001	.1272	.0001	-.0007
Stddev	.0018	.0562	.0037	.0003	.0007	.0139	.0003	.0003
%RSD	278.4	88.70	48.77	142.1	1013.	10.90	196.0	40.88
#1	-.0021	.0230	-.0033	.0003	.0008	.1329	.0002	-.0005
#2	.0013	.1277	-.0097	-.0001	-.0001	.1374	-.0002	-.0006
#3	-.0011	.0395	-.0098	.0005	-.0005	.1114	.0004	-.0010
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.0050					
Low Limit			-.0050					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0187	.0011	F.2284	.1792	.1785	F.0229	-.0011	.2663
Stddev	.0039	.0002	.0117	.0214	.1436	.0042	.0004	.0301
%RSD	20.69	18.09	5.106	11.92	80.44	18.49	32.19	11.29
#1	.0230	.0013	.2159	.1852	.2430	.0274	-.0008	.2956
#2	.0177	.0010	.2390	.1969	.0140	.0224	-.0010	.2355
#3	.0154	.0009	.2304	.1555	.2786	.0190	-.0015	.2678
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		.1500			.0075		
Low Limit	-.0050		-.1500			-.0075		

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	F.0064	F.0063	.0032	.0528	F.0666	.0004	.0006
Stddev	.0004	.0069	.0060	.0070	.0049	.0013	.0004	.0001
%RSD	19.98	107.6	95.66	215.5	9.220	1.946	85.79	15.63
#1	.0016	.0016	.0095	.0109	.0576	.0677	.0006	.0005
#2	.0024	.0033	.0100	-.0027	.0479	.0652	.0007	.0007
#3	.0018	.0143	-.0006	.0015	.0528	.0668	.0000	.0007
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass
High Limit		.0025	.0025			.0250		
Low Limit		-.0025	-.0025			-.0250		

Zoom In Zoom Out

Sample Name: MP33784-MB1 Acquired: 5/24/2018 14:51:49 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F-.0066	.0011	.0056
Stddev	.0055	.0016	.0003
%RSD	82.72	148.8	5.671
#1	-.0120	.0025	.0060
#2	-.0068	-.0007	.0056
#3	-.0011	.0015	.0053
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	743.83	1420.2	16444.	1957.8
Stddev	3.33	1.9	69.	4.8
%RSD	.44795	.13490	.41959	.24269
#1	740.02	1418.8	16365.	1961.3
#2	745.26	1419.5	16478.	1959.7
#3	746.20	1422.4	16489.	1952.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 14:56:07 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2435	40.29	1.975	2.017	2.036	39.35	2.021	2.016	2.043	2.016
Stddev	.0008	.05	.011	.008	.006	.03	.005	.006	.005	.005
%RSD	.3164	.1230	.5370	.3776	.2827	.0830	.2680	.3077	.2523	.2275
#1	.2440	40.27	1.962	2.020	2.033	39.38	2.015	2.009	2.038	2.013
#2	.2426	40.26	1.979	2.009	2.031	39.34	2.020	2.016	2.044	2.013
#3	.2438	40.35	1.982	2.023	2.042	39.32	2.026	2.021	2.048	2.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.40	39.86	39.06	2.027	2.028	40.37	2.006	1.983	1.983	1.990
Stddev	.09	.12	.13	.006	.010	.08	.003	.003	.007	.011
%RSD	.2104	.3135	.3350	.3005	.5033	.1880	.1329	.1354	.3757	.5344
#1	40.31	39.91	39.04	2.026	2.018	40.31	2.003	1.982	1.977	1.985
#2	40.41	39.72	39.19	2.022	2.028	40.35	2.006	1.980	1.991	1.982
#3	40.47	39.95	38.93	2.034	2.038	40.46	2.008	1.986	1.982	2.002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.059	2.004	2.071	2.056	2.009	2.012	2.005
Stddev	.005	.010	.007	.005	.006	.001	.003
%RSD	.2557	.4904	.3287	.2660	.3098	.0712	.1369
#1	2.054	1.995	2.069	2.054	2.009	2.011	2.003
#2	2.057	2.004	2.065	2.052	2.002	2.011	2.006
#3	2.065	2.015	2.078	2.062	2.015	2.014	2.008
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 14:56:07 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	651.63	1348.6	15721.	1950.4
Stddev	.66	5.7	59.	2.2
%RSD	.10203	.42331	.37756	.11411
#1	651.92	1354.2	15737.	1952.1
#2	652.10	1348.8	15771.	1947.9
#3	650.87	1342.8	15656.	1951.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 15:00:04 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0007	.0007	.0002	.0002	.0060	.0003	.0002	.0002
Stddev	.000	.0029	.0008	.0001	.0001	.0039	.0001	.0001	.0004
%RSD	747.6	432.6	119.0	58.57	56.84	64.75	43.47	41.88	268.5
#1	-.0002	.0027	.0013	.0003	.0002	.0091	.0003	.0002	-.0003
#2	.0001	-.0022	-.0003	.0001	.0003	.0017	.0001	.0002	.0002
#3	.0000	-.0025	.0011	.0003	.0001	.0072	.0003	.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0211	.0046	.0109	.0002	F.0031	-.0014	.0002	.0009
Stddev	.000	.0042	.0140	.0060	.0000	.0008	.0012	.0001	.0009
%RSD	5234.	19.70	305.5	55.05	17.81	27.31	85.06	41.02	96.64
#1	.0001	.0256	.0198	.0127	.0002	.0040	-.0022	.0003	.0012
#2	-.0001	.0202	-.0076	.0042	.0002	.0029	.0000	.0002	-.0001
#3	.0000	.0174	.0015	.0158	.0002	.0023	-.0020	.0001	.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0008	.0025	.0002	.0002	.0020	.0010	.0002	-.0001
Stddev	.0008	.0012	.0013	.0006	.0001	.0001	.0016	.0002	.0001
%RSD	112.2	149.1	51.84	343.3	43.44	3.732	162.5	82.54	119.4
#1	.0016	-.0006	.0016	.0008	.0002	.0020	.0027	.0002	-.0002
#2	-.0001	.0014	.0040	.0000	.0003	.0020	-.0002	.0005	-.0001
#3	.0007	.0016	.0019	-.0003	.0001	.0019	.0004	.0001	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 15:00:04 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	744.43	1428.4	16513.	1974.6
Stddev	.99	4.9	34.	17.8
%RSD	.13318	.34171	.20860	.90104
#1	744.79	1426.6	16481.	1954.1
#2	745.20	1424.8	16509.	1984.6
#3	743.31	1434.0	16549.	1985.2

Zoom In Zoom Out

Sample Name: MP33784-B1 Acquired: 5/24/2018 15:04:24 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0525	29.00	2.020	2.189	.0564	26.64	.0530	.5486	F.2401
Stddev	.0017	.05	.005	.006	.0004	.12	.0008	.0013	.0031
%RSD	3.214	.1735	.2522	.2820	.7030	.4537	1.477	.2339	1.277
#1	.0534	28.94	2.026	2.191	.0559	26.57	.0534	.5501	.2411
#2	.0506	29.03	2.019	2.183	.0566	26.58	.0536	.5479	.2425
#3	.0536	29.04	2.016	2.195	.0566	26.78	.0521	.5478	.2366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value									.2000
Range									20.00%

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2733	28.80	25.94	25.93	.5795	.5184	26.77	.5581	.5147
Stddev	.0023	.07	.04	.20	.0060	.0038	.09	.0021	.0028
%RSD	.8390	.2474	.1453	.7588	1.035	.7345	.3322	.3741	.5469
#1	.2755	28.76	25.92	26.15	.5803	.5223	26.87	.5587	.5126
#2	.2709	28.76	25.92	25.88	.5850	.5181	26.74	.5598	.5179
#3	.2736	28.88	25.99	25.77	.5731	.5147	26.71	.5557	.5137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5282	2.005	.4770	.5939	.5593	.5518	2.014	.5130	.5307
Stddev	.0034	.013	.0011	.0064	.0007	.0034	.008	.0039	.0022
%RSD	.6355	.6230	.2357	1.078	.1215	.6165	.4064	.7612	.4200
#1	.5315	2.020	.4782	.6000	.5600	.5538	2.023	.5175	.5320
#2	.5283	1.998	.4760	.5946	.5586	.5537	2.008	.5110	.5281
#3	.5248	1.999	.4769	.5872	.5592	.5479	2.011	.5104	.5319
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33784-B1 Acquired: 5/24/2018 15:04:24 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	723.35	1404.1	16175.	1952.2
Stddev	1.83	4.2	68.	10.5
%RSD	.25250	.30050	.41975	.53926
#1	722.02	1402.4	16144.	1946.0
#2	722.61	1401.0	16128.	1964.4
#3	725.44	1408.9	16253.	1946.3

Zoom In Zoom Out

Sample Name: FA53725-59A Acquired: 5/24/2018 15:08:37 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0041	182.5	.0564	.8090	.0050	20.56	-.0063	.0285	.3974	.1276
Stddev	.0015	.7	.0044	.0076	.0003	.04	.0004	.0009	.0022	.0011
%RSD	36.23	.4087	7.829	.9340	6.982	.2025	6.851	3.231	.5531	.8718
#1	.0024	182.1	.0521	.8141	.0047	20.51	-.0065	.0283	.3993	.1263
#2	.0053	183.4	.0609	.8124	.0054	20.58	-.0058	.0295	.3950	.1279
#3	.0044	182.1	.0562	.8003	.0048	20.59	-.0065	.0277	.3979	.1284

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	188.1	25.44	19.11	1.598	.0103	4.475	.1414	.3925	.0043	.0052
Stddev	.4	.06	.28	.002	.0005	.068	.0008	.0053	.0083	.0102
%RSD	.2261	.2523	1.439	.1448	4.803	1.528	.6000	1.363	194.0	195.2
#1	187.6	25.51	18.79	1.597	.0101	4.531	.1404	.3986	.0022	-.0057
#2	188.4	25.43	19.29	1.601	.0100	4.399	.1418	.3902	.0135	.0145
#3	188.2	25.38	19.24	1.596	.0109	4.496	.1419	.3887	-.0028	.0068

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	56.76	.0748	.3185	5.322	.0157	.4008	.2032
Stddev	1.56	.0022	.0023	.023	.0020	.0006	.0011
%RSD	2.756	2.886	.7121	.4314	12.81	.1442	.5476
#1	54.99	.0753	.3170	5.304	.0158	.4002	.2019
#2	57.34	.0724	.3211	5.348	.0136	.4013	.2034
#3	57.95	.0767	.3175	5.314	.0176	.4010	.2041

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	716.50	1417.3	16141.	1969.3
Stddev	1.79	5.7	22.	9.0
%RSD	.24961	.40542	.13425	.45702
#1	714.99	1417.3	16121.	1978.5
#2	716.03	1411.6	16164.	1960.5
#3	718.48	1423.0	16138.	1968.9

Zoom In Zoom Out

Sample Name: MP33784-D1 Acquired: 5/24/2018 15:12:52 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0034	177.5	.0542	.7698	.0044	19.08	-.0055	.0263	.3738	.1152
Stddev	.0011	.6	.0078	.0056	.0004	.15	.0008	.0006	.0031	.0005
%RSD	31.31	.3492	14.37	.7306	9.267	.7780	13.91	2.299	.8266	.4060
#1	.0023	176.8	.0615	.7662	.0048	18.91	-.0063	.0270	.3710	.1152
#2	.0044	177.7	.0460	.7763	.0046	19.14	-.0055	.0259	.3771	.1156
#3	.0037	178.0	.0550	.7669	.0040	19.19	-.0047	.0259	.3732	.1147

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	176.0	24.05	17.85	1.476	.0092	4.384	.1301	.3577	-.0011	.0119
Stddev	.9	.30	.28	.001	.0004	.048	.0003	.0065	.0042	.0084
%RSD	.5254	1.232	1.587	.0432	4.128	1.086	.2573	1.810	367.2	70.78
#1	175.2	23.76	17.52	1.477	.0088	4.341	.1305	.3620	.0026	.0075
#2	175.7	24.35	17.97	1.476	.0093	4.435	.1299	.3502	-.0056	.0066
#3	177.0	24.05	18.05	1.475	.0096	4.374	.1298	.3608	-.0004	.0216

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	46.62	.0699	.2943	5.284	.0133	.3743	.1857
Stddev	1.66	.0039	.0021	.041	.0076	.0018	.0012
%RSD	3.550	5.573	.7278	.7818	56.76	.4847	.6338
#1	48.51	.0654	.2919	5.329	.0065	.3735	.1868
#2	45.85	.0716	.2948	5.248	.0215	.3731	.1845
#3	45.48	.0726	.2961	5.275	.0120	.3764	.1858

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	718.05	1417.2	16223.	1979.2
Stddev	1.01	2.1	3.	13.9
%RSD	.14084	.14583	.01667	.70083
#1	717.12	1419.1	16226.	1993.9
#2	717.90	1415.0	16221.	1977.4
#3	719.13	1417.6	16221.	1966.3

Zoom In Zoom Out

Sample Name: MP33784-D2 Acquired: 5/24/2018 15:17:06 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0048	185.2	.0499	.8160	.0046	19.87	-.0068	.0254	.3928	.1189
Stddev	.0014	2.1	.0038	.0073	.0003	.04	.0007	.0013	.0032	.0014
%RSD	29.02	1.109	7.709	.8941	7.453	.1863	9.630	5.259	.8194	1.173
#1	.0058	186.3	.0493	.8219	.0044	19.90	-.0062	.0269	.3898	.1202
#2	.0053	186.5	.0539	.8182	.0045	19.88	-.0075	.0250	.3962	.1189
#3	.0032	182.8	.0463	.8079	.0050	19.83	-.0066	.0243	.3923	.1175

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	180.7	25.65	18.52	1.522	.0084	4.924	.1317	.3657	.0031	.0054
Stddev	.9	.36	.08	.007	.0003	.154	.0043	.0121	.0012	.0146
%RSD	.4740	1.402	.4329	.4749	3.916	3.126	3.285	3.296	38.37	267.8
#1	180.7	25.96	18.61	1.525	.0080	5.051	.1356	.3659	.0024	-.0101
#2	181.5	25.75	18.49	1.528	.0085	4.968	.1325	.3777	.0024	.0075
#3	179.8	25.26	18.46	1.514	.0087	4.753	.1271	.3536	.0045	.0189

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	50.43	.0706	.3109	5.275	.0150	.3816	.1868
Stddev	8.38	.0027	.0024	.041	.0031	.0015	.0019
%RSD	16.63	3.780	.7634	.7707	20.68	.3813	1.031
#1	58.07	.0736	.3113	5.299	.0178	.3823	.1885
#2	51.76	.0692	.3131	5.299	.0154	.3800	.1871
#3	41.46	.0689	.3084	5.229	.0117	.3826	.1847

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	720.39	1427.8	16150.	1969.8
Stddev	2.28	1.1	59.	7.6
%RSD	.31718	.07701	.36454	.38813
#1	721.72	1426.8	16108.	1977.8
#2	717.75	1429.0	16124.	1962.6
#3	721.70	1427.6	16217.	1968.9

Zoom In Zoom Out

Sample Name: MP33784-SD1 Acquired: 5/24/2018 15:21:20 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0088	182.4	.0521	.8027	.0056	21.16	-.0066	.0255	.4250	.1214
Stddev	.0033	4.5	.0373	.0271	.0010	.44	.0027	.0073	.0103	.0027
%RSD	38.21	2.473	71.66	3.378	18.34	2.098	41.22	28.85	2.425	2.264
#1	.0115	186.5	.0153	.8247	.0055	21.40	-.0090	.0284	.4330	.1239
#2	.0050	183.0	.0511	.8111	.0067	21.43	-.0070	.0171	.4133	.1220
#3	.0098	177.6	.0899	.7724	.0046	20.65	-.0037	.0309	.4286	.1184

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	195.5	25.28	19.74	1.631	.0011	3.367	.1392	.3830	.0068	-.0014
Stddev	2.9	1.00	.71	.027	.0025	.128	.0029	.0230	.0164	.0234
%RSD	1.506	3.968	3.573	1.678	220.8	3.793	2.072	6.009	240.9	1688.
#1	197.7	26.14	19.56	1.663	-.0016	3.489	.1359	.4078	-.0118	.0096
#2	196.6	25.52	20.52	1.616	.0033	3.377	.1414	.3790	.0131	.0145
#3	192.1	24.18	19.15	1.615	.0016	3.234	.1403	.3623	.0192	-.0282

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	52.79	.0513	.3227	5.085	.0177	.3956	.2045
Stddev	2.12	.0060	.0040	.029	.0326	.0051	.0043
%RSD	4.010	11.59	1.243	.5683	184.6	1.291	2.091
#1	50.35	.0581	.3264	5.098	-.0184	.3934	.2017
#2	53.88	.0492	.3232	5.051	.0452	.4015	.2023
#3	54.14	.0468	.3184	5.105	.0262	.3921	.2094

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	741.40	1444.7	16384.	1966.1
Stddev	.12	6.7	47.	14.2
%RSD	.01656	.46426	.28463	.72420
#1	741.26	1437.4	16333.	1964.3
#2	741.43	1446.3	16425.	1952.9
#3	741.50	1450.5	16393.	1981.2

Zoom In Zoom Out

Sample Name: MP33785-PS1 Acquired: 5/24/2018 15:25:35 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0422	190.0	.1619	1.044	.0503	24.47	.0426	.0783	.4471	.2175
Stddev	.0016	.7	.0108	.009	.0003	.11	.0033	.0028	.0062	.0022
%RSD	3.705	.3686	6.687	.8393	.5217	.4531	7.628	3.575	1.384	.9925
#1	.0404	190.6	.1498	1.053	.0502	24.60	.0397	.0758	.4400	.2184
#2	.0431	190.0	.1652	1.043	.0506	24.43	.0420	.0778	.4516	.2151
#3	.0431	189.2	.1707	1.035	.0501	24.39	.0462	.0814	.4496	.2192

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	190.5	34.11	23.56	1.618	.1028	13.37	.2340	.4259	.0964	.0989
Stddev	.5	.22	.12	.012	.0066	.06	.0048	.0062	.0031	.0082
%RSD	.2639	.6504	.5072	.7416	6.403	.4811	2.049	1.447	3.235	8.321
#1	191.0	34.20	23.43	1.608	.0968	13.39	.2300	.4252	.0997	.0904
#2	190.4	34.27	23.61	1.631	.1018	13.43	.2325	.4201	.0935	.0993
#3	190.1	33.86	23.65	1.616	.1098	13.30	.2393	.4323	.0961	.1068

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	44.04	.1139	.3641	5.402	.1166	.4371	.4428
Stddev	7.66	.0054	.0022	.045	.0104	.0030	.0164
%RSD	17.40	4.760	.6051	.8315	8.917	.6864	3.711
#1	52.21	.1089	.3665	5.369	.1099	.4404	.4268
#2	42.91	.1132	.3621	5.453	.1113	.4364	.4420
#3	37.01	.1197	.3638	5.383	.1286	.4346	.4596

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	713.48	1431.6	15969.	1946.7
Stddev	1.24	.4	40.	9.4
%RSD	.17389	.02691	.25113	.48324
#1	712.91	1431.5	16007.	1936.0
#2	714.90	1431.3	15927.	1953.5
#3	712.62	1432.0	15974.	1950.6

Zoom In Zoom Out

Sample Name: MP33785-S1 Acquired: 5/24/2018 15:29:47 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0547	291.1	1.964	3.005	.0613	46.57	.0442	.5615	.6899	.3986
Stddev	.0013	.9	.009	.003	.0002	.07	.0006	.0020	.0043	.0022
%RSD	2.393	.3119	.4616	.0905	.3708	.1463	1.326	.3476	.6225	.5529
#1	.0536	290.1	1.965	3.004	.0611	46.50	.0449	.5601	.6931	.4003
#2	.0544	291.7	1.972	3.008	.0615	46.57	.0437	.5608	.6850	.3961
#3	.0561	291.5	1.954	3.004	.0613	46.64	.0441	.5637	.6915	.3994

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	225.4	52.67	45.57	2.137	.4584	32.18	.7022	.8984	.1817	1.911
Stddev	.9	.17	.43	.014	.0017	.12	.0046	.0067	.0075	.018
%RSD	.3960	.3290	.9480	.6483	.3639	.3724	.6619	.7444	4.111	.9631
#1	224.4	52.65	45.08	2.152	.4579	32.04	.6987	.9048	.1733	1.894
#2	225.4	52.85	45.78	2.125	.4570	32.24	.7075	.8915	.1842	1.930
#3	226.2	52.51	45.86	2.134	.4603	32.26	.7003	.8989	.1876	1.907

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	76.99	.5467	.8942	6.540	2.014	.9116	.7279
Stddev	.50	.0023	.0011	.076	.006	.0025	.0026
%RSD	.6460	.4283	.1281	1.160	.2968	.2750	.3568
#1	77.47	.5461	.8931	6.622	2.011	.9145	.7249
#2	76.48	.5493	.8942	6.524	2.009	.9104	.7294
#3	77.03	.5448	.8954	6.473	2.020	.9100	.7294

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	702.97	1424.9	15872.	1952.7
Stddev	2.26	2.1	93.	2.9
%RSD	.32163	.14966	.58408	.14964
#1	700.36	1422.5	15765.	1955.8
#2	704.38	1425.6	15929.	1952.3
#3	704.16	1426.6	15922.	1950.0

Zoom In Zoom Out

Sample Name: MP33785-S2 Acquired: 5/24/2018 15:33:57 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0547	294.4	1.970	3.031	.0614	46.97	.0443	.5650	.7093	.4043
Stddev	.0011	3.9	.011	.030	.0012	.09	.0006	.0005	.0074	.0023
%RSD	1.996	1.318	.5551	1.002	1.901	.1982	1.283	.0855	1.048	.5613
#1	.0554	298.7	1.978	3.065	.0626	46.93	.0445	.5651	.7143	.4028
#2	.0535	293.5	1.957	3.006	.0613	47.08	.0437	.5655	.7007	.4031
#3	.0553	291.1	1.974	3.022	.0603	46.91	.0447	.5645	.7128	.4069

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	228.2	53.63	46.01	2.170	.4607	32.88	.7043	.9031	.1824	1.902
Stddev	1.0	.63	.08	.007	.0010	.34	.0005	.0085	.0084	.024
%RSD	.4177	1.173	.1726	.3272	.2081	1.029	.0664	.9467	4.589	1.283
#1	228.0	54.33	45.93	2.177	.4603	33.24	.7045	.9084	.1894	1.919
#2	229.2	53.11	46.01	2.162	.4600	32.84	.7046	.9076	.1731	1.912
#3	227.3	53.44	46.09	2.170	.4618	32.57	.7037	.8932	.1848	1.874

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	78.06	.5516	.8964	6.463	2.028	.9167	.7379
Stddev	1.08	.0067	.0028	.051	.015	.0049	.0023
%RSD	1.387	1.215	.3147	.7925	.7492	.5344	.3114
#1	77.95	.5472	.8994	6.522	2.042	.9213	.7392
#2	79.20	.5483	.8958	6.435	2.029	.9116	.7393
#3	77.04	.5593	.8939	6.432	2.012	.9172	.7353

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	701.16	1425.1	15852.	1947.8
Stddev	.80	3.8	44.	8.3
%RSD	.11342	.26775	.27721	.42617
#1	701.07	1424.6	15804.	1945.7
#2	701.99	1429.1	15890.	1940.8
#3	700.41	1421.5	15862.	1956.9

Zoom In Zoom Out

Sample Name: MP33788-MB1 Acquired: 5/24/2018 15:38:06 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0156	-.0020	.0003	.0000	.0198	.0000	-.0002	.0007
Stddev	.0003	.0048	.0006	.0002	.0000	.0001	.0001	.0001	.0002
%RSD	188.0	30.58	32.03	64.75	6000.	.5435	483.3	46.71	29.34
#1	.0001	.0104	-.0016	.0003	.0000	.0198	-.0001	-.0002	.0007
#2	.0005	.0167	-.0027	.0004	.0000	.0200	.0000	-.0001	.0004
#3	-.0001	.0198	-.0017	.0001	.0000	.0198	.0001	-.0004	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0329	.0026	.0338	.0005	-.0001	-.0330	-.0001	-.0001
Stddev	.0001	.0041	.0056	.0242	.0001	.0003	.0072	.0004	.0005
%RSD	15.83	12.45	214.2	71.41	16.99	211.1	21.81	376.6	364.5
#1	-.0010	.0363	.0015	.0163	.0005	.0002	-.0335	.0003	-.0003
#2	-.0007	.0341	-.0024	.0239	.0004	-.0002	-.0256	-.0002	.0004
#3	-.0009	.0284	.0087	.0614	.0005	-.0004	-.0400	-.0005	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	.0037	.0178	F.0251	.0001	.0014	-.0026	.0000	.0028
Stddev	.0002	.0005	.0003	.0003	.0000	.0001	.0010	.0003	.0001
%RSD	22.22	14.83	1.717	1.360	39.74	5.875	37.96	615.1	4.790
#1	.0009	.0043	.0178	.0252	.0001	.0014	-.0027	-.0002	.0028
#2	.0009	.0035	.0182	.0253	.0002	.0015	-.0016	.0000	.0027
#3	.0013	.0033	.0176	.0247	.0001	.0014	-.0035	.0003	.0029
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Zoom In Zoom Out

Sample Name: MP33788-MB1 Acquired: 5/24/2018 15:38:06 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	749.66	1429.0	16487.	1964.1
Stddev	.24	3.1	56.	10.1
%RSD	.03175	.22033	.34101	.51452
#1	749.55	1425.9	16476.	1974.9
#2	749.50	1432.2	16548.	1962.3
#3	749.93	1428.8	16437.	1954.9

Zoom In Zoom Out

Sample Name: MP33788-B1 Acquired: 5/24/2018 15:42:27 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0478	27.15	1.844	2.004	.0514	23.61	.0478	.4943	.2102	.2526
Stddev	.0003	.09	.007	.009	.0003	.12	.0001	.0004	.0010	.0001
%RSD	.7067	.3330	.3998	.4283	.6570	.5200	.2690	.0901	.4950	.0422
#1	.0475	27.22	1.852	2.013	.0518	23.60	.0479	.4947	.2093	.2526
#2	.0482	27.05	1.838	2.002	.0511	23.74	.0476	.4938	.2113	.2525
#3	.0478	27.17	1.842	1.996	.0514	23.50	.0478	.4944	.2099	.2527
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.80	24.33	23.66	.4991	.4664	25.08	.4919	.4695	.4703	1.815
Stddev	.04	.15	.14	.0026	.0008	.09	.0002	.0013	.0060	.006
%RSD	.1517	.6069	.6071	.5147	.1815	.3752	.0368	.2721	1.286	.3595
#1	25.75	24.50	23.76	.4962	.4657	25.18	.4920	.4692	.4653	1.823
#2	25.83	24.27	23.73	.5010	.4661	25.00	.4917	.4685	.4685	1.811
#3	25.81	24.22	23.49	.5001	.4673	25.06	.4919	.4709	.4770	1.811
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0643	.4753	.5045	.4980	1.827	.4685	.4762
Stddev	.0015	.0023	.0010	.0016	.007	.0018	.0011
%RSD	2.305	.4880	.2009	.3218	.4126	.3816	.2306
#1	.0650	.4771	.5057	.4965	1.829	.4671	.4764
#2	.0626	.4761	.5038	.4997	1.819	.4705	.4750
#3	.0653	.4727	.5040	.4977	1.834	.4679	.4772
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33788-B1 Acquired: 5/24/2018 15:42:27 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	685.10	1378.7	15636.	1932.4
Stddev	3.24	4.7	35.	11.0
%RSD	.47272	.34246	.22534	.56679
#1	682.25	1373.4	15605.	1934.4
#2	688.62	1382.3	15628.	1920.6
#3	684.42	1380.5	15674.	1942.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 15:46:32 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2477	42.14	1.934	2.008	2.094	39.27	2.025	2.013	2.137	2.051
Stddev	.0012	.03	.005	.004	.004	.06	.002	.001	.010	.007
%RSD	.4763	.0802	.2423	.1748	.1691	.1446	.1190	.0646	.4696	.3242
#1	.2471	42.17	1.932	2.005	2.098	39.28	2.027	2.015	2.147	2.053
#2	.2469	42.12	1.939	2.008	2.092	39.31	2.025	2.013	2.128	2.056
#3	.2490	42.11	1.930	2.012	2.092	39.20	2.022	2.012	2.136	2.043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.65	40.40	39.81	2.067	2.011	42.18	1.961	2.018	1.959	1.948
Stddev	.14	.04	.27	.008	.003	.02	.002	.005	.006	.005
%RSD	.3454	.0925	.6783	.3896	.1496	.0490	.1230	.2474	.3210	.2498
#1	41.80	40.42	40.10	2.063	2.007	42.19	1.960	2.022	1.960	1.947
#2	41.62	40.36	39.76	2.061	2.013	42.15	1.964	2.019	1.964	1.943
#3	41.52	40.43	39.56	2.076	2.012	42.19	1.960	2.012	1.952	1.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.004	1.935	2.125	2.110	2.029	2.030	2.004
Stddev	.005	.002	.002	.002	.004	.002	.005
%RSD	.2477	.1133	.0868	.0766	.1743	.1118	.2749
#1	1.998	1.933	2.127	2.110	2.030	2.029	2.006
#2	2.007	1.934	2.125	2.108	2.032	2.032	2.008
#3	2.007	1.937	2.124	2.111	2.025	2.028	1.998
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 15:46:32 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	654.13	1380.0	15430.	1916.1
Stddev	.40	2.7	14.	4.7
%RSD	.06175	.19820	.08919	.24552
#1	654.59	1383.1	15430.	1912.6
#2	653.90	1378.1	15444.	1914.3
#3	653.89	1378.7	15417.	1921.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 15:50:29 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0080	.0003	.0003	.0002	.0087	.0002	.0001	.0005
Stddev	.0003	.0035	.0007	.0002	.0001	.0033	.0001	.0001	.0003
%RSD	750.2	44.04	225.4	61.63	54.64	37.91	23.06	56.55	62.54
#1	-.0003	.0063	.0003	.0001	.0002	.0053	.0002	.0001	.0007
#2	.0002	.0120	.0010	.0004	.0001	.0119	.0003	.0001	.0005
#3	.0003	.0056	-.0004	.0002	.0002	.0089	.0002	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0199	-.0242	.0129	.0002	F.0032	-.0345	-.0001	.0004
Stddev	.000	.0039	.0119	.0205	.0001	.0010	.0047	.0002	.0009
%RSD	281.0	19.66	49.07	158.3	54.65	32.53	13.70	198.2	213.2
#1	.0000	.0237	-.0238	.0096	.0004	.0043	-.0366	.0001	.0000
#2	-.0001	.0202	-.0126	-.0056	.0002	.0032	-.0291	-.0003	-.0002
#3	.0000	.0159	-.0364	.0348	.0001	.0022	-.0379	.0000	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0031	F.0023	.0016	.0004	.0003	.0018	.0018	.0004	.0000
Stddev	.0007	.0005	.0013	.0002	.0001	.0002	.0004	.0000	.0002
%RSD	21.32	21.02	77.09	49.55	23.19	11.64	21.80	4.424	614.4
#1	.0024	.0019	.0002	.0002	.0002	.0018	.0015	.0004	-.0002
#2	.0036	.0028	.0027	.0005	.0003	.0019	.0022	.0004	.0002
#3	.0034	.0021	.0020	.0005	.0003	.0015	.0016	.0004	.0001
Check ?	Chk Fail	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020	.0020							
Low Limit	-.0020	-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 15:50:29 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	749.18	1453.9	16358.	1954.6
Stddev	1.47	3.4	30.	3.6
%RSD	.19609	.23168	.18136	.18195
#1	750.87	1457.6	16352.	1951.0
#2	748.23	1452.9	16331.	1954.7
#3	748.44	1451.0	16390.	1958.1

Zoom In Zoom Out

Sample Name: FA54294-44 Acquired: 5/24/2018 15:54:49 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	113.3	.0257	.9041	.0026	5.703	-.0026	.0116	.1146	.0366
Stddev	.0006	.3	.0038	.0045	.0004	.059	.0001	.0004	.0006	.0004
%RSD	104.8	.2604	14.73	.4951	16.40	1.038	4.049	3.653	.5320	1.099
#1	.0001	113.3	.0246	.9089	.0021	5.712	-.0025	.0113	.1152	.0366
#2	-.0010	113.6	.0299	.9000	.0030	5.640	-.0026	.0114	.1147	.0371
#3	-.0007	113.0	.0226	.9036	.0025	5.757	-.0026	.0121	.1140	.0363

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	54.12	1.788	3.860	.6649	.0056	-.0730	.0435	.1498	.0024	-.0040
Stddev	.23	.044	.104	.0010	.0005	.0111	.0011	.0024	.0016	.0010
%RSD	.4232	2.461	2.697	.1463	9.650	15.23	2.572	1.606	64.87	23.51
#1	53.88	1.836	3.763	.6641	.0061	-.0727	.0427	.1524	.0013	-.0030
#2	54.34	1.777	3.970	.6647	.0050	-.0843	.0448	.1476	.0017	-.0041
#3	54.13	1.750	3.847	.6660	.0057	-.0621	.0430	.1494	.0042	-.0049

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.14	.0282	.6334	1.581	.0010	.1107	.1217
Stddev	.09	.0017	.0013	.011	.0028	.0009	.0017
%RSD	.9053	5.937	.2038	.6722	292.3	.8528	1.422
#1	10.03	.0278	.6332	1.580	.0042	.1100	.1199
#2	10.21	.0300	.6348	1.591	-.0006	.1105	.1219
#3	10.17	.0268	.6323	1.570	-.0007	.1118	.1234

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	732.88	1521.1	17124.	2088.1
Stddev	.78	1.5	21.	3.3
%RSD	.10679	.10145	.12148	.15847
#1	733.77	1519.9	17129.	2091.2
#2	732.61	1520.4	17142.	2088.3
#3	732.28	1522.8	17101.	2084.6

Zoom In Zoom Out

Sample Name: MP33788-D1 Acquired: 5/24/2018 15:59:04 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0006	122.5	.0420	.9813	.0034	6.043	-.0029	.0104	.1313	.0448
Stddev	.0011	.5	.0032	.0085	.0005	.078	.0002	.0006	.0026	.0026
%RSD	173.9	.3716	7.583	.8630	14.23	1.291	7.547	5.870	1.970	5.798
#1	.0018	122.3	.0433	.9763	.0029	5.958	-.0032	.0104	.1339	.0427
#2	.0004	123.1	.0443	.9911	.0039	6.111	-.0029	.0098	.1312	.0477
#3	-.0004	122.2	.0384	.9766	.0033	6.059	-.0027	.0110	.1288	.0441

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	60.64	1.917	3.947	.7056	.0033	-.1070	.0454	.1496	.0027	.0059
Stddev	.25	.047	.283	.0047	.0010	.0187	.0014	.0029	.0040	.0095
%RSD	.4158	2.462	7.174	.6622	30.31	17.48	3.133	1.906	147.7	161.5
#1	60.36	1.971	3.769	.7107	.0032	-.0938	.0439	.1501	-.0004	.0038
#2	60.84	1.896	4.273	.7044	.0043	-.1284	.0456	.1521	.0013	.0163
#3	60.72	1.883	3.798	.7016	.0023	-.0989	.0467	.1465	.0073	-.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.263	.0303	.6989	1.585	.0080	.1204	.1437
Stddev	.044	.0038	.0047	.019	.0048	.0014	.0004
%RSD	.4728	12.64	.6671	1.194	60.46	1.137	.2907
#1	9.261	.0322	.6967	1.606	.0026	.1189	.1437
#2	9.308	.0329	.7042	1.571	.0094	.1211	.1434
#3	9.221	.0259	.6957	1.577	.0120	.1214	.1442

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	732.55	1536.7	17100.	2103.9
Stddev	.86	2.0	45.	17.8
%RSD	.11772	.13295	.26363	.84572
#1	733.02	1536.4	17059.	2117.5
#2	733.08	1538.8	17093.	2083.8
#3	731.56	1534.8	17148.	2110.5

Zoom In Zoom Out

Sample Name: MP33788-SD1 Acquired: 5/24/2018 16:03:18 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0016	113.0	.0036	.9004	.0024	5.789	-.0035	.0122	.1180	.0296
Stddev	.0004	.6	.0532	.0035	.0010	.112	.0018	.0013	.0025	.0060
%RSD	22.36	.5018	1493.	.3893	42.44	1.932	52.83	10.83	2.119	20.12
#1	.0015	112.6	-.0125	.9043	.0034	5.664	-.0036	.0124	.1155	.0278
#2	.0013	112.7	.0629	.8992	.0024	5.878	-.0053	.0134	.1181	.0362
#3	.0020	113.7	-.0397	.8976	.0014	5.826	-.0016	.0108	.1204	.0247

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	54.39	1.319	4.271	.6591	-.0030	-1.097	.0413	.1720	.0247	-.0142
Stddev	.45	.222	.514	.0019	.0040	.090	.0085	.0055	.0030	.0524
%RSD	.8357	16.86	12.03	.2835	133.2	8.176	20.66	3.181	12.00	370.2
#1	54.06	1.199	4.227	.6595	-.0017	-1.072	.0316	.1665	.0213	.0461
#2	54.91	1.182	3.781	.6571	.0002	-1.023	.0447	.1775	.0260	-.0491
#3	54.21	1.575	4.805	.6607	-.0075	-1.197	.0476	.1719	.0268	-.0394

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.203	.0267	.6327	1.585	.0014	.1069	.1232
Stddev	.648	.0163	.0033	.099	.0206	.0082	.0040
%RSD	7.896	60.92	.5199	6.256	1442.	7.679	3.279
#1	8.949	.0149	.6295	1.586	-.0167	.1078	.1273
#2	7.875	.0200	.6325	1.683	.0238	.0982	.1232
#3	7.784	.0453	.6361	1.485	-.0028	.1146	.1192

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	745.22	1466.9	16469.	1986.4
Stddev	.52	2.8	31.	8.4
%RSD	.06922	.18976	.18813	.42315
#1	745.19	1469.0	16504.	1995.4
#2	745.75	1468.0	16444.	1978.9
#3	744.72	1463.7	16459.	1984.8

Zoom In Zoom Out

Sample Name: MP33788-PS1 Acquired: 5/24/2018 16:07:36 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0090	23.54	.0250	.2330	.0108	2.116	.0094	.0121	.0331	.0278
Stddev	.0005	.03	.0011	.0002	.0001	.011	.0001	.0001	.0005	.0003
%RSD	5.411	.1236	4.398	.1066	.9004	.5062	.8104	.8352	1.640	.9779
#1	.0096	23.53	.0243	.2328	.0107	2.119	.0093	.0120	.0334	.0281
#2	.0088	23.58	.0245	.2332	.0109	2.124	.0094	.0122	.0325	.0276
#3	.0087	23.53	.0263	.2331	.0107	2.104	.0095	.0122	.0334	.0276

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	11.53	2.252	1.678	.1454	.0187	1.937	.0287	.0409	.0198	.0188
Stddev	.03	.018	.089	.0005	.0001	.005	.0001	.0003	.0004	.0025
%RSD	.2981	.7891	5.292	.3738	.7897	.2513	.4869	.7756	1.817	13.06
#1	11.50	2.261	1.756	.1459	.0186	1.938	.0286	.0406	.0194	.0186
#2	11.57	2.264	1.697	.1448	.0189	1.931	.0285	.0412	.0201	.0214
#3	11.54	2.231	1.581	.1456	.0186	1.941	.0288	.0409	.0198	.0165

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.759	.0152	.1393	.3222	.0204	.0324	.0726
Stddev	.040	.0007	.0003	.0033	.0020	.0004	.0001
%RSD	2.278	4.763	.2171	1.038	9.644	1.224	.2028
#1	1.805	.0144	.1393	.3188	.0181	.0327	.0725
#2	1.733	.0158	.1390	.3255	.0218	.0319	.0728
#3	1.739	.0153	.1396	.3224	.0212	.0325	.0726

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	725.04	1509.0	17009.	2113.9
Stddev	2.55	1.0	52.	12.8
%RSD	.35150	.06559	.30707	.60337
#1	725.79	1508.0	16950.	2116.1
#2	727.14	1509.0	17047.	2100.2
#3	722.21	1510.0	17032.	2125.5

Zoom In Zoom Out

Sample Name: MP33788-S1 Acquired: 5/24/2018 16:11:51 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0477	229.1	1.773	3.277	.0548	30.54	.0435	.4954	.3799	.3002
Stddev	.0018	.9	.003	.003	.0003	.13	.0006	.0005	.0051	.0021
%RSD	3.671	.3991	.1616	.0971	.6350	.4150	1.275	.1028	1.336	.6891
#1	.0481	229.2	1.776	3.275	.0553	30.68	.0439	.4948	.3743	.2984
#2	.0458	229.9	1.773	3.275	.0547	30.50	.0438	.4957	.3812	.2997
#3	.0493	228.1	1.771	3.281	.0546	30.44	.0429	.4957	.3842	.3025

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	94.42	26.25	29.27	1.218	.4181	24.21	.5639	.6415	.2016	1.757
Stddev	.57	.03	.29	.008	.0003	.08	.0008	.0060	.0029	.012
%RSD	.6050	.1118	.9967	.6743	.0667	.3216	.1468	.9340	1.459	.6644
#1	94.64	26.28	29.37	1.211	.4180	24.23	.5641	.6474	.1982	1.745
#2	94.85	26.22	29.50	1.217	.4178	24.27	.5646	.6416	.2037	1.769
#3	93.77	26.25	28.95	1.227	.4184	24.12	.5630	.6355	.2029	1.757

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.86	.4576	1.463	2.380	1.983	.6103	.6512
Stddev	.12	.0020	.003	.070	.005	.0030	.0008
%RSD	1.007	.4391	.1982	2.960	.2349	.4991	.1303
#1	11.98	.4568	1.462	2.358	1.986	.6068	.6518
#2	11.74	.4598	1.467	2.458	1.978	.6120	.6502
#3	11.86	.4560	1.461	2.322	1.985	.6122	.6514

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	714.04	1539.3	17269.	2140.1
Stddev	2.06	2.0	17.	16.6
%RSD	.28841	.13274	.09959	.77623
#1	713.37	1538.4	17279.	2126.8
#2	712.41	1537.9	17280.	2134.7
#3	716.36	1541.6	17250.	2158.7

Zoom In Zoom Out

Sample Name: MP33788-S2 Acquired: 5/24/2018 16:16:03 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0549	227.9	1.926	3.377	.0582	32.57	.0478	.5385	.4128	.3177
Stddev	.0011	.4	.009	.018	.0008	.21	.0002	.0007	.0013	.0008
%RSD	1.968	.1781	.4861	.5238	1.339	.6563	.4625	.1251	.3257	.2401
#1	.0543	228.2	1.935	3.363	.0582	32.42	.0480	.5381	.4143	.3185
#2	.0542	228.1	1.927	3.397	.0590	32.81	.0480	.5380	.4117	.3175
#3	.0561	227.5	1.916	3.371	.0575	32.47	.0476	.5392	.4125	.3170

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	97.70	28.09	31.20	1.334	.4624	26.30	.6066	.6913	.2346	1.933
Stddev	.31	.09	.23	.007	.0013	.06	.0018	.0018	.0067	.022
%RSD	.3147	.3369	.7385	.5326	.2788	.2306	.2951	.2589	2.865	1.152
#1	97.47	28.00	31.37	1.340	.4638	26.36	.6086	.6923	.2269	1.908
#2	97.58	28.19	30.94	1.326	.4622	26.29	.6059	.6892	.2392	1.950
#3	98.05	28.10	31.30	1.335	.4613	26.24	.6052	.6923	.2376	1.941

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.83	.5027	1.469	2.570	2.158	.6593	.6752
Stddev	.43	.0009	.003	.088	.001	.0028	.0025
%RSD	3.129	.1760	.1854	3.439	.0663	.4221	.3745
#1	14.25	.5027	1.470	2.540	2.156	.6566	.6735
#2	13.86	.5018	1.471	2.670	2.159	.6594	.6740
#3	13.39	.5036	1.466	2.501	2.158	.6621	.6781

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	707.35	1517.3	16943.	2119.6
Stddev	1.23	5.5	50.	5.7
%RSD	.17413	.36527	.29641	.26895
#1	706.03	1511.0	16885.	2121.6
#2	707.57	1519.5	16971.	2113.2
#3	708.46	1521.5	16972.	2124.1

Zoom In Zoom Out

Sample Name: FA54294-45 Acquired: 5/24/2018 16:20:16 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	149.8	.0211	1.055	.0038	2.955	-.0033	.0135	.1168	.0301
Stddev	.0013	.6	.0017	.002	.0003	.036	.0005	.0007	.0024	.0011
%RSD	555.3	.3975	7.883	.2017	7.847	1.235	16.40	5.346	2.031	3.745
#1	-.0001	149.4	.0230	1.053	.0041	2.948	-.0027	.0127	.1196	.0313
#2	-.0016	150.5	.0198	1.057	.0039	2.994	-.0035	.0141	.1154	.0300
#3	.0010	149.6	.0204	1.057	.0035	2.922	-.0037	.0137	.1156	.0291

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	68.06	2.055	4.358	2.530	.0007	-.0638	.0617	.0983	.0055	.0083
Stddev	.23	.009	.136	.012	.0006	.0066	.0014	.0066	.0030	.0138
%RSD	.3393	.4261	3.116	.4909	87.13	10.35	2.266	6.700	53.40	166.4
#1	67.82	2.061	4.201	2.516	.0007	-.0564	.0612	.0910	.0086	.0241
#2	68.29	2.045	4.439	2.534	.0013	-.0659	.0606	.1038	.0053	-.0017
#3	68.07	2.059	4.433	2.539	.0001	-.0690	.0632	.1002	.0027	.0026

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.781	.0266	.6036	1.769	.0131	.1264	.1707
Stddev	.163	.0008	.0015	.018	.0052	.0010	.0007
%RSD	1.671	3.095	.2517	1.034	39.61	.7809	.4263
#1	9.917	.0261	.6024	1.772	.0072	.1270	.1714
#2	9.826	.0275	.6053	1.750	.0169	.1269	.1707
#3	9.599	.0262	.6031	1.786	.0152	.1253	.1699

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	729.81	1541.4	17381.	2136.3
Stddev	2.40	3.0	32.	7.0
%RSD	.32929	.19615	.18682	.32635
#1	727.97	1539.1	17407.	2143.4
#2	728.94	1540.2	17392.	2129.5
#3	732.53	1544.8	17345.	2135.9

Zoom In Zoom Out

Sample Name: FA54294-46 Acquired: 5/24/2018 16:24:31 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0011	153.2	.0074	1.072	.0026	3.931	-.0008	.0052	.1217	.0204
Stddev	.0026	.4	.0068	.009	.0003	.051	.0003	.0002	.0017	.0006
%RSD	241.7	.2646	91.44	.7935	10.51	1.288	31.80	3.909	1.369	3.053
#1	-.0020	153.3	.0042	1.064	.0026	3.878	-.0011	.0050	.1210	.0207
#2	-.0031	153.5	.0152	1.080	.0024	3.979	-.0005	.0054	.1236	.0197
#3	.0019	152.8	.0029	1.073	.0029	3.935	-.0009	.0053	.1206	.0209

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	17.83	1.698	3.251	.3657	-.0007	.4783	.0448	.0815	.0034	-.0017
Stddev	.13	.067	.135	.0019	.0009	.0811	.0009	.0077	.0025	.0009
%RSD	.7159	3.950	4.166	.5276	117.1	16.95	1.983	9.446	73.21	53.66
#1	17.73	1.689	3.325	.3660	-.0015	.5708	.0446	.0771	.0031	-.0021
#2	17.98	1.636	3.094	.3675	.0002	.4196	.0440	.0770	.0010	-.0006
#3	17.79	1.769	3.332	.3636	-.0009	.4446	.0457	.0904	.0059	-.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.569	.0257	.6858	.6540	.0003	.0606	.0839
Stddev	.011	.0026	.0019	.0005	.0051	.0004	.0012
%RSD	.4286	10.20	.2752	.0724	1960.	.6985	1.454
#1	2.557	.0247	.6861	.6545	-.0044	.0608	.0840
#2	2.573	.0287	.6876	.6538	-.0005	.0608	.0851
#3	2.578	.0237	.6838	.6536	.0057	.0601	.0827

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	729.25	1511.6	17065.	2105.9
Stddev	1.36	3.5	46.	20.7
%RSD	.18690	.23357	.27212	.98116
#1	729.74	1515.6	17026.	2127.8
#2	727.72	1509.8	17053.	2086.8
#3	730.31	1509.3	17116.	2103.0

Zoom In Zoom Out

Sample Name: FA54294-47 Acquired: 5/24/2018 16:28:48 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	363.3	.0247	3.502	.0066	6.386	-.0029	.0129	.3262	.0495
Stddev	.0011	1.2	.0042	.014	.0003	.022	.0003	.0002	.0030	.0006
%RSD	231.9	.3339	16.86	.4071	5.139	.3437	11.26	1.904	.9185	1.162
#1	-.0016	364.5	.0204	3.518	.0070	6.412	-.0028	.0130	.3288	.0499
#2	-.0002	363.4	.0288	3.497	.0064	6.375	-.0032	.0131	.3229	.0488
#3	.0005	362.1	.0250	3.491	.0065	6.373	-.0026	.0126	.3268	.0498

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	50.07	3.718	6.875	.1177	-.0001	-.0694	.1095	.2322	-.0052	-.0026
Stddev	.13	.031	.174	.0004	.0002	.0249	.0020	.0069	.0017	.0164
%RSD	.2608	.8439	2.527	.3724	313.9	35.81	1.796	2.970	31.89	626.5
#1	50.14	3.717	6.889	.1172	-.0002	-.0908	.1073	.2295	-.0062	-.0072
#2	50.15	3.687	6.695	.1180	-.0002	-.0421	.1104	.2271	-.0062	.0156
#3	49.92	3.750	7.041	.1177	.0002	-.0753	.1109	.2401	-.0033	-.0162

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.484	.0300	2.369	1.630	.0008	.1857	.1356
Stddev	.070	.0018	.006	.004	.0037	.0012	.0008
%RSD	.9423	5.889	.2378	.2525	473.9	.6665	.6114
#1	7.420	.0284	2.373	1.625	-.0013	.1866	.1352
#2	7.473	.0319	2.372	1.631	-.0014	.1862	.1351
#3	7.559	.0297	2.363	1.633	.0050	.1843	.1366

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	712.56	1668.3	18499.	2333.2
Stddev	2.73	3.4	59.	18.6
%RSD	.38364	.20274	.32122	.79679
#1	711.88	1664.7	18446.	2313.1
#2	710.23	1668.6	18487.	2336.5
#3	715.57	1671.5	18563.	2349.9

Zoom In Zoom Out

Sample Name: FA54294-48 Acquired: 5/24/2018 16:33:03 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	348.3	.0244	3.720	.0067	6.729	-.0020	.0117	.3235	.0605
Stddev	.0008	1.0	.0067	.019	.0004	.018	.0005	.0006	.0013	.0014
%RSD	1276.	.2838	27.41	.5185	5.715	.2596	23.26	5.256	.4052	2.249
#1	-.0003	349.0	.0169	3.743	.0071	6.744	-.0015	.0115	.3229	.0614
#2	-.0005	348.8	.0268	3.710	.0064	6.710	-.0023	.0112	.3250	.0590
#3	.0010	347.2	.0297	3.708	.0065	6.732	-.0023	.0124	.3225	.0613

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	34.90	3.608	6.683	.1069	-.0014	-.0441	.1073	.2197	.0001	.0013
Stddev	.12	.035	.116	.0012	.0008	.0227	.0008	.0016	.0064	.0057
%RSD	.3533	.9777	1.741	1.166	55.05	51.55	.7197	.7136	4977.	439.3
#1	34.84	3.607	6.801	.1081	-.0016	-.0647	.1069	.2185	.0074	-.0048
#2	35.04	3.573	6.682	.1071	-.0006	-.0478	.1069	.2215	-.0048	.0022
#3	34.82	3.644	6.568	.1056	-.0021	-.0197	.1082	.2191	-.0022	.0065

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.557	.0271	2.425	1.770	-.0046	.1540	.1301
Stddev	.089	.0013	.012	.010	.0057	.0019	.0008
%RSD	1.038	4.749	.4840	.5833	125.7	1.223	.6057
#1	8.621	.0286	2.436	1.770	-.0038	.1551	.1301
#2	8.456	.0265	2.426	1.781	-.0106	.1552	.1293
#3	8.595	.0262	2.413	1.760	.0008	.1519	.1309

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	713.34	1689.4	18742.	2363.4
Stddev	1.92	6.6	88.	7.5
%RSD	.26937	.38999	.47173	.31789
#1	711.50	1682.9	18670.	2359.8
#2	715.33	1689.3	18716.	2358.4
#3	713.20	1696.1	18841.	2372.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 16:37:17 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2447	41.29	1.942	2.007	2.062	38.84	2.018	2.011	2.087	2.044
Stddev	.0012	.16	.003	.005	.004	.13	.003	.001	.009	.007
%RSD	.4863	.3823	.1689	.2372	.2038	.3295	.1624	.0585	.4061	.3595
#1	.2460	41.17	1.939	2.002	2.057	38.70	2.015	2.010	2.079	2.049
#2	.2443	41.47	1.945	2.009	2.063	38.91	2.019	2.012	2.086	2.047
#3	.2437	41.24	1.943	2.010	2.065	38.92	2.022	2.012	2.096	2.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.75	40.05	39.14	2.042	2.013	41.48	1.970	2.000	1.971	1.964
Stddev	.10	.09	.16	.002	.005	.06	.002	.006	.003	.008
%RSD	.2469	.2359	.4095	.1007	.2710	.1378	.0934	.2842	.1555	.4109
#1	40.63	40.02	38.96	2.042	2.008	41.54	1.971	1.994	1.970	1.965
#2	40.83	39.97	39.19	2.044	2.013	41.43	1.971	2.003	1.969	1.956
#3	40.79	40.15	39.27	2.040	2.019	41.46	1.968	2.004	1.975	1.972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.019	1.946	2.097	2.086	2.016	2.013	1.989
Stddev	.003	.003	.002	.007	.009	.002	.002
%RSD	.1235	.1324	.0815	.3159	.4537	.0730	.0790
#1	2.016	1.949	2.096	2.091	2.006	2.011	1.989
#2	2.021	1.944	2.099	2.089	2.022	2.014	1.990
#3	2.020	1.947	2.098	2.079	2.022	2.013	1.987
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 16:37:17 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	653.37	1364.4	15481.	1945.7
Stddev	1.44	.5	23.	5.8
%RSD	.22024	.03404	.14555	.30032
#1	654.59	1364.8	15455.	1950.7
#2	651.78	1364.4	15489.	1947.2
#3	653.74	1363.9	15498.	1939.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 16:41:15 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0051	-.0005	.0003	.0002	.0112	.0003	.0002	.0005
Stddev	.000	.0047	.0010	.0002	.0001	.0046	.0000	.0001	.0002
%RSD	5433.	91.45	202.3	57.81	34.46	41.25	10.89	26.66	47.59
#1	-.0002	-.0003	.0001	.0002	.0003	.0068	.0002	.0002	.0006
#2	.0003	.0077	.0001	.0002	.0001	.0160	.0003	.0002	.0002
#3	-.0001	.0079	-.0017	.0005	.0002	.0108	.0003	.0001	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0205	-.0048	.0073	.0002	F .0032	-.0439	.0000	.0007
Stddev	.0002	.0030	.0103	.0233	.0000	.0009	.0012	.0002	.0011
%RSD	484.7	14.75	216.6	320.1	8.449	27.44	2.798	1107.	145.2
#1	-.0001	.0239	.0060	.0338	.0002	.0041	-.0442	.0002	.0010
#2	.0000	.0181	-.0145	-.0020	.0002	.0030	-.0425	.0000	.0017
#3	.0002	.0194	-.0059	-.0100	.0002	.0024	-.0449	-.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	.0009	.0007	.0001	.0003	.0011	-.0002	.0005	.0001
Stddev	.0008	.0017	.0001	.0001	.0001	.0001	.0013	.0001	.0000
%RSD	43.53	195.4	15.47	64.26	33.60	7.608	817.4	27.71	20.04
#1	.0013	.0028	.0007	.0001	.0003	.0012	.0002	.0007	.0001
#2	.0028	.0001	.0008	.0002	.0002	.0011	-.0016	.0006	.0001
#3	.0015	-.0003	.0006	.0000	.0004	.0012	.0009	.0004	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 16:41:15 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	746.71	1438.7	16409.	1976.9
Stddev	1.21	3.8	32.	10.6
%RSD	.16205	.26420	.19240	.53750
#1	748.09	1436.8	16422.	1966.3
#2	746.19	1443.1	16432.	1987.6
#3	745.85	1436.2	16373.	1976.7

Zoom In Zoom Out

Sample Name: FA54294-49 Acquired: 5/24/2018 16:45:35 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0070	157.4	.0434	2.989	.0053	60.08	.0068	.0191	.2817	.4712
Stddev	.0022	1.3	.0086	.021	.0008	.36	.0004	.0002	.0088	.0034
%RSD	30.98	.8466	19.73	.6855	15.31	.6075	6.220	1.123	3.117	.7318
#1	.0046	158.7	.0463	2.991	.0055	60.23	.0066	.0193	.2918	.4751
#2	.0089	157.3	.0338	3.008	.0060	60.34	.0066	.0191	.2772	.4685
#3	.0075	156.1	.0502	2.968	.0044	59.66	.0073	.0189	.2760	.4700

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	134.4	4.781	8.441	7.030	.0056	.2602	.0909	2.743	.0148	.0057
Stddev	1.0	.088	.161	.026	.0003	.0178	.0010	.026	.0070	.0040
%RSD	.7403	1.843	1.909	.3639	5.351	6.829	1.117	.9467	47.14	69.08
#1	135.4	4.800	8.613	7.058	.0058	.2764	.0920	2.717	.0187	.0100
#2	134.5	4.684	8.419	7.008	.0053	.2629	.0899	2.769	.0067	.0021
#3	133.4	4.857	8.293	7.023	.0059	.2412	.0908	2.743	.0189	.0051

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.98	.2633	.9363	1.667	.0051	.1561	5.166
Stddev	.50	.0025	.0056	.002	.0066	.0019	.029
%RSD	3.834	.9478	.5945	.1260	128.7	1.187	.5530
#1	13.53	.2622	.9423	1.666	-.0021	.1580	5.150
#2	12.84	.2615	.9352	1.666	.0067	.1543	5.149
#3	12.56	.2661	.9313	1.669	.0107	.1560	5.199

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	715.70	1572.1	17822.	2206.5
Stddev	4.10	7.2	47.	18.0
%RSD	.57341	.46065	.26638	.81366
#1	720.39	1573.1	17768.	2190.1
#2	712.79	1578.7	17842.	2203.8
#3	713.91	1564.4	17857.	2225.7

Zoom In Zoom Out

Sample Name: FA54294-50 Acquired: 5/24/2018 16:49:49 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0023	158.4	.0223	1.289	.0042	13.44	-.0019	.0107	.1517	.0682
Stddev	.0006	.4	.0015	.007	.0003	.08	.0002	.0006	.0044	.0009
%RSD	27.61	.2527	6.894	.5671	6.333	.6115	12.11	5.996	2.915	1.272
#1	.0016	157.9	.0207	1.281	.0039	13.37	-.0018	.0100	.1503	.0678
#2	.0026	158.6	.0238	1.295	.0044	13.41	-.0021	.0110	.1481	.0692
#3	.0026	158.7	.0224	1.289	.0044	13.53	-.0016	.0111	.1566	.0676

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	67.66	2.998	5.872	2.826	.0013	.0122	.0561	.2264	.0060	.0145
Stddev	.38	.047	.044	.020	.0005	.0239	.0009	.0040	.0031	.0051
%RSD	.5642	1.556	.7565	.7043	36.90	195.8	1.635	1.781	51.17	34.88
#1	67.24	3.036	5.879	2.812	.0017	.0023	.0570	.2310	.0083	.0124
#2	67.77	2.946	5.825	2.849	.0015	.0394	.0560	.2249	.0071	.0109
#3	67.98	3.012	5.913	2.818	.0008	-.0051	.0552	.2233	.0025	.0203

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.96	.0380	.6983	1.616	.0072	.1351	.2815
Stddev	.16	.0017	.0035	.014	.0060	.0025	.0016
%RSD	1.321	4.542	.5024	.8756	83.75	1.839	.5529
#1	11.78	.0362	.6948	1.631	.0141	.1366	.2810
#2	12.04	.0396	.6982	1.615	.0034	.1365	.2832
#3	12.06	.0381	.7019	1.603	.0039	.1323	.2802

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	726.59	1572.0	17786.	2217.3
Stddev	3.52	3.5	84.	5.7
%RSD	.48481	.22535	.47312	.25511
#1	726.29	1574.2	17832.	2222.3
#2	730.26	1573.8	17689.	2218.4
#3	723.23	1567.9	17837.	2211.2

◀ Zoom In ▶
Zoom Out

Sample Name: FA54294-51 Acquired: 5/24/2018 16:54:05 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	266.1	.0485	2.467	.0048	18.27	-.0064	.0079	.3678	.0405
Stddev	.0003	.8	.0027	.006	.0004	.11	.0006	.0001	.0040	.0006
%RSD	453.1	.3171	5.565	.2633	8.592	.5755	9.843	1.458	1.100	1.413
#1	.0004	265.7	.0483	2.465	.0051	18.20	-.0070	.0079	.3724	.0399
#2	.0000	265.6	.0513	2.461	.0049	18.23	-.0066	.0079	.3648	.0405
#3	-.0002	267.1	.0460	2.474	.0043	18.39	-.0058	.0077	.3662	.0411

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	146.9	4.351	6.904	.1656	.0090	.1293	.0775	.2645	-.0015	.0108
Stddev	.1	.051	.096	.0010	.0004	.0199	.0007	.0029	.0002	.0149
%RSD	.0825	1.167	1.396	.5942	4.054	15.40	.8720	1.089	11.29	137.8
#1	146.8	4.307	6.983	.1668	.0087	.1496	.0777	.2637	-.0015	-.0021
#2	146.8	4.406	6.796	.1652	.0088	.1284	.0780	.2677	-.0017	.0075
#3	147.0	4.339	6.932	.1650	.0094	.1098	.0767	.2620	-.0013	.0271

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.256	.0304	2.089	1.437	.0121	.3876	.1122
Stddev	.074	.0009	.005	.007	.0122	.0012	.0017
%RSD	1.733	2.858	.2444	.5218	101.5	.3117	1.524
#1	4.277	.0301	2.090	1.441	.0255	.3886	.1132
#2	4.317	.0313	2.083	1.429	.0017	.3880	.1102
#3	4.174	.0297	2.093	1.442	.0090	.3863	.1132

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	714.79	1609.9	18113.	2260.4
Stddev	1.57	.9	81.	5.3
%RSD	.21930	.05645	.44484	.23300
#1	713.71	1610.3	18020.	2261.6
#2	714.07	1608.9	18167.	2265.0
#3	716.59	1610.6	18151.	2254.6

◀ Zoom In ▶
Zoom Out

Sample Name: FA54294-52 Acquired: 5/24/2018 16:58:21 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0009	288.8	.0265	2.839	.0045	15.93	-.0028	.0082	.2874	.0343
Stddev	.0008	2.0	.0068	.025	.0004	.08	.0003	.0002	.0015	.0006
%RSD	95.80	.6799	25.87	.8801	9.659	.5130	10.06	2.401	.5144	1.753
#1	.0000	290.8	.0304	2.859	.0049	15.90	-.0029	.0080	.2865	.0346
#2	.0010	288.6	.0185	2.848	.0040	16.02	-.0029	.0081	.2891	.0336
#3	.0016	286.9	.0304	2.811	.0046	15.87	-.0024	.0084	.2866	.0347

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	56.91	3.490	8.424	.0863	.0004	-.0729	.0750	.2800	-.0012	.0088
Stddev	.27	.067	.067	.0004	.0002	.0228	.0009	.0034	.0054	.0107
%RSD	.4720	1.912	.7992	.4762	54.20	31.34	1.221	1.226	452.2	122.4
#1	57.17	3.525	8.406	.0867	.0006	-.0989	.0741	.2837	-.0053	-.0035
#2	56.92	3.533	8.367	.0859	.0004	-.0563	.0759	.2769	.0049	.0165
#3	56.63	3.413	8.498	.0862	.0002	-.0634	.0751	.2794	-.0032	.0133

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.985	.0291	2.538	1.102	.0076	.1821	.0986
Stddev	.015	.0008	.018	.005	.0014	.0022	.0004
%RSD	.4892	2.587	.7079	.4538	17.92	1.236	.4275
#1	2.990	.0287	2.558	1.107	.0064	.1838	.0981
#2	2.968	.0299	2.535	1.097	.0073	.1795	.0988
#3	2.996	.0285	2.522	1.101	.0091	.1829	.0988

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	715.98	1687.1	18937.	2382.3
Stddev	1.99	4.6	30.	12.0
%RSD	.27773	.27355	.15804	.50505
#1	715.92	1684.6	18935.	2368.6
#2	718.01	1692.4	18968.	2387.5
#3	714.03	1684.3	18908.	2390.9

◀ Zoom In ▶
Zoom Out

Sample Name: FA54294-53 Acquired: 5/24/2018 17:02:37 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0031	253.7	.0509	2.863	.0058	6.685	-.0075	.0042	.3507	.0444
Stddev	.0016	2.0	.0019	.010	.0002	.018	.0009	.0004	.0045	.0004
%RSD	50.89	.7888	3.643	.3351	2.607	.2717	12.01	10.45	1.272	.8020
#1	.0014	253.0	.0513	2.865	.0058	6.698	-.0072	.0038	.3558	.0445
#2	.0034	255.9	.0488	2.852	.0060	6.692	-.0085	.0046	.3482	.0440
#3	.0046	252.1	.0525	2.871	.0057	6.664	-.0068	.0044	.3480	.0446

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	173.7	3.344	5.180	.1228	.0054	-.0901	.0529	.3295	-.0037	.0129
Stddev	.9	.006	.110	.0010	.0003	.0043	.0007	.0036	.0024	.0067
%RSD	.5418	.1913	2.121	.8085	4.832	4.740	1.268	1.085	63.91	52.42
#1	173.3	3.346	5.064	.1239	.0056	-.0933	.0521	.3286	-.0025	.0206
#2	174.7	3.337	5.283	.1226	.0051	-.0853	.0532	.3265	-.0022	.0099
#3	172.9	3.349	5.193	.1219	.0053	-.0918	.0533	.3335	-.0064	.0081

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.713	.0315	2.502	1.560	.0039	.4776	.1082
Stddev	.065	.0021	.008	.024	.0099	.0019	.0012
%RSD	.9605	6.710	.3266	1.518	249.9	.3895	1.140
#1	6.777	.0334	2.503	1.566	.0029	.4798	.1083
#2	6.648	.0320	2.510	1.581	-.0054	.4767	.1069
#3	6.714	.0292	2.494	1.535	.0143	.4764	.1093

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	718.39	1672.8	18876.	2358.4
Stddev	1.32	5.0	131.	10.1
%RSD	.18410	.29811	.69521	.42804
#1	718.39	1667.2	18729.	2357.4
#2	717.08	1676.9	18916.	2348.8
#3	719.72	1674.2	18981.	2368.9

◀ Zoom In ▶
Zoom Out

Sample Name: FA54294-54 Acquired: 5/24/2018 17:06:54 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0023	175.1	.0339	1.464	.0041	15.36	-.0011	.0090	.1865	.0750
Stddev	.0009	.9	.0072	.009	.0002	.09	.0003	.0007	.0017	.0010
%RSD	39.97	.4898	21.19	.5966	4.288	.5532	29.99	7.341	.9376	1.379
#1	.0023	175.8	.0270	1.456	.0040	15.34	-.0015	.0085	.1846	.0760
#2	.0033	175.2	.0413	1.473	.0040	15.45	-.0008	.0088	.1870	.0749
#3	.0014	174.1	.0335	1.463	.0043	15.29	-.0010	.0098	.1880	.0739

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	70.24	2.443	6.181	2.983	.0011	.0146	.0726	.2631	-.0008	.0092
Stddev	.27	.072	.097	.005	.0007	.0209	.0022	.0066	.0045	.0152
%RSD	.3875	2.951	1.575	.1592	63.65	143.2	3.003	2.516	544.1	166.2
#1	70.53	2.493	6.080	2.979	.0003	-.0044	.0716	.2563	.0015	-.0022
#2	70.19	2.474	6.274	2.988	.0015	.0370	.0751	.2634	.0020	.0265
#3	70.00	2.360	6.190	2.982	.0015	.0112	.0711	.2695	-.0060	.0032

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	20.22	.0308	.6505	2.584	.0033	.1295	.6582
Stddev	.50	.0018	.0020	.035	.0060	.0007	.0024
%RSD	2.474	5.883	.3141	1.368	184.2	.5242	.3690
#1	19.93	.0322	.6525	2.613	-.0036	.1302	.6594
#2	19.93	.0316	.6505	2.594	.0059	.1296	.6554
#3	20.80	.0288	.6484	2.545	.0075	.1288	.6597

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	723.24	1572.4	17821.	2199.3
Stddev	1.24	4.3	32.	8.7
%RSD	.17171	.27103	.17888	.39617
#1	722.51	1573.6	17824.	2196.6
#2	722.53	1567.7	17787.	2192.2
#3	724.67	1576.0	17851.	2209.0

Zoom In Zoom Out

Sample Name: FA54294-55 Acquired: 5/24/2018 17:11:07 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	116.2	.0107	.9149	.0031	5.154	-.0025	.0085	.1026	.0222
Stddev	.0020	.6	.0015	.0033	.0004	.041	.0003	.0015	.0021	.0004
%RSD	644.5	.5407	13.87	.3564	14.15	.7896	13.72	17.93	2.080	1.780
#1	-.0019	115.5	.0108	.9136	.0026	5.121	-.0021	.0094	.1024	.0217
#2	.0020	116.5	.0122	.9186	.0031	5.200	-.0027	.0093	.1048	.0224
#3	.0008	116.6	.0092	.9125	.0035	5.142	-.0027	.0067	.1006	.0224

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	55.38	1.962	3.709	1.452	-.0004	-.1049	.0391	.0723	.0019	.0045
Stddev	.07	.059	.136	.018	.0005	.0221	.0020	.0030	.0032	.0060
%RSD	.1273	3.000	3.670	1.254	129.8	21.10	5.230	4.214	168.5	134.1
#1	55.45	1.926	3.832	1.472	-.0003	-.0895	.0383	.0757	-.0002	-.0013
#2	55.38	1.930	3.731	1.436	-.0010	-.1303	.0375	.0700	.0055	.0106
#3	55.31	2.030	3.562	1.448	.0001	-.0949	.0414	.0711	.0003	.0041

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.60	.0263	.5437	2.122	.0023	.1055	.0791
Stddev	.26	.0003	.0025	.065	.0008	.0013	.0014
%RSD	1.812	1.224	.4665	3.071	36.56	1.234	1.788
#1	14.91	.0263	.5427	2.073	.0017	.1048	.0780
#2	14.45	.0260	.5466	2.098	.0033	.1070	.0787
#3	14.46	.0266	.5418	2.196	.0020	.1048	.0807

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	731.81	1522.0	17188.	2107.8
Stddev	.55	1.5	120.	8.6
%RSD	.07561	.09680	.69938	.40899
#1	731.21	1520.6	17076.	2106.6
#2	732.30	1521.9	17315.	2099.9
#3	731.92	1523.6	17174.	2117.0

Zoom In Zoom Out

Sample Name: FA54294-56 Acquired: 5/24/2018 17:15:22 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0023	339.7	.0675	5.028	.0076	22.41	-.0092	.0067	.5468	.0274
Stddev	.0007	2.1	.0033	.019	.0002	.11	.0007	.0007	.0023	.0001
%RSD	31.53	.6242	4.894	.3782	3.205	.4894	7.961	10.92	.4254	.3441
#1	.0032	340.4	.0713	5.046	.0073	22.40	-.0086	.0072	.5452	.0273
#2	.0019	341.4	.0653	5.029	.0078	22.30	-.0100	.0059	.5495	.0275
#3	.0019	337.3	.0660	5.008	.0076	22.52	-.0090	.0071	.5457	.0274

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	199.1	3.982	8.331	.0824	.0065	-.0298	.0688	.5619	-.0065	.0110
Stddev	.5	.132	.211	.0005	.0006	.0036	.0008	.0063	.0058	.0090
%RSD	.2632	3.303	2.536	.5464	9.411	11.97	1.172	1.117	89.38	82.30
#1	198.9	4.123	8.293	.0819	.0071	-.0338	.0686	.5633	.0000	.0020
#2	199.7	3.959	8.559	.0828	.0059	-.0271	.0697	.5674	-.0111	.0200
#3	198.7	3.863	8.141	.0825	.0065	-.0284	.0681	.5551	-.0084	.0110

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.990	.0368	4.637	1.516	.0063	.5410	.0925
Stddev	.138	.0012	.023	.023	.0025	.0025	.0006
%RSD	2.300	3.332	.4986	1.493	39.95	.4654	.6851
#1	6.148	.0354	4.641	1.539	.0076	.5439	.0932
#2	5.930	.0378	4.657	1.517	.0080	.5397	.0924
#3	5.893	.0372	4.612	1.493	.0034	.5393	.0919

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	710.11	1895.4	21307.	2707.5
Stddev	2.18	7.0	65.	10.4
%RSD	.30669	.36888	.30447	.38426
#1	709.73	1901.2	21300.	2711.8
#2	708.15	1897.2	21375.	2715.0
#3	712.46	1887.6	21246.	2695.6

Zoom In Zoom Out

Sample Name: FA54294-57 Acquired: 5/24/2018 17:19:38 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0015	297.2	.0503	4.653	.0076	8.237	-.0056	.0073	.5356	.0242
Stddev	.0006	2.1	.0044	.021	.0001	.056	.0004	.0004	.0076	.0010
%RSD	43.51	.7134	8.760	.4523	1.044	.6753	6.788	5.457	1.425	4.163
#1	.0012	295.8	.0465	4.660	.0075	8.192	-.0059	.0075	.5376	.0235
#2	.0010	299.6	.0551	4.670	.0075	8.299	-.0056	.0068	.5272	.0254
#3	.0022	296.1	.0493	4.630	.0077	8.221	-.0052	.0074	.5420	.0239

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	132.3	3.762	6.085	.0616	.0041	-.1098	.0599	.4569	-.0031	.0009
Stddev	.5	.038	.188	.0001	.0002	.0315	.0007	.0078	.0066	.0114
%RSD	.3538	1.006	3.081	.1687	5.338	28.67	1.215	1.697	217.2	1291.
#1	131.9	3.794	6.171	.0617	.0042	-.1006	.0600	.4497	-.0105	.0105
#2	132.8	3.772	5.870	.0615	.0039	-.1449	.0606	.4651	-.0008	-.0117
#3	132.1	3.720	6.214	.0617	.0043	-.0840	.0592	.4558	.0022	.0038

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.318	.0323	4.149	1.085	.0009	.3866	.0935
Stddev	.006	.0027	.018	.001	.0076	.0023	.0010
%RSD	.1291	8.361	.4304	.0654	878.2	.5835	1.100
#1	4.312	.0316	4.137	1.085	-.0075	.3887	.0946
#2	4.321	.0353	4.170	1.084	.0075	.3842	.0935
#3	4.321	.0300	4.140	1.084	.0026	.3870	.0925

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	713.28	1878.2	21246.	2665.7
Stddev	2.73	2.5	70.	12.1
%RSD	.38338	.13506	.32852	.45282
#1	710.49	1875.3	21198.	2668.8
#2	713.40	1879.7	21326.	2652.4
#3	715.96	1879.7	21213.	2675.9

Zoom In Zoom Out

Sample Name: FA54294-58 Acquired: 5/24/2018 17:23:55 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	281.9	.0534	5.788	.0095	6.727	-.0041	.0054	.5212	.0190
Stddev	.0009	3.1	.0032	.020	.0004	.048	.0002	.0003	.0038	.0006
%RSD	294.8	1.102	6.011	.3532	4.519	.7111	4.312	5.598	.7309	3.262
#1	-.0005	278.9	.0542	5.765	.0090	6.672	-.0043	.0056	.5190	.0197
#2	.0012	281.7	.0561	5.795	.0095	6.756	-.0040	.0051	.5190	.0189
#3	.0001	285.2	.0498	5.805	.0098	6.753	-.0040	.0055	.5256	.0185

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	92.22	4.892	7.482	.0519	.0012	-.1168	.0438	.5462	-.0046	-.0069
Stddev	.66	.098	.184	.0002	.0004	.0035	.0012	.0042	.0038	.0076
%RSD	.7152	1.997	2.454	.3126	33.21	2.995	2.734	.7624	81.47	111.3
#1	91.51	4.870	7.530	.0519	.0008	-.1146	.0429	.5499	-.0073	-.0153
#2	92.35	4.807	7.637	.0521	.0016	-.1149	.0433	.5470	-.0061	-.0048
#3	92.81	4.998	7.280	.0518	.0013	-.1208	.0452	.5417	-.0003	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.346	.0263	4.720	1.663	-.0006	.3168	.0894
Stddev	.047	.0028	.030	.012	.0057	.0027	.0001
%RSD	.7441	10.81	.6287	.7419	962.6	.8618	.1428
#1	6.400	.0273	4.688	1.651	.0029	.3143	.0896
#2	6.322	.0285	4.728	1.664	.0024	.3197	.0893
#3	6.315	.0231	4.746	1.676	-.0071	.3163	.0894

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	712.57	1935.8	21825.	2744.9
Stddev	1.17	2.6	9.	14.6
%RSD	.16376	.13460	.04074	.53123
#1	713.41	1938.3	21834.	2761.7
#2	713.06	1935.9	21816.	2737.3
#3	711.24	1933.1	21825.	2735.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 17:28:11 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2468	41.20	1.968	2.024	2.064	38.95	2.025	2.021	2.084	2.062
Stddev	.0014	.21	.005	.008	.008	.16	.007	.006	.009	.006
%RSD	.5873	.5025	.2620	.4120	.3914	.4170	.3453	.2983	.4491	.2917
#1	.2478	41.37	1.973	2.030	2.072	38.92	2.033	2.028	2.087	2.069
#2	.2475	40.97	1.963	2.014	2.056	38.80	2.020	2.018	2.092	2.057
#3	.2451	41.26	1.969	2.027	2.065	39.12	2.022	2.017	2.074	2.062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.85	40.25	39.17	2.049	2.028	41.64	1.987	2.002	1.993	1.986
Stddev	.13	.19	.27	.015	.003	.30	.002	.008	.004	.003
%RSD	.3176	.4702	.6786	.7360	.1685	.7099	.1151	.3874	.2108	.1621
#1	40.94	40.38	39.18	2.056	2.032	41.93	1.990	2.003	1.996	1.984
#2	40.70	40.04	38.90	2.060	2.026	41.34	1.987	2.010	1.988	1.984
#3	40.89	40.35	39.43	2.032	2.026	41.65	1.986	1.995	1.994	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.052	1.966	2.108	2.099	2.017	2.019	1.988
Stddev	.005	.004	.009	.009	.004	.006	.005
%RSD	.2320	.2230	.4014	.4186	.1916	.2793	.2770
#1	2.057	1.970	2.116	2.107	2.013	2.025	1.994
#2	2.049	1.962	2.099	2.101	2.021	2.020	1.988
#3	2.049	1.968	2.108	2.090	2.016	2.013	1.983
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 17:28:11 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	650.36	1353.9	15463.	1953.3
Stddev	1.43	5.2	60.	8.3
%RSD	.22049	.38090	.38709	.42726
#1	649.79	1348.0	15407.	1946.5
#2	649.31	1357.4	15455.	1962.6
#3	652.00	1356.4	15526.	1950.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 17:32:09 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0077	-.0007	.0000	.0000	.0045	.0000	.0000	-.0001
Stddev	.0001	.0007	.0009	.0001	.0001	.0018	.000	.0001	.0004
%RSD	87.75	8.949	131.2	1669.	175.0	38.93	518.4	227.7	747.5
#1	.0000	-.0075	-.0005	.0000	.0001	.0052	.0000	.0001	-.0005
#2	.0001	-.0071	.0001	-.0001	.0000	.0059	.0000	-.0001	.0003
#3	.0002	-.0084	-.0017	.0001	.0001	.0025	.0000	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0140	-.0126	-.0003	.0000	F.0028	-.0565	-.0001	.0004
Stddev	.0002	.0026	.0076	.0356	.000	.0008	.0016	.0001	.0004
%RSD	66.07	18.56	60.64	10860.	330.4	29.74	2.917	101.3	111.2
#1	-.0001	.0169	-.0125	-.0396	.0000	.0036	-.0558	-.0002	.0002
#2	-.0004	.0119	-.0203	.0087	.0000	.0027	-.0584	.0000	.0001
#3	-.0004	.0131	-.0050	.0299	.0000	.0020	-.0553	-.0002	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	.0019	-.0004	.0004	.0001	.0007	F.0022	.0001	-.0001
Stddev	.0005	.0014	.0004	.0005	.0000	.0001	.0005	.0001	.0001
%RSD	40.56	72.03	105.8	117.2	44.22	16.45	21.95	60.41	51.10
#1	.0007	.0004	-.0001	.0007	.0000	.0008	.0023	.0002	-.0001
#2	.0013	.0031	-.0008	.0005	.0001	.0007	.0026	.0000	-.0001
#3	.0017	.0022	-.0002	-.0001	.0001	.0006	.0017	.0001	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 17:32:09 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	743.69	1429.2	16382.	1983.4
Stddev	1.02	2.4	6.	11.9
%RSD	.13668	.16554	.03380	.59977
#1	742.61	1427.1	16378.	1973.2
#2	743.85	1431.8	16388.	1996.5
#3	744.62	1428.7	16380.	1980.4

◀ Zoom In ▶
Zoom Out

Sample Name: FA54294-59 Acquired: 5/24/2018 17:36:29 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	135.8	.0206	1.033	.0034	7.173	-.0025	.0099	.1055	.0256
Stddev	.0009	.3	.0017	.004	.0001	.053	.0004	.0002	.0019	.0007
%RSD	115.4	.2454	8.455	.3417	2.254	.7378	17.06	2.436	1.846	2.916
#1	.0008	135.5	.0199	1.032	.0033	7.180	-.0030	.0096	.1036	.0255
#2	-.0001	136.1	.0226	1.030	.0034	7.117	-.0022	.0099	.1075	.0264
#3	.0016	135.6	.0193	1.037	.0035	7.222	-.0022	.0101	.1055	.0249

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	62.91	1.659	4.085	2.054	.0031	-.1126	.0455	.0857	-.0009	-.0043
Stddev	.16	.033	.147	.006	.0004	.0120	.0005	.0008	.0049	.0083
%RSD	.2571	1.993	3.599	.3129	13.71	10.64	1.169	.9745	536.1	192.0
#1	62.96	1.655	4.022	2.051	.0036	-.1028	.0459	.0854	-.0066	-.0134
#2	63.05	1.628	3.981	2.062	.0029	-.1090	.0458	.0851	.0022	-.0025
#3	62.73	1.694	4.253	2.050	.0029	-.1260	.0449	.0866	.0016	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.950	.0248	.5446	1.449	.0107	.1128	.1620
Stddev	.195	.0019	.0014	.040	.0092	.0011	.0004
%RSD	2.448	7.637	.2623	2.792	86.37	.9869	.2760
#1	8.094	.0227	.5458	1.424	.0206	.1139	.1625
#2	7.729	.0263	.5451	1.427	.0023	.1117	.1619
#3	8.029	.0254	.5430	1.495	.0091	.1128	.1616

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	727.25	1531.4	17368.	2156.2
Stddev	1.64	4.1	50.	9.6
%RSD	.22546	.27069	.29000	.44620
#1	727.80	1535.4	17364.	2145.7
#2	728.54	1531.5	17320.	2158.7
#3	725.40	1527.1	17421.	2164.4

◀ Zoom In ▶
Zoom Out

Sample Name: FA54294-60 Acquired: 5/24/2018 17:40:42 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0011	182.1	.0199	1.473	.0045	9.639	-.0041	.0153	.1689	.0362
Stddev	.0016	1.2	.0053	.008	.0001	.019	.0003	.0006	.0020	.0011
%RSD	146.2	.6752	26.47	.5692	1.370	.2006	6.520	4.231	1.202	3.031
#1	.0028	180.7	.0139	1.463	.0045	9.619	-.0038	.0158	.1684	.0349
#2	.0010	182.9	.0221	1.479	.0044	9.640	-.0043	.0155	.1711	.0366
#3	-.0005	182.7	.0237	1.477	.0045	9.658	-.0042	.0145	.1671	.0369

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	96.26	2.974	5.342	1.017	.0037	-.0216	.0608	.1352	-.0005	.0054
Stddev	.32	.096	.184	.009	.0013	.0132	.0012	.0050	.0043	.0113
%RSD	.3336	3.211	3.437	.8703	35.42	60.92	1.896	3.682	873.7	211.0
#1	95.89	2.987	5.388	1.010	.0045	-.0244	.0597	.1298	-.0054	-.0012
#2	96.42	3.061	5.499	1.014	.0022	-.0333	.0608	.1395	.0011	.0184
#3	96.48	2.872	5.140	1.027	.0043	-.0073	.0620	.1364	.0028	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.899	.0296	.9772	1.905	.0150	.1951	.1341
Stddev	.214	.0024	.0039	.054	.0060	.0010	.0013
%RSD	2.160	8.264	.4020	2.836	39.98	.4926	.9930
#1	10.13	.0292	.9727	1.914	.0105	.1950	.1343
#2	9.869	.0275	.9798	1.847	.0127	.1942	.1353
#3	9.702	.0323	.9791	1.954	.0218	.1961	.1326

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	723.93	1528.9	17210.	2166.0
Stddev	1.91	.6	72.	3.2
%RSD	.26350	.04108	.41849	.14666
#1	723.39	1529.6	17250.	2163.5
#2	722.35	1528.4	17253.	2165.0
#3	726.05	1528.7	17127.	2169.6

◀ Zoom In ▶
Zoom Out

Sample Name: FA54294-61 Acquired: 5/24/2018 17:44:57 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0034	291.3	.0570	2.952	.0052	15.87	-.0073	.0075	.3600	.0307
Stddev	.0006	.8	.0060	.013	.0004	.11	.0002	.0008	.0014	.0007
%RSD	16.41	.2841	10.57	.4361	7.854	.6705	2.724	11.00	.3962	2.413
#1	.0038	291.3	.0569	2.938	.0048	15.78	-.0075	.0071	.3609	.0312
#2	.0028	290.5	.0511	2.953	.0056	15.85	-.0071	.0085	.3608	.0310
#3	.0035	292.1	.0631	2.964	.0053	15.99	-.0073	.0070	.3584	.0299

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	172.0	3.513	7.145	.1642	.0088	-.0597	.0828	.3569	-.0046	-.0010
Stddev	.5	.055	.199	.0014	.0004	.0271	.0015	.0094	.0013	.0130
%RSD	.3114	1.557	2.782	.8539	4.620	45.44	1.869	2.637	28.61	1354.
#1	171.5	3.453	7.323	.1627	.0091	-.0909	.0822	.3676	-.0033	-.0159
#2	172.0	3.526	6.931	.1645	.0083	-.0465	.0846	.3534	-.0060	.0078
#3	172.6	3.560	7.180	.1655	.0088	-.0417	.0818	.3498	-.0045	.0052

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.014	.0324	2.703	1.375	.0035	.4681	.1325
Stddev	.018	.0015	.011	.011	.0027	.0015	.0005
%RSD	.4561	4.707	.4219	.8322	76.93	.3123	.4129
#1	4.021	.0317	2.702	1.365	.0066	.4691	.1321
#2	4.027	.0341	2.692	1.387	.0022	.4664	.1331
#3	3.993	.0313	2.715	1.373	.0017	.4686	.1323

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	712.90	1673.6	18898.	2376.0
Stddev	1.87	2.4	75.	10.2
%RSD	.26253	.14264	.39570	.43021
#1	711.41	1671.1	18981.	2387.4
#2	712.30	1675.8	18837.	2373.2
#3	715.00	1673.8	18875.	2367.5

◀ Zoom In ▶
Zoom Out

Sample Name: FA54294-62 Acquired: 5/24/2018 17:49:12 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0024	258.8	.0627	4.276	.0072	6.411	-.0084	.0048	.5014	.0310
Stddev	.0018	.9	.0068	.027	.0002	.026	.0003	.0007	.0017	.0003
%RSD	74.93	.3595	10.80	.6287	3.212	.4062	3.044	13.57	.3482	1.048
#1	.0043	259.9	.0690	4.304	.0074	6.385	-.0082	.0047	.5004	.0308
#2	.0007	258.6	.0555	4.274	.0073	6.437	-.0083	.0055	.5004	.0308
#3	.0022	258.1	.0637	4.250	.0070	6.412	-.0087	.0042	.5034	.0314

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	206.8	2.713	5.135	.1199	.0057	-.1386	.0559	.4479	-.0090	.0077
Stddev	.1	.021	.142	.0009	.0001	.0060	.0003	.0053	.0006	.0092
%RSD	.0593	.7680	2.760	.7475	2.108	4.346	.4774	1.179	6.347	120.4
#1	206.9	2.713	5.223	.1192	.0056	-.1317	.0557	.4539	-.0084	.0122
#2	206.8	2.734	4.971	.1209	.0058	-.1430	.0562	.4439	-.0096	-.0030
#3	206.6	2.692	5.209	.1195	.0058	-.1409	.0558	.4459	-.0089	.0137

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.985	.0317	3.846	1.585	-.0025	.4929	.0768
Stddev	.096	.0028	.017	.016	.0016	.0022	.0016
%RSD	1.064	8.833	.4442	.9859	63.19	.4368	2.078
#1	9.082	.0285	3.862	1.567	-.0043	.4907	.0750
#2	8.981	.0330	3.849	1.593	-.0018	.4931	.0777
#3	8.891	.0336	3.828	1.595	-.0014	.4950	.0778

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	714.09	1836.6	20752.	2613.5
Stddev	1.15	1.6	30.	7.9
%RSD	.16092	.08914	.14584	.30386
#1	712.85	1835.3	20751.	2616.8
#2	715.12	1836.0	20723.	2604.5
#3	714.30	1838.4	20783.	2619.3

Zoom In Zoom Out

Sample Name: FA54294-63 Acquired: 5/24/2018 17:53:28 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	307.4	.0367	5.521	.0413	6.546	-.0037	.0053	.3538	.0216
Stddev	.0017	2.4	.0031	.014	.0004	.039	.0003	.0004	.0012	.0009
%RSD	1541.	.7914	8.434	.2537	.9957	.5877	9.178	7.158	.3287	3.972
#1	.0020	304.8	.0400	5.507	.0408	6.590	-.0034	.0055	.3531	.0225
#2	-.0007	309.6	.0365	5.521	.0416	6.523	-.0041	.0049	.3532	.0215
#3	-.0010	307.7	.0338	5.535	.0415	6.524	-.0037	.0056	.3552	.0208

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	80.02	2.939	5.103	.0498	-.0004	-.1134	.0441	.4059	-.0020	-.0041
Stddev	.24	.037	.192	.0008	.0006	.0169	.0010	.0024	.0027	.0043
%RSD	.2991	1.250	3.767	1.535	150.3	14.89	2.290	.5962	132.5	104.5
#1	79.75	2.897	5.322	.0506	.0003	-.1227	.0431	.4035	-.0009	-.0007
#2	80.18	2.954	4.962	.0499	-.0009	-.0939	.0443	.4057	-.0001	-.0027
#3	80.14	2.966	5.026	.0491	-.0006	-.1236	.0451	.4084	-.0051	-.0090

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.916	.0270	4.635	1.203	-.0027	.2551	.0737
Stddev	.255	.0009	.027	.019	.0027	.0018	.0004
%RSD	3.217	3.211	.5906	1.555	99.01	.7121	.5564
#1	7.682	.0278	4.603	1.200	-.0003	.2546	.0741
#2	7.879	.0271	4.652	1.223	-.0056	.2571	.0737
#3	8.187	.0261	4.649	1.186	-.0023	.2536	.0732

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	713.73	1901.9	21502.	2684.4
Stddev	1.07	2.6	94.	7.3
%RSD	.14993	.13622	.43590	.27101
#1	713.74	1904.7	21447.	2687.6
#2	712.66	1899.6	21449.	2676.0
#3	714.80	1901.4	21610.	2689.5

Zoom In Zoom Out

Sample Name: MP33789-MB1 Acquired: 5/24/2018 17:57:42 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0206	-.0018	.0002	.0000	.0180	.0000	-.0003	.0010
Stddev	.0003	.0039	.0005	.0001	.0000	.0025	.0001	.0002	.0005
%RSD	258.2	18.76	29.29	28.91	169.1	13.96	2744.	78.14	51.24
#1	.0002	.0250	-.0023	.0002	.0000	.0195	-.0002	-.0006	.0015
#2	-.0003	.0181	-.0013	.0002	.0000	.0151	.0001	-.0001	.0005
#3	-.0003	.0186	-.0018	.0001	.0000	.0194	.0001	-.0002	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	.0377	.0027	.0215	.0004	-.0003	-.0513	-.0001	.0008
Stddev	.0001	.0064	.0093	.0329	.0001	.0002	.0069	.0002	.0008
%RSD	6.453	16.98	348.4	152.8	13.46	69.65	13.41	120.6	105.3
#1	-.0010	.0445	-.0078	.0595	.0005	-.0001	-.0435	.0000	-.0002
#2	-.0011	.0317	.0056	.0051	.0004	-.0003	-.0537	-.0001	.0013
#3	-.0010	.0370	.0102	.0001	.0004	-.0005	-.0566	-.0003	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0032	.0179	F.0256	.0002	.0008	-.0023	.0001	.0029
Stddev	.0002	.0002	.0003	.0003	.0001	.0001	.0009	.0003	.0001
%RSD	35.36	6.778	1.712	1.167	50.29	8.027	38.22	524.8	2.153
#1	.0004	.0030	.0182	.0255	.0003	.0009	-.0019	-.0003	.0030
#2	.0009	.0034	.0176	.0255	.0002	.0007	-.0017	.0004	.0029
#3	.0008	.0033	.0178	.0260	.0001	.0008	-.0033	.0001	.0029
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Zoom In Zoom Out

Sample Name: MP33789-MB1 Acquired: 5/24/2018 17:57:42 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	747.04	1414.4	16463.	2011.5
Stddev	.68	2.2	30.	7.6
%RSD	.09138	.15273	.18492	.37570
#1	747.20	1416.5	16477.	2002.8
#2	747.62	1412.2	16428.	2016.5
#3	746.29	1414.5	16484.	2015.3

Zoom In Zoom Out

Sample Name: MP33789-B1 Acquired: 5/24/2018 18:02:01 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0480	22.99	1.830	1.968	.0502	F19.78	.0472	.4888	.2017
Stddev	.0004	.04	.007	.007	.0003	.23	.0001	.0010	.0007
%RSD	.7705	.1533	.3962	.3517	.5337	1.143	.3025	.1976	.3480
#1	.0480	23.02	1.823	1.972	.0501	19.55	.0471	.4883	.2010
#2	.0484	22.95	1.837	1.960	.0499	19.79	.0472	.4899	.2025
#3	.0477	23.01	1.828	1.972	.0504	20.01	.0474	.4881	.2017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						25.00			
Range						-20.00%			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2517	21.83	20.52	F19.72	.4929	.4734	21.23	.4920	.4562
Stddev	.0005	.13	.06	.17	.0030	.0007	.09	.0023	.0029
%RSD	.1871	.5747	.2797	.8589	.6003	.1517	.4053	.4612	.6358
#1	.2522	21.72	20.57	19.54	.4962	.4727	21.32	.4908	.4559
#2	.2515	21.81	20.46	19.75	.4920	.4742	21.16	.4946	.4535
#3	.2513	21.97	20.54	19.88	.4904	.4734	21.21	.4906	.4592
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				25.00					
Range				-20.00%					

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4707	1.819	.0608	.4863	.5067	.5031	1.803	.4595	.4650
Stddev	.0030	.008	.0001	.0019	.0017	.0027	.005	.0001	.0011
%RSD	.6434	.4521	.1527	.3989	.3352	.5308	.2914	.0302	.2395
#1	.4678	1.812	.0609	.4849	.5075	.5060	1.798	.4594	.4641
#2	.4704	1.828	.0609	.4885	.5048	.5025	1.803	.4596	.4647
#3	.4739	1.816	.0607	.4856	.5079	.5007	1.808	.4597	.4663
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33789-B1 Acquired: 5/24/2018 18:02:01 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	689.84	1367.8	15755.	1987.8
Stddev	.97	5.7	65.	12.3
%RSD	.14062	.41667	.41445	.62072
#1	689.83	1368.9	15680.	2000.4
#2	688.87	1361.6	15800.	1987.3
#3	690.81	1372.9	15784.	1975.8

Zoom In Zoom Out

Sample Name: FA54294-64 Acquired: 5/24/2018 18:06:07 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	132.1	.0091	.9581	.0034	9.769	-.0019	.0073	.1078	.0293
Stddev	.0025	.9	.0068	.0097	.0002	.115	.0002	.0004	.0017	.0018
%RSD	4008.	.6964	75.16	1.015	6.584	1.174	12.62	5.311	1.570	6.201
#1	.0005	133.2	.0016	.9683	.0034	9.846	-.0020	.0077	.1073	.0313
#2	-.0026	131.7	.0106	.9490	.0036	9.824	-.0017	.0072	.1097	.0279
#3	.0023	131.5	.0151	.9569	.0032	9.637	-.0022	.0069	.1064	.0286

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	55.35	2.025	4.422	2.823	.0018	-.0900	.0460	.0892	.0066	.0026
Stddev	.29	.064	.208	.018	.0006	.0307	.0019	.0032	.0004	.0115
%RSD	.5166	3.148	4.705	.6231	30.98	34.16	4.163	3.564	5.631	438.3
#1	55.68	1.976	4.654	2.819	.0024	-.0557	.0449	.0911	.0064	-.0039
#2	55.24	2.001	4.362	2.843	.0013	-.0990	.0450	.0909	.0065	-.0041
#3	55.15	2.097	4.250	2.808	.0017	-.1152	.0483	.0855	.0071	.0159

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.06	.0267	.4965	1.719	.0110	.1057	.1382
Stddev	.38	.0024	.0032	.023	.0019	.0013	.0004
%RSD	2.891	8.907	.6380	1.317	17.48	1.272	.2594
#1	13.47	.0294	.4996	1.718	.0088	.1053	.1385
#2	13.01	.0256	.4933	1.697	.0125	.1045	.1378
#3	12.72	.0251	.4966	1.743	.0116	.1071	.1384

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	733.05	1548.1	17641.	2195.0
Stddev	1.30	6.9	72.	18.3
%RSD	.17670	.44441	.40547	.83481
#1	732.61	1547.9	17614.	2184.2
#2	734.51	1555.1	17587.	2184.7
#3	732.03	1541.3	17722.	2216.2

Zoom In Zoom Out

Sample Name: MP33789-D1 Acquired: 5/24/2018 18:10:21 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0011	129.5	.0165	.9107	.0040	8.966	-.0019	.0073	.1055	.0268
Stddev	.0010	.4	.0051	.0036	.0005	.105	.0004	.0006	.0016	.0009
%RSD	97.97	.3423	30.93	.3968	12.60	1.174	20.08	8.263	1.549	3.367
#1	.0020	129.8	.0107	.9134	.0046	8.859	-.0017	.0078	.1072	.0278
#2	.0000	129.0	.0205	.9066	.0036	8.969	-.0018	.0066	.1051	.0261
#3	.0011	129.7	.0182	.9122	.0039	9.070	-.0024	.0075	.1040	.0266

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	53.89	1.910	4.126	2.589	-.0002	-.1397	.0469	.0829	.0001	.0025
Stddev	.29	.018	.049	.009	.0002	.0102	.0011	.0024	.0029	.0097
%RSD	.5365	.9374	1.178	.3486	112.1	7.307	2.389	2.943	2005.	389.6
#1	53.61	1.930	4.074	2.584	.0000	-.1514	.0458	.0840	.0034	.0135
#2	53.86	1.905	4.170	2.599	-.0004	-.1357	.0469	.0847	-.0008	-.0009
#3	54.19	1.895	4.135	2.584	-.0001	-.1322	.0480	.0801	-.0021	-.0051

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.28	.0278	.4725	1.457	.0066	.1024	.1221
Stddev	.11	.0020	.0018	.022	.0018	.0016	.0006
%RSD	1.092	7.325	.3834	1.535	26.85	1.611	.5256
#1	10.35	.0287	.4708	1.448	.0047	.1005	.1214
#2	10.15	.0255	.4744	1.440	.0082	.1032	.1224
#3	10.33	.0292	.4723	1.482	.0068	.1034	.1226

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	732.63	1530.5	17591.	2183.4
Stddev	2.31	2.7	49.	7.7
%RSD	.31510	.17514	.27754	.35097
#1	733.40	1531.2	17589.	2191.1
#2	730.03	1527.6	17543.	2183.4
#3	734.45	1532.8	17641.	2175.8

Zoom In Zoom Out

Sample Name: MP33789-SD1 Acquired: 5/24/2018 18:14:37 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0043	134.1	.0063	.9696	.0035	9.868	-.0027	.0036	.1050	.0268
Stddev	.0081	1.0	.0271	.0031	.0022	.097	.0007	.0007	.0107	.0073
%RSD	187.5	.7378	429.3	.3213	63.19	.9779	26.34	18.95	10.19	27.22
#1	-.0043	133.0	-.0008	.9663	.0054	9.773	-.0034	.0029	.1045	.0241
#2	.0055	134.8	-.0165	.9724	.0011	9.966	-.0025	.0041	.0946	.0212
#3	.0118	134.6	.0363	.9702	.0039	9.865	-.0021	.0040	.1160	.0350

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	56.48	1.507	4.911	2.848	-.0092	-1.323	.0449	.1106	-.0084	.0200
Stddev	.14	.435	.468	.025	.0057	.069	.0050	.0138	.0264	.0434
%RSD	.2438	28.86	9.525	.8828	61.97	5.175	11.07	12.48	313.0	217.1
#1	56.37	1.986	5.237	2.858	-.0093	-1.361	.0501	.1228	-.0289	-.0301
#2	56.44	1.399	4.375	2.819	-.0034	-1.244	.0445	.0956	-.0178	.0434
#3	56.63	1.137	5.122	2.866	-.0148	-1.364	.0402	.1135	.0214	.0466

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.29	.0200	.5052	1.863	-.0040	.1094	.1408
Stddev	.70	.0127	.0024	.087	.0197	.0076	.0016
%RSD	4.899	63.69	.4724	4.653	488.5	6.964	1.137
#1	14.36	.0255	.5041	1.947	-.0244	.1020	.1414
#2	14.95	.0290	.5035	1.774	.0150	.1172	.1390
#3	13.55	.0054	.5079	1.868	-.0027	.1089	.1421

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	750.53	1461.5	16764.	2049.8
Stddev	2.58	1.1	81.	2.5
%RSD	.34368	.07601	.48560	.12271
#1	748.63	1462.3	16714.	2052.6
#2	753.47	1460.2	16858.	2047.8
#3	749.49	1462.0	16720.	2049.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 18:18:54 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2473	40.99	1.965	2.016	2.047	38.57	2.021	2.020	2.060	2.057
Stddev	.0008	.16	.003	.009	.006	.17	.001	.003	.010	.007
%RSD	.3204	.3941	.1710	.4416	.2988	.4456	.0289	.1680	.4824	.3200
#1	.2476	41.00	1.969	2.024	2.044	38.42	2.021	2.020	2.056	2.059
#2	.2464	40.83	1.962	2.007	2.043	38.55	2.022	2.024	2.053	2.063
#3	.2479	41.15	1.965	2.018	2.054	38.76	2.021	2.017	2.071	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.59	40.13	38.85	2.036	2.034	41.52	1.994	1.988	2.001	2.000
Stddev	.24	.15	.22	.012	.005	.24	.001	.006	.006	.013
%RSD	.5878	.3637	.5744	.5908	.2639	.5706	.0438	.3002	.3014	.6279
#1	40.35	40.15	38.60	2.024	2.028	41.48	1.993	1.990	1.998	2.015
#2	40.60	39.97	38.90	2.038	2.039	41.30	1.995	1.982	2.007	1.991
#3	40.82	40.26	39.04	2.048	2.036	41.77	1.994	1.993	1.996	1.995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.060	1.974	2.100	2.085	2.014	2.011	1.984
Stddev	.004	.003	.010	.006	.014	.011	.003
%RSD	.2139	.1476	.4966	.2690	.7166	.5563	.1376
#1	2.058	1.972	2.102	2.079	2.013	2.003	1.981
#2	2.065	1.977	2.088	2.089	2.000	2.007	1.984
#3	2.057	1.972	2.109	2.087	2.029	2.024	1.987
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 18:18:54 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	653.12	1352.7	15618.	1984.9
Stddev	1.48	2.7	47.	9.2
%RSD	.22634	.20119	.29851	.46258
#1	652.15	1351.9	15662.	1985.7
#2	654.82	1350.4	15622.	1993.7
#3	652.38	1355.7	15569.	1975.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 18:22:52 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0001	-.0001	.0001	.0000	.0013	.0000	-.0002	.0000
Stddev	.0004	.0086	.0003	.0001	.0001	.0028	.0000	.0002	.000
%RSD	121.8	8923.	489.8	117.0	193.9	220.7	133.6	80.09	4540.
#1	-.0006	.0038	-.0005	.0002	.0001	.0022	.0000	-.0002	.0004
#2	-.0004	-.0100	.0002	.0001	.0000	.0036	.0000	-.0004	-.0002
#3	.0001	.0059	.0000	.0000	.0000	-.0019	.0001	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0133	-.0263	.0242	.0000	F.0028	-.0558	-.0002	.0001
Stddev	.0001	.0027	.0064	.0506	.000	.0008	.0005	.0005	.0012
%RSD	111.9	20.52	24.41	209.5	1357.	29.32	.9189	290.5	937.0
#1	.0000	.0114	-.0295	.0825	.0000	.0038	-.0562	.0004	.0015
#2	-.0002	.0121	-.0306	-.0025	.0000	.0026	-.0552	-.0005	-.0003
#3	-.0002	.0165	-.0189	-.0076	.0000	.0022	-.0559	-.0004	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	.0010	-.0005	.0002	.0001	.0008	.0004	.0000	.0000
Stddev	.0008	.0021	.0001	.0006	.0000	.0001	.0009	.000	.0001
%RSD	82.53	217.9	25.56	279.9	1.529	19.03	229.6	6147.	416.0
#1	.0009	.0031	-.0004	-.0001	.0001	.0009	.0004	.0000	.0000
#2	.0018	-.0011	-.0007	-.0001	.0001	.0007	-.0005	-.0001	.0000
#3	.0002	.0008	-.0005	.0009	.0001	.0007	.0013	.0002	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 18:22:52 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	750.60	1436.1	16613.	2019.4
Stddev	.47	3.0	20.	15.3
%RSD	.06253	.21035	.11747	.75670
#1	750.39	1437.1	16590.	2032.9
#2	751.13	1438.5	16626.	2022.4
#3	750.26	1432.7	16622.	2002.8

Zoom In Zoom Out

Sample Name: MP33789-PS1 Acquired: 5/24/2018 18:27:13 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0411	136.9	.1140	1.177	.0434	13.71	.0454	.0557	.1491	.1160
Stddev	.0007	1.0	.0034	.004	.0013	.09	.0009	.0010	.0017	.0014
%RSD	1.788	.7637	3.010	.3273	3.082	.6766	2.020	1.782	1.117	1.208
#1	.0402	138.1	.1168	1.177	.0419	13.69	.0443	.0545	.1510	.1152
#2	.0415	136.7	.1150	1.173	.0438	13.63	.0461	.0563	.1480	.1152
#3	.0415	136.0	.1102	1.180	.0445	13.82	.0456	.0562	.1483	.1176

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	59.07	9.426	8.389	2.940	.0922	7.536	.1433	.1435	.0918	.0916
Stddev	.53	.262	.129	.026	.0025	.307	.0018	.0007	.0044	.0048
%RSD	.8919	2.779	1.541	.9021	2.686	4.077	1.270	.4969	4.831	5.203
#1	59.67	9.155	8.279	2.967	.0896	7.228	.1415	.1432	.0877	.0917
#2	58.76	9.445	8.356	2.940	.0923	7.538	.1451	.1430	.0913	.0868
#3	58.76	9.677	8.531	2.914	.0946	7.842	.1431	.1443	.0965	.0963

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.585	.0718	.5484	1.574	.0962	.1463	.3677
Stddev	.262	.0033	.0023	.016	.0054	.0018	.0027
%RSD	2.732	4.549	.4192	1.016	5.590	1.235	.7364
#1	9.872	.0681	.5510	1.593	.1024	.1453	.3653
#2	9.523	.0745	.5465	1.566	.0934	.1452	.3672
#3	9.359	.0727	.5478	1.564	.0929	.1484	.3706

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	726.17	1535.9	17525.	2198.2
Stddev	1.30	3.3	104.	14.4
%RSD	.17836	.21437	.59543	.65727
#1	725.96	1537.2	17423.	2182.0
#2	727.56	1532.2	17521.	2209.8
#3	724.99	1538.5	17632.	2202.8

Zoom In Zoom Out

Sample Name: MP33789-S1 Acquired: 5/24/2018 18:31:26 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0487	220.0	1.766	3.059	.0536	33.05	.0435	.4851	.3421	.2855
Stddev	.0001	.9	.012	.014	.0010	.31	.0003	.0017	.0038	.0027
%RSD	.1651	.4213	.6504	.4410	1.827	.9473	.5929	.3555	1.110	.9429
#1	.0487	220.9	1.772	3.074	.0547	33.41	.0434	.4870	.3462	.2884
#2	.0486	219.1	1.772	3.056	.0531	32.84	.0433	.4843	.3413	.2849
#3	.0487	220.1	1.752	3.048	.0529	32.90	.0438	.4839	.3387	.2831

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	88.60	25.89	28.56	3.544	.4205	23.80	.5549	.5859	.2103	1.766
Stddev	.61	.15	.05	.024	.0032	.15	.0025	.0063	.0034	.014
%RSD	.6853	.5820	.1626	.6839	.7531	.6387	.4534	1.069	1.594	.7870
#1	89.27	26.06	28.52	3.550	.4241	23.95	.5573	.5931	.2134	1.763
#2	88.09	25.77	28.61	3.565	.4180	23.65	.5549	.5817	.2107	1.782
#3	88.44	25.83	28.57	3.518	.4194	23.81	.5523	.5830	.2068	1.755

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.949	.4613	1.099	2.201	1.952	.5821	.6326
Stddev	.406	.0009	.007	.058	.015	.0011	.0058
%RSD	4.083	.2005	.6317	2.629	.7849	.1873	.9157
#1	10.42	.4606	1.107	2.258	1.970	.5833	.6392
#2	9.721	.4624	1.094	2.204	1.941	.5819	.6301
#3	9.707	.4609	1.095	2.142	1.946	.5811	.6284

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	712.12	1533.0	17540.	2229.4
Stddev	.75	3.4	51.	18.0
%RSD	.10468	.21948	.29285	.80755
#1	711.72	1536.5	17521.	2209.5
#2	712.98	1529.8	17501.	2244.5
#3	711.66	1532.7	17598.	2234.1

Zoom In Zoom Out

Sample Name: MP33789-S2 Acquired: 5/24/2018 18:35:37 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0497	184.5	1.756	2.954	.0521	30.61	.0447	.4836	.3126	.2726
Stddev	.0023	.6	.015	.005	.0013	.24	.0003	.0013	.0046	.0024
%RSD	4.637	.3039	.8535	.1805	2.400	.7889	.7268	.2755	1.456	.8873
#1	.0506	184.7	1.763	2.959	.0535	30.89	.0446	.4844	.3095	.2702
#2	.0515	185.0	1.739	2.956	.0514	30.50	.0444	.4844	.3105	.2725
#3	.0471	183.9	1.766	2.949	.0514	30.45	.0451	.4821	.3179	.2750

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	76.78	24.94	27.34	2.992	.4245	23.25	.5444	.5734	.2231	1.770
Stddev	.44	.17	.58	.028	.0018	.06	.0014	.0036	.0068	.006
%RSD	.5690	.6634	2.126	.9498	.4262	.2370	.2522	.6227	3.028	.3204
#1	76.96	24.92	28.01	2.961	.4227	23.23	.5457	.5774	.2171	1.771
#2	77.10	25.11	27.03	2.999	.4263	23.31	.5446	.5726	.2218	1.775
#3	76.29	24.78	26.98	3.016	.4245	23.20	.5430	.5704	.2304	1.763

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.987	.4628	1.077	1.873	1.958	.5523	.5869
Stddev	.205	.0010	.003	.030	.005	.0029	.0025
%RSD	2.278	.2213	.2715	1.612	.2463	.5258	.4225
#1	9.221	.4625	1.077	1.838	1.959	.5498	.5841
#2	8.894	.4639	1.081	1.893	1.953	.5516	.5890
#3	8.845	.4620	1.075	1.888	1.963	.5555	.5875

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	711.36	1518.3	17389.	2209.8
Stddev	1.48	4.5	53.	14.7
%RSD	.20868	.29872	.30431	.66321
#1	709.97	1513.5	17443.	2193.7
#2	712.92	1518.8	17387.	2213.3
#3	711.20	1522.5	17337.	2222.3

Zoom In Zoom Out

Sample Name: FA54294-65 Acquired: 5/24/2018 18:39:48 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	116.2	.0136	1.006	.0029	5.645	-.0017	.0098	.0952	.0245
Stddev	.0013	.7	.0037	.003	.0003	.045	.0003	.0005	.0007	.0012
%RSD	261.4	.5861	27.16	.2573	9.987	.7997	15.11	4.816	.7065	4.830
#1	.0015	116.4	.0155	1.003	.0032	5.629	-.0015	.0097	.0947	.0258
#2	.0010	115.5	.0159	1.006	.0026	5.610	-.0017	.0103	.0949	.0244
#3	-.0010	116.8	.0093	1.008	.0028	5.696	-.0020	.0094	.0960	.0234

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	54.51	1.998	3.699	1.547	.0011	-.1252	.0407	.0717	-.0018	-.0013
Stddev	.31	.015	.091	.005	.0006	.0109	.0014	.0042	.0054	.0054
%RSD	.5662	.7375	2.458	.3446	52.15	8.723	3.480	5.869	304.5	409.7
#1	54.67	2.013	3.609	1.550	.0008	-.1364	.0423	.0745	.0040	.0045
#2	54.15	1.984	3.791	1.550	.0008	-.1146	.0399	.0738	-.0026	-.0061
#3	54.70	1.996	3.697	1.541	.0018	-.1245	.0399	.0669	-.0067	-.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.75	.0255	.5178	1.636	.0043	.1013	.0711
Stddev	.19	.0019	.0019	.012	.0017	.0011	.0006
%RSD	1.744	7.356	.3642	.7489	39.71	1.125	.7742
#1	10.96	.0253	.5176	1.622	.0053	.1002	.0705
#2	10.60	.0237	.5160	1.640	.0052	.1025	.0714
#3	10.70	.0275	.5198	1.645	.0023	.1012	.0715

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	732.92	1502.9	17302.	2150.3
Stddev	2.16	1.4	16.	8.4
%RSD	.29498	.09025	.09043	.39093
#1	730.85	1502.0	17303.	2144.9
#2	732.77	1502.2	17286.	2160.0
#3	735.16	1504.5	17317.	2146.0

Zoom In Zoom Out

Sample Name: FA54294-66 Acquired: 5/24/2018 18:44:04 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	250.2	.0436	2.019	.0055	13.03	-.0061	.0067	.3200	.0350
Stddev	.0021	.7	.0045	.007	.0002	.10	.0002	.0006	.0038	.0007
%RSD	157.2	.2770	10.34	.3631	3.176	.7815	3.173	8.891	1.184	1.956
#1	.0027	249.4	.0437	2.012	.0055	12.99	-.0063	.0066	.3191	.0345
#2	.0025	250.4	.0481	2.026	.0056	13.15	-.0060	.0061	.3242	.0358
#3	-.0011	250.7	.0391	2.018	.0053	12.96	-.0059	.0073	.3167	.0347

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	146.4	3.268	5.754	.1463	.0032	-.0521	.0703	.2137	-.0026	-.0041
Stddev	.5	.023	.107	.0005	.0007	.0108	.0015	.0013	.0058	.0002
%RSD	.3683	.7021	1.854	.3120	22.87	20.74	2.155	.5990	227.5	4.340
#1	145.8	3.286	5.668	.1461	.0030	-.0587	.0688	.2125	-.0087	-.0040
#2	146.5	3.242	5.719	.1468	.0040	-.0396	.0703	.2150	-.0020	-.0043
#3	146.9	3.275	5.873	.1460	.0025	-.0580	.0718	.2137	.0030	-.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.60	.0306	1.704	1.858	.0110	.3379	.1031
Stddev	.28	.0004	.006	.032	.0051	.0017	.0010
%RSD	2.650	1.381	.3355	1.694	46.28	.5086	.9254
#1	10.92	.0307	1.697	1.841	.0163	.3378	.1020
#2	10.48	.0309	1.708	1.895	.0105	.3397	.1033
#3	10.39	.0301	1.706	1.839	.0062	.3363	.1039

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	721.08	1580.6	17971.	2276.4
Stddev	1.20	4.6	64.	11.1
%RSD	.16585	.29011	.35417	.48646
#1	722.13	1578.2	18023.	2288.5
#2	719.78	1585.9	17990.	2266.8
#3	721.34	1577.7	17900.	2274.0

Zoom In Zoom Out

Sample Name: FA54294-67 Acquired: 5/24/2018 18:48:18 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0034	260.8	.0746	3.587	.0066	10.41	-.0094	.0037	.5272	.0292
Stddev	.0010	.2	.0056	.010	.0003	.07	.0004	.0010	.0052	.0015
%RSD	27.87	.0588	7.511	.2810	4.668	.6398	3.955	28.38	.9924	5.098
#1	.0035	260.9	.0686	3.591	.0065	10.42	-.0095	.0046	.5285	.0306
#2	.0043	260.8	.0796	3.595	.0069	10.47	-.0090	.0038	.5316	.0276
#3	.0024	260.6	.0756	3.576	.0063	10.33	-.0098	.0025	.5214	.0295

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	268.8	2.557	4.576	.0735	.0089	-.1325	.0524	.4064	-.0035	.0039
Stddev	.3	.017	.070	.0002	.0006	.0307	.0004	.0030	.0070	.0030
%RSD	.1255	.6439	1.525	.3361	6.373	23.19	.8102	.7290	201.3	77.11
#1	268.7	2.574	4.642	.0733	.0094	-.1659	.0519	.4033	-.0110	.0075
#2	269.2	2.556	4.503	.0738	.0083	-.1055	.0527	.4068	-.0024	.0023
#3	268.5	2.541	4.583	.0734	.0091	-.1260	.0526	.4092	.0029	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.085	.0342	3.207	1.287	.0093	.7011	.0764
Stddev	.082	.0018	.010	.011	.0018	.0044	.0008
%RSD	1.616	5.289	.3247	.8817	19.15	.6224	.9928
#1	5.019	.0358	3.203	1.299	.0106	.7001	.0755
#2	5.059	.0322	3.219	1.284	.0073	.7059	.0768
#3	5.177	.0345	3.200	1.277	.0100	.6973	.0769

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	717.76	1716.4	19778.	2504.8
Stddev	1.06	.3	92.	11.8
%RSD	.14768	.02024	.46354	.46937
#1	718.49	1716.2	19739.	2494.5
#2	716.54	1716.3	19712.	2502.3
#3	718.24	1716.8	19883.	2517.6

Zoom In Zoom Out

Sample Name: FA54294-68 Acquired: 5/24/2018 18:52:32 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0010	222.9	.0260	3.807	.0047	7.507	-.0011	.0061	.2382	.0173
Stddev	.0014	.6	.0041	.014	.0002	.020	.0004	.0001	.0023	.0010
%RSD	145.9	.2840	15.75	.3731	3.914	.2669	36.15	2.045	.9751	5.724
#1	-.0015	222.2	.0293	3.791	.0047	7.485	-.0007	.0061	.2386	.0168
#2	-.0021	223.2	.0273	3.819	.0049	7.511	-.0011	.0060	.2357	.0184
#3	.0006	223.4	.0214	3.810	.0046	7.525	-.0015	.0062	.2402	.0166

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	24.12	2.467	4.195	.0468	-.0019	-.1685	.0437	.3250	.0009	.0021
Stddev	.03	.012	.076	.0001	.0008	.0036	.0014	.0028	.0068	.0051
%RSD	.1400	.4831	1.803	.1625	42.18	2.108	3.169	.8596	773.0	242.8
#1	24.11	2.479	4.122	.0469	-.0011	-.1661	.0434	.3268	.0023	-.0038
#2	24.16	2.455	4.190	.0468	-.0021	-.1726	.0425	.3264	-.0066	.0047
#3	24.10	2.467	4.273	.0467	-.0027	-.1669	.0452	.3217	.0069	.0054

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.966	.0274	3.440	1.024	-.0063	.0923	.0682
Stddev	.026	.0024	.010	.005	.0060	.0016	.0010
%RSD	.8784	8.678	.2811	.5066	95.71	1.707	1.471
#1	2.984	.0298	3.429	1.029	.0000	.0921	.0670
#2	2.977	.0275	3.448	1.022	-.0068	.0940	.0690
#3	2.936	.0250	3.444	1.019	-.0120	.0908	.0685

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	722.98	1786.9	20373.	2606.9
Stddev	1.20	2.3	32.	7.8
%RSD	.16541	.12935	.15949	.29780
#1	723.71	1785.0	20353.	2598.0
#2	723.63	1786.2	20356.	2610.6
#3	721.60	1789.5	20411.	2612.2

Zoom In Zoom Out

Sample Name: FA54270-1 Acquired: 5/24/2018 18:56:48 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0028	3.413	.0052	.2694	.0002	131.1	.0001	.0098	.0272	.1420
Stddev	.0000	.005	.0004	.0018	.0001	.8	.0000	.0002	.0002	.0005
%RSD	1.437	.1378	6.939	.6549	59.48	.6150	33.02	2.124	.8134	.3175
#1	.0027	3.412	.0048	.2703	.0002	131.6	.0001	.0099	.0271	.1421
#2	.0027	3.418	.0052	.2705	.0001	131.5	.0001	.0096	.0275	.1424
#3	.0028	3.408	.0055	.2674	.0003	130.2	.0002	.0100	.0270	.1415

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	43.13	.5038	2.154	.2487	.0153	6.342	.1338	.0513	.0014	.0111
Stddev	.10	.0039	.051	.0016	.0001	.022	.0001	.0012	.0010	.0024
%RSD	.2361	.7700	2.387	.6345	.7993	.3493	.0423	2.276	70.55	21.91
#1	43.06	.5071	2.213	.2505	.0153	6.322	.1338	.0513	.0012	.0134
#2	43.25	.5049	2.122	.2481	.0154	6.366	.1339	.0501	.0005	.0116
#3	43.08	.4995	2.128	.2475	.0152	6.338	.1338	.0524	.0024	.0085

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9033	.0282	1.569	.0577	.0044	.3186	2.140
Stddev	.0011	.0002	.004	.0006	.0010	.0006	.003
%RSD	.1253	.6056	.2365	1.002	22.17	.2018	.1203
#1	.9021	.0283	1.566	.0583	.0035	.3193	2.138
#2	.9043	.0283	1.573	.0572	.0054	.3183	2.140
#3	.9034	.0280	1.568	.0576	.0041	.3181	2.143

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	681.82	1307.3	15796.	1989.1
Stddev	.26	2.3	103.	7.5
%RSD	.03759	.17562	.64976	.37560
#1	682.12	1305.3	15692.	1983.7
#2	681.70	1306.8	15800.	1985.9
#3	681.65	1309.8	15897.	1997.6

Zoom In Zoom Out

Sample Name: FA54270-2 Acquired: 5/24/2018 19:00:59 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0006	.2886	.0007	.0218	.0000	10.42	.0000	.0007	.0020	.0109
Stddev	.0001	.0109	.0003	.0002	.000	.06	.000	.0000	.0004	.0002
%RSD	22.12	3.761	49.25	1.060	829.8	.5441	588.1	2.733	20.26	1.420
#1	.0005	.2831	.0004	.0217	-.0001	10.45	-.0001	.0007	.0019	.0111
#2	.0005	.3011	.0011	.0221	.0000	10.45	.0000	.0007	.0017	.0108
#3	.0007	.2815	.0006	.0217	.0001	10.36	.0001	.0007	.0025	.0108

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.501	.0298	.1915	.0212	.0008	.4487	.0115	.0065	.0001	.0011
Stddev	.003	.0063	.0145	.0002	.0002	.0022	.0000	.0005	.0009	.0021
%RSD	.0921	21.12	7.578	1.049	18.66	.4911	.1567	8.281	716.8	196.2
#1	3.505	.0317	.1983	.0210	.0010	.4507	.0115	.0063	.0009	.0003
#2	3.501	.0227	.1748	.0214	.0008	.4490	.0115	.0062	-.0008	.0034
#3	3.498	.0348	.2014	.0212	.0007	.4463	.0115	.0072	.0003	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0813	.0022	.1264	.0053	.0022	.0267	.1894
Stddev	.0012	.0008	.0000	.0001	.0008	.0003	.0003
%RSD	1.517	35.88	.0066	2.371	38.16	.9617	.1535
#1	.0825	.0020	.1264	.0052	.0031	.0268	.1891
#2	.0800	.0031	.1264	.0053	.0020	.0268	.1897
#3	.0815	.0016	.1264	.0054	.0015	.0264	.1894

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	744.85	1398.0	16506.	2092.6
Stddev	.95	2.1	45.	3.7
%RSD	.12801	.14723	.27361	.17902
#1	744.80	1398.4	16549.	2090.8
#2	745.82	1395.8	16459.	2096.9
#3	743.92	1399.9	16509.	2090.1

Zoom In Zoom Out

Sample Name: FA54291-7 Acquired: 5/24/2018 19:05:17 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	43.64	.0026	.0698	.0006	23.93	-.0001	-.0001	.0441	.0075
Stddev	.0003	.14	.0019	.0002	.0000	.20	.0001	.0001	.0003	.0002
%RSD	178.4	.3250	73.32	.3415	5.137	.8415	87.21	111.0	.5713	2.590
#1	.0005	43.69	.0023	.0697	.0006	23.73	-.0002	-.0002	.0439	.0073
#2	.0002	43.48	.0046	.0701	.0006	24.14	-.0001	.0000	.0443	.0075
#3	-.0002	43.75	.0008	.0697	.0006	23.93	.0000	-.0001	.0443	.0076

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.980	.3655	.7855	.0482	.0005	.1688	.0068	.0901	.0006	.0049
Stddev	.030	.0175	.0232	.0003	.0001	.0031	.0004	.0005	.0019	.0017
%RSD	.6097	4.779	2.953	.6091	25.12	1.845	6.089	.5284	325.9	34.55
#1	4.965	.3518	.7884	.0479	.0007	.1654	.0067	.0904	-.0003	.0030
#2	5.015	.3852	.8071	.0482	.0005	.1694	.0065	.0895	.0027	.0064
#3	4.960	.3596	.7610	.0485	.0004	.1715	.0073	.0904	-.0007	.0054

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.611	.0219	.1632	.6275	-.0008	.0265	.0450
Stddev	.004	.0000	.0006	.0037	.0018	.0004	.0002
%RSD	.2512	.1234	.3488	.5943	239.3	1.523	.3904
#1	1.615	.0219	.1628	.6239	-.0023	.0261	.0450
#2	1.611	.0219	.1628	.6273	.0012	.0264	.0448
#3	1.607	.0219	.1638	.6313	-.0012	.0269	.0451

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	710.69	1420.1	16713.	2129.8
Stddev	1.93	7.0	42.	4.1
%RSD	.27193	.49483	.25383	.19222
#1	709.31	1412.7	16751.	2132.0
#2	712.90	1420.8	16721.	2125.1
#3	709.87	1426.7	16668.	2132.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 19:09:31 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2464	40.90	1.980	2.029	2.044	38.70	2.019	2.025	2.048	2.070
Stddev	.0019	.21	.005	.009	.007	.17	.002	.003	.009	.005
%RSD	.7861	.5205	.2401	.4476	.3350	.4422	.1129	.1408	.4143	.2622
#1	.2445	40.88	1.977	2.022	2.038	38.63	2.017	2.024	2.039	2.069
#2	.2484	40.71	1.985	2.039	2.041	38.58	2.022	2.028	2.051	2.075
#3	.2463	41.13	1.977	2.026	2.051	38.90	2.018	2.022	2.055	2.065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.36	40.25	38.72	2.027	2.039	41.57	1.997	1.989	2.020	2.012
Stddev	.32	.05	.20	.012	.004	.22	.003	.003	.002	.007
%RSD	.7907	.1288	.5233	.5978	.1890	.5351	.1316	.1631	.0746	.3286
#1	40.33	40.20	38.59	2.013	2.035	41.53	1.996	1.993	2.020	2.005
#2	40.06	40.28	38.63	2.035	2.043	41.36	2.000	1.987	2.021	2.018
#3	40.70	40.29	38.96	2.033	2.039	41.80	1.995	1.989	2.018	2.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.075	1.976	2.100	2.084	2.021	2.006	1.968
Stddev	.004	.003	.008	.008	.007	.005	.003
%RSD	.1680	.1721	.3735	.4039	.3627	.2410	.1474
#1	2.073	1.976	2.098	2.075	2.024	2.005	1.970
#2	2.079	1.979	2.093	2.091	2.012	2.003	1.969
#3	2.073	1.973	2.108	2.087	2.025	2.012	1.964
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 19:09:31 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	650.13	1343.8	15607.	1995.3
Stddev	1.13	2.3	10.	11.1
%RSD	.17421	.17061	.06300	.55851
#1	648.83	1342.9	15616.	1995.3
#2	650.80	1342.1	15608.	2006.5
#3	650.77	1346.4	15597.	1984.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 19:13:30 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0012	.0004	.0000	.0002	.0015	.0001	.0000	.0003
Stddev	.0004	.0155	.0006	.0001	.0000	.0054	.0001	.000	.0002
%RSD	123.2	1245.	142.9	796.0	21.06	353.7	89.11	600.4	51.25
#1	-.0006	-.0149	-.0003	.0001	.0002	.0076	.0001	-.0002	.0001
#2	.0001	.0155	.0008	.0001	.0001	-.0028	.0001	.0003	.0004
#3	-.0003	-.0043	.0007	-.0001	.0002	-.0002	.0000	-.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0122	-.0149	-.0007	.0000	F.0030	-.0573	.0001	.0010
Stddev	.0003	.0040	.0030	.0055	.0000	.0007	.0025	.0001	.0005
%RSD	401.7	32.58	20.33	760.2	150.4	24.48	4.346	88.81	54.60
#1	-.0001	.0168	-.0162	-.0033	.0000	.0036	-.0596	.0001	.0013
#2	.0005	.0098	-.0171	-.0045	.0000	.0031	-.0546	.0003	.0012
#3	-.0002	.0101	-.0115	.0056	.0000	.0022	-.0576	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	F.0029	.0003	.0001	.0001	.0009	.0006	.0003	-.0001
Stddev	.0011	.0027	.0010	.0001	.0001	.0000	.0008	.0003	.0001
%RSD	142.2	92.19	362.1	144.3	35.99	5.204	123.3	101.0	75.45
#1	-.0005	.0006	.0003	.0000	.0002	.0010	.0009	.0001	-.0002
#2	.0012	.0022	-.0008	.0000	.0001	.0009	-.0002	.0001	.0000
#3	.0015	.0059	.0013	.0002	.0001	.0010	.0012	.0006	-.0001
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 19:13:30 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	747.36	1421.1	16637.	2060.1
Stddev	1.17	2.5	129.	10.5
%RSD	.15654	.17353	.77492	.51107
#1	748.69	1418.8	16784.	2055.5
#2	746.91	1420.8	16545.	2052.6
#3	746.49	1423.7	16581.	2072.1

Zoom In Zoom Out

Sample Name: FA54370-39 Acquired: 5/24/2018 19:17:49 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	142.0	.1177	1.516	.0065	36.75	-.0034	.0458	.3422	.1798
Stddev	.0008	.8	.0026	.004	.0001	.10	.0003	.0005	.0041	.0018
%RSD	1733.	.5792	2.179	.2627	2.094	.2800	8.972	1.130	1.197	1.027
#1	-.0008	142.9	.1170	1.513	.0066	36.66	-.0033	.0455	.3393	.1781
#2	.0008	141.8	.1156	1.520	.0066	36.72	-.0032	.0464	.3403	.1796
#3	.0001	141.4	.1206	1.515	.0064	36.86	-.0038	.0455	.3469	.1818

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	135.4	3.165	6.048	2.203	.0122	.1984	.1396	.2599	-.0018	.0048
Stddev	.2	.072	.141	.012	.0009	.0058	.0009	.0026	.0088	.0149
%RSD	.1740	2.287	2.335	.5269	7.765	2.948	.6483	1.017	494.8	310.5
#1	135.5	3.203	5.933	2.197	.0129	.1983	.1390	.2570	.0072	.0158
#2	135.1	3.210	6.006	2.196	.0125	.1926	.1406	.2607	-.0022	-.0121
#3	135.5	3.081	6.205	2.216	.0111	.2043	.1391	.2621	-.0104	.0106

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.882	.0284	1.057	2.557	.0128	.2070	.2324
Stddev	.008	.0006	.000	.014	.0107	.0009	.0014
%RSD	.2871	1.975	.0308	.5599	83.27	.4301	.5901
#1	2.887	.0290	1.056	2.552	.0171	.2080	.2333
#2	2.872	.0279	1.057	2.547	.0007	.2065	.2309
#3	2.886	.0285	1.057	2.574	.0208	.2065	.2331

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	722.82	1512.9	17667.	2226.2
Stddev	.66	2.3	38.	3.7
%RSD	.09127	.15393	.21366	.16661
#1	723.11	1510.3	17666.	2222.1
#2	723.28	1513.6	17706.	2229.5
#3	722.06	1514.8	17630.	2226.9

Zoom In Zoom Out

Sample Name: FA54370-40 Acquired: 5/24/2018 19:22:02 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	140.4	.0171	1.097	.0036	7.754	-.0018	.0160	.1224	.0347
Stddev	.0007	.6	.0030	.002	.0002	.064	.0002	.0006	.0037	.0002
%RSD	144.4	.4359	17.80	.1723	5.651	.8298	10.45	3.453	2.985	.6991
#1	.0007	140.6	.0197	1.096	.0035	7.680	-.0018	.0161	.1215	.0349
#2	-.0003	139.7	.0137	1.099	.0038	7.795	-.0017	.0154	.1192	.0347
#3	.0011	140.9	.0179	1.095	.0034	7.787	-.0021	.0165	.1264	.0344

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	59.26	2.282	4.100	1.652	.0031	.0803	.0454	.1216	-.0021	.0009
Stddev	.43	.125	.069	.010	.0010	.0083	.0010	.0070	.0083	.0069
%RSD	.7229	5.468	1.677	.6173	30.96	10.39	2.215	5.718	395.0	745.4
#1	59.16	2.426	4.022	1.647	.0042	.0852	.0454	.1255	-.0075	.0088
#2	58.88	2.205	4.126	1.645	.0029	.0707	.0465	.1136	-.0062	-.0019
#3	59.72	2.216	4.152	1.664	.0023	.0851	.0445	.1258	.0075	-.0041

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.584	.0234	.6716	.8527	.0067	.1139	.1156
Stddev	.007	.0022	.0014	.0034	.0057	.0005	.0005
%RSD	.2590	9.584	.2025	.3993	85.22	.4790	.4117
#1	2.592	.0212	.6713	.8522	.0098	.1145	.1160
#2	2.581	.0234	.6704	.8495	.0001	.1135	.1156
#3	2.580	.0256	.6731	.8563	.0101	.1138	.1151

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	726.79	1537.2	17904.	2258.8
Stddev	3.50	5.4	30.	6.9
%RSD	.48162	.35006	.16666	.30521
#1	723.03	1532.0	17920.	2254.8
#2	729.96	1537.0	17922.	2266.8
#3	727.38	1542.8	17869.	2254.9

Zoom In Zoom Out

Sample Name: FA54370-41 Acquired: 5/24/2018 19:26:17 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	308.1	.0373	3.450	.0058	11.07	-.0036	.0093	.3725	.0410
Stddev	.0015	1.2	.0090	.004	.0004	.08	.0005	.0003	.0022	.0008
%RSD	515.7	.4049	24.09	.1005	6.427	.7183	13.81	3.341	.5792	1.910
#1	-.0005	307.9	.0395	3.454	.0054	11.15	-.0039	.0094	.3741	.0417
#2	-.0016	307.0	.0275	3.450	.0059	11.06	-.0038	.0089	.3734	.0402
#3	.0013	309.4	.0450	3.447	.0061	10.99	-.0030	.0095	.3701	.0410

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	87.69	4.679	7.673	.5920	.0021	.6286	.0776	.3196	.0005	-.0001
Stddev	.34	.034	.033	.0008	.0007	.0258	.0007	.0046	.0058	.0099
%RSD	.3895	.7189	.4296	.1319	34.64	4.101	.9525	1.439	1120.	7452.
#1	88.01	4.717	7.667	.5924	.0013	.6169	.0784	.3158	.0031	.0113
#2	87.33	4.651	7.709	.5911	.0025	.6582	.0769	.3247	-.0061	-.0061
#3	87.73	4.670	7.644	.5925	.0026	.6108	.0775	.3183	.0046	-.0056

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.609	.0294	2.949	1.201	.0031	.2929	.1126
Stddev	.009	.0032	.004	.002	.0018	.0007	.0006
%RSD	.3265	10.98	.1313	.1453	59.49	.2380	.5429
#1	2.605	.0329	2.951	1.200	.0046	.2934	.1131
#2	2.603	.0285	2.944	1.199	.0010	.2932	.1119
#3	2.619	.0266	2.950	1.202	.0036	.2921	.1127

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	714.55	1721.2	19682.	2517.2
Stddev	.81	1.8	37.	14.6
%RSD	.11382	.10288	.18872	.57882
#1	714.90	1721.6	19663.	2500.5
#2	715.14	1722.8	19725.	2523.3
#3	713.63	1719.3	19658.	2527.6

Zoom In Zoom Out

Sample Name: FA54370-42 Acquired: 5/24/2018 19:30:31 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	177.9	.0243	1.715	.0039	5.128	-.0018	.0081	.2384	.0361
Stddev	.0001	.9	.0011	.004	.0000	.023	.0001	.0001	.0013	.0002
%RSD	9.144	.5208	4.415	.2469	.6322	.4452	6.356	.9153	.5463	.4907
#1	.0014	178.9	.0255	1.719	.0040	5.149	-.0018	.0082	.2398	.0362
#2	.0013	177.2	.0239	1.716	.0039	5.131	-.0017	.0081	.2372	.0363
#3	.0015	177.5	.0235	1.711	.0039	5.103	-.0019	.0081	.2381	.0359

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	70.46	2.640	4.304	.7486	.0034	.4147	.0463	.2648	-.0022	-.0008
Stddev	.37	.008	.049	.0030	.0001	.0026	.0002	.0016	.0008	.0014
%RSD	.5239	.3053	1.132	.4069	3.482	.6335	.4609	.5995	37.40	187.8
#1	70.86	2.649	4.285	.7519	.0033	.4153	.0463	.2661	-.0014	-.0008
#2	70.13	2.635	4.268	.7458	.0035	.4118	.0460	.2631	-.0031	-.0022
#3	70.40	2.635	4.360	.7482	.0034	.4169	.0464	.2652	-.0021	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.661	.0183	1.410	.7447	-.0052	.2287	.0814
Stddev	.006	.0006	.005	.0018	.0001	.0003	.0001
%RSD	.3629	3.183	.3793	.2458	2.562	.1451	.1658
#1	1.667	.0183	1.416	.7466	-.0050	.2290	.0812
#2	1.660	.0189	1.407	.7430	-.0052	.2283	.0813
#3	1.655	.0178	1.407	.7443	-.0053	.2287	.0815

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	669.82	2467.5	28014.	3686.2
Stddev	1.64	14.3	108.	21.2
%RSD	.24519	.57861	.38453	.57380
#1	667.94	2453.3	27897.	3662.1
#2	670.56	2467.3	28035.	3701.4
#3	670.96	2481.9	28109.	3695.2

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/24/2018 19:34:42 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0091	.2191	.0093	.1985	.0052	.9641	.0051	.0503	.0102	.0246
Stddev	.0006	.0037	.0019	.0010	.0001	.0046	.0001	.0001	.0001	.0002
%RSD	6.481	1.704	20.11	.5251	1.860	.4816	1.635	.1312	.7332	.6914
#1	.0097	.2148	.0076	.1980	.0052	.9606	.0051	.0504	.0102	.0247
#2	.0090	.2209	.0090	.1997	.0052	.9694	.0051	.0502	.0103	.0244
#3	.0085	.2216	.0113	.1978	.0054	.9624	.0052	.0503	.0101	.0247

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3240	9.615	4.753	.0151	.0465	9.900	.0400	.0050	.0057	.0088
Stddev	.0060	.035	.039	.0002	.0005	.022	.0002	.0007	.0008	.0011
%RSD	1.838	.3696	.8249	1.062	1.065	.2205	.6142	14.14	14.75	12.04
#1	.3218	9.585	4.765	.0152	.0461	9.925	.0401	.0049	.0066	.0077
#2	.3308	9.654	4.710	.0150	.0463	9.892	.0397	.0058	.0053	.0089
#3	.3195	9.604	4.786	.0153	.0470	9.883	.0401	.0044	.0051	.0098

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0269	.0477	.0101	.0101	.0101	.0467	.0201
Stddev	.0009	.0010	.0001	.0001	.0012	.0005	.0001
%RSD	3.272	2.135	.8453	.9965	12.18	1.043	.4973
#1	.0267	.0488	.0102	.0100	.0095	.0470	.0202
#2	.0278	.0472	.0101	.0101	.0115	.0461	.0200
#3	.0261	.0469	.0101	.0102	.0092	.0469	.0201

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	730.13	1423.4	16283.	2011.3
Stddev	1.32	6.3	47.	14.5
%RSD	.18134	.44544	.29046	.72104
#1	731.65	1429.9	16228.	2027.2
#2	729.50	1423.1	16314.	1998.8
#3	729.24	1417.3	16306.	2007.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/24/2018 19:39:00 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0006	F549.6	-.0006	.0008	.0000	457.4	-.0010	-.0004
Stddev	.0006	4.1	.0020	.0003	.0001	2.8	.0005	.0003
%RSD	100.0	.7451	344.2	32.38	287.4	.6217	49.56	66.23
#1	.0001	548.6	-.0002	.0005	.0000	454.6	-.0007	-.0006
#2	.0012	554.1	.0012	.0010	.0000	460.3	-.0015	-.0001
#3	.0005	546.2	-.0027	.0008	.0001	457.4	-.0007	-.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0001	.0010	185.6	-.0294	F527.3	.0001	.0016	.0501
Stddev	.0001	.0003	1.2	.0070	3.2	.0001	.0003	.0051
%RSD	126.7	30.16	.6641	23.76	.6045	131.9	21.74	10.22
#1	.0001	.0013	185.3	-.0336	525.3	.0001	.0018	.0558
#2	.0001	.0007	187.0	-.0213	530.9	.0000	.0012	.0460
#3	.0000	.0011	184.6	-.0333	525.5	.0000	.0018	.0485

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0005	F-.0111	-.0004	.0013	.0097	.0016	.0016	.0009
Stddev	.0006	.0012	.0018	.0012	.0017	.0001	.0001	.0002
%RSD	109.4	10.63	452.8	90.19	17.47	7.253	7.538	19.71
#1	-.0001	-.0101	-.0004	.0020	.0103	.0018	.0015	.0011
#2	.0006	-.0124	-.0022	.0020	.0077	.0016	.0017	.0008
#3	.0011	-.0109	.0014	-.0001	.0109	.0015	.0015	.0007

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0042	.0005	-.0019
Stddev	.0015	.0001	.0002
%RSD	35.49	29.69	12.50
#1	.0036	.0006	-.0017
#2	.0030	.0004	-.0019
#3	.0058	.0004	-.0022

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/24/2018 19:39:00 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	561.62	1210.3	13950.	1887.8
Stddev	2.44	4.8	48.	13.6
%RSD	.43361	.39777	.34176	.72237
#1	559.60	1207.8	13895.	1889.5
#2	564.32	1215.8	13982.	1873.5
#3	560.94	1207.2	13973.	1900.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/24/2018 19:43:16 Type: Unk
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.051	F548.4	1.036	.5177	.5148	463.3	.9357	.4797	.5023
Stddev	.002	.9	.002	.0002	.0004	2.0	.0013	.0011	.0012
%RSD	.2163	.1638	.2191	.0343	.0683	.4375	.1424	.2341	.2351
#1	1.052	548.8	1.038	.5179	.5151	465.0	.9370	.4810	.5010
#2	1.053	547.4	1.033	.5176	.5147	461.1	.9343	.4795	.5025
#3	1.049	549.1	1.036	.5176	.5144	463.8	.9358	.4788	.5033

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5867	185.9	-.0183	F526.6	.4975	.8499	.0695	.9335	.9496
Stddev	.0013	.6	.0119	2.3	.0020	.0010	.0061	.0019	.0013
%RSD	.2278	.3023	64.66	.4283	.4070	.1135	8.790	.2034	.1328
#1	.5882	186.3	-.0209	528.0	.4997	.8506	.0631	.9340	.9504
#2	.5863	185.2	-.0287	524.0	.4972	.8488	.0703	.9313	.9503
#3	.5856	186.0	-.0054	527.8	.4957	.8504	.0753	.9350	.9482

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9783	.9423	.0241	.8570	.9829	.9557	.8966	.4753	.9068
Stddev	.0022	.0040	.0006	.0012	.0025	.0020	.0036	.0009	.0032
%RSD	.2283	.4257	2.486	.1452	.2504	.2072	.4023	.1878	.3561
#1	.9777	.9469	.0235	.8584	.9857	.9566	.8985	.4744	.9105
#2	.9764	.9404	.0242	.8562	.9810	.9570	.8989	.4762	.9044
#3	.9807	.9396	.0247	.8563	.9820	.9534	.8925	.4755	.9057

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	560.23	1223.7	14096.	1908.6
Stddev	1.58	.8	44.	9.2
%RSD	.28213	.06505	.31514	.48175
#1	559.53	1222.9	14072.	1901.7
#2	559.13	1223.8	14068.	1919.0
#3	562.04	1224.5	14147.	1905.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 19:47:17 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2459	41.19	1.980	2.029	2.053	38.57	2.020	2.024	2.059	2.079
Stddev	.0016	.12	.005	.006	.003	.11	.007	.005	.008	.003
%RSD	.6567	.2998	.2779	.2888	.1455	.2902	.3295	.2266	.4037	.1494
#1	.2442	41.28	1.974	2.022	2.054	38.52	2.014	2.019	2.051	2.077
#2	.2474	41.05	1.985	2.034	2.050	38.70	2.020	2.023	2.068	2.082
#3	.2461	41.23	1.980	2.029	2.056	38.49	2.027	2.028	2.058	2.077
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.62	40.29	38.77	2.024	2.037	41.73	1.992	1.993	2.013	2.006
Stddev	.10	.04	.10	.011	.007	.12	.005	.005	.005	.001
%RSD	.2350	.1083	.2557	.5257	.3223	.2841	.2435	.2312	.2755	.0501
#1	40.73	40.27	38.80	2.012	2.031	41.80	1.991	1.991	2.008	2.006
#2	40.57	40.26	38.85	2.033	2.037	41.60	1.987	1.999	2.013	2.006
#3	40.56	40.34	38.66	2.026	2.044	41.80	1.997	1.990	2.019	2.008
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.070	1.971	2.111	2.088	2.024	2.006	1.972
Stddev	.004	.009	.002	.010	.005	.005	.009
%RSD	.2181	.4381	.0728	.4739	.2640	.2571	.4481
#1	2.070	1.967	2.110	2.077	2.019	2.001	1.964
#2	2.065	1.964	2.111	2.097	2.023	2.011	1.971
#3	2.074	1.981	2.113	2.088	2.030	2.004	1.982
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/24/2018 19:47:17 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	652.72	1350.9	15635.	1987.7
Stddev	.96	3.3	32.	11.6
%RSD	.14665	.24623	.20482	.58257
#1	652.83	1352.6	15660.	1979.6
#2	651.72	1353.1	15599.	1982.5
#3	653.62	1347.1	15646.	2001.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 19:51:16 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0066	.0005	.0000	.0001	.0099	.0001	-.0001	.0002
Stddev	.0002	.0103	.0003	.000	.0000	.0026	.0000	.0001	.0003
%RSD	112.3	154.9	62.43	580.5	22.81	25.88	29.96	140.1	129.9
#1	-.0004	.0185	.0008	.0001	.0001	.0076	.0001	.0000	-.0001
#2	.0000	.0002	.0002	-.0002	.0001	.0095	.0002	.0000	.0003
#3	-.0001	.0012	.0006	.0000	.0002	.0127	.0001	-.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0171	-.0010	.0161	.0001	F .0031	-.0561	-.0001	.0004
Stddev	.0001	.0034	.0037	.0293	.0001	.0009	.0037	.0004	.0006
%RSD	144.4	19.74	375.6	182.6	64.12	28.86	6.649	303.4	158.5
#1	.0001	.0201	-.0044	.0333	.0001	.0040	-.0600	-.0005	-.0001
#2	.0000	.0179	.0029	-.0178	.0001	.0030	-.0557	.0000	.0011
#3	.0001	.0134	-.0014	.0327	.0000	.0022	-.0525	.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	.0004	-.0002	.0002	.0001	.0008	.0014	.0006	.0000
Stddev	.0005	.0035	.0002	.0001	.0001	.0001	.0010	.0001	.000
%RSD	39.15	977.5	130.1	34.39	65.11	11.61	71.17	24.34	219.8
#1	.0013	-.0014	-.0004	.0002	.0001	.0009	.0021	.0004	.0001
#2	.0008	-.0019	.0001	.0002	.0000	.0008	.0003	.0006	-.0001
#3	.0019	.0044	-.0002	.0001	.0001	.0008	.0017	.0007	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/24/2018 19:51:16 Type: QC
Method: 60102007_041712(v230) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	752.28	1434.8	16724.	2040.4
Stddev	1.39	8.8	51.	7.4
%RSD	.18540	.61427	.30736	.36125
#1	752.63	1426.9	16775.	2048.1
#2	750.74	1444.3	16726.	2033.4
#3	753.46	1433.1	16672.	2039.8

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	V	-0.009834	0.000000	No
			Fe	0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.035224	0.000000	No
As 189.042 {478}	☒	5	Fe	-0.000108	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000003	0.000000	No
Be 313.042 {108}	☒	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000177	0.000000	No
			Ca	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Ti	0.000000	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000008	0.000000	No
Cr 267.716 {126}	☒	3	Al	0.000007	0.000000	No
			Fe	-0.000017	0.000000	No
			Ca	0.000004	0.000000	No
Cu 324.754 {104}	☒	10	Fe	-0.000103	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000006	0.000000	No
			Mg	0.000005	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000022	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000009	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	☒	9	Al	0.000292	0.000000	No
			Fe	-0.000348	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000029	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000002	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000018	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000033	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000056	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000003	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000010	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000016	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000024	0.000000	No
			As	0.001128	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.000311	0.565763	0.000000	1.000000
Al 396.152 { 85}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.001269	0.164549	0.000000	1.000000
As 189.042 {478}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.001269	0.227462	0.000000	1.000000
Ba 455.403 { 74}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.026765	12.853163	0.000000	1.000000
Be 313.042 {108}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.000426	8.222626	0.000000	1.000000
Ca 317.933 {106}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.003627	0.200231	0.000000	1.000000
Cd 226.502 {449}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.000070	4.265156	0.000000	1.000000
Co 228.616 {447}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.000085	2.494043	0.000000	1.000000
Cr 267.716 {126}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.000135	0.308594	0.000000	1.000000
Cu 324.754 {104}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.004159	0.918088	0.000000	1.000000
Fe 259.940 {130}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.002880	0.179003	0.000000	1.000000
In 230.606 {446}*	5/24/2018 9:25:25	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.001091	0.278572	0.000000	1.000000
Mg 279.079 {121}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.000131	0.019487	0.000000	1.000000
Mn 257.610 {131}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.000193	1.966603	0.000000	1.000000
Mo 202.030 {467}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.004936	1.448262	0.000000	1.000000
Na 589.592 { 57}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.000903	0.824991	0.000000	1.000000
Ni 231.604 {445}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.000219	1.427684	0.000000	1.000000
Pb 220.353 {453}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.002701	0.856058	0.000000	1.000000
Sb 206.833 {463}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.000016	0.330026	0.000000	1.000000
Se 196.090 {472}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.000369	0.167643	0.000000	1.000000
Si 212.412 {459}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.006260	0.545975	0.000000	1.000000
Sn 189.989 {477}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.000604	0.471402	0.000000	1.000000
Sr 407.771 { 83}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.000178	19.756019	0.000000	1.000000
Ti 334.941 {101}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.002428	1.897085	0.000000	1.000000
Tl 190.856 {477}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.002951	0.516426	0.000000	1.000000
V 292.402 {115}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	-0.000200	0.599252	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/24/2018 9:53:05	5/24/2018 9:53:05	Linear	1/Conc	0.000801	1.994191	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999811	0.000102	0.000479	0.001597	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999947	0.002733	0.011538	0.038458	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999970	0.000142	0.001291	0.004305	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999995	0.003432	0.000210	0.000700	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999896	0.009565	0.000107	0.000357	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999933	0.003744	0.005068	0.016893	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999878	0.005390	0.000092	0.000307	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999905	0.002771	0.000168	0.000559	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999810	0.000484	0.000502	0.001674	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999994	0.000247	0.000264	0.000879	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999680	0.007292	0.003448	0.011493	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999918	0.005743	0.020132	0.067108	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999913	0.000413	0.036504	0.121681	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999790	0.003248	0.000069	0.000230	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999949	0.001179	0.000193	0.000642	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999945	0.013996	0.006144	0.020482	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999866	0.001881	0.000288	0.000959	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999993	0.000263	0.001082	0.003607	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999976	0.000184	0.001290	0.004301	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999990	0.000059	0.002488	0.008294	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.999431	0.001512	0.000560	0.001868	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999929	0.000452	0.000523	0.001744	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999935	0.018214	0.000082	0.000274	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999921	0.001923	0.000132	0.000442	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999984	0.000223	0.001345	0.004484	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999983	0.000281	0.000341	0.001137	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999864	0.002650	0.000150	0.000501	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/25/2018 10:28:10 Type: Cal
Method: 60102007_042011(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0004**	**-.0040**	**-.0007**	**.0025**	**-.0004**	**.0021**	**-.0014**	**-.0011**	**-.0001**
Stddev	.0000	.0005	.0001	.0008	.0004	.0004	.0002	.0001	.0001
%RSD	12.14	11.84	10.88	33.41	91.49	19.27	13.03	10.67	84.24
#1	-.0004	-.0045	-.0007	.0027	-.0001	.0024	-.0016	-.0013	.0000
#2	-.0004	-.0036	-.0006	.0031	-.0009	.0017	-.0014	-.0011	-.0002
#3	-.0003	-.0040	-.0006	.0016	-.0004	.0024	-.0013	-.0011	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0049**	**.0013**	**.0030**	**-.0002**	**.0006**	**.0021**	**.0075**	**-.0008**	**.0000**
Stddev	.0001	.0003	.0004	.0001	.0000	.0002	.0018	.0002	.0004
%RSD	1.648	23.07	14.10	70.33	3.683	8.670	24.20	21.72	1074.
#1	.0049	.0017	.0026	-.0003	.0006	.0022	.0058	-.0010	.0003
#2	.0048	.0011	.0030	-.0002	.0006	.0022	.0094	-.0006	-.0004
#3	.0049	.0011	.0035	.0000	.0006	.0019	.0072	-.0007	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0004**	**.0004**	**.0043**	**.0007**	**-.0008**	**.0016**	**-.0013**	**-.0002**	**.0042**
Stddev	.0001	.0002	.0001	.0001	.0007	.0001	.0002	.0000	.0002
%RSD	22.17	46.26	1.514	17.42	90.99	6.941	12.55	12.63	4.578
#1	.0005	.0004	.0043	.0008	-.0013	.0017	-.0011	-.0002	.0041
#2	.0004	.0006	.0042	.0005	-.0010	.0015	-.0014	-.0003	.0044
#3	.0003	.0002	.0043	.0007	.0000	.0016	-.0013	-.0002	.0041

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1962.7**	**3752.5**	**29357.**	**6086.9**
Stddev	2.7	5.8	97.	34.4
%RSD	.13931	.15374	.33047	.56476
#1	1961.1	3747.1	29386.	6126.6
#2	1965.8	3751.8	29249.	6068.1
#3	1961.1	3758.6	29436.	6066.0

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/25/2018 10:31:42 Type: Cal
Method: 60102007_042011(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0289**	**1.239**	**.0848**	**5.209**	**3.804**	**2.093**	**2.341**	**1.356**	**.1790**
Stddev	.0001	.006	.0003	.037	.011	.014	.004	.001	.0009
%RSD	.3653	.5200	.3547	.7175	.2836	.6829	.1634	.0550	.5169
#1	.0290	1.245	.0848	5.205	3.797	2.090	2.338	1.357	.1794
#2	.0289	1.241	.0852	5.248	3.800	2.080	2.339	1.356	.1779
#3	.0288	1.232	.0846	5.174	3.817	2.108	2.345	1.357	.1796

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3236**	**1.272**	**.9025**	**.1417**	**1.217**	**.5215**	**3.826**	**.8191**	**.3973**
Stddev	.0011	.005	.0042	.0015	.001	.0007	.030	.0020	.0009
%RSD	.3461	.4091	.4681	1.075	.0670	.1282	.7881	.2477	.2280
#1	.3238	1.268	.9044	.1417	1.218	.5215	3.832	.8177	.3967
#2	.3246	1.270	.9055	.1402	1.217	.5208	3.853	.8181	.3984
#3	.3224	1.278	.8977	.1433	1.217	.5222	3.794	.8214	.3969

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1232**	**.0609**	**.2229**	**.1866**	**5.429**	**.7600**	**.1404**	**.2905**	**1.089**
Stddev	.0004	.0006	.0001	.0005	.024	.0015	.0002	.0001	.004
%RSD	.3207	.9224	.0228	.2468	.4456	.1936	.1339	.0425	.3397
#1	.1233	.0608	.2229	.1862	5.435	.7615	.1406	.2903	1.086
#2	.1227	.0614	.2230	.1871	5.449	.7600	.1403	.2904	1.087
#3	.1235	.0603	.2229	.1865	5.402	.7585	.1403	.2906	1.093

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1881.9**	**3717.4**	**28997.**	**6093.7**
Stddev	2.4	6.8	89.	34.5
%RSD	.12520	.18325	.30851	.56671
#1	1879.3	3720.2	29076.	6100.3
#2	1882.8	3722.5	29014.	6124.5
#3	1883.7	3709.7	28900.	6056.3

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/25/2018 10:34:54 Type: Cal
Method: 60102007_042011(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1106**	**4.841**	**.3423**	**20.37**	**15.00**	**8.097**	**9.143**	**5.278**	**.6998**
Stddev	.0004	.020	.0012	.03	.01	.020	.012	.002	.0031
%RSD	.3336	.4146	.3513	.1414	.0751	.2404	.1331	.0445	.4400
#1	.1110	4.834	.3421	20.39	15.01	8.077	9.129	5.279	.6982
#2	.1104	4.826	.3437	20.34	14.99	8.099	9.153	5.275	.7033
#3	.1104	4.864	.3413	20.38	15.00	8.116	9.146	5.279	.6978

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.258**	**4.725**	**3.499**	**.5575**	**4.723**	**2.144**	**14.82**	**3.173**	**1.619**
Stddev	.005	.003	.014	.0036	.016	.002	.07	.006	.004
%RSD	.3877	.0573	.3980	.6414	.3373	.0749	.4791	.1762	.2612
#1	1.261	4.726	3.510	.5564	4.716	2.146	14.87	3.170	1.614
#2	1.252	4.727	3.483	.5545	4.741	2.143	14.74	3.179	1.622
#3	1.260	4.722	3.505	.5614	4.711	2.143	14.86	3.169	1.622

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4882**	**.2410**	**.8243**	**.7620**	**22.42**	**3.127**	**.5711**	**1.190**	**4.251**
Stddev	.0020	.0014	.0018	.0019	.07	.005	.0013	.005	.014
%RSD	.4076	.5911	.2241	.2524	.3076	.1542	.2248	.3954	.3313
#1	.4890	.2416	.8254	.7605	22.40	3.127	.5697	1.190	4.236
#2	.4897	.2421	.8252	.7614	22.36	3.131	.5722	1.194	4.264
#3	.4860	.2394	.8221	.7642	22.50	3.122	.5714	1.185	4.254

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1721.9**	**3584.7**	**27985.**	**5983.1**
Stddev	3.7	5.9	74.	20.8
%RSD	.21446	.16498	.26319	.34778
#1	1724.3	3581.8	28017.	6005.1
#2	1717.7	3580.8	27901.	5980.4
#3	1723.8	3591.5	28038.	5963.7

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/25/2018 10:38:00 Type: Cal
Method: 60102007_042011(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2282**	**9.859**	**.6864**	**39.98**	**29.42**	**16.18**	**17.84**	**10.33**	**1.372**
Stddev	.0009	.019	.0015	.13	.14	.07	.04	.02	.006
%RSD	.3767	.1891	.2193	.3244	.4660	.4068	.2071	.1773	.4243
#1	.2273	9.840	.6882	39.86	29.27	16.13	17.88	10.35	1.365
#2	.2290	9.877	.6856	40.12	29.55	16.26	17.80	10.31	1.374
#3	.2283	9.859	.6855	39.96	29.43	16.16	17.84	10.32	1.376

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.503**	**9.290**	**7.053**	**1.144**	**9.176**	**4.183**	**29.78**	**6.184**	**3.271**
Stddev	.007	.055	.024	.009	.020	.008	.13	.008	.013
%RSD	.2861	.5928	.3356	.8127	.2218	.1833	.4449	.1363	.4096
#1	2.495	9.240	7.039	1.139	9.161	4.192	29.69	6.193	3.280
#2	2.504	9.349	7.039	1.155	9.167	4.180	29.72	6.178	3.256
#3	2.510	9.279	7.080	1.139	9.199	4.179	29.93	6.180	3.277

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.9766**	**.4803**	**1.549**	**1.473**	**43.06**	**6.018**	**1.142**	**2.346**	**8.322**
Stddev	.0030	.0012	.004	.004	.83	.013	.004	.005	.021
%RSD	.3095	.2587	.2493	.2587	1.929	.2075	.3848	.2269	.2533
#1	.9786	.4806	1.552	1.476	42.61	6.017	1.141	2.340	8.335
#2	.9779	.4814	1.552	1.469	44.02	6.006	1.138	2.349	8.298
#3	.9731	.4790	1.545	1.473	42.56	6.031	1.147	2.349	8.334

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1606.9**	**3480.3**	**27210.**	**5861.5**
Stddev	3.0	5.0	15.	58.5
%RSD	.18529	.14348	.05622	.99815
#1	1606.2	3477.6	27194.	5901.5
#2	1610.1	3477.3	27213.	5794.4
#3	1604.2	3486.1	27224.	5888.6

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/25/2018 10:41:28 Type: QC
Method: 60102007_042011(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5026	79.78	3.979	3.951	3.962	79.23	3.946	3.945	3.999
Stddev	.0019	.27	.005	.020	.015	.18	.013	.012	.013
%RSD	.3715	.3321	.1215	.4982	.3700	.2314	.3407	.2975	.3140
#1	.5012	80.00	3.979	3.972	3.978	79.43	3.945	3.944	4.012
#2	.5047	79.49	3.984	3.933	3.949	79.07	3.959	3.957	3.988
#3	.5019	79.84	3.974	3.950	3.961	79.19	3.933	3.933	3.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.954	78.94	80.59	79.15	3.966	3.954	80.55	3.936	4.020
Stddev	.013	.36	.54	.02	.002	.010	.48	.011	.022
%RSD	.3244	.4571	.6708	.0281	.0408	.2604	.5940	.2661	.5605
#1	3.945	79.28	80.82	79.17	3.965	3.956	80.90	3.937	4.027
#2	3.969	78.56	79.97	79.16	3.968	3.963	80.01	3.946	4.038
#3	3.949	78.99	80.97	79.13	3.966	3.943	80.75	3.925	3.994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.975	3.973	3.866	3.947	3.911	3.957	3.999	4.012	3.953
Stddev	.007	.017	.007	.013	.029	.006	.023	.007	.015
%RSD	.1758	.4318	.1794	.3218	.7428	.1632	.5717	.1660	.3772
#1	3.974	3.984	3.865	3.948	3.930	3.951	4.000	4.019	3.950
#2	3.982	3.982	3.874	3.960	3.926	3.964	4.021	4.009	3.970
#3	3.968	3.954	3.860	3.935	3.878	3.956	3.976	4.007	3.940
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/25/2018 10:41:28 Type: QC
Method: 60102007_042011(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1605.9	3488.5	27065.	5904.5
Stddev	6.8	2.8	59.	10.2
%RSD	.42286	.08010	.21615	.17279
#1	1601.7	3488.5	27126.	5894.1
#2	1602.3	3485.7	27010.	5904.8
#3	1613.8	3491.3	27060.	5914.5

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/25/2018 10:44:48 Type: QC
Method: 60102007_042011(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2307	40.49	1.974	2.007	2.037	40.32	2.007	2.021	2.009
Stddev	.0016	.13	.013	.003	.003	.26	.011	.012	.009
%RSD	.7004	.3133	.6338	.1403	.1262	.6376	.5603	.6078	.4563
#1	.2306	40.41	1.965	2.005	2.040	40.57	2.003	2.017	2.019
#2	.2292	40.43	1.969	2.010	2.036	40.05	1.998	2.012	2.006
#3	.2324	40.64	1.988	2.006	2.035	40.34	2.019	2.035	2.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.966	39.55	39.82	40.26	1.984	1.879	39.49	2.031	1.972
Stddev	.005	.07	.19	.53	.003	.013	.18	.012	.011
%RSD	.2527	.1743	.4862	1.313	.1370	.6679	.4600	.5973	.5452
#1	1.966	39.63	39.70	40.35	1.985	1.873	39.43	2.026	1.966
#2	1.960	39.49	40.05	39.69	1.986	1.869	39.70	2.022	1.965
#3	1.970	39.55	39.72	40.73	1.981	1.893	39.36	2.045	1.984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.992	1.987	.0867	2.014	1.944	1.968	2.043	1.921	2.015
Stddev	.015	.009	.0012	.010	.003	.002	.011	.006	.011
%RSD	.7266	.4281	1.396	.5052	.1765	.0902	.5434	.3364	.5597
#1	1.989	1.985	.0859	2.011	1.941	1.969	2.038	1.928	2.009
#2	1.978	1.979	.0861	2.007	1.944	1.969	2.035	1.920	2.008
#3	2.007	1.996	.0880	2.026	1.948	1.966	2.056	1.915	2.028
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/25/2018 10:44:48 Type: QC
Method: 60102007_042011(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1723.6	3584.1	27880.	5908.7
Stddev	7.5	21.1	30.	40.9
%RSD	.43479	.58914	.10596	.69236
#1	1727.6	3589.9	27877.	5886.1
#2	1728.2	3601.7	27853.	5956.0
#3	1715.0	3560.7	27912.	5884.1

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/25/2018 10:50:45 Type: QC
Method: 60102007_042011(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0083	.0010	-.0002	.0000	-.0017	.0000	.0000	.0000
Stddev	.0003	.0035	.0004	.0001	.000	.0018	.000	.000	.0002
%RSD	103.8	41.93	40.40	32.09	197.5	106.7	410.2	166.4	1302.
#1	.0003	.0054	.0011	-.0001	.0000	-.0034	.0000	.0000	-.0001
#2	.0006	.0122	.0013	-.0002	.0000	.0002	.0000	-.0001	-.0001
#3	.0000	.0073	.0005	-.0002	.0000	-.0019	.0000	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0010	-.0160	.0019	-.0001	.0003	-.0079	.0003	-.0005
Stddev	.0001	.0016	.0066	.0186	.0001	.0003	.0036	.0001	.0001
%RSD	65.93	159.0	41.10	959.9	44.39	78.63	45.56	43.50	16.83
#1	.0002	-.0005	-.0149	-.0161	-.0001	.0005	-.0047	.0005	-.0006
#2	.0001	.0002	-.0230	.0211	-.0002	.0005	-.0118	.0002	-.0004
#3	.0003	-.0028	-.0100	.0009	-.0002	.0000	-.0073	.0002	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	.0008	-.0005	-.0008	.0000	.0001	.0013	.0000	-.0016
Stddev	.0003	.0002	.0002	.0001	.000	.0001	.0001	.000	.0001
%RSD	25.15	31.69	38.68	17.68	438.2	59.73	8.590	905.4	4.433
#1	-.0013	.0007	-.0006	-.0007	.0000	.0001	.0014	-.0001	-.0017
#2	-.0007	.0011	-.0005	-.0007	.0000	.0000	.0012	.0000	-.0016
#3	-.0011	.0006	-.0003	-.0009	.0000	.0002	.0012	.0001	-.0016
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/25/2018 10:50:45 Type: QC
Method: 60102007_042011(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1971.2	3727.1	29158.	6023.4
Stddev	1.9	11.4	52.	34.5
%RSD	.09834	.30571	.17863	.57290
#1	1972.8	3714.5	29216.	5994.2
#2	1969.1	3736.8	29142.	6014.6
#3	1971.8	3730.0	29116.	6061.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/25/2018 10:54:27 Type: QC
Method: 60102007_042011(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0095	.2002	.0110	.1982	.0051	.9941	.0051	.0508	.0100
Stddev	.0003	.0085	.0000	.0006	.0001	.0015	.0000	.0001	.0000
%RSD	2.875	4.242	.4351	.3194	1.664	.1461	.3416	.1980	.0919
#1	.0093	.1942	.0111	.1977	.0050	.9951	.0051	.0507	.0100
#2	.0097	.2062	.0110	.1986	.0051	.9931	.0051	.0508	.0100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0244	.2959	9.789	4.799	.0154	.0463	9.702	.0417	.0043
Stddev	.0002	.0018	.031	.047	.0001	.0001	.035	.0001	.0011
%RSD	.6236	.6073	.3212	.9863	.4114	.3071	.3631	.3407	25.88
#1	.0243	.2947	9.766	4.832	.0154	.0464	9.677	.0418	.0035
#2	.0245	.2972	9.811	4.765	.0154	.0462	9.727	.0416	.0051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0045	.0101	.0270	.0500	.0094	.0096	.0105	.0478	.0194
Stddev	.0003	.0005	.0005	.0004	.0001	.0001	.0003	.0001	.0001
%RSD	7.750	5.253	1.938	.8396	.7174	1.315	2.839	.2995	.3267
#1	.0042	.0105	.0273	.0503	.0094	.0095	.0107	.0477	.0194
#2	.0047	.0097	.0266	.0497	.0093	.0097	.0103	.0479	.0193
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/25/2018 10:54:27 Type: QC
Method: 60102007_042011(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1932.6	3704.1	28700.	5939.9
Stddev	2.8	1.1	8.	9.7
%RSD	.14563	.02892	.02890	.16360
#1	1930.6	3703.3	28706.	5933.0
#2	1934.6	3704.8	28695.	5946.7

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/25/2018 10:58:21 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	524.2	-.0005	.0003	.0000	471.7	.0000	.0001	-.0003
Stddev	.0001	6.7	.0010	.0001	.0000	3.3	.000	.0000	.0002
%RSD	120.3	1.285	200.2	21.72	207.7	.6958	359.3	36.77	68.94
#1	.0000	531.0	-.0015	.0004	.0000	474.8	.0000	.0002	-.0005
#2	.0002	517.6	-.0003	.0003	.0000	468.3	.0001	.0001	-.0001
#3	.0001	524.1	.0004	.0003	.0000	472.1	-.0001	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	184.7	.0028	530.9	.0002	F .0012	.1087	.0000	.0000
Stddev	.000	.2	.0073	1.8	.0000	.0003	.0057	.0001	.001
%RSD	812.3	.1117	261.5	.3464	15.25	21.78	5.221	126.0	7190.
#1	.0000	184.7	-.0032	533.0	.0002	.0009	.1102	.0000	-.0016
#2	-.0001	184.8	.0007	530.1	.0001	.0015	.1024	.0001	.0009
#3	.0000	184.4	.0109	529.5	.0002	.0013	.1134	.0000	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0000	.0040	.0005	-.0007	.0013	.0011	.0000	.0007
Stddev	.0011	.004	.0023	.0012	.0002	.0001	.0009	.000	.0001
%RSD	301.4	18440.	57.80	240.1	32.02	6.205	87.02	1239.	16.47
#1	.0012	-.0043	.0055	-.0003	-.0009	.0014	.0001	.0000	.0008
#2	-.0009	.0010	.0013	-.0001	-.0005	.0014	.0019	-.0002	.0006
#3	.0008	.0033	.0051	.0018	-.0009	.0012	.0013	.0002	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/25/2018 10:58:21 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1517.4	3298.5	24755.	5649.8
Stddev	5.4	13.3	35.	28.0
%RSD	.35800	.40192	.14184	.49640
#1	1517.9	3297.6	24791.	5620.3
#2	1511.7	3285.7	24755.	5652.9
#3	1522.5	3312.2	24720.	5676.1

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/25/2018 11:03:37 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.112	524.8	1.039	.5124	.5155	479.5	.9475	.4810	.5000
Stddev	.002	5.7	.002	.0023	.0004	5.7	.0007	.0003	.0037
%RSD	.1760	1.092	.1786	.4452	.0818	1.192	.0760	.0617	.7416
#1	1.110	529.3	1.041	.5098	.5158	486.1	.9481	.4809	.5020
#2	1.113	518.4	1.039	.5135	.5155	476.3	.9478	.4808	.4957
#3	1.114	526.7	1.038	.5139	.5150	476.0	.9467	.4813	.5023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5498	187.0	-.0305	529.8	.5091	.8407	.0900	.9678	.9823
Stddev	.0027	.5	.0100	3.8	.0022	.0030	.0004	.0008	.0045
%RSD	.4952	.2428	32.71	.7196	.4262	.3525	.4667	.0810	.4544
#1	.5467	187.4	-.0416	534.1	.5100	.8375	.0896	.9682	.9851
#2	.5509	186.5	-.0222	526.7	.5067	.8414	.0900	.9669	.9846
#3	.5518	186.9	-.0277	528.7	.5108	.8433	.0904	.9684	.9771
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9712	.9319	.0384	.8858	.9360	.9464	.9093	.4883	.9512
Stddev	.0063	.0046	.0010	.0008	.0009	.0020	.0025	.0040	.0024
%RSD	.6506	.4912	2.586	.0867	.0984	.2135	.2715	.8161	.2525
#1	.9712	.9288	.0373	.8862	.9350	.9455	.9091	.4908	.9534
#2	.9649	.9371	.0387	.8863	.9366	.9451	.9070	.4837	.9514
#3	.9776	.9298	.0392	.8849	.9366	.9488	.9119	.4903	.9486
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/25/2018 11:03:37 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1493.1	3291.1	24946.	5654.3
Stddev	.4	10.5	99.	38.5
%RSD	.02599	.31784	.39578	.68170
#1	1493.5	3302.3	24978.	5609.8
#2	1492.8	3289.2	25025.	5674.6
#3	1493.0	3281.7	24835.	5678.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 11:09:25 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2440	39.39	2.026	2.000	2.026	40.23	2.050	2.031	2.034
Stddev	.0005	.08	.006	.005	.002	.10	.003	.004	.004
%RSD	.2187	.2012	.3166	.2651	.0971	.2590	.1251	.2007	.1715
#1	.2443	39.31	2.027	1.994	2.026	40.27	2.047	2.028	2.034
#2	.2434	39.40	2.019	2.005	2.024	40.11	2.050	2.031	2.030
#3	.2443	39.47	2.031	2.000	2.028	40.31	2.052	2.036	2.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.988	39.97	40.38	39.10	2.068	2.049	40.42	2.064	2.000
Stddev	.007	.12	.11	.10	.004	.006	.09	.004	.007
%RSD	.3414	.3123	.2661	.2613	.1993	.2790	.2144	.1772	.3562
#1	1.984	39.93	40.47	39.01	2.073	2.043	40.52	2.063	2.002
#2	1.995	39.87	40.26	39.09	2.065	2.048	40.40	2.061	2.006
#3	1.983	40.11	40.41	39.21	2.066	2.055	40.35	2.068	1.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.034	2.020	2.090	2.049	2.022	2.085	2.021	2.056	2.065
Stddev	.007	.010	.005	.004	.004	.003	.005	.004	.003
%RSD	.3624	.4744	.2291	.1769	.2114	.1623	.2738	.1941	.1392
#1	2.032	2.009	2.088	2.045	2.017	2.089	2.026	2.061	2.062
#2	2.028	2.025	2.086	2.050	2.025	2.083	2.015	2.054	2.067
#3	2.042	2.026	2.095	2.052	2.024	2.083	2.020	2.054	2.067
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 11:09:25 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1726.7	3553.3	27710.	5917.1
Stddev	2.0	10.6	53.	16.1
%RSD	.11476	.29958	.19114	.27249
#1	1728.1	3564.6	27675.	5933.9
#2	1724.4	3551.7	27771.	5915.6
#3	1727.7	3543.5	27684.	5901.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 11:14:14 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0046	.0001	-.0001	.0000	-.0023	.0000	.0001	.0001
Stddev	.0004	.0028	.0004	.0001	.000	.0011	.000	.0000	.0001
%RSD	351.6	60.13	315.6	127.9	199.1	46.27	266.0	62.98	144.6
#1	-.0001	.0015	-.0003	-.0001	.0000	-.0030	.0000	.0001	.0000
#2	-.0002	.0057	.0001	.0000	.0000	-.0011	.0000	.0000	.0002
#3	.0006	.0067	.0005	-.0002	.0000	-.0028	.0000	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0031	-.0345	.0069	-.0002	.0001	-.0123	.0000	-.0005
Stddev	.0001	.0028	.0211	.0191	.0000	.0002	.0030	.0001	.0005
%RSD	79.89	88.59	61.18	278.2	25.92	147.9	24.59	352.3	89.86
#1	.0002	.0057	-.0204	-.0004	-.0001	.0004	-.0128	.0000	-.0010
#2	.0002	.0002	-.0243	.0285	-.0002	.0002	-.0150	.0001	-.0001
#3	.0000	.0034	-.0588	-.0075	-.0002	-.0001	-.0090	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	F .0022	-.0002	-.0008	-.0001	.0000	.0004	-.0002	-.0017
Stddev	.0012	.0014	.0004	.0003	.0001	.0001	.0018	.0002	.0000
%RSD	258.1	66.54	178.4	35.81	82.83	282.9	458.5	125.5	.8561
#1	-.0011	.0031	-.0004	-.0006	-.0001	.0002	.0018	-.0005	-.0017
#2	.0009	.0029	.0002	-.0011	.0000	.0000	.0011	-.0001	-.0017
#3	-.0011	.0005	-.0005	-.0006	-.0001	.0000	-.0017	.0000	-.0017
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 11:14:14 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1971.9	3701.7	29051.	6008.9
Stddev	3.4	7.9	64.	22.6
%RSD	.17079	.21212	.22073	.37650
#1	1971.2	3697.5	28998.	5983.6
#2	1975.5	3696.8	29122.	6016.2
#3	1968.9	3710.8	29032.	6027.0

Zoom In Zoom Out

Sample Name: FA54359-13 Acquired: 5/25/2018 11:22:38 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0034	70.55	.0153	.0568	.0025	312.3	.4519	.0992	.0994
Stddev	.0029	.39	.0088	.0009	.0007	.5	.0012	.0008	.0013
%RSD	86.09	.5510	57.48	1.538	27.77	.1757	.2624	.7831	1.345
#1	.0023	70.28	.0251	.0568	.0017	311.6	.4530	.0992	.0981
#2	.0011	70.38	.0129	.0560	.0029	312.6	.4506	.1000	.1007
#3	.0066	71.00	.0080	.0577	.0029	312.5	.4519	.0985	.0993

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0512	45.25	68.56	130.8	3.987	-.0069	161.0	.9413	.0010
Stddev	.0026	.08	.03	.4	.016	.0007	.2	.0009	.0066
%RSD	5.117	.1823	.0387	.3054	.3991	9.823	.1486	.0997	652.7
#1	.0482	45.15	68.53	130.4	4.001	-.0076	160.9	.9421	-.0065
#2	.0525	45.31	68.59	130.7	3.988	-.0063	161.3	.9403	.0040
#3	.0529	45.27	68.57	131.2	3.970	-.0068	160.9	.9416	.0055

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0090	.0078	27.68	-.0087	.3005	.2052	-.0093	.1637	5.545
Stddev	.0077	.0263	.12	.0005	.0027	.0007	.0028	.0011	.007
%RSD	85.77	337.8	.4235	5.878	.8899	.3592	30.43	.7007	.1299
#1	-.0034	.0272	27.73	-.0085	.2980	.2058	-.0125	.1631	5.547
#2	-.0059	-.0221	27.54	-.0084	.3000	.2044	-.0080	.1629	5.537
#3	-.0179	.0182	27.76	-.0093	.3033	.2054	-.0073	.1650	5.551

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1849.9	3619.1	28289.	6000.0
Stddev	.7	11.3	200.	18.1
%RSD	.03772	.31182	.70840	.30233
#1	1850.5	3607.8	28063.	6006.7
#2	1849.1	3630.4	28360.	6013.9
#3	1850.0	3619.3	28444.	5979.5

Zoom In Zoom Out

Sample Name: MP33784-MB1 Acquired: 5/25/2018 11:27:02 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0024	.0406	-.0006	-.0003	.0000	.0401	-.0002	.0003	.0016
Stddev	.0008	.0323	.0036	.0005	.000	.0062	.0001	.0002	.0009
%RSD	34.47	79.55	577.3	182.7	387.2	15.42	41.36	54.24	57.91
#1	.0031	.0524	-.0048	-.0003	.0000	.0333	-.0001	.0004	.0017
#2	.0027	.0652	.0009	-.0008	-.0002	.0417	-.0002	.0002	.0024
#3	.0015	.0041	.0020	.0002	.0001	.0454	-.0002	.0002	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0304	-.1587	-.0316	.0017	-.0053	-.0417	.0010	-.0010
Stddev	.0012	.0103	.1150	.0885	.0002	.0002	.0121	.0011	.0024
%RSD	307.8	33.98	72.50	280.1	13.64	3.219	29.09	104.0	241.5
#1	.0001	.0423	-.0493	.0576	.0019	-.0052	-.0464	.0008	-.0031
#2	-.0006	.0243	-.2787	-.1194	.0015	-.0055	-.0279	.0001	.0016
#3	.0017	.0246	-.1481	-.0330	.0016	-.0052	-.0507	.0022	-.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0012	.0084	.0076	.0339	-.0001	-.0024	.0017	-.0003	-.0048
Stddev	.0089	.0018	.0011	.0006	.0001	.0002	.0052	.0006	.0002
%RSD	720.1	21.61	14.85	1.621	66.73	9.036	300.1	201.4	4.294
#1	.0011	.0094	.0071	.0346	-.0002	-.0027	-.0034	-.0007	-.0046
#2	.0062	.0095	.0069	.0337	-.0001	-.0024	.0015	.0004	-.0048
#3	-.0110	.0063	.0089	.0335	-.0001	-.0022	.0070	-.0007	-.0050

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1945.8	3674.4	28945.	6011.8
Stddev	6.9	13.5	90.	54.2
%RSD	.35689	.36656	.31224	.90152
#1	1942.3	3661.6	28920.	6032.6
#2	1941.3	3673.0	29046.	6052.5
#3	1953.8	3688.4	28871.	5950.3

Zoom In Zoom Out

Sample Name: FA54294-63 Acquired: 5/25/2018 11:31:35 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	321.6	.0514	6.095	.0447	7.541	-.0012	.0081	.3789
Stddev	.0037	.5	.0070	.017	.0004	.035	.0006	.0009	.0030
%RSD	751.6	.1476	13.57	.2743	.8268	.4578	48.88	11.46	.8017
#1	.0025	322.1	.0442	6.078	.0446	7.573	-.0011	.0076	.3819
#2	-.0038	321.5	.0581	6.111	.0445	7.545	-.0007	.0091	.3789
#3	.0028	321.2	.0519	6.098	.0452	7.504	-.0018	.0075	.3759

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0194	86.72	3.060	5.566	.0537	-.0109	.1030	.0537	.3868
Stddev	.0015	.43	.172	.037	.0003	.0009	.0176	.0019	.0110
%RSD	7.870	.4993	5.629	.6584	.6307	8.627	17.06	3.525	2.835
#1	.0178	86.58	2.973	5.563	.0535	-.0118	.1110	.0538	.3982
#2	.0208	87.20	3.258	5.603	.0535	-.0108	.0828	.0517	.3763
#3	.0195	86.37	2.949	5.530	.0541	-.0099	.1151	.0555	.3860

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0165	.0129	5.753	.0233	4.922	1.068	-.0041	.2850	.0721
Stddev	.0110	.0063	.013	.0039	.003	.006	.0055	.0020	.0010
%RSD	66.68	49.18	.2307	16.97	.0507	.5243	134.6	.6885	1.380
#1	-.0162	.0104	5.738	.0201	4.921	1.071	.0013	.2829	.0732
#2	-.0276	.0201	5.760	.0277	4.920	1.061	-.0038	.2868	.0716
#3	-.0056	.0082	5.762	.0220	4.925	1.072	-.0096	.2852	.0714

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1922.0	4256.0	33281.	6985.5
Stddev	3.7	3.0	60.	62.5
%RSD	.19483	.07090	.17913	.89417
#1	1919.2	4258.5	33252.	6972.9
#2	1920.6	4256.7	33350.	6930.2
#3	1926.3	4252.6	33241.	7053.2

Zoom In Zoom Out

Sample Name: FA54370-42 Acquired: 5/25/2018 11:36:03 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	278.0	.0391	2.708	.0061	8.787	-.0012	.0150	.3787
Stddev	.0008	.2	.0030	.005	.0002	.034	.0001	.0003	.0017
%RSD	1174.	.0840	7.679	.1810	3.456	.3815	10.40	2.172	.4388
#1	.0010	277.7	.0384	2.708	.0063	8.748	-.0011	.0154	.3803
#2	-.0005	278.0	.0366	2.712	.0059	8.808	-.0013	.0150	.3789
#3	-.0003	278.2	.0424	2.703	.0061	8.805	-.0013	.0148	.3770

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0530	117.0	4.087	7.202	1.262	-.0015	.6432	.0821	.2670
Stddev	.0009	.4	.060	.103	.001	.0012	.0148	.0004	.0026
%RSD	1.692	.3592	1.472	1.425	.0522	82.42	2.303	.5368	.9770
#1	.0520	116.6	4.109	7.287	1.262	-.0006	.6502	.0822	.2698
#2	.0534	117.4	4.133	7.088	1.261	-.0010	.6533	.0825	.2665
#3	.0536	116.9	4.019	7.232	1.262	-.0029	.6262	.0816	.2646

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0049	-.0058	8.213	.0281	2.174	1.447	-.0017	.3772	.1352
Stddev	.0052	.0090	.008	.0020	.001	.011	.0019	.0013	.0010
%RSD	105.7	154.0	.0982	7.110	.0214	.7902	115.1	.3379	.7215
#1	-.0082	-.0023	8.218	.0273	2.174	1.458	-.0028	.3772	.1342
#2	.0011	.0009	8.218	.0267	2.173	1.435	.0006	.3759	.1361
#3	-.0076	-.0160	8.204	.0304	2.174	1.449	-.0028	.3785	.1352

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1886.1	4242.1	32925.	7002.4
Stddev	4.6	10.4	98.	30.8
%RSD	.24145	.24587	.29644	.43992
#1	1881.0	4230.0	32885.	7037.9
#2	1889.9	4248.0	32854.	6986.9
#3	1887.4	4248.2	33036.	6982.4

Zoom In Zoom Out

Sample Name: MP33793-MB1 Acquired: 5/25/2018 11:40:28 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0053	-.0008	.0000	-.0001	.0104	-.0001	-.0001	-.0001
Stddev	.0004	.0083	.0001	.000	.0000	.0012	.0000	.0001	.0002
%RSD	94.99	155.7	17.23	1190.	83.99	11.64	18.78	131.3	209.7
#1	.0000	.0017	-.0009	-.0001	-.0001	.0117	-.0001	.0000	-.0002
#2	.0008	-.0005	-.0007	.0001	-.0001	.0093	-.0001	-.0001	.0001
#3	.0005	.0149	-.0006	-.0001	.0000	.0102	-.0001	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0050	-.0152	.0044	-.0001	-.0012	-.0062	.0002	.0005
Stddev	.0001	.0014	.0114	.0249	.0001	.0002	.0034	.0001	.0004
%RSD	12.88	28.55	75.24	563.7	49.41	13.92	54.77	39.86	75.65
#1	-.0008	.0066	-.0119	.0324	-.0001	-.0010	-.0076	.0003	.0008
#2	-.0007	.0040	-.0057	-.0153	-.0002	-.0013	-.0086	.0001	.0001
#3	-.0006	.0043	-.0278	-.0039	-.0001	-.0013	-.0023	.0002	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0022	.0190	-.0002	.0000	-.0005	-.0015	-.0001	-.0002
Stddev	.0004	.0010	.0001	.0002	.000	.0001	.0017	.0001	.0001
%RSD	122.5	45.89	.7683	107.5	193.4	13.36	112.3	77.61	40.14
#1	.0000	.0018	.0189	-.0004	.0000	-.0005	-.0034	.0000	-.0003
#2	.0003	.0034	.0191	.0001	-.0001	-.0004	-.0002	-.0002	-.0002
#3	.0008	.0015	.0189	-.0003	.0000	-.0005	-.0008	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP33793-MB1 Acquired: 5/25/2018 11:40:28 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1969.8	3681.3	29078.	5958.9
Stddev	6.5	4.0	80.	31.2
%RSD	.33036	.10943	.27606	.52402
#1	1962.3	3680.0	28985.	5949.5
#2	1973.9	3678.1	29125.	5993.8
#3	1973.2	3685.8	29124.	5933.5

Zoom In Zoom Out

Sample Name: MP33793-B1 Acquired: 5/25/2018 11:45:02 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0490	25.97	1.998	2.001	.0514	25.20	.0513	.5132	.2066
Stddev	.0002	.09	.006	.006	.0000	.06	.0001	.0010	.0003
%RSD	.4664	.3433	.3032	.3025	.0329	.2505	.2006	.1929	.1679
#1	.0490	25.99	1.992	2.005	.0514	25.12	.0512	.5121	.2063
#2	.0488	26.05	1.999	2.004	.0513	25.22	.0514	.5139	.2070
#3	.0493	25.87	2.004	1.994	.0514	25.24	.0514	.5136	.2064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2504	25.59	25.14	23.67	.5263	.4862	24.97	.5404	.4868
Stddev	.0006	.01	.03	.10	.0023	.0011	.02	.0015	.0010
%RSD	.2269	.0439	.1286	.4233	.4409	.2314	.0726	.2767	.2028
#1	.2497	25.58	25.15	23.72	.5288	.4852	24.99	.5389	.4858
#2	.2508	25.58	25.10	23.55	.5242	.4874	24.96	.5403	.4868
#3	.2506	25.60	25.16	23.73	.5258	.4860	24.96	.5419	.4878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5067	1.950	.1637	.5000	.4870	.5157	1.927	.4963	.5214
Stddev	.0023	.009	.0007	.0008	.0020	.0012	.012	.0005	.0018
%RSD	.4496	.4422	.4330	.1650	.4040	.2356	.6012	.0944	.3499
#1	.5069	1.946	.1629	.4991	.4882	.5167	1.918	.4968	.5195
#2	.5089	1.960	.1638	.5006	.4881	.5144	1.923	.4959	.5215
#3	.5043	1.944	.1643	.5004	.4847	.5160	1.940	.4961	.5231
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33793-B1 Acquired: 5/25/2018 11:45:02 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1802.3	3566.4	27759.	5931.0
Stddev	1.9	12.9	148.	17.4
%RSD	.10303	.36132	.53286	.29378
#1	1804.4	3575.0	27654.	5948.9
#2	1801.3	3551.6	27928.	5930.1
#3	1801.1	3572.7	27694.	5914.1

Zoom In Zoom Out

Sample Name: FA54350-7L Acquired: 5/25/2018 11:49:15 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**.0163**	**-.0005**	**.1430**	**.0000**	**78.77**	**.0000**	**.0000**	**.0005**
Stddev	.0007	.0081	.0012	.0004	.0000	.36	.000	.0001	.0002
%RSD	310.4	49.81	241.6	.3085	344.5	.4576	333.8	339.5	41.04
#1	-.0006	.0256	-.0019	.1434	.0000	79.09	.0000	.0000	.0004
#2	.0006	.0110	.0001	.1432	.0000	78.38	-.0001	.0001	.0008
#3	.0006	.0122	.0003	.1425	.0000	78.83	.0000	.0000	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0001**	**-.0014**	**1.165**	**3.582**	**.0009**	**-.0010**	F **147.3**	**.0001**	**-.0005**
Stddev	.0001	.0007	.008	.037	.0000	.0001	4.1	.0002	.0008
%RSD	88.63	46.48	.6833	1.032	.6534	6.733	2.791	154.8	169.9
#1	.0000	-.0008	1.156	3.586	.0009	-.0010	150.9	.0003	-.0007
#2	-.0002	-.0021	1.168	3.543	.0009	-.0010	142.8	.0000	.0004
#3	-.0002	-.0014	1.172	3.617	.0009	-.0011	148.1	.0000	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0005**	**.0018**	**.8067**	**-.0001**	**.3449**	**.0013**	**-.0013**	**.0003**	**.0009**
Stddev	.0008	.0020	.0007	.0002	.0009	.0001	.0018	.0001	.0000
%RSD	151.8	112.3	.0900	137.4	.2740	8.312	135.2	36.93	4.784
#1	.0003	.0013	.8059	-.0004	.3454	.0014	.0007	.0002	.0009
#2	-.0006	.0000	.8073	.0000	.3456	.0012	-.0022	.0004	.0009
#3	-.0013	.0040	.8069	-.0001	.3438	.0013	-.0026	.0002	.0010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1748.7**	**3450.0**	**26533.**	**5845.0**
Stddev	.7	5.0	118.	40.9
%RSD	.03831	.14592	.44423	.69930
#1	1748.3	3451.6	26412.	5811.5
#2	1749.5	3454.1	26539.	5890.5
#3	1748.4	3444.4	26648.	5833.0

Zoom In Zoom Out

Sample Name: MP33793-D1 Acquired: 5/25/2018 11:53:54 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**.0209**	**-.0006**	**.1404**	**.0000**	**76.59**	**.0000**	**-.0001**	**.0003**
Stddev	.0002	.0065	.0003	.0003	.000	.55	.000	.0001	.0001
%RSD	70.06	31.29	45.74	.2131	137.4	.7230	124.4	249.4	57.76
#1	.0001	.0134	-.0003	.1407	-.0001	76.75	.0000	-.0001	.0004
#2	.0005	.0239	-.0006	.1402	.0000	77.05	-.0001	.0001	.0001
#3	.0002	.0255	-.0008	.1402	.0000	75.98	.0000	-.0002	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0000**	**-.0062**	**1.146**	**3.489**	**.0006**	**-.0012**	F **142.0**	**.0002**	**-.0012**
Stddev	.0002	.0007	.018	.019	.0000	.0002	1.6	.0001	.0002
%RSD	511.0	10.94	1.560	.5449	2.594	17.06	1.111	29.72	15.75
#1	.0002	-.0056	1.148	3.504	.0006	-.0012	140.8	.0002	-.0010
#2	.0000	-.0069	1.127	3.468	.0006	-.0010	143.8	.0002	-.0013
#3	-.0001	-.0060	1.163	3.495	.0006	-.0014	141.4	.0003	-.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0004**	**.0030**	**.7879**	**.0000**	**.3367**	**.0008**	**-.0016**	**.0006**	**.0007**
Stddev	.0006	.0019	.0021	.001	.0009	.0001	.0008	.0000	.0000
%RSD	166.0	61.41	.2717	1054.	.2621	14.47	53.74	6.848	4.587
#1	.0002	.0048	.7903	.0005	.3377	.0008	-.0006	.0006	.0006
#2	-.0004	.0011	.7871	-.0002	.3366	.0007	-.0022	.0005	.0007
#3	-.0009	.0033	.7863	-.0004	.3359	.0010	-.0019	.0005	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1745.5**	**3439.5**	**26504.**	**5843.4**
Stddev	2.4	10.5	23.	81.5
%RSD	.13769	.30443	.08595	1.3951
#1	1743.3	3428.4	26481.	5819.6
#2	1745.1	3440.9	26505.	5776.4
#3	1748.1	3449.2	26527.	5934.1

Zoom In Zoom Out

Sample Name: MP33793-SD1 Acquired: 5/25/2018 11:58:32 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0021**	**.0473**	**.0007**	**.1320**	**.0000**	**73.77**	**-.0002**	**.0003**	**.0007**
Stddev	.0011	.0560	.0047	.0006	.000	.10	.0001	.0002	.0001
%RSD	55.67	118.3	722.3	.4498	203.4	.1399	71.83	81.37	9.684
#1	.0022	.1059	-.0015	.1318	-.0001	73.66	-.0002	.0005	.0008
#2	.0008	-.0055	.0061	.1314	.0000	73.80	-.0001	.0003	.0006
#3	.0031	.0415	-.0026	.1326	.0000	73.86	-.0003	.0000	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0011**	**-.0388**	**.9245**	**3.362**	**.0000**	**-.0066**	**136.7**	**.0001**	**.0004**
Stddev	.0012	.0142	.1235	.084	.0002	.0004	.5	.0006	.0018
%RSD	109.7	36.71	13.35	2.507	504.0	5.559	.3466	470.7	491.0
#1	.0023	-.0362	.9622	3.350	-.0002	-.0070	137.1	.0001	.0001
#2	-.0001	-.0260	1.025	3.452	.0001	-.0063	136.8	.0008	.0023
#3	.0011	-.0541	.7866	3.284	.0001	-.0063	136.2	-.0005	-.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0004**	**.0103**	**.7457**	**-.0047**	**.3180**	**-.0002**	**-.0040**	**-.0010**	**-.0059**
Stddev	.0051	.0064	.0015	.0016	.0004	.0006	.0062	.0008	.0002
%RSD	1195.	62.12	.1988	34.10	.1137	304.2	158.0	83.83	3.351
#1	-.0052	.0030	.7441	-.0038	.3185	-.0007	-.0065	-.0019	-.0057
#2	.0048	.0128	.7463	-.0037	.3178	-.0005	-.0085	-.0006	-.0060
#3	.0017	.0150	.7468	-.0066	.3179	.0005	.0032	-.0004	-.0059

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1878.5**	**3582.6**	**27939.**	**5944.4**
Stddev	4.2	6.0	60.	17.5
%RSD	.22103	.16690	.21472	.29478
#1	1876.8	3575.8	27974.	5963.7
#2	1883.3	3586.5	27973.	5929.6
#3	1875.5	3585.7	27870.	5939.8

Zoom In Zoom Out

Sample Name: MP33793-S1 Acquired: 5/25/2018 12:03:03 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0497**	**25.63**	**2.044**	**2.099**	**.0507**	**100.8**	**.0503**	**.4981**	**.2036**
Stddev	.0001	.08	.005	.011	.0001	.2	.0002	.0003	.0014
%RSD	.2390	.2969	.2317	.5205	.1055	.2294	.3132	.0523	.6761
#1	.0498	25.58	2.049	2.095	.0507	101.0	.0502	.4979	.2022
#2	.0496	25.72	2.040	2.112	.0507	100.5	.0504	.4984	.2038
#3	.0498	25.60	2.044	2.092	.0506	100.7	.0501	.4979	.2049

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2514**	**25.00**	**26.38**	**26.42**	**.5153**	**.4766**	F **166.1**	**.5235**	**.4824**
Stddev	.0012	.06	.04	.07	.0015	.0008	4.2	.0012	.0035
%RSD	.4694	.2254	.1332	.2805	.2960	.1753	2.548	.2290	.7356
#1	.2528	25.07	26.41	26.50	.5135	.4764	170.5	.5236	.4842
#2	.2508	24.98	26.40	26.40	.5164	.4776	165.7	.5247	.4783
#3	.2506	24.96	26.34	26.36	.5159	.4760	162.0	.5223	.4847

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5144**	**2.025**	**.9558**	**.4815**	**.8130**	**.5088**	**1.882**	**.4951**	**.5138**
Stddev	.0020	.002	.0020	.0002	.0033	.0009	.004	.0018	.0011
%RSD	.3807	.0928	.2119	.0419	.4003	.1704	.2351	.3643	.2159
#1	.5128	2.027	.9546	.4818	.8104	.5086	1.884	.4931	.5149
#2	.5138	2.023	.9582	.4815	.8167	.5097	1.877	.4959	.5137
#3	.5166	2.024	.9547	.4814	.8119	.5080	1.885	.4965	.5127

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1682.5**	**3422.5**	**26644.**	**5891.4**
Stddev	3.0	4.4	74.	33.4
%RSD	.17947	.12738	.27620	.56763
#1	1682.0	3425.4	26572.	5852.8
#2	1685.8	3417.5	26640.	5909.6
#3	1679.8	3424.5	26719.	5911.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 12:07:23 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2426	38.85	2.062	1.978	2.023	40.34	2.080	2.047	2.050
Stddev	.0007	.04	.002	.003	.006	.19	.002	.002	.004
%RSD	.2817	.0963	.0788	.1458	.2874	.4811	.0887	.1066	.2008
#1	.2426	38.81	2.060	1.976	2.028	40.53	2.079	2.046	2.055
#2	.2433	38.88	2.063	1.977	2.017	40.14	2.082	2.049	2.047
#3	.2419	38.87	2.061	1.981	2.025	40.36	2.079	2.045	2.049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.979	39.65	40.54	38.38	2.092	2.057	40.18	2.107	2.019
Stddev	.007	.08	.18	.04	.002	.006	.18	.003	.004
%RSD	.3647	.2021	.4356	.1073	.0705	.2960	.4514	.1331	.1949
#1	1.971	39.73	40.57	38.34	2.092	2.054	40.21	2.105	2.014
#2	1.986	39.57	40.36	38.39	2.093	2.064	39.98	2.110	2.020
#3	1.979	39.66	40.71	38.42	2.090	2.053	40.34	2.105	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.060	2.047	2.127	2.060	1.996	2.115	2.037	2.091	2.114
Stddev	.006	.007	.006	.004	.005	.004	.002	.003	.001
%RSD	.2899	.3209	.3019	.1712	.2322	.1755	.0973	.1350	.0686
#1	2.063	2.042	2.121	2.062	1.990	2.111	2.037	2.094	2.113
#2	2.064	2.054	2.125	2.062	1.998	2.119	2.034	2.090	2.116
#3	2.053	2.043	2.134	2.056	1.999	2.113	2.038	2.088	2.113
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 12:07:23 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1710.0	3486.5	27326.	5908.4
Stddev	.9	10.5	95.	18.1
%RSD	.05117	.30001	.34936	.30620
#1	1710.3	3485.8	27290.	5901.2
#2	1709.0	3476.3	27254.	5929.0
#3	1710.6	3497.2	27434.	5895.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 12:11:34 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0039	.0008	-.0001	.0000	-.0042	.0000	.0000	.0000
Stddev	.0001	.0066	.0005	.0001	.000	.0002	.000	.000	.000
%RSD	24.67	170.3	68.71	93.56	157.4	4.180	111.0	116.0	207.3
#1	.0003	.0083	.0012	-.0001	.0000	-.0043	-.0001	.0000	.0000
#2	.0002	-.0037	.0009	.0000	.0000	-.0040	.0000	-.0001	-.0001
#3	.0003	.0070	.0002	-.0003	.0000	-.0043	.0000	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0035	-.0150	.0008	-.0002	.0003	-.0033	.0000	-.0004
Stddev	.0000	.0011	.0175	.0119	.0000	.0003	.0029	.0000	.0003
%RSD	16.79	30.84	116.3	1486.	24.79	93.35	87.53	22.81	66.45
#1	.0003	.0042	.0050	-.0118	-.0002	.0006	-.0045	.0000	-.0002
#2	.0003	.0041	-.0267	.0118	-.0002	.0003	.0000	.0000	-.0004
#3	.0002	.0023	-.0234	.0025	-.0001	.0000	-.0054	.0001	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	F .0031	.0012	-.0010	.0000	.0001	.0004	.0000	-.0016
Stddev	.0012	.0015	.0002	.0004	.000	.0001	.0015	.0002	.0001
%RSD	470.4	47.23	19.43	43.21	105.8	195.6	341.5	7209.	4.776
#1	-.0003	.0037	.0015	-.0006	.0000	.0002	.0003	-.0002	-.0016
#2	-.0015	.0015	.0012	-.0008	.0000	.0000	-.0009	.0001	-.0015
#3	.0010	.0042	.0010	-.0014	.0000	.0000	.0020	.0001	-.0015
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 12:11:34 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1956.5	3644.3	28776.	6017.1
Stddev	4.3	11.4	170.	27.1
%RSD	.21743	.31197	.59187	.45062
#1	1952.6	3636.5	28637.	6007.1
#2	1961.0	3657.4	28966.	5996.4
#3	1955.8	3639.1	28727.	6047.8

◀ Zoom In ▶
Zoom Out

Sample Name: MP33793-S2 Acquired: 5/25/2018 12:16:08 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0502	26.31	2.059	2.133	.0516	102.5	.0506	.5035	.2065
Stddev	.0006	.10	.005	.001	.0000	.6	.0002	.0002	.0006
%RSD	1.125	.3691	.2406	.0662	.0778	.6195	.3574	.0415	.2953
#1	.0509	26.22	2.062	2.132	.0515	101.8	.0504	.5035	.2058
#2	.0499	26.31	2.061	2.134	.0516	102.8	.0508	.5038	.2069
#3	.0499	26.41	2.053	2.134	.0516	103.0	.0505	.5034	.2068

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2566	25.56	26.95	26.95	.5201	.4847	F 170.5	.5289	.4872
Stddev	.0012	.17	.15	.29	.0008	.0010	3.2	.0015	.0010
%RSD	.4712	.6705	.5542	1.083	.1451	.1974	1.865	.2839	.2035
#1	.2580	25.39	27.11	26.66	.5201	.4851	173.5	.5279	.4882
#2	.2556	25.73	26.92	26.95	.5208	.4855	171.0	.5306	.4862
#3	.2563	25.56	26.81	27.25	.5193	.4836	167.2	.5281	.4871

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5191	2.040	.9632	.4894	.8278	.5172	1.899	.5009	.5157
Stddev	.0014	.009	.0030	.0008	.0028	.0008	.002	.0008	.0009
%RSD	.2691	.4416	.3144	.1533	.3426	.1533	.1065	.1675	.1760
#1	.5189	2.050	.9643	.4888	.8248	.5167	1.898	.5000	.5147
#2	.5179	2.037	.9655	.4902	.8280	.5181	1.901	.5017	.5162
#3	.5206	2.032	.9597	.4891	.8304	.5168	1.898	.5010	.5164

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1683.7	3430.6	26548.	5851.3
Stddev	5.1	10.8	37.	37.4
%RSD	.30286	.31438	.14007	.63946
#1	1680.9	3423.3	26522.	5893.0
#2	1680.7	3425.5	26531.	5840.0
#3	1689.6	3443.0	26590.	5820.8

◀ Zoom In ▶
Zoom Out

Sample Name: FA54350-1L Acquired: 5/25/2018 12:20:29 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0145	-.0001	.1135	.0000	54.25	.0000	-.0001	.0003
Stddev	.0004	.0030	.0011	.0004	.0001	.32	.0001	.0000	.0003
%RSD	156.9	20.65	1755.	.3861	165.6	.5893	172.8	49.06	98.39
#1	-.0002	.0113	-.0001	.1140	.0000	54.07	.0001	.0000	.0002
#2	.0003	.0173	-.0011	.1133	.0001	54.07	.0000	-.0001	.0001
#3	.0007	.0151	.0010	.1132	.0001	54.62	.0000	-.0001	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	-.0009	.7513	3.279	.0024	-.0008	F 142.3	.0008	-.0016
Stddev	.0002	.0038	.0261	.019	.0000	.0003	.9	.0001	.0003
%RSD	62.98	428.1	3.468	.5841	1.184	31.66	.6380	17.28	19.96
#1	.0006	.0020	.7787	3.259	.0024	-.0005	141.4	.0008	-.0013
#2	.0003	-.0052	.7268	3.298	.0024	-.0009	143.2	.0006	-.0016
#3	.0001	.0005	.7486	3.280	.0025	-.0010	142.2	.0009	-.0019

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0009	.0040	.9653	.0001	.2921	.0010	-.0016	.0002	.0037
Stddev	.0005	.0003	.0009	.0002	.0017	.0001	.0010	.0001	.0001
%RSD	61.66	8.087	.0965	132.1	.5785	8.369	63.30	54.30	1.390
#1	-.0015	.0041	.9649	.0000	.2941	.0011	-.0017	.0003	.0038
#2	-.0006	.0036	.9646	.0001	.2910	.0010	-.0026	.0002	.0037
#3	-.0005	.0042	.9663	.0003	.2913	.0009	-.0006	.0001	.0038

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1758.1	3436.1	26682.	5878.7
Stddev	1.2	4.1	115.	22.8
%RSD	.06547	.11979	.43134	.38821
#1	1759.3	3434.2	26558.	5886.4
#2	1757.0	3440.8	26701.	5896.7
#3	1758.1	3433.3	26786.	5853.0

◀ Zoom In ▶
Zoom Out

Sample Name: FA54350-2L Acquired: 5/25/2018 12:25:07 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0611	-.0010	.1128	.0000	37.36	.0001	-.0001	.0001
Stddev	.0005	.0048	.0010	.0000	.000	.17	.0000	.0001	.0002
%RSD	206.5	7.909	99.62	.0255	82.45	.4631	49.13	126.4	230.8
#1	.0003	.0606	-.0003	.1128	.0000	37.56	.0001	.0000	-.0001
#2	.0007	.0661	-.0021	.1128	.0000	37.28	.0001	-.0002	.0003
#3	-.0003	.0565	-.0005	.1129	.0000	37.24	.0001	.0000	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	.0252	.5935	3.157	.0043	-.0011	F 142.4	.0011	-.0005
Stddev	.0002	.0014	.0230	.017	.0000	.0001	1.6	.0000	.0009
%RSD	386.2	5.616	3.881	.5290	.5309	13.62	1.114	2.343	192.7
#1	-.0002	.0269	.5860	3.175	.0043	-.0009	143.9	.0011	-.0010
#2	.0003	.0243	.5751	3.156	.0043	-.0012	140.8	.0011	-.0010
#3	.0001	.0246	.6193	3.141	.0043	-.0012	142.6	.0011	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0031	1.096	.0003	.2090	.0037	-.0024	.0001	.0026
Stddev	.0006	.0014	.003	.0001	.0009	.0001	.0008	.0002	.0001
%RSD	89.40	42.93	.2409	43.63	.4239	3.831	31.44	274.6	3.011
#1	-.0001	.0047	1.099	.0003	.2084	.0037	-.0029	.0002	.0026
#2	-.0007	.0021	1.094	.0005	.2087	.0039	-.0029	.0000	.0026
#3	-.0013	.0026	1.096	.0002	.2101	.0037	-.0016	-.0001	.0027

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1771.5	3475.0	26720.	5856.6
Stddev	2.4	5.8	126.	15.7
%RSD	.13447	.16798	.47317	.26854
#1	1774.2	3470.6	26575.	5839.9
#2	1769.9	3472.6	26789.	5858.8
#3	1770.3	3481.6	26798.	5871.1

◀ Zoom In ▶
Zoom Out

Sample Name: FA54350-3L Acquired: 5/25/2018 12:29:45 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0933	-.0006	.1159	.0000	35.27	.0000	.0000	.0003
Stddev	.0003	.0033	.0002	.0004	.0000	.06	.0001	.000	.0002
%RSD	98.56	3.526	30.82	.3850	358.8	.1700	141.7	281.3	69.95
#1	.0002	.0961	-.0006	.1163	.0000	35.22	.0001	.0000	.0005
#2	.0006	.0897	-.0004	.1154	.0000	35.34	.0000	-.0001	.0002
#3	.0001	.0941	-.0008	.1160	.0001	35.27	.0001	.0000	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0479	.6181	3.100	.0051	-.0012	F 143.5	.0012	-.0006
Stddev	.0003	.0022	.0066	.033	.0000	.0001	1.1	.0002	.0004
%RSD	481.5	4.683	1.073	1.052	.6293	6.753	.7319	12.72	65.98
#1	-.0004	.0505	.6162	3.082	.0051	-.0011	143.1	.0011	-.0005
#2	.0002	.0466	.6127	3.081	.0051	-.0013	142.7	.0011	-.0010
#3	.0000	.0467	.6255	3.138	.0051	-.0011	144.7	.0014	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0009	.0025	1.176	.0001	.2004	.0061	-.0023	.0001	.0029
Stddev	.0008	.0012	.003	.0005	.0010	.0001	.0003	.0002	.0000
%RSD	97.81	47.90	.2117	324.0	.4933	1.041	11.02	207.5	1.310
#1	-.0004	.0030	1.178	.0006	.2015	.0061	-.0026	.0002	.0029
#2	-.0003	.0011	1.176	.0001	.1998	.0060	-.0022	-.0001	.0028
#3	-.0018	.0033	1.173	-.0003	.1999	.0061	-.0021	.0001	.0029

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1780.2	3487.8	26767.	5892.8
Stddev	3.5	8.0	6.	33.9
%RSD	.19631	.23030	.02180	.57596
#1	1778.5	3482.9	26770.	5872.4
#2	1784.2	3483.4	26770.	5874.0
#3	1777.8	3497.1	26760.	5932.0

◀ Zoom In ▶
Zoom Out

Sample Name: FA54350-4L Acquired: 5/25/2018 12:34:23 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0429	-.0012	.1135	.0000	77.67	-.0001	-.0001	.0003
Stddev	.0003	.0014	.0008	.0004	.000	.38	.0000	.0001	.0003
%RSD	53.87	3.305	64.30	.3955	341.0	.4842	65.98	70.55	111.2
#1	.0007	.0423	-.0012	.1140	.0000	77.35	-.0001	.0000	-.0001
#2	.0002	.0419	-.0020	.1134	-.0001	77.56	.0000	-.0002	.0004
#3	.0004	.0445	-.0004	.1132	.0000	78.08	.0000	-.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0007	.0119	2.678	3.470	.0019	-.0013	F 145.7	.0005	-.0012
Stddev	.0001	.0006	.013	.035	.0000	.0001	1.7	.0001	.0003
%RSD	12.57	4.869	.5009	1.010	1.353	9.877	1.182	30.35	23.80
#1	.0007	.0122	2.683	3.441	.0018	-.0014	144.1	.0005	-.0009
#2	.0007	.0112	2.689	3.461	.0019	-.0011	145.6	.0003	-.0013
#3	.0006	.0122	2.663	3.509	.0019	-.0014	147.5	.0006	-.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0001	.0025	.9067	-.0001	.3507	.0024	-.0025	.0004	.0028
Stddev	.0005	.0025	.0013	.0002	.0001	.0001	.0003	.0004	.0000
%RSD	418.0	99.29	.1386	207.4	.0285	2.288	13.90	100.2	.1715
#1	.0001	.0029	.9081	.0002	.3508	.0024	-.0026	.0004	.0028
#2	.0003	-.0001	.9059	-.0002	.3506	.0025	-.0021	.0000	.0028
#3	-.0007	.0048	.9060	-.0003	.3507	.0024	-.0028	.0009	.0028

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1750.1	3419.7	26522.	5868.6
Stddev	2.5	3.9	92.	21.4
%RSD	.14335	.11310	.34823	.36499
#1	1748.1	3415.4	26490.	5863.2
#2	1749.4	3420.8	26450.	5892.2
#3	1752.9	3422.8	26626.	5850.4

◀ Zoom In ▶
Zoom Out

Sample Name: FA54350-5L Acquired: 5/25/2018 12:39:01 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.0404	-.0005	.0815	.0000	34.04	.0004	.0000	.0002
Stddev	.0005	.0047	.0006	.0003	.000	.07	.0001	.000	.0003
%RSD	133.5	11.64	112.9	.3578	129.1	.2073	22.50	393.5	180.2
#1	.0000	.0430	.0001	.0815	.0000	33.96	.0003	.0001	.0005
#2	.0009	.0432	-.0011	.0818	.0000	34.07	.0005	.0000	.0000
#3	.0002	.0350	-.0005	.0812	.0000	34.09	.0004	-.0001	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.9208	.0181	.6040	1.609	.0014	-.0013	F 136.9	.0012	.0437
Stddev	.0069	.0040	.0298	.009	.0000	.0002	3.7	.0001	.0002
%RSD	.7516	22.36	4.929	.5754	2.098	15.11	2.706	10.12	.4397
#1	.9231	.0137	.6347	1.615	.0014	-.0012	140.1	.0013	.0436
#2	.9131	.0188	.5752	1.599	.0014	-.0015	137.8	.0011	.0439
#3	.9264	.0217	.6021	1.614	.0014	-.0012	132.9	.0012	.0437

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0001	.0035	.3384	.0018	.1629	.0022	-.0029	.0003	.5935
Stddev	.0010	.0018	.0017	.0002	.0007	.0002	.0007	.0002	.0016
%RSD	1035.	52.11	.5087	13.40	.4034	8.055	22.55	64.78	.2708
#1	.0005	.0015	.3390	.0016	.1630	.0023	-.0027	.0003	.5939
#2	-.0012	.0050	.3364	.0018	.1636	.0024	-.0025	.0001	.5917
#3	.0004	.0041	.3397	.0020	.1623	.0020	-.0037	.0004	.5948

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1777.2	3462.3	26777.	5867.5
Stddev	1.4	6.0	52.	9.7
%RSD	.07688	.17383	.19361	.16545
#1	1775.6	3455.5	26738.	5858.6
#2	1778.0	3466.6	26836.	5877.8
#3	1778.0	3464.9	26756.	5866.1

◀ Zoom In ▶
Zoom Out

Sample Name: FA54350-6L Acquired: 5/25/2018 12:43:38 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0481	-.0007	.1119	.0000	77.31	.0000	.0000	.0000
Stddev	.0002	.0028	.0008	.0003	.000	.40	.0001	.000	.000
%RSD	237.4	5.900	119.4	.2667	191.5	.5112	361.7	1026.	705.7
#1	.0002	.0452	-.0016	.1118	.0000	76.96	.0000	.0000	.0002
#2	.0002	.0484	-.0002	.1122	.0000	77.23	.0001	-.0001	-.0001
#3	-.0002	.0508	-.0002	.1116	-.0001	77.74	.0000	.0001	-.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	.0207	2.270	4.262	.0016	-.0013	F 148.0	.0000	-.0013
Stddev	.0002	.0022	.027	.049	.0000	.0000	1.7	.0000	.0005
%RSD	173.5	10.59	1.193	1.151	2.176	1.681	1.153	125.0	36.46
#1	-.0001	.0182	2.245	4.228	.0016	-.0013	147.7	.0000	-.0009
#2	.0002	.0222	2.299	4.239	.0016	-.0013	146.4	.0001	-.0018
#3	.0002	.0217	2.267	4.318	.0016	-.0013	149.8	.0000	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0001	.0035	.8182	.0001	.3314	.0034	-.0025	.0005	.0011
Stddev	.0014	.0014	.0018	.0001	.0007	.0001	.0009	.0001	.0000
%RSD	1694.	40.80	.2152	131.1	.2260	3.318	37.57	19.63	.1798
#1	.0005	.0033	.8176	.0002	.3320	.0033	-.0034	.0004	.0011
#2	.0012	.0051	.8168	.0001	.3318	.0035	-.0025	.0006	.0011
#3	-.0014	.0022	.8201	.0000	.3306	.0034	-.0016	.0004	.0011

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1743.3	3403.1	26372.	5828.2
Stddev	3.1	3.2	51.	32.6
%RSD	.17700	.09410	.19512	.55958
#1	1745.9	3401.1	26347.	5856.4
#2	1744.0	3406.8	26337.	5835.8
#3	1739.9	3401.5	26431.	5792.5

◀ Zoom In ▶
Zoom Out

Sample Name: FA54350-8L Acquired: 5/25/2018 12:48:16 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0329	-.0004	.0550	.0000	80.25	.0001	-.0001	.0005
Stddev	.0003	.0073	.0012	.0001	.000	.43	.0000	.0001	.0003
%RSD	1144.	22.21	327.5	.1017	211.3	.5334	21.38	92.23	54.58
#1	-.0001	.0404	-.0002	.0550	.0000	80.57	.0001	.0000	.0008
#2	-.0002	.0323	.0007	.0551	.0000	79.77	.0001	.0000	.0003
#3	.0003	.0259	-.0017	.0550	.0000	80.42	.0001	-.0002	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	.0097	2.343	2.316	.0077	-.0013	F 149.0	.0003	-.0007
Stddev	.0002	.0017	.005	.014	.0000	.0001	2.2	.0002	.0009
%RSD	150.6	17.16	.2247	.6187	.2923	6.598	1.508	61.77	136.4
#1	.0004	.0079	2.344	2.330	.0076	-.0014	147.5	.0002	.0000
#2	-.0001	.0101	2.348	2.301	.0076	-.0012	147.8	.0001	-.0017
#3	.0001	.0112	2.337	2.317	.0077	-.0012	151.6	.0005	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0000	.0032	.6433	.0003	.2803	.0027	-.0022	.0002	.0085
Stddev	.000	.0005	.0020	.0001	.0010	.0001	.0007	.0003	.0000
%RSD	4691.	15.39	.3173	21.27	.3616	4.528	31.85	139.6	.3909
#1	-.0005	.0037	.6452	.0004	.2807	.0027	-.0018	-.0001	.0085
#2	.0004	.0029	.6411	.0003	.2792	.0025	-.0018	.0005	.0085
#3	.0001	.0028	.6434	.0003	.2811	.0028	-.0030	.0003	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1744.4	3412.9	26381.	5861.6
Stddev	2.8	3.2	97.	34.1
%RSD	.16089	.09490	.36721	.58109
#1	1742.5	3410.6	26489.	5826.1
#2	1743.1	3416.6	26301.	5894.0
#3	1747.7	3411.5	26355.	5864.7

◀ Zoom In ▶
Zoom Out

Sample Name: FA54360-1L Acquired: 5/25/2018 12:52:55 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0298**	**-.0008**	**.0149**	**.0000**	**75.74**	**.0000**	**-.0001**	**.0003**
Stddev	.0001	.0077	.0005	.0001	.000	.45	.0000	.0000	.0005
%RSD	220.9	25.75	63.61	.9848	134.2	.5956	76.34	25.65	166.4
#1	.0001	.0278	-.0010	.0150	.0000	75.62	.0000	-.0001	.0008
#2	.0001	.0233	-.0002	.0147	.0000	76.24	.0001	-.0001	.0003
#3	-.0001	.0382	-.0010	.0150	.0000	75.36	.0000	.0000	-.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0006**	**.0024**	**1.522**	**6.144**	**.0214**	**-.0012**	F **144.6**	**.0026**	**-.0007**
Stddev	.0001	.0019	.025	.071	.0001	.0001	.7	.0002	.0007
%RSD	16.41	76.85	1.649	1.162	.3812	8.793	.5044	7.361	100.3
#1	.0006	.0004	1.536	6.173	.0213	-.0013	145.1	.0024	-.0013
#2	.0007	.0028	1.493	6.195	.0214	-.0012	145.0	.0027	.0001
#3	.0005	.0041	1.536	6.062	.0213	-.0011	143.8	.0027	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0006**	**.0024**	**1.001**	**.0001**	**.6166**	**.0018**	**-.0037**	**.0005**	**.0061**
Stddev	.0011	.0010	.001	.0002	.0017	.0001	.0004	.0004	.0000
%RSD	177.8	42.52	.0911	179.8	.2823	3.164	11.70	80.41	.7344
#1	-.0011	.0022	1.000	.0004	.6166	.0018	-.0042	.0001	.0061
#2	-.0014	.0015	1.002	.0001	.6184	.0017	-.0034	.0009	.0061
#3	.0006	.0035	1.000	-.0001	.6149	.0018	-.0035	.0006	.0061

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1746.7**	**3398.2**	**26415.**	**5895.1**
Stddev	2.2	12.5	157.	43.7
%RSD	.12440	.36695	.59389	.74103
#1	1745.1	3398.0	26234.	5914.1
#2	1745.7	3385.9	26516.	5845.1
#3	1749.2	3410.8	26495.	5926.0

◀ Zoom In ▶
Zoom Out

Sample Name: FA54360-2L Acquired: 5/25/2018 12:57:34 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0246**	**-.0012**	**.0187**	**.0000**	**77.11**	**.0000**	**.0000**	**.0004**
Stddev	.0004	.0009	.0008	.0001	.000	.17	.000	.0002	.0002
%RSD	393.1	3.808	73.11	.7045	320.8	.2238	687.2	2001.	53.55
#1	.0001	.0235	-.0014	.0185	.0000	77.07	.0000	.0000	.0007
#2	.0006	.0250	-.0002	.0186	.0001	77.30	.0000	.0002	.0002
#3	-.0003	.0252	-.0018	.0188	-.0001	76.96	.0000	-.0002	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0006**	**.0051**	**1.171**	**6.612**	**.0269**	**-.0013**	F **147.5**	**.0020**	**-.0005**
Stddev	.0001	.0011	.034	.097	.0001	.0003	2.3	.0001	.0009
%RSD	26.24	20.71	2.907	1.459	.3507	20.34	1.531	4.854	172.4
#1	.0005	.0057	1.185	6.523	.0270	-.0012	145.1	.0019	-.0013
#2	.0007	.0057	1.132	6.715	.0268	-.0016	149.6	.0021	.0004
#3	.0005	.0039	1.196	6.598	.0269	-.0011	147.9	.0021	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0004**	**.0026**	**.8232**	**-.0002**	**.5694**	**.0018**	**-.0021**	**.0005**	**.0012**
Stddev	.0004	.0007	.0024	.0004	.0021	.0001	.0004	.0001	.0000
%RSD	97.93	25.91	.2952	201.8	.3752	3.331	20.04	25.02	2.016
#1	-.0008	.0025	.8258	.0002	.5710	.0018	-.0025	.0004	.0012
#2	.0000	.0033	.8211	-.0003	.5703	.0018	-.0017	.0006	.0012
#3	-.0005	.0020	.8227	-.0006	.5670	.0019	-.0020	.0005	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1746.8**	**3414.0**	**26458.**	**5860.5**
Stddev	3.6	13.6	78.	28.5
%RSD	.20873	.39690	.29451	.48702
#1	1747.0	3399.9	26378.	5891.4
#2	1750.3	3426.9	26461.	5835.1
#3	1743.0	3415.3	26534.	5855.0

◀ Zoom In ▶
Zoom Out

Sample Name: CCV Acquired: 5/25/2018 13:02:12 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2453**	**38.90**	**2.091**	**1.989**	**2.048**	**40.64**	**2.107**	**2.068**	**2.064**
Stddev	.0019	.11	.002	.009	.003	.06	.004	.003	.006
%RSD	.7871	.2869	.0972	.4409	.1323	.1408	.1852	.1287	.2784
#1	.2441	39.01	2.089	1.995	2.051	40.64	2.109	2.071	2.070
#2	.2442	38.78	2.092	1.979	2.046	40.70	2.110	2.069	2.059
#3	.2475	38.91	2.093	1.992	2.048	40.59	2.103	2.065	2.062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.995**	**39.90**	**41.62**	**37.85**	**2.106**	**2.074**	**41.04**	**2.139**	**2.039**
Stddev	.001	.02	.10	.15	.006	.003	.11	.005	.005
%RSD	.0290	.0554	.2483	.3957	.2994	.1424	.2800	.2233	.2544
#1	1.996	39.92	41.66	37.77	2.113	2.077	41.14	2.142	2.036
#2	1.995	39.92	41.51	38.03	2.105	2.075	40.92	2.141	2.045
#3	1.995	39.88	41.70	37.77	2.101	2.071	41.07	2.133	2.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.093**	**2.078**	**2.149**	**2.075**	**1.993**	**2.132**	**2.066**	**2.114**	**2.149**
Stddev	.003	.004	.005	.010	.006	.005	.006	.008	.006
%RSD	.1581	.1881	.2157	.4603	.3117	.2255	.2708	.3986	.2901
#1	2.090	2.074	2.149	2.085	1.997	2.136	2.064	2.123	2.150
#2	2.096	2.079	2.154	2.073	1.986	2.134	2.072	2.111	2.155
#3	2.092	2.082	2.145	2.066	1.995	2.127	2.062	2.107	2.143
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

◀ Zoom In ▶
Zoom Out

Sample Name: CCV Acquired: 5/25/2018 13:02:12 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1699.5**	**3460.1**	**27158.**	**5873.8**
Stddev	2.8	9.2	120.	19.4
%RSD	.16663	.26652	.44082	.33012
#1	1697.9	3450.2	27037.	5864.1
#2	1697.9	3461.7	27161.	5861.2
#3	1702.8	3468.4	27276.	5896.1

Sample Name: CCB Acquired: 5/25/2018 13:06:23 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0052	.0004	-.0001	.0000	-.0030	.0000	.0000	.0000
Stddev	.0004	.0032	.0004	.0001	.0001	.0017	.0000	.0001	.000
%RSD	73.85	60.76	110.8	173.3	327.7	55.61	66.44	236.6	50.22
#1	.0009	.0016	.0001	.0000	.0001	-.0047	.0000	.0001	.0000
#2	.0006	.0063	.0008	-.0002	.0000	-.0014	.0000	.0002	.0000
#3	.0001	.0077	.0002	-.0001	.0000	-.0030	.0000	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0040	-.0095	-.0014	-.0001	.0004	.0040	.0002	-.0005
Stddev	.0001	.0043	.0178	.0213	.0001	.0005	.0006	.0002	.0007
%RSD	50.34	109.7	188.0	1475.	43.63	109.5	13.66	82.77	140.9
#1	.0005	.0070	-.0052	.0011	-.0002	.0010	.0045	.0004	.0000
#2	.0002	.0059	.0058	.0184	-.0001	.0004	.0034	.0002	-.0002
#3	.0003	-.0010	-.0291	-.0239	-.0001	.0000	.0042	.0001	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0013	-.0001	-.0005	.0000	.0004	.0008	.0000	-.0015
Stddev	.0005	.0011	.0003	.0001	.000	.0001	.0009	.0002	.0001
%RSD	50.35	84.84	219.8	27.82	78.91	27.47	113.0	485.3	5.597
#1	-.0017	.0005	-.0005	-.0004	.0000	.0006	.0011	.0002	-.0014
#2	-.0008	.0008	-.0002	-.0004	-.0001	.0004	.0015	.0002	-.0016
#3	-.0008	.0025	.0002	-.0006	.0000	.0003	-.0002	-.0002	-.0015
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/25/2018 13:06:23 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1946.4	3604.2	28680.	6023.9
Stddev	1.4	5.2	112.	51.2
%RSD	.07212	.14507	.39047	.85035
#1	1945.7	3598.3	28696.	5965.1
#2	1945.4	3606.2	28783.	6059.0
#3	1948.0	3608.2	28560.	6047.7

Sample Name: FA54286-1L Acquired: 5/25/2018 13:10:56 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0261	-.0004	.1160	.0000	76.66	.0001	-.0001	.0003
Stddev	.0003	.0040	.0006	.0007	.0001	.62	.0001	.0001	.0002
%RSD	157.2	15.47	157.5	.5737	2188.	.8102	124.4	121.7	57.86
#1	.0005	.0298	-.0011	.1167	.0001	76.08	.0000	.0000	.0005
#2	.0004	.0266	-.0002	.1159	.0000	77.32	.0000	-.0001	.0002
#3	-.0002	.0218	.0001	.1153	-.0001	76.58	.0001	-.0001	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	.0099	2.142	3.559	.0041	-.0007	F 160.9	.0003	-.0006
Stddev	.0001	.0014	.009	.055	.0000	.0002	3.7	.0001	.0005
%RSD	78.00	13.67	.4319	1.543	.8250	23.32	2.269	35.31	82.48
#1	.0000	.0099	2.153	3.497	.0042	-.0006	158.3	.0002	-.0010
#2	.0002	.0113	2.139	3.602	.0041	-.0005	165.1	.0003	-.0007
#3	.0002	.0085	2.135	3.578	.0041	-.0008	159.4	.0004	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	.0003	.8912	-.0001	.3719	.0024	-.0019	.0007	.0013
Stddev	.0010	.0011	.0027	.0005	.0015	.0002	.0005	.0002	.0001
%RSD	312.1	369.9	.3046	395.3	.4141	6.917	27.13	33.00	4.694
#1	-.0014	.0008	.8930	.0000	.3735	.0022	-.0015	.0010	.0013
#2	.0004	-.0010	.8926	-.0006	.3716	.0025	-.0024	.0006	.0014
#3	.0000	.0011	.8881	.0003	.3705	.0024	-.0016	.0006	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1734.9	3387.9	26222.	5889.3
Stddev	4.9	15.9	104.	50.8
%RSD	.28030	.46930	.39659	.86192
#1	1729.9	3370.3	26132.	5941.6
#2	1739.6	3392.5	26335.	5840.2
#3	1735.0	3401.1	26198.	5886.1

Sample Name: FA54308-4L Acquired: 5/25/2018 13:15:35 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	.0209	-.0009	.1072	-.0001	77.72	.0000	-.0001	-.0001
Stddev	.0005	.0019	.0003	.0006	.0000	.37	.0000	.0000	.0002
%RSD	67.09	9.282	37.67	.5821	76.52	.4784	81.98	25.99	144.8
#1	.0012	.0192	-.0012	.1076	.0000	77.33	.0000	-.0002	-.0002
#2	.0006	.0230	-.0011	.1075	.0000	77.77	.0001	-.0002	-.0003
#3	.0003	.0205	-.0005	.1065	-.0001	78.06	.0001	-.0001	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0037	-.0017	2.236	3.633	.0064	-.0010	F 149.5	.0007	-.0006
Stddev	.0001	.0011	.014	.034	.0001	.0001	2.1	.0001	.0002
%RSD	2.421	64.74	.6048	.9402	.9055	12.55	1.404	9.260	39.52
#1	.0038	-.0006	2.241	3.594	.0063	-.0011	151.8	.0007	-.0003
#2	.0037	-.0018	2.220	3.647	.0063	-.0010	148.6	.0006	-.0007
#3	.0036	-.0028	2.245	3.657	.0064	-.0008	147.9	.0008	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0027	.9039	-.0001	.2924	.0013	-.0023	.0007	.0030
Stddev	.0016	.0018	.0011	.0003	.0026	.0002	.0007	.0000	.0001
%RSD	228.6	67.00	.1219	477.9	.8898	12.53	31.23	4.510	2.838
#1	.0008	.0043	.9045	.0003	.2948	.0014	-.0028	.0007	.0030
#2	-.0006	.0029	.9044	-.0001	.2929	.0013	-.0027	.0007	.0030
#3	-.0024	.0008	.9026	-.0004	.2896	.0011	-.0015	.0007	.0031

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1737.3	3388.7	26333.	5834.9
Stddev	5.6	7.3	13.	26.1
%RSD	.31964	.21483	.05107	.44699
#1	1730.9	3381.6	26332.	5859.6
#2	1740.2	3388.2	26347.	5837.5
#3	1740.8	3396.1	26320.	5807.6

Zoom In Zoom Out

Sample Name: FA54308-5L Acquired: 5/25/2018 13:20:14 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0064	-.0015	.0714	.0000	78.80	.0000	.0000	-.0001
Stddev	.0001	.0071	.0003	.0003	.000	.35	.0000	.000	.0002
%RSD	35.19	111.3	16.50	.4207	68.58	.4476	124.7	136.9	269.1
#1	.0002	.0136	-.0015	.0717	.0000	78.42	.0000	-.0001	-.0002
#2	.0003	.0061	-.0018	.0713	.0000	79.11	.0000	.0000	.0001
#3	.0004	-.0006	-.0013	.0711	.0000	78.87	.0001	-.0001	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0009	-.0083	2.972	3.305	.0157	-.0012	F 145.1	.0003	-.0006
Stddev	.0003	.0015	.024	.033	.0001	.0000	2.6	.0001	.0005
%RSD	32.77	17.65	.8063	.9843	.6267	3.985	1.775	19.96	82.61
#1	.0006	-.0078	2.954	3.311	.0157	-.0012	142.3	.0003	-.0009
#2	.0009	-.0071	2.963	3.333	.0155	-.0011	147.4	.0003	.0000
#3	.0011	-.0099	2.999	3.269	.0157	-.0012	145.6	.0004	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0008	.0034	.8998	.0000	.2370	.0009	-.0033	.0005	.0038
Stddev	.0005	.0020	.0012	.0002	.0005	.0002	.0014	.0001	.0001
%RSD	65.43	57.12	.1352	784.2	.1995	17.48	41.93	21.47	1.579
#1	-.0002	.0055	.9010	-.0002	.2376	.0011	-.0030	.0005	.0037
#2	-.0010	.0032	.8999	.0000	.2369	.0008	-.0048	.0004	.0038
#3	-.0012	.0016	.8985	.0002	.2366	.0008	-.0020	.0005	.0039

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1734.6	3375.3	26196.	5785.8
Stddev	5.7	6.2	64.	26.8
%RSD	.32587	.18223	.24393	.46370
#1	1729.6	3368.5	26141.	5805.5
#2	1733.6	3377.1	26181.	5755.2
#3	1740.7	3380.4	26266.	5796.6

Zoom In Zoom Out

Sample Name: FA54308-12L Acquired: 5/25/2018 13:24:52 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.0093	-.0010	.1897	.0000	79.29	.0000	.0000	.0000
Stddev	.0003	.0032	.0005	.0007	.0000	.34	.0000	.0001	.000
%RSD	84.89	33.92	51.27	.3746	39.85	.4303	250.5	382.3	84.70
#1	.0008	.0057	-.0016	.1902	.0000	79.41	.0000	.0000	-.0001
#2	.0001	.0109	-.0007	.1899	.0000	79.56	.0000	.0001	.0000
#3	.0004	.0114	-.0007	.1889	.0000	78.91	.0000	.0000	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	-.0060	1.255	2.807	.0018	-.0012	F 143.9	.0002	-.0017
Stddev	.0004	.0018	.017	.021	.0000	.0001	2.3	.0002	.0001
%RSD	528.0	29.88	1.325	.7395	2.314	6.533	1.595	103.4	5.070
#1	.0005	-.0040	1.260	2.796	.0018	-.0011	145.3	.0000	-.0018
#2	-.0003	-.0074	1.236	2.793	.0017	-.0013	145.2	.0003	-.0016
#3	.0000	-.0065	1.268	2.830	.0018	-.0012	141.3	.0004	-.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0013	.0024	.8824	-.0003	.2622	.0009	-.0023	.0005	.0009
Stddev	.0007	.0002	.0016	.0001	.0013	.0001	.0014	.0000	.0000
%RSD	54.64	7.605	.1803	36.66	.4910	6.810	61.75	6.587	2.396
#1	-.0006	.0023	.8811	-.0002	.2634	.0008	-.0028	.0006	.0009
#2	-.0020	.0022	.8842	-.0004	.2624	.0010	-.0007	.0005	.0009
#3	-.0012	.0026	.8818	-.0003	.2608	.0009	-.0035	.0005	.0009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1745.6	3408.5	26403.	5827.3
Stddev	8.0	13.8	37.	33.2
%RSD	.45662	.40378	.13855	.56899
#1	1737.0	3399.4	26429.	5796.0
#2	1746.9	3401.8	26362.	5823.9
#3	1752.8	3424.3	26420.	5862.0

Zoom In Zoom Out

Sample Name: MP33793-D2 Acquired: 5/25/2018 13:29:32 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0155	-.0017	.1118	.0000	53.93	.0000	-.0001	.0004
Stddev	.0000	.0037	.0002	.0007	.000	.29	.0000	.0001	.0002
%RSD	6.581	23.82	14.01	.5854	1003.	.5382	108.6	62.62	41.08
#1	.0004	.0196	-.0020	.1125	.0000	53.97	.0001	-.0002	.0006
#2	.0005	.0124	-.0016	.1113	.0000	54.20	.0000	.0000	.0002
#3	.0005	.0144	-.0016	.1116	.0000	53.63	.0000	-.0001	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0002	-.0082	.7228	3.232	.0024	-.0013	F 141.8	.0009	-.0008
Stddev	.0002	.0014	.0100	.062	.0001	.0002	1.3	.0001	.0003
%RSD	106.0	17.00	1.388	1.930	3.774	15.70	.9256	12.41	31.89
#1	.0003	-.0077	.7329	3.253	.0024	-.0013	142.9	.0008	-.0005
#2	.0000	-.0071	.7128	3.281	.0025	-.0011	142.1	.0008	-.0010
#3	.0002	-.0098	.7228	3.162	.0023	-.0015	140.3	.0010	-.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0005	.0040	.9609	-.0001	.2853	.0006	-.0031	.0002	.0032
Stddev	.0008	.0024	.0035	.0001	.0010	.0001	.0008	.0002	.0001
%RSD	157.3	58.94	.3643	122.3	.3462	9.343	26.71	84.95	3.979
#1	.0003	.0021	.9583	-.0002	.2864	.0006	-.0024	.0002	.0030
#2	-.0002	.0067	.9649	-.0001	.2845	.0006	-.0028	.0005	.0033
#3	.0014	.0033	.9596	.0000	.2849	.0007	-.0040	.0001	.0033

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1760.4	3426.3	26467.	5875.7
Stddev	4.9	7.1	70.	52.1
%RSD	.27702	.20815	.26617	.88685
#1	1755.4	3423.1	26515.	5838.1
#2	1760.5	3421.4	26387.	5853.7
#3	1765.2	3434.5	26500.	5935.1

Zoom In Zoom Out

Sample Name: MP33793-MB2 Acquired: 5/25/2018 13:34:11 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.0124	-.0012	-.0001	.0000	.0658	.0000	.0000	-.0001
Stddev	.0001	.0015	.0004	.0001	.000	.0014	.000	.000	.0006
%RSD	21.51	12.19	32.71	175.7	99.99	2.065	139.6	114.5	1052.
#1	.0003	.0111	-.0008	.0001	.0000	.0666	.0000	.0000	.0006
#2	.0005	.0119	-.0012	-.0001	.0000	.0665	-.0001	.0000	-.0003
#3	.0004	.0140	-.0016	-.0001	-.0001	.0642	.0000	.0000	-.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	-.0055	.1718	.0117	.0000	-.0012	F 142.1	.0006	-.0001
Stddev	.0001	.0012	.0093	.0232	.000	.0002	1.1	.0001	.0003
%RSD	36.67	21.99	5.421	199.2	210.7	13.13	.7614	17.08	275.0
#1	.0002	-.0041	.1650	.0345	-.0001	-.0013	141.6	.0007	-.0003
#2	.0002	-.0059	.1824	-.0120	.0000	-.0013	141.3	.0005	-.0003
#3	.0004	-.0064	.1678	.0125	.0000	-.0010	143.3	.0006	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0011	.0034	.0335	-.0003	.0012	-.0007	-.0007	-.0003	.0023
Stddev	.0008	.0028	.0003	.0002	.0001	.0000	.0013	.0002	.0001
%RSD	72.86	81.95	.8895	75.21	5.478	3.600	203.2	70.06	4.850
#1	-.0013	.0061	.0336	.0000	.0013	-.0007	.0002	-.0003	.0021
#2	-.0002	.0006	.0338	-.0005	.0011	-.0007	-.0022	-.0001	.0023
#3	-.0018	.0033	.0332	-.0004	.0012	-.0007	.0000	-.0005	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1793.3	3457.5	26569.	5801.5
Stddev	1.5	11.2	51.	15.5
%RSD	.08254	.32330	.19239	.26727
#1	1794.6	3445.0	26580.	5818.7
#2	1791.7	3461.0	26613.	5788.7
#3	1793.7	3466.5	26513.	5797.1

◀ Zoom In ▶ Zoom Out

Sample Name: MP33793-B2 Acquired: 5/25/2018 13:38:55 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0498	25.99	2.076	1.978	.0518	25.72	.0520	.5122	.2089
Stddev	.0004	.11	.009	.009	.0002	.15	.0001	.0012	.0013
%RSD	.7811	.4147	.4230	.4378	.3128	.5665	.1537	.2383	.6114
#1	.0494	26.07	2.081	1.982	.0517	25.59	.0519	.5117	.2104
#2	.0498	25.86	2.065	1.983	.0520	25.70	.0519	.5114	.2084
#3	.0502	26.03	2.080	1.968	.0519	25.88	.0521	.5136	.2080

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2531	25.82	26.67	23.26	.5291	.4887	F 166.1	.5462	.4918
Stddev	.0002	.15	.11	.27	.0001	.0007	2.4	.0015	.0023
%RSD	.0810	.6000	.4108	1.172	.0230	.1498	1.446	.2829	.4598
#1	.2533	25.65	26.78	22.99	.5292	.4891	163.7	.5471	.4915
#2	.2530	25.85	26.64	23.25	.5289	.4878	168.5	.5445	.4897
#3	.2530	25.95	26.57	23.53	.5290	.4891	166.0	.5472	.4942

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5218	2.058	.1820	.4935	.4772	.5222	1.921	.5087	.5336
Stddev	.0013	.005	.0008	.0014	.0020	.0007	.004	.0013	.0017
%RSD	.2451	.2250	.4282	.2933	.4212	.1318	.2229	.2470	.3263
#1	.5225	2.057	.1819	.4927	.4781	.5226	1.926	.5091	.5323
#2	.5203	2.063	.1813	.4927	.4787	.5214	1.918	.5098	.5330
#3	.5226	2.053	.1829	.4952	.4750	.5225	1.920	.5073	.5356

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1718.0	3437.0	26671.	5866.0
Stddev	5.7	9.0	70.	37.5
%RSD	.33461	.26056	.26341	.63883
#1	1712.1	3428.9	26604.	5908.9
#2	1723.6	3446.6	26744.	5839.8
#3	1718.1	3435.6	26665.	5849.3

◀ Zoom In ▶ Zoom Out

Sample Name: MP33793-MB3 Acquired: 5/25/2018 13:43:18 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0117	-.0011	.0001	.0000	.0387	-.0001	.0000	-.0002
Stddev	.0002	.0009	.0004	.0001	.0001	.0019	.0000	.000	.0002
%RSD	125.8	7.812	38.80	187.9	1542.	5.012	23.61	227.9	66.62
#1	.0004	.0118	-.0014	-.0001	.0000	.0405	-.0001	-.0001	-.0004
#2	-.0001	.0108	-.0006	.0001	.0000	.0366	-.0001	.0000	-.0001
#3	.0003	.0126	-.0013	.0002	.0001	.0389	-.0001	.0000	-.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	-.0020	.2037	.0128	-.0001	-.0012	F 139.3	.0008	-.0008
Stddev	.0003	.0019	.0187	.0292	.0000	.0001	1.4	.0001	.0002
%RSD	336.1	95.72	9.199	227.2	78.85	5.285	.9705	6.730	21.65
#1	-.0003	.0001	.1833	.0420	-.0001	-.0012	137.8	.0007	-.0009
#2	.0003	-.0037	.2078	.0129	-.0001	-.0011	140.2	.0008	-.0006
#3	.0003	-.0023	.2201	-.0164	.0000	-.0012	140.0	.0008	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0004	.0045	.0343	.0001	.0013	-.0006	.0000	-.0003	-.0002
Stddev	.0010	.0017	.0006	.0002	.0000	.0001	.0011	.0002	.0000
%RSD	257.0	38.18	1.843	291.6	2.289	9.429	4122.	68.97	22.81
#1	-.0008	.0062	.0335	-.0001	.0013	-.0005	.0011	-.0003	-.0002
#2	.0008	.0044	.0345	.0001	.0012	-.0006	.0002	-.0001	-.0002
#3	-.0012	.0028	.0347	.0002	.0013	-.0006	-.0012	-.0004	-.0002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1795.6	3464.2	26695.	5882.4
Stddev	6.5	3.5	145.	17.9
%RSD	.36212	.09989	.54198	.30414
#1	1791.7	3460.2	26530.	5896.7
#2	1792.0	3465.6	26760.	5888.2
#3	1803.1	3466.7	26796.	5862.3

◀ Zoom In ▶ Zoom Out

Sample Name: MP33793-B3 Acquired: 5/25/2018 13:48:01 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0498	26.14	2.085	2.001	.0516	25.33	.0519	.5120	.2097
Stddev	.0005	.17	.008	.013	.0004	.11	.0002	.0011	.0027
%RSD	1.093	.6413	.3919	.6549	.7376	.4410	.2958	.2193	1.265
#1	.0492	26.15	2.078	2.003	.0518	25.33	.0521	.5109	.2070
#2	.0501	26.31	2.083	2.014	.0512	25.22	.0518	.5119	.2096
#3	.0502	25.98	2.094	1.988	.0518	25.44	.0518	.5131	.2123

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2534	25.59	26.43	23.10	.5287	.4799	F 163.2	.5452	.4902
Stddev	.0003	.12	.24	.11	.0010	.0007	2.3	.0006	.0019
%RSD	.1077	.4653	.8950	.4669	.1852	.1472	1.439	.1102	.3890
#1	.2534	25.55	26.41	23.05	.5278	.4798	165.0	.5454	.4917
#2	.2532	25.50	26.67	23.04	.5284	.4792	164.1	.5445	.4908
#3	.2537	25.73	26.20	23.23	.5297	.4806	160.5	.5457	.4880

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5224	2.061	.1787	.4860	.4749	.5119	1.921	.5080	.5317
Stddev	.0022	.009	.0009	.0006	.0040	.0023	.013	.0035	.0024
%RSD	.4289	.4273	.4939	.1275	.8400	.4464	.6580	.6832	.4437
#1	.5205	2.051	.1784	.4866	.4747	.5130	1.935	.5042	.5342
#2	.5219	2.069	.1779	.4854	.4789	.5134	1.913	.5089	.5295
#3	.5249	2.062	.1796	.4860	.4710	.5092	1.914	.5110	.5314

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1718.2	3439.2	26762.	5879.8
Stddev	3.4	3.9	47.	27.0
%RSD	.20017	.11445	.17694	.45970
#1	1716.5	3443.7	26792.	5853.8
#2	1715.9	3436.6	26707.	5907.7
#3	1722.2	3437.3	26786.	5877.9

◀ Zoom In ▶ Zoom Out

Sample Name: MP33796-MB1 Acquired: 5/25/2018 13:52:23 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0215	-.0005	.0000	.0000	.0264	-.0001	-.0001	.0006
Stddev	.0001	.0028	.0002	.000	.000	.0027	.0000	.0001	.0006
%RSD	32.43	12.98	30.89	1363.	381.8	10.10	5.102	126.5	89.65
#1	.0002	.0187	-.0005	-.0002	.0000	.0272	-.0001	-.0001	.0001
#2	.0004	.0243	-.0004	.0001	.0000	.0235	-.0001	-.0003	.0012
#3	.0002	.0214	-.0007	.0001	-.0001	.0286	-.0001	.0000	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0185	.0077	.0196	.0003	-.0010	.0261	.0006	-.0008
Stddev	.0002	.0003	.0056	.0152	.0000	.0002	.0038	.0002	.0004
%RSD	56.58	1.599	72.69	77.79	14.25	17.80	14.49	31.15	48.32
#1	-.0003	.0185	.0101	.0371	.0004	-.0008	.0295	.0004	-.0004
#2	-.0003	.0188	.0117	.0129	.0003	-.0011	.0220	.0006	-.0012
#3	-.0007	.0182	.0013	.0089	.0003	-.0012	.0266	.0007	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0012	.0024	.0168	F .0270	.0001	.0003	.0000	.0000	.0016
Stddev	.0008	.0015	.0005	.0002	.0000	.0000	.0004	.000	.0001
%RSD	69.05	63.87	2.782	.7934	69.11	14.86	1117.	539.3	4.743
#1	-.0009	.0036	.0167	.0271	.0001	.0003	-.0003	-.0002	.0016
#2	-.0021	.0028	.0164	.0271	.0001	.0002	.0005	.0000	.0017
#3	-.0005	.0007	.0173	.0267	.0000	.0003	-.0001	.0001	.0015
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Zoom In Zoom Out

Sample Name: MP33796-MB1 Acquired: 5/25/2018 13:52:23 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1954.9**	**3612.1**	**28879.**	**6041.8**
Stddev	8.7	17.0	64.	80.6
%RSD	.44265	.46929	.22273	1.3336
#1	1944.9	3596.3	28864.	5964.2
#2	1959.7	3630.0	28824.	6125.0
#3	1960.0	3610.0	28950.	6036.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 13:56:57 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2426**	**38.58**	**2.075**	**1.967**	**2.029**	**40.39**	**2.094**	**2.053**	**2.051**
Stddev	.0012	.04	.006	.003	.006	.12	.004	.004	.006
%RSD	.5119	.1066	.2964	.1601	.3200	.2971	.1965	.2089	.2788
#1	.2411	38.55	2.080	1.970	2.036	40.52	2.098	2.057	2.045
#2	.2432	38.58	2.068	1.963	2.027	40.35	2.090	2.048	2.056
#3	.2434	38.63	2.077	1.967	2.024	40.29	2.096	2.055	2.051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.980**	**39.45**	**41.59**	**37.45**	**2.095**	**2.061**	**40.96**	**2.127**	**2.025**
Stddev	.008	.16	.28	.23	.006	.002	.25	.004	.004
%RSD	.4021	.4172	.6643	.6055	.2885	.0992	.6156	.1920	.1828
#1	1.988	39.64	41.28	37.67	2.091	2.060	40.69	2.131	2.030
#2	1.972	39.35	41.67	37.48	2.102	2.060	41.01	2.123	2.023
#3	1.981	39.35	41.82	37.21	2.092	2.064	41.19	2.128	2.024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.087**	**2.065**	**2.136**	**2.061**	**1.964**	**2.123**	**2.045**	**2.108**	**2.139**
Stddev	.005	.002	.004	.005	.002	.002	.009	.005	.009
%RSD	.2613	.1011	.2063	.2501	.0808	.0711	.4349	.2413	.4317
#1	2.089	2.067	2.133	2.059	1.966	2.124	2.055	2.102	2.148
#2	2.080	2.063	2.135	2.058	1.964	2.123	2.043	2.110	2.130
#3	2.091	2.066	2.141	2.067	1.963	2.121	2.038	2.112	2.139
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 13:56:57 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1712.4**	**3478.7**	**27388.**	**5907.5**
Stddev	1.2	1.4	78.	1.9
%RSD	.07110	.04069	.28346	.03270
#1	1712.6	3479.2	27459.	5908.6
#2	1711.1	3479.7	27401.	5905.3
#3	1713.5	3477.0	27305.	5908.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 14:01:07 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0094**	**.0007**	**.0000**	**.0001**	**-.0013**	**.0000**	**.0001**	**.0000**
Stddev	.0001	.0020	.0003	.000	.0001	.0003	.0000	.0001	.000
%RSD	67.35	21.22	41.40	187.4	64.52	21.35	110.9	75.77	1454.
#1	.0002	.0116	.0007	.0000	.0001	-.0014	.0000	.0000	.0001
#2	.0002	.0077	.0004	-.0001	.0000	-.0010	.0001	.0002	.0001
#3	.0000	.0090	.0010	-.0001	.0001	-.0016	.0000	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0046**	**-.0192**	**.0064**	**-.0001**	**.0005**	**.0045**	**.0002**	**-.0003**
Stddev	.0003	.0026	.0239	.0235	.0000	.0004	.0048	.0001	.0005
%RSD	82.06	56.62	124.6	370.2	28.56	75.58	105.6	33.18	150.9
#1	.0002	.0063	-.0047	.0126	-.0001	.0009	-.0007	.0002	-.0001
#2	.0001	.0059	-.0061	-.0197	.0000	.0005	.0087	.0001	-.0009
#3	.0006	.0016	-.0468	.0261	-.0001	.0001	.0055	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	F **.0034**	**.0001**	**-.0007**	**.0000**	**.0005**	**.0000**	**-.0002**	**-.0015**
Stddev	.0006	.0010	.0000	.0002	.0000	.0000	.0004	.0000	.0001
%RSD	165.9	31.06	76.66	22.65	123.6	6.162	1387.	11.51	7.292
#1	-.0010	.0041	.0001	-.0006	.0000	.0005	.0001	-.0002	-.0015
#2	-.0004	.0038	.0001	-.0008	.0001	.0005	.0004	-.0002	-.0013
#3	.0002	.0022	.0000	-.0006	.0000	.0005	-.0004	-.0002	-.0015
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 14:01:07 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1940.4**	**3601.9**	**28648.**	**5992.1**
Stddev	4.5	11.8	108.	20.7
%RSD	.23292	.32784	.37581	.34562
#1	1935.2	3588.3	28547.	5981.0
#2	1943.0	3607.7	28636.	6016.0
#3	1943.1	3609.7	28761.	5979.4

Zoom In Zoom Out

Sample Name: MP33796-B1 Acquired: 5/25/2018 14:05:41 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0477**	**25.29**	**1.990**	**1.966**	**.0504**	**24.49**	**.0507**	**.5047**	**.2051**
Stddev	.0000	.06	.006	.009	.0001	.08	.0000	.0013	.0016
%RSD	.0864	.2412	.3148	.4478	.2207	.3427	.0456	.2632	.7826
#1	.0477	25.34	1.997	1.972	.0503	24.40	.0507	.5062	.2037
#2	.0477	25.31	1.984	1.971	.0504	24.51	.0507	.5037	.2069
#3	.0478	25.22	1.990	1.956	.0505	24.57	.0507	.5043	.2048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2467**	**24.89**	**25.77**	**22.11**	**.5192**	**.4771**	**25.47**	**.5373**	**.4747**
Stddev	.0020	.03	.08	.04	.0011	.0007	.16	.0014	.0012
%RSD	.8124	.1080	.3065	.1755	.2030	.1524	.6105	.2519	.2437
#1	.2466	24.87	25.79	22.13	.5180	.4774	25.56	.5388	.4749
#2	.2448	24.92	25.84	22.06	.5200	.4763	25.57	.5366	.4757
#3	.2488	24.88	25.69	22.13	.5196	.4776	25.29	.5363	.4734
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5001**	**1.941**	**.1472**	**.5115**	**.4695**	**.5108**	**1.886**	**.4960**	**.5153**
Stddev	.0019	.011	.0005	.0009	.0021	.0013	.007	.0018	.0007
%RSD	.3894	.5519	.3126	.1832	.4450	.2515	.3923	.3562	.1384
#1	.5010	1.951	.1471	.5126	.4706	.5115	1.880	.4944	.5149
#2	.4979	1.944	.1468	.5108	.4708	.5093	1.894	.4979	.5148
#3	.5014	1.930	.1477	.5113	.4671	.5115	1.885	.4956	.5161
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33796-B1 Acquired: 5/25/2018 14:05:41 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1796.4**	**3509.4**	**27491.**	**5930.0**
Stddev	4.5	19.1	13.	24.7
%RSD	.25174	.54509	.04823	.41676
#1	1793.2	3487.3	27476.	5920.4
#2	1794.5	3520.5	27503.	5911.5
#3	1801.6	3520.4	27493.	5958.0

Zoom In Zoom Out

Sample Name: FA54440-1 Acquired: 5/25/2018 14:09:55 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0026**	**61.84**	**.1390**	**1.039**	**.0062**	**87.76**	**.0064**	**.0561**	**.3085**
Stddev	.0007	.22	.0027	.008	.0001	.47	.0002	.0003	.0038
%RSD	28.44	.3573	1.964	.7700	2.412	.5316	2.655	.5424	1.218
#1	.0029	62.07	.1377	1.048	.0063	88.28	.0062	.0562	.3119
#2	.0031	61.63	.1371	1.036	.0061	87.59	.0065	.0563	.3045
#3	.0018	61.82	.1421	1.032	.0061	87.40	.0065	.0558	.3092

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5935**	**203.3**	**4.049**	**15.51**	**2.400**	**.0094**	**1.188**	**.1831**	**1.460**
Stddev	.0055	1.1	.106	.14	.014	.0007	.026	.0007	.007
%RSD	.9201	.5486	2.614	.8847	.5787	7.612	2.221	.3652	.4827
#1	.5891	204.5	4.155	15.61	2.413	.0102	1.197	.1836	1.467
#2	.5996	203.0	3.944	15.35	2.385	.0092	1.209	.1834	1.460
#3	.5917	202.4	4.047	15.57	2.402	.0088	1.158	.1823	1.453

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0240**	**-.0158**	**2.696**	**.0812**	**.9394**	**1.593**	**.0057**	**.1793**	**2.681**
Stddev	.0086	.0040	.013	.0027	.0041	.006	.0027	.0017	.003
%RSD	35.82	25.21	.4831	3.266	.4331	.3860	48.42	.9302	.0919
#1	.0297	-.0161	2.699	.0783	.9436	1.600	.0055	.1803	2.680
#2	.0281	-.0116	2.682	.0836	.9390	1.590	.0030	.1773	2.680
#3	.0141	-.0196	2.708	.0816	.9355	1.590	.0085	.1801	2.684

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1871.2**	**3655.2**	**29056.**	**6162.1**
Stddev	2.6	12.5	64.	26.0
%RSD	.13736	.34327	.22190	.42273
#1	1872.5	3661.0	29126.	6154.6
#2	1872.9	3663.9	29044.	6191.1
#3	1868.2	3640.8	28998.	6140.6

Zoom In Zoom Out

Sample Name: MP33796-D1 Acquired: 5/25/2018 14:14:20 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0019	59.30	.1696	1.071	.0061	81.03	.0083	.0660	.2692
Stddev	.0018	.34	.0057	.006	.0002	.57	.0003	.0007	.0017
%RSD	99.00	.5706	3.387	.5817	3.088	.6988	3.506	1.135	.6399
#1	.0018	59.67	.1707	1.078	.0059	80.44	.0081	.0659	.2686
#2	.0000	59.24	.1634	1.067	.0061	81.07	.0086	.0653	.2712
#3	.0037	59.00	.1748	1.068	.0062	81.57	.0082	.0668	.2679

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3543	156.0	3.987	17.48	2.385	.0041	1.130	.1286	1.327
Stddev	.0019	.6	.124	.14	.005	.0008	.022	.0004	.006
%RSD	.5259	.3895	3.112	.8230	.1968	19.24	1.944	.2881	.4670
#1	.3523	155.3	4.124	17.32	2.387	.0033	1.153	.1283	1.333
#2	.3559	156.3	3.953	17.54	2.388	.0049	1.109	.1290	1.329
#3	.3548	156.4	3.883	17.59	2.380	.0042	1.127	.1285	1.321

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0098	-.0020	2.264	.0677	.8769	1.547	.0021	.1739	2.130
Stddev	.0035	.0065	.004	.0005	.0042	.002	.0054	.0007	.005
%RSD	35.31	333.5	.1669	.6785	.4817	.1308	259.6	.4149	.2199
#1	.0101	-.0056	2.260	.0675	.8817	1.547	-.0041	.1747	2.125
#2	.0131	-.0058	2.264	.0682	.8746	1.548	.0059	.1736	2.133
#3	.0062	.0056	2.267	.0673	.8743	1.544	.0045	.1734	2.131

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1873.6	3669.2	29037.	6119.3
Stddev	6.7	9.1	101.	26.9
%RSD	.35834	.24890	.34910	.43953
#1	1866.4	3659.0	29024.	6150.3
#2	1874.8	3672.1	28944.	6104.8
#3	1879.7	3676.6	29145.	6102.7

Zoom In Zoom Out

Sample Name: MP33796-SD1 Acquired: 5/25/2018 14:18:44 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0139	58.85	.1579	.9899	.0051	83.77	.0055	.0548	.2934
Stddev	.0045	.70	.0158	.0061	.0010	.40	.0008	.0022	.0029
%RSD	32.25	1.196	9.991	.6173	19.80	.4727	15.17	4.099	.9853
#1	.0182	59.27	.1752	.9968	.0048	83.95	.0050	.0573	.2946
#2	.0093	59.25	.1442	.9879	.0043	84.04	.0050	.0545	.2954
#3	.0143	58.04	.1543	.9851	.0063	83.31	.0064	.0528	.2901

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5747	197.1	2.777	14.62	2.384	-.0178	.6971	.1854	1.395
Stddev	.0138	1.1	.657	.35	.005	.0018	.1347	.0035	.022
%RSD	2.408	.5508	23.67	2.405	.2062	10.16	19.33	1.910	1.603
#1	.5637	197.9	3.067	14.97	2.387	-.0165	.5766	.1893	1.399
#2	.5702	197.5	3.239	14.64	2.379	-.0199	.6721	.1846	1.372
#3	.5903	195.9	2.024	14.26	2.387	-.0171	.8426	.1824	1.416

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0084	-.0127	2.601	.0615	.8989	1.552	.0000	.1730	2.650
Stddev	.0284	.0241	.010	.0046	.0015	.005	.039	.0039	.002
%RSD	338.6	189.0	.3953	7.502	.1675	.3211	99800.	2.237	.0634
#1	-.0057	-.0393	2.611	.0657	.9001	1.557	.0239	.1686	2.650
#2	-.0102	-.0066	2.601	.0622	.8994	1.551	-.0447	.1746	2.649
#3	.0411	.0077	2.591	.0566	.8972	1.547	.0207	.1758	2.652

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1918.5	3588.0	28506.	6041.8
Stddev	3.4	7.2	64.	42.0
%RSD	.17492	.20085	.22560	.69531
#1	1916.9	3591.4	28490.	6007.8
#2	1916.2	3579.8	28577.	6028.7
#3	1922.3	3592.9	28451.	6088.7

Zoom In Zoom Out

Sample Name: MP33796-PS1 Acquired: 5/25/2018 14:23:13 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0492	58.72	.2443	1.204	.0569	85.59	.0598	.1049	.3428
Stddev	.0021	.10	.0026	.005	.0003	.08	.0003	.0009	.0033
%RSD	4.325	.1756	1.082	.4462	.5889	.0981	.4837	.8212	.9605
#1	.0470	58.81	.2437	1.209	.0566	85.51	.0596	.1059	.3426
#2	.0513	58.61	.2420	1.198	.0572	85.68	.0596	.1044	.3462
#3	.0493	58.74	.2472	1.205	.0569	85.58	.0601	.1044	.3396

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6586	191.0	14.11	18.60	2.314	.1020	11.20	.2846	1.431
Stddev	.0015	.1	.02	.08	.008	.0002	.02	.0010	.001
%RSD	.2342	.0784	.1272	.4155	.3333	.1951	.1859	.3526	.0940
#1	.6604	190.8	14.13	18.54	2.322	.1019	11.19	.2843	1.432
#2	.6577	191.1	14.11	18.68	2.312	.1018	11.18	.2838	1.430
#3	.6577	191.0	14.09	18.58	2.307	.1022	11.22	.2858	1.432

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1174	.0834	2.534	.1275	.9032	1.613	.0970	.2212	2.826
Stddev	.0024	.0122	.010	.0019	.0034	.003	.0059	.0010	.001
%RSD	2.035	14.60	.4026	1.495	.3740	.1547	6.110	.4467	.0309
#1	.1152	.0967	2.543	.1288	.9067	1.615	.0925	.2221	2.826
#2	.1199	.0727	2.523	.1253	.9000	1.610	.0947	.2214	2.826
#3	.1169	.0807	2.536	.1283	.9028	1.614	.1037	.2202	2.825

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1880.9	3666.8	29028.	6227.8
Stddev	1.2	7.4	30.	16.3
%RSD	.06254	.20191	.10307	.26183
#1	1879.5	3663.7	28995.	6238.8
#2	1881.6	3675.2	29055.	6235.6
#3	1881.5	3661.5	29033.	6209.1

Zoom In Zoom Out

Sample Name: MP33796-S1 Acquired: 5/25/2018 14:27:35 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0524	100.5	2.242	3.300	.0589	142.6	.0619	.5716	.5166
Stddev	.0011	.4	.018	.012	.0005	.8	.0003	.0030	.0013
%RSD	2.111	.3549	.7853	.3569	.8337	.5323	.5587	.5249	.2469
#1	.0525	100.4	2.248	3.307	.0595	143.1	.0619	.5748	.5174
#2	.0535	100.9	2.256	3.307	.0585	142.9	.0623	.5710	.5151
#3	.0513	100.2	2.222	3.286	.0587	141.7	.0616	.5689	.5173

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.002	218.2	32.18	47.22	2.700	.4616	28.43	.6981	2.017
Stddev	.003	1.4	.11	.26	.005	.0012	.17	.0023	.006
%RSD	.2524	.6292	.3357	.5580	.1704	.2552	.6123	.3325	.2858
#1	1.002	219.4	32.14	47.29	2.704	.4618	28.41	.6989	2.024
#2	1.005	218.6	32.30	47.45	2.701	.4627	28.61	.6999	2.013
#3	.9999	216.7	32.10	46.93	2.695	.4604	28.26	.6954	2.015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1874	2.013	3.294	.5628	1.492	2.296	1.948	.6894	2.707
Stddev	.0020	.008	.012	.0024	.002	.006	.009	.0025	.007
%RSD	1.064	.3974	.3652	.4264	.1641	.2629	.4708	.3694	.2675
#1	.1851	2.013	3.304	.5654	1.493	2.294	1.958	.6896	2.713
#2	.1884	2.022	3.296	.5607	1.493	2.303	1.942	.6918	2.709
#3	.1887	2.006	3.280	.5624	1.489	2.292	1.943	.6867	2.699

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1840.4	3642.5	28859.	6225.6
Stddev	7.6	20.4	11.	24.8
%RSD	.41502	.55951	.03969	.39777
#1	1832.7	3627.4	28867.	6200.6
#2	1840.3	3634.4	28846.	6226.0
#3	1848.0	3665.7	28865.	6250.1

Zoom In Zoom Out

Sample Name: MP33796-S2 Acquired: 5/25/2018 14:31:55 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0539	123.8	2.363	3.572	.0665	111.7	.0677	.6546	.8349
Stddev	.0006	.4	.005	.015	.0003	.5	.0000	.0013	.0018
%RSD	1.022	.2937	.2047	.4282	.4493	.4751	.0443	.2058	.2120
#1	.0533	123.7	2.367	3.579	.0666	112.2	.0676	.6555	.8366
#2	.0541	124.2	2.358	3.582	.0667	111.8	.0676	.6552	.8330
#3	.0543	123.5	2.364	3.554	.0662	111.1	.0677	.6530	.8351

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7601	334.0	32.67	39.08	6.352	.4894	29.13	.8230	2.308
Stddev	.0041	1.2	.25	.33	.028	.0015	.29	.0021	.010
%RSD	.5348	.3656	.7613	.8357	.4413	.2975	1.007	.2602	.4448
#1	.7647	335.1	32.46	39.16	6.353	.4911	28.98	.8251	2.315
#2	.7568	334.2	32.94	39.37	6.379	.4883	29.47	.8229	2.312
#3	.7590	332.7	32.60	38.73	6.323	.4890	28.94	.8209	2.296

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1873	2.082	3.378	.6002	1.456	2.210	2.044	.8501	4.077
Stddev	.0017	.011	.010	.0029	.006	.005	.011	.0026	.017
%RSD	.8829	.5263	.2835	.4752	.4042	.2188	.5156	.3100	.4096
#1	.1862	2.094	3.384	.6034	1.458	2.208	2.053	.8487	4.094
#2	.1892	2.077	3.367	.5980	1.461	2.216	2.047	.8531	4.075
#3	.1864	2.074	3.383	.5991	1.450	2.207	2.033	.8484	4.061

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1831.1	3669.3	29000.	6299.8
Stddev	7.6	9.7	71.	24.4
%RSD	.41442	.26335	.24385	.38656
#1	1822.4	3663.3	29070.	6301.0
#2	1835.1	3680.4	28928.	6274.9
#3	1835.9	3664.1	29001.	6323.6

Zoom In Zoom Out

Sample Name: FA54440-2 Acquired: 5/25/2018 14:36:14 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	246.9	.0400	2.950	.0048	19.50	-.0003	.0146	.2931
Stddev	.0009	.9	.0047	.004	.0001	.02	.0002	.0005	.0022
%RSD	139.1	.3529	11.81	.1290	2.776	.1060	64.36	3.401	.7638
#1	-.0015	246.8	.0425	2.954	.0047	19.51	-.0006	.0149	.2936
#2	-.0006	247.8	.0430	2.947	.0047	19.51	-.0003	.0149	.2907
#3	.0003	246.1	.0346	2.948	.0049	19.47	-.0001	.0140	.2951

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0450	75.76	5.260	5.983	.6019	-.0027	1.144	.0673	.3200
Stddev	.0012	.12	.081	.108	.0026	.0005	.009	.0004	.0028
%RSD	2.594	.1562	1.530	1.808	.4349	17.40	.8285	.5546	.8722
#1	.0437	75.76	5.218	5.904	.6048	-.0026	1.155	.0669	.3180
#2	.0454	75.88	5.209	6.106	.6011	-.0031	1.138	.0674	.3232
#3	.0460	75.65	5.353	5.938	.5998	-.0022	1.139	.0676	.3189

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0061	.0056	2.850	.0297	2.368	1.044	-.0090	.2603	.2969
Stddev	.0040	.0041	.014	.0009	.001	.002	.0051	.0018	.0012
%RSD	64.49	72.78	.5055	3.067	.0602	.2166	56.80	.7048	.4183
#1	-.0106	.0039	2.866	.0303	2.369	1.046	-.0145	.2620	.2982
#2	-.0032	.0027	2.842	.0286	2.369	1.045	-.0044	.2604	.2957
#3	-.0046	.0103	2.841	.0300	2.367	1.042	-.0081	.2584	.2969

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1868.7	4143.5	32605.	6972.9
Stddev	6.5	6.0	48.	21.0
%RSD	.34536	.14452	.14794	.30175
#1	1861.9	4136.6	32557.	6996.8
#2	1869.3	4147.1	32602.	6964.3
#3	1874.7	4146.8	32654.	6957.5

Zoom In Zoom Out

Sample Name: FA54440-3 Acquired: 5/25/2018 14:40:41 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0014	311.1	.0493	4.094	.0075	13.86	-.0011	.0115	.4623
Stddev	.0008	2.8	.0024	.029	.0001	.10	.0002	.0004	.0064
%RSD	61.58	.9135	4.963	.7192	1.164	.6895	16.84	3.770	1.379
#1	-.0010	314.1	.0507	4.122	.0074	13.77	-.0009	.0118	.4687
#2	-.0023	310.8	.0464	4.095	.0076	13.96	-.0013	.0118	.4623
#3	-.0008	308.4	.0506	4.064	.0075	13.85	-.0011	.0110	.4559

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0197	173.7	6.853	7.256	.1383	-.0021	1.137	.0741	.4432
Stddev	.0005	.4	.053	.142	.0031	.0004	.028	.0004	.0043
%RSD	2.454	.2566	.7678	1.951	2.207	17.29	2.483	.4769	.9732
#1	.0195	173.6	6.913	7.114	.1417	-.0017	1.162	.0744	.4465
#2	.0203	174.1	6.815	7.257	.1372	-.0023	1.144	.0737	.4448
#3	.0194	173.2	6.831	7.397	.1359	-.0023	1.106	.0741	.4383

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0022	-.0059	3.129	.0301	3.293	1.243	-.0087	.4686	.1281
Stddev	.0018	.0177	.009	.0014	.018	.002	.0051	.0022	.0001
%RSD	80.38	300.9	.2828	4.507	.5526	.1683	59.16	.4714	.0524
#1	-.0040	-.0151	3.134	.0313	3.313	1.244	-.0146	.4701	.1280
#2	-.0004	-.0171	3.118	.0303	3.289	1.243	-.0052	.4696	.1281
#3	-.0022	.0145	3.134	.0286	3.277	1.240	-.0063	.4660	.1280

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1855.3	4466.3	34986.	7587.3
Stddev	1.8	11.3	84.	49.0
%RSD	.09482	.25411	.24009	.64564
#1	1855.0	4456.2	34905.	7638.5
#2	1853.7	4478.6	35072.	7540.8
#3	1857.2	4464.0	34981.	7582.6

Zoom In Zoom Out

Sample Name: FA54440-4 Acquired: 5/25/2018 14:45:07 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	276.4	.0468	4.325	.0069	12.35	-.0004	.0100	.4056
Stddev	.0001	.6	.0048	.007	.0003	.09	.0001	.0004	.0007
%RSD	156.4	.2214	10.29	.1550	4.805	.7234	33.78	3.650	.1717
#1	-.0002	276.8	.0496	4.319	.0069	12.43	-.0004	.0096	.4051
#2	-.0001	276.8	.0494	4.332	.0073	12.35	-.0005	.0103	.4054
#3	.0001	275.7	.0412	4.322	.0066	12.25	-.0003	.0102	.4064

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0162	88.78	6.956	8.089	.1065	-.0031	.7869	.0665	.4503
Stddev	.0011	.29	.033	.094	.0004	.0009	.0286	.0004	.0039
%RSD	6.579	.3271	.4689	1.164	.3666	27.66	3.629	.6201	.8594
#1	.0174	89.09	6.973	8.105	.1068	-.0031	.7539	.0665	.4532
#2	.0162	88.74	6.918	7.988	.1066	-.0023	.8042	.0668	.4519
#3	.0152	88.52	6.975	8.175	.1061	-.0040	.8026	.0660	.4459

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0113	-.0018	3.198	.0256	3.379	1.276	-.0126	.3092	.1284
Stddev	.0036	.0168	.012	.0021	.005	.003	.0045	.0011	.0007
%RSD	31.61	925.4	.3628	8.193	.1613	.2035	35.59	.3443	.5354
#1	-.0152	-.0204	3.211	.0280	3.383	1.276	-.0178	.3090	.1292
#2	-.0105	.0029	3.197	.0241	3.381	1.274	-.0108	.3103	.1281
#3	-.0082	.0121	3.187	.0248	3.373	1.279	-.0094	.3082	.1280

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1860.6	4535.1	35564.	7701.6
Stddev	5.6	12.2	30.	68.0
%RSD	.30208	.26978	.08372	.88240
#1	1866.1	4525.4	35559.	7623.5
#2	1854.9	4531.0	35596.	7733.4
#3	1860.9	4548.8	35537.	7747.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 14:49:35 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2443	38.46	2.129	1.974	2.038	40.41	2.133	2.080	2.080
Stddev	.0011	.16	.005	.009	.004	.10	.004	.002	.012
%RSD	.4515	.4091	.2166	.4545	.2159	.2483	.1717	.0848	.5519
#1	.2430	38.53	2.128	1.973	2.037	40.42	2.131	2.079	2.086
#2	.2448	38.28	2.125	1.966	2.034	40.31	2.131	2.079	2.087
#3	.2451	38.57	2.134	1.984	2.043	40.51	2.137	2.082	2.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.976	39.28	42.27	36.62	2.135	2.084	41.64	2.179	2.042
Stddev	.008	.15	.11	.18	.012	.001	.16	.004	.005
%RSD	.4085	.3860	.2605	.4945	.5575	.0535	.3730	.1927	.2347
#1	1.979	39.14	42.36	36.69	2.138	2.085	41.67	2.176	2.042
#2	1.967	39.24	42.15	36.42	2.145	2.084	41.48	2.176	2.038
#3	1.983	39.44	42.29	36.77	2.122	2.083	41.78	2.183	2.047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.136	2.106	2.191	2.077	1.960	2.160	2.069	2.154	2.185
Stddev	.002	.006	.006	.003	.008	.004	.002	.013	.006
%RSD	.0746	.2738	.2871	.1391	.4182	.1889	.0845	.6159	.2908
#1	2.136	2.099	2.195	2.080	1.962	2.162	2.067	2.159	2.179
#2	2.138	2.111	2.193	2.078	1.951	2.163	2.070	2.163	2.185
#3	2.135	2.107	2.183	2.074	1.966	2.156	2.068	2.138	2.192
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 14:49:35 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1685.4	3386.0	26766.	5873.2
Stddev	3.0	3.1	116.	41.1
%RSD	.17966	.09246	.43205	.70060
#1	1681.9	3383.1	26691.	5860.5
#2	1686.7	3389.3	26707.	5919.2
#3	1687.5	3385.5	26899.	5839.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 14:53:45 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0084	.0007	.0000	.0001	.0002	.0001	.0001	.0000
Stddev	.0004	.0030	.0011	.000	.0001	.0008	.0001	.0001	.000
%RSD	105.2	35.86	154.8	217.6	65.23	383.3	81.03	123.3	658.1
#1	.0000	.0054	.0020	-.0001	.0002	-.0006	.0000	.0001	.0000
#2	.0008	.0114	.0002	.0001	.0001	.0009	.0001	.0001	-.0004
#3	.0004	.0083	.0000	-.0001	.0000	.0003	.0001	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0054	-.0226	.0094	-.0001	.0004	-.0065	.0003	-.0004
Stddev	.0000	.0006	.0226	.0274	.0000	.0004	.0020	.0001	.0005
%RSD	4.391	10.29	99.84	292.4	42.88	108.6	31.07	15.44	109.8
#1	.0006	.0059	-.0018	.0034	-.0001	.0009	-.0045	.0003	-.0009
#2	.0006	.0048	-.0194	.0393	-.0001	.0002	-.0085	.0003	-.0005
#3	.0005	.0055	-.0467	-.0146	-.0001	.0001	-.0065	.0004	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0017	F .0045	.0012	-.0006	.0000	.0002	.0009	.0002	-.0014
Stddev	.0014	.0012	.0002	.0002	.0001	.0001	.0002	.0002	.0000
%RSD	83.23	27.66	16.29	24.66	194.0	43.77	22.89	80.24	.8516
#1	-.0033	.0033	.0014	-.0005	.0001	.0002	.0010	.0004	-.0014
#2	-.0008	.0044	.0010	-.0007	.0001	.0001	.0010	.0001	-.0014
#3	-.0010	.0058	.0012	-.0007	.0000	.0001	.0006	.0001	-.0014
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 14:53:45 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1935.6	3557.5	28366.	5934.4
Stddev	1.4	4.0	53.	23.5
%RSD	.07095	.11197	.18588	.39609
#1	1935.7	3558.3	28309.	5944.5
#2	1936.9	3561.0	28375.	5907.5
#3	1934.1	3553.2	28413.	5951.2

Zoom In Zoom Out

Sample Name: FA54440-5 Acquired: 5/25/2018 14:58:18 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0004**	**264.2**	**.0407**	**4.262**	**.0060**	**10.03**	**-.0001**	**.0091**	**.3557**
Stddev	.0005	2.2	.0021	.042	.0001	.03	.0002	.0004	.0025
%RSD	140.8	.8261	5.073	.9848	1.044	.3109	154.4	4.002	.6910
#1	.0001	266.3	.0426	4.299	.0060	10.06	-.0004	.0092	.3578
#2	.0010	264.5	.0408	4.271	.0061	10.00	.0000	.0087	.3564
#3	.0001	261.9	.0385	4.217	.0061	10.02	-.0001	.0093	.3530

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0161**	**48.06**	**8.474**	**8.908**	**.0941**	**-.0036**	**.6706**	**.0634**	**.4305**
Stddev	.0010	.22	.149	.052	.0006	.0009	.0303	.0006	.0016
%RSD	5.978	.4497	1.761	.5878	.6526	25.41	4.525	1.015	.3609
#1	.0163	48.24	8.468	8.968	.0941	-.0042	.6672	.0630	.4291
#2	.0150	48.11	8.626	8.886	.0947	-.0025	.7024	.0642	.4322
#3	.0169	47.82	8.328	8.870	.0935	-.0041	.6420	.0631	.4302

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0075**	**.0037**	**3.112**	**.0275**	**3.307**	**1.364**	**-.0078**	**.1961**	**.1211**
Stddev	.0054	.0015	.013	.0005	.028	.002	.0068	.0009	.0006
%RSD	71.76	40.56	.4291	1.988	.8415	.1476	86.76	.4714	.5220
#1	-.0106	.0054	3.127	.0270	3.333	1.362	-.0156	.1965	.1214
#2	-.0013	.0031	3.108	.0275	3.311	1.366	-.0041	.1968	.1215
#3	-.0108	.0025	3.101	.0281	3.277	1.363	-.0037	.1951	.1203

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1862.2**	**4439.4**	**34933.**	**7578.1**
Stddev	2.9	6.7	111.	23.8
%RSD	.15669	.14999	.31634	.31361
#1	1863.1	4444.5	34998.	7605.4
#2	1858.9	4431.8	34806.	7562.5
#3	1864.5	4441.9	34997.	7566.3

Zoom In Zoom Out

Sample Name: FA54440-6 Acquired: 5/25/2018 15:02:48 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**44.58**	**.1933**	**.6219**	**.0039**	**189.5**	**.0030**	**.0374**	**.2430**
Stddev	.0010	.22	.0027	.0036	.0001	.1	.0002	.0004	.0015
%RSD	593.4	.4863	1.422	.5794	2.458	.0785	6.227	1.052	.5975
#1	.0001	44.82	.1964	.6258	.0038	189.5	.0031	.0372	.2431
#2	-.0012	44.49	.1912	.6187	.0039	189.6	.0032	.0379	.2415
#3	.0006	44.41	.1923	.6211	.0040	189.3	.0028	.0372	.2444

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2499**	**181.7**	**3.712**	**76.75**	**1.876**	**.0140**	**2.049**	**.1177**	**.5129**
Stddev	.0043	.6	.087	.31	.008	.0006	.017	.0004	.0035
%RSD	1.723	.3350	2.345	.4058	.4123	4.346	.8499	.3427	.6874
#1	.2548	182.4	3.811	76.63	1.881	.0139	2.067	.1181	.5152
#2	.2480	181.3	3.647	77.10	1.868	.0135	2.049	.1173	.5089
#3	.2469	181.4	3.679	76.52	1.881	.0147	2.032	.1178	.5147

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0056**	**-.0184**	**2.648**	**.0518**	**.3819**	**2.206**	**.0028**	**.2181**	**.8555**
Stddev	.0042	.0045	.008	.0017	.0025	.012	.0013	.0016	.0042
%RSD	75.44	24.42	.3191	3.278	.6453	.5444	48.65	.7204	.4927
#1	.0049	-.0220	2.657	.0527	.3841	2.219	.0019	.2191	.8603
#2	.0018	-.0134	2.640	.0528	.3823	2.195	.0021	.2163	.8526
#3	.0101	-.0199	2.646	.0498	.3792	2.206	.0043	.2189	.8535

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1831.5**	**3557.4**	**28125.**	**6143.9**
Stddev	2.1	6.8	32.	15.4
%RSD	.11248	.19125	.11481	.25108
#1	1829.2	3550.6	28088.	6148.6
#2	1832.4	3564.2	28147.	6126.6
#3	1833.0	3557.4	28139.	6156.3

Zoom In Zoom Out

Sample Name: FA54440-7 Acquired: 5/25/2018 15:07:14 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**115.3**	**.0241**	**1.019**	**.0035**	**12.39**	**-.0002**	**.0121**	**.1179**
Stddev	.0011	.5	.0035	.001	.0000	.02	.0002	.0003	.0015
%RSD	414.7	.4204	14.37	.1077	.4675	.1990	135.7	2.350	1.309
#1	-.0004	115.5	.0278	1.019	.0035	12.38	-.0002	.0118	.1170
#2	-.0003	114.7	.0235	1.017	.0035	12.42	-.0004	.0121	.1171
#3	.0016	115.7	.0209	1.019	.0036	12.39	.0001	.0123	.1197

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0579**	**61.21**	**1.536**	**5.828**	**.3888**	**-.0041**	**.4854**	**.0570**	**.2175**
Stddev	.0002	.08	.072	.044	.0007	.0005	.0233	.0002	.0060
%RSD	.3197	.1275	4.705	.7559	.1909	12.03	4.797	.4056	2.774
#1	.0579	61.12	1.501	5.796	.3895	-.0042	.4615	.0568	.2188
#2	.0578	61.25	1.487	5.878	.3880	-.0046	.4867	.0570	.2227
#3	.0581	61.25	1.619	5.811	.3888	-.0036	.5080	.0573	.2109

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0056**	**.0068**	**2.225**	**.0299**	**.4614**	**.7300**	**-.0089**	**.1169**	**.2608**
Stddev	.0007	.0040	.009	.0018	.0014	.0010	.0024	.0007	.0002
%RSD	12.37	58.54	.4156	5.969	.3053	.1433	26.46	.6071	.0688
#1	-.0063	.0109	2.236	.0319	.4599	.7312	-.0062	.1161	.2608
#2	-.0049	.0064	2.220	.0284	.4626	.7294	-.0103	.1173	.2607
#3	-.0055	.0030	2.219	.0294	.4618	.7293	-.0102	.1173	.2610

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1902.1**	**3880.0**	**30598.**	**6496.1**
Stddev	1.3	14.4	27.	15.4
%RSD	.07000	.37207	.08854	.23748
#1	1900.6	3863.5	30586.	6513.1
#2	1902.7	3890.3	30579.	6492.2
#3	1903.0	3886.1	30629.	6482.9

Zoom In Zoom Out

Sample Name: FA54440-8 Acquired: 5/25/2018 15:11:42 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**187.2**	**.0296**	**1.750**	**.0051**	**8.024**	**-.0006**	**.0160**	**.2012**
Stddev	.0014	.7	.0046	.008	.0002	.003	.0002	.0004	.0021
%RSD	719.5	.3895	15.70	.4403	3.721	.0426	32.79	2.465	1.039
#1	.0008	186.8	.0242	1.744	.0051	8.024	-.0006	.0157	.2013
#2	.0012	186.7	.0323	1.747	.0049	8.021	-.0004	.0164	.1990
#3	-.0014	188.0	.0322	1.758	.0052	8.028	-.0008	.0158	.2032

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0348**	**110.9**	**3.174**	**4.196**	**.3156**	**-.0044**	**.4383**	**.0699**	**.1636**
Stddev	.0009	.2	.036	.134	.0008	.0008	.0208	.0010	.0051
%RSD	2.445	.2088	1.144	3.195	.2578	17.10	4.737	1.416	3.112
#1	.0358	110.6	3.139	4.284	.3150	-.0036	.4417	.0702	.1695
#2	.0343	111.0	3.211	4.262	.3153	-.0051	.4161	.0688	.1609
#3	.0342	111.0	3.171	4.042	.3166	-.0046	.4573	.0707	.1605

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0043**	**.0039**	**3.324**	**.0283**	**1.213**	**1.161**	**-.0053**	**.2523**	**.1158**
Stddev	.0023	.0021	.007	.0011	.002	.004	.0054	.0007	.0006
%RSD	53.51	53.65	.2034	4.049	.1602	.3325	101.3	.2749	.5069
#1	-.0062	.0062	3.316	.0281	1.212	1.165	-.0031	.2519	.1161
#2	-.0017	.0034	3.330	.0295	1.211	1.158	-.0114	.2519	.1152
#3	-.0051	.0021	3.326	.0273	1.215	1.159	-.0014	.2531	.1163

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1885.4**	**3950.8**	**31053.**	**6633.8**
Stddev	6.8	6.6	67.	22.4
%RSD	.35971	.16807	.21646	.33763
#1	1878.3	3946.0	30976.	6624.9
#2	1891.9	3958.3	31085.	6617.2
#3	1885.9	3948.0	31098.	6659.2

◀ Zoom In ▶
Zoom Out

Sample Name: FA54440-11 Acquired: 5/25/2018 15:16:11 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**155.4**	**.0713**	**1.610**	**.0051**	**112.9**	**.0005**	**.0242**	**.2682**
Stddev	.0012	.2	.0034	.007	.0001	.8	.0002	.0005	.0031
%RSD	734.0	.1008	4.835	.4682	2.279	.6885	32.25	2.087	1.138
#1	-.0016	155.6	.0673	1.615	.0050	112.7	.0007	.0237	.2715
#2	.0002	155.4	.0735	1.602	.0052	113.8	.0004	.0242	.2676
#3	.0008	155.3	.0730	1.614	.0052	112.3	.0005	.0247	.2654

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1464**	**139.6**	**4.284**	**15.08**	**1.414**	**.0040**	**1.236**	**.0815**	**.3581**
Stddev	.0023	.1	.135	.33	.001	.0007	.013	.0004	.0029
%RSD	1.589	.0799	3.160	2.220	.0447	18.29	1.065	.4536	.7972
#1	.1479	139.6	4.427	14.77	1.413	.0032	1.250	.0819	.3599
#2	.1477	139.8	4.265	15.43	1.414	.0047	1.235	.0812	.3548
#3	.1438	139.5	4.158	15.05	1.415	.0040	1.224	.0813	.3596

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0005**	**.0030**	**3.614**	**.0362**	**1.277**	**1.179**	**.0034**	**.2650**	**.7199**
Stddev	.0033	.0034	.023	.0016	.003	.006	.0013	.0003	.0040
%RSD	631.4	112.4	.6395	4.363	.2390	.4876	39.19	.1058	.5549
#1	-.0003	.0005	3.640	.0345	1.280	1.182	.0046	.2653	.7246
#2	-.0039	.0017	3.607	.0375	1.274	1.183	.0035	.2648	.7175
#3	.0026	.0068	3.595	.0367	1.277	1.173	.0020	.2648	.7177

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1847.5**	**3802.2**	**29913.**	**6426.8**
Stddev	3.1	3.6	89.	38.7
%RSD	.16700	.09590	.29732	.60256
#1	1845.5	3799.6	29977.	6467.0
#2	1846.0	3800.6	29951.	6389.7
#3	1851.1	3806.4	29811.	6423.6

◀ Zoom In ▶
Zoom Out

Sample Name: FA54440-12 Acquired: 5/25/2018 15:20:39 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0006**	**119.6**	**.0198**	**.9497**	**.0034**	**12.21**	**-.0002**	**.0127**	**.1044**
Stddev	.0008	1.3	.0003	.0096	.0002	.03	.0002	.0005	.0002
%RSD	129.9	1.068	1.742	1.007	5.041	.2822	92.98	4.242	.1585
#1	-.0003	120.6	.0200	.9556	.0033	12.24	-.0003	.0130	.1045
#2	.0008	120.0	.0201	.9548	.0033	12.18	.0000	.0121	.1046
#3	.0012	118.2	.0194	.9386	.0036	12.22	-.0004	.0131	.1042

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0439**	**49.86**	**1.832**	**3.602**	**.5442**	**-.0048**	**.7715**	**.0570**	**.1381**
Stddev	.0012	.39	.034	.025	.0015	.0005	.0207	.0002	.0024
%RSD	2.625	.7773	1.841	.6930	.2807	9.853	2.683	.3323	1.702
#1	.0428	50.29	1.817	3.574	.5441	-.0047	.7944	.0569	.1355
#2	.0451	49.53	1.807	3.622	.5457	-.0045	.7541	.0573	.1401
#3	.0439	49.77	1.870	3.611	.5427	-.0054	.7661	.0569	.1387

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0064**	**.0028**	**2.443**	**.0275**	**.4961**	**.7221**	**-.0003**	**.1145**	**.1731**
Stddev	.0058	.0027	.013	.0019	.0027	.0021	.0034	.0010	.0003
%RSD	90.45	96.73	.5249	7.043	.5494	.2933	1317.	.8736	.1640
#1	-.0073	.0010	2.456	.0254	.4962	.7239	.0023	.1156	.1734
#2	-.0116	.0015	2.430	.0278	.4987	.7226	-.0041	.1142	.1732
#3	-.0002	.0058	2.445	.0292	.4933	.7198	.0010	.1136	.1728

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1903.0**	**3911.9**	**30930.**	**6558.0**
Stddev	5.6	2.8	77.	58.9
%RSD	.29505	.07266	.24905	.89740
#1	1901.0	3912.9	30844.	6544.9
#2	1898.7	3908.7	30955.	6622.3
#3	1909.4	3914.1	30992.	6506.8

◀ Zoom In ▶
Zoom Out

Sample Name: FA54440-13 Acquired: 5/25/2018 15:25:07 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0005**	**243.5**	**.0394**	**1.835**	**.0055**	**12.88**	**-.0014**	**.0150**	**.2134**
Stddev	.0021	1.4	.0022	.014	.0000	.09	.0002	.0003	.0005
%RSD	431.5	.5852	5.471	.7336	.8768	.6686	18.33	2.132	.2152
#1	-.0017	244.8	.0411	1.848	.0055	12.96	-.0011	.0153	.2139
#2	.0024	243.6	.0400	1.835	.0054	12.79	-.0016	.0147	.2131
#3	.0007	242.0	.0370	1.821	.0055	12.89	-.0013	.0150	.2132

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0359**	**131.4**	**4.353**	**5.466**	**.3202**	**-.0028**	**.7578**	**.0833**	**.1902**
Stddev	.0014	.5	.085	.043	.0013	.0001	.0346	.0014	.0043
%RSD	3.932	.3515	1.945	.7946	.3941	4.541	4.568	1.656	2.241
#1	.0366	131.9	4.262	5.511	.3201	-.0028	.7834	.0843	.1949
#2	.0367	131.2	4.367	5.462	.3190	-.0029	.7716	.0817	.1892
#3	.0342	131.1	4.430	5.425	.3215	-.0027	.7184	.0839	.1866

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0103**	**-.0089**	**3.440**	**.0297**	**1.494**	**1.110**	**-.0088**	**.2980**	**.1186**
Stddev	.0025	.0096	.014	.0013	.012	.009	.0010	.0002	.0007
%RSD	24.20	108.5	.3920	4.486	.7663	.7699	11.79	.0623	.6262
#1	-.0118	-.0200	3.452	.0312	1.507	1.118	-.0077	.2982	.1183
#2	-.0116	-.0030	3.426	.0292	1.492	1.101	-.0091	.2980	.1194
#3	-.0074	-.0036	3.442	.0287	1.484	1.110	-.0097	.2978	.1180

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1876.1**	**3963.1**	**31026.**	**6586.0**
Stddev	8.5	10.5	83.	36.5
%RSD	.45562	.26616	.26902	.55396
#1	1866.7	3951.0	31028.	6553.0
#2	1883.5	3968.2	31108.	6625.2
#3	1878.2	3970.1	30941.	6579.7

◀ Zoom In ▶
Zoom Out

Sample Name: FA54440-14 Acquired: 5/25/2018 15:29:35 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0011**	**156.9**	**.0333**	**2.026**	**.0028**	**7.257**	**-.0010**	**.0041**	**.2567**
Stddev	.0009	.7	.0007	.005	.0002	.048	.0002	.0003	.0027
%RSD	84.66	.4150	2.004	.2671	5.513	.6647	22.25	7.244	1.063
#1	-.0013	157.0	.0330	2.024	.0030	7.262	-.0010	.0044	.2598
#2	-.0001	157.4	.0328	2.032	.0027	7.302	-.0008	.0038	.2553
#3	-.0018	156.2	.0341	2.021	.0027	7.206	-.0012	.0043	.2549

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0143**	**93.26**	**2.008**	**2.623**	**.0641**	**-.0038**	**.4865**	**.0354**	**.2072**
Stddev	.0006	.60	.171	.046	.0008	.0004	.0086	.0010	.0023
%RSD	4.128	.6473	8.524	1.767	1.186	9.718	1.762	2.718	1.115
#1	.0141	93.77	2.046	2.578	.0649	-.0038	.4788	.0350	.2079
#2	.0150	93.42	2.157	2.671	.0641	-.0042	.4957	.0365	.2091
#3	.0138	92.59	1.821	2.621	.0634	-.0034	.4848	.0347	.2047

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0097**	**-.0042**	**2.804**	**.0281**	**1.730**	**.7961**	**-.0076**	**.2202**	**.0579**
Stddev	.0016	.0014	.011	.0006	.008	.0026	.0010	.0029	.0010
%RSD	16.12	32.17	.4044	2.225	.4674	.3320	12.61	1.334	1.762
#1	-.0104	-.0057	2.817	.0279	1.730	.7983	-.0069	.2231	.0579
#2	-.0079	-.0032	2.796	.0288	1.739	.7968	-.0072	.2201	.0570
#3	-.0107	-.0037	2.799	.0277	1.723	.7931	-.0087	.2173	.0590

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1897.3**	**4033.4**	**31673.**	**6686.3**
Stddev	4.7	3.2	199.	41.8
%RSD	.24764	.08044	.62703	.62447
#1	1902.6	4030.3	31503.	6649.8
#2	1893.7	4033.0	31627.	6677.4
#3	1895.6	4036.8	31891.	6731.8

◀ Zoom In ▶
Zoom Out

Sample Name: FA54440-15 Acquired: 5/25/2018 15:34:05 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0011**	**232.3**	**.0575**	**3.769**	**.0054**	**10.00**	**-.0015**	**.0033**	**.4569**
Stddev	.0013	.6	.0038	.006	.0002	.07	.0003	.0003	.0029
%RSD	121.7	.2615	6.679	.1660	3.428	.6531	21.37	8.043	.6328
#1	.0004	232.9	.0602	3.773	.0056	10.07	-.0018	.0030	.4595
#2	-.0014	232.3	.0531	3.772	.0054	10.00	-.0016	.0034	.4575
#3	-.0021	231.6	.0593	3.762	.0052	9.935	-.0012	.0035	.4538

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0171**	**204.1**	**2.393**	**3.275**	**.0744**	**-.0006**	**.3729**	**.0334**	**.4140**
Stddev	.0008	.7	.065	.056	.0003	.0004	.0112	.0006	.0025
%RSD	4.955	.3542	2.722	1.697	.4543	63.49	3.008	1.685	.5985
#1	.0178	204.5	2.407	3.339	.0748	-.0002	.3625	.0338	.4150
#2	.0162	204.5	2.449	3.237	.0741	-.0009	.3715	.0337	.4112
#3	.0174	203.2	2.322	3.249	.0744	-.0007	.3848	.0328	.4158

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0059**	**-.0152**	**2.225**	**.0304**	**3.529**	**.6466**	**-.0119**	**.5370**	**.0427**
Stddev	.0029	.0065	.005	.0015	.004	.0021	.0041	.0006	.0001
%RSD	49.09	42.70	.2113	4.921	.1269	.3211	34.78	.1136	.1651
#1	-.0034	-.0166	2.223	.0304	3.535	.6483	-.0155	.5377	.0427
#2	-.0053	-.0208	2.230	.0289	3.527	.6443	-.0074	.5366	.0428
#3	-.0091	-.0081	2.221	.0319	3.526	.6472	-.0127	.5368	.0426

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1874.9**	**4541.2**	**35497.**	**7572.9**
Stddev	5.6	9.7	80.	3.8
%RSD	.29678	.21362	.22422	.05067
#1	1872.9	4552.4	35449.	7568.5
#2	1870.6	4536.7	35453.	7575.5
#3	1881.2	4534.7	35589.	7574.7

◀ Zoom In ▶
Zoom Out

Sample Name: FA54440-17 Acquired: 5/25/2018 15:38:34 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0016**	**89.77**	**.0508**	**1.973**	**.0048**	**72.06**	**.0012**	**.0300**	**.1577**
Stddev	.0012	.30	.0039	.004	.0000	.79	.0003	.0004	.0030
%RSD	75.63	.3386	7.752	.2104	.6560	1.096	26.17	1.226	1.892
#1	.0009	90.06	.0484	1.970	.0048	72.57	.0009	.0298	.1574
#2	.0029	89.46	.0486	1.978	.0049	71.15	.0011	.0297	.1549
#3	.0009	89.80	.0553	1.972	.0048	72.46	.0015	.0304	.1608

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1989**	**116.0**	**2.412**	**5.552**	**1.702**	**.0032**	**1.026**	**.0896**	**.2371**
Stddev	.0012	.6	.011	.160	.005	.0002	.011	.0005	.0031
%RSD	.5939	.4807	.4520	2.882	.2684	7.778	1.085	.5405	1.320
#1	.2000	116.4	2.418	5.645	1.707	.0029	1.027	.0897	.2402
#2	.1991	115.3	2.399	5.367	1.699	.0034	1.036	.0891	.2340
#3	.1976	116.1	2.418	5.643	1.700	.0032	1.014	.0900	.2370

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0016**	**-.0060**	**3.033**	**.0339**	**.8874**	**1.250**	**-.0006**	**.1345**	**.2165**
Stddev	.0025	.0030	.006	.0023	.0032	.009	.0033	.0018	.0009
%RSD	155.0	49.17	.1875	6.880	.3646	.7517	595.2	1.316	.4094
#1	-.0003	-.0086	3.035	.0346	.8904	1.259	.0000	.1327	.2175
#2	.0006	-.0028	3.026	.0358	.8880	1.251	.0024	.1363	.2158
#3	.0045	-.0066	3.036	.0313	.8840	1.241	-.0041	.1344	.2162

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1891.7**	**3775.1**	**29876.**	**6290.3**
Stddev	3.5	.4	85.	87.6
%RSD	.18552	.01004	.28367	1.3922
#1	1895.1	3775.5	29778.	6243.0
#2	1888.1	3774.8	29917.	6391.4
#3	1892.1	3775.1	29932.	6236.6

◀ Zoom In ▶
Zoom Out

Sample Name: CCV Acquired: 5/25/2018 15:42:59 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2432**	**38.46**	**2.101**	**1.962**	**2.025**	**40.31**	**2.114**	**2.065**	**2.060**
Stddev	.0010	.08	.004	.009	.004	.13	.005	.006	.009
%RSD	.4098	.1972	.2038	.4466	.2105	.3218	.2280	.3099	.4555
#1	.2422	38.48	2.098	1.964	2.030	40.29	2.111	2.061	2.067
#2	.2442	38.53	2.106	1.969	2.024	40.19	2.119	2.072	2.063
#3	.2433	38.38	2.100	1.952	2.022	40.45	2.112	2.061	2.049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.970**	**39.09**	**42.06**	**36.92**	**2.116**	**2.071**	**41.49**	**2.153**	**2.035**
Stddev	.003	.08	.15	.34	.006	.004	.15	.004	.005
%RSD	.1476	.2082	.3508	.9235	.2709	.2183	.3575	.2033	.2557
#1	1.966	39.09	42.13	36.82	2.121	2.067	41.66	2.151	2.038
#2	1.970	39.01	41.89	36.63	2.118	2.076	41.39	2.158	2.030
#3	1.972	39.17	42.15	37.30	2.110	2.070	41.41	2.149	2.039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.099**	**2.084**	**2.155**	**2.068**	**1.953**	**2.140**	**2.054**	**2.123**	**2.168**
Stddev	.003	.006	.012	.002	.006	.002	.004	.006	.009
%RSD	.1186	.2901	.5358	.0878	.2857	.0950	.1939	.2799	.3959
#1	2.102	2.077	2.151	2.068	1.955	2.140	2.057	2.124	2.161
#2	2.098	2.086	2.169	2.071	1.958	2.142	2.049	2.129	2.178
#3	2.098	2.088	2.147	2.067	1.947	2.138	2.055	2.117	2.166
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

◀ Zoom In ▶
Zoom Out

Sample Name: CCV Acquired: 5/25/2018 15:42:59 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1698.9**	**3432.7**	**27026.**	**5818.9**
Stddev	.7	11.4	86.	31.9
%RSD	.03965	.33323	.31709	.54900
#1	1698.5	3439.3	26979.	5826.9
#2	1699.7	3419.5	26973.	5846.1
#3	1698.5	3439.3	27124.	5783.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 15:47:10 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0085	-.0005	.0000	.0002	-.0014	.0000	.0001	.0001
Stddev	.0003	.0031	.0010	.0001	.0001	.0006	.0000	.0001	.0003
%RSD	81.44	36.23	222.0	1321.	33.47	41.77	86.03	57.21	470.9
#1	.0004	.0063	-.0005	.0002	.0001	-.0020	.0001	.0001	.0003
#2	.0001	.0072	-.0015	-.0001	.0001	-.0015	.0000	.0000	-.0003
#3	.0008	.0120	.0006	-.0001	.0002	-.0008	.0001	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0056	-.0243	.0081	-.0001	.0004	-.0120	.0003	-.0002
Stddev	.0002	.0014	.0109	.0210	.0000	.0003	.0069	.0002	.0011
%RSD	54.02	24.73	44.92	257.8	24.77	64.05	57.59	75.37	561.2
#1	.0002	.0071	-.0230	.0121	-.0001	.0007	-.0040	.0005	-.0011
#2	.0002	.0044	-.0140	-.0145	-.0001	.0004	-.0155	.0001	.0010
#3	.0005	.0054	-.0357	.0268	.0000	.0002	-.0163	.0002	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	F .0029	.0007	-.0007	.0001	.0000	.0006	-.0001	-.0015
Stddev	.0006	.0017	.0003	.0003	.0001	.0001	.0010	.0001	.0001
%RSD	84.99	58.76	44.16	46.78	42.24	446.4	151.4	69.68	3.426
#1	-.0014	.0041	.0004	-.0005	.0002	.0001	.0016	-.0002	-.0015
#2	-.0003	.0009	.0010	-.0010	.0002	.0000	.0006	-.0002	-.0014
#3	-.0004	.0036	.0006	-.0005	.0001	-.0001	-.0003	.0000	-.0015
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 15:47:10 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1943.6	3593.6	28365.	5882.9
Stddev	3.6	8.8	75.	81.5
%RSD	.18765	.24476	.26356	1.3859
#1	1939.5	3603.7	28280.	5807.2
#2	1945.1	3587.4	28392.	5872.4
#3	1946.3	3589.8	28422.	5969.2

Zoom In Zoom Out

Sample Name: FA54440-18 Acquired: 5/25/2018 15:51:44 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	246.8	.0534	3.633	.0048	15.87	-.0010	.0059	.3948
Stddev	.0007	.1	.0038	.006	.0003	.13	.0003	.0005	.0019
%RSD	125.4	.0508	7.087	.1785	5.837	.8100	32.11	7.670	.4904
#1	-.0003	246.9	.0515	3.629	.0047	15.89	-.0013	.0058	.3938
#2	-.0013	246.7	.0577	3.630	.0052	15.99	-.0008	.0064	.3970
#3	.0000	246.7	.0509	3.641	.0047	15.74	-.0007	.0055	.3935

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0256	117.9	2.961	4.887	.1991	.0007	.7150	.0536	.4252
Stddev	.0006	.5	.011	.114	.0003	.0006	.0243	.0007	.0022
%RSD	2.182	.4454	.3779	2.332	.1309	87.58	3.396	1.335	.5290
#1	.0261	118.2	2.968	4.991	.1993	.0013	.7051	.0544	.4230
#2	.0250	118.3	2.948	4.905	.1993	.0008	.7427	.0535	.4275
#3	.0257	117.3	2.967	4.765	.1988	.0001	.6972	.0529	.4252

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0066	.0047	2.642	.0312	3.376	.9904	-.0040	.4377	.0854
Stddev	.0033	.0064	.011	.0003	.008	.0026	.0040	.0028	.0003
%RSD	49.67	134.7	.4241	.8556	.2466	.2614	99.76	.6494	.3891
#1	-.0076	.0094	2.629	.0310	3.374	.9912	-.0004	.4374	.0856
#2	-.0029	-.0025	2.647	.0316	3.368	.9925	-.0083	.4407	.0850
#3	-.0093	.0073	2.650	.0311	3.384	.9875	-.0033	.4350	.0855

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1881.3	4418.2	34437.	7279.7
Stddev	2.7	4.9	63.	80.0
%RSD	.14232	.11150	.18419	1.0987
#1	1880.3	4423.8	34394.	7254.2
#2	1879.4	4414.5	34407.	7215.6
#3	1884.4	4416.3	34510.	7369.3

Zoom In Zoom Out

Sample Name: FA54440-19 Acquired: 5/25/2018 15:56:12 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0008	174.2	.0348	3.435	.0041	7.538	-.0002	.0026	.2757
Stddev	.0013	.4	.0060	.005	.0001	.045	.0000	.0002	.0026
%RSD	155.3	.2413	17.14	.1463	2.603	.5944	6.698	7.038	.9440
#1	-.0023	173.8	.0327	3.429	.0040	7.499	-.0002	.0027	.2787
#2	.0001	174.6	.0416	3.439	.0042	7.587	-.0002	.0024	.2743
#3	-.0003	174.3	.0302	3.436	.0041	7.527	-.0002	.0028	.2741

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0135	32.02	1.714	2.859	.0388	-.0041	.5415	.0278	.3511
Stddev	.0013	.20	.070	.059	.0001	.0006	.0259	.0007	.0034
%RSD	9.468	.6185	4.052	2.077	.2302	13.98	4.776	2.692	.9783
#1	.0124	31.82	1.634	2.798	.0389	-.0037	.5714	.0275	.3540
#2	.0131	32.22	1.751	2.916	.0388	-.0038	.5267	.0287	.3521
#3	.0149	32.01	1.758	2.864	.0388	-.0047	.5264	.0273	.3473

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0100	.0057	2.667	.0249	3.186	.8974	-.0097	.1810	.0430
Stddev	.0015	.0018	.014	.0009	.004	.0036	.0061	.0008	.0004
%RSD	15.04	30.91	.5096	3.556	.1202	.4060	63.26	.4401	1.020
#1	-.0085	.0067	2.673	.0246	3.183	.9014	-.0133	.1816	.0426
#2	-.0101	.0037	2.651	.0259	3.190	.8966	-.0026	.1801	.0435
#3	-.0115	.0067	2.676	.0242	3.184	.8943	-.0131	.1812	.0428

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1909.6	4430.6	34707.	7290.0
Stddev	7.2	15.7	26.	48.9
%RSD	.37606	.35365	.07368	.67051
#1	1901.7	4414.0	34698.	7344.7
#2	1911.6	4445.1	34736.	7250.5
#3	1915.6	4432.7	34687.	7274.8

◀ Zoom In ▶
Zoom Out

Sample Name: FA54440-20 Acquired: 5/25/2018 16:00:42 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0017**	**239.2**	**.0567**	**5.970**	**.0072**	**9.825**	**-.0002**	**.0042**	**.4204**
Stddev	.0017	.6	.0024	.023	.0001	.049	.0002	.0003	.0015
%RSD	98.62	.2393	4.270	.3778	1.865	.5000	75.60	7.369	.3597
#1	.0002	239.1	.0555	5.971	.0073	9.867	-.0004	.0043	.4188
#2	-.0027	238.7	.0551	5.947	.0072	9.836	-.0002	.0039	.4204
#3	-.0027	239.8	.0595	5.992	.0070	9.771	-.0001	.0045	.4219

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0217**	**67.37**	**2.158**	**3.629**	**.0533**	**-.0026**	**.5374**	**.0423**	**.5183**
Stddev	.0014	.13	.057	.062	.0004	.0004	.0203	.0006	.0049
%RSD	6.307	.1879	2.648	1.703	.6801	17.46	3.772	1.365	.9372
#1	.0209	67.51	2.204	3.674	.0535	-.0022	.5187	.0429	.5231
#2	.0233	67.28	2.176	3.653	.0534	-.0024	.5347	.0421	.5183
#3	.0210	67.32	2.094	3.558	.0529	-.0031	.5590	.0418	.5134

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0123**	**.0039**	**2.529**	**.0274**	**4.652**	**.7897**	**-.0122**	**.3604**	**.0664**
Stddev	.0014	.0059	.007	.0014	.011	.0012	.0100	.0012	.0006
%RSD	11.79	153.2	.2802	5.222	.2445	.1540	81.93	.3390	.9454
#1	-.0107	.0034	2.537	.0289	4.654	.7890	-.0132	.3603	.0671
#2	-.0126	.0100	2.523	.0272	4.639	.7911	-.0017	.3616	.0662
#3	-.0135	-.0018	2.527	.0261	4.662	.7890	-.0216	.3592	.0659

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1884.4**	**4875.3**	**38030.**	**8036.2**
Stddev	5.4	9.7	3.	36.1
%RSD	.28619	.19935	.00871	.44977
#1	1881.2	4864.2	38032.	8016.5
#2	1881.3	4879.8	38033.	8014.3
#3	1890.6	4882.0	38026.	8078.0

◀ Zoom In ▶
Zoom Out

Sample Name: FA54440-21 Acquired: 5/25/2018 16:05:11 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0008**	**100.8**	**.2426**	**1.102**	**.0057**	**54.00**	**.0026**	**.1003**	**.5027**
Stddev	.0018	.2	.0081	.004	.0002	.20	.0003	.0012	.0006
%RSD	214.6	.1595	3.357	.3881	2.970	.3729	9.702	1.167	.1120
#1	-.0003	100.9	.2519	1.105	.0056	54.23	.0029	.1010	.5025
#2	.0029	101.0	.2395	1.104	.0057	53.83	.0027	.1009	.5033
#3	.0000	100.6	.2365	1.097	.0059	53.95	.0024	.0989	.5022

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5403**	**316.7**	**2.129**	**14.29**	**3.518**	**.0113**	**1.018**	**.5322**	**.9138**
Stddev	.0024	1.3	.091	.22	.011	.0008	.021	.0048	.0112
%RSD	.4453	.4169	4.274	1.557	.2992	7.021	2.033	.8979	1.221
#1	.5406	318.2	2.205	14.44	3.530	.0106	1.018	.5376	.9265
#2	.5426	316.3	2.155	14.04	3.514	.0121	1.039	.5306	.9089
#3	.5378	315.7	2.028	14.39	3.510	.0111	.9973	.5285	.9059

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0078**	**-.0177**	**2.914**	**.0648**	**.7053**	**1.199**	**.0062**	**.1994**	**1.154**
Stddev	.0015	.0135	.028	.0019	.0017	.005	.0058	.0011	.012
%RSD	19.40	75.90	.9667	2.934	.2439	.4460	93.59	.5552	1.021
#1	.0061	-.0173	2.943	.0639	.7043	1.205	.0127	.2004	1.167
#2	.0087	-.0314	2.913	.0670	.7073	1.198	.0017	.1995	1.153
#3	.0086	-.0045	2.887	.0635	.7043	1.194	.0042	.1982	1.144

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1887.7**	**3784.1**	**29903.**	**6307.4**
Stddev	7.4	4.9	48.	44.0
%RSD	.39145	.12944	.16139	.69768
#1	1879.3	3779.4	29858.	6262.9
#2	1893.2	3783.6	29954.	6350.9
#3	1890.6	3789.2	29896.	6308.3

◀ Zoom In ▶
Zoom Out

Sample Name: FA54440-22 Acquired: 5/25/2018 16:09:34 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0017**	**243.0**	**.0470**	**2.352**	**.0047**	**8.815**	**-.0012**	**.0176**	**.3102**
Stddev	.0017	.7	.0035	.004	.0002	.032	.0001	.0002	.0024
%RSD	99.94	.2871	7.400	.1566	4.647	.3618	6.656	1.316	.7708
#1	.0000	242.2	.0442	2.349	.0049	8.836	-.0011	.0178	.3129
#2	-.0018	243.5	.0460	2.351	.0045	8.778	-.0012	.0173	.3094
#3	-.0034	243.3	.0509	2.356	.0048	8.830	-.0013	.0176	.3083

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0358**	**123.9**	**3.133**	**5.575**	**2.005**	**-.0013**	**.7391**	**.0691**	**.2652**
Stddev	.0011	.4	.061	.077	.009	.0004	.0057	.0009	.0002
%RSD	3.160	.3333	1.947	1.373	.4437	26.40	.7756	1.342	.0566
#1	.0371	124.3	3.195	5.487	2.012	-.0017	.7365	.0684	.2652
#2	.0349	123.5	3.130	5.628	2.009	-.0013	.7352	.0702	.2650
#3	.0354	123.9	3.074	5.609	1.995	-.0010	.7457	.0687	.2653

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0060**	**.0025**	**2.615**	**.0285**	**1.901**	**.9816**	**.0020**	**.3843**	**.1398**
Stddev	.0048	.0109	.003	.0021	.007	.0067	.0039	.0021	.0004
%RSD	79.87	441.3	.0963	7.398	.3718	.6825	197.0	.5529	.3014
#1	-.0044	.0114	2.613	.0291	1.893	.9836	.0061	.3868	.1393
#2	-.0114	-.0097	2.617	.0303	1.906	.9871	.0014	.3833	.1399
#3	-.0022	.0058	2.614	.0262	1.905	.9742	-.0016	.3829	.1401

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1897.4**	**4155.5**	**32332.**	**6799.3**
Stddev	2.5	5.0	73.	21.9
%RSD	.12974	.11926	.22552	.32176
#1	1894.5	4155.5	32367.	6794.0
#2	1898.9	4150.5	32249.	6823.3
#3	1898.7	4160.4	32381.	6780.5

◀ Zoom In ▶
Zoom Out

Sample Name: CRIA Acquired: 5/25/2018 16:14:03 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0098**	**.1992**	**.0108**	**.1954**	**.0050**	**1.005**	**.0053**	**.0516**	**.0103**
Stddev	.0005	.0060	.0003	.0007	.0001	.006	.0001	.0001	.0001
%RSD	4.634	3.032	2.849	.3392	1.661	.5709	.9472	.1274	.7924
#1	.0095	.2057	.0112	.1955	.0050	1.007	.0052	.0517	.0104
#2	.0103	.1979	.0106	.1947	.0050	1.010	.0053	.0516	.0104
#3	.0095	.1939	.0108	.1960	.0051	.9988	.0053	.0516	.0102

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0248**	**.2967**	**10.26**	**4.597**	**.0158**	**.0458**	**10.04**	**.0436**	**.0046**
Stddev	.0005	.0018	.05	.040	.0000	.0001	.08	.0001	.0005
%RSD	2.041	.6173	.4779	.8722	.2920	.2796	.7517	.2235	11.69
#1	.0251	.2961	10.29	4.555	.0158	.0456	10.03	.0435	.0042
#2	.0250	.2953	10.20	4.635	.0158	.0458	9.974	.0435	.0045
#3	.0242	.2988	10.29	4.601	.0159	.0459	10.12	.0437	.0053

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0042**	**.0115**	**.0288**	**.0502**	**.0093**	**.0096**	**.0087**	**.0495**	**.0205**
Stddev	.0010	.0006	.0009	.0002	.0000	.0001	.0013	.0005	.0000
%RSD	24.18	5.179	3.274	.3558	.1286	.9421	14.70	1.033	.1983
#1	.0037	.0112	.0296	.0500	.0093	.0096	.0090	.0494	.0205
#2	.0054	.0122	.0290	.0504	.0093	.0096	.0073	.0500	.0205
#3	.0036	.0112	.0278	.0503	.0093	.0095	.0097	.0490	.0205

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1914.5**	**3611.2**	**28100.**	**5860.7**
Stddev	.7	1.7	64.	25.9
%RSD	.03902	.04807	.22822	.44140
#1	1914.0	3609.3	28068.	5889.8
#2	1914.2	3611.7	28174.	5851.8
#3	1915.4	3612.6	28059.	5840.4

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/25/2018 16:18:36 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**F 521.6**	**-.0004**	**.0005**	**.0000**	**476.4**	**.0014**	**.0001**	**-.0002**
Stddev	.0005	1.2	.0017	.0001	.000	3.2	.0000	.0001	.0006
%RSD	1016.	.2314	477.1	15.35	1554.	.6747	.2736	77.65	274.9
#1	-.0005	520.8	-.0023	.0006	.0000	479.2	.0014	.0001	-.0002
#2	-.0002	523.0	.0002	.0004	.0000	477.0	.0014	.0002	.0004
#3	.0005	521.0	.0011	.0005	.0000	472.9	.0014	.0000	-.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0007**	**181.1**	**-.0250**	**F 509.8**	**.0005**	**.0007**	**.1162**	**-.0002**	**.0030**
Stddev	.0002	.8	.0211	4.5	.0000	.0005	.0072	.0001	.0009
%RSD	23.85	.4408	84.30	.8890	9.751	67.97	6.225	36.72	28.84
#1	-.0007	182.0	-.0039	513.7	.0005	.0006	.1217	-.0002	.0021
#2	-.0006	180.9	-.0251	510.8	.0005	.0004	.1080	-.0002	.0038
#3	-.0009	180.4	-.0461	504.8	.0006	.0013	.1188	-.0004	.0029

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0003**	**-.0035**	**.0059**	**.0011**	**-.0014**	**.0010**	**-.0018**	**-.0003**	**.0032**
Stddev	.0015	.0023	.0003	.0009	.0003	.0002	.0019	.0004	.0003
%RSD	538.7	64.75	5.820	77.29	22.35	18.59	108.1	134.4	9.952
#1	-.0009	-.0013	.0056	.0012	-.0014	.0011	-.0030	-.0007	.0033
#2	.0015	-.0034	.0062	.0002	-.0017	.0011	-.0026	-.0001	.0029
#3	-.0014	-.0058	.0058	.0019	-.0011	.0008	.0004	-.0001	.0035

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1504.2**	**3220.5**	**24249.**	**5535.8**
Stddev	3.4	11.0	37.	46.0
%RSD	.22434	.34053	.15363	.83007
#1	1501.2	3208.8	24253.	5489.4
#2	1503.6	3222.0	24284.	5536.7
#3	1507.9	3230.5	24210.	5581.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/25/2018 16:23:16 Type: Unk
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**F 1.117**	**F 526.4**	**1.071**	**.5120**	**.5124**	**478.2**	**.9725**	**.4884**	**.5016**
Stddev	.006	4.4	.003	.0012	.0021	6.0	.0015	.0006	.0026
%RSD	.5728	.8274	.2971	.2251	.4106	1.260	.1523	.1143	.5116
#1	1.124	525.1	1.067	.5131	.5144	482.3	.9721	.4878	.5004
#2	1.111	522.8	1.073	.5108	.5127	481.0	.9713	.4885	.5045
#3	1.115	531.3	1.072	.5120	.5102	471.3	.9742	.4889	.4998

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5508**	**182.4**	**-.0273**	**F 508.7**	**.5206**	**.8529**	**.1200**	**.9991**	**.9980**
Stddev	.0039	1.0	.0234	2.5	.0024	.0036	.0051	.0011	.0016
%RSD	.7079	.5694	85.80	.4997	.4698	.4216	4.247	.1126	.1623
#1	.5547	183.2	-.0538	510.3	.5182	.8488	.1256	1.000	.9998
#2	.5469	182.7	-.0092	510.0	.5231	.8542	.1188	.9985	.9976
#3	.5507	181.2	-.0189	505.8	.5205	.8557	.1157	.9983	.9967

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.9964**	**.9553**	**.0416**	**.8959**	**.9253**	**.9716**	**.9245**	**.5003**	**.9932**
Stddev	.0015	.0015	.0007	.0018	.0040	.0007	.0041	.0027	.0030
%RSD	.1519	.1604	1.657	.2004	.4351	.0716	.4440	.5335	.2988
#1	.9949	.9540	.0412	.8977	.9271	.9709	.9287	.4979	.9946
#2	.9963	.9549	.0413	.8942	.9207	.9722	.9205	.5032	.9898
#3	.9980	.9570	.0424	.8957	.9281	.9718	.9244	.5000	.9951

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1489.7**	**3237.9**	**24673.**	**5581.3**
Stddev	2.6	2.2	73.	46.2
%RSD	.17304	.06657	.29691	.82715
#1	1487.0	3240.1	24619.	5540.6
#2	1492.1	3237.9	24643.	5571.9
#3	1490.0	3235.8	24756.	5631.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 16:27:47 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2440**	**39.11**	**2.069**	**1.990**	**2.026**	**40.53**	**2.089**	**2.054**	**2.044**
Stddev	.0020	.16	.006	.009	.006	.09	.003	.002	.006
%RSD	.8373	.4169	.3151	.4454	.3137	.2261	.1617	.0789	.2762
#1	.2426	39.24	2.077	2.000	2.033	40.58	2.092	2.055	2.048
#2	.2430	38.93	2.066	1.987	2.023	40.42	2.086	2.053	2.047
#3	.2463	39.16	2.065	1.983	2.022	40.59	2.089	2.056	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.981**	**39.34**	**41.92**	**38.23**	**2.100**	**2.069**	**41.47**	**2.116**	**2.028**
Stddev	.006	.09	.43	.20	.006	.001	.44	.005	.009
%RSD	.2985	.2343	1.022	.5201	.2850	.0431	1.066	.2245	.4300
#1	1.977	39.38	42.40	38.21	2.102	2.070	41.97	2.121	2.036
#2	1.979	39.23	41.81	38.03	2.105	2.068	41.26	2.113	2.018
#3	1.988	39.40	41.57	38.43	2.094	2.070	41.16	2.113	2.029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.070**	**2.058**	**2.126**	**2.070**	**2.001**	**2.126**	**2.047**	**2.096**	**2.131**
Stddev	.013	.002	.004	.001	.010	.003	.007	.003	.006
%RSD	.6307	.1019	.2129	.0542	.4800	.1331	.3347	.1345	.2838
#1	2.085	2.059	2.131	2.070	2.012	2.124	2.054	2.093	2.135
#2	2.064	2.055	2.126	2.069	1.995	2.129	2.040	2.099	2.124
#3	2.061	2.059	2.122	2.071	1.995	2.124	2.046	2.096	2.135
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/25/2018 16:27:47 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1714.2**	**3502.9**	**27330.**	**5735.5**
Stddev	4.2	11.9	26.	27.5
%RSD	.24779	.33915	.09598	.48011
#1	1709.4	3493.4	27342.	5714.6
#2	1715.5	3499.2	27299.	5766.7
#3	1717.6	3516.2	27347.	5725.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 16:31:59 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0118	.0002	.0000	.0001	-.0011	.0000	.0001	-.0001
Stddev	.0004	.0038	.0003	.000	.0000	.0005	.0000	.0001	.0005
%RSD	56.97	31.89	181.5	6511.	51.84	43.78	98.84	111.8	551.7
#1	.0010	.0111	.0006	-.0001	.0000	-.0014	.0000	.0000	.0001
#2	.0003	.0084	.0000	.0001	.0001	-.0005	.0001	.0002	.0003
#3	.0008	.0159	.0000	.0000	.0001	-.0012	.0000	.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0045	-.0414	-.0035	-.0001	.0004	-.0061	.0002	-.0003
Stddev	.0001	.0008	.0170	.0177	.0000	.0005	.0042	.0001	.0002
%RSD	41.27	18.24	41.19	501.1	36.64	105.9	69.37	50.71	92.90
#1	.0002	.0051	-.0220	.0169	-.0001	.0010	-.0023	.0002	.0000
#2	.0004	.0047	-.0541	-.0146	-.0001	.0002	-.0106	.0001	-.0003
#3	.0002	.0036	-.0480	-.0129	-.0001	.0002	-.0053	.0002	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	F .0024	-.0001	-.0005	.0000	.0000	.0009	.0001	-.0017
Stddev	.0002	.0010	.0002	.0001	.0000	.000	.0011	.0001	.0000
%RSD	115.8	39.62	181.6	26.92	104.1	41.21	129.3	102.5	2.439
#1	.0000	.0027	-.0002	-.0003	.0000	.0000	.0021	.0000	-.0017
#2	.0001	.0013	-.0003	-.0006	.0000	.0000	.0006	.0003	-.0018
#3	.0003	.0032	.0001	-.0005	.0000	.0000	-.0001	.0001	-.0017
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/25/2018 16:31:59 Type: QC
Method: 60102007_042011(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1956.5	3652.4	28612.	5850.5
Stddev	5.1	9.9	80.	14.2
%RSD	.25915	.26990	.27976	.24246
#1	1954.8	3663.1	28593.	5843.4
#2	1952.4	3643.7	28700.	5866.9
#3	1962.2	3650.5	28543.	5841.3

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000010	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000052	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000005	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000102	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000007	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000003	0.000000	No
			Fe	-0.000004	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000105	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	0.000007	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000014	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000031	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000193	0.000000	No
			Fe	-0.000062	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000003	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	-0.000000	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	0.000118	0.000000	No
			Ca	0.000008	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000031	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000054	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000014	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	-0.000022	0.000000	No
			Al	-0.000010	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000000	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000012	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	-0.000001	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000028	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.000377	0.475395	0.000000	1.000000
Al 396.152 { 85}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.003998	0.122456	0.000000	1.000000
As 189.042 {478}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.000654	0.171839	0.000000	1.000000
Ba 455.403 { 74}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.002639	10.083319	0.000000	1.000000
Be 313.042 {108}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.000345	7.416174	0.000000	1.000000
Ca 317.933 {106}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.002183	0.202821	0.000000	1.000000
Cd 226.502 {449}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.001332	4.502596	0.000000	1.000000
Co 228.616 {447}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.001083	2.606678	0.000000	1.000000
Cr 267.716 {126}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.000092	0.346333	0.000000	1.000000
Cu 324.754 {104}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.004894	0.627725	0.000000	1.000000
Fe 259.940 {130}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.001405	0.117558	0.000000	1.000000
In 230.606 {446}*	5/25/2018 11:03:19	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.003046	0.088042	0.000000	1.000000
Mg 279.079 {121}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.000186	0.014184	0.000000	1.000000
Mn 257.610 {131}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.000644	2.324833	0.000000	1.000000
Mo 202.030 {467}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.002119	1.053033	0.000000	1.000000
Na 589.592 { 57}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.007559	0.372353	0.000000	1.000000
Ni 231.604 {445}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.000738	1.565400	0.000000	1.000000
Pb 220.353 {453}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.000026	0.812732	0.000000	1.000000
Sb 206.833 {463}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.000378	0.244639	0.000000	1.000000
Se 196.090 {472}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.000393	0.119954	0.000000	1.000000
Si 212.412 {459}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.004282	0.397504	0.000000	1.000000
Sn 189.989 {477}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.000681	0.372194	0.000000	1.000000
Sr 407.771 { 83}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.000709	10.898200	0.000000	1.000000
Ti 334.941 {101}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.001616	1.523454	0.000000	1.000000
Tl 190.856 {477}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.001275	0.284832	0.000000	1.000000
V 292.402 {115}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	-0.000238	0.596517	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/25/2018 11:03:19	5/25/2018 10:41:13	Linear	1/Conc	0.004236	2.099007	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999871	0.000073	0.000449	0.001497	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999961	0.001744	0.007935	0.026449	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999999	0.000018	0.000961	0.003202	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999920	0.010284	0.000136	0.000454	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999932	0.006943	0.000058	0.000192	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999960	0.002911	0.002578	0.008594	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999876	0.005715	0.000056	0.000186	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999882	0.003234	0.000108	0.000360	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999911	0.000373	0.000350	0.001165	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999985	0.000273	0.000277	0.000922	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999698	0.004654	0.002220	0.007400	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999974	0.001028	0.023045	0.076817	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999932	0.000266	0.022194	0.073980	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999824	0.003512	0.000050	0.000165	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999932	0.000991	0.000154	0.000512	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999970	0.004609	0.005234	0.017446	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999838	0.002272	0.000184	0.000613	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999967	0.000530	0.000700	0.002334	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999999	0.000034	0.001052	0.003508	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999998	0.000021	0.001954	0.006513	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.999218	0.001267	0.000462	0.001539	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999881	0.000462	0.000386	0.001286	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999829	0.016265	0.000073	0.000244	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999848	0.002137	0.000122	0.000407	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999997	0.000057	0.001192	0.003973	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999973	0.000347	0.000273	0.000910	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999910	0.002269	0.000089	0.000297	OK.	1.000000	0.000000	1	0

5g dry Sieve DoD

SGS Accutest - Orlando **Metals Digestion Log Soil**

MP #: 33784 Method of Digestion: SW846-3050B

		Spk. Sol. [A]	Volume Used(ml)	Pipette #
Prep Date/Time (mm/dd/yy 24:00):	05/24/18 08:05	ACC1002	1.0	19
HotBlock I.D.	9	ACC 1851	0.5	19
Thermometer I.D.	213	MET 6051	0.5	19
Correction Factor (°C)	-1	Filter Lot#:	1619217J-P	
Temperature Observed/Corrected (°C)	93 / 92	Dig. Tube Lot#	~~165A~~ 1605323	
Balance I.D.	ADVPR03			

Added [B]:	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	177290	0000187388	0000190962	23430173

Sample #		Wt., g	Final Volume(ml)	Comments
Method Blank(MB)		5.0	100.00	5x reagents used
Spike Blank(SB)		5.0		
Matrix Spike(MS)		5.04		
Matrix Spike Dup(MSD)		5.04		
Duplicate(DUP)		5.00		
1 QC [C] FA53725-59A	D 2	5.03		
2 D2-FA53725-59A	2	5.03		
3				
4				
5				
6				
7				
8				
9				
10				
11		JC		
12				
13			05/24/18	
14				
15				
16				
17				
18				
19				
20				
21 [E]				
22 [E]				
23 [E]				
24 [E]				

Analyst: Jordan Cuyler Date: 05/24/18

QC Review: Date: 5-24-18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog 0316.xls

Rev 03/04/16 DM

54 of 100

☆ JC 05/23/18

7.3.1 7

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kemron Environmental Services, Inc

Ft Ord; CA

07202.2001

SGS Job Number: FA53725R

Sampling Dates: 04/18/18 - 04/23/18

Report to:

Kemron Environmental Services, Inc
4522 Joe Lloyd Way
Monterey, CA 93944
EDawson@GilbaneCo.com; TBeer@GilbaneCo.com

ATTN: Evenlyn Dawson

Total number of pages in report: 81

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **5**
Section 4: Sample Results **6**
4.1: FA53725-11R: 31-04SC0001 7
4.2: FA53725-12R: 31-04SC0002 8
4.3: FA53725-44AR: 31-22SC0001 9
4.4: FA53725-75R: 31-31SC0001 10
4.5: FA53725-76R: 31-31SC0002 11
Section 5: Misc. Forms **12**
5.1: Chain of Custody 13
5.2: QC Evaluation: DOD QSM5 Limits 34
Section 6: Metals Analysis - QC Data Summaries **35**
6.1: Inst QC MA14941: Pb 36
6.2: Prep QC MP33823: Pb 48
6.3: IDL and Linear Range Summaries 54
Section 7: Metals Analysis - Raw Data **56**
7.1: Raw Data MA14941 57
7.2: Prep Logs 81

SGS North America Inc.

Sample Summary

Kemron Environmental Services, Inc

Job No: FA53725R

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53725-11R	04/18/18	13:36	FPBL	04/26/18	SO	Soil	31-04SC0001
FA53725-12R	04/18/18	13:54	FPBL	04/26/18	SO	Soil	31-04SC0002
FA53725-44AR	04/23/18	13:24	FPBL	04/26/18	SO	Soil	31-22SC0001
FA53725-75R	04/19/18	15:09	FPBL	04/26/18	SO	Soil	31-31SC0001
FA53725-76R	04/19/18	15:29	FPBL	04/26/18	SO	Soil	31-31SC0002

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Kemron Environmental Services, Inc **Job No:** FA53725R

Site: Ft Ord; CA **Report Date:** 6/5/2018 5:29:20 PM

5 Sample(s) were collected on/ between 04/18/2018 and 04/23/2018 and were received at SGS North America Inc - Orlando on 04/26/2018 properly preserved, at 4.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA53725R. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals Analysis By Method SW846 6010C

Matrix: SO **Batch ID:** MP33823

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53517-2RDUP, FA53517-2RMSD, FA53517-2RSDL, FA53517-2RPS were used as the QC samples.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Lead are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MP33823-PS1 for Lead: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA53725-11R for Lead: Sample dilution required due to difficult matrix.

FA53725-12R for Lead: Sample dilution required due to difficult matrix.

FA53725-44AR for Lead: Sample dilution required due to difficult matrix.

FA53725-75R for Lead: Sample dilution required due to difficult matrix.

FA53725-76R for Lead: Sample dilution required due to difficult matrix.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA53725R
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/23/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53725-11R	**31-04SC0001**					
Lead [a]		204	3.4	0.67	mg/kg	SW846 6010C
FA53725-12R	**31-04SC0002**					
Lead [a]		88.4	4.2	0.85	mg/kg	SW846 6010C
FA53725-44AR	**31-22SC0001**					
Lead [a]		90.9	4.2	0.85	mg/kg	SW846 6010C
FA53725-75R	**31-31SC0001**					
Lead [a]		20.5	4.3	0.87	mg/kg	SW846 6010C
FA53725-76R	**31-31SC0002**					
Lead [a]		5.3	5.0	0.99	mg/kg	SW846 6010C

(a) Sample dilution required due to difficult matrix.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	31-04SC0001		
Lab Sample ID:	FA53725-11R	**Date Sampled:**	04/18/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	204	3.4	0.67	0.17	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) Sample was dried prior to analysis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-04SC0002		
Lab Sample ID:	FA53725-12R	**Date Sampled:**	04/18/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	88.4	4.2	0.85	0.21	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) Sample was dried prior to analysis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-22SC0001		
Lab Sample ID:	FA53725-44AR	**Date Sampled:**	04/23/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	90.9	4.2	0.85	0.21	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) Sample was dried prior to analysis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-31SC0001		
Lab Sample ID:	FA53725-75R	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	20.5	4.3	0.87	0.22	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) Sample was dried prior to analysis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	31-31SC0002		
Lab Sample ID:	FA53725-76R	**Date Sampled:**	04/19/18
Matrix:	SO - Soil	**Date Received:**	04/26/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [b]	5.3	5.0	0.99	0.25	mg/kg	5	06/01/18	06/01/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14941
(2) Prep QC Batch: MP33823

(a) Sample was dried prior to analysis.
(b) Sample dilution required due to difficult matrix.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-01
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:
Unit 31

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
							11	13	8	13					
1	31-01SC0000	SO	4-24-18	1505	LF/RP	2		X		X	31-01	N1	0.00	0.00	
2	31-01SC0001	SO	"	1522	"	2		X		X	31-01	N1	0.00	0.00	HOLD
3	31-01SC0002	SO	"	1321 1541	TB/KL	2		X		X	31-01	N1	0.00	0.00	HOLD Time 1541
4	31-02SC0000	SO	4-24-18	1321	TB/KL	1		X			31-02	N1	0.00	0.00	
5	31-02SC0001	SO	"	1338	"	1		X			31-02	N1	0.00	0.00	HOLD
6	31-02SC0002	SO	"	1355	"	1		X			31-02	N1	0.00	0.00	HOLD
7	31-03SC0000	SO	4-18-18	1327	LF/RP	1		X			31-03	N1	0.00	0.00	Run Time 1427
8	31-03SC0001	SO	"	1445	"	1		X			31-03	N1	0.00	0.00	HOLD
9	31-03SC0002	SO	"	1500	"	1		X			31-03	N1	0.00	0.00	HOLD
	Cooler #	Turnaround Time: 14 Days													

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-24-18	0800 1645	FedEx	4-24-18	0800 1655
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

4.0, 4.2, 4.0, 3.8, 20.2

ENV.COC_Record
April 13, 2018

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041818-02
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	8	13					
10	31-04SC0000 (10)	SO	4-18-18	1321	LF/RP		X			31-04	N1	0.00	0.00	
11	31-04SC0001 (11)	SO	"	1336	"		X			31-04	N1	0.00	0.00	HOLD
12	31-04SC0002 (12)	SO	"	1354	"		X			31-04	N1	0.00	0.00	HOLD
13	31-05SC0000 (13)	SO	4-19-18	0920	LF/RP		X			31-05	N1	0.00	0.00	
14	31-05SC0001 (14)	SO	"	0932	"		X			31-05	N1	0.00	0.00	HOLD
15	31-05SC0002 (15)	SO	"	0952	"		X			31-05	N1	0.00	0.00	HOLD
~~16~~	~~31-06SC0000~~	~~SO~~					~~X~~			~~31-06~~	~~N1~~	~~0.00~~	~~0.00~~	JB
~~17~~	~~31-06SC0001~~	~~SO~~					~~X~~			~~31-06~~	~~N1~~	~~0.00~~	~~0.00~~	JB
~~18~~	~~31-06SC0002~~	~~SO~~					X			~~31-06~~	~~N1~~	~~0.00~~	~~0.00~~	JB
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-24-18	0800 1645	Fed Ex	4-25-18	0800 1655
Fed Ex	"				

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 2 of 18

FA53725R: Chain of Custody
Page 2 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 04/9/18-03
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram beg

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top - Bottom		
~~19~~	~~31-07SC0000~~	SO					X			~~31-07~~	N1	~~0.00~~	~~0.00~~	JB
~~20~~	~~31-07SC0001~~	SO					X			~~31-07~~	N1	~~0.00~~	~~0.00~~	JB
~~21~~	~~31-07SC0002~~	SO					X			~~31-07~~	N1	~~0.00~~	~~0.00~~	JB
22	31-08SC0000 (16)	SO	4-18-18	1117	RP/LF		X			31-08	N1	0.00	0.00	
23	31-08SC0001 (17)	SO	〃	1134	〃		X			31-08	N1	0.00	0.00	HOLD
24	31-08SC0002 (18)	SO	〃	1154	〃		X			31-08	N1	0.00	0.00	HOLD
25	31-09SC0000 (19)	SO	4-19-18	0911	TB/KL		X			31-09	N1	0.00	0.00	
26	31-09SC0000Q (20)	SO	〃	0944	〃		X			31-09	FD1	0.00	0.00	
27	31-09SC0001 (21)	SO	〃	0928	〃		X			31-09	N1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-24-18	0800
Fed Ex	4-25-18	1645

Received by: *(Signature)*	Date	Time
FedEx	4-25-18	0800

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 3 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-04
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
28	31-09SC0001Q (22)	SO	4-19-18	1010	TB/KL		X			31-09	FD1	0.00	0.00	HOLD
29	31-09SC0002 (23)	SO	4-19-18	0947	"		X			31-09	N1	0.00	0.00	HOLD
30	31-09SC0002Q (24)	SO	4-19-18	1020	"		X			31-09	FD1	0.00	0.00	HOLD
31	31-10SC0000 (25)	SO	4-18-18	1444	TB/KL		X			31-10	N1	0.00	0.00	
32	31-10SC0001 (26)	SO	"	1500	"		X			31-10	N1	0.00	0.00	HOLD
33	31-10SC0002 (27)	SO	"	1515	"		X			31-10	N1	0.00	0.00	HOLD
~~34~~	~~31-11SC0000~~	~~SO~~					~~X~~			~~31-11~~	~~N1~~	~~0.00~~	~~0.00~~	~~JB~~
~~35~~	~~31-11SC0001~~	~~SO~~					~~X~~			~~31-11~~	~~N1~~	~~0.00~~	~~0.00~~	~~JB~~
~~36~~	~~31-11SC0002~~	~~SO~~					~~X~~			~~31-11~~	~~N1~~	~~0.00~~	~~0.00~~	~~JB~~

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-25-18	0800

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 4 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
						11	13	8	13				
37	31-12SC0000	SO					X			31-12	N1	0.00	0.00
38	31-12SC0001	SO					X			31-12	N1	0.00	0.00
39	31-12SC0002	SO					X			31-12	N1	0.00	0.00
40	31-13SC0000	SO					X			31-13	N1	0.00	0.00
41	31-13SC0001	SO					X			31-13	N1	0.00	0.00
42	31-13SC0002	SO					X			31-13	N1	0.00	0.00
43	31-14SC0000	SO					X			31-14	N1	0.00	0.00
44	31-14SC0001	SO					X			31-14	N1	0.00	0.00
45	31-14SC0002	SO					X			31-14	N1	0.00	0.00

J.Beer 4-25-18

Cooler # **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex		

Shipping Date / Carrier / Airbill Number

Received by Laboratory: *(Signature, Date, Time)* **& condition**

04/26/18 930

ENV.COC_Record
April 13, 2018

Page 5 of 18

5.1 5

FA53725R: Chain of Custody
Page 5 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-06
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	8	13					
46	31-15SC0000 (28)	SO	4-19-18	1018	LF/RF		X			31-15	N1	0.00	0.00	
47	31-15SC0001 (29)	SO	"	1040	"		X			31-15	N1	0.00	0.00	HOLD
48	31-15SC0002 (30)	SO	"	1108	"		X			31-15	N1	0.00	0.00	HOLD
49	31-16SC0000	SO					X			31-16	N1	0.00	0.00	
50	31-16SC0001	SO					X			31-16	N1	0.00	0.00	
51	31-16SC0002	SO					X			31-16	N1	0.00	0.00	
52	31-17SC0000	SO					X			31-17	N1	0.00	0.00	
53	31-17SC0001	SO					X			31-17	N1	0.00	0.00	
54	31-17SC0002	SO					X			31-17	N1	0.00	0.00	

J. Beer 4-25-18

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J Beer	4-25-18	0800
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-25-18	0800

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 6 of 18

FA53725R: Chain of Custody
Page 6 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-07
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1*, 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID		Matrix	Date	Time	Samp Init.	Analytical Test Method: No. of Bags.	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
								11	13	8	13					
55	31-18SC0000	31	SO	4-23-18	1305	KL/TB	1		X		X	31-18	N1	0.00	0.00	
56	31-18SC0001	32	SO	"	1320	"	1		X		X	31-18	N1	0.00	0.00	HOLD
57	31-18SC0002	33	SO	"	1345	"	1		X		X	31-18	N1	0.00	0.00	HOLD
58	31-19SC0000	34	SO	4-23-18	1354	LF/RP	1		X			31-19	N1	0.00	0.00	
59	31-19SC0001	35	SO	"	1409	"	1		X			31-19	N1	0.00	0.00	HOLD
60	31-19SC0002	36	SO	"	1429	"	1		X			31-19	N1	0.00	0.00	HOLD
61	31-20SC0000	37	SO	4-19-18	1033	KL/TB	1		X			31-20	N1	0.00	0.00	
62	31-20SC0001	38	SO	"	1045	"	1		X			31-20	N1	0.00	0.00	HOLD
63	31-20SC0002	39	SO	"	1101	"	1		X			31-20	N1	0.00	0.00	HOLD
Cooler #			**Turnaround Time: 14 Days**													

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	Fed Ex	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 7 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-08

FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID		Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
							11	13	8	13					
64	31-21SC0000	40	SO	4-23-18	1458	KL/TB		X		X	31-21	N1	0.00	0.00	
65	31-21SC0001	41	SO	"	1512	"		X		X	31-21	N1	0.00	0.00	HOLD
66	31-21SC0002	42	SO	"	1526	"		X		X	31-21	N1	0.00	0.00	HOLD
67	31-22SC0000	43	SO	"	1254	RP/LF		X		X	31-22	N1	0.00	0.00	
68	31-22SC0001	44	SO	"	1324	"		X		X	31-22	N1	0.00	0.00	HOLD
~~69~~	~~31-22SC0002~~		~~SO~~	~~"~~		"		~~X~~		~~X~~	~~31-22~~	~~N1~~	~~0.00~~	~~0.00~~	~~HOLD~~ e-JWB
70	31-23SC0000	45	SO	4-19-18	1310	TB/KL		X			31-23	N1	0.00	0.00	
71	31-23SC0001	46	SO	"	1330	"		X			31-23	N1	0.00	0.00	HOLD
72	31-23SC0002	47	SO	"	1354	"		X			31-23	N1	0.00	0.00	HOLD
Cooler #			Turnaround Time: 14 Days												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	FedEx	4-25-18	0800
FedEx					

Shipping Date / Carrier / Airbill Number

8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* & condition

04/26/18 930

ENV.COC_Record
April 13, 2018

Page 8 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042318-09
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
	Analytical Test Method							11	13	8	13				
73	31-24SC0000 48	SO	4-23-18	1402	TB/KL	1		X			31-24	N1	0.00	0.00	
74	31-24SC0001 49	SO	1	1414	1	1		X			31-24	N1	0.00	0.00	HOLD
75	31-24SC0002 50	SO	1	1435	1	1		X			31-24	N1	0.00	0.00	HOLD
76	31-25SC0000 51	SO	4-23-18	0953	LF/RP	2		X		X	31-25	N1	0.00	0.00	
77	31-25SC0001 52	SO	1	1022	1	2		X		X	31-25	N1	0.00	0.00	HOLD
78	31-25SC0002 53	SO	1	1104	1	2		X		X	31-25	N1	0.00	0.00	HOLD
79	31-26SC0000 54	SO	4-23-18	1526	RP/LF	2		X		X	31-26	N1	0.00	0.00	
80	31-26SC0001 55	SO	1	1558	1	2		X		X	31-26	N1	0.00	0.00	HOLD
~~81~~	~~31-26SG0002~~	~~SO~~	~~1~~		~~1~~	~~2~~		~~X~~		~~X~~	~~31-26~~	~~N1~~	~~0.00~~	~~0.00~~	~~HOLD~~ e JWS
Cooler #		Turnaround Time: 14 Days													

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-25-18	0800

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 9 of 18

5.1 5

FA53725R: Chain of Custody
Page 9 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042318-10
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
							11	13	8	13					
82	31-27SC0000 56	SO	4-23-18	1533	LF/RP	2		X		X	31-27	N1	0.00	0.00	
83	31-27SC0001 57	SO	"	1550	"	2		X		X	31-27	N1	0.00	0.00	HOLD
84	31-27SC0002 58	SO	"	1626	"	2		X		X	31-27	N1	0.00	0.00	HOLD
85	31-28SC0000 59	SO	4-23-18	0932	TB/KL	1		X		X	31-28	N1	0.00	0.00	
86	31-28SC0000Q 60	SO	"	0938	"	1		X		X	31-28	FD1	0.00	0.00	
87	31-28SC0001 61	SO	"	0954	"	1		X		X	31-28	N1	0.00	0.00	HOLD
88	31-28SC0001Q 62	SO	"	1000	"	1		X		X	31-28	FD1	0.00	0.00	HOLD
89	31-28SC0002 63	SO	"	1010	"	1		X		X	31-28	N1	0.00	0.00	HOLD
90	31-28SC0002Q 64	SO	"	1014	"	1		X		X	31-28	FD1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**													

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	FedEx	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 10 of 18

5.1
5

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-11

FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	13	8	13					
91	31-29SC0000 65	SO	4-23-18	0834	LF/RP	2		X		X	31-29	N1	0.00	0.00	
92	31-29SC0001 66	SO	"	0855	"	2		X		X	31-29	N1	0.00	0.00	HOLD
93	31-29SC0002 67	SO	"	0925	"	2		X		X	31-29	N1	0.00	0.00	HOLD
94	31-30SC0000 68	SO	4-19-18	13-53	LF/RP			X			31-30	N1	0.00	0.00	
95	31-30SC0000Q 69	SO	"	1353	"			X			31-30	FD1	0.00	0.00	
96	31-30SC0001 70	SO	"	1409	"			X			31-30	N1	0.00	0.00	HOLD
97	31-30SC0001Q 71	SO	"	1409	"			X			31-30	FD1	0.00	0.00	HOLD
98	31-30SC0002 72	SO	"	1440	"			X			31-30	N1	0.00	0.00	HOLD
99	31-30SC0002Q 73	SO	"	1440	"			X			31-30	FD1	0.00	0.00	HOLD
Cooler #		**Turnaround Time: 14 Days**													

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J Beer	4-25-18	0800	FedEx	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number

8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**

930
04/26/18

ENV.COC_Record
April 13, 2018

Page 11 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 0419/8-12.
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
100	31-31SC0000 74	SO	4-19-18	1500	TB/KL		X			31-31	N1	0.00	0.00	
101	31-31SC0001 75	SO	4-19-18	1509	〃		X			31-31	N1	0.00	0.00	HOLD
102	31-31SC0002 76	SO	4-19-18	1529	〃		X			31-31	N1	0.00	0.00	HOLD
103	31-32SC0000 77	SO	4-24-18	1010	TO/TE		X			31-32	N1	0.00	0.00	
104	31-32SC0001 78	SO	〃	1020	〃		X			31-32	N1	0.00	0.00	HOLD
105	31-32SC0002 79	SO	〃	1045	〃		X			31-32	N1	0.00	0.00	HOLD
106	31-33SC0000 80	SO	4-23-18	1037	TB/KL		X			31-33	N1	0.00	0.00	
107	31-33SC0001 81	SO	〃	1053	〃		X			31-33	N1	0.00	0.00	HOLD
108	31-33SC0002 82	SO	〃	1109	〃		X			31-33	N1	0.00	0.00	HOLD
Cooler #		Turnaround Time: 14 Days												

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	FedEx	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 12 of 18

5.1 5

FA53725R: Chain of Custody
Page 12 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-13
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
109	31-34SC0000 83	SO	4-19-18	1428	KL/TB		X			31-34	N1	0.00	0.00	
110	31-34SC0000Q 84	SO	"	1432	"		X			31-34	FD1	0.00	0.00	
111	31-34SC0001 85	SO	"	1453	"		X			31-34	N1	0.00	0.00	HOLD
112	31-34SC0001Q 86	SO	"	1456	"		X			31-34	FD1	0.00	0.00	HOLD
113	31-34SC0002 87	SO	"	1515	"		X			31-34	N1	0.00	0.00	HOLD
114	31-34SC0002Q 88	SO	"	1520	"		X			31-34	FD1	0.00	0.00	HOLD
115	31-35SC0000 89	SO	4-24-18	1125	TO/TE		X		X	31-35	N1	0.00	0.00	
116	31-35SC0001 90	SO	"	1145	"		X		X	31-35	N1	0.00	0.00	HOLD
117	31-35SC0002 91	SO	"	1205	"		X		X	31-35	N1	0.00	0.00	HOLD

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	Fed Ex	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
930
04/26/18

ENV.COC_Record
April 13, 2018

Page 13 of 18

5.1 5

FA53725R: Chain of Custody
Page 13 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042418-14
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method / No. of EA's	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
							11	13	8	13					
118	31-36SC0000 92	SO	4-24-18	1130	TB/KL	2		X		X	31-36	N1	0.00	0.00	
119	31-36SC0001 93	SO	"	1150	"	2		X		X	31-36	N1	0.00	0.00	HOLD
120	31-36SC0002 94	SO	"	1238	"	2		X		X	31-36	N1	0.00	0.00	HOLD
121	31-37SC0000 95	SO	4-24-18	1149	LF/RP	2		X		X	31-37	N1	0.00	0.00	
122	31-37SC0000Q 96	SO	"	1149	"	2		X		X	31-37	FD1	0.00	0.00	
123	31-37SC0001 97	SO	"	1337	"	2		X		X	31-37	N1	0.00	0.00	HOLD
124	31-37SC0001Q 98	SO	"	1337	"	2		X		X	31-37	FD1	0.00	0.00	HOLD
125	31-37SC0002 99	SO	"	1421	"	2		X		X	31-37	N1	0.00	0.00	HOLD
126	31-37SC0002Q 100	SO	"	1421	"	2		X		X	31-37	FD1	0.00	0.00	HOLD

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	FedEx	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/26/18 930

ENV.COC_Record
April 13, 2018

Page 14 of 18

5.1 5

FA53725R: Chain of Custody
Page 14 of 21

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042418-15

FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
127	31-38SC0000 101	SO	4-24-18	0947	LF/KP				X	31-38	N1	0.00	0.00	
128	31-38SC0001 102	SO	〃	1007	〃				X	31-38	N1	0.00	0.00	HOLD
129	31-38SC0002 103	SO	〃	1028	〃				X	31-38	N1	0.00	0.00	HOLD
130	31-39SC0000 104	SO	4-24-18	0943	TB/KL				X	31-39	N1	0.00	0.00	
131	31-39SC0001 105	SO	〃	1010	TB/KL				X	31-39	N1	0.00	0.00	HOLD
132	31-39SC0002 106	SO	〃	1045	TB				X	31-39	N1	0.00	0.00	HOLD
133	31-40SC0000 107	SO	4-24-18	0915	TO/TE				X	31-40	N1	0.00	0.00	
134	31-40SC0001 108	SO	〃	0930	〃				X	31-40	N1	0.00	0.00	HOLD
135	31-40SC0002 109	SO	〃	0945	〃				X	31-40	N1	0.00	0.00	HOLD
Cooler #		Turnaround Time: 14 Days												

Relinquished by: *(Signature)*	Date	Time
J Beer	4-25-18	
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-25-18	0800

Shipping Date / Carrier / Airbill Number

8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**

930
04/26/18

ENV.COC_Record
April 13, 2018

Page 15 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042418-16
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID		Matrix	Date	Time	Samp Init.	Analytical Test Method: No. of Bags	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
								11	13	8	13					
136	31-41SC0000	110	SO	4-24-18	0833	LF/KP	1				X	31-41	N1	0.00	0.00	
137	31-41SC0001	111	SO	"	0850	"	1				X	31-41	N1	0.00	0.00	HOLD
138	31-41SC0002	112	SO	"	0914	"	1				X	31-41	N1	0.00	0.00	HOLD
139	31-42SC0000	113	SO	4-24-18	0830	TB/KL	1				X	31-42	N1	0.00	0.00	
140	31-42SC0000Q	114	SO	"	0834	"	1				X	31-42	FD1	0.00	0.00	
141	31-42SC0001	115	SO	"	0850	"	1				X	31-42	N1	0.00	0.00	HOLD
142	31-42SC0001Q	116	SO	"	0855	"	1				X	31-42	FD1	0.00	0.00	HOLD
143	31-42SC0002	117	SO	"	0914	"	1				X	31-42	N1	0.00	0.00	HOLD
144	31-42SC0002Q	118	SO	"	0917	"	1				X	31-42	FD1	0.00	0.00	HOLD
Cooler #			Turnaround Time: 14 Days													

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J Beer	4-25-18	0800	Fed Ex	4-25-18	0800
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3495

Received by Laboratory: *(Signature, Date, Time)* **& condition**
930
04/26/18

ENV.COC_Record
April 13, 2018

Page 16 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 041918-17
FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
145	31-43SC0000 119	SO	4-24-18	0830	TO/TE				X	31-43	N1	0.00	0.00	
146	31-43SC0001 120	SO	"	0845	"				X	31-43	N1	0.00	0.00	HOLD
147	31-43SC0002 121	SO	"	0905	"				X	31-43	N1	0.00	0.00	HOLD
~~148~~	~~31-ER01SC~~	~~WQ~~				X				FIELDQC*	EB1	0.00	0.00	eJB
149	31-ER02SC 122	WQ	4-19-18	0654	KL/JB	X				FIELDQC	EB1	0.00	0.00	
150	31-ER03SC 123	WQ	4-23-18	0736	KL/JB	X				FIELDQC	EB1	0.00	0.00	~~HOLD~~ JB Run
151	31-ER04SC 124	WQ	4-23-18	1655	KL/JB	X		X		FIELDQC	EB1	0.00	0.00	~~HOLD~~ JB Run
152	31-ER05SC 125	WQ	4-25-18	0713	KL/JB	X		X		FIELDQC	EB1	0.00	0.00	
~~153~~	~~31-ER06SC~~	~~WQ~~				X		X		FIELDQC	EB1	0.00	0.00	eJB

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-25-18	0800	FedEx	4-25-18	0800
FedEx					

Shipping Date / Carrier / Airbill Number: 8133 7208 3495

Received by Laboratory *(Signature, Date, Time)* **& condition**: 04/26/18 930

ENV.COC_Record
April 13, 2018

* 31-ER03SC for samples collected by JB on 4-22-18.

Page 17 of 18

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # FA53725

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
154													
155													
156													
157													
158													
159													
160													
161													
162													

Cooler # **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex		

Shipping Date / Carrier / Airbill Number

Received by Laboratory: *(Signature, Date, Time)* **& condition**

04/26/18 930

ENV.COC_Record
April 13, 2018

Page 18 of 18

SGS Sample Receipt Summary

Job Number: FA53725 **Client:** GILBANE **Project:** BRA KEMRON SOIL SAMPLING

Date / Time Received: 4/26/2018 9:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** 1015923873760003281100780684030524

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 5

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6); Cooler 2: (3.8); Cooler 3: (3.6); Cooler 4: (3.4); Cooler 5: (19.8);

Cooler Temps (Corrected) °C: Cooler 1: (4.0); Cooler 2: (4.2); Cooler 3: (4.0); Cooler 4: (3.8); Cooler 5: (20.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 4/26/2018 9:30:00 AM Reviewer: SP Date: 4/26/2018

5.1

5

Job Change Order: FA53725

Requested Date:	4/26/2018	**Received Date:**	4/26/2018
Account Name:	Kemron Environmental	**Due Date:**	5/10/2018
Project	Ft Ord; CA	**Deliverable:**	FULT1
CSR:	jeans	**TAT (Days):**	14

Sample #: FA53725-31, 59	**Change:**	Per client for Samples 31-18 and 31-28, please log and analyze 8330 explosives only. Client will collect another sample for Lead analysis. Thank you.
Sample #: FA53725-	**Change:**	All samples listed as "HOLD" for LC8330B, are to be dried and logged for LC8330B XH. Thank you.

Above Changes Per: client, Thomas Beer, via e-mail request **Date:** 4/26/2018

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: FA53725

Requested Date:	5/30/2018	**Received Date:**	4/26/2018
Account Name:	Kemron Environmental Services, I	**Due Date:**	5/23/2018
Project Description:	Ft Ord; CA	**Deliverable:**	FULT1
CSR:	jeans	**TAT (Days):**	5

==========

Sample #: FA53725-11,12,44,45,75,76

Dept:

TAT: 5

Change:
Please log and analyze for Pb per client request. Thank you.

==========

Above Changes Per: client, Thomas Beer, via e-mail re **Date/Time:** 5/30/2018 1:47:32 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

QC Evaluation: DOD QSM5 Limits

Job Number: FA53725R
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/18/18 thru 04/23/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP33823	SW846 6010C						
MP33823-B1	7439-92-1	Lead	BSP	REC	93.2	%	81-112
MP33823-S1*	7439-92-1	Lead	MS	REC	10.3 [a]	%	81-112
MP33823-S2*	7439-92-1	Lead	MSD	REC	25.4 [a]	%	81-112
MP33823-S2*	7439-92-1	Lead	MSD	RPD	2.4	%	20
MP33823-D1*	7439-92-1	Lead	DUP	RPD	10.5	%	20
MP33823-D2*	7439-92-1	Lead	DUP	RPD	14.8	%	20

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

* Sample used for QC is not from job FA53725R

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14941
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:42	MA14941-STD1	1		STDA
09:46	MA14941-STD2	1		STDB
09:50	MA14941-STD3	1		STDC
09:53	MA14941-STD4	1		STDD
09:56	MA14941-HSTD1	1		
10:02	MA14941-ICV1	1		
10:09	MA14941-ICB1	1		
10:13	MA14941-CRIA1	1		
10:25	MA14941-ICSA1	1		
10:34	MA14941-ICSAB1	1		
10:41	MA14941-CCV1	1		
11:06	MA14941-CCB1	1		
11:11	ZZZZZZ	10		
11:15	MP33817-S1	2		
11:19	MP33817-S2	2		
11:23	ZZZZZZ	2		
11:27	MA14941-CCV2	1		
11:31	MA14941-CCB2	1		
11:58	MA14941-CCV3	1		
12:05	MA14941-CCB3	1		
13:32	MA14941-CCV4	1		
13:36	MA14941-CCB4	1		
13:50	MP33823-MB1	1		
13:54	MP33823-B1	1		
13:58	FA53517-2R	5		(sample used for QC only; not part of login FA53725R)
14:02	MP33823-D1	5		
14:07	MP33823-SD1	25		
14:11	MP33823-PS1	5		
14:15	MP33823-S1	5		
14:19	MP33823-S2	5		
14:23	ZZZZZZ	5		
14:27	ZZZZZZ	5		
14:32	MA14941-CCV5	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14941
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:35	MA14941-CCB5	1		
14:40	ZZZZZZ	5		
14:44	ZZZZZZ	5		
14:48	ZZZZZZ	5		
14:52	ZZZZZZ	5		
14:56	ZZZZZZ	5		
15:05	ZZZZZZ	5		
15:09	ZZZZZZ	5		
15:13	ZZZZZZ	5		
15:17	FA53725-11R	5		
15:21	MA14941-CCV6	1		
15:25	MA14941-CCB6	1		
15:30	FA53725-12R	5		
15:34	FA53725-75R	5		
15:38	FA53725-76R	5		
15:42	FA53725-44AR	5		
15:46	MP33823-D2	5		
---------->	Last reportable sample/prep for job FA53725R			
15:51	MA14941-CRIA2	1		
15:55	MA14941-ICSA2	1		
15:59	MA14941-ICSAB2	1		
16:03	MA14941-CCV7	1		
16:07	MA14941-CCB7	1		
---------->	Last reportable CCB for job FA53725R			
	Refer to raw data for calibration curve and standards.			

INTERNAL STANDARD SUMMARY

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14941
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:42	MA14941-STD1	11907 !	43031 !	2034	4913 !
09:46	MA14941-STD2	3667	25726	2024	1390
09:50	MA14941-STD3	3536	24846	1997	1266
09:53	MA14941-STD4	3391	24171	2003	1180
09:56	MA14941-HSTD1	3390	24124	1995	1178
10:02	MA14941-ICV1	3481	24845	2041	1261
10:09	MA14941-ICB1	3615 R	26151 R	2096 R	1483 R
10:13	MA14941-CRIA1	3566	26028	2084	1413
10:25	MA14941-ICSA1	3137	22558	1985	1093
10:34	MA14941-ICSAB1	3144	22867	2015	1087
10:41	MA14941-CCV1	3405	25169	2082	1253
11:06	MA14941-CCB1	3516	26338	2103	1465
11:11	ZZZZZZ	3829	29141	2363	1408
11:15	MP33817-S1	3340	25021	2086	1259
11:19	MP33817-S2	3322	25067	2110	1257
11:23	ZZZZZZ	3304	25217	2107	1303
11:27	MA14941-CCV2	3360	25320	2117	1247
11:31	MA14941-CCB2	3522	26478	2117	1460
11:58	MA14941-CCV3	3342	25240	2100	1238
12:05	MA14941-CCB3	3460	26154	2110	1436
13:32	MA14941-CCV4	3366	25258	2128	1235
13:36	MA14941-CCB4	3487	25793	2084	1427
13:50	MP33823-MB1	3455	26717	2158	1446
13:54	MP33823-B1	3340	25656	2116	1291
13:58	FA53517-2R	3593	27136	2246	1410
14:02	MP33823-D1	3585	26880	2244	1414
14:07	MP33823-SD1	3536	26263	2172	1432
14:11	MP33823-PS1	3565	26952	2242	1389
14:15	MP33823-S1	3539	26635	2205	1361
14:19	MP33823-S2	3542	26470	2228	1369
14:23	ZZZZZZ	3601	26898	2241	1393
14:27	ZZZZZZ	3549	26746	2228	1392
14:32	MA14941-CCV5	3290	25043	2122	1224

INTERNAL STANDARD SUMMARY

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14941
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:35	MA14941-CCB5	3403	26178	2144	1418
14:40	ZZZZZZ	3539	26611	2225	1399
14:44	ZZZZZZ	3707	28189	2381	1326
14:48	ZZZZZZ	3666	27832	2354	1328
14:52	ZZZZZZ	3602	26654	2286	1334
14:56	ZZZZZZ	3626	26860	2302	1328
15:05	ZZZZZZ	3618	27499	2284	1383
15:09	ZZZZZZ	3519	26738	2235	1382
15:13	ZZZZZZ	3489	26442	2214	1366
15:17	FA53725-11R	3535	26485	2238	1320
15:21	MA14941-CCV6	3288	25304	2113	1227
15:25	MA14941-CCB6	3422	25859	2113	1418
15:30	FA53725-12R	3540	26612	2208	1371
15:34	FA53725-75R	3506	26291	2169	1370
15:38	FA53725-76R	3553	26493	2220	1382
15:42	FA53725-44AR	3525	26558	2206	1370
15:46	MP33823-D2	3531	26511	2185	1387
15:51	MA14941-CRIA2	3405	25829	2134	1369
15:55	MA14941-ICSA2	3021	22430	2019	1064
15:59	MA14941-ICSAB2	3031	22504	2041	1060
16:03	MA14941-CCV7	3295	24961	2125	1223
16:07	MA14941-CCB7	3398	25852	2129	1416

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14941 Units: ug/l

Time: / Sample ID:			10:09 ICB1		11:06 CCB1		11:31 CCB2		12:05 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2								
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	1.40	<20	0.800	<20	1.10	<20	-0.400	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14941 Units: ug/l

Time: / Sample ID:			13:36 CCB4		14:35 CCB5		15:25 CCB6		16:07 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2								
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	-0.100	<20	0.600	<20	0.300	<20	0.500	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14941 Units: ug/l

Time:		10:02			10:41			11:27	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	2000	1920	96.0	2000	1970	98.5	2000	1950	97.5
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14941 Units: ug/l

Time:		11:58			13:32			14:32	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	2000	1990	99.5	2000	2020	101.0	2000	2000	100.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14941 Units: ug/l

Time: / Sample ID: / Metal	CCV True	15:21 CCV6 Results	% Rec	CCV True	16:03 CCV7 Results	% Rec
Aluminum						
Antimony						
Arsenic	anr					
Barium	anr					
Beryllium						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	2000	1990	99.5	2000	2000	100.0
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14941 Units: ug/l

Time:		09:56	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic	anr		
Barium	anr		
Beryllium			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper			
Iron			
Lead	4000	4000	100.0
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14941 Units: ug/l

Time:			10:13		15:51	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0				
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	anr			
Cobalt	100	50				
Copper	50	25				
Iron	600	300				
Lead	10	5.0	5.10	102.0	4.80	96.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB060118M1.ICP Date Analyzed: 06/01/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14941 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:25 ICSA1 Results	% Rec	10:34 ICSAB1 Results	% Rec	15:55 ICSA2 Results	% Rec	15:59 ICSAB2 Results	% Rec
Aluminum	500000	500000	504000	100.8	499000	99.8	521000	104.2	517000	103.4
Antimony		1000	0.00		969	96.9	-0.700		957	95.7
Arsenic		1000	0.00		1050	105.0	3.20		1030	103.0
Barium		500	0.00		515	103.0	0.500		523	104.6
Beryllium		500	0.00		496	99.2	-0.100		506	101.2
Cadmium		1000	0.00		941	94.1	0.500		943	94.3
Calcium	500000	500000	461000	92.2	456000	91.2	478000	95.6	475000	95.0
Chromium		500	-0.300		472	94.4	0.200		494	98.8
Cobalt		500	-0.100		482	96.4	-0.400		481	96.2
Copper		500	-0.500		528	105.6	-0.800		538	107.6
Iron	200000	200000	187000	93.5	185000	92.5	192000	96.0	191000	95.5
Lead		1000	0.00		952	95.2	-2.50		963	96.3
Magnesium	500000	500000	508000	101.6	499000	99.8	520000	104.0	510000	102.0
Manganese		500	-0.100		489	97.8	0.200		504	100.8
Molybdenum		1000	0.00		851	85.1	-0.500		846	84.6
Nickel		1000	0.00		983	98.3	0.400		972	97.2
Potassium			64.4		2.80		230		36.8	
Selenium		1000	0.00		939	93.9	4.20		933	93.3
Silver		1000	0.00		1020	102.0	-0.300		1050	105.0
Sodium			191		161		164		125	
Strontium		1000	-0.100		926	92.6	-0.200		951	95.1
Thallium		1000	-0.700		884	88.4	3.30		897	89.7
Tin		1000	2.10		922	92.2	1.60		896	89.6
Titanium		1000	-1.50		911	91.1	-1.40		940	94.0
Vanadium		500	-0.700		482	96.4	-0.800		487	97.4
Zinc		1000	0.600		944	94.4	2.30		945	94.5

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/01/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8		
Antimony	1.0	.05	.065		
Arsenic	0.50	.065	.1		
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05		
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05		
Iron	15	.85	.85		
Lead	1.0	.05	.05	0.035	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15		

Associated samples MP33823: FA53725-11R, FA53725-12R, FA53725-75R, FA53725-76R, FA53725-44AR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/01/18 06/01/18

Metal	FA53517-2R Original	DUP	RPD	QC Limits	FA53517-2R Original	MS	Spikelot MPFLICP2 % Rec		QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	160	144 (a)	10.5	0-20	160	162 (a)	19.4	10.3 (b)	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP33823: FA53725-11R, FA53725-12R, FA53725-75R, FA53725-76R, FA53725-44AR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/01/18 06/01/18

Metal	FA53517-2R Original MSD		Spikelot MPFLICP2 % Rec		MSD RPD	QC Limit	FA53517-2R Original DUP		RPD	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	160	166 (a)	23.6	25.4 (b)	2.4	20	160	138 (a)	14.8	0-20
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33823: FA53725-11R, FA53725-12R, FA53725-75R, FA53725-76R, FA53725-44AR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Sample dilution required due to difficult matrix.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/01/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	23.3	25	93.2	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33823: FA53725-11R, FA53725-12R, FA53725-75R, FA53725-76R, FA53725-44AR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 06/01/18

Metal	FA53517-2R Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	4130	3800	8.1	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33823: FA53725-11R, FA53725-12R, FA53725-75R, FA53725-76R, FA53725-44AR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53725R
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33823 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 06/01/18

Metal	Sample ml	Final ml	FA53517-2R Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	4130	4047.4	4147	0.2	2.5	50	199.2*(a	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33823: FA53725-11R, FA53725-12R, FA53725-75R, FA53725-76R, FA53725-44AR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Instrument Detection Limits

Job Number: FA53725R
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14941

Instrument Linear Ranges

Job Number: FA53725R
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14941

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 6/1/2018 9:42:57 Type: Cal
Method: 60102007_041712(v244) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0005	-.0028	-.0002	.0488	-.0010	.0071	-.0001	.0002	.0002
Stddev	.0004	.0005	.0000	.0018	.0011	.0014	.0002	.0001	.0000
%RSD	75.89	18.93	10.33	3.661	111.5	18.97	138.7	48.65	21.09
#1	-.0004	-.0035	-.0002	.0502	-.0019	.0056	-.0003	.0002	.0002
#2	-.0002	-.0025	-.0002	.0468	.0002	.0077	.0000	.0001	.0002
#3	-.0009	-.0026	-.0002	.0493	-.0013	.0081	.0000	.0002	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0021	.0009	.0096	-.0010	.0001	-.0001	-.0431	.0000	.0009
Stddev	.0011	.0008	.0027	.0004	.0002	.0000	.0041	.0000	.0004
%RSD	52.77	85.63	28.46	43.12	177.2	56.57	9.539	64.12	40.02
#1	.0029	.0003	.0100	-.0008	.0003	-.0001	-.0476	.0001	.0013
#2	.0026	.0018	.0120	-.0007	.0001	-.0001	-.0396	.0001	.0006
#3	.0008	.0007	.0066	-.0015	.0000	-.0001	-.0422	.0000	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	-.0003	.0014	.0001	.0023	.0015	-.0014	-.0002	.0003
Stddev	.0001	.0001	.0000	.0000	.0010	.0006	.0001	.0000	.0000
%RSD	564.0	29.65	2.374	43.57	42.56	42.83	8.498	21.23	6.346
#1	.0000	-.0002	.0014	.0002	.0018	.0019	-.0015	-.0001	.0003
#2	-.0001	-.0004	.0014	.0001	.0034	.0017	-.0014	-.0002	.0003
#3	.0001	-.0004	.0014	.0001	.0017	.0008	-.0013	-.0002	.0003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4912.5	11907.	43031.	2034.4
Stddev	14.7	18.	25870.	13.2
%RSD	.29834	.15446	60.119	.64673
#1	4897.1	11886.	25766.	2049.5
#2	4914.1	11920.	30553.	2027.3
#3	4926.3	11916.	72775.	2026.2

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 6/1/2018 9:46:47 Type: Cal
Method: 60102007_041712(v244) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0325	1.735	.0974	5.398	4.262	2.920	2.377	1.167	.2194	.3921
Stddev	.0003	.005	.0001	.019	.026	.018	.003	.002	.0010	.0004
%RSD	1.074	.2881	.0937	.3563	.6089	.6353	.1290	.1354	.4639	.0980
#1	.0328	1.741	.0975	5.401	4.277	2.930	2.379	1.167	.2206	.3922
#2	.0326	1.731	.0973	5.378	4.232	2.898	2.378	1.166	.2192	.3924
#3	.0321	1.735	.0975	5.416	4.277	2.931	2.373	1.169	.2186	.3916

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.202	2.593	.2968	1.233	.5593	7.590	.6663	.5962	.1190	.0723
Stddev	.003	.015	.0020	.008	.0010	.044	.0005	.0020	.0003	.0003
%RSD	.1498	.5906	.6655	.6702	.1785	.5845	.0779	.3417	.2860	.3801
#1	2.205	2.610	.2958	1.240	.5591	7.611	.6658	.5983	.1193	.0722
#2	2.198	2.583	.2991	1.235	.5584	7.539	.6662	.5942	.1187	.0726
#3	2.203	2.585	.2955	1.224	.5604	7.620	.6669	.5961	.1191	.0721

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2105	.2313	8.603	.9328	.2904	.3151	1.468
Stddev	.0009	.0006	.028	.0030	.0027	.0012	.001
%RSD	.4239	.2684	.3196	.3262	.9215	.3904	.0733
#1	.2114	.2320	8.633	.9343	.2935	.3160	1.468
#2	.2103	.2309	8.578	.9348	.2894	.3156	1.467
#3	.2096	.2309	8.599	.9293	.2884	.3137	1.469

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1390.0	3667.1	25726.	2023.9
Stddev	5.0	2.3	104.	6.6
%RSD	.36249	.06320	.40406	.32802
#1	1385.5	3667.3	25615.	2030.1
#2	1395.4	3669.4	25743.	2024.6
#3	1389.0	3664.8	25821.	2016.9

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 6/1/2018 9:50:11 Type: Cal
Method: 60102007_041712(v244) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1256	6.936	.4008	21.92	17.15	11.47	9.471	4.610	.8766	1.564
Stddev	.0004	.043	.0011	.14	.13	.09	.013	.004	.0018	.001
%RSD	.3357	.6204	.2713	.6569	.7569	.7855	.1413	.0820	.2063	.0742
#1	.1256	6.985	.3998	22.07	17.29	11.57	9.477	4.613	.8781	1.565
#2	.1252	6.917	.4007	21.78	17.12	11.44	9.480	4.611	.8771	1.563
#3	.1261	6.906	.4019	21.91	17.04	11.40	9.455	4.606	.8746	1.564

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8.464	10.34	1.174	4.942	2.359	30.15	2.624	2.463	.4803	.2961
Stddev	.041	.07	.014	.013	.004	.20	.005	.004	.0015	.0012
%RSD	.4806	.6985	1.180	.2529	.1491	.6528	.1806	.1847	.3046	.3886
#1	8.511	10.41	1.190	4.956	2.358	30.35	2.625	2.466	.4798	.2968
#2	8.439	10.33	1.167	4.931	2.357	30.14	2.619	2.465	.4791	.2948
#3	8.441	10.27	1.165	4.940	2.363	29.96	2.629	2.458	.4819	.2968

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.7858	.9581	36.43	3.965	1.184	1.318	5.841
Stddev	.0022	.0020	.23	.012	.001	.002	.009
%RSD	.2847	.2047	.6261	.3077	.0884	.1549	.1600
#1	.7844	.9567	36.65	3.977	1.185	1.320	5.849
#2	.7845	.9572	36.44	3.953	1.185	1.317	5.844
#3	.7884	.9603	36.20	3.965	1.183	1.316	5.831

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1265.6	3536.1	24846.	1997.0
Stddev	1.6	3.2	60.	26.3
%RSD	.12569	.09188	.24341	1.3172
#1	1264.5	3532.4	24787.	1972.1
#2	1264.9	3537.4	24841.	2024.5
#3	1267.4	3538.5	24908.	1994.3

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 6/1/2018 9:53:25 Type: Cal
Method: 60102007_041712(v244) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2531	13.47	.8075	43.07	32.96	22.00	18.46	9.007	1.697	3.066
Stddev	.0010	.04	.0022	.11	.07	.08	.02	.007	.005	.007
%RSD	.4123	.3123	.2758	.2524	.2248	.3579	.1108	.0782	.2893	.2179
#1	.2519	13.51	.8054	43.16	33.05	22.08	18.46	9.011	1.694	3.059
#2	.2538	13.47	.8098	42.95	32.92	22.00	18.48	9.010	1.696	3.066
#3	.2536	13.43	.8072	43.10	32.92	21.92	18.44	8.998	1.703	3.073

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	16.12	20.09	2.272	9.606	4.581	58.35	5.162	4.908	.9628	.5916
Stddev	.03	.06	.010	.054	.009	.20	.007	.022	.0021	.0007
%RSD	.2138	.2987	.4432	.5657	.1990	.3502	.1424	.4530	.2150	.1195
#1	16.16	20.16	2.283	9.547	4.572	58.56	5.160	4.913	.9627	.5911
#2	16.09	20.04	2.263	9.617	4.590	58.32	5.170	4.927	.9649	.5924
#3	16.11	20.08	2.270	9.654	4.580	58.16	5.156	4.883	.9608	.5913

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.423	1.838	69.12	7.525	2.343	2.550	11.39
Stddev	.003	.005	.17	.035	.012	.006	.02
%RSD	.1971	.2664	.2428	.4718	.4993	.2406	.2019
#1	1.421	1.834	69.31	7.485	2.344	2.550	11.41
#2	1.426	1.844	69.04	7.535	2.354	2.543	11.40
#3	1.423	1.837	69.01	7.554	2.331	2.555	11.37

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1179.6	3390.6	24171.	2003.4
Stddev	4.5	5.6	121.	9.3
%RSD	.38539	.16421	.49990	.46256
#1	1177.6	3387.5	24249.	1996.3
#2	1176.4	3387.2	24231.	2013.9
#3	1184.8	3397.0	24031.	2000.1

Zoom In Zoom Out

Sample Name: HSTD Acquired: 6/1/2018 9:56:54 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4989	79.05	4.009	3.982	3.938	78.53	3.958	3.962	3.950	3.972
Stddev	.0024	.15	.005	.014	.012	.04	.003	.001	.005	.012
%RSD	.4847	.1909	.1270	.3574	.3089	.0512	.0633	.0351	.1404	.3062
#1	.5010	79.00	4.003	3.998	3.924	78.53	3.961	3.961	3.950	3.984
#2	.4963	78.92	4.011	3.973	3.948	78.50	3.956	3.962	3.945	3.972
#3	.4994	79.21	4.013	3.974	3.940	78.57	3.957	3.963	3.956	3.959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.09	78.97	79.06	3.962	3.977	78.48	3.962	4.002	4.000	3.996
Stddev	.11	.36	.34	.018	.003	.10	.004	.006	.005	.008
%RSD	.1450	.4529	.4285	.4461	.0671	.1310	.0910	.1403	.1355	.1953
#1	78.22	78.67	78.78	3.978	3.978	78.41	3.960	4.006	3.999	3.989
#2	78.01	79.37	79.43	3.943	3.979	78.44	3.966	3.995	4.006	4.005
#3	78.05	78.89	78.96	3.965	3.974	78.60	3.959	4.005	3.996	3.994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.819	3.936	3.931	3.939	3.985	3.958	3.958
Stddev	.002	.004	.007	.013	.007	.010	.003
%RSD	.0562	.1047	.1854	.3220	.1787	.2540	.0679
#1	3.818	3.934	3.924	3.953	3.988	3.957	3.960
#2	3.817	3.941	3.938	3.929	3.977	3.949	3.957
#3	3.821	3.934	3.932	3.935	3.990	3.969	3.955
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 6/1/2018 9:56:54 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1178.1	3390.1	24124.	1995.4
Stddev	2.0	3.5	161.	3.2
%RSD	.17351	.10359	.66732	.16094
#1	1177.4	3386.8	24174.	1997.6
#2	1180.4	3389.8	24254.	1991.7
#3	1176.5	3393.8	23944.	1997.0

Zoom In Zoom Out

Sample Name: ICV Acquired: 6/1/2018 10:02:54 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2331	40.22	1.963	1.974	1.976	39.24	1.962	1.987	1.932	1.969
Stddev	.0005	.10	.005	.003	.004	.08	.001	.001	.006	.007
%RSD	.2247	.2442	.2425	.1707	.1847	.2023	.0625	.0625	.3102	.3525
#1	.2328	40.25	1.957	1.972	1.980	39.23	1.964	1.987	1.935	1.969
#2	.2327	40.11	1.967	1.971	1.972	39.17	1.962	1.989	1.925	1.963
#3	.2337	40.30	1.964	1.978	1.976	39.32	1.961	1.987	1.935	1.977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.69	38.98	39.86	1.945	1.862	38.50	2.002	1.923	1.973	1.978
Stddev	.10	.11	.13	.004	.004	.13	.004	.004	.001	.009
%RSD	.2526	.2793	.3263	.2071	.2105	.3372	.1727	.1854	.0510	.4626
#1	38.60	39.10	39.77	1.949	1.858	38.61	1.998	1.926	1.972	1.968
#2	38.67	38.93	40.01	1.944	1.862	38.35	2.004	1.923	1.974	1.986
#3	38.79	38.90	39.81	1.941	1.866	38.53	2.004	1.919	1.973	1.980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0646	2.016	1.902	1.945	1.995	1.893	1.967
Stddev	.0008	.005	.001	.004	.000	.002	.001
%RSD	1.285	.2427	.0677	.1824	.0128	.0874	.0502
#1	.0655	2.011	1.903	1.949	1.996	1.894	1.968
#2	.0644	2.017	1.901	1.943	1.995	1.894	1.966
#3	.0639	2.021	1.903	1.943	1.995	1.891	1.966
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 6/1/2018 10:02:54 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1261.4	3480.9	24845.	2040.6
Stddev	1.1	7.5	110.	13.5
%RSD	.09116	.21405	.44442	.66317
#1	1262.4	3486.9	24722.	2046.8
#2	1261.6	3483.1	24876.	2025.1
#3	1260.1	3472.5	24936.	2049.9

Zoom In Zoom Out

Sample Name: ICB Acquired: 6/1/2018 10:09:50 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0011	-.0015	-.0018	-.0001	.0001	.0017	.0000	.0001	-.0002
Stddev	.0004	.0056	.0007	.0001	.0001	.0037	.0000	.0001	.0000
%RSD	32.71	371.6	37.21	282.6	156.4	217.8	416.9	103.0	24.97
#1	.0015	.0049	-.0023	.0000	.0002	-.0026	.0001	.0002	-.0002
#2	.0007	-.0039	-.0010	-.0002	.0000	.0035	.0000	.0000	-.0001
#3	.0011	-.0055	-.0020	.0000	.0001	.0042	.0000	.0001	-.0002
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0010								
Low Limit	-.0010								

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0016	-.0415	.0372	.0000	F.0017	.0200	.0001	F.0014
Stddev	.0003	.0047	.0100	.0229	.0000	.0001	.0019	.0002	.0002
%RSD	16.53	291.4	24.02	61.59	259.8	5.808	9.529	224.3	14.00
#1	.0013	.0061	-.0378	.0109	.0000	.0019	.0210	.0003	.0012
#2	.0018	.0021	-.0528	.0478	.0001	.0017	.0178	.0002	.0013
#3	.0017	-.0033	-.0339	.0530	.0000	.0017	.0213	-.0002	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0011	.0058	.0007	.0000	.0004	-.0011	-.0002	.0002
Stddev	.0010	.0004	.0004	.0003	.000	.0001	.0012	.0001	.0000
%RSD	902.7	36.99	7.600	41.99	607.6	25.56	106.6	48.62	18.27
#1	.0011	-.0007	.0063	.0010	.0001	.0004	-.0017	-.0001	.0002
#2	.0002	-.0010	.0058	.0006	-.0001	.0004	.0003	-.0002	.0002
#3	-.0009	-.0015	.0054	.0005	.0000	.0003	-.0020	-.0003	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 6/1/2018 10:09:50 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1482.5	3614.5	26151.	2095.9
Stddev	.3	8.3	103.	11.3
%RSD	.02359	.22912	.39258	.53696
#1	1482.8	3622.8	26212.	2082.9
#2	1482.7	3614.6	26207.	2102.0
#3	1482.1	3606.2	26032.	2102.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 6/1/2018 10:13:29 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0102	.1943	.0081	.1945	.0048	.9564	.0050	.0505	.0096
Stddev	.0006	.0054	.0001	.0009	.0000	.0034	.0001	.0001	.0003
%RSD	5.411	2.756	.8232	.4405	.1145	.3559	1.560	.1120	3.349
#1	.0098	.1905	.0080	.1939	.0048	.9588	.0050	.0506	.0098
#2	.0106	.1981	.0081	.1951	.0048	.9540	.0049	.0505	.0093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0255	.2927	9.549	4.853	.0146	.0479	9.395	.0417	.0051
Stddev	.0004	.0015	.041	.010	.0000	.0002	.032	.0000	.0003
%RSD	1.384	.5277	.4294	.2089	.0958	.3700	.3380	.0944	6.319
#1	.0257	.2938	9.578	4.860	.0146	.0481	9.417	.0418	.0053
#2	.0252	.2916	9.520	4.845	.0146	.0478	9.372	.0417	.0049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050	.0084	.0349	.0534	.0093	.0097	F.0074	.0467	.0211
Stddev	.0006	.0002	.0003	.0003	.0000	.0000	.0007	.0000	.0001
%RSD	12.29	2.534	.8976	.5255	.2472	.3883	9.212	.1049	.3526
#1	.0054	.0085	.0346	.0536	.0092	.0097	.0078	.0468	.0211
#2	.0046	.0082	.0351	.0532	.0093	.0097	.0069	.0467	.0210
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.0100		
Range							-20.00%		

Zoom In Zoom Out

Sample Name: CRIA Acquired: 6/1/2018 10:13:29 Type: QC
Method: 60102007_041712(v244) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1412.7	3566.4	26028.	2084.2
Stddev	4.5	7.3	17.	11.0
%RSD	.32151	.20498	.06398	.52764
#1	1415.9	3561.3	26040.	2076.4
#2	1409.5	3571.6	26016.	2091.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 6/1/2018 10:25:24 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	504.3	.0000	.0000	.0000	460.7	.0000	-.0001	-.0003
Stddev	.001	.5	.0013	.0003	.000	.7	.0001	.0001	.0004
%RSD	9721.	.1065	2658.	799.0	760.7	.1525	579.3	40.72	132.1
#1	-.0007	503.7	-.0012	.0004	.0001	460.6	.0000	-.0002	.0001
#2	.0000	504.7	.0013	-.0001	.0000	461.4	-.0001	-.0001	-.0008
#3	.0008	504.5	.0000	-.0002	-.0001	460.0	.0002	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	186.5	.0644	508.3	-.0001	.0000	.1911	.0000	.0000
Stddev	.0001	.3	.0298	1.7	.0001	.000	.0125	.0007	.0021
%RSD	16.12	.1639	46.32	.3251	101.5	784.8	6.545	1663.	6991.
#1	-.0004	186.6	.0769	508.6	-.0001	-.0004	.1784	.0004	.0013
#2	-.0006	186.7	.0303	509.8	.0000	.0001	.1915	.0005	.0011
#3	-.0005	186.1	.0859	506.6	-.0001	.0002	.2035	-.0007	-.0023
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	.0203	F.0021	-.0001	-.0015	-.0007	-.0007	.0006
Stddev	.001	.001	.0015	.0003	.0001	.0003	.0021	.0000	.0001
%RSD	5295.	20760.	7.348	13.55	74.74	18.43	321.9	6.546	14.37
#1	-.0002	.0007	.0215	.0021	.0000	-.0013	.0014	-.0007	.0005
#2	-.0006	-.0009	.0207	.0024	-.0001	-.0018	-.0006	-.0008	.0006
#3	.0008	.0002	.0186	.0018	-.0001	-.0014	-.0028	-.0007	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 6/1/2018 10:25:24 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1092.8	3137.0	22558.	1985.4
Stddev	1.2	7.0	70.	11.7
%RSD	.10984	.22431	.31090	.58696
#1	1093.9	3136.4	22542.	1978.4
#2	1092.9	3144.3	22635.	1979.0
#3	1091.5	3130.3	22497.	1998.9

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 6/1/2018 10:34:31 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.022	499.1	1.051	.5149	.4957	456.0	.9407	.4816	.4717	.5277
Stddev	.003	1.1	.003	.0011	.0026	1.3	.0012	.0008	.0021	.0003
%RSD	.3014	.2285	.3035	.2219	.5266	.2826	.1282	.1691	.4509	.0655
#1	1.019	500.4	1.055	.5148	.4983	457.3	.9421	.4825	.4734	.5281
#2	1.023	498.2	1.050	.5138	.4931	454.7	.9403	.4811	.4723	.5276
#3	1.025	498.8	1.049	.5161	.4957	456.0	.9398	.4812	.4693	.5274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	184.8	.0028	499.3	.4888	.8507	.1610	.9826	.9522	.9690	.9390
Stddev	.6	.0469	2.0	.0011	.0010	.0073	.0026	.0036	.0031	.0057
%RSD	.3209	1649.	.4009	.2192	.1200	4.513	.2691	.3820	.3208	.6044
#1	185.3	.0510	501.6	.4875	.8515	.1673	.9857	.9564	.9682	.9445
#2	184.1	.0002	497.9	.4895	.8495	.1530	.9813	.9508	.9725	.9394
#3	184.9	-.0427	498.4	.4892	.8510	.1627	.9810	.9496	.9664	.9331
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0423	.9215	.9255	.9105	.8839	.4823	.9442
Stddev	.0007	.0015	.0042	.0023	.0055	.0004	.0027
%RSD	1.639	.1622	.4587	.2564	.6191	.0801	.2895
#1	.0422	.9227	.9299	.9084	.8900	.4822	.9472
#2	.0416	.9198	.9215	.9130	.8793	.4827	.9419
#3	.0430	.9218	.9252	.9101	.8823	.4819	.9434
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 6/1/2018 10:34:31 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1087.3	3143.5	22867.	2014.6
Stddev	4.5	7.1	52.	8.0
%RSD	.41540	.22734	.22619	.39873
#1	1082.2	3135.3	22807.	2005.5
#2	1089.0	3146.9	22894.	2020.8
#3	1090.8	3148.3	22899.	2017.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 10:41:21 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2493	38.38	2.086	2.046	1.972	38.54	2.032	2.045	1.942	1.998
Stddev	.0004	.09	.006	.005	.003	.12	.002	.004	.006	.005
%RSD	.1648	.2431	.2763	.2242	.1261	.3160	.1024	.2029	.3316	.2350
#1	.2492	38.30	2.092	2.044	1.970	38.43	2.032	2.048	1.948	2.002
#2	.2498	38.36	2.081	2.043	1.973	38.52	2.029	2.040	1.935	1.993
#3	.2490	38.48	2.083	2.051	1.974	38.67	2.033	2.046	1.944	1.998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.88	39.47	39.81	2.024	2.097	38.65	2.105	1.966	2.073	2.089
Stddev	.16	.03	.13	.003	.006	.12	.006	.003	.003	.001
%RSD	.3905	.0856	.3369	.1585	.3005	.3132	.2834	.1577	.1627	.0665
#1	39.76	39.43	39.94	2.026	2.096	38.52	2.111	1.967	2.077	2.087
#2	39.82	39.47	39.67	2.024	2.091	38.69	2.100	1.962	2.071	2.089
#3	40.05	39.50	39.81	2.020	2.104	38.75	2.103	1.968	2.072	2.090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.206	2.180	1.996	2.045	1.998	2.057	2.036
Stddev	.007	.004	.002	.002	.004	.006	.003
%RSD	.3219	.1796	.1109	.0808	.2059	.2732	.1411
#1	2.208	2.184	1.994	2.046	2.003	2.064	2.039
#2	2.199	2.177	1.996	2.044	1.995	2.056	2.033
#3	2.213	2.180	1.999	2.043	1.997	2.053	2.035
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 10:41:21 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1253.0	3404.6	25169.	2082.2
Stddev	.6	2.9	80.	22.1
%RSD	.04812	.08488	.31807	1.0607
#1	1253.3	3404.9	25083.	2078.4
#2	1253.4	3407.3	25185.	2106.0
#3	1252.3	3401.5	25240.	2062.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 11:06:26 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0057	F-.0026	-.0003	.0000	.0015	-.0001	.0000
Stddev	.0001	.0032	.0004	.0003	.000	.0006	.0000	.000
%RSD	6.016	56.06	13.55	100.1	3930.	37.25	41.06	301.3
#1	.0008	-.0040	-.0024	-.0004	.0001	.0022	-.0001	-.0001
#2	.0009	-.0037	-.0030	-.0004	.0002	.0013	-.0001	.0000
#3	.0009	-.0094	-.0025	.0000	-.0002	.0011	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.0020					
Low Limit			-.0020					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0015	-.0040	-.0561	.0154	-.0001	.0003	.0169
Stddev	.0003	.0001	.0021	.0200	.0370	.0000	.0001	.0091
%RSD	159.3	5.705	51.95	35.64	239.7	70.65	34.57	54.23
#1	.0004	.0016	-.0034	-.0775	.0447	-.0001	.0003	.0266
#2	.0002	.0014	-.0024	-.0529	.0277	-.0001	.0003	.0085
#3	-.0001	.0016	-.0064	-.0379	-.0261	.0000	.0002	.0155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0008	-.0002	-.0016	.0053	.0003	-.0002	-.0002
Stddev	.000	.0006	.0010	.0010	.0002	.0002	.0001	.0000
%RSD	208.8	73.73	661.6	61.49	3.846	84.96	34.84	25.43
#1	-.0001	.0012	-.0011	-.0023	.0056	.0002	-.0001	-.0002
#2	-.0001	.0012	.0009	-.0022	.0053	.0005	-.0002	-.0002
#3	.0000	.0001	-.0002	-.0005	.0052	.0001	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 11:06:26 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F-.0032	-.0002	.0002
Stddev	.0003	.0001	.0000
%RSD	10.54	31.26	17.74
#1	-.0034	-.0002	.0002
#2	-.0028	-.0003	.0002
#3	-.0033	-.0001	.0002
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1465.2	3516.2	26338.	2103.4
Stddev	1.7	5.9	197.	.7
%RSD	.11334	.16705	.74797	.03250
#1	1467.1	3521.5	26318.	2102.6
#2	1464.5	3517.0	26152.	2103.6
#3	1464.0	3509.9	26544.	2103.9

Zoom In Zoom Out

Sample Name: FA54391-3 Acquired: 6/1/2018 11:11:26 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0124	-.1081	-.0134	.1073	.0003	6.702	-.0006	.0008	-.0027	.0128
Stddev	.0023	.0751	.0075	.0031	.0007	.034	.0002	.0009	.0023	.0019
%RSD	18.12	69.49	56.29	2.925	231.3	.5035	41.12	104.6	87.64	14.65
#1	.0117	-.1826	-.0162	.1109	-.0005	6.664	-.0004	.0016	-.0054	.0128
#2	.0150	-.0324	-.0191	.1061	.0006	6.717	-.0009	-.0001	-.0015	.0146
#3	.0106	-.1091	-.0049	.1050	.0007	6.726	-.0005	.0010	-.0012	.0109

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1658	.0651	.3491	.0043	.0021	141.3	.0285	.0130	.0054	-.0128
Stddev	.0311	.2491	.1475	.0001	.0006	.2	.0024	.0033	.0045	.0176
%RSD	18.77	382.7	42.25	3.077	28.12	.1533	8.533	25.79	83.68	137.0
#1	.1299	.3287	.5135	.0044	.0023	141.2	.0282	.0142	.0002	-.0197
#2	.1819	-.1664	.3057	.0042	.0026	141.3	.0262	.0156	.0080	.0071
#3	.1855	.0329	.2282	.0042	.0014	141.6	.0311	.0092	.0080	-.0259

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2109	.0021	.0499	-.0005	-.0308	.0011	.0110
Stddev	.0072	.0008	.0014	.0004	.0047	.0028	.0005
%RSD	3.402	38.75	2.881	81.99	15.18	244.4	4.873
#1	.2055	.0017	.0488	.0000	-.0320	.0039	.0105
#2	.2190	.0030	.0515	-.0008	-.0257	-.0016	.0115
#3	.2081	.0015	.0493	-.0007	-.0348	.0011	.0111

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1408.1	3828.5	29141.	2362.6
Stddev	4.6	7.9	105.	10.8
%RSD	.32936	.20553	.36130	.45563
#1	1412.1	3833.5	29056.	2362.8
#2	1403.0	3819.4	29259.	2373.2
#3	1409.2	3832.6	29109.	2351.7

Zoom In Zoom Out

Sample Name: MP33817-S1 Acquired: 6/1/2018 11:15:44 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0535	24.89	2.078	2.112	.0489	193.1	.0498	.5012	.1892	.2525
Stddev	.0007	.09	.003	.003	.0002	.9	.0002	.0007	.0007	.0008
%RSD	1.286	.3418	.1180	.1297	.4583	.4421	.4947	.1374	.3436	.3041
#1	.0543	24.92	2.075	2.113	.0489	193.3	.0497	.5005	.1900	.2533
#2	.0531	24.95	2.080	2.114	.0491	193.9	.0496	.5016	.1888	.2525
#3	.0531	24.79	2.078	2.109	.0487	192.2	.0501	.5017	.1889	.2517

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	24.87	31.60	85.83	.5382	.4880	83.12	.5323	.4779	.5226	2.071
Stddev	.12	.07	.31	.0033	.0007	.30	.0007	.0015	.0035	.007
%RSD	.4714	.2325	.3643	.6141	.1397	.3553	.1262	.3127	.6657	.3494
#1	24.98	31.57	86.04	.5417	.4872	83.20	.5316	.4797	.5240	2.074
#2	24.89	31.69	85.98	.5376	.4884	83.37	.5325	.4773	.5187	2.063
#3	24.75	31.56	85.47	.5352	.4884	82.80	.5329	.4769	.5252	2.076

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	17.15	.5273	.9441	.4879	1.883	.4825	.5043
Stddev	.02	.0019	.0016	.0033	.008	.0022	.0010
%RSD	.1003	.3608	.1676	.6768	.4084	.4551	.1956
#1	17.13	.5293	.9437	.4916	1.888	.4851	.5040
#2	17.16	.5256	.9459	.4864	1.874	.4814	.5035
#3	17.15	.5270	.9428	.4855	1.886	.4811	.5054

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1259.2	3340.3	25021.	2086.0
Stddev	3.2	4.3	51.	16.9
%RSD	.25473	.12781	.20474	.81042
#1	1257.3	3340.0	24963.	2079.7
#2	1262.9	3344.7	25038.	2073.2
#3	1257.5	3336.1	25061.	2105.2

Zoom In Zoom Out

Sample Name: MP33817-S2 Acquired: 6/1/2018 11:19:43 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0539	25.00	2.107	2.135	.0488	193.3	.0499	.5045	.1905	.2528
Stddev	.0007	.04	.006	.007	.0002	.6	.0002	.0017	.0004	.0007
%RSD	1.247	.1646	.2688	.3174	.3184	.3211	.4130	.3407	.1868	.2930
#1	.0538	25.04	2.111	2.137	.0488	193.6	.0498	.5047	.1909	.2529
#2	.0546	24.96	2.101	2.141	.0487	192.6	.0502	.5061	.1903	.2520
#3	.0532	25.01	2.110	2.127	.0490	193.7	.0498	.5027	.1903	.2534

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	25.08	31.78	85.96	.5388	.4909	83.21	.5385	.4778	.5267	2.092
Stddev	.05	.14	.36	.0006	.0009	.23	.0006	.0004	.0001	.002
%RSD	.2102	.4451	.4227	.1083	.1769	.2749	.1061	.0884	.0135	.1110
#1	25.14	31.90	86.16	.5395	.4909	83.47	.5387	.4773	.5266	2.089
#2	25.03	31.62	85.54	.5385	.4918	83.04	.5379	.4781	.5267	2.094
#3	25.08	31.83	86.18	.5385	.4901	83.11	.5390	.4779	.5268	2.092

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	17.30	.5322	.9473	.4870	1.889	.4882	.5078
Stddev	.03	.0019	.0014	.0008	.006	.0009	.0009
%RSD	.1478	.3556	.1494	.1631	.3458	.1865	.1765
#1	17.29	.5314	.9463	.4879	1.897	.4891	.5079
#2	17.33	.5343	.9489	.4869	1.887	.4884	.5086
#3	17.28	.5308	.9467	.4863	1.884	.4873	.5068

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1256.8	3321.7	25067.	2109.9
Stddev	3.4	11.1	95.	17.0
%RSD	.26957	.33289	.37906	.80691
#1	1257.3	3324.7	24970.	2102.0
#2	1253.2	3309.5	25070.	2129.4
#3	1259.9	3331.1	25160.	2098.2

Zoom In Zoom Out

Sample Name: FA54483-1 Acquired: 6/1/2018 11:23:41 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0029	.4821	-.0074	.0412	-.0002	173.5	-.0001	.0006	.0081	.0590
Stddev	.0007	.0365	.0022	.0004	.0002	.6	.0001	.0003	.0008	.0004
%RSD	23.37	7.566	30.49	1.011	86.75	.3330	116.6	52.00	9.814	.7042
#1	.0034	.4802	-.0083	.0417	-.0001	174.2	-.0001	.0003	.0089	.0587
#2	.0031	.4466	-.0048	.0411	-.0001	173.1	-.0001	.0009	.0080	.0588
#3	.0021	.5194	-.0090	.0408	-.0003	173.2	.0000	.0005	.0073	.0595

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.388	3.892	4.149	.0327	.0013	127.5	.0057	.0098	.0008	.0123
Stddev	.001	.042	.050	.0002	.0002	.6	.0004	.0017	.0018	.0031
%RSD	.0328	1.066	1.192	.7368	18.88	.4520	7.921	17.28	230.6	25.30
#1	4.387	3.934	4.207	.0326	.0015	128.2	.0057	.0113	.0022	.0116
#2	4.390	3.851	4.123	.0325	.0014	127.2	.0052	.0100	-.0012	.0157
#3	4.388	3.891	4.119	.0329	.0010	127.2	.0061	.0080	.0013	.0095

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.209	.0070	.2896	.0243	-.0062	.0055	.0635
Stddev	.007	.0006	.0009	.0012	.0017	.0006	.0003
%RSD	.1403	9.126	.3235	4.986	26.97	11.80	.4298
#1	5.210	.0064	.2889	.0233	-.0054	.0058	.0636
#2	5.215	.0069	.2892	.0240	-.0051	.0059	.0632
#3	5.201	.0076	.2906	.0257	-.0081	.0047	.0637

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1303.1	3303.5	25217.	2106.9
Stddev	3.5	6.9	124.	8.7
%RSD	.26856	.21015	.49139	.41198
#1	1299.2	3296.8	25316.	2105.6
#2	1305.8	3310.7	25258.	2099.0
#3	1304.5	3303.1	25078.	2116.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 11:27:55 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2479	37.67	2.109	2.040	1.952	37.75	2.032	2.048	1.897
Stddev	.0018	.06	.004	.015	.005	.12	.004	.001	.011
%RSD	.7355	.1571	.1784	.7549	.2446	.3058	.1725	.0443	.5801
#1	.2482	37.73	2.113	2.053	1.957	37.88	2.032	2.049	1.890
#2	.2459	37.61	2.106	2.044	1.950	37.66	2.028	2.047	1.891
#3	.2495	37.68	2.107	2.023	1.948	37.71	2.035	2.049	1.909
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.980	39.29	39.22	39.47	2.000	2.106	37.74	2.123	1.953
Stddev	.002	.07	.05	.25	.011	.006	.16	.002	.003
%RSD	.0798	.1822	.1223	.6208	.5505	.2877	.4206	.1096	.1396
#1	1.982	39.37	39.25	39.74	1.998	2.102	37.91	2.126	1.950
#2	1.979	39.26	39.16	39.26	1.991	2.104	37.60	2.121	1.955
#3	1.981	39.24	39.24	39.42	2.012	2.113	37.70	2.123	1.955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.093	2.109	2.232	F2.211	1.974	2.020	1.987	2.052	2.036
Stddev	.005	.004	.003	.005	.005	.010	.004	.002	.002
%RSD	.2249	.1791	.1285	.2265	.2568	.4770	.2092	.0736	.0894
#1	2.088	2.105	2.232	2.216	1.978	2.017	1.982	2.050	2.038
#2	2.094	2.111	2.229	2.206	1.976	2.012	1.990	2.052	2.034
#3	2.098	2.112	2.234	2.211	1.969	2.030	1.989	2.053	2.036
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				2.000					
Range				10.00%					

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 11:27:55 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1247.3	3359.6	25320.	2116.5
Stddev	2.2	2.1	102.	15.6
%RSD	.17260	.06207	.40256	.73532
#1	1249.0	3360.9	25388.	2100.2
#2	1244.9	3360.7	25370.	2118.0
#3	1248.0	3357.2	25203.	2131.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 11:31:51 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0015	.0014	F-.0020	.0000	.0002	.0104	.0002	.0002
Stddev	.0001	.0112	.0008	.0004	.0001	.0020	.0001	.0000
%RSD	9.505	775.1	40.45	4160.	54.91	19.23	33.46	20.22
#1	.0016	.0129	-.0026	-.0001	.0002	.0126	.0002	.0003
#2	.0015	-.0095	-.0011	.0004	.0001	.0087	.0002	.0002
#3	.0013	.0009	-.0024	-.0003	.0003	.0099	.0001	.0002
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0010		.0020					
Low Limit	-.0010		-.0020					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F.0021	.0107	.0042	.0012	.0004	F.0032	.0451
Stddev	.0002	.0003	.0031	.0267	.0115	.0001	.0007	.0078
%RSD	80.56	14.42	28.83	639.2	993.7	27.48	22.45	17.35
#1	.0000	.0018	.0120	.0298	-.0087	.0003	.0040	.0540
#2	-.0004	.0024	.0128	-.0236	-.0017	.0004	.0031	.0414
#3	-.0003	.0020	.0071	.0063	.0138	.0004	.0026	.0398
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.0020					.0010	
Low Limit		-.0020					-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	F.0011	-.0004	-.0018	.0064	.0006	.0001	.0011
Stddev	.0002	.0001	.0005	.0011	.0006	.0004	.0002	.0001
%RSD	68.96	4.453	121.7	62.59	9.258	62.23	221.9	5.327
#1	.0001	.0012	-.0008	-.0012	.0058	.0007	.0003	.0011
#2	.0004	.0011	-.0004	-.0031	.0063	.0009	.0001	.0010
#3	.0005	.0012	.0001	-.0011	.0070	.0002	-.0001	.0011
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 11:31:51 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F-.0030	.0004	.0005
Stddev	.0006	.0002	.0001
%RSD	21.38	48.74	12.10
#1	-.0022	.0006	.0005
#2	-.0032	.0004	.0006
#3	-.0034	.0002	.0005
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1460.0	3521.5	26478.	2117.2
Stddev	1.9	12.1	125.	19.4
%RSD	.13282	.34497	.47336	.91774
#1	1462.3	3535.3	26340.	2121.1
#2	1458.7	3512.5	26586.	2134.4
#3	1459.1	3516.8	26509.	2096.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 11:58:28 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2492	40.20	2.011	2.026	2.028	40.52	2.027	2.026	2.020	2.010
Stddev	.0004	.27	.001	.005	.007	.19	.000	.002	.006	.005
%RSD	.1726	.6755	.0440	.2307	.3311	.4776	.0137	.0806	.3181	.2465
#1	.2490	40.45	2.011	2.031	2.031	40.70	2.027	2.027	2.015	2.010
#2	.2488	39.91	2.011	2.023	2.020	40.31	2.027	2.025	2.027	2.015
#3	.2496	40.23	2.012	2.023	2.032	40.54	2.027	2.024	2.018	2.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.94	40.17	40.68	2.042	2.054	40.27	2.039	1.992	2.011	2.014
Stddev	.12	.12	.19	.005	.002	.13	.003	.003	.006	.001
%RSD	.2834	.2925	.4779	.2443	.1036	.3149	.1411	.1426	.3256	.0542
#1	41.00	40.15	40.86	2.041	2.052	40.38	2.042	1.989	2.018	2.013
#2	40.81	40.07	40.47	2.047	2.053	40.13	2.037	1.995	2.004	2.015
#3	41.02	40.30	40.71	2.037	2.056	40.29	2.038	1.993	2.010	2.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.127	2.084	2.051	2.075	2.009	2.056	2.031
Stddev	.001	.002	.005	.005	.005	.004	.000
%RSD	.0601	.0955	.2617	.2491	.2530	.1776	.0148
#1	2.128	2.082	2.053	2.075	2.010	2.058	2.031
#2	2.128	2.086	2.045	2.080	2.013	2.057	2.031
#3	2.126	2.084	2.054	2.070	2.003	2.051	2.031
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 11:58:28 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1237.9	3341.9	25240.	2100.4
Stddev	3.6	5.9	36.	4.6
%RSD	.29260	.17797	.14415	.21747
#1	1242.0	3347.3	25204.	2097.1
#2	1236.3	3342.9	25238.	2105.6
#3	1235.3	3335.6	25277.	2098.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 12:05:02 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0060	.0001	.0000	.0000	.0028	.0000	-.0001	.0000
Stddev	.0002	.0133	.0003	.000	.000	.0057	.000	.0000	.000
%RSD	736.0	222.0	216.0	265.4	534.7	205.0	212.4	35.26	936.9
#1	-.0002	-.0047	-.0001	.0000	.0000	.0092	-.0001	-.0001	.0002
#2	.0002	-.0199	.0005	.0000	.0000	-.0019	.0000	-.0001	-.0002
#3	.0001	.0066	.0000	-.0002	-.0001	.0011	.0000	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0070	.0403	-.0488	.0000	F.0017	.0001	.0001	-.0004
Stddev	.0002	.0022	.0228	.0260	.0000	.0003	.0089	.0001	.0004
%RSD	34.33	31.65	56.71	53.35	55.52	18.07	6347.	67.11	96.06
#1	-.0007	.0068	.0645	-.0727	.0000	.0018	.0074	.0001	-.0007
#2	-.0004	.0049	.0192	-.0527	.0000	.0019	-.0098	.0001	.0000
#3	-.0009	.0093	.0371	-.0211	.0000	.0014	.0028	.0002	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	.0014	.0020	F.0010	.0000	.0007	.0010	-.0002	-.0001
Stddev	.0012	.0006	.0003	.0002	.0001	.0001	.0002	.0003	.0001
%RSD	117.8	43.09	15.17	16.92	248.5	11.89	19.79	116.5	136.4
#1	.0007	.0010	.0024	.0012	.0001	.0006	.0012	.0000	.0000
#2	.0023	.0012	.0019	.0008	-.0001	.0007	.0009	-.0002	-.0001
#3	.0000	.0021	.0018	.0010	.0001	.0008	.0009	-.0005	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 12:05:02 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1435.7	3459.6	26154.	2110.3
Stddev	3.1	12.9	240.	13.5
%RSD	.21688	.37310	.91833	.64070
#1	1436.2	3459.4	25994.	2124.7
#2	1432.4	3446.8	26430.	2108.2
#3	1438.6	3472.6	26037.	2097.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 13:32:12 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2511	40.70	2.003	2.031	2.047	40.93	2.036	2.034	2.046	2.029
Stddev	.0024	.18	.000	.004	.006	.17	.003	.001	.004	.008
%RSD	.9397	.4400	.0008	.2223	.3181	.4122	.1347	.0647	.1840	.3794
#1	.2538	40.58	2.003	2.029	2.048	40.88	2.033	2.032	2.043	2.034
#2	.2497	40.91	2.003	2.036	2.053	41.12	2.035	2.034	2.045	2.032
#3	.2498	40.63	2.003	2.027	2.040	40.79	2.039	2.035	2.050	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.16	40.64	40.60	2.050	2.053	41.00	2.030	2.017	2.008	2.007
Stddev	.09	.16	.15	.011	.005	.12	.001	.001	.005	.004
%RSD	.2168	.3841	.3643	.5207	.2561	.3015	.0522	.0715	.2678	.2206
#1	41.10	40.78	40.72	2.062	2.047	40.99	2.029	2.018	2.002	2.008
#2	41.26	40.66	40.64	2.040	2.055	41.13	2.030	2.018	2.013	2.002
#3	41.11	40.47	40.43	2.049	2.057	40.89	2.031	2.015	2.010	2.011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.120	2.061	2.077	2.091	2.028	2.062	2.035
Stddev	.004	.003	.008	.009	.002	.003	.004
%RSD	.1693	.1502	.4037	.4268	.1094	.1431	.1794
#1	2.117	2.060	2.079	2.101	2.027	2.065	2.031
#2	2.124	2.065	2.084	2.084	2.031	2.059	2.035
#3	2.119	2.059	2.068	2.089	2.028	2.062	2.038
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 13:32:12 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1235.4	3365.8	25258.	2128.1
Stddev	2.3	10.3	74.	19.3
%RSD	.18478	.30631	.29254	.90471
#1	1238.0	3377.7	25201.	2146.3
#2	1234.0	3360.3	25342.	2108.0
#3	1234.1	3359.3	25232.	2130.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 13:36:09 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0077	-.0004	.0005	.0001	.0112	.0002	.0000	.0004
Stddev	.0004	.0151	.0008	.0001	.0000	.0012	.0000	.000	.0001
%RSD	238.5	195.2	184.3	13.66	24.73	10.47	14.08	72.20	25.65
#1	-.0007	.0071	-.0012	.0004	.0001	.0100	.0002	.0000	.0005
#2	.0001	-.0073	.0004	.0006	.0001	.0124	.0002	.0000	.0003
#3	.0001	-.0231	-.0006	.0005	.0001	.0113	.0001	-.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0183	.0125	-.0114	.0001	F.0029	.0055	.0003	-.0001
Stddev	.0001	.0059	.0142	.0233	.0000	.0007	.0102	.0002	.0005
%RSD	14.69	32.39	113.5	205.2	17.06	26.19	186.2	61.69	519.1
#1	-.0006	.0233	-.0014	-.0014	.0002	.0036	.0171	.0004	-.0004
#2	-.0005	.0199	.0271	-.0381	.0001	.0029	-.0023	.0003	.0005
#3	-.0006	.0117	.0119	.0053	.0001	.0021	.0017	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	F.0020	.0026	F.0014	.0002	.0015	.0016	.0001	.0001
Stddev	.0012	.0006	.0003	.0002	.0001	.0002	.0005	.0006	.0001
%RSD	365.3	29.54	12.69	15.21	56.03	11.20	29.96	530.2	108.8
#1	.0006	.0014	.0028	.0011	.0001	.0017	.0021	-.0005	.0002
#2	.0014	.0025	.0022	.0015	.0002	.0015	.0012	.0001	.0001
#3	-.0010	.0022	.0028	.0015	.0003	.0014	.0014	.0007	.0000
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020		.0010					
Low Limit		-.0020		-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 13:36:09 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1426.9	3486.6	25793.	2083.7
Stddev	5.9	11.5	179.	9.6
%RSD	.41185	.33063	.69503	.46196
#1	1420.7	3473.6	25968.	2083.0
#2	1432.4	3490.8	25803.	2074.4
#3	1427.7	3495.5	25609.	2093.6

Zoom In Zoom Out

Sample Name: MP33823-MB1 Acquired: 6/1/2018 13:50:33 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0254	-.0010	-.0001	-.0001	.0277	.0000	-.0001	.0008	.0007
Stddev	.0001	.0118	.0006	.0003	.0002	.0023	.0000	.0002	.0003	.0001
%RSD	109.2	46.60	63.87	292.0	160.3	8.357	1790.	176.5	31.46	19.98
#1	.0000	.0359	-.0015	.0000	-.0003	.0280	.0000	-.0001	.0011	.0007
#2	-.0002	.0126	-.0003	-.0005	.0000	.0253	.0000	.0001	.0008	.0008
#3	-.0002	.0277	-.0012	.0001	.0000	.0299	.0000	-.0004	.0006	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0159	-.0046	.0198	.0004	.0001	.0112	.0004	.0007	.0010	.0020
Stddev	.0010	.0131	.0216	.0000	.0002	.0101	.0002	.0002	.0006	.0013
%RSD	6.381	283.6	108.9	10.53	116.9	90.43	42.47	36.21	56.36	67.50
#1	.0158	-.0129	.0124	.0003	.0001	.0013	.0003	.0005	.0005	.0033
#2	.0149	.0105	.0029	.0004	.0003	.0108	.0005	.0006	.0011	.0006
#3	.0169	-.0114	.0442	.0004	.0000	.0215	.0003	.0009	.0016	.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0159	.0230	.0001	.0006	-.0014	-.0001	.0044
Stddev	.0006	.0001	.0001	.0002	.0012	.0003	.0001
%RSD	3.998	.2965	44.26	42.74	86.65	210.8	1.268
#1	.0157	.0230	.0001	.0003	-.0008	.0000	.0045
#2	.0166	.0230	.0001	.0008	-.0006	.0000	.0044
#3	.0153	.0231	.0002	.0006	-.0027	-.0004	.0044
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33823-MB1 Acquired: 6/1/2018 13:50:33 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1445.6	3454.9	26717.	2157.9
Stddev	5.2	6.9	77.	7.0
%RSD	.36202	.19974	.28903	.32424
#1	1441.9	3450.6	26789.	2152.8
#2	1443.4	3451.2	26727.	2154.9
#3	1451.6	3462.8	26636.	2165.9

Zoom In Zoom Out

Sample Name: MP33823-B1 Acquired: 6/1/2018 13:54:51 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0497	25.93	1.934	1.999	.0502	24.56	.0490	.4959	.1970	.2494
Stddev	.0002	.17	.005	.007	.0001	.22	.0001	.0002	.0013	.0005
%RSD	.3099	.6411	.2633	.3717	.2786	.9012	.2997	.0313	.6422	.2023
#1	.0495	25.98	1.940	2.001	.0502	24.54	.0488	.4959	.1966	.2491
#2	.0498	26.06	1.930	2.005	.0503	24.79	.0490	.4958	.1960	.2492
#3	.0497	25.74	1.932	1.991	.0500	24.35	.0491	.4961	.1984	.2500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.70	24.44	24.59	.4917	.4758	24.37	.5158	.4660	.4844	1.904
Stddev	.25	.15	.17	.0006	.0008	.19	.0012	.0022	.0013	.004
%RSD	.9546	.6135	.7105	.1285	.1580	.7927	.2287	.4631	.2686	.1943
#1	25.76	24.46	24.57	.4916	.4757	24.37	.5171	.4635	.4829	1.902
#2	25.91	24.58	24.78	.4923	.4751	24.57	.5153	.4670	.4848	1.902
#3	25.43	24.28	24.43	.4911	.4766	24.18	.5149	.4675	.4854	1.908
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3556	.5216	.4859	.4883	1.862	.4759	.4895
Stddev	.0023	.0014	.0026	.0008	.004	.0004	.0000
%RSD	.6487	.2701	.5261	.1592	.2284	.0878	.0051
#1	.3556	.5229	.4856	.4886	1.858	.4763	.4895
#2	.3580	.5218	.4886	.4888	1.861	.4755	.4895
#3	.3533	.5201	.4836	.4874	1.867	.4760	.4895
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33823-B1 Acquired: 6/1/2018 13:54:51 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1291.1	3339.9	25656.	2116.4
Stddev	.9	6.9	83.	31.5
%RSD	.07019	.20676	.32534	1.4895
#1	1291.9	3332.0	25752.	2105.9
#2	1290.1	3343.1	25617.	2091.4
#3	1291.2	3344.7	25600.	2151.8

Zoom In Zoom Out

Sample Name: FA53517-2R Acquired: 6/1/2018 13:58:48 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0023	101.4	.0500	.3909	.0038	6.895	.0000	.0382	.2276	.6111
Stddev	.0019	.2	.0051	.0018	.0009	.055	.0003	.0013	.0017	.0052
%RSD	82.38	.1756	10.14	.4728	23.30	.7997	1850.	3.295	.7317	.8455
#1	.0044	101.5	.0499	.3930	.0040	6.949	.0004	.0396	.2292	.6170
#2	.0016	101.2	.0551	.3896	.0029	6.899	-.0003	.0379	.2279	.6079
#3	.0009	101.5	.0449	.3901	.0047	6.839	.0000	.0371	.2259	.6083

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	121.4	12.62	11.79	.6614	.0037	1.531	.0988	4.130	.0981	.0072
Stddev	.4	.04	.14	.0054	.0005	.009	.0027	.081	.0036	.0062
%RSD	.3059	.3425	1.173	.8208	13.23	.6103	2.740	1.968	3.646	86.02
#1	121.8	12.65	11.92	.6674	.0043	1.537	.1013	4.215	.0985	.0034
#2	121.2	12.63	11.64	.6568	.0033	1.536	.0993	4.121	.0944	.0038
#3	121.1	12.57	11.81	.6599	.0036	1.520	.0959	4.053	.1015	.0143

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.148	.0307	.4272	2.718	.0097	.2742	.2399
Stddev	.068	.0014	.0016	.019	.0031	.0031	.0042
%RSD	1.629	4.444	.3753	.6905	32.06	1.142	1.733
#1	4.212	.0312	.4288	2.739	.0133	.2772	.2444
#2	4.156	.0318	.4256	2.704	.0079	.2746	.2391
#3	4.077	.0292	.4273	2.712	.0079	.2709	.2361

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1409.5	3592.7	27136.	2245.8
Stddev	4.0	4.3	235.	12.1
%RSD	.28456	.12106	.86544	.53755
#1	1405.5	3596.4	26974.	2252.2
#2	1409.4	3587.9	27405.	2253.3
#3	1413.5	3593.7	27028.	2231.9

Zoom In Zoom Out

Sample Name: MP33823-D1 Acquired: 6/1/2018 14:02:57 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0028	86.52	.0369	.3654	.0034	4.945	.0004	.0295	.1790	.4896
Stddev	.0010	.49	.0086	.0033	.0006	.026	.0003	.0004	.0019	.0044
%RSD	34.40	.5638	23.32	.9074	17.73	.5267	81.11	1.511	1.038	.8989
#1	.0017	86.48	.0467	.3672	.0027	4.975	.0004	.0292	.1791	.4881
#2	.0030	86.05	.0303	.3674	.0039	4.930	.0007	.0300	.1808	.4946
#3	.0036	87.02	.0339	.3615	.0036	4.931	.0001	.0292	.1771	.4862

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	95.77	11.98	9.157	.5155	.0026	2.121	.0796	3.119	.0839	.0050
Stddev	.50	.09	.152	.0029	.0003	.027	.0012	.013	.0049	.0111
%RSD	.5225	.7473	1.663	.5682	10.46	1.271	1.520	.4032	5.787	219.5
#1	96.03	12.07	9.310	.5146	.0025	2.140	.0784	3.113	.0871	.0163
#2	95.19	11.90	9.156	.5131	.0024	2.134	.0798	3.111	.0783	.0047
#3	96.09	11.95	9.006	.5187	.0029	2.090	.0808	3.133	.0863	-.0059

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	24.74	.0297	.3408	2.708	.0072	.2181	.1849
Stddev	.43	.0010	.0011	.064	.0044	.0005	.0005
%RSD	1.750	3.503	.3206	2.357	60.84	.2225	.2974
#1	25.22	.0297	.3408	2.775	.0022	.2184	.1843
#2	24.64	.0308	.3397	2.648	.0102	.2175	.1854
#3	24.37	.0287	.3419	2.700	.0093	.2183	.1849

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1414.3	3584.8	26880.	2243.6
Stddev	3.9	14.2	134.	21.3
%RSD	.27580	.39630	.49912	.95152
#1	1418.7	3587.0	26982.	2228.6
#2	1413.0	3569.7	26929.	2268.0
#3	1411.2	3597.8	26728.	2234.1

Zoom In Zoom Out

Sample Name: MP33823-SD1 Acquired: 6/1/2018 14:07:08 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0087	118.1	.0413	.5551	.0038	6.673	.0005	.0329	.2314	.5603
Stddev	.0103	1.4	.0193	.0049	.0037	.169	.0006	.0010	.0044	.0039
%RSD	119.0	1.201	46.84	.8801	97.61	2.528	139.8	3.051	1.882	.6943
#1	.0130	119.7	.0374	.5596	.0003	6.480	.0004	.0321	.2361	.5562
#2	.0162	117.5	.0623	.5559	.0076	6.787	-.0002	.0325	.2306	.5610
#3	-.0031	117.1	.0242	.5499	.0034	6.753	.0011	.0340	.2275	.5639

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	113.5	17.66	11.02	.6454	-.0014	4.591	.1038	3.796	.1121	.0263
Stddev	.8	.90	.20	.0443	.0055	.387	.0017	.033	.0053	.0322
%RSD	.7385	5.109	1.852	6.872	400.9	8.421	1.593	.8594	4.737	122.6
#1	113.3	18.06	10.79	.6211	.0028	4.834	.1019	3.768	.1180	.0603
#2	114.4	16.62	11.20	.6184	.0008	4.794	.1048	3.832	.1078	-.0037
#3	112.8	18.29	11.06	.6965	-.0077	4.145	.1048	3.789	.1105	.0223

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	62.59	.0298	.4193	4.085	.0268	.2568	.2203
Stddev	1.72	.0074	.0023	.051	.0384	.0045	.0036
%RSD	2.748	24.67	.5524	1.254	143.2	1.756	1.613
#1	60.71	.0289	.4171	4.114	-.0116	.2610	.2238
#2	64.08	.0229	.4189	4.026	.0268	.2520	.2204
#3	62.98	.0375	.4217	4.114	.0652	.2573	.2167

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1431.8	3536.1	26263.	2172.2
Stddev	3.9	8.9	158.	33.9
%RSD	.27118	.25075	.60283	1.5589
#1	1435.5	3545.9	26085.	2185.0
#2	1427.7	3533.7	26317.	2133.7
#3	1432.1	3528.7	26388.	2197.7

Zoom In Zoom Out

Sample Name: MP33823-PS1 Acquired: 6/1/2018 14:11:23 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0473	100.3	.1487	.6261	.0529	11.10	.0501	.0884	.2695	.6896
Stddev	.0005	.4	.0066	.0052	.0002	.09	.0002	.0008	.0008	.0036
%RSD	1.153	.4284	4.441	.8295	.3163	.8049	.3245	.8498	.2889	.5163
#1	.0473	100.1	.1508	.6235	.0528	11.06	.0499	.0889	.2691	.6895
#2	.0479	99.97	.1539	.6227	.0531	11.03	.0502	.0876	.2704	.6861
#3	.0468	100.8	.1413	.6321	.0528	11.20	.0502	.0889	.2690	.6932

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	120.2	21.78	16.40	.6861	.0945	10.64	.2027	4.147	.1849	.0964
Stddev	.7	.02	.19	.0030	.0007	.04	.0004	.023	.0012	.0073
%RSD	.5763	.0891	1.143	.4359	.6946	.3342	.2212	.5525	.6393	7.590
#1	120.2	21.77	16.36	.6892	.0941	10.67	.2032	4.171	.1836	.0957
#2	119.5	21.76	16.23	.6860	.0941	10.60	.2025	4.125	.1854	.0894
#3	120.9	21.80	16.60	.6832	.0952	10.67	.2025	4.146	.1858	.1040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.050	.0799	.4592	2.706	.1087	.3131	.4739
Stddev	.016	.0007	.0023	.007	.0017	.0017	.0018
%RSD	.4043	.9373	.5093	.2638	1.587	.5391	.3883
#1	4.046	.0797	.4590	2.714	.1106	.3134	.4721
#2	4.036	.0807	.4569	2.700	.1072	.3147	.4737
#3	4.068	.0793	.4616	2.704	.1083	.3113	.4758

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1388.9	3564.7	26952.	2241.7
Stddev	4.4	4.2	98.	15.4
%RSD	.32028	.11686	.36482	.68553
#1	1387.3	3567.5	26902.	2246.1
#2	1393.9	3566.6	26889.	2254.4
#3	1385.5	3559.9	27065.	2224.6

Zoom In Zoom Out

Sample Name: MP33823-S1 Acquired: 6/1/2018 14:15:29 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0499	166.2	1.858	2.371	.0528	30.17	.0484	.5228	.4357	.8003
Stddev	.0020	.8	.003	.008	.0006	.09	.0003	.0011	.0095	.0030
%RSD	4.005	.4792	.1603	.3304	1.189	.3035	.6847	.2098	2.169	.3725
#1	.0496	166.5	1.858	2.370	.0535	30.20	.0485	.5215	.4339	.8032
#2	.0521	166.8	1.860	2.380	.0526	30.25	.0486	.5234	.4459	.8005
#3	.0481	165.3	1.854	2.365	.0524	30.07	.0480	.5234	.4273	.7973

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	142.6	37.36	35.53	1.100	.4185	26.42	.6253	4.182	.2654	1.837
Stddev	.2	.21	.07	.004	.0018	.16	.0013	.008	.0048	.002
%RSD	.1560	.5687	.1920	.4125	.4186	.5985	.2071	.1984	1.821	.1274
#1	142.7	37.56	35.53	1.097	.4167	26.54	.6266	4.173	.2638	1.837
#2	142.8	37.39	35.46	1.106	.4202	26.49	.6253	4.190	.2708	1.834
#3	142.4	37.14	35.59	1.098	.4188	26.24	.6241	4.184	.2615	1.838

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	27.32	.4947	.8694	3.552	1.885	.7199	.6938
Stddev	.42	.0007	.0027	.063	.015	.0025	.0015
%RSD	1.533	.1429	.3094	1.769	.8081	.3509	.2091
#1	27.76	.4952	.8688	3.583	1.870	.7196	.6949
#2	27.26	.4951	.8723	3.594	1.884	.7226	.6942
#3	26.93	.4939	.8671	3.480	1.901	.7176	.6921

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1361.3	3539.3	26635.	2204.5
Stddev	2.8	7.0	54.	16.0
%RSD	.20293	.19689	.20272	.72448
#1	1364.5	3547.2	26660.	2186.1
#2	1359.3	3536.6	26573.	2213.0
#3	1360.1	3534.1	26672.	2214.5

Zoom In Zoom Out

Sample Name: MP33823-S2 Acquired: 6/1/2018 14:19:33 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0480	138.9	1.780	2.213	.0497	27.91	.0465	.5002	.3780	.6832
Stddev	.0014	1.0	.009	.008	.0002	.10	.0004	.0019	.0019	.0044
%RSD	2.834	.6855	.5049	.3755	.4719	.3605	.8131	.3865	.4982	.6474
#1	.0465	137.8	1.773	2.207	.0495	27.83	.0461	.4986	.3795	.6883
#2	.0489	139.1	1.791	2.223	.0500	27.89	.0468	.4997	.3759	.6815
#3	.0488	139.7	1.777	2.210	.0496	28.02	.0467	.5024	.3786	.6799

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	119.3	33.82	32.29	.9571	.4093	24.84	.5863	3.529	.2485	1.783
Stddev	.6	.19	.20	.0015	.0013	.19	.0016	.006	.0022	.007
%RSD	.4696	.5672	.6290	.1561	.3139	.7727	.2681	.1852	.8929	.3903
#1	118.7	33.60	32.42	.9588	.4078	24.62	.5881	3.536	.2508	1.783
#2	119.3	33.97	32.40	.9560	.4099	24.93	.5855	3.528	.2464	1.776
#3	119.9	33.88	32.06	.9566	.4101	24.97	.5852	3.523	.2484	1.790

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	24.91	.4850	.7778	2.983	1.825	.6528	.6427
Stddev	.33	.0024	.0050	.029	.003	.0026	.0006
%RSD	1.330	.5008	.6370	.9897	.1509	.3946	.0971
#1	25.15	.4873	.7726	2.991	1.826	.6510	.6429
#2	24.53	.4825	.7783	3.008	1.827	.6517	.6421
#3	25.04	.4853	.7824	2.951	1.822	.6557	.6433

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1368.8	3542.4	26470.	2228.1
Stddev	1.5	3.5	97.	14.8
%RSD	.11109	.09928	.36665	.66512
#1	1367.7	3539.1	26456.	2245.2
#2	1370.5	3546.1	26573.	2218.4
#3	1368.3	3541.9	26380.	2220.8

Zoom In Zoom Out

Sample Name: FA53517-3R Acquired: 6/1/2018 14:23:36 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0030	135.8	.0494	.3868	.0039	3.322	.0005	.0293	.2493	.1678
Stddev	.0006	.2	.0065	.0010	.0002	.007	.0000	.0003	.0012	.0014
%RSD	21.42	.1171	13.09	.2676	5.685	.2169	3.796	.9402	.4638	.8639
#1	.0027	135.6	.0472	.3858	.0039	3.322	.0005	.0296	.2492	.1671
#2	.0038	136.0	.0567	.3867	.0040	3.329	.0005	.0294	.2483	.1695
#3	.0026	135.9	.0443	.3879	.0036	3.314	.0005	.0290	.2506	.1668

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	137.0	16.75	15.71	.5413	.0035	2.071	.1156	.4631	.0236	.0085
Stddev	.2	.04	.07	.0028	.0007	.016	.0002	.0040	.0073	.0076
%RSD	.1688	.2660	.4575	.5162	20.82	.7688	.1491	.8608	30.80	89.89
#1	137.1	16.72	15.74	.5444	.0034	2.053	.1154	.4677	.0307	.0163
#2	137.1	16.73	15.76	.5389	.0027	2.079	.1155	.4612	.0240	.0011
#3	136.7	16.80	15.63	.5407	.0042	2.082	.1158	.4604	.0162	.0080

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	21.54	.0262	.1338	3.795	.0129	.3054	.5065
Stddev	.18	.0013	.0005	.068	.0042	.0025	.0009
%RSD	.8530	5.110	.3785	1.777	32.99	.8169	.1861
#1	21.75	.0253	.1335	3.733	.0084	.3025	.5076
#2	21.47	.0277	.1344	3.787	.0134	.3063	.5060
#3	21.41	.0256	.1335	3.867	.0169	.3072	.5059

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1392.7	3601.3	26898.	2241.3
Stddev	5.2	4.2	102.	5.1
%RSD	.37092	.11752	.37887	.22807
#1	1387.4	3596.7	26790.	2246.7
#2	1397.7	3605.1	26909.	2240.5
#3	1393.0	3602.0	26993.	2236.6

Zoom In Zoom Out

Sample Name: FA53517-5R Acquired: 6/1/2018 14:27:49 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0027	152.2	.0450	1.251	.0045	19.21	.0018	.0459	.2452	.1191
Stddev	.0021	.7	.0020	.009	.0004	.10	.0003	.0008	.0034	.0017
%RSD	77.05	.4614	4.344	.7176	8.334	.5366	15.82	1.701	1.391	1.389
#1	.0037	152.8	.0469	1.248	.0040	19.29	.0022	.0468	.2443	.1186
#2	.0041	151.4	.0449	1.262	.0046	19.09	.0016	.0455	.2423	.1177
#3	.0003	152.5	.0430	1.245	.0047	19.24	.0018	.0453	.2490	.1209

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	124.4	14.81	12.75	5.720	.0026	2.091	.1276	.3291	.0142	.0098
Stddev	.4	.09	.15	.006	.0002	.050	.0003	.0016	.0018	.0045
%RSD	.2935	.5774	1.168	.1137	6.036	2.385	.2567	.4983	12.79	46.12
#1	124.5	14.75	12.84	5.725	.0024	2.132	.1280	.3307	.0140	.0149
#2	124.0	14.91	12.83	5.712	.0027	2.036	.1275	.3274	.0161	.0085
#3	124.7	14.78	12.58	5.722	.0027	2.107	.1274	.3291	.0125	.0062

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.16	.0283	.3330	3.342	.0084	.2449	.1371
Stddev	1.28	.0018	.0001	.031	.0048	.0001	.0007
%RSD	6.665	6.209	.0242	.9217	57.70	.0462	.5228
#1	20.29	.0270	.3331	3.378	.0050	.2450	.1379
#2	19.41	.0275	.3330	3.327	.0062	.2448	.1366
#3	17.77	.0303	.3330	3.322	.0139	.2448	.1367

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1391.5	3549.1	26746.	2227.7
Stddev	3.2	8.4	38.	10.2
%RSD	.22910	.23712	.14288	.45824
#1	1392.6	3552.2	26708.	2224.6
#2	1394.0	3555.5	26785.	2239.1
#3	1387.9	3539.5	26744.	2219.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 14:32:00 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2525	39.84	2.038	2.049	2.025	40.14	2.033	2.038	2.009	2.023
Stddev	.0009	.10	.006	.007	.004	.07	.003	.003	.004	.004
%RSD	.3750	.2614	.2736	.3230	.2091	.1868	.1679	.1685	.2222	.1855
#1	.2529	39.74	2.043	2.051	2.020	40.09	2.035	2.039	2.010	2.026
#2	.2532	39.95	2.037	2.054	2.026	40.23	2.035	2.040	2.012	2.025
#3	.2514	39.83	2.032	2.041	2.029	40.11	2.029	2.034	2.004	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.91	40.30	40.51	2.065	2.075	40.36	2.072	1.995	2.045	2.047
Stddev	.12	.05	.16	.006	.002	.04	.002	.008	.004	.005
%RSD	.2918	.1340	.4065	.2952	.1032	.0919	.0731	.3933	.2002	.2558
#1	40.83	40.28	40.46	2.065	2.073	40.35	2.070	1.986	2.047	2.051
#2	41.05	40.26	40.37	2.071	2.077	40.40	2.073	2.001	2.048	2.048
#3	40.86	40.36	40.69	2.059	2.075	40.33	2.072	1.997	2.040	2.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.160	2.118	2.052	2.092	2.019	2.073	2.037
Stddev	.001	.002	.005	.008	.003	.005	.001
%RSD	.0303	.0971	.2309	.3789	.1587	.2346	.0574
#1	2.161	2.119	2.047	2.091	2.016	2.078	2.038
#2	2.160	2.116	2.054	2.101	2.022	2.069	2.038
#3	2.159	2.119	2.055	2.085	2.018	2.073	2.036
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 14:32:00 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1224.1	3289.6	25043.	2122.2
Stddev	1.3	1.9	43.	17.4
%RSD	.10844	.05634	.17157	.82218
#1	1225.6	3288.0	25003.	2112.3
#2	1223.4	3291.6	25037.	2112.0
#3	1223.2	3289.2	25089.	2142.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 14:35:56 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0038	.0005	.0000	.0001	.0081	.0001	.0000	.0000
Stddev	.0004	.0053	.0003	.000	.0000	.0050	.0000	.000	.0002
%RSD	157.0	141.4	64.21	363.7	32.93	61.29	14.02	288.5	1093.
#1	.0002	-.0042	.0008	-.0001	.0001	.0125	.0001	.0000	.0000
#2	.0006	.0018	.0006	-.0002	.0002	.0027	.0001	-.0002	.0002
#3	-.0001	-.0088	.0001	.0002	.0001	.0093	.0001	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0197	.0165	-.0096	.0001	F.0027	-.0042	.0003	.0006
Stddev	.0003	.0037	.0304	.0257	.0001	.0008	.0068	.0000	.0004
%RSD	45.79	18.83	184.0	267.4	48.64	29.60	161.7	13.19	71.06
#1	-.0010	.0229	.0362	-.0015	.0002	.0036	.0030	.0003	.0003
#2	-.0004	.0206	.0319	-.0384	.0001	.0026	-.0052	.0003	.0011
#3	-.0007	.0157	-.0185	.0111	.0001	.0020	-.0104	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0007	.0023	F.0012	.0002	.0012	.0015	.0000	.0001
Stddev	.0002	.0009	.0008	.0003	.0001	.0002	.0008	.0004	.0000
%RSD	107.4	129.4	32.53	21.20	49.25	13.77	54.16	919.1	36.64
#1	-.0004	.0018	.0017	.0009	.0002	.0014	.0024	.0002	.0001
#2	.0000	.0003	.0032	.0013	.0001	.0013	.0013	-.0004	.0001
#3	-.0002	.0001	.0022	.0013	.0002	.0011	.0008	.0004	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 14:35:56 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1417.6	3402.6	26178.	2143.7
Stddev	4.3	8.2	79.	10.1
%RSD	.30493	.24243	.30277	.47060
#1	1415.7	3402.7	26127.	2154.8
#2	1414.5	3394.3	26138.	2135.2
#3	1422.5	3410.8	26270.	2140.9

◀ Zoom In ▶
Zoom Out

Sample Name: FA53517-6R Acquired: 6/1/2018 14:40:14 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0024	125.0	.0427	.9168	.0043	12.03	.0015	.0368	.2275	.0811
Stddev	.0003	.4	.0042	.0058	.0004	.08	.0003	.0006	.0025	.0018
%RSD	10.55	.3162	9.858	.6343	9.425	.6812	20.88	1.524	1.095	2.207
#1	.0025	125.4	.0435	.9104	.0041	12.09	.0012	.0364	.2284	.0828
#2	.0021	125.1	.0381	.9218	.0047	12.08	.0018	.0375	.2293	.0792
#3	.0025	124.6	.0464	.9183	.0039	11.94	.0016	.0367	.2246	.0814

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	107.6	11.99	10.70	3.474	.0062	1.776	.1146	.0805	.0001	.0085
Stddev	.2	.23	.12	.016	.0006	.067	.0009	.0030	.0031	.0076
%RSD	.2324	1.892	1.092	.4616	9.279	3.787	.8093	3.689	5198.	89.97
#1	107.4	11.73	10.57	3.479	.0066	1.854	.1156	.0775	-.0026	.0020
#2	107.8	12.16	10.80	3.456	.0055	1.734	.1137	.0805	.0035	.0168
#3	107.4	12.07	10.73	3.487	.0065	1.740	.1144	.0835	-.0008	.0066

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.32	.0293	.2127	2.945	.0103	.2180	.1103
Stddev	.21	.0009	.0012	.013	.0014	.0015	.0002
%RSD	1.448	3.020	.5608	.4300	13.80	.7015	.2000
#1	14.55	.0299	.2128	2.959	.0116	.2165	.1105
#2	14.22	.0297	.2139	2.941	.0088	.2178	.1100
#3	14.17	.0283	.2115	2.934	.0104	.2195	.1103

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1398.5	3539.3	26611.	2225.1
Stddev	1.6	7.8	144.	7.4
%RSD	.11398	.22083	.54081	.33177
#1	1397.9	3540.1	26666.	2233.3
#2	1400.3	3546.7	26720.	2219.0
#3	1397.2	3531.1	26448.	2223.0

◀ Zoom In ▶
Zoom Out

Sample Name: FA53517-8R Acquired: 6/1/2018 14:44:26 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0018	323.4	.0810	.9257	.0098	19.86	.0027	.0726	.5886	.1865
Stddev	.0011	2.1	.0054	.0039	.0004	.11	.0004	.0005	.0020	.0005
%RSD	64.01	.6428	6.678	.4177	4.125	.5525	16.33	.6364	.3369	.2609
#1	.0008	321.8	.0797	.9247	.0096	19.77	.0029	.0722	.5908	.1871
#2	.0030	322.7	.0869	.9224	.0103	19.84	.0029	.0725	.5869	.1862
#3	.0015	325.8	.0763	.9299	.0096	19.99	.0022	.0731	.5880	.1863

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	367.1	104.2	98.99	2.827	.0023	18.58	.3062	.1750	-.0047	.0003
Stddev	1.9	.5	.33	.001	.0002	.12	.0006	.0045	.0060	.0040
%RSD	.5154	.4980	.3335	.0366	9.963	.6297	.2089	2.554	126.6	1349.
#1	365.5	103.7	98.81	2.828	.0026	18.49	.3061	.1801	-.0063	.0024
#2	366.6	104.0	98.80	2.826	.0023	18.53	.3056	.1722	.0019	.0028
#3	369.2	104.7	99.37	2.826	.0021	18.71	.3068	.1726	-.0097	-.0043

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.034	.0461	.3924	15.40	.0144	.6434	.8426
Stddev	.106	.0019	.0037	.02	.0056	.0020	.0006
%RSD	1.321	4.212	.9500	.1410	38.91	.3111	.0726
#1	8.027	.0466	.3885	15.39	.0207	.6419	.8432
#2	8.143	.0440	.3926	15.39	.0099	.6426	.8428
#3	7.931	.0477	.3960	15.43	.0127	.6456	.8420

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1325.5	3707.1	28189.	2380.5
Stddev	2.2	8.5	26.	7.5
%RSD	.16279	.23046	.09242	.31581
#1	1324.6	3714.7	28172.	2384.1
#2	1328.0	3708.7	28176.	2385.5
#3	1323.9	3697.9	28219.	2371.8

◀ Zoom In ▶
Zoom Out

Sample Name: FA53517-9R Acquired: 6/1/2018 14:48:34 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0006	251.3	.0811	.8188	.0087	30.14	.0025	.0618	.7610	.1601
Stddev	.0012	.8	.0041	.0053	.0004	.14	.0002	.0008	.0056	.0008
%RSD	196.4	.3290	5.058	.6522	4.274	.4634	8.810	1.259	.7367	.4753
#1	.0018	252.1	.0856	.8126	.0091	30.26	.0023	.0612	.7657	.1592
#2	.0006	251.4	.0801	.8221	.0087	30.16	.0025	.0627	.7625	.1605
#3	-.0006	250.5	.0776	.8216	.0084	29.99	.0028	.0615	.7548	.1605

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	310.5	92.83	85.50	2.565	.0036	15.55	.3798	.1897	-.0014	.0029
Stddev	.7	.27	.26	.030	.0011	.08	.0009	.0032	.0133	.0125
%RSD	.2379	.2936	.3065	1.161	28.98	.4993	.2338	1.682	955.6	433.4
#1	310.3	93.07	85.76	2.596	.0040	15.61	.3804	.1861	-.0010	.0162
#2	311.3	92.87	85.49	2.562	.0045	15.46	.3787	.1923	-.0149	-.0085
#3	309.9	92.53	85.24	2.536	.0024	15.56	.3802	.1908	.0117	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.074	.0398	.2719	14.66	.0155	.5621	.7370
Stddev	.049	.0017	.0012	.12	.0041	.0025	.0011
%RSD	.8008	4.195	.4473	.7886	26.28	.4415	.1539
#1	6.021	.0379	.2728	14.77	.0149	.5645	.7380
#2	6.115	.0409	.2706	14.67	.0198	.5595	.7358
#3	6.087	.0407	.2725	14.54	.0117	.5622	.7372

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1328.4	3665.5	27832.	2354.0
Stddev	4.0	13.5	85.	14.3
%RSD	.30121	.36771	.30537	.60779
#1	1325.6	3652.1	27788.	2340.4
#2	1333.0	3679.1	27778.	2352.8
#3	1326.6	3665.4	27930.	2368.9

◀ Zoom In ▶
Zoom Out

Sample Name: FA53517-11R Acquired: 6/1/2018 14:52:40 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0030	581.6	.1381	.2949	.0115	6.991	.0002	.0533	.5502	.0776
Stddev	.0023	1.4	.0014	.0028	.0009	.055	.0003	.0004	.0057	.0003
%RSD	76.93	.2370	1.007	.9328	7.600	.7907	128.2	.7888	1.044	.4476
#1	.0055	580.1	.1392	.2933	.0104	6.940	.0000	.0538	.5492	.0772
#2	.0027	582.7	.1387	.2981	.0119	6.982	.0001	.0531	.5564	.0778
#3	.0009	582.1	.1366	.2934	.0120	7.050	.0005	.0530	.5450	.0778

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	279.2	21.37	30.42	.5353	.0040	17.61	.4193	.1432	-.0075	.0016
Stddev	.4	.15	.36	.0008	.0010	.06	.0022	.0042	.0006	.0059
%RSD	.1504	.7083	1.182	.1583	26.28	.3143	.5317	2.943	8.212	371.4
#1	279.0	21.20	30.02	.5345	.0036	17.55	.4213	.1445	-.0078	-.0051
#2	279.7	21.49	30.73	.5351	.0051	17.61	.4198	.1465	-.0068	.0042
#3	279.0	21.41	30.51	.5362	.0032	17.66	.4169	.1384	-.0080	.0057

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.753	.0317	.1672	5.071	.0081	.5505	.2188
Stddev	.036	.0006	.0006	.002	.0063	.0007	.0004
%RSD	.4089	1.898	.3714	.0342	78.07	.1271	.2052
#1	8.736	.0314	.1665	5.072	.0069	.5513	.2192
#2	8.728	.0314	.1673	5.073	.0024	.5501	.2187
#3	8.794	.0324	.1678	5.070	.0148	.5500	.2183

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1333.9	3601.7	26654.	2285.8
Stddev	4.0	11.5	43.	12.7
%RSD	.29812	.32027	.16208	.55498
#1	1329.6	3590.4	26661.	2300.0
#2	1337.4	3613.5	26694.	2281.9
#3	1334.6	3601.3	26608.	2275.6

Zoom In Zoom Out

Sample Name: FA53517-12R Acquired: 6/1/2018 14:56:52 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0030	609.6	.1500	.4153	.0152	7.245	.0001	.0728	.5874	.0849
Stddev	.0016	4.5	.0086	.0004	.0005	.060	.0003	.0004	.0020	.0011
%RSD	55.23	.7403	5.706	.1045	3.590	.8342	273.2	.5437	.3327	1.319
#1	.0031	614.8	.1403	.4158	.0154	7.310	.0003	.0725	.5884	.0862
#2	.0045	607.1	.1531	.4153	.0146	7.190	.0002	.0733	.5852	.0843
#3	.0013	606.9	.1565	.4149	.0156	7.236	-.0002	.0726	.5887	.0843

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	308.3	23.54	33.95	.7071	.0039	24.02	.4583	.1669	-.0053	.0141
Stddev	1.7	.09	.25	.0036	.0001	.23	.0019	.0035	.0022	.0123
%RSD	.5558	.3987	.7453	.5089	3.705	.9593	.4144	2.100	42.29	87.37
#1	310.3	23.64	34.24	.7092	.0041	24.26	.4588	.1656	-.0075	.0003
#2	307.7	23.54	33.87	.7029	.0038	23.99	.4562	.1709	-.0031	.0240
#3	307.0	23.45	33.75	.7090	.0040	23.80	.4599	.1643	-.0051	.0181

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.523	.0316	.1416	6.038	.0076	.6000	.2593
Stddev	.046	.0017	.0013	.021	.0011	.0009	.0011
%RSD	.6151	5.517	.9458	.3440	13.96	.1452	.4433
#1	7.539	.0333	.1430	6.055	.0077	.5993	.2588
#2	7.560	.0298	.1404	6.015	.0086	.5997	.2584
#3	7.471	.0318	.1413	6.044	.0065	.6010	.2606

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1327.9	3625.5	26860.	2302.0
Stddev	1.6	9.6	123.	15.7
%RSD	.12030	.26519	.45821	.68082
#1	1329.8	3634.4	26832.	2305.5
#2	1326.8	3626.8	26995.	2284.9
#3	1327.3	3615.3	26753.	2315.6

Zoom In Zoom Out

Sample Name: FA53517-14R Acquired: 6/1/2018 15:01:02 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0080	102.2	.0755	.9639	.0037	16.69	.0028	.0312	.1843
Stddev	.0004	.3	.0040	.0007	.0005	.04	.0002	.0000	.0009
%RSD	5.044	.2579	5.284	.0740	13.48	.2602	6.279	.1526	.4934
#1	.0082	101.9	.0781	.9647	.0043	16.73	.0028	.0312	.1834
#2	.0076	102.4	.0709	.9633	.0033	16.64	.0026	.0313	.1852
#3	.0083	102.4	.0775	.9638	.0035	16.69	.0029	.0312	.1844

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	16.10	93.84	12.03	12.62	1.998	.0008	1.800	.1204	F68.93
Stddev	.01	.37	.05	.11	.005	.0004	.068	.0000	.05
%RSD	.0813	.3965	.3947	.9025	.2592	48.18	3.753	.0322	.0764
#1	16.11	93.44	11.99	12.75	1.994	.0009	1.791	.1203	68.87
#2	16.08	94.18	12.08	12.55	1.997	.0011	1.738	.1203	68.97
#3	16.11	93.91	12.02	12.56	2.004	.0004	1.872	.1204	68.96

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.348	.0048	21.45	.0743	6.902	2.374	.0065	.1942	3.997
Stddev	.002	.0053	.31	.0006	.019	.022	.0041	.0006	.004
%RSD	.1221	111.1	1.439	.8174	.2723	.9189	63.16	.3113	.1028
#1	1.346	.0053	21.68	.0750	6.884	2.360	.0112	.1949	3.996
#2	1.349	-.0008	21.10	.0741	6.921	2.363	.0045	.1940	4.002
#3	1.348	.0098	21.58	.0739	6.902	2.399	.0037	.1937	3.994

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1398.9	3523.7	26999.	2266.2
Stddev	1.5	4.0	126.	5.1
%RSD	.10701	.11421	.46781	.22453
#1	1400.6	3528.3	27140.	2272.1
#2	1398.5	3520.6	26961.	2263.8
#3	1397.7	3522.3	26896.	2262.8

Zoom In Zoom Out

Sample Name: FA53517-15R Acquired: 6/1/2018 15:05:13 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0020	172.1	.0772	.6358	.0064	7.255	.0012	.0784	.3560	2.155
Stddev	.0010	.8	.0019	.0068	.0009	.078	.0002	.0005	.0036	.003
%RSD	47.54	.4651	2.488	1.069	13.35	1.075	16.46	.6484	1.007	.1529
#1	.0027	171.3	.0751	.6331	.0057	7.207	.0014	.0790	.3593	2.157
#2	.0024	172.2	.0776	.6308	.0073	7.213	.0010	.0781	.3522	2.151
#3	.0009	172.9	.0789	.6436	.0061	7.345	.0013	.0781	.3565	2.157

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	158.3	19.38	23.50	1.106	.0073	1.991	.2487	15.52	.4136	.0107
Stddev	.8	.10	.24	.003	.0003	.039	.0008	.03	.0038	.0068
%RSD	.4865	.5004	1.020	.2409	3.972	1.953	.3404	.2133	.9252	63.22
#1	157.8	19.41	23.24	1.107	.0069	2.033	.2494	15.48	.4179	.0122
#2	157.8	19.28	23.55	1.108	.0073	1.985	.2477	15.55	.4123	.0033
#3	159.2	19.46	23.72	1.103	.0075	1.956	.2490	15.52	.4106	.0165

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.11	.0352	1.075	3.691	.0064	.3055	.9087
Stddev	.23	.0019	.006	.007	.0016	.0028	.0013
%RSD	1.614	5.462	.6005	.1947	25.08	.9214	.1390
#1	14.37	.0332	1.069	3.697	.0047	.3070	.9094
#2	14.02	.0355	1.073	3.683	.0079	.3022	.9072
#3	13.95	.0370	1.082	3.692	.0064	.3072	.9095

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1383.3	3617.6	27499.	2283.5
Stddev	.7	9.7	63.	27.2
%RSD	.04875	.26734	.22841	1.1923
#1	1384.0	3610.4	27485.	2296.3
#2	1382.7	3628.6	27567.	2301.9
#3	1383.1	3613.8	27444.	2252.2

Zoom In Zoom Out

Sample Name: FA53517-17R Acquired: 6/1/2018 15:09:22 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	161.6	.0410	1.627	.0061	44.72	.0030	.0540	.2718	.2148
Stddev	.0006	1.1	.0033	.006	.0007	.13	.0002	.0002	.0057	.0026
%RSD	47.19	.6965	7.974	.3439	11.22	.2972	5.715	.4519	2.111	1.196
#1	.0018	162.6	.0426	1.631	.0053	44.84	.0028	.0543	.2723	.2169
#2	.0007	161.8	.0372	1.621	.0062	44.75	.0030	.0541	.2658	.2119
#3	.0010	160.4	.0432	1.630	.0067	44.58	.0031	.0538	.2773	.2156

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	130.0	15.93	14.20	5.868	.0021	2.323	.1582	.9329	.0271	.0069
Stddev	.5	.06	.08	.009	.0003	.156	.0001	.0052	.0051	.0085
%RSD	.3799	.3553	.5661	.1543	15.77	6.705	.0524	.5548	18.81	123.6
#1	130.5	15.88	14.11	5.878	.0020	2.497	.1582	.9383	.0284	.0061
#2	130.1	15.99	14.25	5.865	.0018	2.276	.1583	.9279	.0314	.0158
#3	129.5	15.91	14.25	5.861	.0024	2.197	.1582	.9324	.0215	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	27.29	.0264	.6911	3.780	.0073	.2538	.1399
Stddev	2.07	.0013	.0053	.013	.0021	.0004	.0006
%RSD	7.602	4.903	.7619	.3316	29.35	.1750	.4514
#1	29.45	.0251	.6960	3.786	.0092	.2535	.1404
#2	27.08	.0262	.6918	3.765	.0077	.2543	.1401
#3	25.32	.0277	.6855	3.788	.0050	.2536	.1392

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1381.8	3518.5	26738.	2235.1
Stddev	1.7	11.7	36.	4.2
%RSD	.12292	.33177	.13292	.18817
#1	1381.8	3529.7	26707.	2230.3
#2	1380.1	3519.3	26730.	2236.7
#3	1383.5	3506.4	26777.	2238.2

Zoom In Zoom Out

Sample Name: FA53517-18R Acquired: 6/1/2018 15:13:33 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0015	164.4	.0444	1.612	.0058	38.28	.0025	.0588	.2679	.1255
Stddev	.0020	1.3	.0024	.004	.0006	.18	.0003	.0007	.0012	.0023
%RSD	129.9	.7922	5.489	.2446	10.32	.4828	12.51	1.272	.4624	1.834
#1	.0023	164.5	.0418	1.616	.0052	38.30	.0023	.0588	.2687	.1281
#2	-.0007	165.7	.0449	1.612	.0064	38.46	.0024	.0595	.2664	.1244
#3	.0030	163.1	.0466	1.609	.0060	38.09	.0029	.0580	.2685	.1239

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	139.1	16.59	13.95	6.115	.0028	2.184	.1655	.0811	.0058	-.0019
Stddev	.6	.17	.17	.020	.0006	.097	.0017	.0021	.0043	.0092
%RSD	.3992	1.011	1.228	.3332	22.76	4.423	1.008	2.531	75.06	480.3
#1	138.8	16.76	13.89	6.133	.0021	2.267	.1674	.0818	.0034	-.0067
#2	139.7	16.58	14.14	6.093	.0028	2.207	.1648	.0828	.0107	-.0077
#3	138.7	16.42	13.81	6.119	.0034	2.078	.1643	.0789	.0031	.0087

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	24.55	.0289	.5751	3.628	.0084	.2807	.1370
Stddev	.27	.0007	.0029	.025	.0024	.0005	.0005
%RSD	1.097	2.581	.5062	.6904	28.11	.1867	.3717
#1	24.73	.0285	.5753	3.640	.0101	.2813	.1369
#2	24.67	.0298	.5778	3.599	.0057	.2804	.1366
#3	24.24	.0285	.5720	3.644	.0094	.2804	.1376

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1366.3	3488.9	26442.	2214.2
Stddev	3.2	6.2	145.	17.5
%RSD	.23238	.17748	.54889	.78834
#1	1363.3	3485.9	26295.	2224.5
#2	1366.1	3484.8	26585.	2194.1
#3	1369.7	3496.0	26447.	2224.1

Zoom In Zoom Out

Sample Name: FA53725-11R Acquired: 6/1/2018 15:17:44 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0057	324.1	.0612	3.979	.0095	121.9	.0058	.0932	.4428	1.048
Stddev	.0012	1.2	.0054	.008	.0002	.5	.0003	.0003	.0016	.003
%RSD	21.16	.3616	8.795	.1910	1.699	.4111	4.789	.3333	.3614	.2493
#1	.0065	324.6	.0645	3.973	.0095	122.1	.0060	.0934	.4433	1.047
#2	.0043	322.8	.0550	3.976	.0093	121.3	.0059	.0933	.4410	1.051
#3	.0064	325.0	.0642	3.987	.0096	122.3	.0055	.0928	.4441	1.046

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	244.4	31.18	34.64	10.06	.0040	6.092	.3245	6.090	.0393	.0109
Stddev	.7	.22	.36	.04	.0013	.053	.0013	.021	.0016	.0144
%RSD	.2692	.6899	1.040	.3475	32.66	.8697	.4087	.3437	4.162	132.6
#1	244.2	31.20	34.56	10.05	.0054	6.033	.3244	6.092	.0385	-.0058
#2	243.8	30.96	34.32	10.10	.0037	6.109	.3258	6.068	.0382	.0192
#3	245.1	31.39	35.03	10.03	.0029	6.135	.3232	6.110	.0412	.0192

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	59.15	.0376	1.661	6.776	.0096	.5455	.6361
Stddev	1.29	.0021	.004	.036	.0026	.0027	.0005
%RSD	2.175	5.476	.2400	.5377	26.91	.4991	.0769
#1	60.21	.0370	1.661	6.787	.0066	.5478	.6358
#2	59.52	.0360	1.657	6.805	.0112	.5425	.6367
#3	57.72	.0400	1.665	6.735	.0109	.5461	.6358

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1320.2	3534.5	26485.	2238.1
Stddev	1.2	7.5	72.	11.5
%RSD	.09162	.21107	.27335	.51455
#1	1321.3	3539.5	26426.	2239.1
#2	1320.3	3525.9	26566.	2249.2
#3	1318.9	3538.0	26463.	2226.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 15:21:50 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2500	39.37	2.042	2.042	2.010	39.89	2.037	2.040	1.992	2.010
Stddev	.0010	.20	.006	.002	.005	.24	.003	.001	.006	.009
%RSD	.4195	.5012	.2859	.0734	.2736	.6114	.1279	.0443	.3282	.4253
#1	.2512	39.59	2.046	2.042	2.016	40.11	2.033	2.039	2.000	2.019
#2	.2492	39.33	2.045	2.044	2.009	39.94	2.038	2.041	1.989	2.002
#3	.2496	39.20	2.036	2.041	2.005	39.63	2.038	2.039	1.988	2.008

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.73	40.19	40.48	2.039	2.075	40.07	2.070	1.991	2.042	2.047
Stddev	.15	.14	.19	.016	.003	.20	.003	.003	.006	.009
%RSD	.3624	.3571	.4745	.7740	.1603	.5068	.1267	.1393	.3003	.4339
#1	40.75	40.35	40.61	2.057	2.071	40.30	2.072	1.993	2.049	2.054
#2	40.87	40.12	40.58	2.032	2.078	40.02	2.071	1.988	2.040	2.050
#3	40.57	40.09	40.26	2.027	2.075	39.90	2.067	1.992	2.038	2.037

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.165	2.120	2.036	2.068	2.015	2.063	2.041
Stddev	.009	.005	.005	.014	.006	.006	.002
%RSD	.3950	.2548	.2425	.6645	.2756	.2913	.1096
#1	2.175	2.125	2.042	2.084	2.021	2.070	2.038
#2	2.160	2.122	2.034	2.061	2.011	2.060	2.042
#3	2.160	2.114	2.033	2.059	2.013	2.060	2.042

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 6/1/2018 15:21:50 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1226.8	3287.9	25304.	2113.3
Stddev	1.8	2.3	123.	13.5
%RSD	.14910	.06920	.48512	.63949
#1	1226.3	3289.3	25163.	2105.4
#2	1228.8	3285.3	25384.	2105.5
#3	1225.2	3289.2	25366.	2128.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 15:25:46 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0060	.0005	.0003	.0002	.0121	.0002	.0000	.0003
Stddev	.0005	.0171	.0005	.0002	.0000	.0017	.0000	.000	.0003
%RSD	379.5	283.9	83.77	61.09	19.34	13.74	6.765	1927.	122.4
#1	-.0004	.0258	.0010	.0004	.0002	.0122	.0002	.0000	.0002
#2	-.0004	-.0046	.0001	.0002	.0002	.0138	.0003	-.0001	.0000
#3	.0004	-.0031	.0005	.0001	.0002	.0104	.0002	.0001	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0218	.0436	.0001	.0002	F.0026	-.0089	.0004	.0003
Stddev	.0003	.0022	.0092	.0154	.0000	.0007	.0021	.0001	.0002
%RSD	87.24	9.927	21.09	17930.	18.44	27.83	23.36	38.72	67.06
#1	-.0007	.0243	.0376	.0068	.0003	.0034	-.0113	.0005	.0001
#2	-.0001	.0201	.0542	-.0175	.0002	.0025	-.0076	.0002	.0003
#3	-.0002	.0211	.0389	.0110	.0002	.0019	-.0078	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0015	.0022	F.0012	.0004	.0014	.0009	.0001	.0001
Stddev	.0011	.0017	.0001	.0007	.0001	.0000	.0010	.0005	.0001
%RSD	241.6	118.0	4.415	53.90	22.63	1.539	104.5	429.2	91.00
#1	.0007	.0003	.0023	.0006	.0005	.0013	.0005	.0002	.0001
#2	-.0005	.0006	.0022	.0011	.0004	.0014	.0020	-.0004	.0002
#3	-.0015	.0034	.0021	.0019	.0003	.0014	.0002	.0006	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 15:25:46 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1417.7	3421.7	25859.	2112.7
Stddev	3.0	4.2	44.	12.1
%RSD	.21026	.12404	.16950	.57277
#1	1418.6	3417.7	25832.	2102.3
#2	1414.4	3421.4	25909.	2126.0
#3	1420.2	3426.1	25834.	2109.9

Zoom In Zoom Out

Sample Name: FA53725-12R Acquired: 6/1/2018 15:30:05 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0026	183.6	.0393	1.802	.0050	60.12	.0031	.0522	.2676	.3252
Stddev	.0029	.7	.0017	.009	.0005	.22	.0002	.0005	.0016	.0013
%RSD	113.5	.4019	4.326	.5125	9.346	.3608	8.038	.9758	.5807	.3994
#1	.0012	183.1	.0393	1.796	.0047	60.21	.0033	.0516	.2675	.3254
#2	.0006	183.2	.0376	1.798	.0048	59.88	.0030	.0526	.2692	.3264
#3	.0060	184.4	.0410	1.812	.0056	60.28	.0029	.0523	.2661	.3239

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	138.5	16.99	17.43	4.612	.0031	2.869	.1950	2.087	.0201	.0054
Stddev	.2	.04	.26	.011	.0007	.072	.0012	.007	.0088	.0146
%RSD	.1569	.2594	1.496	.2299	23.14	2.497	.5986	.3457	44.05	270.0
#1	138.2	16.99	17.56	4.619	.0025	2.787	.1963	2.095	.0275	-.0108
#2	138.6	16.95	17.13	4.616	.0039	2.900	.1940	2.086	.0103	.0096
#3	138.6	17.04	17.60	4.600	.0029	2.919	.1948	2.080	.0224	.0174

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	30.02	.0279	.8104	4.094	.0114	.2984	.2516
Stddev	.37	.0016	.0031	.003	.0068	.0027	.0014
%RSD	1.239	5.615	.3818	.0800	60.02	.9158	.5445
#1	30.00	.0277	.8074	4.092	.0101	.2956	.2523
#2	29.66	.0296	.8136	4.098	.0053	.3010	.2500
#3	30.41	.0265	.8101	4.094	.0188	.2985	.2524

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1371.4	3539.9	26612.	2208.3
Stddev	2.0	4.4	104.	20.5
%RSD	.14582	.12382	.39023	.92854
#1	1369.2	3543.0	26598.	2194.9
#2	1372.0	3541.7	26515.	2231.9
#3	1373.0	3534.9	26721.	2198.1

Zoom In Zoom Out

Sample Name: FA53725-75R Acquired: 6/1/2018 15:34:13 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	205.3	.0495	.4985	.0049	3.129	.0003	.0289	.2696	.2369
Stddev	.0022	.1	.0013	.0042	.0002	.023	.0003	.0001	.0023	.0008
%RSD	296.7	.0506	2.622	.8339	3.309	.7407	103.2	.4473	.8714	.3203
#1	-.0014	205.3	.0500	.5011	.0049	3.121	-.0001	.0289	.2724	.2373
#2	.0006	205.3	.0505	.5007	.0047	3.155	.0005	.0291	.2685	.2361
#3	.0030	205.2	.0480	.4937	.0050	3.111	.0004	.0288	.2681	.2374

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	126.8	14.73	14.75	.3110	.0048	2.122	.1551	.4721	.0143	.0045
Stddev	.5	.18	.16	.0028	.0005	.045	.0007	.0015	.0010	.0040
%RSD	.3549	1.254	1.102	.9131	9.615	2.129	.4699	.3157	7.254	89.11
#1	126.7	14.93	14.65	.3142	.0044	2.155	.1560	.4704	.0140	.0003
#2	127.3	14.70	14.94	.3088	.0049	2.140	.1547	.4725	.0155	.0048
#3	126.4	14.57	14.67	.3099	.0053	2.070	.1548	.4733	.0135	.0083

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	17.58	.0314	.1346	3.918	.0064	.2525	.1686
Stddev	.30	.0007	.0002	.055	.0035	.0025	.0015
%RSD	1.730	2.086	.1625	1.402	55.12	.9703	.9170
#1	17.87	.0322	.1348	3.965	.0099	.2554	.1671
#2	17.26	.0311	.1344	3.858	.0066	.2510	.1702
#3	17.60	.0310	.1345	3.930	.0028	.2513	.1685

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1370.4	3506.1	26291.	2169.1
Stddev	.9	3.3	182.	4.4
%RSD	.06393	.09330	.69072	.20242
#1	1370.2	3509.2	26085.	2173.3
#2	1371.3	3506.5	26430.	2169.5
#3	1369.6	3502.7	26358.	2164.5

Zoom In Zoom Out

Sample Name: FA53517-76R Acquired: 6/1/2018 15:38:24 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0013	260.9	.0611	.6134	.0061	2.290	-.0001	.0414	.3171	.0900
Stddev	.0013	2.0	.0021	.0052	.0006	.014	.0003	.0009	.0038	.0011
%RSD	106.3	.7732	3.460	.8440	9.120	.6270	590.8	2.091	1.211	1.257
#1	.0014	263.1	.0597	.6155	.0061	2.282	-.0004	.0424	.3214	.0913
#2	.0025	260.6	.0636	.6172	.0055	2.306	.0001	.0409	.3141	.0893
#3	-.0002	259.1	.0601	.6075	.0066	2.280	.0001	.0410	.3157	.0894

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	150.8	14.03	16.29	.3411	.0033	2.186	.1973	.1076	.0024	.0015
Stddev	1.0	.10	.29	.0030	.0005	.037	.0005	.0052	.0039	.0096
%RSD	.6948	.7399	1.807	.8672	14.25	1.685	.2747	4.877	165.7	633.6
#1	151.9	14.13	16.61	.3443	.0034	2.187	.1967	.1099	.0052	.0125
#2	150.8	14.03	16.23	.3406	.0028	2.149	.1978	.1016	.0039	-.0028
#3	149.8	13.92	16.03	.3384	.0038	2.222	.1973	.1114	-.0021	-.0051

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.482	.0264	.1177	4.471	.0073	.3038	.1131
Stddev	.546	.0011	.0005	.041	.0048	.0039	.0014
%RSD	6.439	4.056	.4236	.9172	66.55	1.286	1.235
#1	9.092	.0275	.1179	4.513	.0093	.3079	.1143
#2	8.314	.0264	.1171	4.468	.0107	.3033	.1116
#3	8.039	.0253	.1181	4.431	.0017	.3001	.1134

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1381.7	3553.0	26493.	2220.1
Stddev	5.1	10.7	229.	14.7
%RSD	.37063	.30136	.86273	.66174
#1	1377.3	3550.1	26314.	2207.3
#2	1387.3	3564.8	26414.	2236.1
#3	1380.5	3544.0	26750.	2216.9

Raw Data MA14941 page 69 of 78

Zoom In Zoom Out

Sample Name: FA53517-44AR Acquired: 6/1/2018 15:42:36 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0038	185.7	.0490	.3685	.0033	5.388	.0005	.0228	.3296	.3088
Stddev	.0022	.7	.0047	.0025	.0003	.017	.0003	.0006	.0031	.0028
%RSD	59.10	.3959	9.633	.6688	9.082	.3176	64.78	2.768	.9299	.9156
#1	.0017	186.3	.0534	.3684	.0030	5.400	.0009	.0226	.3330	.3089
#2	.0035	184.9	.0440	.3710	.0036	5.368	.0003	.0235	.3286	.3116
#3	.0061	185.9	.0497	.3661	.0033	5.396	.0003	.0223	.3272	.3060

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	187.1	9.920	10.72	.3601	.0048	3.124	.1207	2.145	.0090	.0084
Stddev	.6	.123	.10	.0018	.0006	.023	.0006	.004	.0029	.0052
%RSD	.3130	1.244	.8957	.5118	11.82	.7471	.5169	.1905	32.01	62.10
#1	187.2	9.788	10.62	.3622	.0052	3.119	.1211	2.140	.0116	.0059
#2	186.5	10.03	10.75	.3594	.0041	3.104	.1200	2.147	.0097	.0050
#3	187.7	9.940	10.80	.3588	.0050	3.150	.1211	2.148	.0059	.0145

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.68	.0314	.1778	2.744	.0084	.3968	.0936
Stddev	.27	.0017	.0006	.030	.0035	.0034	.0002
%RSD	1.366	5.352	.3335	1.109	42.26	.8462	.2205
#1	19.91	.0299	.1777	2.774	.0055	.3981	.0938
#2	19.39	.0332	.1773	2.744	.0123	.3993	.0934
#3	19.76	.0310	.1784	2.713	.0073	.3929	.0937

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1370.2	3525.1	26558.	2205.5
Stddev	.7	12.1	84.	1.7
%RSD	.05360	.34445	.31584	.07788
#1	1370.4	3511.6	26469.	2206.6
#2	1369.4	3535.2	26635.	2203.5
#3	1370.9	3528.6	26569.	2206.3

Raw Data MA14941 page 70 of 78

Zoom In Zoom Out

Sample Name: MP33823-D2 Acquired: 6/1/2018 15:46:49 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	85.21	.0368	.3607	.0031	5.093	.0005	.0327	.1845	.5128
Stddev	.0023	.09	.0072	.0021	.0005	.030	.0004	.0010	.0026	.0007
%RSD	2365.	.1095	19.62	.5707	16.76	.5904	67.86	3.157	1.426	.1293
#1	.0027	85.28	.0373	.3631	.0028	5.063	.0003	.0328	.1831	.5132
#2	-.0015	85.10	.0293	.3595	.0029	5.093	.0010	.0336	.1875	.5132
#3	-.0009	85.25	.0437	.3594	.0037	5.123	.0004	.0316	.1828	.5120

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	98.75	11.80	9.317	.5468	.0010	1.803	.0809	3.314	.0850	-.0013
Stddev	.04	.28	.318	.0020	.0004	.032	.0007	.009	.0072	.0041
%RSD	.0421	2.403	3.410	.3590	42.54	1.762	.8269	.2817	8.456	310.8
#1	98.79	11.48	9.648	.5448	.0012	1.812	.0805	3.304	.0864	.0013
#2	98.71	11.91	9.014	.5487	.0014	1.768	.0817	3.322	.0772	-.0060
#3	98.74	12.02	9.288	.5470	.0006	1.830	.0806	3.316	.0913	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	21.19	.0257	.3519	2.552	.0047	.2252	.1891
Stddev	.33	.0013	.0021	.018	.0090	.0017	.0006
%RSD	1.557	5.009	.5828	.6914	192.3	.7608	.2948
#1	21.56	.0270	.3543	2.560	-.0057	.2270	.1893
#2	21.07	.0245	.3511	2.564	.0108	.2236	.1895
#3	20.94	.0256	.3504	2.532	.0090	.2250	.1884

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1387.2	3531.3	26511.	2185.0
Stddev	1.3	6.2	87.	6.4
%RSD	.09728	.17418	.32720	.29404
#1	1388.7	3524.3	26549.	2178.1
#2	1386.1	3533.8	26412.	2186.1
#3	1386.7	3535.8	26572.	2190.8

Raw Data MA14941 page 71 of 78

Zoom In Zoom Out

Sample Name: CRIA Acquired: 6/1/2018 15:51:01 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0093	.2059	.0097	.1963	.0050	.9882	.0051	.0504	.0101	.0245
Stddev	.0004	.0101	.0008	.0009	.0001	.0010	.0000	.0002	.0000	.0002
%RSD	4.406	4.902	7.814	.4793	1.527	.1014	.0847	.3228	.4718	.7558
#1	.0093	.1958	.0089	.1956	.0050	.9882	.0051	.0506	.0102	.0247
#2	.0097	.2057	.0103	.1960	.0051	.9891	.0051	.0503	.0101	.0244
#3	.0089	.2160	.0098	.1974	.0049	.9871	.0051	.0503	.0102	.0244

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3070	9.702	4.891	.0150	.0465	9.681	.0416	.0048	.0062	.0103
Stddev	.0028	.037	.044	.0000	.0002	.015	.0003	.0002	.0018	.0025
%RSD	.9124	.3855	.9067	.3114	.5172	.1522	.7960	3.563	29.63	24.41
#1	.3043	9.673	4.857	.0149	.0467	9.673	.0414	.0049	.0044	.0115
#2	.3099	9.744	4.874	.0150	.0463	9.698	.0420	.0046	.0063	.0074
#3	.3070	9.689	4.941	.0150	.0467	9.672	.0415	.0049	.0081	.0119

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0344	.0520	.0096	.0101	.0096	.0473	.0205
Stddev	.0017	.0000	.0001	.0002	.0008	.0004	.0001
%RSD	4.852	.0783	.6604	2.303	8.042	.7930	.5187
#1	.0358	.0520	.0096	.0098	.0105	.0473	.0204
#2	.0326	.0520	.0097	.0100	.0093	.0477	.0204
#3	.0347	.0519	.0096	.0103	.0090	.0470	.0206

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1369.4	3405.1	25829.	2133.7
Stddev	.2	5.4	113.	8.1
%RSD	.01252	.15737	.43687	.38177
#1	1369.5	3410.7	25791.	2142.7
#2	1369.6	3404.5	25955.	2126.8
#3	1369.2	3400.0	25739.	2131.7

Raw Data MA14941 page 72 of 78

7.1

7

◀ Zoom In ▶
Zoom Out

Sample Name: ICSA Acquired: 6/1/2018 15:55:19 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	F521.4	.0032	.0005	-.0001	478.0	.0005	-.0004	.0002
Stddev	.0003	5.2	.0011	.0003	.0001	4.1	.0000	.0002	.0003
%RSD	81.61	1.003	34.02	68.65	57.30	.8671	6.827	48.13	170.4
#1	-.0003	526.7	.0041	.0008	.0000	482.3	.0005	-.0006	-.0002
#2	-.0006	516.2	.0034	.0004	-.0002	474.1	.0005	-.0003	.0003
#3	-.0001	521.4	.0020	.0002	-.0001	477.6	.0005	-.0003	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0008	191.7	.2300	F519.7	.0002	-.0005	.1641	.0004	-.0025
Stddev	.0000	1.3	.0225	2.8	.0000	.0003	.0023	.0003	.0029
%RSD	2.632	.6792	9.783	.5407	19.87	71.93	1.385	75.03	115.9
#1	-.0008	193.0	.2537	522.7	.0002	-.0006	.1660	.0003	-.0058
#2	-.0008	190.4	.2273	517.2	.0002	-.0001	.1647	.0007	-.0002
#3	-.0008	191.5	.2089	519.3	.0002	-.0007	.1616	.0001	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0042	.0178	.0016	-.0002	-.0014	.0033	-.0008	.0023
Stddev	.0018	.0008	.0010	.0007	.0001	.0001	.0024	.0002	.0001
%RSD	267.3	19.41	5.468	45.82	43.06	7.358	72.58	22.03	3.967
#1	.0009	.0049	.0169	.0010	-.0001	-.0013	.0046	-.0008	.0022
#2	-.0027	.0044	.0188	.0024	-.0003	-.0015	.0048	-.0006	.0023
#3	-.0003	.0033	.0177	.0014	-.0003	-.0014	.0005	-.0009	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1064.0	3020.9	22430.	2019.4
Stddev	.9	4.2	81.	14.1
%RSD	.08894	.13787	.36048	.69584
#1	1063.4	3016.6	22518.	2005.0
#2	1065.1	3025.0	22359.	2020.0
#3	1063.6	3021.1	22412.	2033.1

◀ Zoom In ▶
Zoom Out

Sample Name: ICSAB Acquired: 6/1/2018 15:59:29 Type: Unk
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.047	F517.3	1.032	.5230	.5060	474.8	.9426	.4806	.4941
Stddev	.004	3.9	.003	.0020	.0026	3.9	.0016	.0004	.0015
%RSD	.4081	.7516	.2376	.3827	.5063	.8253	.1725	.0828	.3019
#1	1.048	519.9	1.029	.5220	.5080	477.6	.9429	.4809	.4956
#2	1.051	512.8	1.033	.5253	.5031	470.4	.9408	.4801	.4940
#3	1.043	519.1	1.033	.5216	.5068	476.6	.9440	.4808	.4926

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5378	190.5	.0368	F509.5	.5041	.8456	.1252	.9721	.9633
Stddev	.0004	1.0	.0304	2.8	.0041	.0014	.0066	.0019	.0022
%RSD	.0674	.5200	82.57	.5470	.8142	.1643	5.263	.1920	.2332
#1	.5374	191.2	.0298	512.1	.5059	.8453	.1319	.9713	.9625
#2	.5381	189.3	.0105	506.6	.5071	.8444	.1251	.9708	.9659
#3	.5379	190.9	.0701	509.8	.4994	.8471	.1187	.9743	.9617

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9567	.9328	.0363	.8957	.9506	.9400	.8973	.4870	.9451
Stddev	.0015	.0041	.0008	.0017	.0042	.0049	.0021	.0015	.0010
%RSD	.1557	.4391	2.164	.1910	.4457	.5162	.2353	.3024	.1022
#1	.9584	.9293	.0354	.8939	.9549	.9379	.8975	.4874	.9442
#2	.9557	.9318	.0365	.8962	.9465	.9455	.8993	.4882	.9450
#3	.9560	.9373	.0369	.8972	.9503	.9365	.8951	.4853	.9461

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1059.8	3030.8	22504.	2041.3
Stddev	2.1	7.5	114.	18.0
%RSD	.20178	.24703	.50587	.88234
#1	1061.3	3037.5	22432.	2024.6
#2	1057.4	3032.0	22445.	2060.3
#3	1060.7	3022.7	22636.	2038.9

◀ Zoom In ▶
Zoom Out

Sample Name: CCV Acquired: 6/1/2018 16:03:25 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2534	39.76	2.041	2.064	2.017	40.09	2.039	2.042	2.018	2.025
Stddev	.0016	.16	.009	.001	.009	.19	.006	.006	.013	.009
%RSD	.6125	.4100	.4171	.0698	.4380	.4653	.2743	.2910	.6590	.4566
#1	.2537	39.90	2.036	2.065	2.025	40.23	2.033	2.037	2.025	2.031
#2	.2548	39.58	2.035	2.062	2.007	39.88	2.040	2.041	2.028	2.030
#3	.2517	39.81	2.051	2.064	2.017	40.15	2.045	2.049	2.003	2.014

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.06	40.18	40.38	2.075	2.084	40.34	2.077	2.001	2.046	2.055
Stddev	.19	.14	.35	.012	.009	.12	.005	.003	.011	.013
%RSD	.4633	.3459	.8713	.5744	.4566	.3079	.2293	.1588	.5513	.6514
#1	41.18	40.30	40.63	2.083	2.076	40.44	2.073	2.001	2.037	2.047
#2	40.84	40.03	39.97	2.081	2.081	40.20	2.075	2.004	2.042	2.048
#3	41.16	40.22	40.53	2.062	2.094	40.39	2.082	1.998	2.058	2.071

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.164	2.113	2.050	2.103	2.030	2.075	2.041
Stddev	.010	.012	.006	.012	.001	.003	.005
%RSD	.4569	.5621	.3087	.5603	.0284	.1505	.2657
#1	2.162	2.104	2.056	2.109	2.030	2.077	2.035
#2	2.156	2.108	2.044	2.111	2.030	2.077	2.042
#3	2.175	2.127	2.050	2.090	2.031	2.072	2.046

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

◀ Zoom In ▶
Zoom Out

Sample Name: CCV Acquired: 6/1/2018 16:03:25 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1223.2	3295.0	24961.	2124.7
Stddev	2.3	9.9	52.	20.7
%RSD	.19169	.29909	.20764	.97324
#1	1223.9	3305.2	24985.	2105.3
#2	1220.6	3294.2	24902.	2146.5
#3	1225.2	3285.5	24998.	2122.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 16:07:21 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0043	.0002	.0005	.0004	.0125	.0002	.0000	.0002
Stddev	.0005	.0084	.0004	.0001	.0001	.0058	.0001	.0002	.0003
%RSD	140.4	195.6	225.5	21.93	36.83	46.28	34.14	5887.	122.3
#1	-.0002	.0054	.0006	.0006	.0005	.0174	.0003	.0000	.0004
#2	.0005	-.0094	.0000	.0004	.0002	.0061	.0002	.0002	.0003
#3	.0008	-.0089	-.0001	.0004	.0004	.0141	.0002	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0236	.0127	-.0060	.0002	F.0031	.0120	.0005	.0005
Stddev	.0001	.0073	.0082	.0173	.0001	.0007	.0064	.0001	.0005
%RSD	163.4	31.06	64.44	288.4	32.39	23.99	53.82	24.01	88.33
#1	-.0002	.0321	.0037	.0027	.0003	.0038	.0190	.0005	.0009
#2	-.0001	.0193	.0146	.0052	.0003	.0029	.0064	.0004	.0000
#3	.0001	.0195	.0197	-.0259	.0002	.0024	.0105	.0007	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0009	.0042	F.0013	.0004	.0014	F.0020	.0001	.0001
Stddev	.0006	.0017	.0031	.0001	.0001	.0002	.0009	.0001	.0001
%RSD	46.04	188.2	74.44	9.242	13.18	10.93	43.68	77.37	68.53
#1	.0006	-.0001	.0077	.0014	.0005	.0016	.0010	.0001	.0002
#2	.0018	-.0001	.0018	.0011	.0004	.0014	.0026	.0002	.0001
#3	.0016	.0029	.0031	.0013	.0004	.0013	.0025	.0000	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.0010			.0020		
Low Limit				-.0010			-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 6/1/2018 16:07:21 Type: QC
Method: 60102007_041712(v245) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1415.6	3398.3	25852.	2129.4
Stddev	3.3	3.5	60.	10.5
%RSD	.23643	.10380	.23160	.49543
#1	1419.4	3394.7	25839.	2137.8
#2	1414.2	3398.2	25917.	2132.9
#3	1413.1	3401.8	25799.	2117.5

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	V	-0.009834	0.000000	No
			Fe	0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.035224	0.000000	No
As 189.042 {478}	☒	5	Fe	-0.000108	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000010	0.000000	No
Be 313.042 {108}	☒	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000108	0.000000	No
			Ca	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Ti	0.000000	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000008	0.000000	No
Cr 267.716 {126}	☒	3	Al	0.000007	0.000000	No
			Fe	-0.000017	0.000000	No
			Ca	0.000004	0.000000	No
Cu 324.754 {104}	☒	10	Fe	-0.000152	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000006	0.000000	No
			Mg	0.000005	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000016	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000026	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	☒	9	Al	0.000292	0.000000	No
			Fe	-0.000088	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000027	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000002	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	0.000019	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000033	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000059	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000003	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000018	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000016	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000016	0.000000	No
			As	0.001128	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000495	0.551079	0.000000	1.000000
Al 396.152 { 85}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.002793	0.170071	0.000000	1.000000
As 189.042 {478}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000192	0.201424	0.000000	1.000000
Ba 455.403 { 74}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.048774	10.805071	0.000000	1.000000
Be 313.042 {108}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000843	8.365310	0.000000	1.000000
Ca 317.933 {106}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.007279	0.279780	0.000000	1.000000
Cd 226.502 {449}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000050	4.652161	0.000000	1.000000
Co 228.616 {447}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000190	2.269888	0.000000	1.000000
Cr 267.716 {126}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000198	0.429711	0.000000	1.000000
Cu 324.754 {104}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.002124	0.774209	0.000000	1.000000
Fe 259.940 {130}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.001084	0.206019	0.000000	1.000000
In 230.606 {446}*	6/1/2018 9:36:18	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.009615	0.253782	0.000000	1.000000
Mg 279.079 {121}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000998	0.028814	0.000000	1.000000
Mn 257.610 {131}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000113	2.427873	0.000000	1.000000
Mo 202.030 {467}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000091	1.154200	0.000000	1.000000
Na 589.592 { 57}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.042844	0.740122	0.000000	1.000000
Ni 231.604 {445}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000066	1.300976	0.000000	1.000000
Pb 220.353 {453}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000888	1.219829	0.000000	1.000000
Sb 206.833 {463}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000017	0.241071	0.000000	1.000000
Se 196.090 {472}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000328	0.147751	0.000000	1.000000
Si 212.412 {459}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.001444	0.364617	0.000000	1.000000
Sn 189.989 {477}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000114	0.465754	0.000000	1.000000
Sr 407.771 { 83}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.002299	17.539990	0.000000	1.000000
Ti 334.941 {101}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.001472	1.910661	0.000000	1.000000
Tl 190.856 {477}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.001388	0.612297	0.000000	1.000000
V 292.402 {115}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	-0.000170	0.648932	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	6/1/2018 9:56:20	6/1/2018 9:56:20	Linear	1/Conc	0.000330	2.875172	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999935	0.000058	0.000399	0.001329	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999892	0.004036	0.015089	0.050297	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999961	0.000143	0.000385	0.001282	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999967	0.007026	0.000327	0.001091	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999820	0.012785	0.000135	0.000451	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999753	0.010021	0.004811	0.016035	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999915	0.004907	0.000026	0.000085	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999915	0.002392	0.000057	0.000190	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999875	0.000546	0.000286	0.000953	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999957	0.000578	0.000249	0.000831	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999560	0.009850	0.003655	0.012183	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999906	0.005610	0.028227	0.094091	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999837	0.000838	0.031555	0.105182	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999906	0.002686	0.000044	0.000146	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999870	0.001500	0.000069	0.000230	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999842	0.021197	0.008931	0.029771	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999946	0.001087	0.000097	0.000322	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999966	0.000819	0.000282	0.000942	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999996	0.000058	0.000526	0.001753	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999987	0.000060	0.000810	0.002699	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.998352	0.001720	0.000246	0.000821	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999820	0.000712	0.000142	0.000473	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999692	0.035092	0.000124	0.000412	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999687	0.003850	0.000105	0.000351	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999984	0.000267	0.000363	0.001209	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999869	0.000838	0.000253	0.000842	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999917	0.002977	0.000031	0.000102	OK.	1.000000	0.000000	1	0

DOD
Dry Sieve

SGS Accutest - Orlando Metals Digestion Log Soil

MP #: 33823 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 06/01/18 0805
HotBlock I.D. 10
Thermometer I.D. 6071
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 93 / 92
Balance I.D. ADUPB06

Spk. Sol. A	Volume Used(ml)	Pipette #
ACC1062	0.5	EU15244
ACC1051	0.25	EU15244
MET6035	0.25	EU15244

Filter Lot#: 1019Z17J-P
Dig. Tube Lot# MP3088

Added B:	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	177290	0000196399	0000190962	23430173

Sample #			Wt., g	Final Volume(ml)	Comments
Method Blank(MB)			1.0	50.0	
Spike Blank(SB)			1.0		
Matrix Spike(MS)			1.29		
Matrix Spike Dup(MSD)			1.06		
Duplicate(DUP)			1.08		
1 QC C	FA53517-2R	D1	1.29		
2	-3R		1.26		
3	-5R		1.19		
4	-6R		1.06		
5	-8R		1.20		
6	-9R		1.13		
7	-11R		1.04		
8	-12R		1.17		
9	-14R		1.12		
10	-15R		1.25		
11	-17R		1.22		
12	-18R		1.38		
13	FA53725-11R		1.49		
14	-12R		1.18		
15	-75R		1.15		
16	-76R		1.01		
17	-44AR		1.18		
18	D2-FA53517-2	2	1.20		
19					
20					
21 E	06/01/18 IT				
22 E					
23 E					
24 E					

Analyst: [signature] Date: 06-01-18

QC Review: [signature] Date: 6.1.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kemron Environmental Services, Inc

Ft Ord; CA

07202.2001

SGS Job Number: FA53800

Sampling Dates: 04/25/18 - 04/26/18

Report to:

Kemron Environmental Services, Inc
4522 Joe Lloyd Way
Monterey, CA 93944
EDawson@GilbaneCo.com; PCota@GilbaneCo.com;
TBeer@GilbaneCo.com
ATTN: Evenlyn Dawson

Total number of pages in report: 665

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **7**
Section 3: Summary of Hits **8**
Section 4: Sample Results **10**
4.1: FA53800-1: 25-01SC0000 11
4.2: FA53800-4: 25-02SC0000 12
4.3: FA53800-4A: 25-02SC0000 13
4.4: FA53800-7: 25-03SC0000 14
4.5: FA53800-7A: 25-03SC0000 15
4.6: FA53800-8: 25-03SC0000Q 16
4.7: FA53800-8A: 25-03SC0000Q 17
4.8: FA53800-13: 25-06SC0000 18
4.9: FA53800-16: 25-11SC0000 19
4.10: FA53800-16A: 25-11SC0000 20
4.11: FA53800-17: 25-11SC0000Q 21
4.12: FA53800-17A: 25-11SC0000Q 22
4.13: FA53800-22: 25-12SC0000 23
Section 5: Misc. Forms **24**
5.1: Chain of Custody 25
5.2: QC Evaluation: DOD QSM5 Limits 31
Section 6: GC/LC Semi-volatiles - QC Data Summaries **33**
6.1: Method Blank Summary 34
6.2: Blank Spike Summary 42
6.3: Laboratory Control Sample Summary 44
6.4: Matrix Spike/Matrix Spike Duplicate Summary 46
6.5: Duplicate Summary 48
6.6: Surrogate Recovery Summaries 52
6.7: GC Surrogate Retention Time Summaries 53
6.8: Initial and Continuing Calibration Summaries 59
Section 7: GC/LC Semi-volatiles - Raw Data **85**
7.1: Samples 86
7.2: Method Blanks 105
7.3: Blank Spikes 127
7.4: Laboratory Control Samples 173
7.5: Matrix Spike/Matrix Spike Duplicates 215
7.6: Duplicates 251
7.7: Initial and Continuing Calibrations 262
7.8: Instrument Run Logs 597
7.9: Prep Logs 607
Section 8: Metals Analysis - QC Data Summaries **609**
8.1: Inst QC MA14898: Pb 610
8.2: Prep QC MP33740: Pb 624

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

8.3: IDL and Linear Range Summaries 631
Section 9: Metals Analysis - Raw Data 633
9.1: Raw Data MA14898 634
9.2: Prep Logs 665

SGS North America Inc.

Sample Summary

Kemron Environmental Services, Inc

Job No: FA53800

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA53800-1	04/26/18	10:51	BLFP	04/28/18	SO	Soil	25-01SC0000
FA53800-2	04/26/18	11:03	BLFP	04/28/18	SO	Soil	25-01SC0001
FA53800-3	04/26/18	11:16	BLFP	04/28/18	SO	Soil	25-01SC0002
FA53800-4	04/25/18	10:43	BLFP	04/28/18	SO	Soil	25-02SC0000
FA53800-4A	04/25/18	10:43	BLFP	04/28/18	SO	Soil	25-02SC0000
FA53800-5	04/25/18	11:10	BLFP	04/28/18	SO	Soil	25-02SC0001
FA53800-5A	04/25/18	11:10	BLFP	04/28/18	SO	Soil	25-02SC0001
FA53800-6	04/25/18	11:40	BLFP	04/28/18	SO	Soil	25-02SC0002
FA53800-6A	04/25/18	11:40	BLFP	04/28/18	SO	Soil	25-02SC0002
FA53800-7	04/25/18	11:15	BLFP	04/28/18	SO	Soil	25-03SC0000
FA53800-7A	04/25/18	11:15	BLFP	04/28/18	SO	Soil	25-03SC0000
FA53800-8	04/25/18	11:20	BLFP	04/28/18	SO	Soil	25-03SC0000Q
FA53800-8A	04/25/18	11:20	BLFP	04/28/18	SO	Soil	25-03SC0000Q

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53800

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53800-9	04/25/18	11:42	BLFP	04/28/18	SO	Soil	25-03SC0001
FA53800-9A	04/25/18	11:42	BLFP	04/28/18	SO	Soil	25-03SC0001
FA53800-10	04/25/18	11:46	BLFP	04/28/18	SO	Soil	25-03SC0001Q
FA53800-10A	04/25/18	11:46	BLFP	04/28/18	SO	Soil	25-03SC0001Q
FA53800-11	04/25/18	12:15	BLFP	04/28/18	SO	Soil	25-03SC0002
FA53800-11A	04/25/18	12:15	BLFP	04/28/18	SO	Soil	25-03SC0002
FA53800-12	04/25/18	12:20	BLFP	04/28/18	SO	Soil	25-03SC0002Q
FA53800-12A	04/25/18	12:20	BLFP	04/28/18	SO	Soil	25-03SC0002Q
FA53800-13	04/26/18	13:19	BLFP	04/28/18	SO	Soil	25-06SC0000
FA53800-14	04/26/18	13:41	BLFP	04/28/18	SO	Soil	25-06SC0001
FA53800-15	04/26/18	14:10	BLFP	04/28/18	SO	Soil	25-06SC0002
FA53800-16	04/25/18	10:15	BLFP	04/28/18	SO	Soil	25-11SC0000
FA53800-16A	04/25/18	10:15	BLFP	04/28/18	SO	Soil	25-11SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53800

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53800-17	04/25/18	10:15	BLFP	04/28/18	SO	Soil	25-11SC0000Q
FA53800-17A	04/25/18	10:15	BLFP	04/28/18	SO	Soil	25-11SC0000Q
FA53800-18	04/25/18	11:10	BLFP	04/28/18	SO	Soil	25-11SC0001
FA53800-18A	04/25/18	11:10	BLFP	04/28/18	SO	Soil	25-11SC0001
FA53800-19	04/25/18	11:10	BLFP	04/28/18	SO	Soil	25-11SC0001Q
FA53800-19A	04/25/18	11:10	BLFP	04/28/18	SO	Soil	25-11SC0001Q
FA53800-20	04/25/18	12:00	BLFP	04/28/18	SO	Soil	25-11SC0002
FA53800-20A	04/25/18	12:00	BLFP	04/28/18	SO	Soil	25-11SC0002
FA53800-21	04/25/18	12:00	BLFP	04/28/18	SO	Soil	25-11SC0002Q
FA53800-21A	04/25/18	12:00	BLFP	04/28/18	SO	Soil	25-11SC0002Q
FA53800-22	04/25/18	08:58	BLFP	04/28/18	SO	Soil	25-12SC0000
FA53800-23	04/25/18	09:16	BLFP	04/28/18	SO	Soil	25-12SC0001
FA53800-24	04/25/18	09:45	BLFP	04/28/18	SO	Soil	25-12SC0002

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Kemron Environmental Services, Inc **Job No:** FA53800

Site: Ft Ord; CA **Report Date:** 5/17/2018 10:45:40

8 Sample(s) were collected on/ between 04/25/2018 and 04/26/2018 and were received at SGS North America Inc - Orlando on 04/28/2018 properly preserved, at 4.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA53800. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

GC/LC Semi-volatiles By Method SW846 8330B

Matrix: SO **Batch ID:** OP69946

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-119MS, FA53725-119MSD, FA53800-1DUP were used as the QC samples indicated.

Matrix: SO **Batch ID:** OP69960

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53800-16MS, FA53800-16MSD, FA53800-22DUP were used as the QC samples indicated.

Metals Analysis By Method SW846 6010C

Matrix: SO **Batch ID:** MP33740

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-31ADUP, FA53725-31AMS, FA53725-31AMSD, FA53725-31ASDL, FA53725-31APS were used as the QC samples for metals.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA53800
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/25/18 thru 04/26/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53800-1	**25-01SC0000**					
No hits reported in this sample.						
FA53800-4	**25-02SC0000**					
No hits reported in this sample.						
FA53800-4A	**25-02SC0000**					
Lead		16.3	2.0	0.40	mg/kg	SW846 6010C
FA53800-7	**25-03SC0000**					
No hits reported in this sample.						
FA53800-7A	**25-03SC0000**					
Lead		12.7	2.0	0.40	mg/kg	SW846 6010C
FA53800-8	**25-03SC0000Q**					
No hits reported in this sample.						
FA53800-8A	**25-03SC0000Q**					
Lead		12.9	2.0	0.40	mg/kg	SW846 6010C
FA53800-13	**25-06SC0000**					
No hits reported in this sample.						
FA53800-16	**25-11SC0000**					
No hits reported in this sample.						
FA53800-16A	**25-11SC0000**					
Lead		7.0	2.0	0.40	mg/kg	SW846 6010C
FA53800-17	**25-11SC0000Q**					
No hits reported in this sample.						

Summary of Hits

Job Number: FA53800
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/25/18 thru 04/26/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53800-17A	**25-11SC0000Q**					
Lead		8.1	2.0	0.40	mg/kg	SW846 6010C
FA53800-22	**25-12SC0000**					
No hits reported in this sample.						

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-01SC0000		
Lab Sample ID:	FA53800-1	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614655.D	1	05/09/18 13:08	EM	05/07/18 17:00	OP69946	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	75 U	100	75	50	ug/kg	
121-82-4	RDX	75 U	100	75	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	75 U	100	75	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	94%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-02SC0000		
Lab Sample ID:	FA53800-4	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614658.D	1	05/09/18 14:36	EM	05/07/18 17:00	OP69946	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	96%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-02SC0000		
Lab Sample ID:	FA53800-4A	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	16.3	2.0	0.40	0.10	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-03SC0000		
Lab Sample ID:	FA53800-7	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614661.D	1	05/09/18 16:05	EM	05/07/18 17:00	OP69946	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	94%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-03SC0000		
Lab Sample ID:	FA53800-7A	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	12.7	2.0	0.40	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-03SC0000Q		
Lab Sample ID:	FA53800-8	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614662.D	1	05/09/18 16:34	EM	05/07/18 17:00	OP69946	GGG2626
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	95%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-03SC0000Q		
Lab Sample ID:	FA53800-8A	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	12.9	2.0	0.40	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-06SC0000		
Lab Sample ID:	FA53800-13	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059676.D	1	05/10/18 13:29	EM	05/08/18 18:30	OP69960	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	70%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-11SC0000		
Lab Sample ID:	FA53800-16	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059679.D	1	05/10/18 14:59	EM	05/08/18 18:30	OP69960	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	72%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-11SC0000		
Lab Sample ID:	FA53800-16A	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	7.0	2.0	0.40	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-11SC0000Q		
Lab Sample ID:	FA53800-17	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059684.D	1	05/10/18 17:29	EM	05/08/18 18:30	OP69960	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	70%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-11SC0000Q		
Lab Sample ID:	FA53800-17A	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	8.1	2.0	0.40	0.099	mg/kg	5	05/15/18	05/15/18	DM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14898
(2) Prep QC Batch: MP33740

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-12SC0000		
Lab Sample ID:	FA53800-22	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059689.D	1	05/10/18 19:58	EM	05/08/18 18:30	OP69960	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	73%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042518-01
FA53800

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:
Unit 25

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
1	25-01SC0000	SO	4-26-18	1051	TB/KL				X	25-01	N1	0.00	0.00	
2	25-01SC0001	SO	"	1103	"				X	25-01	N1	0.00	0.00	HOLD
3	25-01SC0002	SO	"	1116	"				X	25-01	N1	0.00	0.00	HOLD
4	25-02SC0000	SO	4-25-18	1043	LF/RP		X		X	25-02	N1	0.00	0.00	
5	25-02SC0001	SO	"	1110	"		X		X	25-02	N1	0.00	0.00	HOLD
6	25-02SC0002	SO	"	1140	"		X		X	25-02	N1	0.00	0.00	HOLD
7	25-03SC0000	SO	4-25-18	1115	KL/TB		X		X	25-03	N1	0.00	0.00	
8	25-03SC0000Q	SO	"	1120	"		X		X	25-03	FD1	0.00	0.00	
9	25-03SC0001	SO	"	1142	"		X		X	25-03	N1	0.00	0.00	HOLD
	Cooler #	Turnaround Time: 14 Days												

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-26-18	1645
Fed Ex		

Received by: *(Signature)*	Date	Time
FedEx	4-26-18	1645

Shipping Date / Carrier / Airbill Number
8133 7208 3500

Received by Laboratory *(Signature, Date, Time)* & condition
04/28/18 945

3.8, 4.2, 3.0, 15.8

ENV.COC_Record
April 13, 2018

Page 1 of 5

FA53800: Chain of Custody
Page 1 of 6

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042518-02
FA53800

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
	Analytical Test Method					11	13	8	13					
10	25-03SC0001Q (10)	SO	4-25-18	1146	TB/KL		X		X	25-03	FD1	0.00	0.00	HOLD
11	25-03SC0002 (11)	SO	"	1215	"		X		X	25-03	N1	0.00	0.00	HOLD
12	25-03SC0002Q (12)	SO	"	1220	"		X		X	25-03	FD1	0.00	0.00	HOLD
~~13~~	~~25-04SC0000~~	~~SO~~					~~X~~		~~X~~	~~25-04~~	~~N1~~	~~0.00~~	~~0.00~~	
14	25-04SC0001	SO					X		X	25-04	N1	0.00	0.00	
15	25-04SC0002	SO		J.Beer	4-26 KB		X		X	25-04	N1	0.00	0.00	
16	25-05SC0000	SO					X		X	25-05	N1	0.00	0.00	
17	25-05SC0001	SO					X		X	25-05	N1	0.00	0.00	
~~18~~	~~25-05SC0002~~	~~SO~~					~~X~~		~~X~~	~~25-05~~	~~N1~~	~~0.00~~	~~0.00~~	
Cooler #		**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-26-18	1645
Fed Ex		

Received by: *(Signature)*	Date	Time
FedEx	4-26-18	1645

Shipping Date / Carrier / Airbill Number
8133 7208 3500

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/28/18 945

ENV.COC_Record
April 13, 2018

Page 2 of 5

FA53800: Chain of Custody
Page 2 of 6

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042618-03
FA53800

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM					Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
						11	13	8	13									
19	25-06SC0000 13	SO	4-26-18	1319	RP/LF				X					25-06	N1	0.00	0.00	
20	25-06SC0001 14	SO	1	1341	1				X					25-06	N1	0.00	0.00	HOLD
21	25-06SC0002 15	SO	1	1410	1				X					25-06	N1	0.00	0.00	HOLD
~~22~~	~~25-07SC0000~~	~~SO~~							~~X~~					~~25-07~~	~~N1~~	~~0.00~~	~~0.00~~	
23	25-07SC0001	SO							X					25-07	N1	0.00	0.00	
24	25-07SC0002	SO							X					25-07	N1	0.00	0.00	
25	25-08SC0000	SO	J Beer	4-26-18					X					25-08	N1	0.00	0.00	
26	25-08SC0001	SO							X					25-08	N1	0.00	0.00	
~~27~~	~~25-08SC0002~~	~~SO~~							~~X~~					~~25-08~~	~~N1~~	~~0.00~~	~~0.00~~	
Cooler #		**Turnaround Time: 14 Days**																

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-26-18	1645
Fed Ex		

Received by: *(Signature)*	Date	Time
FedEx	4-26-18	1645

Shipping Date / Carrier / Airbill Number
8133 7208 3500

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/28/18 945

ENV.COC_Record
April 13, 2018

Page 3 of 5

FA53800: Chain of Custody
Page 3 of 6

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042518-04
FA53800

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID		Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
							11	13	8	13					
~~28~~	~~25-00SC0000~~		~~SO~~							X	~~25-09~~	~~N1~~	~~0.00~~	~~0.00~~	
29	25-09SC0001		SO							X	25-09	N1	0.00	0.00	
30	25-09SC0002		SO	J. Beer 4-26-18						X	25-09	N1	0.00	0.00	
31	25-10SC0000		SO							X	25-10	N1	0.00	0.00	
32	25-10SC0001		SO							X	25-10	N1	0.00	0.00	
~~33~~	~~25-10SC0002~~		~~SO~~							X	~~25-10~~	~~N1~~	~~0.00~~	~~0.00~~	
34	25-11SC0000	16	SO	4-25-18	1015	TO/TE		X		X	25-11	N1	0.00	0.00	
35	25-11SC0000Q	17	SO	1	1015	1		X		X	25-11	FD1	0.00	0.00	
36	25-11SC0001	18	SO	1	1110	1		X		X	25-11	N1	0.00	0.00	HOLD
Cooler #			**Turnaround Time: 14 Days**												

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-26-18	1645
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-26-18	1645

Shipping Date / Carrier / Airbill Number
8133 7208 3500

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/28/18 945

ENV.COC_Record
April 13, 2018

Page 4 of 5

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC #042518-05
FA53800

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID		Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
37	25-11SC0001Q	19	SO	4-25-18	1110	TD/TE		X		X	25-11	FD1	0.00	0.00	HOLD
38	25-11SC0002	20	SO	"	1200	"		X		X	25-11	N1	0.00	0.00	HOLD
39	25-11SC0002Q	21	SO	"	1200	"		X		X	25-11	FD1	0.00	0.00	HOLD
40	25-12SC0000	22	SO	4-25-18	0858	LF/RP				X	25-12	N1	0.00	0.00	
41	25-12SC0001	23	SO	"	0916	"				X	25-12	N1	0.00	0.00	HOLD
42	25-12SC0002	24	SO	"	0945	"				X	25-12	N1	0.00	0.00	HOLD
~~43~~	~~25-ER01SC~~		~~WQ~~				X		X		FIELDQC	~~EB1~~	~~0.00~~	~~0.00~~	e
~~44~~	~~25-ER02SC~~		~~WQ~~				X		X		FIELDQC	~~EB1~~	~~0.00~~	~~0.00~~	e
45															
Cooler #			Turnaround Time: 14 Days												

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-26-18	1645
Fed Ex		

Received by: *(Signature)*	Date	Time
FedEx	4-26-18	1645

Shipping Date / Carrier / Airbill Number
8133 7208 3500

Received by Laboratory: *(Signature, Date, Time)* & condition
04/28/18 945

ENV.COC_Record
April 13, 2018

Page 5 of 5

SGS Sample Receipt Summary

Job Number: FA53800 **Client:** GILBANE **Project:** BRA KEMRON SOIL SAMPLING

Date / Time Received: 4/28/2018 9:45:00 AM **Delivery Method:** FED EX **Airbill #'s:** 1015930474060003281100780712838200

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 4

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4); Cooler 2: (3.8); Cooler 3: (2.6); Cooler 4: (15.4);

Cooler Temps (Corrected) °C: Cooler 1: (3.8); Cooler 2: (4.2); Cooler 3: (3.0); Cooler 4: (15.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 4/28/2018 9:45:00 AM Reviewer: SP Date: 4/28/2018

QC Evaluation: DOD QSM5 Limits

Job Number: FA53800
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/25/18 thru 04/26/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP69946	SW846 8330B						
OP69946-BS	2691-41-0	HMX	BSP	REC	122	%	74-124
OP69946-BS	121-82-4	RDX	BSP	REC	99	%	67-129
OP69946-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	93	%	71-120
OP69946-MS*	2691-41-0	HMX	MS	REC	117	%	74-124
OP69946-MS*	121-82-4	RDX	MS	REC	96	%	67-129
OP69946-MS*	118-96-7	2,4,6-Trinitrotoluene	MS	REC	89	%	71-120
OP69946-MSD*	2691-41-0	HMX	MSD	REC	120	%	74-124
OP69946-MSD*	2691-41-0	HMX	MSD	RPD	2	%	20
OP69946-MSD*	121-82-4	RDX	MSD	REC	97	%	67-129
OP69946-MSD*	121-82-4	RDX	MSD	RPD	0	%	20
OP69946-MSD*	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	88	%	71-120
OP69946-MSD*	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	1	%	20
OP69946-DUP	2691-41-0	HMX	DUP	RPD	0	%	20
OP69946-DUP	121-82-4	RDX	DUP	RPD	0	%	20
OP69946-DUP	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69946-DUP2	2691-41-0	HMX	DUP	RPD	0	%	20
OP69946-DUP2	121-82-4	RDX	DUP	RPD	0	%	20
OP69946-DUP2	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69960	SW846 8330B						
OP69960-BS	2691-41-0	HMX	BSP	REC	82	%	74-124
OP69960-BS	121-82-4	RDX	BSP	REC	80	%	67-129
OP69960-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	93	%	71-120
OP69960-MS	2691-41-0	HMX	MS	REC	91	%	74-124
OP69960-MS	121-82-4	RDX	MS	REC	79	%	67-129
OP69960-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	77	%	71-120
OP69960-MSD	2691-41-0	HMX	MSD	REC	94	%	74-124
OP69960-MSD	2691-41-0	HMX	MSD	RPD	4	%	20
OP69960-MSD	121-82-4	RDX	MSD	REC	82	%	67-129
OP69960-MSD	121-82-4	RDX	MSD	RPD	3	%	20
OP69960-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	76	%	71-120
OP69960-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	2	%	20
OP69960-DUP	2691-41-0	HMX	DUP	RPD	0	%	20
OP69960-DUP	121-82-4	RDX	DUP	RPD	0	%	20
OP69960-DUP	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69960-DUP2	2691-41-0	HMX	DUP	RPD	0	%	20
OP69960-DUP2	121-82-4	RDX	DUP	RPD	0	%	20
OP69960-DUP2	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
MP33740	SW846 6010C						

* Sample used for QC is not from job FA53800

QC Evaluation: DOD QSM5 Limits

Job Number: FA53800
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/25/18 thru 04/26/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP33740-B1	7439-92-1	Lead	BSP	REC	108	%	81-112
MP33740-S1*	7439-92-1	Lead	MS	REC	110.9	%	81-112
MP33740-S2*	7439-92-1	Lead	MSD	REC	97.2	%	81-112
MP33740-S2*	7439-92-1	Lead	MSD	RPD	5.3	%	20
MP33740-D1*	7439-92-1	Lead	DUP	RPD	7.4	%	20
MP33740-D2*	7439-92-1	Lead	DUP	RPD	2.2	%	20

* Sample used for QC is not from job FA53800

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-MB	GG614649.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-1, FA53800-4, FA53800-7, FA53800-8

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	101%	69-134%

Method Blank Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-GB1	GG614663.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-1, FA53800-4, FA53800-7, FA53800-8

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	50	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	93%	69-134%

Method Blank Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-GB2	GG614664.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-1, FA53800-4, FA53800-7, FA53800-8

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	93%	69-134%

Method Blank Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-GB3	GG614665.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-1, FA53800-4, FA53800-7, FA53800-8

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	50	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	89%	69-134%

Method Blank Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69960-MB	BB059673.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-13, FA53800-16, FA53800-17, FA53800-22

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	77%	69-134%

Method Blank Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69960-GB1	BB059696.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-13, FA53800-16, FA53800-17, FA53800-22

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

Method Blank Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69960-GB2	BB059697.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-13, FA53800-16, FA53800-17, FA53800-22

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

Method Blank Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69960-GB3	BB059698.D	1	05/11/18	EM	05/08/18	OP69960	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-13, FA53800-16, FA53800-17, FA53800-22

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

Blank Spike Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-BS	GG614647.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-1, FA53800-4, FA53800-7, FA53800-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	3050	122	75-147
121-82-4	RDX	2500	2470	99	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2330	93	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	99%	69-134%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69960-BS	BB059671.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-13, FA53800-16, FA53800-17, FA53800-22

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2040	82	75-147
121-82-4	RDX	2500	2010	80	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2320	93	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	85%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-PT1	GG614648.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-1, FA53800-4, FA53800-7, FA53800-8

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	4160	111	74-124
121-82-4	RDX	3200	2480	78	67-129
118-96-7	2,4,6-Trinitrotoluene	520	427	82	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	99%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69960-PT1	BB059672.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-13, FA53800-16, FA53800-17, FA53800-22

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	3080	82	74-124
121-82-4	RDX	3200	2270	71	67-129
118-96-7	2,4,6-Trinitrotoluene	520	449	86	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	79%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-MS	GG614651.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626
OP69946-MSD	GG614652.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626
FA53725-119	GG614650.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-1, FA53800-4, FA53800-7, FA53800-8

CAS No.	Compound	FA53725-119 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99 U		2490	2910	117	2490	2980	120	2	75-147/22
121-82-4	RDX	99 U		2490	2400	96	2490	2410	97	0	79-126/21
118-96-7	2,4,6-Trinitrotoluene	99 U		2490	2230	89	2490	2200	88	1	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53725-119	Limits
610-39-9	3,4-Dinitrotoluene	94%	93%	98%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69960-MS	BB059682.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730
OP69960-MSD	BB059683.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730
FA53800-16	BB059679.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-13, FA53800-16, FA53800-17, FA53800-22

CAS No.	Compound	FA53800-16 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99	U	2470	2250	91	2480	2340	94	4	75-147/22
121-82-4	RDX	99	U	2470	1960	79	2480	2020	82	3	79-126/21
118-96-7	2,4,6-Trinitrotoluene	99	U	2470	1910	77	2480	1880	76	2	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53800-16	Limits
610-39-9	3,4-Dinitrotoluene	70%	71%	72%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-DUP	GG614656.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626
FA53800-1	GG614655.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-1, FA53800-4, FA53800-7, FA53800-8

CAS No.	Compound	FA53800-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53800-1	Limits
610-39-9	3,4-Dinitrotoluene	96%	94%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69946-DUP2	GG614657.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626
FA53800-1	GG614655.D	1	05/09/18	EM	05/07/18	OP69946	GGG2626

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-1, FA53800-4, FA53800-7, FA53800-8

CAS No.	Compound	FA53800-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53800-1	Limits
610-39-9	3,4-Dinitrotoluene	93%	94%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69960-DUP	BB059690.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730
FA53800-22	BB059689.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-13, FA53800-16, FA53800-17, FA53800-22

CAS No.	Compound	FA53800-22 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53800-22	Limits
610-39-9	3,4-Dinitrotoluene	76%	73%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69960-DUP2	BB059691.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730
FA53800-22	BB059689.D	1	05/10/18	EM	05/08/18	OP69960	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53800-13, FA53800-16, FA53800-17, FA53800-22

CAS No.	Compound	FA53800-22 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53800-22	Limits
610-39-9	3,4-Dinitrotoluene	75%	73%	69-134%

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA53800-1	GG614655.D	94
FA53800-4	GG614658.D	96
FA53800-7	GG614661.D	94
FA53800-8	GG614662.D	95
FA53800-13	BB059676.D	70
FA53800-16	BB059679.D	72
FA53800-17	BB059684.D	70
FA53800-22	BB059689.D	73
OP69946-BS	GG614647.D	99
OP69946-DUP	GG614656.D	96
OP69946-DUP2	GG614657.D	93
OP69946-GB1	GG614663.D	93
OP69946-GB2	GG614664.D	93
OP69946-GB3	GG614665.D	89
OP69946-MB	GG614649.D	101
OP69946-MS	GG614651.D	94
OP69946-MSD	GG614652.D	93
OP69946-PT1	GG614648.D	99
OP69960-BS	BB059671.D	85
OP69960-DUP	BB059690.D	76
OP69960-DUP2	BB059691.D	75
OP69960-GB1	BB059696.D	
OP69960-GB2	BB059697.D	
OP69960-GB3	BB059698.D	
OP69960-MB	BB059673.D	77
OP69960-MS	BB059682.D	70
OP69960-MSD	BB059683.D	71
OP69960-PT1	BB059672.D	79

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1730-CC1722	**Injection Date:**	05/10/18
Lab File ID:	BB059670.D	**Injection Time:**	09:23
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	9.94

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69960-BS	BB059671.D	05/10/18	10:57	9.99
OP69960-PT1	BB059672.D	05/10/18	11:29	10.00
OP69960-MB	BB059673.D	05/10/18	11:59	10.00
FA53800-13	BB059676.D	05/10/18	13:29	9.95
FA53800-16	BB059679.D	05/10/18	14:59	9.95

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1730-CC1722	**Injection Date:**	05/10/18
Lab File ID:	BB059680.D	**Injection Time:**	15:29
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	9.92

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69960-MS	BB059682.D	05/10/18	16:29	9.83
OP69960-MSD	BB059683.D	05/10/18	16:59	9.92
FA53800-17	BB059684.D	05/10/18	17:29	9.96
FA53800-22	BB059689.D	05/10/18	19:58	9.86
OP69960-DUP	BB059690.D	05/10/18	20:28	9.88
OP69960-DUP2	BB059691.D	05/10/18	20:58	9.83

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1730-CC1722	**Injection Date:**	05/10/18
Lab File ID:	BB059692.D	**Injection Time:**	21:28
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	9.89

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69960-GB1	BB059696.D	05/10/18	23:28	
OP69960-GB2	BB059697.D	05/10/18	23:58	
OP69960-GB3	BB059698.D	05/11/18	00:28	
OP69973-BS	BB059699.D	05/11/18	00:58	9.94
OP69973-PT1	BB059700.D	05/11/18	01:28	9.89
OP69973-MB	BB059701.D	05/11/18	01:58	9.92
FA53801-1	BB059702.D	05/11/18	02:28	9.89

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/09/18
Lab File ID:	GG614645.D	**Injection Time:**	08:11
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.23

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69946-BS	GG614647.D	05/09/18	09:10	14.28
OP69946-PT1	GG614648.D	05/09/18	09:39	14.22
OP69946-MB	GG614649.D	05/09/18	10:09	14.21
FA53725-119	GG614650.D	05/09/18	10:41	14.15
OP69946-MS	GG614651.D	05/09/18	11:10	14.22
OP69946-MSD	GG614652.D	05/09/18	11:40	14.18

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/09/18
Lab File ID:	GG614653.D	**Injection Time:**	12:09
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.24

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
FA53800-1	GG614655.D	05/09/18	13:08	14.20
OP69946-DUP	GG614656.D	05/09/18	13:37	14.14
OP69946-DUP2	GG614657.D	05/09/18	14:07	14.15
FA53800-4	GG614658.D	05/09/18	14:36	14.22

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2626-CC2571	**Injection Date:**	05/09/18
Lab File ID:	GG614659.D	**Injection Time:**	15:06
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	14.24	14.24

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA53800-7	GG614661.D	05/09/18	16:05		14.23
FA53800-8	GG614662.D	05/09/18	16:34		14.23
OP69946-GB1	GG614663.D	05/09/18	17:04		14.24
OP69946-GB2	GG614664.D	05/09/18	17:33		14.23
OP69946-GB3	GG614665.D	05/09/18	18:03		14.23
GGG2626-ECC2571	GG614666.D	05/09/18	18:32	14.28	14.28

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA53800 **Sample:** GBB1722-ICC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059468.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration

Calibration Files
20 =BB059464.D 50 =BB059465.D 100 =BB059466.D 200 =BB059467.D
500 =BB059468.D 1000=BB059469.D 2000=BB059470.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	4.057	5.437	5.336	4.870	4.755	4.712	4.606	4.825	E3	9.63
2)	HMX	1.565	2.172	2.000	1.766	1.871	1.897	1.819	1.870	E3	10.12
3)	DNX	3.283	3.662	3.269	2.786	2.867	2.866	2.946	3.097	E3	10.29
4)	MNX	2.964	3.443	3.424	3.009	2.956	2.936	2.943	3.097	E3	7.48
5)	RDX	2.292	2.368	2.423	2.022	1.981	1.949	1.934	2.138	E3	9.98
6)	1,3,5-Trinitroben	5.015	4.250	4.380	4.228	4.133	4.163	4.290	4.351	E3	6.98
7)	1,3-Dinitrobenzen	5.103	6.130	6.106	5.453	5.359	5.313	5.343	5.544	E3	7.33
8)	3,5-Dinitroanilin	4.716	5.643	5.219	4.627	4.650	4.615	4.762	4.890	E3	8.03
9)	Nitrobenzene	3.761	4.464	3.850	3.539	3.342	3.234	3.316	3.644	E3	11.78
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	4.693	3.753	3.290	3.126	2.967	2.901	2.923	3.379	E3	19.28
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 2950.09304 *A + -0.01551 *A^2										
12)	2,4,6-Trinitrotol	4.956	4.943	4.194	4.070	3.843	3.741	3.794	4.220	E3	12.39
13)	2-Amino-4,6-Dinit	3.909	4.360	3.860	3.648	3.604	3.533	3.585	3.785	E3	7.68
14)	4-Amino-2,6-Dinit	1.542	3.426	2.979	2.840	2.690	2.591	2.687	2.679	E3	21.41
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997										
	Response Ratio = 0.00000 + 2602.89377 *A + 0.03960 *A^2										
15)S	3,4-Dinitrotoluen	2.547	2.965	2.725	2.872	2.626	2.453	2.542	2.676	E3	7.02
16)	2,4-Dinitrotoluen	4.866	6.729	5.238	5.204	4.993	4.826	4.971	5.261	E3	12.65
17)	2,6-Dinitrotoluen	3.711	4.396	3.251	3.385	3.230	2.946	3.275	3.456	E3	13.67
18)	o-Nitrotoluene	2.384	3.152	2.790	2.334	2.287	2.268	2.270	2.498	E3	13.69
19)	p-Nitrotoluene	3.192	4.942	4.366	3.947	3.706	3.724	3.752	3.947	E3	14.19
20)	m-Nitrotoluene	3.139	4.450	3.763	3.373	3.372	3.439	3.434	3.567	E3	12.06
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	6.055	8.407	8.188	7.236	7.294	7.503	7.246	7.418	E3	10.32
2)	HMX	3.365	6.202	5.612	5.174	4.982	5.081	5.035	5.064	E3	17.11
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 5093.51943 *A + -0.02911 *A^2										
3)	DNX	4.174	6.652	5.296	4.870	4.545	4.745	4.792	5.011	E3	15.95
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998										
	Response Ratio = 0.00000 + 4658.23377 *A + 0.06712 *A^2										
4)	MNX	4.258	4.893	5.093	4.585	4.573	4.564	4.576	4.649	E3	5.77
5)	RDX	3.570	3.610	3.606	3.105	3.137	3.116	3.125	3.324	E3	7.64
6)	1,3,5-Trinitroben	7.940	8.986	9.024	8.086	8.009	8.095	8.296	8.348	E3	5.54
7)	1,3-Dinitrobenzen	3.838	3.615	4.019	3.565	3.564	3.567	3.902	3.724	E3	5.13
8)	3,5-Dinitroanilin	5.802	7.490	8.086	7.445	7.563	7.569	8.398	7.479	E3	10.97
9)	Nitrobenzene	3.281	3.639	3.339	3.520	3.125	3.092	3.214	3.316	E3	6.09
10)	Nitroglycerin	1.415	1.345	1.370	1.191	1.221	1.213	1.214	1.281	E3	7.18
11)	Tetryl	5.506	4.771	5.669	5.060	5.077	5.090	5.183	5.194	E3	5.80

Job Number: FA53800 **Sample:** GBB1722-ICC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059468.D
Project: Ft Ord; CA

```
12)  2,4,6-Trinitrotol 3.797 4.195 5.241 4.572 4.606 4.634 4.683 4.533 E3   9.85
13)  2-Amino-4,6-Dinit 5.591 4.051 6.113 5.405 5.388 5.449 5.549 5.364 E3  11.74
14)  4-Amino-2,6-Dinit 4.328 4.594 6.000 5.208 5.287 5.370 5.487 5.182 E3  10.82
15)S 3,4-Dinitrotoluen 4.756 5.015 5.428 4.321 4.394 4.465 4.624 4.715 E3   8.35
16)  2,4-Dinitrotoluen 2.567 3.016 3.002 2.767 2.947 3.113 3.260 2.953 E3   7.70
17)  2,6-Dinitrotoluen 2.596 3.517 3.074 3.493 3.663 3.691 3.868 3.415 E3  12.80
18)  o-Nitrotoluene    2.982 3.433 3.803 3.387 3.104 3.071 3.149 3.276 E3   8.71
19)  p-Nitrotoluene    2.104 3.372 3.768 3.429 3.167 3.116 3.166 3.160 E3  16.37
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 3146.83363 *A + 0.00734 *A^2

20)  m-Nitrotoluene    3.211 4.166 4.659 4.114 3.971 3.990 4.055 4.024 E3  10.63
21)  PETN              1.516 1.363 1.415 1.322 1.380 1.356 1.369 1.389 E3   4.51
-------------------------------------------------------------------------------
(#) = Out of Range

          8330B_0419PLUS.M        Mon Apr 23 08:16:33 2018
```

Initial Calibration Verification

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GBB1722-ICV1722
Lab FileID: BB059471.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	446.785	10.6	91	0.00	1.01- 1.61
2	HMX	500.000	476.953	4.6	95	0.00	1.14- 1.74
3	DNX	500.000	416.669	16.7	90	0.00	1.36- 1.96
4	MNX	500.000	416.410	16.7	87	0.00	1.89- 2.49
5	RDX	500.000	405.824	18.8	88	0.00	2.36- 3.16
6	1,3,5-Trinitrobenzene	500.000	440.520	11.9	93	0.00	4.01- 4.81
7	1,3-Dinitrobenzene	500.000	414.651	17.1	86	0.00	5.18- 5.98
8	3,5-Dinitroaniline	500.000	449.315	10.1	95	0.00	5.48- 6.28
9	Nitrobenzene	500.000	428.399	14.3	93	0.00	6.69- 7.49
10	Nitroglycerin		----------NA----------				
	----------	Amount	Calc.	%Drift			
11	Tetryl	500.000	447.453	10.5	89	-0.01	8.30- 9.10
	----------	Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	500.000	366.508	26.7#	80	-0.01	8.72- 9.52
13	2-Amino-4,6-Dinitrotol	500.000	436.189	12.8	92	-0.01	9.02- 9.82
	----------	Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	500.000	475.168	5.0	93	0.00	9.45-10.25
	----------	Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	419.899	16.0	88	-0.01	10.57-11.37
17	2,6-Dinitrotoluene	500.000	409.093	18.2	88	0.00	11.01-11.81
18	o-Nitrotoluene	500.000	416.479	16.7	91	-0.01	14.30-15.17
19	p-Nitrotoluene	500.000	410.091	18.0	87	-0.01	14.75-15.75
20	m-Nitrotoluene	500.000	436.986	12.6	92	-0.01	15.73-16.73
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	442.711	11.5	90	0.00	1.01- 1.61
	----------	Amount	Calc.	%Drift			
2	HMX	500.000	502.668	-0.5	102	0.00	1.14- 1.74
3	DNX	500.000	466.541	6.7	96	0.00	1.36- 1.96
	----------	Amount	Calc.	%Drift			
4	MNX	500.000	435.357	12.9	89	0.00	1.89- 2.49
5	RDX	500.000	435.262	12.9	92	0.00	2.36- 3.16

Initial Calibration Verification

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample: GBB1722-ICV1722
Lab FileID: BB059471.D

6	1,3,5-Trinitrobenzene	500.000	440.109	12.0	92	0.00	4.01-	4.81
7	1,3-Dinitrobenzene	500.000	423.626	15.3	89	0.00	5.18-	5.98
8	3,5-Dinitroaniline	500.000	486.621	2.7	96	0.00	5.48-	6.28
9	Nitrobenzene	500.000	439.568	12.1	93	0.00	6.69-	7.49
10	Nitroglycerin	2500.000	2349.932	6.0	99	0.00	7.88-	8.88
11	Tetryl	500.000	431.996	13.6	88	-0.01	8.29-	9.09
12	2,4,6-Trinitrotoluene	500.000	430.591	13.9	85	0.00	8.72-	9.52
13	2-Amino-4,6-Dinitrotol	500.000	475.149	5.0	95	0.00	9.03-	9.83
14	4-Amino-2,6-Dinitrotol	500.000	500.329	-0.1	98	-0.01	9.46-	10.26
15 S	3,4-Dinitrotoluene			----------NA----------				
16	2,4-Dinitrotoluene	500.000	458.258	8.3	92	0.00	10.56-	11.36
17	2,6-Dinitrotoluene	500.000	501.832	-0.4	94	0.00	11.01-	11.81
18	o-Nitrotoluene	500.000	443.790	11.2	94	-0.02	14.17-	15.17

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	500.000	458.274	8.3	91	0.00	14.75- 15.75

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	500.000	474.905	5.0	96	-0.02	15.73- 16.73
21	PETN	2500.000	2504.495	-0.2	101	0.00	17.83- 19.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059468.D 8330B_0419PLUS.M Mon Apr 23 08:16:21 2018

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059670.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	904.494	9.6	93	0.00	0.98- 1.58
2	HMX	1000.000	955.718	4.4	94	0.00	1.08- 1.68
3	DNX	1000.000	947.122	5.3	102	0.00	1.31- 1.91
4	MNX	1000.000	916.193	8.4	97	0.00	1.82- 2.42
5	RDX	1000.000	877.003	12.3	96	0.01	2.26- 3.06
6	1,3,5-Trinitrobenzene	1000.000	933.696	6.6	98	0.00	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	922.447	7.8	96	0.01	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	912.231	8.8	97	0.02	5.26- 6.06
9	Nitrobenzene	1000.000	861.767	13.8	97	0.00	6.50- 7.30
10	Nitroglycerin	----------NA----------					
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	877.488	12.3	89	0.02	7.96- 8.76
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	802.152	19.8	90	0.00	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	944.518	5.5	101	0.05	8.60- 9.40
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	971.819	2.8	99	0.04	9.04- 9.84
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	886.166	11.4	97	0.02	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	904.513	9.5	99	0.03	10.14-10.94
17	2,6-Dinitrotoluene	1000.000	820.183	18.0	96	0.03	10.58-11.38
18	o-Nitrotoluene	1000.000	833.020	16.7	92	0.03	13.87-14.75
19	p-Nitrotoluene	1000.000	883.063	11.7	94	0.03	14.31-15.31
20	m-Nitrotoluene	1000.000	885.981	11.4	92	0.03	15.30-16.30
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	889.906	11.0	88	0.00	0.98- 1.58
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	938.716	6.1	94	0.00	1.09- 1.69
3	DNX	1000.000	997.850	0.2	99	0.00	1.31- 1.91
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	958.230	4.2	98	0.00	1.82- 2.42
5	RDX	1000.000	905.031	9.5	97	0.01	2.26- 3.06

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059670.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	1000.000	952.988	4.7	98	0.00	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	911.225	8.9	95	0.01	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	999.278	0.1	99	0.02	5.26- 6.06
9	Nitrobenzene	1000.000	898.879	10.1	96	0.00	6.50- 7.30
10	Nitroglycerin	5000.000	4915.304	1.7	104	0.00	7.67- 8.67
11	Tetryl	1000.000	791.328	20.9#	81	0.05	7.90- 8.70
12	2,4,6-Trinitrotoluene	1000.000	900.326	10.0	88	0.00	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	1051.037	-5.1	103	0.05	8.60- 9.40
14	4-Amino-2,6-Dinitrotol	1000.000	1022.200	-2.2	99	0.04	9.04- 9.84
15 S	3,4-Dinitrotoluene	1000.000	926.325	7.4	98	0.02	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	1060.486	-6.0	101	0.02	10.15-10.95
17	2,6-Dinitrotoluene	1000.000	1068.990	-6.9	99	0.03	10.58-11.38
18	o-Nitrotoluene	1000.000	891.199	10.9	95	0.03	13.75-14.75

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	1000.000	935.085	6.5	95	0.03	14.31-15.31

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	927.112	7.3	93	0.03	15.30-16.30
21	PETN	5000.000	4799.692	4.0	98	0.00	17.63-18.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Fri May 11 08:38:51 2018

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059680.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	974.340	2.6	100	0.00	0.98- 1.58
2	HMX	1000.000	957.659	4.2	94	0.00	1.08- 1.68
3	DNX	1000.000	925.763	7.4	100	0.00	1.31- 1.91
4	MNX	1000.000	928.453	7.2	98	0.00	1.82- 2.42
5	RDX	1000.000	874.977	12.5	96	0.00	2.26- 3.06
6	1,3,5-Trinitrobenzene	1000.000	951.218	4.9	99	0.00	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	927.578	7.2	97	0.00	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	955.877	4.4	101	0.00	5.26- 6.06
9	Nitrobenzene	1000.000	888.421	11.2	100	0.00	6.50- 7.30
10	Nitroglycerin	----------NA----------					
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	871.734	12.8	88	0.00	7.96- 8.76
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	779.821	22.0#	88	0.00	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	984.557	1.5	105	0.00	8.60- 9.40
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	989.198	1.1	101	0.00	9.04- 9.84
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	897.658	10.2	98	0.00	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	917.548	8.2	100	0.00	10.14-10.94
17	2,6-Dinitrotoluene	1000.000	848.319	15.2	100	0.00	10.58-11.38
18	o-Nitrotoluene	1000.000	888.722	11.1	98	0.00	13.87-14.75
19	p-Nitrotoluene	1000.000	937.677	6.2	99	0.00	14.31-15.31
20	m-Nitrotoluene	1000.000	970.613	2.9	101	0.00	15.30-16.30
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	916.648	8.3	91	0.00	0.98- 1.58
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	928.039	7.2	93	0.00	1.09- 1.69
3	DNX	1000.000	979.626	2.0	98	0.00	1.31- 1.91
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	964.454	3.6	98	0.00	1.82- 2.42
5	RDX	1000.000	906.057	9.4	97	0.00	2.26- 3.06

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059680.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	1000.000	949.278	5.1	98	0.00	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	906.260	9.4	95	0.00	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	998.489	0.2	99	0.00	5.26- 6.06
9	Nitrobenzene	1000.000	927.613	7.2	99	0.00	6.50- 7.30
10	Nitroglycerin	5000.000	4680.025	6.4	99	0.00	7.67- 8.67
11	Tetryl	1000.000	770.223	23.0#	79	0.00	7.90- 8.70
12	2,4,6-Trinitrotoluene	1000.000	835.394	16.5	82	0.00	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	1113.383	-11.3	110	0.00	8.60- 9.40
14	4-Amino-2,6-Dinitrotol	1000.000	1033.242	-3.3	100	0.00	9.04- 9.84
15 S	3,4-Dinitrotoluene	1000.000	922.293	7.8	97	0.00	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	1059.582	-6.0	101	0.00	10.15-10.95
17	2,6-Dinitrotoluene	1000.000	1070.986	-7.1	99	0.00	10.58-11.38
18	o-Nitrotoluene	1000.000	919.869	8.0	98	0.00	13.75-14.75

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	1000.000	967.543	3.2	98	0.00	14.31-15.31

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	969.361	3.1	98	0.00	15.30-16.30
21	PETN	5000.000	4817.401	3.7	99	0.00	17.63-18.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Fri May 11 08:38:52 2018

6.8.4

6

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059692.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	928.405	7.2	95	-0.01	0.98- 1.58
2	HMX	1000.000	937.259	6.3	92	-0.02	1.08- 1.68
3	DNX	1000.000	928.793	7.1	100	-0.01	1.31- 1.91
4	MNX	1000.000	924.834	7.5	98	-0.01	1.82- 2.42
5	RDX	1000.000	881.402	11.9	97	-0.01	2.26- 3.06
6	1,3,5-Trinitrobenzene	1000.000	930.637	6.9	97	-0.02	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	917.407	8.3	96	-0.02	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	930.257	7.0	99	-0.02	5.26- 6.06
9	Nitrobenzene	1000.000	874.103	12.6	98	-0.02	6.50- 7.30
10	Nitroglycerin	----------NA----------					
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	856.915	14.3	87	-0.02	7.96- 8.76
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	791.451	20.9#	89	-0.03	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	966.508	3.3	104	-0.03	8.60- 9.40
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	977.853	2.2	100	-0.02	9.04- 9.84
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	899.911	10.0	98	-0.03	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	915.887	8.4	100	-0.02	10.14-10.94
17	2,6-Dinitrotoluene	1000.000	849.480	15.1	100	-0.02	10.58-11.38
18	o-Nitrotoluene	1000.000	880.743	11.9	97	-0.02	13.87-14.75
19	p-Nitrotoluene	1000.000	924.177	7.6	98	-0.02	14.31-15.31
20	m-Nitrotoluene	1000.000	935.141	6.5	97	-0.02	15.30-16.30
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	934.030	6.6	92	-0.01	0.98- 1.58
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1026.979	-2.7	102	-0.01	1.09- 1.69
3	DNX	1000.000	971.248	2.9	97	-0.01	1.31- 1.91
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	962.912	3.7	98	-0.01	1.82- 2.42
5	RDX	1000.000	916.892	8.3	98	-0.01	2.26- 3.06

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059692.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	1000.000	951.711	4.8	98	-0.02	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	884.223	11.6	92	-0.02	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	996.050	0.4	98	-0.02	5.26- 6.06
9	Nitrobenzene	1000.000	910.016	9.0	98	-0.02	6.50- 7.30
10	Nitroglycerin	5000.000	4321.991	13.6	91	-0.03	7.67- 8.67
11	Tetryl	1000.000	834.238	16.6	85	-0.05	7.90- 8.70
12	2,4,6-Trinitrotoluene	1000.000	811.396	18.9	79	-0.03	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	1128.397	-12.8	111	-0.03	8.60- 9.40
14	4-Amino-2,6-Dinitrotol	1000.000	1022.195	-2.2	99	-0.02	9.04- 9.84
15 S	3,4-Dinitrotoluene	1000.000	925.760	7.4	98	-0.03	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	1062.363	-6.2	101	-0.02	10.15-10.95
17	2,6-Dinitrotoluene	1000.000	1086.204	-8.6	100	-0.02	10.58-11.38
18	o-Nitrotoluene	1000.000	916.364	8.4	98	-0.01	13.75-14.75

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	1000.000	977.994	2.2	99	-0.01	14.31-15.31

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	967.547	3.2	98	-0.02	15.30-16.30
21	PETN	5000.000	4791.624	4.2	98	-0.02	17.63-18.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Fri May 11 08:38:53 2018

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059703.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	907.172	9.3	93	0.00	0.98- 1.58
2	HMX	1000.000	1007.241	-0.7	99	0.00	1.08- 1.68
3	DNX	1000.000	934.151	6.6	101	-0.01	1.31- 1.91
4	MNX	1000.000	924.600	7.5	98	-0.01	1.82- 2.42
5	RDX	1000.000	871.013	12.9	96	-0.01	2.26- 3.06
6	1,3,5-Trinitrobenzene	1000.000	932.281	6.8	97	-0.02	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	927.106	7.3	97	-0.01	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	945.883	5.4	100	0.00	5.26- 6.06
9	Nitrobenzene	1000.000	882.583	11.7	99	0.00	6.50- 7.30
10	Nitroglycerin	----------NA----------					
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	860.820	13.9	87	0.00	7.96- 8.76
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	803.638	19.6	91	-0.02	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	953.028	4.7	102	0.01	8.60- 9.40
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	976.817	2.3	100	0.00	9.04- 9.84
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	900.738	9.9	98	0.00	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	919.993	8.0	100	0.00	10.14-10.94
17	2,6-Dinitrotoluene	1000.000	850.875	14.9	100	0.00	10.58-11.38
18	o-Nitrotoluene	1000.000	832.586	16.7	92	0.02	13.87-14.75
19	p-Nitrotoluene	1000.000	888.187	11.2	94	0.02	14.31-15.31
20	m-Nitrotoluene	1000.000	896.224	10.4	93	0.01	15.30-16.30
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	885.101	11.5	88	0.00	0.98- 1.58
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	966.054	3.4	96	-0.01	1.09- 1.69
3	DNX	1000.000	1001.176	-0.1	100	-0.01	1.31- 1.91
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	960.661	3.9	98	-0.01	1.82- 2.42
5	RDX	1000.000	912.597	8.7	97	-0.01	2.26- 3.06

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059703.D
Project: Ft Ord; CA

6		1,3,5-Trinitrobenzene	1000.000	947.941	5.2	98	-0.02	3.87- 4.67
7		1,3-Dinitrobenzene	1000.000	899.961	10.0	94	0.00	5.01- 5.81
8		3,5-Dinitroaniline	1000.000	985.034	1.5	97	0.00	5.26- 6.06
9		Nitrobenzene	1000.000	936.618	6.3	100	0.00	6.50- 7.30
10		Nitroglycerin	5000.000	4843.488	3.1	102	-0.02	7.67- 8.67
11		Tetryl	1000.000	765.009	23.5#	78	0.01	7.90- 8.70
12		2,4,6-Trinitrotoluene	1000.000	890.604	10.9	87	-0.03	8.42- 9.22
13		2-Amino-4,6-Dinitrotol	1000.000	1064.909	-6.5	105	0.01	8.60- 9.40
14		4-Amino-2,6-Dinitrotol	1000.000	1015.208	-1.5	98	0.01	9.04- 9.84
15	S	3,4-Dinitrotoluene	1000.000	928.034	7.2	98	0.00	9.52-10.32
16		2,4-Dinitrotoluene	1000.000	1057.337	-5.7	100	0.00	10.15-10.95
17		2,6-Dinitrotoluene	1000.000	1078.103	-7.8	100	0.00	10.58-11.38
18		o-Nitrotoluene	1000.000	906.901	9.3	97	0.02	13.75-14.75
		----------	Amount	Calc.	%Drift	----------		
19		p-Nitrotoluene	1000.000	985.181	1.5	100	0.02	14.31-15.31
		----------	Amount	Calc.	%Drift	----------		
20		m-Nitrotoluene	1000.000	951.892	4.8	96	0.02	15.30-16.30
21		PETN	5000.000	4743.345	5.1	97	-0.02	17.63-18.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Fri May 11 08:38:54 2018

Initial Calibration Summary

Job Number: FA53800 **Sample:** GGG2571-ICC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613830.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration

Calibration Files
20 =GG613826.D 50 =GG613827.D 100 =GG613828.D 200 =GG613829.D
500 =GG613830.D 1000=GG613831.D 2000=GG613832.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	1.352	1.377	1.510	1.459	1.436	1.410	1.414	1.423	E4	3.67
2)	HMX	3.057	3.298	3.764	3.284	3.135	3.075	3.080	3.242	E3	7.74
3)	DNX	7.579	7.967	8.251	7.597	7.678	7.556	7.556	7.741	E3	3.46
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.012	7.160	7.024	E3	2.87
5)	1,3,5-Trinitroben	1.042	1.032	1.066	1.053	1.015	1.014	1.032	1.036	E4	1.85
6)	RDX	4.655	4.741	4.946	4.851	4.693	4.693	4.771	4.764	E3	2.15
7)	1,3-Dinitrobenzen	1.581	1.387	1.454	1.448	1.378	1.372	1.396	1.431	E4	5.16
8)	Nitrobenzene	1.168	0.878	0.954	0.925	0.890	0.891	0.899	0.944	E4	10.84
9)	2,4,6-Trinitrotol	1.271	0.986	1.002	0.994	0.945	0.938	0.957	1.013	E4	11.49
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	9.406	8.156	8.448	7.884	7.567	7.535	7.730	8.104	E3	8.15
12)S	3,4-Dinitrotoluen	4.934	5.176	5.394	5.317	5.132	5.134	5.275	5.195	E3	2.91
13)	2,6-Dinitrotoluen	7.042	7.189	7.341	7.323	7.011	6.992	7.150	7.150	E3	2.01
14)	2,4-Dinitrotoluen	1.375	1.321	1.340	1.317	1.268	1.264	1.292	1.311	E4	3.05
15)	o-Nitrotoluene	6.003	5.683	5.997	5.756	5.616	5.638	5.743	5.777	E3	2.78
16)	3,5-Dinitroanilin	1.439	1.084	1.075	1.031	0.980	0.977	0.999	1.084	E4	14.99
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 9713.03096 *A + 0.13365 *A^2										
17)	p-Nitrotoluene	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
18)	4-Amino-2,6-Dinit	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
19)	m-Nitrotoluene	5.287	5.715	6.137	6.029	5.964	6.024	6.111	5.895	E3	5.12
20)	2-Amino-4,6-Dinit	8.442	8.820	9.024	9.262	9.082	9.162	9.369	9.023	E3	3.44
21)	PETN								0.000		-1.00
Signal #2											
1)	TNX	1.343	1.386	1.510	1.459	1.436	1.410	1.414	1.422	E4	3.75
2)	HMX	3.279	2.935	3.764	3.284	3.135	3.075	3.080	3.222	E3	8.34
3)	DNX	8.457	7.331	8.251	7.597	7.678	7.556	7.556	7.775	E3	5.32
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.021	7.190	7.029	E3	2.92
5)	1,3,5-Trinitroben	1.042	1.030	1.063	1.050	1.015	1.016	1.037	1.036	E4	1.68
6)	RDX	4.655	4.670	4.823	4.763	4.696	4.737	4.857	4.743	E3	1.61
7)	1,3-Dinitrobenzen	0.880	0.862	1.273	1.143	1.344	1.204	1.104	1.116	E4	16.58
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993										
	Response Ratio = 0.00000 + 13276.14205 *A + -1.11873 *A^2										
8)	Nitrobenzene	0.924	0.888	0.901	0.870	1.044	0.976	0.880	0.926	E4	6.79
9)	2,4,6-Trinitrotol	1.089	1.237	1.458	1.298	1.440	1.347	1.310	1.311	E4	9.57
10)	Nitroglycerin	2.684	3.204	3.404	3.401	3.722	3.603	3.570	3.370	E3	10.27
11)	Tetryl	2.495	1.493	1.140	1.333	1.452	1.389	1.373	1.525	E4	29.01
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997										
	Response Ratio = 0.00000 + 14197.55319 *A + -0.23730 *A^2										
12)S	3,4-Dinitrotoluen	1.259	1.015	1.021	1.090	1.061	1.056	1.070	1.082	E4	7.62
13)	2,6-Dinitrotoluen	0.875	1.106	0.996	1.038	1.024	1.022	1.041	1.015	E4	6.93
14)	2,4-Dinitrotoluen	2.450	1.728	1.231	1.056	0.977	0.913	0.920	1.325	E4	43.18

Job Number: FA53800 **Sample:** GGG2571-ICC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613830.D
Project: Ft Ord; CA

```
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 9621.10583 *A + -0.22476 *A^2

 15)  o-Nitrotoluene    8.554 9.270 8.481 8.837 8.240 8.443 8.540 8.624 E3   3.89
 16)  3,5-Dinitroanilin 2.378 1.717 1.751 1.723 1.603 1.631 1.657 1.780 E4  15.12
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 16131.47839 *A + 0.21636 *A^2

 17)  p-Nitrotoluene    2.097 1.953 2.158 2.200 2.120 2.137 2.170 2.119 E4   3.81
 18)  4-Amino-2,6-Dinit 2.140 1.953 2.158 2.200 2.120 2.137 2.170 2.125 E4   3.78
 19)  m-Nitrotoluene    1.024 0.732 1.030 1.026 0.980 0.989 1.027 0.972 E4  11.11
 20)  2-Amino-4,6-Dinit 0.592 0.798 1.032 1.130 1.175 1.240 1.304 1.039 E4  24.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 11496.69993 *A + 0.78000 *A^2

 21)  PETN              2.883 2.660 3.060 3.416 3.438 3.469 3.526 3.207 E3  10.60
 ------------------------------------------------------------------------------
 (#) = Out of Range

          8330RPB.M_1113M.M        Tue Nov 14 13:38:28 2017
```

Initial Calibration Verification

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICV2571
Lab FileID: GG613833.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	311.255	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	512.341	-2.5	106	-0.01	4.96- 5.96
3	DNX	500.000	481.707	3.7	97	0.00	5.08- 6.08
4	MNX	500.000	498.403	0.3	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.713	1.9	100	0.00	7.04- 8.04
6	RDX	500.000	504.766	-1.0	102	-0.03	7.57- 8.57
7	1,3-Dinitrobenzene	500.000	459.805	8.0	96	-0.01	9.58-10.58
8	Nitrobenzene	500.000	482.574	3.5	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene	500.000	493.369	1.3	101	0.00	14.38-15.38
14	2,4-Dinitrotoluene	500.000	484.298	3.1	100	-0.02	15.12-16.12
15	o-Nitrotoluene	500.000	512.102	-2.4	105	0.00	16.70-17.70
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	500.000	479.670	4.1	96	-0.07	16.16-17.16
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	500.000	491.360	1.7	101	-0.06	17.91-18.91
18	4-Amino-2,6-Dinitrotol	500.000	491.360	1.7	101	-0.06	17.91-18.91
19	m-Nitrotoluene	500.000	546.610	-9.3	108	0.00	19.13-20.13
20	2-Amino-4,6-Dinitrotol	500.000	514.599	-2.9	102	-0.07	20.16-21.16
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	311.279	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	515.543	-3.1	106	-0.01	4.96- 5.96
3	DNX	500.000	479.565	4.1	97	0.00	5.08- 6.08
4	MNX	500.000	498.000	0.4	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.831	1.8	100	0.00	7.04- 8.04
6	RDX	500.000	507.885	-1.6	103	-0.03	7.57- 8.57
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	500.000	525.898	-5.2	99	-0.01	9.57-10.57
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	500.000	577.158	-15.4#	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				

Job Number: FA53800 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613833.D
Project: Ft Ord; CA

10	Nitroglycerin	2500.000	2766.568	-10.7	100	-0.02	12.20-13.20
		Amount	Calc.	%Drift			
11	Tetryl			NA			
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene			NA			
13	2,6-Dinitrotoluene	500.000	540.982	-8.2	107	0.03	14.36-15.36
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	500.000	495.523	0.9	97	-0.02	15.12-16.12
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	500.000	509.800	-2.0	107	0.00	16.70-17.70
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	500.000	484.898	3.0	98	-0.07	16.16-17.16
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	500.000	510.118	-2.0	102	-0.06	17.92-18.92
18	4-Amino-2,6-Dinitrotol	500.000	508.634	-1.7	102	-0.06	17.92-18.92
19	m-Nitrotoluene	500.000	525.201	-5.0	104	-0.01	19.13-20.13
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	500.000	496.742	0.7	100	-0.07	20.16-21.16
		Amount	Calc.	%Drift			
21	PETN	2500.000	2876.898	-15.1#	107	-0.02	21.81-22.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:38:14 2017

Initial Calibration Verification

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICV2571
Lab FileID: GG613834.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX		----------NA----------				
2	HMX		----------NA----------				
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	1,3,5-Trinitrobenzene		----------NA----------				
6	RDX		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	Nitrobenzene		----------NA----------				
9	2,4,6-Trinitrotoluene	500.000	474.847	5.0	102	0.00	11.37-12.37
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	513.472	-2.7	110	0.00	12.78-13.78
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene		----------NA----------				
14	2,4-Dinitrotoluene		----------NA----------				
15	o-Nitrotoluene		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene		----------NA----------				
18	4-Amino-2,6-Dinitrotoluen		----------NA----------				
19	m-Nitrotoluene		----------NA----------				
20	2-Amino-4,6-Dinitrotoluen		----------NA----------				
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX		----------NA----------				
2	HMX		----------NA----------				
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	1,3,5-Trinitrobenzene		----------NA----------				
6	RDX		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene		----------NA----------				
9	2,4,6-Trinitrotoluene	500.000	485.592	2.9	88	0.00	11.37-12.37

Job Number: FA53800 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613834.D
Project: Ft Ord; CA

10	Nitroglycerin		----------NA----------				
		Amount	Calc.	%Drift			
11	Tetryl	500.000	520.034	-4.0	101	0.00	12.78-13.78
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene		----------NA----------				
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene		----------NA----------				
		Amount	Calc.	%Drift			
15	o-Nitrotoluene		----------NA----------				
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline		----------NA----------				
		Amount	Calc.	%Drift			
17	p-Nitrotoluene		----------NA----------				
18	4-Amino-2,6-Dinitrotoluen		----------NA----------				
19	m-Nitrotoluene		----------NA----------				
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotoluen		----------NA----------				
		Amount	Calc.	%Drift			
21	PETN		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:46:22 2017

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614645.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

```
Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch         Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On    : 09-May-2018, 08:11:13                    Operator: evitam
Sample    : cc2571-1000                              Inst    : G1315B
Misc      : op69945,Ggg2626,10.00,,,50,1,soil        Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	988.389	1.2	100	0.00	4.49- 5.49
2	HMX	1000.000	1120.680	-12.1	118	0.00	4.89- 5.89
3	DNX	1000.000	1101.960	-10.2	113	0.00	5.06- 6.06
4	MNX	1000.000	1048.730	-4.9	105	-0.01	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	992.353	0.8	101	0.00	6.94- 7.94
6	RDX	1000.000	1066.959	-6.7	108	0.00	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	994.030	0.6	104	0.00	9.43-10.43
8	Nitrobenzene	1000.000	980.601	1.9	104	-0.01	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	980.444	2.0	106	0.00	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	921.611	7.8	99	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1138.065	-13.8	115	-0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	988.359	1.2	101	-0.02	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1003.868	-0.4	104	-0.02	14.83-15.83
15	o-Nitrotoluene	1000.000	1007.713	-0.8	103	-0.02	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1132.768	-13.3	114	-0.04	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1026.262	-2.6	105	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1026.262	-2.6	105	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1057.407	-5.7	103	-0.03	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1057.797	-5.8	104	-0.05	19.71-20.71
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	988.465	1.2	100	0.00	4.49- 5.49
2	HMX	1000.000	1127.684	-12.8	118	0.00	4.89- 5.89
3	DNX	1000.000	1097.059	-9.7	113	0.00	5.06- 6.06
4	MNX	1000.000	1047.883	-4.8	105	-0.01	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	997.167	0.3	102	0.00	6.94- 7.94
6	RDX	1000.000	1119.982	-12.0	112	0.00	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	946.423	5.4	96	0.00	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1056.348	-5.6	100	-0.01	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1084.394	-8.4	106	0.00	11.16-12.16

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614645.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5245.820	-4.9	98	0.00	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	984.331	1.6	99	0.00	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1190.969	-19.1	122	-0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1069.702	-7.0	106	-0.01	14.12-15.12
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1123.240	-12.3	115	-0.01	14.83-15.83
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1098.983	-9.9	112	-0.02	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1222.663	-22.3#	123	-0.04	15.80-16.80
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1047.941	-4.8	104	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1044.894	-4.5	104	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1080.180	-8.0	106	-0.03	18.75-19.75
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1102.621	-10.3	110	-0.05	19.71-20.71
		Amount	Calc.	%Drift			
21	PETN	5000.000	5485.963	-9.7	101	0.00	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Wed May 09 11:11:17 2018

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614653.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On : 09-May-2018, 12:09:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	973.179	2.7	98	0.02	4.49- 5.49
2	HMX	1000.000	1095.361	-9.5	115	0.02	4.89- 5.89
3	DNX	1000.000	1070.928	-7.1	110	0.02	5.06- 6.06
4	MNX	1000.000	1049.860	-5.0	105	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	980.088	2.0	100	0.02	6.94- 7.94
6	RDX	1000.000	985.389	1.5	100	0.01	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	999.221	0.1	104	0.00	9.43-10.43
8	Nitrobenzene	1000.000	977.288	2.3	104	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	979.745	2.0	106	0.01	11.16-12.16
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	927.285	7.3	100	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1138.218	-13.8	115	-0.01	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	994.276	0.6	102	0.00	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1004.888	-0.5	104	0.00	14.83-15.83
15	o-Nitrotoluene	1000.000	1000.775	-0.1	103	-0.01	16.37-17.37
	---------- Amount	Calc.	%Drift	----------			
16	3,5-Dinitroaniline	1000.000	1133.087	-13.3	114	-0.06	15.80-16.80
	---------- Amount	Calc.	%Drift	----------			
17	p-Nitrotoluene	1000.000	1019.331	-1.9	104	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1019.331	-1.9	104	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1052.370	-5.2	103	-0.02	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1052.508	-5.3	104	-0.07	19.71-20.71
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	973.253	2.7	98	0.02	4.49- 5.49
2	HMX	1000.000	1102.206	-10.2	115	0.02	4.89- 5.89
3	DNX	1000.000	1066.165	-6.6	110	0.02	5.06- 6.06
4	MNX	1000.000	1049.013	-4.9	105	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	980.188	2.0	100	0.02	6.94- 7.94
6	RDX	1000.000	989.757	1.0	99	0.01	7.40- 8.40
	---------- Amount	Calc.	%Drift	----------			
7	1,3-Dinitrobenzene	1000.000	917.861	8.2	93	0.00	9.43-10.43
	---------- Amount	Calc.	%Drift	----------			
8	Nitrobenzene	1000.000	993.650	0.6	94	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1073.362	-7.3	104	0.01	11.16-12.16

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614653.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5261.751	-5.2	98	0.00	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1003.614	-0.4	101	0.00	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1178.936	-17.9	121	-0.01	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1091.704	-9.2	108	0.00	14.12-15.12
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1124.503	-12.5	115	0.00	14.83-15.83
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1026.418	-2.6	105	-0.01	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1202.354	-20.2#	121	-0.06	15.80-16.80
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1029.591	-3.0	102	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1026.597	-2.7	102	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1103.667	-10.4	109	-0.03	18.75-19.75
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1098.752	-9.9	109	-0.07	19.71-20.71
		Amount	Calc.	%Drift			
21	PETN	5000.000	5581.870	-11.6	103	0.02	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Wed May 09 14:14:08 2018

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614659.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

```
Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch         Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On    : 09-May-2018, 15:06:24                    Operator: evitam
Sample    : cc2571-1000                              Inst    : G1315B
Misc      : op69946,Ggg2626,10.01,,,50,1,soil        Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	973.267	2.7	98	0.02	4.49- 5.49
2	HMX	1000.000	1105.504	-10.6	117	0.02	4.89- 5.89
3	DNX	1000.000	1076.866	-7.7	110	0.02	5.06- 6.06
4	MNX	1000.000	1045.438	-4.5	105	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	977.072	2.3	100	0.02	6.94- 7.94
6	RDX	1000.000	981.099	1.9	100	0.00	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	994.263	0.6	104	0.00	9.43-10.43
8	Nitrobenzene	1000.000	969.301	3.1	103	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	969.333	3.1	105	0.02	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	920.428	8.0	99	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1127.096	-12.7	114	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	999.220	0.1	102	0.00	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1002.711	-0.3	104	-0.01	14.83-15.83
15	o-Nitrotoluene	1000.000	992.948	0.7	102	0.00	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1130.732	-13.1	114	-0.08	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1017.504	-1.8	104	-0.04	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1017.504	-1.8	104	-0.04	17.53-18.53
19	m-Nitrotoluene	1000.000	1042.268	-4.2	102	-0.02	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1049.620	-5.0	103	-0.09	19.71-20.71
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	973.342	2.7	98	0.02	4.49- 5.49
2	HMX	1000.000	1112.413	-11.2	117	0.02	4.89- 5.89
3	DNX	1000.000	1072.077	-7.2	110	0.02	5.06- 6.06
4	MNX	1000.000	1044.594	-4.5	105	0.00	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	977.172	2.3	100	0.02	6.94- 7.94
6	RDX	1000.000	985.448	1.5	99	0.00	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	942.805	5.7	96	0.00	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1020.185	-2.0	97	0.00	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1049.528	-5.0	102	0.02	11.16-12.16

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GGG2626-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614659.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5250.607	-5.0	98	0.02	11.90-12.90	
		Amount	Calc.	%Drift				
11	Tetryl	1000.000	1021.991	-2.2	103	0.00	12.42-13.42	
		Amount	Calc.	%Drift				
12 S	3,4-Dinitrotoluene	1000.000	1180.561	-18.1	121	0.00	13.75-14.75	
13	2,6-Dinitrotoluene	1000.000	1109.183	-10.9	110	0.00	14.12-15.12	
		Amount	Calc.	%Drift				
14	2,4-Dinitrotoluene	1000.000	1117.953	-11.8	115	-0.01	14.83-15.83	
		Amount	Calc.	%Drift				
15	o-Nitrotoluene	1000.000	998.107	0.2	102	0.00	16.37-17.37	
		Amount	Calc.	%Drift				
16	3,5-Dinitroaniline	1000.000	1184.025	-18.4	119	-0.08	15.80-16.80	
		Amount	Calc.	%Drift				
17	p-Nitrotoluene	1000.000	1033.084	-3.3	102	-0.04	17.53-18.53	
18	4-Amino-2,6-Dinitrotol	1000.000	1030.080	-3.0	102	-0.04	17.53-18.53	
19	m-Nitrotoluene	1000.000	1080.116	-8.0	106	-0.03	18.75-19.75	
		Amount	Calc.	%Drift				
20	2-Amino-4,6-Dinitrotol	1000.000	1095.568	-9.6	109	-0.09	19.71-20.71	
		Amount	Calc.	%Drift				
21	PETN	5000.000	5424.961	-8.5	100	0.04	21.25-22.25	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Thu May 10 13:17:27 2018

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GGG2626-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614666.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	963.679	3.6	97	0.03	4.49- 5.49
2	HMX	1000.000	1070.987	-7.1	113	0.04	4.89- 5.89
3	DNX	1000.000	1052.334	-5.2	108	0.03	5.06- 6.06
4	MNX	1000.000	1045.217	-4.5	105	0.02	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	975.245	2.5	100	0.05	6.94- 7.94
6	RDX	1000.000	977.029	2.3	99	0.04	7.40- 8.40
7	1,3-Dinitrobenzene	1000.000	996.769	0.3	104	0.04	9.43-10.43
8	Nitrobenzene	1000.000	961.532	3.8	102	0.03	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	966.653	3.3	104	0.05	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	906.723	9.3	98	0.04	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1119.219	-11.9	113	0.03	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1004.018	-0.4	103	0.04	14.13-15.13
14	2,4-Dinitrotoluene	1000.000	1004.950	-0.5	104	0.03	14.83-15.83
15	o-Nitrotoluene	1000.000	984.504	1.5	101	0.04	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1125.205	-12.5	114	-0.03	15.80-16.80
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1010.044	-1.0	103	0.00	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1010.044	-1.0	103	0.00	17.53-18.53
19	m-Nitrotoluene	1000.000	1029.273	-2.9	101	0.02	18.75-19.75
20	2-Amino-4,6-Dinitrotol	1000.000	1043.792	-4.4	103	-0.03	19.71-20.71
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	963.753	3.6	97	0.03	4.49- 5.49
2	HMX	1000.000	1077.679	-7.8	113	0.04	4.89- 5.89
3	DNX	1000.000	1047.653	-4.8	108	0.03	5.06- 6.06
4	MNX	1000.000	1044.373	-4.4	105	0.02	6.06- 7.06
5	1,3,5-Trinitrobenzene	1000.000	975.345	2.5	99	0.05	6.94- 7.94
6	RDX	1000.000	981.360	1.9	98	0.04	7.40- 8.40
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	923.211	7.7	94	0.04	9.43-10.43
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	975.456	2.5	93	0.03	10.39-11.39
9	2,4,6-Trinitrotoluene	1000.000	1050.880	-5.1	102	0.05	11.16-12.16

Continuing Calibration Summary

Job Number: FA53800 **Sample:** GGG2626-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614666.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5167.220	-3.3	97	0.06	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	970.472	3.0	98	0.04	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1176.120	-17.6	120	0.03	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1107.588	-10.8	110	0.04	14.12-15.12
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1138.873	-13.9	117	0.03	14.83-15.83
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	986.285	1.4	101	0.04	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1178.461	-17.8	118	-0.03	15.80-16.80
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1016.031	-1.6	101	0.00	17.53-18.53
18	4-Amino-2,6-Dinitrotol	1000.000	1013.077	-1.3	101	0.00	17.53-18.53
19	m-Nitrotoluene	1000.000	1060.041	-6.0	104	0.02	18.75-19.75
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1084.317	-8.4	108	-0.03	19.71-20.71
		Amount	Calc.	%Drift			
21	PETN	5000.000	5441.897	-8.8	101	0.08	21.25-22.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Thu May 10 13:17:28 2018

GC/LC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614655.D\dad1B.ch Vial: 72
Signal #2 : G:\DATA\0508RPB3\GG614655.D\dad1A.ch
Acq On : 09-May-2018, 13:08:31 Operator: evitam
Sample : fa53800-1 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.20	14.20	2431211	5205174	468.001	481.175
	Spiked Amount 500.000	Range 69 - 134		Recovery =		93.60%	96.23%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

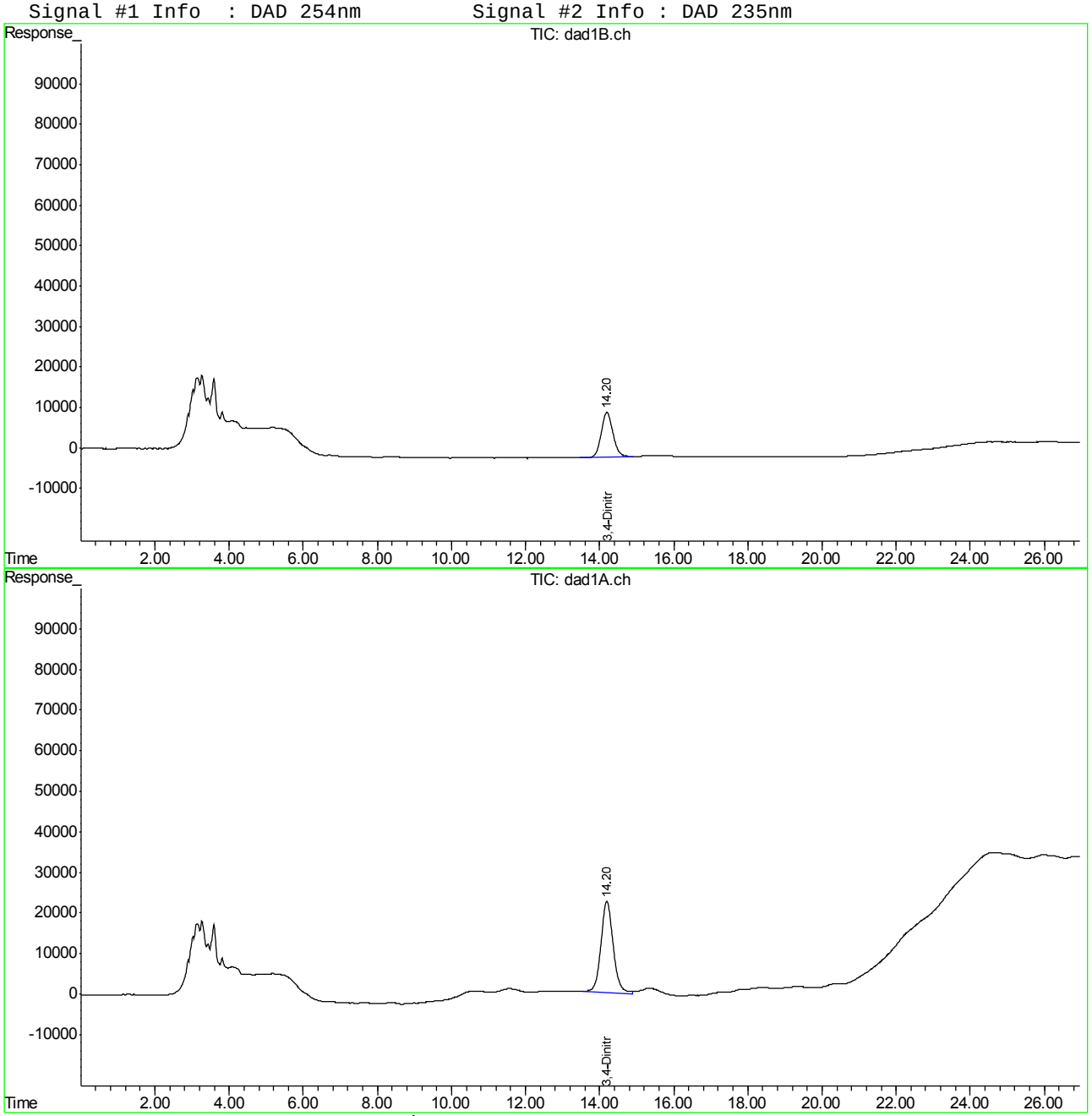
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614655.D 8330RPB.M_1113M.M Thu May 10 13:16:33 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614655.D\dad1B.ch Vial: 72
Signal #2 : G:\DATA\0508RPB3\GG614655.D\dad1A.ch
Acq On : 09-May-2018, 13:08:31 Operator: evitam
Sample : fa53800-1 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:09 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614658.D\dad1B.ch Vial: 75
Signal #2 : G:\DATA\0508RPB3\GG614658.D\dad1A.ch
Acq On : 09-May-2018, 14:36:57 Operator: evitam
Sample : fa53800-4 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:34 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.22	2496452	4864739	480.560	449.705m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		96.11%	89.94%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

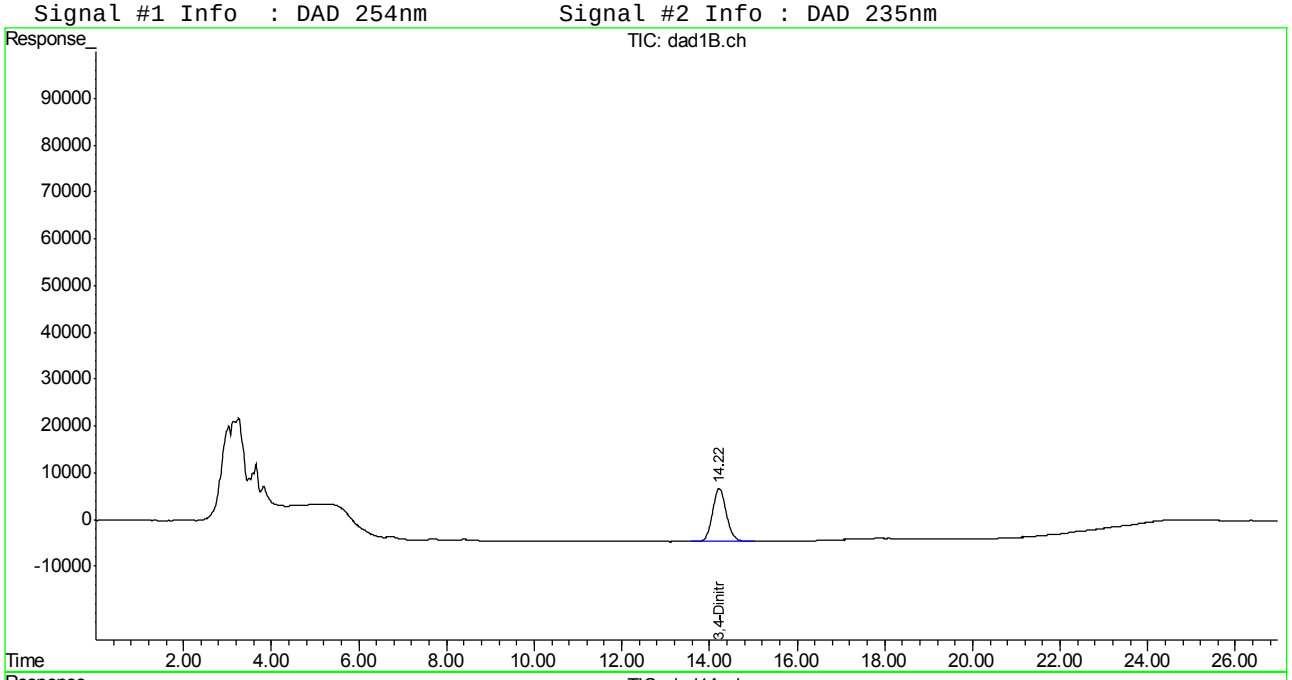
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614658.D 8330RPB.M_1113M.M Thu May 10 13:16:36 2018 Page 1

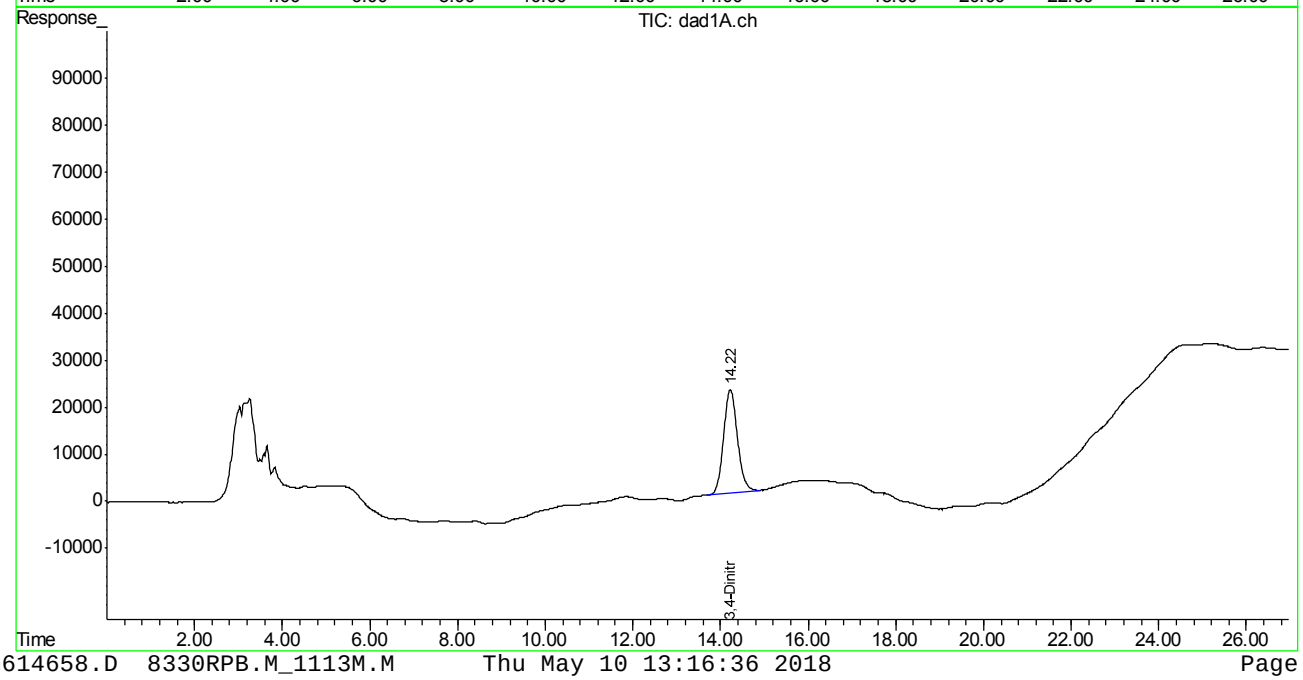
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614658.D\dad1B.ch Vial: 75
Signal #2 : G:\DATA\0508RPB3\GG614658.D\dad1A.ch
Acq On : 09-May-2018, 14:36:57 Operator: evitam
Sample : fa53800-4 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

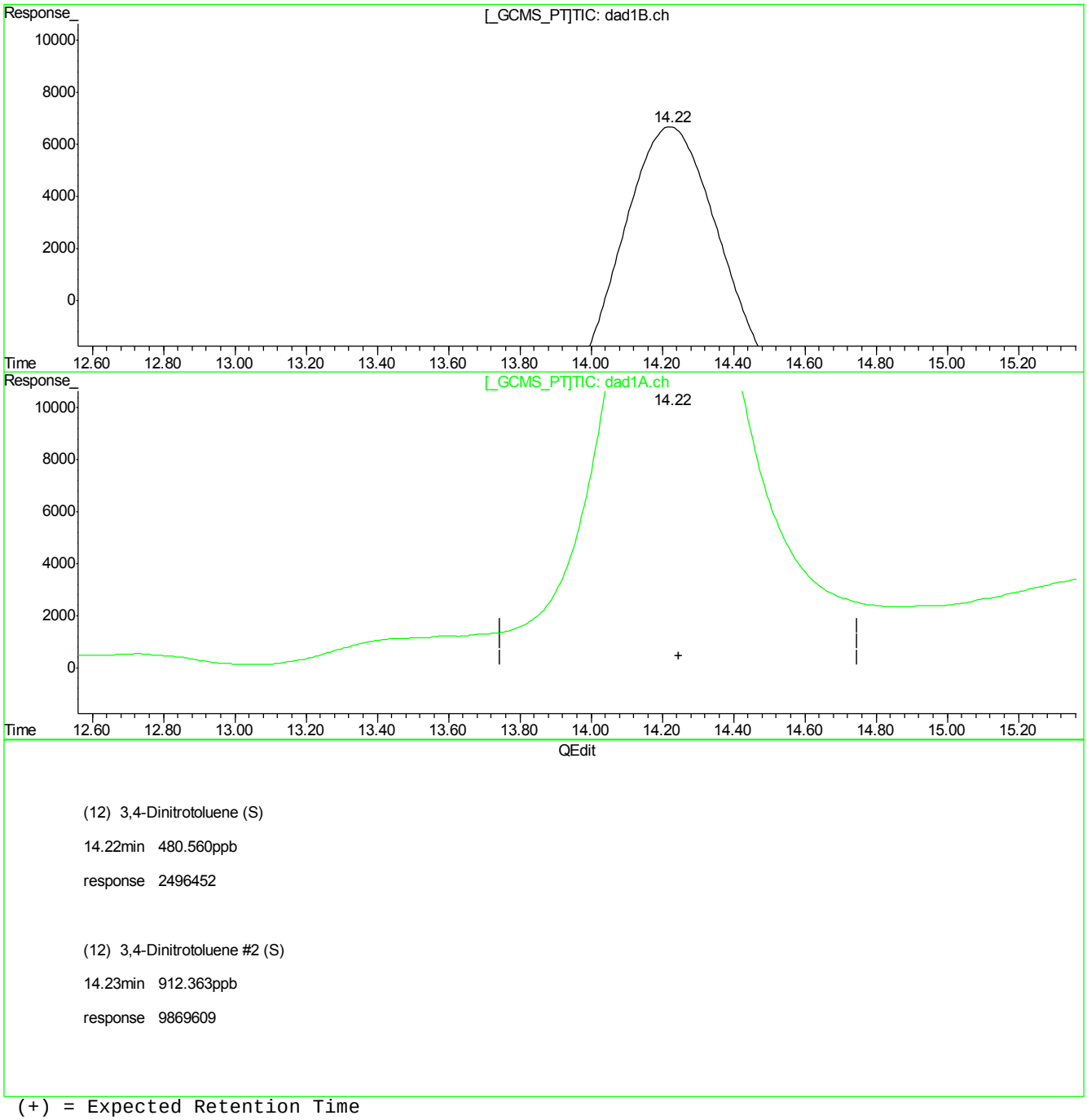
Sample Number:	FA53800-4	**Method:**	SW846 8330B
Lab FileID:	GG614658.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 14:36	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.22	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614658.D\dad1B.ch Vial: 75
Signal #2 : G:\DATA\0508RPB3\GG614658.D\dad1A.ch
Acq On : 09-May-2018, 14:36:57 Operator: evitam
Sample : fa53800-4 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.22min 480.560ppb

response 2496452

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 912.363ppb

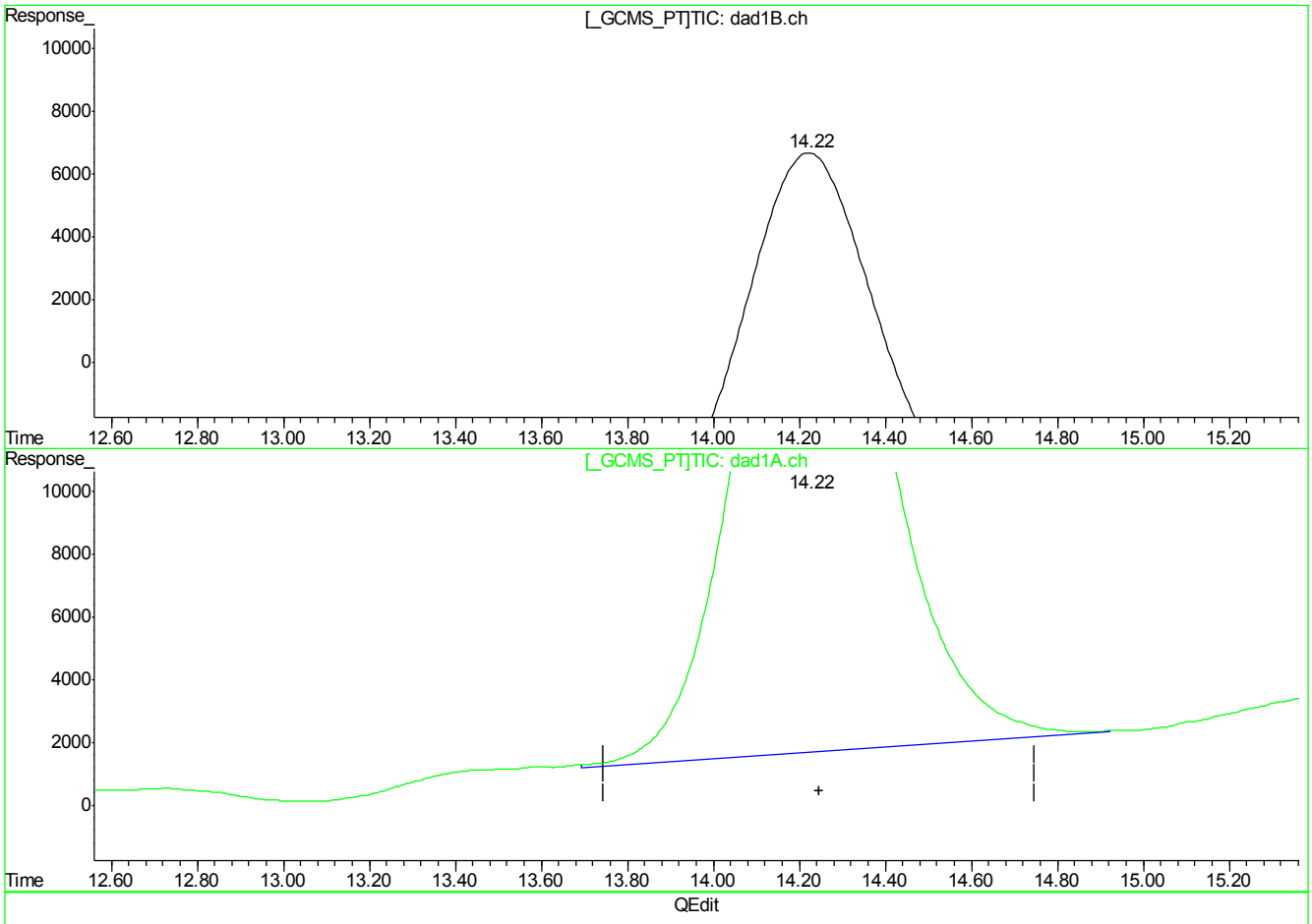
response 9869609

(+) = Expected Retention Time
GG614658.D 8330RPB.M_1113M.M Thu May 10 13:12:24 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614658.D\dad1B.ch Vial: 75
Signal #2 : G:\DATA\0508RPB3\GG614658.D\dad1A.ch
Acq On : 09-May-2018, 14:36:57 Operator: evitam
Sample : fa53800-4 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.22min 480.560ppb

response 2496452

(12) 3,4-Dinitrotoluene #2 (S)

14.22min 449.705ppb m

response 4864739

(+) = Expected Retention Time
GG614658.D 8330RPB.M_1113M.M Thu May 10 13:12:28 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614661.D\dad1B.ch Vial: 76
Signal #2 : G:\DATA\0508RPB3\GG614661.D\dad1A.ch
Acq On : 09-May-2018, 16:05:20 Operator: evitam
Sample : fa53800-7 Inst : G1315B
Misc : op69946,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:38 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.23	2453901	5069724	472.369	468.654
	Spiked Amount 500.000	Range 69 - 134		Recovery =		94.47%	93.73%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

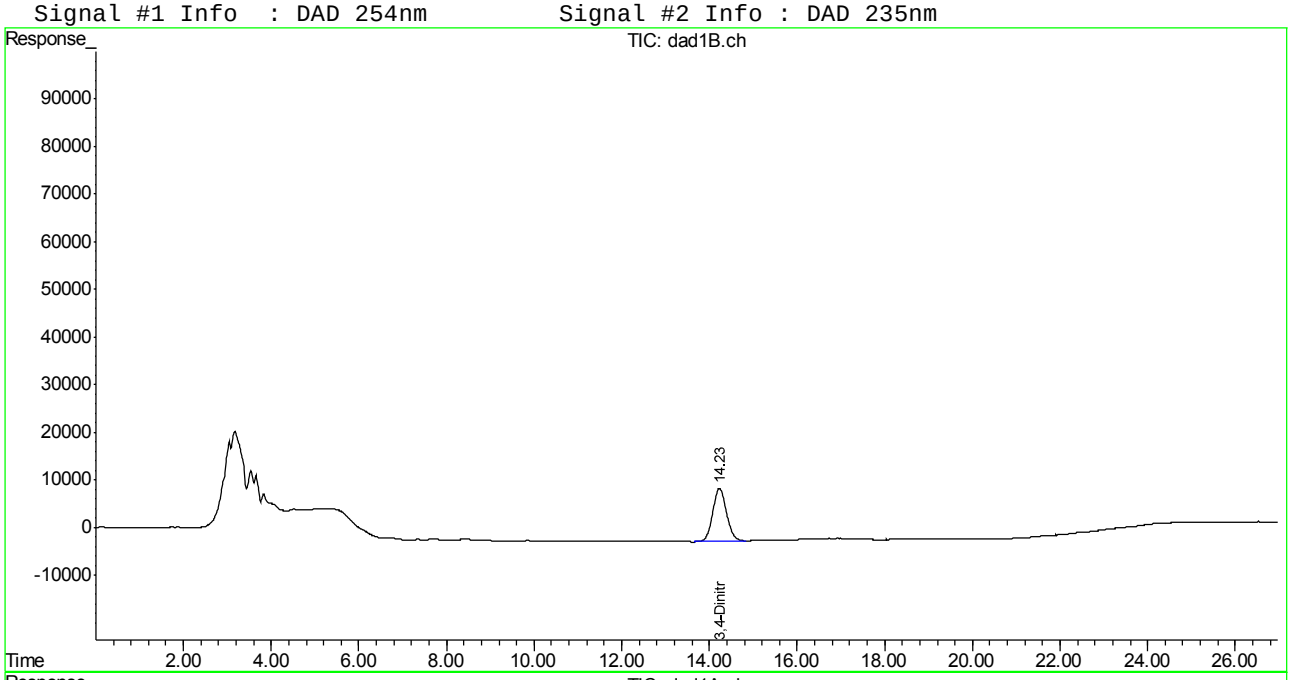
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614661.D 8330RPB.M_1113M.M Thu May 10 13:16:38 2018 Page 1

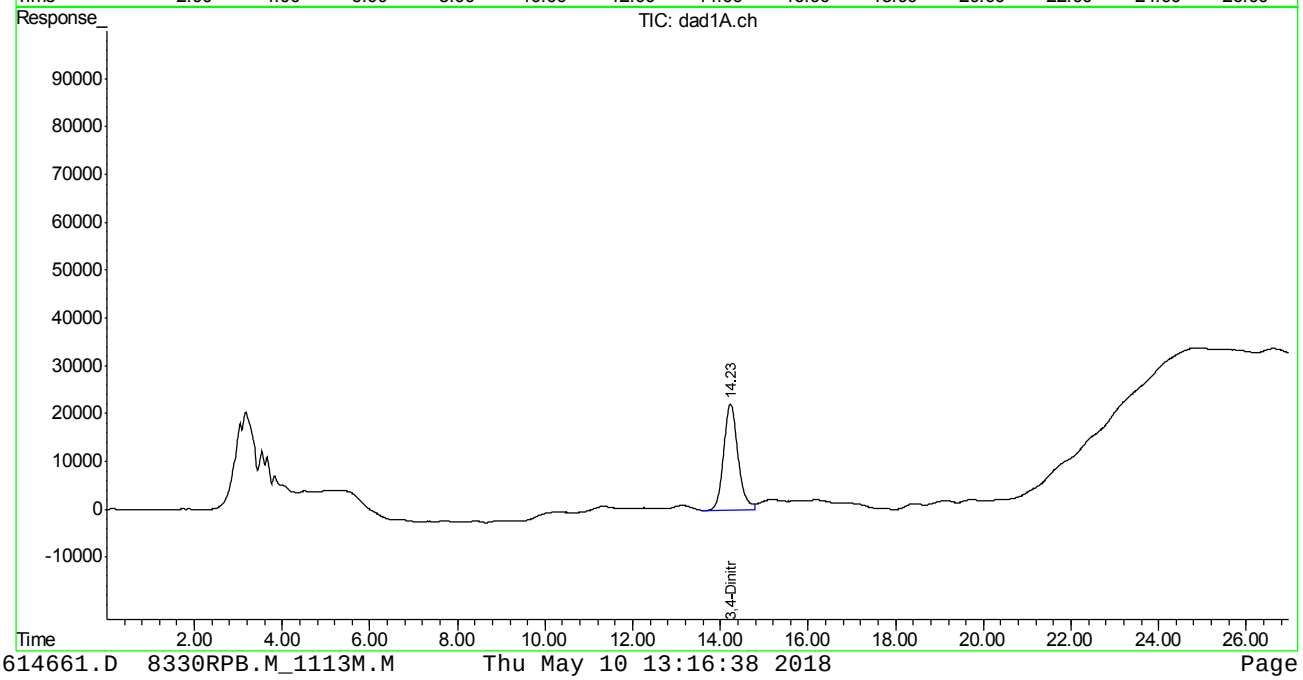
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614661.D\dad1B.ch Vial: 76
Signal #2 : G:\DATA\0508RPB3\GG614661.D\dad1A.ch
Acq On : 09-May-2018, 16:05:20 Operator: evitam
Sample : fa53800-7 Inst : G1315B
Misc : op69946,Ggg2626,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:13 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614662.D\dad1B.ch Vial: 77
Signal #2 : G:\DATA\0508RPB3\GG614662.D\dad1A.ch
Acq On : 09-May-2018, 16:34:48 Operator: evitam
Sample : fa53800-8 Inst : G1315B
Misc : op69946,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:39 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.24	2477823	5084884	476.974	470.055
	Spiked Amount 500.000	Range 69 - 134		Recovery =		95.39%	94.01%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

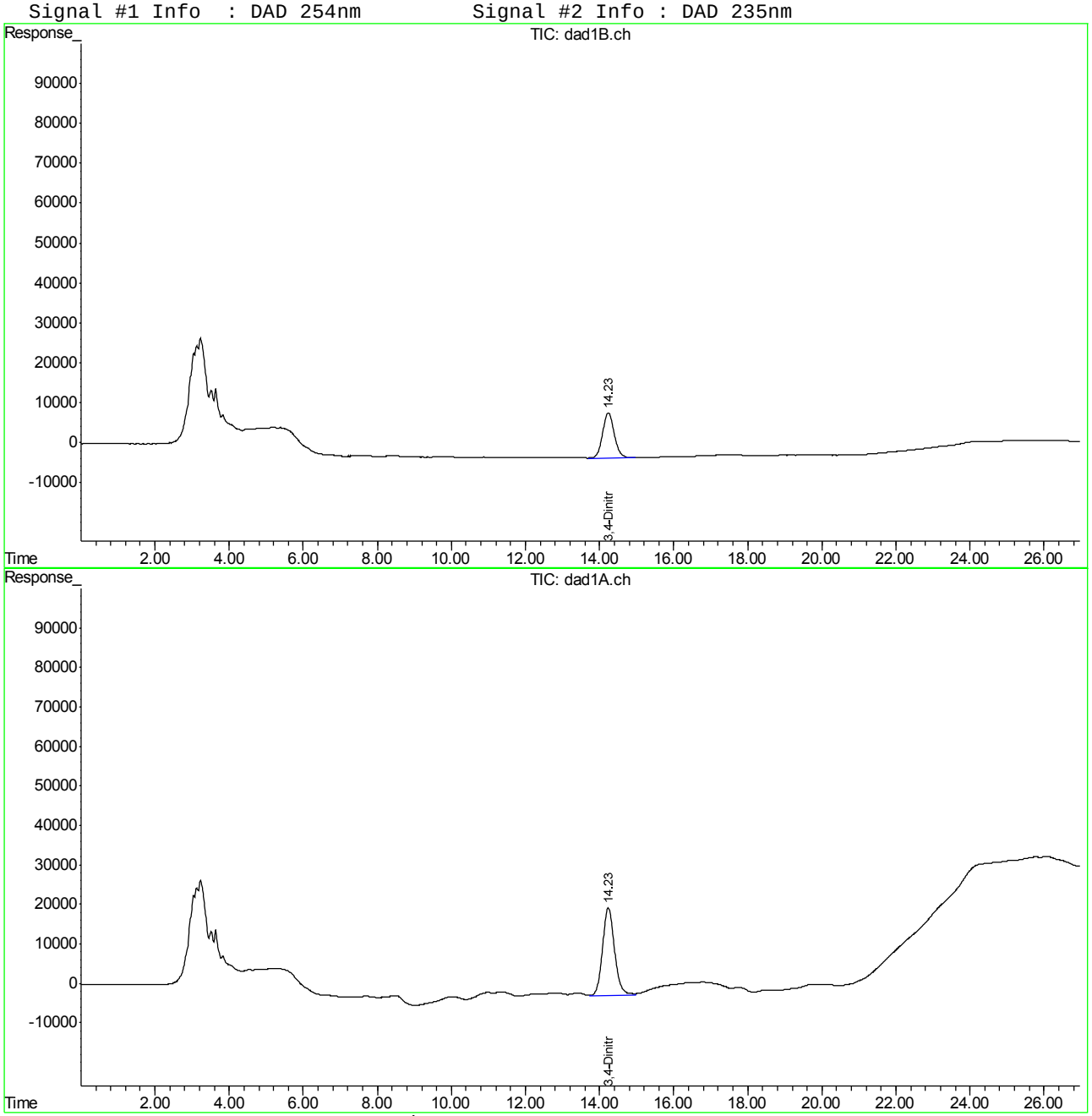
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614662.D 8330RPB.M_1113M.M Thu May 10 13:16:39 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614662.D\dad1B.ch Vial: 77
Signal #2 : G:\DATA\0508RPB3\GG614662.D\dad1A.ch
Acq On : 09-May-2018, 16:34:48 Operator: evitam
Sample : fa53800-8 Inst : G1315B
Misc : op69946,Ggg2626,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:14 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059676.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059676.D\dad1A.ch
Acq On : 10-May-2018, 13:29:33 Operator: evitam
Sample : FA53800-13 Inst : G1315B
Misc : OP69960,gbb1730,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:02:54 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.95	9.95	936354	1656084	349.947	351.256
	Spiked Amount 500.000	Range 69 - 134		Recovery =		69.99%	70.25%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

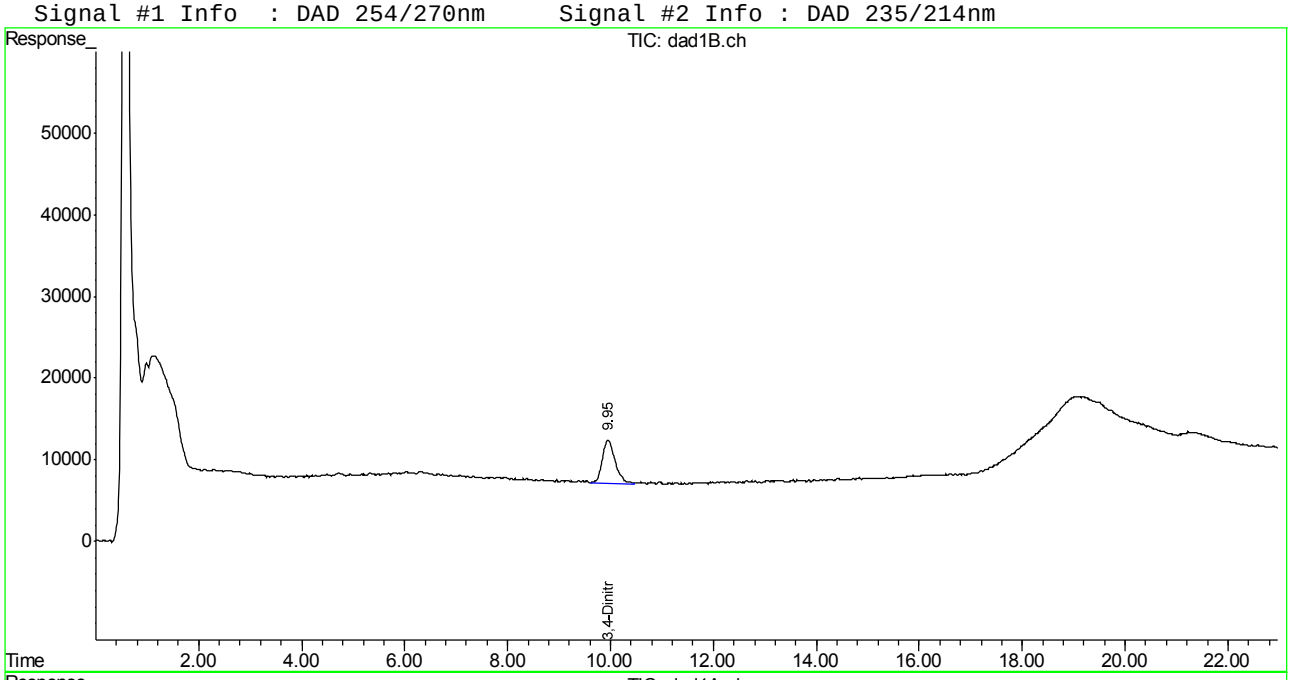
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059676.D 8330B_0419PLUS.M Fri May 11 08:37:51 2018 Page 1

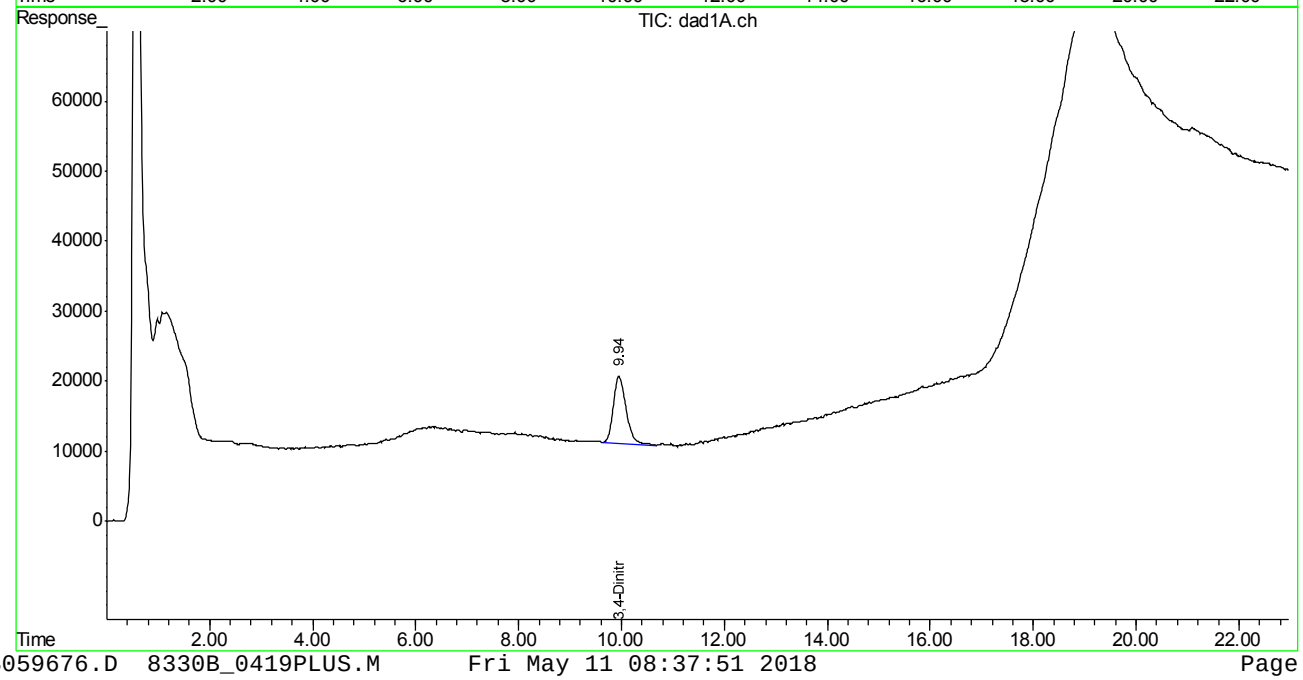
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059676.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059676.D\dad1A.ch
Acq On : 10-May-2018, 13:29:33 Operator: evitam
Sample : FA53800-13 Inst : G1315B
Misc : OP69960,gbb1730,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:10 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059679.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059679.D\dad1A.ch
Acq On : 10-May-2018, 14:59:26 Operator: evitam
Sample : FA53800-16 Inst : G1315B
Misc : OP69960,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:02:57 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.95	9.96	957118	1719586	357.707	364.725
	Spiked Amount 500.000	Range 69 - 134		Recovery =		71.54%	72.95%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

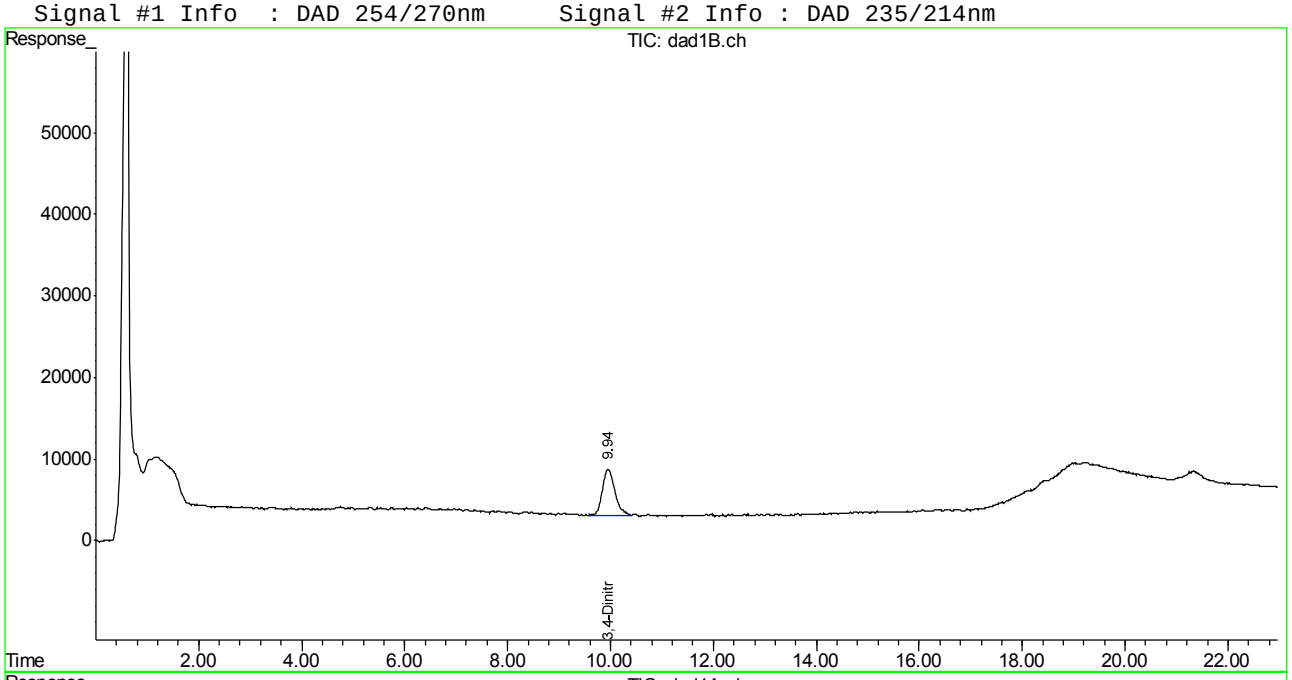
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059679.D 8330B_0419PLUS.M Fri May 11 08:37:54 2018 Page 1

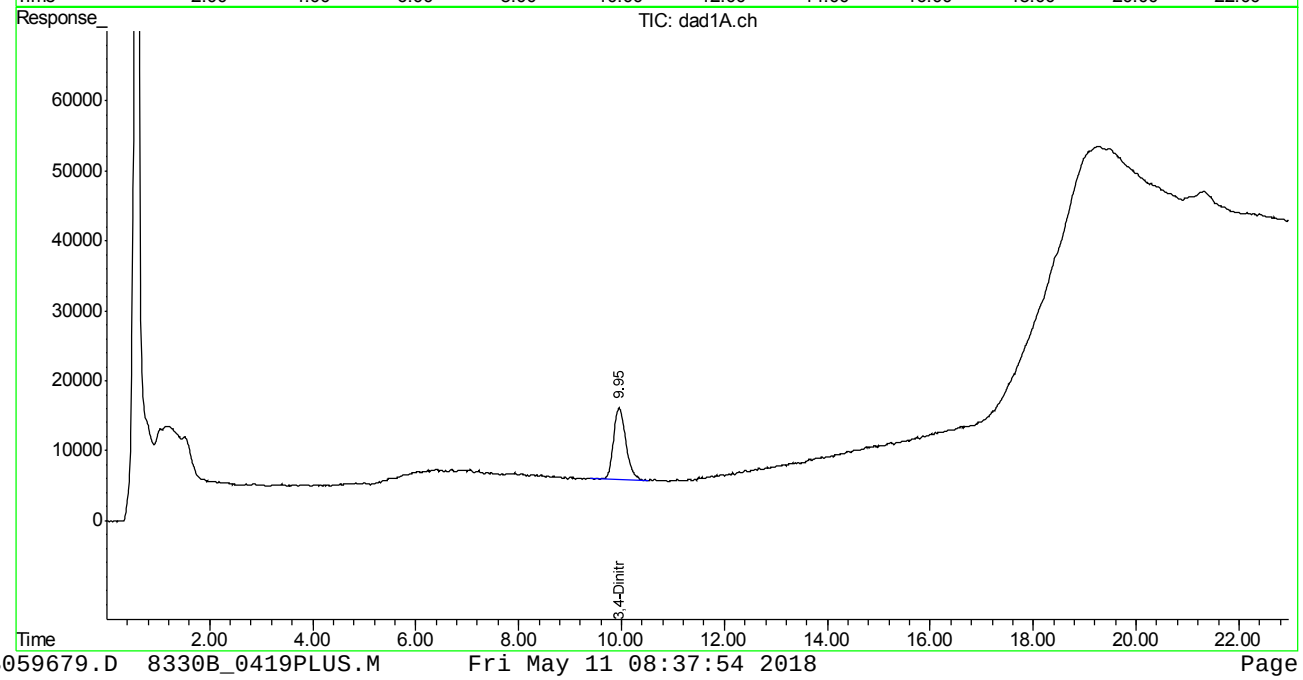
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059679.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059679.D\dad1A.ch
Acq On : 10-May-2018, 14:59:26 Operator: evitam
Sample : FA53800-16 Inst : G1315B
Misc : OP69960,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:11 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059684.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059684.D\dad1A.ch
Acq On : 10-May-2018, 17:29:14 Operator: evitam
Sample : FA53800-17 Inst : G1315B
Misc : OP69960,gbb1730,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:02 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.96	9.96	940130	1682584	351.358	356.877
	Spiked Amount 500.000	Range 69 - 134		Recovery =		70.27%	71.38%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

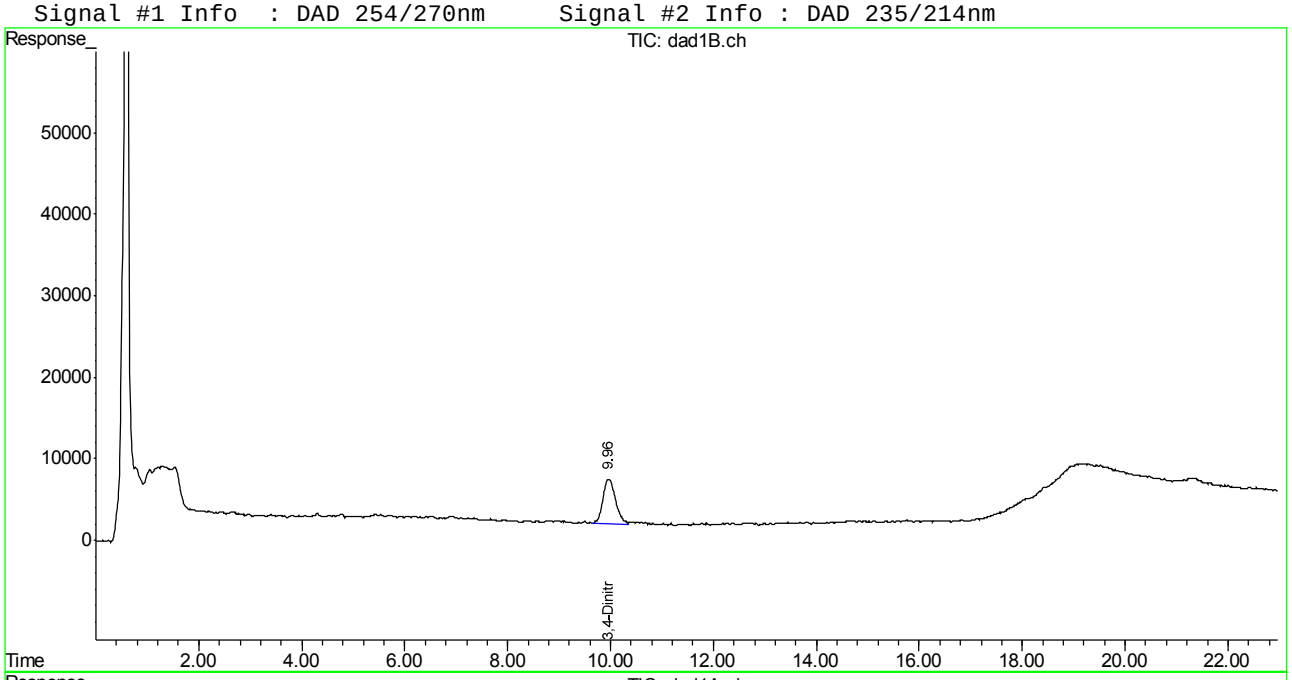
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059684.D 8330B_0419PLUS.M Fri May 11 08:37:58 2018 Page 1

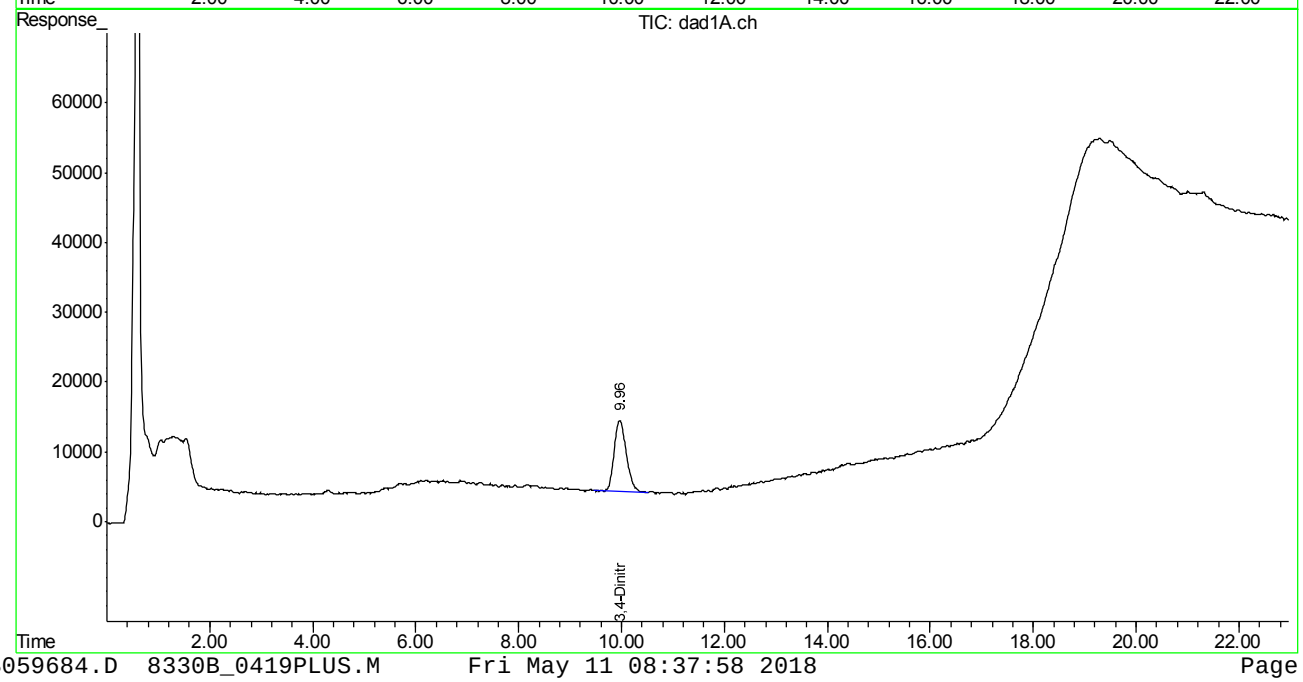
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059684.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059684.D\dad1A.ch
Acq On : 10-May-2018, 17:29:14 Operator: evitam
Sample : FA53800-17 Inst : G1315B
Misc : OP69960,gbb1730,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:19 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059684.D 8330B_0419PLUS.M Fri May 11 08:37:58 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059689.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059689.D\dad1A.ch
Acq On : 10-May-2018, 19:58:57 Operator: evitam
Sample : FA53800-22 Inst : G1315B
Misc : OP69960,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:07 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.86	9.85	976860	1818923	365.085	385.794
	Spiked Amount 500.000	Range 69 - 134		Recovery =		73.02%	77.16%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

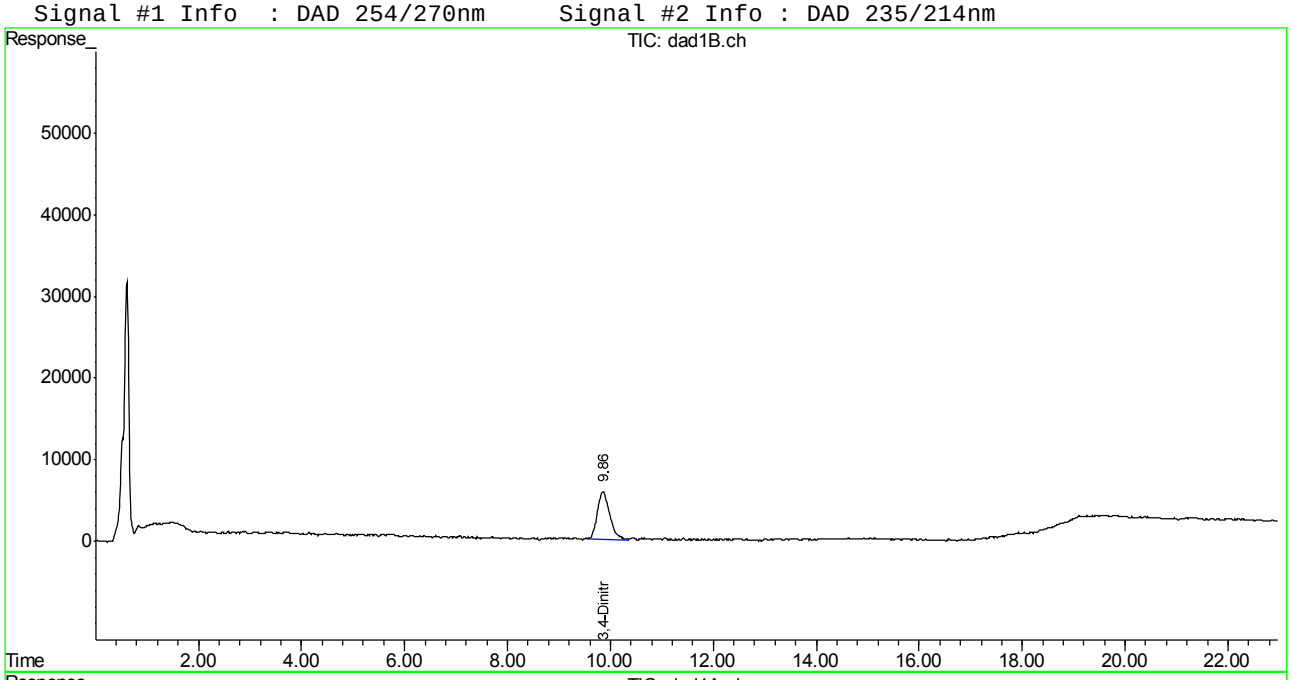
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059689.D 8330B_0419PLUS.M Fri May 11 08:38:03 2018

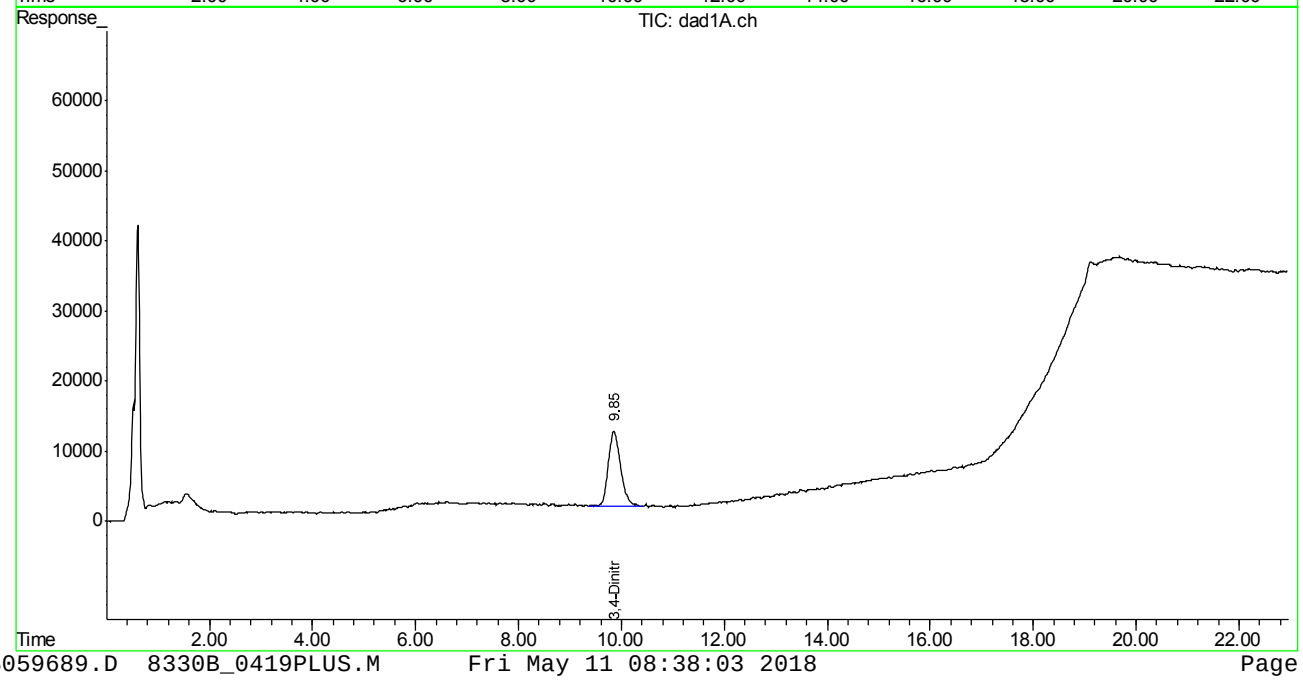
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059689.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059689.D\dad1A.ch
Acq On : 10-May-2018, 19:58:57 Operator: evitam
Sample : FA53800-22 Inst : G1315B
Misc : OP69960,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:20 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614649.D\dad1B.ch Vial: 68
Signal #2 : G:\DATA\0508RPB3\GG614649.D\dad1A.ch
Acq On : 09-May-2018, 10:09:06 Operator: evitam
Sample : op69946-mb Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 11:08:59 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.21	14.21	2623906	5772946	505.094	533.661
	Spiked Amount 500.000	Range 69 - 134		Recovery =		101.02%	106.73%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

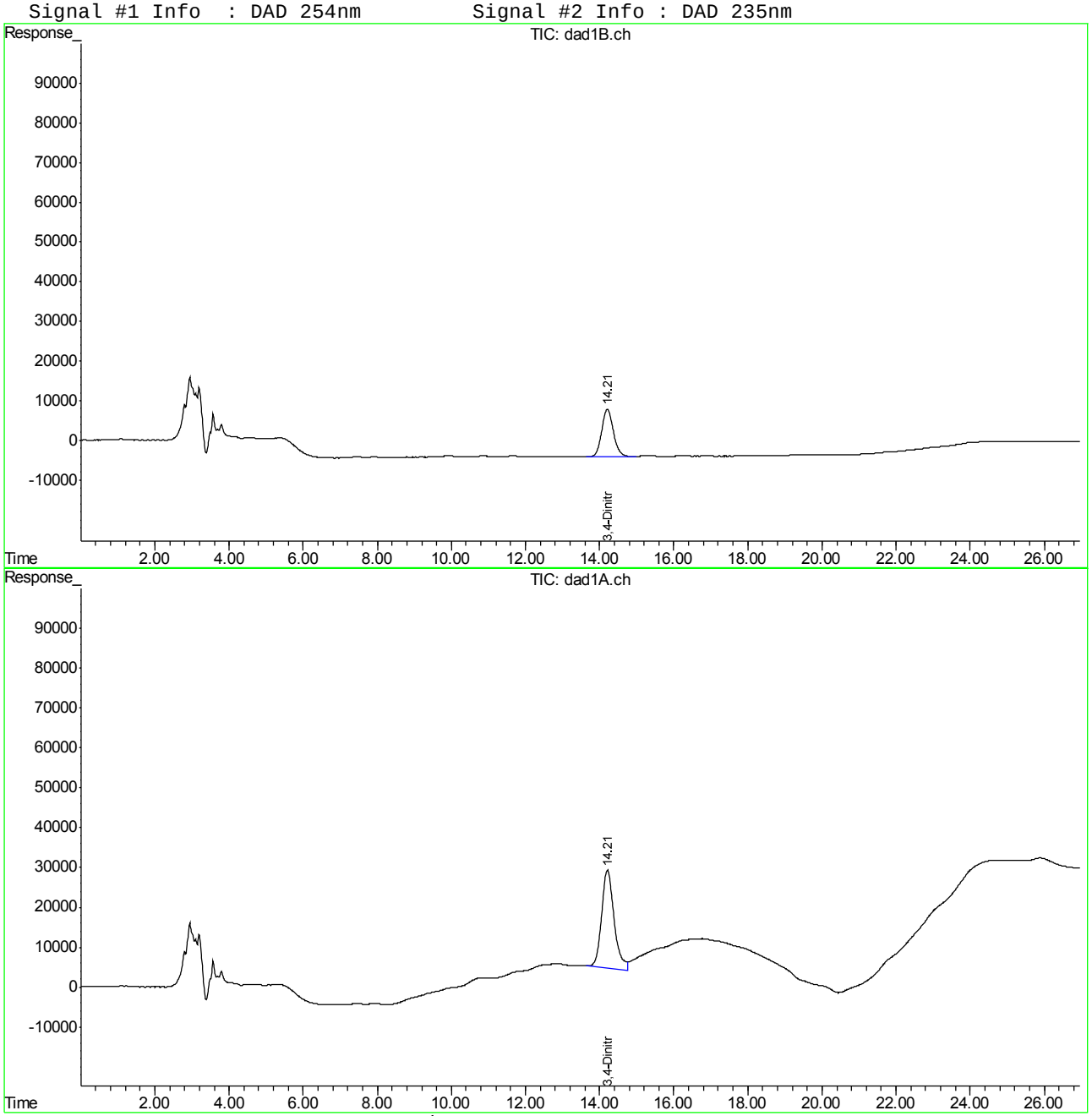
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614649.D 8330RPB.M_1113M.M Wed May 09 11:14:51 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614649.D\dad1B.ch Vial: 68
Signal #2 : G:\DATA\0508RPB3\GG614649.D\dad1A.ch
Acq On : 09-May-2018, 10:09:06 Operator: evitam
Sample : op69946-mb Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:09 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614649.D 8330RPB.M_1113M.M Wed May 09 11:14:51 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614663.D\dad1B.ch Vial: 78
Signal #2 : G:\DATA\0508RPB3\GG614663.D\dad1A.ch
Acq On : 09-May-2018, 17:04:15 Operator: evitam
Sample : op69946-gb1 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.24	2416731	5493730	465.214	507.850
	Spiked Amount 500.000	Range 69 - 134		Recovery =		93.04%	101.57%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

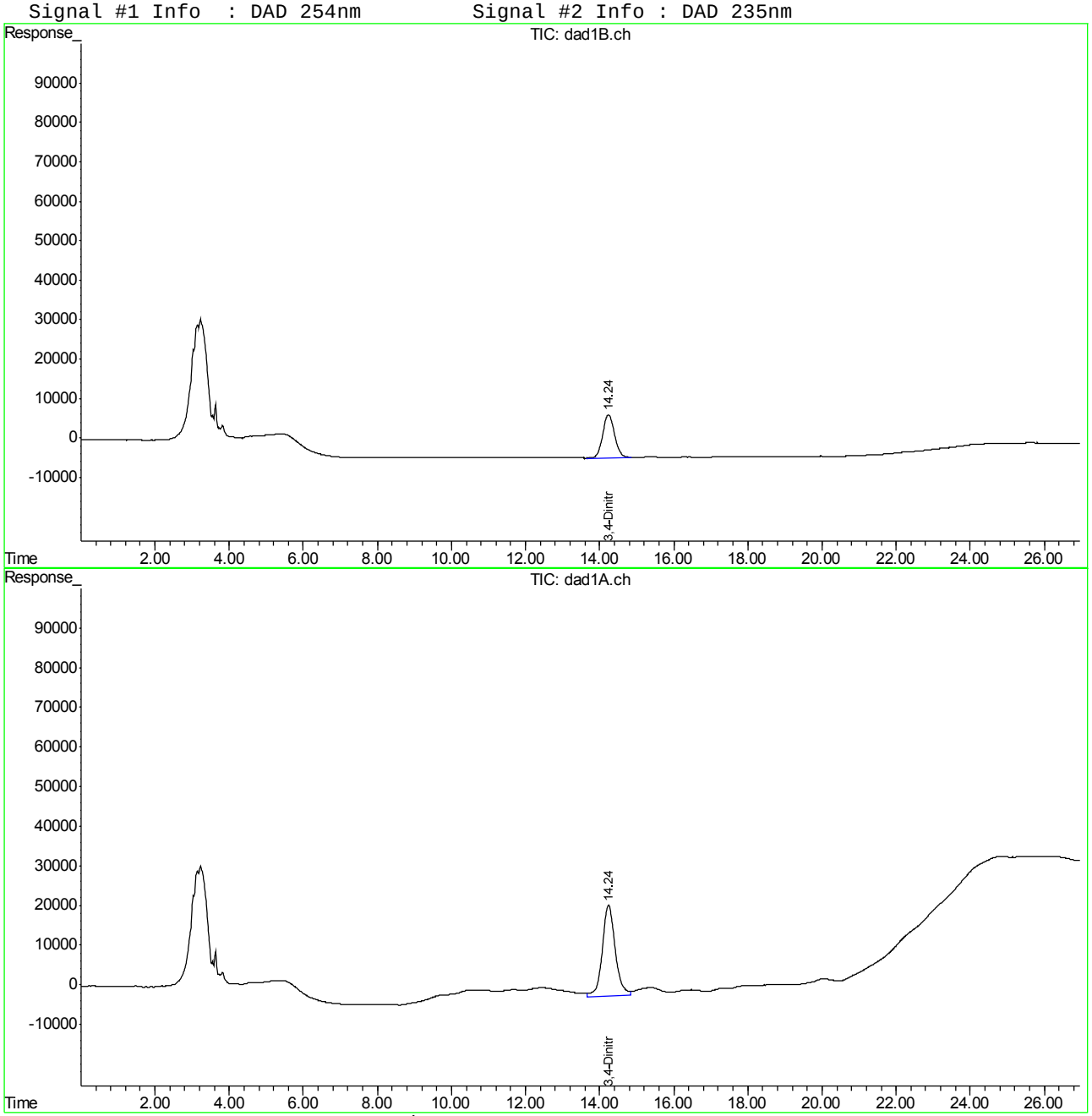
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614663.D 8330RPB.M_1113M.M Thu May 10 13:16:40 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614663.D\dad1B.ch Vial: 78
Signal #2 : G:\DATA\0508RPB3\GG614663.D\dad1A.ch
Acq On : 09-May-2018, 17:04:15 Operator: evitam
Sample : op69946-gb1 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:14 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614663.D 8330RPB.M_1113M.M Thu May 10 13:16:40 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614664.D\dad1B.ch Vial: 79
Signal #2 : G:\DATA\0508RPB3\GG614664.D\dad1A.ch
Acq On : 09-May-2018, 17:33:45 Operator: evitam
Sample : op69946-gb2 Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:41 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.22	2409228	4766767	463.769	440.648m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		92.75%	88.13%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

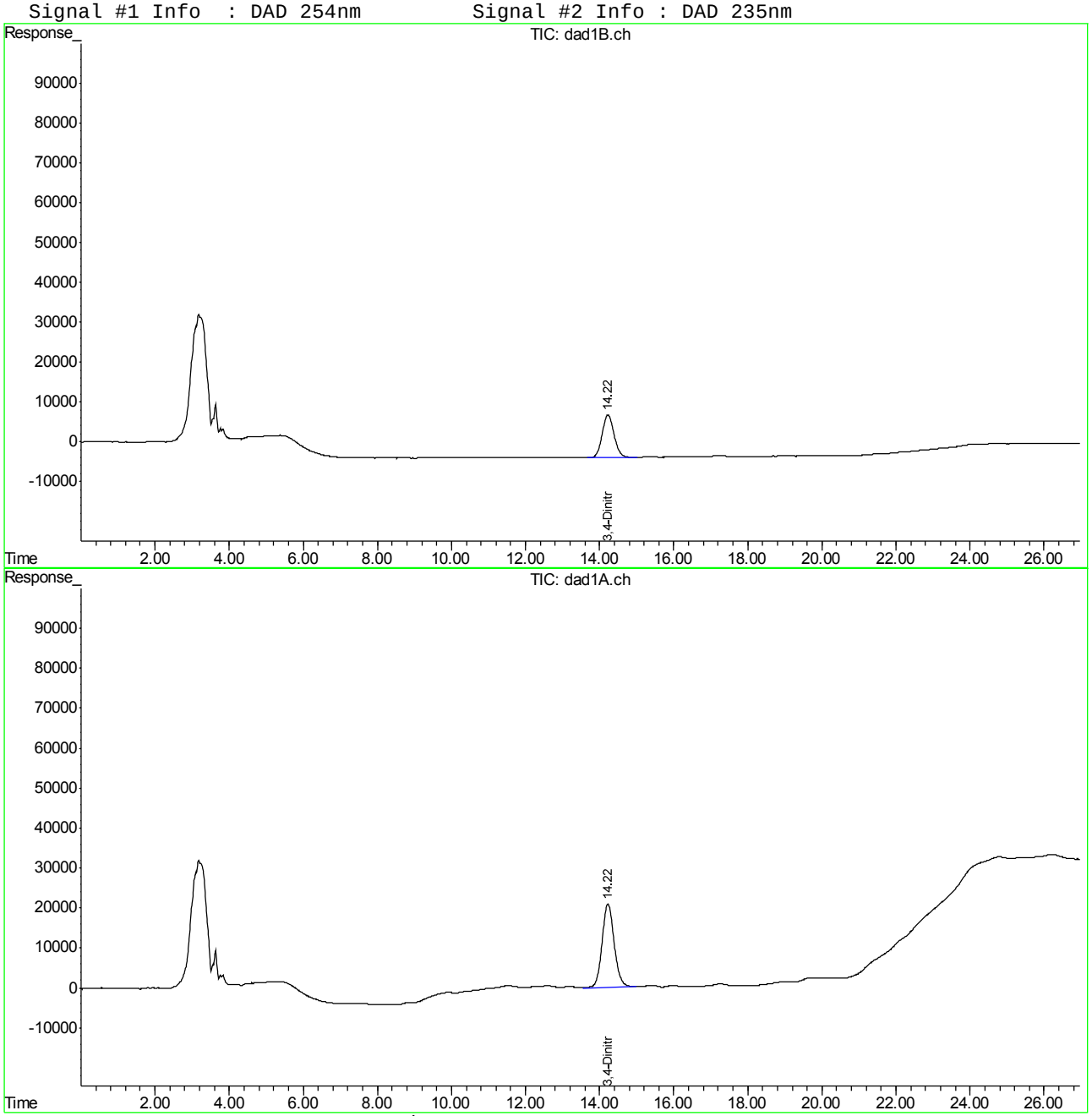
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614664.D 8330RPB.M_1113M.M Thu May 10 13:16:41 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614664.D\dad1B.ch Vial: 79
Signal #2 : G:\DATA\0508RPB3\GG614664.D\dad1A.ch
Acq On : 09-May-2018, 17:33:45 Operator: evitam
Sample : op69946-gb2 Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:14 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

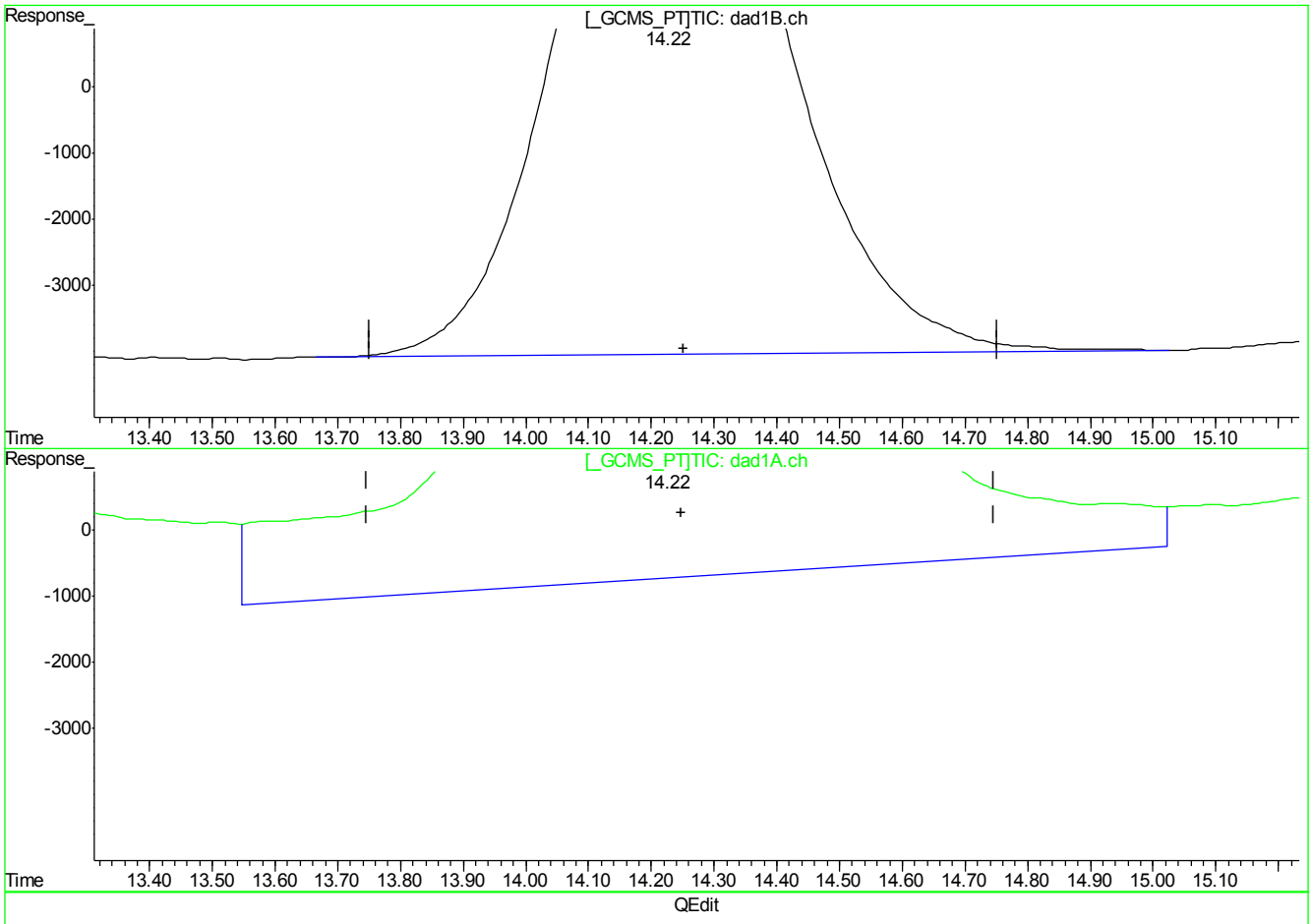
Sample Number:	OP69946-GB2	**Method:**	SW846 8330B
Lab FileID:	GG614664.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 17:33	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.22	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614664.D\dad1B.ch Vial: 79
Signal #2 : G:\DATA\0508RPB3\GG614664.D\dad1A.ch
Acq On : 09-May-2018, 17:33:45 Operator: evitam
Sample : op69946-gb2 Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 463.769ppb

response 2409228

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 509.750ppb

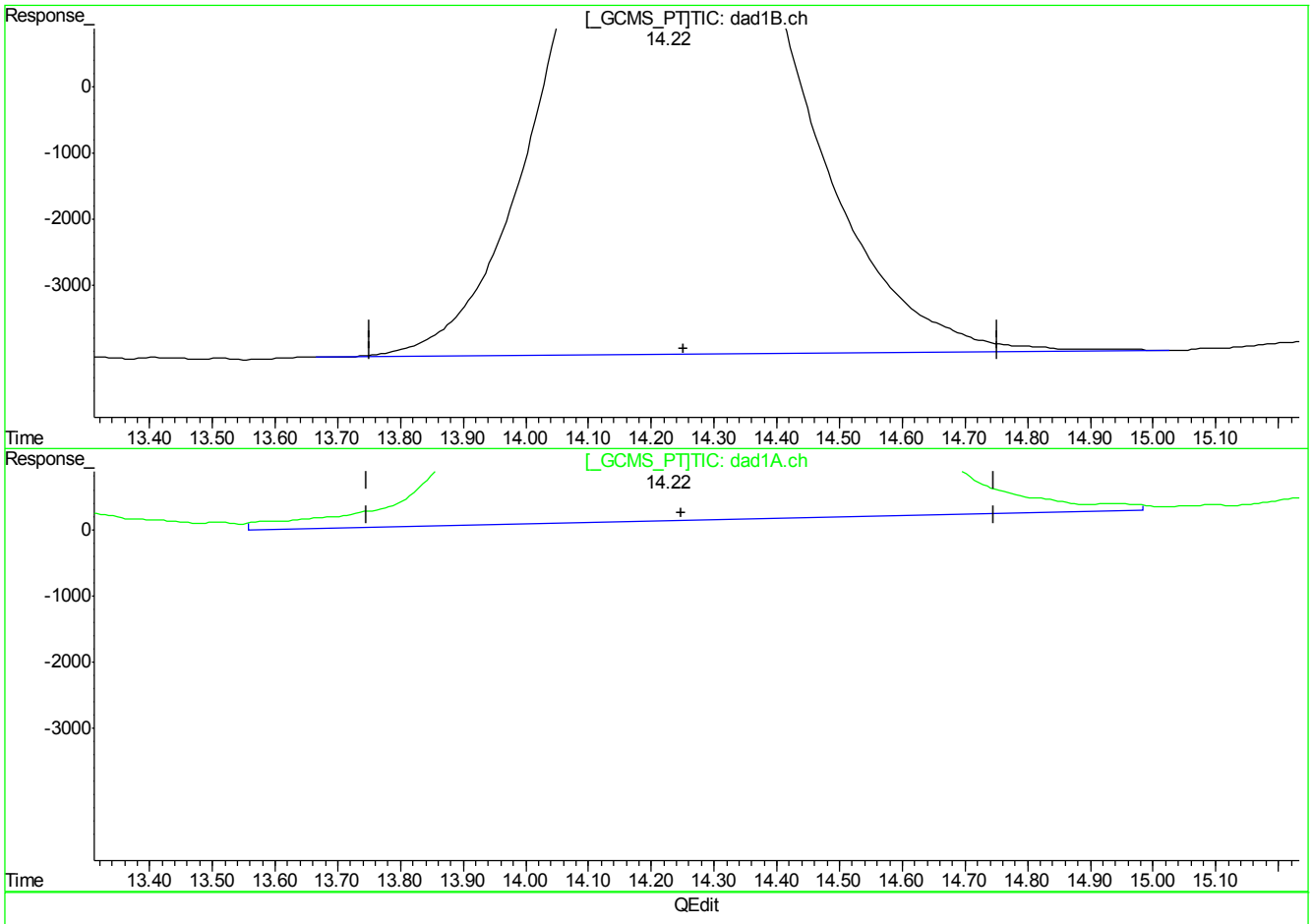
response 5514285

(+) = Expected Retention Time
GG614664.D 8330RPB.M_1113M.M Thu May 10 13:14:54 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614664.D\dad1B.ch Vial: 79
Signal #2 : G:\DATA\0508RPB3\GG614664.D\dad1A.ch
Acq On : 09-May-2018, 17:33:45 Operator: evitam
Sample : op69946-gb2 Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 463.769ppb

response 2409228

(12) 3,4-Dinitrotoluene #2 (S)

14.22min 440.648ppb m

response 4766767

(+) = Expected Retention Time
GG614664.D 8330RPB.M_1113M.M Thu May 10 13:14:57 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614665.D\dad1B.ch Vial: 80
Signal #2 : G:\DATA\0508RPB3\GG614665.D\dad1A.ch
Acq On : 09-May-2018, 18:03:14 Operator: evitam
Sample : op69946-gb3 Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:42 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.23	2323571	4730617	447.281	437.306m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		89.46%	87.46%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

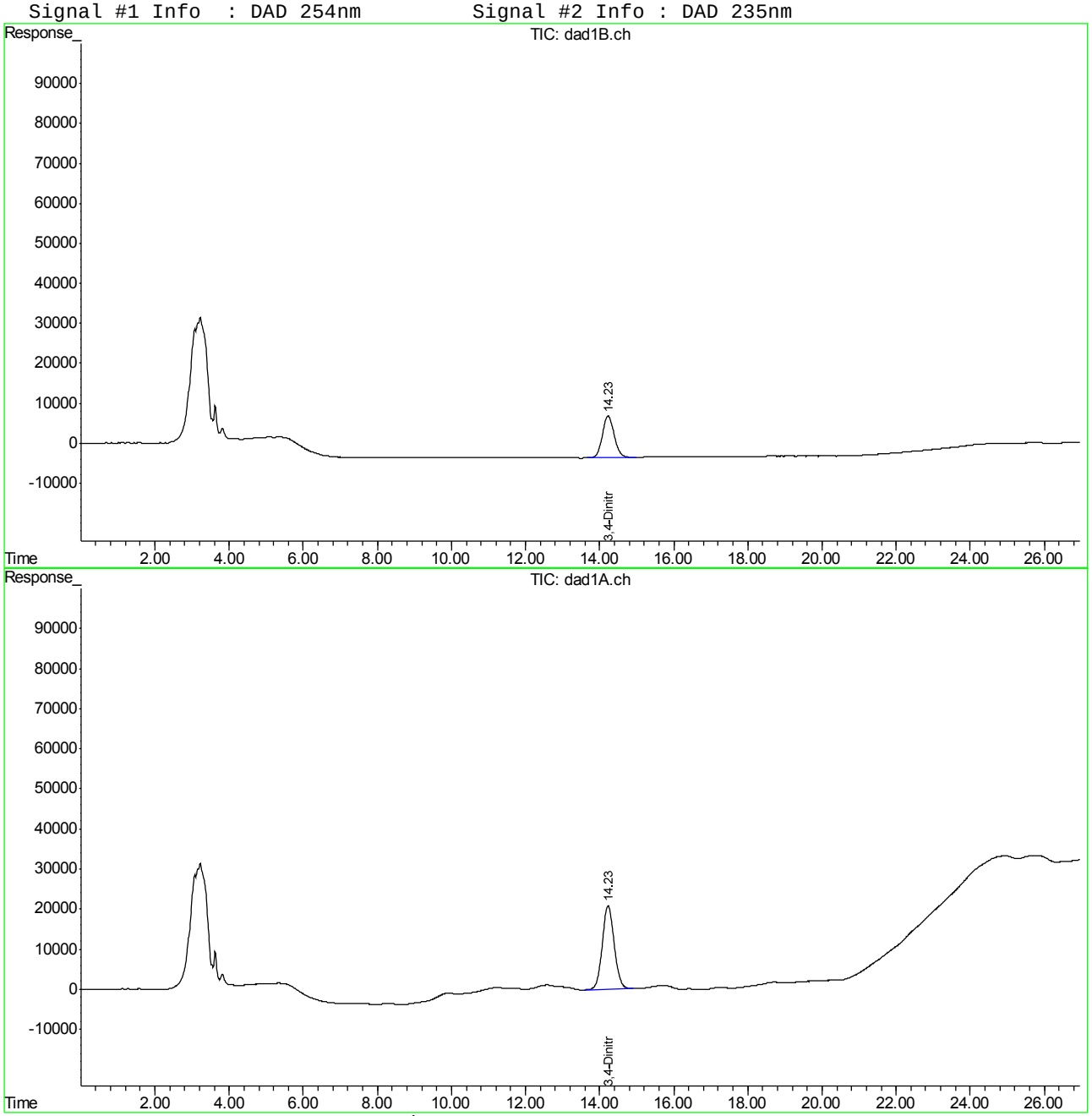
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614665.D 8330RPB.M_1113M.M Thu May 10 13:16:42 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614665.D\dad1B.ch Vial: 80
Signal #2 : G:\DATA\0508RPB3\GG614665.D\dad1A.ch
Acq On : 09-May-2018, 18:03:14 Operator: evitam
Sample : op69946-gb3 Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614665.D 8330RPB.M_1113M.M Thu May 10 13:16:42 2018 Page 2

Manual Integration Approval Summary

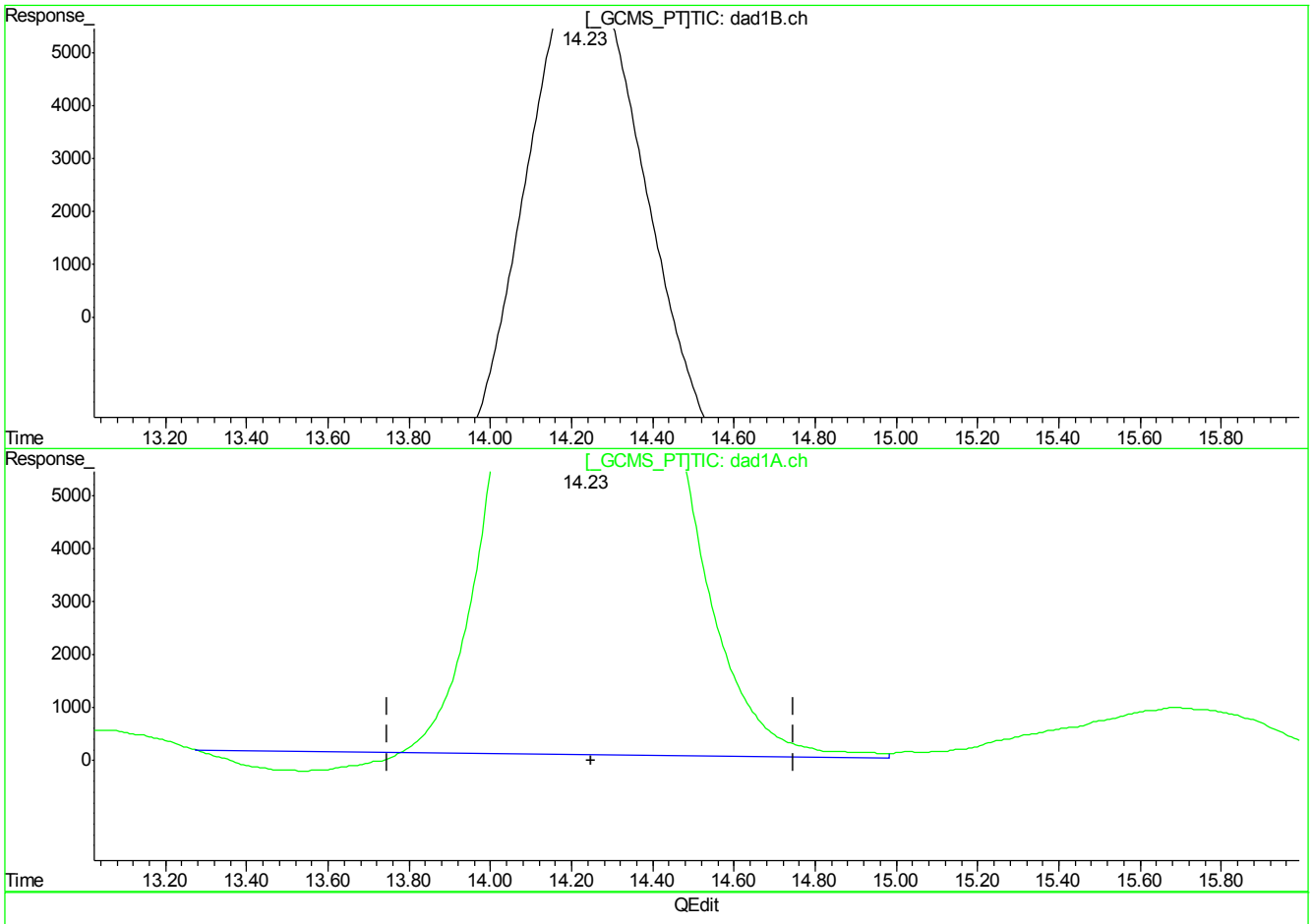
Sample Number:	OP69946-GB3	**Method:**	SW846 8330B
Lab FileID:	GG614665.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 18:03	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.23	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614665.D\dad1B.ch Vial: 80
Signal #2 : G:\DATA\0508RPB3\GG614665.D\dad1A.ch
Acq On : 09-May-2018, 18:03:14 Operator: evitam
Sample : op69946-gb3 Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 447.281ppb

response 2323571

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 418.974ppb

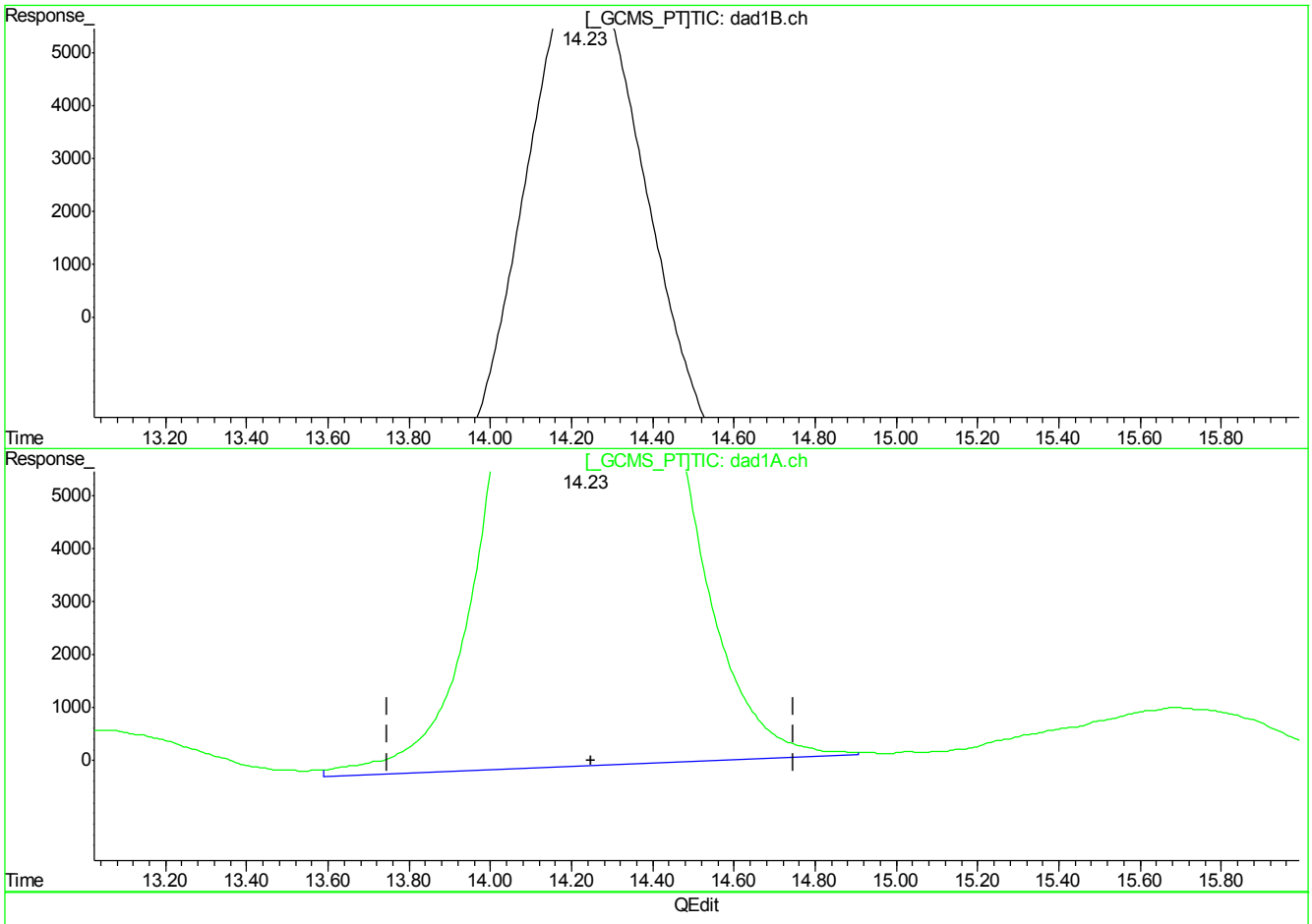
response 4532304

(+) = Expected Retention Time
GG614665.D 8330RPB.M_1113M.M Thu May 10 13:15:32 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614665.D\dad1B.ch Vial: 80
Signal #2 : G:\DATA\0508RPB3\GG614665.D\dad1A.ch
Acq On : 09-May-2018, 18:03:14 Operator: evitam
Sample : op69946-gb3 Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.23min 447.281ppb

response 2323571

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 437.306ppb m

response 4730617

(+) = Expected Retention Time
GG614665.D 8330RPB.M_1113M.M Thu May 10 13:15:36 2018

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059673.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059673.D\dad1A.ch
Acq On : 10-May-2018, 11:59:46 Operator: evitam
Sample : OP69960-MB Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:02:51 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.00	10.00	1033533	1772311	386.266	375.908
	Spiked Amount 500.000	Range 69 - 134		Recovery =		77.25%	75.18%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

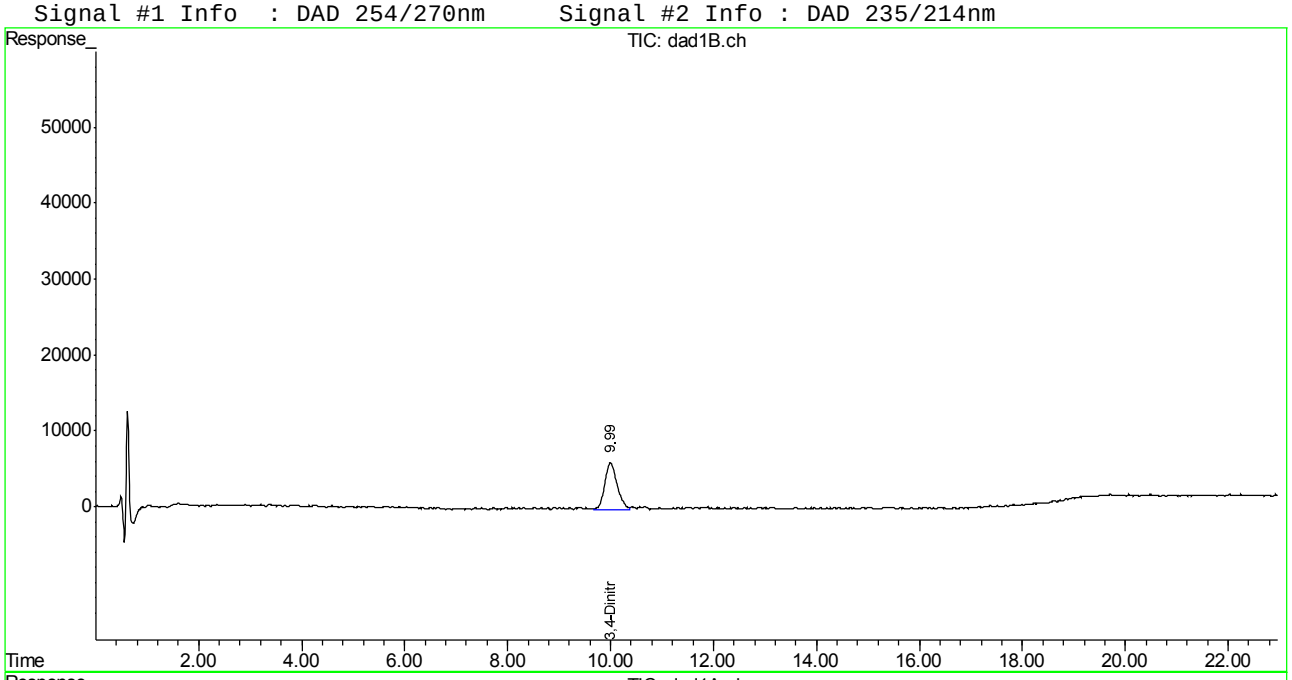
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059673.D 8330B_0419PLUS.M Fri May 11 08:37:48 2018 Page 1

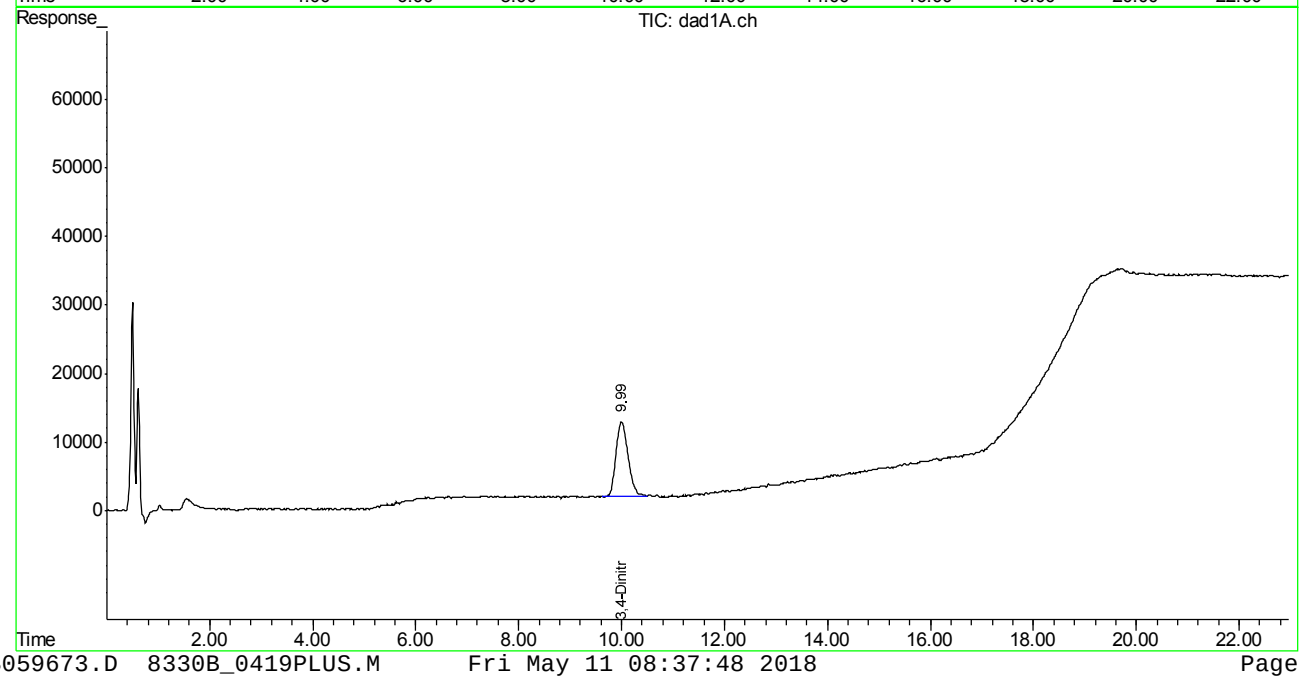
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059673.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059673.D\dad1A.ch
Acq On : 10-May-2018, 11:59:46 Operator: evitam
Sample : OP69960-MB Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:09 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059696.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059696.D\dad1A.ch
Acq On : 10-May-2018, 23:28:43 Operator: evitam
Sample : OP69960-GB1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:14 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.86	9.86	887505	1517977	331.690	321.963
	Spiked Amount 500.000	Range 69 - 134		Recovery =		66.34%#	64.39%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

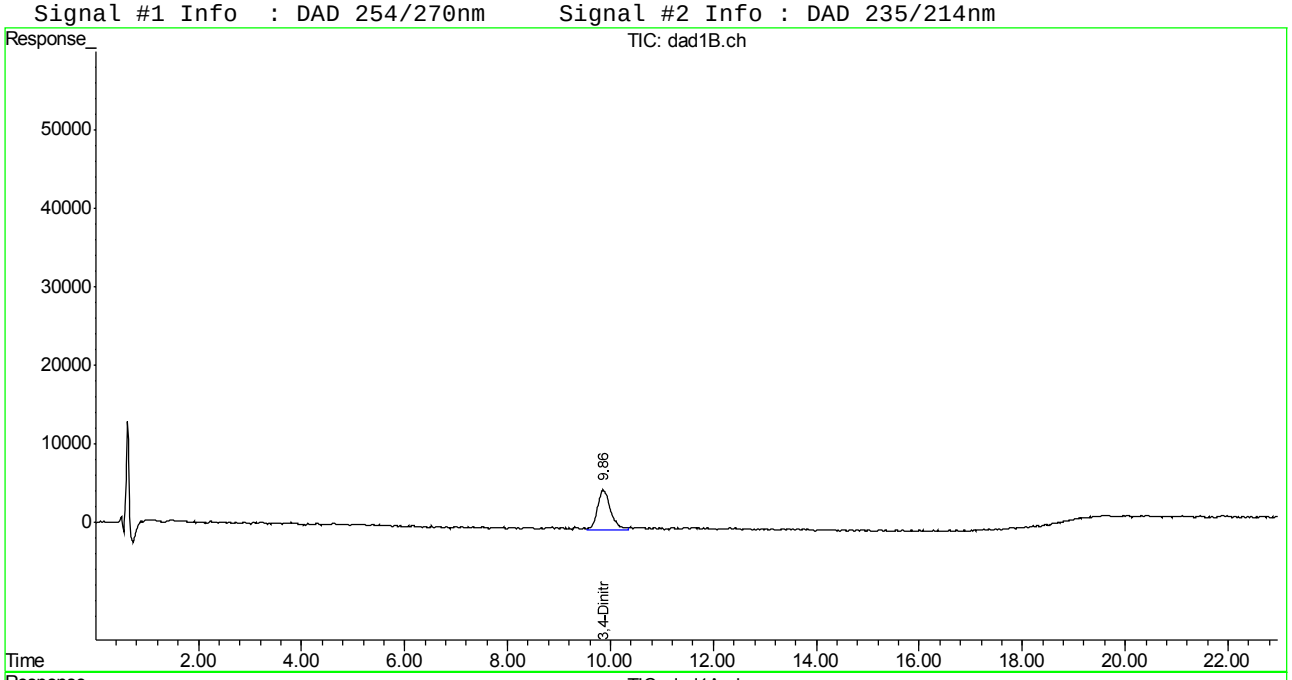
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059696.D 8330B_0419PLUS.M Fri May 11 08:38:09 2018 Page 1

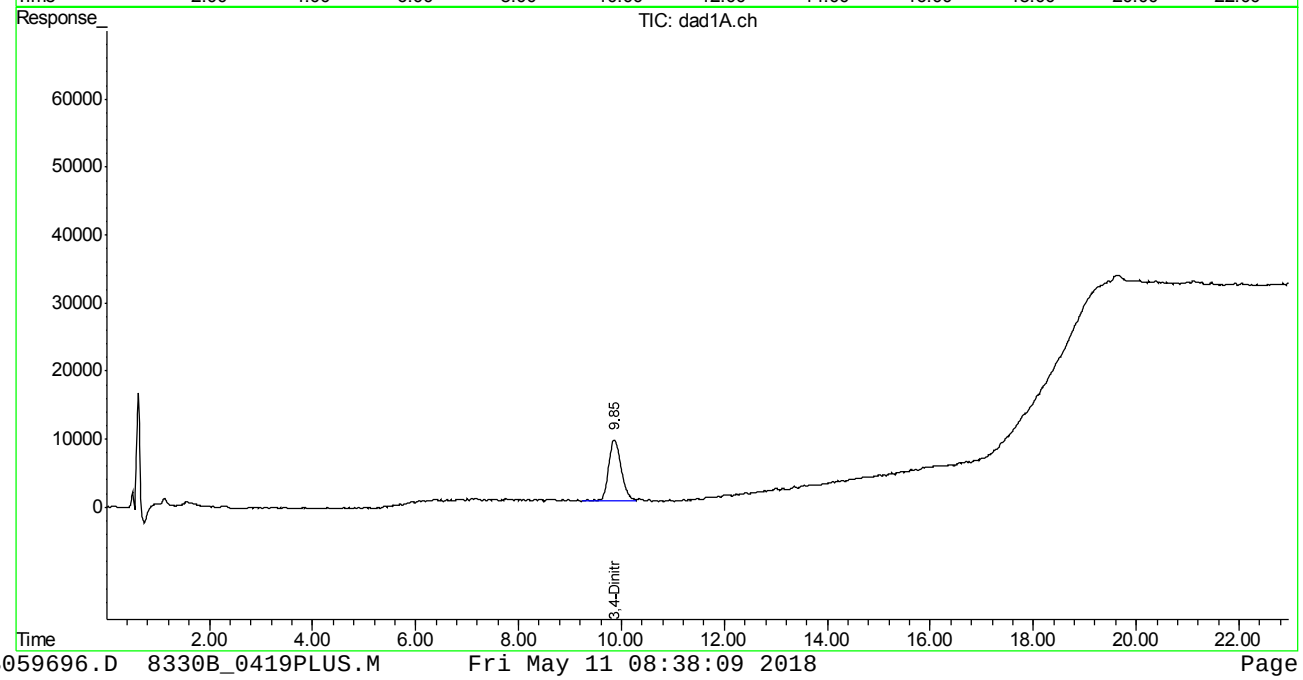
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059696.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059696.D\dad1A.ch
Acq On : 10-May-2018, 23:28:43 Operator: evitam
Sample : OP69960-GB1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:26 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059697.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059697.D\dad1A.ch
Acq On : 10-May-2018, 23:58:43 Operator: evitam
Sample : OP69960-GB2 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:15 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.89	9.89	847002	1485512	316.553	315.077
	Spiked Amount 500.000	Range 69 - 134		Recovery =		63.31%#	63.02%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

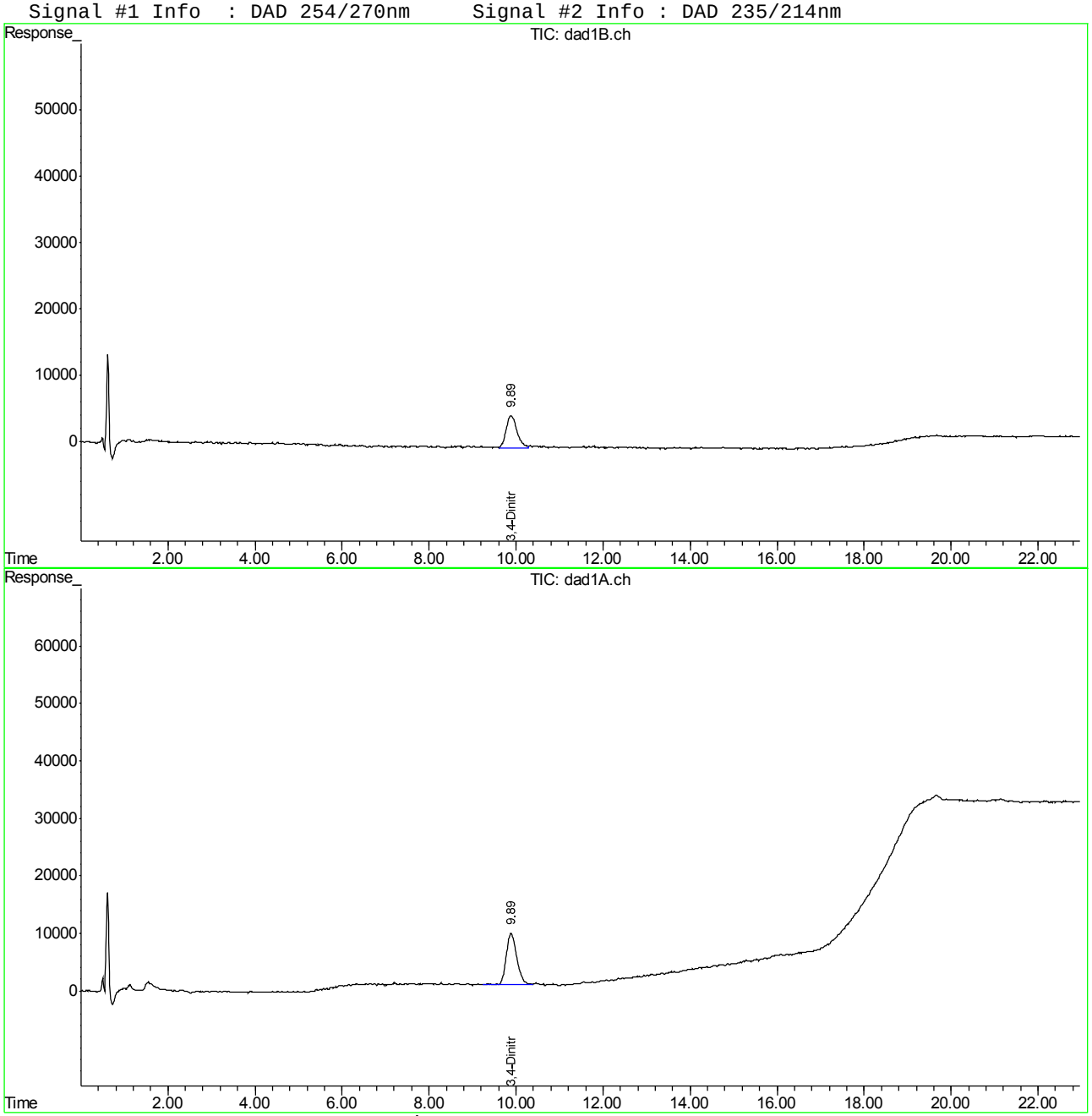
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059697.D 8330B_0419PLUS.M Fri May 11 08:38:10 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059697.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059697.D\dad1A.ch
Acq On : 10-May-2018, 23:58:43 Operator: evitam
Sample : OP69960-GB2 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:26 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



BB059697.D 8330B_0419PLUS.M Fri May 11 08:38:10 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059698.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059698.D\dad1A.ch
Acq On : 11-May-2018, 00:28:41 Operator: evitam
Sample : OP69960-GB3 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:16 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.92	9.91	899689	1550786	336.244	328.922
	Spiked Amount 500.000	Range 69 - 134		Recovery =		67.25%#	65.78%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

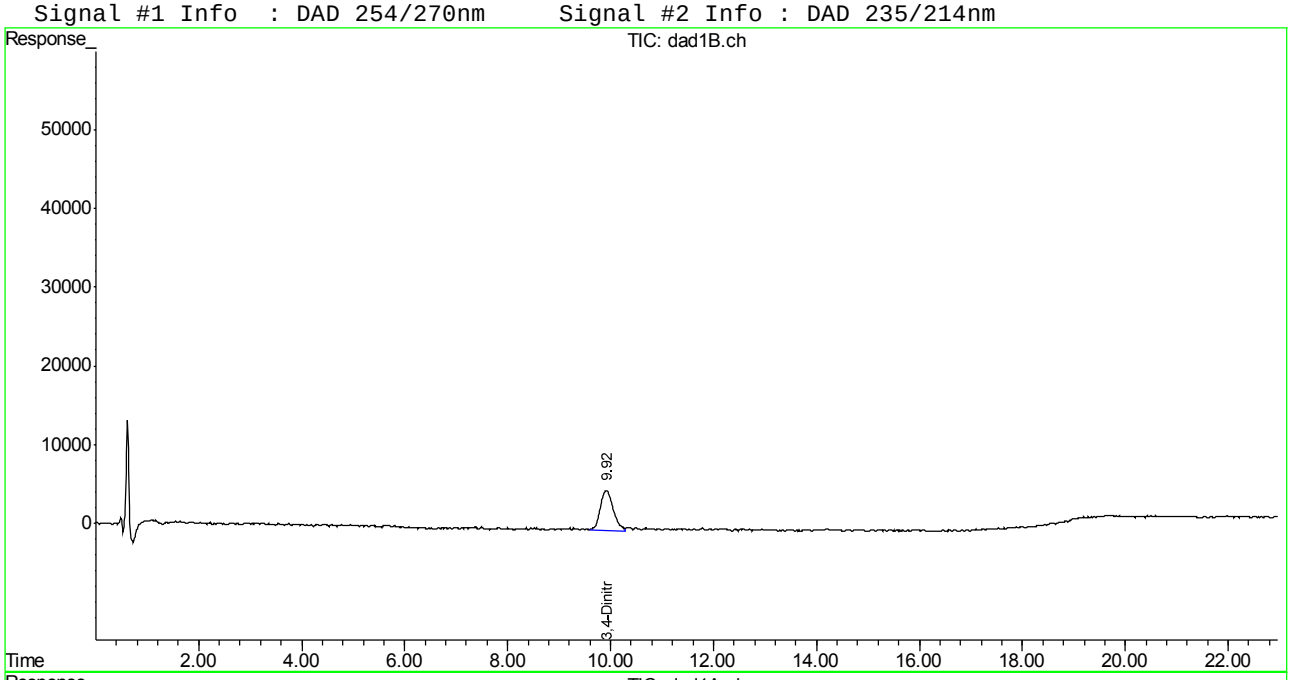
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059698.D 8330B_0419PLUS.M Fri May 11 08:38:11 2018 Page 1

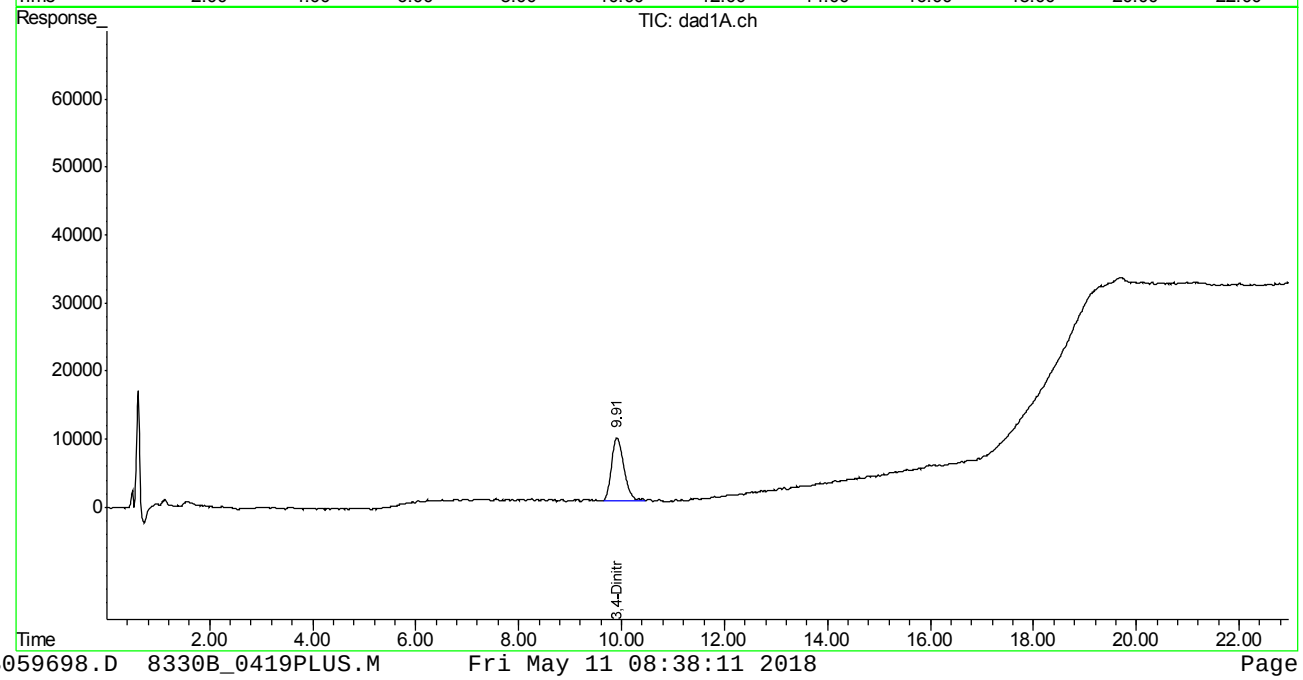
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059698.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059698.D\dad1A.ch
Acq On : 11-May-2018, 00:28:41 Operator: evitam
Sample : OP69960-GB3 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:26 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059698.D 8330B_0419PLUS.M Fri May 11 08:38:11 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 10:17:50 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.28	14.27	2579498	4850973	496.546	448.432m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		99.31%	89.69%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.42	5.42	1980222	1993185	610.824m	618.665m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.46	7.46	4873156	4864347	470.309	469.507
6)	RDX	7.92	7.92	2353235	2321424	493.944	489.427
7)	1,3-Dinitrobenze	9.95	9.94	6603125	5105078	461.535	397.870m
8)	Nitrobenzene	10.91	10.90	4341134	4487418	459.992	484.555m
9)	2,4,6-Trinitroto	11.68	11.68	4719733	6833744	465.718	521.069m
10)	Nitroglycerin	0.00	12.43	0	8021507	N.D. d	2380.448m
11)	Tetryl	12.95	12.95	3505980	6303189	432.631	447.307m
13)	2,6-Dinitrotolue	14.64	14.64	3394647	4588360	474.802	452.231m
14)	2,4-Dinitrotolue	15.35	15.35	6093328	3868860	464.817	405.972m
15)	o-Nitrotoluene	16.89	16.89	2801324	4543500	484.944	526.867m
16)	3,5-Dinitroanili	16.29	16.28	5464839	9279949	558.340	570.898m
17)	p-Nitrotoluene	18.03	18.04	5520024	10274054	470.095	484.781m
18)	4-Amino-2,6-Dini	18.03	18.04	5520024	10273975	470.095	483.368m
19)	m-Nitrotoluene	19.26	19.26	2952011	5192768	500.734	533.993m
20)	2-Amino-4,6-Dini	20.20	20.20	4454049	5616832	493.637	473.358m
21)	PETN	0.00	21.79	0	8442995	N.D. d	2632.345m

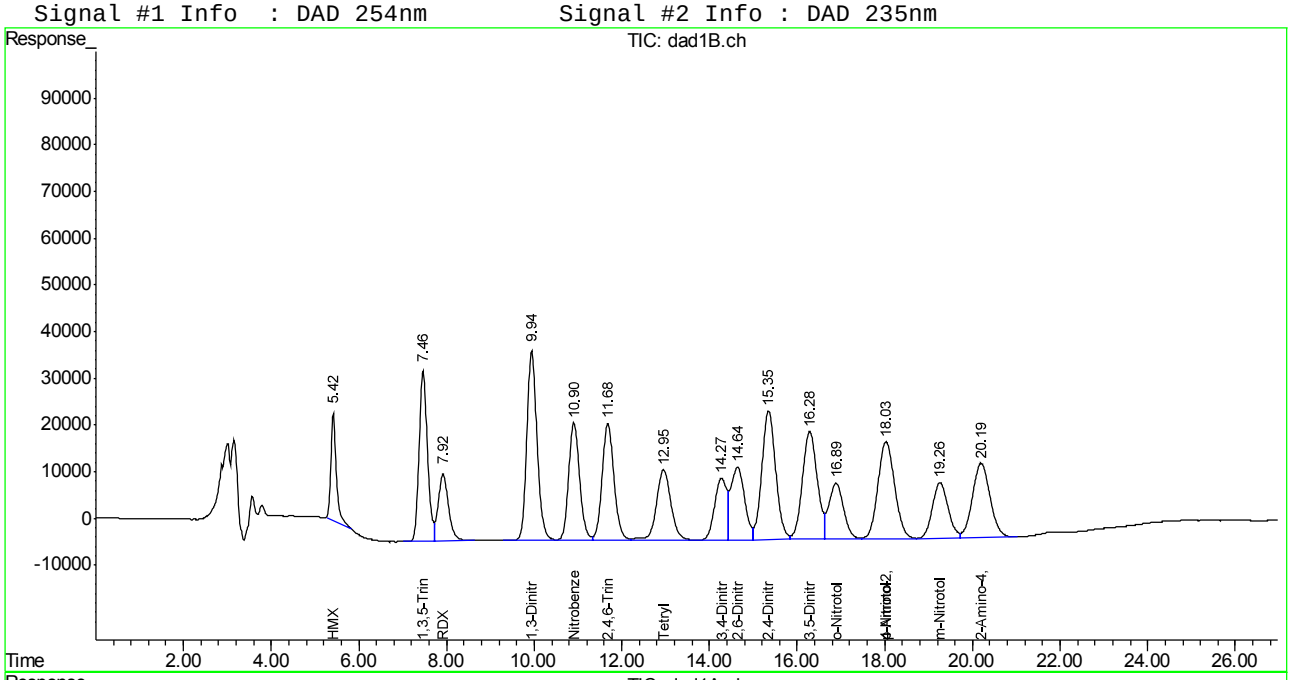
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:33:15 2018 Page 1

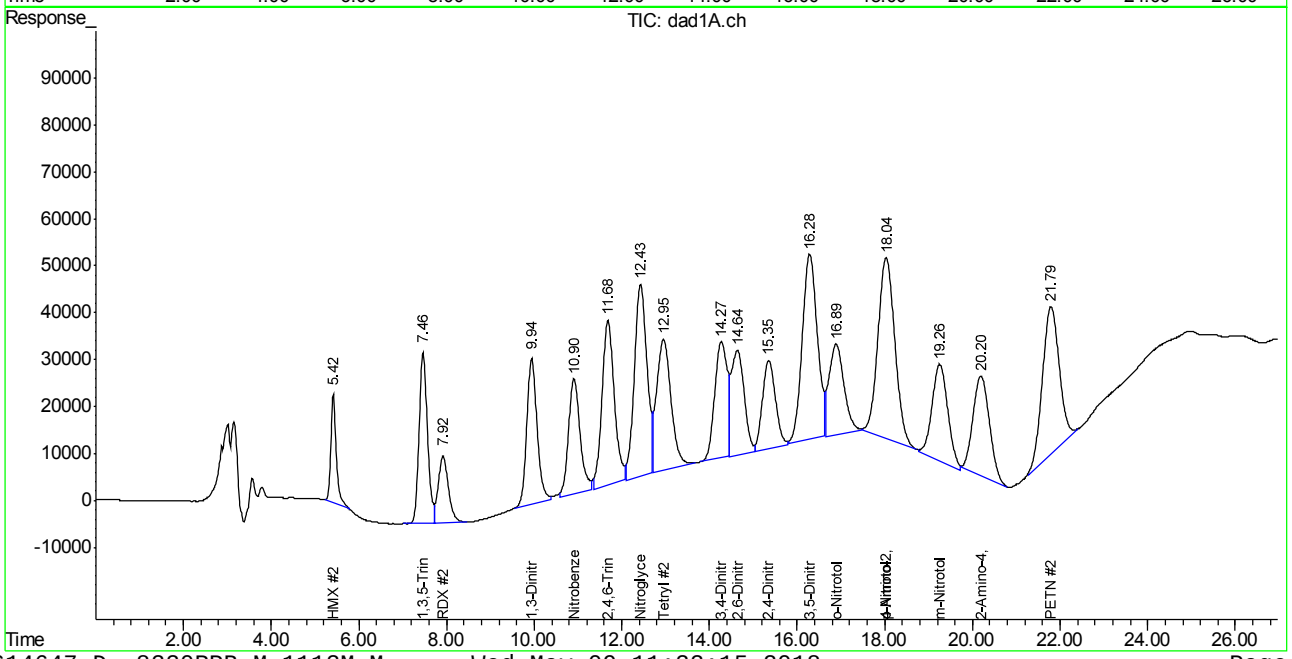
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

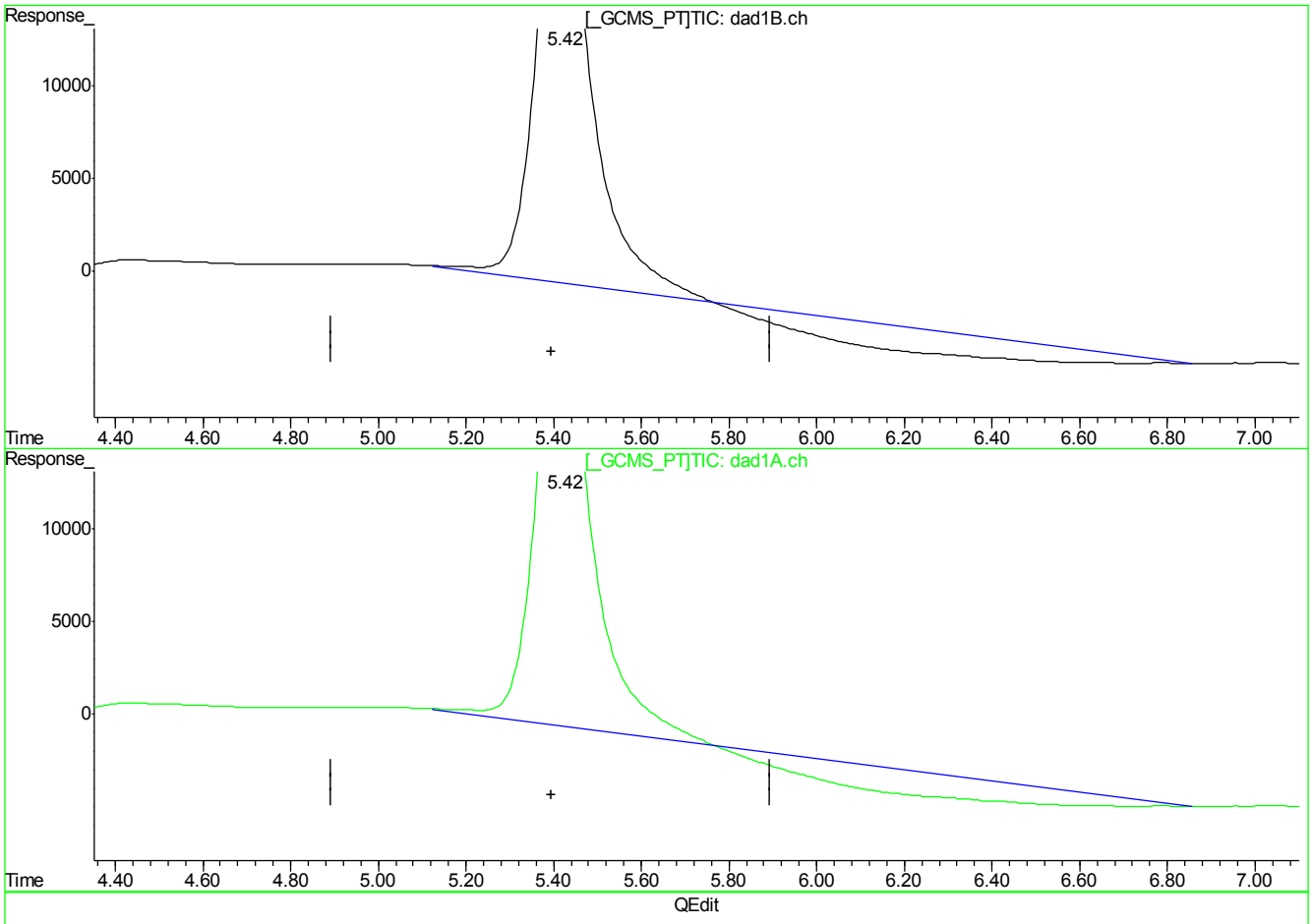
Sample Number:	OP69946-BS	**Method:**	SW846 8330B
Lab FileID:	GG614647.D	**Analyst approved:**	05/09/18 11:26 Evita Martinez
Injection Time:	05/09/18 09:10	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.42	Poorly defined baseline
HMX	2691-41-0	2	5.42	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.94	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.90	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.68	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.43	Poorly defined baseline
Tetryl	479-45-8	2	12.95	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.27	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.64	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.35	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.28	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.89	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.04	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.04	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.26	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.20	Poorly defined baseline
PETN	78-11-5	2	21.79	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.42min 453.289ppb

response 1469511

(2) HMX #2

5.42min 456.121ppb

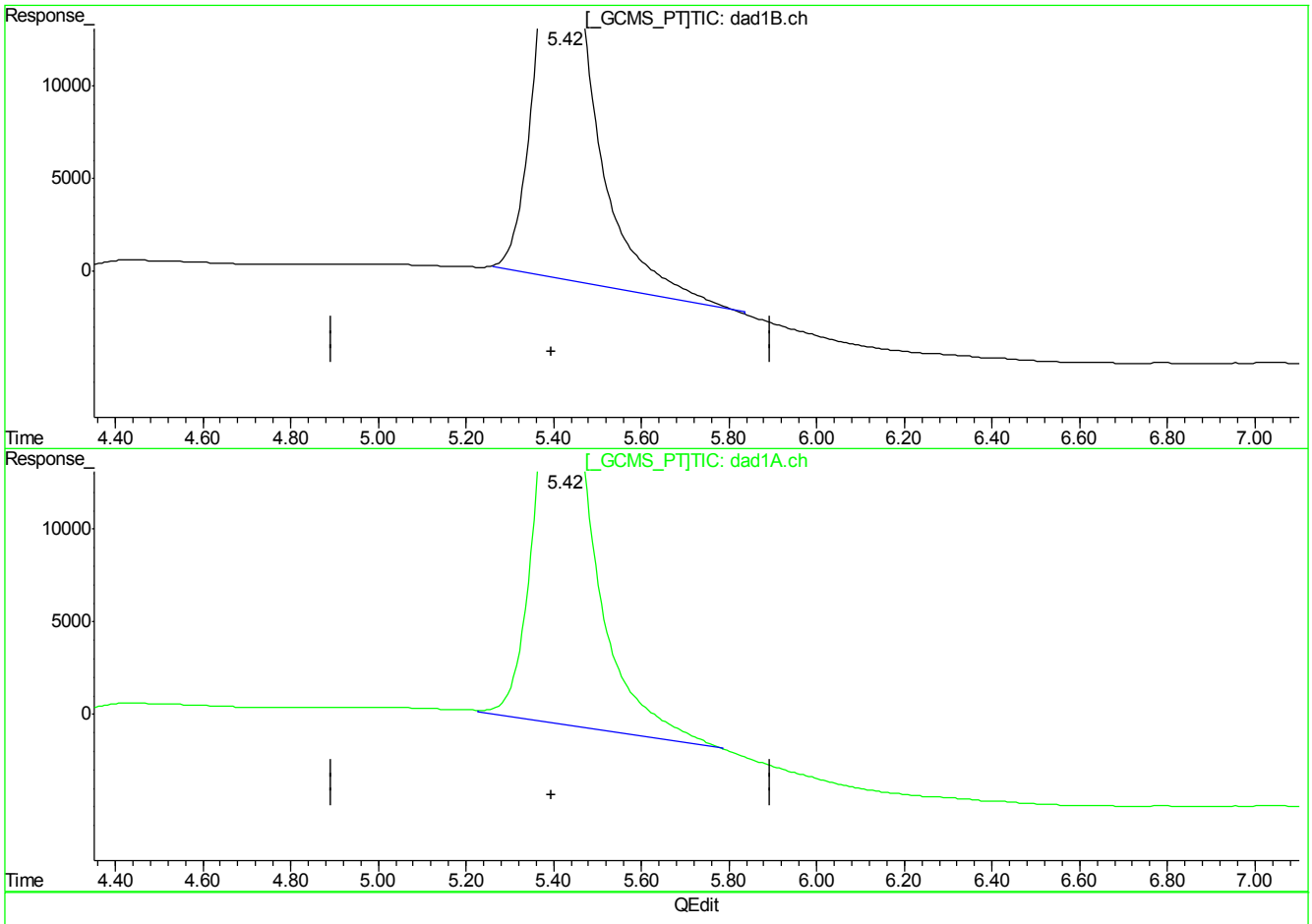
response 1469511

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:13 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.42min 610.824ppb m

response 1980222

(2) HMX #2

5.42min 618.665ppb m

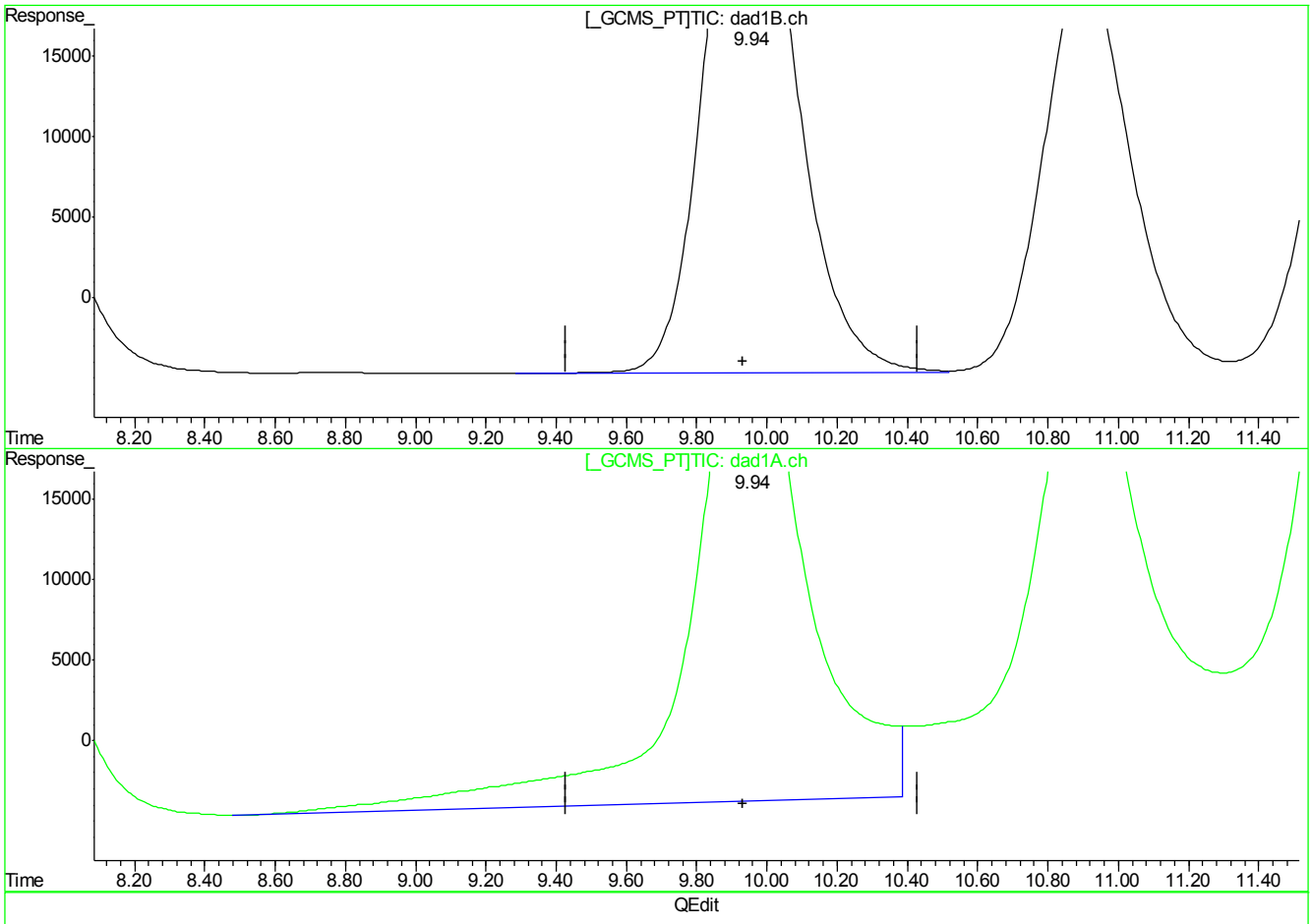
response 1993185

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.95min 461.535ppb

response 6603125

(7) 1,3-Dinitrobenzene #2

9.95min 568.112ppb

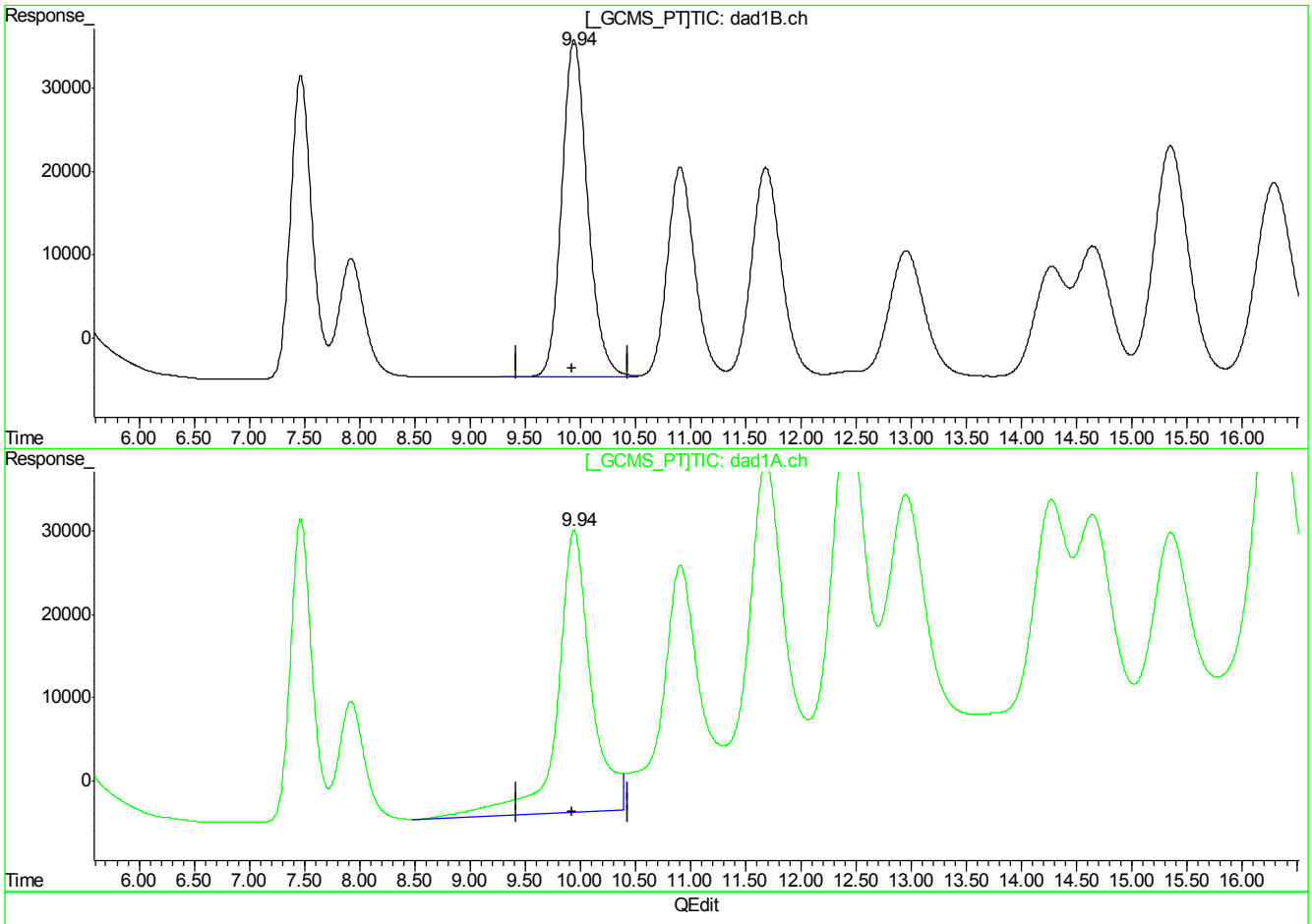
response 7181266

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.95min 461.535ppb

response 6603125

(7) 1,3-Dinitrobenzene #2

9.95min 568.112ppb

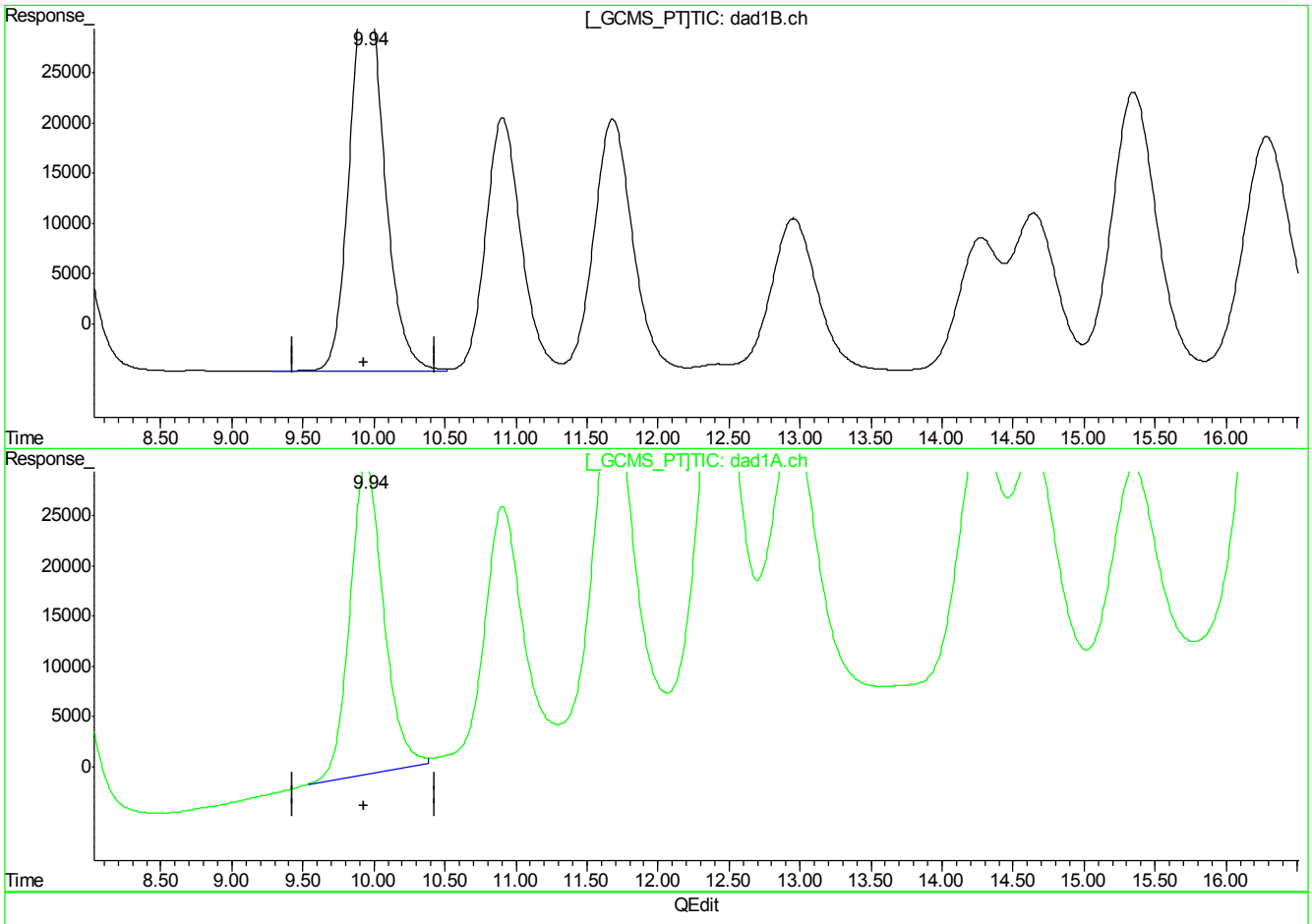
response 7181266

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:41 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.95min 461.535ppb

response 6603125

(7) 1,3-Dinitrobenzene #2

9.94min 397.870ppb m

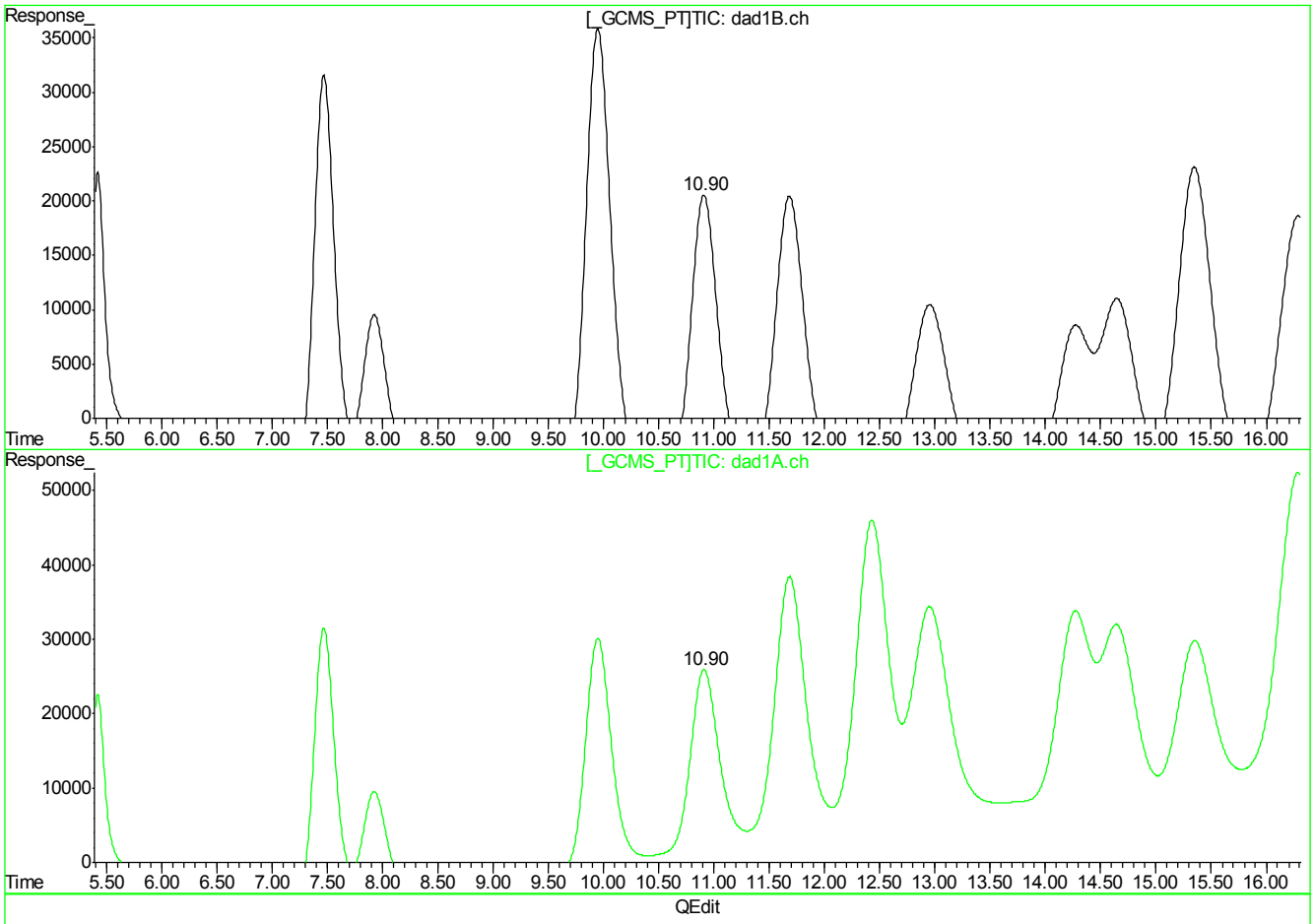
response 5105078

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:49 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.91min 459.992ppb

response 4341134

(8) Nitrobenzene #2

10.91min 754.105ppb

response 6983692

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:01:54 2018

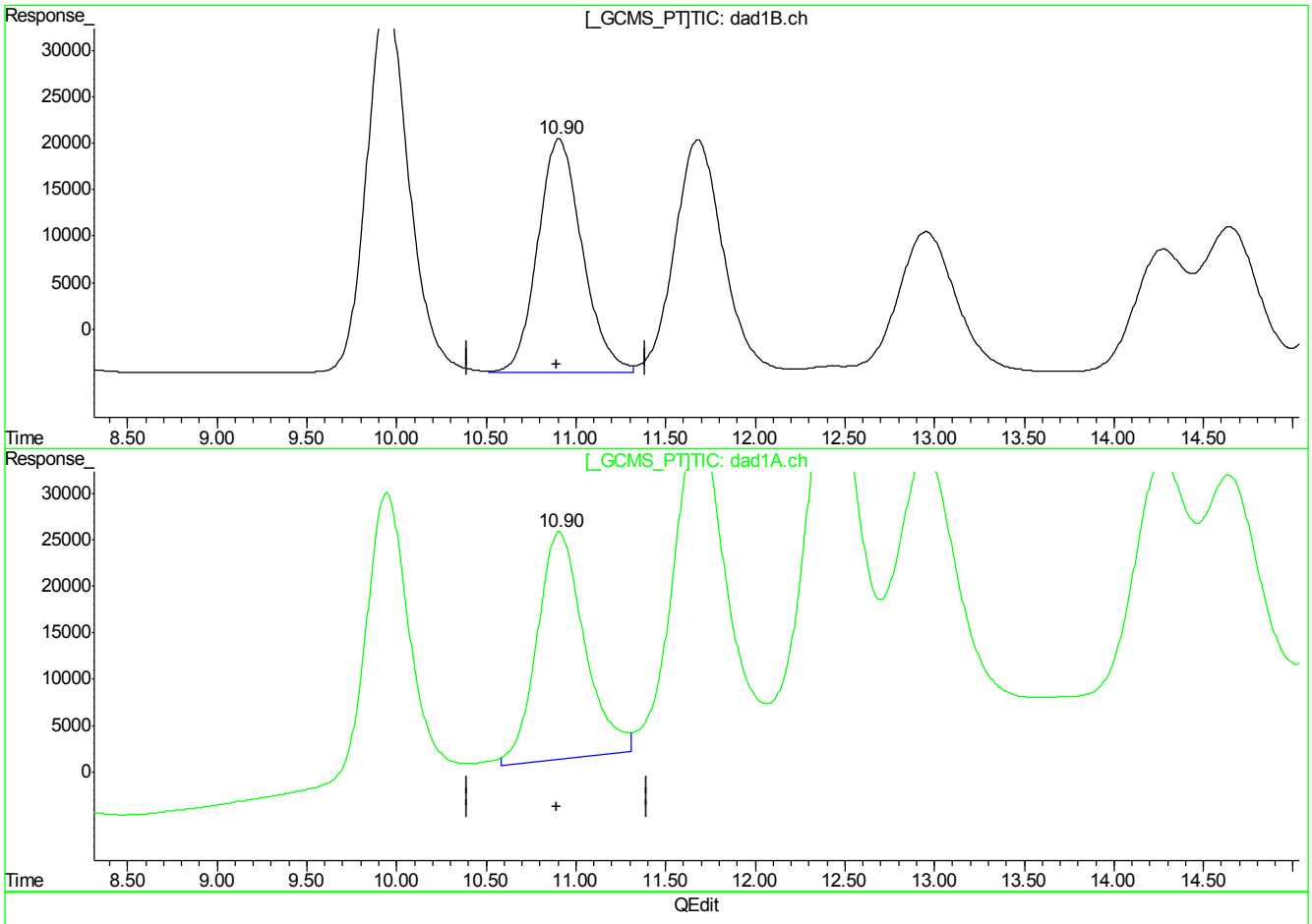
7.3.1.7

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.91min 459.992ppb

response 4341134

(8) Nitrobenzene #2

10.90min 484.555ppb m

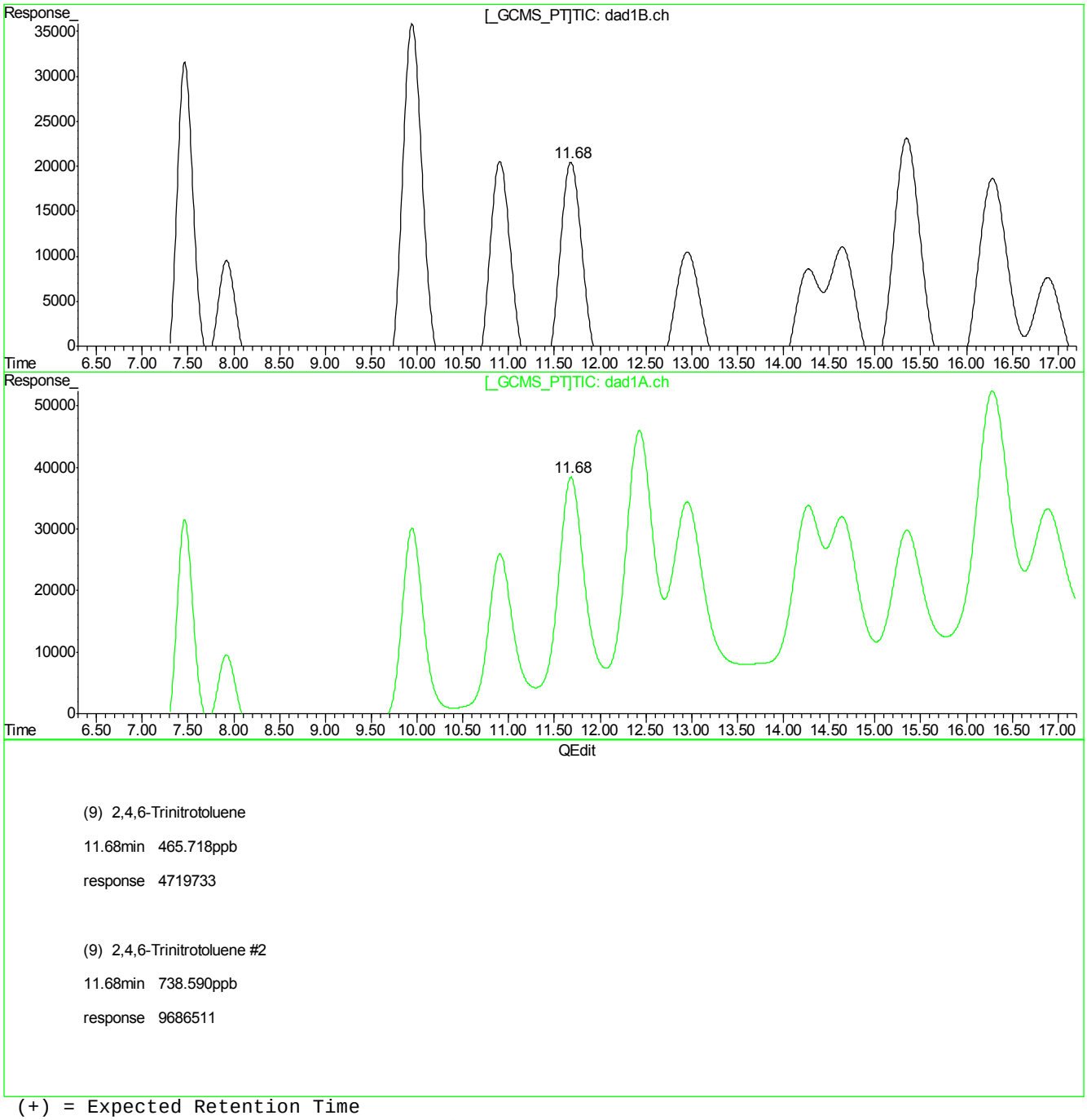
response 4487418

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:00 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

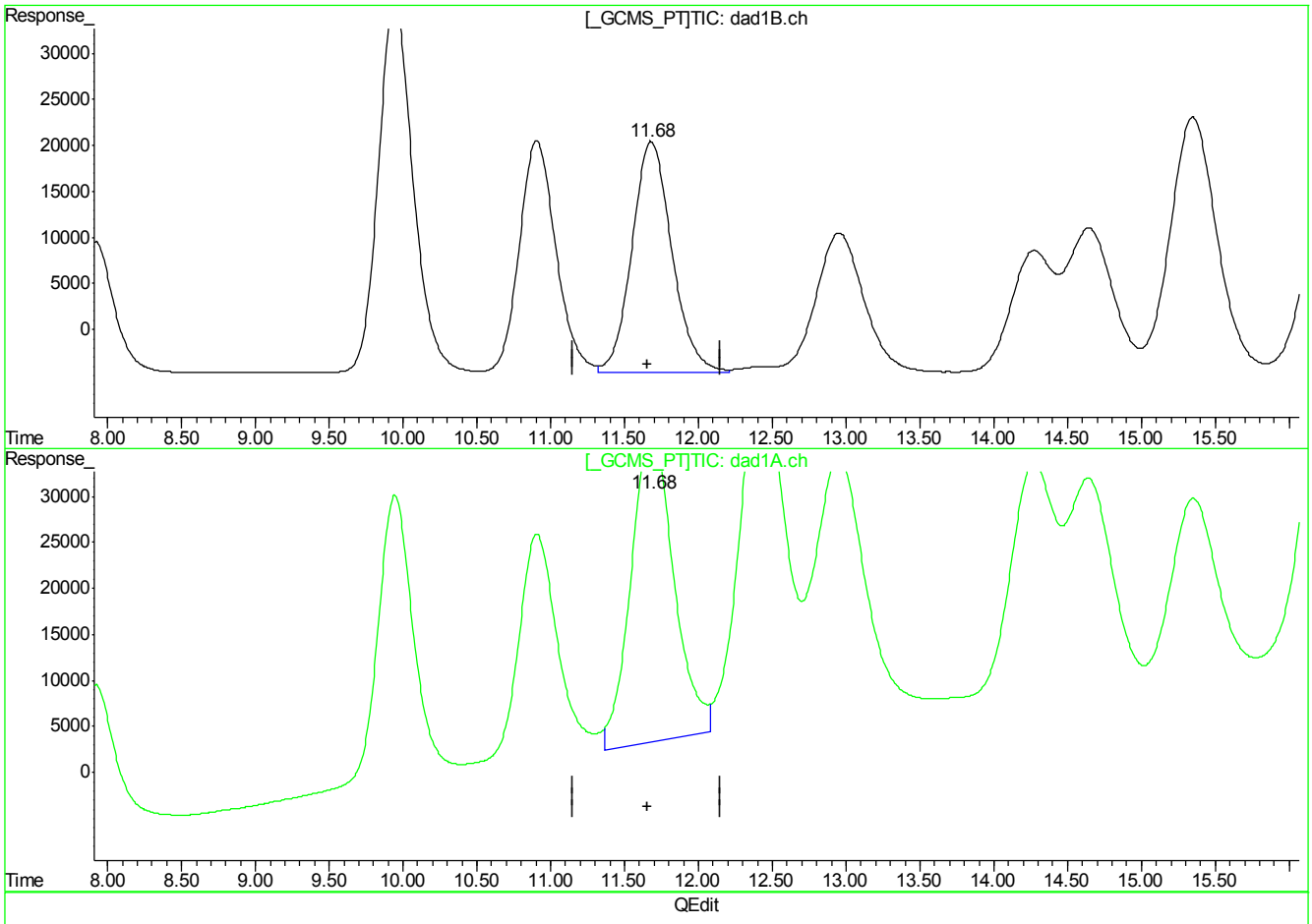


(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:05 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.68min 465.718ppb

response 4719733

(9) 2,4,6-Trinitrotoluene #2

11.68min 521.069ppb m

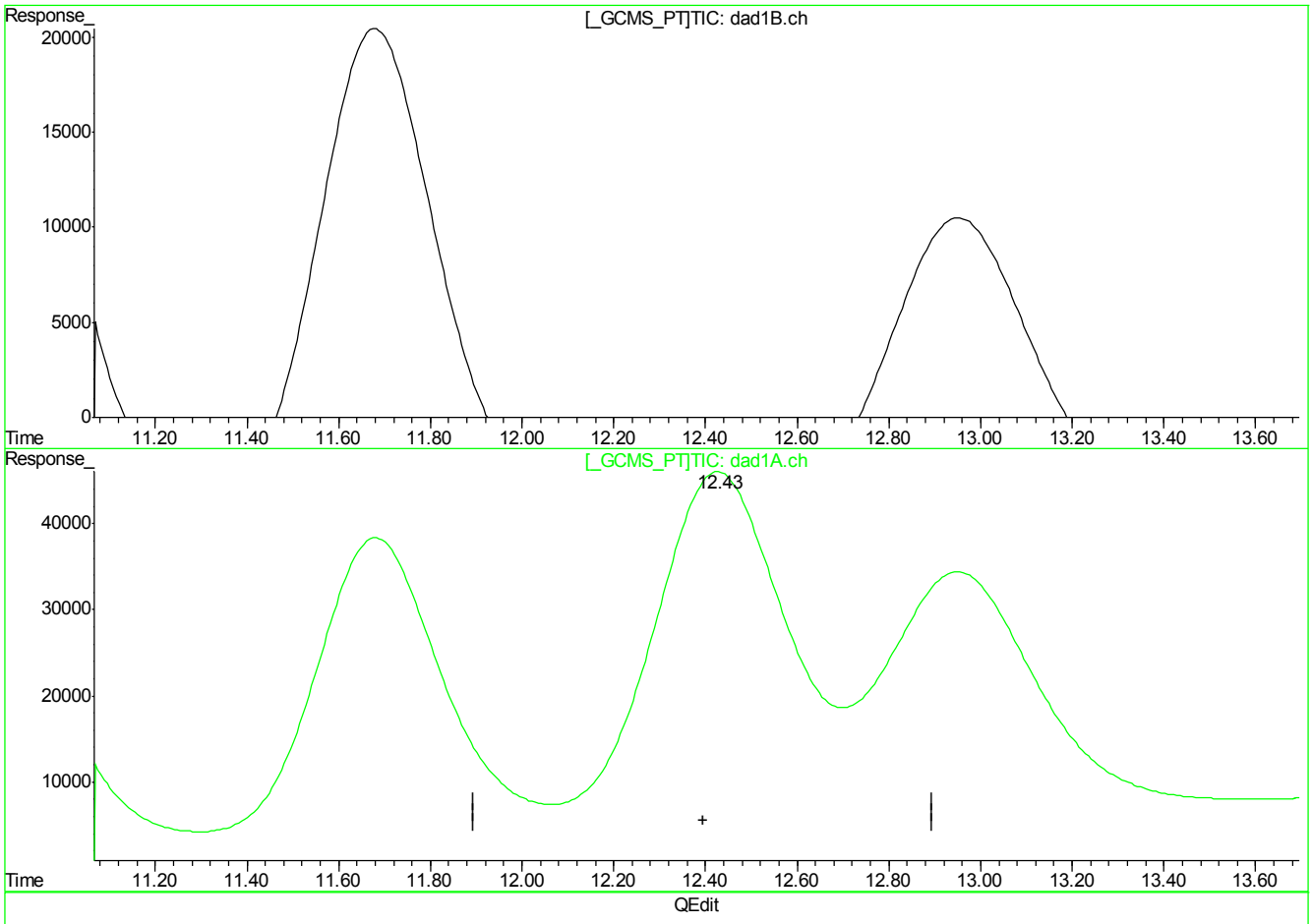
response 6833744

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:13 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.43min 3290.451ppb

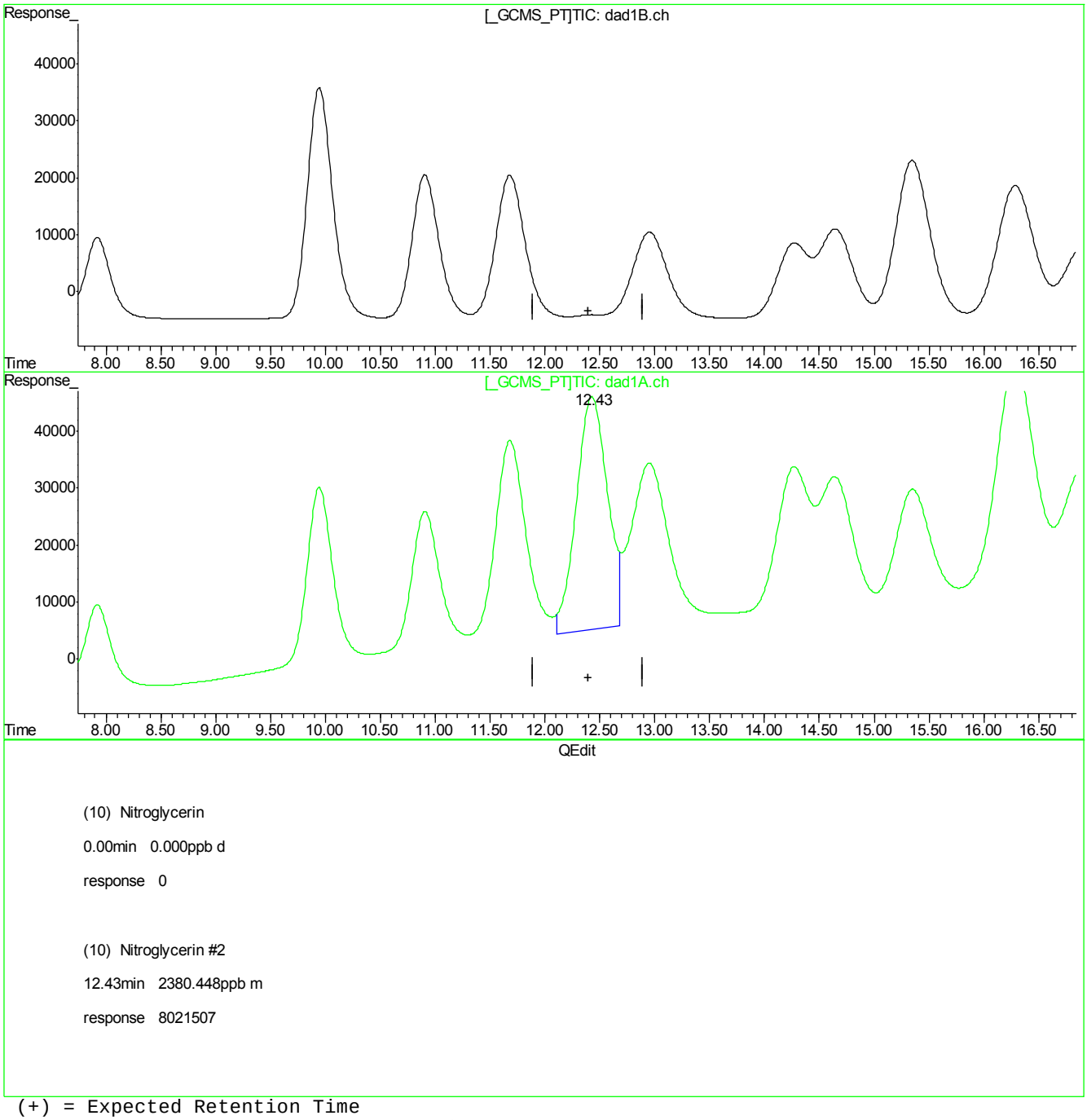
response 11087988

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:19 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.43min 2380.448ppb m

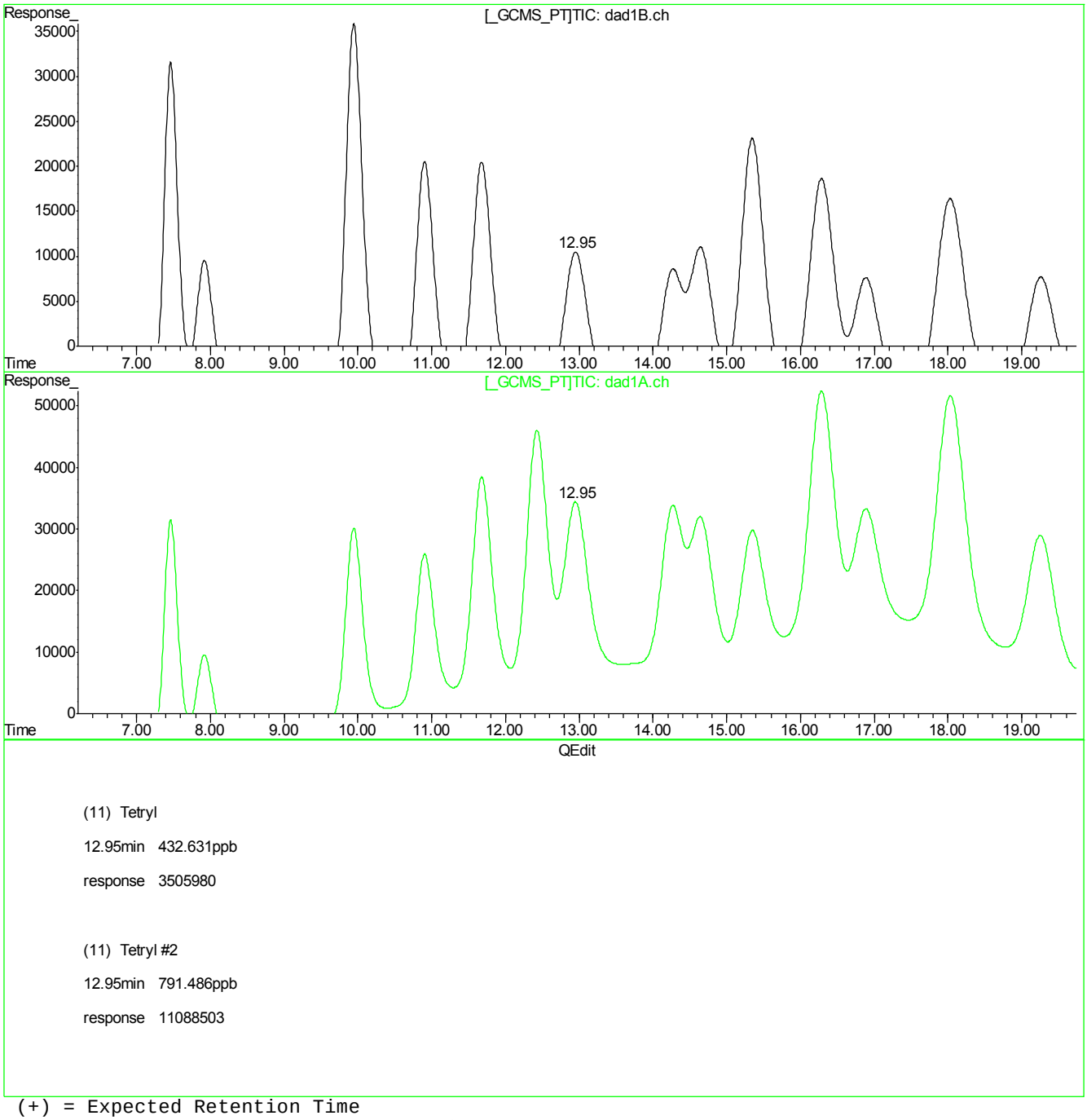
response 8021507

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:35 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(11) Tetryl

12.95min 432.631ppb

response 3505980

(11) Tetryl #2

12.95min 791.486ppb

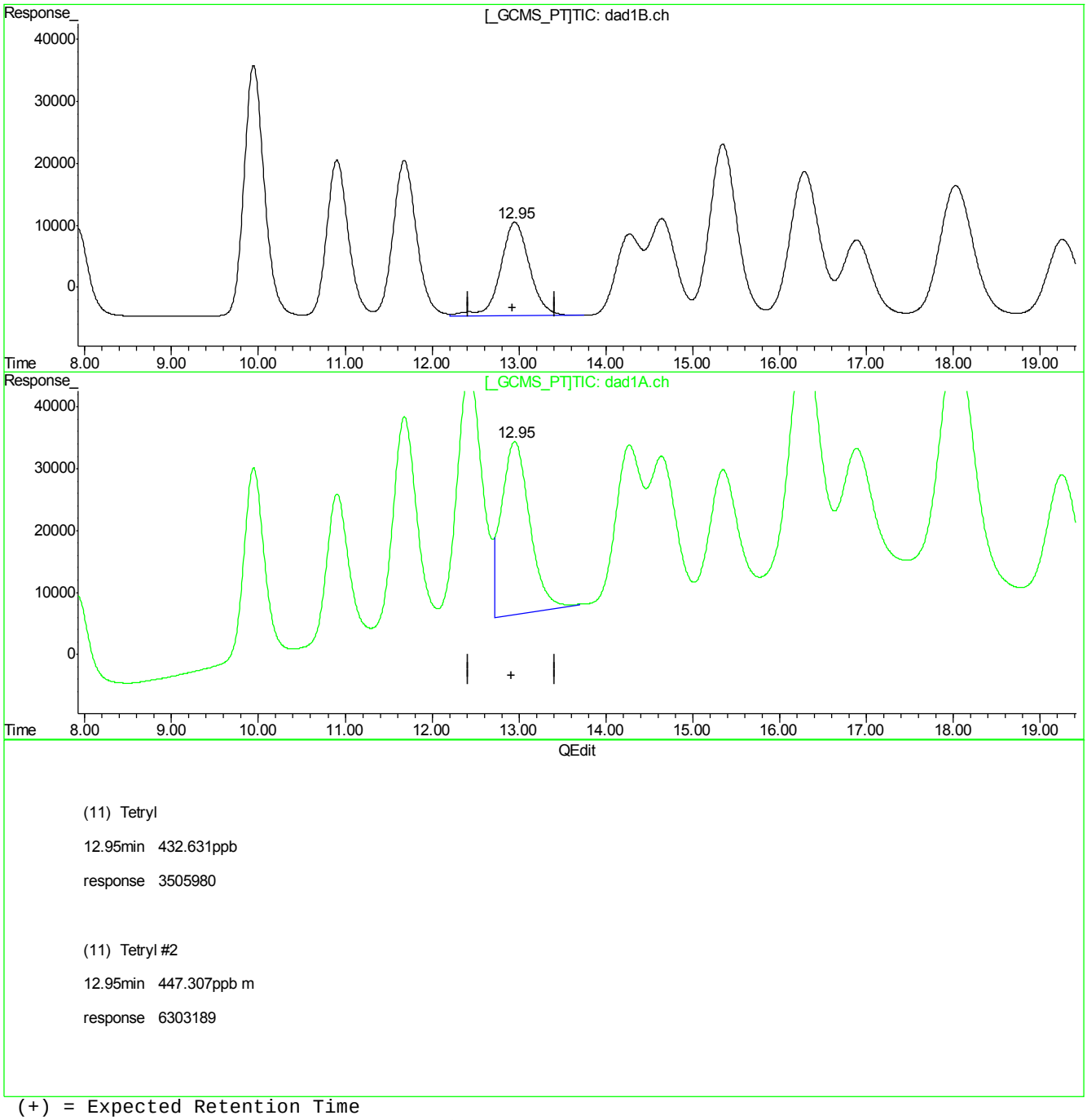
response 11088503

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:41 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(11) Tetryl

12.95min 432.631ppb

response 3505980

(11) Tetryl #2

12.95min 447.307ppb m

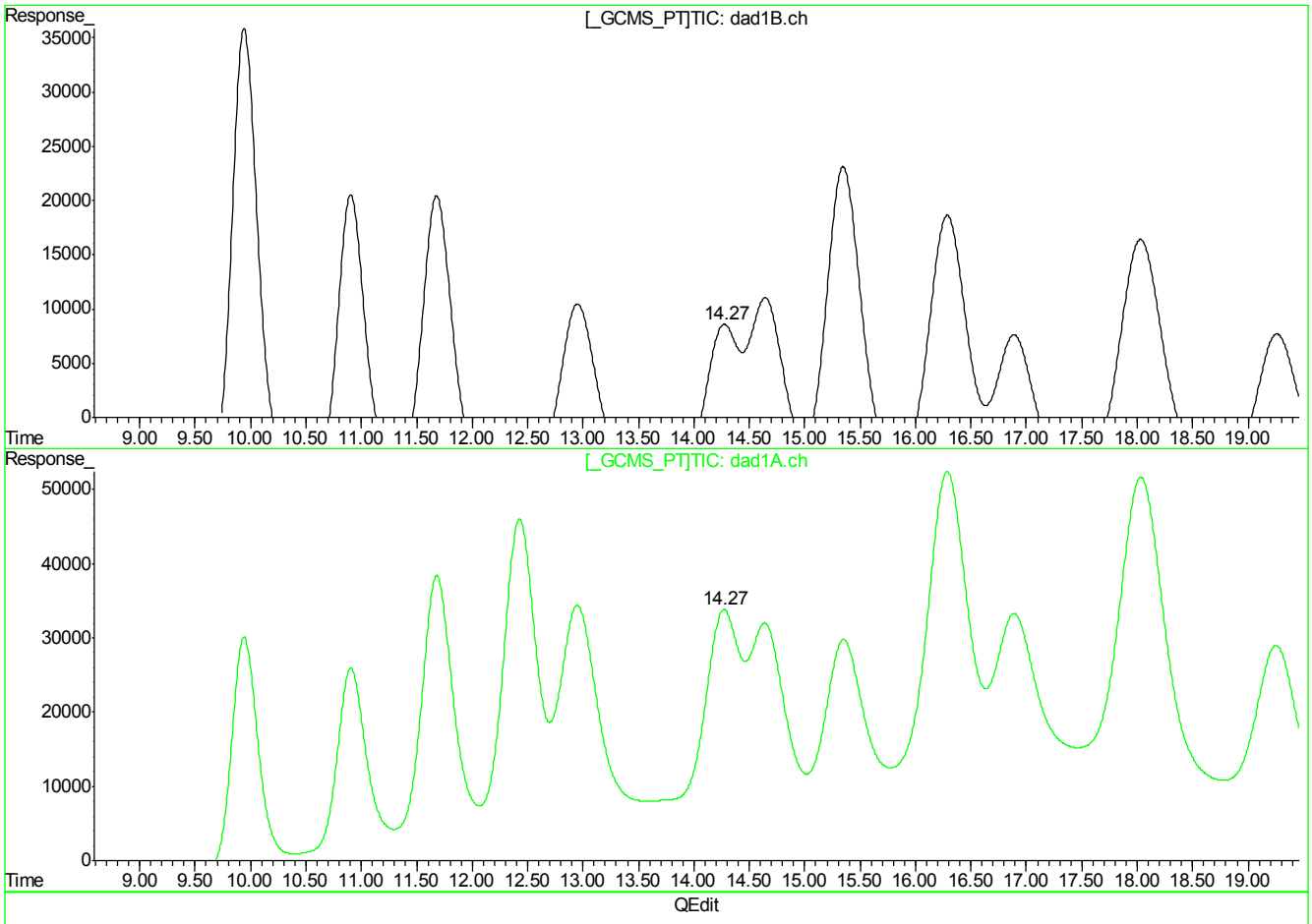
response 6303189

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:51 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.28min 496.546ppb

response 2579498

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 944.575ppb

response 10218058

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:02:57 2018

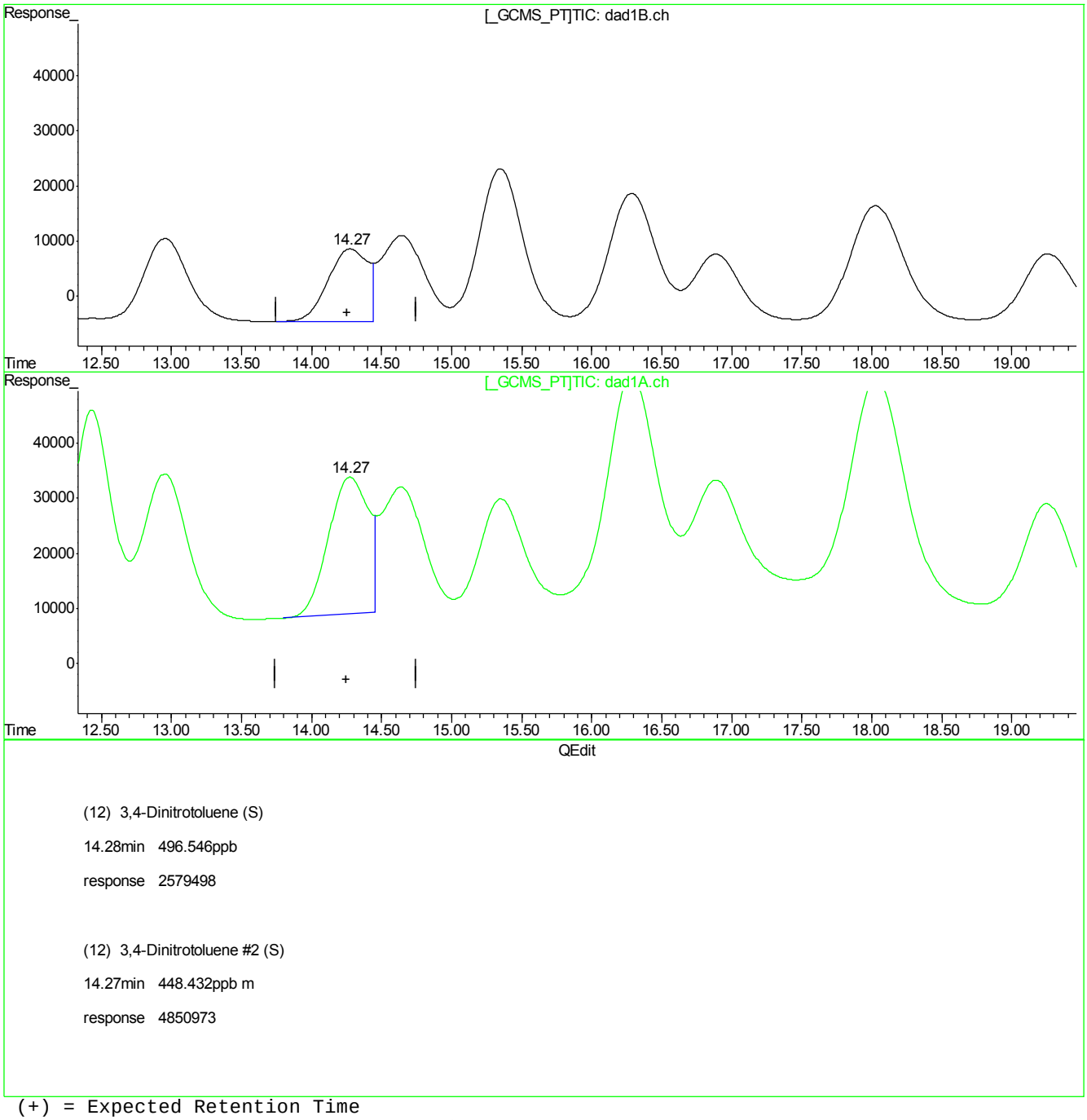
7.3.1.15

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

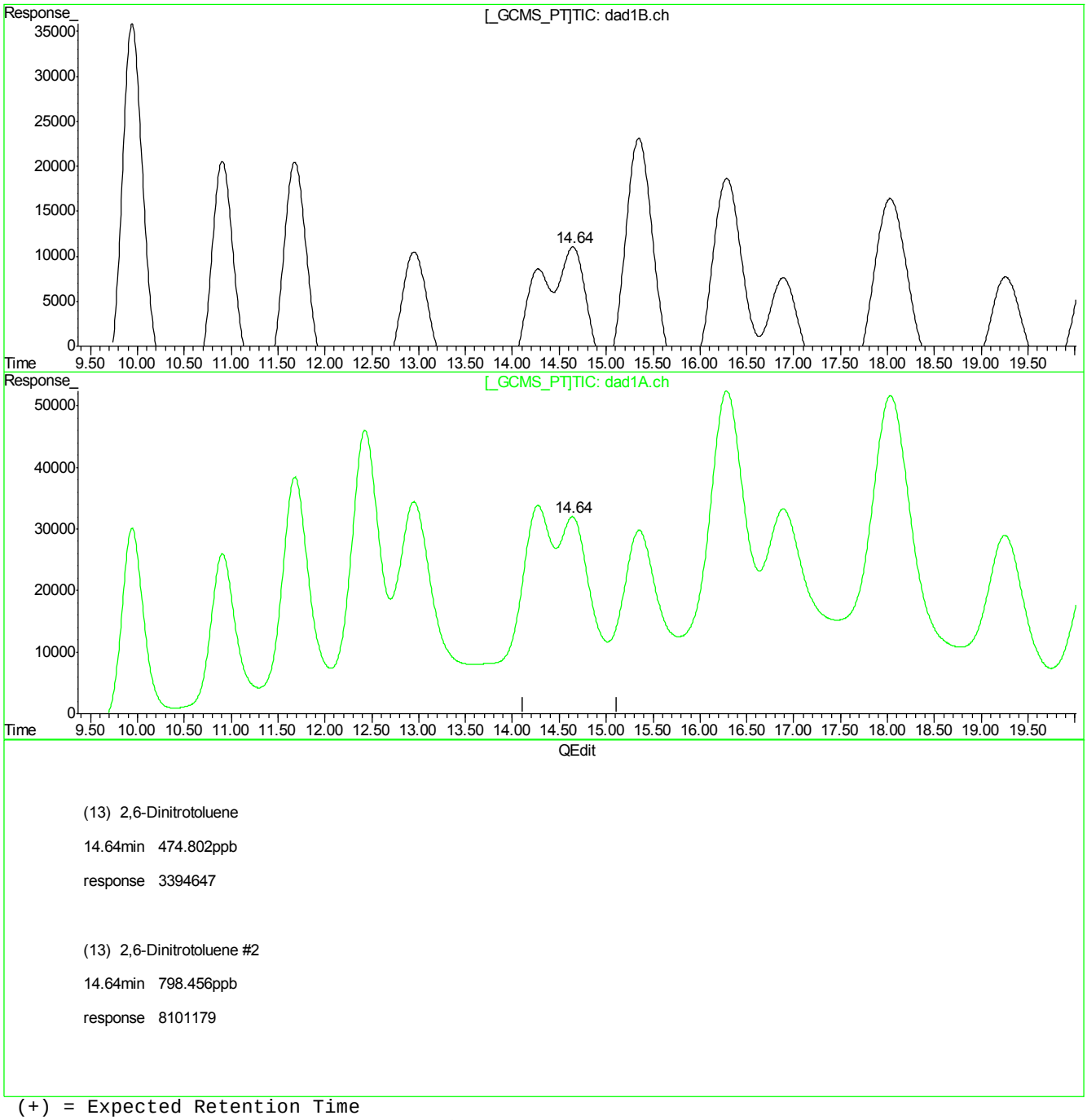


(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.64min 474.802ppb

response 3394647

(13) 2,6-Dinitrotoluene #2

14.64min 798.456ppb

response 8101179

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:12 2018

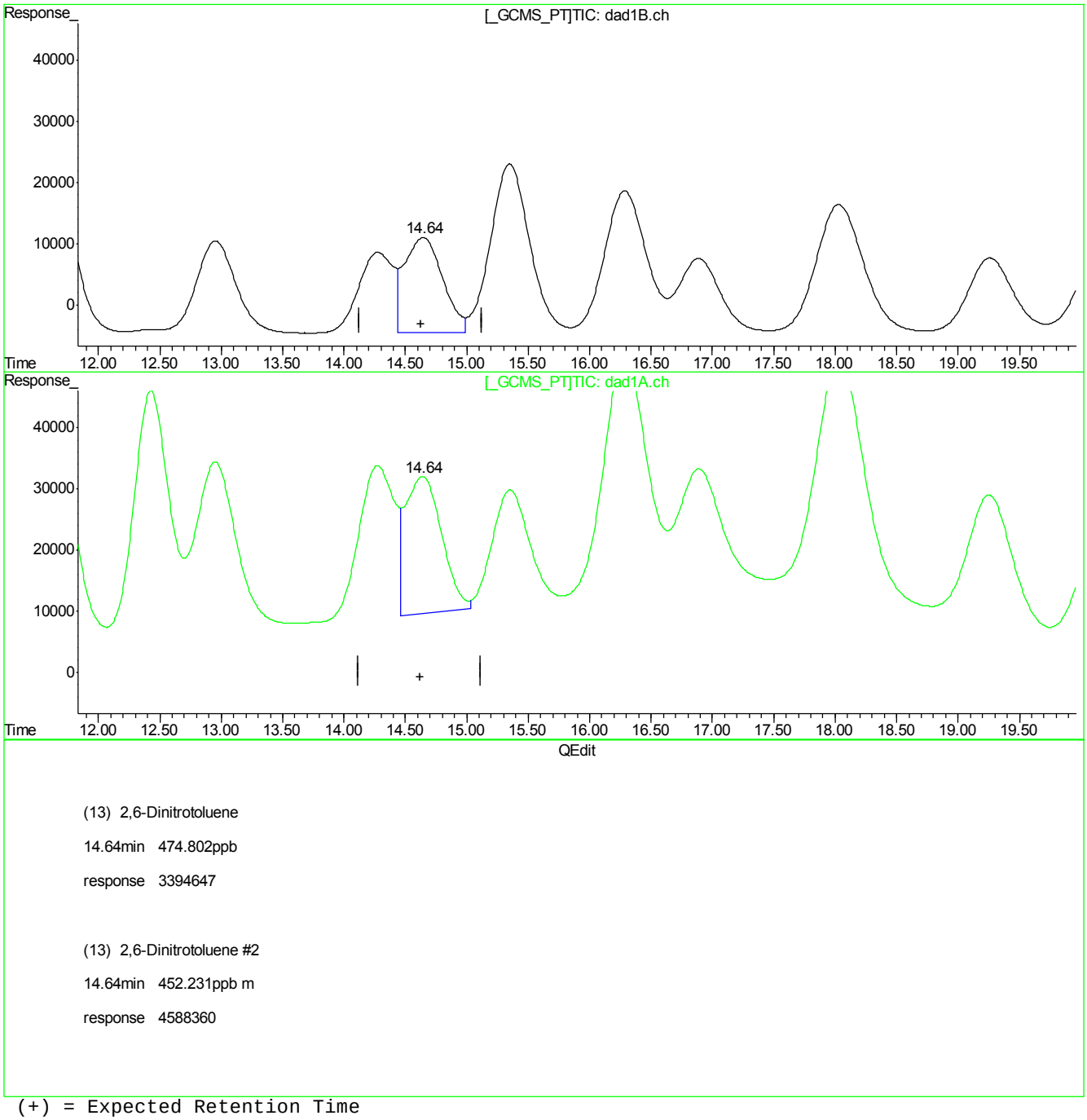
7.3.1.17

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.64min 474.802ppb

response 3394647

(13) 2,6-Dinitrotoluene #2

14.64min 452.231ppb m

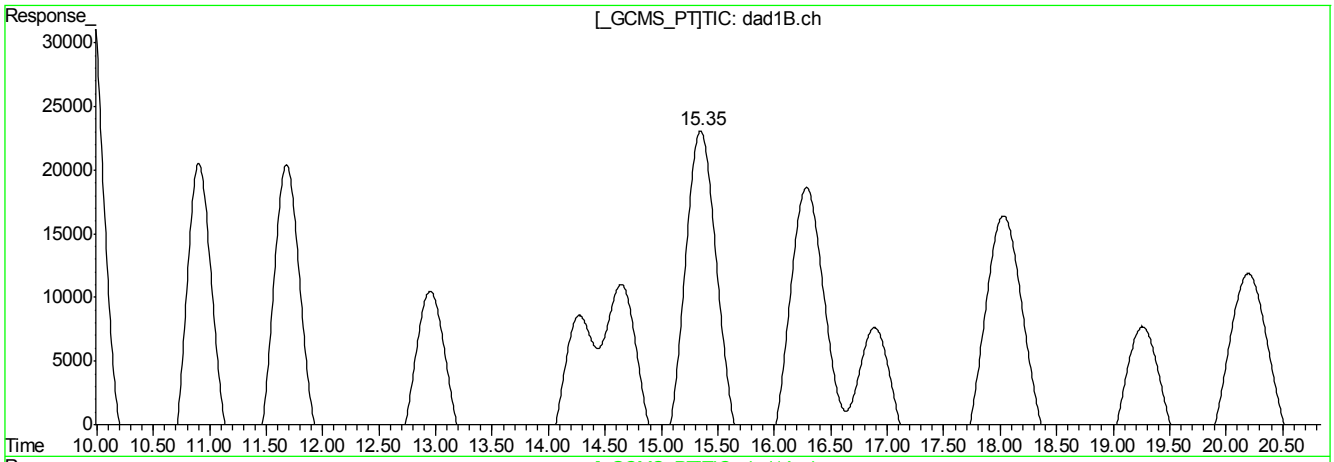
response 4588360

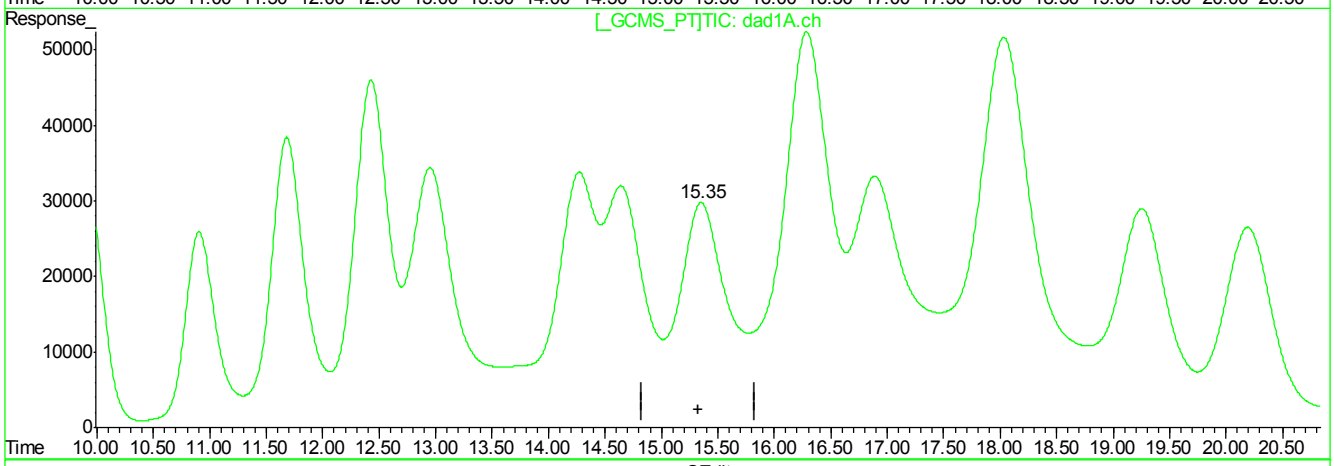
(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:21 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(14) 2,4-Dinitrotoluene

15.35min 464.817ppb

response 6093328

(14) 2,4-Dinitrotoluene #2

15.35min 976.312ppb

response 9178960

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:28 2018

7.3.1.19

7

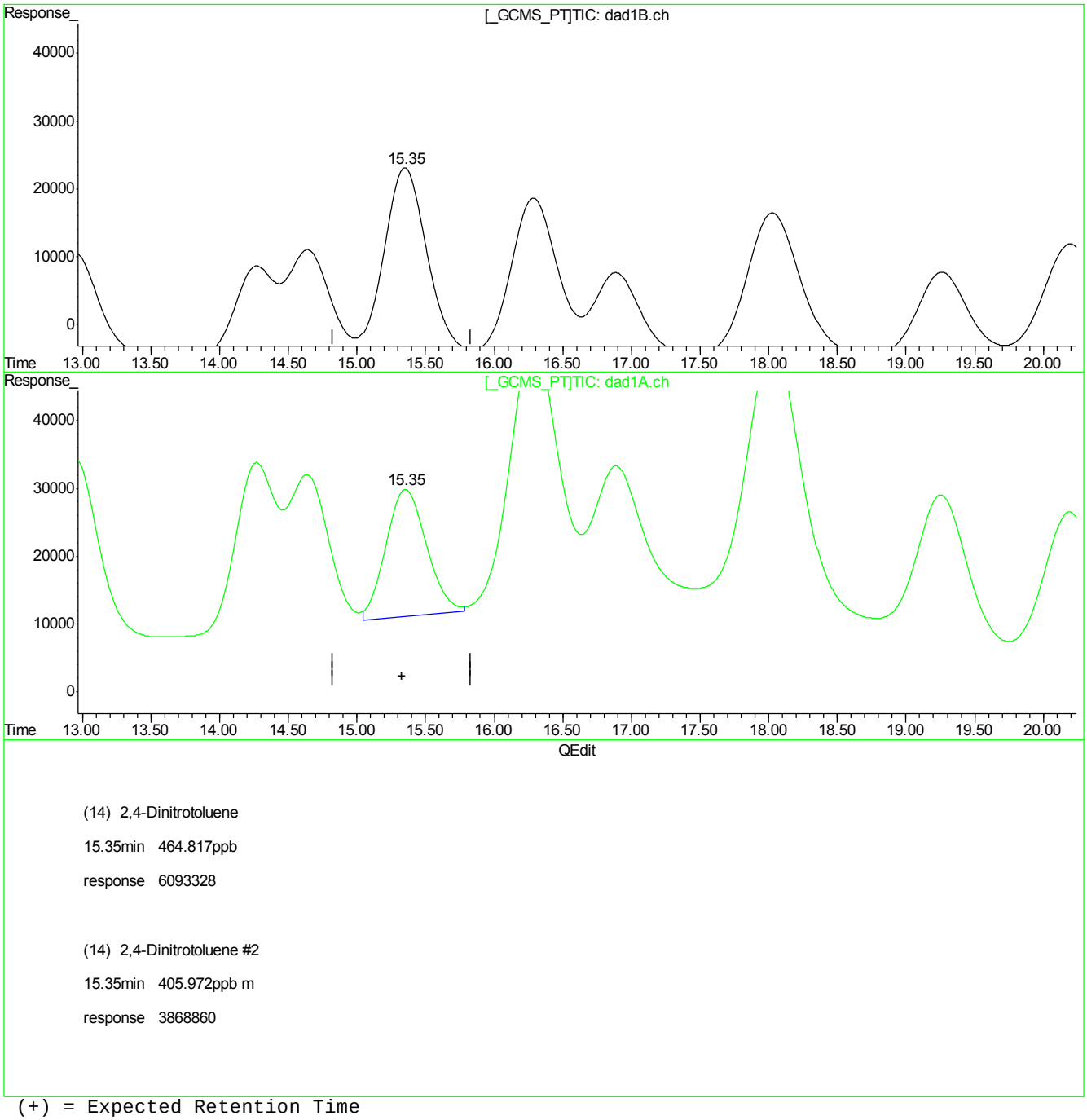
GG614647.D edits: 2,4-Dinitrotoluene

FA53800

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.35min 464.817ppb

response 6093328

(14) 2,4-Dinitrotoluene #2

15.35min 405.972ppb m

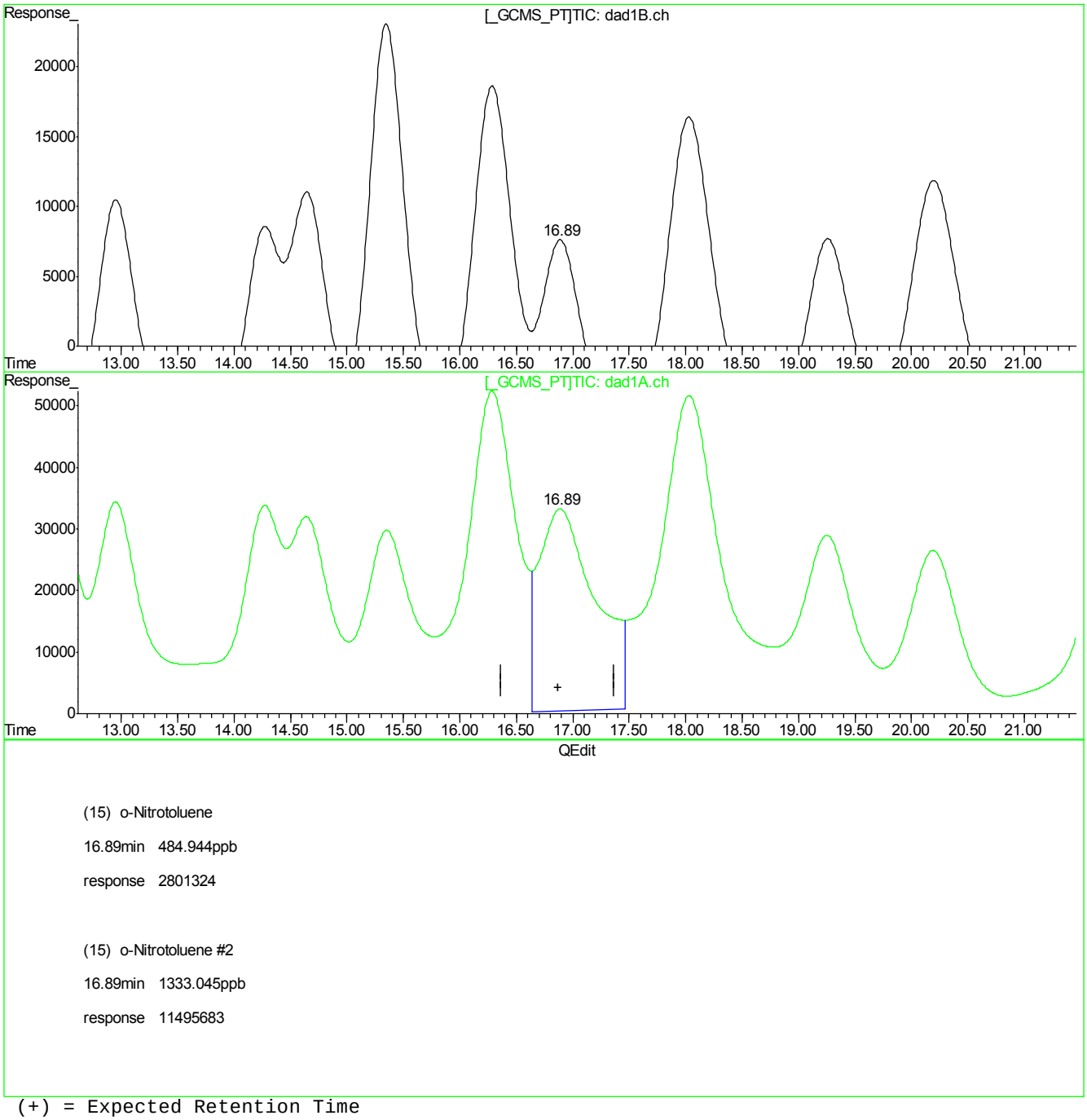
response 3868860

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:34 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.89min 484.944ppb

response 2801324

(15) o-Nitrotoluene #2

16.89min 1333.045ppb

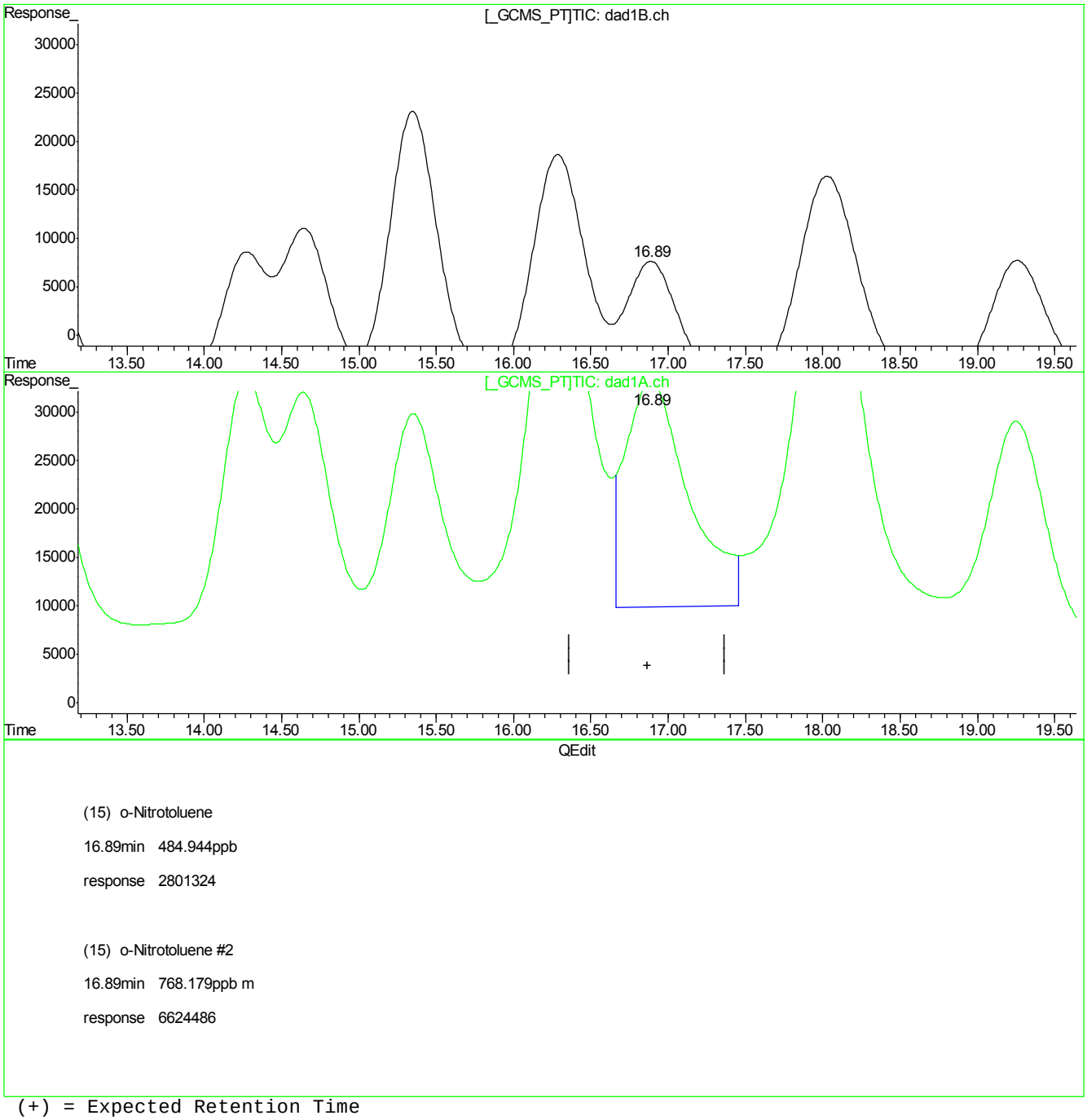
response 11495683

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:03:39 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.89min 484.944ppb

response 2801324

(15) o-Nitrotoluene #2

16.89min 768.179ppb m

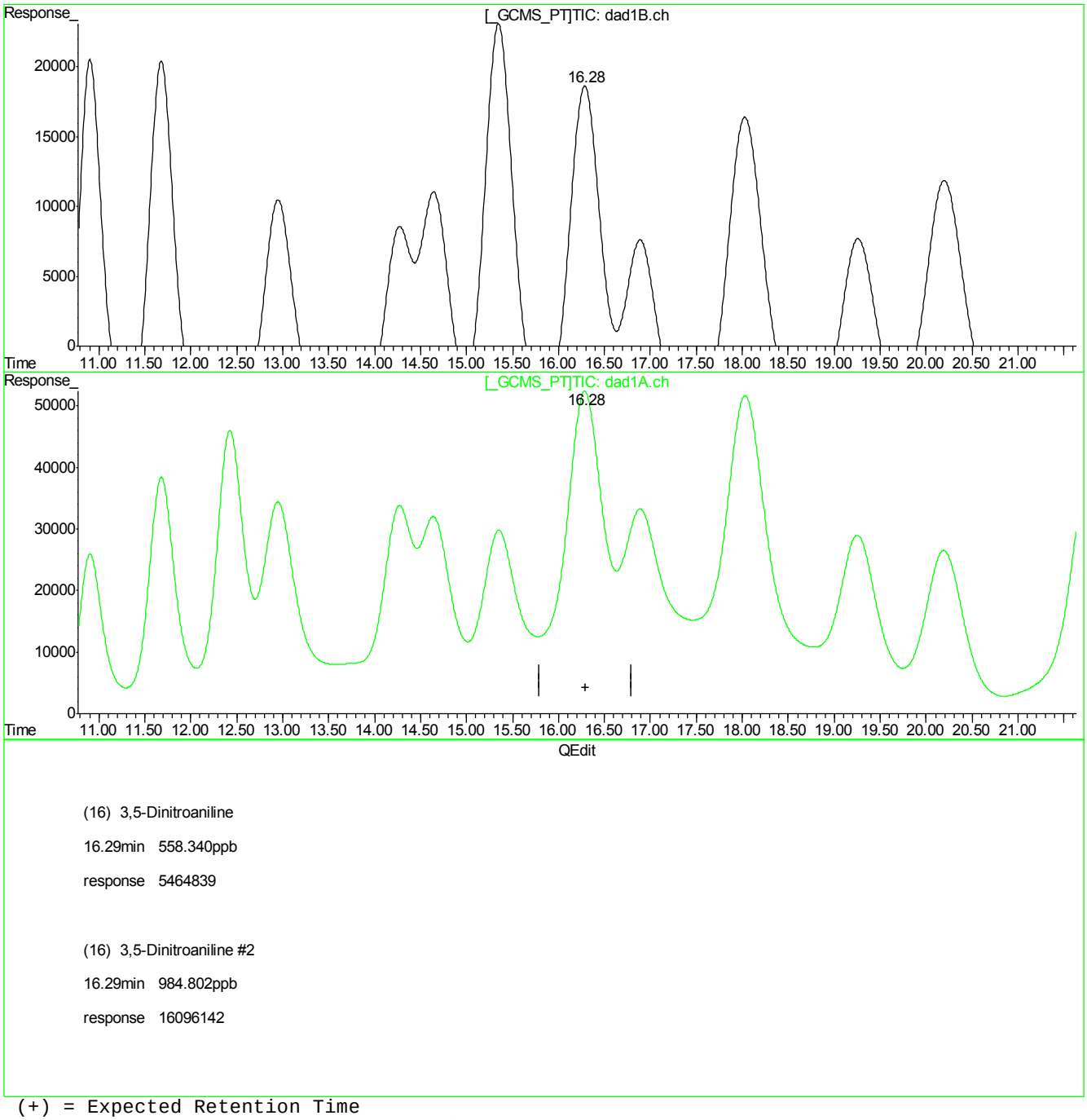
response 6624486

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.29min 558.340ppb

response 5464839

(16) 3,5-Dinitroaniline #2

16.29min 984.802ppb

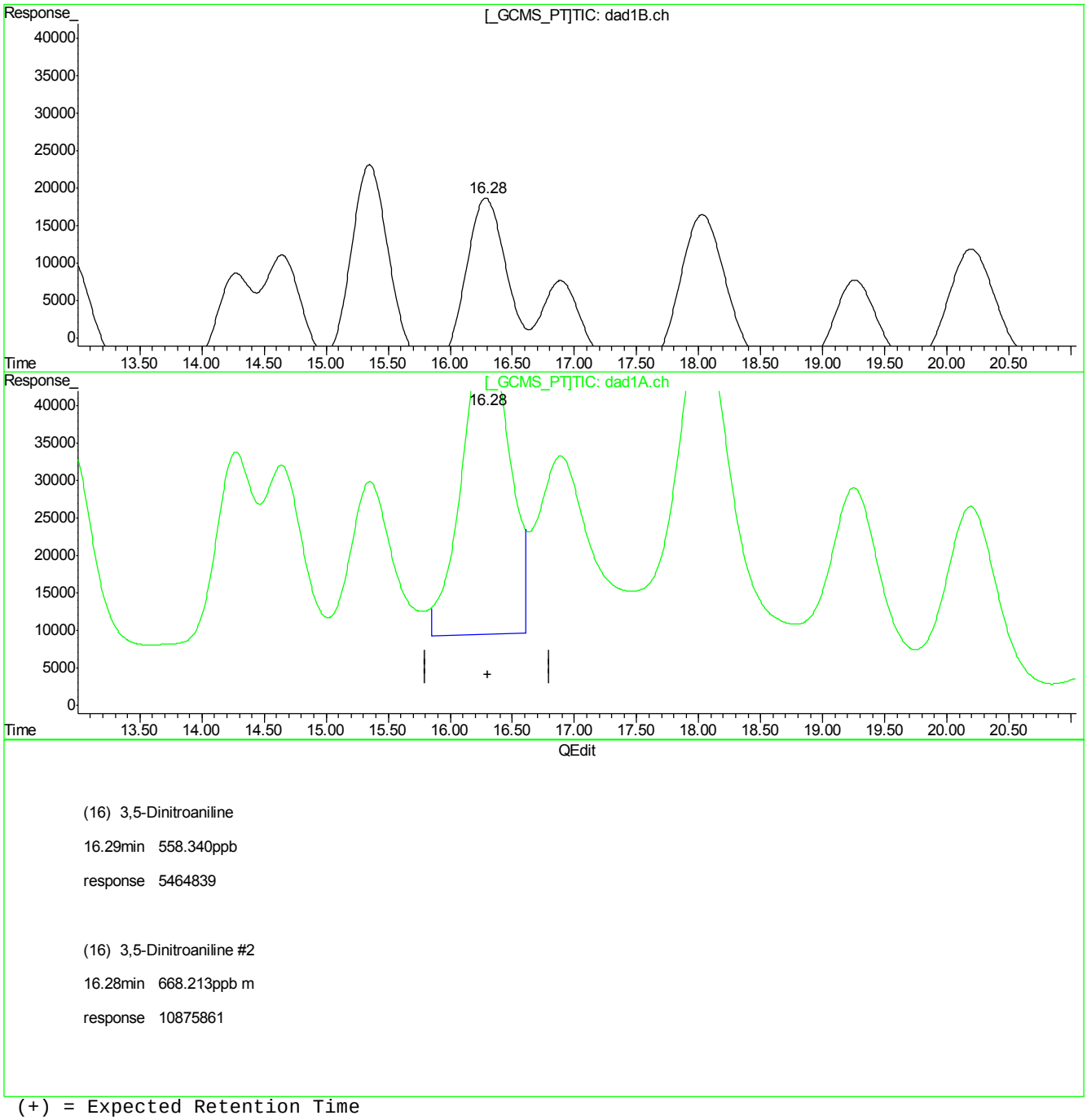
response 16096142

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:19 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.29min 558.340ppb

response 5464839

(16) 3,5-Dinitroaniline #2

16.28min 668.213ppb m

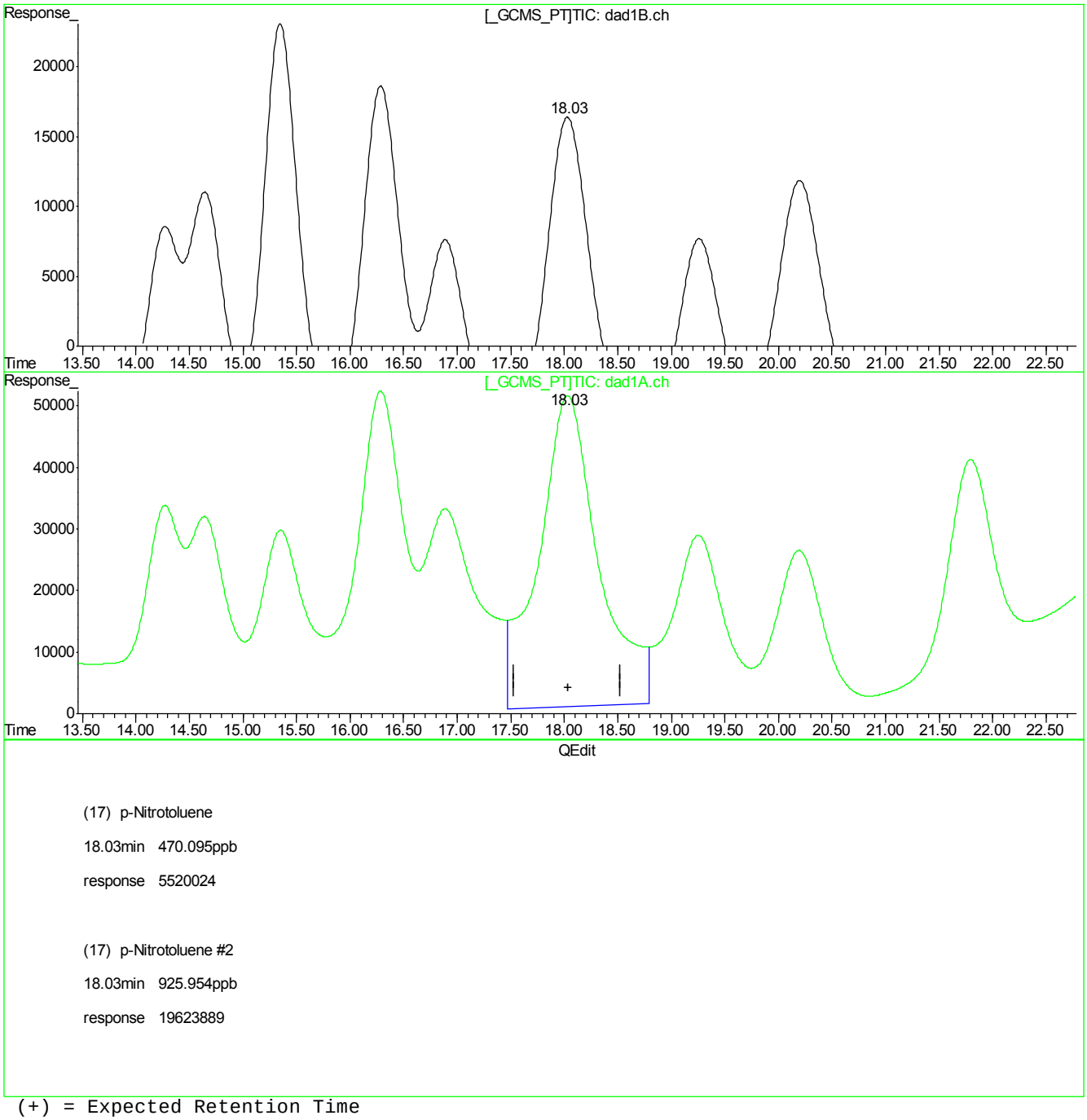
response 10875861

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:30 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

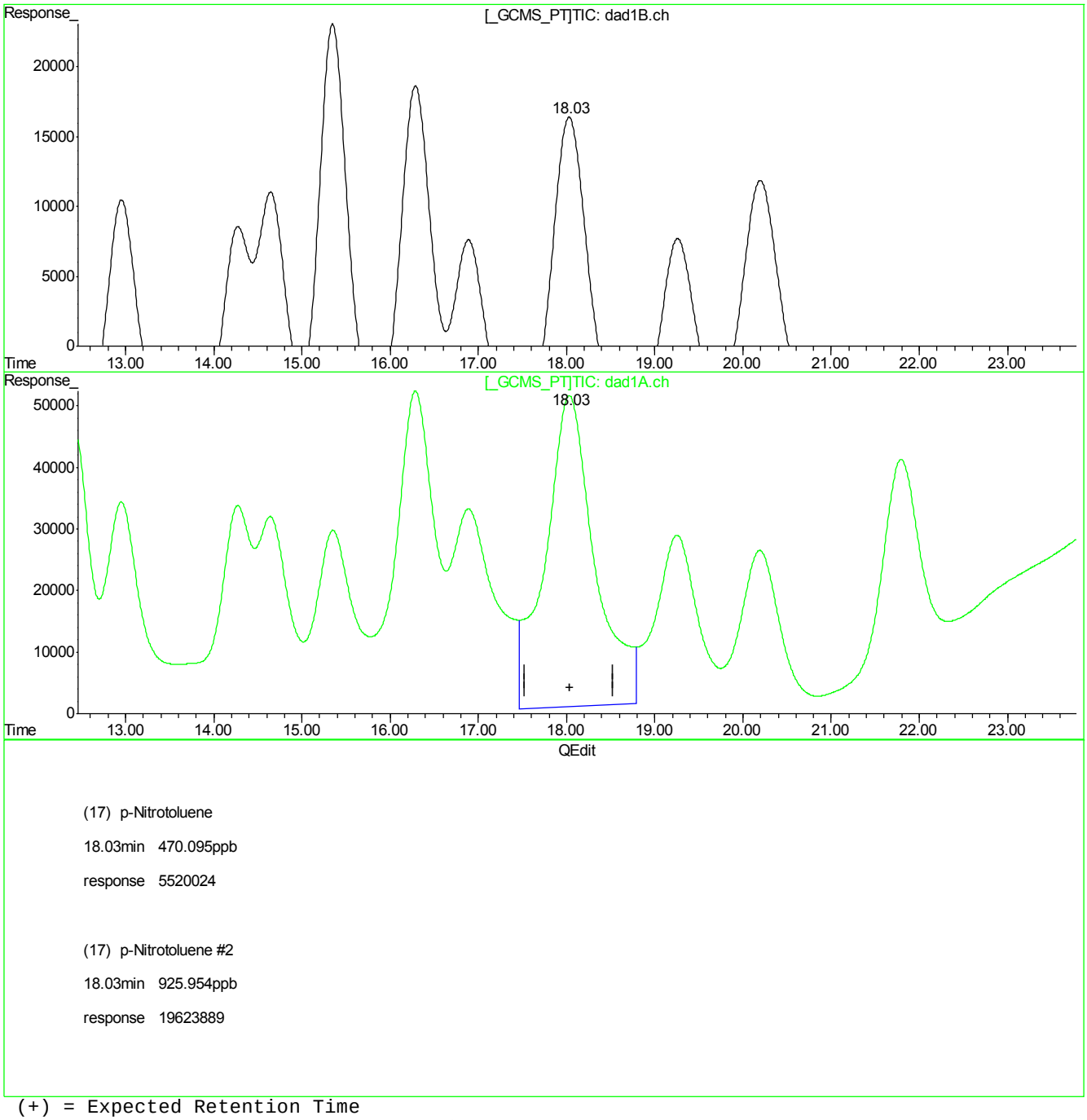


(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:35 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.03min 470.095ppb

response 5520024

(17) p-Nitrotoluene #2

18.03min 925.954ppb

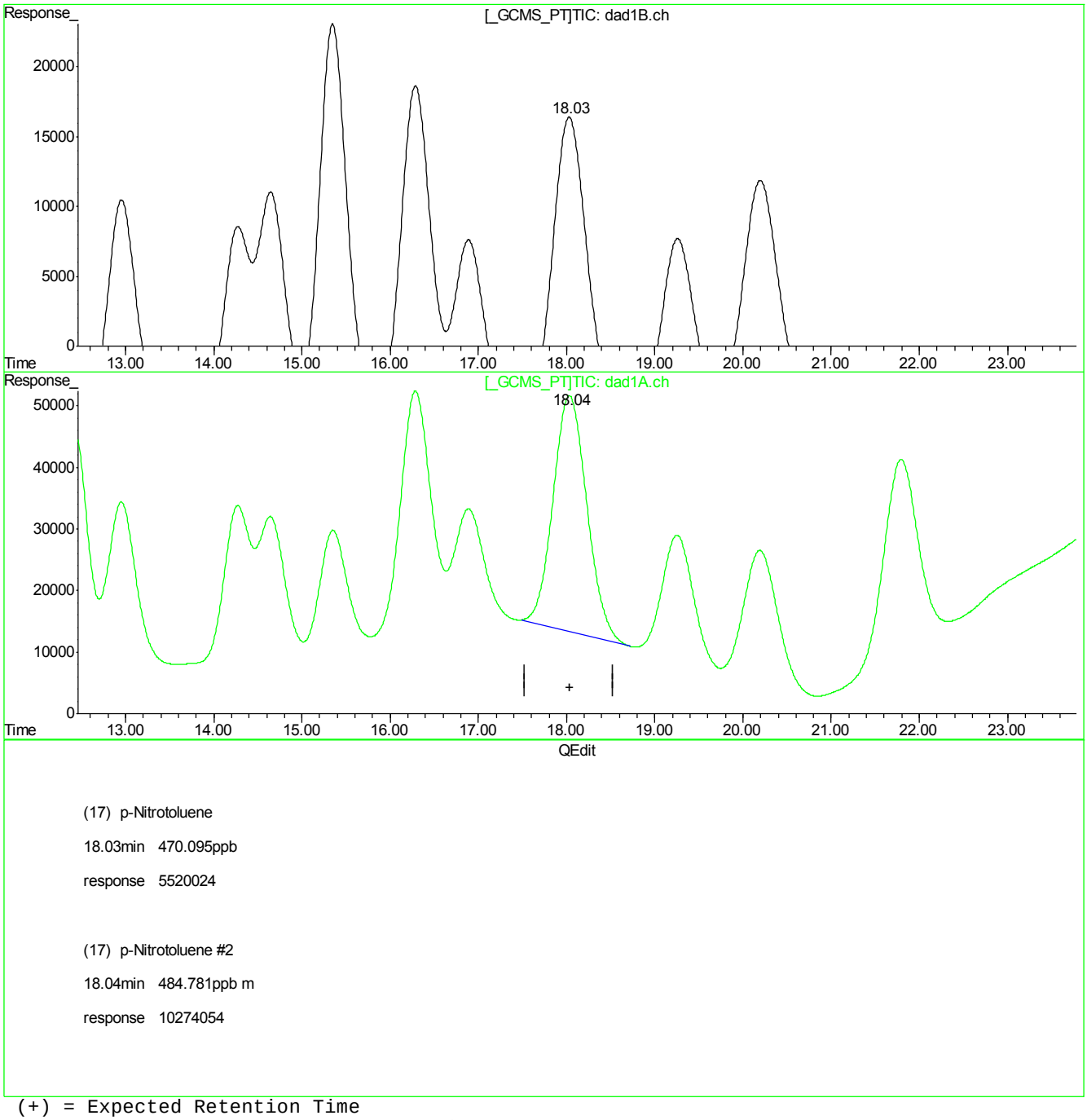
response 19623889

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:40 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.03min 470.095ppb

response 5520024

(17) p-Nitrotoluene #2

18.04min 484.781ppb m

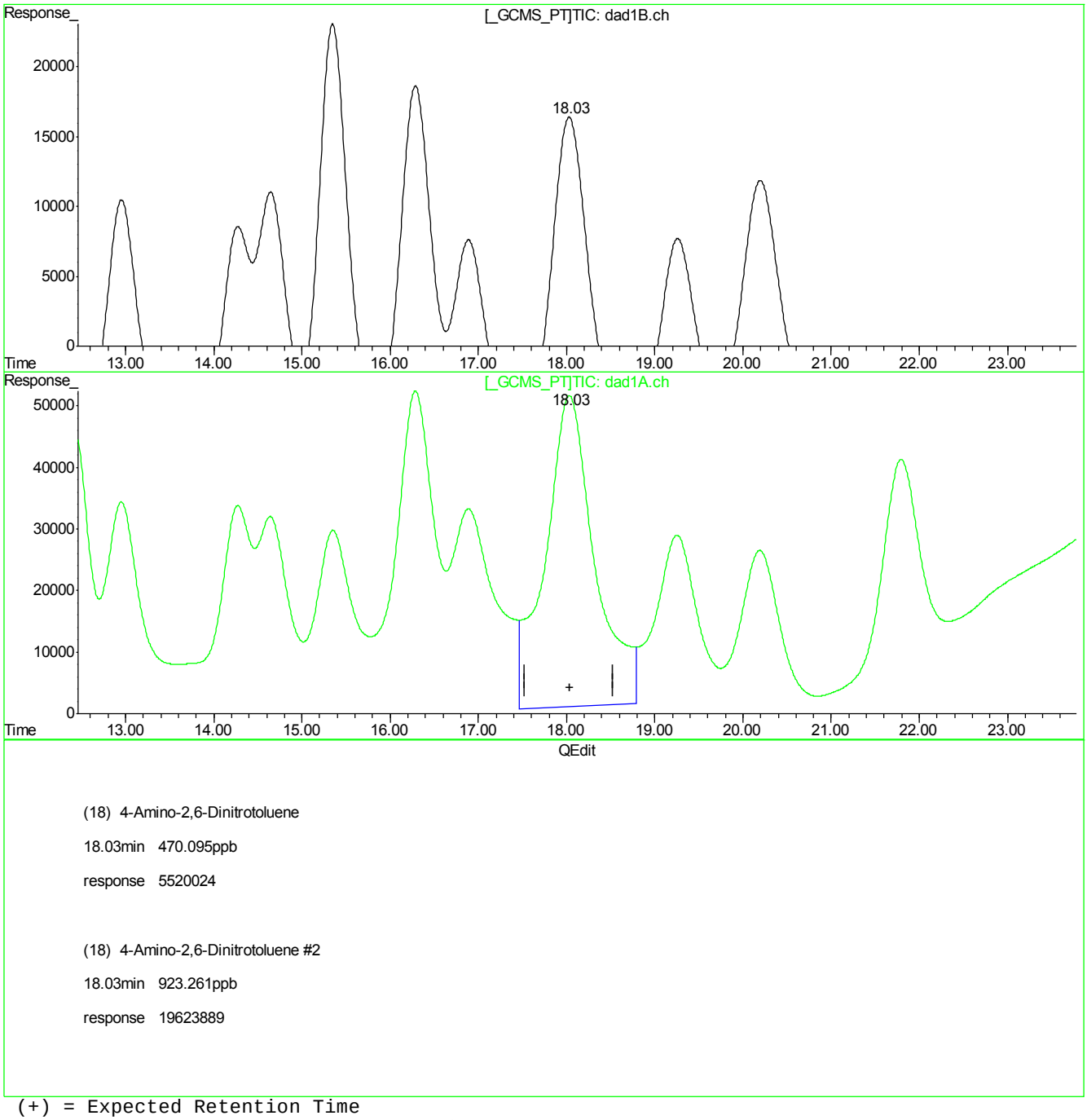
response 10274054

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:04:50 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

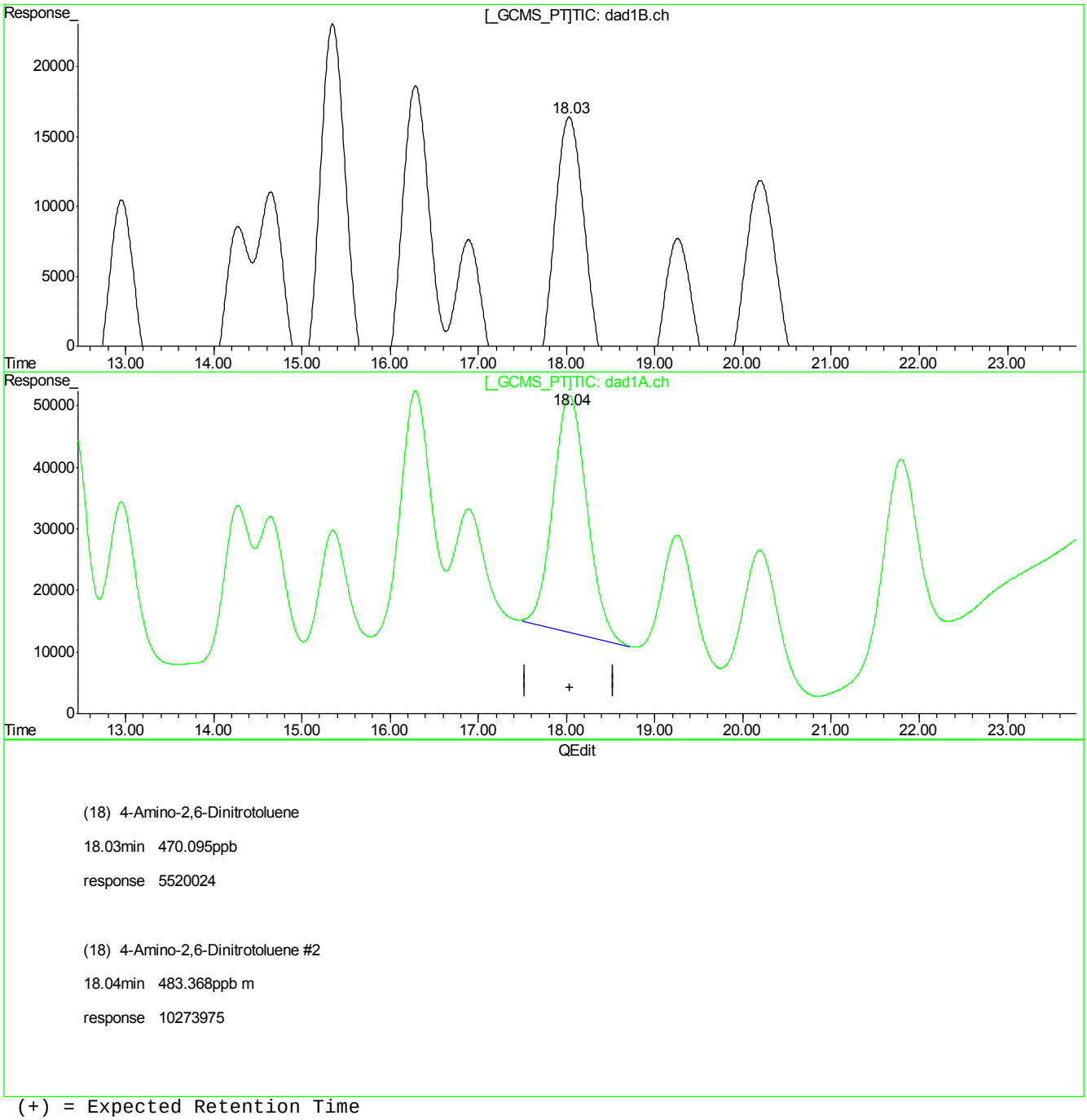


(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:11 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

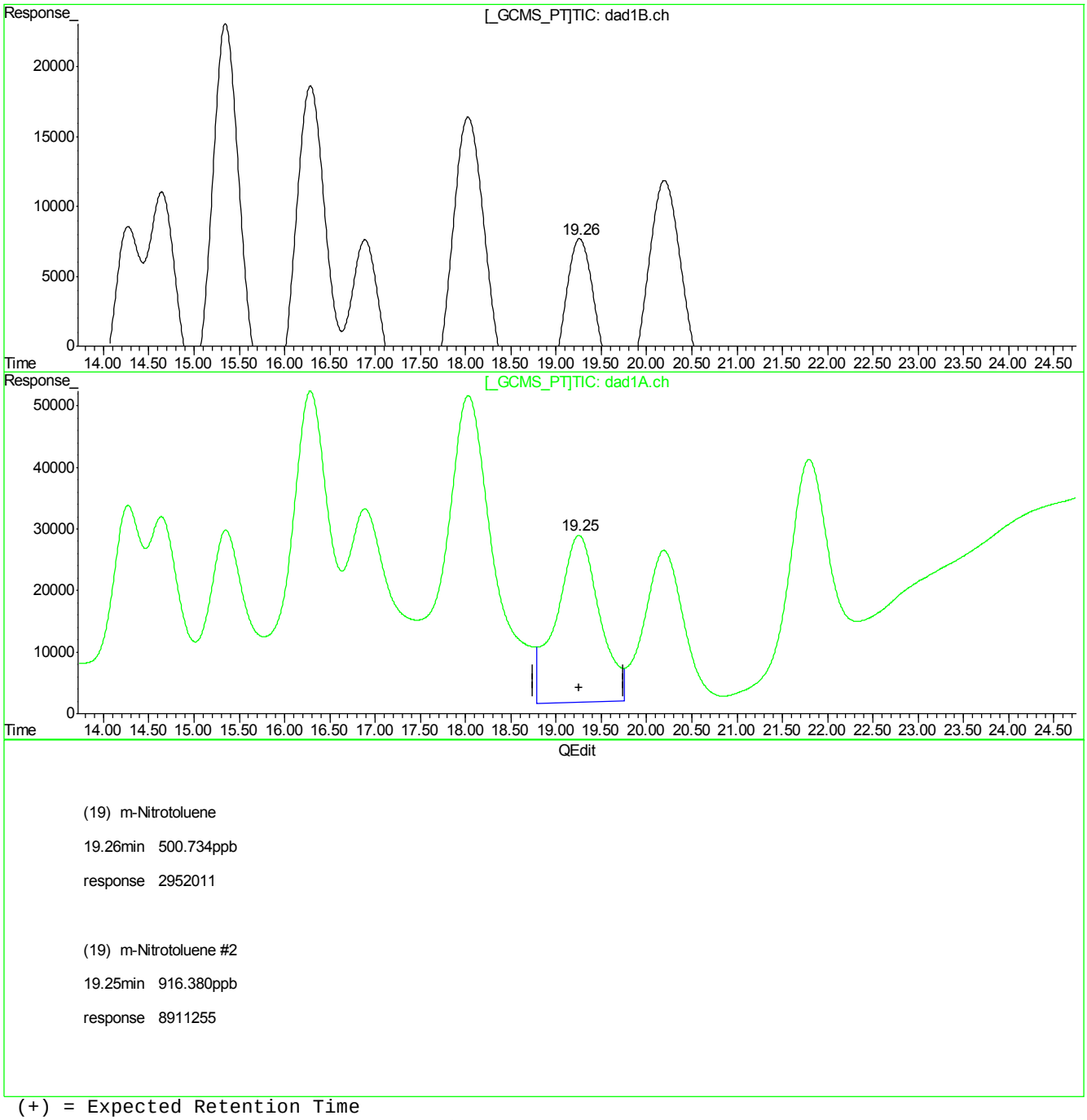


(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:17 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.26min 500.734ppb

response 2952011

(19) m-Nitrotoluene #2

19.25min 916.380ppb

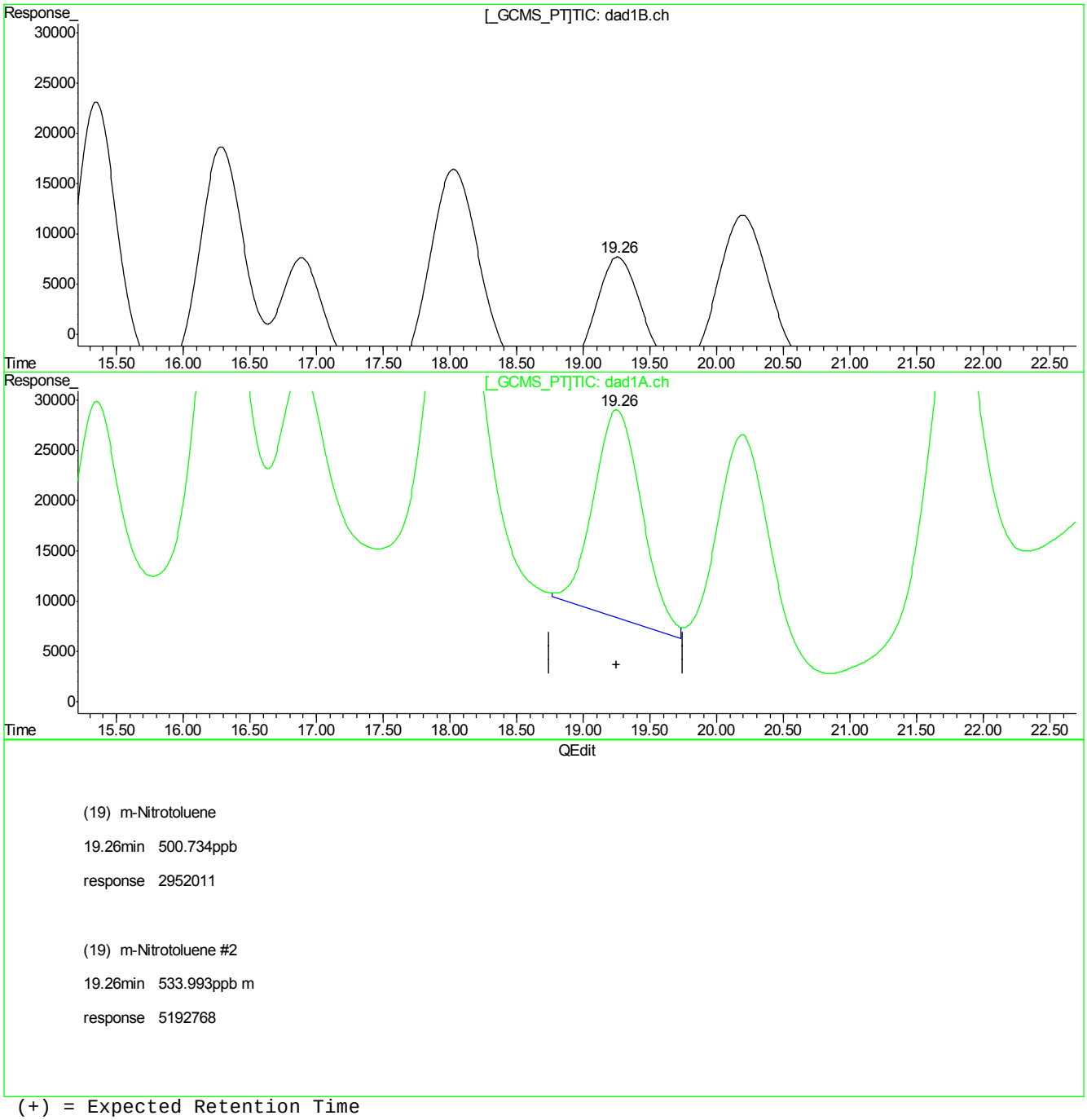
response 8911255

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.26min 500.734ppb

response 2952011

(19) m-Nitrotoluene #2

19.26min 533.993ppb m

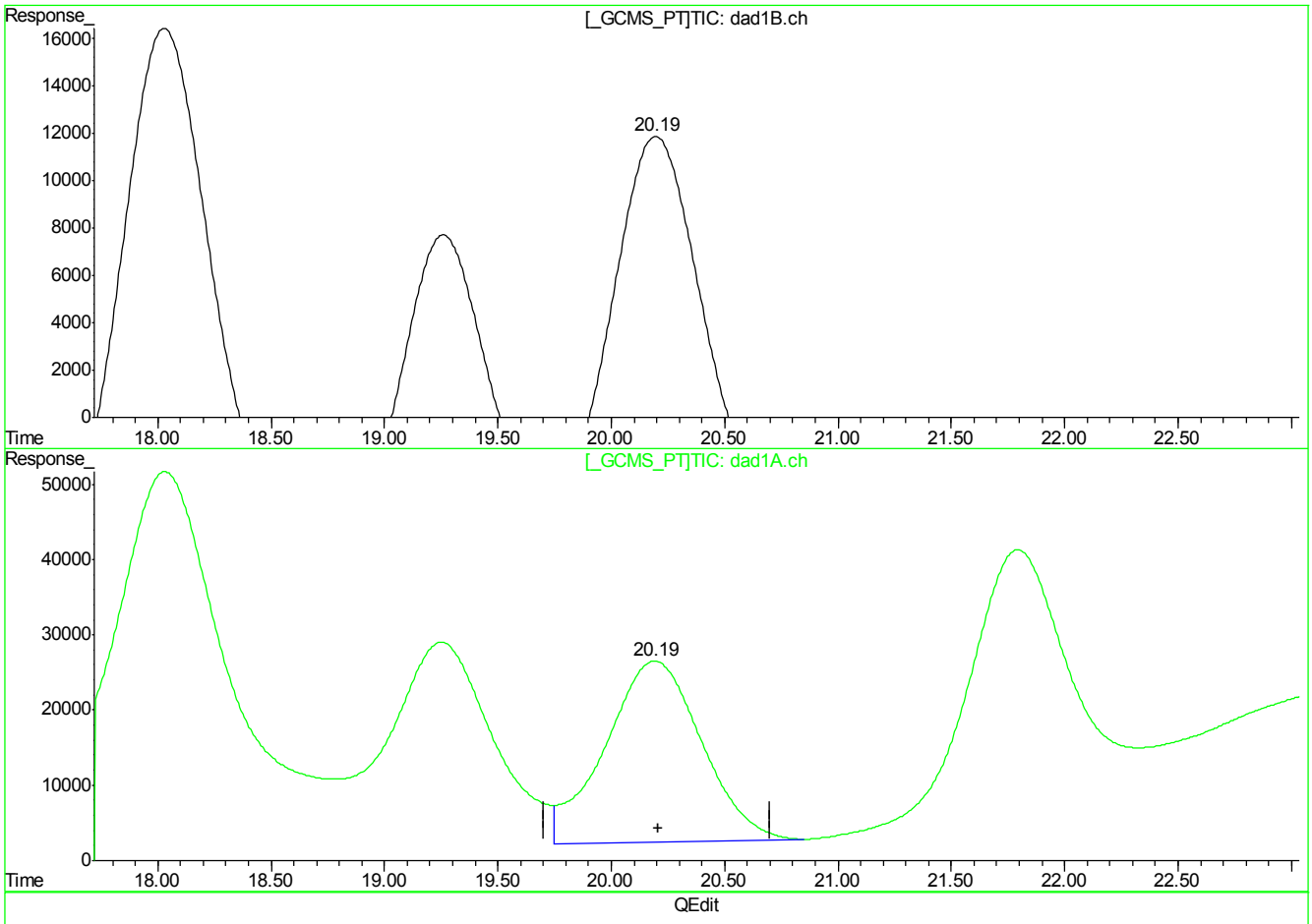
response 5192768

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:31 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.20min 493.637ppb

response 4454049

(20) 2-Amino-4,6-Dinitrotoluene #2

20.19min 595.630ppb

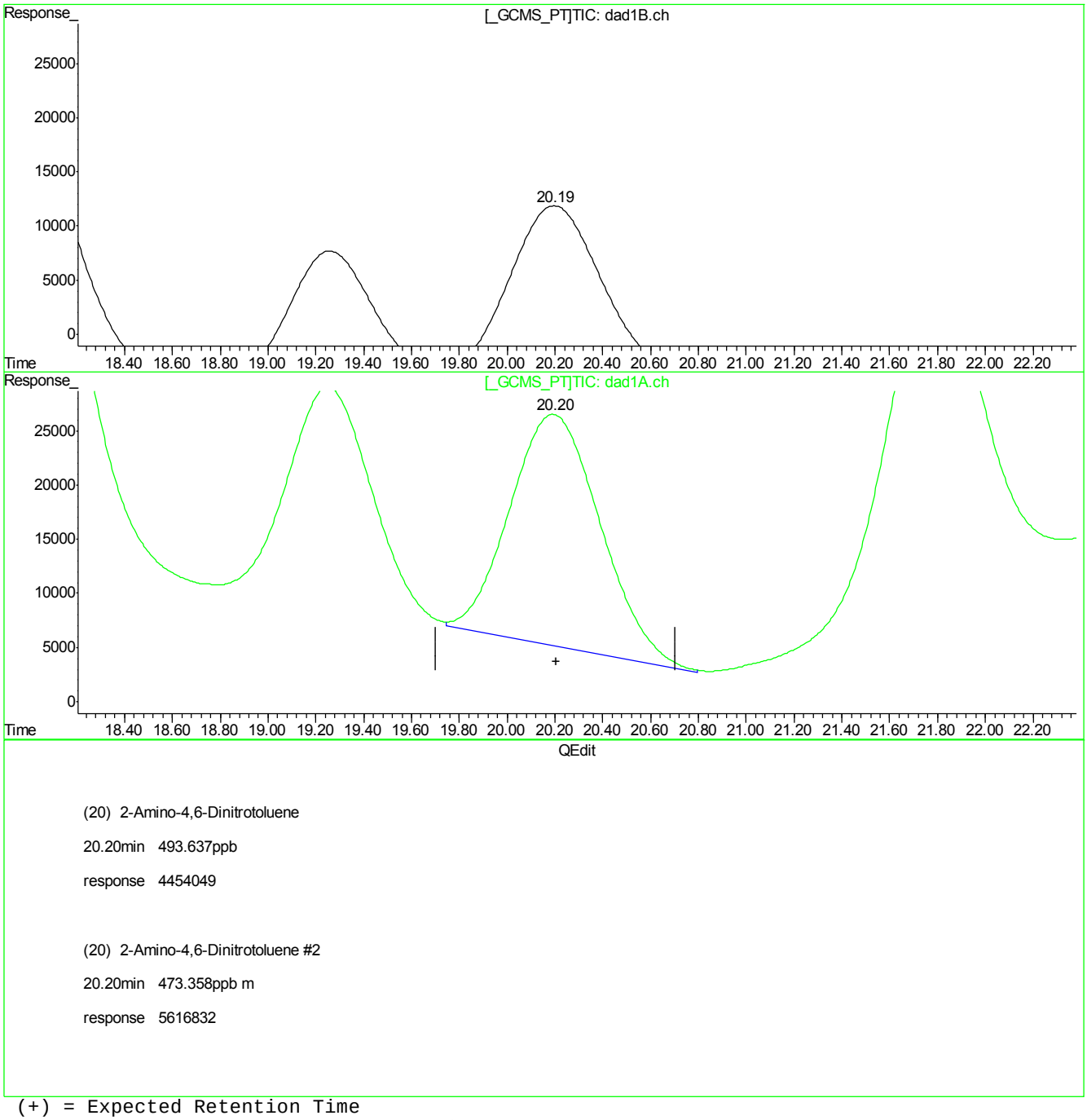
response 7124503

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:34 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.20min 493.637ppb

response 4454049

(20) 2-Amino-4,6-Dinitrotoluene #2

20.20min 473.358ppb m

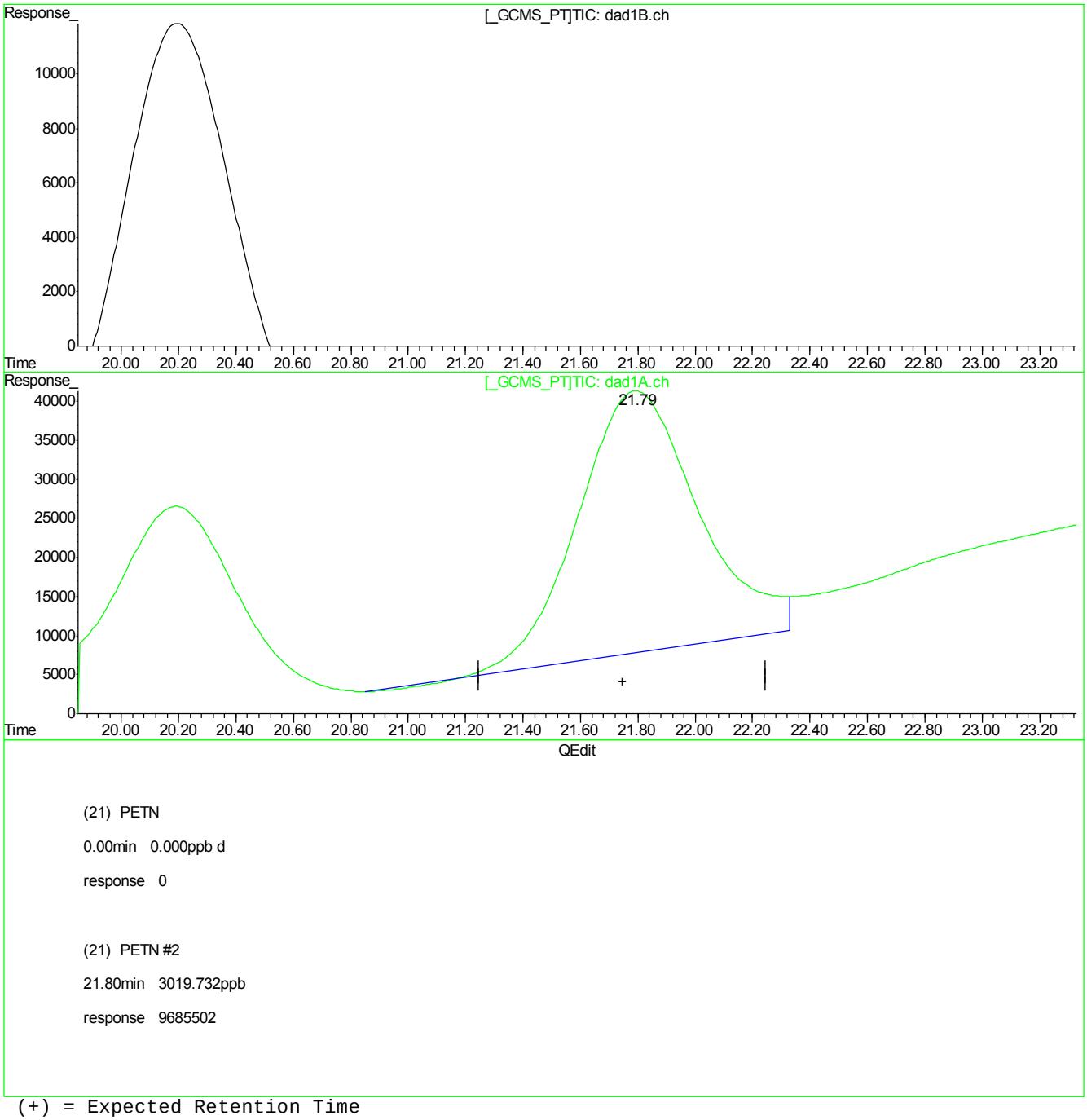
response 5616832

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:43 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.80min 3019.732ppb

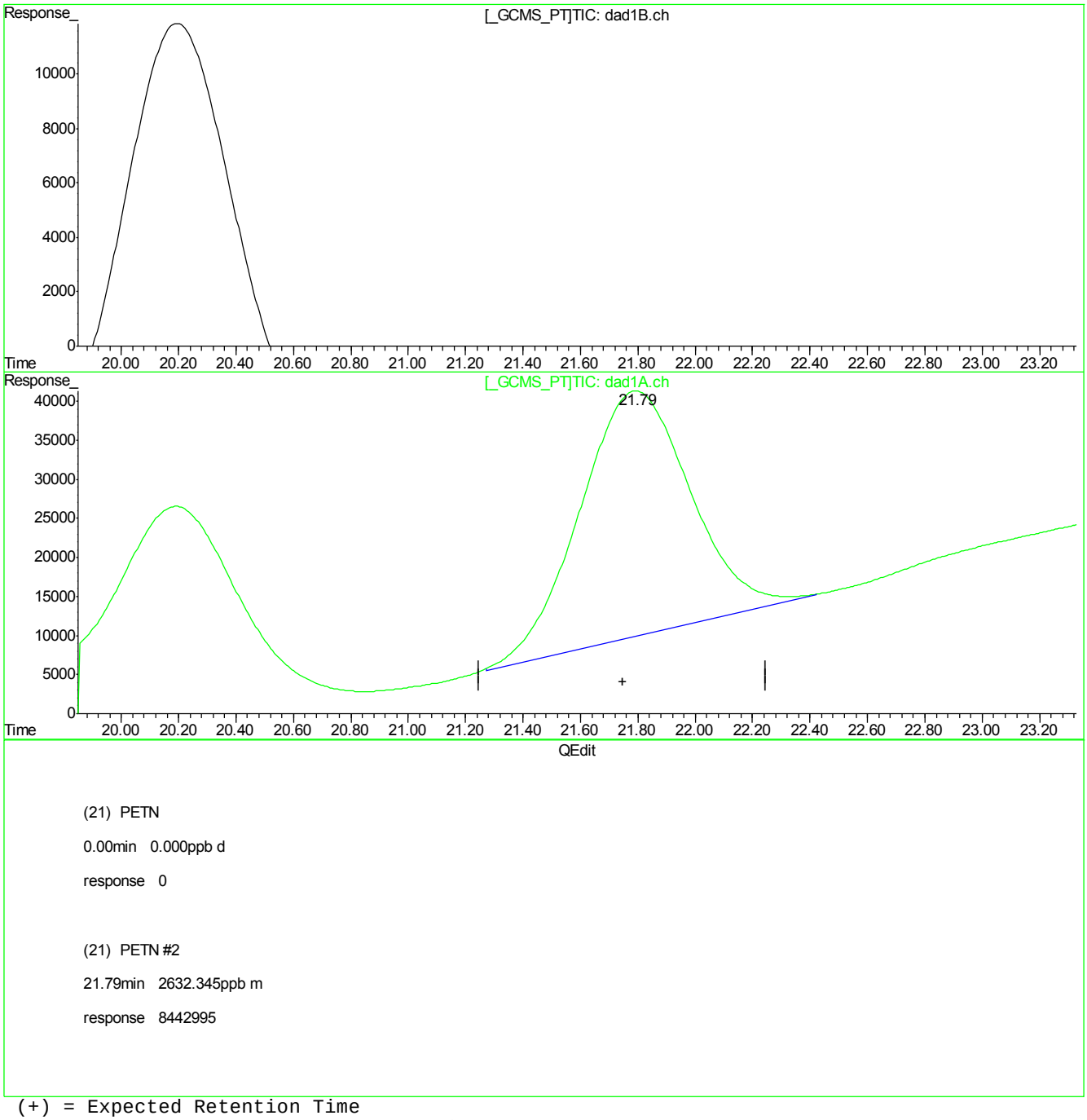
response 9685502

(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:46 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614647.D\dad1B.ch Vial: 66
Signal #2 : G:\DATA\0508RPB3\GG614647.D\dad1A.ch
Acq On : 09-May-2018, 09:10:09 Operator: evitam
Sample : op69946-bs Inst : G1315B
Misc : op69946,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:01 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614647.D 8330RPB.M_1113M.M Wed May 09 11:05:50 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1A.ch
Acq On : 10-May-2018, 10:57:14 Operator: evitam
Sample : OP69960-BS Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:02:49 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.99	9.99	1135262	1955697	424.286	414.804
	Spiked Amount 500.000	Range 69 - 134		Recovery =		84.86%	82.96%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.41	1.41	761931	2325296	407.427m	457.718m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.68	2.68	861057	1423332	402.667	428.199
6)	1,3,5-Trinitrobe	4.29	4.29	1967746	3777926	452.221	452.550
7)	1,3-Dinitrobenze	5.44	5.44	2414184	1590126	435.461	426.951m
8)	3,5-Dinitroanili	5.71	5.71	2285376	3681139	467.321	492.210
9)	Nitrobenzene	6.93	6.93	1504351	1442970	412.851	435.174
10)	Nitroglycerin	0.00	8.21	0	2829613	N.D. d	2208.170
11)	Tetryl	8.43	8.21	1357017	2829613	461.109	544.809
12)	2,4,6-Trinitroto	8.86	8.86	1780938	2103692	422.008	464.111
13)	2-Amino-4,6-Dini	9.08	9.09	1759941	2748193	464.918	512.356
14)	4-Amino-2,6-Dini	9.51	9.52	1249232	2491267	476.485	480.767
16)	2,4-Dinitrotolue	10.62	10.62	2338909	1449405	444.574	490.786
17)	2,6-Dinitrotolue	11.06	11.07	1450813	1756311	419.763	514.348
18)	o-Nitrotoluene	14.33	14.34	1108633	1540556	443.837	470.291
19)	p-Nitrotoluene	14.89	14.89	1749418	1637193	443.223	519.637
20)	m-Nitrotoluene	15.87	15.87	1625601	1914226	455.708	475.717
21)	PETN	0.00	18.27	0	3136153	N.D. d	2258.124m

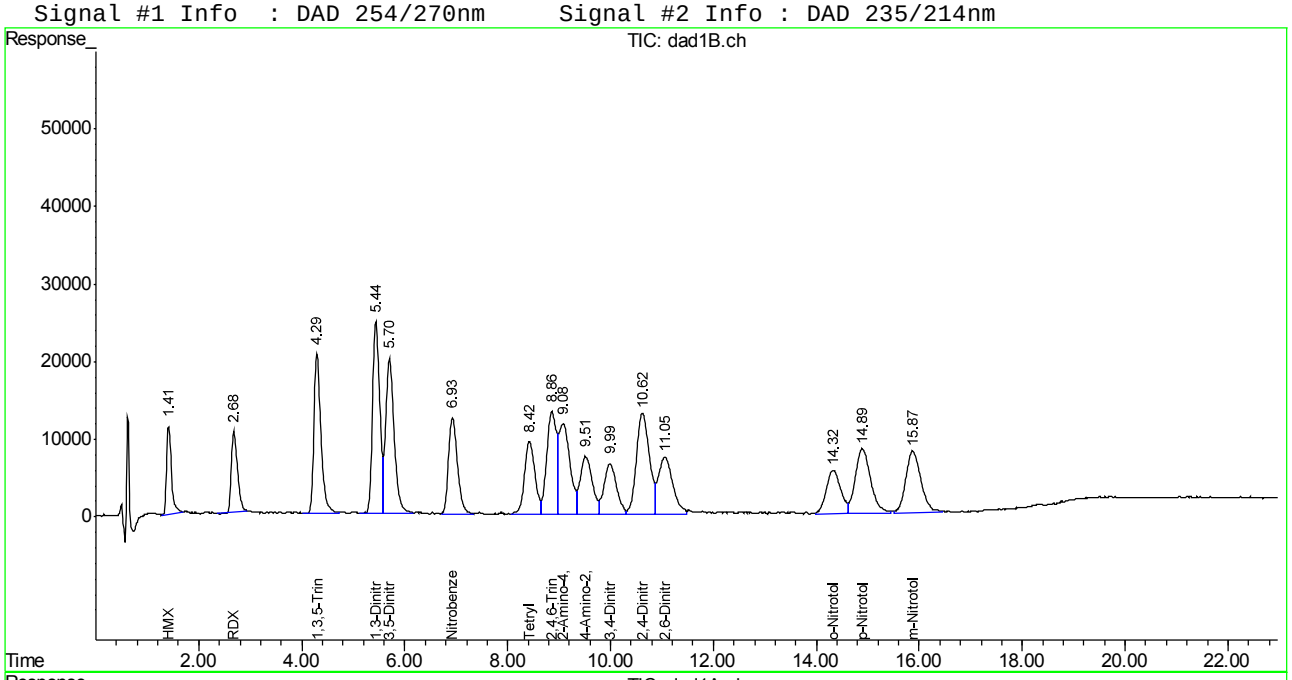
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059671.D 8330B_0419PLUS.M Fri May 11 08:37:46 2018 Page 1

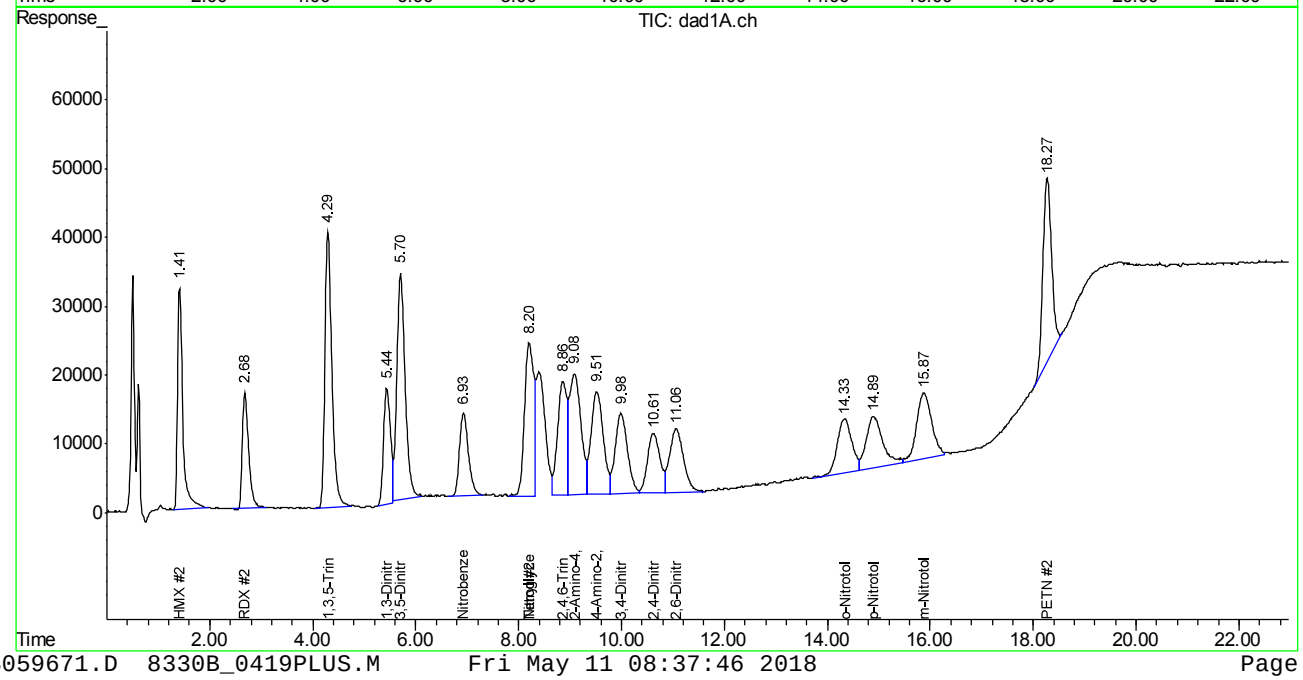
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1A.ch
Acq On : 10-May-2018, 10:57:14 Operator: evitam
Sample : OP69960-BS Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:06 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

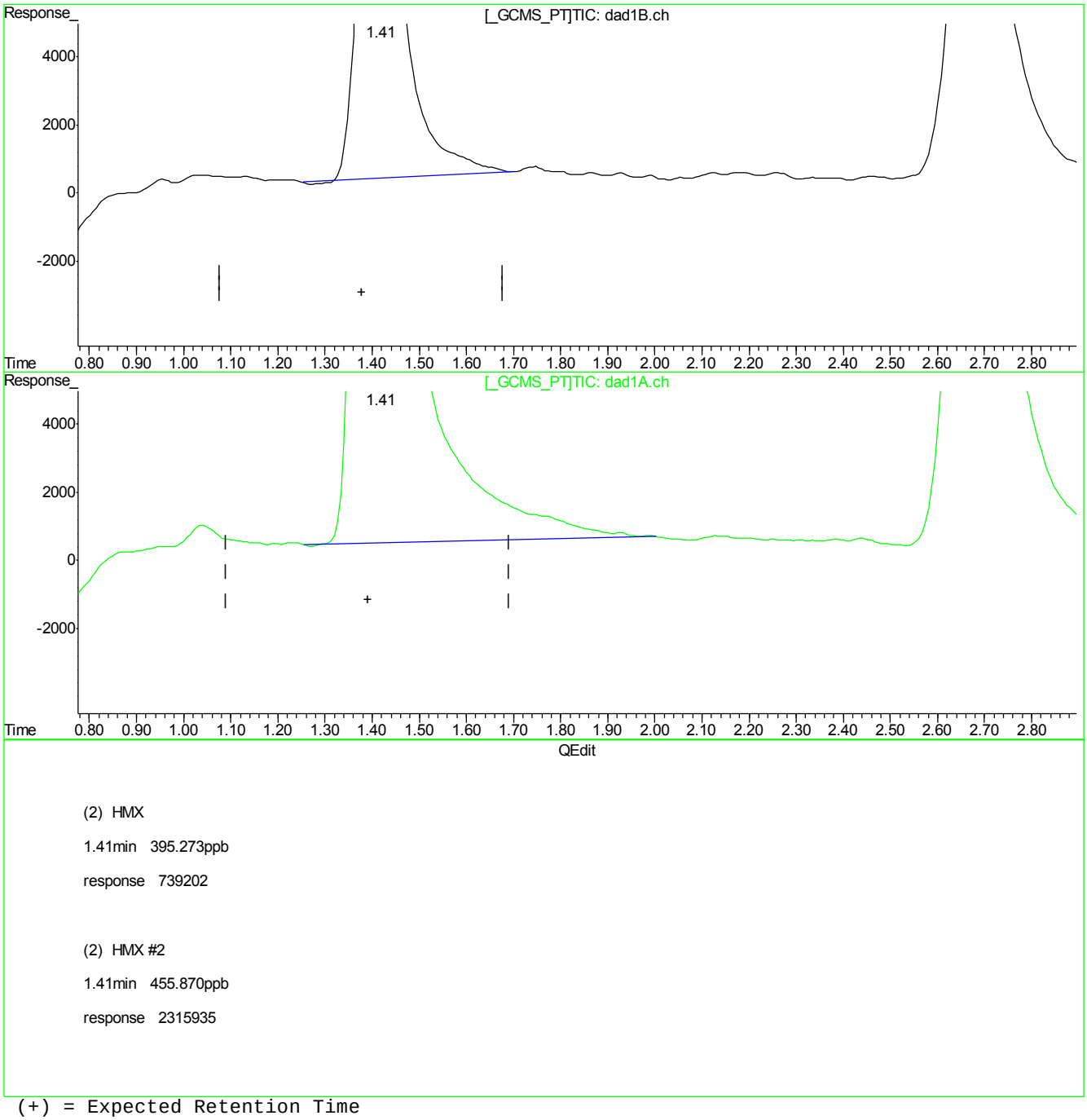
Sample Number:	OP69960-BS	**Method:**	SW846 8330B
Lab FileID:	BB059671.D	**Analyst approved:**	05/11/18 08:46 Evita Martinez
Injection Time:	05/10/18 10:57	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.41	Poorly defined baseline
HMX	2691-41-0	2	1.41	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.44	Poorly defined baseline
PETN	78-11-5	2	18.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1A.ch
Acq On : 10-May-2018, 10:57:14 Operator: evitam
Sample : OP69960-BS Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059671.D 8330B_0419PLUS.M Fri May 11 08:06:09 2018

7.3.2.2

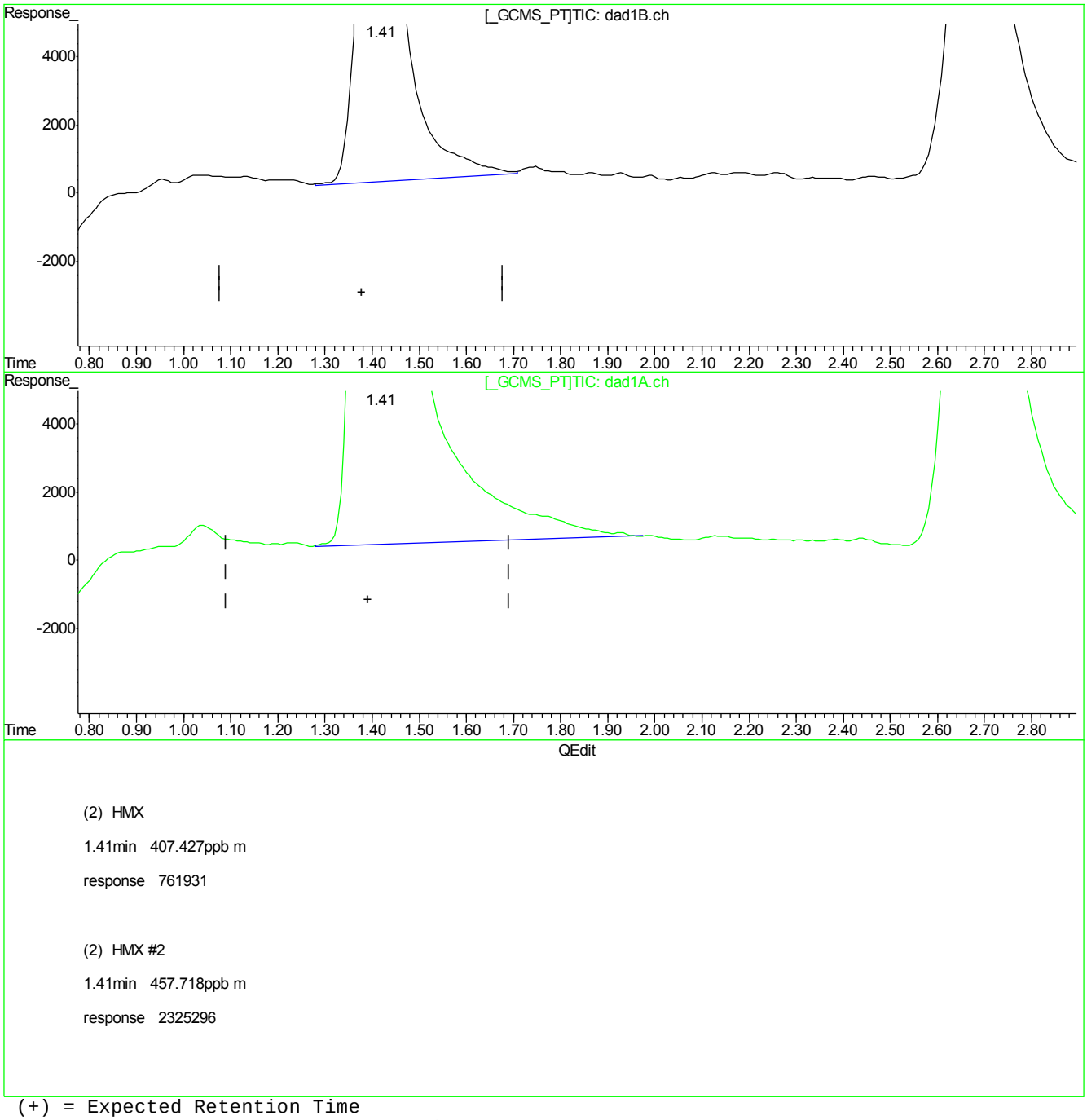
7

BB059671.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1A.ch
Acq On : 10-May-2018, 10:57:14 Operator: evitam
Sample : OP69960-BS Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059671.D 8330B_0419PLUS.M Fri May 11 08:06:14 2018

7.3.2.3

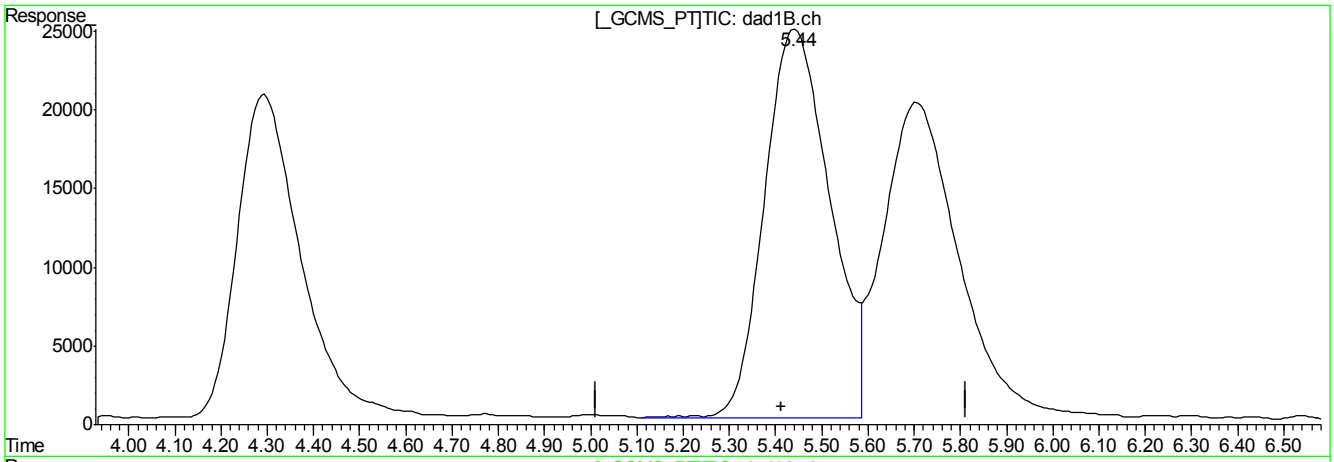
7

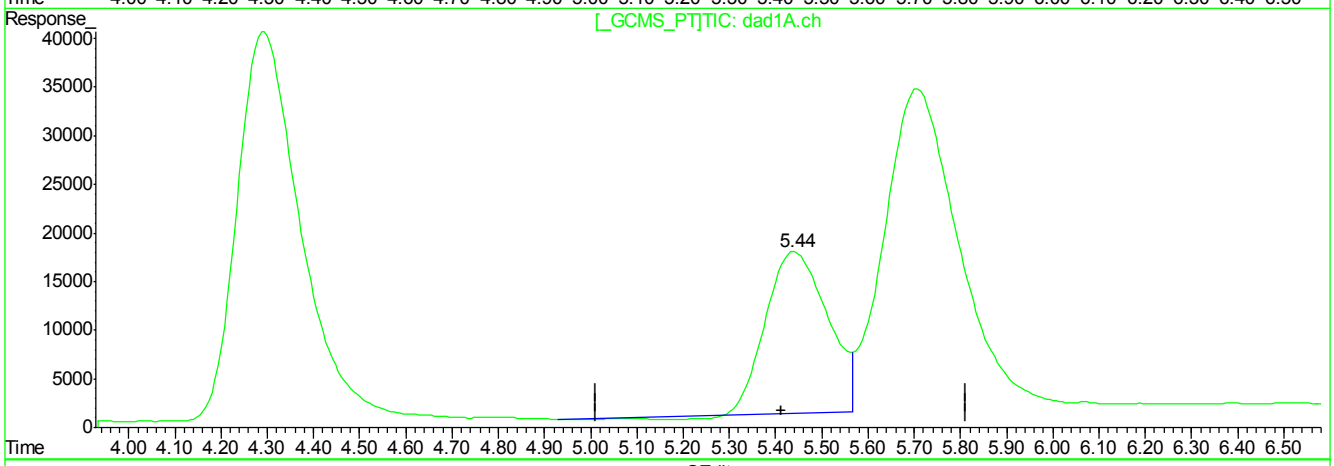
BB059671.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1A.ch
Acq On : 10-May-2018, 10:57:14 Operator: evitam
Sample : OP69960-BS Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(7) 1,3-Dinitrobenzene

5.44min 435.461ppb

response 2414184

(7) 1,3-Dinitrobenzene #2

5.44min 400.264ppb

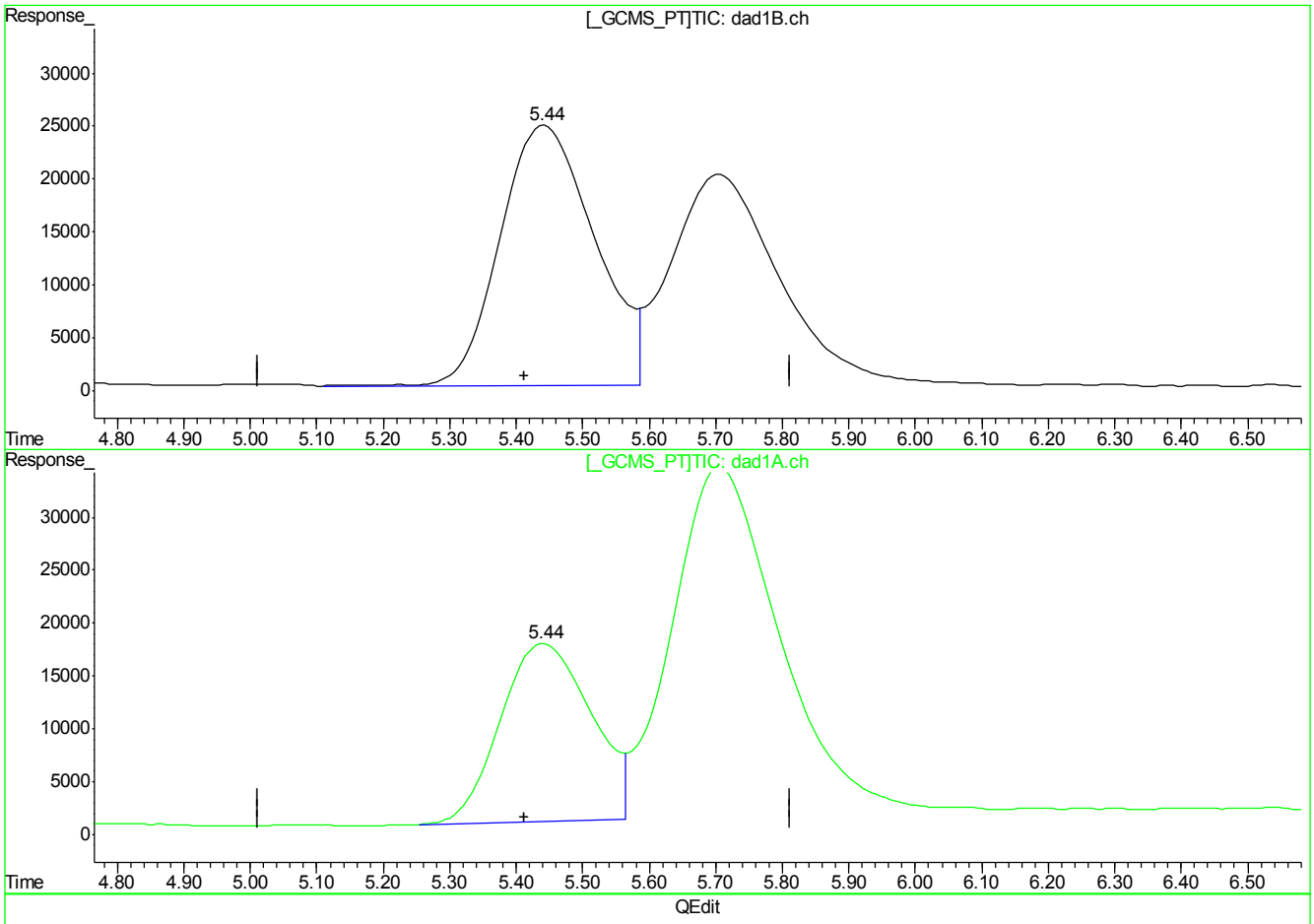
response 1490733

(+) = Expected Retention Time
BB059671.D 8330B_0419PLUS.M Fri May 11 08:06:22 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1A.ch
Acq On : 10-May-2018, 10:57:14 Operator: evitam
Sample : OP69960-BS Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.44min 435.461ppb

response 2414184

(7) 1,3-Dinitrobenzene #2

5.44min 426.951ppb m

response 1590126

(+) = Expected Retention Time
BB059671.D 8330B_0419PLUS.M Fri May 11 08:06:27 2018

7.3.2.5

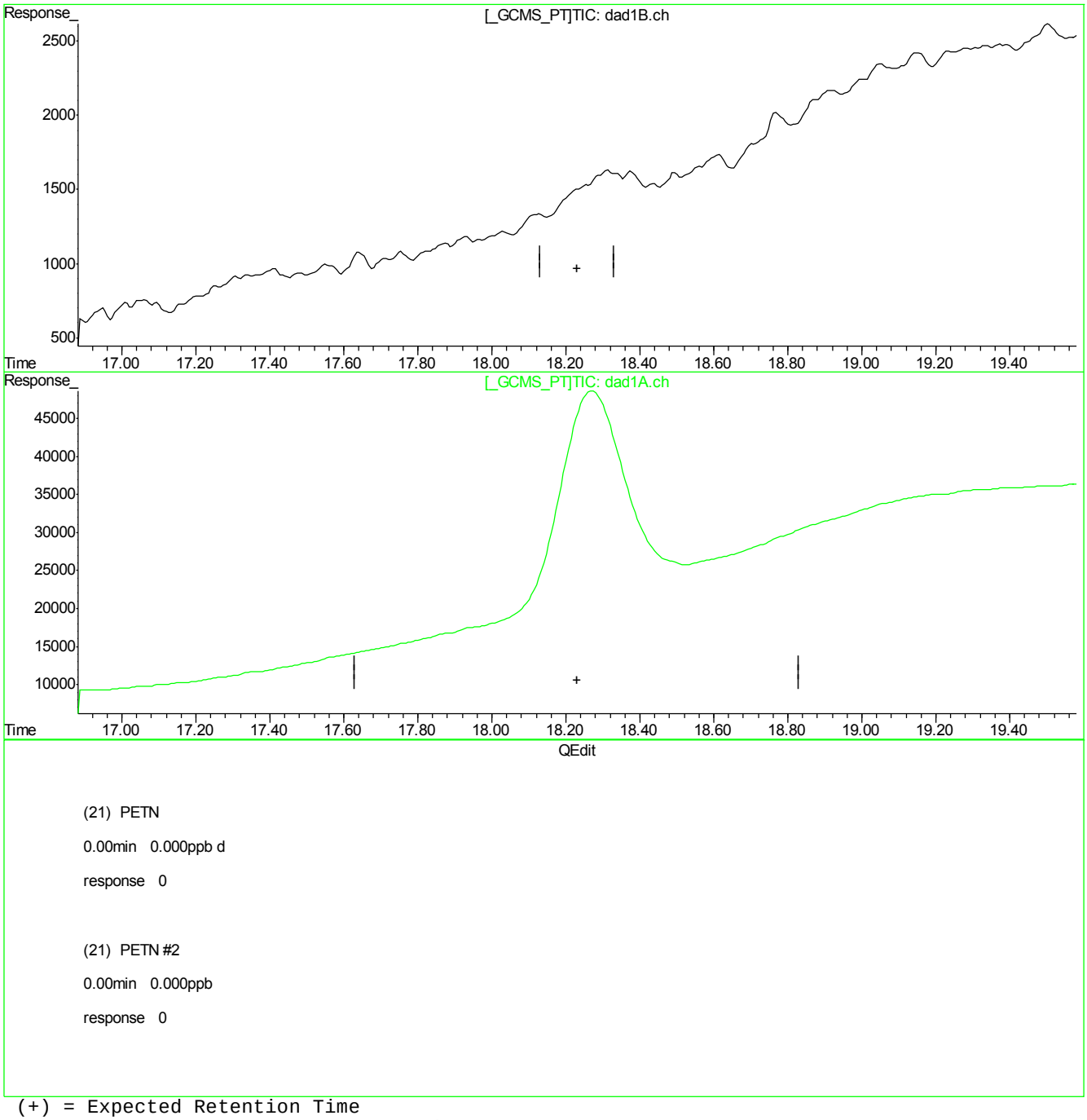
7

BB059671.D edits: 1,3-Dinitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1A.ch
Acq On : 10-May-2018, 10:57:14 Operator: evitam
Sample : OP69960-BS Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

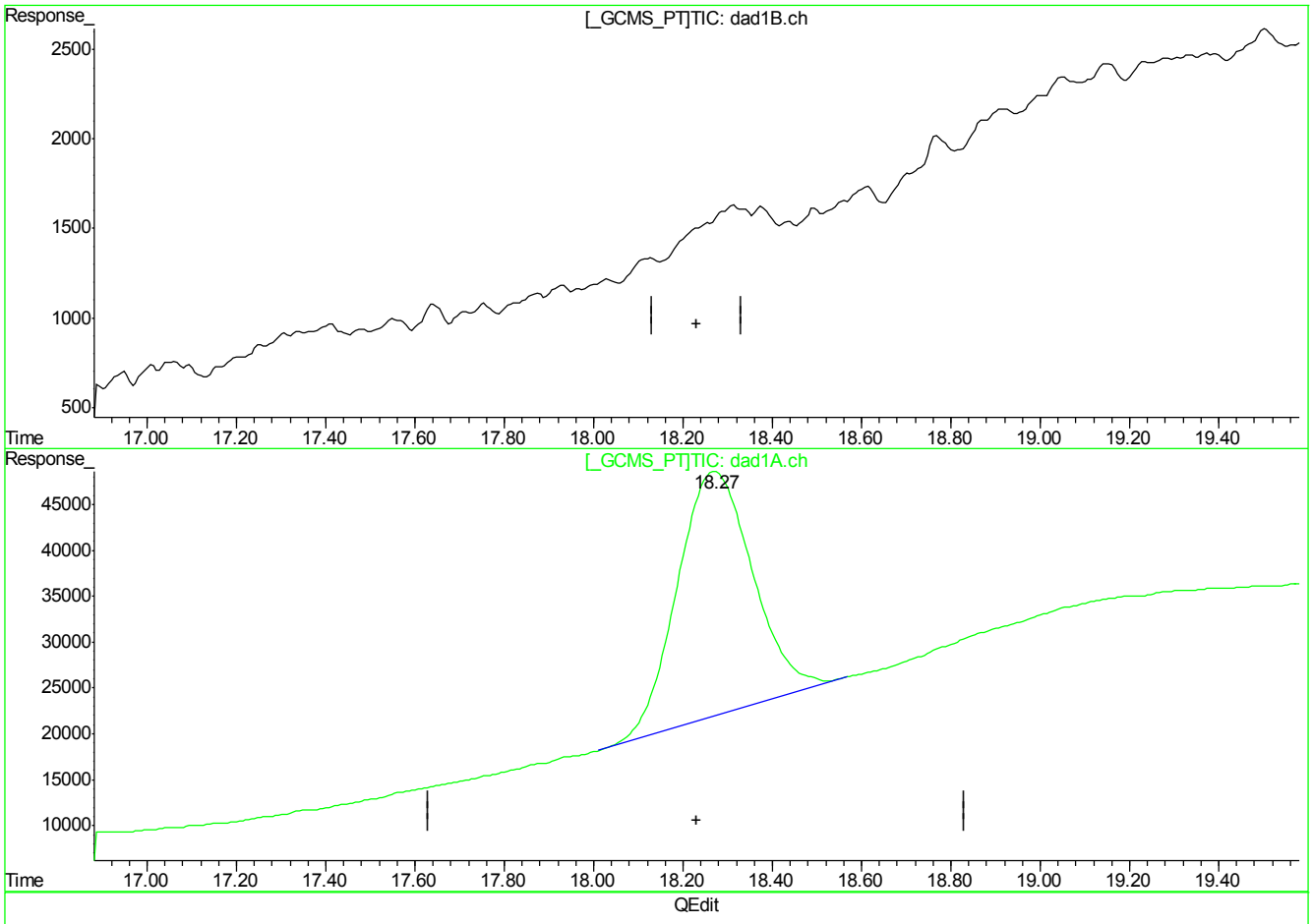


(+) = Expected Retention Time
BB059671.D 8330B_0419PLUS.M Fri May 11 08:06:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059671.D\dad1A.ch
Acq On : 10-May-2018, 10:57:14 Operator: evitam
Sample : OP69960-BS Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.27min 2258.124ppb m

response 3136153

(+) = Expected Retention Time
BB059671.D 8330B_0419PLUS.M Fri May 11 08:06:41 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 10:17:51 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.21	2567972	5477161	494.327	506.318
	Spiked Amount 500.000	Range 69 - 134		Recovery =		98.87%	101.26%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1347979	1298250	415.801m	402.964m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.43	7.43	1490945	1486169	143.891	143.445
6)	RDX	7.88	7.88	1179501	1157493	247.577	244.035
7)	1,3-Dinitrobenze	9.91	9.91	1577666	1122108	110.273	85.131m
8)	Nitrobenzene	10.87	10.86	1750930	1730888	185.531	186.903m
9)	2,4,6-Trinitroto	11.65	11.65	432580	845516	42.685	64.470m#
10)	Nitroglycerin	0.00	12.40	0	612977	N.D.	181.906m#
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.59	14.58	1734260	2690793	242.567	265.206
14)	2,4-Dinitrotolue	15.31	15.31	963653	640083	73.510	66.633m
15)	o-Nitrotoluene	16.84	16.86	1094769	1482628	189.518	171.926m
16)	3,5-Dinitroanili	16.25	16.25	1868044	3250224	191.817	200.942m
17)	p-Nitrotoluene	17.94	17.94	2283495	4570588	194.466	215.663m
18)	4-Amino-2,6-Dini	17.94	17.94	2283495	4539733	194.466	213.584m
19)	m-Nitrotoluene	19.22	19.21	1748073	2943834	296.516	302.726m
20)	2-Amino-4,6-Dini	20.15	20.14	3183533	4623824	352.827	391.774m
21)	PETN	0.00	21.83	0	579922	N.D. d	180.807m

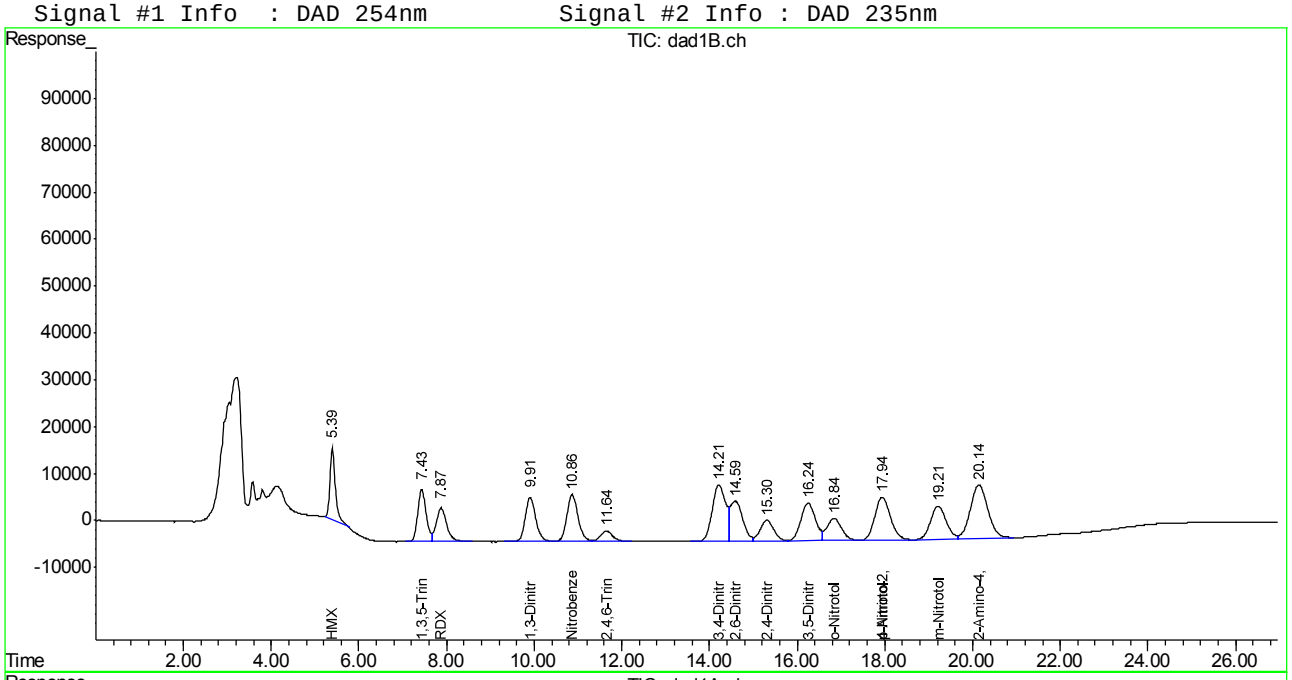
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:10:36 2018 Page 1

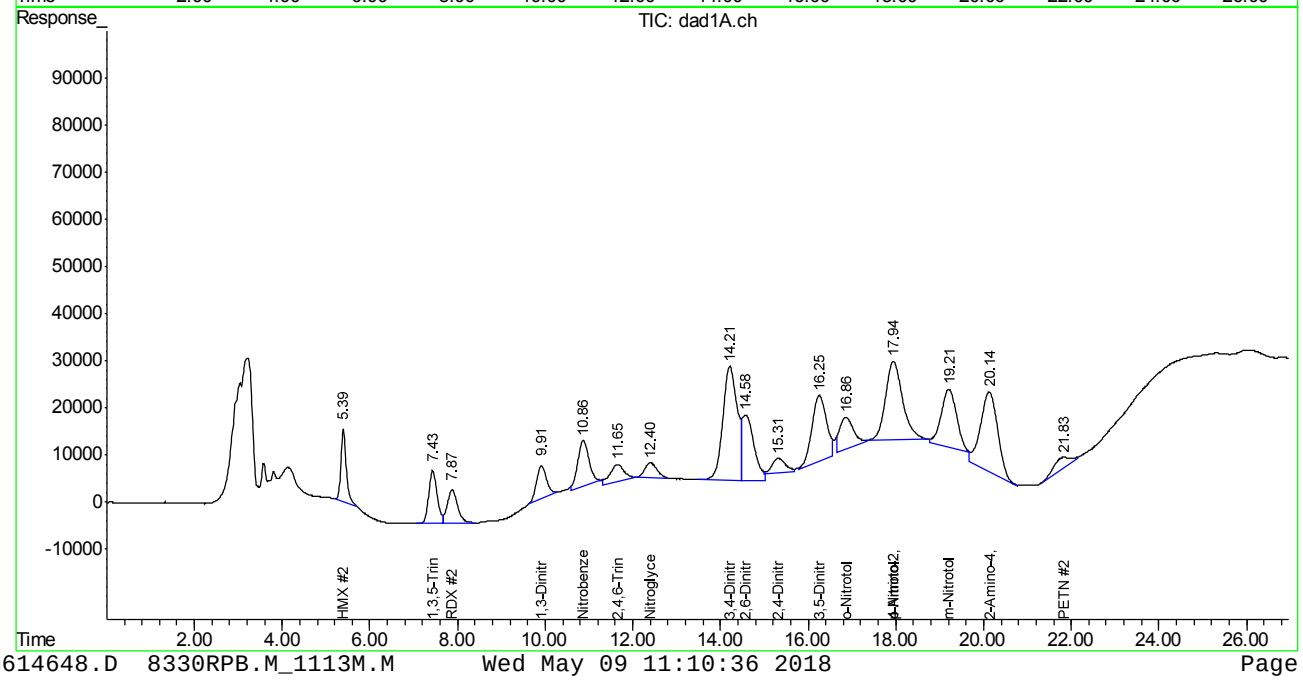
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:08 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

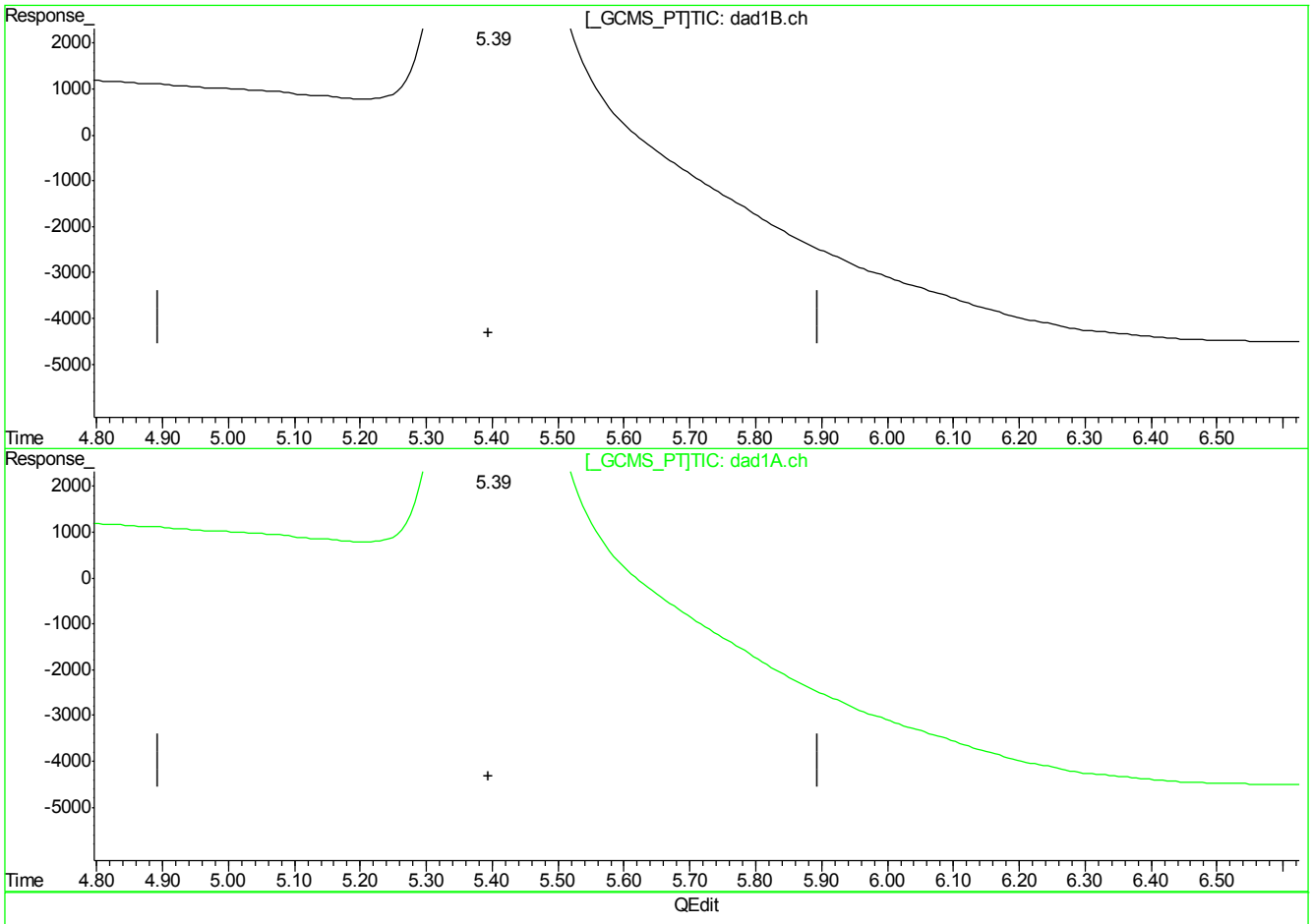
Sample Number:	OP69946-PT1	**Method:**	SW846 8330B
Lab FileID:	GG614648.D	**Analyst approved:**	05/09/18 11:26 Evita Martinez
Injection Time:	05/09/18 09:39	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.91	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.86	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.65	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.40	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.31	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.25	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.86	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	17.94	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	17.94	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.21	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.14	Poorly defined baseline
PETN	78-11-5	2	21.83	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.40min 252.504ppb

response 818589

(2) HMX #2

5.40min 254.082ppb

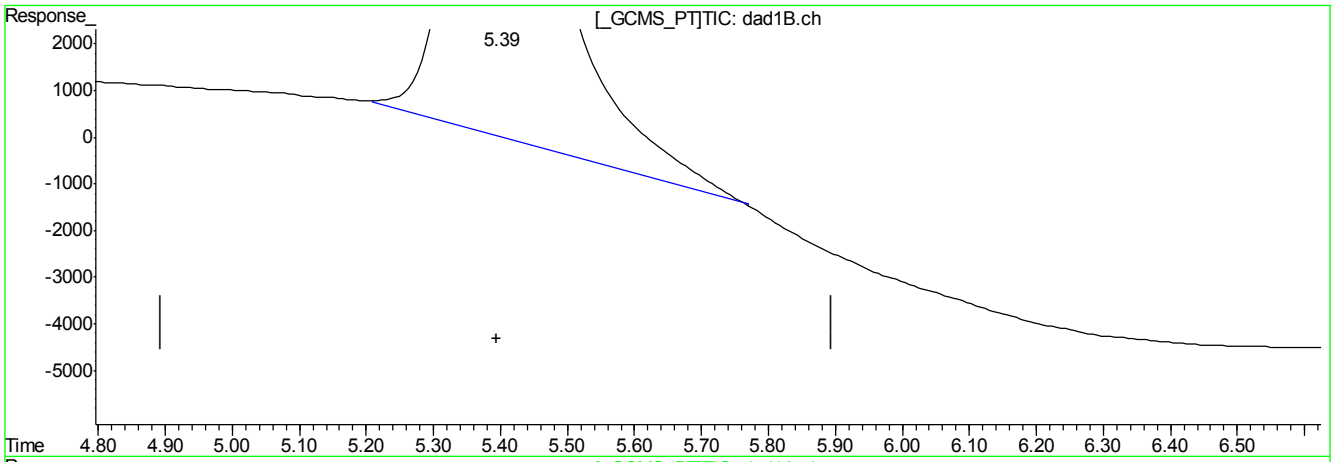
response 818589

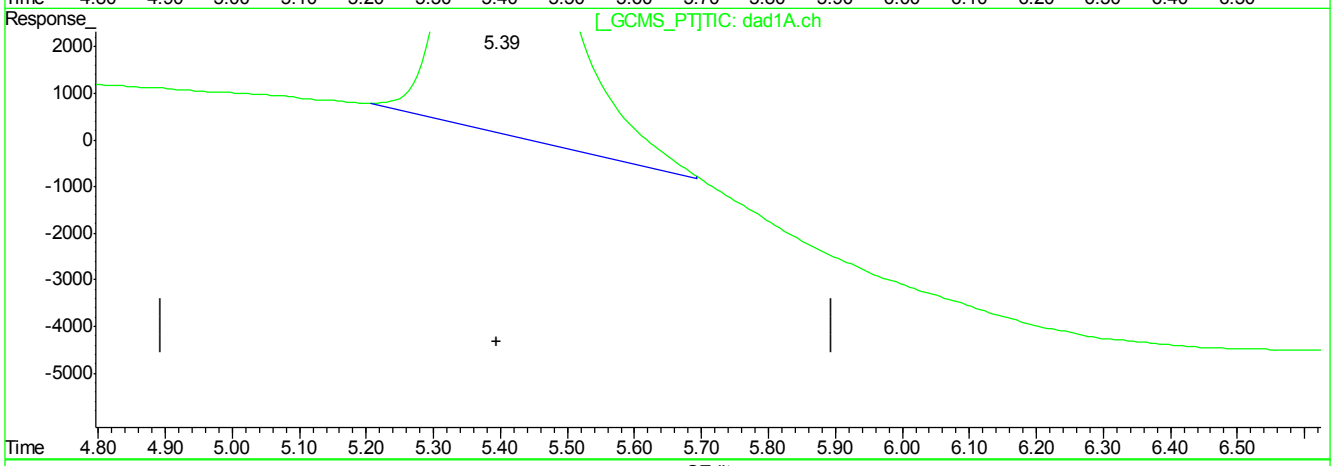
(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.39min 415.801ppb m

response 1347979

(2) HMX #2

5.39min 402.964ppb m

response 1298250

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:24 2018

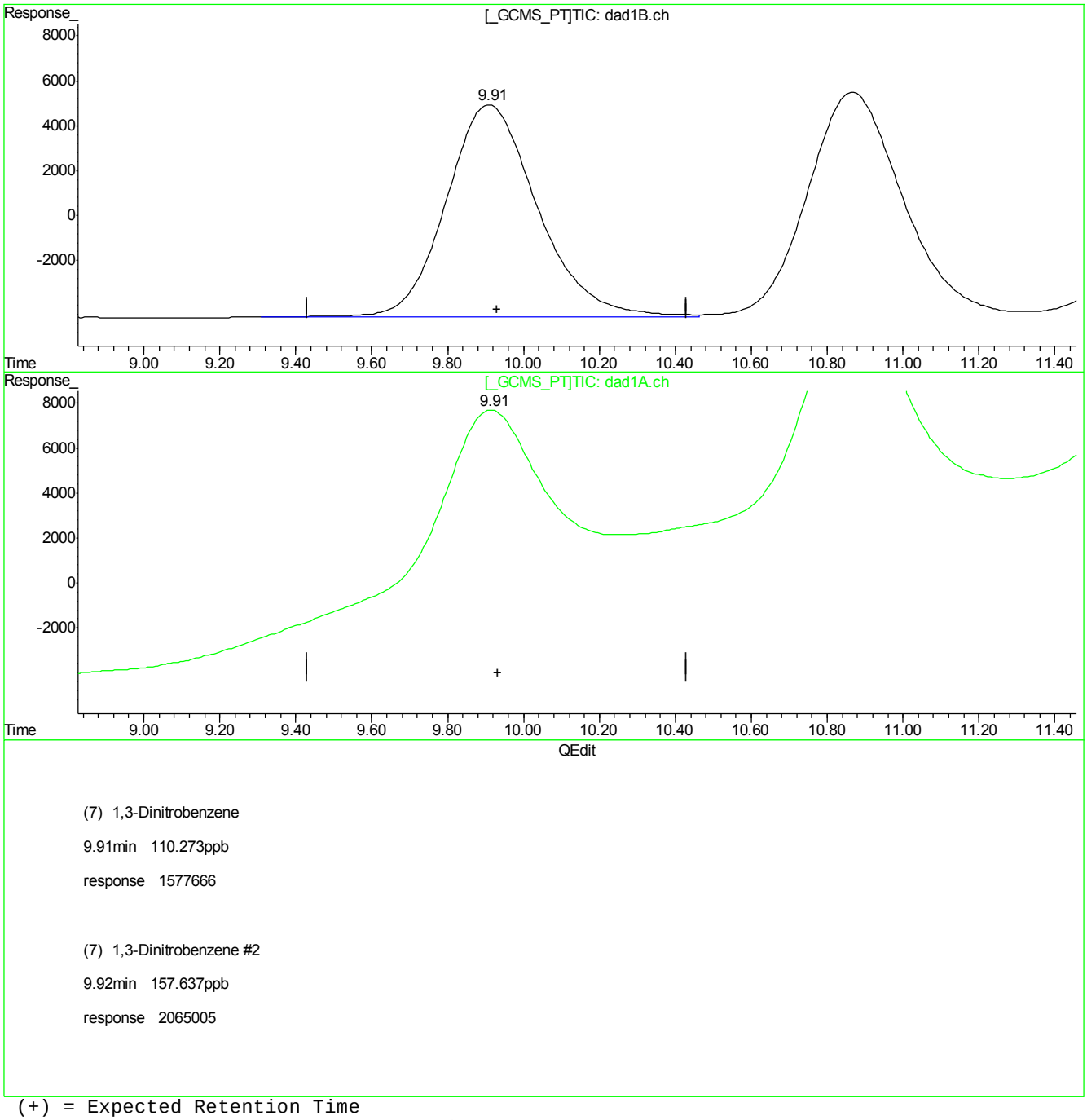
7.4.1.3

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.91min 110.273ppb

response 1577666

(7) 1,3-Dinitrobenzene #2

9.92min 157.637ppb

response 2065005

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:33 2018

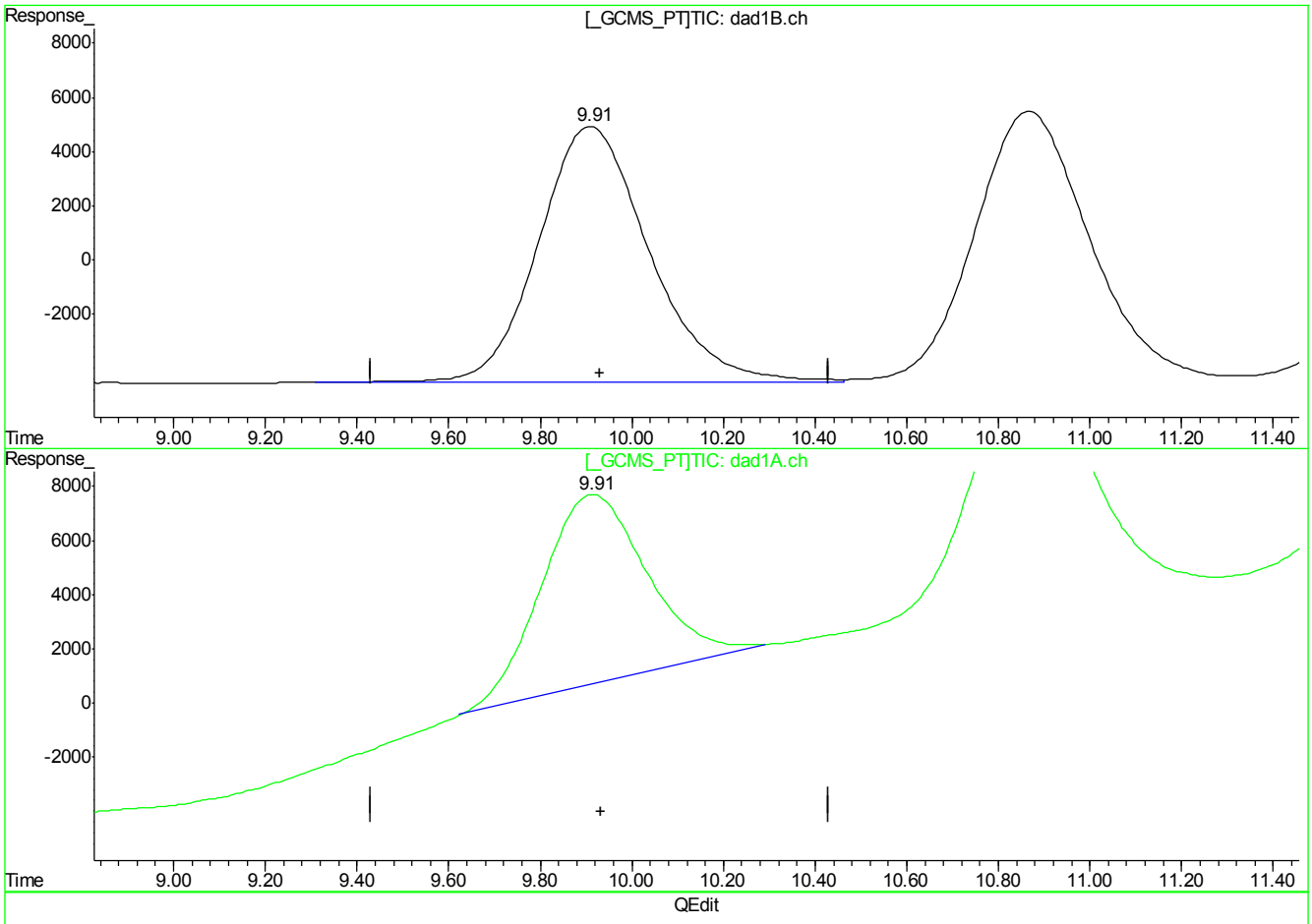
7.4.1.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.91min 110.273ppb

response 1577666

(7) 1,3-Dinitrobenzene #2

9.91min 85.131ppb m

response 1122108

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:37 2018

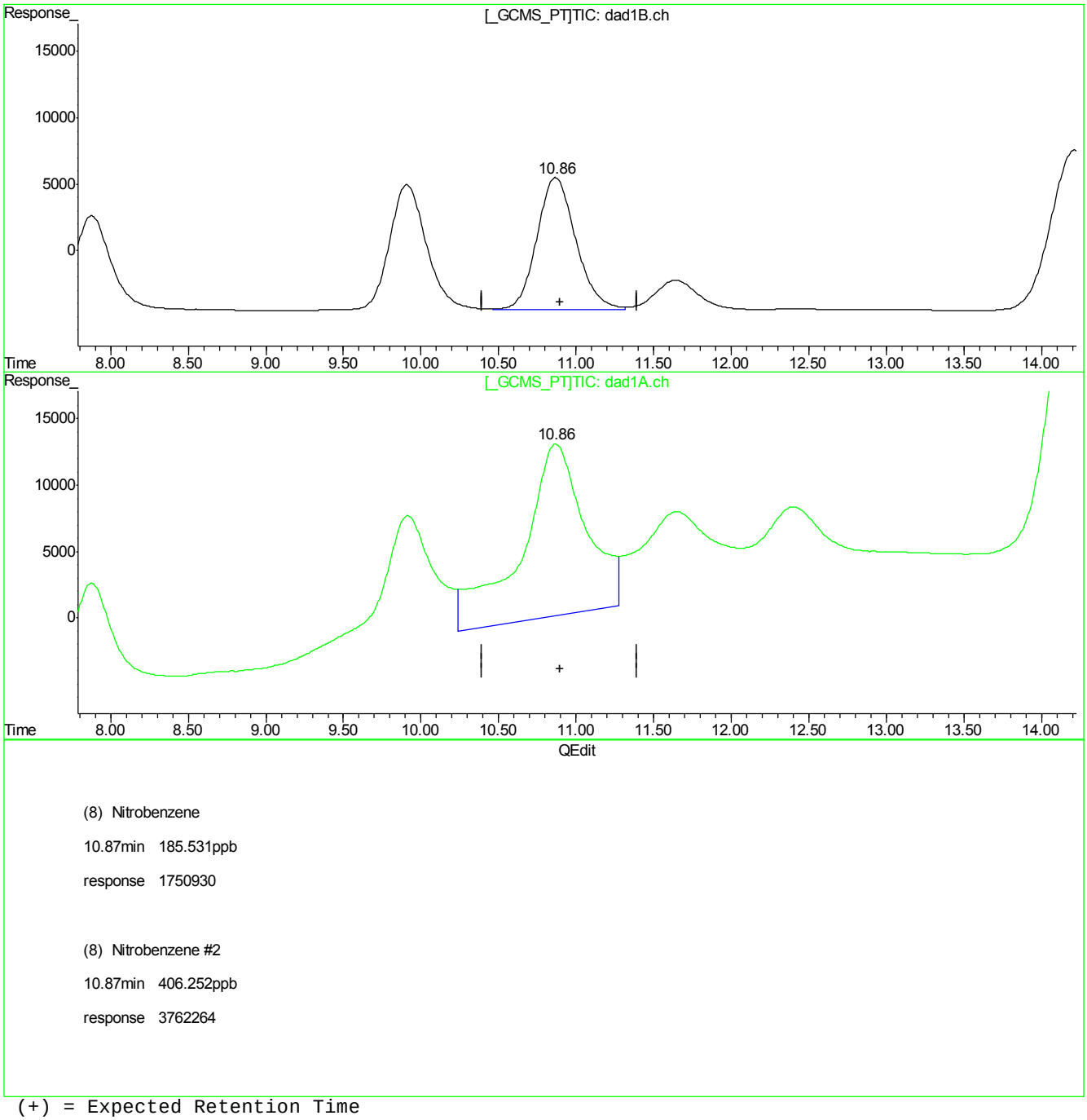
7.4.1.5

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.87min 185.531ppb

response 1750930

(8) Nitrobenzene #2

10.87min 406.252ppb

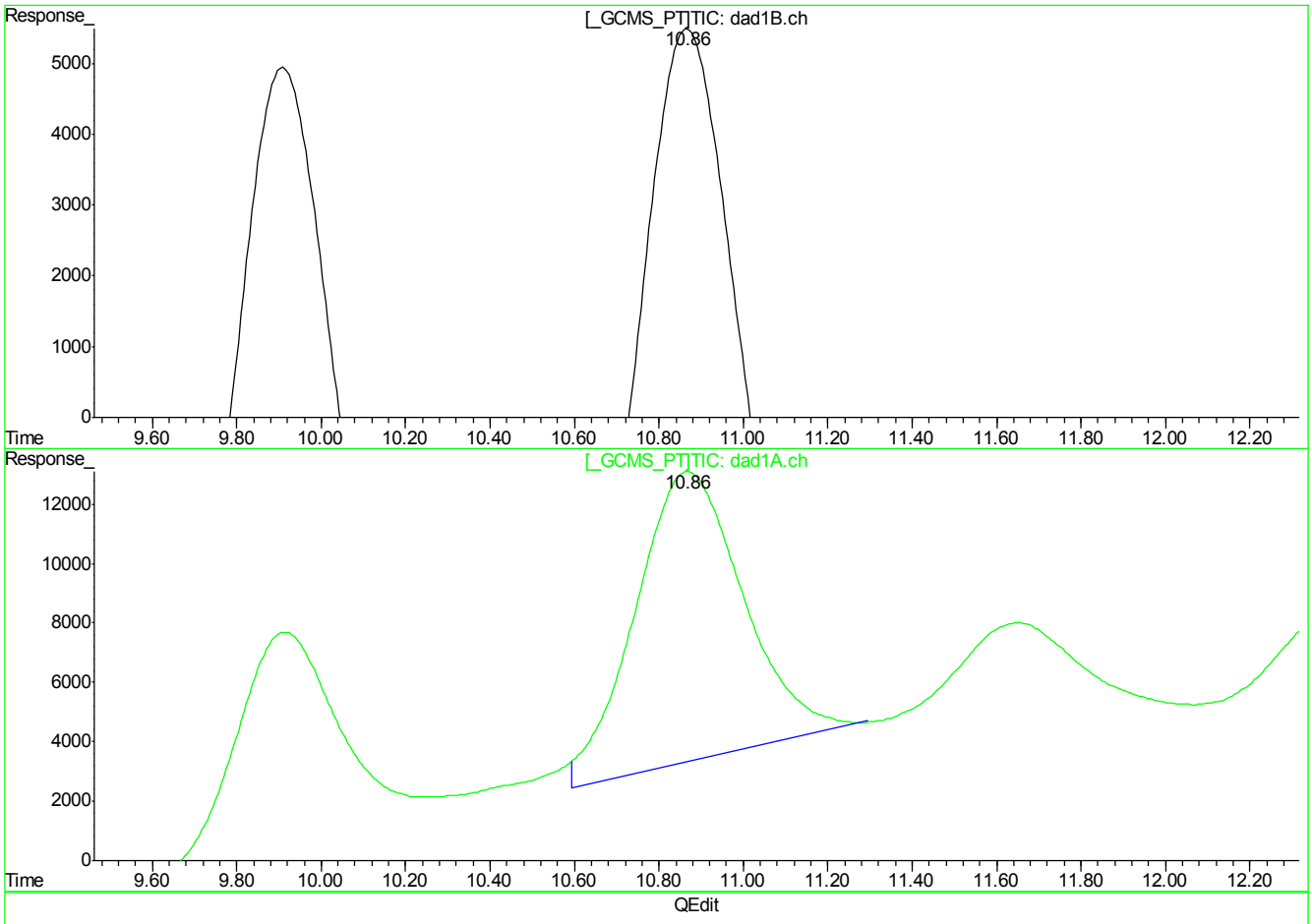
response 3762264

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.87min 185.531ppb

response 1750930

(8) Nitrobenzene #2

10.86min 186.903ppb m

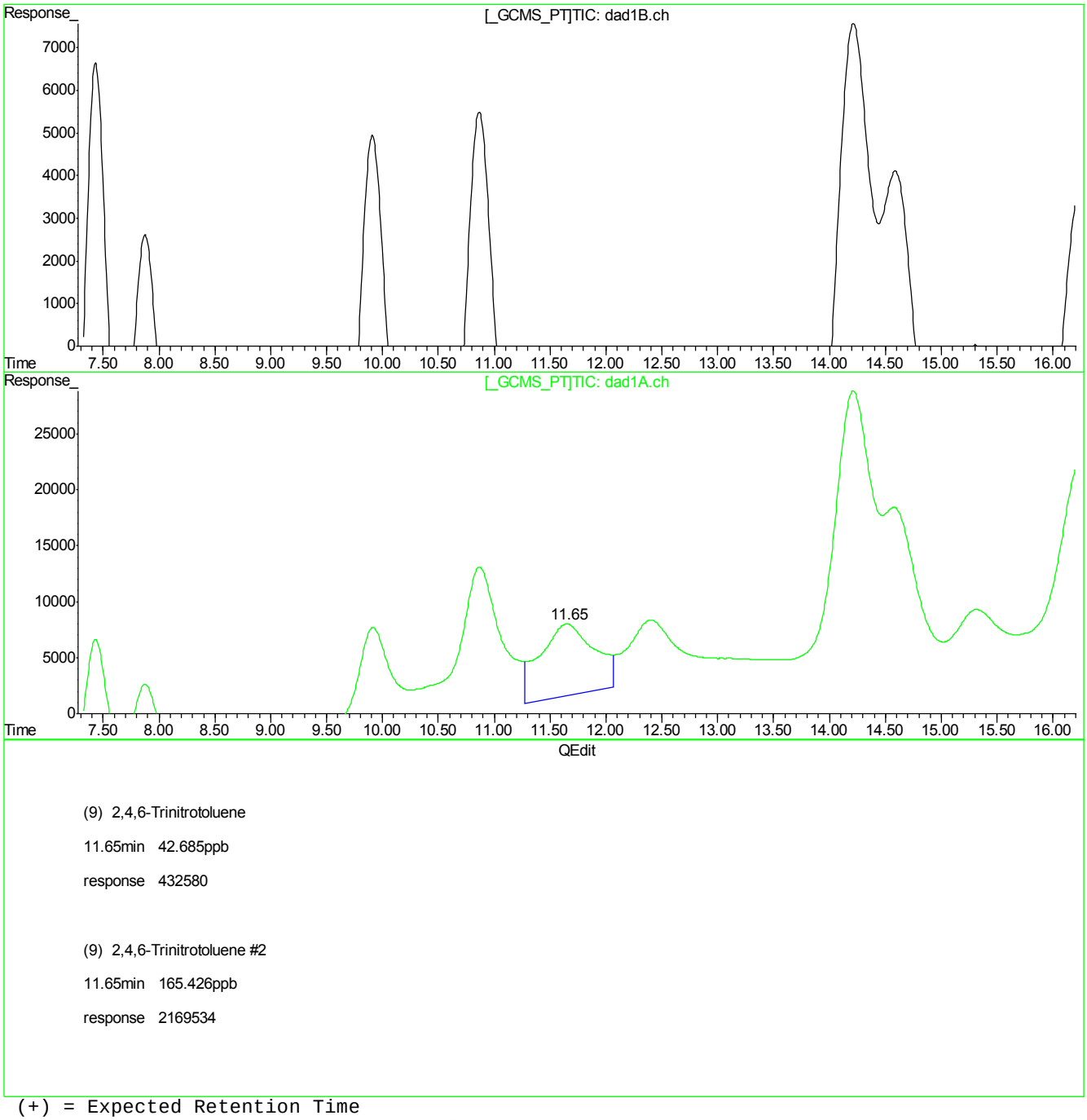
response 1730888

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:06:52 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.65min 42.685ppb

response 432580

(9) 2,4,6-Trinitrotoluene #2

11.65min 165.426ppb

response 2169534

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:01 2018

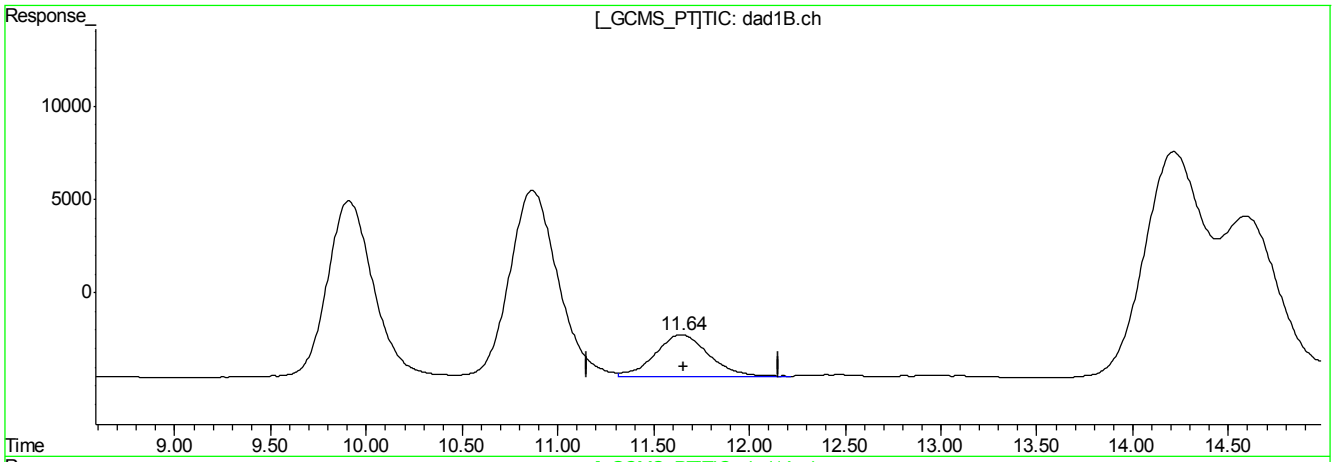
7.4.1.8

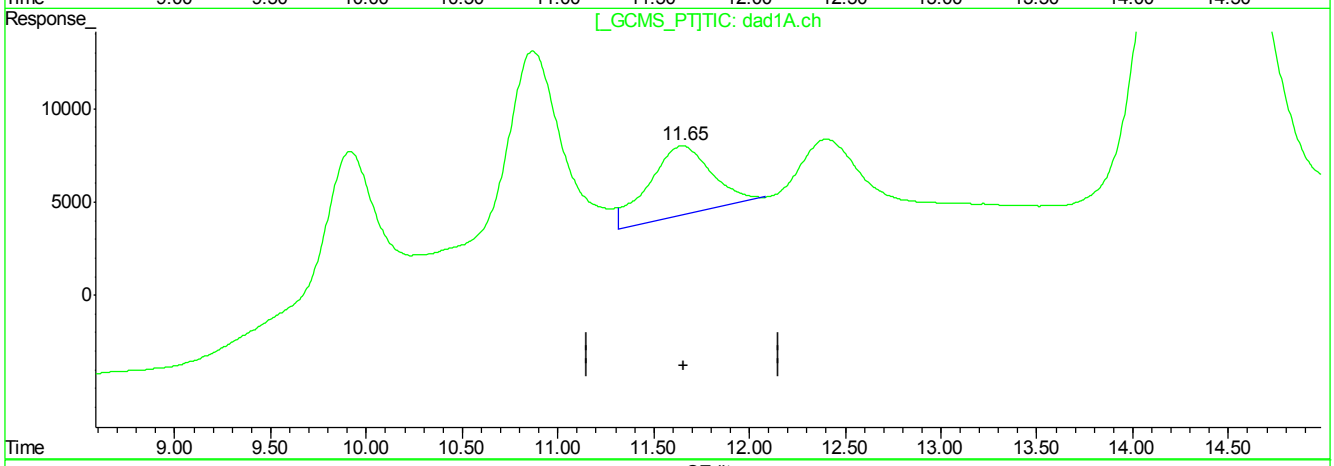
7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(9) 2,4,6-Trinitrotoluene

11.65min 42.685ppb

response 432580

(9) 2,4,6-Trinitrotoluene #2

11.65min 64.470ppb m

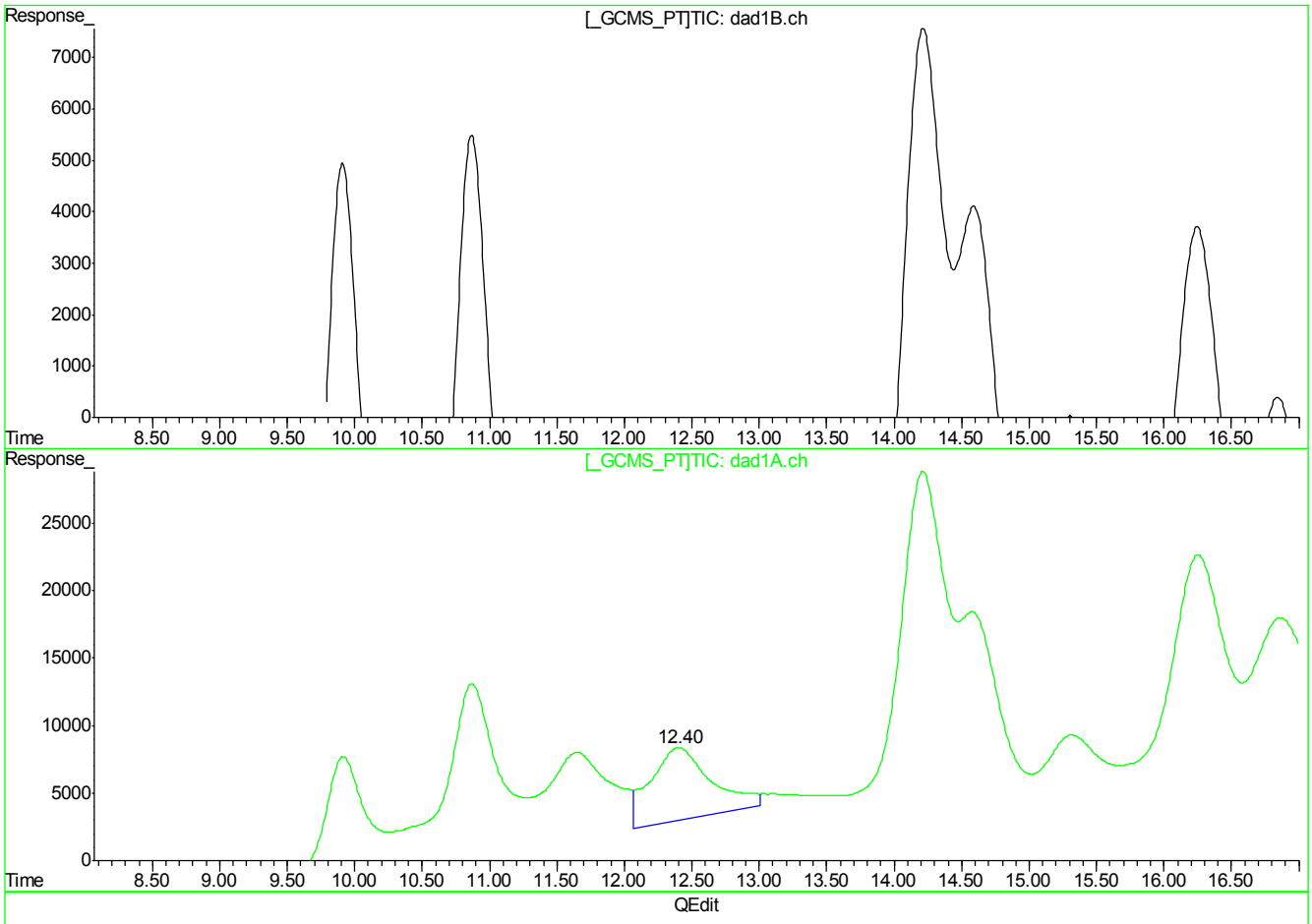
response 845516

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.40min 499.353ppb

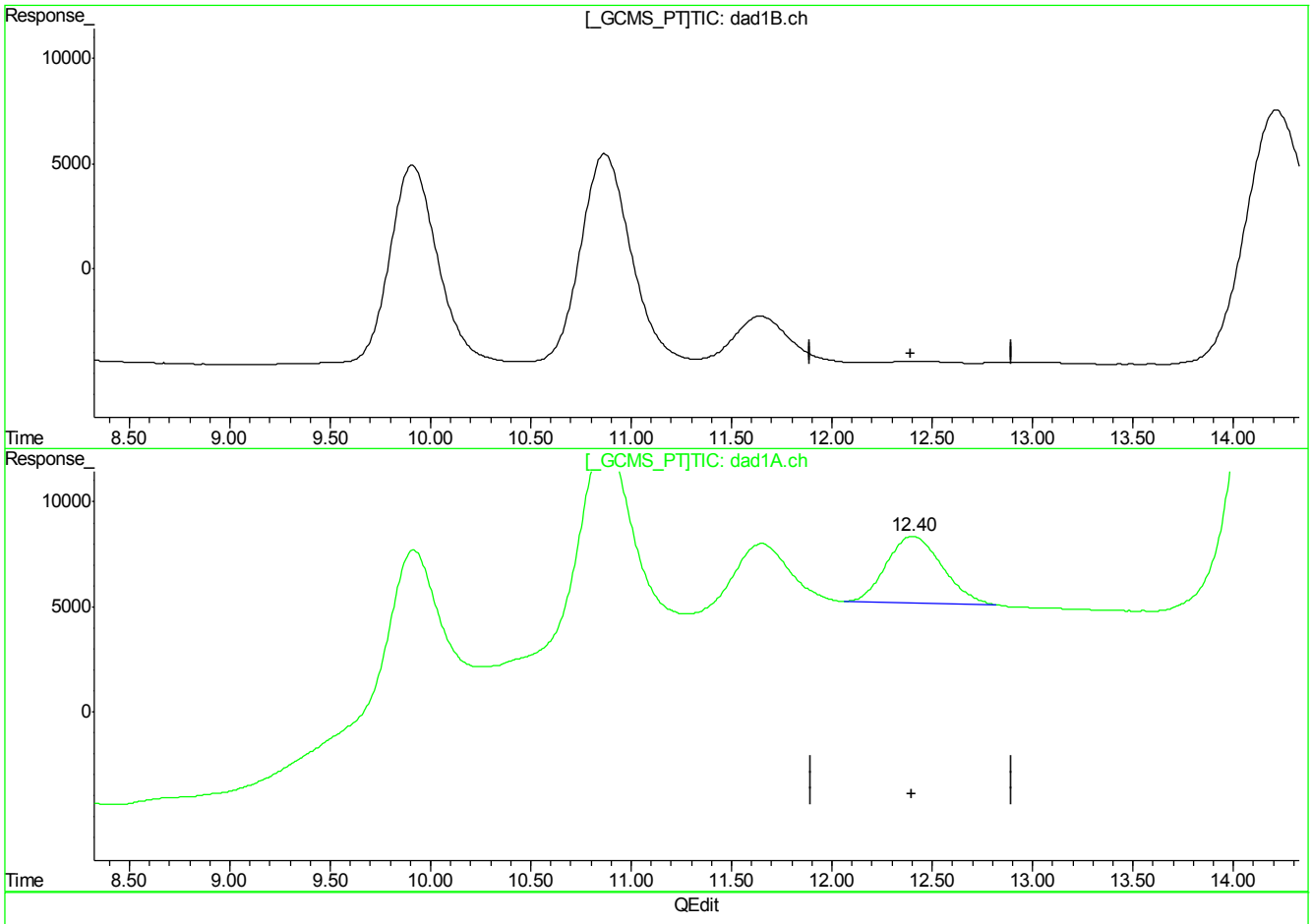
response 1682692

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:17 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.40min 181.906ppb m

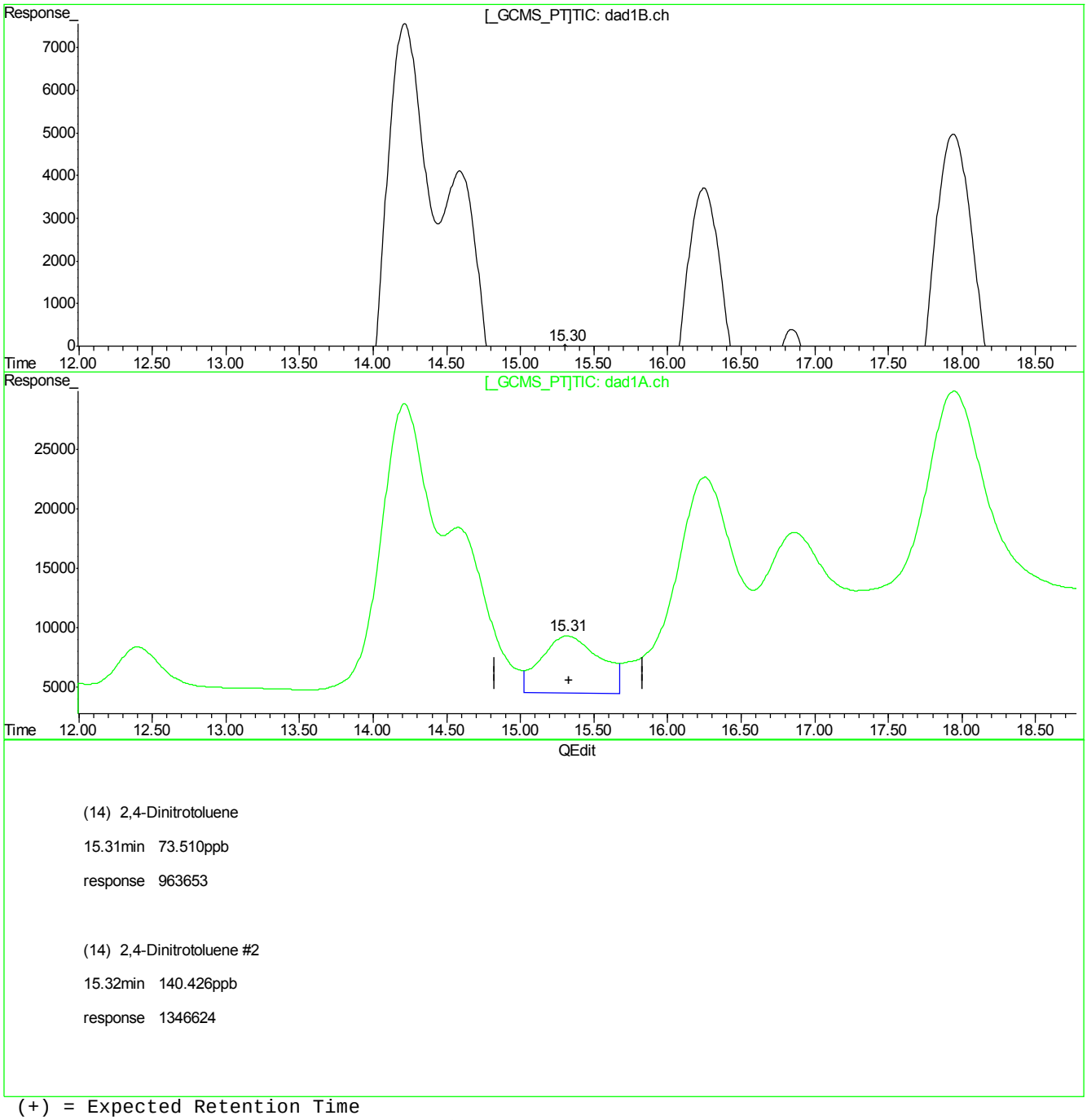
response 612977

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:26 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.31min 73.510ppb

response 963653

(14) 2,4-Dinitrotoluene #2

15.32min 140.426ppb

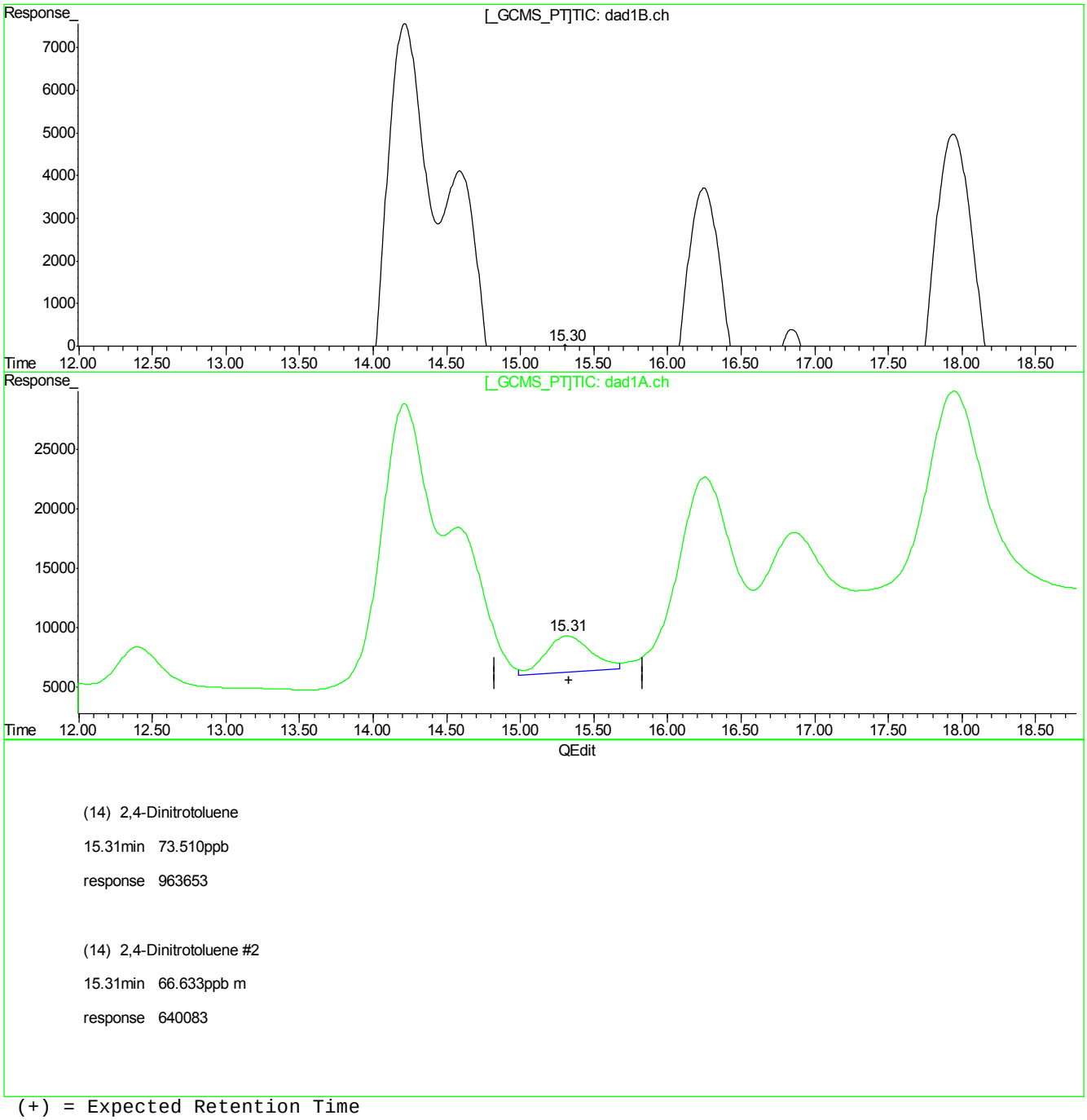
response 1346624

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:39 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.31min 73.510ppb

response 963653

(14) 2,4-Dinitrotoluene #2

15.31min 66.633ppb m

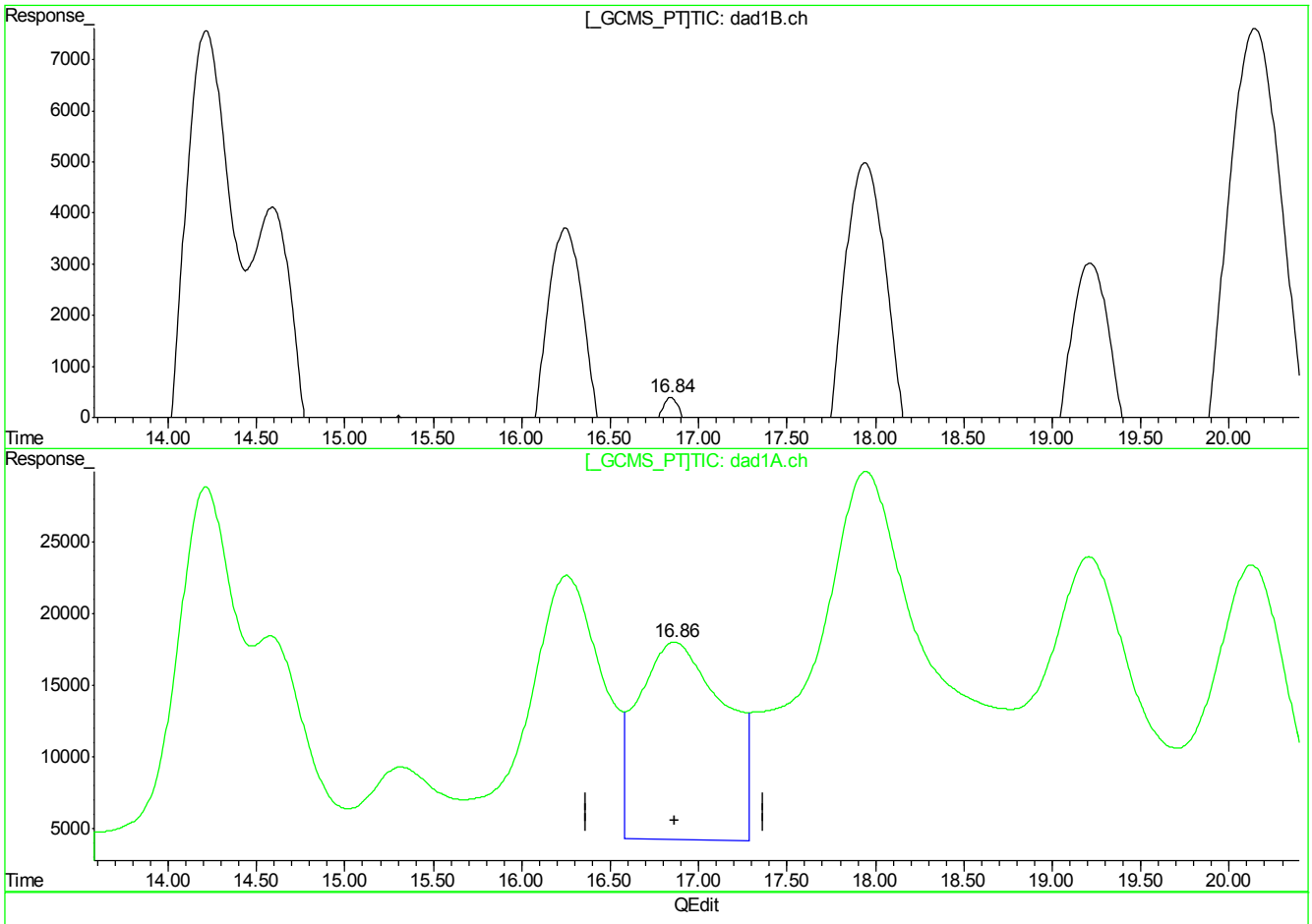
response 640083

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.84min 189.518ppb

response 1094769

(15) o-Nitrotoluene #2

16.86min 541.191ppb

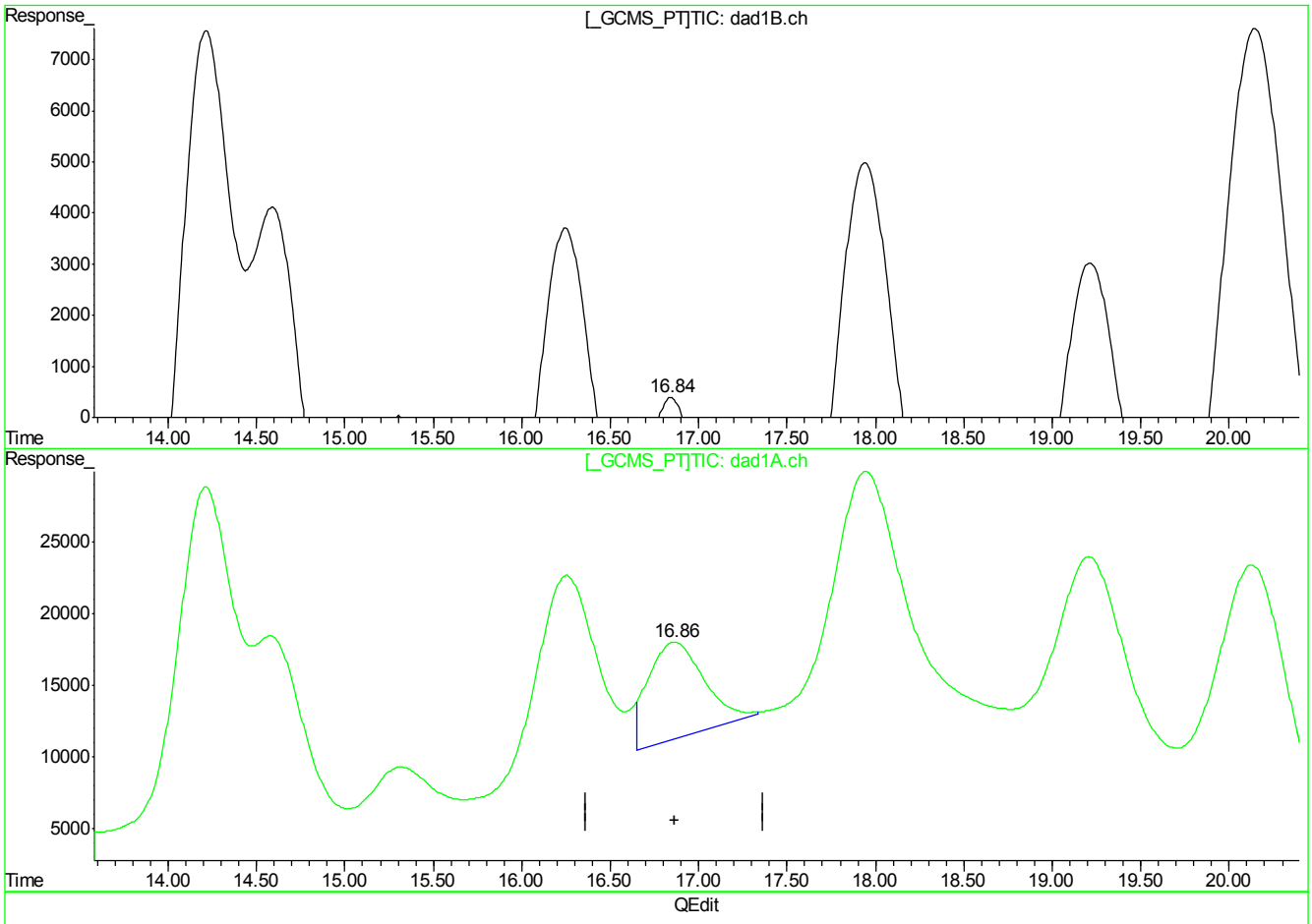
response 4667025

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:49 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.84min 189.518ppb

response 1094769

(15) o-Nitrotoluene #2

16.86min 171.926ppb m

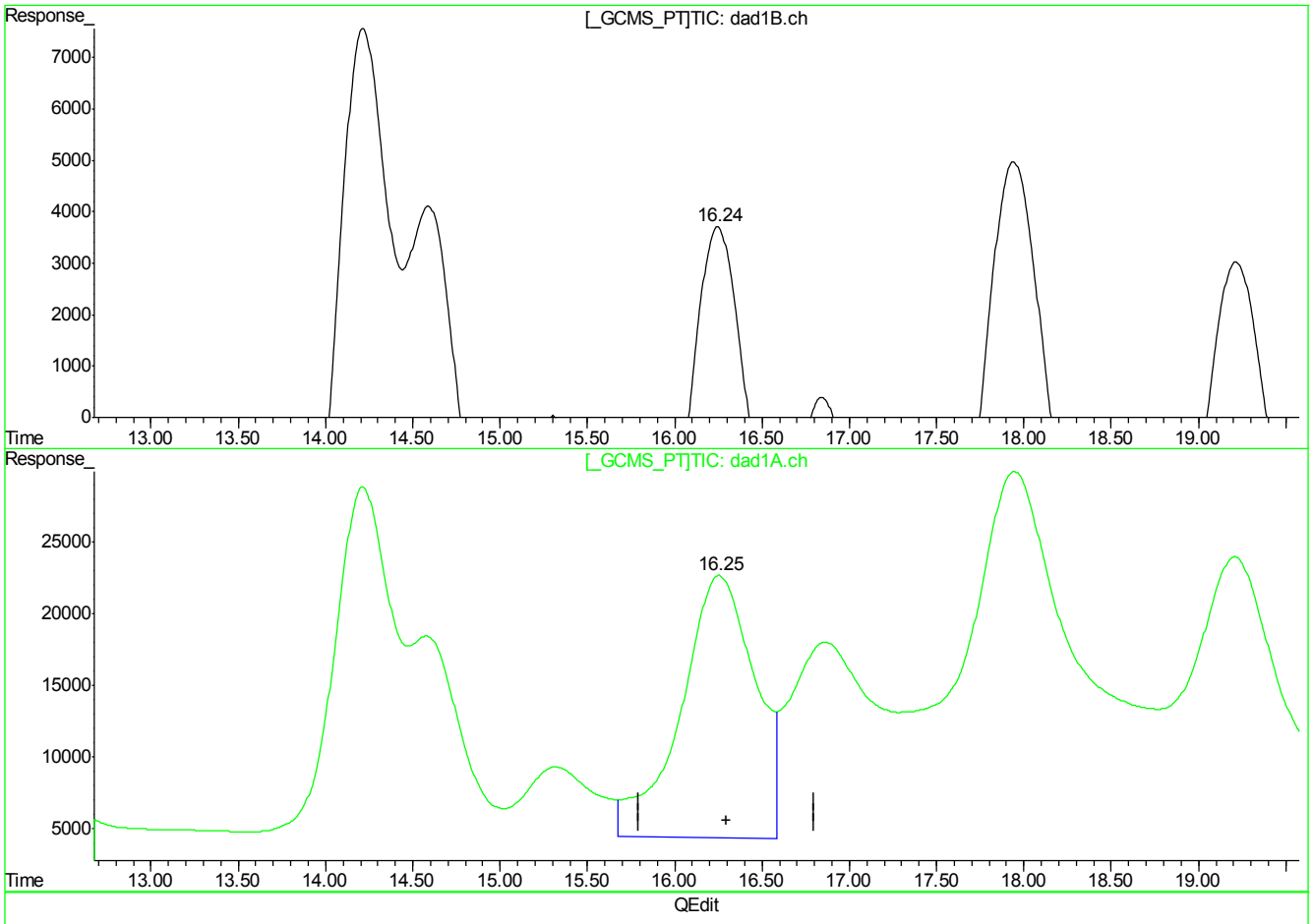
response 1482628

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:54 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.25min 191.817ppb

response 1868044

(16) 3,5-Dinitroaniline #2

16.25min 332.934ppb

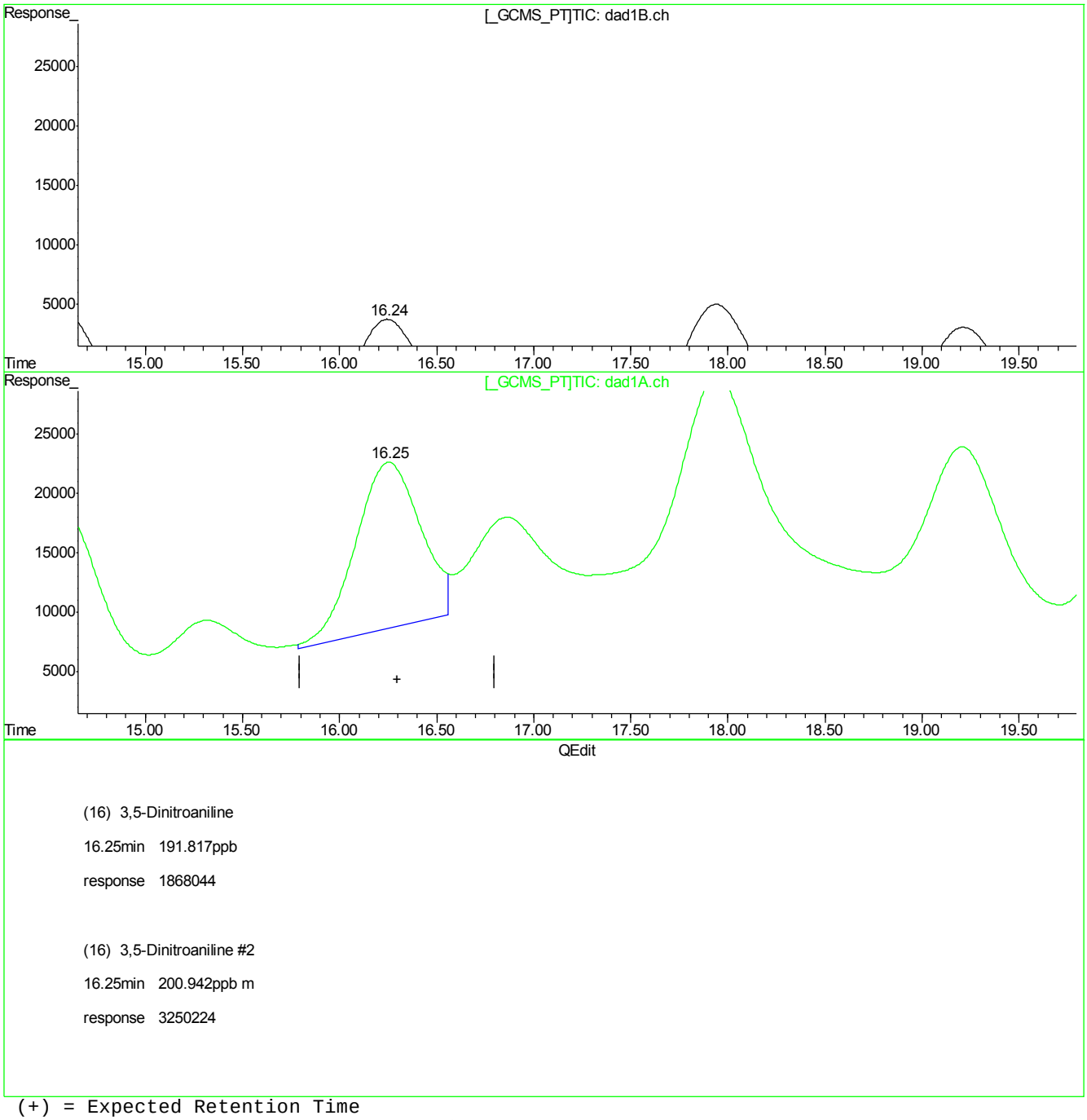
response 5394697

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:07:58 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.25min 191.817ppb

response 1868044

(16) 3,5-Dinitroaniline #2

16.25min 200.942ppb m

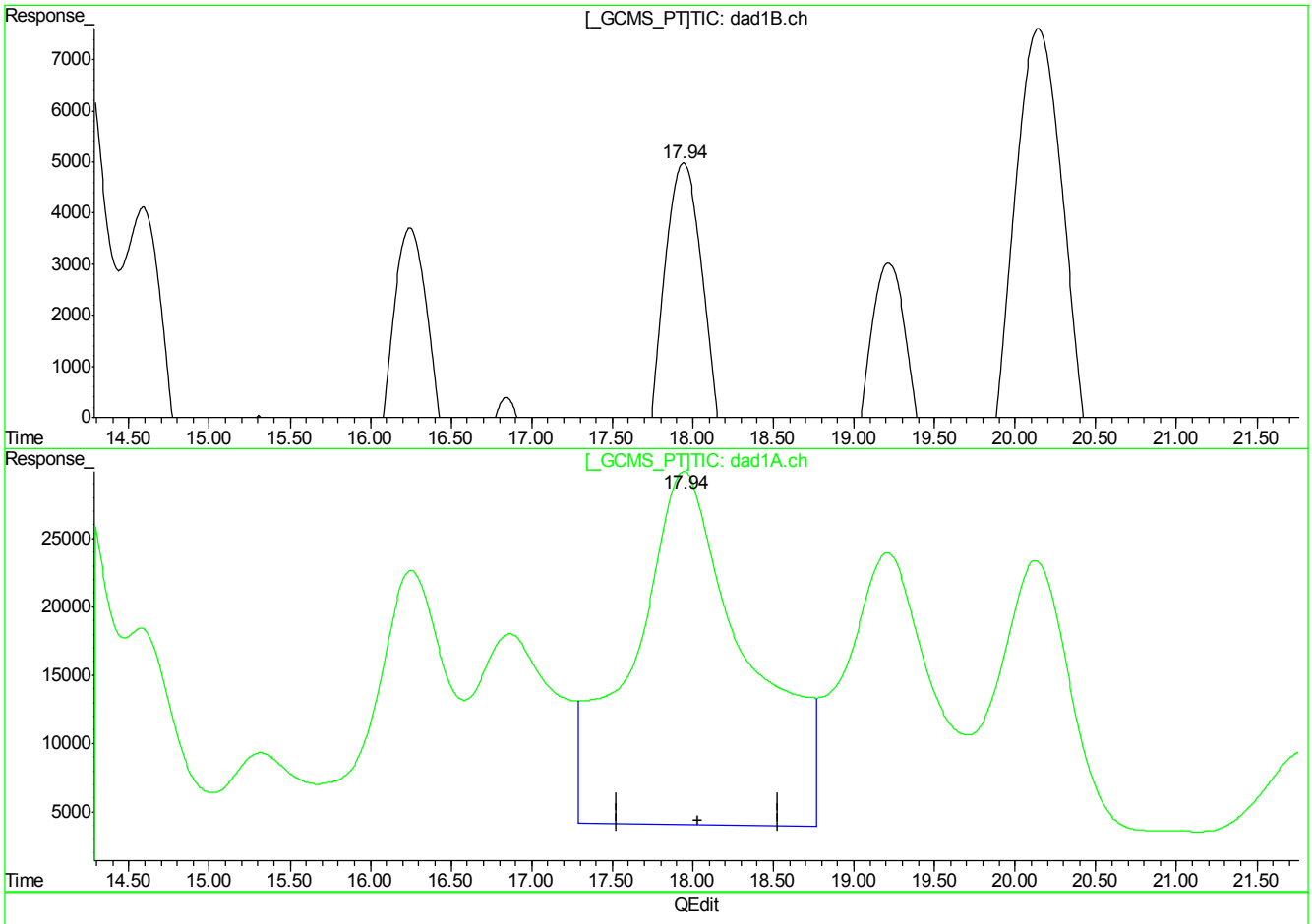
response 3250224

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:08 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.94min 194.466ppb

response 2283495

(17) p-Nitrotoluene #2

17.95min 597.965ppb

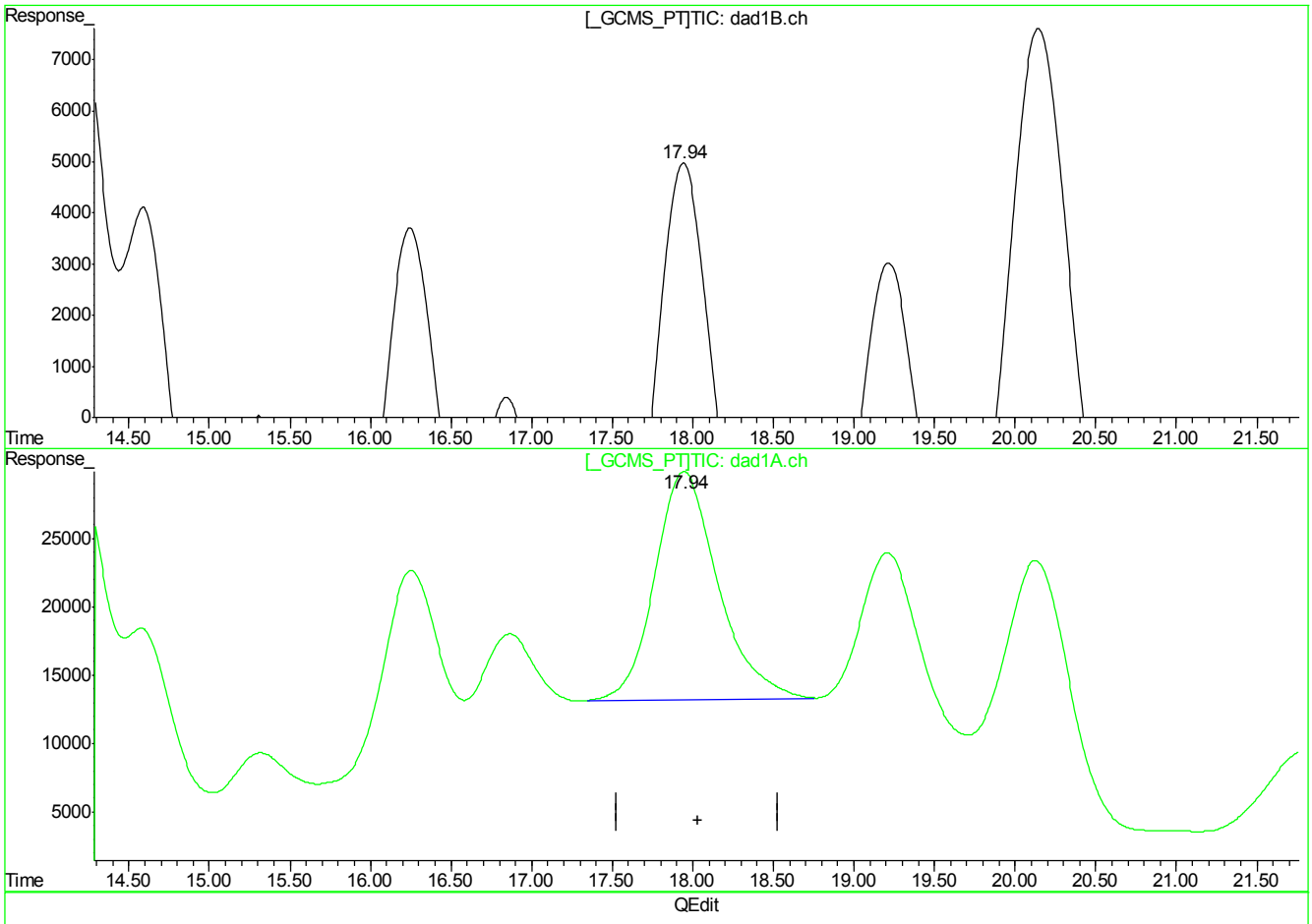
response 12672782

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

17.94min 194.466ppb

response 2283495

(17) p-Nitrotoluene #2

17.94min 215.663ppb m

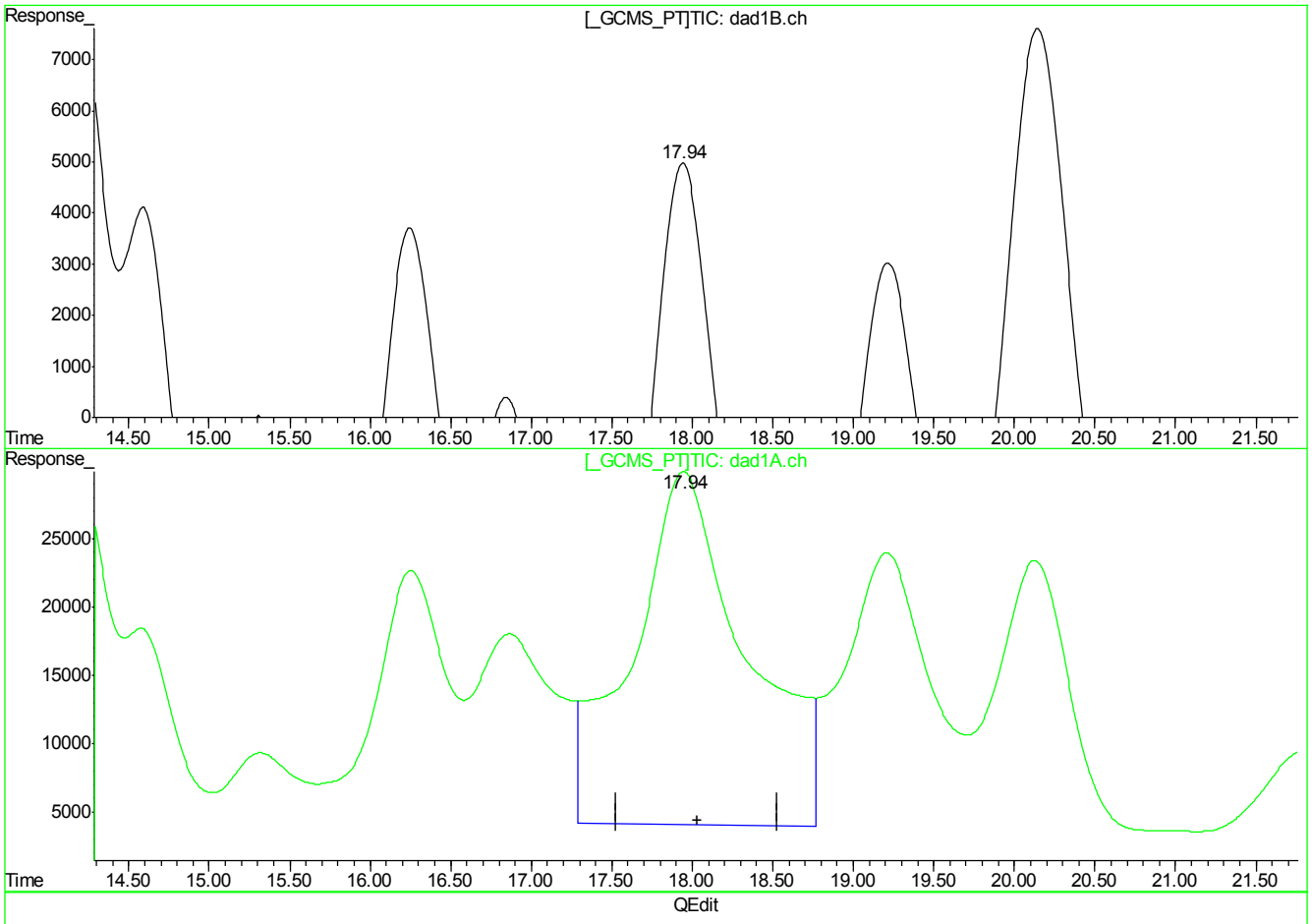
response 4570588

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:15 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.94min 194.466ppb

response 2283495

(18) 4-Amino-2,6-Dinitrotoluene #2

17.95min 596.227ppb

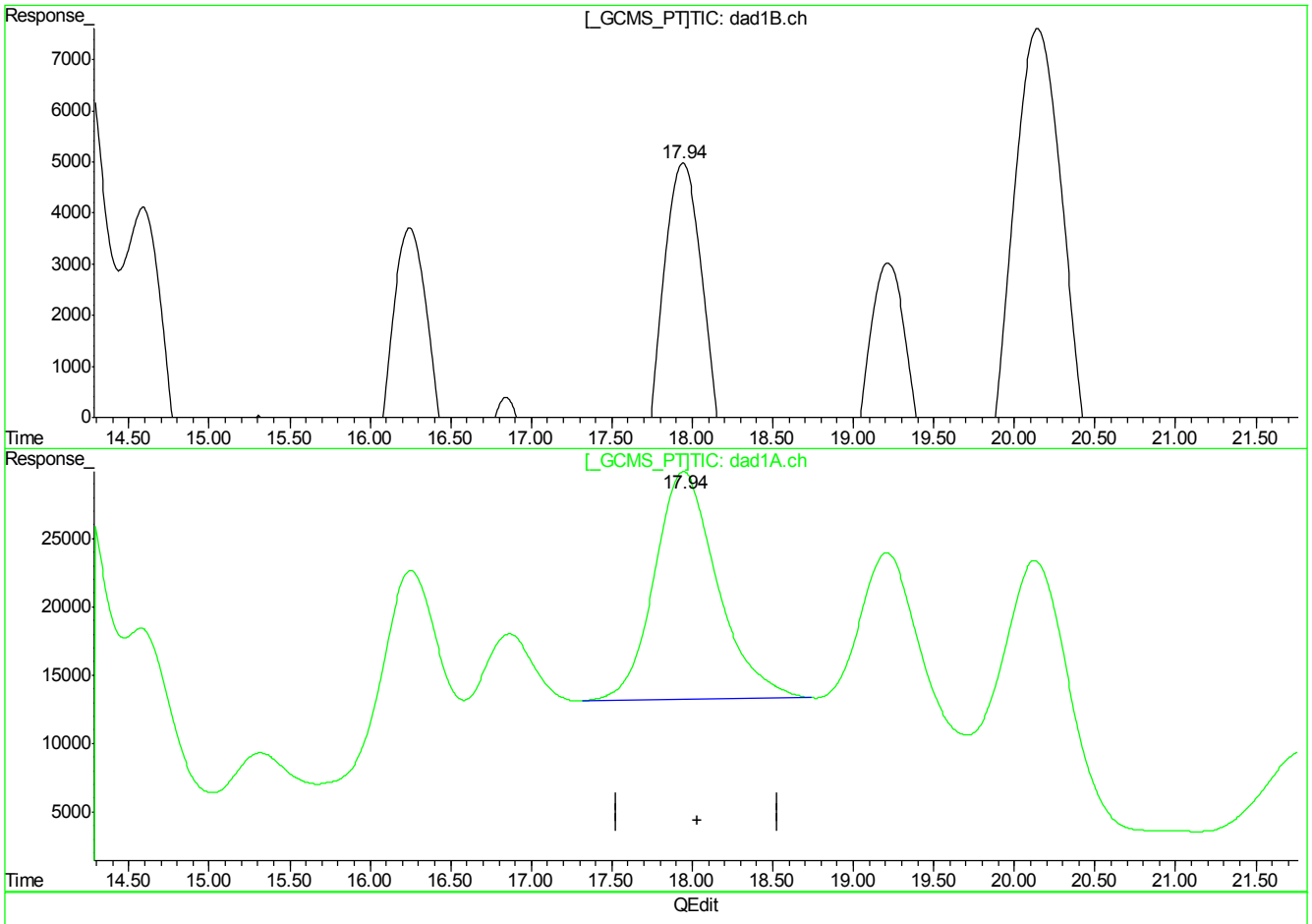
response 12672782

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:20 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

17.94min 194.466ppb

response 2283495

(18) 4-Amino-2,6-Dinitrotoluene #2

17.94min 213.584ppb m

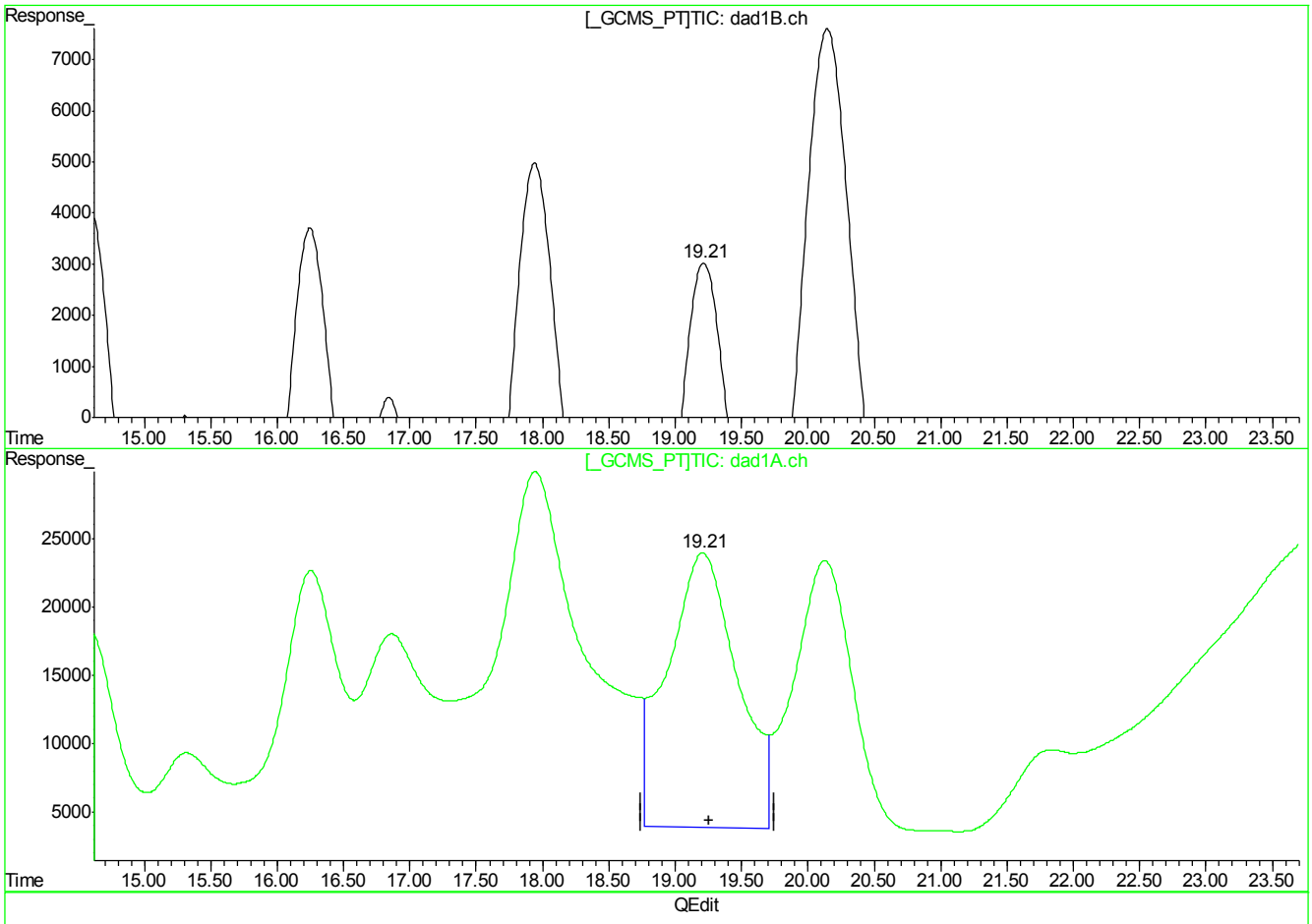
response 4539733

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.22min 296.516ppb

response 1748073

(19) m-Nitrotoluene #2

19.21min 759.634ppb

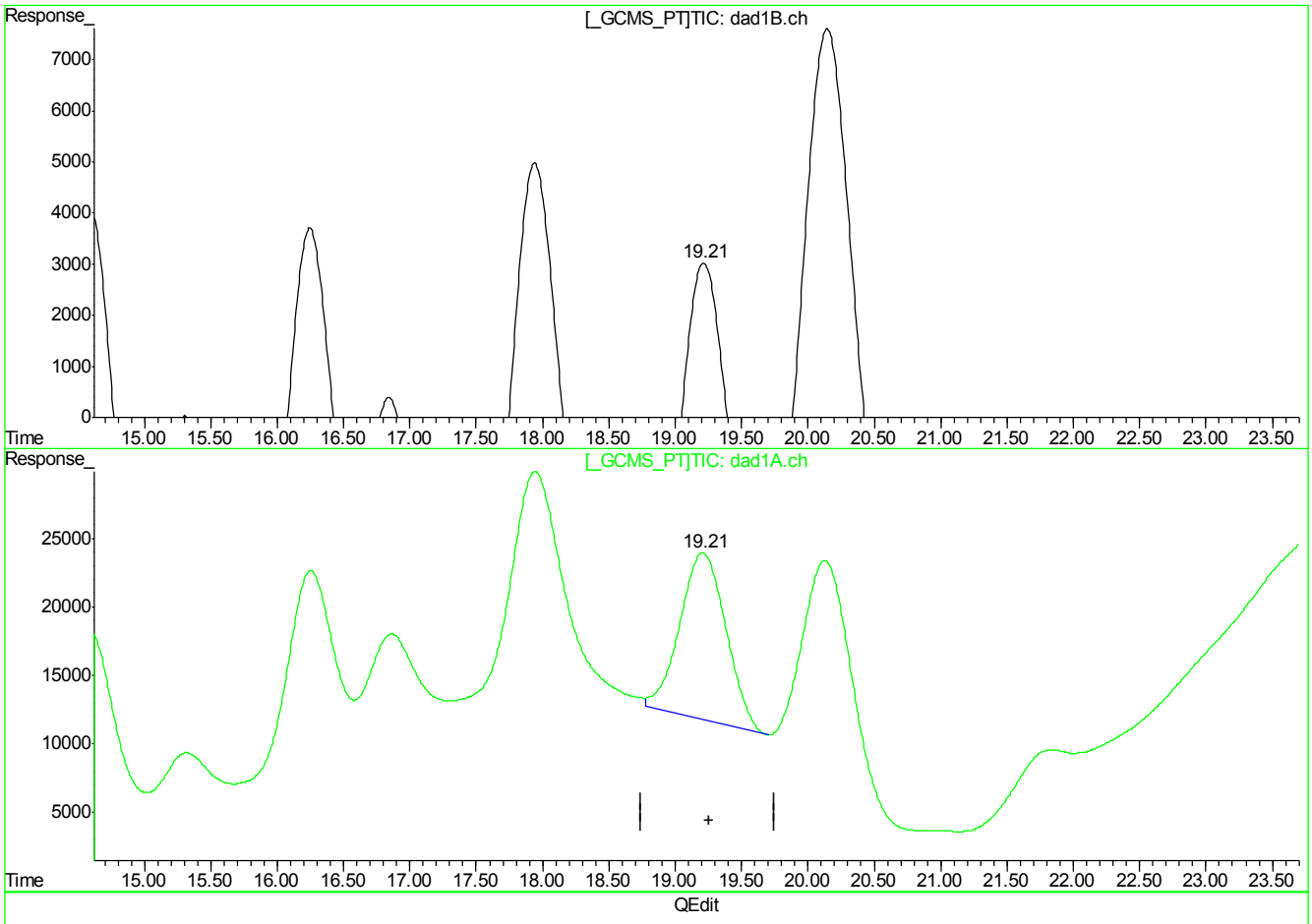
response 7386990

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:29 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.22min 296.516ppb

response 1748073

(19) m-Nitrotoluene #2

19.21min 302.726ppb m

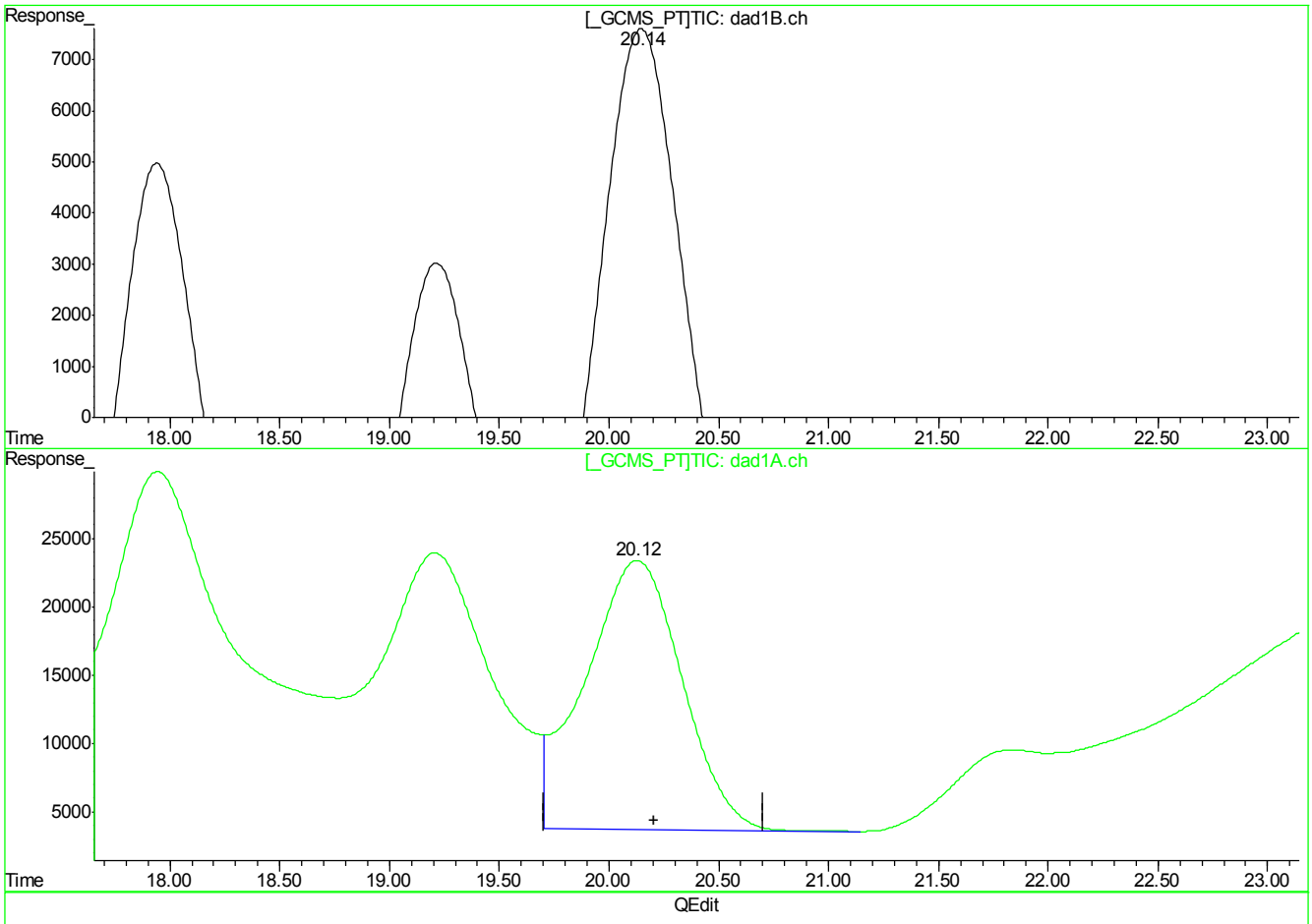
response 2943834

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.15min 352.827ppb

response 3183533

(20) 2-Amino-4,6-Dinitrotoluene #2

20.13min 508.856ppb

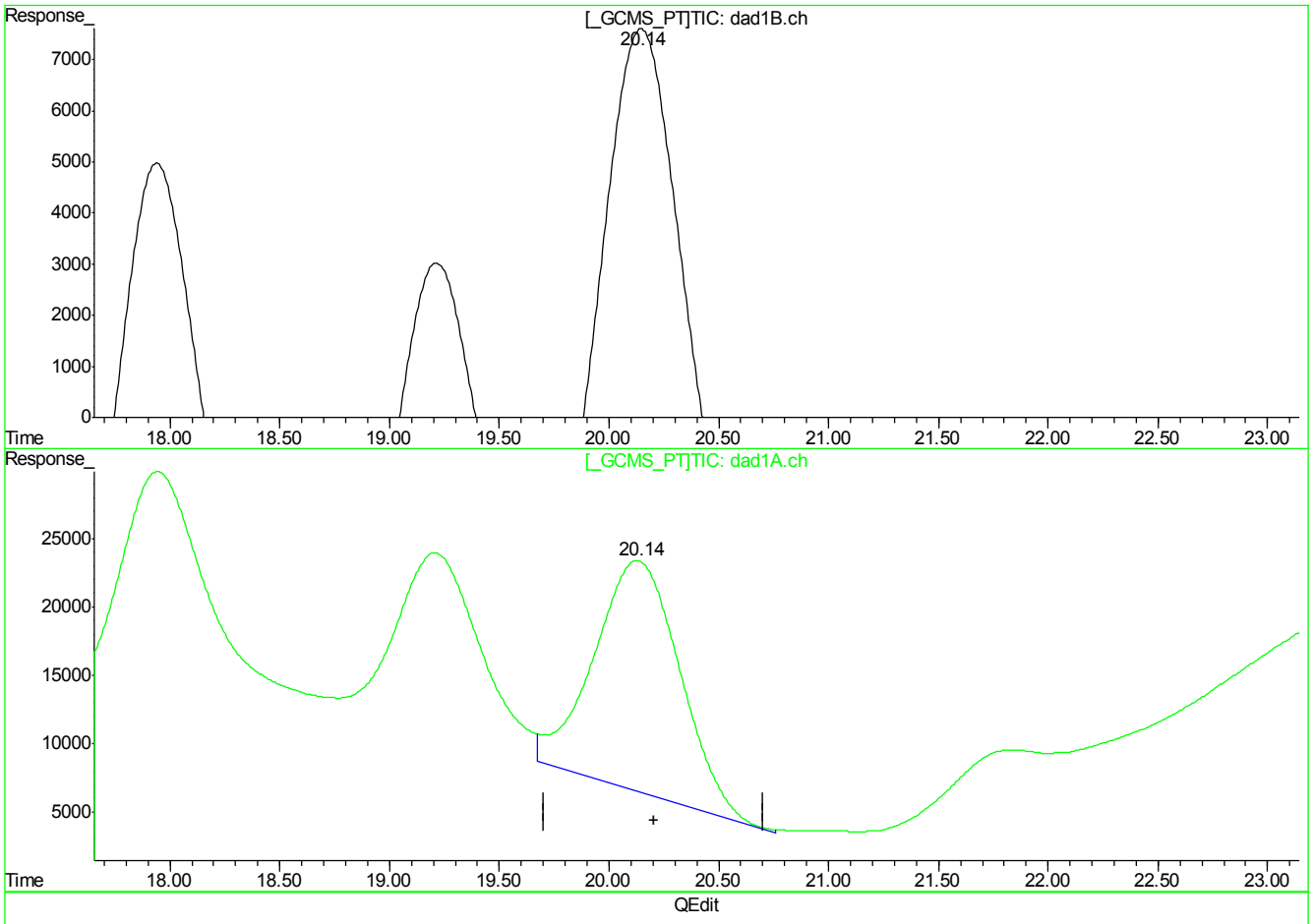
response 6052130

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:36 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.15min 352.827ppb

response 3183533

(20) 2-Amino-4,6-Dinitrotoluene #2

20.14min 391.774ppb m

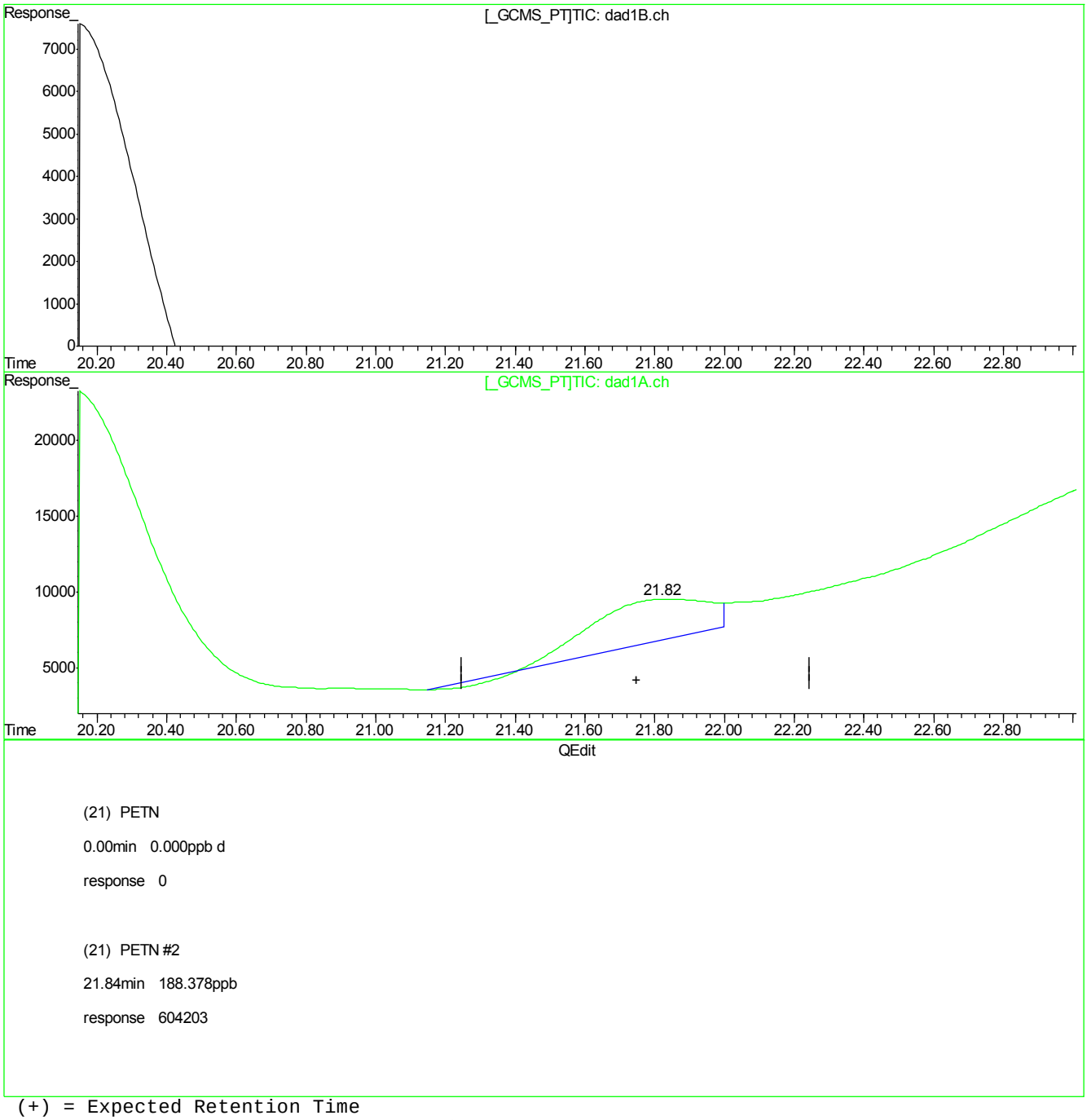
response 4623824

(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:42 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

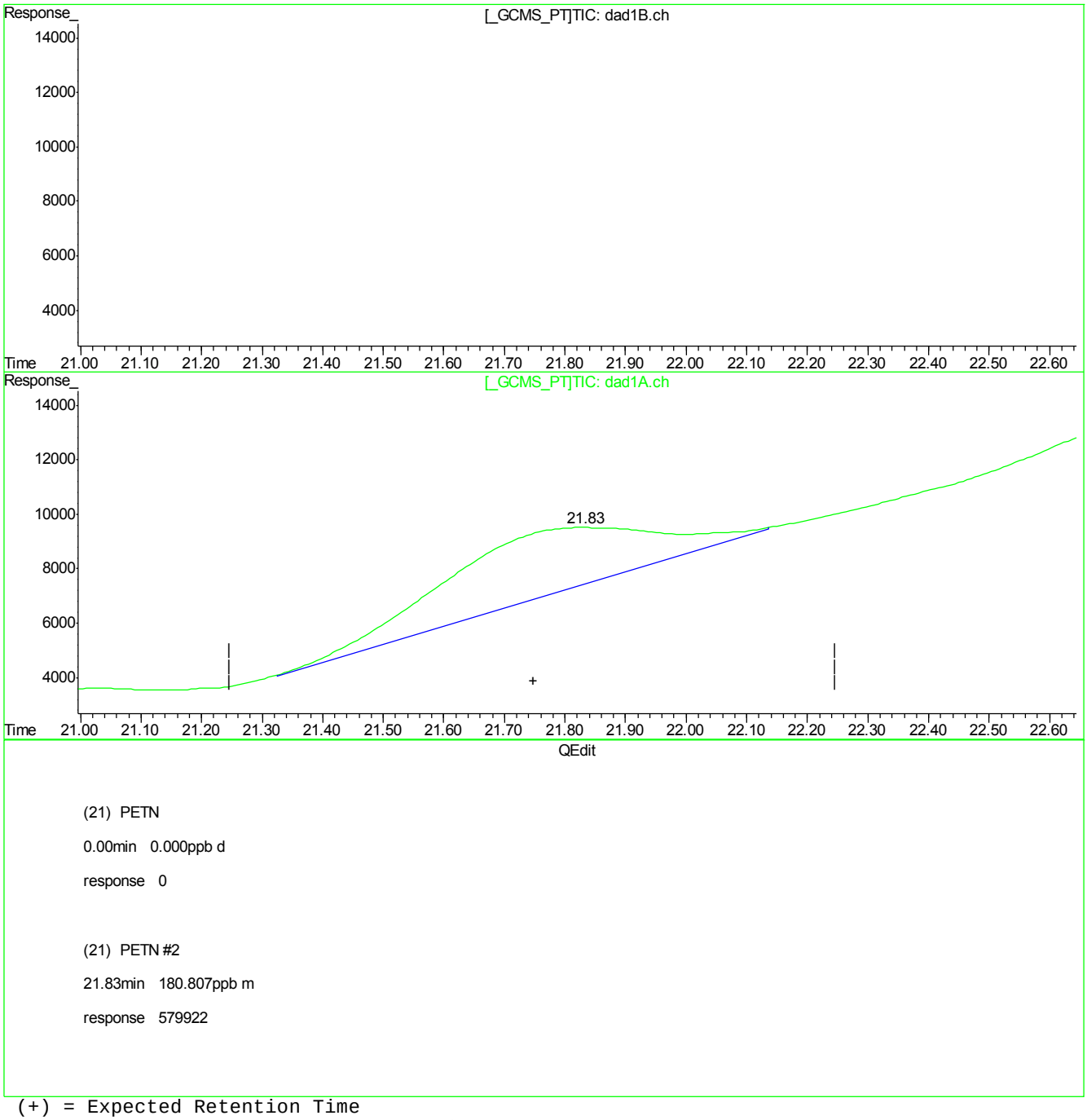


(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614648.D\dad1B.ch Vial: 67
Signal #2 : G:\DATA\0508RPB3\GG614648.D\dad1A.ch
Acq On : 09-May-2018, 09:39:37 Operator: evitam
Sample : op69946-pt1 Inst : G1315B
Misc : op69946,Ggg2626,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614648.D 8330RPB.M_1113M.M Wed May 09 11:08:54 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:02:50 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.00	10.00	1059753	1771977	396.066	375.837
	Spiked Amount 500.000	Range 69 - 134		Recovery =		79.21%	75.17%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.41	1.41	575596	1643863	307.788m	323.334
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.68	2.68	485031	786244	226.821	236.536
6)	1,3,5-Trinitrobe	4.29	4.29	691370	1286265	158.888	154.079
7)	1,3-Dinitrobenze	5.44	5.44	641580	404463	115.726	108.599
8)	3,5-Dinitroanili	5.70	5.71	874904	1422169	178.903	190.160
9)	Nitrobenzene	6.93	6.93	683546	699428	187.591	210.935
10)	Nitroglycerin	0.00	8.23	0	233340	N.D. d	182.093
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	8.91	8.93	176323	203552	41.781m	44.907m
13)	2-Amino-4,6-Dini	9.11	9.11	1326510	1939978	350.420m	361.677m
14)	4-Amino-2,6-Dini	9.51	9.50	155189	329692	59.568	63.624
16)	2,4-Dinitrotolue	10.62	10.61	440152	198755	83.663	67.301m
17)	2,6-Dinitrotolue	11.09	11.06	864519	952241	250.131	278.871
18)	o-Nitrotoluene	14.34	14.33	498458	689342	199.556	210.438
19)	p-Nitrotoluene	14.90	14.91	1561365	1313920	395.579	417.131
20)	m-Nitrotoluene	15.89	15.88	1133358	1283393	317.716	318.945
21)	PETN	0.00	18.30	0	324933	N.D. d	233.961m

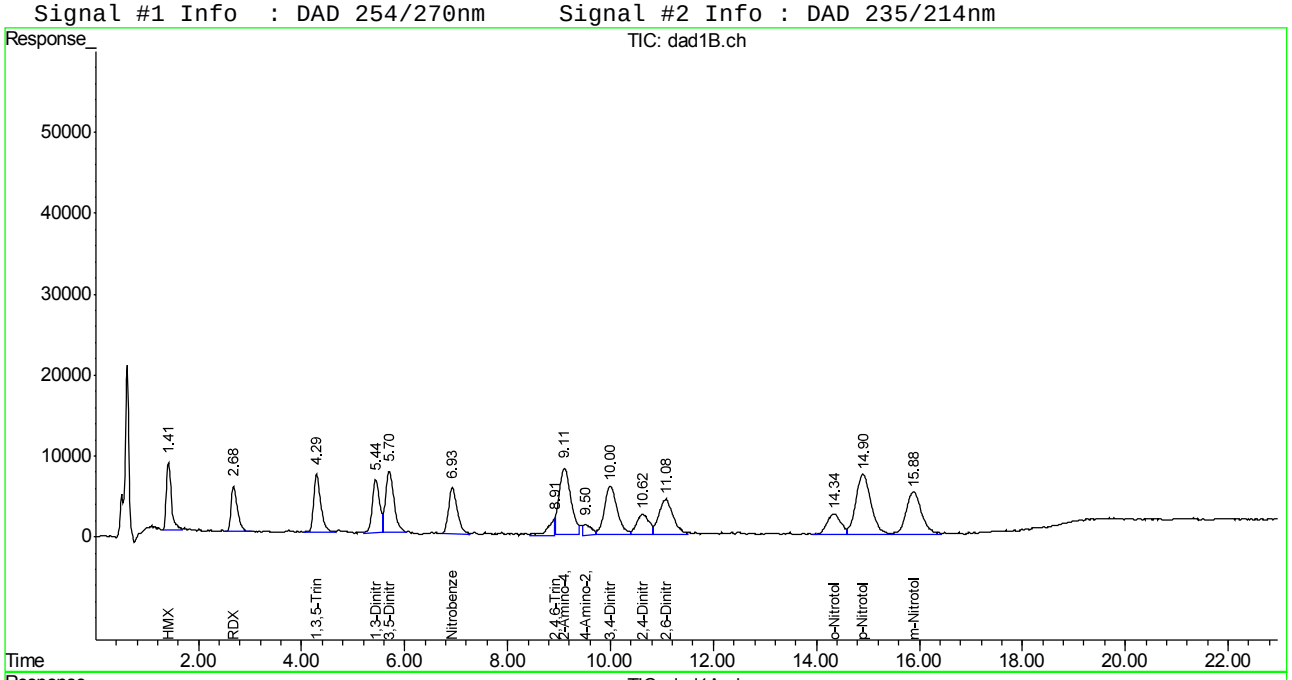
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059672.D 8330B_0419PLUS.M Fri May 11 08:37:47 2018 Page 1

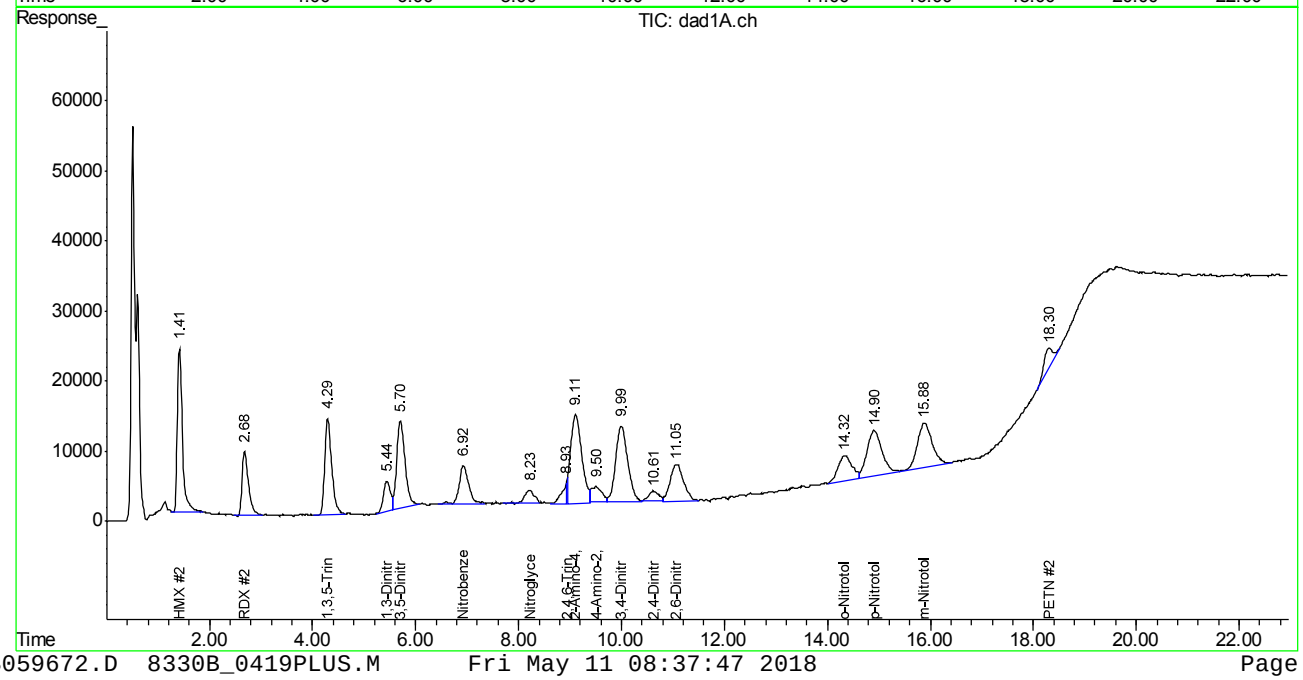
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:09 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

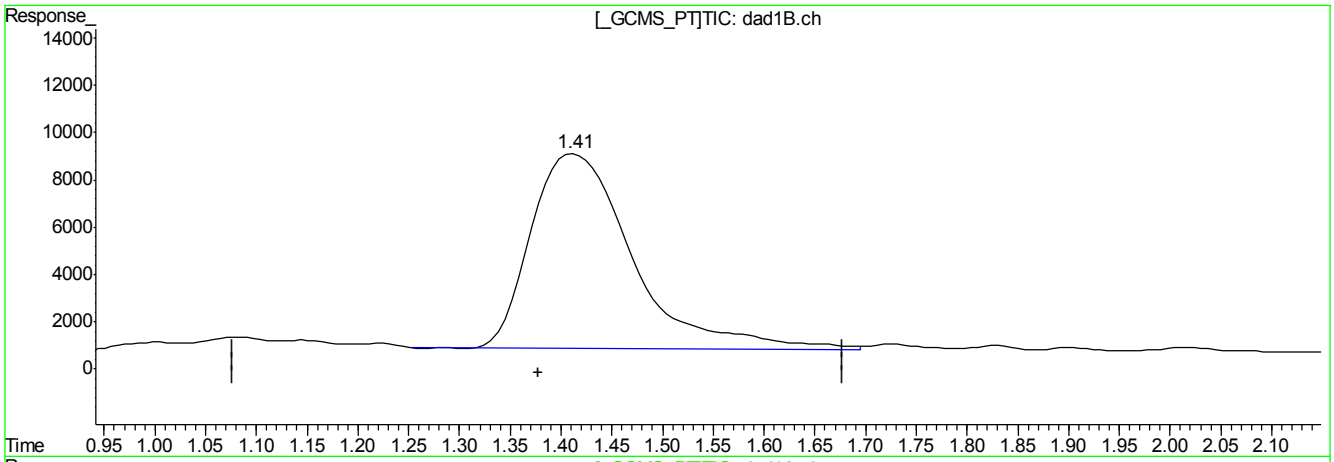
Sample Number:	OP69960-PT1	**Method:**	SW846 8330B
Lab FileID:	BB059672.D	**Analyst approved:**	05/11/18 08:46 Evita Martinez
Injection Time:	05/10/18 11:29	**Supervisor approved:**	05/11/18 15:51 Mike Eger

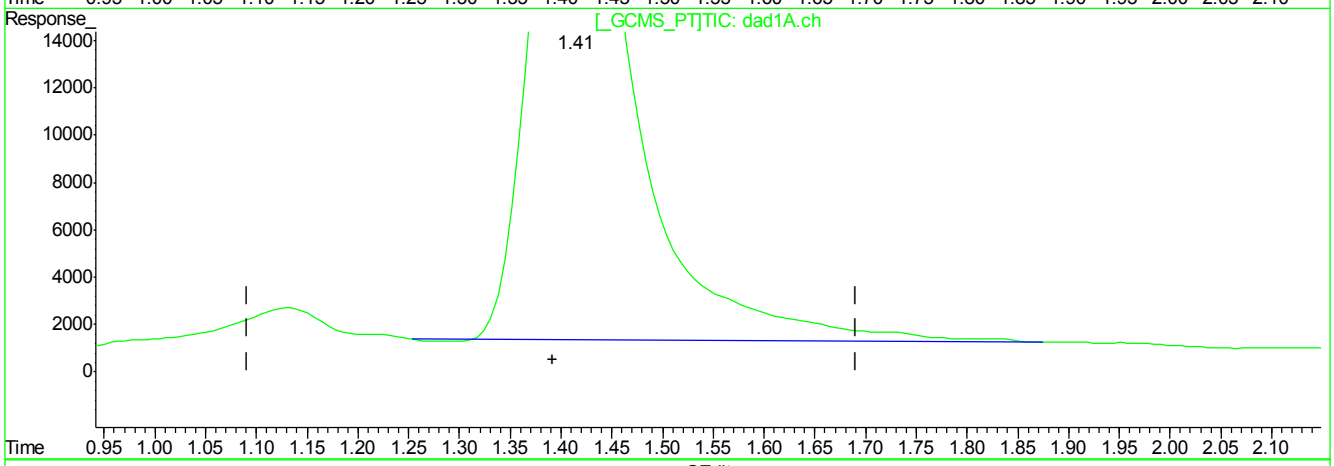
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.41	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	8.91	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	8.93	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	9.11	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.11	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	10.61	Poorly defined baseline
PETN	78-11-5	2	18.30	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.41min 305.255ppb

response 570859

(2) HMX #2

1.41min 323.334ppb

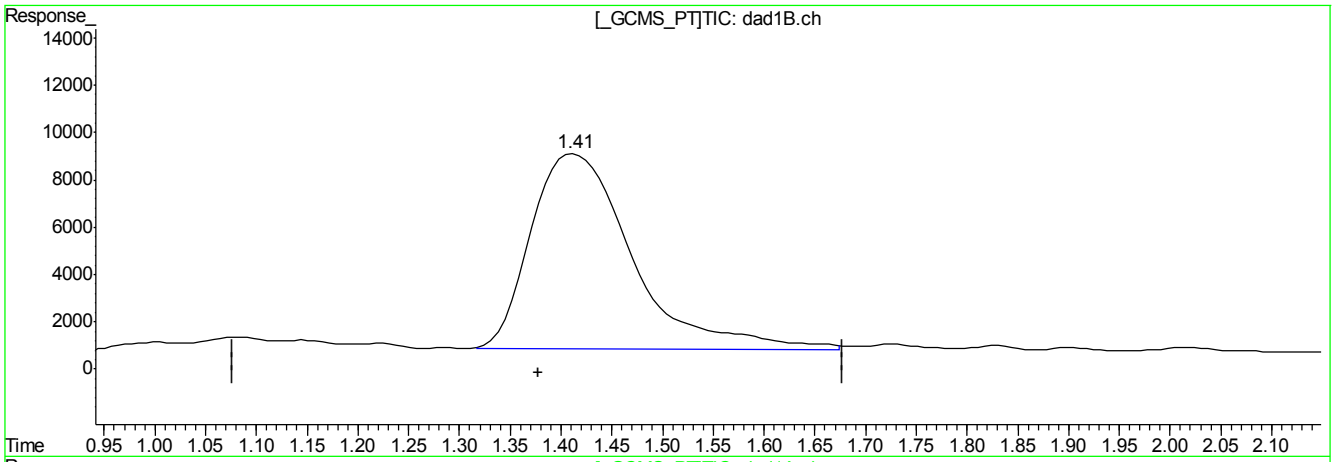
response 1643863

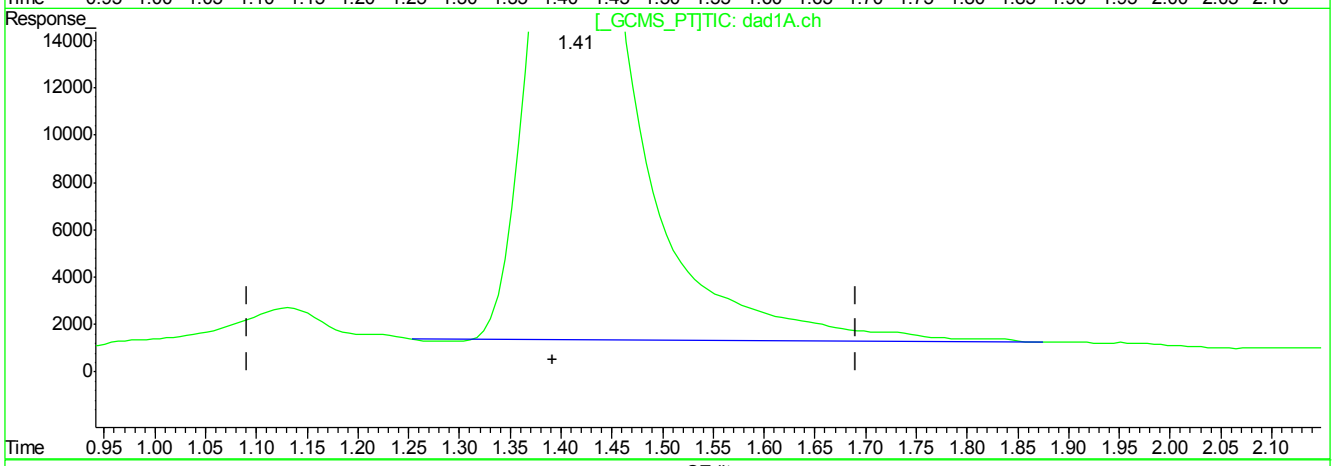
(+) = Expected Retention Time
BB059672.D 8330B_0419PLUS.M Fri May 11 08:06:57 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.41min 307.788ppb m

response 575596

(2) HMX #2

1.41min 323.334ppb

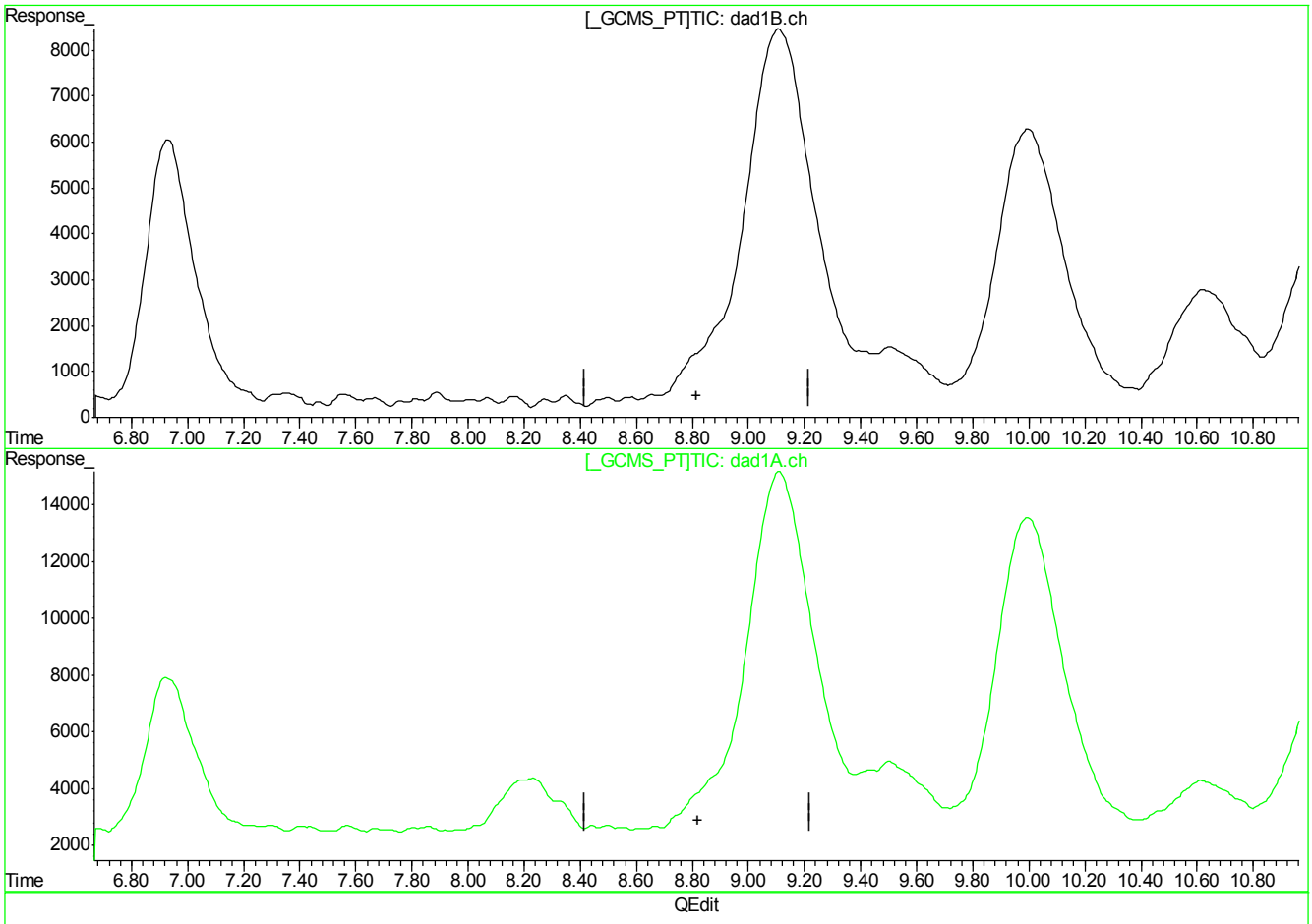
response 1643863

(+) = Expected Retention Time
BB059672.D 8330B_0419PLUS.M Fri May 11 08:07:02 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

0.00min 0.000ppb

response 0

(12) 2,4,6-Trinitrotoluene #2

0.00min 0.000ppb

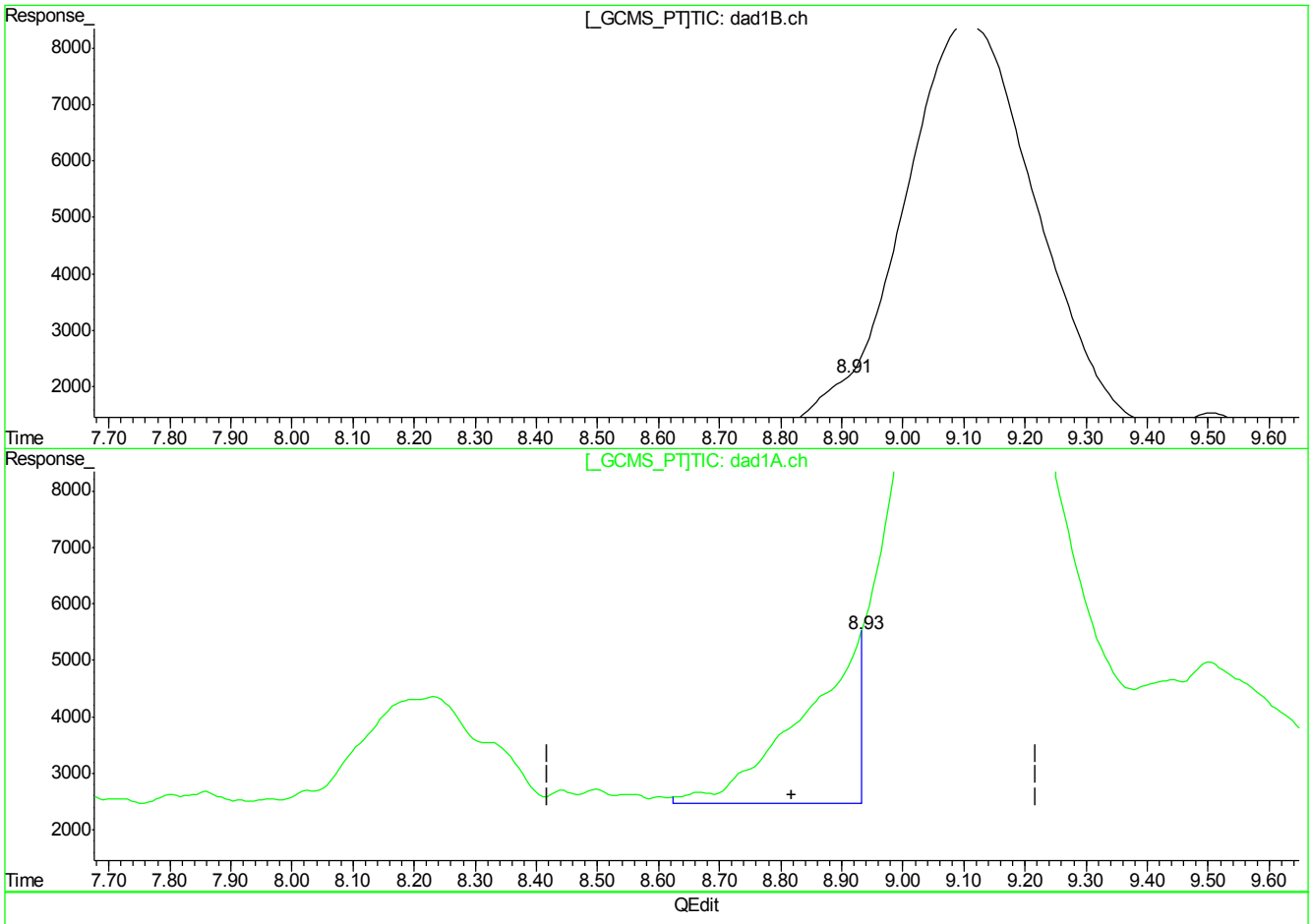
response 0

(+) = Expected Retention Time
BB059672.D 8330B_0419PLUS.M Fri May 11 08:07:18 2018

Quantitation Report (Qedit)

```
Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On    : 10-May-2018, 11:29:49                    Operator: evitam
Sample    : OP69960-PT1                              Inst    : G1315B
Misc      : OP69960,gbb1730,10.00,,,50,1,soil        Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: May 11  8:02 2018  Quant Results File: 8330B_0419PLUS.RES

Method       : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
```



(12) 2,4,6-Trinitrotoluene

8.91min 41.781ppb m

response 176323

(12) 2,4,6-Trinitrotoluene #2

8.93min 44.907ppb m

response 203552

(+) = Expected Retention Time

BB059672.D 8330B_0419PLUS.M Fri May 11 08:07:48 2018

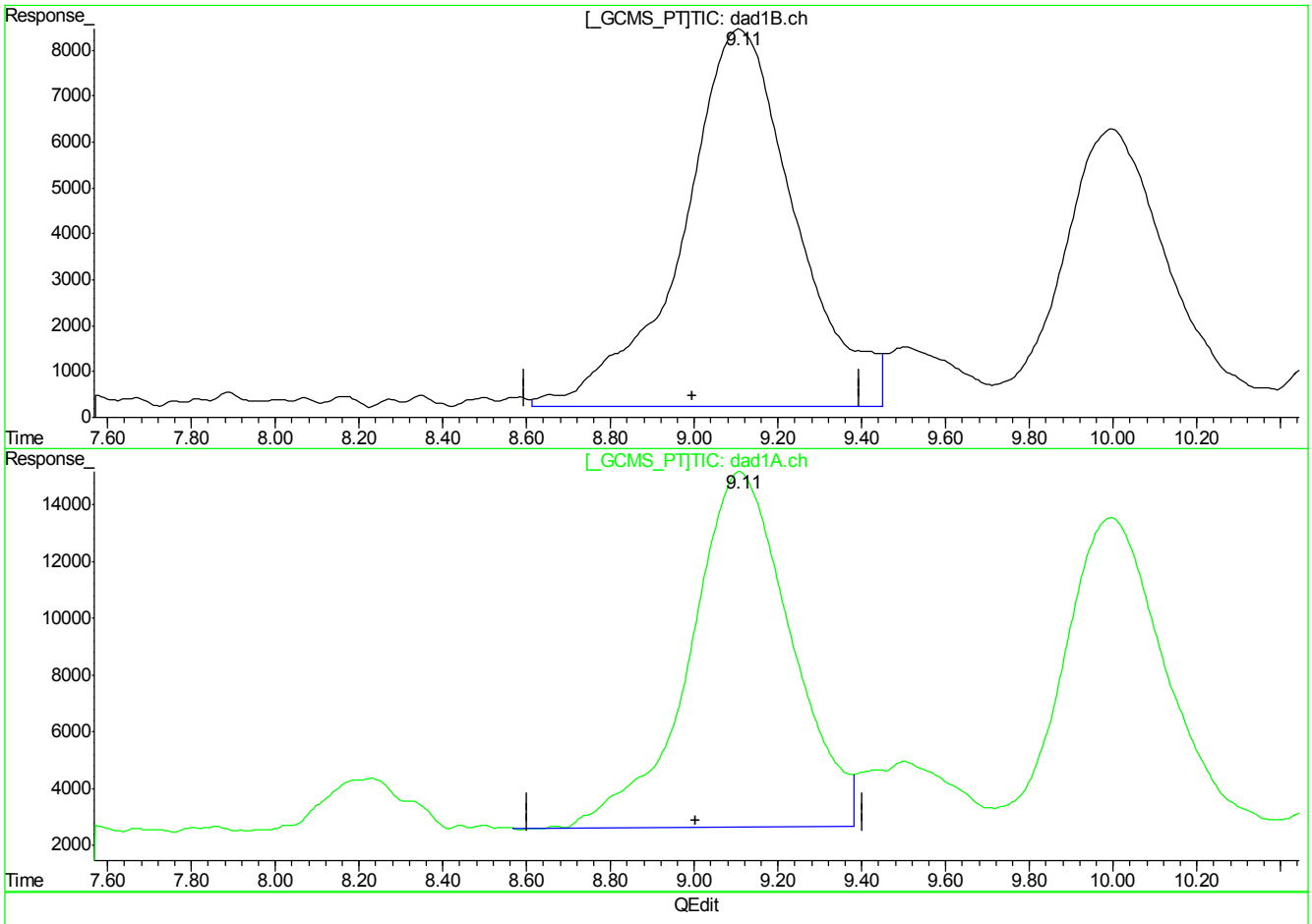
7.4.2.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.11min 408.215ppb

response 1545291

(13) 2-Amino-4,6-Dinitrotoluene #2

9.11min 390.373ppb

response 2093898

(+) = Expected Retention Time
BB059672.D 8330B_0419PLUS.M Fri May 11 08:07:51 2018

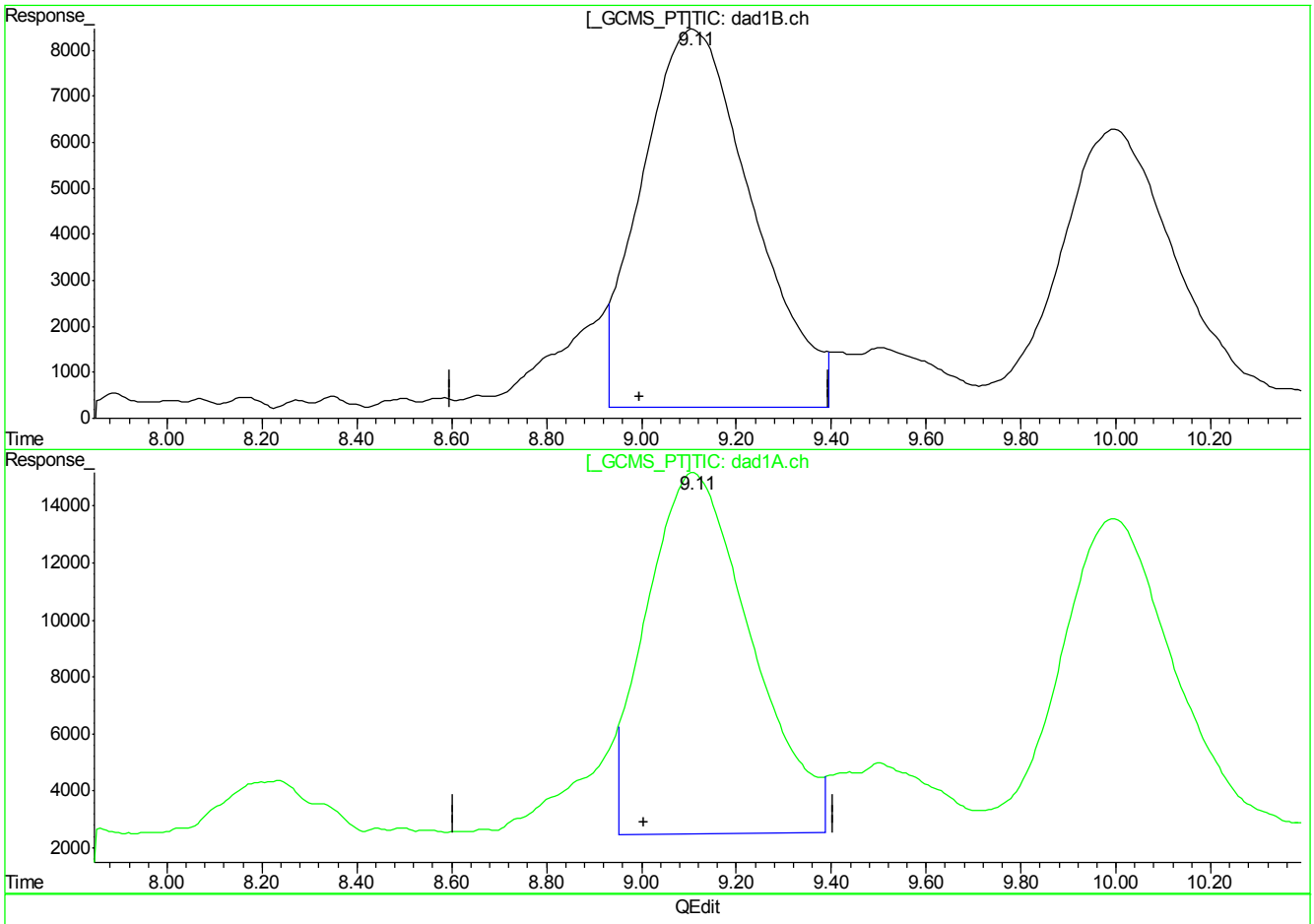
7.4.2.6

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.11min 350.420ppb m

response 1326510

(13) 2-Amino-4,6-Dinitrotoluene #2

9.11min 361.677ppb m

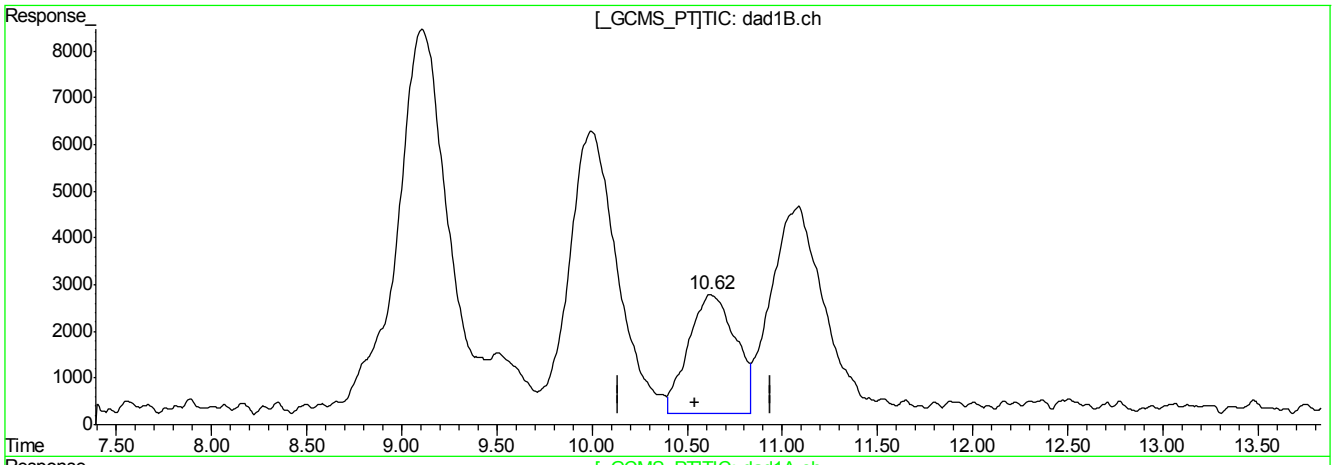
response 1939978

(+) = Expected Retention Time
BB059672.D 8330B_0419PLUS.M Fri May 11 08:09:02 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

10.62min 83.663ppb

response 440152

(16) 2,4-Dinitrotoluene #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059672.D 8330B_0419PLUS.M Fri May 11 08:09:11 2018

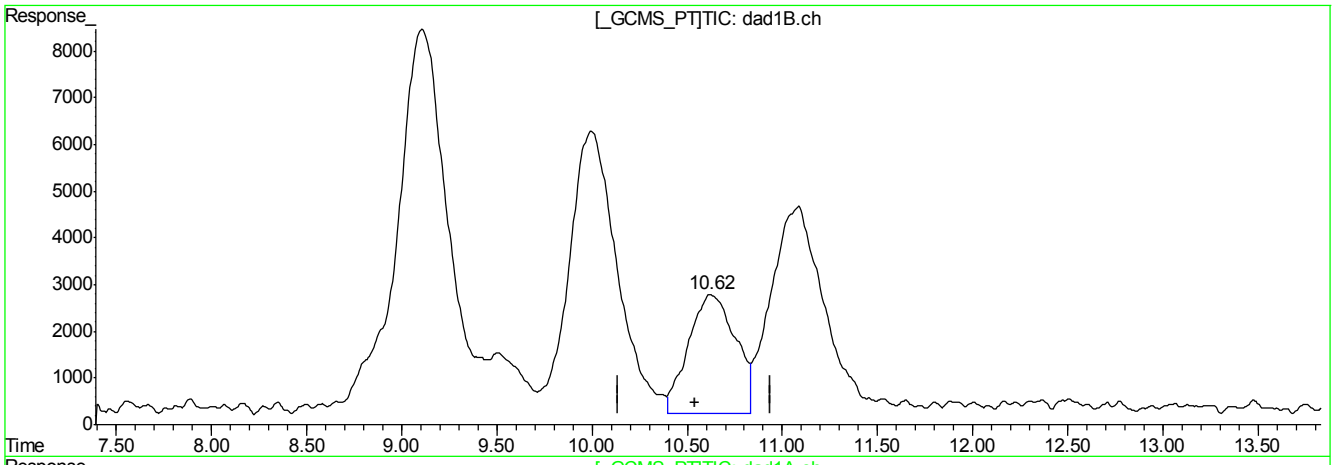
7.4.2.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

10.62min 83.663ppb

response 440152

(16) 2,4-Dinitrotoluene #2

10.61min 67.301ppb m

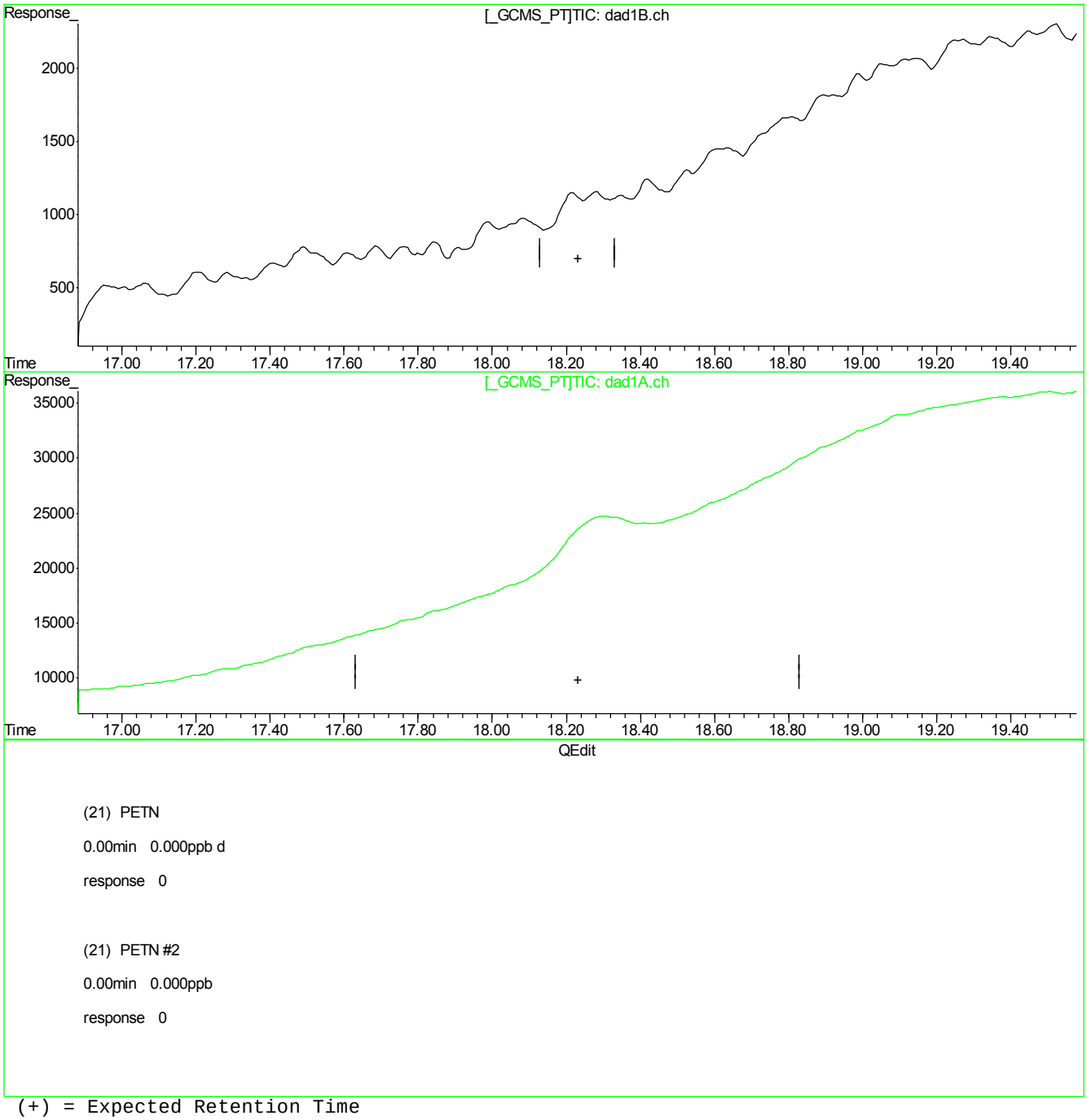
response 198755

(+) = Expected Retention Time
BB059672.D 8330B_0419PLUS.M Fri May 11 08:09:14 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059672.D 8330B_0419PLUS.M Fri May 11 08:09:20 2018

7.4.2.10

7

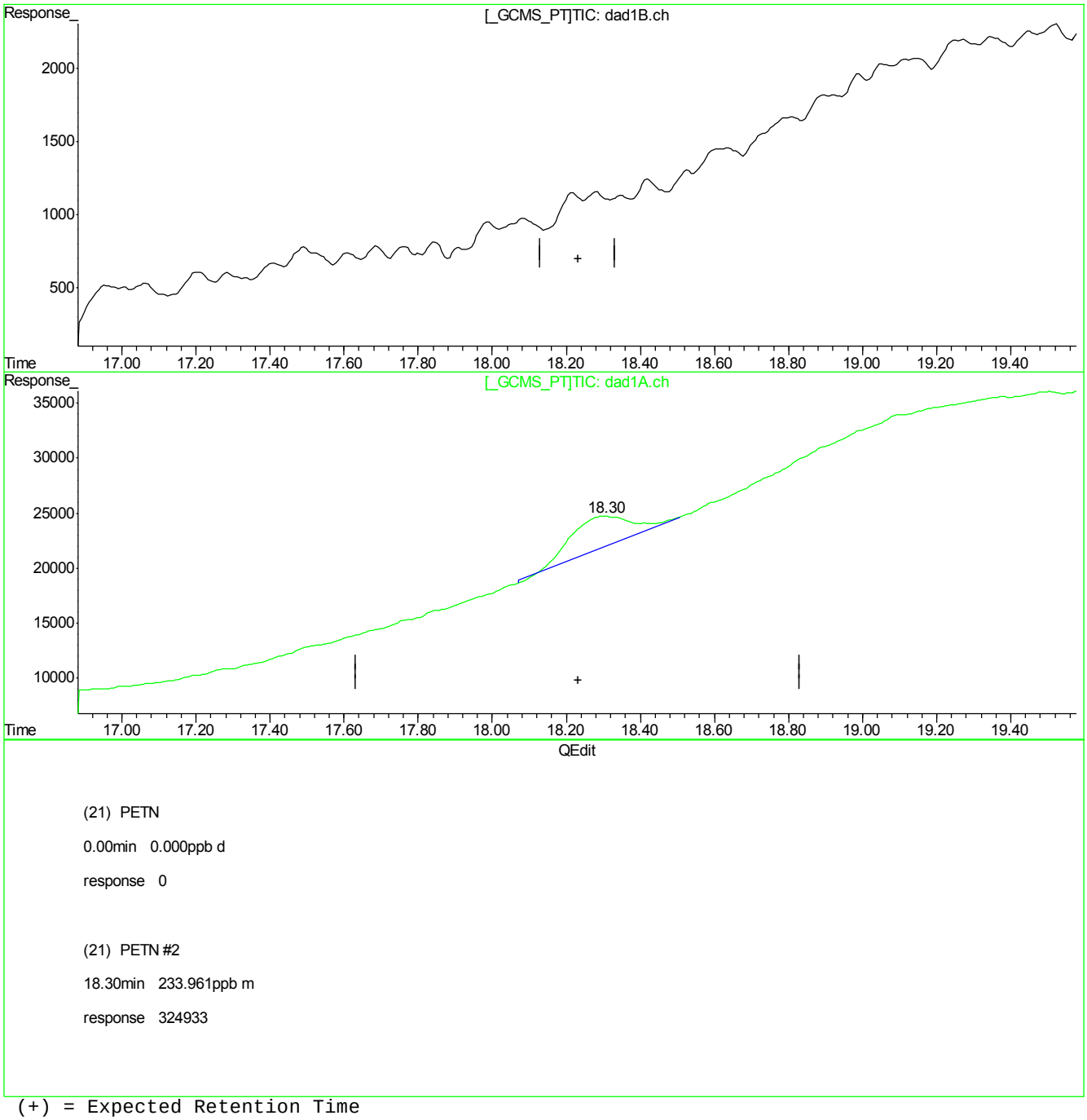
BB059672.D edits: PETN

FA53800

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059672.D\dad1A.ch
Acq On : 10-May-2018, 11:29:49 Operator: evitam
Sample : OP69960-PT1 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059672.D 8330B_0419PLUS.M Fri May 11 08:09:23 2018

7.4.2.11

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 12:05:20 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.22	14.22	2443561	5281077	470.378	488.192
	Spiked Amount 500.000	Range 69 - 134		Recovery =		94.08%	97.64%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.41	5.41	1892838	1915139	583.869m	594.440m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.45	7.45	4601730	4605963	444.114	444.568
6)	RDX	7.89	7.89	2291995	2311426	481.090	487.319
7)	1,3-Dinitrobenze	9.91	9.91	6374970	6238960	445.588	490.185
8)	Nitrobenzene	10.87	10.87	4346417	5115626	460.552	552.390
9)	2,4,6-Trinitroto	11.64	11.64	4536386	7124722	447.626	543.256
10)	Nitroglycerin	0.00	12.38	0	8337675	N.D. d	2474.273
11)	Tetryl	12.89	12.89	3377936	6375584	416.830	452.484
13)	2,6-Dinitrotolue	14.59	14.59	3324226	5074723	464.952	500.167
14)	2,4-Dinitrotolue	15.29	15.29	5899454	4769384	450.028	501.599
15)	o-Nitrotoluene	16.83	16.83	2901732	4693553	502.326	544.267
16)	3,5-Dinitroanili	16.22	16.22	5179110	9311419	529.357	572.820
17)	p-Nitrotoluene	17.96	17.97	5406666	10126625	460.441	477.825
18)	4-Amino-2,6-Dini	17.96	17.97	5406666	10126625	460.441	476.436
19)	m-Nitrotoluene	19.20	19.20	2951473	5177228	500.642	532.395
20)	2-Amino-4,6-Dini	20.12	20.13	4191864	5709288	464.579	480.911
21)	PETN	0.00	21.75	0	7720696	N.D. d	2407.147m

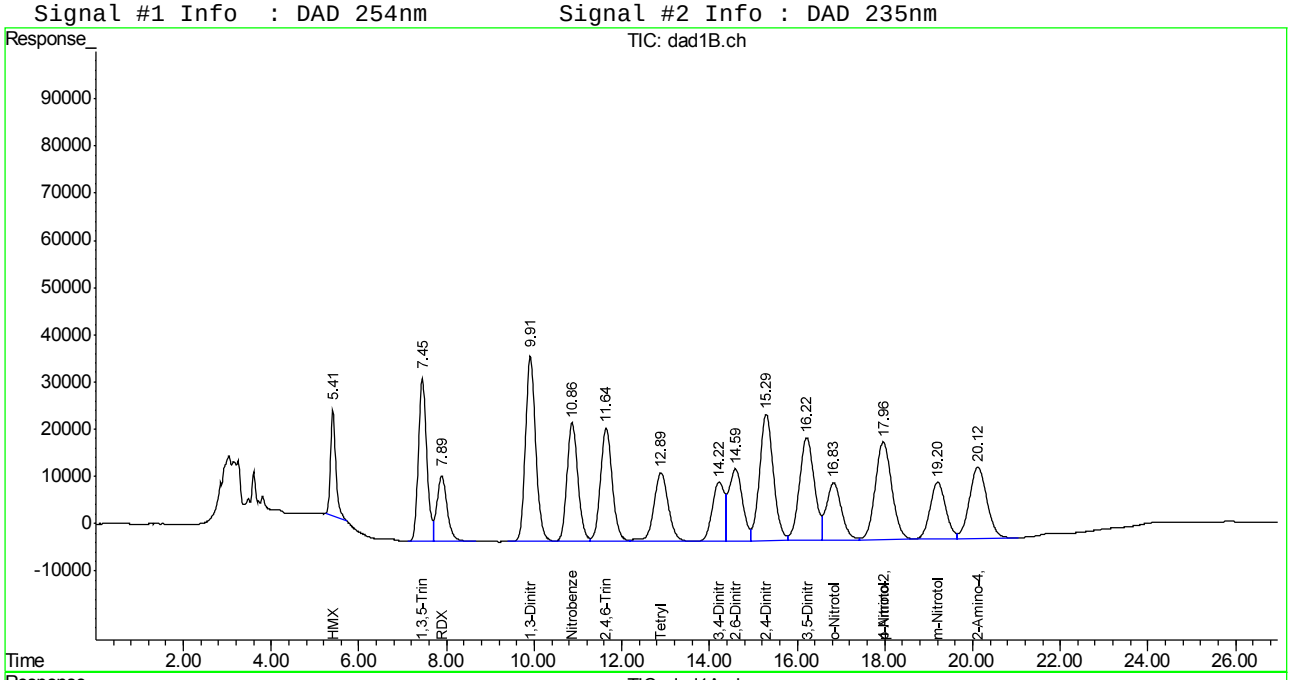
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:13:12 2018 Page 1

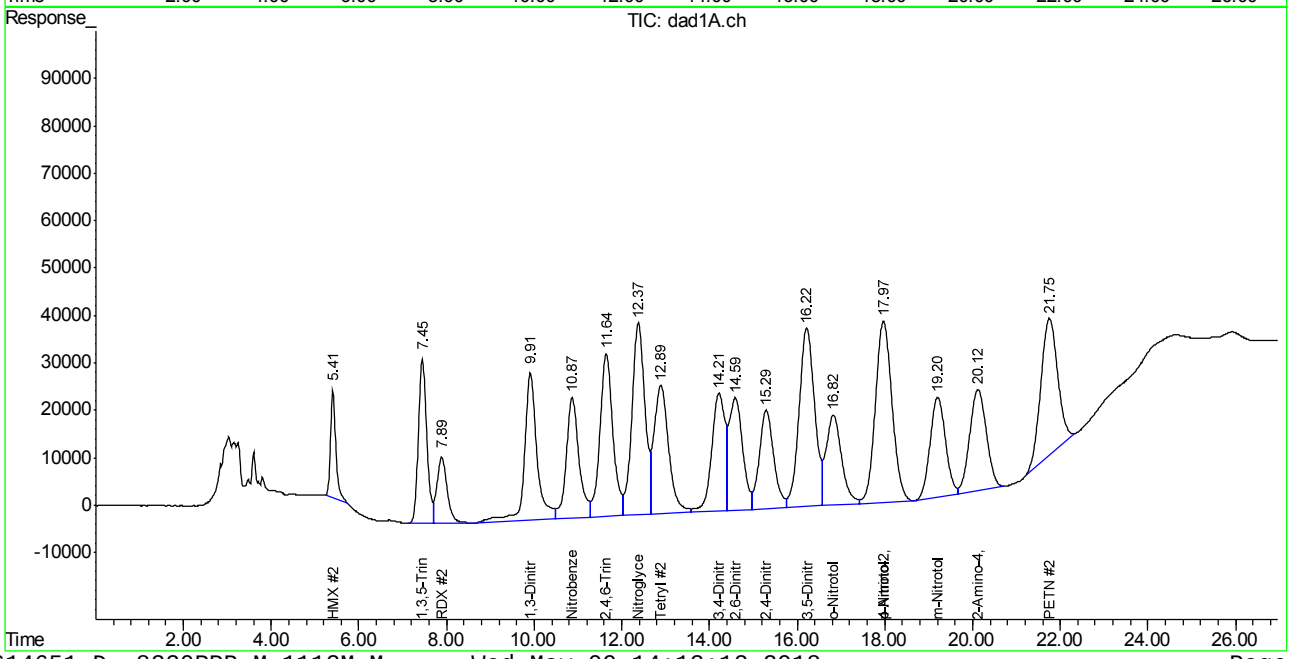
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

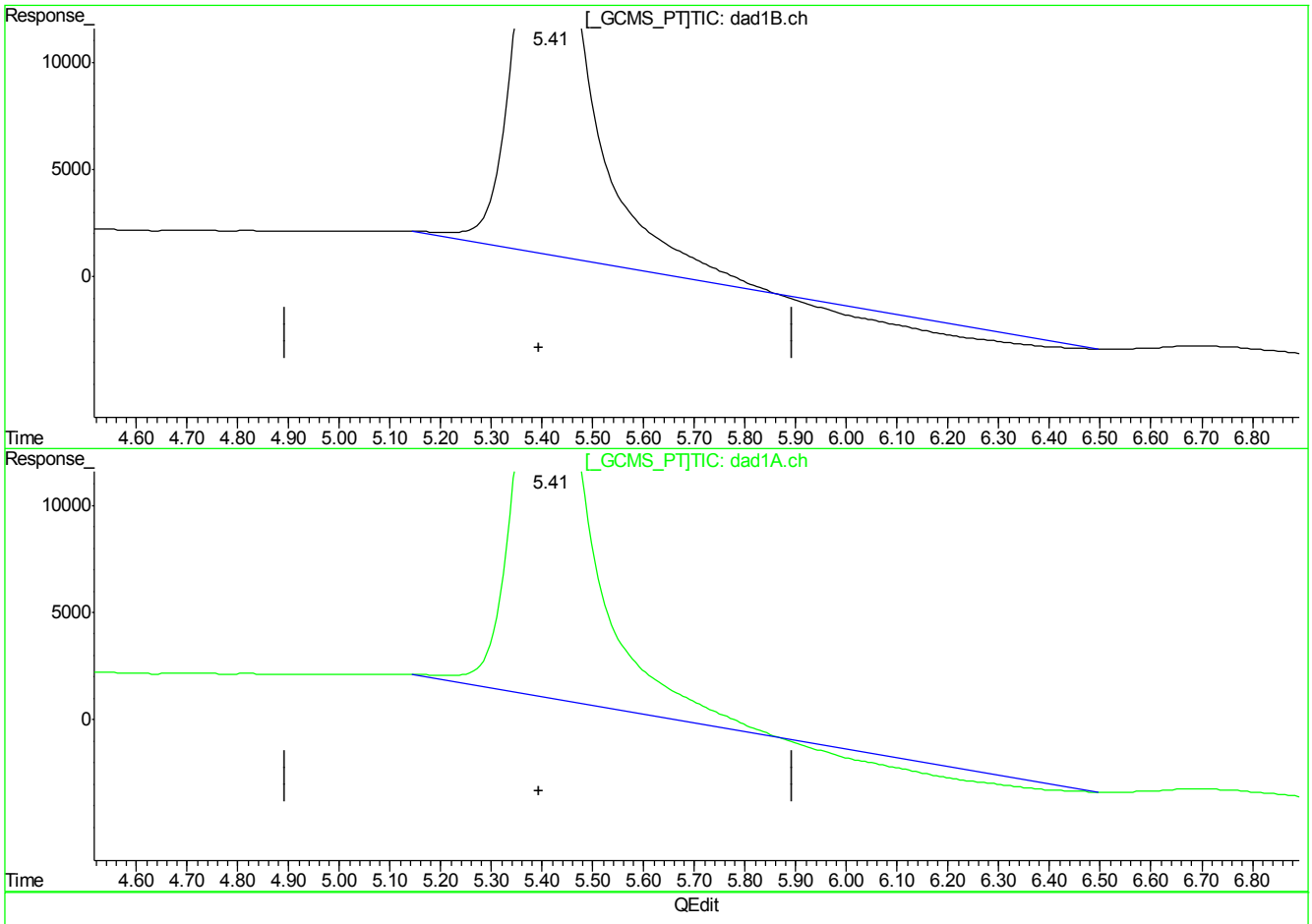
Sample Number:	OP69946-MS	**Method:**	SW846 8330B
Lab FileID:	GG614651.D	**Analyst approved:**	05/09/18 14:15 Evita Martinez
Injection Time:	05/09/18 11:10	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.41	Poorly defined baseline
HMX	2691-41-0	2	5.41	Poorly defined baseline
PETN	78-11-5	2	21.75	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.41min 610.652ppb

response 1979664

(2) HMX #2

5.41min 614.468ppb

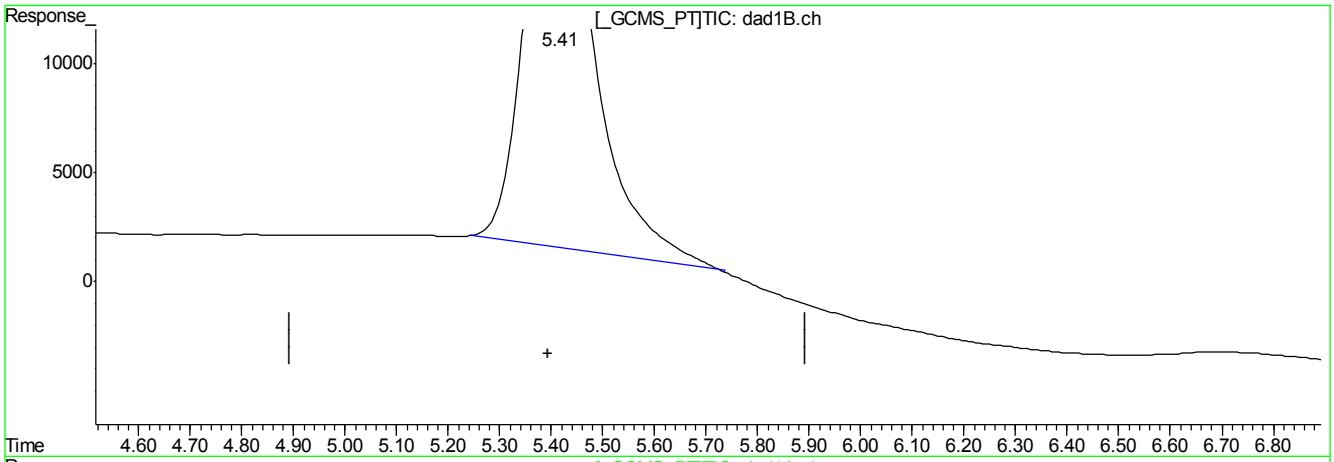
response 1979664

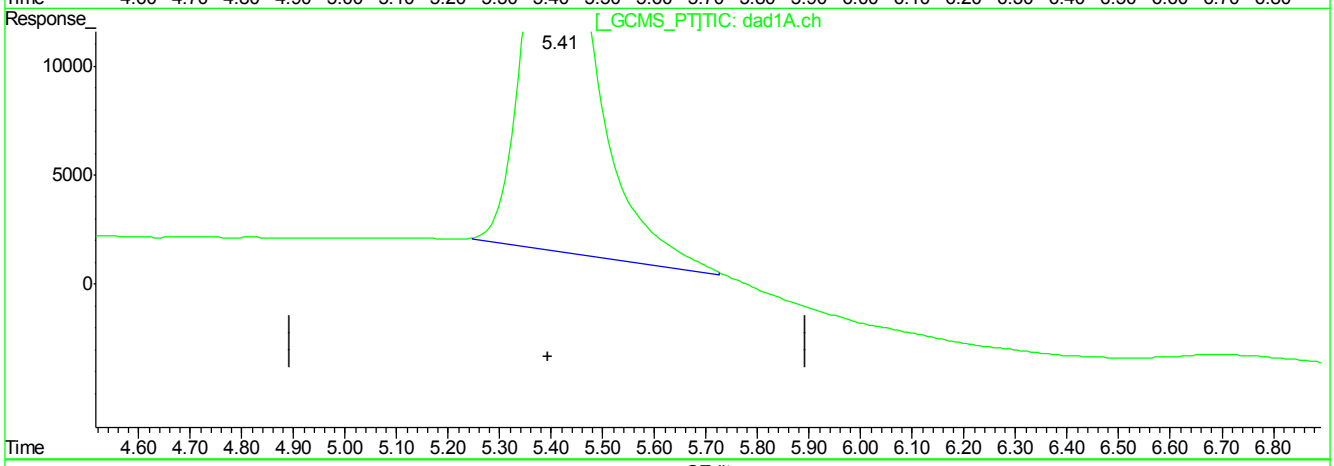
(+) = Expected Retention Time
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:11:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.41min 583.869ppb m

response 1892838

(2) HMX #2

5.41min 594.440ppb m

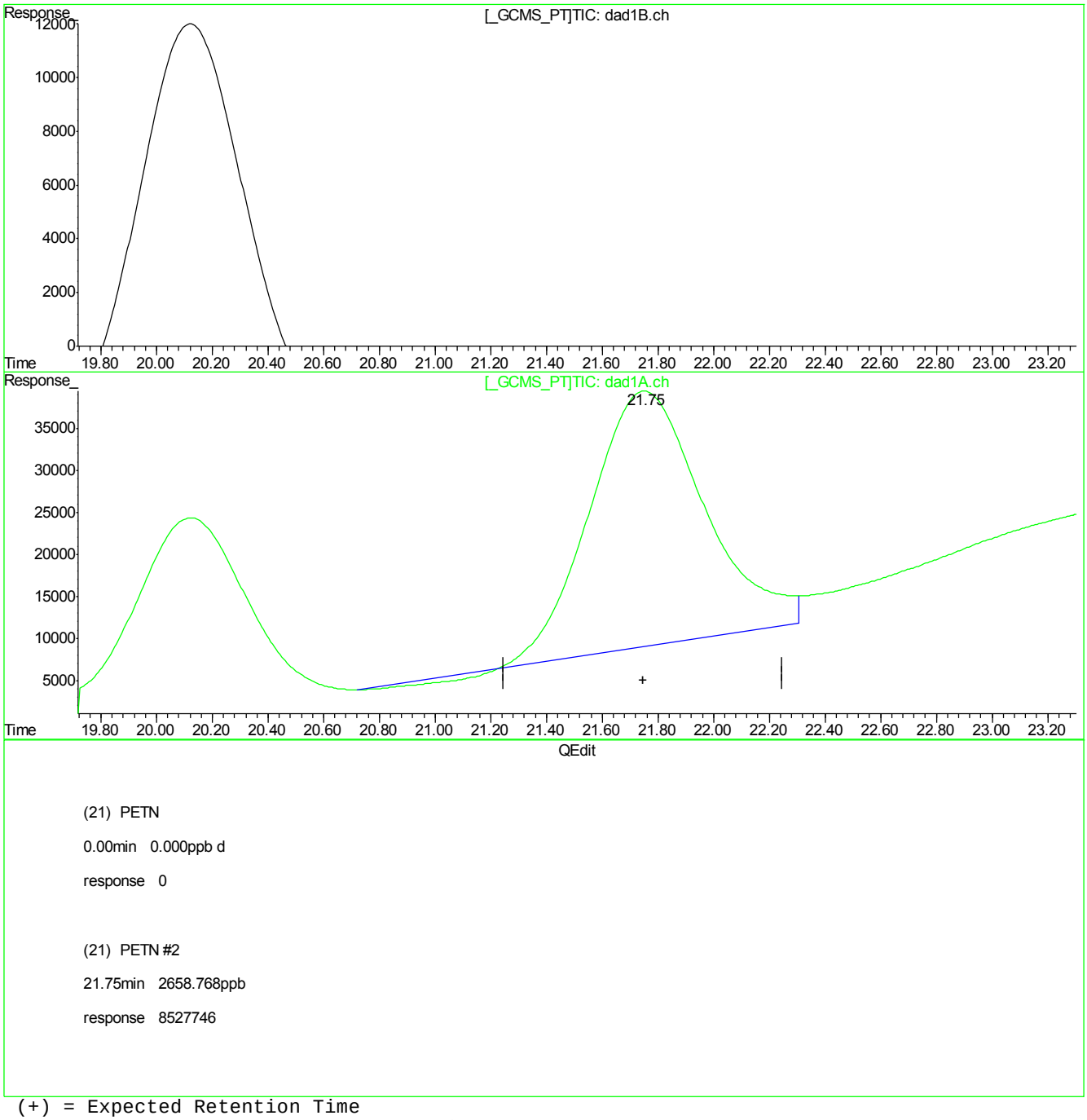
response 1915139

(+) = Expected Retention Time
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:11:15 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

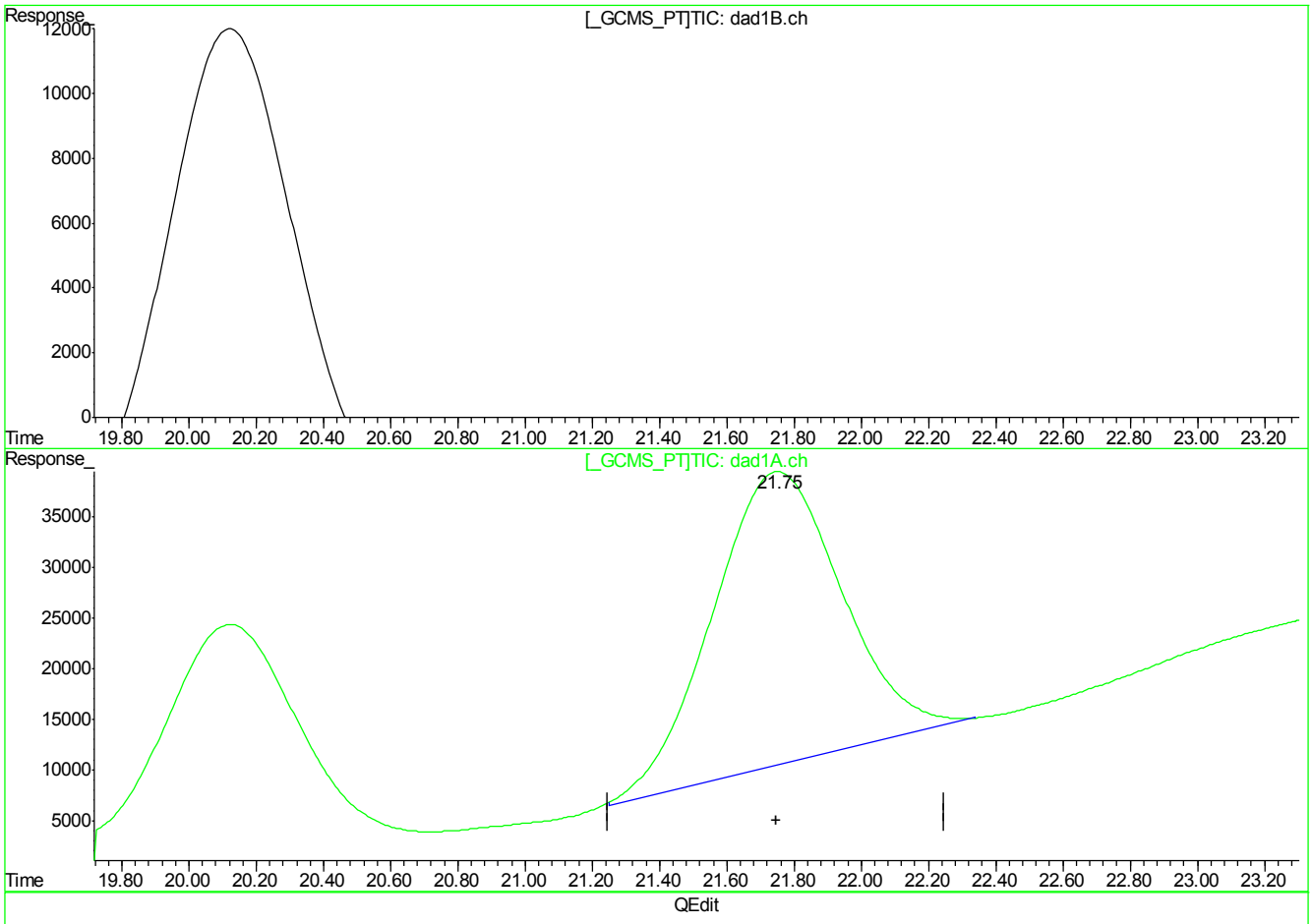


(+) = Expected Retention Time
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:11:31 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614651.D\dad1B.ch Vial: 70
Signal #2 : G:\DATA\0508RPB3\GG614651.D\dad1A.ch
Acq On : 09-May-2018, 11:10:42 Operator: evitam
Sample : op69946-ms Inst : G1315B
Misc : op69946,Ggg2626,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 12:05 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.75min 2407.147ppb m

response 7720696

(+) = Expected Retention Time
GG614651.D 8330RPB.M_1113M.M Wed May 09 14:11:36 2018

7.5.1.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 14:11:49 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.18	14.18	2425799	4749882	466.959	439.087
	Spiked Amount 500.000	Range 69 - 134		Recovery =		93.39%	87.82%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.39	5.39	1939052	1954526	598.125m	606.665m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.43	7.43	4567244	4590392	440.786	443.065
6)	RDX	7.86	7.86	2311840	2430362	485.255	512.394
7)	1,3-Dinitrobenze	9.88	9.88	6354739	5041994	444.174	392.779
8)	Nitrobenzene	10.83	10.83	4341494	4751555	460.030	513.077
9)	2,4,6-Trinitroto	11.61	11.61	4486691	6586894	442.723	502.247
10)	Nitroglycerin	0.00	12.35	0	7785466	N.D. d	2310.401
11)	Tetryl	12.86	12.86	3383885	6392763	417.564	453.713
13)	2,6-Dinitrotolue	14.56	14.56	3277789	4668698	458.457	460.149
14)	2,4-Dinitrotolue	15.27	15.27	5861544	4413605	447.136	463.766
15)	o-Nitrotoluene	16.80	16.79	2868340	4419679	496.545	512.508
16)	3,5-Dinitroanili	16.19	16.19	5112413	8915190	522.588	548.621
17)	p-Nitrotoluene	17.93	17.94	5392993	9966210	459.276	470.256
18)	4-Amino-2,6-Dini	17.93	17.94	5392993	9966210	459.276	468.888
19)	m-Nitrotoluene	19.17	19.17	2913008	4830292	494.118	496.719
20)	2-Amino-4,6-Dini	20.09	20.09	4134012	5560852	458.168	468.782
21)	PETN	0.00	21.72	0	7481639	N.D. d	2332.614m

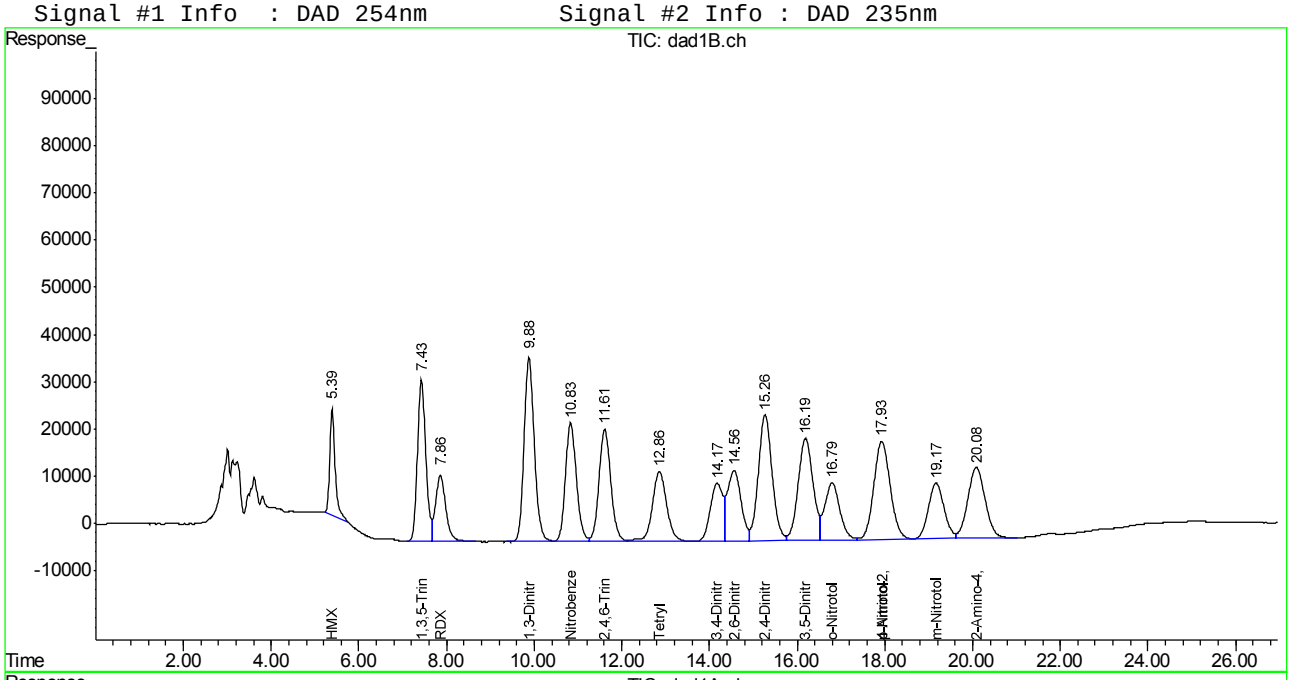
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:13:13 2018 Page 1

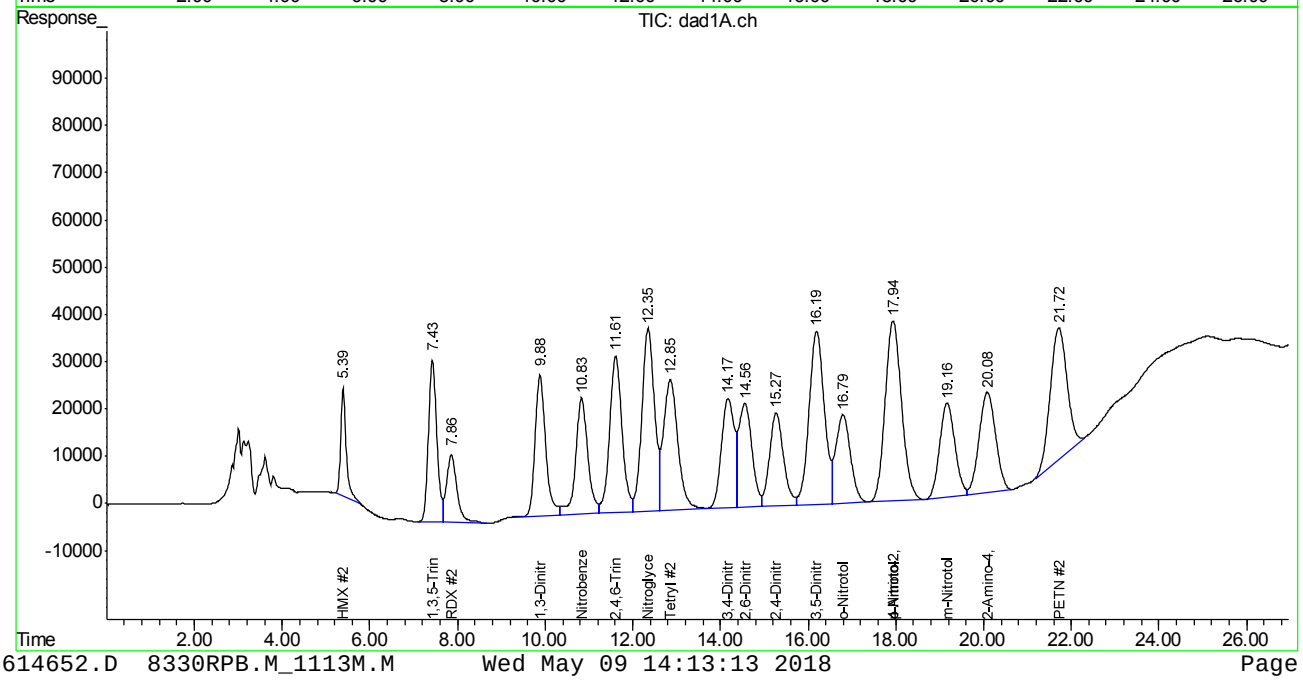
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

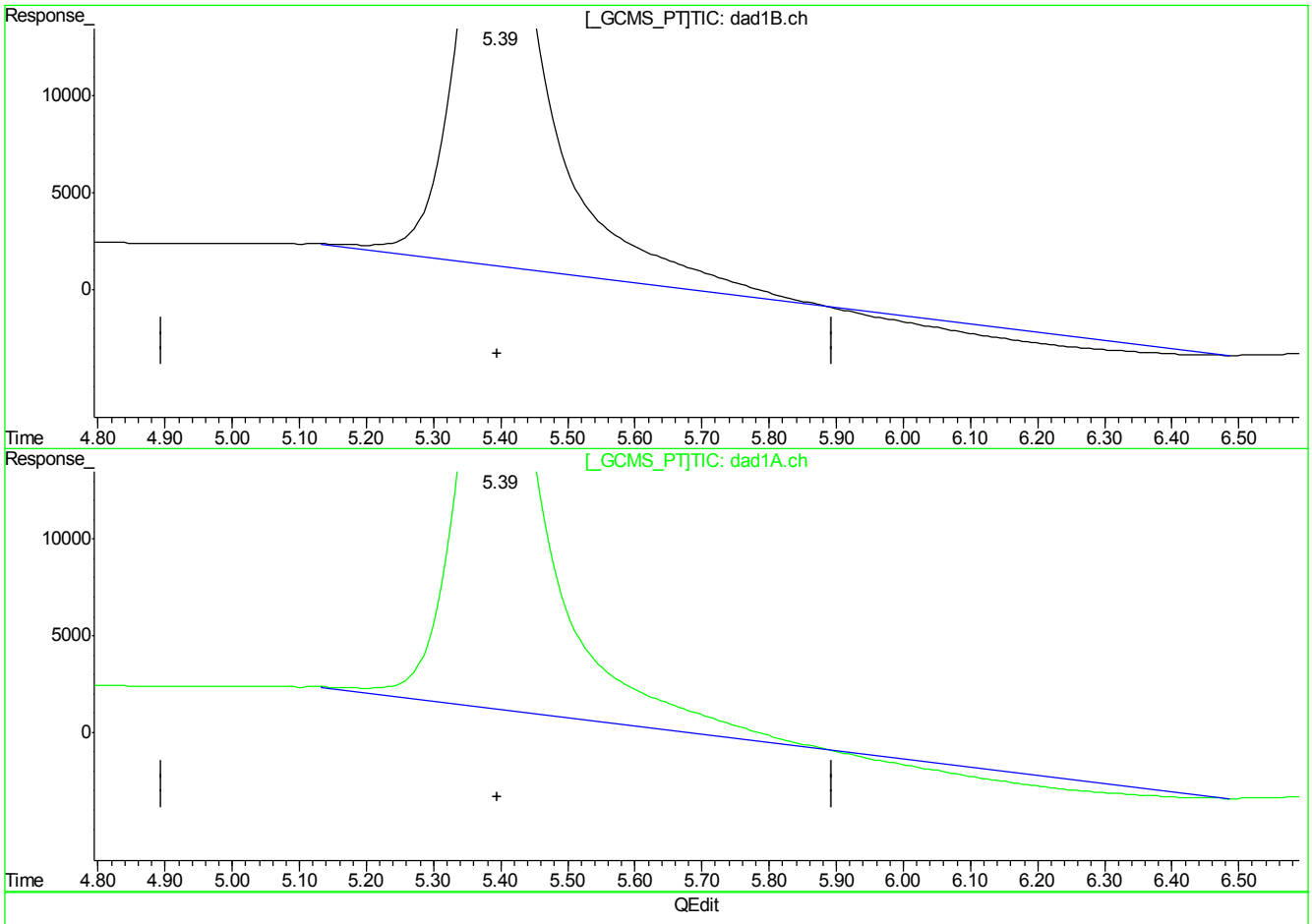
Sample Number:	OP69946-MSD	**Method:**	SW846 8330B
Lab FileID:	GG614652.D	**Analyst approved:**	05/09/18 14:15 Evita Martinez
Injection Time:	05/09/18 11:40	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.39	Poorly defined baseline
HMX	2691-41-0	2	5.39	Poorly defined baseline
PETN	78-11-5	2	21.72	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 613.759ppb

response 1989737

(2) HMX #2

5.39min 617.594ppb

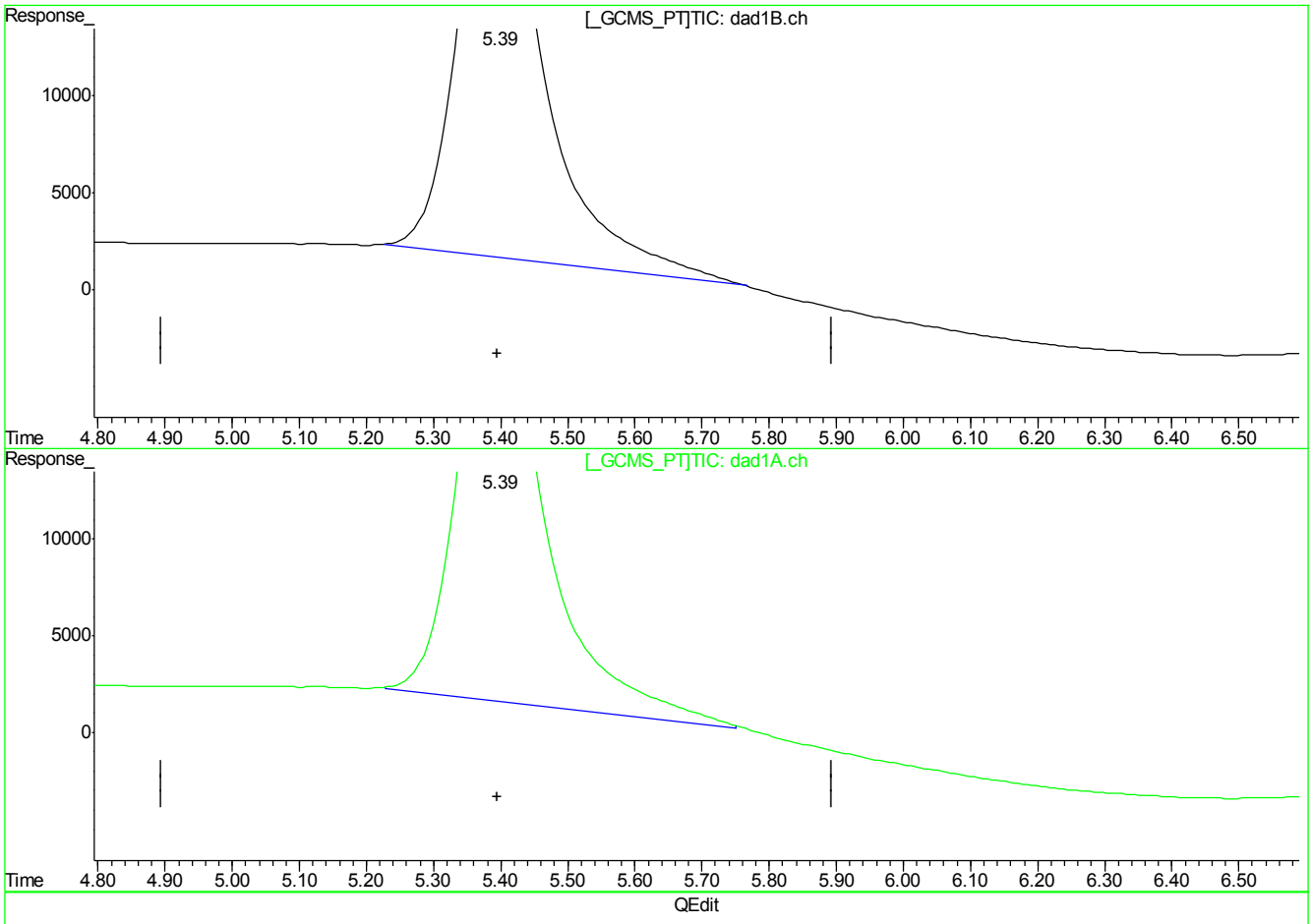
response 1989737

(+) = Expected Retention Time
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:11:55 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(2) HMX

5.39min 598.125ppb m

response 1939052

(2) HMX #2

5.39min 606.665ppb m

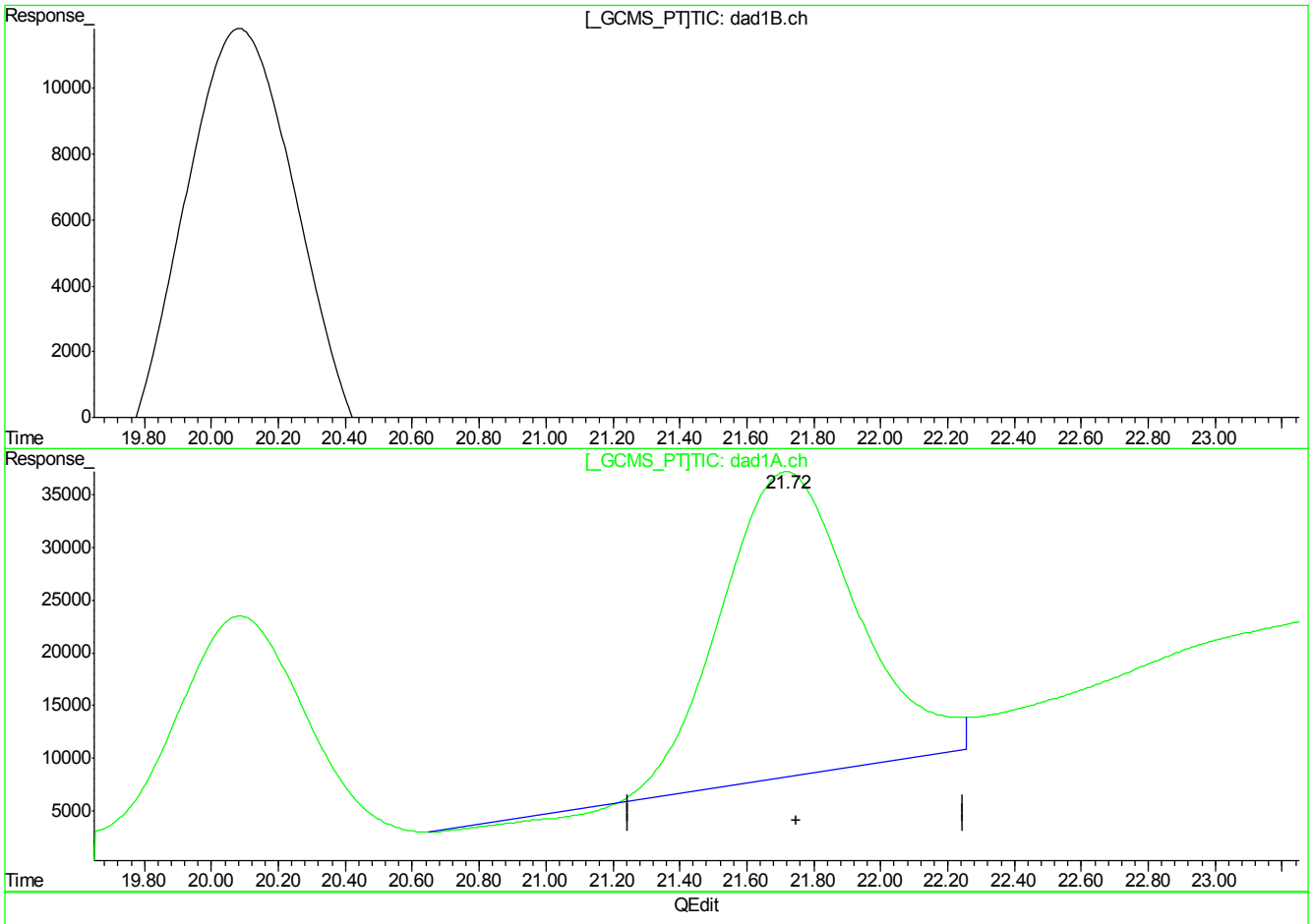
response 1954526

(+) = Expected Retention Time
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:12:01 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.72min 2505.671ppb

response 8036703

(+) = Expected Retention Time
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:12:13 2018

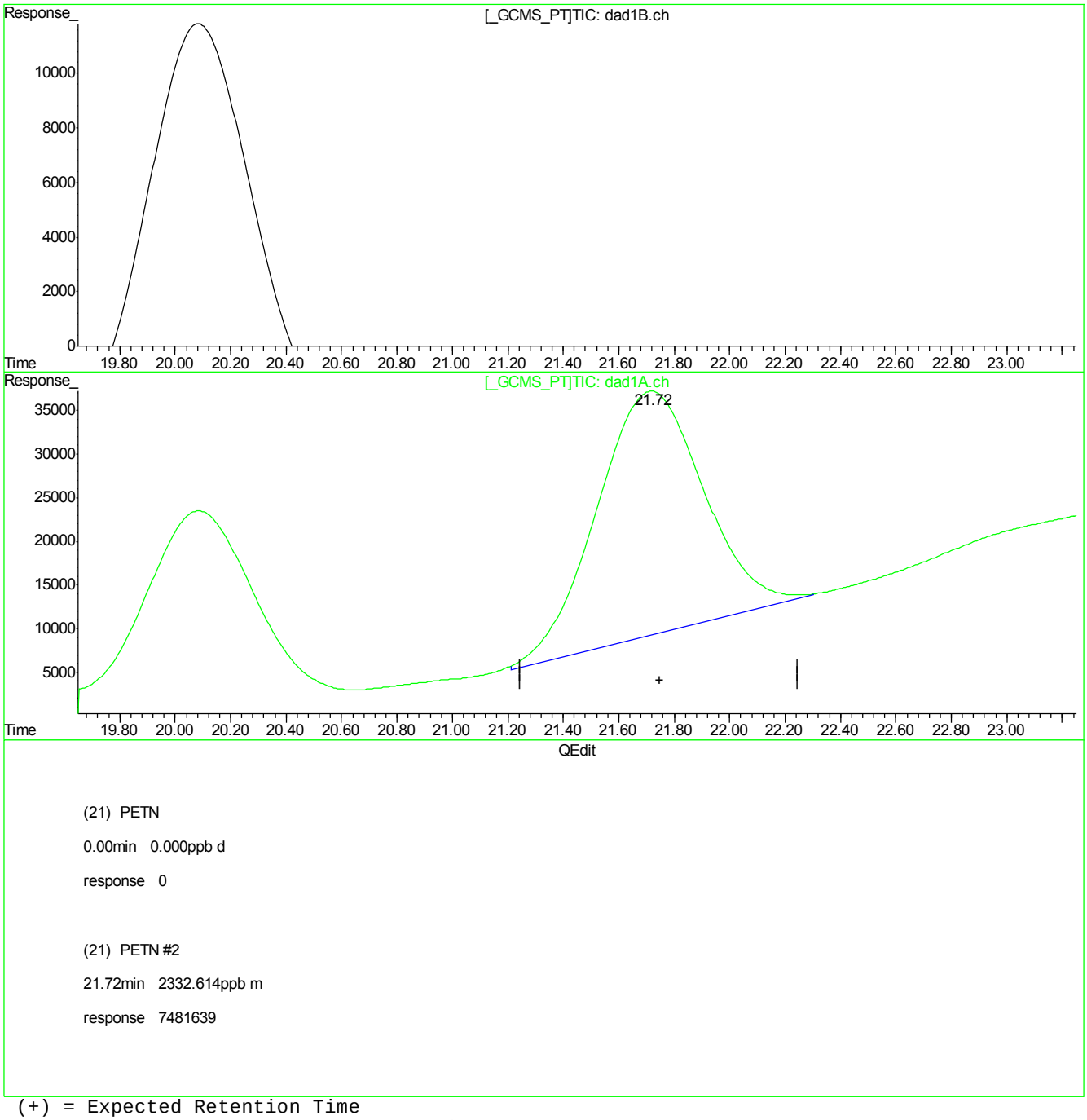
7.5.2.4

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614652.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\0508RPB3\GG614652.D\dad1A.ch
Acq On : 09-May-2018, 11:40:11 Operator: evitam
Sample : op69946-msd Inst : G1315B
Misc : op69946,Ggg2626,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614652.D 8330RPB.M_1113M.M Wed May 09 14:12:19 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:00 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.83	9.84	932347	1732829	348.449	367.534
	Spiked Amount 500.000	Range 69 - 134		Recovery =		69.69%	73.51%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.41	1.40	852450	2070498	455.830m	407.445m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.64	2.64	847722	1315528	396.431	395.767
6)	1,3,5-Trinitrobe	4.25	4.25	1750151	3311785	402.214	396.712
7)	1,3-Dinitrobenze	5.38	5.38	2174931	1361937	392.305	365.682
8)	3,5-Dinitroanili	5.62	5.62	1970378	3238036	402.909	432.962
9)	Nitrobenzene	6.86	6.86	1470453	1436017	403.549	433.077
10)	Nitroglycerin	0.00	8.13	0	2498684	N.D. d	1949.920m
11)	Tetryl	8.30	8.25	1186270	1726142	402.966	332.348m
12)	2,4,6-Trinitroto	8.77	8.82	1592313	1753511	377.311m	386.855m
13)	2-Amino-4,6-Dini	8.88	8.90	1342902	2189082	354.750m	408.118m
14)	4-Amino-2,6-Dini	9.35	9.35	1023946	2128480	391.061	410.756
16)	2,4-Dinitrotolue	10.46	10.47	1994347	1277030	379.081	432.418
17)	2,6-Dinitrotolue	10.89	10.89	1255785	1562511	363.335	457.592
18)	o-Nitrotoluene	14.17	14.18	991980	1372298	397.135	418.926
19)	p-Nitrotoluene	14.73	14.75	1569498	1382045	397.640	438.737
20)	m-Nitrotoluene	15.71	15.71	1478618	1673831	414.504	415.975
21)	PETN	0.00	18.19	0	2730407	N.D. d	1965.975m

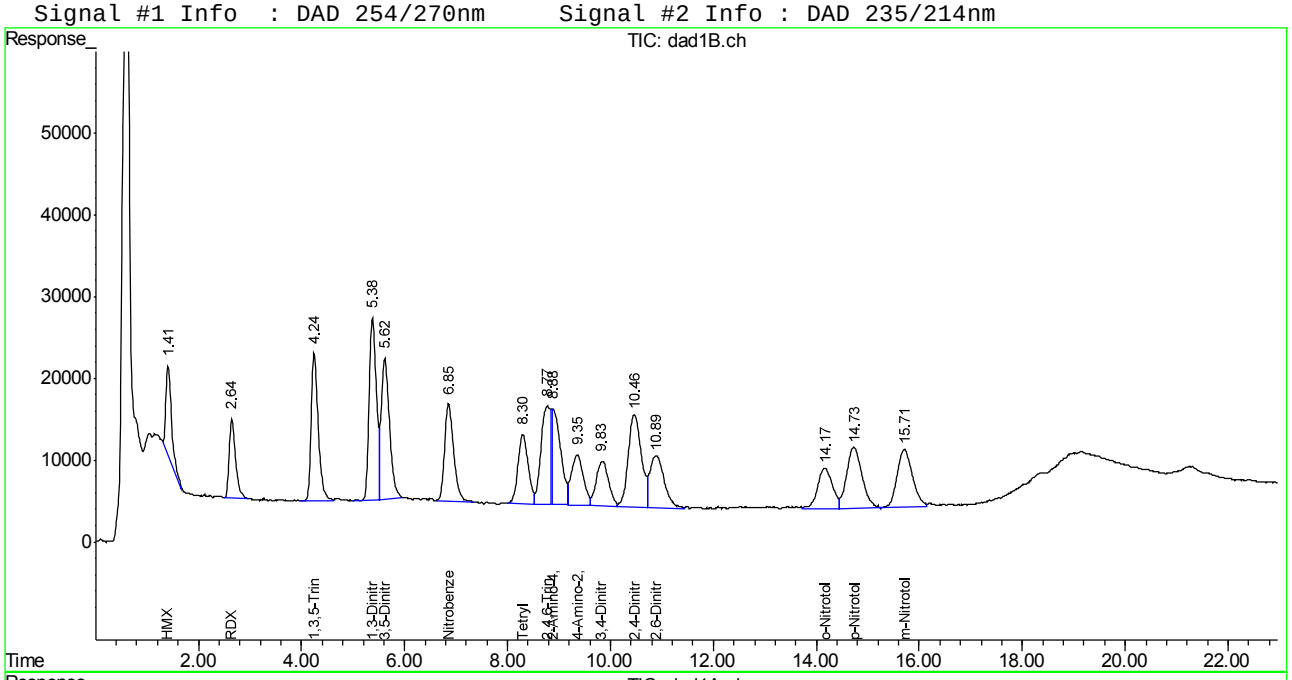
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059682.D 8330B_0419PLUS.M Fri May 11 08:37:56 2018 Page 1

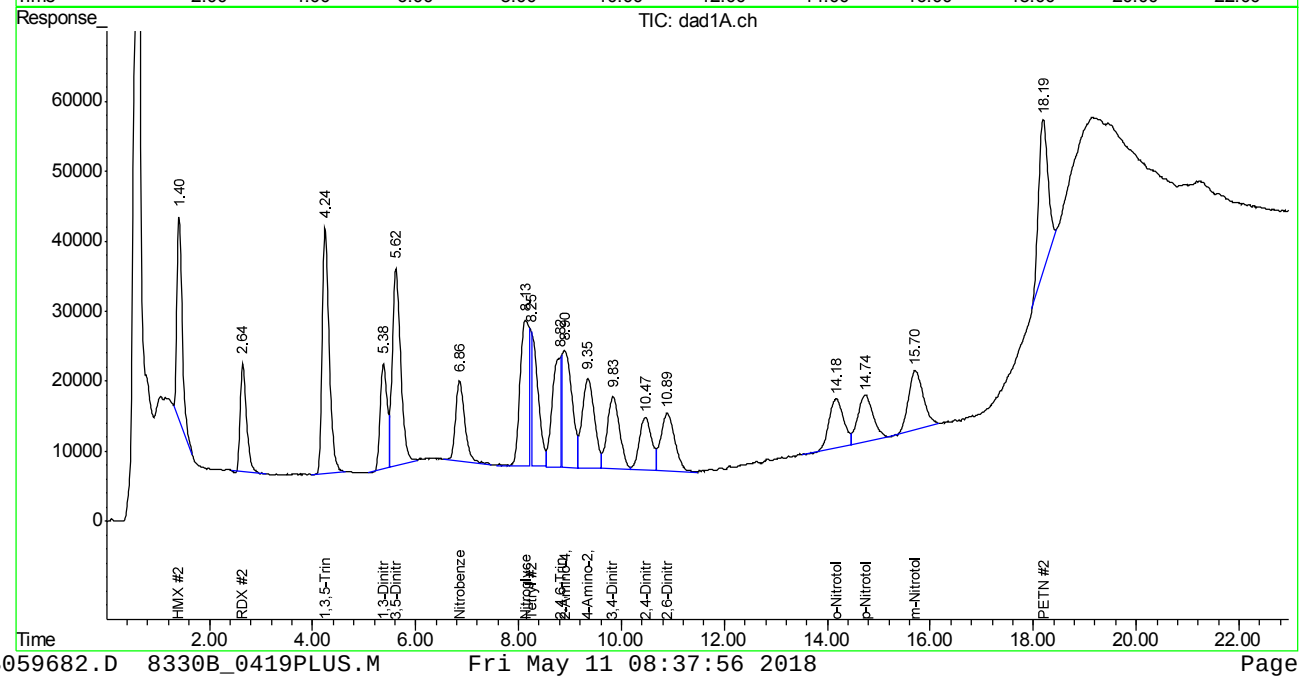
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:18 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

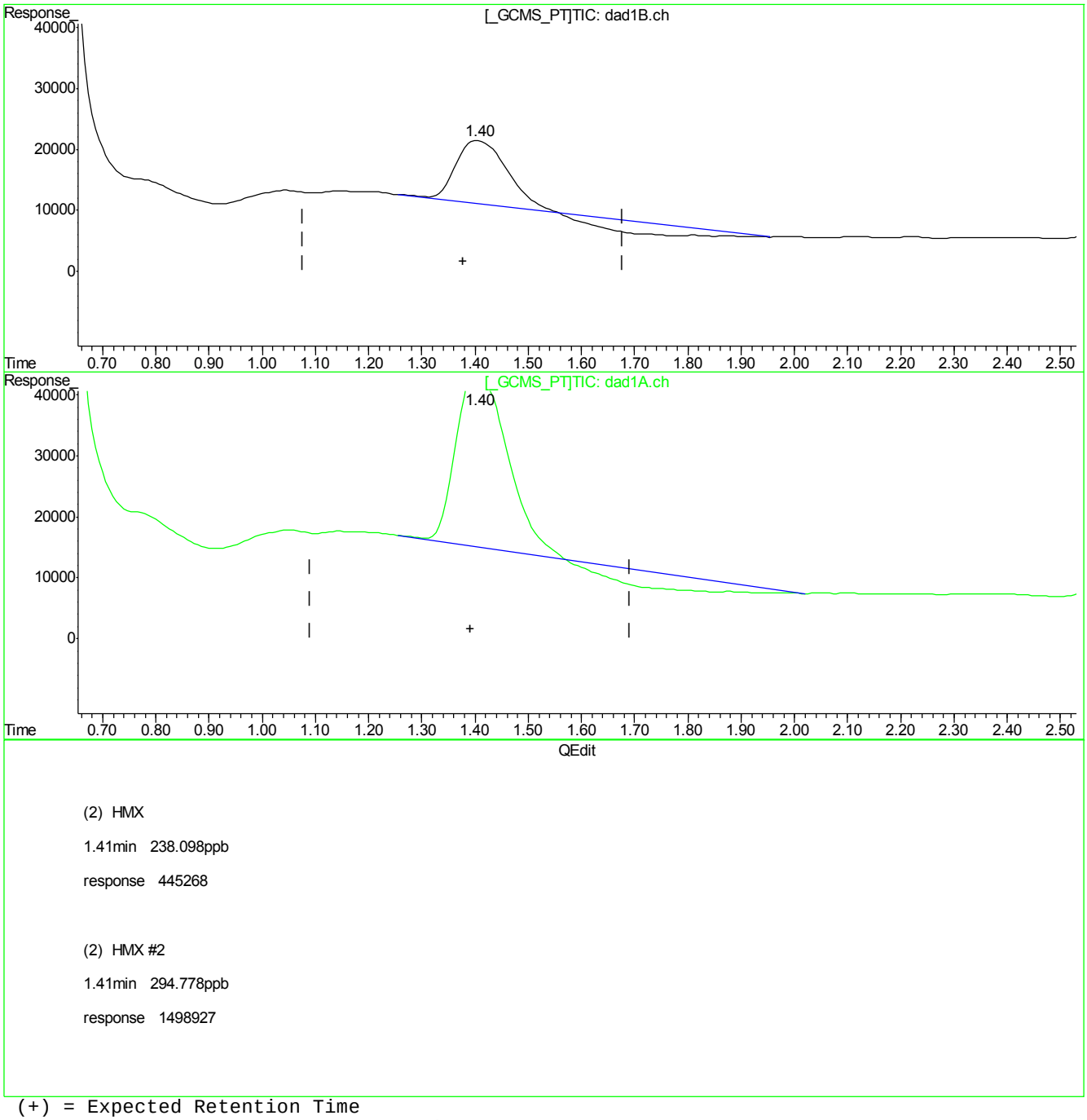
Sample Number:	OP69960-MS	**Method:**	SW846 8330B
Lab FileID:	BB059682.D	**Analyst approved:**	05/11/18 08:46 Evita Martinez
Injection Time:	05/10/18 16:29	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	2	1.40	Poorly defined baseline
HMX	2691-41-0	1	1.41	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.13	Poorly defined baseline
Tetryl	479-45-8	2	8.25	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	8.77	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	8.82	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	8.88	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	8.90	Poorly defined baseline
PETN	78-11-5	2	18.19	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



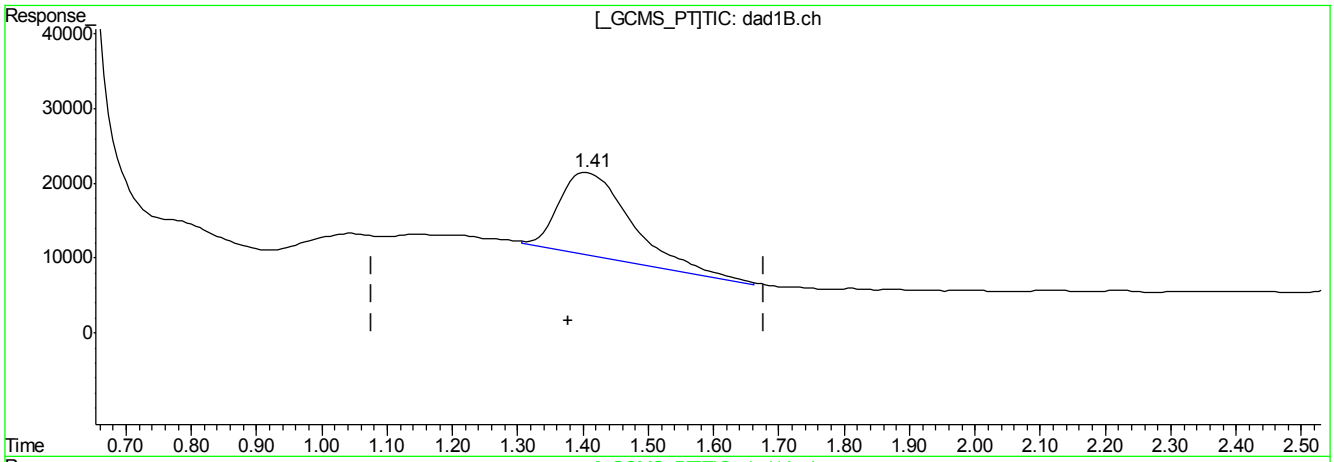
(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:16:37 2018

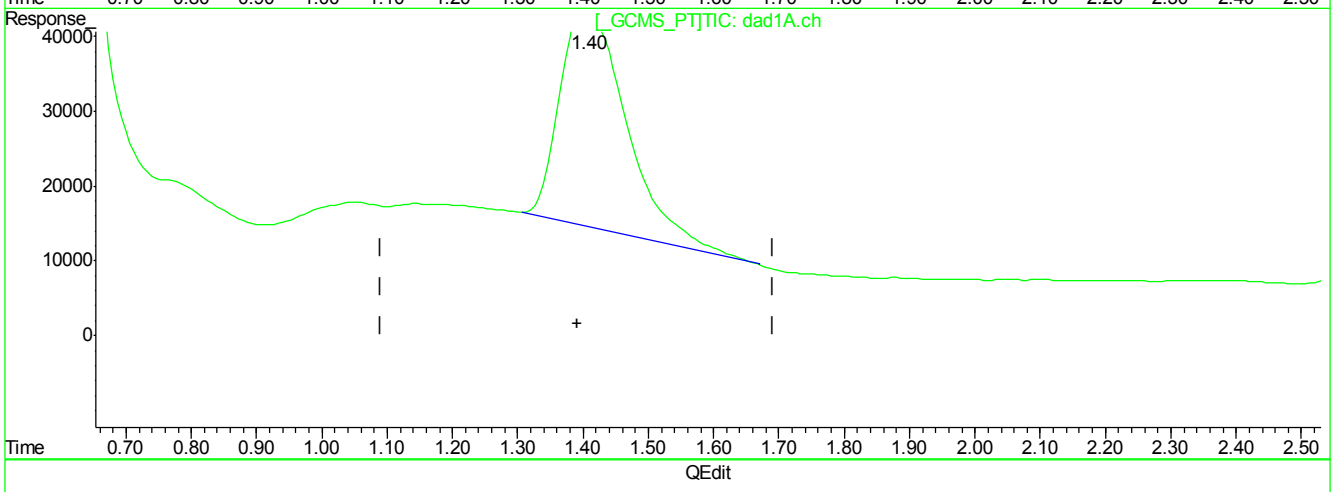
7.5.3.2
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.41min 455.830ppb m

response 852450

(2) HMX #2

1.40min 407.445ppb m

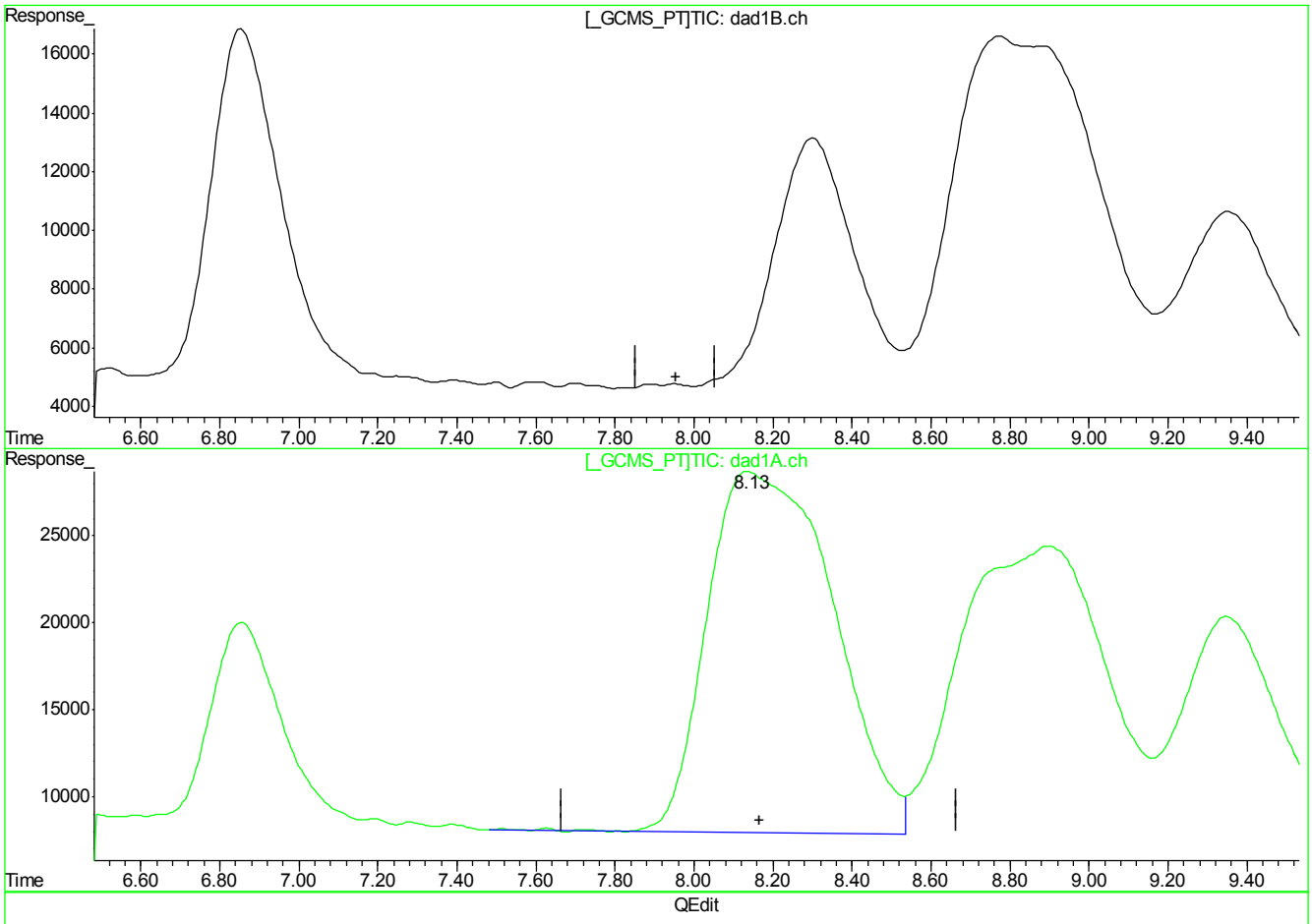
response 2070498

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:16:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.14min 3593.770ppb

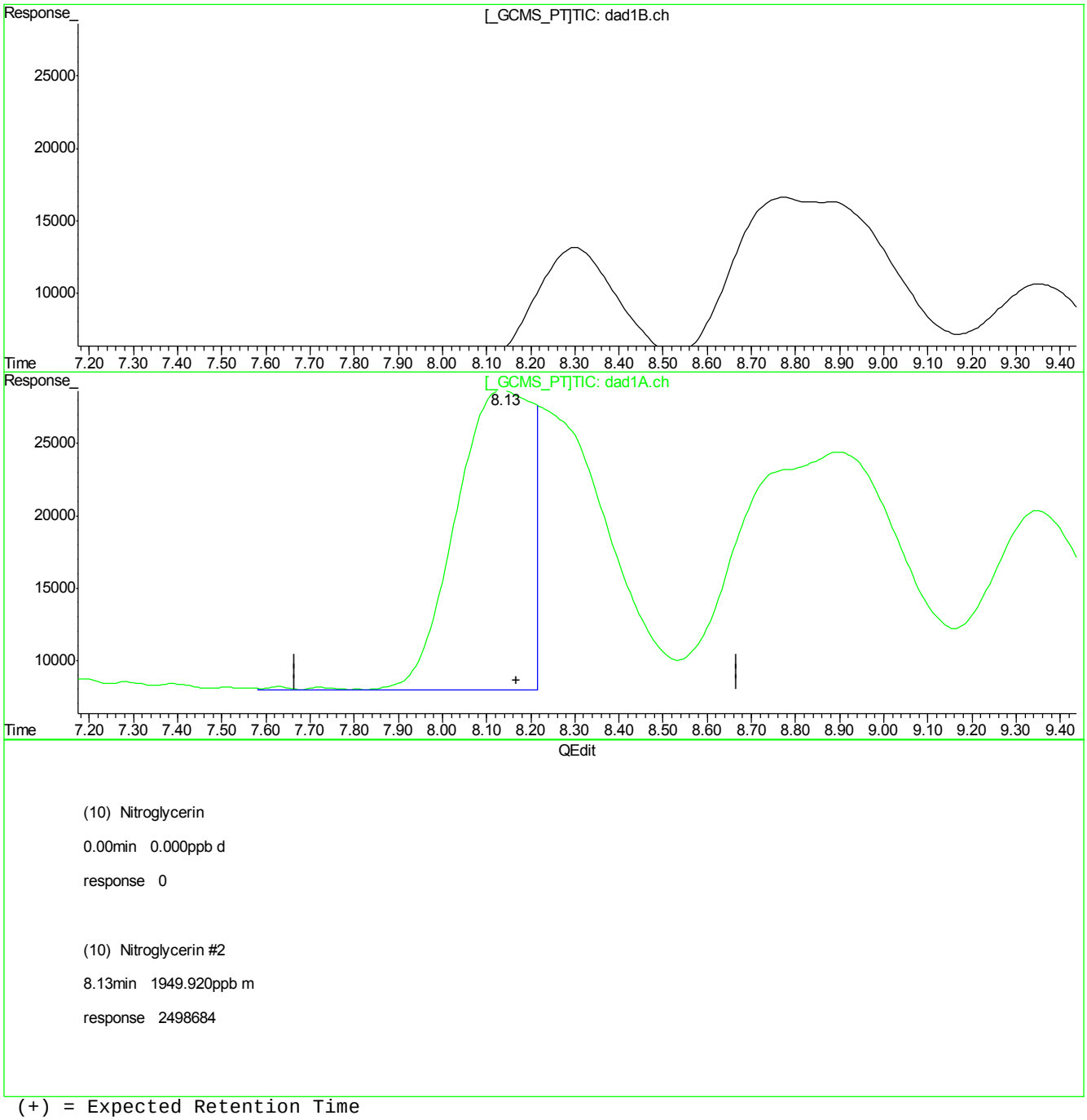
response 4605161

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:17:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.13min 1949.920ppb m

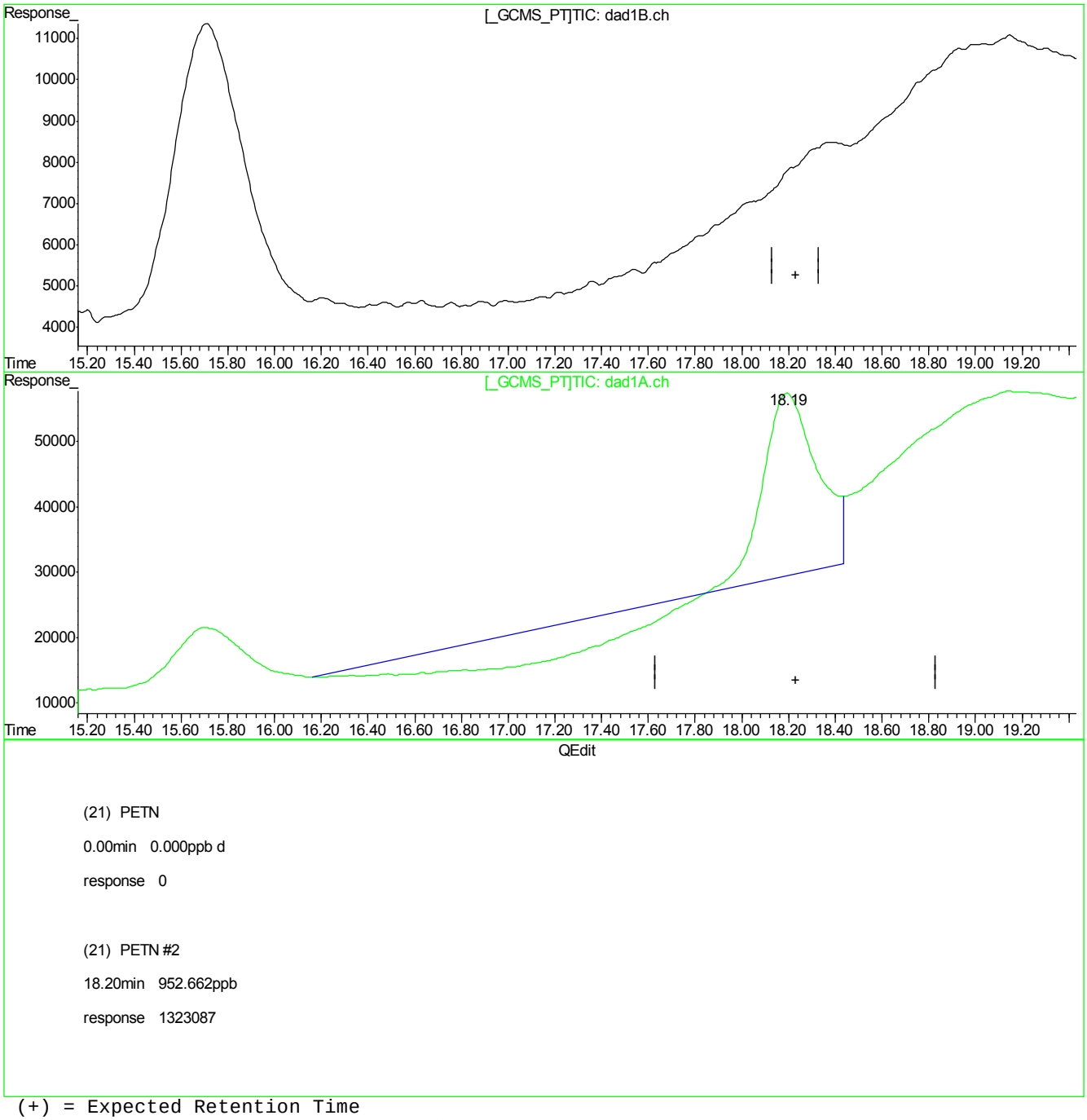
response 2498684

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:17:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.20min 952.662ppb

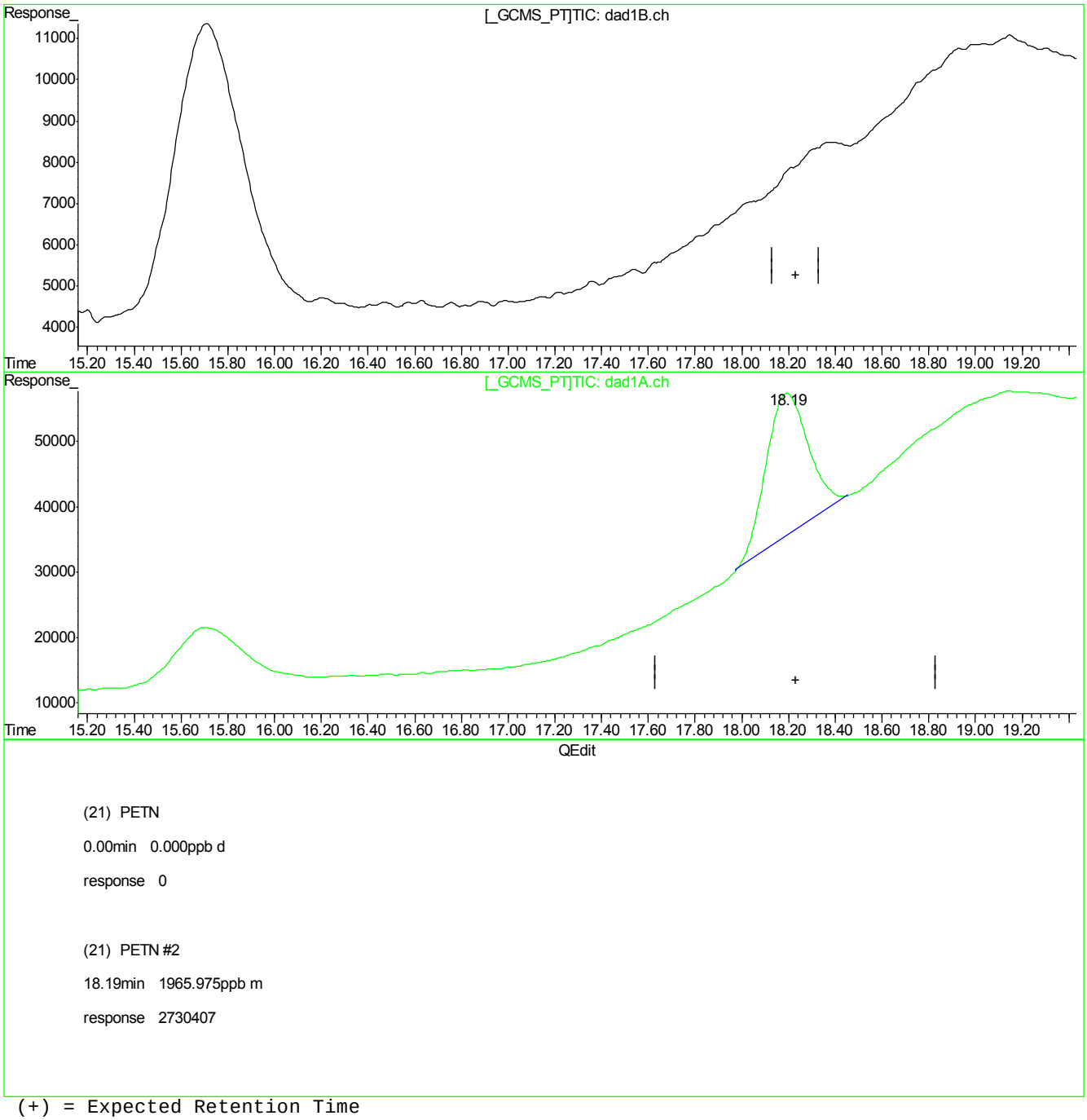
response 1323087

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:17:21 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.19min 1965.975ppb m

response 2730407

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:17:25 2018

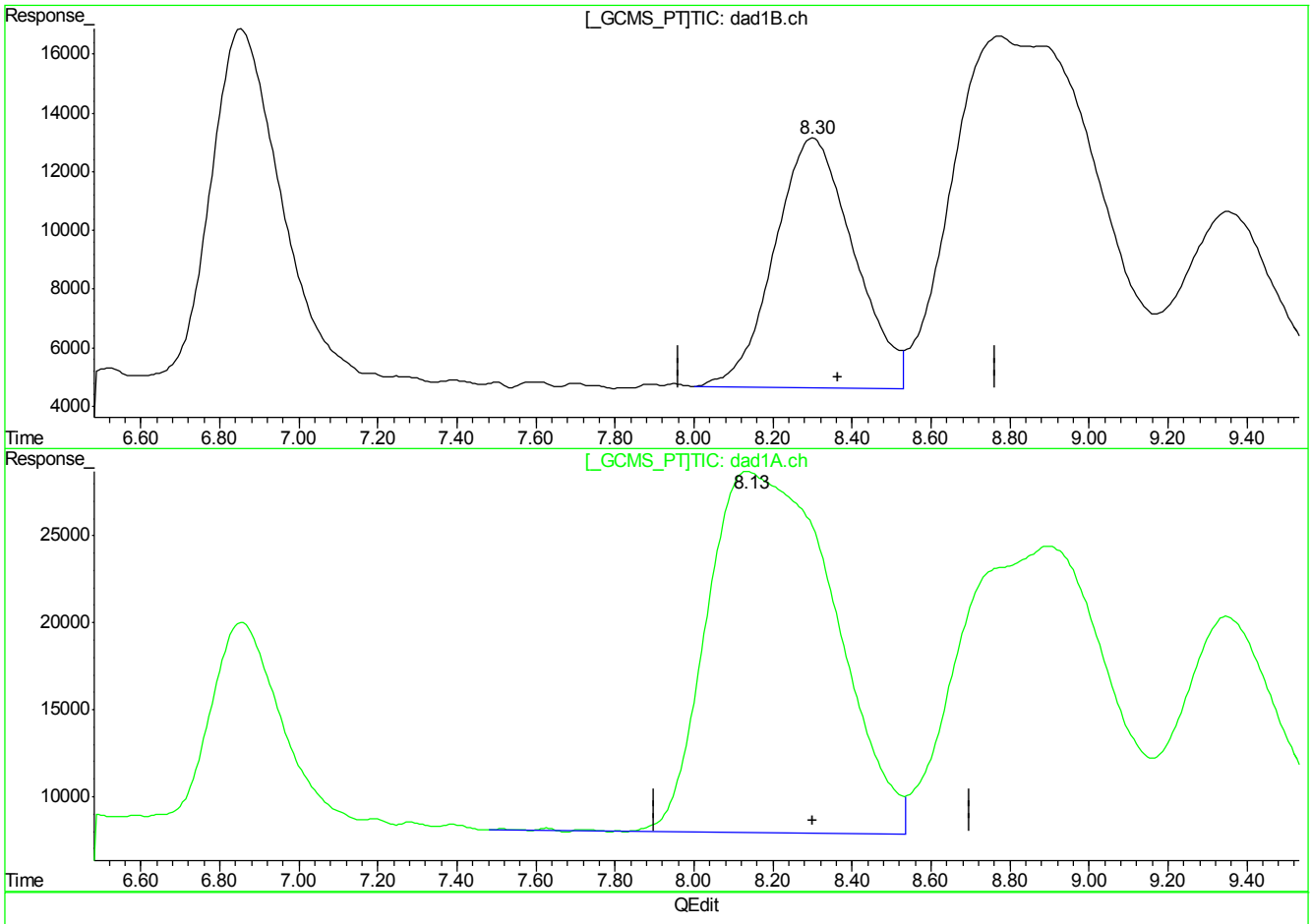
7.5.3.7

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.30min 402.966ppb

response 1186270

(11) Tetryl #2

8.14min 886.670ppb

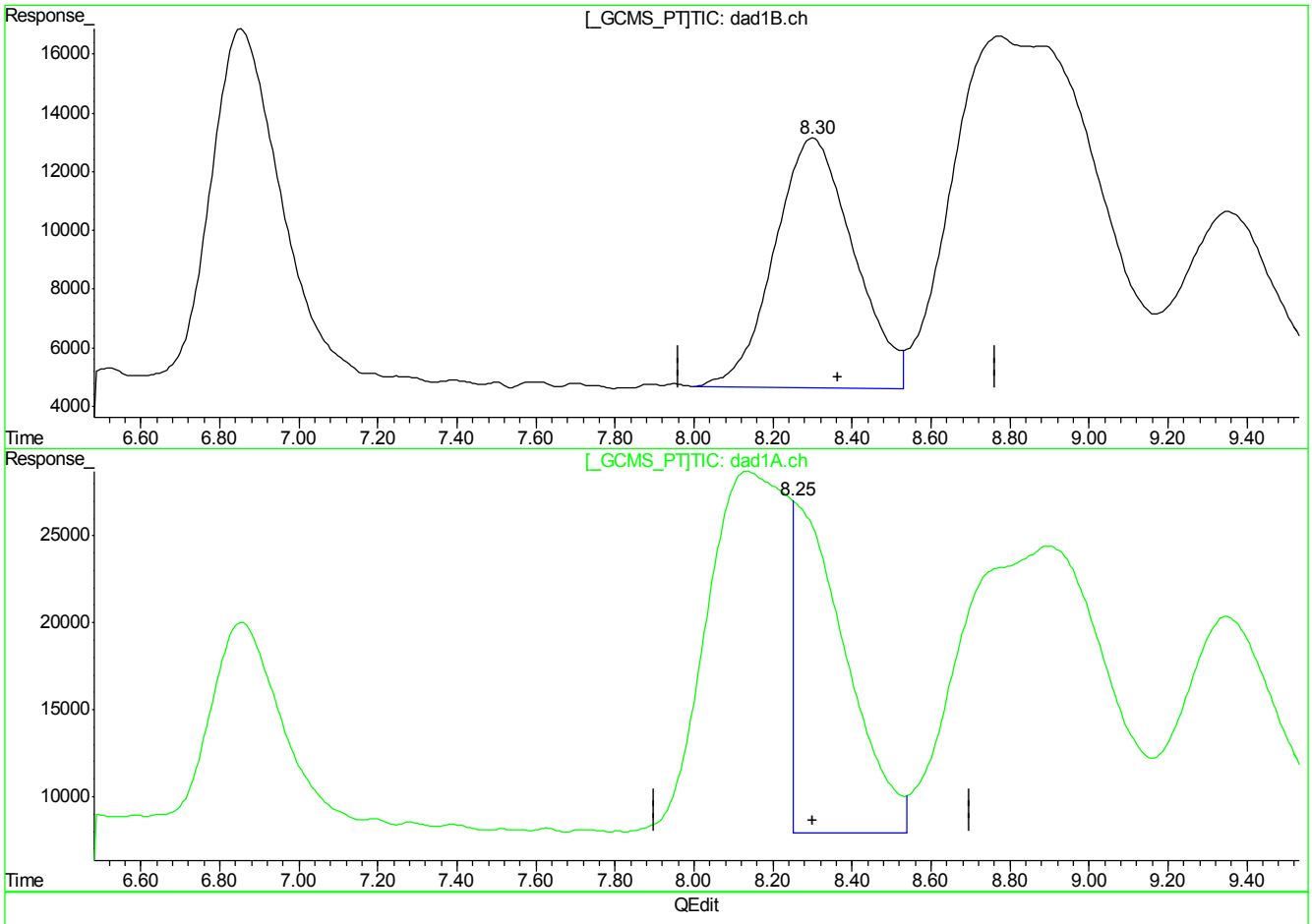
response 4605161

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:17:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.30min 402.966ppb

response 1186270

(11) Tetryl #2

8.25min 332.348ppb m

response 1726142

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:17:35 2018

7.5.3.9

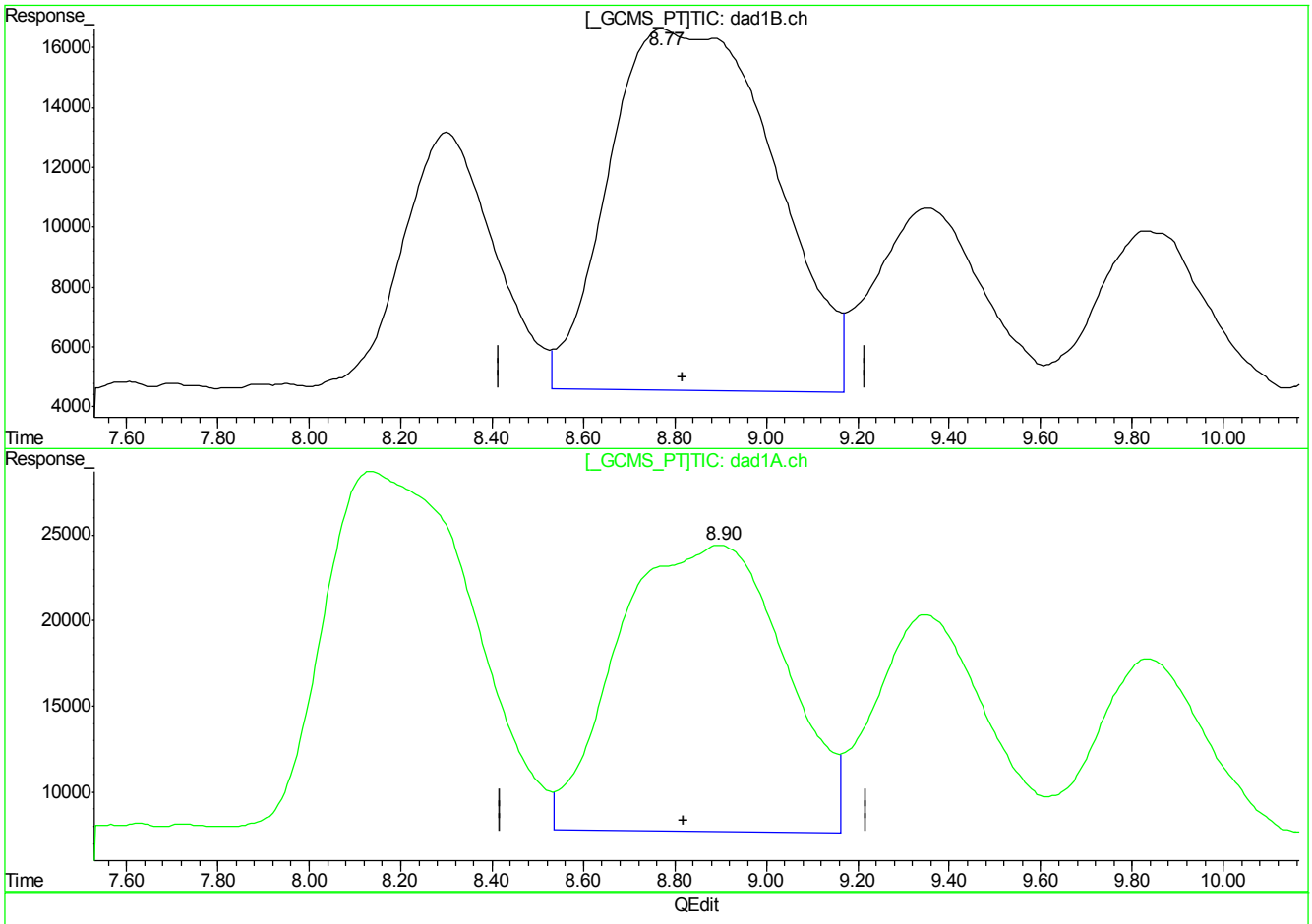
7

BB059682.D edits: Tetryl

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

8.77min 714.442ppb

response 3015054

(12) 2,4,6-Trinitrotoluene #2

8.90min 923.211ppb

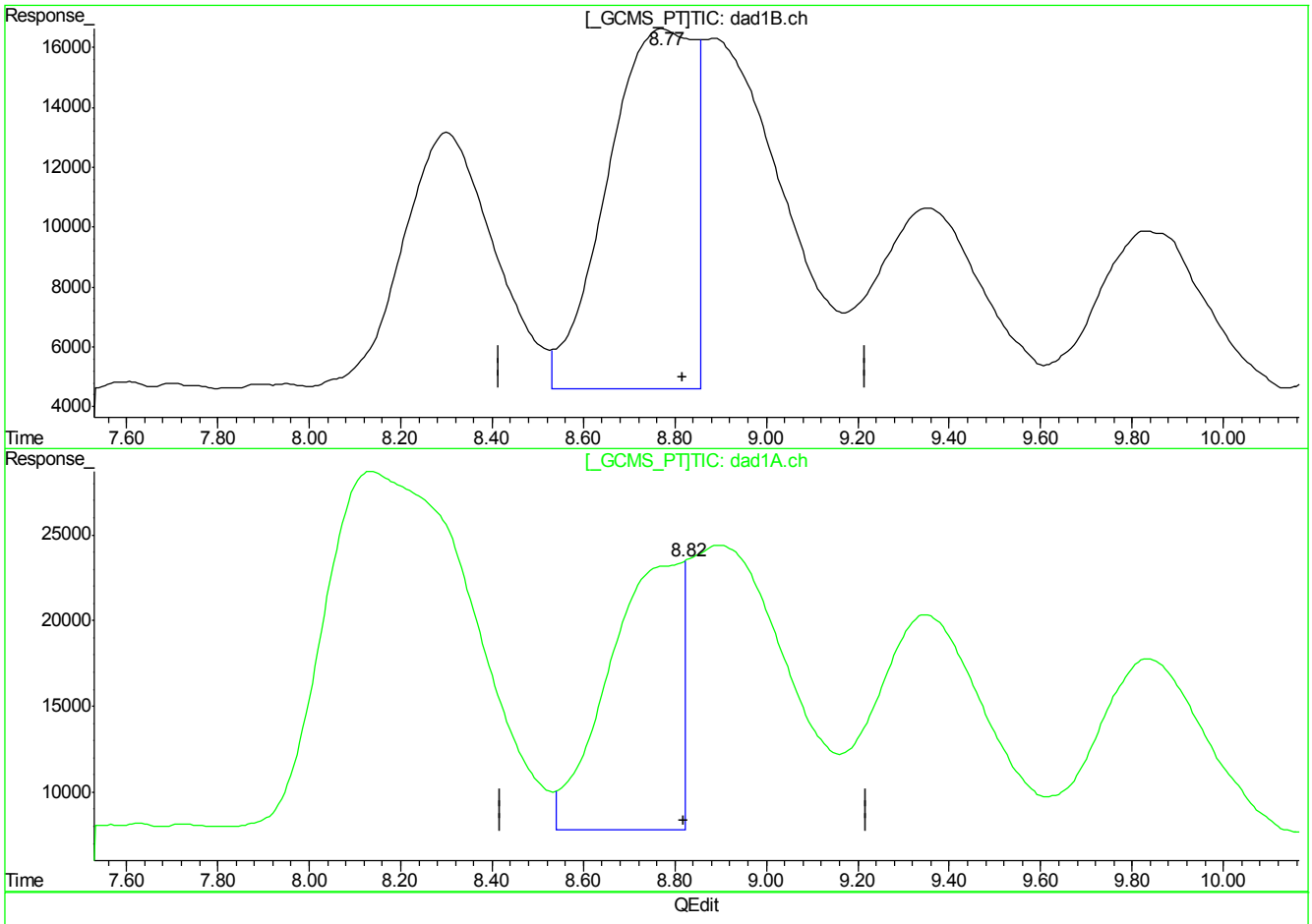
response 4184672

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:17:39 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

8.77min 377.311ppb m

response 1592313

(12) 2,4,6-Trinitrotoluene #2

8.82min 386.855ppb m

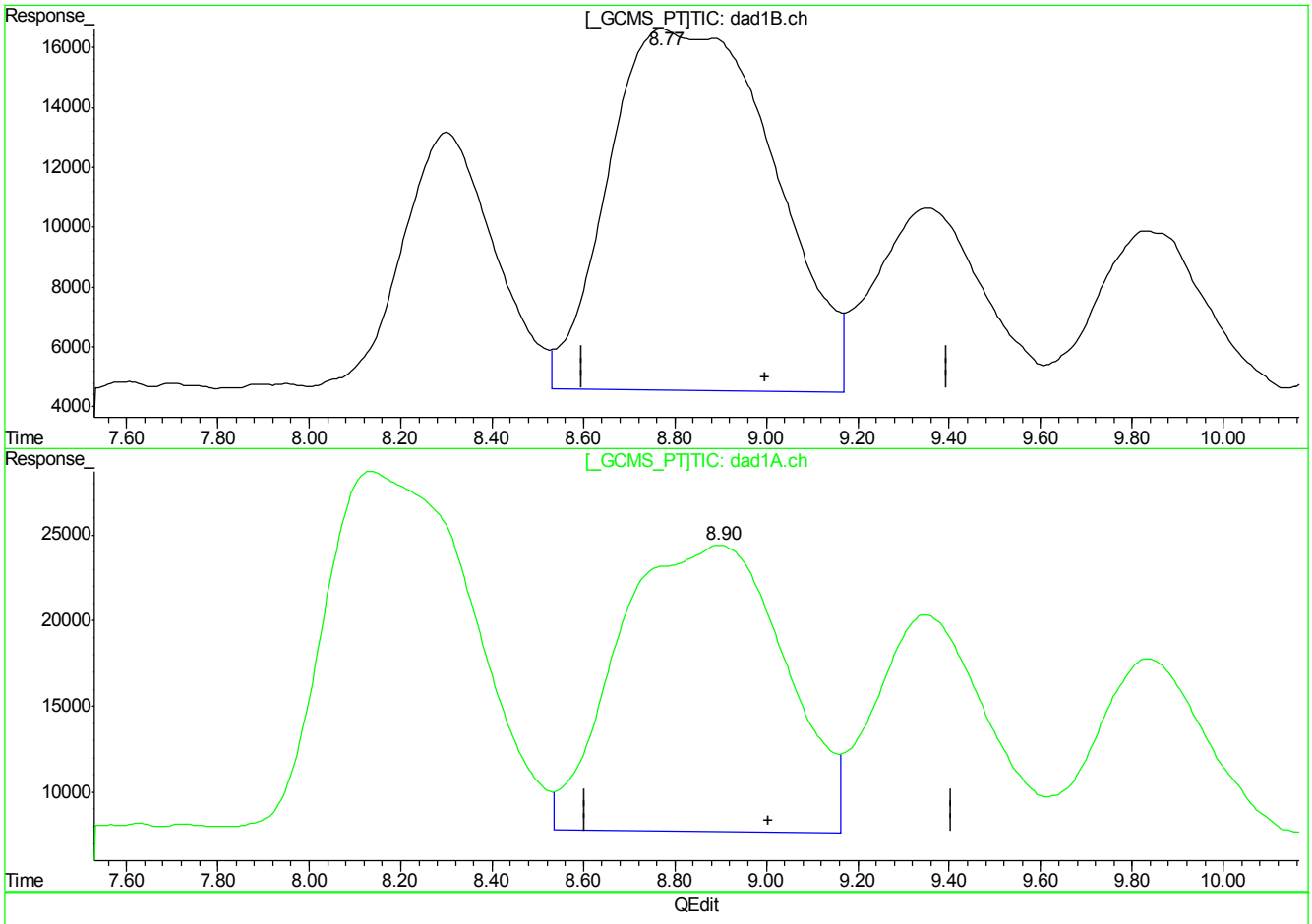
response 1753511

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:17:59 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

8.77min 796.477ppb

response 3015054

(13) 2-Amino-4,6-Dinitrotoluene #2

8.90min 780.163ppb

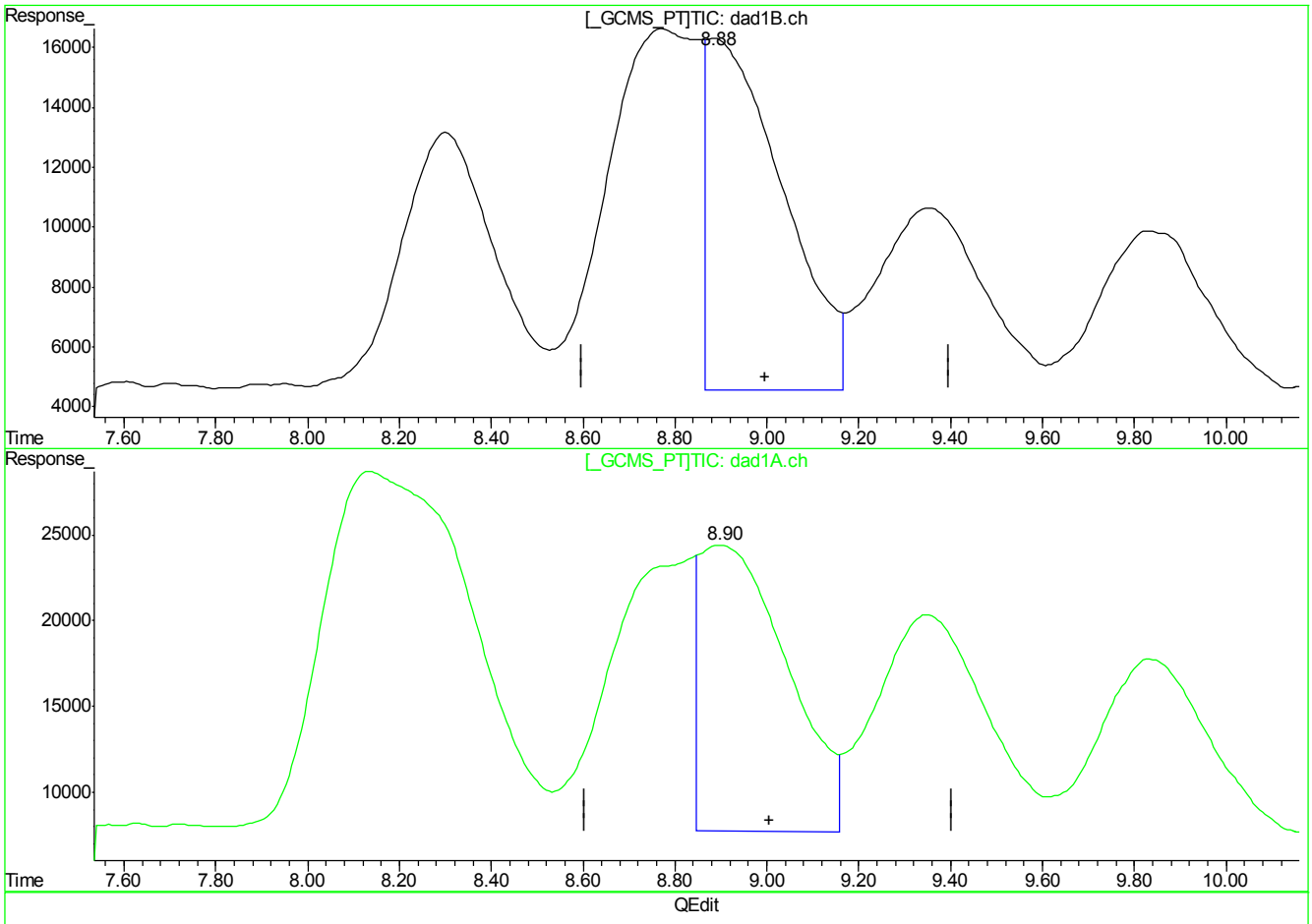
response 4184672

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:18:01 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059682.D\dad1A.ch
Acq On : 10-May-2018, 16:29:23 Operator: evitam
Sample : OP69960-MS Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

8.88min 354.750ppb m

response 1342902

(13) 2-Amino-4,6-Dinitrotoluene #2

8.90min 408.118ppb m

response 2189082

(+) = Expected Retention Time
BB059682.D 8330B_0419PLUS.M Fri May 11 08:18:22 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1A.ch
Acq On : 10-May-2018, 16:59:18 Operator: evitam
Sample : OP69960-MSD Inst : G1315B
Misc : OP69960,gbb1730,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:01 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.92	9.92	944219	1711864	352.886	363.087
	Spiked Amount 500.000	Range 69 - 134		Recovery =		70.58%	72.62%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.39	1.39	881429	2239947	471.326m	440.875m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.65	2.65	871230	1382178	407.424	415.818
6)	1,3,5-Trinitrobe	4.27	4.27	1764824	3379679	405.586	404.845
7)	1,3-Dinitrobenze	5.41	5.41	2257436	1455589	407.187	390.827
8)	3,5-Dinitroanili	5.66	5.67	2024116	3228750	413.898	431.721
9)	Nitrobenzene	6.90	6.90	1496280	1449513	410.636	437.147
10)	Nitroglycerin	0.00	8.18	0	2572387	N.D. d	2007.437
11)	Tetryl	8.38	8.33	1232752	2088388	418.791	402.095
12)	2,4,6-Trinitroto	8.82	8.82	1600353	1722477	379.217	380.008
13)	2-Amino-4,6-Dini	8.99	9.01	1499795	2535387	396.196	472.681
14)	4-Amino-2,6-Dini	9.45	9.44	1050858	2143871	401.277	413.726
16)	2,4-Dinitrotolue	10.55	10.55	2026063	1246353	385.109	422.030
17)	2,6-Dinitrotolue	10.99	10.98	1275413	1588363	369.014	465.163
18)	o-Nitrotoluene	14.26	14.26	1002445	1438148	401.325	439.029
19)	p-Nitrotoluene	14.82	14.81	1570465	1397034	397.885	443.490
20)	m-Nitrotoluene	15.80	15.80	1442792	1657340	404.460	411.877
21)	PETN	0.00	18.24	0	2884493	N.D. d	2076.921m

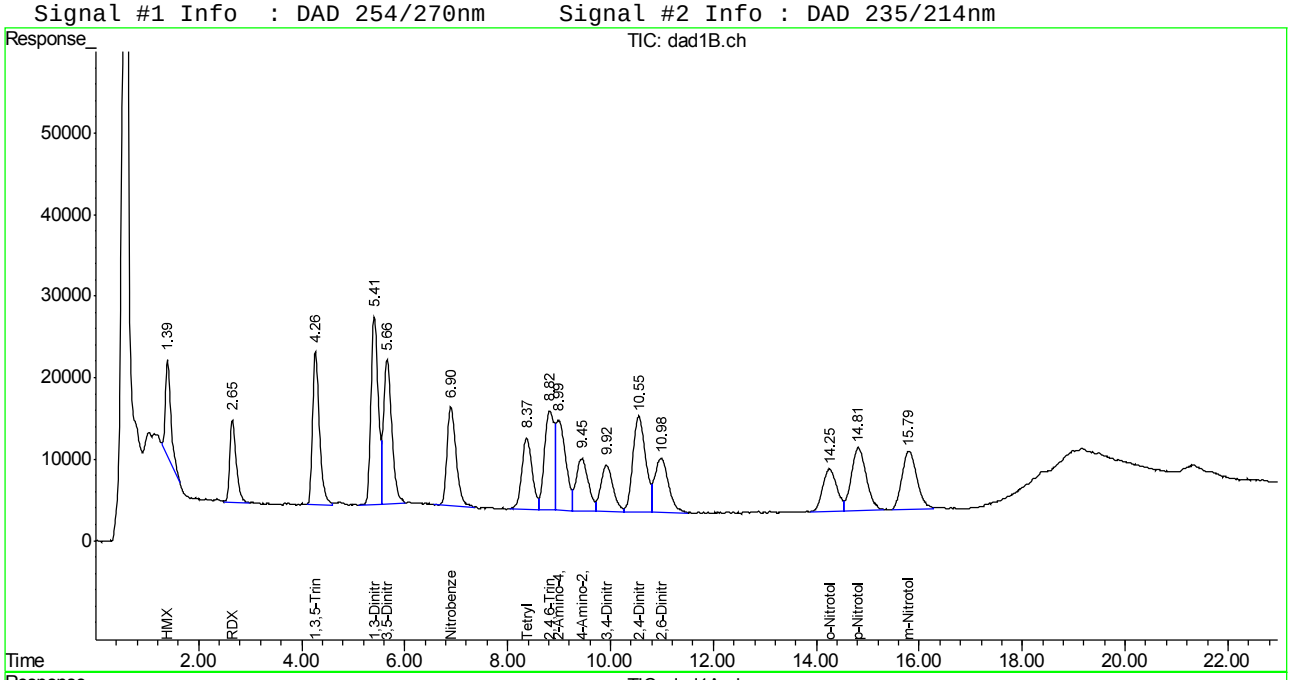
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059683.D 8330B_0419PLUS.M Fri May 11 08:37:57 2018 Page 1

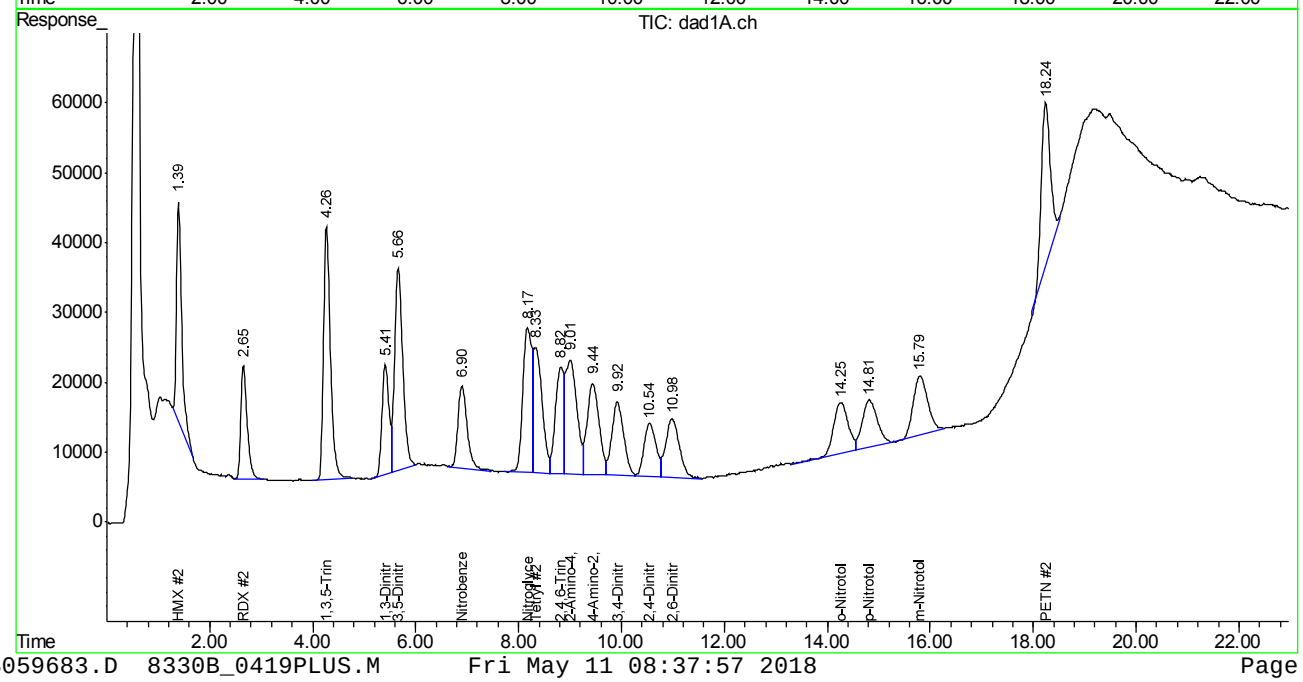
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1A.ch
Acq On : 10-May-2018, 16:59:18 Operator: evitam
Sample : OP69960-MSD Inst : G1315B
Misc : OP69960,gbb1730,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:19 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059683.D 8330B_0419PLUS.M Fri May 11 08:37:57 2018 Page 2

Manual Integration Approval Summary

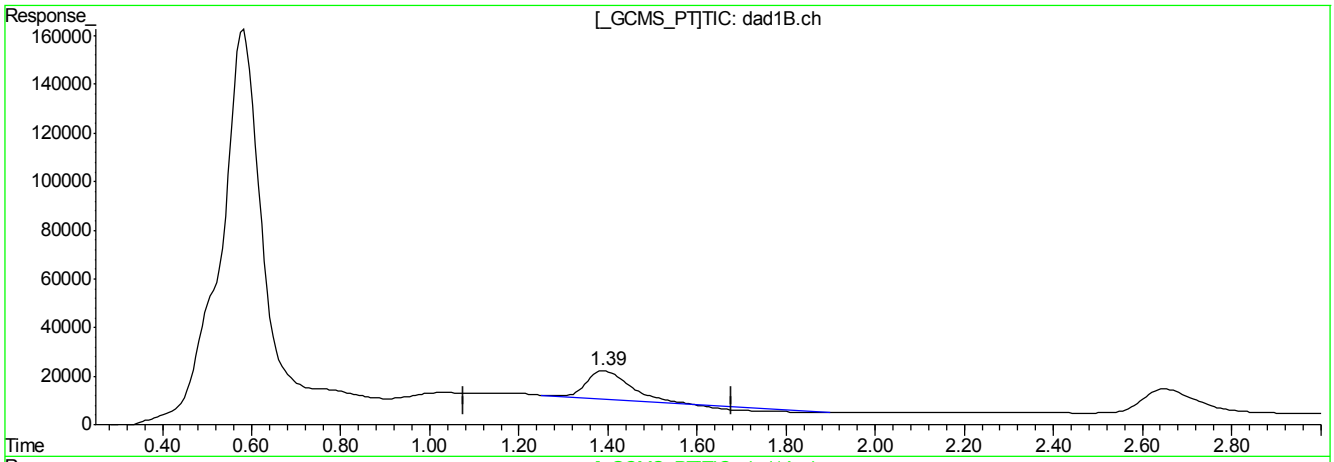
Sample Number:	OP69960-MSD	**Method:**	SW846 8330B
Lab FileID:	BB059683.D	**Analyst approved:**	05/11/18 08:46 Evita Martinez
Injection Time:	05/10/18 16:59	**Supervisor approved:**	05/11/18 15:51 Mike Eger

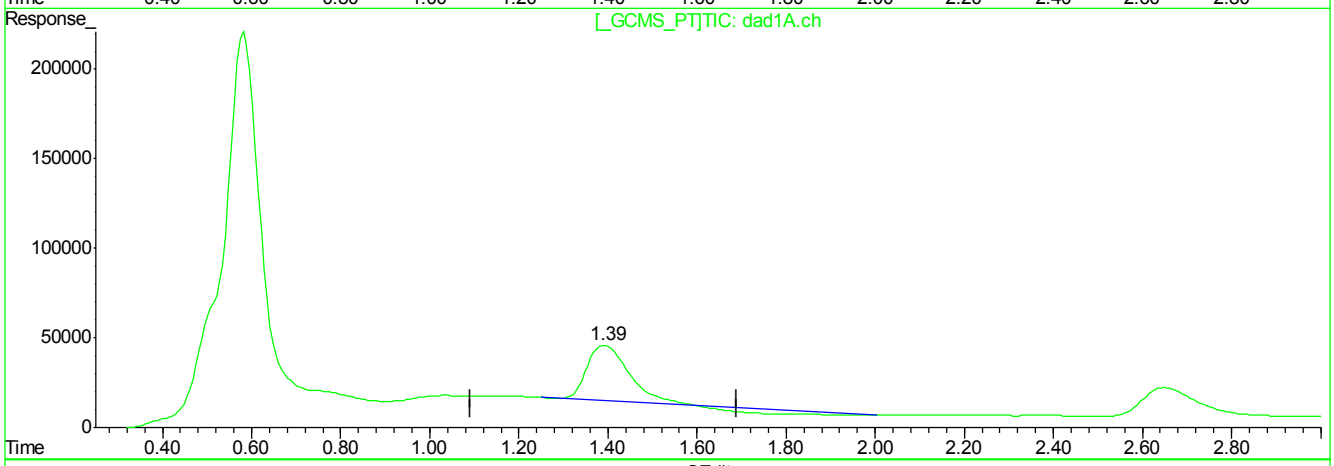
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.39	Poorly defined baseline
HMX	2691-41-0	2	1.39	Poorly defined baseline
PETN	78-11-5	2	18.24	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1A.ch
Acq On : 10-May-2018, 16:59:18 Operator: evitam
Sample : OP69960-MSD Inst : G1315B
Misc : OP69960,gbb1730,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.39min 341.694ppb

response 639004

(2) HMX #2

1.39min 340.475ppb

response 1730840

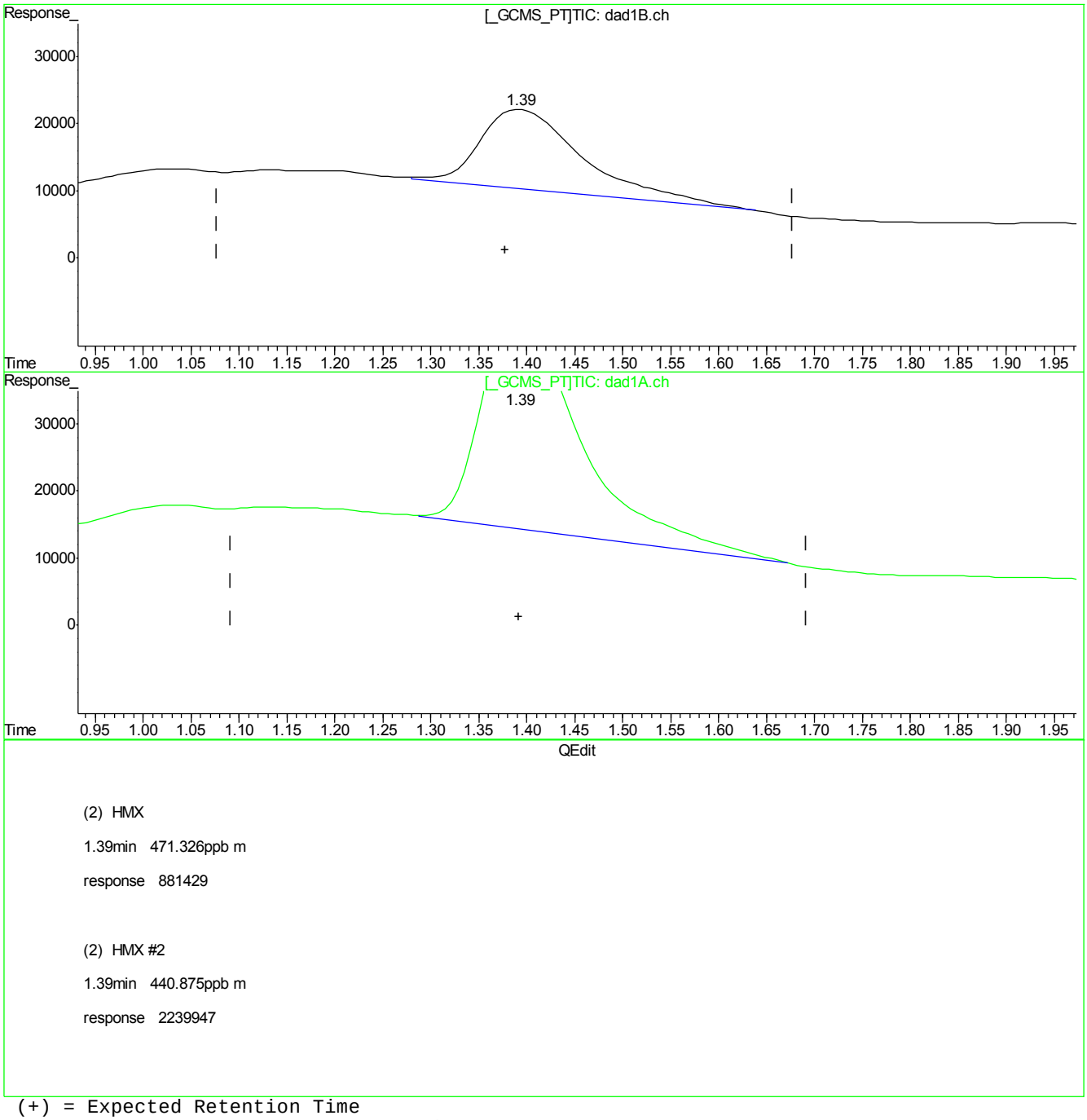
(+) = Expected Retention Time
BB059683.D 8330B_0419PLUS.M Fri May 11 08:18:41 2018

BB059683.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1A.ch
Acq On : 10-May-2018, 16:59:18 Operator: evitam
Sample : OP69960-MSD Inst : G1315B
Misc : OP69960,gbb1730,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

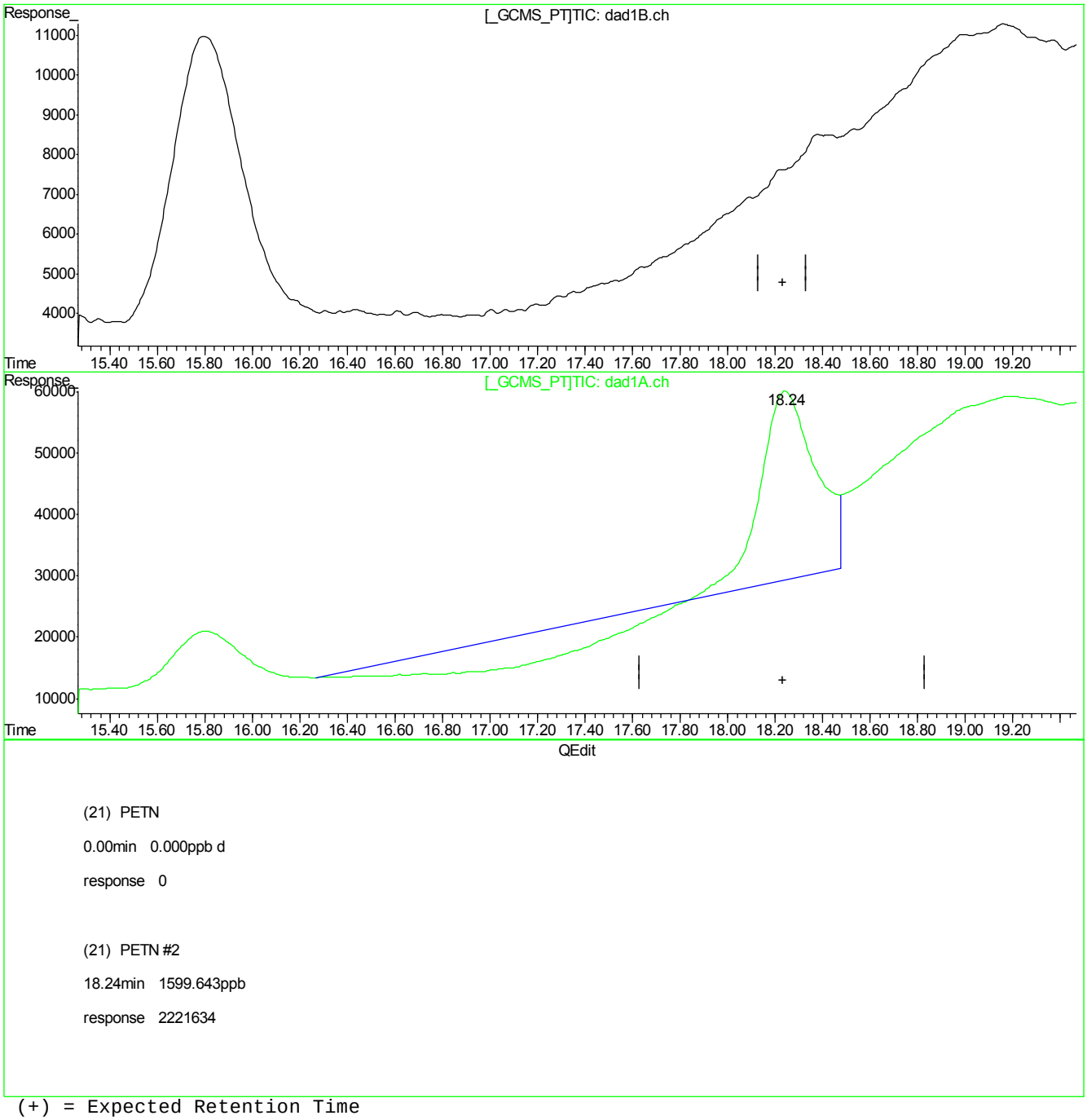


(+) = Expected Retention Time
BB059683.D 8330B_0419PLUS.M Fri May 11 08:18:46 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1A.ch
Acq On : 10-May-2018, 16:59:18 Operator: evitam
Sample : OP69960-MSD Inst : G1315B
Misc : OP69960,gbb1730,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

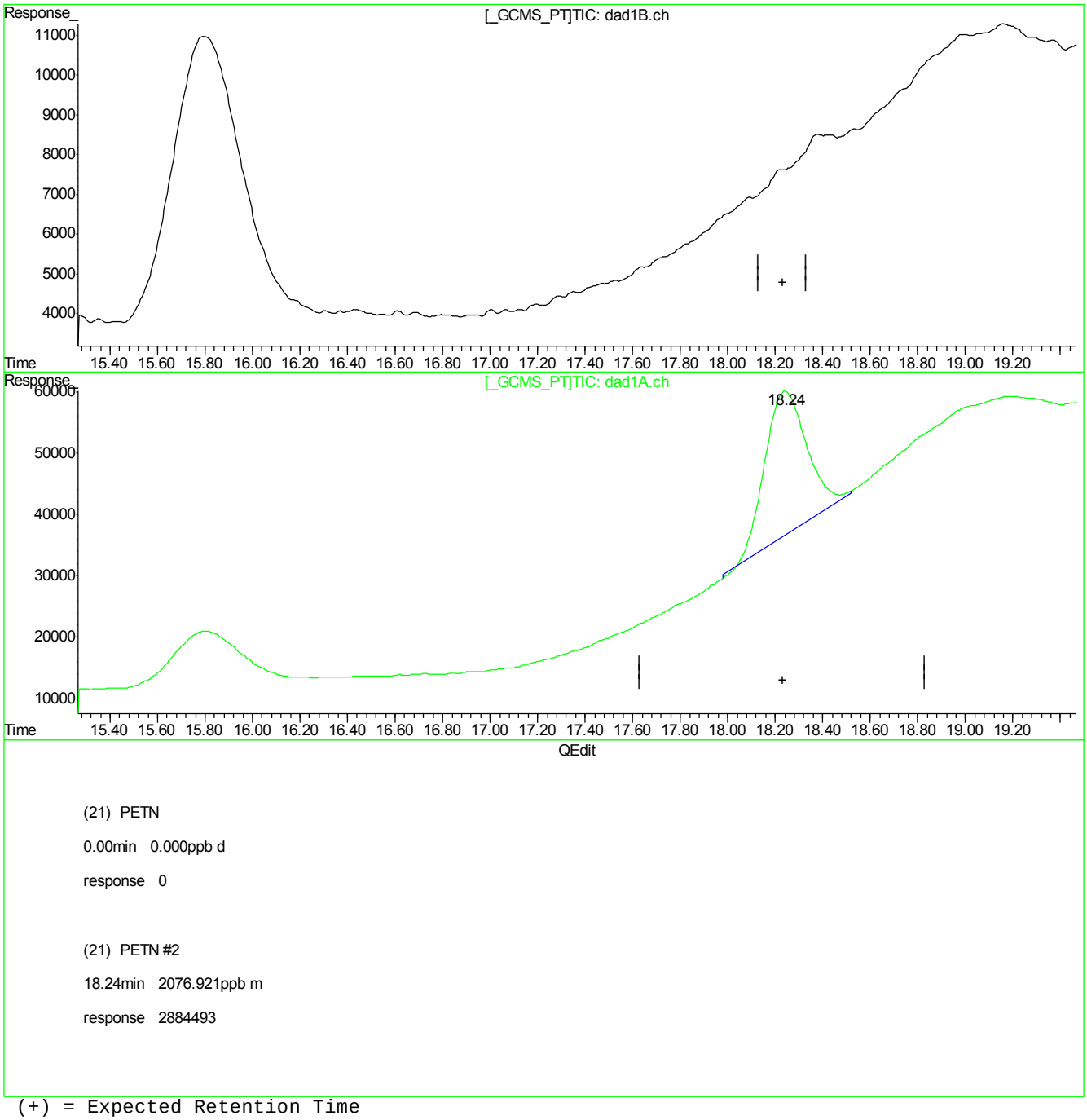


(+) = Expected Retention Time
BB059683.D 8330B_0419PLUS.M Fri May 11 08:19:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059683.D\dad1A.ch
Acq On : 10-May-2018, 16:59:18 Operator: evitam
Sample : OP69960-MSD Inst : G1315B
Misc : OP69960,gbb1730,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059683.D 8330B_0419PLUS.M Fri May 11 08:19:06 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614656.D\dad1B.ch Vial: 73
Signal #2 : G:\DATA\0508RPB3\GG614656.D\dad1A.ch
Acq On : 09-May-2018, 13:37:57 Operator: evitam
Sample : op69946-dup Inst : G1315B
Misc : op69946,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.14	14.14	2486354	6018564	478.616	556.366
	Spiked Amount 500.000	Range 69 - 134		Recovery =		95.72%	111.27%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

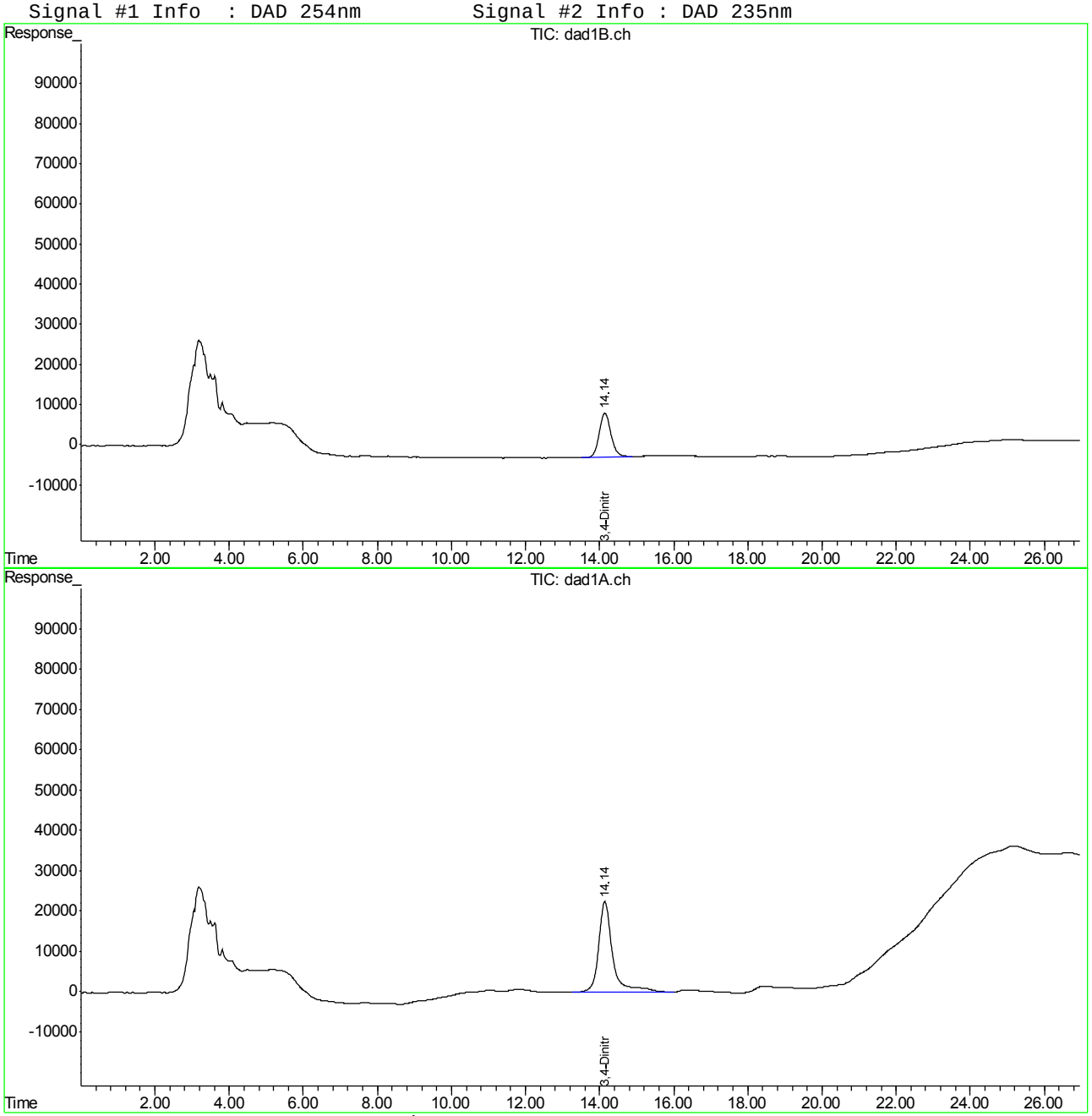
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614656.D 8330RPB.M_1113M.M Thu May 10 13:16:34 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614656.D\dad1B.ch Vial: 73
Signal #2 : G:\DATA\0508RPB3\GG614656.D\dad1A.ch
Acq On : 09-May-2018, 13:37:57 Operator: evitam
Sample : op69946-dup Inst : G1315B
Misc : op69946,Ggg2626,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614656.D 8330RPB.M_1113M.M Thu May 10 13:16:34 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614657.D\dad1B.ch Vial: 74
Signal #2 : G:\DATA\0508RPB3\GG614657.D\dad1A.ch
Acq On : 09-May-2018, 14:07:29 Operator: evitam
Sample : op69946-dup2 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:33 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.15	14.15	2406011	4998452	463.150	462.065m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		92.63%	92.41%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

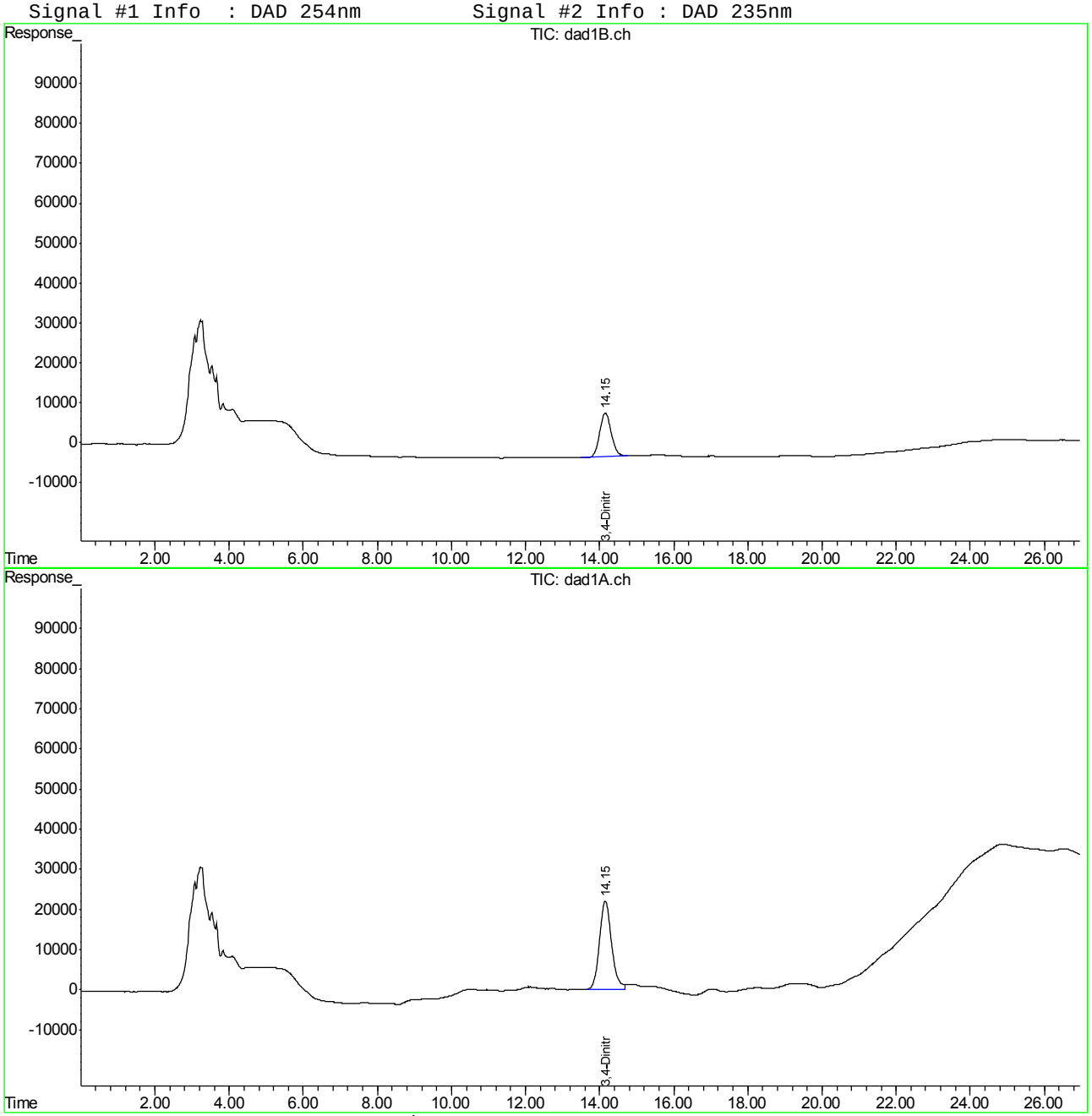
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614657.D 8330RPB.M_1113M.M Thu May 10 13:16:35 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614657.D\dad1B.ch Vial: 74
Signal #2 : G:\DATA\0508RPB3\GG614657.D\dad1A.ch
Acq On : 09-May-2018, 14:07:29 Operator: evitam
Sample : op69946-dup2 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:11 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

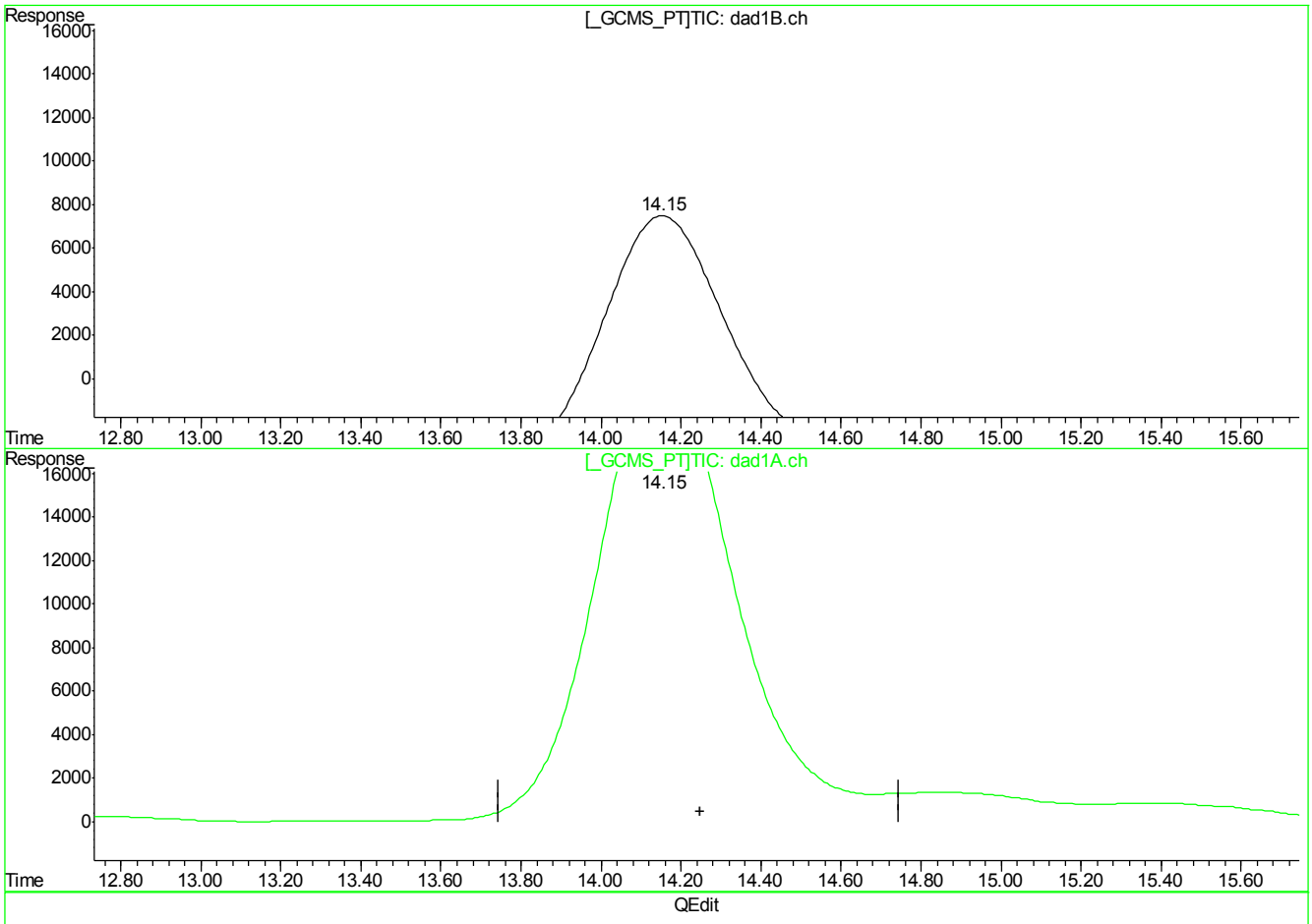
Sample Number:	OP69946-DUP2	**Method:**	SW846 8330B
Lab FileID:	GG614657.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 14:07	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.15	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614657.D\dad1B.ch Vial: 74
Signal #2 : G:\DATA\0508RPB3\GG614657.D\dad1A.ch
Acq On : 09-May-2018, 14:07:29 Operator: evitam
Sample : op69946-dup2 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.15min 463.150ppb

response 2406011

(12) 3,4-Dinitrotoluene #2 (S)

14.15min 648.069ppb

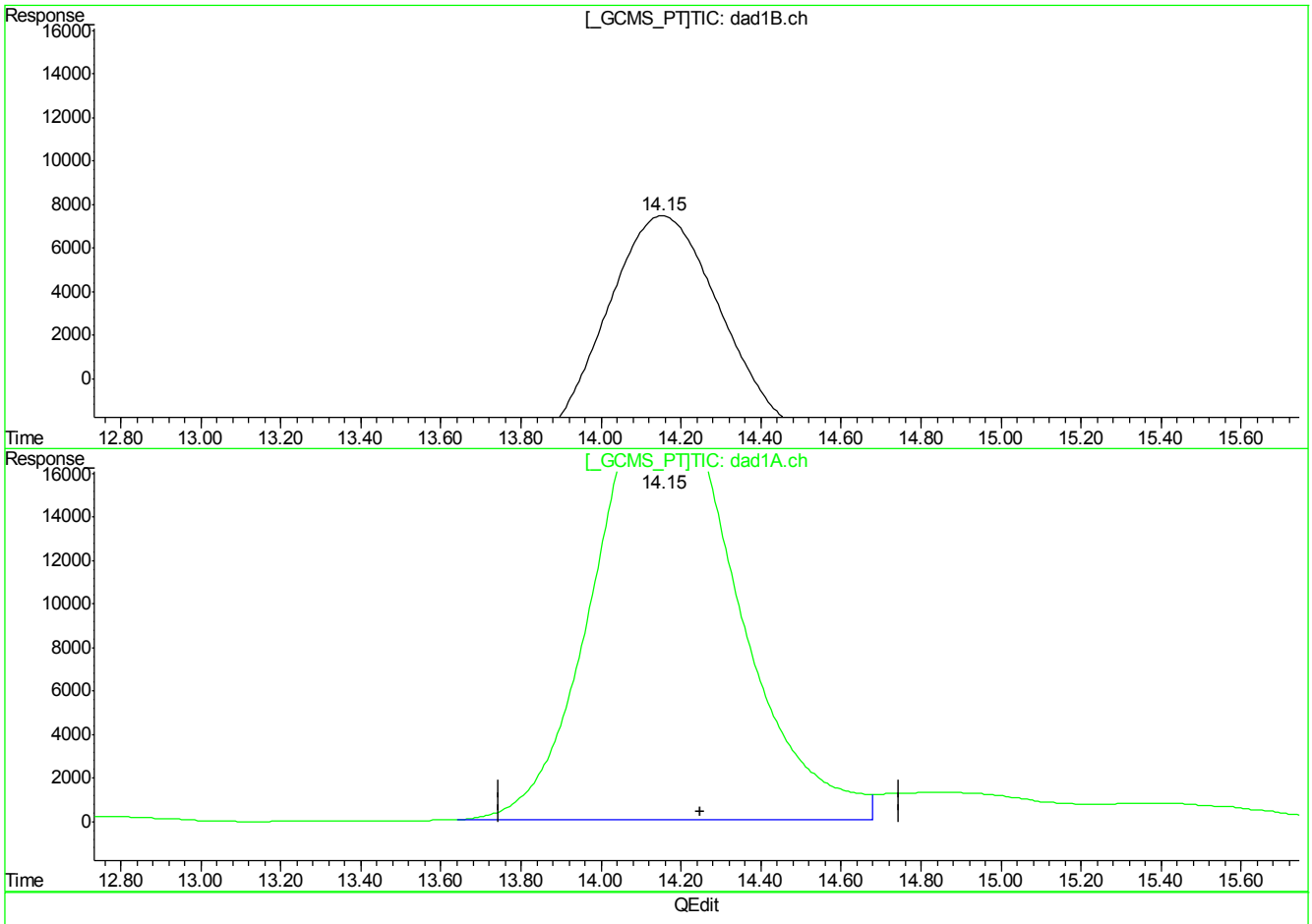
response 7010564

(+) = Expected Retention Time
GG614657.D 8330RPB.M_1113M.M Thu May 10 13:11:46 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614657.D\dad1B.ch Vial: 74
Signal #2 : G:\DATA\0508RPB3\GG614657.D\dad1A.ch
Acq On : 09-May-2018, 14:07:29 Operator: evitam
Sample : op69946-dup2 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.15min 463.150ppb

response 2406011

(12) 3,4-Dinitrotoluene #2 (S)

14.15min 462.065ppb m

response 4998452

(+) = Expected Retention Time
GG614657.D 8330RPB.M_1113M.M Thu May 10 13:11:54 2018

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059690.D\dad1B.ch Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059690.D\dad1A.ch
Acq On : 10-May-2018, 20:28:58 Operator: evitam
Sample : OP69960-DUP Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:08 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.88	9.87	1015425	1781207	379.499	377.794
	Spiked Amount 500.000	Range 69 - 134		Recovery =		75.90%	75.56%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

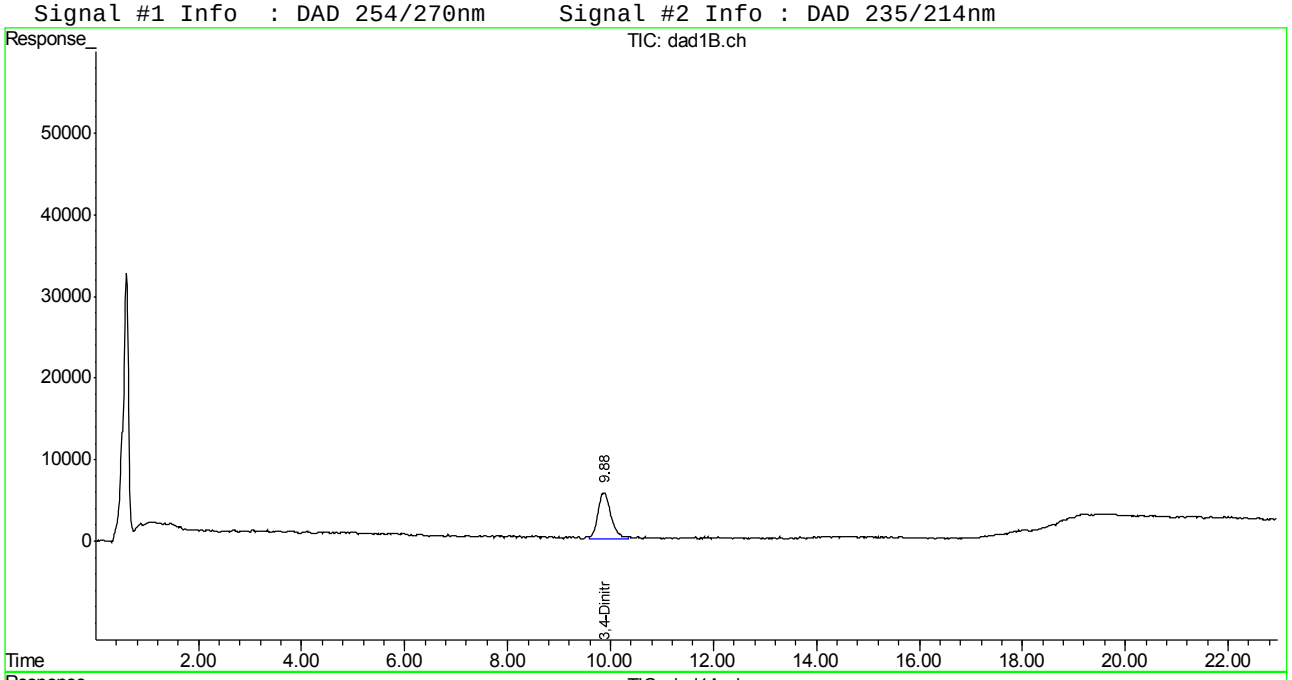
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059690.D 8330B_0419PLUS.M Fri May 11 08:38:04 2018 Page 1

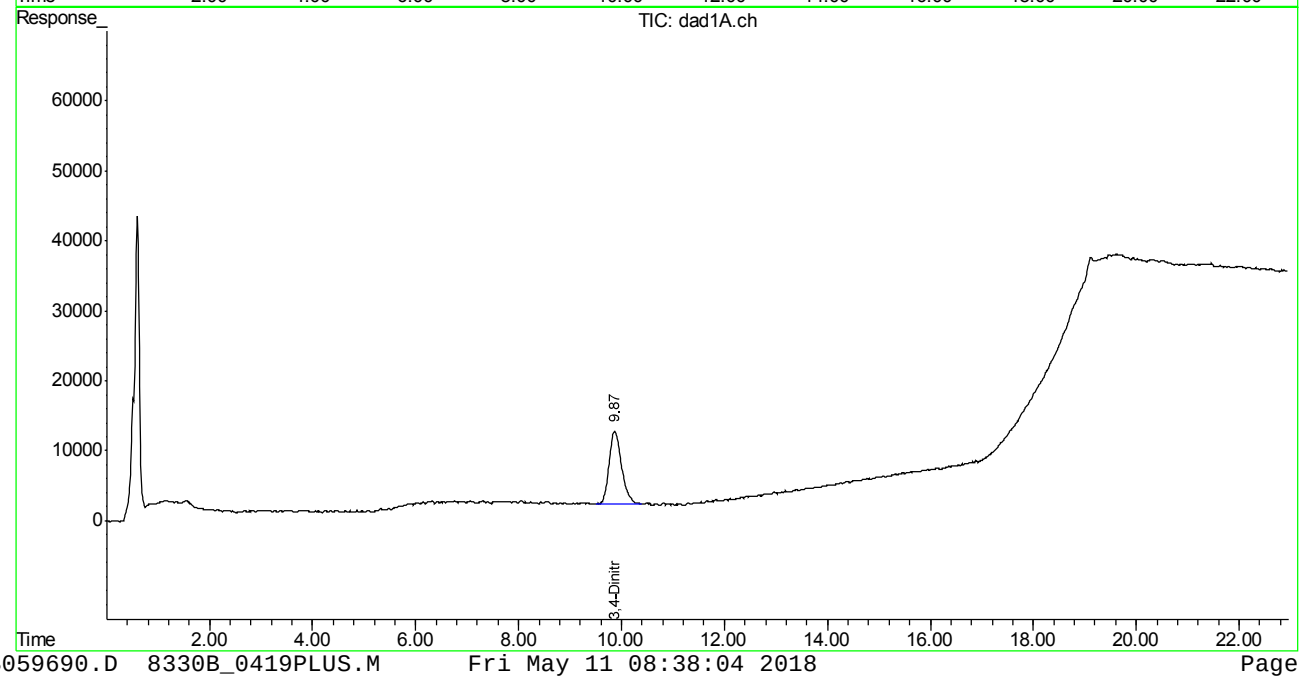
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059690.D\dad1B.ch Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059690.D\dad1A.ch
Acq On : 10-May-2018, 20:28:58 Operator: evitam
Sample : OP69960-DUP Inst : G1315B
Misc : OP69960,gbb1730,10.11,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:21 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059691.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059691.D\dad1A.ch
Acq On : 10-May-2018, 20:58:55 Operator: evitam
Sample : OP69960-DUP2 Inst : G1315B
Misc : OP69960,gbb1730,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:09 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.83	9.84	1006673	1727040	376.228	366.306
	Spiked Amount 500.000	Range 69 - 134		Recovery =		75.25%	73.26%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

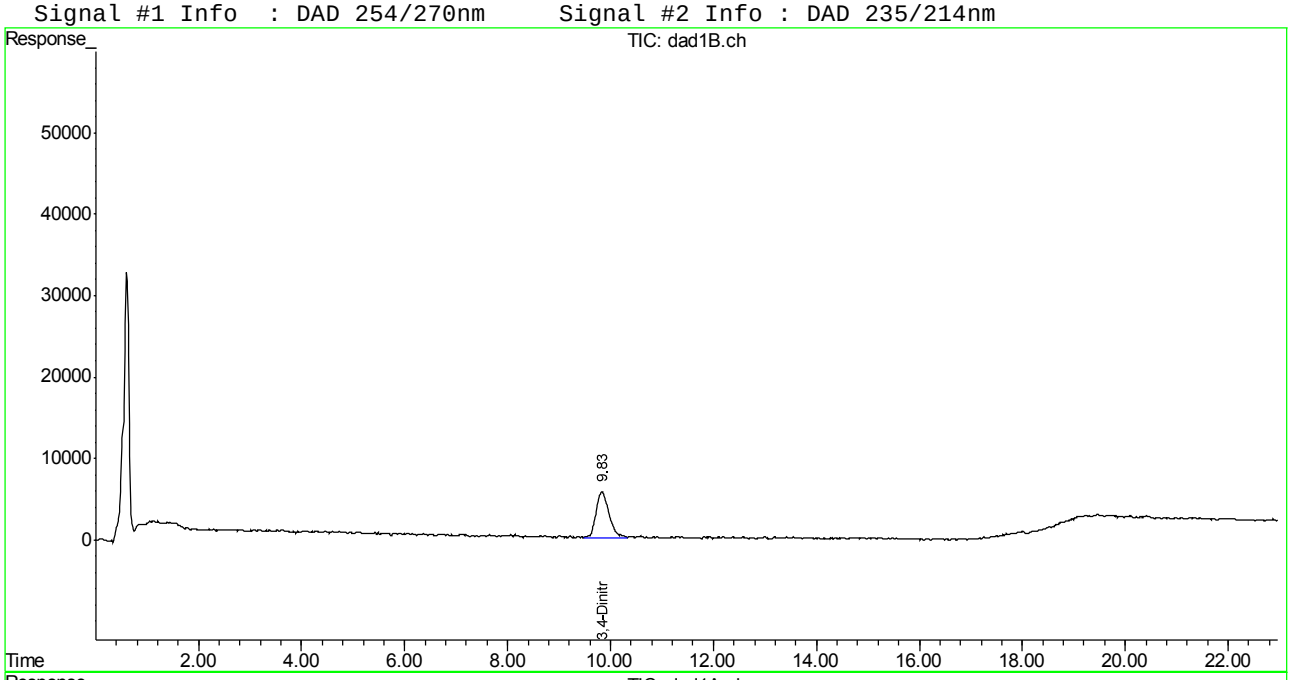
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059691.D 8330B_0419PLUS.M Fri May 11 08:38:05 2018 Page 1

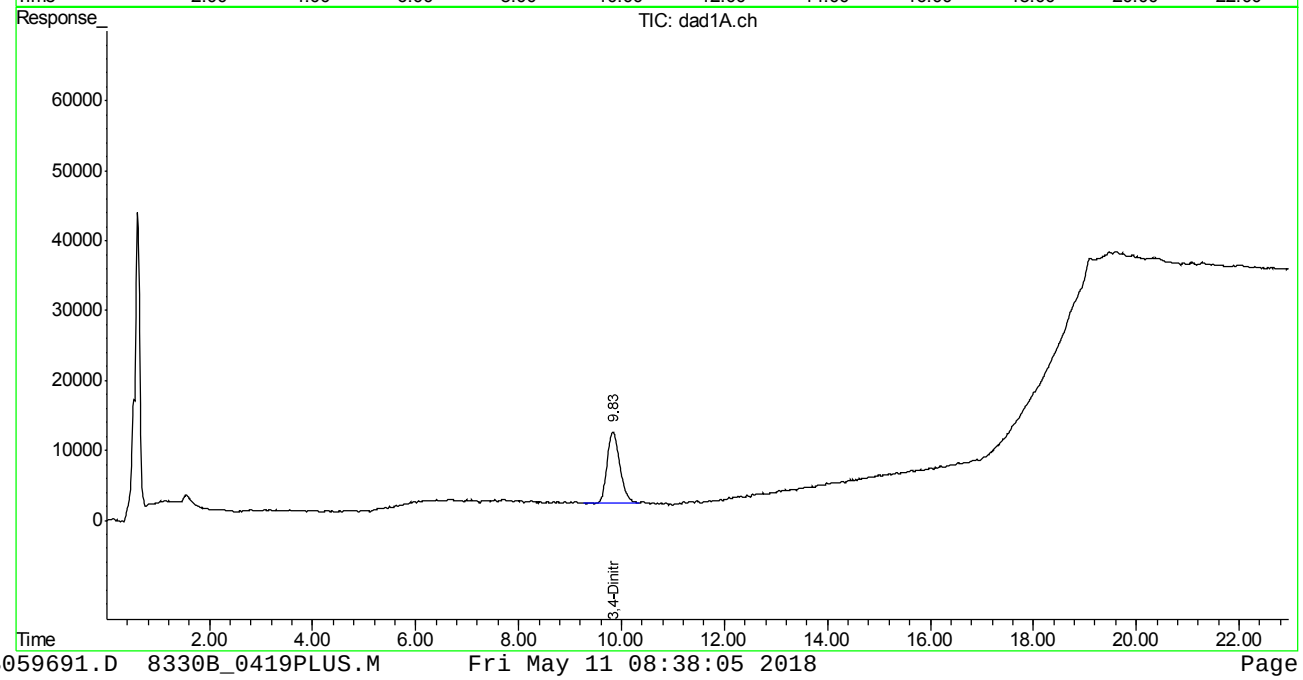
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059691.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059691.D\dad1A.ch
Acq On : 10-May-2018, 20:58:55 Operator: evitam
Sample : OP69960-DUP2 Inst : G1315B
Misc : OP69960,gbb1730,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:21 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:44 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.28	10.30	50941	95121	22.056	22.845m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	4.41%#	4.57%#
	Target Compounds						
1)	TNX	1.32	1.32	81134	121101	15.988	15.538
2)	HMX	1.44	1.44	31306	67296	16.059	12.805
3)	DNX	1.67	1.66	65656	83477	22.155m	17.466m
4)	MNX	2.21	2.20	59277	85161	19.065	18.169m
5)	RDX	2.78	2.78	45831	71397	19.752	19.064m
6)	1,3,5-Trinitrobe	4.41	4.41	100308	158806	20.299m	17.427m
7)	1,3-Dinitrobenze	5.59	5.60	102063	76764	16.722	19.482m
8)	3,5-Dinitroanili	5.88	5.89	94329	116035	20.575	14.714
9)	Nitrobenzene	7.10	7.09	75214	65624	19.715	18.304m
10)	Nitroglycerin	0.00	8.40	0	141549	N.D. d	106.959m
11)	Tetryl	8.63	8.68	93861	110112	29.498	21.477m
12)	2,4,6-Trinitroto	9.10	9.11	99127	75942	27.471	17.706m
13)	2-Amino-4,6-Dini	9.41	9.38	78176	111824	19.475	20.113m
14)	4-Amino-2,6-Dini	9.78	9.89	30840	86551	10.928	16.014m#
16)	2,4-Dinitrotolue	10.94	11.00	97322	51333	18.050	15.376m
17)	2,6-Dinitrotolue	11.43	11.44	74215	51922	22.573	13.240m#
18)	o-Nitrotoluene	14.67	14.68	47689	59648	19.100	16.353m
19)	p-Nitrotoluene	15.23	15.29	63838	42073	17.255m	13.295m
20)	m-Nitrotoluene	16.19	16.42	62788	64213	17.018m	14.807m
21)	PETN	0.00	18.50	0	151593	N.D. d	109.347m

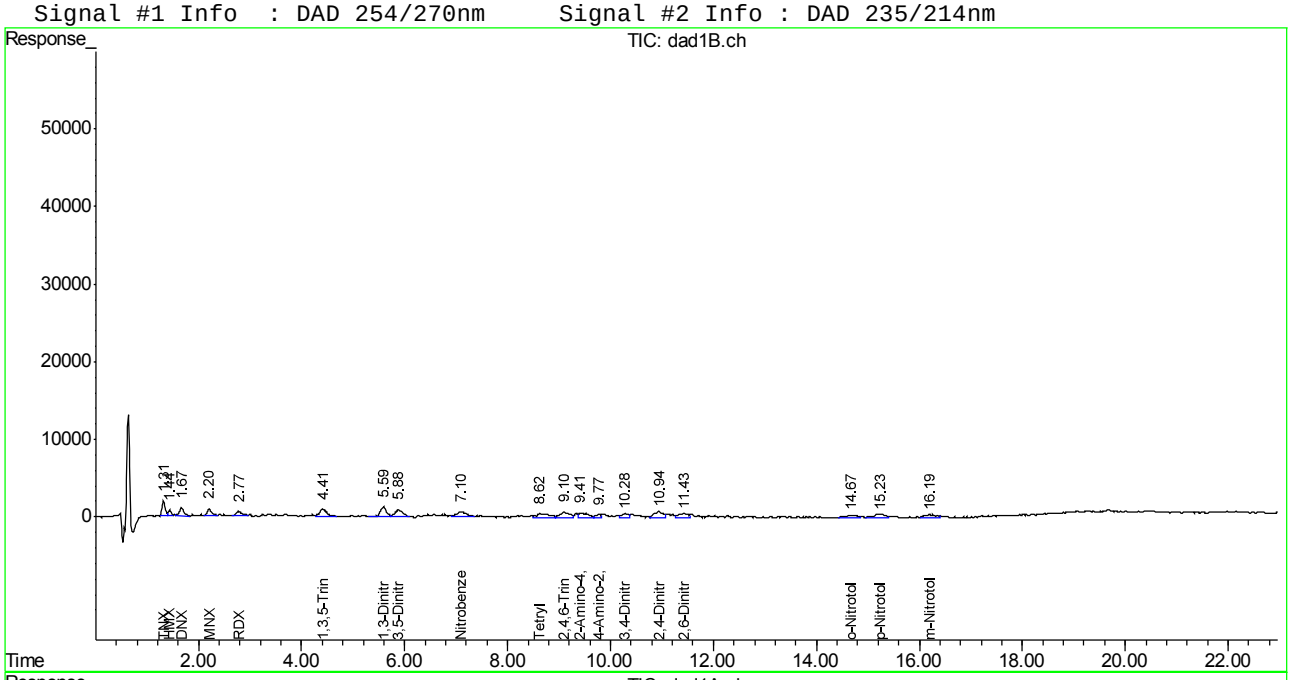
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059464.D 8330B_0419PLUS.M Fri Apr 20 08:01:18 2018 Page 1

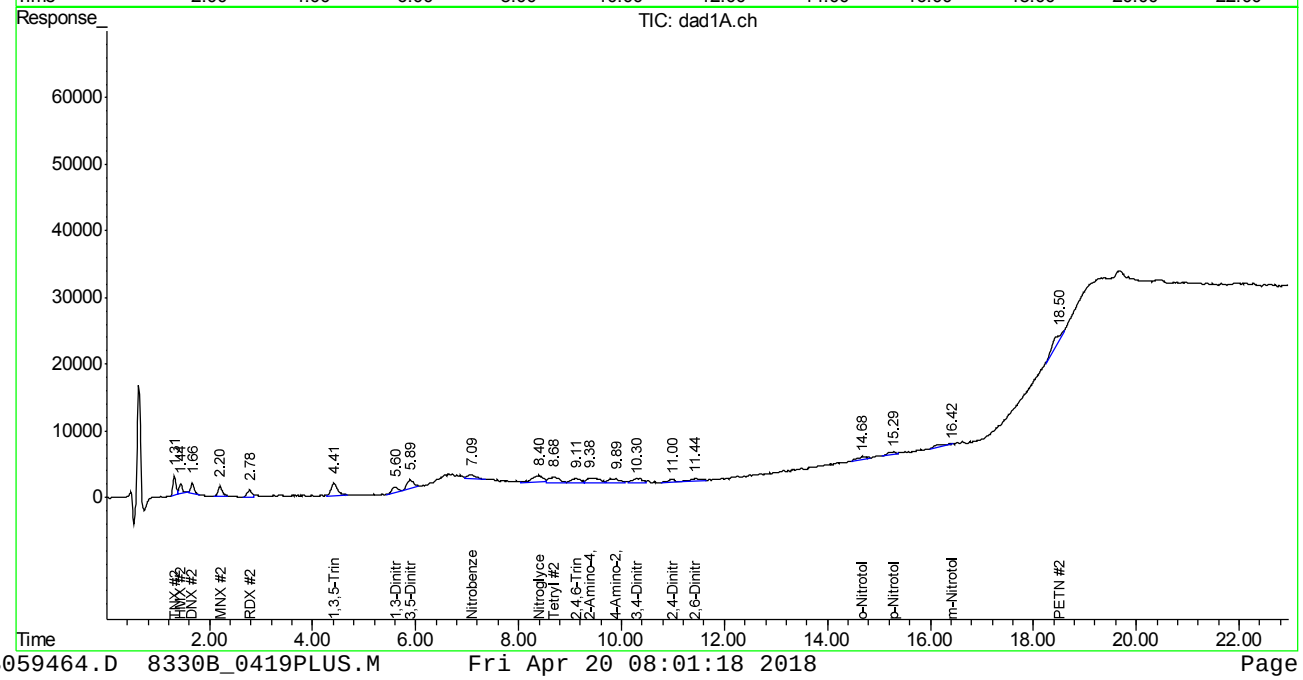
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:52 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

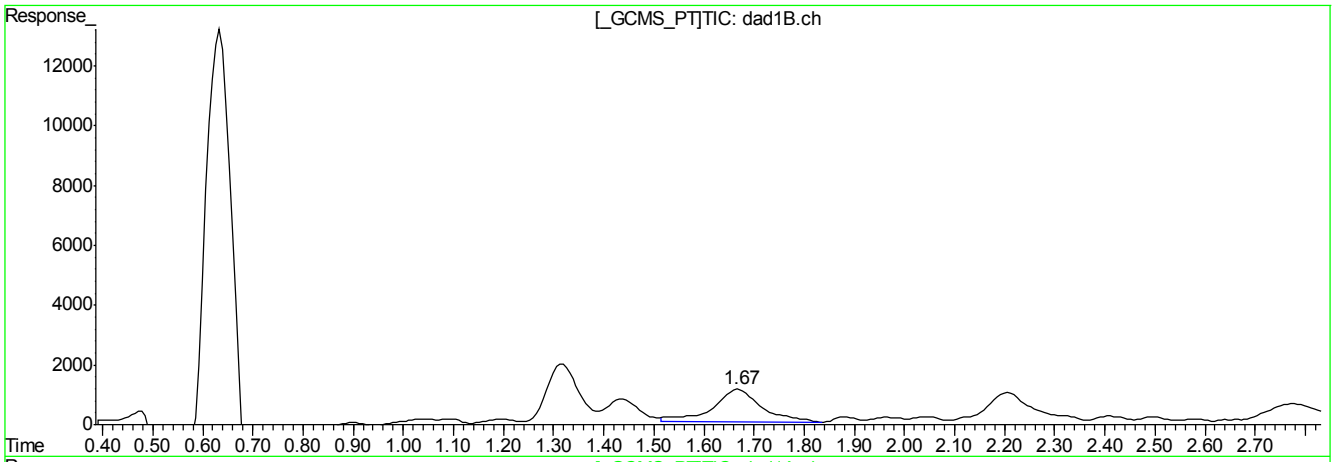
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059464.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 10:14	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
DNX		2	1.66	Poorly defined baseline
DNX		1	1.67	Poorly defined baseline
MNX		2	2.20	Poorly defined baseline
RDX	121-82-4	2	2.78	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.41	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.41	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.09	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.40	Poorly defined baseline
Tetryl	479-45-8	2	8.68	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.11	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.38	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	9.89	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.30	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.00	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.44	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.68	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	15.23	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.29	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	16.19	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.42	Poorly defined baseline
PETN	78-11-5	2	18.50	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



QEdit

(3) DNX

1.67min 24.954ppb

response 73947

(3) DNX #2

1.44min 14.080ppb

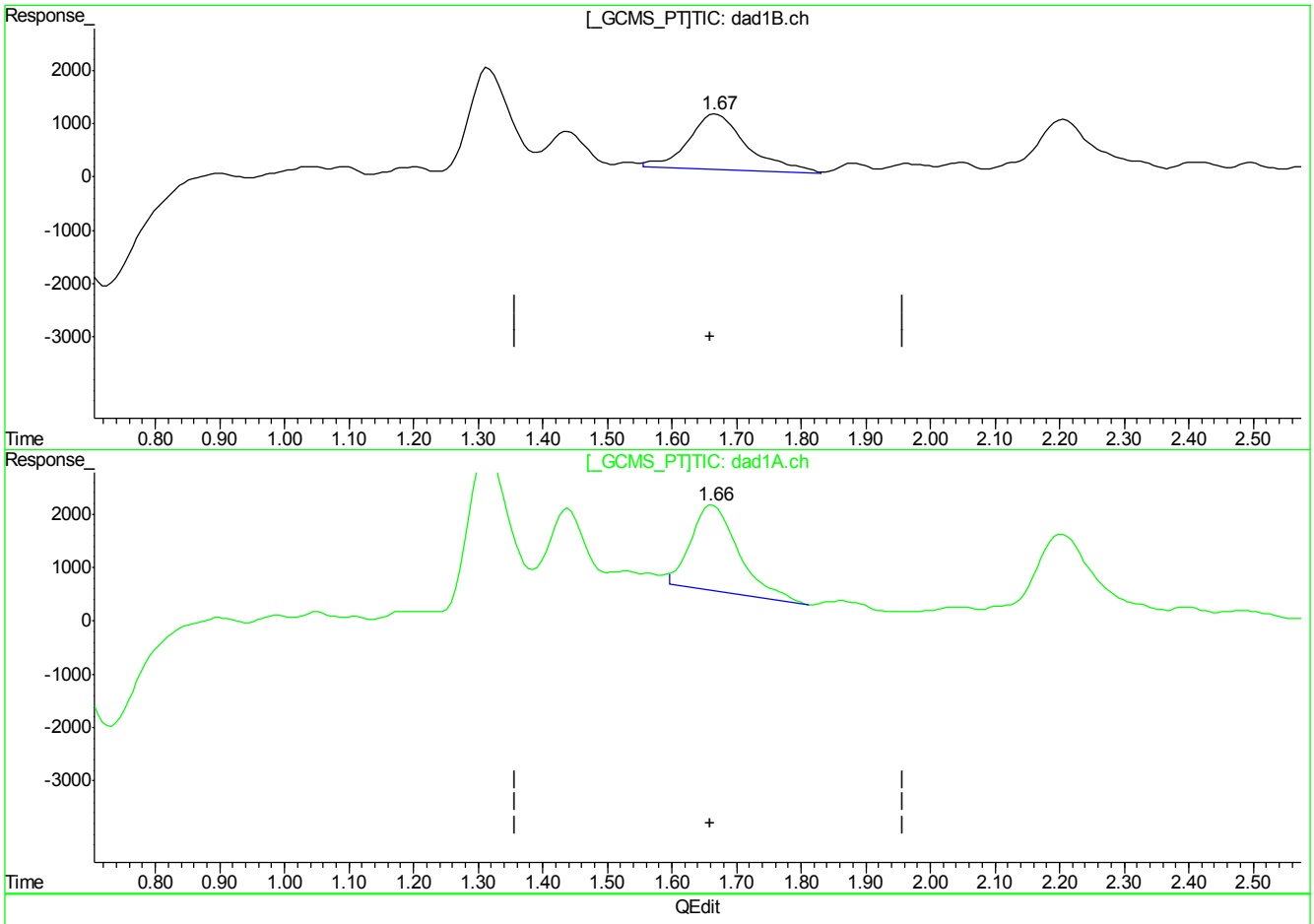
response 67296

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:48:46 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 22.155ppb m

response 65656

(3) DNX #2

1.66min 17.466ppb m

response 83477

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:48:56 2018

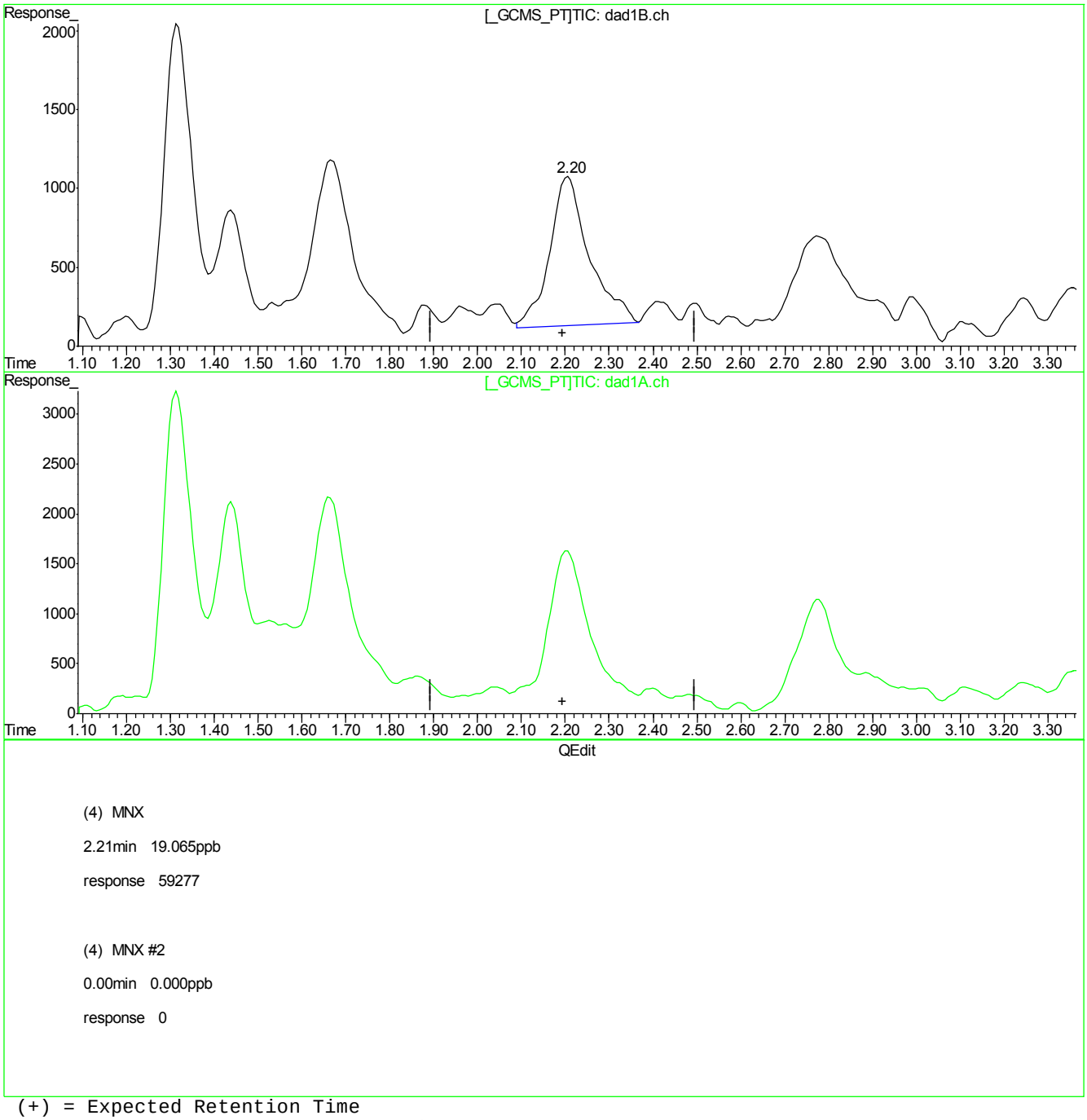
7.7.1.3

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:01 2018

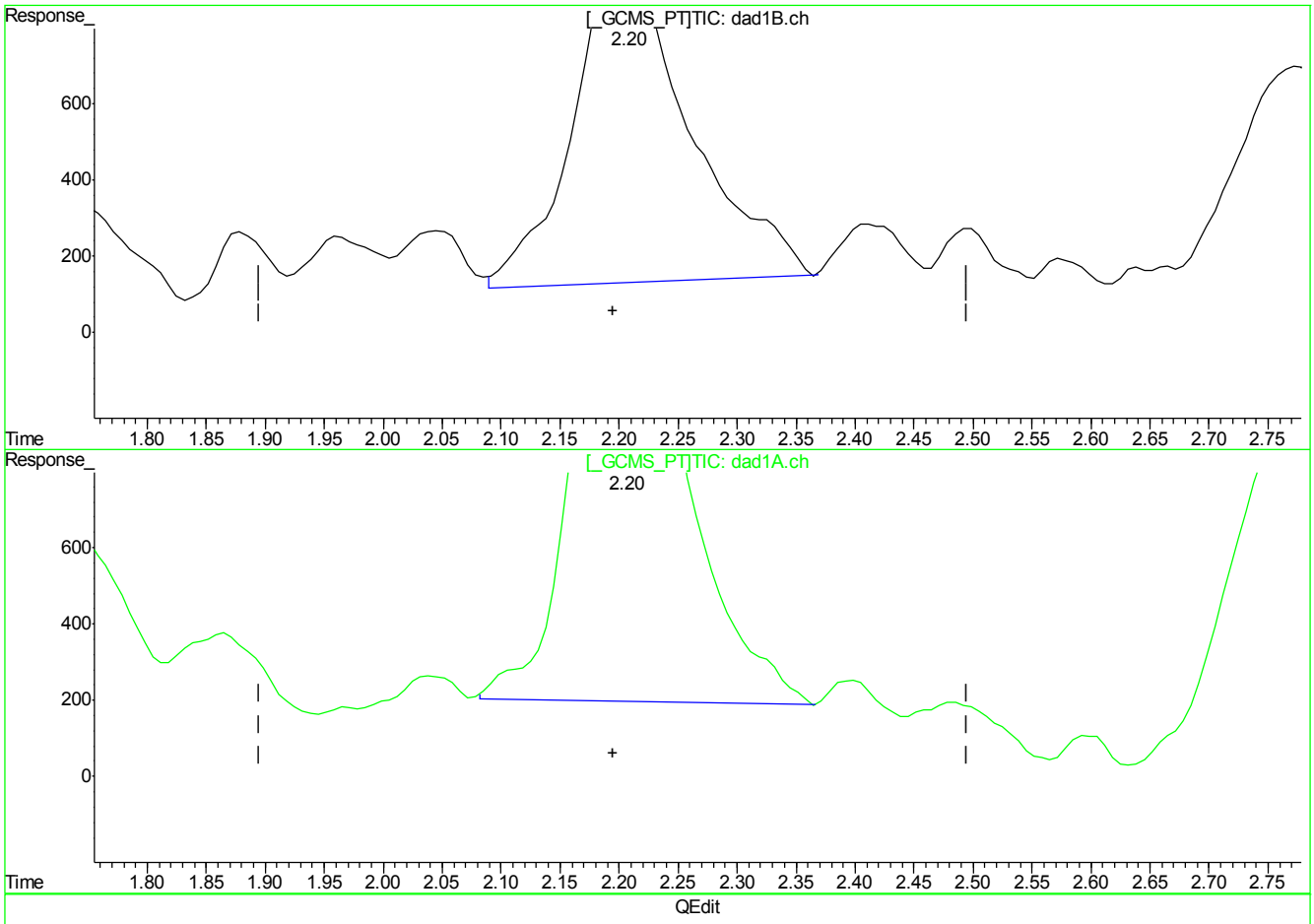
7.7.1.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(4) MNX

2.21min 19.065ppb

response 59277

(4) MNX #2

2.20min 18.169ppb m

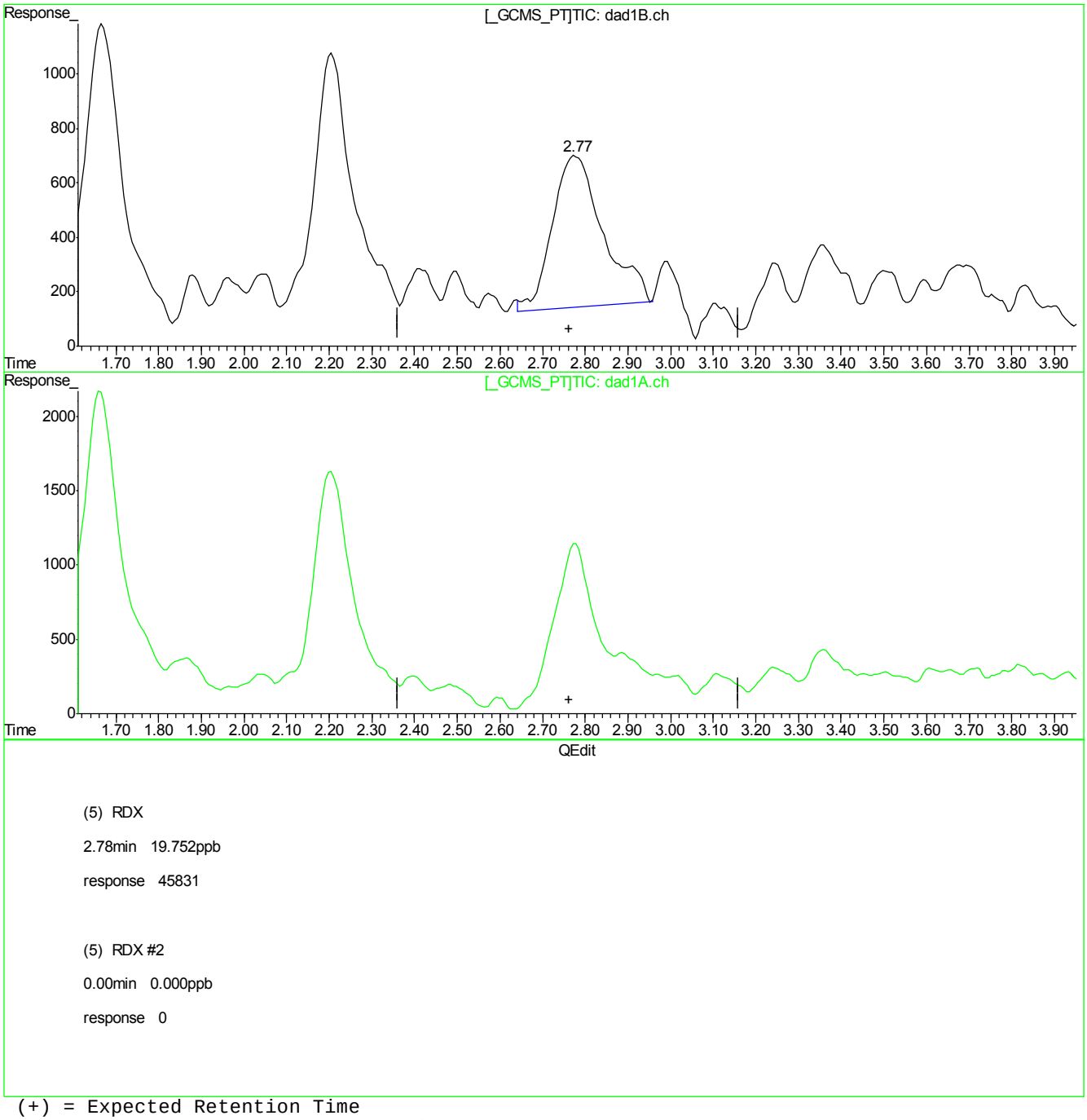
response 85161

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:06 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:09 2018

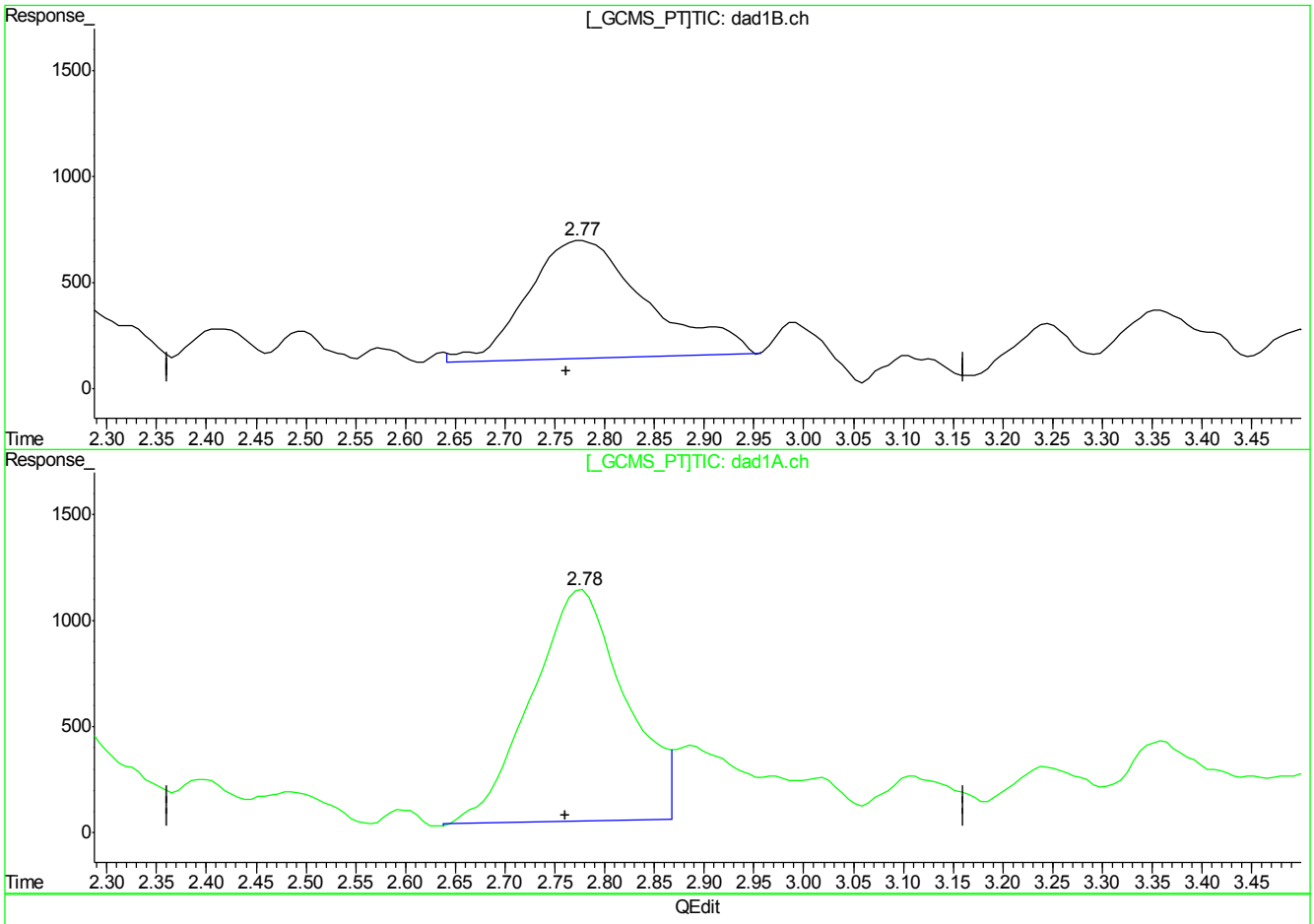
7.7.1.6

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(5) RDX

2.78min 19.752ppb

response 45831

(5) RDX #2

2.78min 19.064ppb m

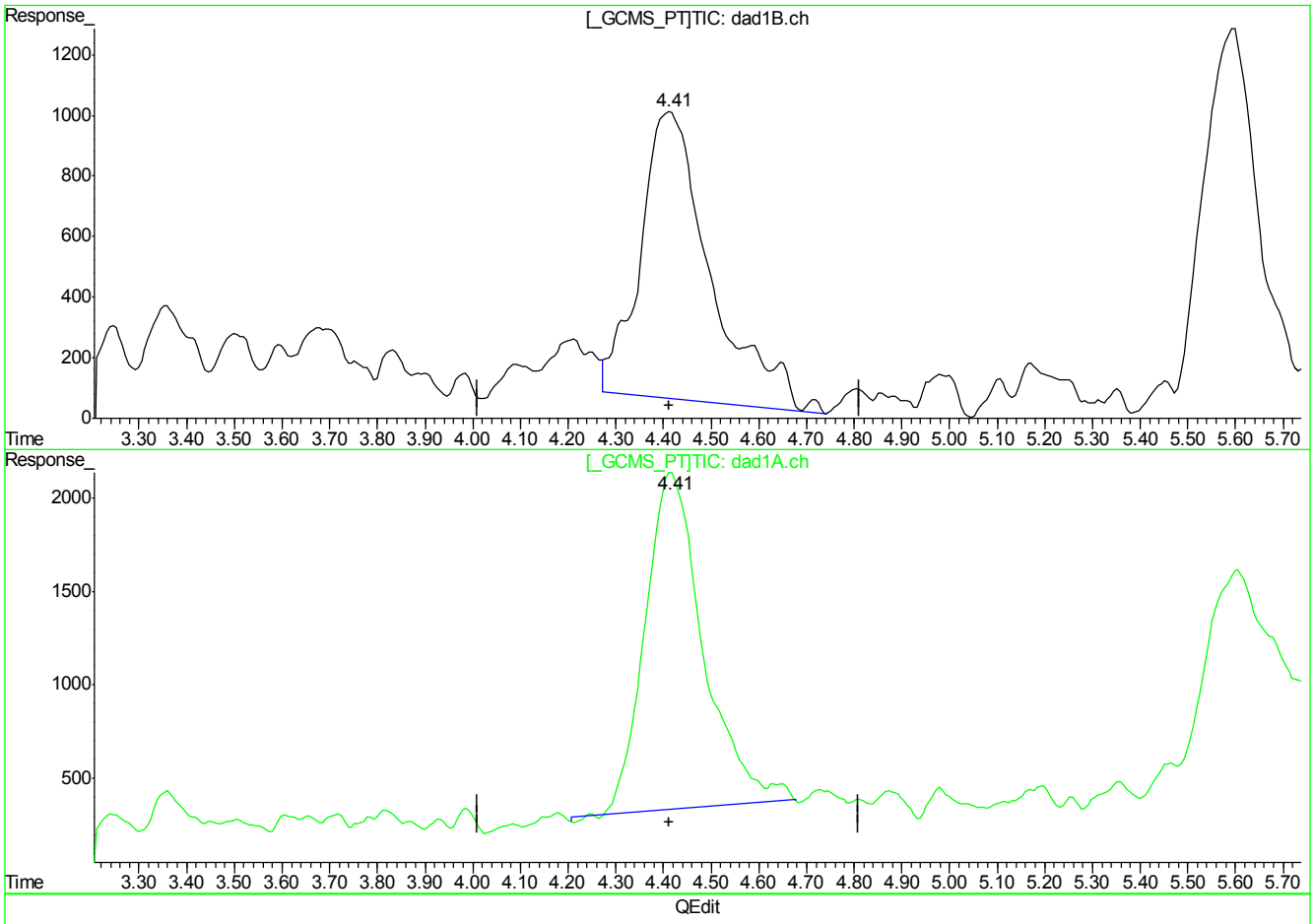
response 71397

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:12 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(6) 1,3,5-Trinitrobenzene

4.41min 19.710ppb

response 97395

(6) 1,3,5-Trinitrobenzene #2

4.42min 16.806ppb

response 153155

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:15 2018

7.7.1.8

7

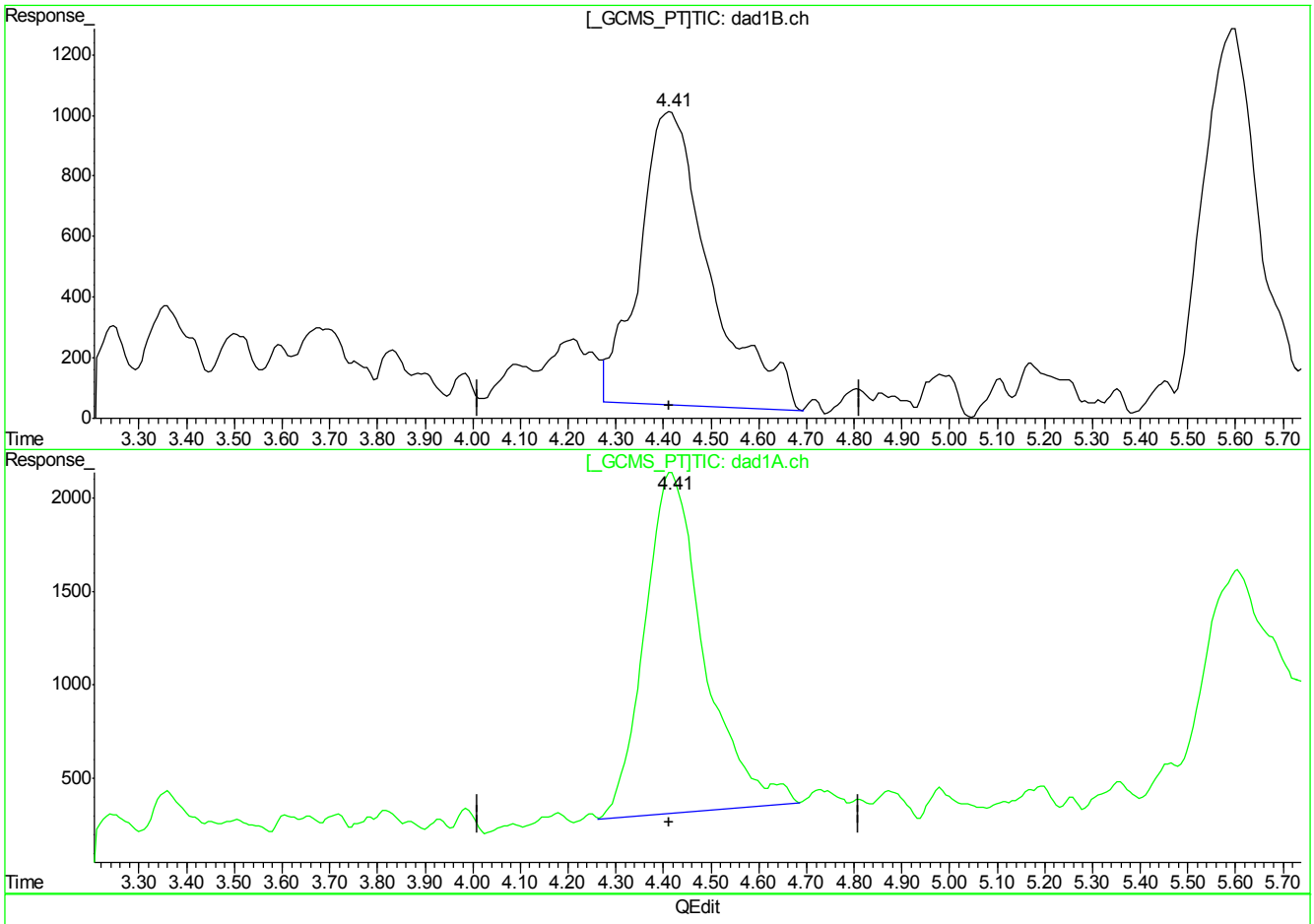
FA53800

BB059464.D edits: 1,3,5-Trinitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(6) 1,3,5-Trinitrobenzene

4.41min 20.299ppb m

response 100308

(6) 1,3,5-Trinitrobenzene #2

4.41min 17.427ppb m

response 158806

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:23 2018

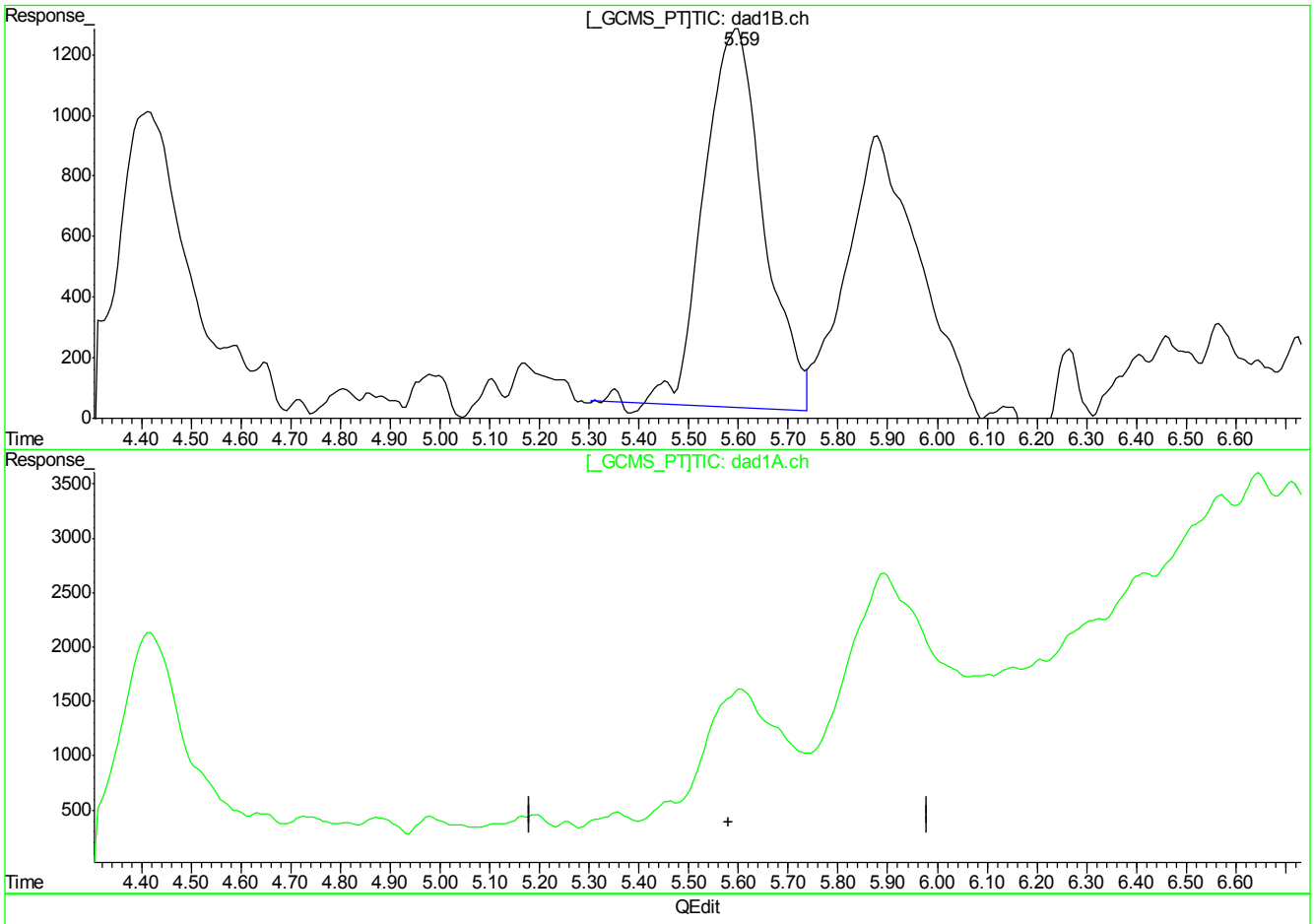
7.7.19

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 16.722ppb

response 102063

(7) 1,3-Dinitrobenzene #2

0.00min 0.000ppb

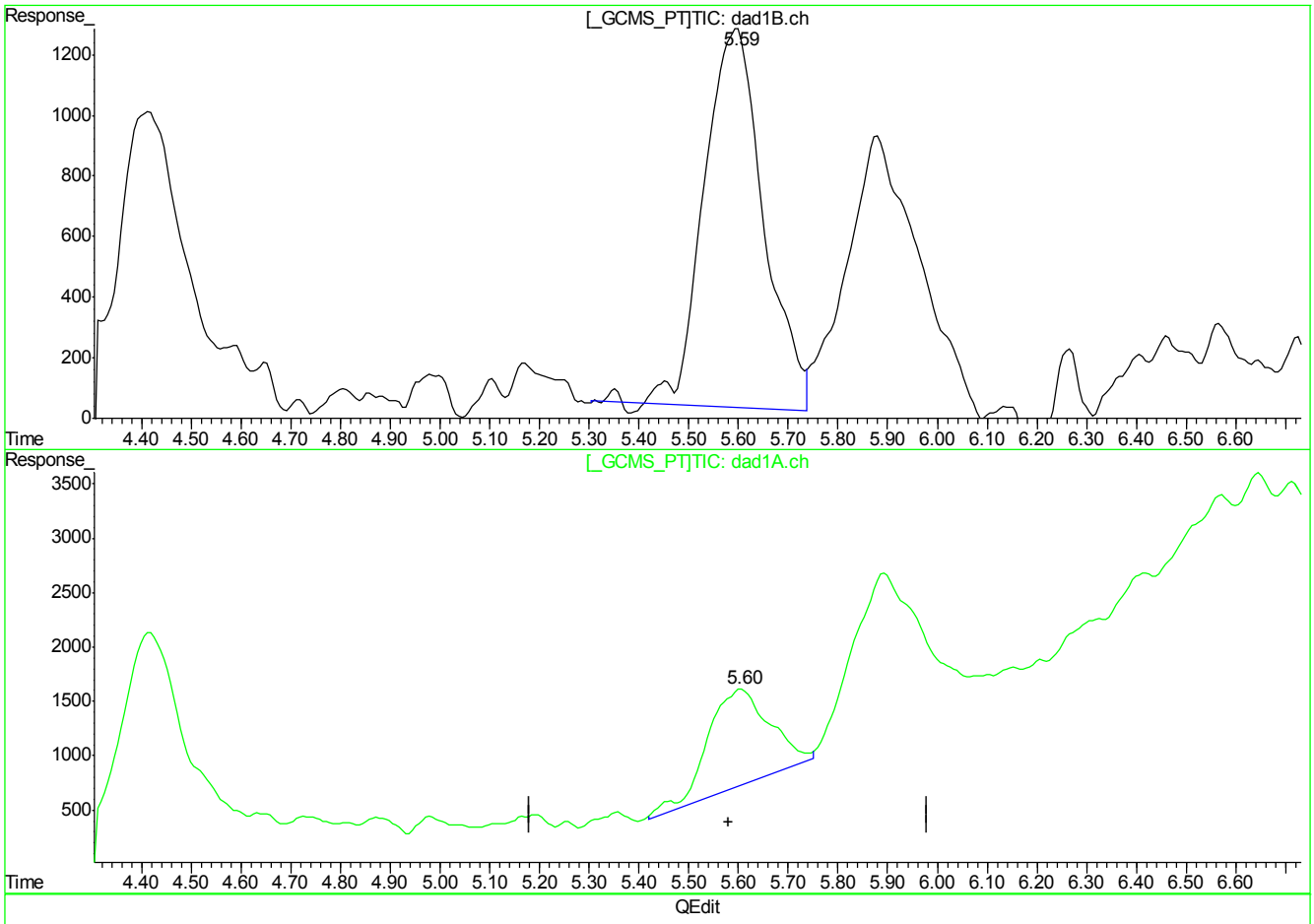
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:26 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 16.722ppb

response 102063

(7) 1,3-Dinitrobenzene #2

5.60min 19.482ppb m

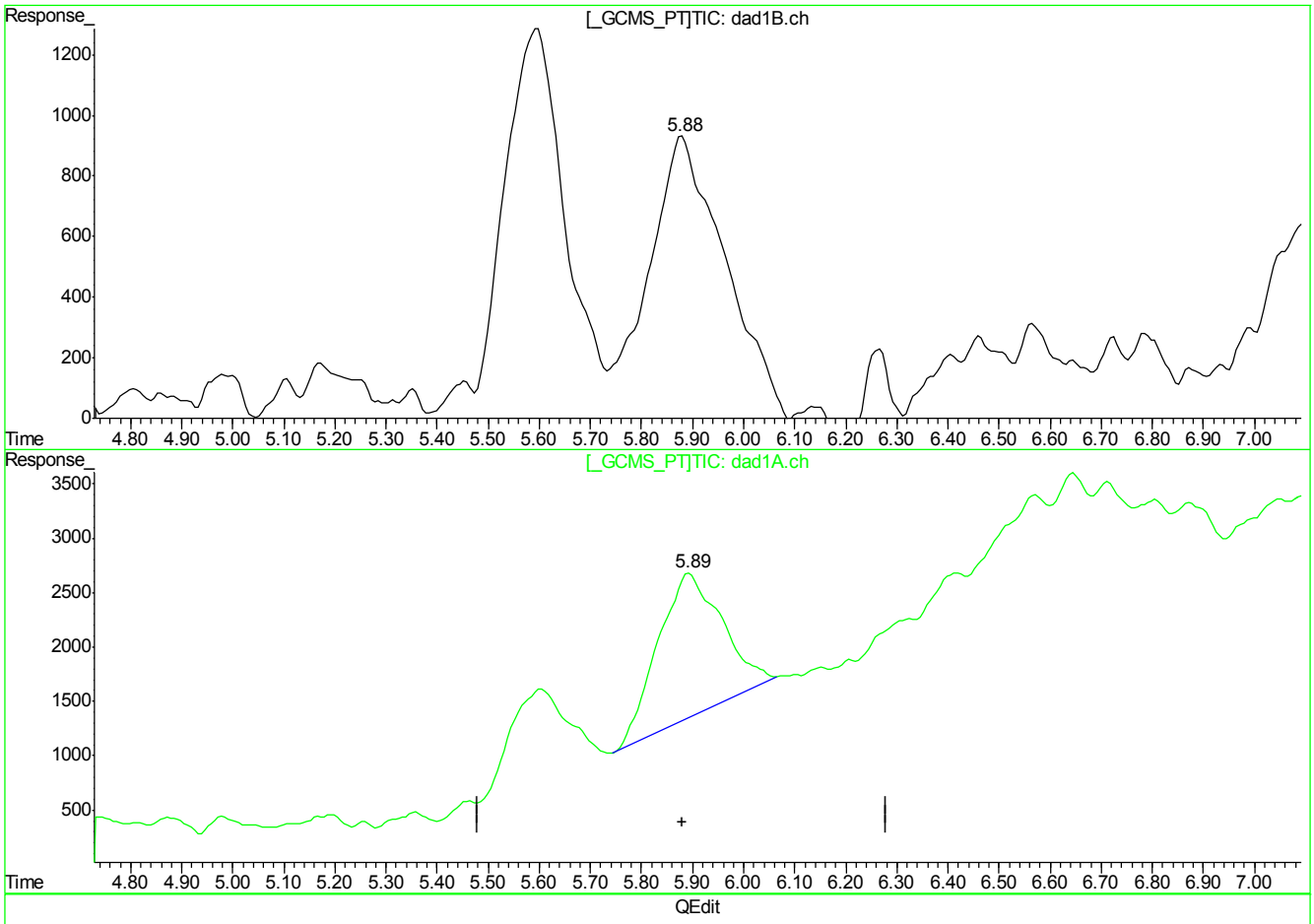
response 76764

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:30 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.88min 20.575ppb

response 94329

(8) 3,5-Dinitroaniline #2

5.89min 14.714ppb

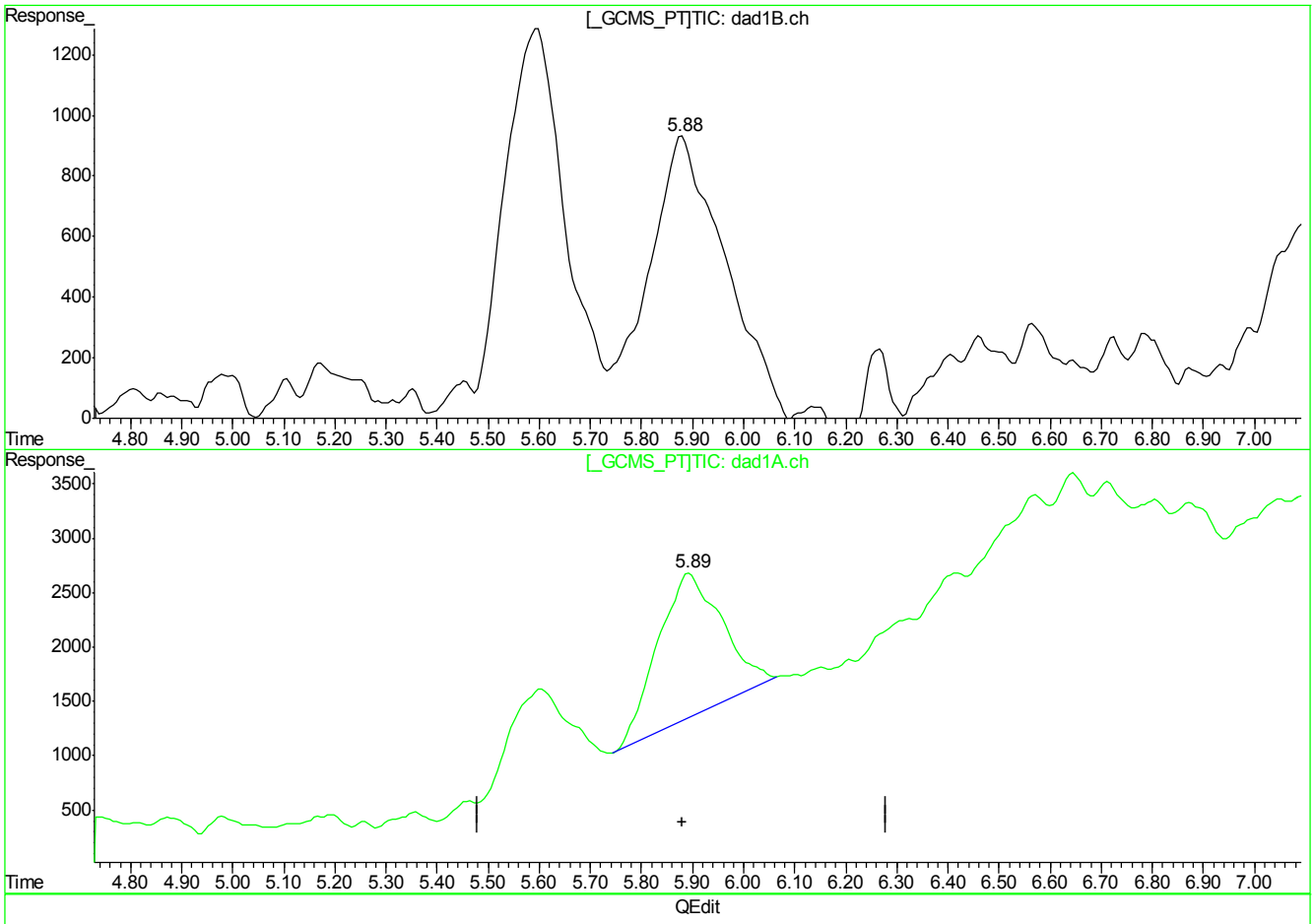
response 116035

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:32 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.88min 20.575ppb

response 94329

(8) 3,5-Dinitroaniline #2

5.89min 14.714ppb

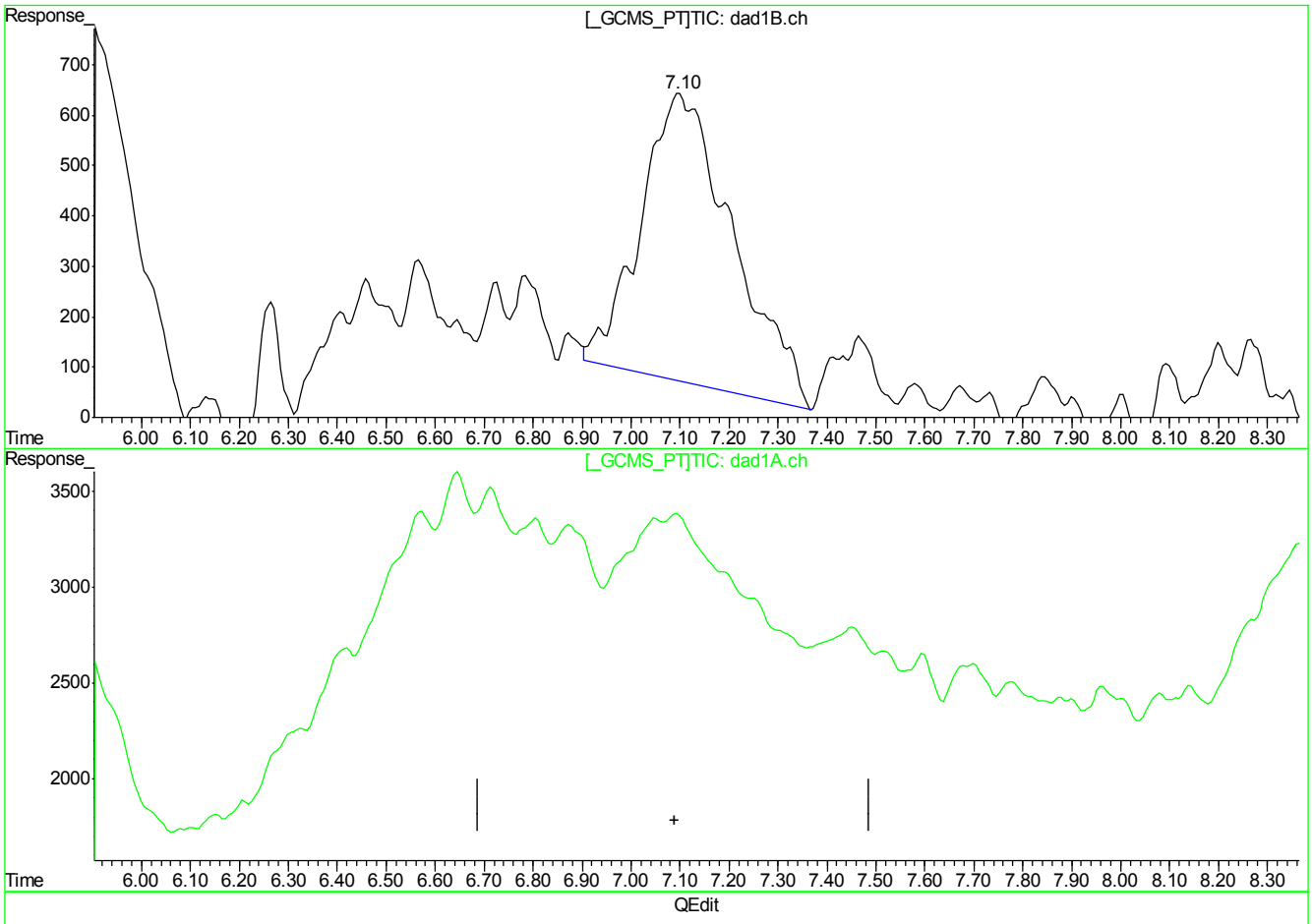
response 116035

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.10min 19.715ppb

response 75214

(9) Nitrobenzene #2

0.00min 0.000ppb

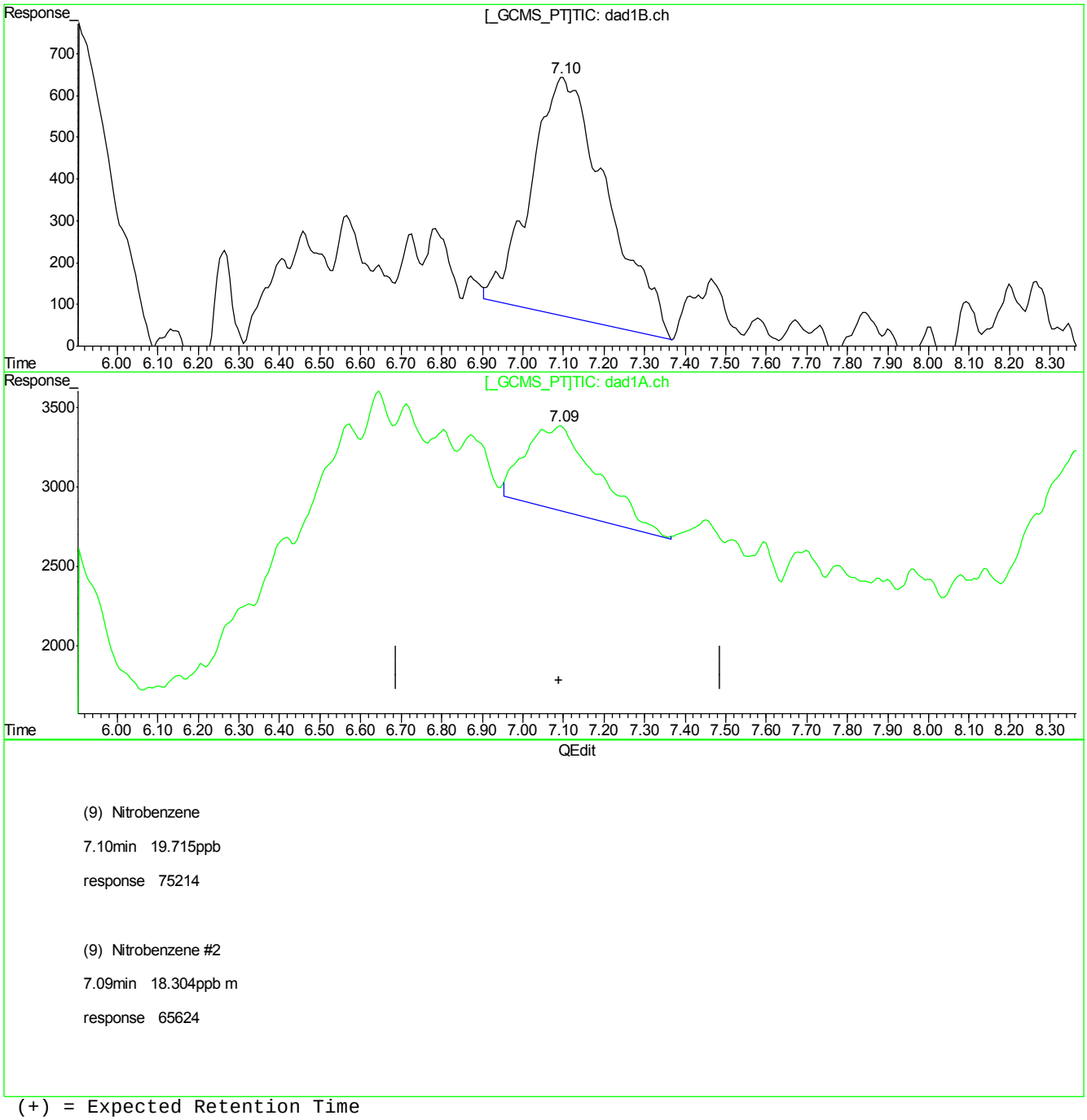
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:39 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.10min 19.715ppb

response 75214

(9) Nitrobenzene #2

7.09min 18.304ppb m

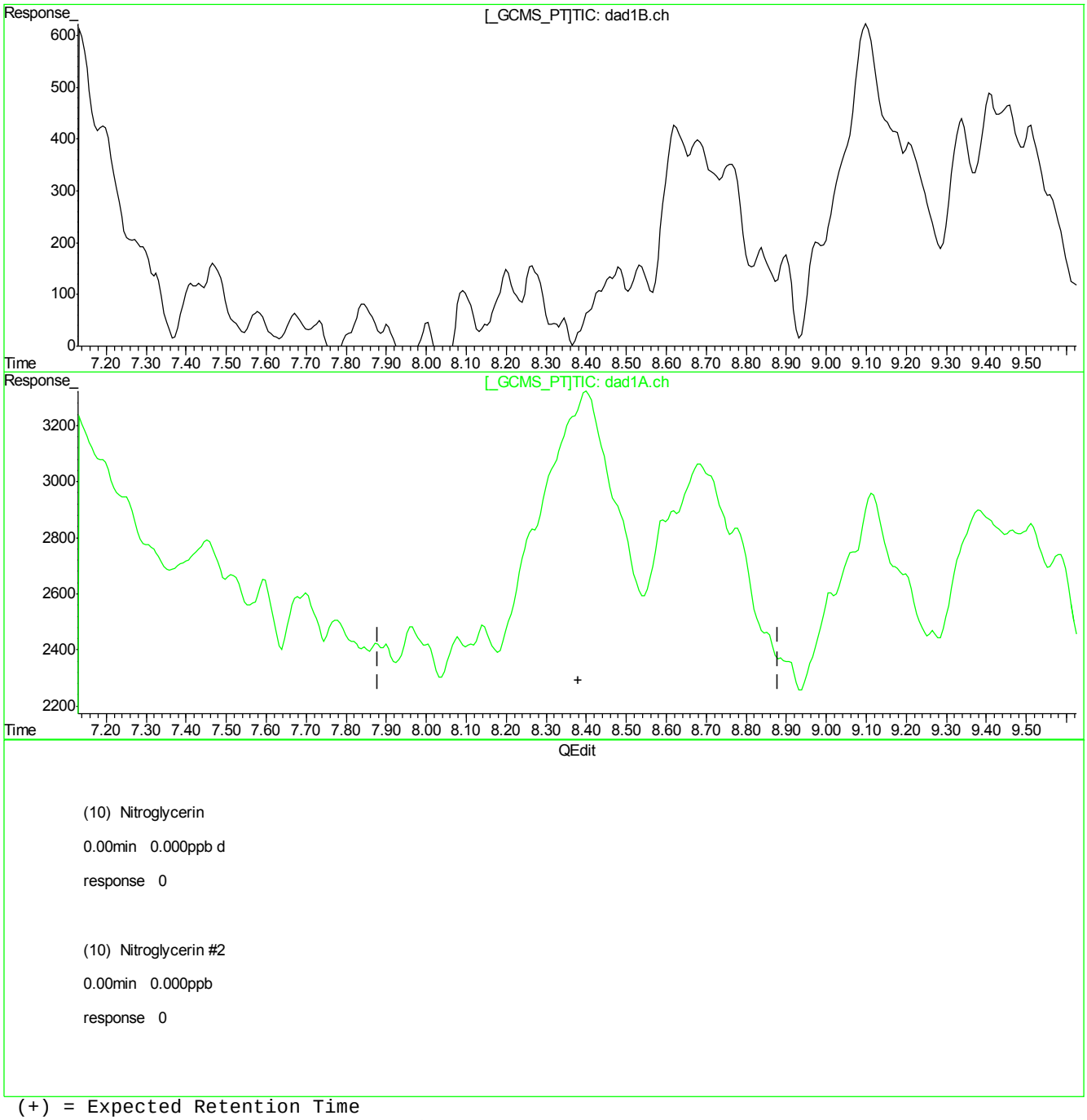
response 65624

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

0.00min 0.000ppb

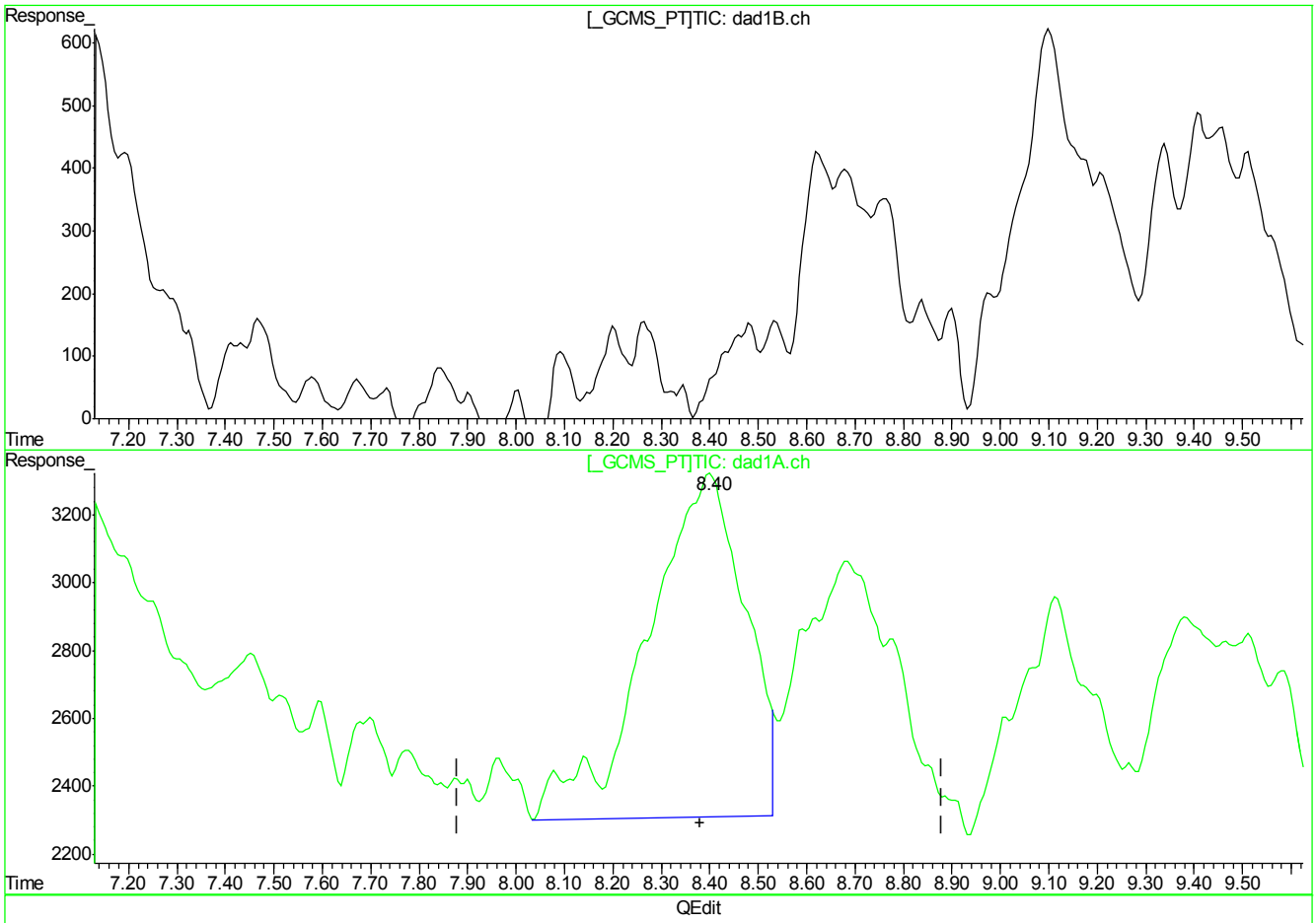
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:47 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.40min 106.959ppb m

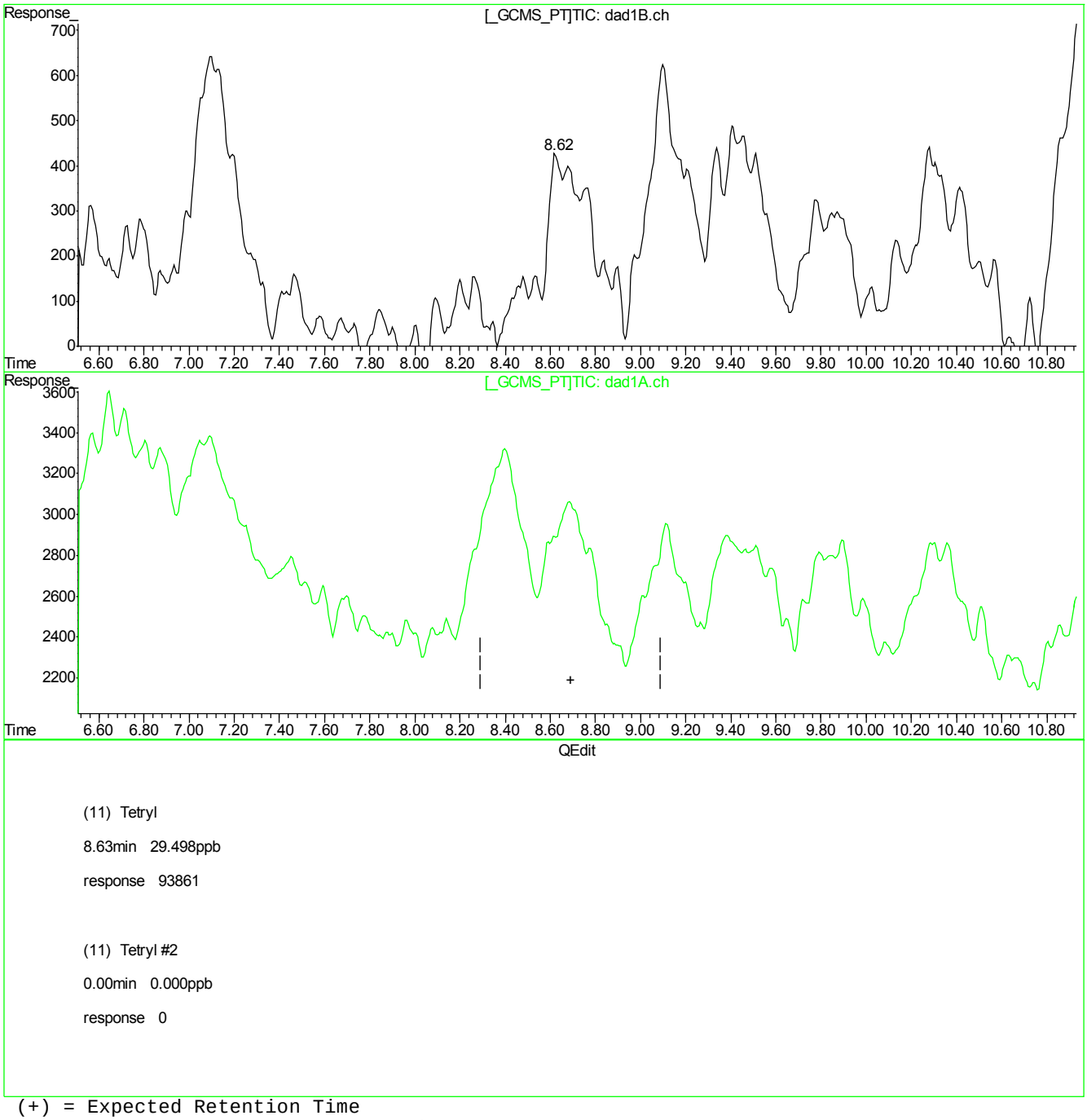
response 141549

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.63min 29.498ppb

response 93861

(11) Tetryl #2

0.00min 0.000ppb

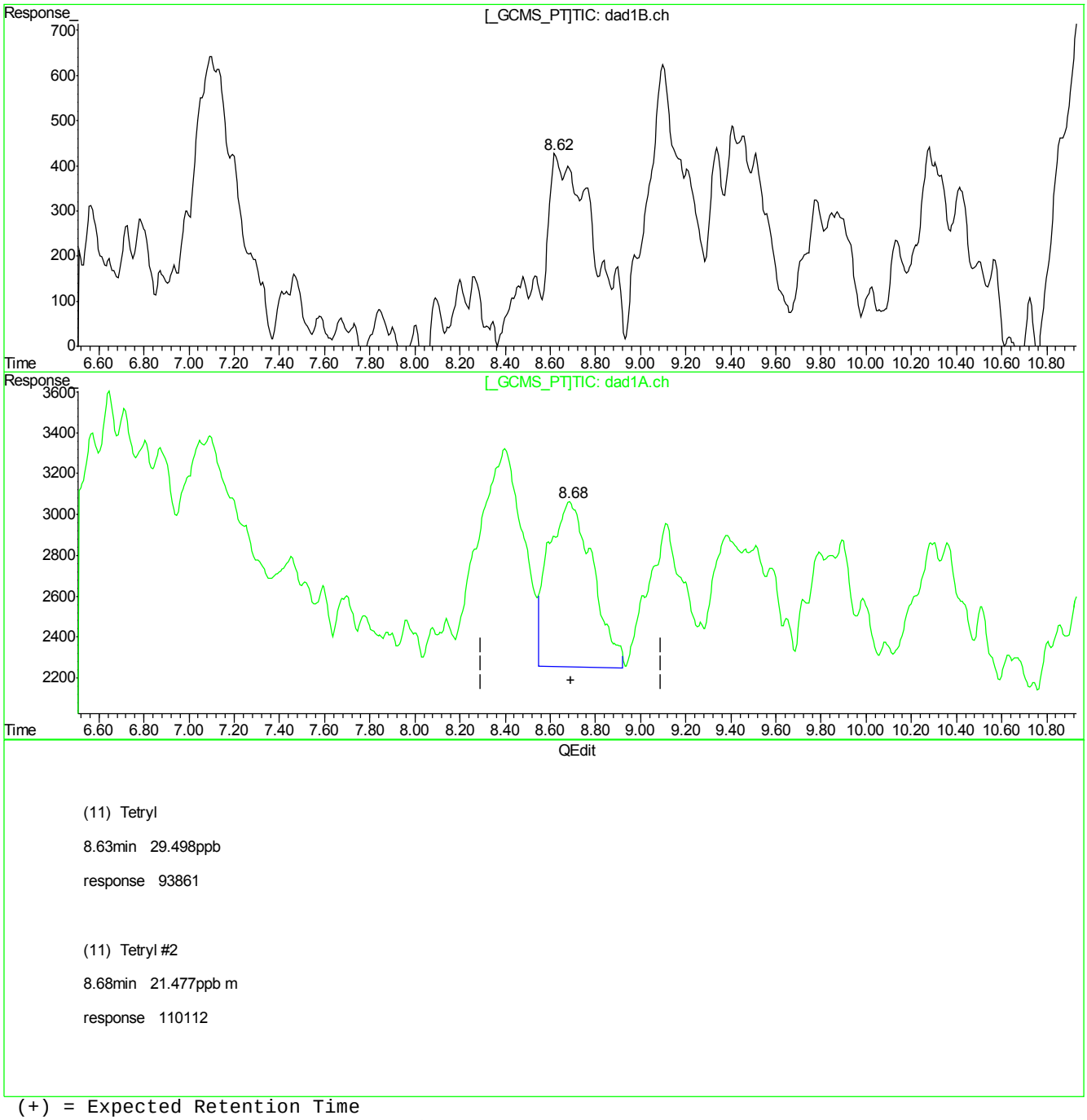
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.63min 29.498ppb

response 93861

(11) Tetryl #2

8.68min 21.477ppb m

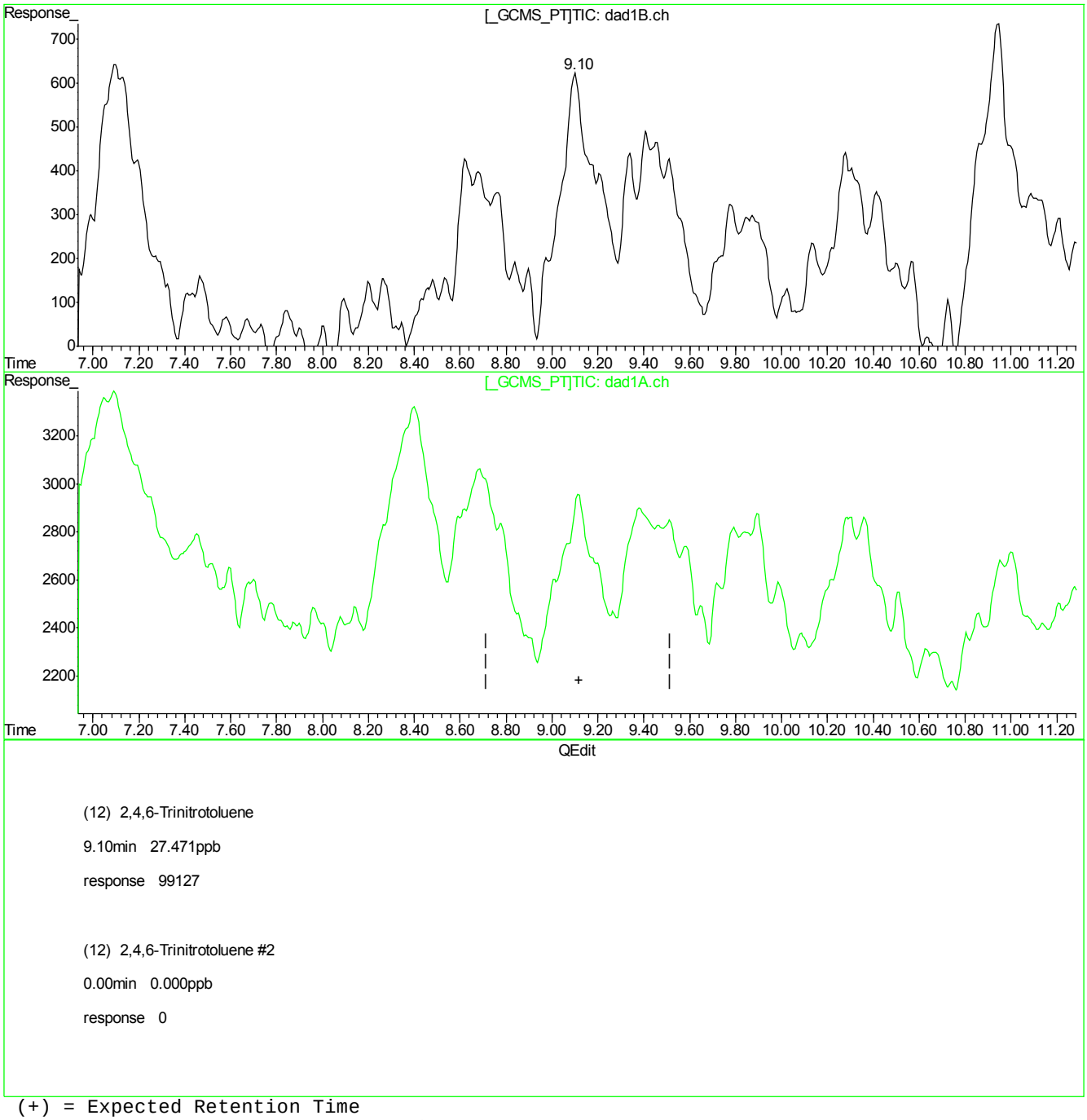
response 110112

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

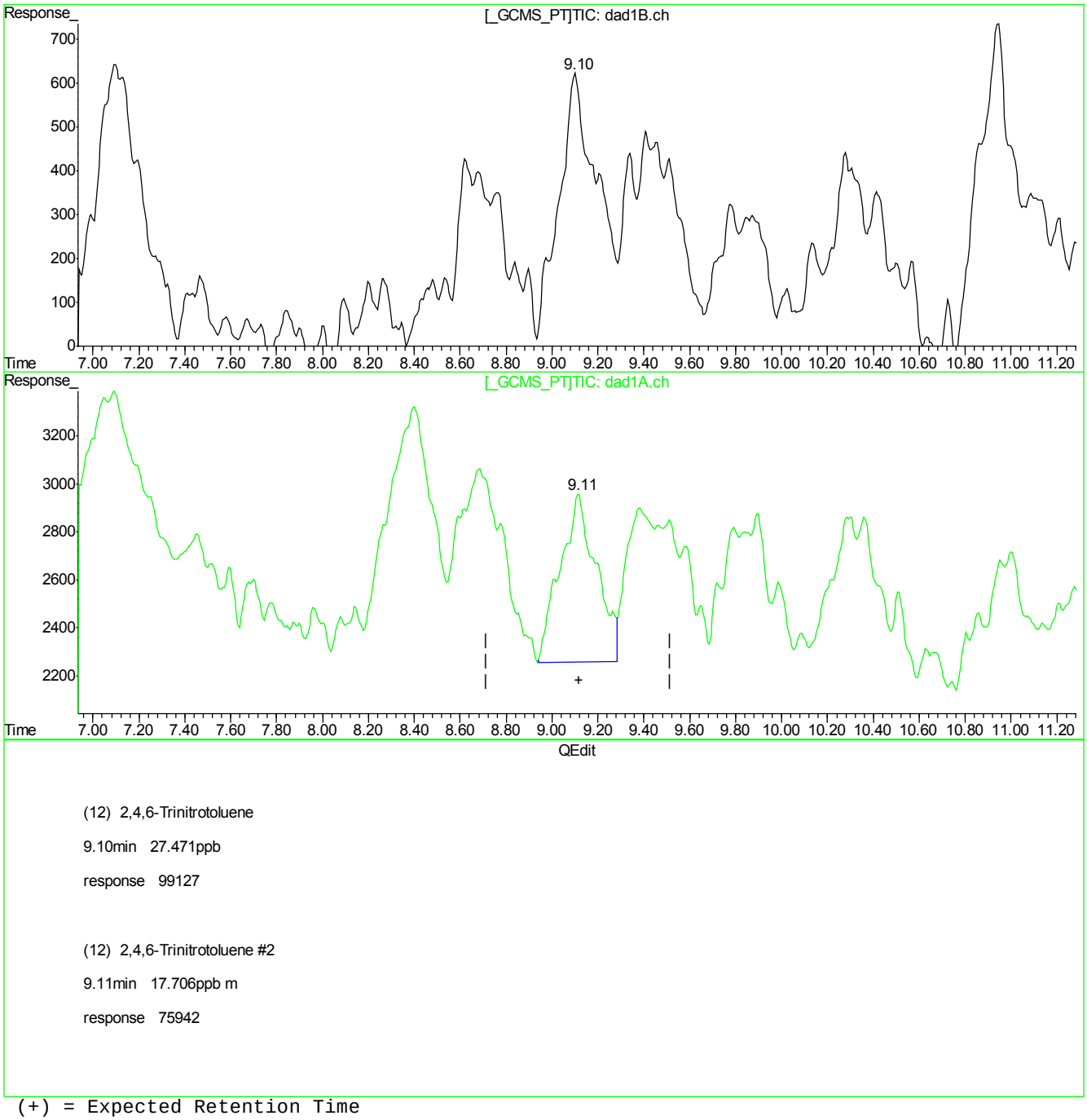


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

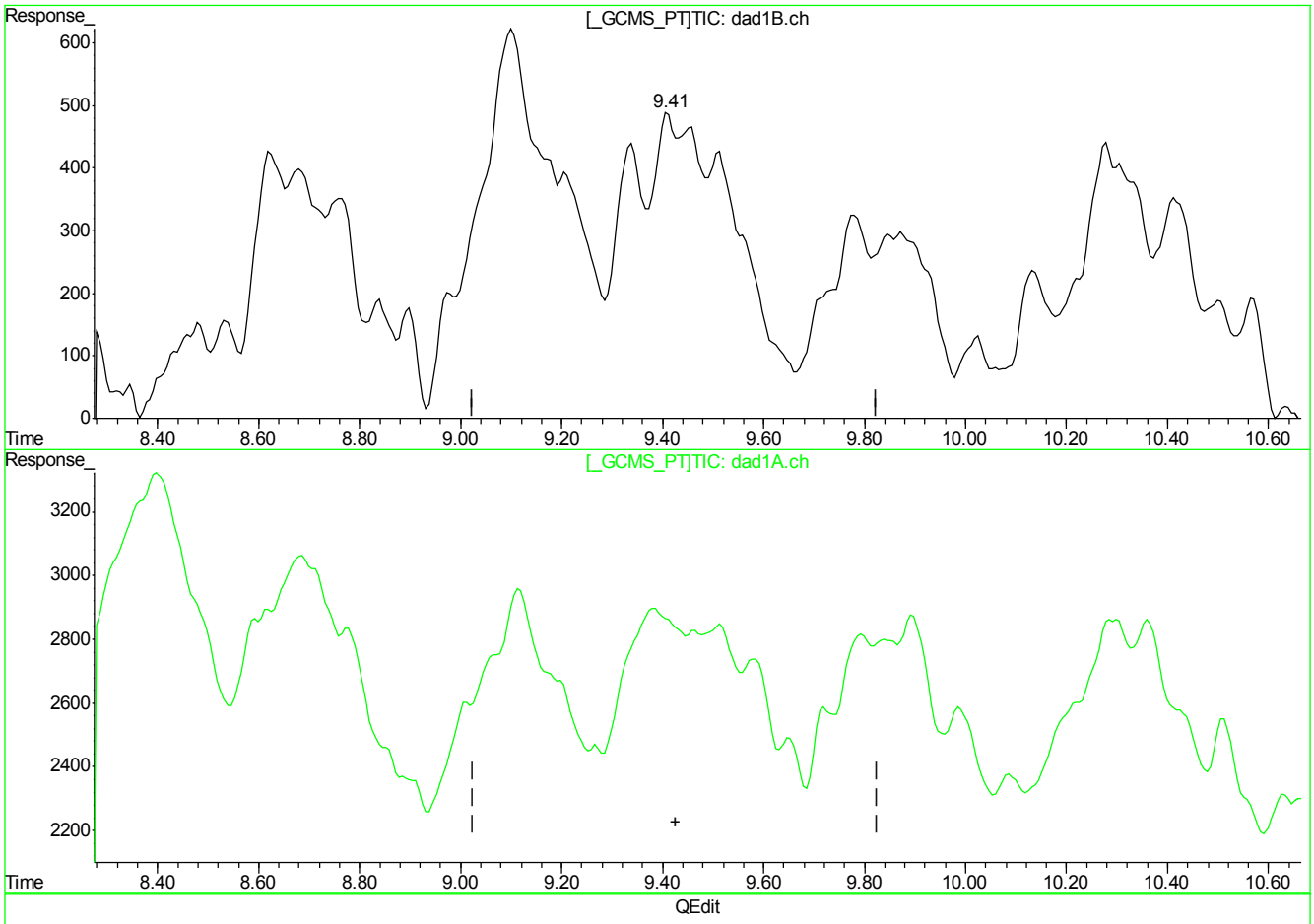


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:23 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.41min 19.475ppb

response 78176

(13) 2-Amino-4,6-Dinitrotoluene #2

0.00min 0.000ppb

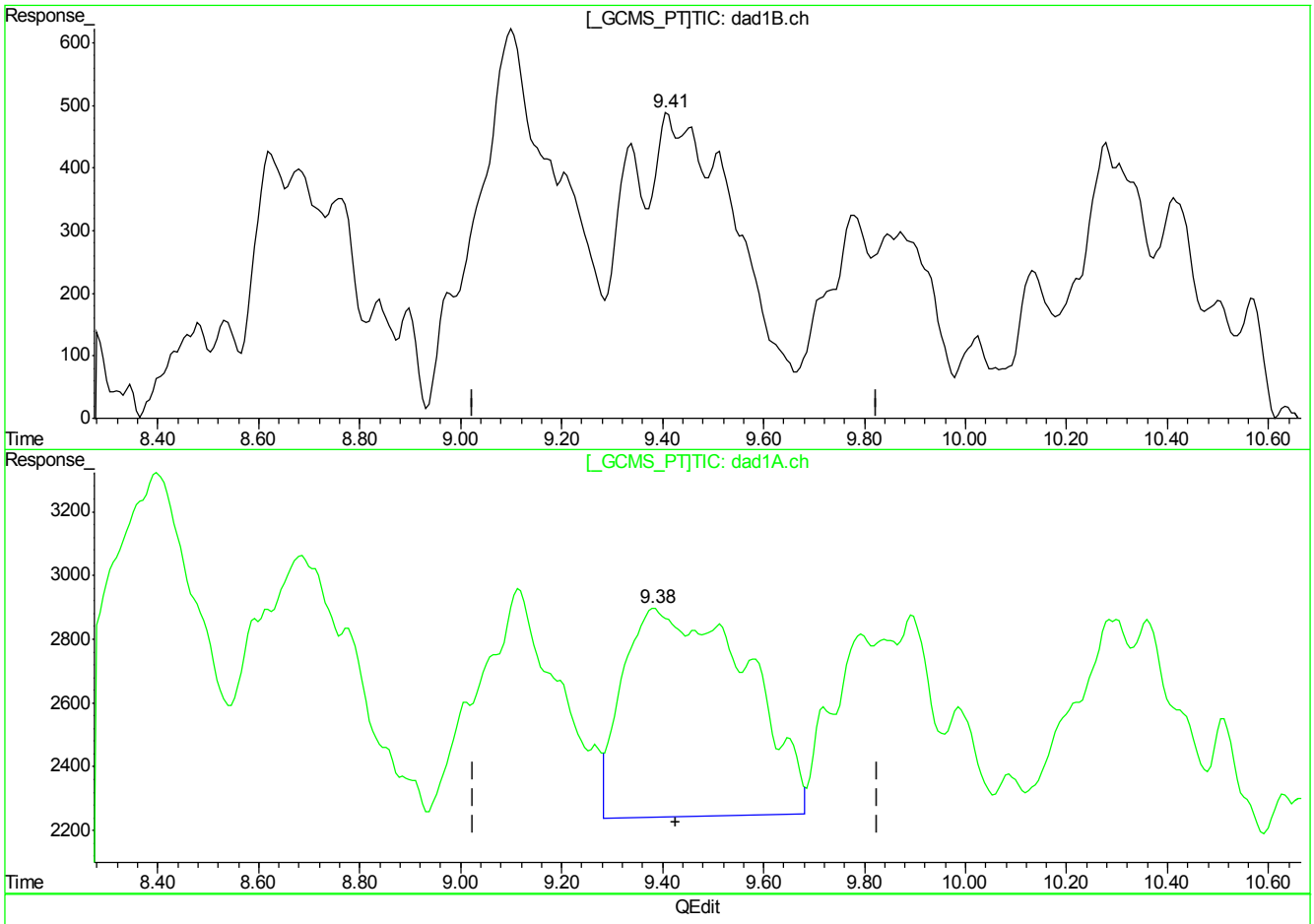
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.41min 19.475ppb

response 78176

(13) 2-Amino-4,6-Dinitrotoluene #2

9.38min 20.113ppb m

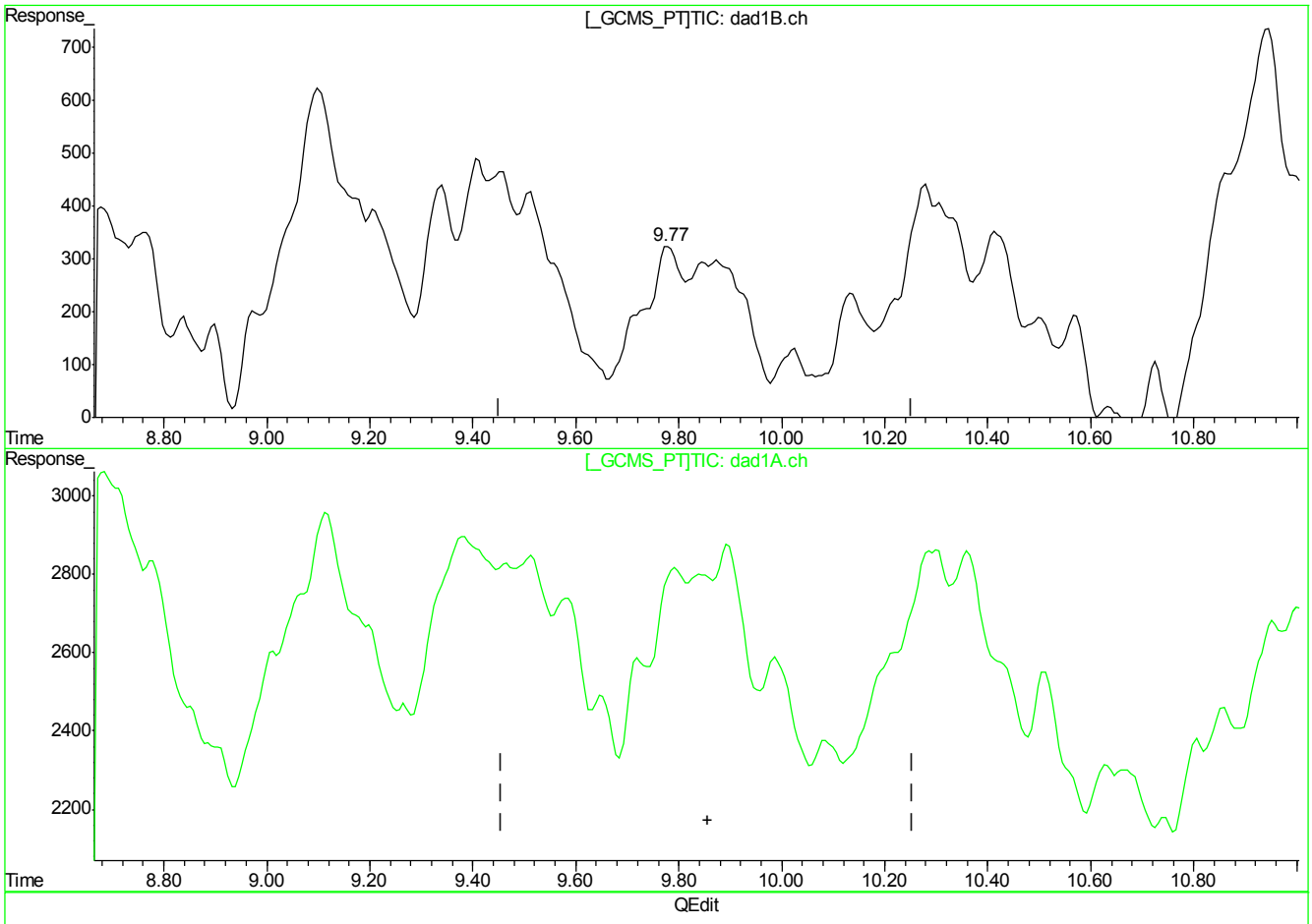
response 111824

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:31 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.78min 10.928ppb

response 30840

(14) 4-Amino-2,6-Dinitrotoluene #2

0.00min 0.000ppb

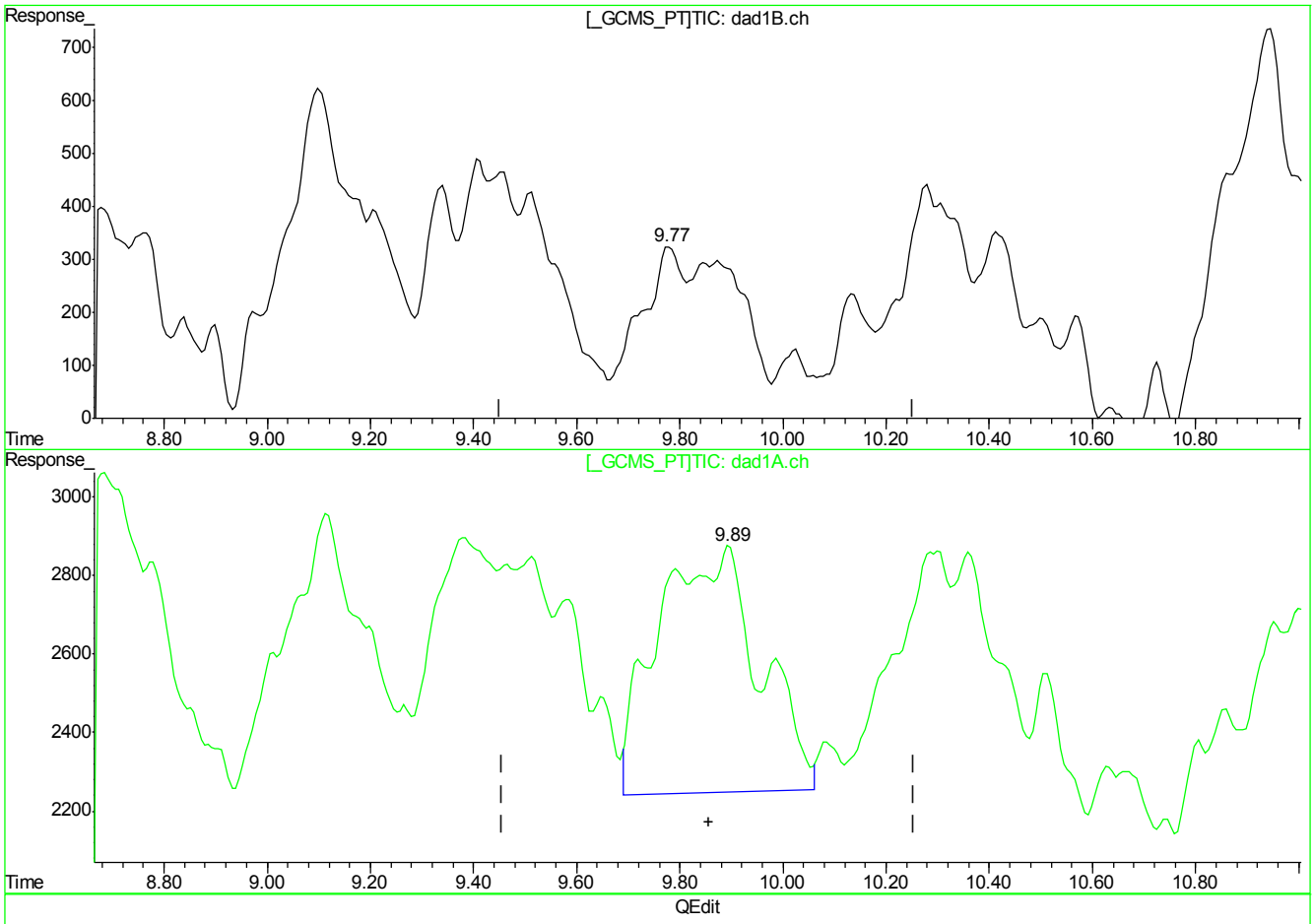
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.78min 10.928ppb

response 30840

(14) 4-Amino-2,6-Dinitrotoluene #2

9.89min 16.014ppb m

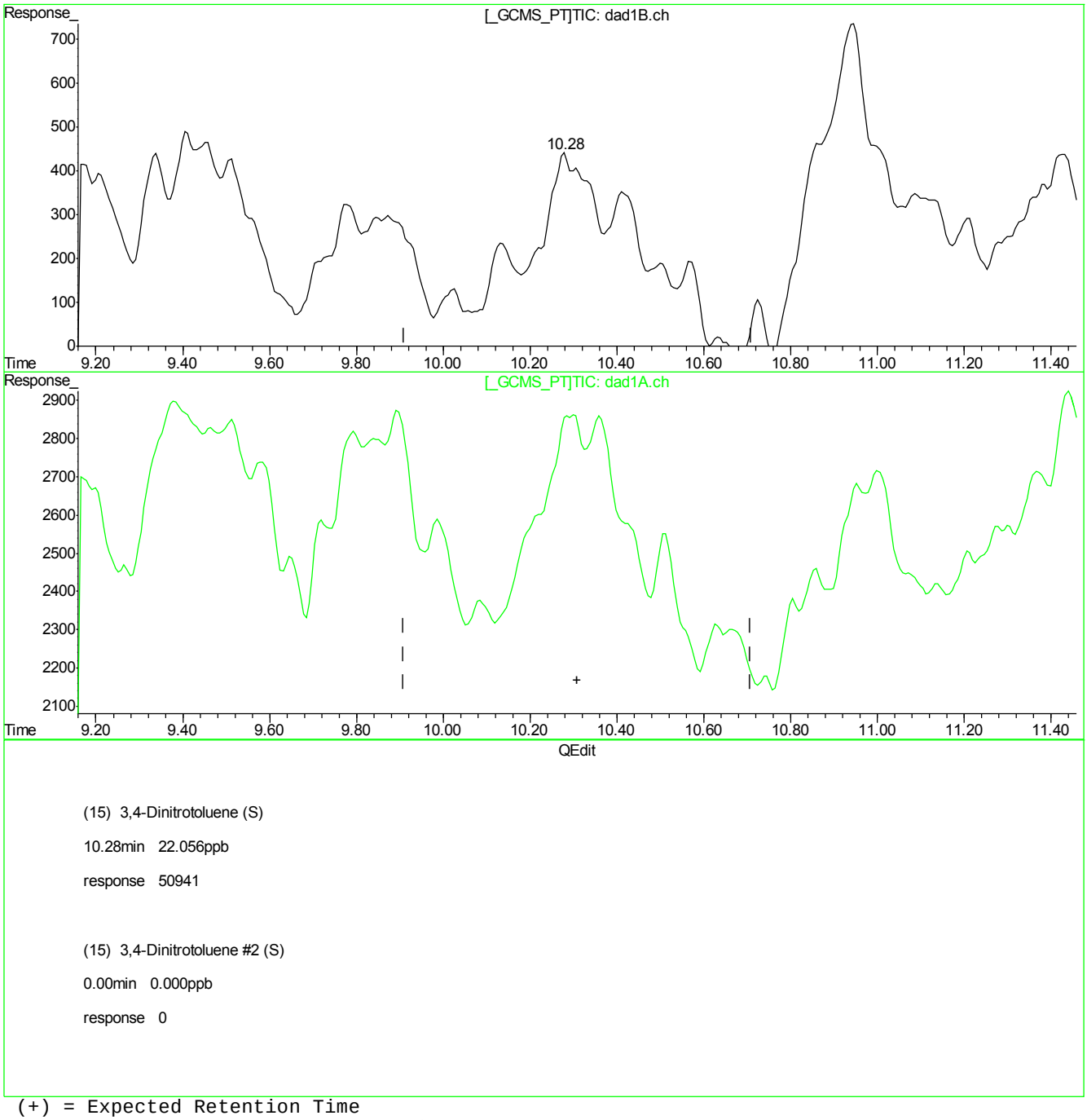
response 86551

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.28min 22.056ppb

response 50941

(15) 3,4-Dinitrotoluene #2 (S)

0.00min 0.000ppb

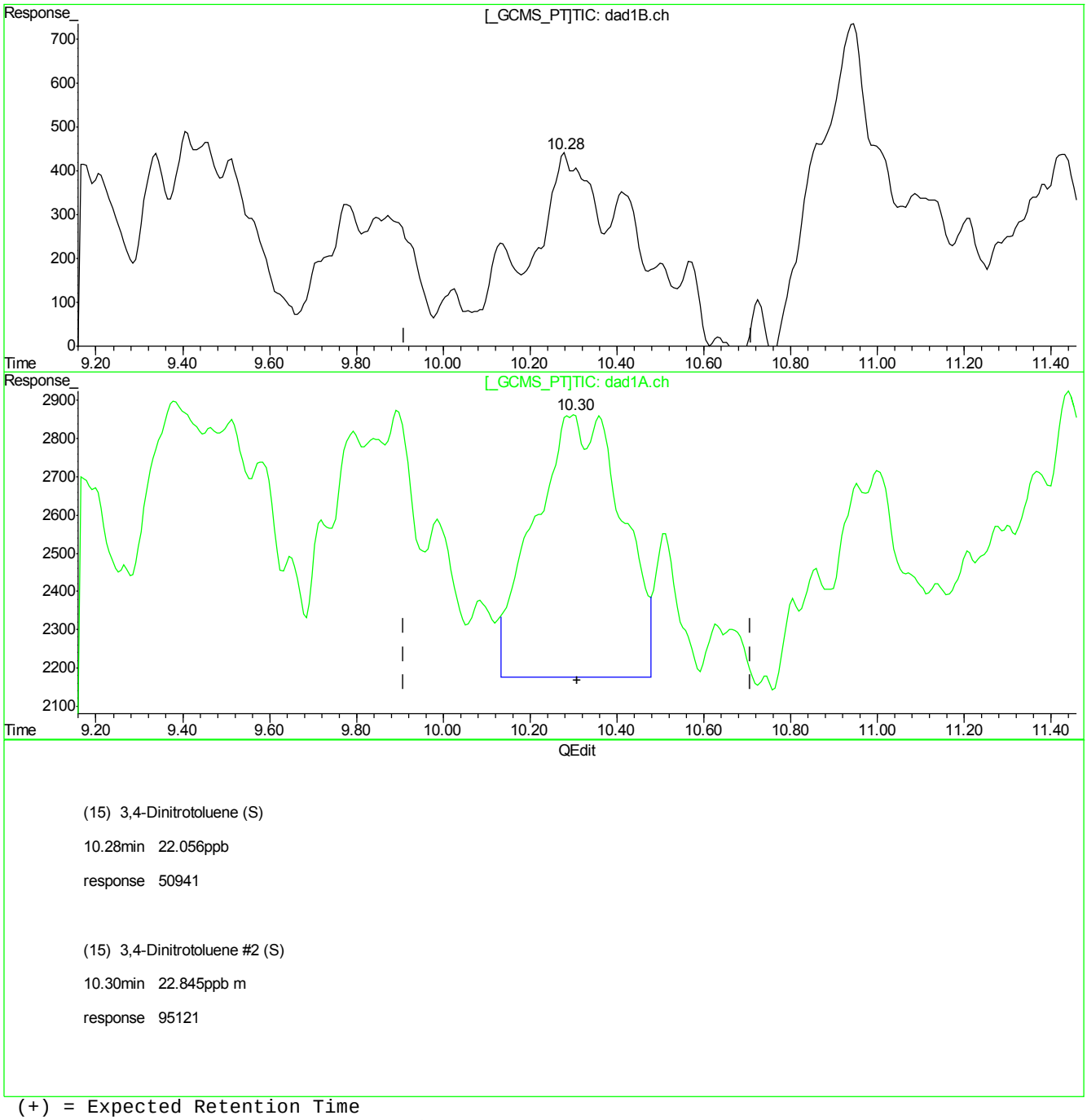
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.28min 22.056ppb

response 50941

(15) 3,4-Dinitrotoluene #2 (S)

10.30min 22.845ppb m

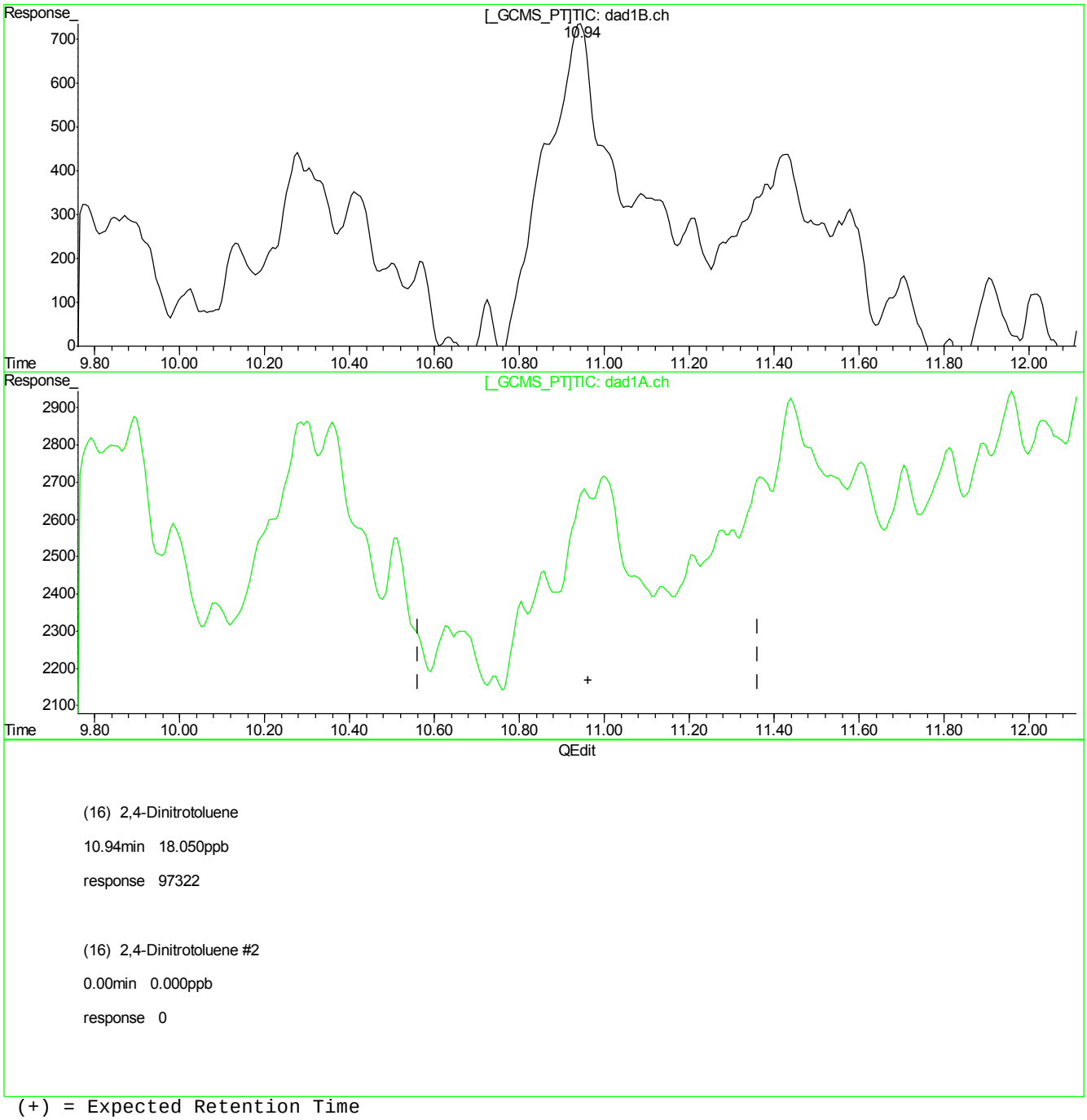
response 95121

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

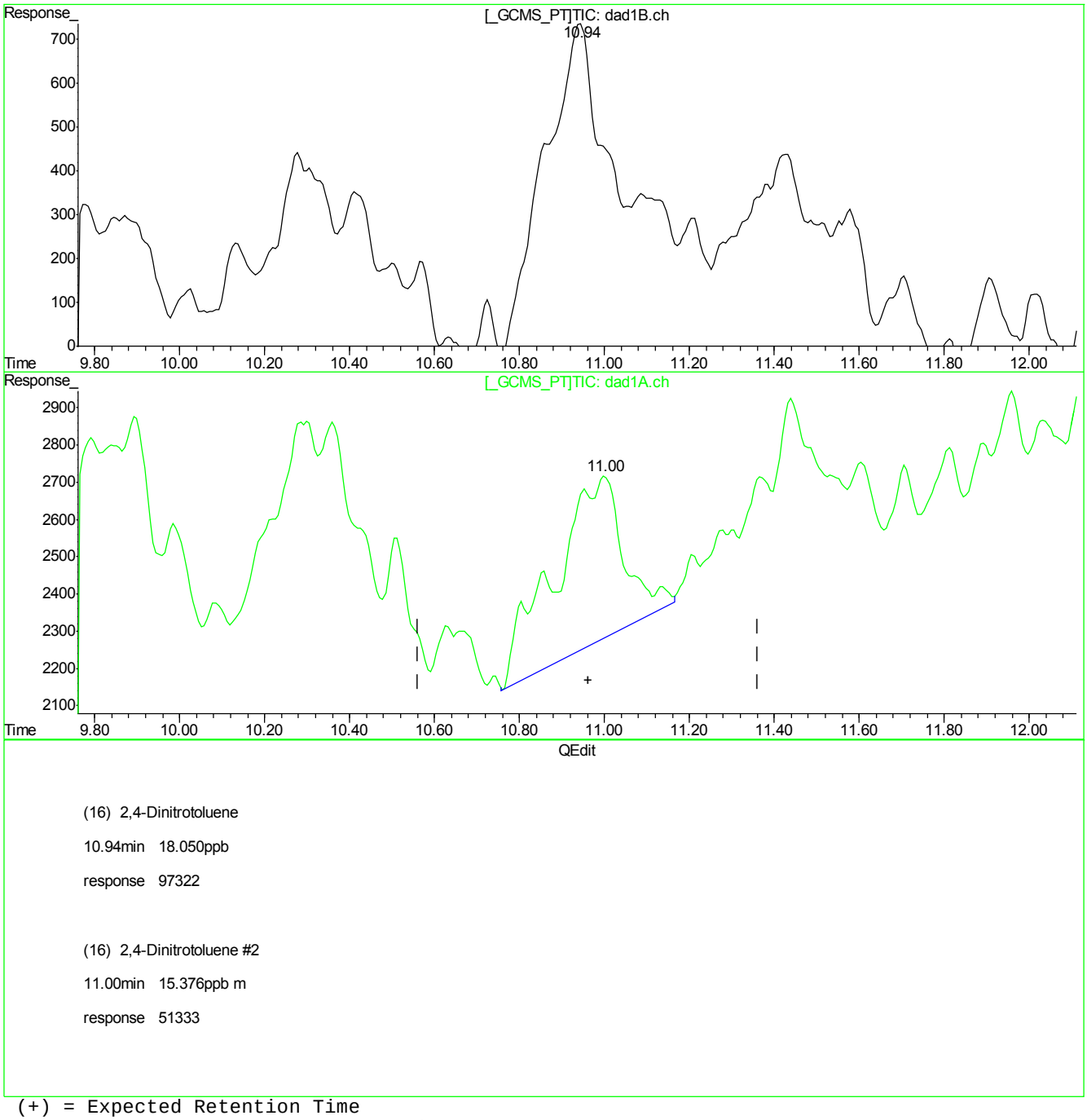


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

10.94min 18.050ppb

response 97322

(16) 2,4-Dinitrotoluene #2

11.00min 15.376ppb m

response 51333

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:53 2018

7.7.1.29

7

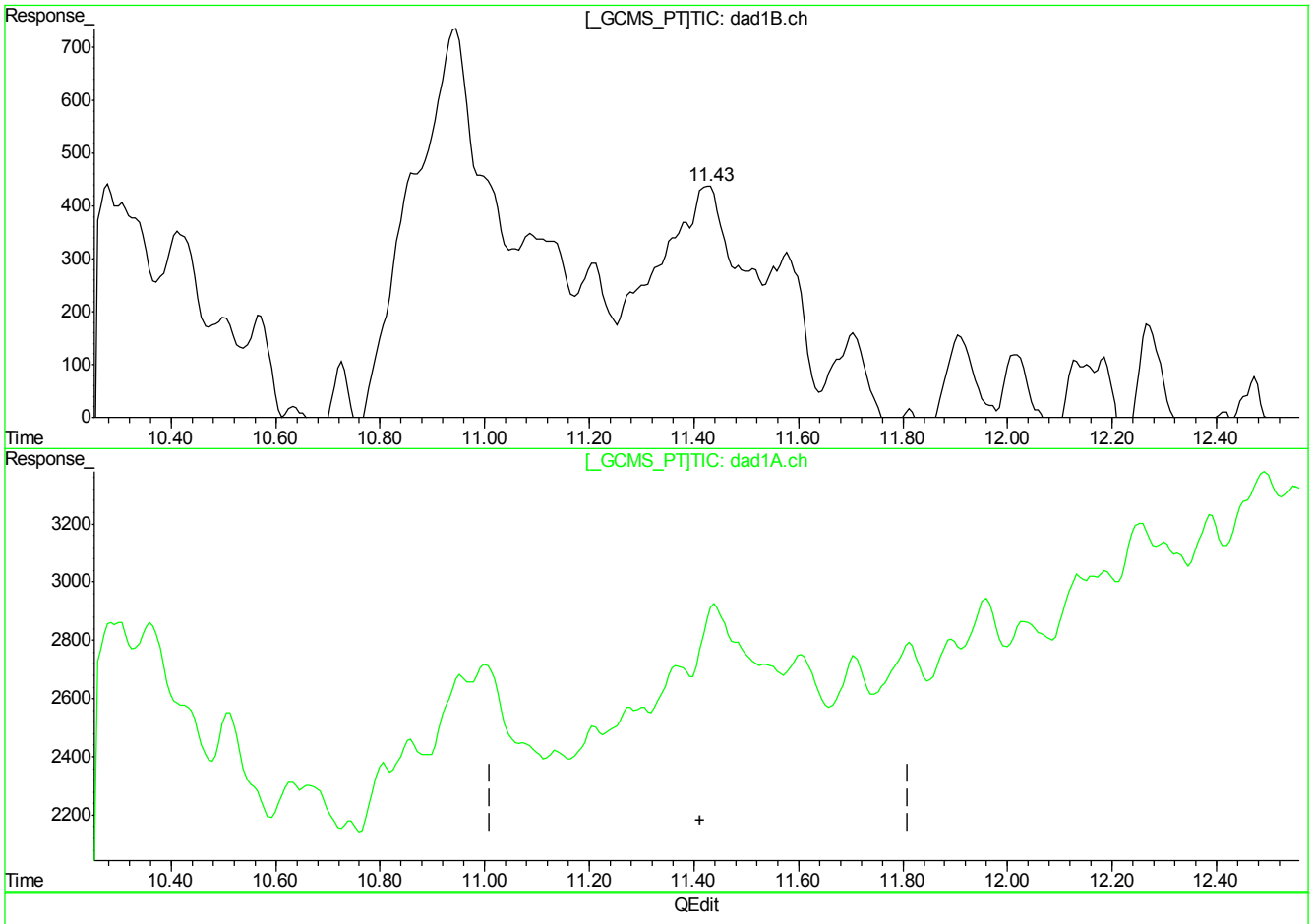
BB059464.D edits: 2,4-Dinitrotoluene

FA53800

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.43min 22.573ppb

response 74215

(17) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:03 2018

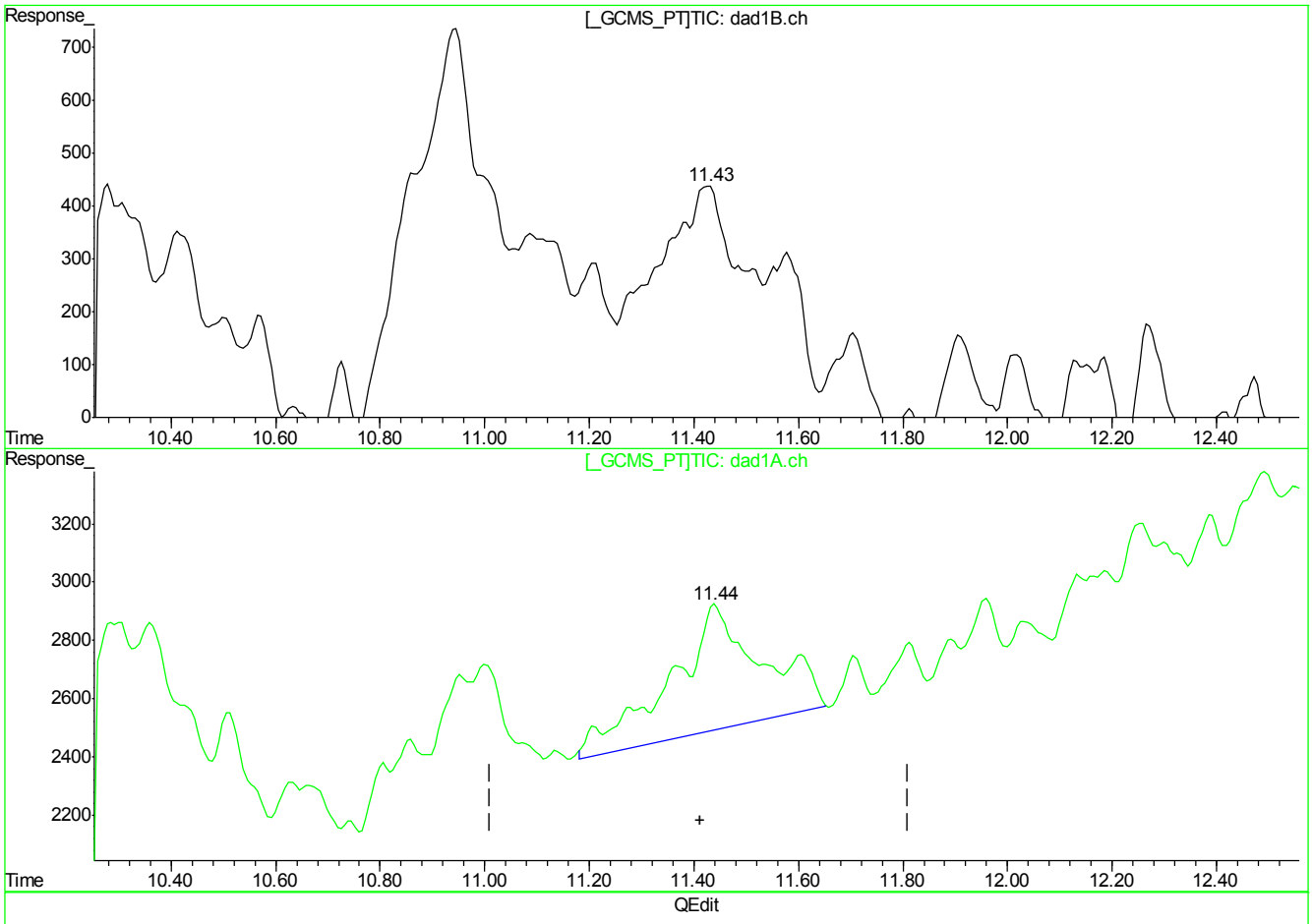
7.7.1.30

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.43min 22.573ppb

response 74215

(17) 2,6-Dinitrotoluene #2

11.44min 13.240ppb m

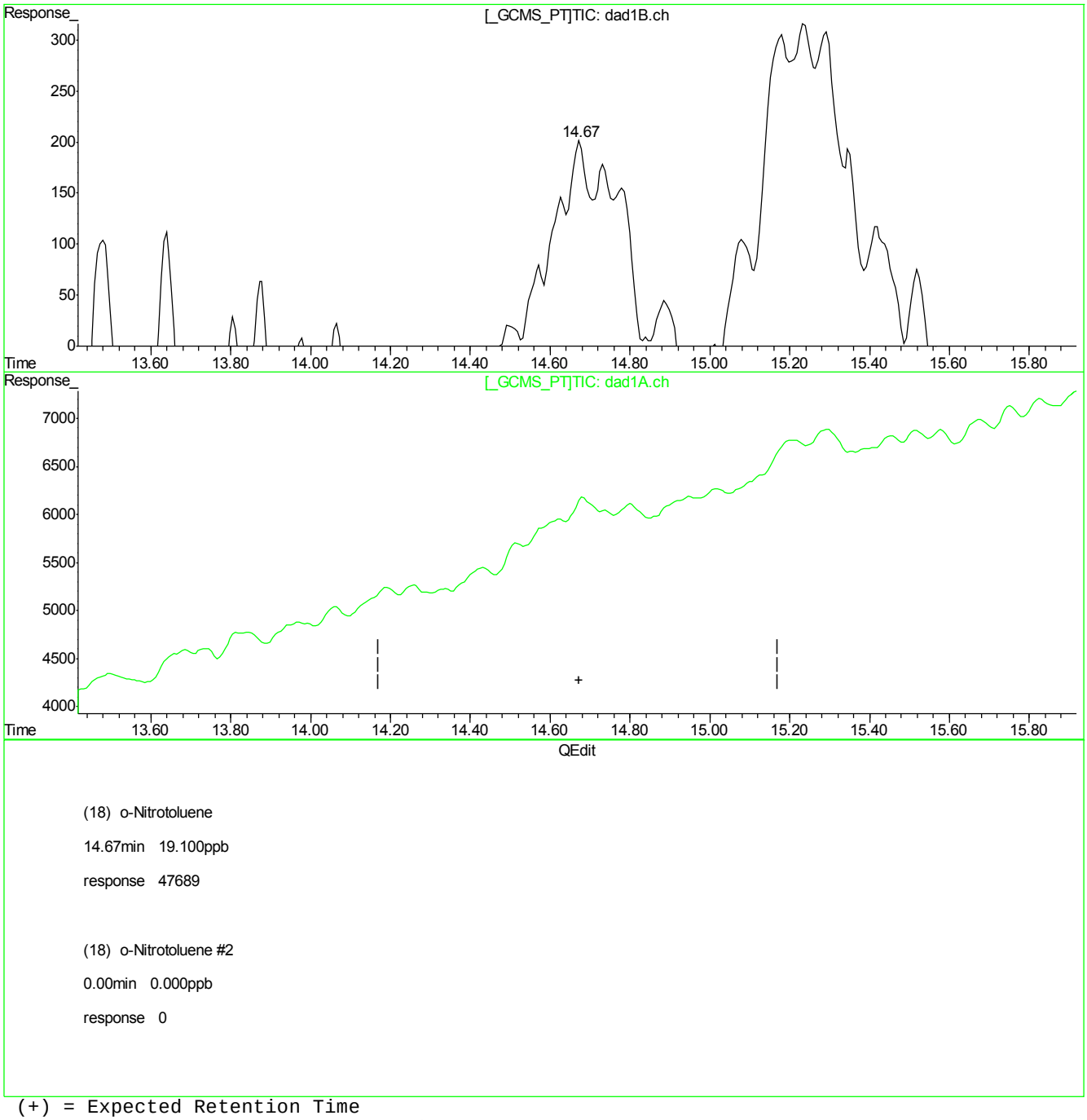
response 51922

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:07 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.67min 19.100ppb

response 47689

(18) o-Nitrotoluene #2

0.00min 0.000ppb

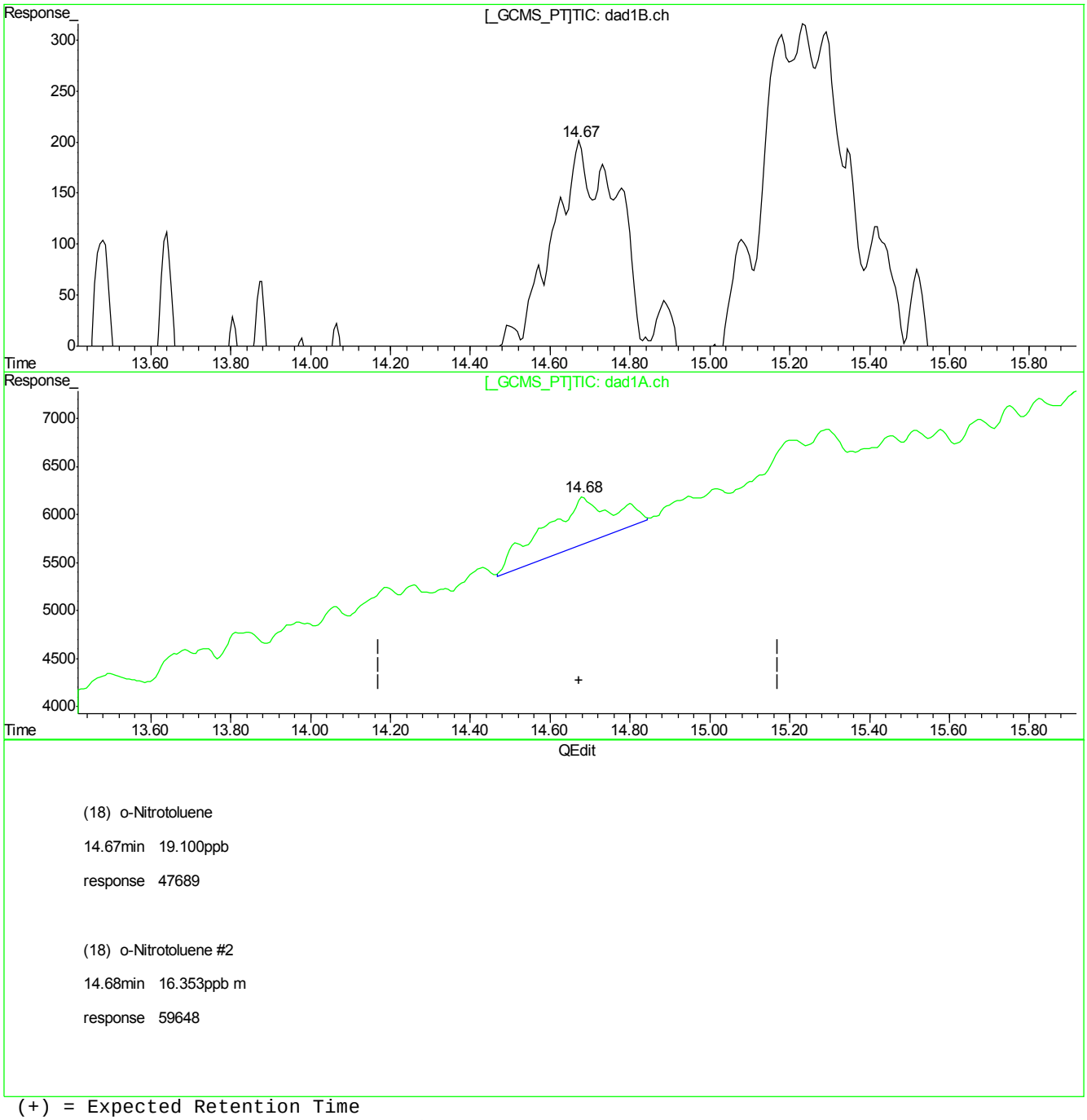
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.67min 19.100ppb

response 47689

(18) o-Nitrotoluene #2

14.68min 16.353ppb m

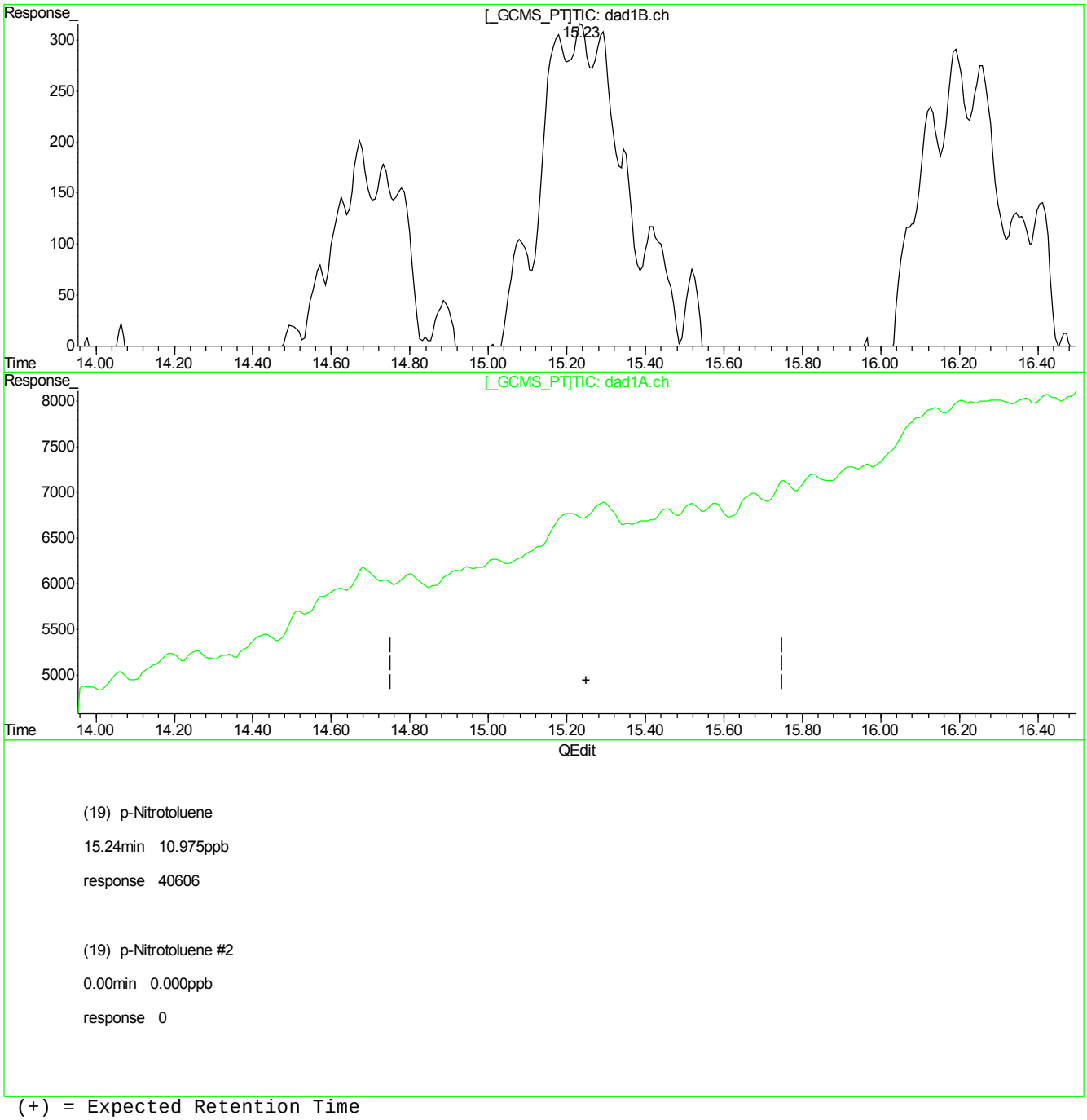
response 59648

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:14 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

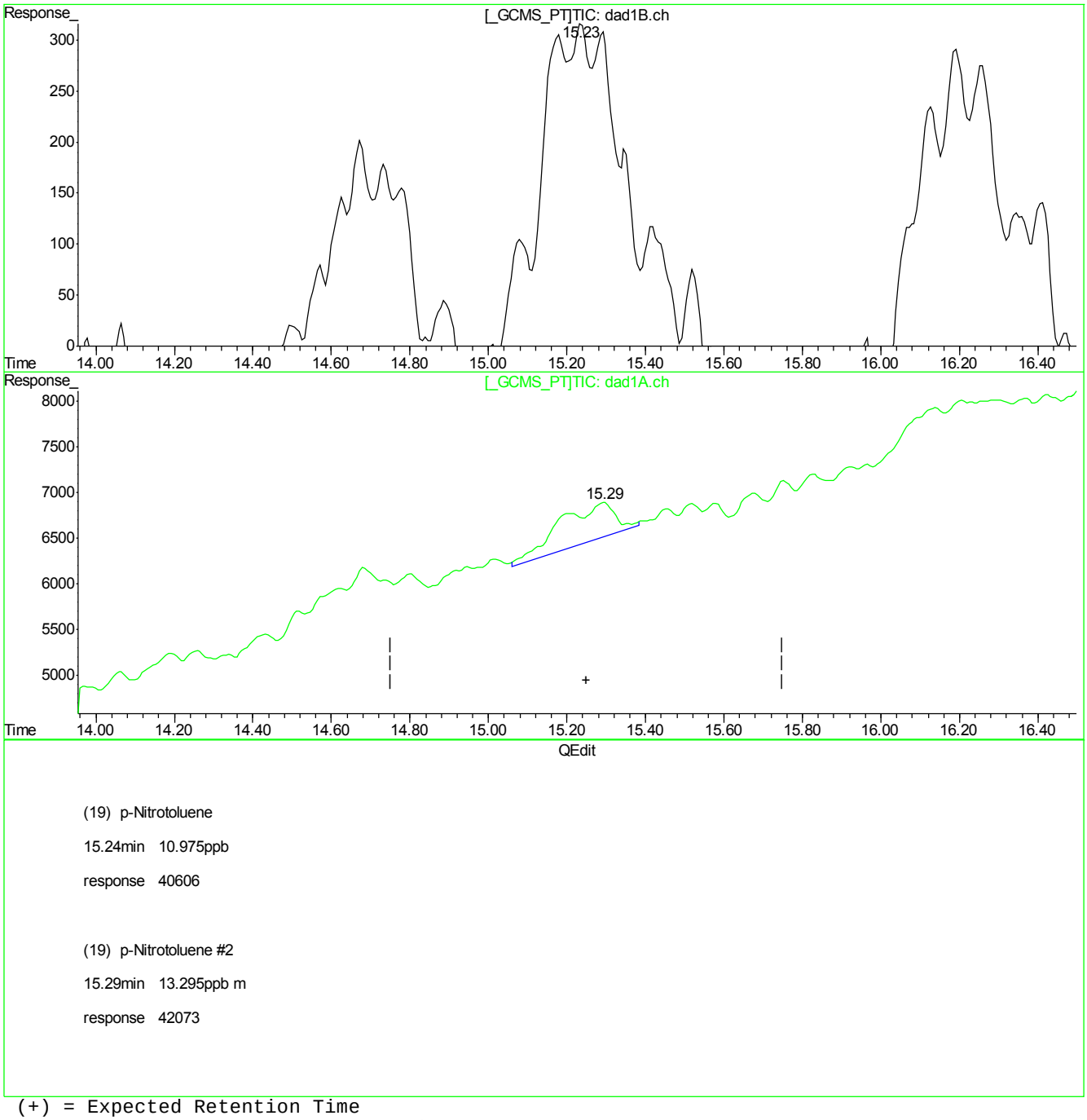


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:17 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

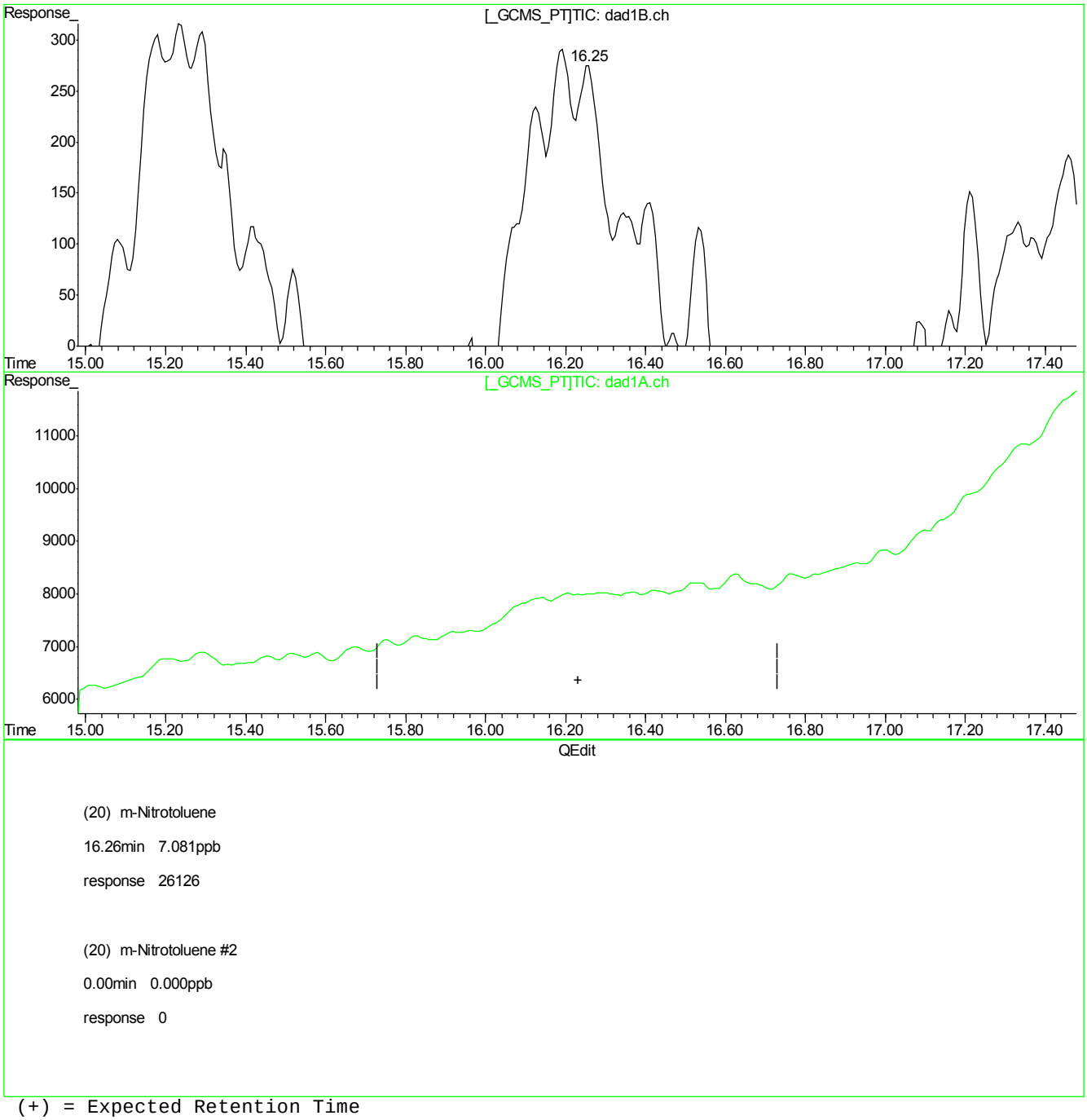


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:20 2018

Quantitation Report (Qedit)

```
Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On    : 19-Apr-2018, 10:14:00                    Operator: evitam
Sample    : IC1722-20                                Inst    : G1315B
Misc      :                                          Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018  Quant Results File: 8330B_0419PLUS.RES

Method       : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
```



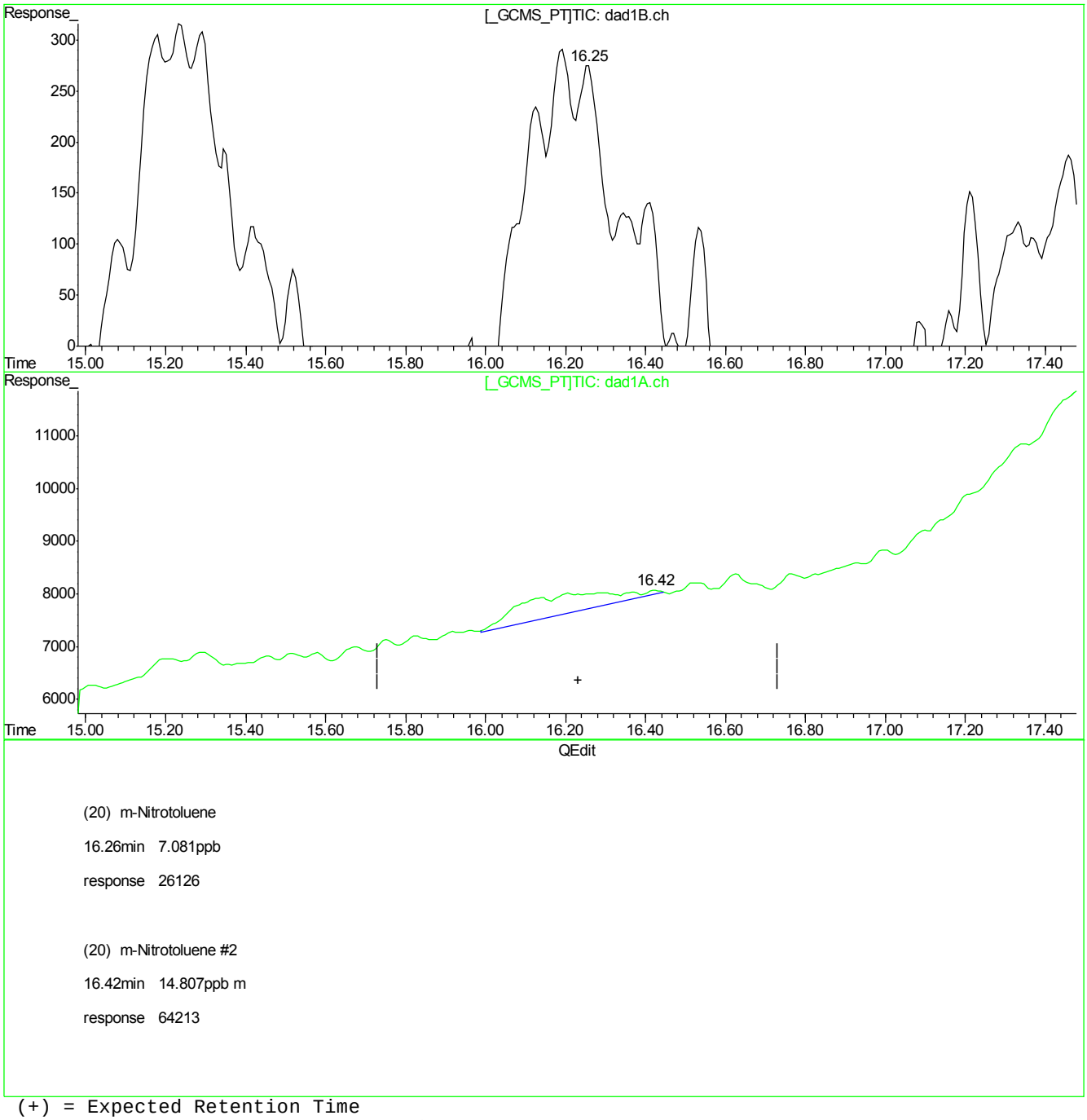
(+) = Expected Retention Time

BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(20) m-Nitrotoluene

16.26min 7.081ppb

response 26126

(20) m-Nitrotoluene #2

16.42min 14.807ppb m

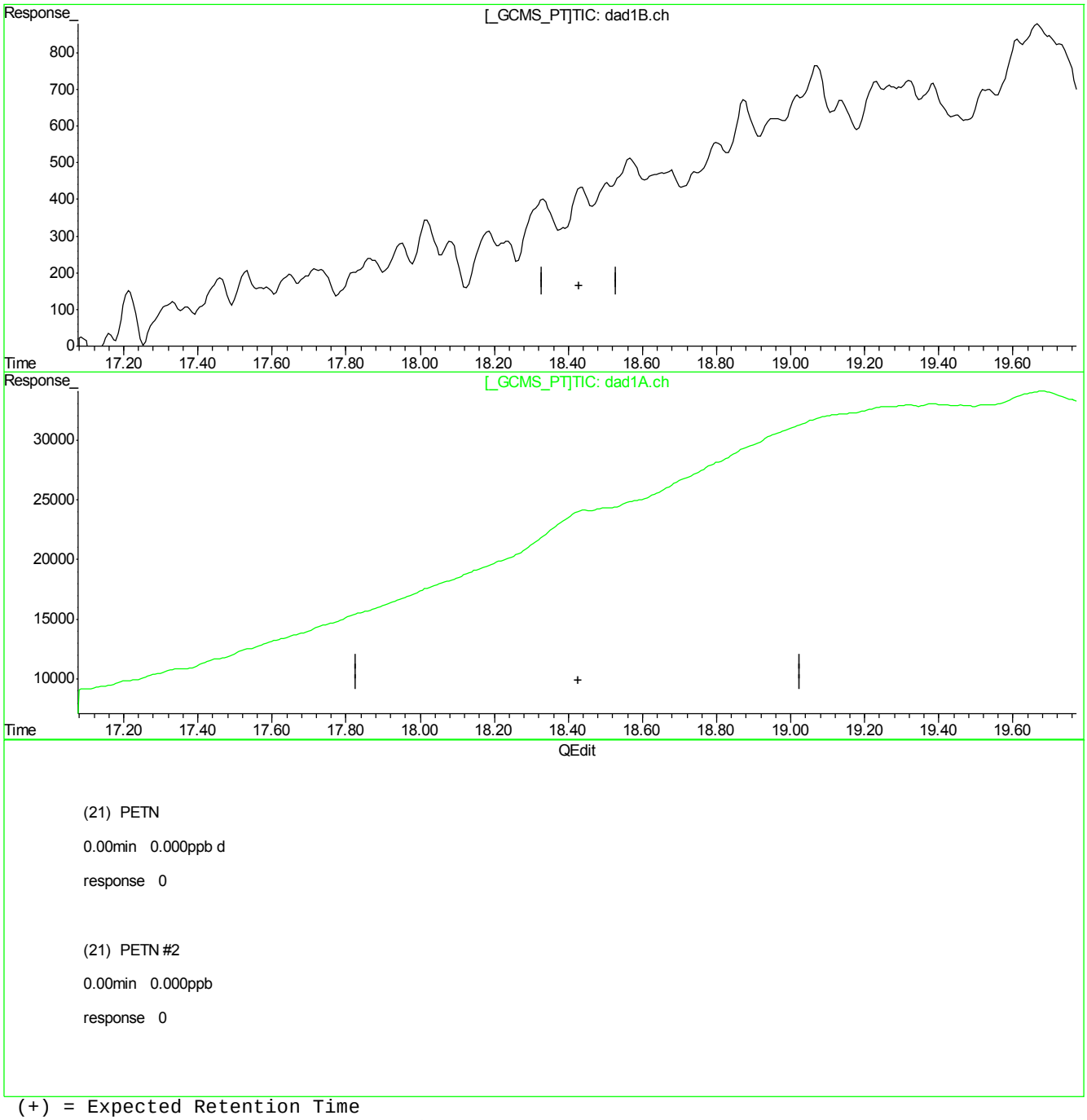
response 64213

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

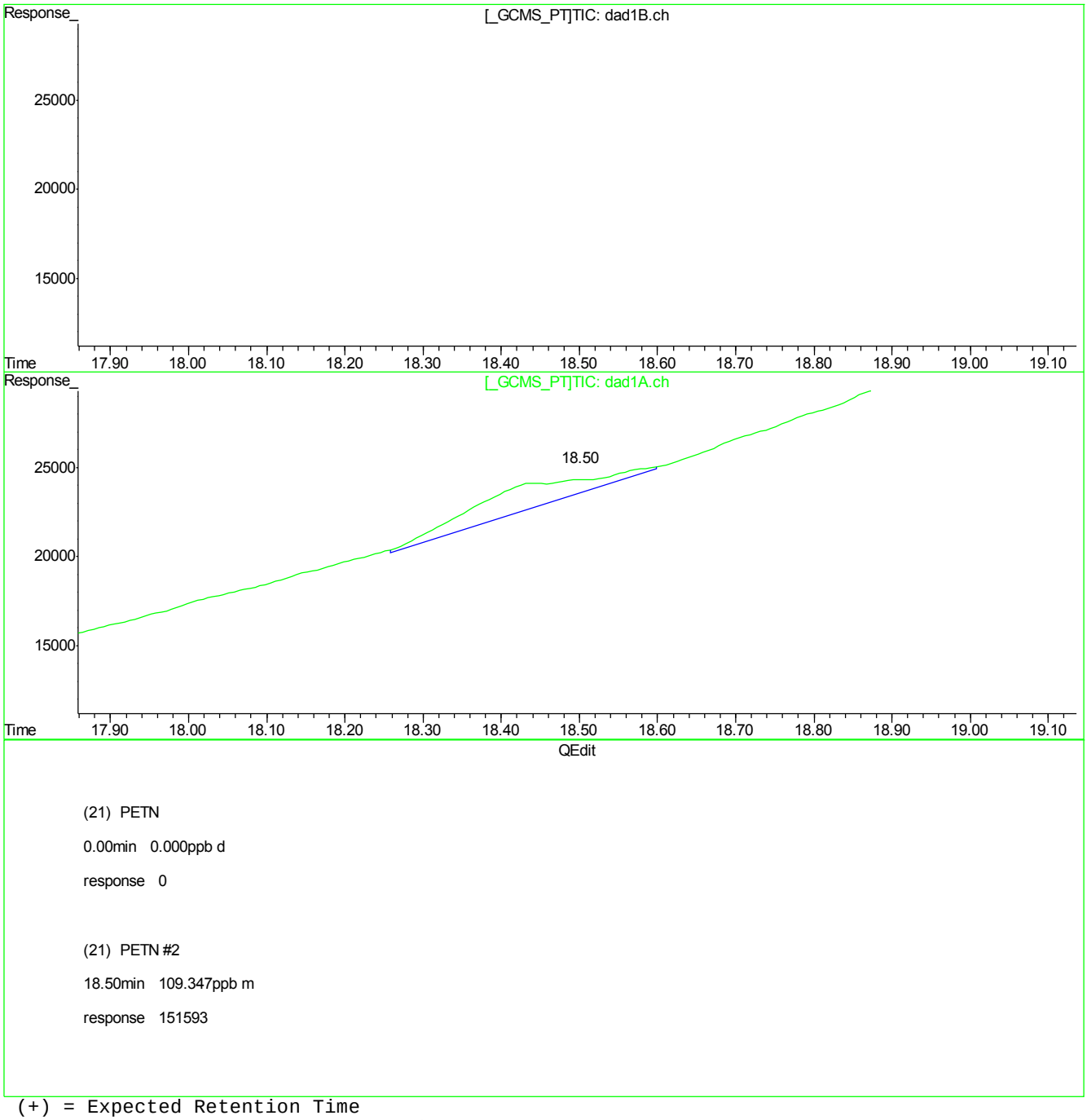


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:52:01 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:45 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.32	10.31	148252	250753	64.190m	60.222m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		12.84%#	12.04%#
	Target Compounds						
1)	TNX	1.31	1.31	271857	420352	53.572m	53.933m
2)	HMX	1.44	1.44	108610	310120	55.713	59.009m
3)	DNX	1.66	1.67	183097	332602	61.821m	69.640
4)	MNX	2.20	2.20	172151	244651	55.367	52.195
5)	RDX	2.77	2.77	118381	180480	51.055	48.190
6)	1,3,5-Trinitrobe	4.42	4.42	212484	449305	43.000	49.305
7)	1,3-Dinitrobenze	5.59	5.59	306521	180727	50.221	45.866m
8)	3,5-Dinitroanili	5.89	5.90	282156	374495	61.543	47.488
9)	Nitrobenzene	7.09	7.10	223213	181960	58.508	50.753
10)	Nitroglycerin	0.00	8.39	0	336203	N.D. d	254.046m
11)	Tetryl	8.73	8.71	187659	238575	58.975	46.534
12)	2,4,6-Trinitroto	9.13	9.12	247127	209769	68.486	48.907
13)	2-Amino-4,6-Dini	9.44	9.47	217984	202574	54.303	36.436
14)	4-Amino-2,6-Dini	9.87	9.85	171280	229722	60.694	42.505m
16)	2,4-Dinitrotolue	11.00	11.01	336433	150818	62.397	45.176m
17)	2,6-Dinitrotolue	11.39	11.46	219785	175853	66.850m	44.840m
18)	o-Nitrotoluene	14.68	14.67	157597	171653	63.119	47.060m
19)	p-Nitrotoluene	15.26	15.26	247116	168598	66.793	53.275m
20)	m-Nitrotoluene	16.24	16.30	222504	208312	60.309	48.036m
21)	PETN	0.00	18.44	0	340859	N.D. d	245.869m

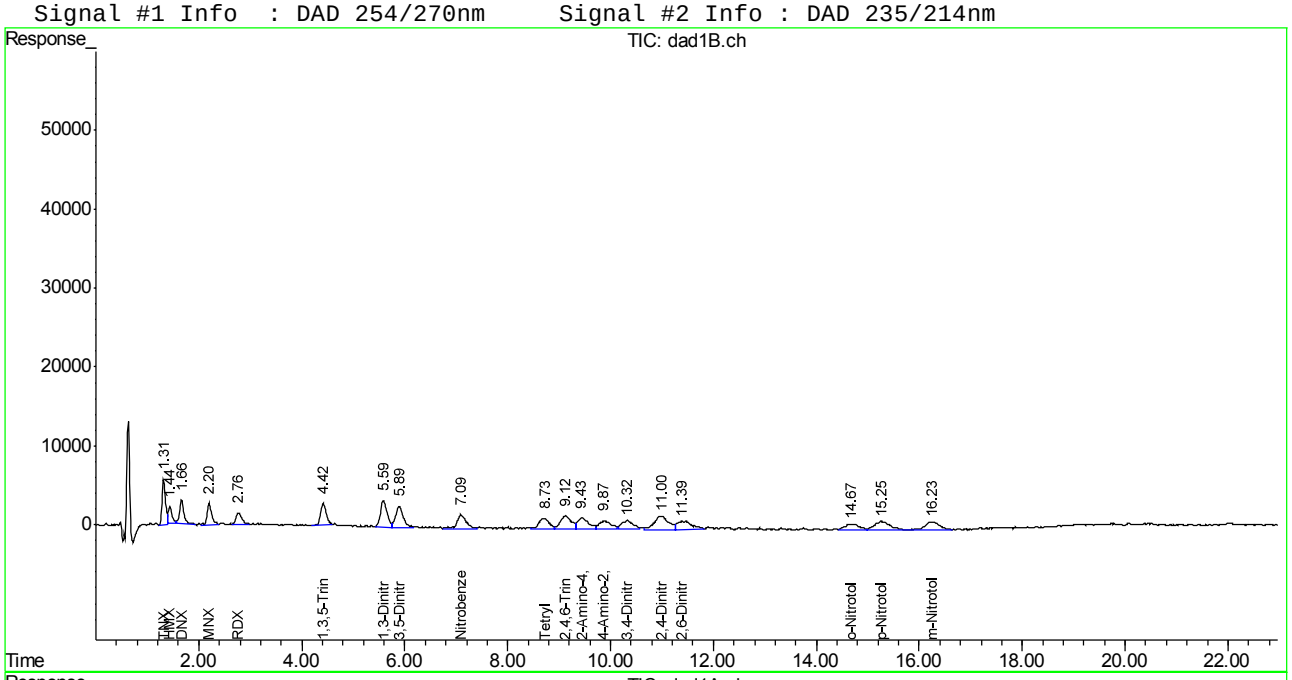
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059465.D 8330B_0419PLUS.M Fri Apr 20 08:01:19 2018 Page 1

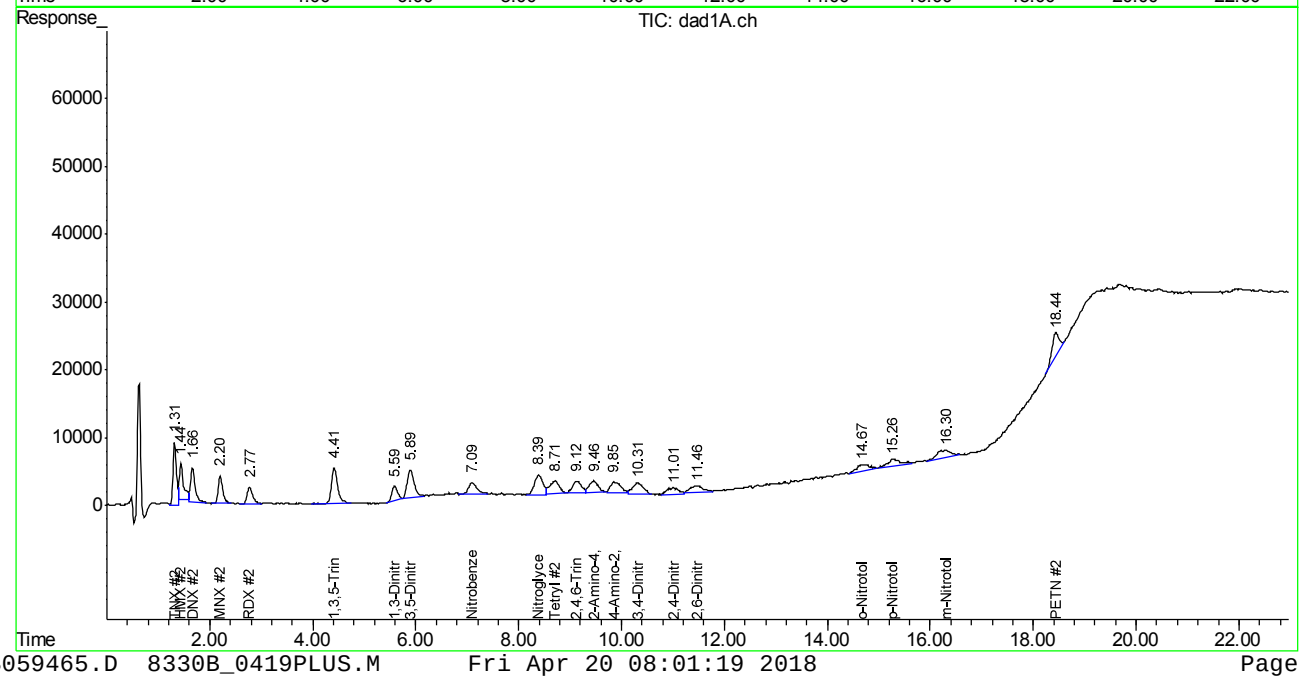
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:55 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

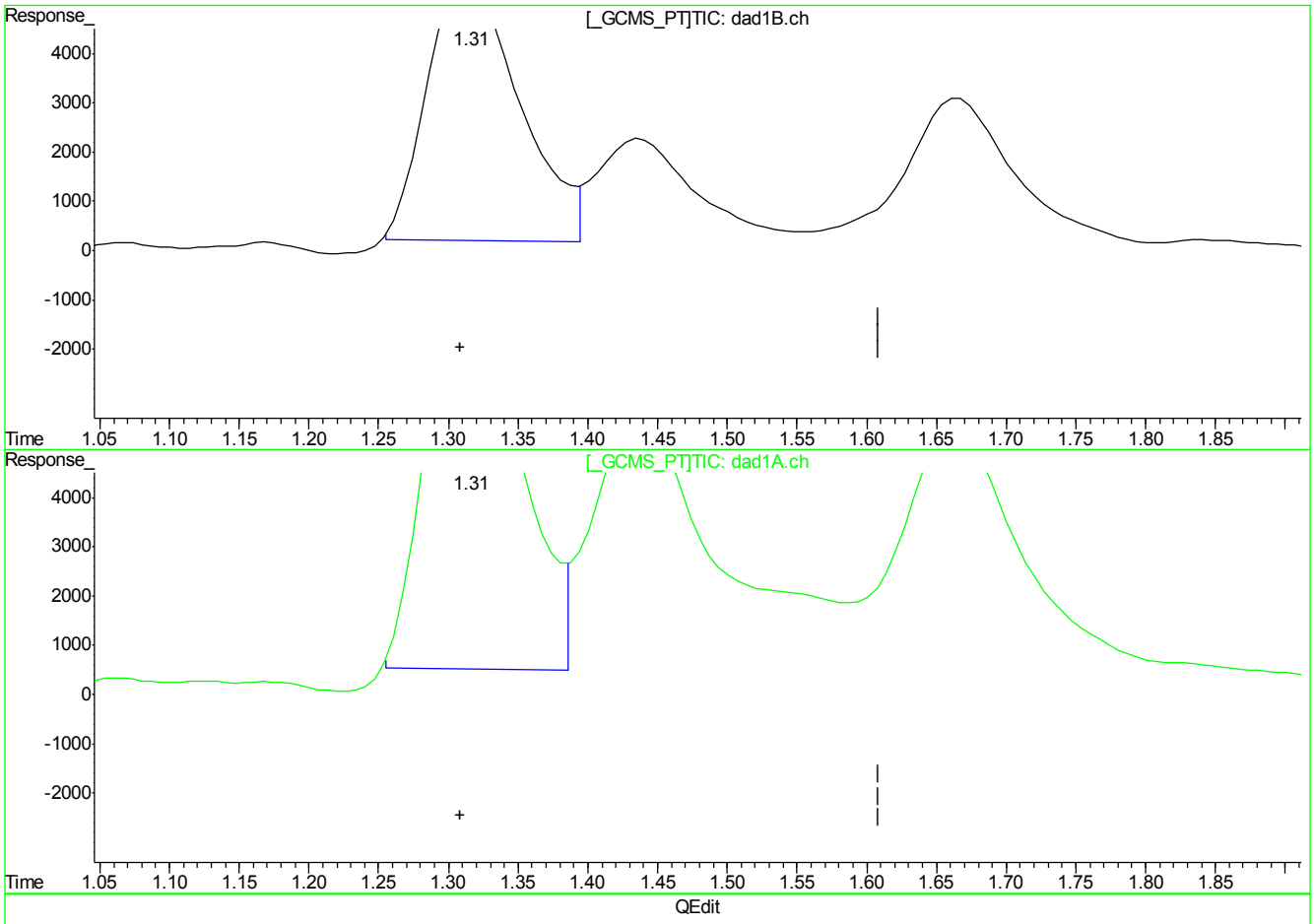
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059465.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 10:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.59	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.39	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	9.85	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.31	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.32	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.01	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.39	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.46	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.67	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.30	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 48.520ppb

response 246218

(1) TNX #2

1.32min 48.662ppb

response 379265

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:52:18 2018

7.7.2.2

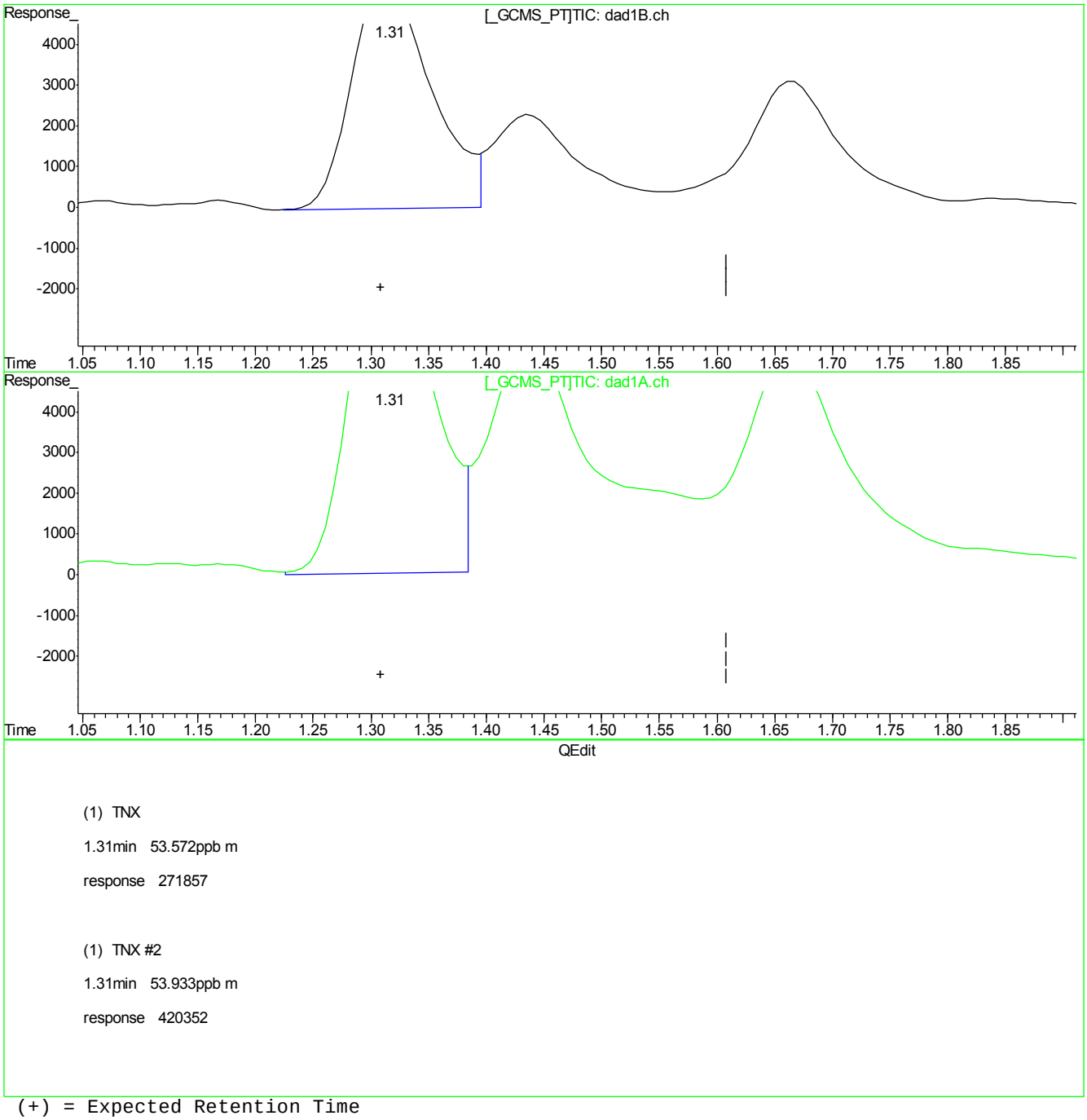
7

BB059465.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:52:24 2018

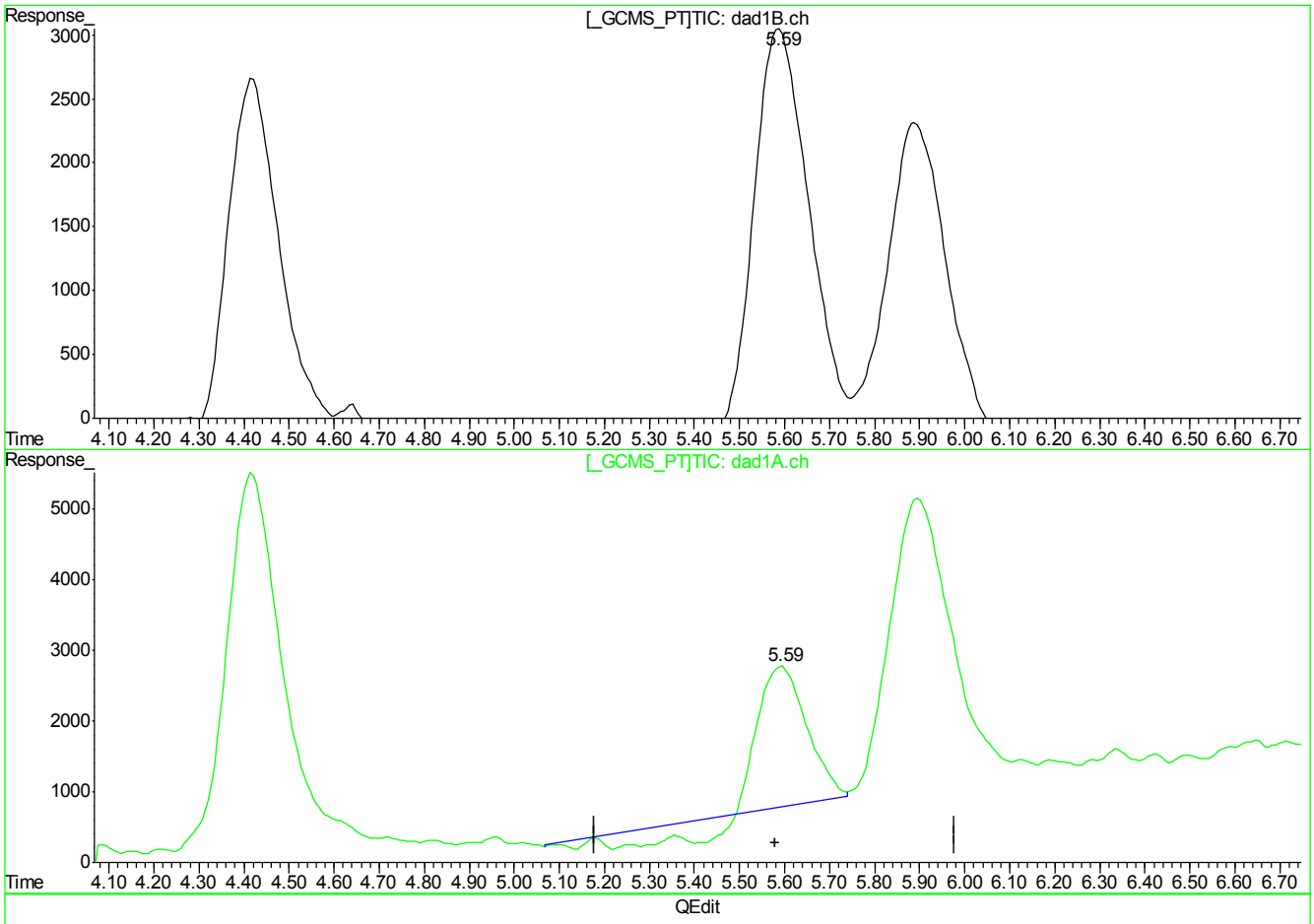
7.7.2.3

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 50.221ppb

response 306521

(7) 1,3-Dinitrobenzene #2

5.59min 26.458ppb

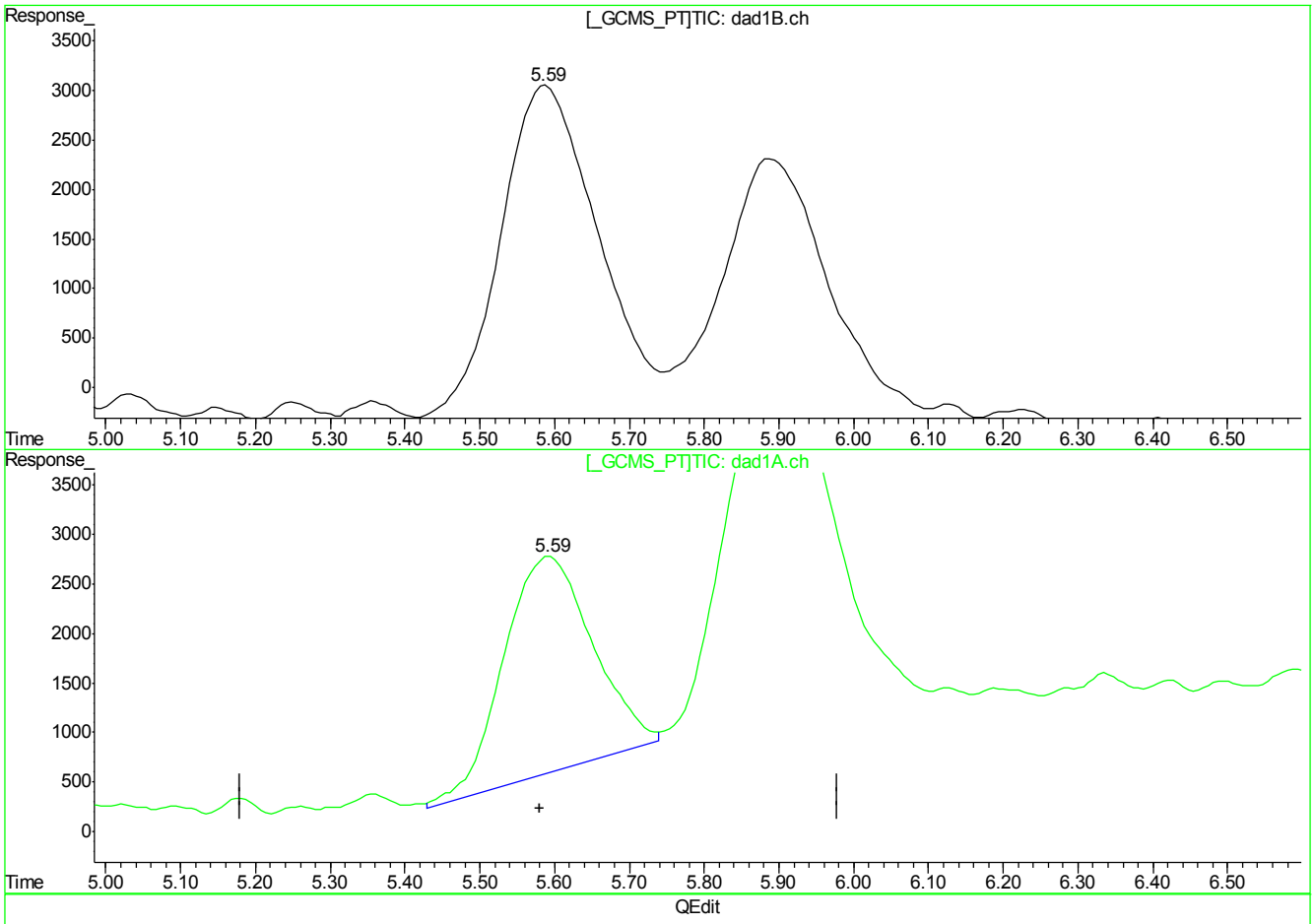
response 104252

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 50.221ppb

response 306521

(7) 1,3-Dinitrobenzene #2

5.59min 45.866ppb m

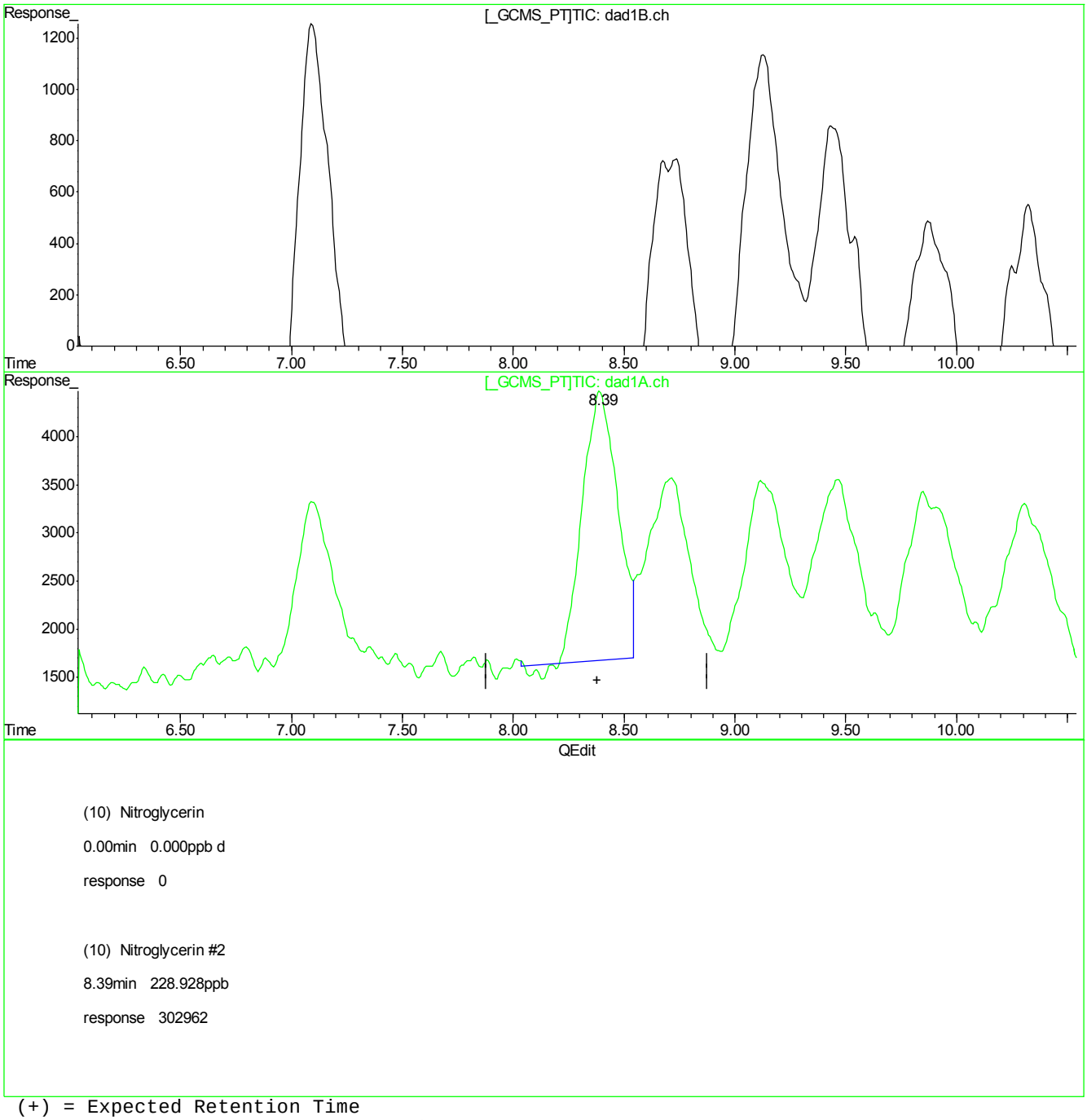
response 180727

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:21 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.39min 228.928ppb

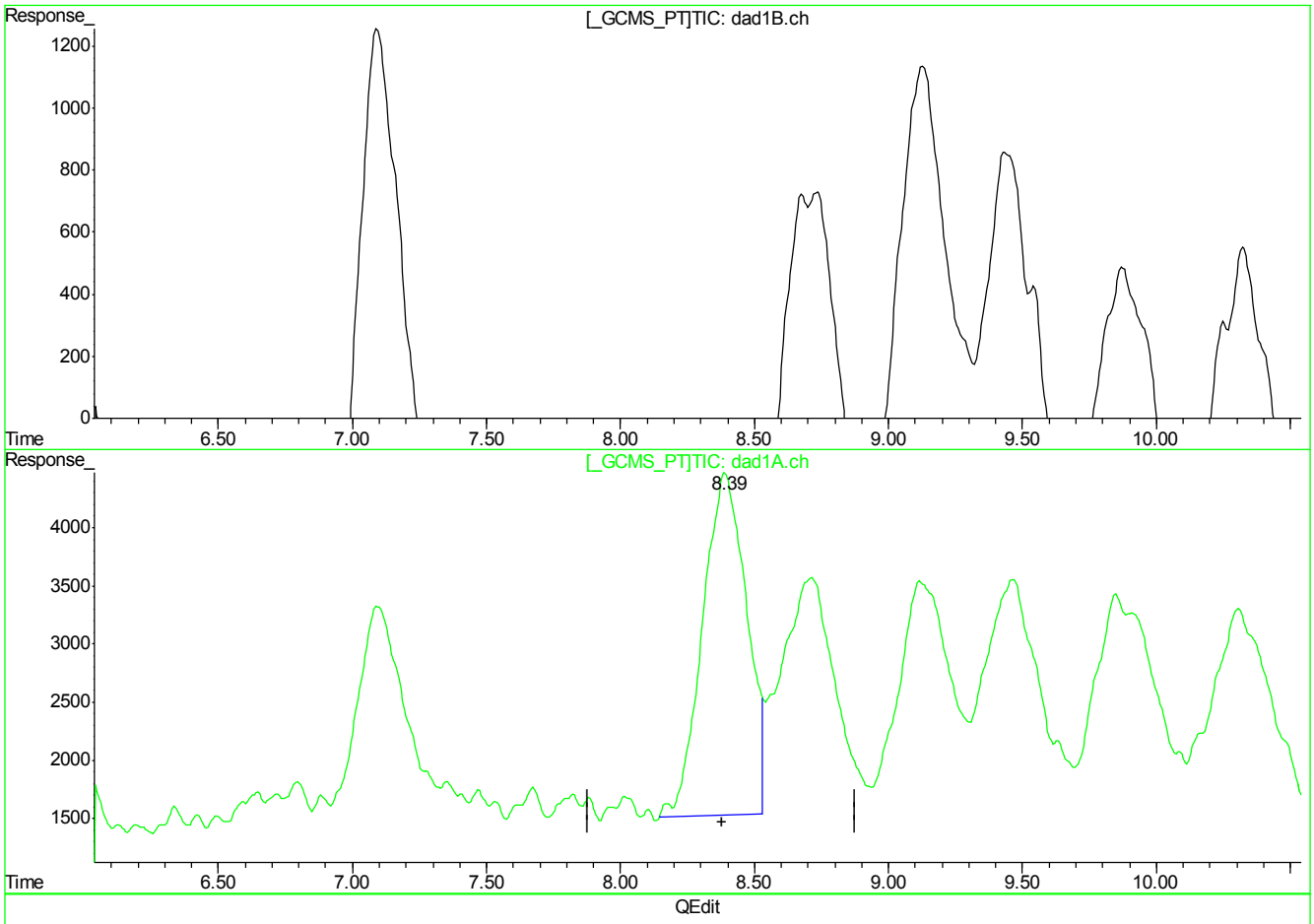
response 302962

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.39min 254.046ppb m

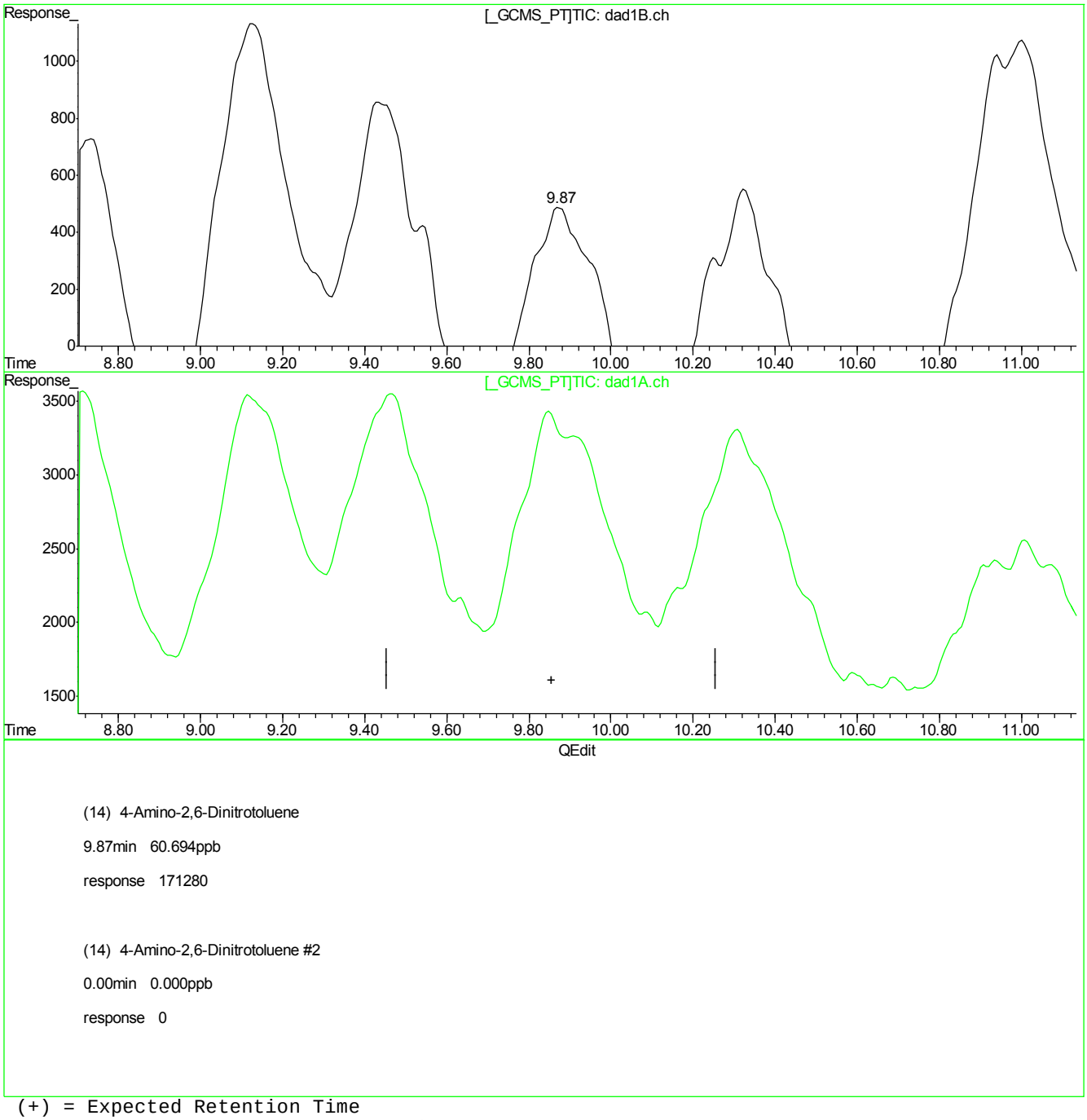
response 336203

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:32 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration

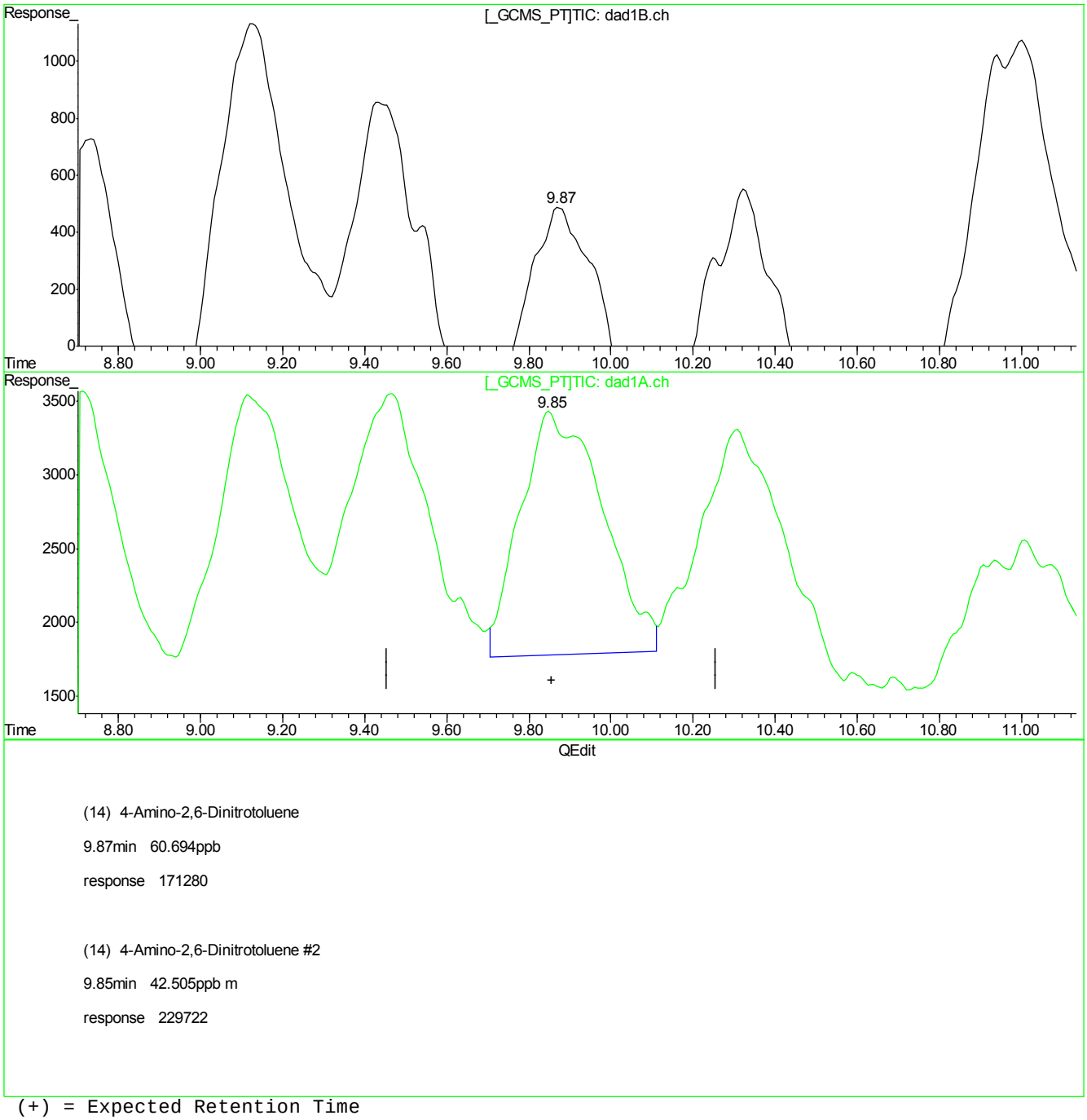


(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.87min 60.694ppb

response 171280

(14) 4-Amino-2,6-Dinitrotoluene #2

9.85min 42.505ppb m

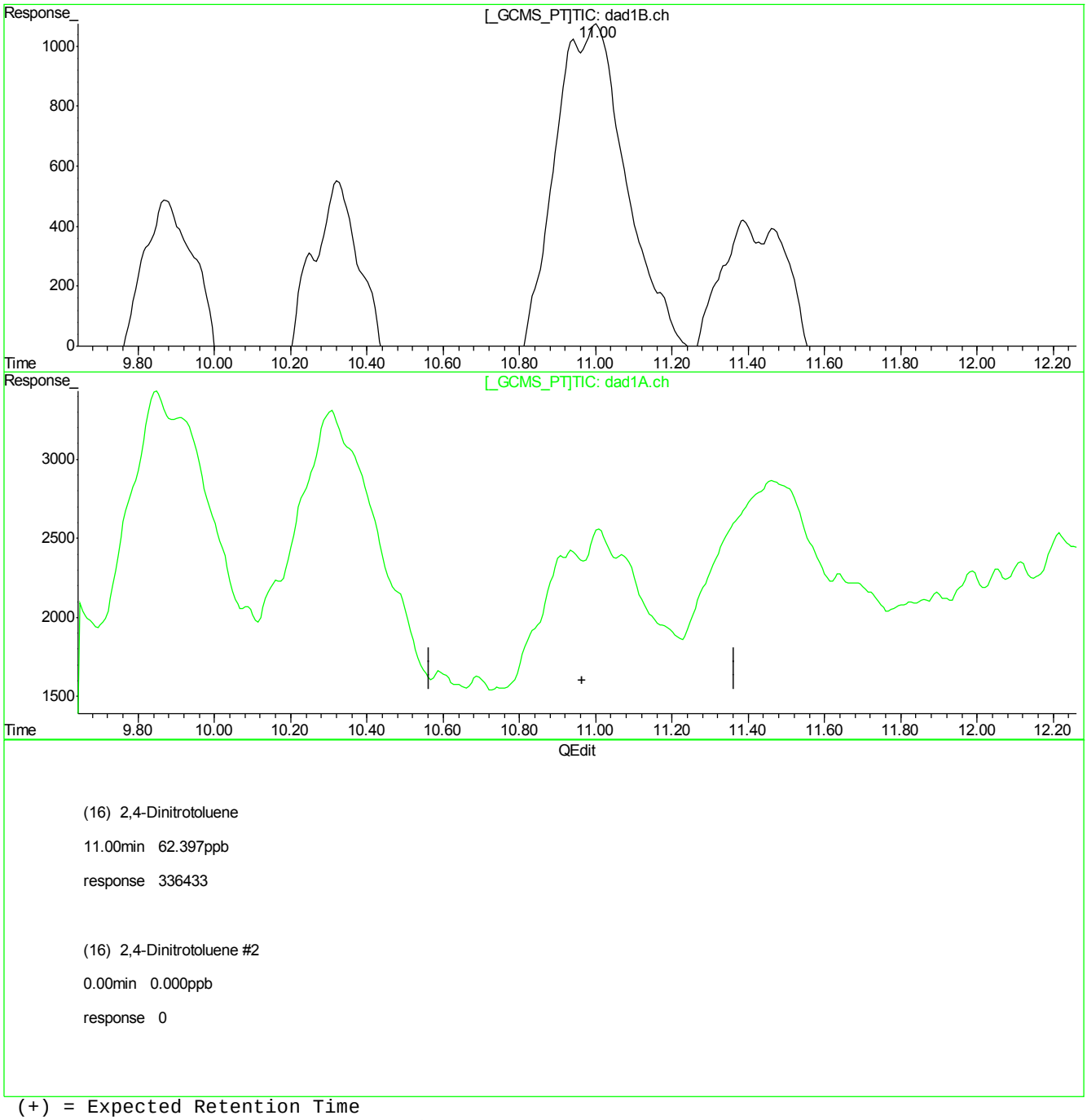
response 229722

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.00min 62.397ppb

response 336433

(16) 2,4-Dinitrotoluene #2

0.00min 0.000ppb

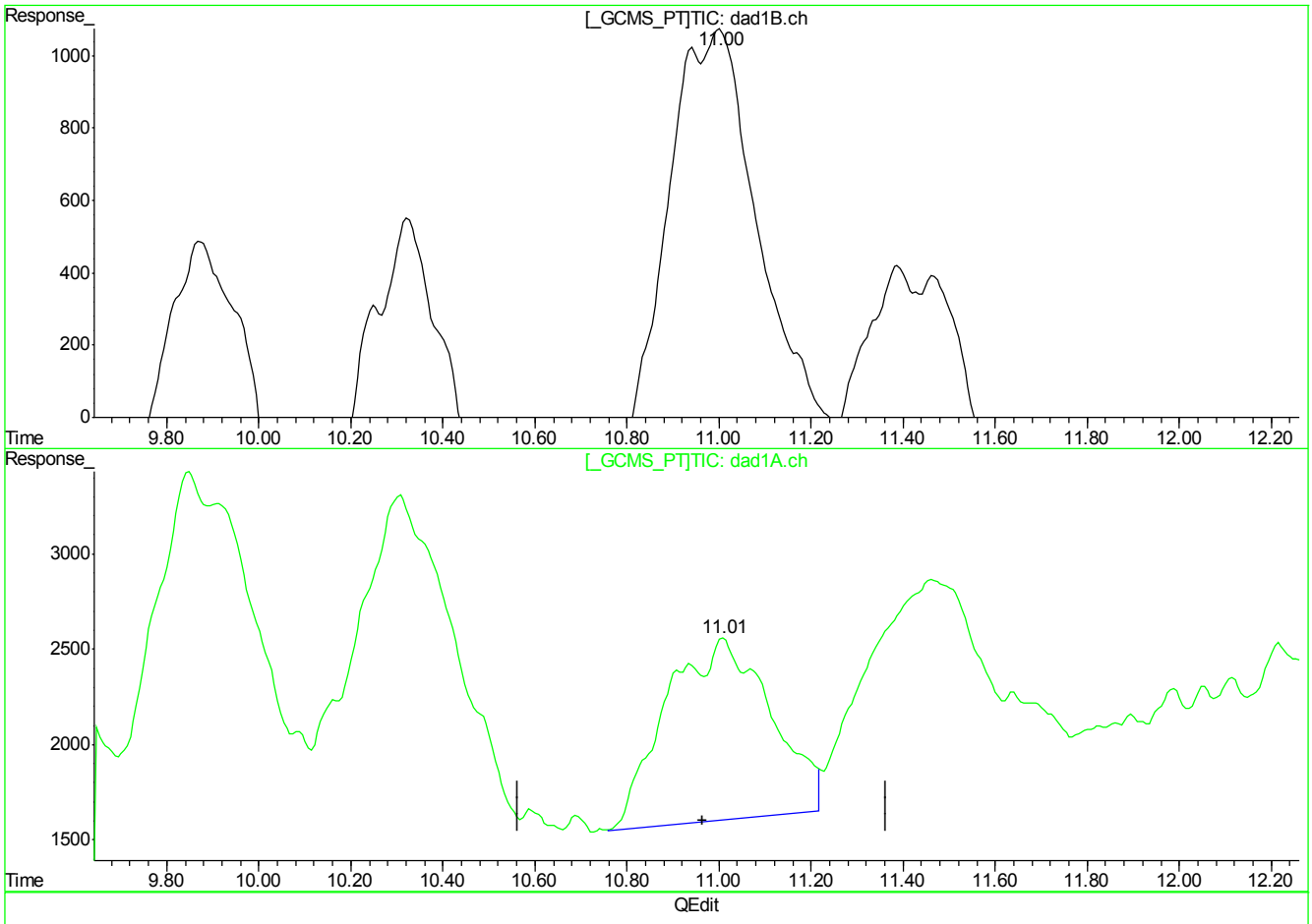
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.00min 62.397ppb

response 336433

(16) 2,4-Dinitrotoluene #2

11.01min 45.176ppb m

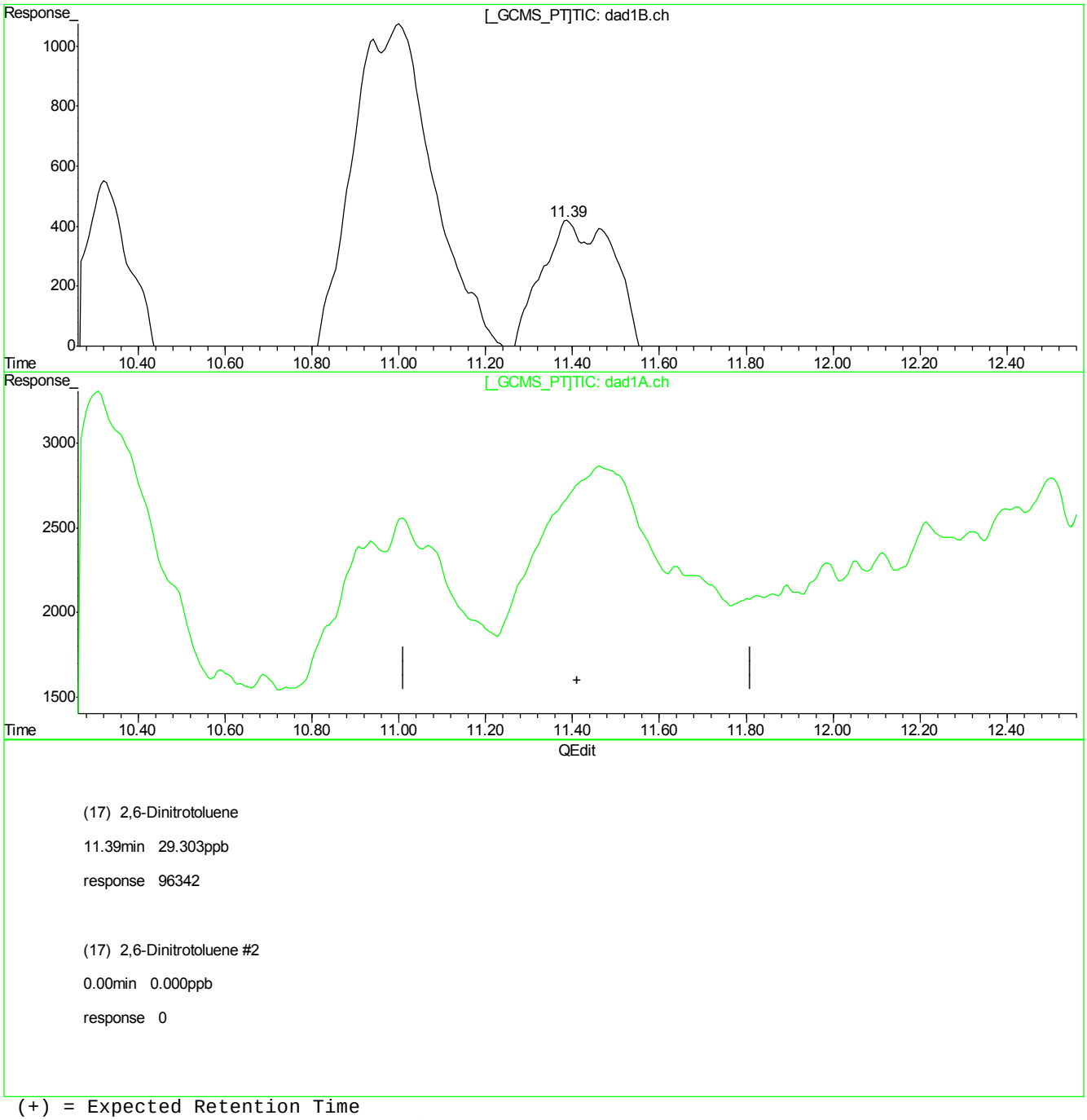
response 150818

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.39min 29.303ppb

response 96342

(17) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

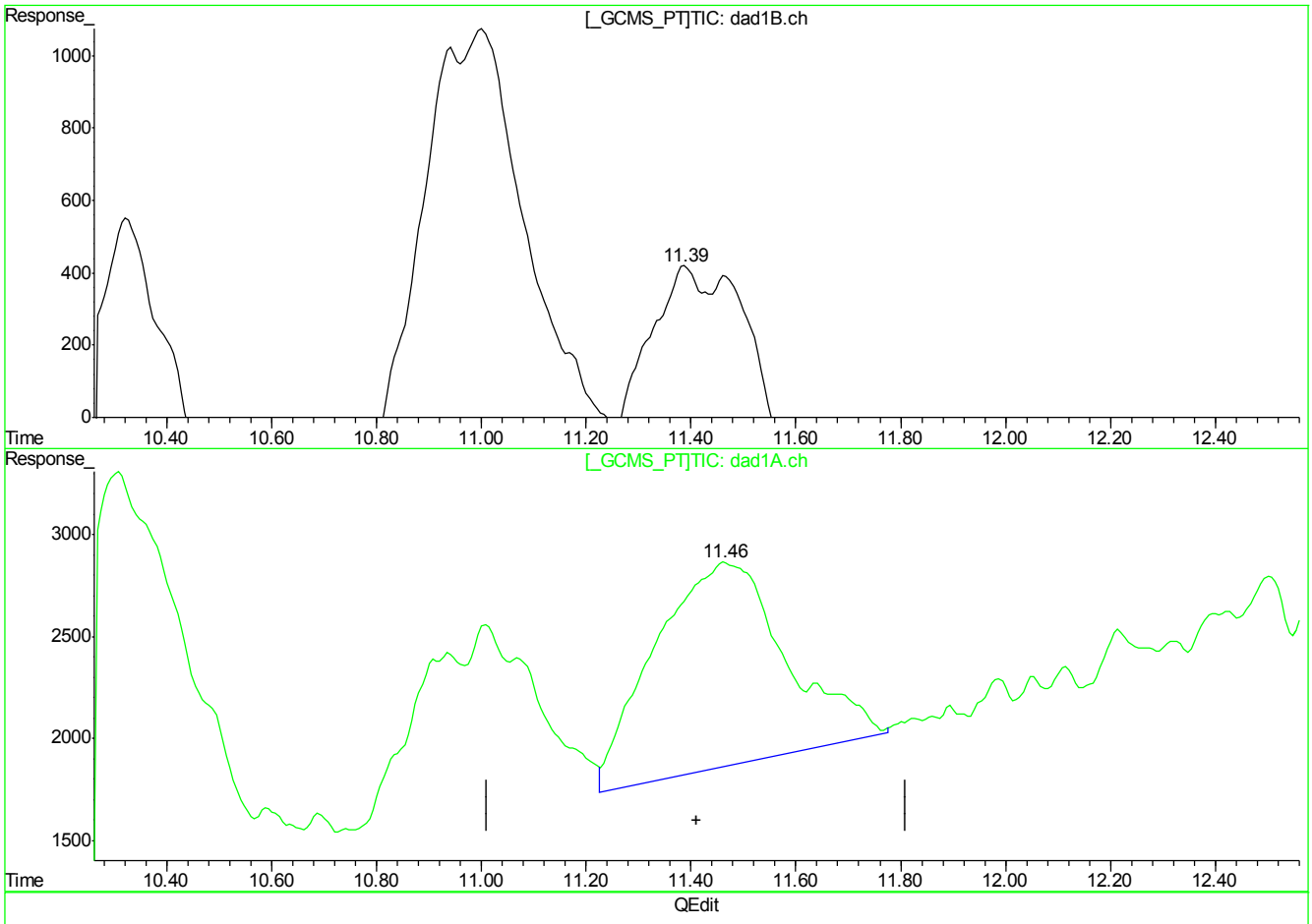
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:45 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.39min 29.303ppb

response 96342

(17) 2,6-Dinitrotoluene #2

11.46min 44.840ppb m

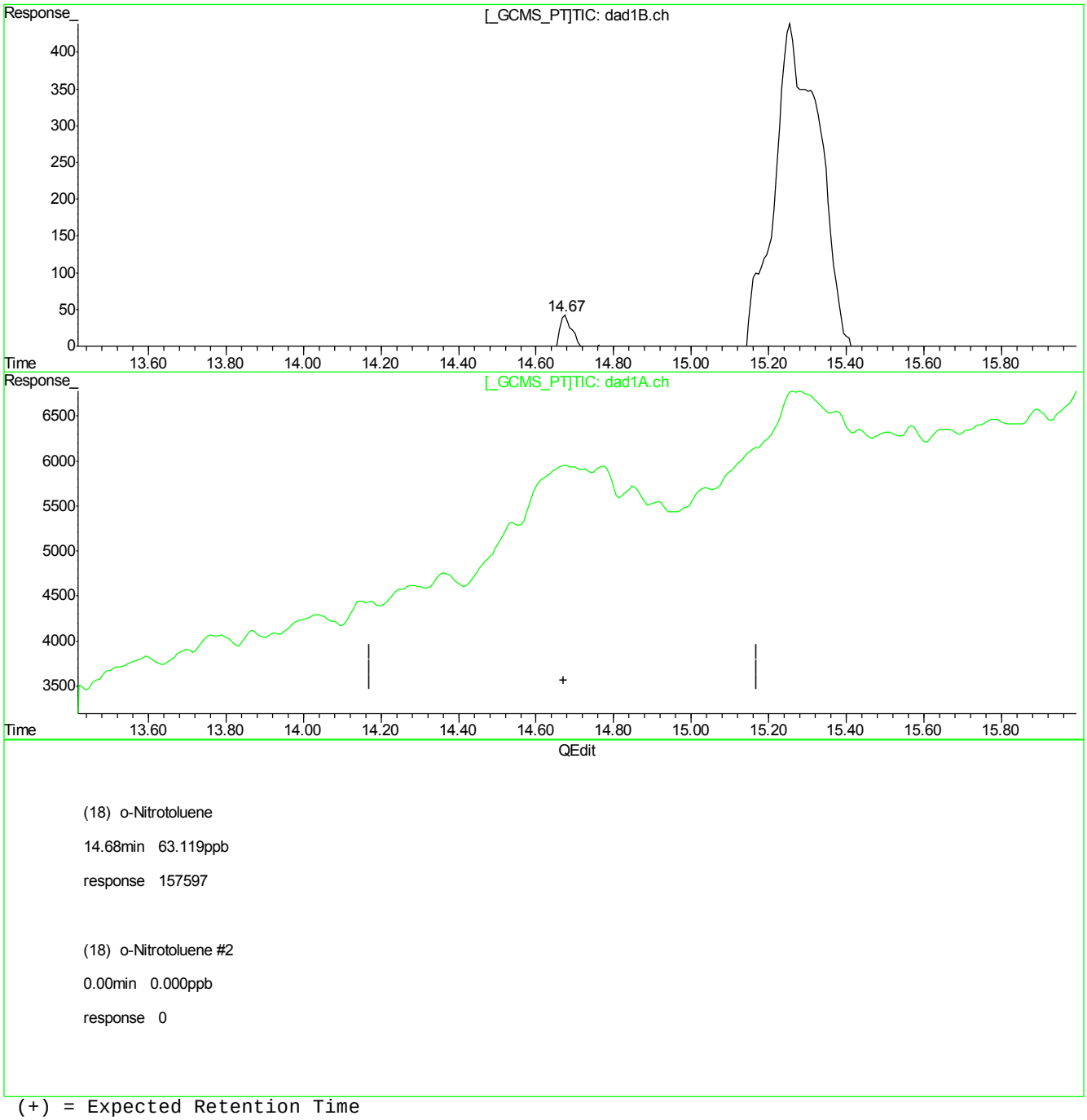
response 175853

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 63.119ppb

response 157597

(18) o-Nitrotoluene #2

0.00min 0.000ppb

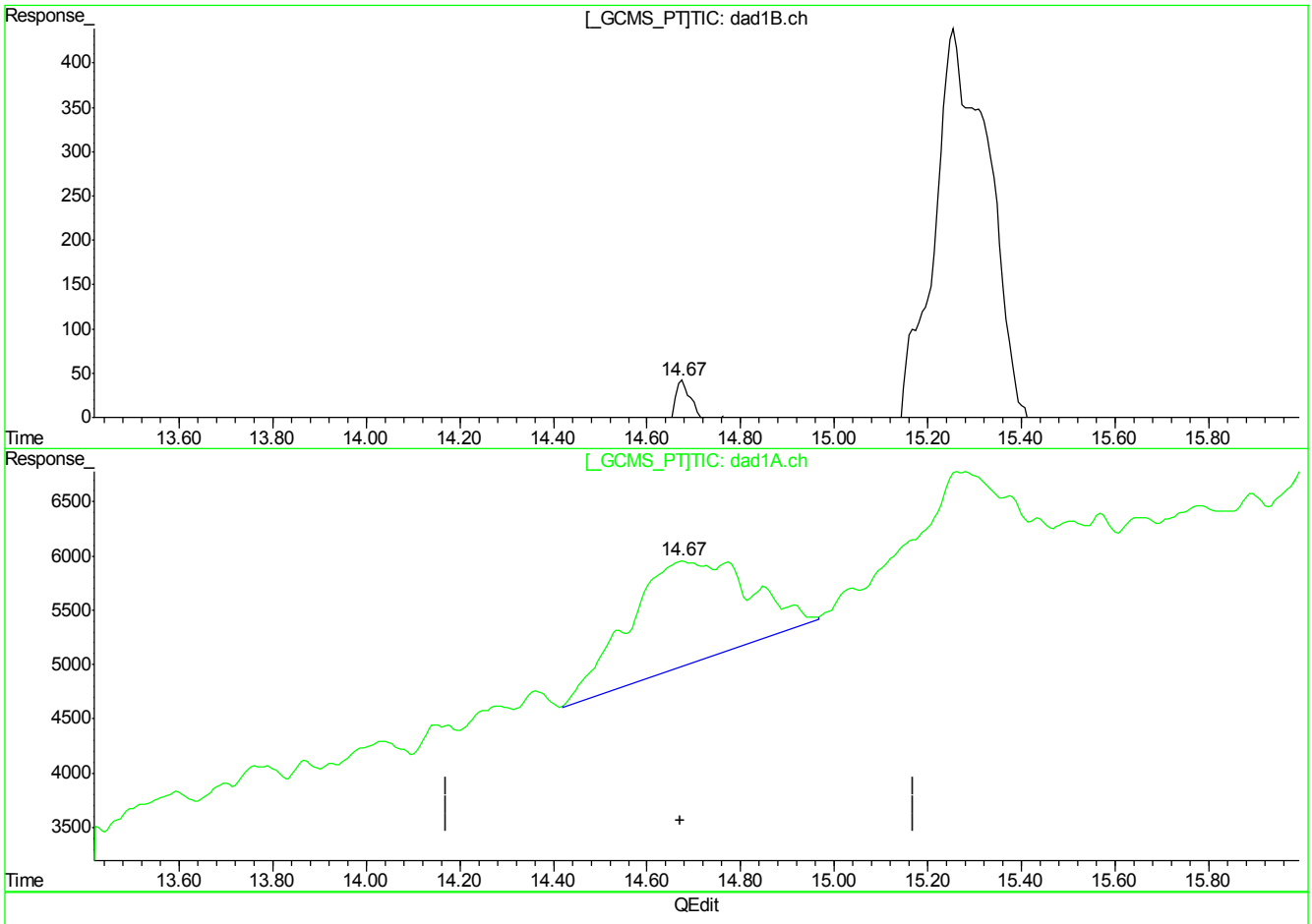
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 63.119ppb

response 157597

(18) o-Nitrotoluene #2

14.67min 47.060ppb m

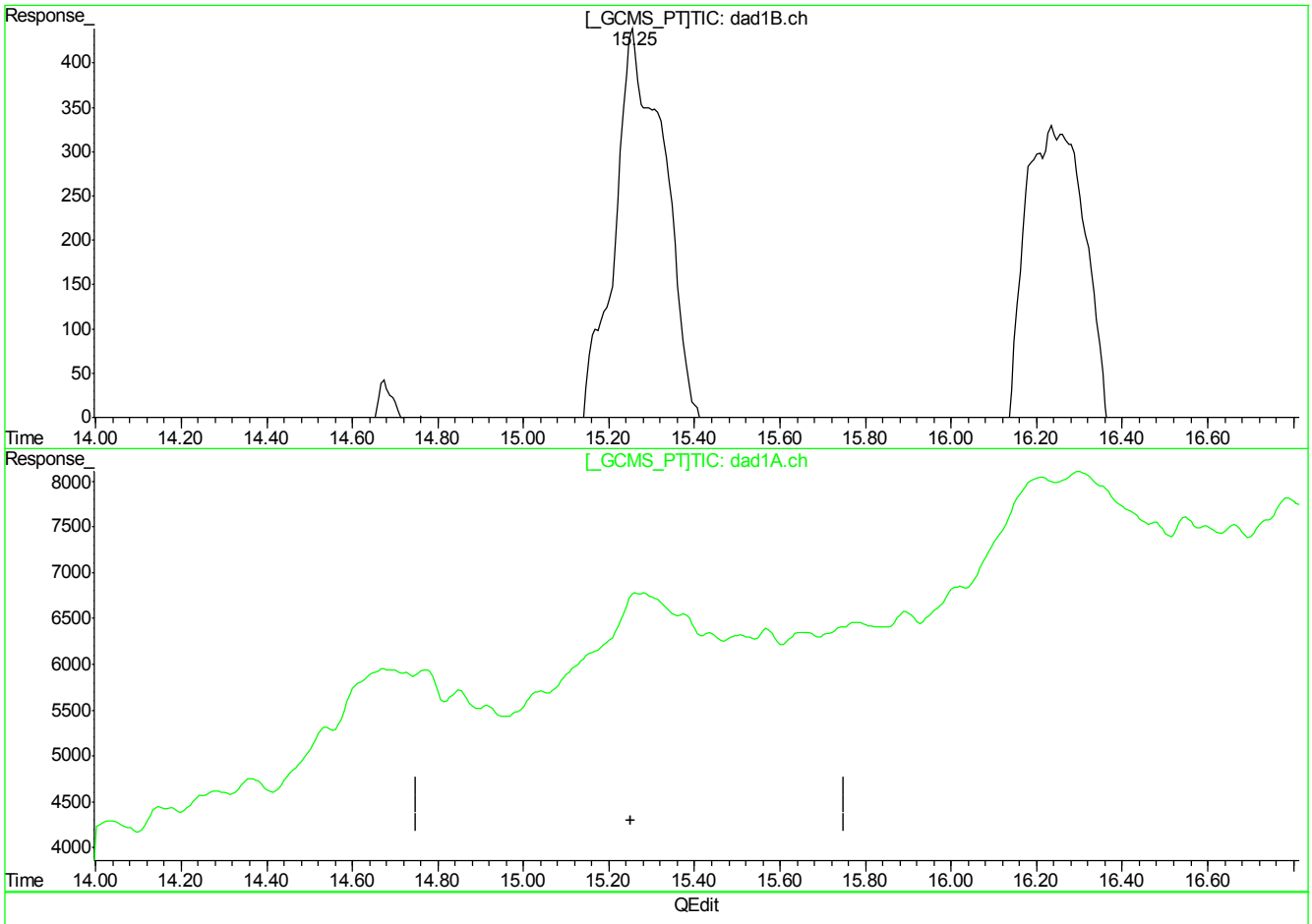
response 171653

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.26min 66.793ppb

response 247116

(19) p-Nitrotoluene #2

0.00min 0.000ppb

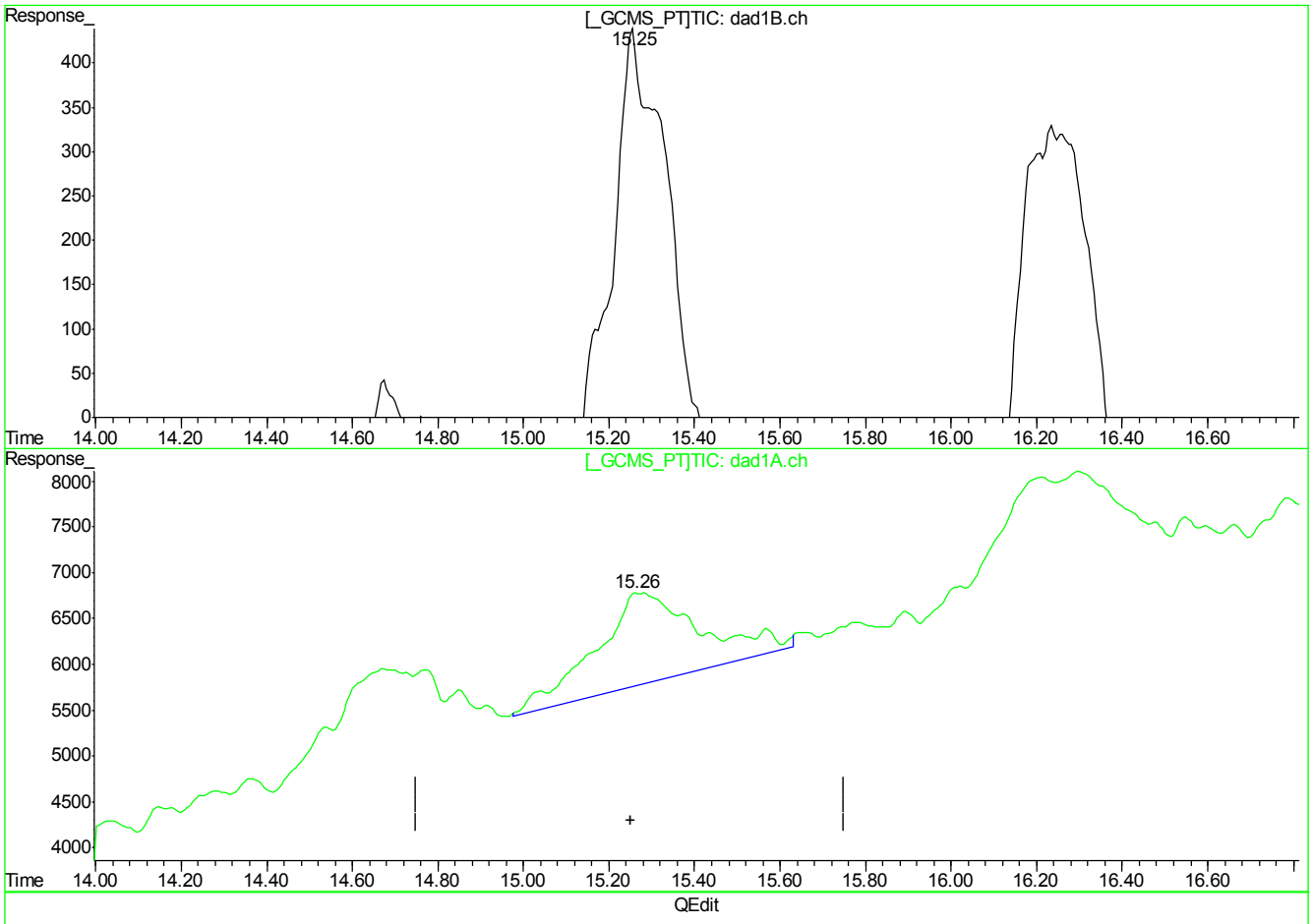
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:00 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.26min 66.793ppb

response 247116

(19) p-Nitrotoluene #2

15.26min 53.275ppb m

response 168598

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:04 2018

7.7.2.17

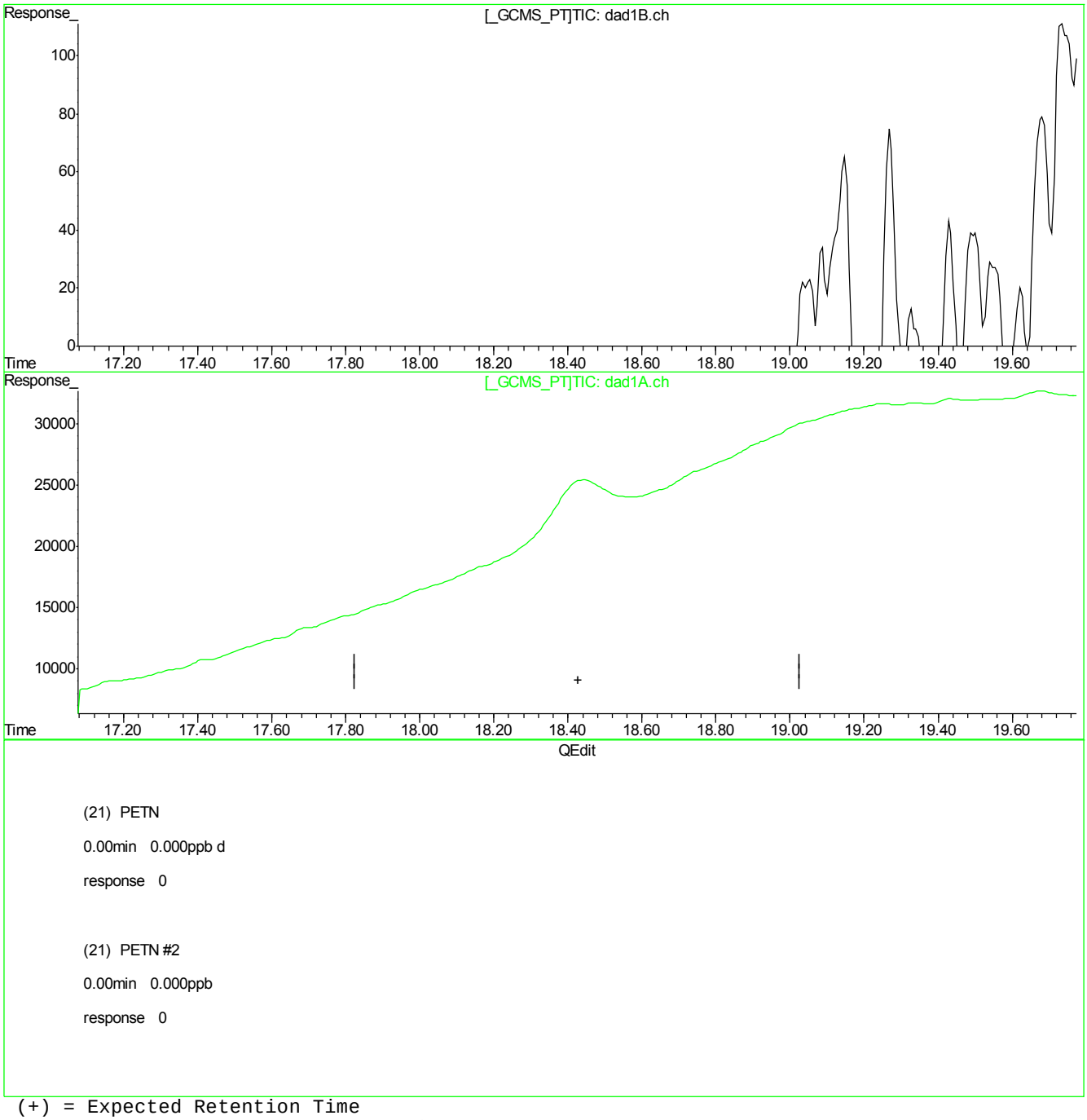
7

BB059465.D edits: p-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration

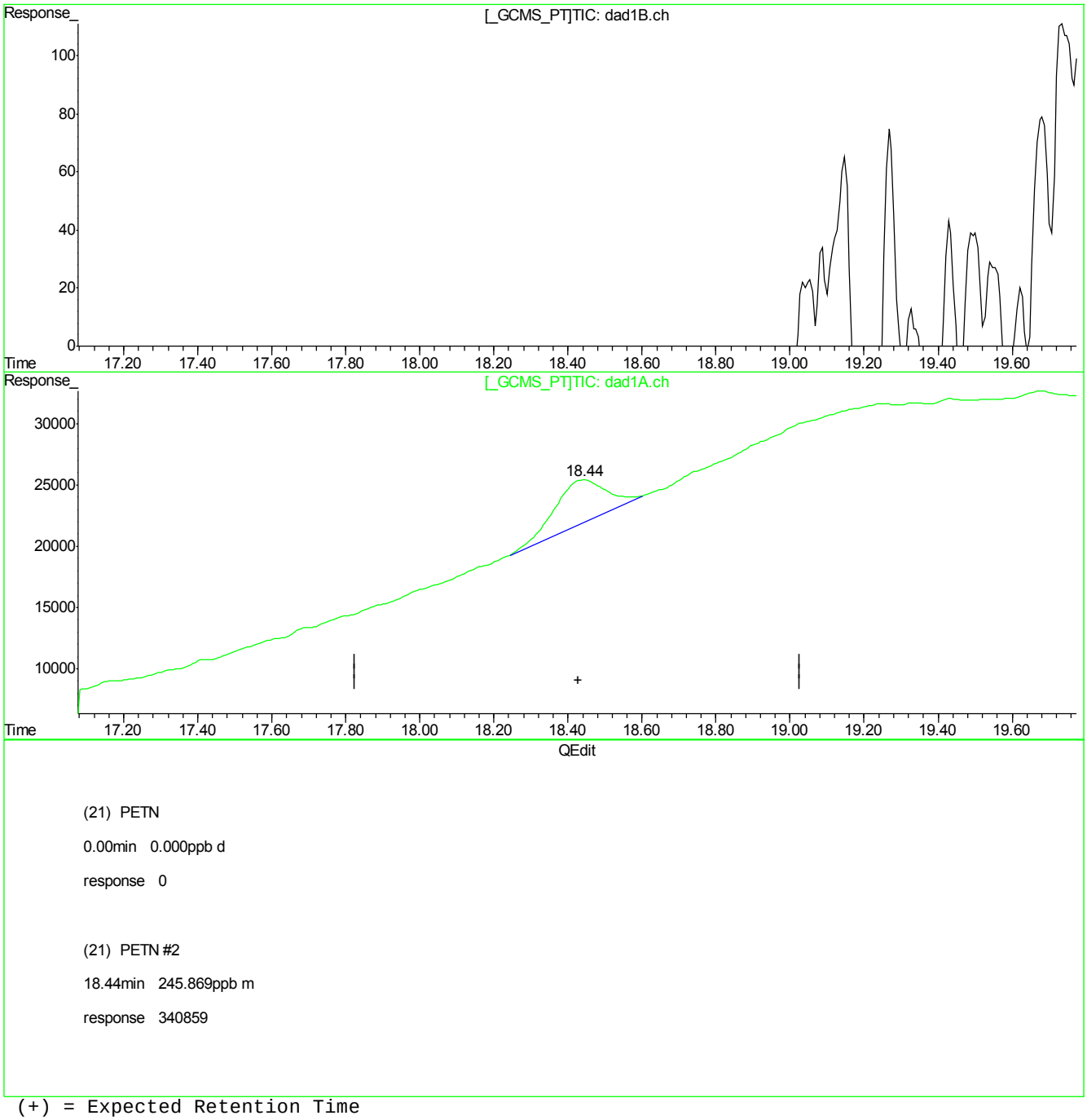


(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:32 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:46 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.34	10.34	272485	542828	117.981	130.369
	Spiked Amount 500.000	Range 70 - 136		Recovery =		23.60%#	26.07%#
	Target Compounds						
1)	TNX	1.31	1.32	533635	818783	105.159m	105.054m
2)	HMX	1.44	1.44	199951	561154	102.567	106.775
3)	DNX	1.67	1.67	326904	529647	110.452	110.960
4)	MNX	2.21	2.21	342440	509252	110.134	108.645
5)	RDX	2.77	2.77	242339	360585	104.634	96.279
6)	1,3,5-Trinitrobe	4.42	4.42	437968	902443	88.631	99.030
7)	1,3-Dinitrobenze	5.60	5.60	610628	401941	100.046	102.007m
8)	3,5-Dinitroanili	5.90	5.90	521888	808560	113.832	102.530
9)	Nitrobenzene	7.11	7.10	384978	333931	100.909	93.141
10)	Nitroglycerin	0.00	8.39	0	685075	N.D. d	517.665
11)	Tetryl	8.72	8.71	328974	566940	103.386	110.581
12)	2,4,6-Trinitroto	9.13	9.13	419408	524069	116.230	122.186
13)	2-Amino-4,6-Dini	9.46	9.46	386042	611330	96.169	109.955
14)	4-Amino-2,6-Dini	9.87	9.88	297874	600015	105.554	111.019
16)	2,4-Dinitrotolue	10.99	11.00	523838	300231	97.154	89.931
17)	2,6-Dinitrotolue	11.46	11.45	325135	307361	98.893	78.373
18)	o-Nitrotoluene	14.68	14.68	278959	380286	111.725	104.258
19)	p-Nitrotoluene	15.27	15.28	436597	376793	118.008	119.062
20)	m-Nitrotoluene	16.27	16.26	376321	465946	102.001	107.445
21)	PETN	0.00	18.44	0	707738	N.D. d	510.508m

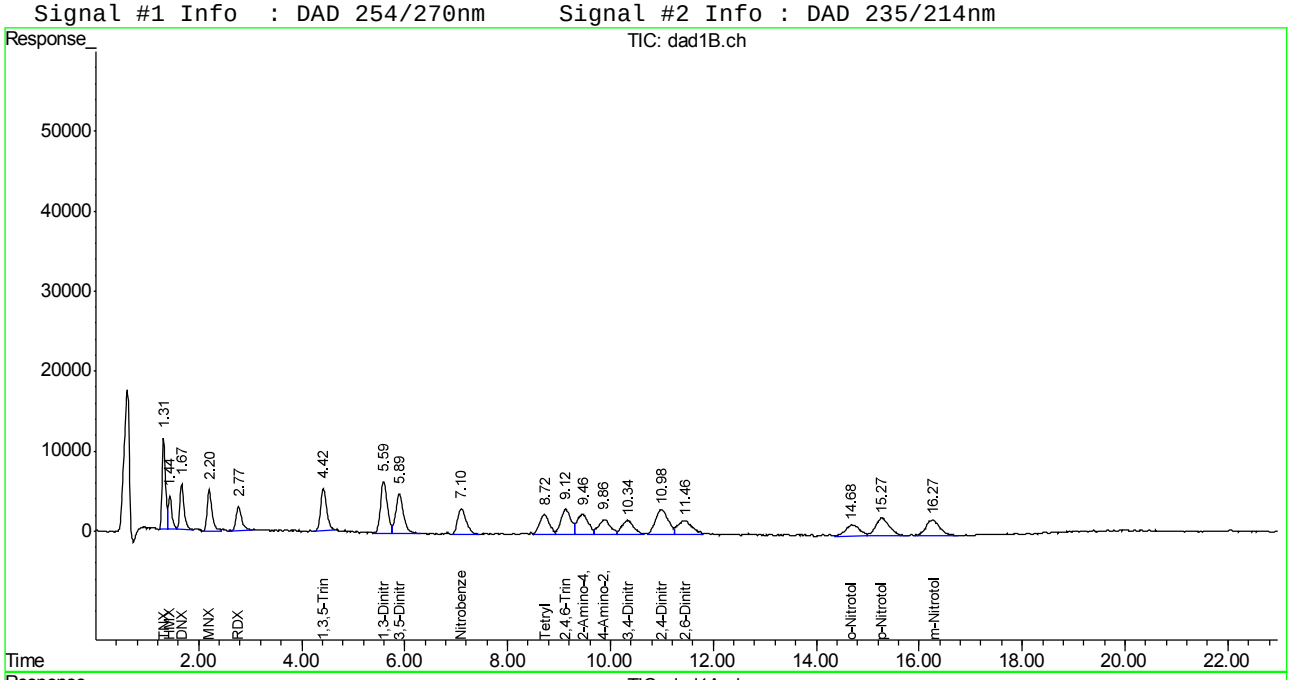
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059466.D 8330B_0419PLUS.M Fri Apr 20 08:01:20 2018 Page 1

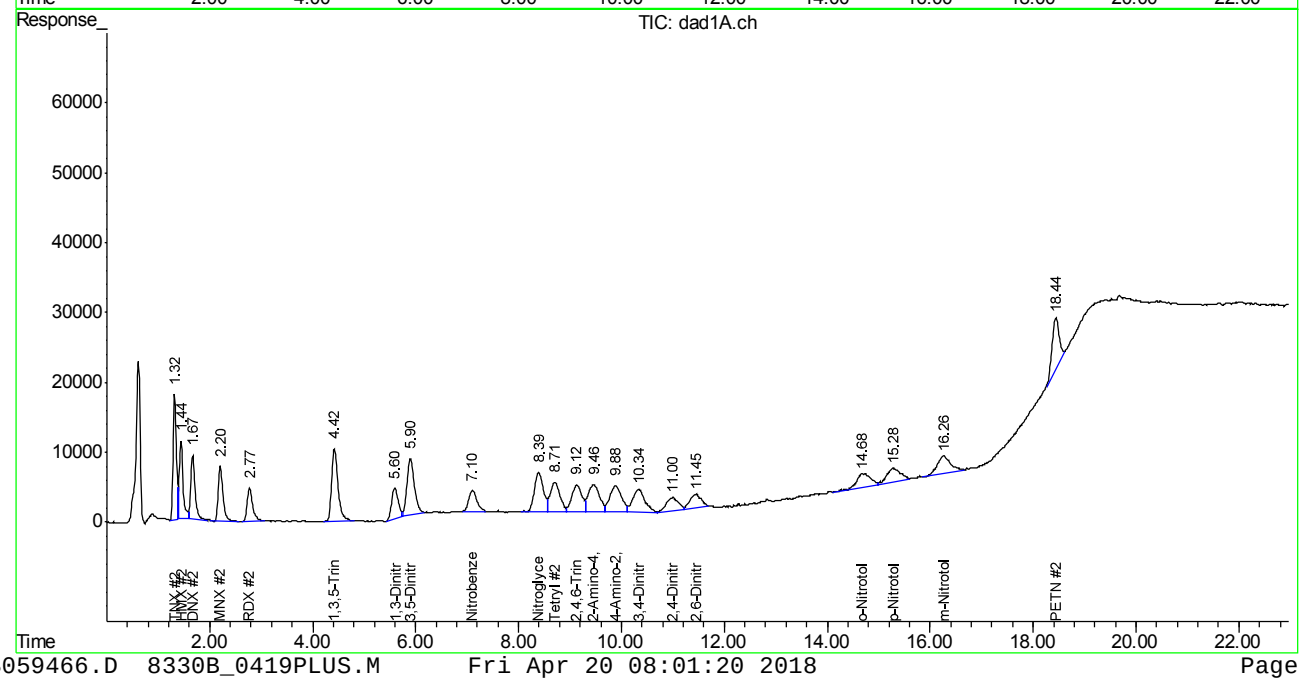
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:56 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

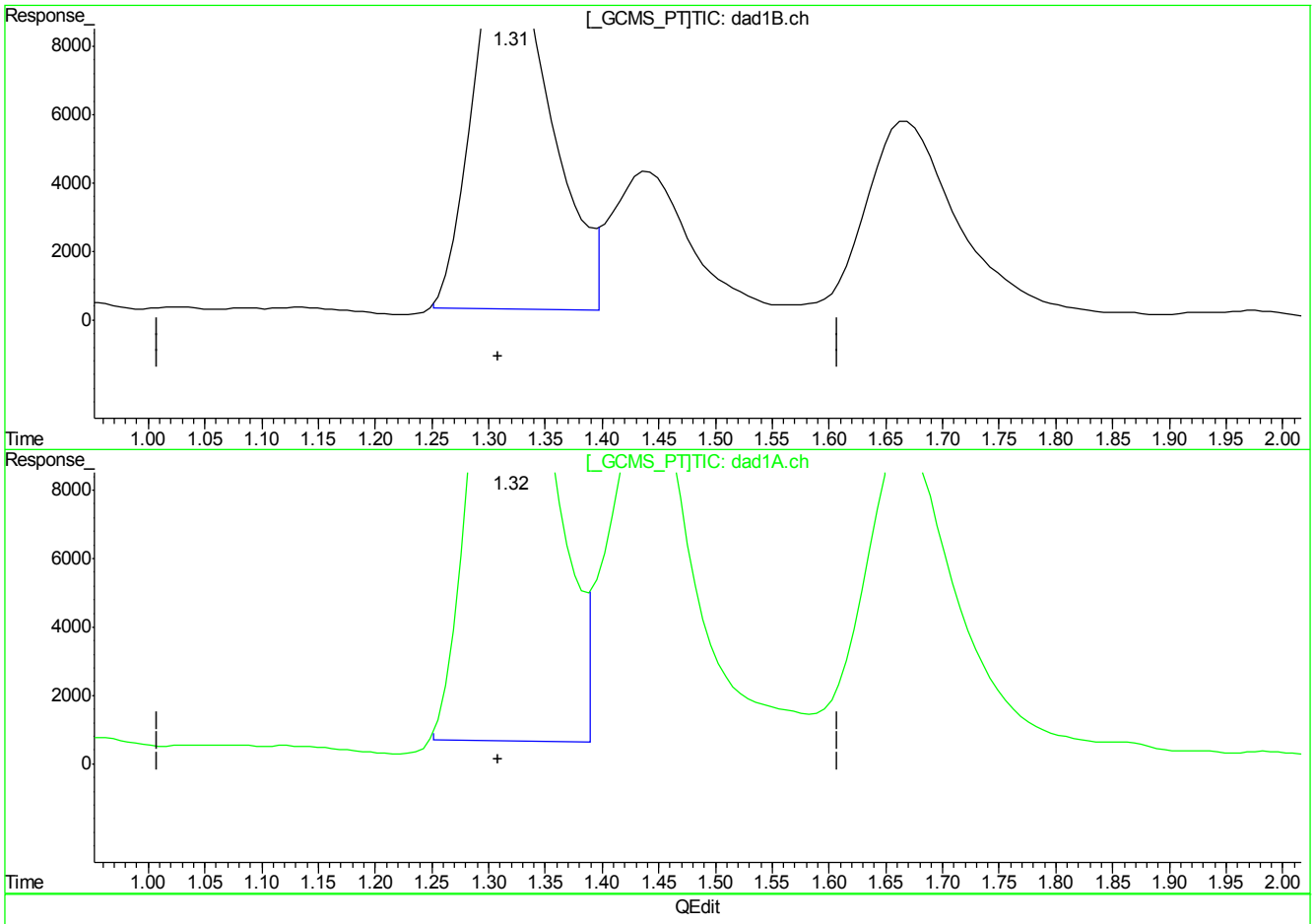
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059466.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 11:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 100.494ppb

response 509967

(1) TNX #2

1.32min 100.117ppb

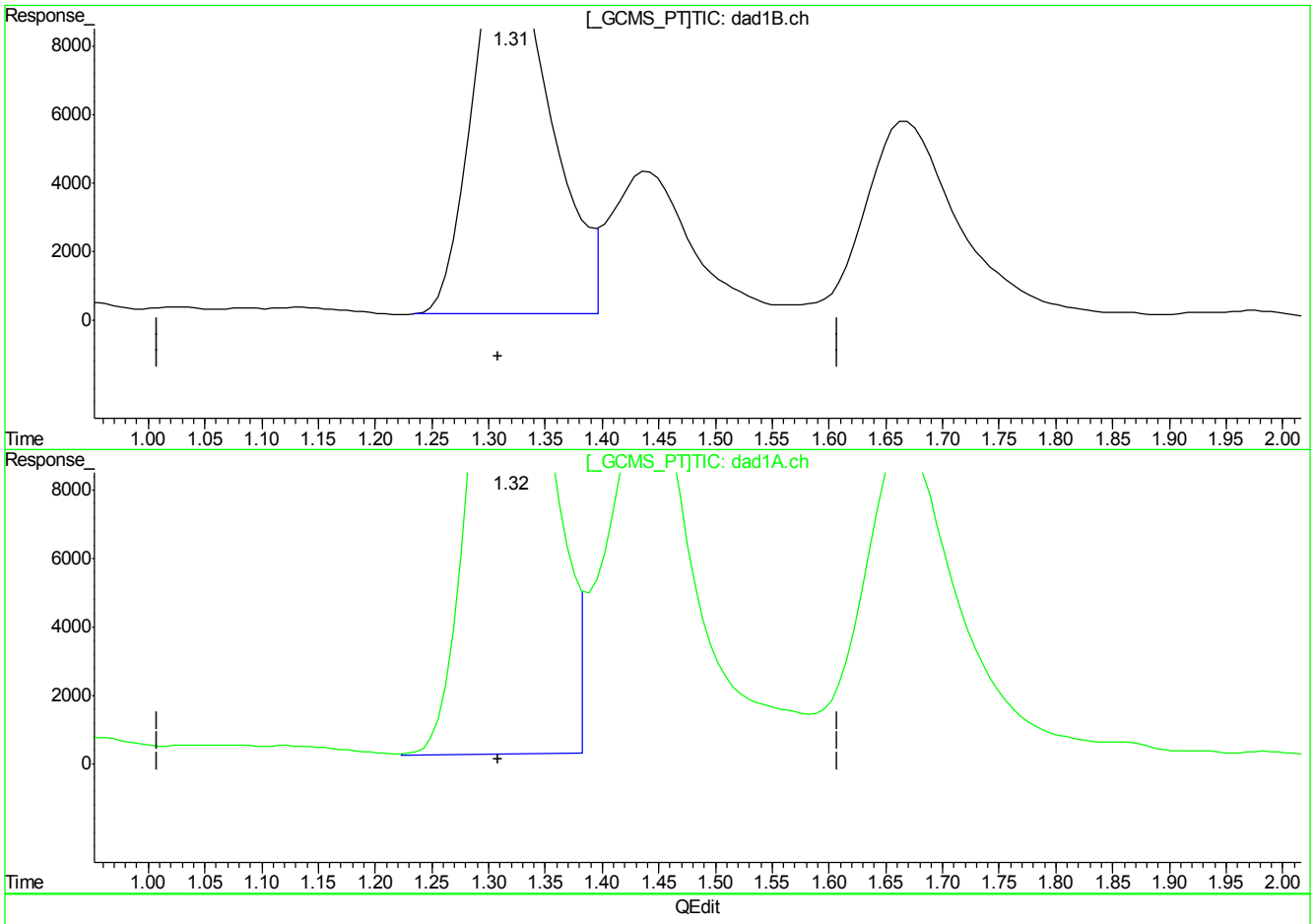
response 780302

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:55:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 105.159ppb m

response 533635

(1) TNX #2

1.32min 105.054ppb m

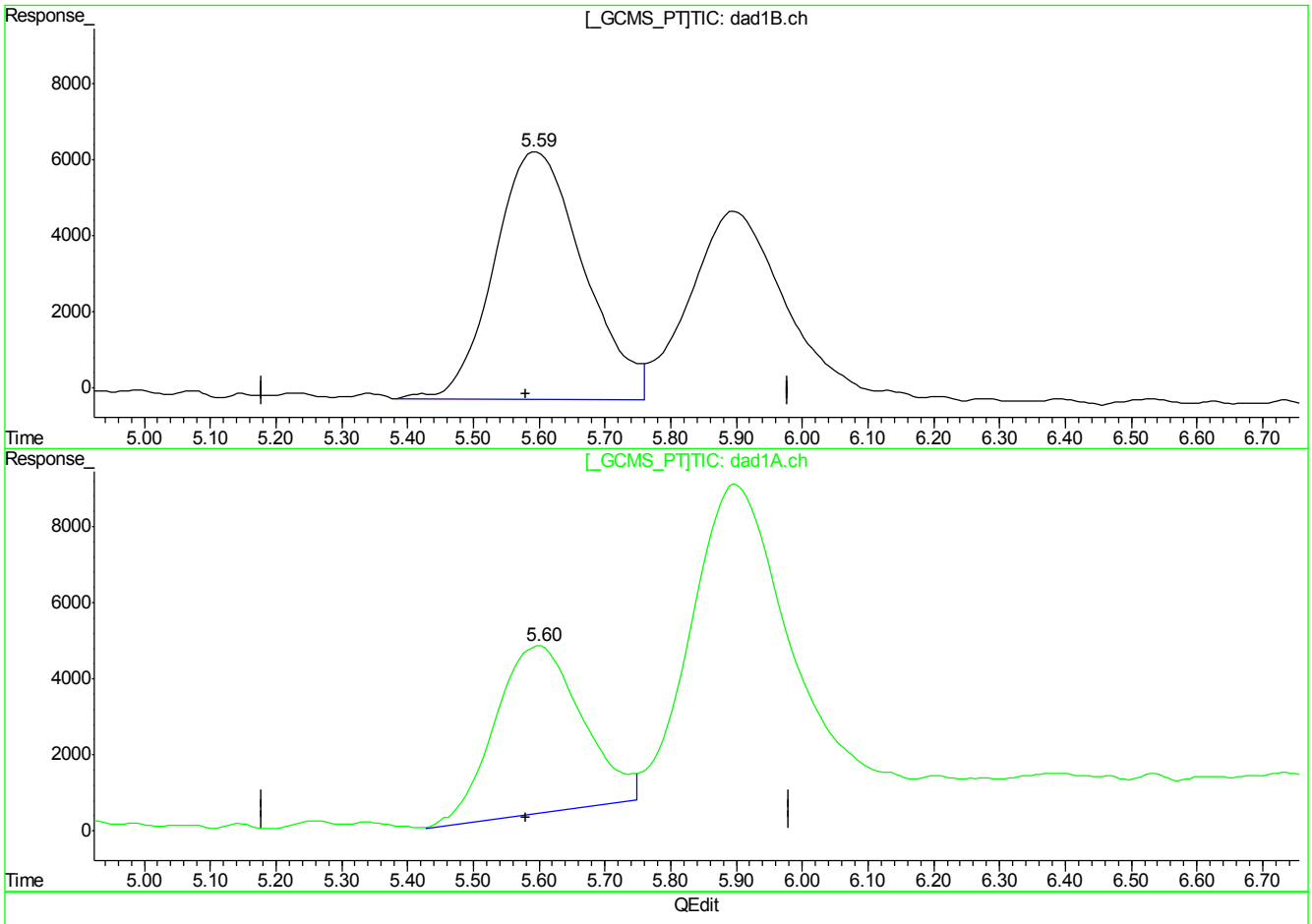
response 818783

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:55:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 100.046ppb

response 610628

(7) 1,3-Dinitrobenzene #2

5.60min 102.007ppb m

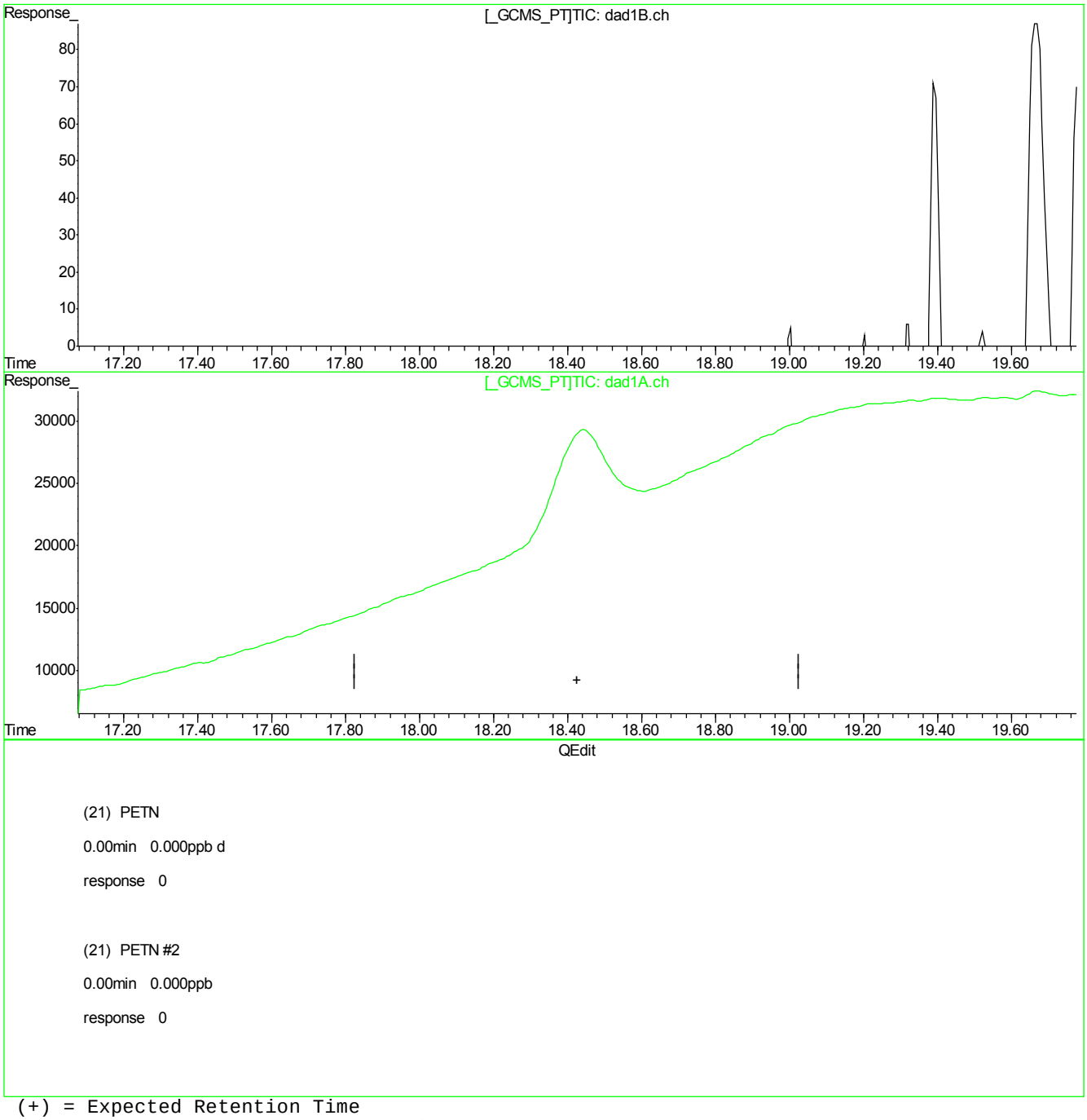
response 401941

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

0.00min 0.000ppb

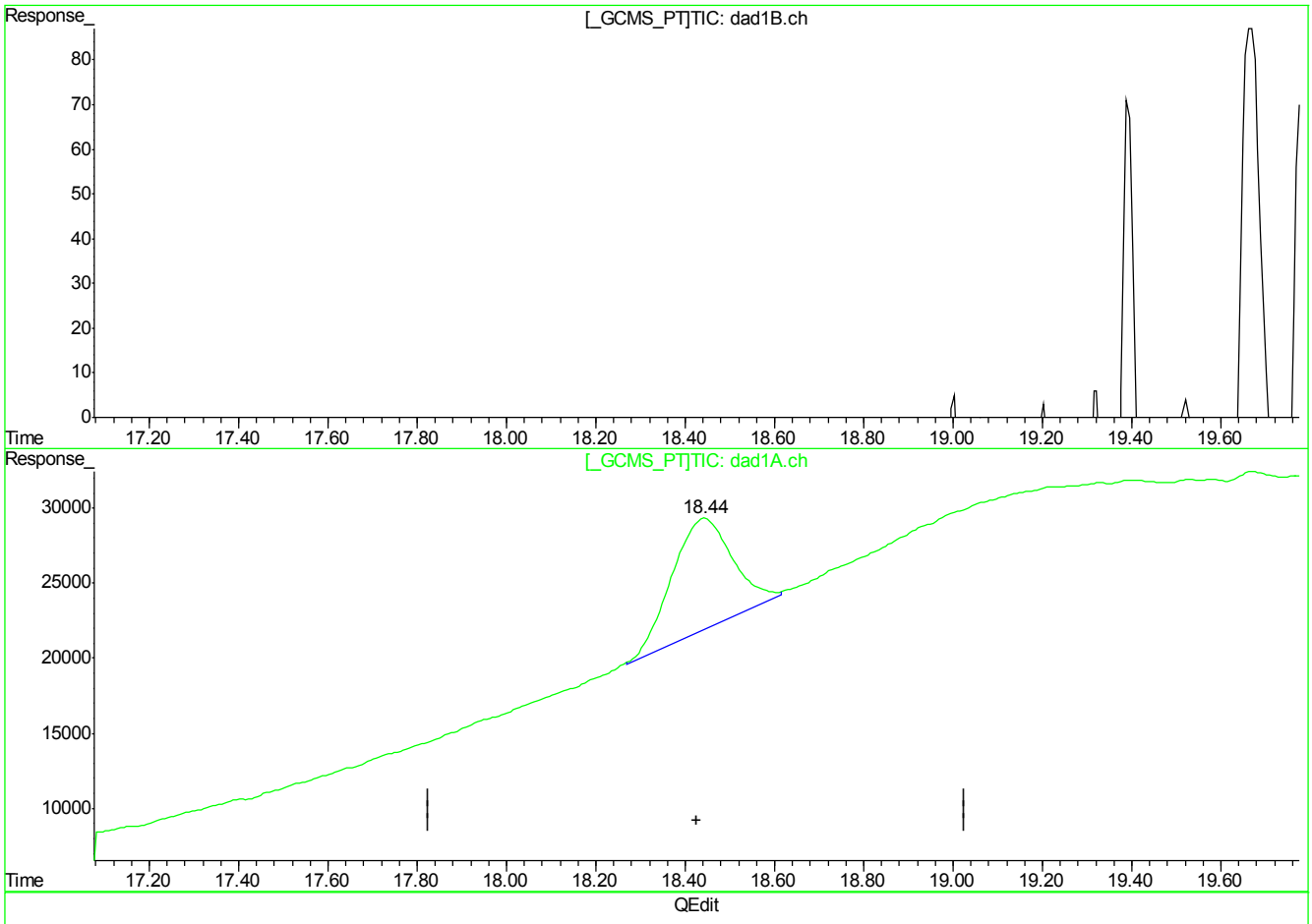
response 0

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:22 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.44min 510.508ppb m

response 707738

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:25 2018

7.7.3.6

7

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:47 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.33	10.34	574463	864172	248.731	207.544
	Spiked Amount 500.000	Range 70 - 136		Recovery =		49.75%#	41.51%#
	Target Compounds						
1)	TNX	1.32	1.32	973915	1447277	191.920m	185.693m
2)	HMX	1.44	1.44	353288	1034890	181.222	196.916
3)	DNX	1.67	1.67	557165	973975	188.461	204.311
4)	MNX	2.21	2.21	601874	917081	193.572	195.653
5)	RDX	2.77	2.77	404360	620985	174.855	165.808
6)	1,3,5-Trinitrobe	4.42	4.42	845691	1617161	171.142	177.459
7)	1,3-Dinitrobenze	5.60	5.60	1090649	713093	178.694	180.973m
8)	3,5-Dinitroanili	5.90	5.90	925462	1488930	201.858	188.806
9)	Nitrobenzene	7.11	7.11	707824	703995	185.532	196.361
10)	Nitroglycerin	0.00	8.39	0	1191118	N.D. d	900.047
11)	Tetryl	8.72	8.71	625180	1011909	196.474	197.371
12)	2,4,6-Trinitroto	9.14	9.13	813983	914451	225.578	213.203
13)	2-Amino-4,6-Dini	9.45	9.45	729629	1080997	181.762	194.431
14)	4-Amino-2,6-Dini	9.88	9.89	567927	1041527	201.249	192.711
16)	2,4-Dinitrotolue	10.99	10.98	1040801	553443	193.033	165.778
17)	2,6-Dinitrotolue	11.44	11.43	676914	698642	205.891	178.145
18)	o-Nitrotoluene	14.69	14.69	466779	677451	186.949	185.727
19)	p-Nitrotoluene	15.28	15.27	789495	685759	213.394	216.691
20)	m-Nitrotoluene	16.24	16.26	674661	822841	182.865	189.743
21)	PETN	0.00	18.44	0	1321717	N.D. d	953.386m

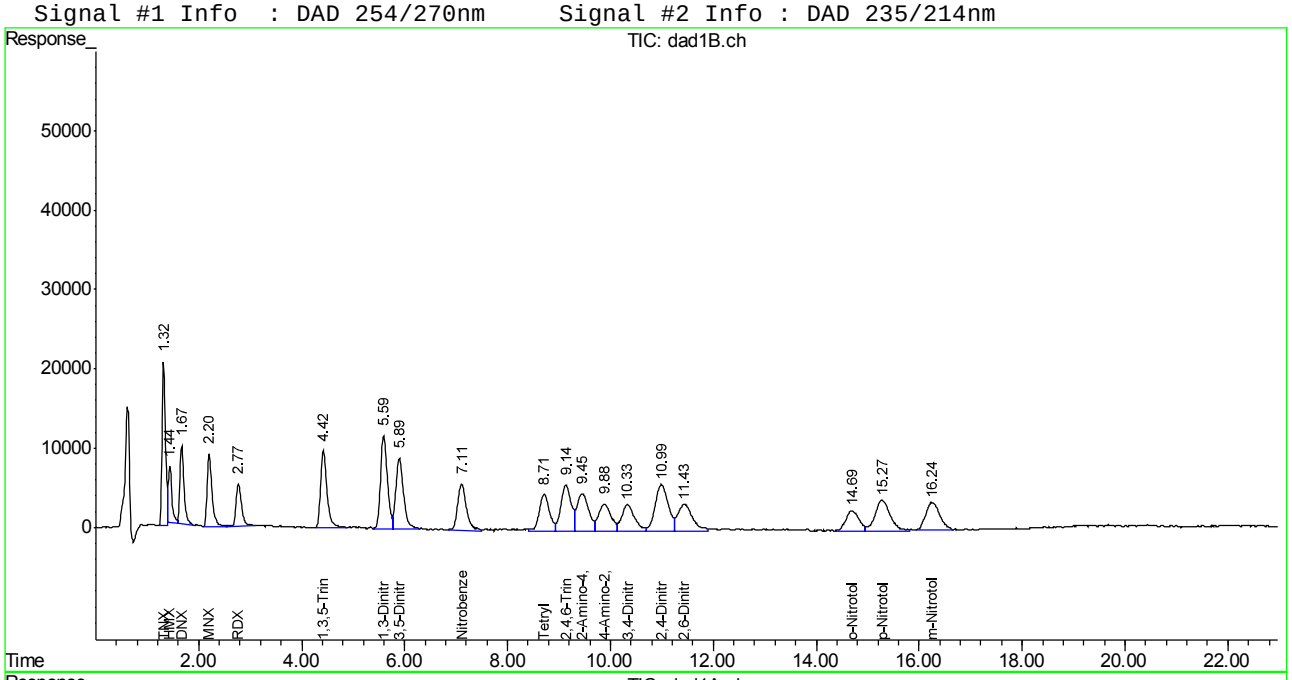
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059467.D 8330B_0419PLUS.M Fri Apr 20 08:01:21 2018 Page 1

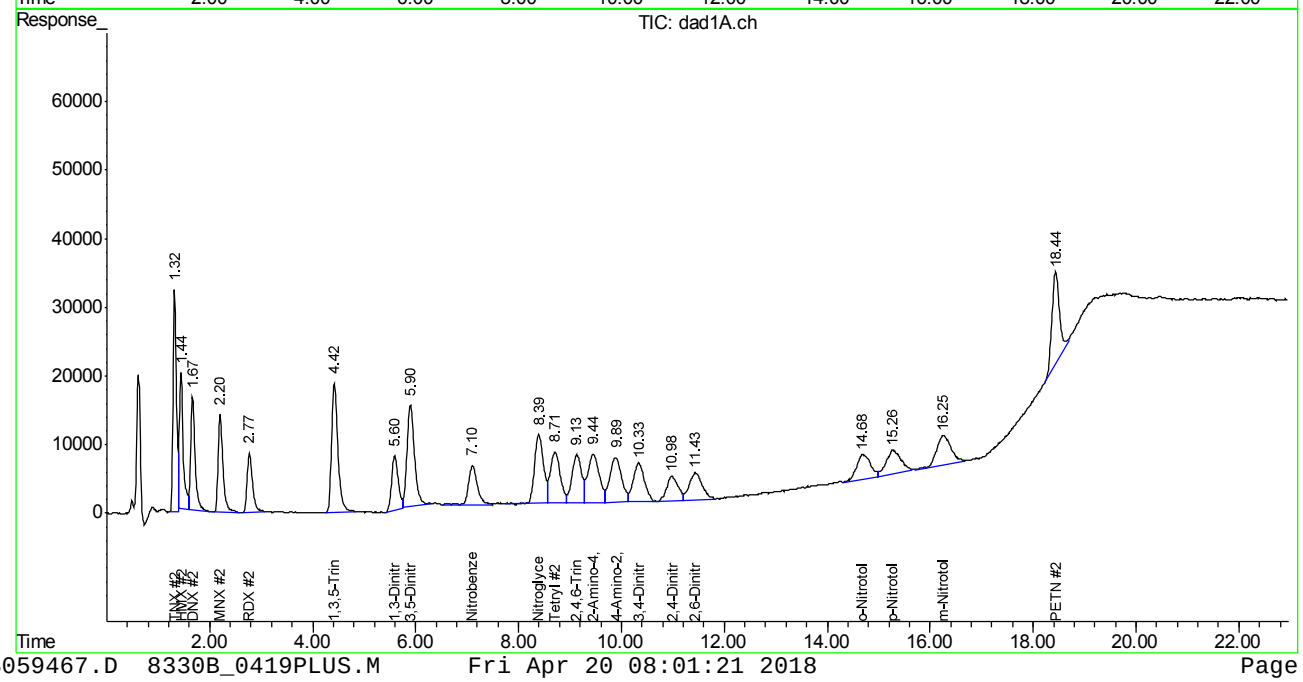
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:57 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

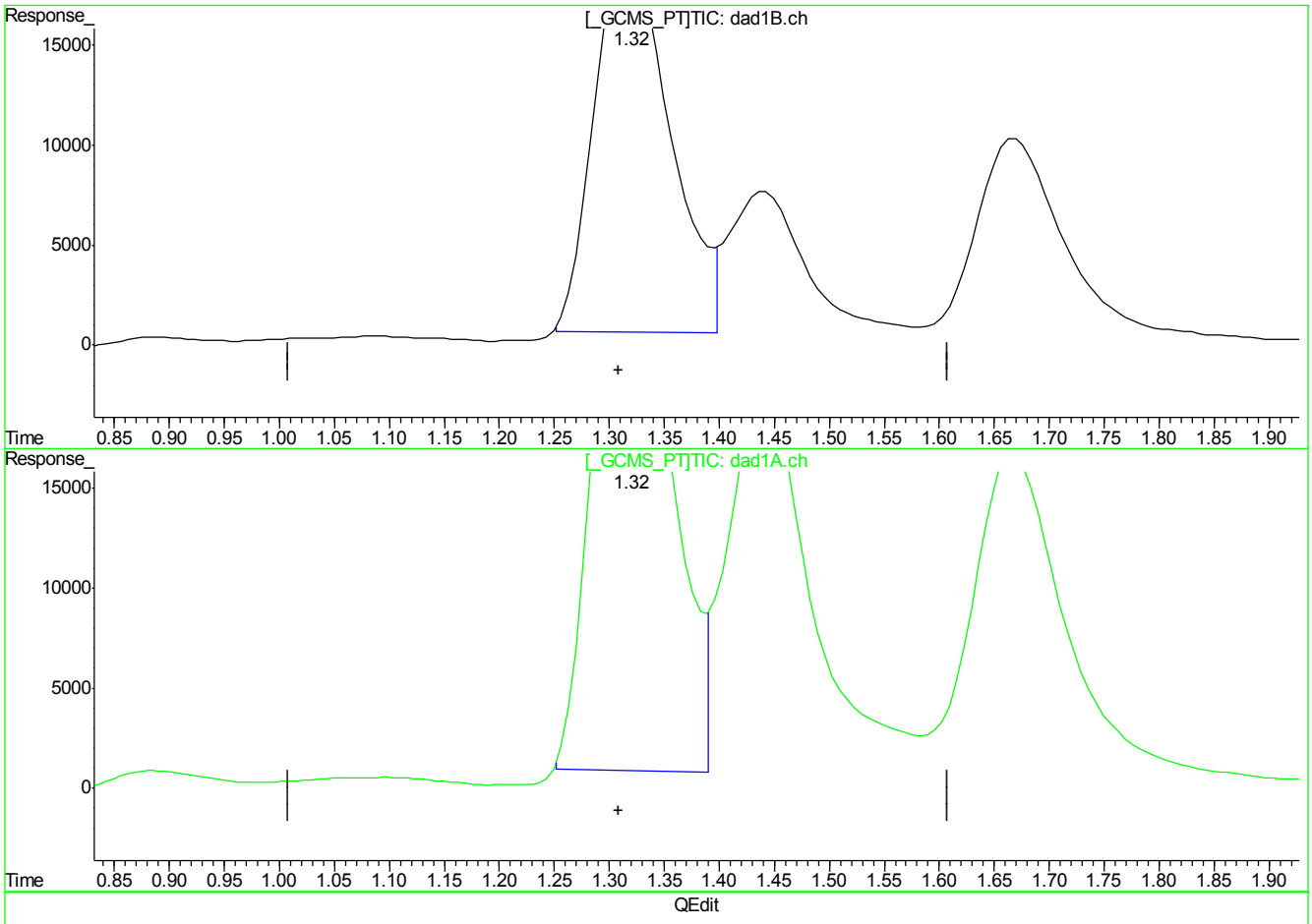
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059467.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 11:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.32	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 181.080ppb

response 918905

(1) TNX #2

1.32min 181.135ppb

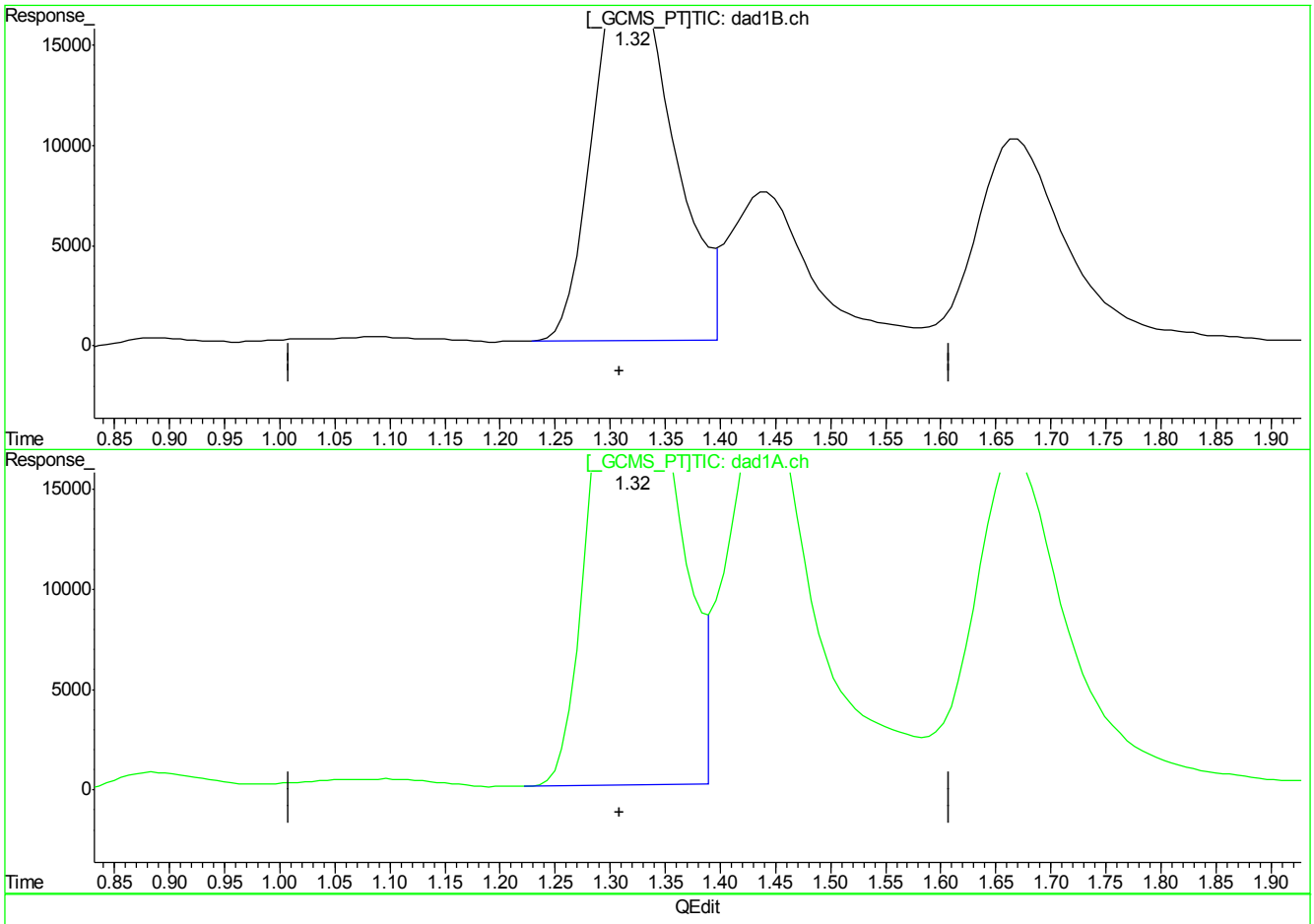
response 1411756

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 191.920ppb m

response 973915

(1) TNX #2

1.32min 185.693ppb m

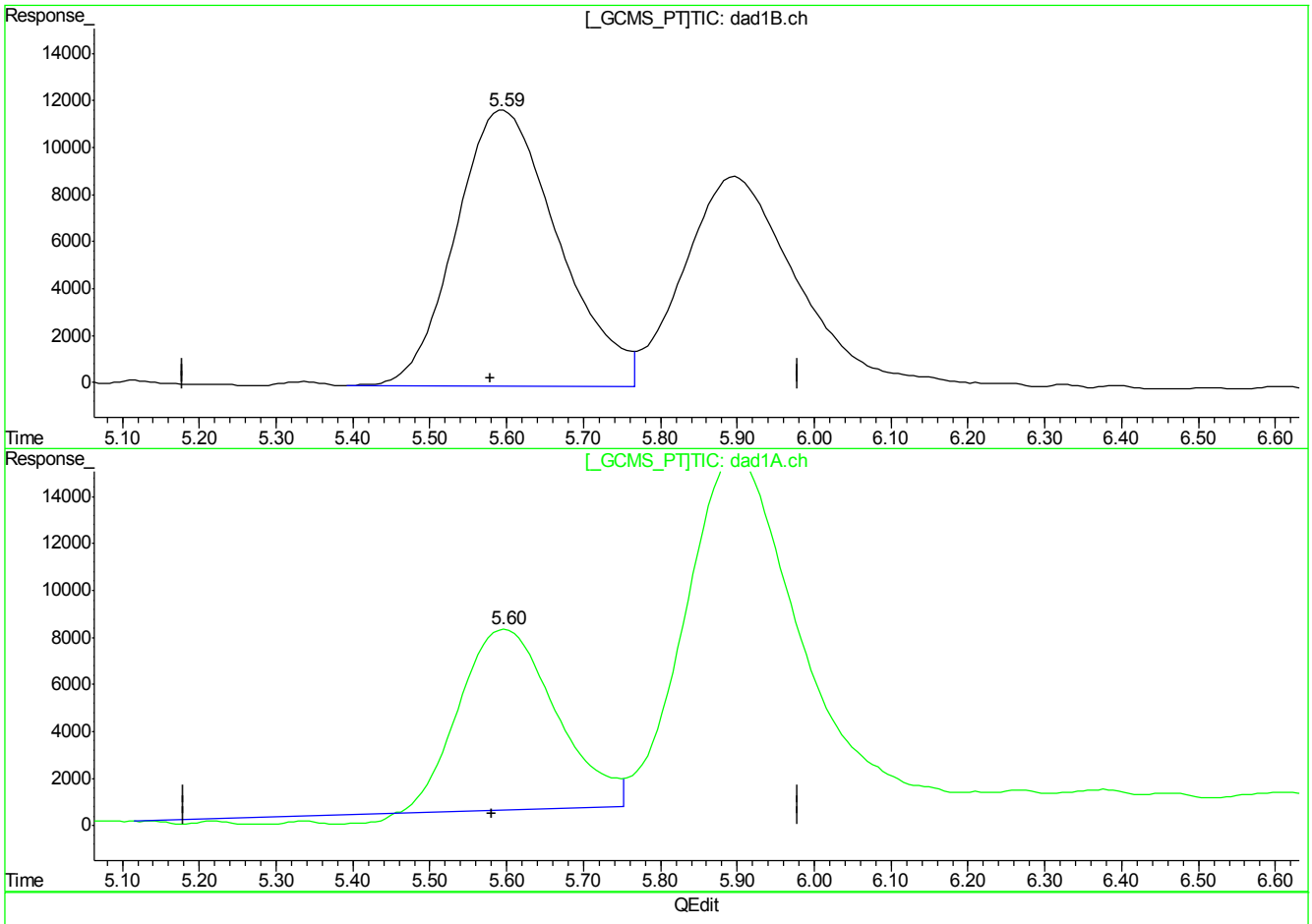
response 1447277

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 178.694ppb

response 1090649

(7) 1,3-Dinitrobenzene #2

5.60min 160.067ppb

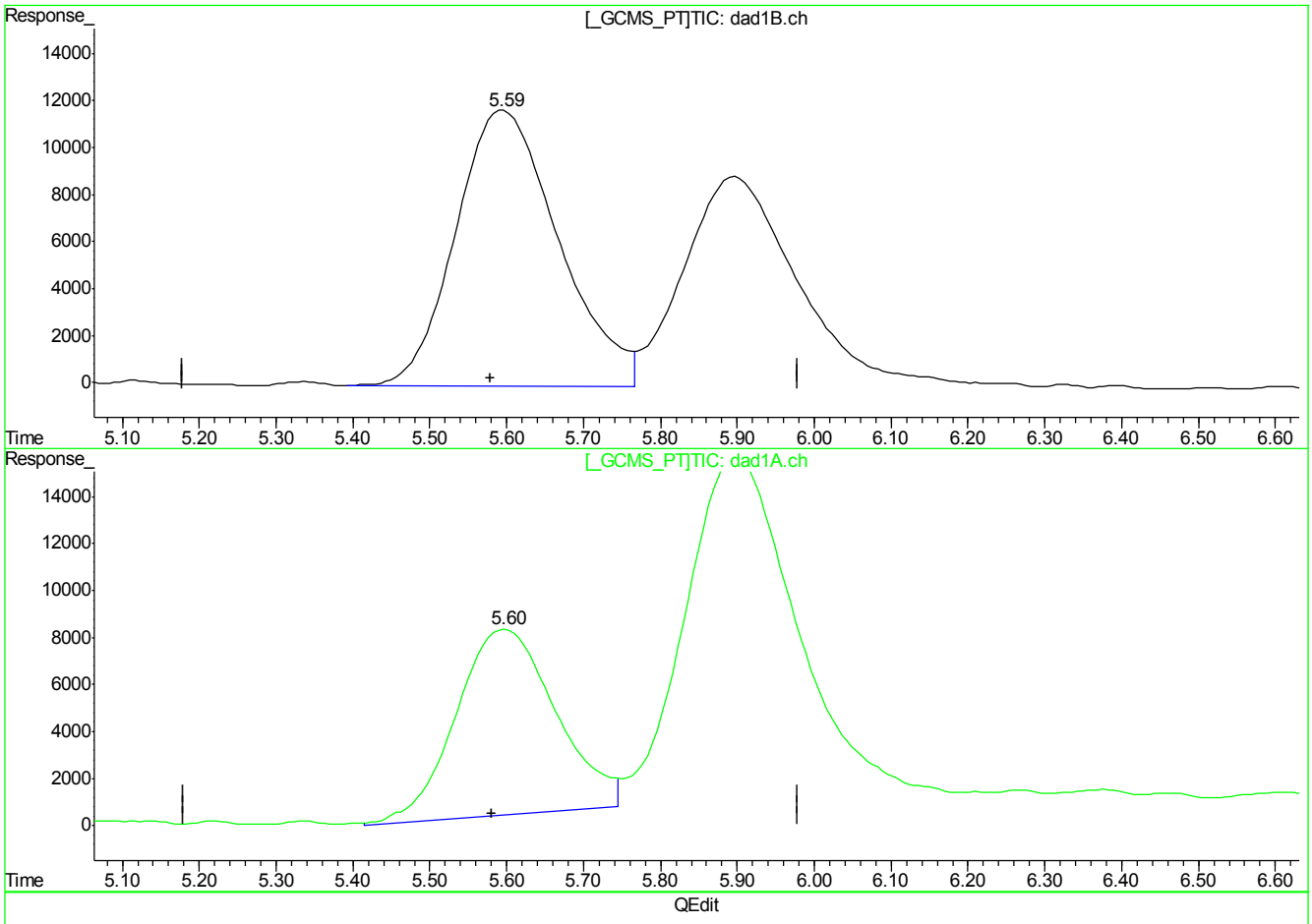
response 630718

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 178.694ppb

response 1090649

(7) 1,3-Dinitrobenzene #2

5.60min 180.973ppb m

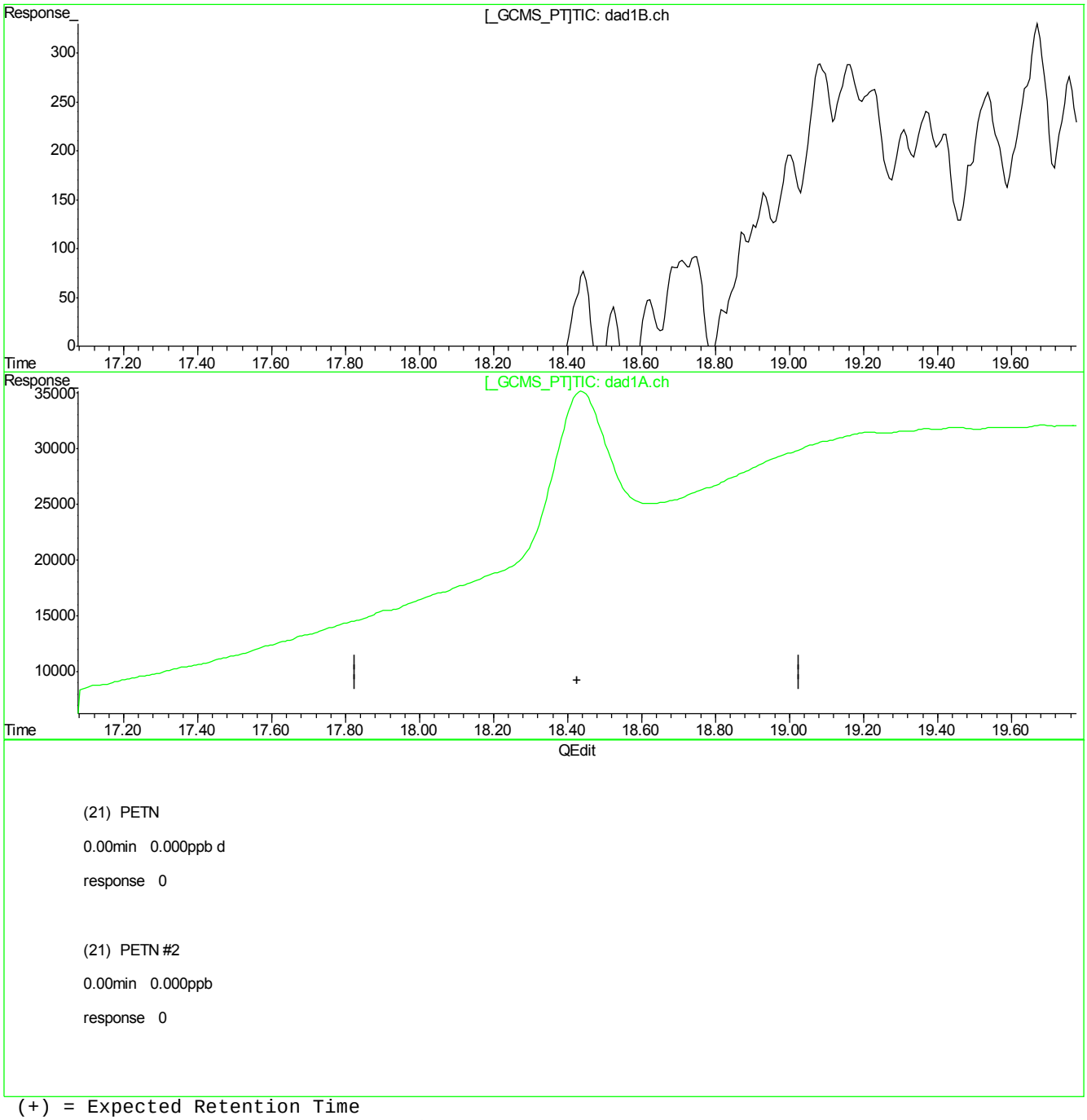
response 713093

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:54 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration

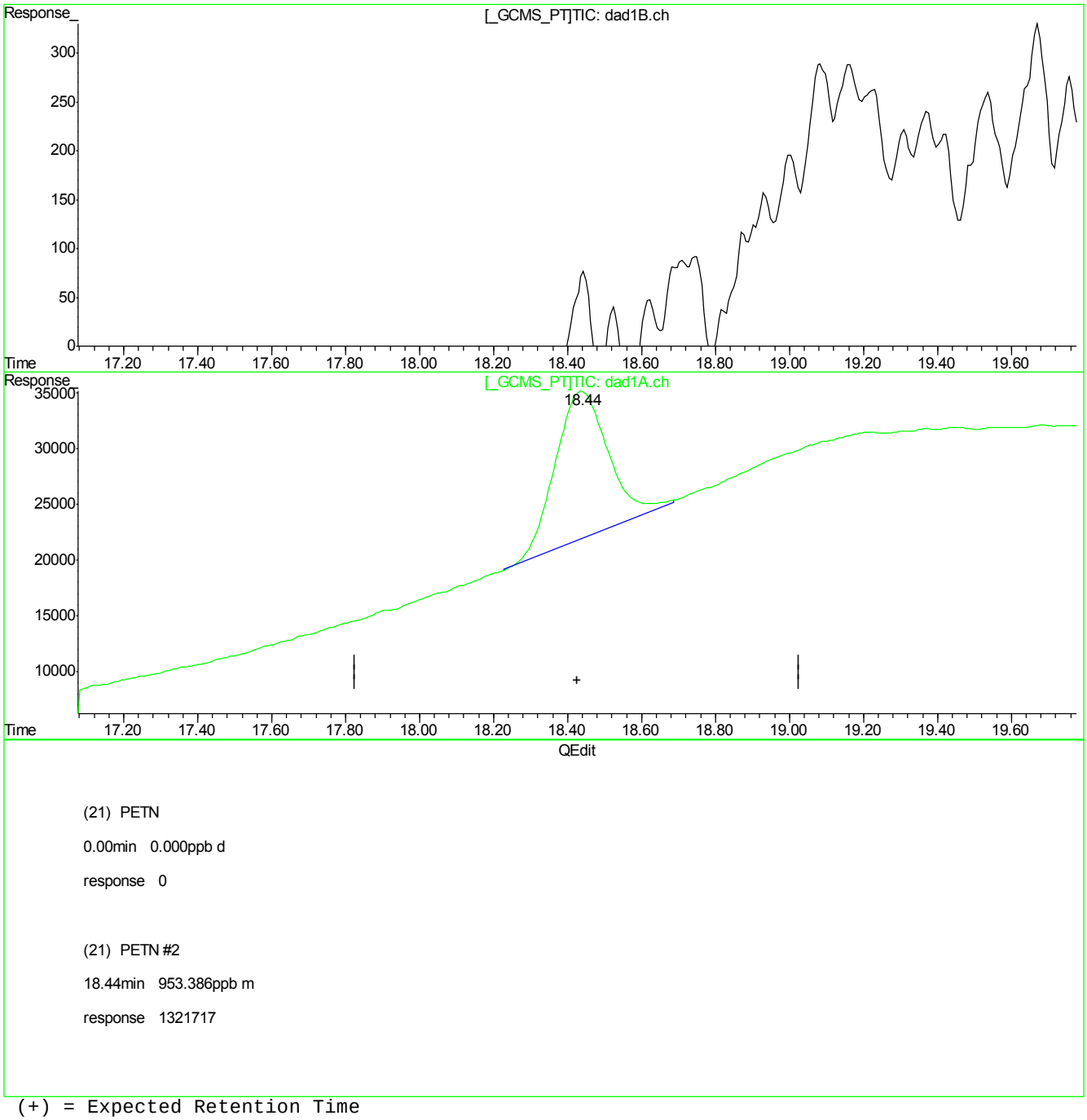


(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:57:05 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.44min 953.386ppb m

response 1321717

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:57:08 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:48 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.32	10.33	1313071	2197124	568.534	527.673
Spiked Amount	500.000	Range	70 - 136	Recovery	=	113.71%	105.53%
	Target Compounds						
1)	TNX	1.31	1.31	2377327	3647073	468.478m	467.938m
2)	HMX	1.44	1.44	935456	2491099	479.850m	473.999m
3)	DNX	1.66	1.66	1433691	2272296	487.028m	478.485m
4)	MNX	2.20	2.20	1478175	2286671	475.405	487.846
5)	RDX	2.77	2.77	990527	1568605	430.703	418.831
6)	1,3,5-Trinitrobe	4.42	4.42	2066563	4004610	418.208	439.446
7)	1,3-Dinitrobenze	5.59	5.59	2679478	1782018	439.010	452.251
8)	3,5-Dinitroanili	5.89	5.89	2324806	3781357	507.077	479.500
9)	Nitrobenzene	7.10	7.10	1671085	1562470	438.019	435.811
10)	Nitroglycerin	0.00	8.39	0	3052703	N.D. d	2306.721
11)	Tetryl	8.71	8.70	1483433	2538597	466.196	495.149
12)	2,4,6-Trinitroto	9.13	9.13	1921592	2303072	532.527	536.958
13)	2-Amino-4,6-Dini	9.45	9.44	1801766	2694209	448.848	484.588
14)	4-Amino-2,6-Dini	9.88	9.88	1344823	2643442	476.547	489.110
16)	2,4-Dinitrotolue	10.98	10.98	2496550	1473568	463.023	441.393
17)	2,6-Dinitrotolue	11.43	11.43	1615025	1831379	491.226	466.979
18)	o-Nitrotoluene	14.69	14.69	1143442	1552232	457.959	425.553m
19)	p-Nitrotoluene	15.27	15.27	1852819	1583340	500.801	500.315
20)	m-Nitrotoluene	16.24	16.24	1685984	1985596	456.981	457.869
21)	PETN	0.00	18.43	0	3450516	N.D. d	2488.940m

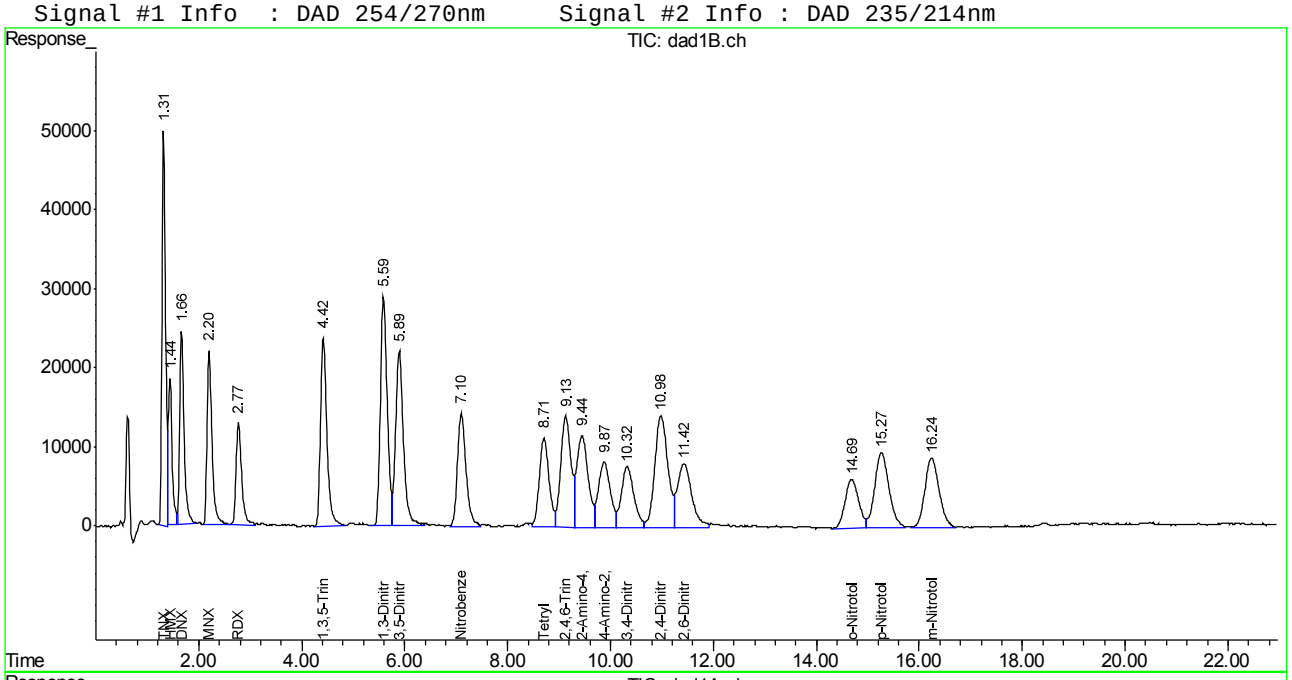
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059468.D 8330B_0419PLUS.M Fri Apr 20 08:01:22 2018 Page 1

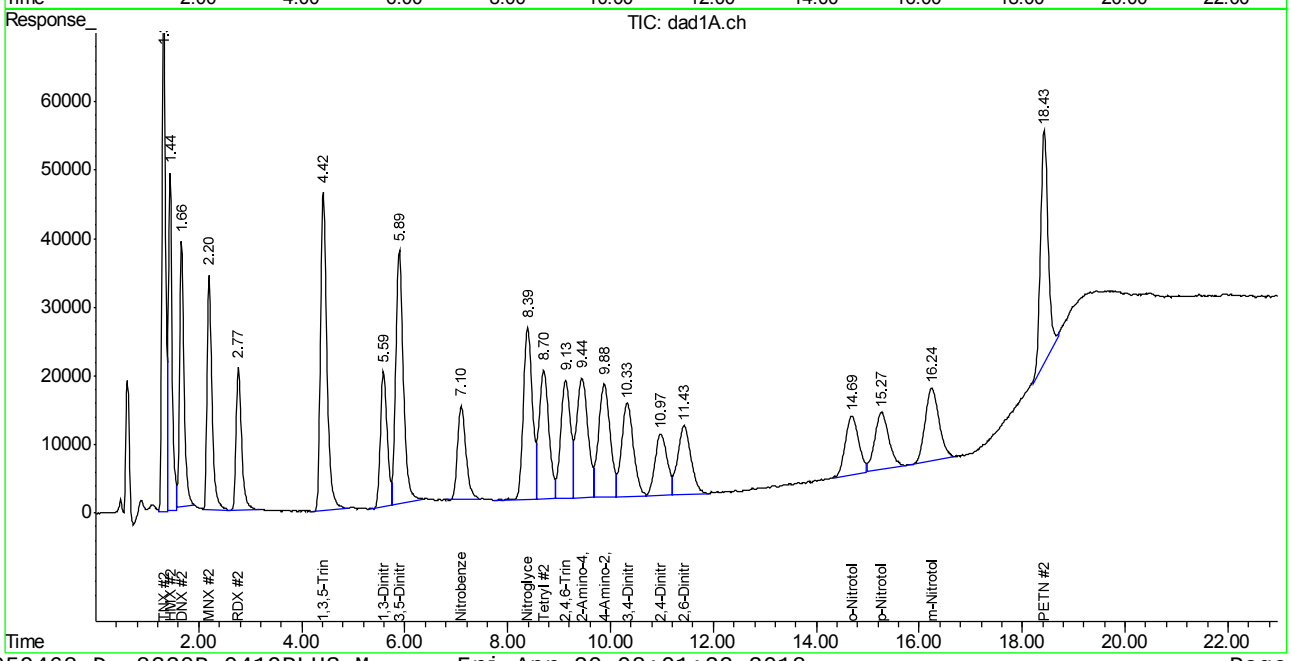
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:58 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

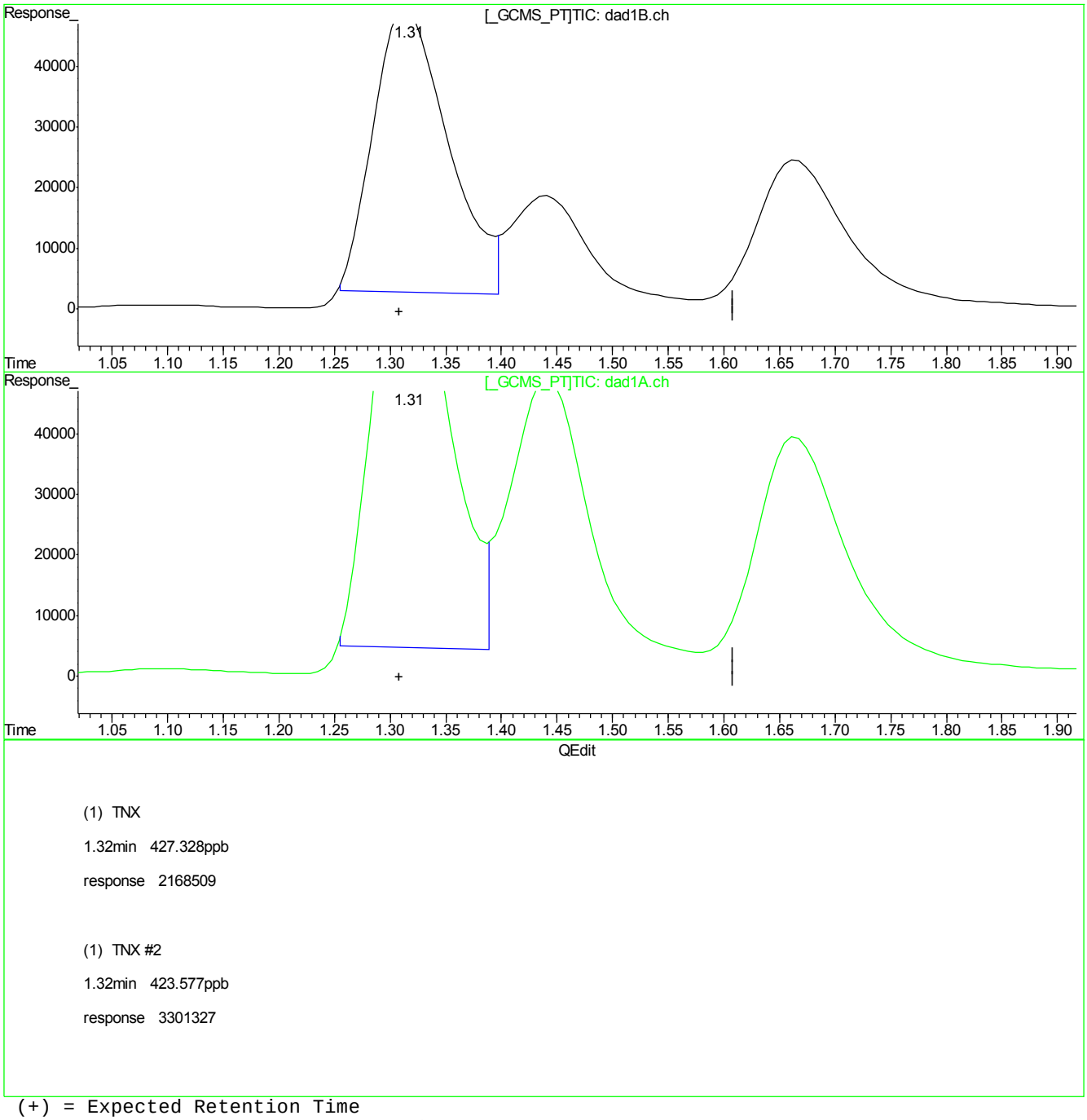
Sample Number:	GBB1722-ICC1722	**Method:**	SW846 8330B
Lab FileID:	BB059468.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 12:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.69	Poorly defined baseline
PETN	78-11-5	2	18.43	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 427.328ppb

response 2168509

(1) TNX #2

1.32min 423.577ppb

response 3301327

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:20 2018

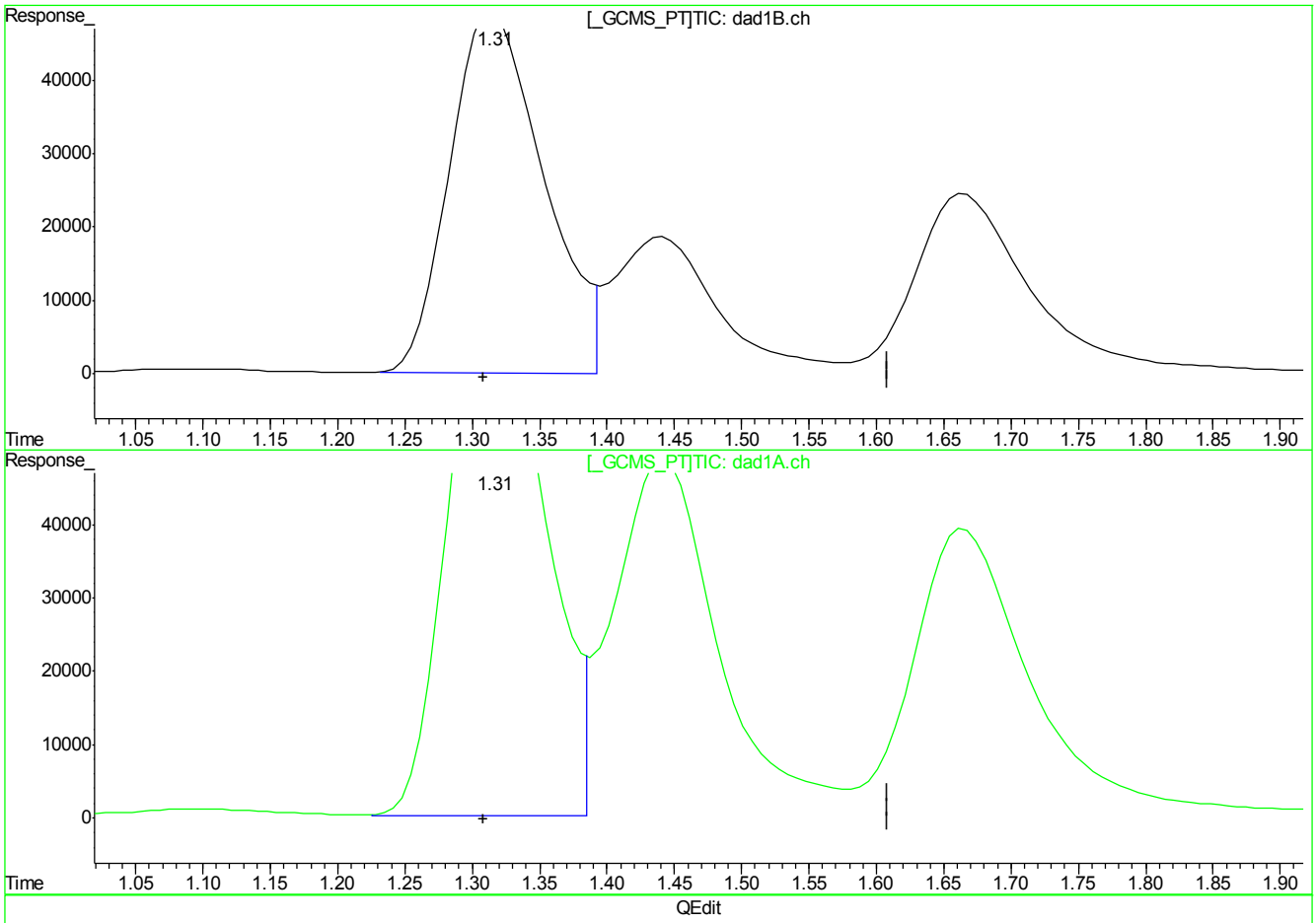
7.7.5.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 468.478ppb m

response 2377327

(1) TNX #2

1.31min 467.938ppb m

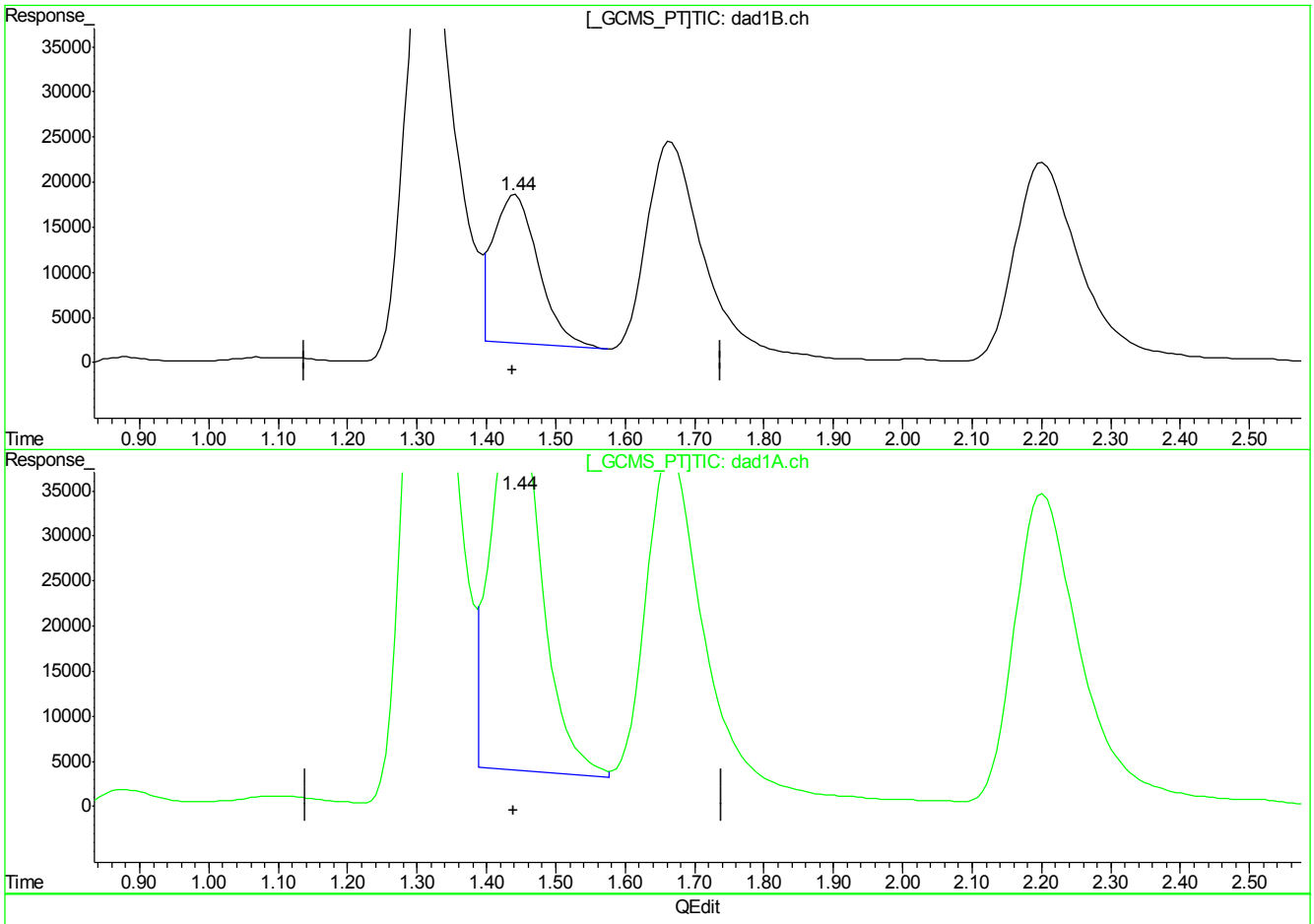
response 3647073

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 394.488ppb

response 769046

(2) HMX #2

1.44min 414.745ppb

response 2179694

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:31 2018

7.7.5.4

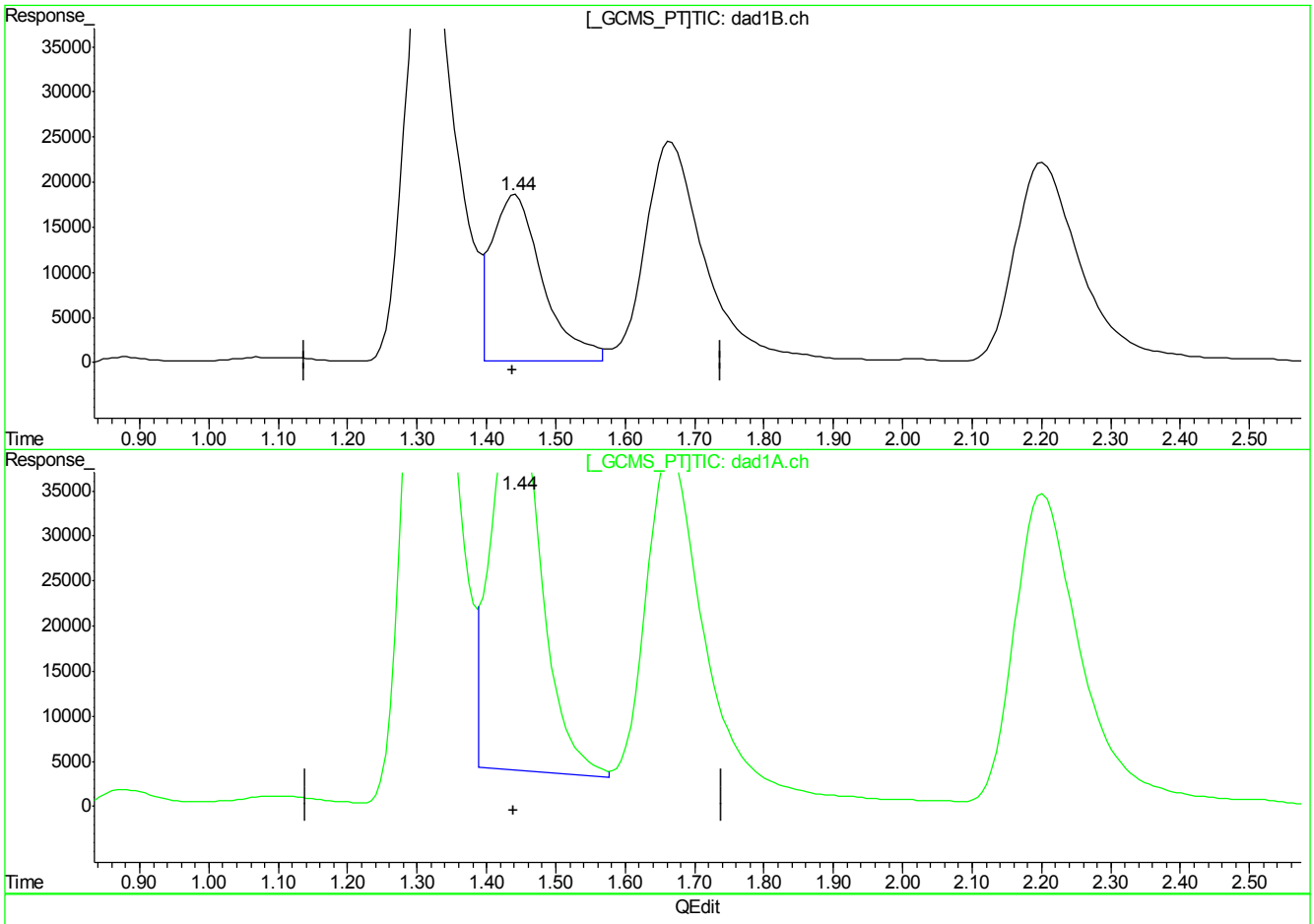
7

BB059468.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 479.850ppb m

response 935456

(2) HMX #2

1.44min 414.745ppb

response 2179694

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:38 2018

7.7.5.5

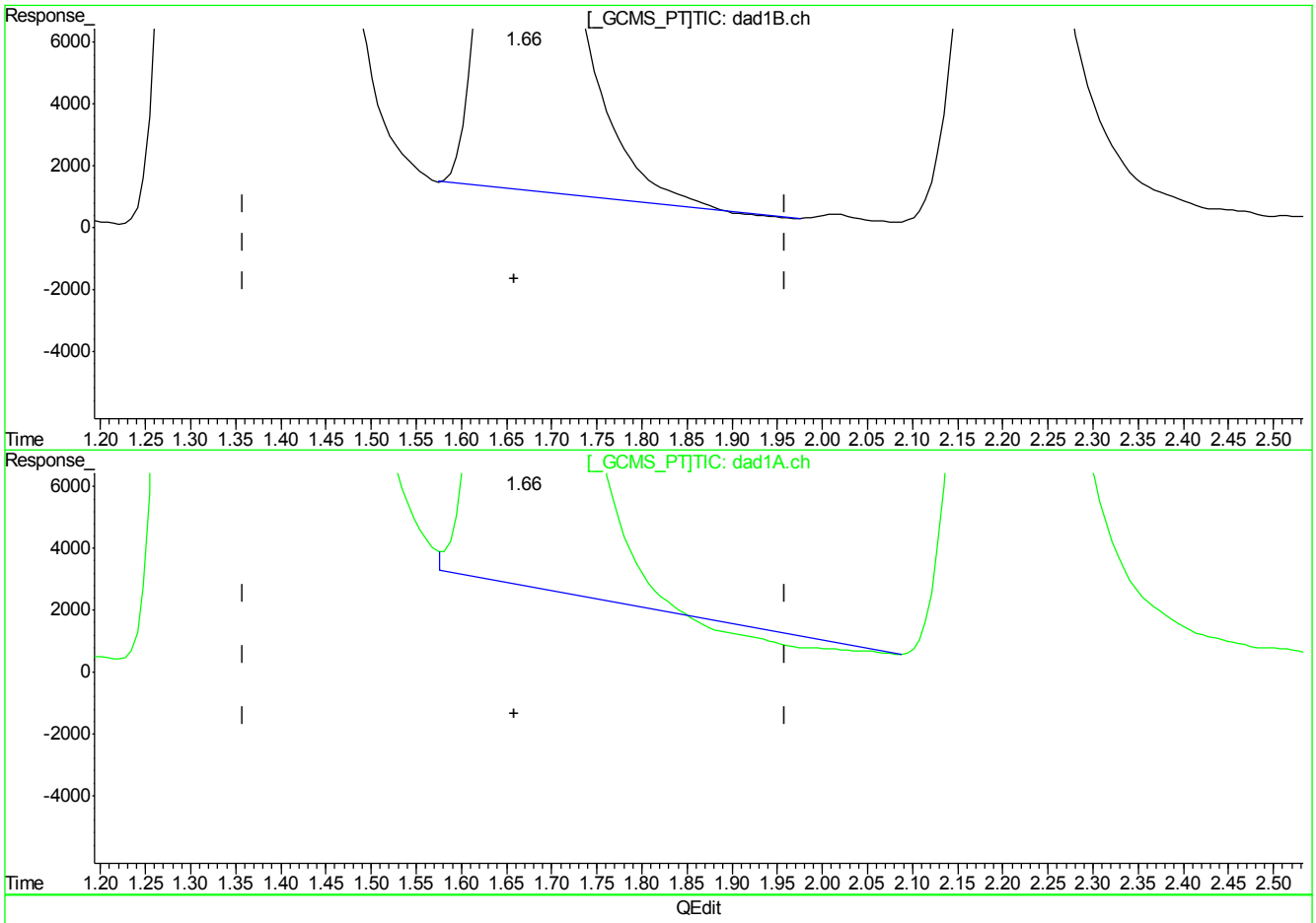
7

BB059468.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 437.099ppb

response 1287636

(3) DNX #2

1.67min 414.701ppb

response 1971141

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:55 2018

7.7.5.9

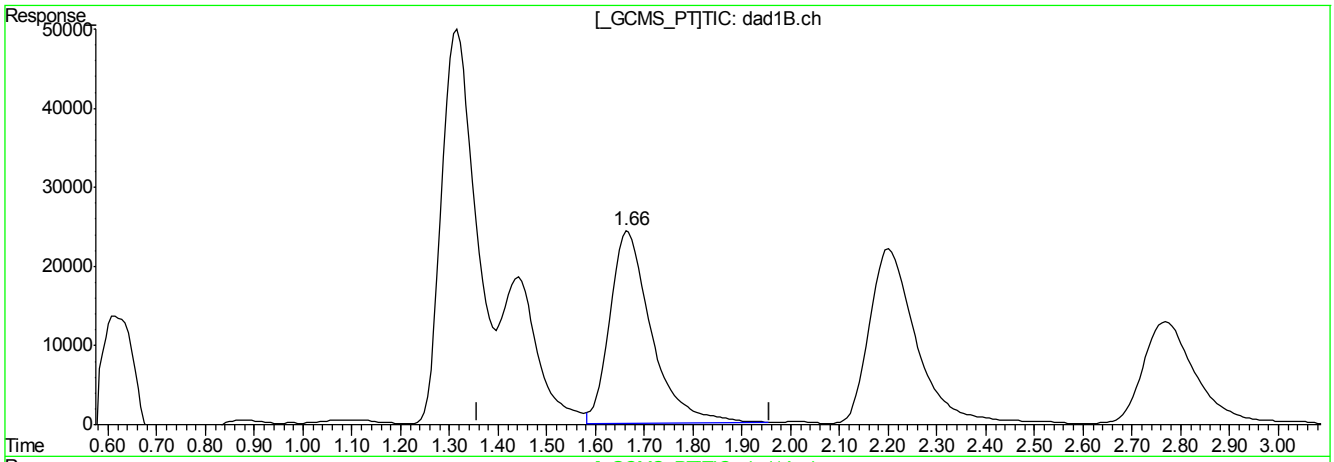
7

BB059468.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 487.028ppb m

response 1433691

(3) DNX #2

1.66min 478.485ppb m

response 2272296

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:13 2018

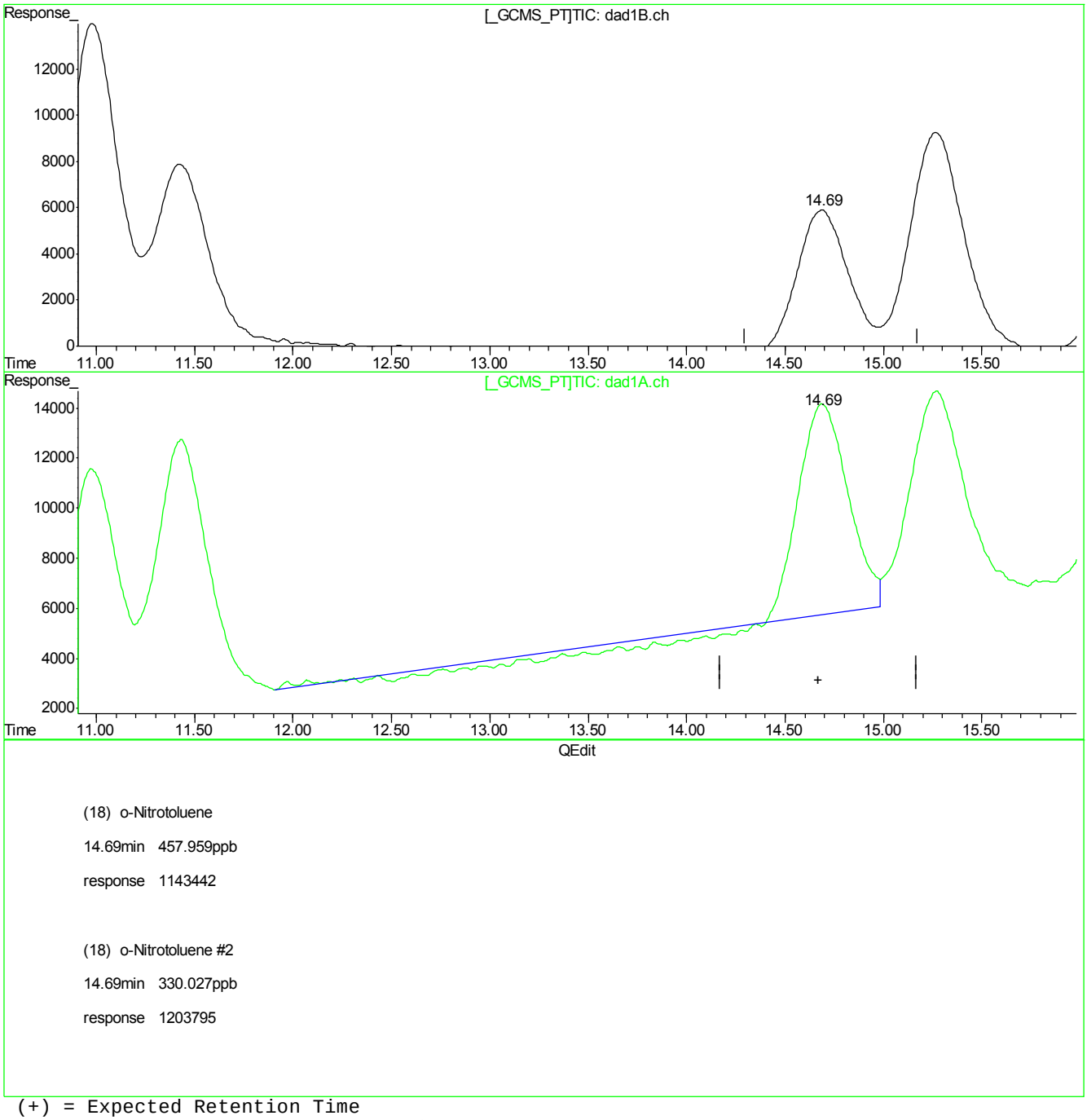
7.7.5.7

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 457.959ppb

response 1143442

(18) o-Nitrotoluene #2

14.69min 330.027ppb

response 1203795

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:29 2018

7.7.5.8

7

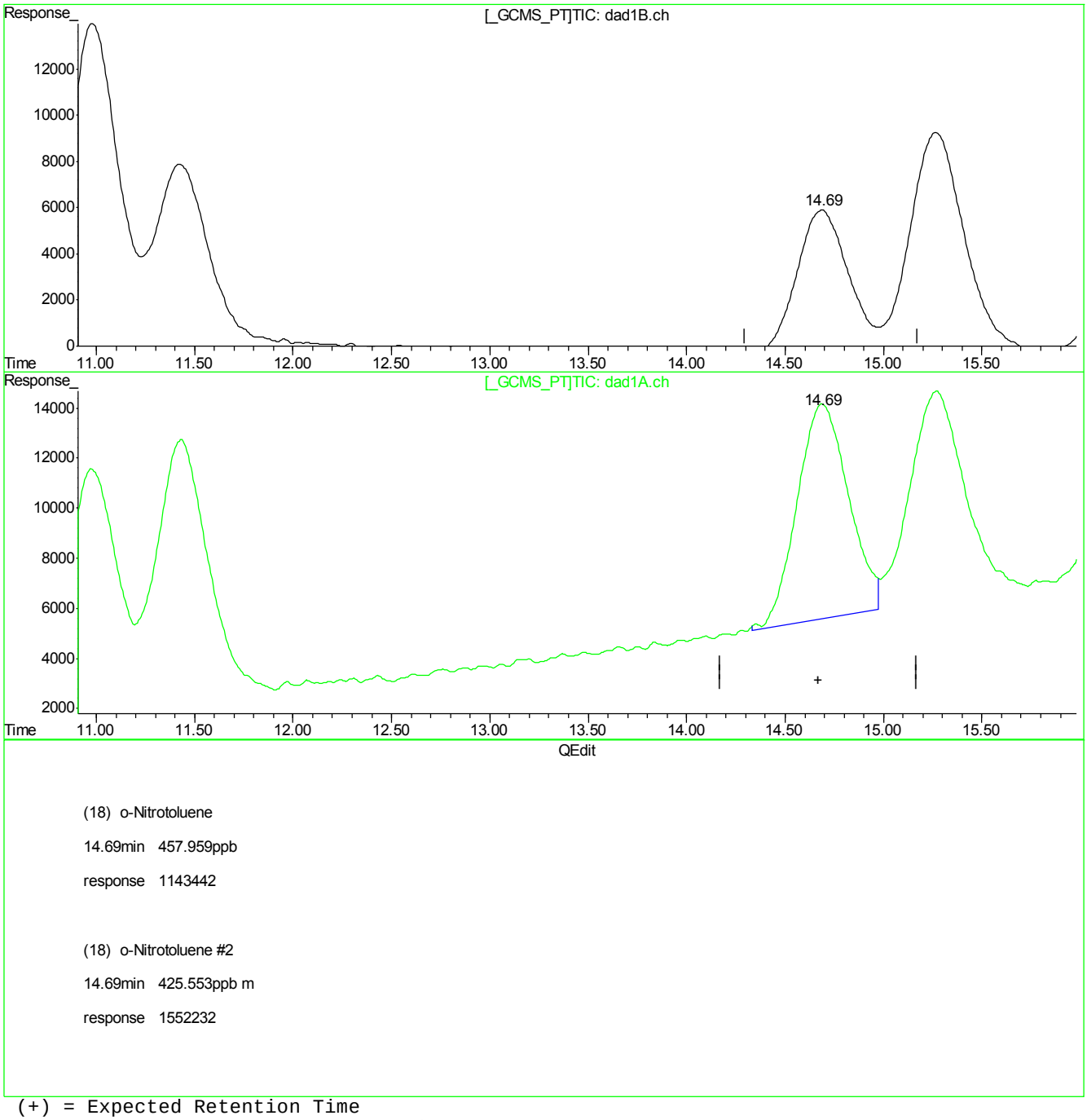
FA53800

BB059468.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 457.959ppb

response 1143442

(18) o-Nitrotoluene #2

14.69min 425.553ppb m

response 1552232

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:36 2018

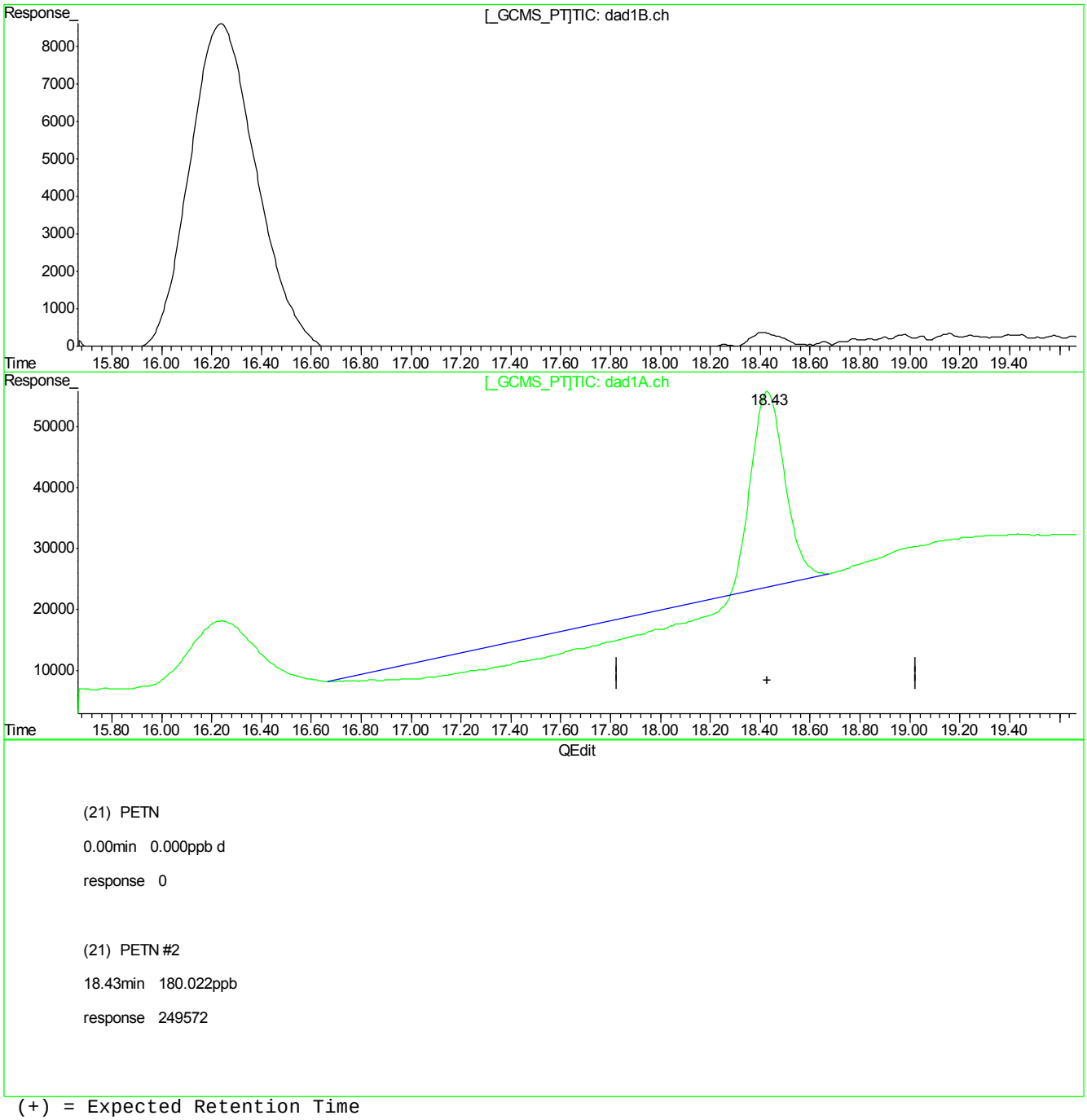
7.7.5.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:40 2018

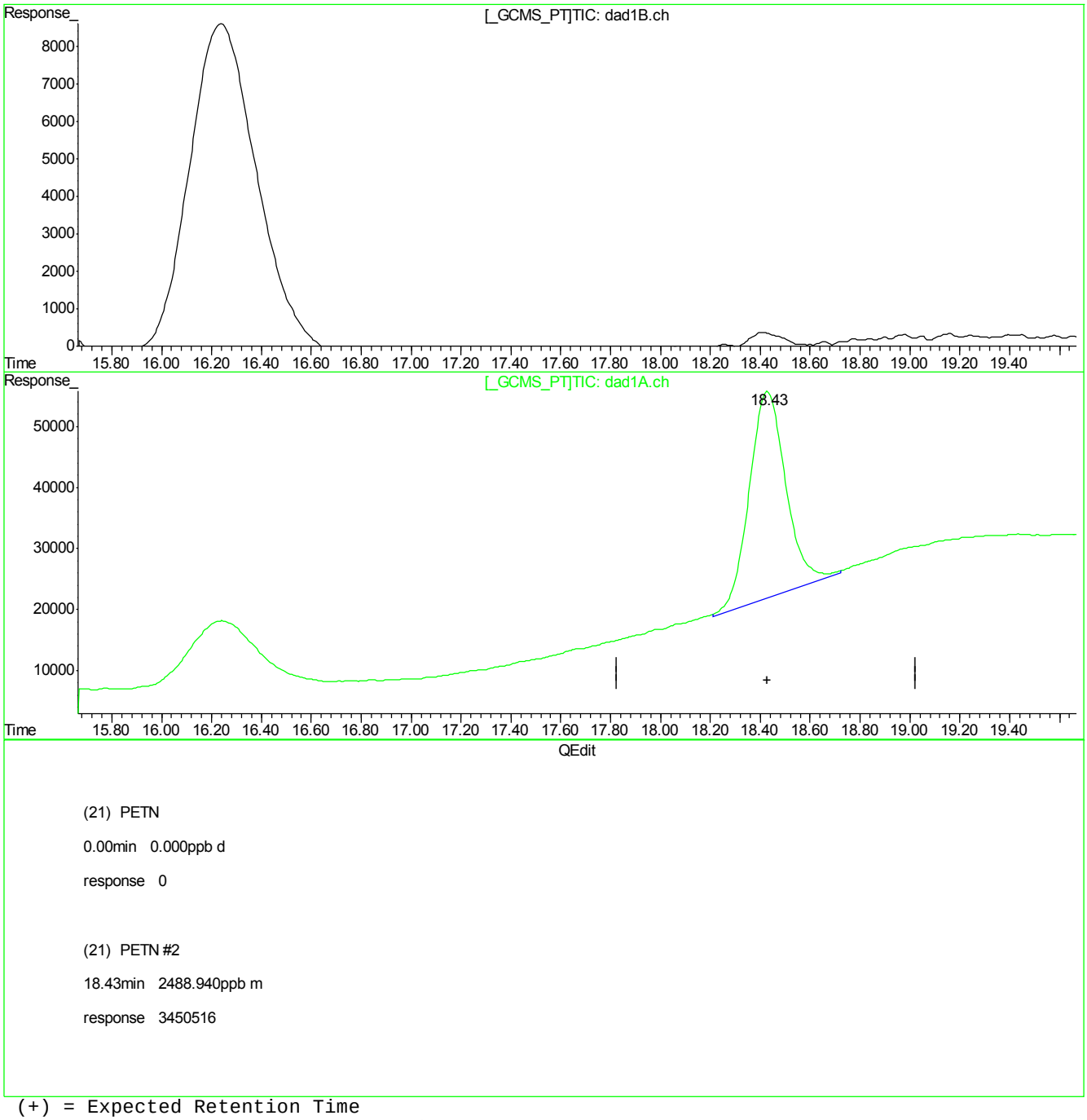
7.7.5.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:43 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:49 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.31	10.31	2452926	4465153	1062.069	1072.376
	Spiked Amount 500.000	Range 70 - 136		Recovery =		212.41%#	214.48%#
	Target Compounds						
1)	TNX	1.31	1.31	4711834	7502705	928.517m	962.635m
2)	HMX	1.44	1.44	1896985	5080506	973.074m	966.703m
3)	DNX	1.66	1.66	2865864	4744960	980.493m	1006.582m
4)	MNX	2.20	2.20	2935667	4563791	944.158	973.654
5)	RDX	2.76	2.76	1949428	3115738	855.536	831.929
6)	1,3,5-Trinitrobe	4.41	4.41	4162990	8095208	842.461	888.329
7)	1,3-Dinitrobenze	5.58	5.58	5312977	3567135	870.487	905.285
8)	3,5-Dinitroanili	5.88	5.88	4615207	7569126	1006.649	959.813
9)	Nitrobenzene	7.09	7.09	3234435	3092232	847.799	862.498
10)	Nitroglycerin	0.00	8.38	0	6065549	N.D. d	4583.325
11)	Tetryl	8.70	8.70	2900724	5089762	911.605	992.750
12)	2,4,6-Trinitroto	9.12	9.12	3740946	4634286	1036.721	1080.478
13)	2-Amino-4,6-Dini	9.43	9.43	3532796	5448944	880.074	980.062
14)	4-Amino-2,6-Dini	9.86	9.86	2590690	5369582	918.028	993.522
16)	2,4-Dinitrotolue	10.97	10.97	4825667	3112957	894.994	932.455
17)	2,6-Dinitrotolue	11.41	11.42	2946410	3691393	896.181	941.259
18)	o-Nitrotoluene	14.68	14.67	2268482	3070855	908.548	841.892m
19)	p-Nitrotoluene	15.26	15.26	3723769	3115857	1006.502	984.570
20)	m-Nitrotoluene	16.23	16.23	3438848	3990421	932.090	920.173
21)	PETN	0.00	18.43	0	6778199	N.D. d	4889.277m

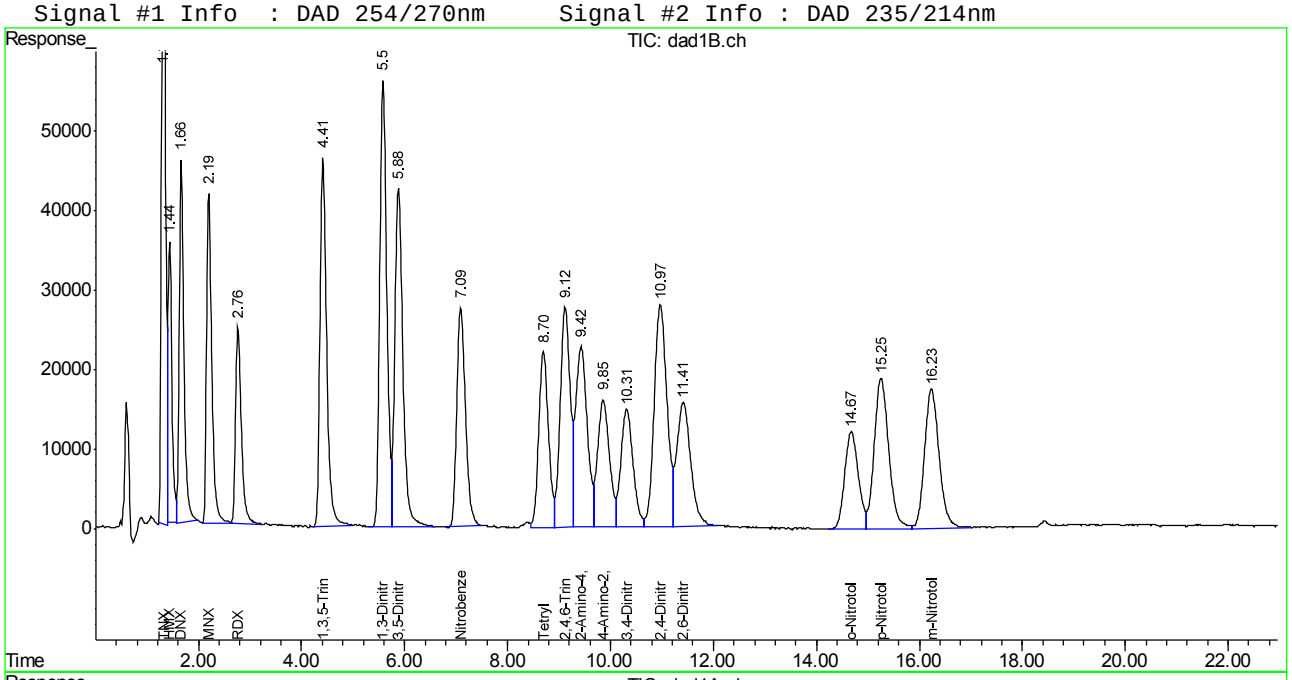
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059469.D 8330B_0419PLUS.M Fri Apr 20 08:01:23 2018 Page 1

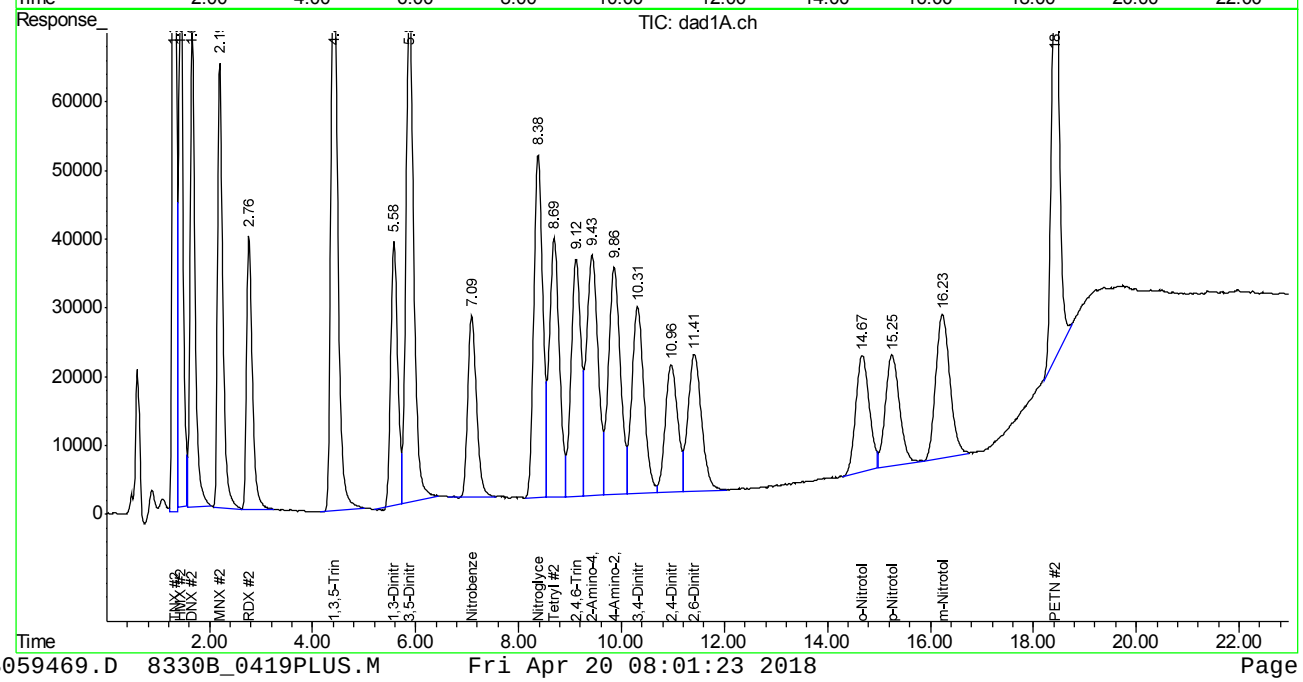
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:00 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

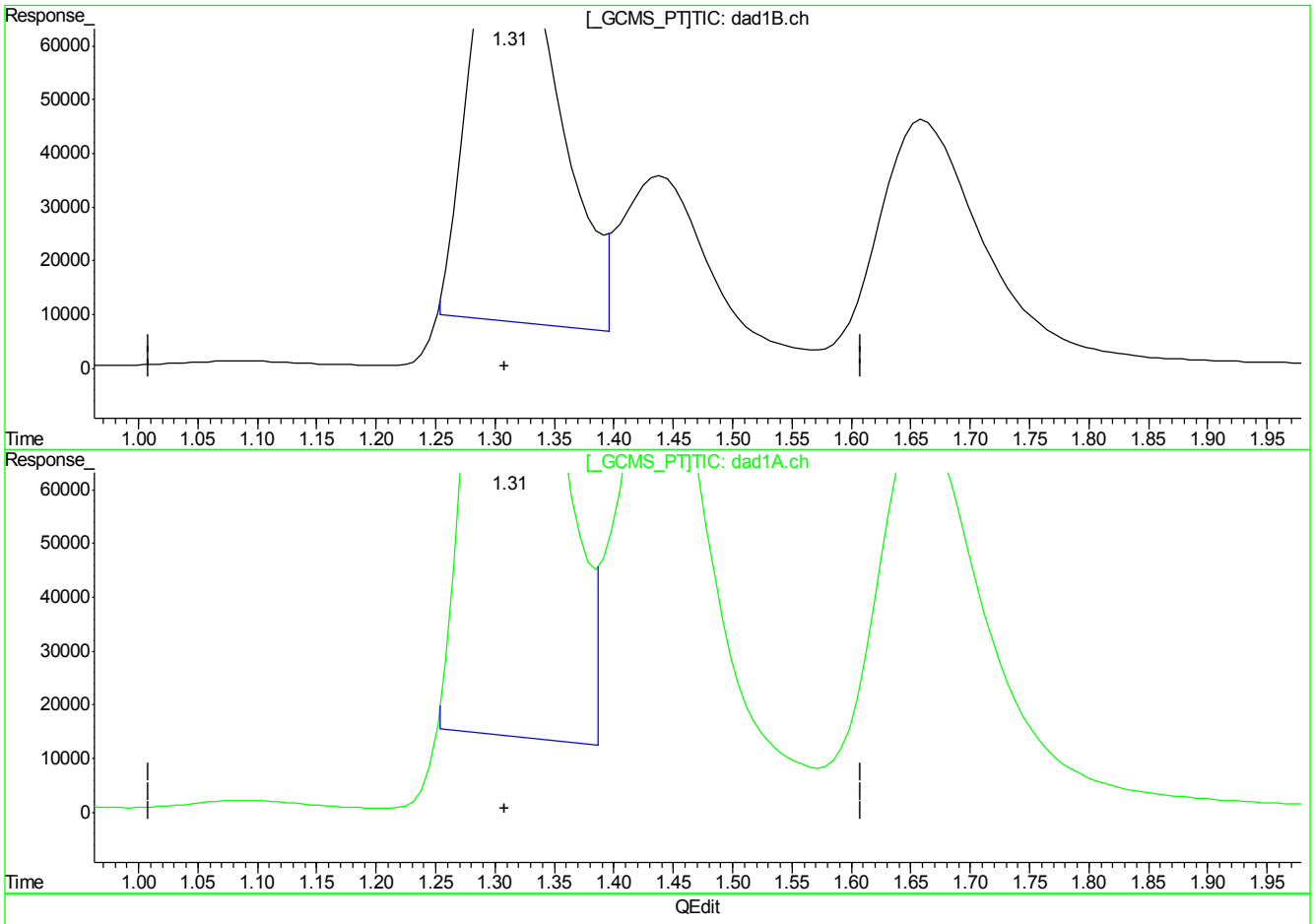
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059469.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 12:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.67	Poorly defined baseline
PETN	78-11-5	2	18.43	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 800.355ppb

response 4061464

(1) TNX #2

1.31min 788.203ppb

response 6143200

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:58:57 2018

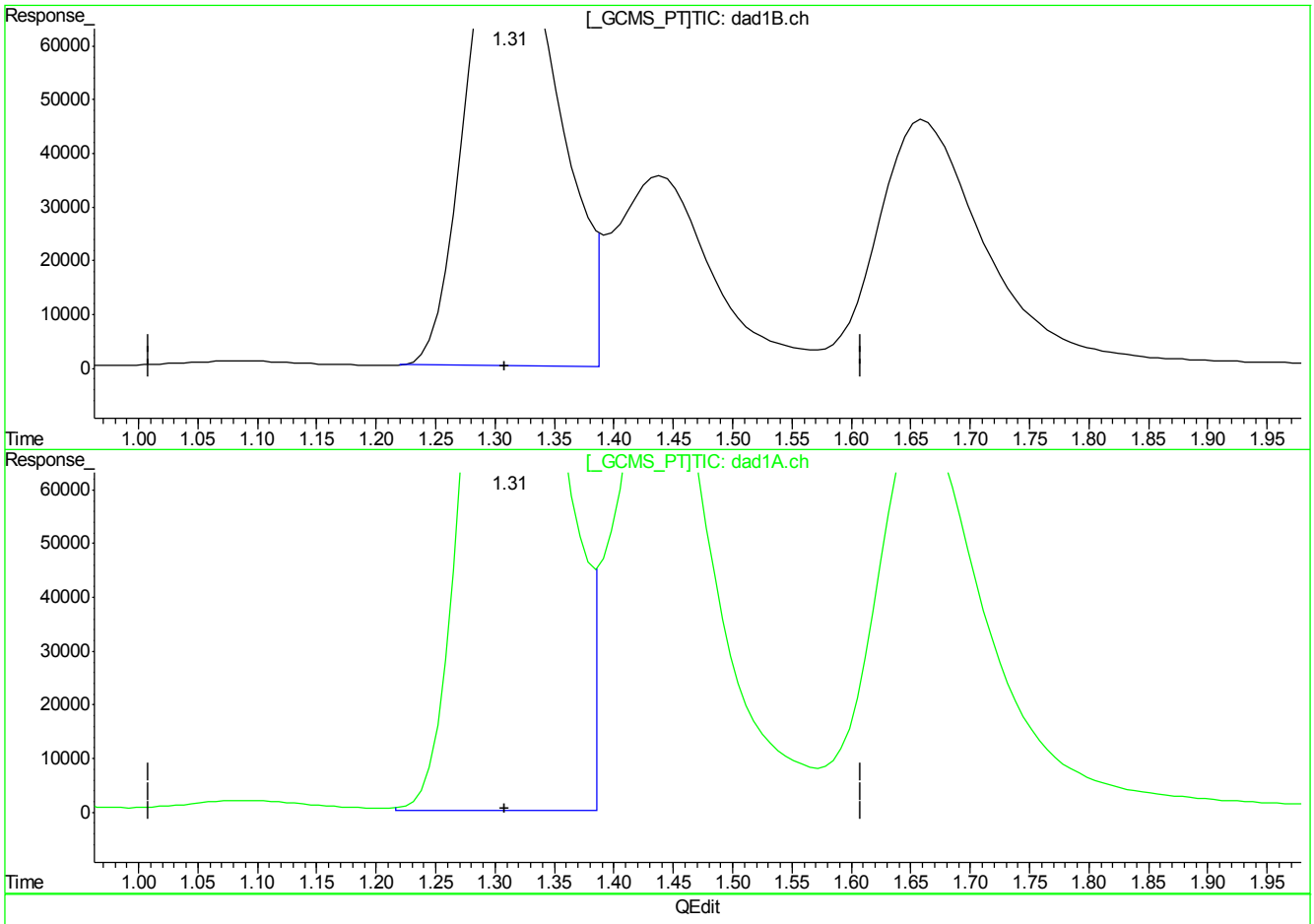
7.7.6.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 928.517ppb m

response 4711834

(1) TNX #2

1.31min 962.635ppb m

response 7502705

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:03 2018

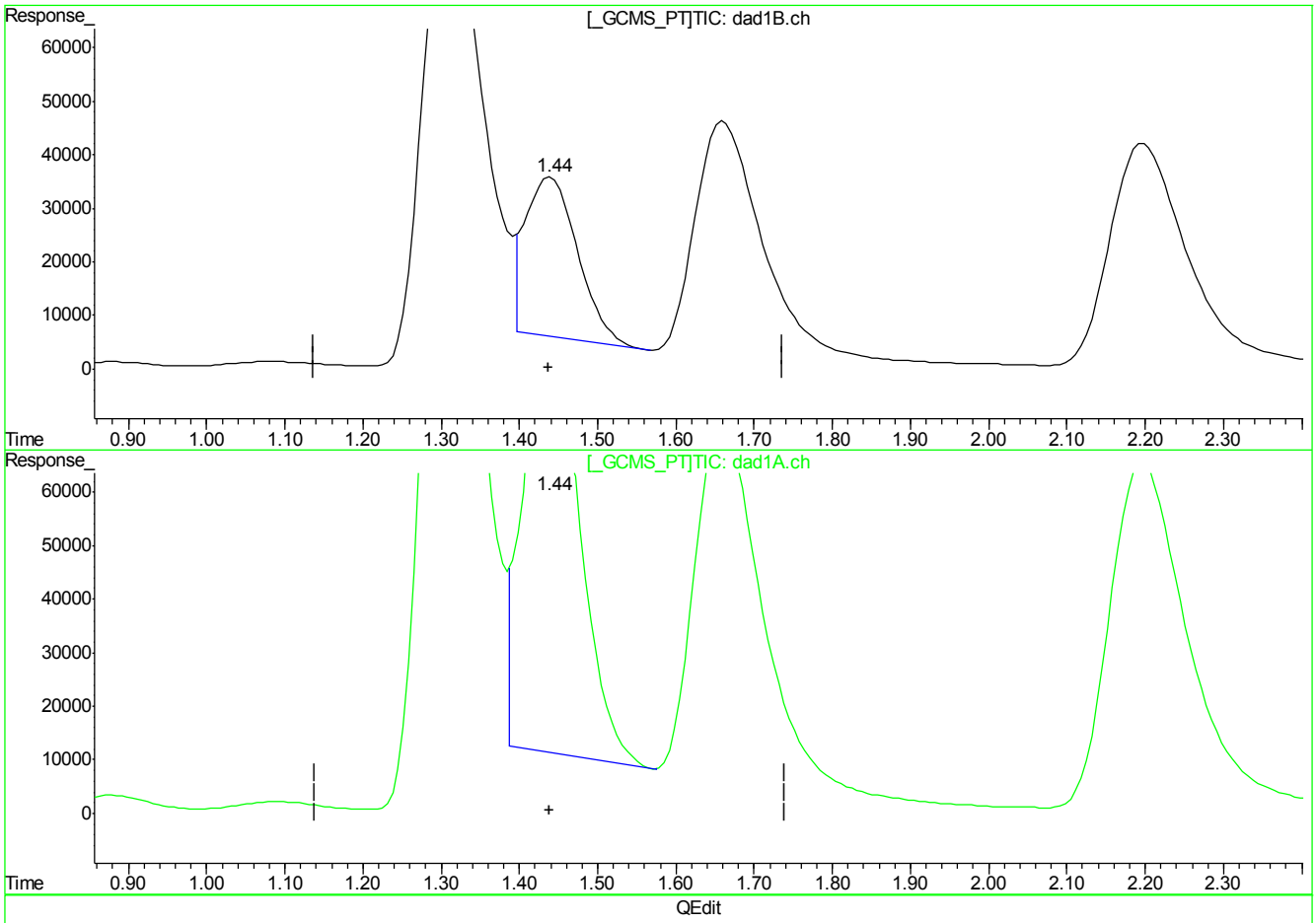
7.7.6.3

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 726.666ppb

response 1416618

(2) HMX #2

1.44min 773.768ppb

response 4066540

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:06 2018

7.7.6.4

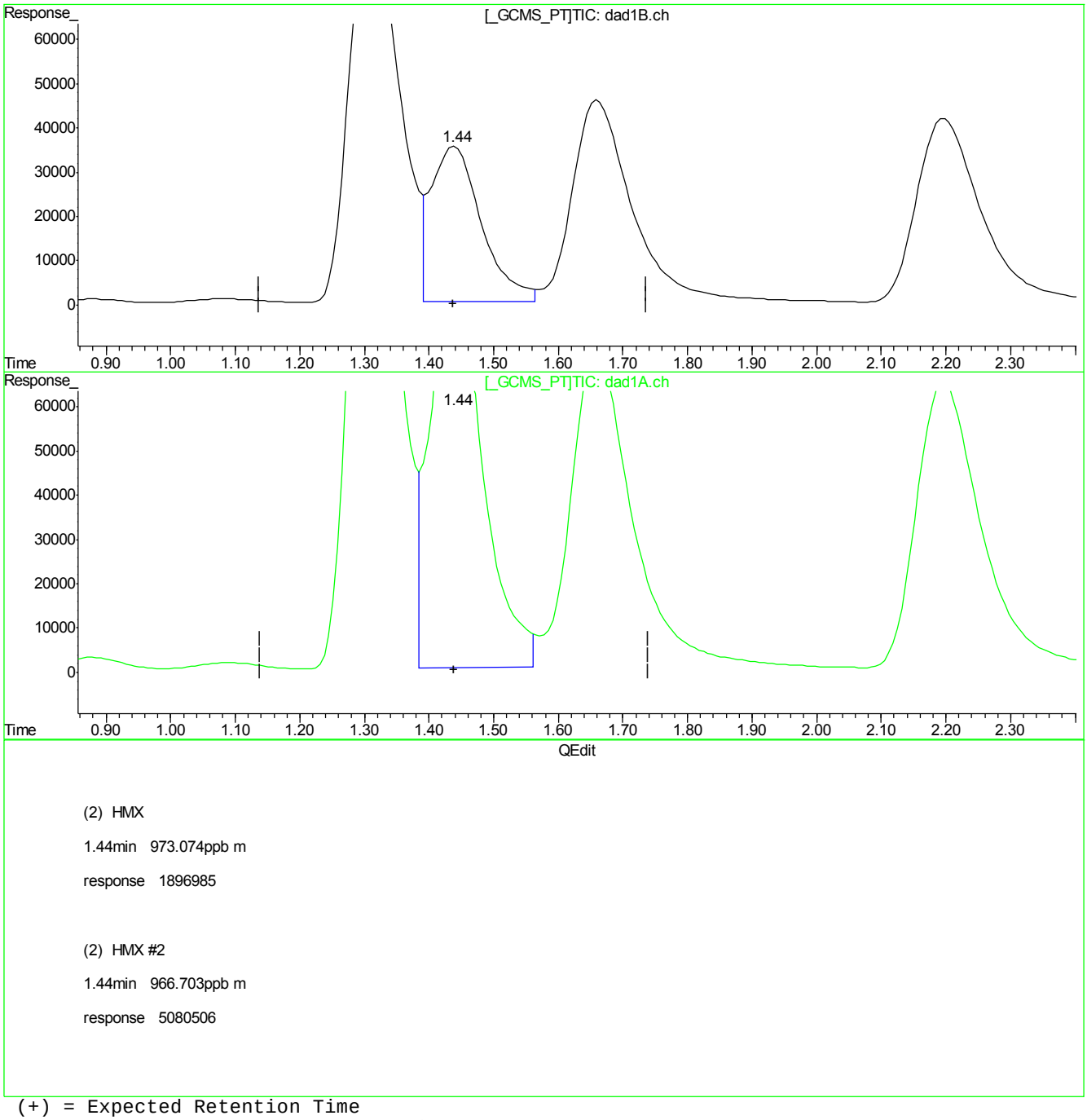
7

BB059469.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration

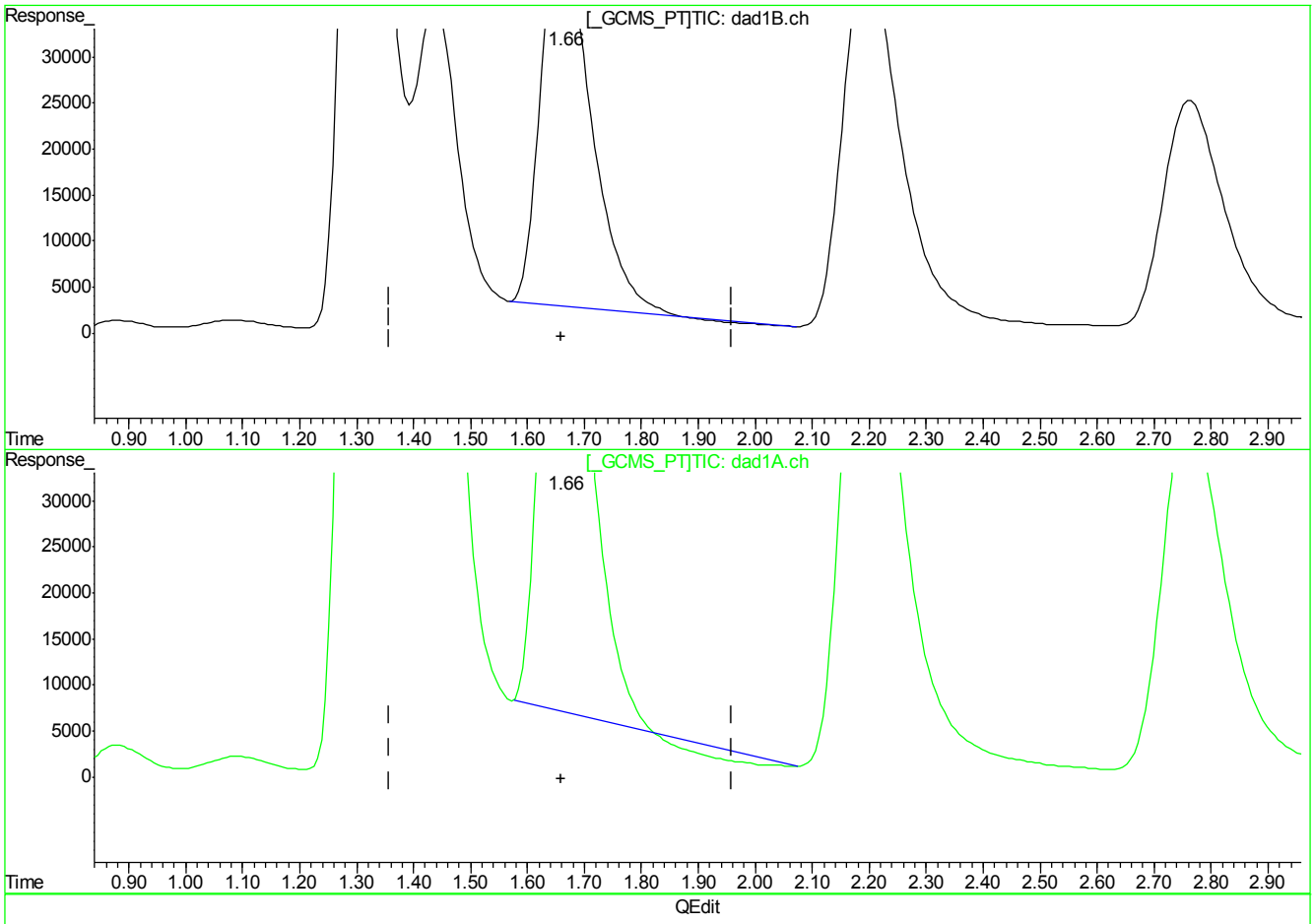


(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:30 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 863.341ppb

response 2527721

(3) DNX #2

1.66min 781.314ppb

response 3694727

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:33 2018

7.7.6.9

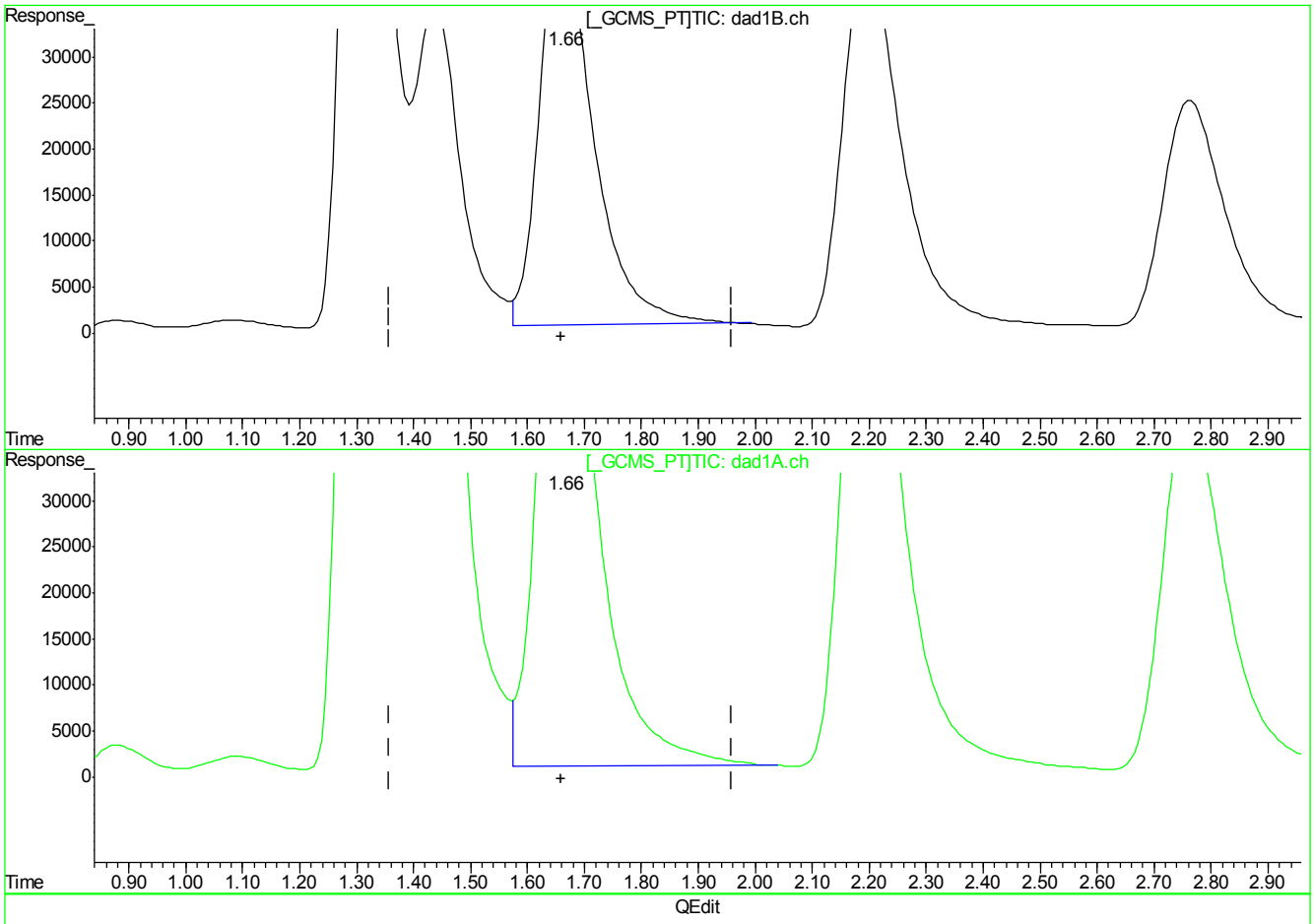
7

BB059469.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 980.493ppb m

response 2865864

(3) DNX #2

1.66min 1006.582ppb m

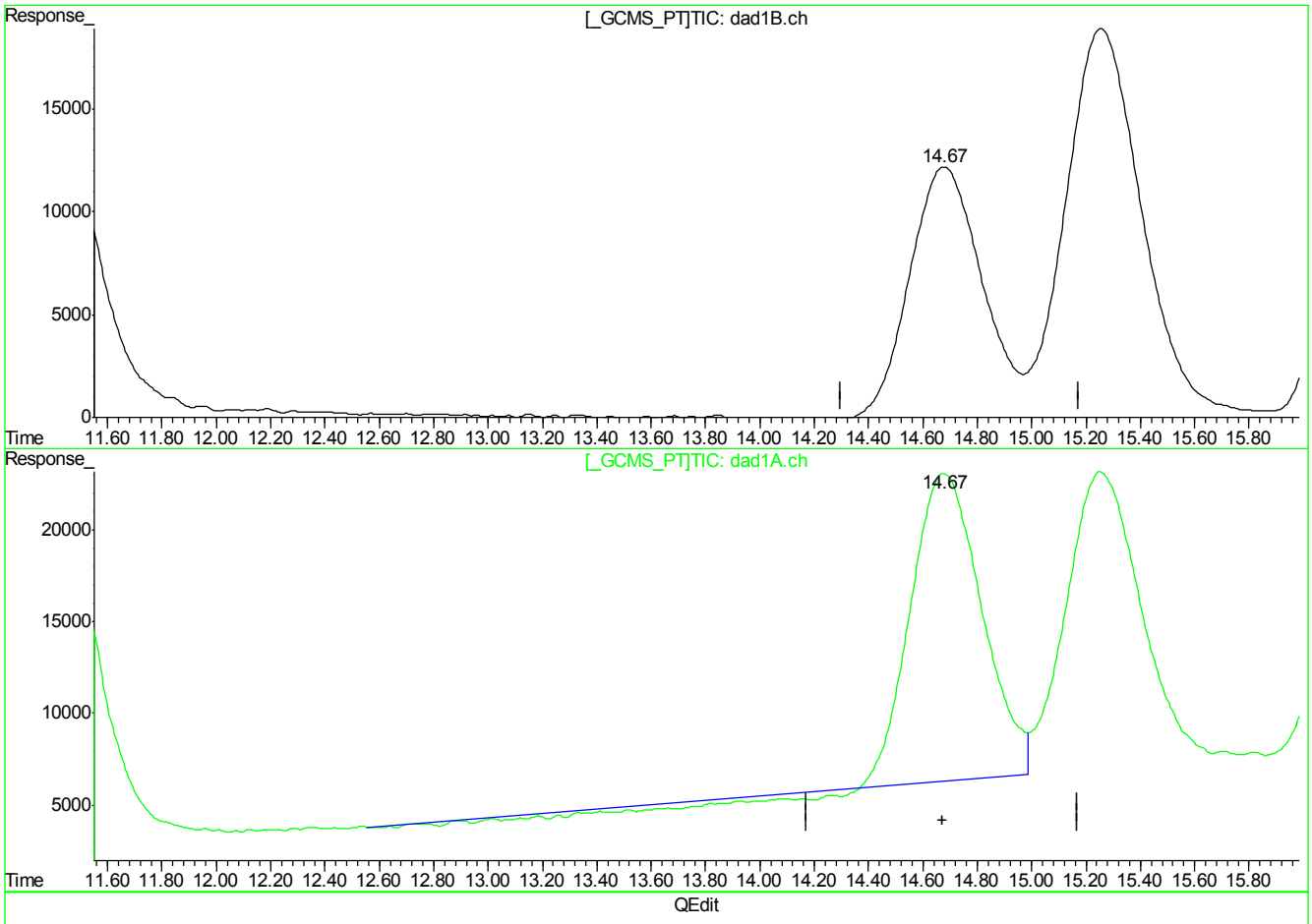
response 4744960

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 908.548ppb

response 2268482

(18) o-Nitrotoluene #2

14.68min 775.181ppb

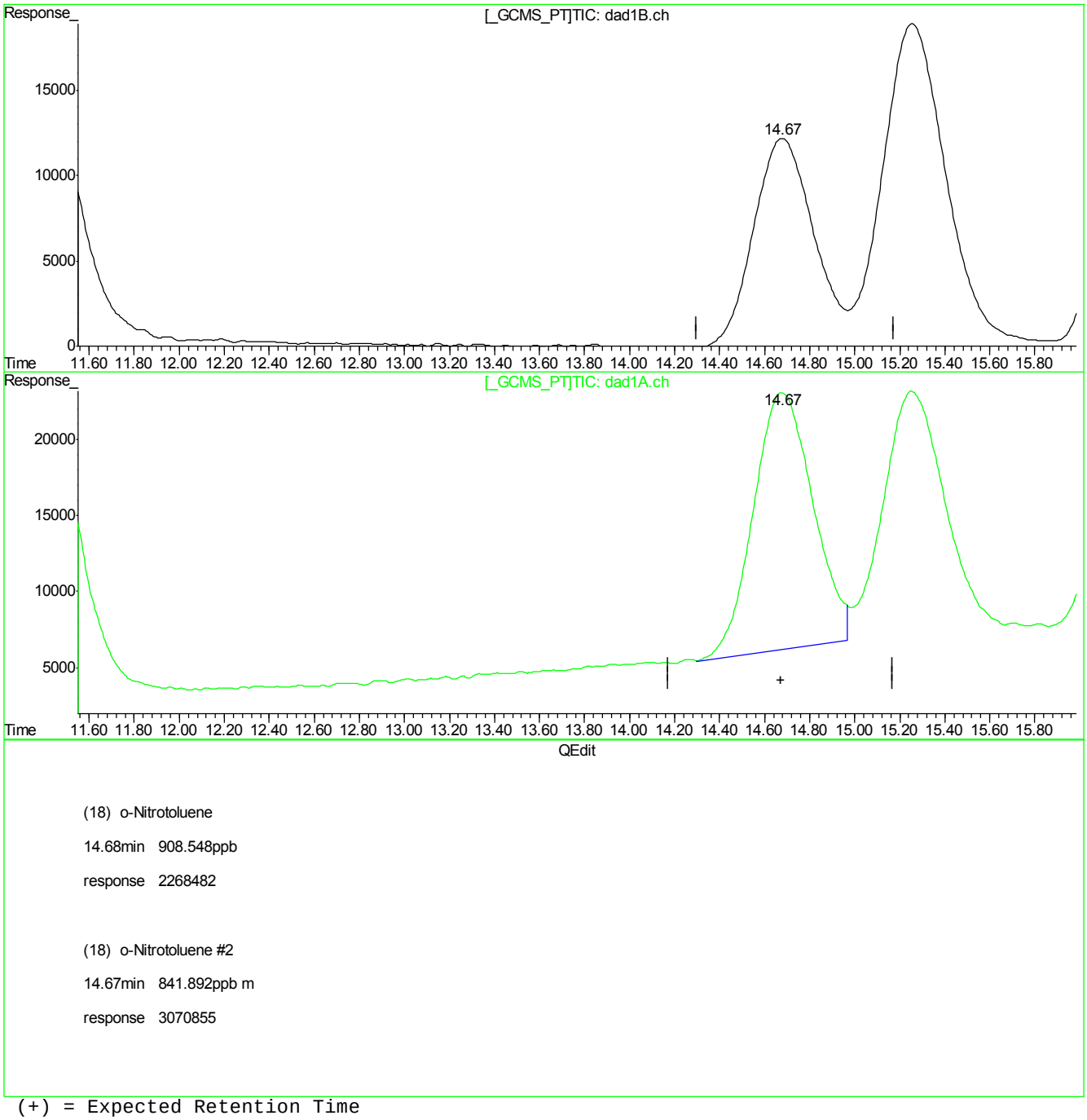
response 2827520

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:02 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 908.548ppb

response 2268482

(18) o-Nitrotoluene #2

14.67min 841.892ppb m

response 3070855

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:05 2018

7.7.6.9

7

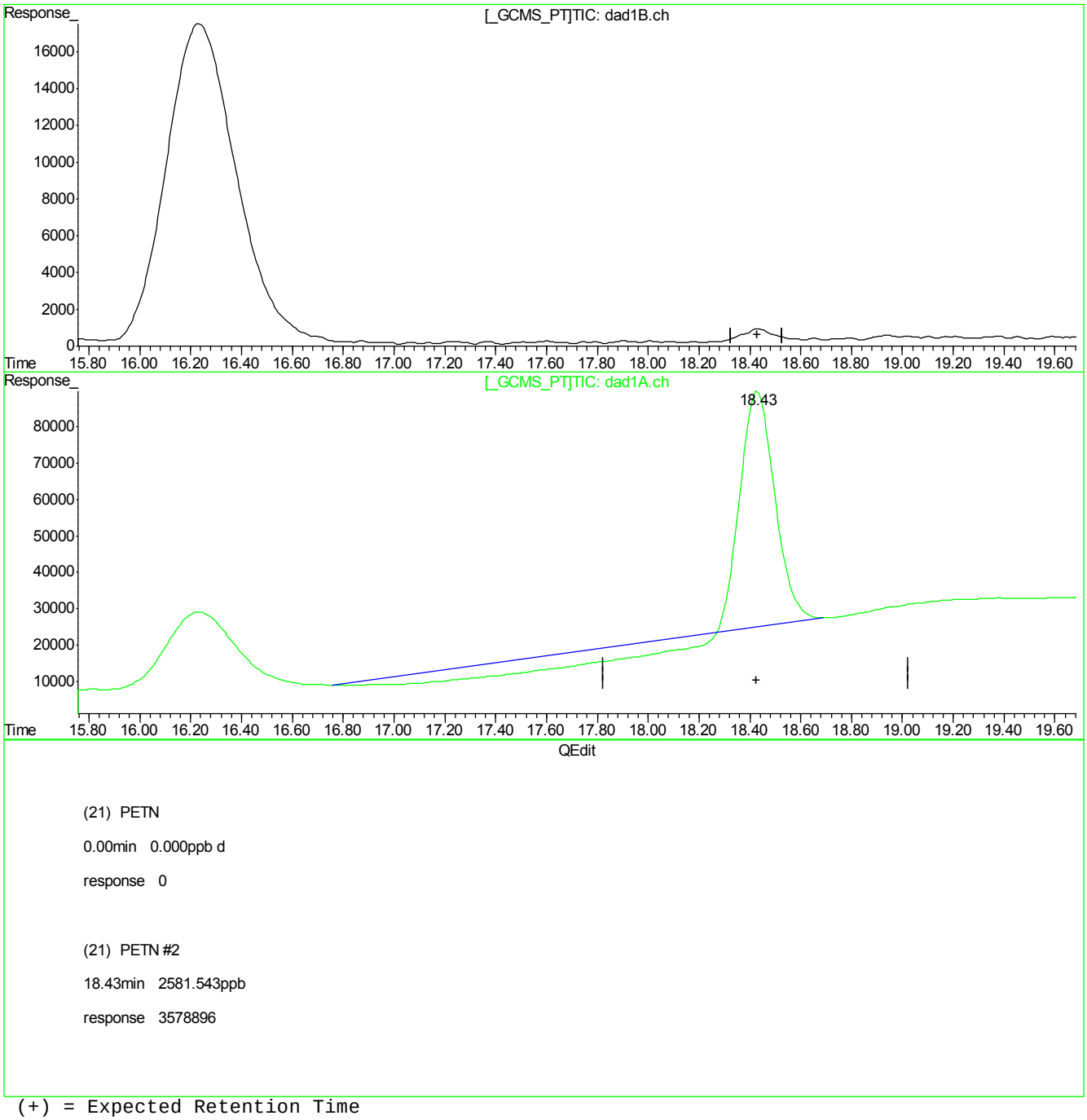
BB059469.D edits: o-Nitrotoluene

FA53800

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 2581.543ppb

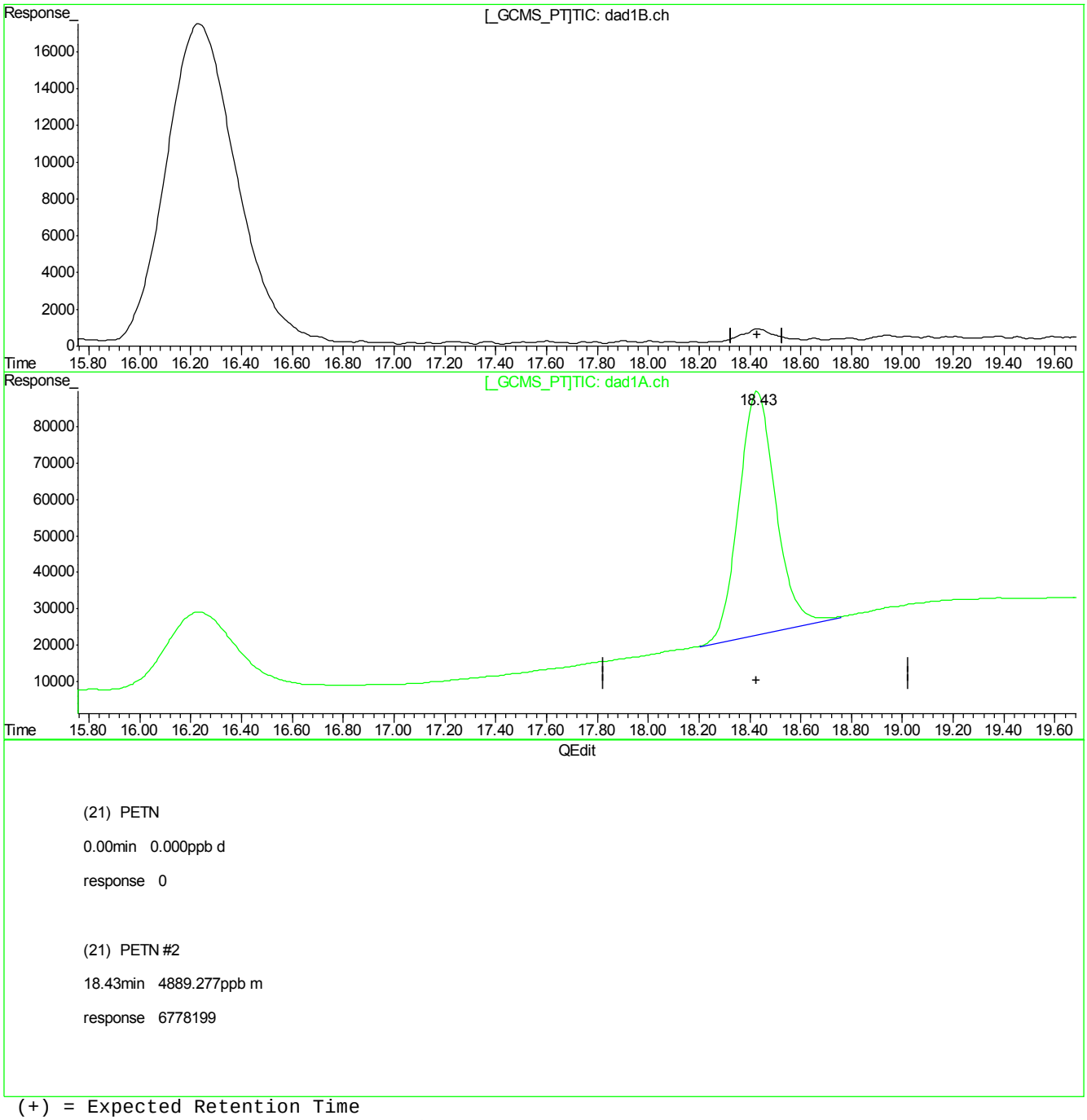
response 3578896

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 4889.277ppb m

response 6778199

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:11 2018

Manual Integrations APPROVED (compounds with "m" flag)

Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:50 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.29	10.29	5083250	9247239	2200.948	2220.868
	Spiked Amount 500.000	Range 70 - 136		Recovery =		440.19%#	444.17%#
	Target Compounds						
1)	TNX	1.30	1.30	9211273	14491645	1815.179m	1859.350m
2)	HMX	1.43	1.44	3638718	10069253	1866.511m	1915.946m
3)	DNX	1.65	1.65	5892557	9584014	2047.638m	2063.804m
4)	MNX	2.19	2.19	5885974	9151830	1893.025	1952.481
5)	RDX	2.76	2.76	3867732	6249623	1730.557	1668.704
6)	1,3,5-Trinitrobe	4.41	4.41	8579482	16591008	1736.222	1820.617
7)	1,3-Dinitrobenze	5.57	5.57	10685649	7803739	1750.755	1980.456
8)	3,5-Dinitroanili	5.87	5.87	9524110	16795702	2077.357	2129.802
9)	Nitrobenzene	7.08	7.08	6632371	6428143	1738.453	1792.964
10)	Nitroglycerin	0.00	8.37	0	12142455	N.D. d	9175.233
11)	Tetryl	8.69	8.68	5845384	10366785	1837.017	2022.025
12)	2,4,6-Trinitroto	9.11	9.11	7588161	9366584	2102.893	2183.808
13)	2-Amino-4,6-Dini	9.40	9.40	7170099	11097154	1786.183	1995.964
14)	4-Amino-2,6-Dini	9.83	9.83	5374487	10973582	1904.486	2030.417
16)	2,4-Dinitrotolue	10.94	10.94	9942239	6519975	1843.940	1952.994
17)	2,6-Dinitrotolue	11.39	11.39	6550095	7736590	1992.279	1972.734
18)	o-Nitrotoluene	14.65	14.64	4539267	6298701	1818.018	1726.825m
19)	p-Nitrotoluene	15.23	15.22	7504319	6331384	2028.351	2000.634
20)	m-Nitrotoluene	16.20	16.20	6867225	8109895	1861.341	1870.104
21)	PETN	0.00	18.42	0	13694187	N.D. d	9877.944m

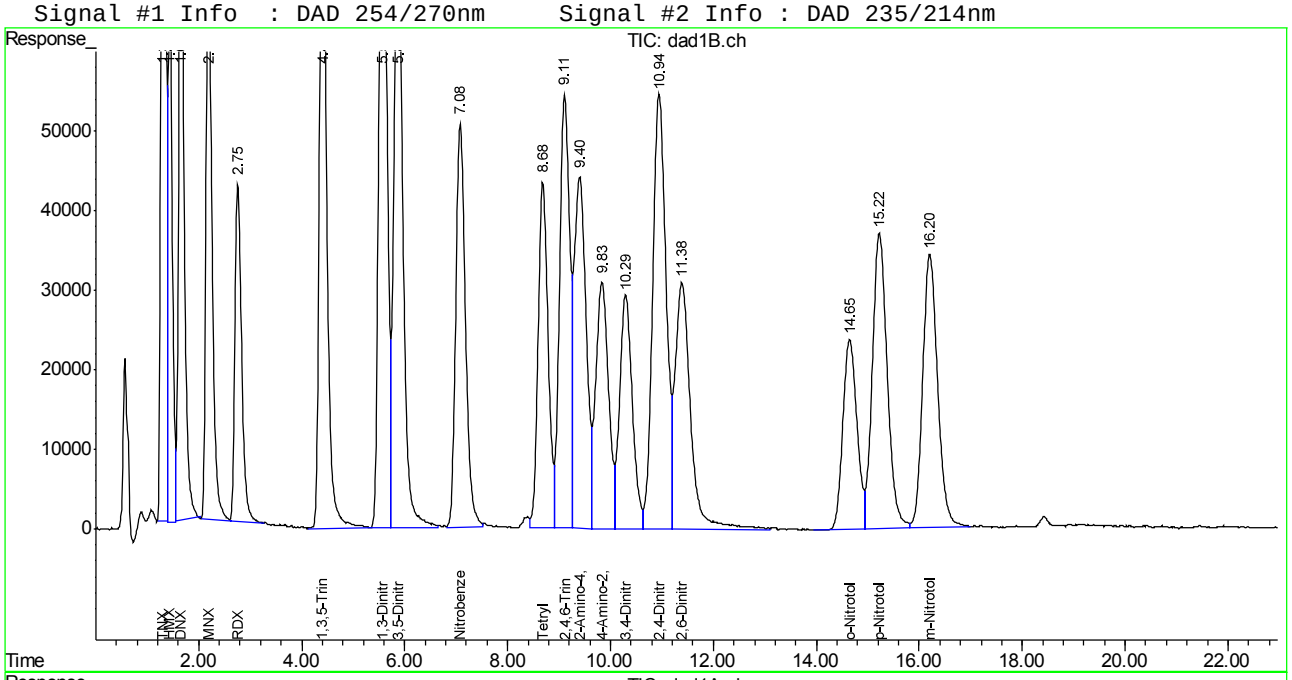
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059470.D 8330B_0419PLUS.M Fri Apr 20 08:01:24 2018 Page 1

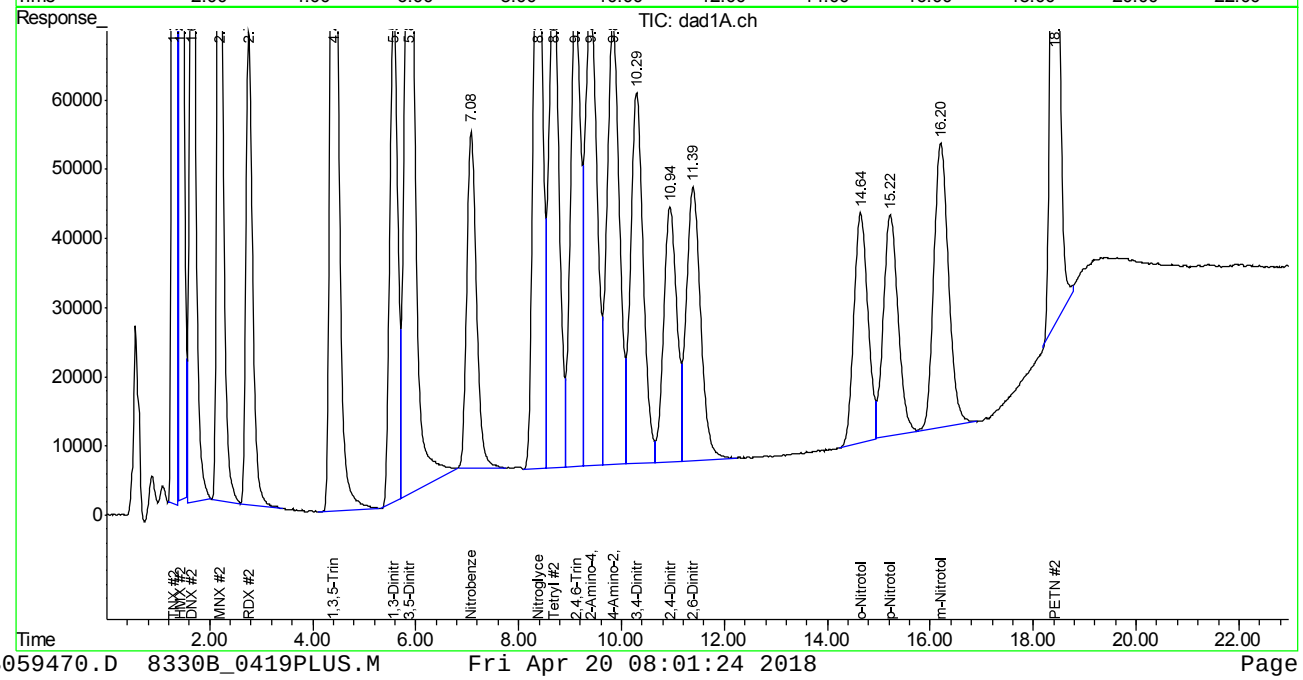
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:01 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

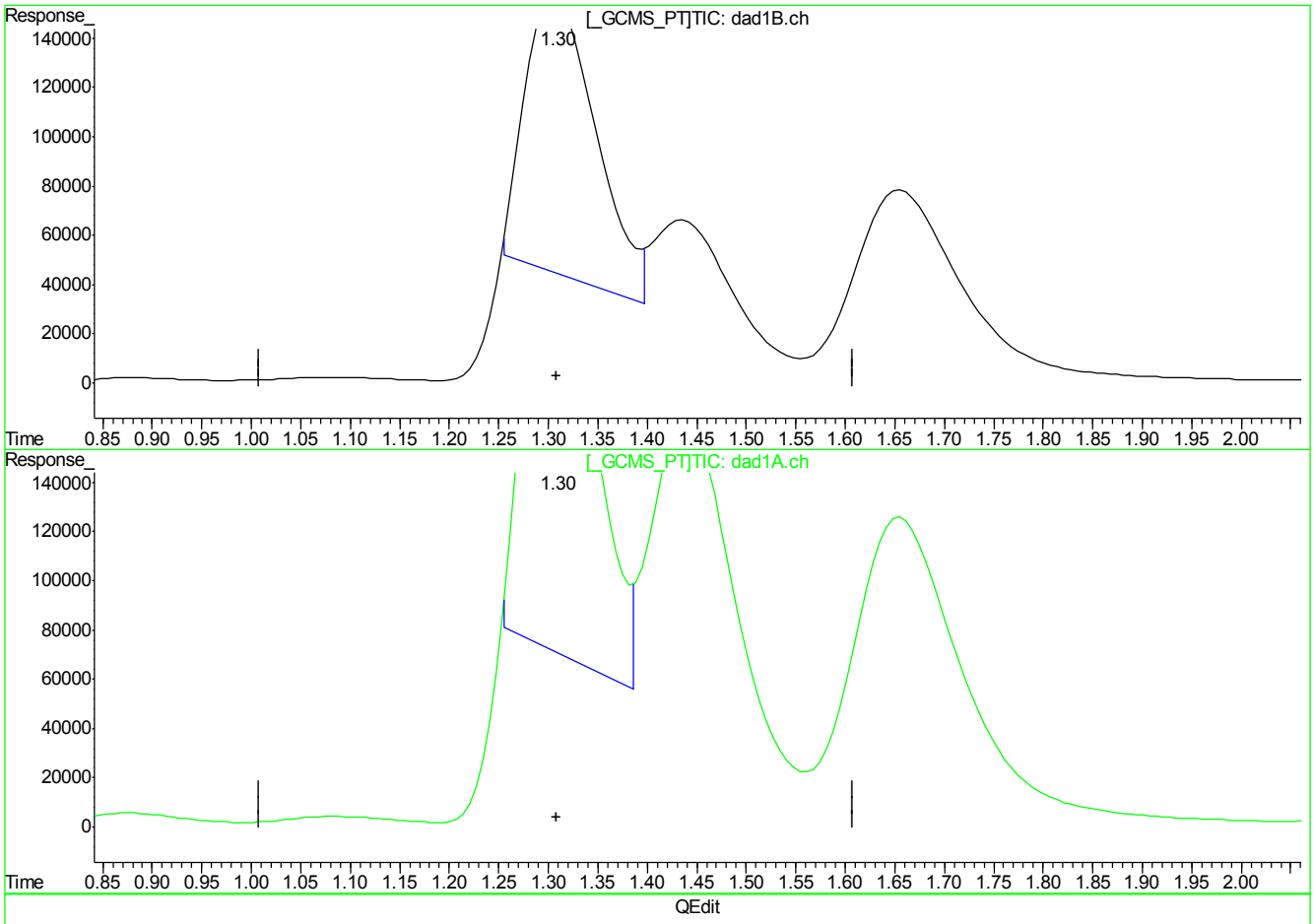
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059470.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 13:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.30	Poorly defined baseline
TNX		2	1.30	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.65	Poorly defined baseline
DNX		2	1.65	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.64	Poorly defined baseline
PETN	78-11-5	2	18.42	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 1109.709ppb

response 5631306

(1) TNX #2

1.31min 1083.207ppb

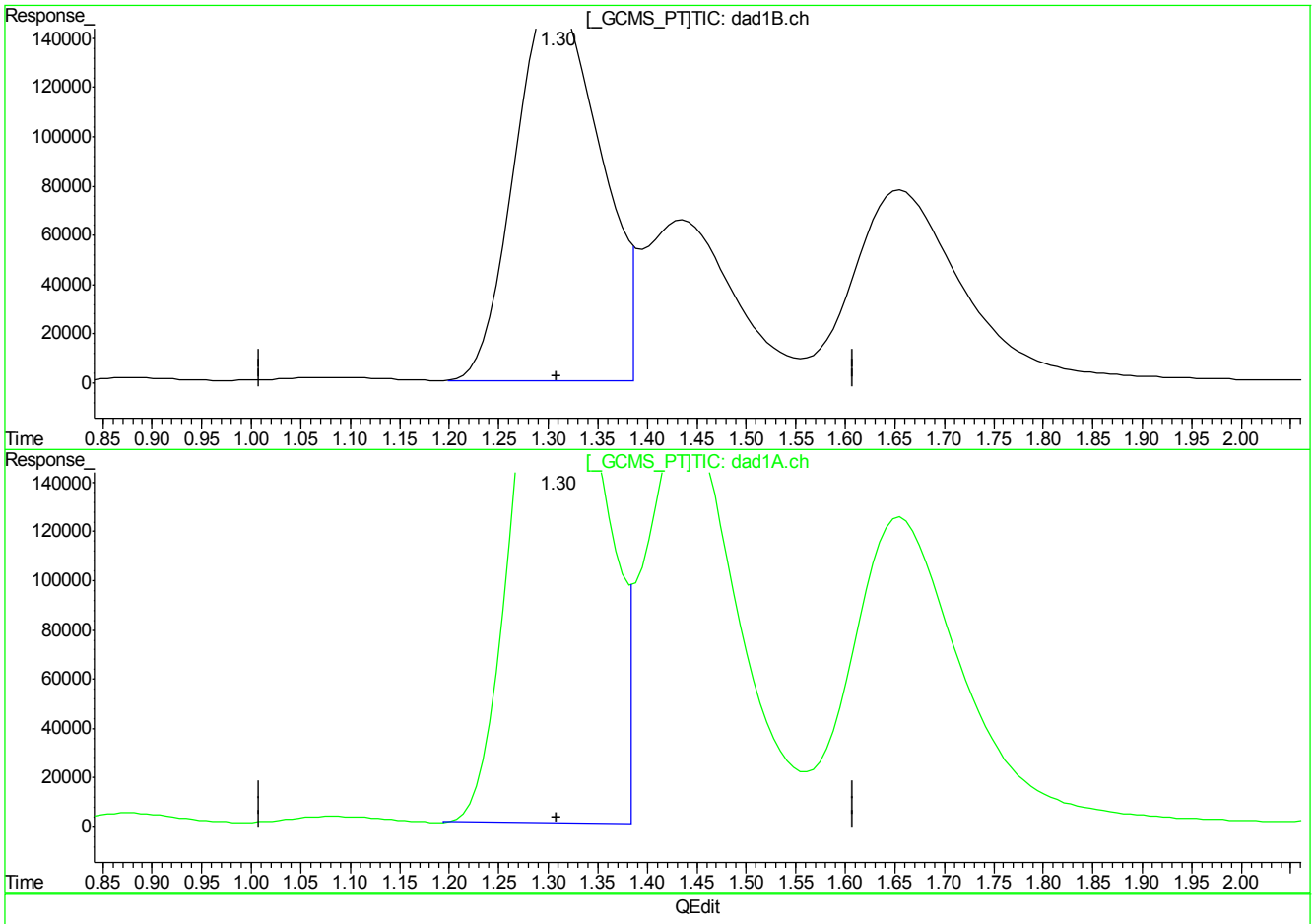
response 8442437

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(1) TNX

1.30min 1815.179ppb m

response 9211273

(1) TNX #2

1.30min 1859.350ppb m

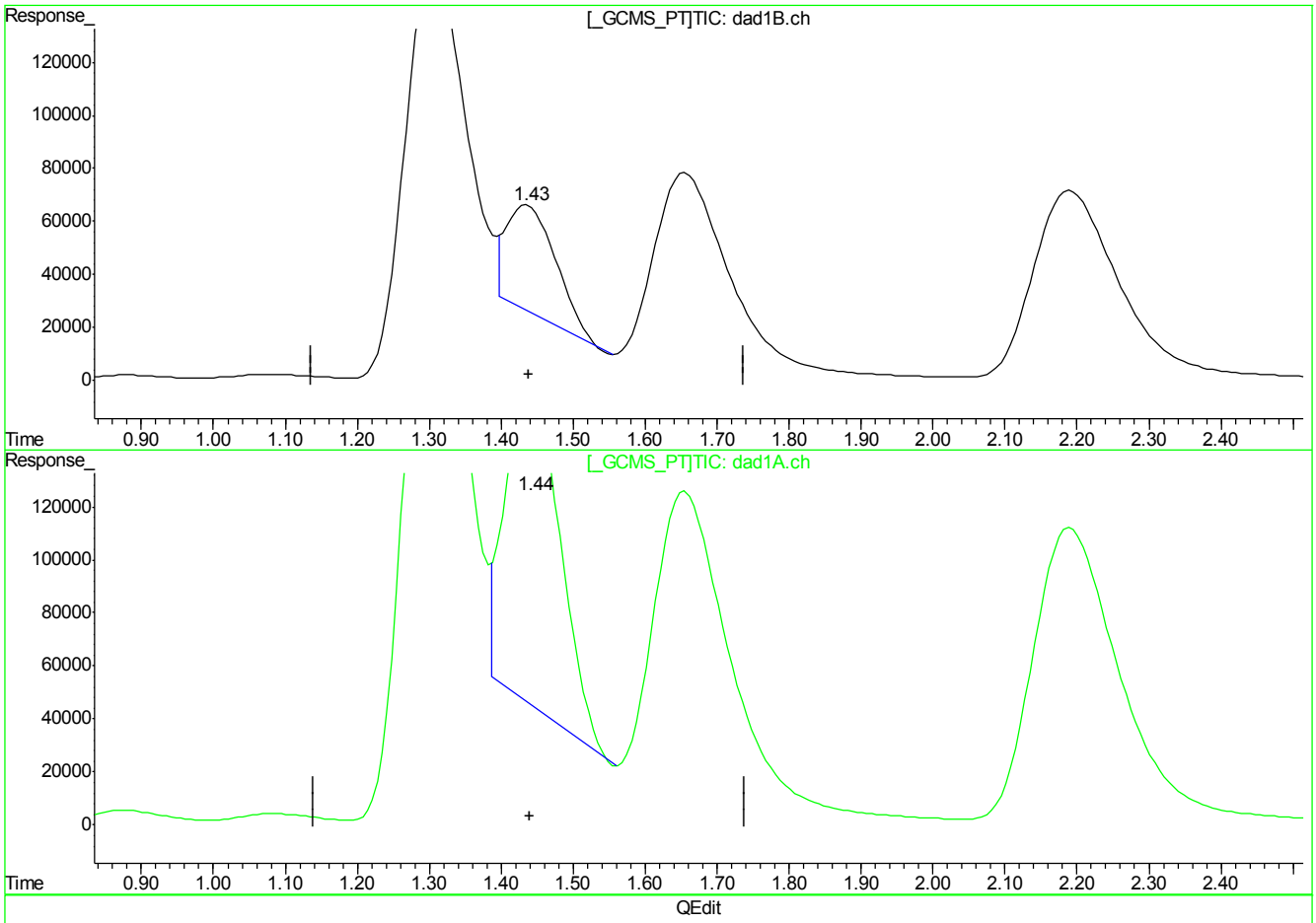
response 14491645

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 1002.989ppb

response 1955304

(2) HMX #2

1.44min 1232.863ppb

response 6479313

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:41 2018

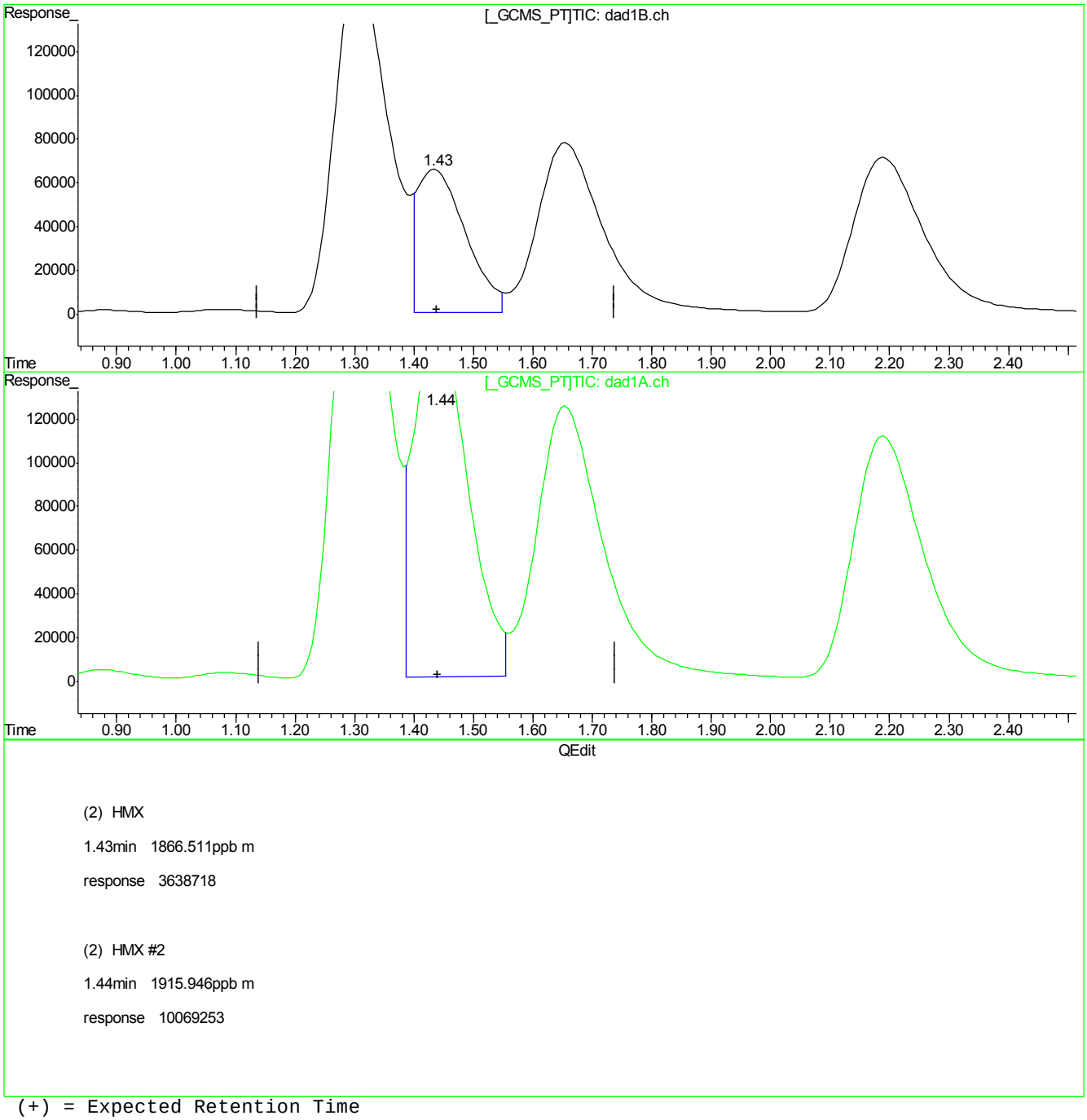
7.7.7.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(2) HMX

1.43min 1866.511ppb m

response 3638718

(2) HMX #2

1.44min 1915.946ppb m

response 10069253

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:03 2018

7.7.7.5

7

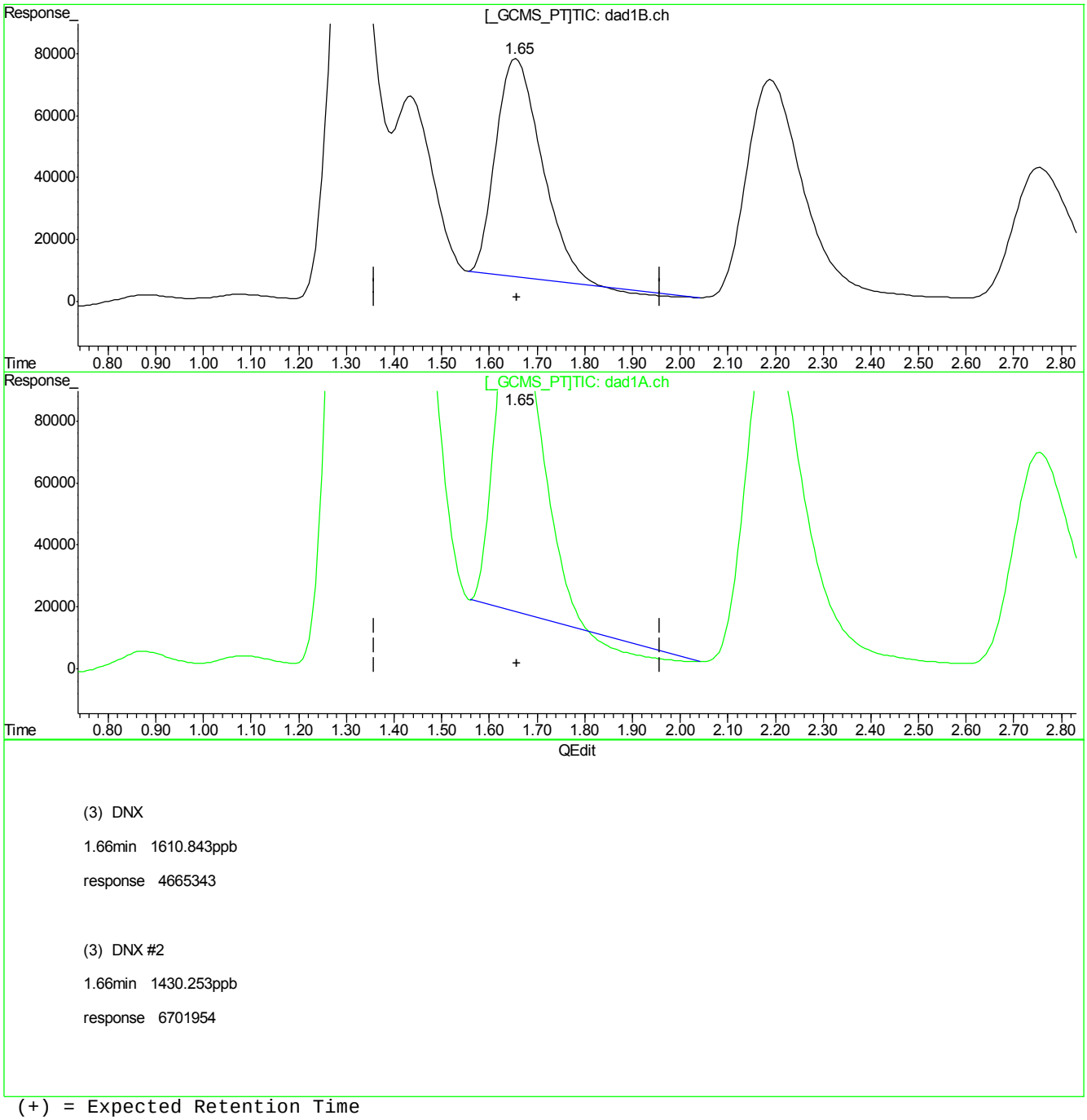
BB059470.D edits: HMX

FA53800

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:06 2018

7.7.7.6

7

BB059470.D edits: DNX

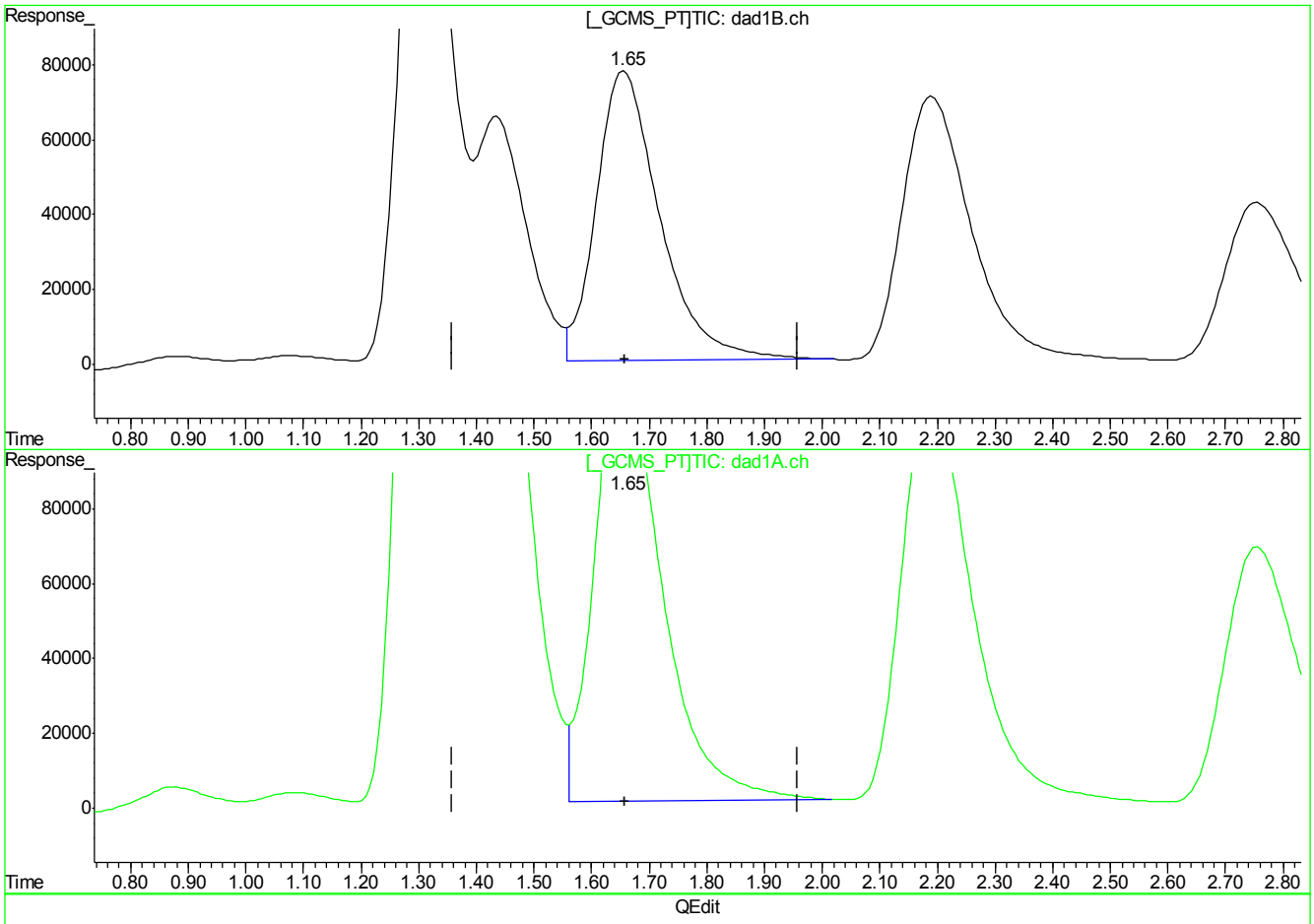
SGS

FA53800

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(3) DNX

1.65min 2047.638ppb m

response 5892557

(3) DNX #2

1.65min 2063.804ppb m

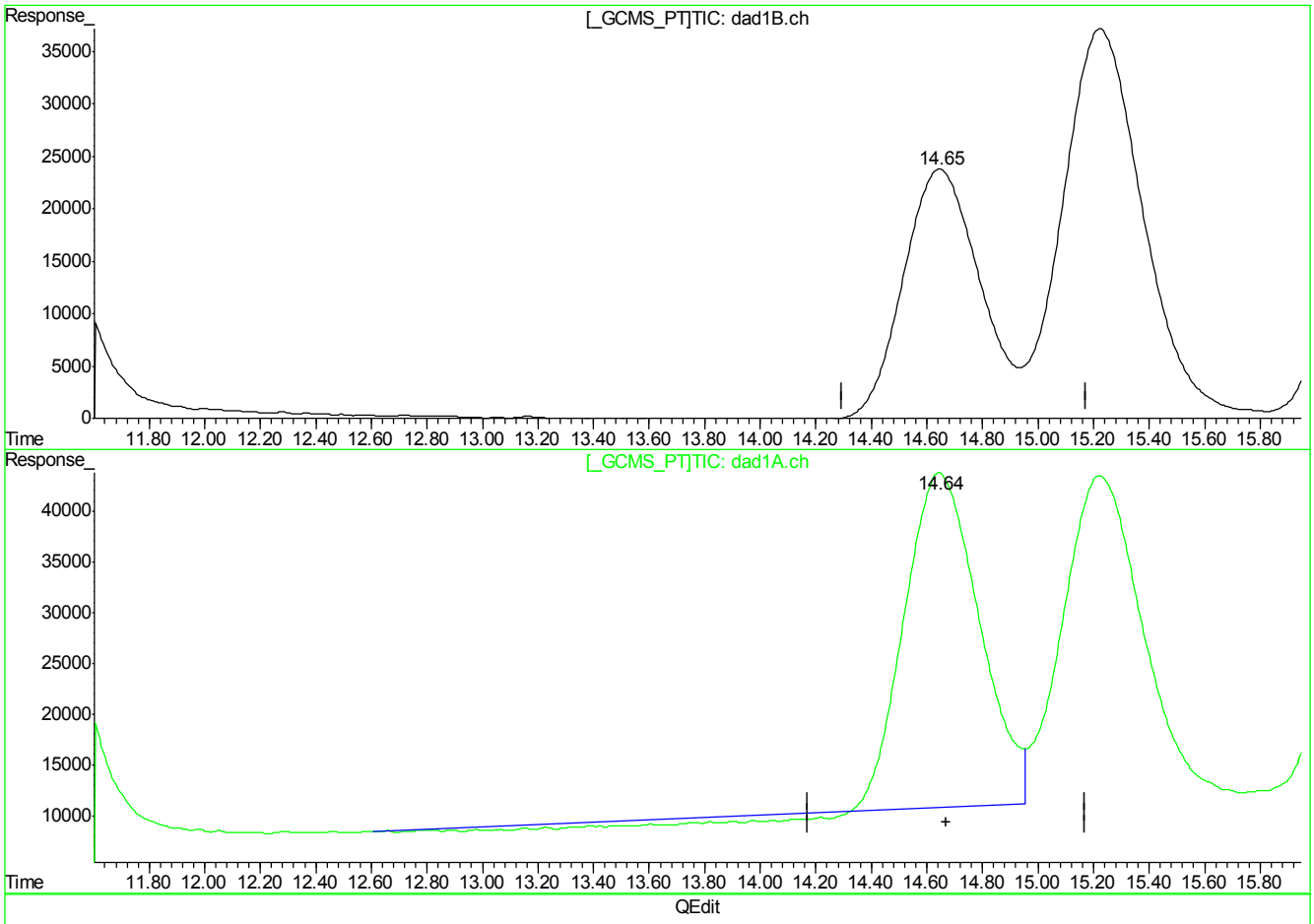
response 9584014

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.65min 1818.018ppb

response 4539267

(18) o-Nitrotoluene #2

14.65min 1563.768ppb

response 5703940

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:30 2018

7.7.7.8

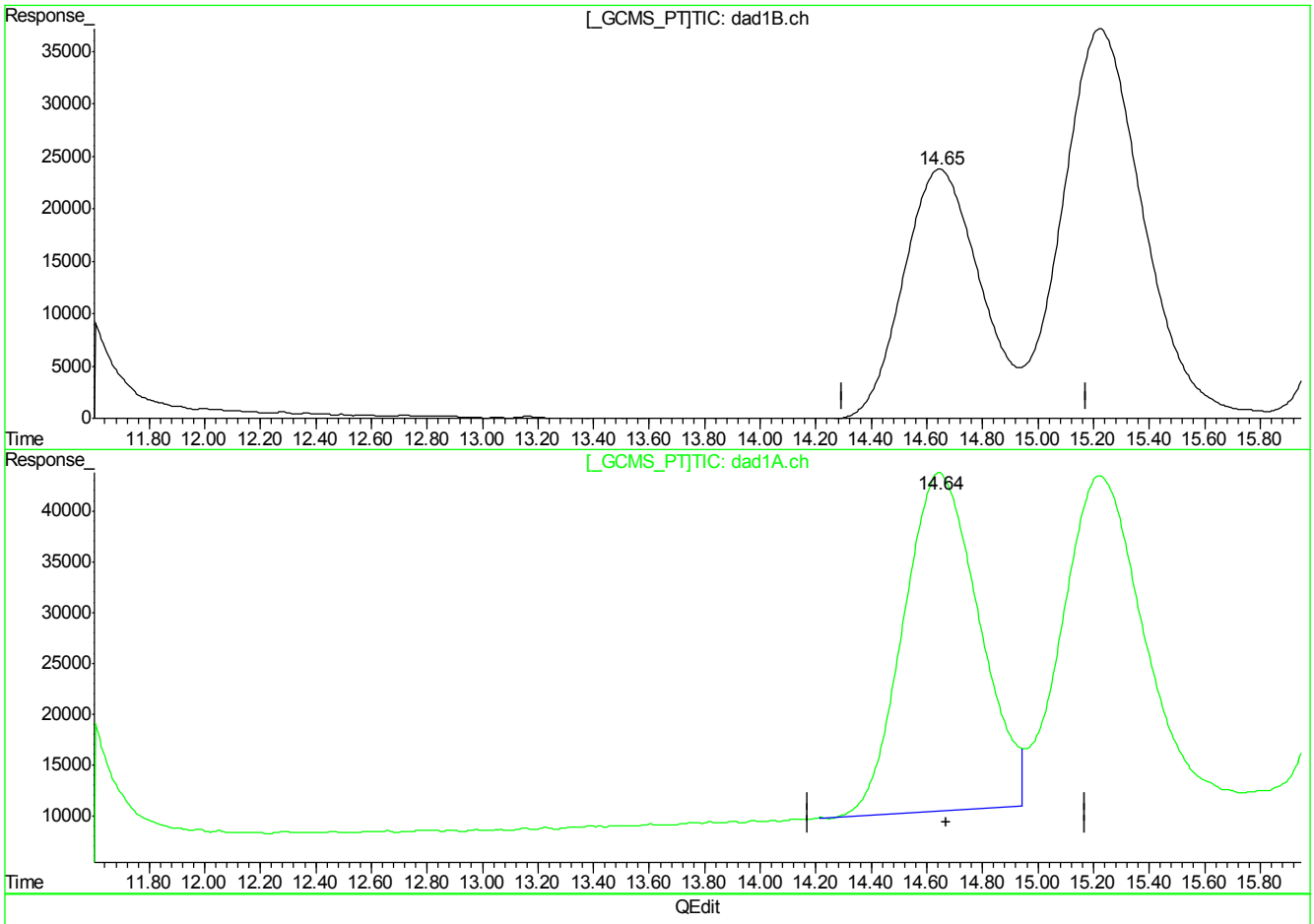
7

BB059470.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.65min 1818.018ppb

response 4539267

(18) o-Nitrotoluene #2

14.64min 1726.825ppb m

response 6298701

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:34 2018

7.7.7.9

7

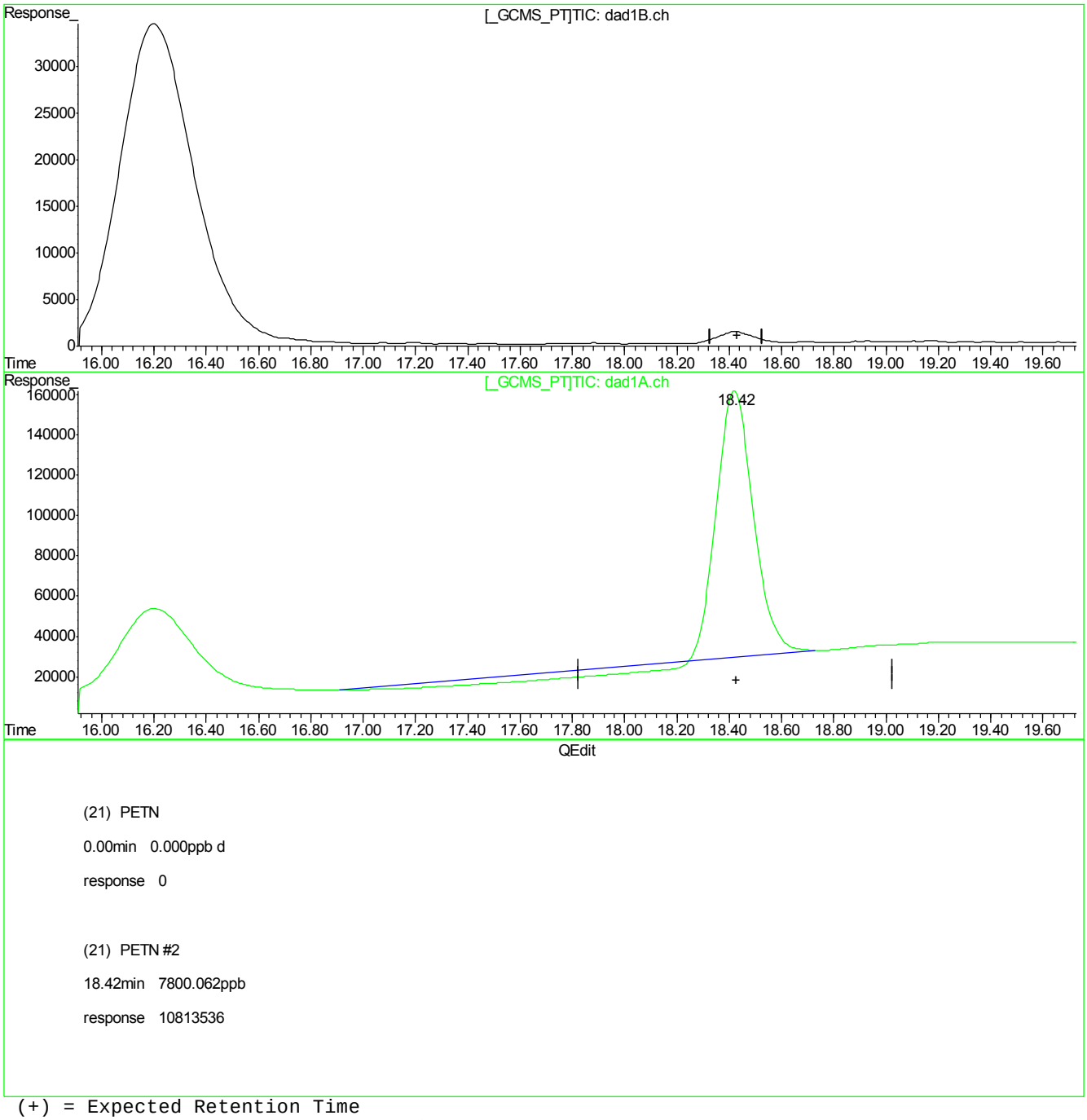
FA53800

BB059470.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 7800.062ppb

response 10813536

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:38 2018

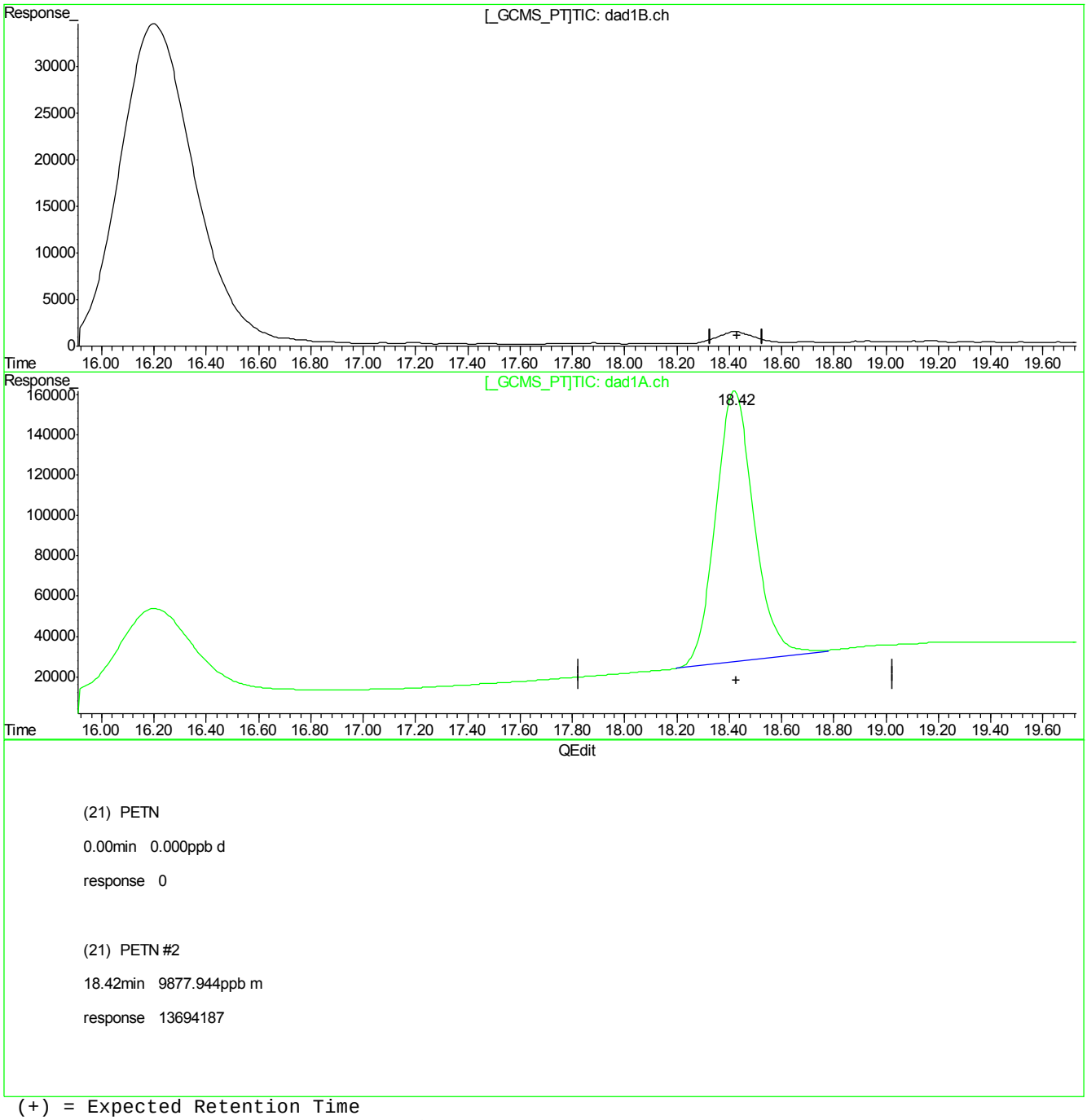
7.7.7.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 9877.944ppb m

response 13694187

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:42 2018

7.7.7.11

7

BB059470.D edits: PETN

FA53800

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10:27 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.31	1.31	2155539	3284215	446.785m	442.711m
2)	HMX	1.44	1.44	891952	2552992	476.953m	502.668m
3)	DNX	1.66	1.66	1290432	2187865	416.669m	466.541m
4)	MNX	2.20	2.20	1289423	2023915	416.410	435.357
5)	RDX	2.76	2.76	867810	1446810	405.824	435.262
6)	1,3,5-Trinitrobe	4.41	4.41	1916834	3674065	440.520	440.109
7)	1,3-Dinitrobenze	5.58	5.57	2298814	1577744	414.651	423.626m
8)	3,5-Dinitroanili	5.87	5.87	2197319	3639339	449.315	486.621
9)	Nitrobenzene	7.09	7.09	1561002	1457542	428.399	439.568
10)	Nitroglycerin	0.00	8.38	0	3011271	N.D. d	2349.932
11)	Tetryl	8.69	8.68	1316922	2243689	447.453	431.996
12)	2,4,6-Trinitroto	9.11	9.11	1546722	1951756	366.508	430.591
13)	2-Amino-4,6-Dini	9.41	9.42	1651187	2548623	436.189	475.149
14)	4-Amino-2,6-Dini	9.85	9.85	1245755	2592637	475.168	500.329
16)	2,4-Dinitrotolue	10.95	10.96	2209091	1353341	419.899	458.258
17)	2,6-Dinitrotolue	11.40	11.41	1413935	1713574	409.093	501.832
18)	o-Nitrotoluene	14.66	14.65	1040298	1453747	416.479	443.790m
19)	p-Nitrotoluene	15.24	15.25	1618644	1443654	410.091	458.274
20)	m-Nitrotoluene	16.22	16.22	1558816	1910959	436.986	474.905
21)	PETN	0.00	18.42	0	3478321	N.D. d	2504.495m

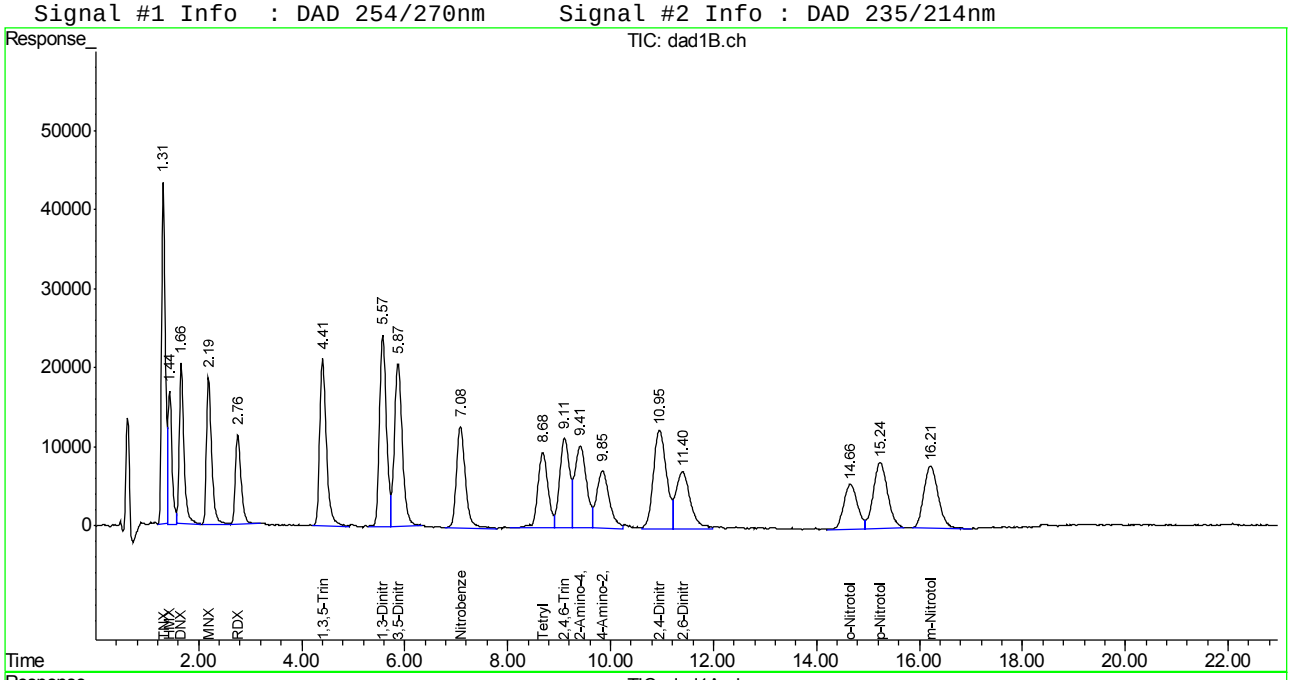
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059471.D 8330B_0419PLUS.M Mon Apr 23 08:16:05 2018 Page 1

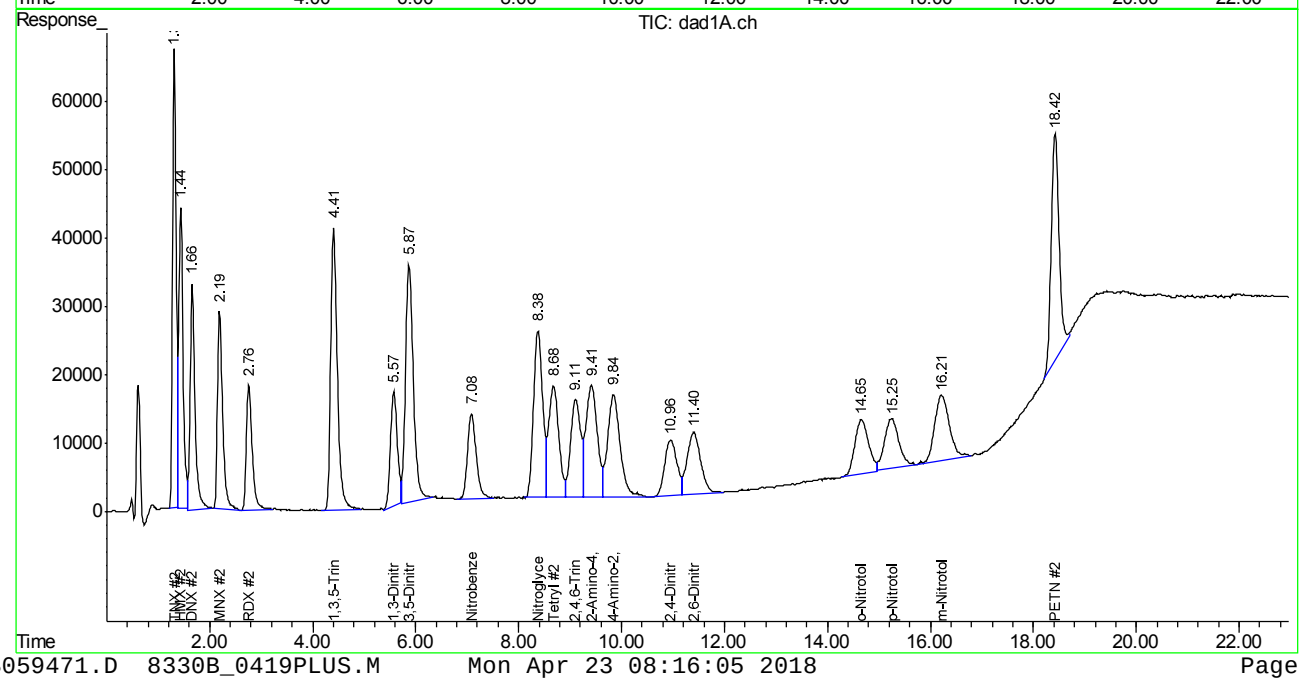
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:43 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

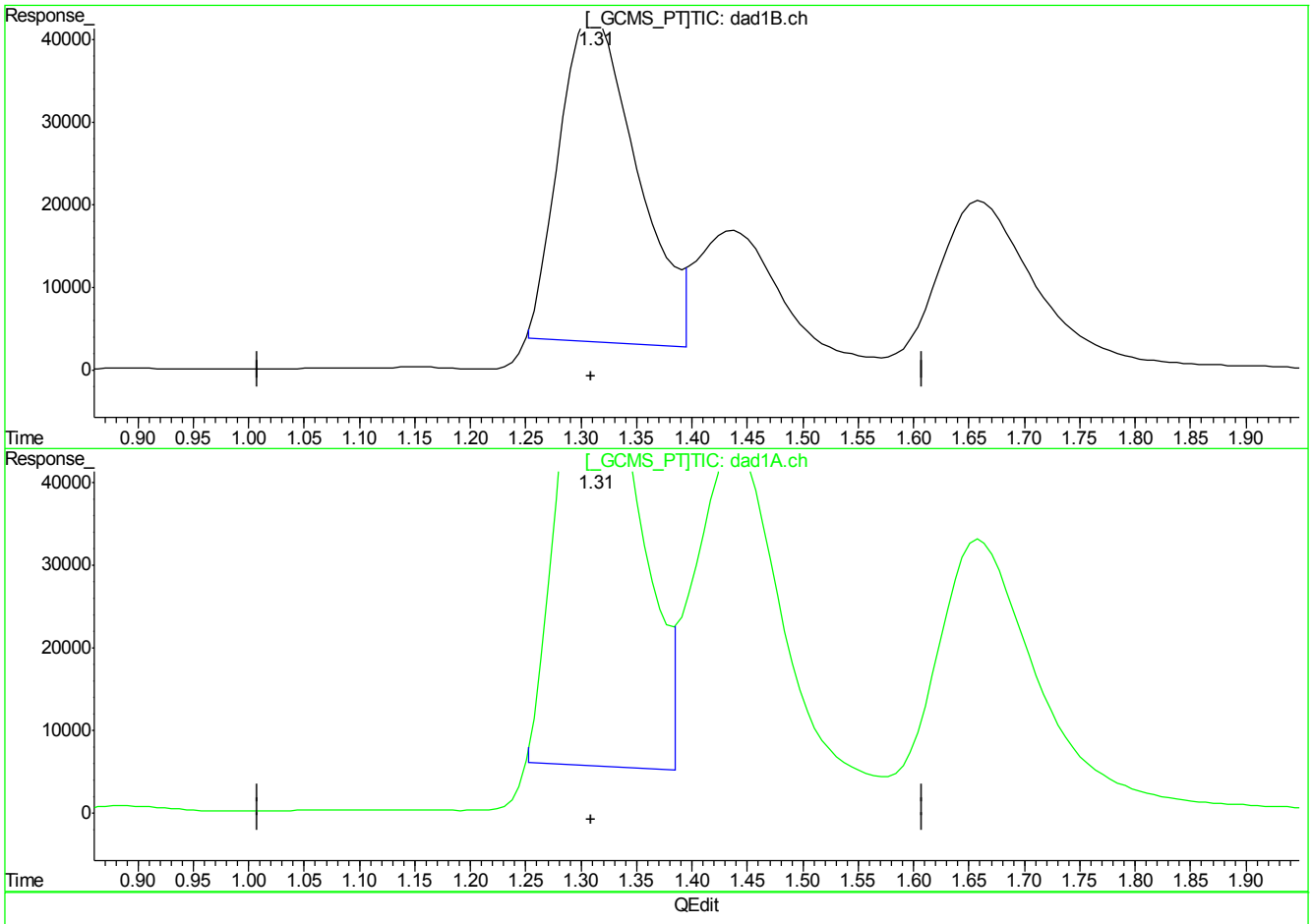
Sample Number:	GBB1722-ICV1722	**Method:**	SW846 8330B
Lab FileID:	BB059471.D	**Analyst approved:**	04/23/18 08:17 Evita Martinez
Injection Time:	04/19/18 13:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.57	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.65	Poorly defined baseline
PETN	78-11-5	2	18.42	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 394.963ppb

response 1905519

(1) TNX #2

1.31min 386.665ppb

response 2868446

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:26 2018

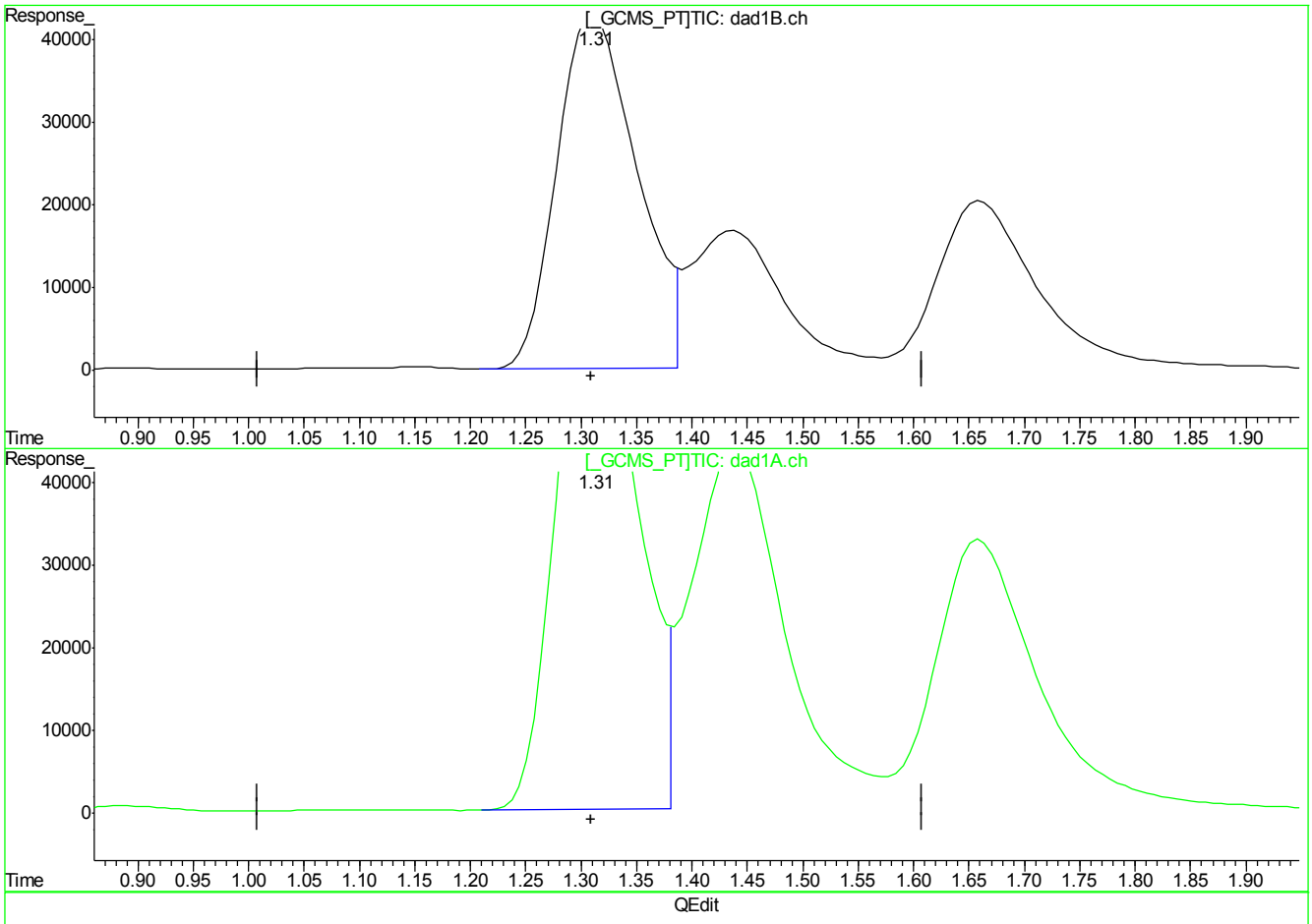
7.7.8.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 446.785ppb m

response 2155539

(1) TNX #2

1.31min 442.711ppb m

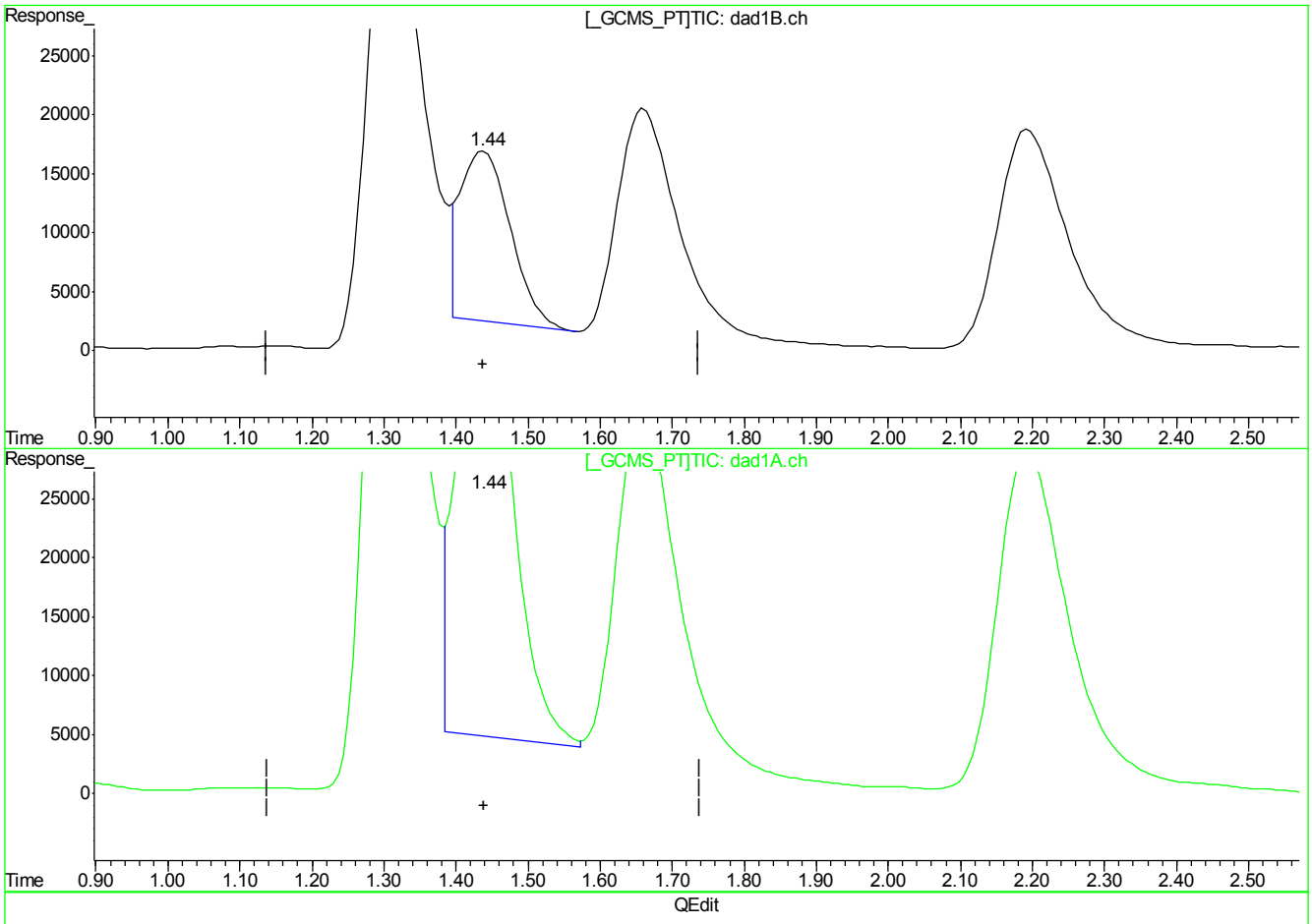
response 3284215

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 384.331ppb

response 718739

(2) HMX #2

1.44min 406.216ppb

response 2064264

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:41 2018

7.7.8.4

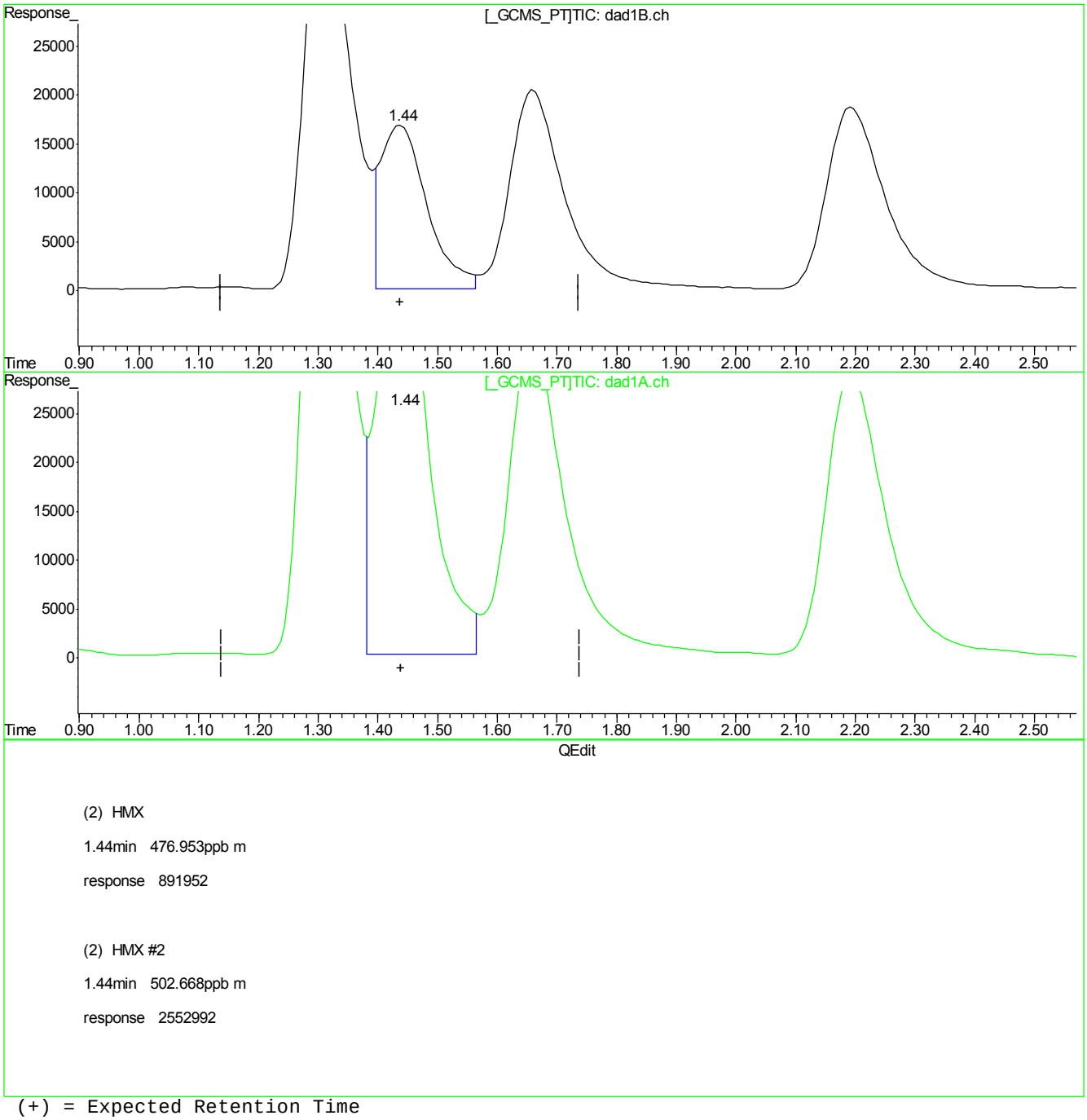
7

BB059471.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 476.953ppb m

response 891952

(2) HMX #2

1.44min 502.668ppb m

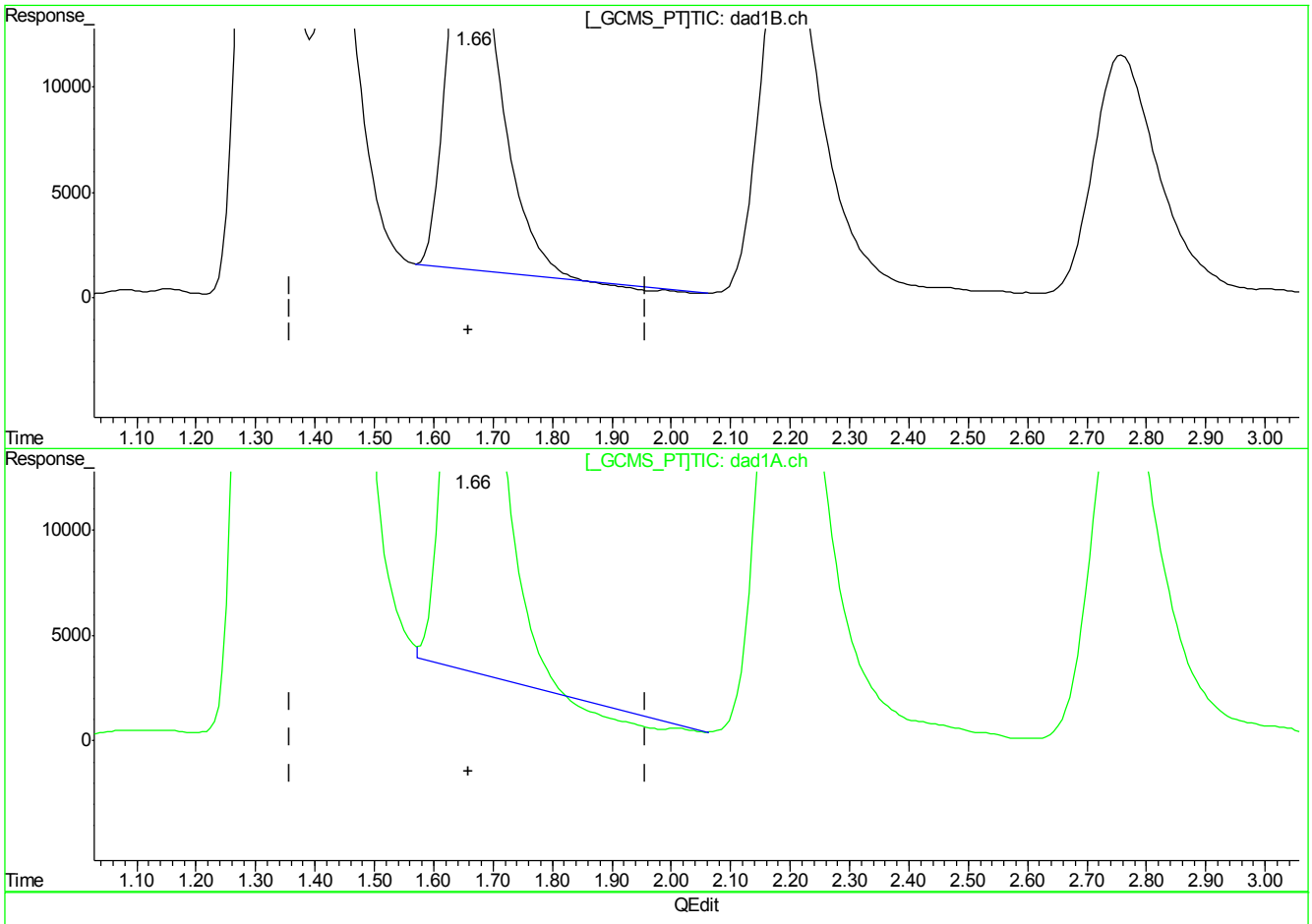
response 2552992

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:10 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 353.884ppb

response 1095983

(3) DNX #2

1.66min 351.062ppb

response 1643602

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:15 2018

7.7.8.9

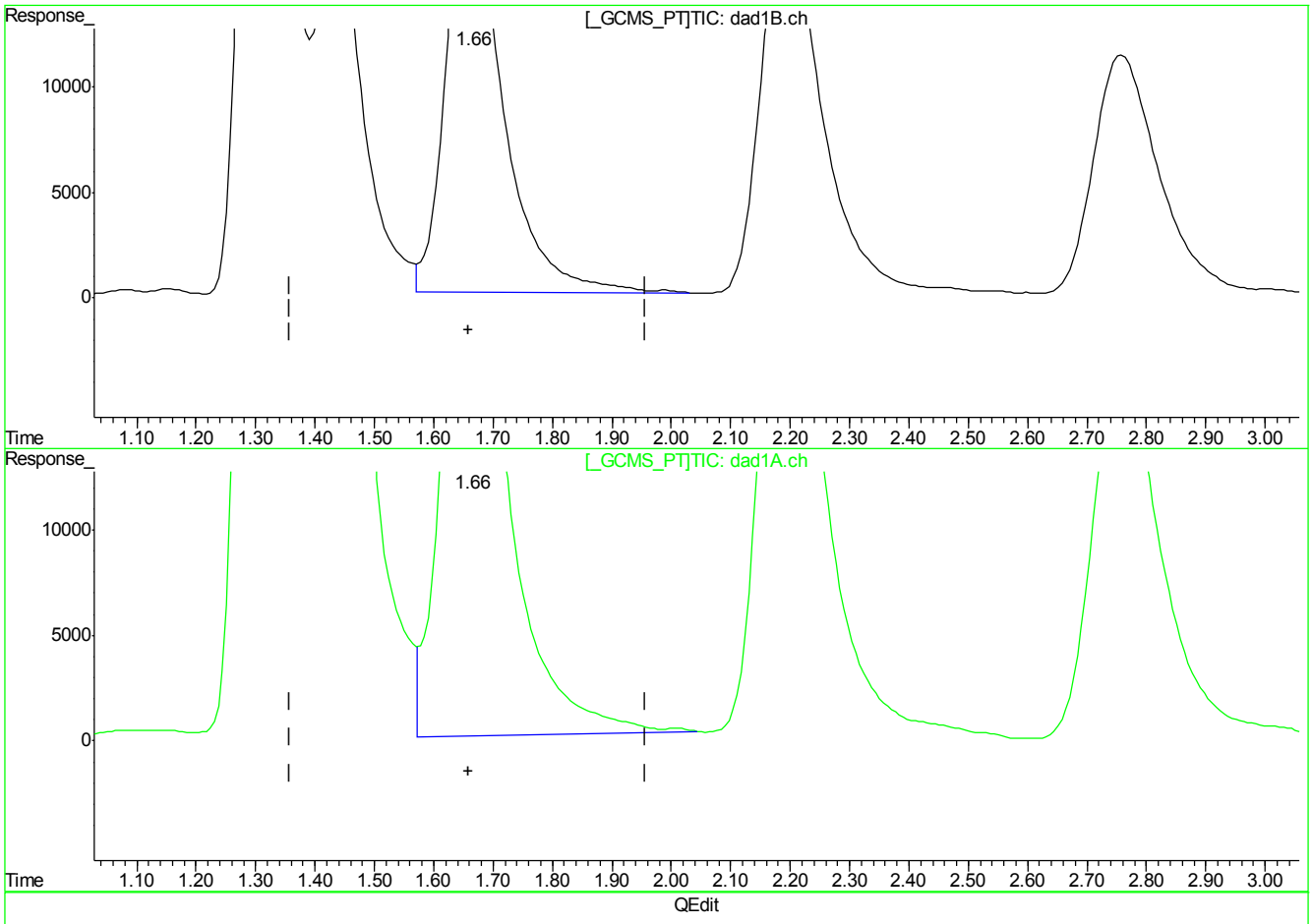
7

BB059471.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 416.669ppb m

response 1290432

(3) DNX #2

1.66min 466.541ppb m

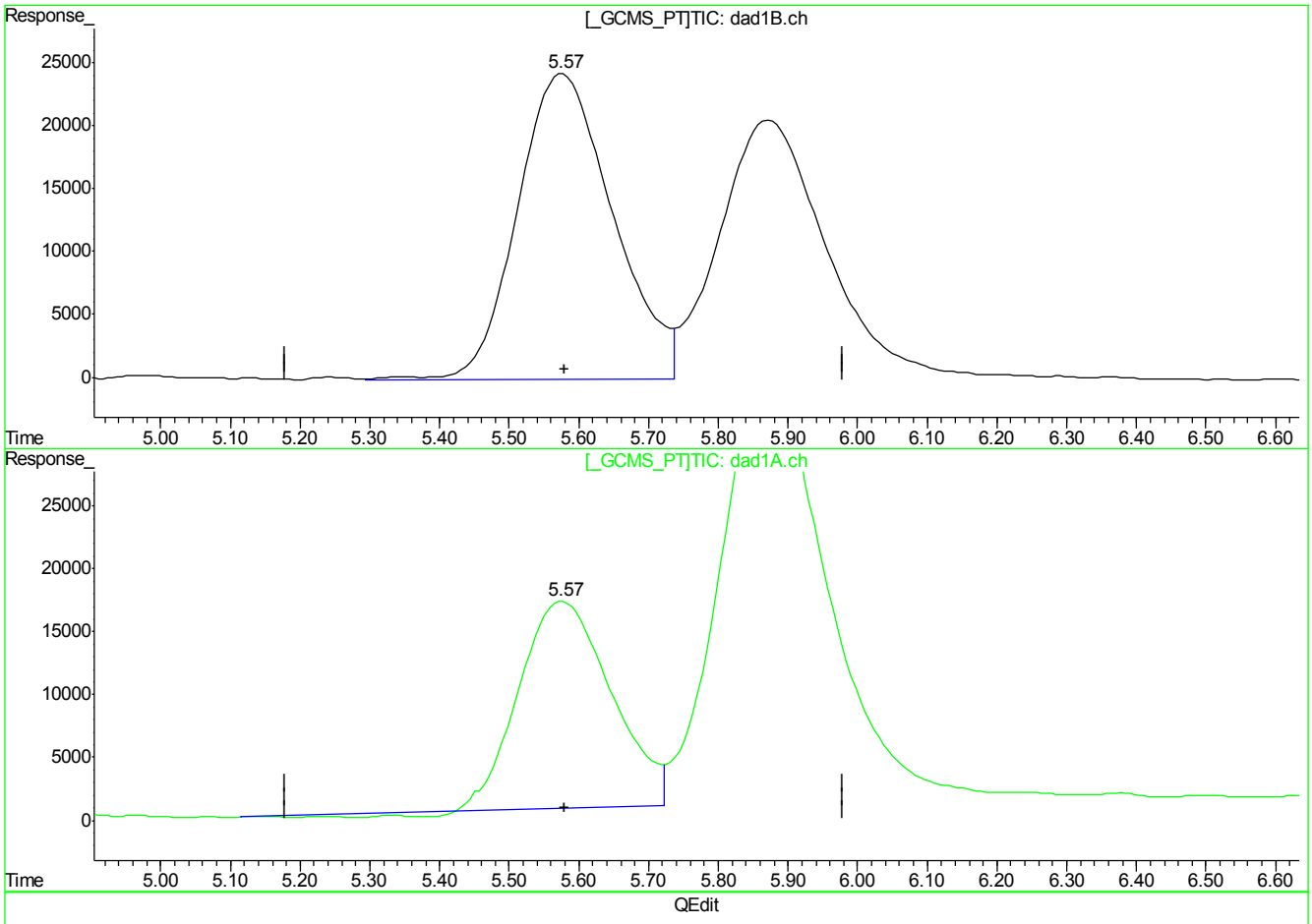
response 2187865

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.58min 414.651ppb

response 2298814

(7) 1,3-Dinitrobenzene #2

5.58min 399.114ppb

response 1486450

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:33 2018

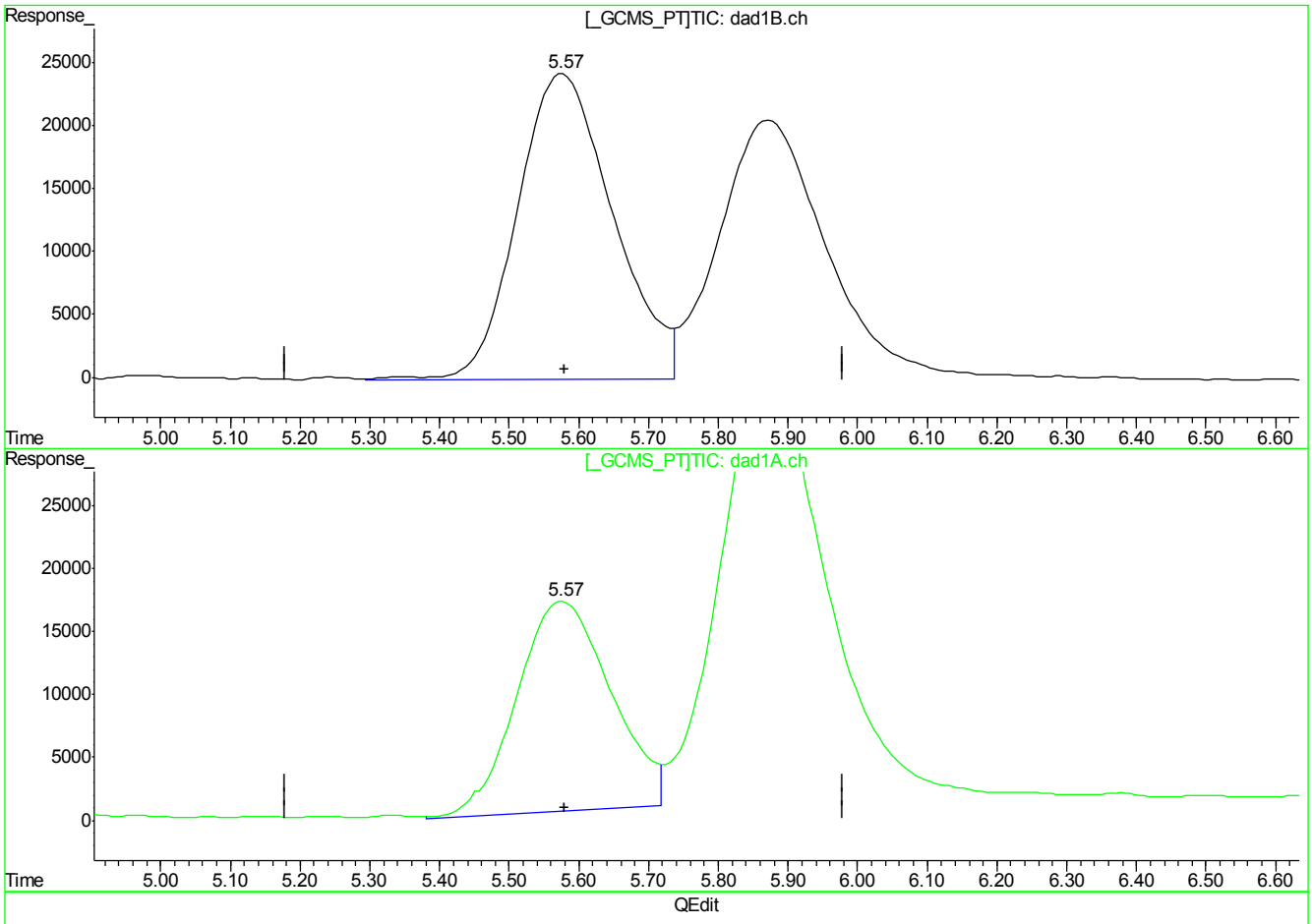
7.7.8.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.58min 414.651ppb

response 2298814

(7) 1,3-Dinitrobenzene #2

5.57min 423.626ppb m

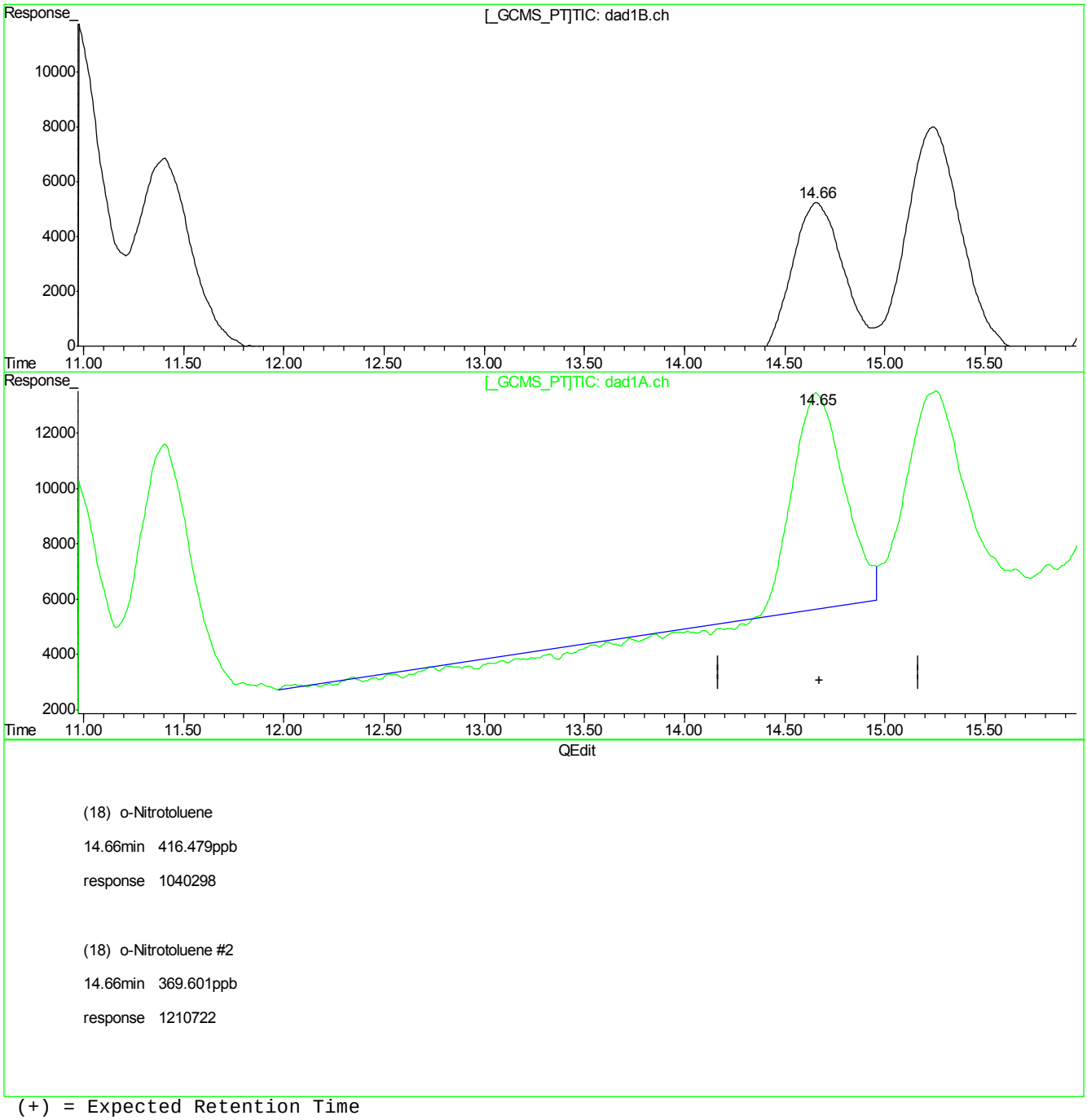
response 1577744

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.66min 416.479ppb

response 1040298

(18) o-Nitrotoluene #2

14.66min 369.601ppb

response 1210722

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:49 2018

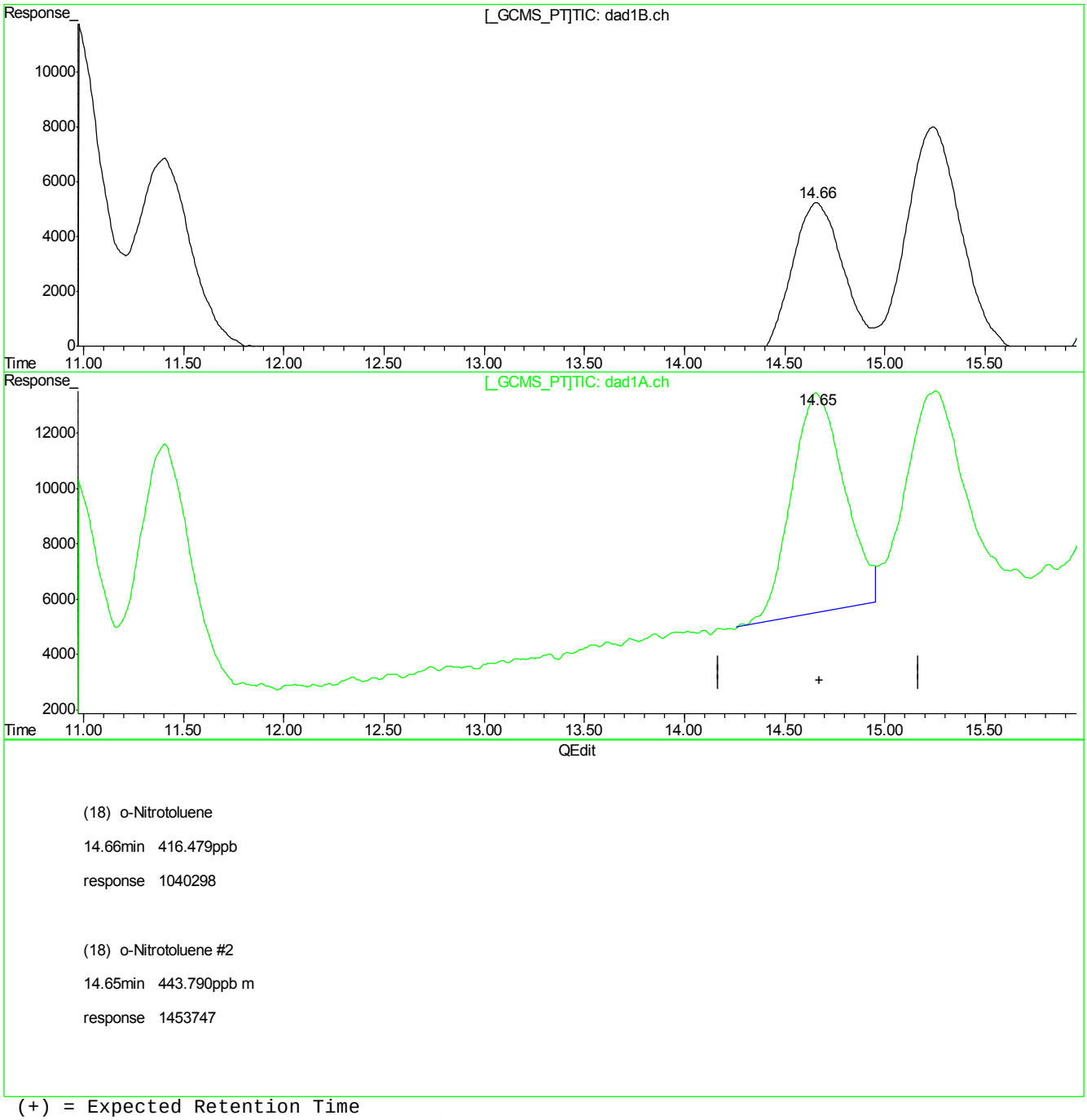
7.7.8.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.66min 416.479ppb

response 1040298

(18) o-Nitrotoluene #2

14.65min 443.790ppb m

response 1453747

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:53 2018

7.7.8.11

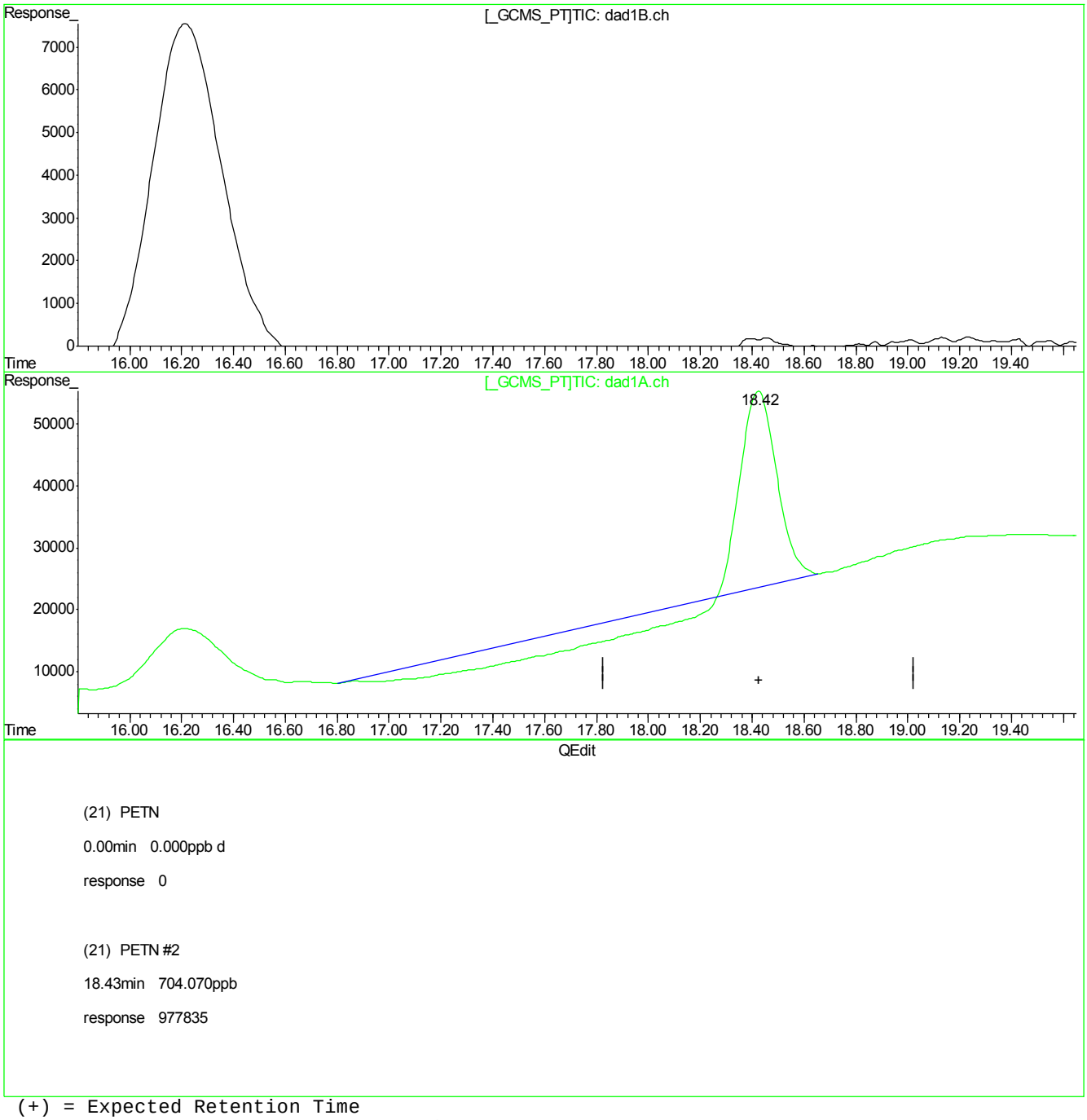
7

BB059471.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 704.070ppb

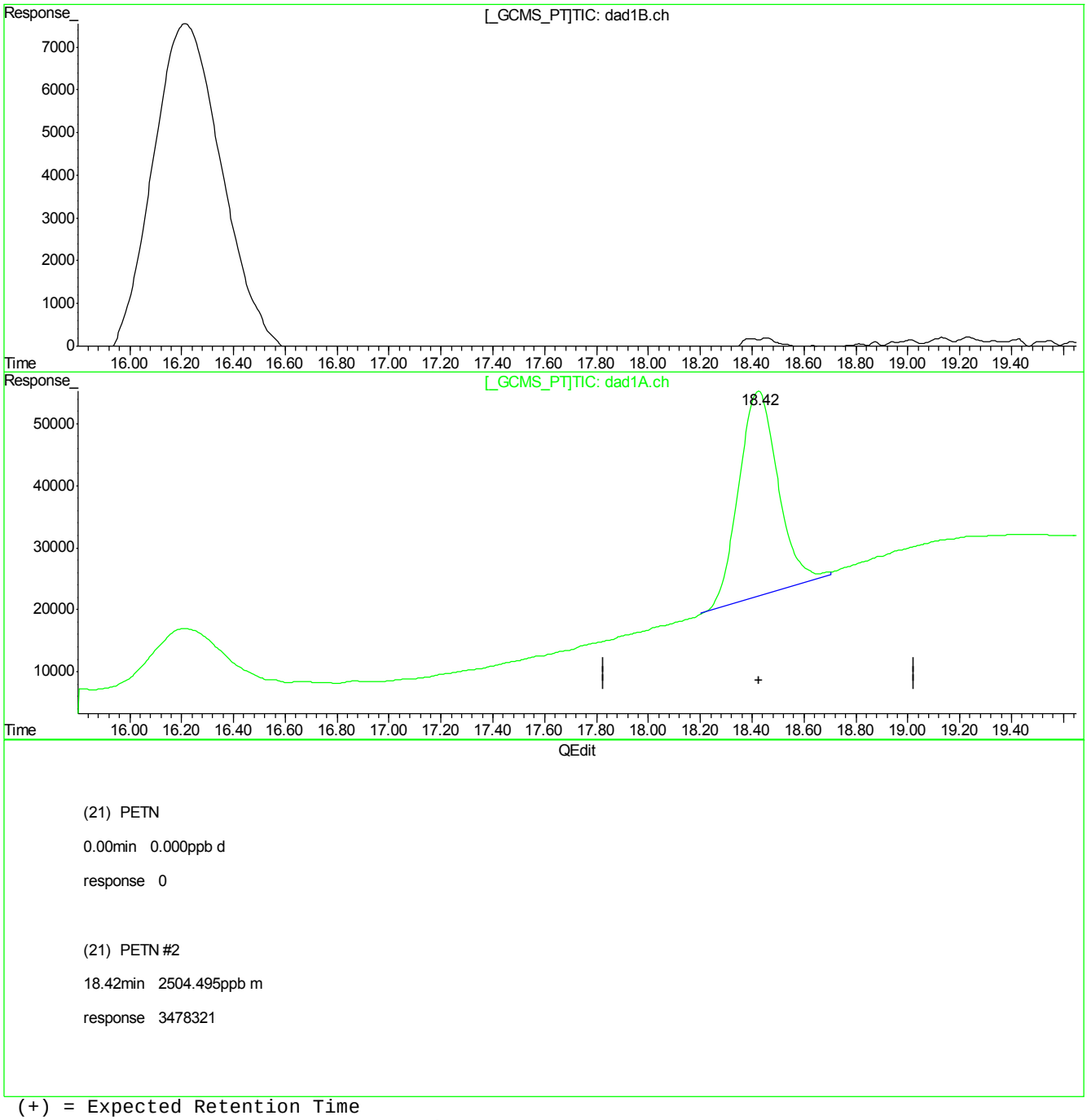
response 977835

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 2504.495ppb m

response 3478321

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:58 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:02:48 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.94	9.94	2371115	4367390	886.166	926.325
	Spiked Amount 500.000	Range 70 - 136		Recovery =		177.23%#	185.27%#
	Target Compounds						
1)	TNX	1.28	1.28	4363783	6601700	904.494m	889.906m
2)	HMX	1.38	1.39	1787292	4755713	955.718m	938.716m
3)	DNX	1.61	1.61	2933252	4715046	947.122m	997.850m
4)	MNX	2.13	2.13	2837010	4454683	916.193	958.230
5)	RDX	2.67	2.67	1875371	3008320	877.003	905.031
6)	1,3,5-Trinitrobe	4.28	4.28	4062786	7955623	933.696	952.988
7)	1,3-Dinitrobenze	5.42	5.42	5114022	3393746	922.447	911.225
8)	3,5-Dinitroanili	5.69	5.69	4461151	7473396	912.231	999.278
9)	Nitrobenzene	6.91	6.91	3140114	2980546	861.767	898.879
10)	Nitroglycerin	0.00	8.17	0	6298613	N.D. d	4915.304
11)	Tetryl	8.39	8.35	2576730	4109975	877.488	791.328
12)	2,4,6-Trinitroto	8.83	8.83	3385205	4080941	802.152	900.326
13)	2-Amino-4,6-Dini	9.05	9.05	3575460	5637595	944.518	1051.037
14)	4-Amino-2,6-Dini	9.48	9.48	2566944	5296900	971.819	1022.200
16)	2,4-Dinitrotolue	10.57	10.57	4758653	3131860	904.513	1060.486
17)	2,6-Dinitrotolue	11.01	11.01	2834771	3650210	820.183	1068.990
18)	o-Nitrotoluene	14.28	14.28	2080751	2919345	833.020	891.199m
19)	p-Nitrotoluene	14.84	14.85	3485480	2948975	883.063	935.085
20)	m-Nitrotoluene	15.83	15.83	3160474	3730581	885.981	927.112
21)	PETN	0.00	18.23	0	6665962	N.D. d	4799.692m

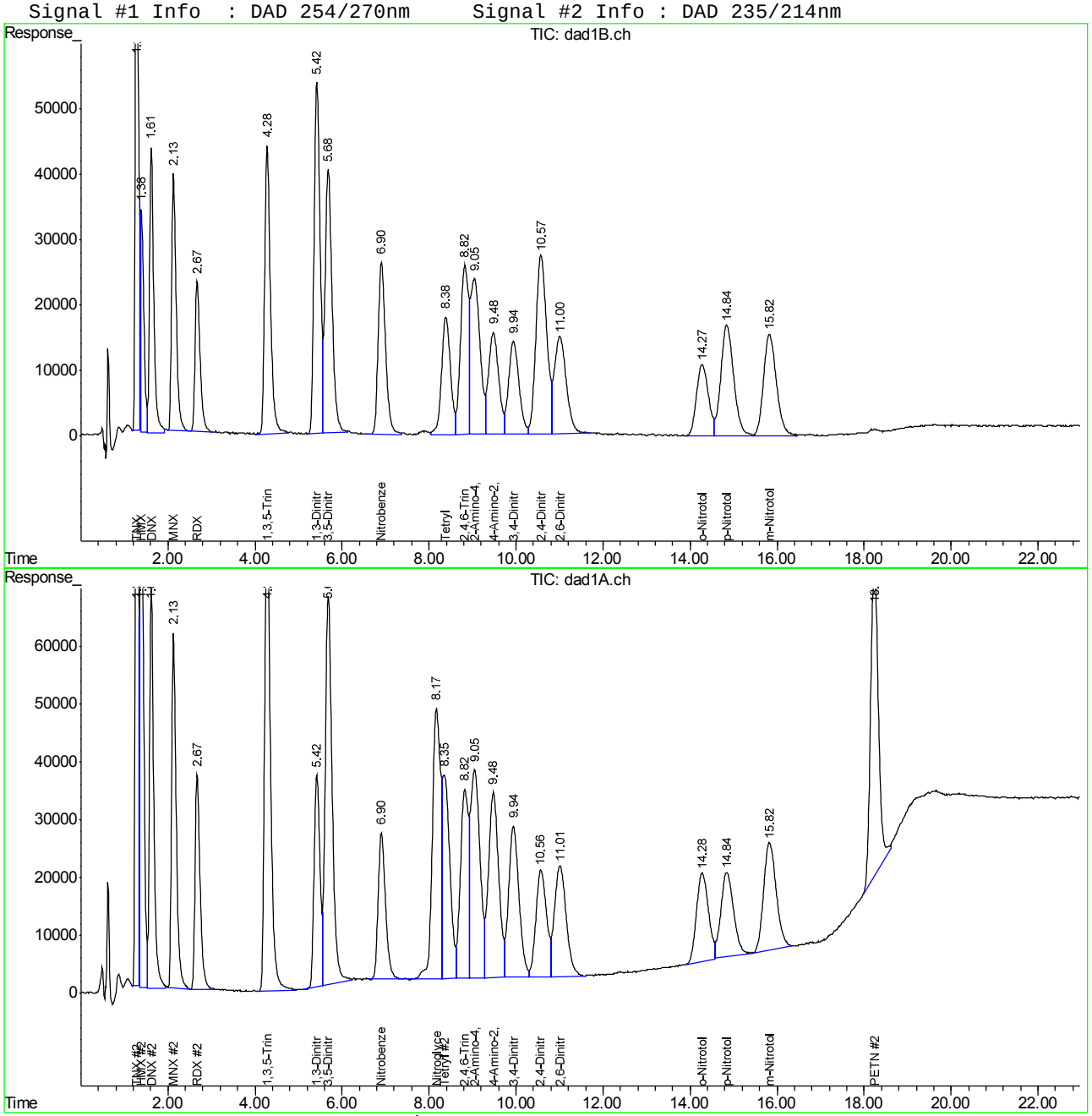
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059670.D 8330B_0419PLUS.M Fri May 11 08:37:45 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:05 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



Manual Integration Approval Summary

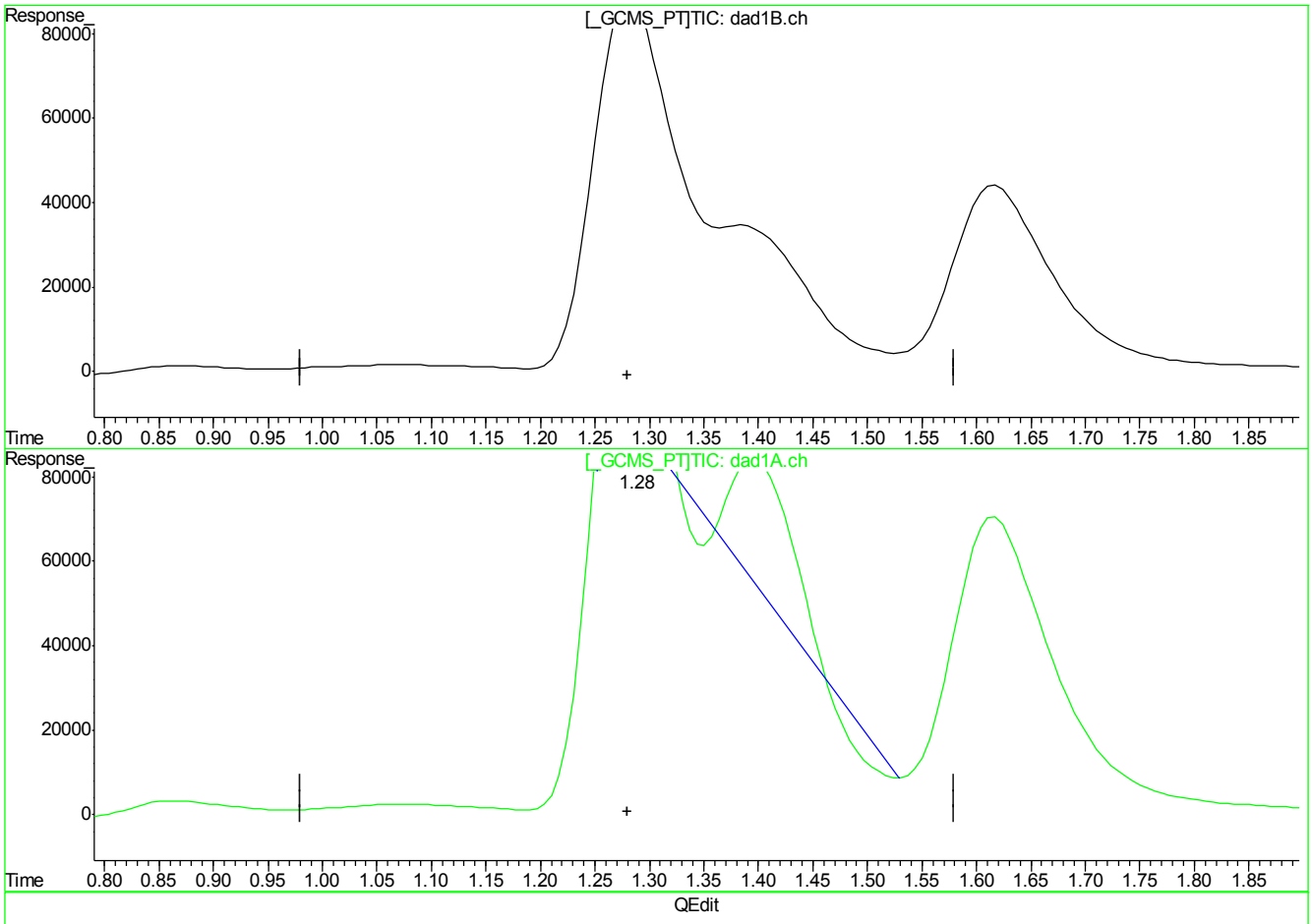
Sample Number:	GBB1730-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059670.D	**Analyst approved:**	05/11/18 08:45 Evita Martinez
Injection Time:	05/10/18 09:23	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.28	Poorly defined baseline
TNX		2	1.28	Poorly defined baseline
HMX	2691-41-0	1	1.38	Poorly defined baseline
HMX	2691-41-0	2	1.39	Poorly defined baseline
DNX		1	1.61	Poorly defined baseline
DNX		2	1.61	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.28	Poorly defined baseline
PETN	78-11-5	2	18.23	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

0.00min 0.000ppb

response 0

(1) TNX #2

1.40min 202.988ppb

response 1505848

(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:03:52 2018

7.7.9.2

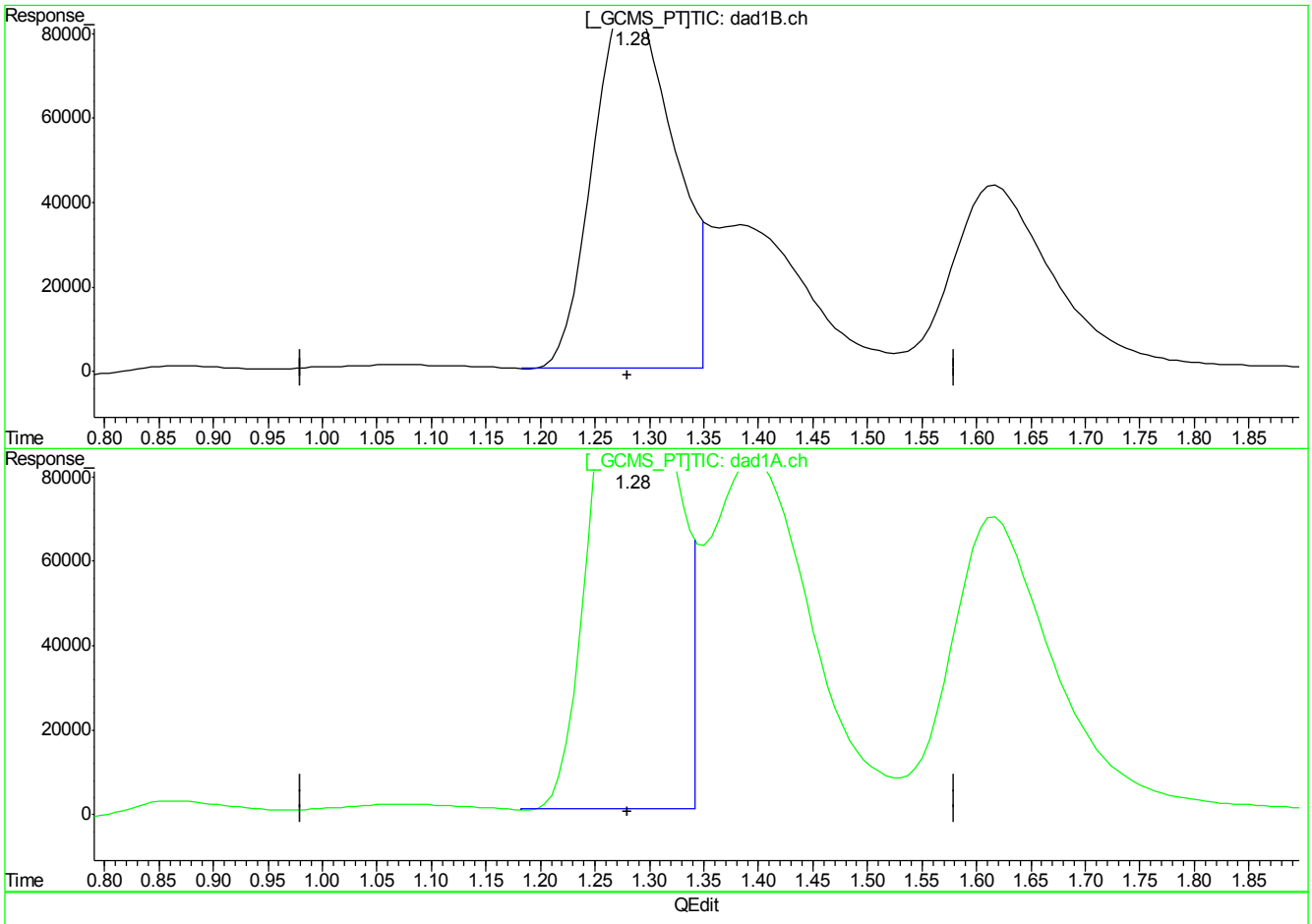
7

BB059670.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

1.28min 904.494ppb m

response 4363783

(1) TNX #2

1.28min 889.906ppb m

response 6601700

(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:03:58 2018

7.7.9.3

7

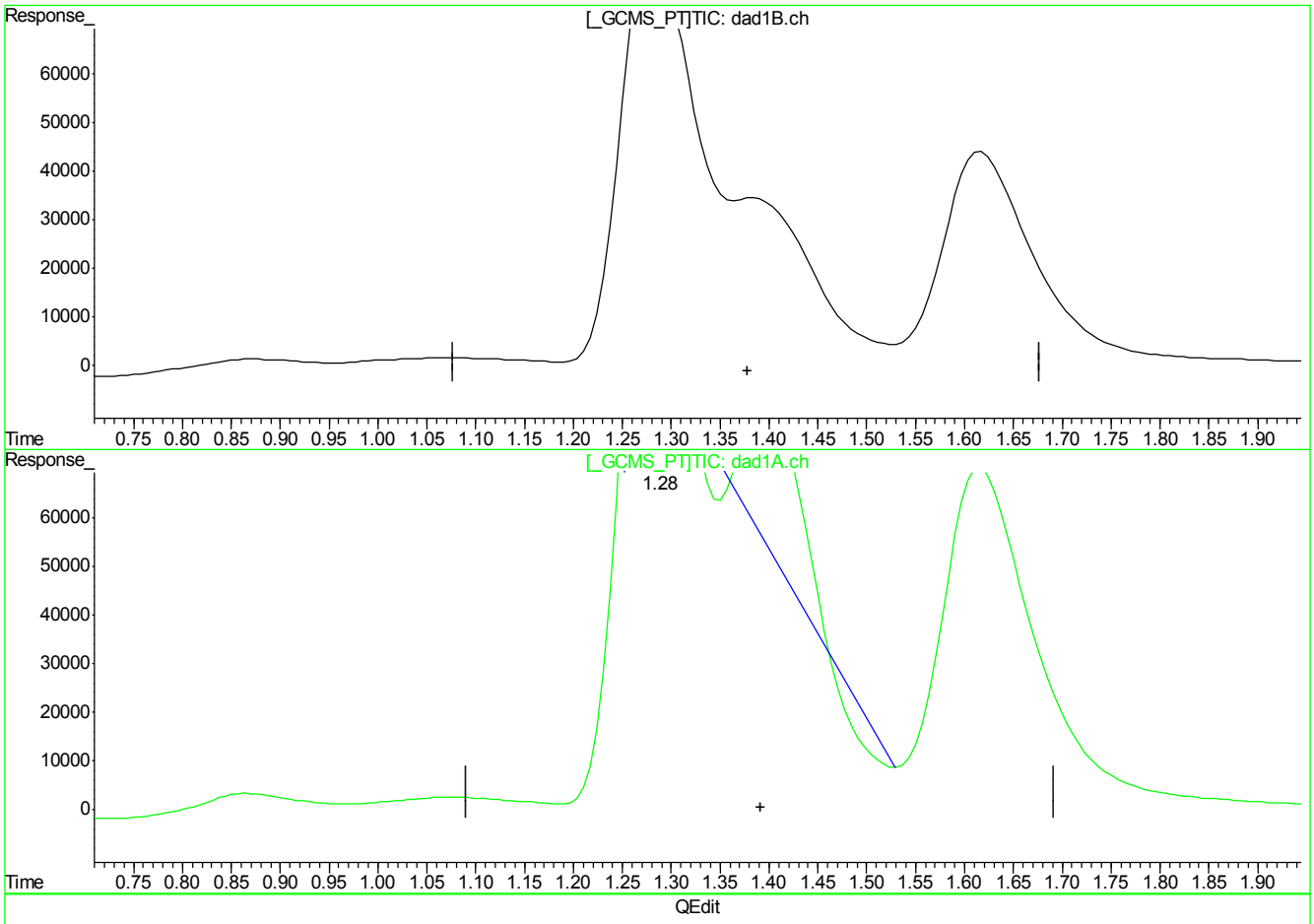
FA53800

BB059670.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

0.00min 0.000ppb

response 0

(2) HMX #2

1.40min 296.141ppb

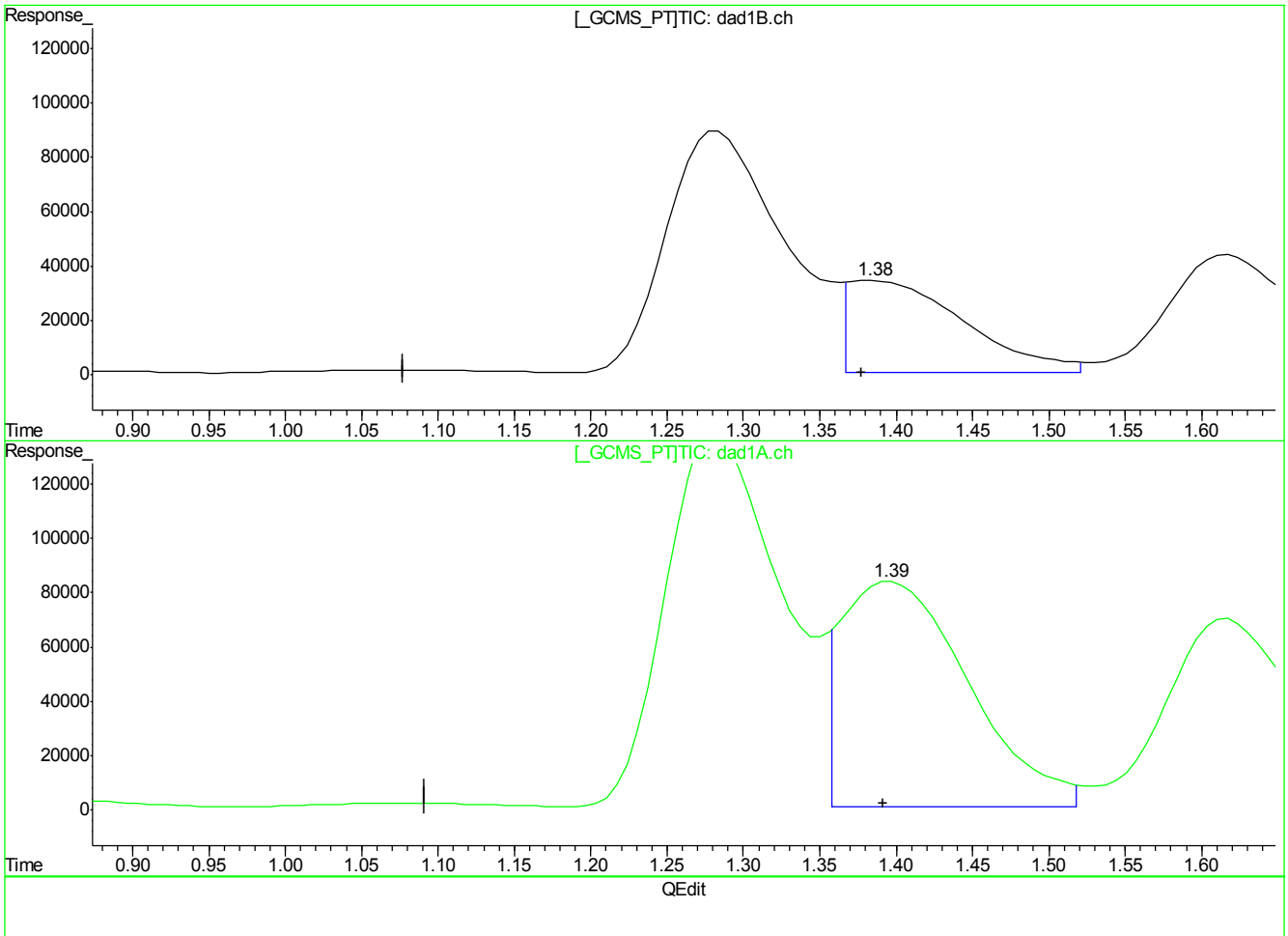
response 1505848

(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:04:01 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

1.38min 955.718ppb m

response 1787292

(2) HMX #2

1.39min 938.716ppb m

response 4755713

(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:04:30 2018

7.7.9.5

7

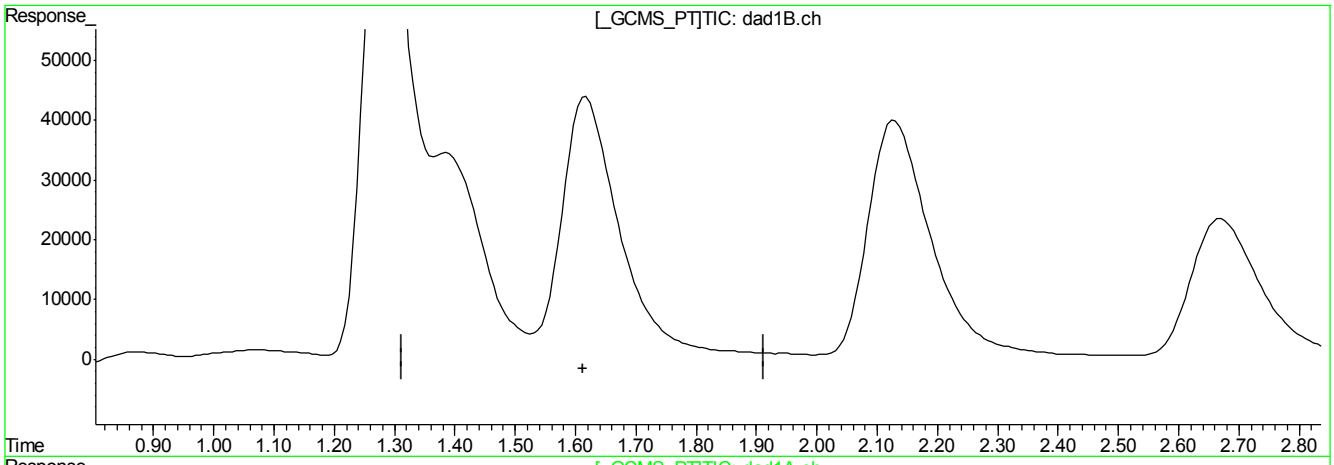
BB059670.D edits: HMX

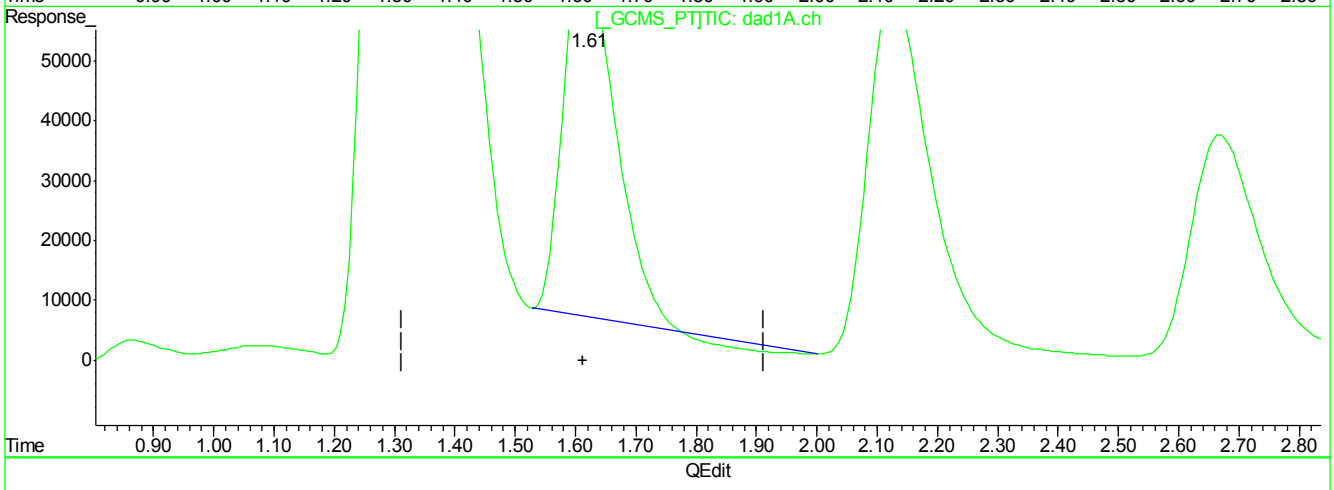
FA53800

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

0.00min 0.000ppb

response 0

(3) DNX #2

1.62min 761.360ppb

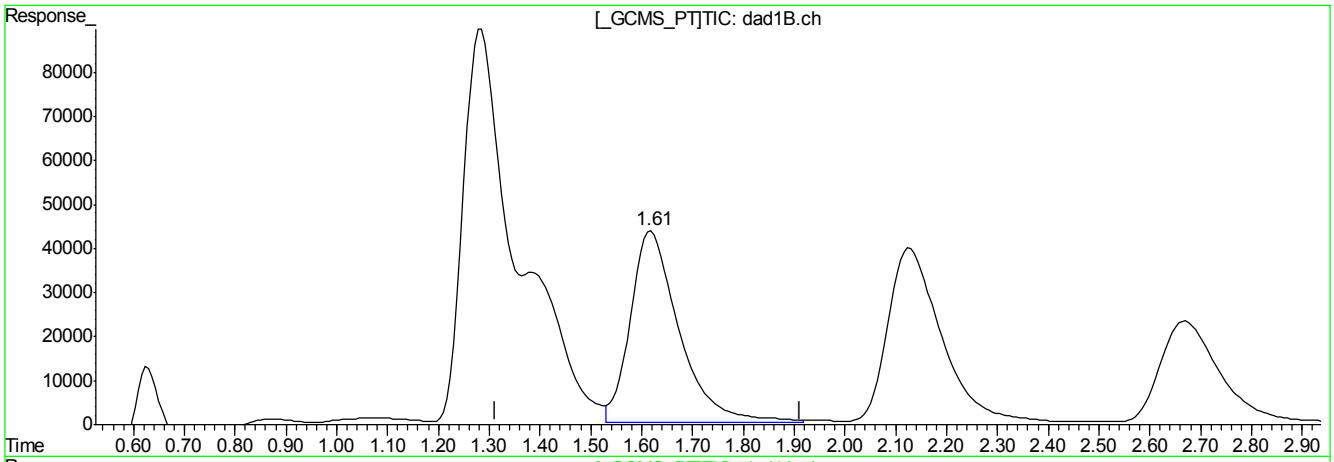
response 3585496

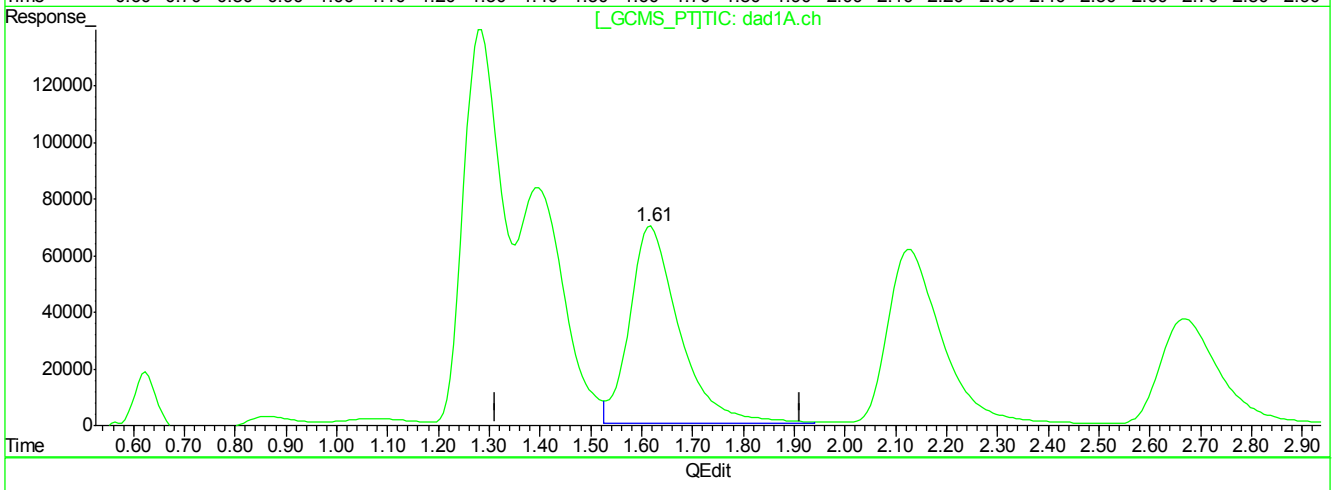
(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:04:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.61min 947.122ppb m

response 2933252

(3) DNX #2

1.61min 997.850ppb m

response 4715046

(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:04:48 2018

7.7.9.7

7

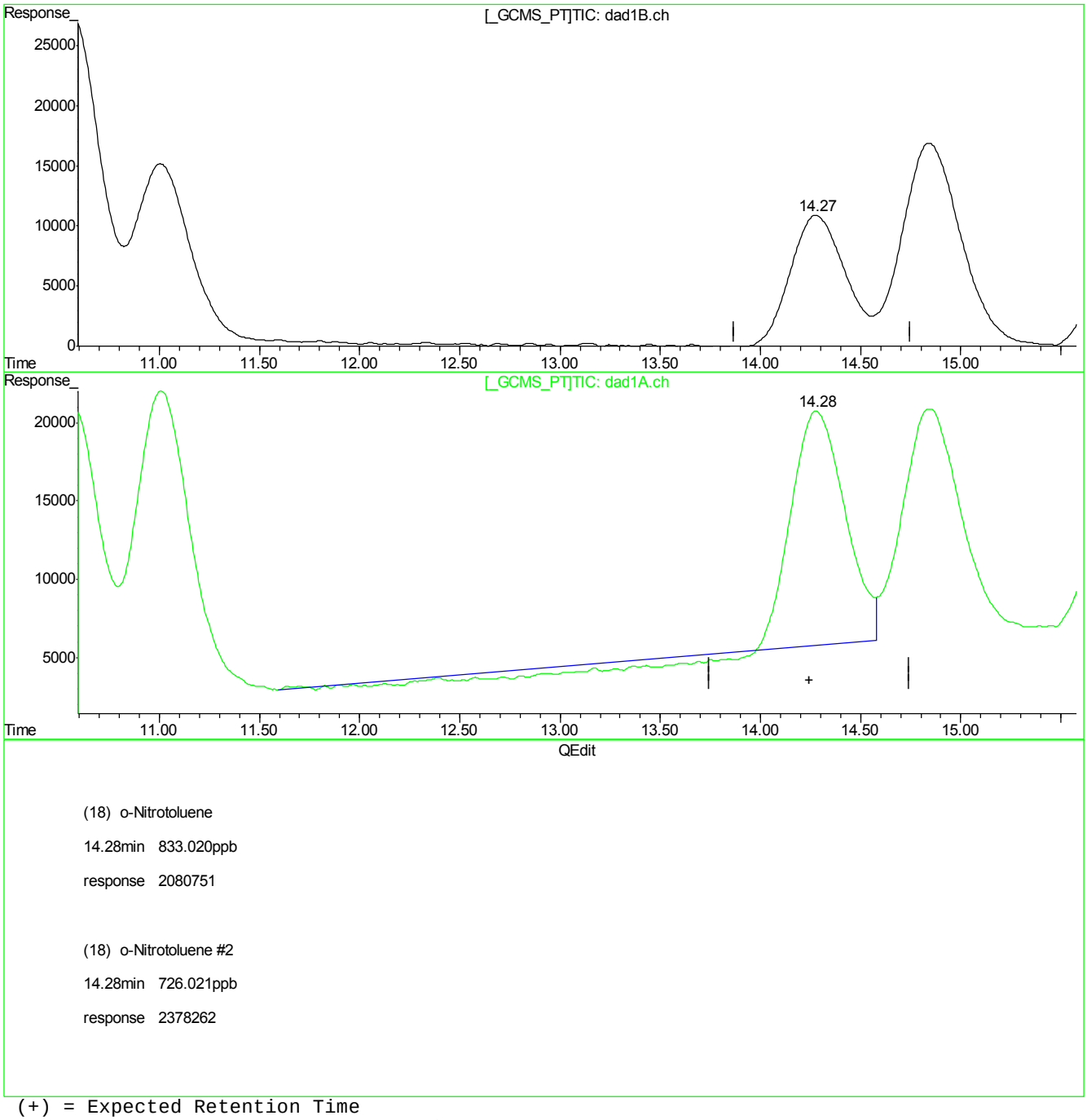
FA53800

BB059670.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.28min 833.020ppb

response 2080751

(18) o-Nitrotoluene #2

14.28min 726.021ppb

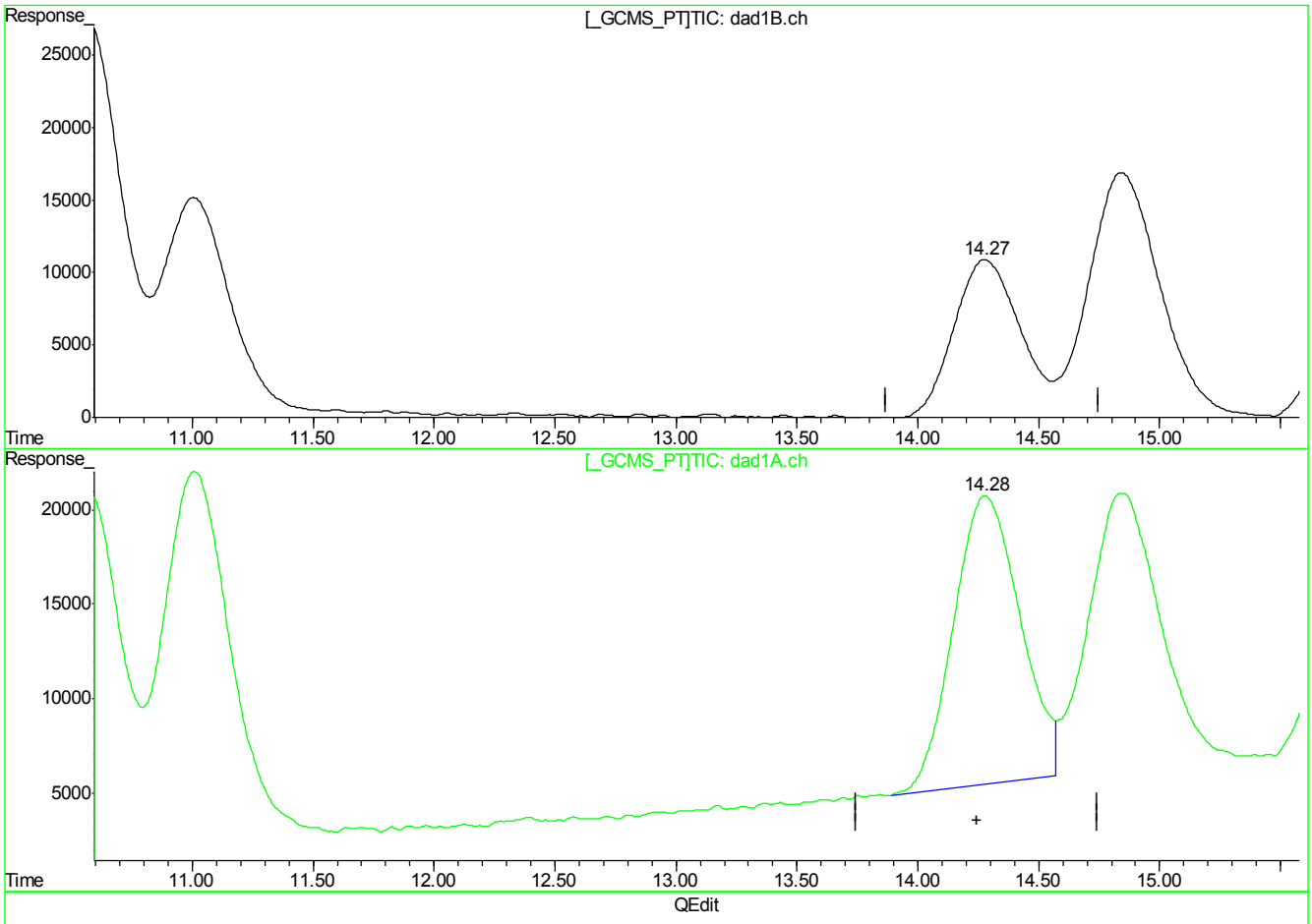
response 2378262

(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:04:59 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.28min 833.020ppb

response 2080751

(18) o-Nitrotoluene #2

14.28min 891.199ppb m

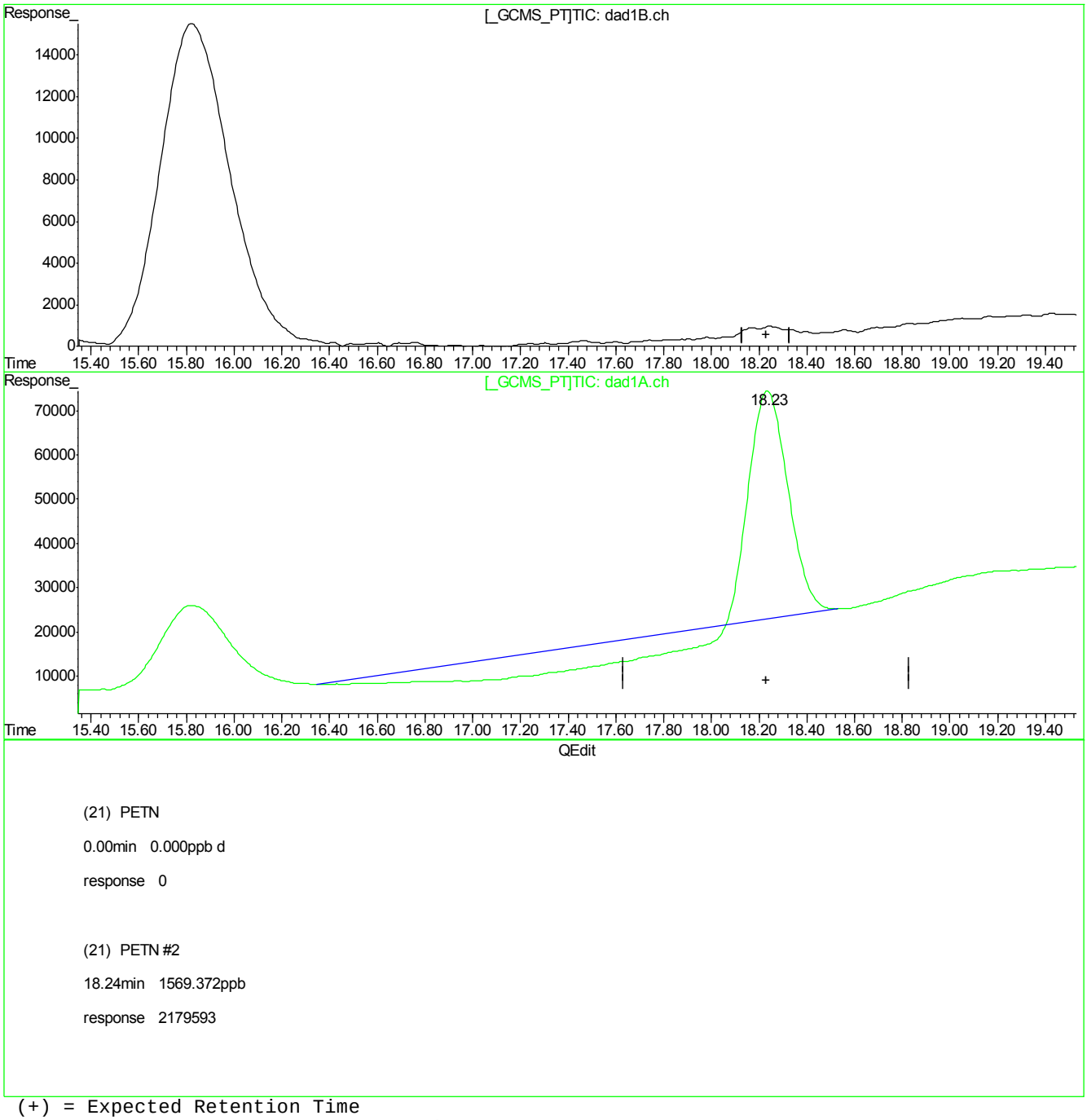
response 2919345

(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:05:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.24min 1569.372ppb

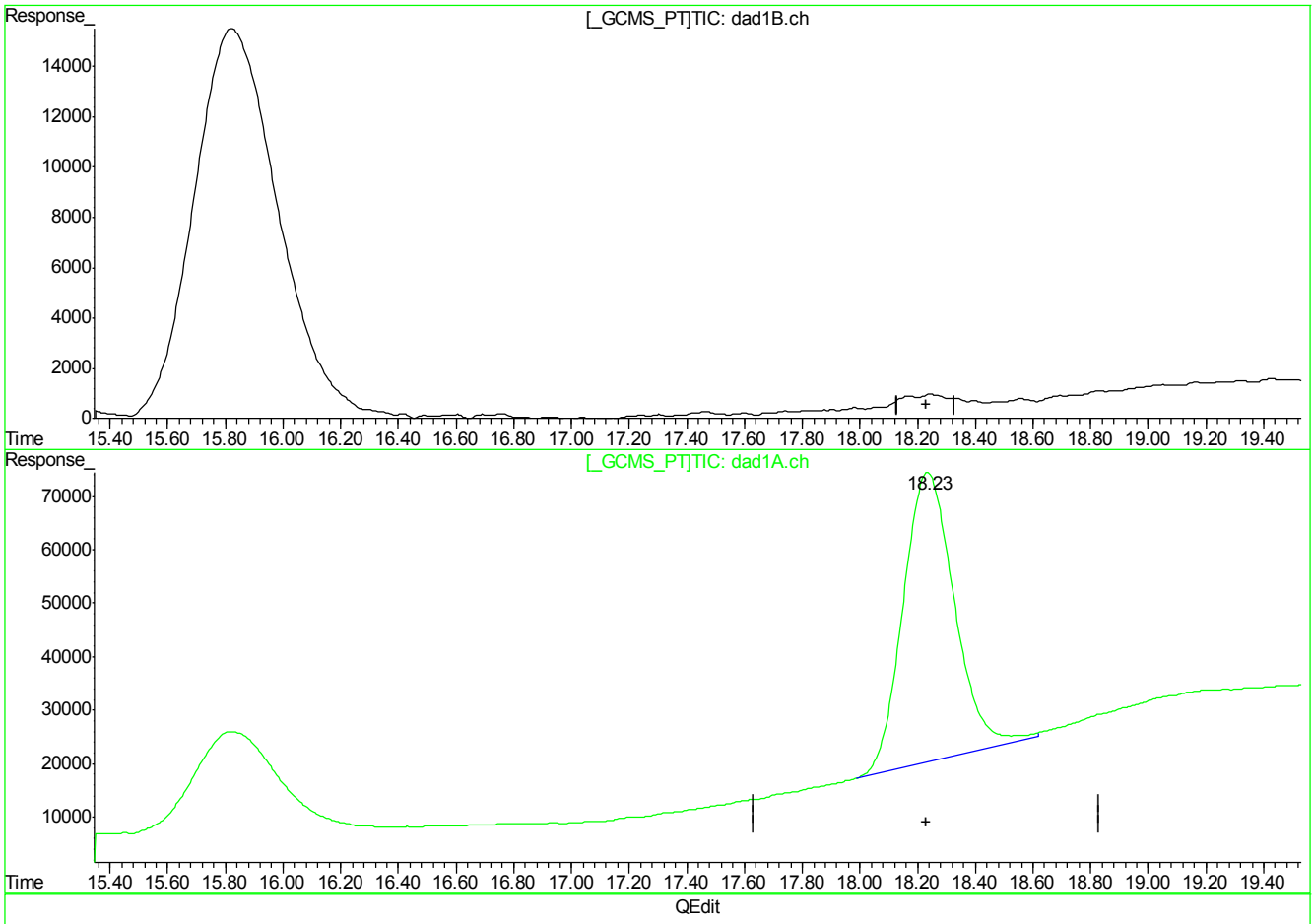
response 2179593

(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:05:06 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059670.D\dad1A.ch
Acq On : 10-May-2018, 09:23:30 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69878,gbb1730,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.23min 4799.692ppb m

response 6665962

(+) = Expected Retention Time
BB059670.D 8330B_0419PLUS.M Fri May 11 08:05:09 2018

7.7.9.11

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:02:58 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.92	9.92	2401865	4348382	897.658	922.293
	Spiked Amount 500.000	Range 69 - 134		Recovery =		179.53%#	184.46%#
	Target Compounds						
1)	TNX	1.28	1.28	4700758	6800087	974.340m	916.648m
2)	HMX	1.38	1.39	1790922	4701914	957.659m	928.039m
3)	DNX	1.61	1.61	2867102	4627736	925.763m	979.626m
4)	MNX	2.13	2.13	2874976	4483616	928.453	964.454
5)	RDX	2.66	2.66	1871039	3011731	874.977	906.057
6)	1,3,5-Trinitrobe	4.28	4.28	4139033	7924647	951.218	949.278
7)	1,3-Dinitrobenze	5.42	5.42	5142472	3375257	927.578	906.260
8)	3,5-Dinitroanili	5.67	5.67	4674596	7467496	955.877	998.489
9)	Nitrobenzene	6.90	6.90	3237236	3075823	888.421	927.613
10)	Nitroglycerin	0.00	8.17	0	5997120	N.D. d	4680.025m
11)	Tetryl	8.37	8.29	2559913	4000362	871.734	770.223m
12)	2,4,6-Trinitroto	8.82	8.82	3290964	3786620	779.821	835.394
13)	2-Amino-4,6-Dini	9.00	9.01	3727027	5972011	984.557	1113.383
14)	4-Amino-2,6-Dini	9.44	9.44	2613531	5354114	989.198	1033.242
16)	2,4-Dinitrotolue	10.55	10.55	4827228	3129192	917.548	1059.582
17)	2,6-Dinitrotolue	10.98	10.98	2932018	3657026	848.319	1070.986
18)	o-Nitrotoluene	14.25	14.25	2219886	3013261	888.722	919.869m
19)	p-Nitrotoluene	14.82	14.82	3701046	3051568	937.677	967.543
20)	m-Nitrotoluene	15.80	15.80	3462374	3900586	970.613	969.361
21)	PETN	0.00	18.23	0	6690557	N.D. d	4817.401m

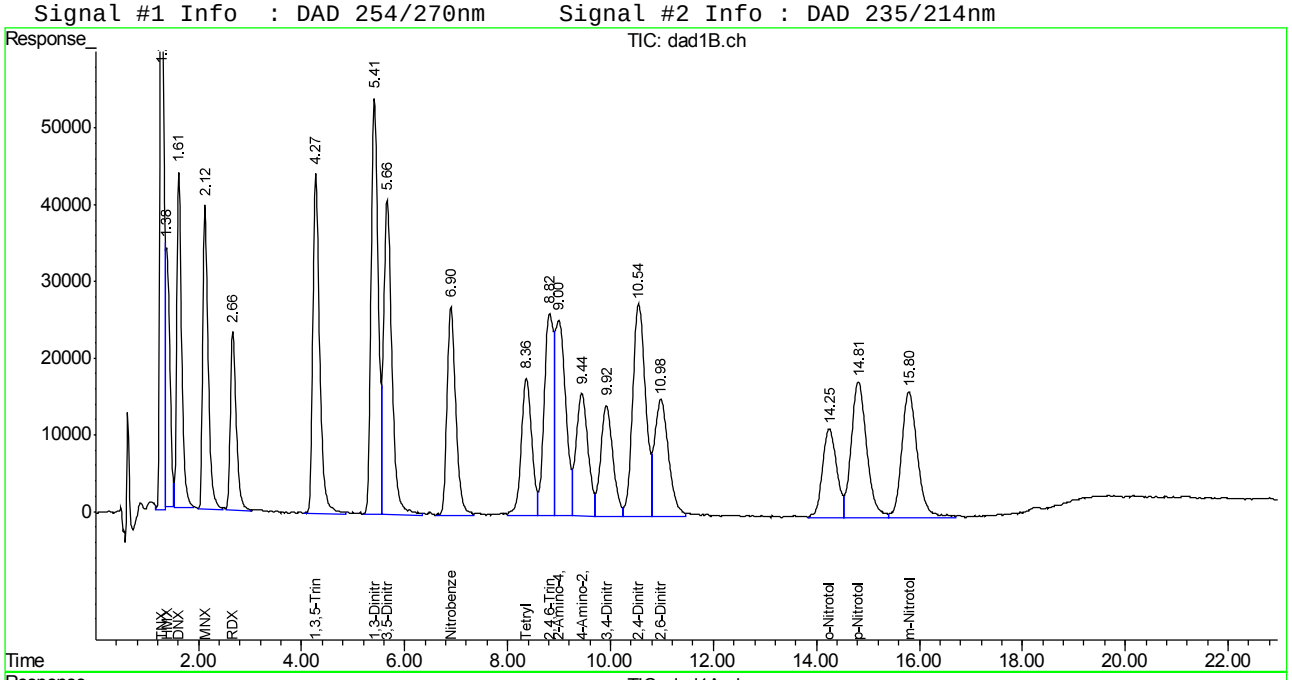
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059680.D 8330B_0419PLUS.M Fri May 11 08:37:55 2018 Page 1

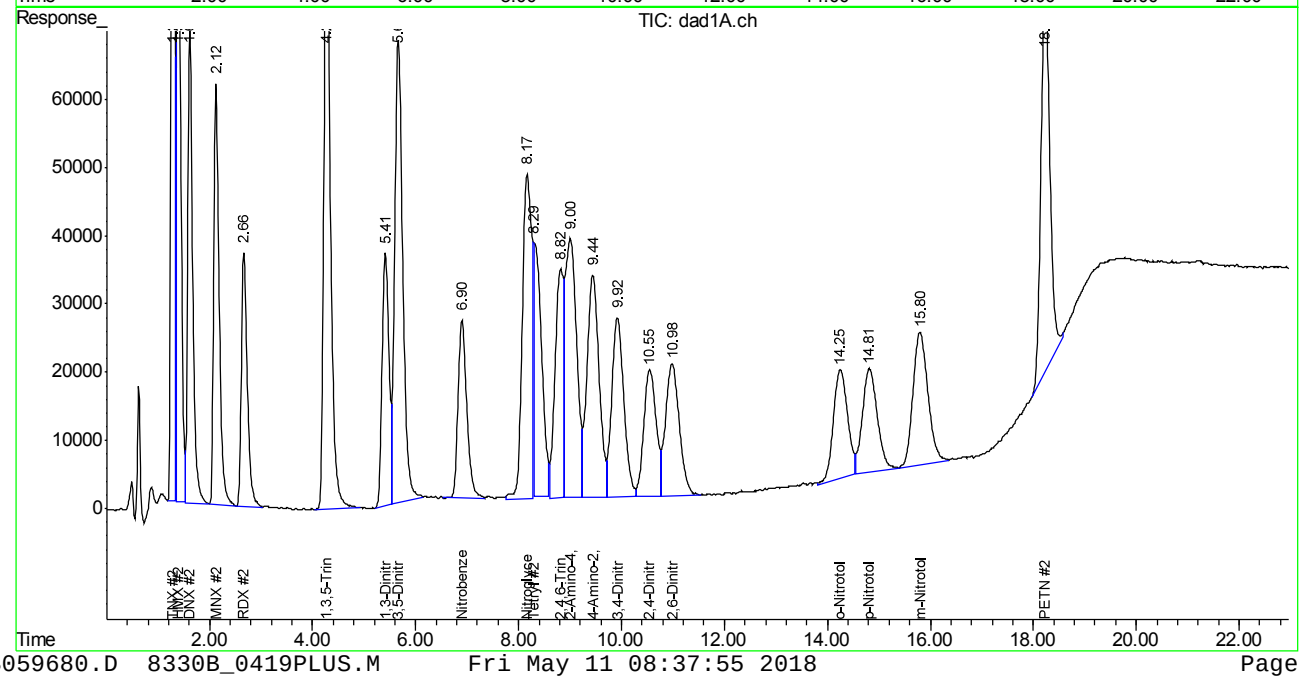
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:15 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

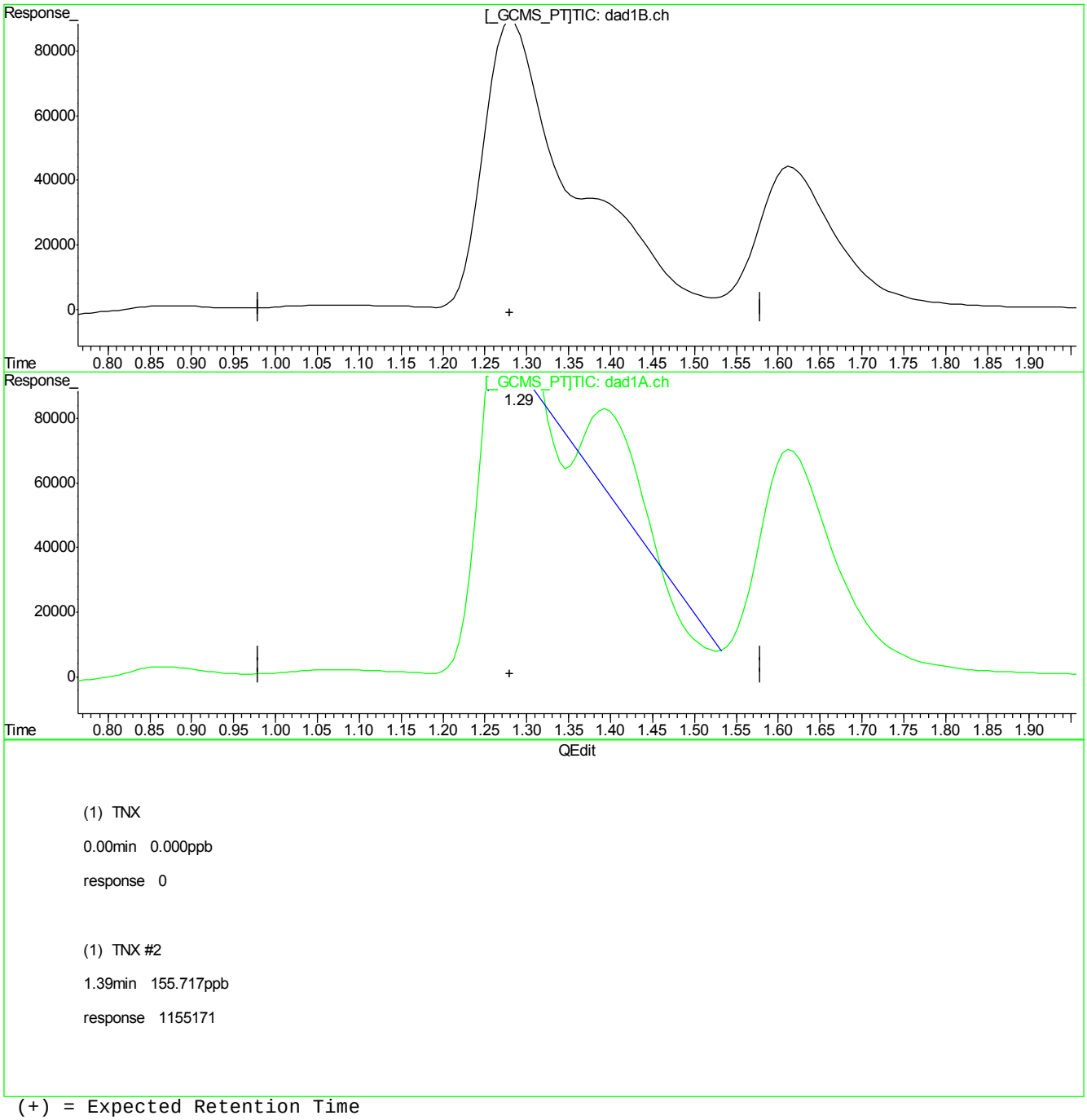
Sample Number:	GBB1730-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059680.D	**Analyst approved:**	05/11/18 08:45 Evita Martinez
Injection Time:	05/10/18 15:29	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.28	Poorly defined baseline
TNX		2	1.28	Poorly defined baseline
HMX	2691-41-0	1	1.38	Poorly defined baseline
HMX	2691-41-0	2	1.39	Poorly defined baseline
DNX		1	1.61	Poorly defined baseline
DNX		2	1.61	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.17	Poorly defined baseline
Tetryl	479-45-8	2	8.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.25	Poorly defined baseline
PETN	78-11-5	2	18.23	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



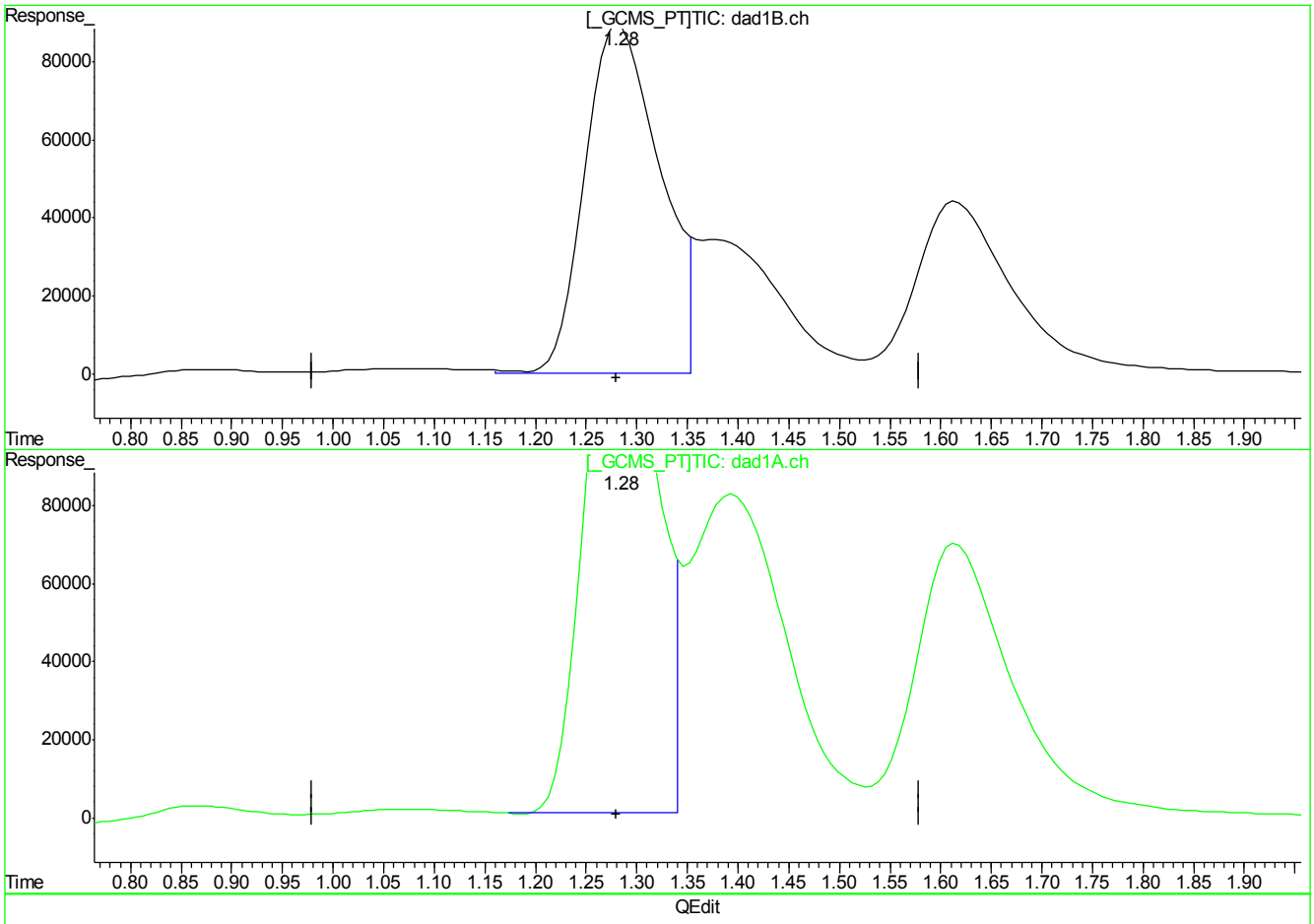
(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:11:46 2018

BB059680.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

1.28min 974.340ppb m

response 4700758

(1) TNX #2

1.28min 916.648ppb m

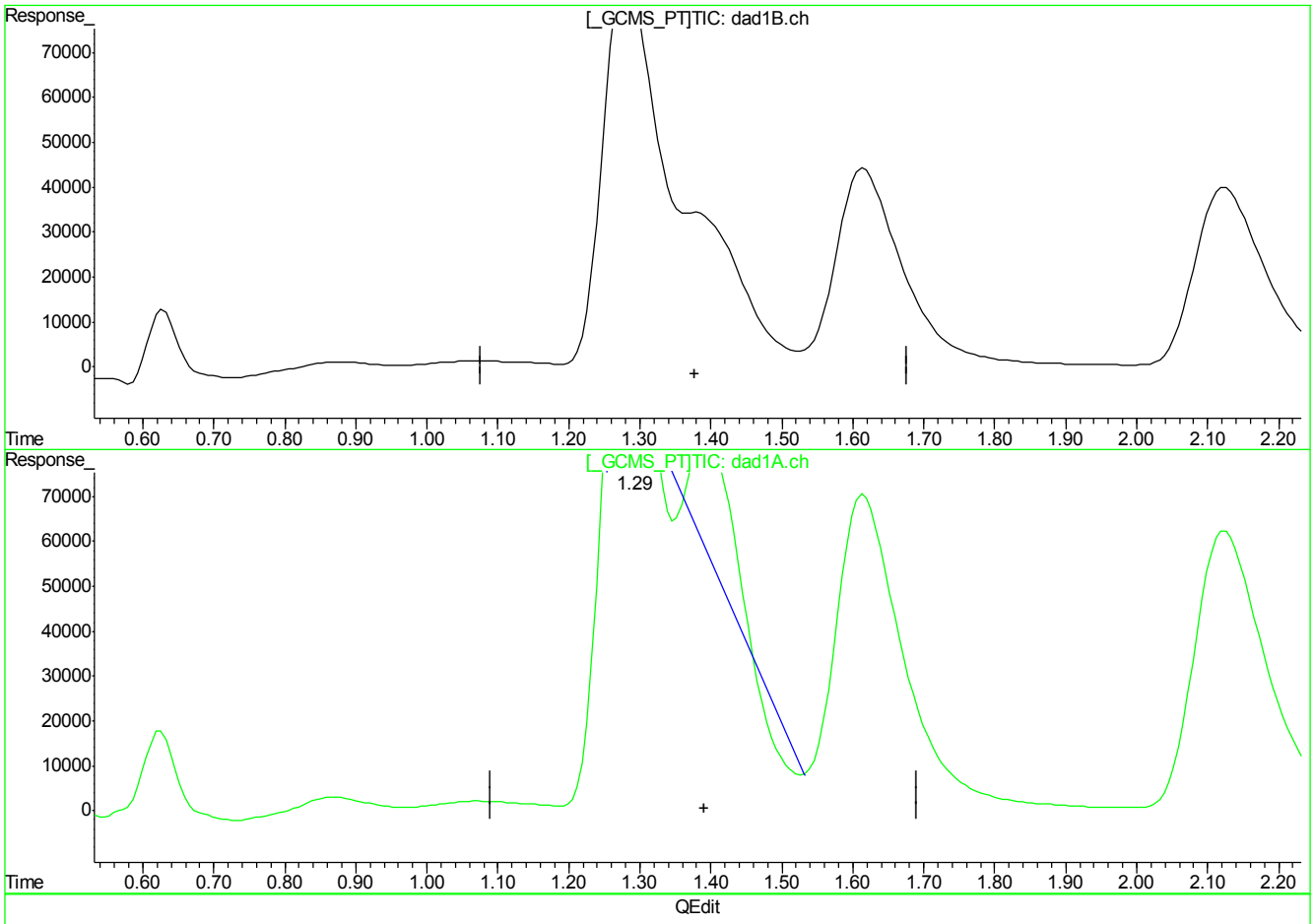
response 6800087

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:13:49 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

0.00min 0.000ppb

response 0

(2) HMX #2

1.39min 227.087ppb

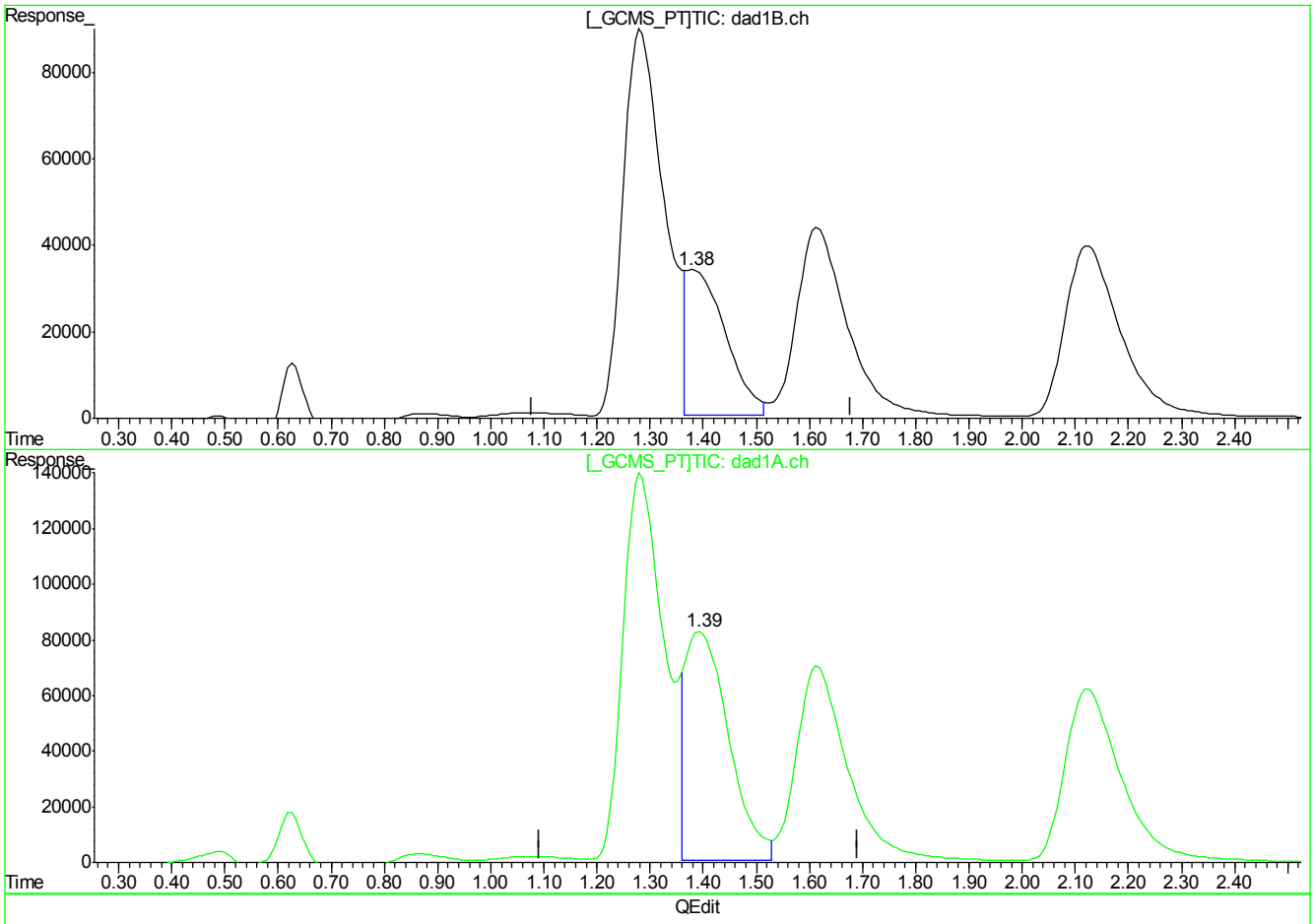
response 1155171

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:13:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

1.38min 957.659ppb m

response 1790922

(2) HMX #2

1.39min 928.039ppb m

response 4701914

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:14:07 2018

7.7.10.5

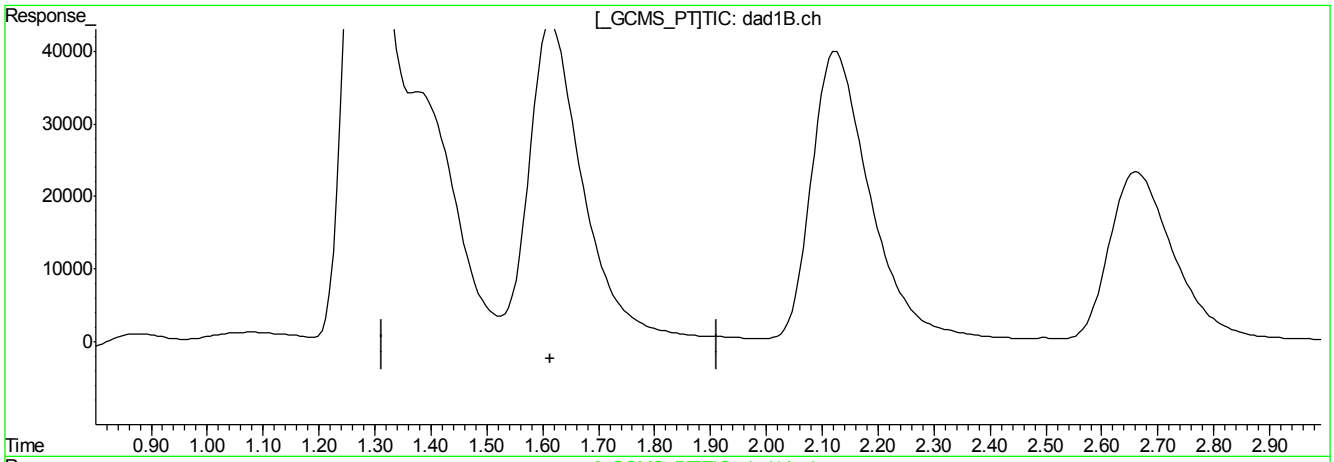
7

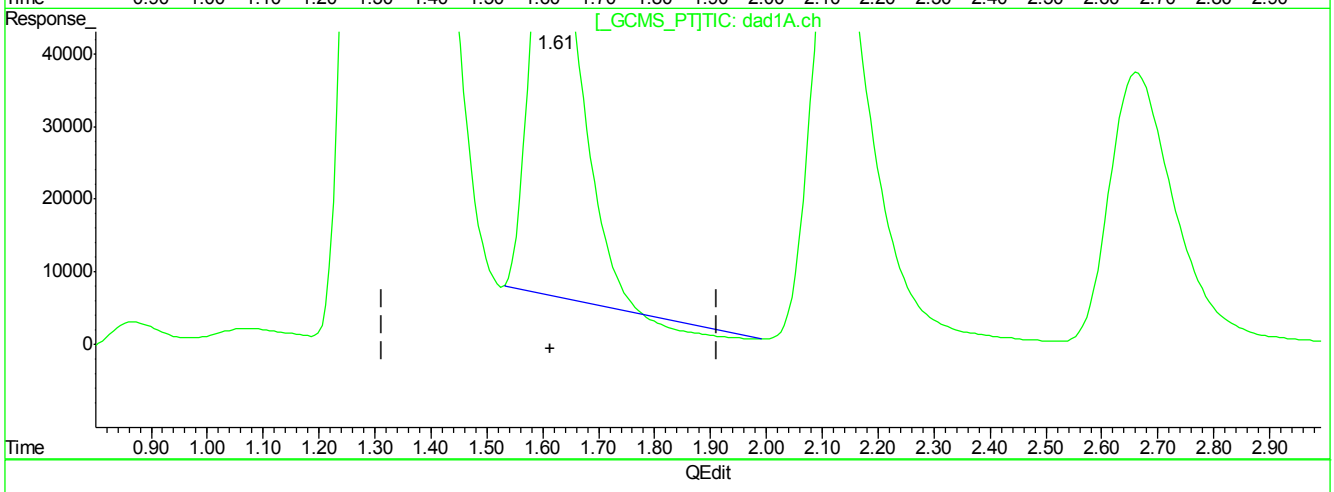
BB059680.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

0.00min 0.000ppb

response 0

(3) DNX #2

1.62min 775.907ppb

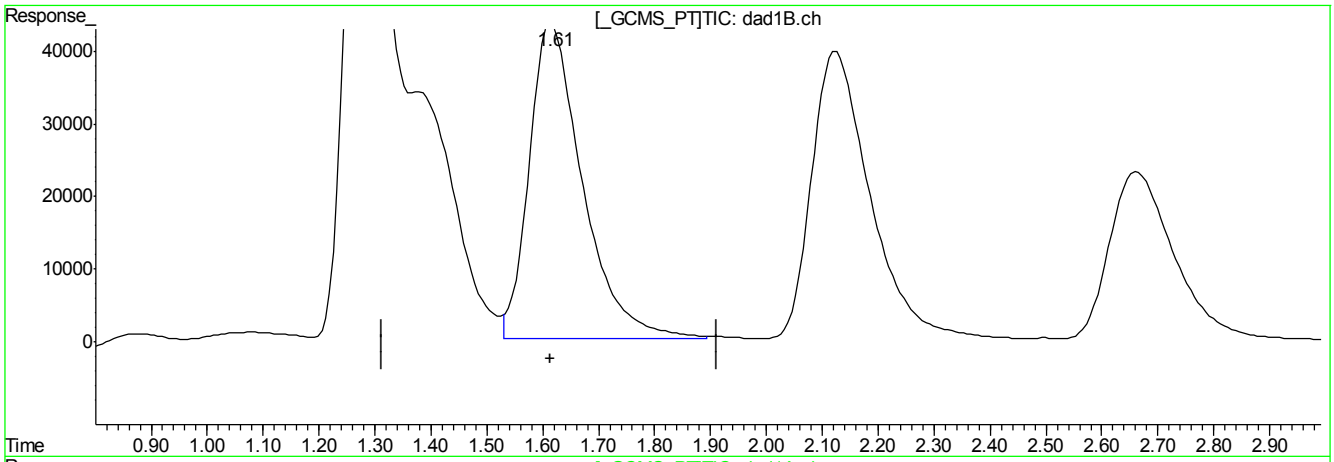
response 3654760

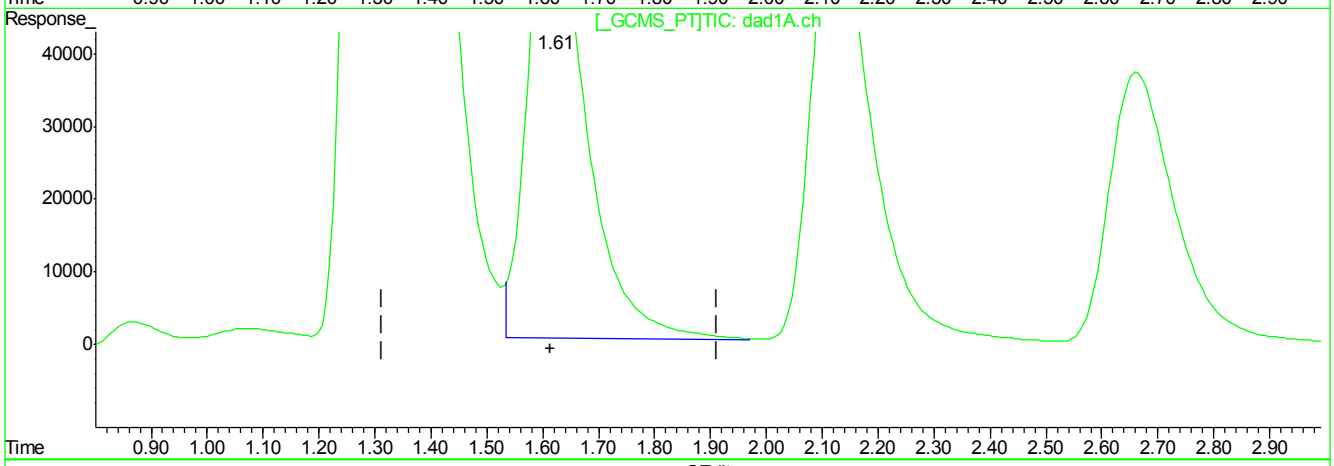
(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:14:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.61min 925.763ppb m

response 2867102

(3) DNX #2

1.61min 979.626ppb m

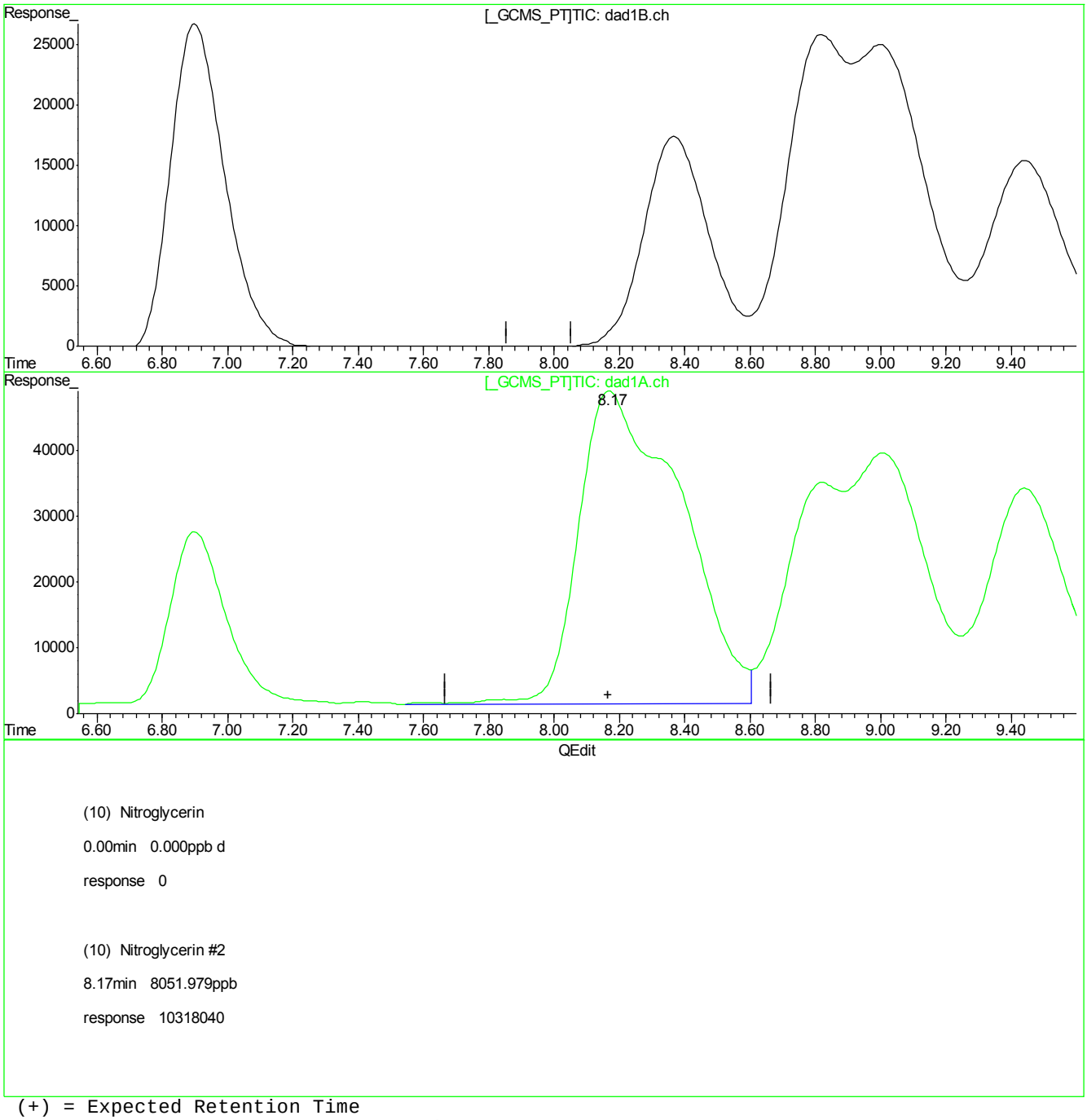
response 4627736

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:14:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

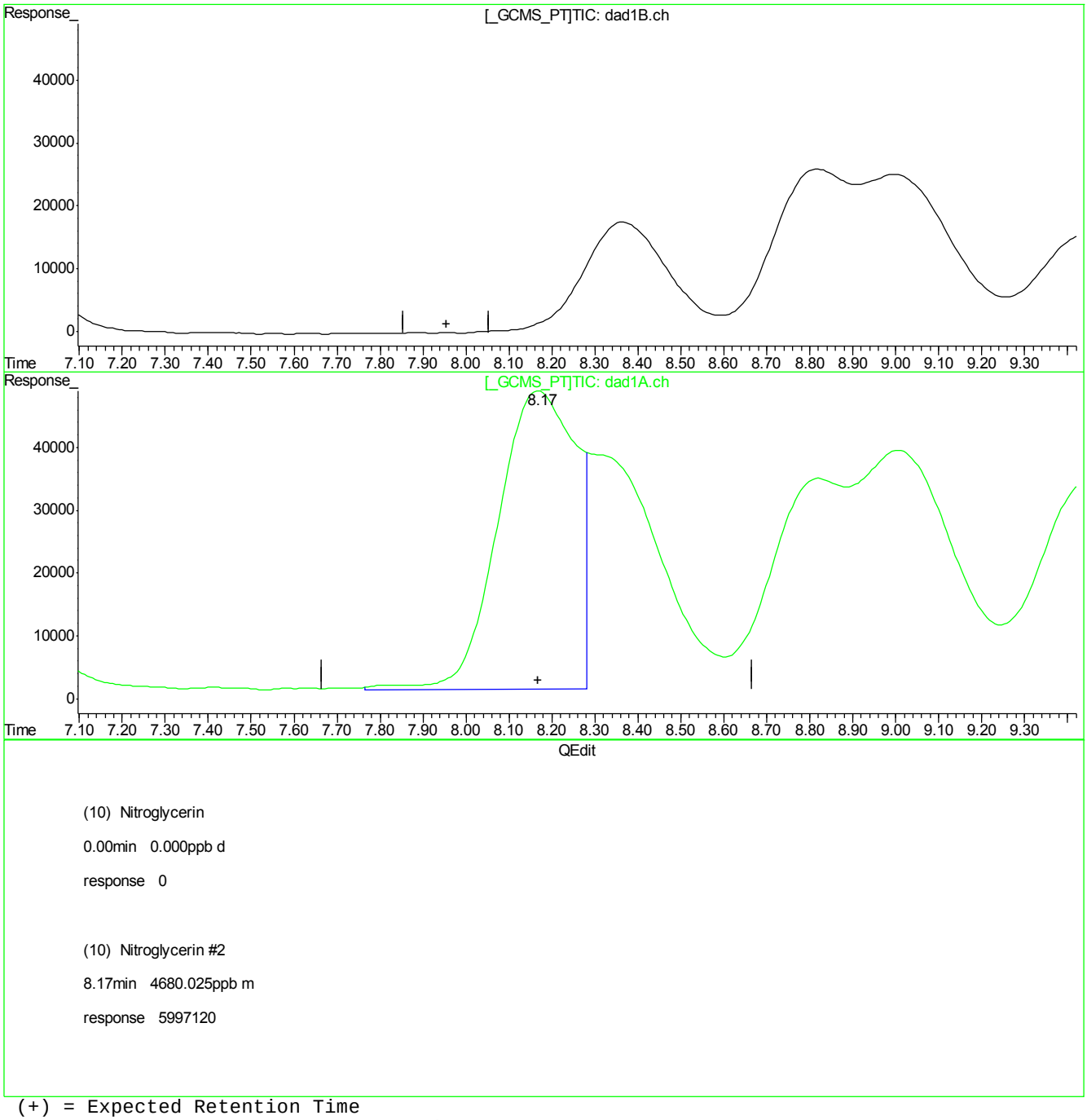


(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:14:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.17min 4680.025ppb m

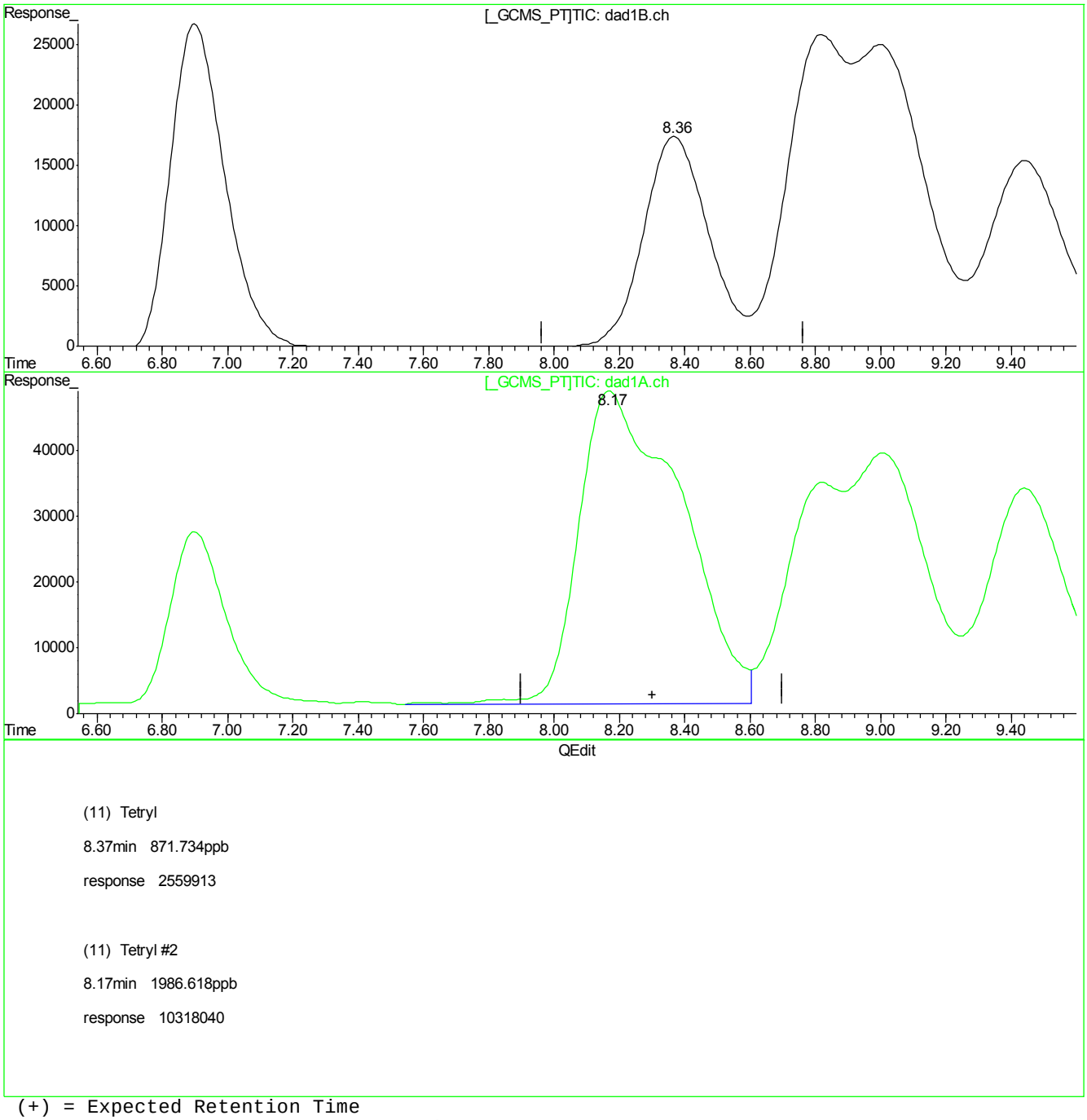
response 5997120

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:14:49 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.37min 871.734ppb

response 2559913

(11) Tetryl #2

8.17min 1986.618ppb

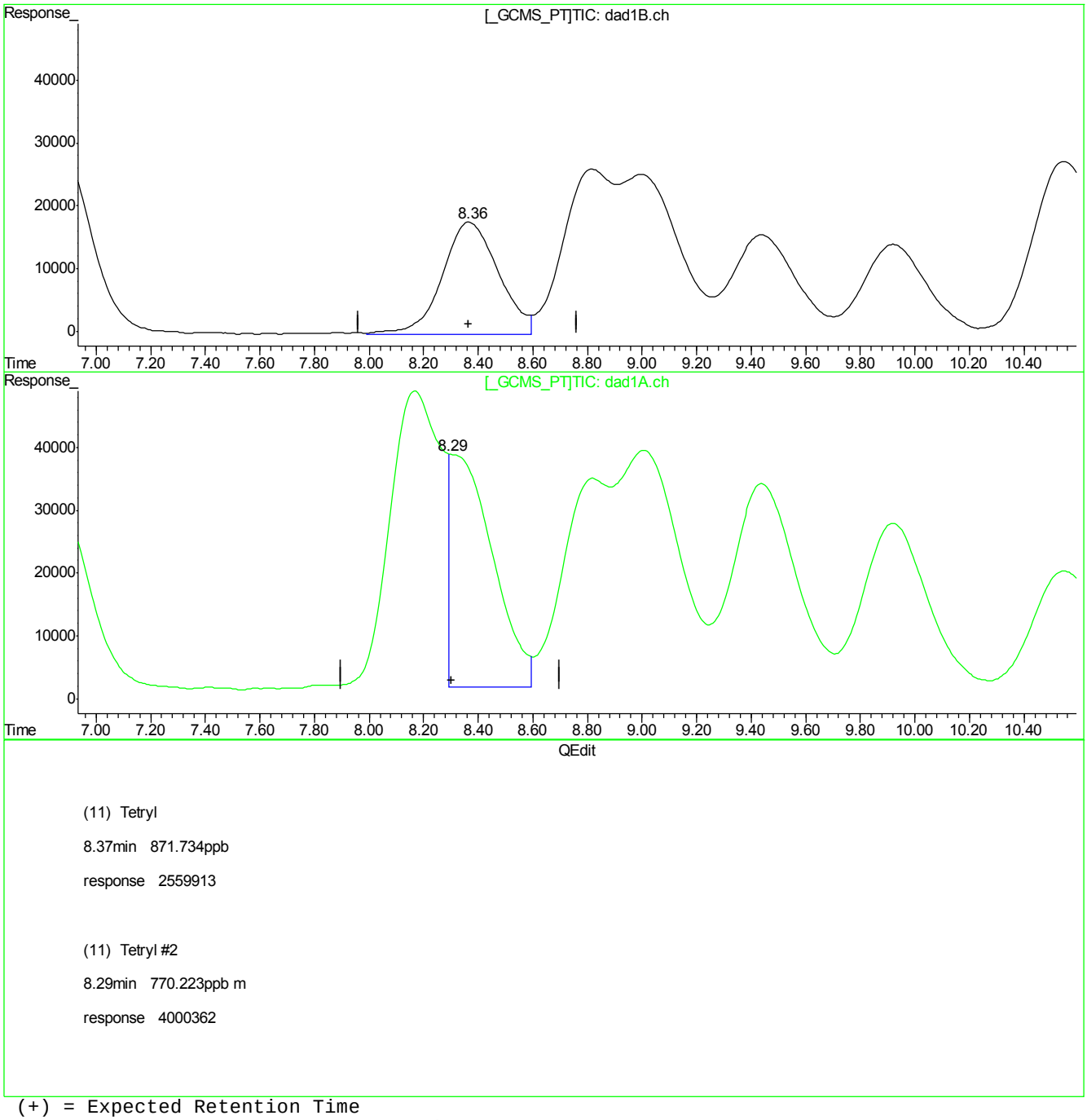
response 10318040

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:14:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.37min 871.734ppb

response 2559913

(11) Tetryl #2

8.29min 770.223ppb m

response 4000362

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:15:11 2018

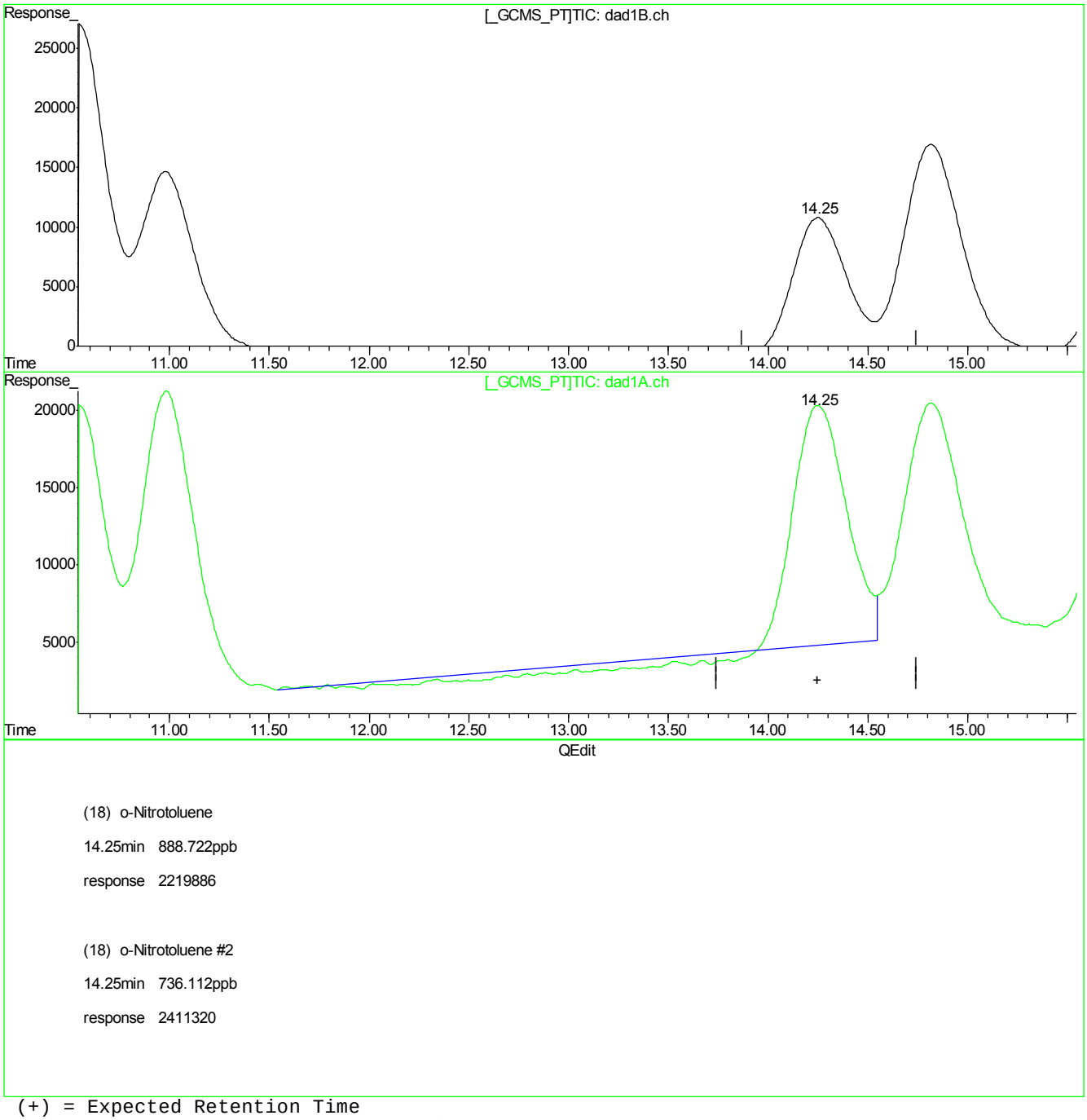
7.7.10.11

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.25min 888.722ppb

response 2219886

(18) o-Nitrotoluene #2

14.25min 736.112ppb

response 2411320

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:15:20 2018

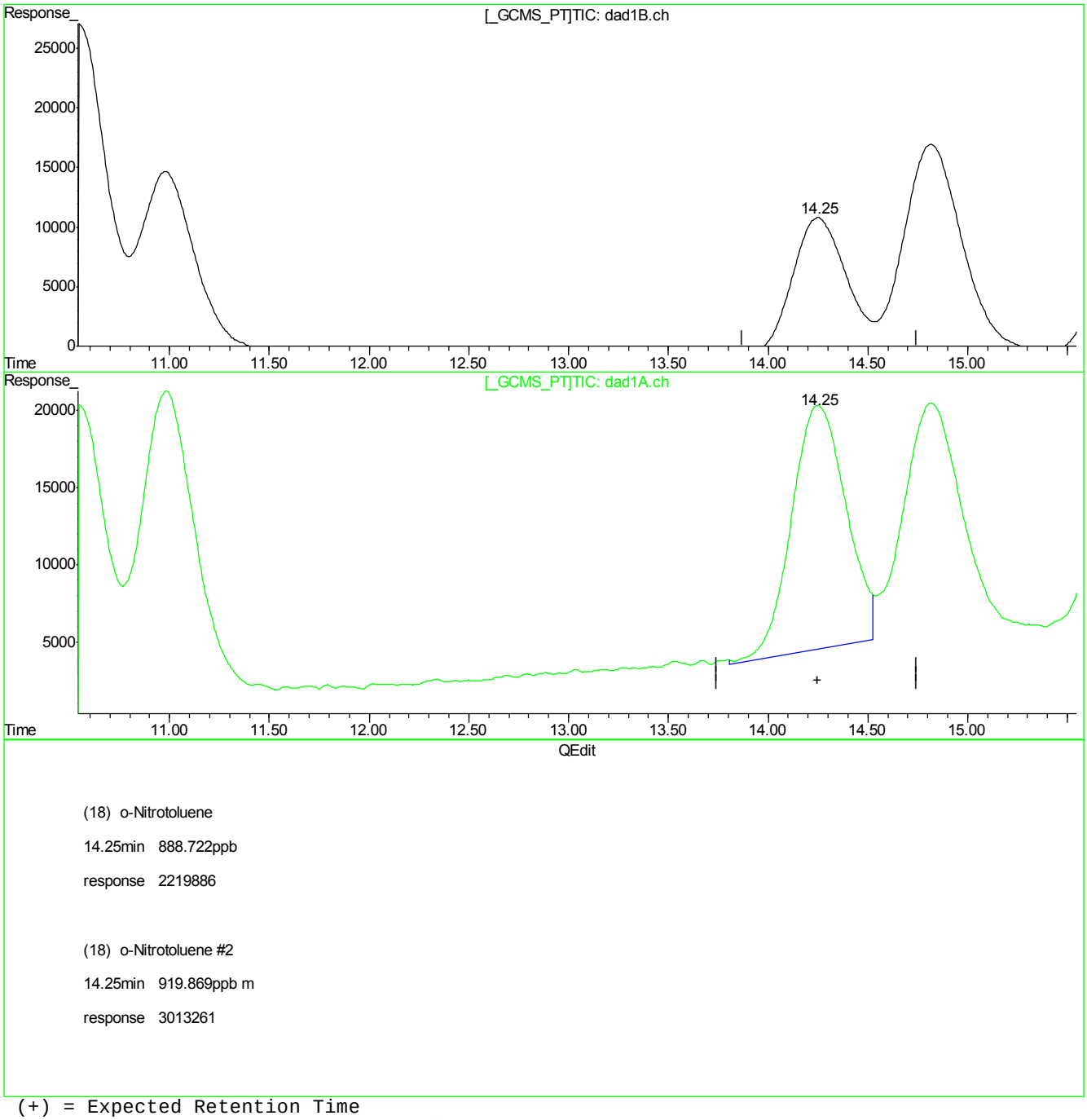
7.7.10.12

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.25min 888.722ppb

response 2219886

(18) o-Nitrotoluene #2

14.25min 919.869ppb m

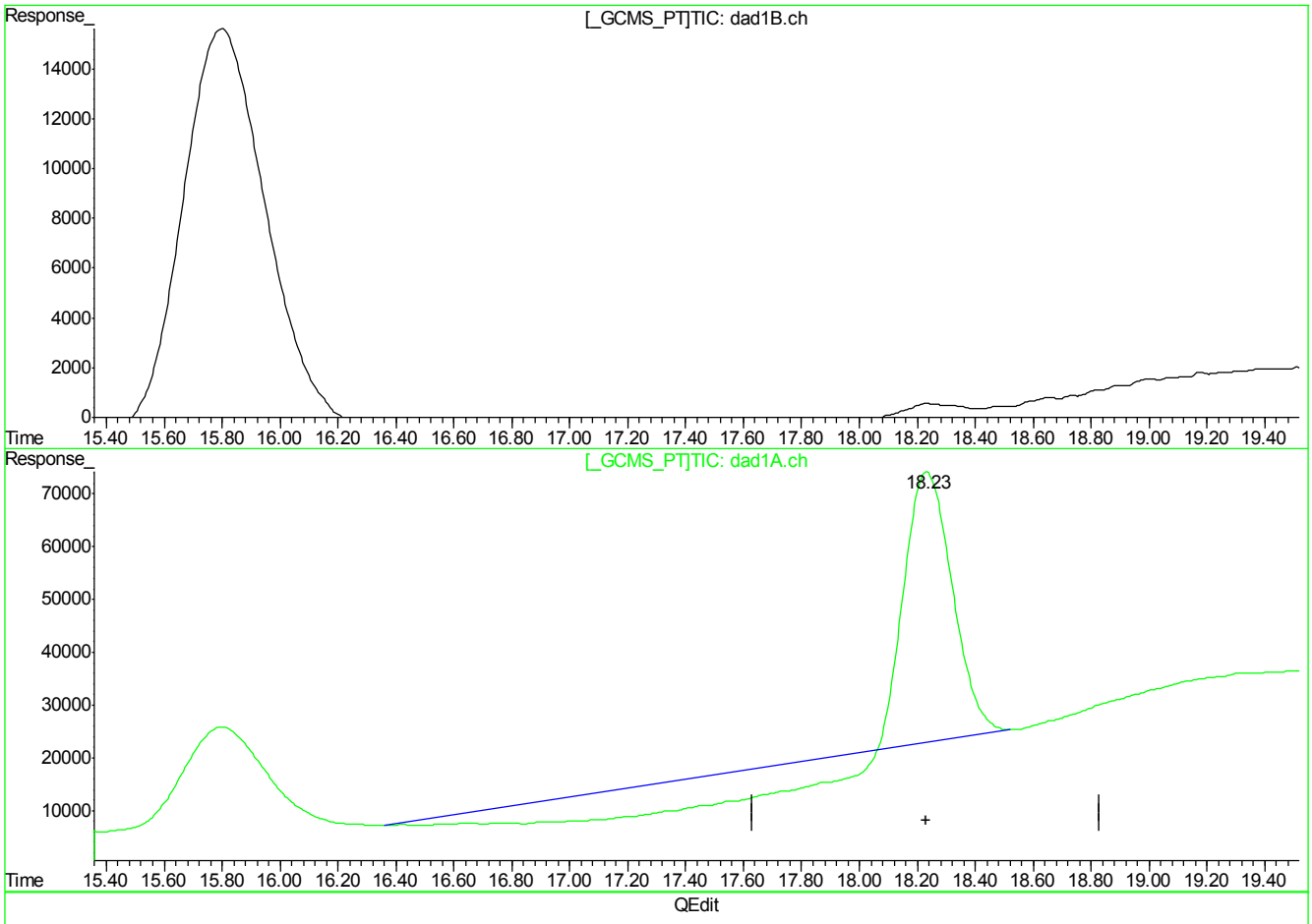
response 3013261

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:15:23 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.23min 1296.623ppb

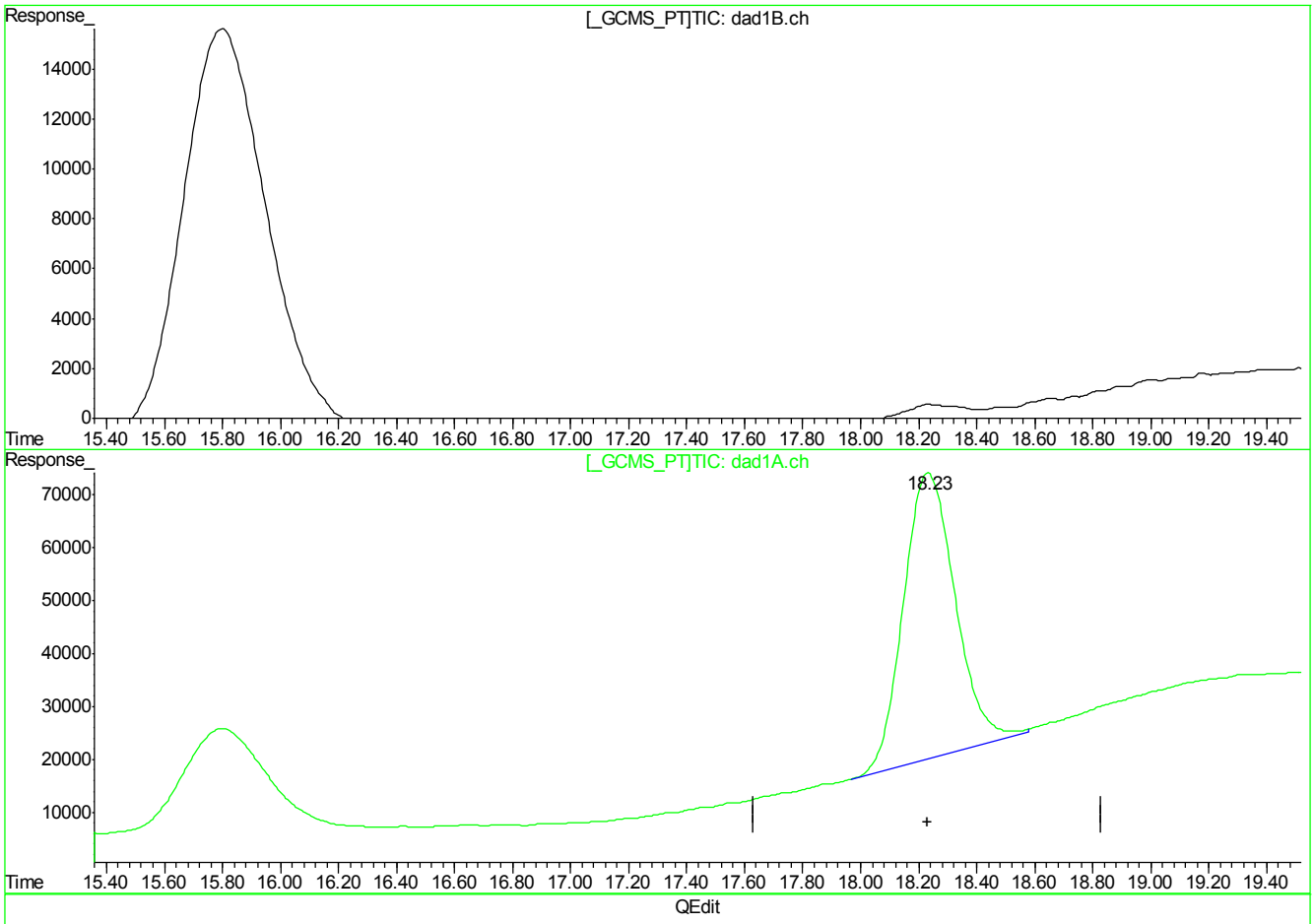
response 1800791

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:15:26 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059680.D\dad1A.ch
Acq On : 10-May-2018, 15:29:26 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:02 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.23min 4817.401ppb m

response 6690557

(+) = Expected Retention Time
BB059680.D 8330B_0419PLUS.M Fri May 11 08:15:31 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:10 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.89	9.89	2407895	4364730	899.911	925.760
	Spiked Amount 500.000	Range 69 - 134		Recovery =		179.98%#	185.15%#
	Target Compounds						
1)	TNX	1.27	1.27	4479144	6929032	928.405m	934.030m
2)	HMX	1.36	1.38	1752771	5200234	937.259m	1026.979m
3)	DNX	1.60	1.60	2876485	4587611	928.793m	971.248m
4)	MNX	2.11	2.11	2863770	4476451	924.834	962.912
5)	RDX	2.65	2.65	1884779	3047746	881.402	916.892
6)	1,3,5-Trinitrobe	4.25	4.25	4049477	7944958	930.637	951.711
7)	1,3-Dinitrobenze	5.39	5.40	5086083	3293182	917.407	884.223
8)	3,5-Dinitroanili	5.64	5.65	4549306	7449255	930.257	996.050
9)	Nitrobenzene	6.88	6.88	3185062	3017475	874.103	910.016
10)	Nitroglycerin	0.00	8.14	0	5538325	N.D. d	4321.991m
11)	Tetryl	8.34	8.25	2516593	4332844	856.915	834.238m
12)	2,4,6-Trinitroto	8.79	8.79	3340047	3677846	791.451	811.396
13)	2-Amino-4,6-Dini	8.97	8.98	3658705	6052541	966.508	1128.397
14)	4-Amino-2,6-Dini	9.42	9.42	2583117	5296873	977.853	1022.195
16)	2,4-Dinitrotolue	10.52	10.52	4818492	3137403	915.887	1062.363
17)	2,6-Dinitrotolue	10.95	10.96	2936031	3708992	849.480	1086.204
18)	o-Nitrotoluene	14.23	14.23	2199956	3001779	880.743	916.364m
19)	p-Nitrotoluene	14.80	14.80	3647759	3084605	924.177	977.994
20)	m-Nitrotoluene	15.78	15.78	3335835	3893286	935.141	967.547
21)	PETN	0.00	18.21	0	6654757	N.D. d	4791.624m

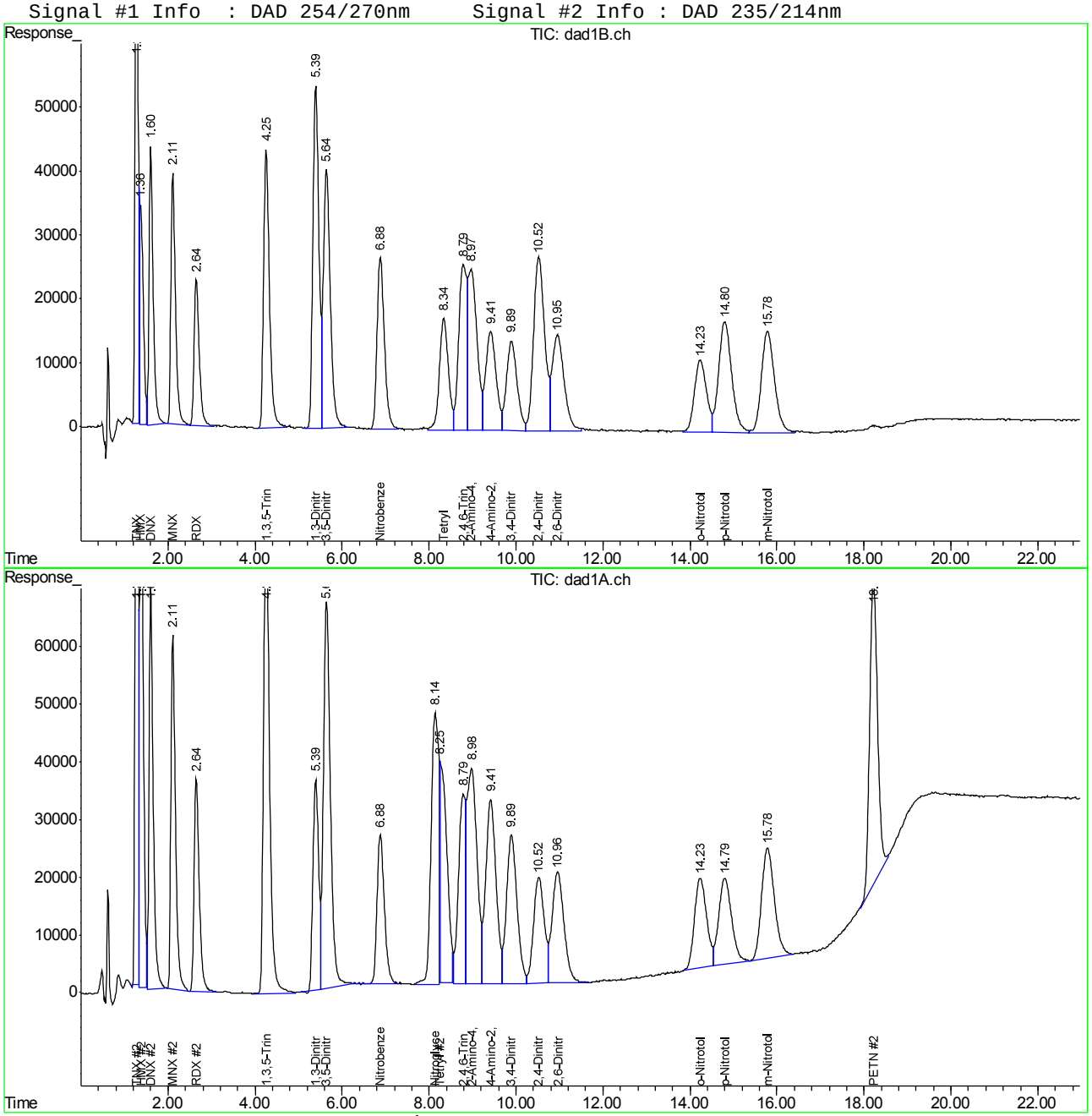
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059692.D 8330B_0419PLUS.M Fri May 11 08:38:06 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:23 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



Manual Integration Approval Summary

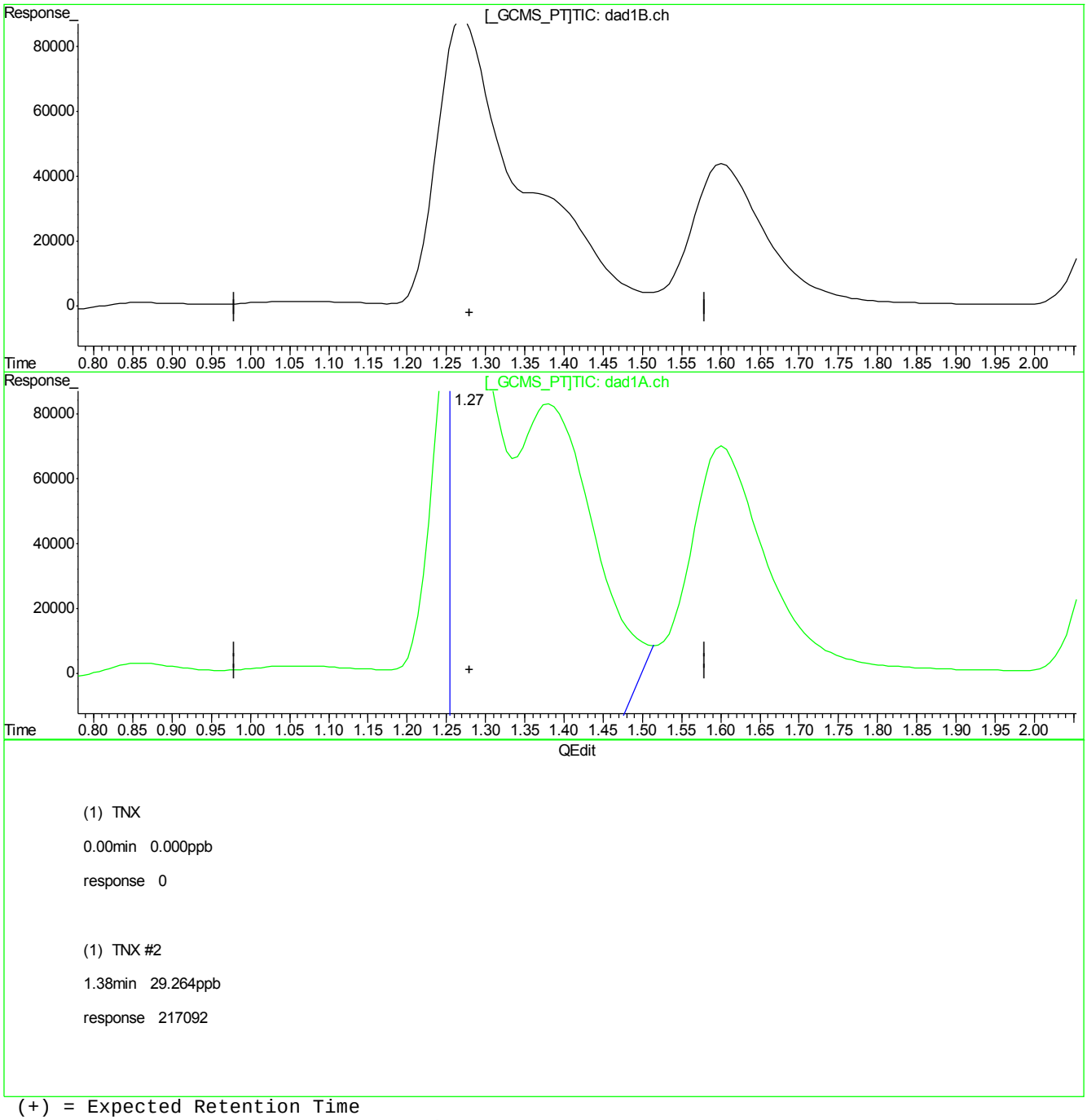
Sample Number:	GBB1730-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059692.D	**Analyst approved:**	05/11/18 08:45 Evita Martinez
Injection Time:	05/10/18 21:28	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.27	Poorly defined baseline
TNX		2	1.27	Poorly defined baseline
HMX	2691-41-0	1	1.36	Poorly defined baseline
HMX	2691-41-0	2	1.38	Poorly defined baseline
DNX		1	1.60	Poorly defined baseline
DNX		2	1.60	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.14	Poorly defined baseline
Tetryl	479-45-8	2	8.25	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.23	Poorly defined baseline
PETN	78-11-5	2	18.21	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

0.00min 0.000ppb

response 0

(1) TNX #2

1.38min 29.264ppb

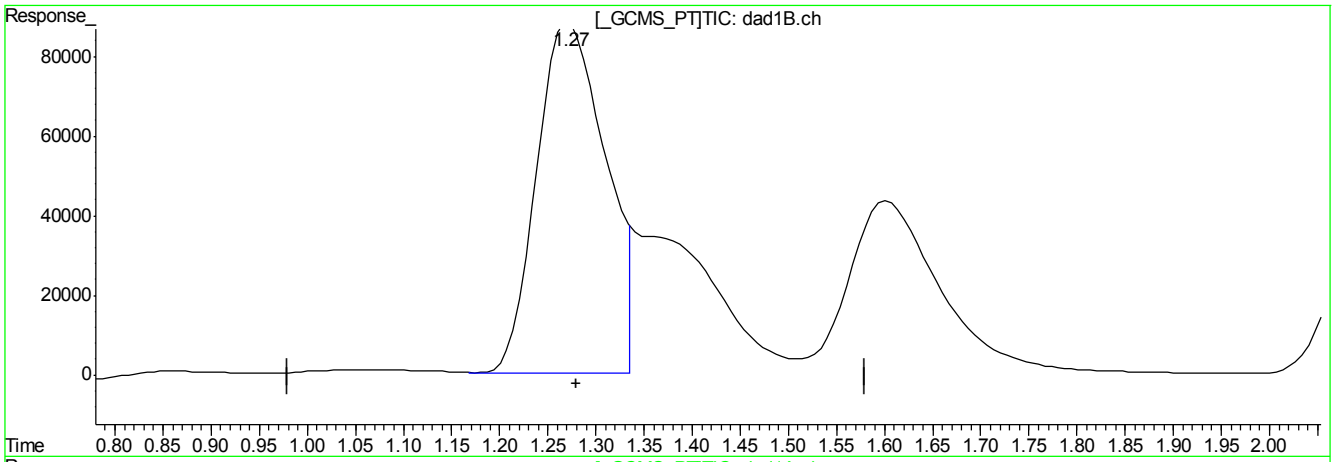
response 217092

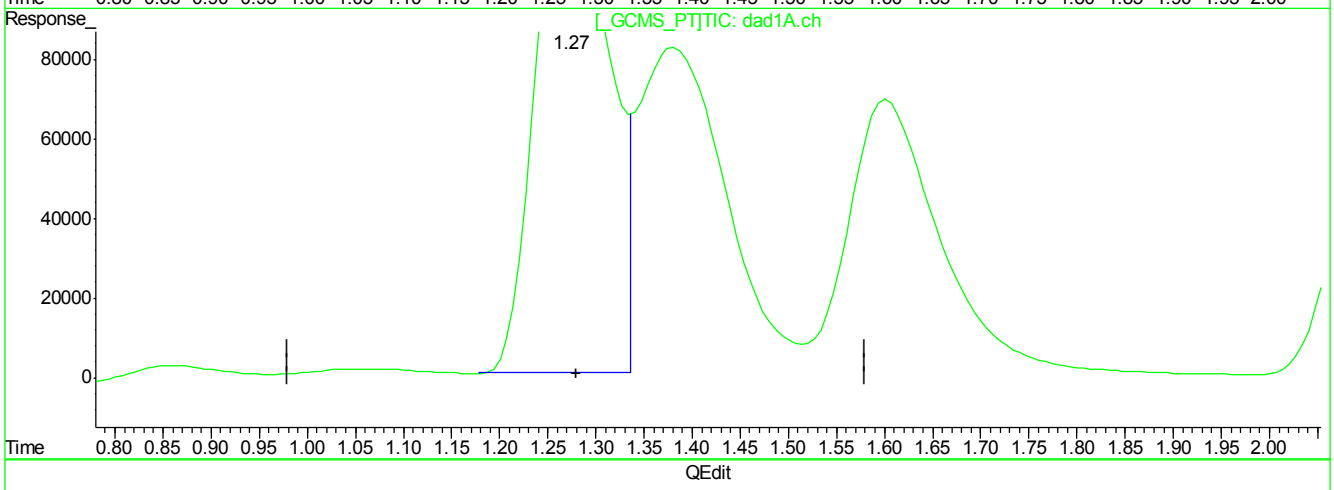
(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:21:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(1) TNX

1.27min 928.405ppb m

response 4479144

(1) TNX #2

1.27min 934.030ppb m

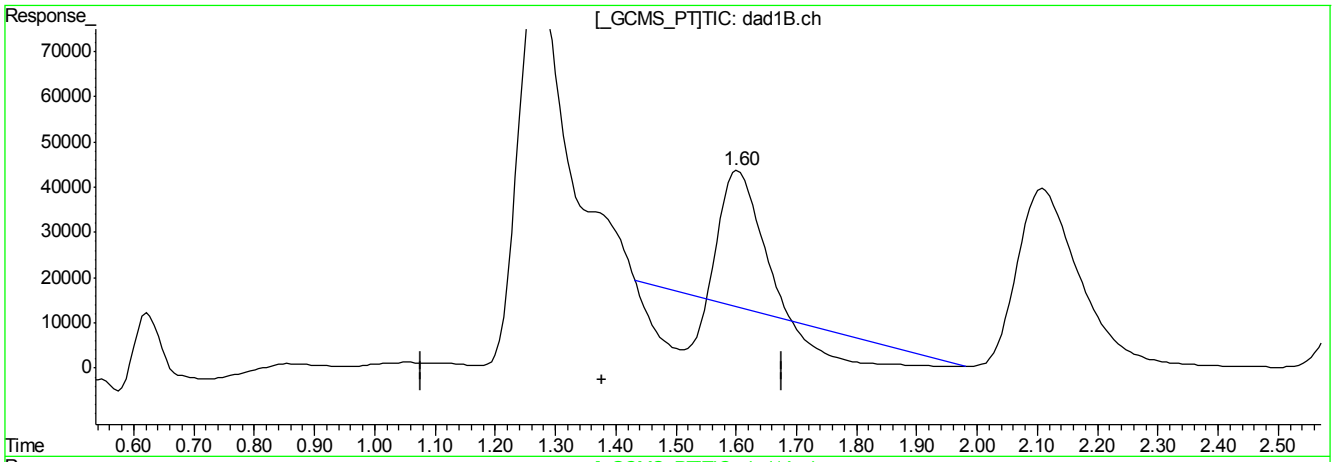
response 6929032

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:21:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

1.60min 209.401ppb

response 391601

(2) HMX #2

1.38min 42.632ppb

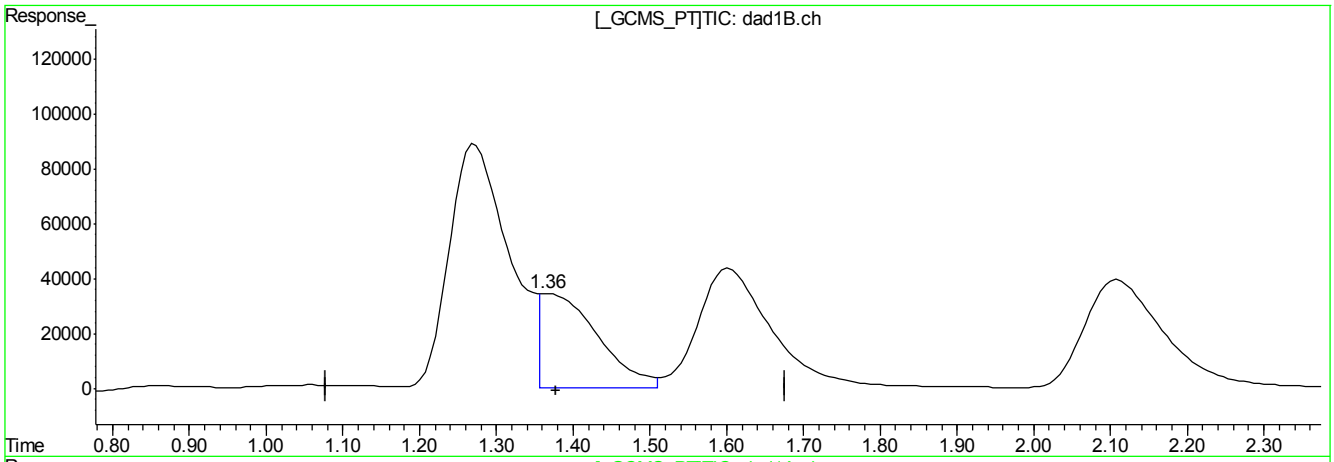
response 217092

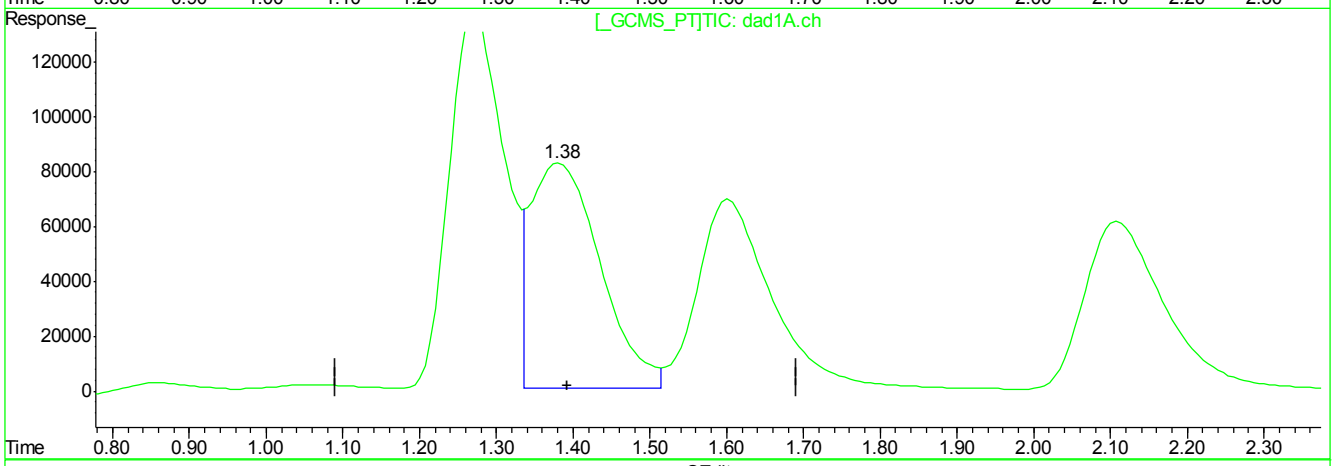
(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:21:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.36min 937.259ppb m

response 1752771

(2) HMX #2

1.38min 1026.979ppb m

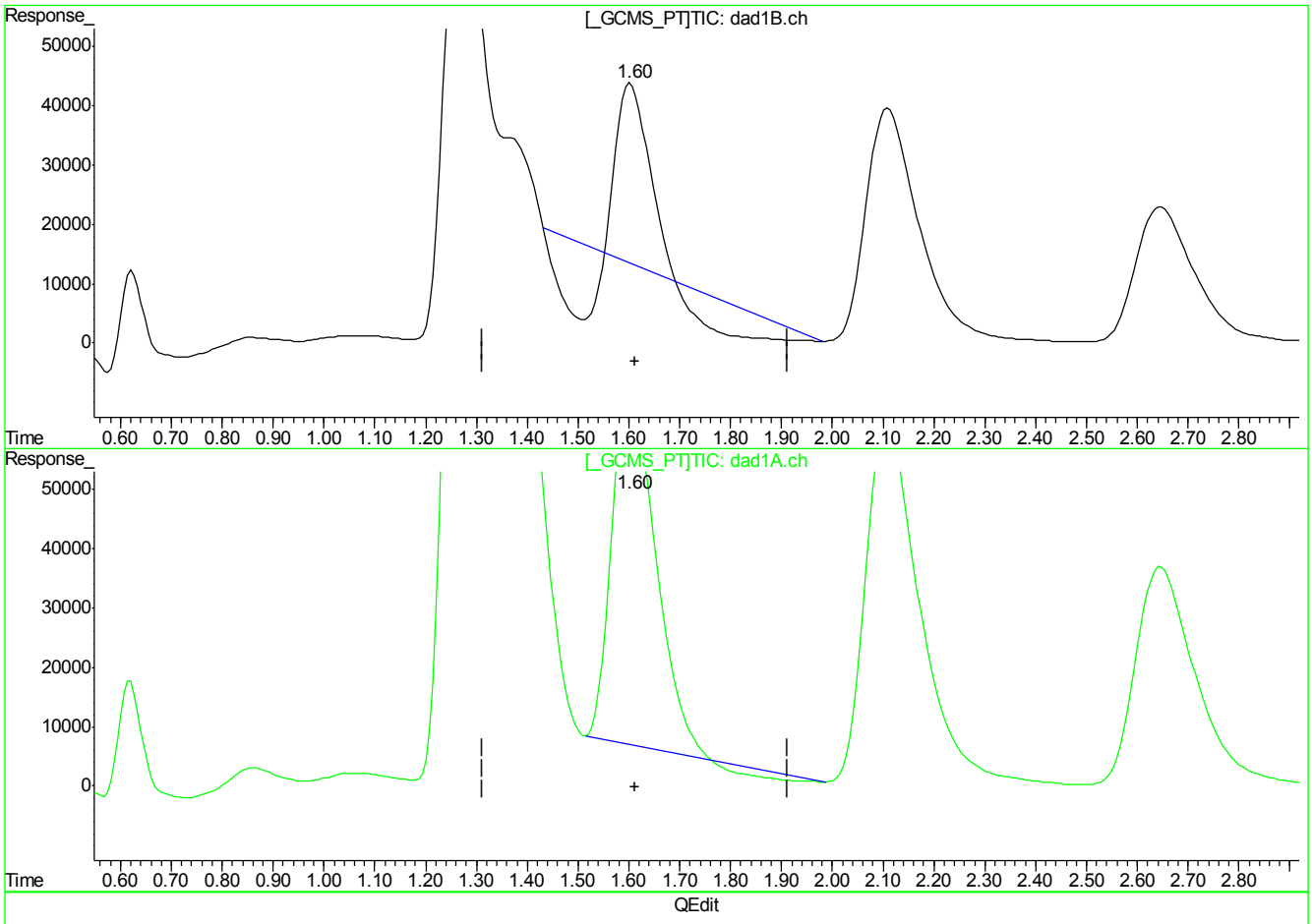
response 5200234

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(3) DNX

1.60min 126.445ppb

response 391601

(3) DNX #2

1.60min 758.083ppb

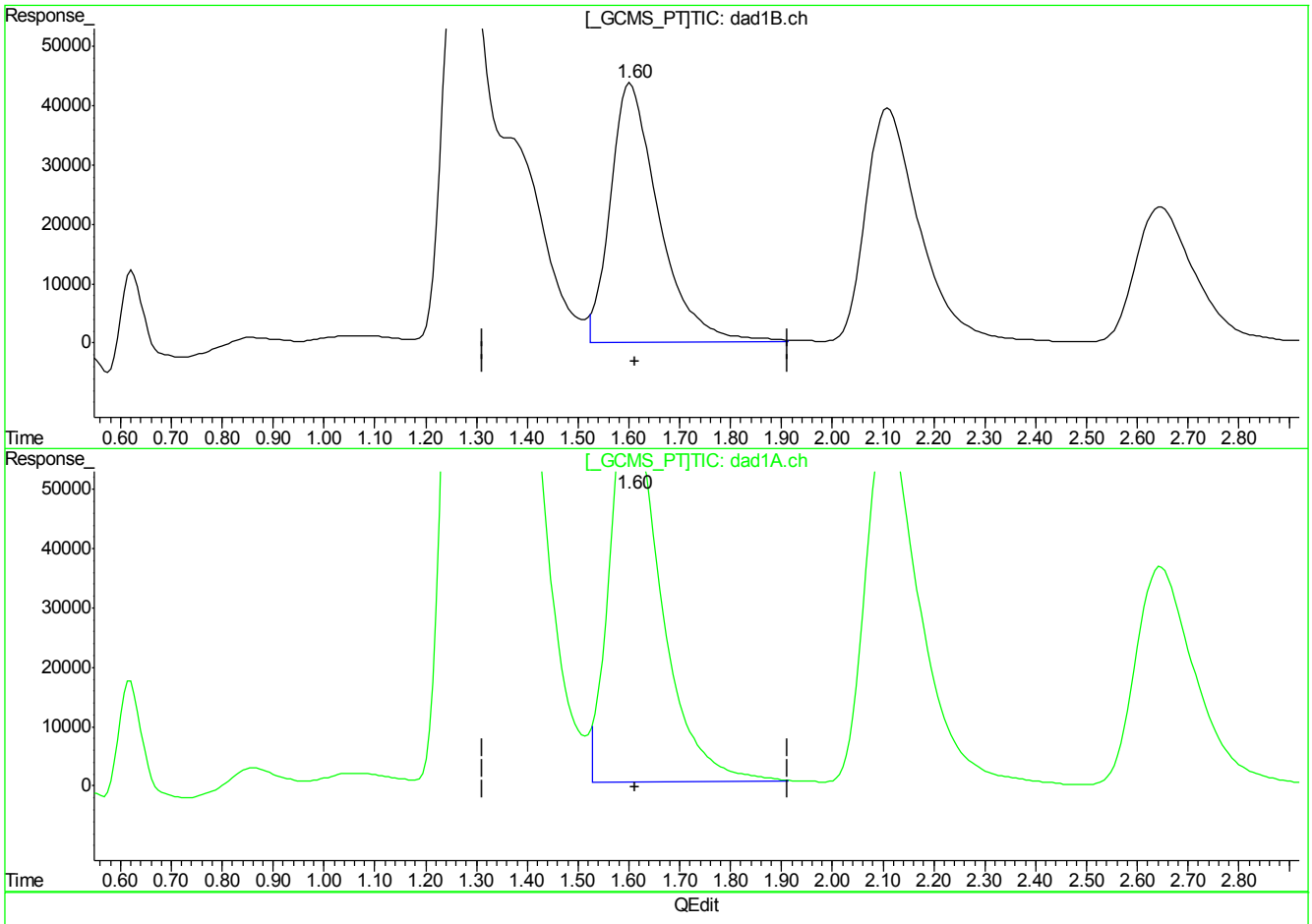
response 3569901

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(3) DNX

1.60min 928.793ppb m

response 2876485

(3) DNX #2

1.60min 971.248ppb m

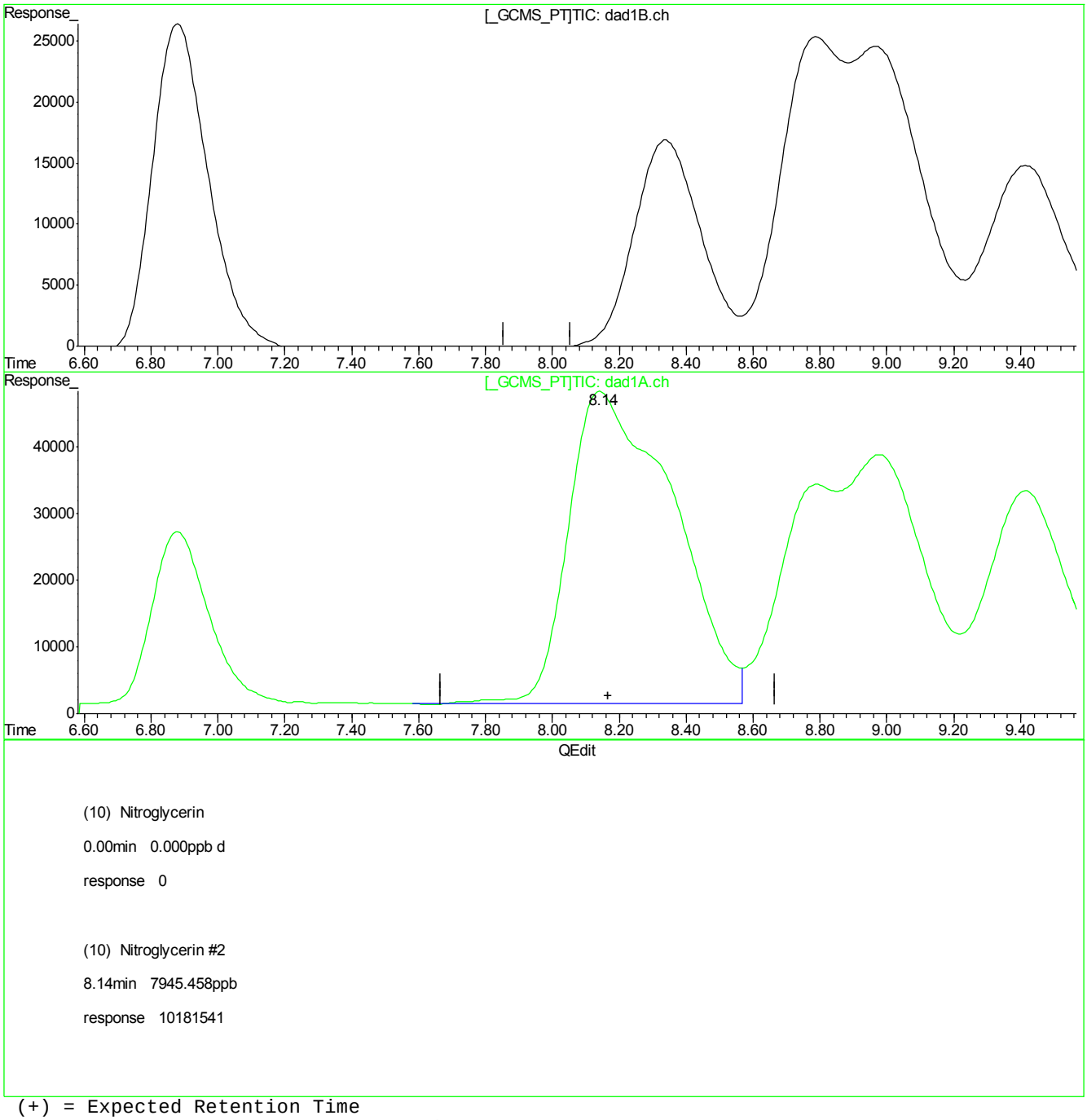
response 4587611

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

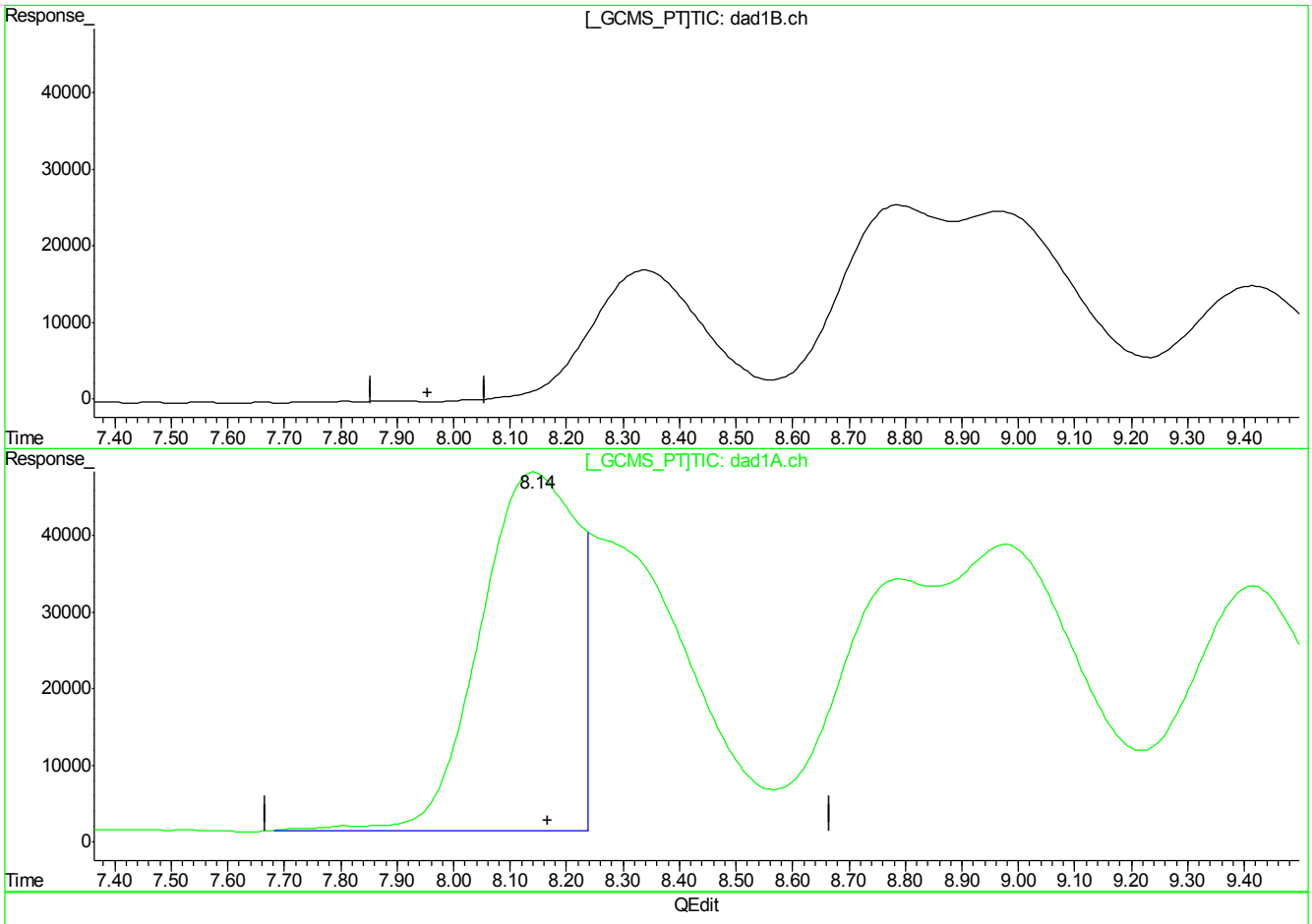


(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.14min 4321.991ppb m

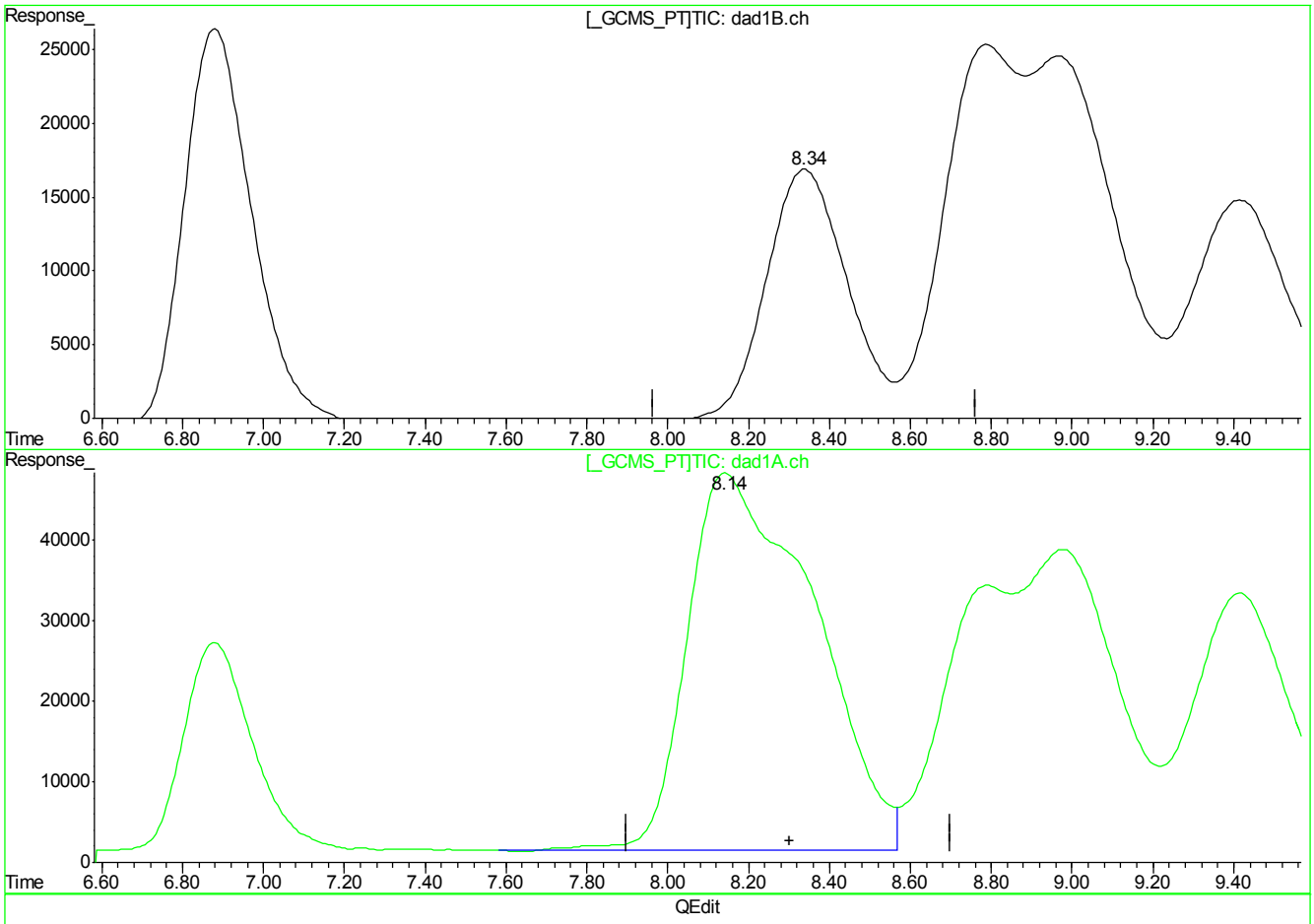
response 5538325

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:51 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.34min 856.915ppb

response 2516593

(11) Tetryl #2

8.14min 1960.336ppb

response 10181541

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:53 2018

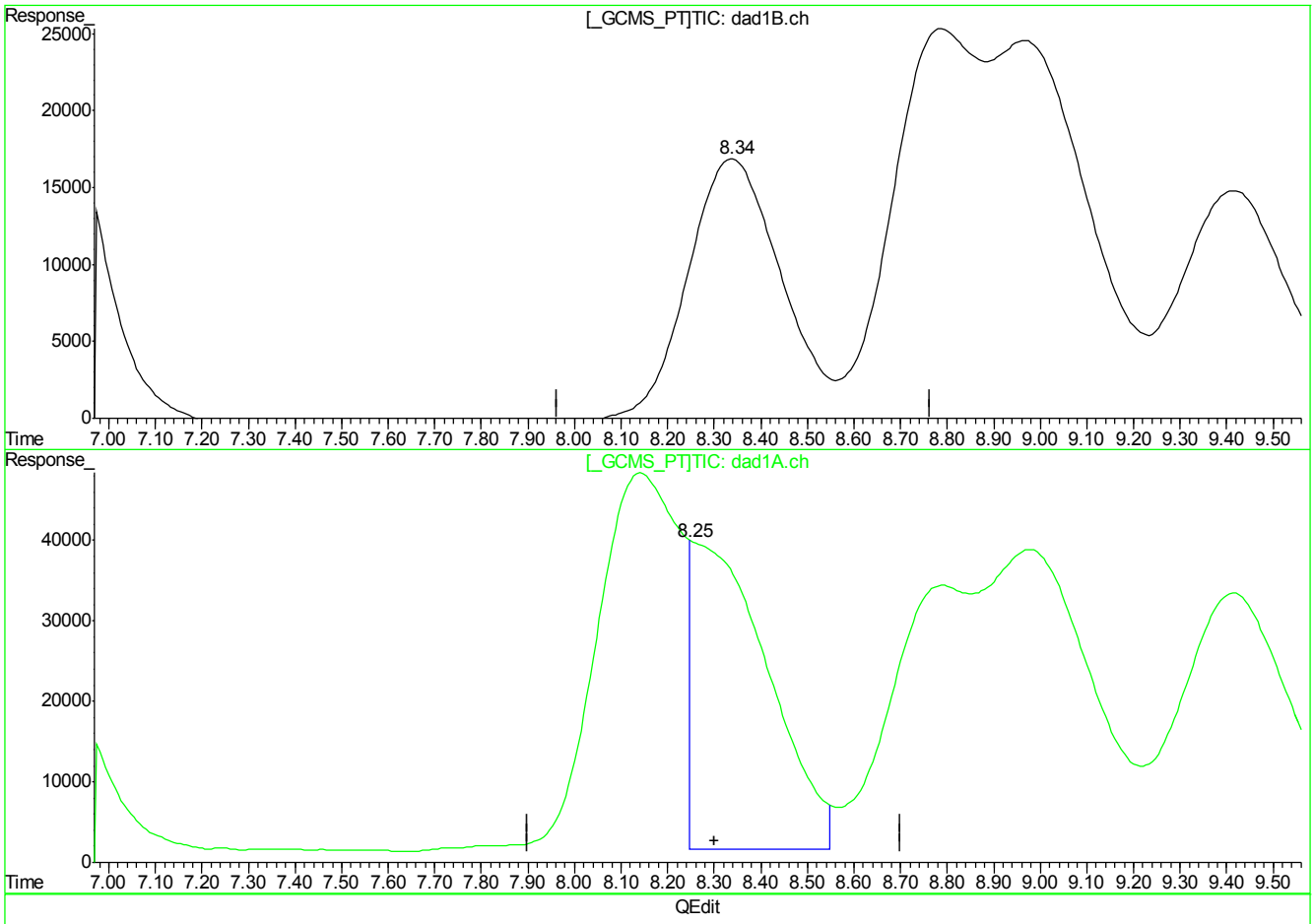
7.7.11.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.34min 856.915ppb

response 2516593

(11) Tetryl #2

8.25min 834.238ppb m

response 4332844

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:21 2018

7.7.11.11

7

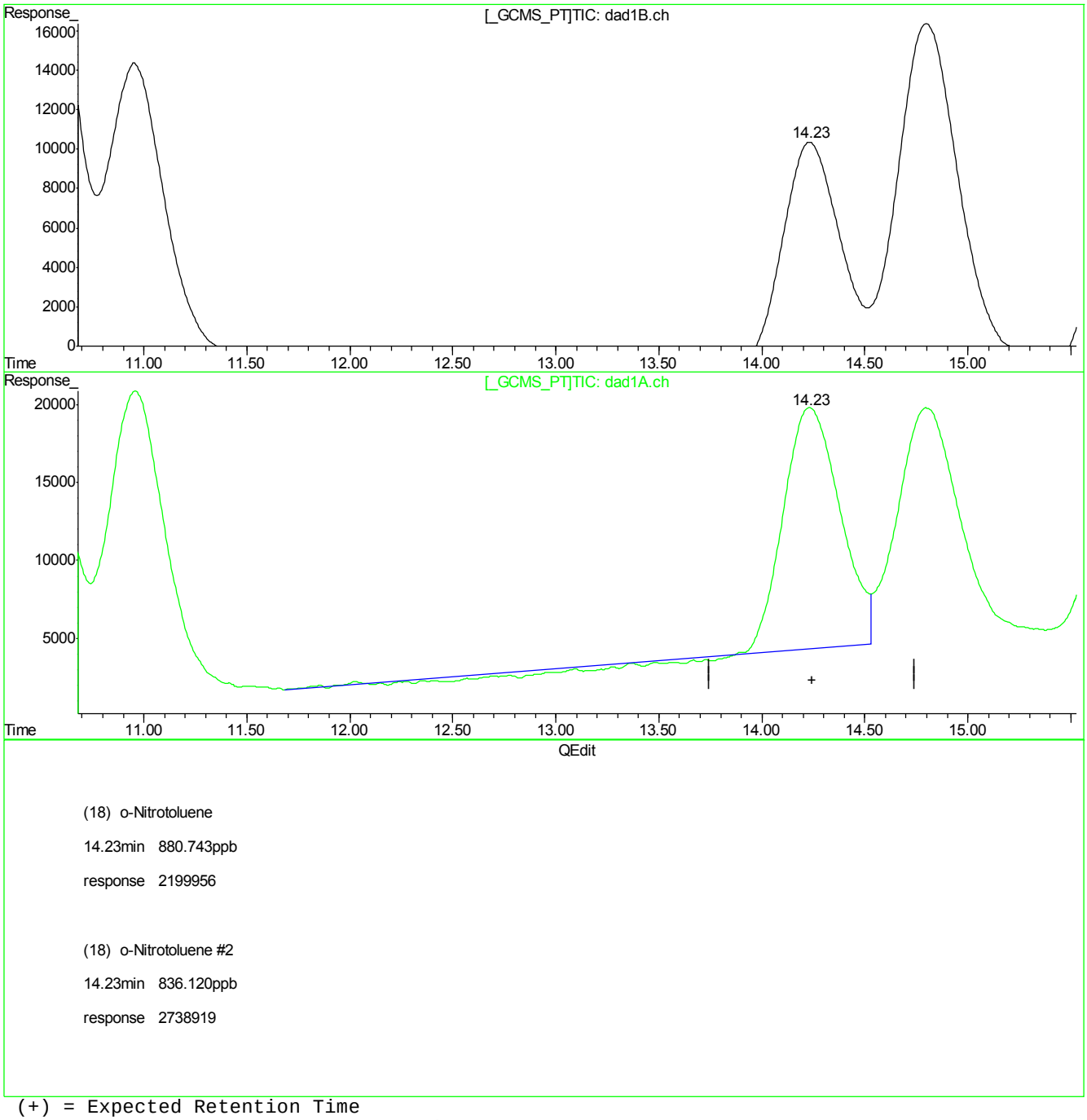
FA53800

BB059692.D edits: Tetryl

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.23min 880.743ppb

response 2199956

(18) o-Nitrotoluene #2

14.23min 836.120ppb

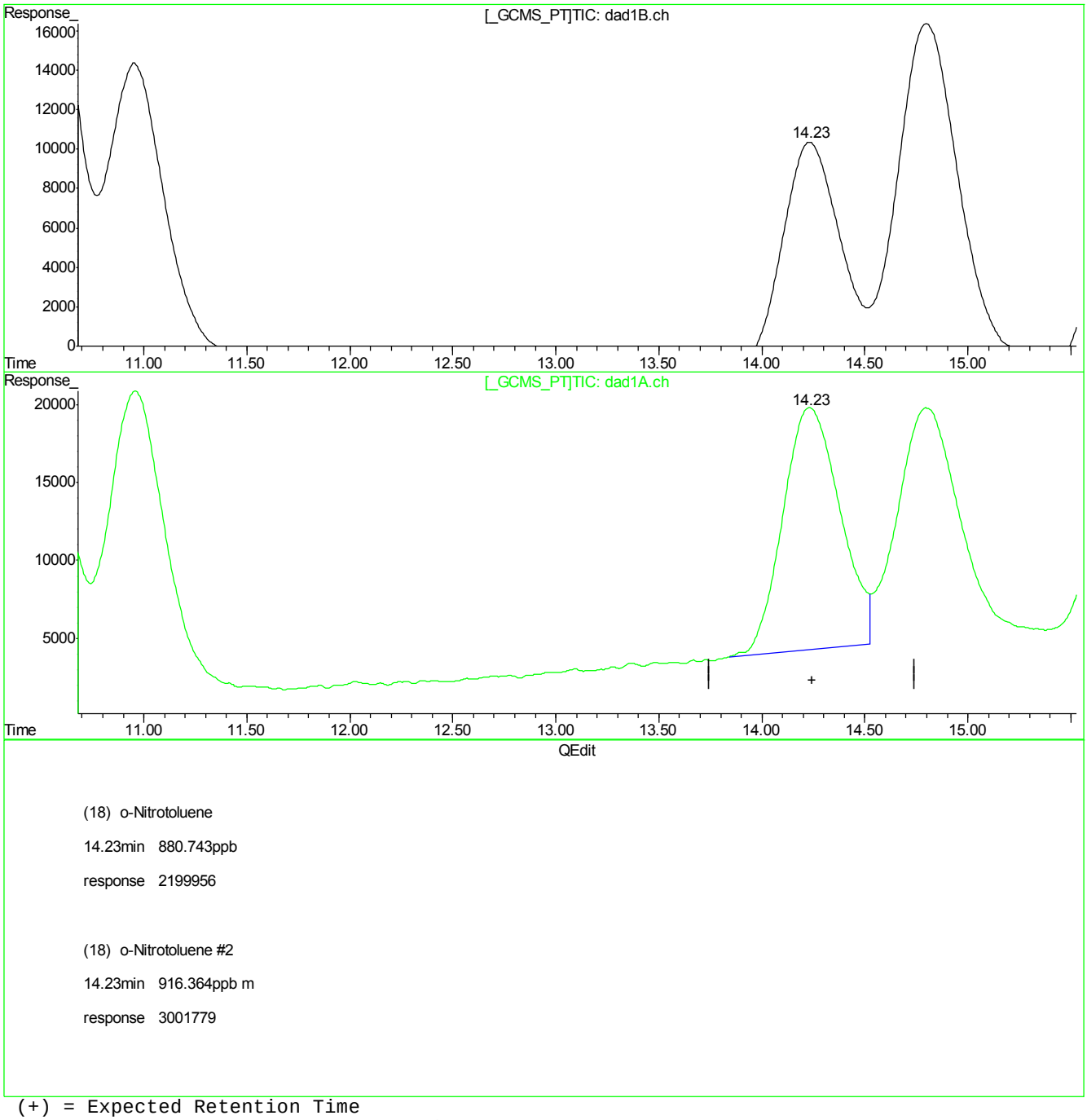
response 2738919

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.23min 880.743ppb

response 2199956

(18) o-Nitrotoluene #2

14.23min 916.364ppb m

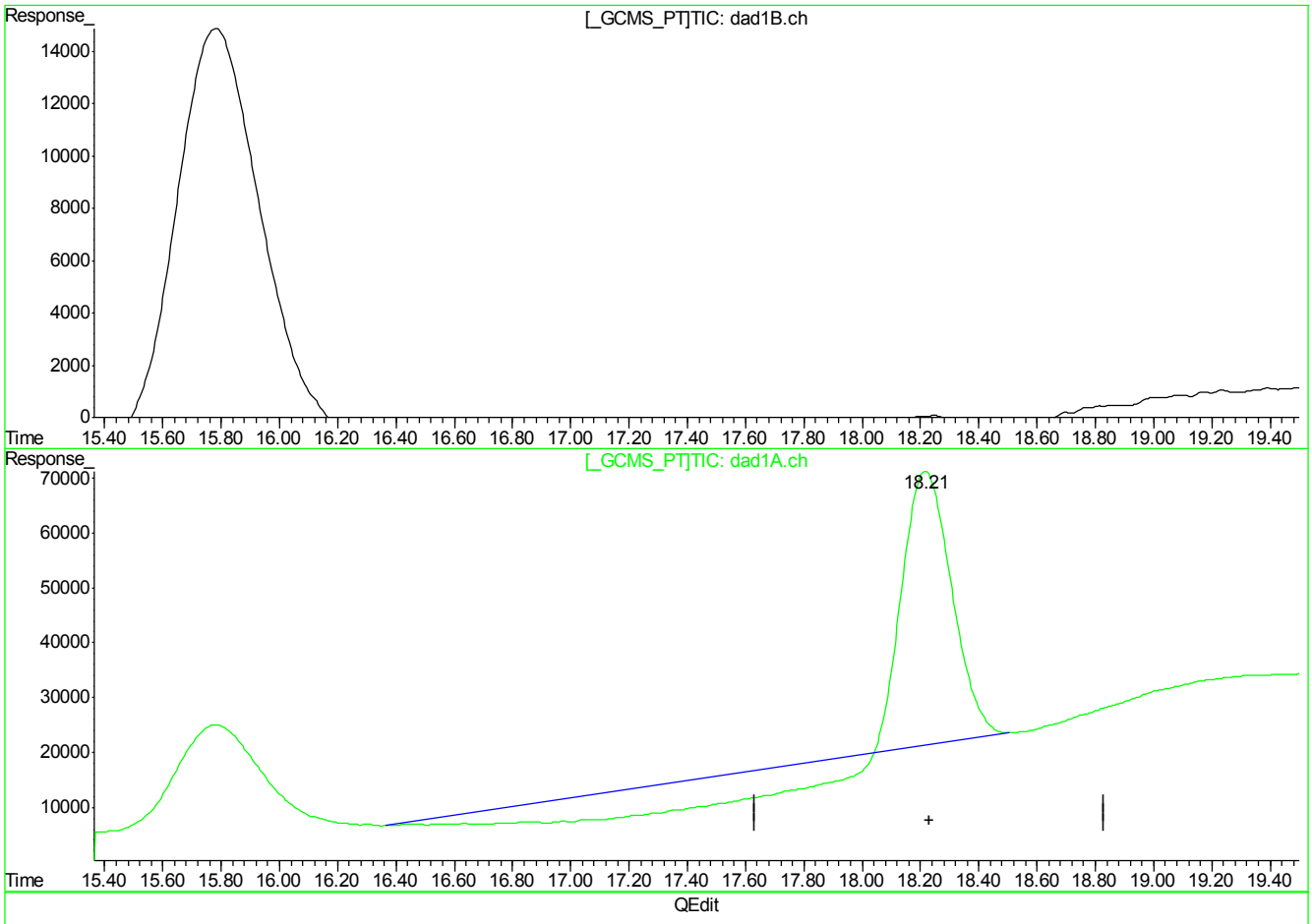
response 3001779

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:30 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.22min 1618.317ppb

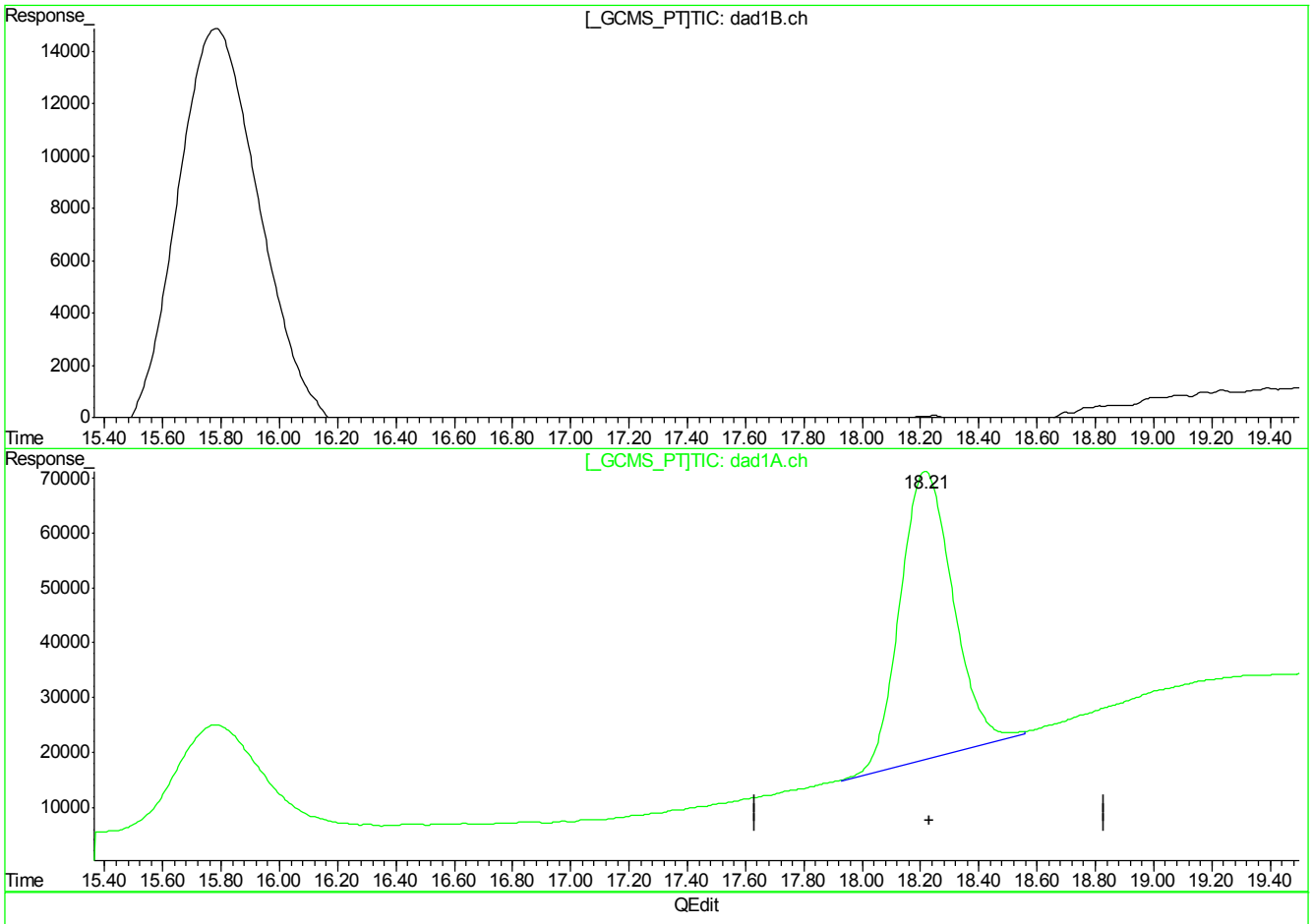
response 2247569

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.21min 4791.624ppb m

response 6654757

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:39 2018

7.7.11.15

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:21 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.92	9.92	2410108	4375450	900.738	928.034
	Spiked Amount 500.000	Range 69 - 134		Recovery =		180.15%#	185.61%#
	Target Compounds						
1)	TNX	1.27	1.27	4376705	6566051	907.172m	885.101m
2)	HMX	1.37	1.38	1883645	4893443	1007.241m	966.054m
3)	DNX	1.60	1.60	2893081	4730988	934.151m	1001.176m
4)	MNX	2.11	2.11	2863044	4465985	924.600	960.661
5)	RDX	2.65	2.65	1862563	3033472	871.013	912.597
6)	1,3,5-Trinitrobe	4.26	4.26	4056632	7913485	932.281	947.941
7)	1,3-Dinitrobenze	5.40	5.40	5139851	3351796	927.106	899.961
8)	3,5-Dinitroanili	5.66	5.66	4625726	7366869	945.883	985.034
9)	Nitrobenzene	6.89	6.89	3215964	3105685	882.583	936.618
10)	Nitroglycerin	0.00	8.15	0	6206586	N.D. d	4843.488
11)	Tetryl	8.36	8.31	2528008	3973284	860.820	765.009
12)	2,4,6-Trinitroto	8.79	8.79	3391477	4036875	803.638	890.604
13)	2-Amino-4,6-Dini	9.01	9.02	3607673	5712003	953.028	1064.909
14)	4-Amino-2,6-Dini	9.45	9.45	2580340	5260669	976.817	1015.208
16)	2,4-Dinitrotolue	10.55	10.55	4840092	3122560	919.993	1057.337
17)	2,6-Dinitrotolue	10.98	10.99	2940853	3681330	850.875	1078.103
18)	o-Nitrotoluene	14.27	14.26	2079668	2970781	832.586	906.901m
19)	p-Nitrotoluene	14.83	14.83	3505705	3107327	888.187	985.181
20)	m-Nitrotoluene	15.81	15.82	3197010	3830296	896.224	951.892
21)	PETN	0.00	18.22	0	6587706	N.D. d	4743.345m

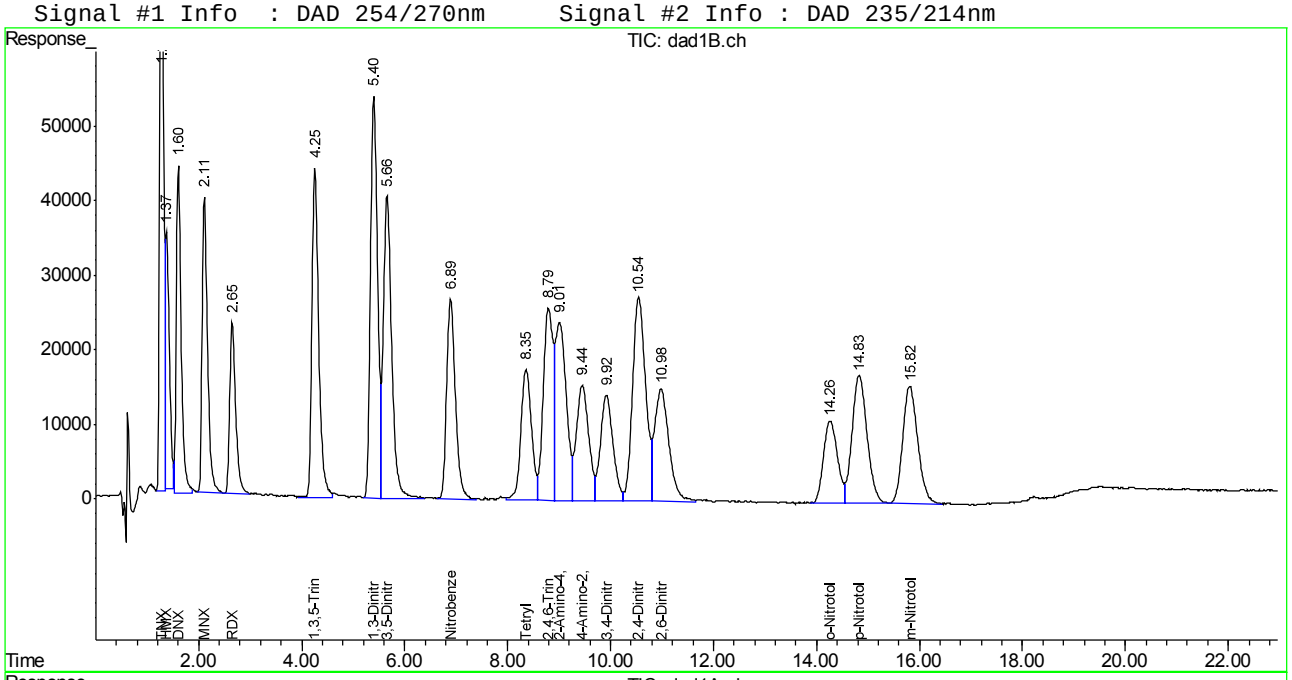
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059703.D 8330B_0419PLUS.M Fri May 11 08:38:16 2018 Page 1

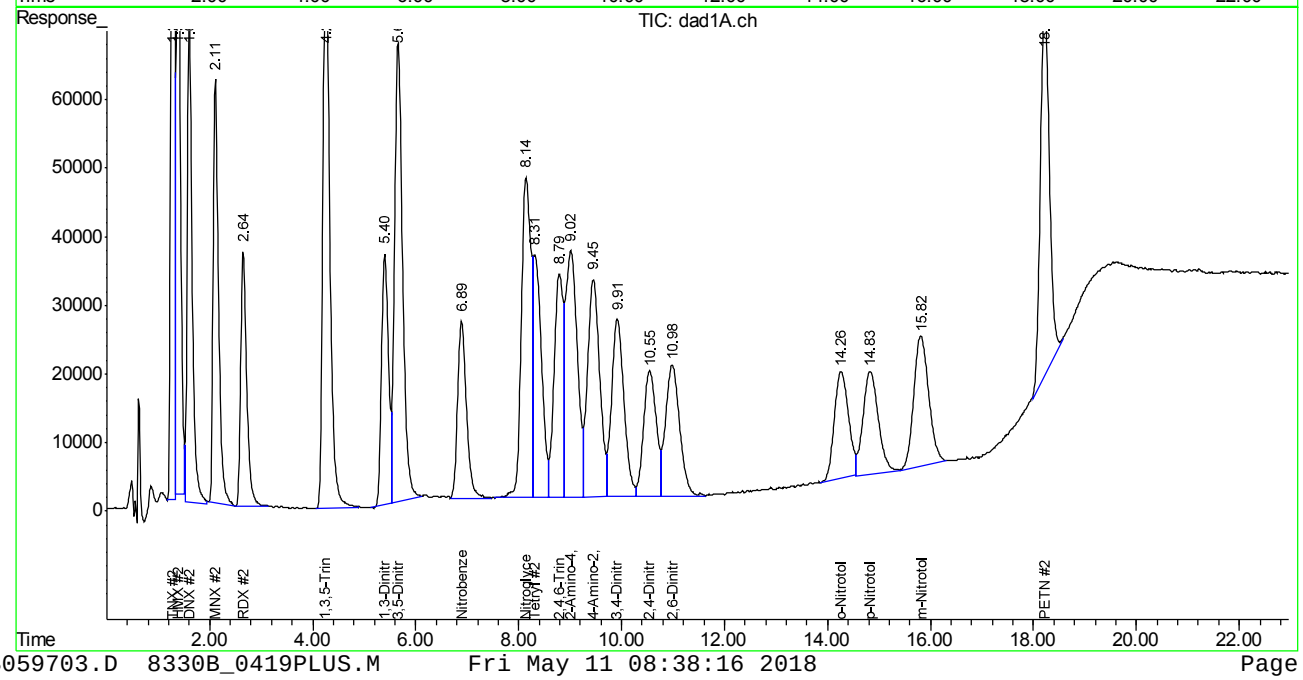
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

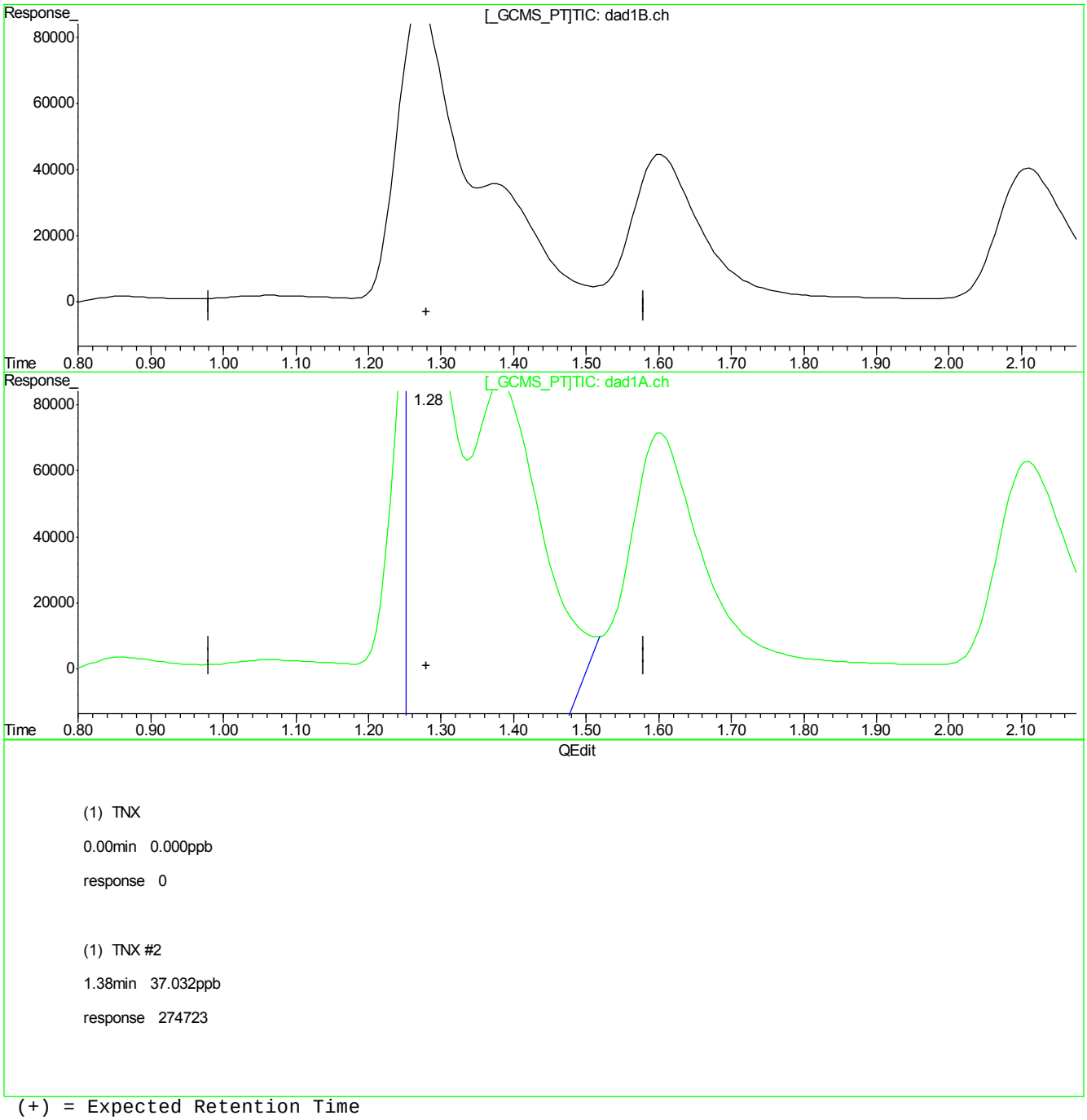
Sample Number:	GBB1730-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059703.D	**Analyst approved:**	05/11/18 08:45 Evita Martinez
Injection Time:	05/11/18 02:58	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.27	Poorly defined baseline
TNX		2	1.27	Poorly defined baseline
HMX	2691-41-0	1	1.37	Poorly defined baseline
HMX	2691-41-0	2	1.38	Poorly defined baseline
DNX		1	1.60	Poorly defined baseline
DNX		2	1.60	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.26	Poorly defined baseline
PETN	78-11-5	2	18.22	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:31:33 2018

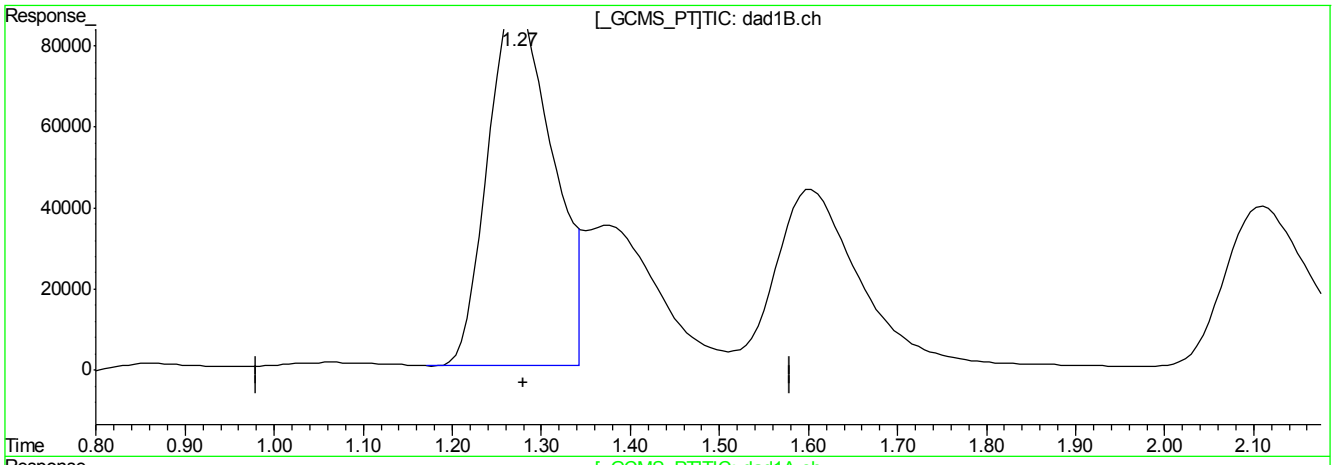
7.7.12.2

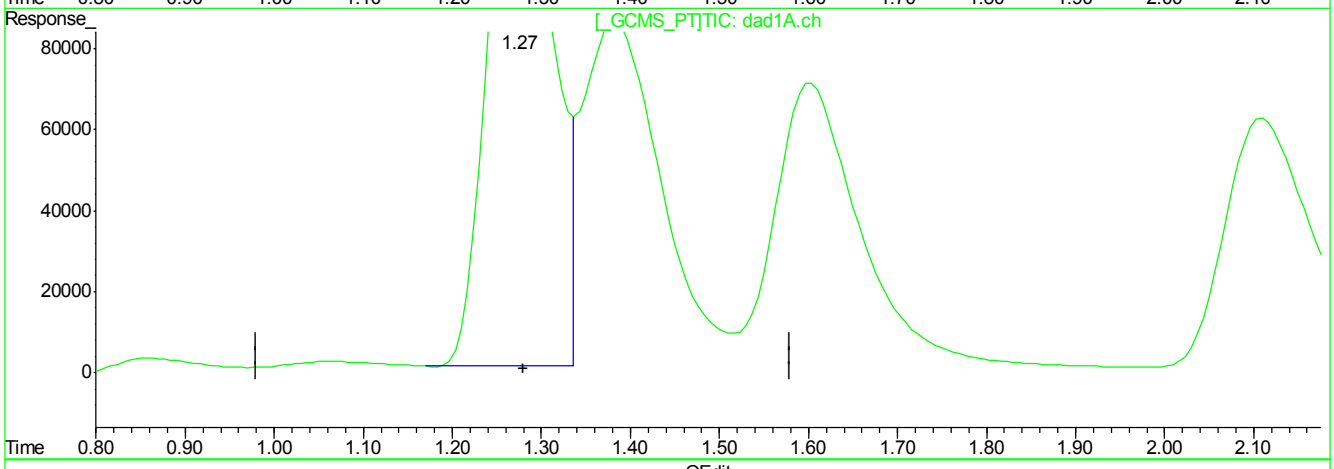
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(1) TNX

1.27min 907.172ppb m

response 4376705

(1) TNX #2

1.27min 885.101ppb m

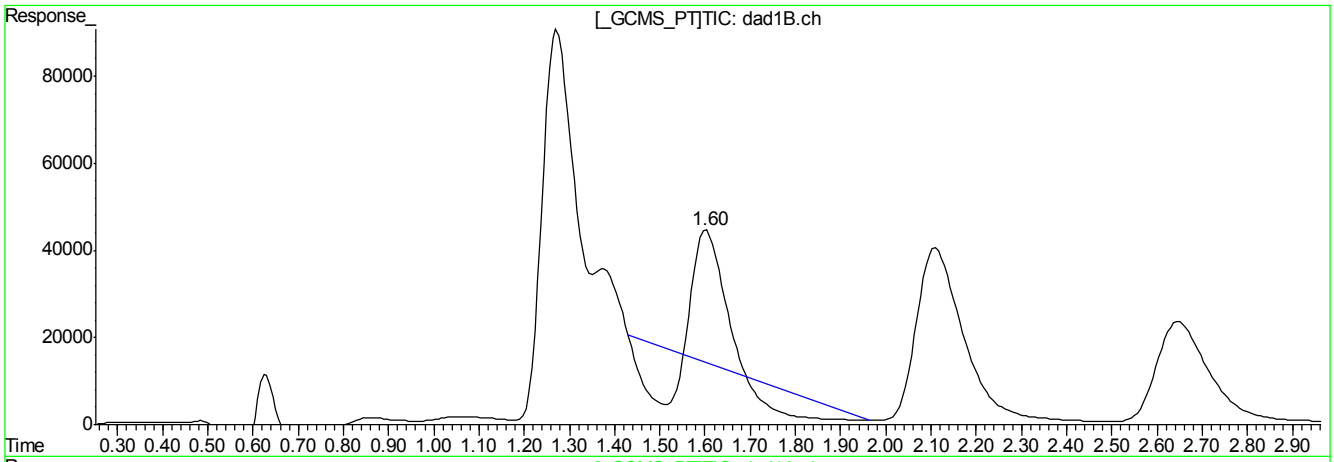
response 6566051

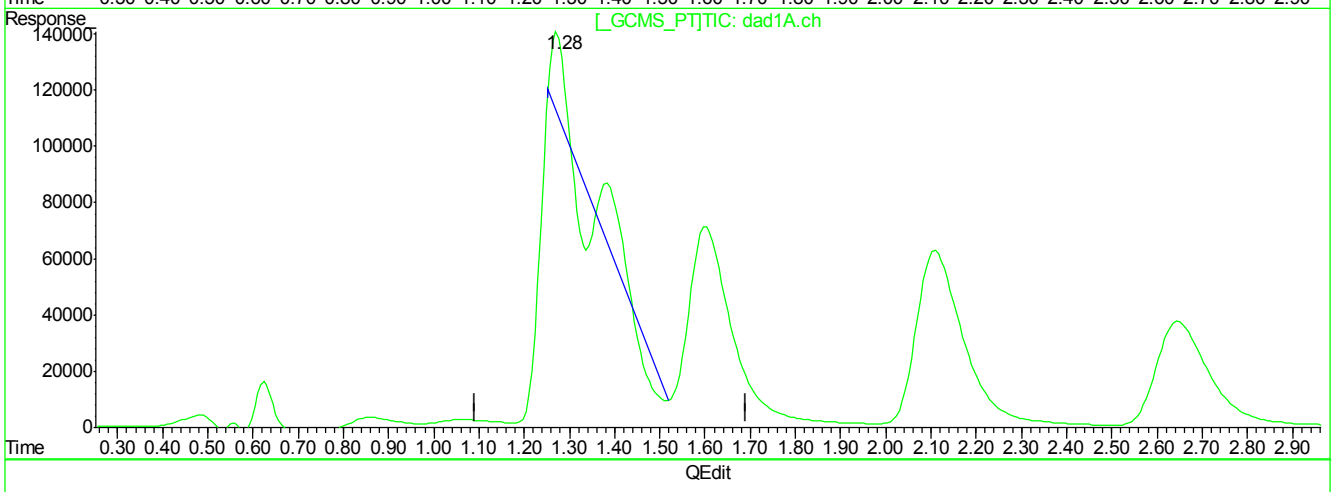
(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:31:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.60min 206.985ppb

response 387084

(2) HMX #2

1.38min 53.952ppb

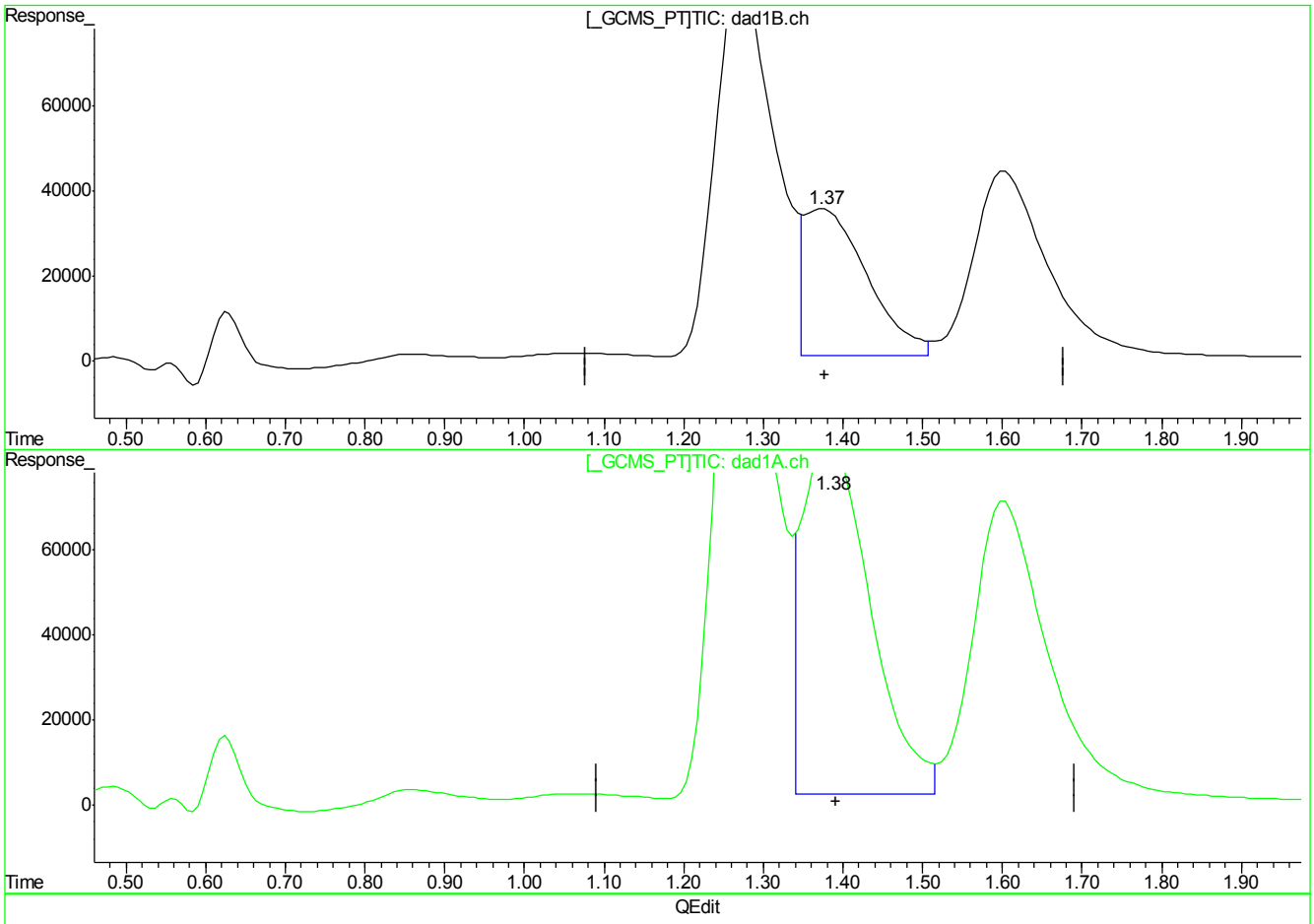
response 274723

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:31:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

1.37min 1007.241ppb m

response 1883645

(2) HMX #2

1.38min 966.054ppb m

response 4893443

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:16 2018

7.7.12.5

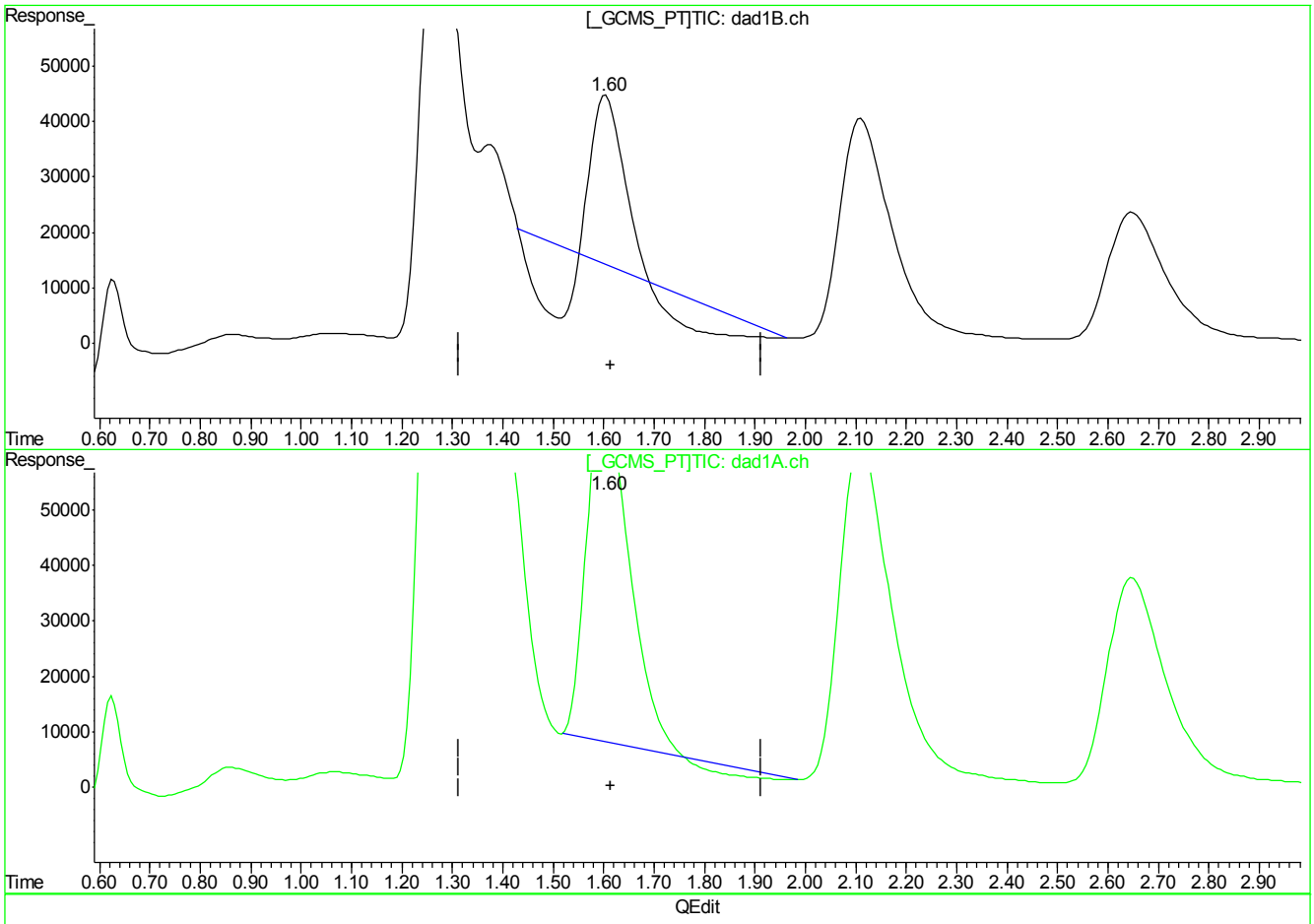
7

BB059703.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(3) DNX

1.60min 124.986ppb

response 387084

(3) DNX #2

1.60min 750.668ppb

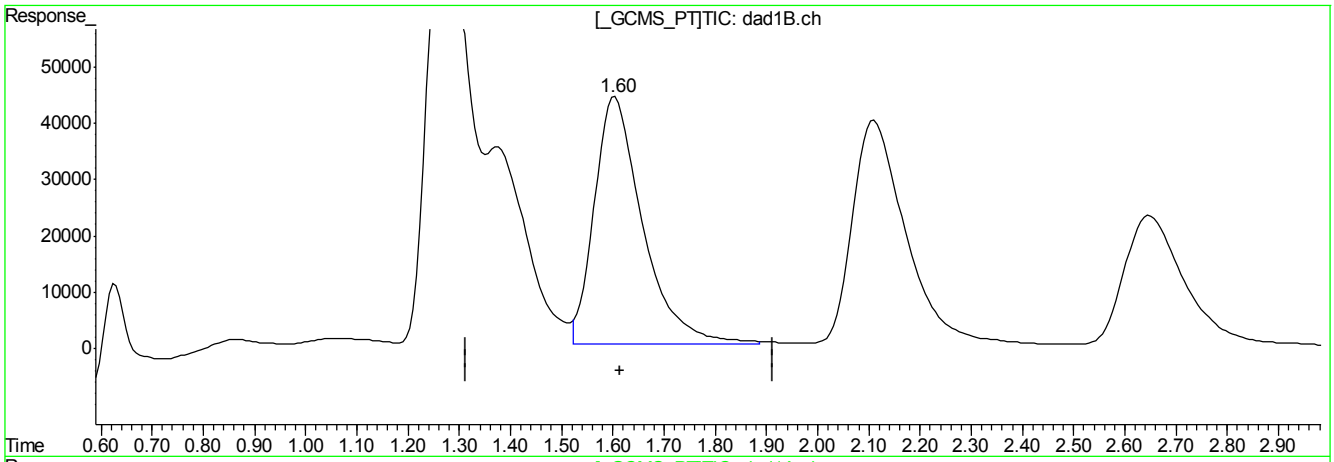
response 3534609

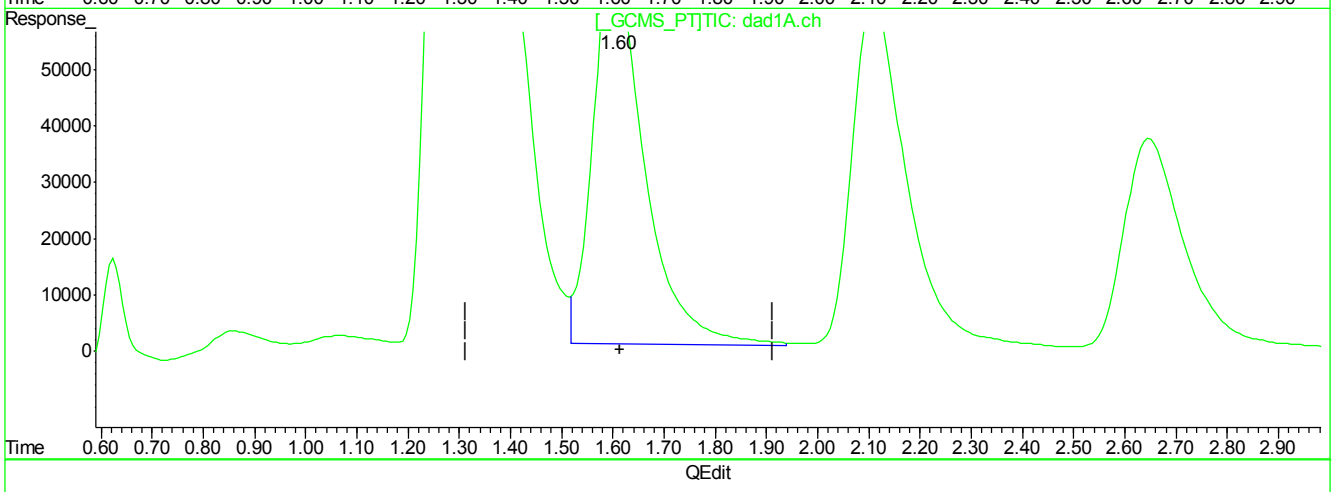
(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.60min 934.151ppb m

response 2893081

(3) DNX #2

1.60min 1001.176ppb m

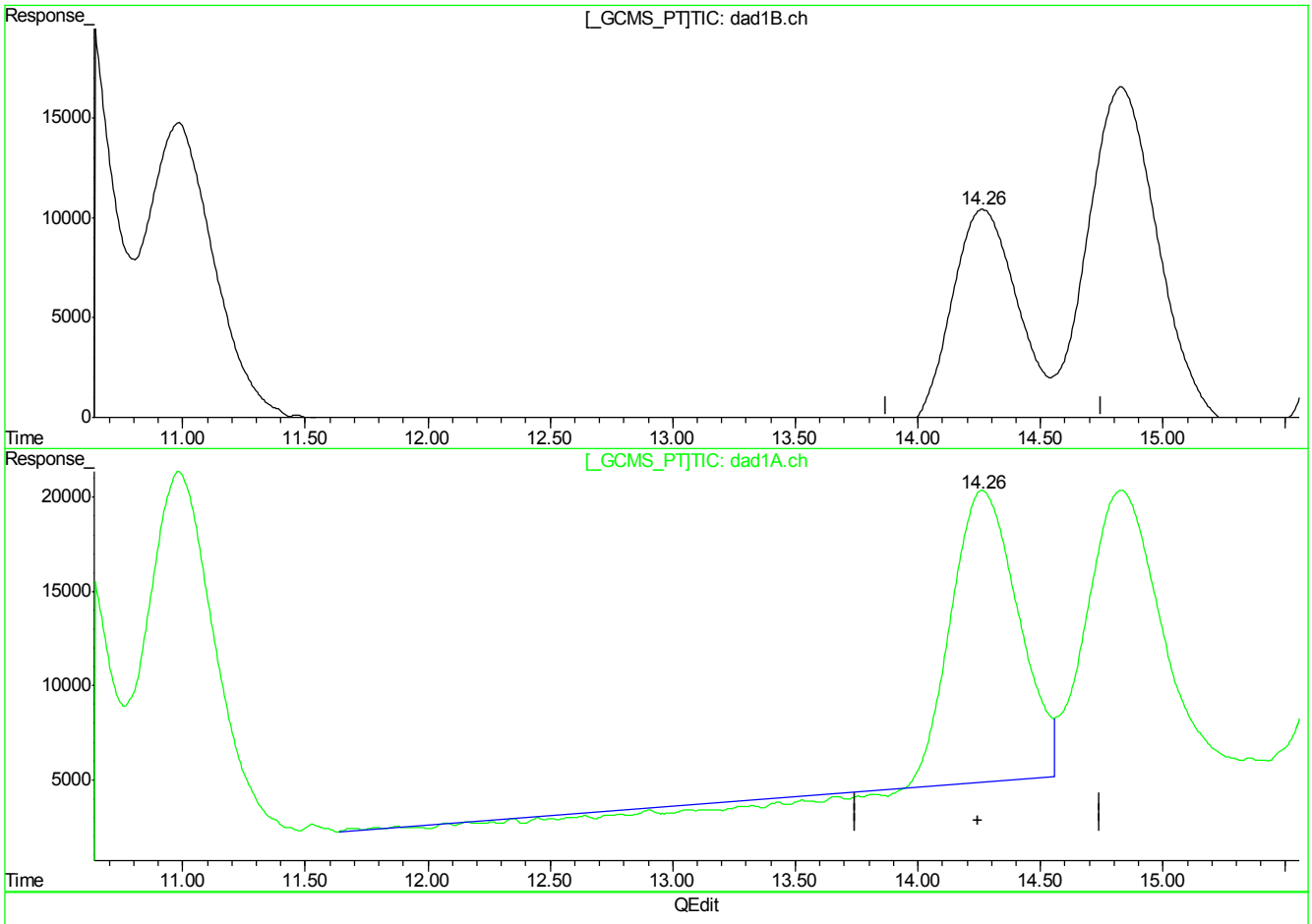
response 4730988

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.27min 832.586ppb

response 2079668

(18) o-Nitrotoluene #2

14.26min 821.405ppb

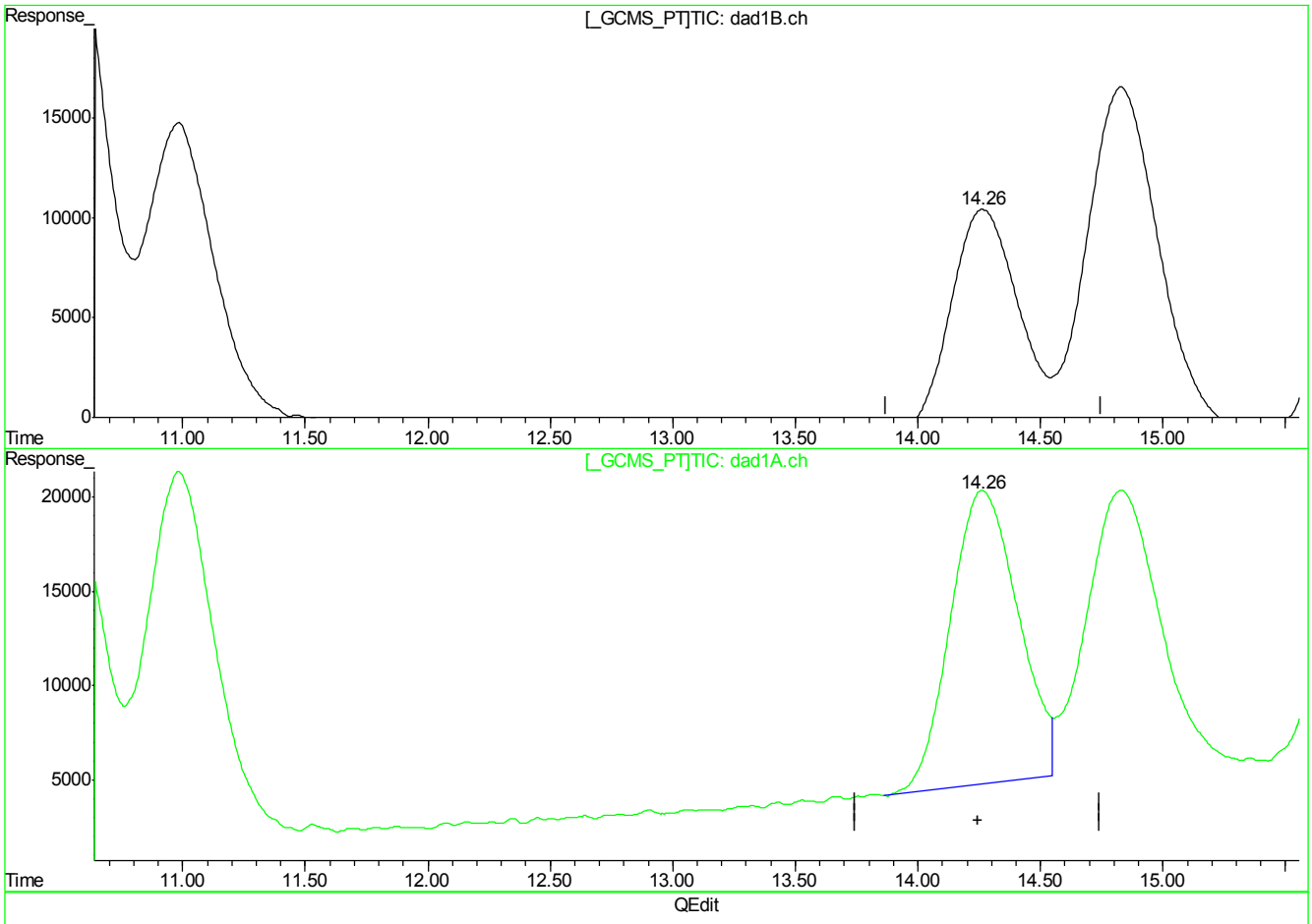
response 2690716

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.27min 832.586ppb

response 2079668

(18) o-Nitrotoluene #2

14.26min 906.901ppb m

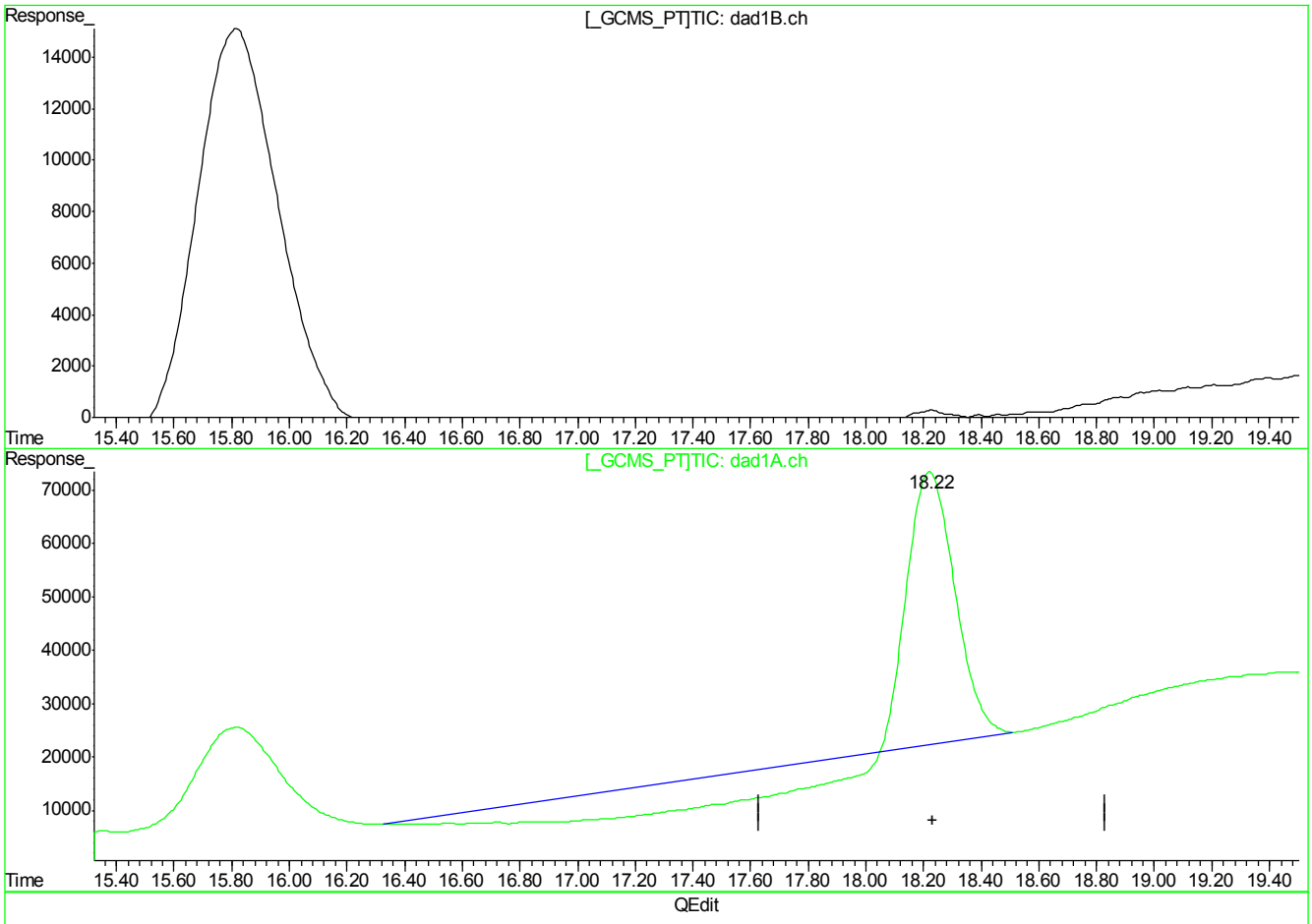
response 2970781

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.22min 1330.183ppb

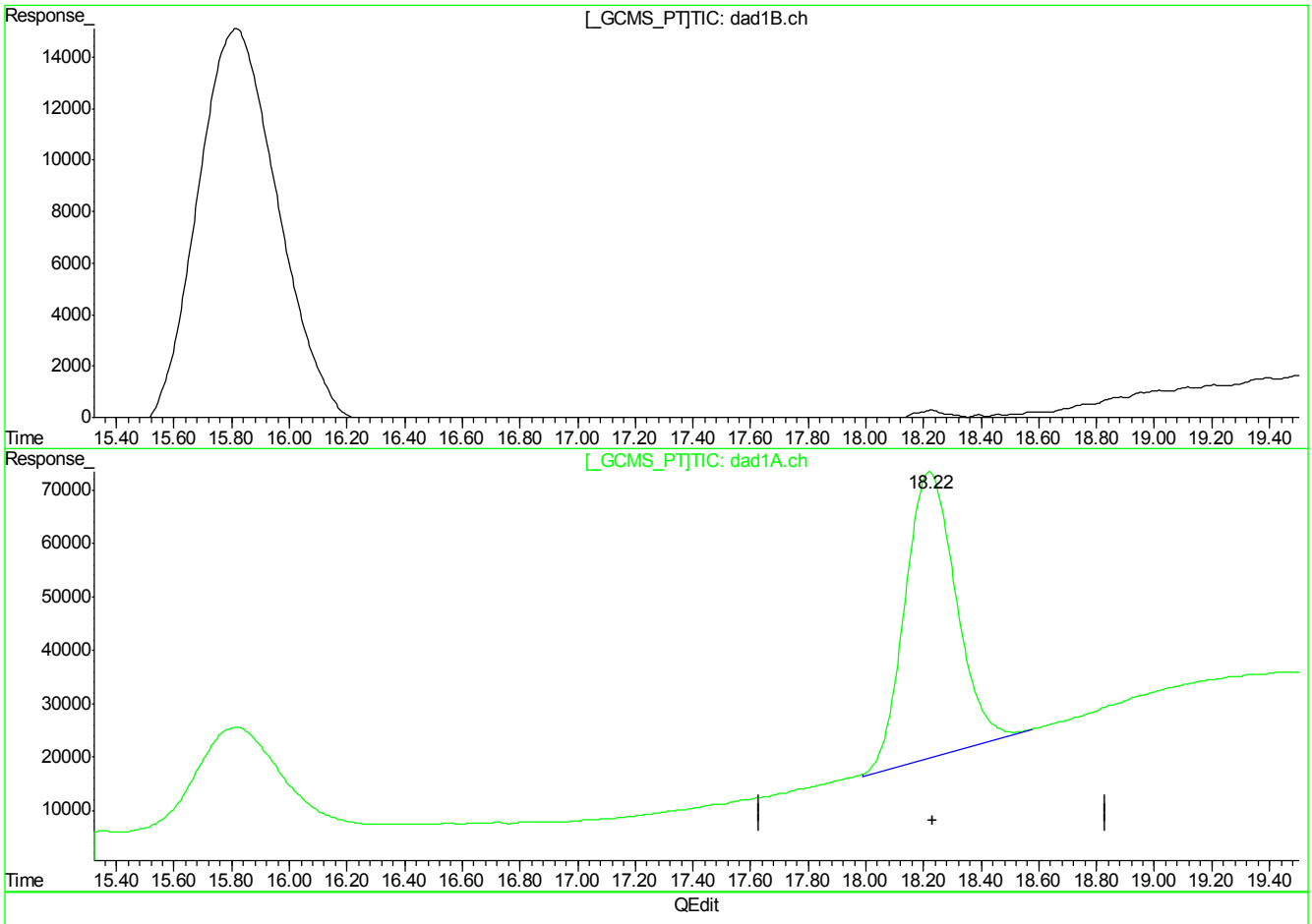
response 1847399

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:44 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.22min 4743.345ppb m

response 6587706

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:48 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:57 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.58	14.60	98690	251786	16.740	20.083
	Spiked Amount 500.000	Range 70 - 136		Recovery =		3.35%#	4.02%#
	Target Compounds						
1)	TNX	5.00	5.00	270396	268585	32.146m	31.846m
2)	HMX	5.46	5.46	61139	65579	16.096m	17.142m
3)	DNX	5.58	5.58	151583	169136	23.094m	25.858m
4)	MNX	6.68	6.68	132741	132741	27.438	27.438
5)	1,3,5-Trinitrobe	7.55	7.55	208327	208327	20.402	20.410
6)	RDX	8.09	8.09	93105	93105	19.557	19.648
7)	1,3-Dinitrobenze	10.09	10.10	316123	176008	21.719	12.357m#
8)	Nitrobenzene	11.09	11.09	233656	184835	30.565	19.401m
9)	2,4,6-Trinitroto	11.89	11.89	254281	217868	24.940	13.900m#
10)	Nitroglycerin	0.00	12.72	0	268418	N.D. d	73.009m
11)	Tetryl	13.30	13.28	188129	499094	27.427	40.951m#
13)	2,6-Dinitrotolue	14.93	14.90	140836	174953	20.257	16.038
14)	2,4-Dinitrotolue	15.65	15.67	275037	489908	20.698	49.345 #
15)	o-Nitrotoluene	17.23	17.25	120053	171082	28.895	30.388
16)	3,5-Dinitroanili	16.68	16.68	287796	475677	27.156	26.561
17)	p-Nitrotoluene	18.42	18.46	235862	419386	20.499	19.889m
18)	4-Amino-2,6-Dini	18.42	18.46	235862	428039	20.499	20.299m
19)	m-Nitrotoluene	19.66	19.69	105739	204872	21.883	21.659
20)	2-Amino-4,6-Dini	20.68	20.83	168840	118490	17.600	8.755m#
21)	PETN	0.00	22.34	0	288256	N.D. d	88.948m

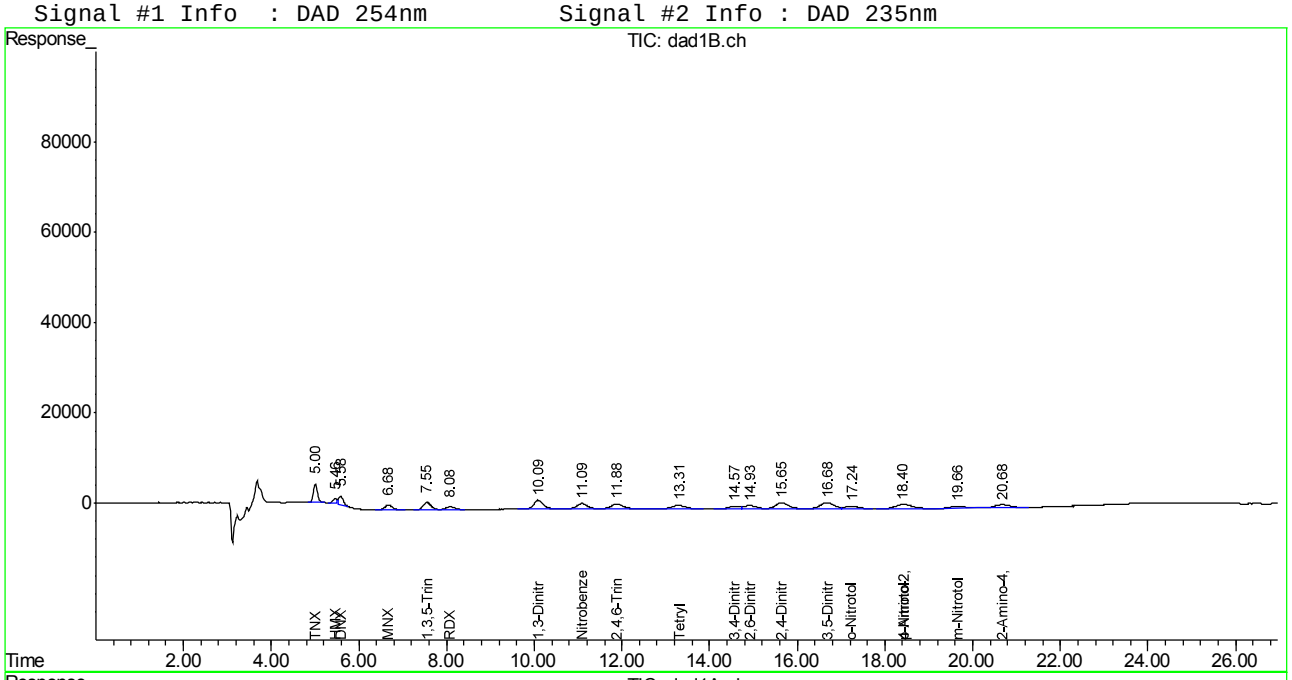
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

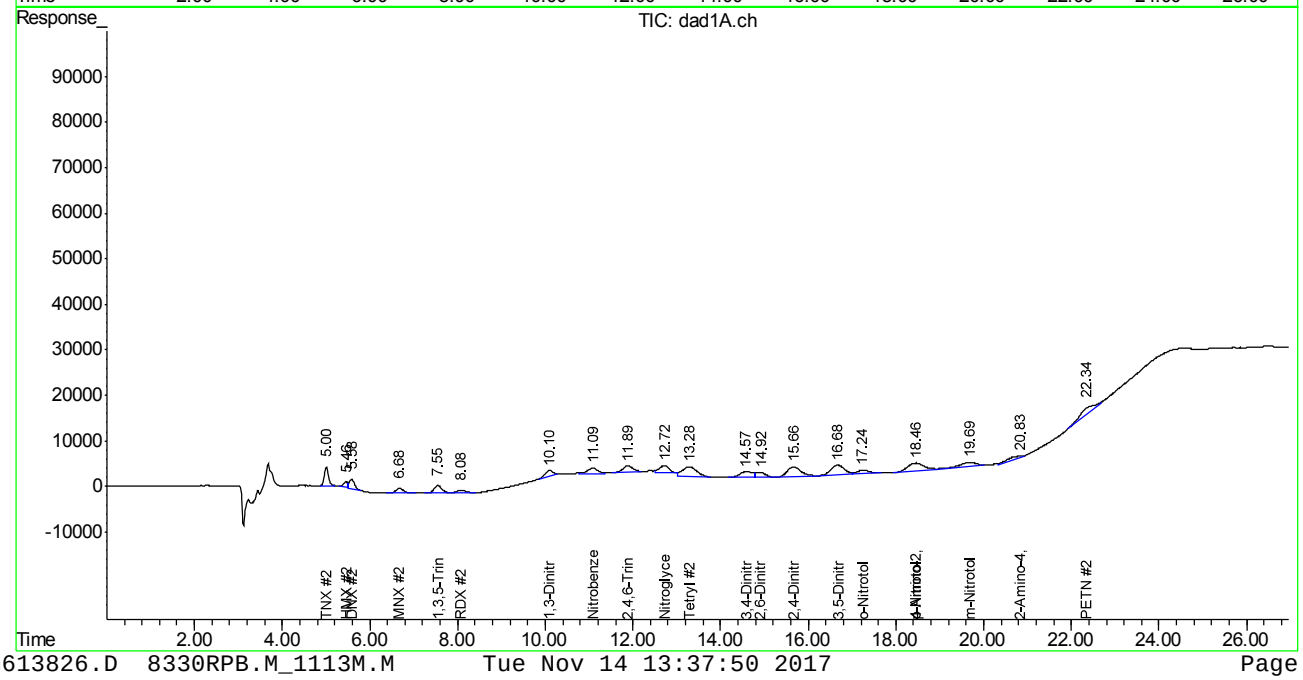
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:53 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

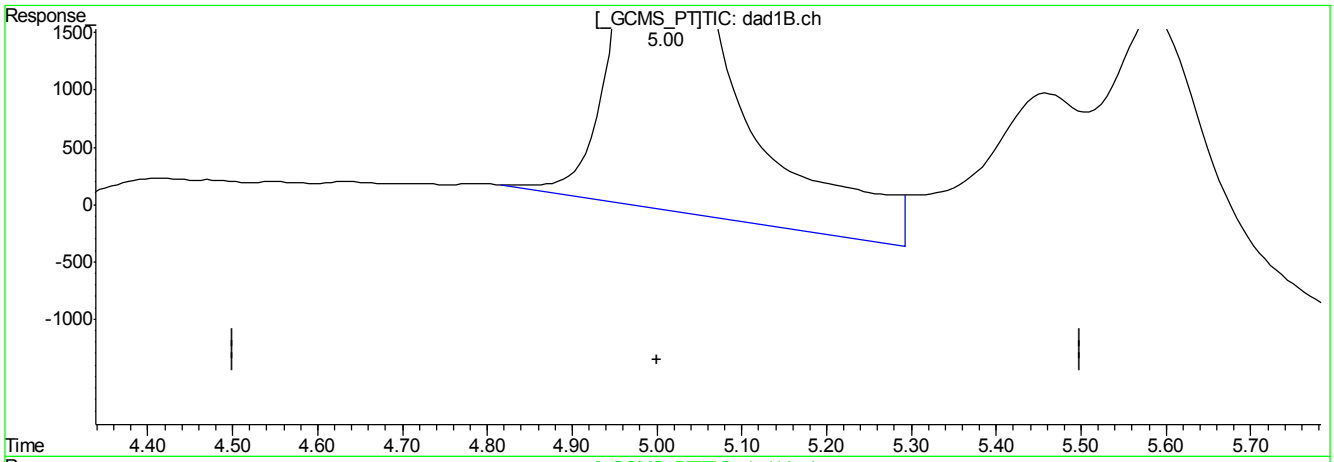
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613826.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 13:36	**Supervisor approved:**	11/15/17 16:31 Mike Eger

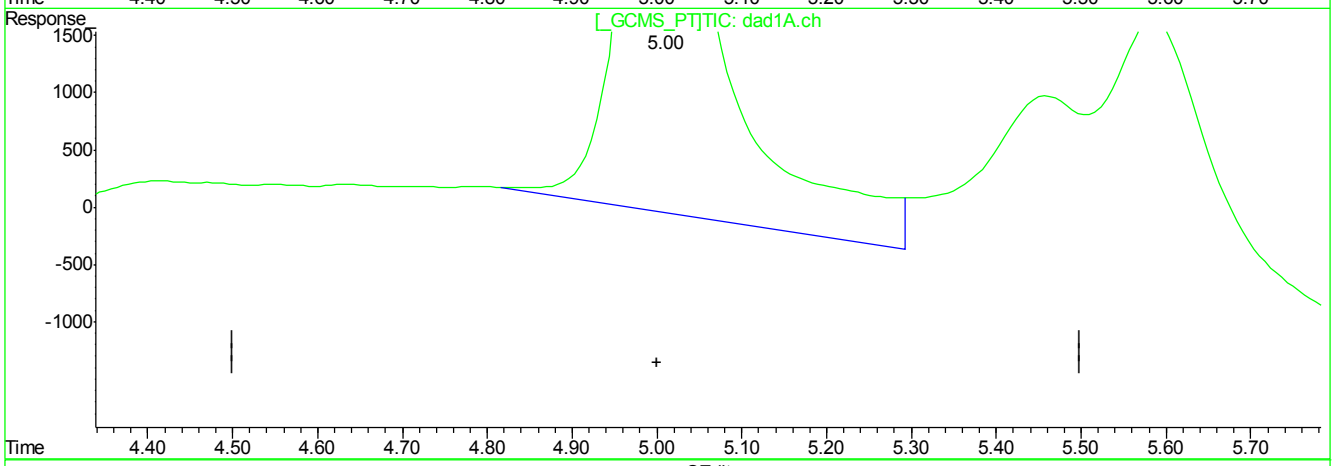
Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.58	Poorly defined baseline
DNX		2	5.58	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.10	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.09	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.89	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.72	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.46	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.46	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.83	Poorly defined baseline
PETN	78-11-5	2	22.34	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration





QEdit

(1) TNX

5.01min 40.668ppb

response 342081

(1) TNX #2

5.01min 40.561ppb

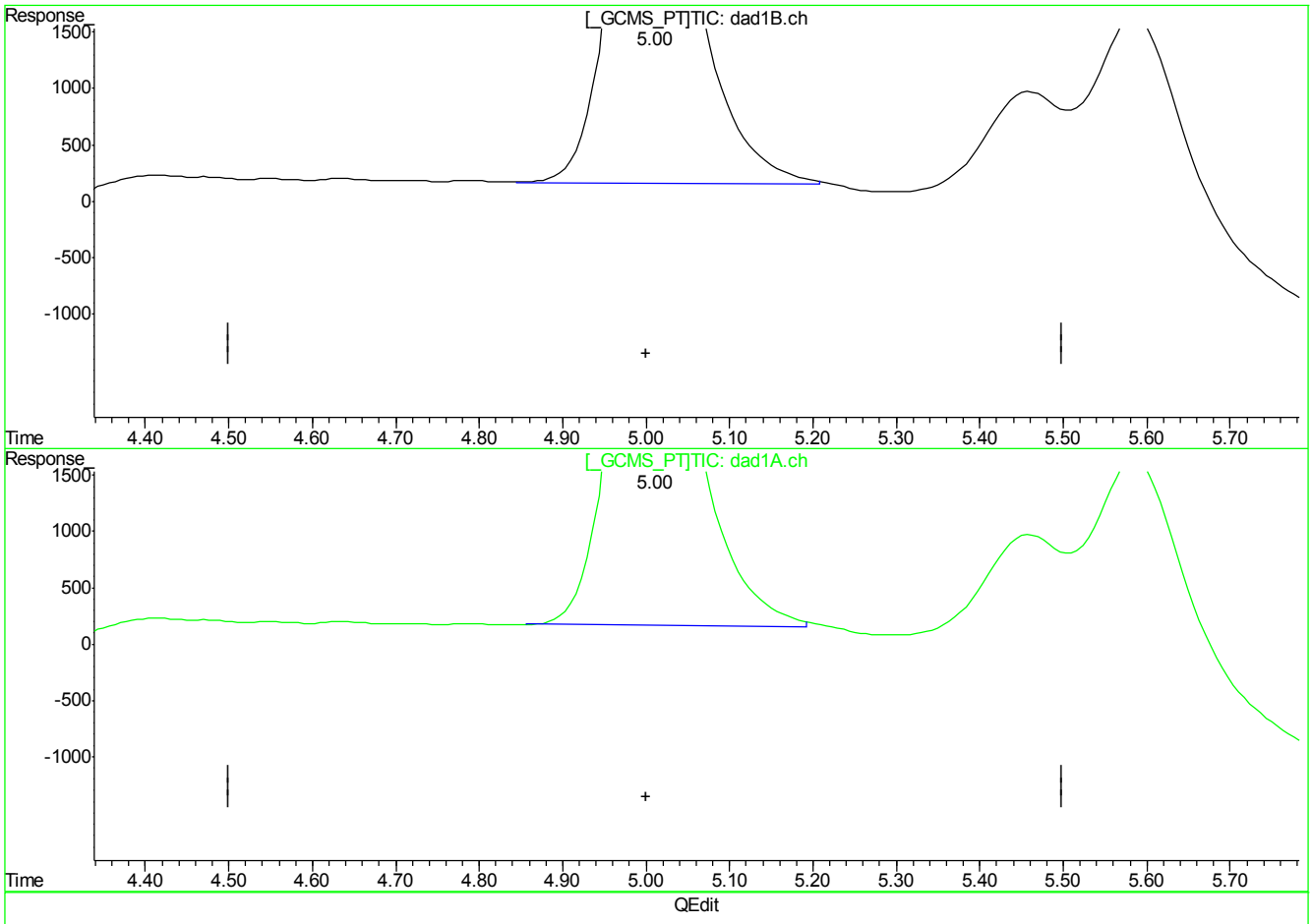
response 342081

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:24 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(1) TNX

5.00min 32.146ppb m

response 270396

(1) TNX #2

5.00min 31.846ppb m

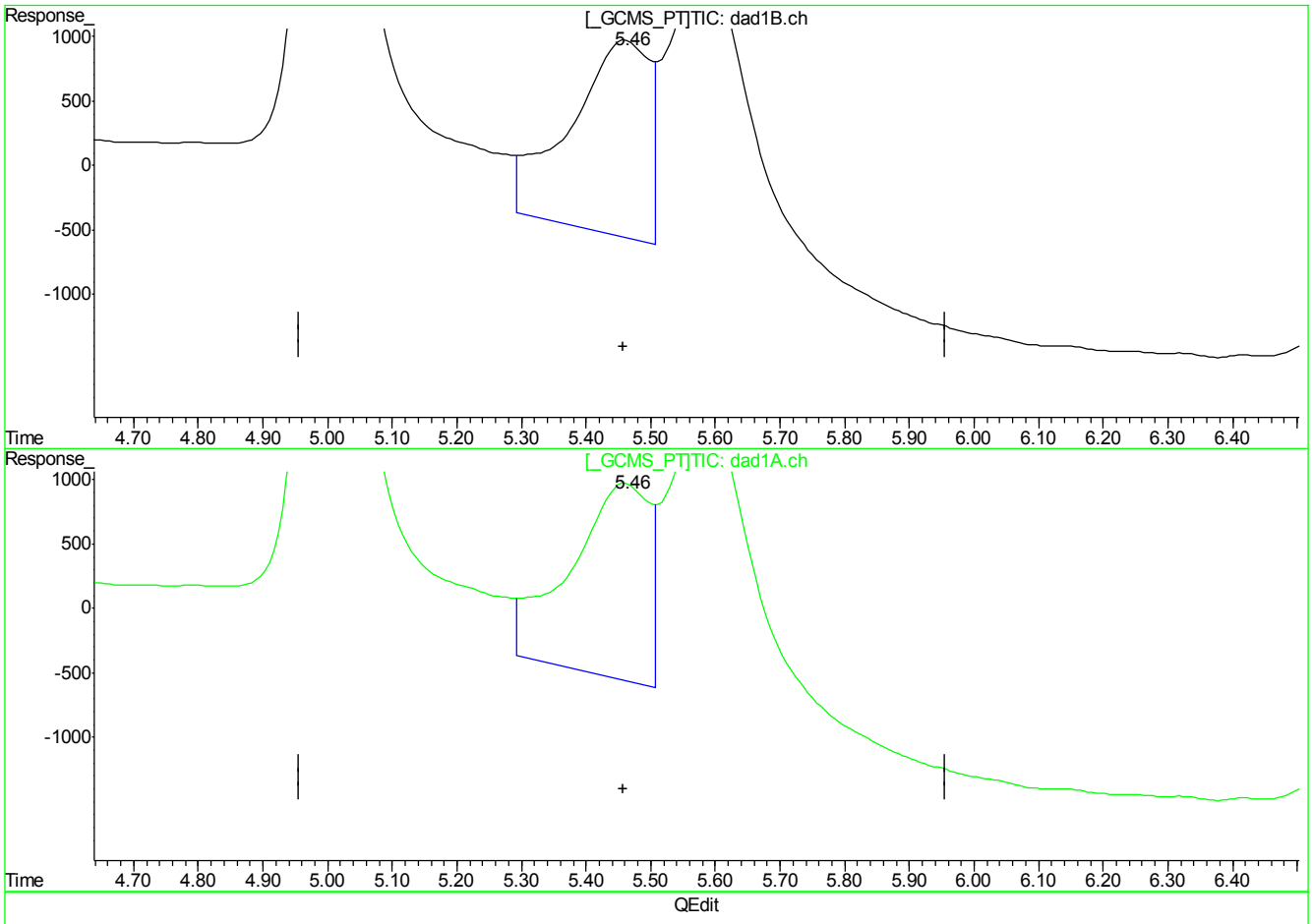
response 268585

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:29 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 33.683ppb

response 127943

(2) HMX #2

5.46min 33.445ppb

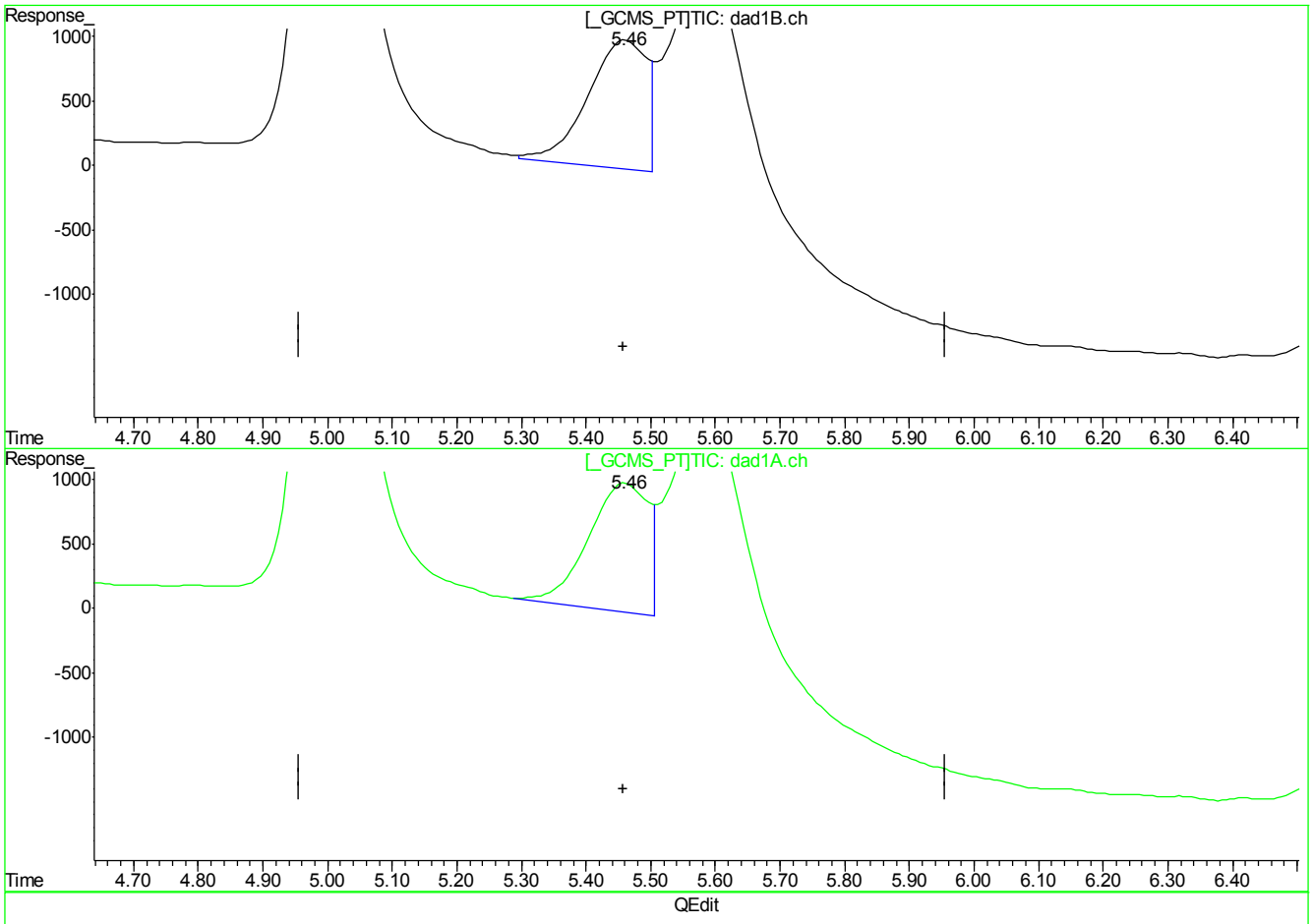
response 127943

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 16.096ppb m

response 61139

(2) HMX #2

5.46min 17.142ppb m

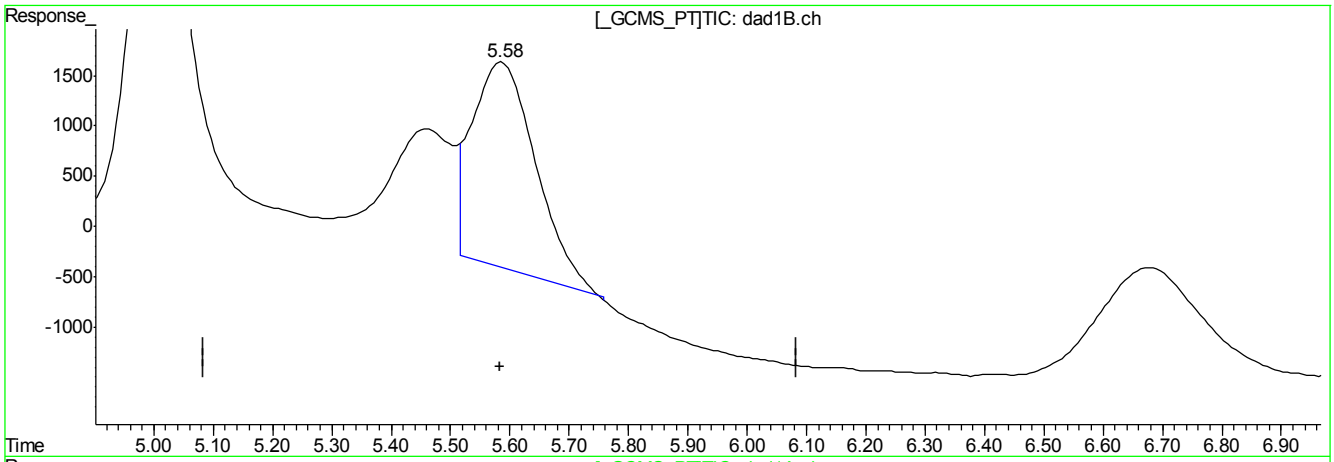
response 65579

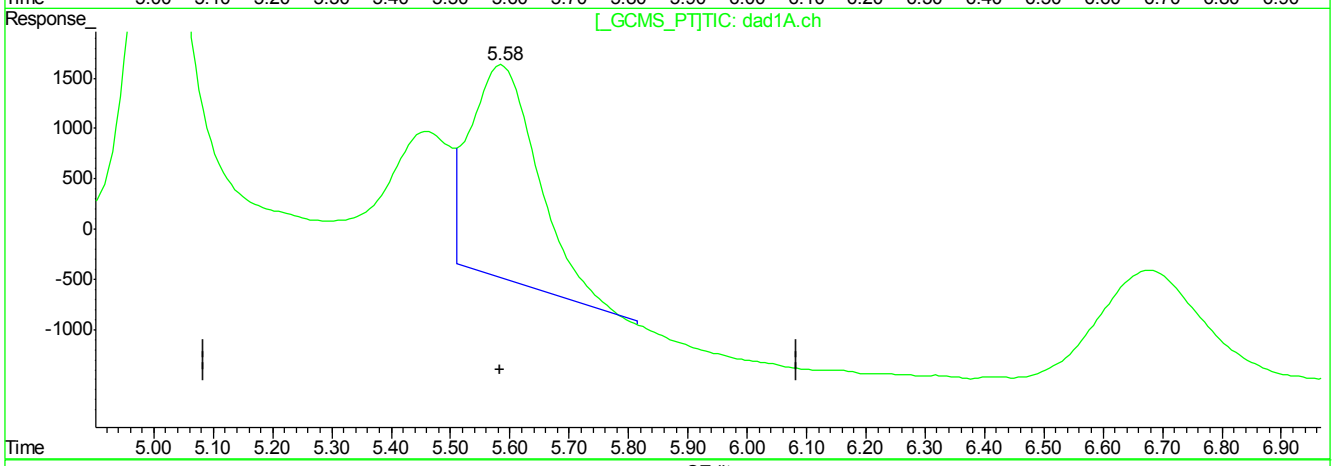
(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:39 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.58min 23.094ppb m

response 151583

(3) DNX #2

5.58min 25.858ppb m

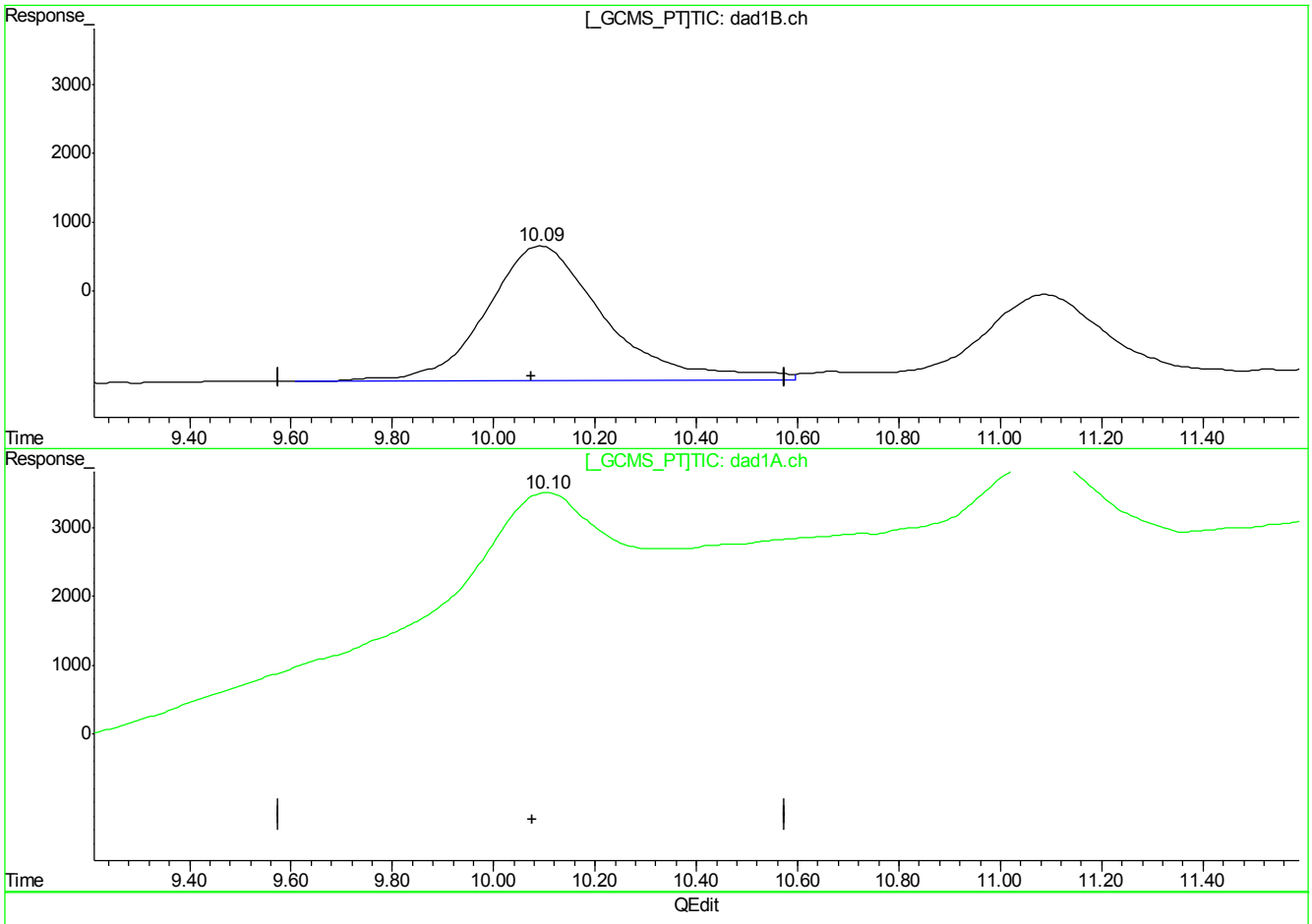
response 169136

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.11min 117.682ppb

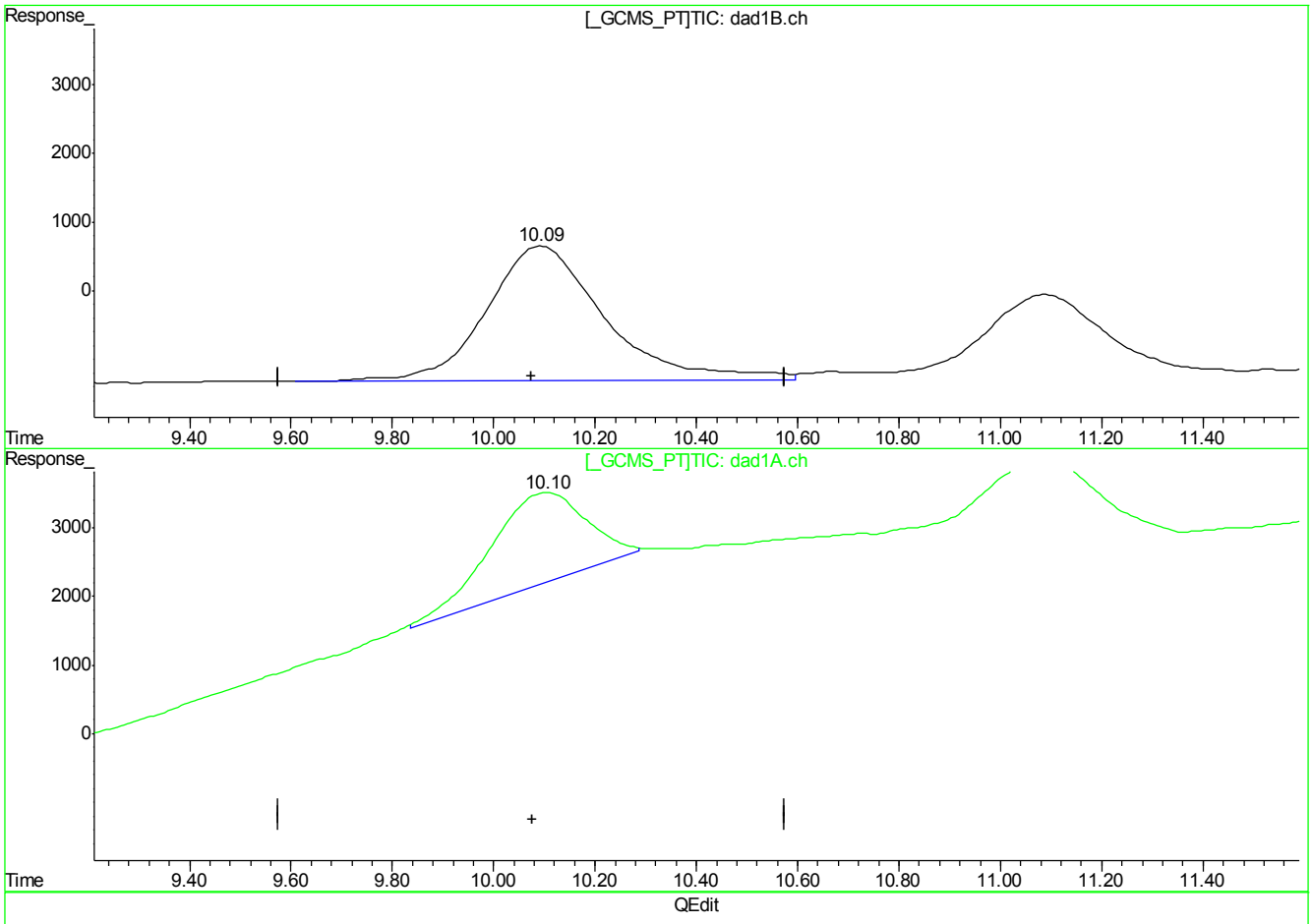
response 1660323

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:01 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.10min 12.357ppb m

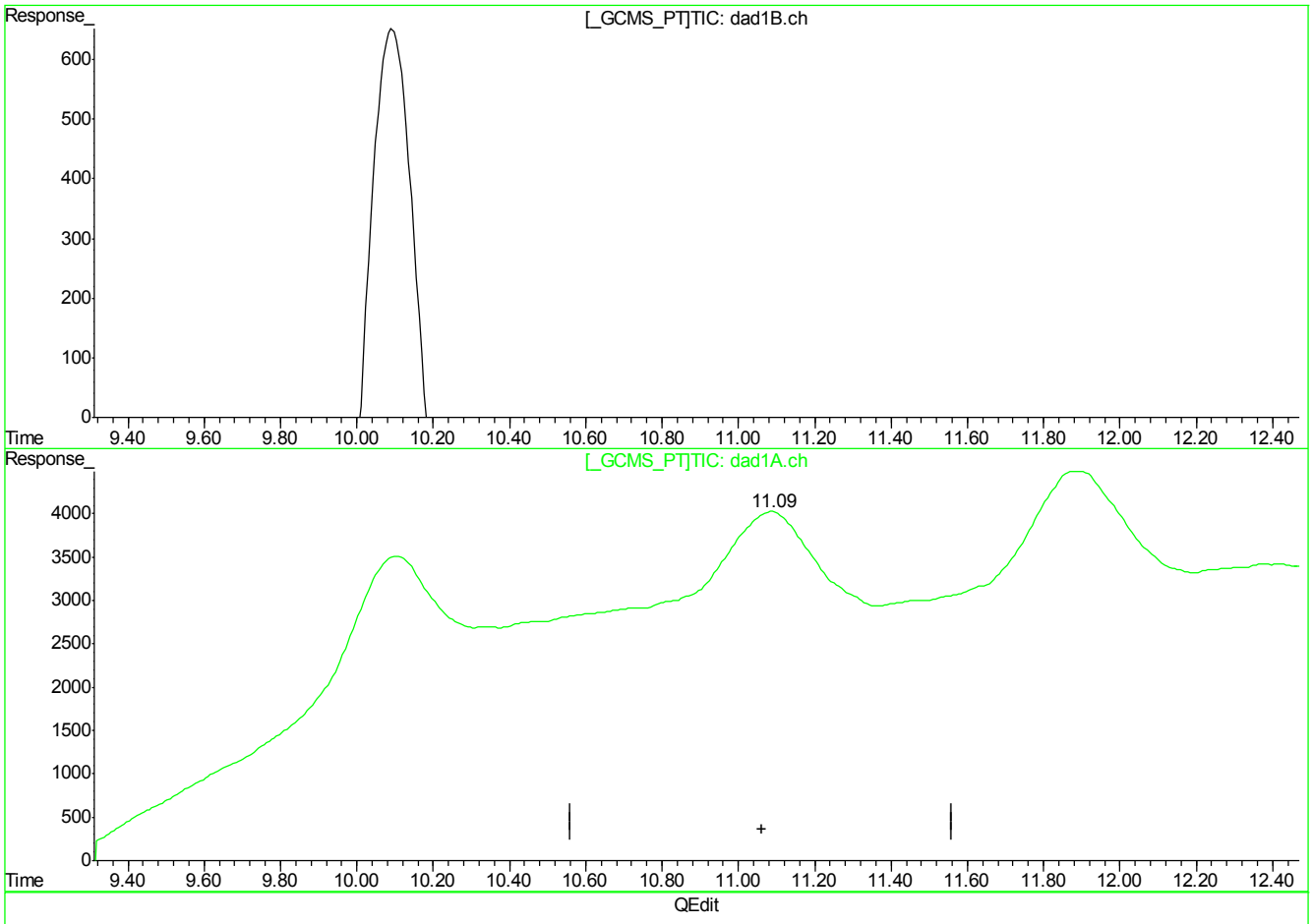
response 176008

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 206.853ppb

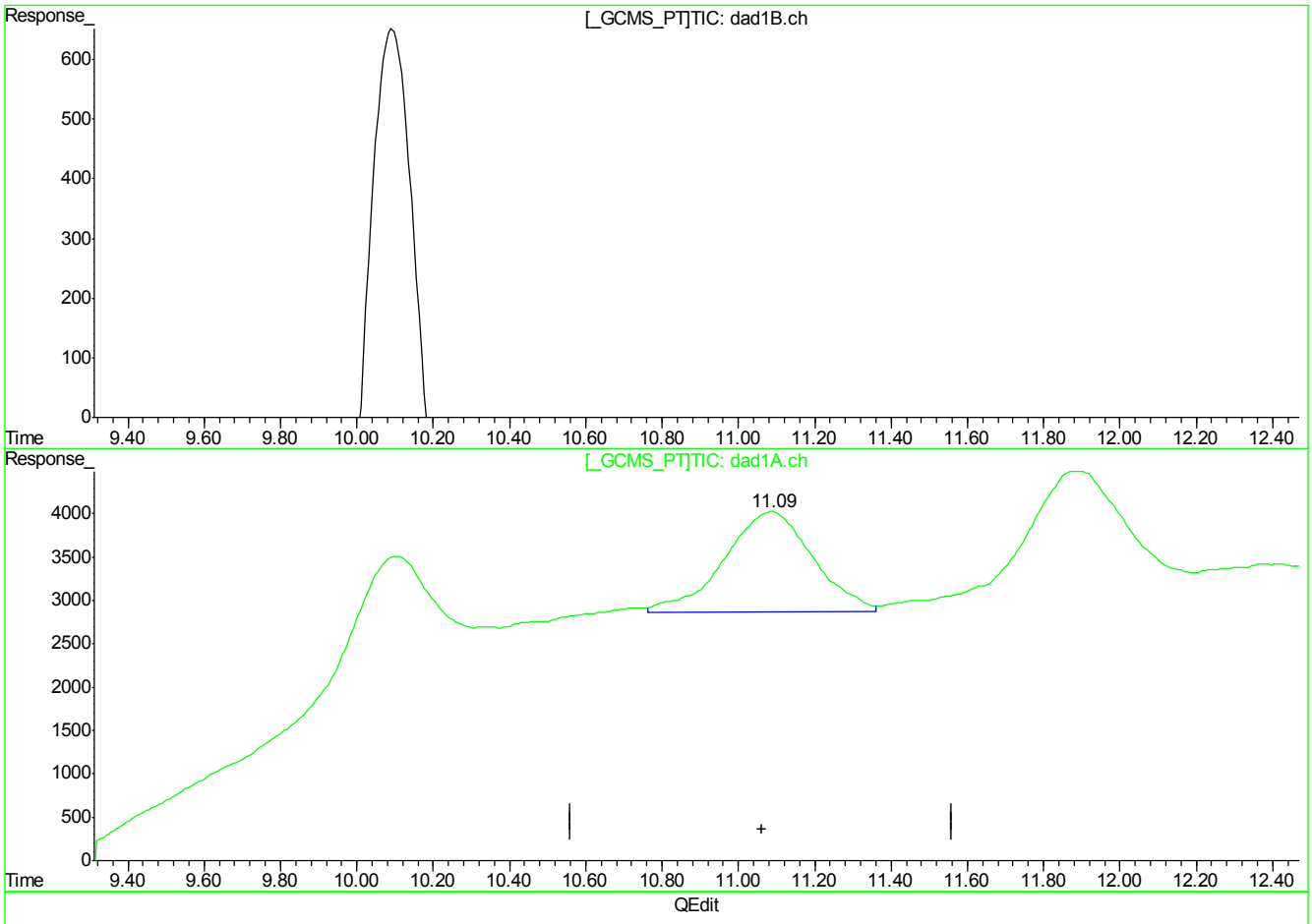
response 1961183

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 19.401ppb m

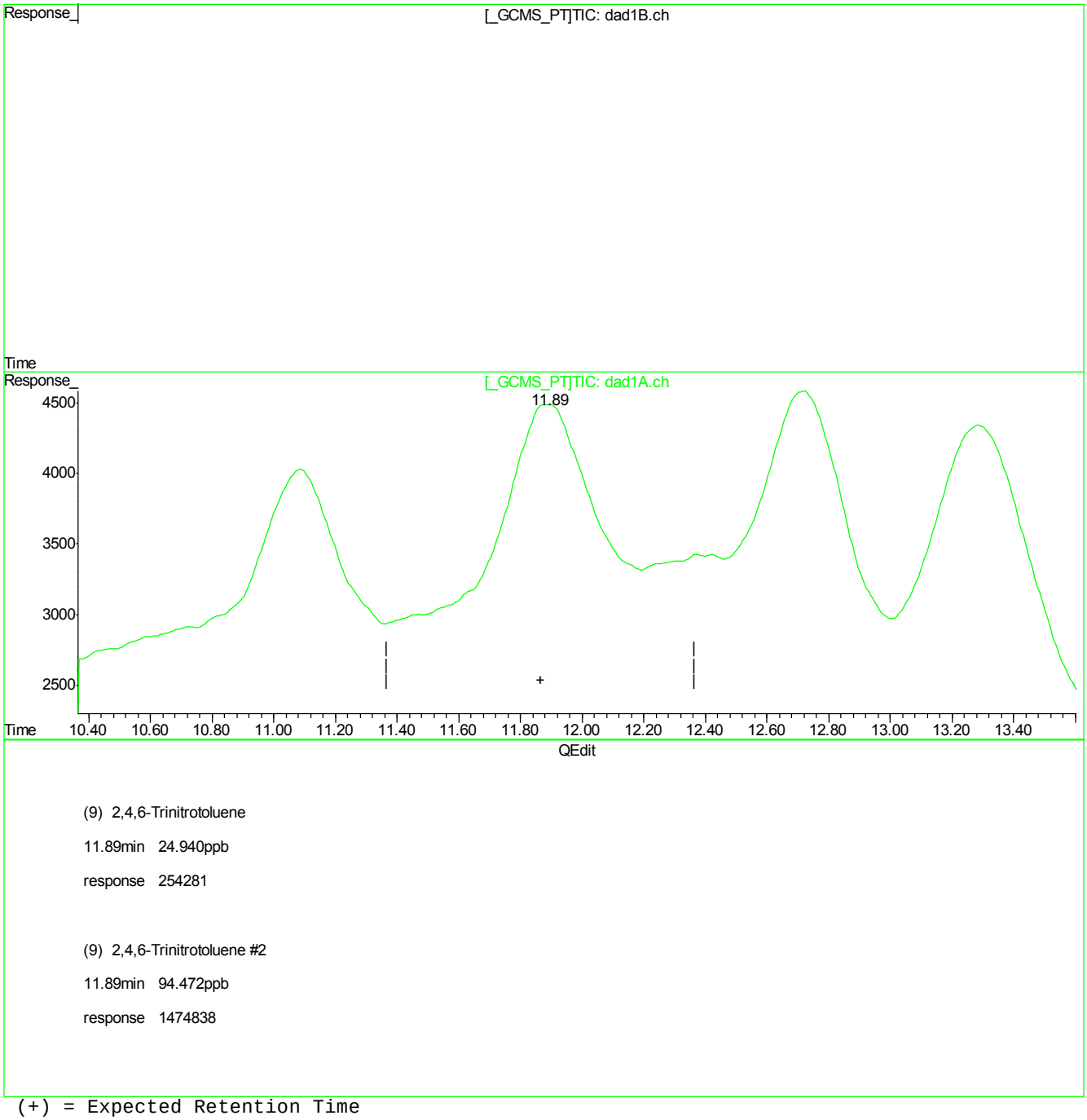
response 184835

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:15 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 94.472ppb

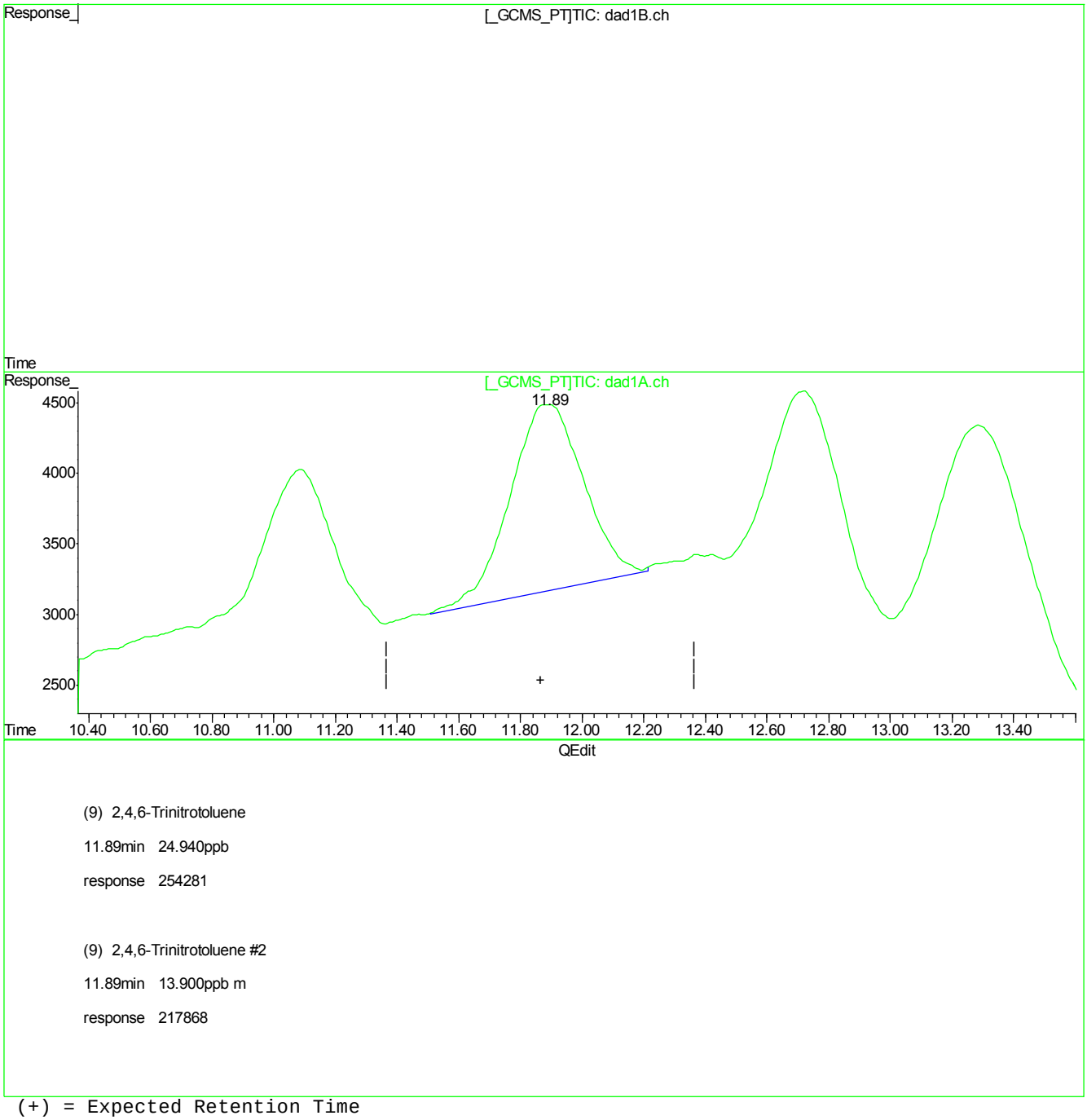
response 1474838

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:19 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 13.900ppb m

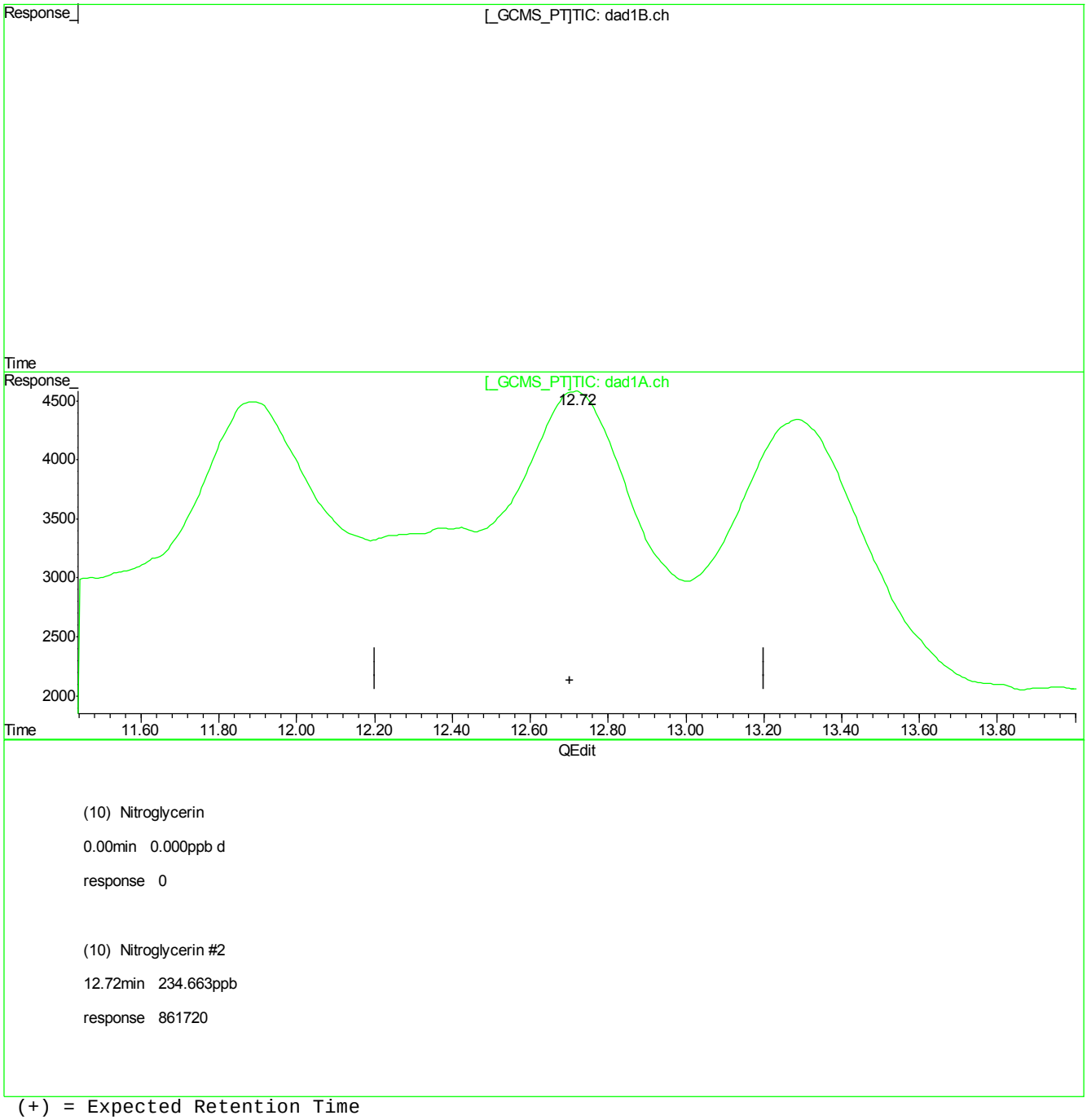
response 217868

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 234.663ppb

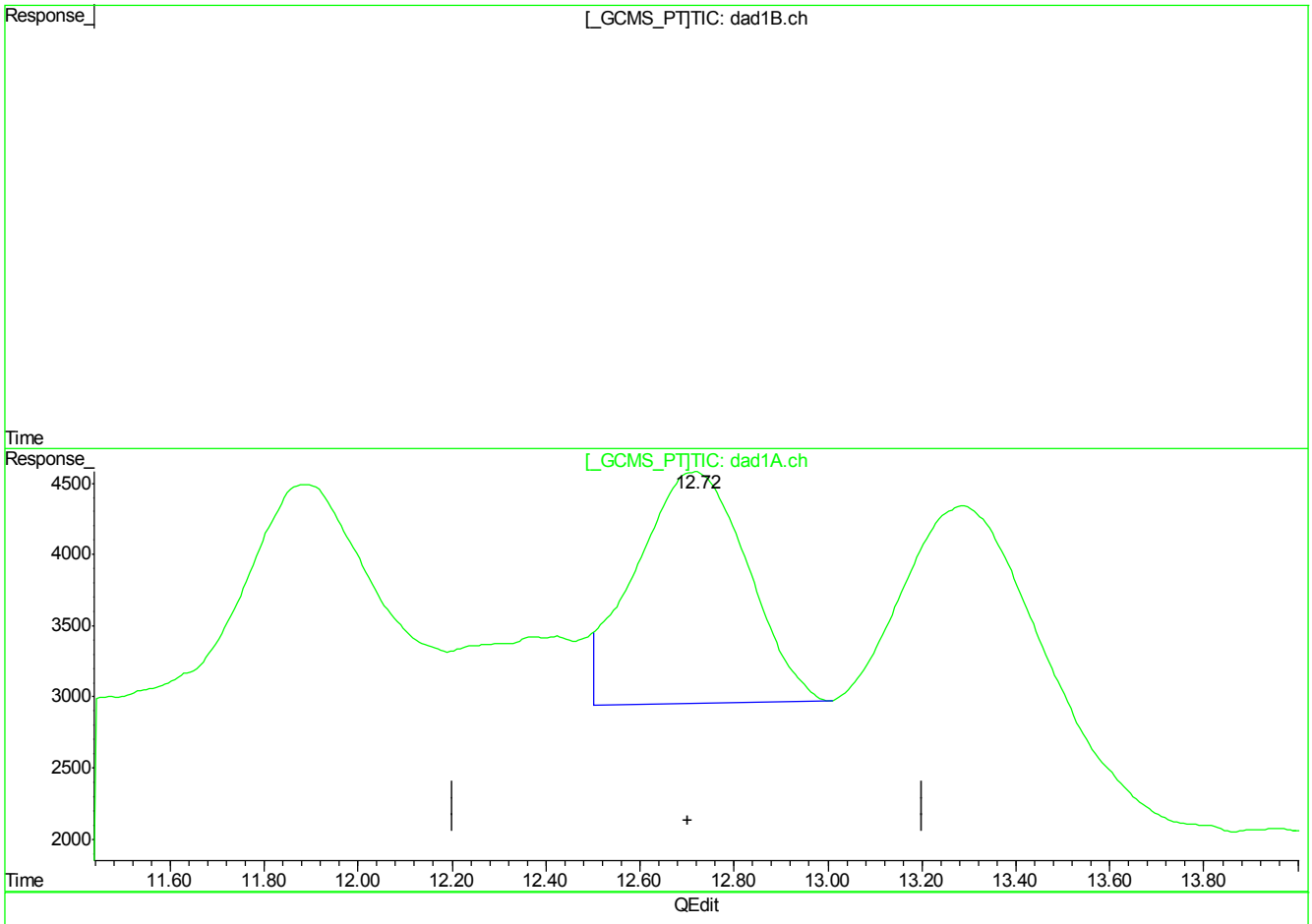
response 861720

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 73.009ppb m

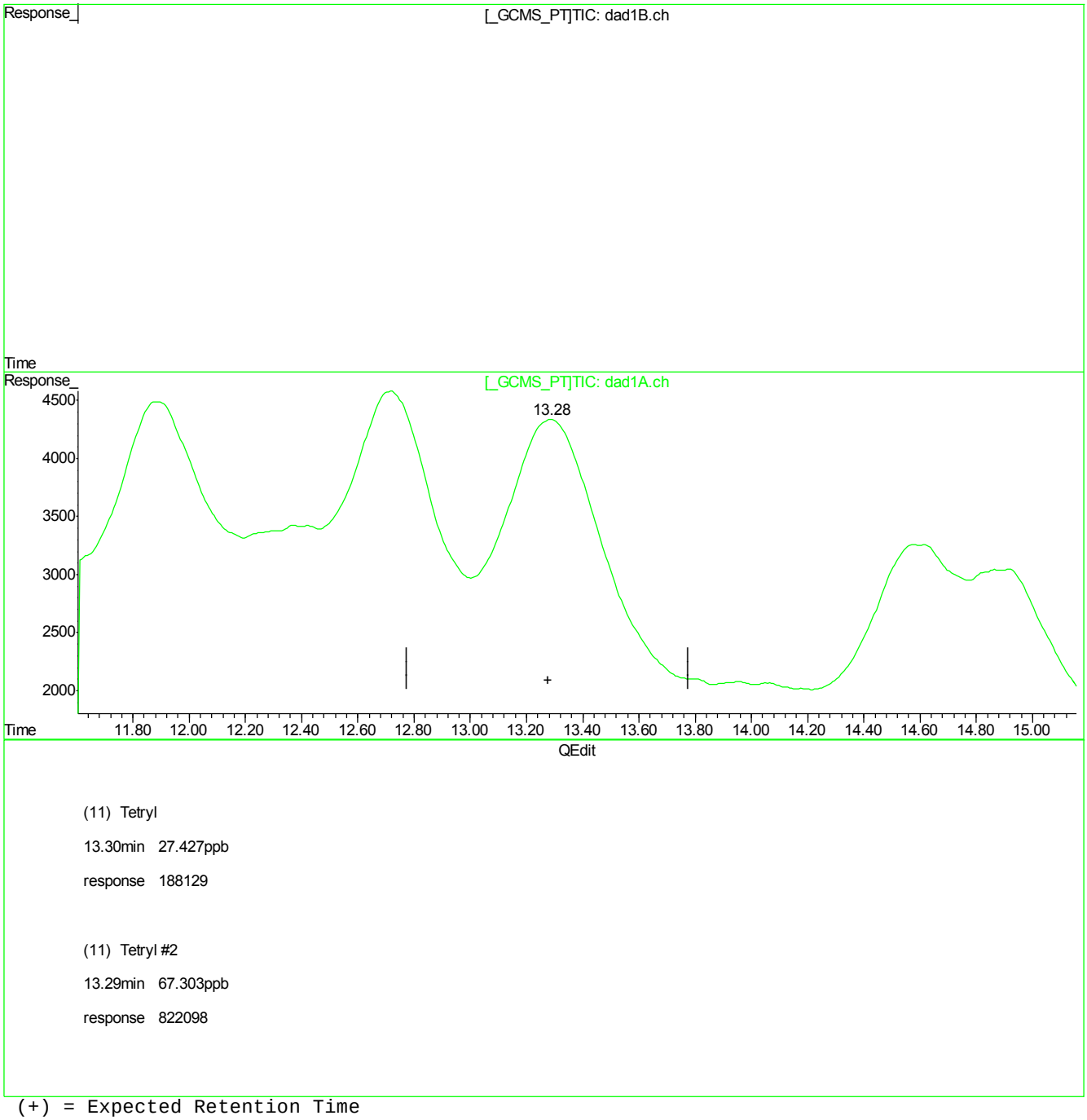
response 268418

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:31 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

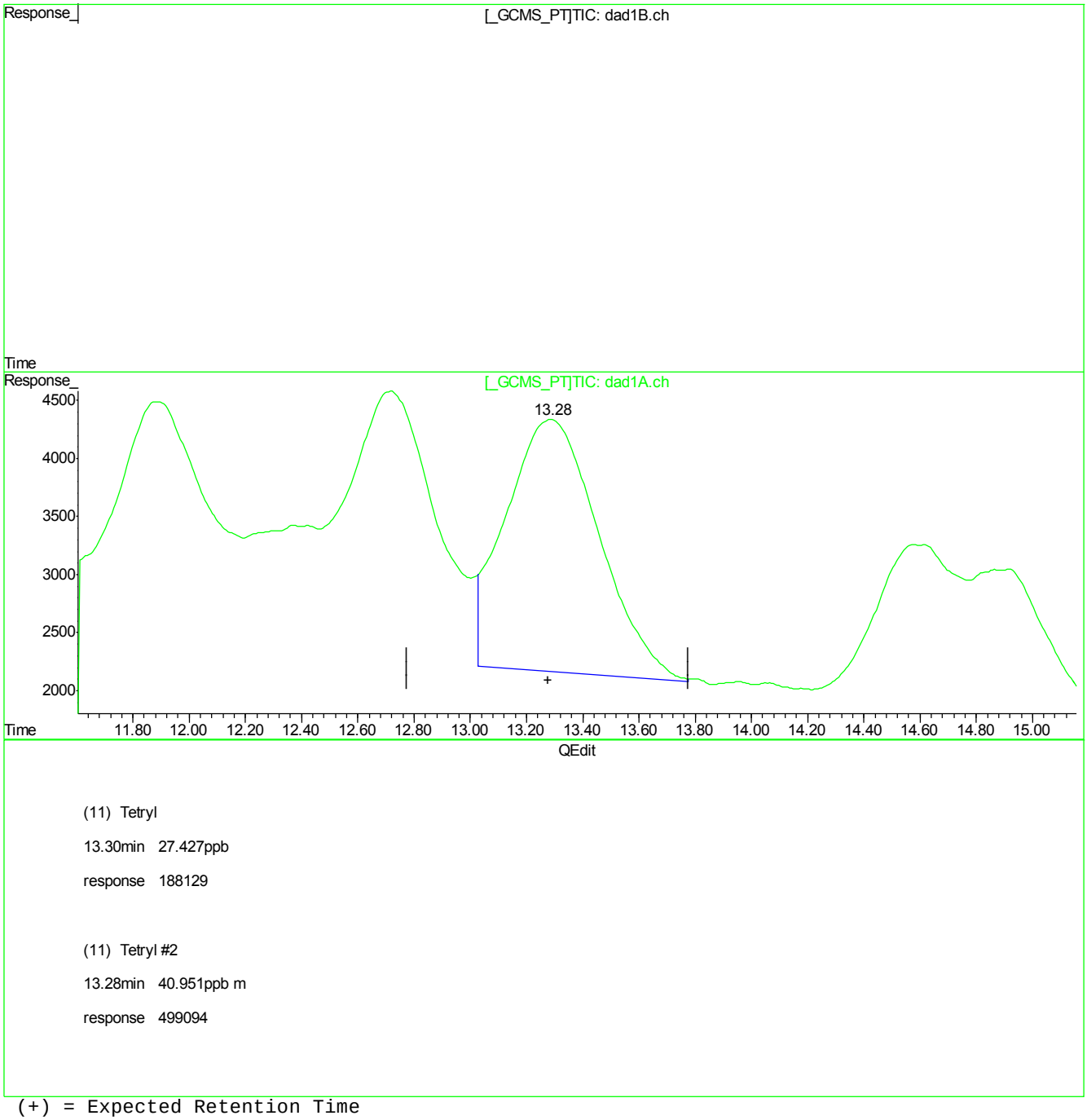


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

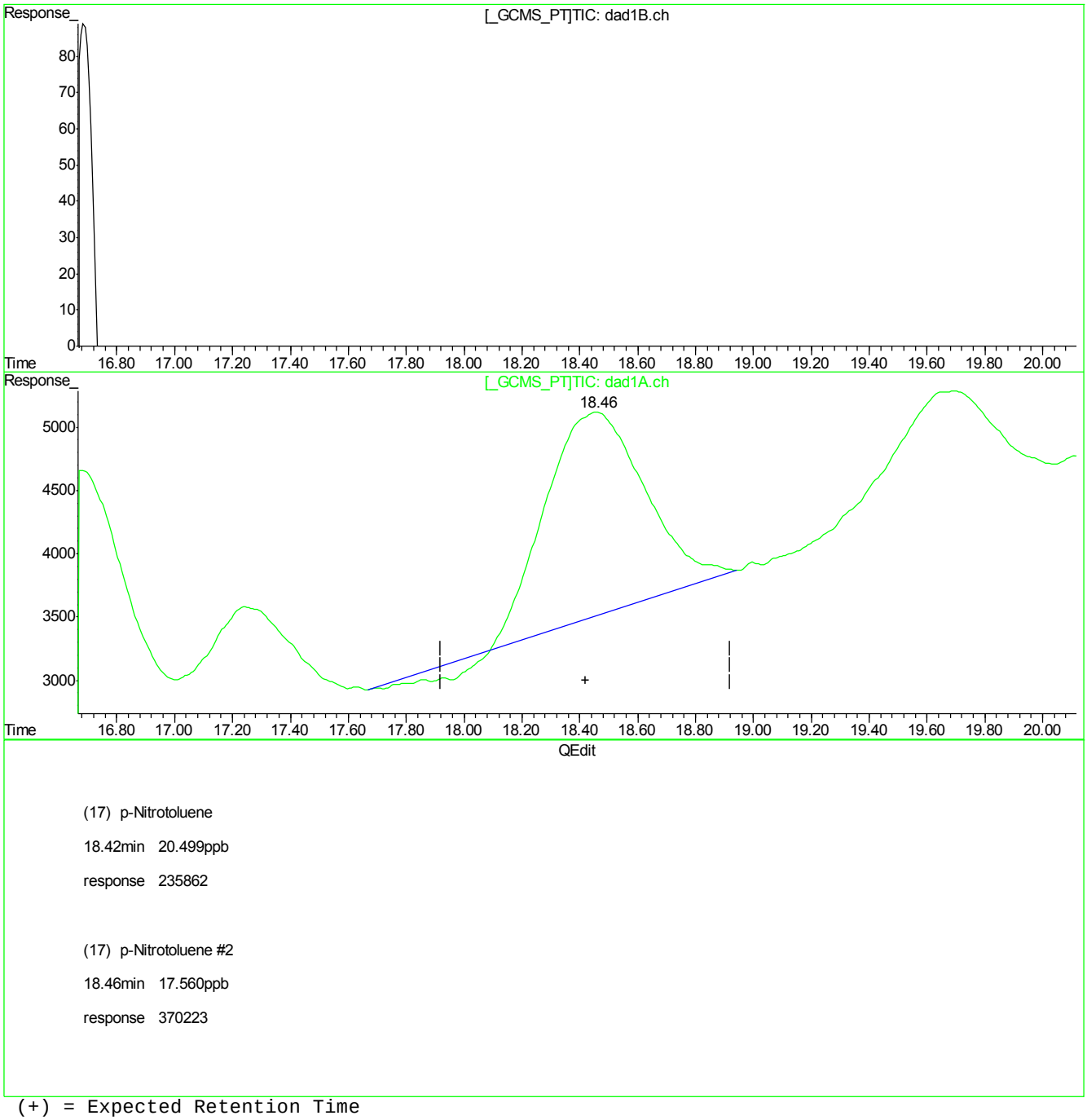


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:52:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 17.560ppb

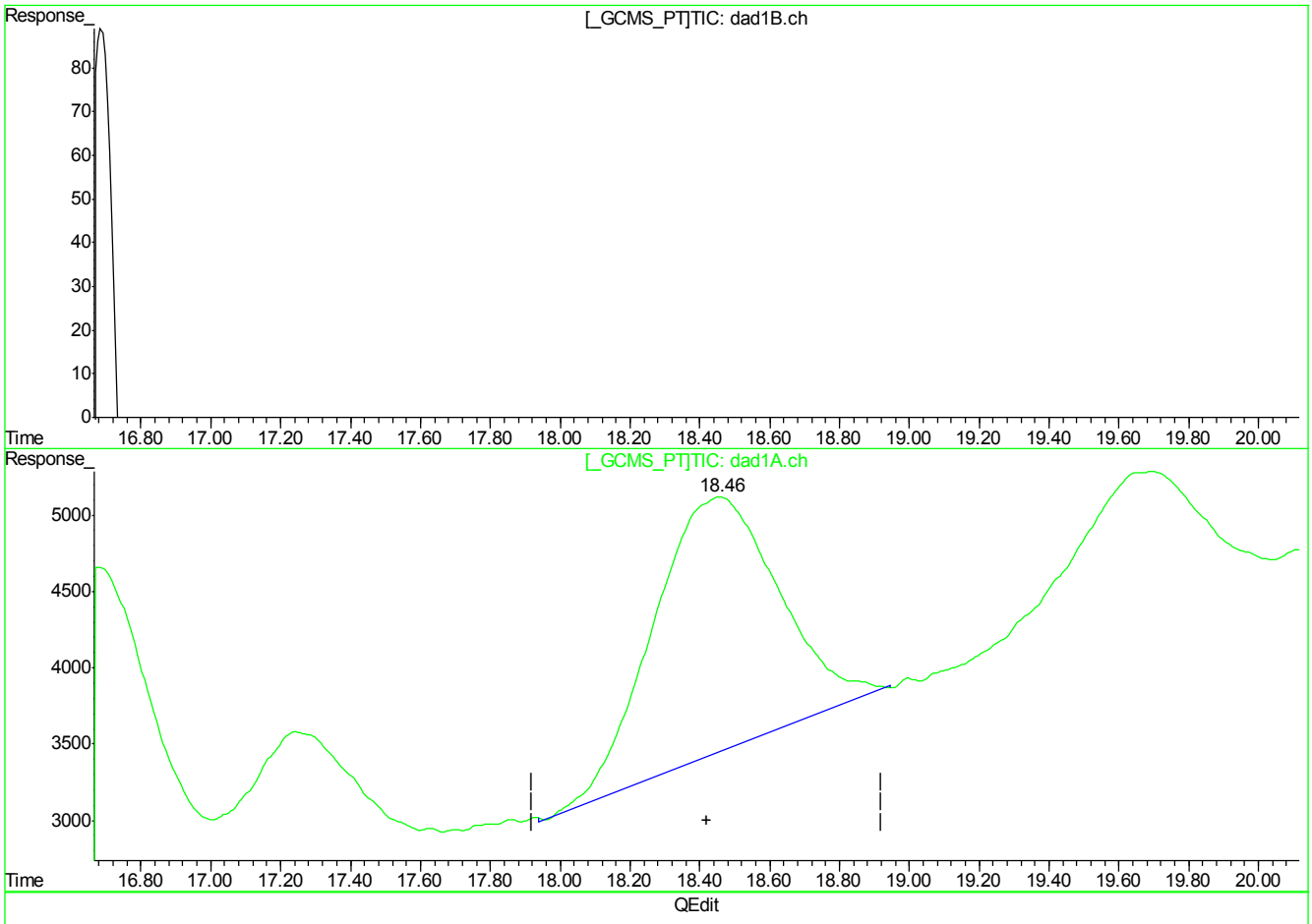
response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:26 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 19.889ppb m

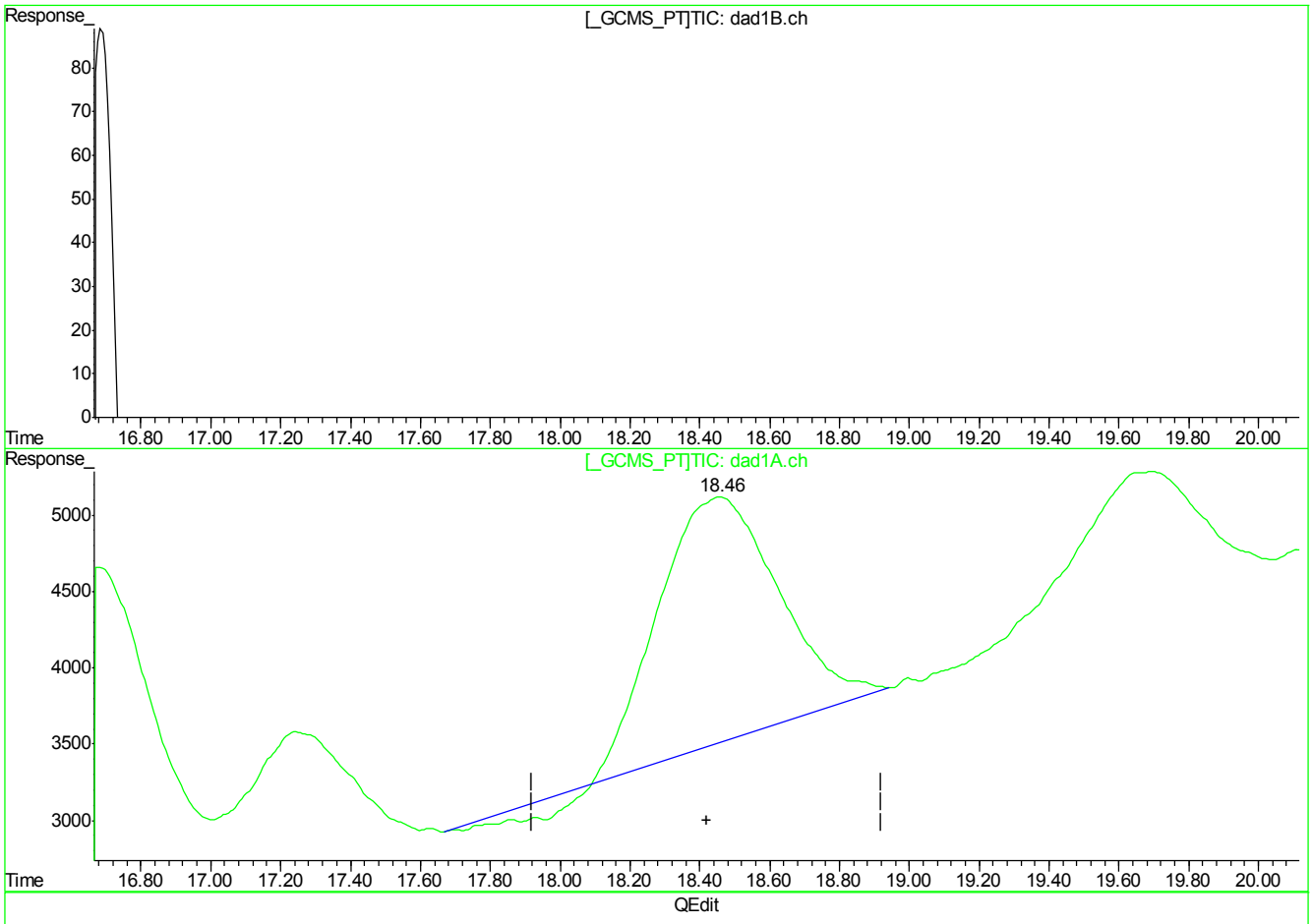
response 419386

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:29 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 17.560ppb

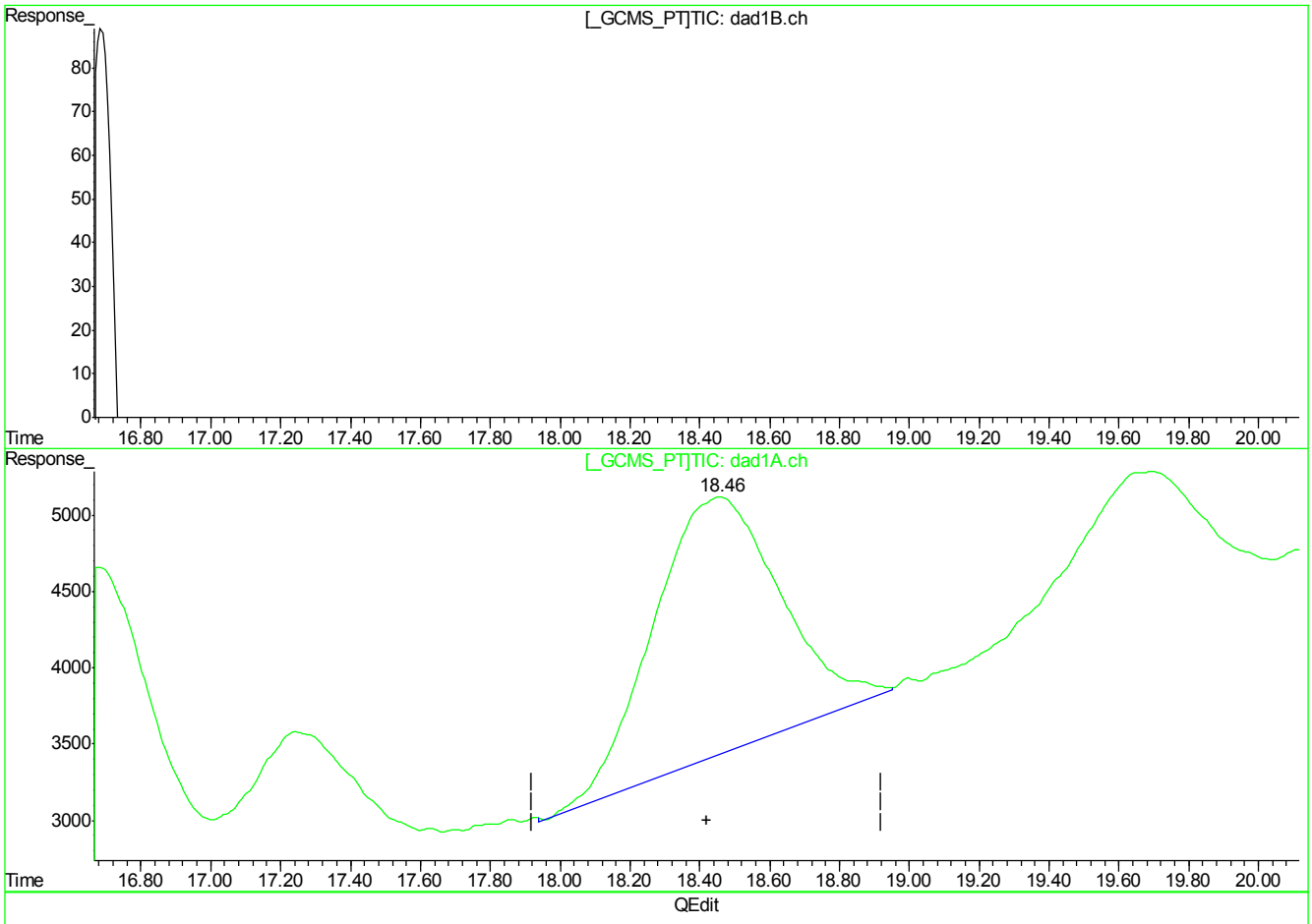
response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:32 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 20.299ppb m

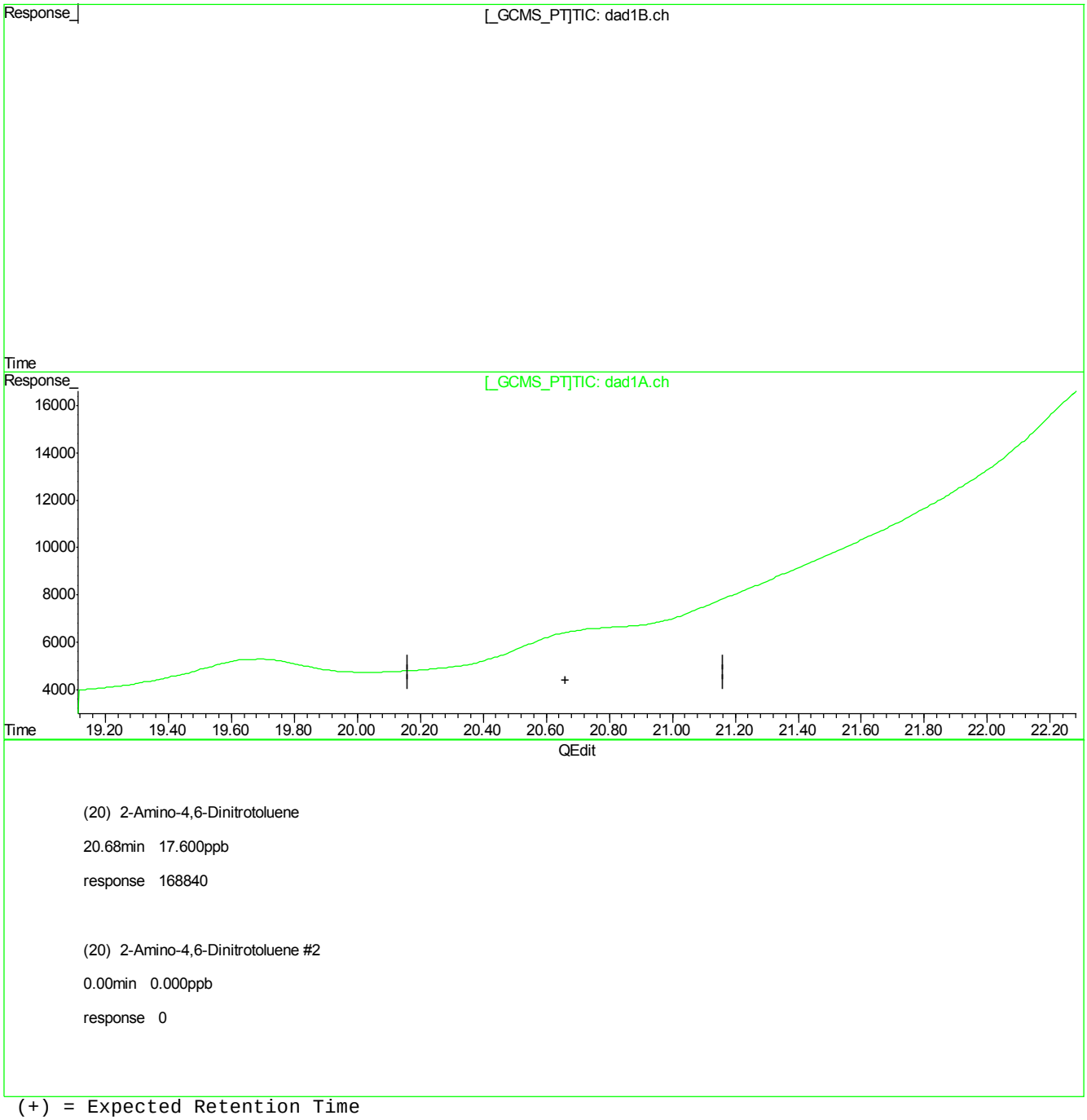
response 428039

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

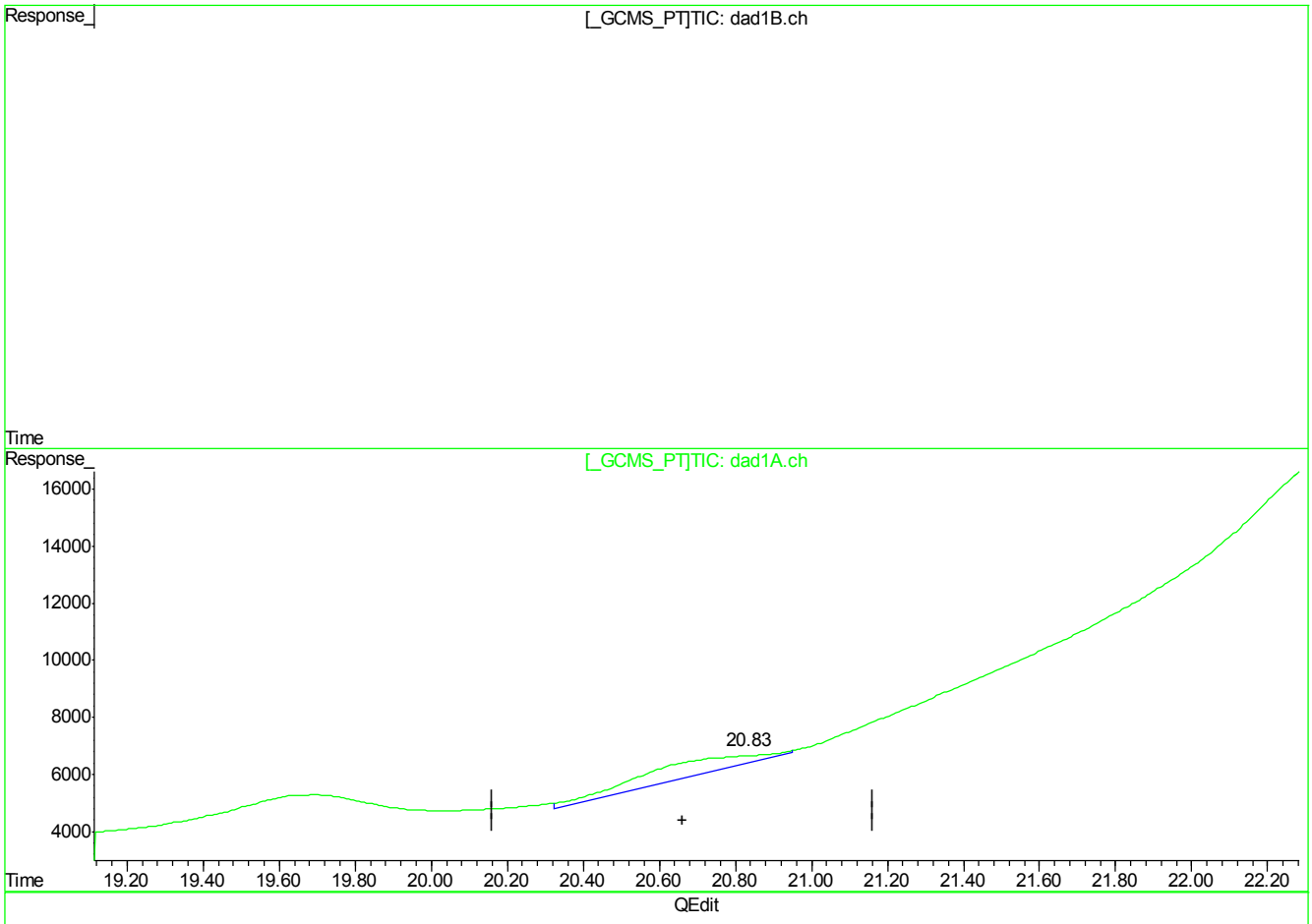


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.68min 17.600ppb

response 168840

(20) 2-Amino-4,6-Dinitrotoluene #2

20.83min 8.755ppb m

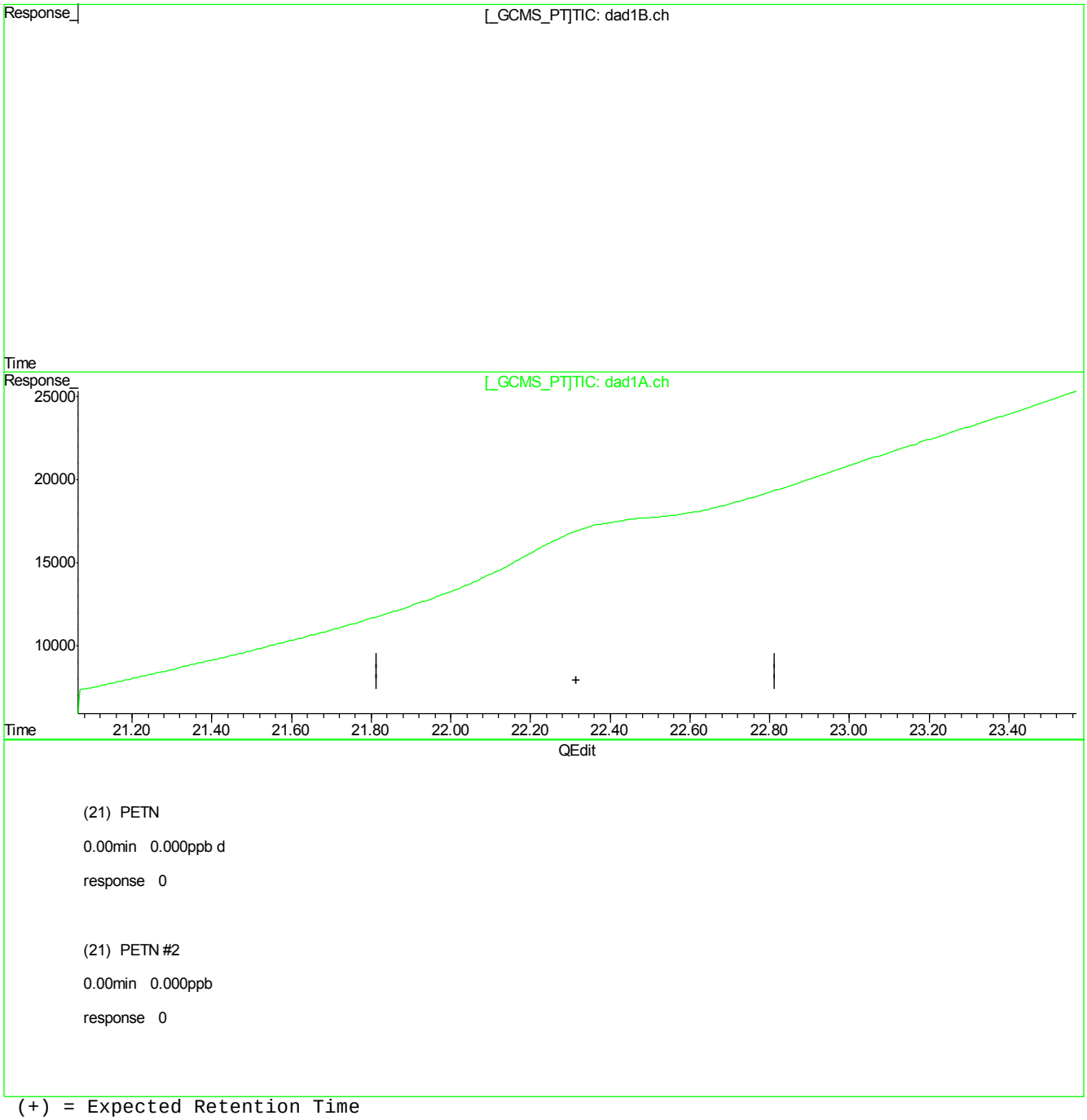
response 118490

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

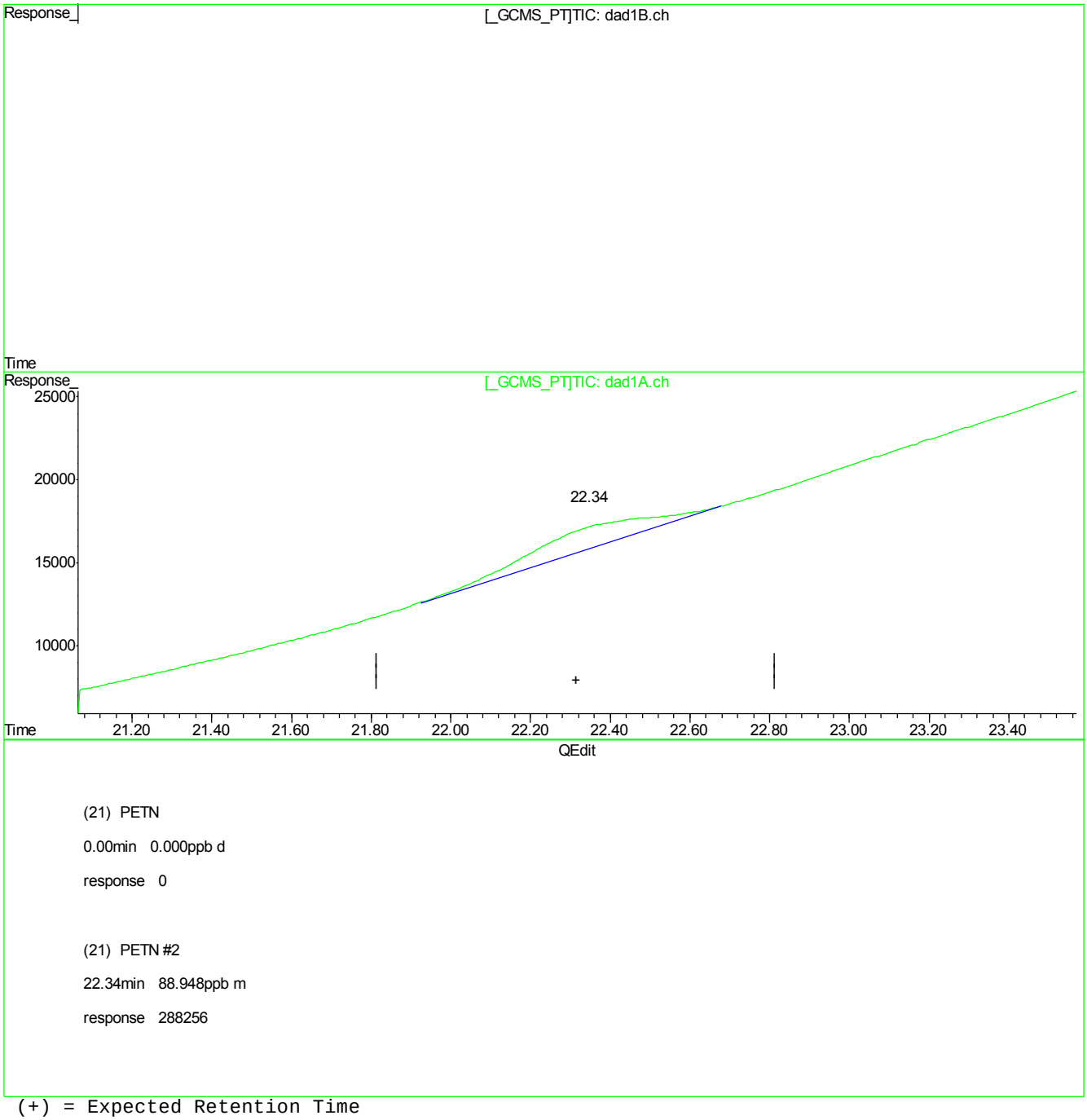


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:59 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.58	258823	507389	43.903	40.501m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		8.78%#	8.10%#
	Target Compounds						
1)	TNX	5.00	5.00	688634	692781	81.868m	82.143m
2)	HMX	5.46	5.46	164910	146764	43.415m	38.364m
3)	DNX	5.59	5.59	398344	366564	60.688m	56.040m
4)	MNX	6.67	6.67	346845	346845	71.694	71.694
5)	1,3,5-Trinitrobe	7.55	7.55	515904	514795	50.524	50.436
6)	RDX	8.08	8.08	237032	233498	49.790	49.276
7)	1,3-Dinitrobenze	10.08	10.08	693606	431067	47.654	30.312m
8)	Nitrobenzene	11.08	11.08	439122	444089	57.443	46.645m
9)	2,4,6-Trinitroto	11.88	11.87	493138	618562	48.367	39.514m
10)	Nitroglycerin	0.00	12.71	0	801043	N.D. d	218.113m
11)	Tetryl	13.28	13.27	407817	746662	59.454	61.159m
13)	2,6-Dinitrotolue	14.90	14.89	359440	552975	51.700	50.694m
14)	2,4-Dinitrotolue	15.63	15.65	660258	863855	49.688	86.988m#
15)	o-Nitrotoluene	17.23	17.24	284138	463485	67.838	81.127
16)	3,5-Dinitroanili	16.66	16.67	541983	858371	51.141	47.914
17)	p-Nitrotoluene	18.40	18.43	584278	976483	50.781	46.253
18)	4-Amino-2,6-Dini	18.40	18.43	584278	976483	50.781	46.253
19)	m-Nitrotoluene	19.66	19.66	285765	365933	58.777	38.687m
20)	2-Amino-4,6-Dini	20.66	20.66	440998	398969	45.970	29.479m
21)	PETN	0.00	22.39	0	664952	N.D. d	205.186m

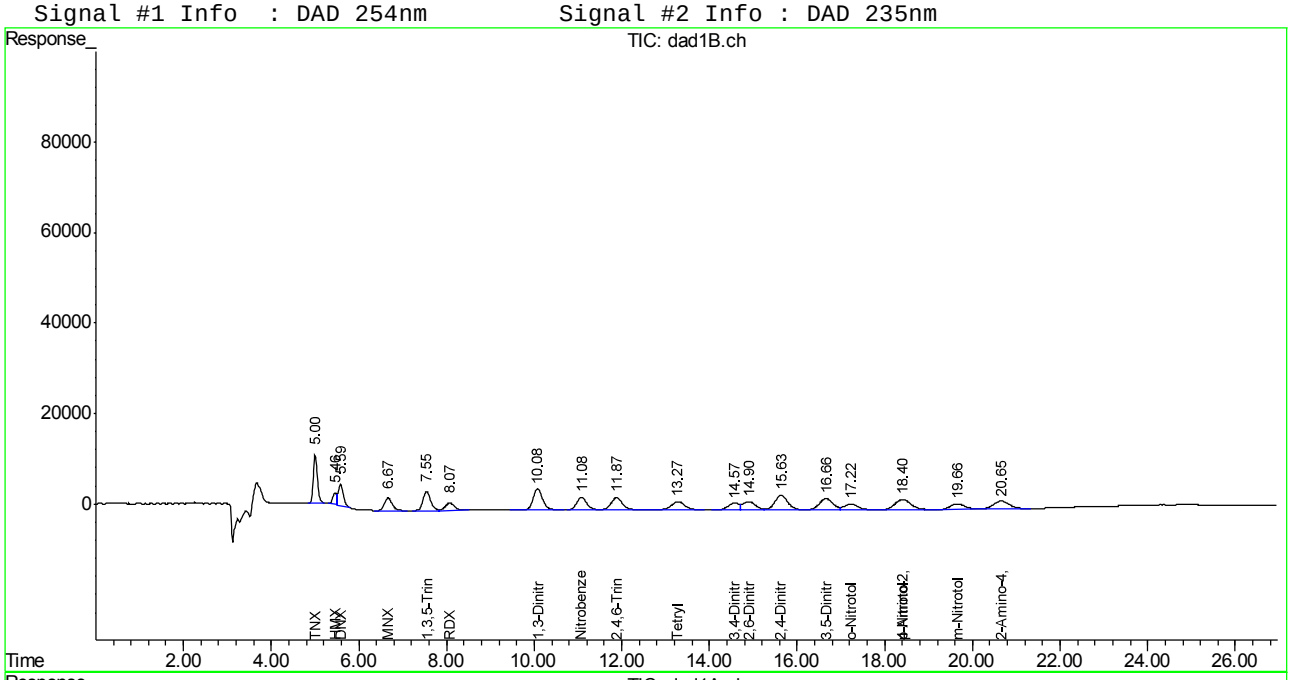
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 13:37:51 2017 Page 1

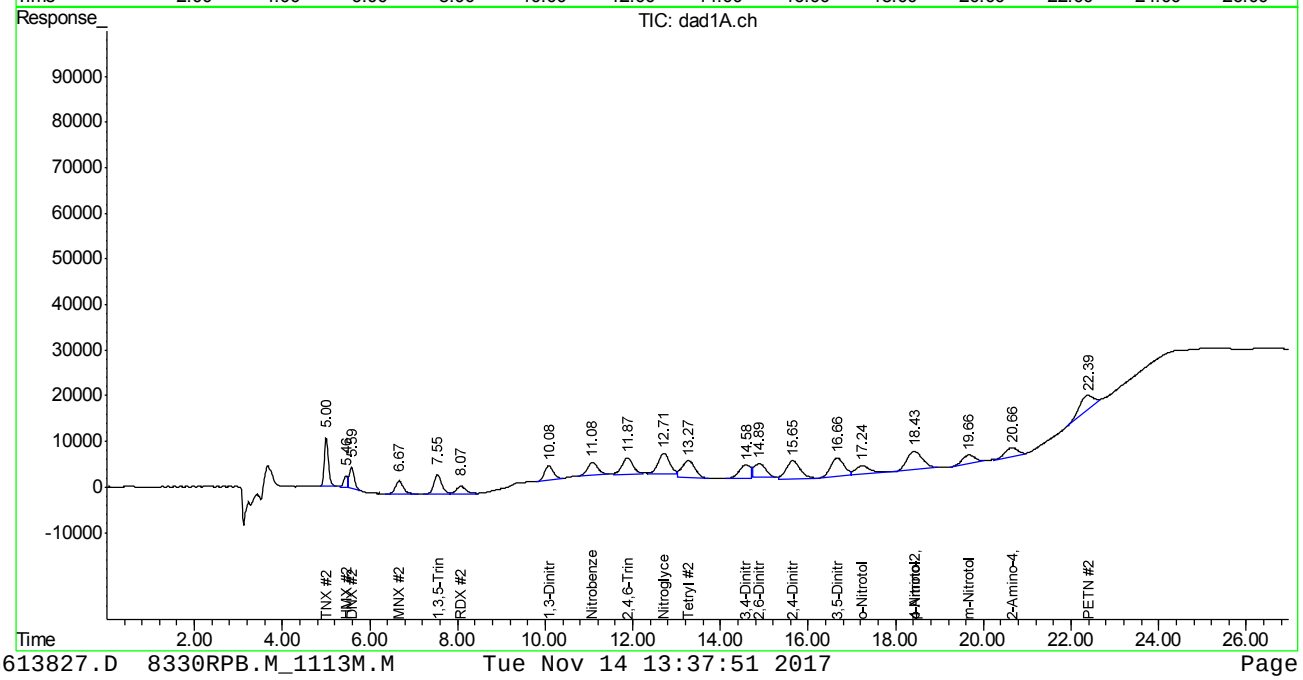
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:56 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

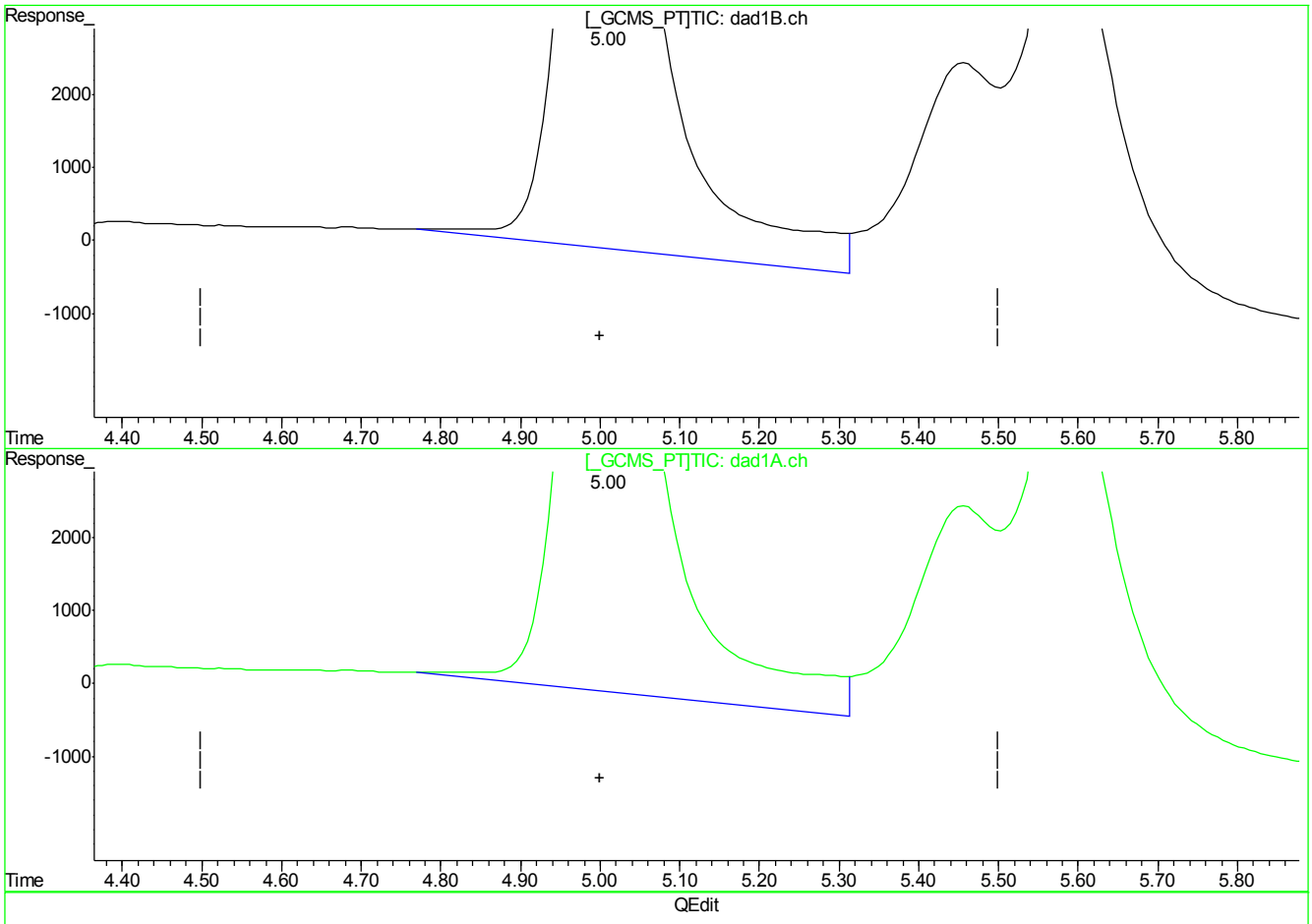
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613827.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:05	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.59	Poorly defined baseline
DNX		2	5.59	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.58	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.65	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.66	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.66	Poorly defined baseline
PETN	78-11-5	2	22.39	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.01min 93.407ppb

response 785694

(1) TNX #2

5.01min 93.160ppb

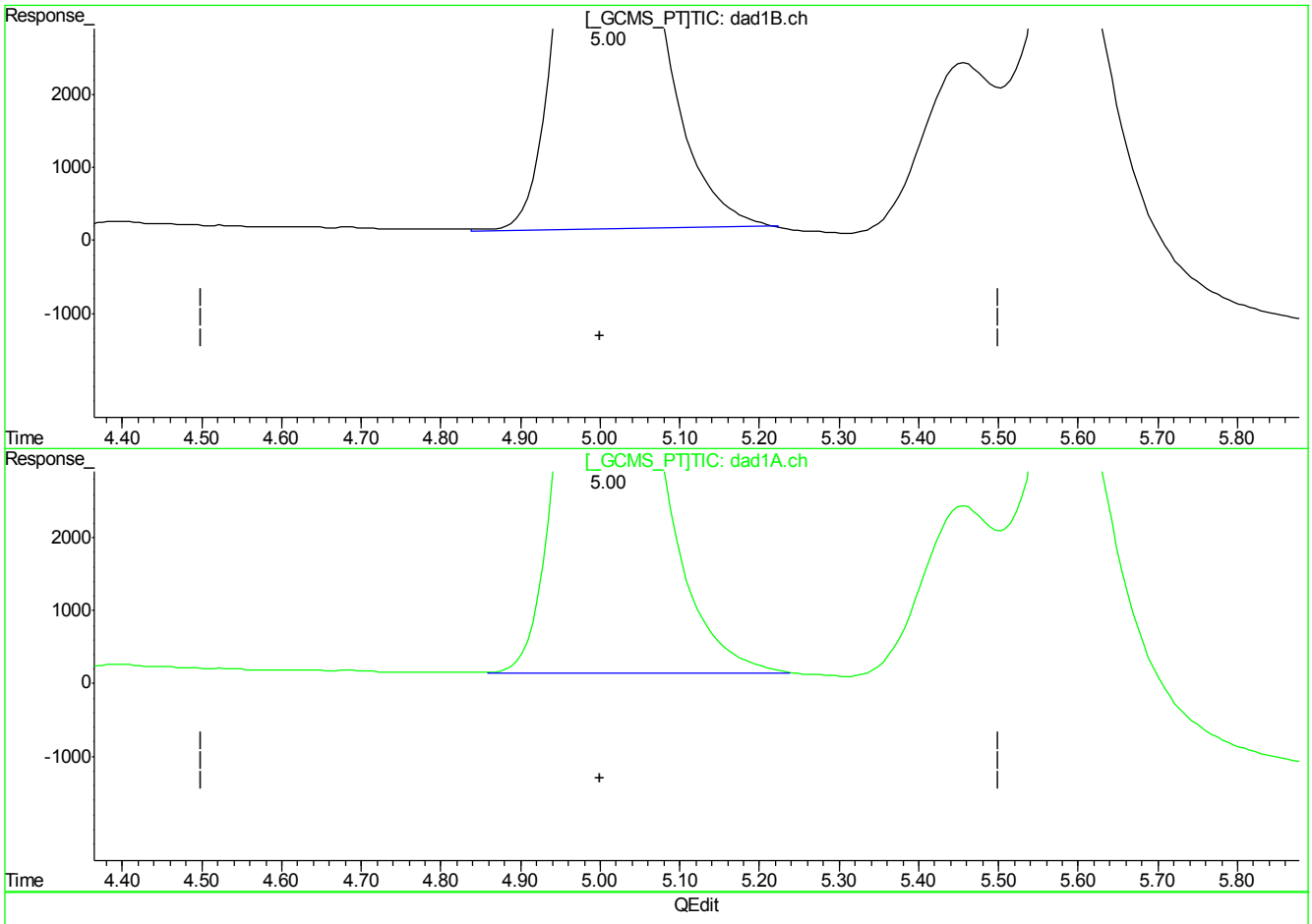
response 785694

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.00min 81.868ppb m

response 688634

(1) TNX #2

5.00min 82.143ppb m

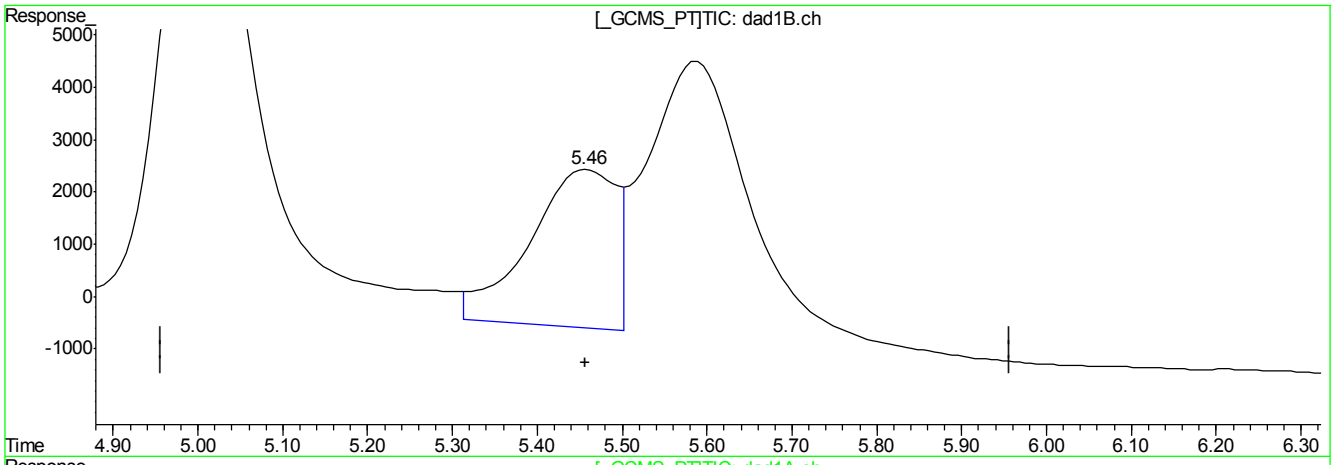
response 692781

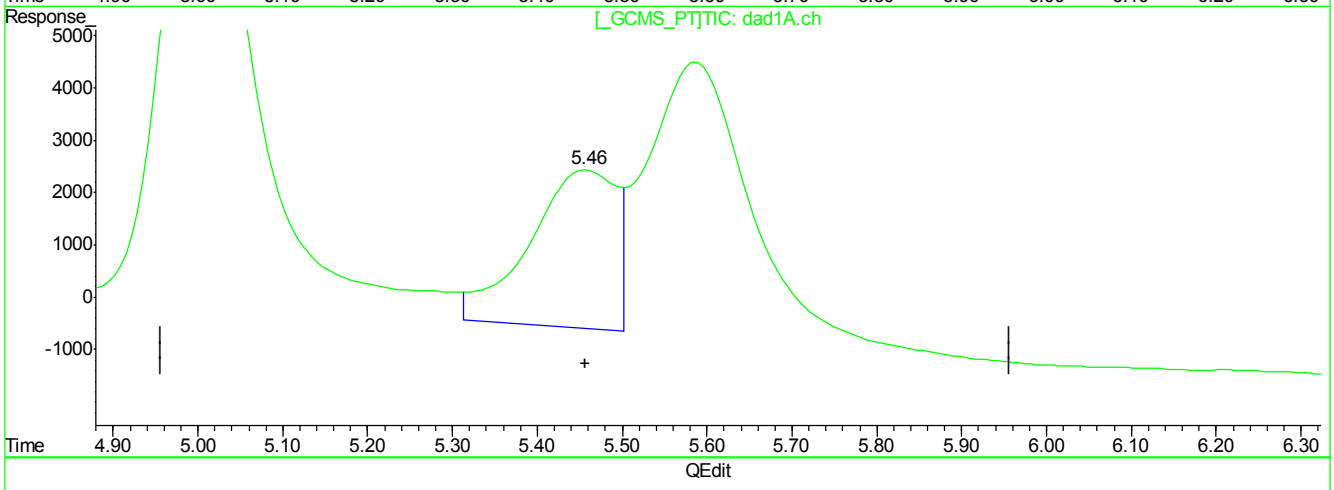
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:32 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.46min 55.811ppb

response 211996

(2) HMX #2

5.46min 55.416ppb

response 211996

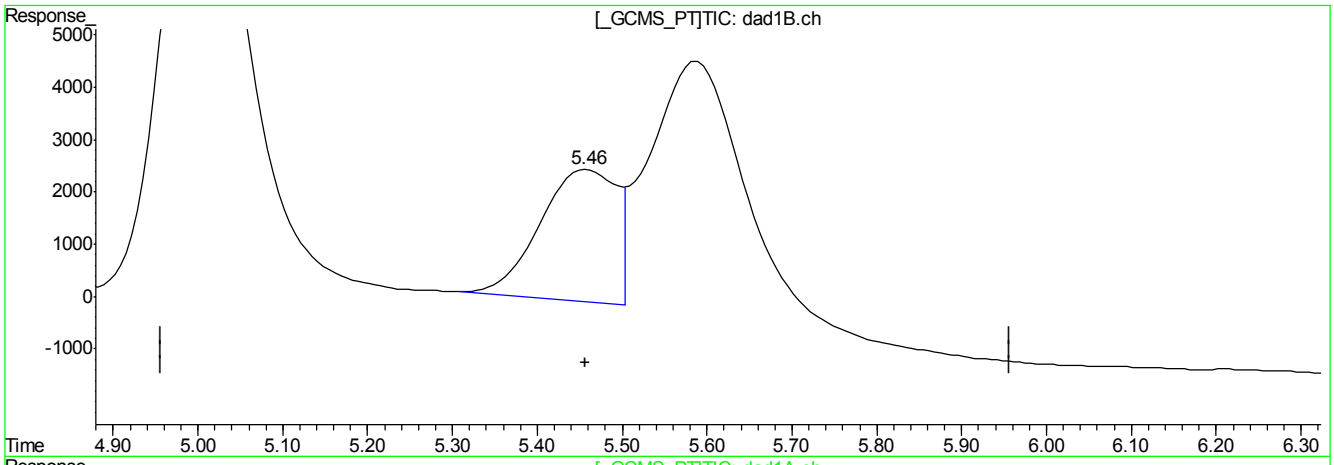
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:35 2017

GG613827.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 43.415ppb m

response 164910

(2) HMX #2

5.46min 38.364ppb m

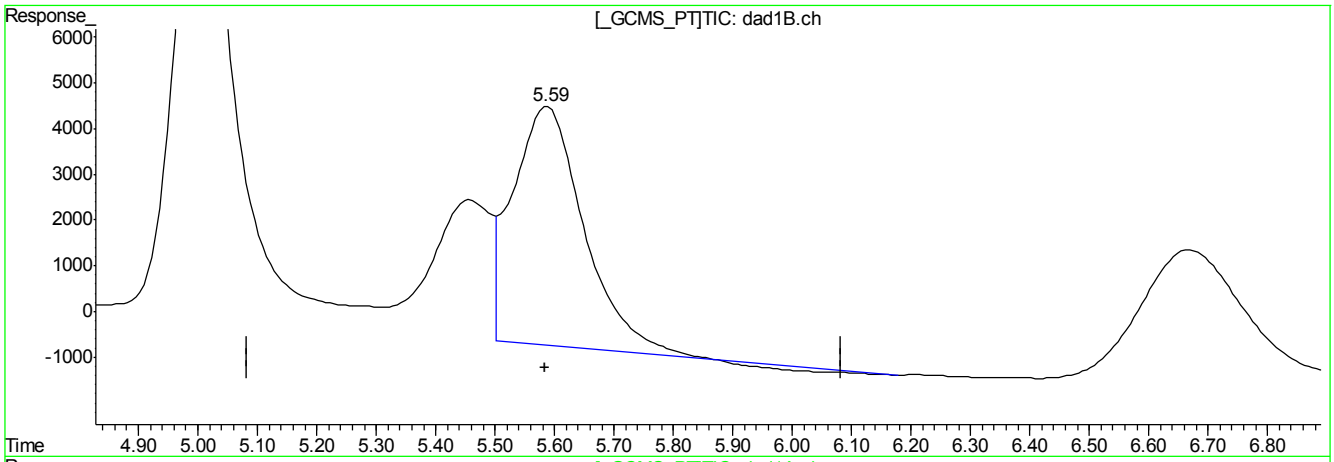
response 146764

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:41 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(3) DNX

5.59min 65.551ppb

response 430267

(3) DNX #2

5.59min 65.779ppb

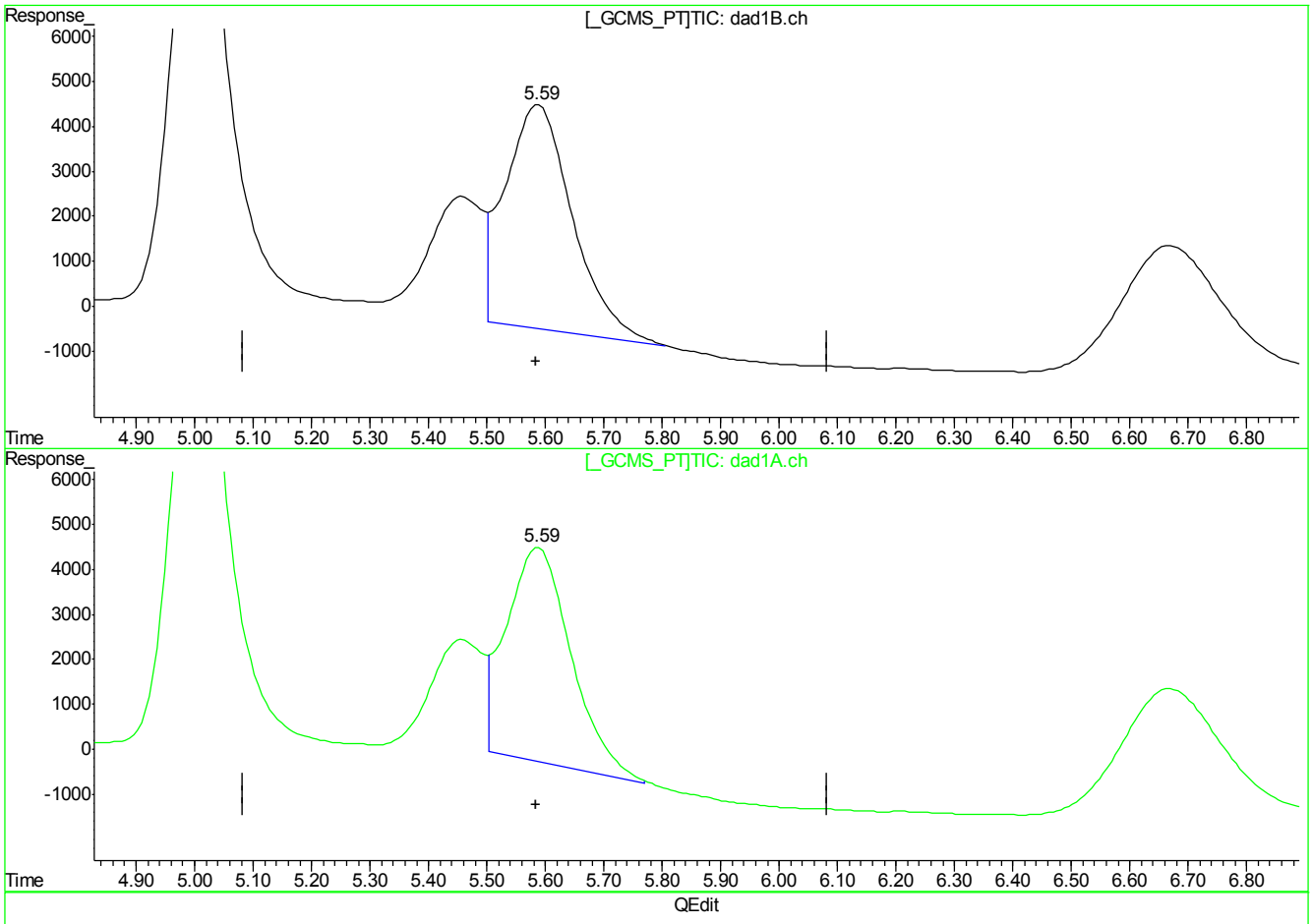
response 430267

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(3) DNX

5.59min 60.688ppb m

response 398344

(3) DNX #2

5.59min 56.040ppb m

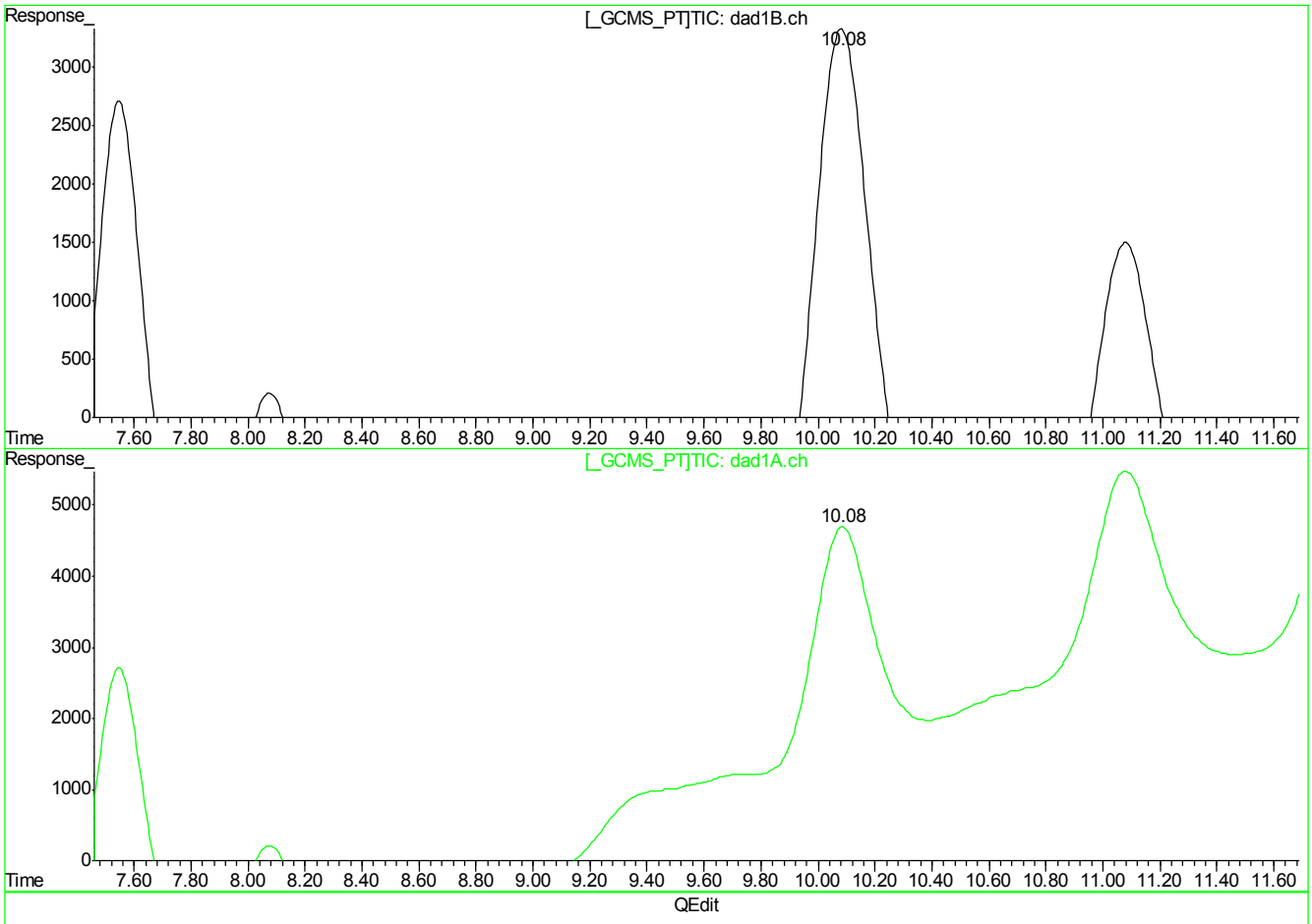
response 366564

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:51 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.09min 151.649ppb

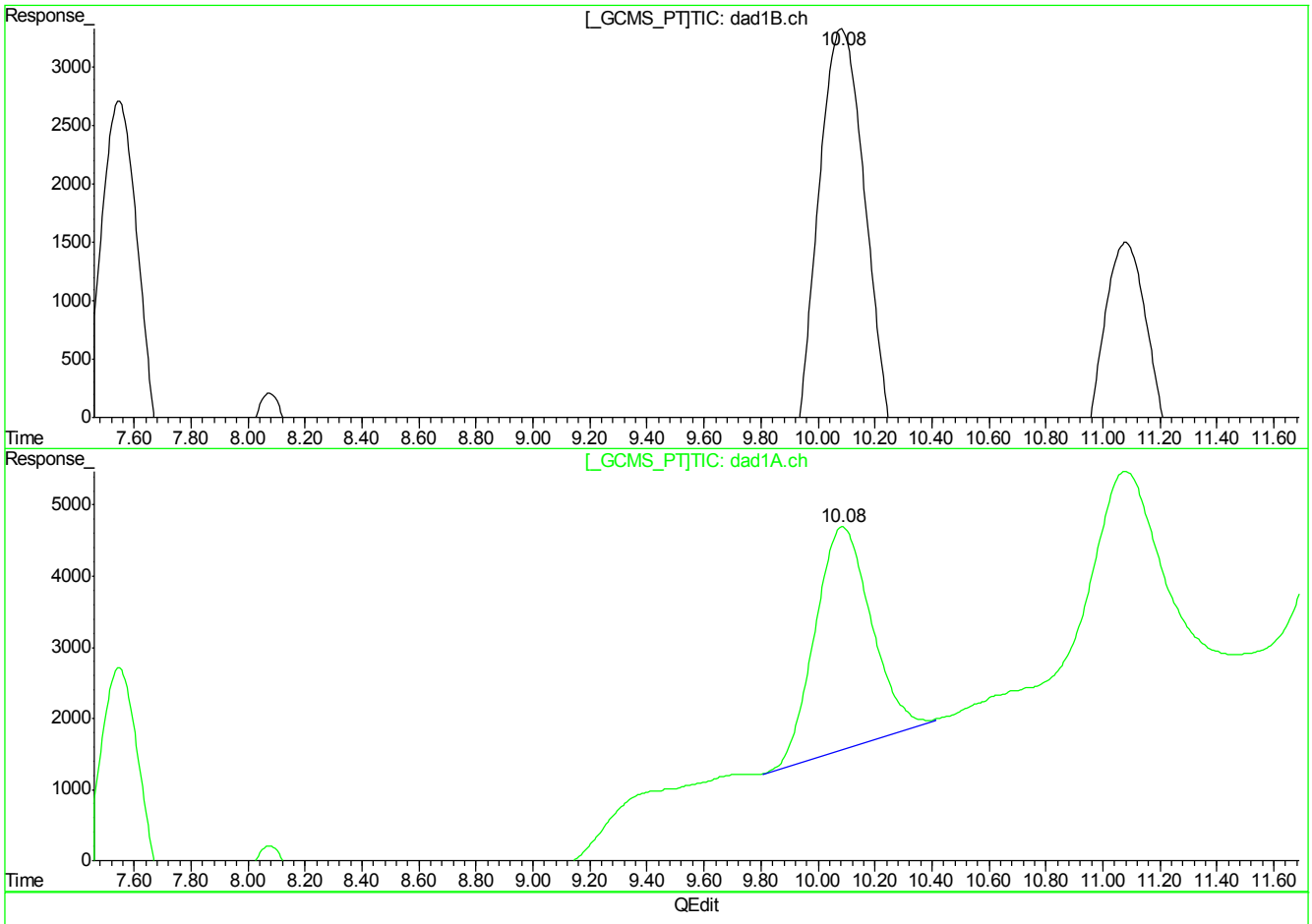
response 2132933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:00 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.08min 30.312ppb m

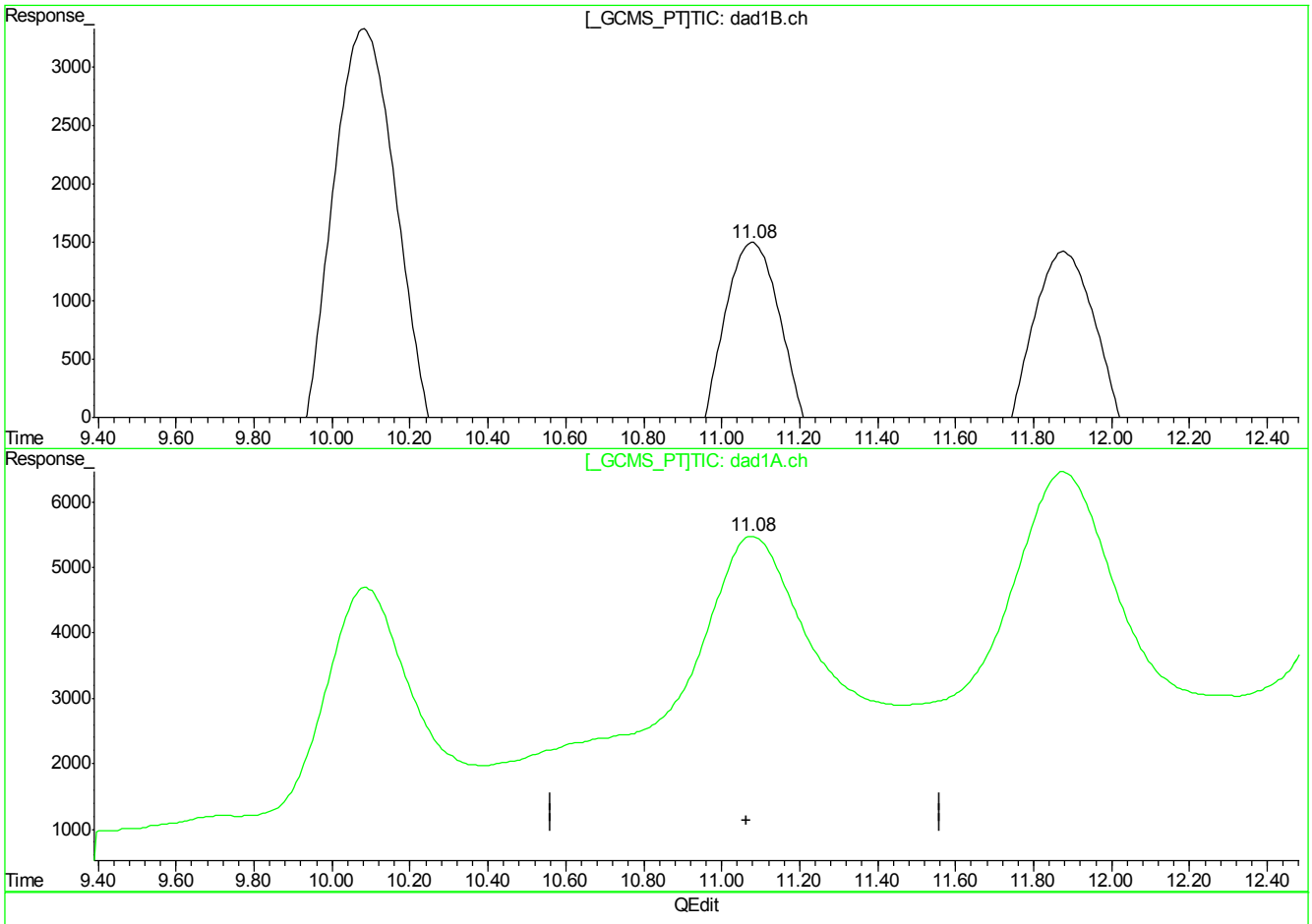
response 431067

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 240.311ppb

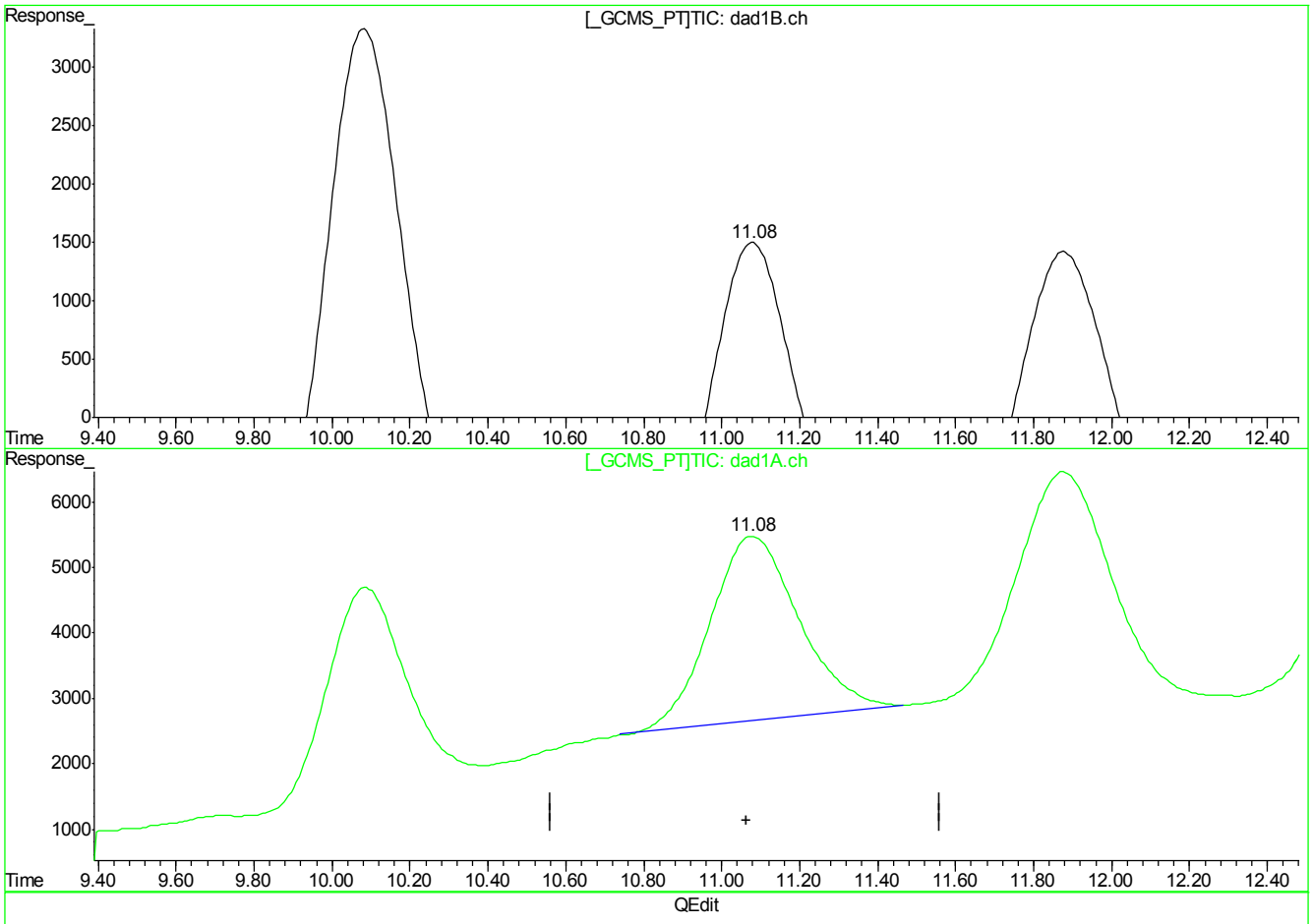
response 2276420

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 46.645ppb m

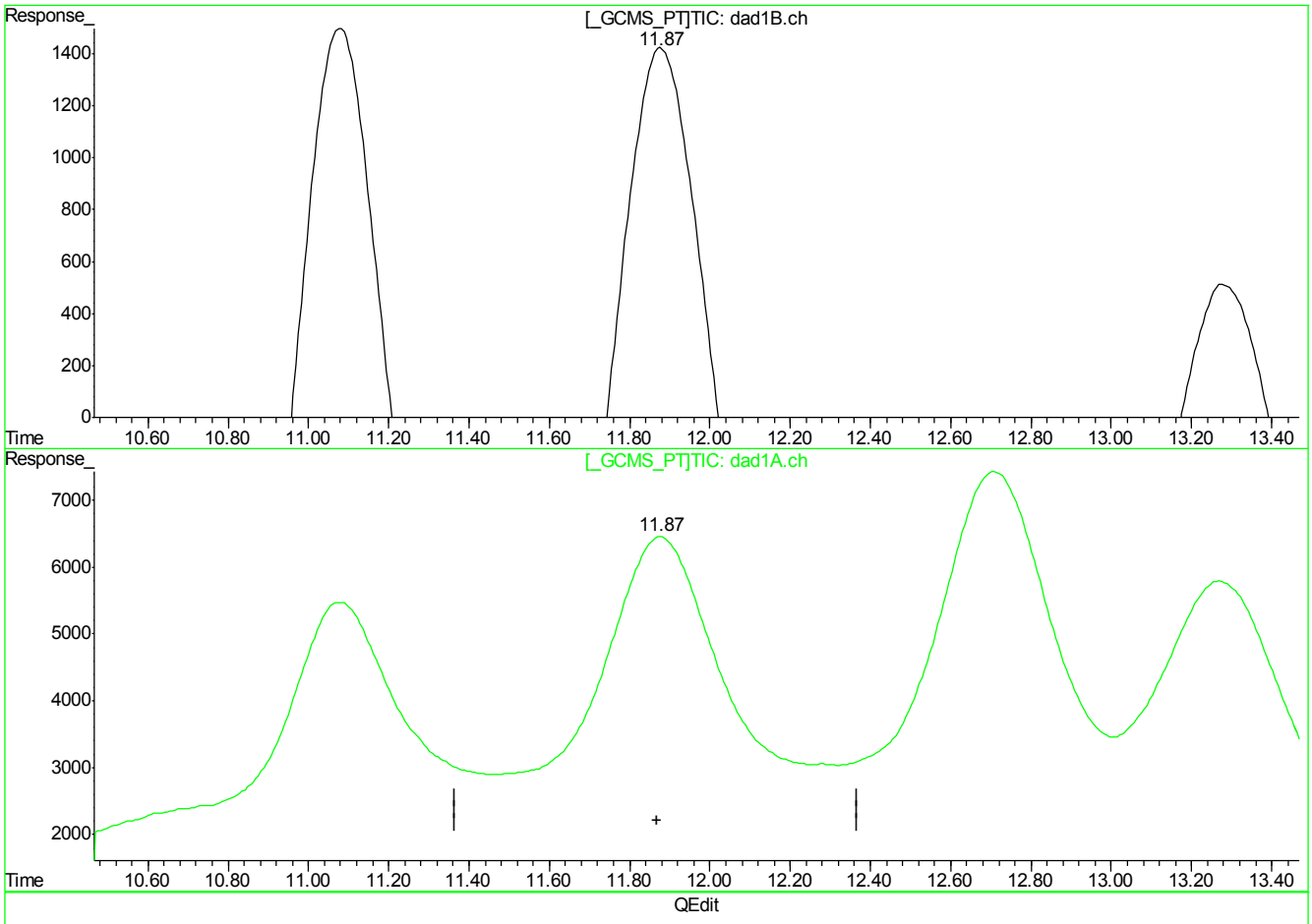
response 444089

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:13 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.88min 132.294ppb

response 2061411

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:16 2017

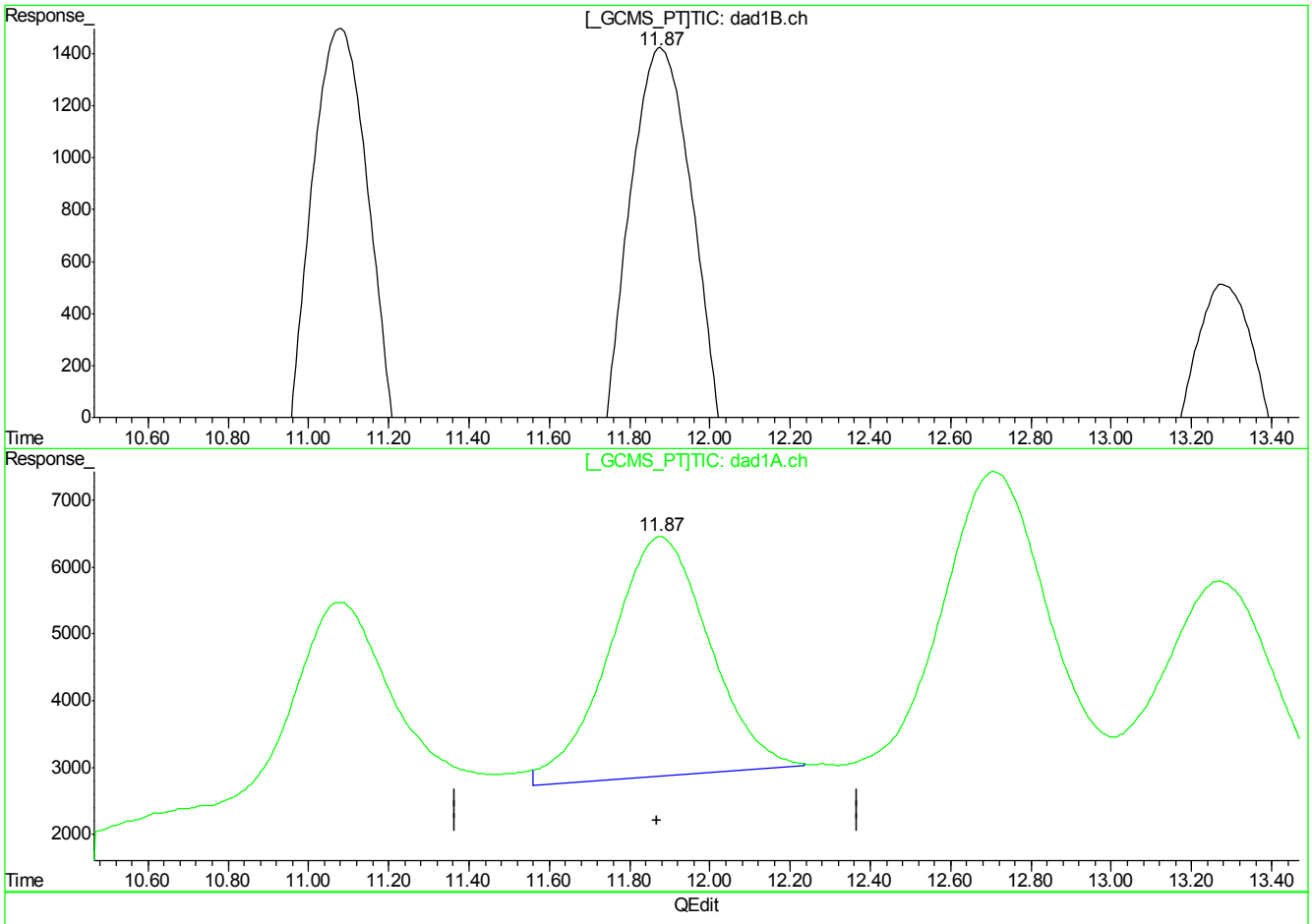
7.7.14.12

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.87min 39.514ppb m

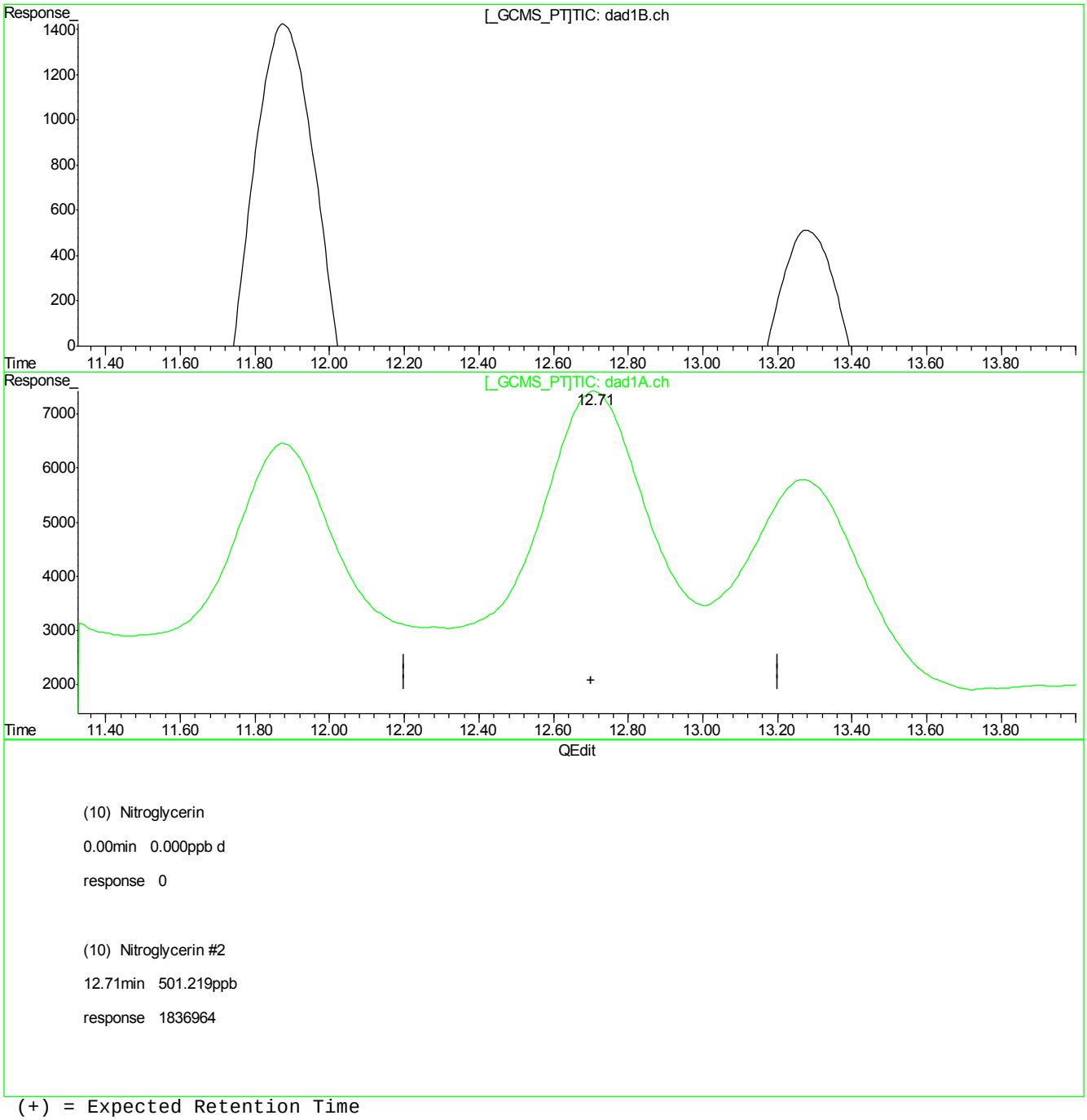
response 618562

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:20 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration

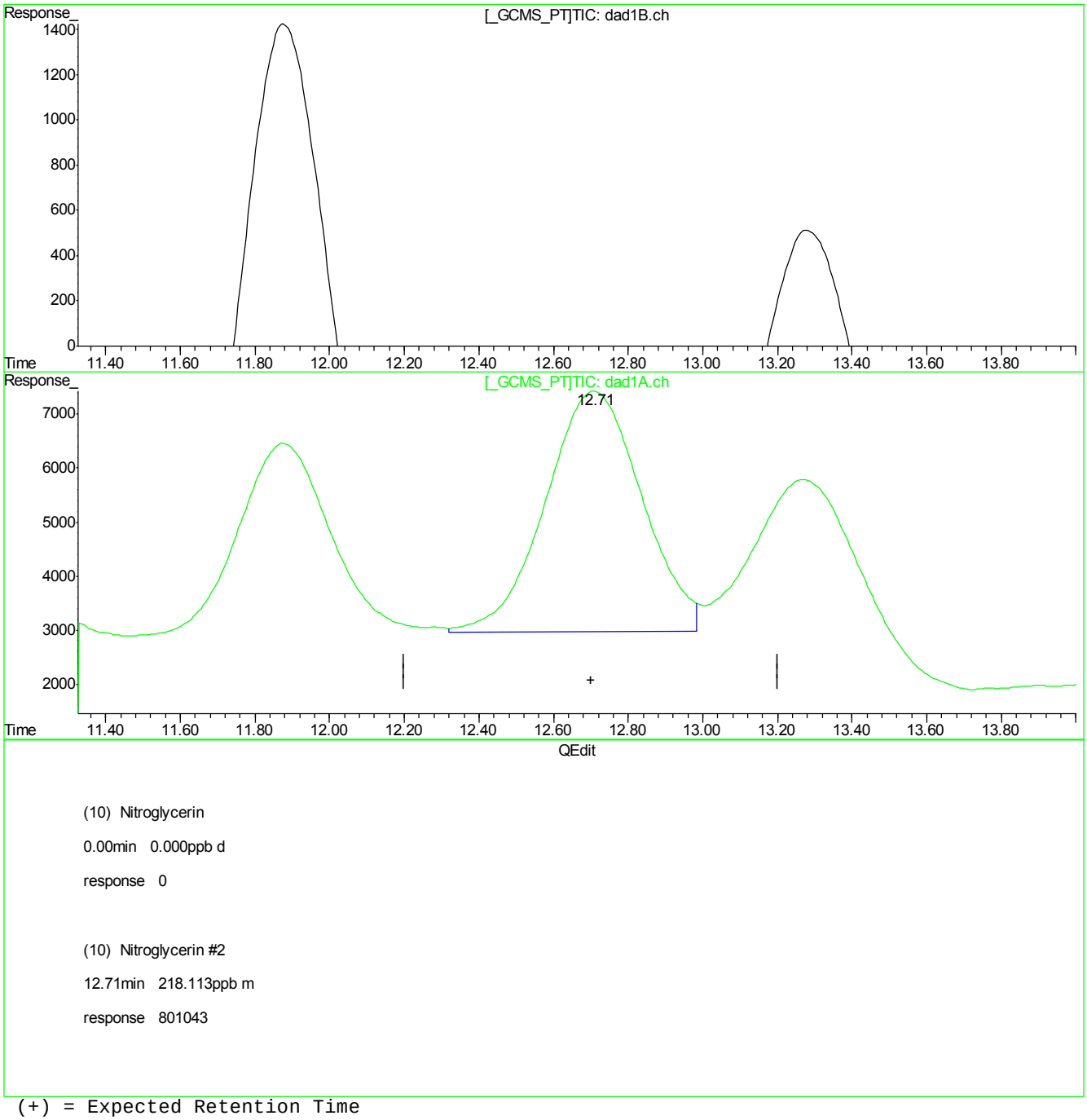


(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.71min 218.113ppb m

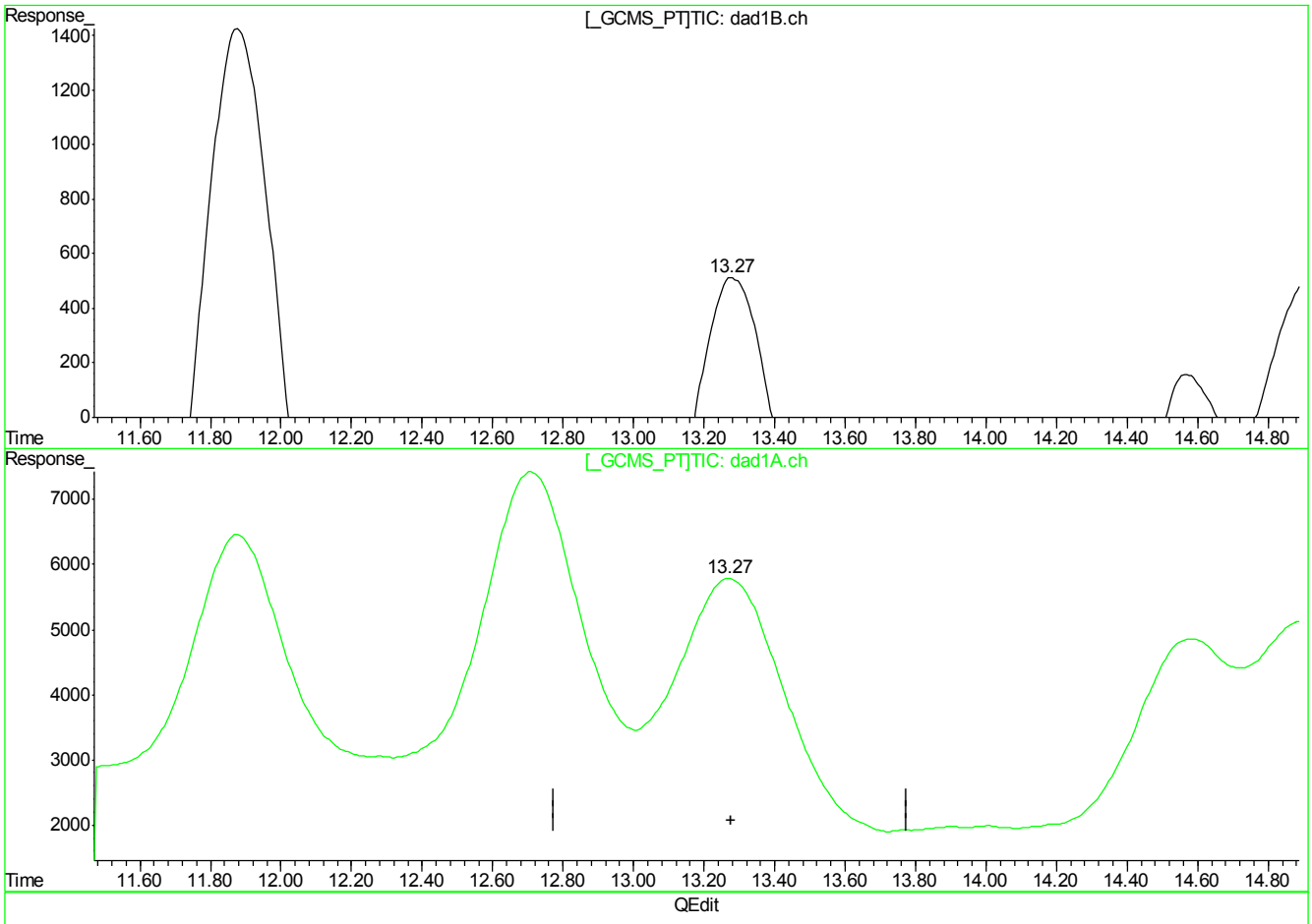
response 801043

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:27 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 109.642ppb

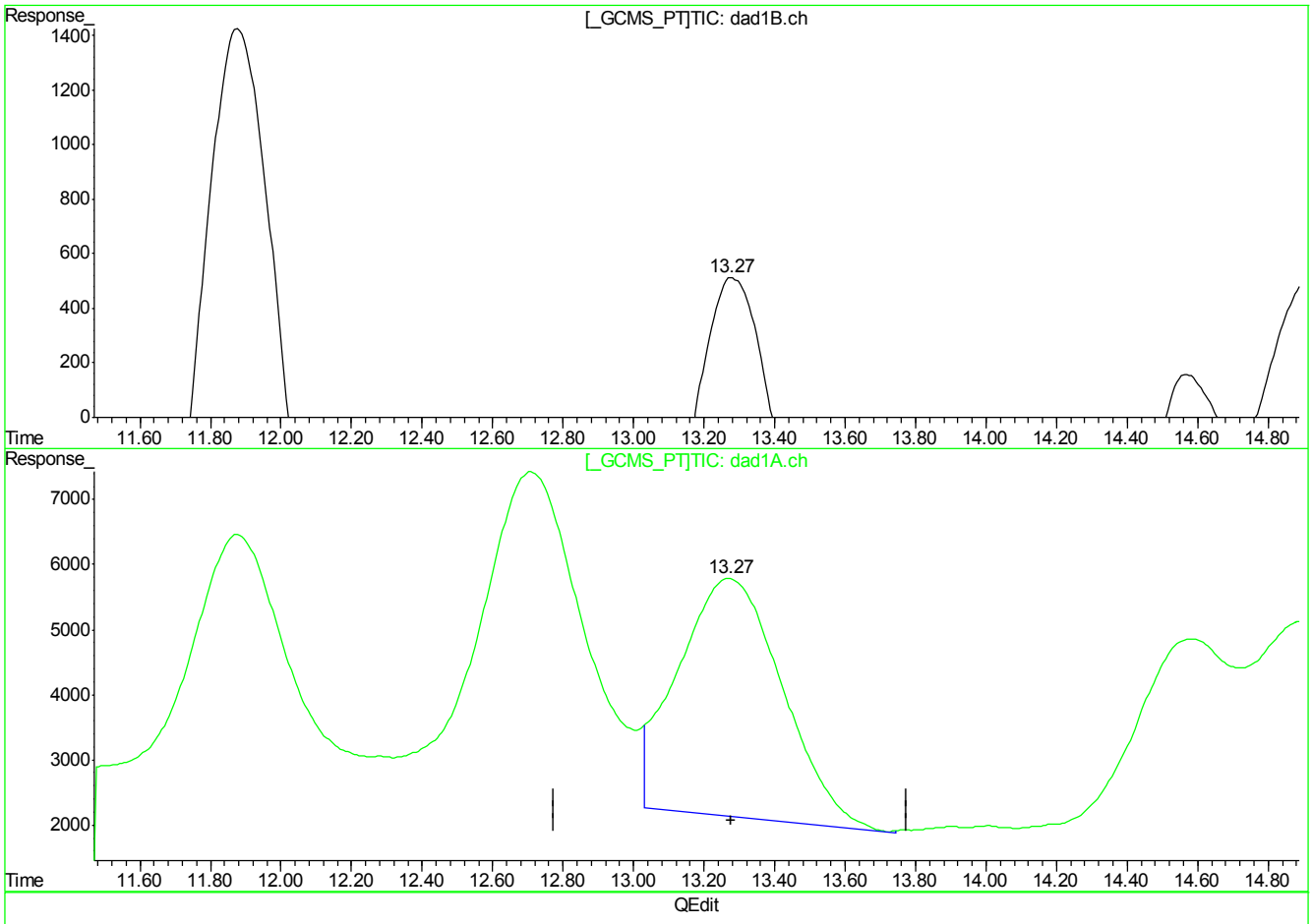
response 1344073

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:30 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 61.159ppb m

response 746662

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:33 2017

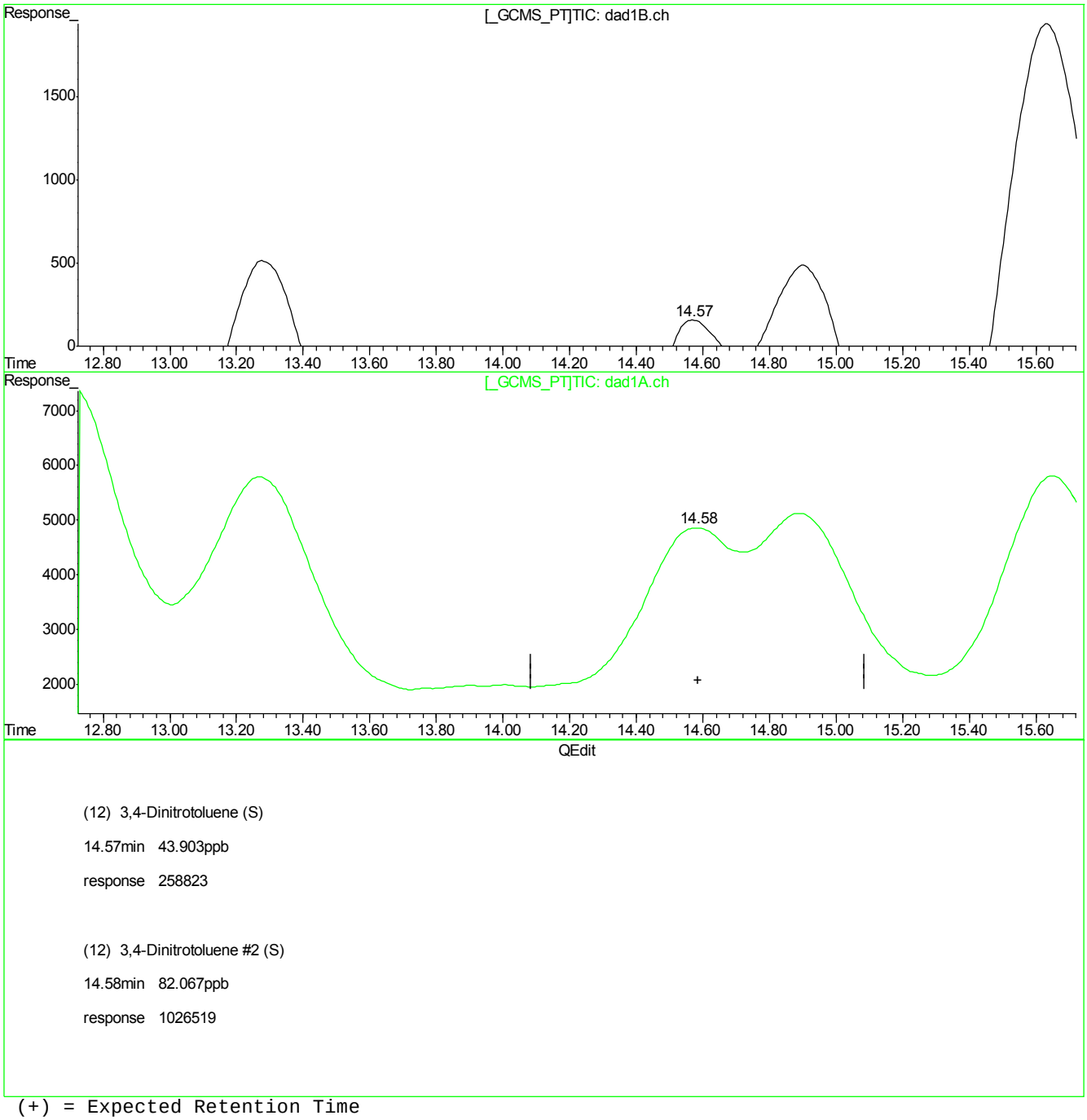
7.7.14.17

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 82.067ppb

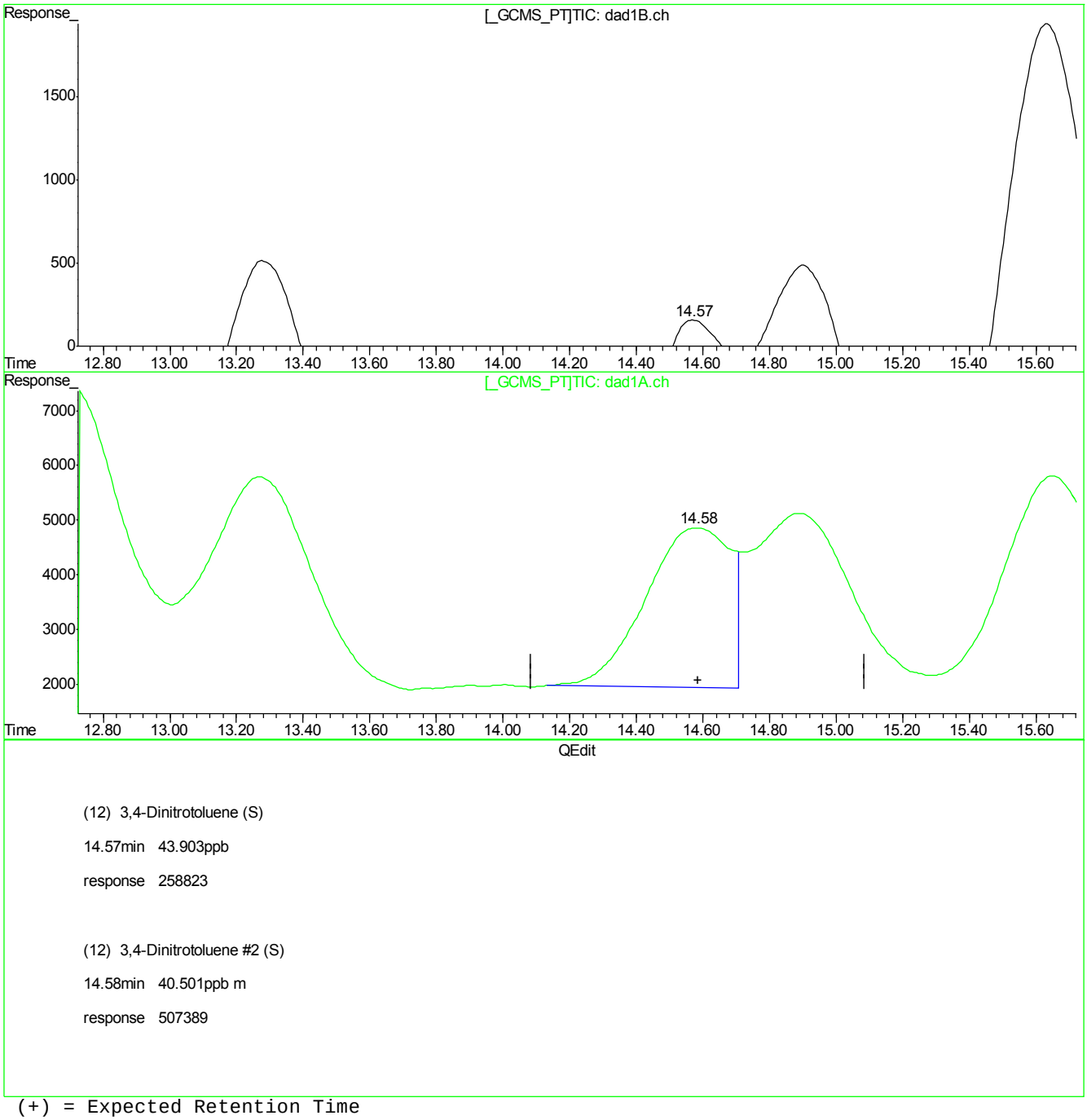
response 1026519

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:37 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 40.501ppb m

response 507389

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:40 2017

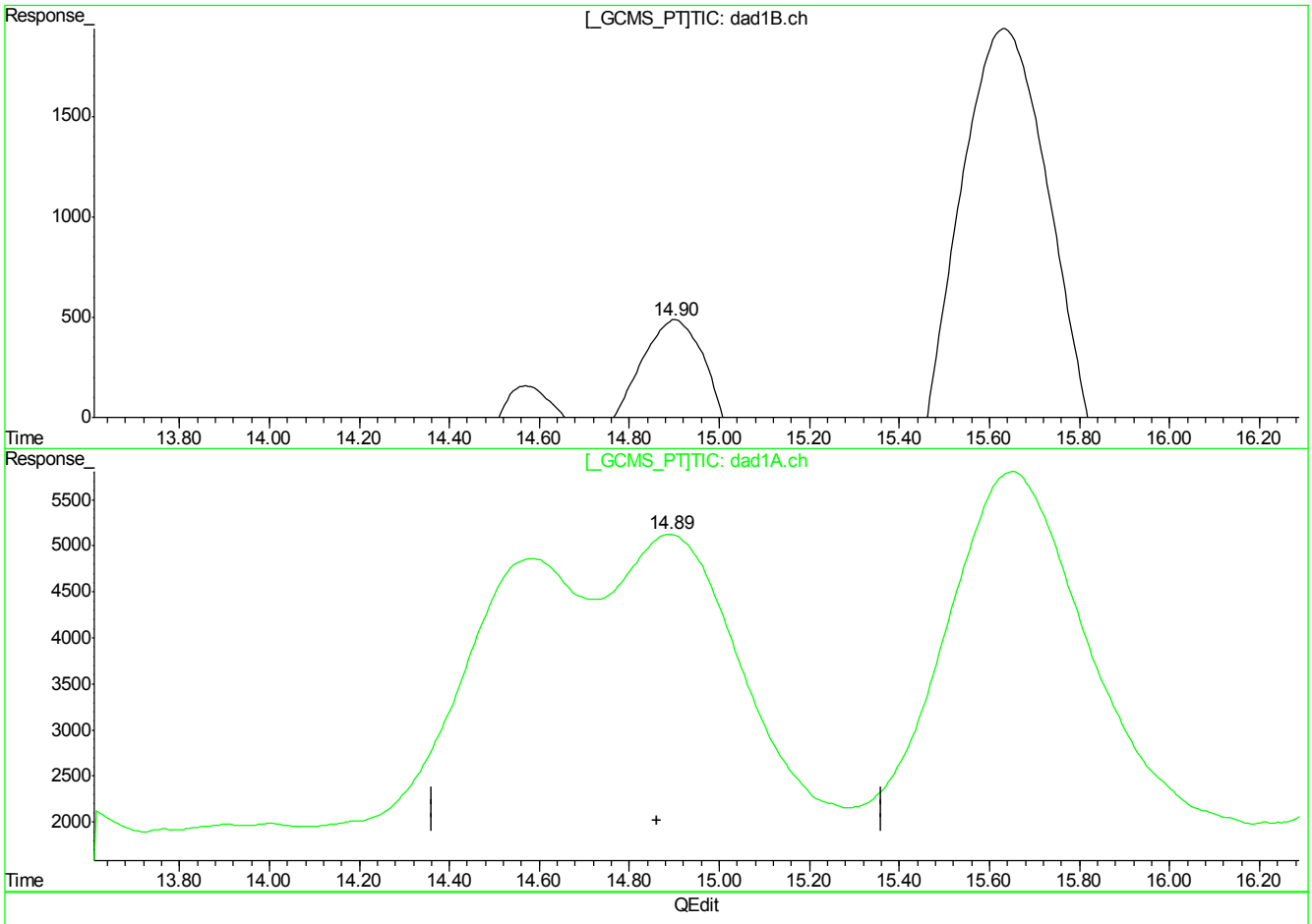
7.7.14.19

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 73.498ppb

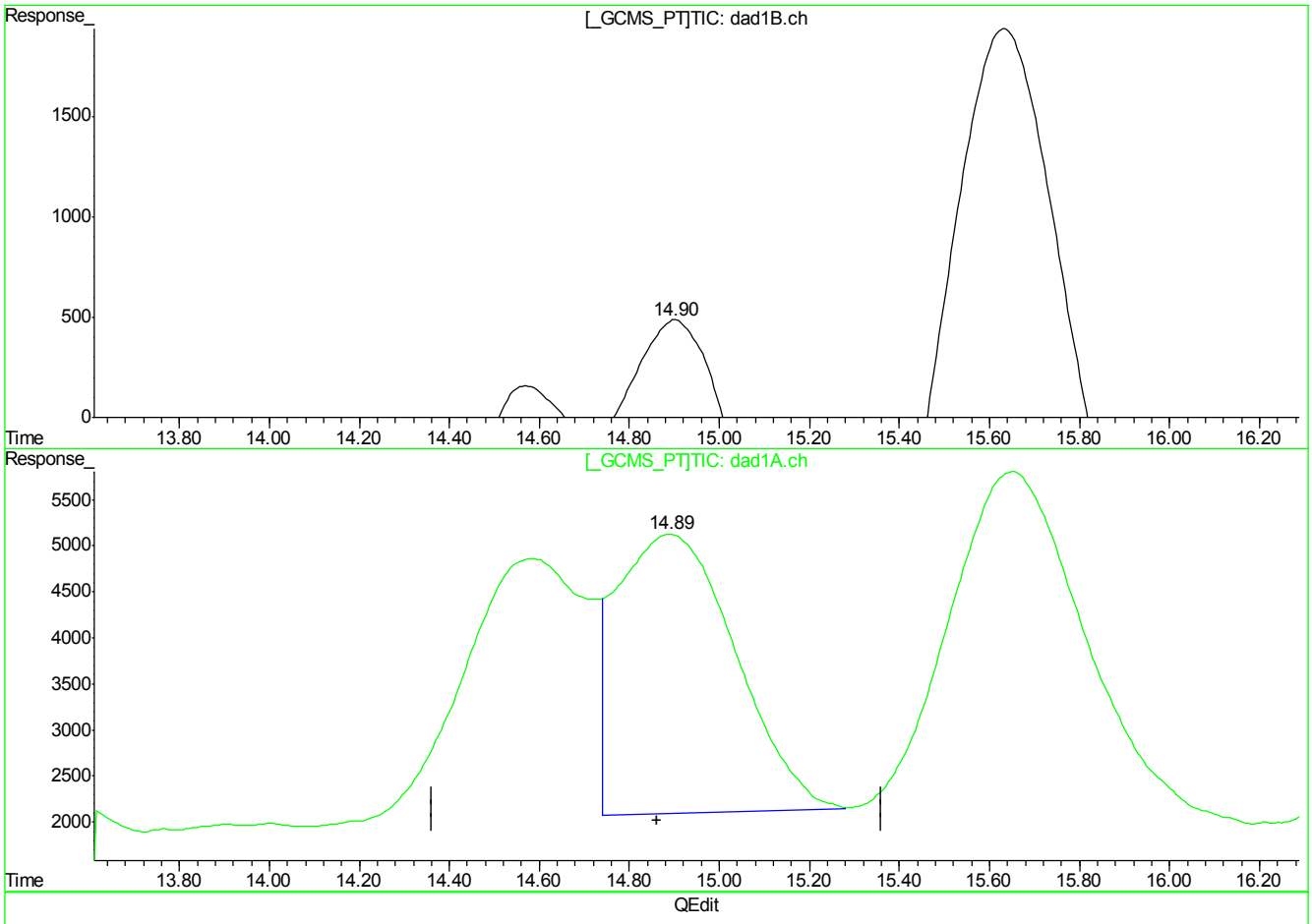
response 801693

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 50.694ppb m

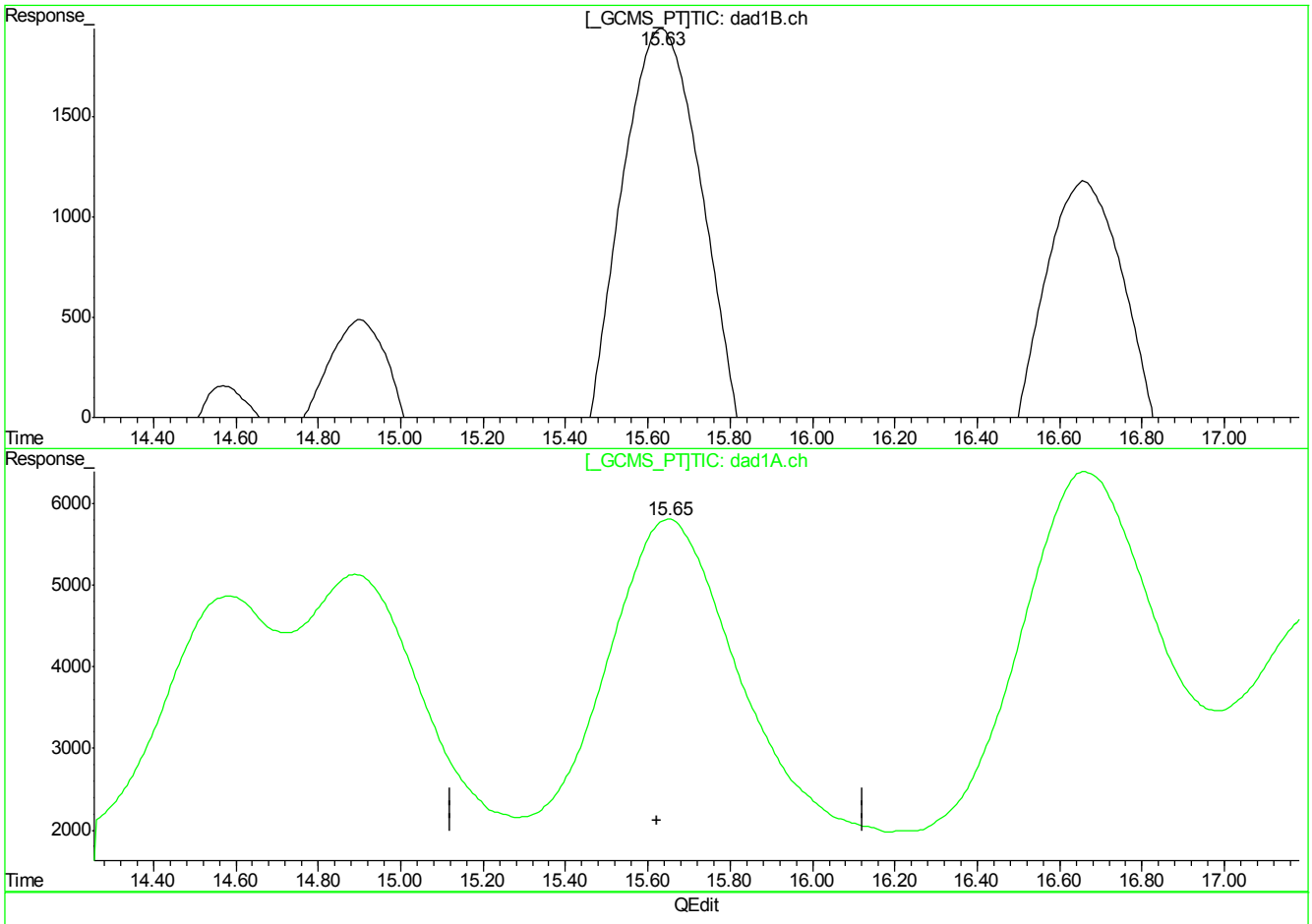
response 552975

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:47 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



QEdit

(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 93.393ppb

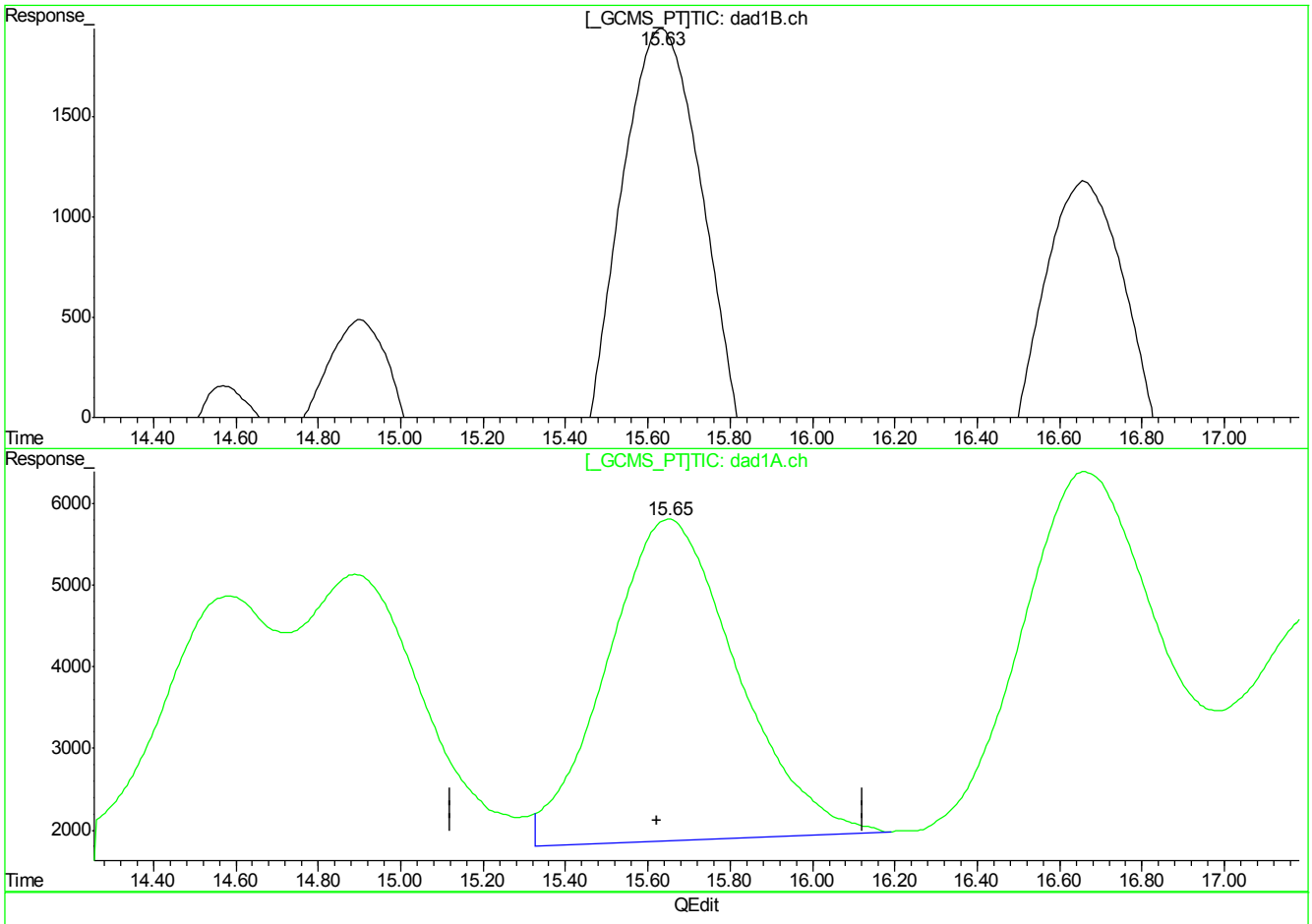
response 927502

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 86.988ppb m

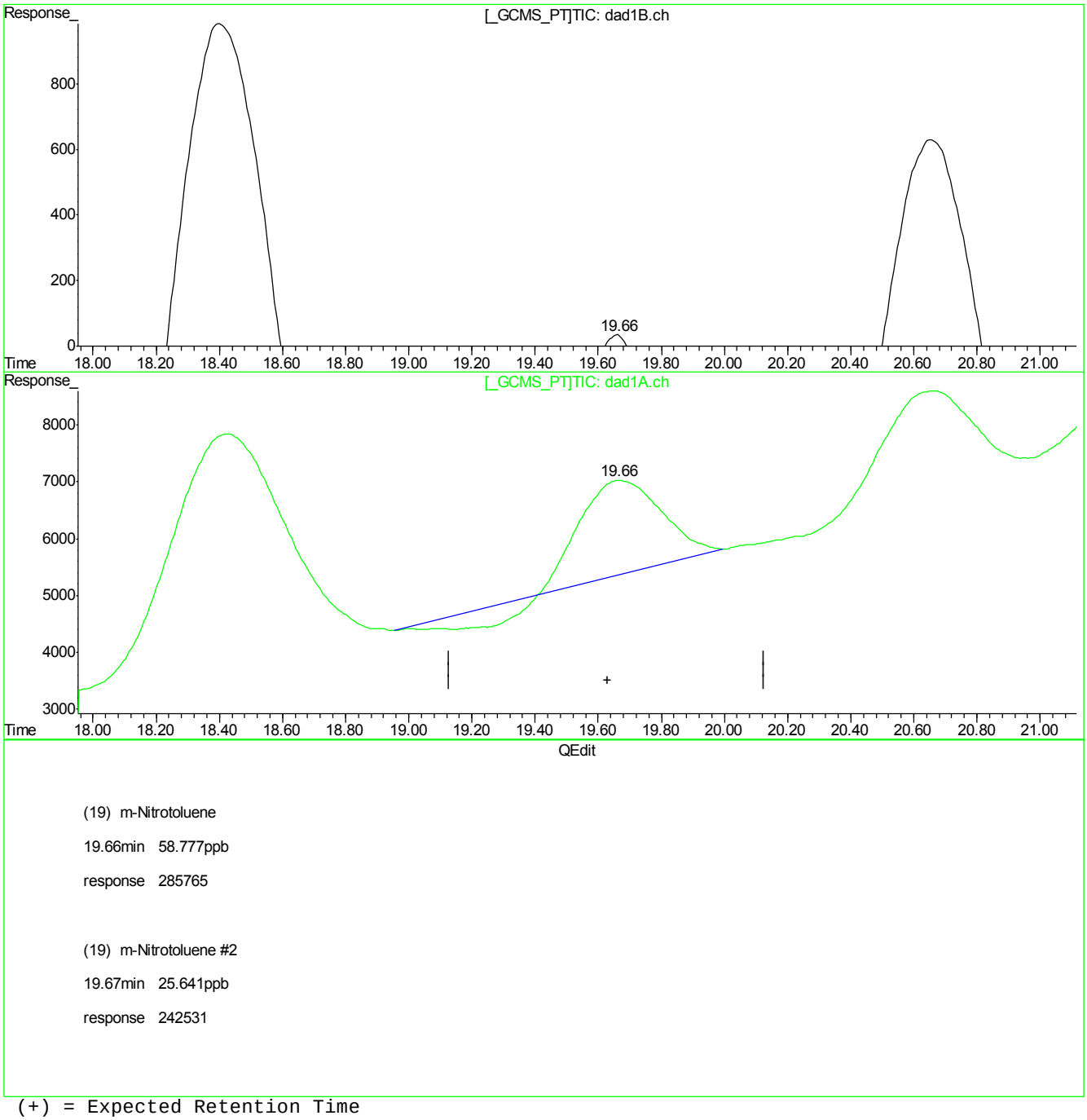
response 863855

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:53 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.67min 25.641ppb

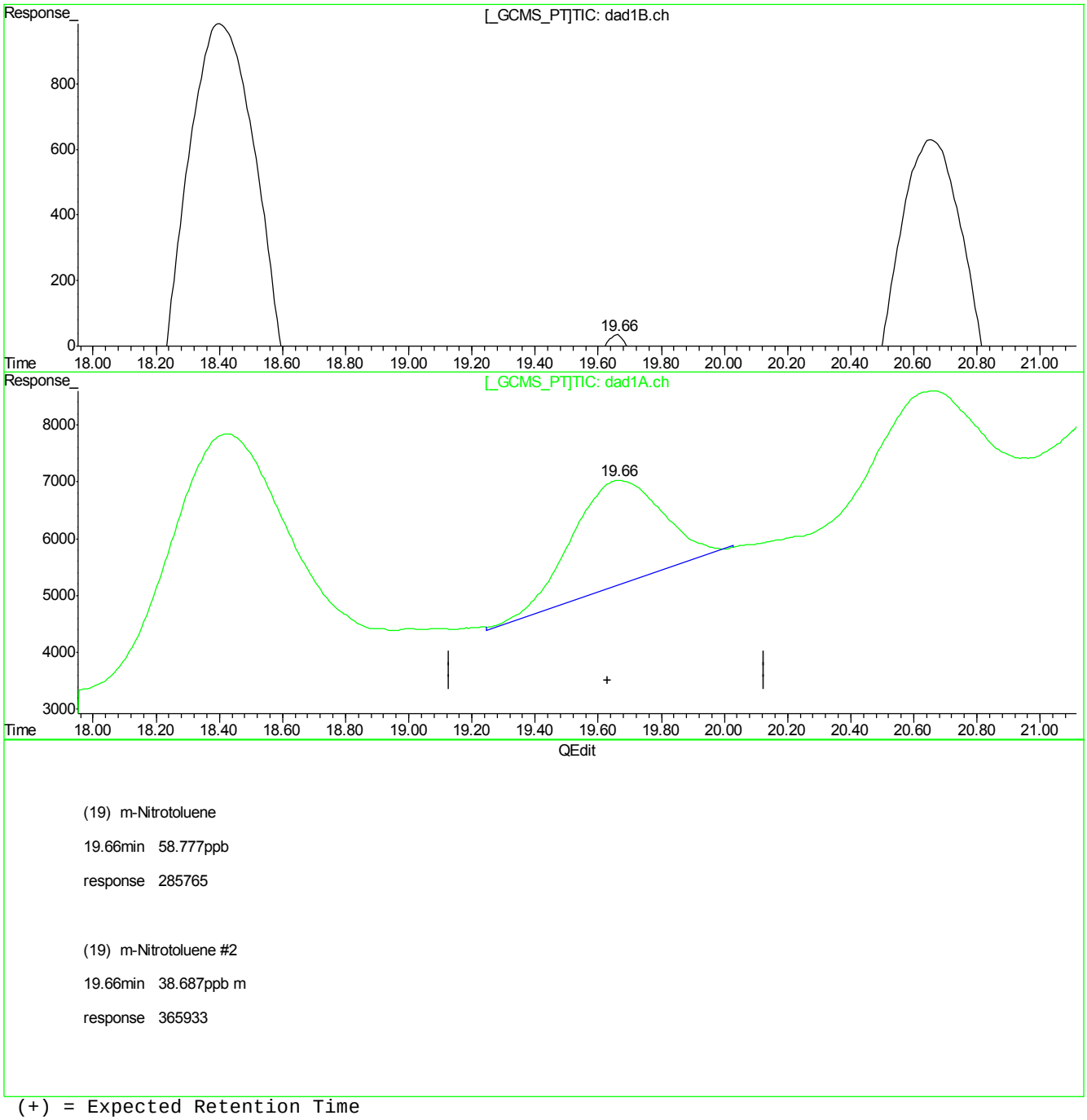
response 242531

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:01 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.66min 38.687ppb m

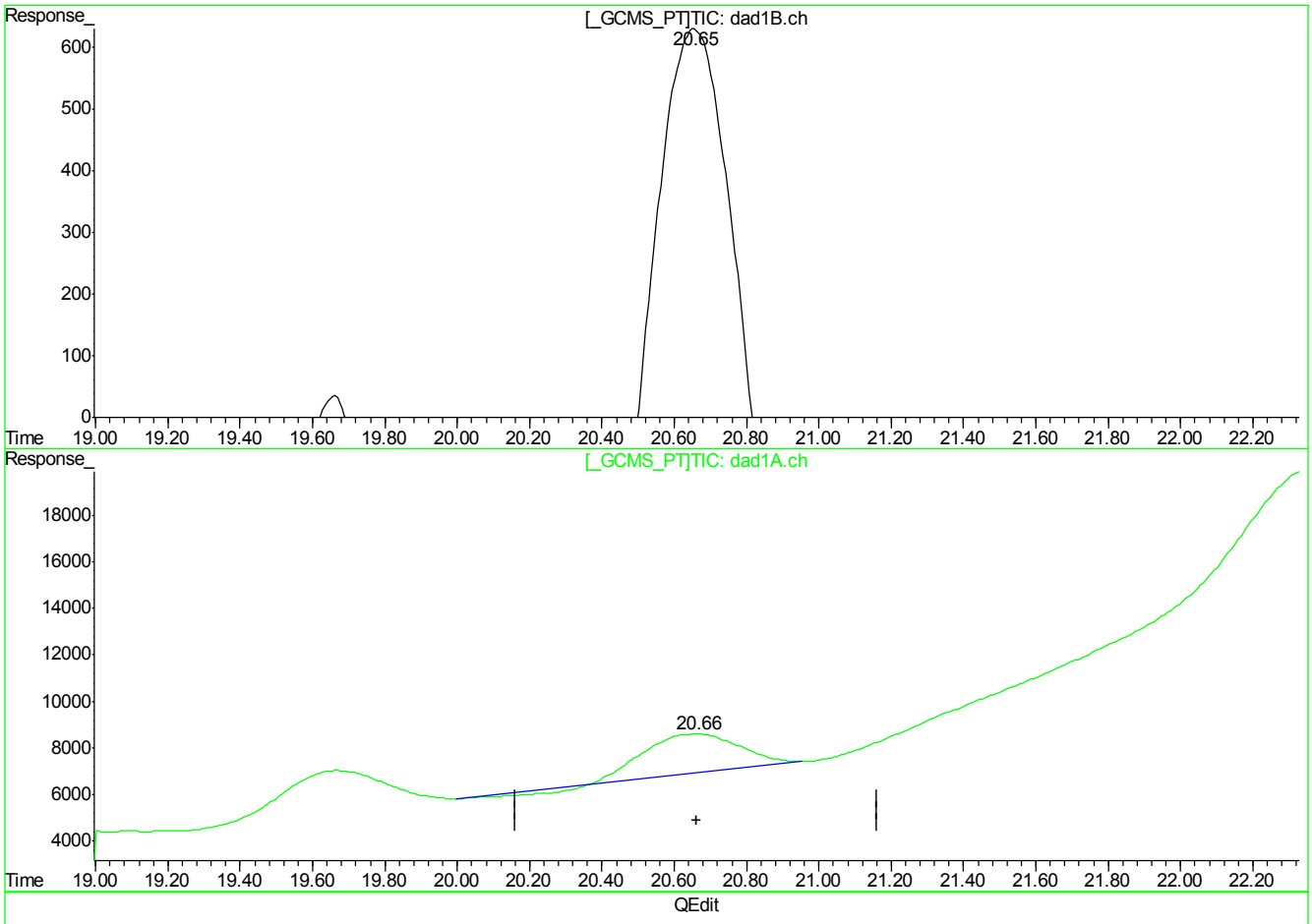
response 365933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 21.333ppb

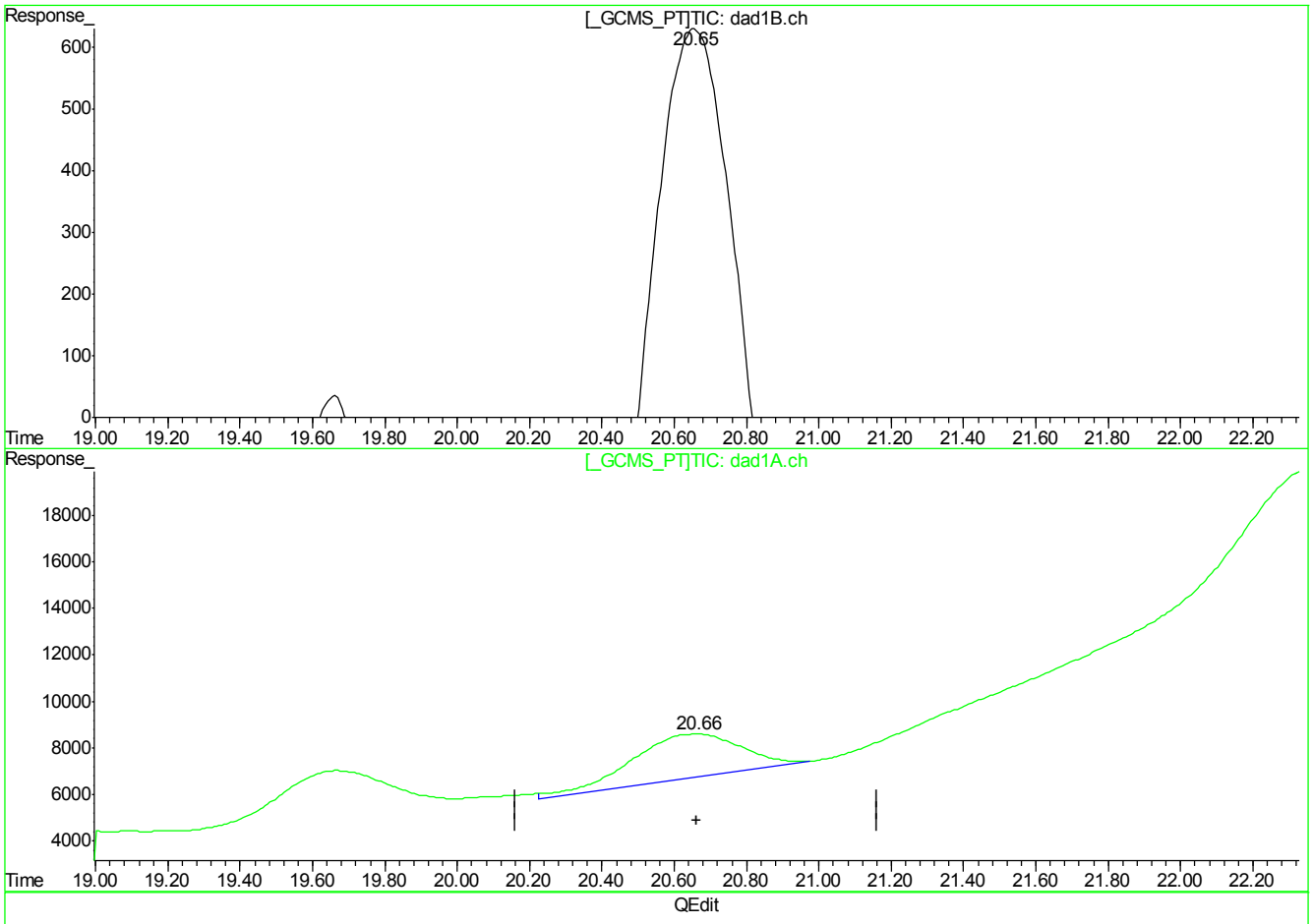
response 288721

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 29.479ppb m

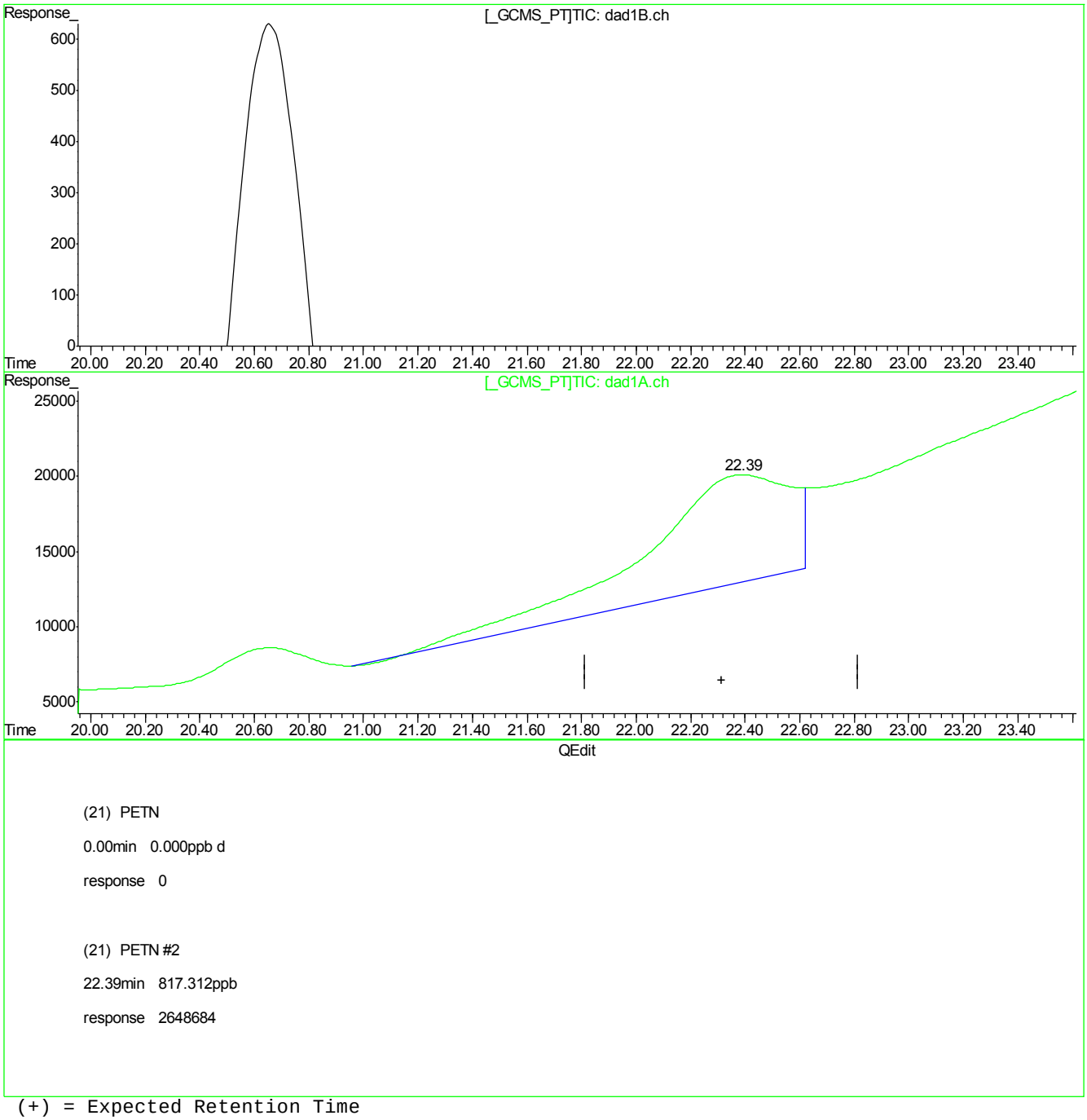
response 398969

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:09 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration

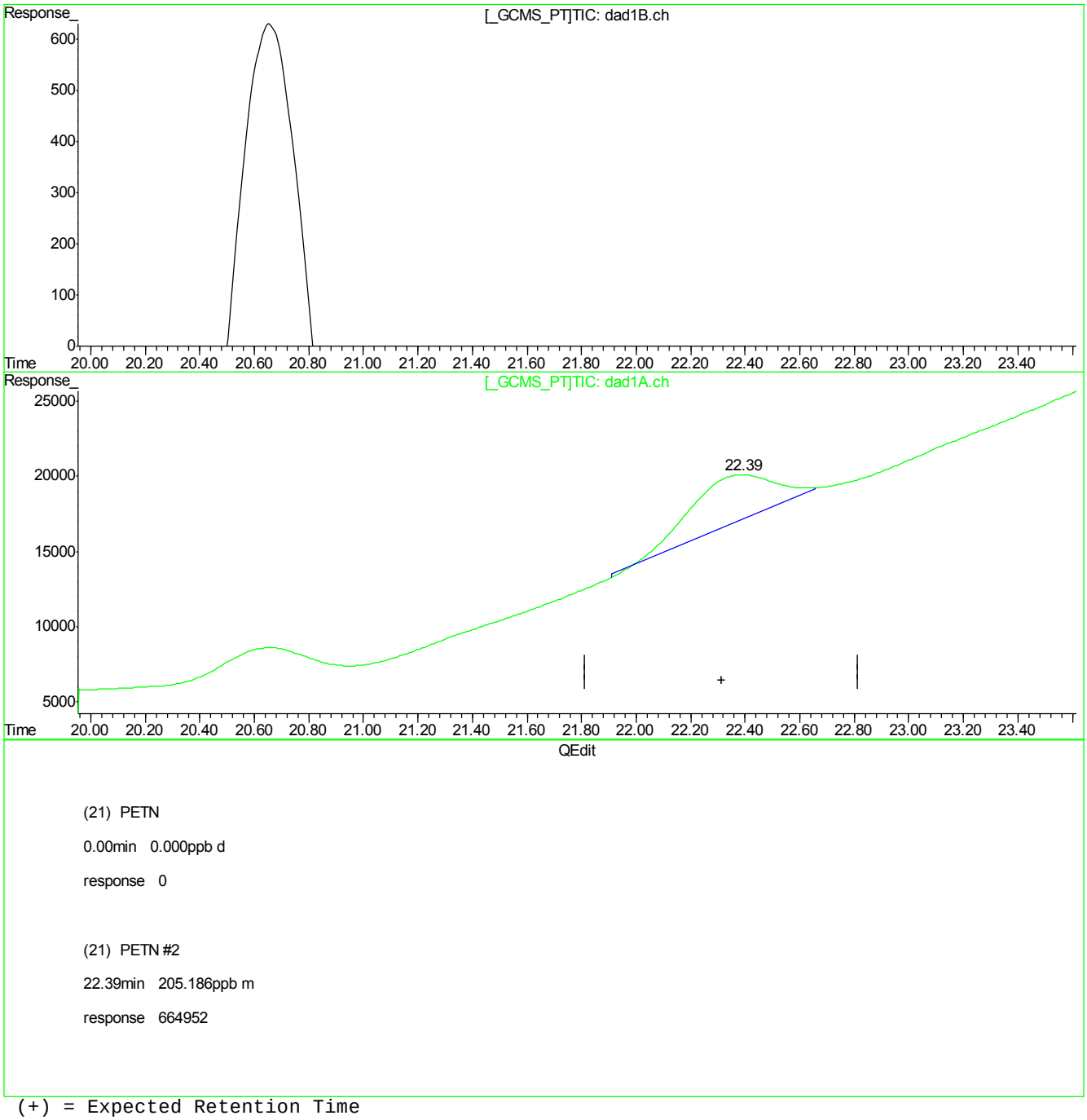


(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.39min 205.186ppb m

response 664952

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:15 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:59 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	539446	1021169	91.503	81.638m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		18.30%#	16.33%#
	Target Compounds						
1)	TNX	5.01	5.01	1509922	1509922	179.506	179.032
2)	HMX	5.46	5.46	376444	376444	99.104	98.403
3)	DNX	5.59	5.59	825106	825106	125.705	126.142
4)	MNX	6.66	6.66	719732	719732	148.771	148.771
5)	1,3,5-Trinitrobe	7.54	7.54	1066153	1062518	104.411	104.098
6)	RDX	8.07	8.07	494554	482286	103.884	101.779
7)	1,3-Dinitrobenze	10.08	10.08	1453602	1272574	99.869	89.971m
8)	Nitrobenzene	11.07	11.07	953891	901312	124.781	94.788m
9)	2,4,6-Trinitroto	11.87	11.87	1001781	1458021	98.255	93.389m
10)	Nitroglycerin	0.00	12.70	0	1702013	N.D. d	464.272m
11)	Tetryl	13.28	13.27	844790	1140150	123.159	93.137m
13)	2,6-Dinitrotolue	14.89	14.89	734094	996233	105.588	91.335m
14)	2,4-Dinitrotolue	15.62	15.63	1340479	1231048	100.879	123.933
15)	o-Nitrotoluene	17.22	17.22	599687	848130	141.042	145.750
16)	3,5-Dinitroanili	16.64	16.64	1075378	1750952	101.472	97.657
17)	p-Nitrotoluene	18.39	18.40	1208979	2157804	105.075	101.946
18)	4-Amino-2,6-Dini	18.39	18.40	1208979	2157804	105.075	101.946
19)	m-Nitrotoluene	19.64	19.64	613746	1029981	124.866	108.890
20)	2-Amino-4,6-Dini	20.64	20.66	902382	1031982	94.065	76.251
21)	PETN	0.00	22.33	0	1529945	N.D. d	472.100m

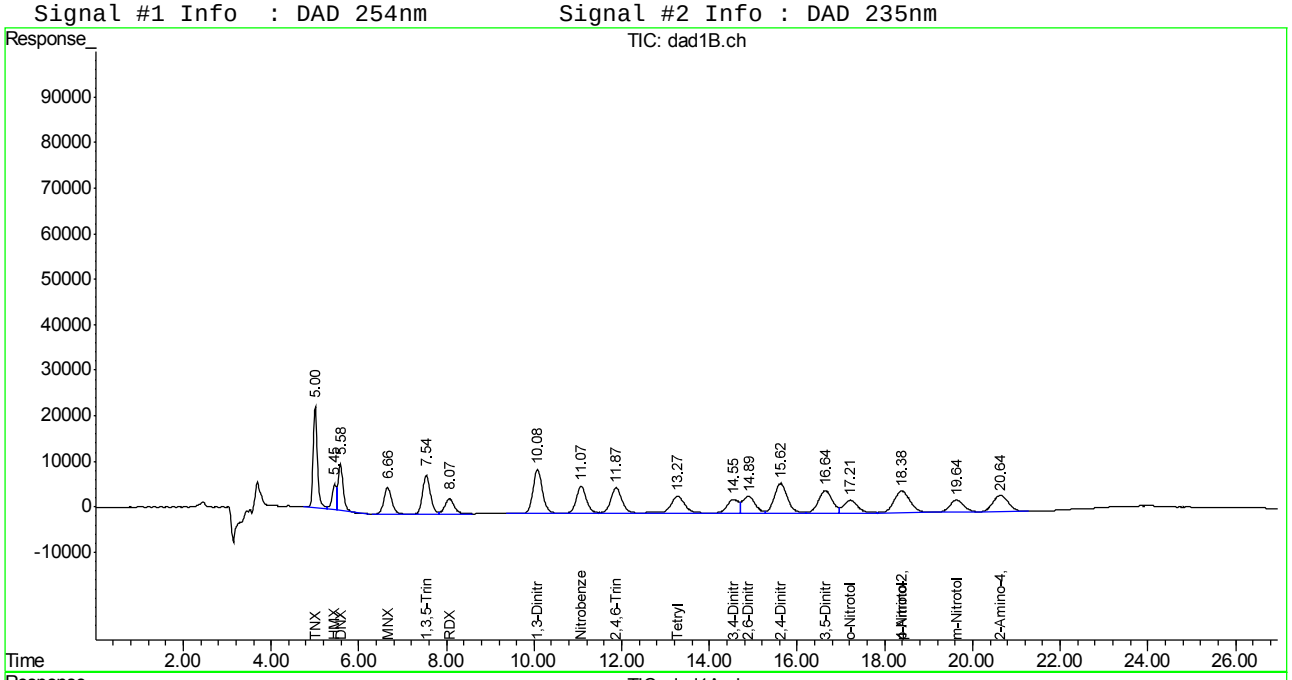
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 13:37:52 2017 Page 1

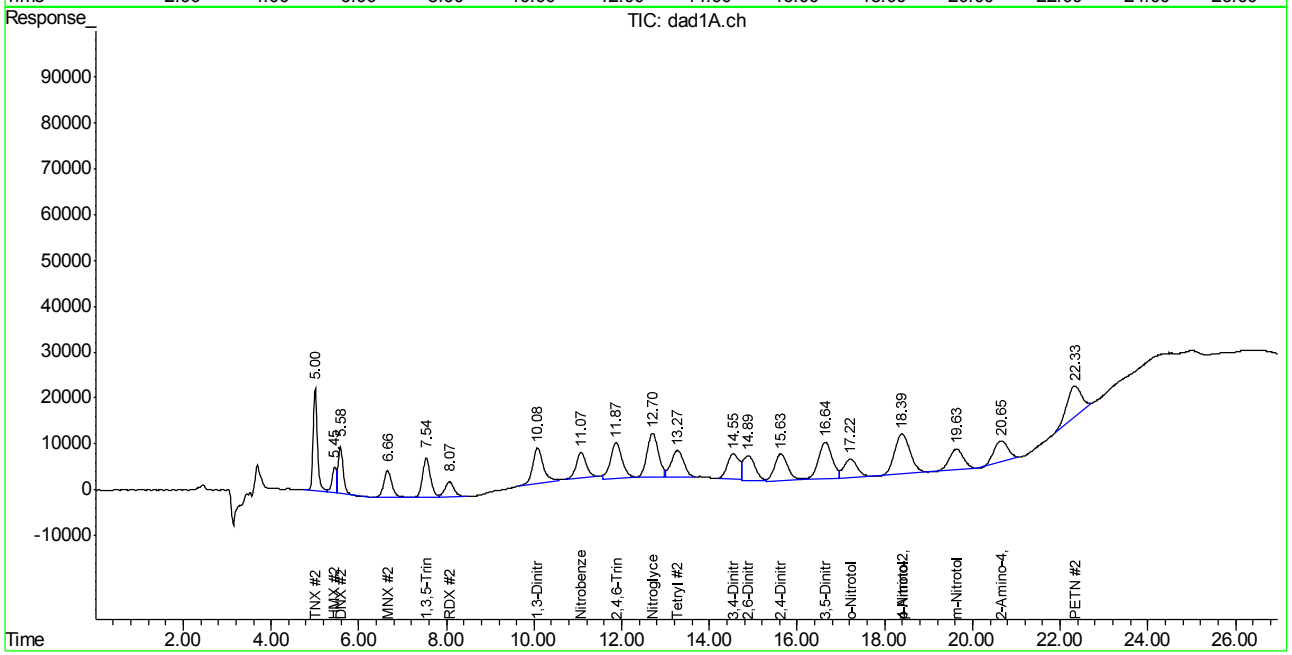
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

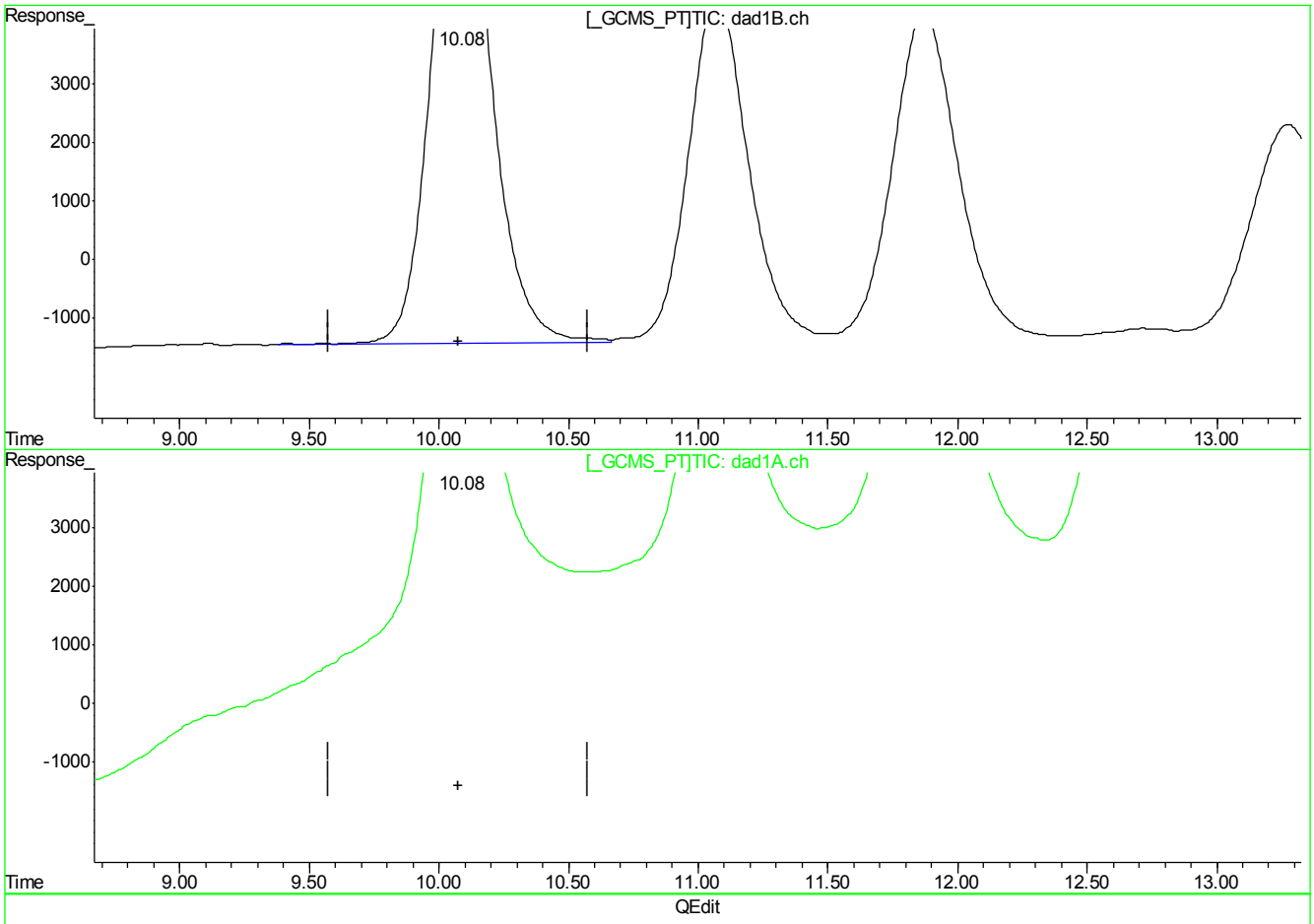
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613828.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:35	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.07	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.70	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.55	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 216.460ppb

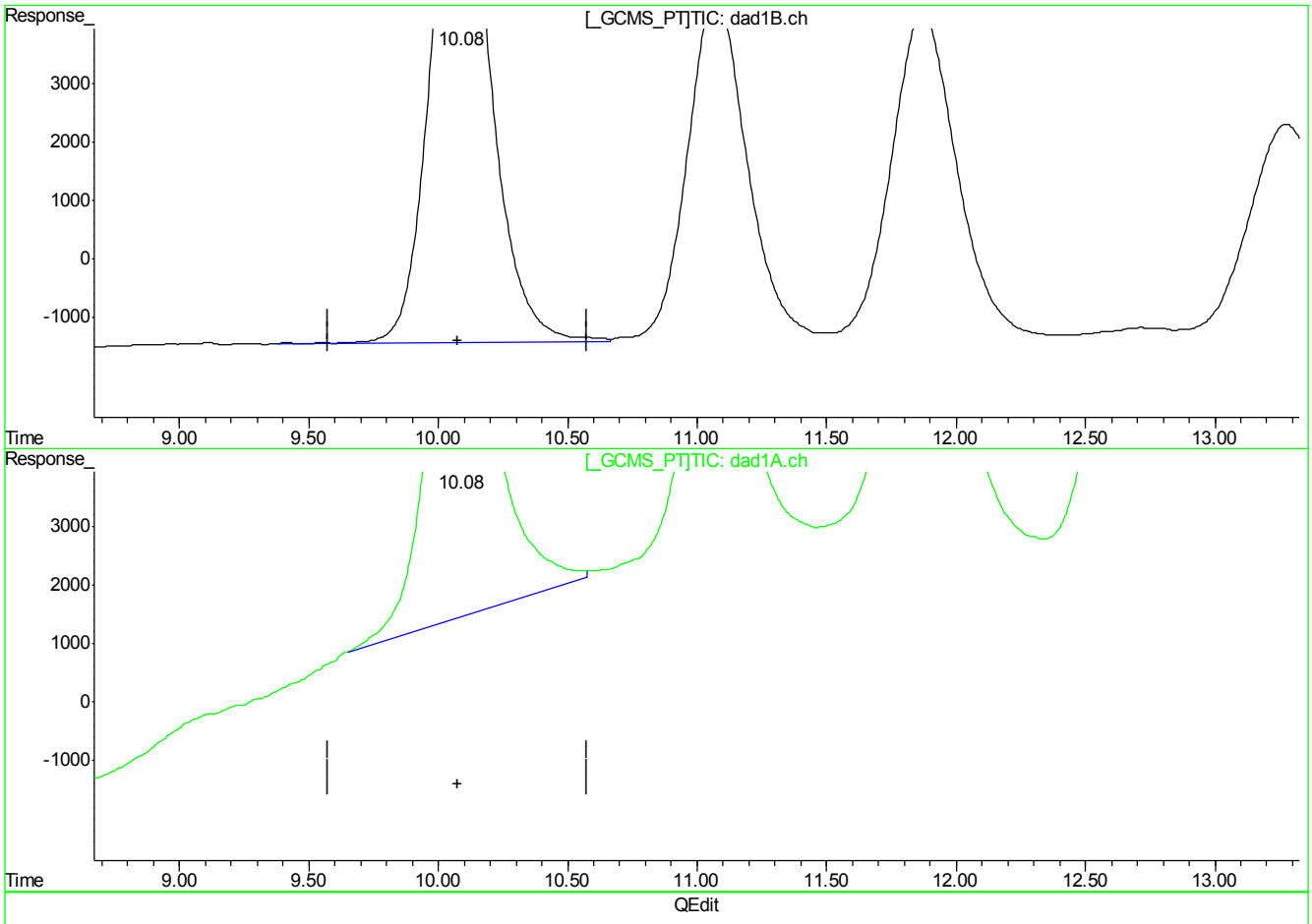
response 3026444

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 89.971ppb m

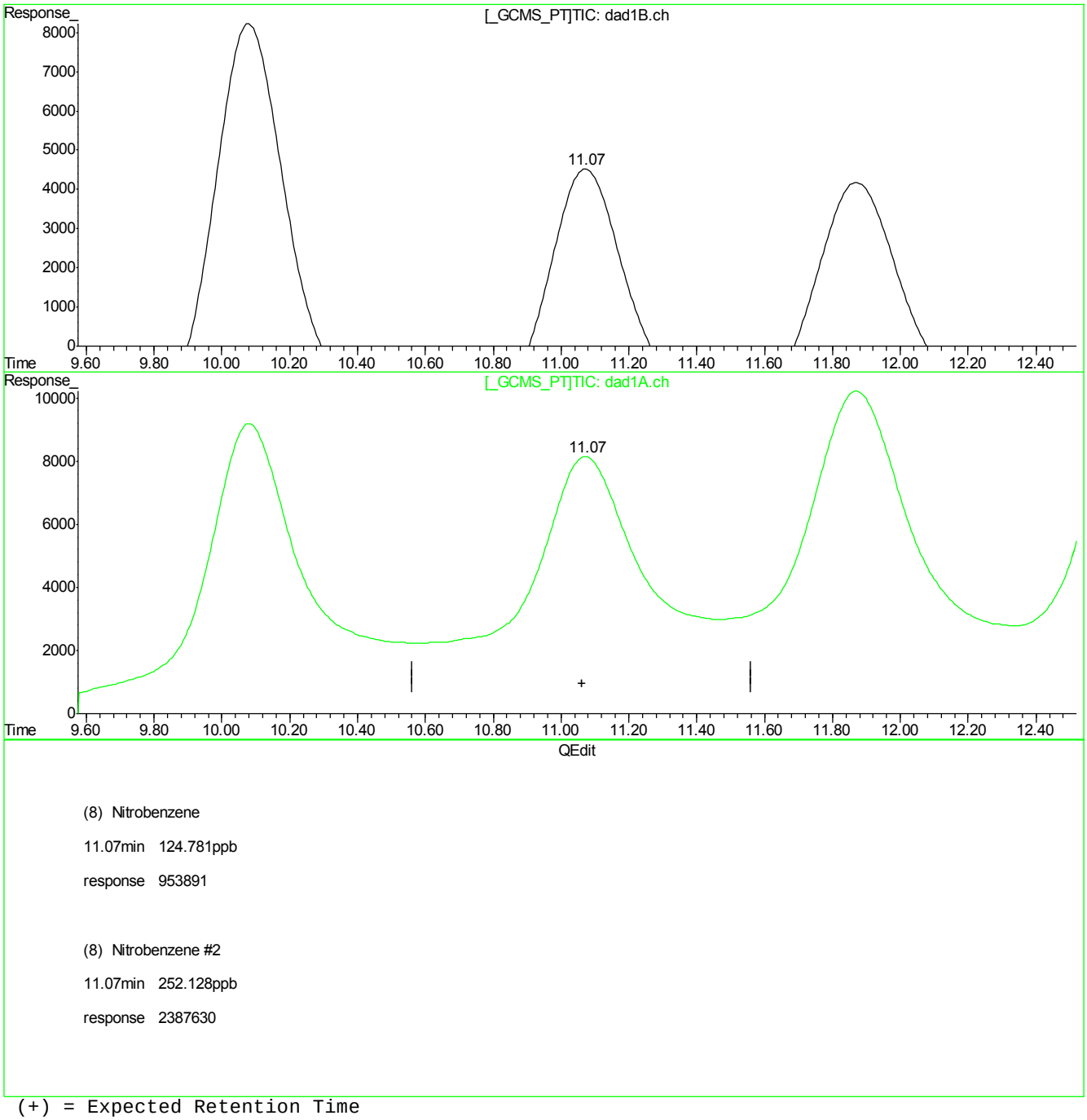
response 1272574

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration

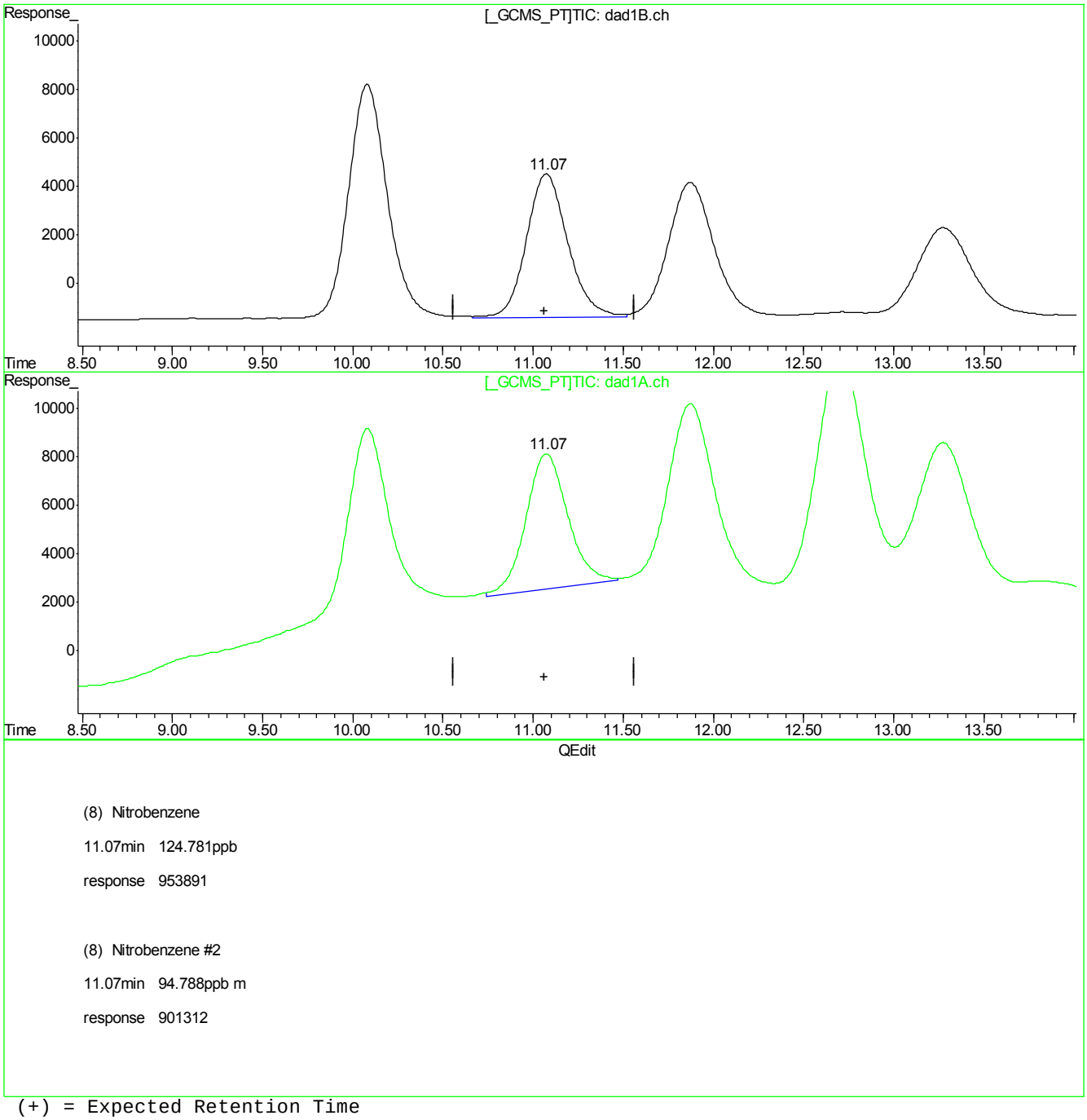


(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.07min 124.781ppb

response 953891

(8) Nitrobenzene #2

11.07min 94.788ppb m

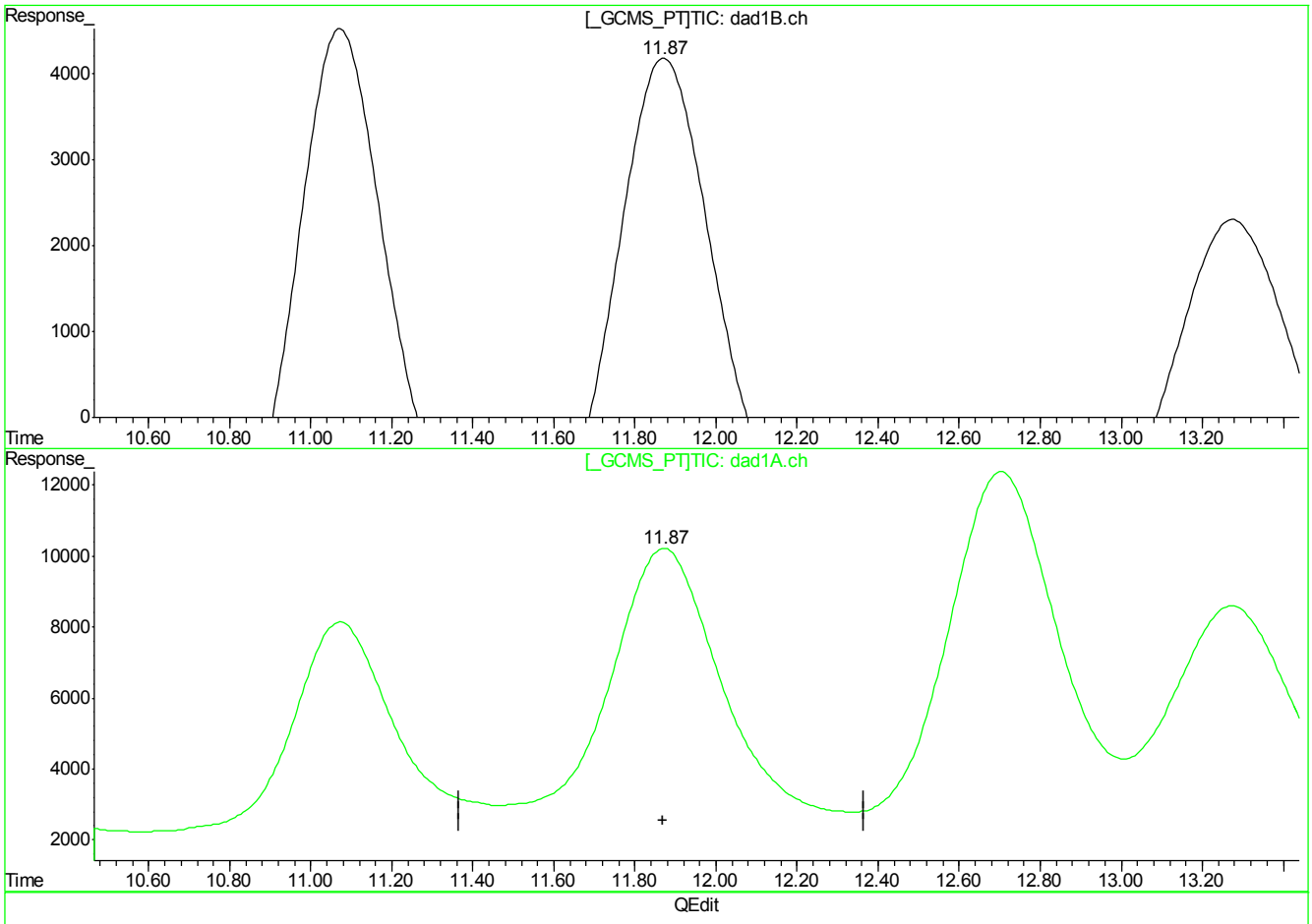
response 901312

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 174.293ppb

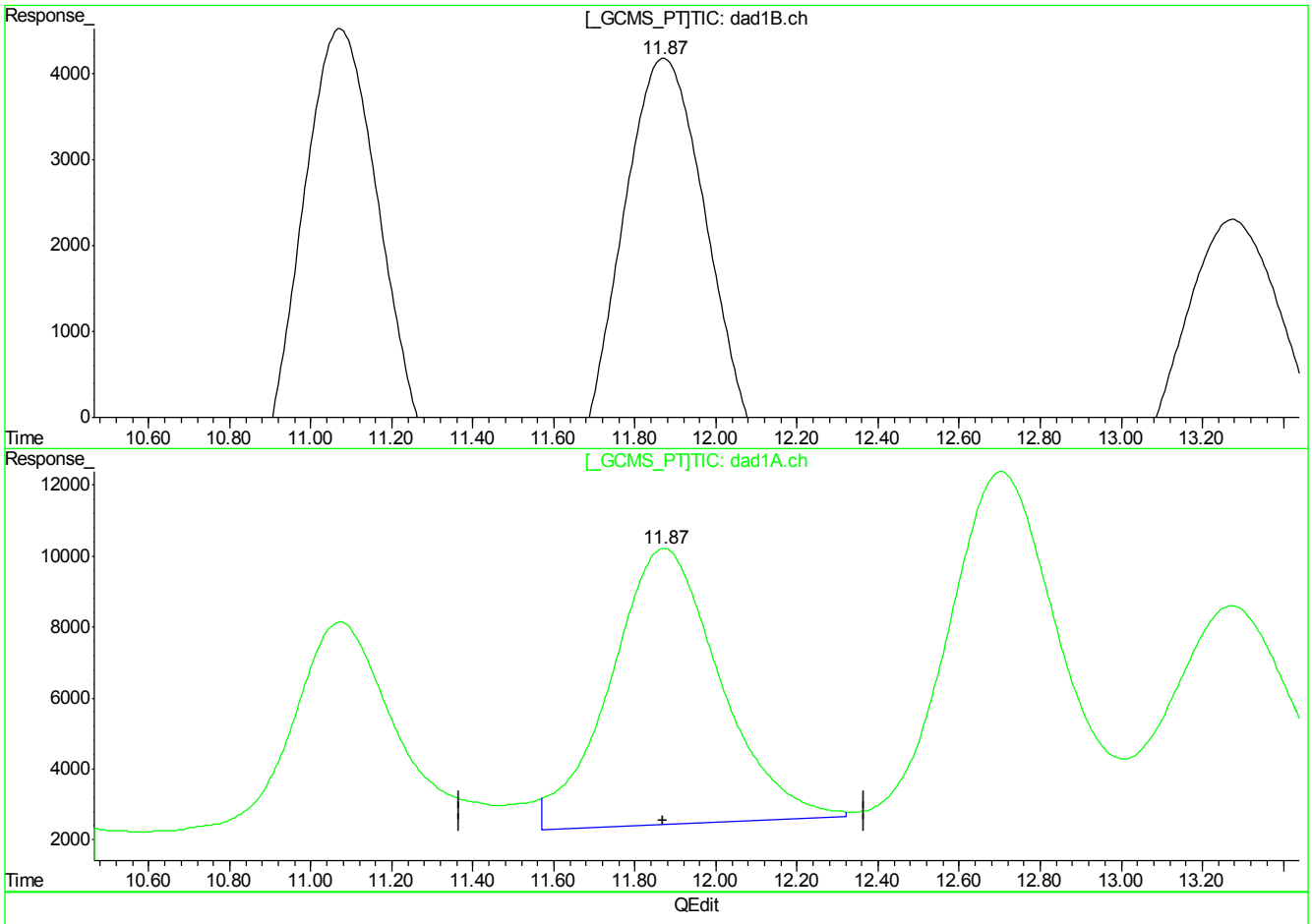
response 2710161

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:08 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 93.389ppb m

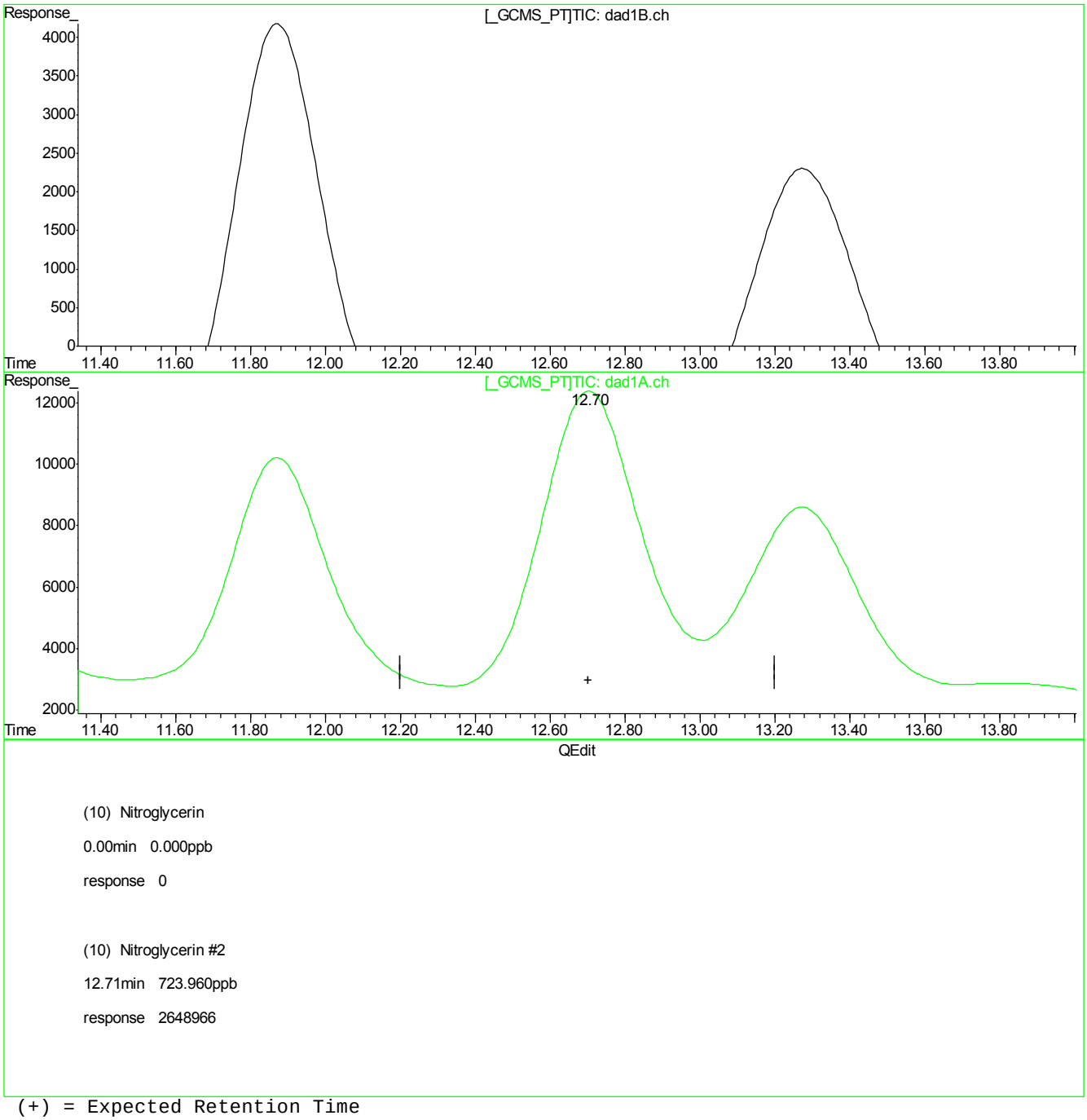
response 1458021

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration

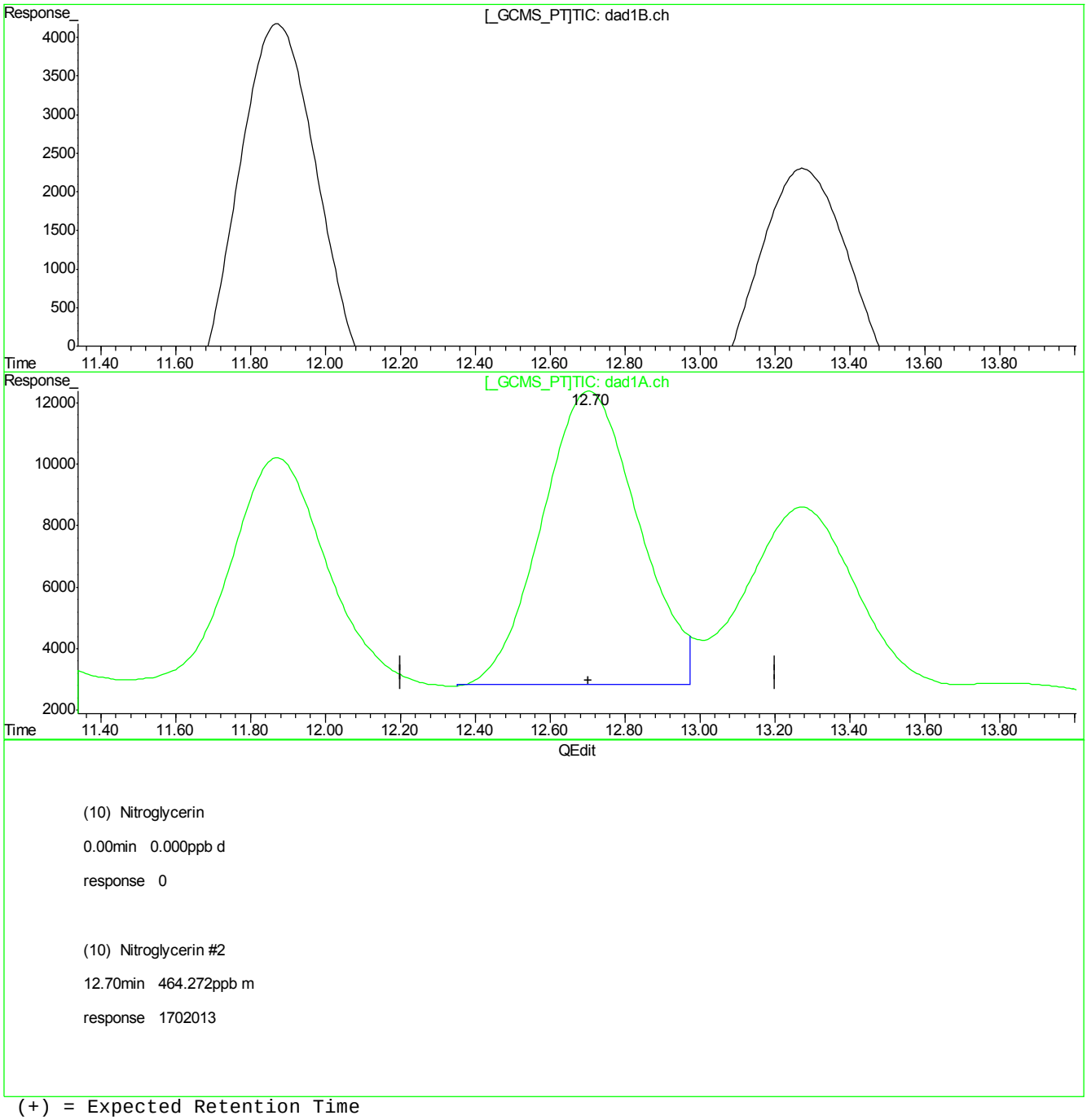


(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:14 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.70min 464.272ppb m

response 1702013

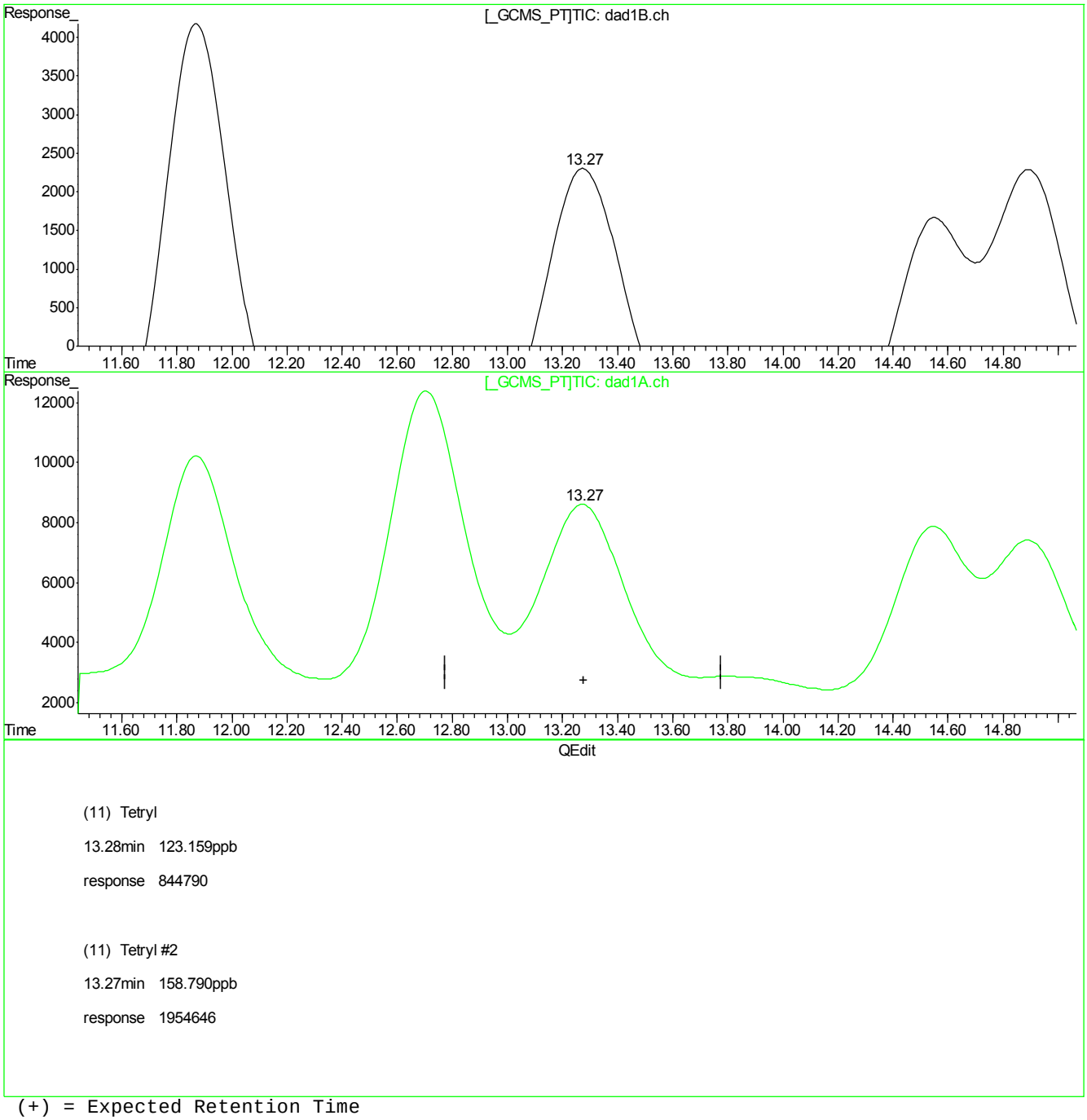
(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:20 2017

GG613828.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 158.790ppb

response 1954646

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:22 2017

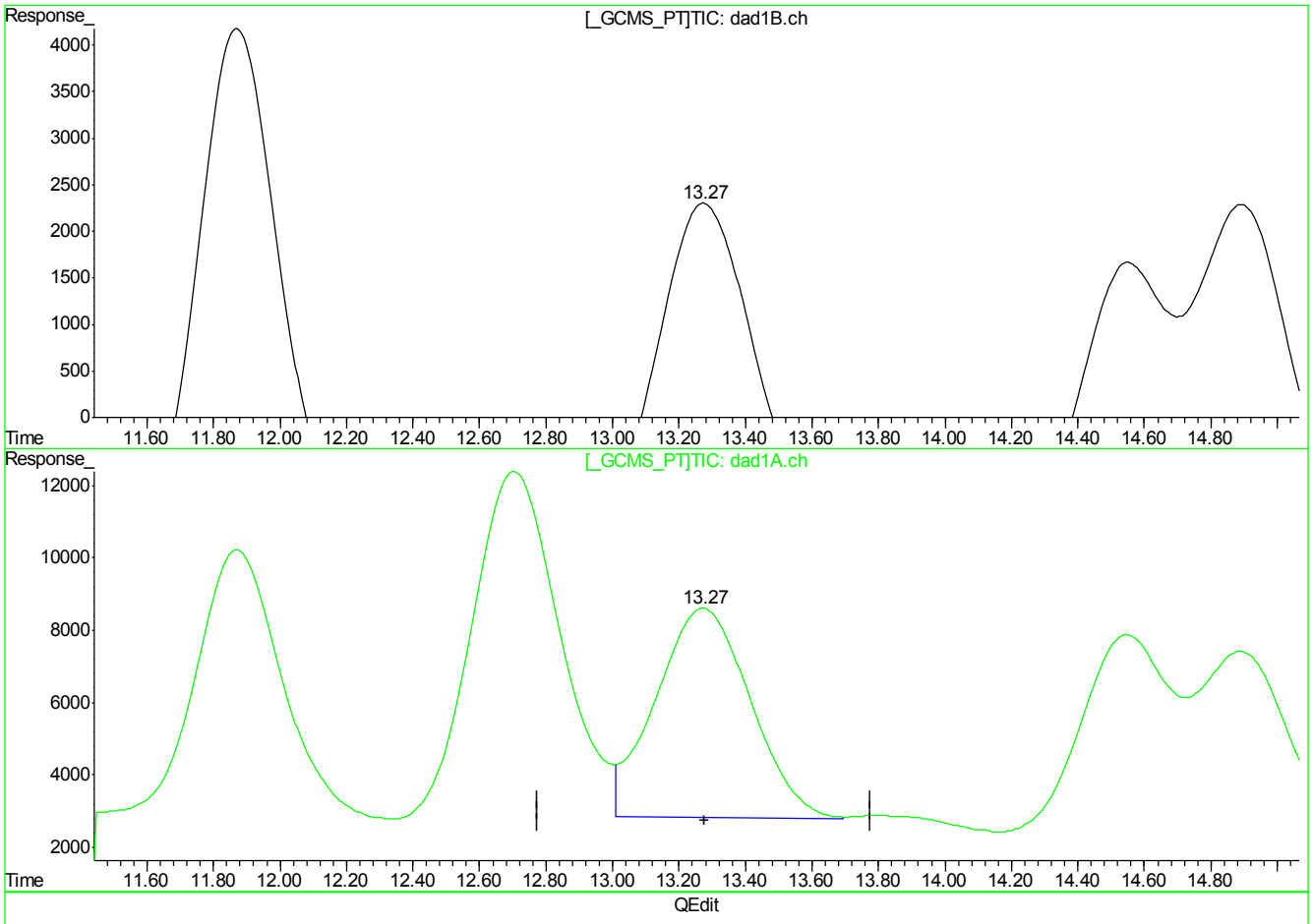
7.7.15.10

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 93.137ppb m

response 1140150

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:25 2017

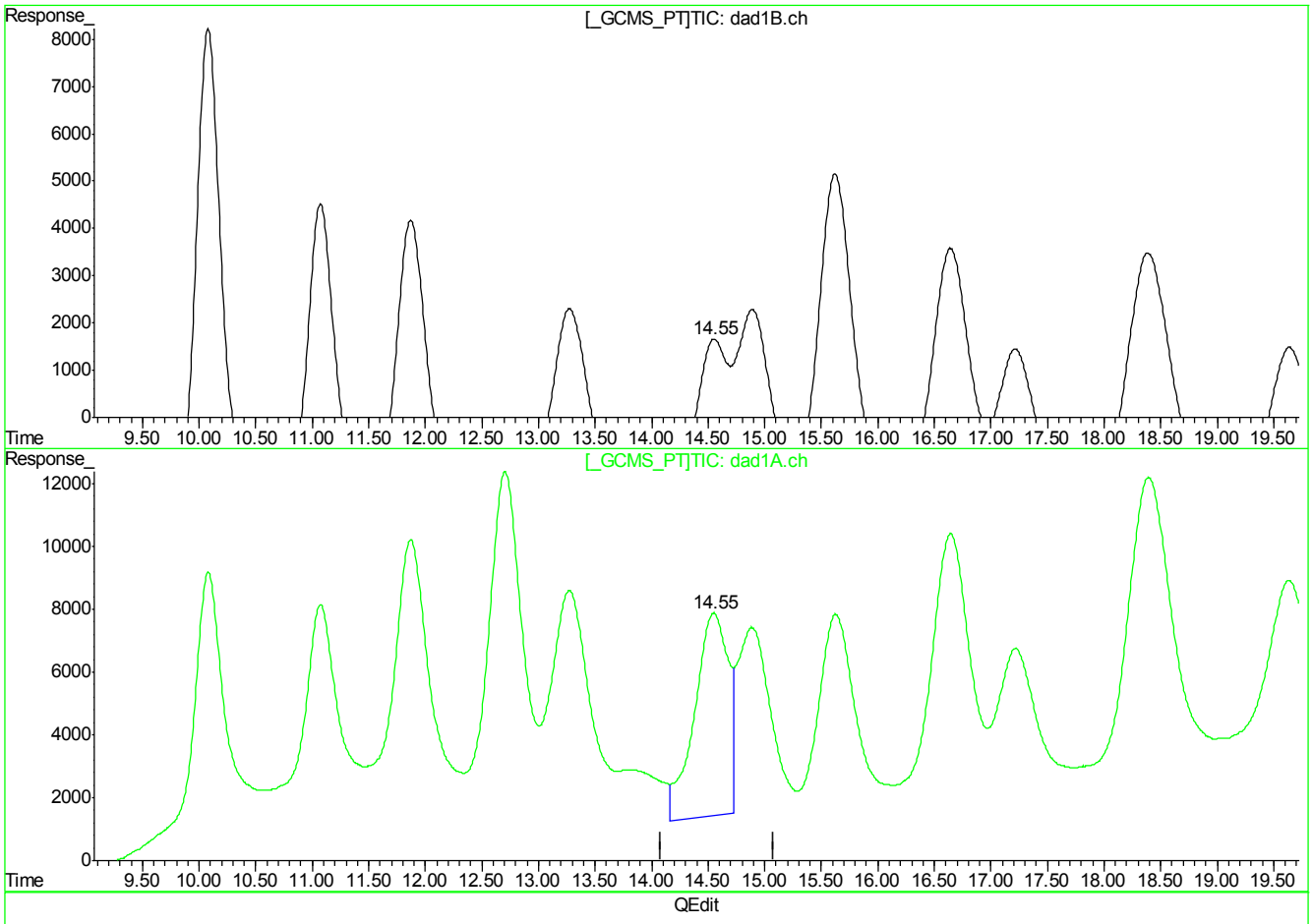
7.7.15.11

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 107.581ppb

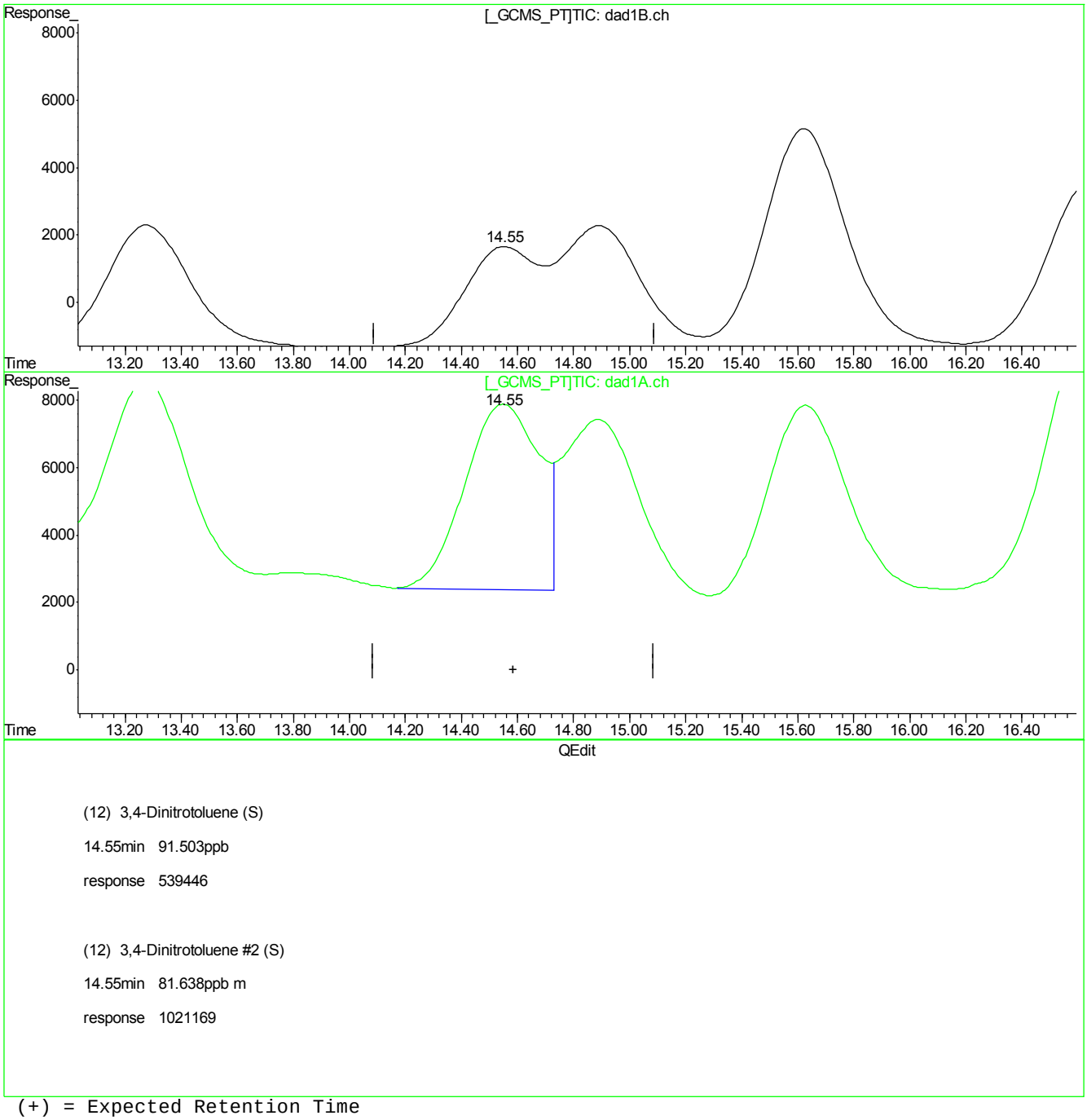
response 1344362

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 81.638ppb m

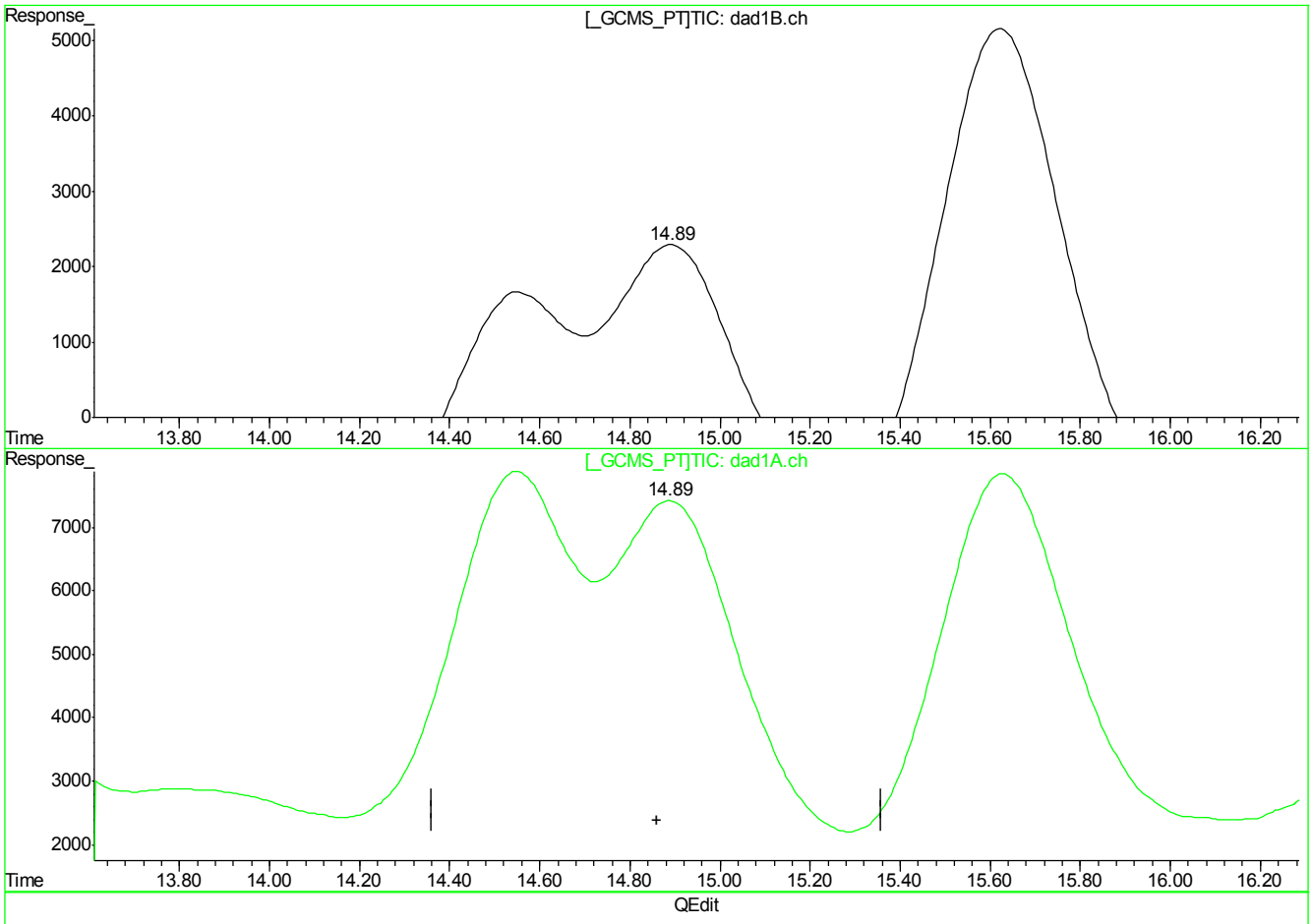
response 1021169

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:43 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 107.016ppb

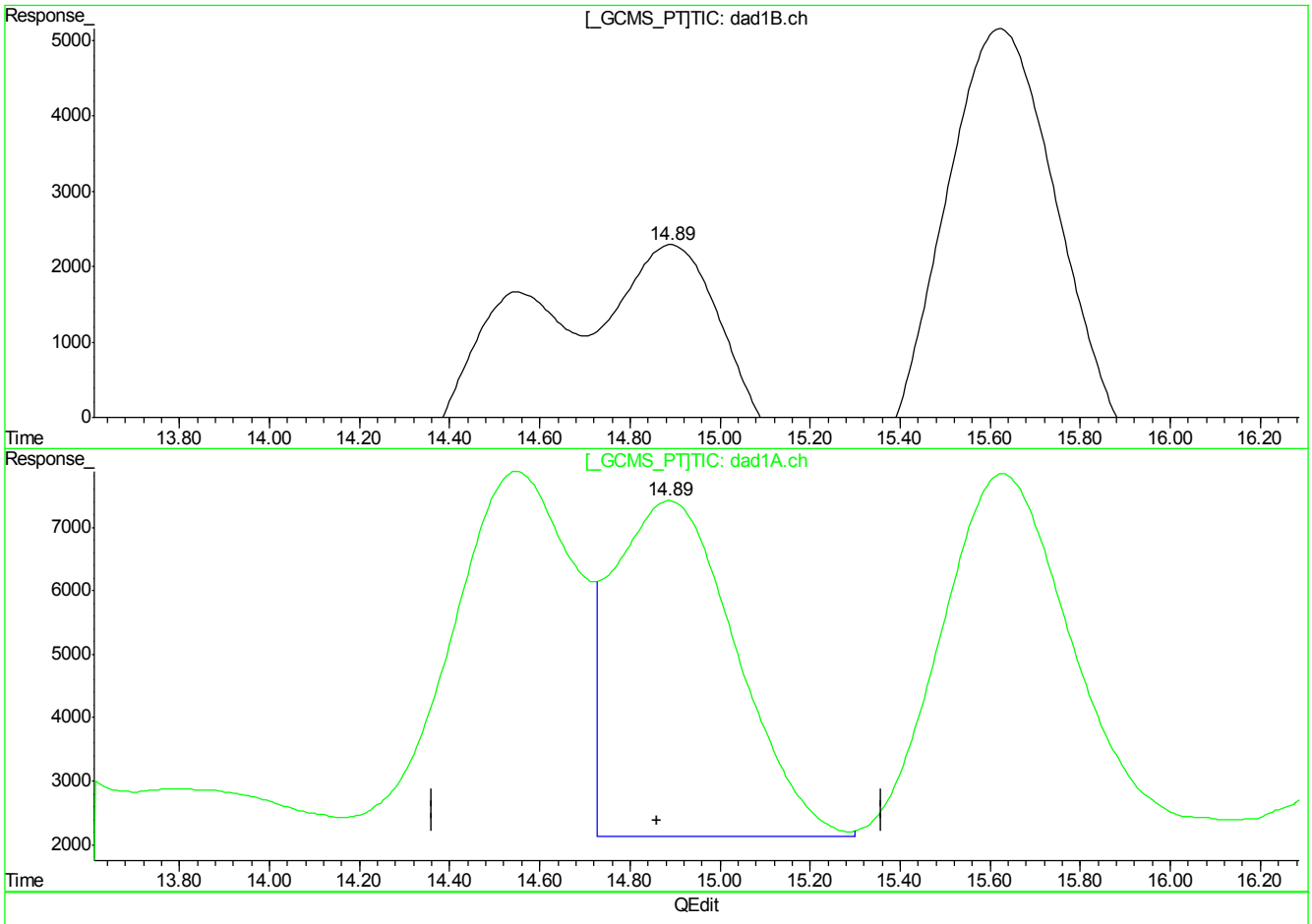
response 1167236

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 91.335ppb m

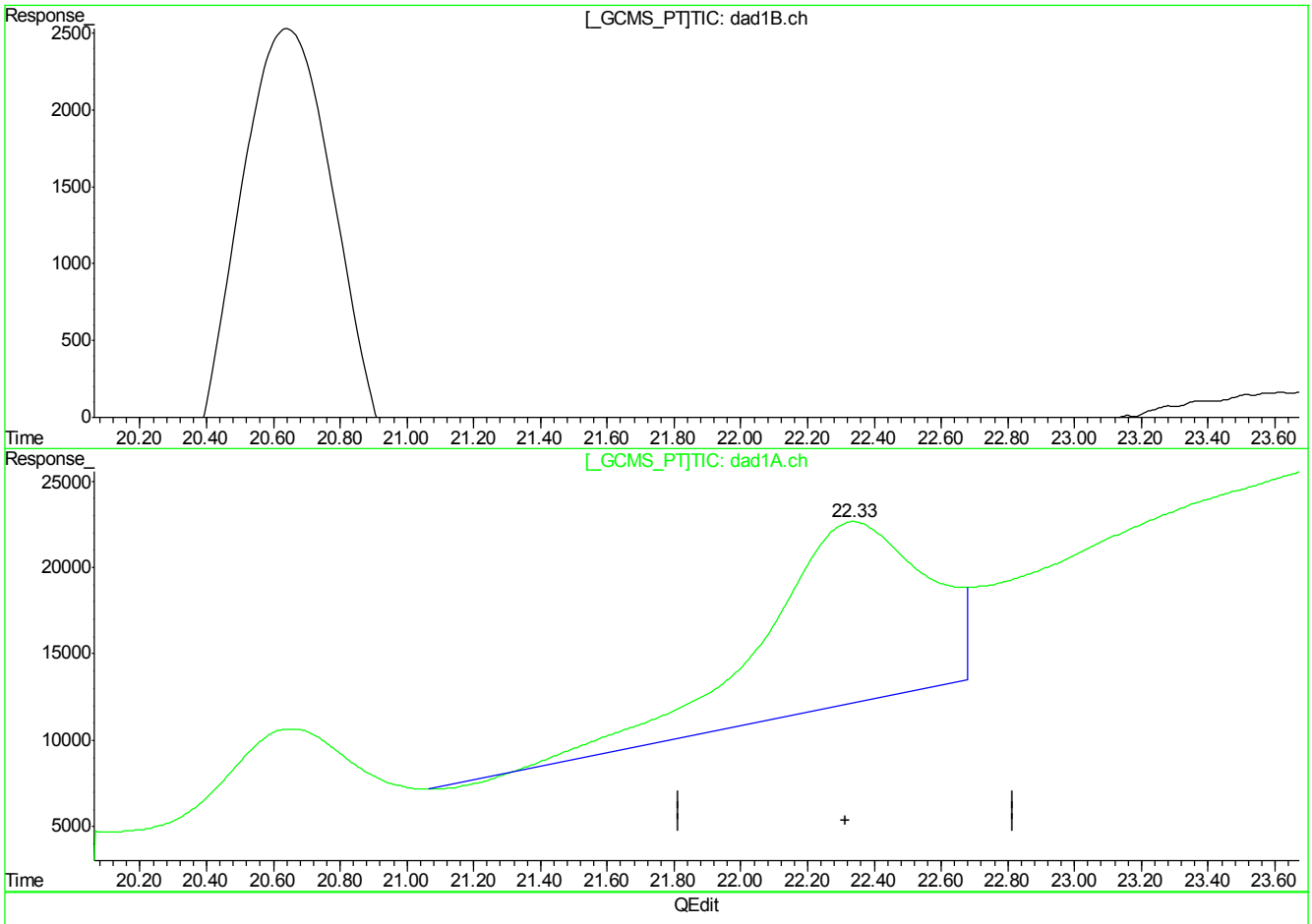
response 996233

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.34min 1088.398ppb

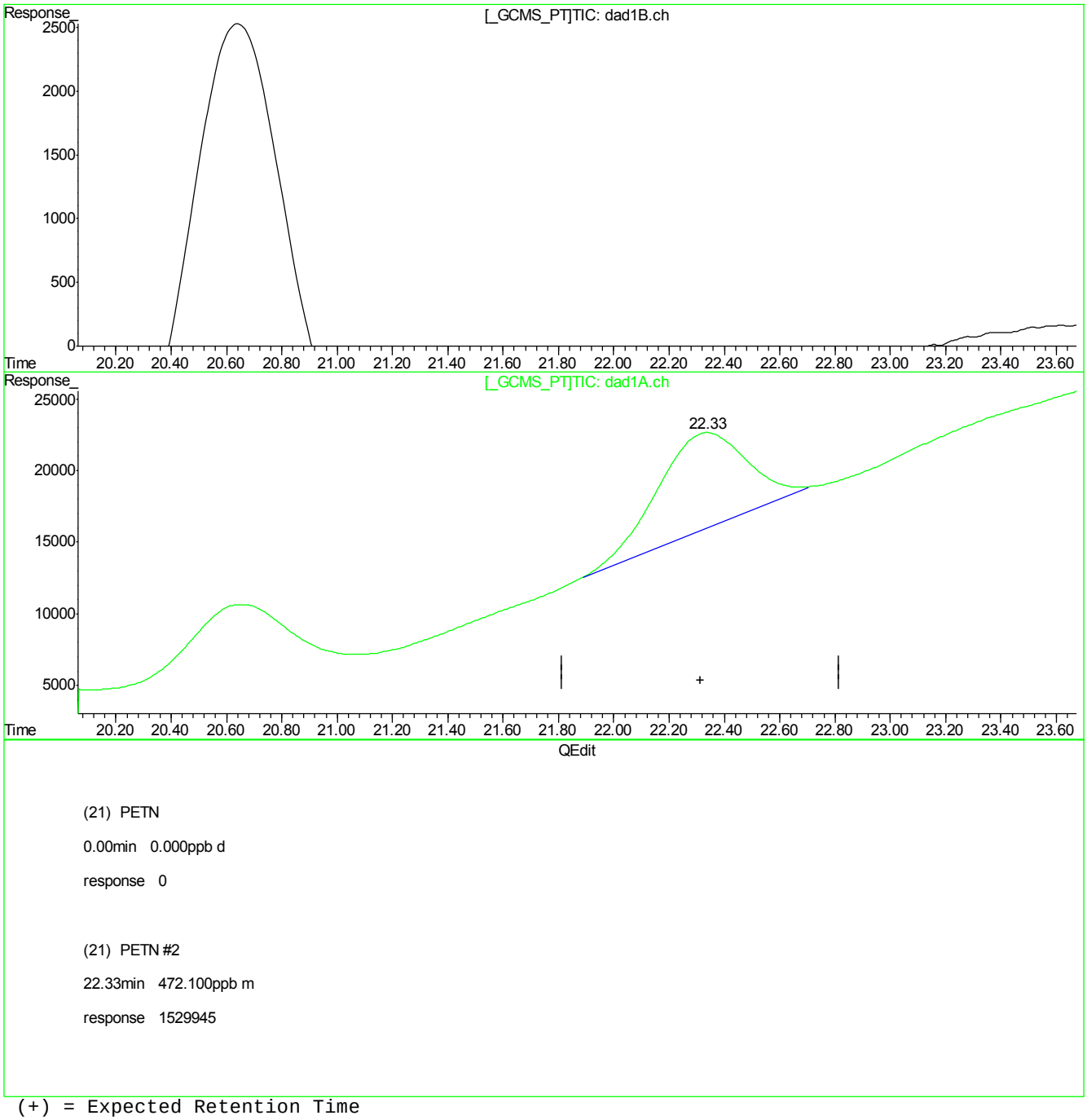
response 3527199

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:59 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 472.100ppb m

response 1529945

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:58:01 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:00 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.56	1063491	2179380	180.394	174.846m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		36.08%#	34.97%#
	Target Compounds						
1)	TNX	5.01	5.01	2917600	2917600	346.858	345.941
2)	HMX	5.46	5.46	656713	656713	172.889	171.666
3)	DNX	5.59	5.59	1519481	1519481	231.493	232.298
4)	MNX	6.67	6.67	1443328	1443328	298.340	298.340
5)	1,3,5-Trinitrobe	7.55	7.55	2106246	2100950	206.269	205.837
6)	RDX	8.07	8.07	970188	952673	203.793	201.047
7)	1,3-Dinitrobenze	10.09	10.08	2896074	2285655	198.974	162.672m
8)	Nitrobenzene	11.08	11.08	1850780	1739643	242.105	183.374m
9)	2,4,6-Trinitroto	11.88	11.87	1988673	2595550	195.051	166.860m
10)	Nitroglycerin	0.00	12.71	0	3400685	N.D. d	930.820m
11)	Tetryl	13.29	13.28	1576705	2666776	229.863	215.610m
13)	2,6-Dinitrotolue	14.91	14.90	1464572	2076245	210.655	190.384m
14)	2,4-Dinitrotolue	15.63	15.64	2633670	2111724	198.199	212.468
15)	o-Nitrotoluene	17.23	17.23	1151278	1767333	264.153	291.713
16)	3,5-Dinitroanili	16.65	16.65	2062620	3445874	194.627	191.892
17)	p-Nitrotoluene	18.40	18.40	2368549	4400784	205.856	206.913
18)	4-Amino-2,6-Dini	18.40	18.40	2368549	4400784	205.856	206.913
19)	m-Nitrotoluene	19.65	19.65	1205775	2051289	240.727	216.863
20)	2-Amino-4,6-Dini	20.64	20.65	1852313	2259776	193.086	166.971
21)	PETN	0.00	22.33	0	3416410	N.D. d	1054.212m

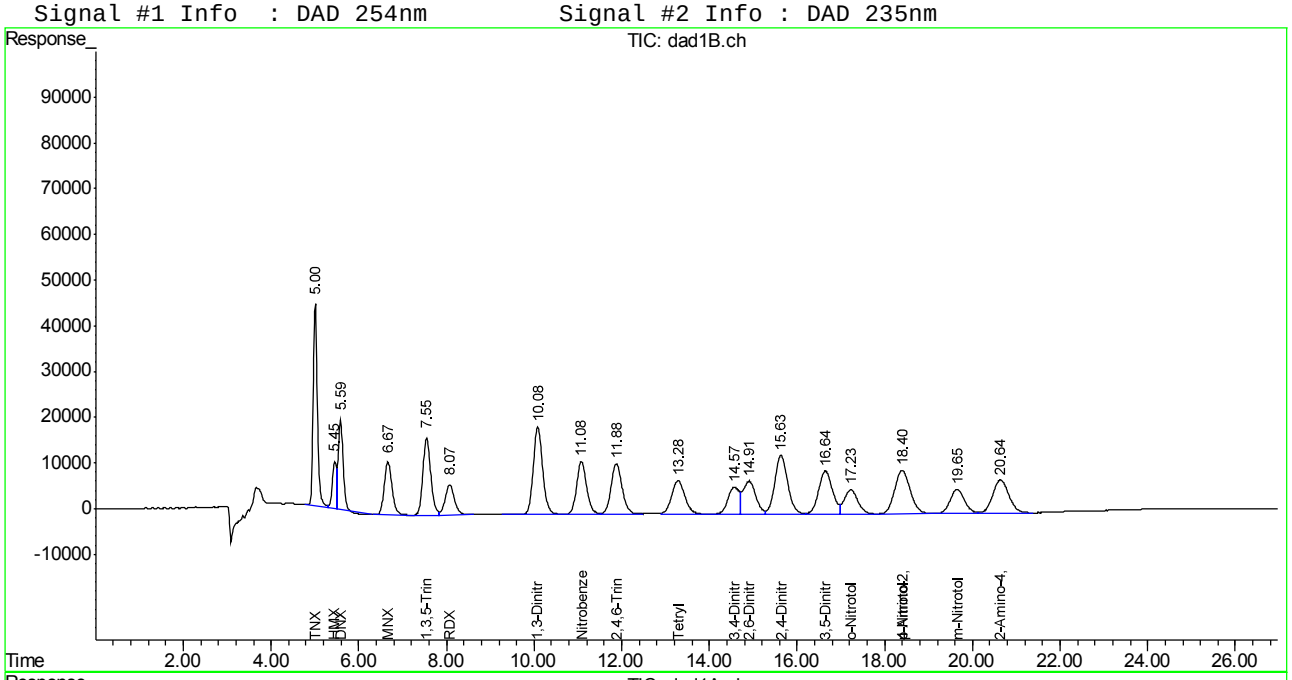
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 13:37:53 2017 Page 1

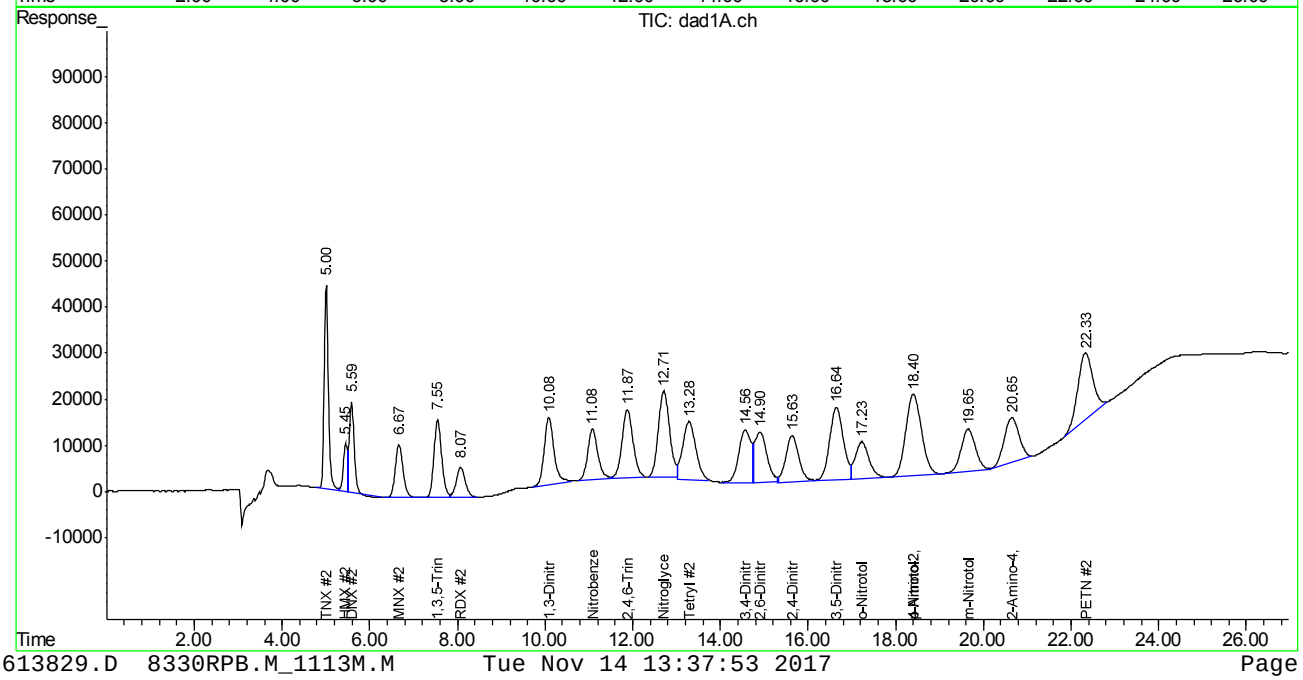
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

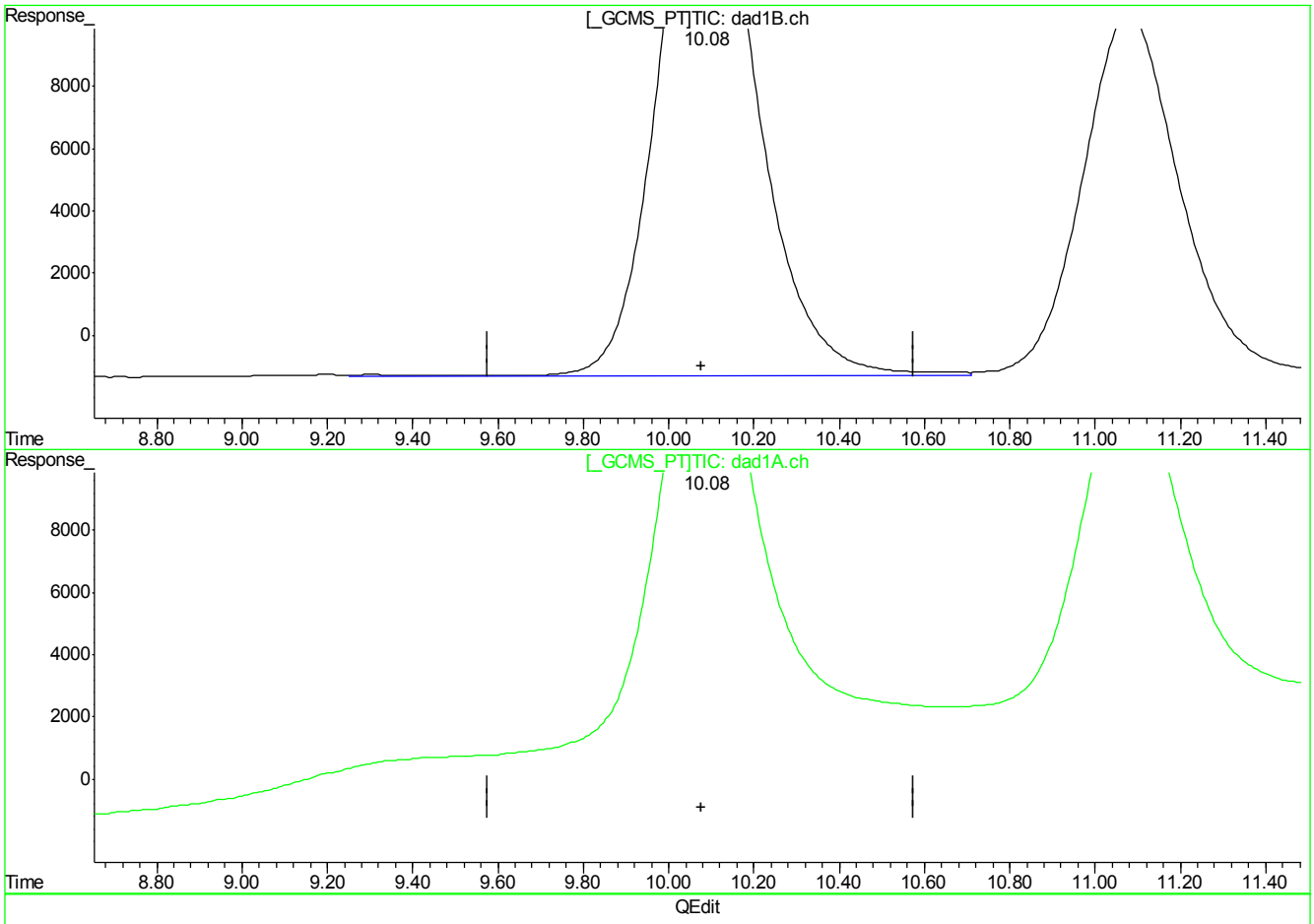
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613829.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:04	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.56	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.90	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.09min 292.876ppb

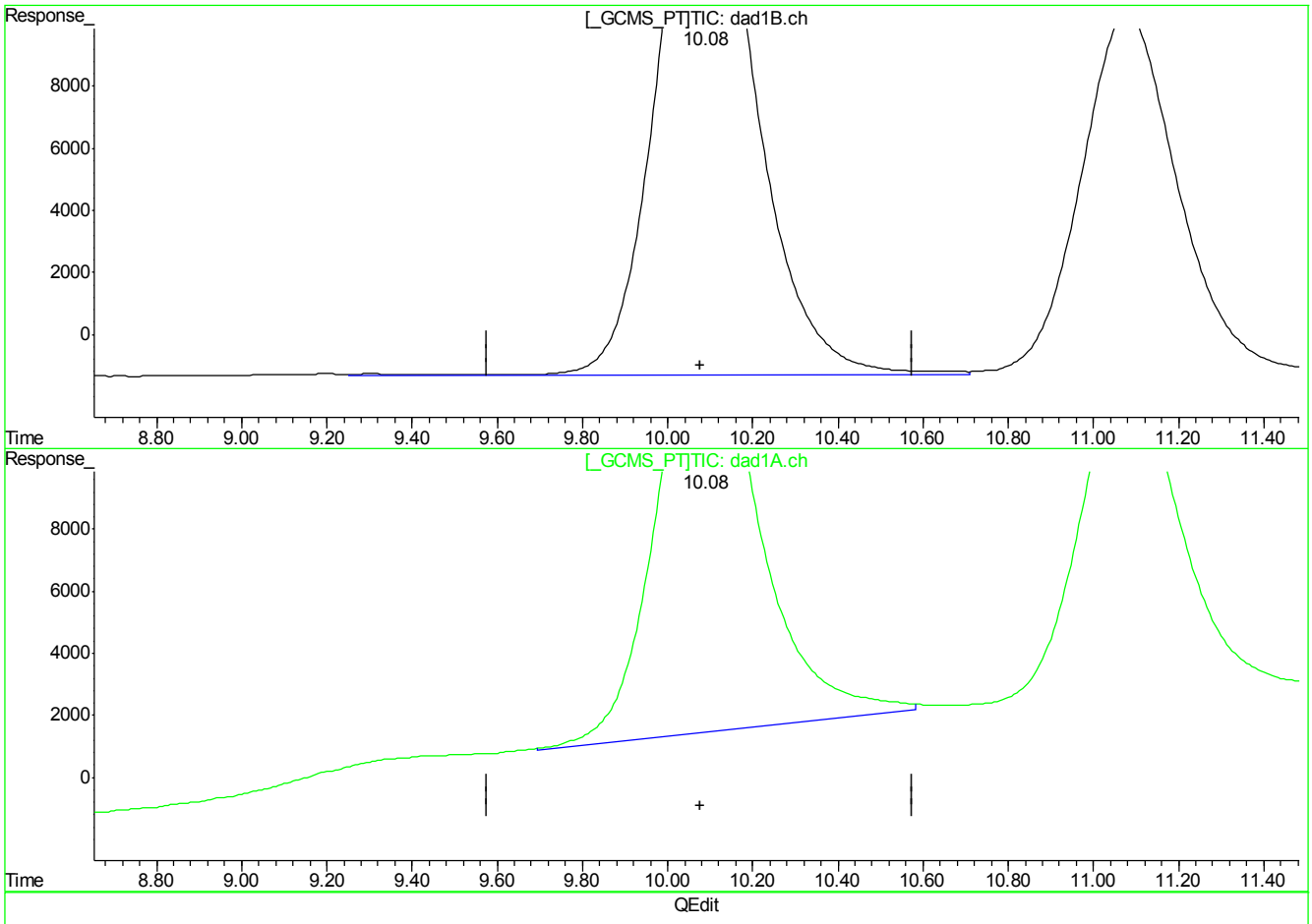
response 4066063

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:15 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.08min 162.672ppb m

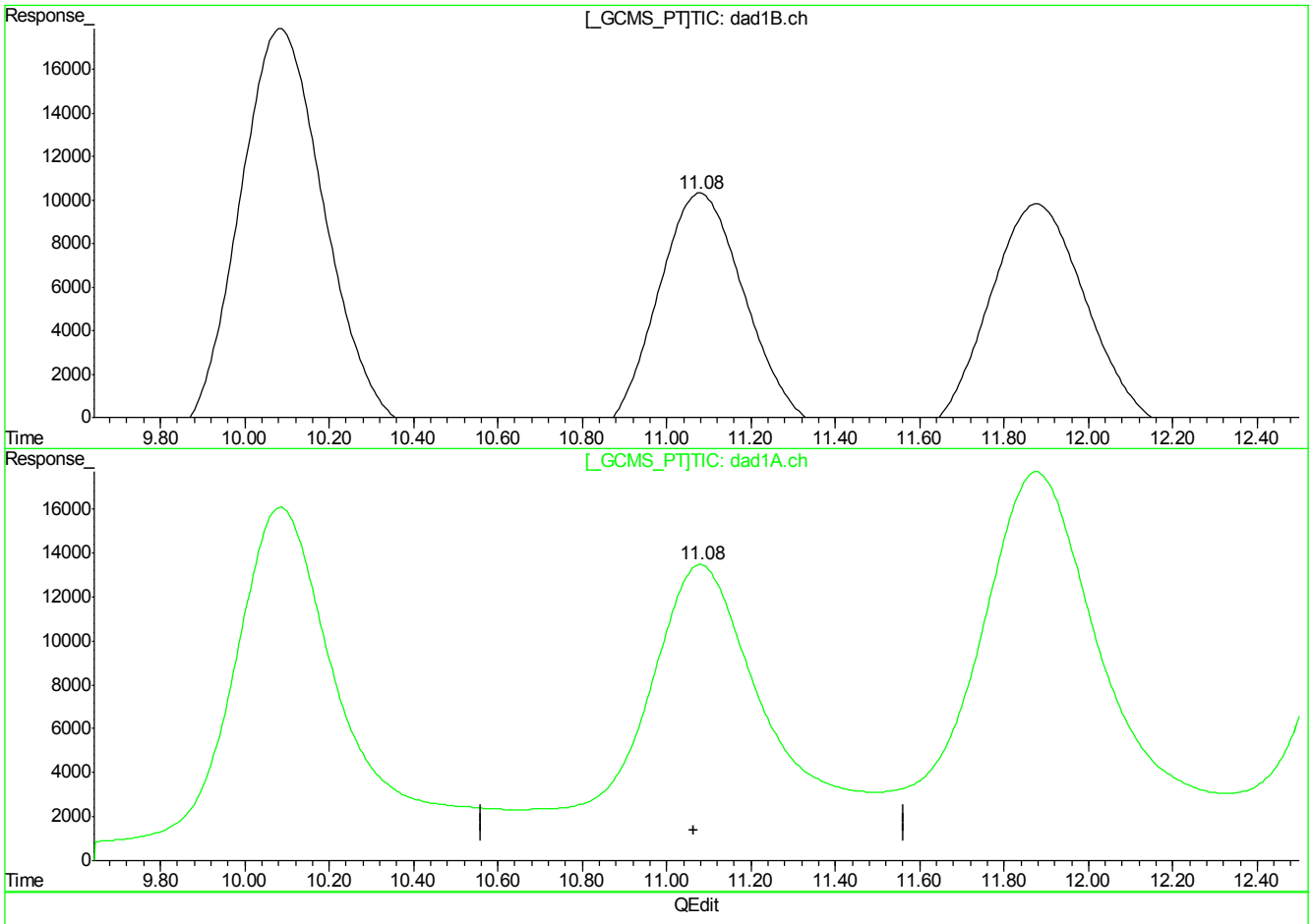
response 2285655

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 328.328ppb

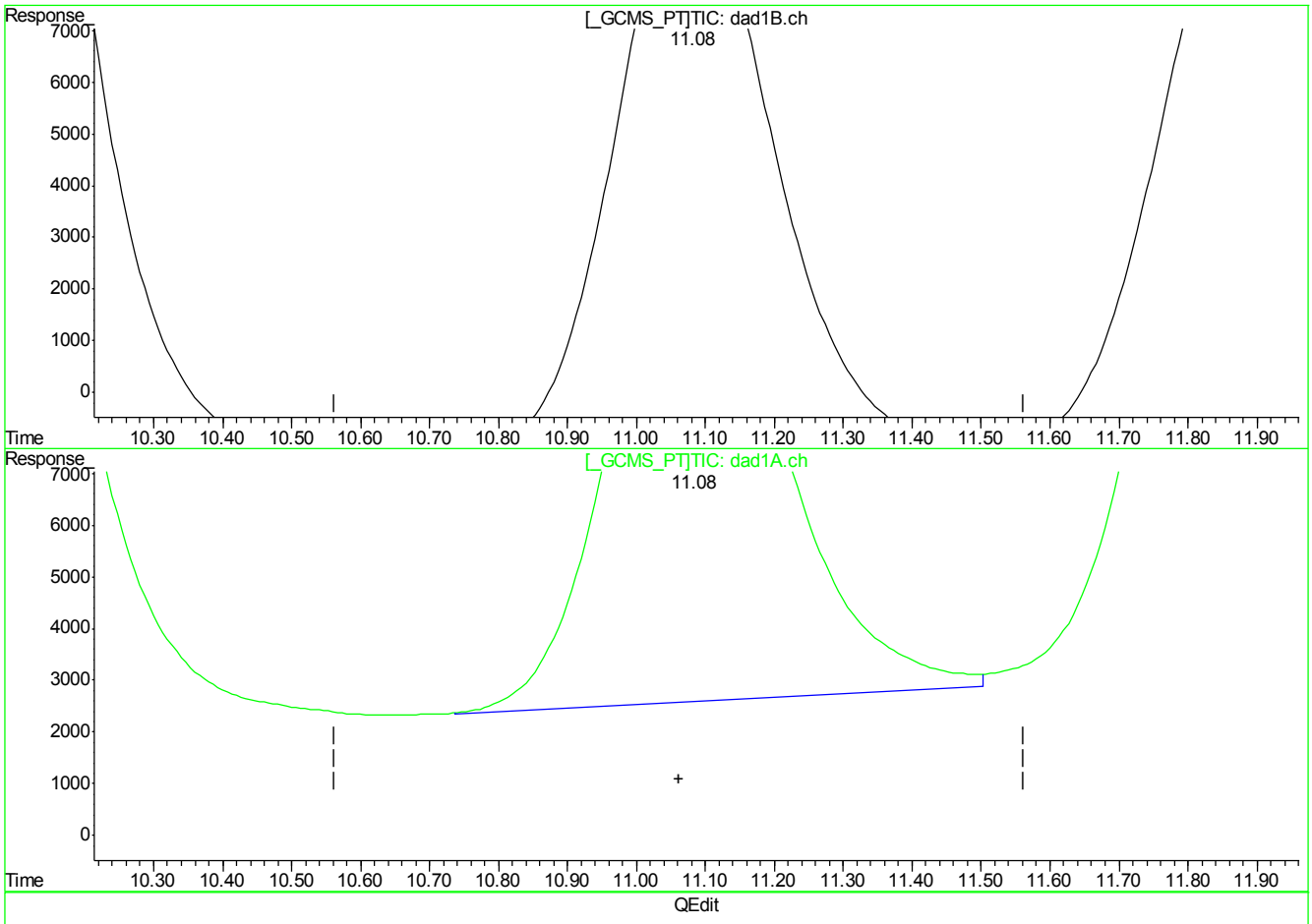
response 3103070

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:25 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 183.374ppb m

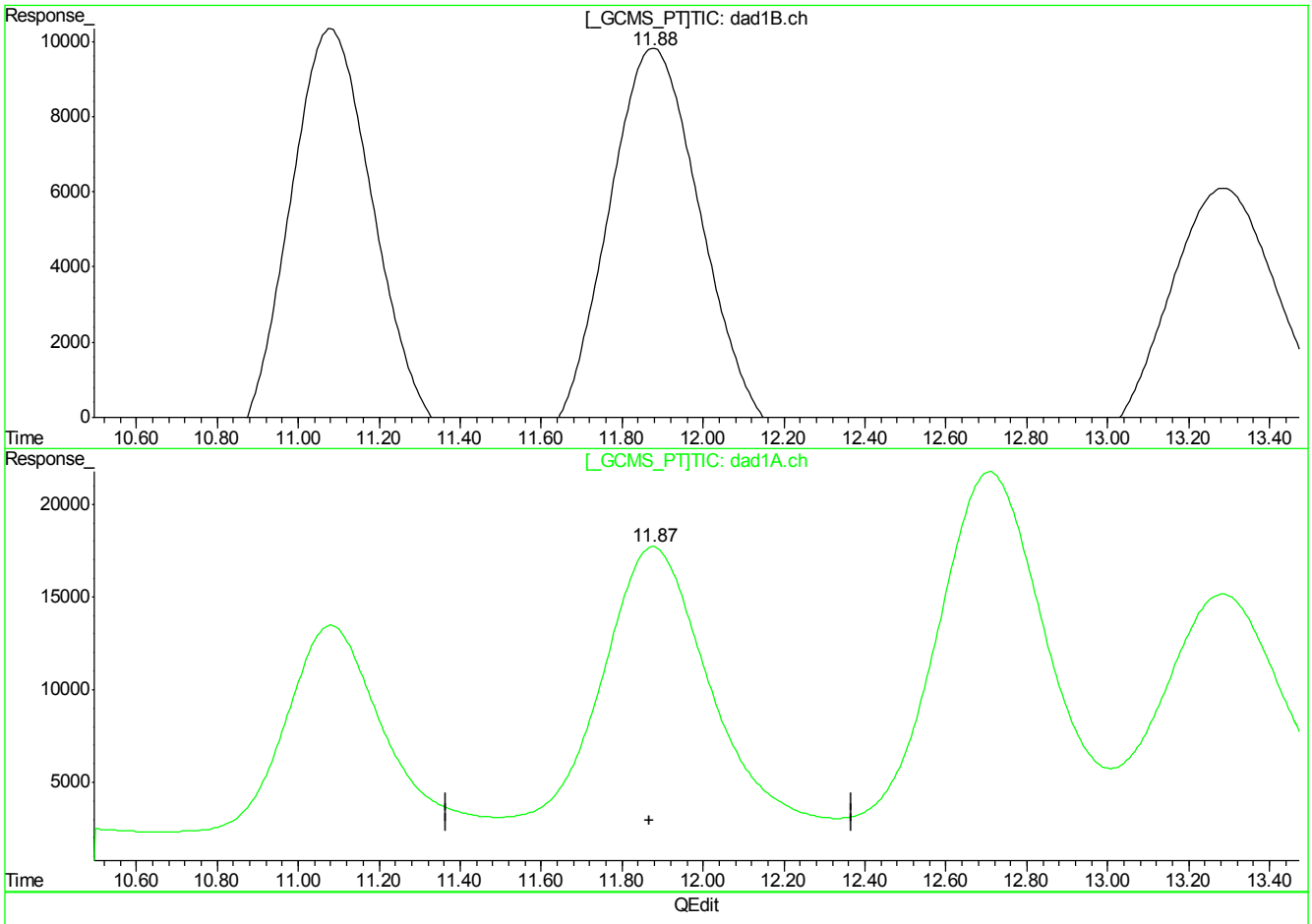
response 1739643

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:31 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.88min 253.581ppb

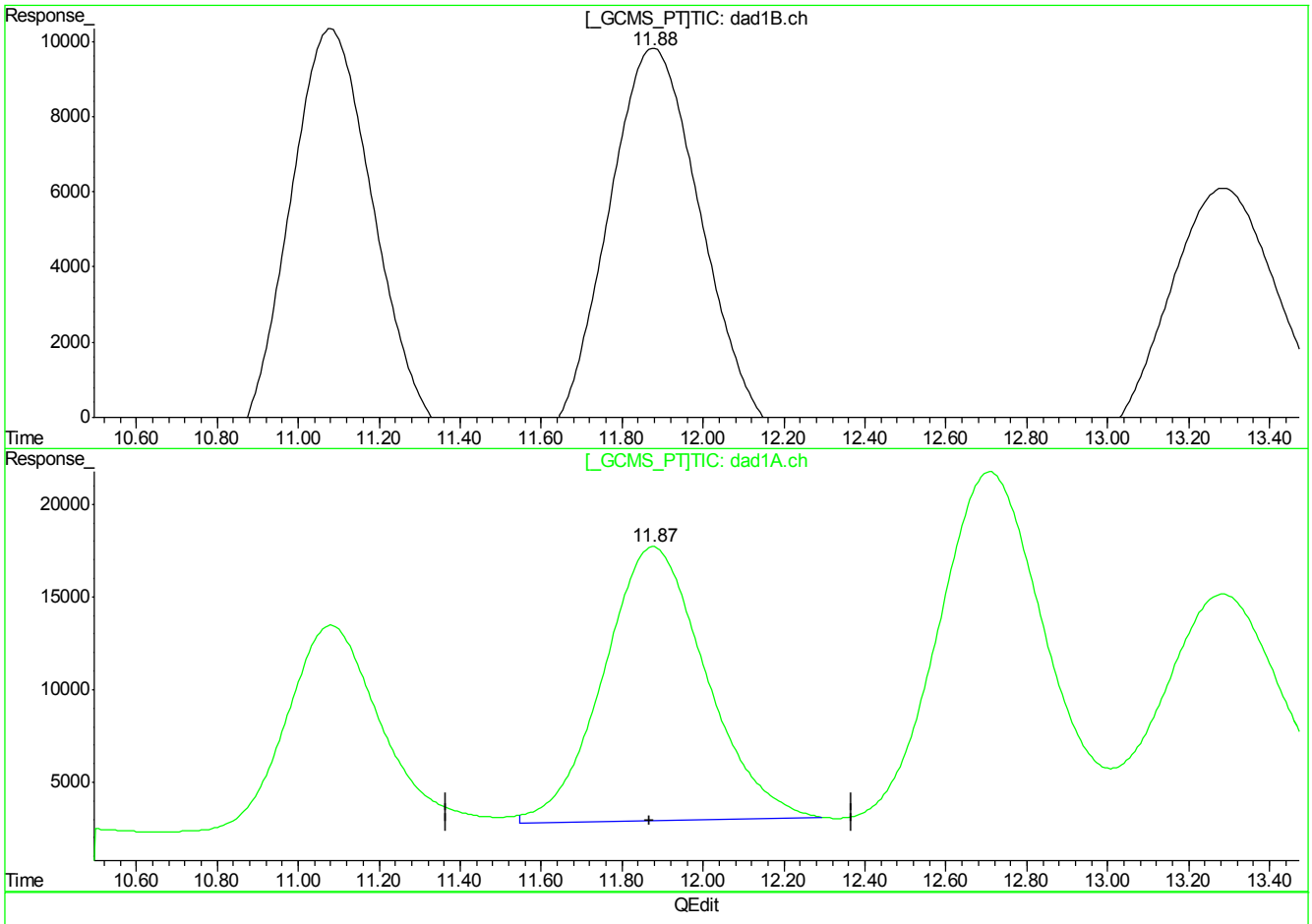
response 3927420

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:33 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.87min 166.860ppb m

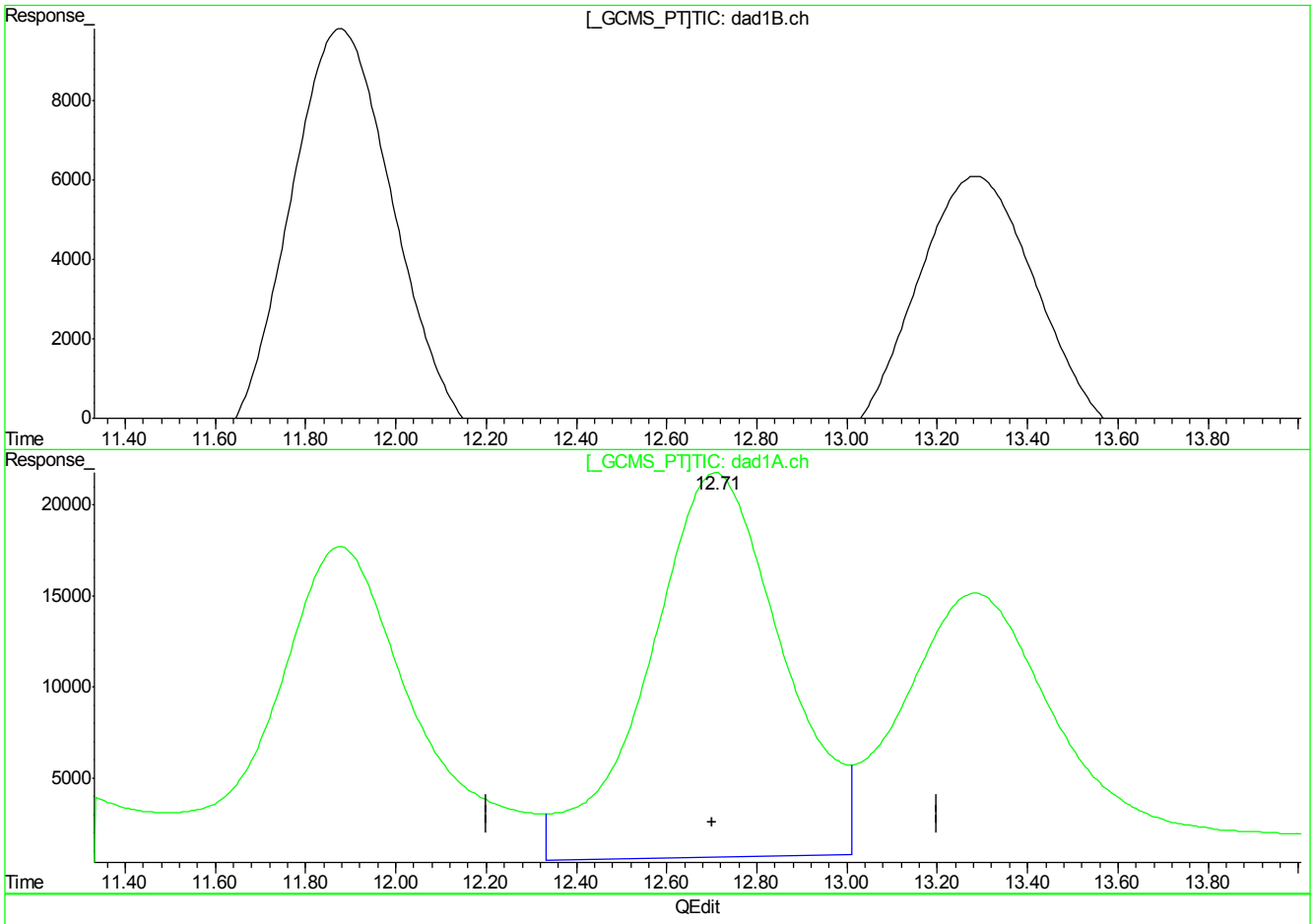
response 2595550

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 1189.969ppb

response 4339170

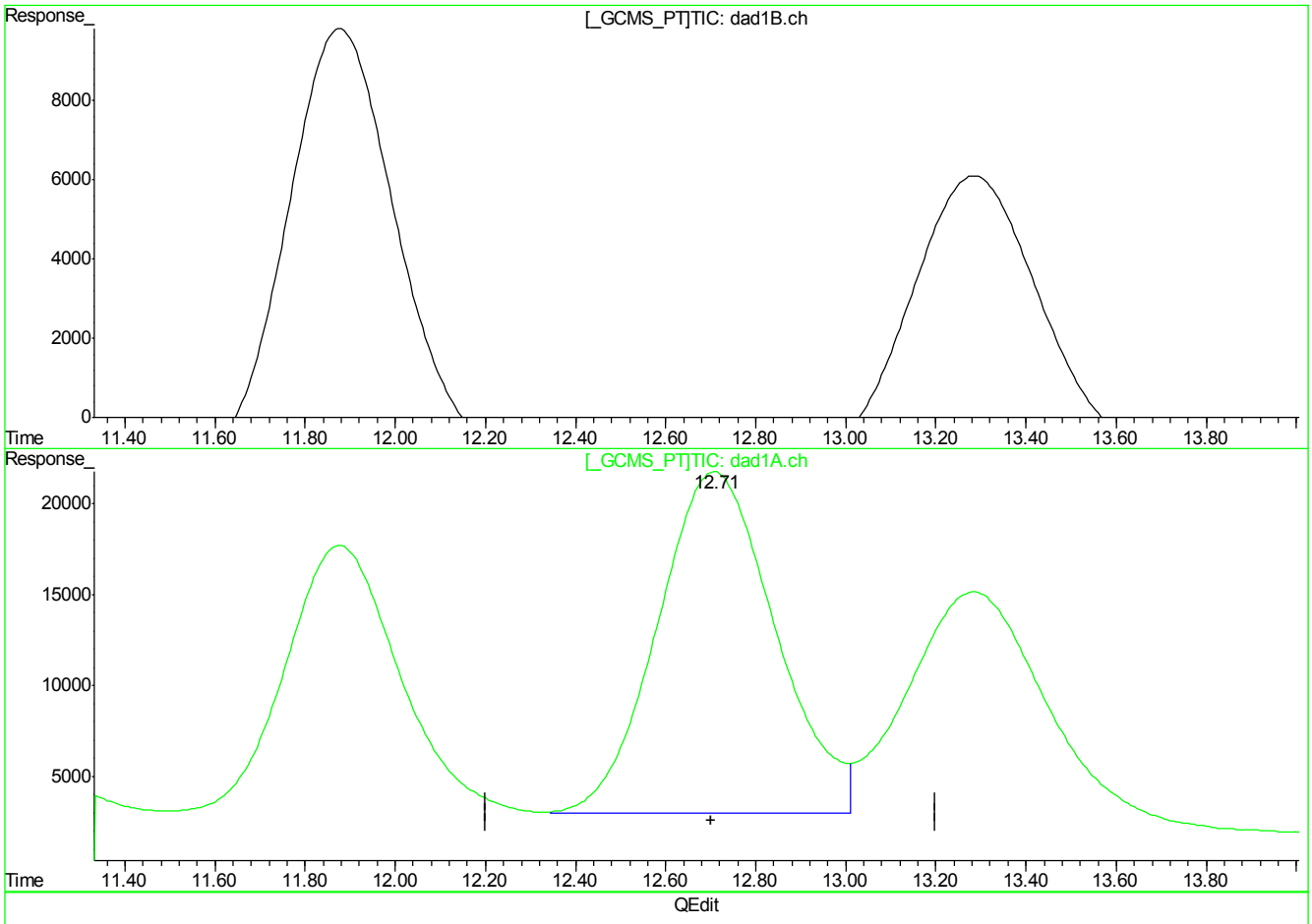
(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:38 2017

GG613829.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 930.820ppb m

response 3400685

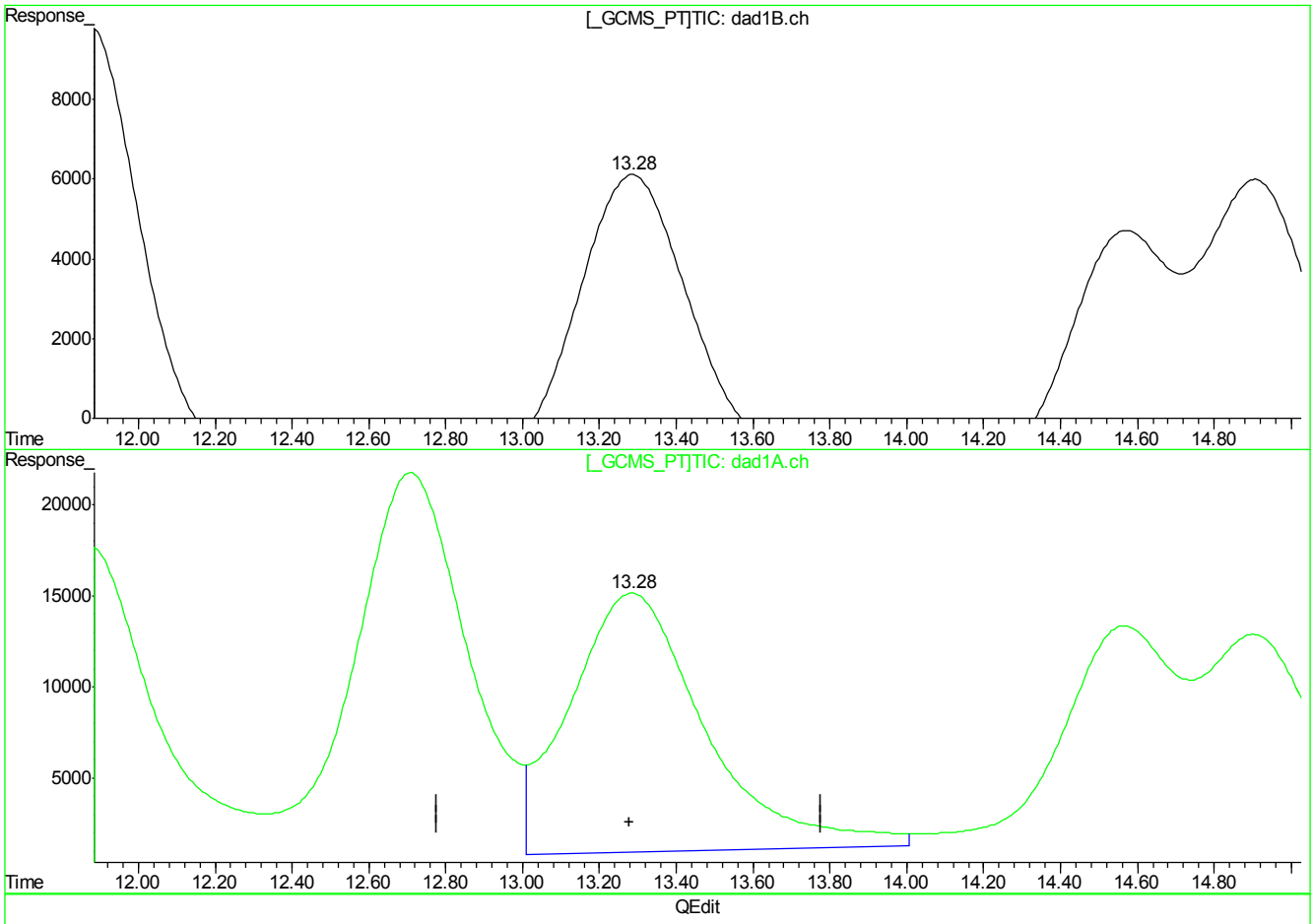
(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:42 2017

GG613829.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.29min 280.400ppb

response 3486939

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:48 2017

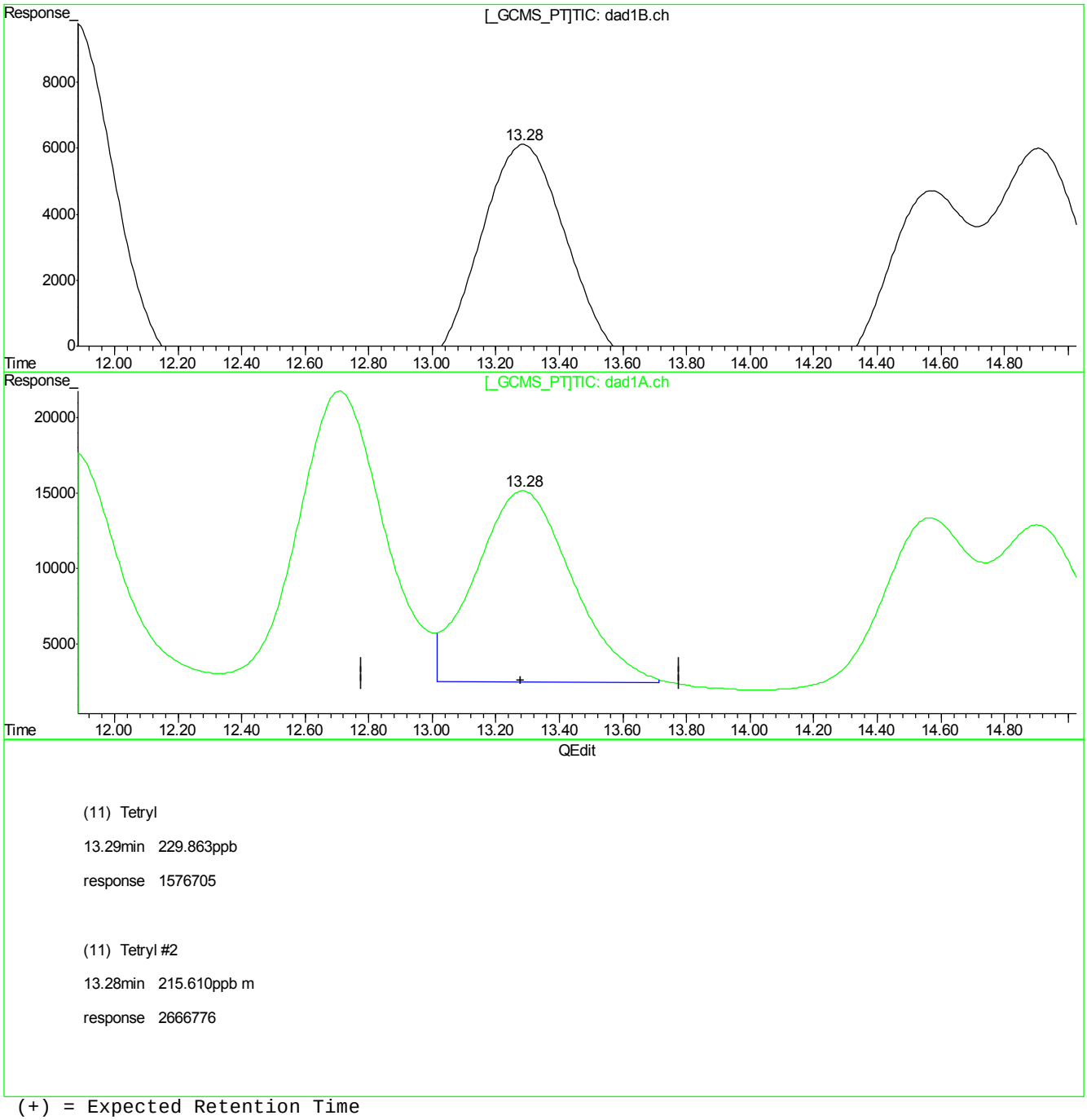
7.7.16.10

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.28min 215.610ppb m

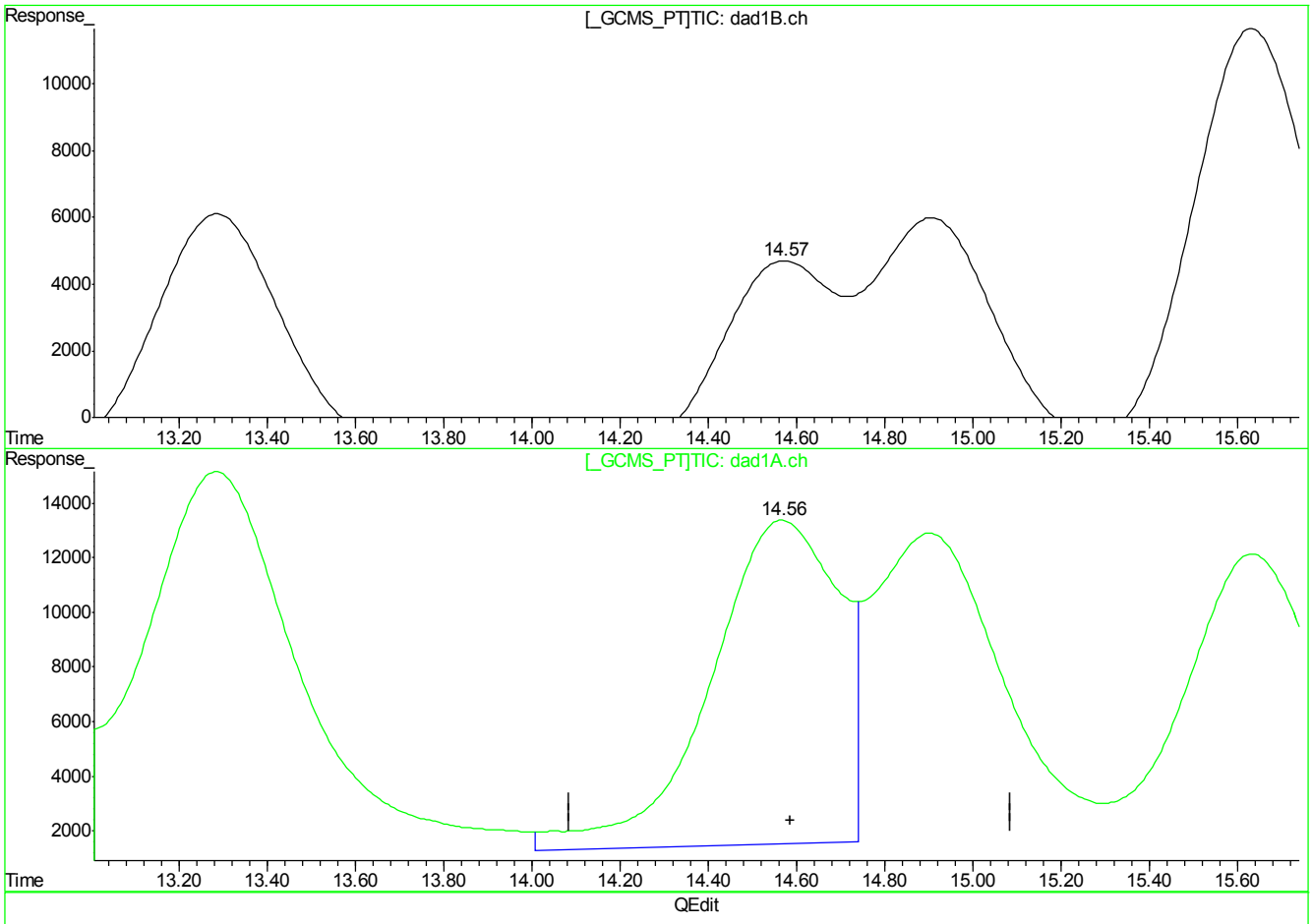
response 2666776

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:51 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.57min 192.743ppb

response 2400836

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:53 2017

7.7.16.12

7

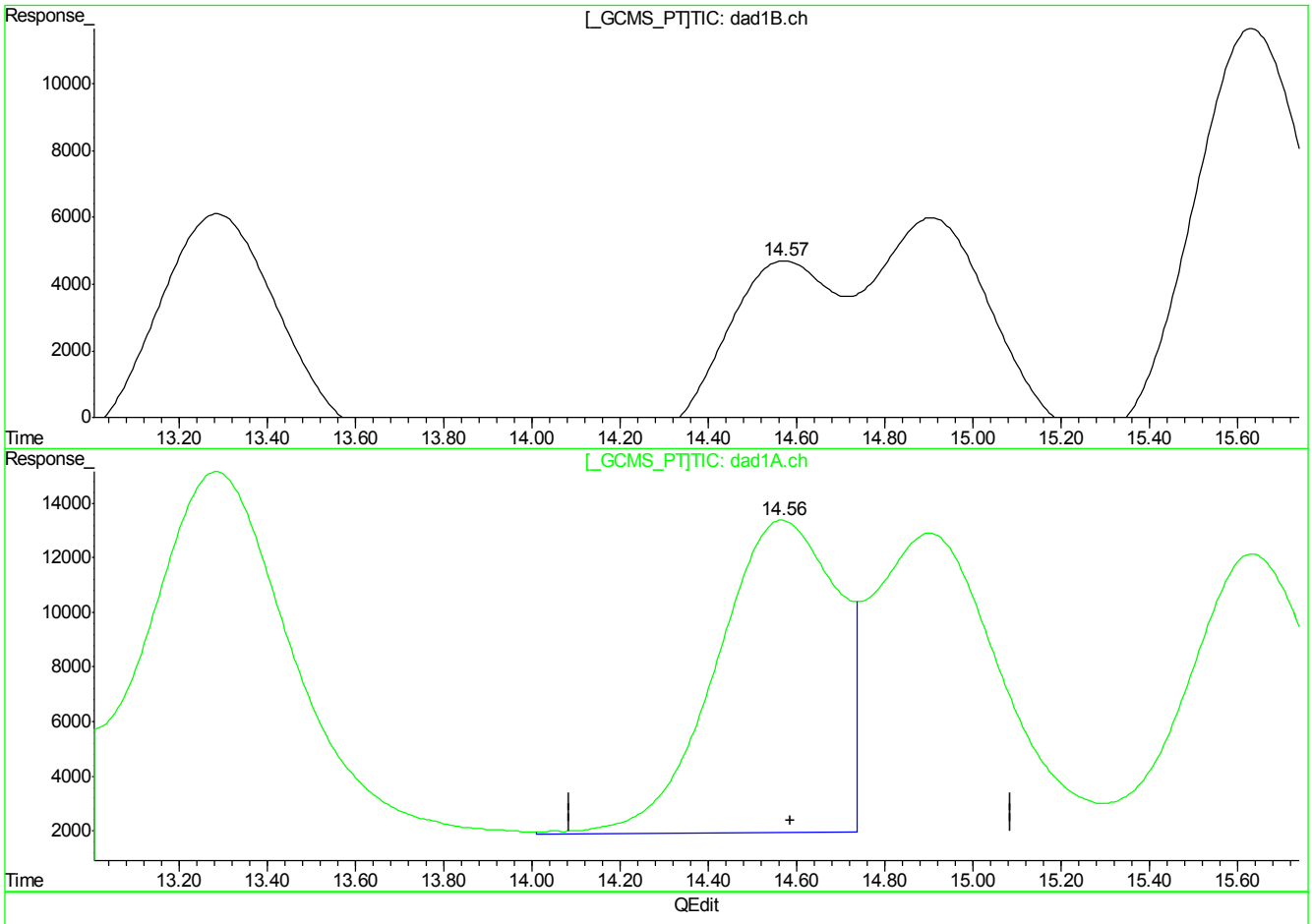
GG613829.D edits: 3,4-Dinitrotoluene

FA53800

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.56min 174.846ppb m

response 2179380

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:57 2017

7.7.16.13

7

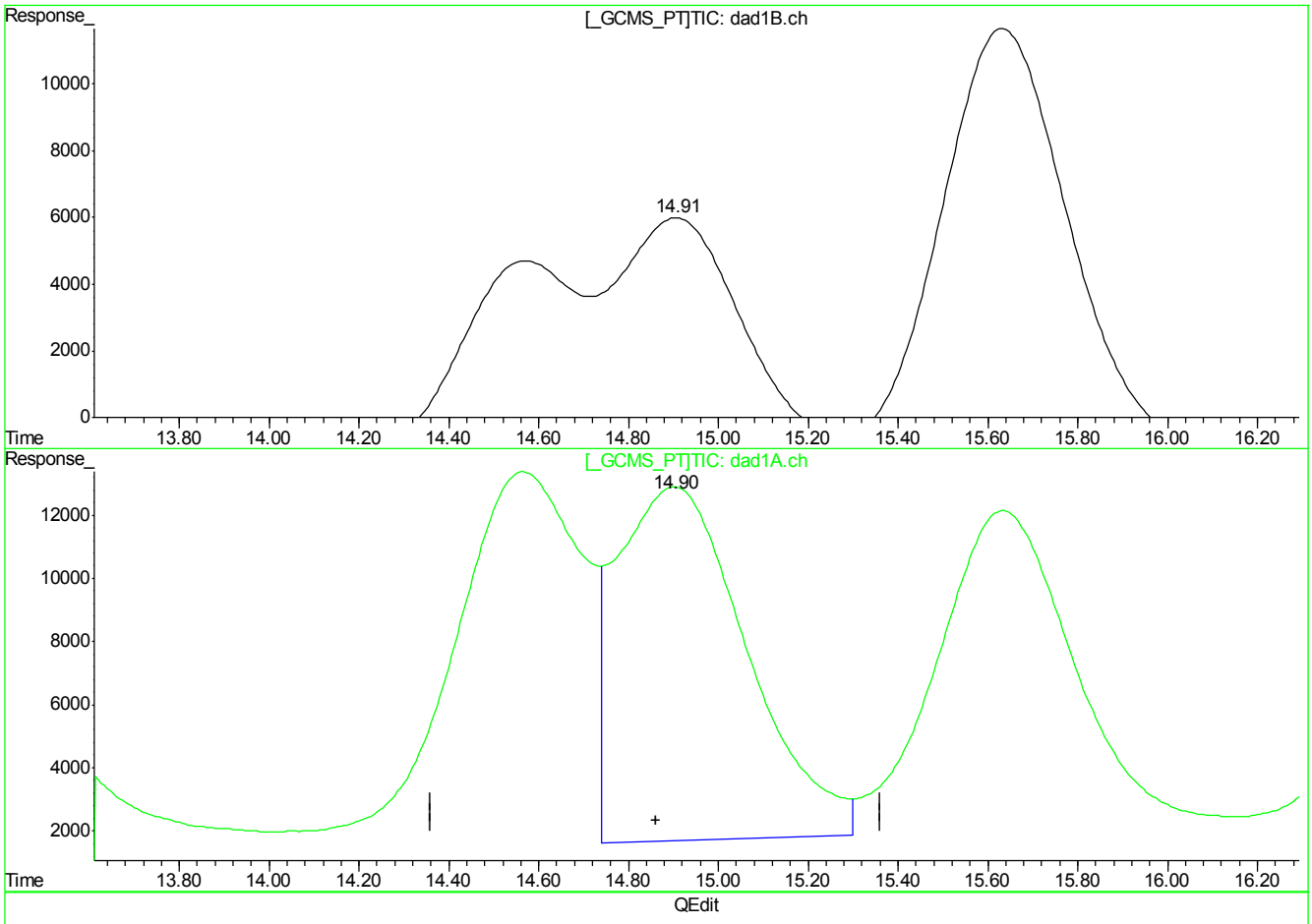
GG613829.D edits: 3,4-Dinitrotoluene

FA53800

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 206.393ppb

response 2250772

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:58 2017

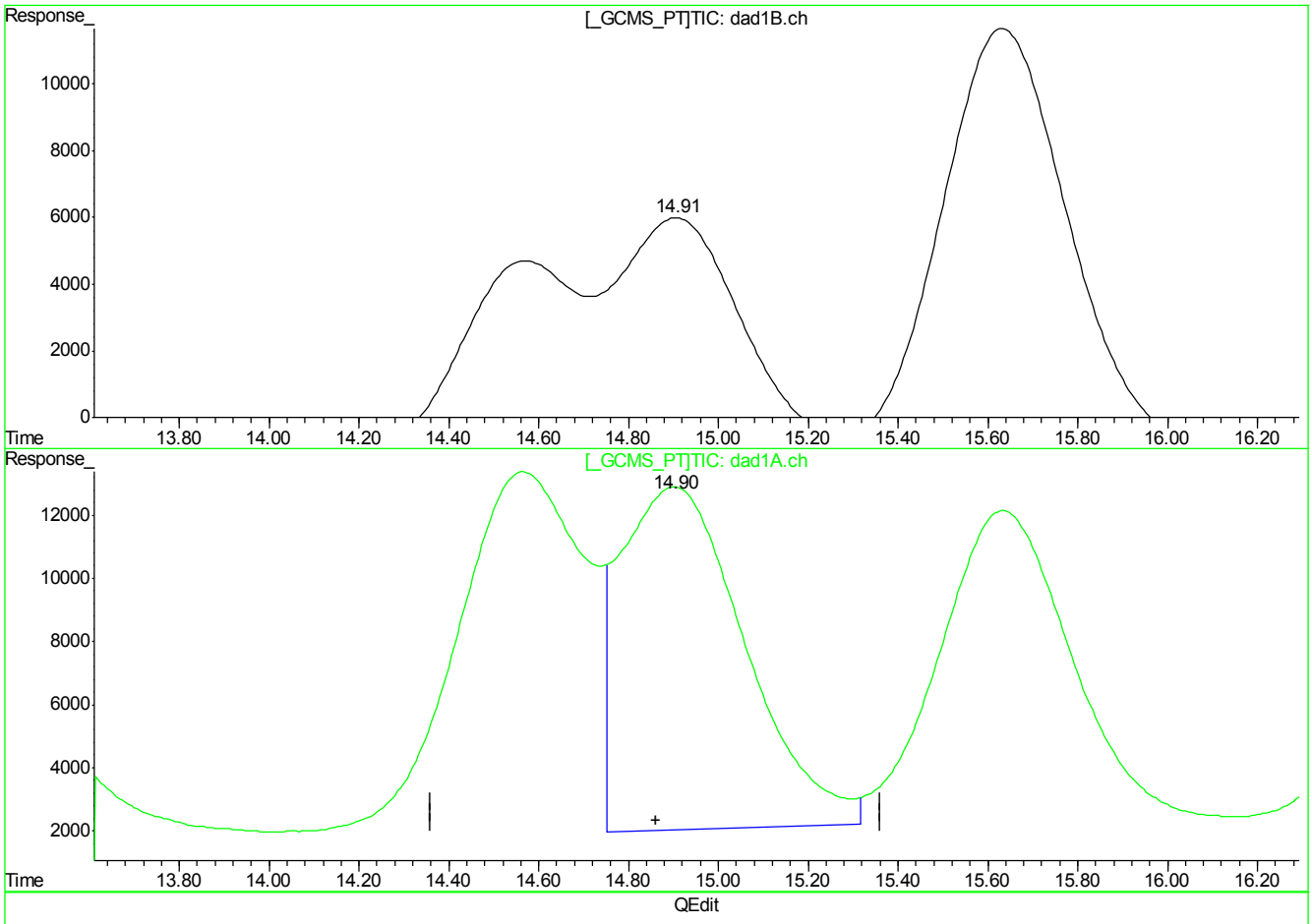
7.7.16.14

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 190.384ppb m

response 2076245

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:09 2017

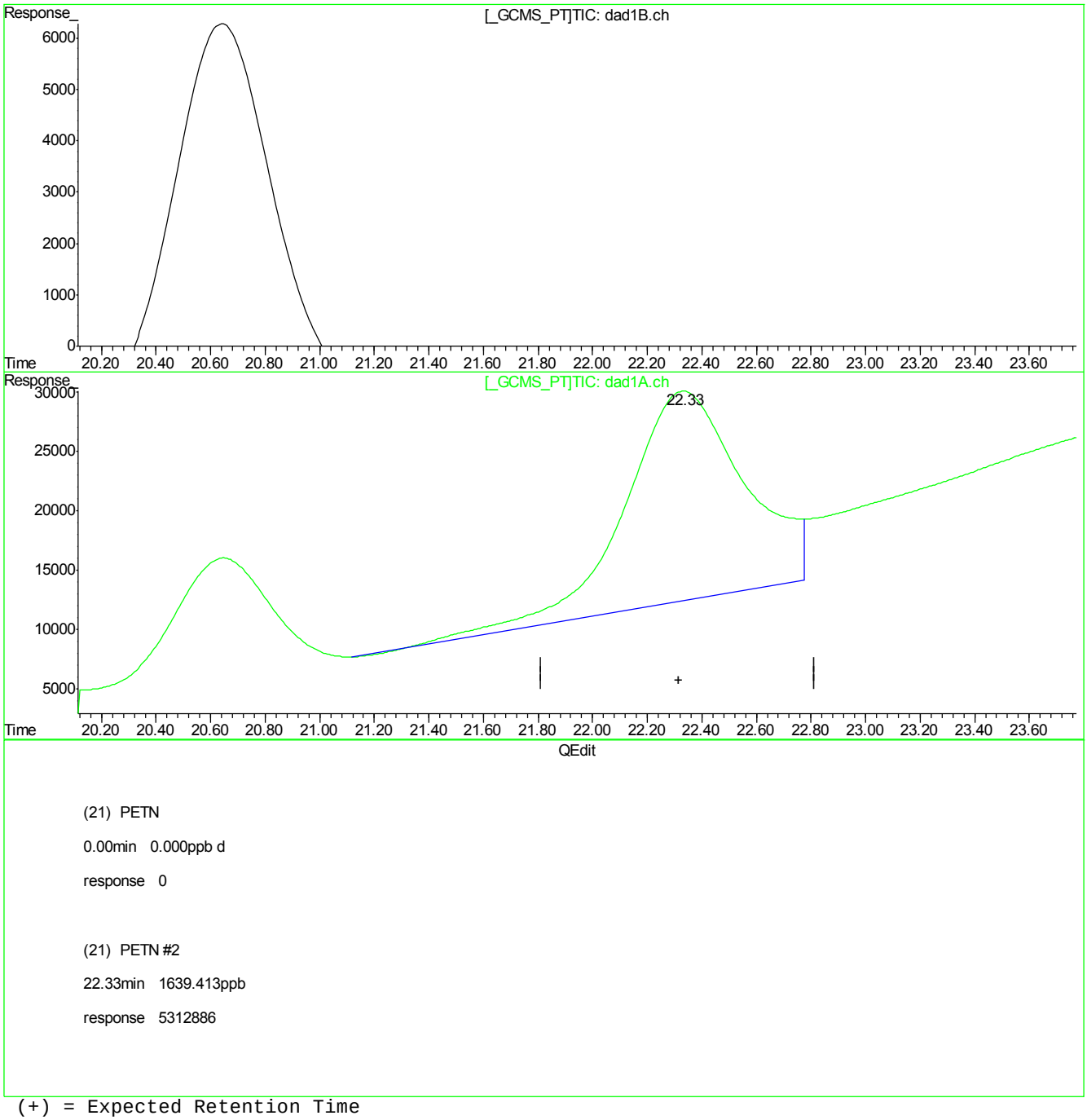
7.7.16.15

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 1639.413ppb

response 5312886

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:16 2017

7.7.16.16

7

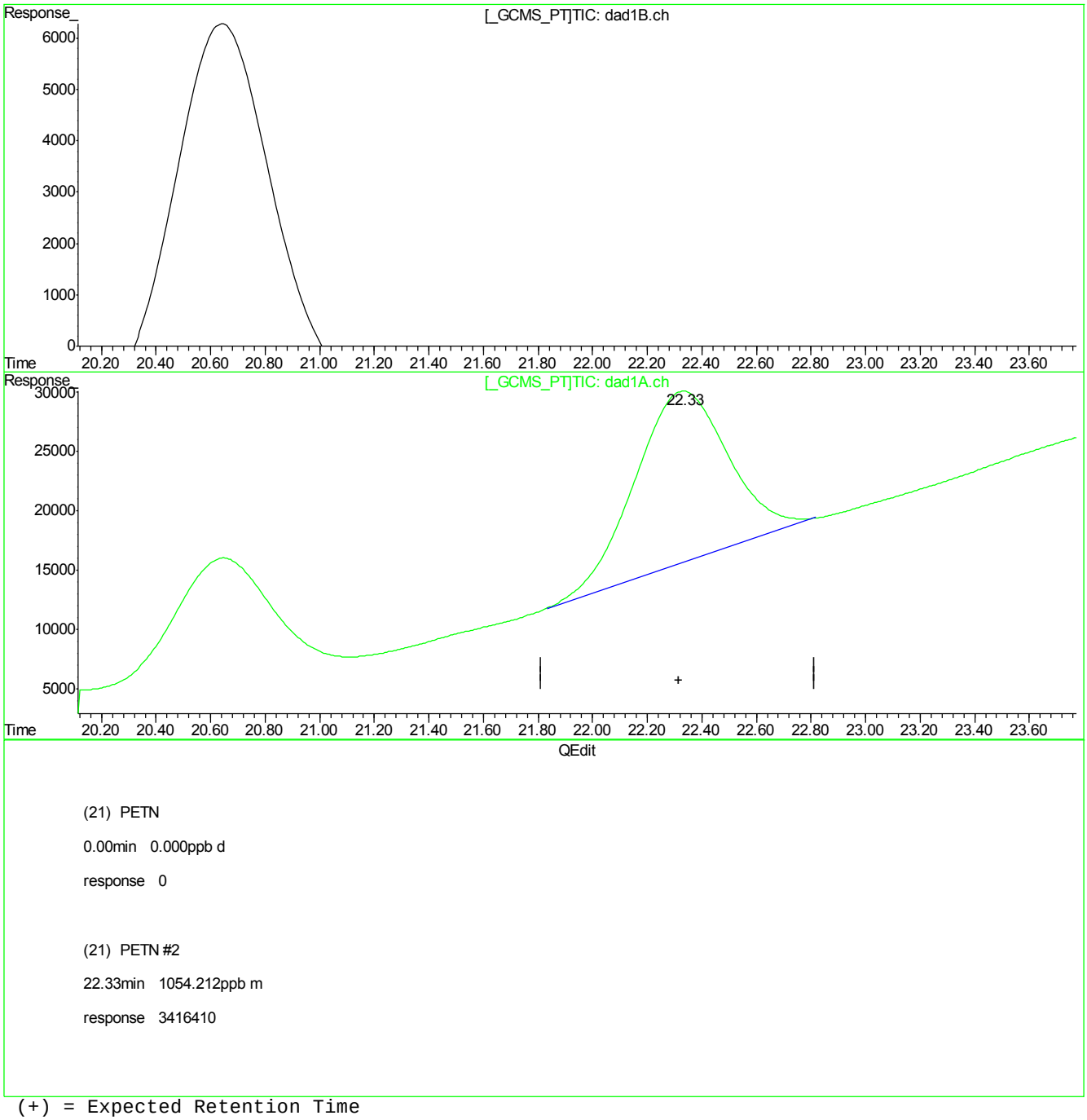
GG613829.D edits: PETN

FA53800

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 1054.212ppb m

response 3416410

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:18 2017

7.7.16.17

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:05 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.56	14.56	2566024	5307161	435.261	429.923
	Spiked Amount 500.000	Range 70 - 136		Recovery =		87.05%	85.98%
	Target Compounds						
1)	TNX	5.01	5.01	7178191	7178191	853.377	851.121
2)	HMX	5.46	5.46	1567471	1567471	412.659	409.740
3)	DNX	5.59	5.59	3839121	3839121	584.891	586.925
4)	MNX	6.66	6.66	3503085	3503085	724.097	724.097
5)	1,3,5-Trinitrobe	7.55	7.55	5075707	5076436	497.074	497.355
6)	RDX	8.07	8.07	2346451	2347827	492.885	495.472
7)	1,3-Dinitrobenze	10.08	10.08	6887672	6720081	473.215	493.198
8)	Nitrobenzene	11.08	11.08	4451511	5219104	582.312	555.512
9)	2,4,6-Trinitroto	11.88	11.88	4723401	7202241	463.275	470.131
10)	Nitroglycerin	0.00	12.71	0	9304341	N.D. d	2578.020
11)	Tetryl	13.28	13.28	3783586	7259516	551.597	570.016
13)	2,6-Dinitrotolue	14.90	14.90	3505597	5120931	504.224	469.790
14)	2,4-Dinitrotolue	15.63	15.63	6338975	4883124	477.045	490.411
15)	o-Nitrotoluene	17.22	17.22	2807950	4120241	603.576	623.959
16)	3,5-Dinitroanili	16.63	16.63	4900917	8015740	462.446	444.537
17)	p-Nitrotoluene	18.39	18.39	5738993	10601258	498.789	491.995
18)	4-Amino-2,6-Dini	18.39	18.39	5738993	10601258	498.789	491.995
19)	m-Nitrotoluene	19.65	19.65	2981905	4897585	565.664	517.775
20)	2-Amino-4,6-Dini	20.63	20.63	4541236	5876348	473.381	434.192
21)	PETN	0.00	22.30	0	8594642	N.D. d	2652.074m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:37:54 2017 Page 1

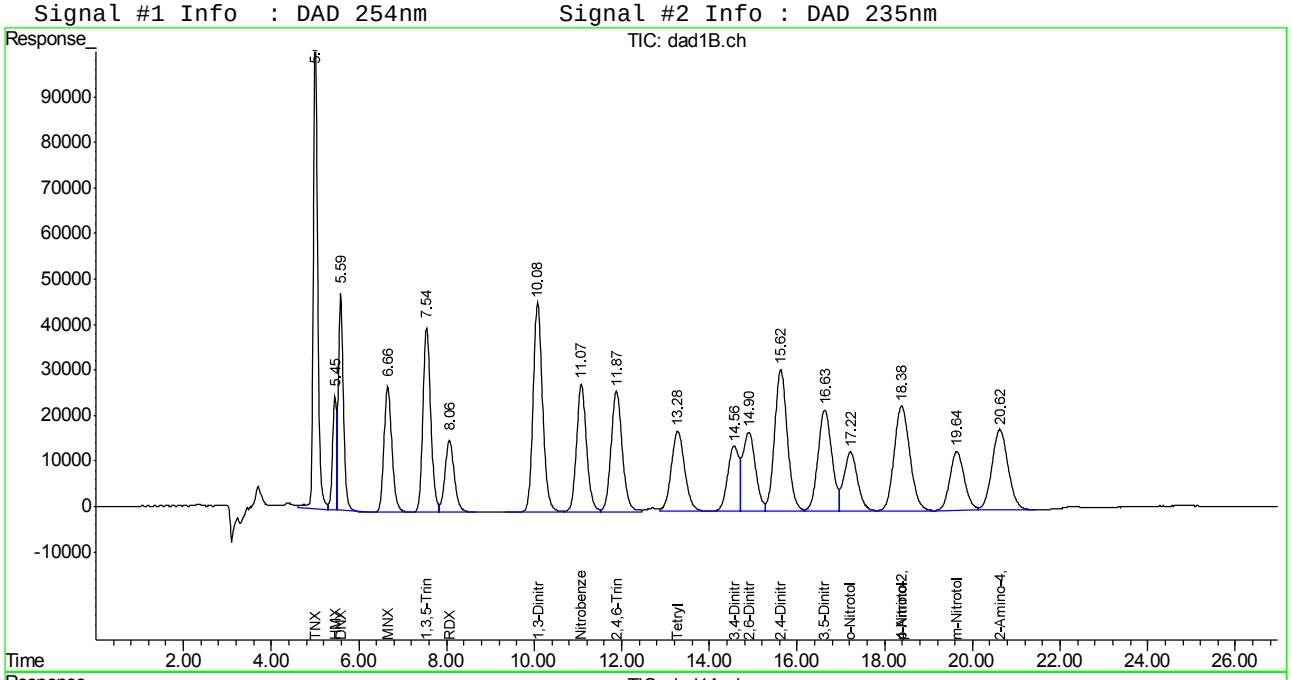
7.7.17
7

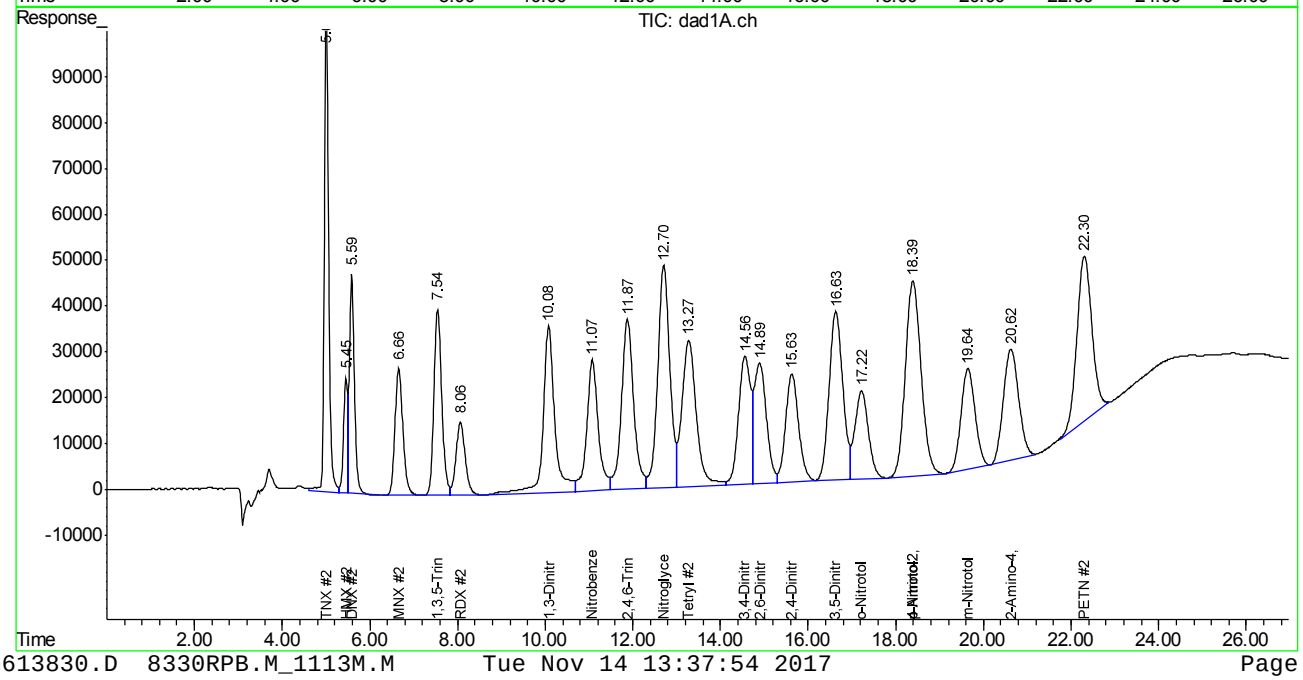
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

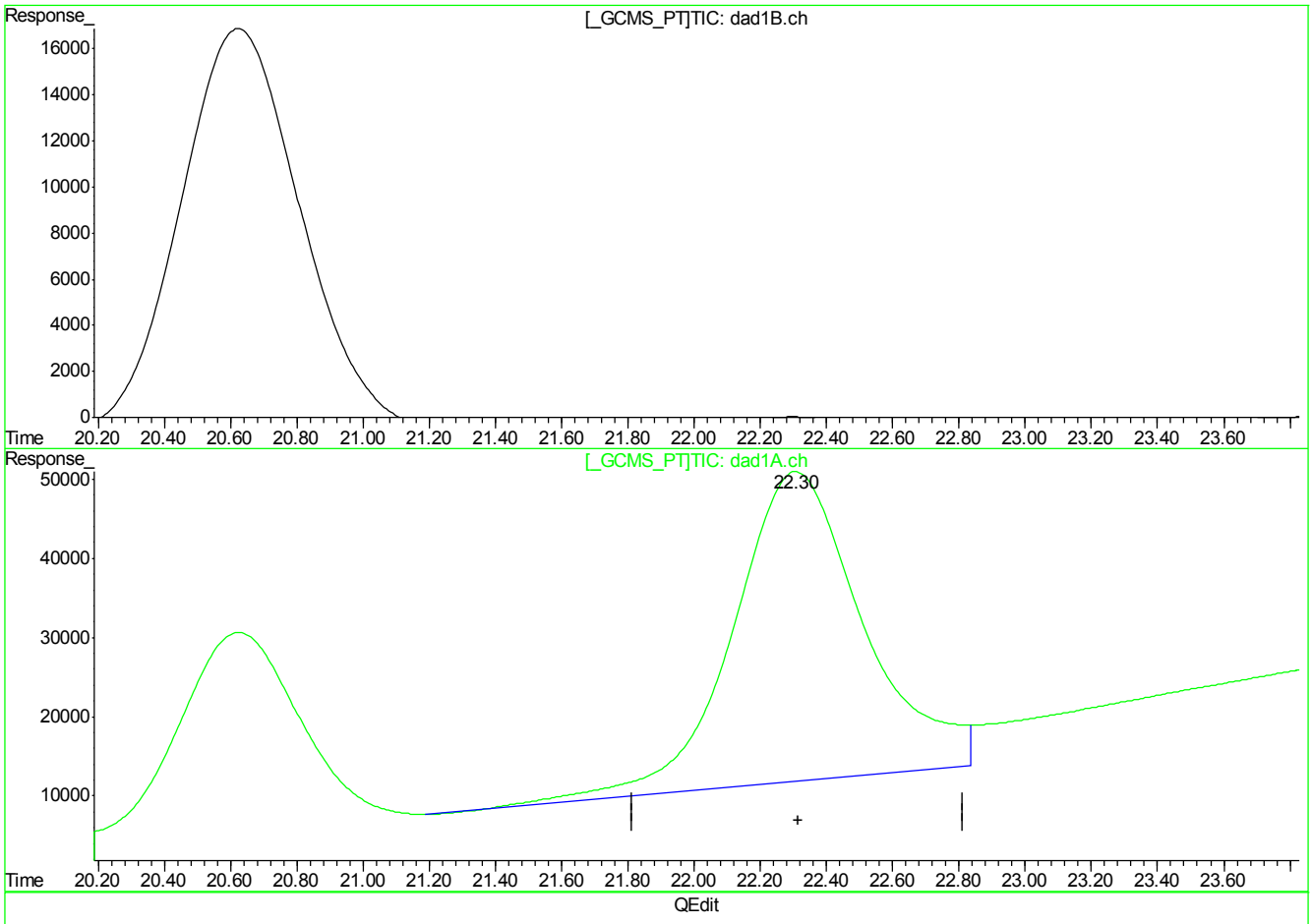
Sample Number:	GGG2571-ICC2571	**Method:**	SW846 8330A
Lab FileID:	GG613830.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:34	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.30	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 3296.542ppb

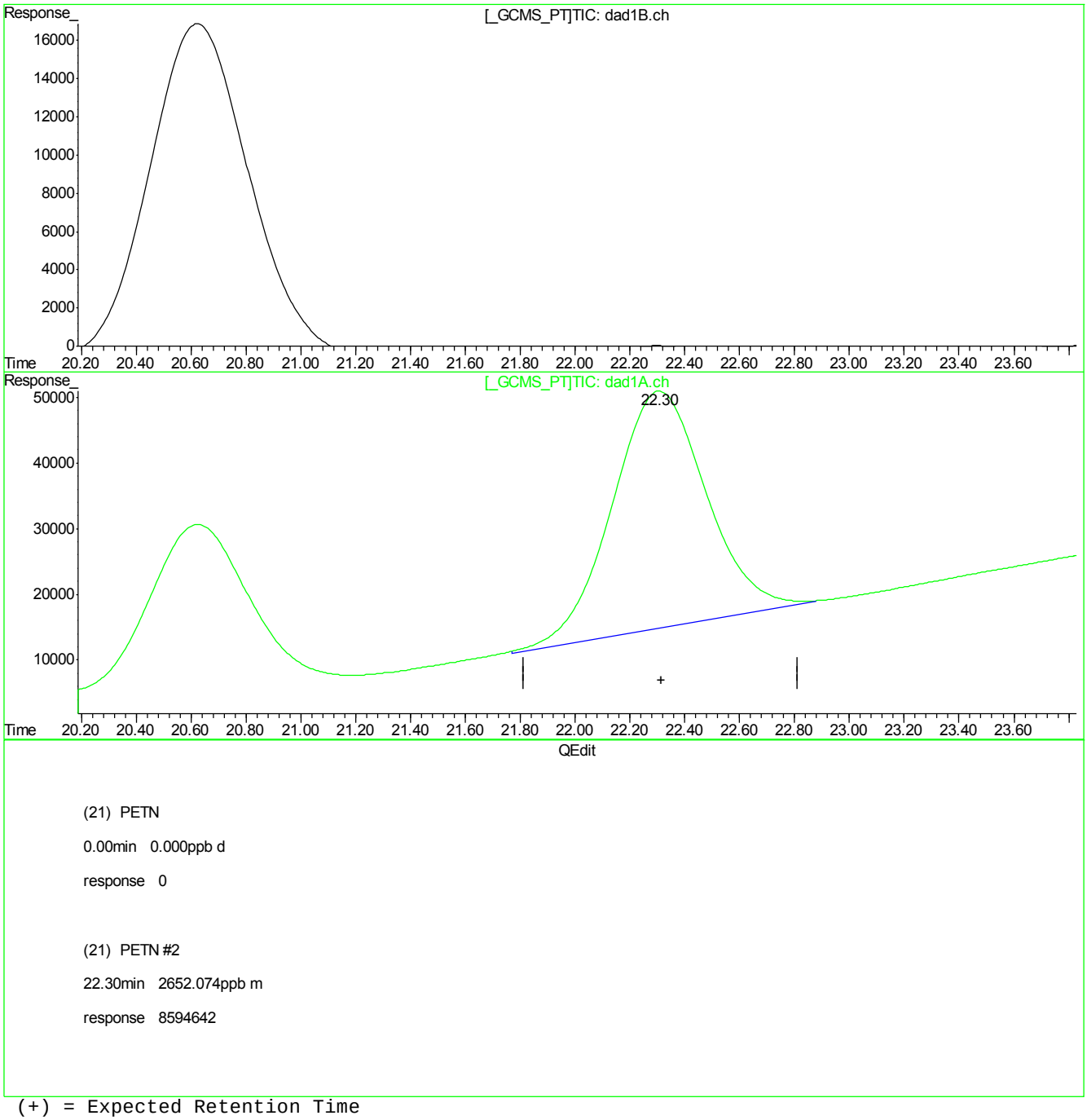
response 10683184

(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:49 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:06 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	5134237	10563524	870.893	870.355
	Spiked Amount 500.000	Range 70 - 136		Recovery =		174.18%#	174.07%#
	Target Compounds						
1)	TNX	5.01	5.01	14095710	14095710	1675.764	1671.335
2)	HMX	5.45	5.45	3075086	3075086	809.559	803.833
3)	DNX	5.59	5.59	7555662	7555662	1151.106	1155.110
4)	MNX	6.66	6.66	7011708	7021085	1449.340	1451.278
5)	1,3,5-Trinitrobe	7.54	7.54	10137190	10160510	992.756	995.458
6)	RDX	8.06	8.06	4692682	4737484	985.724	999.772
7)	1,3-Dinitrobenze	10.08	10.08	13715413	12037357	942.312	920.589
8)	Nitrobenzene	11.07	11.07	8906160	9757665	1165.035	1052.303
9)	2,4,6-Trinitroto	11.87	11.87	9383167	13474808	920.308	899.133
10)	Nitroglycerin	0.00	12.70	0	18017203	N.D. d	5087.336
11)	Tetryl	13.27	13.26	7535288	13894482	1098.545	1049.997
13)	2,6-Dinitrotolue	14.89	14.89	6992017	10221713	1005.690	938.471
14)	2,4-Dinitrotolue	15.62	15.62	12638679	9128347	951.136	914.210
15)	o-Nitrotoluene	17.22	17.21	5638423	8443365	1108.003	1134.699
16)	3,5-Dinitroanili	16.62	16.62	9768472	16313142	921.745	898.051
17)	p-Nitrotoluene	18.38	18.38	11526542	21366781	1001.798	970.537
18)	4-Amino-2,6-Dini	18.38	18.38	11526542	21366781	1001.798	970.537
19)	m-Nitrotoluene	19.64	19.64	6023786	9889615	1061.910	1045.534
20)	2-Amino-4,6-Dini	20.62	20.62	9161666	12398036	955.017	916.067
21)	PETN	0.00	22.31	0	17345332	N.D. d	5352.300m

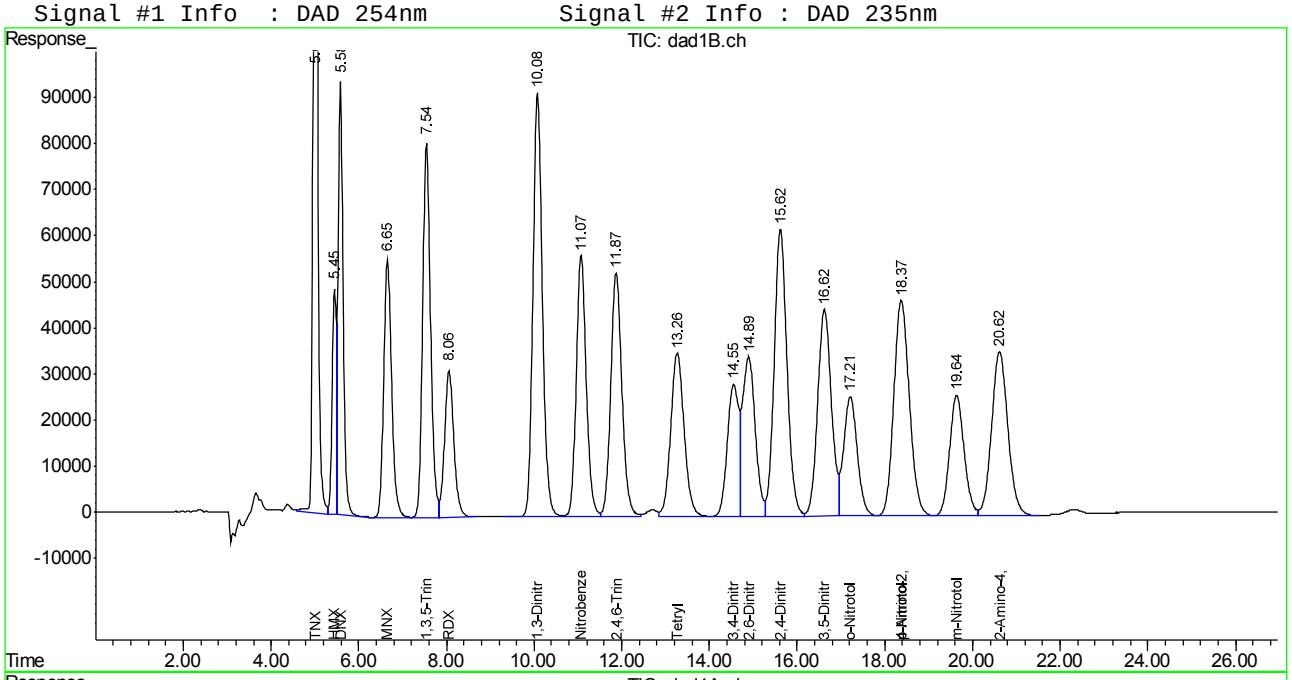
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

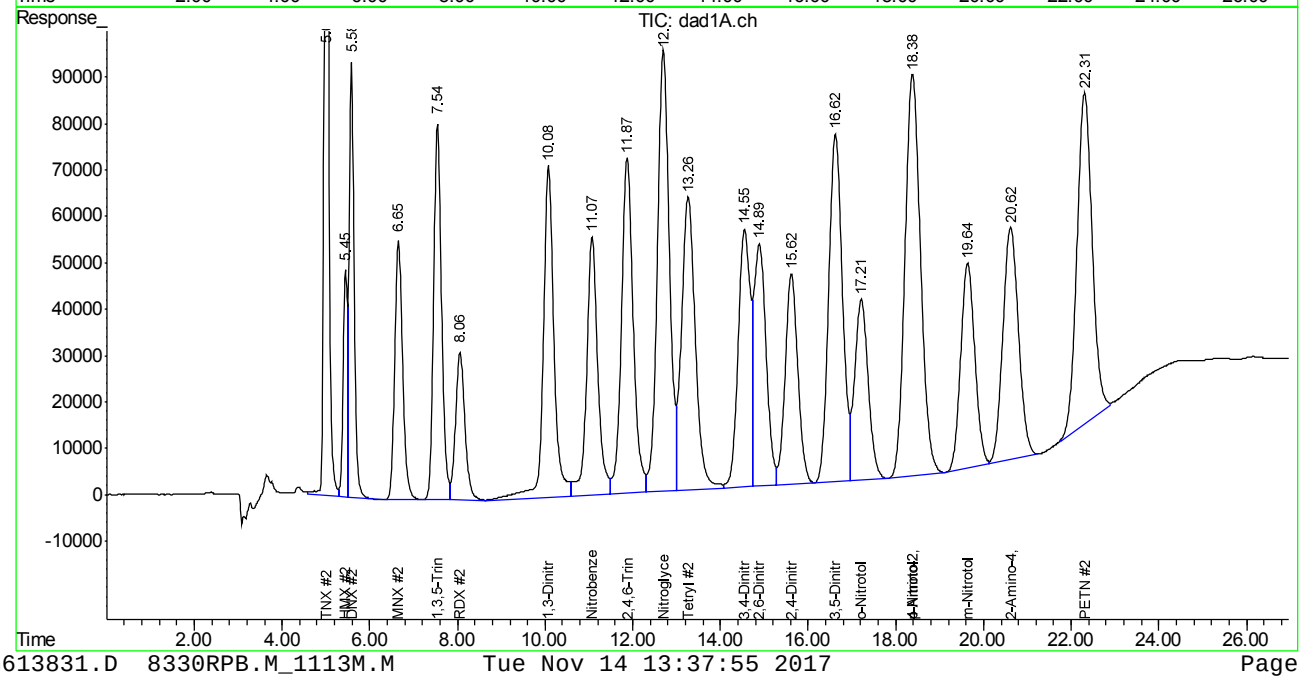
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

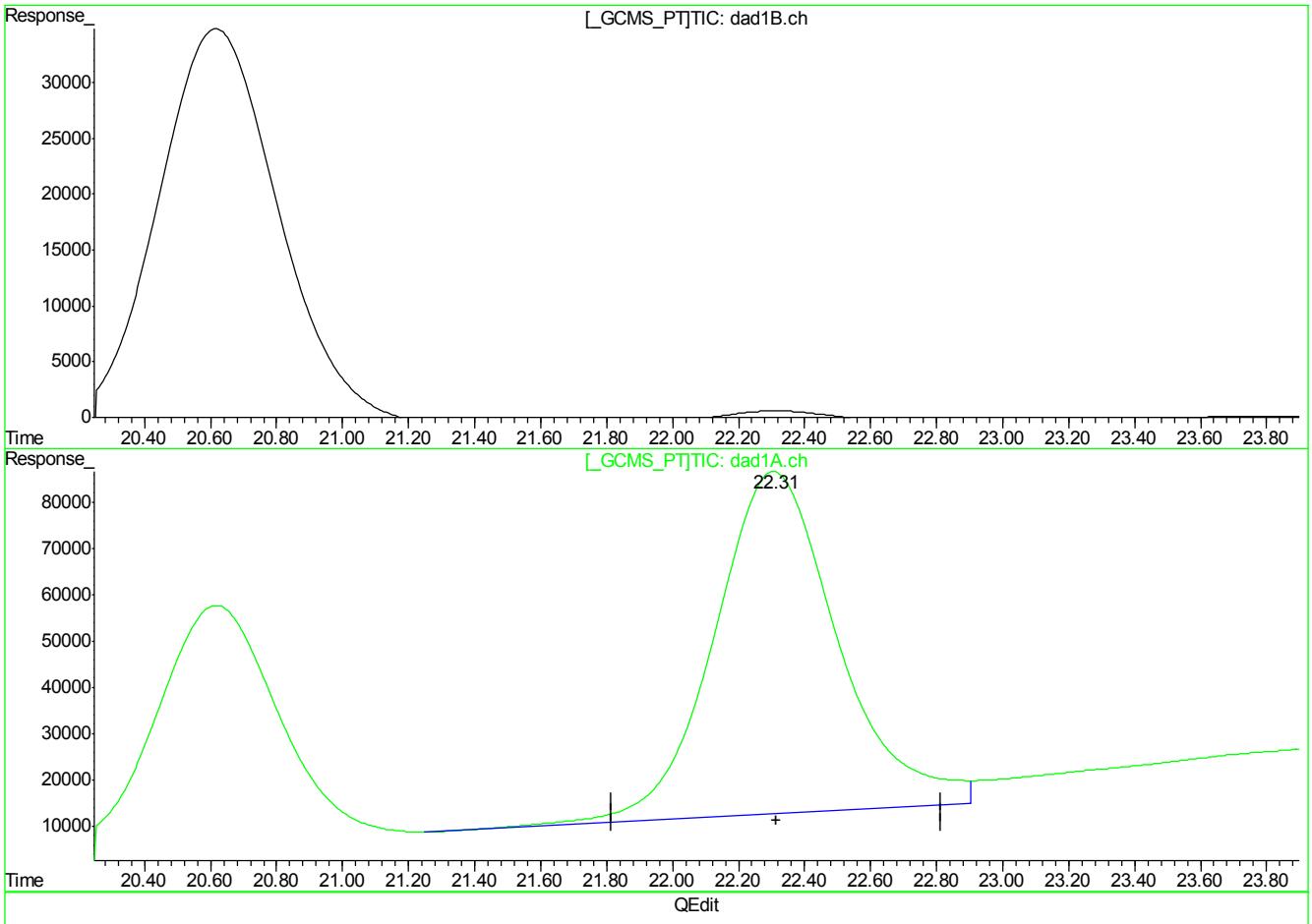
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613831.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:03	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.31	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 5907.912ppb

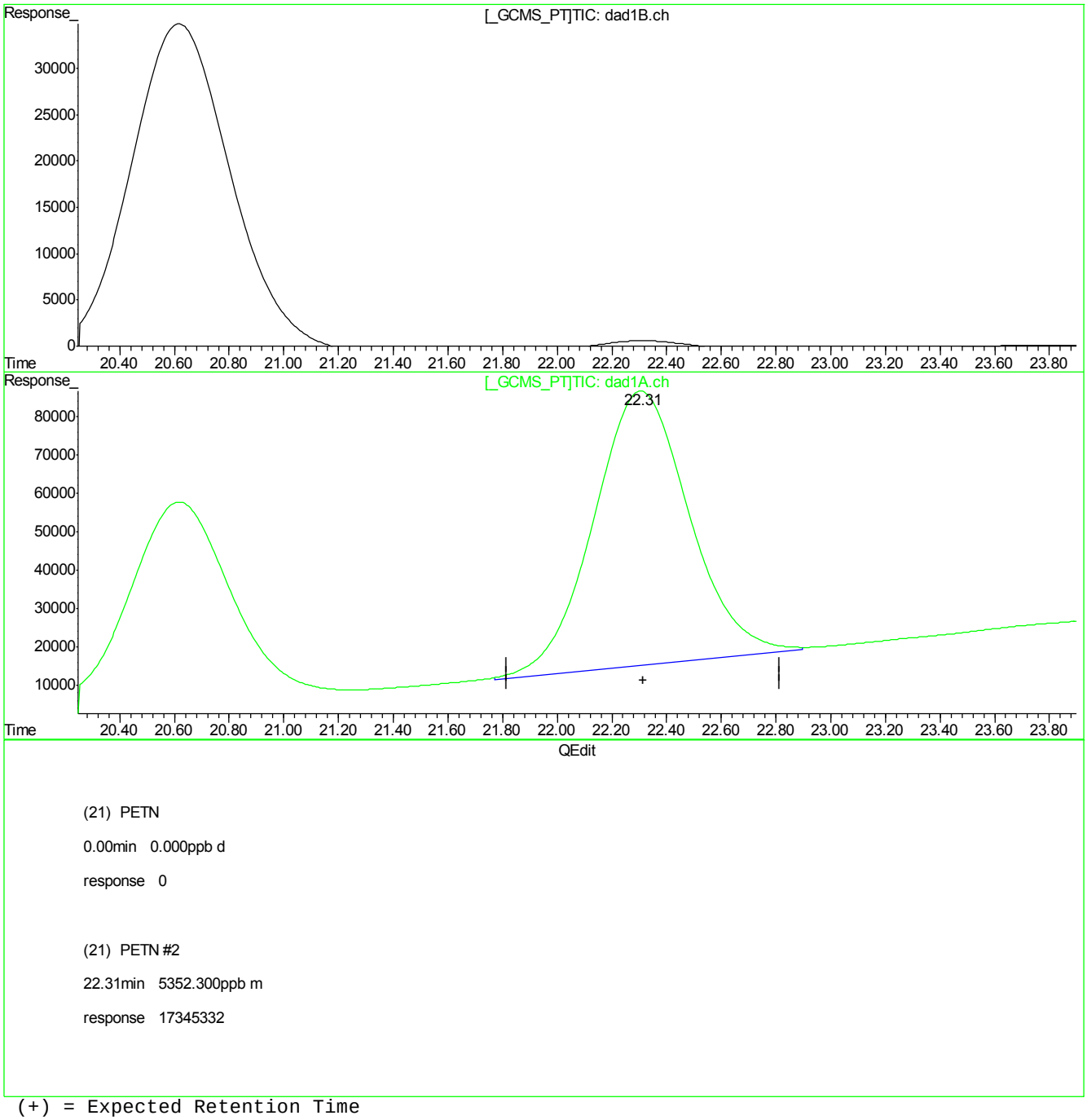
response 19145917

(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 5352.300ppb m

response 17345332

(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:10 2017

GG613832.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:07 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.57	10550046	21399713	1789.548	1831.472
	Spiked Amount 500.000	Range 70 - 136		Recovery =		357.91%#	366.29%#
	Target Compounds						
1)	TNX	5.01	5.01	28286611	28286611	3362.844	3353.956
2)	HMX	5.45	5.45	6160036	6160036	1621.715	1610.245
3)	DNX	5.59	5.59	15111963	15111963	2302.310	2310.317
4)	MNX	6.67	6.67	14319142	14379845	2959.807	2972.354
5)	1,3,5-Trinitrobe	7.55	7.55	20630748	20736361	2020.412	2031.609
6)	RDX	8.07	8.07	9542524	9714929	2004.461	2050.183
7)	1,3-Dinitrobenze	10.09	10.09	27925425	22088278	1918.604	1861.609
8)	Nitrobenzene	11.08	11.08	17989336	17591198	2353.226	1943.111
9)	2,4,6-Trinitroto	11.88	11.88	19144422	26204296	1877.700	1837.967
10)	Nitroglycerin	0.00	12.71	0	35699929	N.D. d	10513.714
11)	Tetryl	13.28	13.28	15460803	27450889	2253.980	1939.407
13)	2,6-Dinitrotolue	14.91	14.90	14299221	20816201	2056.715	1914.307
14)	2,4-Dinitrotolue	15.63	15.63	25833590	18399200	1944.131	1831.671
15)	o-Nitrotoluene	17.23	17.23	11486355	17079534	1968.871	1946.822
16)	3,5-Dinitroanili	16.63	16.63	19978063	33141066	1885.113	1798.231
17)	p-Nitrotoluene	18.40	18.40	23561706	43403899	2047.801	1893.857
18)	4-Amino-2,6-Dini	18.40	18.40	23561706	43403899	2047.801	1893.857
19)	m-Nitrotoluene	19.66	19.66	12222790	20535097	1919.977	2170.979
20)	2-Amino-4,6-Dini	20.63	20.63	18737965	26088409	1953.256	1927.623
21)	PETN	0.00	22.32	0	35262467	N.D. d	10881.043m

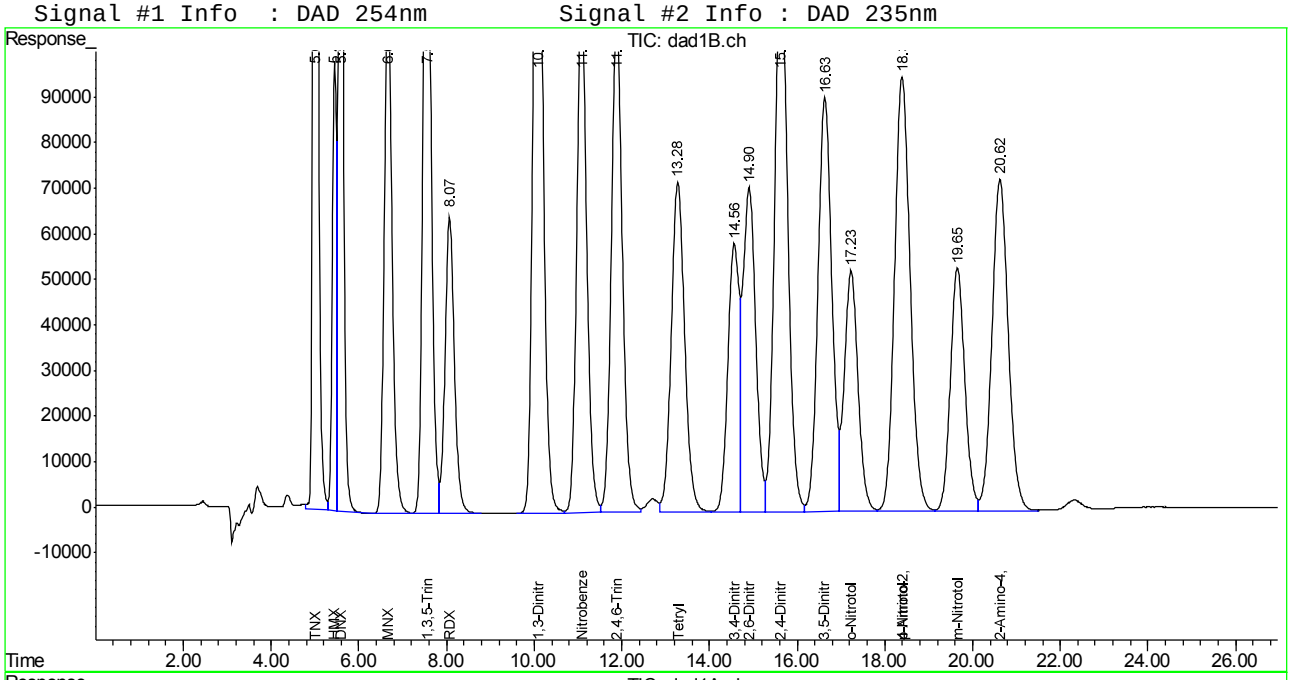
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 13:37:56 2017 Page 1

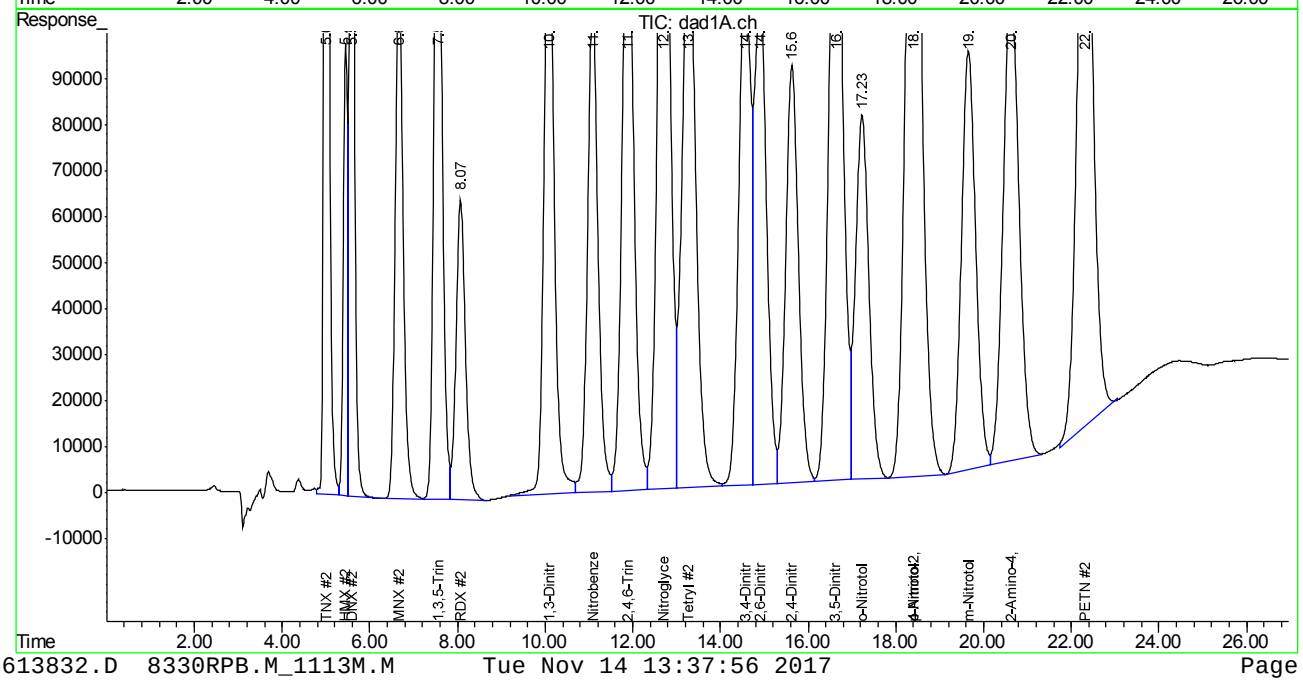
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

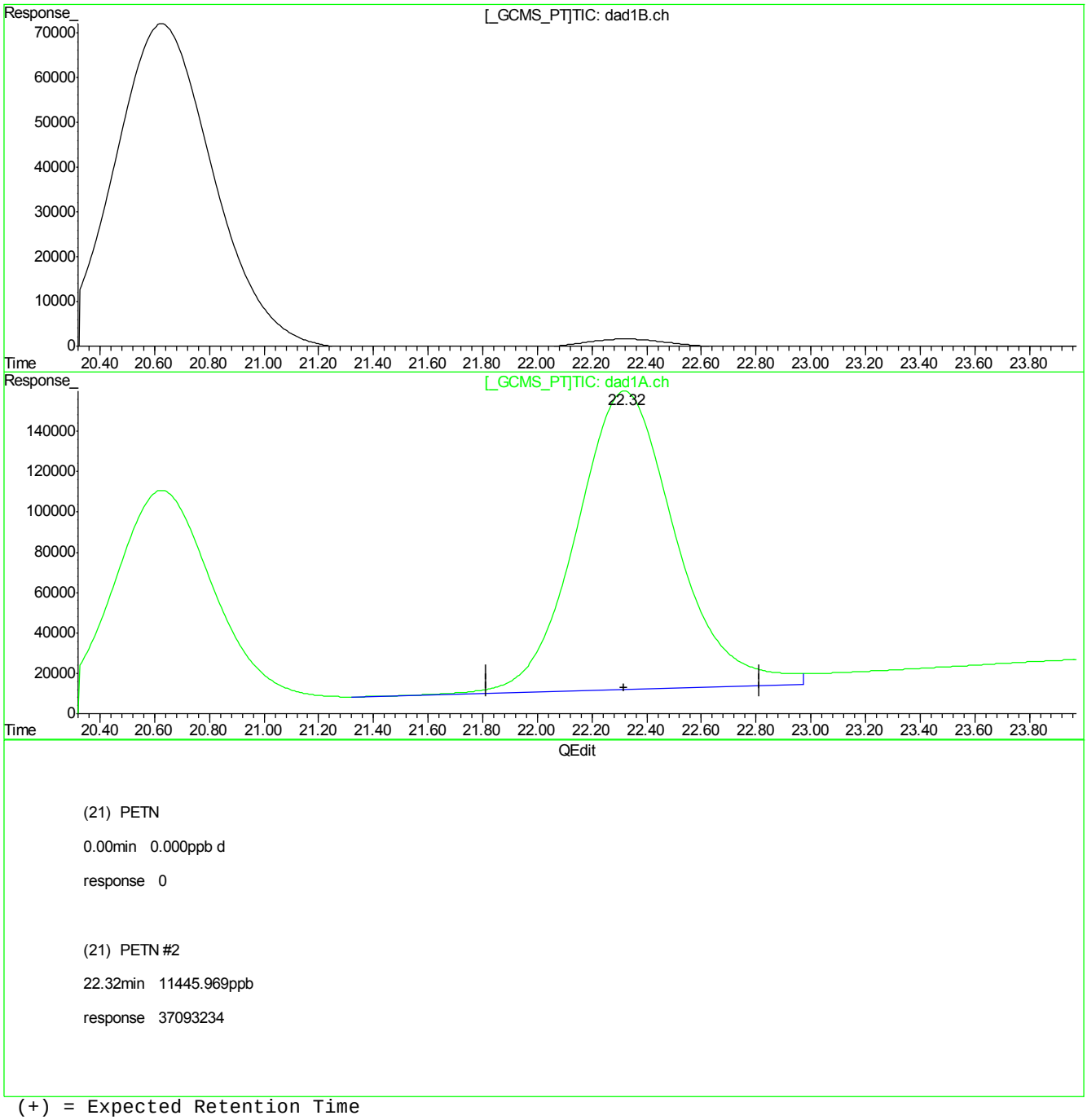
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613832.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:33	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.32	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration

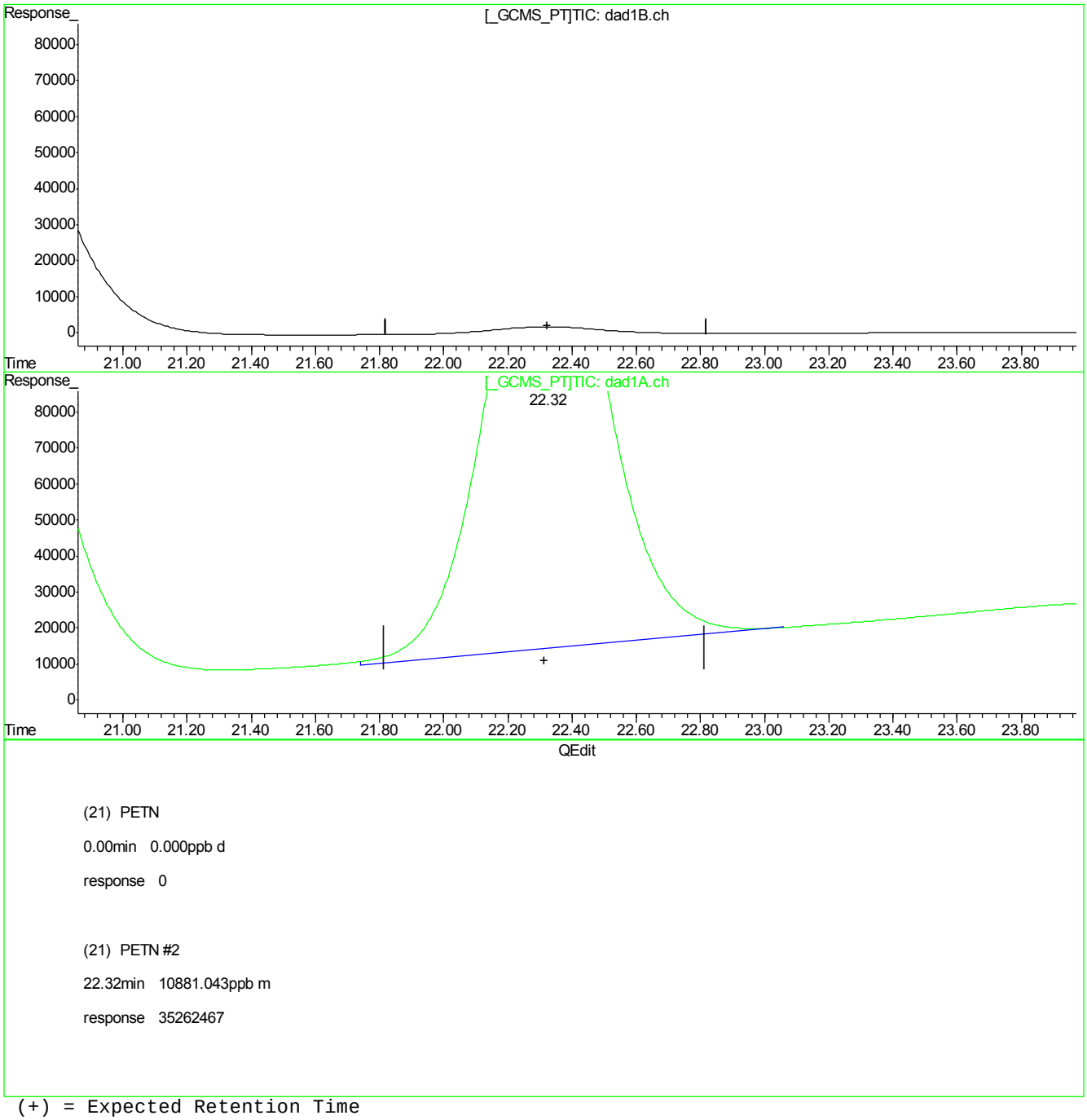


(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:30 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:38 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15:22 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	5.00	5.00	4427614	4427614	311.255	311.279
2)	HMX	5.44	5.44	1660951	1660951	512.341	515.543
3)	DNX	5.57	5.57	3728715	3728715	481.707	479.565
4)	MNX	6.64	6.64	3500595	3500595	498.403	498.000
5)	1,3,5-Trinitrobe	7.53	7.53	5084566	5085276	490.713	490.831
6)	RDX	8.04	8.04	2404792	2408976	504.766	507.885
7)	1,3-Dinitrobenze	10.06	10.06	6578375	6672490	459.805	525.898
8)	Nitrobenzene	11.05	11.05	4554253	5345006	482.574	577.158
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	12.68	0	9322634	N.D. d	2766.568
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.89	14.89	3527390	5488834	493.369	540.982
14)	2,4-Dinitrotolue	15.60	15.60	6348698	4712292	484.298	495.523
15)	o-Nitrotoluene	17.20	17.20	2958205	4396320	512.102	509.800
16)	3,5-Dinitroanili	16.59	16.59	4689804	7872997	479.670	484.898
17)	p-Nitrotoluene	18.35	18.36	5769728	10811008	491.360	510.118
18)	4-Amino-2,6-Dini	18.35	18.36	5769728	10811008	491.360	508.634
19)	m-Nitrotoluene	19.62	19.62	3222471	5107269	546.610	525.201
20)	2-Amino-4,6-Dini	20.59	20.59	4643185	5903363	514.599	496.742
21)	PETN	0.00	22.29	0	9227376	N.D. d	2876.898m

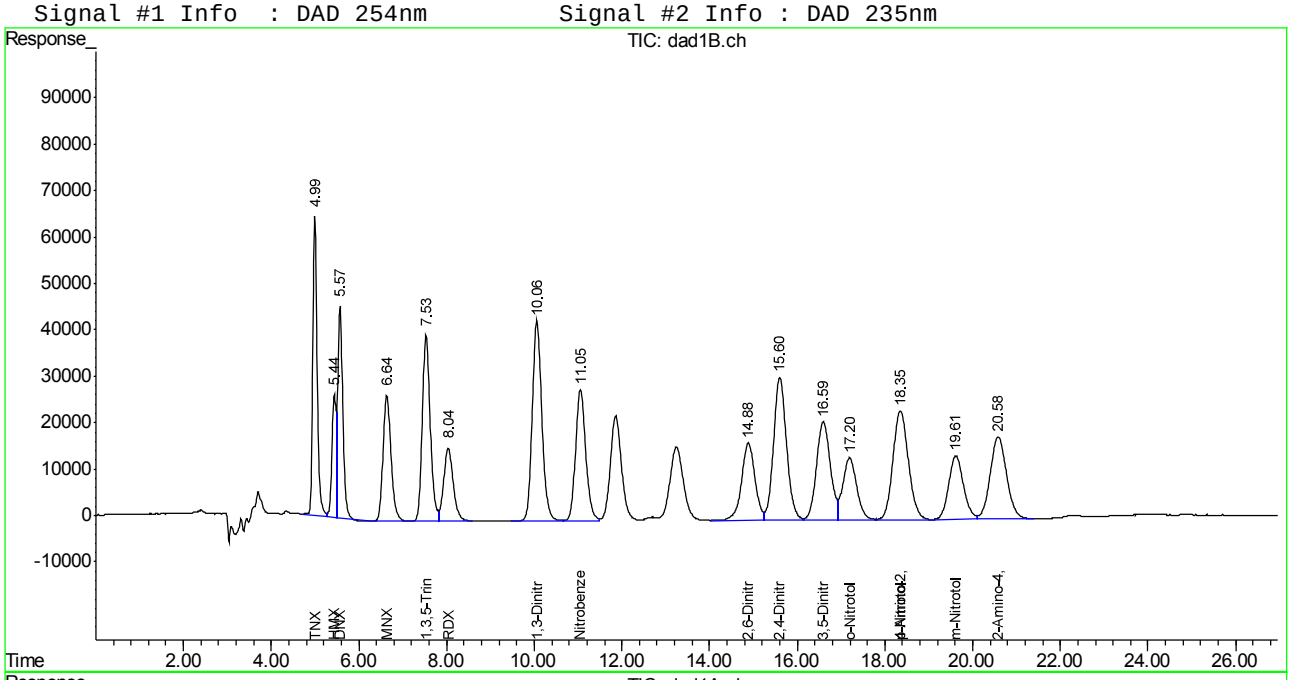
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 13:37:57 2017 Page 1

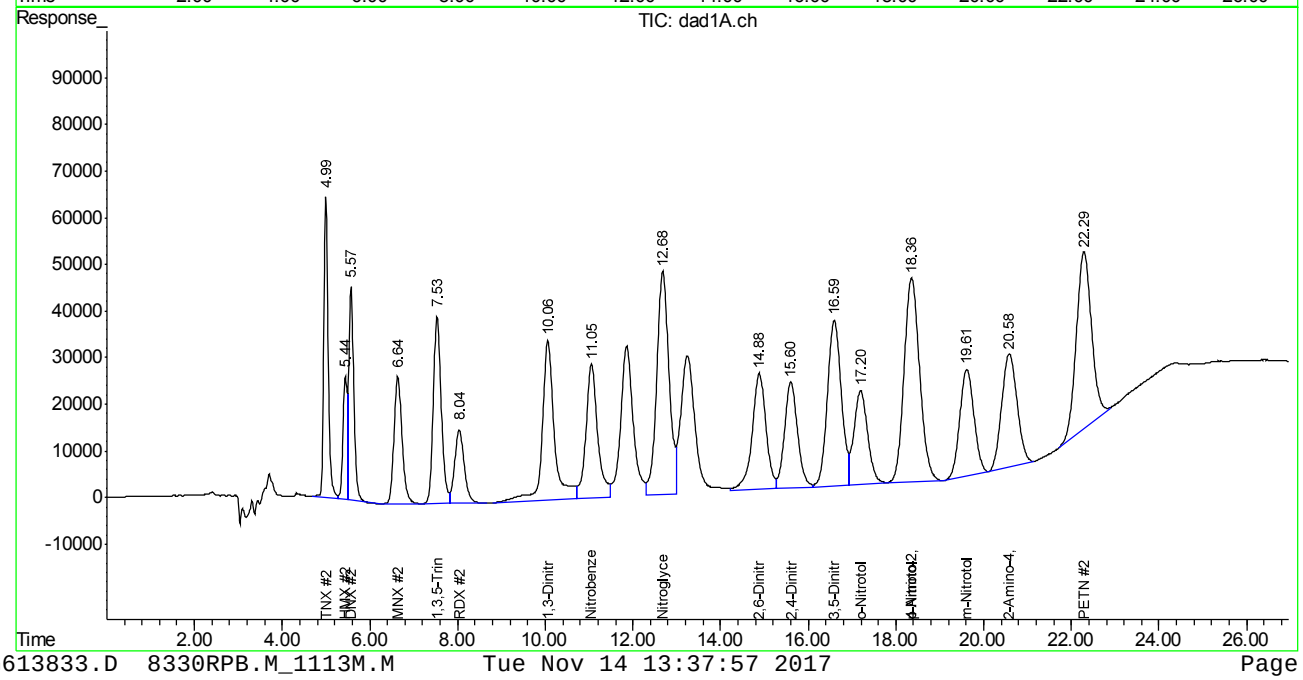
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

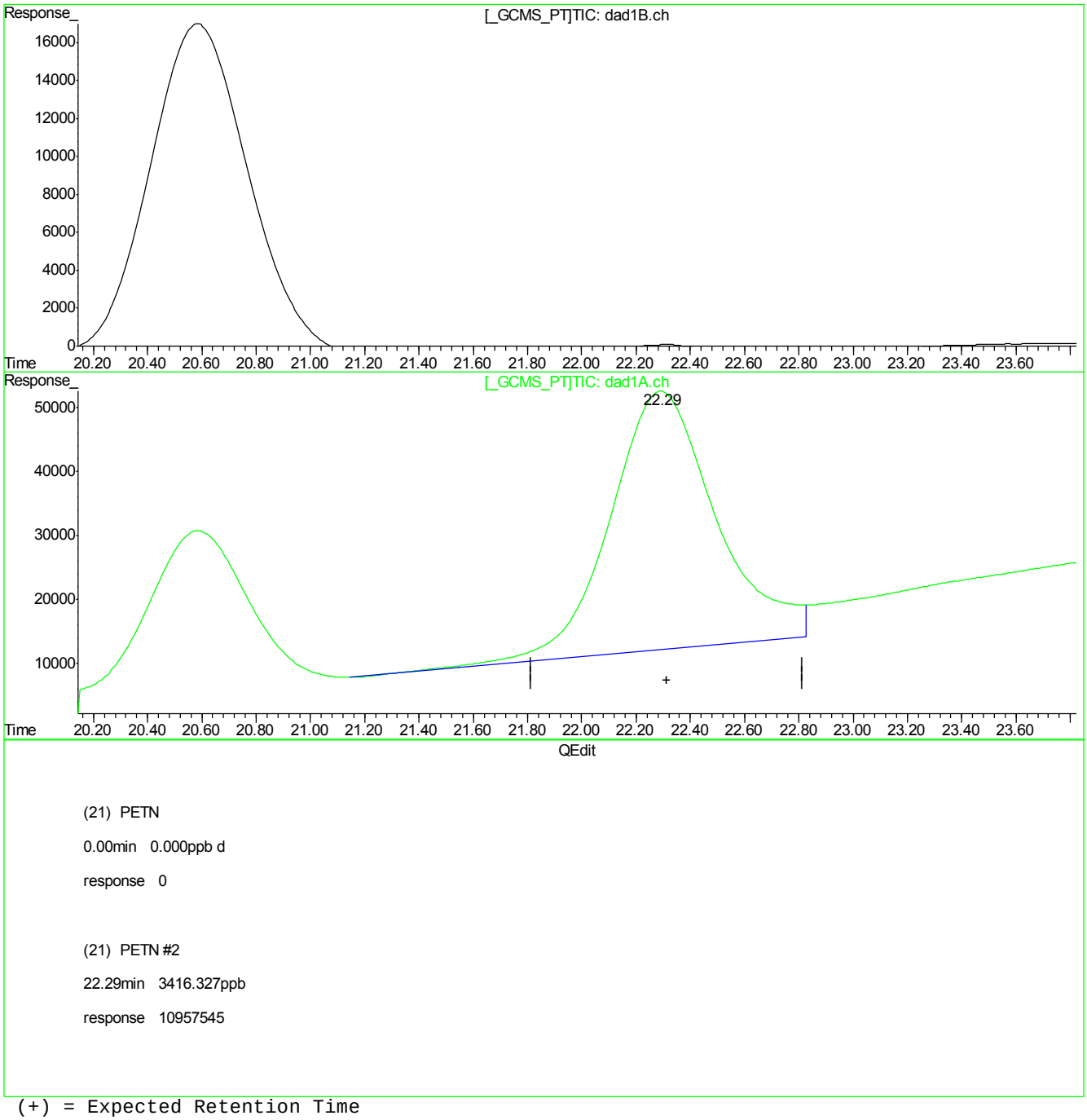
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613833.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 17:02	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.29	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

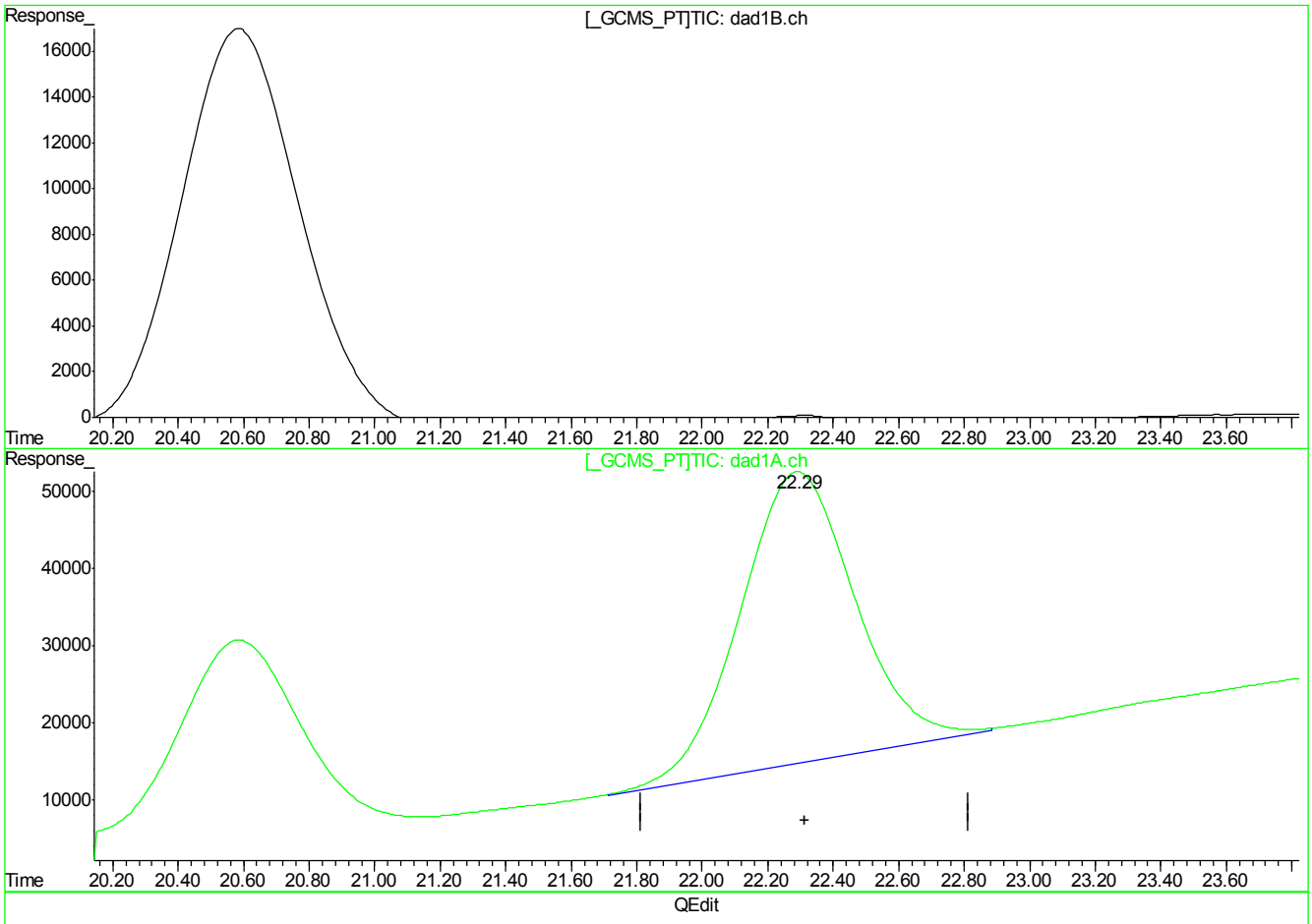


(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.29min 2876.898ppb m

response 9227376

(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:14 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:16:38 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	11.88	11.87	4812246	6368475	474.847	485.592m
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	13.27	13.27	4161106	7319038	513.472	520.034m
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

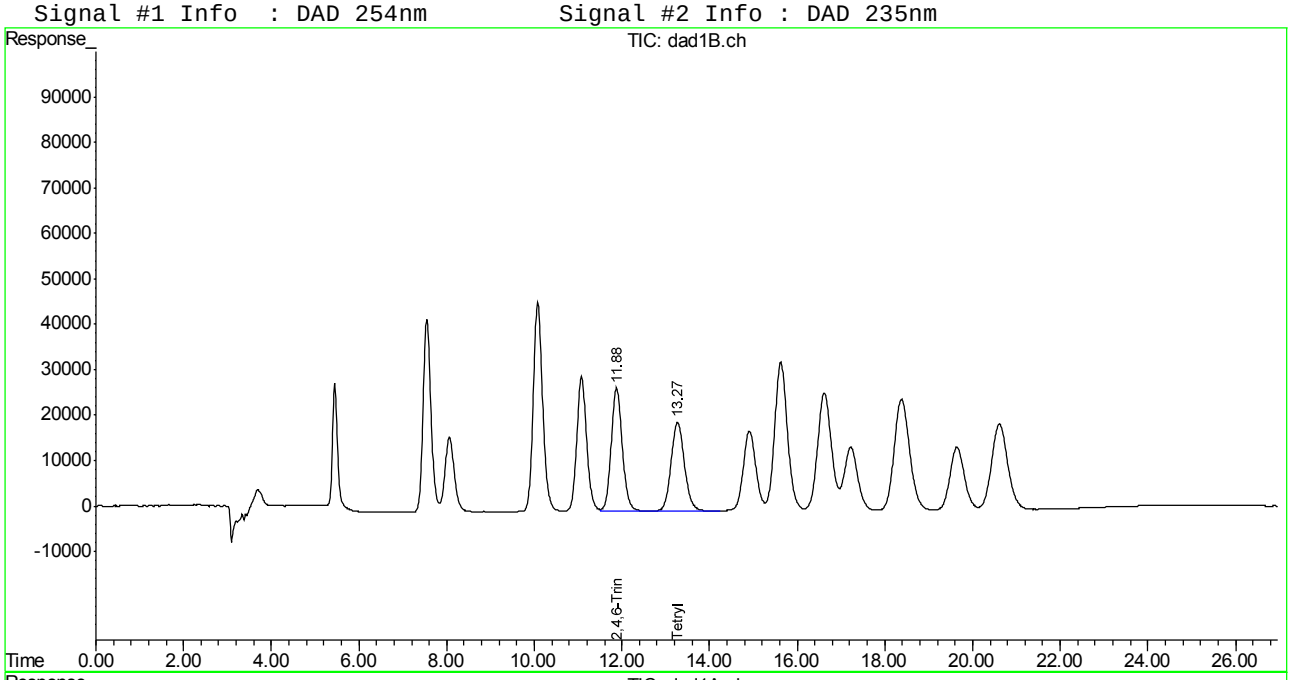
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:46:13 2017 Page 1

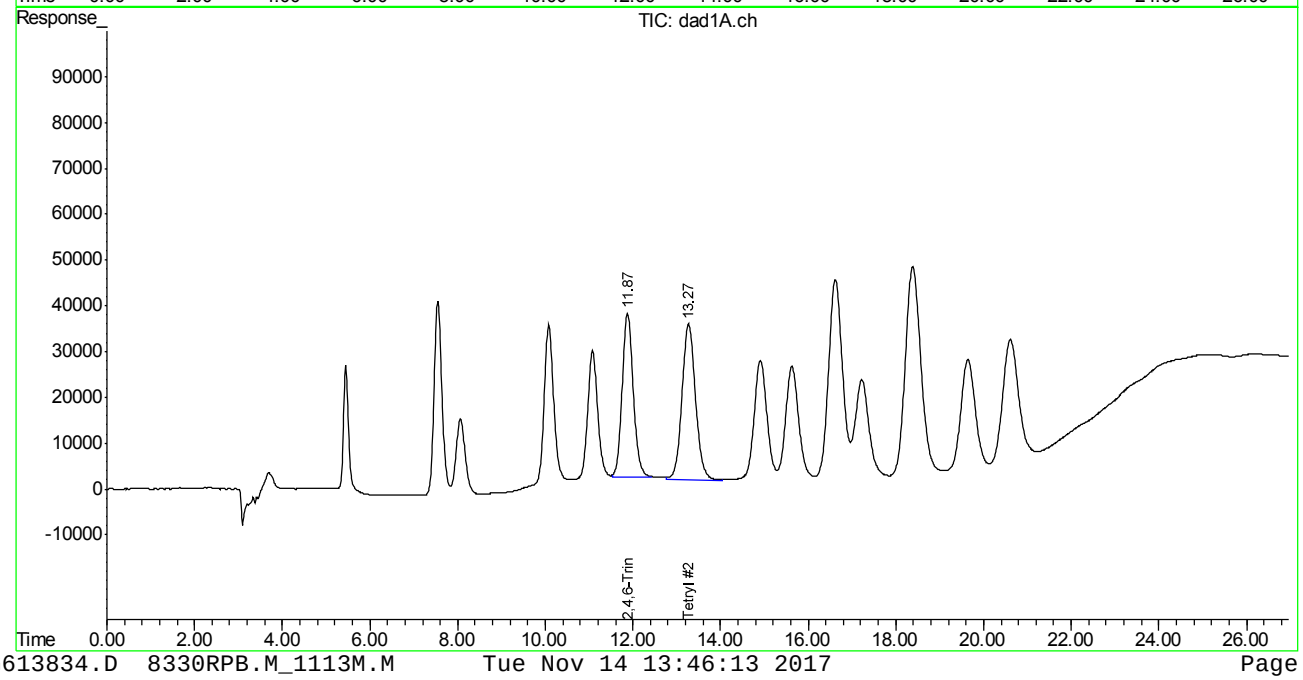
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 13:45 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

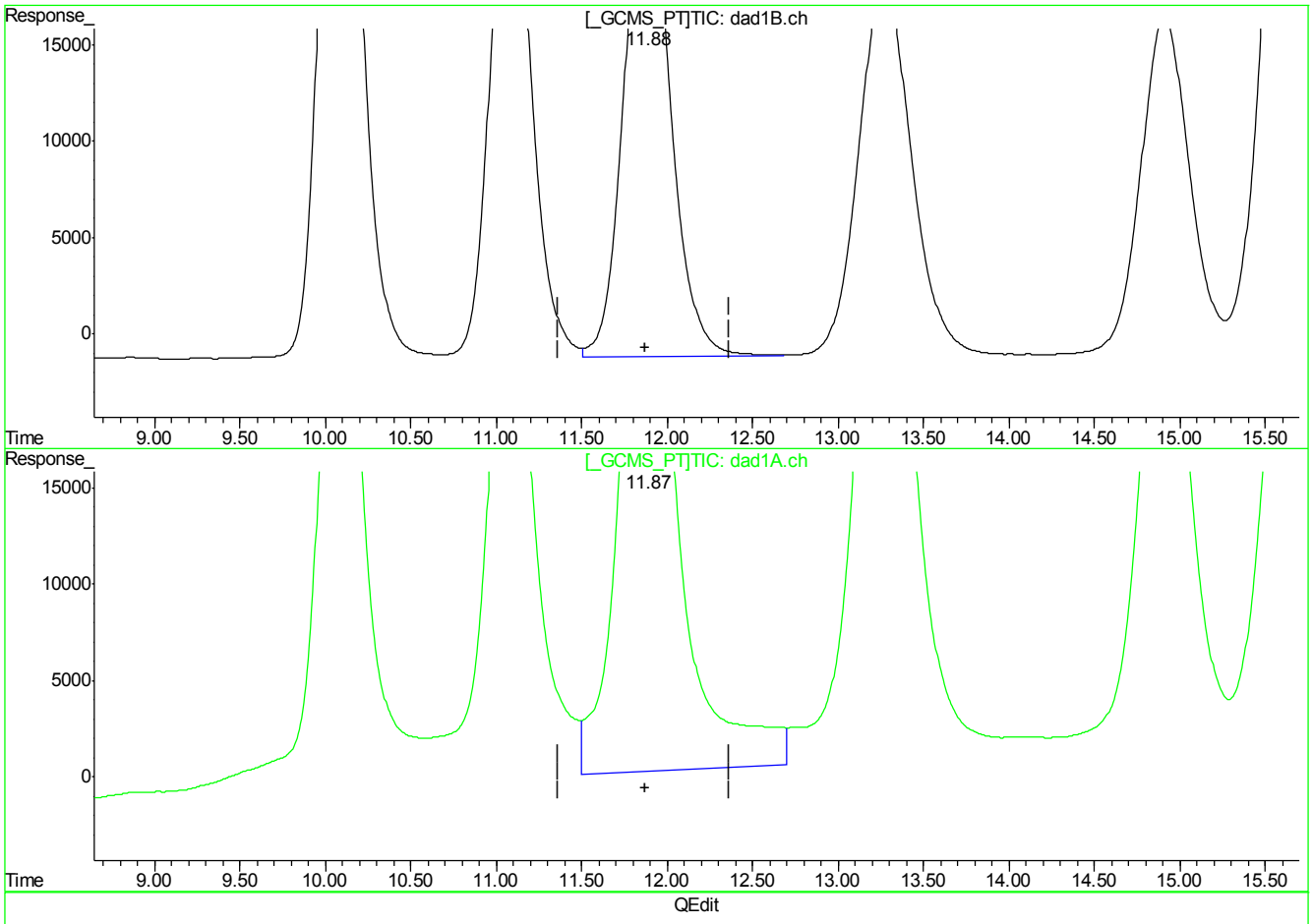
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613834.D	**Analyst approved:**	11/14/17 15:34 Evita Martinez
Injection Time:	11/13/17 17:32	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.88min 604.076ppb

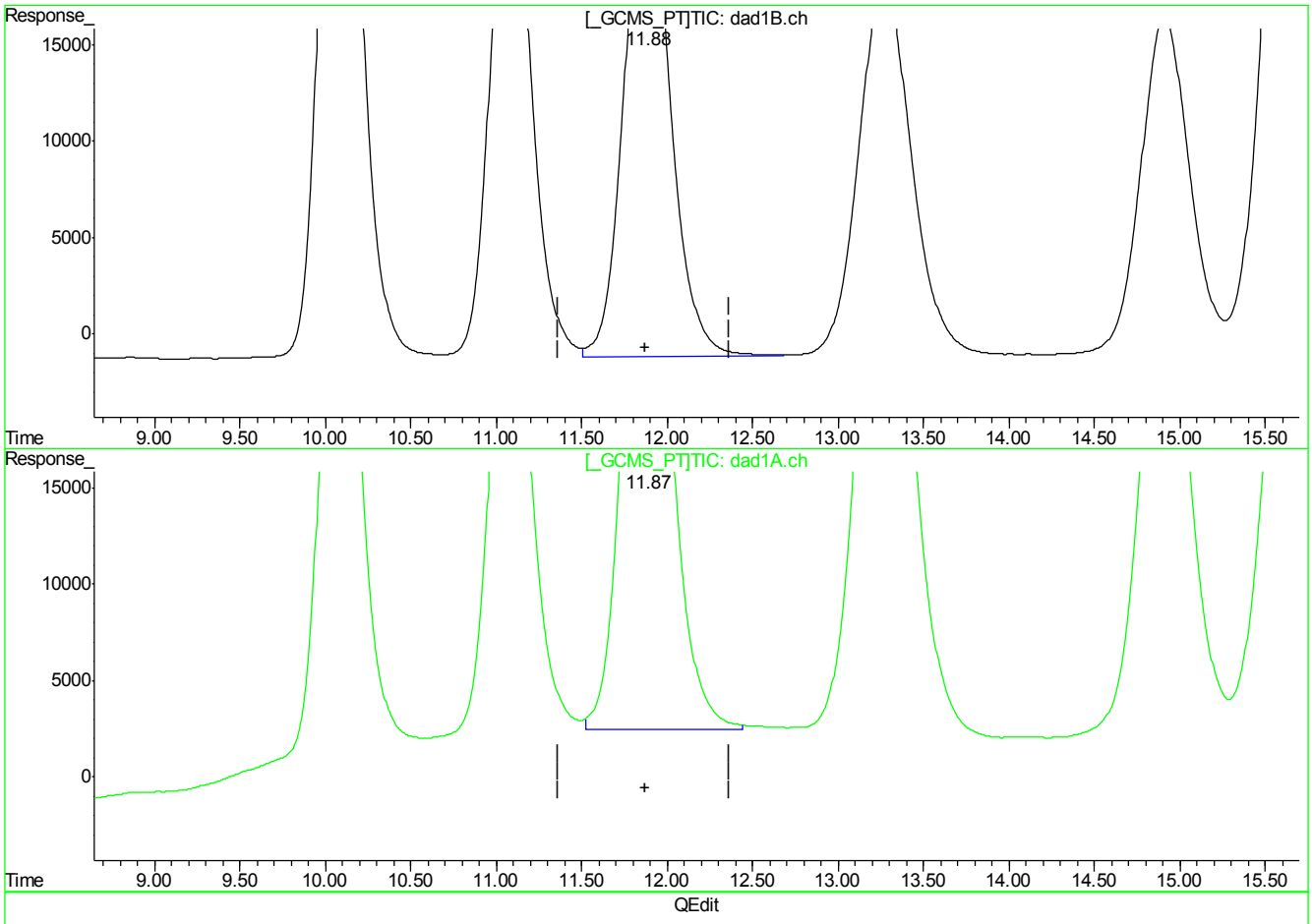
response 7922376

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.87min 485.592ppb m

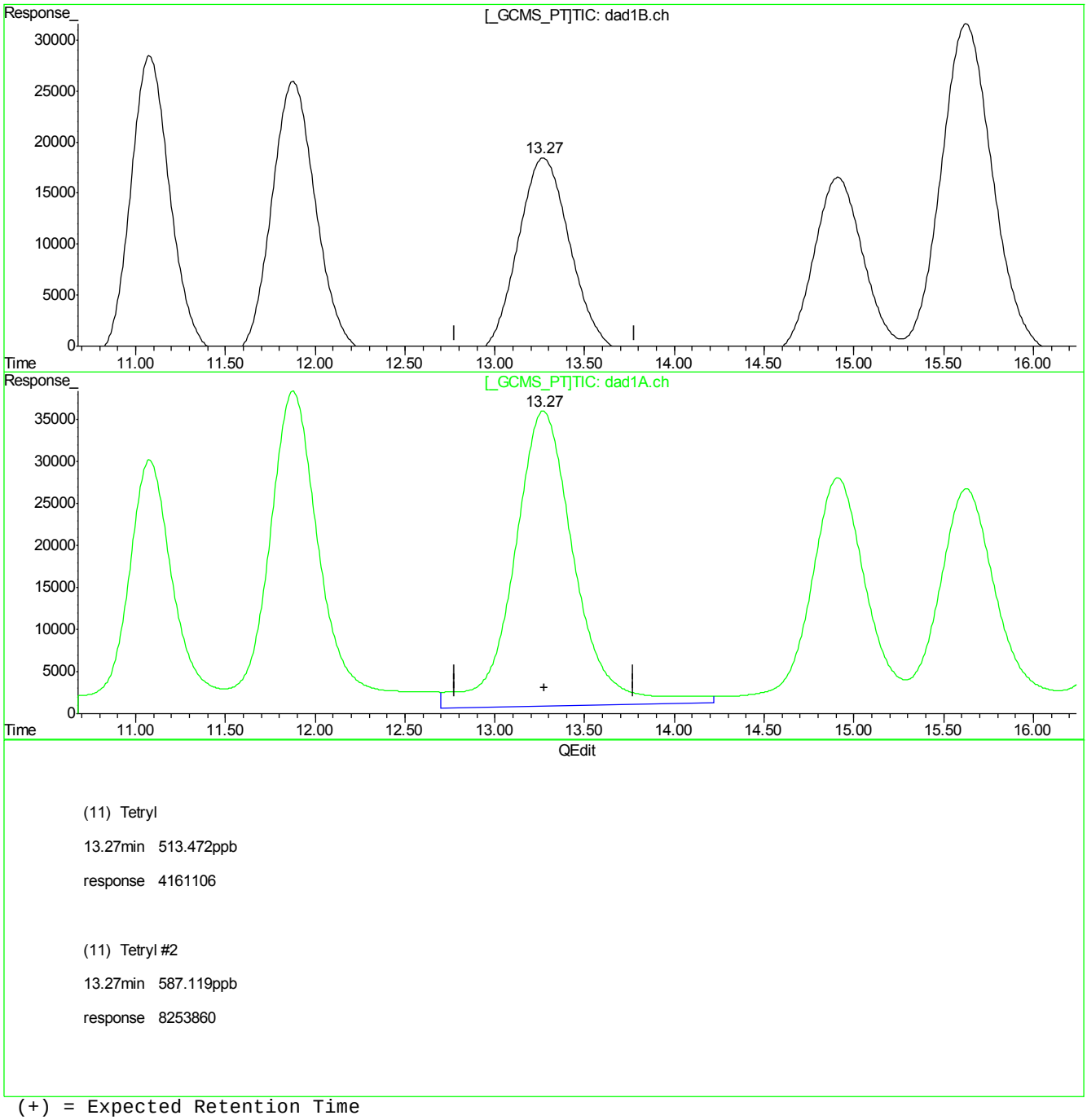
response 6368475

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 587.119ppb

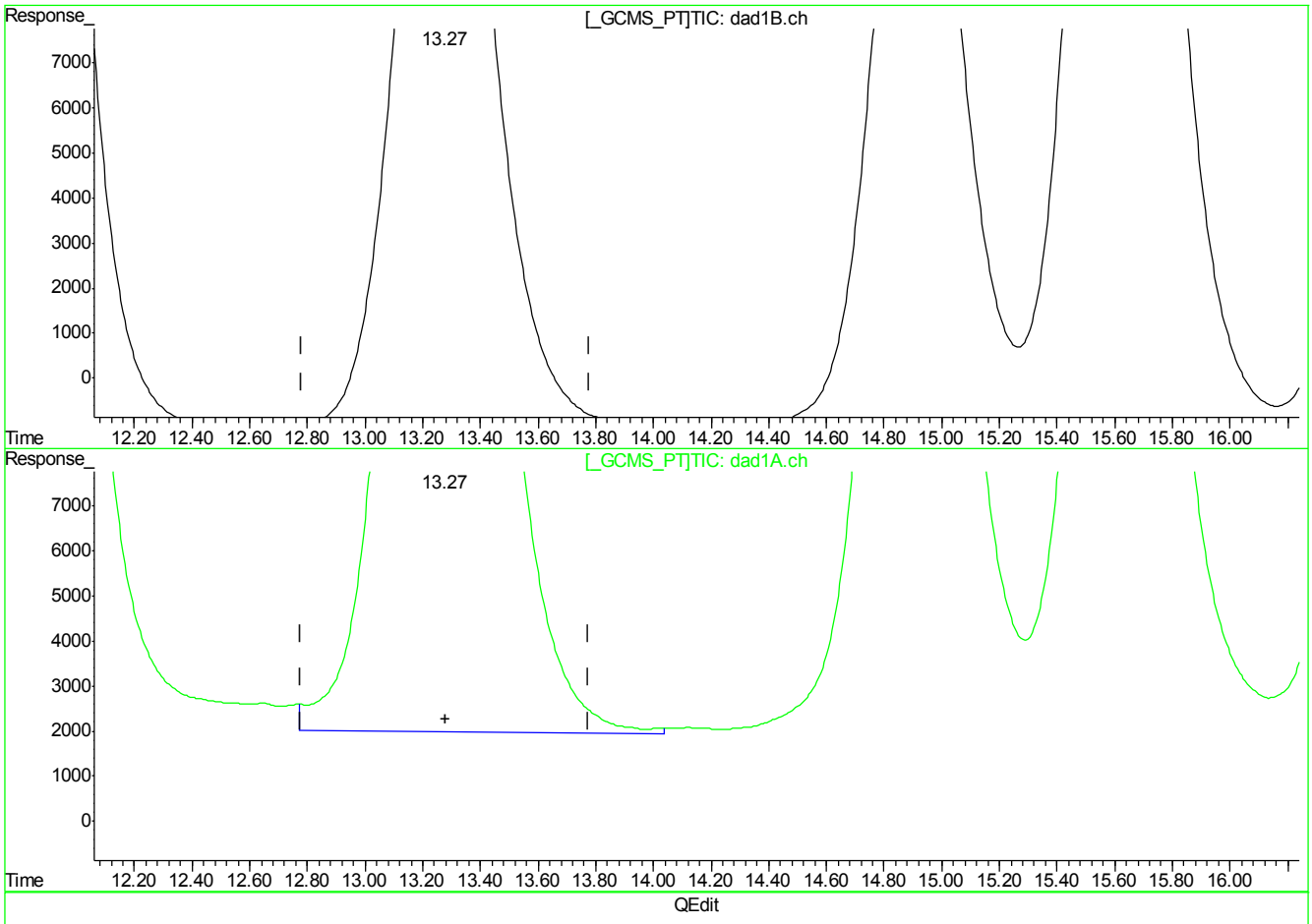
response 8253860

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:51 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 520.034ppb m

response 7319038

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:57 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On : 09-May-2018, 08:11:13 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 10:17:48 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.23	14.22	5912114	12883459	1138.065	1190.969
	Spiked Amount 500.000	Range 69 - 134		Recovery =		227.61%#	238.19%#
	Target Compounds						
1)	TNX	4.99	4.99	14059852	14059852	988.389	988.465
2)	HMX	5.40	5.40	3633119	3633119	1120.680	1127.684
3)	DNX	5.56	5.56	8529858	8529858	1101.960	1097.059
4)	MNX	6.55	6.55	7365886	7365886	1048.730	1047.883
5)	1,3,5-Trinitrobe	7.44	7.44	10282364	10331189	992.353	997.167
6)	RDX	7.90	7.90	5083178	5312239	1066.959	1119.982
7)	1,3-Dinitrobenze	9.93	9.93	14221460	11562776	994.030	946.423
8)	Nitrobenzene	10.88	10.88	9254337	9782737	980.601	1056.348
9)	2,4,6-Trinitroto	11.65	11.65	9936123	14221674	980.444	1084.394
10)	Nitroglycerin	0.00	12.39	0	17677084	N.D. d	5245.820
11)	Tetryl	12.92	12.92	7468608	13745172	921.611	984.331
13)	2,6-Dinitrotolue	14.61	14.61	7066380	10853255	988.359	1069.702
14)	2,4-Dinitrotolue	15.32	15.32	13159782	10523234	1003.868	1123.240
15)	o-Nitrotoluene	16.85	16.85	5821147	9477220	1007.713	1098.983
16)	3,5-Dinitroanili	16.26	16.26	11174105	20046788	1132.768	1222.663
17)	p-Nitrotoluene	17.99	18.00	12050743	22209196	1026.262	1047.941
18)	4-Amino-2,6-Dini	17.99	18.00	12050743	22209196	1026.262	1044.894
19)	m-Nitrotoluene	19.22	19.22	6233808	10504103	1057.407	1080.180
20)	2-Amino-4,6-Dini	20.16	20.16	9544424	13624813	1057.797	1102.621
21)	PETN	0.00	21.75	0	17595706	N.D. d	5485.963m

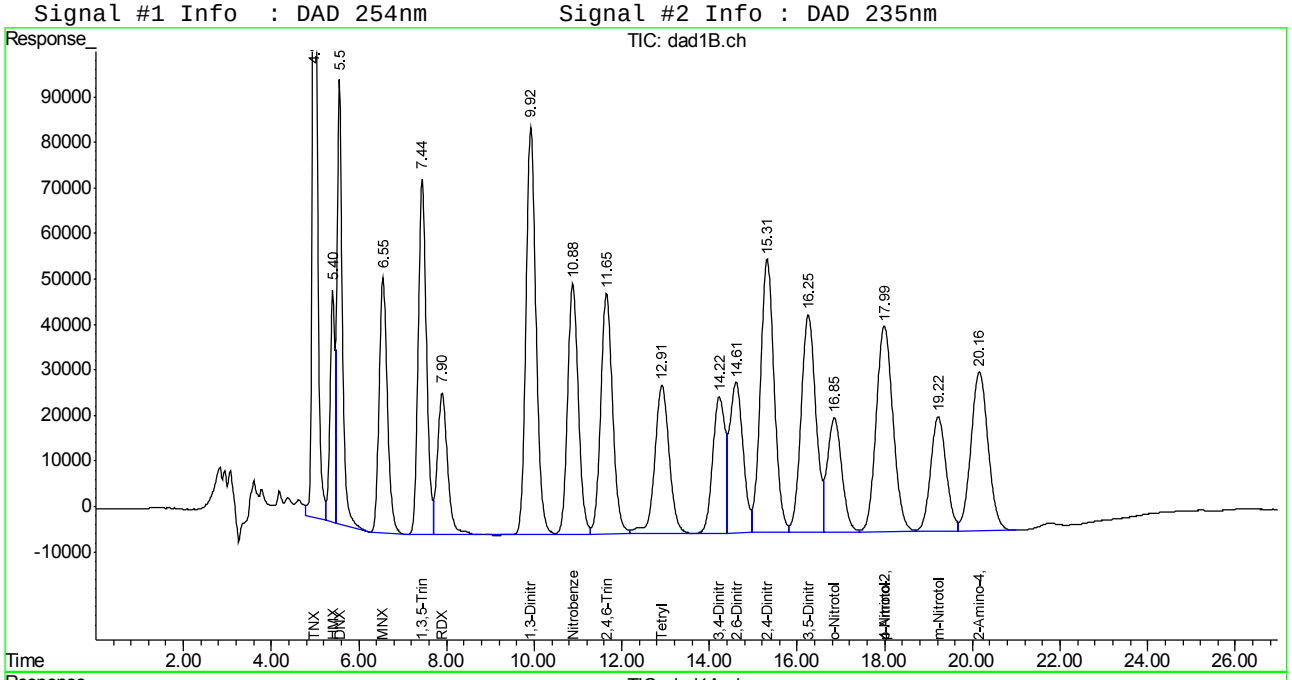
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614645.D 8330RPB.M_1113M.M Wed May 09 11:10:34 2018 Page 1

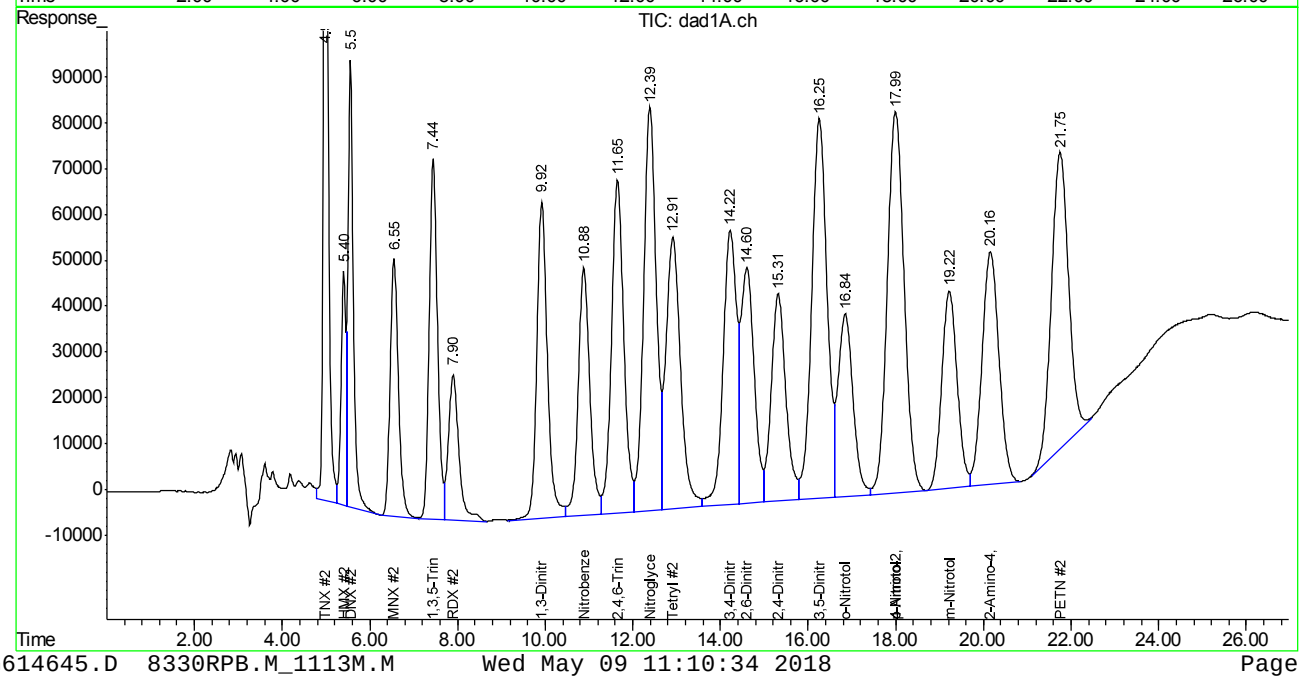
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On : 09-May-2018, 08:11:13 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 11:00 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

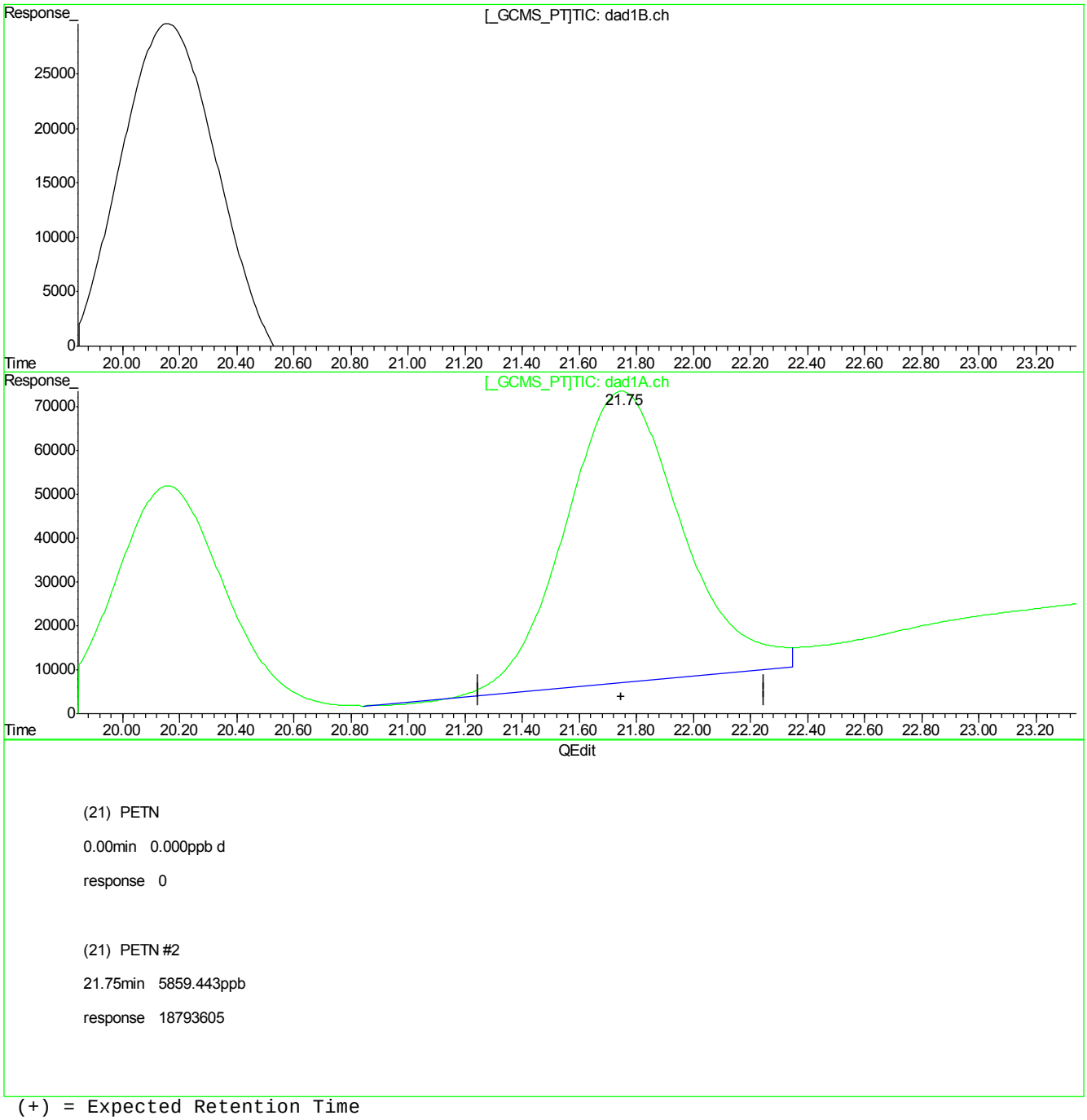
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614645.D	**Analyst approved:**	05/09/18 11:18 Evita Martinez
Injection Time:	05/09/18 08:11	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.75	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On : 09-May-2018, 08:11:13 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

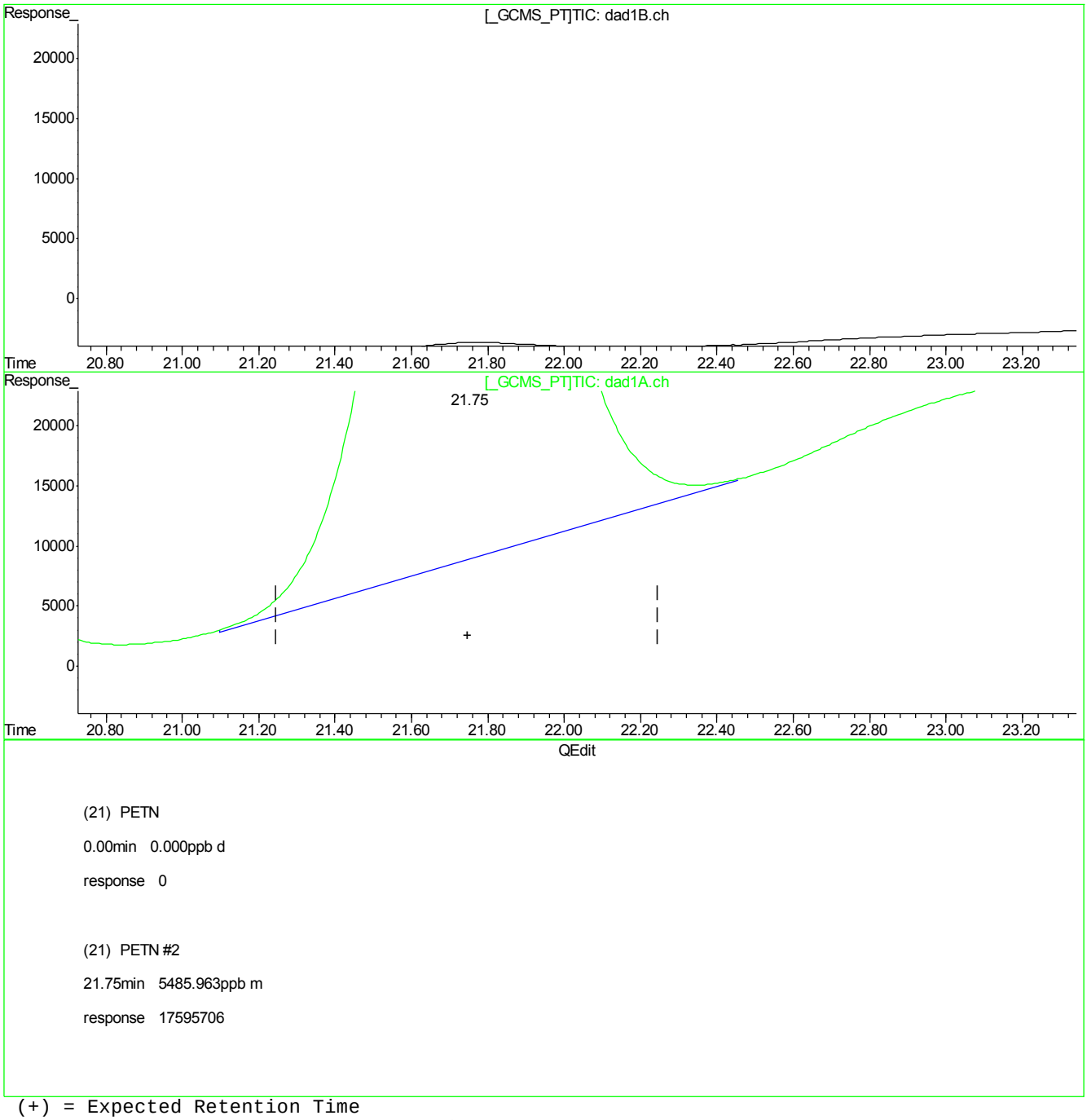


(+) = Expected Retention Time
GG614645.D 8330RPB.M_1113M.M Wed May 09 11:00:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614645.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614645.D\dad1A.ch
Acq On : 09-May-2018, 08:11:13 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69945,Ggg2626,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614645.D 8330RPB.M_1113M.M Wed May 09 11:00:27 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/09/18 15:34

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On : 09-May-2018, 12:09:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 14:12:28 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.24	5912911	12753292	1138.218	1178.936
	Spiked Amount 500.000	Range 69 - 134		Recovery =		227.64%#	235.79%#
	Target Compounds						
1)	TNX	5.01	5.01	13843483	13843483	973.179	973.253
2)	HMX	5.42	5.42	3551036	3551036	1095.361	1102.206
3)	DNX	5.57	5.57	8289654	8289654	1070.928	1066.165
4)	MNX	6.57	6.57	7373826	7373826	1049.860	1049.013
5)	1,3,5-Trinitrobe	7.47	7.47	10155273	10155273	980.088	980.188
6)	RDX	7.91	7.91	4694565	4694565	985.389	989.757
7)	1,3-Dinitrobenze	9.93	9.93	14295732	11243159	999.221	917.861
8)	Nitrobenzene	10.89	10.89	9223069	9202091	977.288	993.650
9)	2,4,6-Trinitroto	11.67	11.67	9929038	14076994	979.745	1073.362
10)	Nitroglycerin	0.00	12.41	0	17730770	N.D. d	5261.751
11)	Tetryl	12.92	12.91	7514596	14009844	927.285	1003.614
13)	2,6-Dinitrotolue	14.62	14.61	7108683	11076485	994.276	1091.704
14)	2,4-Dinitrotolue	15.32	15.32	13173156	10534747	1004.888	1124.503
15)	o-Nitrotoluene	16.86	16.86	5781071	8851445	1000.775	1026.418
16)	3,5-Dinitroanili	16.24	16.24	11177295	19708529	1133.087	1202.354
17)	p-Nitrotoluene	17.99	17.99	11969362	21820286	1019.331	1029.591
18)	4-Amino-2,6-Dini	17.99	17.99	11969362	21820286	1019.331	1026.597
19)	m-Nitrotoluene	19.22	19.22	6204114	10732502	1052.370	1103.667
20)	2-Amino-4,6-Dini	20.14	20.14	9496702	13573689	1052.508	1098.752
21)	PETN	0.00	21.76	0	17903317	N.D. d	5581.870m

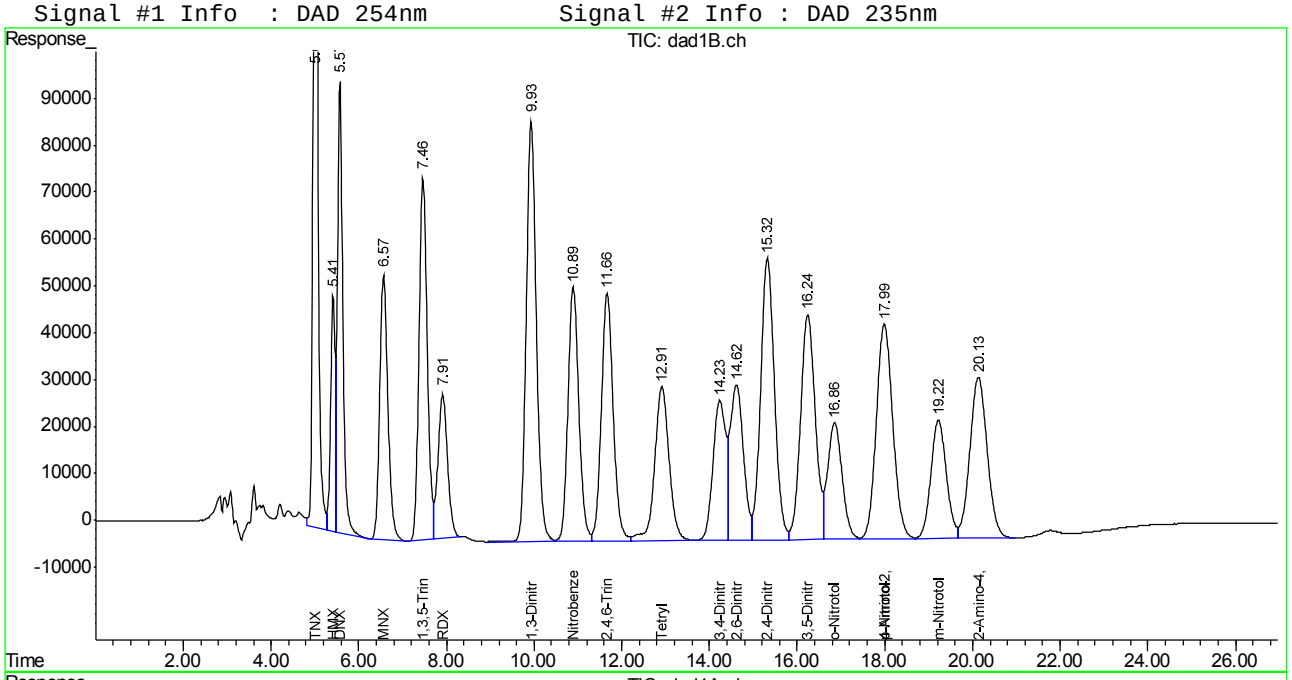
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614653.D 8330RPB.M_1113M.M Wed May 09 14:13:14 2018 Page 1

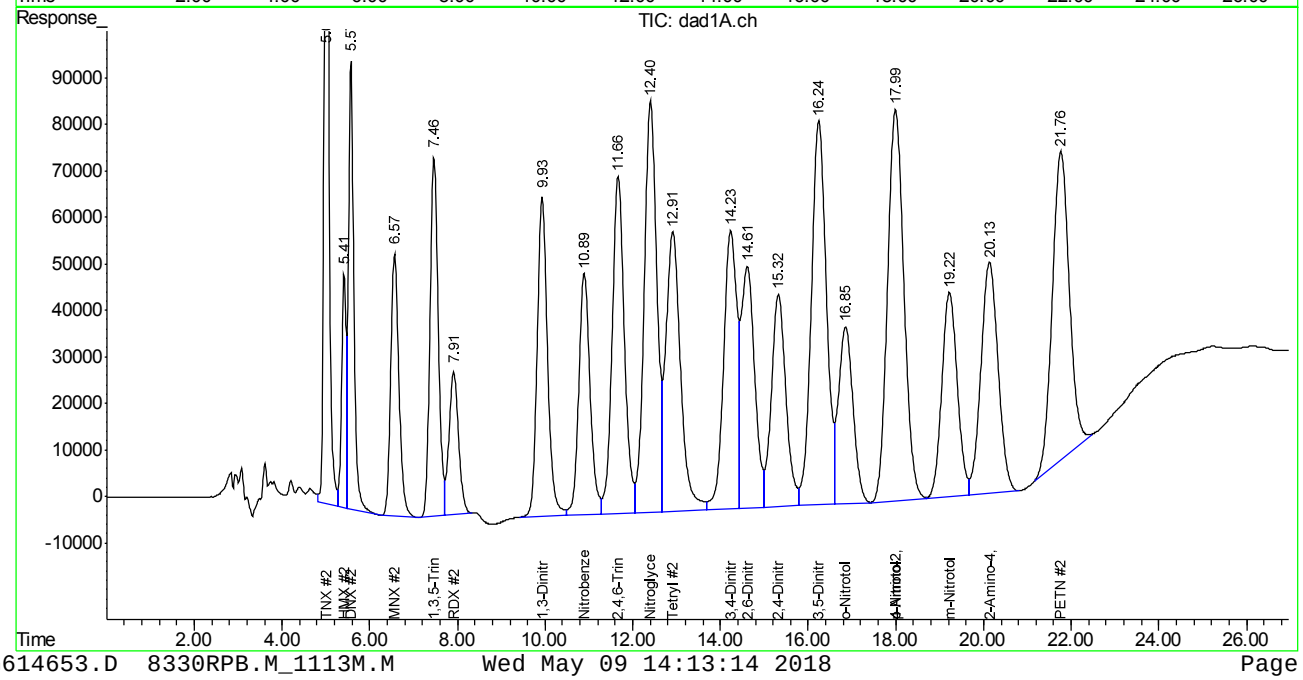
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On : 09-May-2018, 12:09:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

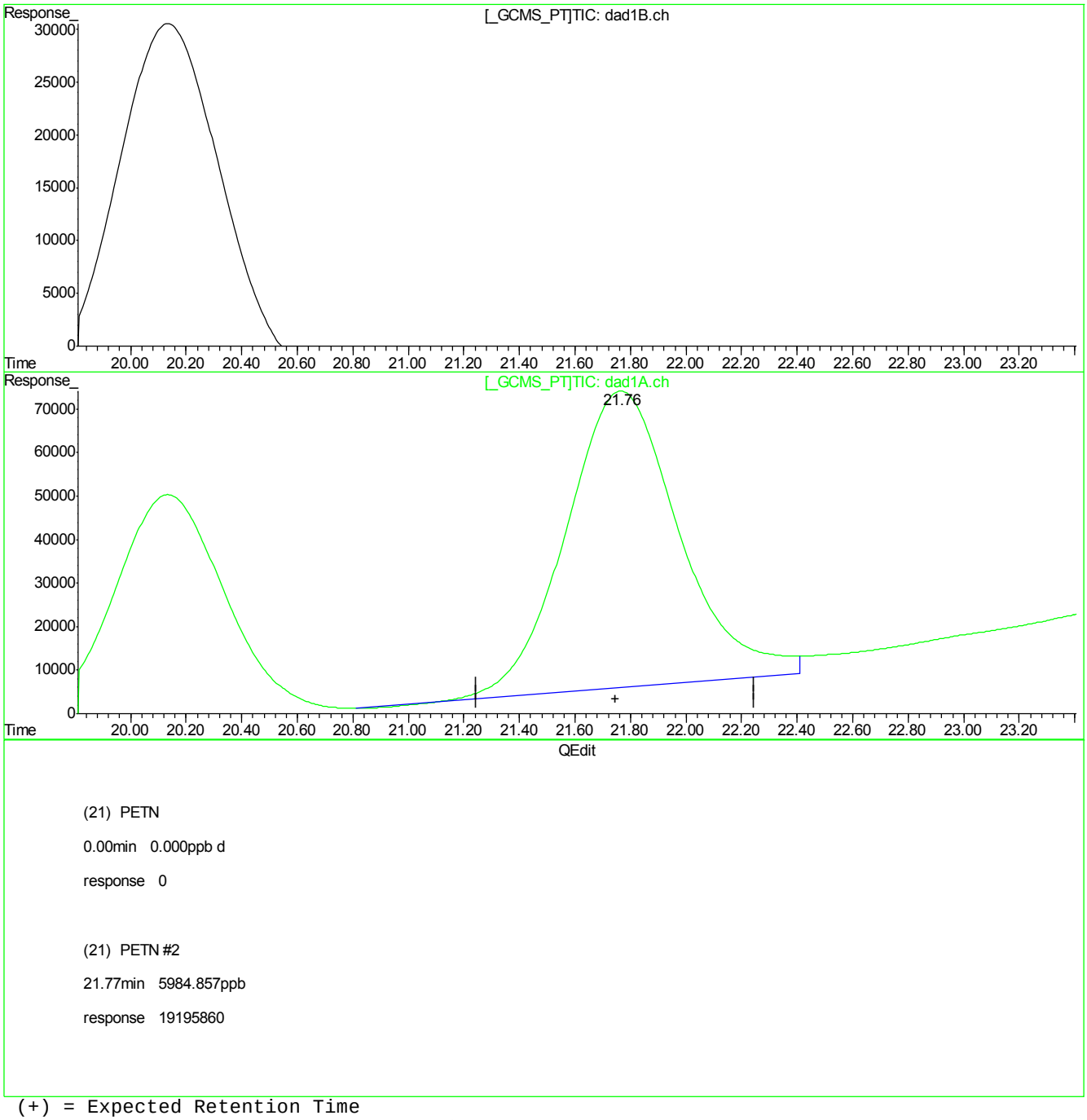
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614653.D	**Analyst approved:**	05/09/18 14:15 Evita Martinez
Injection Time:	05/09/18 12:09	**Supervisor approved:**	05/09/18 15:34 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.76	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On : 09-May-2018, 12:09:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

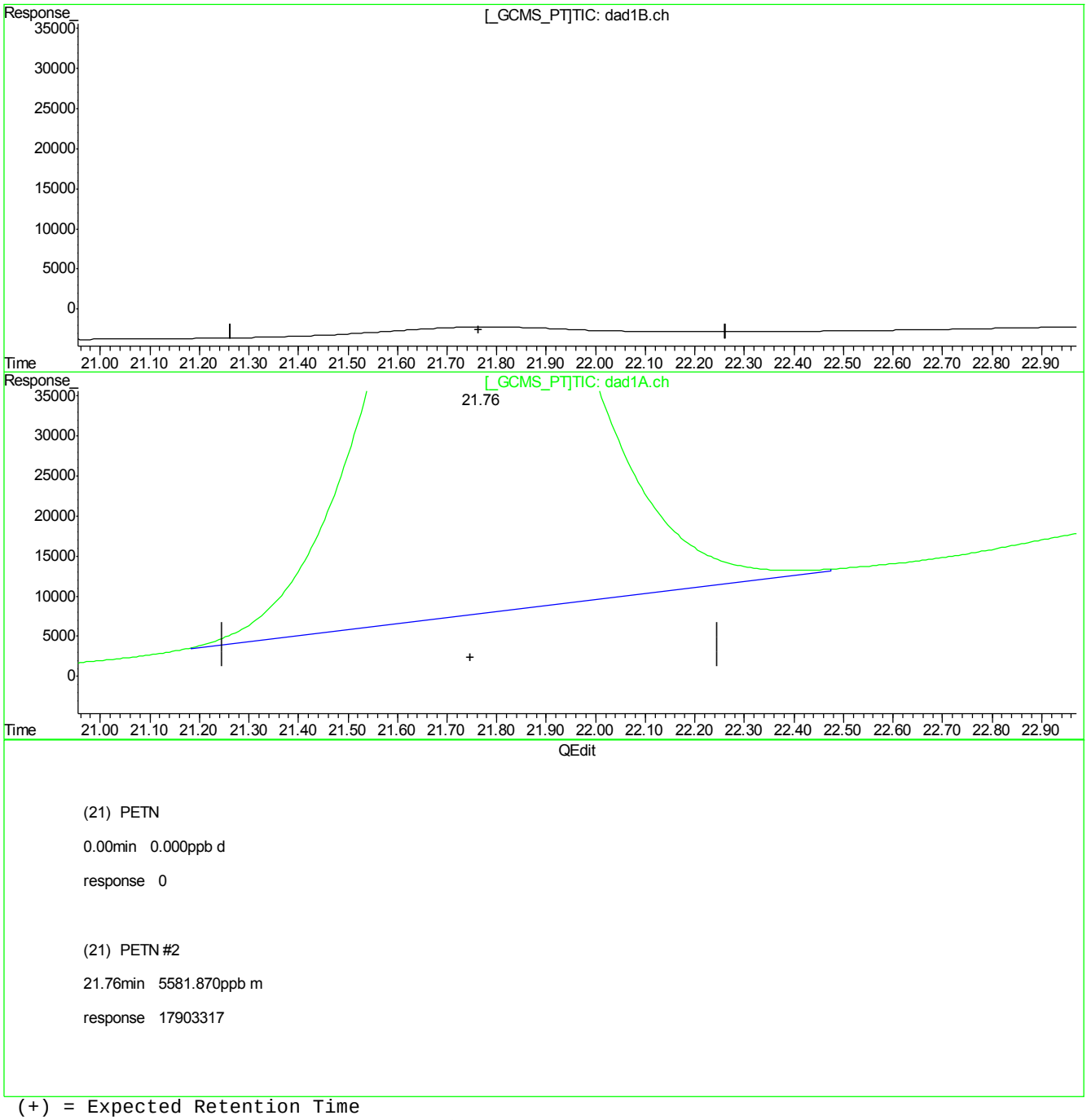


(+) = Expected Retention Time
GG614653.D 8330RPB.M_1113M.M Wed May 09 14:12:36 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614653.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614653.D\dad1A.ch
Acq On : 09-May-2018, 12:09:40 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.08,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614653.D 8330RPB.M_1113M.M Wed May 09 14:12:49 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On : 09-May-2018, 15:06:24 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:35 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.24	5855135	12770875	1127.096	1180.561
	Spiked Amount 500.000	Range 69 - 134		Recovery =		225.42%#	236.11%#
	Target Compounds						
1)	TNX	5.01	5.01	13844744	13844744	973.267	973.342
2)	HMX	5.42	5.42	3583920	3583920	1105.504	1112.413
3)	DNX	5.57	5.57	8335618	8335618	1076.866	1072.077
4)	MNX	6.57	6.57	7342770	7342770	1045.438	1044.594
5)	1,3,5-Trinitrobe	7.47	7.47	10124026	10124026	977.072	977.172
6)	RDX	7.91	7.91	4674127	4674127	981.099	985.448
7)	1,3-Dinitrobenze	9.94	9.94	14224795	11522388	994.263	942.805
8)	Nitrobenzene	10.90	10.90	9147695	9447832	969.301	1020.185
9)	2,4,6-Trinitroto	11.68	11.68	9823520	13764411	969.333	1049.528
10)	Nitroglycerin	0.00	12.42	0	17693217	N.D. d	5250.607
11)	Tetryl	12.92	12.92	7459021	14261927	920.428	1021.991
13)	2,6-Dinitrotolue	14.62	14.61	7144029	11253830	999.220	1109.183
14)	2,4-Dinitrotolue	15.32	15.32	13144620	10475034	1002.711	1117.953
15)	o-Nitrotoluene	16.86	16.86	5735856	8607302	992.948	998.107
16)	3,5-Dinitroanili	16.22	16.22	11153706	19403382	1130.732	1184.025
17)	p-Nitrotoluene	17.98	17.99	11947904	21894326	1017.504	1033.084
18)	4-Amino-2,6-Dini	17.98	17.99	11947904	21894326	1017.504	1030.080
19)	m-Nitrotoluene	19.23	19.22	6144559	10503489	1042.268	1080.116
20)	2-Amino-4,6-Dini	20.11	20.11	9470636	13531632	1049.620	1095.568
21)	PETN	0.00	21.78	0	17400047	N.D. d	5424.961m

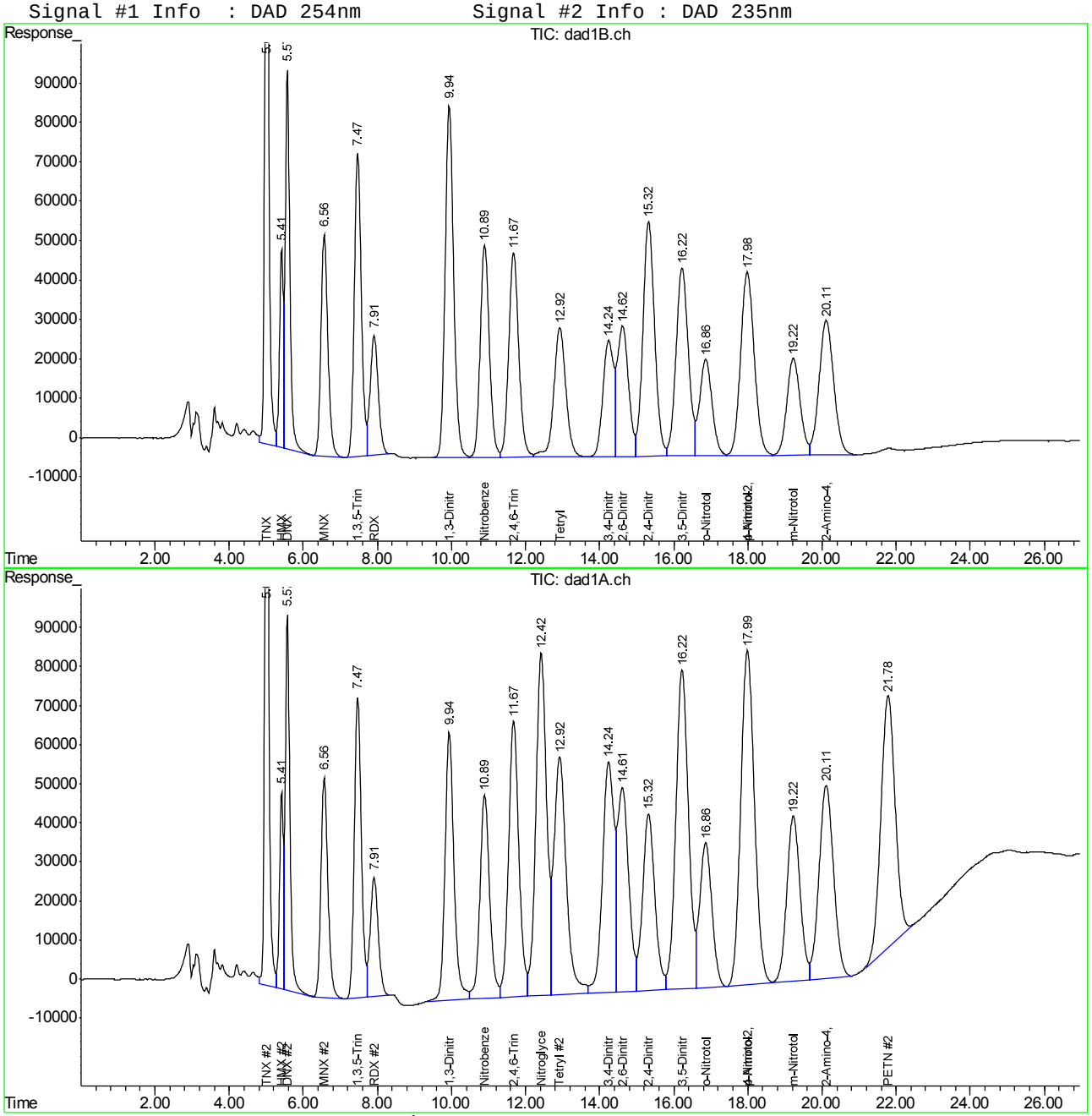
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614659.D 8330RPB.M_1113M.M Thu May 10 13:16:37 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On : 09-May-2018, 15:06:24 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:12 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

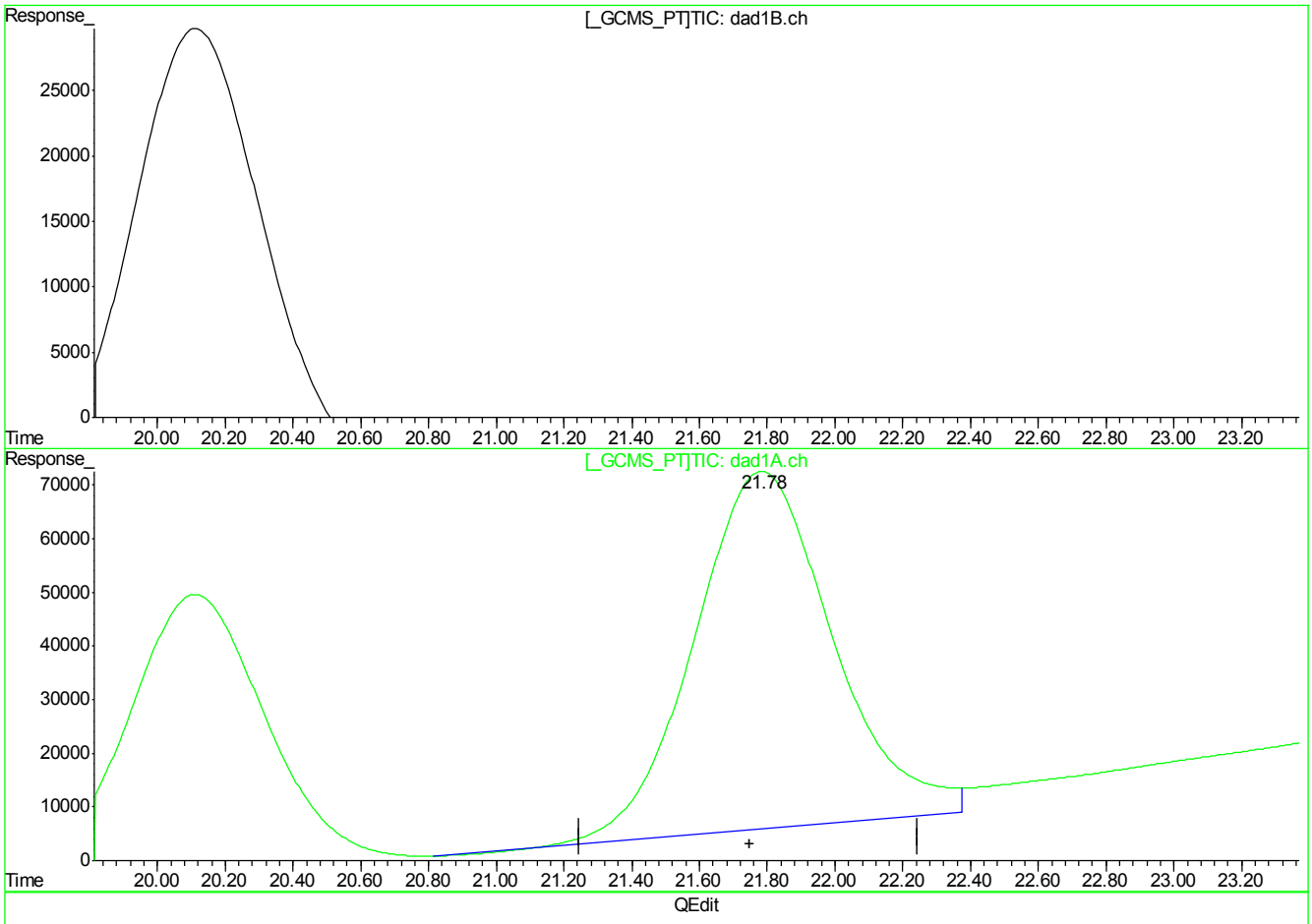
Sample Number:	GGG2626-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614659.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 15:06	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.78	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On : 09-May-2018, 15:06:24 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.79min 5876.023ppb

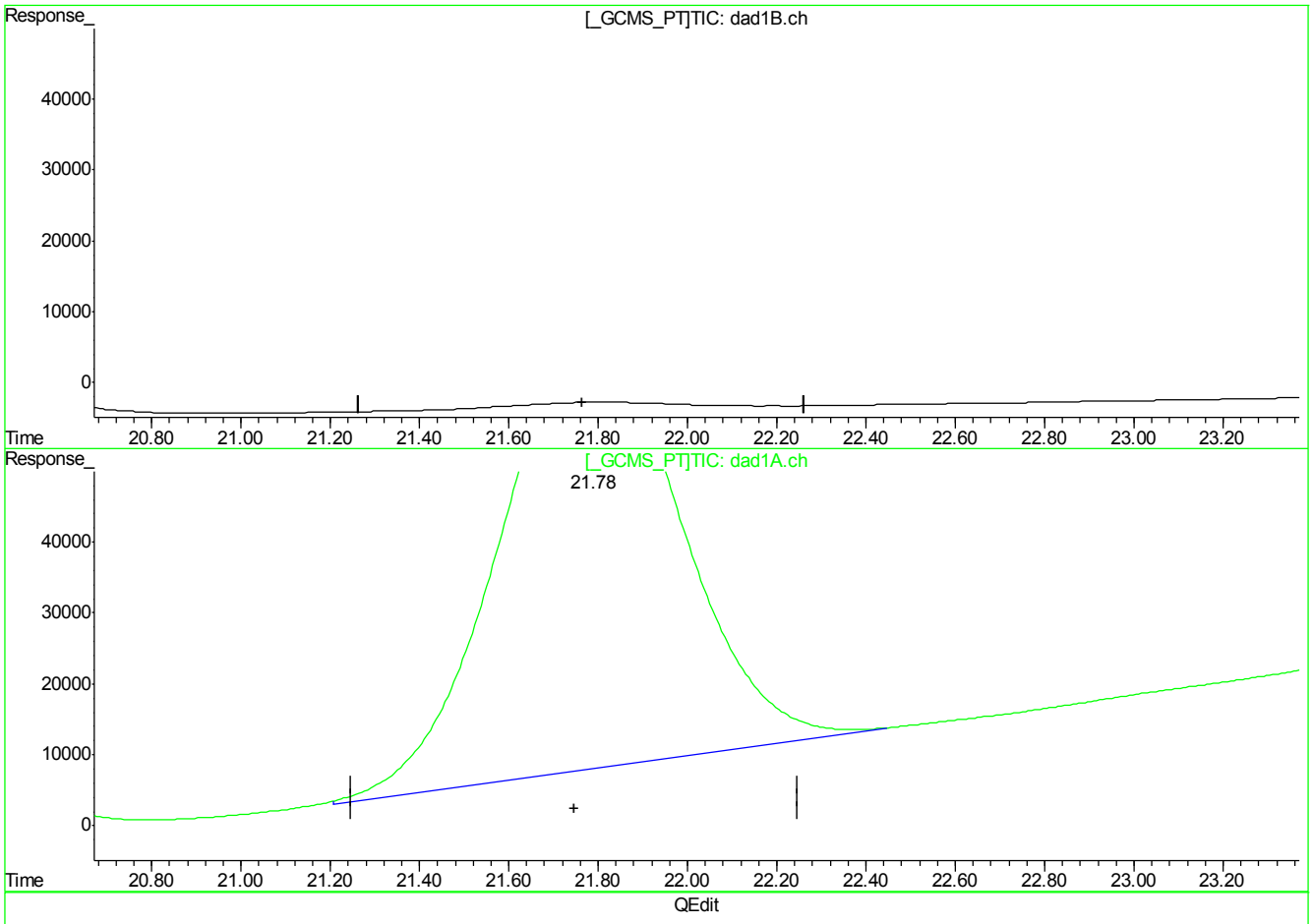
response 18846785

(+) = Expected Retention Time
GG614659.D 8330RPB.M_1113M.M Thu May 10 13:12:58 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614659.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614659.D\dad1A.ch
Acq On : 09-May-2018, 15:06:24 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.78min 5424.961ppb m

response 17400047

(+) = Expected Retention Time
GG614659.D 8330RPB.M_1113M.M Thu May 10 13:13:04 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/10/18 18:02

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 07:06:43 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.28	14.28	5814212	12722829	1119.219	1176.120
	Spiked Amount 500.000	Range 69 - 134		Recovery =		223.84%#	235.22%#
	Target Compounds						
1)	TNX	5.02	5.02	13708350	13708350	963.679	963.753
2)	HMX	5.43	5.43	3472018	3472018	1070.987	1077.679
3)	DNX	5.59	5.59	8145720	8145720	1052.334	1047.653
4)	MNX	6.59	6.59	7341211	7341211	1045.217	1044.373
5)	1,3,5-Trinitrobe	7.49	7.49	10105100	10105100	975.245	975.345
6)	RDX	7.94	7.94	4654737	4654737	977.029	981.360
7)	1,3-Dinitrobenze	9.97	9.97	14260641	11303163	996.769	923.211
8)	Nitrobenzene	10.93	10.93	9074378	9033607	961.532	975.456
9)	2,4,6-Trinitroto	11.71	11.71	9796363	13782141	966.653	1050.880
10)	Nitroglycerin	0.00	12.45	0	17412224	N.D. d	5167.220
11)	Tetryl	12.97	12.96	7347961	13554843	906.723	970.472
13)	2,6-Dinitrotolue	14.66	14.66	7178335	11237646	1004.018	1107.588
14)	2,4-Dinitrotolue	15.37	15.37	13173963	10665689	1004.950	1138.873
15)	o-Nitrotoluene	16.91	16.91	5687076	8505355	984.504	986.285
16)	3,5-Dinitroanili	16.27	16.27	11098357	19310791	1125.205	1178.461
17)	p-Nitrotoluene	18.03	18.04	11860309	21532917	1010.044	1016.031
18)	4-Amino-2,6-Dini	18.03	18.04	11860309	21532917	1010.044	1013.077
19)	m-Nitrotoluene	19.27	19.27	6067948	10308268	1029.273	1060.041
20)	2-Amino-4,6-Dini	20.18	20.18	9418058	13383144	1043.792	1084.317
21)	PETN	0.00	21.82	0	17454368	N.D. d	5441.897m

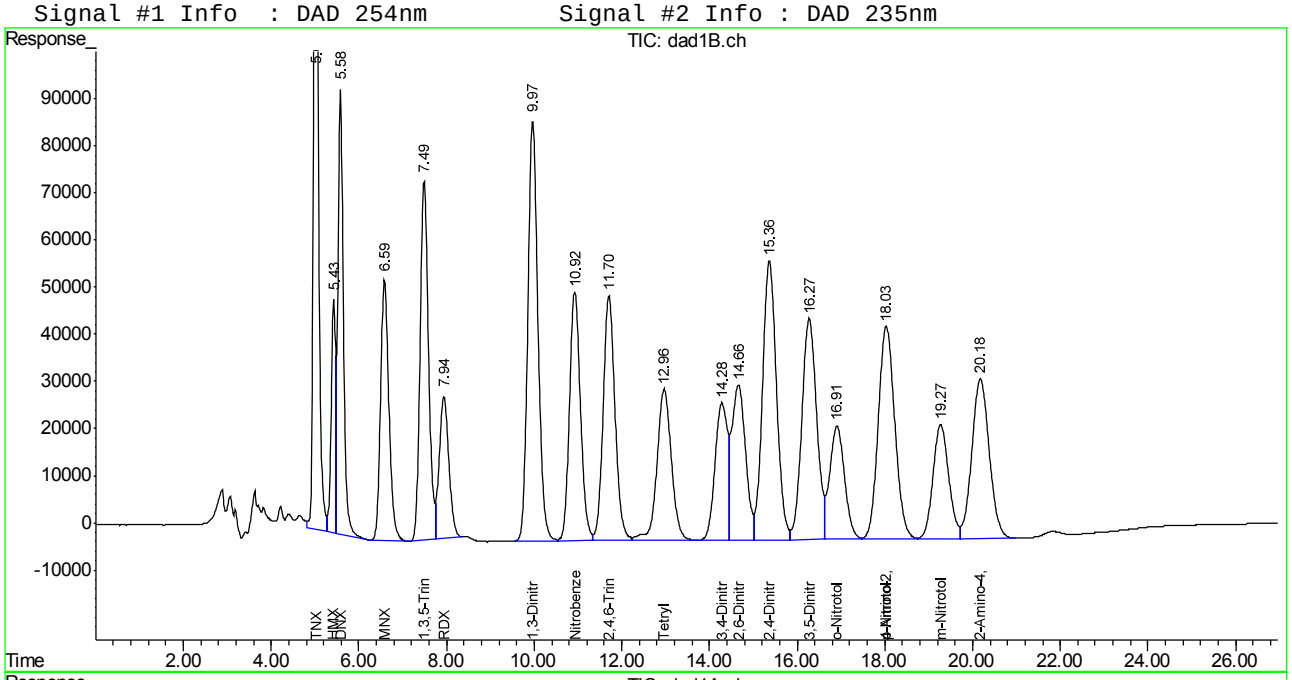
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614666.D 8330RPB.M_1113M.M Thu May 10 13:16:43 2018 Page 1

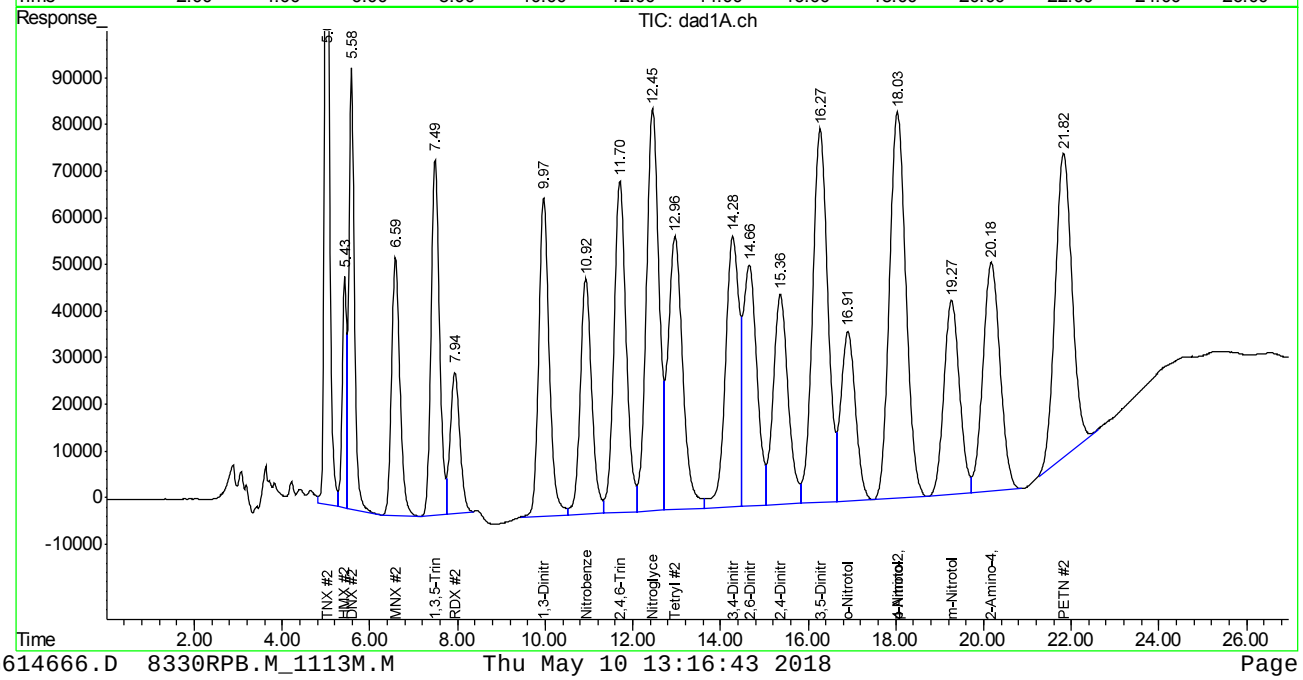
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 13:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

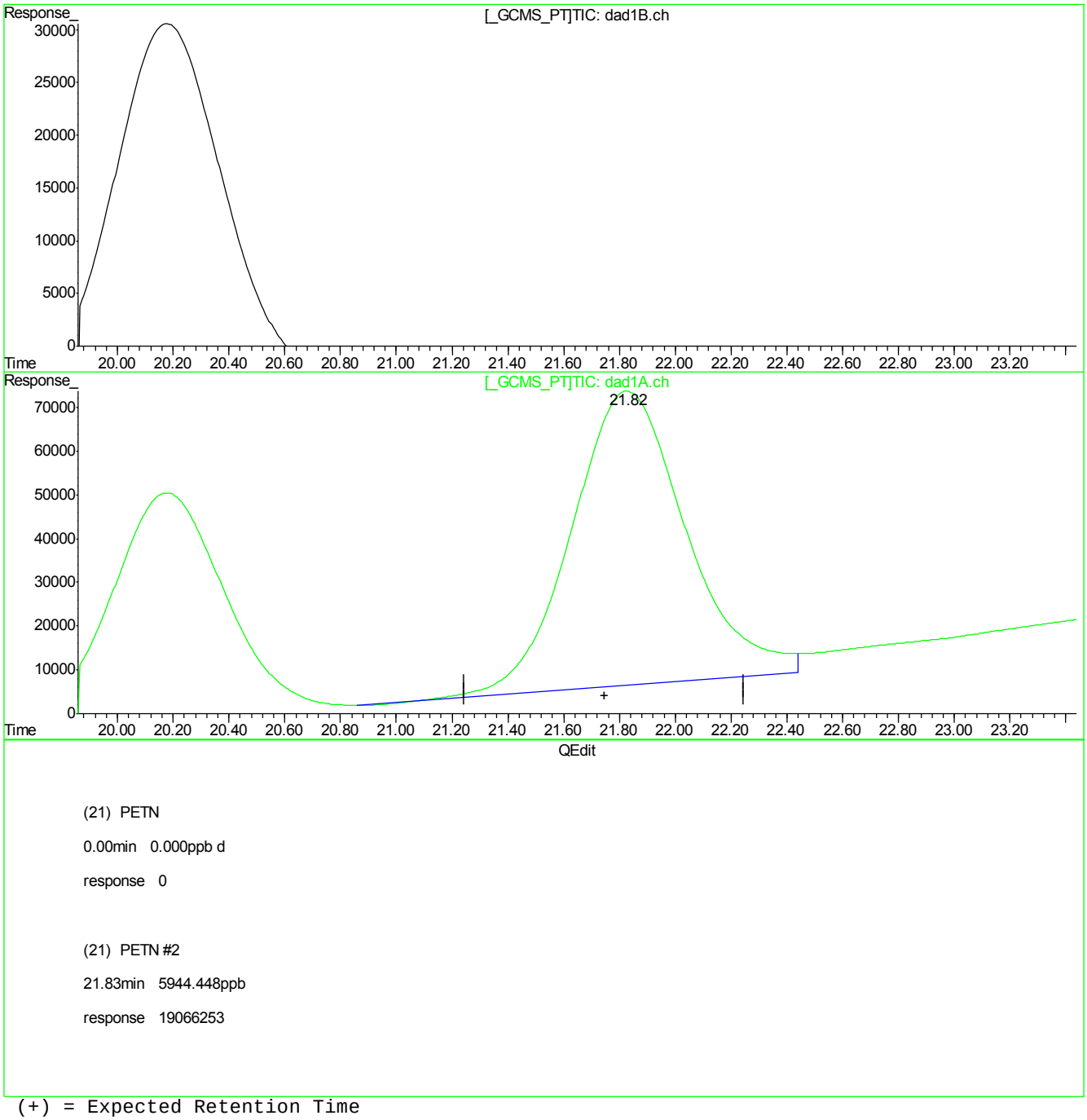
Sample Number:	GGG2626-ECC2571	**Method:**	SW846 8330B
Lab FileID:	GG614666.D	**Analyst approved:**	05/10/18 13:19 Evita Martinez
Injection Time:	05/09/18 18:32	**Supervisor approved:**	05/10/18 18:02 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.82	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration

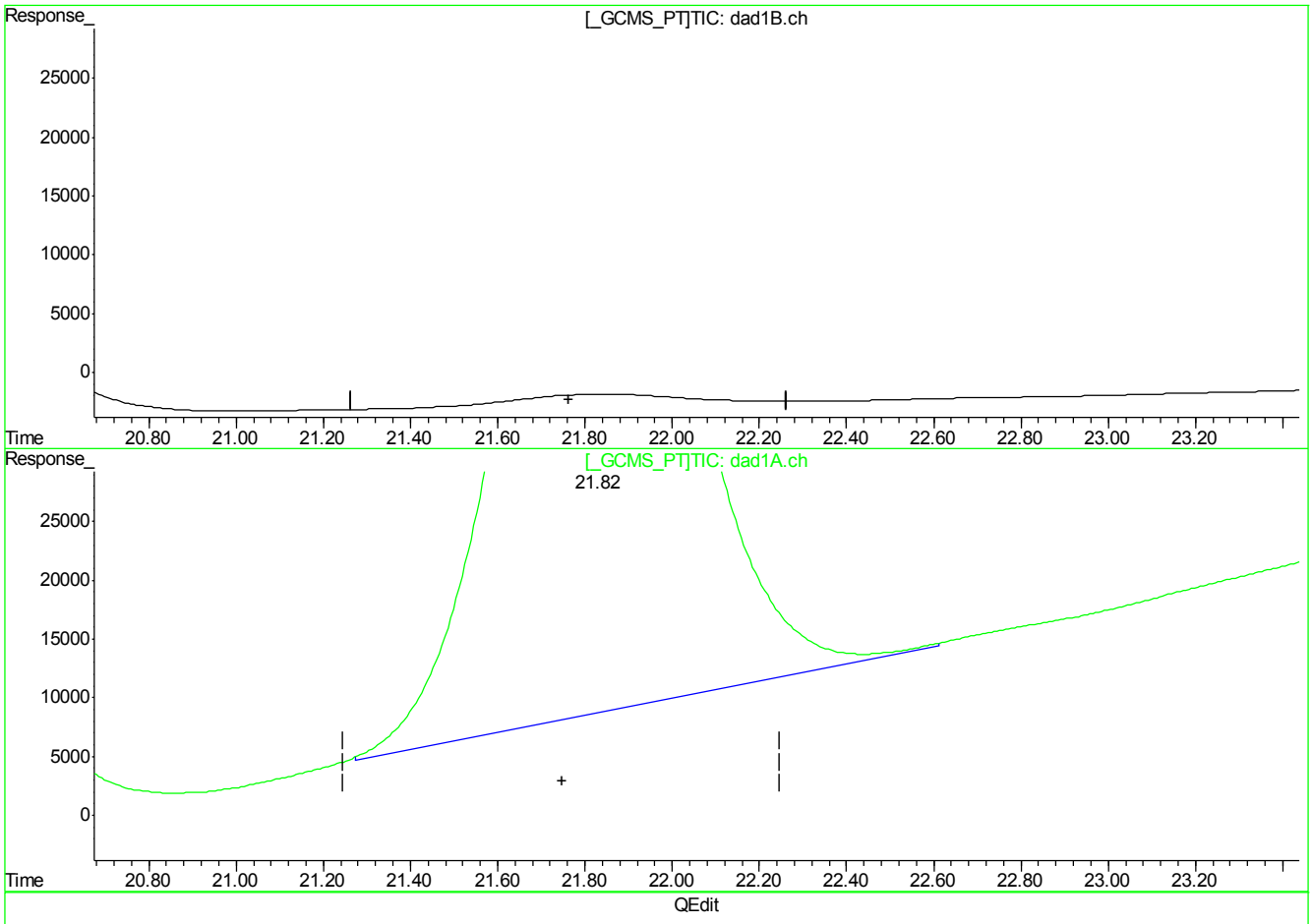


(+) = Expected Retention Time
GG614666.D 8330RPB.M_1113M.M Thu May 10 13:15:58 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0508RPB3\GG614666.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0508RPB3\GG614666.D\dad1A.ch
Acq On : 09-May-2018, 18:32:44 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69946,Ggg2626,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 10 7:06 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 08 14:32:18 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.82min 5441.897ppb m

response 17454368

(+) = Expected Retention Time
GG614666.D 8330RPB.M_1113M.M Thu May 10 13:16:04 2018

SGS ACCUTEST-ORLANDO

DATE:	4/19/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 0329 plus
CALIB. DATE:	03/09/18
RUN BATCH:	GBB 1722

ANALYST:	GW
ACETONITRILE LOT #:	350
MEOH LOT #:	—
HEAD PRESSURE:	280

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059462	1	CCB	8330				ND
BB 63	20	test					✓
BB 64	21	IC 17122-20		LC1020	50+450		test
BB 65	22	| | -50			10+90	pii	carry past
BB 66	23	-100			25+75		
BB 67	24	↓ -200			50+50		
BB 68	25	icc -500			100+300		
BB 69	26	ic -1000			200+200		
BB 10	27	-2000			1X		
BB 11	28	icv -500		Evol LC991 LC990 Evol	20:25 :10uL	>1mL	
BB 12	29	↓ ↓ -500		E 6231	10/400	40X	no need
BB 13	3	op69647 bs		op69647	1X		✓
BB 14	4	↓ -mb					ND
BB 15	5	IAS319461					ND
BB 16	6	op69647 -ms				pii	✓
BB 17	7	↓ -msd				↓	✓
BB 18	8	IAS319-2					ND
BB 19	9	IAS3384-1					✓ RLE 10X
BB 80	10	↓ -2			↓		✓ RLE 10X
BB 81	26	cc1722-100		LC1020	1:1	pii	pii

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: E. Maim

SGS ACCUTEST-ORLANDO

DATE:	4/19/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 0329 pkS
CALIB. DATE:	3/29/18
RUN BATCH: GBB	1722

ANALYST:	EM
ACETONITRILE LOT #:	3510
MEOH LOT #:	—
HEAD PRESSURE:	200

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059 182	1	CCB	8330	—	—		MD
BB 83	11	IQ33383		OP16647	1X		RR COK
BB 84	24	QC 1722-1000		QLC1020	1:1	EM 4/19/18 pkS	PASS
BB 85	71	E6249 spike		—			test only
BB 86	72	test spike stock		—			↓
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 06/16

Analyst's Signature: EMcAm

SGS ACCUTEST-ORLANDO

DATE:	5/10/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A16
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 04190115
CALIB. DATE:	11/9/18
RUN BATCH: GBB	1730

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	310

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059069	1	CCB	8330	←	→		ND
BB 70	2	cc 1722-1000		LC1020	1:1	pii	tetryl low 2nd signal
BB 71	3	0p66960-BS		0p66960	K	↓	✓
BB 72	4	-PT1					✓
BB 73	5	-MB					ND
BB 74	6	F AS3800-11					ND
BB 75	7	-12					ND
BB 76	8	-13					ND
BB 77	9	-14					ND
BB 78	10	-15					ND
BB 79	11	-16					ND
BB 80	2	cc1722-1000		LC1020	1:1	pii	1st signal 2,4DT low 2nd signal tetryl low ND
BB 81	1	CCB					✓
BB 82	12	0p66960.MS		0p66960	1X	pii	✓
BB 83	13	↓ -MSD				↓	
BB 84	14	F AS3800-17					ND
BB 85	15	-18					ND
BB 86	16	-19					ND
BB 87	17	-20					ND
BB 88	18	- 21	✓	↓	↓		ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 06/16

Analyst's Signature: EM

SGS ACCUTEST-ORLANDO

DATE:	5/10/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 04/19/18
CALIB. DATE:	4/9/18
RUN BATCH: GBB	1730

ANALYST:	EH
ACETONITRILE LOT #:	320
MEOH LOT #:	—
HEAD PRESSURE:	370

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 0596 89	19	FA53800 22	8330	op66960	1x		ND
BB 90	20	op66960 dup					ND
BB 91	21	-dup2					ND
BB 92	2	CC1722-1000		LC1020	1:1	pii	ter signal 2,4,6 below
BB 93	1	CCB					ND
BB 94	22	FA53800-2 2/3		op66960	1x		ND
EH 5/10/18 BB 95	23	-4					ND
BB 96	24	op66960-gb1					ND
BB 97	25	-gb2					ND
BB 98	26	-gb3					ND
BB 99	27	op66973-bs		op66973		pii	✓
BB 700	28	-PT1					✓
BB 01	29	-MB					ND
BB 02	30	FA53801-1					ND
BB 03	2	CC1722-1000		LC1020	1:1	pii	2nd signal tetryl low
BB 04	1	CCB					ND
BB 05	31	op66973 MS		op66973	1x	pii	✓
BB 06	32	msd				pii	✓
BB 07	33	FA53801-2					ND
BB 08	34	-3					ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	5/10/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330
CALIB. DATE:	4/19/18 4/19/18
RUN BATCH:	GBB 1730

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	310

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB059709	35	FAS3801-4	8330	OP69973	1X		ND
BB 10	36	OP69973dup					ND
BB 11	37	dup2					ND
BB 12	38	FAS3801-5					ND
BB 13	39	-6					ND
BB 14	40	-7					ND
BB 15	41	CC1722-1000		LC1020	1:1	pii 5/11/18	~~ND~~ ICV signal 2,4,6 low 2nd signal ethyl low
BB 16		CCB					ND
BB 17	41	FAS3801-8		OP69973	1X		ND
BB 18	42	-9					ND
BB 19	43	-10					ND
BB 20	44	-11					ND
BB 21	45	-12					ND
BB 22	46	-13					ND
BB 23	47	-14					ND
BB 24	48	OP69973-gb1					ND
BB 25	49	-gb2					ND
BB 26	50	-gb3					ND
BB 27	2	CC1722-1000		LC1020	1:1	pii 5/11/18	ICV signal 2,4,6 low 2nd signal ethyl low
BB 29							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature

SGS ACCUTEST-ORLANDO

DATE:	11/13/19
COLUMN TYPE:	Bres RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 416
ACQ. METHOD:	8330 RPB3
PROC. METHOD:	8330 RPB-1113
CALIB. DATE:	11/13/19
RUN BATCH: GGG	2571

ANALYST:	GM
ACETONITRILE LOT #:	343
MEOH LOT #:	171102
HEAD PRESSURE:	152

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 613824	1	CCb	8330	—			ND
GG 25	2	ICC25561000		LC9409	1:1		CCU + Run acetic
GG 26	3	ic2571-20			50/450 50/450	pii	acetic pass
GG 27	4	-50			10/390		
GG 28	5	-100			25/475		
GG 29	6	-200			50/450		
GG 30	7	icc -500			100/300		
GG 31	8	ic -1000			200/200		
GG 32	9	-2000			1X		
GG 33	10	icv -50		ES936/LC852 LC8611 & 5164	20:25 25:10	X mL	TNX/DW
GG 34	100	-500		E11098	40K		Hexyl & 246 TONY
GG 35	11	opb7519-mB		opb7519	1X		NB
GG 36	12	FAU8150-7cf					ND not needed
GG 37	13	FAU4005-1				pii	3,5 dini >40%
GG 38	14	-3					3,5 dini >40%
GG 39	15	-5					3,5 dini >40%
GG 40	16	opb64538-mB		opb67538			ND
GG 41	17	FAU8952-1Acf				pii	
GG 42	18	-2Acf				pii	
GG ✓ 43	19	opb7536-mB	✓	opb7536	✓		NP

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature:

SGS ACCUTEST-ORLANDO

DATE:	11/3/17
COLUMN TYPE:	Bives RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330 RPB 1113
CALIB. DATE:	11/3/17
RUN BATCH:	GGG 2571

ANALYST:	EM
ACETONITRILE LOT #:	343
MEOH LOT #:	171002
HEAD PRESSURE:	1052

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 0138441	20	FA49040-1cf	8330	op67534	1X	pii	✓
GG 45	8	CC2571-1000		LC949	1:1	pii	PASS
GG 46	1	CCB					ND
GG 47	21	FA49040-1cf		op67534	8/400	50X pii	✓
GG 48	22	-2			1X		✓
GG 49	23	-2			10/400	4X	✓
GG 50	24	-3			1X	✓	✓
GG 51	25	-3			10/400	4X	R1 @ 10X
GG 52	26	-4			1X		✓
GG 53	27	-5			↓		TNT>40% 2,4dini
GG 54	28	-5			10/400	4X	✓
GG 55	29	FA49077-1		✓	1X		✓
GG 56	8	CC2571-1000		LC949	1:1	pii	PASS
GG 57	1	CCB					ND
GG 58	30	op67540-MB		op67540	1X		ND
GG 59	31	FA49042-1cf			↓		2Amino 40%
GG 60	32	-1		↓	10/400	4X pii	✓
GG 61	33	op67576-MB		op67576	1X		ND
GG 62	34	FA49036-3cf					ND
GG 63	35	-10cf		↓	↓		ND
GG 64	8	CC2571-1000		LC949	1:1	pii	PASS

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature:

SGS ACCUTEST-ORLANDO

DATE:	05/08/18
COLUMN TYPE:	BOND RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 RP II B
CALIB. DATE:	11/18/17
RUN BATCH:	GGG 26026

ANALYST:	FI
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	233

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 614601	1	CCB	8330	→			ND
GG 02	2	CC2571-1000		LC1000	1:1	pii	PASS
GG 03	16	FA53725-46		op69919	1X		ND
GG 04	21	-51		↓			ND
GG 05	27	op69920-65		op69920	1X	pii	✓
GG 06	28	↓ -PT1				pii	✓
GG 07	29	↓ -MS					ND
GG 08	30	FA53725-54					ND
GG 09	31	op69920-ms				pii	✓
GG 10	32	↓ -msd				pii	✓
GG 11	34	FA53725-56		↓	1X		ND
GG 12	2	CC2571-1000		LC1000	1:1	pii	PASS
GG 13	1	CCB		—	—	—	ND
GG 14	1	CCB		—	—	—	ND
GG 15	35	op69920-dup		op69920	1X		ND
GG 16	36	↓ -dup2					ND
GG 17	39	FA53725-59					ND
GG 18	40	↓ -60					ND
GG 19	45	↓ -65					ND
GG 20	24	op6599 19-961	↓	↓	↓		ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

SGS ACCUTEST-ORLANDO

DATE:	05/08/18
COLUMN TYPE:	2 Rtx BP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 RP 11 13
CALIB. DATE:	11/13/17
RUN BATCH:	GGG 2626

ANALYST:	EM
ACETONITRILE LOT #:	3526
MEOH LOT #:	—
HEAD PRESSURE:	233

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 14624	25	op6919-gb4	8330	op6919	1		ND
GG 22	26	↓ -gb3		↓	↓		ND
GG 23	2	cc 2571-100		LC1020	1:1	PII	2nd signal 3-5 min RT
GG 24	1	CCB					ND
GG 25	48	op6920-gb1		op6920	1		ND
GG 26	49	↓ -gb2		↓	↓		ND
GG 27	50	↓ -gb3		↓	↓		ND
GG 28	51	op6995-gb5 MS		op6995	↓	PII	ND
GG 29	52	↓ -PT1 PT1		↓	↓	PII	✓
GG 30	53	↓ -MS BS		↓	↓	EM 5/9/18	ND ✓
GG 31	54	FAS3725-104		↓	↓		ND
GG 32	55	op6995 ms		↓	↓	PII	✓
GG 33	56	↓ -msd		↓	↓	PII	✓
GG 34	57	FAS3725-107		↓	↓		ND
GG 35	2	CC 2571-100		LC1020	1:1	PII	PASS
GG 36	1	CCB					ND
GG 37	58	op6995-dup		op6995	1		ND
GG 38	59	-dup2		↓	↓		ND
GG 39	60	FAS3725-110		↓	↓		ND
GG 40	61	↓ 113		↓	↓		ND

5/9/18 EM

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	05/8/18
COLUMN TYPE:	BONESRP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A1B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 RP 11.13
CALIB. DATE:	11/13/17
RUN BATCH: GGG	26226

ANALYST:	EM
ACETONITRILE LOT #:	8526
MEOH LOT #:	
HEAD PRESSURE:	233

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 61464l	62	FA53725-114	8330	OP69945	1X		ND
GG 42	63	OP 69945-gb1					ND
GG 43	64	-gb2					ND
GG 44	65	-gb3					ND
GG 45	2	CC2571-1000		LC1020	1.1	PII	PASS
GG 46	1	CCB				CM5/9/18	ND
GG 47	66	OP 69946-BS		OP69946	1X		✓
GG 48	67	-PT1					✓
GG 49	68	-mb					ND
GG 50							
GG 51							
GG 52							
GG 53							
GG 54							
GG 55							
GG 56							
GG 57							
GG 58							
GG 59							
GG 60							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature:

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B, 537MOD (PFC) or Other_____ (circle)

Date/Time: 05/07/18 1700 Started {mm/dd/yy 24:00}

Therm. ID: — Corr. Factor (±°C): —

Bath Temp. (High) °C : —/— {obs/corr}

Date/Time: 05/08/18 1100 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332): —

Shaker Table ID (8330B): ST1

Batch#: OP69946 Ext. By: MB Vialed By: MB Balance ID: METTLER1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69946 MB	X	10.00	1.25ml		50ml	
OP 69946 BS	X	10.00		125+125ul 1.25ml		
FA53725-117	1	10.08				
-118	1	10.02				
-119	1	10.08				
-120	1	10.09				
-121	1	10.00				
FA53800-1	1	10.01				
-2	1	10.09				
-3	1	10.10				
-4	1	10.08				
-5	1	10.09				
-6	1	10.07				
-7	1	10.15				
-8	1	10.14				
-9	1	10.08				
-10	1	10.10				
GRINDING BLANK	A	10.01				
	B	10.00				
	C	10.03				
						MB 05/08/18
OP 69946 PT-1	X	5.00	1.25ml		50ml	
FA53725-119 MS	1	10.03		125+125ul 1.25ml		
-119 MSD	1	10.05				
FA53800-1 DUP	1	10.10				
-1 TRP	1	10.08				

Comments:

Surr. ID: E624UF Conc: 20ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6249 Conc: 20ppm Exp. Date: 10/19/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8993 8937F Conc: 1000ug/ml Exp. Date: 05/04/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 170845 Methanol Lot # — Water Lot# 180700 HPLC

Syringe Filter Lot# 121122030 Reagent # CS1 Reagent # —

Relinquished By: Date: 05/08/18

Accepted By: 1430 Date: 5/8/18

NF 05/16 extsolid_exp 051616.xls

7.9.1

7

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, (8330B), 537MOD (PFC) or Other_____ (circle)

Date/Time: 05/08/18 1830 Started {mm/dd/yy 24:00}

Therm. ID: — Corr. Factor (±°C): _____

Bath Temp. (High) °C: —/— {obs/corr}

Date/Time: 05/09/18 1230 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332): —

Shaker Table ID (8330B): ST 1

Batch#: OP69960 Ext. By: MB Vialed By: MB Balance ID: METTLER 1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69960 MB	X	10.00	1.25ml		50ml	
OP 69960 BS	X	10.00		125+125ul 1.25ml		
FAS3800-11	1	10.09				
-12	1	10.18				
-13	1	10.13				
-14	1	10.06				
-15	1	10.09				
-16	1	10.10				
-17	1	10.15				
-18		10.00				
-19		10.06				
-20		10.05				
-21		10.08				
-22		10.10				
-23		10.13				
-24		10.10				
GRINDING BLANK	A	10.00				
	B	10.00				
	C	10.00				
					MB 05/09/18	
MB OP69960 PT-1	X	5~~10~~.00	1.25ml		50ml	
05/08/18 FAS3800-16 MS	1	10.11		125+125ul 1.25ml		
-16 MSD	1	10.09		+		
FAS3800-22 DUP	1	10.11				
-22 TRP	1	10.13				

Comments:

Surr. ID: E62441 Conc: 20ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E62249 Conc: 20ppm Exp. Date: 10/19/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8937E 8992E Conc: 1000ug/ml 1000ug/ml Exp. Date: 05/08/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 170845 Methanol Lot # — Water Lot# 186700 HPLC

Syringe Filter Lot# 121122030 Reagent # CS1 Reagent # —

Relinquished By: _____ Date: 05/09/18

Accepted By: _____ Date: 5/9/18

NF 05/16 extsolid_exp 051616.xls

7.9.2

7

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:25	MA14898-STD1	1		STDA
09:30	MA14898-STD2	1		STDB
09:33	MA14898-STD3	1		STDC
09:37	MA14898-STD4	1		STDD
09:40	MA14898-HSTD1	1		
09:44	MA14898-ICV1	1		
09:49	MA14898-ICB1	1		
09:53	MA14898-CRIA1	1		
09:57	MA14898-ICSA1	1		
10:04	MA14898-ICSAB1	1		
10:08	MA14898-CCV1	1		
10:14	MA14898-CCB1	1		
10:18	MP33734-MB1	5		
10:22	MP33734-B1	5		
10:27	FA53725-4	10		(sample used for QC only; not part of login FA53800)
10:31	MP33734-D1	10		
10:35	MP33734-D2	10		
10:40	MP33734-SD1	50		
10:44	MP33734-PS1	10		
10:48	MP33734-S1	10		
10:53	MP33734-S2	10		
10:57	ZZZZZZ	10		
11:01	MA14898-CCV2	1		
11:06	MA14898-CCB2	1		
11:10	ZZZZZZ	10		
11:14	ZZZZZZ	10		
11:19	ZZZZZZ	10		
11:23	ZZZZZZ	10		
11:27	ZZZZZZ	10		
11:32	ZZZZZZ	10		
11:36	ZZZZZZ	10		
11:40	ZZZZZZ	10		
11:45	ZZZZZZ	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:49	ZZZZZZ	10		
11:54	MA14898-CCV3	1		
11:58	MA14898-CCB3	1		
12:02	ZZZZZZ	10		
12:07	ZZZZZZ	10		
12:11	ZZZZZZ	10		
12:15	ZZZZZZ	10		
12:20	ZZZZZZ	10		
12:24	ZZZZZZ	10		
12:28	ZZZZZZ	5		
12:33	ZZZZZZ	5		
12:37	ZZZZZZ	5		
12:41	ZZZZZZ	5		
12:46	MA14898-CCV4	1		
12:50	MA14898-CCB4	1		
12:54	MP33740-MB1	5		
12:59	MP33740-B1	5		
13:03	FA53725-31A	5		(sample used for QC only; not part of login FA53800)
13:07	MP33740-D1	5		
13:12	MP33740-D2	5		
13:16	MP33740-SD1	25		
13:20	MP33740-PS1	5		
13:25	MP33740-S1	5		
13:29	MP33740-S2	5		
13:33	ZZZZZZ	5		
13:38	MA14898-CCV5	1		
13:42	MA14898-CCB5	1		
13:46	ZZZZZZ	5		
13:51	ZZZZZZ	5		
13:55	ZZZZZZ	5		
13:59	ZZZZZZ	5		
14:04	ZZZZZZ	5		
14:08	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:13	ZZZZZZ	5		
14:17	ZZZZZZ	5		
14:21	ZZZZZZ	5		
14:26	ZZZZZZ	5		
14:30	MA14898-CCV6	1		
14:34	MA14898-CCB6	1		
14:39	ZZZZZZ	5		
14:43	FA53800-4A	5		
14:47	FA53800-7A	5		
14:52	FA53800-8A	5		
14:56	FA53800-16A	5		
15:00	FA53800-17A	5		
15:05	MP33740-SD1	25		
---------->	Last reportable sample/prep for job FA53800			
15:09	MA14898-CRIA2	1		
15:14	MA14898-ICSA2	1		
15:18	MA14898-ICSAB2	1		
15:23	MA14898-CCV7	1		
15:27	MA14898-CCB7	1		
---------->	Last reportable CCB for job FA53800			
15:31	MA14898-CCV8	1		
15:35	MA14898-CCB8	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:25	MA14898-STD1	4867	26147	2358	1950
09:30	MA14898-STD2	4819	25666	2349	1921
09:33	MA14898-STD3	4679	25301	2323	1833
09:37	MA14898-STD4	4516	24964	2301	1738
09:40	MA14898-HSTD1	4508	24883	2307	1740
09:44	MA14898-ICV1	4647	25358	2327	1834
09:49	MA14898-ICB1	4786 R	25659 R	2308 R	1934 R
09:53	MA14898-CRIA1	4828	25493	2295	1946
09:57	MA14898-ICSA1	4366	23555	2198	1728
10:04	MA14898-ICSAB1	4300	23491	2176	1688
10:08	MA14898-CCV1	4591	24964	2251	1818
10:14	MA14898-CCB1	4757	25587	2282	1934
10:18	MP33734-MB1	4762	25411	2264	1926
10:22	MP33734-B1	4735	25319	2261	1926
10:27	FA53725-4	4781	25439	2301	1938
10:31	MP33734-D1	4781	25552	2318	1939
10:35	MP33734-D2	4786	25528	2305	1945
10:40	MP33734-SD1	4781	25745	2293	1948
10:44	MP33734-PS1	4763	25393	2300	1931
10:48	MP33734-S1	4737	25357	2266	1923
10:53	MP33734-S2	4711	25370	2276	1910
10:57	ZZZZZZ	4742	25490	2278	1911
11:01	MA14898-CCV2	4551	24768	2223	1817
11:06	MA14898-CCB2	4732	25592	2288	1932
11:10	ZZZZZZ	4774	25625	2293	1933
11:14	ZZZZZZ	4802	25813	2317	1924
11:19	ZZZZZZ	4793	25787	2310	1926
11:23	ZZZZZZ	4755	25536	2315	1930
11:27	ZZZZZZ	4735	25452	2282	1939
11:32	ZZZZZZ	4725	25348	2259	1930
11:36	ZZZZZZ	4715	25374	2273	1929
11:40	ZZZZZZ	4729	25333	2268	1932
11:45	ZZZZZZ	4752	25435	2294	1931

INTERNAL STANDARD SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:49	ZZZZZZ	4752	25549	2289	1933
11:54	MA14898-CCV3	4576	24888	2236	1827
11:58	MA14898-CCB3	4721	25742	2264	1934
12:02	ZZZZZZ	4753	25521	2290	1947
12:07	ZZZZZZ	4735	25380	2284	1946
12:11	ZZZZZZ	4721	25527	2303	1936
12:15	ZZZZZZ	4743	25379	2264	1942
12:20	ZZZZZZ	4700	25320	2270	1933
12:24	ZZZZZZ	4682	25206	2253	1926
12:28	ZZZZZZ	4752	25335	2278	1905
12:33	ZZZZZZ	4666	24934	2223	1905
12:37	ZZZZZZ	4678	25107	2240	1903
12:41	ZZZZZZ	4687	25120	2262	1905
12:46	MA14898-CCV4	4524	24843	2230	1808
12:50	MA14898-CCB4	4712	25494	2267	1937
12:54	MP33740-MB1	4652	25095	2229	1897
12:59	MP33740-B1	4626	25007	2209	1892
13:03	FA53725-31A	4734	25290	2273	1913
13:07	MP33740-D1	4717	25271	2232	1918
13:12	MP33740-D2	4710	25326	2239	1906
13:16	MP33740-SD1	4722	25270	2275	1936
13:20	MP33740-PS1	4701	25392	2259	1892
13:25	MP33740-S1	4693	25174	2263	1893
13:29	MP33740-S2	4687	24993	2282	1894
13:33	ZZZZZZ	4720	25422	2273	1905
13:38	MA14898-CCV5	4536	24987	2228	1815
13:42	MA14898-CCB5	4715	25580	2263	1936
13:46	ZZZZZZ	4709	25358	2255	1906
13:51	ZZZZZZ	4695	25356	2247	1915
13:55	ZZZZZZ	4824	25825	2316	1911
13:59	ZZZZZZ	4732	25428	2283	1917
14:04	ZZZZZZ	4691	25190	2261	1907
14:08	ZZZZZZ	4662	25084	2254	1896

INTERNAL STANDARD SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
Analyst: DM Run ID: MA14898
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:13	ZZZZZZ	4679	25200	2251	1904
14:17	ZZZZZZ	4692	25329	2271	1896
14:21	ZZZZZZ	4699	25446	2262	1907
14:26	ZZZZZZ	4715	25324	2277	1910
14:30	MA14898-CCV6	4543	24764	2242	1815
14:34	MA14898-CCB6	4712	25580	2274	1931
14:39	ZZZZZZ	4712	25259	2256	1912
14:43	FA53800-4A	4701	25189	2265	1899
14:47	FA53800-7A	4670	25114	2268	1889
14:52	FA53800-8A	4665	25134	2255	1891
14:56	FA53800-16A	4679	25183	2250	1908
15:00	FA53800-17A	4678	25242	2248	1909
15:05	MP33740-SD1	4726	25593	2279	1941
15:09	MA14898-CRIA2	4671	25431	2251	1921
15:14	MA14898-ICSA2	4236	23218	2150	1703
15:18	MA14898-ICSAB2	4198	22922	2132	1675
15:23	MA14898-CCV7	4487	24795	2218	1798
15:27	MA14898-CCB7	4659	25316	2247	1914
15:31	MA14898-CCV8	4483	24490	2203	1795
15:35	MA14898-CCB8	4652	25321	2259	1918

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14898 Units: ug/l

Time: / Sample ID:			09:49 ICB1		10:14 CCB1		11:06 CCB2		11:58 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	5.0	.2								
Cadmium	4.0	.2								
Calcium	5000	50								
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	-0.200	<20	-0.400	<20	-0.600	<20	0.500	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4								
Silver	10	.7								
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14898 Units: ug/l

Time: / Sample ID:			12:50 CCB4		13:42 CCB5		14:34 CCB6		15:27 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	5.0	.2								
Cadmium	4.0	.2								
Calcium	5000	50								
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	20	1	0.500	<20	-0.100	<20	0.200	<20	-0.300	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	20	2.4								
Silver	10	.7								
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14898 Units: ug/l

Time:		09:44			10:08			11:01	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	2000	1950	97.5	2000	2020	101.0	2000	2040	102.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14898 Units: ug/l

Time: / Sample ID: / Metal	CCV True	11:54 CCV3 Results	% Rec	CCV True	12:46 CCV4 Results	% Rec	CCV True	13:38 CCV5 Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	2000	2040	102.0	2000	2060	103.0	2000	2060	103.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14898 Units: ug/l

Time:		14:30			15:23	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	2000	2060	103.0	2000	2100	105.0
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14898 Units: ug/l

Time:		09:40	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead	4000	4020	100.5
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium			
Silver			
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14898 Units: ug/l

Time: / Sample ID: / Metal	CRI True	CRIA True	09:53 CRIA1 Results	% Rec	15:09 CRIA2 Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10				
Barium	400	200				
Beryllium	10	5.0				
Cadmium	10	5.0				
Calcium	2000	1000				
Chromium	20	10				
Cobalt	100	50				
Copper	50	25				
Iron	600	300				
Lead	10	5.0	4.20	84.0	4.70	94.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000				
Selenium	20	10				
Silver	20	10				
Sodium	20000	10000				
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SA051518M1.ICP Date Analyzed: 05/15/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14898 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	09:57 ICSA1 Results	% Rec	10:04 ICSAB1 Results	% Rec	15:14 ICSA2 Results	% Rec	15:18 ICSAB2 Results	% Rec
Aluminum	500000	500000	515000	103.0	521000	104.2	530000HH	106.0	540000HH	108.0
Antimony		1000	1.90		1020	102.0	0.600		1070	107.0
Arsenic		1000	0.00		1080	108.0	-1.60		1130	113.0
Barium		500	0.200		518	103.6	-0.200		542	108.4
Beryllium		500	-0.600		501	100.2	-0.600		511	102.2
Cadmium		1000	0.00		960	96.0	1.00		1000	100.0
Calcium	500000	500000	467000	93.4	472000	94.4	476000H	95.2	480000H	96.0
Chromium		500	-0.800		489	97.8	-0.700		498	99.6
Cobalt		500	-0.900		489	97.8	-0.600		505	101.0
Copper		500	-0.900		532	106.4	-1.50		538	107.6
Iron	200000	200000	177000	88.5	182000	91.0	176000C	88.0	181000C	90.5
Lead		1000	0.500		970	97.0	-0.900		992	99.2
Magnesium	500000	500000	497000	99.4	504000	100.8	505000HH	101.0	514000HH	102.8
Manganese		500	-0.500		500	100.0	-0.200		519	103.8
Molybdenum		1000	-3.50		911	91.1	-4.20		936	93.6
Nickel		1000	-0.100		969	96.9	-0.100		986	98.6
Potassium			283		49.3		125		-5.60	
Selenium		1000	0.00		966	96.6	-4.00		1010	101.0
Silver		1000	0.300		1050	105.0	-0.100		1070HH	107.0
Sodium			193		164		110		118	
Strontium		1000	0.00		1010	101.0	0.00		1040	104.0
Thallium		1000	0.00		957	95.7	1.70		986	98.6
Tin		1000	-1.80		943	94.3	-2.20		967	96.7
Titanium		1000	-0.100		986	98.6	-0.200		1020	102.0
Vanadium		500	0.800		483	96.6	0.300		507	101.4
Zinc		1000	1.30		934	93.4	1.60		951	95.1

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/15/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	3.5		
Antimony	2.0	.1	.13		
Arsenic	1.0	.13	.2		
Barium	20	.1	.1		
Beryllium	0.50	.02	.05		
Cadmium	0.40	.02	.05		
Calcium	500	5	5		
Chromium	1.0	.1	.1		
Cobalt	5.0	.02	.05		
Copper	2.5	.1	.1		
Iron	30	1.7	1.7		
Lead	2.0	.1	.1	-0.074	<2.0
Magnesium	500	3.5	3.6		
Manganese	1.5	.05	.05		
Molybdenum	5.0	.03	.05		
Nickel	4.0	.04	.05		
Potassium	1000	20	20		
Selenium	2.0	.24	.24		
Silver	1.0	.07	.082		
Sodium	1000	50	50		
Strontium	1.0	.05	.05		
Thallium	1.0	.11	.11		
Tin	5.0	.09	.09		
Titanium	1.0	.05	.05		
Vanadium	5.0	.05	.05		
Zinc	2.0	.3	.3		

Associated samples MP33740: FA53800-4A, FA53800-7A, FA53800-8A, FA53800-16A, FA53800-17A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/15/18				05/15/18	
Metal	FA53725-31A Original	DUP	RPD	QC Limits	FA53725-31A Original	DUP	RPD	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	14.1	13.1	7.4	0-20	14.1	13.8	2.2	0-20
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33740: FA53800-4A, FA53800-7A, FA53800-8A, FA53800-16A, FA53800-17A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/15/18

Metal	FA53725-31A Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	14.1	25.1	9.92	110.9	80-120
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP33740: FA53800-4A, FA53800-7A, FA53800-8A, FA53800-16A, FA53800-17A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/15/18

Metal	FA53725-31A Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	14.1	23.8	9.98	97.2	5.3	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP33740: FA53800-4A, FA53800-7A, FA53800-8A, FA53800-16A, FA53800-17A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/15/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	10.8	10	108.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33740: FA53800-4A, FA53800-7A, FA53800-8A, FA53800-16A, FA53800-17A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/15/18

Metal	FA53725-31A Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	717	664	7.4	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33740: FA53800-4A, FA53800-7A, FA53800-8A, FA53800-16A, FA53800-17A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53800
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33740 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 05/15/18

Metal	Sample ml	Final ml	FA53725-31A Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	717.2	702.856	781.4	0.2	2.5	50	157.1*(a	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33740: FA53800-4A, FA53800-7A, FA53800-8A, FA53800-16A, FA53800-17A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Instrument Detection Limits

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14898

Instrument Linear Ranges

Job Number: FA53800
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14898

Metals Analysis

Raw Data

Inst QC: MA14898

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/15/2018 9:25:52 Type: Cal
Method: 60102007_042011(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0004**	**-.0043**	**.0000**	**.0099**	**.0044**	**.0111**	**.0039**	**.0017**	**.0002**
Stddev	.0004	.0020	.000	.0021	.0014	.0010	.0009	.0007	.0001
%RSD	108.8	46.90	397.8	20.95	30.91	8.636	22.81	40.24	31.84
#1	-.0008	-.0055	.0002	.0075	.0029	.0100	.0036	.0017	.0001
#2	-.0001	-.0020	-.0002	.0110	.0053	.0115	.0049	.0025	.0003
#3	-.0002	-.0053	-.0001	.0112	.0052	.0118	.0032	.0011	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0087**	**.0059**	**-.0007**	**.0000**	**.0023**	**.0069**	**.0225**	**.0029**	**-.0018**
Stddev	.0000	.0004	.0043	.001	.0002	.0011	.0023	.0003	.0009
%RSD	.4353	6.254	590.7	1271.	9.220	16.38	10.39	10.74	48.91
#1	.0087	.0061	.0019	-.0006	.0022	.0082	.0199	.0031	-.0010
#2	.0087	.0062	.0016	.0001	.0022	.0067	.0244	.0031	-.0027
#3	.0088	.0055	-.0057	.0004	.0026	.0059	.0231	.0026	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0007**	**.0008**	**.0044**	**.0011**	**.0069**	**.0046**	**-.0017**	**-.0003**	**.0045**
Stddev	.0001	.0003	.0001	.0001	.0019	.0002	.0002	.0001	.0005
%RSD	20.31	36.95	2.881	12.04	27.72	3.442	11.75	52.53	11.61
#1	.0006	.0009	.0042	.0012	.0081	.0048	-.0018	-.0001	.0042
#2	.0009	.0011	.0044	.0012	.0078	.0045	-.0015	-.0004	.0050
#3	.0007	.0005	.0044	.0009	.0047	.0046	-.0018	-.0002	.0041

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1950.2**	**4866.7**	**26147.**	**2358.2**
Stddev	4.4	14.3	37.	14.0
%RSD	.22700	.29461	.14151	.59396
#1	1948.4	4868.3	26108.	2342.3
#2	1955.2	4880.2	26181.	2368.7
#3	1946.9	4851.6	26152.	2363.7

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/15/2018 9:30:19 Type: Cal
Method: 60102007_042011(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0332**	**1.478**	**.0948**	**4.884**	**3.872**	**2.973**	**2.500**	**1.288**	**.2158**
Stddev	.0006	.002	.0004	.011	.002	.004	.002	.001	.0007
%RSD	1.823	.1575	.4084	.2341	.0554	.1435	.0603	.1068	.3284
#1	.0339	1.479	.0948	4.893	3.871	2.974	2.502	1.288	.2153
#2	.0329	1.476	.0952	4.871	3.870	2.977	2.499	1.289	.2166
#3	.0327	1.480	.0944	4.887	3.874	2.969	2.500	1.286	.2156

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3239**	**1.400**	**1.013**	**.2780**	**1.424**	**.4567**	**4.036**	**.7046**	**.5081**
Stddev	.0003	.004	.005	.0020	.005	.0002	.024	.0015	.0007
%RSD	.0990	.3249	.4753	.7281	.3382	.0399	.5852	.2089	.1281
#1	.3236	1.396	1.010	.2779	1.420	.4567	4.028	.7029	.5074
#2	.3239	1.401	1.019	.2760	1.429	.4570	4.018	.7058	.5084
#3	.3242	1.405	1.010	.2800	1.423	.4566	4.063	.7050	.5085

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1093**	**.0717**	**.1948**	**.2048**	**5.650**	**.7338**	**.1545**	**.3028**	**1.420**
Stddev	.0006	.0004	.0004	.0000	.011	.0024	.0002	.0008	.001
%RSD	.5279	.5662	.2125	.0237	.1949	.3337	.1410	.2708	.0388
#1	.1097	.0714	.1944	.2048	5.640	.7360	.1546	.3024	1.420
#2	.1096	.0715	.1953	.2048	5.648	.7341	.1542	.3038	1.421
#3	.1087	.0722	.1948	.2049	5.662	.7312	.1546	.3023	1.420

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1921.3**	**4818.5**	**25666.**	**2348.8**
Stddev	3.8	5.8	145.	8.2
%RSD	.19675	.12129	.56457	.34919
#1	1917.6	4814.6	25810.	2351.8
#2	1921.0	4815.6	25520.	2355.1
#3	1925.2	4825.2	25668.	2339.6

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/15/2018 9:33:44 Type: Cal
Method: 60102007_042011(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1295**	**5.977**	**.3919**	**19.51**	**15.48**	**11.79**	**10.08**	**5.198**	**.8581**
Stddev	.0002	.030	.0014	.09	.07	.05	.03	.012	.0040
%RSD	.1785	.5006	.3500	.4719	.4440	.4060	.2886	.2289	.4700
#1	.1294	5.986	.3911	19.54	15.56	11.84	10.07	5.200	.8607
#2	.1294	6.002	.3935	19.59	15.46	11.79	10.11	5.209	.8601
#3	.1298	5.944	.3912	19.41	15.43	11.74	10.05	5.185	.8535

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.293**	**5.353**	**4.121**	**1.117**	**5.642**	**1.957**	**16.07**	**2.822**	**2.091**
Stddev	.004	.023	.018	.004	.015	.003	.06	.004	.004
%RSD	.3287	.4324	.4474	.3480	.2689	.1362	.3800	.1225	.1774
#1	1.296	5.379	4.141	1.122	5.643	1.958	16.11	2.823	2.087
#2	1.295	5.343	4.117	1.114	5.657	1.960	16.09	2.825	2.094
#3	1.288	5.337	4.105	1.116	5.627	1.954	16.00	2.818	2.092

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4485**	**.2916**	**.6093**	**.8724**	**23.58**	**3.054**	**.6524**	**1.291**	**5.677**
Stddev	.0008	.0004	.0021	.0027	.12	.004	.0022	.004	.012
%RSD	.1795	.1518	.3421	.3139	.4947	.1263	.3374	.2770	.2182
#1	.4491	.2915	.6099	.8715	23.60	3.055	.6535	1.287	5.674
#2	.4488	.2921	.6111	.8755	23.69	3.057	.6538	1.294	5.691
#3	.4476	.2912	.6070	.8703	23.46	3.049	.6499	1.290	5.667

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1833.4**	**4678.8**	**25301.**	**2323.1**
Stddev	2.2	11.5	93.	15.0
%RSD	.11973	.24531	.36621	.64666
#1	1834.6	4676.6	25295.	2305.8
#2	1830.8	4668.6	25211.	2332.9
#3	1834.7	4691.2	25396.	2330.5

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/15/2018 9:37:29 Type: Cal
Method: 60102007_042011(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2632**	**11.72**	**.7771**	**38.06**	**30.24**	**22.82**	**19.70**	**10.22**	**1.652**
Stddev	.0009	.09	.0028	.34	.27	.17	.04	.01	.006
%RSD	.3229	.7802	.3654	.8992	.8924	.7316	.1887	.1120	.3859
#1	.2623	11.81	.7743	38.32	30.41	22.97	19.66	10.21	1.646
#2	.2635	11.63	.7769	37.67	29.93	22.64	19.72	10.23	1.659
#3	.2639	11.73	.7800	38.20	30.38	22.86	19.72	10.23	1.652

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.552**	**10.31**	**8.079**	**2.169**	**10.85**	**3.802**	**31.10**	**5.524**	**4.187**
Stddev	.003	.07	.042	.020	.03	.007	.21	.001	.016
%RSD	.1236	.6676	.5237	.9064	.2734	.1822	.6893	.0223	.3719
#1	2.548	10.37	8.119	2.191	10.82	3.795	31.24	5.525	4.193
#2	2.554	10.24	8.035	2.153	10.88	3.803	30.86	5.522	4.199
#3	2.552	10.34	8.084	2.164	10.84	3.809	31.21	5.524	4.169

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.8922**	**.5752**	**1.393**	**1.684**	**45.76**	**5.930**	**1.307**	**2.481**	**11.03**
Stddev	.0041	.0017	.003	.001	.36	.015	.006	.009	.01
%RSD	.4603	.2913	.1832	.0390	.7926	.2494	.4637	.3824	.0724
#1	.8874	.5732	1.391	1.684	46.06	5.915	1.303	2.473	11.02
#2	.8946	.5759	1.395	1.684	45.36	5.944	1.314	2.491	11.03
#3	.8944	.5763	1.395	1.683	45.86	5.930	1.305	2.477	11.03

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1737.9**	**4516.2**	**24964.**	**2300.7**
Stddev	6.5	8.2	196.	13.2
%RSD	.37292	.18210	.78700	.57541
#1	1738.0	4525.1	25078.	2286.9
#2	1731.4	4509.0	24737.	2313.3
#3	1744.4	4514.4	25077.	2301.8

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/15/2018 9:40:56 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5033	80.14	4.015	3.998	3.962	79.07	3.985	3.991	3.954
Stddev	.0031	.38	.006	.020	.029	.46	.006	.004	.006
%RSD	.6124	.4698	.1435	.4913	.7440	.5845	.1530	.1125	.1634
#1	.5021	79.78	4.013	3.992	3.949	78.59	3.979	3.989	3.961
#2	.5009	80.53	4.010	4.020	3.996	79.52	3.983	3.987	3.948
#3	.5068	80.10	4.021	3.982	3.942	79.10	3.991	3.996	3.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.984	78.86	79.68	79.39	3.944	3.999	79.16	3.970	4.016
Stddev	.005	.70	.34	.60	.007	.009	.41	.003	.007
%RSD	.1237	.8926	.4325	.7517	.1709	.2233	.5227	.0845	.1731
#1	3.979	78.34	79.63	78.70	3.947	3.991	78.94	3.969	4.009
#2	3.984	79.66	80.05	79.71	3.936	3.997	79.64	3.967	4.018
#3	3.989	78.58	79.37	79.75	3.948	4.009	78.90	3.974	4.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.028	4.016	4.160	3.970	4.005	3.968	4.033	3.966	3.954
Stddev	.005	.011	.009	.001	.028	.004	.008	.009	.003
%RSD	.1135	.2604	.2138	.0214	.6880	.0949	.2067	.2360	.0797
#1	4.023	4.013	4.154	3.971	3.991	3.972	4.024	3.968	3.951
#2	4.028	4.006	4.157	3.970	4.036	3.964	4.034	3.956	3.953
#3	4.032	4.027	4.170	3.969	3.987	3.968	4.041	3.974	3.957
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/15/2018 9:40:56 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1739.7	4508.1	24883.	2306.6
Stddev	3.1	3.7	133.	12.0
%RSD	.17553	.08181	.53457	.52097
#1	1736.7	4503.9	24735.	2314.9
#2	1739.5	4509.9	24922.	2312.0
#3	1742.8	4510.5	24993.	2292.8

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/15/2018 9:44:21 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2310	40.78	1.964	2.003	1.997	39.58	1.981	1.986	1.965
Stddev	.0014	.31	.004	.011	.009	.26	.003	.003	.007
%RSD	.6214	.7721	.1790	.5309	.4267	.6516	.1266	.1558	.3654
#1	.2325	41.09	1.964	2.005	2.004	39.80	1.980	1.987	1.970
#2	.2297	40.79	1.960	2.013	2.000	39.65	1.980	1.983	1.967
#3	.2308	40.46	1.967	1.992	1.987	39.30	1.984	1.989	1.957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.968	38.83	39.13	39.89	1.953	1.842	38.96	1.981	1.946
Stddev	.013	.30	.20	.26	.006	.003	.23	.003	.005
%RSD	.6708	.7720	.5099	.6597	.2861	.1734	.5802	.1445	.2540
#1	1.983	38.98	39.19	40.06	1.954	1.845	39.09	1.983	1.941
#2	1.964	39.04	39.29	40.02	1.958	1.838	39.09	1.978	1.948
#3	1.958	38.49	38.91	39.59	1.947	1.842	38.70	1.981	1.950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.976	1.970	.0973	1.971	1.937	1.954	2.010	1.887	1.975
Stddev	.007	.002	.0009	.004	.010	.006	.002	.003	.007
%RSD	.3561	.1157	.9508	.1864	.4983	.3198	.1024	.1491	.3466
#1	1.979	1.972	.0971	1.971	1.939	1.955	2.012	1.886	1.969
#2	1.968	1.968	.0966	1.967	1.946	1.959	2.011	1.890	1.974
#3	1.980	1.970	.0984	1.974	1.927	1.947	2.008	1.884	1.983
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/15/2018 9:44:21 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1833.7	4646.9	25358.	2326.6
Stddev	4.1	15.4	93.	34.2
%RSD	.22618	.33032	.36869	1.4716
#1	1833.1	4643.2	25274.	2291.7
#2	1838.1	4663.8	25342.	2328.0
#3	1829.9	4633.8	25459.	2360.1

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/15/2018 9:49:38 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0181	.0001	-.0001	-.0004	-.0132	-.0004	-.0004
Stddev	.0003	.0039	.0005	.0003	.0003	.0037	.0001	.0002
%RSD	76.96	21.38	629.5	308.3	74.37	27.83	27.62	55.83
#1	.0002	-.0171	.0006	-.0005	-.0004	-.0093	-.0004	-.0006
#2	.0002	-.0148	-.0005	.0000	-.0006	-.0166	-.0003	-.0002
#3	.0007	-.0223	.0001	.0002	-.0001	-.0139	-.0006	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0000	-.0166	.0435	-.0141	-.0004	F -.0016	-.0002
Stddev	.0001	.000	.0007	.0333	.0358	.0000	.0009	.0092
%RSD	40.11	1118.	3.946	76.73	254.1	9.748	55.94	4512.
#1	-.0005	-.0002	-.0159	.0433	.0223	-.0004	-.0008	.0071
#2	-.0003	.0002	-.0169	.0102	-.0152	-.0004	-.0014	.0029
#3	-.0003	.0000	-.0171	.0769	-.0493	-.0005	-.0026	-.0106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0002	-.0010	-.0008	-.0019	.0000	-.0004	.0000
Stddev	.0001	.0005	.0005	.0008	.0010	.001	.0001	.000
%RSD	23.10	259.7	53.91	96.67	51.80	1866.	34.37	314.2
#1	-.0006	-.0006	-.0005	-.0012	-.0008	-.0001	-.0004	.0000
#2	-.0004	.0004	-.0009	.0001	-.0026	.0005	-.0006	.0001
#3	-.0005	-.0004	-.0016	-.0013	-.0023	-.0004	-.0003	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/15/2018 9:49:38 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0005	.0000	-.0005
Stddev	.0020	.0003	.0001
%RSD	377.8	629.5	17.16
#1	-.0010	-.0001	-.0005
#2	-.0002	-.0001	-.0005
#3	.0029	.0004	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1933.8	4785.8	25659.	2308.1
Stddev	6.6	14.5	157.	18.8
%RSD	.34169	.30396	.61322	.81501
#1	1941.3	4802.4	25668.	2291.6
#2	1929.2	4780.0	25498.	2304.2
#3	1930.7	4775.1	25812.	2328.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/15/2018 9:53:16 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0089	.1685	.0086	.2008	.0045	.9794	F .0040	.0483	.0100
Stddev	.0002	.0083	.0010	.0010	.0000	.0082	.0000	.0001	.0002
%RSD	1.954	4.897	11.06	.5111	1.029	.8413	1.078	.2965	2.429
#1	.0090	.1653	.0075	.2002	.0044	.9699	.0040	.0482	.0099
#2	.0087	.1779	.0090	.2019	.0045	.9849	.0040	.0485	.0102
#3	.0090	.1623	.0093	.2001	.0045	.9833	.0039	.0484	.0098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.0050		
Range							-20.00%		

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0239	.2683	9.787	4.964	.0146	.0411	9.789	.0387	.0042
Stddev	.0006	.0104	.113	.020	.0001	.0002	.035	.0002	.0009
%RSD	2.325	3.866	1.154	.3970	.6175	.4588	.3527	.4834	20.63
#1	.0245	.2735	9.695	4.950	.0147	.0409	9.758	.0385	.0048
#2	.0235	.2751	9.913	4.987	.0145	.0413	9.826	.0388	.0032
#3	.0236	.2564	9.752	4.956	.0146	.0412	9.783	.0389	.0046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0037	.0092	.0332	.0484	.0092	F .0080	F .0079	.0467	.0191
Stddev	.0013	.0003	.0004	.0001	.0002	.0001	.0014	.0001	.0001
%RSD	33.95	2.752	1.245	.2414	2.086	1.179	17.52	.2902	.5250
#1	.0052	.0090	.0334	.0485	.0090	.0080	.0094	.0466	.0192
#2	.0031	.0090	.0327	.0483	.0093	.0079	.0077	.0469	.0190
#3	.0029	.0095	.0335	.0484	.0094	.0081	.0067	.0467	.0190
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
Value	.0050					.0100	.0100		
Range	-20.00%					-20.00%	-20.00%		

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/15/2018 9:53:16 Type: QC
Method: 60102007_042011(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1945.8	4827.7	25493.	2294.7
Stddev	7.2	12.8	72.	6.0
%RSD	.37174	.26467	.28264	.25941
#1	1949.4	4841.6	25501.	2301.5
#2	1937.4	4816.4	25418.	2292.3
#3	1950.4	4825.1	25561.	2290.4

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/15/2018 9:57:51 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**515.4**	**.0000**	**.0002**	**-.0006**	**467.0**	**.0000**	**-.0009**
Stddev	.0004	2.9	.001	.0004	.0001	1.0	.0001	.0000
%RSD	125.2	.5597	11640.	233.2	22.30	.2217	536.6	3.232
#1	.0008	518.7	.0014	.0000	-.0004	467.5	.0001	-.0009
#2	.0000	513.4	-.0015	.0005	-.0007	465.8	.0000	-.0010
#3	.0002	514.1	.0000	-.0001	-.0005	467.6	.0000	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**-.0009**	**176.5**	**.2828**	**496.7**	**-.0005**	F **-.0035**	**.1931**
Stddev	.0004	.0003	.7	.0655	2.1	.0000	.0001	.0194
%RSD	47.75	37.79	.3877	23.17	.4185	9.336	3.402	10.07
#1	-.0004	-.0012	177.2	.2245	499.1	-.0005	-.0036	.1934
#2	-.0010	-.0008	175.9	.3537	495.7	-.0006	-.0035	.1735
#3	-.0010	-.0006	176.4	.2702	495.3	-.0005	-.0034	.2124
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0005**	**.0019**	**.0000**	**.0165**	F **-.0018**	**.0000**	**-.0001**
Stddev	.0001	.0019	.0026	.0035	.0013	.0005	.000	.0002
%RSD	181.7	360.4	133.7	9967.	7.753	28.81	578.3	390.1
#1	-.0001	.0018	-.0010	.0040	.0179	-.0018	.0000	.0002
#2	.0001	.0015	.0033	-.0012	.0154	-.0024	-.0001	-.0003
#3	-.0001	-.0017	.0036	-.0026	.0162	-.0013	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/15/2018 9:57:51 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	**.0000**	**.0008**	**.0013**
Stddev	.002	.0000	.0001
%RSD	11270.	5.031	6.536
#1	.0022	.0009	.0012
#2	-.0007	.0008	.0014
#3	-.0016	.0008	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1727.7**	**4366.4**	**23555.**	**2197.8**
Stddev	1.1	3.6	128.	7.7
%RSD	.06083	.08290	.54143	.34901
#1	1726.6	4369.1	23699.	2199.4
#2	1727.8	4362.3	23506.	2204.6
#3	1728.7	4368.0	23459.	2189.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/15/2018 10:04:21 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.048**	**521.0**	**1.077**	**.5175**	**.5013**	**471.5**	**.9601**	**.4892**	**.4893**
Stddev	.002	.8	.004	.0018	.0009	1.1	.0003	.0006	.0014
%RSD	.2125	.1515	.3878	.3552	.1745	.2380	.0293	.1204	.2817
#1	1.047	520.2	1.074	.5154	.5003	472.8	.9600	.4896	.4903
#2	1.050	521.7	1.075	.5182	.5017	471.1	.9604	.4895	.4877
#3	1.046	521.3	1.082	.5188	.5019	470.7	.9599	.4885	.4899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5323**	**181.6**	**.0493**	**503.9**	**.5003**	**.9109**	**.1637**	**.9692**	**.9700**
Stddev	.0005	.8	.0272	1.3	.0009	.0014	.0101	.0021	.0012
%RSD	.0933	.4314	55.19	.2548	.1824	.1577	6.159	.2156	.1220
#1	.5325	180.7	.0637	504.1	.4993	.9126	.1534	.9714	.9695
#2	.5328	182.1	.0663	502.5	.5011	.9103	.1641	.9692	.9713
#3	.5318	182.0	.0179	505.1	.5005	.9099	.1735	.9672	.9690
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.023**	**.9659**	**.0427**	**.9433**	**1.006**	**.9864**	**.9568**	**.4825**	**.9339**
Stddev	.003	.0043	.0002	.0030	.004	.0017	.0045	.0017	.0023
%RSD	.2724	.4450	.4449	.3187	.4522	.1724	.4674	.3517	.2429
#1	1.026	.9619	.0425	.9435	1.001	.9846	.9612	.4810	.9345
#2	1.021	.9654	.0428	.9462	1.010	.9866	.9522	.4843	.9357
#3	1.021	.9704	.0427	.9402	1.006	.9880	.9569	.4821	.9313
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/15/2018 10:04:21 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1687.5**	**4299.5**	**23491.**	**2175.7**
Stddev	2.2	1.9	86.	13.2
%RSD	.13193	.04326	.36498	.60519
#1	1685.3	4299.5	23397.	2168.6
#2	1687.3	4297.6	23513.	2190.9
#3	1689.8	4301.4	23564.	2167.6

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 10:08:03 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2457	41.09	2.044	2.053	2.021	40.96	2.058	2.026	2.035
Stddev	.0008	.09	.005	.003	.003	.13	.004	.001	.003
%RSD	.3126	.2178	.2544	.1610	.1627	.3145	.1815	.0669	.1403
#1	.2462	41.19	2.039	2.056	2.023	40.98	2.058	2.028	2.037
#2	.2449	41.03	2.050	2.050	2.017	40.82	2.062	2.026	2.031
#3	.2462	41.04	2.043	2.053	2.022	41.07	2.055	2.025	2.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.973	40.62	40.73	40.84	2.062	2.044	40.96	2.008	2.016
Stddev	.003	.18	.16	.26	.001	.001	.02	.001	.004
%RSD	.1724	.4542	.3828	.6402	.0513	.0538	.0562	.0231	.2143
#1	1.977	40.76	40.68	40.71	2.062	2.045	40.97	2.008	2.015
#2	1.971	40.41	40.61	40.67	2.063	2.045	40.93	2.008	2.020
#3	1.972	40.70	40.91	41.14	2.061	2.043	40.97	2.008	2.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.036	2.030	1.818	2.043	2.052	2.055	2.012	2.079	2.024
Stddev	.002	.003	.003	.002	.007	.001	.009	.002	.002
%RSD	.1090	.1250	.1382	.1137	.3395	.0613	.4664	.1053	.0900
#1	2.037	2.031	1.821	2.043	2.059	2.057	2.013	2.081	2.024
#2	2.037	2.032	1.817	2.045	2.045	2.054	2.021	2.077	2.026
#3	2.033	2.027	1.816	2.041	2.051	2.055	2.002	2.080	2.023
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA14898 page 17 of 108

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 10:08:03 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1818.4	4590.7	24964.	2251.3
Stddev	4.4	4.2	28.	20.1
%RSD	.24274	.09092	.11275	.89331
#1	1813.9	4585.9	24987.	2263.4
#2	1818.6	4593.1	24932.	2262.5
#3	1822.7	4593.1	24973.	2228.1

Raw Data MA14898 page 18 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 10:14:27 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0038	-.0007	-.0001	-.0004	-.0148	-.0007	-.0006
Stddev	.0002	.0108	.0006	.0003	.0001	.0052	.0000	.0001
%RSD	338.3	283.5	83.47	218.2	19.30	35.36	6.355	22.65
#1	-.0002	-.0043	-.0014	-.0005	-.0003	-.0107	-.0007	-.0007
#2	.0001	-.0143	-.0006	-.0001	-.0004	-.0206	-.0006	-.0005
#3	.0003	.0072	-.0002	.0002	-.0005	-.0130	-.0007	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0001	-.0140	-.0315	.0079	-.0003	F -.0025	-.0210
Stddev	.0003	.0001	.0038	.0305	.0236	.0001	.0008	.0135
%RSD	172.5	97.70	26.75	96.69	297.9	23.14	29.86	64.14
#1	-.0005	.0000	-.0099	-.0667	.0347	-.0003	-.0017	-.0337
#2	-.0001	.0000	-.0172	-.0147	-.0009	-.0003	-.0026	-.0068
#3	.0001	-.0001	-.0150	-.0131	-.0100	-.0002	-.0032	-.0226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	-.0004	-.0014	-.0016	-.0017	-.0006	-.0003	-.0005
Stddev	.0001	.0009	.0008	.0016	.0001	.0004	.0001	.0002
%RSD	11.83	252.9	60.38	104.2	8.056	69.23	34.24	37.54
#1	-.0009	-.0015	-.0015	-.0024	-.0017	-.0010	-.0005	-.0003
#2	-.0011	.0001	-.0021	-.0026	-.0019	-.0005	-.0003	-.0006
#3	-.0008	.0002	-.0005	.0003	-.0016	-.0002	-.0002	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Raw Data MA14898 page 19 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 10:14:27 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0004	-.0002	-.0008
Stddev	.0010	.0004	.0000
%RSD	249.7	237.0	4.216
#1	.0006	.0002	-.0008
#2	.0013	-.0001	-.0008
#3	-.0007	-.0006	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1934.2	4756.8	25587.	2281.9
Stddev	6.9	12.6	188.	10.6
%RSD	.35568	.26547	.73390	.46318
#1	1935.3	4759.1	25764.	2270.5
#2	1940.4	4768.1	25606.	2283.7
#3	1926.8	4743.1	25390.	2291.4

Raw Data MA14898 page 20 of 108

Zoom In Zoom Out

Sample Name: MP33734-MB1 Acquired: 5/15/2018 10:18:22 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0075	F -.0059	-.0011	F -.0033	-.0046	F -.0061	-.0059
Stddev	.0026	.0215	.0014	.0025	.0005	.0171	.0003	.0003
%RSD	316.6	288.4	24.19	228.4	13.88	368.7	4.461	5.487
#1	-.0022	.0312	-.0062	.0010	-.0037	.0048	-.0063	-.0057
#2	.0020	-.0108	-.0072	-.0004	-.0028	-.0243	-.0061	-.0057
#3	.0026	.0020	-.0043	-.0039	-.0034	.0057	-.0058	-.0062
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
High Limit			.0050		.0020		.0050	
Low Limit			-.0050		-.0020		-.0050	

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0038	.0012	F .2122	-.1703	-.0895	.0001	F -.0264	-.0821
Stddev	.0016	.0023	.0227	.1535	.0778	.0004	.0008	.0359
%RSD	42.23	195.3	10.71	90.14	86.98	563.3	2.976	43.81
#1	-.0050	.0000	.2092	.0035	-.1544	-.0003	-.0255	-.0507
#2	-.0045	.0038	.2363	-.2873	-.0032	.0005	-.0265	-.0742
#3	-.0020	-.0003	.1912	-.2273	-.1108	.0000	-.0271	-.1213
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			.1500				.0250	
Low Limit			-.1500				-.0250	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0046	-.0012	F -.0052	-.0038	.0087	F .0643	-.0020	F -.0054
Stddev	.0003	.0027	.0059	.0089	.0003	.0020	.0004	.0010
%RSD	7.331	218.5	114.0	230.4	3.539	3.058	21.85	17.81
#1	-.0046	-.0022	-.0104	-.0125	.0090	.0654	-.0025	-.0045
#2	-.0050	-.0033	-.0065	.0052	.0084	.0620	-.0017	-.0064
#3	-.0043	.0018	.0013	-.0042	.0088	.0654	-.0018	-.0054
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail
High Limit			.0025			.0250		.0050
Low Limit			-.0025			-.0250		-.0050

Zoom In Zoom Out

Sample Name: MP33734-MB1 Acquired: 5/15/2018 10:18:22 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0169	-.0021	-.0003
Stddev	.0038	.0014	.0003
%RSD	22.69	66.88	83.68
#1	-.0147	-.0036	-.0002
#2	-.0147	-.0009	-.0001
#3	-.0213	-.0018	-.0006
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1925.7	4762.4	25411.	2263.6
Stddev	2.2	10.6	171.	13.9
%RSD	.11368	.22347	.67191	.61621
#1	1923.9	4751.6	25518.	2259.2
#2	1925.1	4772.8	25214.	2279.2
#3	1928.2	4762.9	25500.	2252.4

Zoom In Zoom Out

Sample Name: MP33734-B1 Acquired: 5/15/2018 10:22:52 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0529	28.61	2.055	2.180	.0494	26.65	.0475	.5214	.2150
Stddev	.0024	.14	.013	.007	.0007	.07	.0004	.0002	.0015
%RSD	4.547	.4794	.6318	.3242	1.416	.2597	.9144	.0406	.7070
#1	.0550	28.48	2.069	2.184	.0501	26.71	.0471	.5216	.2133
#2	.0502	28.61	2.044	2.184	.0491	26.67	.0480	.5212	.2161
#3	.0534	28.75	2.052	2.172	.0488	26.58	.0474	.5214	.2158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2547	27.35	25.52	26.89	.5517	.4561	26.42	.5327	.5050
Stddev	.0017	.24	.17	.39	.0015	.0010	.18	.0028	.0010
%RSD	.6761	.8884	.6521	1.455	.2784	.2227	.6726	.5214	.1989
#1	.2536	27.56	25.72	26.98	.5525	.4569	26.43	.5295	.5061
#2	.2538	27.41	25.42	27.24	.5499	.4550	26.60	.5347	.5045
#3	.2567	27.09	25.43	26.47	.5527	.4565	26.24	.5337	.5043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5092	1.989	.3913	.5703	.5300	.5180	1.959	.5011	.5219
Stddev	.0082	.008	.0044	.0012	.0020	.0024	.003	.0026	.0009
%RSD	1.614	.4009	1.130	.2100	.3846	.4674	.1393	.5195	.1645
#1	.5031	1.981	.3963	.5717	.5308	.5197	1.962	.4995	.5228
#2	.5185	1.997	.3895	.5697	.5315	.5152	1.957	.4997	.5211
#3	.5059	1.988	.3880	.5695	.5276	.5189	1.959	.5041	.5216
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value Range									

Zoom In Zoom Out

Sample Name: MP33734-B1 Acquired: 5/15/2018 10:22:52 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1925.6	4734.5	25319.	2261.4
Stddev	4.2	5.6	101.	10.4
%RSD	.22005	.11884	.39850	.45822
#1	1925.9	4740.3	25341.	2256.5
#2	1921.2	4729.0	25407.	2254.4
#3	1929.7	4734.1	25209.	2273.3

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-4 Acquired: 5/15/2018 10:27:10 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0023**	**276.5**	**.0243**	**1.583**	**.0018**	**48.32**	**-.0113**	**.0463**	**.4002**
Stddev	.0018	1.9	.0050	.011	.0004	.33	.0007	.0010	.0016
%RSD	80.41	.6712	20.44	.6666	23.35	.6848	5.994	2.199	.4117
#1	.0033	274.4	.0289	1.571	.0023	47.94	-.0115	.0472	.3984
#2	.0002	277.9	.0190	1.591	.0016	48.54	-.0119	.0464	.4006
#3	.0033	277.2	.0249	1.588	.0015	48.49	-.0106	.0452	.4017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.7074**	**217.8**	**17.58**	**19.87**	**1.904**	**-.0458**	**5.446**	**.2111**	**.6303**
Stddev	.0025	1.0	.24	.20	.008	.0014	.125	.0050	.0089
%RSD	.3467	.4806	1.350	.9972	.4000	3.036	2.286	2.351	1.414
#1	.7092	216.6	17.72	19.65	1.898	-.0463	5.310	.2107	.6400
#2	.7046	218.4	17.31	20.00	1.912	-.0469	5.555	.2064	.6224
#3	.7084	218.4	17.72	19.98	1.901	-.0442	5.473	.2163	.6284

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0056**	**-.0242**	**7.619**	**.0600**	**.5104**	**5.955**	**-.0159**	**.5058**	**.4044**
Stddev	.0150	.0152	.048	.0029	.0037	.043	.0063	.0030	.0011
%RSD	266.8	62.65	.6283	4.756	.7329	.7230	39.86	.5853	.2749
#1	-.0103	-.0132	7.667	.0633	.5064	5.920	-.0231	.5029	.4056
#2	.0076	-.0415	7.618	.0587	.5111	6.003	-.0114	.5088	.4043
#3	.0195	-.0179	7.571	.0580	.5138	5.941	-.0132	.5058	.4034

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1937.8**	**4781.0**	**25439.**	**2301.0**
Stddev	5.8	5.3	79.	29.5
%RSD	.29903	.11087	.31090	1.2842
#1	1936.6	4786.2	25355.	2335.1
#2	1932.7	4775.6	25451.	2284.6
#3	1944.1	4781.3	25511.	2283.2

Zoom In Zoom Out

Sample Name: MP33734-D1 Acquired: 5/15/2018 10:31:30 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0009**	**279.2**	**.0203**	**1.562**	**-.0002**	**47.17**	**-.0115**	**.0464**	**.4050**
Stddev	.0068	.9	.0054	.003	.0008	.23	.0001	.0014	.0024
%RSD	786.2	.3273	26.36	.1684	363.9	.4832	1.204	2.940	.6018
#1	.0024	279.9	.0222	1.562	-.0009	47.43	-.0116	.0477	.4078
#2	-.0087	278.2	.0244	1.560	-.0003	47.01	-.0113	.0465	.4033
#3	.0037	279.6	.0143	1.565	.0006	47.07	-.0115	.0450	.4038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6984**	**213.2**	**18.46**	**19.93**	**1.862**	**-.0473**	**5.380**	**.2161**	**.6252**
Stddev	.0054	.8	.63	.35	.009	.0011	.051	.0021	.0071
%RSD	.7713	.3639	3.398	1.771	.4802	2.400	.9492	.9766	1.135
#1	.7008	214.0	18.55	19.79	1.872	-.0464	5.326	.2144	.6193
#2	.7022	213.0	17.79	20.33	1.856	-.0471	5.387	.2185	.6233
#3	.6922	212.5	19.03	19.67	1.858	-.0486	5.427	.2153	.6331

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0123**	**-.0356**	**10.66**	**.0644**	**.5020**	**6.058**	**-.0241**	**.5047**	**.3996**
Stddev	.0092	.0083	.04	.0017	.0030	.028	.0064	.0035	.0014
%RSD	74.49	23.35	.4140	2.617	.5998	.4595	26.41	.6977	.3386
#1	.0103	-.0377	10.68	.0628	.5048	6.090	-.0304	.5069	.4011
#2	.0223	-.0426	10.70	.0642	.5023	6.047	-.0177	.5065	.3994
#3	.0043	-.0264	10.61	.0661	.4988	6.037	-.0241	.5006	.3984

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1939.2**	**4781.0**	**25552.**	**2318.4**
Stddev	2.9	4.7	165.	16.3
%RSD	.15084	.09833	.64509	.70459
#1	1938.6	4786.3	25362.	2307.7
#2	1942.4	4777.3	25633.	2337.2
#3	1936.6	4779.3	25661.	2310.2

Zoom In Zoom Out

Sample Name: MP33734-D2 Acquired: 5/15/2018 10:35:50 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0023**	**280.4**	**.0238**	**1.552**	**.0012**	**47.02**	**-.0112**	**.0467**	**.4034**
Stddev	.0061	2.4	.0063	.008	.0012	.35	.0001	.0025	.0006
%RSD	270.8	.8698	26.48	.5176	99.53	.7463	1.187	5.416	.1431
#1	-.0008	280.6	.0283	1.551	.0015	47.40	-.0113	.0446	.4027
#2	.0093	277.9	.0265	1.544	.0022	46.71	-.0110	.0461	.4036
#3	-.0017	282.8	.0166	1.560	-.0001	46.95	-.0113	.0495	.4038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6989**	**213.3**	**17.73**	**19.59**	**1.861**	**-.0496**	**5.394**	**.2141**	**.5836**
Stddev	.0053	.9	.23	.85	.007	.0006	.056	.0008	.0155
%RSD	.7577	.4171	1.284	4.314	.3642	1.265	1.046	.3775	2.648
#1	.6986	213.3	17.75	19.96	1.860	-.0490	5.337	.2139	.5663
#2	.6937	212.3	17.95	18.62	1.855	-.0502	5.394	.2134	.5962
#3	.7043	214.1	17.49	20.19	1.869	-.0495	5.450	.2150	.5881

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0175**	**-.0208**	**10.26**	**.0662**	**.4982**	**6.090**	**-.0223**	**.4979**	**.4034**
Stddev	.0163	.0240	.07	.0040	.0030	.028	.0049	.0024	.0009
%RSD	92.80	115.7	.6877	6.063	.5970	.4551	22.07	.4859	.2321
#1	.0058	-.0045	10.34	.0667	.5014	6.072	-.0251	.5004	.4023
#2	.0107	-.0483	10.21	.0699	.4955	6.077	-.0166	.4955	.4037
#3	.0361	-.0094	10.22	.0619	.4977	6.122	-.0252	.4979	.4041

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1945.0**	**4785.5**	**25528.**	**2305.4**
Stddev	3.7	11.2	52.	22.2
%RSD	.18971	.23311	.20176	.96294
#1	1941.1	4780.3	25481.	2290.2
#2	1945.5	4798.3	25521.	2330.9
#3	1948.4	4777.8	25583.	2295.2

Zoom In Zoom Out

Sample Name: MP33734-SD1 Acquired: 5/15/2018 10:40:11 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0057**	**275.5**	**-.0508**	**1.576**	**-.0260**	**47.42**	**-.0578**	**-.0029**	**.3781**
Stddev	.0016	2.5	.0320	.019	.0017	.41	.0028	.0021	.0193
%RSD	27.95	.9035	63.01	1.215	6.504	.8567	4.866	71.72	5.093
#1	.0045	275.8	-.0226	1.559	-.0276	47.04	-.0584	-.0026	.3657
#2	.0051	272.9	-.0856	1.573	-.0263	47.36	-.0602	-.0051	.3683
#3	.0075	277.9	-.0442	1.597	-.0243	47.85	-.0547	-.0010	.4003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.7260**	**217.2**	**18.41**	**20.42**	**1.863**	**-.3068**	**4.179**	**.1653**	**.6037**
Stddev	.0240	.7	1.18	1.04	.008	.0093	.911	.0156	.0537
%RSD	3.305	.3200	6.396	5.108	.4059	3.018	21.79	9.428	8.892
#1	.7139	216.5	19.50	19.96	1.857	-.3151	3.763	.1832	.6611
#2	.7537	217.9	17.16	19.68	1.872	-.3086	5.224	.1547	.5952
#3	.7105	217.2	18.57	21.61	1.860	-.2968	3.551	.1581	.5548

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0825**	**-.0895**	**8.770**	**-.0037**	**.4802**	**5.848**	**-.1453**	**.4757**	**.3621**
Stddev	.0564	.0145	.110	.0115	.0128	.030	.0457	.0192	.0029
%RSD	68.37	16.25	1.258	308.9	2.665	.5199	31.45	4.031	.8033
#1	-.1476	-.0879	8.778	-.0006	.4774	5.855	-.0934	.4925	.3587
#2	-.0501	-.0758	8.876	.0059	.4690	5.815	-.1631	.4548	.3636
#3	-.0497	-.1048	8.656	-.0164	.4941	5.874	-.1794	.4799	.3639

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1948.0**	**4780.7**	**25745.**	**2292.9**
Stddev	2.8	5.8	197.	16.8
%RSD	.14398	.12140	.76590	.73076
#1	1948.6	4781.0	25592.	2299.0
#2	1950.5	4786.4	25676.	2305.7
#3	1945.0	4774.8	25968.	2273.9

Zoom In Zoom Out

Sample Name: MP33734-PS1 Acquired: 5/15/2018 10:44:34 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0561	280.3	.1281	1.859	.0548	53.24	.0422	.0999	.4521
Stddev	.0015	.1	.0099	.005	.0012	.28	.0004	.0027	.0032
%RSD	2.720	.0344	7.719	.2654	2.225	.5281	.9170	2.703	.7060
#1	.0544	280.3	.1194	1.865	.0562	53.46	.0418	.0968	.4508
#2	.0572	280.4	.1261	1.856	.0543	52.92	.0425	.1010	.4557
#3	.0568	280.2	.1389	1.857	.0540	53.34	.0424	.1019	.4498

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.8151	219.8	28.52	25.30	1.940	.0468	15.96	.3182	.6629
Stddev	.0065	.7	.23	.45	.004	.0016	.18	.0007	.0104
%RSD	.7963	.3077	.8108	1.790	.2006	3.470	1.110	.2269	1.564
#1	.8122	219.9	28.74	25.25	1.942	.0454	15.94	.3178	.6743
#2	.8225	219.1	28.28	24.88	1.935	.0486	15.80	.3177	.6604
#3	.8105	220.5	28.55	25.78	1.943	.0463	16.15	.3190	.6540

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1177	.0805	9.531	.1161	.5615	6.133	.0845	.5576	.6662
Stddev	.0144	.0328	.018	.0029	.0041	.029	.0062	.0063	.0016
%RSD	12.23	40.77	.1913	2.492	.7236	.4673	7.378	1.137	.2461
#1	.1135	.1159	9.552	.1194	.5656	6.139	.0780	.5552	.6655
#2	.1058	.0511	9.523	.1146	.5574	6.158	.0904	.5527	.6650
#3	.1337	.0745	9.519	.1142	.5614	6.102	.0852	.5648	.6681

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1931.2	4762.8	25393.	2300.4
Stddev	4.2	5.3	141.	22.1
%RSD	.21953	.11101	.55484	.95996
#1	1932.8	4768.5	25525.	2310.9
#2	1934.4	4761.8	25408.	2315.2
#3	1926.4	4758.1	25245.	2275.0

Zoom In Zoom Out

Sample Name: MP33734-S1 Acquired: 5/15/2018 10:48:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0482	391.8	1.938	3.776	.0532	75.30	.0406	.5656	.6619
Stddev	.0048	1.2	.010	.023	.0009	.24	.0004	.0031	.0073
%RSD	9.986	.3177	.5295	.6196	1.746	.3132	.9710	.5561	1.110
#1	.0427	393.2	1.945	3.802	.0539	75.55	.0405	.5692	.6544
#2	.0504	391.2	1.943	3.768	.0537	75.27	.0410	.5638	.6691
#3	.0515	391.0	1.926	3.757	.0522	75.08	.0403	.5637	.6620

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.9583	246.7	43.81	47.24	2.435	.3732	31.41	.7977	1.099
Stddev	.0048	1.1	.41	.34	.004	.0037	.20	.0023	.021
%RSD	.5058	.4521	.9260	.7120	.1658	.9982	.6315	.2847	1.899
#1	.9635	248.0	43.94	47.61	2.438	.3774	31.55	.7968	1.119
#2	.9574	246.0	43.35	46.97	2.431	.3703	31.19	.8003	1.101
#3	.9539	246.1	44.13	47.14	2.437	.3719	31.50	.7960	1.078

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1723	1.840	11.44	.5261	1.048	6.698	1.893	1.019	.9204
Stddev	.0070	.007	.10	.0030	.003	.027	.008	.005	.0026
%RSD	4.093	.3708	.8562	.5626	.2894	.3964	.4378	.4552	.2866
#1	.1683	1.847	11.54	.5279	1.050	6.727	1.897	1.019	.9229
#2	.1804	1.842	11.44	.5227	1.049	6.693	1.900	1.014	.9208
#3	.1681	1.833	11.34	.5277	1.044	6.675	1.884	1.023	.9176

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1923.3	4737.0	25357.	2265.5
Stddev	4.9	3.3	145.	13.6
%RSD	.25237	.06936	.56987	.60142
#1	1920.2	4739.8	25362.	2249.7
#2	1920.8	4733.4	25499.	2273.4
#3	1928.9	4737.9	25210.	2273.3

Zoom In Zoom Out

Sample Name: MP33734-S2 Acquired: 5/15/2018 10:53:12 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0519	393.1	1.978	3.757	.0541	75.62	.0411	.5775	.6633
Stddev	.0049	1.8	.004	.018	.0019	.18	.0002	.0014	.0011
%RSD	9.413	.4517	.1982	.4672	3.591	.2381	.4323	.2491	.1604
#1	.0501	391.1	1.982	3.742	.0542	75.63	.0413	.5762	.6636
#2	.0481	394.2	1.974	3.752	.0522	75.44	.0409	.5772	.6621
#3	.0574	394.1	1.978	3.776	.0560	75.80	.0411	.5790	.6642

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.9635	248.4	43.94	47.54	2.463	.3849	31.71	.8127	1.125
Stddev	.0028	1.5	.32	.10	.006	.0011	.28	.0027	.004
%RSD	.2933	.5862	.7197	.2207	.2645	.2943	.8810	.3383	.3275
#1	.9639	247.4	44.21	47.64	2.469	.3861	31.75	.8133	1.122
#2	.9661	247.8	43.59	47.43	2.456	.3838	31.41	.8097	1.124
#3	.9605	250.1	44.03	47.55	2.463	.3848	31.96	.8151	1.129

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1869	1.911	12.56	.5472	1.050	6.991	1.944	1.030	.9350
Stddev	.0079	.021	.17	.0055	.004	.019	.005	.005	.0031
%RSD	4.211	1.075	1.316	1.010	.3478	.2777	.2555	.4583	.3265
#1	.1782	1.887	12.67	.5444	1.048	6.969	1.950	1.026	.9326
#2	.1936	1.921	12.63	.5536	1.048	7.004	1.942	1.031	.9339
#3	.1888	1.924	12.37	.5436	1.054	7.000	1.940	1.035	.9385

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1909.5	4711.4	25370.	2275.9
Stddev	3.8	9.1	75.	4.5
%RSD	.19978	.19282	.29444	.19877
#1	1911.1	4718.5	25296.	2270.7
#2	1912.3	4714.6	25370.	2278.8
#3	1905.2	4701.2	25446.	2278.2

Zoom In Zoom Out

Sample Name: FA53725-1A Acquired: 5/15/2018 10:57:31 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0042	334.2	.0355	4.167	.0030	140.4	-.0068	.0912	.6188
Stddev	.0037	1.3	.0014	.016	.0010	.7	.0001	.0022	.0096
%RSD	88.72	.3839	3.947	.3909	34.78	.4736	1.780	2.384	1.559
#1	-.0017	335.4	.0347	4.184	.0024	141.0	-.0069	.0887	.6273
#2	-.0025	334.5	.0371	4.164	.0042	140.3	-.0067	.0928	.6207
#3	-.0085	332.9	.0347	4.152	.0024	139.7	-.0069	.0920	.6083

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.065	316.8	25.35	37.78	8.385	-.0496	2.861	.3817	.9975
Stddev	.002	.7	.54	.34	.035	.0017	.107	.0002	.0076
%RSD	.1504	.2351	2.132	.9018	.4223	3.391	3.724	.0649	.7632
#1	1.065	317.5	25.75	37.39	8.424	-.0503	2.969	.3814	1.002
#2	1.063	316.8	25.57	37.90	8.375	-.0508	2.756	.3819	1.002
#3	1.066	316.0	24.73	38.04	8.356	-.0477	2.858	.3817	.9887

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0049	-.0305	10.96	.0665	1.679	10.95	-.0237	.7992	1.281
Stddev	.0019	.0117	.06	.0023	.003	.05	.0237	.0070	.006
%RSD	38.62	38.19	.5531	3.441	.1698	.4764	100.4	.8724	.4359
#1	-.0047	-.0174	10.96	.0673	1.680	11.00	-.0487	.8071	1.287
#2	-.0069	-.0346	11.01	.0683	1.676	10.95	-.0207	.7964	1.278
#3	-.0031	-.0396	10.89	.0639	1.681	10.90	-.0015	.7940	1.278

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1911.1	4742.2	25490.	2278.2
Stddev	6.7	9.3	43.	7.1
%RSD	.35147	.19653	.16842	.31129
#1	1904.9	4731.7	25442.	2270.1
#2	1910.2	4745.4	25504.	2282.5
#3	1918.2	4749.6	25524.	2282.2

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 11:01:51 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2466	41.74	2.075	2.072	2.036	41.39	2.092	2.050	2.058
Stddev	.0005	.55	.005	.016	.014	.25	.004	.004	.008
%RSD	.2040	1.311	.2623	.7637	.7005	.6094	.1928	.2110	.4049
#1	.2469	42.17	2.072	2.085	2.047	41.58	2.094	2.053	2.048
#2	.2469	41.92	2.072	2.076	2.041	41.49	2.088	2.045	2.063
#3	.2460	41.12	2.081	2.055	2.020	41.10	2.096	2.051	2.063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.990	40.70	41.14	41.25	2.097	2.064	41.38	2.020	2.039
Stddev	.004	.23	.31	.20	.003	.005	.32	.002	.002
%RSD	.1826	.5734	.7573	.4822	.1485	.2526	.7780	.0792	.0836
#1	1.989	40.76	41.43	41.34	2.094	2.064	41.64	2.022	2.041
#2	1.986	40.90	41.17	41.40	2.100	2.059	41.48	2.019	2.038
#3	1.993	40.45	40.81	41.03	2.096	2.069	41.02	2.020	2.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.069	2.062	1.847	2.061	2.069	2.087	2.035	2.115	2.041
Stddev	.007	.004	.005	.002	.011	.003	.003	.002	.004
%RSD	.3552	.2163	.2503	.0755	.5287	.1440	.1357	.1020	.1941
#1	2.075	2.060	1.847	2.060	2.077	2.085	2.034	2.114	2.041
#2	2.061	2.059	1.842	2.060	2.073	2.086	2.034	2.118	2.037
#3	2.071	2.068	1.852	2.063	2.056	2.090	2.039	2.114	2.045
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA14898 page 33 of 108

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 11:01:51 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1817.2	4550.7	24768.	2223.1
Stddev	2.9	14.2	151.	22.7
%RSD	.16062	.31173	.60912	1.0213
#1	1820.5	4561.7	24679.	2210.6
#2	1815.5	4555.8	24683.	2209.4
#3	1815.5	4534.7	24942.	2249.3

Raw Data MA14898 page 34 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 11:06:03 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0114	.0004	.0000	-.0003	-.0121	-.0004	-.0005
Stddev	.000	.0195	.0004	.000	.0002	.0027	.0001	.0002
%RSD	908.1	171.9	91.02	2251.	70.06	22.50	37.96	48.23
#1	-.0003	.0097	.0005	.0000	-.0003	-.0093	-.0005	-.0007
#2	.0004	-.0149	.0007	.0002	-.0001	-.0147	-.0004	-.0004
#3	-.0003	-.0289	.0000	-.0002	-.0006	-.0123	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0005	-.0113	-.0101	.0160	-.0001	F -.0027	-.0223
Stddev	.0001	.0003	.0009	.0340	.0137	.0001	.0008	.0112
%RSD	19.30	62.51	8.300	335.2	85.49	80.56	27.66	50.00
#1	-.0004	.0005	-.0104	-.0475	.0133	.0000	-.0020	-.0203
#2	-.0006	.0008	-.0114	.0189	.0039	-.0001	-.0027	-.0123
#3	-.0005	.0002	-.0123	-.0018	.0308	-.0002	-.0035	-.0344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0006	-.0007	-.0012	-.0015	-.0006	-.0004	-.0003
Stddev	.0002	.0008	.0006	.0019	.0004	.0003	.0002	.0000
%RSD	74.69	138.7	88.63	152.4	26.87	51.33	48.56	10.16
#1	-.0005	-.0006	-.0015	-.0012	-.0014	-.0004	-.0005	-.0003
#2	-.0002	-.0013	-.0004	-.0032	-.0019	-.0009	-.0002	-.0004
#3	-.0001	.0002	-.0003	.0006	-.0011	-.0004	-.0005	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Raw Data MA14898 page 35 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 11:06:03 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0008	.0000	-.0004
Stddev	.0018	.000	.0002
%RSD	212.8	1317.	47.42
#1	-.0025	.0002	-.0006
#2	-.0011	.0001	-.0003
#3	.0011	-.0003	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1932.1	4731.6	25592.	2287.7
Stddev	7.1	28.2	145.	18.8
%RSD	.36792	.59498	.56530	.81989
#1	1924.7	4706.8	25755.	2279.7
#2	1932.8	4762.2	25479.	2309.1
#3	1938.8	4726.0	25542.	2274.3

Raw Data MA14898 page 36 of 108

9.1 9

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-7 Acquired: 5/15/2018 11:10:32 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0056**	**279.2**	**.1026**	**.6466**	**.0065**	**16.05**	**-.0102**	**.0829**	**.6242**
Stddev	.0015	2.2	.0090	.0027	.0009	.15	.0005	.0013	.0049
%RSD	27.43	.7827	8.754	.4224	13.99	.9499	4.671	1.578	.7809
#1	-.0073	280.8	.0988	.6470	.0072	16.16	-.0107	.0843	.6221
#2	-.0048	276.7	.1128	.6437	.0069	15.87	-.0098	.0826	.6207
#3	-.0046	280.1	.0961	.6491	.0055	16.11	-.0102	.0817	.6298

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0970**	**263.1**	**27.68**	**36.78**	**1.049**	**-.0500**	**2.715**	**.3089**	**.0682**
Stddev	.0039	1.3	.33	.13	.003	.0025	.098	.0011	.0074
%RSD	3.987	.5083	1.203	.3408	.3091	4.949	3.598	.3438	10.87
#1	.1007	264.2	28.03	36.83	1.046	-.0527	2.828	.3078	.0673
#2	.0973	261.6	27.64	36.63	1.051	-.0478	2.652	.3099	.0760
#3	.0930	263.5	27.36	36.86	1.052	-.0497	2.667	.3091	.0612

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0018**	**-.0175**	**9.489**	**.0558**	**.2466**	**8.071**	**-.0248**	**.5547**	**.2974**
Stddev	.0024	.0082	.155	.0017	.0017	.004	.0121	.0038	.0025
%RSD	132.8	46.81	1.632	3.107	.6997	.0465	48.81	.6826	.8400
#1	-.0008	-.0247	9.641	.0560	.2465	8.073	-.0287	.5508	.2972
#2	-.0045	-.0086	9.494	.0574	.2450	8.072	-.0346	.5584	.2999
#3	.0000	-.0193	9.331	.0539	.2484	8.066	-.0113	.5549	.2950

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1933.3**	**4773.9**	**25625.**	**2292.7**
Stddev	5.1	6.0	26.	35.4
%RSD	.26531	.12607	.10185	1.5460
#1	1937.9	4770.1	25641.	2257.1
#2	1927.8	4770.7	25595.	2328.0
#3	1934.3	4780.8	25640.	2293.1

Zoom In Zoom Out

Sample Name: FA53725-10 Acquired: 5/15/2018 11:14:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0005**	**410.0**	**.0609**	**6.003**	**.0075**	**171.1**	**-.0047**	**.1256**	**.5993**
Stddev	.0051	.5	.0023	.010	.0003	.5	.0006	.0006	.0036
%RSD	1076.	.1159	3.851	.1734	4.531	.2748	11.93	.5116	.6022
#1	-.0009	409.5	.0636	5.994	.0076	171.3	-.0042	.1264	.5951
#2	-.0038	410.4	.0598	6.014	.0078	170.5	-.0046	.1253	.6012
#3	.0062	410.2	.0593	6.000	.0071	171.4	-.0053	.1252	.6015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**1.649**	**346.0**	**52.72**	**43.93**	**15.56**	**-.0485**	**3.325**	**.4089**	**11.95**
Stddev	.020	1.4	.24	.74	.01	.0006	.098	.0009	.01
%RSD	1.221	.4086	.4588	1.677	.0473	1.169	2.953	.2320	.1114
#1	1.626	344.7	52.57	43.15	15.56	-.0485	3.411	.4083	11.96
#2	1.659	345.8	52.59	44.01	15.56	-.0491	3.346	.4100	11.96
#3	1.662	347.5	52.99	44.62	15.55	-.0479	3.218	.4084	11.93

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0347**	**-.0328**	**9.232**	**.0589**	**2.338**	**7.835**	**-.0111**	**.7470**	**1.395**
Stddev	.0005	.0078	.102	.0045	.003	.009	.0099	.0027	.001
%RSD	1.553	23.80	1.104	7.599	.1065	.1163	88.70	.3678	.0668
#1	.0343	-.0411	9.334	.0542	2.337	7.825	-.0009	.7478	1.396
#2	.0345	-.0256	9.232	.0631	2.341	7.842	-.0118	.7440	1.394
#3	.0353	-.0316	9.130	.0593	2.336	7.840	-.0206	.7493	1.395

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1923.6**	**4801.5**	**25813.**	**2316.6**
Stddev	6.1	13.0	173.	5.2
%RSD	.31686	.27155	.67071	.22315
#1	1916.6	4788.6	25738.	2310.7
#2	1926.6	4814.7	25690.	2319.7
#3	1927.7	4801.2	26011.	2319.5

Zoom In Zoom Out

Sample Name: FA53725-13 Acquired: 5/15/2018 11:19:13 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0022**	**214.6**	**.0776**	**1.207**	**.0051**	**29.94**	**-.0013**	**.0871**	**.6949**
Stddev	.0061	1.0	.0097	.007	.0006	.06	.0006	.0015	.0049
%RSD	276.4	.4667	12.52	.6033	11.98	.1917	43.82	1.757	.7041
#1	.0037	213.4	.0741	1.198	.0048	30.00	-.0006	.0857	.6934
#2	.0074	215.2	.0702	1.212	.0059	29.91	-.0017	.0888	.7004
#3	-.0045	215.1	.0886	1.209	.0048	29.90	-.0016	.0868	.6910

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**3.749**	**290.8**	**25.82**	**37.76**	**3.739**	**-.0527**	**1.887**	**.4141**	**.9112**
Stddev	.008	1.3	.34	.12	.009	.0026	.151	.0049	.0030
%RSD	.2177	.4590	1.320	.3222	.2521	4.970	7.999	1.177	.3258
#1	3.759	289.4	25.75	37.84	3.747	-.0506	2.029	.4172	.9081
#2	3.745	290.9	26.19	37.62	3.742	-.0517	1.904	.4084	.9140
#3	3.744	292.0	25.52	37.83	3.728	-.0556	1.729	.4166	.9115

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0313**	**-.0250**	**8.622**	**.0622**	**.2841**	**7.722**	**-.0292**	**.5046**	**27.19**
Stddev	.0014	.0122	.097	.0013	.0025	.031	.0020	.0024	.07
%RSD	4.327	48.84	1.125	2.052	.8721	.4033	6.728	.4739	.2675
#1	.0317	-.0114	8.726	.0636	.2867	7.755	-.0277	.5027	27.25
#2	.0298	-.0288	8.607	.0612	.2836	7.720	-.0314	.5073	27.11
#3	.0325	-.0349	8.534	.0617	.2819	7.693	-.0284	.5039	27.22

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1925.6**	**4793.4**	**25787.**	**2309.8**
Stddev	8.0	7.8	109.	20.0
%RSD	.41749	.16238	.42444	.86621
#1	1922.2	4787.6	25781.	2316.6
#2	1919.9	4790.5	25681.	2325.4
#3	1934.8	4802.3	25899.	2287.2

Zoom In Zoom Out

Sample Name: FA53725-16 Acquired: 5/15/2018 11:23:32 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0810**	**253.9**	**.0868**	**2.442**	**.0047**	**65.34**	**-.0074**	**.0969**	**.4434**
Stddev	.0044	.7	.0115	.010	.0009	.05	.0005	.0018	.0041
%RSD	5.449	.2856	13.22	.4089	19.72	.0774	6.253	1.827	.9147
#1	.0855	254.1	.0835	2.431	.0056	65.35	-.0078	.0956	.4389
#2	.0807	253.1	.0774	2.445	.0049	65.29	-.0074	.0961	.4468
#3	.0767	254.5	.0996	2.451	.0038	65.39	-.0069	.0989	.4444

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6218**	**234.8**	**32.83**	**27.27**	**9.917**	**-.0527**	**1.879**	**.2231**	**3.831**
Stddev	.0025	1.7	.41	.27	.025	.0021	.118	.0035	.017
%RSD	.4070	.7329	1.242	.9733	.2573	4.051	6.274	1.549	.4313
#1	.6204	232.8	32.44	27.20	9.890	-.0548	1.856	.2242	3.816
#2	.6204	235.9	33.25	27.04	9.919	-.0505	1.775	.2193	3.830
#3	.6248	235.6	32.80	27.56	9.941	-.0528	2.007	.2259	3.849

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0113**	**-.0354**	**10.71**	**.0528**	**.9178**	**6.105**	**-.0209**	**.4808**	**1.104**
Stddev	.0052	.0045	.08	.0034	.0058	.006	.0206	.0013	.002
%RSD	46.09	12.70	.7057	6.494	.6369	.0934	98.77	.2711	.2191
#1	.0172	-.0394	10.74	.0525	.9111	6.105	-.0013	.4794	1.102
#2	.0073	-.0305	10.76	.0564	.9206	6.099	-.0424	.4819	1.104
#3	.0094	-.0362	10.62	.0495	.9217	6.110	-.0190	.4812	1.107

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1930.3**	**4755.4**	**25536.**	**2314.5**
Stddev	5.9	10.3	159.	5.2
%RSD	.30765	.21640	.62276	.22532
#1	1925.2	4750.0	25716.	2308.6
#2	1936.8	4767.2	25413.	2318.3
#3	1928.9	4748.8	25480.	2316.6

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-19 Acquired: 5/15/2018 11:27:52 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0031**	**188.0**	**.0270**	**.7603**	**-.0001**	**13.62**	**-.0094**	**.0458**	**.4767**
Stddev	.0049	.6	.0055	.0053	.0005	.10	.0003	.0008	.0068
%RSD	157.9	.3357	20.38	.6940	474.6	.7671	3.091	1.690	1.419
#1	.0003	187.3	.0275	.7661	-.0003	13.71	-.0096	.0452	.4832
#2	-.0009	188.6	.0321	.7591	-.0004	13.62	-.0095	.0456	.4771
#3	-.0087	188.2	.0212	.7558	.0005	13.51	-.0090	.0467	.4697

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6083**	**230.2**	**17.31**	**16.73**	**1.712**	**-.0518**	**2.412**	**.1983**	**.1875**
Stddev	.0073	1.0	.25	.17	.007	.0024	.043	.0031	.0106
%RSD	1.192	.4463	1.447	1.042	.4322	4.653	1.782	1.538	5.674
#1	.6049	230.2	17.24	16.82	1.720	-.0542	2.385	.2018	.1859
#2	.6167	231.3	17.59	16.53	1.712	-.0493	2.461	.1967	.1778
#3	.6035	229.2	17.11	16.84	1.705	-.0519	2.389	.1964	.1989

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0071**	**-.0291**	**9.225**	**.0527**	**.1702**	**9.262**	**-.0189**	**.5915**	**6.424**
Stddev	.0155	.0126	.234	.0027	.0008	.041	.0167	.0072	.029
%RSD	218.0	43.23	2.536	5.117	.4409	.4411	88.47	1.209	.4596
#1	-.0216	-.0269	9.452	.0555	.1710	9.295	-.0351	.5974	6.458
#2	.0093	-.0177	9.238	.0501	.1698	9.275	-.0198	.5835	6.412
#3	-.0090	-.0426	8.985	.0524	.1697	9.216	-.0017	.5935	6.403

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1938.5**	**4734.7**	**25452.**	**2281.9**
Stddev	5.7	5.0	34.	2.3
%RSD	.29440	.10587	.13397	.09865
#1	1931.9	4729.3	25424.	2284.5
#2	1940.8	4739.1	25490.	2280.6
#3	1942.6	4735.9	25442.	2280.7

Zoom In Zoom Out

Sample Name: FA53725-20 Acquired: 5/15/2018 11:32:14 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0043**	**198.0**	**.0270**	**.7670**	**.0003**	**13.27**	**-.0101**	**.0520**	**.5054**
Stddev	.0037	.5	.0027	.0082	.0006	.18	.0004	.0007	.0023
%RSD	85.81	.2629	10.17	1.073	222.4	1.355	4.100	1.342	.4599
#1	.0002	198.6	.0289	.7685	.0009	13.48	-.0096	.0526	.5037
#2	.0072	197.9	.0239	.7581	.0001	13.16	-.0104	.0512	.5045
#3	.0056	197.6	.0283	.7744	-.0002	13.17	-.0103	.0523	.5081

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4312**	**252.1**	**19.96**	**19.10**	**1.772**	**-.0518**	**3.083**	**.1988**	**.1678**
Stddev	.0068	2.2	.34	.13	.004	.0026	.083	.0019	.0122
%RSD	1.584	.8787	1.721	.6959	.2301	5.027	2.697	.9679	7.300
#1	.4381	254.6	20.30	19.21	1.776	-.0544	3.177	.2007	.1554
#2	.4312	251.1	19.98	19.13	1.768	-.0492	3.018	.1989	.1799
#3	.4244	250.6	19.61	18.95	1.771	-.0518	3.054	.1968	.1679

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0105**	**-.0386**	**9.075**	**.0554**	**.1668**	**9.681**	**-.0298**	**.6541**	**5.056**
Stddev	.0091	.0101	.220	.0037	.0009	.017	.0114	.0078	.036
%RSD	86.98	26.15	2.428	6.677	.5485	.1762	38.48	1.199	.7094
#1	-.0210	-.0280	9.316	.0513	.1670	9.698	-.0307	.6593	5.090
#2	-.0054	-.0480	9.025	.0584	.1676	9.664	-.0179	.6580	5.058
#3	-.0050	-.0397	8.884	.0567	.1658	9.683	-.0407	.6451	5.019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1930.1**	**4724.7**	**25348.**	**2258.9**
Stddev	5.2	12.1	26.	21.5
%RSD	.27041	.25561	.10125	.95261
#1	1926.7	4711.0	25337.	2239.2
#2	1927.5	4729.0	25377.	2281.9
#3	1936.1	4734.0	25329.	2255.5

Zoom In Zoom Out

Sample Name: FA53725-25 Acquired: 5/15/2018 11:36:35 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0018**	**139.7**	**.0220**	**.4064**	**-.0013**	**5.943**	**-.0123**	**.0256**	**.4005**
Stddev	.0043	1.9	.0013	.0042	.0001	.032	.0005	.0016	.0040
%RSD	235.6	1.334	5.797	1.030	7.948	.5321	4.290	6.335	1.002
#1	.0033	141.7	.0234	.4085	-.0012	5.944	-.0124	.0273	.4038
#2	-.0030	139.5	.0209	.4090	-.0013	5.974	-.0117	.0241	.4017
#3	.0051	138.0	.0217	.4016	-.0013	5.910	-.0127	.0253	.3960

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0970**	**174.7**	**13.53**	**11.68**	**.7498**	**-.0543**	**1.561**	**.1409**	**.2634**
Stddev	.0013	1.5	.25	.25	.0050	.0015	.134	.0041	.0074
%RSD	1.347	.8467	1.848	2.145	.6617	2.772	8.610	2.926	2.796
#1	.0972	176.3	13.80	11.43	.7555	-.0560	1.715	.1448	.2643
#2	.0957	174.1	13.30	11.70	.7469	-.0540	1.466	.1413	.2703
#3	.0983	173.5	13.50	11.93	.7470	-.0530	1.502	.1366	.2556

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0022**	**-.0335**	**8.230**	**.0557**	**.0899**	**6.506**	**-.0122**	**.4677**	**.5731**
Stddev	.0063	.0065	.234	.0014	.0025	.040	.0068	.0038	.0029
%RSD	285.1	19.30	2.840	2.591	2.807	.6131	55.29	.8225	.4977
#1	-.0058	-.0280	8.472	.0566	.0926	6.552	-.0156	.4721	.5762
#2	-.0059	-.0319	8.210	.0565	.0876	6.487	-.0166	.4664	.5728
#3	.0051	-.0406	8.006	.0541	.0896	6.479	-.0044	.4647	.5705

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1928.9**	**4715.3**	**25374.**	**2272.9**
Stddev	.5	1.1	137.	26.4
%RSD	.02601	.02292	.53813	1.1626
#1	1929.3	4715.9	25247.	2242.4
#2	1928.3	4714.1	25518.	2288.6
#3	1929.0	4716.0	25357.	2287.8

Zoom In Zoom Out

Sample Name: FA53725-28 Acquired: 5/15/2018 11:40:58 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0035**	**146.3**	**.0415**	**1.047**	**-.0028**	**34.22**	**-.0020**	**.0234**	**.3377**
Stddev	.0058	1.0	.0077	.006	.0009	.12	.0007	.0010	.0028
%RSD	165.8	.6621	18.42	.5643	30.96	.3419	36.27	4.465	.8382
#1	-.0009	145.6	.0354	1.047	-.0035	34.10	-.0014	.0229	.3386
#2	.0101	146.0	.0391	1.041	-.0030	34.25	-.0028	.0227	.3400
#3	.0014	147.4	.0501	1.053	-.0018	34.33	-.0019	.0246	.3346

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**1.123**	**187.1**	**17.55**	**18.45**	**2.626**	**-.0536**	**1.422**	**.1377**	**1.614**
Stddev	.003	.7	.25	.32	.006	.0013	.027	.0019	.006
%RSD	.2246	.3642	1.447	1.725	.2183	2.456	1.920	1.363	.4008
#1	1.126	186.6	17.38	18.17	2.633	-.0521	1.411	.1357	1.613
#2	1.121	186.8	17.84	18.80	2.623	-.0545	1.453	.1394	1.608
#3	1.123	187.9	17.43	18.38	2.623	-.0542	1.402	.1380	1.620

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0024**	**-.0327**	**9.396**	**.0606**	**.5112**	**5.287**	**-.0307**	**.4168**	**3.868**
Stddev	.0217	.0186	.081	.0028	.0017	.020	.0085	.0057	.006
%RSD	903.9	56.81	.8604	4.602	.3384	.3766	27.57	1.361	.1511
#1	.0127	-.0202	9.478	.0625	.5105	5.310	-.0369	.4133	3.871
#2	.0170	-.0541	9.393	.0574	.5099	5.278	-.0343	.4137	3.871
#3	-.0225	-.0239	9.316	.0619	.5131	5.274	-.0211	.4233	3.861

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1932.3**	**4729.1**	**25333.**	**2267.8**
Stddev	9.5	14.4	89.	18.9
%RSD	.49030	.30526	.35143	.83195
#1	1921.4	4712.9	25244.	2289.5
#2	1938.1	4733.7	25422.	2255.7
#3	1937.5	4740.6	25335.	2258.0

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-37 Acquired: 5/15/2018 11:45:17 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0038**	**210.7**	**.0345**	**.7583**	**-.0003**	**9.570**	**-.0113**	**.0398**	**.4390**
Stddev	.0006	1.5	.0049	.0073	.0014	.079	.0008	.0019	.0072
%RSD	16.25	.7199	14.29	.9614	394.3	.8297	7.168	4.804	1.642
#1	-.0033	212.0	.0367	.7667	.0007	9.660	-.0110	.0420	.4314
#2	-.0037	209.0	.0378	.7537	-.0019	9.512	-.0108	.0388	.4398
#3	-.0045	211.1	.0288	.7545	.0001	9.537	-.0123	.0387	.4458

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.8447**	**214.7**	**16.22**	**14.73**	**.9971**	**-.0532**	**1.534**	**.1559**	**.1980**
Stddev	.0033	.9	.24	.22	.0041	.0028	.066	.0026	.0100
%RSD	.3941	.4084	1.507	1.523	.4146	5.319	4.326	1.655	5.026
#1	.8464	215.6	16.50	14.61	.9950	-.0511	1.597	.1589	.2009
#2	.8468	213.8	16.07	14.99	1.002	-.0564	1.464	.1547	.1870
#3	.8409	214.6	16.07	14.60	.9945	-.0522	1.542	.1541	.2063

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0182**	**-.0178**	**7.785**	**.0546**	**.1427**	**6.283**	**-.0164**	**.4809**	**8.633**
Stddev	.0121	.0169	.078	.0046	.0018	.042	.0071	.0086	.028
%RSD	66.14	95.01	1.002	8.514	1.258	.6748	43.20	1.780	.3202
#1	-.0268	.0003	7.863	.0552	.1432	6.265	-.0208	.4879	8.664
#2	-.0044	-.0333	7.785	.0496	.1407	6.331	-.0082	.4834	8.610
#3	-.0234	-.0204	7.707	.0589	.1442	6.252	-.0202	.4714	8.625

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1931.3**	**4752.1**	**25435.**	**2293.7**
Stddev	4.1	7.9	204.	15.3
%RSD	.21168	.16647	.80078	.66812
#1	1930.8	4743.0	25483.	2280.4
#2	1927.4	4755.9	25212.	2290.3
#3	1935.6	4757.5	25611.	2310.5

Zoom In Zoom Out

Sample Name: FA53725-45 Acquired: 5/15/2018 11:49:39 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0009**	**207.0**	**.0513**	**.5751**	**.0008**	**10.45**	**-.0075**	**.0444**	**.5680**
Stddev	.0016	.6	.0071	.0011	.0006	.04	.0004	.0004	.0056
%RSD	170.6	.3057	13.86	.1958	81.19	.4281	5.809	.8007	.9869
#1	-.0006	206.5	.0433	.5754	.0004	10.40	-.0074	.0442	.5739
#2	.0008	206.8	.0568	.5738	.0015	10.47	-.0080	.0442	.5674
#3	.0025	207.7	.0539	.5760	.0004	10.48	-.0071	.0448	.5627

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1305**	**243.9**	**19.26**	**20.54**	**1.903**	**-.0518**	**1.671**	**.1974**	**.2512**
Stddev	.0033	.5	.59	.08	.008	.0012	.080	.0016	.0091
%RSD	2.506	.2061	3.044	.3907	.4354	2.379	4.812	.8330	3.641
#1	.1270	243.4	18.58	20.45	1.908	-.0509	1.759	.1983	.2543
#2	.1310	244.3	19.61	20.60	1.907	-.0532	1.652	.1955	.2585
#3	.1335	244.2	19.58	20.57	1.893	-.0512	1.601	.1985	.2409

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0044**	**-.0349**	**7.862**	**.0524**	**.1503**	**6.789**	**-.0222**	**.5250**	**.2708**
Stddev	.0188	.0118	.044	.0039	.0028	.023	.0214	.0041	.0001
%RSD	429.4	33.71	.5615	7.357	1.880	.3451	96.27	.7843	.0490
#1	-.0186	-.0267	7.898	.0536	.1523	6.811	-.0468	.5277	.2708
#2	-.0116	-.0296	7.875	.0482	.1470	6.793	-.0116	.5270	.2709
#3	.0170	-.0484	7.812	.0556	.1515	6.764	-.0082	.5203	.2706

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1932.9**	**4752.3**	**25549.**	**2288.8**
Stddev	1.3	4.2	163.	9.0
%RSD	.06612	.08745	.63920	.39333
#1	1931.9	4754.0	25578.	2299.2
#2	1932.4	4755.3	25373.	2283.0
#3	1934.3	4747.6	25696.	2284.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 11:54:00 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2455**	**41.44**	**2.072**	**2.069**	**2.033**	**41.25**	**2.087**	**2.043**	**2.054**
Stddev	.0009	.05	.004	.007	.006	.08	.001	.001	.011
%RSD	.3603	.1269	.2118	.3399	.3132	.1833	.0535	.0692	.5341
#1	.2450	41.41	2.069	2.068	2.040	41.33	2.087	2.041	2.042
#2	.2450	41.50	2.077	2.076	2.030	41.20	2.087	2.043	2.063
#3	.2465	41.41	2.071	2.062	2.028	41.21	2.089	2.044	2.057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.985**	**40.50**	**40.85**	**41.29**	**2.093**	**2.057**	**41.26**	**2.013**	**2.035**
Stddev	.006	.07	.04	.12	.007	.002	.11	.002	.004
%RSD	.3092	.1636	.0867	.3008	.3163	.1182	.2644	.0764	.2123
#1	1.992	40.56	40.87	41.41	2.086	2.054	41.37	2.013	2.040
#2	1.981	40.43	40.81	41.16	2.097	2.058	41.24	2.011	2.032
#3	1.982	40.51	40.87	41.31	2.097	2.059	41.15	2.014	2.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.066**	**2.064**	**1.844**	**2.054**	**2.059**	**2.089**	**2.037**	**2.118**	**2.030**
Stddev	.005	.007	.000	.002	.004	.004	.007	.006	.001
%RSD	.2627	.3266	.0098	.0909	.1944	.1899	.3639	.2866	.0705
#1	2.067	2.056	1.844	2.055	2.058	2.085	2.032	2.114	2.029
#2	2.060	2.065	1.844	2.054	2.063	2.093	2.046	2.115	2.029
#3	2.071	2.069	1.844	2.052	2.055	2.089	2.034	2.125	2.031
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 11:54:00 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1827.2**	**4575.7**	**24888.**	**2236.3**
Stddev	5.4	3.9	166.	28.5
%RSD	.29396	.08475	.66620	1.2736
#1	1821.1	4571.9	25078.	2222.9
#2	1829.4	4579.7	24814.	2269.0
#3	1831.2	4575.5	24772.	2217.0

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 11:58:10 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0129	-.0002	-.0003	-.0002	-.0131	-.0004	-.0005
Stddev	.0006	.0164	.0005	.0003	.0001	.0031	.0002	.0001
%RSD	248.7	127.2	207.2	88.99	41.52	23.55	40.22	22.59
#1	-.0005	-.0114	.0001	-.0002	-.0001	-.0133	-.0006	-.0006
#2	.0008	.0027	-.0007	-.0002	-.0003	-.0099	-.0004	-.0004
#3	.0004	-.0299	-.0001	-.0007	-.0003	-.0161	-.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0006	-.0122	-.0066	.0172	-.0002	F -.0030	-.0218
Stddev	.0001	.0001	.0047	.0383	.0066	.0000	.0005	.0129
%RSD	112.7	20.50	38.67	582.1	38.06	22.51	18.46	59.18
#1	.0001	.0007	-.0077	-.0354	.0100	-.0002	-.0024	-.0074
#2	.0001	.0005	-.0171	-.0212	.0190	-.0002	-.0030	-.0258
#3	.0000	.0005	-.0117	.0369	.0227	-.0001	-.0035	-.0322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0005	-.0016	.0005	-.0017	-.0006	-.0002	-.0008
Stddev	.0004	.0009	.0005	.0016	.0004	.0005	.0001	.0003
%RSD	100.3	185.5	32.95	296.9	20.86	82.48	70.96	34.13
#1	-.0007	.0001	-.0020	-.0006	-.0014	-.0009	-.0002	-.0009
#2	-.0007	-.0002	-.0019	.0024	-.0016	.0000	-.0003	-.0005
#3	.0001	.0015	-.0010	-.0001	-.0021	-.0008	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 11:58:10 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0006	.0000	-.0005
Stddev	.0004	.001	.0002
%RSD	72.22	1335.	33.55
#1	-.0006	.0002	-.0007
#2	-.0010	.0003	-.0005
#3	-.0002	-.0006	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1933.8	4721.3	25742.	2263.9
Stddev	2.1	8.7	125.	13.5
%RSD	.10783	.18348	.48589	.59489
#1	1933.2	4711.9	25848.	2248.3
#2	1932.0	4723.0	25773.	2271.5
#3	1936.1	4728.9	25604.	2271.8

Zoom In Zoom Out

Sample Name: FA53725-48 Acquired: 5/15/2018 12:02:39 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0052	180.8	.0125	1.353	-.0018	22.22	-.0098	.0296	.3238
Stddev	.0018	.2	.0037	.004	.0009	.09	.0001	.0016	.0040
%RSD	33.42	.1377	29.88	.2603	50.35	.4184	1.522	5.488	1.244
#1	.0032	181.0	.0089	1.352	-.0008	22.16	-.0097	.0281	.3216
#2	.0064	180.5	.0122	1.356	-.0026	22.33	-.0100	.0313	.3214
#3	.0062	180.9	.0163	1.349	-.0021	22.18	-.0098	.0294	.3285

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5224	198.6	14.03	12.85	3.532	-.0448	1.381	.1940	2.042
Stddev	.0016	.2	.55	.11	.009	.0034	.125	.0017	.009
%RSD	.3128	.1114	3.895	.8229	.2439	7.548	9.020	.8614	.4242
#1	.5209	198.7	13.94	12.78	3.532	-.0431	1.470	.1931	2.032
#2	.5221	198.3	14.61	12.81	3.540	-.0426	1.239	.1930	2.047
#3	.5241	198.7	13.53	12.97	3.523	-.0487	1.435	.1960	2.046

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0075	-.0223	9.626	.0580	.4592	5.183	-.0108	.5322	2.592
Stddev	.0011	.0088	.110	.0028	.0012	.026	.0140	.0032	.015
%RSD	14.02	39.21	1.140	4.810	.2571	.5041	128.9	.6042	.5800
#1	-.0065	-.0129	9.752	.0558	.4579	5.212	-.0017	.5294	2.606
#2	-.0075	-.0302	9.577	.0571	.4598	5.177	-.0269	.5357	2.576
#3	-.0086	-.0239	9.549	.0612	.4600	5.160	-.0039	.5315	2.595

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1946.6	4752.5	25521.	2290.1
Stddev	3.0	16.0	70.	7.3
%RSD	.15505	.33598	.27565	.31729
#1	1943.9	4734.3	25489.	2298.3
#2	1945.9	4764.3	25602.	2284.5
#3	1949.9	4758.7	25473.	2287.6

Zoom In Zoom Out

Sample Name: FA53725-69 Acquired: 5/15/2018 12:07:00 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0017	136.9	.0344	.4833	-.0004	9.051	-.0116	.0191	.3248
Stddev	.0060	.7	.0110	.0028	.0012	.027	.0001	.0011	.0023
%RSD	363.3	.4774	32.11	.5744	339.6	.2977	.5556	5.913	.7073
#1	-.0062	136.6	.0408	.4843	-.0012	9.043	-.0115	.0196	.3236
#2	-.0039	137.6	.0216	.4855	.0010	9.082	-.0116	.0178	.3233
#3	.0051	136.4	.0407	.4802	-.0009	9.030	-.0116	.0199	.3274

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	4.031	153.6	13.50	11.68	.7856	-.0533	1.013	-.1031	9.586
Stddev	.014	.7	.36	.41	.0012	.0022	.089	.0008	.067
%RSD	.3462	.4825	2.655	3.471	.1536	4.119	8.788	.7857	.6934
#1	4.044	153.4	13.45	11.75	.7849	-.0546	.9121	.1023	9.652
#2	4.032	154.5	13.16	12.05	.7850	-.0545	1.080	.1031	9.588
#3	4.016	153.1	13.87	11.25	.7870	-.0508	1.047	.1039	9.519

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1567	-.0140	8.340	.0639	.1702	4.780	-.0226	.3573	.6499
Stddev	.0101	.0068	.188	.0040	.0012	.014	.0078	.0018	.0031
%RSD	6.463	48.38	2.256	6.195	.7021	.2824	34.45	.4950	.4813
#1	.1512	-.0102	8.450	.0652	.1697	4.795	-.0274	.3558	.6516
#2	.1505	-.0218	8.446	.0595	.1716	4.769	-.0267	.3593	.6518
#3	.1684	-.0099	8.122	.0671	.1694	4.777	-.0136	.3570	.6463

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1946.1	4735.3	25380.	2284.1
Stddev	5.6	3.3	93.	7.6
%RSD	.28853	.06937	.36757	.33259
#1	1942.4	4732.7	25477.	2292.8
#2	1943.3	4734.2	25291.	2280.7
#3	1952.6	4739.0	25373.	2278.8

Zoom In Zoom Out

Sample Name: FA53725-74 Acquired: 5/15/2018 12:11:21 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0064**	**166.9**	**.0497**	**.5075**	**.0003**	**5.220**	**-.0124**	**.0355**	**.4060**
Stddev	.0048	.9	.0021	.0041	.0016	.038	.0008	.0005	.0026
%RSD	75.11	.5195	4.180	.7996	479.1	.7304	6.851	1.548	.6501
#1	-.0012	167.8	.0477	.5122	.0021	5.252	-.0115	.0352	.4052
#2	-.0073	166.7	.0519	.5051	-.0010	5.178	-.0132	.0351	.4038
#3	-.0106	166.1	.0495	.5053	.0000	5.229	-.0124	.0361	.4089

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**4.421**	**172.2**	**16.39**	**16.41**	**.5730**	**-.0542**	**1.356**	**.1426**	**19.16**
Stddev	.012	.4	.14	.19	.0031	.0012	.063	.0023	.08
%RSD	.2703	.2599	.8599	1.172	.5387	2.221	4.643	1.587	.4397
#1	4.435	172.7	16.47	16.56	.5751	-.0552	1.428	.1416	19.24
#2	4.416	172.2	16.47	16.49	.5744	-.0545	1.310	.1452	19.17
#3	4.413	171.8	16.22	16.20	.5694	-.0528	1.330	.1410	19.07

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.2334**	**-.0277**	**7.897**	**.0601**	**.1883**	**5.220**	**-.0137**	**.3822**	**1.182**
Stddev	.0106	.0204	.133	.0027	.0008	.015	.0041	.0021	.000
%RSD	4.527	73.44	1.689	4.441	.4107	.2879	30.24	.5570	.0227
#1	.2245	-.0411	8.037	.0632	.1885	5.229	-.0169	.3842	1.182
#2	.2450	-.0379	7.881	.0586	.1889	5.228	-.0151	.3799	1.182
#3	.2305	-.0043	7.772	.0585	.1874	5.202	-.0090	.3824	1.182

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1935.5**	**4720.9**	**25527.**	**2302.5**
Stddev	6.0	10.9	136.	24.7
%RSD	.31247	.23087	.53154	1.0740
#1	1941.9	4727.7	25605.	2305.6
#2	1929.9	4708.4	25605.	2325.5
#3	1934.7	4726.8	25370.	2276.3

Zoom In Zoom Out

Sample Name: FA53725-77 Acquired: 5/15/2018 12:15:43 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0029**	**211.8**	**-.0048**	**1.918**	**-.0010**	**51.52**	**-.0074**	**.0313**	**.3469**
Stddev	.0078	1.8	.0078	.011	.0001	.28	.0009	.0021	.0017
%RSD	269.8	.8468	160.0	.5591	7.398	.5374	12.01	6.713	.4887
#1	.0116	210.5	-.0123	1.910	-.0010	51.47	-.0079	.0311	.3462
#2	.0006	213.8	.0032	1.930	-.0009	51.82	-.0064	.0293	.3458
#3	-.0036	211.0	-.0054	1.915	-.0010	51.27	-.0080	.0335	.3489

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**1.169**	**212.6**	**18.68**	**18.98**	**3.872**	**-.0511**	**1.598**	**.2073**	**1.933**
Stddev	.008	.5	.34	.35	.009	.0017	.120	.0010	.012
%RSD	.7066	.2291	1.816	1.828	.2228	3.371	7.526	.4893	.5993
#1	1.178	212.4	18.30	19.25	3.872	-.0522	1.726	.2072	1.946
#2	1.169	213.1	18.94	19.11	3.881	-.0491	1.487	.2064	1.928
#3	1.161	212.2	18.81	18.59	3.864	-.0520	1.581	.2084	1.924

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0005**	**-.0362**	**10.27**	**.0671**	**.7693**	**7.220**	**-.0270**	**.5298**	**4.520**
Stddev	.0114	.0082	.06	.0055	.0044	.015	.0118	.0013	.004
%RSD	2469.	22.70	.6129	8.260	.5780	.2078	43.63	.2398	.1000
#1	.0003	-.0268	10.22	.0686	.7647	7.221	-.0143	.5305	4.518
#2	.0106	-.0421	10.34	.0717	.7736	7.234	-.0291	.5306	4.526
#3	-.0123	-.0396	10.25	.0609	.7696	7.205	-.0376	.5284	4.518

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1941.5**	**4743.3**	**25379.**	**2264.2**
Stddev	5.6	1.9	183.	17.4
%RSD	.28980	.03935	.71932	.76799
#1	1940.6	4745.0	25170.	2262.3
#2	1936.3	4741.3	25462.	2247.9
#3	1947.5	4743.7	25506.	2282.5

Zoom In Zoom Out

Sample Name: FA53725-80 Acquired: 5/15/2018 12:20:03 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0031**	**191.1**	**.0069**	**.8551**	**-.0032**	**19.78**	**-.0124**	**.0136**	**.2841**
Stddev	.0020	2.2	.0135	.0077	.0019	.14	.0008	.0007	.0041
%RSD	65.73	1.148	195.6	.8972	61.13	.7107	6.848	5.014	1.441
#1	.0008	193.3	.0060	.8636	-.0021	19.95	-.0121	.0139	.2885
#2	.0039	190.9	.0208	.8532	-.0020	19.70	-.0133	.0141	.2834
#3	.0046	188.9	-.0061	.8486	-.0054	19.71	-.0117	.0128	.2804

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**3.711**	**188.1**	**13.39**	**13.33**	**1.081**	**-.0539**	**1.547**	**.1438**	**10.19**
Stddev	.016	1.1	.26	.08	.003	.0005	.102	.0034	.10
%RSD	.4305	.5997	1.907	.6298	.3075	.8627	6.588	2.386	.9712
#1	3.725	189.2	13.68	13.36	1.083	-.0539	1.448	.1424	10.29
#2	3.713	188.2	13.23	13.39	1.083	-.0534	1.652	.1477	10.19
#3	3.693	186.9	13.25	13.23	1.077	-.0543	1.540	.1413	10.09

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0379**	**-.0313**	**10.91**	**.0594**	**.2992**	**6.825**	**-.0123**	**.4837**	**.6461**
Stddev	.0108	.0092	.34	.0033	.0027	.059	.0096	.0044	.0047
%RSD	28.39	29.50	3.108	5.602	.8913	.8587	77.86	.9083	.7290
#1	.0424	-.0382	11.21	.0626	.3021	6.887	-.0191	.4870	.6511
#2	.0256	-.0348	10.98	.0595	.2987	6.820	-.0165	.4854	.6454
#3	.0456	-.0208	10.54	.0560	.2968	6.770	-.0014	.4787	.6418

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1933.4**	**4700.1**	**25320.**	**2269.7**
Stddev	5.1	14.0	93.	13.9
%RSD	.26295	.29719	.36782	.61067
#1	1939.3	4714.6	25425.	2279.6
#2	1931.0	4699.0	25247.	2275.6
#3	1930.0	4686.7	25287.	2253.8

Zoom In Zoom Out

Sample Name: FA53725-83 Acquired: 5/15/2018 12:24:25 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0037**	**170.4**	**.0153**	**.9486**	**-.0024**	**17.94**	**-.0124**	**.0167**	**.2676**
Stddev	.0046	1.6	.0008	.0079	.0008	.12	.0002	.0015	.0039
%RSD	124.2	.9522	5.410	.8285	33.42	.6856	1.767	8.882	1.448
#1	-.0004	171.0	.0162	.9528	-.0015	17.97	-.0126	.0171	.2708
#2	.0028	171.7	.0145	.9535	-.0030	18.05	-.0121	.0150	.2633
#3	.0087	168.6	.0154	.9395	-.0026	17.81	-.0124	.0179	.2686

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**5.391**	**166.0**	**12.21**	**11.50**	**.9751**	**-.0546**	**1.405**	**.1402**	**8.766**
Stddev	.015	1.5	.11	.26	.0022	.0013	.129	.0029	.008
%RSD	.2776	.9326	.9349	2.278	.2291	2.296	9.187	2.042	.0875
#1	5.393	166.6	12.11	11.23	.9736	-.0537	1.256	.1376	8.768
#2	5.375	167.1	12.33	11.52	.9740	-.0560	1.479	.1397	8.758
#3	5.405	164.2	12.18	11.75	.9777	-.0541	1.479	.1433	8.773

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.2030**	**-.0262**	**10.39**	**.0619**	**.3844**	**6.344**	**-.0257**	**.4456**	**.9816**
Stddev	.0092	.0052	.07	.0015	.0044	.017	.0076	.0025	.0025
%RSD	4.535	19.99	.6943	2.461	1.137	.2712	29.46	.5625	.2527
#1	.1933	-.0323	10.43	.0608	.3848	6.336	-.0281	.4433	.9790
#2	.2041	-.0236	10.42	.0637	.3885	6.332	-.0317	.4483	.9817
#3	.2116	-.0228	10.30	.0613	.3798	6.364	-.0172	.4454	.9840

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1925.7**	**4682.2**	**25206.**	**2253.1**
Stddev	4.1	14.6	104.	27.0
%RSD	.21126	.31191	.41313	1.1987
#1	1921.0	4686.6	25325.	2244.3
#2	1928.0	4665.9	25129.	2231.5
#3	1928.1	4694.1	25165.	2283.4

Zoom In Zoom Out

Sample Name: FA53725-7 Acquired: 5/15/2018 12:28:48 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0010**	**292.0**	**.1104**	**.6697**	**.0088**	**16.58**	**-.0051**	**.0885**	**.6447**
Stddev	.0024	.7	.0054	.0021	.0009	.06	.0003	.0004	.0036
%RSD	246.4	.2269	4.893	.3156	9.742	.3370	4.943	.4183	.5523
#1	-.0032	291.9	.1052	.6674	.0085	16.64	-.0049	.0886	.6482
#2	.0015	291.4	.1159	.6701	.0082	16.53	-.0049	.0888	.6449
#3	-.0012	292.7	.1101	.6716	.0098	16.57	-.0054	.0881	.6411

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1024**	**269.0**	**28.93**	**38.09**	**1.087**	**-.0236**	**2.894**	**.3176**	**.0792**
Stddev	.0038	.9	.25	.19	.004	.0002	.032	.0005	.0046
%RSD	3.709	.3264	.8617	.5113	.3527	.9094	1.091	.1429	5.781
#1	.1014	269.8	29.11	38.30	1.090	-.0237	2.862	.3180	.0820
#2	.1066	269.1	29.02	37.91	1.089	-.0233	2.925	.3177	.0817
#3	.0992	268.0	28.64	38.07	1.083	-.0237	2.896	.3171	.0739

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0025**	**-.0147**	**9.376**	**.0621**	**.2588**	**8.488**	**-.0062**	**.5812**	**.3037**
Stddev	.0087	.0112	.035	.0025	.0007	.035	.0041	.0038	.0021
%RSD	354.6	76.22	.3691	3.975	.2574	.4104	65.22	.6490	.6931
#1	.0057	-.0144	9.412	.0621	.2581	8.509	-.0094	.5845	.3060
#2	-.0015	-.0037	9.343	.0646	.2594	8.507	-.0077	.5821	.3034
#3	-.0116	-.0261	9.372	.0597	.2590	8.448	-.0017	.5771	.3018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1904.6**	**4752.4**	**25335.**	**2277.5**
Stddev	5.8	3.6	35.	17.9
%RSD	.30666	.07506	.13955	.78665
#1	1904.4	4748.3	25298.	2258.0
#2	1898.9	4753.9	25339.	2293.2
#3	1910.6	4755.0	25369.	2281.4

Zoom In Zoom Out

Sample Name: FA53725-19 Acquired: 5/15/2018 12:33:07 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**195.6**	**.0344**	**.7849**	**.0043**	**14.18**	**-.0036**	**.0524**	**.4886**
Stddev	.0035	2.8	.0041	.0089	.0011	.09	.0002	.0009	.0031
%RSD	1166.	1.410	11.91	1.130	24.59	.6291	6.592	1.720	.6367
#1	.0004	198.6	.0342	.7943	.0042	14.29	-.0039	.0530	.4922
#2	-.0033	195.0	.0387	.7834	.0054	14.15	-.0034	.0528	.4868
#3	.0038	193.2	.0305	.7768	.0033	14.12	-.0036	.0514	.4869

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6244**	**235.1**	**18.52**	**17.34**	**1.752**	**-.0188**	**2.816**	**.2061**	**.1944**
Stddev	.0042	2.6	.23	.08	.006	.0010	.083	.0018	.0042
%RSD	.6702	1.105	1.235	.4483	.3564	5.404	2.957	.8912	2.181
#1	.6205	237.5	18.65	17.36	1.758	-.0189	2.871	.2081	.1986
#2	.6288	235.3	18.26	17.42	1.752	-.0178	2.857	.2047	.1946
#3	.6240	232.4	18.66	17.26	1.746	-.0198	2.721	.2054	.1901

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0032**	**-.0224**	**10.13**	**.0616**	**.1816**	**9.701**	**-.0120**	**.6138**	**6.465**
Stddev	.0067	.0046	.02	.0015	.0021	.044	.0037	.0044	.046
%RSD	213.8	20.71	.1555	2.380	1.172	.4556	30.73	.7185	.7181
#1	.0006	-.0187	10.15	.0633	.1840	9.738	-.0132	.6172	6.517
#2	.0108	-.0276	10.13	.0608	.1809	9.713	-.0150	.6154	6.451
#3	-.0019	-.0209	10.12	.0607	.1799	9.652	-.0079	.6088	6.428

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1905.0**	**4665.6**	**24934.**	**2223.4**
Stddev	6.0	7.9	71.	12.2
%RSD	.31388	.16826	.28573	.54802
#1	1900.4	4662.6	24929.	2209.9
#2	1911.8	4674.5	24865.	2226.8
#3	1902.9	4659.7	25007.	2233.5

Zoom In Zoom Out

Sample Name: FA53725-20 Acquired: 5/15/2018 12:37:27 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**194.0**	**.0336**	**.7616**	**.0035**	**13.19**	**-.0032**	**.0579**	**.5013**
Stddev	.0005	2.0	.0030	.0059	.0003	.14	.0002	.0005	.0026
%RSD	171.7	1.006	9.056	.7787	9.535	1.085	7.203	.8371	.5152
#1	-.0008	196.3	.0365	.7649	.0039	13.35	-.0030	.0579	.4991
#2	-.0002	193.2	.0304	.7652	.0033	13.16	-.0035	.0574	.5007
#3	.0002	192.6	.0339	.7548	.0034	13.07	-.0032	.0583	.5042

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4256**	**245.2**	**19.44**	**18.30**	**1.748**	**-.0198**	**3.262**	**.2056**	**.1744**
Stddev	.0019	1.9	.36	.20	.007	.0009	.095	.0009	.0048
%RSD	.4406	.7608	1.858	1.109	.4268	4.303	2.908	.4385	2.748
#1	.4258	247.2	19.72	18.49	1.755	-.0189	3.371	.2048	.1799
#2	.4236	244.9	19.58	18.32	1.748	-.0205	3.222	.2055	.1711
#3	.4274	243.5	19.04	18.09	1.741	-.0200	3.194	.2066	.1722

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0047**	**-.0150**	**9.087**	**.0615**	**.1671**	**9.709**	**-.0100**	**.6597**	**5.006**
Stddev	.0037	.0063	.118	.0012	.0035	.023	.0034	.0039	.009
%RSD	77.42	41.76	1.294	2.020	2.087	.2377	33.67	.5918	.1880
#1	.0073	-.0218	9.153	.0625	.1706	9.732	-.0137	.6624	5.014
#2	.0005	-.0136	9.157	.0620	.1637	9.686	-.0090	.6615	5.009
#3	.0064	-.0095	8.952	.0601	.1672	9.709	-.0072	.6552	4.996

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1902.6**	**4678.4**	**25107.**	**2240.3**
Stddev	6.6	6.7	178.	28.1
%RSD	.34850	.14238	.70775	1.2547
#1	1897.2	4674.3	24966.	2212.4
#2	1900.6	4674.7	25049.	2239.7
#3	1910.0	4686.0	25307.	2268.6

Zoom In Zoom Out

Sample Name: FA53725-37 Acquired: 5/15/2018 12:41:47 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**216.5**	**.0478**	**.7847**	**.0038**	**10.16**	**-.0048**	**.0465**	**.4567**
Stddev	.0012	1.9	.0031	.0019	.0009	.16	.0002	.0001	.0021
%RSD	818.3	.8645	6.577	.2439	23.19	1.574	3.811	.1950	.4701
#1	-.0013	218.4	.0442	.7865	.0048	10.34	-.0050	.0464	.4592
#2	.0011	216.3	.0500	.7849	.0033	10.09	-.0047	.0465	.4552
#3	-.0002	214.7	.0492	.7827	.0033	10.05	-.0046	.0465	.4558

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.8612**	**217.2**	**17.10**	**14.88**	**1.024**	**-.0206**	**1.814**	**.1619**	**.2019**
Stddev	.0024	1.3	.12	.41	.006	.0008	.044	.0020	.0042
%RSD	.2803	.6201	.6937	2.769	.5713	3.878	2.401	1.231	2.074
#1	.8588	218.4	17.18	15.28	1.029	-.0214	1.833	.1642	.1989
#2	.8637	217.4	17.17	14.91	1.027	-.0198	1.765	.1608	.2067
#3	.8612	215.7	16.97	14.46	1.018	-.0206	1.846	.1608	.2000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**-.0180**	**8.510**	**.0649**	**.1511**	**6.574**	**-.0186**	**.5014**	**8.719**
Stddev	.0047	.0085	.063	.0020	.0014	.028	.0020	.0054	.030
%RSD	539.7	47.40	.7342	3.086	.9506	.4212	10.75	1.067	.3494
#1	.0036	-.0230	8.553	.0654	.1527	6.583	-.0185	.5049	8.753
#2	-.0046	-.0081	8.538	.0666	.1506	6.596	-.0167	.5041	8.706
#3	.0036	-.0229	8.438	.0627	.1499	6.543	-.0207	.4953	8.696

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1905.1**	**4687.1**	**25120.**	**2262.4**
Stddev	2.6	9.8	104.	19.7
%RSD	.13579	.20840	.41339	.86916
#1	1906.2	4696.9	25023.	2239.7
#2	1902.1	4677.3	25108.	2274.2
#3	1906.9	4687.2	25229.	2273.4

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 12:46:07 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2467	41.95	2.105	2.093	2.035	41.49	2.116	2.063	2.058
Stddev	.0016	.19	.003	.015	.011	.19	.004	.002	.007
%RSD	.6374	.4589	.1290	.7106	.5322	.4667	.1648	.0713	.3666
#1	.2481	42.15	2.108	2.103	2.043	41.60	2.120	2.065	2.066
#2	.2450	41.94	2.106	2.100	2.038	41.59	2.113	2.062	2.055
#3	.2470	41.76	2.103	2.076	2.023	41.26	2.115	2.062	2.052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.000	40.50	41.15	41.40	2.110	2.076	41.61	2.027	2.058
Stddev	.005	.18	.11	.32	.010	.001	.16	.003	.004
%RSD	.2759	.4563	.2773	.7671	.4629	.0658	.3895	.1217	.1946
#1	2.005	40.68	41.23	41.46	2.119	2.077	41.73	2.029	2.062
#2	1.994	40.50	41.20	41.68	2.110	2.074	41.66	2.024	2.054
#3	2.001	40.31	41.02	41.05	2.100	2.076	41.43	2.028	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.091	2.096	1.871	2.072	2.086	2.109	2.057	2.137	2.049
Stddev	.001	.005	.003	.004	.016	.006	.004	.007	.003
%RSD	.0479	.2277	.1429	.1963	.7496	.2889	.1882	.3385	.1231
#1	2.091	2.092	1.869	2.076	2.091	2.116	2.053	2.145	2.049
#2	2.091	2.094	1.869	2.070	2.098	2.104	2.059	2.135	2.052
#3	2.089	2.101	1.874	2.069	2.068	2.106	2.060	2.131	2.047
Check ?	Chk Pass	Chk Pass		None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 12:46:07 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1808.4	4524.3	24843.	2230.4
Stddev	3.3	10.1	205.	12.5
%RSD	.18001	.22332	.82587	.56169
#1	1805.6	4517.7	24823.	2222.4
#2	1812.0	4536.0	24648.	2224.0
#3	1807.7	4519.3	25057.	2244.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 12:50:18 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0232	-.0004	.0002	-.0002	-.0115	-.0006	-.0006
Stddev	.0000	.0059	.0002	.0005	.0001	.0059	.0001	.0001
%RSD	6.794	25.31	55.44	208.0	30.51	51.17	22.02	21.24
#1	.0001	-.0291	-.0007	-.0001	-.0002	-.0057	-.0007	-.0007
#2	.0001	-.0174	-.0003	.0008	-.0002	-.0175	-.0006	-.0007
#3	.0001	-.0232	-.0003	.0000	-.0003	-.0112	-.0005	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0004	-.0184	-.0151	.0075	-.0003	F -.0030	-.0299
Stddev	.000	.0004	.0046	.0200	.0190	.0000	.0007	.0111
%RSD	345.4	85.56	25.26	132.8	253.7	.7341	21.89	37.03
#1	-.0001	.0001	-.0140	.0069	.0261	-.0003	-.0022	-.0367
#2	.0000	.0004	-.0179	-.0199	.0082	-.0003	-.0032	-.0171
#3	.0000	.0008	-.0233	-.0323	-.0119	-.0003	-.0035	-.0358
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0005	-.0010	-.0016	-.0014	-.0009	-.0003	-.0008
Stddev	.0003	.0012	.0003	.0020	.0002	.0004	.0001	.0000
%RSD	61.67	239.6	33.42	125.2	15.19	44.33	46.15	5.942
#1	-.0008	.0006	-.0008	-.0009	-.0015	-.0013	-.0001	-.0007
#2	-.0007	-.0008	-.0014	-.0037	-.0012	-.0011	-.0004	-.0008
#3	-.0002	.0017	-.0008	.0000	-.0016	-.0005	-.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 12:50:18 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0006	-.0002	-.0006
Stddev	.0008	.0001	.0002
%RSD	141.7	64.28	34.13
#1	-.0004	-.0003	-.0008
#2	-.0014	-.0001	-.0008
#3	.0002	-.0003	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1936.7	4712.4	25494.	2267.1
Stddev	10.9	20.2	183.	25.8
%RSD	.56022	.42808	.71763	1.1367
#1	1925.8	4689.5	25387.	2295.0
#2	1936.7	4727.6	25705.	2262.0
#3	1947.5	4720.0	25390.	2244.3

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: MP33740-MB1 Acquired: 5/15/2018 12:54:47 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**-.0435**	F **-.0129**	**-.0001**	F **-.0035**	**-.0260**	F **-.0058**	**-.0055**
Stddev	.0006	.0191	.0041	.0009	.0001	.0147	.0005	.0002
%RSD	63.94	43.81	31.62	1333.	3.790	56.64	8.266	4.173
#1	-.0013	-.0593	-.0169	.0006	-.0036	-.0148	-.0063	-.0053
#2	-.0002	-.0223	-.0088	-.0011	-.0034	-.0427	-.0056	-.0055
#3	-.0011	-.0489	-.0130	.0004	-.0034	-.0204	-.0054	-.0058
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
High Limit			.0050		.0020		.0050	
Low Limit			-.0050		-.0020		-.0050	

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0016**	**.0005**	**-.0211**	**-.0308**	**-.0398**	**-.0010**	F **-.0279**	**-.1857**
Stddev	.0030	.0004	.0077	.3295	.1952	.0001	.0010	.0743
%RSD	187.2	84.20	36.75	1071.	489.8	12.36	3.645	40.05
#1	-.0023	.0003	-.0222	-.4030	.0148	-.0009	-.0267	-.1686
#2	-.0042	.0009	-.0128	.2232	.1222	-.0011	-.0284	-.1213
#3	.0017	.0002	-.0282	.0875	-.2565	-.0012	-.0285	-.2670
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0250	
Low Limit							-.0250	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0047**	F **-.0037**	F **-.0027**	**-.0026**	**.0209**	F **.0640**	**-.0030**	F **-.0059**
Stddev	.0009	.0032	.0060	.0070	.0065	.0012	.0007	.0006
%RSD	19.08	87.80	220.6	264.8	30.87	1.889	23.86	10.60
#1	-.0048	-.0019	-.0065	.0034	.0278	.0644	-.0023	-.0062
#2	-.0037	-.0018	-.0058	-.0103	.0150	.0650	-.0037	-.0062
#3	-.0055	-.0074	.0042	-.0010	.0199	.0627	-.0031	-.0051
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail
High Limit		.0025	.0025			.0250		.0050
Low Limit		-.0025	-.0025			-.0250		-.0050

Zoom In Zoom Out

Sample Name: MP33740-MB1 Acquired: 5/15/2018 12:54:47 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F **-.0093**	**-.0037**	**-.0016**
Stddev	.0089	.0011	.0002
%RSD	95.24	30.19	10.67
#1	-.0189	-.0047	-.0017
#2	-.0077	-.0039	-.0015
#3	-.0014	-.0025	-.0018
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1897.0**	**4652.4**	**25095.**	**2229.4**
Stddev	4.0	13.4	24.	20.4
%RSD	.20953	.28885	.09584	.91430
#1	1893.5	4637.9	25076.	2217.1
#2	1901.3	4655.0	25088.	2252.9
#3	1896.1	4664.4	25122.	2218.2

Zoom In Zoom Out

Sample Name: MP33740-B1 Acquired: 5/15/2018 12:59:18 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0517**	**30.59**	**2.185**	**2.318**	**.0536**	**28.51**	**.0506**	**.5499**	**.2270**
Stddev	.0018	.25	.010	.001	.0005	.16	.0004	.0028	.0032
%RSD	3.385	.8020	.4548	.0595	.9764	.5546	.8796	.5152	1.410
#1	.0499	30.64	2.196	2.319	.0538	28.35	.0503	.5531	.2289
#2	.0533	30.80	2.184	2.317	.0530	28.67	.0503	.5478	.2287
#3	.0521	30.32	2.176	2.319	.0540	28.51	.0511	.5488	.2233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2743**	**29.02**	**27.24**	**28.17**	**.5871**	**.4833**	**28.12**	**.5587**	**.5378**
Stddev	.0028	.18	.24	.17	.0011	.0031	.04	.0043	.0062
%RSD	1.022	.6150	.8716	.5957	.1916	.6385	.1495	.7750	1.162
#1	.2775	28.96	27.00	27.98	.5878	.4866	28.08	.5635	.5449
#2	.2727	28.88	27.48	28.27	.5858	.4827	28.16	.5572	.5352
#3	.2726	29.22	27.25	28.26	.5876	.4805	28.11	.5553	.5332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5320**	**2.121**	**.4965**	**.5986**	**.5632**	**.5602**	**2.077**	**.5382**	**.5500**
Stddev	.0040	.020	.0151	.0026	.0007	.0014	.004	.0018	.0007
%RSD	.7520	.9401	3.041	.4284	.1320	.2497	.1748	.3382	.1299
#1	.5346	2.137	.4873	.6011	.5630	.5617	2.080	.5364	.5508
#2	.5340	2.128	.4884	.5960	.5626	.5600	2.073	.5400	.5494
#3	.5274	2.099	.5140	.5988	.5641	.5589	2.078	.5384	.5498
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33740-B1 Acquired: 5/15/2018 12:59:18 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1892.0**	**4625.7**	**25007.**	**2209.0**
Stddev	3.3	8.0	64.	14.8
%RSD	.17325	.17292	.25759	.66989
#1	1893.3	4627.9	24962.	2223.1
#2	1894.4	4632.4	25081.	2193.6
#3	1888.2	4616.9	24978.	2210.2

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-31A Acquired: 5/15/2018 13:03:36 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0016**	**254.9**	**.0531**	**.7940**	**.0029**	**28.99**	**-.0048**	**.0350**	**.4334**
Stddev	.0022	1.5	.0038	.0049	.0005	.13	.0004	.0013	.0018
%RSD	138.5	.5795	7.243	.6138	17.77	.4564	9.268	3.756	.4174
#1	-.0035	253.6	.0566	.7893	.0031	28.84	-.0049	.0341	.4316
#2	-.0021	256.5	.0537	.7990	.0023	29.09	-.0043	.0365	.4334
#3	.0008	254.5	.0490	.7935	.0032	29.04	-.0052	.0344	.4353

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3948**	**259.1**	**19.63**	**17.92**	**1.492**	**-.0129**	**2.400**	**.1992**	**.7172**
Stddev	.0007	1.4	.05	.15	.003	.0007	.055	.0016	.0087
%RSD	.1809	.5503	.2398	.8621	.2062	5.524	2.292	.8205	1.210
#1	.3950	257.6	19.58	18.08	1.494	-.0129	2.350	.1974	.7186
#2	.3954	260.5	19.67	17.77	1.488	-.0121	2.459	.1997	.7080
#3	.3940	259.2	19.64	17.91	1.492	-.0135	2.390	.2006	.7252

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0102**	**-.0138**	**5.163**	**.0605**	**.4658**	**6.612**	**-.0096**	**.6798**	**1.640**
Stddev	.0080	.0032	.006	.0022	.0042	.008	.0029	.0014	.003
%RSD	78.88	23.08	.1125	3.559	.8983	.1251	30.28	.2076	.1768
#1	.0147	-.0173	5.163	.0621	.4621	6.621	-.0063	.6787	1.642
#2	.0149	-.0131	5.169	.0581	.4704	6.606	-.0116	.6814	1.636
#3	.0009	-.0110	5.157	.0614	.4649	6.608	-.0110	.6792	1.641

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1912.7**	**4733.9**	**25290.**	**2273.4**
Stddev	10.7	11.1	91.	18.1
%RSD	.55693	.23414	.36151	.79737
#1	1904.4	4723.8	25186.	2288.4
#2	1924.7	4745.7	25332.	2253.3
#3	1909.0	4732.1	25353.	2278.6

Zoom In Zoom Out

Sample Name: MP33740-D1 Acquired: 5/15/2018 13:07:57 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**243.5**	**.0466**	**.7632**	**.0027**	**28.00**	**-.0054**	**.0329**	**.4168**
Stddev	.0014	.3	.0032	.0024	.0005	.11	.0002	.0003	.0068
%RSD	792.0	.1061	6.948	.3191	20.16	.3773	2.894	.9478	1.624
#1	-.0001	243.4	.0440	.7628	.0032	28.11	-.0053	.0327	.4182
#2	-.0016	243.4	.0502	.7658	.0027	27.90	-.0056	.0328	.4227
#3	.0012	243.8	.0456	.7610	.0021	27.98	-.0053	.0333	.4094

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3799**	**249.7**	**18.93**	**17.26**	**1.424**	**-.0147**	**2.353**	**.1787**	**.6590**
Stddev	.0020	.8	.25	.17	.001	.0003	.032	.0023	.0105
%RSD	.5310	.3059	1.329	.9956	.0865	2.143	1.371	1.289	1.596
#1	.3822	249.7	18.81	17.42	1.423	-.0149	2.377	.1804	.6711
#2	.3787	248.9	18.76	17.27	1.425	-.0144	2.365	.1760	.6527
#3	.3787	250.4	19.22	17.08	1.424	-.0150	2.316	.1796	.6531

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0056**	**-.0164**	**4.394**	**.0558**	**.4539**	**5.751**	**-.0112**	**.6479**	**1.554**
Stddev	.0024	.0087	.030	.0008	.0009	.017	.0019	.0013	.009
%RSD	41.93	53.01	.6949	1.472	.1889	.2875	16.78	.1999	.5541
#1	.0029	-.0095	4.425	.0567	.4548	5.767	-.0134	.6489	1.564
#2	.0065	-.0262	4.392	.0551	.4531	5.752	-.0099	.6465	1.548
#3	.0074	-.0135	4.364	.0556	.4537	5.734	-.0104	.6485	1.551

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1917.5**	**4716.9**	**25271.**	**2232.0**
Stddev	9.8	11.2	27.	25.5
%RSD	.51002	.23777	.10845	1.1422
#1	1914.0	4721.6	25262.	2208.9
#2	1928.5	4725.0	25302.	2259.4
#3	1909.9	4704.1	25250.	2227.7

Zoom In Zoom Out

Sample Name: MP33740-D2 Acquired: 5/15/2018 13:12:16 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0012**	**249.9**	**.0494**	**.7853**	**.0026**	**28.53**	**-.0048**	**.0345**	**.4248**
Stddev	.0030	1.5	.0024	.0033	.0005	.17	.0003	.0006	.0040
%RSD	252.3	.5900	4.781	.4191	20.14	.5997	5.644	1.737	.9372
#1	.0017	249.3	.0495	.7841	.0020	28.63	-.0048	.0338	.4235
#2	-.0043	248.8	.0518	.7829	.0031	28.33	-.0051	.0346	.4217
#3	-.0009	251.6	.0470	.7891	.0025	28.62	-.0045	.0350	.4293

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3970**	**256.8**	**19.44**	**17.72**	**1.479**	**-.0154**	**2.353**	**.1847**	**.7005**
Stddev	.0015	.4	.18	.28	.003	.0007	.038	.0014	.0074
%RSD	.3698	.1391	.9336	1.575	.2081	4.238	1.609	.7599	1.062
#1	.3968	257.1	19.53	17.52	1.483	-.0159	2.309	.1838	.7082
#2	.3986	256.4	19.56	17.59	1.477	-.0157	2.375	.1839	.7001
#3	.3956	256.8	19.23	18.04	1.478	-.0147	2.374	.1863	.6934

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0097**	**-.0212**	**5.068**	**.0596**	**.4630**	**6.194**	**-.0082**	**.6677**	**1.642**
Stddev	.0055	.0027	.007	.0022	.0043	.019	.0008	.0019	.002
%RSD	56.59	12.65	.1414	3.685	.9209	.3078	9.419	.2793	.1110
#1	.0060	-.0207	5.061	.0601	.4603	6.215	-.0074	.6689	1.640
#2	.0071	-.0241	5.070	.0614	.4609	6.178	-.0083	.6656	1.643
#3	.0161	-.0189	5.075	.0572	.4679	6.189	-.0090	.6687	1.644

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1906.0**	**4710.3**	**25326.**	**2239.0**
Stddev	2.2	9.2	102.	11.5
%RSD	.11742	.19503	.40218	.51142
#1	1903.4	4717.9	25369.	2225.8
#2	1907.5	4712.9	25399.	2244.1
#3	1907.0	4700.1	25210.	2247.0

Zoom In Zoom Out

Sample Name: MP33740-SD1 Acquired: 5/15/2018 13:16:36 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0075**	**570.3**	**.0884**	**1.762**	**-.0017**	**66.10**	**-.0287**	**.0588**	**.9614**
Stddev	.0107	2.1	.0066	.020	.0040	.10	.0011	.0042	.0098
%RSD	142.0	.3736	7.508	1.113	232.5	.1535	3.893	7.136	1.019
#1	.0187	571.9	.0815	1.778	-.0026	66.08	-.0290	.0541	.9682
#2	-.0025	567.9	.0889	1.740	-.0052	66.00	-.0275	.0620	.9659
#3	.0063	571.0	.0948	1.769	.0027	66.21	-.0297	.0603	.9502

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.8676**	**582.3**	**43.19**	**39.36**	**3.335**	**-.1217**	**6.018**	**.4037**	**1.534**
Stddev	.0151	.5	.24	1.26	.013	.0025	.119	.0043	.003
%RSD	1.740	.0889	.5571	3.208	.3739	2.043	1.978	1.053	.2078
#1	.8844	582.9	43.39	37.96	3.349	-.1191	5.884	.4080	1.537
#2	.8552	581.9	42.92	39.70	3.333	-.1221	6.112	.4035	1.531
#3	.8631	582.2	43.25	40.41	3.324	-.1240	6.057	.3995	1.533

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0151**	**-.0928**	**11.98**	**.1065**	**1.047**	**14.52**	**-.0401**	**1.492**	**3.685**
Stddev	.0243	.0488	.04	.0024	.004	.06	.0066	.008	.015
%RSD	161.2	52.55	.3229	2.282	.3523	.3876	16.44	.5653	.4119
#1	.0067	-.1480	12.02	.1050	1.043	14.55	-.0440	1.495	3.702
#2	-.0412	-.0752	11.97	.1093	1.048	14.55	-.0437	1.499	3.673
#3	-.0107	-.0553	11.95	.1051	1.050	14.45	-.0325	1.483	3.681

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1935.5**	**4721.5**	**25270.**	**2274.8**
Stddev	3.5	5.9	166.	20.6
%RSD	.18205	.12400	.65615	.90364
#1	1934.4	4716.0	25149.	2280.1
#2	1932.7	4727.6	25202.	2292.2
#3	1939.4	4720.9	25459.	2252.1

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: MP33740-PS1 Acquired: 5/15/2018 13:20:58 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0498**	**263.0**	**.1610**	**1.079**	**.0557**	**34.80**	**.0477**	**.0878**	**.4984**
Stddev	.0032	2.3	.0001	.008	.0015	.22	.0001	.0003	.0015
%RSD	6.463	.8892	.0821	.7067	2.713	.6218	.1668	.3895	.3017
#1	.0499	265.7	.1610	1.088	.0575	35.05	.0477	.0880	.5001
#2	.0531	262.0	.1612	1.075	.0548	34.68	.0478	.0874	.4976
#3	.0466	261.4	.1610	1.074	.0550	34.67	.0477	.0880	.4974

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5115**	**268.1**	**30.25**	**23.66**	**1.565**	**.0813**	**13.05**	**.2994**	**.7814**
Stddev	.0039	2.1	.15	.26	.004	.0014	.11	.0017	.0034
%RSD	.7530	.7957	.5085	1.116	.2688	1.727	.8726	.5664	.4311
#1	.5154	270.5	30.23	23.95	1.566	.0797	13.18	.2978	.7835
#2	.5077	267.0	30.11	23.58	1.569	.0822	13.00	.2993	.7775
#3	.5114	266.7	30.42	23.44	1.561	.0820	12.96	.3012	.7831

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1129**	**.0803**	**5.467**	**.1116**	**.5308**	**6.873**	**.0903**	**.7430**	**1.929**
Stddev	.0031	.0160	.006	.0031	.0050	.013	.0026	.0009	.001
%RSD	2.702	19.98	.1157	2.772	.9364	.1828	2.866	.1146	.0560
#1	.1158	.0878	5.472	.1101	.5355	6.885	.0927	.7432	1.928
#2	.1097	.0619	5.460	.1095	.5314	6.874	.0908	.7437	1.928
#3	.1132	.0912	5.469	.1152	.5256	6.860	.0876	.7421	1.930

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1892.4**	**4701.2**	**25392.**	**2259.0**
Stddev	5.0	8.1	68.	17.9
%RSD	.26432	.17125	.26609	.79080
#1	1888.9	4697.2	25396.	2238.7
#2	1890.2	4695.8	25458.	2272.1
#3	1898.1	4710.4	25323.	2266.3

Zoom In Zoom Out

Sample Name: MP33740-S1 Acquired: 5/15/2018 13:25:18 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0525**	**362.3**	**2.054**	**3.082**	**.0587**	**58.61**	**.0496**	**.5816**	**.7119**
Stddev	.0017	3.2	.011	.031	.0013	.54	.0004	.0029	.0048
%RSD	3.299	.8852	.5173	1.019	2.277	.9252	.8292	.4968	.6758
#1	.0537	365.1	2.066	3.113	.0594	59.04	.0500	.5845	.7175
#2	.0532	362.9	2.048	3.083	.0596	58.80	.0492	.5814	.7088
#3	.0505	358.8	2.048	3.051	.0572	58.00	.0497	.5787	.7096

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6890**	**302.5**	**46.89**	**46.85**	**2.123**	**.3830**	**30.19**	**.8039**	**1.266**
Stddev	.0087	1.7	.35	.96	.026	.0020	.25	.0036	.021
%RSD	1.263	.5599	.7470	2.053	1.227	.5175	.8396	.4423	1.635
#1	.6977	303.8	47.25	47.67	2.151	.3852	30.42	.8080	1.289
#2	.6891	303.1	46.88	47.10	2.119	.3825	30.23	.8015	1.260
#3	.6803	300.6	46.55	45.79	2.100	.3813	29.92	.8021	1.249

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1270**	**1.976**	**6.011**	**.5103**	**.9996**	**6.609**	**2.024**	**1.250**	**2.272**
Stddev	.0036	.005	.023	.0051	.0065	.074	.014	.014	.012
%RSD	2.851	.2591	.3807	.9970	.6532	1.126	.6768	1.153	.5120
#1	.1240	1.980	6.038	.5160	1.006	6.690	2.039	1.266	2.286
#2	.1260	1.970	5.999	.5087	1.001	6.592	2.012	1.247	2.265
#3	.1310	1.978	5.997	.5062	.9926	6.544	2.020	1.238	2.266

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1892.7**	**4692.7**	**25174.**	**2262.9**
Stddev	5.0	3.5	163.	18.6
%RSD	.26352	.07386	.64583	.82209
#1	1887.6	4694.2	25002.	2256.2
#2	1892.9	4695.1	25193.	2283.9
#3	1897.6	4688.7	25326.	2248.6

Zoom In Zoom Out

Sample Name: MP33740-S2 Acquired: 5/15/2018 13:29:36 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0476**	**342.5**	**1.967**	**2.953**	**.0567**	**56.05**	**.0472**	**.5520**	**.6752**
Stddev	.0035	1.5	.010	.026	.0002	.41	.0007	.0049	.0064
%RSD	7.432	.4377	.5117	.8920	.3249	.7288	1.481	.8824	.9496
#1	.0435	344.1	1.973	2.977	.0569	56.50	.0480	.5560	.6807
#2	.0495	342.4	1.973	2.956	.0566	55.94	.0469	.5535	.6769
#3	.0498	341.1	1.956	2.925	.0565	55.70	.0466	.5466	.6682

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6512**	**287.2**	**44.87**	**44.42**	**2.009**	**.4014**	**28.89**	**.7540**	**1.191**
Stddev	.0093	2.4	.27	.54	.022	.0025	.23	.0053	.011
%RSD	1.424	.8397	.6025	1.216	1.104	.6225	.8096	.7064	.9337
#1	.6586	289.6	45.07	45.05	2.027	.4043	29.16	.7592	1.199
#2	.6542	287.2	44.97	44.10	2.015	.4003	28.80	.7543	1.195
#3	.6408	284.8	44.56	44.12	1.984	.3997	28.72	.7486	1.178

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1186**	**1.882**	**5.284**	**.5274**	**.9990**	**6.395**	**1.924**	**1.183**	**2.162**
Stddev	.0032	.016	.022	.0036	.0067	.063	.017	.010	.017
%RSD	2.670	.8468	.4088	.6807	.6745	.9892	.8909	.8655	.7982
#1	.1155	1.893	5.306	.5313	1.004	6.454	1.925	1.193	2.176
#2	.1218	1.889	5.283	.5266	1.002	6.402	1.940	1.184	2.166
#3	.1184	1.864	5.263	.5242	.9913	6.328	1.906	1.173	2.143

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1893.5**	**4687.1**	**24993.**	**2282.3**
Stddev	5.2	8.1	79.	3.9
%RSD	.27348	.17212	.31458	.17283
#1	1891.6	4696.4	24902.	2285.2
#2	1889.6	4683.2	25040.	2277.9
#3	1899.4	4681.8	25037.	2284.0

Zoom In Zoom Out

Sample Name: FA53725-40A Acquired: 5/15/2018 13:33:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**221.0**	**.0276**	**1.486**	**.0031**	**36.44**	**-.0044**	**.0438**	**.3773**
Stddev	.0008	.4	.0032	.003	.0010	.14	.0004	.0006	.0048
%RSD	518.3	.1610	11.78	.1707	33.71	.3755	9.140	1.329	1.272
#1	-.0009	220.5	.0261	1.483	.0022	36.60	-.0043	.0436	.3822
#2	.0006	221.1	.0313	1.487	.0042	36.41	-.0049	.0445	.3772
#3	-.0002	221.2	.0253	1.488	.0028	36.33	-.0041	.0434	.3726

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.9443**	**232.5**	**17.00**	**16.71**	**4.026**	**-.0181**	**2.070**	**.2031**	**3.075**
Stddev	.0042	.8	.30	.19	.014	.0004	.029	.0013	.014
%RSD	.4452	.3355	1.744	1.126	.3444	2.295	1.421	.6503	.4640
#1	.9473	232.7	16.87	16.56	4.037	-.0182	2.058	.2026	3.088
#2	.9460	233.2	16.78	16.65	4.030	-.0184	2.048	.2046	3.076
#3	.9395	231.6	17.33	16.92	4.010	-.0176	2.103	.2022	3.060

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0151**	**-.0181**	**5.265**	**.0651**	**.6561**	**5.119**	**-.0088**	**.6186**	**.9297**
Stddev	.0045	.0090	.016	.0009	.0023	.017	.0098	.0030	.0035
%RSD	29.78	49.71	.2964	1.401	.3513	.3394	111.1	.4878	.3811
#1	.0194	-.0081	5.281	.0645	.6554	5.134	-.0176	.6217	.9318
#2	.0154	-.0208	5.250	.0661	.6586	5.124	-.0104	.6183	.9316
#3	.0104	-.0255	5.265	.0646	.6541	5.100	.0017	.6157	.9256

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1905.3**	**4720.3**	**25422.**	**2272.7**
Stddev	3.6	7.4	86.	11.0
%RSD	.18640	.15709	.33662	.48573
#1	1901.8	4723.3	25374.	2275.0
#2	1905.3	4725.8	25520.	2260.7
#3	1908.9	4711.9	25371.	2282.4

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 13:38:14 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2465	41.97	2.100	2.102	2.053	41.64	2.116	2.064	2.055
Stddev	.0004	.23	.003	.003	.009	.12	.005	.004	.011
%RSD	.1787	.5410	.1620	.1185	.4366	.2932	.2288	.1787	.5196
#1	.2470	41.98	2.104	2.105	2.053	41.64	2.120	2.067	2.067
#2	.2463	42.19	2.099	2.100	2.062	41.76	2.117	2.065	2.047
#3	.2463	41.73	2.098	2.101	2.044	41.52	2.111	2.059	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.988	40.50	41.47	41.54	2.110	2.072	41.86	2.025	2.060
Stddev	.004	.18	.13	.20	.013	.004	.07	.004	.004
%RSD	.2190	.4543	.3044	.4879	.5976	.1728	.1585	.1932	.2040
#1	1.984	40.30	41.55	41.50	2.125	2.075	41.92	2.027	2.061
#2	1.988	40.67	41.52	41.76	2.101	2.072	41.88	2.028	2.055
#3	1.993	40.52	41.32	41.36	2.105	2.068	41.79	2.021	2.063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.094	2.088	1.876	2.072	2.084	2.107	2.055	2.140	2.043
Stddev	.004	.004	.005	.004	.005	.009	.006	.006	.005
%RSD	.1824	.1740	.2472	.2105	.2290	.4083	.2898	.2914	.2593
#1	2.093	2.088	1.881	2.075	2.081	2.117	2.057	2.146	2.046
#2	2.098	2.092	1.875	2.073	2.089	2.102	2.048	2.134	2.046
#3	2.090	2.085	1.872	2.067	2.081	2.102	2.059	2.141	2.037
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 13:38:14 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1815.1	4535.8	24987.	2228.3
Stddev	3.4	7.0	125.	13.0
%RSD	.18629	.15541	.49840	.58532
#1	1814.7	4532.1	24925.	2237.5
#2	1818.6	4531.4	25130.	2213.3
#3	1811.9	4543.9	24906.	2233.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 13:42:25 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0027	-.0009	.0001	.0000	-.0077	-.0004	-.0005
Stddev	.0002	.0017	.0004	.0003	.000	.0015	.0001	.0001
%RSD	317.0	62.41	49.58	361.7	372.0	19.26	34.85	16.66
#1	-.0003	-.0013	-.0004	-.0002	.0000	-.0063	-.0003	-.0006
#2	.0000	-.0045	-.0012	.0004	.0001	-.0076	-.0005	-.0005
#3	.0001	-.0022	-.0010	.0000	-.0001	-.0093	-.0005	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0007	-.0104	.0092	-.0011	-.0001	F -.0028	-.0282
Stddev	.0003	.0004	.0032	.0500	.0102	.0001	.0007	.0049
%RSD	159.8	59.07	30.42	543.3	941.1	118.1	25.00	17.25
#1	.0000	.0012	-.0067	.0601	.0101	-.0002	-.0021	-.0229
#2	-.0001	.0006	-.0121	.0074	-.0035	-.0001	-.0028	-.0293
#3	-.0005	.0004	-.0123	-.0399	-.0098	.0000	-.0035	-.0324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0001	-.0012	.0008	.0001	-.0008	-.0001	-.0005
Stddev	.0002	.0009	.0017	.0010	.0010	.0004	.0001	.0002
%RSD	31.06	1676.	147.9	131.5	1263.	43.93	105.0	42.22
#1	-.0006	.0004	-.0002	.0018	.0012	-.0005	-.0001	-.0003
#2	-.0004	.0005	-.0031	.0008	-.0004	-.0007	-.0002	-.0006
#3	-.0007	-.0011	-.0001	-.0003	-.0006	-.0012	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 13:42:25 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0003	-.0004	-.0005
Stddev	.0013	.0003	.0001
%RSD	440.2	85.65	11.21
#1	.0011	-.0006	-.0006
#2	-.0005	-.0005	-.0004
#3	-.0015	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1936.3	4715.2	25580.	2263.4
Stddev	6.5	5.5	111.	3.8
%RSD	.33480	.11757	.43474	.16736
#1	1936.3	4711.9	25703.	2267.0
#2	1929.8	4712.1	25486.	2259.4
#3	1942.8	4721.6	25551.	2263.7

Zoom In Zoom Out

Sample Name: FA53725-43A Acquired: 5/15/2018 13:46:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**186.8**	**.0469**	**.9498**	**.0033**	**32.23**	**-.0049**	**.0359**	**.3785**
Stddev	.0021	1.0	.0062	.0021	.0007	.00	.0005	.0008	.0040
%RSD	1405.	.5337	13.28	.2239	20.09	.0152	9.422	2.148	1.061
#1	-.0025	186.2	.0443	.9513	.0040	32.24	-.0053	.0351	.3770
#2	.0009	186.2	.0540	.9508	.0031	32.24	-.0044	.0360	.3831
#3	.0012	187.9	.0423	.9474	.0027	32.23	-.0049	.0366	.3755

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**2.306**	**251.8**	**17.32**	**13.35**	**2.277**	**-.0141**	**2.970**	**.1351**	**11.96**
Stddev	.009	.5	.24	.05	.005	.0003	.092	.0016	.03
%RSD	.4137	.2116	1.366	.3609	.2094	2.456	3.085	1.152	.2451
#1	2.305	252.4	17.34	13.32	2.281	-.0143	3.075	.1333	11.95
#2	2.316	251.3	17.07	13.41	2.279	-.0137	2.925	.1358	11.94
#3	2.297	251.8	17.55	13.32	2.272	-.0142	2.909	.1361	11.99

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0500**	**-.0261**	**5.191**	**.0684**	**.9713**	**3.752**	**-.0129**	**.7062**	**.4461**
Stddev	.0020	.0042	.018	.0013	.0030	.005	.0037	.0060	.0004
%RSD	3.932	15.98	.3527	1.857	.3092	.1446	28.45	.8564	.0812
#1	.0507	-.0229	5.212	.0698	.9679	3.754	-.0126	.7114	.4459
#2	.0515	-.0245	5.183	.0677	.9726	3.757	-.0167	.7075	.4465
#3	.0478	-.0308	5.178	.0675	.9734	3.746	-.0094	.6996	.4459

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1905.5**	**4709.1**	**25358.**	**2255.4**
Stddev	6.9	4.6	70.	8.2
%RSD	.35966	.09853	.27423	.36256
#1	1911.9	4711.9	25332.	2259.0
#2	1906.3	4711.6	25436.	2246.1
#3	1898.3	4703.7	25304.	2261.2

Zoom In Zoom Out

Sample Name: FA53725-51A Acquired: 5/15/2018 13:51:16 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0021**	**161.3**	**.0218**	**1.278**	**.0005**	**46.01**	**.0003**	**.0222**	**.2390**
Stddev	.0005	1.1	.0006	.005	.0008	.19	.0003	.0004	.0016
%RSD	24.16	.6701	2.688	.3573	159.4	.4214	82.23	1.895	.6725
#1	.0020	160.3	.0216	1.274	-.0002	46.22	.0006	.0227	.2379
#2	.0016	161.1	.0214	1.277	.0013	45.97	.0003	.0219	.2409
#3	.0026	162.5	.0225	1.283	.0004	45.84	.0001	.0221	.2383

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.9462**	**181.0**	**16.33**	**15.23**	**2.493**	**-.0201**	**2.415**	**.1497**	**2.429**
Stddev	.0041	.5	.17	.17	.009	.0005	.043	.0008	.015
%RSD	.4383	.2613	1.036	1.148	.3464	2.560	1.798	.5107	.6308
#1	.9507	180.7	16.41	15.05	2.497	-.0199	2.374	.1499	2.438
#2	.9456	181.5	16.13	15.40	2.499	-.0197	2.409	.1504	2.439
#3	.9424	180.7	16.43	15.24	2.483	-.0207	2.461	.1489	2.412

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0091**	**-.0170**	**4.267**	**.0579**	**.6221**	**5.264**	**-.0091**	**.4594**	**.4318**
Stddev	.0028	.0117	.034	.0014	.0035	.010	.0028	.0030	.0021
%RSD	30.29	68.71	.7870	2.403	.5668	.1883	31.25	.6556	.4769
#1	.0103	-.0179	4.300	.0587	.6215	5.267	-.0107	.4627	.4341
#2	.0110	-.0049	4.267	.0587	.6259	5.272	-.0107	.4584	.4313
#3	.0059	-.0283	4.233	.0563	.6189	5.253	-.0058	.4570	.4300

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1914.8**	**4695.4**	**25356.**	**2247.1**
Stddev	4.3	6.5	18.	7.5
%RSD	.22620	.13898	.07125	.33597
#1	1914.3	4688.8	25377.	2249.5
#2	1910.7	4695.7	25342.	2253.1
#3	1919.4	4701.8	25350.	2238.6

Zoom In Zoom Out

Sample Name: FA53725-54A Acquired: 5/15/2018 13:55:36 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0031**	**235.2**	**.0957**	**.6757**	**.0086**	**16.62**	**-.0054**	**.0515**	**.5906**
Stddev	.0006	.4	.0034	.0031	.0007	.05	.0003	.0001	.0007
%RSD	20.64	.1540	3.584	.4553	8.291	.2799	4.939	.1473	.1175
#1	-.0024	235.5	.0939	.6792	.0093	16.63	-.0053	.0515	.5900
#2	-.0037	234.8	.0936	.6739	.0086	16.57	-.0052	.0514	.5914
#3	-.0032	235.2	.0997	.6739	.0079	16.67	-.0057	.0515	.5905

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4170**	**306.1**	**29.31**	**29.57**	**1.387**	**-.0181**	**3.630**	**.2167**	**2.682**
Stddev	.0011	.6	.18	.11	.003	.0014	.082	.0008	.003
%RSD	.2628	.2055	.6173	.3839	.2101	7.835	2.244	.3503	.1273
#1	.4176	306.6	29.17	29.70	1.384	-.0179	3.583	.2165	2.686
#2	.4157	305.4	29.51	29.48	1.390	-.0168	3.724	.2175	2.681
#3	.4177	306.4	29.24	29.53	1.387	-.0196	3.583	.2160	2.680

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0108**	**-.0334**	**5.042**	**.0604**	**.2562**	**5.514**	**-.0076**	**.6800**	**.7191**
Stddev	.0013	.0079	.011	.0017	.0014	.003	.0035	.0007	.0021
%RSD	12.07	23.49	.2171	2.755	.5597	.0448	45.84	.1090	.2949
#1	.0118	-.0350	5.052	.0616	.2577	5.516	-.0048	.6808	.7215
#2	.0112	-.0404	5.042	.0611	.2548	5.516	-.0115	.6799	.7177
#3	.0093	-.0249	5.031	.0585	.2562	5.512	-.0066	.6794	.7181

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1911.3**	**4823.5**	**25825.**	**2316.4**
Stddev	2.8	5.3	88.	24.1
%RSD	.14643	.11054	.33966	1.0390
#1	1908.6	4817.3	25909.	2312.4
#2	1914.2	4826.7	25831.	2342.2
#3	1911.3	4826.4	25734.	2294.5

Zoom In Zoom Out

Sample Name: FA53725-56A Acquired: 5/15/2018 13:59:58 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**248.0**	**.0432**	**1.017**	**.0029**	**7.109**	**-.0061**	**.0355**	**.5023**
Stddev	.0022	1.6	.0085	.007	.0008	.035	.0002	.0003	.0050
%RSD	620.0	.6647	19.62	.6586	27.41	.4976	3.019	.8827	.9934
#1	.0002	249.8	.0418	1.023	.0022	7.148	-.0061	.0354	.5029
#2	.0016	247.4	.0355	1.018	.0028	7.101	-.0063	.0359	.4970
#3	-.0028	246.7	.0522	1.010	.0038	7.078	-.0059	.0353	.5069

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1540**	**227.9**	**11.84**	**12.55**	**.4253**	**-.0200**	**2.774**	**.1621**	**1.011**
Stddev	.0010	1.4	.10	.24	.0012	.0006	.051	.0003	.006
%RSD	.6375	.6296	.8025	1.928	.2914	2.811	1.848	.2033	.5595
#1	.1543	229.4	11.88	12.44	.4266	-.0199	2.748	.1625	1.016
#2	.1530	226.6	11.73	12.83	.4249	-.0206	2.740	.1620	1.005
#3	.1549	227.6	11.91	12.39	.4243	-.0195	2.833	.1619	1.011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0038**	**-.0160**	**5.273**	**.0611**	**.1511**	**4.729**	**-.0066**	**.5718**	**.1259**
Stddev	.0040	.0069	.030	.0022	.0013	.003	.0063	.0025	.0003
%RSD	105.7	43.23	.5637	3.653	.8426	.0717	95.51	.4345	.2492
#1	.0007	-.0220	5.303	.0631	.1516	4.730	-.0097	.5732	.1260
#2	-.0051	-.0084	5.273	.0587	.1520	4.732	.0007	.5690	.1261
#3	-.0069	-.0177	5.243	.0614	.1496	4.725	-.0106	.5733	.1255

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1917.3**	**4732.2**	**25428.**	**2282.8**
Stddev	2.5	1.9	55.	9.7
%RSD	.12917	.04092	.21608	.42498
#1	1915.8	4733.7	25403.	2273.1
#2	1920.2	4730.0	25491.	2282.6
#3	1916.0	4732.8	25391.	2292.5

Zoom In Zoom Out

Sample Name: FA53725-60A Acquired: 5/15/2018 14:04:19 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0039	156.0	.0532	.6783	.0023	21.53	-.0019	.0268	.3907
Stddev	.0015	.7	.0034	.0040	.0005	.06	.0004	.0004	.0019
%RSD	38.69	.4402	6.419	.5969	21.79	.2612	22.07	1.582	.4927
#1	.0022	156.8	.0524	.6825	.0025	21.59	-.0023	.0267	.3886
#2	.0043	155.6	.0569	.6780	.0018	21.52	-.0016	.0272	.3924
#3	.0050	155.6	.0502	.6744	.0028	21.48	-.0017	.0264	.3909

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1086	180.7	22.86	20.01	1.571	-.0215	2.712	.1373	.2779
Stddev	.0029	.5	.31	.13	.005	.0011	.062	.0032	.0006
%RSD	2.697	.2947	1.337	.6682	.3143	5.024	2.275	2.343	.2057
#1	.1108	180.9	23.20	19.92	1.574	-.0227	2.774	.1388	.2773
#2	.1097	180.1	22.78	19.96	1.574	-.0213	2.651	.1336	.2780
#3	.1053	181.2	22.61	20.17	1.565	-.0206	2.711	.1394	.2785

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0053	-.0118	4.843	.0598	.2941	5.290	-.0116	.4070	.2331
Stddev	.0058	.0021	.006	.0005	.0004	.012	.0038	.0023	.0004
%RSD	108.8	18.05	.1322	.8863	.1457	.2181	32.91	.5741	.1570
#1	.0119	-.0136	4.848	.0599	.2945	5.289	-.0095	.4082	.2330
#2	.0016	-.0095	4.836	.0592	.2942	5.301	-.0160	.4084	.2329
#3	.0024	-.0125	4.843	.0603	.2937	5.278	-.0094	.4043	.2336

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1906.6	4690.5	25190.	2260.9
Stddev	4.9	11.1	82.	12.8
%RSD	.25758	.23651	.32646	.56498
#1	1901.0	4681.9	25122.	2249.2
#2	1909.8	4703.0	25168.	2274.5
#3	1909.1	4686.6	25281.	2258.8

Zoom In Zoom Out

Sample Name: FA53725-65A Acquired: 5/15/2018 14:08:40 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0028	177.9	.0458	.5021	.0017	14.04	-.0058	.0277	.3880
Stddev	.0009	.9	.0034	.0023	.0000	.07	.0003	.0005	.0019
%RSD	31.60	.4795	7.501	.4587	1.223	.4980	4.388	1.657	.4791
#1	-.0036	177.2	.0461	.4994	.0017	14.10	-.0060	.0275	.3901
#2	-.0019	177.7	.0422	.5034	.0017	13.96	-.0059	.0283	.3871
#3	-.0028	178.9	.0490	.5034	.0017	14.07	-.0055	.0275	.3867

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0775	219.3	19.52	15.41	.8518	-.0176	2.833	.1463	.1501
Stddev	.0014	1.2	.18	.03	.0053	.0011	.040	.0023	.0070
%RSD	1.793	.5630	.9255	.1957	.6270	6.341	1.393	1.559	4.666
#1	.0782	219.2	19.32	15.41	.8552	-.0163	2.856	.1487	.1428
#2	.0784	218.1	19.57	15.44	.8547	-.0183	2.788	.1460	.1568
#3	.0759	220.5	19.67	15.38	.8457	-.0182	2.857	.1442	.1506

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0064	-.0175	5.186	.0658	.1607	6.494	-.0140	.5552	.1559
Stddev	.0039	.0033	.007	.0011	.0013	.041	.0072	.0048	.0012
%RSD	61.19	18.71	.1268	1.706	.8001	.6263	51.42	.8594	.7711
#1	-.0051	-.0137	5.193	.0654	.1593	6.531	-.0096	.5605	.1548
#2	-.0108	-.0196	5.179	.0671	.1611	6.501	-.0222	.5539	.1556
#3	-.0033	-.0192	5.186	.0650	.1618	6.451	-.0101	.5513	.1572

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1896.2	4662.2	25084.	2253.5
Stddev	4.4	2.7	88.	4.4
%RSD	.23269	.05696	.34886	.19640
#1	1894.8	4661.8	25028.	2249.8
#2	1892.7	4659.8	25185.	2258.4
#3	1901.2	4665.0	25038.	2252.4

Zoom In Zoom Out

Sample Name: FA53725-84 Acquired: 5/15/2018 14:13:03 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	182.4	.0226	1.023	.0020	20.37	-.0061	.0240	.2701
Stddev	.0030	.5	.0067	.004	.0003	.10	.0005	.0004	.0017
%RSD	435.3	.2992	29.50	.4124	16.75	.4908	8.331	1.595	.6239
#1	-.0016	182.6	.0194	1.027	.0023	20.48	-.0058	.0245	.2705
#2	-.0003	181.8	.0302	1.025	.0020	20.32	-.0066	.0237	.2715
#3	.0040	182.9	.0182	1.019	.0016	20.29	-.0057	.0239	.2682

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	4.730	177.2	13.14	11.79	1.027	-.0204	2.117	.1457	10.01
Stddev	.019	.7	.26	.09	.004	.0009	.052	.0009	.06
%RSD	.4043	.3808	1.964	.8005	.4293	4.541	2.479	.6441	.5513
#1	4.751	177.3	13.29	11.90	1.032	-.0200	2.177	.1462	10.03
#2	4.728	177.8	12.85	11.71	1.024	-.0215	2.093	.1462	10.04
#3	4.713	176.4	13.30	11.77	1.025	-.0198	2.081	.1446	9.944

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1468	-.0104	4.628	.0747	.3944	6.109	-.0154	.4664	.8548
Stddev	.0052	.0055	.023	.0027	.0018	.031	.0053	.0025	.0049
%RSD	3.535	52.51	.4874	3.678	.4659	.5007	34.60	.5366	.5728
#1	.1510	-.0165	4.649	.0731	.3954	6.144	-.0198	.4664	.8586
#2	.1485	-.0060	4.631	.0778	.3923	6.093	-.0095	.4640	.8565
#3	.1410	-.0087	4.605	.0731	.3956	6.090	-.0169	.4690	.8493

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1904.4	4679.3	25200.	2251.0
Stddev	5.1	9.3	162.	4.1
%RSD	.26966	.19823	.64470	.18256
#1	1909.8	4689.8	25371.	2246.4
#2	1899.6	4676.1	25181.	2254.3
#3	1903.8	4672.1	25047.	2252.4

Zoom In Zoom Out

Sample Name: FA53725-89A Acquired: 5/15/2018 14:17:24 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	259.0	.0198	2.056	.0036	46.52	-.0020	.0447	.3402
Stddev	.0014	1.0	.0053	.005	.0002	.11	.0002	.0006	.0023
%RSD	334.9	.3898	26.80	.2562	6.355	.2281	8.290	1.287	.6661
#1	.0020	260.1	.0217	2.062	.0033	46.64	-.0021	.0448	.3428
#2	-.0008	258.1	.0138	2.052	.0038	46.50	-.0018	.0441	.3385
#3	.0001	258.8	.0238	2.054	.0037	46.43	-.0020	.0452	.3392

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2057	217.8	21.58	19.86	3.753	-.0208	1.986	.2194	.2166
Stddev	.0018	1.2	.29	.21	.004	.0005	.025	.0013	.0038
%RSD	.8580	.5333	1.325	1.069	.0927	2.265	1.246	.6004	1.752
#1	.2071	218.9	21.40	19.93	3.756	-.0203	1.966	.2206	.2165
#2	.2063	216.6	21.43	20.03	3.754	-.0208	1.977	.2197	.2128
#3	.2037	217.9	21.91	19.62	3.749	-.0213	2.013	.2180	.2204

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0046	-.0096	5.913	.0597	.6154	6.807	-.0096	.5241	.2733
Stddev	.0062	.0054	.006	.0019	.0039	.016	.0053	.0023	.0013
%RSD	133.6	56.86	.0951	3.103	.6282	.2323	55.30	.4436	.4878
#1	-.0105	-.0087	5.914	.0578	.6192	6.823	-.0128	.5228	.2720
#2	.0019	-.0154	5.918	.0599	.6115	6.807	-.0035	.5268	.2732
#3	-.0053	-.0046	5.907	.0614	.6154	6.792	-.0127	.5227	.2747

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1896.2	4691.6	25329.	2270.6
Stddev	4.2	7.0	27.	10.9
%RSD	.21925	.14951	.10577	.47796
#1	1891.6	4685.3	25350.	2268.5
#2	1899.6	4699.1	25339.	2261.0
#3	1897.5	4690.4	25299.	2282.4

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53725-92A Acquired: 5/15/2018 14:21:46 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	208.0	.0221	1.380	.0017	42.79	.0032	.0328	.3022
Stddev	.0019	.5	.0013	.007	.0007	.26	.0002	.0004	.0016
%RSD	828.3	.2371	5.894	.5142	38.78	.6165	6.588	1.080	.5332
#1	-.0019	208.5	.0214	1.383	.0024	42.99	.0032	.0324	.3005
#2	.0010	207.9	.0236	1.385	.0014	42.89	.0034	.0329	.3038
#3	.0016	207.6	.0213	1.372	.0012	42.49	.0030	.0331	.3022

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2319	192.9	21.17	18.58	3.029	-.0216	2.443	.1824	.3561
Stddev	.0033	1.0	.28	.16	.003	.0012	.086	.0007	.0037
%RSD	1.424	.5089	1.318	.8403	.0960	5.644	3.528	.4013	1.036
#1	.2332	194.0	21.37	18.48	3.027	-.0231	2.482	.1816	.3582
#2	.2344	192.5	21.28	18.76	3.027	-.0210	2.503	.1825	.3583
#3	.2282	192.1	20.85	18.51	3.032	-.0208	2.344	.1831	.3518

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0016	-.0131	5.316	.0558	.5127	5.543	-.0116	.4512	.6185
Stddev	.0002	.0033	.014	.0025	.0032	.002	.0048	.0040	.0028
%RSD	14.06	25.40	.2579	4.441	.6160	.0380	41.32	.8841	.4575
#1	-.0019	-.0153	5.330	.0544	.5164	5.544	-.0065	.4466	.6212
#2	-.0014	-.0147	5.315	.0544	.5110	5.540	-.0123	.4532	.6156
#3	-.0016	-.0093	5.303	.0587	.5108	5.544	-.0161	.4538	.6188

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1907.4	4698.8	25446.	2262.0
Stddev	6.0	15.1	201.	6.7
%RSD	.31226	.32211	.78979	.29646
#1	1904.3	4685.5	25656.	2255.1
#2	1914.3	4715.3	25255.	2262.4
#3	1903.7	4695.7	25427.	2268.5

Zoom In Zoom Out

Sample Name: FA53725-95A Acquired: 5/15/2018 14:26:08 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0039	228.0	.0149	1.391	.0025	30.29	.0074	.0337	.3283
Stddev	.0009	1.1	.0075	.010	.0006	.15	.0009	.0002	.0018
%RSD	23.19	.4938	50.69	.7260	26.26	.5095	11.48	.7130	.5453
#1	.0039	226.9	.0225	1.382	.0024	30.17	.0084	.0335	.3281
#2	.0047	229.2	.0145	1.402	.0031	30.46	.0069	.0340	.3301
#3	.0030	227.8	.0075	1.388	.0018	30.24	.0069	.0337	.3266

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3625	216.7	18.00	17.43	2.903	-.0206	2.318	.2111	.3032
Stddev	.0025	.9	.38	.13	.003	.0008	.045	.0016	.0072
%RSD	.6766	.4189	2.115	.7660	.1180	3.822	1.932	.7653	2.360
#1	.3625	215.8	17.66	17.27	2.906	-.0198	2.342	.2126	.3100
#2	.3601	217.6	18.41	17.48	2.903	-.0213	2.345	.2113	.3037
#3	.3650	216.6	17.93	17.52	2.899	-.0207	2.266	.2094	.2958

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0014	-.0112	5.775	.0613	.4125	6.663	-.0124	.5159	.8187
Stddev	.0075	.0048	.052	.0012	.0011	.005	.0033	.0038	.0063
%RSD	526.9	42.57	.9035	1.897	.2782	.0737	26.92	.7277	.7737
#1	.0085	-.0146	5.824	.0627	.4118	6.665	-.0161	.5177	.8245
#2	.0021	-.0058	5.779	.0605	.4138	6.657	-.0096	.5116	.8196
#3	-.0064	-.0133	5.720	.0608	.4120	6.666	-.0115	.5184	.8119

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1909.9	4714.8	25324.	2276.6
Stddev	4.9	11.9	139.	21.1
%RSD	.25699	.25162	.54894	.92468
#1	1906.3	4706.0	25168.	2300.3
#2	1907.8	4710.0	25373.	2260.1
#3	1915.5	4728.3	25433.	2269.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 14:30:29 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2467	41.61	2.098	2.093	2.042	41.44	2.112	2.064	2.057
Stddev	.0005	.27	.003	.009	.006	.23	.001	.003	.003
%RSD	.2125	.6563	.1434	.4313	.2960	.5668	.0649	.1535	.1194
#1	.2473	41.45	2.100	2.088	2.035	41.25	2.113	2.065	2.060
#2	.2463	41.44	2.094	2.088	2.044	41.37	2.112	2.066	2.055
#3	.2465	41.92	2.100	2.104	2.047	41.70	2.110	2.060	2.058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.991	40.45	41.36	41.21	2.112	2.077	41.73	2.031	2.057
Stddev	.007	.38	.17	.20	.005	.002	.07	.005	.005
%RSD	.3703	.9346	.4113	.4776	.2167	.1070	.1773	.2664	.2558
#1	2.000	40.16	41.24	41.08	2.118	2.077	41.76	2.032	2.051
#2	1.988	40.31	41.29	41.11	2.110	2.079	41.65	2.036	2.060
#3	1.986	40.88	41.56	41.44	2.109	2.075	41.79	2.026	2.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.095	2.092	1.876	2.075	2.074	2.107	2.058	2.145	2.044
Stddev	.003	.005	.002	.004	.009	.003	.005	.008	.005
%RSD	.1620	.2300	.1175	.2056	.4331	.1633	.2591	.3584	.2316
#1	2.094	2.092	1.877	2.073	2.066	2.110	2.053	2.150	2.041
#2	2.091	2.088	1.876	2.073	2.071	2.103	2.057	2.148	2.049
#3	2.098	2.097	1.873	2.080	2.084	2.107	2.063	2.136	2.041
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 14:30:29 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1815.2	4542.7	24764.	2242.4
Stddev	5.1	3.3	115.	7.6
%RSD	.28108	.07330	.46382	.34029
#1	1821.1	4542.9	24634.	2247.7
#2	1813.1	4545.9	24851.	2245.9
#3	1811.6	4539.3	24807.	2233.7

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 14:34:39 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0202**	**-.0003**	**.0003**	**-.0001**	**-.0102**	**-.0006**	**-.0006**
Stddev	.0002	.0050	.0011	.0001	.0002	.0013	.0001	.0000
%RSD	85.49	24.80	399.8	37.85	385.0	13.01	9.730	2.347
#1	.0003	-.0237	-.0014	.0004	.0001	-.0090	-.0006	-.0006
#2	.0000	-.0225	.0006	.0002	.0000	-.0100	-.0006	-.0006
#3	.0005	-.0145	.0000	.0002	-.0003	-.0116	-.0007	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0003**	**-.0083**	**-.0599**	**.0110**	**-.0001**	**F -.0031**	**-.0351**
Stddev	.0002	.0001	.0046	.0152	.0102	.0000	.0009	.0109
%RSD	270.8	41.78	55.90	25.41	93.05	21.06	29.36	31.16
#1	-.0004	.0003	-.0041	-.0733	.0006	-.0002	-.0021	-.0438
#2	.0001	.0005	-.0074	-.0434	.0211	-.0001	-.0034	-.0228
#3	.0000	.0002	-.0132	-.0630	.0113	-.0001	-.0039	-.0387
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.0002**	**-.0008**	**-.0017**	**.0001**	**-.0007**	**.0000**	**-.0003**
Stddev	.0001	.0008	.0011	.0008	.0007	.0002	.000	.0002
%RSD	16.99	448.3	147.3	45.39	872.1	25.53	231.5	67.38
#1	-.0006	.0009	-.0017	-.0010	.0008	-.0007	-.0001	-.0001
#2	-.0006	-.0006	.0005	-.0016	.0001	-.0009	-.0001	-.0004
#3	-.0005	.0002	-.0011	-.0025	-.0007	-.0005	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 14:34:39 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	**-.0001**	**-.0001**	**-.0006**
Stddev	.0008	.0002	.0001
%RSD	1456.	197.7	8.462
#1	.0008	-.0003	-.0006
#2	-.0004	.0001	-.0007
#3	-.0006	-.0001	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1931.0**	**4711.9**	**25580.**	**2273.6**
Stddev	8.0	5.2	160.	7.1
%RSD	.41192	.11080	.62672	.31181
#1	1922.6	4707.4	25520.	2278.4
#2	1931.9	4710.8	25762.	2277.0
#3	1938.5	4717.6	25458.	2265.5

Zoom In Zoom Out

Sample Name: FA53725-96A Acquired: 5/15/2018 14:39:09 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0031**	**215.9**	**.0164**	**1.283**	**.0016**	**27.75**	**.0054**	**.0305**	**.3130**
Stddev	.0035	.7	.0043	.003	.0004	.02	.0002	.0007	.0015
%RSD	114.5	.3394	26.21	.2171	27.22	.0663	4.357	2.232	.4817
#1	-.0001	216.7	.0211	1.284	.0012	27.75	.0056	.0309	.3142
#2	.0069	215.4	.0157	1.285	.0021	27.73	.0055	.0297	.3113
#3	.0024	215.5	.0125	1.279	.0016	27.77	.0052	.0308	.3134

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4102**	**202.9**	**17.50**	**16.47**	**2.701**	**-.0169**	**2.085**	**.1994**	**.2853**
Stddev	.0021	.6	.51	.31	.005	.0004	.030	.0036	.0048
%RSD	.5235	.2881	2.924	1.870	.1840	2.457	1.441	1.783	1.675
#1	.4124	203.5	17.36	16.80	2.705	-.0165	2.053	.2032	.2897
#2	.4102	202.4	18.06	16.39	2.701	-.0169	2.090	.1990	.2802
#3	.4081	202.8	17.06	16.20	2.695	-.0174	2.112	.1961	.2859

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0073**	**-.0150**	**5.360**	**.0591**	**.3798**	**5.989**	**-.0045**	**.4744**	**.6477**
Stddev	.0050	.0069	.050	.0012	.0033	.027	.0012	.0034	.0045
%RSD	69.24	45.66	.9242	2.020	.8759	.4456	25.95	.7245	.6967
#1	-.0017	-.0076	5.412	.0600	.3810	6.017	-.0032	.4765	.6525
#2	-.0115	-.0211	5.357	.0595	.3823	5.986	-.0054	.4763	.6470
#3	-.0087	-.0163	5.313	.0577	.3760	5.963	-.0048	.4705	.6436

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1912.1**	**4711.8**	**25259.**	**2256.0**
Stddev	.6	1.3	105.	14.2
%RSD	.03122	.02724	.41525	.62750
#1	1911.4	4710.7	25379.	2239.7
#2	1912.2	4711.5	25186.	2265.8
#3	1912.6	4713.2	25210.	2262.3

Zoom In Zoom Out

Sample Name: FA53800-4A Acquired: 5/15/2018 14:43:32 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**254.2**	**.0221**	**3.593**	**.0036**	**116.1**	**-.0018**	**.0505**	**.3695**
Stddev	.0018	1.5	.0056	.036	.0004	1.6	.0005	.0011	.0051
%RSD	1840.	.5832	25.10	1.004	11.40	1.344	30.77	2.110	1.384
#1	-.0016	255.6	.0196	3.618	.0040	117.5	-.0012	.0518	.3754
#2	.0019	254.2	.0182	3.608	.0032	116.4	-.0022	.0500	.3669
#3	-.0005	252.7	.0285	3.551	.0035	114.5	-.0020	.0499	.3663

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2105**	**241.4**	**21.38**	**30.15**	**6.951**	**-.0182**	**2.635**	**.2461**	**.8159**
Stddev	.0044	2.5	.14	.35	.077	.0009	.062	.0034	.0163
%RSD	2.093	1.021	.6566	1.152	1.105	4.722	2.361	1.391	2.000
#1	.2151	242.8	21.55	30.41	7.029	-.0176	2.652	.2496	.8312
#2	.2100	242.7	21.30	30.29	6.949	-.0192	2.686	.2460	.8178
#3	.2063	238.5	21.31	29.76	6.875	-.0178	2.566	.2428	.7987

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0023**	**-.0222**	**5.925**	**.0615**	**1.615**	**7.349**	**-.0101**	**.6167**	**.2900**
Stddev	.0026	.0125	.091	.0015	.015	.079	.0009	.0055	.0030
%RSD	117.5	56.21	1.536	2.433	.9377	1.080	8.910	.8960	1.042
#1	.0000	-.0322	6.011	.0618	1.622	7.432	-.0095	.6223	.2932
#2	-.0052	-.0082	5.935	.0628	1.626	7.339	-.0111	.6166	.2895
#3	-.0016	-.0260	5.830	.0599	1.598	7.275	-.0097	.6112	.2872

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1898.6**	**4701.4**	**25189.**	**2265.3**
Stddev	4.5	12.3	128.	24.4
%RSD	.23561	.26254	.50980	1.0781
#1	1895.3	4691.5	25089.	2239.6
#2	1896.9	4697.5	25143.	2268.0
#3	1903.7	4715.2	25334.	2288.2

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: FA53800-7A Acquired: 5/15/2018 14:47:54 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**249.1**	**.0235**	**3.452**	**.0030**	**121.6**	**-.0010**	**.0514**	**.3425**
Stddev	.0031	2.9	.0025	.036	.0004	1.3	.0002	.0011	.0048
%RSD	926.8	1.166	10.85	1.055	14.69	1.079	16.96	2.152	1.399
#1	-.0039	252.2	.0264	3.487	.0035	122.9	-.0012	.0525	.3463
#2	.0010	248.6	.0217	3.453	.0026	121.8	-.0008	.0514	.3440
#3	.0018	246.4	.0223	3.415	.0028	120.3	-.0011	.0503	.3371

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1838**	**223.5**	**21.93**	**27.57**	**7.356**	**-.0197**	**2.636**	**.2518**	**.6409**
Stddev	.0032	3.2	.33	.40	.028	.0004	.049	.0038	.0183
%RSD	1.764	1.451	1.527	1.458	.3785	2.226	1.839	1.492	2.857
#1	.1843	226.7	22.01	28.01	7.383	-.0192	2.581	.2552	.6613
#2	.1867	223.8	22.22	27.50	7.356	-.0199	2.652	.2524	.6259
#3	.1803	220.2	21.56	27.22	7.327	-.0200	2.674	.2477	.6355

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0011**	**-.0097**	**5.806**	**.0522**	**1.601**	**6.506**	**-.0059**	**.5666**	**.3100**
Stddev	.0062	.0109	.086	.0005	.016	.029	.0064	.0029	.0045
%RSD	565.8	112.1	1.478	1.017	1.001	.4458	108.7	.5131	1.463
#1	.0078	.0022	5.894	.0517	1.617	6.535	-.0077	.5693	.3148
#2	-.0043	-.0191	5.800	.0527	1.601	6.505	.0012	.5669	.3095
#3	-.0003	-.0122	5.723	.0523	1.585	6.477	-.0113	.5635	.3058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1888.6**	**4669.7**	**25114.**	**2267.8**
Stddev	5.5	6.6	157.	18.8
%RSD	.29121	.14166	.62395	.82809
#1	1885.5	4672.1	25205.	2251.1
#2	1894.9	4674.7	25205.	2288.1
#3	1885.3	4662.2	24933.	2264.0

Zoom In Zoom Out

Sample Name: FA53800-8A Acquired: 5/15/2018 14:52:15 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0040**	**234.6**	**.0216**	**3.305**	**.0022**	**128.4**	**-.0009**	**.0499**	**.3287**
Stddev	.0035	.7	.0043	.027	.0006	.3	.0003	.0002	.0015
%RSD	88.98	.2810	20.08	.8172	28.76	.2432	37.35	.3693	.4692
#1	.0070	235.0	.0179	3.319	.0025	128.7	-.0005	.0497	.3290
#2	.0047	234.9	.0205	3.322	.0026	128.3	-.0012	.0499	.3301
#3	.0001	233.8	.0264	3.273	.0014	128.1	-.0011	.0500	.3271

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1673**	**210.5**	**20.93**	**27.03**	**7.253**	**-.0201**	**2.264**	**.2433**	**.6473**
Stddev	.0022	.5	.33	.09	.020	.0014	.024	.0019	.0059
%RSD	1.288	.2588	1.553	.3255	.2790	6.806	1.063	.7692	.9041
#1	.1688	210.4	21.02	26.94	7.272	-.0196	2.286	.2455	.6500
#2	.1648	210.0	21.20	27.04	7.255	-.0216	2.269	.2425	.6406
#3	.1682	211.1	20.57	27.11	7.232	-.0190	2.238	.2420	.6514

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0032**	**-.0152**	**5.993**	**.0563**	**1.671**	**6.357**	**-.0089**	**.5377**	**.3125**
Stddev	.0048	.0168	.020	.0014	.005	.025	.0032	.0046	.0014
%RSD	150.9	110.0	.3282	2.528	.3201	.3912	36.06	.8523	.4521
#1	.0078	-.0279	6.015	.0551	1.677	6.386	-.0097	.5369	.3142
#2	-.0018	-.0216	5.987	.0560	1.670	6.342	-.0117	.5336	.3117
#3	.0036	.0038	5.976	.0579	1.667	6.343	-.0054	.5426	.3117

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1891.1**	**4664.7**	**25134.**	**2255.0**
Stddev	.9	8.2	174.	14.2
%RSD	.04664	.17504	.69319	.62864
#1	1892.1	4663.7	25132.	2269.9
#2	1890.6	4657.1	24960.	2253.3
#3	1890.5	4673.3	25309.	2241.7

Zoom In Zoom Out

Sample Name: FA53800-16A Acquired: 5/15/2018 14:56:37 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.1078**	**168.7**	**.0242**	**.8755**	**.0014**	**22.85**	**.0044**	**.0240**	**.2567**
Stddev	.0018	1.0	.0031	.0092	.0003	.07	.0005	.0005	.0008
%RSD	1.675	.6192	12.86	1.047	25.18	.3185	12.00	2.118	.3305
#1	.1097	169.9	.0270	.8850	.0018	22.91	.0050	.0243	.2560
#2	.1075	168.4	.0208	.8747	.0013	22.77	.0042	.0243	.2577
#3	.1061	167.9	.0247	.8668	.0011	22.86	.0040	.0234	.2565

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2311**	**190.5**	**14.68**	**15.23**	**1.723**	**-.0217**	**2.103**	**.1722**	**.3523**
Stddev	.0015	1.0	.31	.22	.009	.0002	.064	.0014	.0114
%RSD	.6501	.5071	2.087	1.459	.5018	.7238	3.046	.7907	3.223
#1	.2325	191.6	14.99	15.43	1.731	-.0216	2.154	.1737	.3652
#2	.2312	190.3	14.38	15.26	1.723	-.0216	2.124	.1719	.3477
#3	.2295	189.7	14.66	14.99	1.714	-.0219	2.031	.1711	.3440

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0007**	**-.0209**	**5.368**	**.0774**	**.2904**	**5.745**	**-.0159**	**.4551**	**.3521**
Stddev	.0001	.0079	.083	.0027	.0012	.033	.0085	.0044	.0040
%RSD	20.86	37.87	1.543	3.483	.4240	.5751	53.71	.9628	1.139
#1	.0008	-.0180	5.459	.0791	.2918	5.777	-.0107	.4593	.3565
#2	.0005	-.0149	5.350	.0789	.2899	5.745	-.0112	.4554	.3514
#3	.0007	-.0299	5.297	.0743	.2895	5.711	-.0257	.4506	.3485

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1907.7**	**4678.5**	**25183.**	**2250.0**
Stddev	4.2	2.4	200.	29.1
%RSD	.21991	.05143	.79278	1.2915
#1	1912.2	4677.5	25405.	2261.2
#2	1903.8	4676.8	25019.	2271.9
#3	1907.2	4681.3	25124.	2217.0

Zoom In Zoom Out

Sample Name: FA53800-17A Acquired: 5/15/2018 15:00:59 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0385**	**163.9**	**.0243**	**.9286**	**.0007**	**23.52**	**.0056**	**.0251**	**.2586**
Stddev	.0042	1.2	.0015	.0067	.0004	.15	.0003	.0001	.0023
%RSD	10.80	.7516	6.092	.7171	52.22	.6467	4.591	.4118	.8898
#1	.0339	164.9	.0250	.9349	.0003	23.68	.0054	.0250	.2563
#2	.0421	162.5	.0226	.9216	.0009	23.38	.0054	.0252	.2609
#3	.0393	164.3	.0253	.9293	.0009	23.49	.0059	.0252	.2586

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2502**	**189.8**	**14.04**	**15.48**	**1.802**	**-.0220**	**1.923**	**.1820**	**.4080**
Stddev	.0027	.9	.13	.24	.001	.0010	.013	.0021	.0032
%RSD	1.074	.4974	.9109	1.561	.0424	4.354	.6888	1.133	.7957
#1	.2507	190.4	14.16	15.70	1.802	-.0224	1.928	.1841	.4099
#2	.2473	188.7	14.06	15.22	1.801	-.0209	1.909	.1800	.4099
#3	.2526	190.3	13.90	15.51	1.802	-.0227	1.934	.1820	.4043

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0048**	**-.0122**	**5.496**	**.0857**	**.2931**	**5.454**	**-.0115**	**.4655**	**.3848**
Stddev	.0088	.0045	.020	.0009	.0011	.004	.0060	.0050	.0005
%RSD	183.5	37.14	.3591	1.030	.3638	.0641	52.28	1.076	.1316
#1	.0122	-.0138	5.514	.0847	.2943	5.458	-.0046	.4707	.3844
#2	.0071	-.0071	5.475	.0860	.2923	5.451	-.0159	.4649	.3845
#3	-.0049	-.0157	5.498	.0863	.2927	5.453	-.0139	.4608	.3853

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1908.7**	**4678.1**	**25242.**	**2248.4**
Stddev	5.7	14.0	58.	24.3
%RSD	.30052	.29926	.22861	1.0795
#1	1907.2	4662.6	25246.	2220.5
#2	1903.9	4681.7	25298.	2264.4
#3	1915.1	4690.0	25183.	2260.4

Zoom In Zoom Out

Sample Name: MP33740-SD1 Acquired: 5/15/2018 15:05:21 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0044**	**280.5**	**-.0005**	**.9259**	**-.0088**	**28.09**	**-.0294**	**.0140**	**.4467**
Stddev	.0056	1.4	.0018	.0109	.0012	.09	.0003	.0042	.0077
%RSD	126.2	.5029	326.5	1.178	13.79	.3255	.9185	29.94	1.713
#1	-.0006	278.9	.0008	.9239	-.0083	27.99	-.0295	.0173	.4516
#2	.0034	281.6	-.0026	.9162	-.0080	28.16	-.0290	.0155	.4379
#3	.0104	280.9	.0001	.9377	-.0102	28.11	-.0295	.0093	.4507

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3803**	**257.3**	**23.97**	**17.95**	**1.474**	**-.1430**	**3.021**	**.1911**	**.6642**
Stddev	.0062	2.1	1.40	.62	.005	.0040	.242	.0089	.0150
%RSD	1.634	.8298	5.835	3.434	.3218	2.824	8.022	4.664	2.257
#1	.3740	255.0	22.39	18.09	1.479	-.1473	3.123	.1901	.6647
#2	.3864	257.8	25.05	18.49	1.470	-.1393	3.197	.2004	.6789
#3	.3805	259.2	24.46	17.28	1.472	-.1423	2.745	.1827	.6489

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0468**	**-.0812**	**69.89**	**.0222**	**.4614**	**8.440**	**-.0727**	**.6624**	**1.597**
Stddev	.0252	.0528	1.76	.0007	.0039	.092	.0287	.0086	.004
%RSD	53.94	65.07	2.521	3.244	.8416	1.085	39.42	1.304	.2261
#1	-.0305	-.1279	71.85	.0214	.4570	8.526	-.0396	.6570	1.601
#2	-.0758	-.0238	68.43	.0227	.4643	8.344	-.0894	.6579	1.597
#3	-.0339	-.0918	69.39	.0224	.4630	8.451	-.0891	.6724	1.594

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1941.0**	**4726.0**	**25593.**	**2279.1**
Stddev	6.2	18.5	177.	15.4
%RSD	.32043	.39086	.69061	.67552
#1	1940.0	4717.3	25410.	2296.4
#2	1935.3	4713.4	25763.	2266.8
#3	1947.7	4747.2	25608.	2274.1

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/15/2018 15:09:47 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0098**	**.1777**	**.0089**	**.2085**	**.0045**	**1.007**	**.0041**	**.0501**	**.0094**
Stddev	.0007	.0115	.0017	.0010	.0000	.009	.0001	.0001	.0003
%RSD	7.203	6.484	18.59	.4725	.3296	.9065	1.450	.2612	3.457
#1	.0094	.1687	.0089	.2080	.0045	1.014	.0041	.0502	.0095
#2	.0094	.1737	.0073	.2096	.0045	1.010	.0042	.0501	.0090
#3	.0106	.1907	.0106	.2079	.0045	.9965	.0041	.0499	.0097

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0248**	**.2792**	**10.04**	**5.078**	**.0151**	**.0410**	**10.11**	**.0398**	**.0047**
Stddev	.0003	.0045	.06	.046	.0000	.0003	.01	.0003	.0013
%RSD	1.336	1.611	.5792	.9051	.1054	.7413	.1069	.8702	27.13
#1	.0244	.2815	10.08	5.117	.0151	.0412	10.10	.0402	.0049
#2	.0251	.2820	10.06	5.027	.0151	.0411	10.10	.0395	.0058
#3	.0248	.2740	9.969	5.091	.0151	.0406	10.12	.0397	.0033

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0034**	**.0093**	**.0381**	**.0493**	**.0094**	**.0081**	**.0072**	**.0487**	**.0196**
Stddev	.0011	.0005	.0007	.0003	.0001	.0002	.0027	.0004	.0001
%RSD	31.56	5.658	1.897	.6412	1.202	2.486	37.70	.8148	.3529
#1	.0028	.0088	.0389	.0490	.0093	.0082	.0095	.0490	.0196
#2	.0028	.0098	.0379	.0494	.0093	.0083	.0080	.0483	.0197
#3	.0047	.0093	.0375	.0496	.0095	.0079	.0042	.0488	.0197

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1921.0**	**4671.0**	**25431.**	**2251.4**
Stddev	4.7	2.8	135.	19.2
%RSD	.24705	.06086	.53032	.85460
#1	1918.1	4668.4	25586.	2229.7
#2	1926.5	4674.0	25365.	2266.3
#3	1918.5	4670.5	25342.	2258.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/15/2018 15:14:14 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**F 530.0**	**-.0016**	**-.0002**	**-.0006**	**475.6**	**.0010**	**-.0006**	**-.0007**
Stddev	.0006	3.3	.0007	.0001	.0001	2.1	.0001	.0000	.0003
%RSD	513.1	.6178	46.09	36.49	13.84	.4451	13.71	4.739	41.67
#1	.0003	528.4	-.0018	-.0002	-.0006	477.1	.0012	-.0006	-.0007
#2	.0002	533.8	-.0023	-.0001	-.0006	473.2	.0010	-.0006	-.0010
#3	-.0008	527.8	-.0008	-.0002	-.0007	476.5	.0009	-.0007	-.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0015**	**176.4**	**.1254**	**F 504.6**	**-.0002**	**-.0042**	**.1100**	**-.0001**	**-.0009**
Stddev	.0010	.9	.0386	2.7	.0001	.0003	.0032	.0003	.0005
%RSD	66.89	.5021	30.74	.5298	32.45	7.974	2.918	199.4	63.41
#1	-.0023	176.1	.1678	503.6	-.0002	-.0038	.1066	.0000	-.0003
#2	-.0004	177.4	.0923	507.6	-.0001	-.0042	.1103	.0000	-.0014
#3	-.0018	175.7	.1162	502.6	-.0002	-.0045	.1130	-.0005	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0006**	**-.0040**	**.0191**	**-.0022**	**.0000**	**-.0002**	**.0017**	**.0003**	**.0016**
Stddev	.0012	.0035	.0016	.0005	.000	.0002	.0010	.0004	.0000
%RSD	223.5	87.00	8.274	22.35	3276.	92.90	57.01	106.3	2.441
#1	-.0004	-.0001	.0208	-.0020	-.0002	.0000	.0008	.0002	.0016
#2	.0001	-.0068	.0185	-.0018	.0004	-.0002	.0028	.0008	.0017
#3	.0020	-.0053	.0178	-.0027	-.0002	-.0003	.0016	.0000	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1702.7**	**4236.0**	**23218.**	**2149.7**
Stddev	4.8	11.4	108.	5.6
%RSD	.27948	.26852	.46413	.25880
#1	1707.6	4233.5	23115.	2145.0
#2	1698.1	4226.2	23210.	2148.2
#3	1702.3	4248.5	23330.	2155.8

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/15/2018 15:18:46 Type: Unk
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**F 1.074**	**F 539.9**	**1.133**	**.5416**	**.5113**	**479.6**	**1.003**	**.5045**	**.4975**
Stddev	.003	2.3	.001	.0014	.0027	6.4	.001	.0007	.0006
%RSD	.2572	.4203	.0726	.2561	.5238	1.325	.0909	.1312	.1182
#1	1.073	537.3	1.132	.5402	.5094	473.1	1.003	.5045	.4981
#2	1.072	540.7	1.134	.5417	.5144	485.8	1.003	.5052	.4974
#3	1.077	541.7	1.133	.5429	.5102	480.0	1.002	.5038	.4969

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5384**	**181.3**	**-.0056**	**F 513.5**	**.5192**	**.9355**	**.1176**	**.9859**	**.9924**
Stddev	.0013	.5	.0038	4.2	.0015	.0007	.0010	.0025	.0021
%RSD	.2449	.2873	68.76	.8264	.2858	.0695	.8909	.2516	.2081
#1	.5373	180.8	-.0046	508.7	.5209	.9358	.1187	.9884	.9948
#2	.5381	181.9	-.0023	516.7	.5187	.9348	.1175	.9860	.9909
#3	.5398	181.3	-.0098	515.0	.5181	.9360	.1166	.9834	.9916

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**1.074**	**1.009**	**.0460**	**.9673**	**1.035**	**1.024**	**.9864**	**.5065**	**.9505**
Stddev	.002	.004	.0030	.0036	.003	.001	.0032	.0020	.0026
%RSD	.1820	.4146	6.502	.3715	.3041	.1276	.3276	.3945	.2767
#1	1.072	1.010	.0442	.9681	1.031	1.023	.9900	.5074	.9524
#2	1.076	1.005	.0444	.9703	1.036	1.025	.9854	.5079	.9516
#3	1.074	1.013	.0495	.9633	1.037	1.023	.9837	.5042	.9475

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1674.5**	**4197.5**	**22922.**	**2131.5**
Stddev	5.3	11.0	22.	14.4
%RSD	.31545	.26236	.09806	.67713
#1	1668.5	4186.4	22899.	2147.3
#2	1676.6	4197.6	22944.	2119.0
#3	1678.5	4208.4	22922.	2128.3

Inst QC: MA14898

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 15:23:05 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2526	42.44	2.154	2.150	2.092	42.35	2.166	2.109	2.078
Stddev	.0013	.01	.005	.004	.007	.05	.002	.002	.005
%RSD	.5291	.0192	.2225	.1870	.3256	.1224	.0990	.1024	.2315
#1	.2521	42.45	2.148	2.153	2.086	42.36	2.163	2.110	2.082
#2	.2541	42.44	2.157	2.151	2.099	42.40	2.167	2.111	2.073
#3	.2515	42.44	2.156	2.145	2.091	42.30	2.166	2.107	2.079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.024	40.95	42.52	41.78	2.144	2.122	42.72	2.066	2.104
Stddev	.009	.02	.17	.10	.005	.003	.11	.004	.004
%RSD	.4517	.0514	.4082	.2355	.2221	.1346	.2516	.1814	.2011
#1	2.018	40.93	42.50	41.70	2.148	2.119	42.70	2.071	2.099
#2	2.035	40.93	42.71	41.76	2.139	2.125	42.84	2.064	2.107
#3	2.020	40.97	42.36	41.89	2.146	2.121	42.62	2.065	2.105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.149	2.143	1.919	2.114	2.120	2.146	2.103	2.188	2.078
Stddev	.003	.005	.007	.004	.008	.001	.005	.008	.002
%RSD	.1410	.2237	.3759	.1979	.3597	.0373	.2291	.3708	.0958
#1	2.147	2.139	1.922	2.118	2.120	2.147	2.098	2.195	2.080
#2	2.148	2.148	1.910	2.110	2.128	2.146	2.108	2.179	2.076
#3	2.153	2.140	1.923	2.113	2.113	2.146	2.104	2.189	2.078
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Raw Data MA14898 page 105 of 108

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/15/2018 15:23:05 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1798.4	4487.2	24795.	2218.2
Stddev	2.7	5.2	140.	6.8
%RSD	.15042	.11590	.56619	.30436
#1	1801.3	4492.6	24716.	2218.5
#2	1798.0	4482.3	24957.	2224.8
#3	1796.0	4486.5	24712.	2211.3

Raw Data MA14898 page 106 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 15:27:17 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0011	-.0006	.0004	.0000	.0181	-.0006	-.0006
Stddev	.0003	.0079	.0006	.0003	.000	.0036	.0002	.0001
%RSD	93.56	714.5	108.3	77.04	719.6	20.12	24.42	14.82
#1	.0007	-.0041	.0001	.0002	-.0001	.0150	-.0005	-.0005
#2	.0001	.0101	-.0010	.0002	.0001	.0171	-.0007	-.0007
#3	.0002	-.0027	-.0009	.0008	.0000	.0221	-.0007	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0014	-.0047	-.0197	.0277	.0002	F -.0030	-.0190
Stddev	.0009	.0001	.0031	.0367	.0118	.0001	.0011	.0070
%RSD	638.3	6.033	67.40	185.7	42.63	36.85	35.24	36.75
#1	-.0008	.0014	-.0077	.0222	.0146	.0001	-.0019	-.0153
#2	.0008	.0015	-.0049	-.0356	.0375	.0003	-.0032	-.0146
#3	-.0004	.0013	-.0014	-.0458	.0309	.0002	-.0040	-.0271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0003	-.0002	-.0010	-.0004	F -.0011	.0000	-.0001
Stddev	.0003	.0007	.0003	.0008	.0005	.0003	.000	.0001
%RSD	61.35	198.6	115.0	80.28	123.7	30.37	749.4	72.80
#1	-.0002	-.0005	-.0004	-.0003	.0000	-.0007	.0000	-.0001
#2	-.0006	.0004	-.0003	-.0019	-.0010	-.0014	-.0003	.0000
#3	-.0008	-.0009	.0001	-.0008	-.0003	-.0013	.0003	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Raw Data MA14898 page 107 of 108

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/15/2018 15:27:17 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0009	.0003	-.0005
Stddev	.0014	.0000	.0002
%RSD	161.1	6.439	35.81
#1	-.0010	.0003	-.0003
#2	.0006	.0003	-.0005
#3	-.0021	.0003	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1913.8	4659.3	25316.	2247.2
Stddev	4.0	9.4	10.	8.3
%RSD	.21054	.20183	.03834	.36866
#1	1910.5	4657.8	25321.	2256.7
#2	1912.5	4650.7	25305.	2243.5
#3	1918.3	4669.4	25323.	2241.3

Raw Data MA14898 page 108 of 108

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000010	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000060	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000005	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000056	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000007	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000003	0.000000	No
			Fe	-0.000010	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000139	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	0.000001	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000013	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000059	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000193	0.000000	No
			Fe	0.000215	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000003	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	-0.000000	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	0.000092	0.000000	No
			Ca	0.000008	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000031	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000052	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000019	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	-0.000029	0.000000	No
			Al	-0.000010	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000000	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000005	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	-0.000001	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000028	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000368	0.550338	0.000000	1.000000
Al 396.152 { 85}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.004250	0.147325	0.000000	1.000000
As 189.042 {478}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000046	0.194729	0.000000	1.000000
Ba 455.403 { 74}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.010009	9.603884	0.000000	1.000000
Be 313.042 {108}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.004514	7.625208	0.000000	1.000000
Ca 317.933 {106}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.011176	0.288865	0.000000	1.000000
Cd 226.502 {449}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.003941	4.957916	0.000000	1.000000
Co 228.616 {447}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.001749	2.567100	0.000000	1.000000
Cr 267.716 {126}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.000200	0.419423	0.000000	1.000000
Cu 324.754 {104}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.008731	0.639365	0.000000	1.000000
Fe 259.940 {130}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.006009	0.131139	0.000000	1.000000
In 230.606 {446}*	5/15/2018 10:04:03	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000728	0.101657	0.000000	1.000000
Mg 279.079 {121}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000034	0.027421	0.000000	1.000000
Mn 257.610 {131}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.002383	2.755078	0.000000	1.000000
Mo 202.030 {467}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.006907	0.953406	0.000000	1.000000
Na 589.592 { 57}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.022573	0.393384	0.000000	1.000000
Ni 231.604 {445}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.002933	1.391427	0.000000	1.000000
Pb 220.353 {453}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.001764	1.038209	0.000000	1.000000
Sb 206.833 {463}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.000736	0.223207	0.000000	1.000000
Se 196.090 {472}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.000833	0.143826	0.000000	1.000000
Si 212.412 {459}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.004374	0.336076	0.000000	1.000000
Sn 189.989 {477}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.001096	0.424263	0.000000	1.000000
Sr 407.771 { 83}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.006846	11.522143	0.000000	1.000000
Ti 334.941 {101}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.004639	1.493405	0.000000	1.000000
Tl 190.856 {477}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.001686	0.325060	0.000000	1.000000
V 292.402 {115}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	-0.000259	0.635243	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/15/2018 10:04:03	5/15/2018 9:40:33	Linear	1/Conc	0.004483	2.785366	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999960	0.000047	0.000657	0.002192	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999958	0.002177	0.015826	0.052755	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999968	0.000126	0.000927	0.003090	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999928	0.009304	0.000335	0.001117	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999934	0.007057	0.000125	0.000418	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999868	0.007568	0.004289	0.014295	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999946	0.004173	0.000058	0.000194	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999972	0.001544	0.000127	0.000424	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999818	0.000644	0.000472	0.001574	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999984	0.000286	0.000464	0.001548	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999694	0.005230	0.004738	0.015792	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999958	0.001494	0.046014	0.153381	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999901	0.000622	0.028165	0.093882	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999799	0.004453	0.000071	0.000236	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999791	0.001570	0.000193	0.000642	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999877	0.009928	0.011521	0.038403	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999951	0.001110	0.000239	0.000796	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999976	0.000585	0.000731	0.002437	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999972	0.000135	0.001325	0.004416	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999973	0.000085	0.001841	0.006137	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.997443	0.001939	0.000622	0.002074	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999806	0.000672	0.000373	0.001244	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999888	0.013927	0.000164	0.000548	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999891	0.001774	0.000213	0.000710	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999926	0.000320	0.001300	0.004333	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999788	0.001041	0.000434	0.001446	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999904	0.003114	0.000077	0.000258	OK.	1.000000	0.000000	1	0

5g dry sieve
DOD

SGS Accutest - Orlando Metals Digestion Log Soil

MP #: 33740 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 05/15/18 0855
HotBlock I.D. 9
Thermometer I.D. 204
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 82 / 81
Balance I.D. ADVPRO6

Spk. Sol. [A]	Volume Used(ml)	Pipette #
ACC 1062	1.0	KU15244
ACC 1051	0.5	KU15244
MET 6015	0.5	KU15244

Filter Lot#: 170112102
Dig. Tube Lot# 1605323

Added [B]:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	177290	000018 7388	000018 9306	23430173

Sample #		D	Wt., g	Final Volume(ml)	Comments
Method Blank(MB)			5.0	100	
Spike Blank(SB)			↓	↓	
Matrix Spike(MS)			5.04		
Matrix Spike Dup(MSD)			5.01		
Duplicate(DUP)			5.02		
1 ~~QC~~ ~~B2~~ FA53725-31A		2	5.08		
2 QC - FA53725-31A		↓	5.08		
3	-40A		5.02		
4	-43A		5.07		
5	-51A ~~-57A~~		5.05		
6	-54A		5.07		
7	-56A		5.08		
8	-60A		5.10		
9	-65A	↓	5.09		
10	-84	1	5.08		
11	-89A	2	5.03		
12	-92A	↓	5.02		
13	-95A		5.03		
14	-96A	↓	5.03		
15 FA53800	-4A	1	5.01		
16	-7A	↓	5.04		
17	-8A	↓	5.03		
18	-16A	2	5.03		
19	-17A	2	5.03	↓	
20					
21 [E]					
22 [E] 05-15-18 IT					
23 [E]					
24 [E]					

Analyst: [signature] Date: 05-15-18

QC Review: [signature] Date: 05-15-18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog 0316.xls Rev 03/04/16 DM

JC 05/14,

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kemron Environmental Services, Inc

Ft Ord; CA

07202.2001

SGS Job Number: FA53801

Sampling Dates: 04/25/18 - 04/26/18

Report to:

Kemron Environmental Services, Inc
4522 Joe Lloyd Way
Monterey, CA 93944
EDawson@GilbaneCo.com; TBeer@GilbaneCo.com

ATTN: Evenlyn Dawson

Total number of pages in report: 913

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **8**
Section 3: Summary of Hits **9**
Section 4: Sample Results **11**
4.1: FA53801-1: 28-01SC0000 12
4.2: FA53801-2: 28-01SC0001 13
4.3: FA53801-3: 28-01SC0002 14
4.4: FA53801-4: 28-02SC0000 15
4.5: FA53801-5: 28-02SC0001 16
4.6: FA53801-6: 28-02SC0002 17
4.7: FA53801-7: 28-03SC0000 18
4.8: FA53801-7A: 28-03SC0000 19
4.9: FA53801-10: 28-05SC0000 20
4.10: FA53801-10A: 28-05SC0000 21
4.11: FA53801-13: 28-07SC0000 22
4.12: FA53801-13A: 28-07SC0000 23
4.13: FA53801-16: 28-08SC0000 24
4.14: FA53801-16A: 28-08SC0000 25
4.15: FA53801-19: 28-09SC0000 26
4.16: FA53801-19A: 28-09SC0000 27
4.17: FA53801-22: 28-ER01SC 28
4.18: FA53801-23: 28-03SC0000Q 30
4.19: FA53801-23A: 28-03SC0000Q 31
Section 5: Misc. Forms **32**
5.1: Chain of Custody 33
5.2: QC Evaluation: DOD QSM5 Limits 39
Section 6: GC/LC Semi-volatiles - QC Data Summaries **41**
6.1: Method Blank Summary 42
6.2: Blank Spike Summary 50
6.3: Laboratory Control Sample Summary 53
6.4: Matrix Spike/Matrix Spike Duplicate Summary 55
6.5: Duplicate Summary 57
6.6: Surrogate Recovery Summaries 61
6.7: GC Surrogate Retention Time Summaries 63
6.8: Initial and Continuing Calibration Summaries 70
Section 7: GC/LC Semi-volatiles - Raw Data **100**
7.1: Samples 101
7.2: Method Blanks 137
7.3: Blank Spikes 162
7.4: Laboratory Control Samples 209
7.5: Matrix Spike/Matrix Spike Duplicates 257
7.6: Duplicates 289

Table of Contents

7.7: Initial and Continuing Calibrations 303
7.8: Instrument Run Logs 652
7.9: Prep Logs 664
Section 8: Metals Analysis - QC Data Summaries 671
8.1: Inst QC MA14875: Pb 672
8.2: Inst QC MA14907: Pb 683
8.3: Prep QC MP33699: Pb 705
8.4: Prep QC MP33746: Pb 710
8.5: IDL and Linear Range Summaries 717
Section 9: Metals Analysis - Raw Data 721
9.1: Raw Data MA14875 722
9.2: Raw Data MA14907 855
9.3: Prep Logs 912

SGS North America Inc.

Sample Summary

Kemron Environmental Services, Inc

Job No: FA53801

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53801-1	04/25/18	14:50	PFOEL	04/28/18	SO	Soil	28-01SC0000
FA53801-2	04/25/18	15:07	PFOEL	04/28/18	SO	Soil	28-01SC0001
FA53801-3	04/25/18	15:27	PFOEL	04/28/18	SO	Soil	28-01SC0002
FA53801-4	04/25/18	14:35	PFOEL	04/28/18	SO	Soil	28-02SC0000
FA53801-5	04/25/18	14:45	PFOEL	04/28/18	SO	Soil	28-02SC0001
FA53801-6	04/25/18	14:55	PFOEL	04/28/18	SO	Soil	28-02SC0002
FA53801-7	04/26/18	09:10	PFOEL	04/28/18	SO	Soil	28-03SC0000
FA53801-7A	04/26/18	09:10	PFOEL	04/28/18	SO	Soil	28-03SC0000
FA53801-8	04/26/18	09:35	PFOEL	04/28/18	SO	Soil	28-03SC0001
FA53801-8A	04/26/18	09:35	PFOEL	04/28/18	SO	Soil	28-03SC0001
FA53801-9	04/26/18	10:02	PFOEL	04/28/18	SO	Soil	28-03SC0002
FA53801-9A	04/26/18	10:02	PFOEL	04/28/18	SO	Soil	28-03SC0002
FA53801-10	04/26/18	09:23	PFOEL	04/28/18	SO	Soil	28-05SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53801

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA53801-10A	04/26/18	09:23	PFOEL	04/28/18	SO	Soil	28-05SC0000
FA53801-11	04/26/18	09:45	PFOEL	04/28/18	SO	Soil	28-05SC0001
FA53801-11A	04/26/18	09:45	PFOEL	04/28/18	SO	Soil	28-05SC0001
FA53801-12	04/26/18	10:09	PFOEL	04/28/18	SO	Soil	28-05SC0002
FA53801-12A	04/26/18	10:09	PFOEL	04/28/18	SO	Soil	28-05SC0002
FA53801-13	04/26/18	11:09	PFOEL	04/28/18	SO	Soil	28-07SC0000
FA53801-13A	04/26/18	11:09	PFOEL	04/28/18	SO	Soil	28-07SC0000
FA53801-14	04/26/18	11:33	PFOEL	04/28/18	SO	Soil	28-07SC0001
FA53801-14A	04/26/18	11:33	PFOEL	04/28/18	SO	Soil	28-07SC0001
FA53801-15	04/26/18	12:11	PFOEL	04/28/18	SO	Soil	28-07SC0002
FA53801-15A	04/26/18	12:11	PFOEL	04/28/18	SO	Soil	28-07SC0002
FA53801-16	04/25/18	13:30	PFOEL	04/28/18	SO	Soil	28-08SC0000
FA53801-16A	04/25/18	13:30	PFOEL	04/28/18	SO	Soil	28-08SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53801

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53801-17	04/25/18	13:55	PFOEL	04/28/18	SO	Soil	28-08SC0001
FA53801-17A	04/25/18	13:55	PFOEL	04/28/18	SO	Soil	28-08SC0001
FA53801-18	04/25/18	14:15	PFOEL	04/28/18	SO	Soil	28-08SC0002
FA53801-18A	04/25/18	14:15	PFOEL	04/28/18	SO	Soil	28-08SC0002
FA53801-19	04/25/18	13:44	PFOEL	04/28/18	SO	Soil	28-09SC0000
FA53801-19A	04/25/18	13:44	PFOEL	04/28/18	SO	Soil	28-09SC0000
FA53801-20	04/25/18	13:59	PFOEL	04/28/18	SO	Soil	28-09SC0001
FA53801-20A	04/25/18	13:59	PFOEL	04/28/18	SO	Soil	28-09SC0001
FA53801-21	04/25/18	14:25	PFOEL	04/28/18	SO	Soil	28-09SC0002
FA53801-21A	04/25/18	14:25	PFOEL	04/28/18	SO	Soil	28-09SC0002
FA53801-22	04/26/18	07:30	PFOEL	04/28/18	AQ	Equipment Blank	28-ER01SC
FA53801-23	04/26/18	09:15	PFOEL	04/28/18	SO	Soil	28-03SC0000Q
FA53801-23A	04/26/18	09:15	PFOEL	04/28/18	SO	Soil	28-03SC0000Q

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53801

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53801-24	04/26/18	09:37	PFOEL	04/28/18	SO	Soil	28-03SC0001Q
FA53801-24A	04/26/18	09:37	PFOEL	04/28/18	SO	Soil	28-03SC0001Q
FA53801-25	04/26/18	10:06	PFOEL	04/28/18	SO	Soil	28-03SC0002Q
FA53801-25A	04/26/18	10:06	PFOEL	04/28/18	SO	Soil	28-03SC0002Q

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Kemron Environmental Services, Inc **Job No:** FA53801

Site: Ft Ord; CA **Report Date:** 5/21/2018 10:54:21

13 Sample(s) were collected on/ between 04/25/2018 and 04/26/2018 and were received at SGS North America Inc - Orlando on 04/28/2018 properly preserved, at 4.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA53801. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

GC/LC Semi-volatiles By Method SW846 8330B

Matrix: AQ **Batch ID:** OP69897

All samples were extracted within the recommended method holding time.
All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

OP69897-BS: Insufficient sample for MS/MSD.

Matrix: SO **Batch ID:** OP69973

All samples were extracted within the recommended method holding time.
All samples were analyzed within the recommended method holding time.
All method blanks for this batch meet method specific criteria.

Sample(s) FA53801-1MS, FA53801-1MSD, FA53801-4DUP were used as the QC samples indicated.

Matrix Spike Recovery(s) for HMX are outside control limits. Probable cause is due to matrix interference.

Matrix: SO **Batch ID:** OP69989

All samples were extracted within the recommended method holding time.
All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53801-16MS, FA53801-16MSD, FA53801-19DUP were used as the QC samples indicated.

Metals Analysis By Method SW846 6010C

Matrix: SO **Batch ID:** MP33746

All samples were digested within the recommended method holding time.
All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-34DUP, FA53725-34MS, FA53725-34MSD, FA53725-34PS, FA53725-34SDL were used as the QC samples.

Metals Analysis By Method SW846 6020A

Matrix: AQ **Batch ID:** MP33699

All samples were digested within the recommended method holding time.
All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53625-18FDUP, FA53625-18FMS, FA53625-18FMSD, FA53625-18FSDL, FA53627-1SDL were used as the QC samples.

RPD(s) for Serial Dilution for Lead are outside control limits for sample MP33699-SD2. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA53801
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/25/18 thru 04/26/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53801-1	**28-01SC0000**					
No hits reported in this sample.						
FA53801-2	**28-01SC0001**					
No hits reported in this sample.						
FA53801-3	**28-01SC0002**					
No hits reported in this sample.						
FA53801-4	**28-02SC0000**					
No hits reported in this sample.						
FA53801-5	**28-02SC0001**					
No hits reported in this sample.						
FA53801-6	**28-02SC0002**					
No hits reported in this sample.						
FA53801-7	**28-03SC0000**					
No hits reported in this sample.						
FA53801-7A	**28-03SC0000**					
Lead		21.1	2.0	0.40	mg/kg	SW846 6010C
FA53801-10	**28-05SC0000**					
No hits reported in this sample.						
FA53801-10A	**28-05SC0000**					
Lead		8.7	2.0	0.40	mg/kg	SW846 6010C
FA53801-13	**28-07SC0000**					
No hits reported in this sample.						

Summary of Hits

Job Number: FA53801
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/25/18 thru 04/26/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53801-13A	**28-07SC0000**					
Lead		65.5	2.0	0.40	mg/kg	SW846 6010C
FA53801-16	**28-08SC0000**					
No hits reported in this sample.						
FA53801-16A	**28-08SC0000**					
Lead		74.4	2.0	0.40	mg/kg	SW846 6010C
FA53801-19	**28-09SC0000**					
No hits reported in this sample.						
FA53801-19A	**28-09SC0000**					
Lead		128	2.0	0.40	mg/kg	SW846 6010C
FA53801-22	**28-ER01SC**					
Lead		0.25 J	2.0	1.0	ug/l	SW846 6020A
FA53801-23	**28-03SC0000Q**					
No hits reported in this sample.						
FA53801-23A	**28-03SC0000Q**					
Lead		20.0	2.0	0.40	mg/kg	SW846 6010C

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-01SC0000		
Lab Sample ID:	FA53801-1	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059702.D	1	05/11/18 02:28	EM	05/08/18 18:30	OP69973	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	71%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-01SC0001		
Lab Sample ID:	FA53801-2	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059707.D	1	05/11/18 04:58	EM	05/08/18 18:30	OP69973	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	76%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-01SC0002		
Lab Sample ID:	FA53801-3	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059708.D	1	05/11/18 05:28	EM	05/08/18 18:30	OP69973	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	78%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-02SC0000		
Lab Sample ID:	FA53801-4	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059709.D	1	05/11/18 05:58	EM	05/08/18 18:30	OP69973	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	70%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-02SC0001		
Lab Sample ID:	FA53801-5	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059712.D	1	05/11/18 07:30	EM	05/08/18 18:30	OP69973	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	75%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-02SC0002		
Lab Sample ID:	FA53801-6	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059713.D	1	05/11/18 08:00	EM	05/08/18 18:30	OP69973	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	75 U	100	75	50	ug/kg	
121-82-4	RDX	75 U	100	75	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	75 U	100	75	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	75%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-03SC0000		
Lab Sample ID:	FA53801-7	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059714.D	1	05/11/18 08:30	EM	05/08/18 18:30	OP69973	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	75 U	100	75	50	ug/kg	
121-82-4	RDX	75 U	100	75	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	75 U	100	75	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	71%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	28-03SC0000		
Lab Sample ID:	FA53801-7A	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	21.1	2.0	0.40	0.099	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-05SC0000		
Lab Sample ID:	FA53801-10	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059719.D	1	05/11/18 11:00	EM	05/08/18 18:30	OP69973	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	76%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	28-05SC0000		
Lab Sample ID:	FA53801-10A	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	8.7	2.0	0.40	0.10	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-07SC0000		
Lab Sample ID:	FA53801-13	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059722.D	1	05/11/18 12:30	EM	05/08/18 18:30	OP69973	GBB1730
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	74%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	28-07SC0000		
Lab Sample ID:	FA53801-13A	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	65.5	2.0	0.40	0.10	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-08SC0000		
Lab Sample ID:	FA53801-16	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614690.D	1	05/10/18 22:54	EM	05/09/18 14:00	OP69989	GGG2627
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	98%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	28-08SC0000		
Lab Sample ID:	FA53801-16A	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	74.4	2.0	0.40	0.099	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-09SC0000		
Lab Sample ID:	FA53801-19	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614695.D	1	05/11/18 01:21	EM	05/09/18 14:00	OP69989	GGG2627
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	96%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	28-09SC0000		
Lab Sample ID:	FA53801-19A	**Date Sampled:**	04/25/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	128	2.0	0.40	0.10	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-ER01SC		
Lab Sample ID:	FA53801-22	**Date Sampled:**	04/26/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 3535A	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614568.D	1	05/04/18 02:32	EM	05/03/18 08:00	OP69897	GGG2624
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	0.094 U	0.19	0.094	0.075	ug/l	
121-82-4	RDX	0.094 U	0.19	0.094	0.075	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.094 U	0.19	0.094	0.075	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	109%		70-136%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	28-ER01SC		
Lab Sample ID:	FA53801-22	**Date Sampled:**	04/26/18
Matrix:	AQ - Equipment Blank	**Date Received:**	04/28/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	0.25 J	2.0	1.0	0.20	ug/l	2	05/05/18	05/07/18	DM	SW846 6020A [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14875
(2) Prep QC Batch: MP33699

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-03SC0000Q		
Lab Sample ID:	FA53801-23	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614702.D	1	05/11/18 04:47	EM	05/09/18 14:00	OP69989	GGG2627
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	95%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	28-03SC0000Q		
Lab Sample ID:	FA53801-23A	**Date Sampled:**	04/26/18
Matrix:	SO - Soil	**Date Received:**	04/28/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	20.0	2.0	0.40	0.10	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) Sample was dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042518-01
FA53801

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:
Unit 28

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
1	28-01SC0000	SO	4-25-18	1450	RP/LF	~~X~~ JB		X	28-01	N1	0.00	0.00
2	28-01SC0001	SO	"	1507	"	~~X~~ JB		X	28-01	N1	0.00	0.00
3	28-01SC0002	SO	"	1527	"	~~X~~ JB		X	28-01	N1	0.00	0.00
4	28-02SC0000	SO	4-25-18	1435	TO/TE	~~X~~ JB		X	28-02	N1	0.00	0.00
5	28-02SC0000Q1 JB	SO	"	1445	"	~~X~~ JB		X	28-02	~~N~~ FD1 JB	0.00	0.00
6	28-02SC0001Q2 JB	SO	"	1455	"	~~X~~ JB		X	28-02	N1	0.00	0.00
~~7~~	~~28-02SC0001Q~~	~~SO~~				~~X~~		~~X~~	28-02	FD1	~~0.00~~	~~0.00~~ e JB
~~8~~	~~28-02SC0002~~	~~SO~~				~~X~~		~~X~~	28-02	N1	~~0.00~~	~~0.00~~ e JB
~~9~~	~~28-02SC0002Q~~	~~SO~~				~~X~~		~~X~~	28-02	FD1	~~0.00~~	~~0.00~~ e JB
Cooler #		Turnaround Time: 14 Days										

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-26-18	1645
Fed Ex		

Received by: *(Signature)*	Date	Time
FedEx	4-26-18	1645

Shipping Date / Carrier / Airbill Number
8133 7208 3500

Received by Laboratory: *(Signature, Date, Time)* **& condition**
04/28/18 945

3.8, 4.2, 3.0, 15.8 JB

ENV.COC_Record
April 13, 2018

Page 1 of 5

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042618-02
FA53801

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID		Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
10	28-03SC0000	7	SO	4-26-18	0910	KL/TB	X		X	28-03	N1	0.00	0.00	
11	28-03SC0001	8	SO	"	0935	"	X		X	28-03	N1	0.00	0.00	HOLD
12	28-03SC0002	9	SO	"	1002	"	X		X	28-03	N1	0.00	0.00	HOLD
~~13~~	~~28-04SC0000~~		~~SO~~				~~X~~		~~X~~	~~28-04~~	~~N1~~	~~0.00~~	~~0.00~~	TB
~~14~~	~~28-04SC0001~~		~~SO~~				~~X~~		~~X~~	~~28-04~~	~~N1~~	~~0.00~~	~~0.00~~	TB
~~15~~	~~28-04SC0002~~		~~SO~~				~~X~~		~~X~~	~~28-04~~	~~N1~~	~~0.00~~	~~0.00~~	TB
16	28-05SC0000	10	SO	4-26-18	0923	LE/RP	X		X	28-05	N1	0.00	0.00	
17	28-05SC0001	11	SO	"	0945	"	X		X	28-05	N1	0.00	0.00	HOLD
18	28-05SC0002	12	SO	"	1009	"	X		X	28-05	N1	0.00	0.00	HOLD

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
T. Beer	4-26-18	1645	Fed Ex	4-26-18	1645
Fed Ex					

Shipping Date / Carrier / Airbill Number: 8133 7208 3500

Received by Laboratory: *(Signature, Date, Time)* **& condition:** 04/28/18 945

ENV.COC_Record
April 13, 2018

Page 2 of 3 5
TB

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042618-03
FA53801

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
~~19~~	~~28-06SG0000~~	~~SO~~				~~X~~	~~X~~	~~X~~	~~28-06~~	~~N1~~	~~0.00~~	~~0.00~~	
~~20~~	~~28-06SG0000Q~~	~~SO~~				~~X~~		~~X~~	~~28-06~~	~~FD1~~	~~0.00~~	~~0.00~~	JB
~~21~~	~~28-06SC0001~~	~~SO~~				~~X~~	~~X~~	~~X~~	~~28-06~~	~~N1~~	~~0.00~~	~~0.00~~	JB
~~22~~	~~28-06SC0001Q~~	~~SO~~				~~X~~		~~X~~	~~28-06~~	~~FD1~~	~~0.00~~	~~0.00~~	JB
~~23~~	~~28-06SC0002~~	~~SO~~				~~X~~	~~X~~	~~X~~	~~28-06~~	~~N1~~	~~0.00~~	~~0.00~~	JB
~~24~~	~~28-06SC0002Q~~	~~SO~~				~~X~~		~~X~~	~~28-06~~	~~FD1~~	~~0.00~~	~~0.00~~	JB
25	28-07SC0000 13	SO	4-26-18	1109	LF/RP	X		X	28-07	N1	0.00	0.00	
26	28-07SC0001 14	SO	"	1133	"	X		X	28-07	N1	0.00	0.00	HOLD
27	28-07SC0002 15	SO	"	1211	"	X		X	28-07	N1	0.00	0.00	HOLD

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
J. Beer	4-26-18	1645	FedEx	4-26-18	1645
Fed Ex					

Shipping Date / Carrier / Airbill Number
8133 7208 3500

Received by Laboratory *(Signature, Date, Time)* **& condition**
04/28/18 945

ENV.COC_Record
April 13, 2018

Page 3 of 5
JB

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042518-04
FA53801

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID		Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	SW6010C-Lead by ISM	SW6010C-Lead by ISM			Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
28	28-08SC0000	16	SO	4-25-18	1330	TO/TE	X		X					28-08	N1	0.00	0.00	
29	28-08SC0001	17	SO	"	1355	"	X		X					28-08	N1	0.00	0.00	HOLD
30	28-08SC0002	18	SO	"	1415	"	X		X					28-08	N1	0.00	0.00	HOLD
31	28-09SC0000	19	SO	4-25-18	1344	TB/KL	X		X					28-09	N1	0.00	0.00	
32	28-09SC0001	20	SO	"	1359	"	X		X					28-09	N1	0.00	0.00	HOLD
33	28-09SC0002	21	SO	"	1425	"	X		X	JB				28-09	N1	0.00	0.00	HOLD
34	28-ER01SC	22	WQ	4-26-18	0730	TB/RP		X		X	X			FIELDQC	EB1	0.00	0.00	Run
35	28-ER02SC		WQ					X		X				FIELDQC	EB1	0.00	0.00	
36										JB								

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-26-18	1645
Fed Ex		

Received by: *(Signature)*	Date	Time
Fed Ex	4-26-18	1645

Shipping Date / Carrier / Airbill Number
8133 7208 3500

Received by Laboratory: *(Signature, Date, Time)* & condition
04/28/18 945

ENV.COC_Record
April 13, 2018

Page 4 of 5
JB

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # 042618-05
FA53801

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method	SW6010C - Lead by ISM	SW6010C - Lead by ISM	SW8330B - Explosives by ISM	SW8330B - Explosives by ISM	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom
							11	13	8	13				
154	28-03SC00000Q (23)	SO	4-26-18	0915	KL/TB			X		X	28-03	FD	0	0
155	28-03SC00001Q (24)	SO	"	0937	"			X		X	28-03	FD	0	0
156	28-03SC00026Q (25)	SO	"	1006	"			X		X	28-03	FD	0	0
157	31-28SC0000	SO	4-26-18	1310	TB/KL			X			31-28	NI	0	0
158	31-28SC0000Q	SO	"	1315	"			X			31-28	FD	0	0
159	31-28SC0001	SO	"	1330	"			X			31-28	NI	0	0
160	31-28SC0001Q	SO	"	1333	"			X			31-28	FD	0	0
161	31-28SC00002	SO	"	1350	"			X			31-28	NI	0	0
162	31-28SC0002Q	SO	"	1354	"			X			31-28	FD	0	0
Cooler #		Turnaround Time: 14 Days												

Run ~~Lead aliquot~~ ~~for previously submitted explosives sample~~ HOLD JB
HOLD
Run
Run Lead aliquot for previously submitted explosives sample HOLD HOLD HOLD HOLD

Relinquished by: *(Signature)*	Date	Time
J. Beer	4-26-18	1645
Fed Ex		

Received by: *(Signature)*	Date	Time
FedEx	4-26-18	1645

Shipping Date / Carrier / Airbill Number
8133 7208 3500

Received by Laboratory *(Signature, Date, Time)* **& condition**
04/28/18 945
JB JB

ENV.COC_Record
April 13, 2018

Page 18 of 18
5 of 5

SGS Sample Receipt Summary

Job Number: FA53801 **Client:** GILBANE **Project:** BRA KEMRON SOIL SAMPLING

Date / Time Received: 4/28/2018 9:45:00 AM **Delivery Method:** FED EX **Airbill #'s:** 1015930474060003281100780712838200

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 4

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4); Cooler 2: (3.8); Cooler 3: (2.6); Cooler 4: (15.4);

Cooler Temps (Corrected) °C: Cooler 1: (3.8); Cooler 2: (4.2); Cooler 3: (3.0); Cooler 4: (15.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 4/28/2018 9:45:00 AM Reviewer: SP Date: 4/28/2018

QC Evaluation: DOD QSM5 Limits

Job Number: FA53801
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/25/18 thru 04/26/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP69897	SW846 8330B						
OP69897-BS	2691-41-0	HMX	BSP	REC	134	%	65-135
OP69897-BS	121-82-4	RDX	BSP	REC	90	%	68-130
OP69897-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	86	%	71-123
OP69973	SW846 8330B						
OP69973-BS	2691-41-0	HMX	BSP	REC	79	%	74-124
OP69973-BS	121-82-4	RDX	BSP	REC	82	%	67-129
OP69973-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	89	%	71-120
OP69973-MS	2691-41-0	HMX	MS	REC	71	%	74-124
OP69973-MS	121-82-4	RDX	MS	REC	86	%	67-129
OP69973-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	81	%	71-120
OP69973-MSD	2691-41-0	HMX	MSD	REC	77	%	74-124
OP69973-MSD	2691-41-0	HMX	MSD	RPD	8	%	20
OP69973-MSD	121-82-4	RDX	MSD	REC	83	%	67-129
OP69973-MSD	121-82-4	RDX	MSD	RPD	4	%	20
OP69973-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	78	%	71-120
OP69973-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	4	%	20
OP69973-DUP	2691-41-0	HMX	DUP	RPD	0	%	20
OP69973-DUP	121-82-4	RDX	DUP	RPD	0	%	20
OP69973-DUP	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69973-DUP2	2691-41-0	HMX	DUP	RPD	0	%	20
OP69973-DUP2	121-82-4	RDX	DUP	RPD	0	%	20
OP69973-DUP2	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
OP69989	SW846 8330B						
OP69989-BS	2691-41-0	HMX	BSP	REC	116	%	74-124
OP69989-BS	121-82-4	RDX	BSP	REC	96	%	67-129
OP69989-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	96	%	71-120
OP69989-MS	2691-41-0	HMX	MS	REC	118	%	74-124
OP69989-MS	121-82-4	RDX	MS	REC	94	%	67-129
OP69989-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	92	%	71-120
OP69989-MSD	2691-41-0	HMX	MSD	REC	117	%	74-124
OP69989-MSD	2691-41-0	HMX	MSD	RPD	1	%	20
OP69989-MSD	121-82-4	RDX	MSD	REC	95	%	67-129
OP69989-MSD	121-82-4	RDX	MSD	RPD	2	%	20
OP69989-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	93	%	71-120
OP69989-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	1	%	20
OP69989-DUP	2691-41-0	HMX	DUP	RPD	0	%	20
OP69989-DUP	121-82-4	RDX	DUP	RPD	0	%	20
OP69989-DUP	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20

* Sample used for QC is not from job FA53801

QC Evaluation: DOD QSM5 Limits

Job Number: FA53801
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/25/18 thru 04/26/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP69989-DUP2	2691-41-0	HMX	DUP	RPD	0	%	20
OP69989-DUP2	121-82-4	RDX	DUP	RPD	0	%	20
OP69989-DUP2	118-96-7	2,4,6-Trinitrotoluene	DUP	RPD	0	%	20
MP33699	SW846 6020A						
MP33699-B1	7439-92-1	Lead	BSP	REC	103.5	%	88-115
MP33699-S1*	7439-92-1	Lead	MS	REC	107.5	%	88-115
MP33699-S2*	7439-92-1	Lead	MSD	REC	102.5	%	88-115
MP33699-S2*	7439-92-1	Lead	MSD	RPD	4.8	%	20
MP33699-D1*	7439-92-1	Lead	DUP	RPD	0	%	20
MP33746	SW846 6010C						
MP33746-B1	7439-92-1	Lead	BSP	REC	100	%	81-112
MP33746-S1*	7439-92-1	Lead	MS	REC	97.5	%	81-112
MP33746-S2*	7439-92-1	Lead	MSD	REC	114.45	%	81-112
MP33746-S2*	7439-92-1	Lead	MSD	RPD	10	%	20
MP33746-D1*	7439-92-1	Lead	DUP	RPD	3.2	%	20
MP33746-D2*	7439-92-1	Lead	DUP	RPD	4.8	%	20

* Sample used for QC is not from job FA53801

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69897-MB	GG614567.D	1	05/04/18	EM	05/03/18	OP69897	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-22

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	103%	70-136%

Method Blank Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69973-MB	BB059701.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-1, FA53801-2, FA53801-3, FA53801-4, FA53801-5, FA53801-6, FA53801-7, FA53801-10, FA53801-13

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	76%	69-134%

Method Blank Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69973-GB1	BB059724.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-1, FA53801-2, FA53801-3, FA53801-4, FA53801-5, FA53801-6, FA53801-7, FA53801-10, FA53801-13

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	50	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	71%	69-134%

Method Blank Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69973-GB2	BB059725.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-1, FA53801-2, FA53801-3, FA53801-4, FA53801-5, FA53801-6, FA53801-7, FA53801-10, FA53801-13

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	71%	69-134%

Method Blank Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69973-GB3	BB059726.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-1, FA53801-2, FA53801-3, FA53801-4, FA53801-5, FA53801-6, FA53801-7, FA53801-10, FA53801-13

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	70%	69-134%

Method Blank Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69989-MB	GG614688.D	1	05/10/18	EM	05/09/18	OP69989	GGG2627

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-16, FA53801-19, FA53801-23

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	103%	69-134%

Method Blank Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69989-GB1	GG614705.D	1	05/11/18	EM	05/09/18	OP69989	GGG2627

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-16, FA53801-19, FA53801-23

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	98%	69-134%

Method Blank Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69989-GB3	GG614709.D	1	05/11/18	EM	05/09/18	OP69989	GGG2627

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-16, FA53801-19, FA53801-23

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	100%	69-134%

Blank Spike Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69897-BS [a]	GG614566.D	1	05/04/18	EM	05/03/18	OP69897	GGG2624

The QC reported here applies to the following samples: Method: SW846 8330B

FA53801-22

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	6.7	134	77-144
121-82-4	RDX	5	4.5	90	77-125
118-96-7	2,4,6-Trinitrotoluene	5	4.3	86	72-112

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	97%	70-136%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69973-BS	BB059699.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-1, FA53801-2, FA53801-3, FA53801-4, FA53801-5, FA53801-6, FA53801-7, FA53801-10, FA53801-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	1980	79	75-147
121-82-4	RDX	2500	2040	82	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2220	89	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	81%	69-134%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69989-BS	GG614686.D	1	05/10/18	EM	05/09/18	OP69989	GGG2627

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-16, FA53801-19, FA53801-23

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2890	116	75-147
121-82-4	RDX	2500	2400	96	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2390	96	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	96%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69973-PT1	BB059700.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-1, FA53801-2, FA53801-3, FA53801-4, FA53801-5, FA53801-6, FA53801-7, FA53801-10, FA53801-13

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	3360	90	74-124
121-82-4	RDX	3200	2350	73	67-129
118-96-7	2,4,6-Trinitrotoluene	520	440	85	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	77%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69989-PT1	GG614687.D	1	05/10/18	EM	05/09/18	OP69989	GGG2627

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-16, FA53801-19, FA53801-23

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	4600	123	74-124
121-82-4	RDX	3200	2720	85	67-129
118-96-7	2,4,6-Trinitrotoluene	520	519	100	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	99%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69973-MS	BB059705.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730
OP69973-MSD	BB059706.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730
FA53801-1	BB059702.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-1, FA53801-2, FA53801-3, FA53801-4, FA53801-5, FA53801-6, FA53801-7, FA53801-10, FA53801-13

CAS No.	Compound	FA53801-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99	U	2480	1750	71*	2470	1900	77	8	75-147/22
121-82-4	RDX	99	U	2480	2140	86	2470	2050	83	4	79-126/21
118-96-7	2,4,6-Trinitrotoluene	99	U	2480	2000	81	2470	1930	78	4	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53801-1	Limits
610-39-9	3,4-Dinitrotoluene	72%	72%	71%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69989-MS	GG614691.D	1	05/10/18	EM	05/09/18	OP69989	GGG2627
OP69989-MSD	GG614692.D	1	05/10/18	EM	05/09/18	OP69989	GGG2627
FA53801-16	GG614690.D	1	05/10/18	EM	05/09/18	OP69989	GGG2627

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-16, FA53801-19, FA53801-23

CAS No.	Compound	FA53801-16 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99 U		2480	2930	118	2480	2900	117	1	75-147/22
121-82-4	RDX	99 U		2480	2320	94	2480	2360	95	2	79-126/21
118-96-7	2,4,6-Trinitrotoluene	99 U		2480	2270	92	2480	2300	93	1	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53801-16	Limits
610-39-9	3,4-Dinitrotoluene	93%	93%	98%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69973-DUP	BB059710.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730
FA53801-4	BB059709.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-1, FA53801-2, FA53801-3, FA53801-4, FA53801-5, FA53801-6, FA53801-7, FA53801-10, FA53801-13

CAS No.	Compound	FA53801-4 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53801-4	Limits
610-39-9	3,4-Dinitrotoluene	75%	70%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69973-DUP2	BB059711.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730
FA53801-4	BB059709.D	1	05/11/18	EM	05/08/18	OP69973	GBB1730

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-1, FA53801-2, FA53801-3, FA53801-4, FA53801-5, FA53801-6, FA53801-7, FA53801-10, FA53801-13

CAS No.	Compound	FA53801-4 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53801-4	Limits
610-39-9	3,4-Dinitrotoluene	70%	70%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69989-DUP	GG614698.D	1	05/11/18	EM	05/09/18	OP69989	GGG2627
FA53801-19	GG614695.D	1	05/11/18	EM	05/09/18	OP69989	GGG2627

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-16, FA53801-19, FA53801-23

CAS No.	Compound	FA53801-19 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53801-19	Limits
610-39-9	3,4-Dinitrotoluene	96%	96%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69989-DUP2	GG614699.D	1	05/11/18	EM	05/09/18	OP69989	GGG2627
FA53801-19	GG614695.D	1	05/11/18	EM	05/09/18	OP69989	GGG2627

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53801-16, FA53801-19, FA53801-23

CAS No.	Compound	FA53801-19 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16

CAS No.	Surrogate Recoveries	DUP	FA53801-19	Limits
610-39-9	3,4-Dinitrotoluene	97%	96%	69-134%

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA53801-22	GG614568.D	109
OP69897-BS	GG614566.D	97
OP69897-MB	GG614567.D	103

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

Surrogate Recovery Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
FA53801-1	BB059702.D		71
FA53801-2	BB059707.D		76
FA53801-3	BB059708.D		78
FA53801-4	BB059709.D	70	
FA53801-5	BB059712.D		75
FA53801-6	BB059713.D		75
FA53801-7	BB059714.D		71
FA53801-10	BB059719.D		76
FA53801-13	BB059722.D		74
FA53801-16	GG614690.D		98
FA53801-19	GG614695.D		96
FA53801-23	GG614702.D		95
OP69973-BS	BB059699.D		81
OP69973-DUP	BB059710.D	75	
OP69973-DUP2	BB059711.D	70	
OP69973-GB1	BB059724.D	71	
OP69973-GB2	BB059725.D	71	
OP69973-GB3	BB059726.D	70	
OP69973-MB	BB059701.D		76
OP69973-MS	BB059705.D		72
OP69973-MSD	BB059706.D		72
OP69973-PT1	BB059700.D		77
OP69989-BS	GG614686.D		96
OP69989-DUP	GG614698.D		96
OP69989-DUP2	GG614699.D		97
OP69989-GB1	GG614705.D		98
OP69989-GB3	GG614709.D		100
OP69989-MB	GG614688.D		103
OP69989-MS	GG614691.D		93
OP69989-MSD	GG614692.D		93
OP69989-PT1	GG614687.D		99

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2627-CC2571	**Injection Date:**	05/10/18
Lab File ID:	GG614684.D	**Injection Time:**	19:57
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.29

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69989-BS	GG614686.D	05/10/18	20:56	14.34
OP69989-PT1	GG614687.D	05/10/18	21:26	14.29
OP69989-MB	GG614688.D	05/10/18	21:55	14.34
FA53801-16	GG614690.D	05/10/18	22:54	14.32
OP69989-MS	GG614691.D	05/10/18	23:24	14.34
OP69989-MSD	GG614692.D	05/10/18	23:53	14.35
FA53801-19	GG614695.D	05/11/18	01:21	14.31

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1730-CC1722	**Injection Date:**	05/10/18
Lab File ID:	BB059692.D	**Injection Time:**	21:28
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	9.89

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69960-GB1	BB059696.D	05/10/18	23:28	
OP69960-GB2	BB059697.D	05/10/18	23:58	
OP69960-GB3	BB059698.D	05/11/18	00:28	
OP69973-BS	BB059699.D	05/11/18	00:58	9.94
OP69973-PT1	BB059700.D	05/11/18	01:28	9.89
OP69973-MB	BB059701.D	05/11/18	01:58	9.92
FA53801-1	BB059702.D	05/11/18	02:28	9.89

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1730-CC1722	**Injection Date:**	05/11/18
Lab File ID:	BB059703.D	**Injection Time:**	02:58
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	9.92	9.92

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP69973-MS	BB059705.D	05/11/18	03:58		9.90
OP69973-MSD	BB059706.D	05/11/18	04:28		9.84
FA53801-2	BB059707.D	05/11/18	04:58		9.84
FA53801-3	BB059708.D	05/11/18	05:28		9.85
FA53801-4	BB059709.D	05/11/18	05:58	9.85	
OP69973-DUP	BB059710.D	05/11/18	06:28	9.82	
OP69973-DUP2	BB059711.D	05/11/18	07:00	9.83	
FA53801-5	BB059712.D	05/11/18	07:30		9.83
FA53801-6	BB059713.D	05/11/18	08:00		9.90
FA53801-7	BB059714.D	05/11/18	08:30		9.85

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1730-CC1722	**Injection Date:**	05/11/18
Lab File ID:	BB059715.D	**Injection Time:**	09:00
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	9.85	9.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA53801-10	BB059719.D	05/11/18	11:00		9.86
FA53801-13	BB059722.D	05/11/18	12:30		9.79
OP69973-GB1	BB059724.D	05/11/18	13:30	9.84	
OP69973-GB2	BB059725.D	05/11/18	14:00	9.83	
OP69973-GB3	BB059726.D	05/11/18	14:30	9.85	
GBB1730-ECC1722	BB059727.D	05/11/18	15:00	9.84	9.84

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2624-CC2571	**Injection Date:**	05/03/18
Lab File ID:	GG614559.D	**Injection Time:**	22:07
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	14.26	14.27

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP69838-GB1	GG614562.D	05/03/18	23:36		14.27
OP69838-GB2	GG614563.D	05/04/18	00:05		14.31
OP69838-GB3	GG614564.D	05/04/18	00:35		14.22
OP69897-BS	GG614566.D	05/04/18	01:33		14.33
OP69897-MB	GG614567.D	05/04/18	02:03		14.27
FA53801-22	GG614568.D	05/04/18	02:32		14.28
ZZZZZZ	GG614569.D	05/04/18	03:02		14.25
ZZZZZZ	GG614570.D	05/04/18	03:31		14.28
GGG2624-ECC2571	GG614571.D	05/04/18	04:01	14.25	14.25

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2627-CC2571	**Injection Date:**	05/11/18
Lab File ID:	GG614696.D	**Injection Time:**	01:51
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.27

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69989-DUP	GG614698.D	05/11/18	02:50	14.27
OP69989-DUP2	GG614699.D	05/11/18	03:19	14.34
FA53801-23	GG614702.D	05/11/18	04:47	14.25
OP69989-GB1	GG614705.D	05/11/18	06:16	14.29

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2627-CC2571	**Injection Date:**	05/11/18
Lab File ID:	GG614706.D	**Injection Time:**	06:45
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	14.29

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP69989-GB3	GG614709.D	05/11/18	08:14	14.24

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA53801 **Sample:** GBB1722-ICC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059468.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration

Calibration Files
20 =BB059464.D 50 =BB059465.D 100 =BB059466.D 200 =BB059467.D
500 =BB059468.D 1000=BB059469.D 2000=BB059470.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	4.057	5.437	5.336	4.870	4.755	4.712	4.606	4.825	E3	9.63
2)	HMX	1.565	2.172	2.000	1.766	1.871	1.897	1.819	1.870	E3	10.12
3)	DNX	3.283	3.662	3.269	2.786	2.867	2.866	2.946	3.097	E3	10.29
4)	MNX	2.964	3.443	3.424	3.009	2.956	2.936	2.943	3.097	E3	7.48
5)	RDX	2.292	2.368	2.423	2.022	1.981	1.949	1.934	2.138	E3	9.98
6)	1,3,5-Trinitroben	5.015	4.250	4.380	4.228	4.133	4.163	4.290	4.351	E3	6.98
7)	1,3-Dinitrobenzen	5.103	6.130	6.106	5.453	5.359	5.313	5.343	5.544	E3	7.33
8)	3,5-Dinitroanilin	4.716	5.643	5.219	4.627	4.650	4.615	4.762	4.890	E3	8.03
9)	Nitrobenzene	3.761	4.464	3.850	3.539	3.342	3.234	3.316	3.644	E3	11.78
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	4.693	3.753	3.290	3.126	2.967	2.901	2.923	3.379	E3	19.28
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 2950.09304 *A + -0.01551 *A^2										
12)	2,4,6-Trinitrotol	4.956	4.943	4.194	4.070	3.843	3.741	3.794	4.220	E3	12.39
13)	2-Amino-4,6-Dinit	3.909	4.360	3.860	3.648	3.604	3.533	3.585	3.785	E3	7.68
14)	4-Amino-2,6-Dinit	1.542	3.426	2.979	2.840	2.690	2.591	2.687	2.679	E3	21.41
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997										
	Response Ratio = 0.00000 + 2602.89377 *A + 0.03960 *A^2										
15)S	3,4-Dinitrotoluen	2.547	2.965	2.725	2.872	2.626	2.453	2.542	2.676	E3	7.02
16)	2,4-Dinitrotoluen	4.866	6.729	5.238	5.204	4.993	4.826	4.971	5.261	E3	12.65
17)	2,6-Dinitrotoluen	3.711	4.396	3.251	3.385	3.230	2.946	3.275	3.456	E3	13.67
18)	o-Nitrotoluene	2.384	3.152	2.790	2.334	2.287	2.268	2.270	2.498	E3	13.69
19)	p-Nitrotoluene	3.192	4.942	4.366	3.947	3.706	3.724	3.752	3.947	E3	14.19
20)	m-Nitrotoluene	3.139	4.450	3.763	3.373	3.372	3.439	3.434	3.567	E3	12.06
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	6.055	8.407	8.188	7.236	7.294	7.503	7.246	7.418	E3	10.32
2)	HMX	3.365	6.202	5.612	5.174	4.982	5.081	5.035	5.064	E3	17.11
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 5093.51943 *A + -0.02911 *A^2										
3)	DNX	4.174	6.652	5.296	4.870	4.545	4.745	4.792	5.011	E3	15.95
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998										
	Response Ratio = 0.00000 + 4658.23377 *A + 0.06712 *A^2										
4)	MNX	4.258	4.893	5.093	4.585	4.573	4.564	4.576	4.649	E3	5.77
5)	RDX	3.570	3.610	3.606	3.105	3.137	3.116	3.125	3.324	E3	7.64
6)	1,3,5-Trinitroben	7.940	8.986	9.024	8.086	8.009	8.095	8.296	8.348	E3	5.54
7)	1,3-Dinitrobenzen	3.838	3.615	4.019	3.565	3.564	3.567	3.902	3.724	E3	5.13
8)	3,5-Dinitroanilin	5.802	7.490	8.086	7.445	7.563	7.569	8.398	7.479	E3	10.97
9)	Nitrobenzene	3.281	3.639	3.339	3.520	3.125	3.092	3.214	3.316	E3	6.09
10)	Nitroglycerin	1.415	1.345	1.370	1.191	1.221	1.213	1.214	1.281	E3	7.18
11)	Tetryl	5.506	4.771	5.669	5.060	5.077	5.090	5.183	5.194	E3	5.80

Job Number: FA53801 **Sample:** GBB1722-ICC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059468.D
Project: Ft Ord; CA

```
12)  2,4,6-Trinitrotol 3.797 4.195 5.241 4.572 4.606 4.634 4.683 4.533 E3   9.85
13)  2-Amino-4,6-Dinit 5.591 4.051 6.113 5.405 5.388 5.449 5.549 5.364 E3  11.74
14)  4-Amino-2,6-Dinit 4.328 4.594 6.000 5.208 5.287 5.370 5.487 5.182 E3  10.82
15)S 3,4-Dinitrotoluen 4.756 5.015 5.428 4.321 4.394 4.465 4.624 4.715 E3   8.35
16)  2,4-Dinitrotoluen 2.567 3.016 3.002 2.767 2.947 3.113 3.260 2.953 E3   7.70
17)  2,6-Dinitrotoluen 2.596 3.517 3.074 3.493 3.663 3.691 3.868 3.415 E3  12.80
18)  o-Nitrotoluene    2.982 3.433 3.803 3.387 3.104 3.071 3.149 3.276 E3   8.71
19)  p-Nitrotoluene    2.104 3.372 3.768 3.429 3.167 3.116 3.166 3.160 E3  16.37
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 3146.83363 *A + 0.00734 *A^2

20)  m-Nitrotoluene    3.211 4.166 4.659 4.114 3.971 3.990 4.055 4.024 E3  10.63
21)  PETN              1.516 1.363 1.415 1.322 1.380 1.356 1.369 1.389 E3   4.51
-------------------------------------------------------------------------------
(#) = Out of Range

          8330B_0419PLUS.M        Mon Apr 23 08:16:33 2018
```

Initial Calibration Verification

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GBB1722-ICV1722
Lab FileID: BB059471.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	446.785	10.6	91	0.00	1.01- 1.61
2	HMX	500.000	476.953	4.6	95	0.00	1.14- 1.74
3	DNX	500.000	416.669	16.7	90	0.00	1.36- 1.96
4	MNX	500.000	416.410	16.7	87	0.00	1.89- 2.49
5	RDX	500.000	405.824	18.8	88	0.00	2.36- 3.16
6	1,3,5-Trinitrobenzene	500.000	440.520	11.9	93	0.00	4.01- 4.81
7	1,3-Dinitrobenzene	500.000	414.651	17.1	86	0.00	5.18- 5.98
8	3,5-Dinitroaniline	500.000	449.315	10.1	95	0.00	5.48- 6.28
9	Nitrobenzene	500.000	428.399	14.3	93	0.00	6.69- 7.49
10	Nitroglycerin		----------NA----------				
	----------	Amount	Calc.	%Drift			
11	Tetryl	500.000	447.453	10.5	89	-0.01	8.30- 9.10
	----------	Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	500.000	366.508	26.7#	80	-0.01	8.72- 9.52
13	2-Amino-4,6-Dinitrotol	500.000	436.189	12.8	92	-0.01	9.02- 9.82
	----------	Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	500.000	475.168	5.0	93	0.00	9.45-10.25
	----------	Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	419.899	16.0	88	-0.01	10.57-11.37
17	2,6-Dinitrotoluene	500.000	409.093	18.2	88	0.00	11.01-11.81
18	o-Nitrotoluene	500.000	416.479	16.7	91	-0.01	14.30-15.17
19	p-Nitrotoluene	500.000	410.091	18.0	87	-0.01	14.75-15.75
20	m-Nitrotoluene	500.000	436.986	12.6	92	-0.01	15.73-16.73
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	442.711	11.5	90	0.00	1.01- 1.61
	----------	Amount	Calc.	%Drift			
2	HMX	500.000	502.668	-0.5	102	0.00	1.14- 1.74
3	DNX	500.000	466.541	6.7	96	0.00	1.36- 1.96
	----------	Amount	Calc.	%Drift			
4	MNX	500.000	435.357	12.9	89	0.00	1.89- 2.49
5	RDX	500.000	435.262	12.9	92	0.00	2.36- 3.16

Job Number: FA53801 **Sample:** GBB1722-ICV1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059471.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	500.000	440.109	12.0	92	0.00	4.01- 4.81
7	1,3-Dinitrobenzene	500.000	423.626	15.3	89	0.00	5.18- 5.98
8	3,5-Dinitroaniline	500.000	486.621	2.7	96	0.00	5.48- 6.28
9	Nitrobenzene	500.000	439.568	12.1	93	0.00	6.69- 7.49
10	Nitroglycerin	2500.000	2349.932	6.0	99	0.00	7.88- 8.88
11	Tetryl	500.000	431.996	13.6	88	-0.01	8.29- 9.09
12	2,4,6-Trinitrotoluene	500.000	430.591	13.9	85	0.00	8.72- 9.52
13	2-Amino-4,6-Dinitrotol	500.000	475.149	5.0	95	0.00	9.03- 9.83
14	4-Amino-2,6-Dinitrotol	500.000	500.329	-0.1	98	-0.01	9.46-10.26
15 S	3,4-Dinitrotoluene			----------NA----------			
16	2,4-Dinitrotoluene	500.000	458.258	8.3	92	0.00	10.56-11.36
17	2,6-Dinitrotoluene	500.000	501.832	-0.4	94	0.00	11.01-11.81
18	o-Nitrotoluene	500.000	443.790	11.2	94	-0.02	14.17-15.17
	----------	Amount	Calc.	%Drift			----------
19	p-Nitrotoluene	500.000	458.274	8.3	91	0.00	14.75-15.75
	----------	Amount	Calc.	%Drift			----------
20	m-Nitrotoluene	500.000	474.905	5.0	96	-0.02	15.73-16.73
21	PETN	2500.000	2504.495	-0.2	101	0.00	17.83-19.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059468.D 8330B_0419PLUS.M Mon Apr 23 08:16:21 2018

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059692.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	928.405	7.2	95	-0.01	0.98- 1.58
2	HMX	1000.000	937.259	6.3	92	-0.02	1.08- 1.68
3	DNX	1000.000	928.793	7.1	100	-0.01	1.31- 1.91
4	MNX	1000.000	924.834	7.5	98	-0.01	1.82- 2.42
5	RDX	1000.000	881.402	11.9	97	-0.01	2.26- 3.06
6	1,3,5-Trinitrobenzene	1000.000	930.637	6.9	97	-0.02	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	917.407	8.3	96	-0.02	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	930.257	7.0	99	-0.02	5.26- 6.06
9	Nitrobenzene	1000.000	874.103	12.6	98	-0.02	6.50- 7.30
10	Nitroglycerin	----------NA----------					
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	856.915	14.3	87	-0.02	7.96- 8.76
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	791.451	20.9#	89	-0.03	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	966.508	3.3	104	-0.03	8.60- 9.40
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	977.853	2.2	100	-0.02	9.04- 9.84
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	899.911	10.0	98	-0.03	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	915.887	8.4	100	-0.02	10.14-10.94
17	2,6-Dinitrotoluene	1000.000	849.480	15.1	100	-0.02	10.58-11.38
18	o-Nitrotoluene	1000.000	880.743	11.9	97	-0.02	13.87-14.75
19	p-Nitrotoluene	1000.000	924.177	7.6	98	-0.02	14.31-15.31
20	m-Nitrotoluene	1000.000	935.141	6.5	97	-0.02	15.30-16.30
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	934.030	6.6	92	-0.01	0.98- 1.58
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1026.979	-2.7	102	-0.01	1.09- 1.69
3	DNX	1000.000	971.248	2.9	97	-0.01	1.31- 1.91
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	962.912	3.7	98	-0.01	1.82- 2.42
5	RDX	1000.000	916.892	8.3	98	-0.01	2.26- 3.06

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059692.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	1000.000	951.711	4.8	98	-0.02	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	884.223	11.6	92	-0.02	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	996.050	0.4	98	-0.02	5.26- 6.06
9	Nitrobenzene	1000.000	910.016	9.0	98	-0.02	6.50- 7.30
10	Nitroglycerin	5000.000	4321.991	13.6	91	-0.03	7.67- 8.67
11	Tetryl	1000.000	834.238	16.6	85	-0.05	7.90- 8.70
12	2,4,6-Trinitrotoluene	1000.000	811.396	18.9	79	-0.03	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	1128.397	-12.8	111	-0.03	8.60- 9.40
14	4-Amino-2,6-Dinitrotol	1000.000	1022.195	-2.2	99	-0.02	9.04- 9.84
15 S	3,4-Dinitrotoluene	1000.000	925.760	7.4	98	-0.03	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	1062.363	-6.2	101	-0.02	10.15-10.95
17	2,6-Dinitrotoluene	1000.000	1086.204	-8.6	100	-0.02	10.58-11.38
18	o-Nitrotoluene	1000.000	916.364	8.4	98	-0.01	13.75-14.75

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	1000.000	977.994	2.2	99	-0.01	14.31-15.31

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	967.547	3.2	98	-0.02	15.30-16.30
21	PETN	5000.000	4791.624	4.2	98	-0.02	17.63-18.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Fri May 11 08:38:53 2018

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059703.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	907.172	9.3	93	0.00	0.98- 1.58
2	HMX	1000.000	1007.241	-0.7	99	0.00	1.08- 1.68
3	DNX	1000.000	934.151	6.6	101	-0.01	1.31- 1.91
4	MNX	1000.000	924.600	7.5	98	-0.01	1.82- 2.42
5	RDX	1000.000	871.013	12.9	96	-0.01	2.26- 3.06
6	1,3,5-Trinitrobenzene	1000.000	932.281	6.8	97	-0.02	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	927.106	7.3	97	-0.01	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	945.883	5.4	100	0.00	5.26- 6.06
9	Nitrobenzene	1000.000	882.583	11.7	99	0.00	6.50- 7.30
10	Nitroglycerin	----------NA----------					
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	860.820	13.9	87	0.00	7.96- 8.76
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	803.638	19.6	91	-0.02	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	953.028	4.7	102	0.01	8.60- 9.40
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	976.817	2.3	100	0.00	9.04- 9.84
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	900.738	9.9	98	0.00	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	919.993	8.0	100	0.00	10.14-10.94
17	2,6-Dinitrotoluene	1000.000	850.875	14.9	100	0.00	10.58-11.38
18	o-Nitrotoluene	1000.000	832.586	16.7	92	0.02	13.87-14.75
19	p-Nitrotoluene	1000.000	888.187	11.2	94	0.02	14.31-15.31
20	m-Nitrotoluene	1000.000	896.224	10.4	93	0.01	15.30-16.30
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	885.101	11.5	88	0.00	0.98- 1.58
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	966.054	3.4	96	-0.01	1.09- 1.69
3	DNX	1000.000	1001.176	-0.1	100	-0.01	1.31- 1.91
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	960.661	3.9	98	-0.01	1.82- 2.42
5	RDX	1000.000	912.597	8.7	97	-0.01	2.26- 3.06

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059703.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	1000.000	947.941	5.2	98	-0.02	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	899.961	10.0	94	0.00	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	985.034	1.5	97	0.00	5.26- 6.06
9	Nitrobenzene	1000.000	936.618	6.3	100	0.00	6.50- 7.30
10	Nitroglycerin	5000.000	4843.488	3.1	102	-0.02	7.67- 8.67
11	Tetryl	1000.000	765.009	23.5#	78	0.01	7.90- 8.70
12	2,4,6-Trinitrotoluene	1000.000	890.604	10.9	87	-0.03	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	1064.909	-6.5	105	0.01	8.60- 9.40
14	4-Amino-2,6-Dinitrotol	1000.000	1015.208	-1.5	98	0.01	9.04- 9.84
15 S	3,4-Dinitrotoluene	1000.000	928.034	7.2	98	0.00	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	1057.337	-5.7	100	0.00	10.15-10.95
17	2,6-Dinitrotoluene	1000.000	1078.103	-7.8	100	0.00	10.58-11.38
18	o-Nitrotoluene	1000.000	906.901	9.3	97	0.02	13.75-14.75

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	1000.000	985.181	1.5	100	0.02	14.31-15.31

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	951.892	4.8	96	0.02	15.30-16.30
21	PETN	5000.000	4743.345	5.1	97	-0.02	17.63-18.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Fri May 11 08:38:54 2018

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059715.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	941.331	5.9	96	0.00	0.98- 1.58
2	HMX	1000.000	1003.479	-0.3	99	0.00	1.08- 1.68
3	DNX	1000.000	907.012	9.3	98	-0.01	1.31- 1.91
4	MNX	1000.000	926.325	7.4	98	-0.01	1.82- 2.42
5	RDX	1000.000	882.125	11.8	97	-0.01	2.26- 3.06
6	1,3,5-Trinitrobenzene	1000.000	932.979	6.7	98	-0.03	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	915.978	8.4	96	-0.03	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	909.906	9.0	96	-0.03	5.26- 6.06
9	Nitrobenzene	1000.000	879.744	12.0	99	-0.03	6.50- 7.30
10	Nitroglycerin	----------	NA	----------			
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	862.722	13.7	87	-0.05	7.96- 8.76
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	788.756	21.1#	89	-0.07	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	960.835	3.9	103	-0.05	8.60- 9.40
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	981.186	1.9	100	-0.05	9.04- 9.84
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	902.794	9.7	98	-0.07	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	910.179	9.0	99	-0.06	10.14-10.94
17	2,6-Dinitrotoluene	1000.000	861.575	13.8	101	-0.07	10.58-11.38
18	o-Nitrotoluene	1000.000	841.922	15.8	93	-0.06	13.87-14.75
19	p-Nitrotoluene	1000.000	890.011	11.0	94	-0.06	14.31-15.31
20	m-Nitrotoluene	1000.000	917.702	8.2	95	-0.06	15.30-16.30
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	905.458	9.5	90	0.00	0.98- 1.58
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1052.941	-5.3	105	-0.01	1.09- 1.69
3	DNX	1000.000	984.670	1.5	98	-0.01	1.31- 1.91
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	957.044	4.3	97	-0.01	1.82- 2.42
5	RDX	1000.000	912.514	8.7	97	-0.01	2.26- 3.06

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GBB1730-CC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059715.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	1000.000	941.405	5.9	97	-0.03	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	904.159	9.6	94	-0.03	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	996.592	0.3	98	-0.03	5.26- 6.06
9	Nitrobenzene	1000.000	916.241	8.4	98	-0.03	6.50- 7.30
10	Nitroglycerin	5000.000	4229.032	15.4	89	-0.06	7.67- 8.67
11	Tetryl	1000.000	740.782	25.9#	76	-0.06	7.90- 8.70
12	2,4,6-Trinitrotoluene	1000.000	877.790	12.2	86	-0.07	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	1063.387	-6.3	105	-0.05	8.60- 9.40
14	4-Amino-2,6-Dinitrotol	1000.000	1021.800	-2.2	99	-0.05	9.04- 9.84
15 S	3,4-Dinitrotoluene	1000.000	925.372	7.5	98	-0.06	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	1061.779	-6.2	101	-0.07	10.15-10.95
17	2,6-Dinitrotoluene	1000.000	1088.786	-8.9	101	-0.07	10.58-11.38
18	o-Nitrotoluene	1000.000	940.505	5.9	100	-0.06	13.75-14.75
	----------	Amount	Calc.	%Drift	----------		
19	p-Nitrotoluene	1000.000	993.196	0.7	101	-0.06	14.31-15.31
	----------	Amount	Calc.	%Drift	----------		
20	m-Nitrotoluene	1000.000	974.542	2.5	98	-0.06	15.30-16.30
21	PETN	5000.000	4750.400	5.0	97	-0.06	17.63-18.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Fri May 11 10:39:58 2018

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GBB1730-ECC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059727.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	951.063	4.9	97	-0.01	0.98- 1.58
2	HMX	1000.000	1033.784	-3.4	102	0.00	1.08- 1.68
3	DNX	1000.000	927.993	7.2	100	-0.01	1.31- 1.91
4	MNX	1000.000	921.792	7.8	97	-0.02	1.82- 2.42
5	RDX	1000.000	881.607	11.8	97	-0.02	2.26- 3.06
6	1,3,5-Trinitrobenzene	1000.000	930.312	7.0	97	-0.04	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	917.873	8.2	96	-0.04	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	943.060	5.7	100	-0.04	5.26- 6.06
9	Nitrobenzene	1000.000	868.417	13.2	98	-0.03	6.50- 7.30
10	Nitroglycerin	----------NA----------					
	----------	Amount	Calc.	%Drift	----------		
11	Tetryl	1000.000	849.031	15.1	86	-0.07	7.96- 8.76
	----------	Amount	Calc.	%Drift	----------		
12	2,4,6-Trinitrotoluene	1000.000	777.749	22.2#	88	-0.07	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	971.278	2.9	104	-0.07	8.60- 9.40
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	974.454	2.6	99	-0.07	9.04- 9.84
	----------	Amount	Calc.	%Drift	----------		
15 S	3,4-Dinitrotoluene	1000.000	898.069	10.2	98	-0.08	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	909.517	9.0	99	-0.08	10.14-10.94
17	2,6-Dinitrotoluene	1000.000	866.926	13.3	102	-0.08	10.58-11.38
18	o-Nitrotoluene	1000.000	841.705	15.8	93	-0.06	13.87-14.75
19	p-Nitrotoluene	1000.000	886.980	11.3	94	-0.06	14.31-15.31
20	m-Nitrotoluene	1000.000	896.345	10.4	93	-0.06	15.30-16.30
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	872.268	12.8	86	-0.01	0.98- 1.58
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1030.252	-3.0	103	-0.01	1.09- 1.69
3	DNX	1000.000	992.984	0.7	99	-0.02	1.31- 1.91
	----------	Amount	Calc.	%Drift	----------		
4	MNX	1000.000	951.954	4.8	97	-0.02	1.82- 2.42
5	RDX	1000.000	900.798	9.9	96	-0.02	2.26- 3.06

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GBB1730-ECC1722
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059727.D
Project: Ft Ord; CA

6	1,3,5-Trinitrobenzene	1000.000	942.667	5.7	97	-0.04	3.87- 4.67
7	1,3-Dinitrobenzene	1000.000	892.902	10.7	93	-0.04	5.01- 5.81
8	3,5-Dinitroaniline	1000.000	990.503	0.9	98	-0.04	5.26- 6.06
9	Nitrobenzene	1000.000	922.050	7.8	99	-0.03	6.50- 7.30
10	Nitroglycerin	5000.000	4490.068	10.2	95	-0.06	7.67- 8.67
11	Tetryl	1000.000	786.953	21.3#	80	-0.08	7.90- 8.70
12	2,4,6-Trinitrotoluene	1000.000	838.146	16.2	82	-0.07	8.42- 9.22
13	2-Amino-4,6-Dinitrotol	1000.000	1097.992	-9.8	108	-0.07	8.60- 9.40
14	4-Amino-2,6-Dinitrotol	1000.000	1018.692	-1.9	98	-0.07	9.04- 9.84
15 S	3,4-Dinitrotoluene	1000.000	919.068	8.1	97	-0.08	9.52-10.32
16	2,4-Dinitrotoluene	1000.000	1069.334	-6.9	101	-0.08	10.15-10.95
17	2,6-Dinitrotoluene	1000.000	1074.287	-7.4	99	-0.08	10.58-11.38
18	o-Nitrotoluene	1000.000	902.671	9.7	96	-0.05	13.75-14.75

		Amount	Calc.	%Drift			
19	p-Nitrotoluene	1000.000	971.062	2.9	98	-0.07	14.31-15.31

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	943.195	5.7	95	-0.06	15.30-16.30
21	PETN	5000.000	4753.087	4.9	97	-0.05	17.63-18.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059469.D 8330B_0419PLUS.M Mon May 14 10:53:11 2018

Initial Calibration Summary

Job Number: FA53801 **Sample:** GGG2571-ICC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613830.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration

Calibration Files
20 =GG613826.D 50 =GG613827.D 100 =GG613828.D 200 =GG613829.D
500 =GG613830.D 1000=GG613831.D 2000=GG613832.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	1.352	1.377	1.510	1.459	1.436	1.410	1.414	1.423	E4	3.67
2)	HMX	3.057	3.298	3.764	3.284	3.135	3.075	3.080	3.242	E3	7.74
3)	DNX	7.579	7.967	8.251	7.597	7.678	7.556	7.556	7.741	E3	3.46
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.012	7.160	7.024	E3	2.87
5)	1,3,5-Trinitroben	1.042	1.032	1.066	1.053	1.015	1.014	1.032	1.036	E4	1.85
6)	RDX	4.655	4.741	4.946	4.851	4.693	4.693	4.771	4.764	E3	2.15
7)	1,3-Dinitrobenzen	1.581	1.387	1.454	1.448	1.378	1.372	1.396	1.431	E4	5.16
8)	Nitrobenzene	1.168	0.878	0.954	0.925	0.890	0.891	0.899	0.944	E4	10.84
9)	2,4,6-Trinitrotol	1.271	0.986	1.002	0.994	0.945	0.938	0.957	1.013	E4	11.49
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	9.406	8.156	8.448	7.884	7.567	7.535	7.730	8.104	E3	8.15
12)S	3,4-Dinitrotoluen	4.934	5.176	5.394	5.317	5.132	5.134	5.275	5.195	E3	2.91
13)	2,6-Dinitrotoluen	7.042	7.189	7.341	7.323	7.011	6.992	7.150	7.150	E3	2.01
14)	2,4-Dinitrotoluen	1.375	1.321	1.340	1.317	1.268	1.264	1.292	1.311	E4	3.05
15)	o-Nitrotoluene	6.003	5.683	5.997	5.756	5.616	5.638	5.743	5.777	E3	2.78
16)	3,5-Dinitroanilin	1.439	1.084	1.075	1.031	0.980	0.977	0.999	1.084	E4	14.99

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999
Response Ratio = 0.00000 + 9713.03096 *A + 0.13365 *A^2

17)	p-Nitrotoluene	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
18)	4-Amino-2,6-Dinit	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
19)	m-Nitrotoluene	5.287	5.715	6.137	6.029	5.964	6.024	6.111	5.895	E3	5.12
20)	2-Amino-4,6-Dinit	8.442	8.820	9.024	9.262	9.082	9.162	9.369	9.023	E3	3.44
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	1.343	1.386	1.510	1.459	1.436	1.410	1.414	1.422	E4	3.75
2)	HMX	3.279	2.935	3.764	3.284	3.135	3.075	3.080	3.222	E3	8.34
3)	DNX	8.457	7.331	8.251	7.597	7.678	7.556	7.556	7.775	E3	5.32
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.021	7.190	7.029	E3	2.92
5)	1,3,5-Trinitroben	1.042	1.030	1.063	1.050	1.015	1.016	1.037	1.036	E4	1.68
6)	RDX	4.655	4.670	4.823	4.763	4.696	4.737	4.857	4.743	E3	1.61
7)	1,3-Dinitrobenzen	0.880	0.862	1.273	1.143	1.344	1.204	1.104	1.116	E4	16.58

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993
Response Ratio = 0.00000 + 13276.14205 *A + -1.11873 *A^2

8)	Nitrobenzene	0.924	0.888	0.901	0.870	1.044	0.976	0.880	0.926	E4	6.79
9)	2,4,6-Trinitrotol	1.089	1.237	1.458	1.298	1.440	1.347	1.310	1.311	E4	9.57
10)	Nitroglycerin	2.684	3.204	3.404	3.401	3.722	3.603	3.570	3.370	E3	10.27
11)	Tetryl	2.495	1.493	1.140	1.333	1.452	1.389	1.373	1.525	E4	29.01

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 14197.55319 *A + -0.23730 *A^2

12)S	3,4-Dinitrotoluen	1.259	1.015	1.021	1.090	1.061	1.056	1.070	1.082	E4	7.62
13)	2,6-Dinitrotoluen	0.875	1.106	0.996	1.038	1.024	1.022	1.041	1.015	E4	6.93
14)	2,4-Dinitrotoluen	2.450	1.728	1.231	1.056	0.977	0.913	0.920	1.325	E4	43.18

Job Number: FA53801 **Sample:** GGG2571-ICC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613830.D
Project: Ft Ord; CA

```
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 9621.10583 *A + -0.22476 *A^2

 15)  o-Nitrotoluene    8.554 9.270 8.481 8.837 8.240 8.443 8.540 8.624 E3   3.89
 16)  3,5-Dinitroanilin 2.378 1.717 1.751 1.723 1.603 1.631 1.657 1.780 E4  15.12
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 16131.47839 *A + 0.21636 *A^2

 17)  p-Nitrotoluene    2.097 1.953 2.158 2.200 2.120 2.137 2.170 2.119 E4   3.81
 18)  4-Amino-2,6-Dinit 2.140 1.953 2.158 2.200 2.120 2.137 2.170 2.125 E4   3.78
 19)  m-Nitrotoluene    1.024 0.732 1.030 1.026 0.980 0.989 1.027 0.972 E4  11.11
 20)  2-Amino-4,6-Dinit 0.592 0.798 1.032 1.130 1.175 1.240 1.304 1.039 E4  24.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 11496.69993 *A + 0.78000 *A^2

 21)  PETN              2.883 2.660 3.060 3.416 3.438 3.469 3.526 3.207 E3  10.60
 ------------------------------------------------------------------------------
 (#) = Out of Range

          8330RPB.M_1113M.M        Tue Nov 14 13:38:28 2017
```

Initial Calibration Verification

Job Number: FA53801 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613833.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	311.255	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	512.341	-2.5	106	-0.01	4.96- 5.96
3	DNX	500.000	481.707	3.7	97	0.00	5.08- 6.08
4	MNX	500.000	498.403	0.3	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.713	1.9	100	0.00	7.04- 8.04
6	RDX	500.000	504.766	-1.0	102	-0.03	7.57- 8.57
7	1,3-Dinitrobenzene	500.000	459.805	8.0	96	-0.01	9.58-10.58
8	Nitrobenzene	500.000	482.574	3.5	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene	500.000	493.369	1.3	101	0.00	14.38-15.38
14	2,4-Dinitrotoluene	500.000	484.298	3.1	100	-0.02	15.12-16.12
15	o-Nitrotoluene	500.000	512.102	-2.4	105	0.00	16.70-17.70
	----------	Amount	Calc.	%Drift			----------
16	3,5-Dinitroaniline	500.000	479.670	4.1	96	-0.07	16.16-17.16
	----------	Amount	Calc.	%Drift			----------
17	p-Nitrotoluene	500.000	491.360	1.7	101	-0.06	17.91-18.91
18	4-Amino-2,6-Dinitrotol	500.000	491.360	1.7	101	-0.06	17.91-18.91
19	m-Nitrotoluene	500.000	546.610	-9.3	108	0.00	19.13-20.13
20	2-Amino-4,6-Dinitrotol	500.000	514.599	-2.9	102	-0.07	20.16-21.16
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	500.000	311.279	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	515.543	-3.1	106	-0.01	4.96- 5.96
3	DNX	500.000	479.565	4.1	97	0.00	5.08- 6.08
4	MNX	500.000	498.000	0.4	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.831	1.8	100	0.00	7.04- 8.04
6	RDX	500.000	507.885	-1.6	103	-0.03	7.57- 8.57
	----------	Amount	Calc.	%Drift			----------
7	1,3-Dinitrobenzene	500.000	525.898	-5.2	99	-0.01	9.57-10.57
	----------	Amount	Calc.	%Drift			----------
8	Nitrobenzene	500.000	577.158	-15.4#	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				

Job Number: FA53801 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613833.D
Project: Ft Ord; CA

10	Nitroglycerin	2500.000	2766.568	-10.7	100	-0.02	12.20-13.20
		Amount	Calc.	%Drift			
11	Tetryl			NA			
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene			NA			
13	2,6-Dinitrotoluene	500.000	540.982	-8.2	107	0.03	14.36-15.36
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	500.000	495.523	0.9	97	-0.02	15.12-16.12
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	500.000	509.800	-2.0	107	0.00	16.70-17.70
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	500.000	484.898	3.0	98	-0.07	16.16-17.16
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	500.000	510.118	-2.0	102	-0.06	17.92-18.92
18	4-Amino-2,6-Dinitrotol	500.000	508.634	-1.7	102	-0.06	17.92-18.92
19	m-Nitrotoluene	500.000	525.201	-5.0	104	-0.01	19.13-20.13
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	500.000	496.742	0.7	100	-0.07	20.16-21.16
		Amount	Calc.	%Drift			
21	PETN	2500.000	2876.898	-15.1#	107	-0.02	21.81-22.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:38:14 2017

6.8.8

Initial Calibration Verification

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICV2571
Lab FileID: GG613834.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX		----------NA----------				
2	HMX		----------NA----------				
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	1,3,5-Trinitrobenzene		----------NA----------				
6	RDX		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	Nitrobenzene		----------NA----------				
9	2,4,6-Trinitrotoluene	500.000	474.847	5.0	102	0.00	11.37-12.37
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	513.472	-2.7	110	0.00	12.78-13.78
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene		----------NA----------				
14	2,4-Dinitrotoluene		----------NA----------				
15	o-Nitrotoluene		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene		----------NA----------				
18	4-Amino-2,6-Dinitrotoluen		----------NA----------				
19	m-Nitrotoluene		----------NA----------				
20	2-Amino-4,6-Dinitrotoluen		----------NA----------				
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX		----------NA----------				
2	HMX		----------NA----------				
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	1,3,5-Trinitrobenzene		----------NA----------				
6	RDX		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene		----------NA----------				
9	2,4,6-Trinitrotoluene	500.000	485.592	2.9	88	0.00	11.37-12.37

Job Number: FA53801 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613834.D
Project: Ft Ord; CA

10	Nitroglycerin		----------NA----------				
		Amount	Calc.	%Drift			
11	Tetryl	500.000	520.034	-4.0	101	0.00	12.78-13.78
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene		----------NA----------				
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene		----------NA----------				
		Amount	Calc.	%Drift			
15	o-Nitrotoluene		----------NA----------				
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline		----------NA----------				
		Amount	Calc.	%Drift			
17	p-Nitrotoluene		----------NA----------				
18	4-Amino-2,6-Dinitrotoluen		----------NA----------				
19	m-Nitrotoluene		----------NA----------				
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotoluen		----------NA----------				
		Amount	Calc.	%Drift			
21	PETN		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:46:22 2017

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614559.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	975.314	2.5	98	0.01	4.48- 5.48
2	HMX	1000.000	1063.869	-6.4	112	0.02	4.88- 5.88
3	DNX	1000.000	1067.834	-6.8	109	0.02	5.05- 6.05
4	MNX	1000.000	1064.522	-6.5	107	0.03	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1001.327	-0.1	102	0.02	6.94- 7.94
6	RDX	1000.000	1064.581	-6.5	108	0.03	7.39- 8.39
7	1,3-Dinitrobenzene	1000.000	1008.816	-0.9	105	0.02	9.42-10.42
8	Nitrobenzene	1000.000	1016.342	-1.6	108	0.02	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	994.771	0.5	107	0.01	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	943.225	5.7	101	0.02	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1117.944	-11.8	113	0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1025.534	-2.6	105	0.02	14.11-15.11
14	2,4-Dinitrotoluene	1000.000	1018.917	-1.9	106	0.02	14.82-15.82
15	o-Nitrotoluene	1000.000	1053.323	-5.3	108	0.02	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1147.194	-14.7	116	0.04	15.75-16.75
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1041.185	-4.1	106	0.05	17.50-18.50
18	4-Amino-2,6-Dinitrotol	1000.000	1041.185	-4.1	106	0.05	17.50-18.50
19	m-Nitrotoluene	1000.000	1089.895	-9.0	107	0.03	18.73-19.73
20	2-Amino-4,6-Dinitrotol	1000.000	1064.430	-6.4	105	0.06	19.66-20.66
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	975.388	2.5	98	0.01	4.48- 5.48
2	HMX	1000.000	1070.517	-7.1	112	0.02	4.88- 5.88
3	DNX	1000.000	1063.084	-6.3	109	0.02	5.05- 6.05
4	MNX	1000.000	1063.662	-6.4	106	0.03	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1001.443	-0.1	102	0.02	6.94- 7.94
6	RDX	1000.000	1065.694	-6.6	107	0.03	7.39- 8.39
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	937.897	6.2	95	0.02	9.42-10.42
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1093.968	-9.4	104	0.02	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1098.099	-9.8	107	0.01	11.16-12.16

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614559.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5395.734	-7.9	101	0.01	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1062.043	-6.2	107	0.02	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1209.610	-21.0#	124	0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1100.117	-10.0	109	0.02	14.10-15.10
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1056.379	-5.6	109	0.02	14.82-15.82
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1019.599	-2.0	104	0.02	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1153.122	-15.3	116	0.04	15.75-16.75
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1048.589	-4.9	104	0.05	17.51-18.51
18	4-Amino-2,6-Dinitrotol	1000.000	1045.540	-4.6	104	0.05	17.51-18.51
19	m-Nitrotoluene	1000.000	1093.677	-9.4	108	0.03	18.73-19.73
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1089.986	-9.0	109	0.06	19.66-20.66
		Amount	Calc.	%Drift			
21	PETN	5000.000	5554.954	-11.1	103	0.03	21.27-22.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 04 09:38:34 2018

6.8.10

6

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2624-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614571.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	955.156	4.5	96	0.00	4.48- 5.48
2	HMX	1000.000	1021.052	-2.1	108	0.00	4.88- 5.88
3	DNX	1000.000	1041.435	-4.1	107	0.00	5.05- 6.05
4	MNX	1000.000	1060.437	-6.0	106	0.00	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	996.571	0.3	102	0.00	6.94- 7.94
6	RDX	1000.000	1058.016	-5.8	107	0.00	7.39- 8.39
7	1,3-Dinitrobenzene	1000.000	1000.504	-0.1	104	0.00	9.42-10.42
8	Nitrobenzene	1000.000	1005.328	-0.5	107	0.00	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	985.850	1.4	106	-0.01	11.16-12.16
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	928.473	7.2	100	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1104.792	-10.5	112	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1024.919	-2.5	105	0.01	14.11-15.11
14	2,4-Dinitrotoluene	1000.000	1017.583	-1.8	106	0.00	14.82-15.82
15	o-Nitrotoluene	1000.000	1053.119	-5.3	108	-0.01	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1143.053	-14.3	115	0.04	15.75-16.75
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1039.108	-3.9	106	0.02	17.50-18.50
18	4-Amino-2,6-Dinitrotol	1000.000	1039.108	-3.9	106	0.02	17.50-18.50
19	m-Nitrotoluene	1000.000	1091.149	-9.1	107	0.00	18.73-19.73
20	2-Amino-4,6-Dinitrotol	1000.000	1063.472	-6.3	105	0.03	19.66-20.66
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	955.229	4.5	96	0.00	4.48- 5.48
2	HMX	1000.000	1027.433	-2.7	108	0.00	4.88- 5.88
3	DNX	1000.000	1036.803	-3.7	107	0.00	5.05- 6.05
4	MNX	1000.000	1059.581	-6.0	106	0.00	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	997.351	0.3	102	0.00	6.94- 7.94
6	RDX	1000.000	1066.727	-6.7	107	0.00	7.39- 8.39
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	954.911	4.5	97	0.00	9.42-10.42
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1074.496	-7.4	102	0.00	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1101.672	-10.2	107	-0.01	11.16-12.16

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2624-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614571.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5375.208	-7.5	101	-0.01	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1028.386	-2.8	103	0.00	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1205.499	-20.5#	123	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1101.971	-10.2	109	0.02	14.10-15.10
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1059.140	-5.9	109	0.00	14.82-15.82
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1022.947	-2.3	104	-0.01	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1151.957	-15.2	116	0.04	15.75-16.75
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1041.232	-4.1	103	0.02	17.51-18.51
18	4-Amino-2,6-Dinitrotol	1000.000	1038.204	-3.8	103	0.02	17.51-18.51
19	m-Nitrotoluene	1000.000	1109.587	-11.0	109	0.00	18.73-19.73
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1092.810	-9.3	109	0.02	19.66-20.66
		Amount	Calc.	%Drift			
21	PETN	5000.000	5534.146	-10.7	102	-0.05	21.27-22.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 04 09:38:35 2018

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2627-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614684.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0510RPB3\GG614684.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614684.D\dad1A.ch
Acq On : 10-May-2018, 19:57:58 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1073.118	-7.3	108	-0.03	4.54- 5.54
2	HMX	1000.000	1148.951	-14.9	121	-0.04	4.96- 5.96
3	DNX	1000.000	1174.775	-17.5	120	-0.04	5.11- 6.11
4	MNX	1000.000	1178.683	-17.9	118	-0.04	6.12- 7.12
5	1,3,5-Trinitrobenzene	1000.000	1094.099	-9.4	112	-0.03	7.01- 8.01
6	RDX	1000.000	1090.962	-9.1	111	-0.05	7.48- 8.48
7	1,3-Dinitrobenzene	1000.000	1099.620	-10.0	115	-0.03	9.49-10.49
8	Nitrobenzene	1000.000	1068.979	-6.9	113	-0.03	10.45-11.45
9	2,4,6-Trinitrotoluene	1000.000	1029.831	-3.0	111	-0.03	11.23-12.23
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	928.454	7.2	100	-0.04	12.51-13.51
12 S	3,4-Dinitrotoluene	1000.000	1280.852	-28.1#	130	-0.03	13.83-14.83
13	2,6-Dinitrotoluene	1000.000	1117.421	-11.7	114	-0.03	14.19-15.19
14	2,4-Dinitrotoluene	1000.000	1114.614	-11.5	116	-0.03	14.90-15.90
15	o-Nitrotoluene	1000.000	1109.038	-10.9	114	-0.03	16.44-17.44
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1254.172	-25.4#	127	-0.05	15.85-16.85
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1133.228	-13.3	115	-0.05	17.61-18.61
18	4-Amino-2,6-Dinitrotol	1000.000	1133.228	-13.3	115	-0.05	17.61-18.61
19	m-Nitrotoluene	1000.000	1152.016	-15.2	113	-0.04	18.83-19.83
20	2-Amino-4,6-Dinitrotol	1000.000	1173.325	-17.3	116	-0.06	19.78-20.78
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	1073.200	-7.3	108	-0.03	4.54- 5.54
2	HMX	1000.000	1156.131	-15.6	121	-0.04	4.96- 5.96
3	DNX	1000.000	1169.550	-17.0	120	-0.04	5.11- 6.11
4	MNX	1000.000	1177.731	-17.8	118	-0.04	6.12- 7.12
5	1,3,5-Trinitrobenzene	1000.000	1094.211	-9.4	112	-0.03	7.01- 8.01
6	RDX	1000.000	1095.798	-9.6	110	-0.05	7.48- 8.48
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	989.072	1.1	100	-0.03	9.49-10.49
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1088.063	-8.8	103	-0.03	10.46-11.46
9	2,4,6-Trinitrotoluene	1000.000	1098.052	-9.8	107	-0.03	11.23-12.23

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2627-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614684.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5694.988	-13.9	107	-0.02	11.97-12.97
11	Tetryl	1000.000	984.543	1.5	99	-0.04	12.50-13.50
12 S	3,4-Dinitrotoluene	1000.000	1321.450	-32.1#	135	-0.03	13.82-14.82
13	2,6-Dinitrotoluene	1000.000	1181.168	-18.1	117	-0.03	14.19-15.19
14	2,4-Dinitrotoluene	1000.000	1173.761	-17.4	120	-0.03	14.90-15.90
15	o-Nitrotoluene	1000.000	1089.075	-8.9	111	-0.02	16.44-17.44
16	3,5-Dinitroaniline	1000.000	1288.922	-28.9#	130	-0.05	15.85-16.85
17	p-Nitrotoluene	1000.000	1150.339	-15.0	114	-0.05	17.61-18.61
18	4-Amino-2,6-Dinitrotol	1000.000	1146.994	-14.7	114	-0.05	17.61-18.61
19	m-Nitrotoluene	1000.000	1146.987	-14.7	113	-0.04	18.83-19.83
20	2-Amino-4,6-Dinitrotol	1000.000	1208.323	-20.8#	121	-0.06	19.78-20.78
21	PETN	5000.000	6120.912	-22.4#	113	-0.03	21.35-22.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 11 10:40:12 2018

6.8.12

6

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2627-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614696.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0510RPB3\GG614696.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614696.D\dad1A.ch
Acq On : 11-May-2018, 01:51:15 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1071.707	-7.2	108	-0.02	4.54- 5.54
2	HMX	1000.000	1141.256	-14.1	120	-0.02	4.96- 5.96
3	DNX	1000.000	1172.469	-17.2	120	-0.03	5.11- 6.11
4	MNX	1000.000	1168.515	-16.9	117	-0.03	6.12- 7.12
5	1,3,5-Trinitrobenzene	1000.000	1082.757	-8.3	111	-0.04	7.01- 8.01
6	RDX	1000.000	1071.369	-7.1	109	-0.04	7.48- 8.48
7	1,3-Dinitrobenzene	1000.000	1095.185	-9.5	114	-0.03	9.49-10.49
8	Nitrobenzene	1000.000	1065.183	-6.5	113	-0.04	10.45-11.45
9	2,4,6-Trinitrotoluene	1000.000	1023.983	-2.4	111	-0.04	11.23-12.23
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	924.504	7.5	99	-0.04	12.51-13.51
12 S	3,4-Dinitrotoluene	1000.000	1275.139	-27.5#	129	-0.05	13.83-14.83
13	2,6-Dinitrotoluene	1000.000	1109.660	-11.0	113	-0.05	14.19-15.19
14	2,4-Dinitrotoluene	1000.000	1106.060	-10.6	115	-0.05	14.90-15.90
15	o-Nitrotoluene	1000.000	1100.910	-10.1	113	-0.05	16.44-17.44
	---------- Amount	Calc.	%Drift	----------			
16	3,5-Dinitroaniline	1000.000	1239.478	-23.9#	125	-0.05	15.85-16.85
	---------- Amount	Calc.	%Drift	----------			
17	p-Nitrotoluene	1000.000	1123.296	-12.3	114	-0.06	17.61-18.61
18	4-Amino-2,6-Dinitrotol	1000.000	1123.296	-12.3	114	-0.06	17.61-18.61
19	m-Nitrotoluene	1000.000	1150.467	-15.0	113	-0.06	18.83-19.83
20	2-Amino-4,6-Dinitrotol	1000.000	1161.896	-16.2	114	-0.06	19.78-20.78
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	1071.789	-7.2	108	-0.02	4.54- 5.54
2	HMX	1000.000	1148.388	-14.8	120	-0.02	4.96- 5.96
3	DNX	1000.000	1167.254	-16.7	120	-0.03	5.11- 6.11
4	MNX	1000.000	1167.572	-16.8	117	-0.03	6.12- 7.12
5	1,3,5-Trinitrobenzene	1000.000	1082.867	-8.3	110	-0.04	7.01- 8.01
6	RDX	1000.000	1076.118	-7.6	108	-0.04	7.48- 8.48
	---------- Amount	Calc.	%Drift	----------			
7	1,3-Dinitrobenzene	1000.000	1005.148	-0.5	101	-0.03	9.49-10.49
	---------- Amount	Calc.	%Drift	----------			
8	Nitrobenzene	1000.000	1122.666	-12.3	107	-0.04	10.46-11.46
9	2,4,6-Trinitrotoluene	1000.000	1115.630	-11.6	109	-0.04	11.23-12.23

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2627-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614696.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5691.391	-13.8	106	-0.04	11.97-12.97
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	990.373	1.0	100	-0.04	12.50-13.50
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1345.807	-34.6#	138	-0.06	13.82-14.82
13	2,6-Dinitrotoluene	1000.000	1186.738	-18.7	118	-0.05	14.19-15.19
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1202.699	-20.3#	123	-0.05	14.90-15.90
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1118.138	-11.8	114	-0.05	16.44-17.44
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1285.833	-28.6#	129	-0.05	15.85-16.85
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1145.078	-14.5	114	-0.06	17.61-18.61
18	4-Amino-2,6-Dinitrotol	1000.000	1141.749	-14.2	114	-0.06	17.61-18.61
19	m-Nitrotoluene	1000.000	1162.441	-16.2	114	-0.07	18.83-19.83
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1205.312	-20.5#	121	-0.06	19.78-20.78
		Amount	Calc.	%Drift			
21	PETN	5000.000	5999.871	-20.0	111	-0.06	21.35-22.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 11 10:40:13 2018

6.8.13

6

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2627-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614706.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0510RPB3\GG614706.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614706.D\dad1A.ch
Acq On : 11-May-2018, 06:45:47 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1063.498	-6.3	107	-0.02	4.54- 5.54
2	HMX	1000.000	1113.057	-11.3	117	-0.01	4.96- 5.96
3	DNX	1000.000	1168.412	-16.8	120	-0.02	5.11- 6.11
4	MNX	1000.000	1162.282	-16.2	116	-0.03	6.12- 7.12
5	1,3,5-Trinitrobenzene	1000.000	1087.959	-8.8	111	-0.04	7.01- 8.01
6	RDX	1000.000	1174.183	-17.4	119	-0.04	7.48- 8.48
7	1,3-Dinitrobenzene	1000.000	1098.782	-9.9	115	-0.02	9.49-10.49
8	Nitrobenzene	1000.000	1063.036	-6.3	113	-0.03	10.45-11.45
9	2,4,6-Trinitrotoluene	1000.000	1021.080	-2.1	110	-0.03	11.23-12.23
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	922.925	7.7	99	-0.03	12.51-13.51
12 S	3,4-Dinitrotoluene	1000.000	1263.634	-26.4#	128	-0.03	13.83-14.83
13	2,6-Dinitrotoluene	1000.000	1124.481	-12.4	115	-0.03	14.19-15.19
14	2,4-Dinitrotoluene	1000.000	1109.126	-10.9	115	-0.03	14.90-15.90
15	o-Nitrotoluene	1000.000	1100.210	-10.0	113	-0.03	16.44-17.44
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1233.722	-23.4#	125	0.00	15.85-16.85
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1112.450	-11.2	113	-0.03	17.61-18.61
18	4-Amino-2,6-Dinitrotol	1000.000	1112.450	-11.2	113	-0.03	17.61-18.61
19	m-Nitrotoluene	1000.000	1132.702	-13.3	111	-0.03	18.83-19.83
20	2-Amino-4,6-Dinitrotol	1000.000	1147.629	-14.8	113	0.00	19.78-20.78
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	1063.579	-6.4	107	-0.02	4.54- 5.54
2	HMX	1000.000	1120.013	-12.0	117	-0.01	4.96- 5.96
3	DNX	1000.000	1163.215	-16.3	120	-0.02	5.11- 6.11
4	MNX	1000.000	1183.662	-18.4	119	-0.03	6.12- 7.12
5	1,3,5-Trinitrobenzene	1000.000	1117.185	-11.7	114	-0.04	7.01- 8.01
6	RDX	1000.000	1325.188	-32.5#	133	-0.04	7.48- 8.48
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	1018.173	-1.8	103	-0.02	9.49-10.49
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1112.967	-11.3	106	-0.03	10.46-11.46
9	2,4,6-Trinitrotoluene	1000.000	1093.844	-9.4	106	-0.03	11.23-12.23

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2627-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614706.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5693.270	-13.9	106	-0.03	11.97-12.97
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	972.032	2.8	98	-0.03	12.50-13.50
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1321.826	-32.2#	135	-0.03	13.82-14.82
13	2,6-Dinitrotoluene	1000.000	1198.769	-19.9	119	-0.03	14.19-15.19
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1186.314	-18.6	122	-0.03	14.90-15.90
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1158.220	-15.8	118	-0.03	16.44-17.44
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1289.931	-29.0#	130	0.00	15.85-16.85
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1123.366	-12.3	111	-0.03	17.61-18.61
18	4-Amino-2,6-Dinitrotol	1000.000	1120.099	-12.0	111	-0.03	17.61-18.61
19	m-Nitrotoluene	1000.000	1144.605	-14.5	113	-0.03	18.83-19.83
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1159.458	-15.9	116	0.00	19.78-20.78
		Amount	Calc.	%Drift			
21	PETN	5000.000	5913.964	-18.3	109	-0.03	21.35-22.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 11 10:40:14 2018

6.8.14

6

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2627-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614711.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0510RPB3\GG614711.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614711.D\dad1A.ch
Acq On : 11-May-2018, 10:10:56 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	982.017	1.8	99	0.00	4.54- 5.54
2	HMX	1000.000	1020.172	-2.0	108	0.00	4.96- 5.96
3	DNX	1000.000	1071.376	-7.1	110	0.00	5.11- 6.11
4	MNX	1000.000	1071.024	-7.1	107	0.00	6.12- 7.12
5	1,3,5-Trinitrobenzene	1000.000	1001.541	-0.2	102	-0.01	7.01- 8.01
6	RDX	1000.000	1037.962	-3.8	105	0.00	7.48- 8.48
7	1,3-Dinitrobenzene	1000.000	1004.015	-0.4	105	0.00	9.49-10.49
8	Nitrobenzene	1000.000	989.417	1.1	105	0.00	10.45-11.45
9	2,4,6-Trinitrotoluene	1000.000	923.068	7.7	100	0.00	11.23-12.23
10	Nitroglycerin	----------NA----------					
11	Tetryl	1000.000	820.655	17.9	88	0.03	12.51-13.51
12 S	3,4-Dinitrotoluene	1000.000	1144.800	-14.5	116	0.03	13.83-14.83
13	2,6-Dinitrotoluene	1000.000	1034.597	-3.5	106	0.02	14.19-15.19
14	2,4-Dinitrotoluene	1000.000	1012.026	-1.2	105	0.02	14.90-15.90
15	o-Nitrotoluene	1000.000	1036.153	-3.6	106	0.02	16.44-17.44
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1128.019	-12.8	114	0.04	15.85-16.85
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1032.193	-3.2	105	0.02	17.61-18.61
18	4-Amino-2,6-Dinitrotol	1000.000	1032.193	-3.2	105	0.02	17.61-18.61
19	m-Nitrotoluene	1000.000	1085.362	-8.5	106	0.00	18.83-19.83
20	2-Amino-4,6-Dinitrotol	1000.000	1059.661	-6.0	104	0.04	19.78-20.78
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	982.092	1.8	99	0.00	4.54- 5.54
2	HMX	1000.000	1026.548	-2.7	108	0.00	4.96- 5.96
3	DNX	1000.000	1066.611	-6.7	110	0.00	5.11- 6.11
4	MNX	1000.000	1070.160	-7.0	107	0.00	6.12- 7.12
5	1,3,5-Trinitrobenzene	1000.000	1001.434	-0.1	102	-0.01	7.01- 8.01
6	RDX	1000.000	1040.173	-4.0	104	0.00	7.48- 8.48
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	942.213	5.8	96	0.00	9.49-10.49
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1037.552	-3.8	98	0.00	10.46-11.46
9	2,4,6-Trinitrotoluene	1000.000	994.110	0.6	97	0.00	11.23-12.23

Continuing Calibration Summary

Job Number: FA53801 **Sample:** GGG2627-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614711.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5155.365	-3.1	96	0.02	11.97-12.97
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	886.122	11.4	89	0.03	12.50-13.50
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1186.210	-18.6	121	0.03	13.82-14.82
13	2,6-Dinitrotoluene	1000.000	1080.307	-8.0	107	0.02	14.19-15.19
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1070.851	-7.1	110	0.02	14.90-15.90
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1038.134	-3.8	106	0.02	16.44-17.44
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1156.224	-15.6	116	0.04	15.85-16.85
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1041.753	-4.2	103	0.03	17.61-18.61
18	4-Amino-2,6-Dinitrotol	1000.000	1038.724	-3.9	103	0.03	17.61-18.61
19	m-Nitrotoluene	1000.000	1110.123	-11.0	109	0.00	18.83-19.83
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1080.980	-8.1	108	0.04	19.78-20.78
		Amount	Calc.	%Drift			
21	PETN	5000.000	5595.603	-11.9	103	0.00	21.35-22.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 11 10:44:50 2018

6.8.15

6

GC/LC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059702.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059702.D\dad1A.ch
Acq On : 11-May-2018, 02:28:31 Operator: evitam
Sample : fa53801-1 Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:20 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.89	9.89	953682	1636477	356.423	347.097
	Spiked Amount 500.000	Range 69 - 134		Recovery =		71.28%	69.42%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D.	N.D.
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

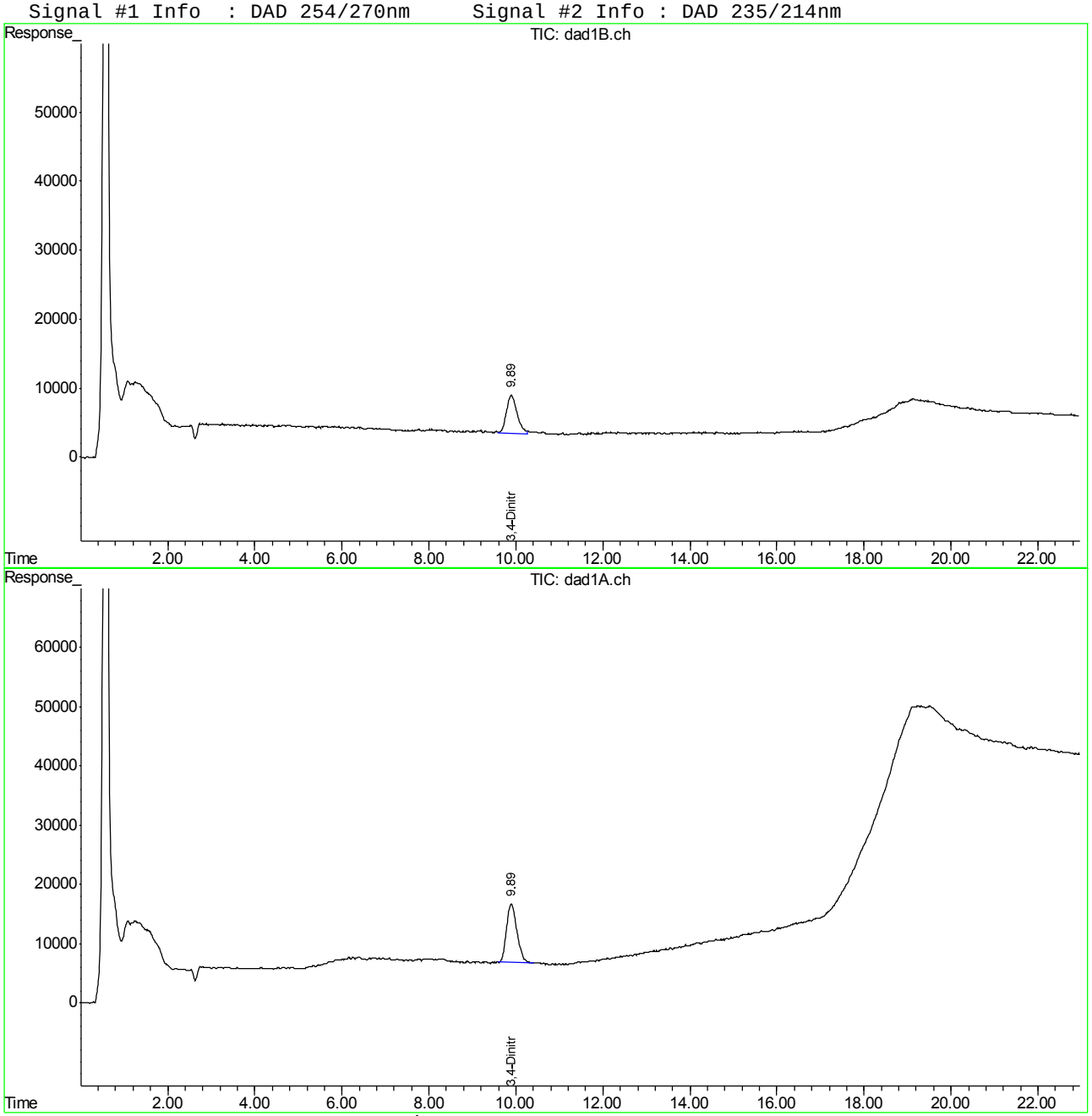
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059702.D 8330B_0419PLUS.M Fri May 11 08:38:15 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059702.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059702.D\dad1A.ch
Acq On : 11-May-2018, 02:28:31 Operator: evitam
Sample : fa53801-1 Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:31 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059707.D\dad1B.ch Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059707.D\dad1A.ch
Acq On : 11-May-2018, 04:58:23 Operator: evitam
Sample : fa53801-2 Inst : G1315B
Misc : OP69973,gbb1730,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:25 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.84	9.84	1022109	1772400	381.997	375.926
	Spiked Amount 500.000	Range 69 - 134		Recovery =		76.40%	75.19%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

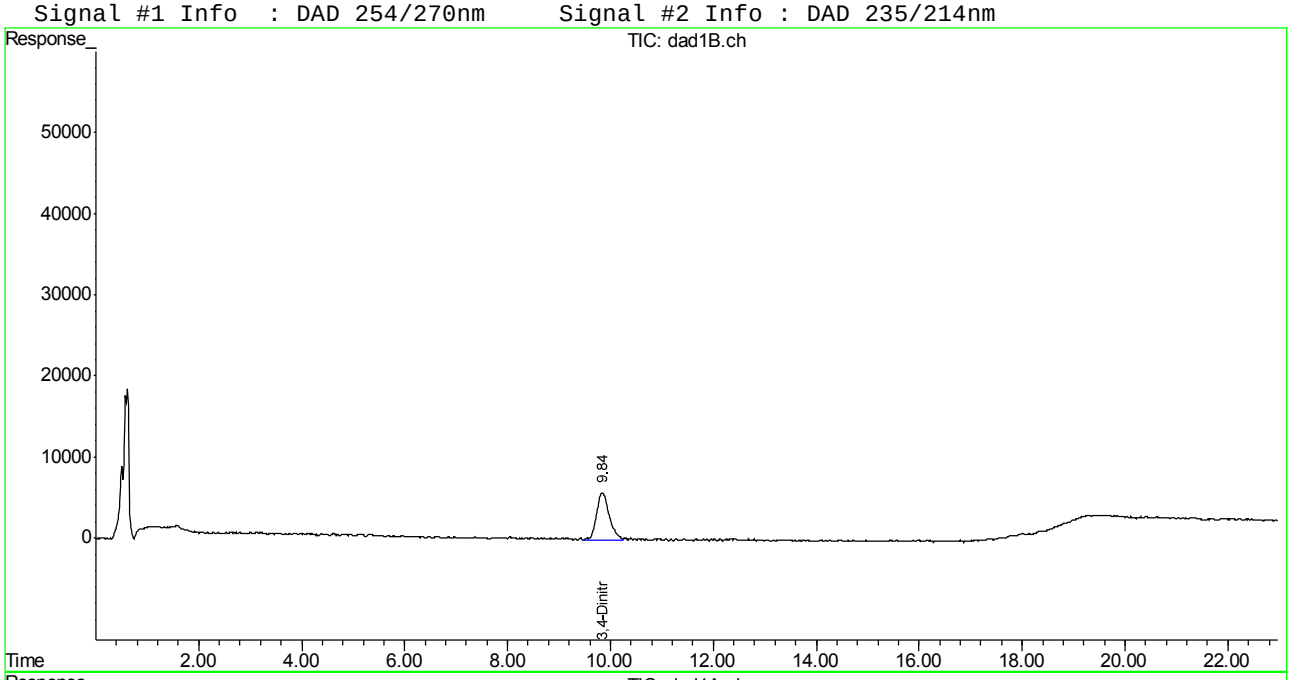
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059707.D 8330B_0419PLUS.M Fri May 11 08:38:19 2018 Page 1

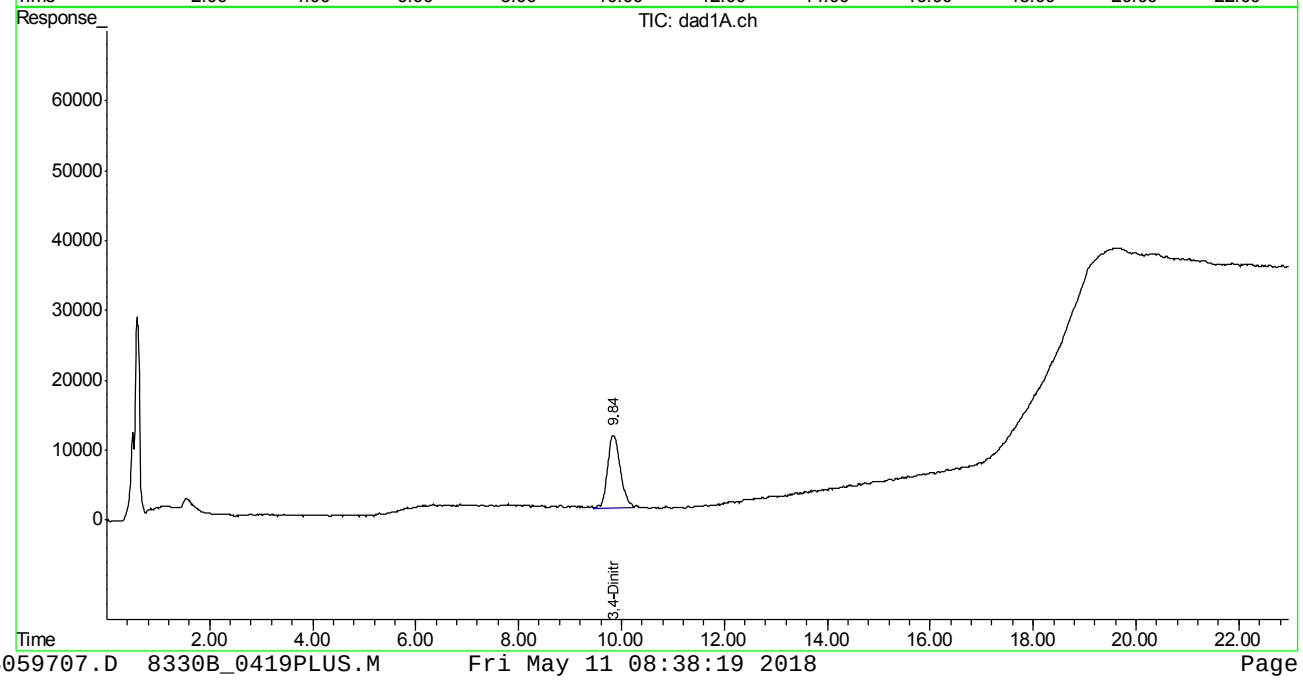
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059707.D\dad1B.ch Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059707.D\dad1A.ch
Acq On : 11-May-2018, 04:58:23 Operator: evitam
Sample : fa53801-2 Inst : G1315B
Misc : OP69973,gbb1730,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:35 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059708.D\dad1B.ch Vial: 34
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059708.D\dad1A.ch
Acq On : 11-May-2018, 05:28:20 Operator: evitam
Sample : fa53801-3 Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:26 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.85	9.85	1039677	1866685	388.562	395.924
	Spiked Amount 500.000	Range 69 - 134		Recovery =		77.71%	79.18%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

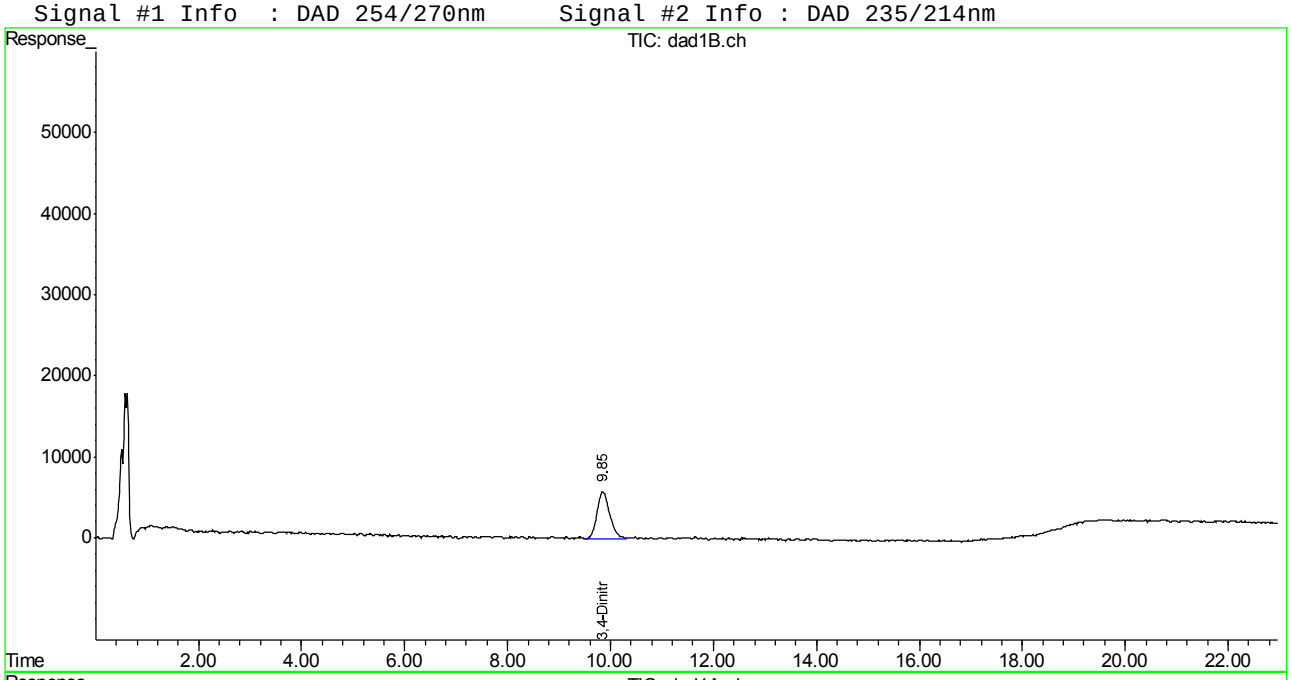
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059708.D 8330B_0419PLUS.M Fri May 11 08:38:20 2018

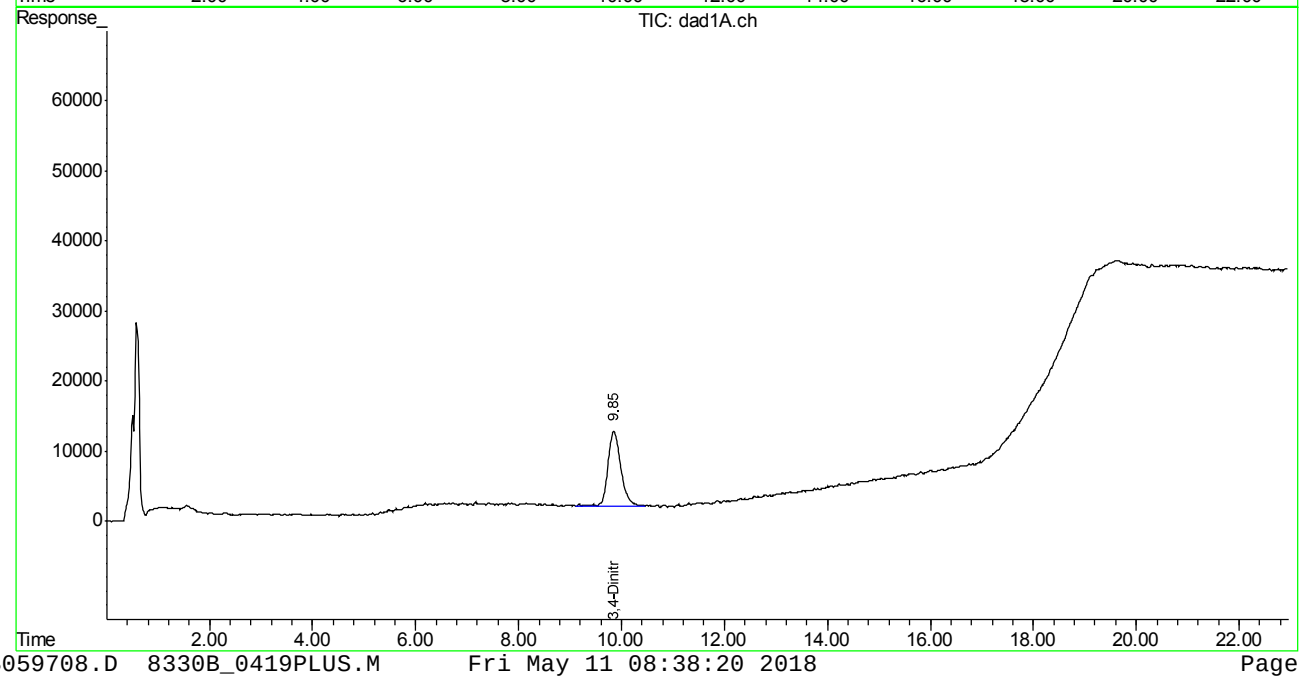
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059708.D\dad1B.ch Vial: 34
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059708.D\dad1A.ch
Acq On : 11-May-2018, 05:28:20 Operator: evitam
Sample : fa53801-3 Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:35 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059709.D\dad1B.ch Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059709.D\dad1A.ch
Acq On : 11-May-2018, 05:58:17 Operator: evitam
Sample : fa53801-4 Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:27 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.85	9.85	910166	1657066	340.160	351.464
	Spiked Amount 500.000	Range 69 - 134		Recovery =		68.03%#	70.29%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

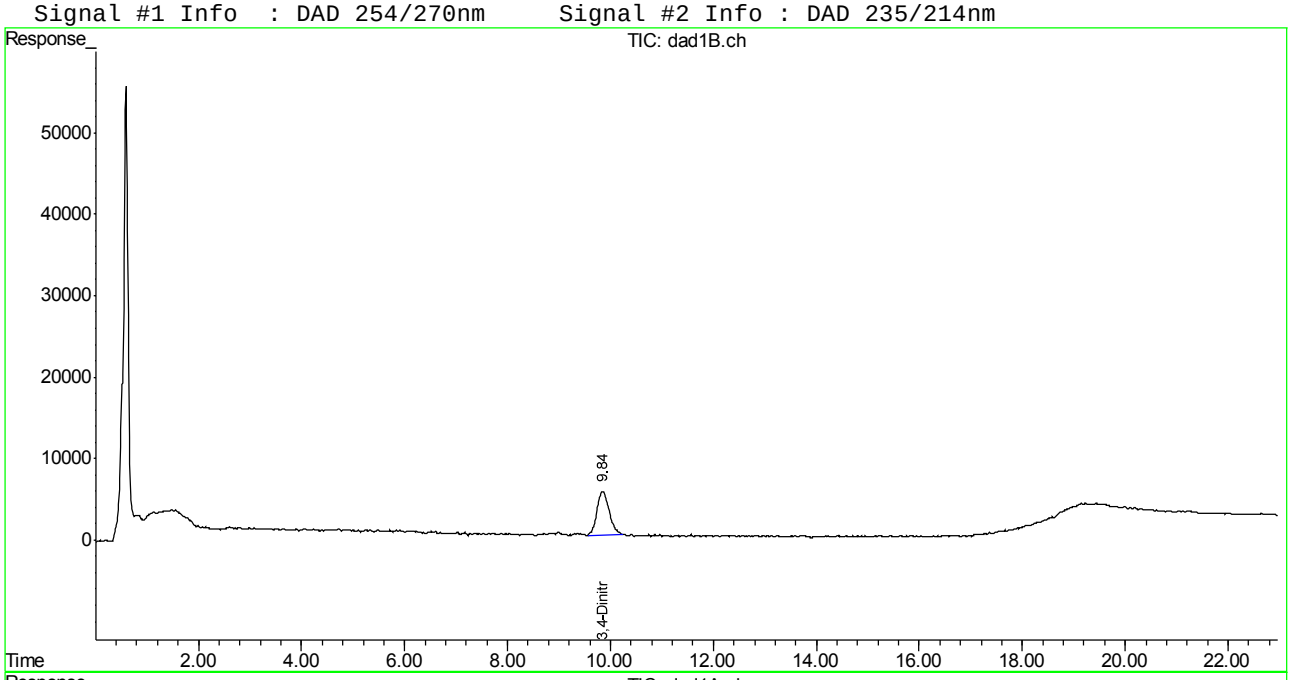
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059709.D 8330B_0419PLUS.M Fri May 11 08:38:21 2018 Page 1

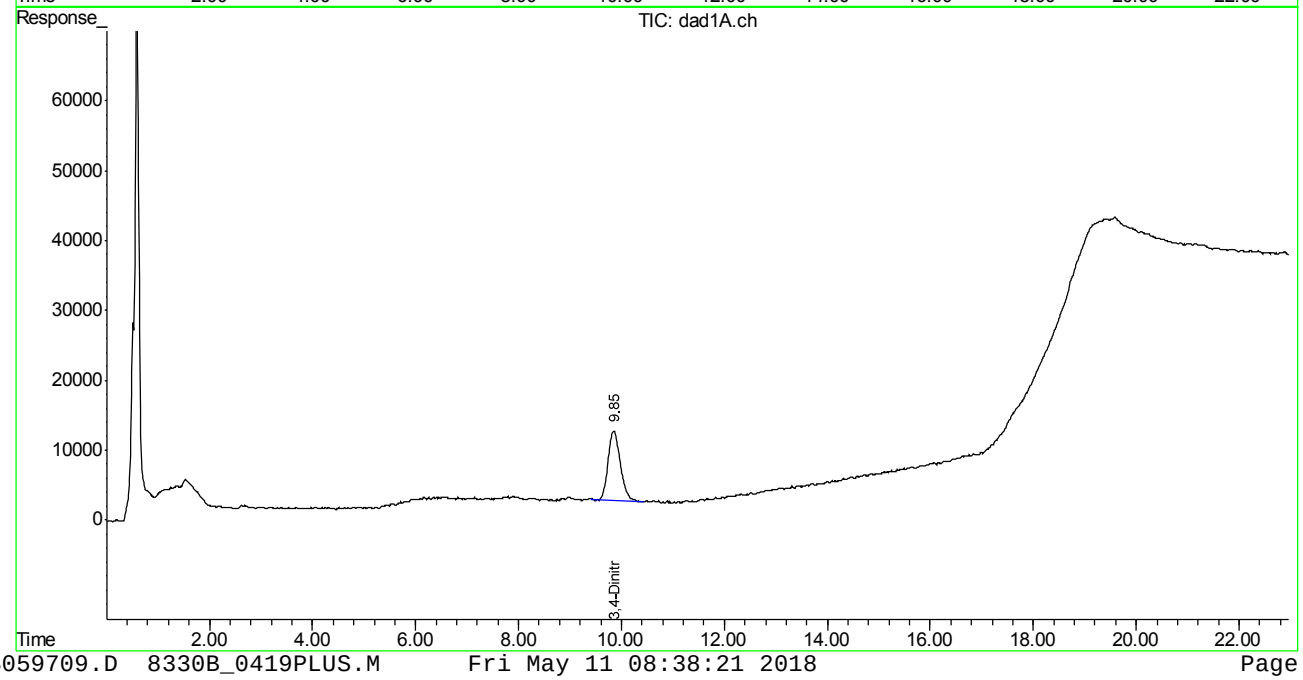
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059709.D\dad1B.ch Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059709.D\dad1A.ch
Acq On : 11-May-2018, 05:58:17 Operator: evitam
Sample : fa53801-4 Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:35 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059712.D\dad1B.ch Vial: 38
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059712.D\dad1A.ch
Acq On : 11-May-2018, 07:30:55 Operator: evitam
Sample : fa53801-5 Inst : G1315B
Misc : OP69973,gbb1730,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:30 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.83	9.83	1000091	1812532	373.768	384.439
	Spiked Amount 500.000	Range 69 - 134		Recovery =		74.75%	76.89%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

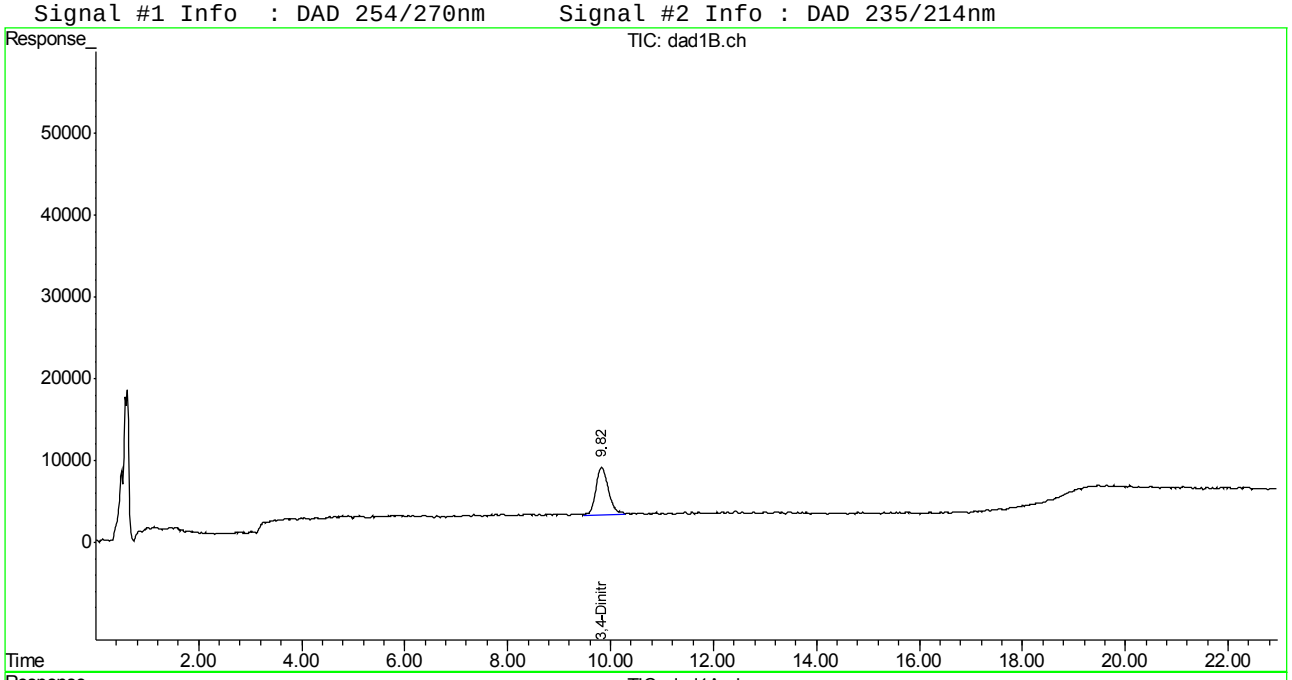
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059712.D 8330B_0419PLUS.M Fri May 11 08:38:24 2018 Page 1

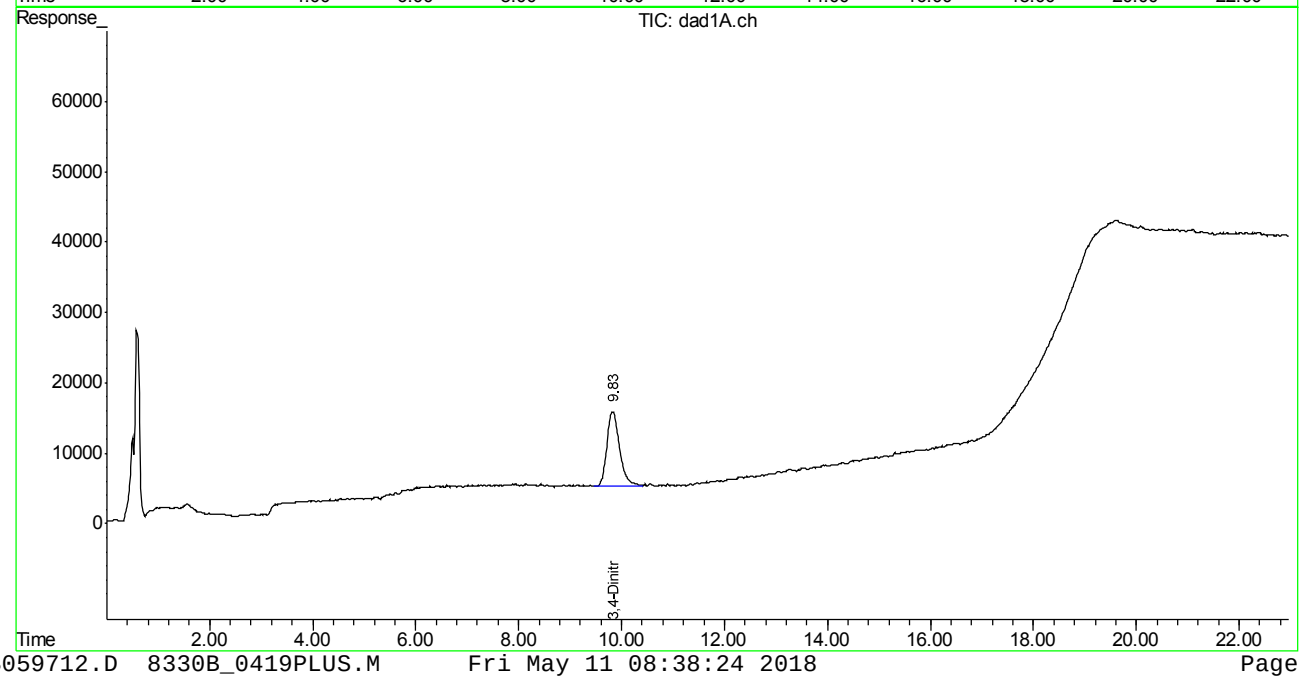
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059712.D\dad1B.ch Vial: 38
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059712.D\dad1A.ch
Acq On : 11-May-2018, 07:30:55 Operator: evitam
Sample : fa53801-5 Inst : G1315B
Misc : OP69973,gbb1730,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:36 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059713.D\dad1B.ch Vial: 39
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059713.D\dad1A.ch
Acq On : 11-May-2018, 08:00:52 Operator: evitam
Sample : fa53801-6 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:37:00 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.90	9.90	1000293	1825879	373.843	387.269
	Spiked Amount 500.000	Range 69 - 134		Recovery =		74.77%	77.45%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

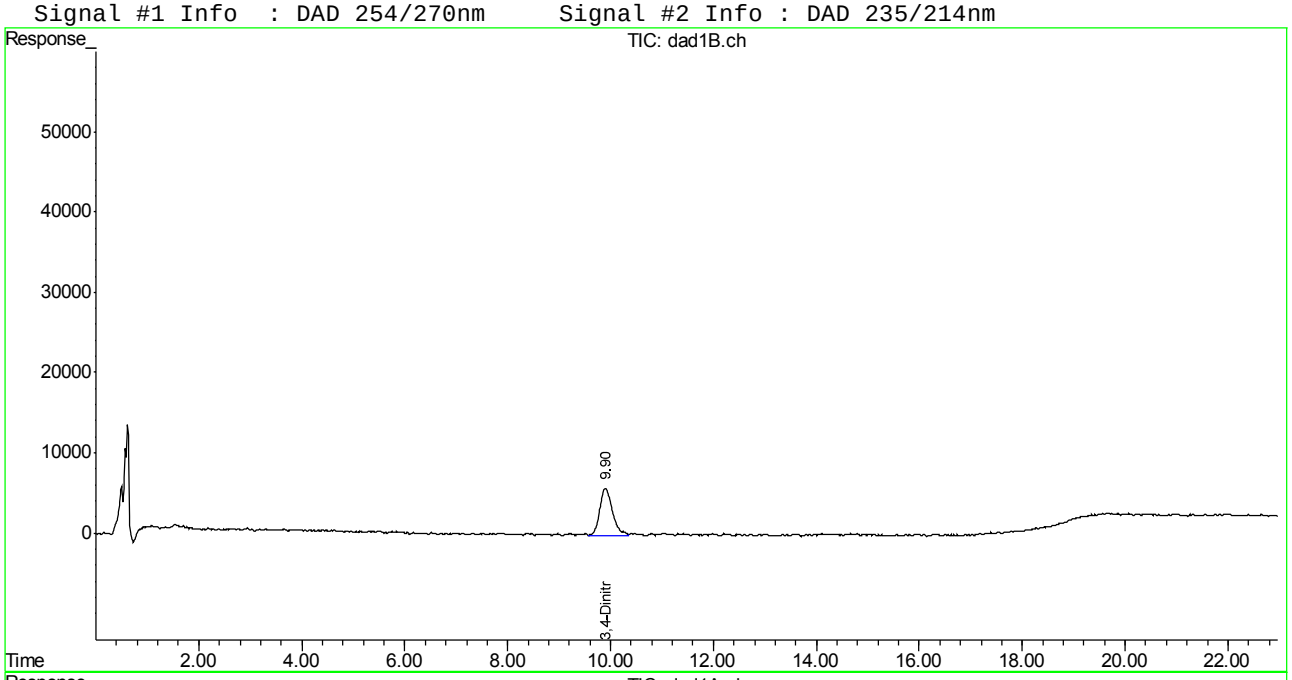
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059713.D 8330B_0419PLUS.M Fri May 11 08:41:18 2018 Page 1

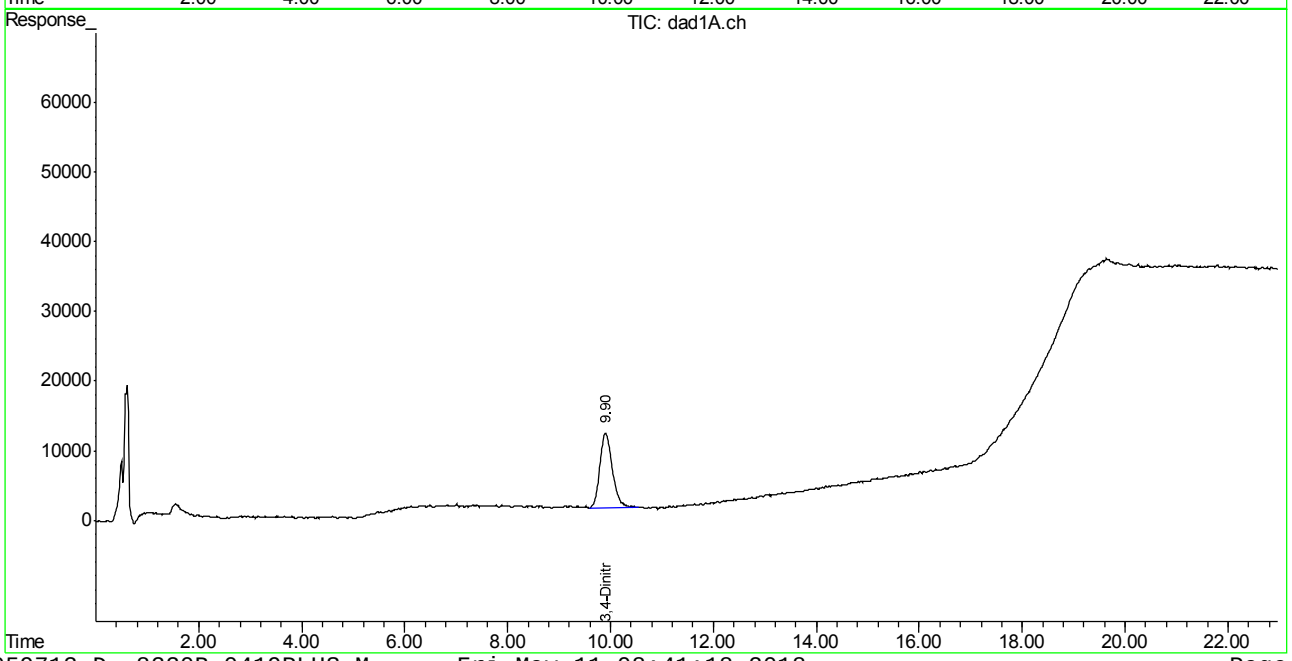
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059713.D\dad1B.ch Vial: 39
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059713.D\dad1A.ch
Acq On : 11-May-2018, 08:00:52 Operator: evitam
Sample : fa53801-6 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:37 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059713.D 8330B_0419PLUS.M Fri May 11 08:41:18 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059714.D\dad1B.ch Vial: 40
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059714.D\dad1A.ch
Acq On : 11-May-2018, 08:30:54 Operator: evitam
Sample : fa53801-7 Inst : G1315B
Misc : OP69973,gbb1730,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:39:25 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.85	9.85	944030	1750115	352.816	371.200
	Spiked Amount 500.000	Range 69 - 134		Recovery =		70.56%	74.24%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

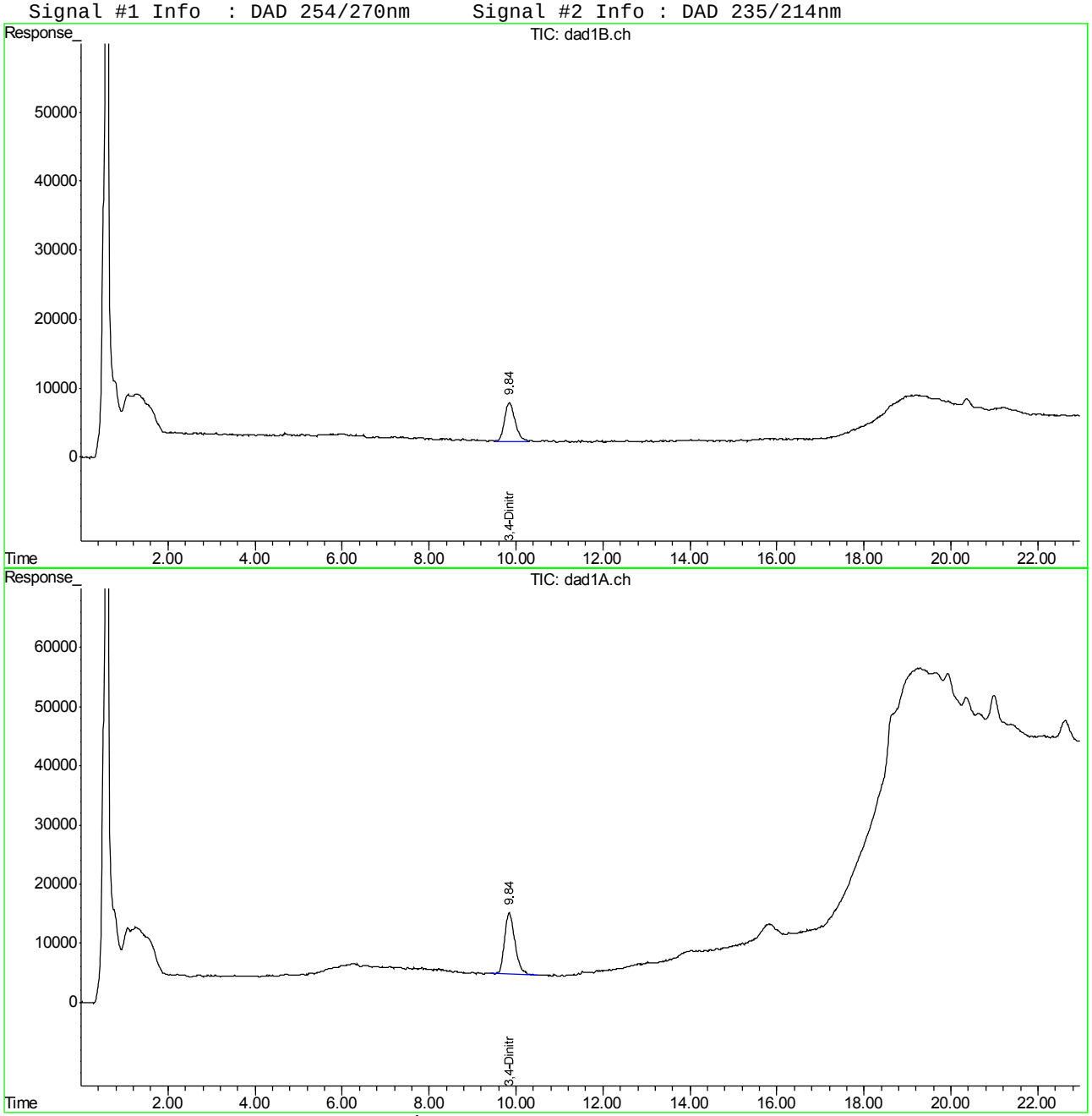
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059714.D 8330B_0419PLUS.M Fri May 11 10:39:46 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059714.D\dad1B.ch Vial: 40
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059714.D\dad1A.ch
Acq On : 11-May-2018, 08:30:54 Operator: evitam
Sample : fa53801-7 Inst : G1315B
Misc : OP69973,gbb1730,10.05,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:39 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



BB059714.D 8330B_0419PLUS.M Fri May 11 10:39:46 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059719.D\dad1B.ch Vial: 43
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059719.D\dad1A.ch
Acq On : 11-May-2018, 11:00:36 Operator: evitam
Sample : fa53801-10 Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 07:07:29 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.86	9.86	1019151	1786762	380.891	378.973
	Spiked Amount 500.000	Range 69 - 134		Recovery =		76.18%	75.79%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

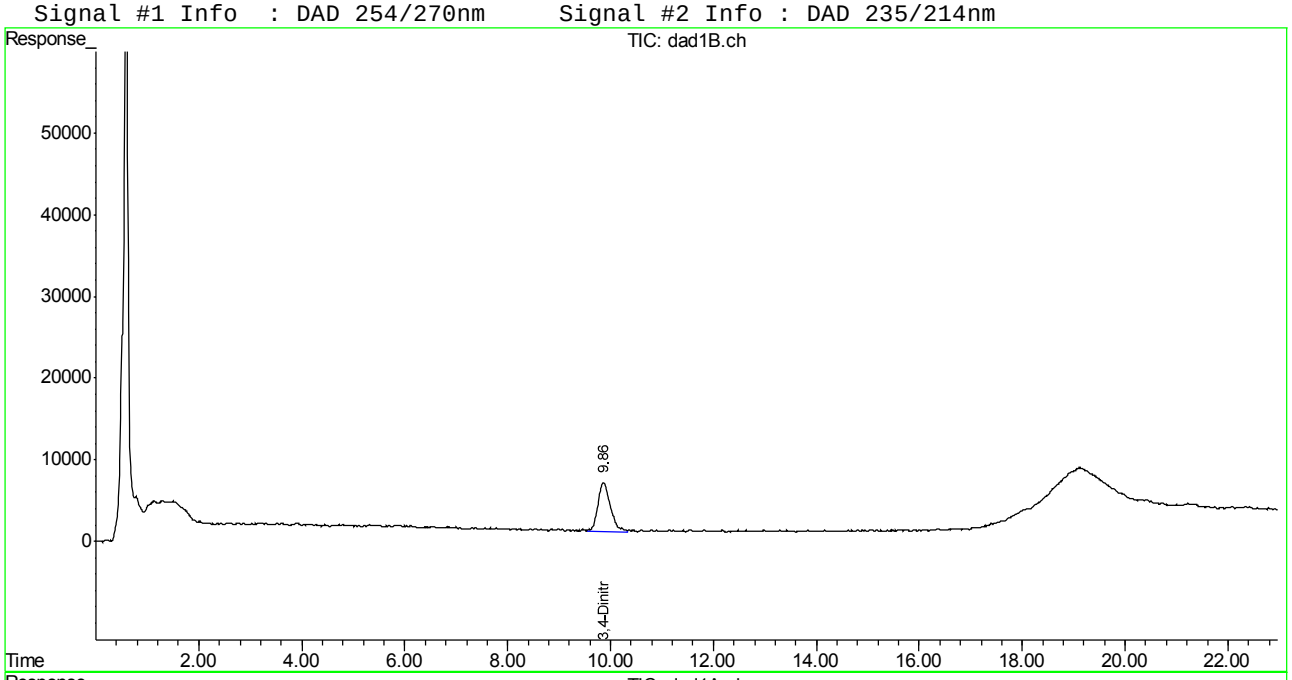
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059719.D 8330B_0419PLUS.M Mon May 14 10:52:45 2018 Page 1

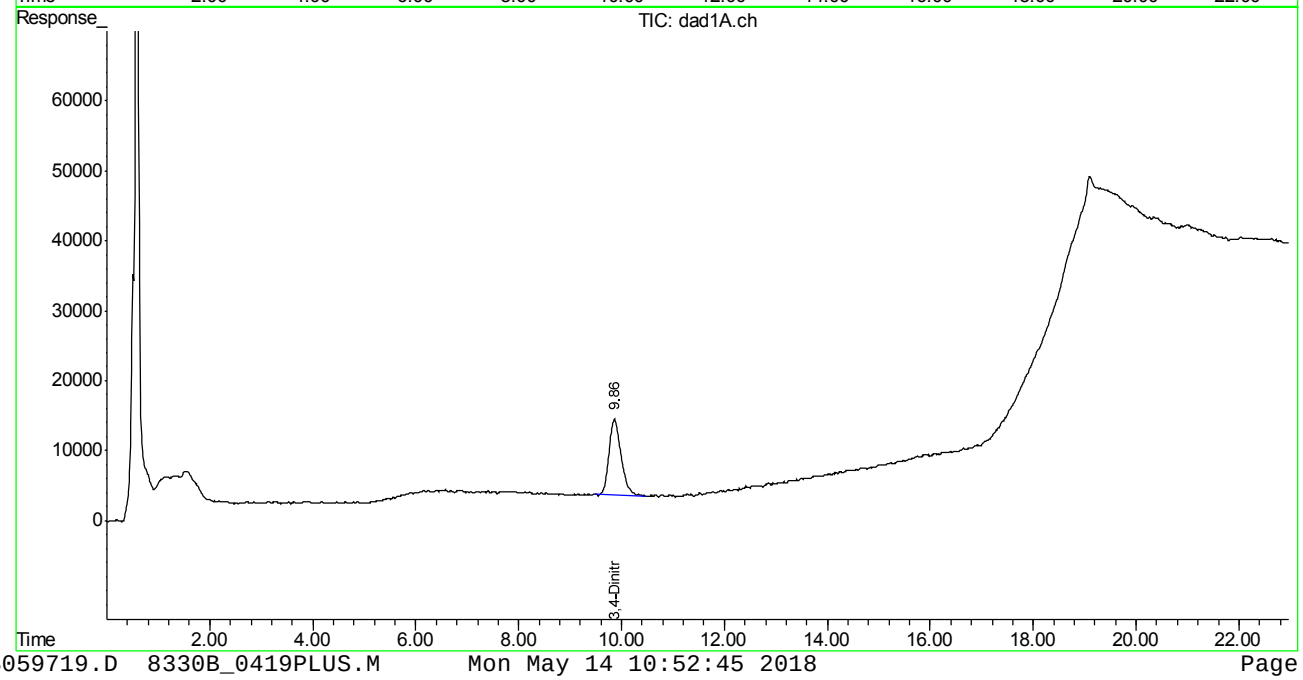
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059719.D\dad1B.ch Vial: 43
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059719.D\dad1A.ch
Acq On : 11-May-2018, 11:00:36 Operator: evitam
Sample : fa53801-10 Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 10:22 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059722.D\dad1B.ch Vial: 46
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059722.D\dad1A.ch
Acq On : 11-May-2018, 12:30:33 Operator: evitam
Sample : fa53801-13 Inst : G1315B
Misc : OP69973,gbb1730,10.07,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 07:07:32 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.79	9.79	985403	1748041	368.278	370.760
	Spiked Amount 500.000	Range 69 - 134		Recovery =		73.66%	74.15%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

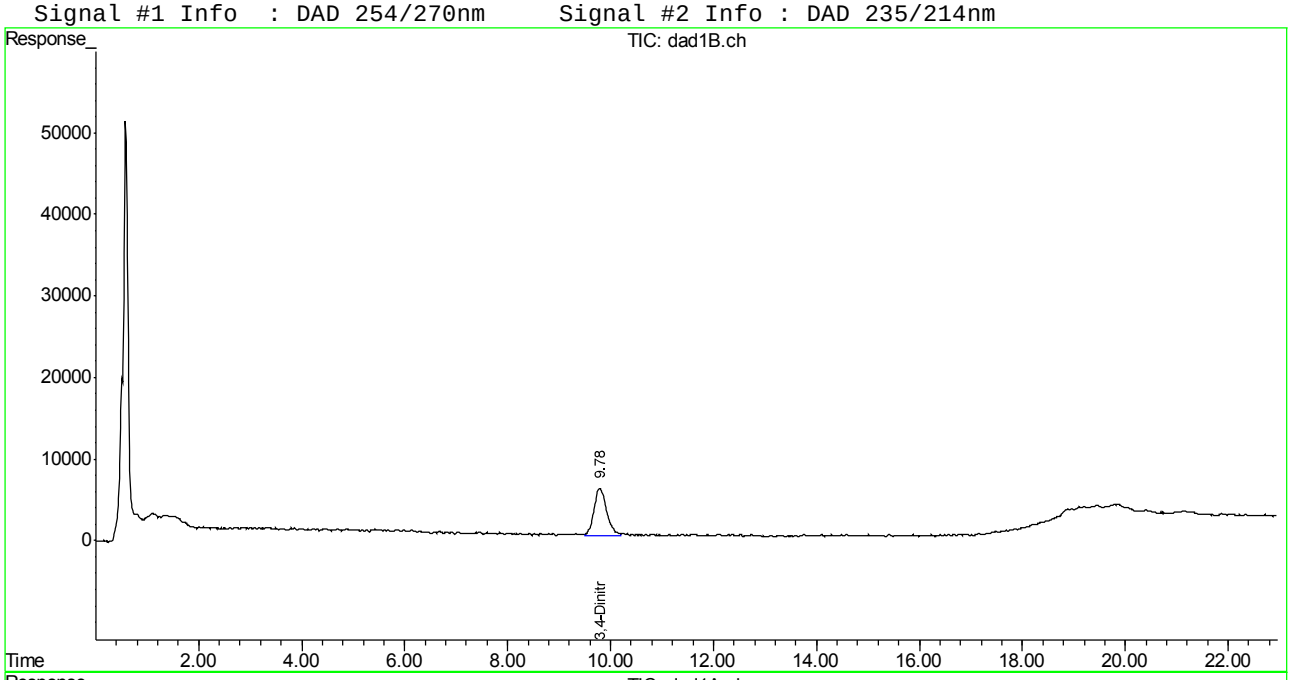
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059722.D 8330B_0419PLUS.M Mon May 14 10:52:48 2018

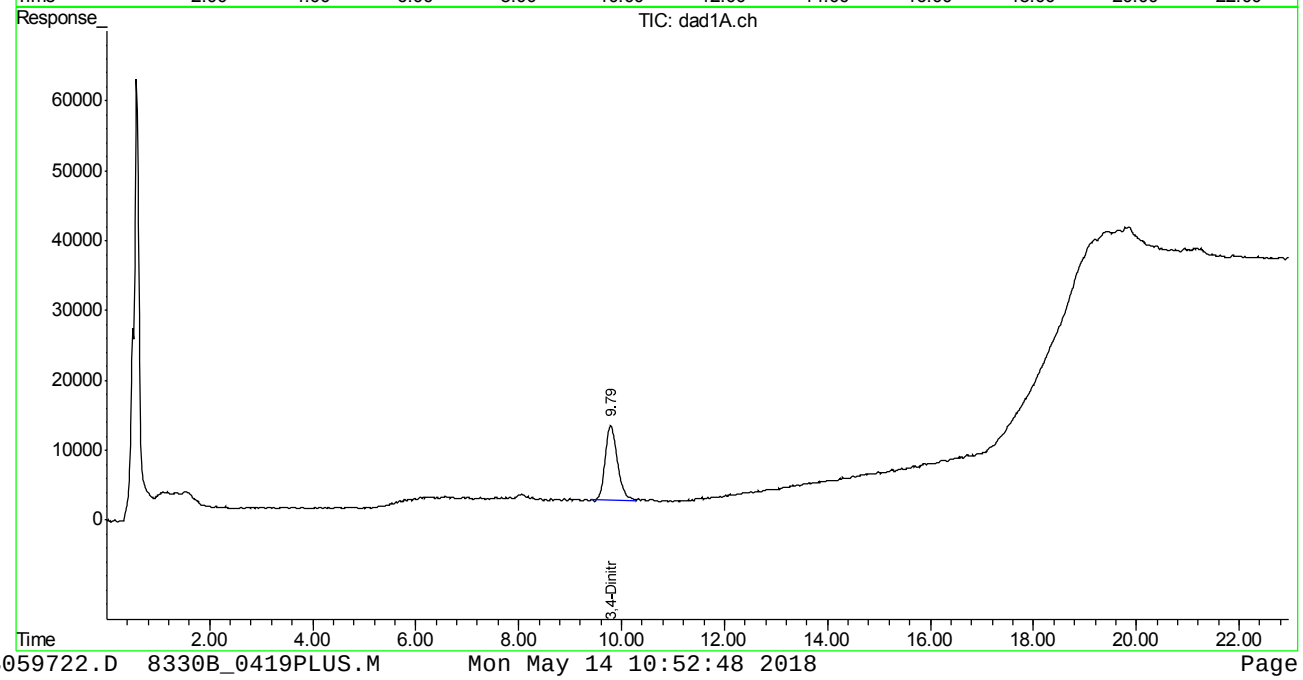
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059722.D\dad1B.ch Vial: 46
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059722.D\dad1A.ch
Acq On : 11-May-2018, 12:30:33 Operator: evitam
Sample : fa53801-13 Inst : G1315B
Misc : OP69973,gbb1730,10.07,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 10:46 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614690.D\dad1B.ch Vial: 19
Signal #2 : G:\DATA\0510RPB3\GG614690.D\dad1A.ch
Acq On : 10-May-2018, 22:54:39 Operator: evitam
Sample : fa53801-16 Inst : G1315B
Misc : op69989,Ggg2627,10.11,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:21 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.32	14.32	2552840	5256842	491.414	485.951
	Spiked Amount 500.000	Range 69 - 134		Recovery =		98.28%	97.19%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

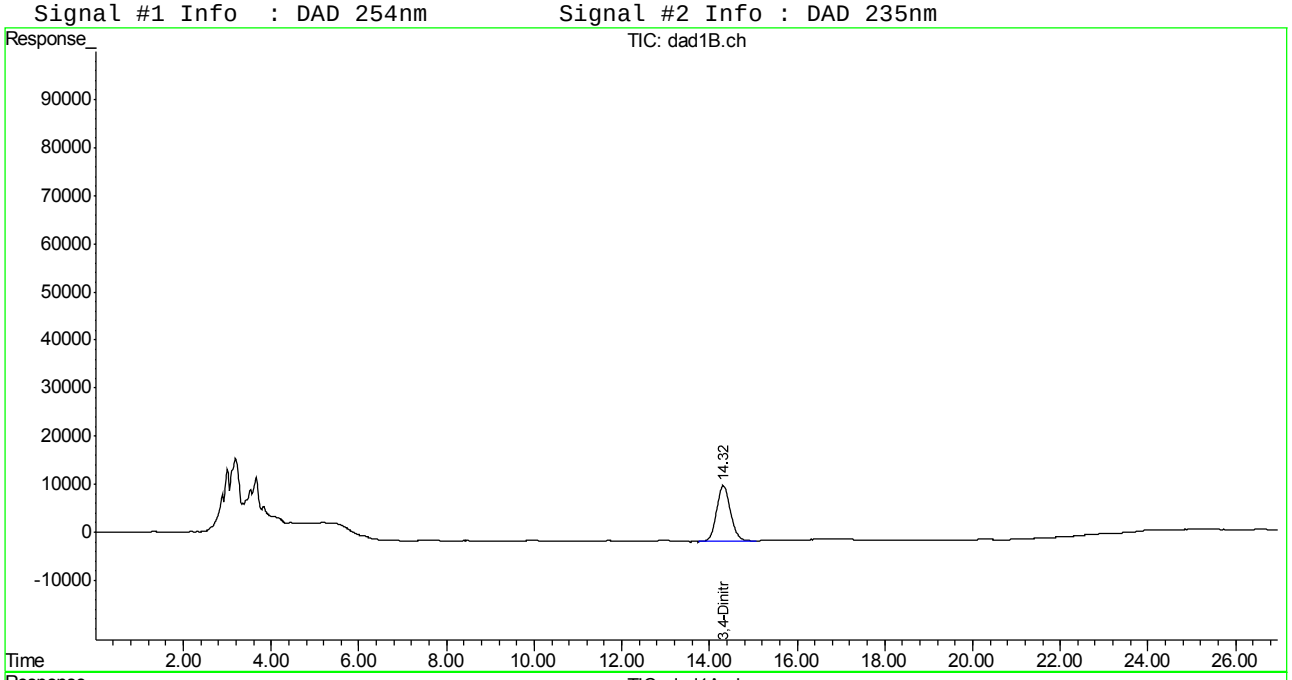
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614690.D 8330RPB.M_1113M.M Fri May 11 10:37:18 2018 Page 1

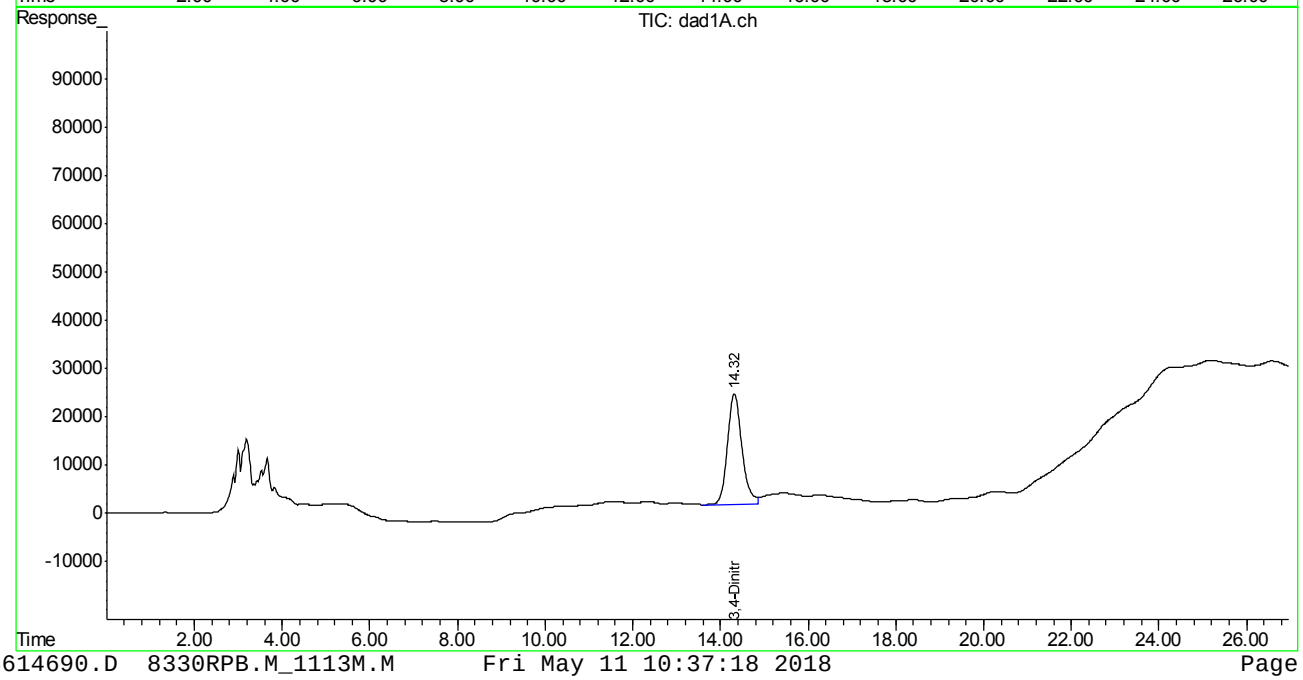
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614690.D\dad1B.ch Vial: 19
Signal #2 : G:\DATA\0510RPB3\GG614690.D\dad1A.ch
Acq On : 10-May-2018, 22:54:39 Operator: evitam
Sample : fa53801-16 Inst : G1315B
Misc : op69989,Ggg2627,10.11,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:28 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614695.D\dad1B.ch Vial: 24
Signal #2 : G:\DATA\0510RPB3\GG614695.D\dad1A.ch
Acq On : 11-May-2018, 01:21:50 Operator: evitam
Sample : fa53801-19 Inst : G1315B
Misc : op69989,Ggg2627,10.10,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:26 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.31	14.31	2502158	5098886	481.658	471.350m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		96.33%	94.27%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

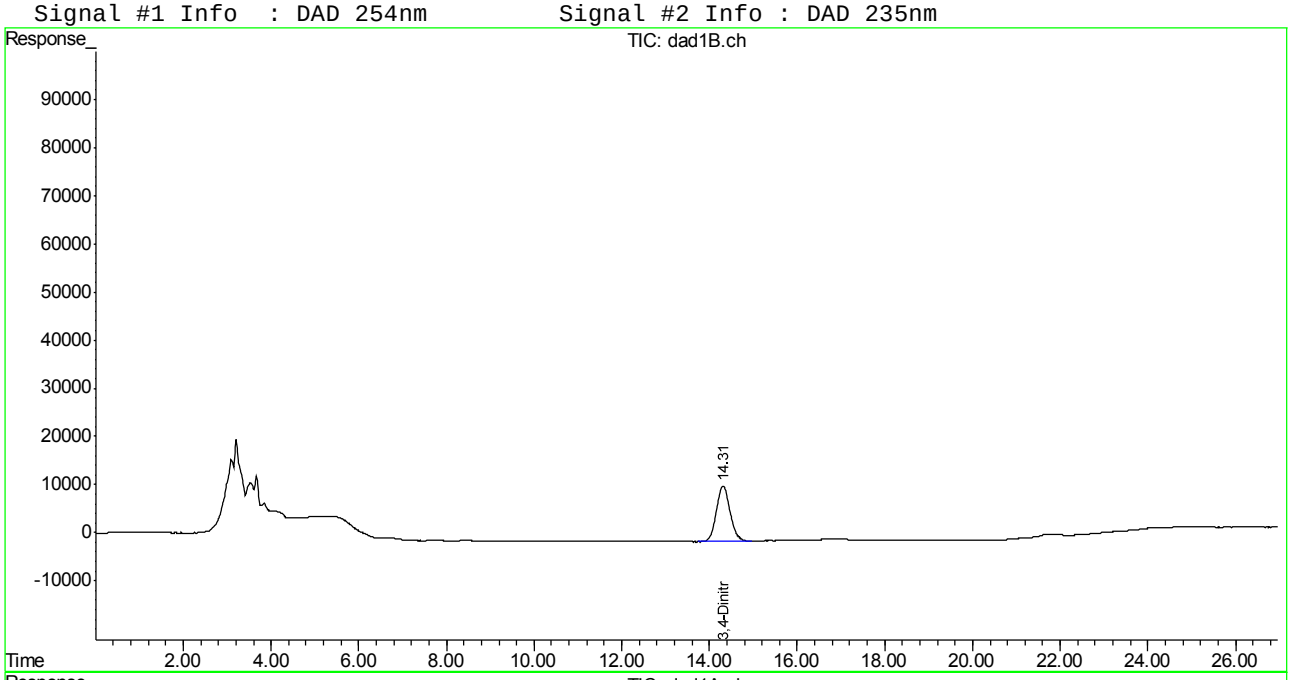
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614695.D 8330RPB.M_1113M.M Fri May 11 10:37:23 2018 Page 1

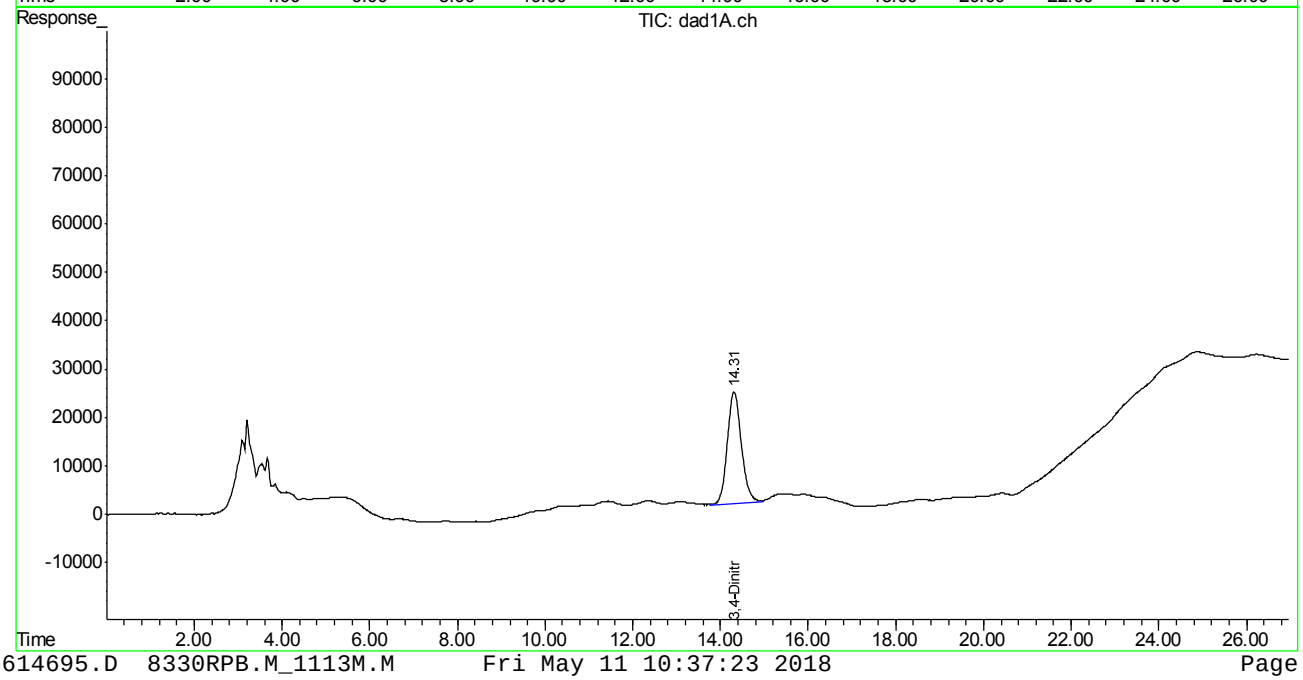
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614695.D\dad1B.ch Vial: 24
Signal #2 : G:\DATA\0510RPB3\GG614695.D\dad1A.ch
Acq On : 11-May-2018, 01:21:50 Operator: evitam
Sample : fa53801-19 Inst : G1315B
Misc : op69989,Ggg2627,10.10,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:30 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

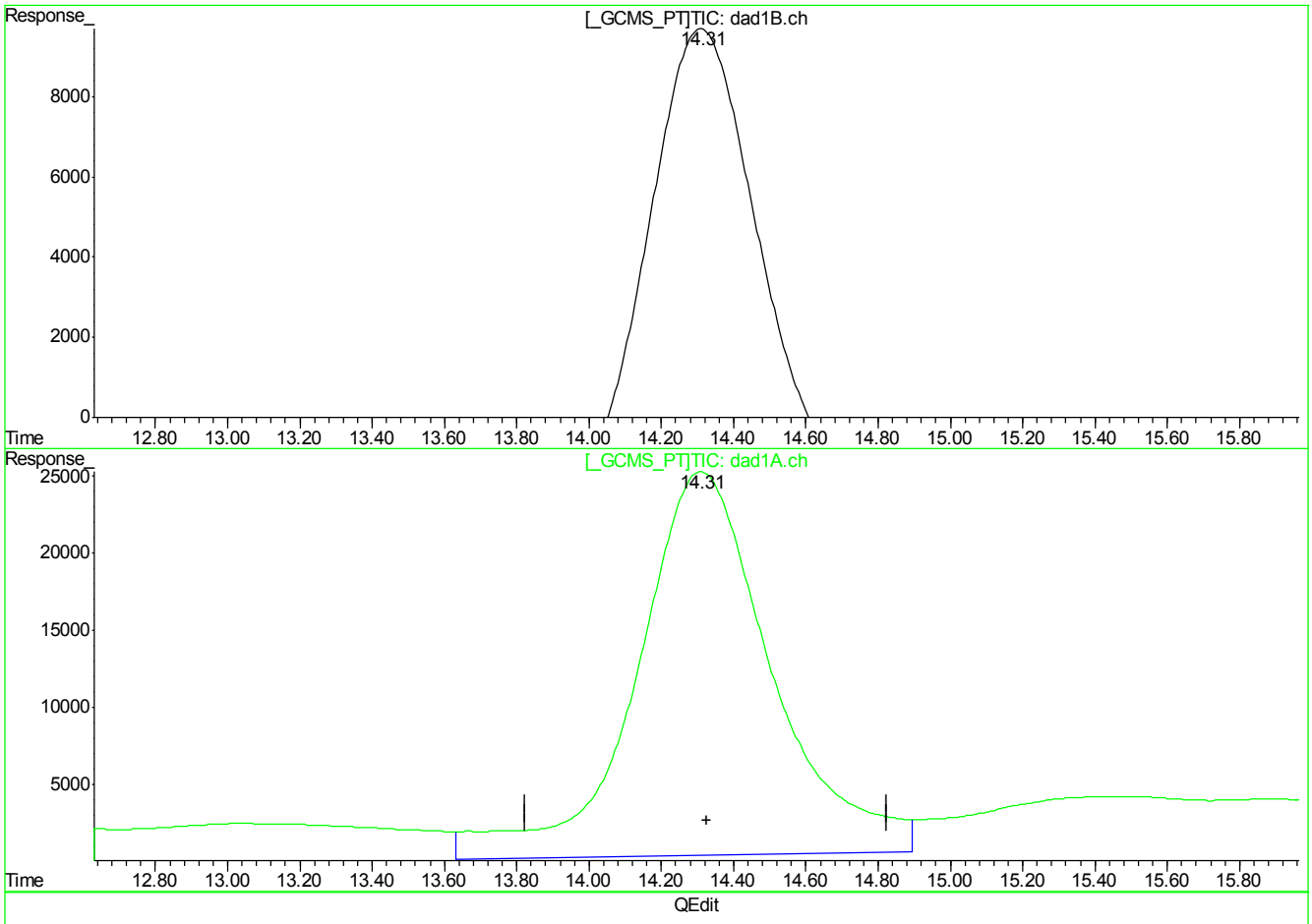
Sample Number:	FA53801-19	**Method:**	SW846 8330B
Lab FileID:	GG614695.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/11/18 01:21	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.31	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614695.D\dad1B.ch Vial: 24
Signal #2 : G:\DATA\0510RPB3\GG614695.D\dad1A.ch
Acq On : 11-May-2018, 01:21:50 Operator: evitam
Sample : fa53801-19 Inst : G1315B
Misc : op69989,Ggg2627,10.10,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.31min 481.658ppb

response 2502158

(12) 3,4-Dinitrotoluene #2 (S)

14.31min 599.469ppb

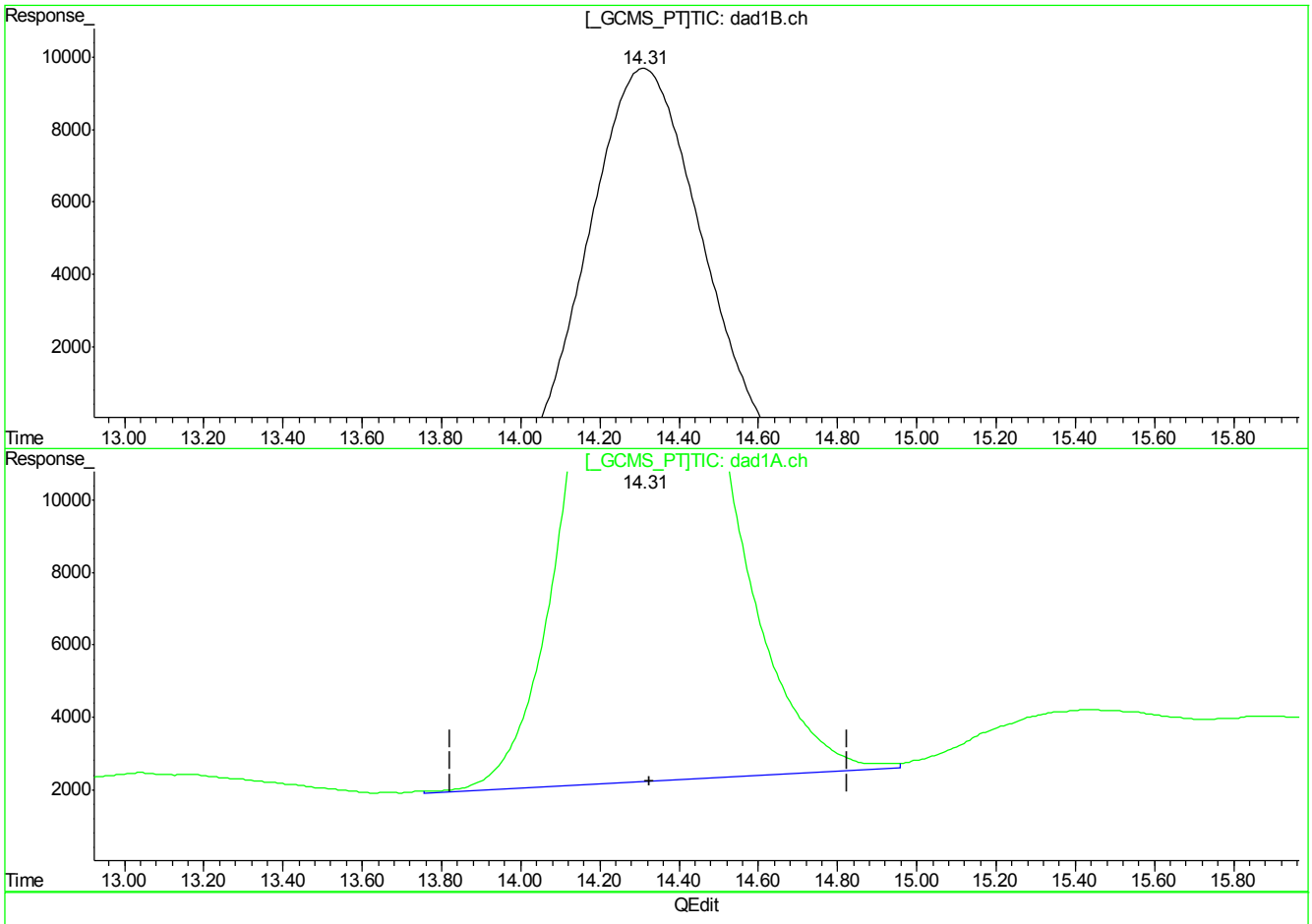
response 6484830

(+) = Expected Retention Time
GG614695.D 8330RPB.M_1113M.M Fri May 11 10:30:48 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614695.D\dad1B.ch Vial: 24
Signal #2 : G:\DATA\0510RPB3\GG614695.D\dad1A.ch
Acq On : 11-May-2018, 01:21:50 Operator: evitam
Sample : fa53801-19 Inst : G1315B
Misc : op69989,Ggg2627,10.10,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.31min 481.658ppb

response 2502158

(12) 3,4-Dinitrotoluene #2 (S)

14.31min 471.350ppb m

response 5098886

(+) = Expected Retention Time
GG614695.D 8330RPB.M_1113M.M Fri May 11 10:30:52 2018

7.1.11.3

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:25

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614568.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0503RPB3\GG614568.D\dad1A.ch
Acq On : 04-May-2018, 02:32:57 Operator: evitam
Sample : fa53801-22 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:35 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.28	14.27	2828331	5982292	544.446	553.013m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		108.89%	110.60%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

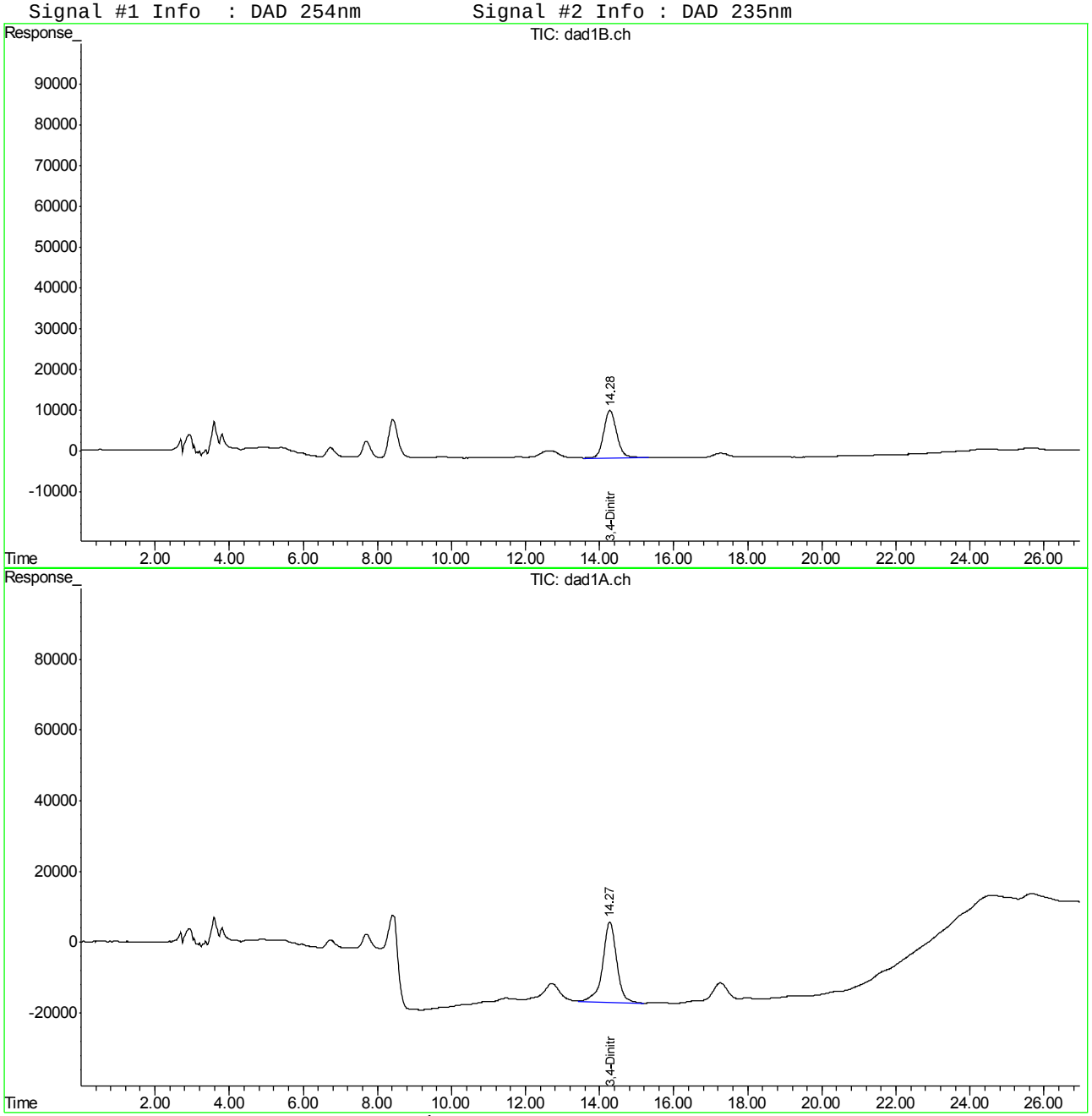
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614568.D 8330RPB.M_1113M.M Fri May 04 13:23:47 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614568.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0503RPB3\GG614568.D\dad1A.ch
Acq On : 04-May-2018, 02:32:57 Operator: evitam
Sample : fa53801-22 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 13:22 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

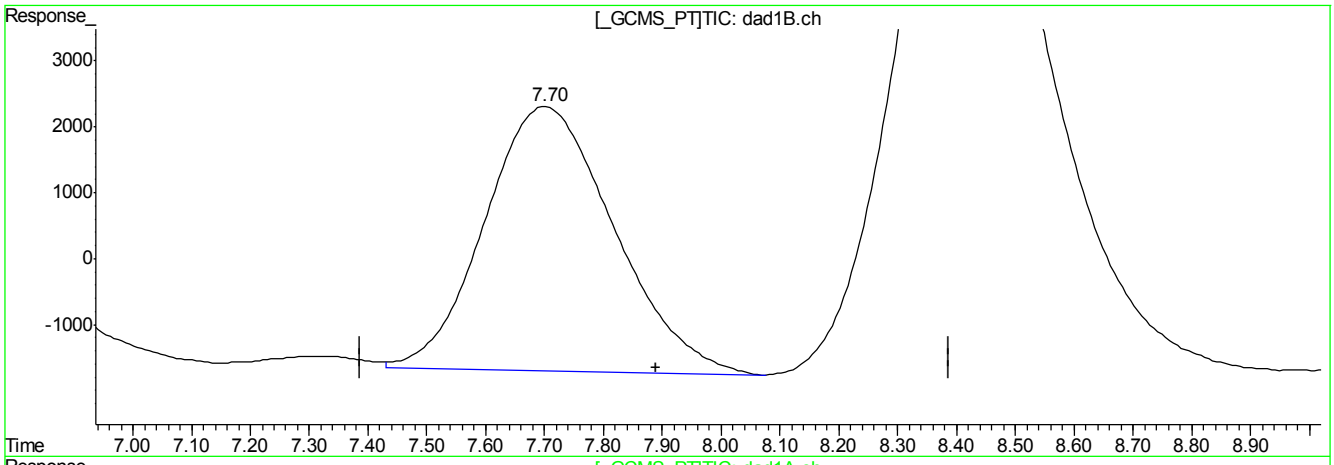
Sample Number:	FA53801-22	**Method:**	SW846 8330B
Lab FileID:	GG614568.D	**Analyst approved:**	05/04/18 13:25 Evita Martinez
Injection Time:	05/04/18 02:32	**Supervisor approved:**	05/04/18 14:25 Mike Eger

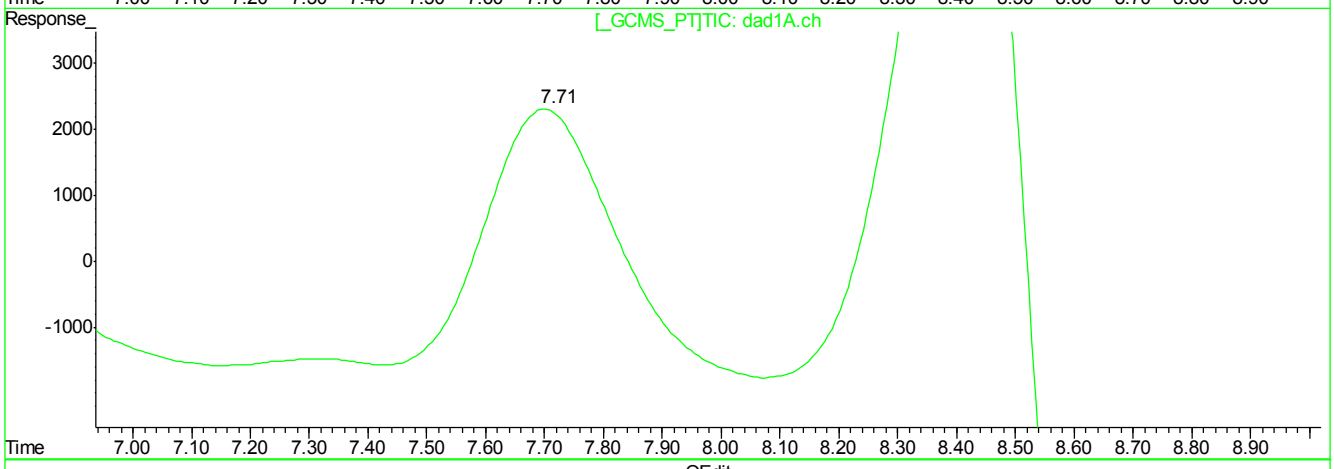
Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614568.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0503RPB3\GG614568.D\dad1A.ch
Acq On : 04-May-2018, 02:32:57 Operator: evitam
Sample : fa53801-22 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration





QEdit

(6) RDX

7.70min 128.496ppb

response 612178

(6) RDX #2

7.70min 962.795ppb

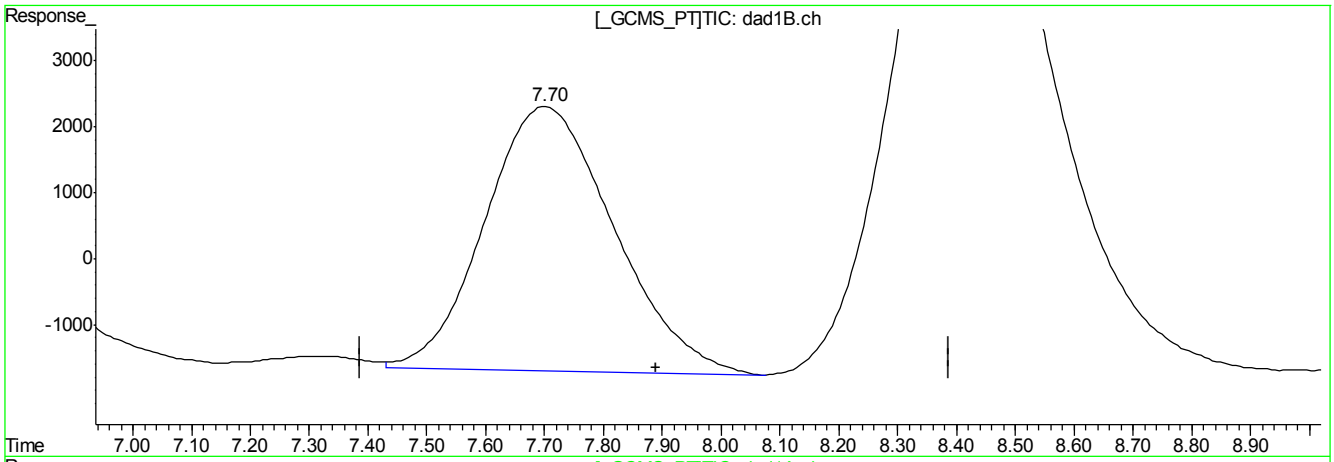
response 4566677

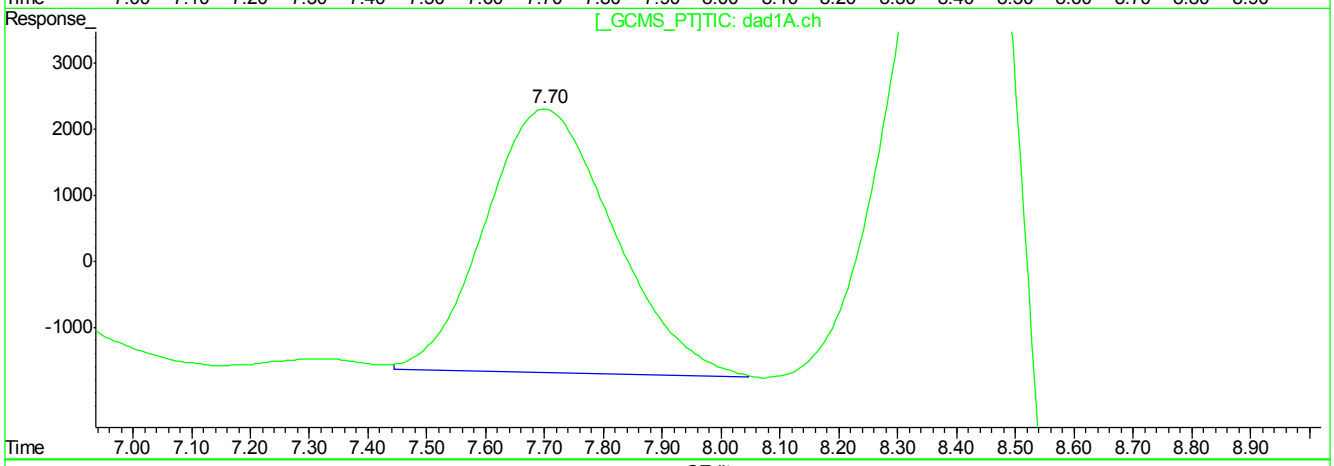
(+) = Expected Retention Time
GG614568.D 8330RPB.M_1113M.M Fri May 04 09:29:05 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614568.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0503RPB3\GG614568.D\dad1A.ch
Acq On : 04-May-2018, 02:32:57 Operator: evitam
Sample : fa53801-22 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration





QEdit

(6) RDX

7.70min 128.496ppb

response 612178

(6) RDX #2

7.70min 127.995ppb m

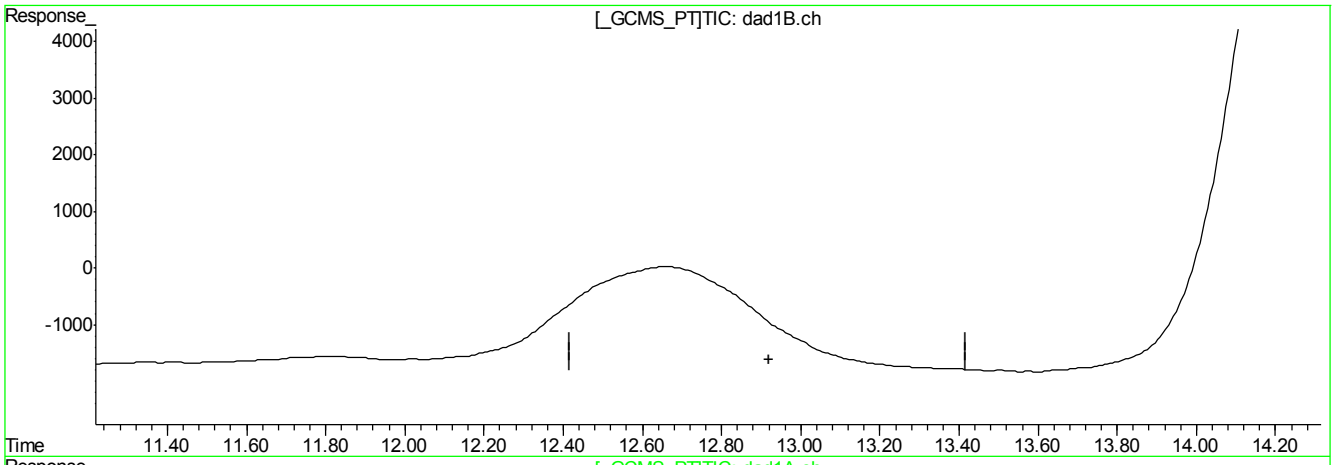
response 607098

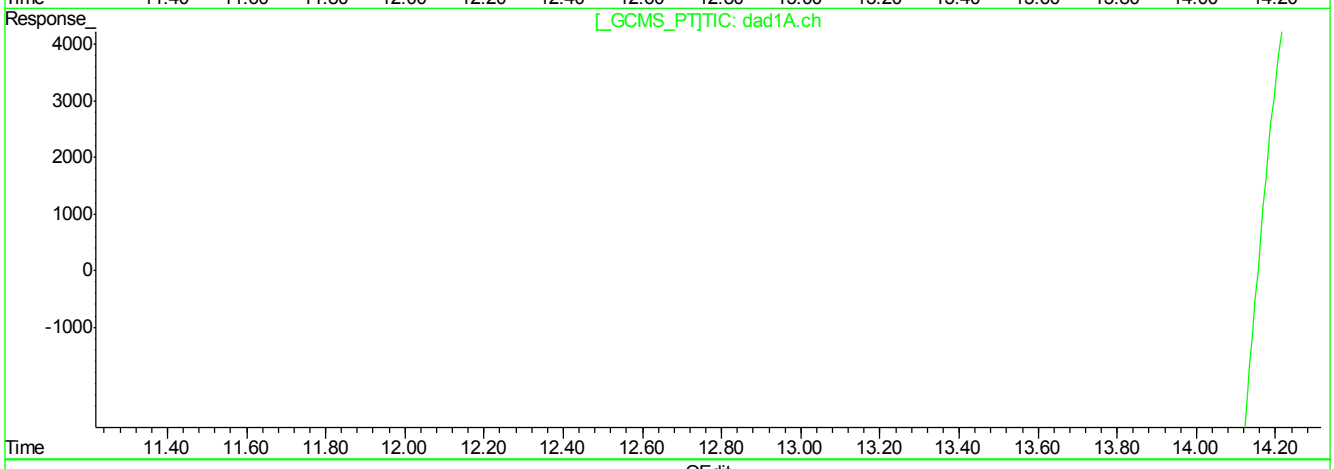
(+) = Expected Retention Time
GG614568.D 8330RPB.M_1113M.M Fri May 04 09:29:09 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614568.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0503RPB3\GG614568.D\dad1A.ch
Acq On : 04-May-2018, 02:32:57 Operator: evitam
Sample : fa53801-22 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration





QEdit

(11) Tetryl

0.00min 0.000ppb

response 0

(11) Tetryl #2

12.71min 191.777ppb

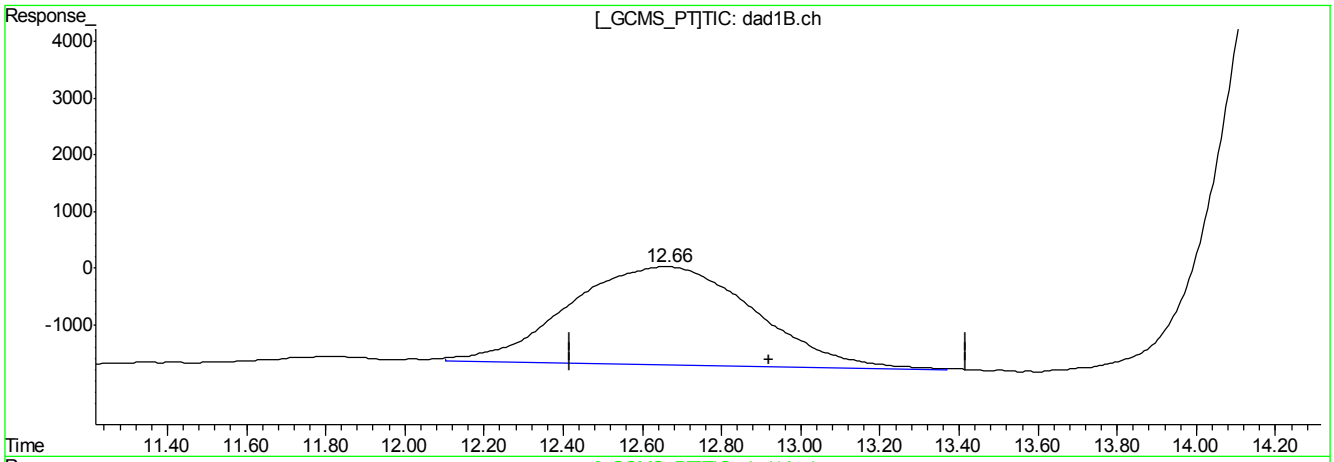
response 2714036

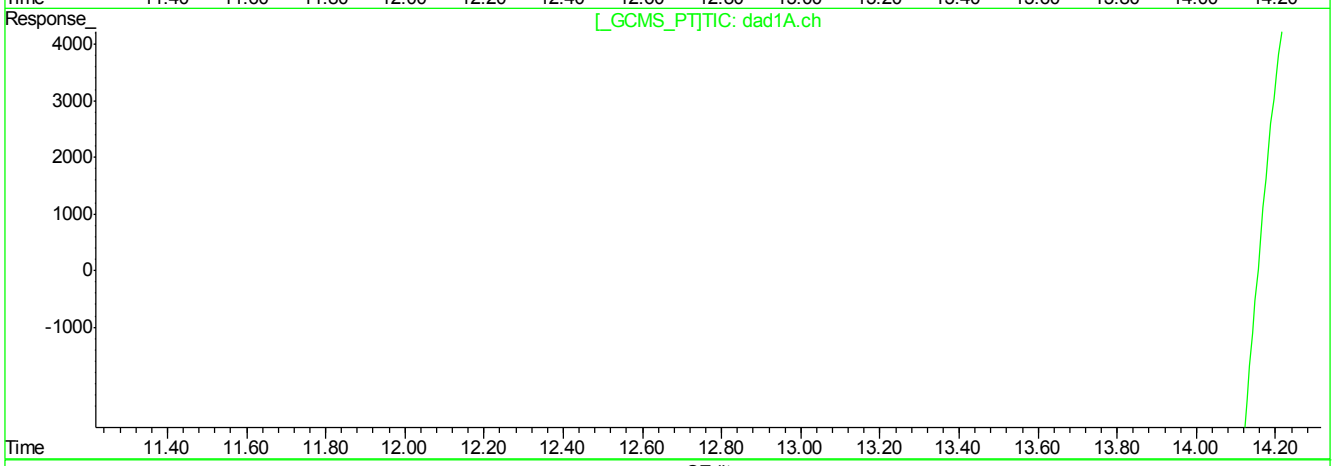
(+) = Expected Retention Time
GG614568.D 8330RPB.M_1113M.M Fri May 04 09:29:25 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614568.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0503RPB3\GG614568.D\dad1A.ch
Acq On : 04-May-2018, 02:32:57 Operator: evitam
Sample : fa53801-22 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration





QEdit

(11) Tetryl

12.66min 69.575ppb m

response 563830

(11) Tetryl #2

12.71min 191.777ppb

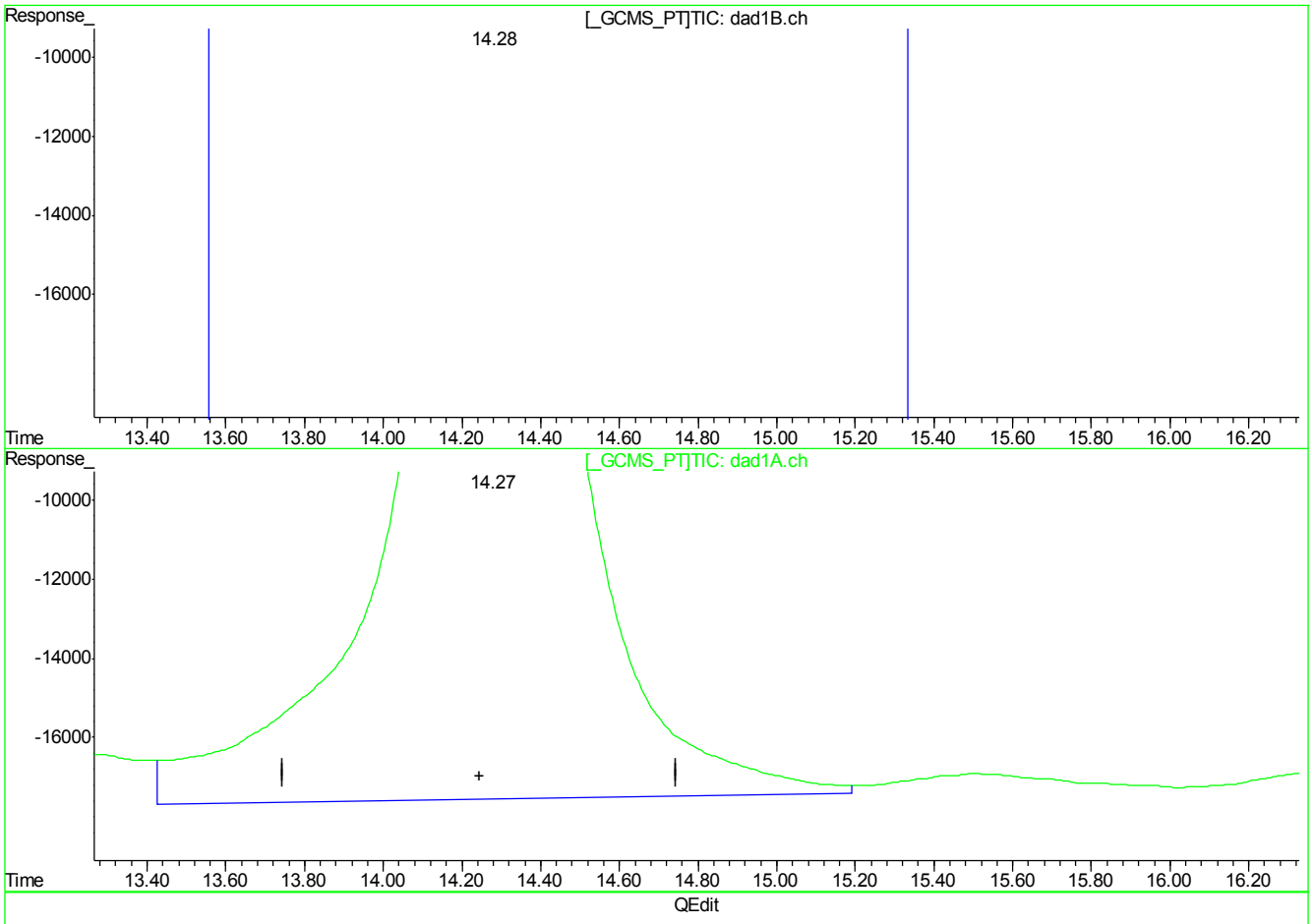
response 2714036

(+) = Expected Retention Time
GG614568.D 8330RPB.M_1113M.M Fri May 04 09:29:28 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614568.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0503RPB3\GG614568.D\dad1A.ch
Acq On : 04-May-2018, 02:32:57 Operator: evitam
Sample : fa53801-22 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.28min 544.446ppb

response 2828331

(12) 3,4-Dinitrotoluene #2 (S)

14.28min 609.734ppb

response 6595879

(+) = Expected Retention Time
GG614568.D 8330RPB.M_1113M.M Fri May 04 09:29:41 2018

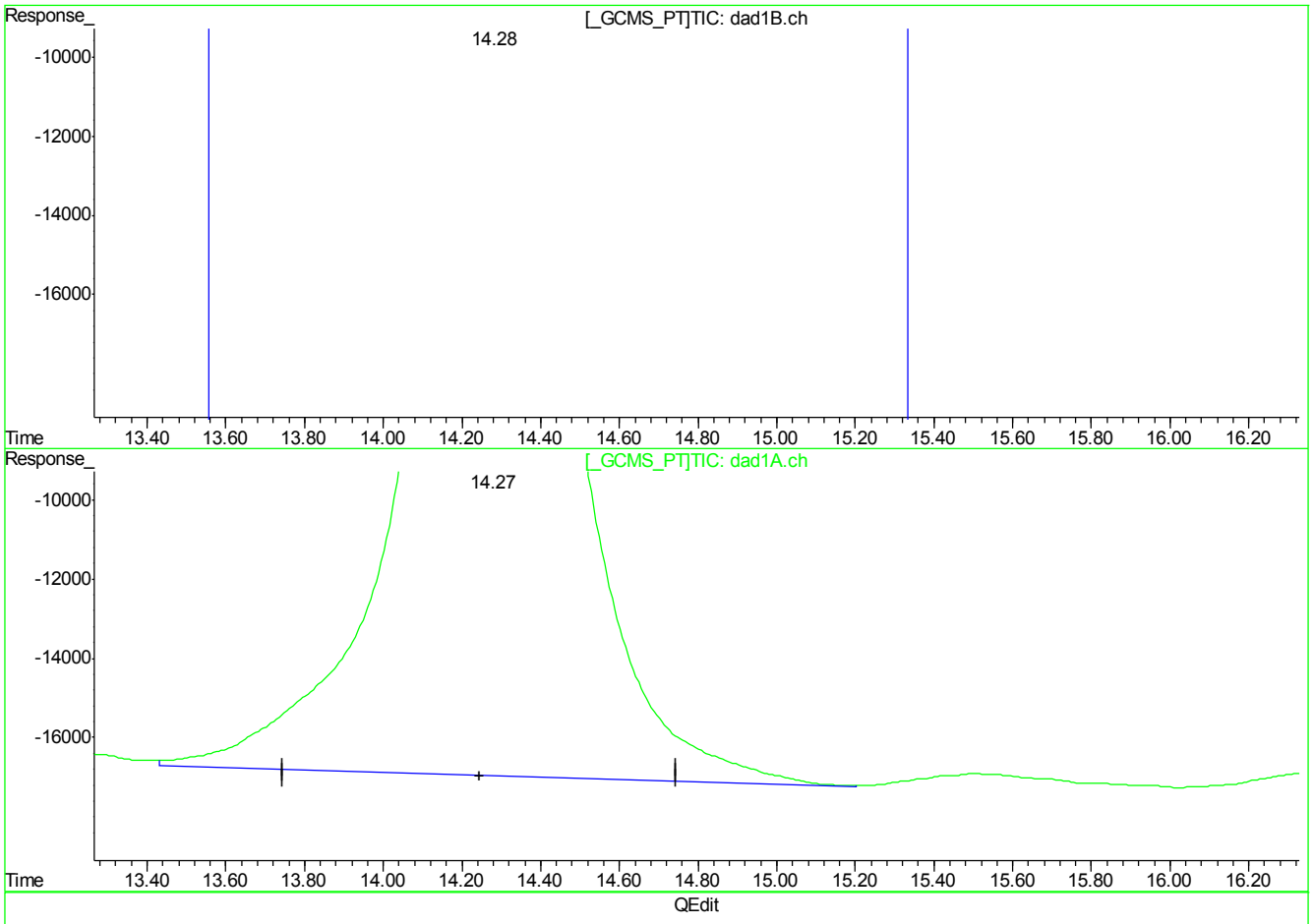
7.1.12.6

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614568.D\dad1B.ch Vial: 28
Signal #2 : G:\DATA\0503RPB3\GG614568.D\dad1A.ch
Acq On : 04-May-2018, 02:32:57 Operator: evitam
Sample : fa53801-22 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.28min 544.446ppb

response 2828331

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 553.013ppb m

response 5982292

(+) = Expected Retention Time
GG614568.D 8330RPB.M_1113M.M Fri May 04 09:29:45 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614702.D\dad1B.ch Vial: 29
Signal #2 : G:\DATA\0510RPB3\GG614702.D\dad1A.ch
Acq On : 11-May-2018, 04:47:58 Operator: evitam
Sample : fa53801-23 Inst : G1315B
Misc : op69989,Ggg2627,10.11,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:33 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	2455198	5113789	472.619	472.727
	Spiked Amount 500.000	Range 69 - 134		Recovery =		94.52%	94.55%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

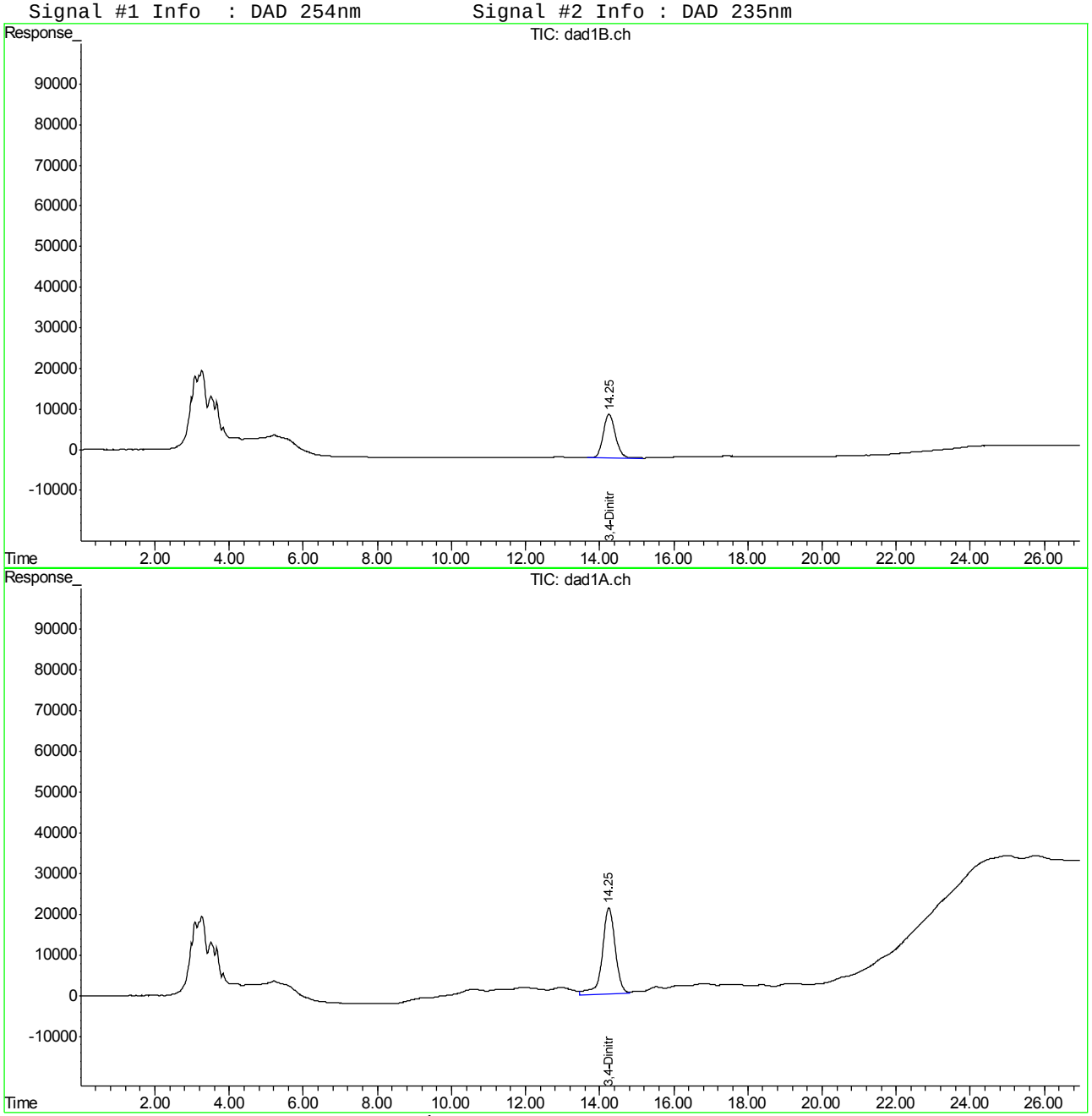
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614702.D 8330RPB.M_1113M.M Fri May 11 10:37:29 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614702.D\dad1B.ch Vial: 29
Signal #2 : G:\DATA\0510RPB3\GG614702.D\dad1A.ch
Acq On : 11-May-2018, 04:47:58 Operator: evitam
Sample : fa53801-23 Inst : G1315B
Misc : op69989,Ggg2627,10.11,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:33 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614567.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0503RPB3\GG614567.D\dad1A.ch
Acq On : 04-May-2018, 02:03:29 Operator: evitam
Sample : op69897-mb Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:34 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.27	2673491	5273029	514.639	487.448m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		102.93%	97.49%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

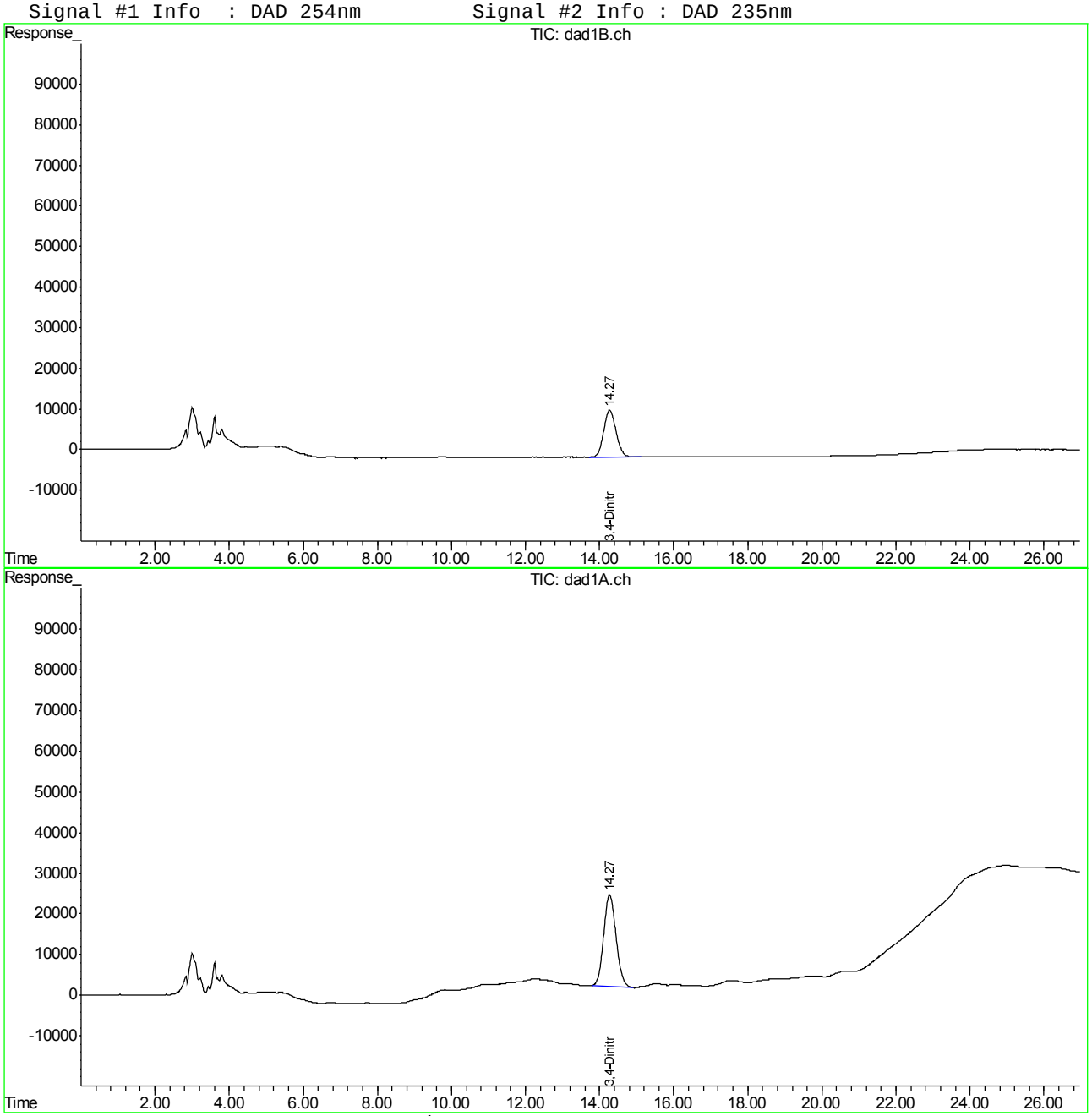
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614567.D 8330RPB.M_1113M.M Fri May 04 09:33:34 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614567.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0503RPB3\GG614567.D\dad1A.ch
Acq On : 04-May-2018, 02:03:29 Operator: evitam
Sample : op69897-mb Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:28 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

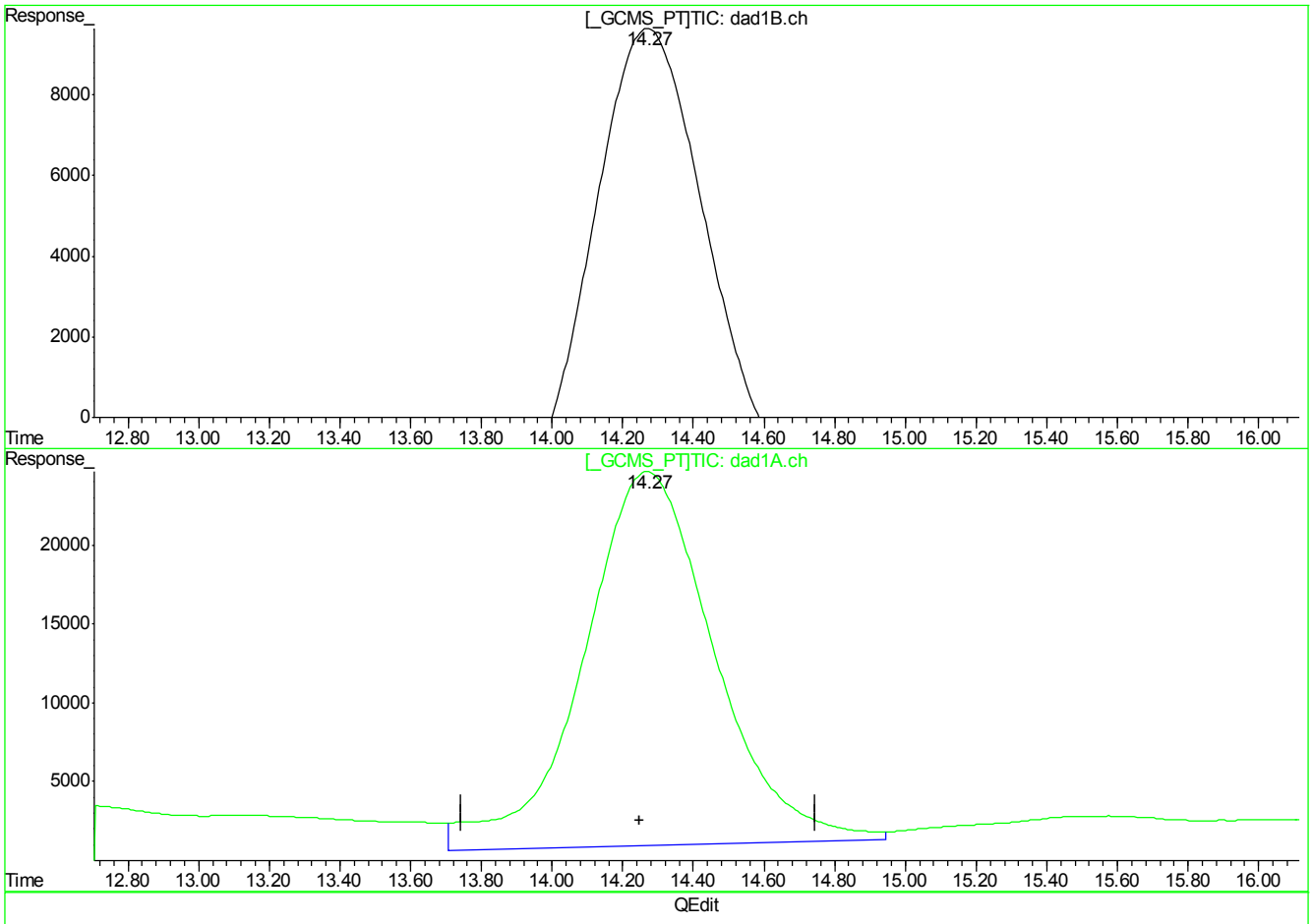
Sample Number:	OP69897-MB	**Method:**	SW846 8330B
Lab FileID:	GG614567.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/04/18 02:03	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614567.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0503RPB3\GG614567.D\dad1A.ch
Acq On : 04-May-2018, 02:03:29 Operator: evitam
Sample : op69897-mb Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.27min 514.639ppb

response 2673491

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 564.341ppb

response 6104836

(+) = Expected Retention Time
GG614567.D 8330RPB.M_1113M.M Fri May 04 09:28:05 2018

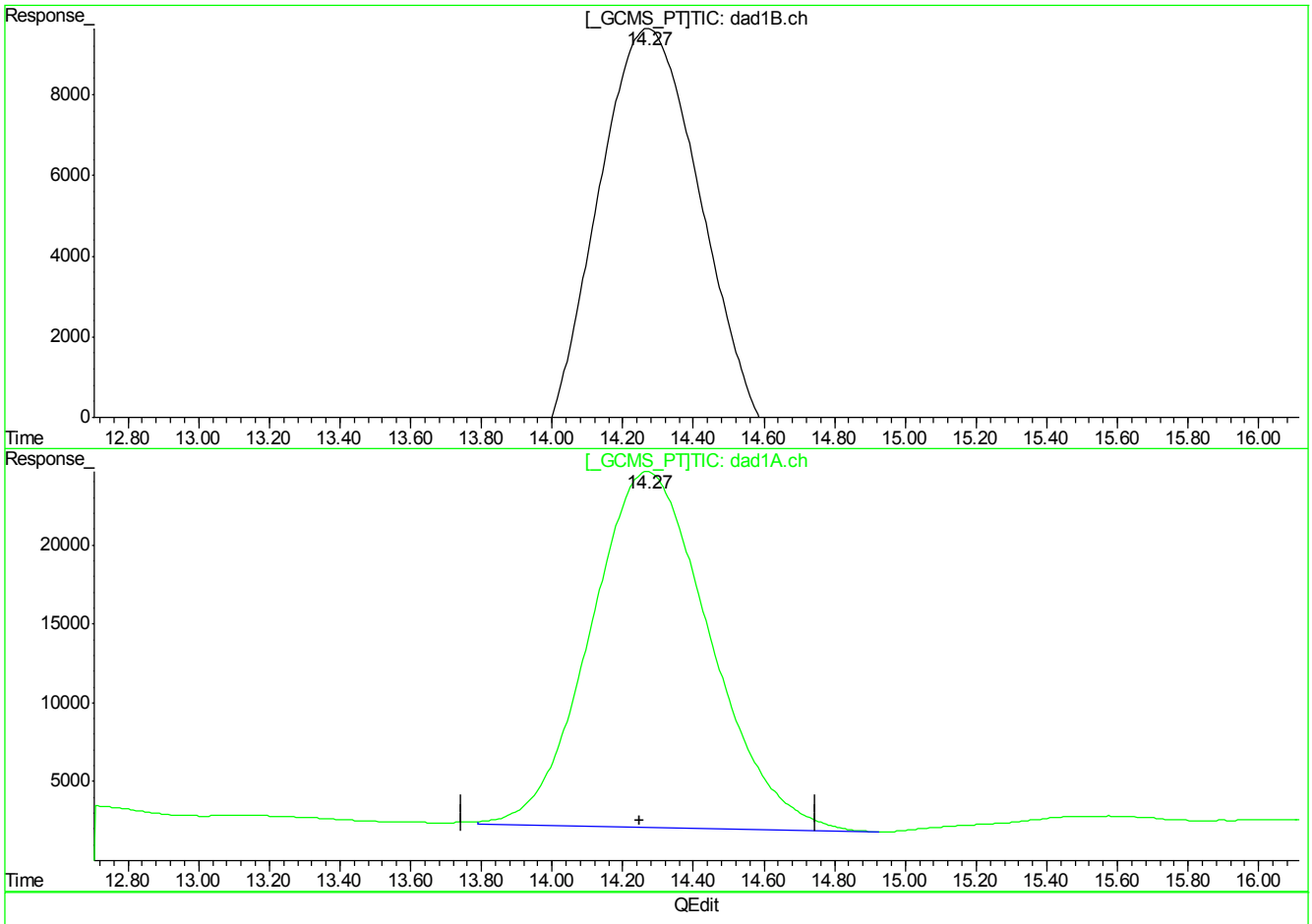
7.2.1.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614567.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0503RPB3\GG614567.D\dad1A.ch
Acq On : 04-May-2018, 02:03:29 Operator: evitam
Sample : op69897-mb Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.27min 514.639ppb

response 2673491

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 487.448ppb m

response 5273029

(+) = Expected Retention Time
GG614567.D 8330RPB.M_1113M.M Fri May 04 09:28:08 2018

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059701.D\dad1B.ch Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059701.D\dad1A.ch
Acq On : 11-May-2018, 01:58:33 Operator: evitam
Sample : op69973-mb Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:19 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.92	9.92	1020217	1839253	381.290	390.106
	Spiked Amount 500.000	Range 69 - 134		Recovery =		76.26%	78.02%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

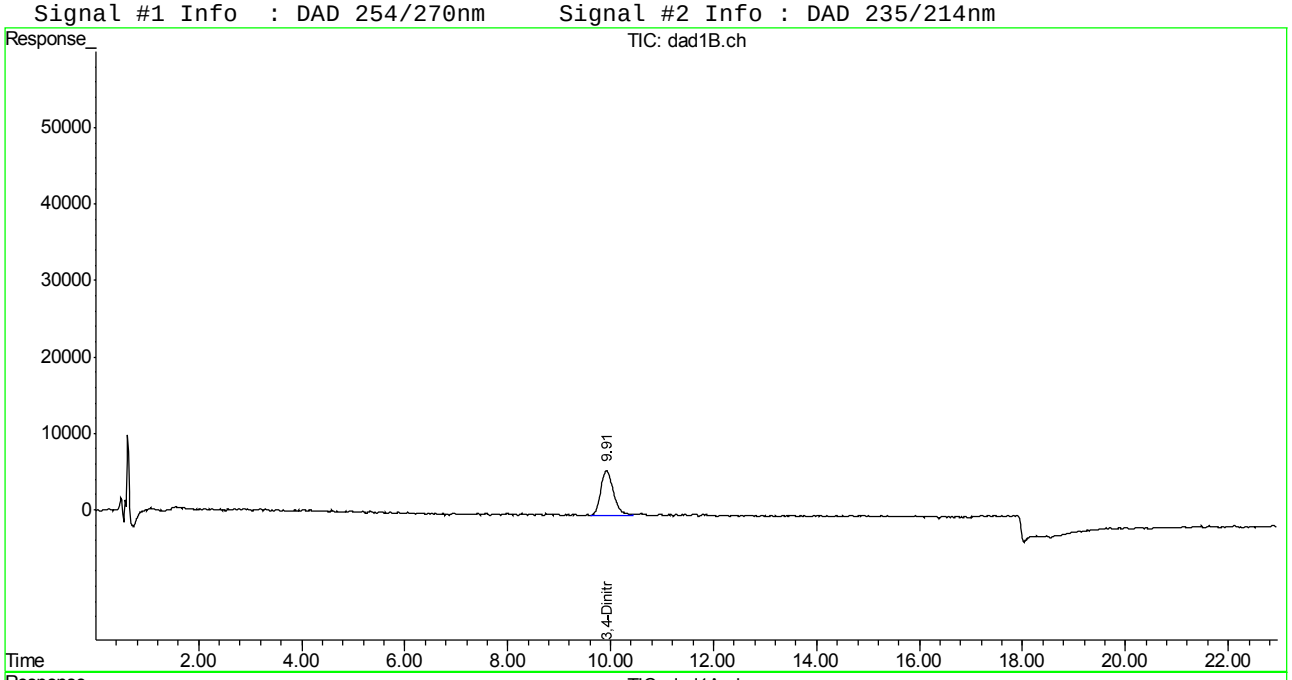
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059701.D 8330B_0419PLUS.M Fri May 11 08:38:14 2018 Page 1

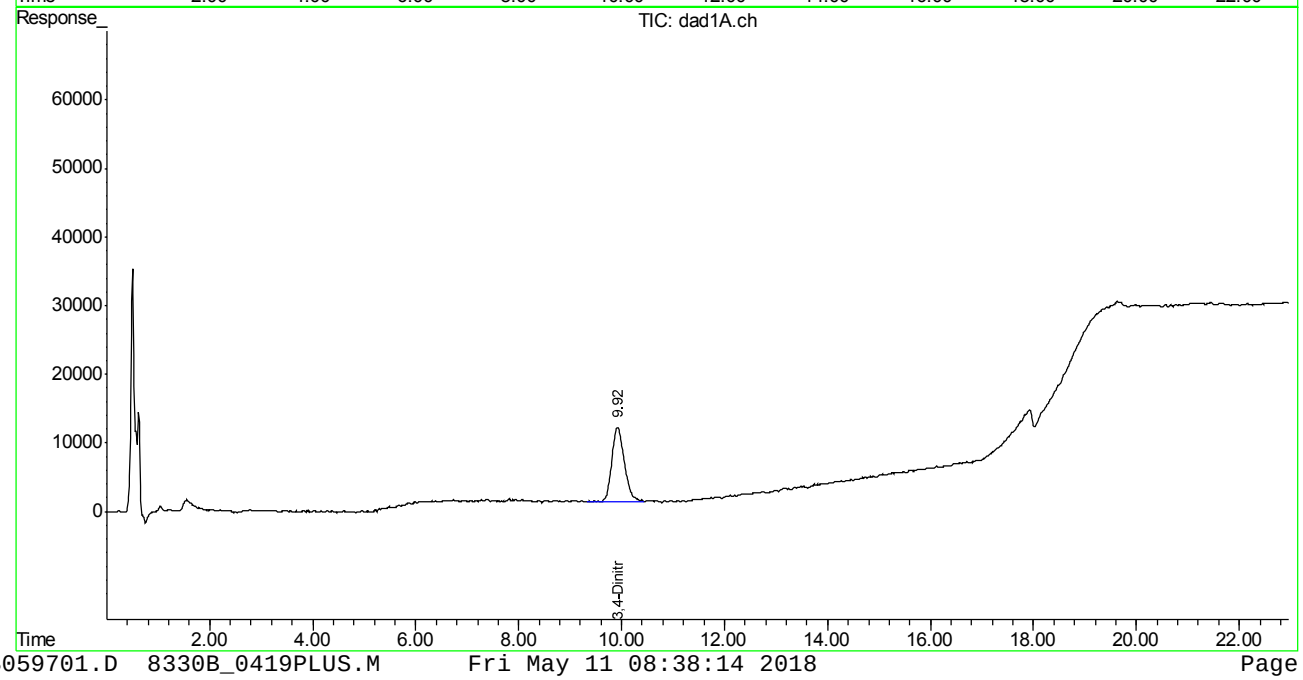
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059701.D\dad1B.ch Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059701.D\dad1A.ch
Acq On : 11-May-2018, 01:58:33 Operator: evitam
Sample : op69973-mb Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:31 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059701.D 8330B_0419PLUS.M Fri May 11 08:38:14 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059724.D\dad1B.ch Vial: 48
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059724.D\dad1A.ch
Acq On : 11-May-2018, 13:30:25 Operator: evitam
Sample : op69973-gb1 Inst : G1315B
Misc : OP69973,gbb1730,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 07:07:34 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.84	9.84	909395	1682393	339.872	356.836
	Spiked Amount 500.000	Range 69 - 134		Recovery =		67.97%#	71.37%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

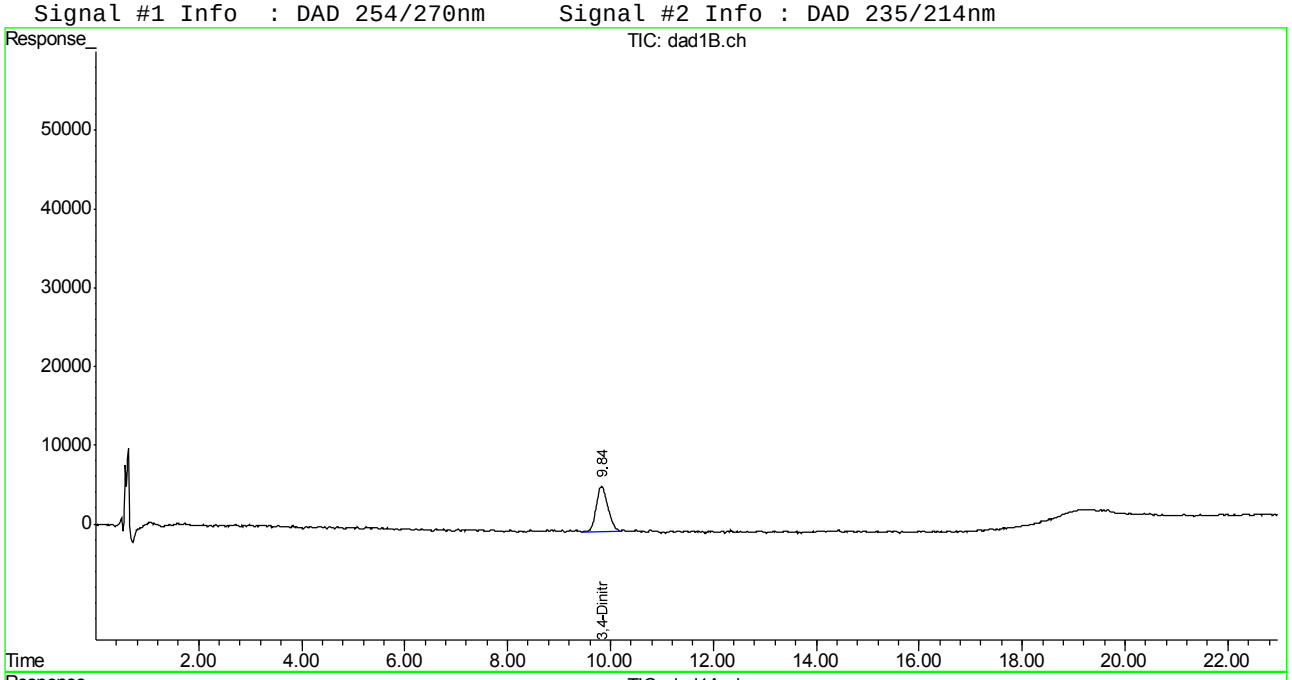
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059724.D 8330B_0419PLUS.M Mon May 14 10:52:50 2018 Page 1

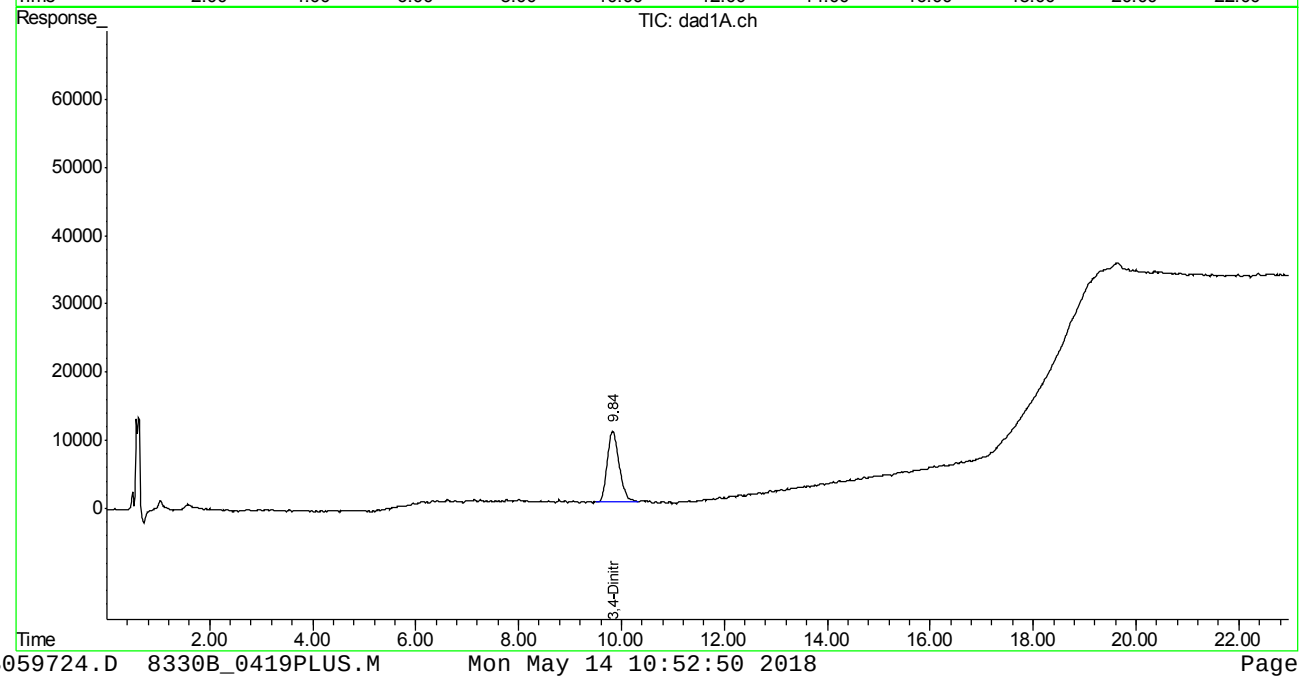
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059724.D\dad1B.ch Vial: 48
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059724.D\dad1A.ch
Acq On : 11-May-2018, 13:30:25 Operator: evitam
Sample : op69973-gb1 Inst : G1315B
Misc : OP69973,gbb1730,10.01,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 10:47 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059724.D 8330B_0419PLUS.M Mon May 14 10:52:50 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059725.D\dad1B.ch Vial: 49
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059725.D\dad1A.ch
Acq On : 11-May-2018, 14:00:20 Operator: evitam
Sample : op69973-gb2 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 07:07:35 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.83	9.83	906758	1667655	338.886	353.710
	Spiked Amount 500.000	Range 69 - 134		Recovery =		67.78%#	70.74%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

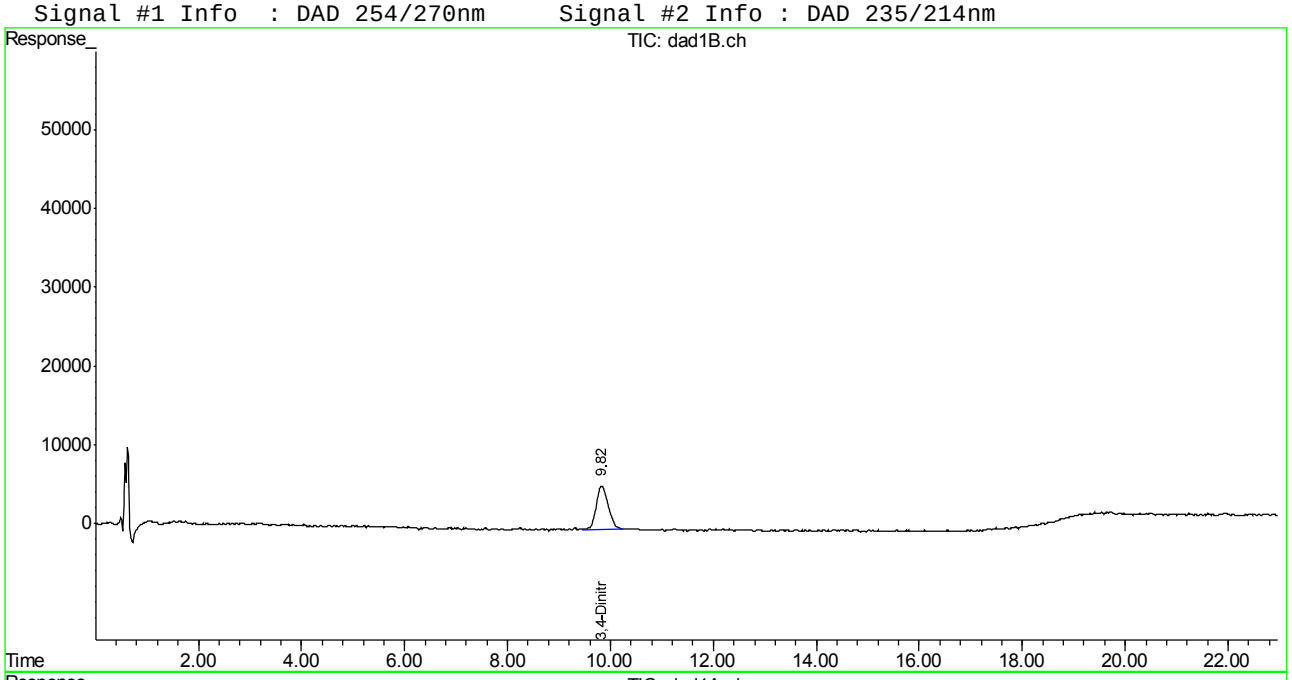
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059725.D 8330B_0419PLUS.M Mon May 14 10:52:51 2018 Page 1

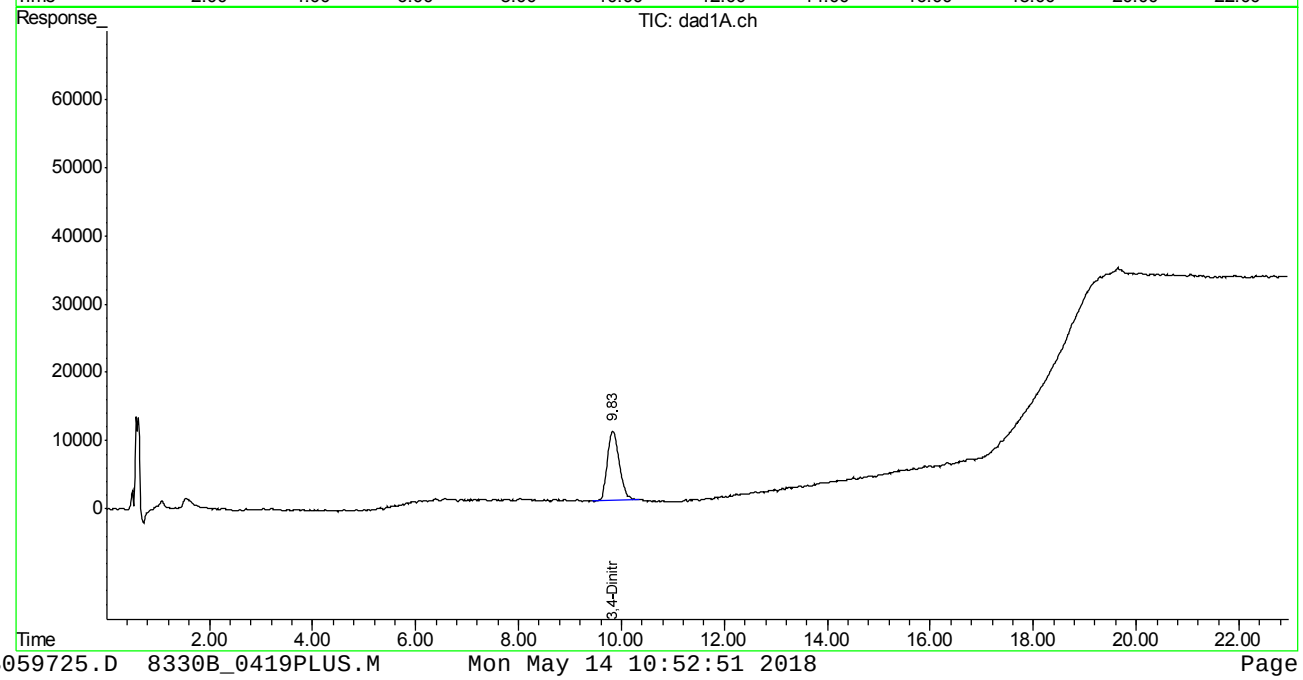
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059725.D\dad1B.ch Vial: 49
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059725.D\dad1A.ch
Acq On : 11-May-2018, 14:00:20 Operator: evitam
Sample : op69973-gb2 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 10:47 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059725.D 8330B_0419PLUS.M Mon May 14 10:52:51 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059726.D\dad1B.ch Vial: 50
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059726.D\dad1A.ch
Acq On : 11-May-2018, 14:30:20 Operator: evitam
Sample : op69973-gb3 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 07:07:36 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.85	9.85	879572	1648514	328.726	349.650
	Spiked Amount 500.000	Range 69 - 134		Recovery =		65.75%#	69.93%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

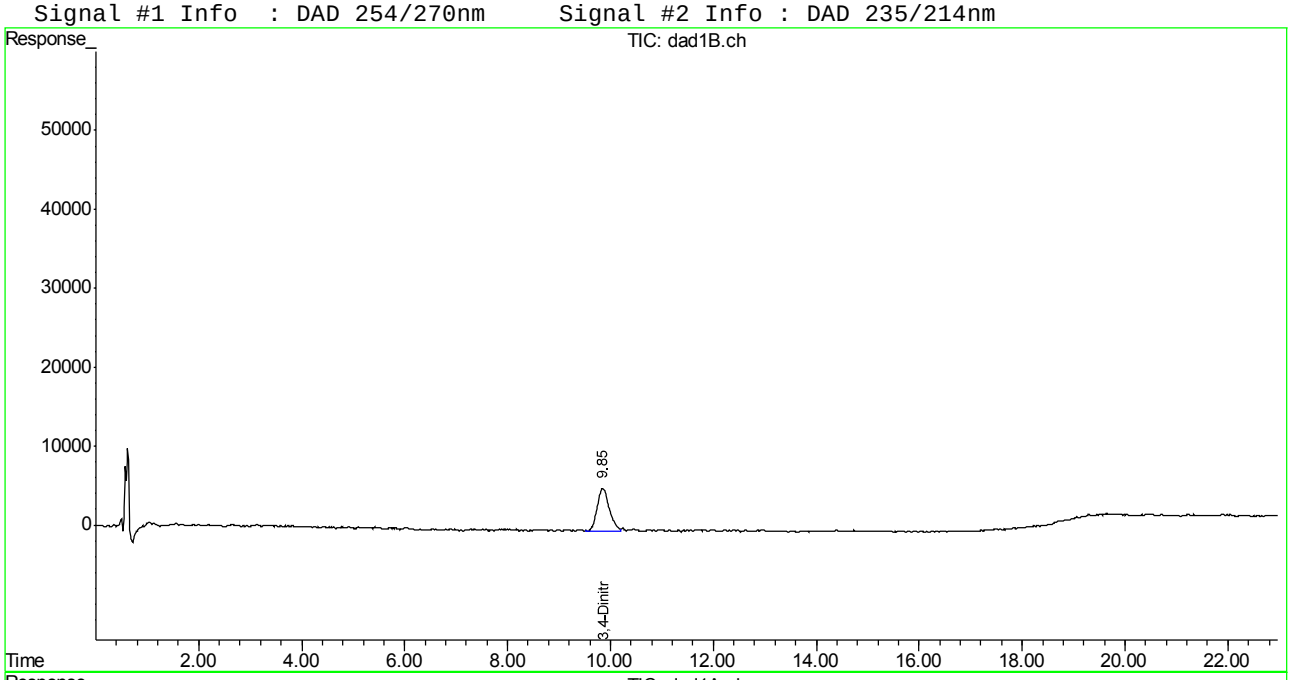
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059726.D 8330B_0419PLUS.M Mon May 14 10:52:52 2018 Page 1

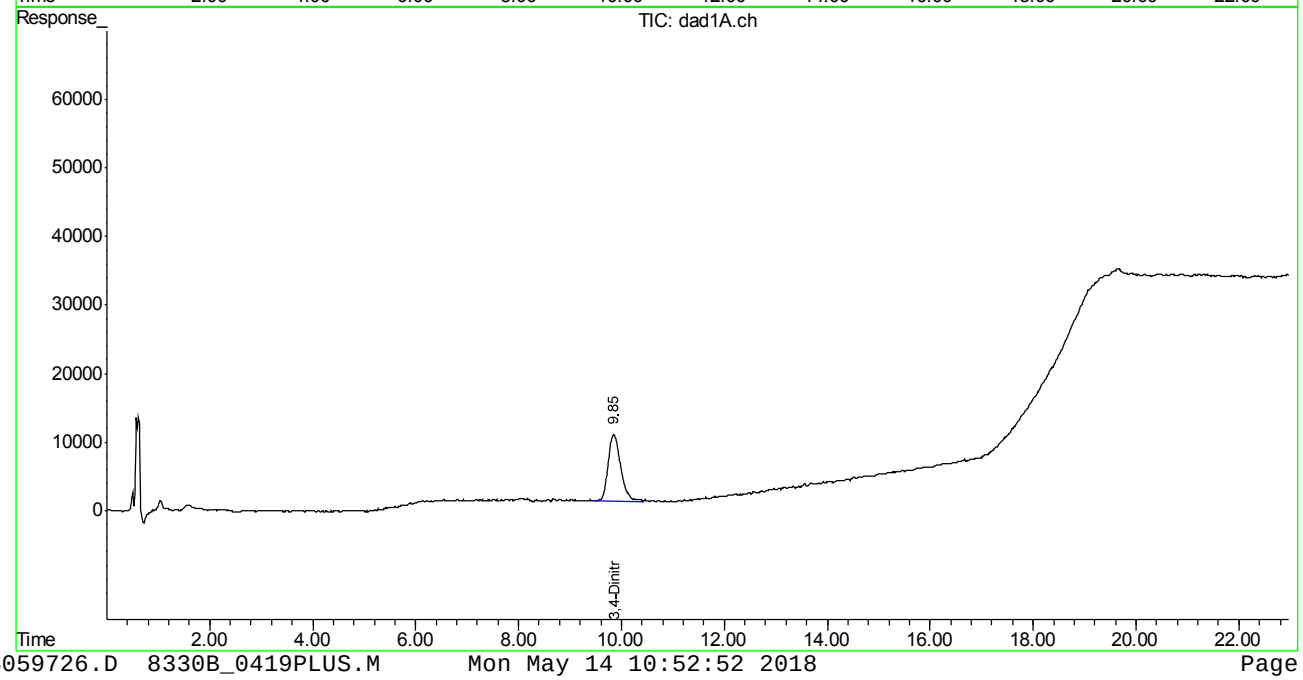
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059726.D\dad1B.ch Vial: 50
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059726.D\dad1A.ch
Acq On : 11-May-2018, 14:30:20 Operator: evitam
Sample : op69973-gb3 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 10:48 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059726.D 8330B_0419PLUS.M Mon May 14 10:52:52 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614688.D\dad1B.ch Vial: 17
Signal #2 : G:\DATA\0510RPB3\GG614688.D\dad1A.ch
Acq On : 10-May-2018, 21:55:45 Operator: evitam
Sample : op69989-mb Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.34	14.34	2667839	5094600	513.551	470.953m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		102.71%	94.19%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

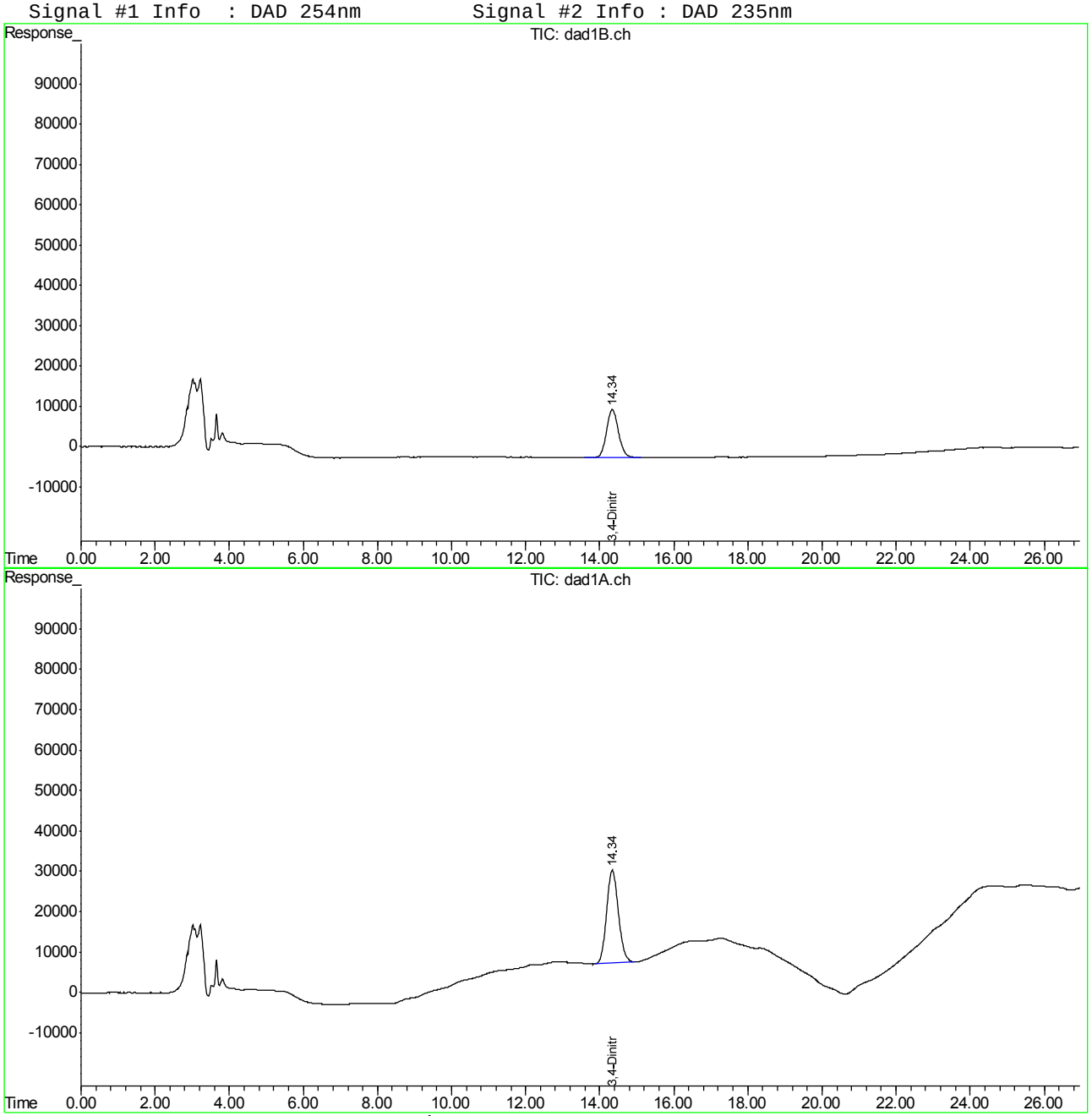
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614688.D 8330RPB.M_1113M.M Fri May 11 10:37:16 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614688.D\dad1B.ch Vial: 17
Signal #2 : G:\DATA\0510RPB3\GG614688.D\dad1A.ch
Acq On : 10-May-2018, 21:55:45 Operator: evitam
Sample : op69989-mb Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:28 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

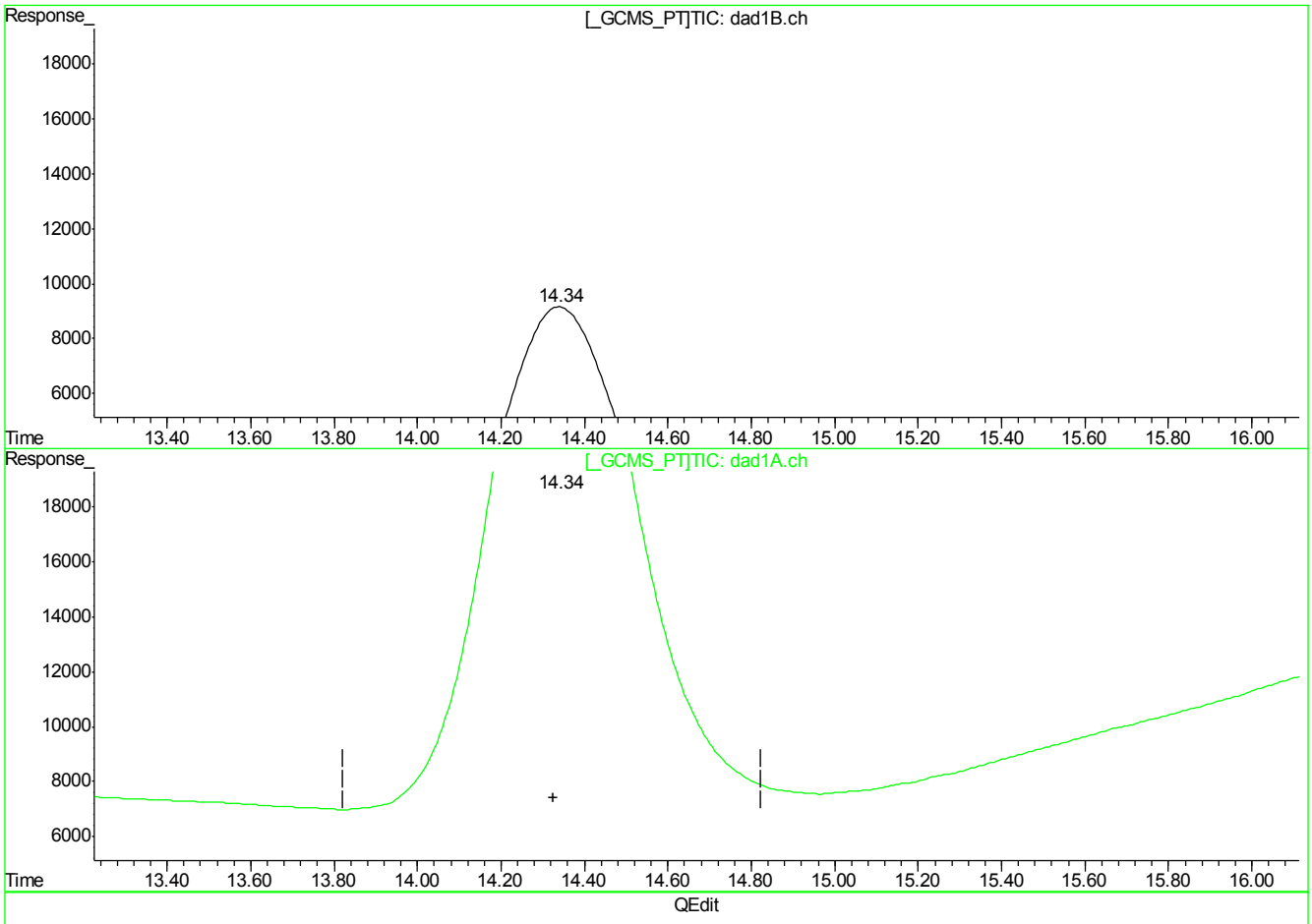
Sample Number:	OP69989-MB	**Method:**	SW846 8330B
Lab FileID:	GG614688.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/10/18 21:55	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.34	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614688.D\dad1B.ch Vial: 17
Signal #2 : G:\DATA\0510RPB3\GG614688.D\dad1A.ch
Acq On : 10-May-2018, 21:55:45 Operator: evitam
Sample : op69989-mb Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.34min 513.551ppb

response 2667839

(12) 3,4-Dinitrotoluene #2 (S)

14.34min 1031.321ppb

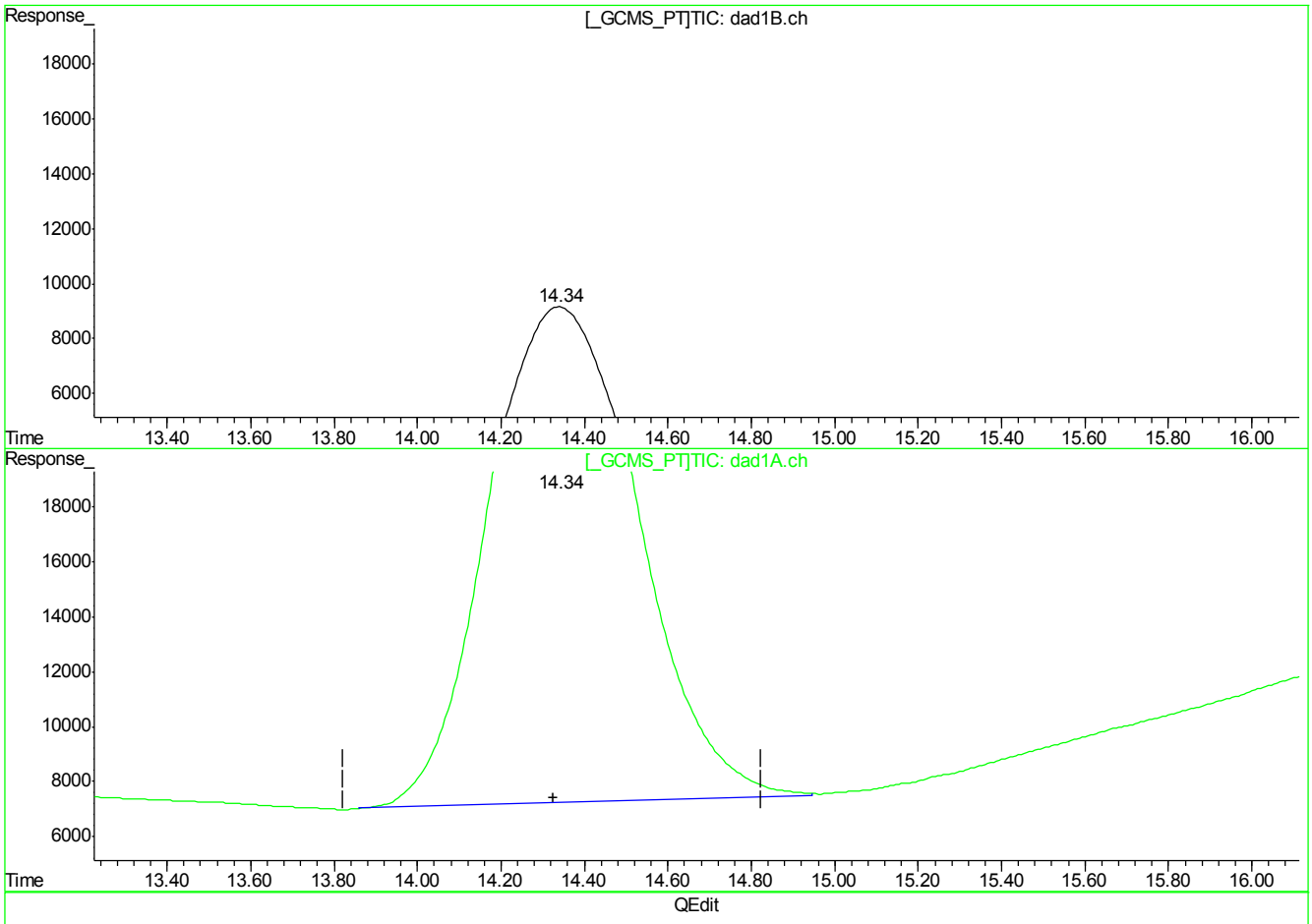
response 11156444

(+) = Expected Retention Time
GG614688.D 8330RPB.M_1113M.M Fri May 11 10:28:03 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614688.D\dad1B.ch Vial: 17
Signal #2 : G:\DATA\0510RPB3\GG614688.D\dad1A.ch
Acq On : 10-May-2018, 21:55:45 Operator: evitam
Sample : op69989-mb Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.34min 513.551ppb

response 2667839

(12) 3,4-Dinitrotoluene #2 (S)

14.34min 470.953ppb m

response 5094600

(+) = Expected Retention Time
GG614688.D 8330RPB.M_1113M.M Fri May 11 10:28:06 2018

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614705.D\dad1B.ch Vial: 32
Signal #2 : G:\DATA\0510RPB3\GG614705.D\dad1A.ch
Acq On : 11-May-2018, 06:16:21 Operator: evitam
Sample : op69989-gb1 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:36 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.29	14.29	2547369	5095396	490.361	471.027
	Spiked Amount 500.000	Range 69 - 134		Recovery =		98.07%	94.21%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

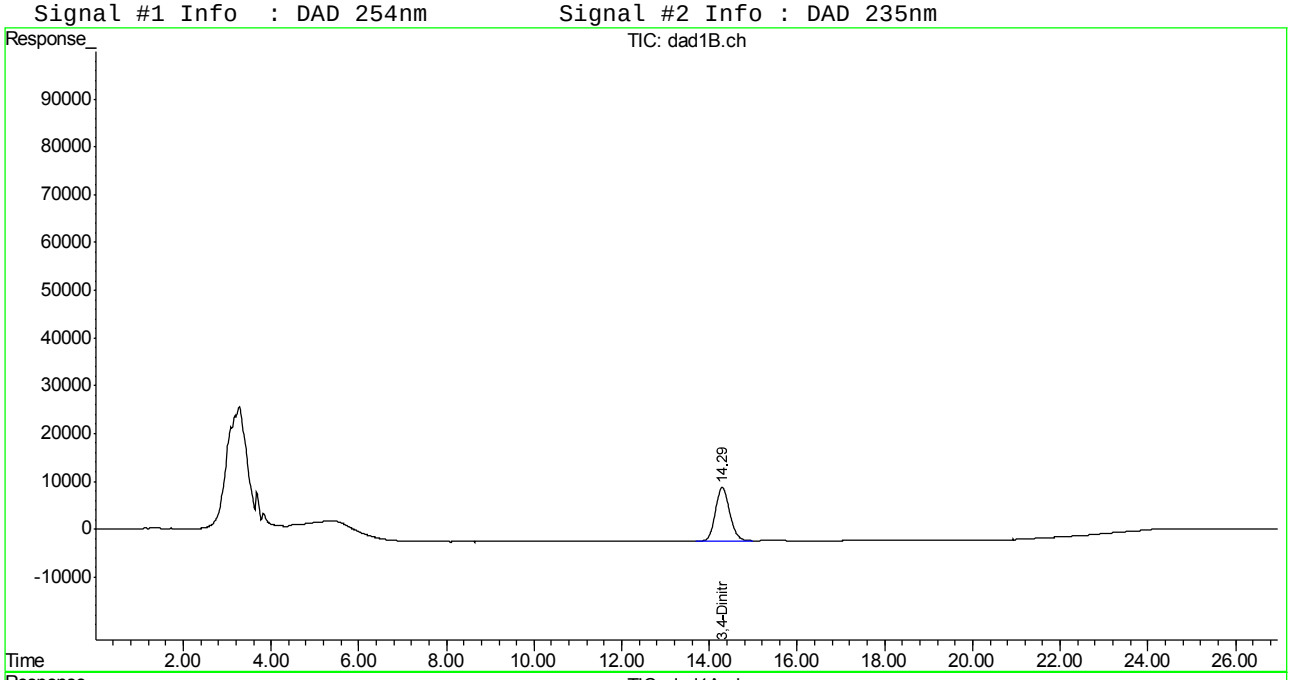
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614705.D 8330RPB.M_1113M.M Fri May 11 10:37:32 2018 Page 1

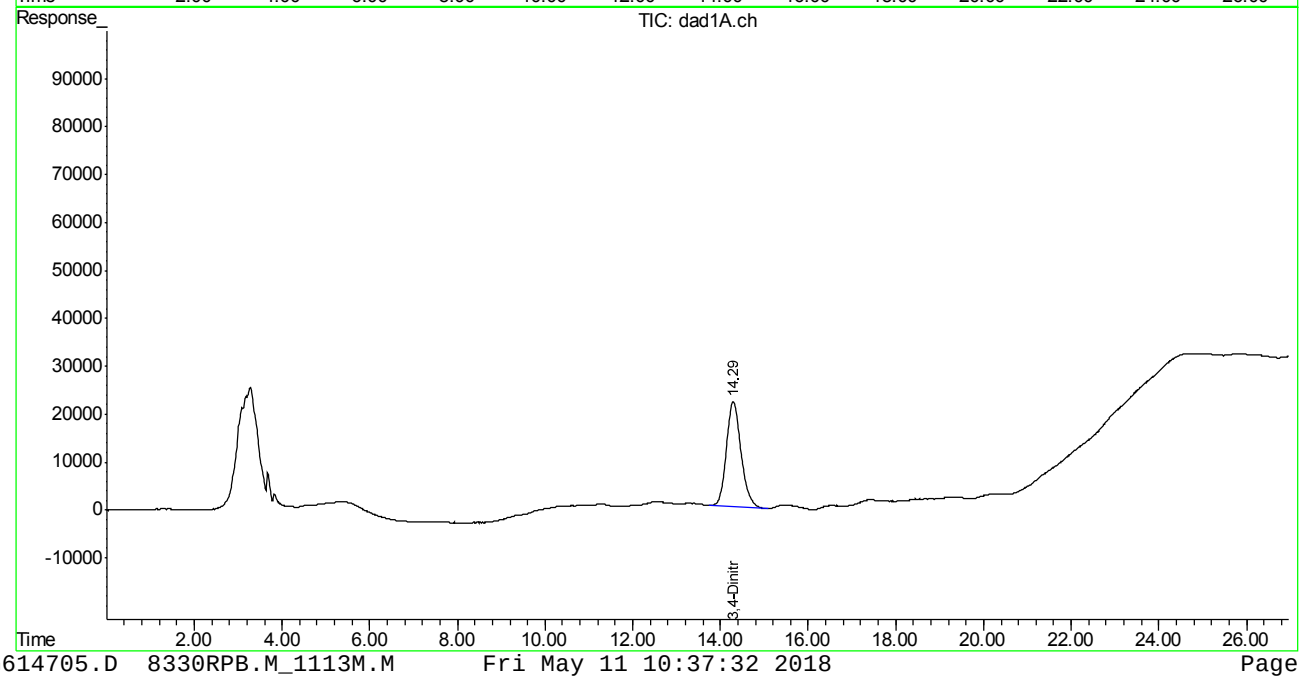
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614705.D\dad1B.ch Vial: 32
Signal #2 : G:\DATA\0510RPB3\GG614705.D\dad1A.ch
Acq On : 11-May-2018, 06:16:21 Operator: evitam
Sample : op69989-gb1 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:34 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614709.D\dad1B.ch Vial: 34
Signal #2 : G:\DATA\0510RPB3\GG614709.D\dad1A.ch
Acq On : 11-May-2018, 08:14:05 Operator: evitam
Sample : op69989-gb3 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:40 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.24	14.23	2588303	5053523	498.241	467.156m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		99.65%	93.43%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

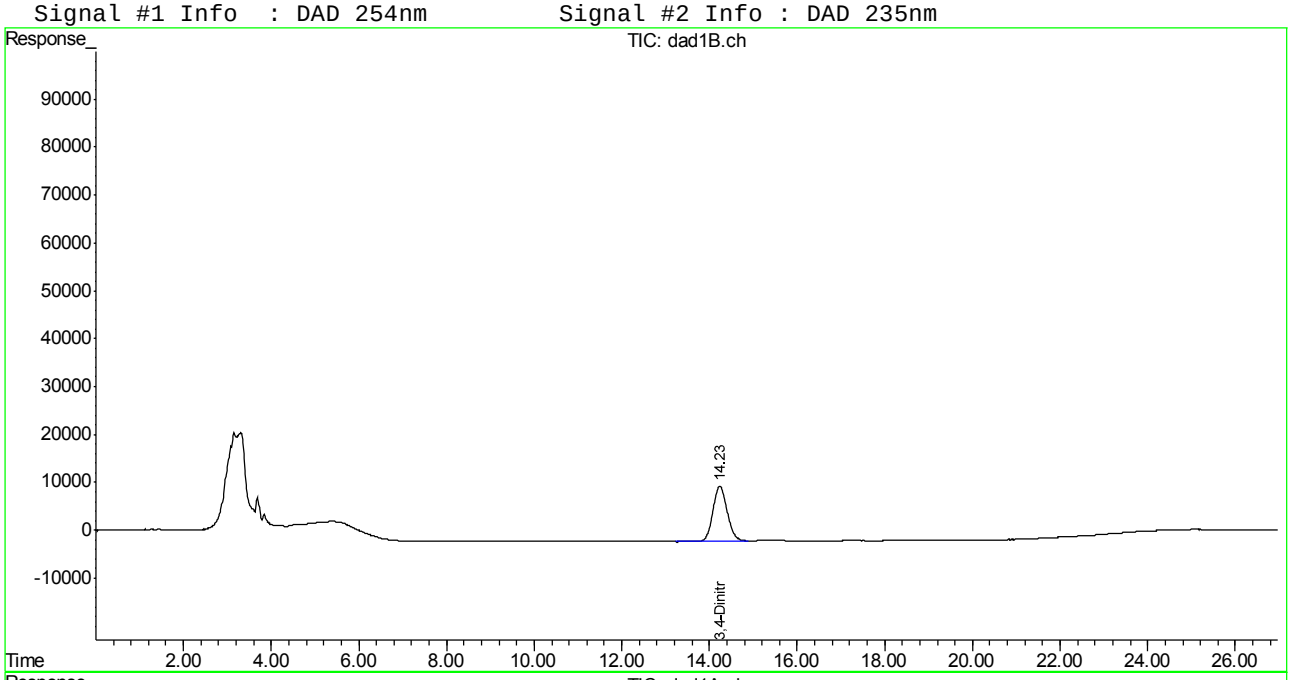
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614709.D 8330RPB.M_1113M.M Fri May 11 10:37:35 2018 Page 1

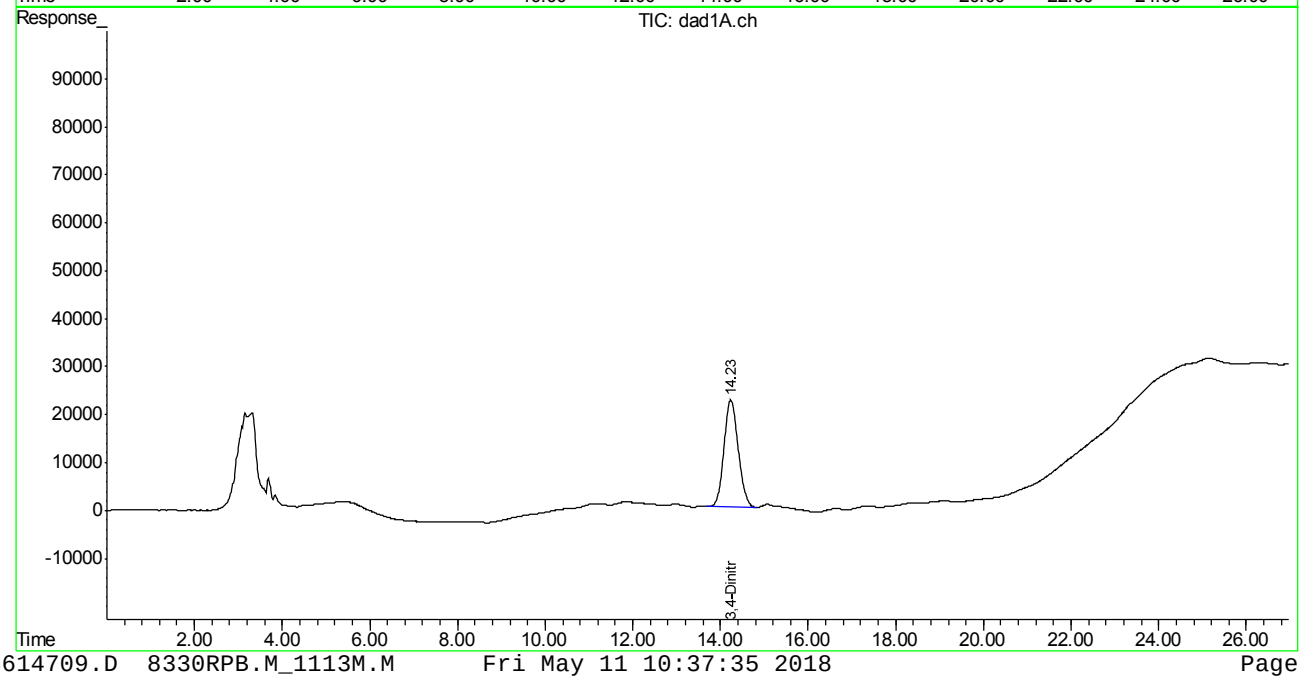
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614709.D\dad1B.ch Vial: 34
Signal #2 : G:\DATA\0510RPB3\GG614709.D\dad1A.ch
Acq On : 11-May-2018, 08:14:05 Operator: evitam
Sample : op69989-gb3 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:35 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

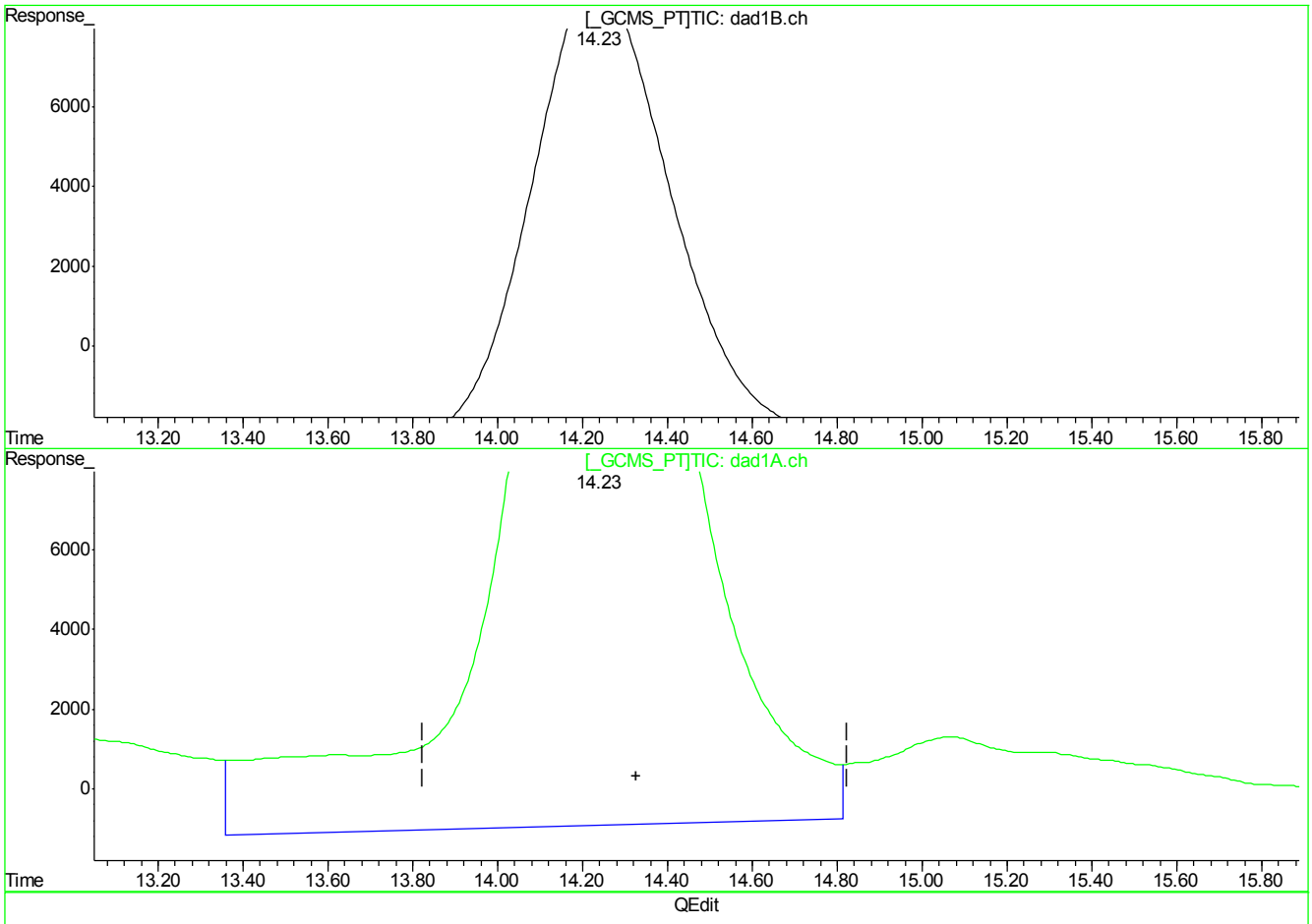
Sample Number:	OP69989-GB3	**Method:**	SW846 8330B
Lab FileID:	GG614709.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/11/18 08:14	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.23	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614709.D\dad1B.ch Vial: 34
Signal #2 : G:\DATA\0510RPB3\GG614709.D\dad1A.ch
Acq On : 11-May-2018, 08:14:05 Operator: evitam
Sample : op69989-gb3 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.24min 498.241ppb

response 2588303

(12) 3,4-Dinitrotoluene #2 (S)

14.24min 603.335ppb

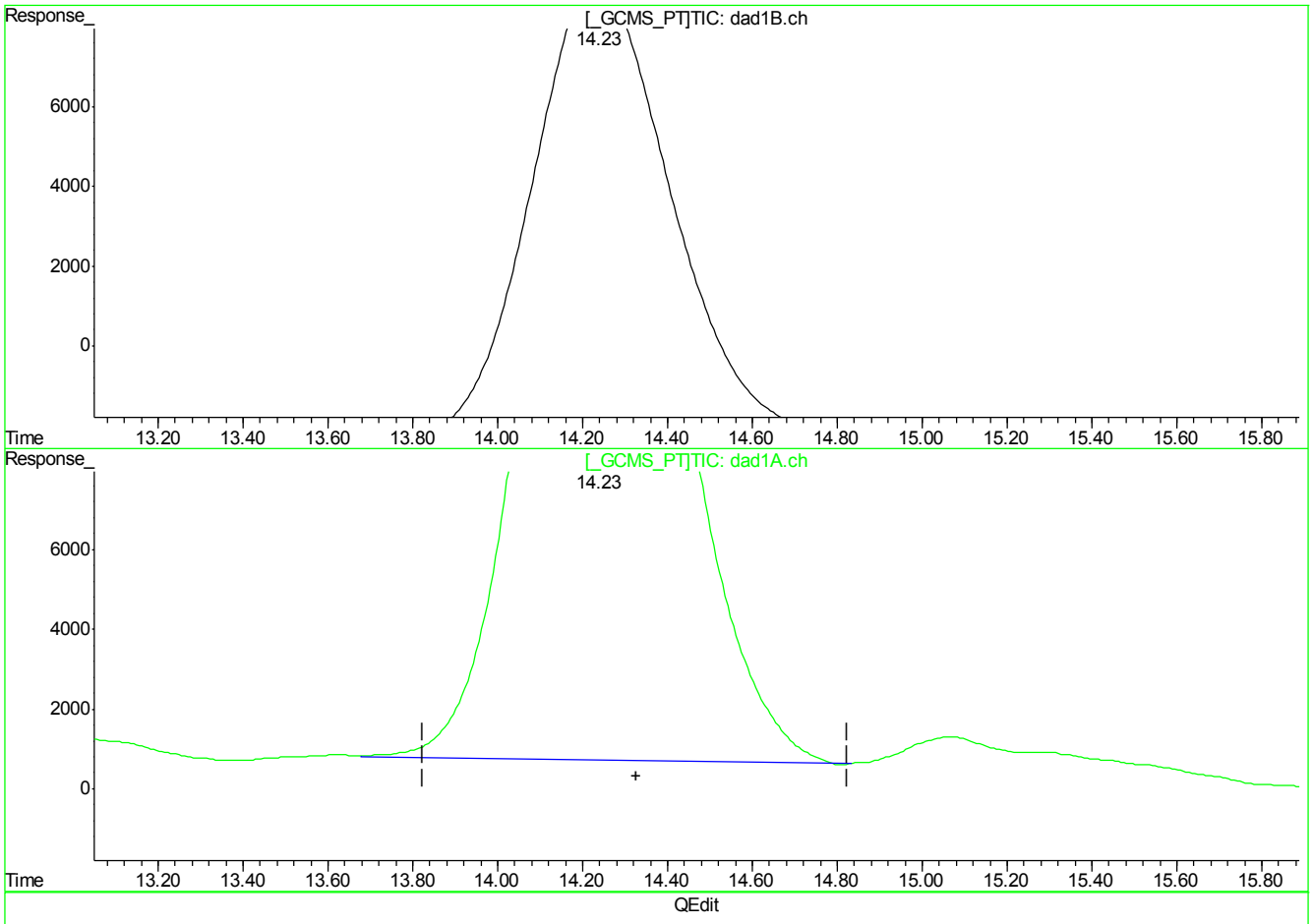
response 6526657

(+) = Expected Retention Time
GG614709.D 8330RPB.M_1113M.M Fri May 11 10:35:58 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614709.D\dad1B.ch Vial: 34
Signal #2 : G:\DATA\0510RPB3\GG614709.D\dad1A.ch
Acq On : 11-May-2018, 08:14:05 Operator: evitam
Sample : op69989-gb3 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.24min 498.241ppb

response 2588303

(12) 3,4-Dinitrotoluene #2 (S)

14.23min 467.156ppb m

response 5053523

(+) = Expected Retention Time
GG614709.D 8330RPB.M_1113M.M Fri May 11 10:36:01 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614566.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0503RPB3\GG614566.D\dad1A.ch
Acq On : 04-May-2018, 01:33:57 Operator: evitam
Sample : op69897-bs Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:27:38 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.33	14.33	2510101	5678774	483.187	524.956
	Spiked Amount 500.000	Range 70 - 136		Recovery =		96.64%	104.99%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.40	5.40	2165208	2165208	667.885	672.059
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.46	7.46	4491944	4486499	433.519	433.037
6)	RDX	7.93	7.93	2123665	2102329	445.757	443.235
7)	1,3-Dinitrobenze	9.96	9.96	6253428	6331452	437.093	497.785
8)	Nitrobenzene	10.93	10.93	4028274	5046819	426.841	544.960
9)	2,4,6-Trinitroto	11.70	11.70	4382994	7142716	432.491	544.628
10)	Nitroglycerin	0.00	12.45	0	10232286	N.D. d	3036.515
11)	Tetryl	12.99	12.99	2926918	6147284	361.176	436.162
13)	2,6-Dinitrotolue	14.68	14.67	3320826	5048030	464.477	497.536
14)	2,4-Dinitrotolue	15.39	15.39	5778681	4118777	440.815	432.467
15)	o-Nitrotoluene	16.94	16.94	2606102	3911230	451.149	453.548
16)	3,5-Dinitroanili	16.37	16.37	5151682	8740291	526.574	537.935
17)	p-Nitrotoluene	18.11	18.12	5213451	9713297	443.986	458.322
18)	4-Amino-2,6-Dini	18.11	18.12	5213451	9713297	443.986	456.989
19)	m-Nitrotoluene	19.33	19.33	2743029	4393227	465.285	451.773
20)	2-Amino-4,6-Dini	20.30	20.31	4231765	5830692	469.002	490.818
21)	PETN	0.00	21.84	0	8765381	N.D. d	2732.857m

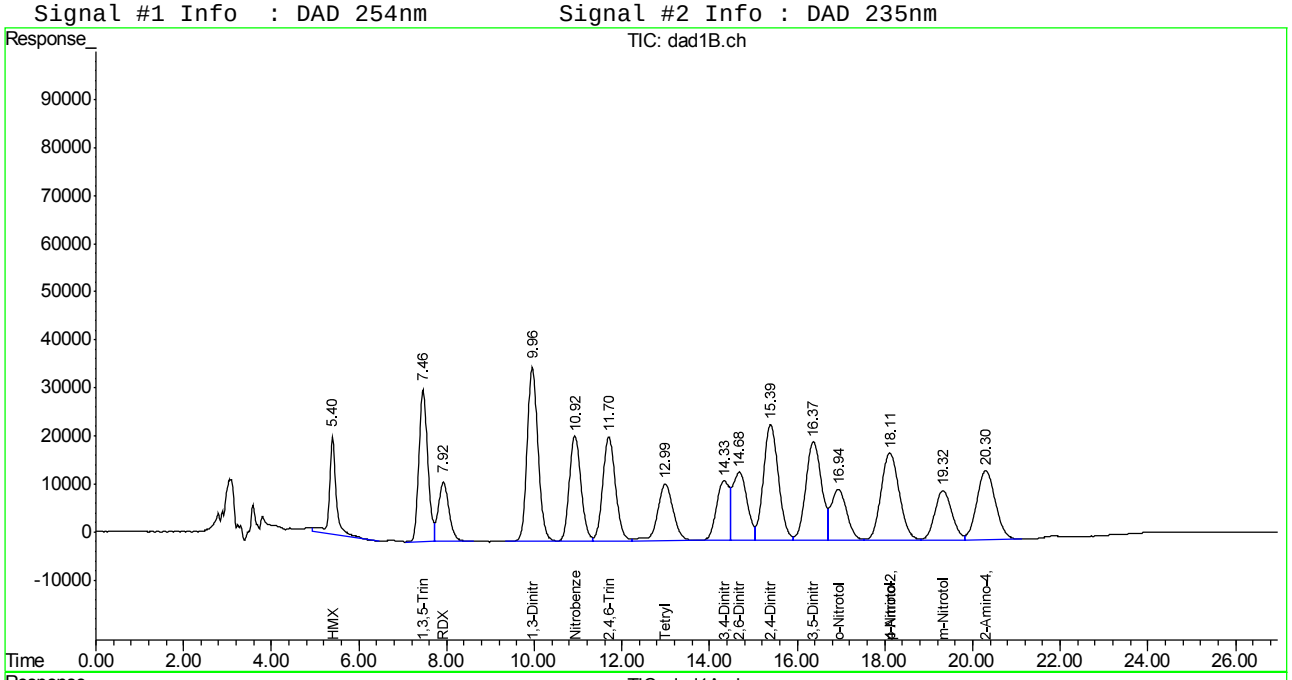
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614566.D 8330RPB.M_1113M.M Fri May 04 09:45:49 2018 Page 1

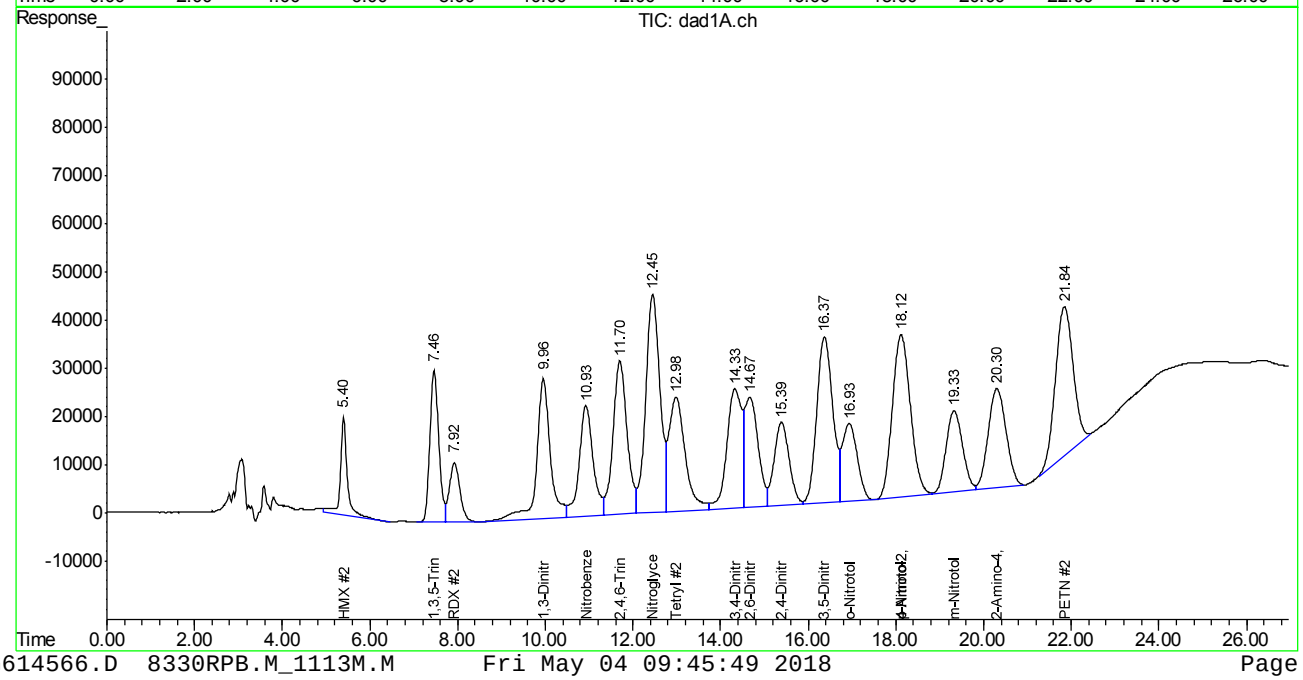
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614566.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0503RPB3\GG614566.D\dad1A.ch
Acq On : 04-May-2018, 01:33:57 Operator: evitam
Sample : op69897-bs Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:45 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG614566.D 8330RPB.M_1113M.M Fri May 04 09:45:49 2018 Page 2

Manual Integration Approval Summary

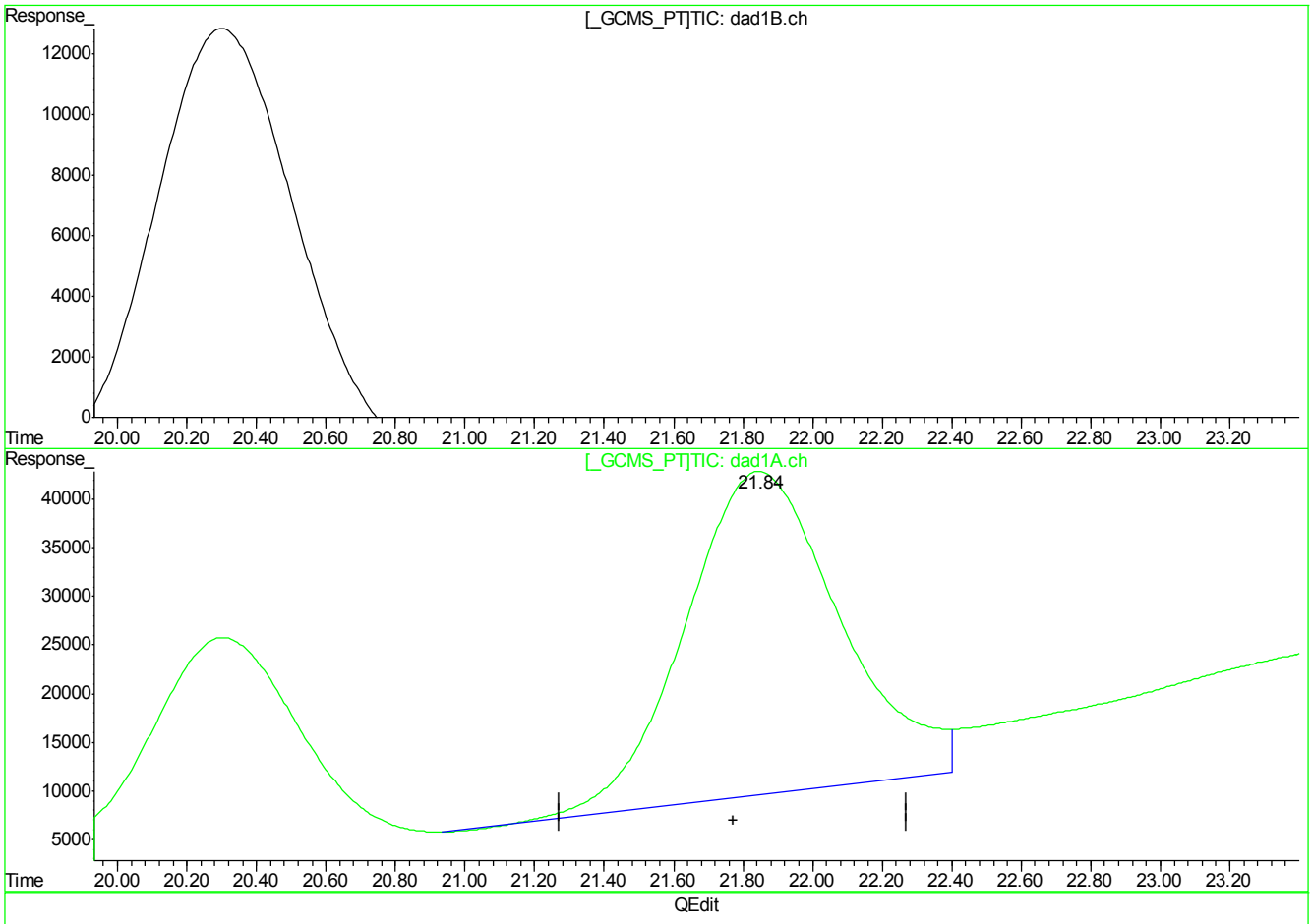
Sample Number:	OP69897-BS	**Method:**	SW846 8330B
Lab FileID:	GG614566.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/04/18 01:33	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.84	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614566.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0503RPB3\GG614566.D\dad1A.ch
Acq On : 04-May-2018, 01:33:57 Operator: evitam
Sample : op69897-bs Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.85min 3185.308ppb

response 10216574

(+) = Expected Retention Time
GG614566.D 8330RPB.M_1113M.M Fri May 04 09:27:15 2018

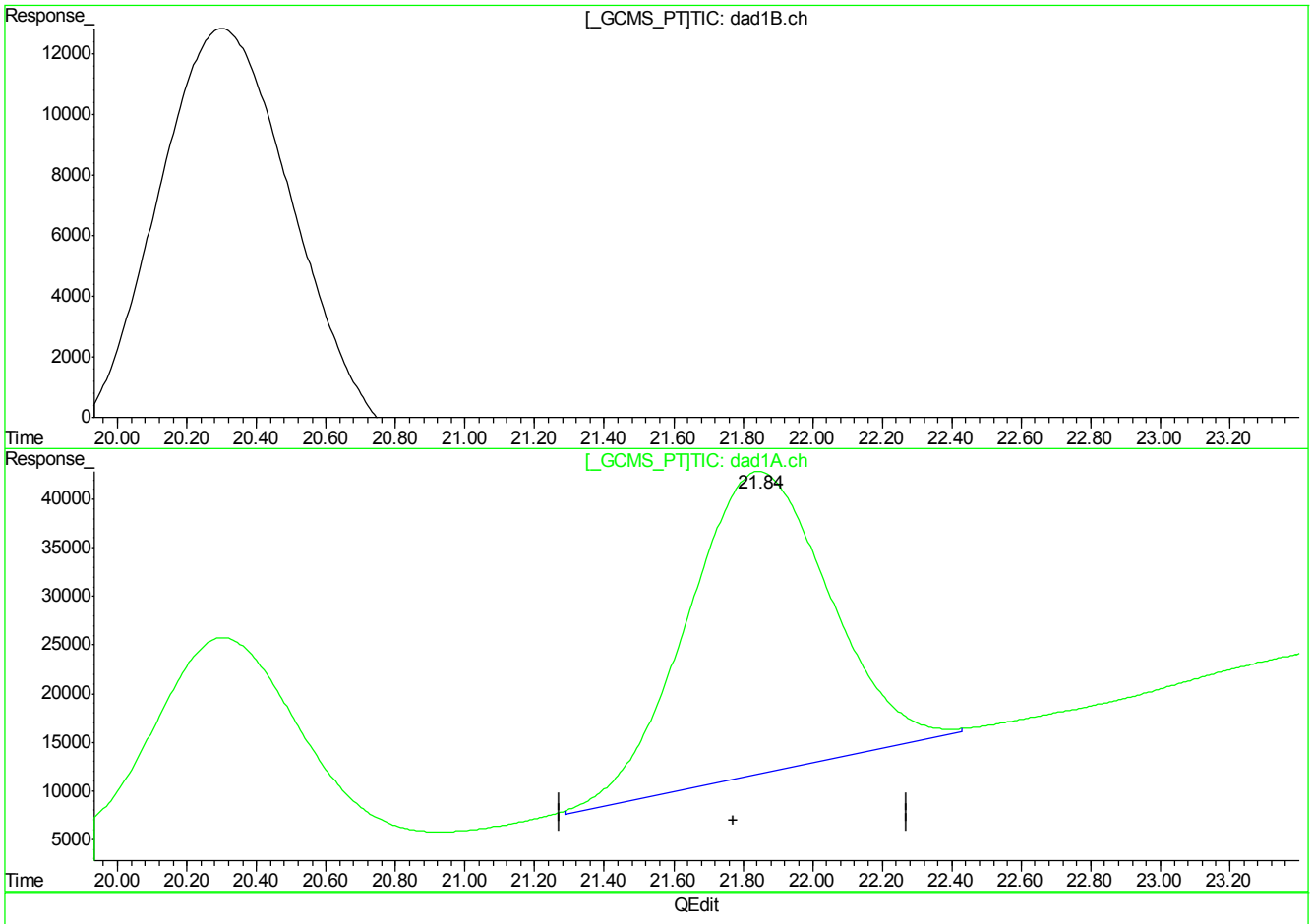
7.3.1.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614566.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0503RPB3\GG614566.D\dad1A.ch
Acq On : 04-May-2018, 01:33:57 Operator: evitam
Sample : op69897-bs Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.84min 2732.857ppb m

response 8765381

(+) = Expected Retention Time
GG614566.D 8330RPB.M_1113M.M Fri May 04 09:27:46 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1A.ch
Acq On : 11-May-2018, 00:58:38 Operator: evitam
Sample : op69973-bs Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:17 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.94	9.94	1085862	1846735	405.823	391.693
	Spiked Amount 500.000	Range 69 - 134		Recovery =		81.16%	78.34%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.41	1.41	741826	2246979	396.676m	442.263
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.67	2.67	874532	1383329	408.968	416.164
6)	1,3,5-Trinitrobe	4.28	4.28	1935851	3708604	444.891	444.246
7)	1,3-Dinitrobenze	5.42	5.42	2334532	1535654	421.093	412.325m
8)	3,5-Dinitroanili	5.69	5.69	2298608	3601017	470.027	481.497
9)	Nitrobenzene	6.91	6.91	1535333	1484469	421.354	447.689
10)	Nitroglycerin	0.00	8.18	0	2603711	N.D. d	2031.880
11)	Tetryl	8.39	8.34	1306131	2207618	443.777	425.051
12)	2,4,6-Trinitroto	8.81	8.81	1718837	2011724	407.292	443.821
13)	2-Amino-4,6-Dini	9.03	9.04	1664790	2650634	439.782	494.167
14)	4-Amino-2,6-Dini	9.47	9.47	1217537	2402604	464.480	463.657
16)	2,4-Dinitrotolue	10.56	10.55	2260736	1368752	429.715	463.476
17)	2,6-Dinitrotolue	10.99	11.00	1415823	1640559	409.639	480.449
18)	o-Nitrotoluene	14.26	14.27	1052478	1497430	421.355	457.126
19)	p-Nitrotoluene	14.84	14.84	1710811	1484562	433.442	471.246
20)	m-Nitrotoluene	15.82	15.83	1584787	1983547	444.266	492.944
21)	PETN	0.00	18.23	0	3100643	N.D. d	2232.556m

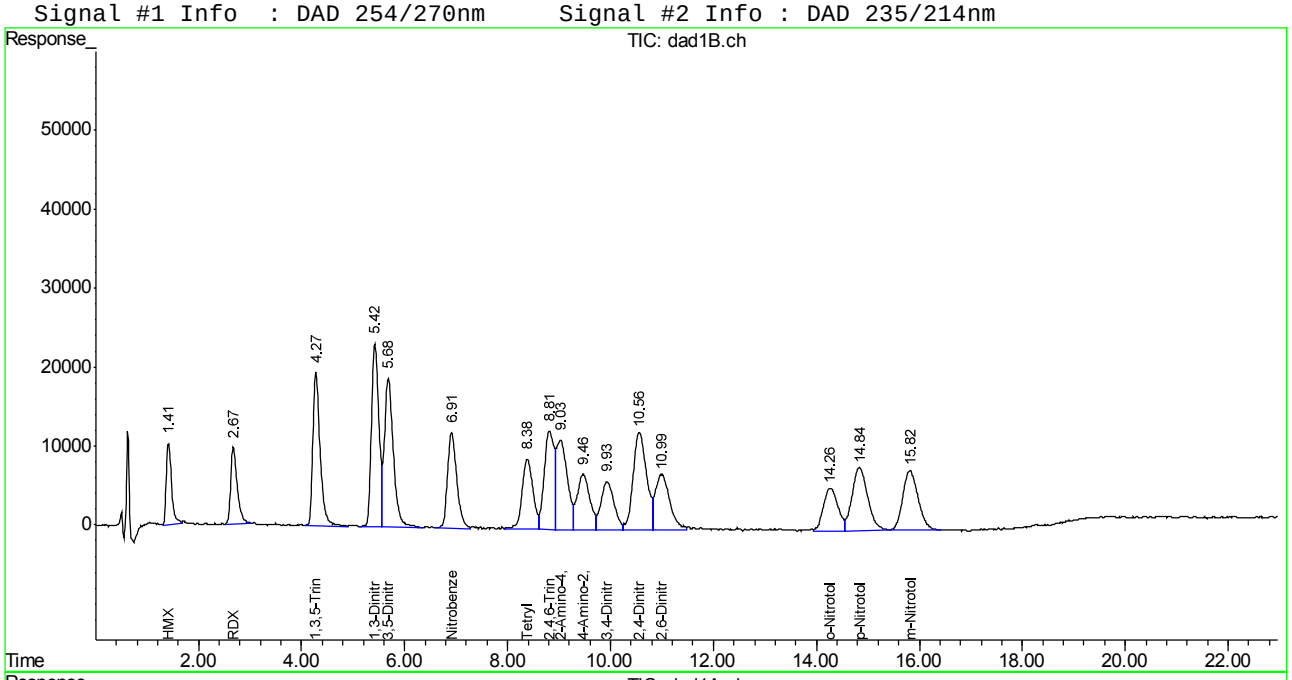
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059699.D 8330B_0419PLUS.M Fri May 11 08:38:12 2018 Page 1

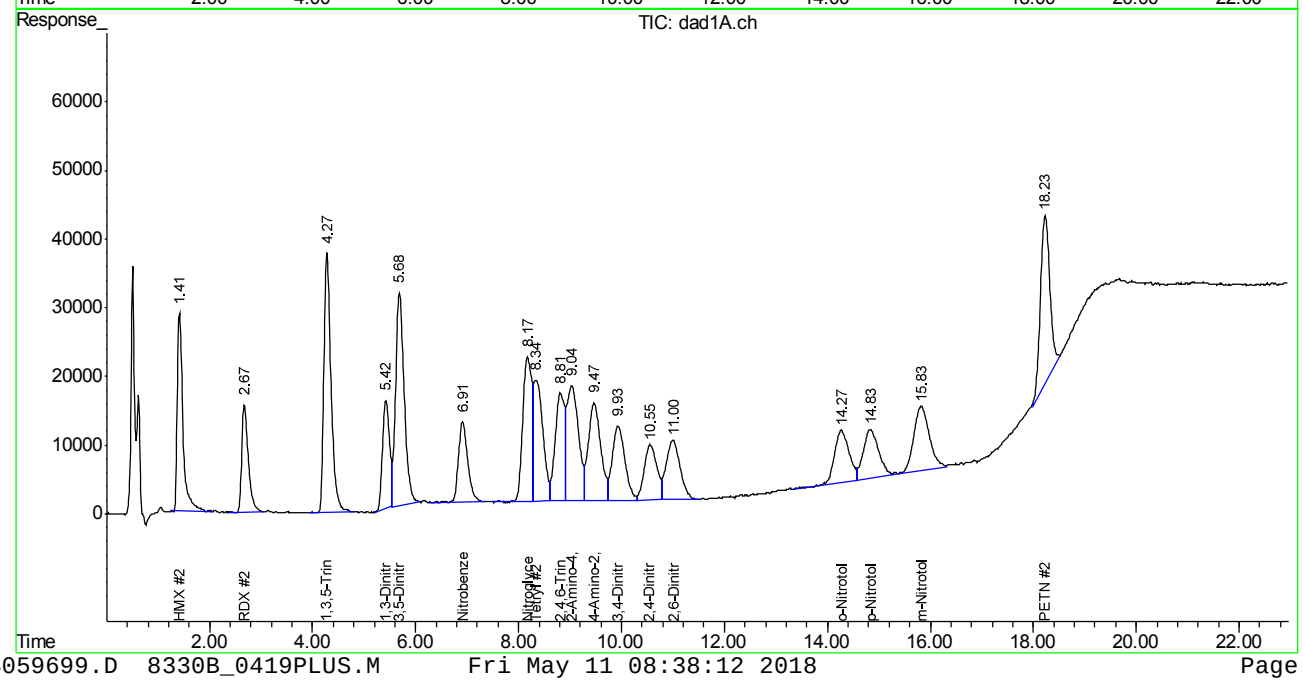
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1A.ch
Acq On : 11-May-2018, 00:58:38 Operator: evitam
Sample : op69973-bs Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:27 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

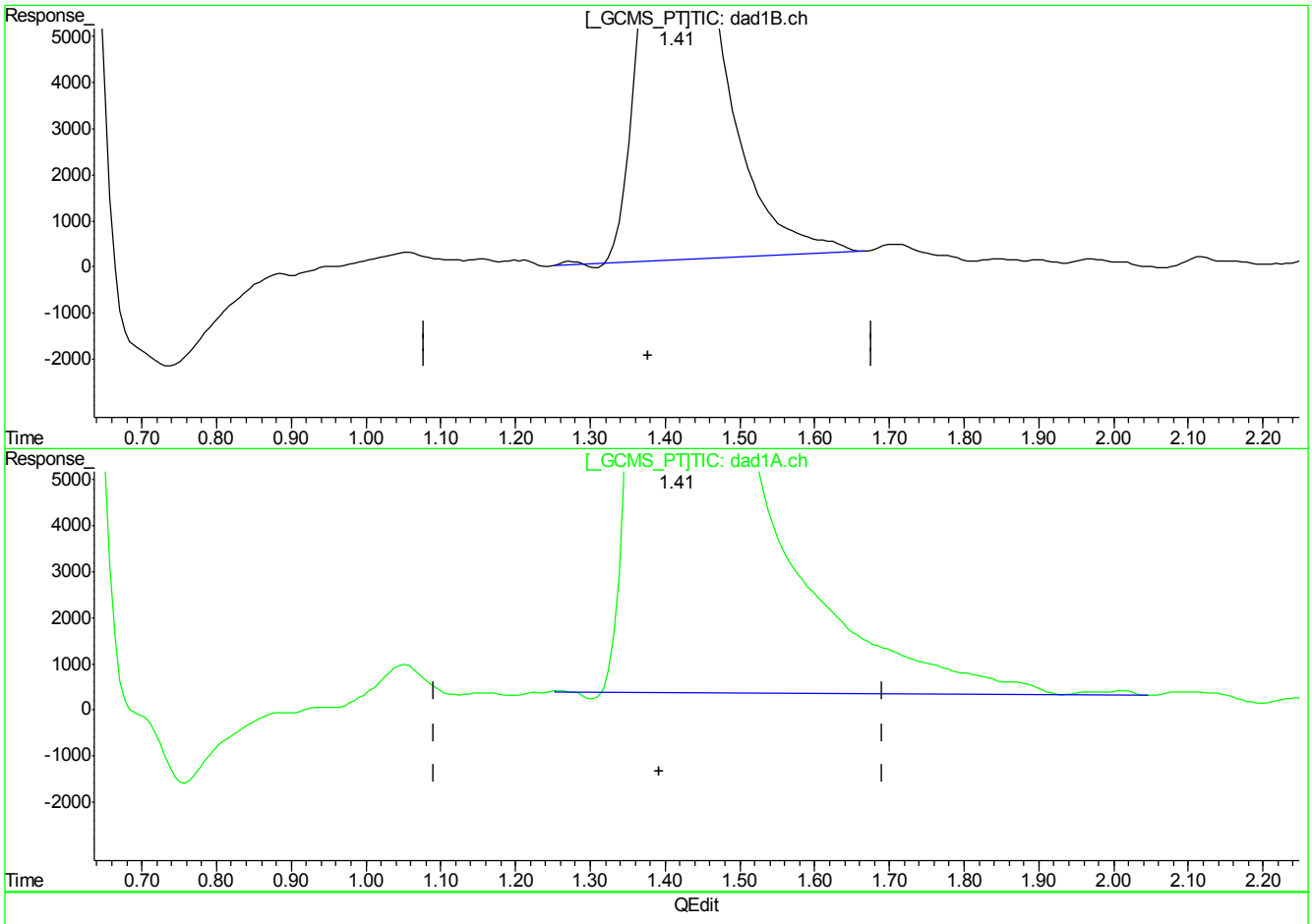
Sample Number:	OP69973-BS	**Method:**	SW846 8330B
Lab FileID:	BB059699.D	**Analyst approved:**	05/11/18 08:46 Evita Martinez
Injection Time:	05/11/18 00:58	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.41	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.42	Poorly defined baseline
PETN	78-11-5	2	18.23	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1A.ch
Acq On : 11-May-2018, 00:58:38 Operator: evitam
Sample : op69973-bs Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

1.41min 383.225ppb

response 716671

(2) HMX #2

1.41min 442.263ppb

response 2246979

(+) = Expected Retention Time
BB059699.D 8330B_0419PLUS.M Fri May 11 08:27:21 2018

7.3.2.2

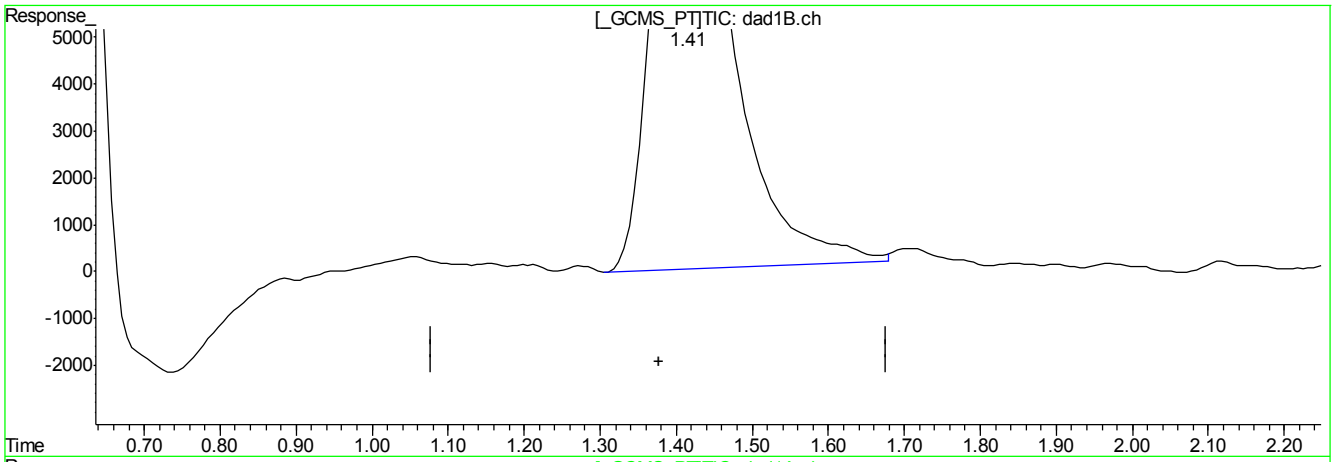
7

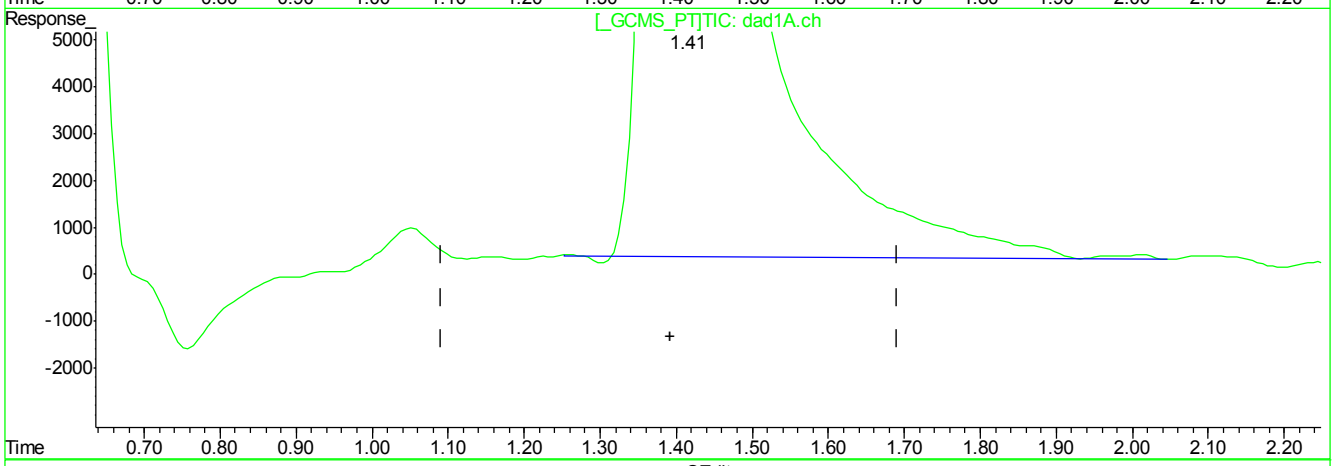
BB059699.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1A.ch
Acq On : 11-May-2018, 00:58:38 Operator: evitam
Sample : op69973-bs Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.41min 396.676ppb m

response 741826

(2) HMX #2

1.41min 442.263ppb

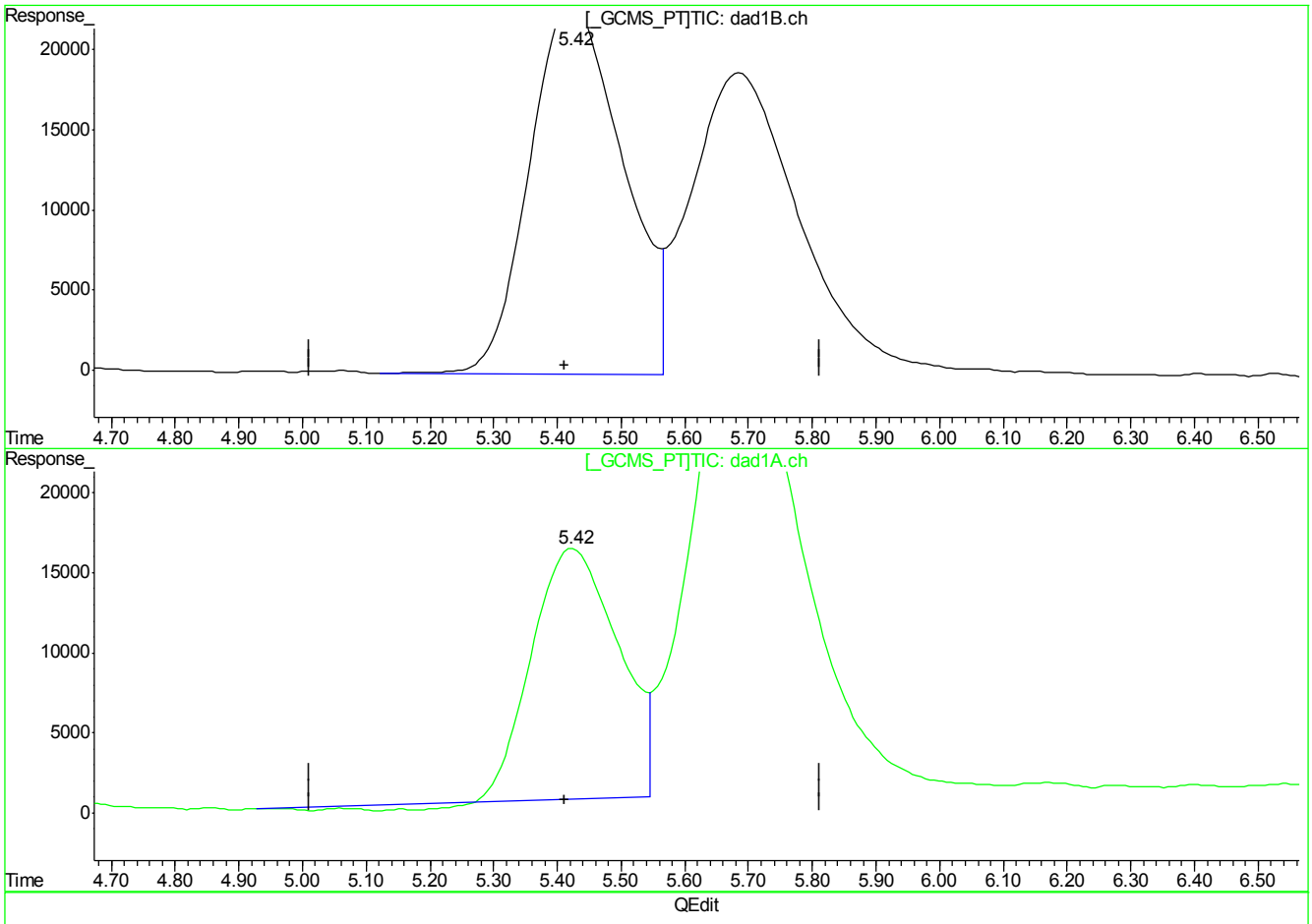
response 2246979

(+) = Expected Retention Time
BB059699.D 8330B_0419PLUS.M Fri May 11 08:27:24 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1A.ch
Acq On : 11-May-2018, 00:58:38 Operator: evitam
Sample : op69973-bs Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.42min 421.093ppb

response 2334532

(7) 1,3-Dinitrobenzene #2

5.42min 385.757ppb

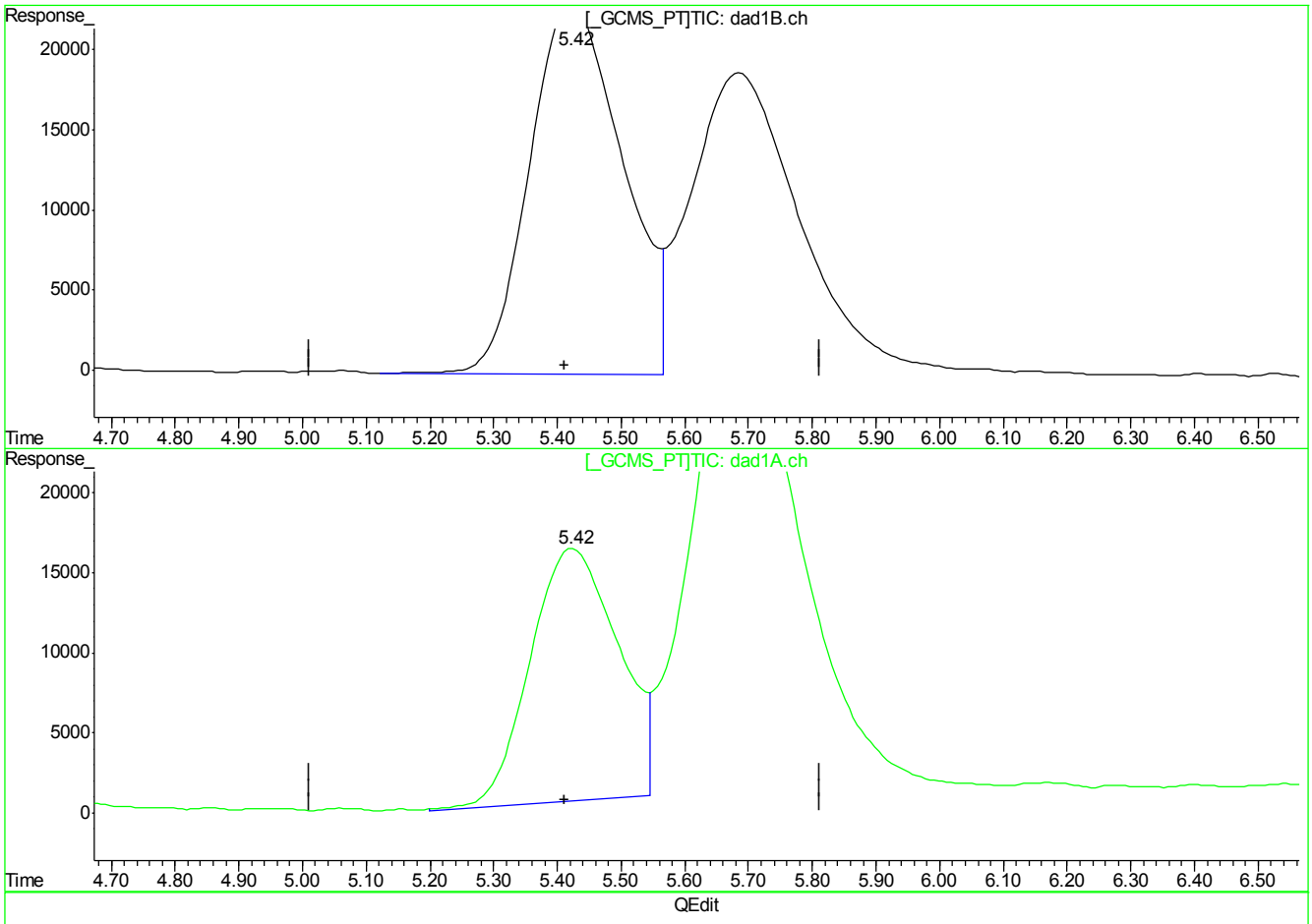
response 1436706

(+) = Expected Retention Time
BB059699.D 8330B_0419PLUS.M Fri May 11 08:27:33 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1A.ch
Acq On : 11-May-2018, 00:58:38 Operator: evitam
Sample : op69973-bs Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.42min 421.093ppb

response 2334532

(7) 1,3-Dinitrobenzene #2

5.42min 412.325ppb m

response 1535654

(+) = Expected Retention Time
BB059699.D 8330B_0419PLUS.M Fri May 11 08:27:36 2018

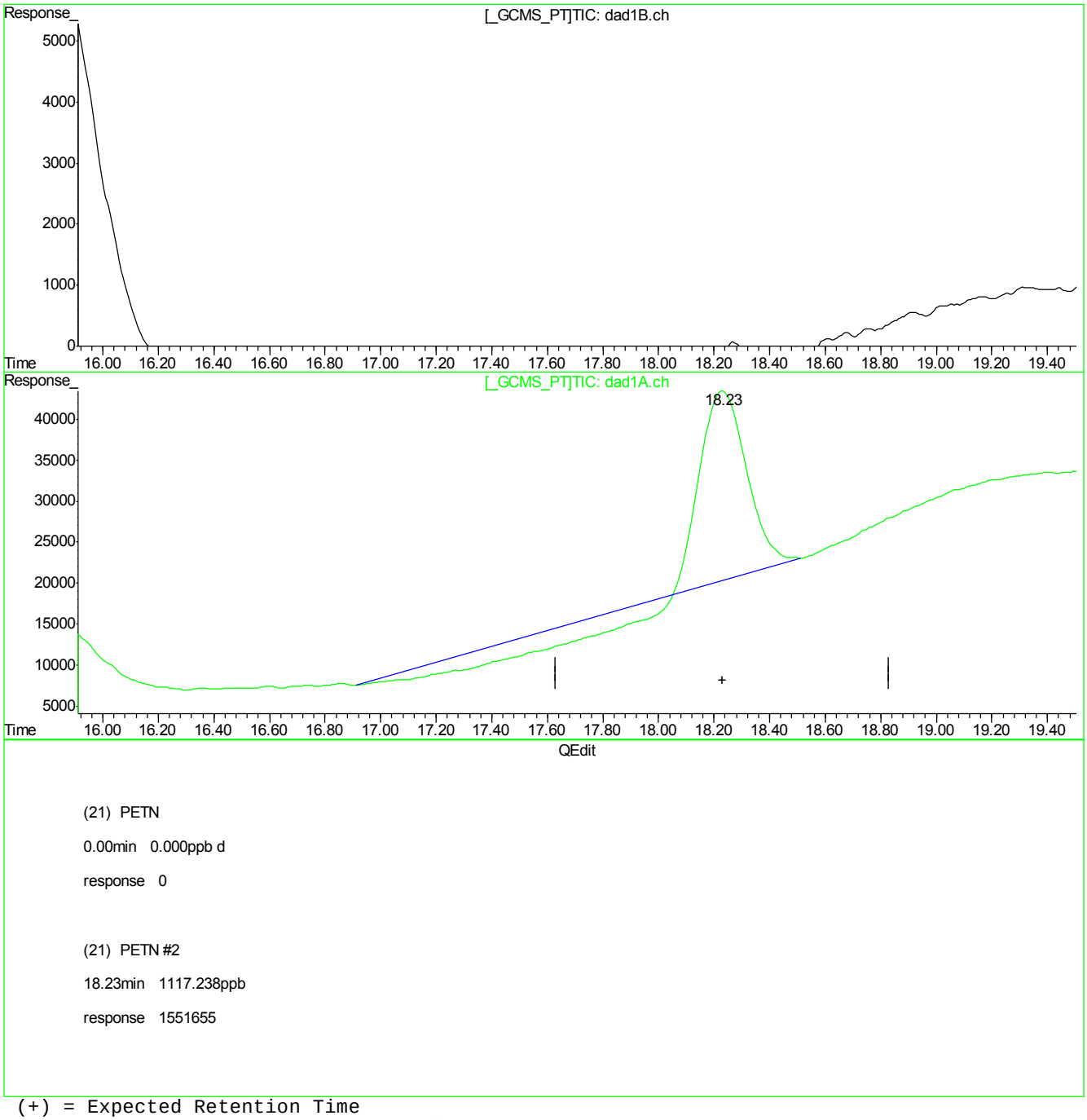
7.3.2.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1A.ch
Acq On : 11-May-2018, 00:58:38 Operator: evitam
Sample : op69973-bs Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059699.D 8330B_0419PLUS.M Fri May 11 08:27:45 2018

7.3.2.6

7

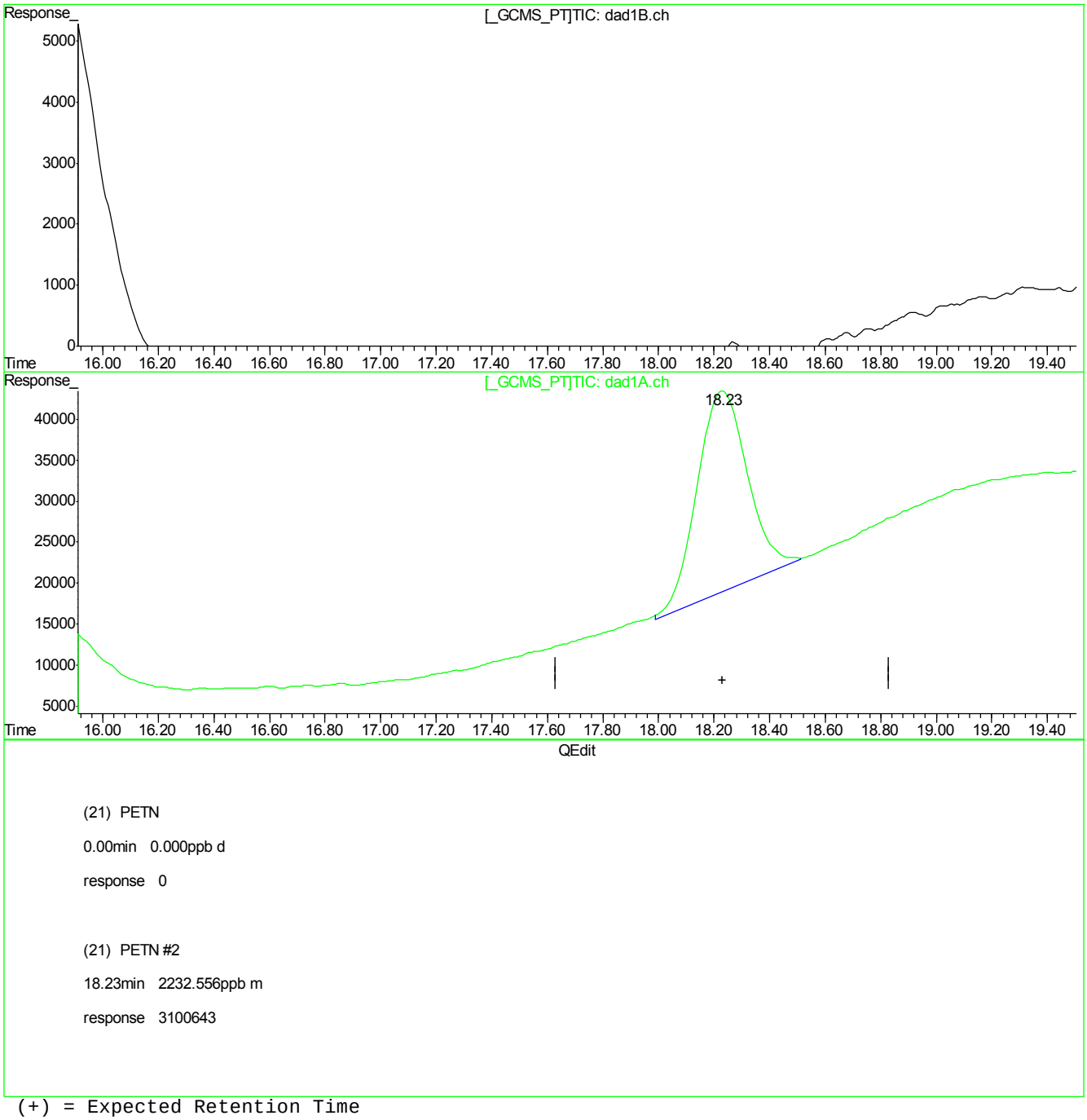
BB059699.D edits: PETN

FA53801

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059699.D\dad1A.ch
Acq On : 11-May-2018, 00:58:38 Operator: evitam
Sample : op69973-bs Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059699.D 8330B_0419PLUS.M Fri May 11 08:27:48 2018

7.3.2.7

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.34	14.34	2501948	4832334	481.618	446.709m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		96.32%	89.34%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.42	5.42	1872500	1878680	577.596m	583.123m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.48	7.48	4782098	4767874	461.521	460.196
6)	RDX	7.94	7.94	2285665	2254878	479.761	475.397
7)	1,3-Dinitrobenze	9.97	9.97	6522261	5425459	455.883	423.797m
8)	Nitrobenzene	10.94	10.94	4285884	4750825	454.137	512.998m
9)	2,4,6-Trinitroto	11.72	11.72	4853325	7262949	478.900	553.795m
10)	Nitroglycerin	0.00	12.47	0	7731063	N.D. d	2294.256m
11)	Tetryl	13.01	13.00	3528481	6215211	435.407	441.017m
13)	2,6-Dinitrotolue	14.71	14.70	3374281	4532195	471.953	446.695m
14)	2,4-Dinitrotolue	15.42	15.42	6012065	3861408	458.618	405.183m
15)	o-Nitrotoluene	16.96	16.96	2748223	4812370	475.752	558.045m
16)	3,5-Dinitroanili	16.36	16.36	5025488	8972381	513.765	552.115m
17)	p-Nitrotoluene	18.11	18.11	5383534	10709202	458.471	505.314m
18)	4-Amino-2,6-Dini	18.11	18.11	5383534	10490344	458.471	493.548m
19)	m-Nitrotoluene	19.34	19.34	2909653	5013936	493.549	515.603m
20)	2-Amino-4,6-Dini	20.28	20.28	4422315	5945897	490.120	500.207
21)	PETN	0.00	21.87	0	8010770	N.D. d	2497.586m

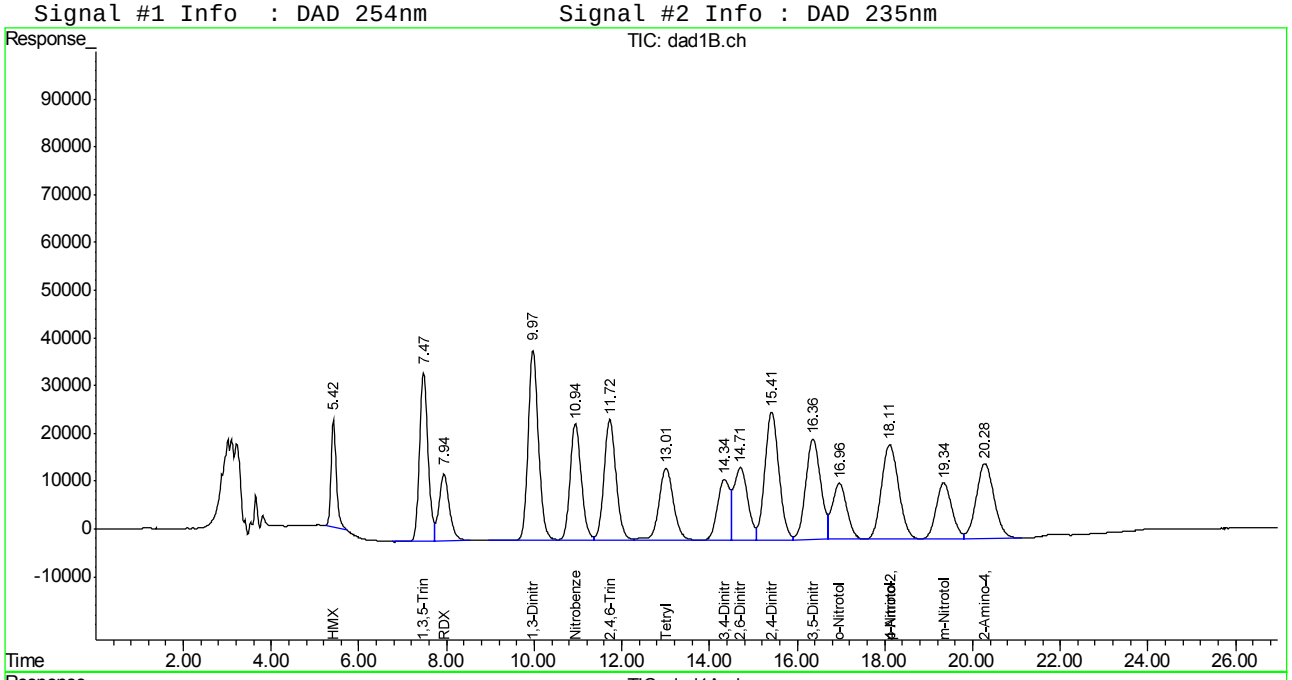
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:37:14 2018 Page 1

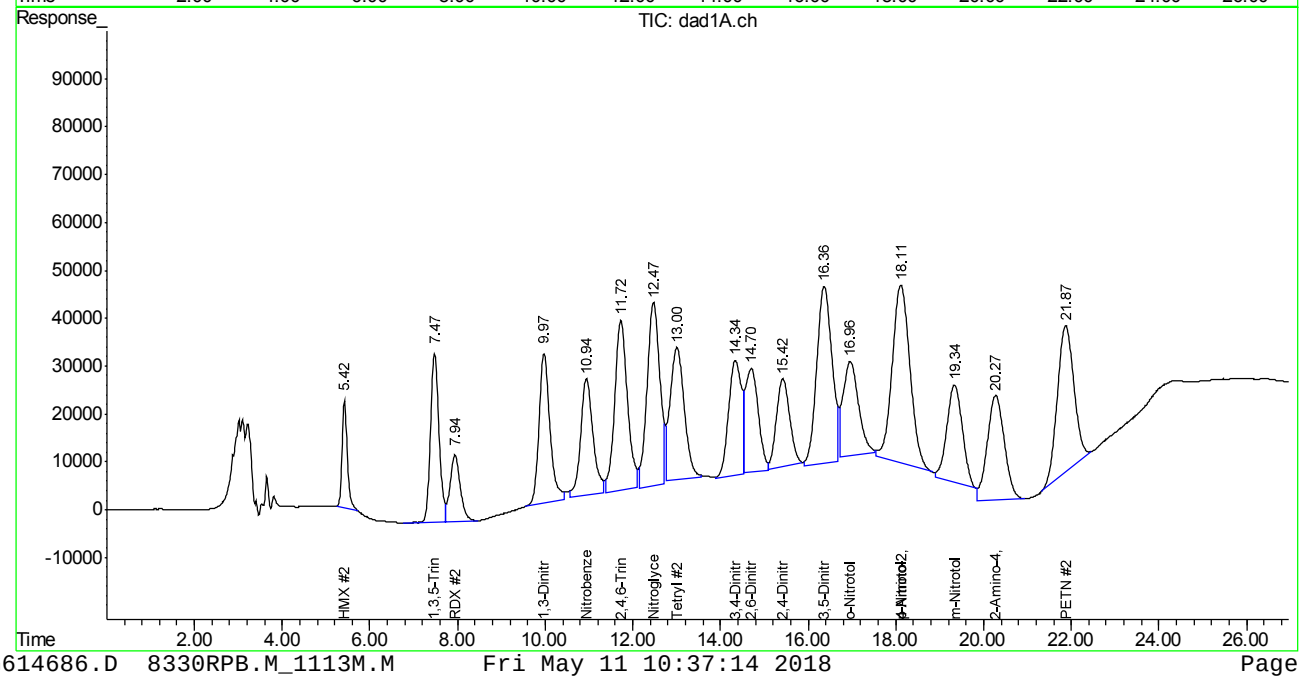
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

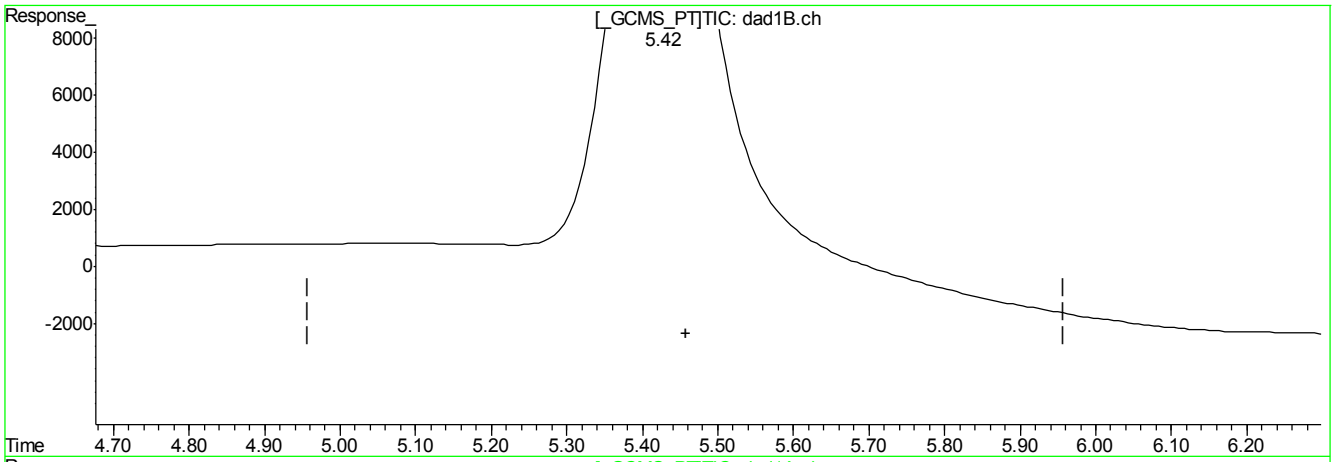
Sample Number:	OP69989-BS	**Method:**	SW846 8330B
Lab FileID:	GG614686.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/10/18 20:56	**Supervisor approved:**	05/15/18 10:39 Mike Eger

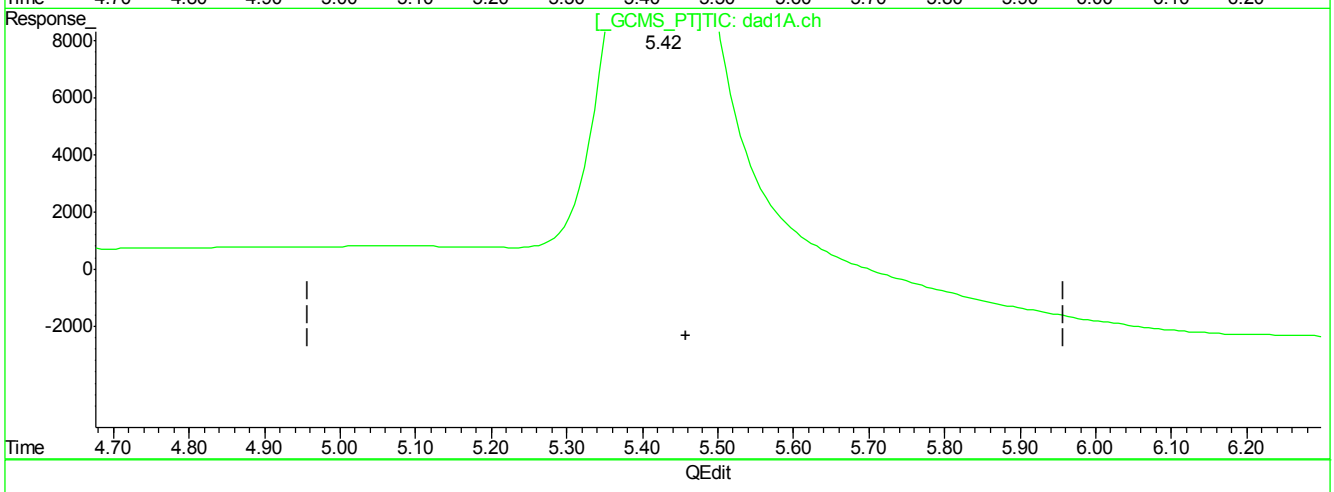
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.42	Poorly defined baseline
HMX	2691-41-0	2	5.42	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.97	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.94	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.72	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.47	Poorly defined baseline
Tetryl	479-45-8	2	13.00	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.34	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.70	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.42	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.36	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.96	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.11	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.11	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.34	Poorly defined baseline
PETN	78-11-5	2	21.87	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.42min 535.502ppb

response 1736037

(2) HMX #2

5.42min 538.848ppb

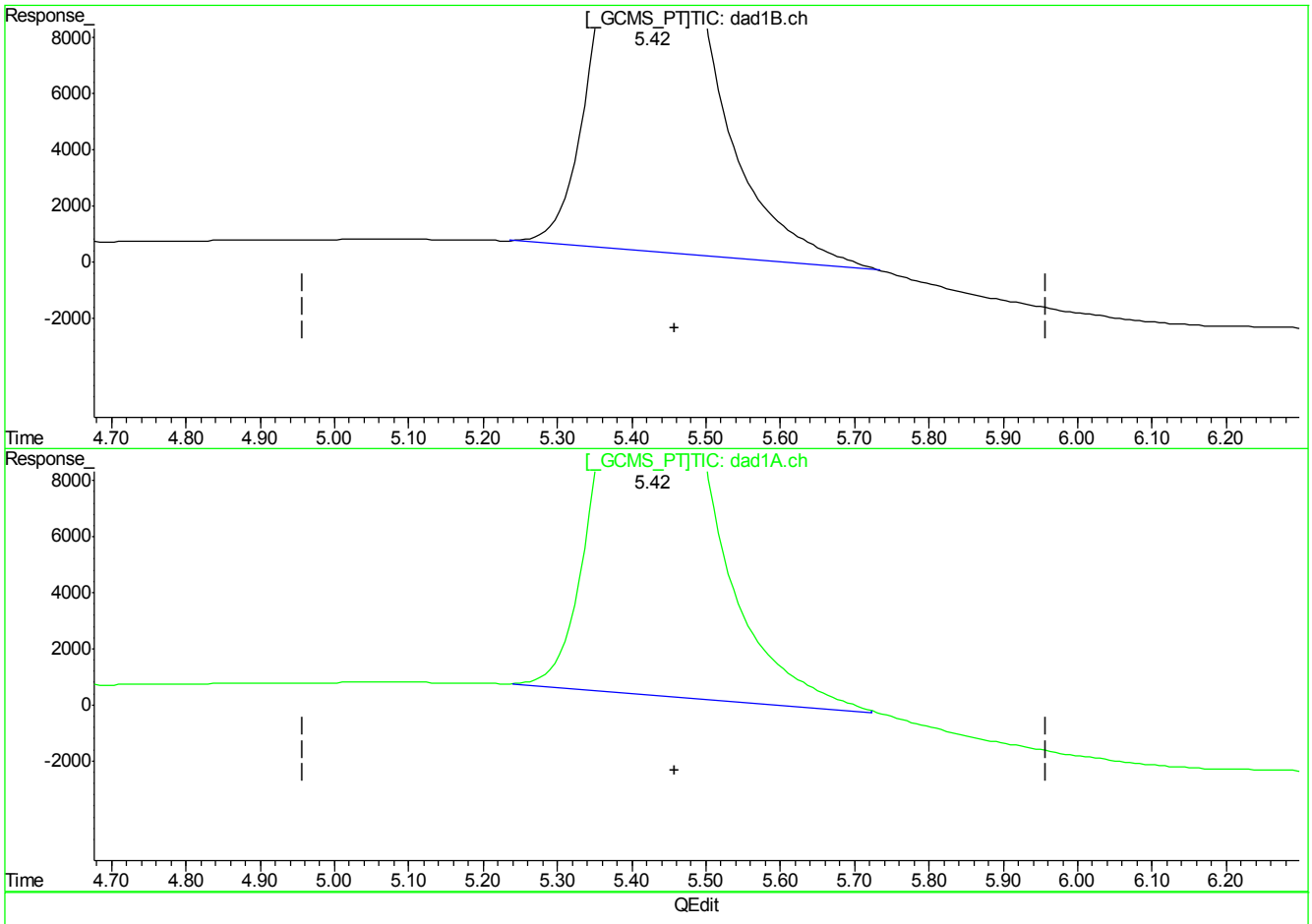
response 1736037

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:19:17 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(2) HMX

5.42min 577.596ppb m

response 1872500

(2) HMX #2

5.42min 583.123ppb m

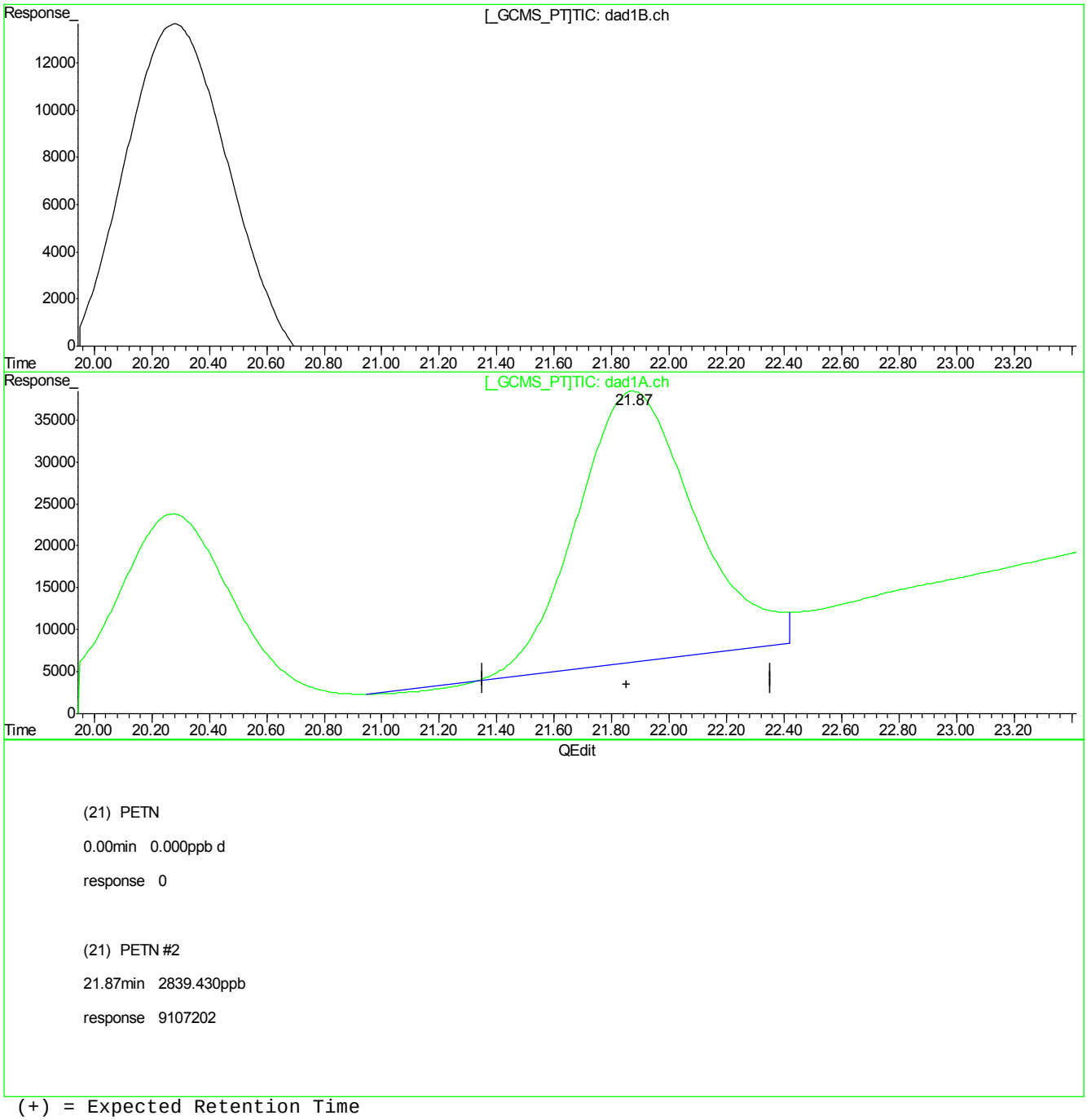
response 1878680

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:19:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

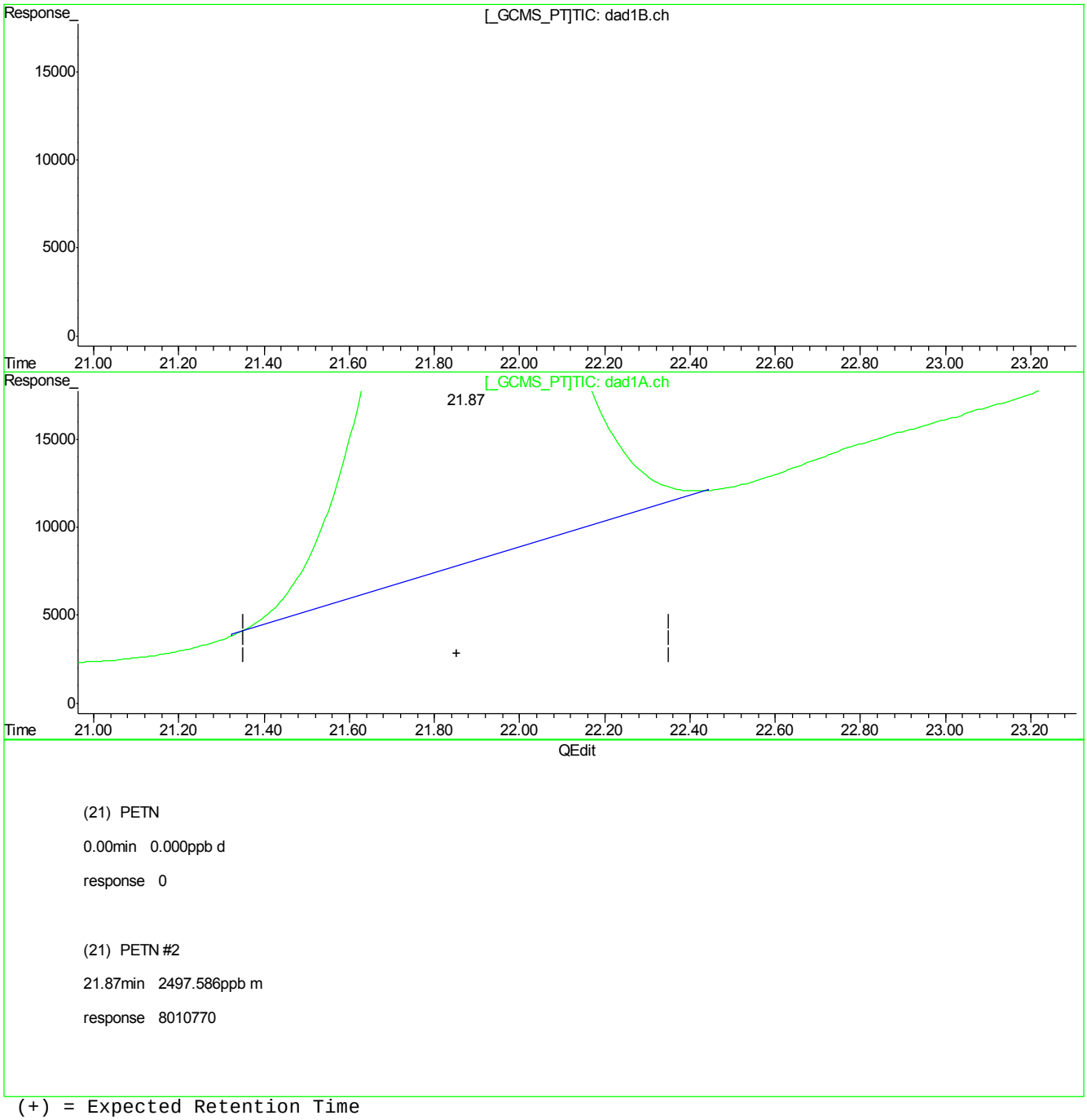


(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:19:31 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

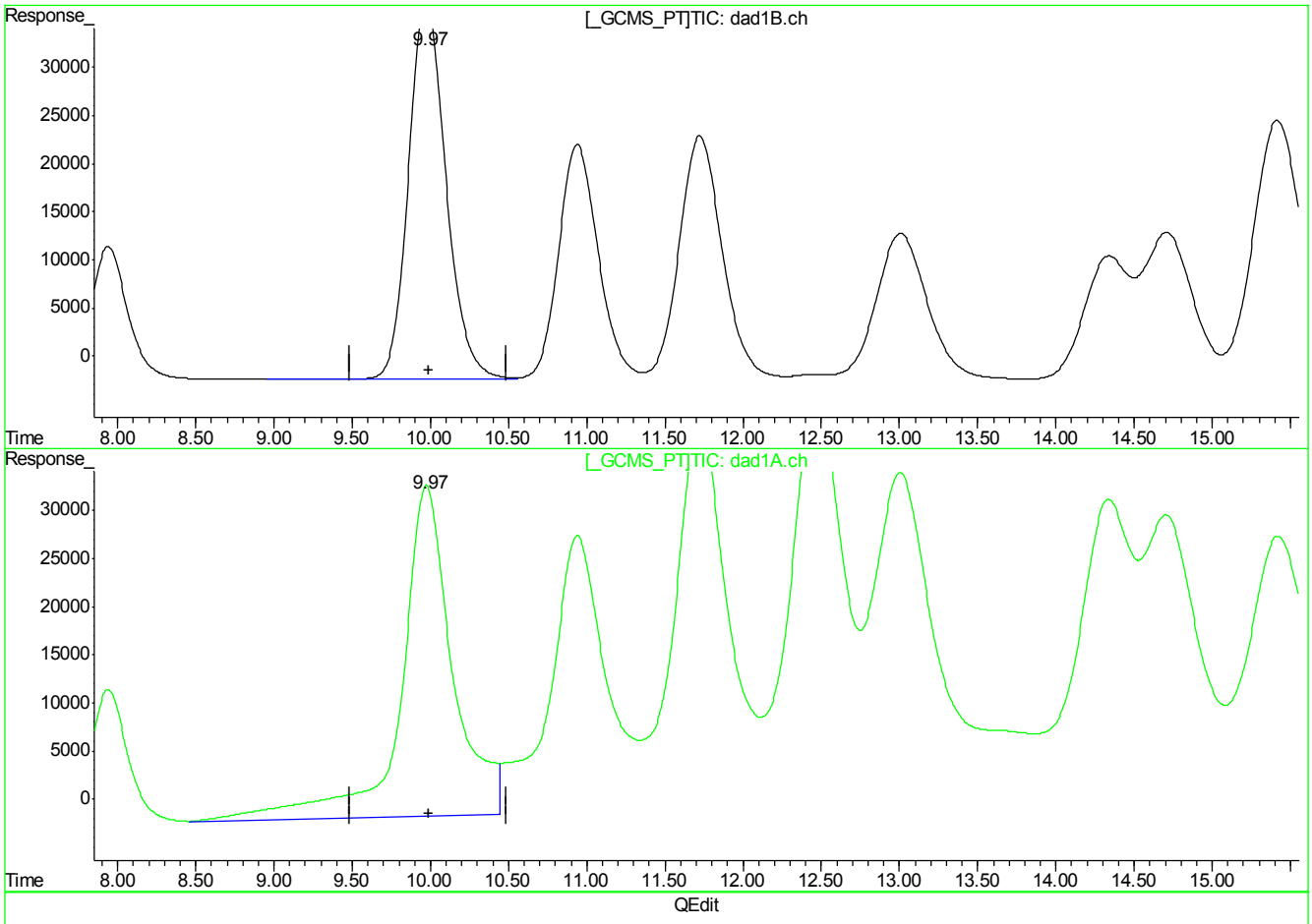


(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:19:39 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.97min 455.883ppb

response 6522261

(7) 1,3-Dinitrobenzene #2

9.98min 630.819ppb

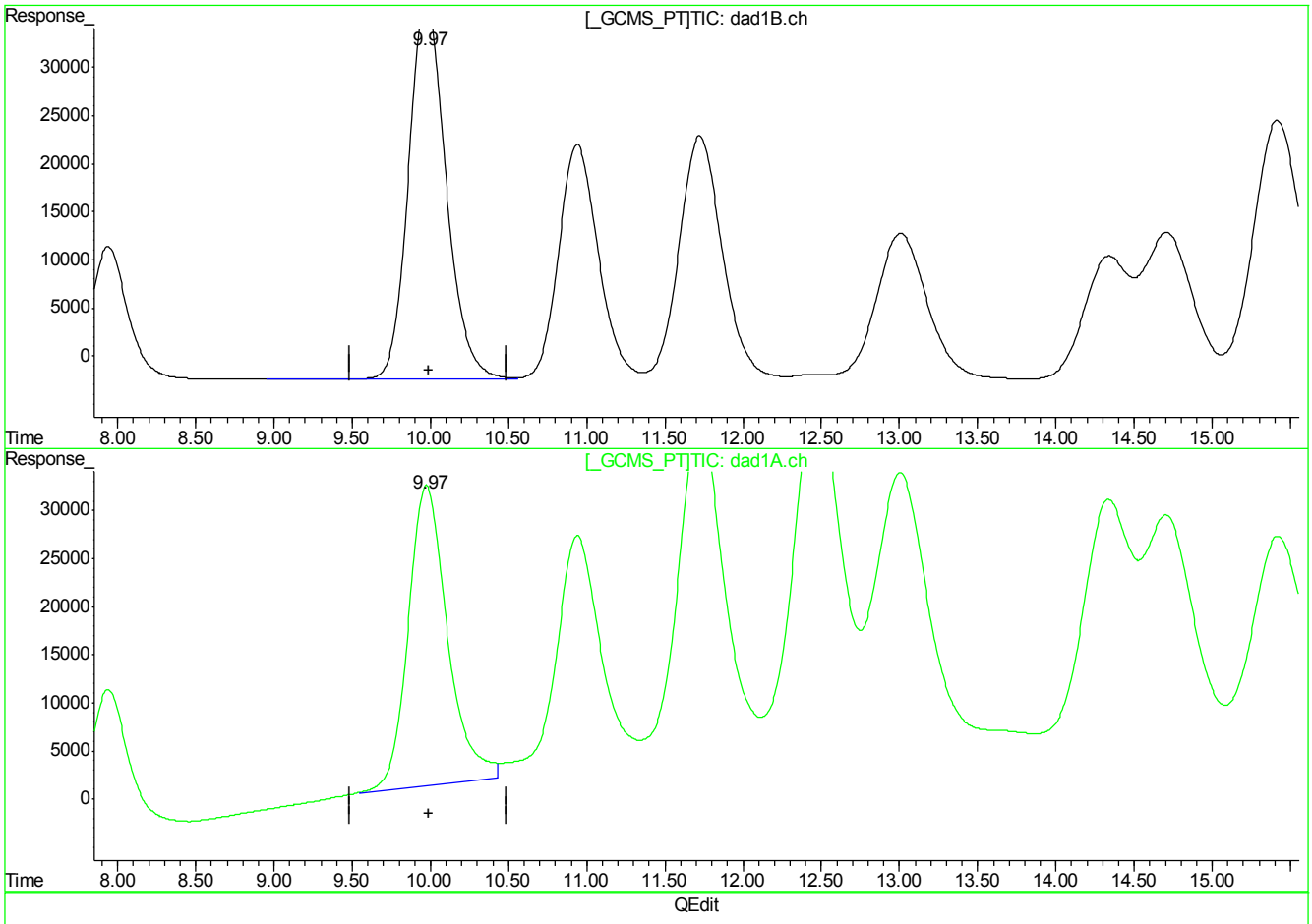
response 7929658

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:19:58 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.97min 455.883ppb

response 6522261

(7) 1,3-Dinitrobenzene #2

9.97min 423.797ppb m

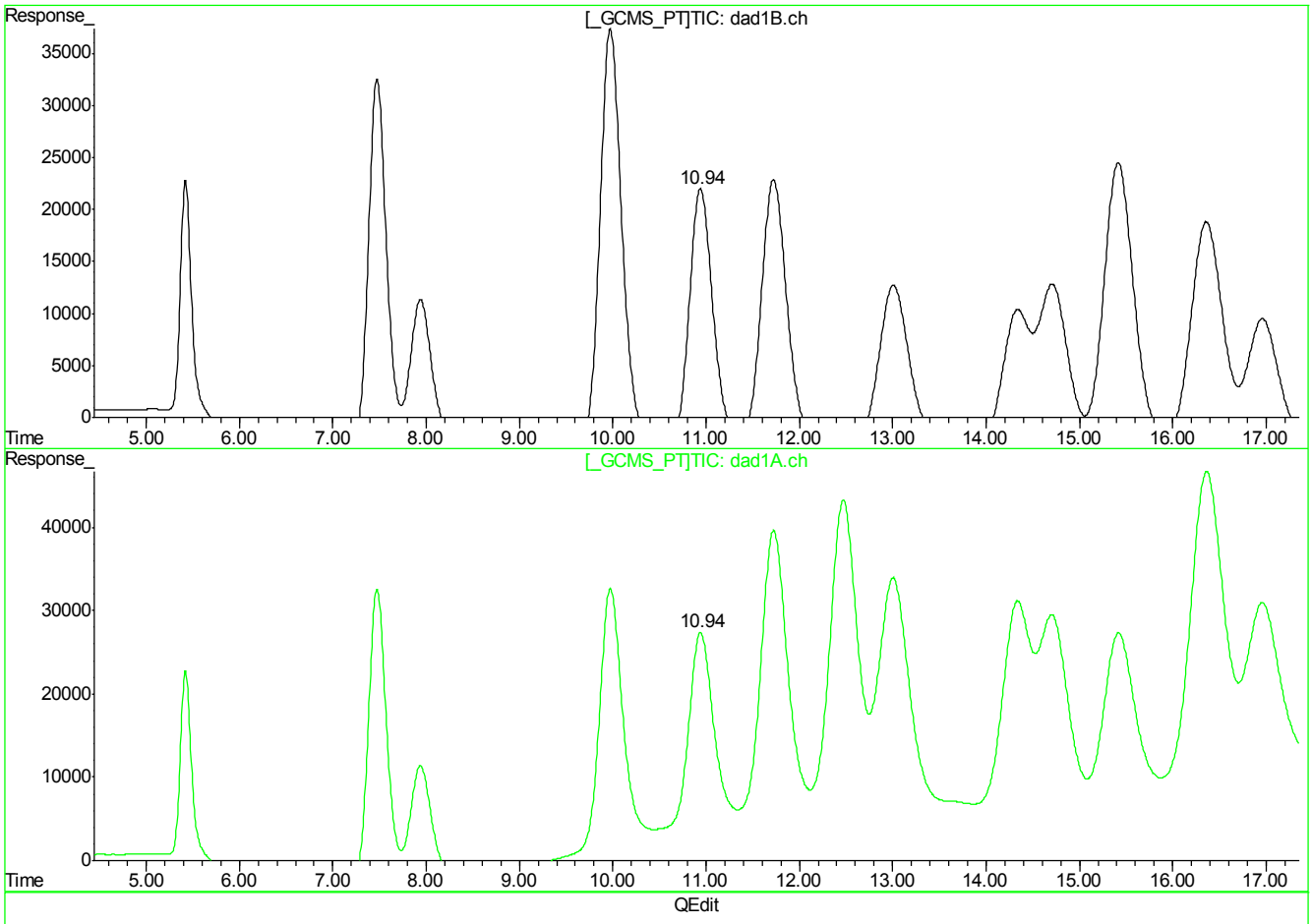
response 5425459

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:20:04 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.94min 454.137ppb

response 4285884

(8) Nitrobenzene #2

10.94min 777.661ppb

response 7201839

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:20:13 2018

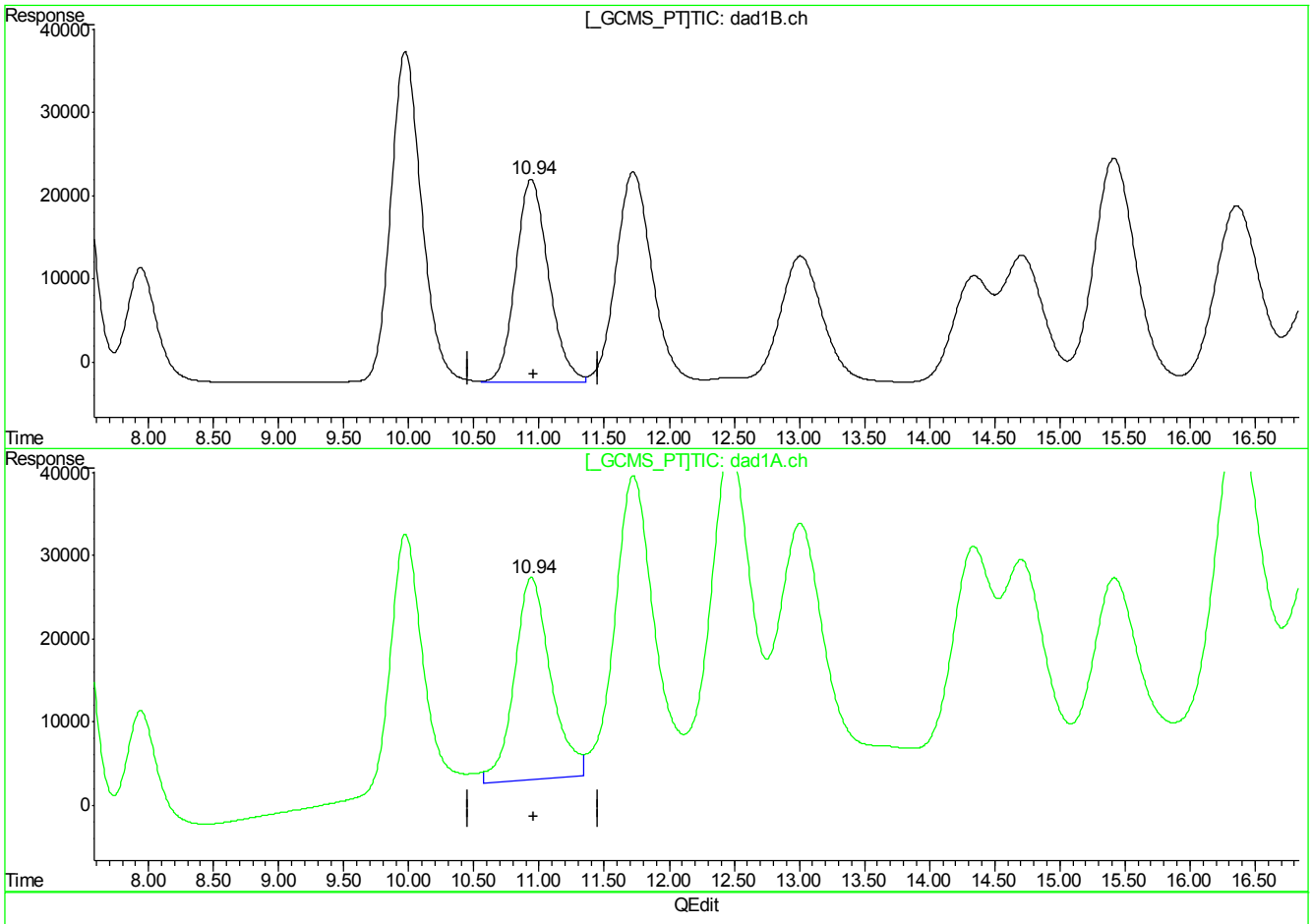
7.3.3.8

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(8) Nitrobenzene

10.94min 454.137ppb

response 4285884

(8) Nitrobenzene #2

10.94min 512.998ppb m

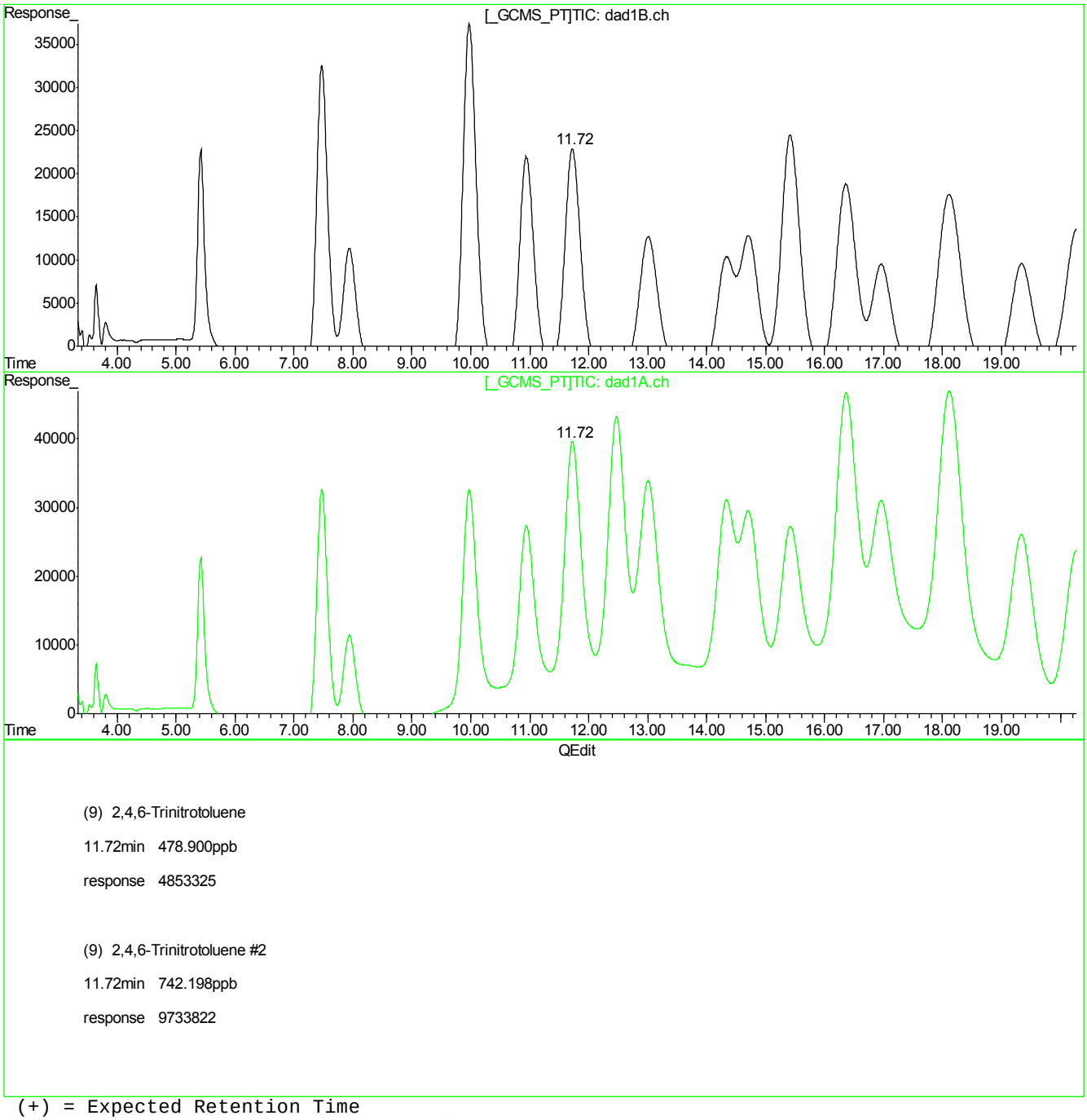
response 4750825

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:20:21 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.72min 478.900ppb

response 4853325

(9) 2,4,6-Trinitrotoluene #2

11.72min 742.198ppb

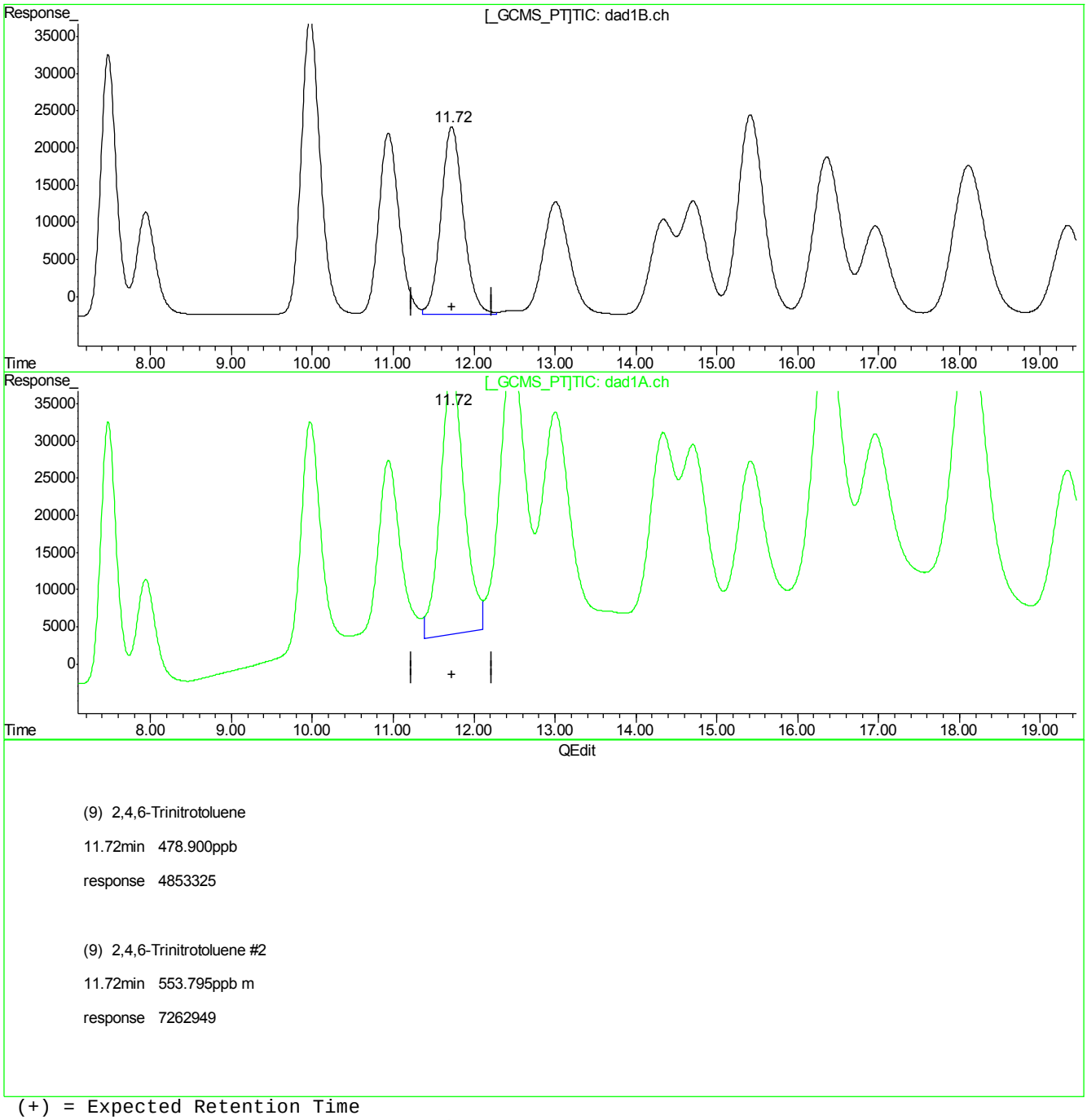
response 9733822

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:20:29 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.72min 478.900ppb

response 4853325

(9) 2,4,6-Trinitrotoluene #2

11.72min 553.795ppb m

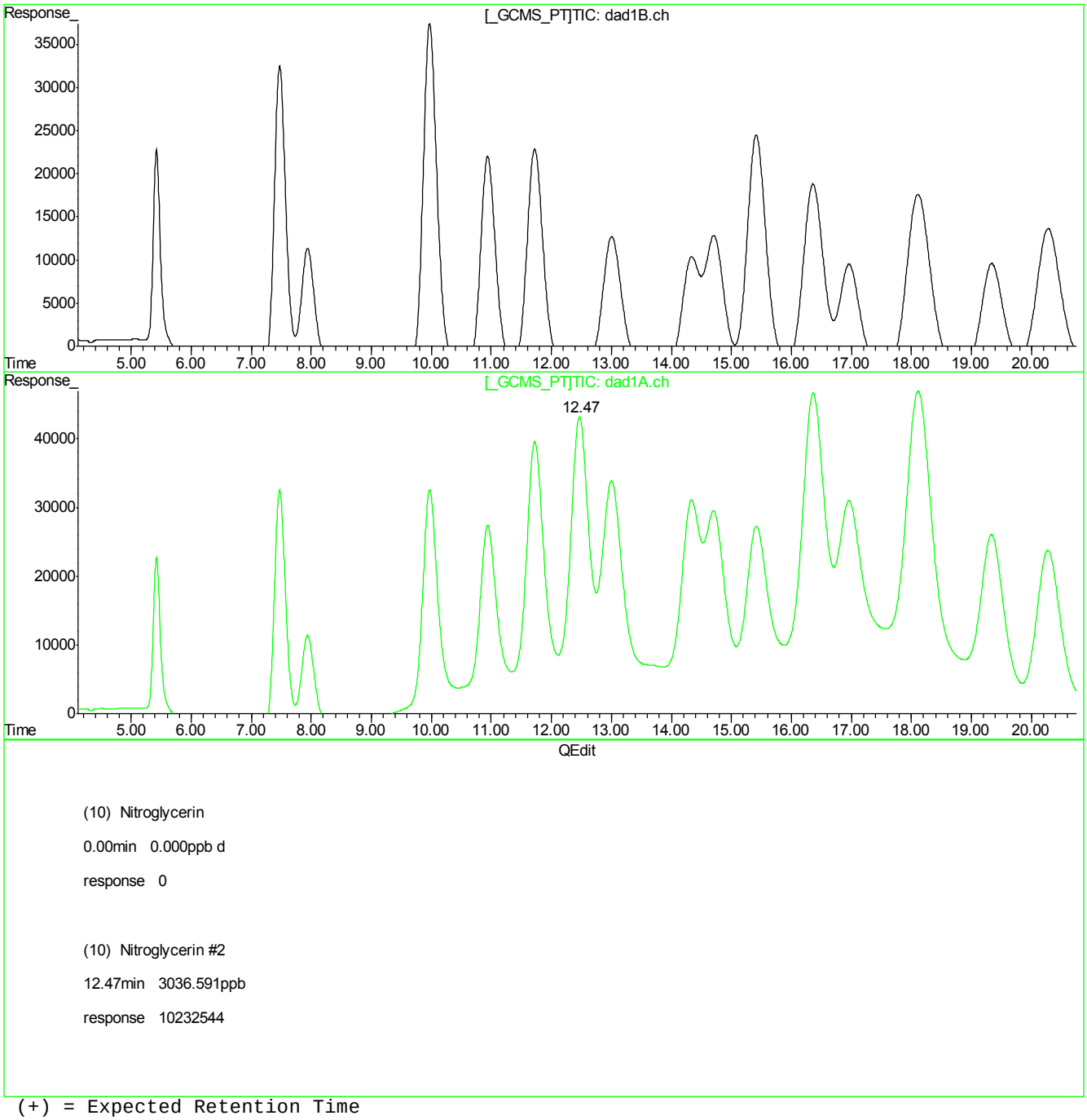
response 7262949

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:20:37 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

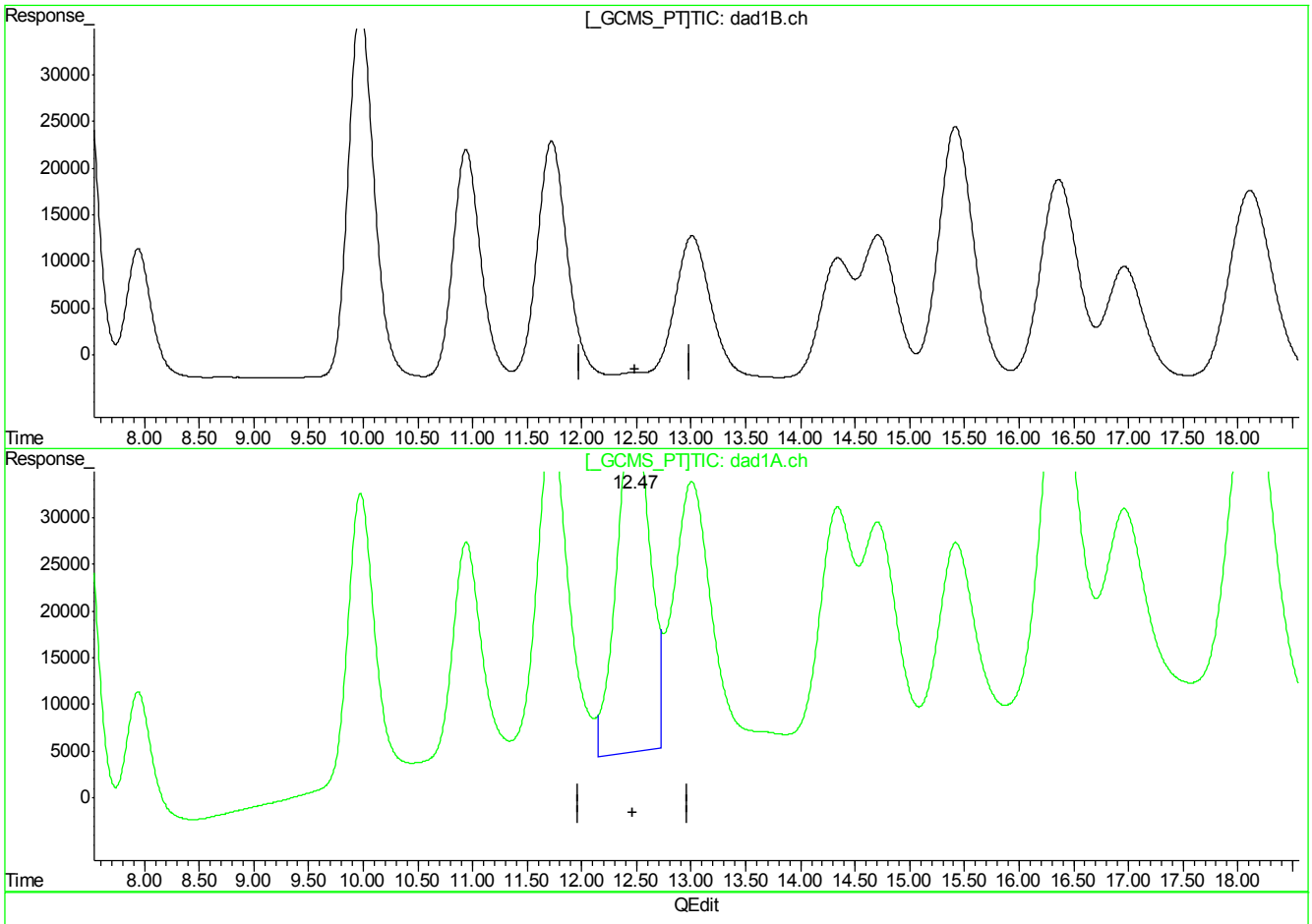


(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:20:45 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.47min 2294.256ppb m

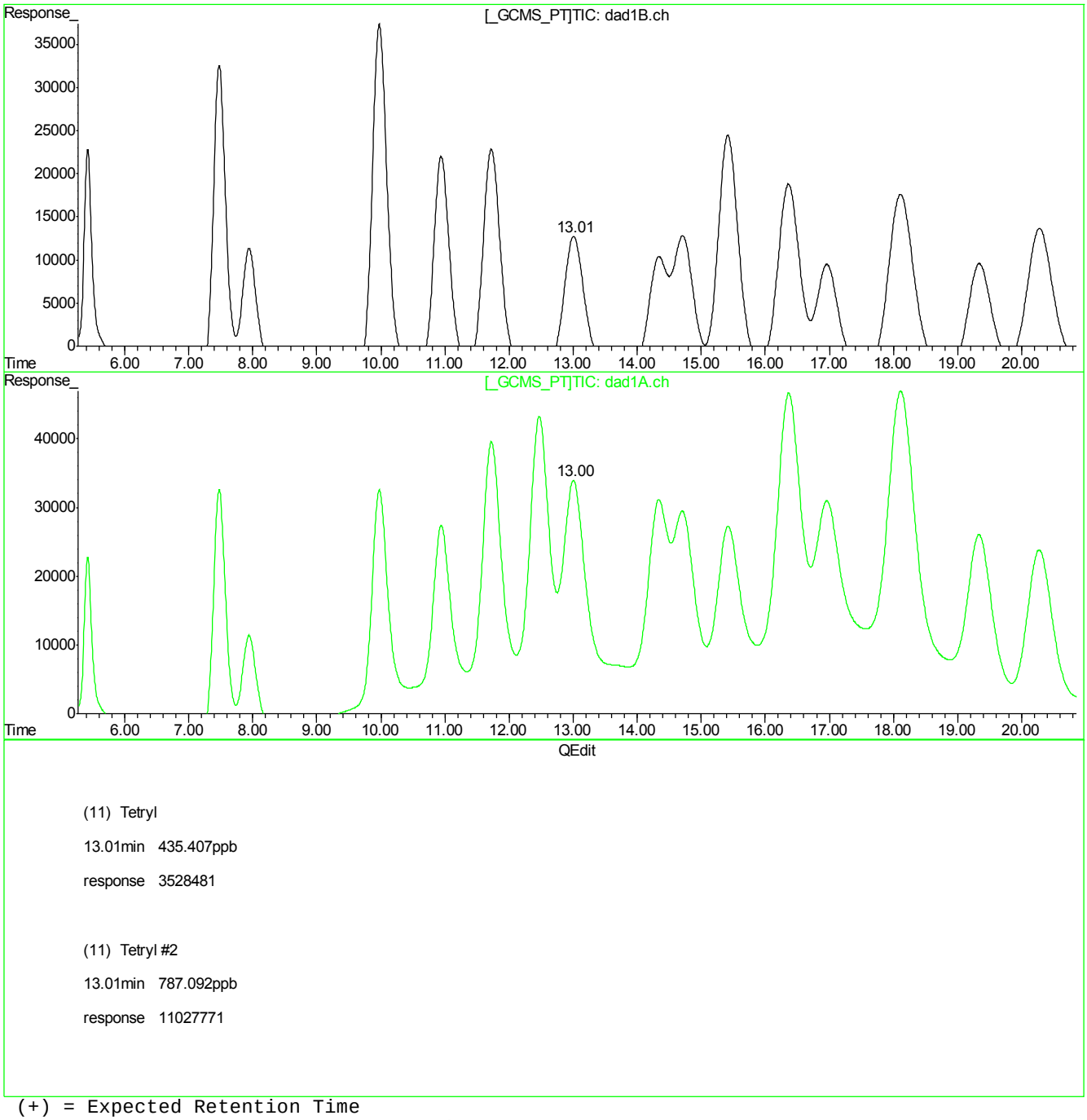
response 7731063

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:21:04 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

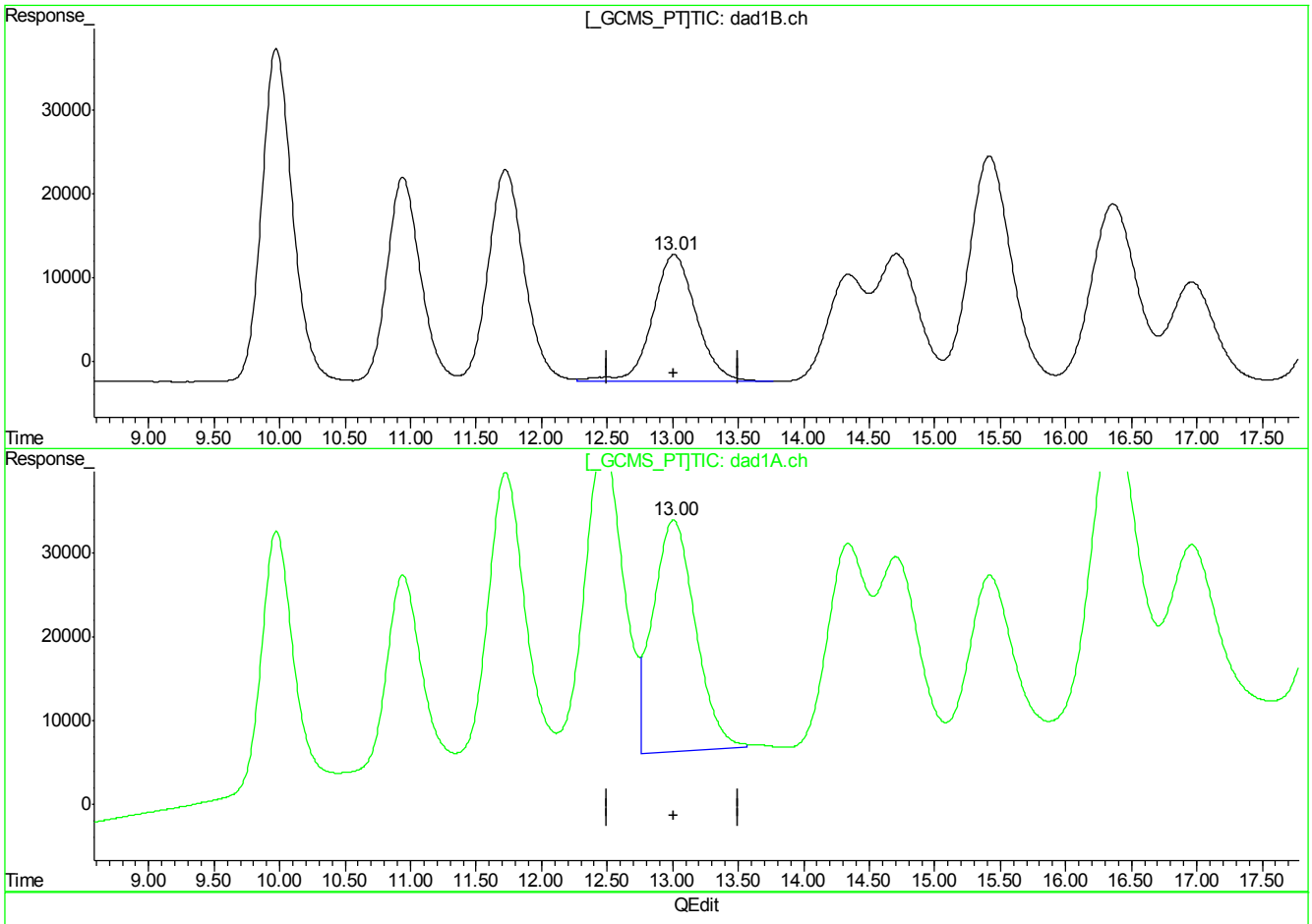


(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:21:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(11) Tetryl

13.01min 435.407ppb

response 3528481

(11) Tetryl #2

13.00min 441.017ppb m

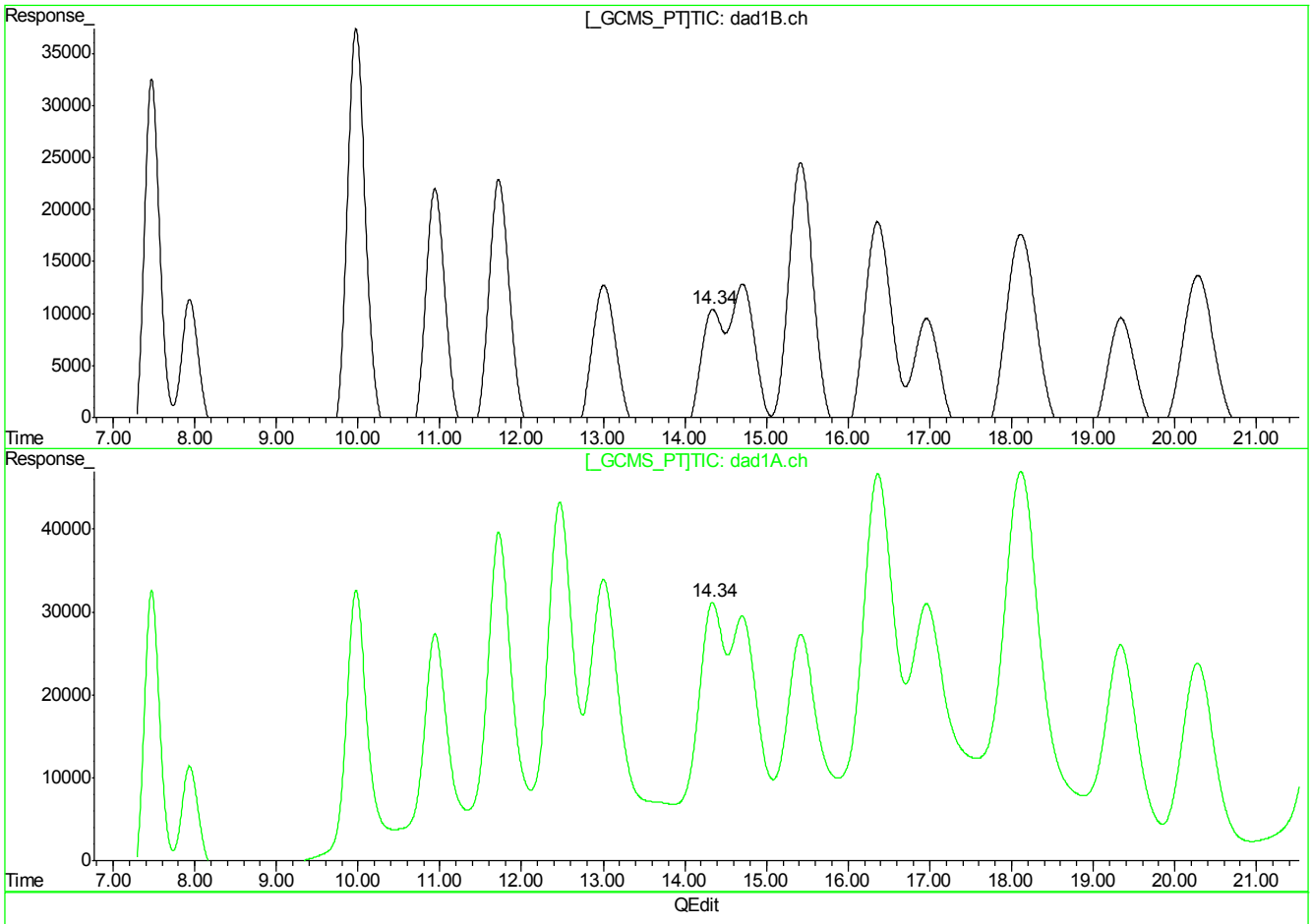
response 6215211

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:21:24 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.34min 481.618ppb

response 2501948

(12) 3,4-Dinitrotoluene #2 (S)

14.34min 719.991ppb

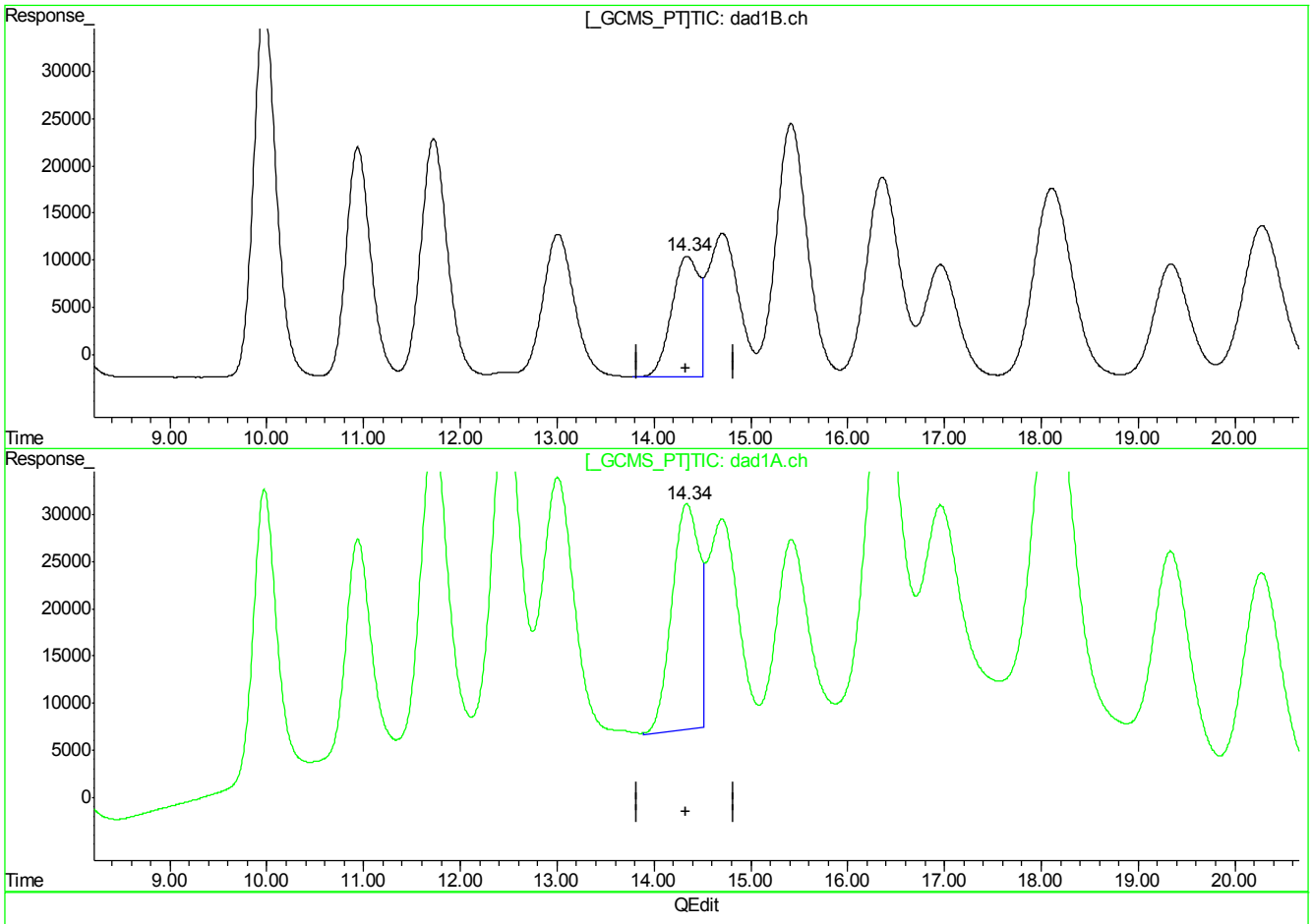
response 7788594

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:21:38 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.34min 481.618ppb

response 2501948

(12) 3,4-Dinitrotoluene #2 (S)

14.34min 446.709ppb m

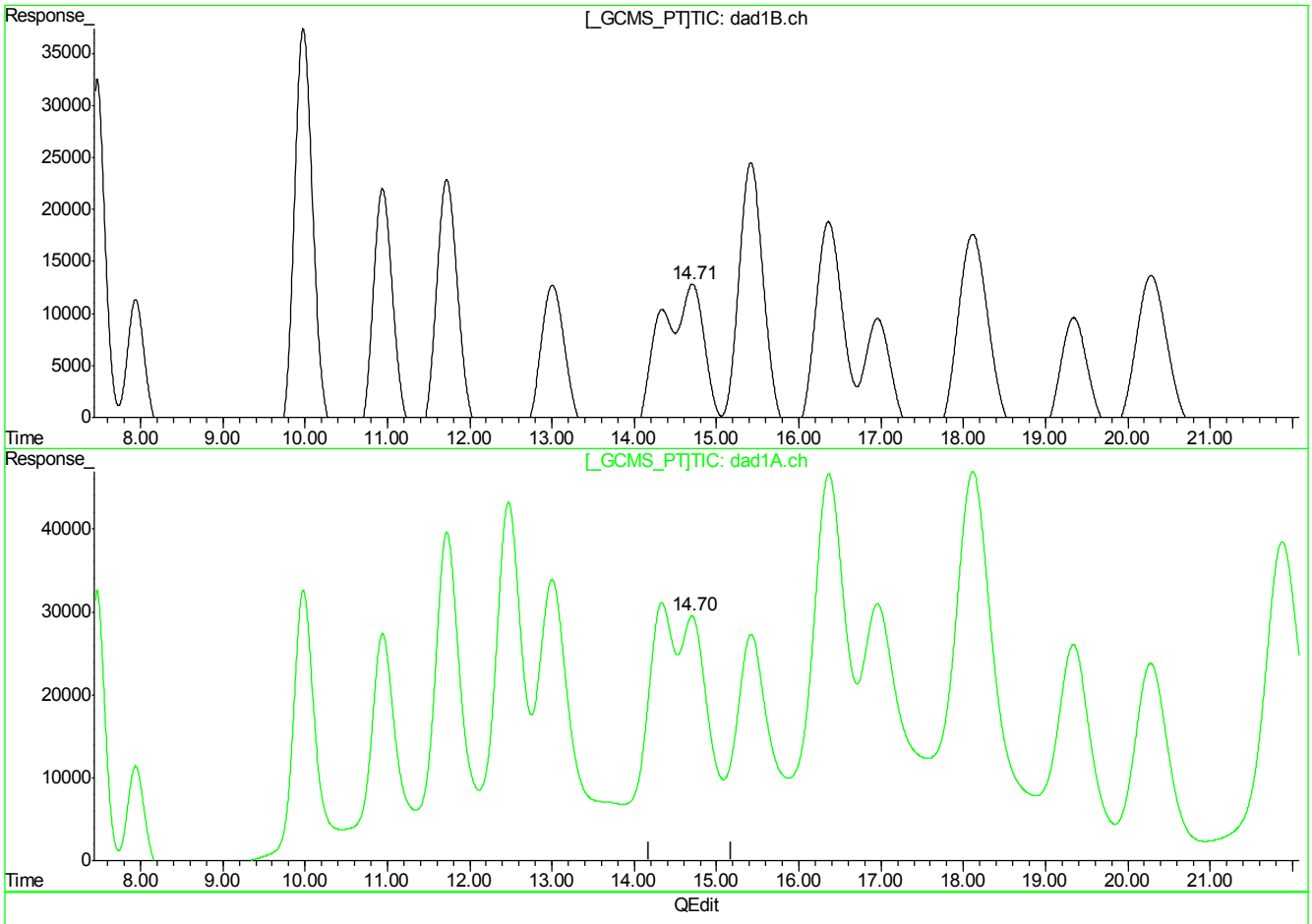
response 4832334

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:21:53 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.71min 471.953ppb

response 3374281

(13) 2,6-Dinitrotoluene #2

14.70min 703.115ppb

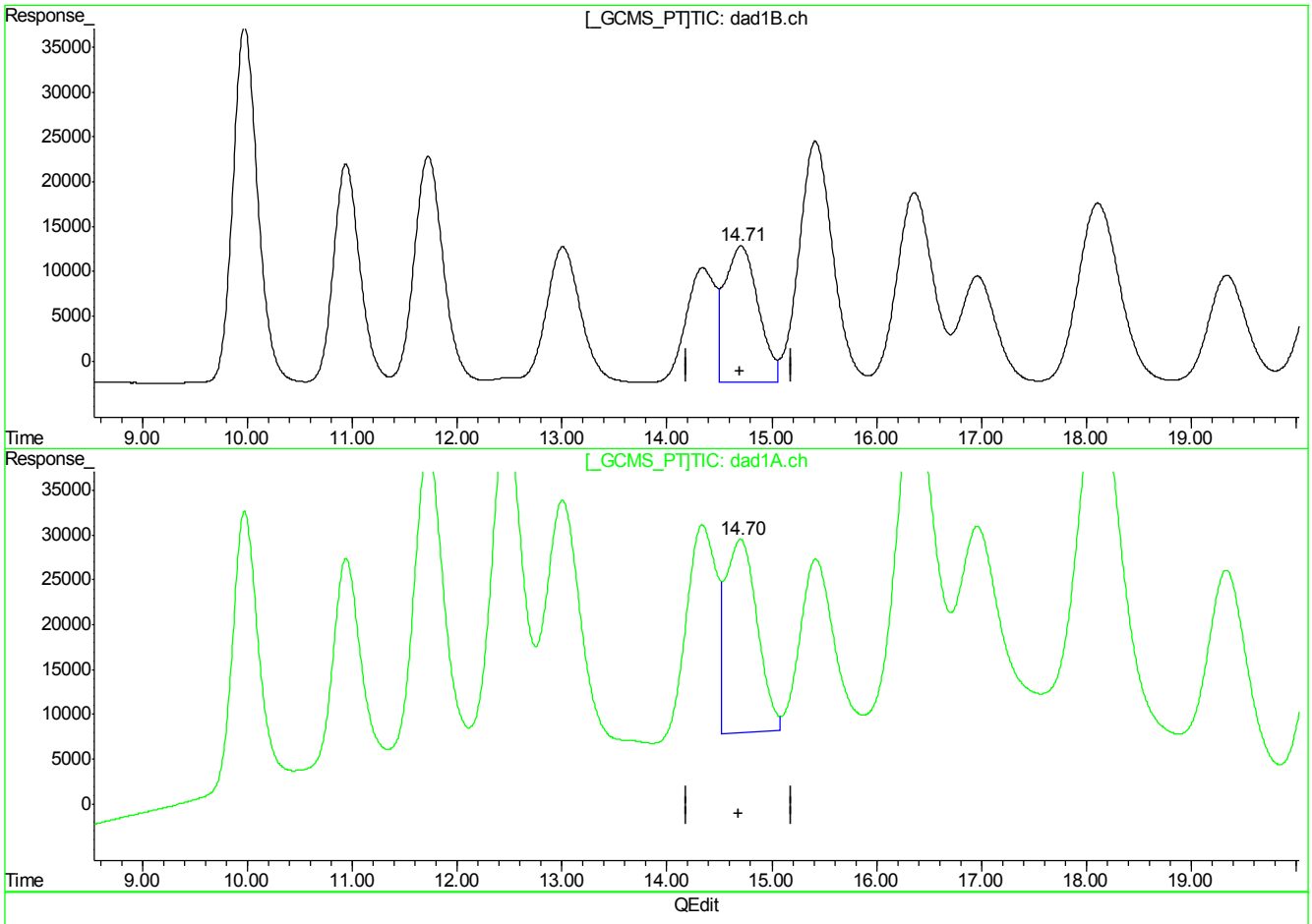
response 7133842

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:22:01 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.71min 471.953ppb

response 3374281

(13) 2,6-Dinitrotoluene #2

14.70min 446.695ppb m

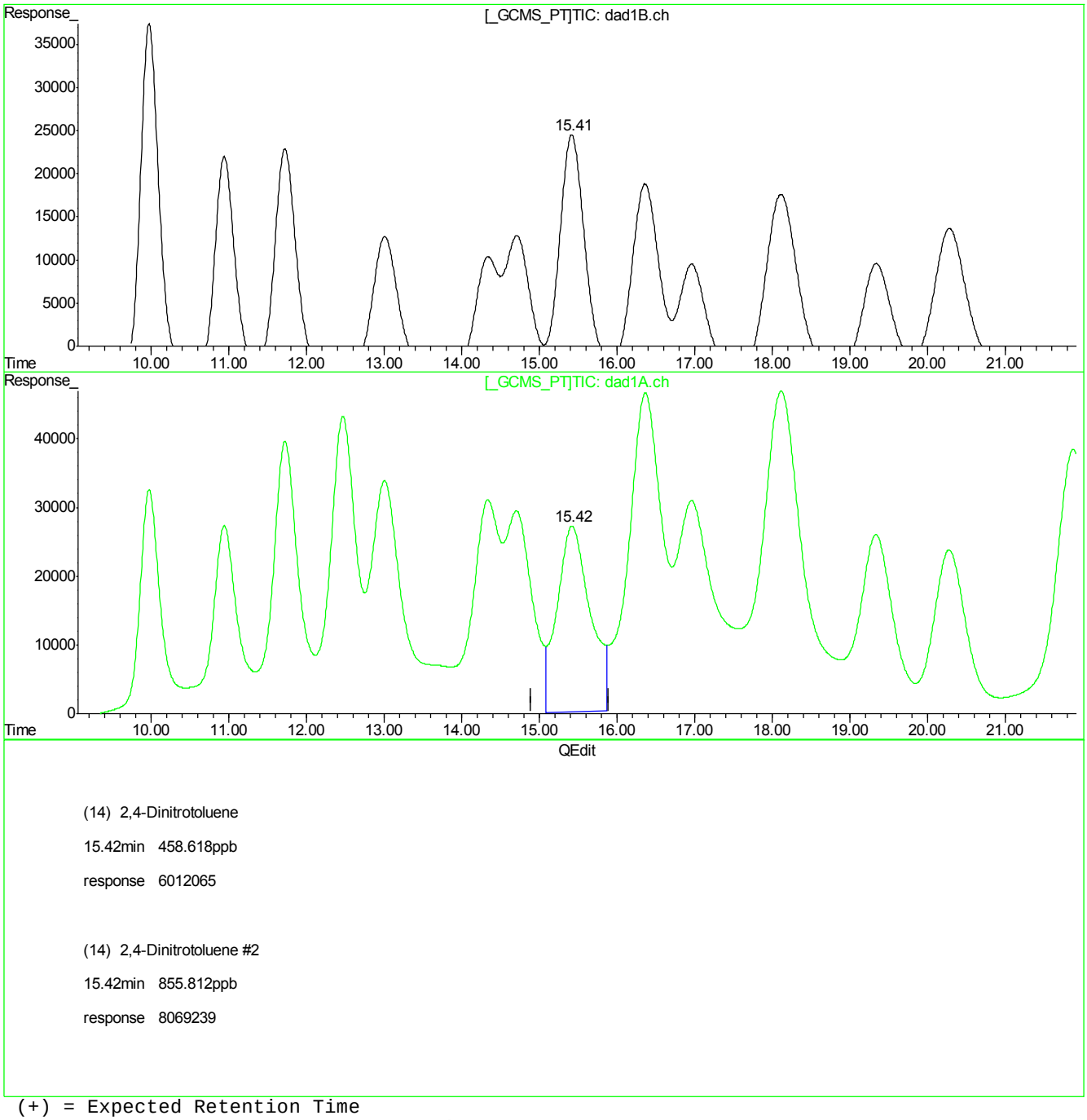
response 4532195

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:22:10 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.42min 458.618ppb

response 6012065

(14) 2,4-Dinitrotoluene #2

15.42min 855.812ppb

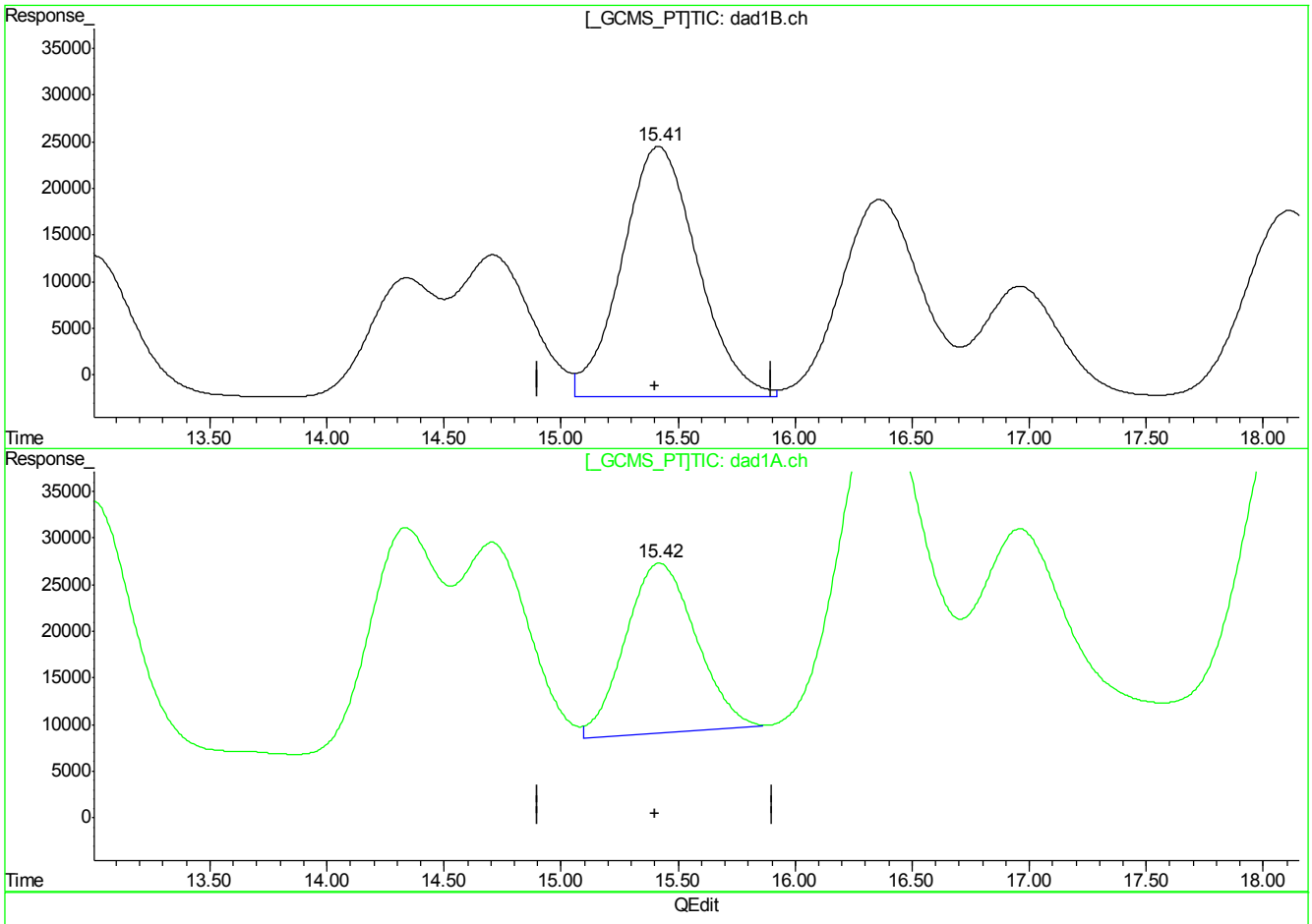
response 8069239

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:22:16 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.42min 458.618ppb

response 6012065

(14) 2,4-Dinitrotoluene #2

15.42min 405.183ppb m

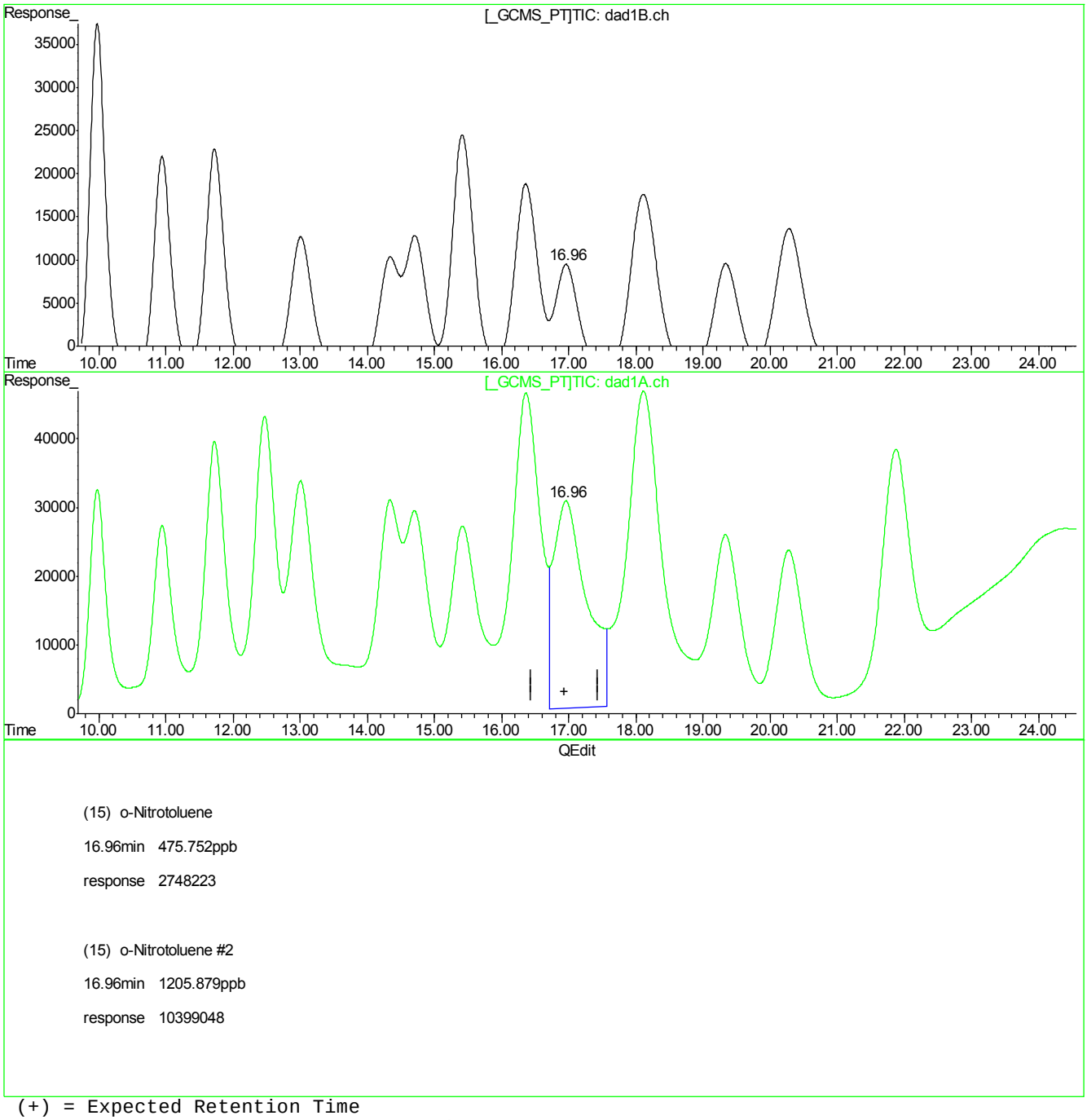
response 3861408

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:22:27 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.96min 475.752ppb

response 2748223

(15) o-Nitrotoluene #2

16.96min 1205.879ppb

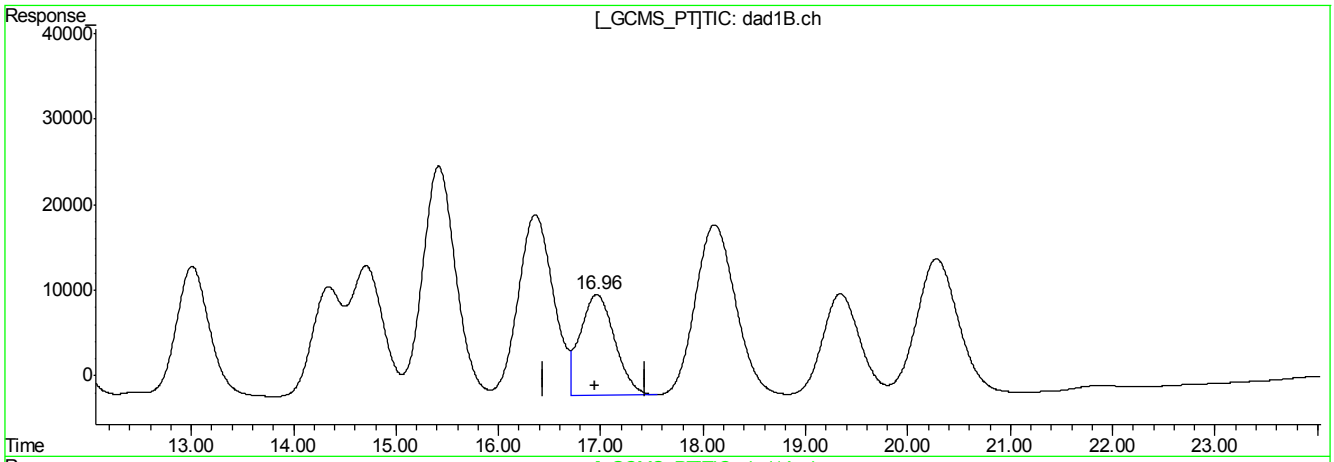
response 10399048

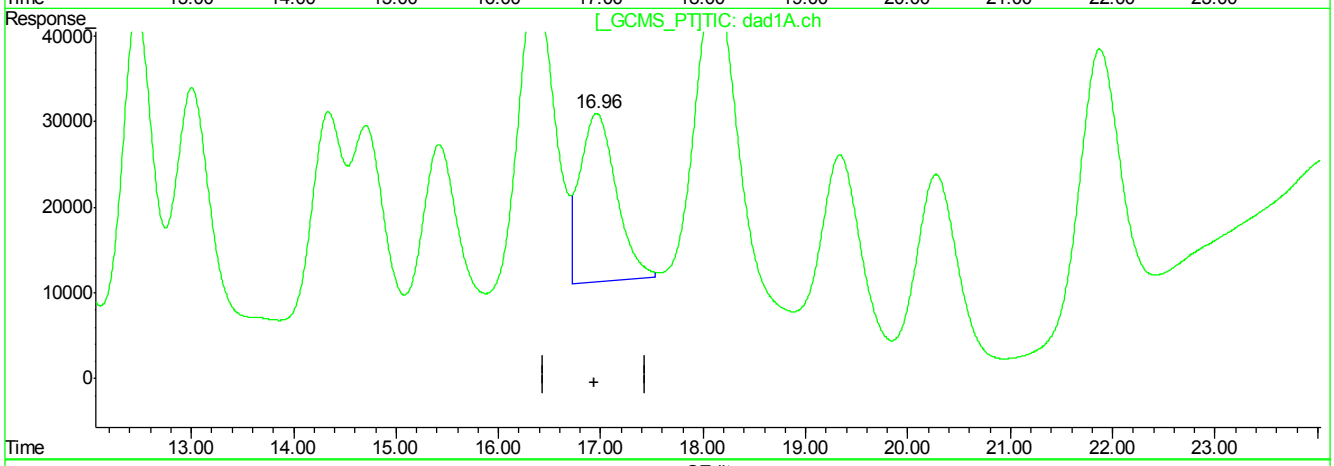
(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:22:34 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration





QEdit

(15) o-Nitrotoluene

16.96min 475.752ppb

response 2748223

(15) o-Nitrotoluene #2

16.96min 558.045ppb m

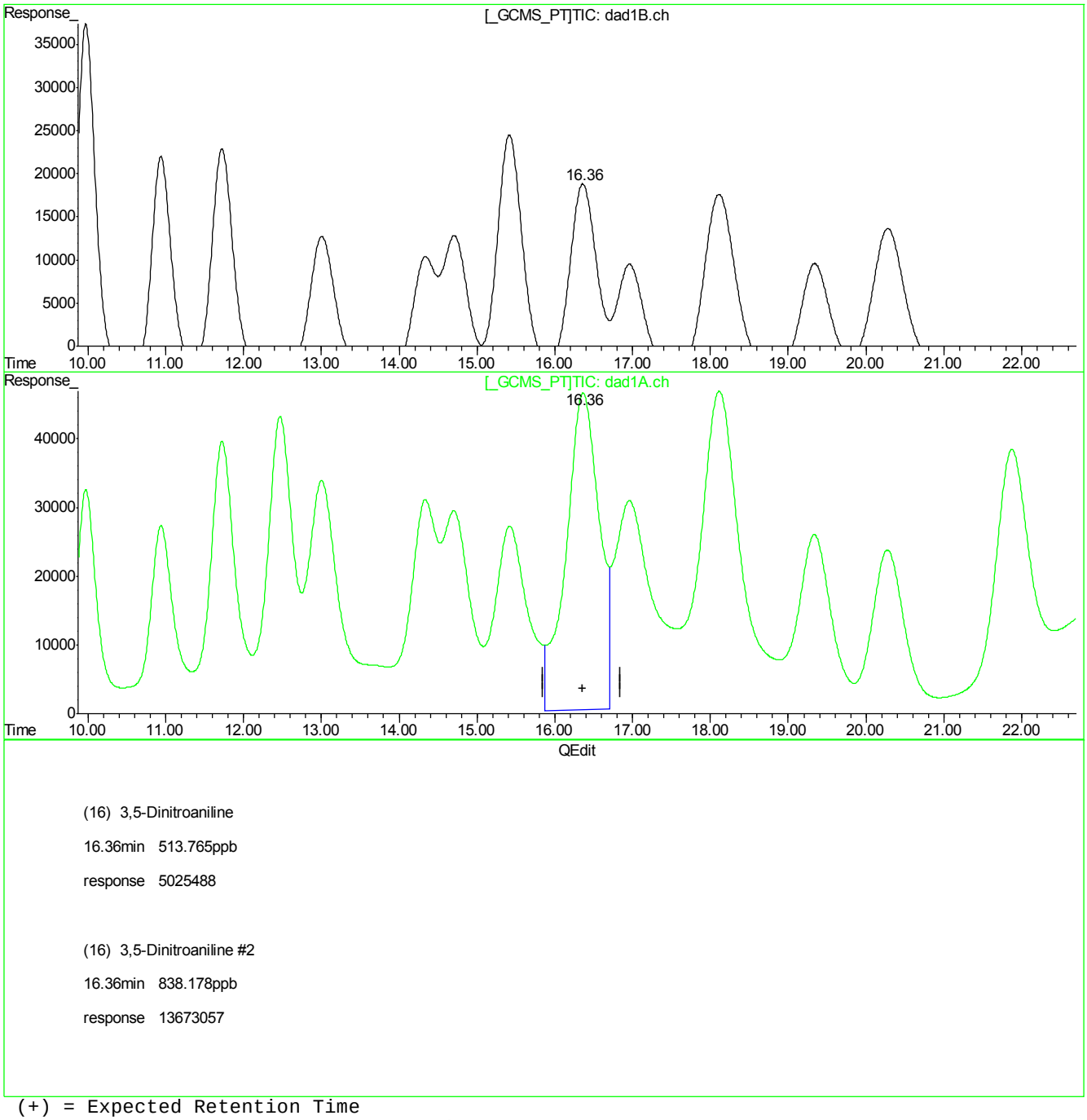
response 4812370

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:22:56 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.36min 513.765ppb

response 5025488

(16) 3,5-Dinitroaniline #2

16.36min 838.178ppb

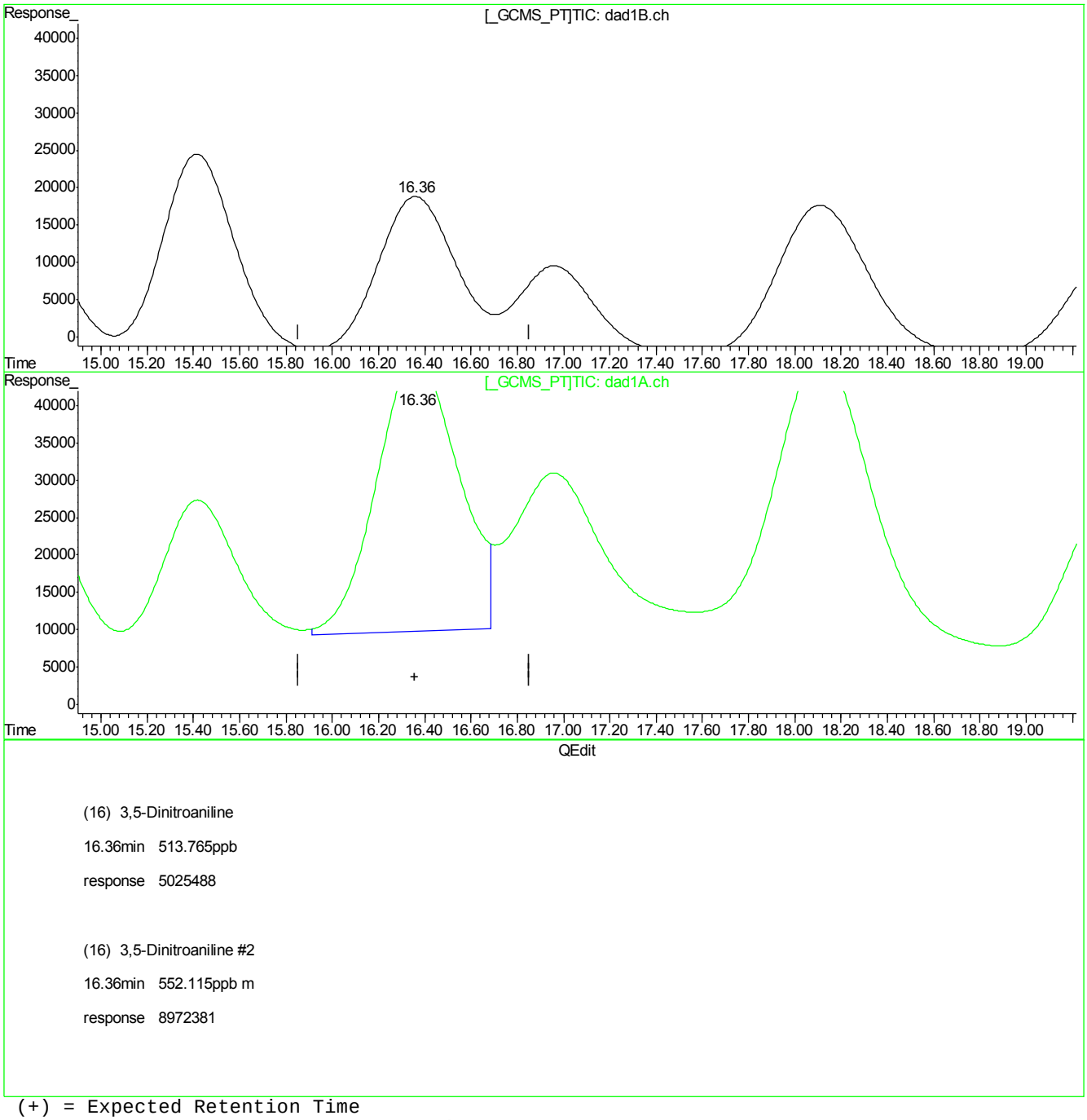
response 13673057

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:23:03 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.36min 513.765ppb

response 5025488

(16) 3,5-Dinitroaniline #2

16.36min 552.115ppb m

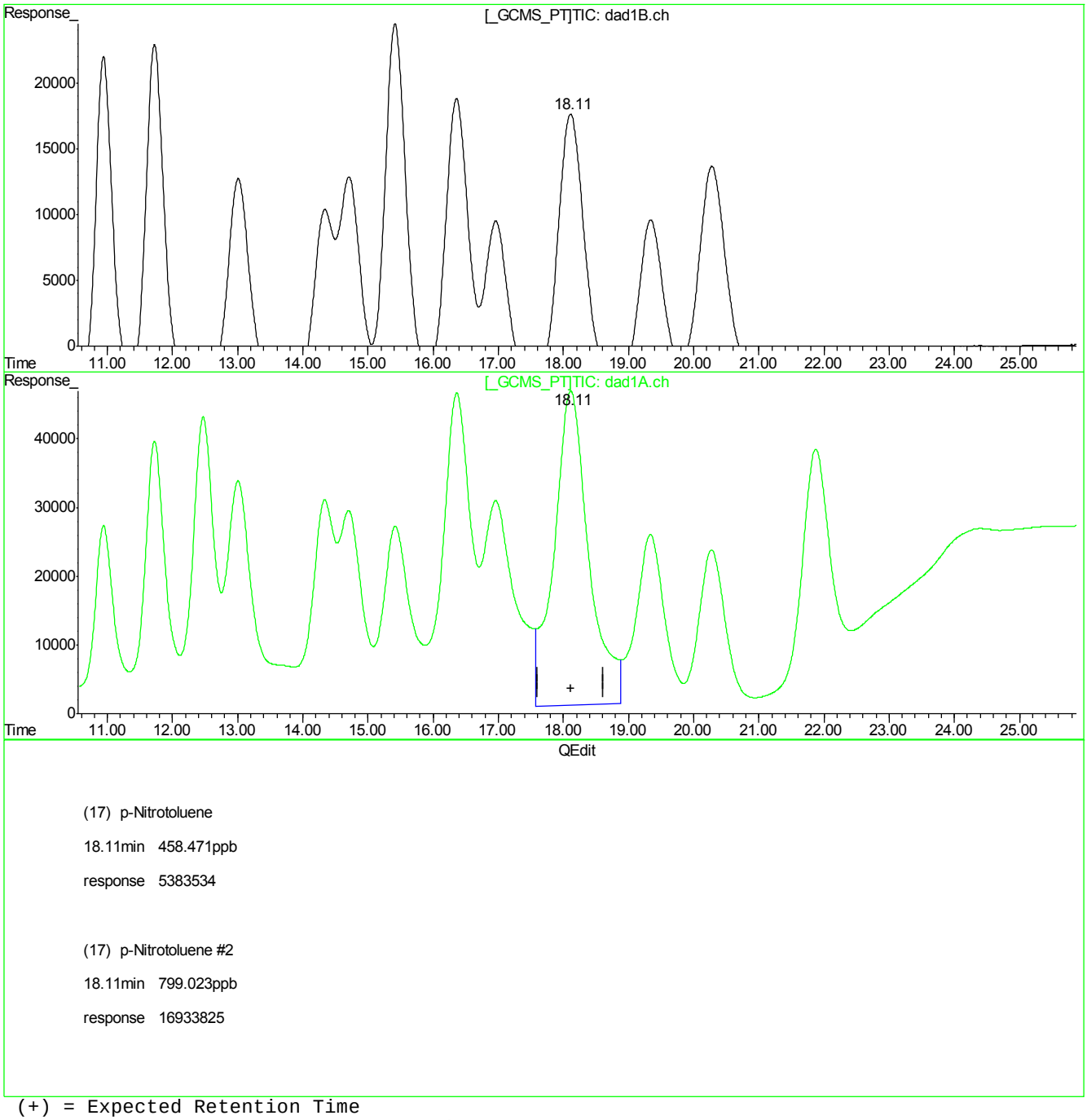
response 8972381

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:23:11 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.11min 458.471ppb

response 5383534

(17) p-Nitrotoluene #2

18.11min 799.023ppb

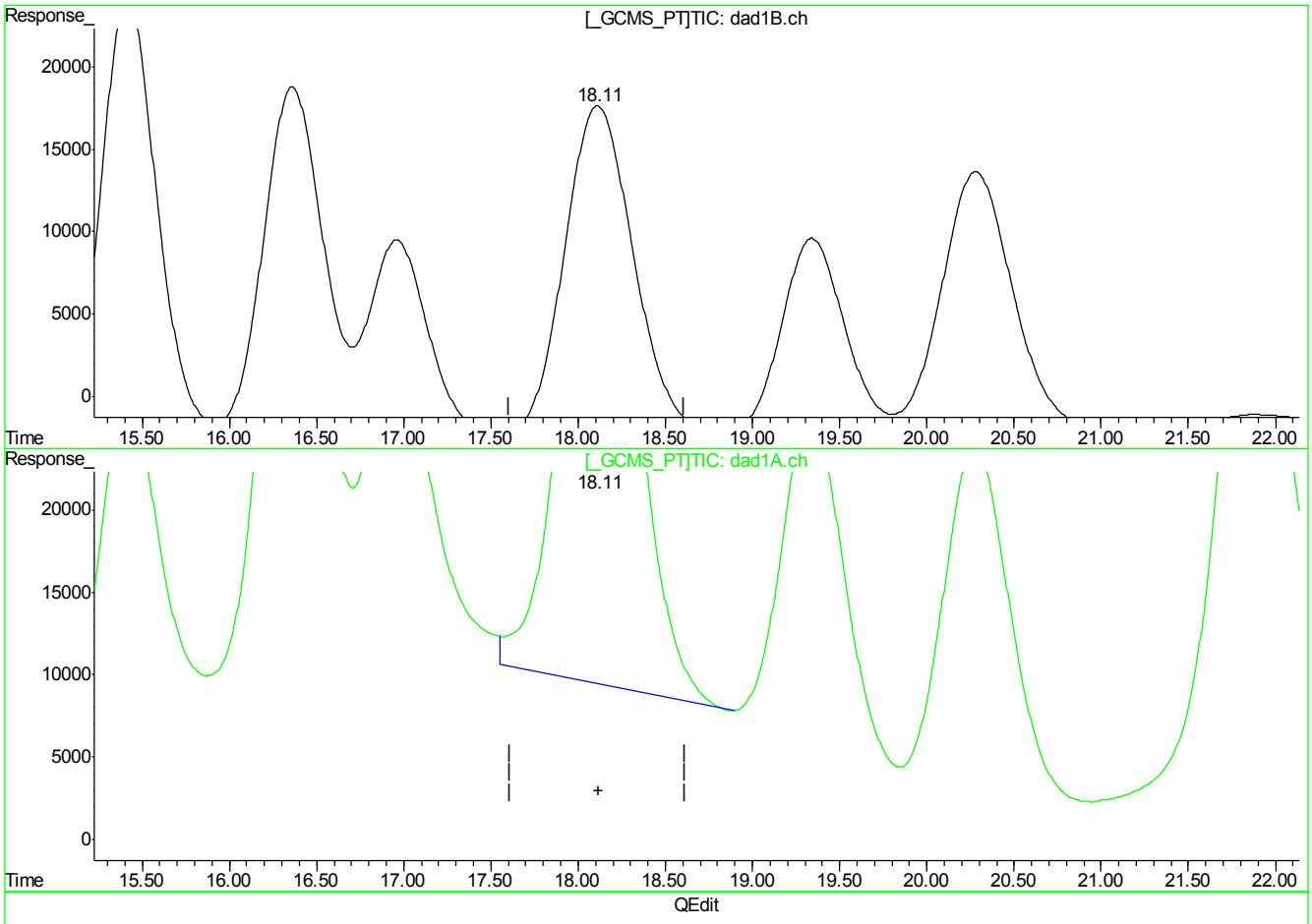
response 16933825

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:23:18 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



QEdit

(17) p-Nitrotoluene

18.11min 458.471ppb

response 5383534

(17) p-Nitrotoluene #2

18.11min 505.314ppb m

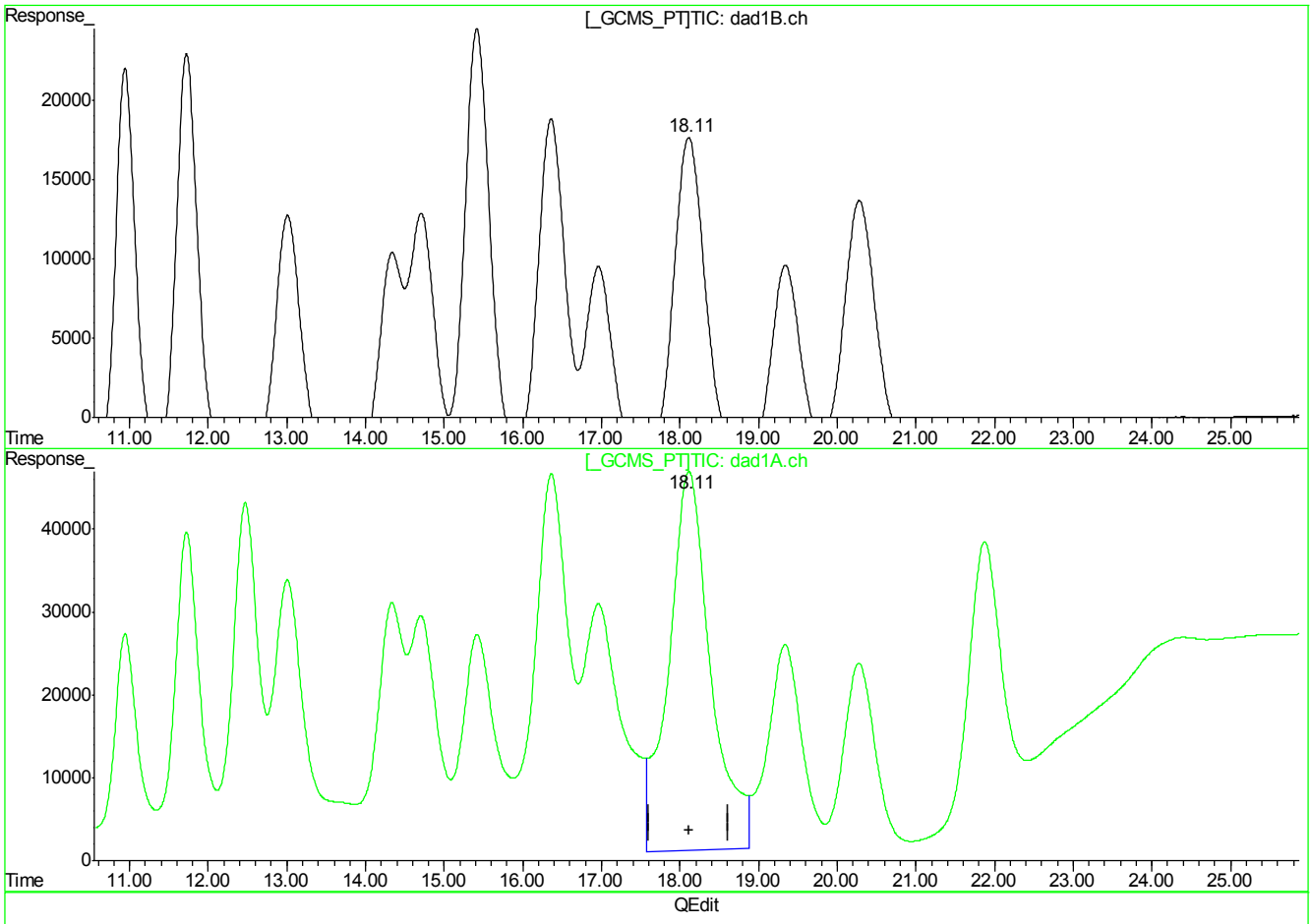
response 10709202

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:23:28 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.11min 458.471ppb

response 5383534

(18) 4-Amino-2,6-Dinitrotoluene #2

18.11min 796.699ppb

response 16933825

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:23:35 2018

7.3.3.28

7

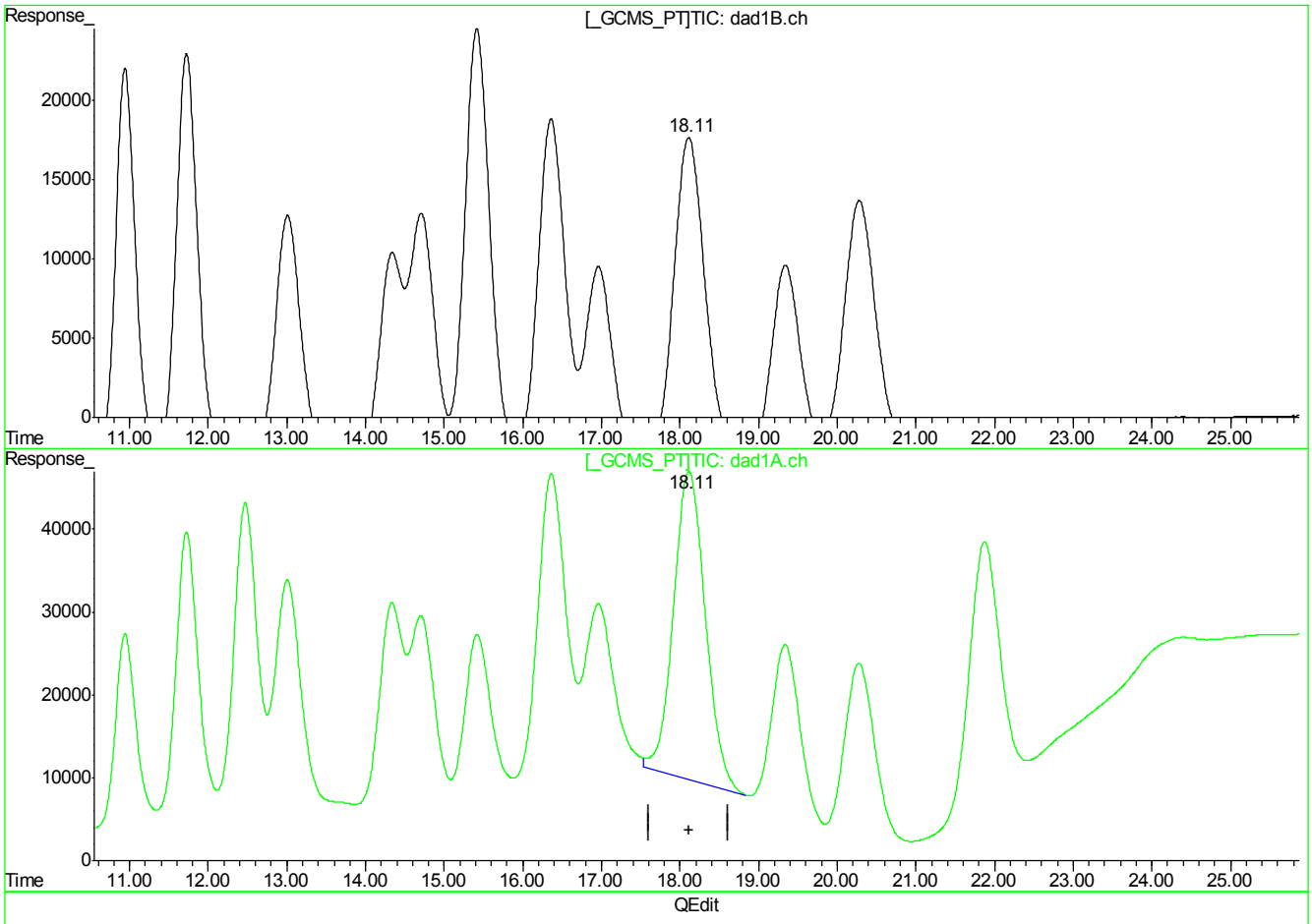
FA53801

GG614686.D edits: 4-Amino-2,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.11min 458.471ppb

response 5383534

(18) 4-Amino-2,6-Dinitrotoluene #2

18.11min 493.548ppb m

response 10490344

(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:23:42 2018

7.3.3.29

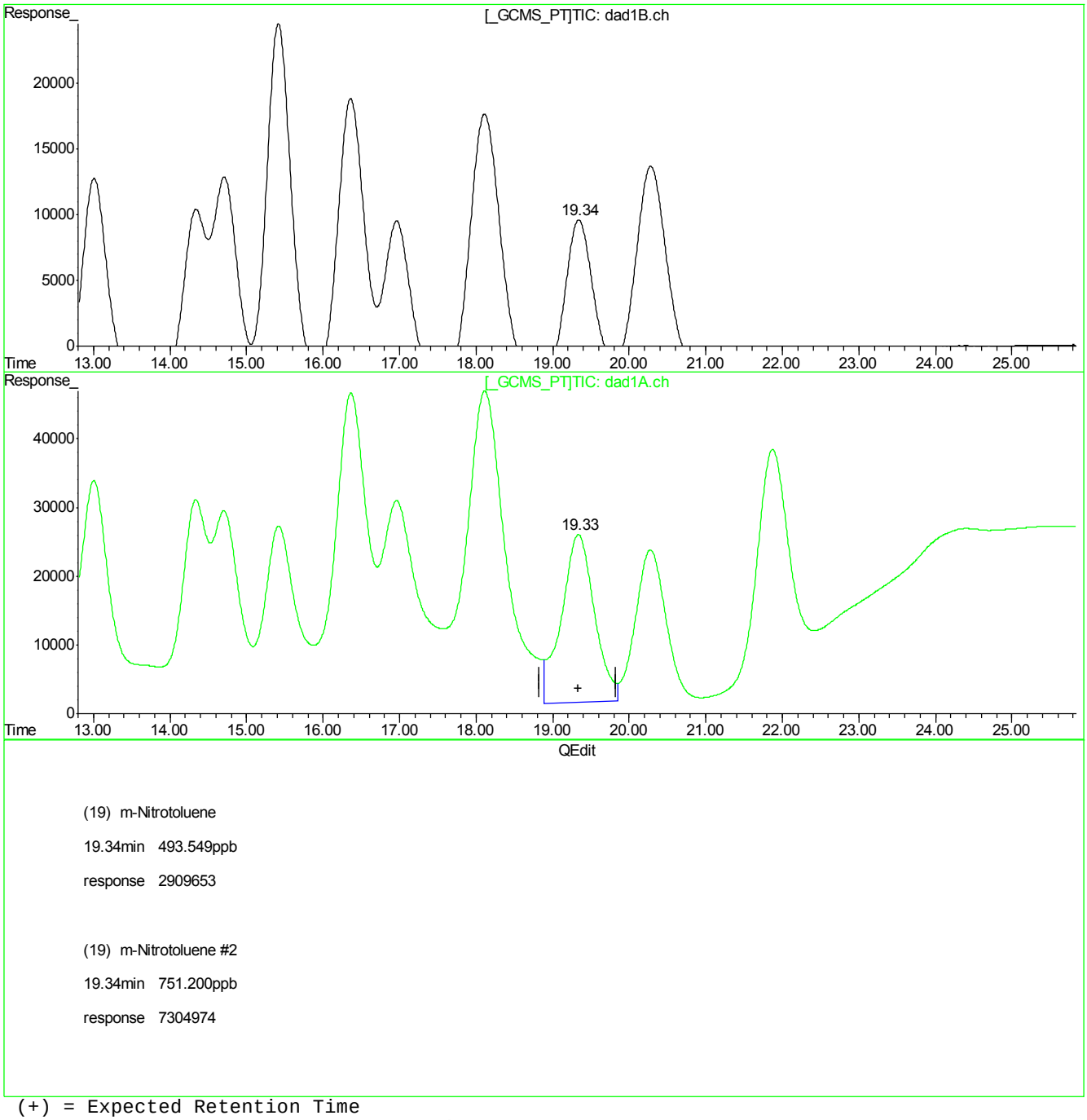
7

GG614686.D edits: 4-Amino-2,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

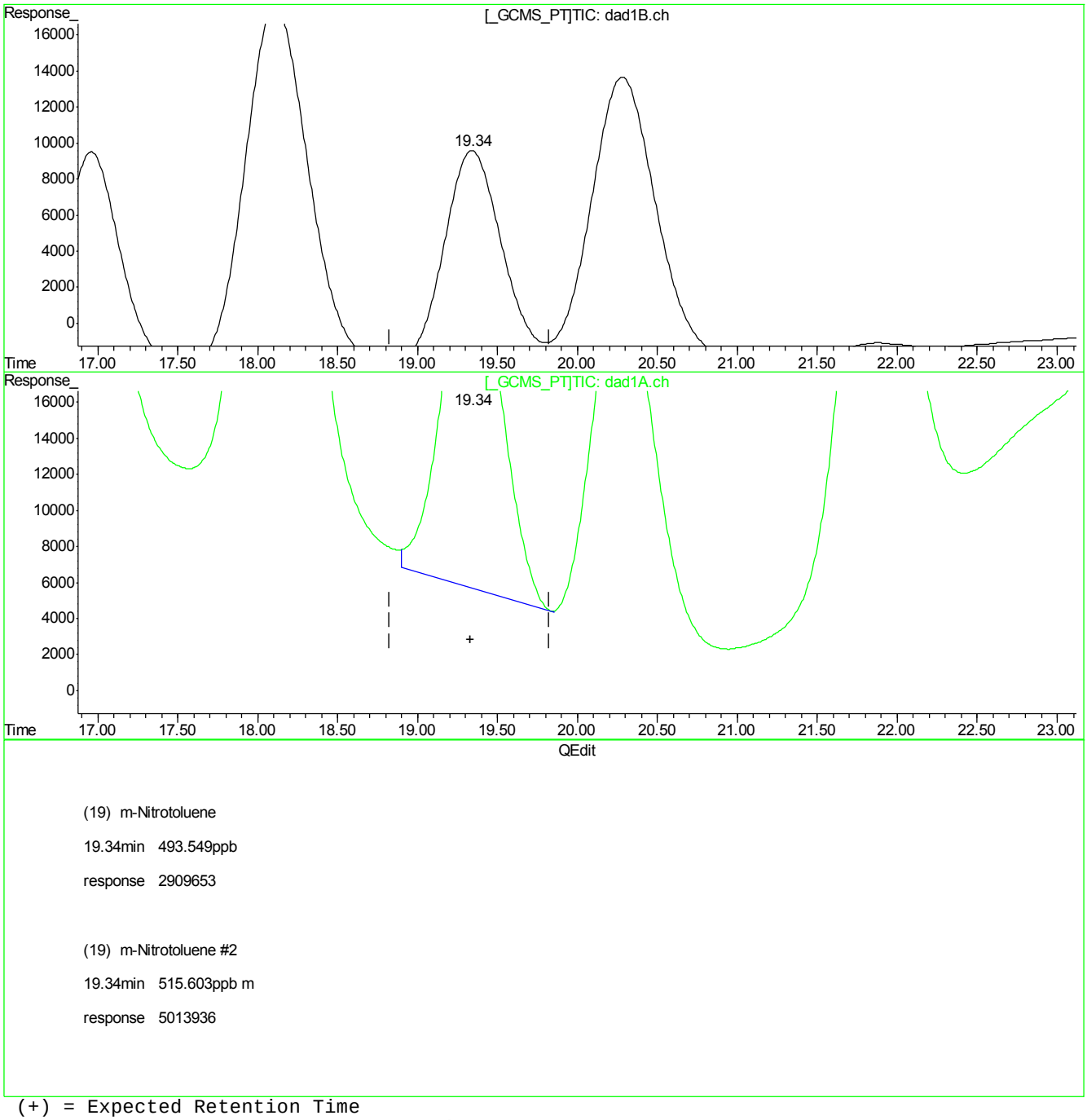


(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:23:48 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614686.D\dad1B.ch Vial: 15
Signal #2 : G:\DATA\0510RPB3\GG614686.D\dad1A.ch
Acq On : 10-May-2018, 20:56:52 Operator: evitam
Sample : op69989-bs Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:19 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614686.D 8330RPB.M_1113M.M Fri May 11 10:23:55 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:18 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.89	9.90	1029753	1801038	384.853	382.001
	Spiked Amount 500.000	Range 69 - 134		Recovery =		76.97%	76.40%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.40	1.40	627886	1736771	335.749m	341.644m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.65	2.65	502057	813072	234.783	244.607
6)	1,3,5-Trinitrobe	4.25	4.25	685629	1319757	157.569	158.091
7)	1,3-Dinitrobenze	5.40	5.40	642498	401214	115.891	107.726m
8)	3,5-Dinitroanili	5.65	5.66	928504	1397878	189.864	186.912
9)	Nitrobenzene	6.88	6.88	728654	679498	199.971	204.924
10)	Nitroglycerin	0.00	8.15	0	251554	N.D. d	196.307
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	8.80	8.84	144271	199567	34.186m	44.028m
13)	2-Amino-4,6-Dini	9.02	9.01	1454049	1984707	384.112m	370.016m
14)	4-Amino-2,6-Dini	9.45	9.45	138315	288152	53.096	55.608
16)	2,4-Dinitrotolue	10.52	10.52	436548	249145	82.978	84.363m
17)	2,6-Dinitrotolue	10.96	10.95	882797	1019843	255.419	298.668
18)	o-Nitrotoluene	14.23	14.24	485817	765003	194.495	233.535
19)	p-Nitrotoluene	14.79	14.79	1560917	1408693	395.466	447.188
20)	m-Nitrotoluene	15.79	15.79	1110242	1373568	311.236	341.355
21)	PETN	0.00	18.25	0	356455	N.D. d	256.658m

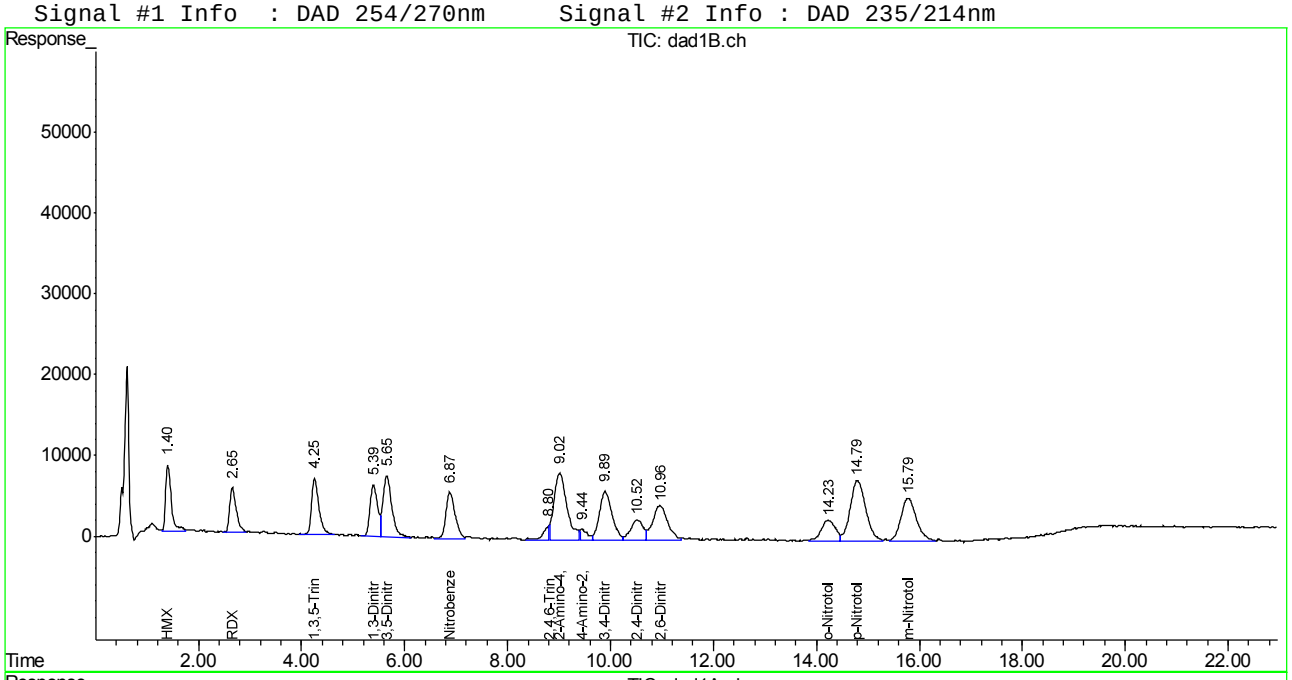
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059700.D 8330B_0419PLUS.M Fri May 11 08:38:13 2018 Page 1

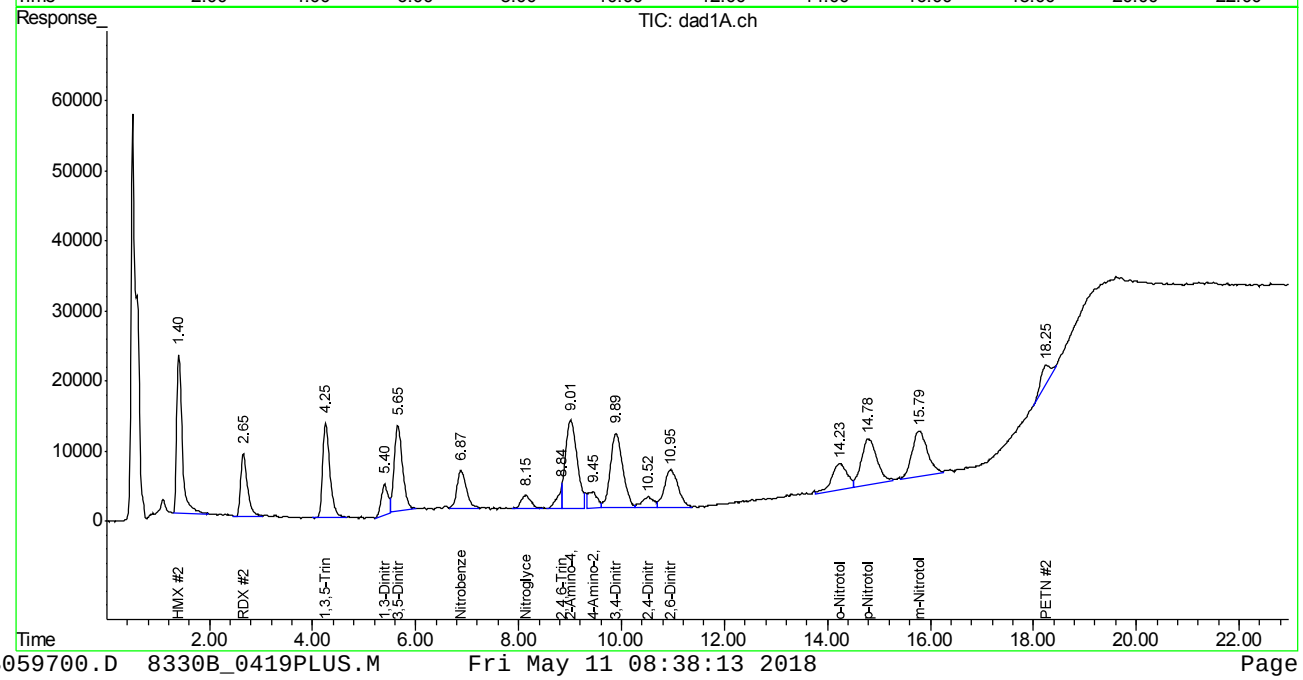
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:30 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

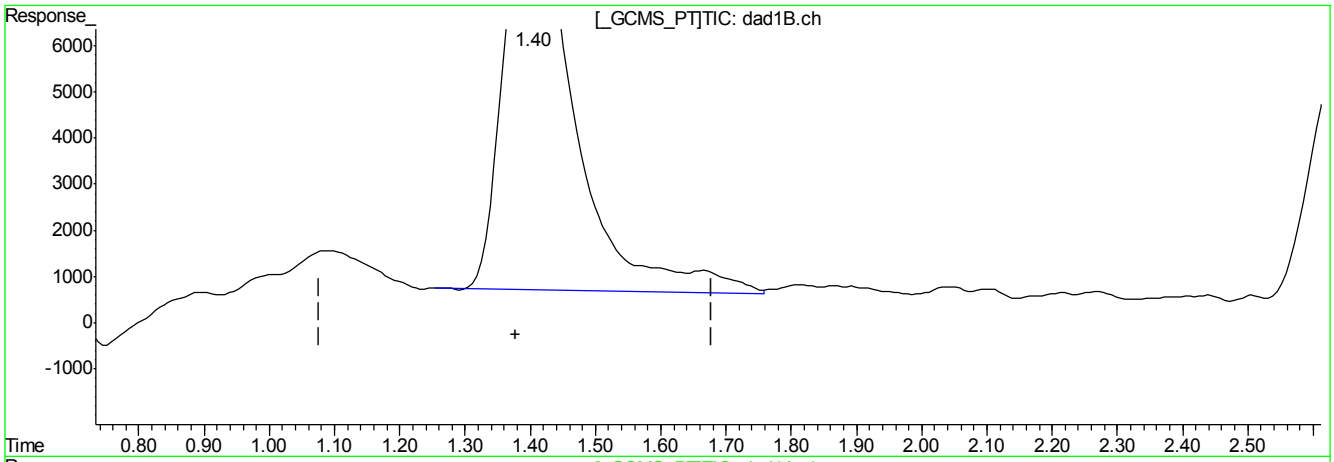
Sample Number:	OP69973-PT1	**Method:**	SW846 8330B
Lab FileID:	BB059700.D	**Analyst approved:**	05/11/18 08:46 Evita Martinez
Injection Time:	05/11/18 01:28	**Supervisor approved:**	05/11/18 15:51 Mike Eger

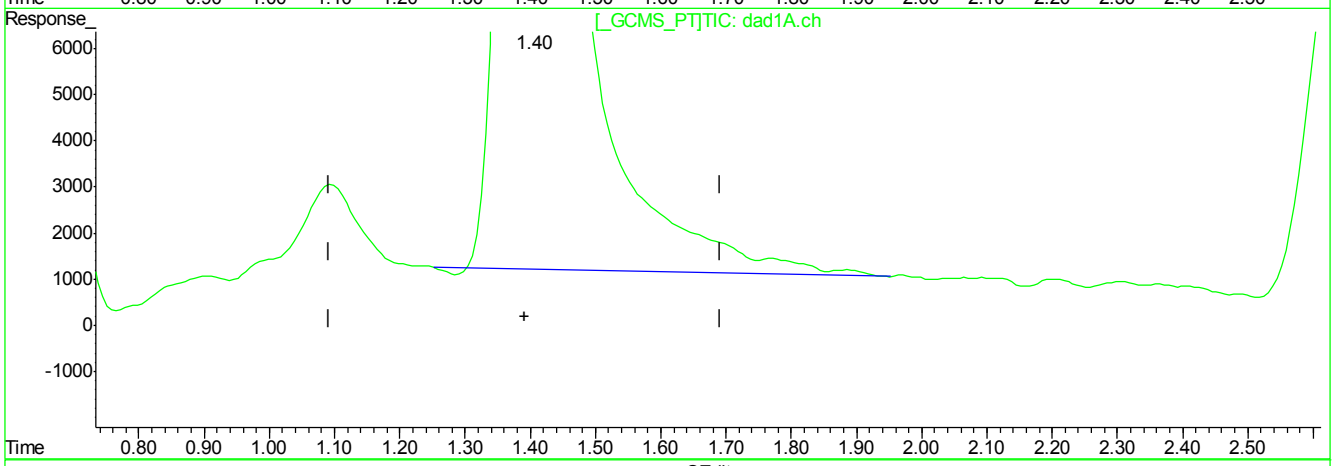
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.40	Poorly defined baseline
HMX	2691-41-0	2	1.40	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.40	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	8.80	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	8.84	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.01	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	9.02	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	10.52	Poorly defined baseline
PETN	78-11-5	2	18.25	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.40min 333.711ppb

response 624074

(2) HMX #2

1.40min 335.581ppb

response 1706008

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:28:54 2018

7.4.1.2

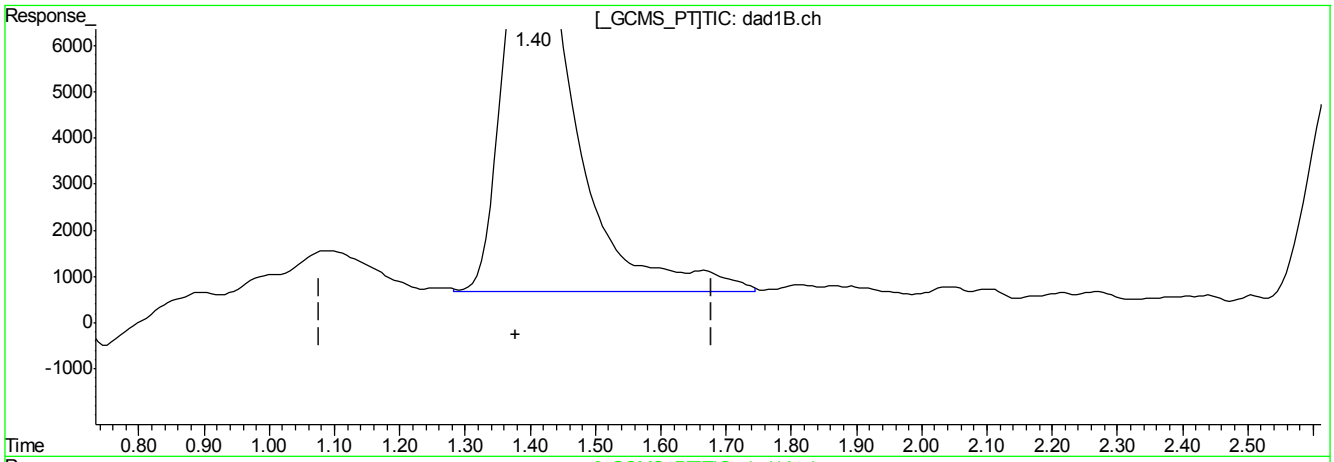
7

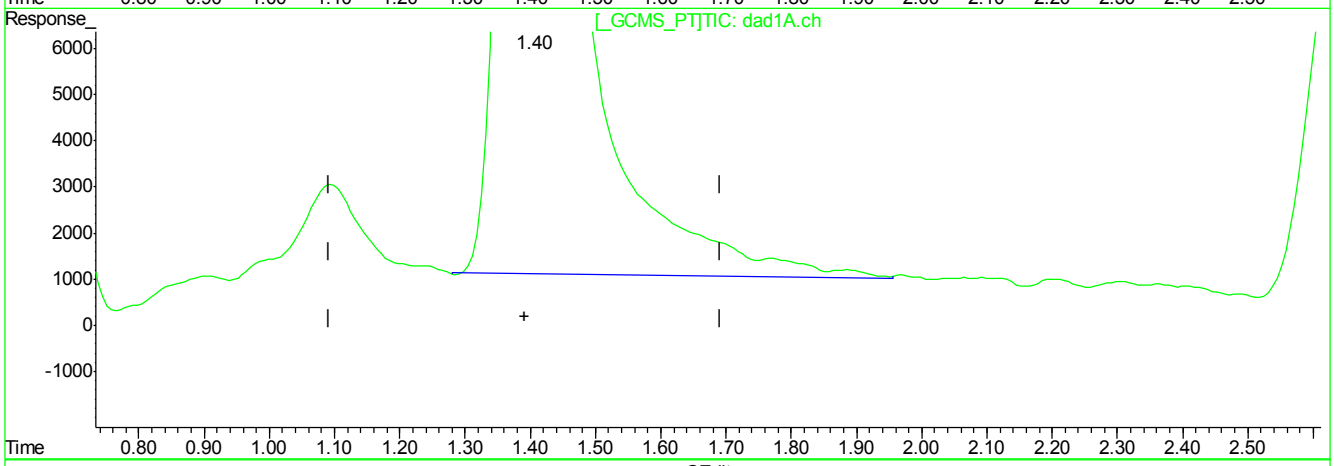
BB059700.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.40min 335.749ppb m

response 627886

(2) HMX #2

1.40min 341.644ppb m

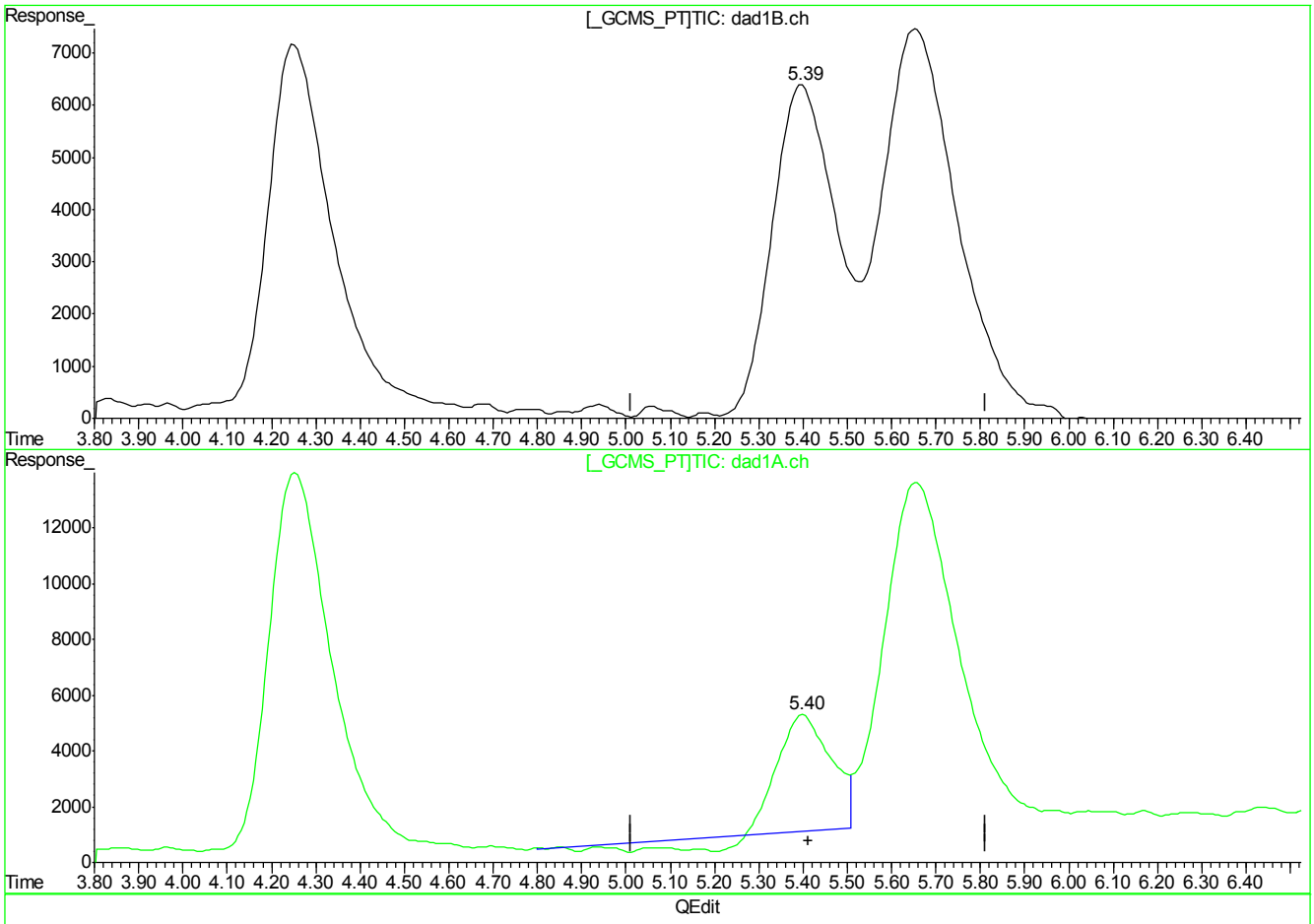
response 1736771

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:29:01 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.40min 115.891ppb

response 642498

(7) 1,3-Dinitrobenzene #2

5.40min 75.658ppb

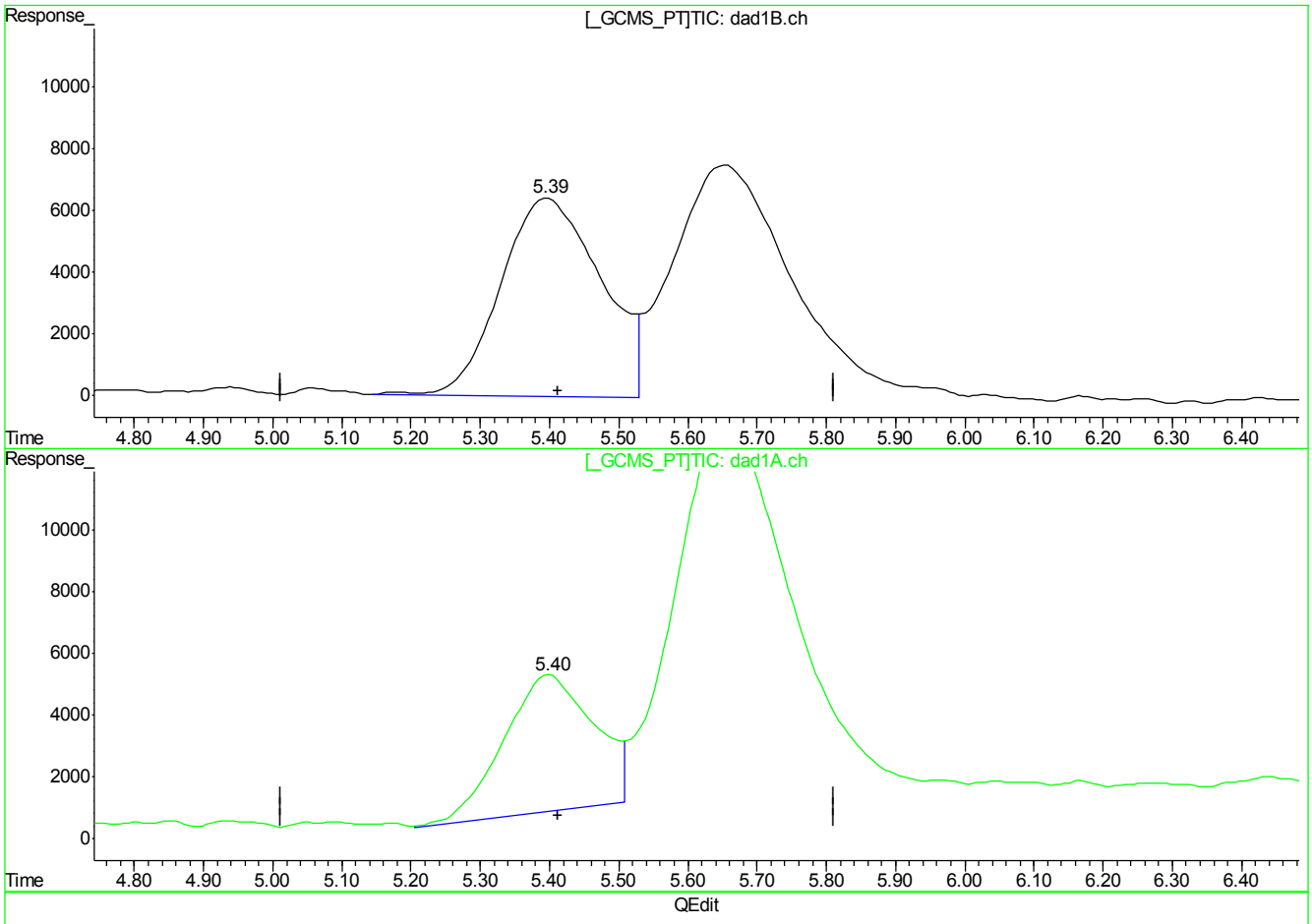
response 281780

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:29:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.40min 115.891ppb

response 642498

(7) 1,3-Dinitrobenzene #2

5.40min 107.726ppb m

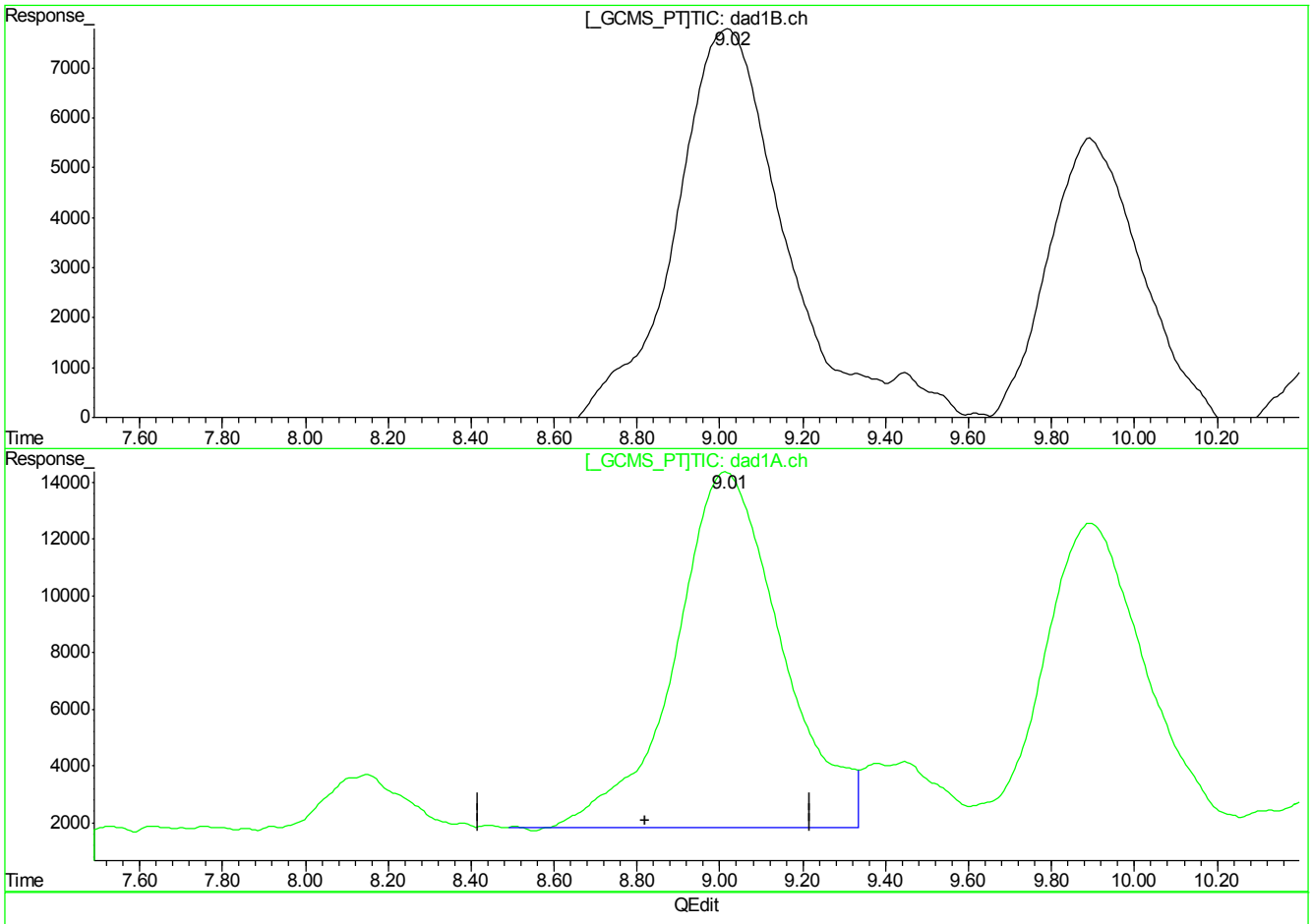
response 401214

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:29:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.02min 381.583ppb

response 1610338

(12) 2,4,6-Trinitrotoluene #2

9.02min 491.738ppb

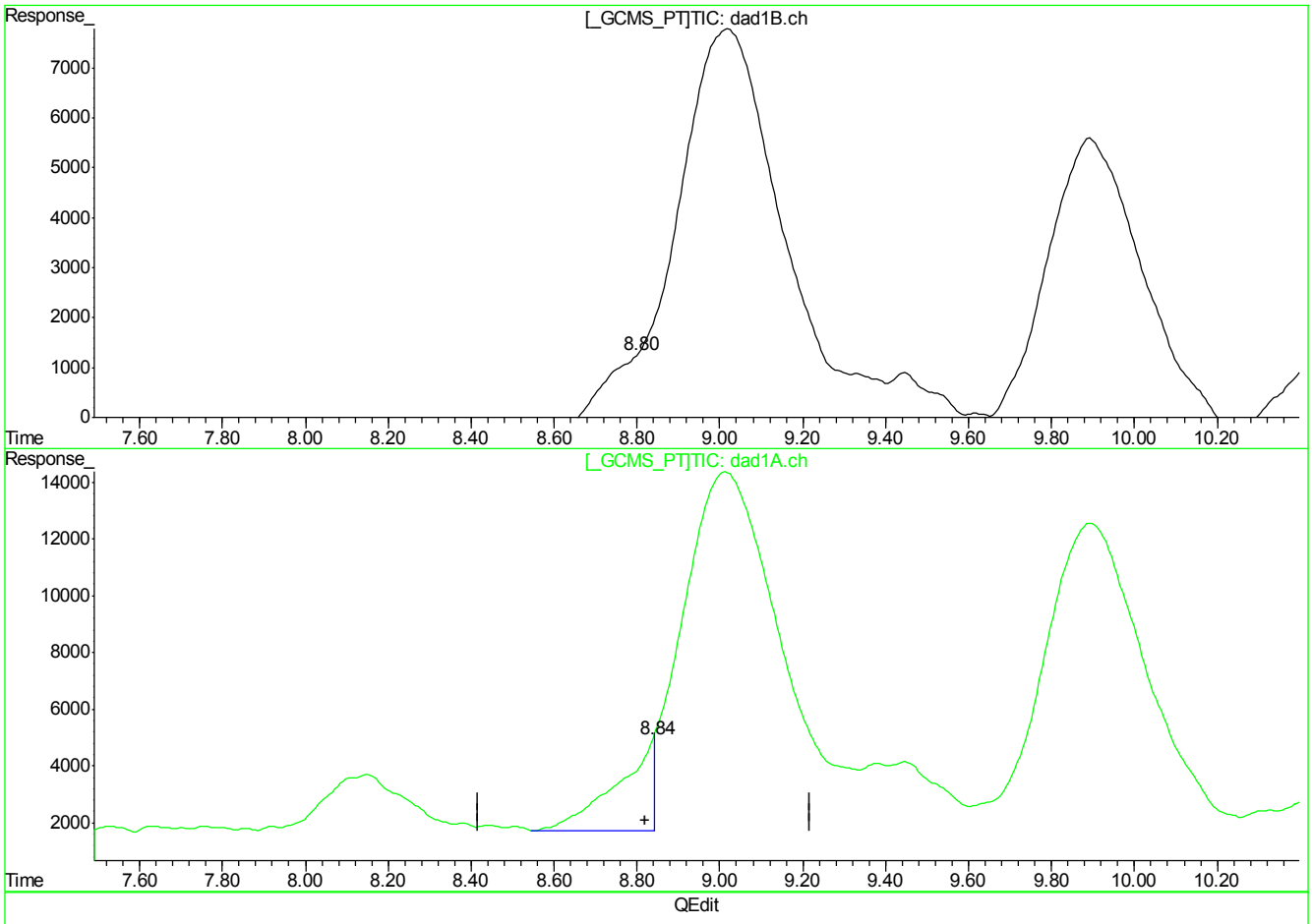
response 2228921

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:29:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

8.80min 34.186ppb m

response 144271

(12) 2,4,6-Trinitrotoluene #2

8.84min 44.028ppb m

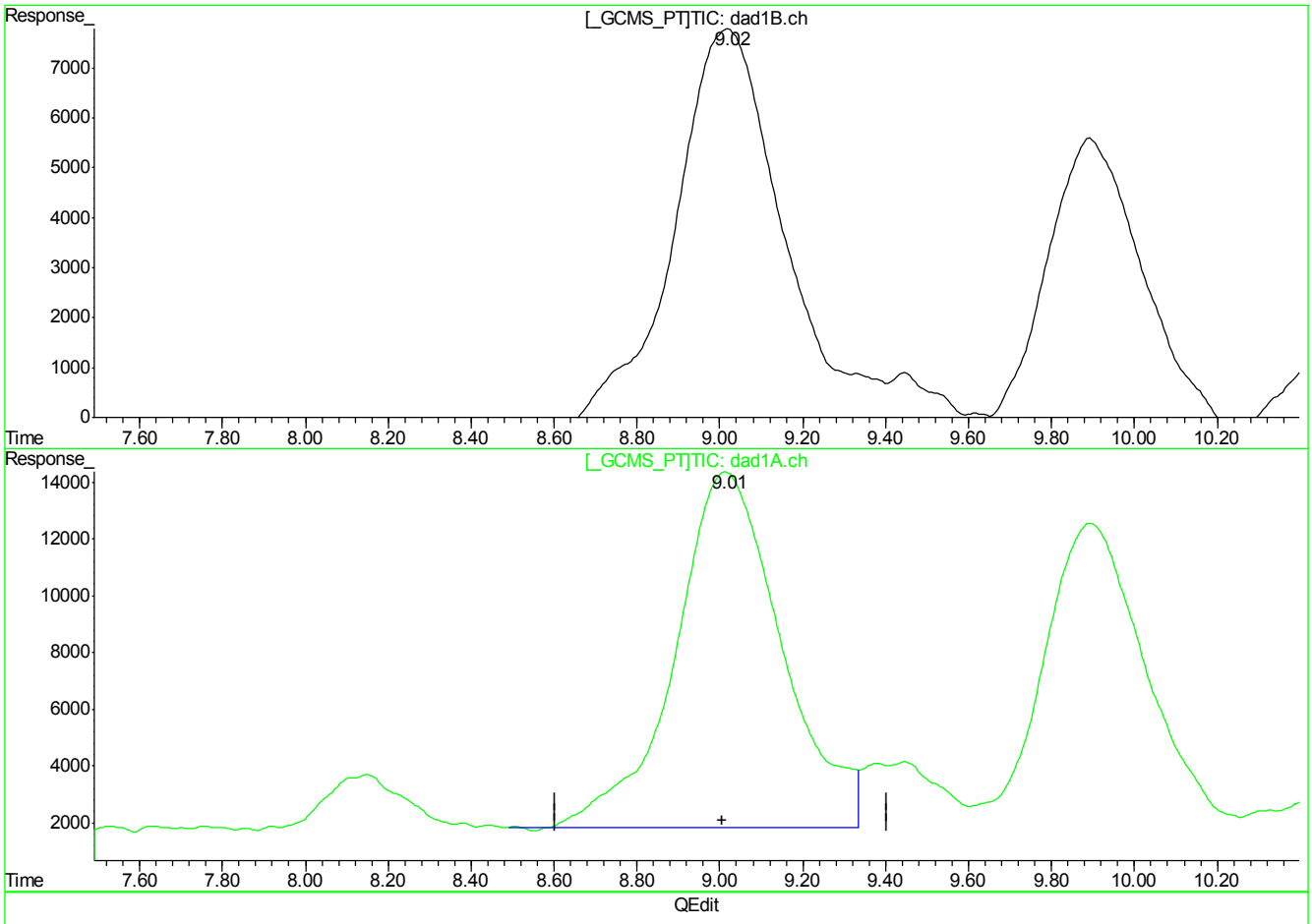
response 199567

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:29:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.02min 425.398ppb

response 1610338

(13) 2-Amino-4,6-Dinitrotoluene #2

9.02min 415.546ppb

response 2228921

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:29:45 2018

7.4.1.8

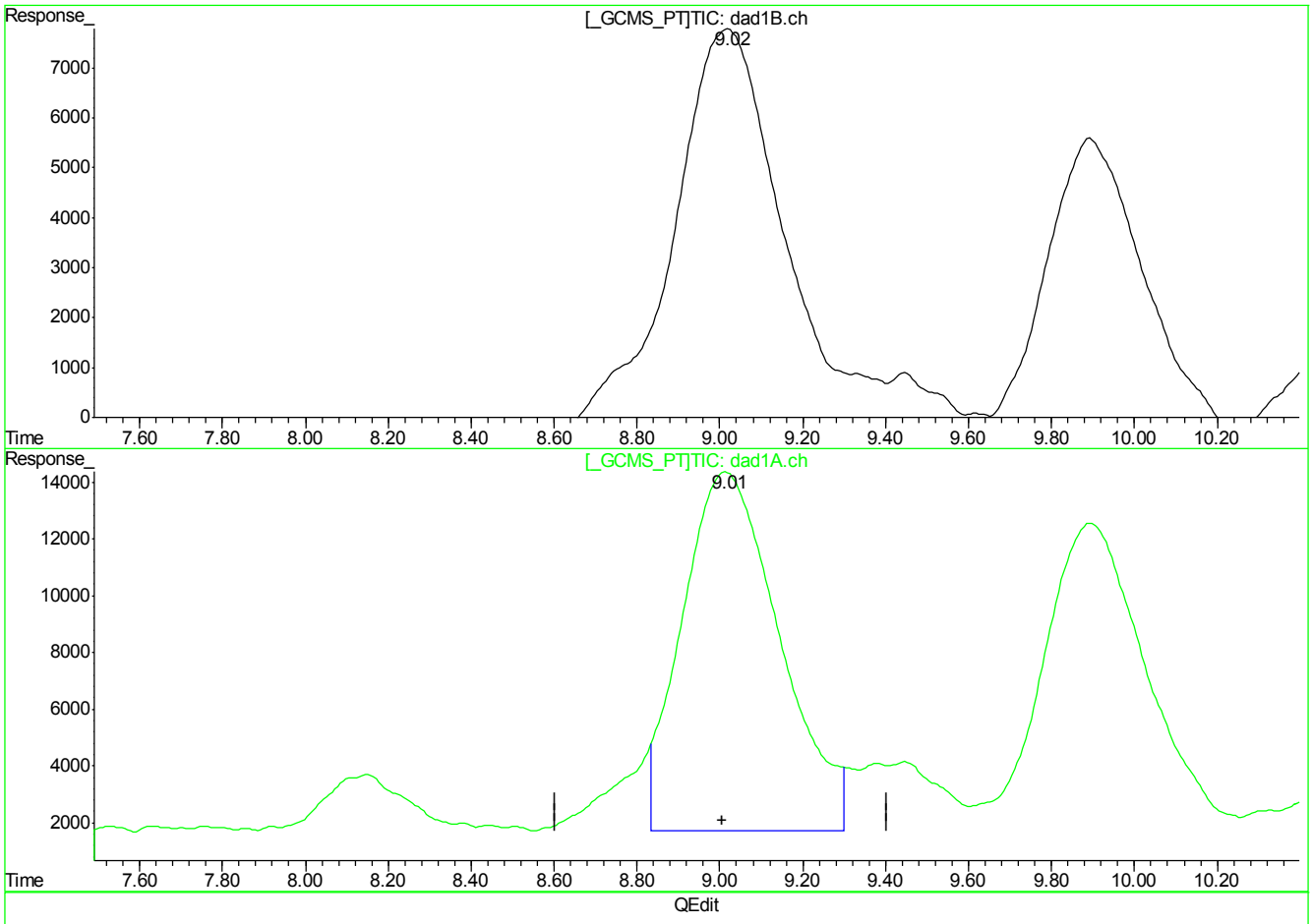
7

BB059700.D edits: 2-Amino-4,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.02min 384.112ppb m

response 1454049

(13) 2-Amino-4,6-Dinitrotoluene #2

9.01min 385.153ppb m

response 2065898

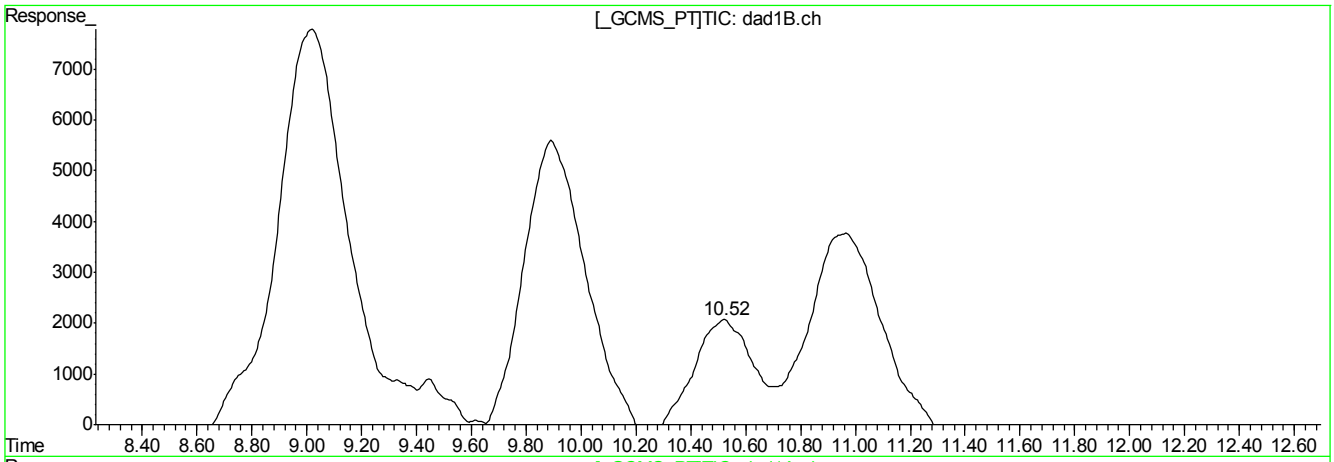
(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:30:15 2018

BB059700.D edits: 2-Amino-4,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

10.52min 82.978ppb

response 436548

(16) 2,4-Dinitrotoluene #2

0.00min 0.000ppb

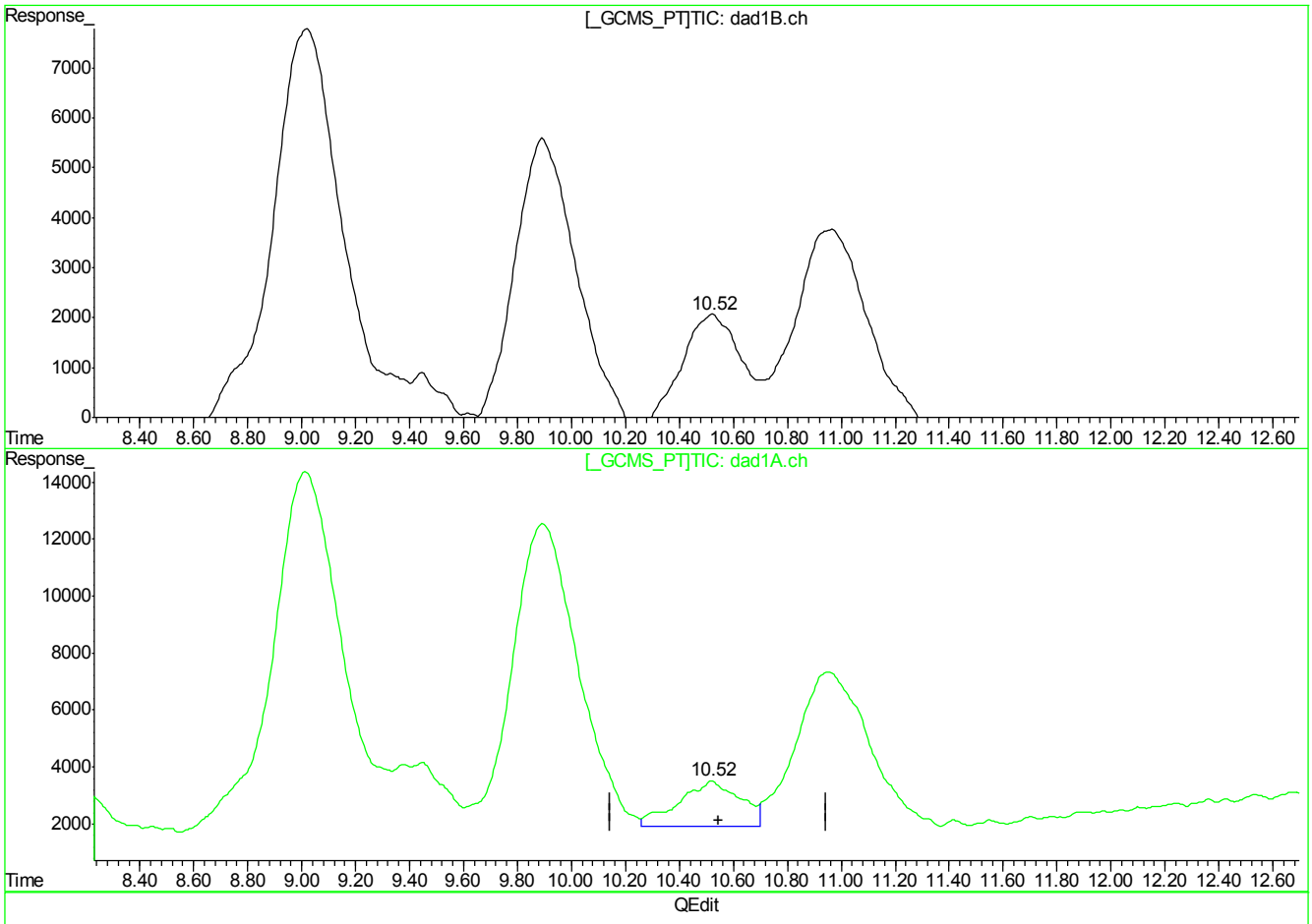
response 0

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:30:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

10.52min 82.978ppb

response 436548

(16) 2,4-Dinitrotoluene #2

10.52min 84.363ppb m

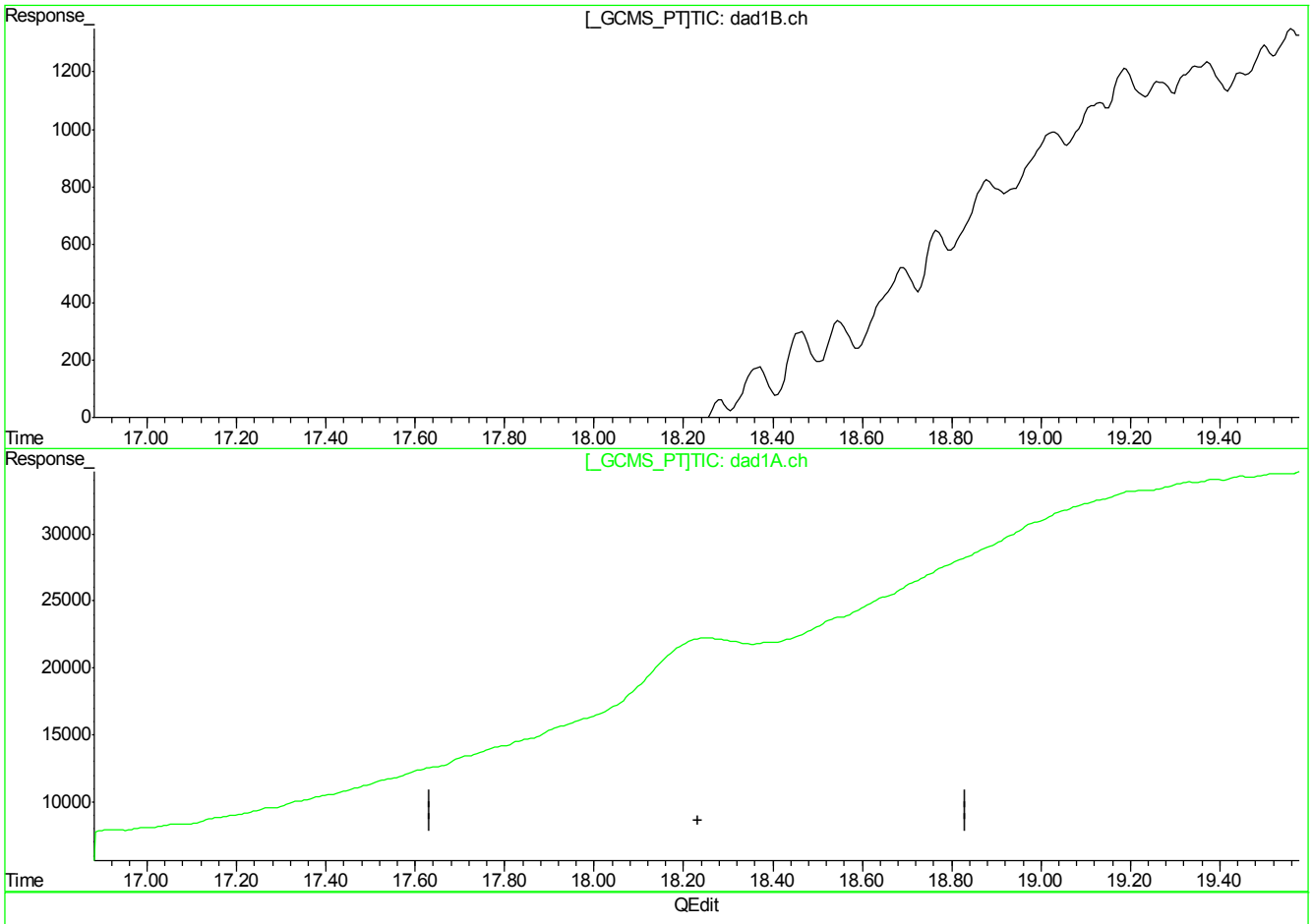
response 249145

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:30:44 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

0.00min 0.000ppb

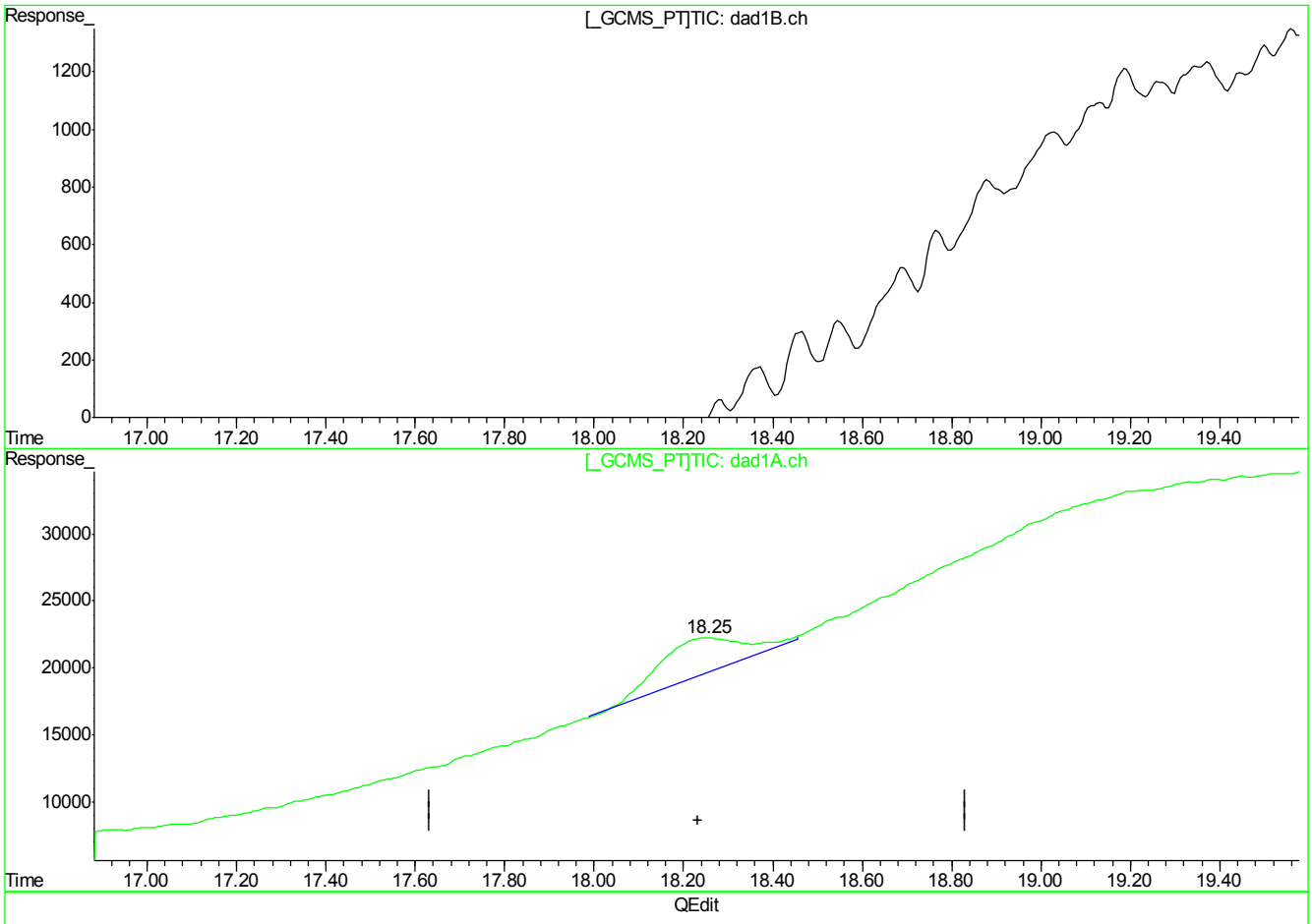
response 0

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:30:49 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059700.D\dad1A.ch
Acq On : 11-May-2018, 01:28:34 Operator: evitam
Sample : op69973-pt1 Inst : G1315B
Misc : OP69973,gbb1730,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.25min 256.658ppb m

response 356455

(+) = Expected Retention Time
BB059700.D 8330B_0419PLUS.M Fri May 11 08:30:51 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:18 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.29	14.29	2564889	5166632	493.734	477.612m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		98.75%	95.52%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.41	5.41	1490524	1446124	459.771m	448.862m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.47	7.47	1725030	1720227	166.483	166.037
6)	RDX	7.93	7.93	1298145	1283031	272.481	270.502
7)	1,3-Dinitrobenze	9.96	9.96	1830060	1583769	127.915	120.518m
8)	Nitrobenzene	10.92	10.92	2030532	1842801	215.158	198.987m
9)	2,4,6-Trinitroto	11.70	11.70	525663	614259	51.870	46.837m
10)	Nitroglycerin	0.00	12.44	0	699117	N.D. d	207.469m
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.66	14.65	2056062	3031022	287.577	298.739m
14)	2,4-Dinitrotolue	15.37	15.40	1128576	668589	86.091	69.605m
15)	o-Nitrotoluene	16.93	16.95	1269668	1741051	219.795	201.893m
16)	3,5-Dinitroanili	16.33	16.33	2144279	3392202	220.097	209.695m
17)	p-Nitrotoluene	18.03	18.03	2623804	5256727	223.448	248.039m
18)	4-Amino-2,6-Dini	18.03	18.03	2623804	5412713	223.448	254.656m
19)	m-Nitrotoluene	19.31	19.31	2027782	3494824	343.962	359.387m
20)	2-Amino-4,6-Dini	20.25	20.25	3665617	5504138	406.256	464.142m
21)	PETN	0.00	21.93	0	930792	N.D. d	290.201m

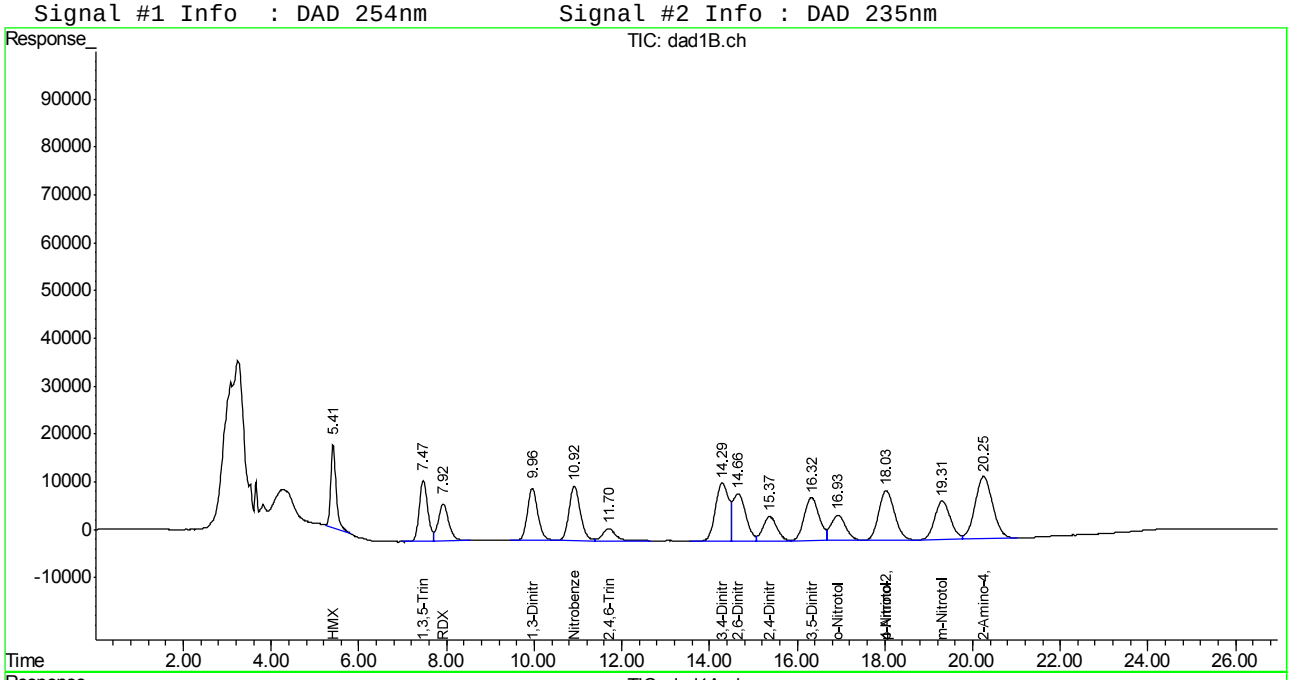
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:37:15 2018 Page 1

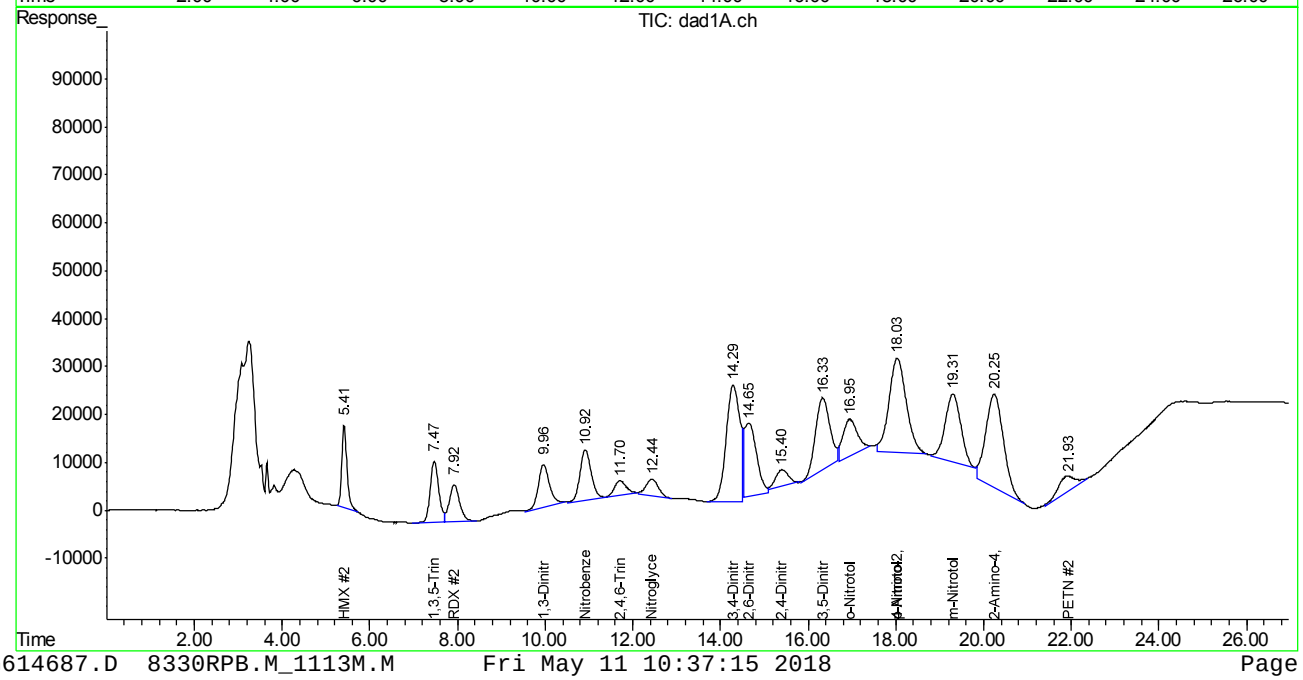
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

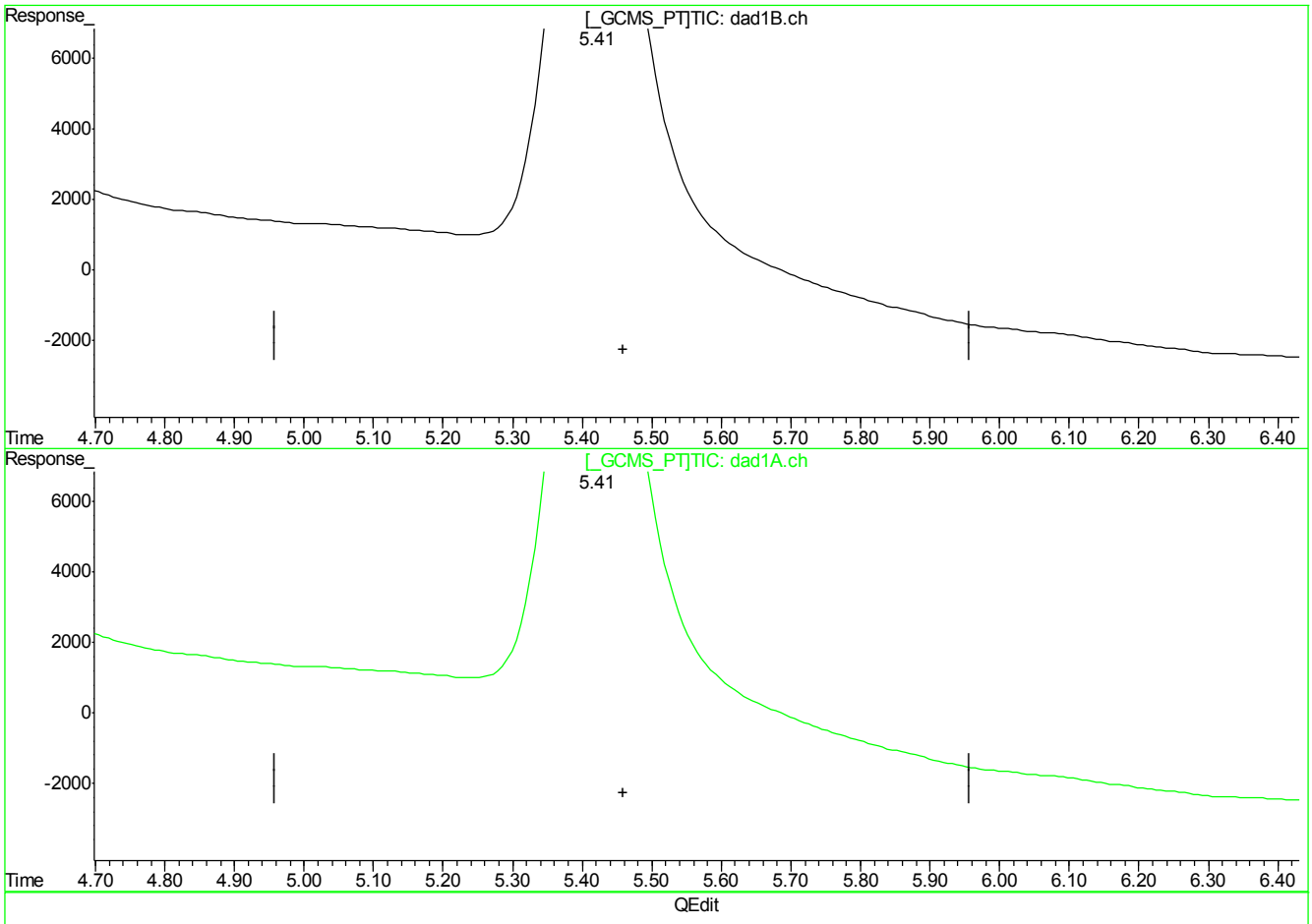
Sample Number:	OP69989-PT1	**Method:**	SW846 8330B
Lab FileID:	GG614687.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/10/18 21:26	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.41	Poorly defined baseline
HMX	2691-41-0	2	5.41	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	9.96	Poorly defined baseline
Nitrobenzene	98-95-3	2	10.92	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.70	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.44	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.29	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.65	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.40	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	16.33	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	16.95	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.03	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.03	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.31	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.25	Poorly defined baseline
PETN	78-11-5	2	21.93	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(2) HMX

5.42min 361.017ppb

response 1170377

(2) HMX #2

5.42min 363.273ppb

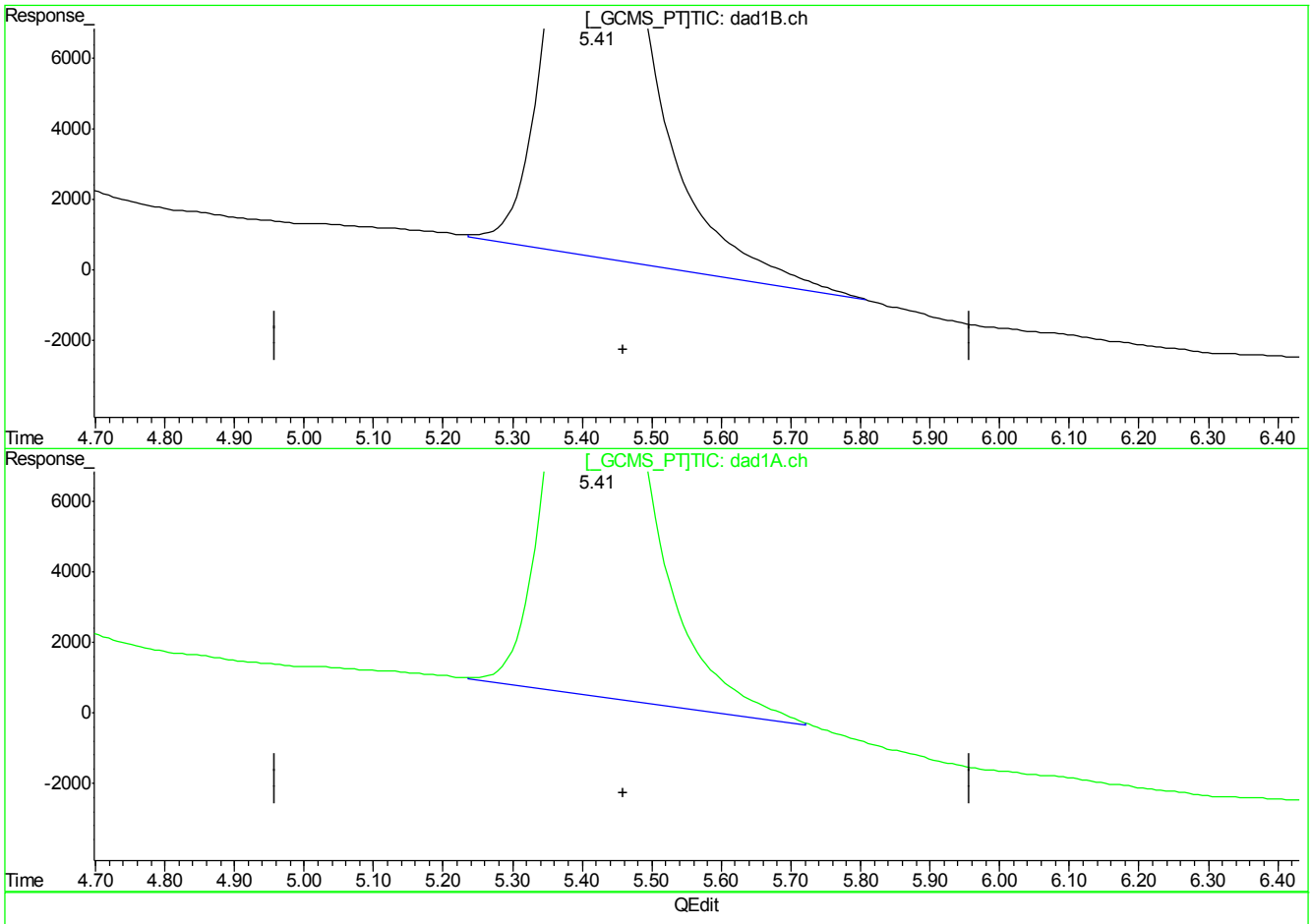
response 1170377

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:24:20 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(2) HMX

5.41min 459.771ppb m

response 1490524

(2) HMX #2

5.41min 448.862ppb m

response 1446124

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:24:27 2018

7.4.2.3

7

SGS

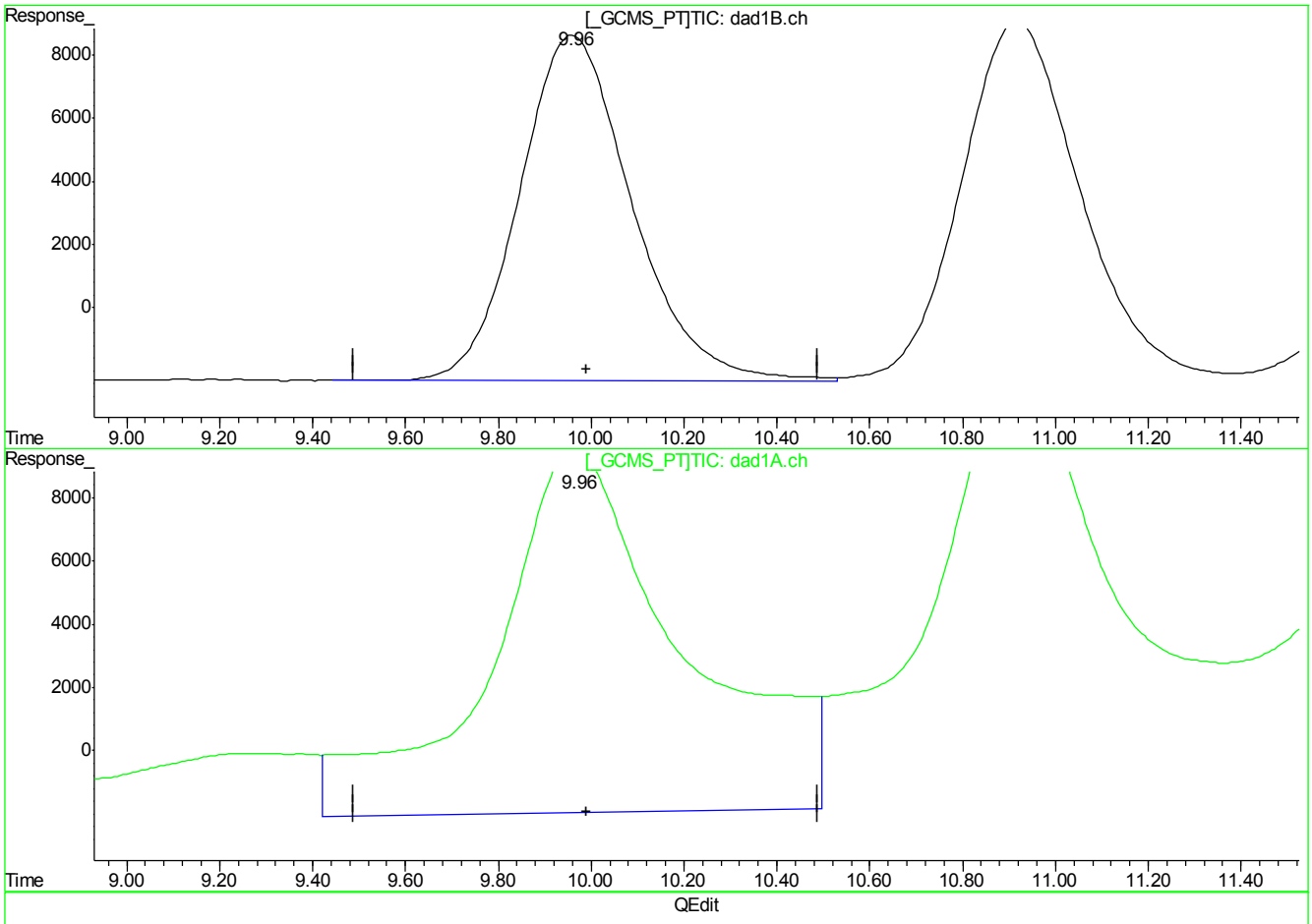
FA53801

GG614687.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.96min 127.915ppb

response 1830060

(7) 1,3-Dinitrobenzene #2

9.97min 252.464ppb

response 3280448

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:24:33 2018

7.4.2.4

7

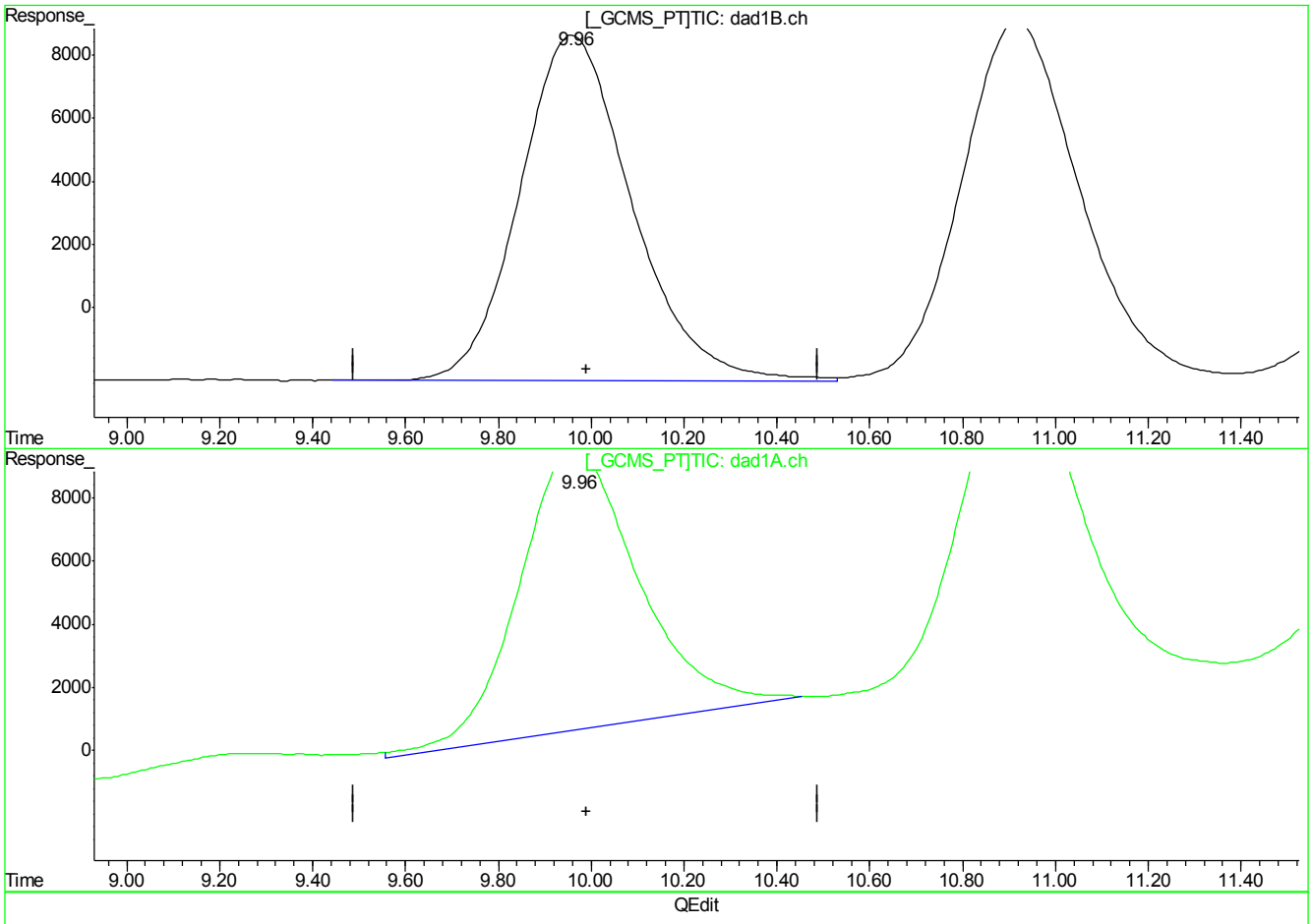
GG614687.D edits: 1,3-Dinitrobenzene

FA53801

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

9.96min 127.915ppb

response 1830060

(7) 1,3-Dinitrobenzene #2

9.96min 120.518ppb m

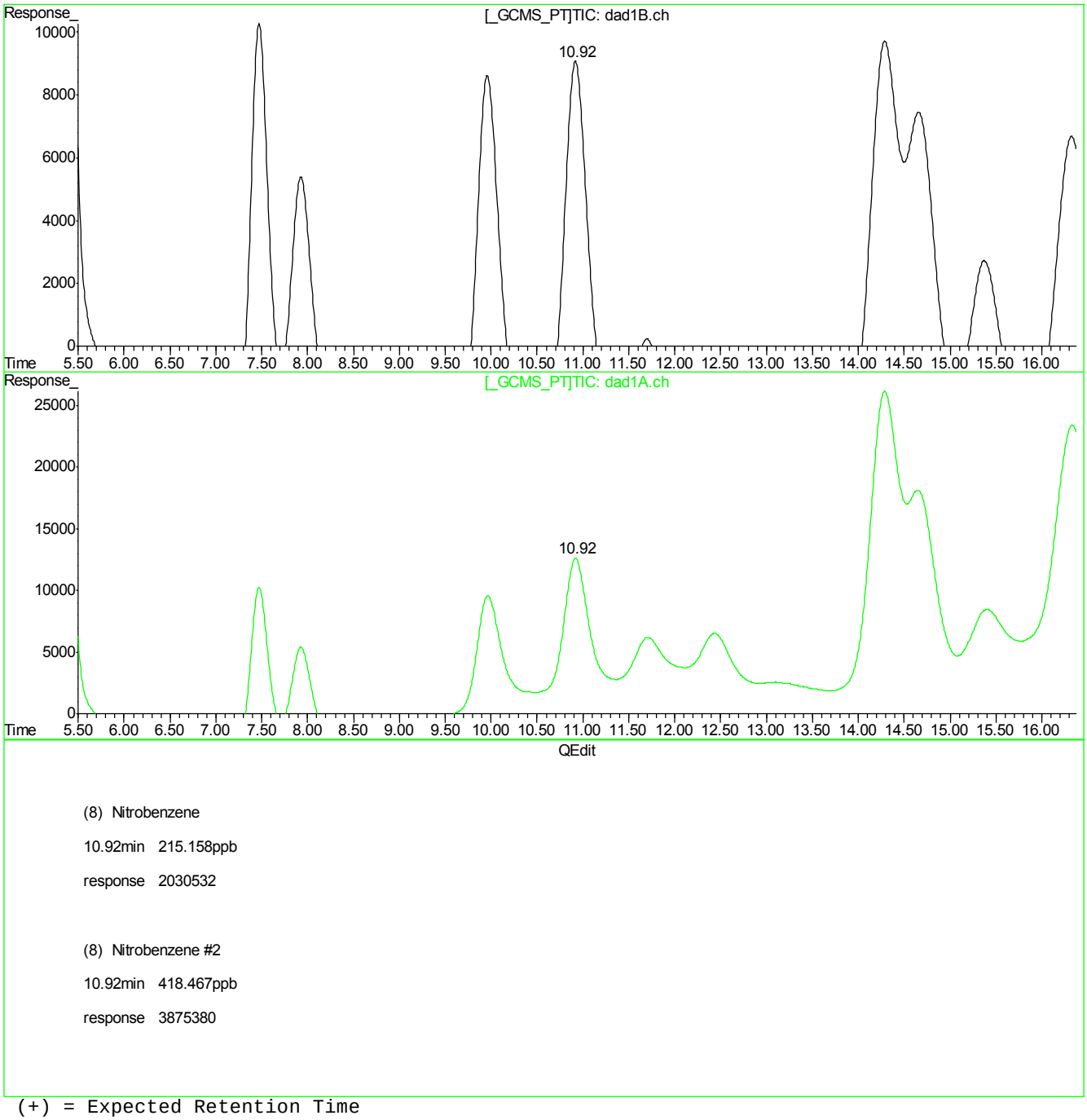
response 1583769

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:24:36 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:24:42 2018

7.4.2.6

7

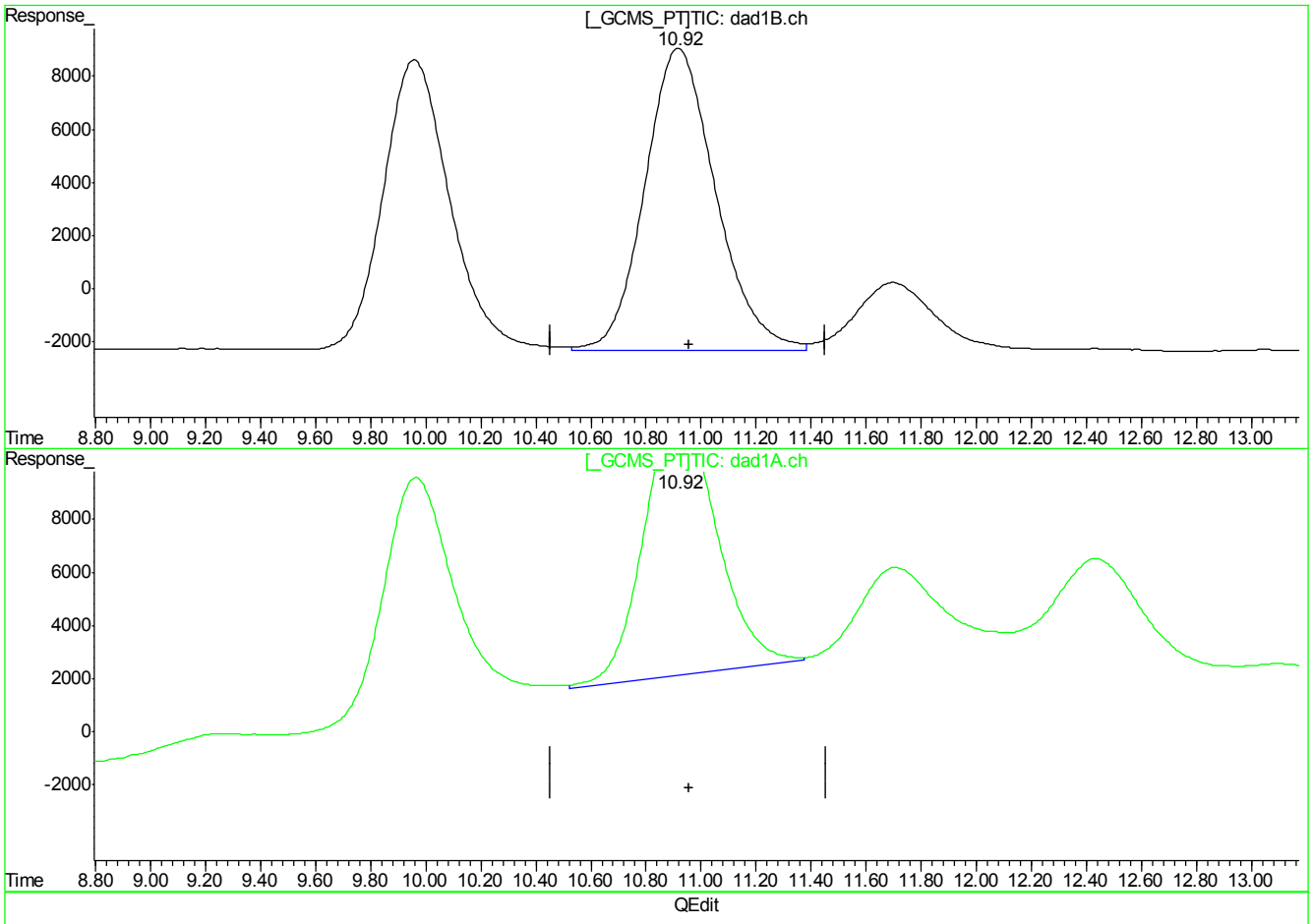
GG614687.D edits: Nitrobenzene

FA53801

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



QEdit

(8) Nitrobenzene

10.92min 215.158ppb

response 2030532

(8) Nitrobenzene #2

10.92min 198.987ppb m

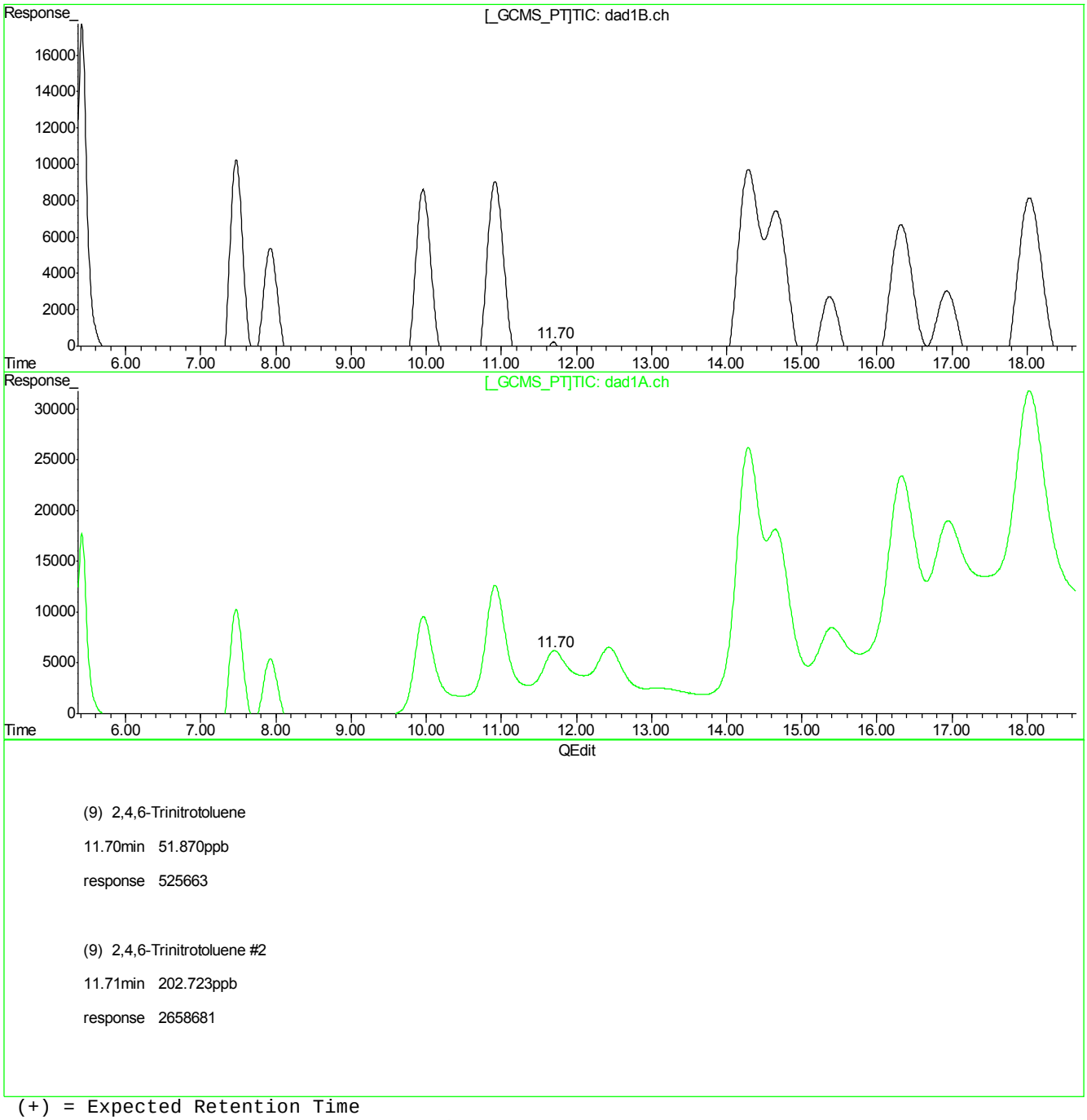
response 1842801

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:24:46 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.70min 51.870ppb

response 525663

(9) 2,4,6-Trinitrotoluene #2

11.71min 202.723ppb

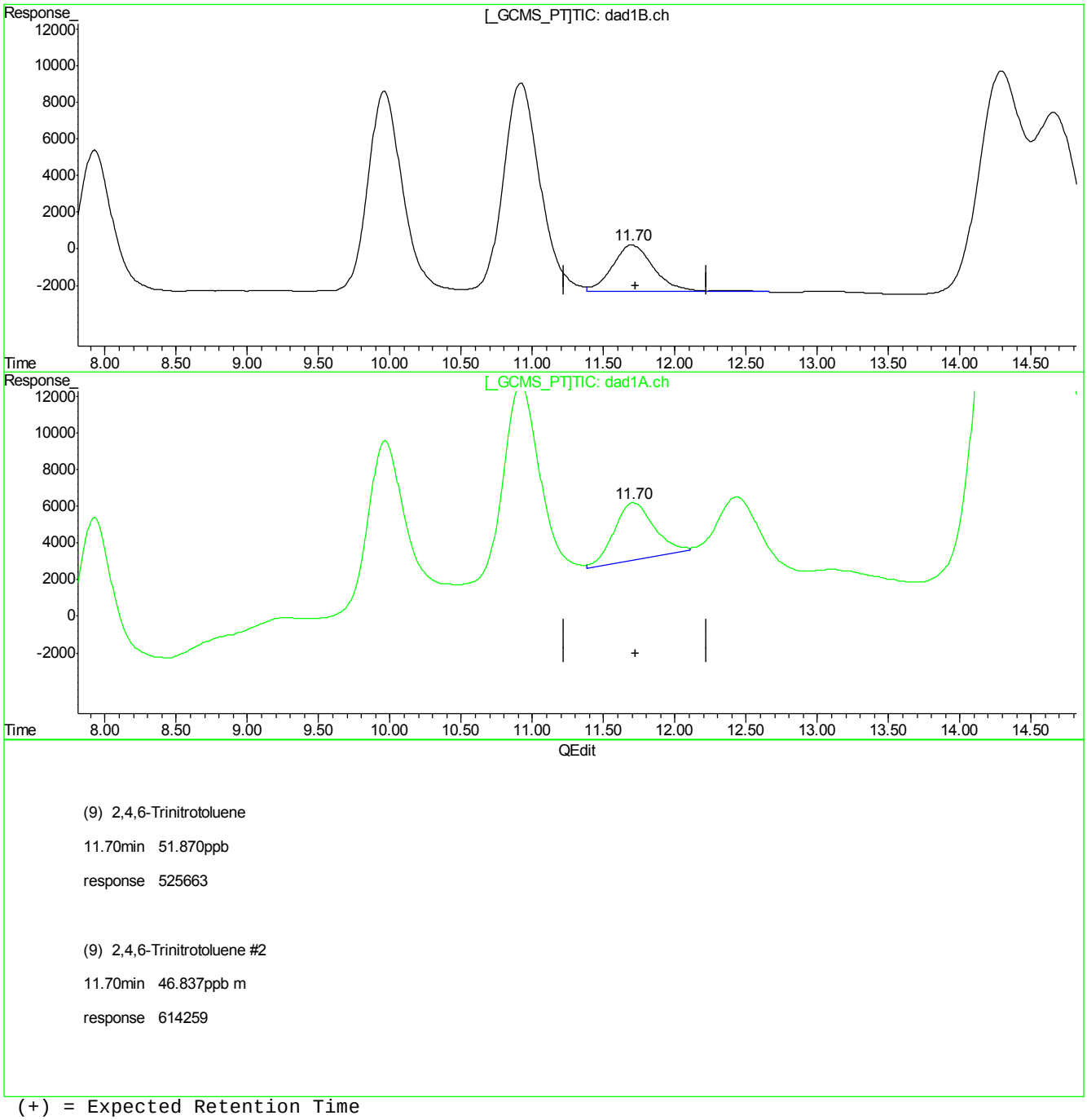
response 2658681

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:24:52 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.70min 51.870ppb

response 525663

(9) 2,4,6-Trinitrotoluene #2

11.70min 46.837ppb m

response 614259

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:24:57 2018

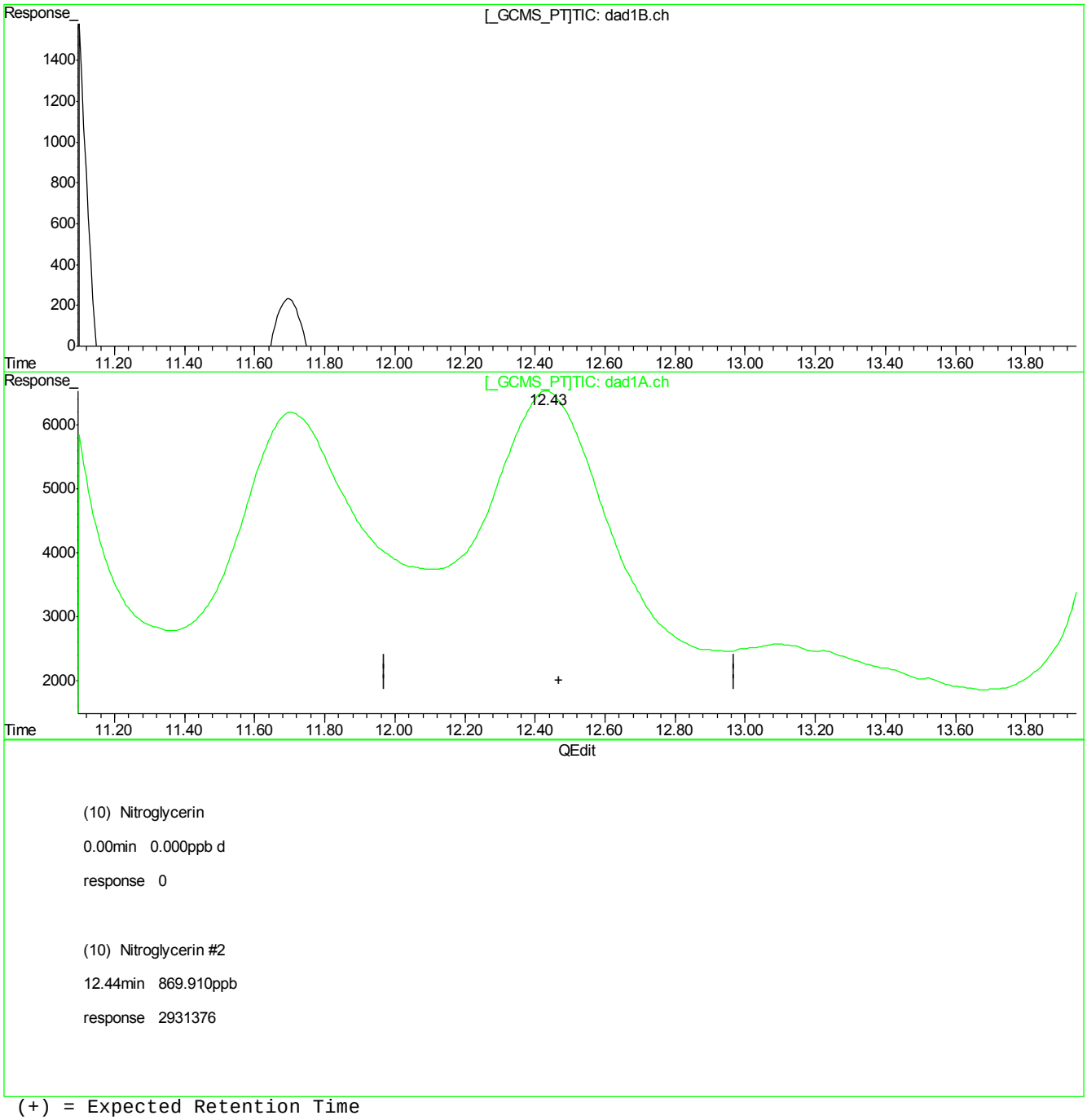
7.4.2.9

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:24:59 2018

7.4.2.10

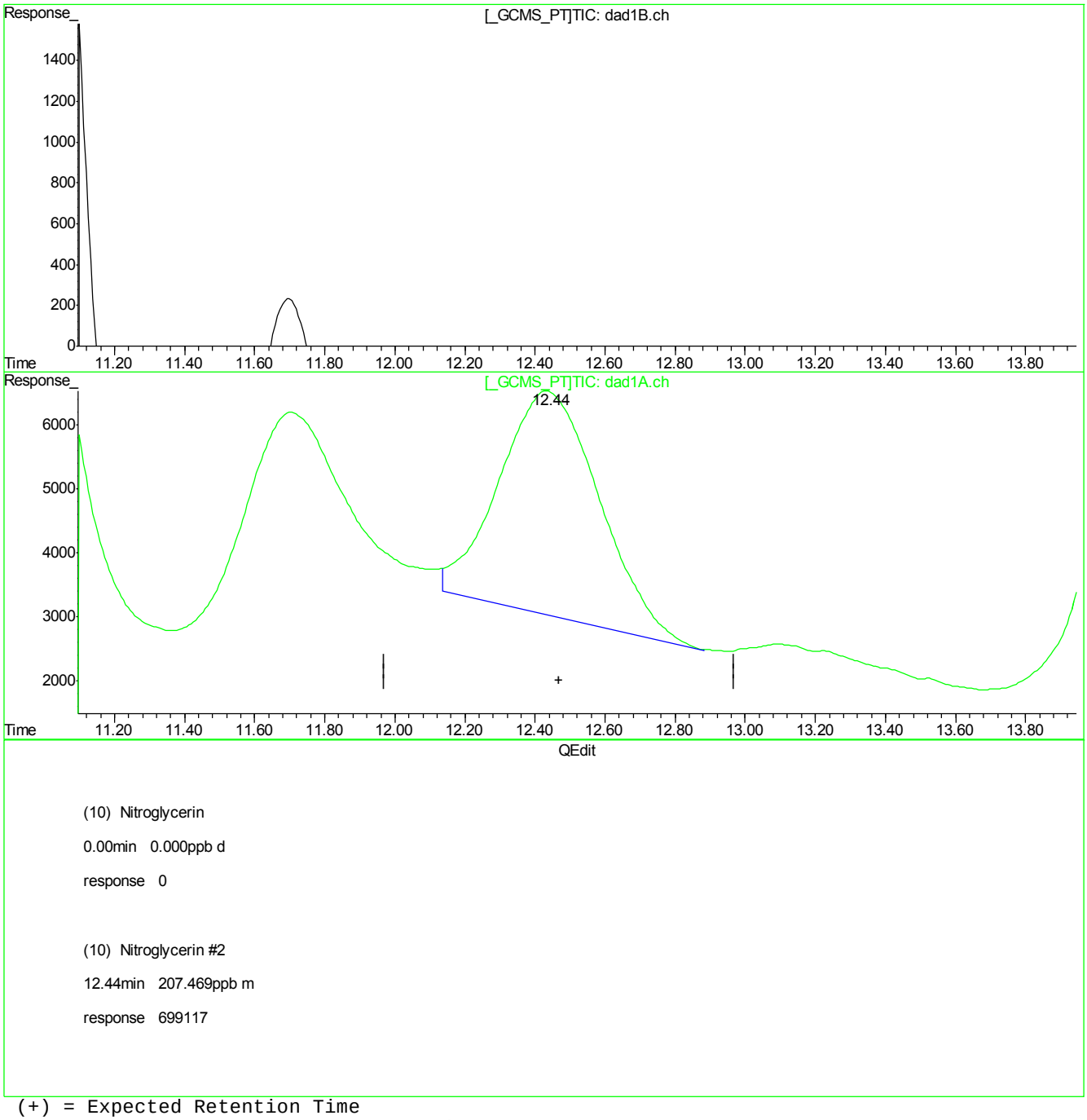
7

GG614687.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.44min 207.469ppb m

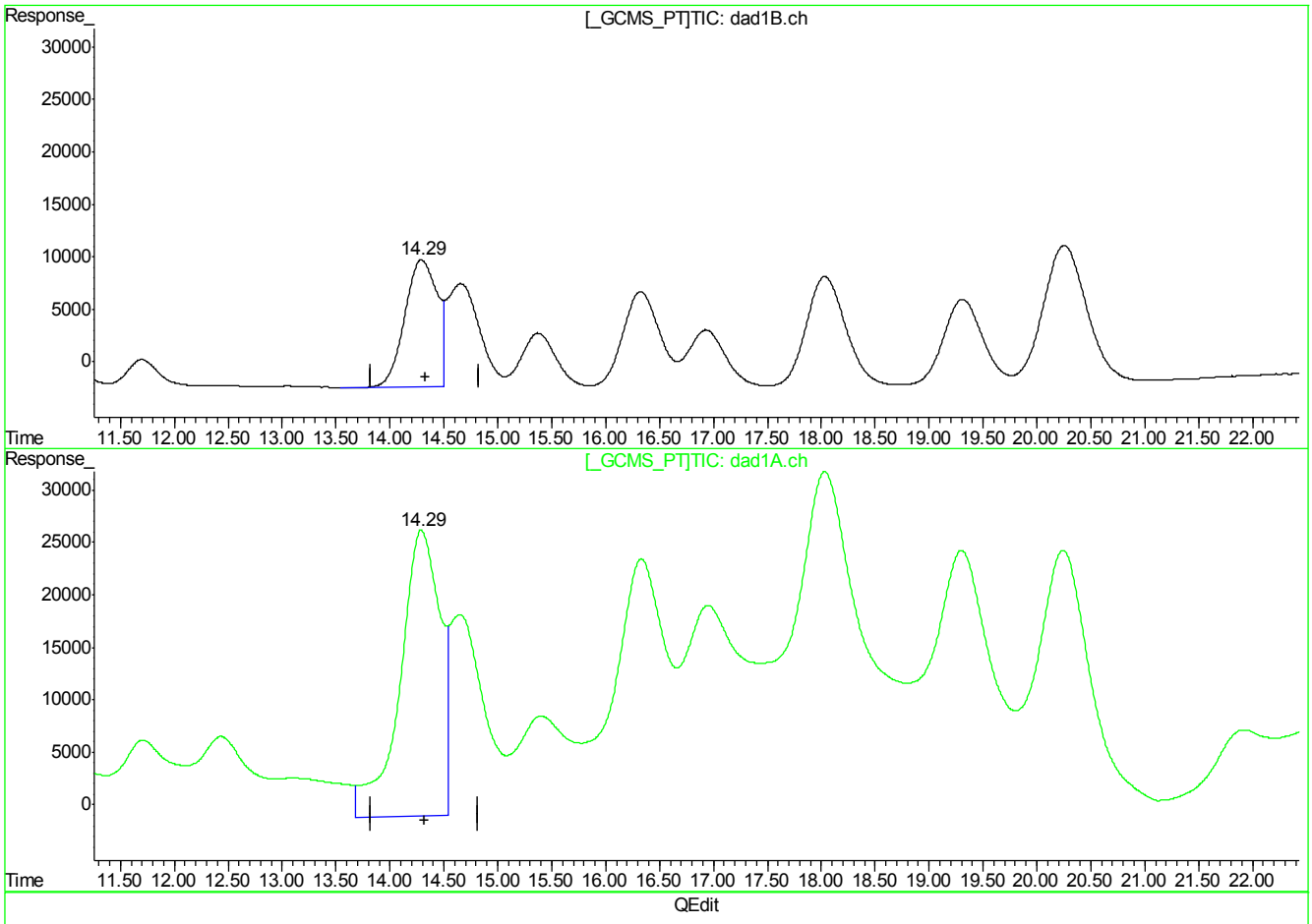
response 699117

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:25:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.29min 493.734ppb

response 2564889

(12) 3,4-Dinitrotoluene #2 (S)

14.29min 644.317ppb

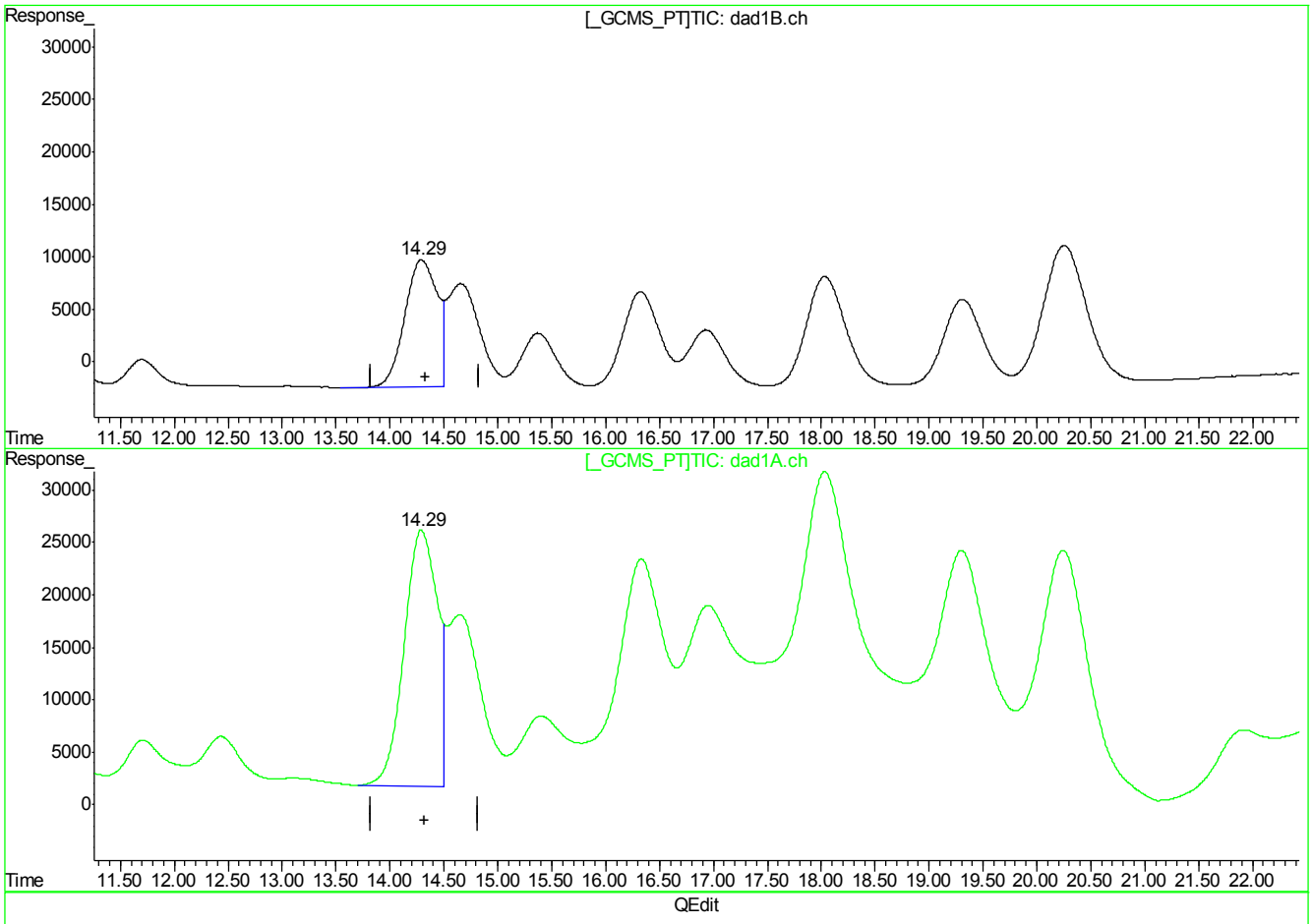
response 6969983

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:25:22 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.29min 493.734ppb

response 2564889

(12) 3,4-Dinitrotoluene #2 (S)

14.29min 477.612ppb m

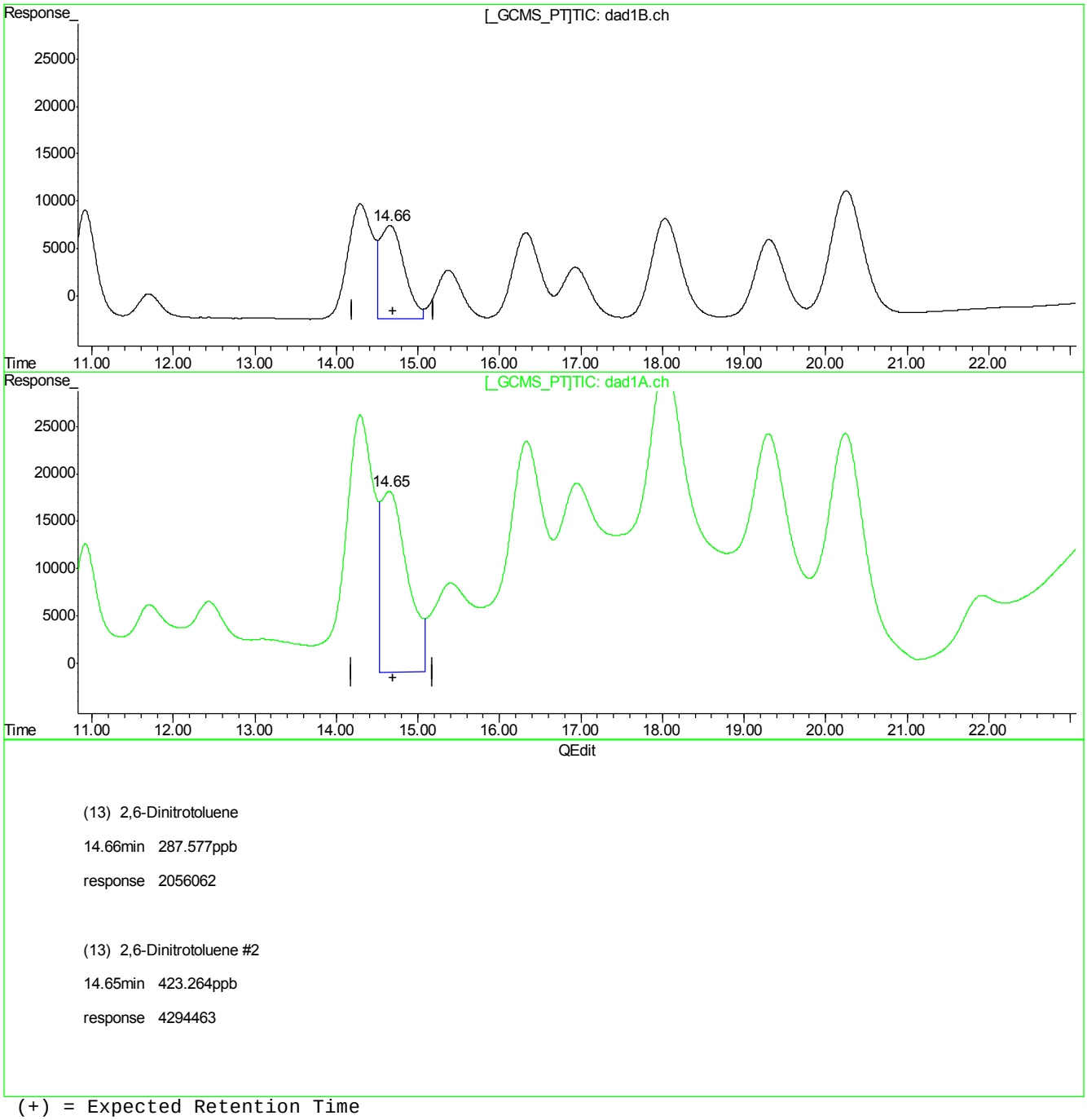
response 5166632

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:25:26 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

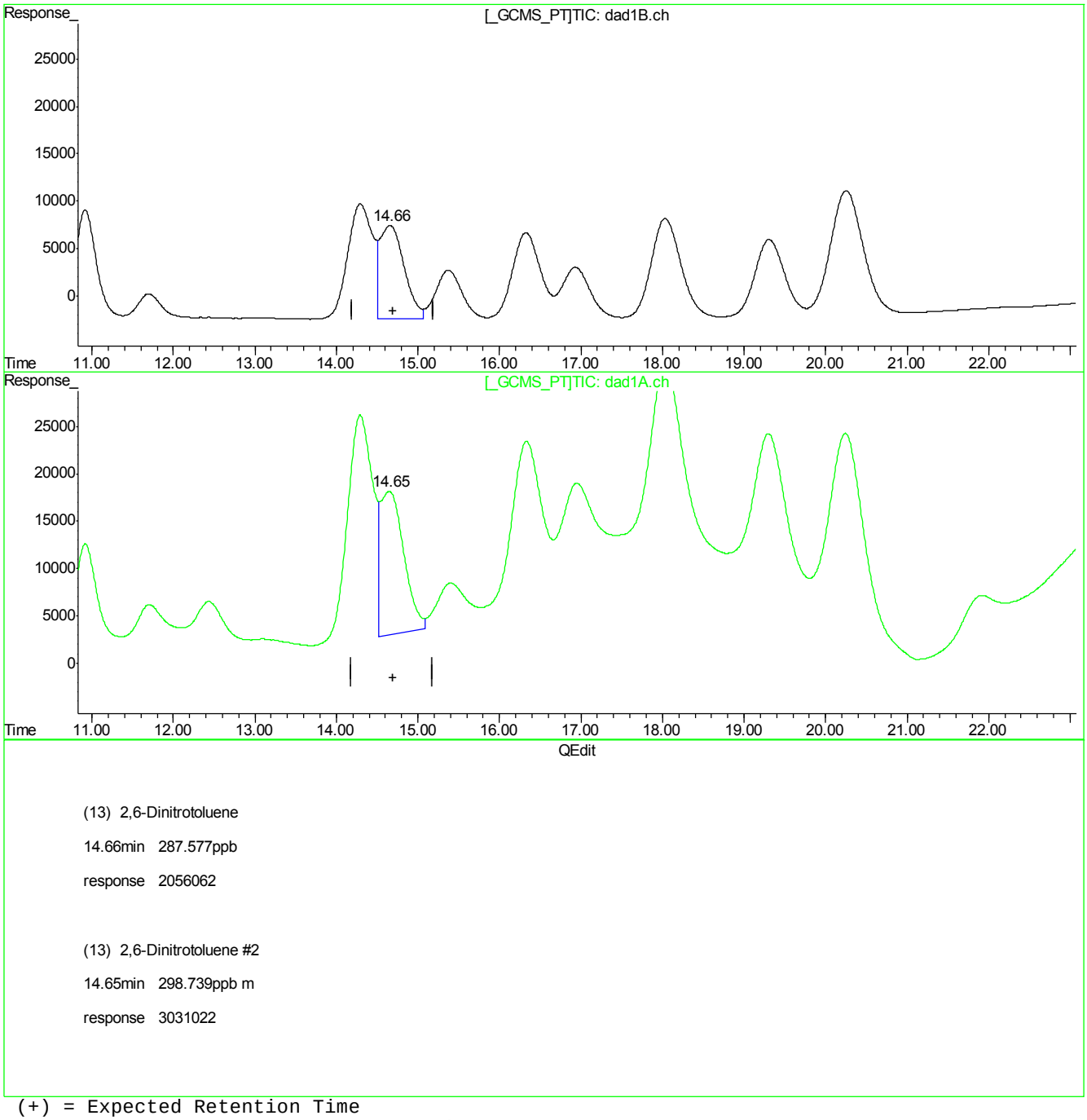


(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:25:36 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



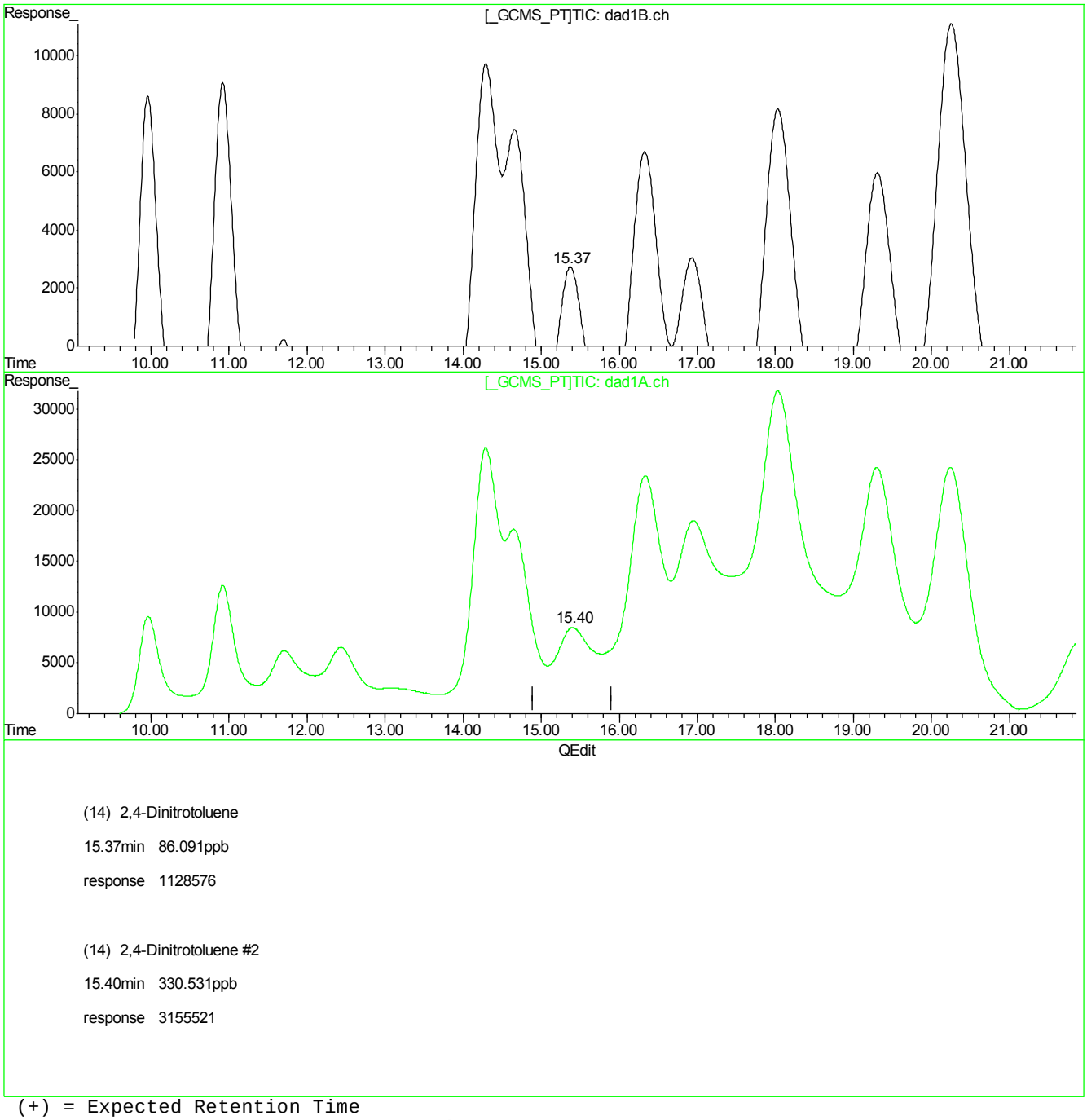
(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:26:08 2018

7.4.2.15
7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.37min 86.091ppb

response 1128576

(14) 2,4-Dinitrotoluene #2

15.40min 330.531ppb

response 3155521

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:26:15 2018

7.4.2.16

7

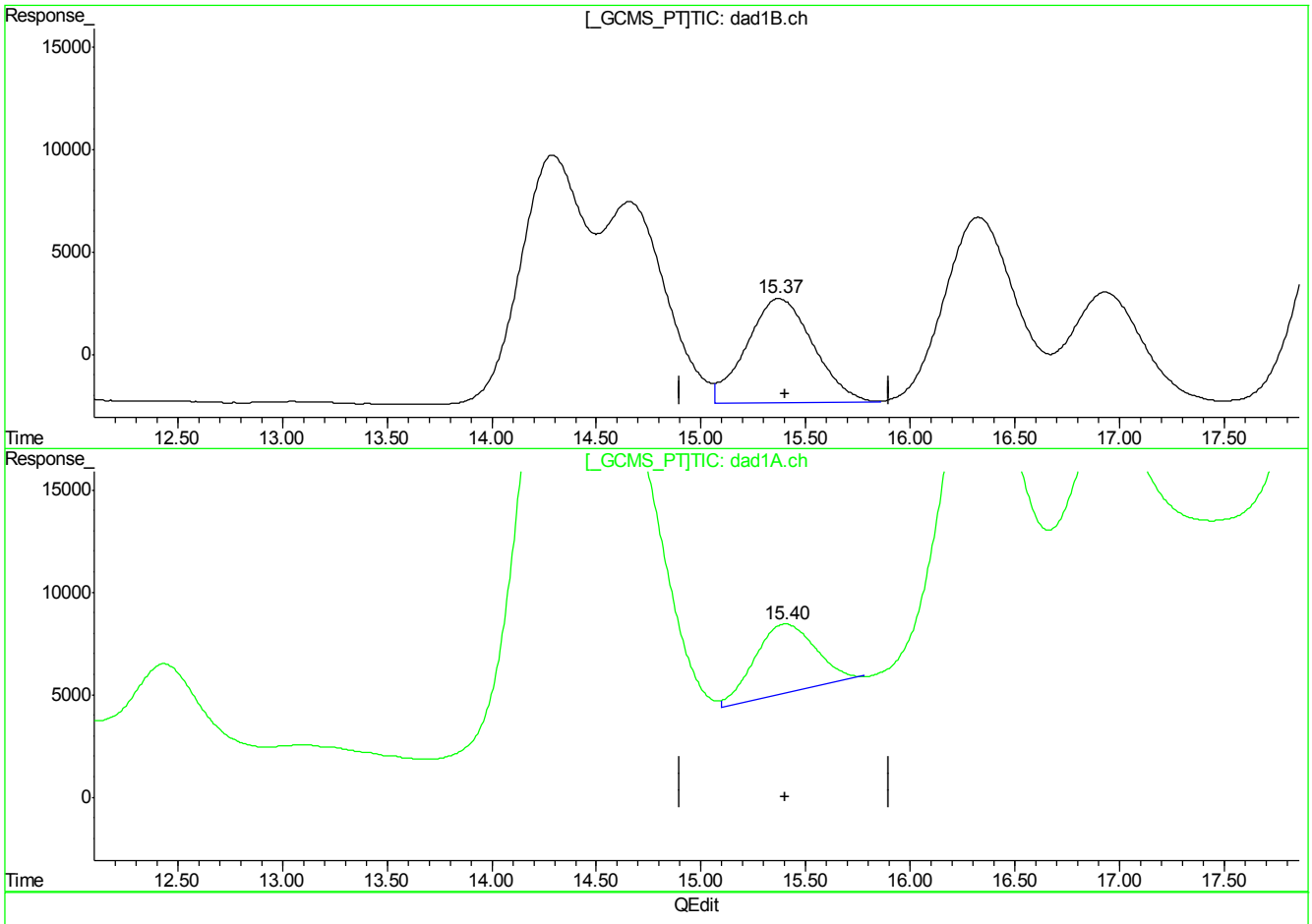
FA53801

GG614687.D edits: 2,4-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.37min 86.091ppb

response 1128576

(14) 2,4-Dinitrotoluene #2

15.40min 69.605ppb m

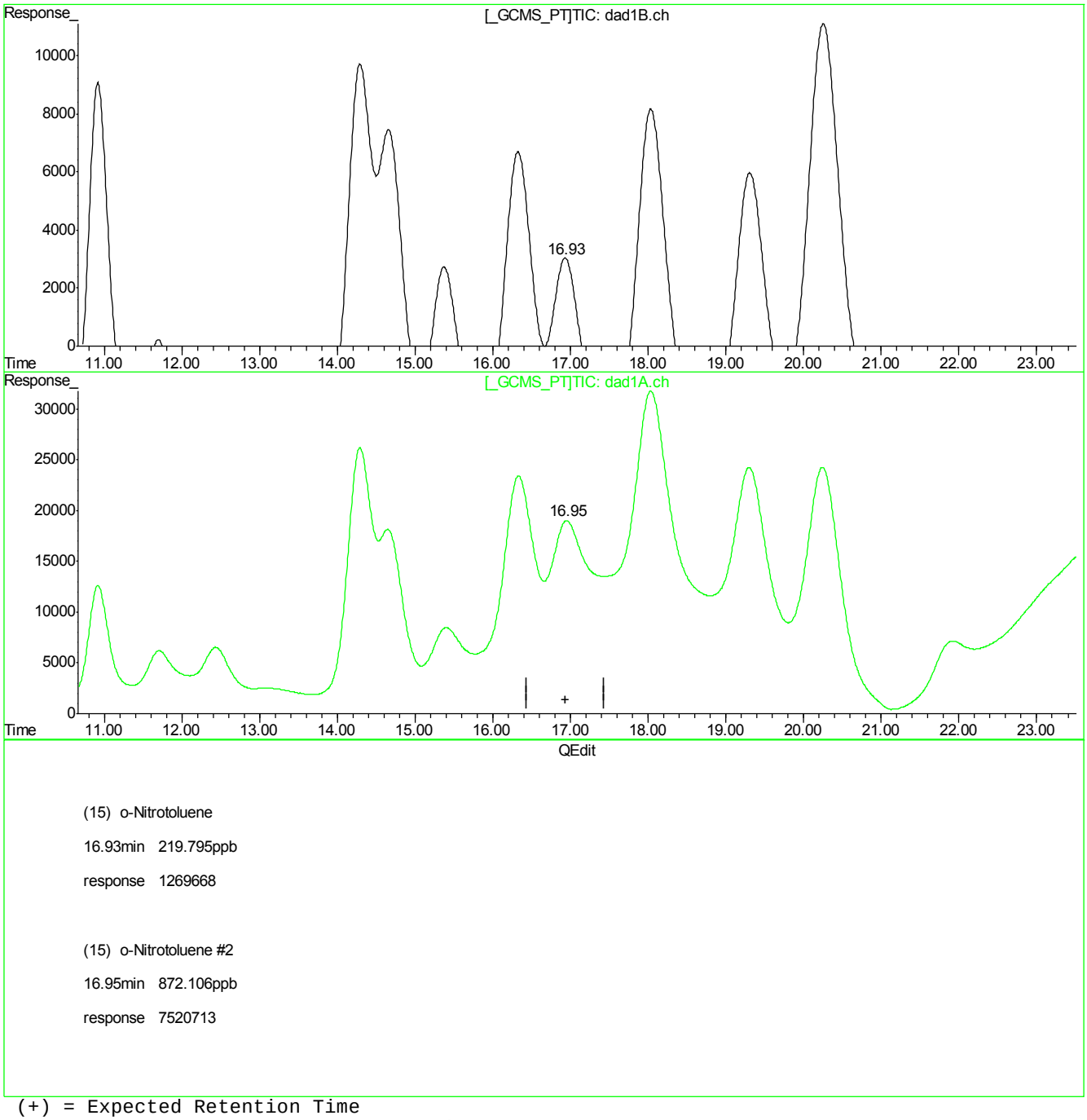
response 668589

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:26:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.93min 219.795ppb

response 1269668

(15) o-Nitrotoluene #2

16.95min 872.106ppb

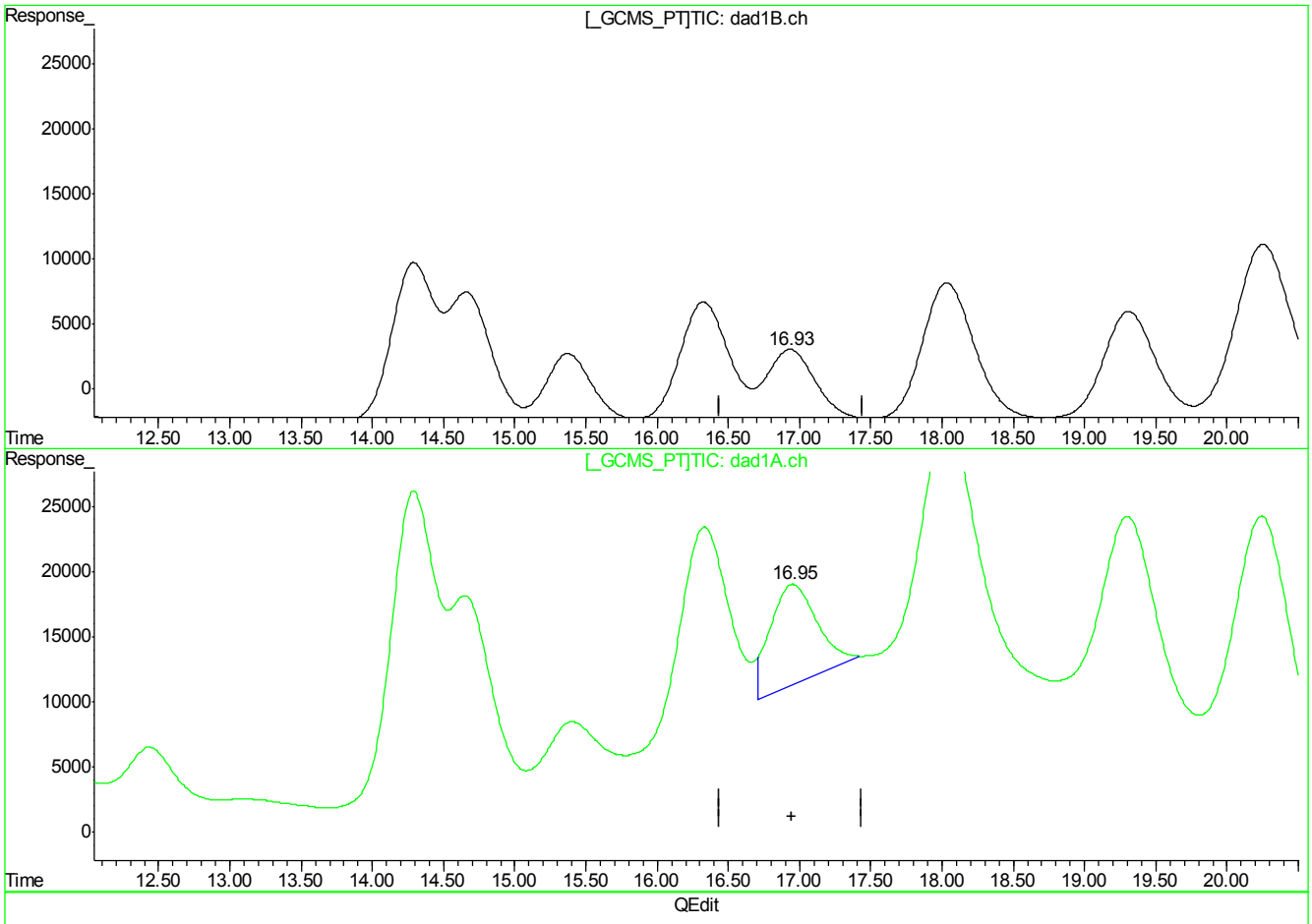
response 7520713

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:26:32 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(15) o-Nitrotoluene

16.93min 219.795ppb

response 1269668

(15) o-Nitrotoluene #2

16.95min 201.893ppb m

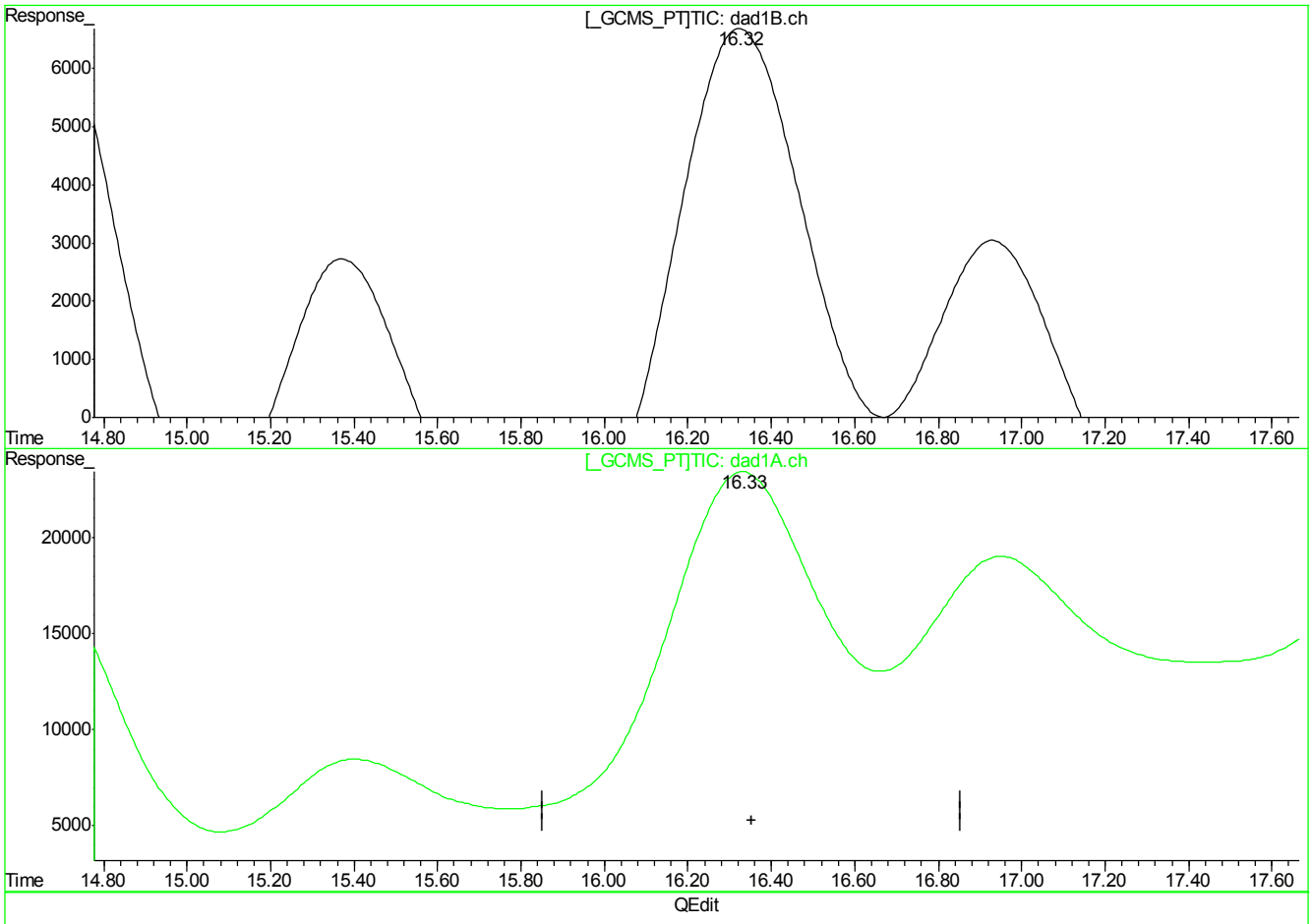
response 1741051

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:26:55 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.33min 220.097ppb

response 2144279

(16) 3,5-Dinitroaniline #2

16.33min 488.667ppb

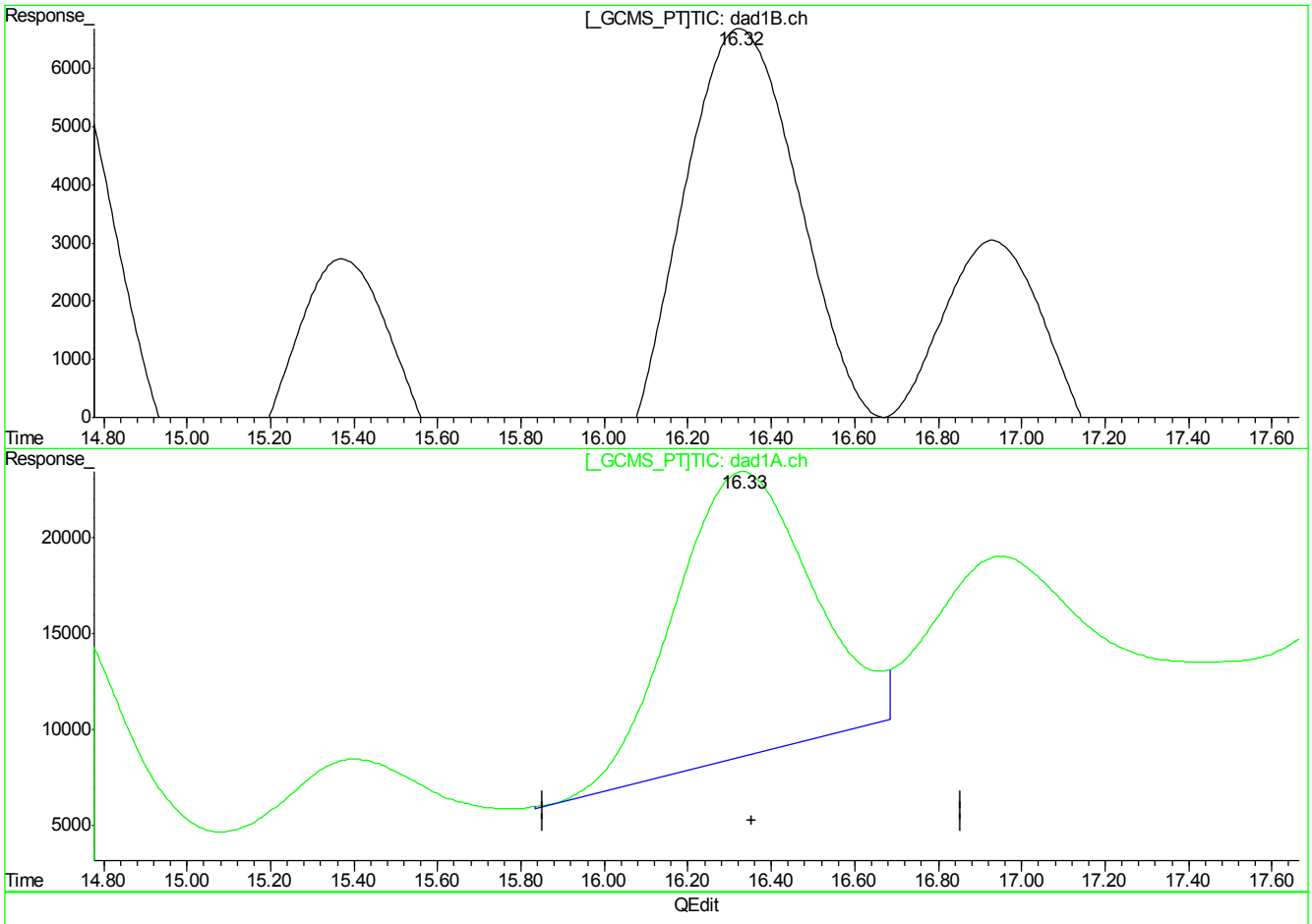
response 7934592

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:26:57 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(16) 3,5-Dinitroaniline

16.33min 220.097ppb

response 2144279

(16) 3,5-Dinitroaniline #2

16.33min 209.695ppb m

response 3392202

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:02 2018

7.4.2.21

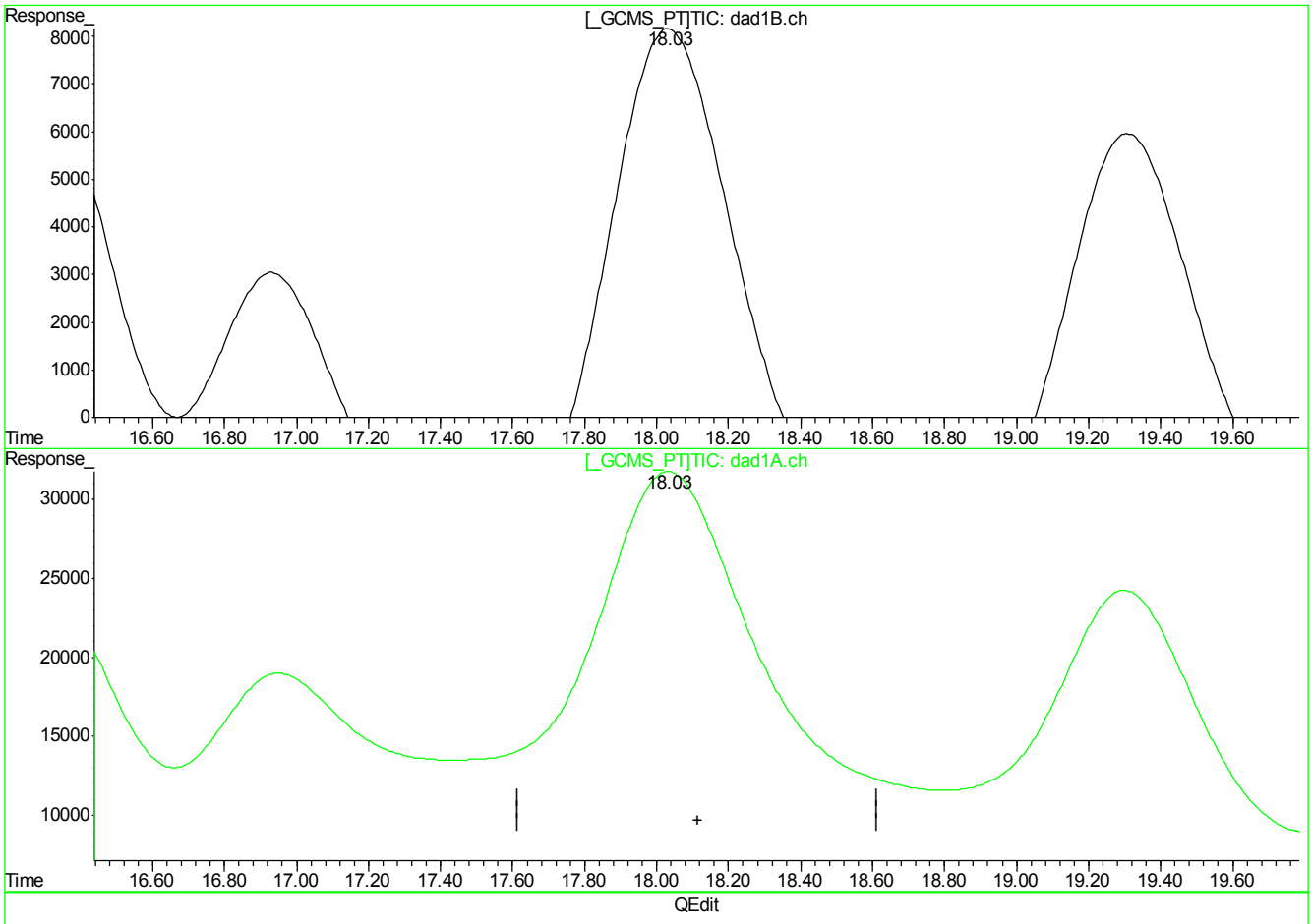
7

GG614687.D edits: 3,5-Dinitroaniline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.03min 223.448ppb

response 2623804

(17) p-Nitrotoluene #2

18.03min 730.377ppb

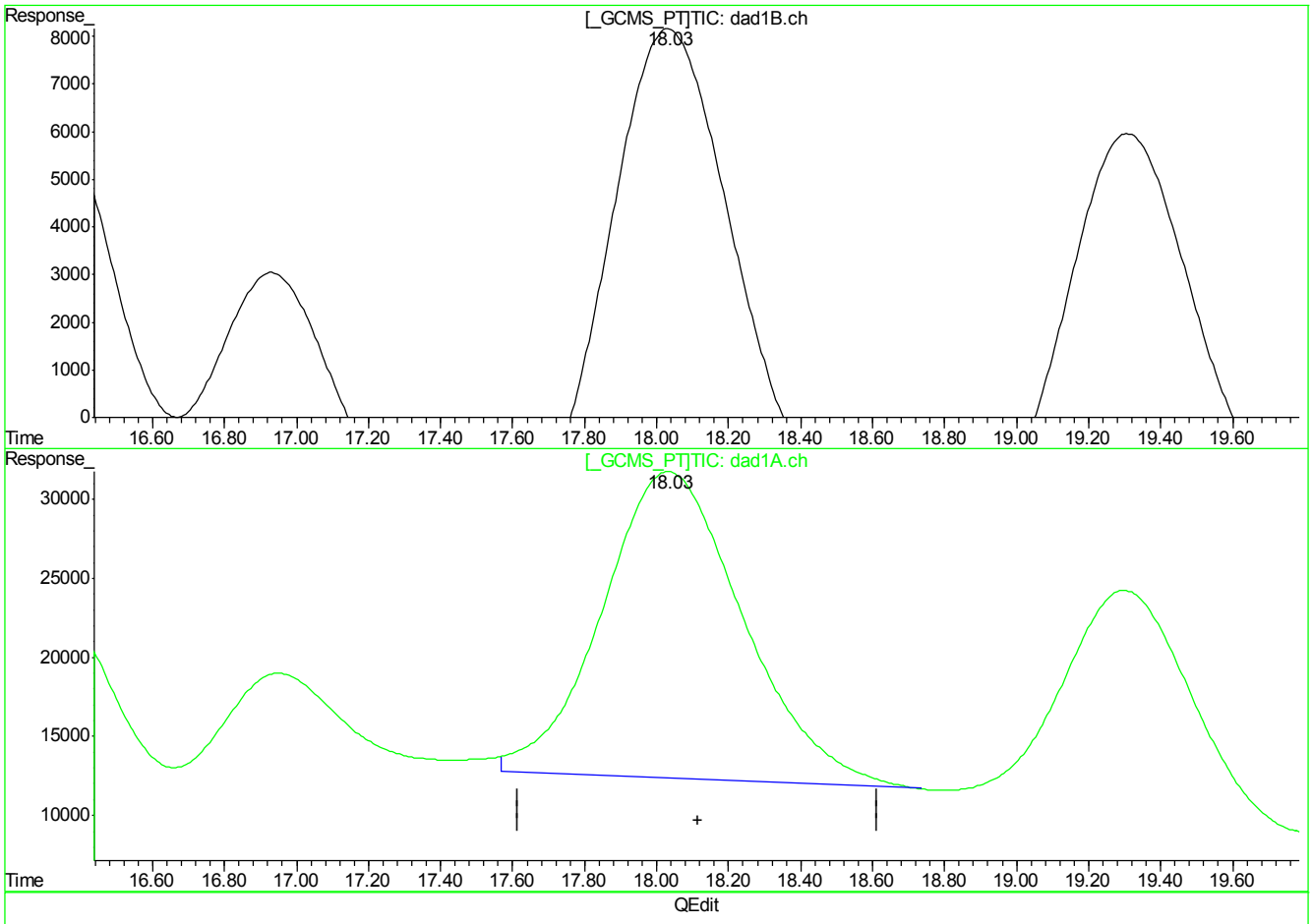
response 15479001

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:04 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.03min 223.448ppb

response 2623804

(17) p-Nitrotoluene #2

18.03min 248.039ppb m

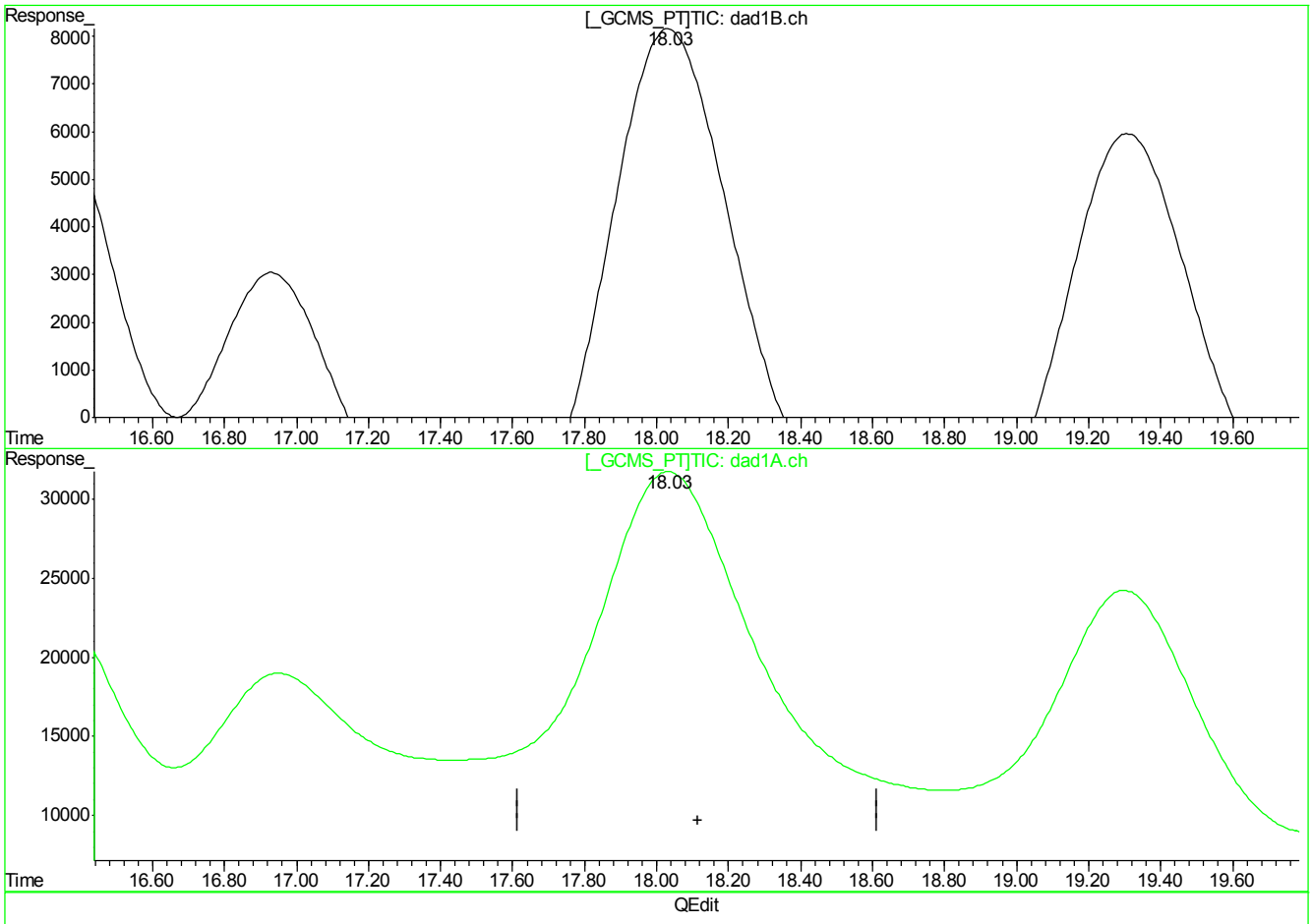
response 5256727

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:07 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.03min 223.448ppb

response 2623804

(18) 4-Amino-2,6-Dinitrotoluene #2

18.03min 728.253ppb

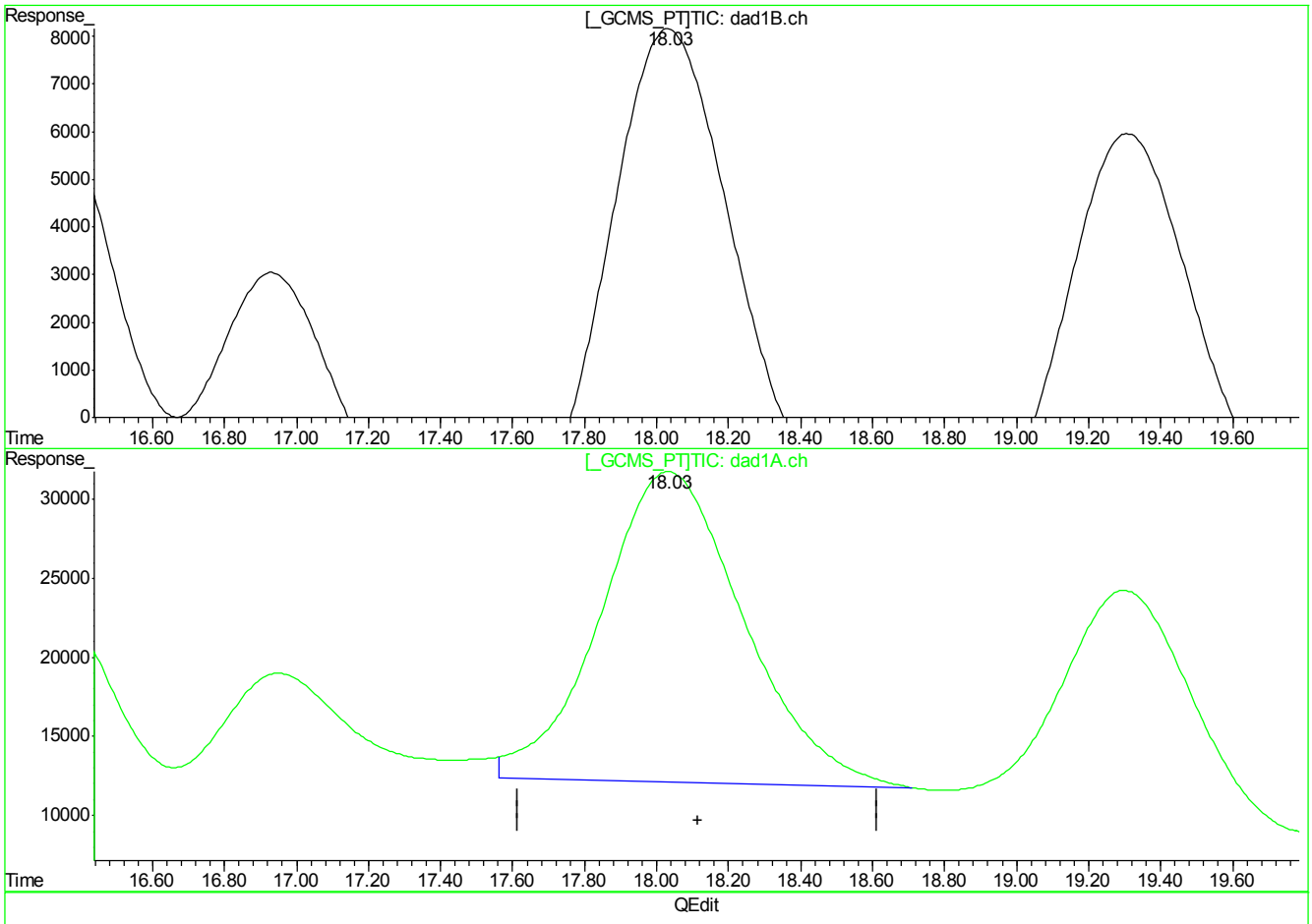
response 15479001

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:08 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.03min 223.448ppb

response 2623804

(18) 4-Amino-2,6-Dinitrotoluene #2

18.03min 254.656ppb m

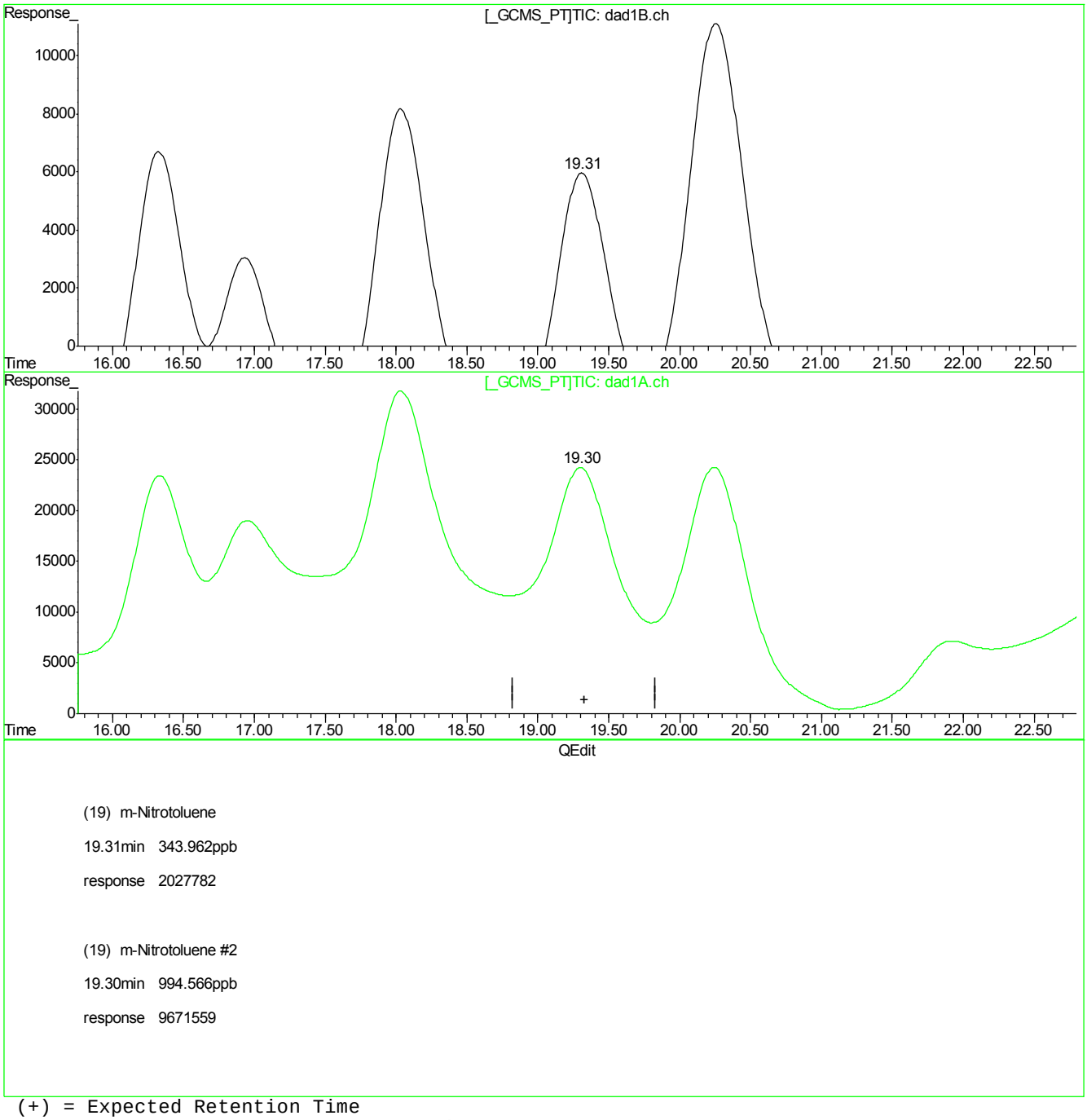
response 5412713

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:11 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.31min 343.962ppb

response 2027782

(19) m-Nitrotoluene #2

19.30min 994.566ppb

response 9671559

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:16 2018

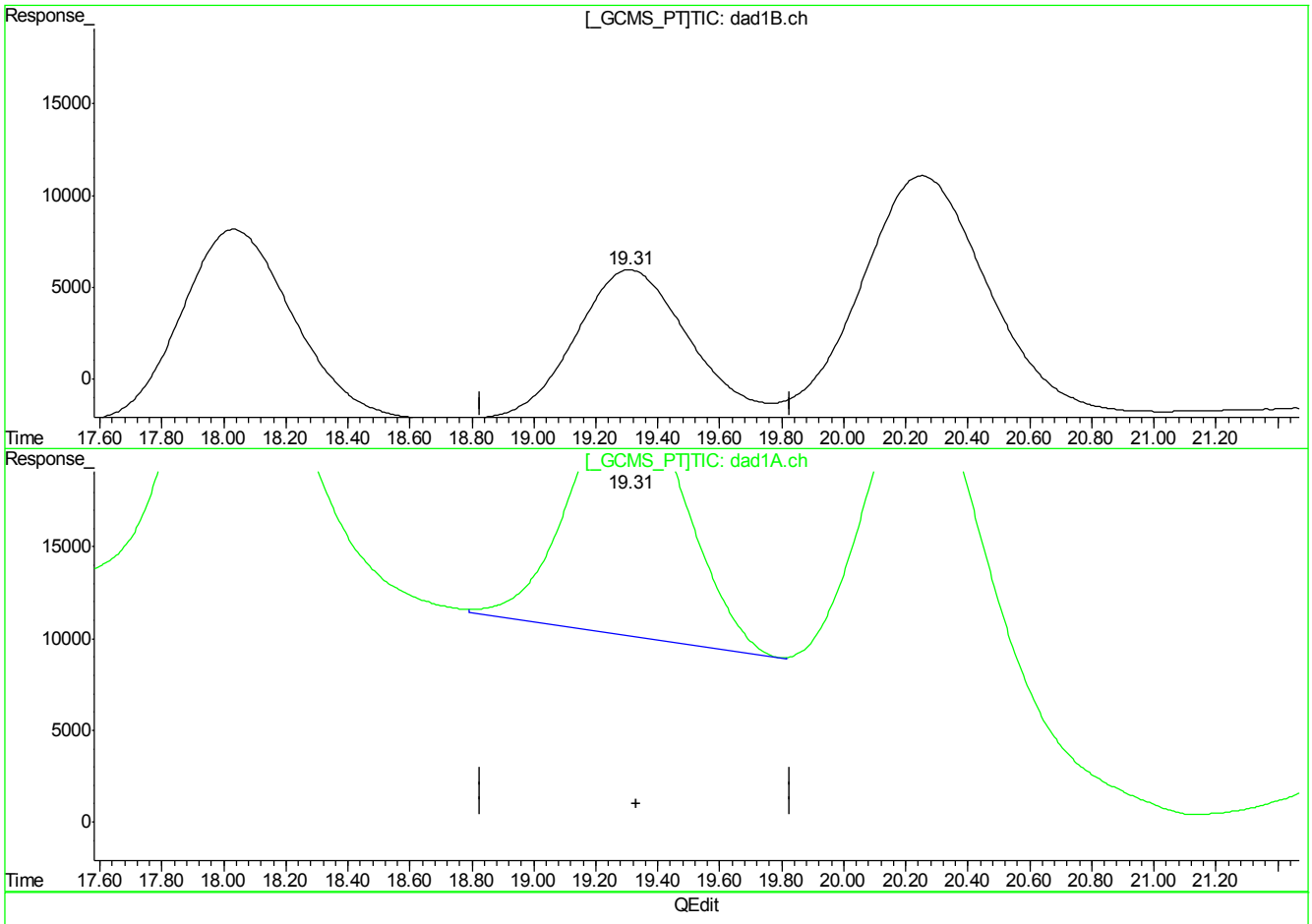
7.4.2.26

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



QEdit

(19) m-Nitrotoluene

19.31min 343.962ppb

response 2027782

(19) m-Nitrotoluene #2

19.31min 359.387ppb m

response 3494824

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:21 2018

7.4.2.27

7

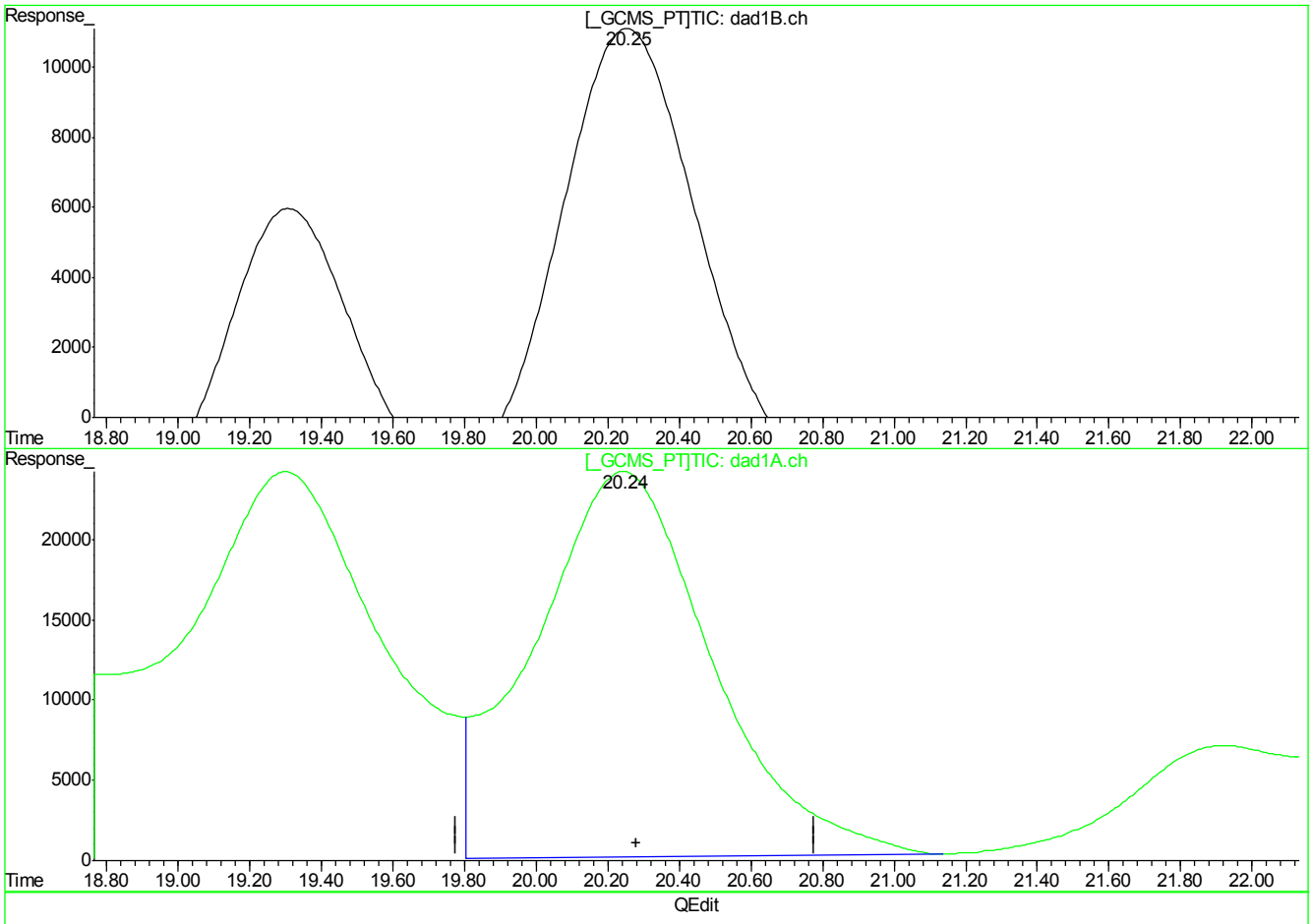
GG614687.D edits: m-Nitrotoluene

FA53801

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.25min 406.256ppb

response 3665617

(20) 2-Amino-4,6-Dinitrotoluene #2

20.24min 686.580ppb

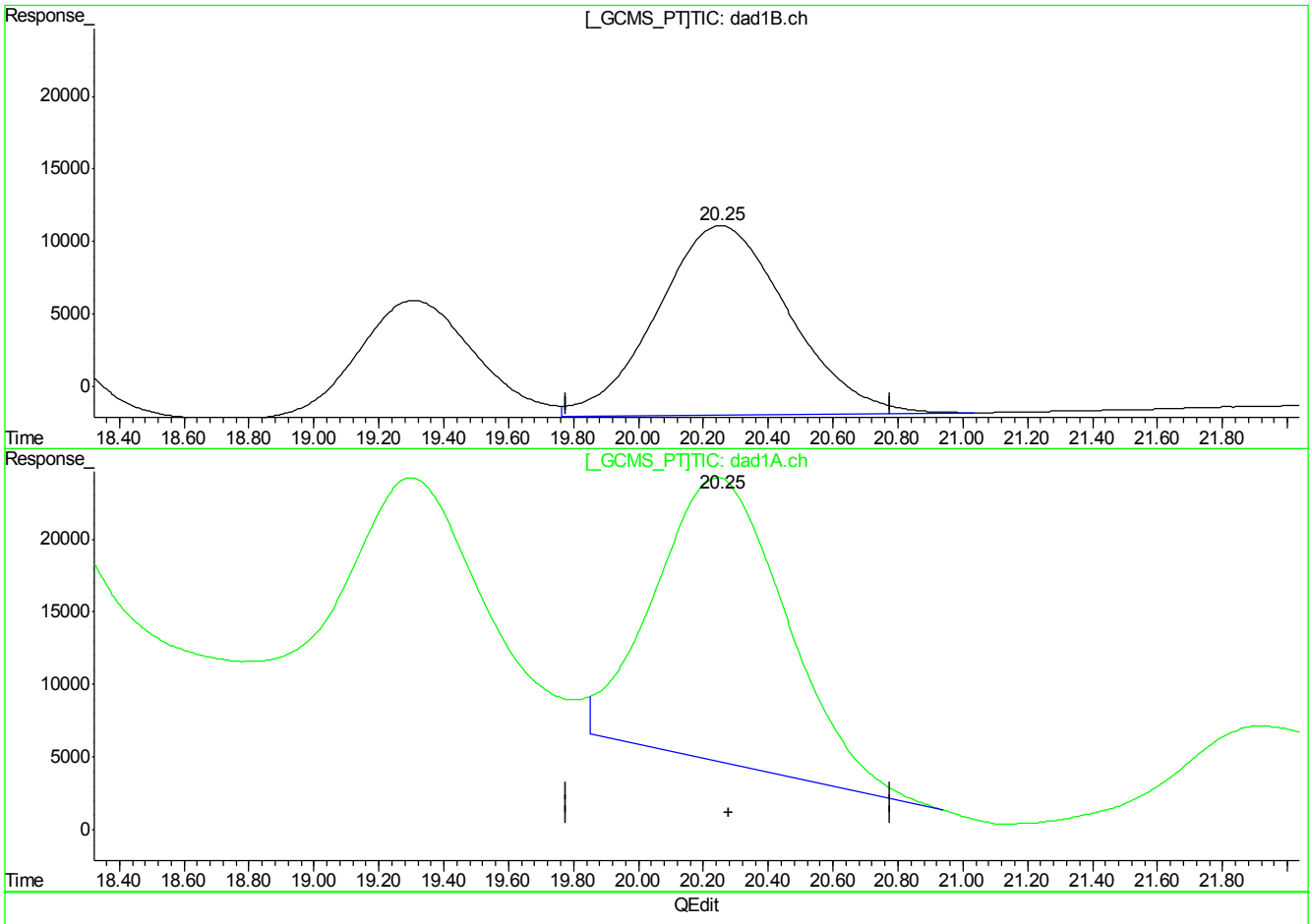
response 8261089

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:23 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.25min 406.256ppb

response 3665617

(20) 2-Amino-4,6-Dinitrotoluene #2

20.25min 464.142ppb m

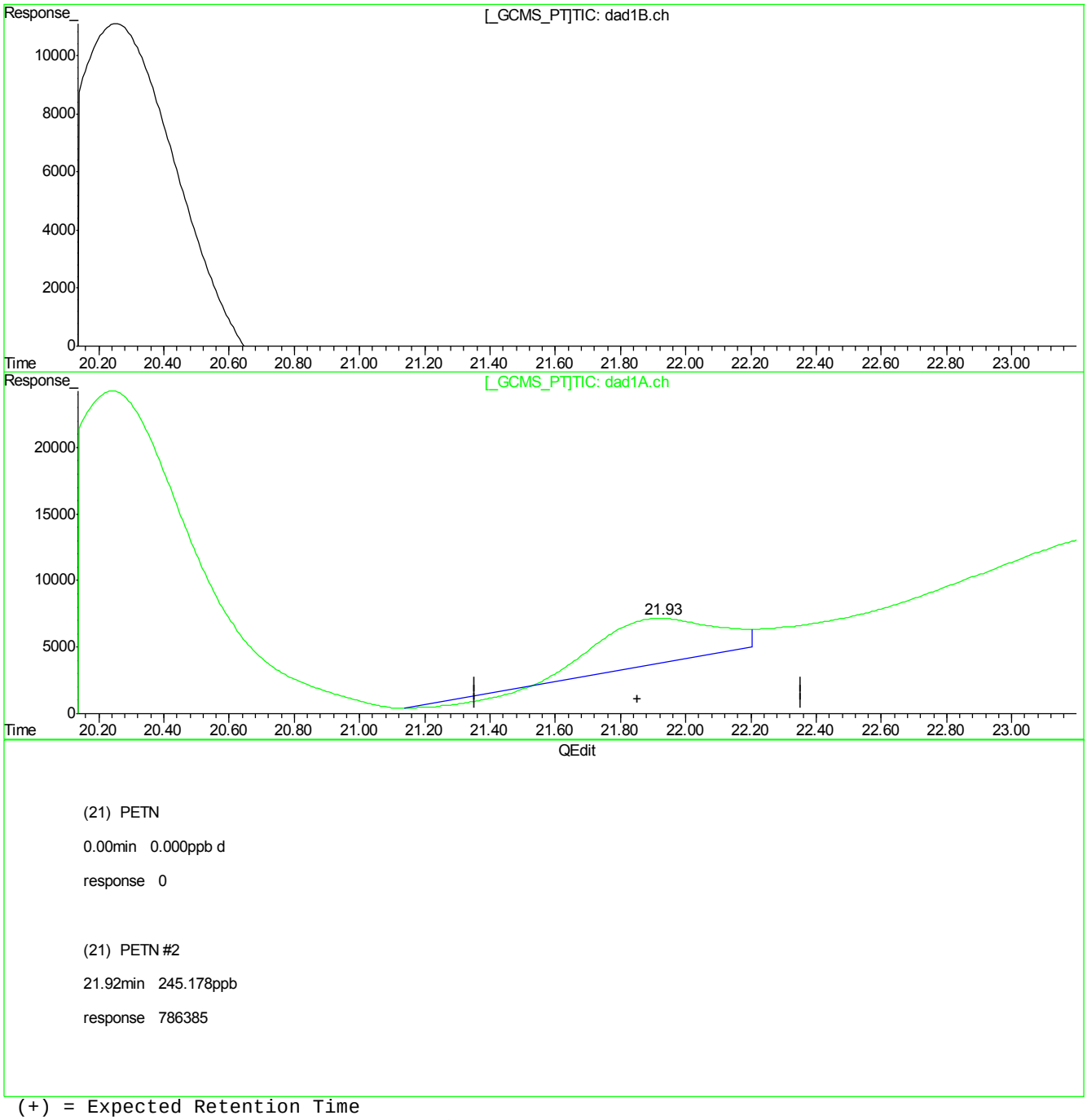
response 5504138

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:38 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

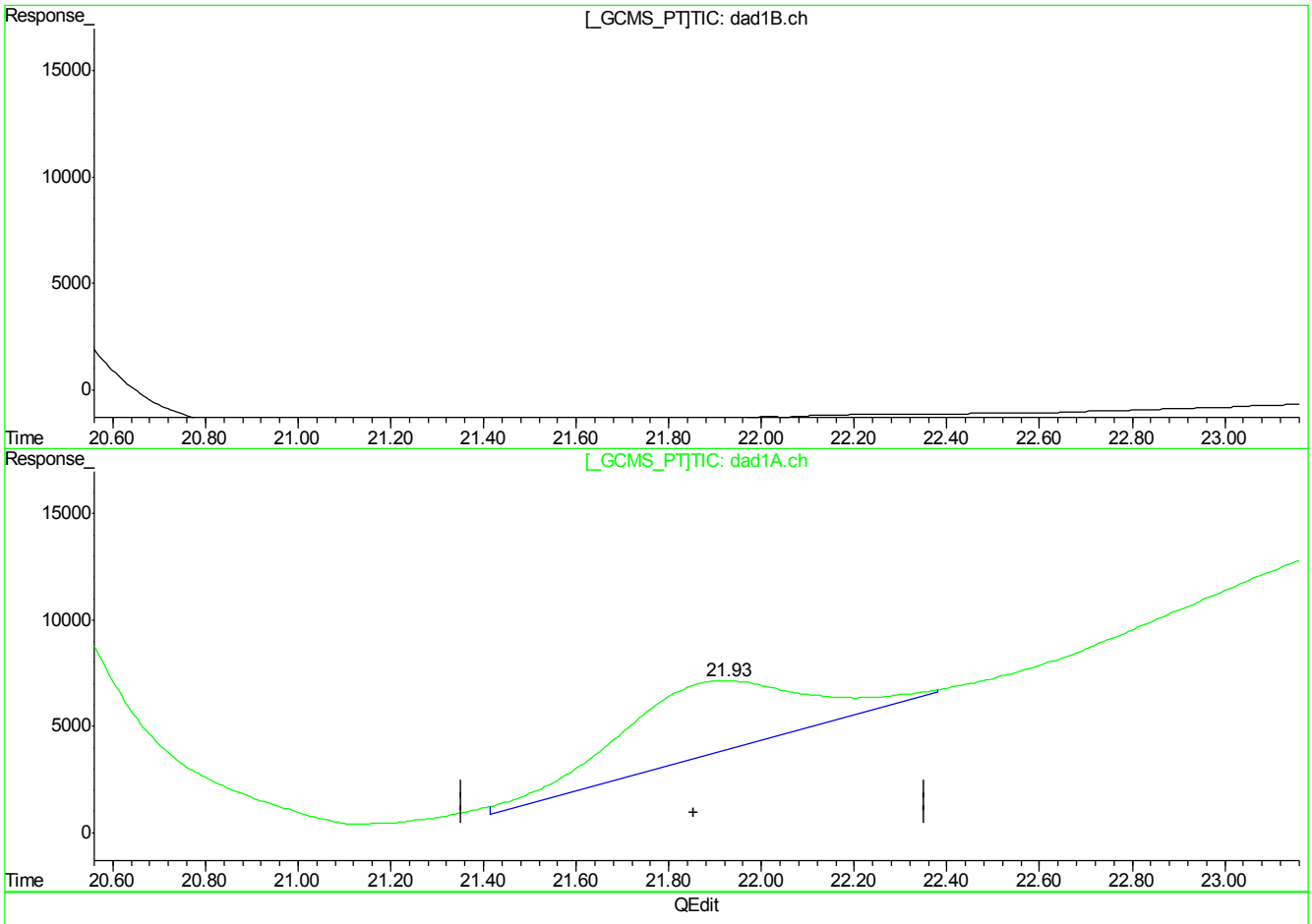


(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:41 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614687.D\dad1B.ch Vial: 16
Signal #2 : G:\DATA\0510RPB3\GG614687.D\dad1A.ch
Acq On : 10-May-2018, 21:26:18 Operator: evitam
Sample : op69989-pt1 Inst : G1315B
Misc : op69989,Ggg2627,5.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.93min 290.201ppb m

response 930792

(+) = Expected Retention Time
GG614687.D 8330RPB.M_1113M.M Fri May 11 10:27:46 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1B.ch Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1A.ch
Acq On : 11-May-2018, 03:58:27 Operator: evitam
Sample : op69973-ms Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:23 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.90	9.90	962620	1727752	359.764	366.457
	Spiked Amount 500.000	Range 69 - 134		Recovery =		71.95%	73.29%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.39	1.39	660187	2051647	353.022m	403.727m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.65	2.65	925234	1385242	432.679	416.740
6)	1,3,5-Trinitrobe	4.26	4.26	1761179	3369872	404.748	403.670
7)	1,3-Dinitrobenze	5.41	5.41	2248970	1423381	405.660	382.179
8)	3,5-Dinitroanili	5.66	5.67	1994424	3210861	407.826	429.329
9)	Nitrobenzene	6.89	6.89	1427754	1347116	391.830	406.266
10)	Nitroglycerin	0.00	8.15	0	2683675	N.D. d	2094.283
11)	Tetryl	8.35	8.31	1219334	2185671	414.223	420.825
12)	2,4,6-Trinitroto	8.79	8.79	1523918	1832465	361.105	404.274
13)	2-Amino-4,6-Dini	9.00	9.01	1563239	2492079	412.956	464.607
14)	4-Amino-2,6-Dini	9.43	9.44	1054314	2182153	402.589	421.114
16)	2,4-Dinitrotolue	10.53	10.53	2018314	1299794	383.636	440.126
17)	2,6-Dinitrotolue	10.96	10.97	1307266	1639875	378.230	480.249
18)	o-Nitrotoluene	14.24	14.25	1020031	1438414	408.365	439.110
19)	p-Nitrotoluene	14.80	14.79	1605127	1369812	406.666	434.857
20)	m-Nitrotoluene	15.78	15.79	1524442	1739325	427.350	432.251
21)	PETN	0.00	18.21	0	2856406	N.D. d	2056.698m

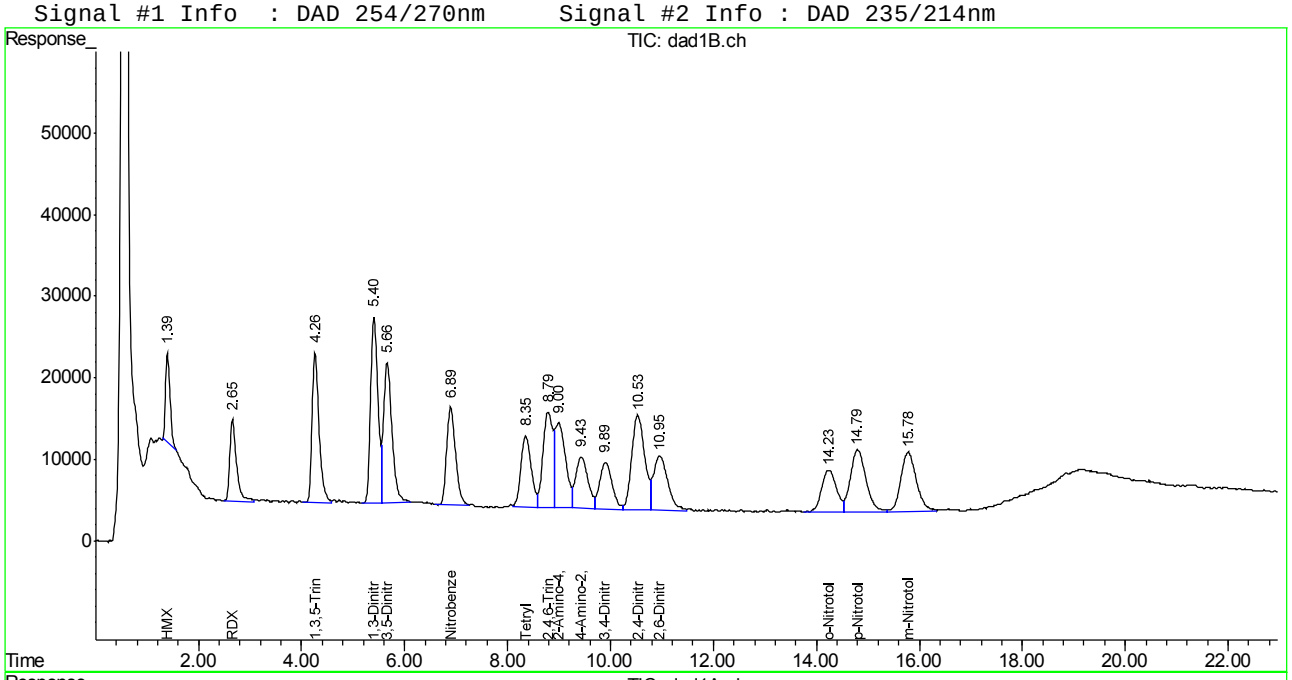
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059705.D 8330B_0419PLUS.M Fri May 11 08:38:17 2018 Page 1

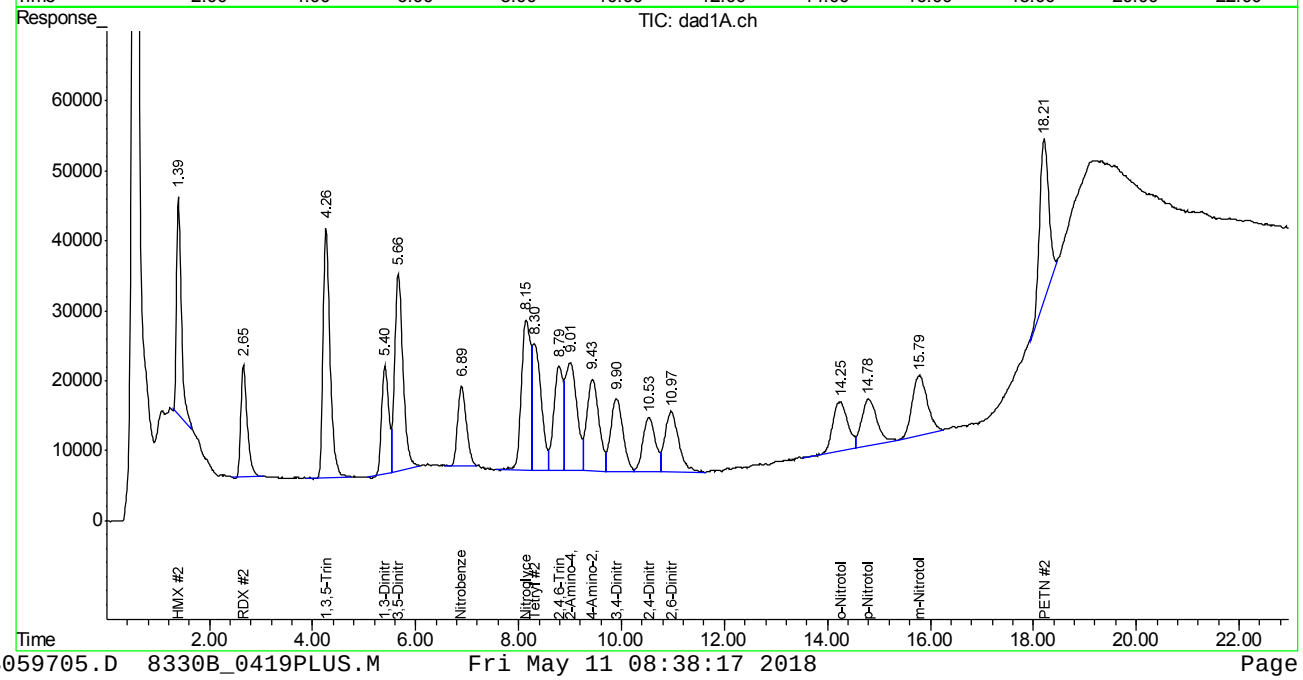
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1B.ch Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1A.ch
Acq On : 11-May-2018, 03:58:27 Operator: evitam
Sample : op69973-ms Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:33 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

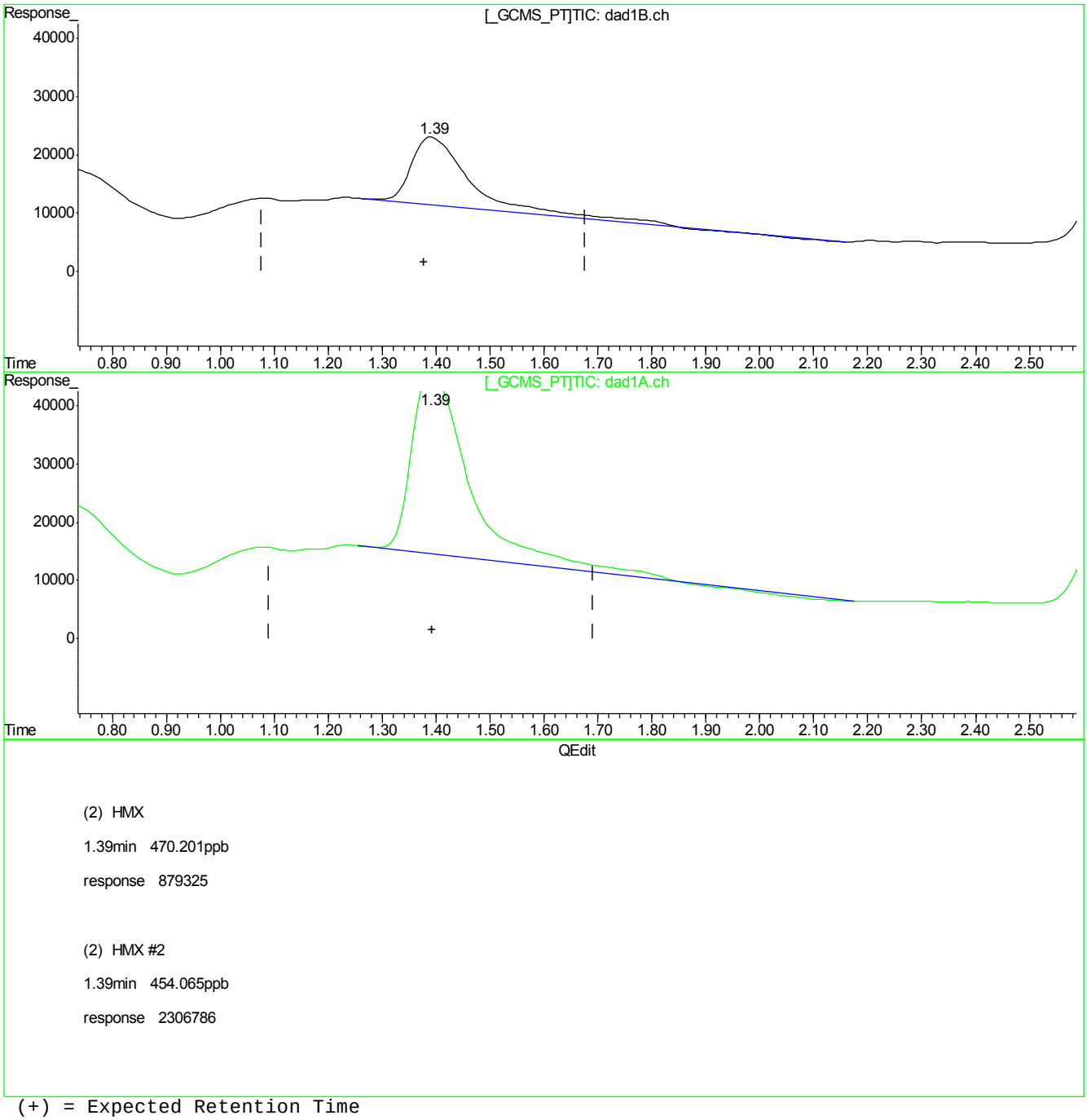
Sample Number:	OP69973-MS	**Method:**	SW846 8330B
Lab FileID:	BB059705.D	**Analyst approved:**	05/11/18 10:41 Evita Martinez
Injection Time:	05/11/18 03:58	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.39	Poorly defined baseline
HMX	2691-41-0	2	1.39	Poorly defined baseline
PETN	78-11-5	2	18.21	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1B.ch Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1A.ch
Acq On : 11-May-2018, 03:58:27 Operator: evitam
Sample : op69973-ms Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059705.D 8330B_0419PLUS.M Fri May 11 08:33:31 2018

7.5.1.2

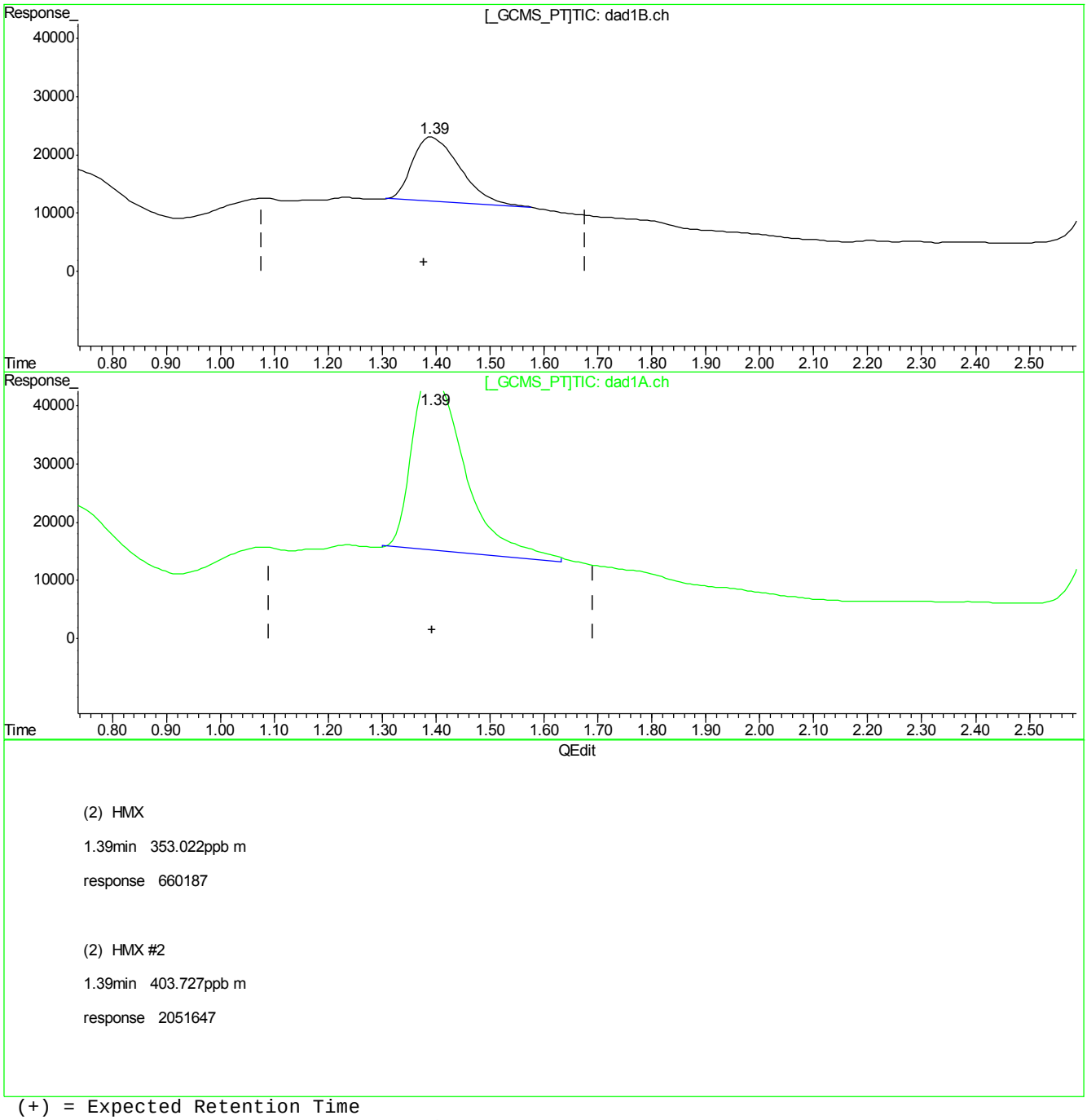
7

BB059705.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1B.ch Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1A.ch
Acq On : 11-May-2018, 03:58:27 Operator: evitam
Sample : op69973-ms Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

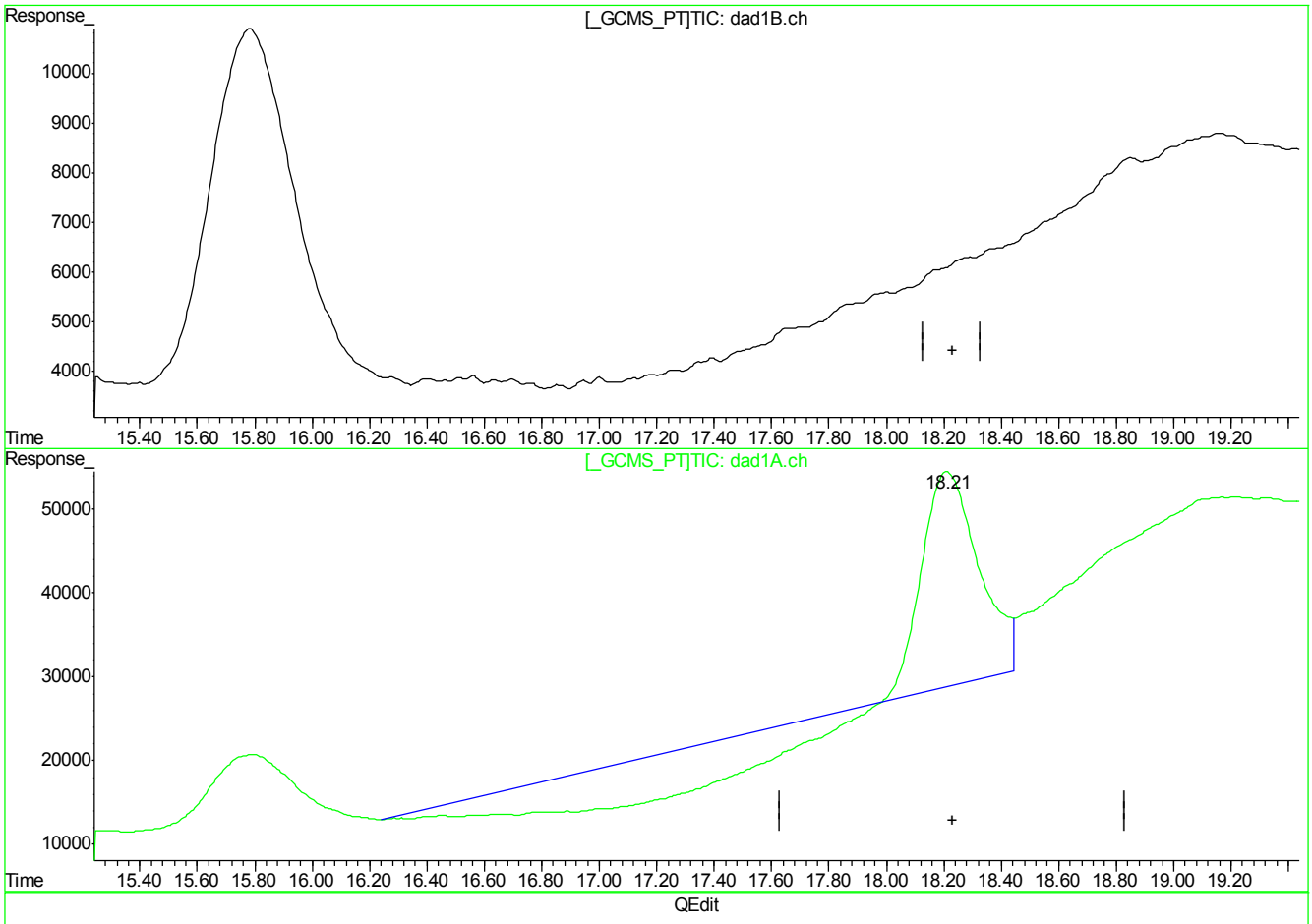


(+) = Expected Retention Time
BB059705.D 8330B_0419PLUS.M Fri May 11 08:33:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1B.ch Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1A.ch
Acq On : 11-May-2018, 03:58:27 Operator: evitam
Sample : op69973-ms Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.21min 89.907ppb

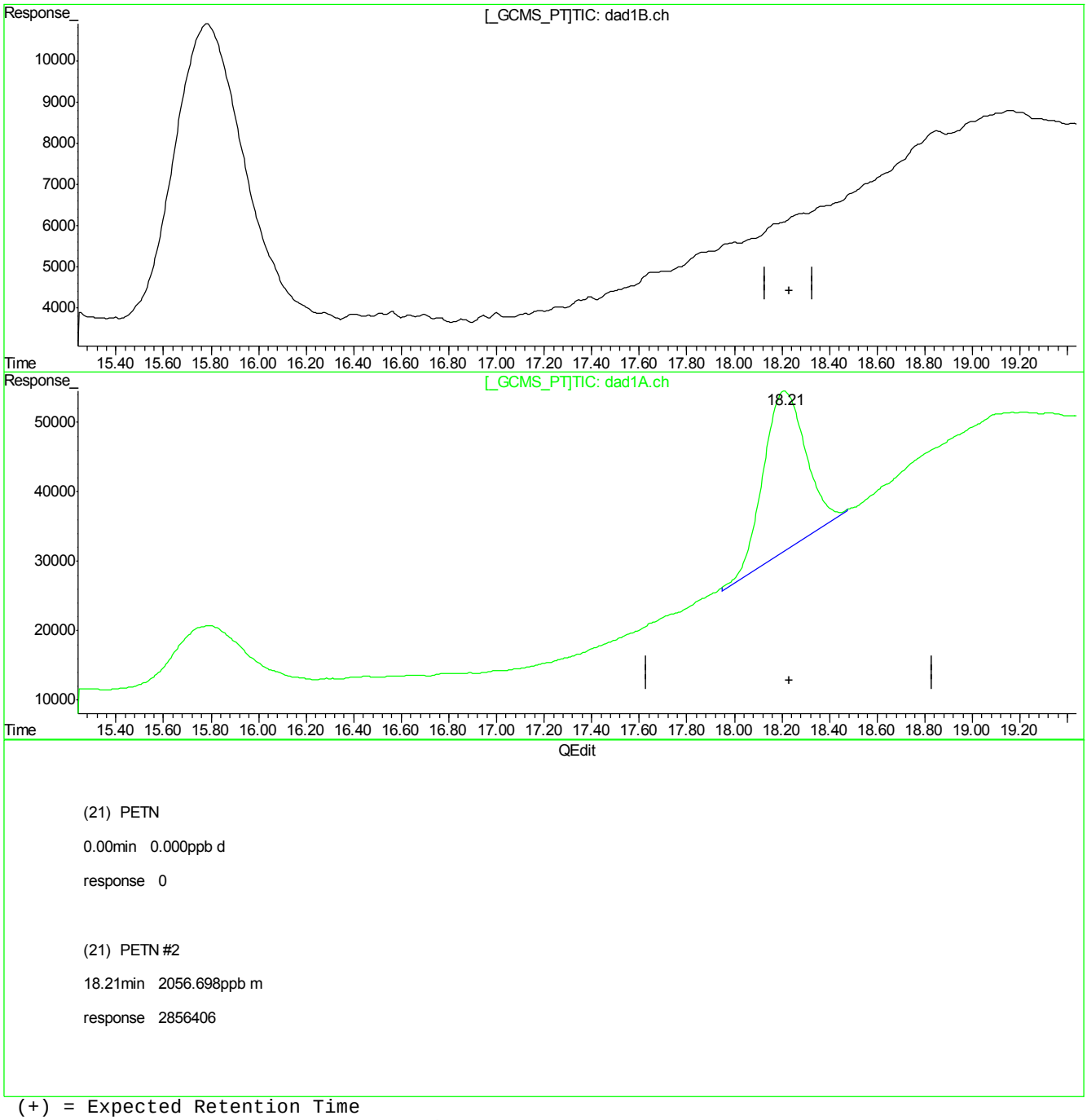
response 124866

(+) = Expected Retention Time
BB059705.D 8330B_0419PLUS.M Fri May 11 08:33:49 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1B.ch Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059705.D\dad1A.ch
Acq On : 11-May-2018, 03:58:27 Operator: evitam
Sample : op69973-ms Inst : G1315B
Misc : OP69973,gbb1730,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059705.D 8330B_0419PLUS.M Fri May 11 08:33:52 2018

7.5.1.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:24 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.84	9.85	961455	1716172	359.328	364.000
	Spiked Amount 500.000	Range 69 - 134		Recovery =		71.87%	72.80%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.39	1.39	719785	2044370	384.890m	402.292m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.65	2.65	885985	1414083	414.324	425.416
6)	1,3,5-Trinitrobe	4.25	4.25	1775791	3405520	408.106	407.940
7)	1,3-Dinitrobenze	5.39	5.39	2209091	1350669	398.467	362.656
8)	3,5-Dinitroanili	5.64	5.64	1990226	3163241	406.968	422.961
9)	Nitrobenzene	6.87	6.86	1457791	1385197	400.074	417.751
10)	Nitroglycerin	0.00	8.12	0	2525238	N.D. d	1970.642m
11)	Tetryl	8.31	8.26	1284600	1933598	436.445	372.292m
12)	2,4,6-Trinitroto	8.75	8.75	1563349	1774806	370.448	391.553
13)	2-Amino-4,6-Dini	8.94	8.95	1539767	2466918	406.755	459.916
14)	4-Amino-2,6-Dini	9.38	9.39	1070851	2141009	408.864	413.174
16)	2,4-Dinitrotolue	10.48	10.48	2029451	1233759	385.753	417.766
17)	2,6-Dinitrotolue	10.90	10.90	1261774	1543350	365.068	451.981
18)	o-Nitrotoluene	14.17	14.18	972254	1412471	389.238	431.190
19)	p-Nitrotoluene	14.74	14.75	1579022	1422099	400.053	451.439
20)	m-Nitrotoluene	15.72	15.72	1498937	1773322	420.200	440.700
21)	PETN	0.00	18.18	0	2896379	N.D. d	2085.480m

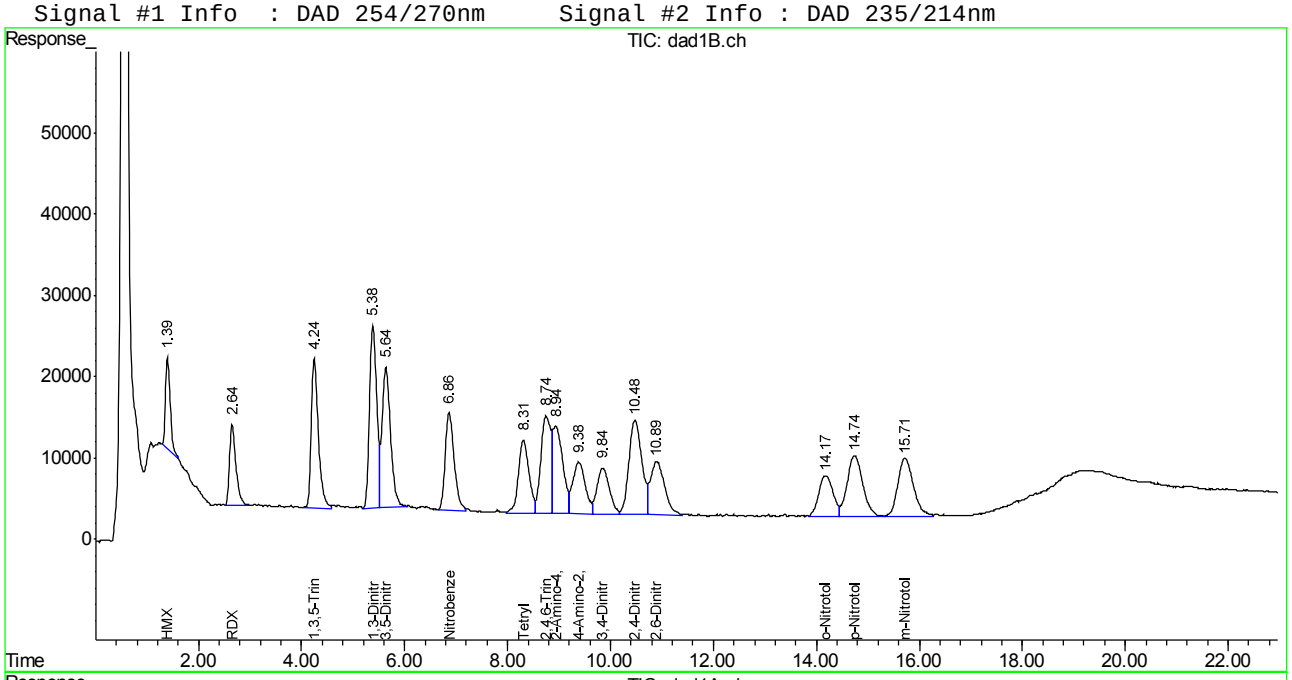
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059706.D 8330B_0419PLUS.M Fri May 11 08:38:18 2018 Page 1

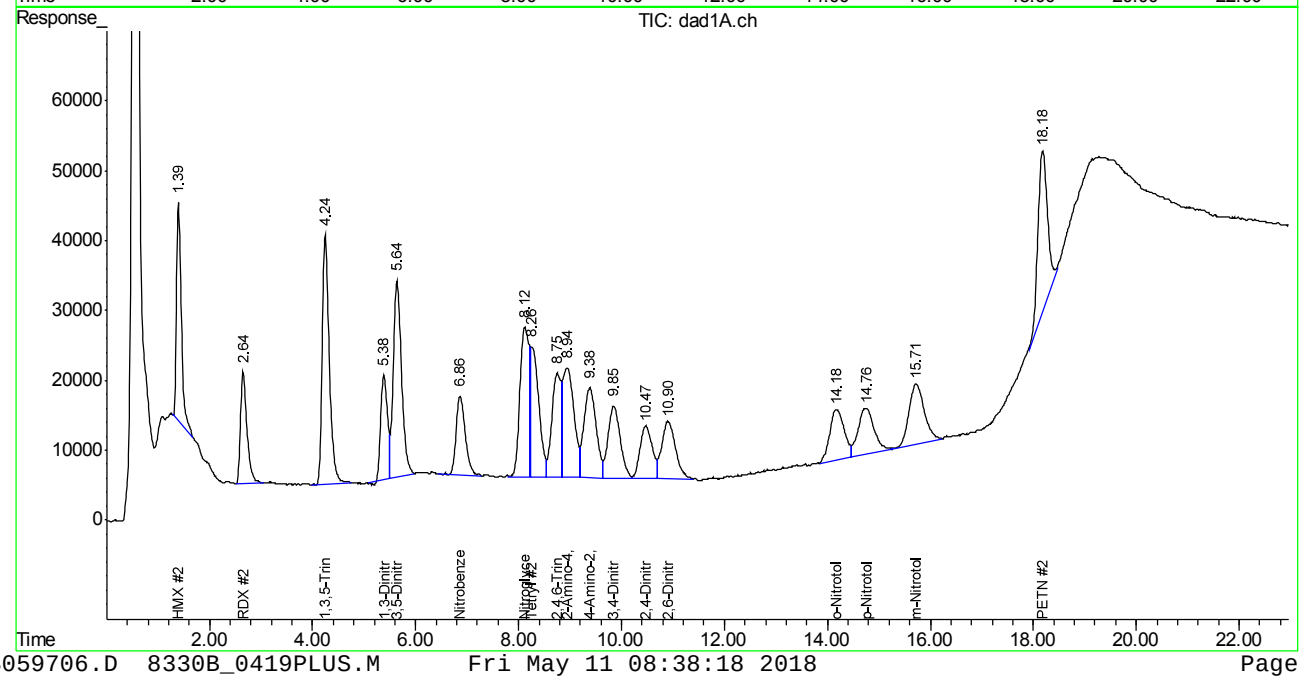
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:35 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

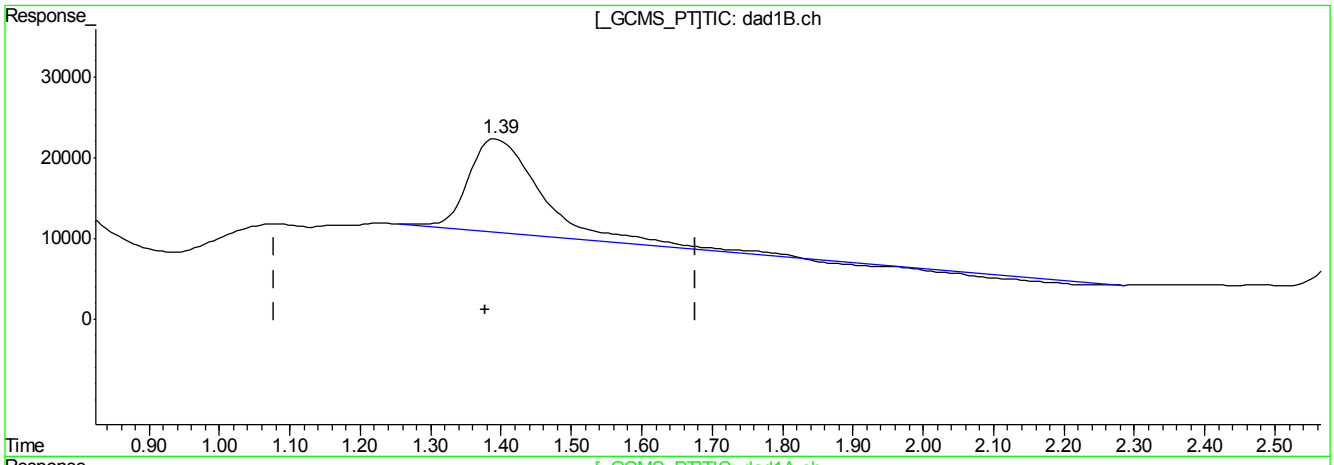
Sample Number:	OP69973-MSD	**Method:**	SW846 8330B
Lab FileID:	BB059706.D	**Analyst approved:**	05/11/18 10:41 Evita Martinez
Injection Time:	05/11/18 04:28	**Supervisor approved:**	05/11/18 15:51 Mike Eger

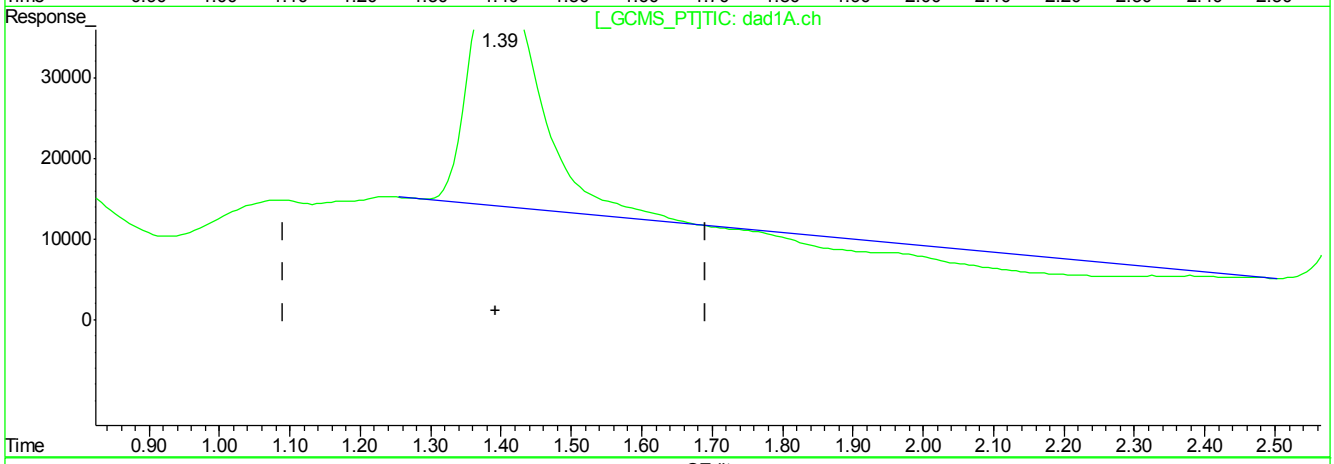
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.39	Poorly defined baseline
HMX	2691-41-0	2	1.39	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.12	Poorly defined baseline
Tetryl	479-45-8	2	8.26	Poorly defined baseline
PETN	78-11-5	2	18.18	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.39min 420.094ppb

response 785620

(2) HMX #2

1.39min 298.044ppb

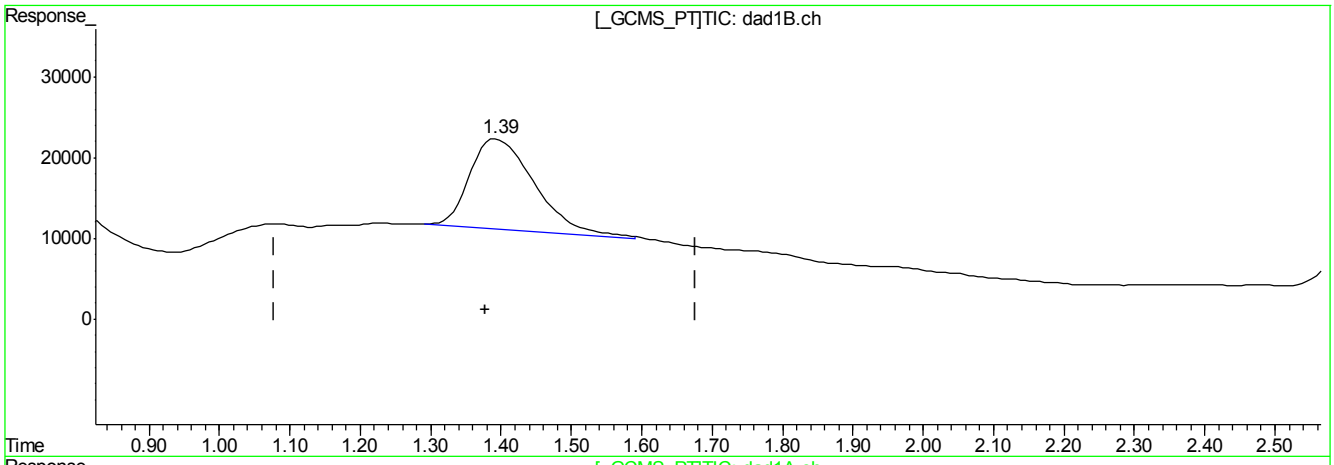
response 1515508

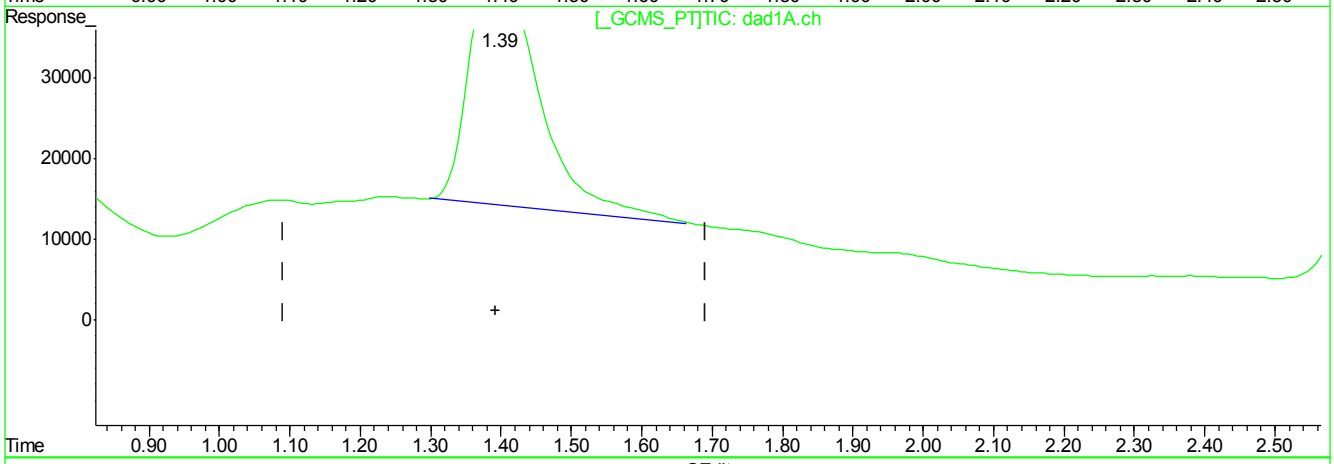
(+) = Expected Retention Time
BB059706.D 8330B_0419PLUS.M Fri May 11 08:34:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.39min 384.890ppb m

response 719785

(2) HMX #2

1.39min 402.292ppb m

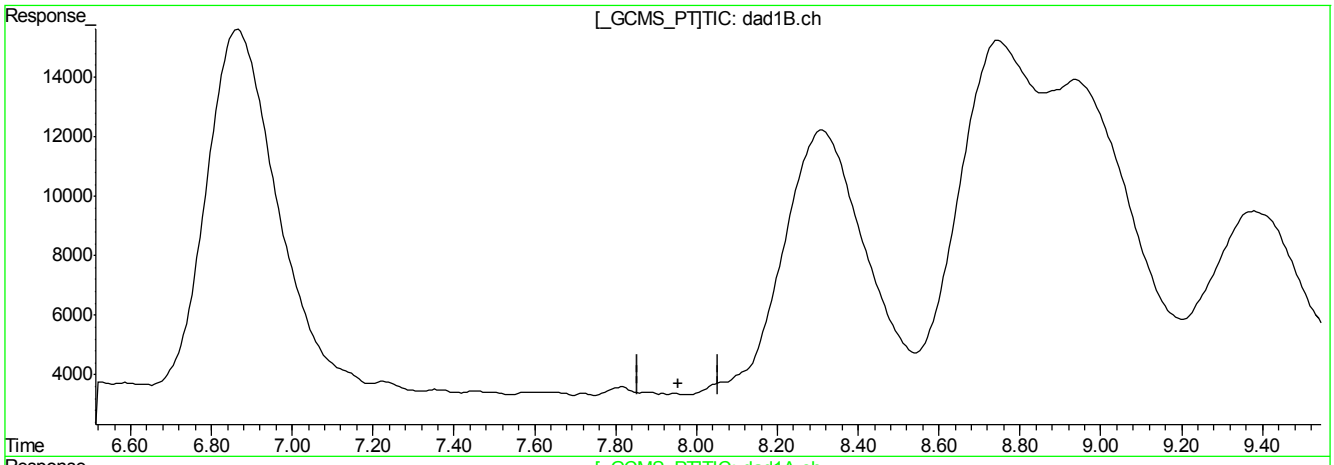
response 2044370

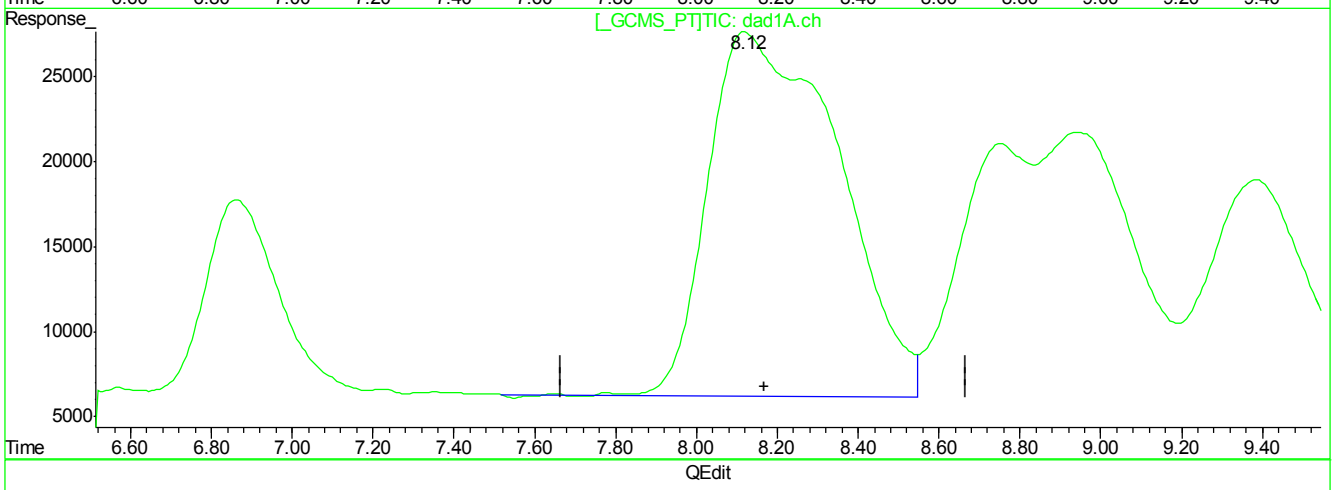
(+) = Expected Retention Time
BB059706.D 8330B_0419PLUS.M Fri May 11 08:34:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.12min 3746.412ppb

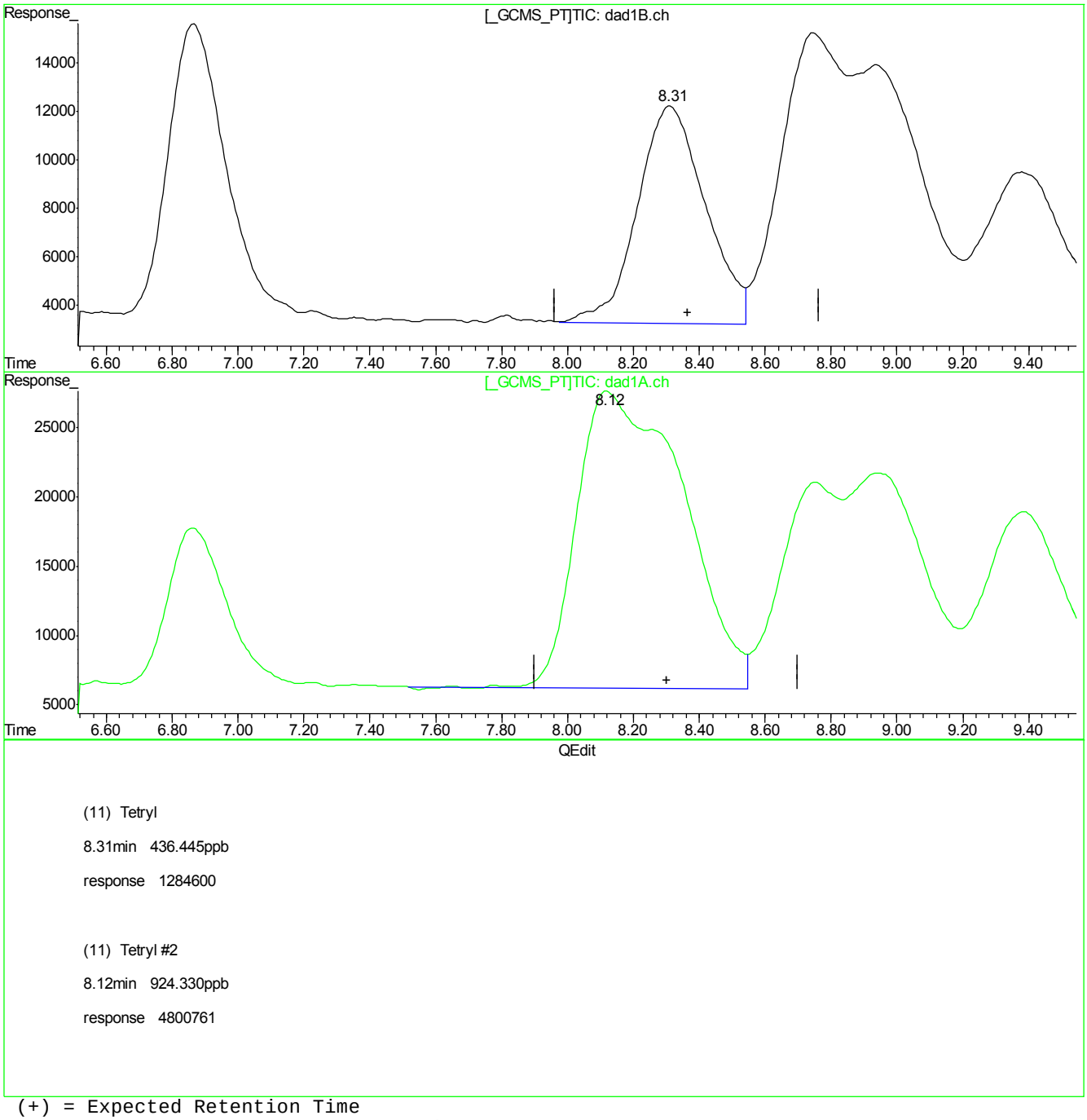
response 4800761

(+) = Expected Retention Time
BB059706.D 8330B_0419PLUS.M Fri May 11 08:34:21 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059706.D 8330B_0419PLUS.M Fri May 11 08:34:27 2018

7.5.2.5

7

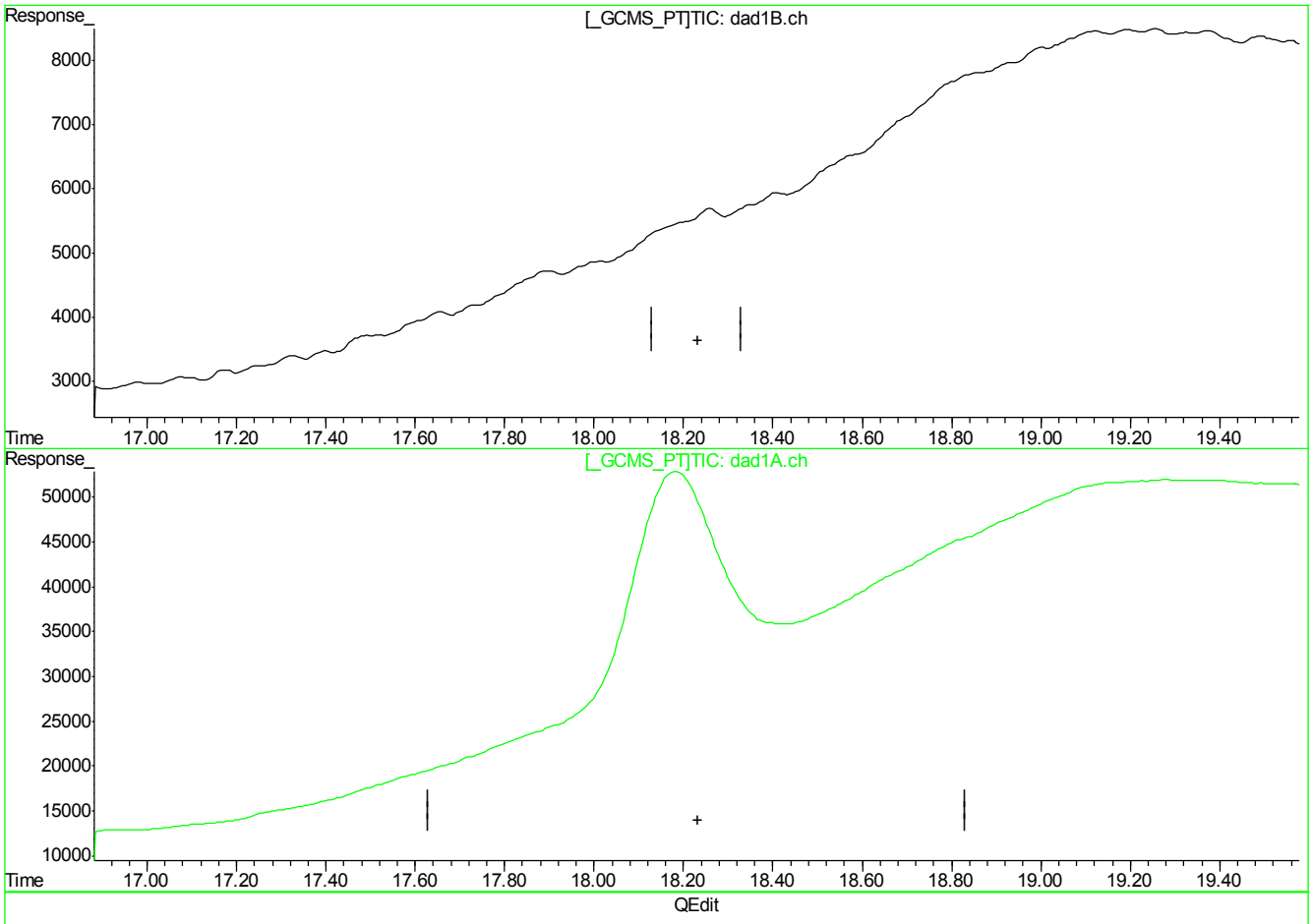
FA53801

BB059706.D edits: Tetryl

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

0.00min 0.000ppb

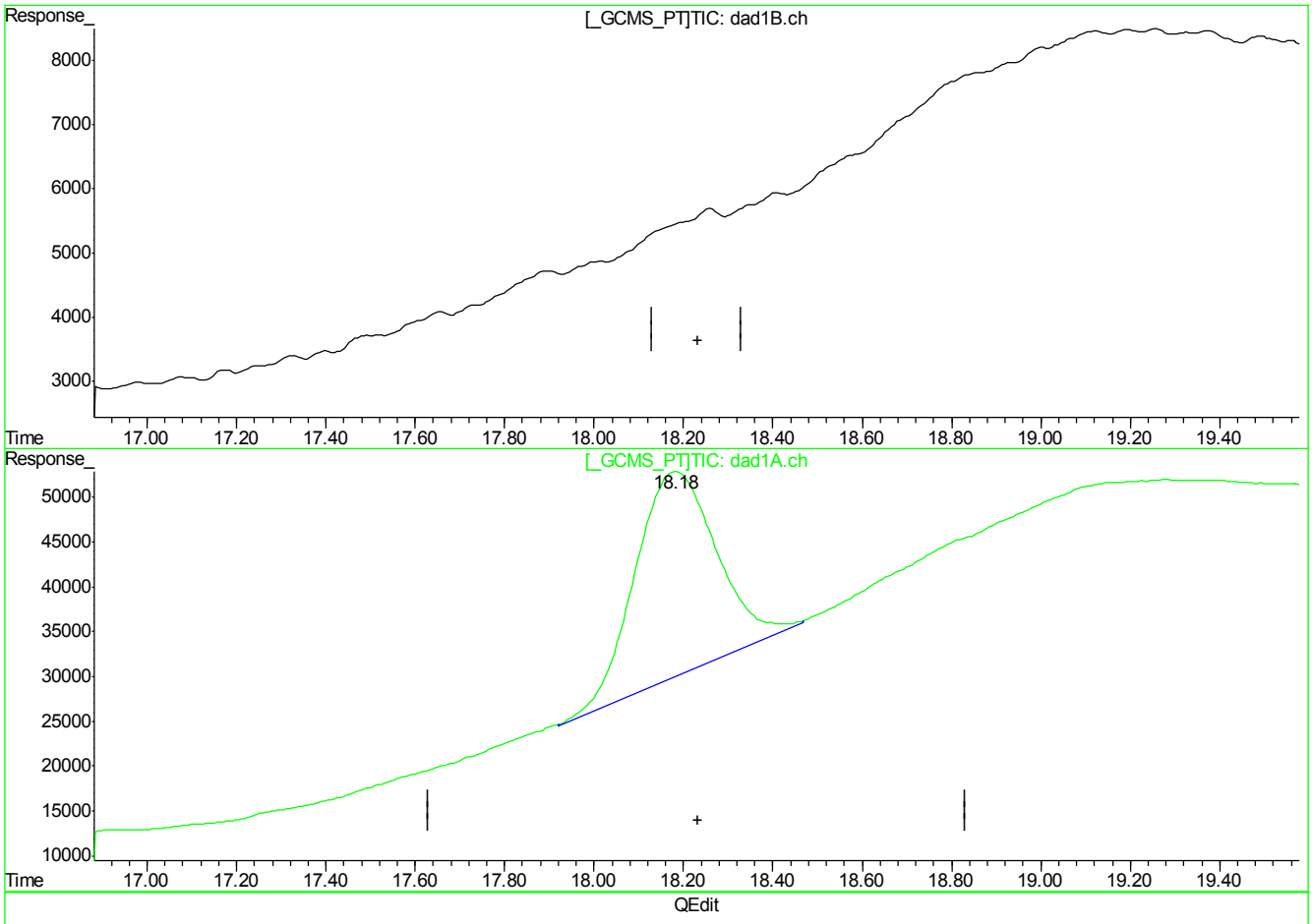
response 0

(+) = Expected Retention Time
BB059706.D 8330B_0419PLUS.M Fri May 11 08:34:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.18min 2085.480ppb m

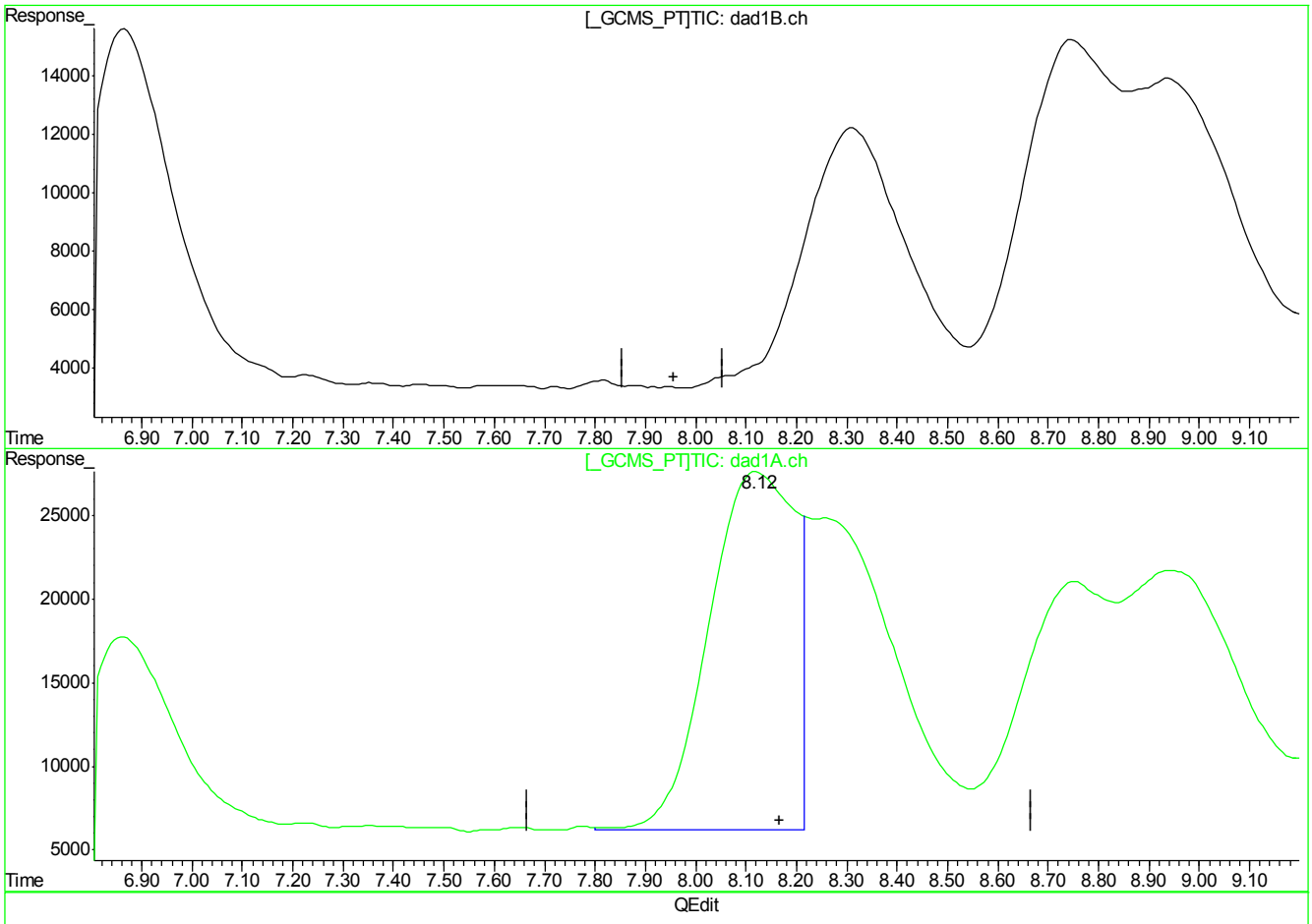
response 2896379

(+) = Expected Retention Time
BB059706.D 8330B_0419PLUS.M Fri May 11 08:34:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.12min 1970.642ppb m

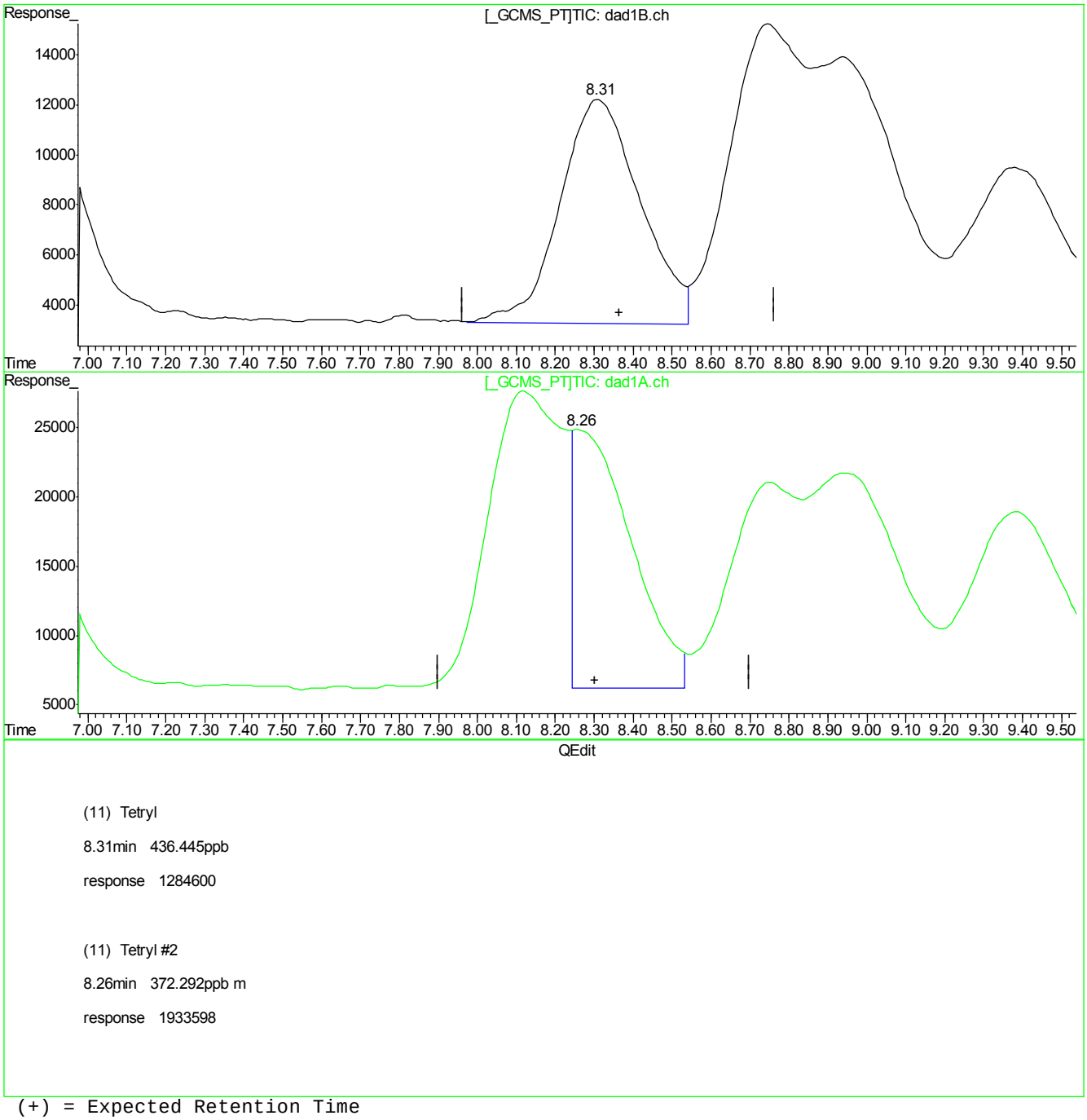
response 2525238

(+) = Expected Retention Time
BB059706.D 8330B_0419PLUS.M Fri May 11 08:34:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1B.ch Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059706.D\dad1A.ch
Acq On : 11-May-2018, 04:28:21 Operator: evitam
Sample : op69973-msd Inst : G1315B
Misc : OP69973,gbb1730,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.31min 436.445ppb

response 1284600

(11) Tetryl #2

8.26min 372.292ppb m

response 1933598

(+) = Expected Retention Time
BB059706.D 8330B_0419PLUS.M Fri May 11 08:35:04 2018

7.5.2.9

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614691.D\dad1B.ch Vial: 20
Signal #2 : G:\DATA\0510RPB3\GG614691.D\dad1A.ch
Acq On : 10-May-2018, 23:24:05 Operator: evitam
Sample : op69989-ms Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:22 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.34	14.33	2415201	5553654	464.919	513.389
	Spiked Amount 500.000	Range 69 - 134		Recovery =		92.98%	102.68%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.42	5.42	1913450	1895753	590.227m	588.423m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.48	7.48	4530865	4562745	437.275	440.397
6)	RDX	7.94	7.94	2232104	2352618	468.519	496.003
7)	1,3-Dinitrobenze	9.98	9.98	6328557	6357461	442.344	499.924
8)	Nitrobenzene	10.93	10.93	4188594	5196693	443.828	561.143
9)	2,4,6-Trinitroto	11.72	11.72	4639435	7282990	457.795	555.323
10)	Nitroglycerin	0.00	12.46	0	8276285	N.D. d	2456.056
11)	Tetryl	13.00	13.00	3539255	7005237	436.737	497.549
13)	2,6-Dinitrotolue	14.71	14.70	3275025	5230115	458.071	515.483
14)	2,4-Dinitrotolue	15.41	15.41	5817130	5104038	443.748	537.247
15)	o-Nitrotoluene	16.96	16.96	2821528	4611570	488.442	534.760
16)	3,5-Dinitroanili	16.36	16.36	4712993	8955310	482.027	551.072
17)	p-Nitrotoluene	18.11	18.12	5231548	9633433	445.528	454.554
18)	4-Amino-2,6-Dini	18.11	18.12	5231548	9633433	445.528	453.232
19)	m-Nitrotoluene	19.34	19.34	2857581	4556231	484.716	468.536
20)	2-Amino-4,6-Dini	20.30	20.30	4087669	5484529	453.032	462.537
21)	PETN	0.00	21.89	0	7750216	N.D. d	2416.351m

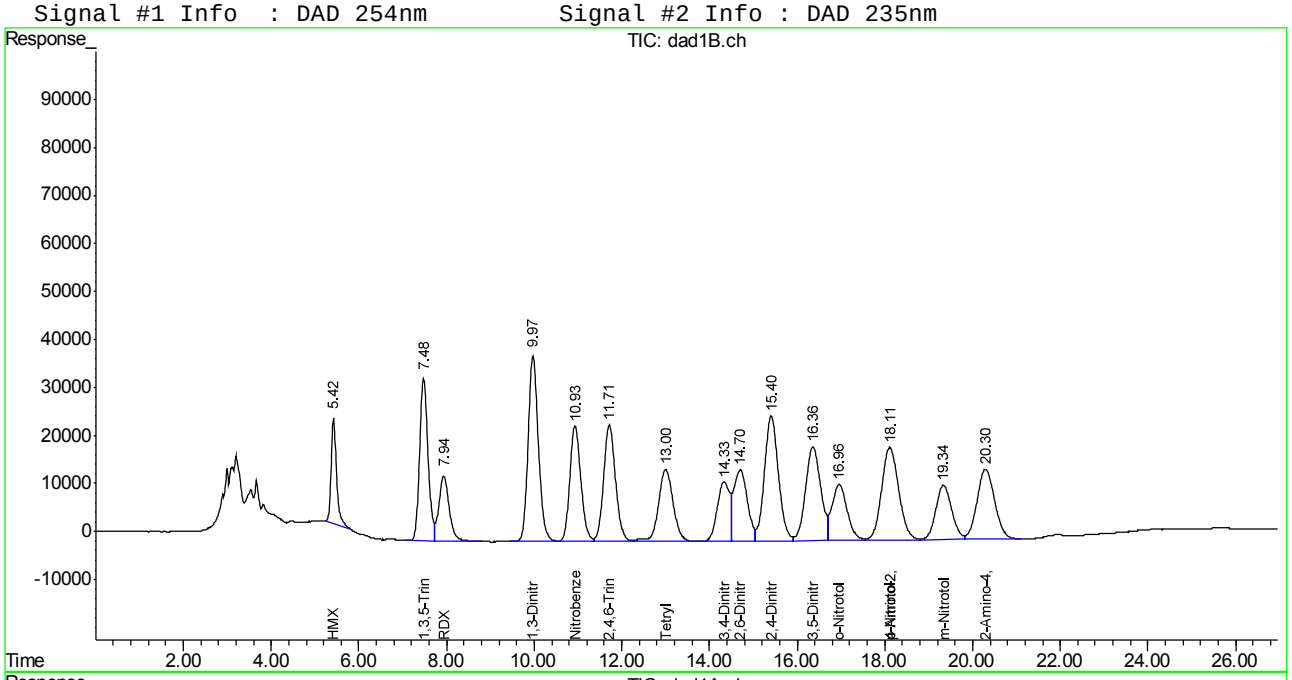
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614691.D 8330RPB.M_1113M.M Fri May 11 10:37:19 2018 Page 1

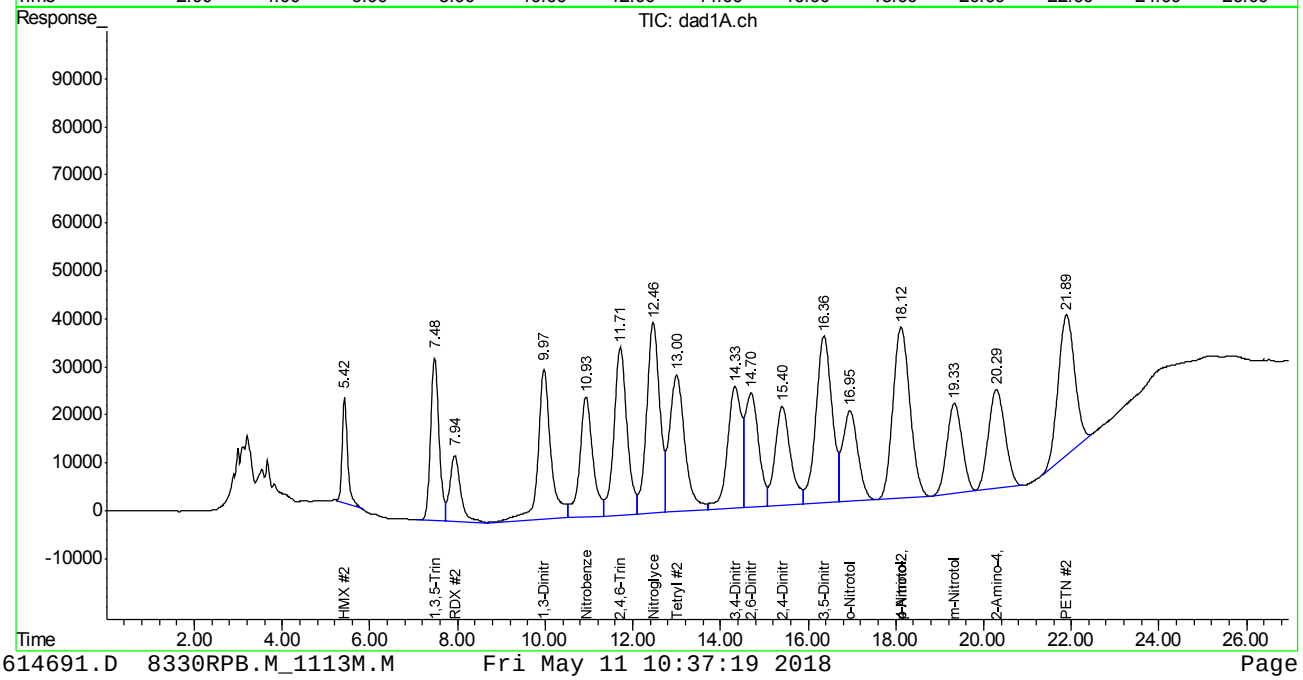
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614691.D\dad1B.ch Vial: 20
Signal #2 : G:\DATA\0510RPB3\GG614691.D\dad1A.ch
Acq On : 10-May-2018, 23:24:05 Operator: evitam
Sample : op69989-ms Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:29 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

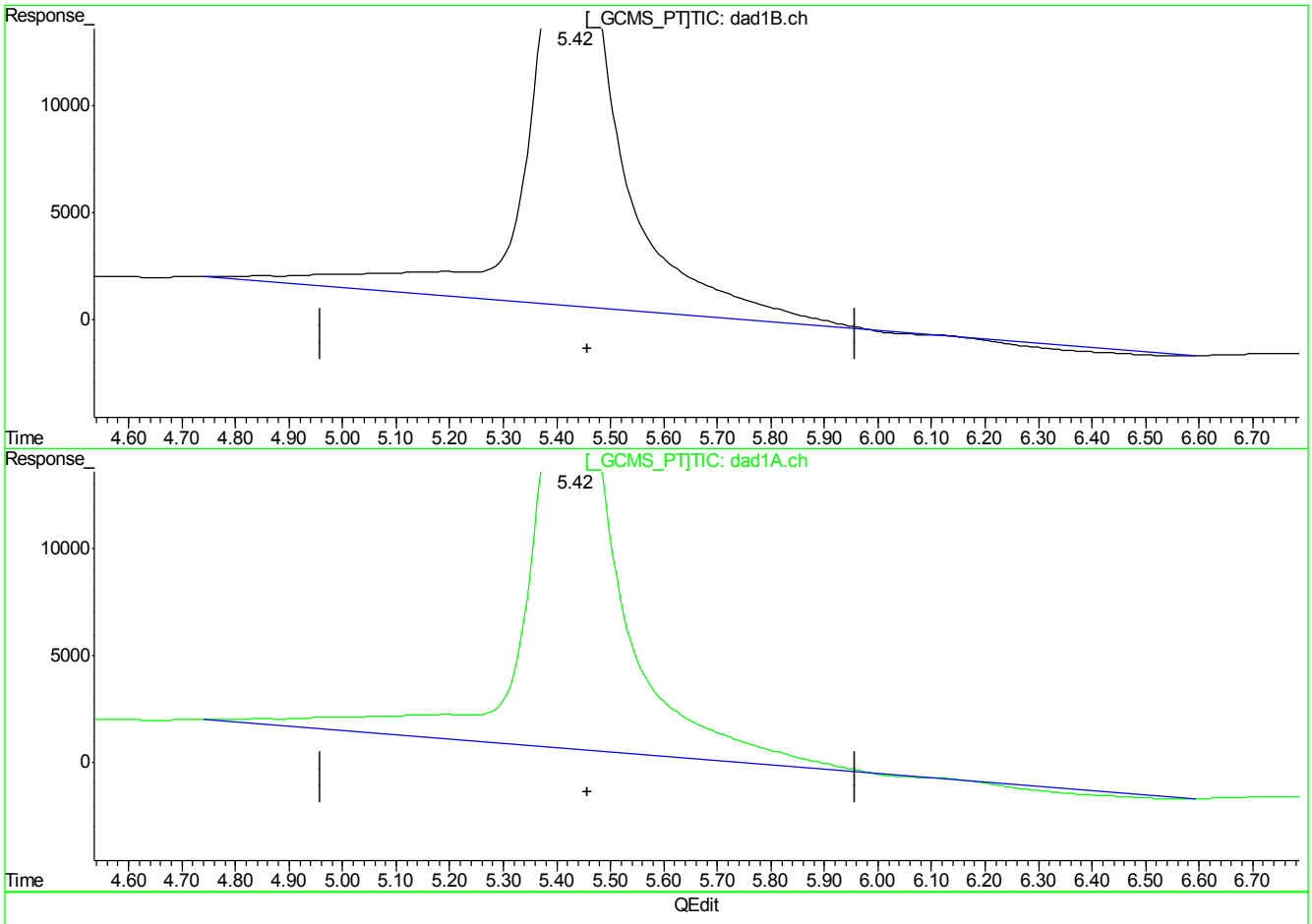
Sample Number:	OP69989-MS	**Method:**	SW846 8330B
Lab FileID:	GG614691.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/10/18 23:24	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.42	Poorly defined baseline
HMX	2691-41-0	2	5.42	Poorly defined baseline
PETN	78-11-5	2	21.89	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614691.D\dad1B.ch Vial: 20
Signal #2 : G:\DATA\0510RPB3\GG614691.D\dad1A.ch
Acq On : 10-May-2018, 23:24:05 Operator: evitam
Sample : op69989-ms Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(2) HMX

5.43min 735.734ppb

response 2385167

(2) HMX #2

5.43min 740.332ppb

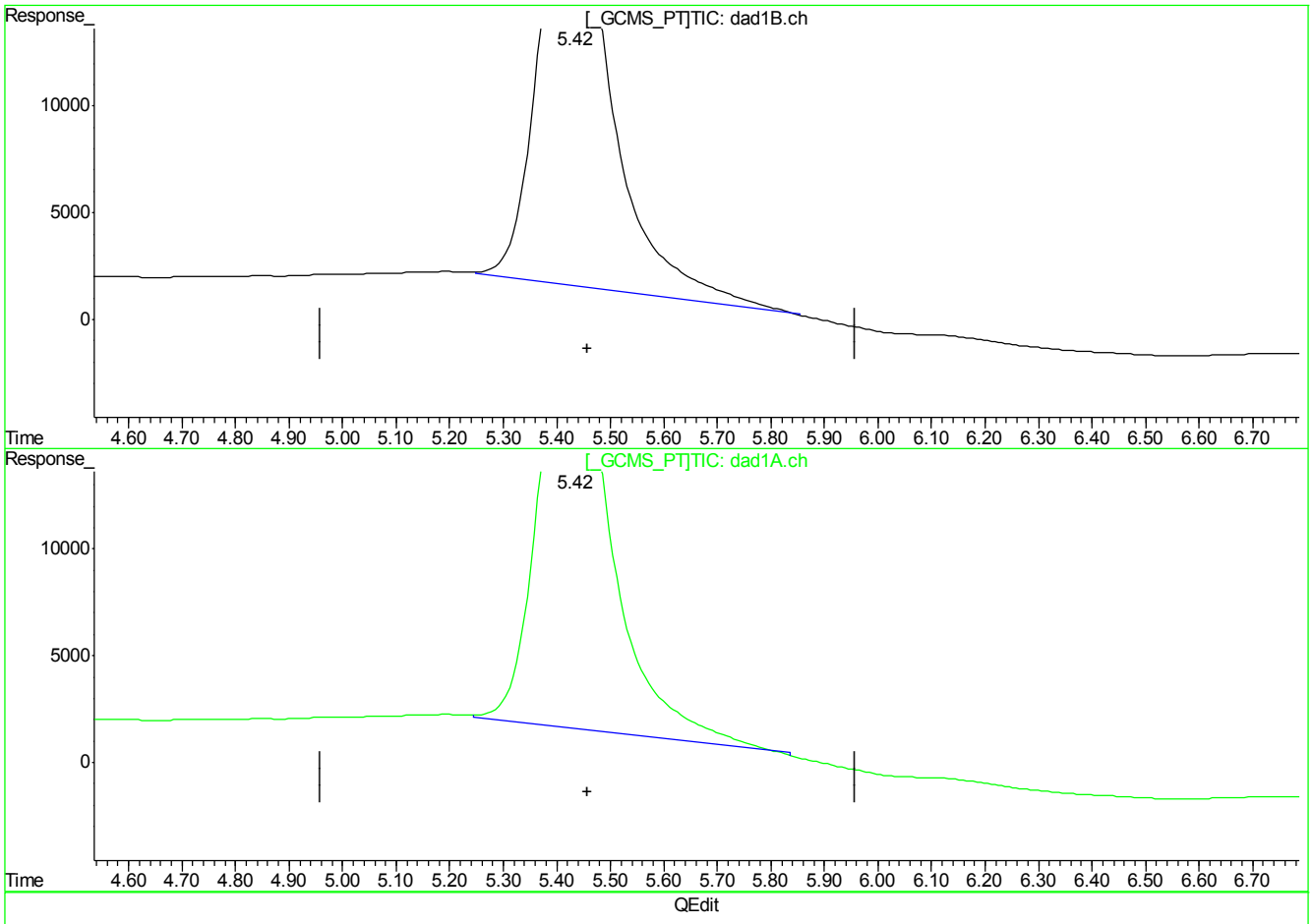
response 2385167

(+) = Expected Retention Time
GG614691.D 8330RPB.M_1113M.M Fri May 11 10:29:02 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614691.D\dad1B.ch Vial: 20
Signal #2 : G:\DATA\0510RPB3\GG614691.D\dad1A.ch
Acq On : 10-May-2018, 23:24:05 Operator: evitam
Sample : op69989-ms Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(2) HMX

5.42min 590.227ppb m

response 1913450

(2) HMX #2

5.42min 588.423ppb m

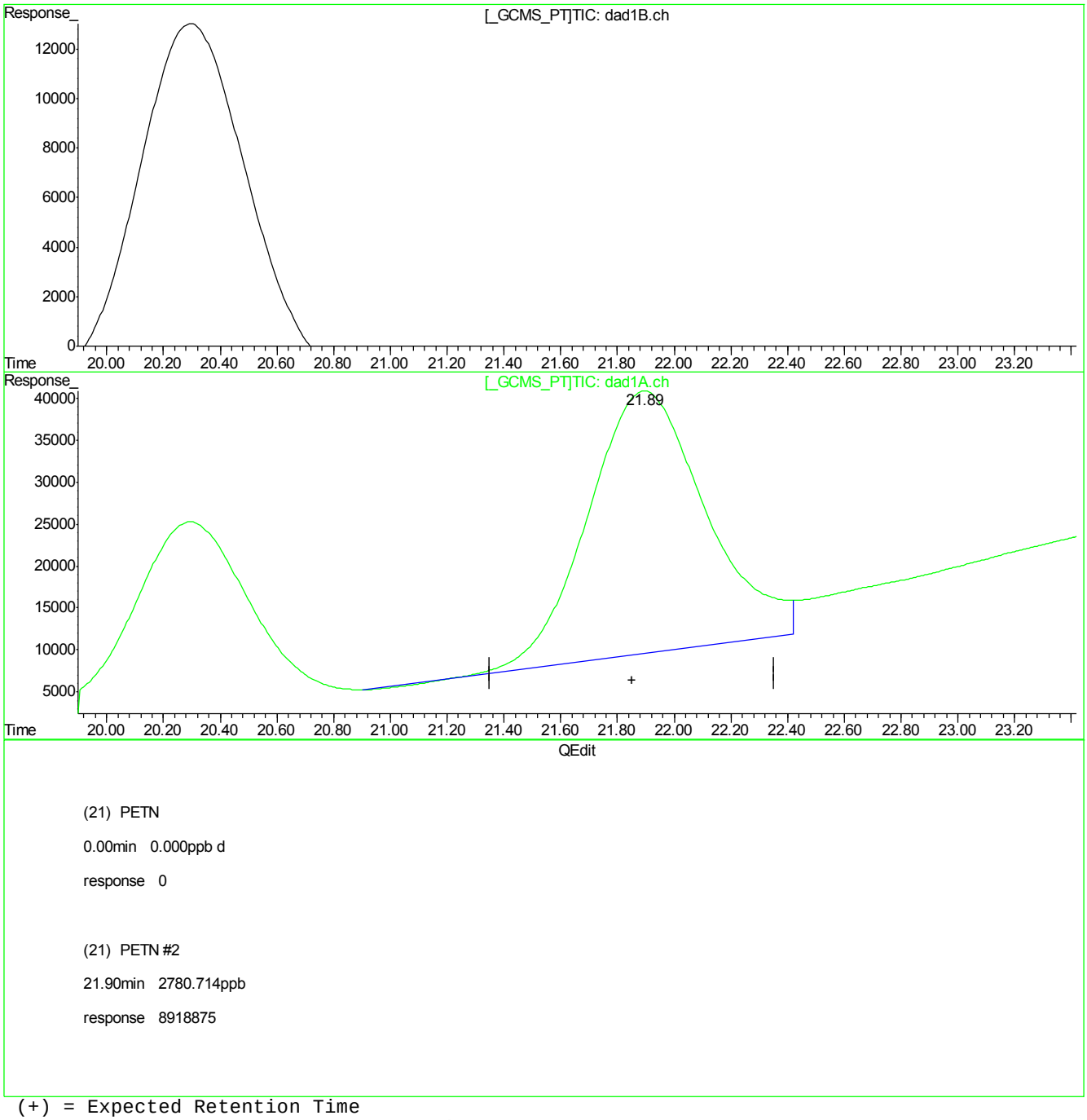
response 1895753

(+) = Expected Retention Time
GG614691.D 8330RPB.M_1113M.M Fri May 11 10:29:06 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614691.D\dad1B.ch Vial: 20
Signal #2 : G:\DATA\0510RPB3\GG614691.D\dad1A.ch
Acq On : 10-May-2018, 23:24:05 Operator: evitam
Sample : op69989-ms Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

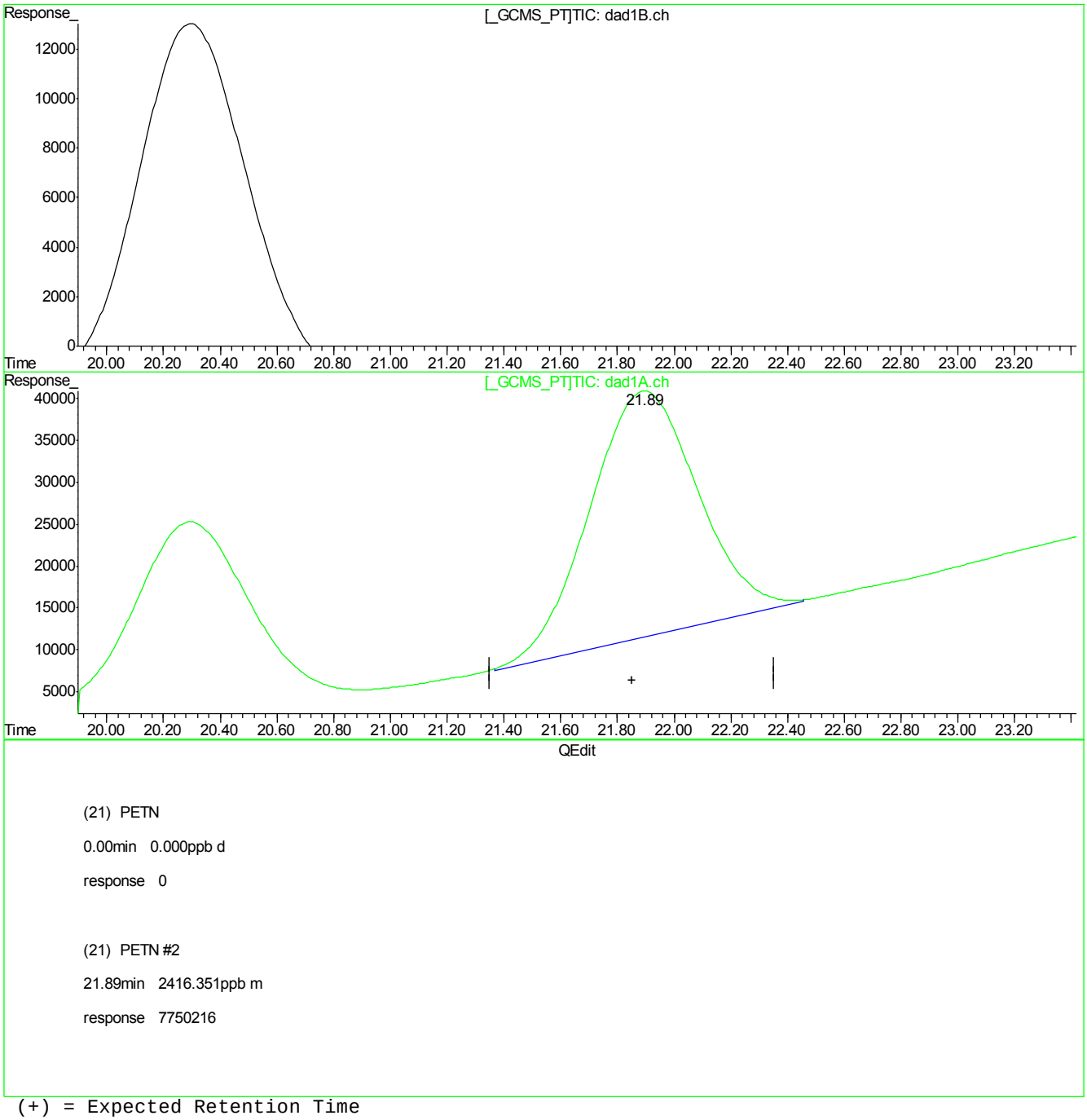


(+) = Expected Retention Time
GG614691.D 8330RPB.M_1113M.M Fri May 11 10:29:12 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614691.D\dad1B.ch Vial: 20
Signal #2 : G:\DATA\0510RPB3\GG614691.D\dad1A.ch
Acq On : 10-May-2018, 23:24:05 Operator: evitam
Sample : op69989-ms Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614691.D 8330RPB.M_1113M.M Fri May 11 10:29:15 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614692.D\dad1B.ch Vial: 21
Signal #2 : G:\DATA\0510RPB3\GG614692.D\dad1A.ch
Acq On : 10-May-2018, 23:53:33 Operator: evitam
Sample : op69989-msd Inst : G1315B
Misc : op69989,Ggg2627,10.09,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.35	14.35	2408323	5421006	463.595	501.127
	Spiked Amount 500.000	Range 69 - 134		Recovery =		92.72%	100.23%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.42	5.42	1895109	1931292	584.570m	599.454m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	7.48	7.48	4619179	4645754	445.798	448.409
6)	RDX	7.94	7.94	2272920	2381135	477.086	502.016
7)	1,3-Dinitrobenze	9.98	9.98	6401892	6330515	447.470	497.708
8)	Nitrobenzene	10.94	10.94	4246018	5097252	449.913	550.405
9)	2,4,6-Trinitroto	11.72	11.72	4709430	7259802	464.702	553.555
10)	Nitroglycerin	0.00	12.48	0	8196138	N.D. d	2432.271
11)	Tetryl	13.01	13.01	3605506	7171854	444.912	509.486
13)	2,6-Dinitrotolue	14.71	14.71	3344011	5403974	467.720	532.618
14)	2,4-Dinitrotolue	15.42	15.42	5913017	5129549	451.063	539.967
15)	o-Nitrotoluene	16.97	16.97	2849029	4222801	493.202	489.678
16)	3,5-Dinitroanili	16.37	16.37	4815937	8983901	492.485	552.819
17)	p-Nitrotoluene	18.13	18.13	5234716	9627276	445.797	454.263
18)	4-Amino-2,6-Dini	18.13	18.13	5234716	9627276	445.797	452.942
19)	m-Nitrotoluene	19.35	19.36	2850462	4724008	483.508	485.789
20)	2-Amino-4,6-Dini	20.31	20.31	4128116	5638920	457.514	475.163
21)	PETN	0.00	21.89	0	7855031	N.D. d	2449.030m

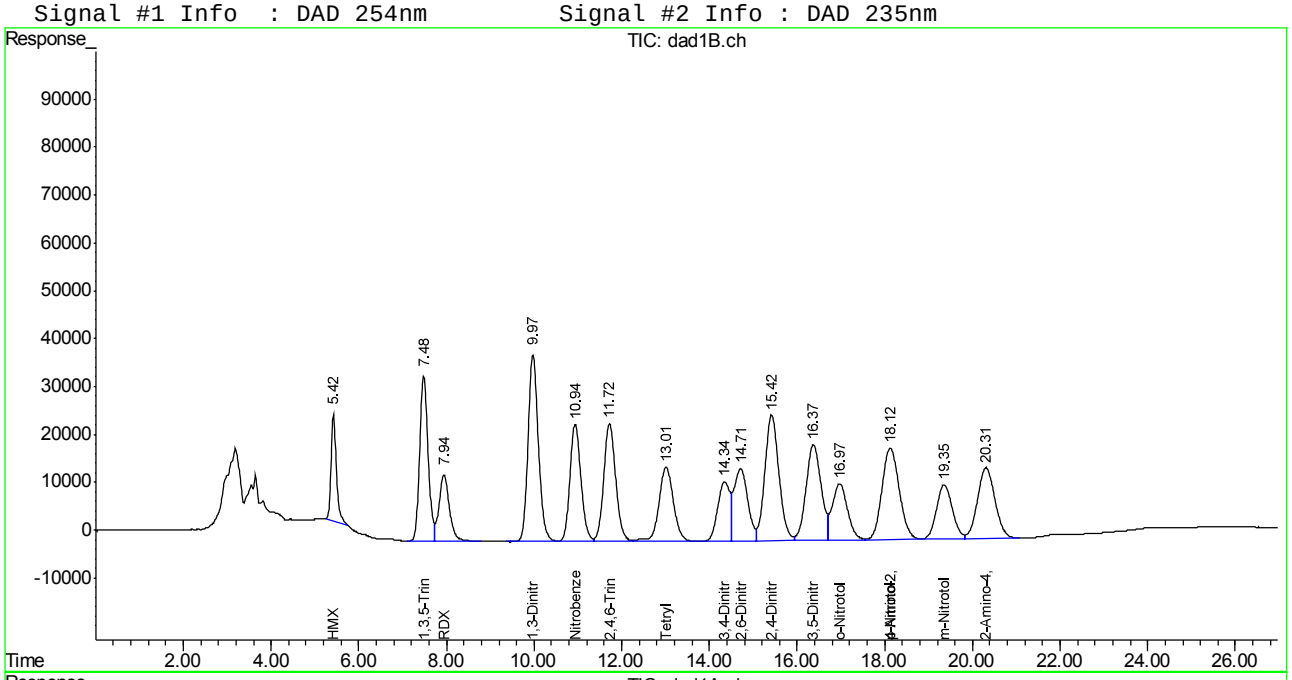
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614692.D 8330RPB.M_1113M.M Fri May 11 10:37:20 2018 Page 1

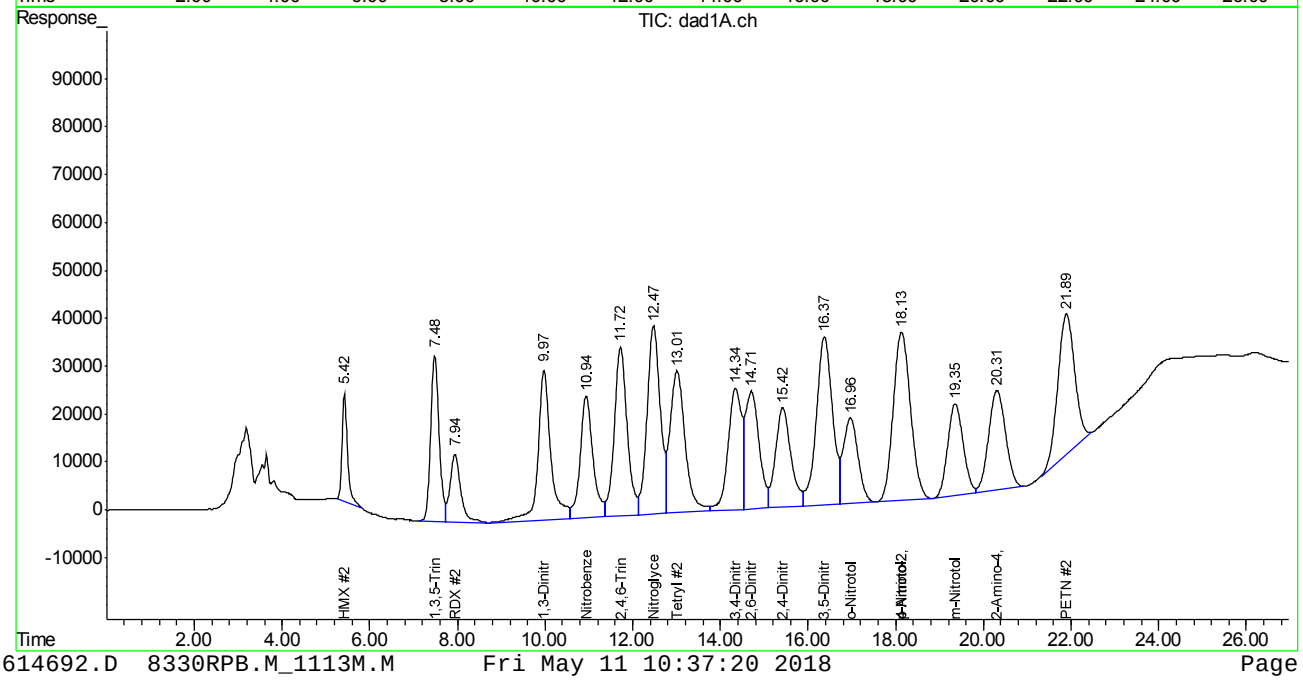
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614692.D\dad1B.ch Vial: 21
Signal #2 : G:\DATA\0510RPB3\GG614692.D\dad1A.ch
Acq On : 10-May-2018, 23:53:33 Operator: evitam
Sample : op69989-msd Inst : G1315B
Misc : op69989,Ggg2627,10.09,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:29 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

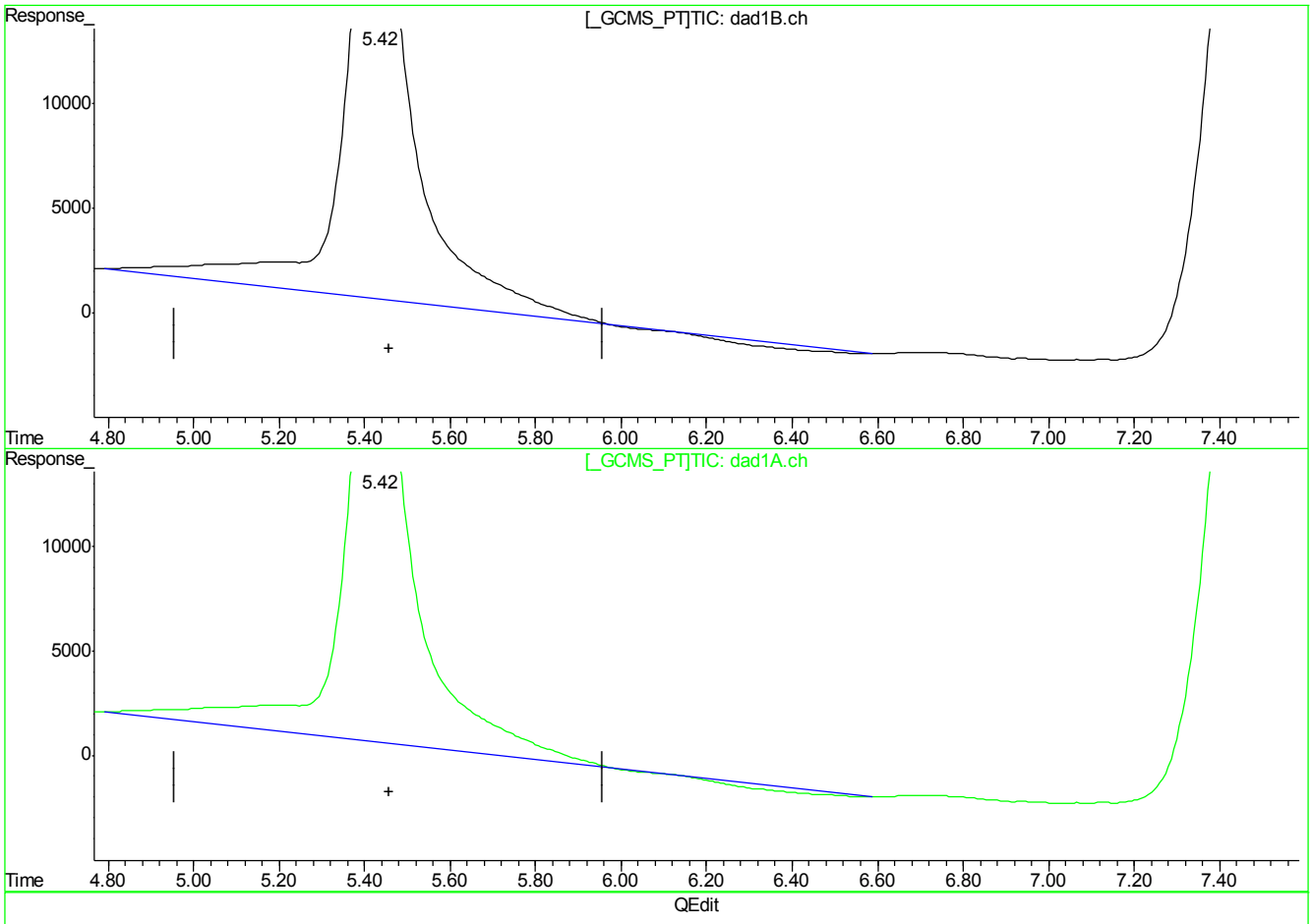
Sample Number:	OP69989-MSD	**Method:**	SW846 8330B
Lab FileID:	GG614692.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/10/18 23:53	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	5.42	Poorly defined baseline
HMX	2691-41-0	2	5.42	Poorly defined baseline
PETN	78-11-5	2	21.89	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614692.D\dad1B.ch Vial: 21
Signal #2 : G:\DATA\0510RPB3\GG614692.D\dad1A.ch
Acq On : 10-May-2018, 23:53:33 Operator: evitam
Sample : op69989-msd Inst : G1315B
Misc : op69989,Ggg2627,10.09,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(2) HMX

5.43min 755.315ppb

response 2448645

(2) HMX #2

5.43min 760.035ppb

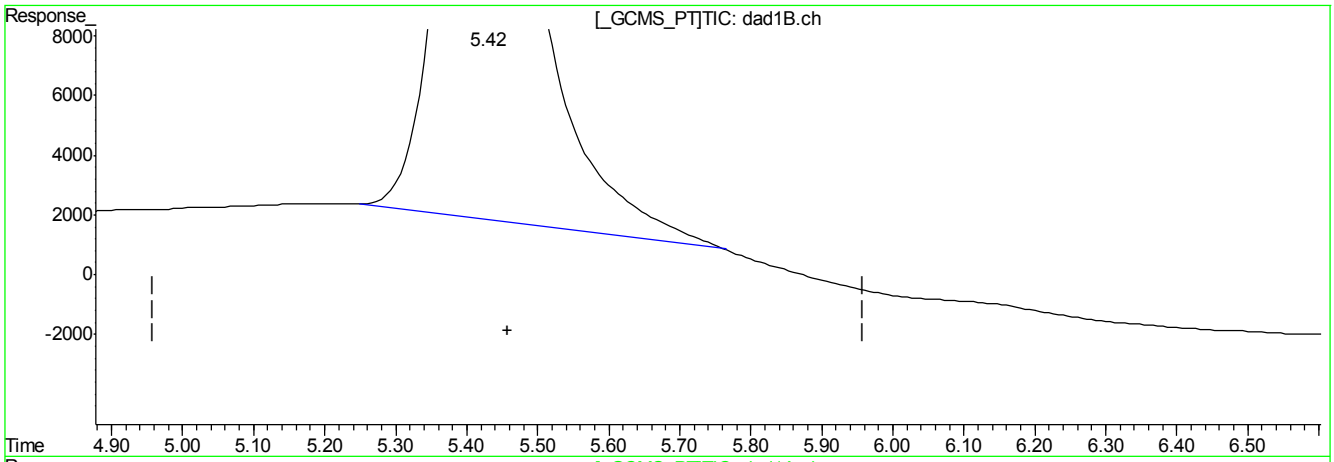
response 2448645

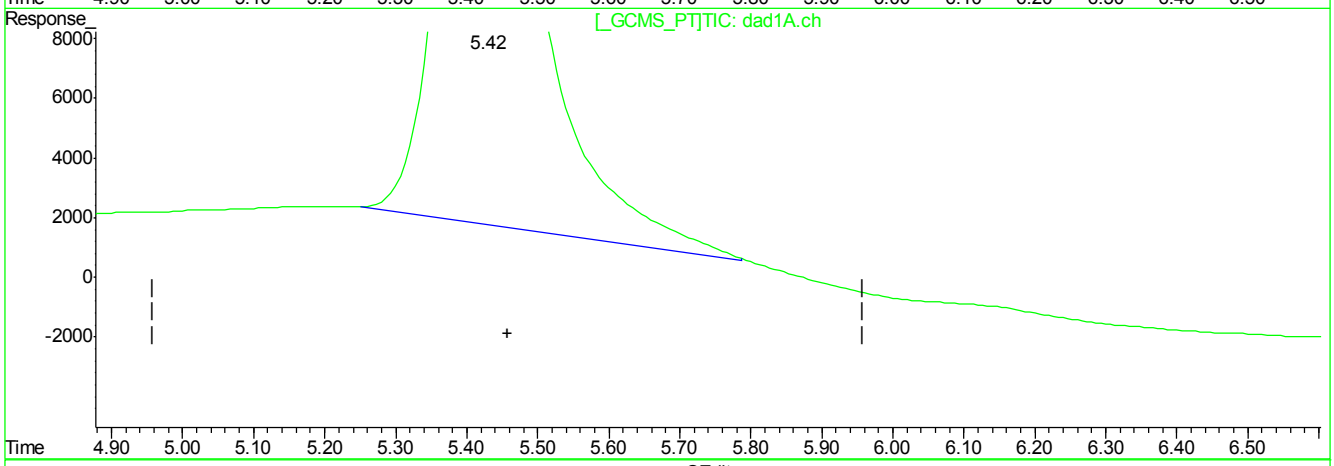
(+) = Expected Retention Time
GG614692.D 8330RPB.M_1113M.M Fri May 11 10:29:30 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614692.D\dad1B.ch Vial: 21
Signal #2 : G:\DATA\0510RPB3\GG614692.D\dad1A.ch
Acq On : 10-May-2018, 23:53:33 Operator: evitam
Sample : op69989-msd Inst : G1315B
Misc : op69989,Ggg2627,10.09,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.42min 584.570ppb m

response 1895109

(2) HMX #2

5.42min 599.454ppb m

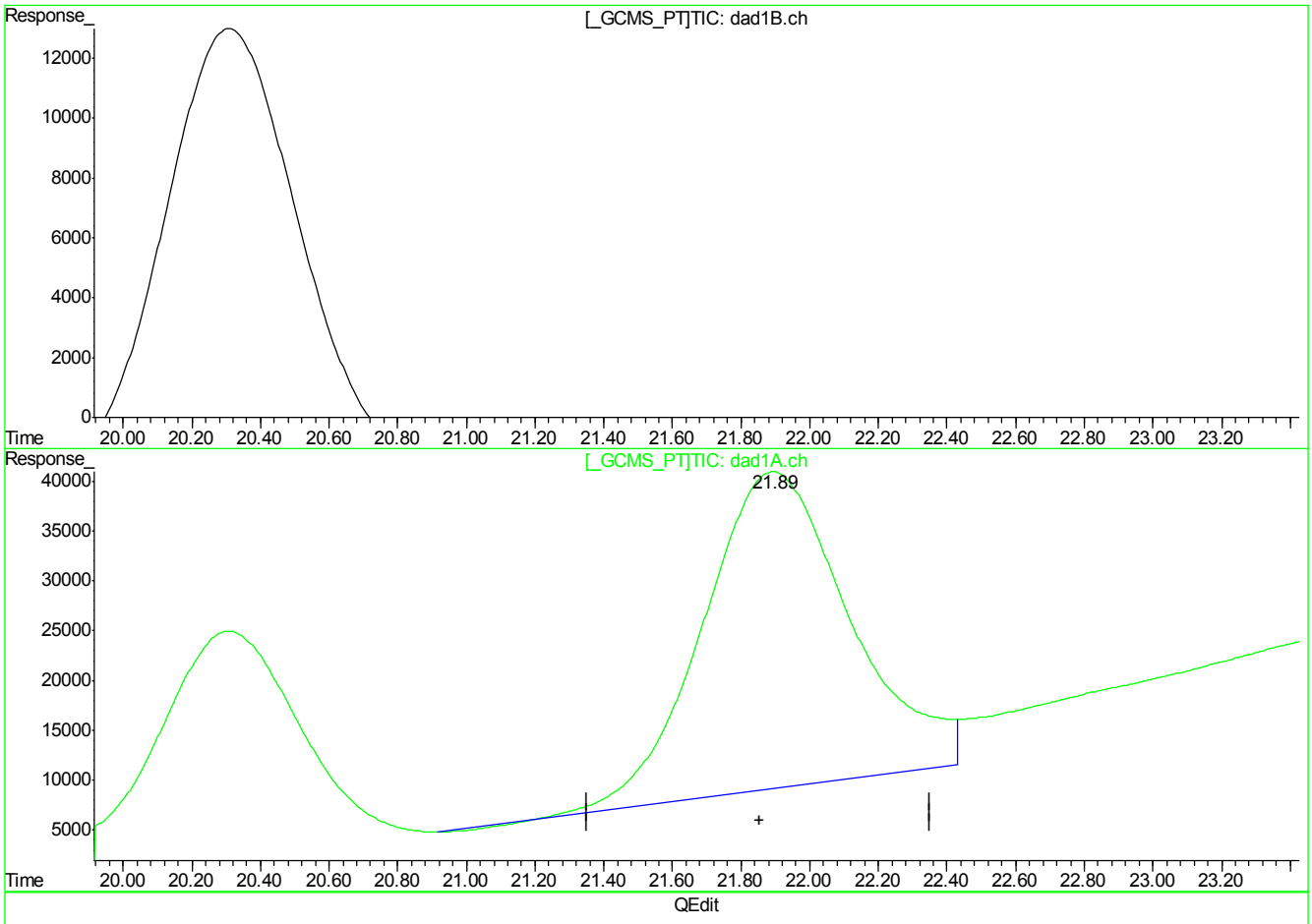
response 1931292

(+) = Expected Retention Time
GG614692.D 8330RPB.M_1113M.M Fri May 11 10:29:43 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614692.D\dad1B.ch Vial: 21
Signal #2 : G:\DATA\0510RPB3\GG614692.D\dad1A.ch
Acq On : 10-May-2018, 23:53:33 Operator: evitam
Sample : op69989-msd Inst : G1315B
Misc : op69989,Ggg2627,10.09,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.90min 2930.067ppb

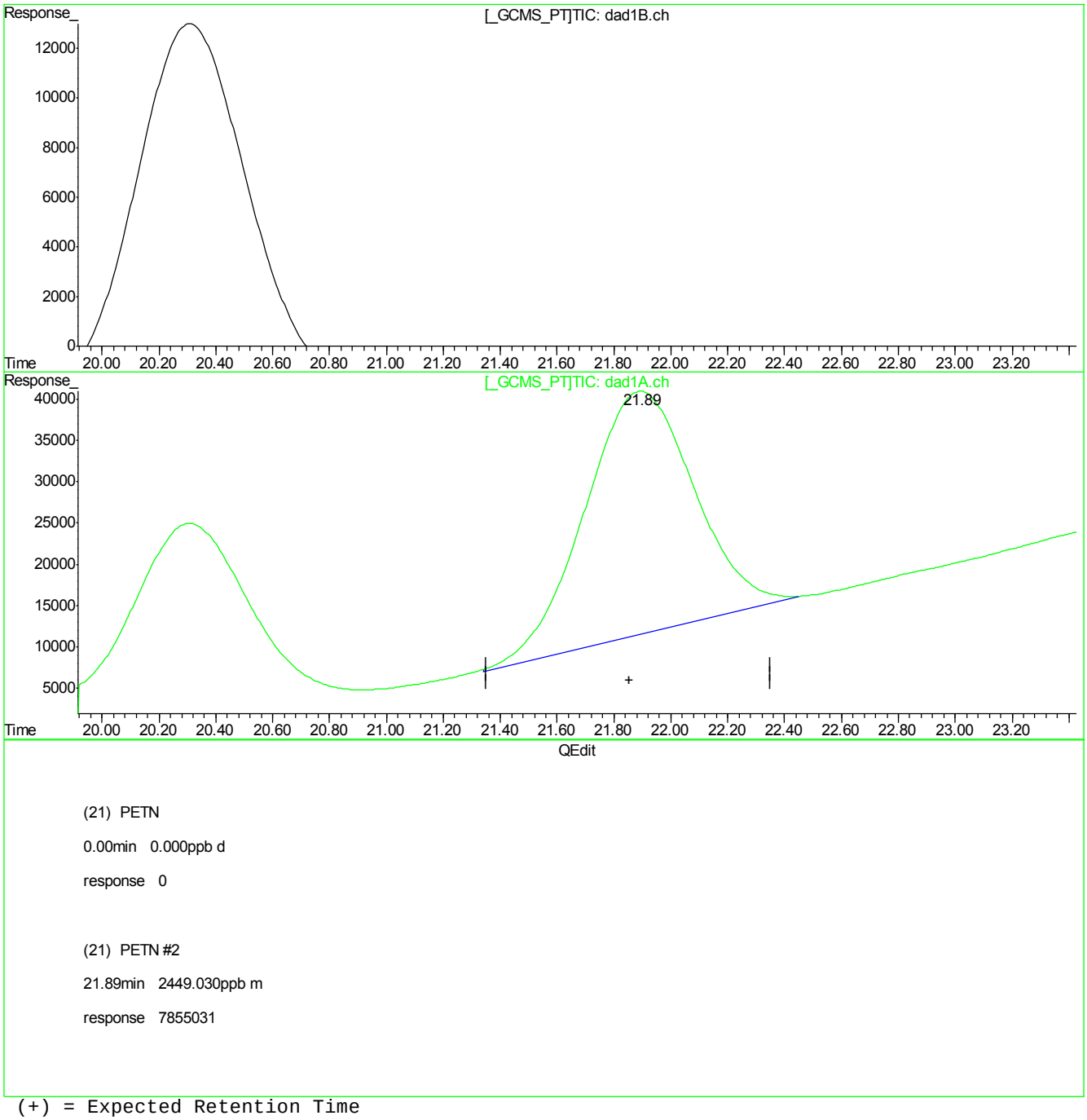
response 9397910

(+) = Expected Retention Time
GG614692.D 8330RPB.M_1113M.M Fri May 11 10:29:50 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614692.D\dad1B.ch Vial: 21
Signal #2 : G:\DATA\0510RPB3\GG614692.D\dad1A.ch
Acq On : 10-May-2018, 23:53:33 Operator: evitam
Sample : op69989-msd Inst : G1315B
Misc : op69989,Ggg2627,10.09,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614692.D 8330RPB.M_1113M.M Fri May 11 10:29:54 2018

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059710.D\dad1B.ch Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059710.D\dad1A.ch
Acq On : 11-May-2018, 06:28:13 Operator: evitam
Sample : op69973-dup Inst : G1315B
Misc : OP69973,gbb1730,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:28 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.81	9.82	984435	1764658	367.916	374.284
	Spiked Amount 500.000	Range 69 - 134		Recovery =		73.58%	74.86%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

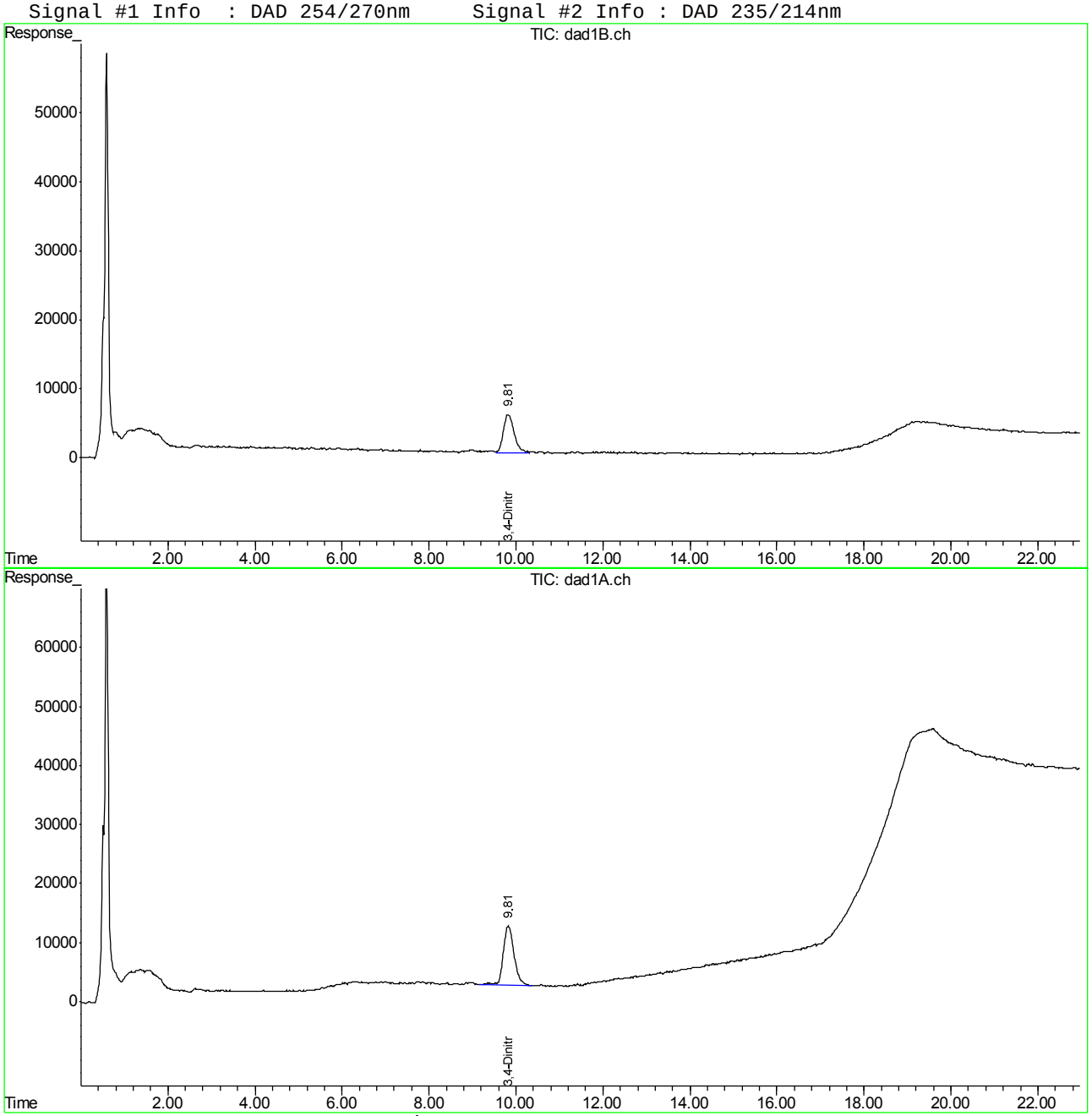
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059710.D 8330B_0419PLUS.M Fri May 11 08:38:22 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059710.D\dad1B.ch Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059710.D\dad1A.ch
Acq On : 11-May-2018, 06:28:13 Operator: evitam
Sample : op69973-dup Inst : G1315B
Misc : OP69973,gbb1730,10.15,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:36 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059711.D\dad1B.ch Vial: 37
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059711.D\dad1A.ch
Acq On : 11-May-2018, 07:00:55 Operator: evitam
Sample : op69973-dup2 Inst : G1315B
Misc : OP69973,gbb1730,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:29 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.84	9.83	964295	1658169	360.389	351.698
	Spiked Amount 500.000	Range 69 - 134		Recovery =		72.08%	70.34%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

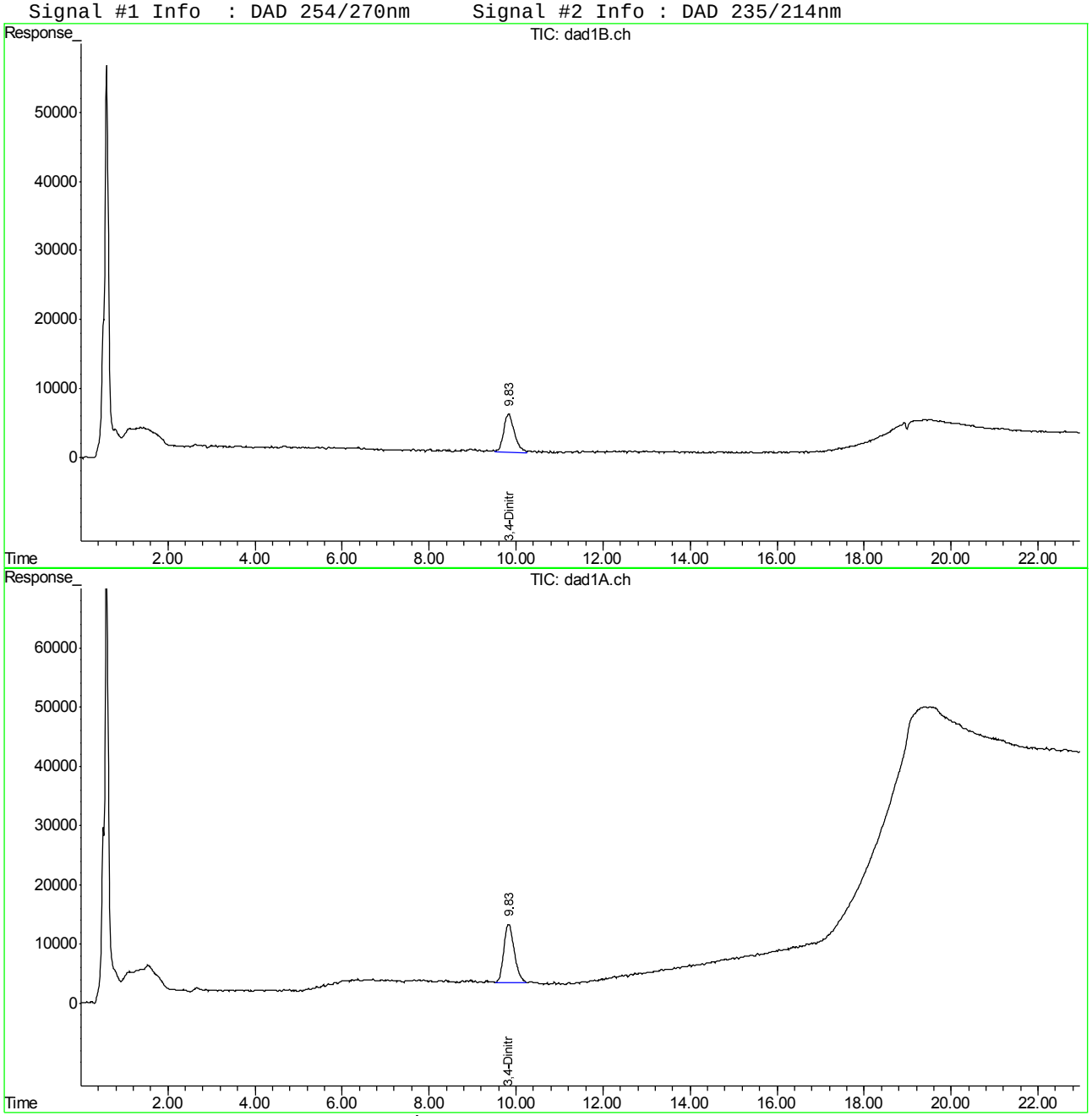
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059711.D 8330B_0419PLUS.M Fri May 11 08:38:23 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059711.D\dad1B.ch Vial: 37
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059711.D\dad1A.ch
Acq On : 11-May-2018, 07:00:55 Operator: evitam
Sample : op69973-dup2 Inst : G1315B
Misc : OP69973,gbb1730,10.13,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:36 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614698.D\dad1B.ch Vial: 25
Signal #2 : G:\DATA\0510RPB3\GG614698.D\dad1A.ch
Acq On : 11-May-2018, 02:50:09 Operator: evitam
Sample : op69989-dup Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:29 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.27	2496498	4796597	480.569	443.406m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		96.11%	88.68%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

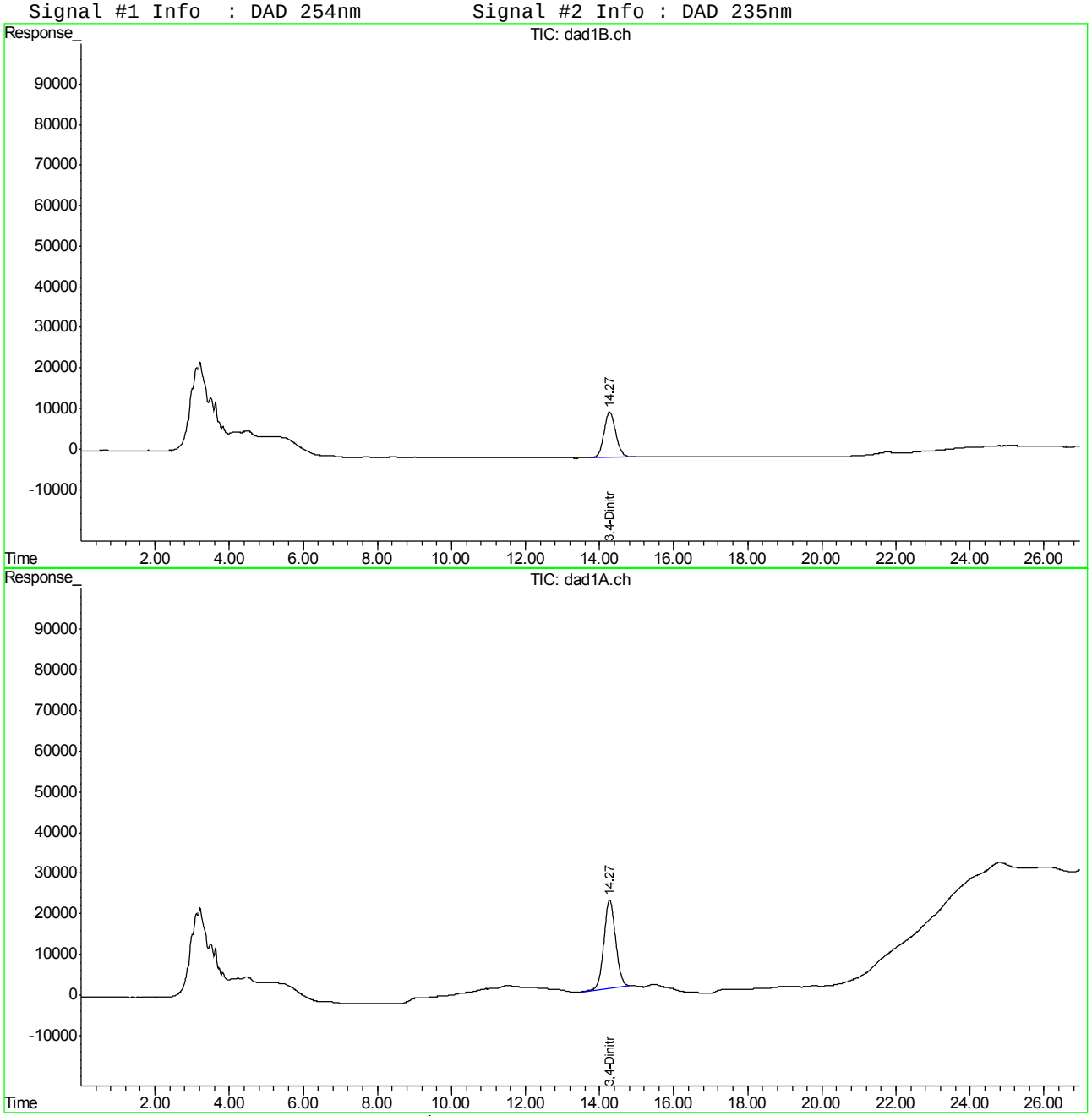
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614698.D 8330RPB.M_1113M.M Fri May 11 10:37:25 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614698.D\dad1B.ch Vial: 25
Signal #2 : G:\DATA\0510RPB3\GG614698.D\dad1A.ch
Acq On : 11-May-2018, 02:50:09 Operator: evitam
Sample : op69989-dup Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



GG614698.D 8330RPB.M_1113M.M Fri May 11 10:37:25 2018 Page 2

Manual Integration Approval Summary

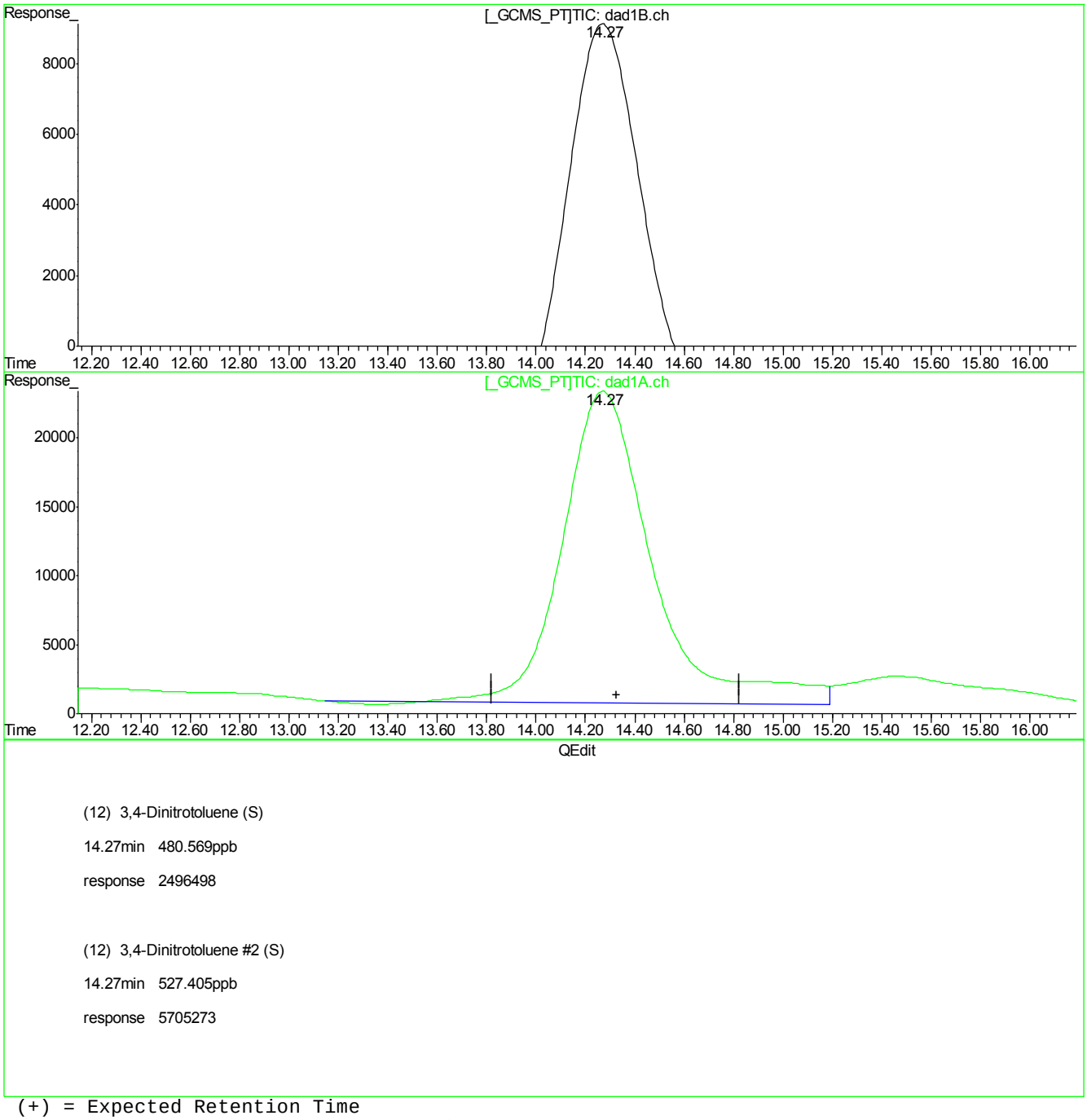
Sample Number:	OP69989-DUP	**Method:**	SW846 8330B
Lab FileID:	GG614698.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/11/18 02:50	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614698.D\dad1B.ch Vial: 25
Signal #2 : G:\DATA\0510RPB3\GG614698.D\dad1A.ch
Acq On : 11-May-2018, 02:50:09 Operator: evitam
Sample : op69989-dup Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.27min 480.569ppb

response 2496498

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 527.405ppb

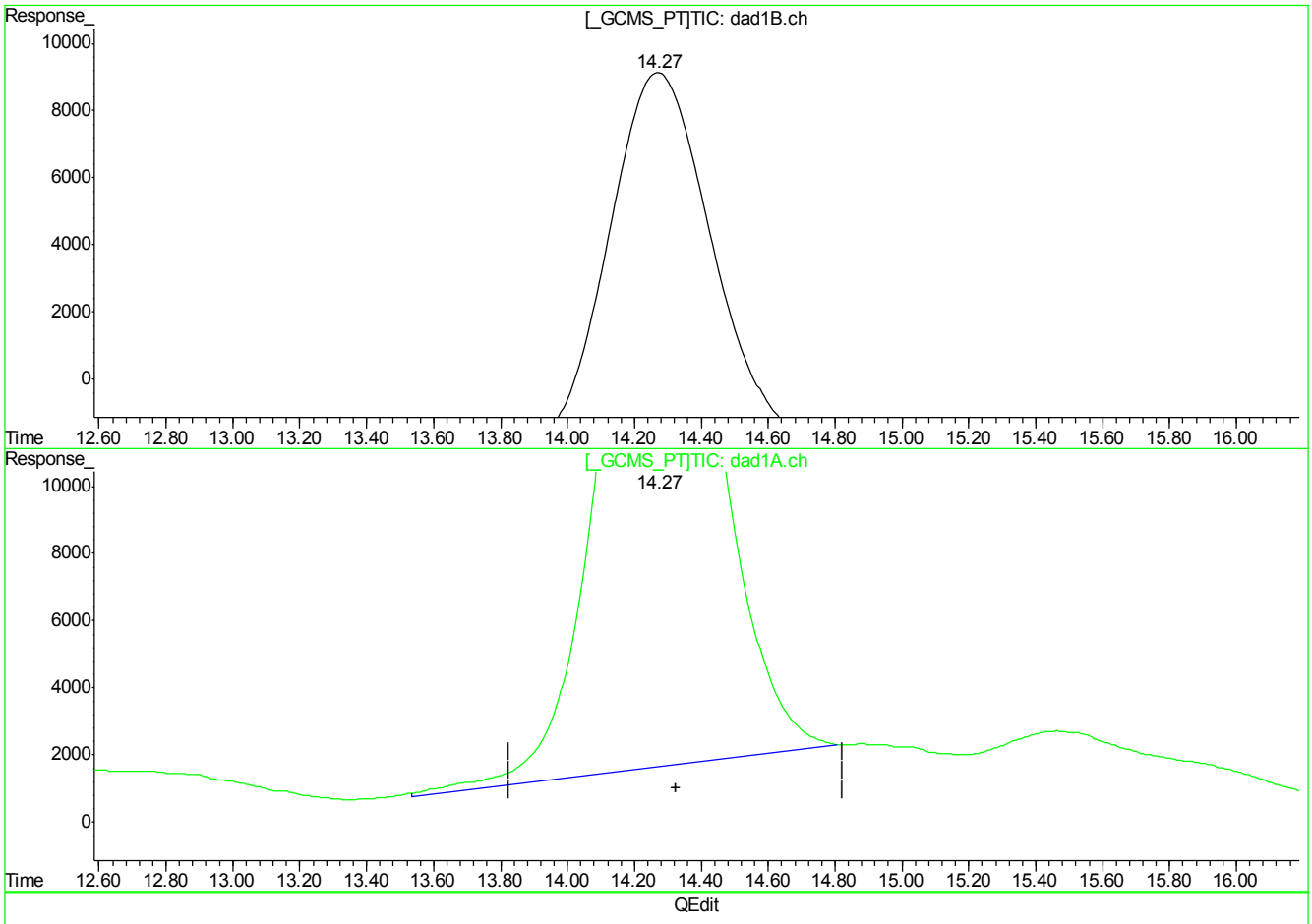
response 5705273

(+) = Expected Retention Time
GG614698.D 8330RPB.M_1113M.M Fri May 11 10:32:09 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614698.D\dad1B.ch Vial: 25
Signal #2 : G:\DATA\0510RPB3\GG614698.D\dad1A.ch
Acq On : 11-May-2018, 02:50:09 Operator: evitam
Sample : op69989-dup Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.27min 480.569ppb

response 2496498

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 443.406ppb m

response 4796597

(+) = Expected Retention Time
GG614698.D 8330RPB.M_1113M.M Fri May 11 10:32:13 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614699.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0510RPB3\GG614699.D\dad1A.ch
Acq On : 11-May-2018, 03:19:36 Operator: evitam
Sample : op69989-dup2 Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:30 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.34	14.33	2518925	5187060	484.886	479.501m
	Spiked Amount 500.000	Range 69 - 134		Recovery =		96.98%	95.90%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

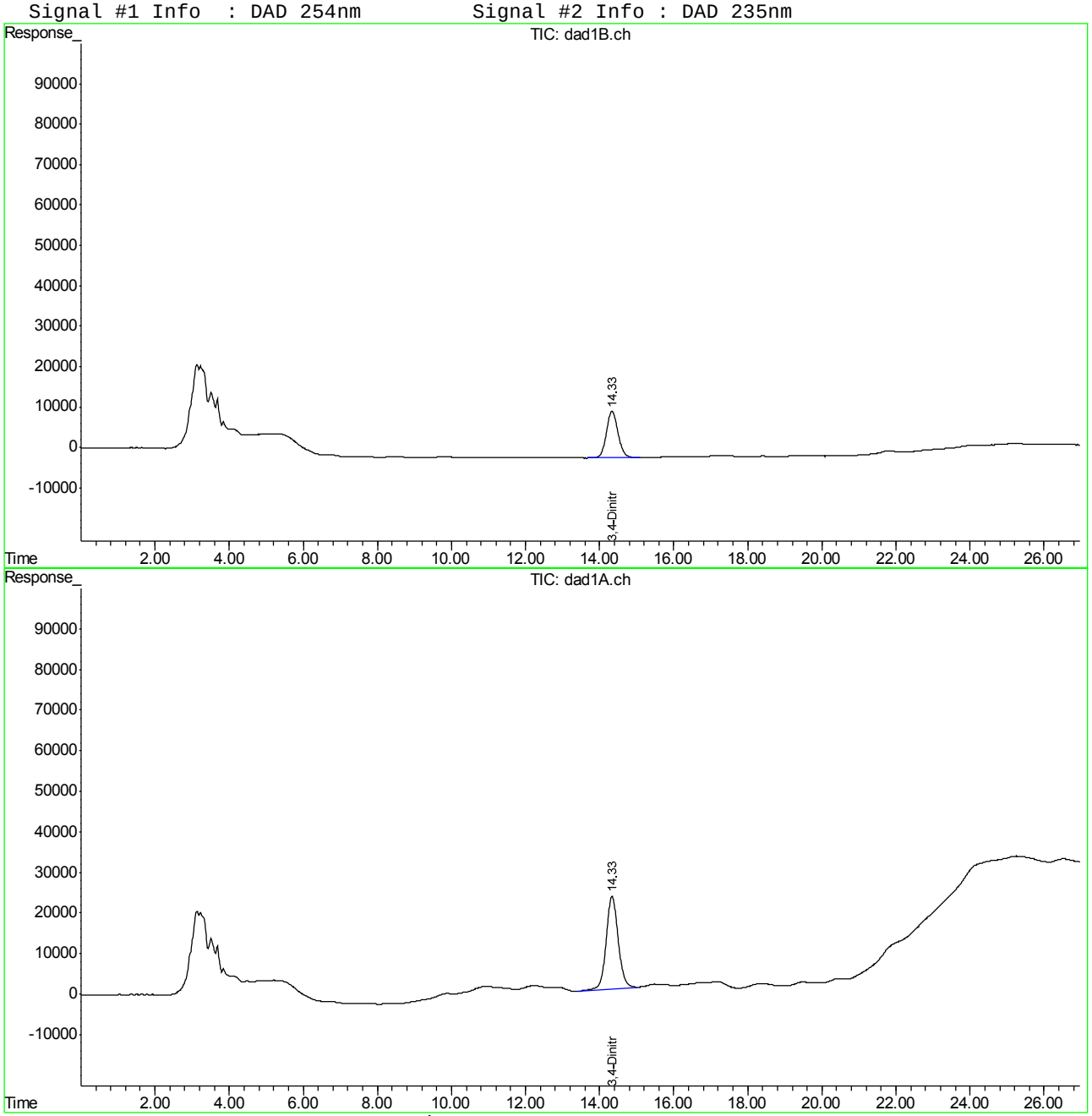
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614699.D 8330RPB.M_1113M.M Fri May 11 10:37:26 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614699.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0510RPB3\GG614699.D\dad1A.ch
Acq On : 11-May-2018, 03:19:36 Operator: evitam
Sample : op69989-dup2 Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

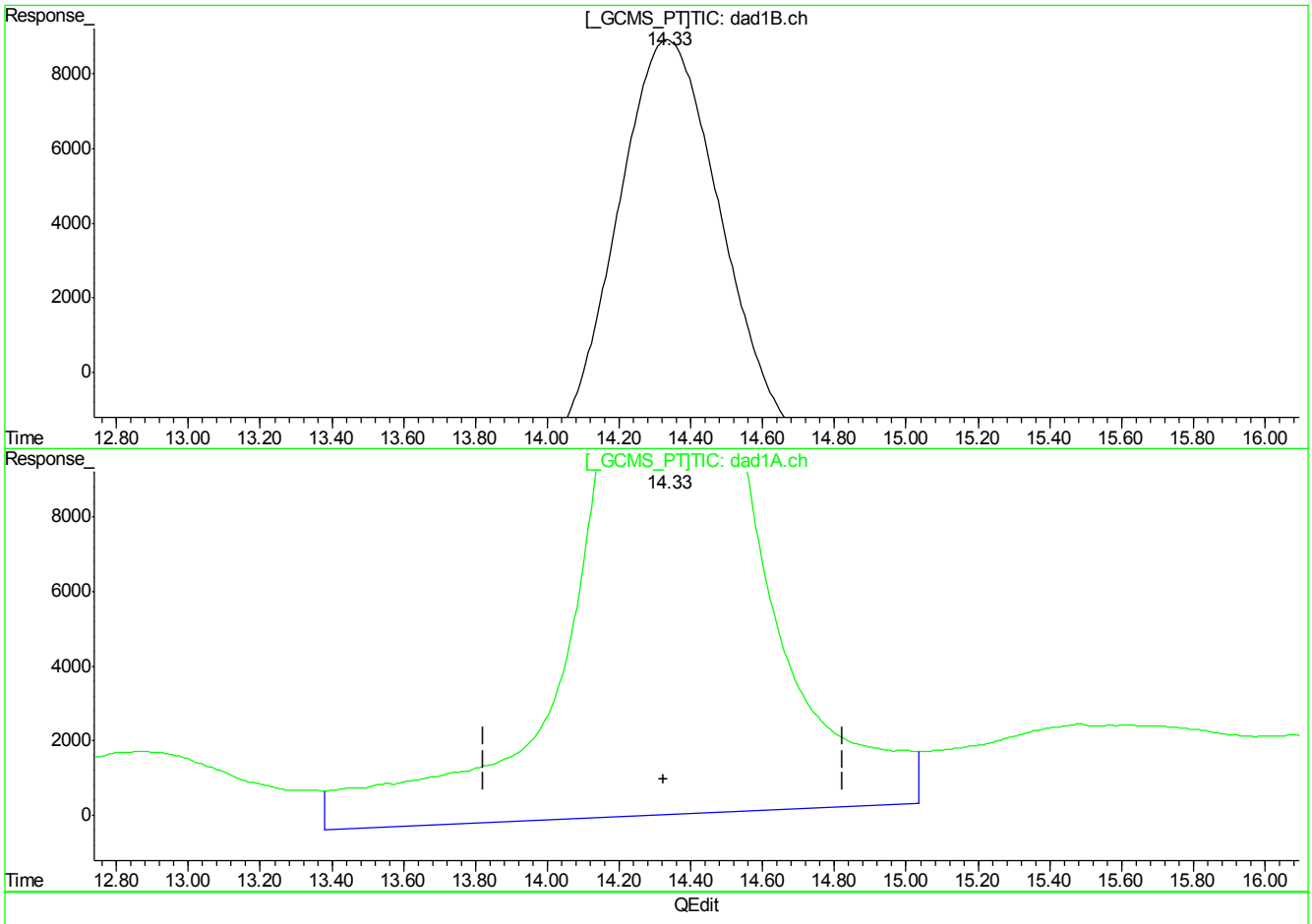
Sample Number:	OP69989-DUP2	**Method:**	SW846 8330B
Lab FileID:	GG614699.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/11/18 03:19	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614699.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0510RPB3\GG614699.D\dad1A.ch
Acq On : 11-May-2018, 03:19:36 Operator: evitam
Sample : op69989-dup2 Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.34min 484.886ppb

response 2518925

(12) 3,4-Dinitrotoluene #2 (S)

14.34min 587.602ppb

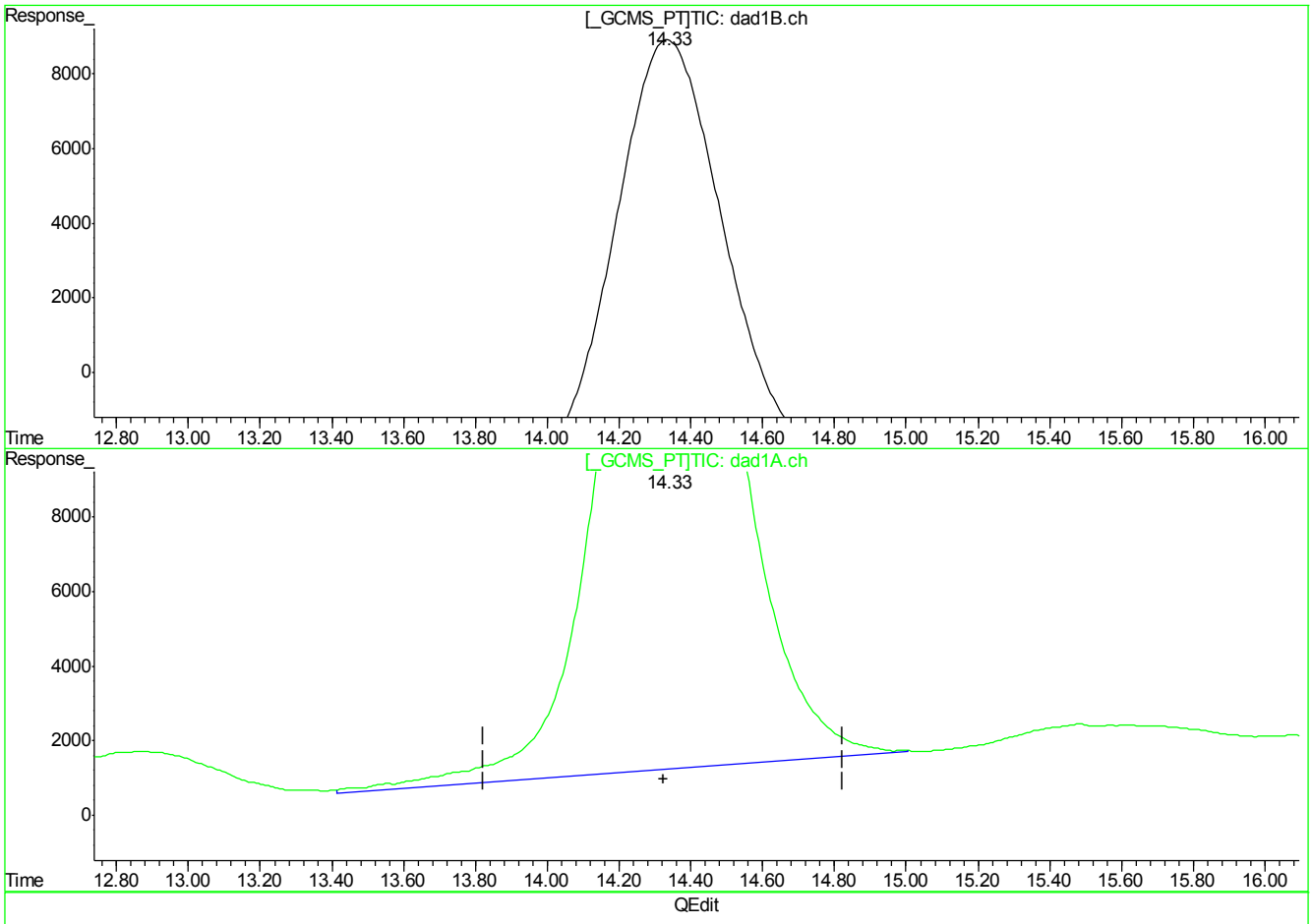
response 6356465

(+) = Expected Retention Time
GG614699.D 8330RPB.M_1113M.M Fri May 11 10:32:36 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614699.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0510RPB3\GG614699.D\dad1A.ch
Acq On : 11-May-2018, 03:19:36 Operator: evitam
Sample : op69989-dup2 Inst : G1315B
Misc : op69989,Ggg2627,10.08,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.34min 484.886ppb

response 2518925

(12) 3,4-Dinitrotoluene #2 (S)

14.33min 479.501ppb m

response 5187060

(+) = Expected Retention Time
GG614699.D 8330RPB.M_1113M.M Fri May 11 10:32:39 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:44 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.28	10.30	50941	95121	22.056	22.845m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	4.41%#	4.57%#
	Target Compounds						
1)	TNX	1.32	1.32	81134	121101	15.988	15.538
2)	HMX	1.44	1.44	31306	67296	16.059	12.805
3)	DNX	1.67	1.66	65656	83477	22.155m	17.466m
4)	MNX	2.21	2.20	59277	85161	19.065	18.169m
5)	RDX	2.78	2.78	45831	71397	19.752	19.064m
6)	1,3,5-Trinitrobe	4.41	4.41	100308	158806	20.299m	17.427m
7)	1,3-Dinitrobenze	5.59	5.60	102063	76764	16.722	19.482m
8)	3,5-Dinitroanili	5.88	5.89	94329	116035	20.575	14.714
9)	Nitrobenzene	7.10	7.09	75214	65624	19.715	18.304m
10)	Nitroglycerin	0.00	8.40	0	141549	N.D. d	106.959m
11)	Tetryl	8.63	8.68	93861	110112	29.498	21.477m
12)	2,4,6-Trinitroto	9.10	9.11	99127	75942	27.471	17.706m
13)	2-Amino-4,6-Dini	9.41	9.38	78176	111824	19.475	20.113m
14)	4-Amino-2,6-Dini	9.78	9.89	30840	86551	10.928	16.014m#
16)	2,4-Dinitrotolue	10.94	11.00	97322	51333	18.050	15.376m
17)	2,6-Dinitrotolue	11.43	11.44	74215	51922	22.573	13.240m#
18)	o-Nitrotoluene	14.67	14.68	47689	59648	19.100	16.353m
19)	p-Nitrotoluene	15.23	15.29	63838	42073	17.255m	13.295m
20)	m-Nitrotoluene	16.19	16.42	62788	64213	17.018m	14.807m
21)	PETN	0.00	18.50	0	151593	N.D. d	109.347m

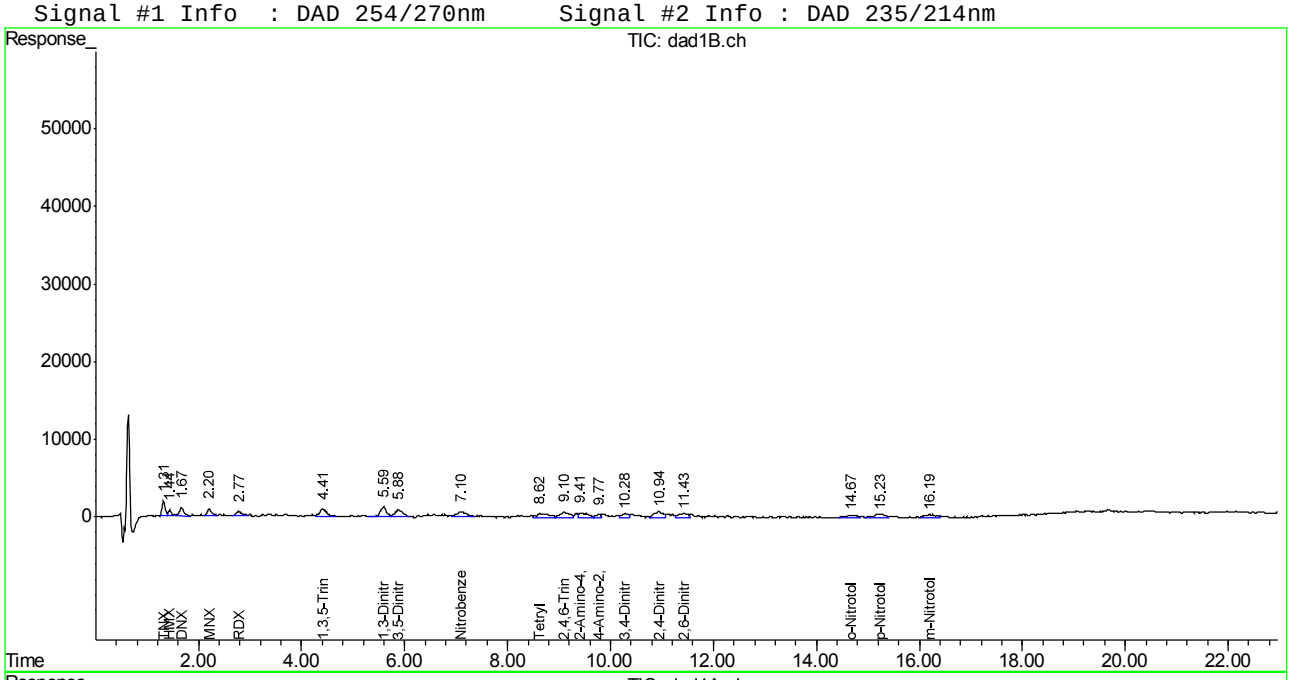
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059464.D 8330B_0419PLUS.M Fri Apr 20 08:01:18 2018 Page 1

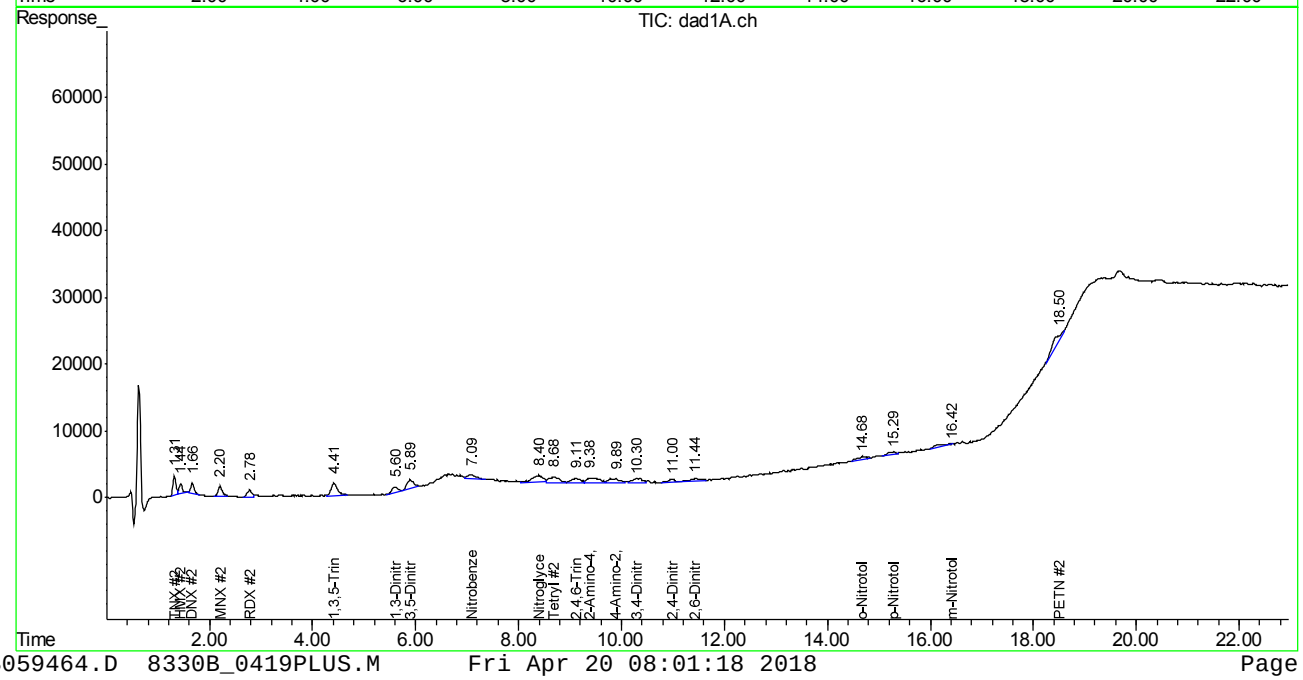
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:52 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

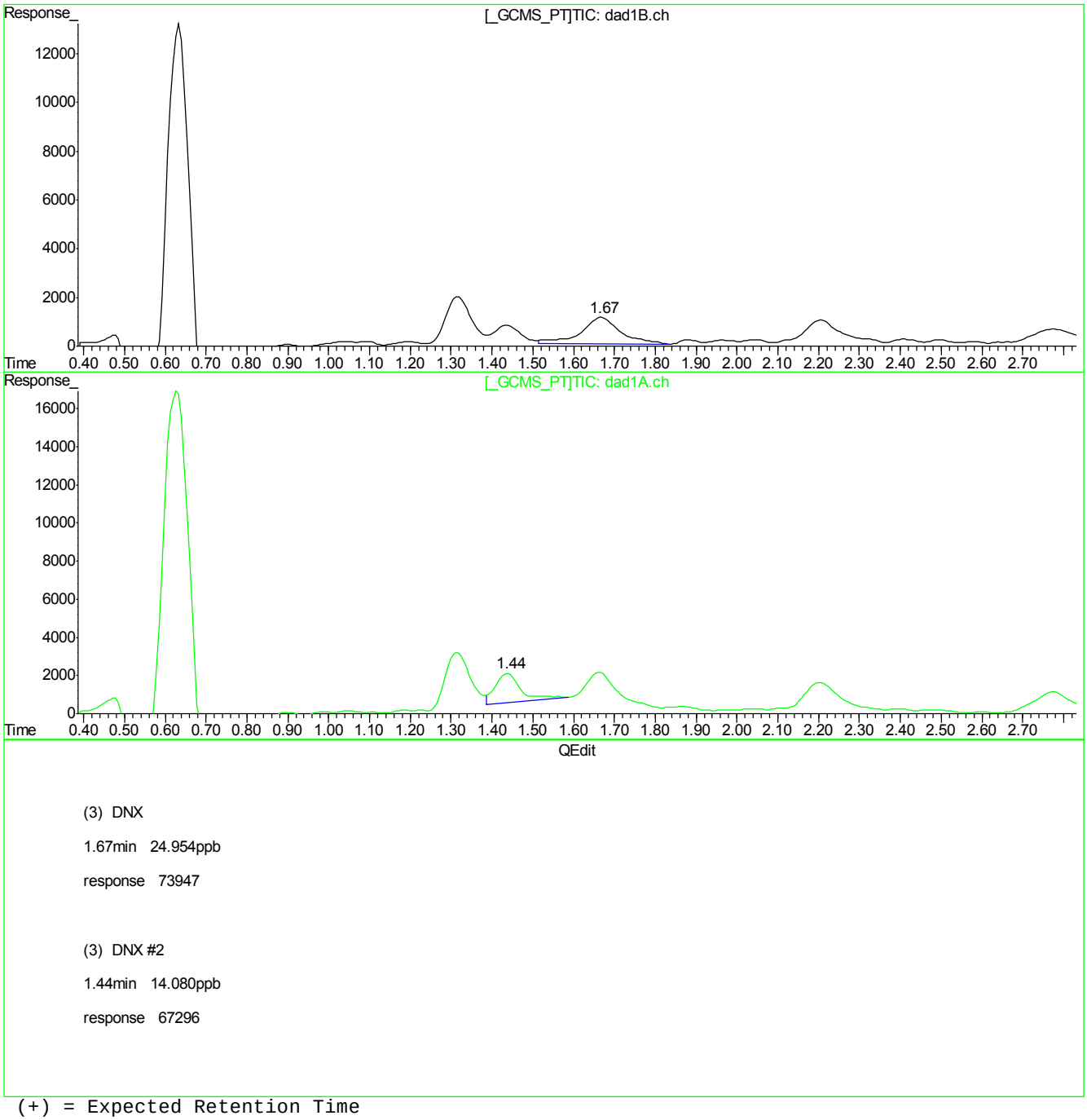
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059464.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 10:14	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
DNX		2	1.66	Poorly defined baseline
DNX		1	1.67	Poorly defined baseline
MNX		2	2.20	Poorly defined baseline
RDX	121-82-4	2	2.78	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.41	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.41	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.09	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.40	Poorly defined baseline
Tetryl	479-45-8	2	8.68	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.11	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.38	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	9.89	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.30	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.00	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.44	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.68	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	15.23	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.29	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	16.19	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.42	Poorly defined baseline
PETN	78-11-5	2	18.50	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 24.954ppb

response 73947

(3) DNX #2

1.44min 14.080ppb

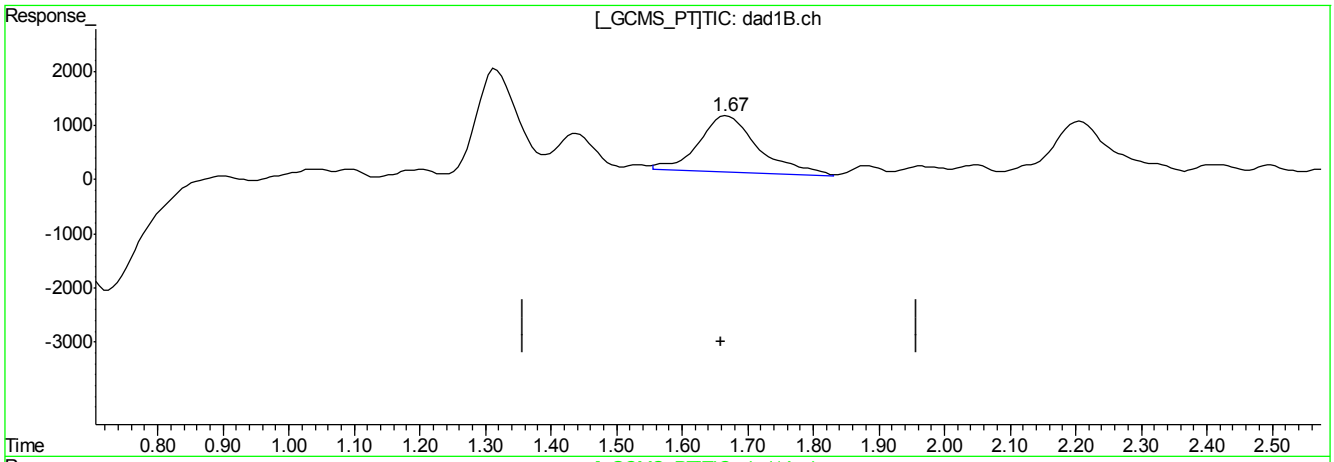
response 67296

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:48:46 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 22.155ppb m

response 65656

(3) DNX #2

1.66min 17.466ppb m

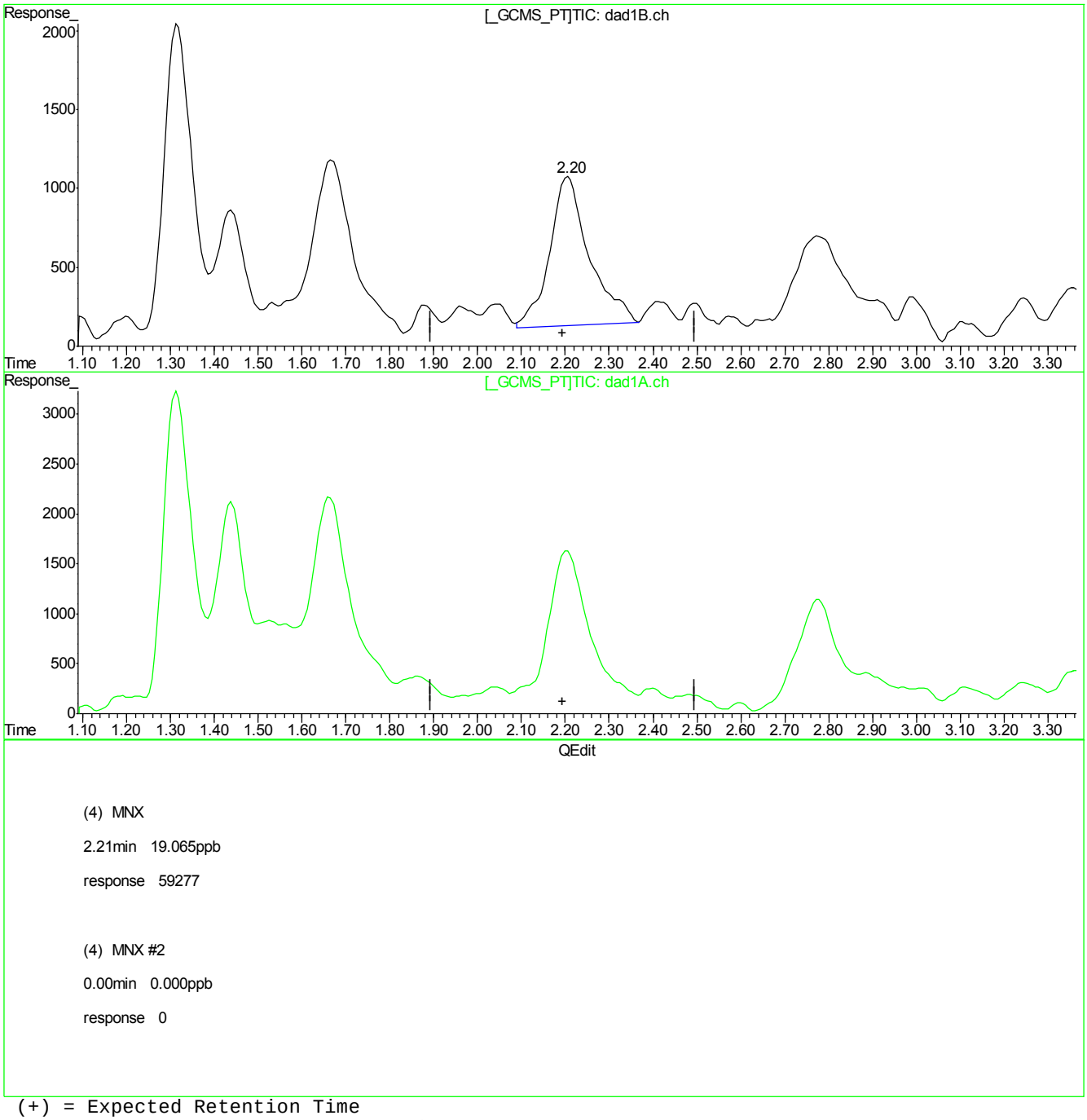
response 83477

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:48:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

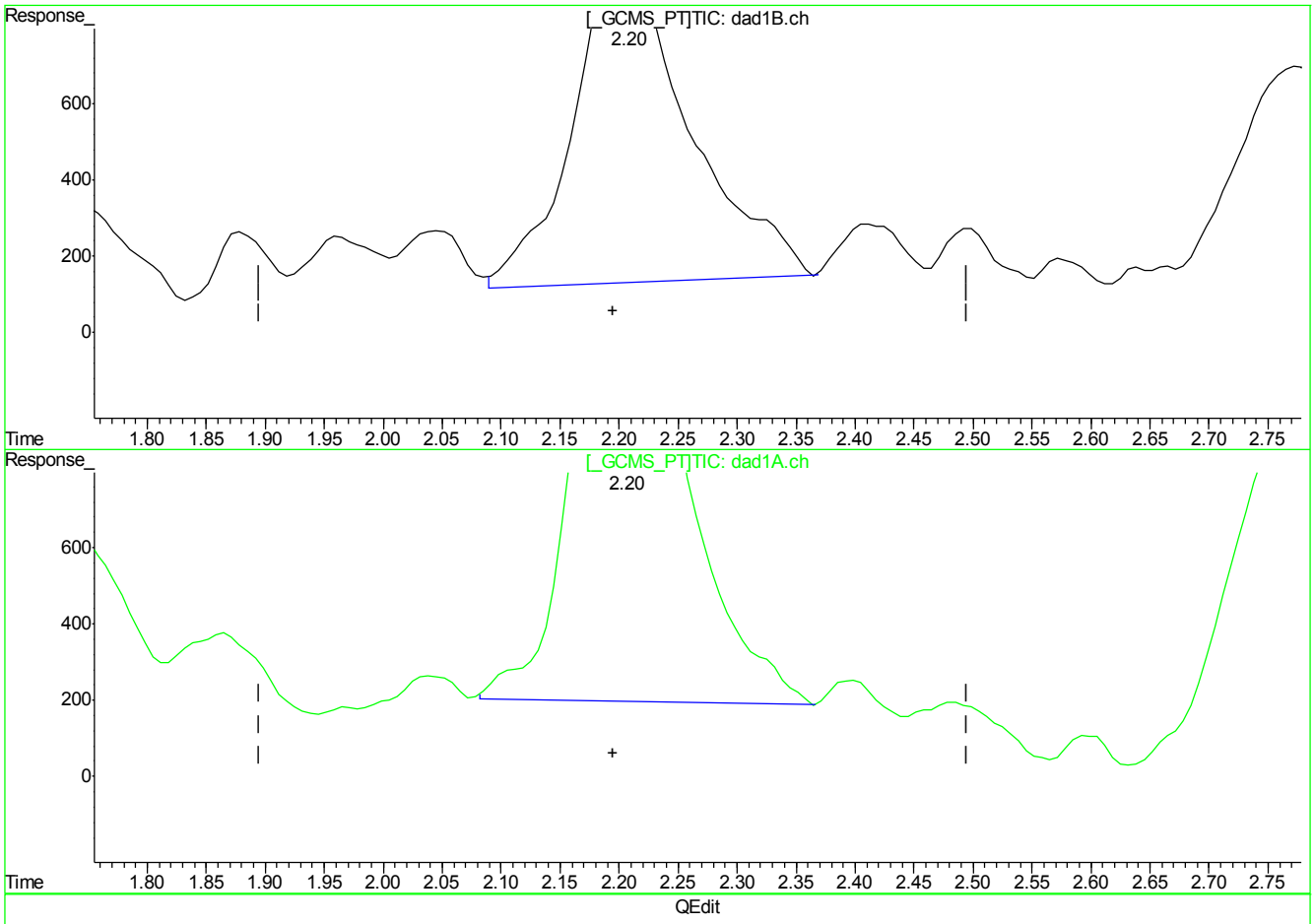


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:01 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(4) MNX

2.21min 19.065ppb

response 59277

(4) MNX #2

2.20min 18.169ppb m

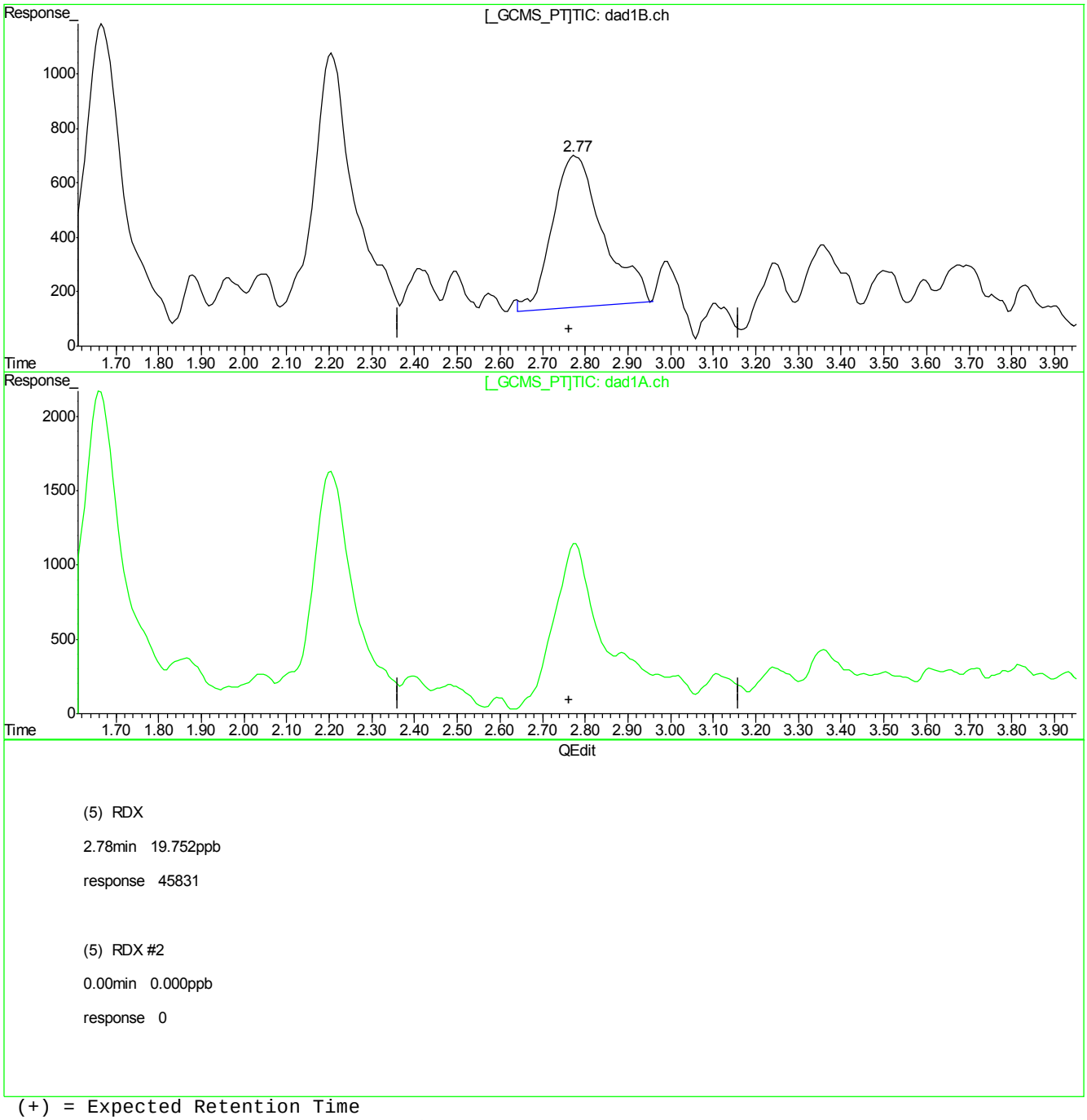
response 85161

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:06 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:09 2018

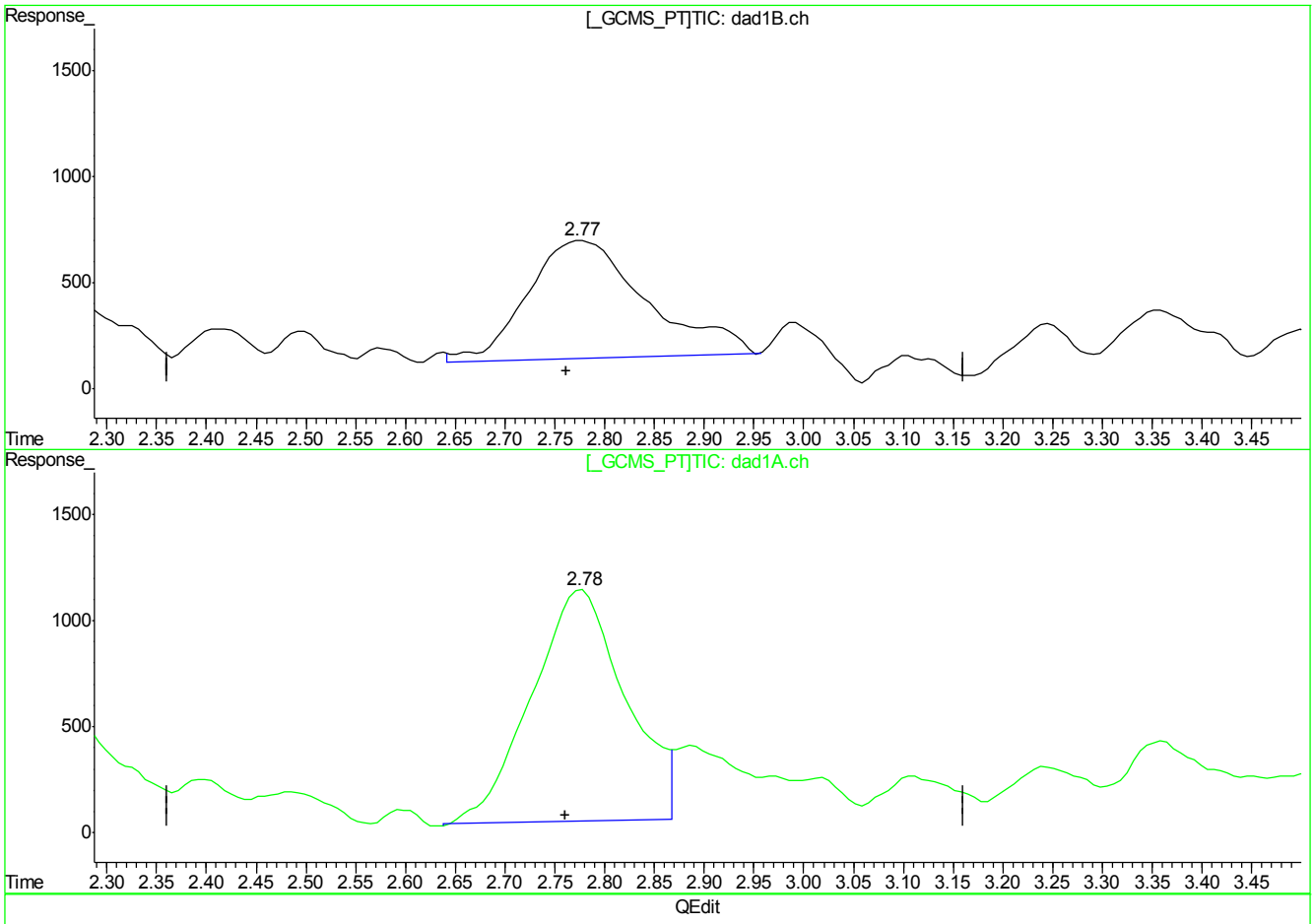
7.7.1.6

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(5) RDX

2.78min 19.752ppb

response 45831

(5) RDX #2

2.78min 19.064ppb m

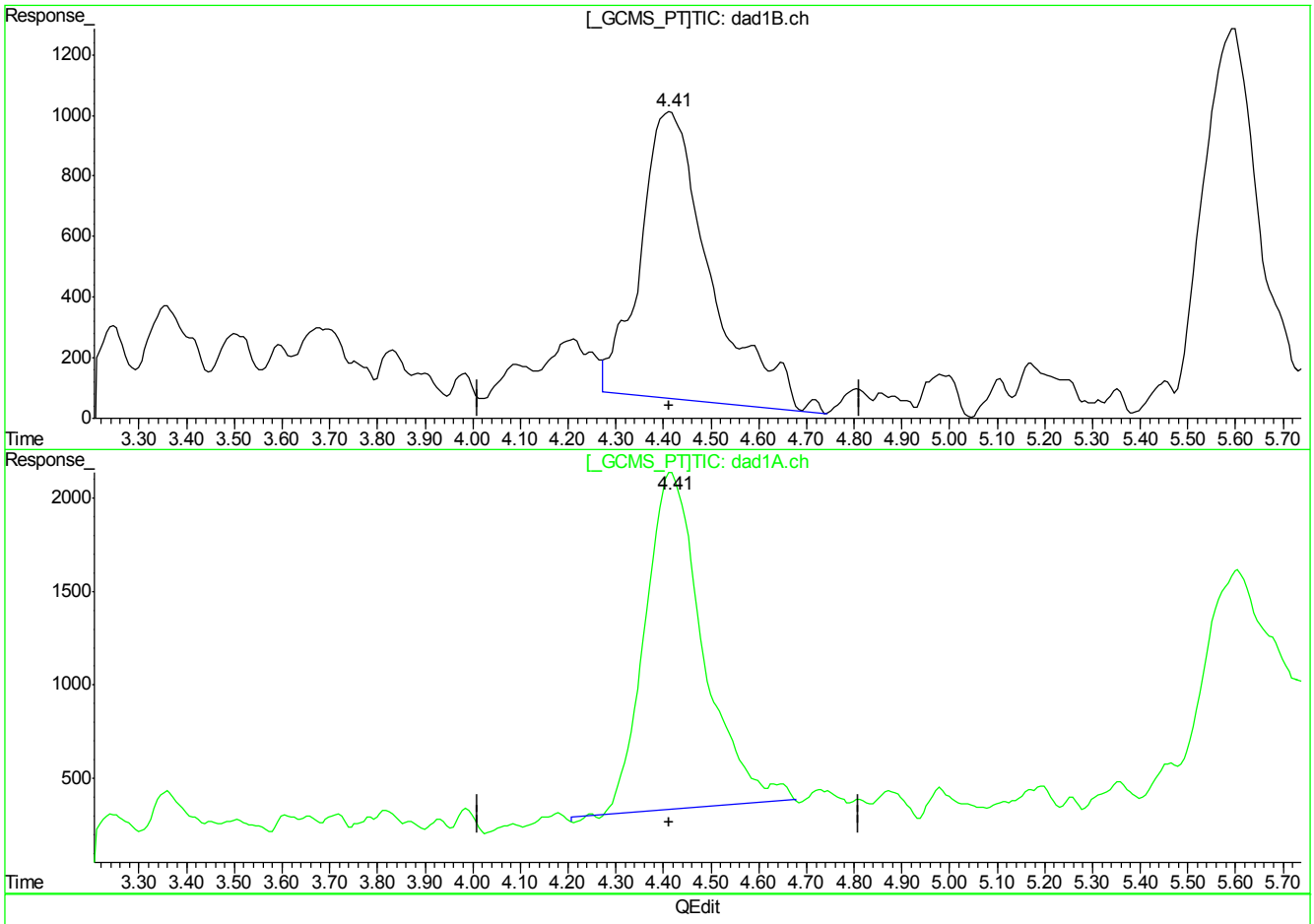
response 71397

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:12 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(6) 1,3,5-Trinitrobenzene

4.41min 19.710ppb

response 97395

(6) 1,3,5-Trinitrobenzene #2

4.42min 16.806ppb

response 153155

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:15 2018

7.7.1.8

7

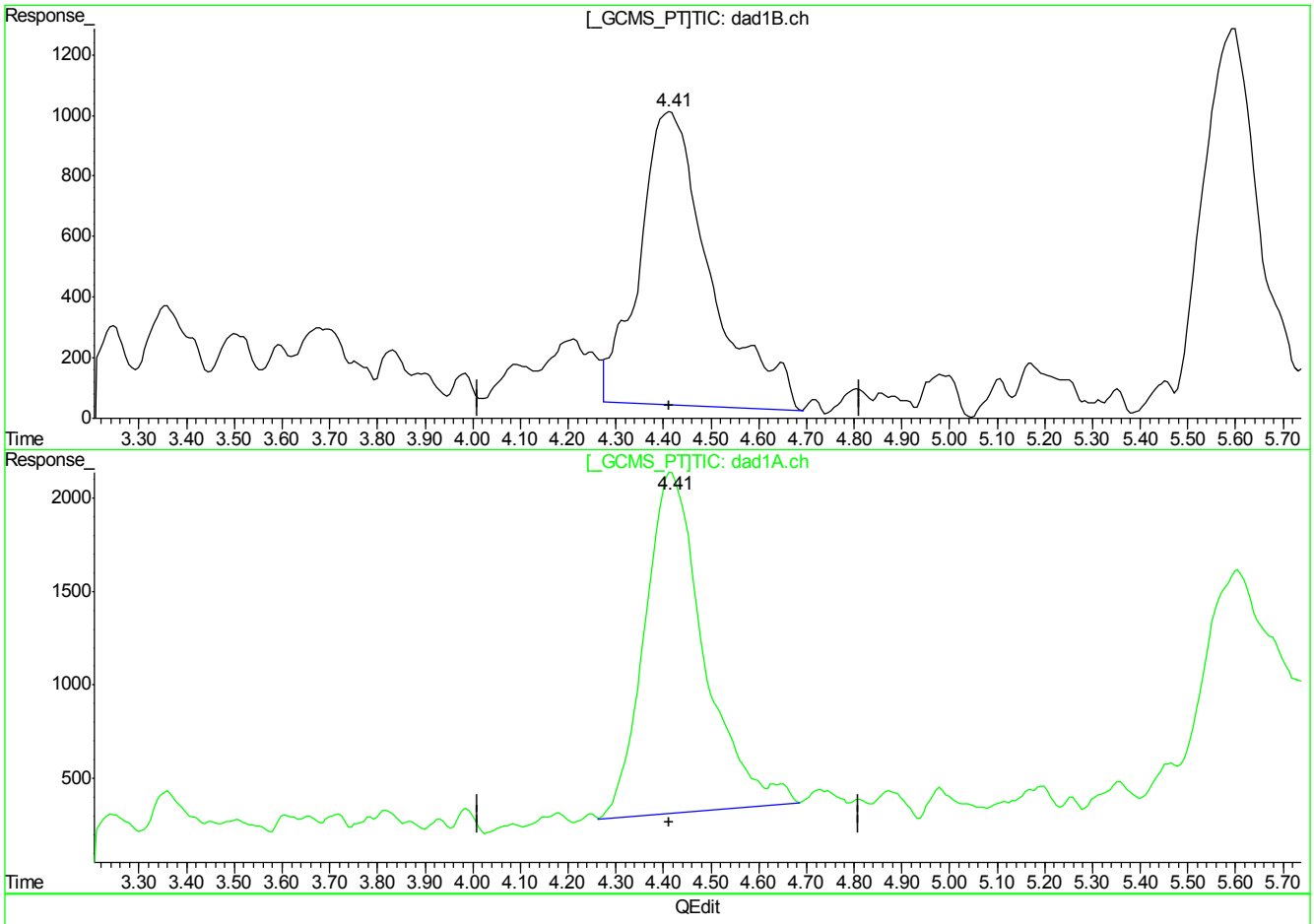
FA53801

BB059464.D edits: 1,3,5-Trinitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(6) 1,3,5-Trinitrobenzene

4.41min 20.299ppb m

response 100308

(6) 1,3,5-Trinitrobenzene #2

4.41min 17.427ppb m

response 158806

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:23 2018

7.7.19

7

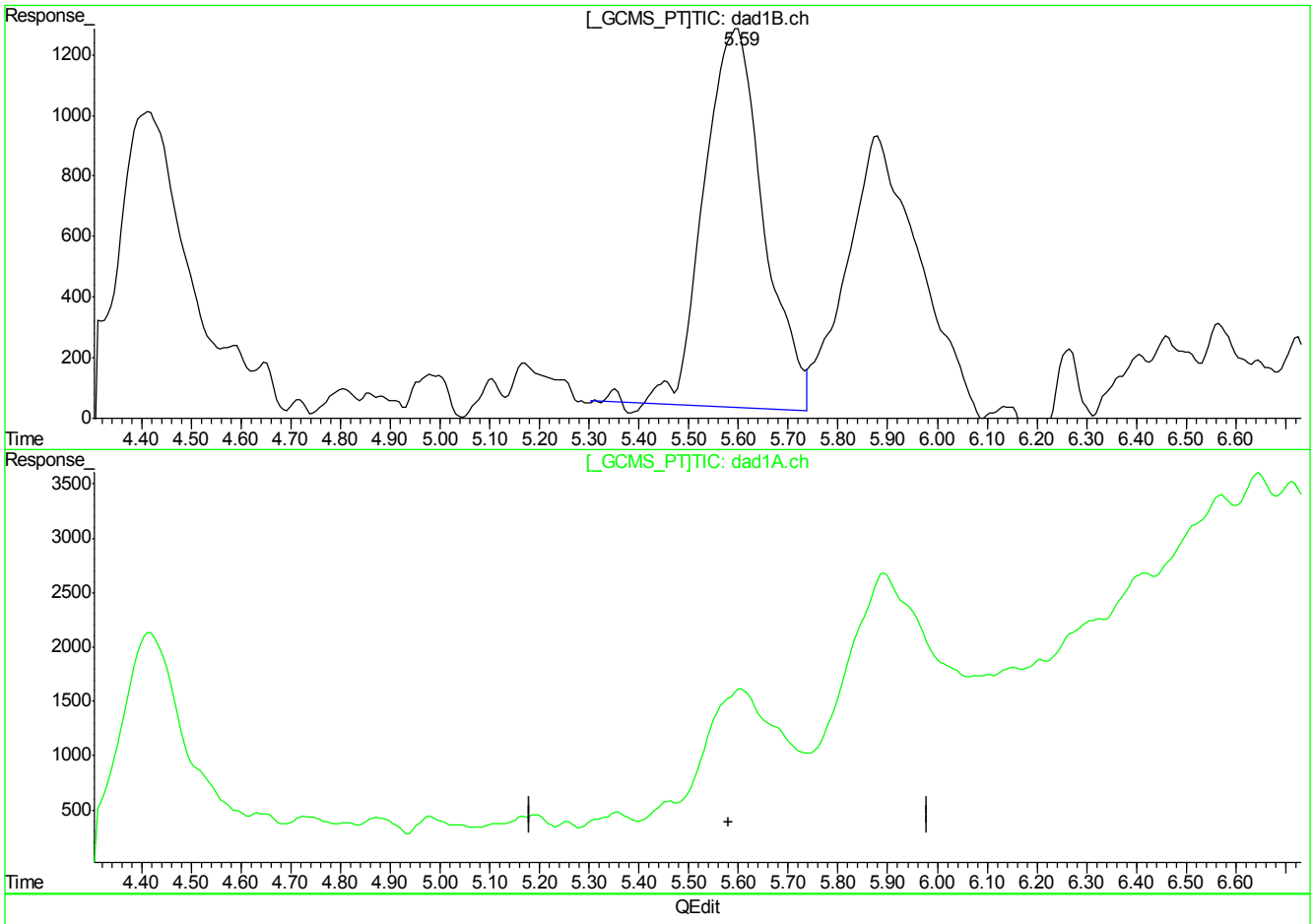
FA53801

BB059464.D edits: 1,3,5-Trinitrobenzene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 16.722ppb

response 102063

(7) 1,3-Dinitrobenzene #2

0.00min 0.000ppb

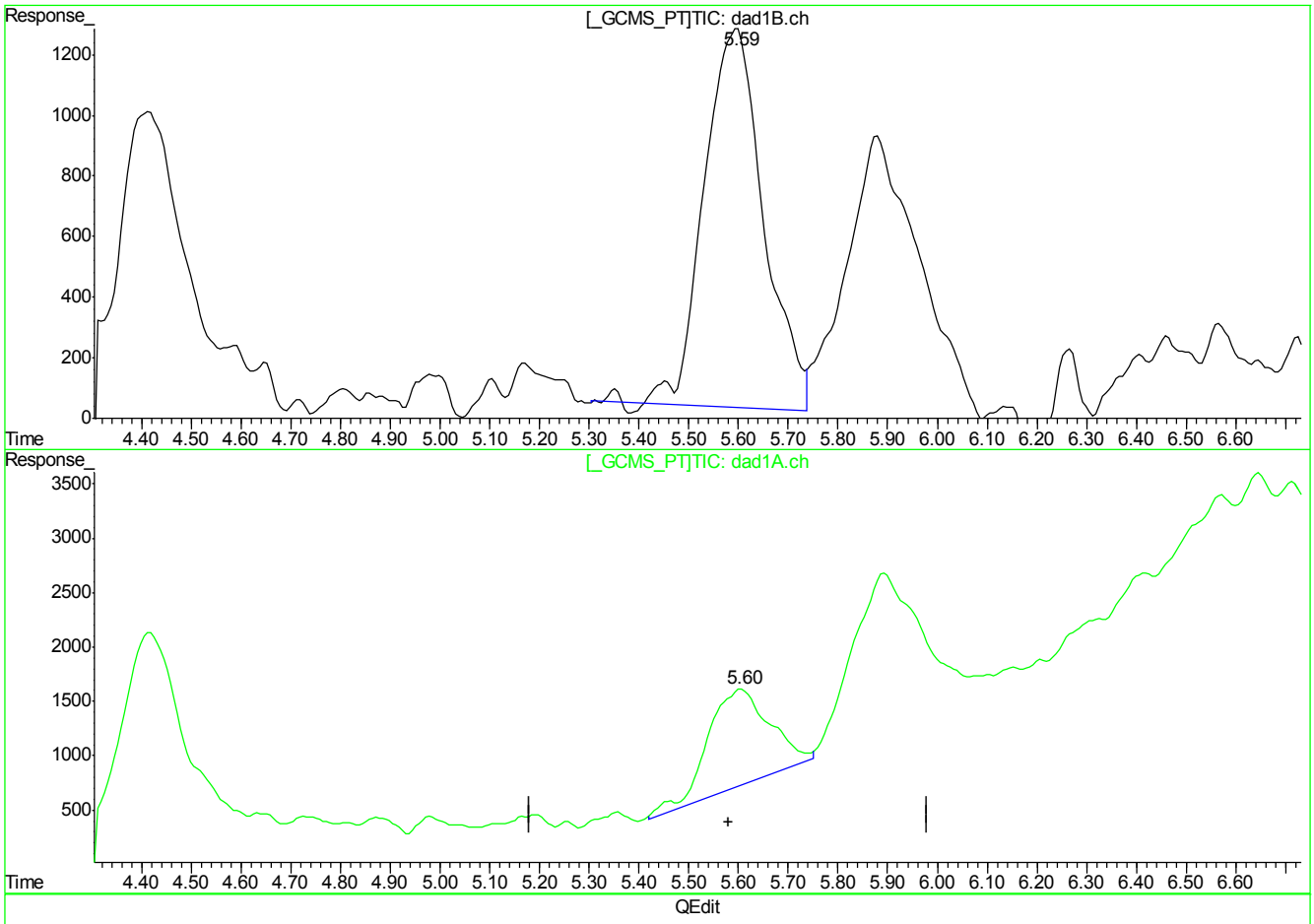
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:26 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 16.722ppb

response 102063

(7) 1,3-Dinitrobenzene #2

5.60min 19.482ppb m

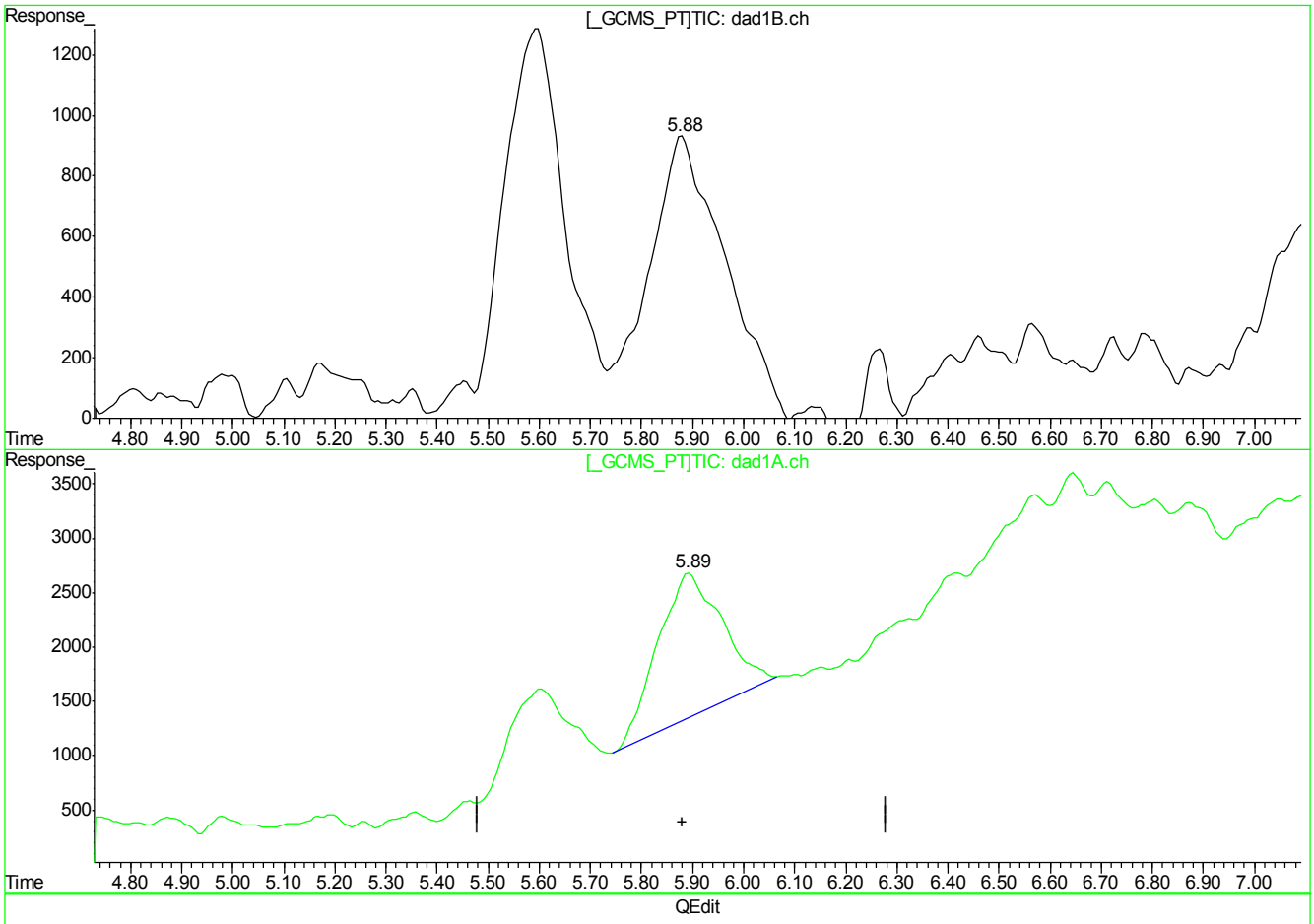
response 76764

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:30 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.88min 20.575ppb

response 94329

(8) 3,5-Dinitroaniline #2

5.89min 14.714ppb

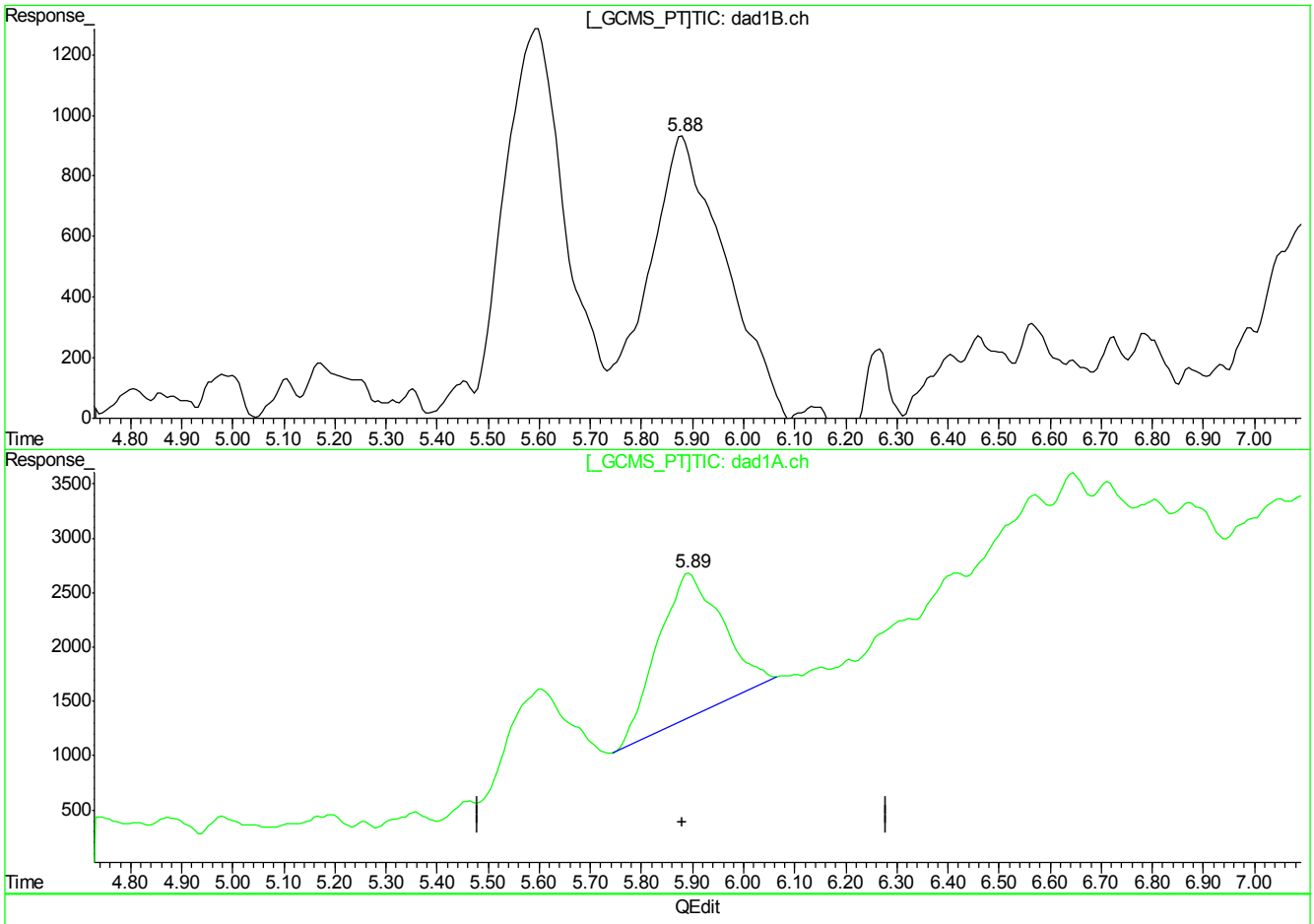
response 116035

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:32 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

5.88min 20.575ppb

response 94329

(8) 3,5-Dinitroaniline #2

5.89min 14.714ppb

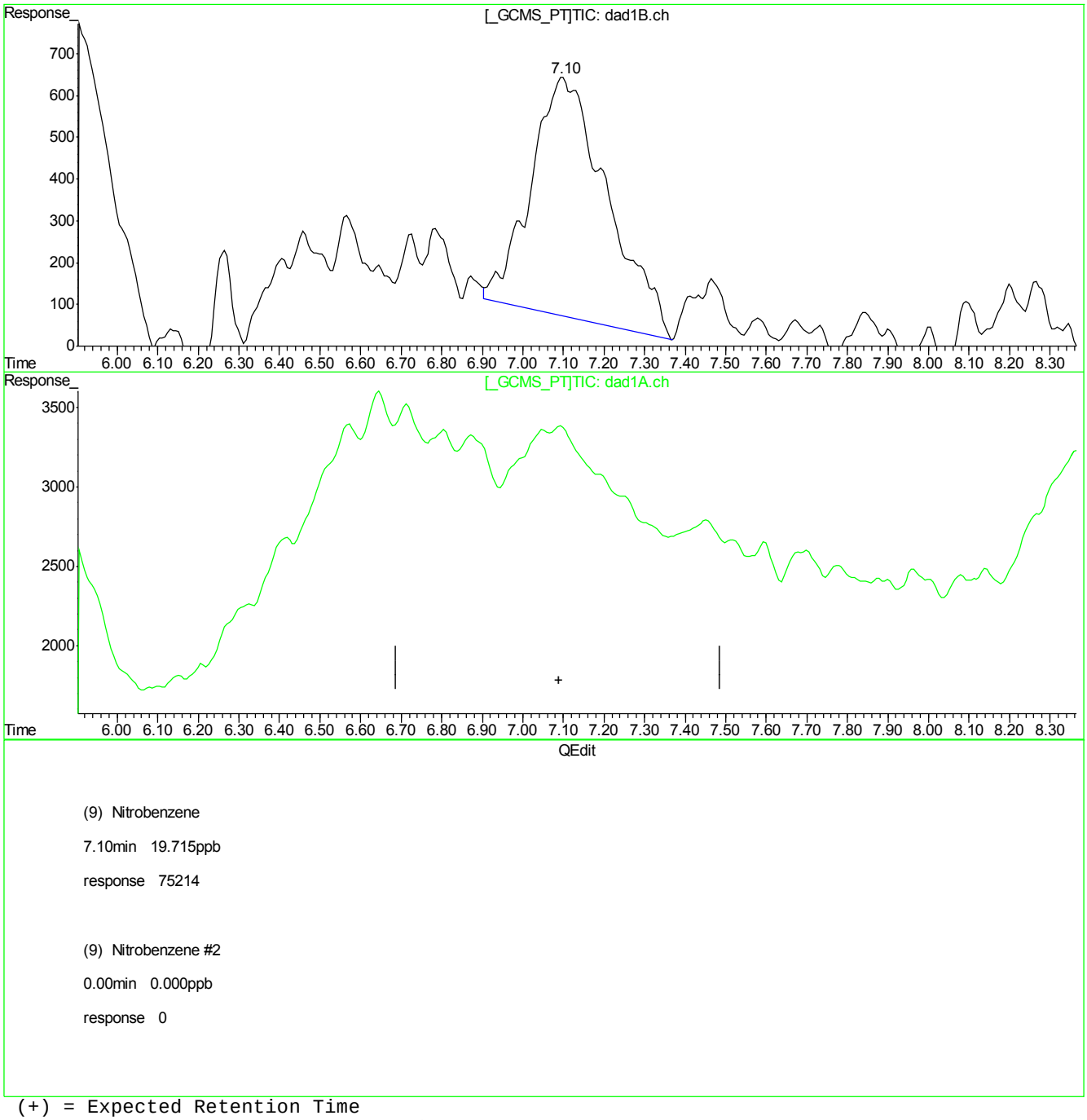
response 116035

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.10min 19.715ppb

response 75214

(9) Nitrobenzene #2

0.00min 0.000ppb

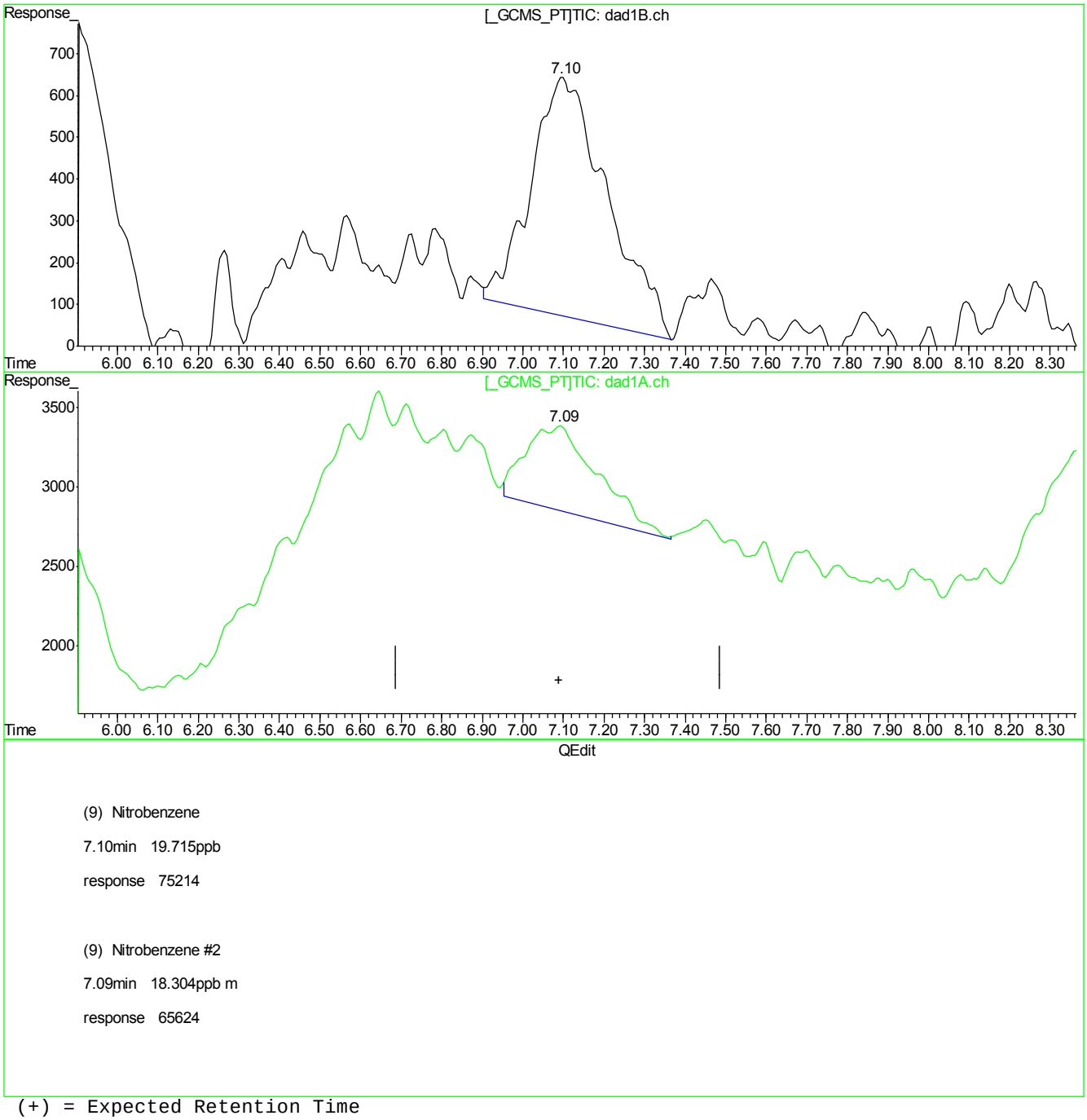
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:39 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.10min 19.715ppb

response 75214

(9) Nitrobenzene #2

7.09min 18.304ppb m

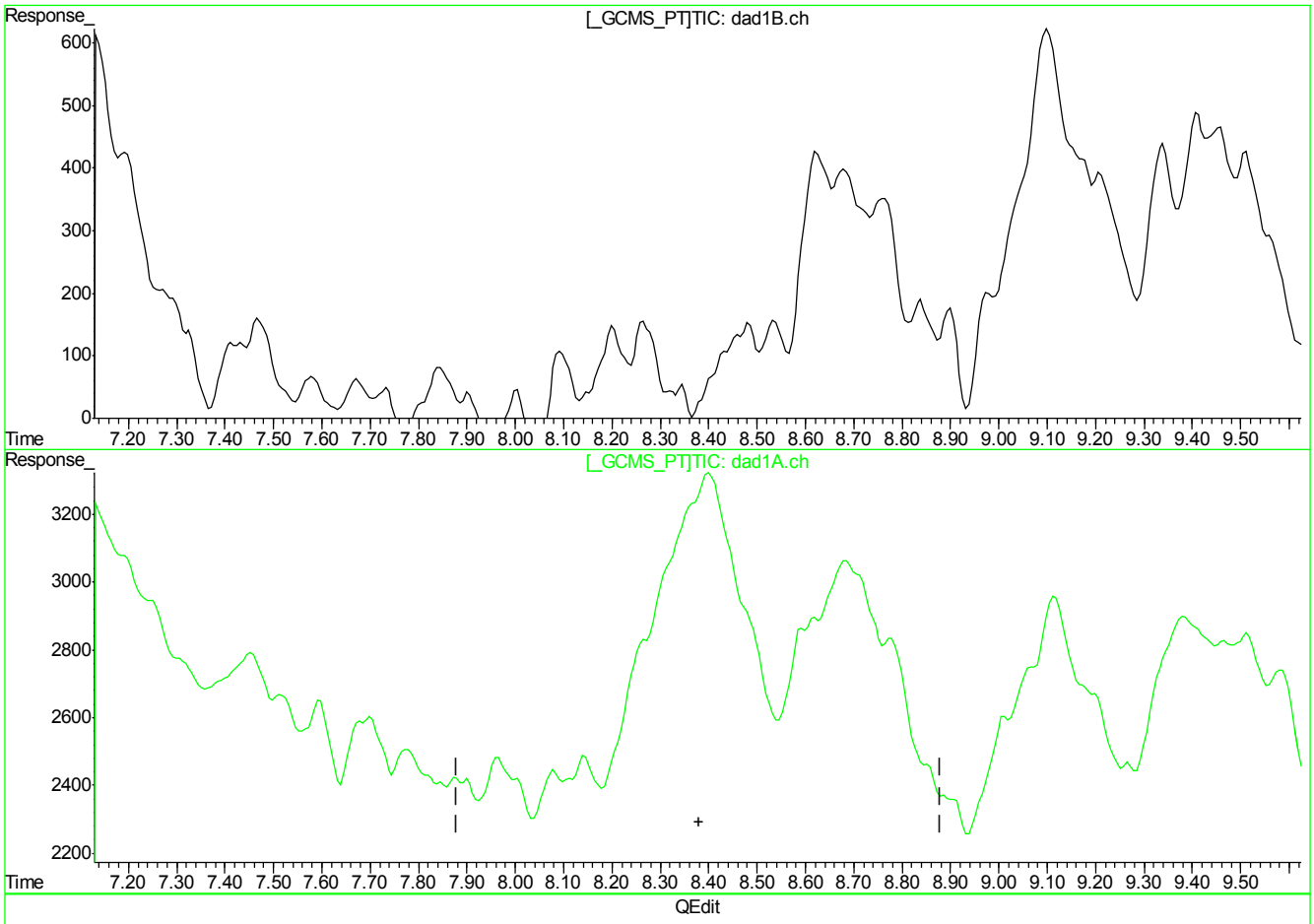
response 65624

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

0.00min 0.000ppb

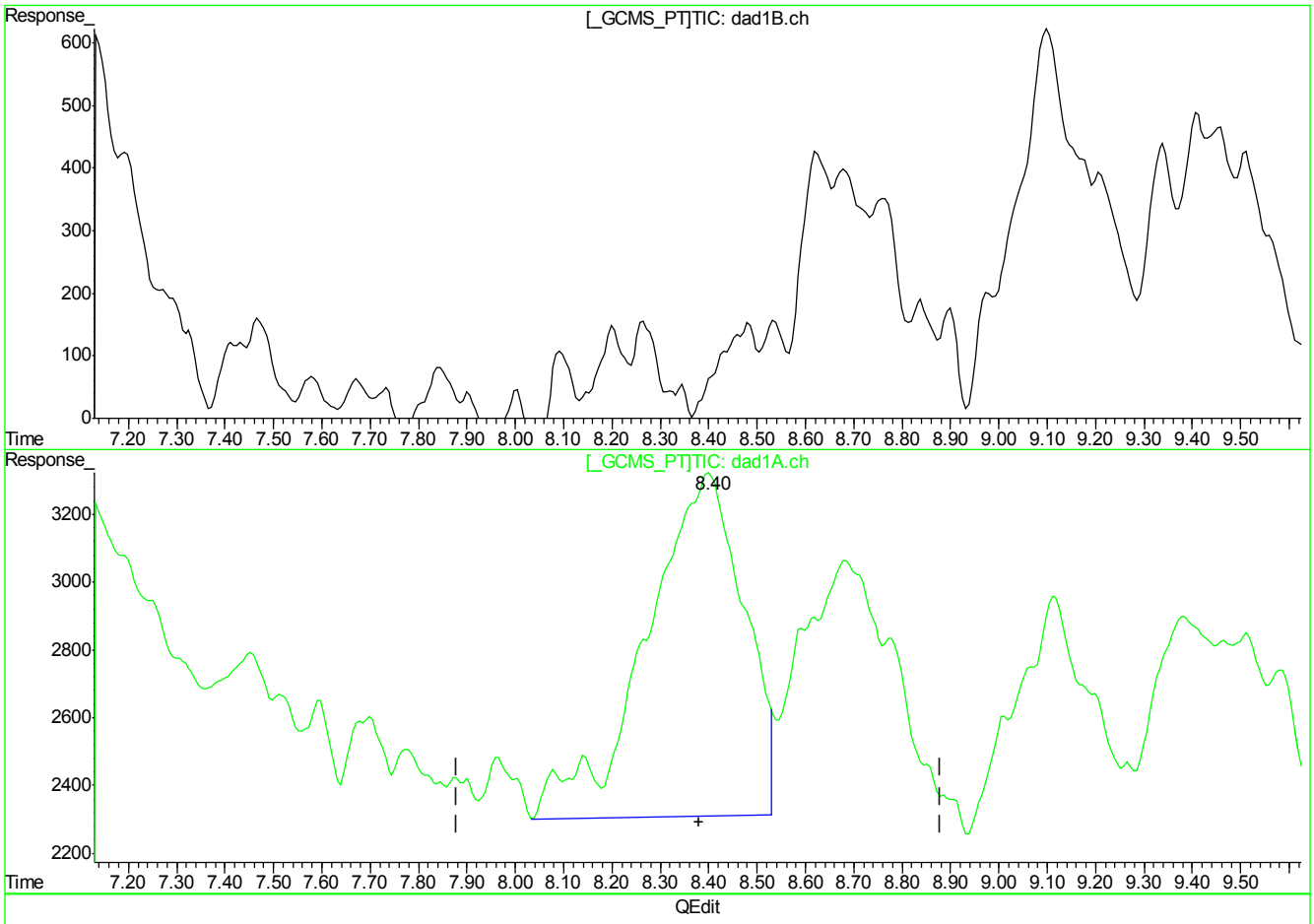
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:47 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.40min 106.959ppb m

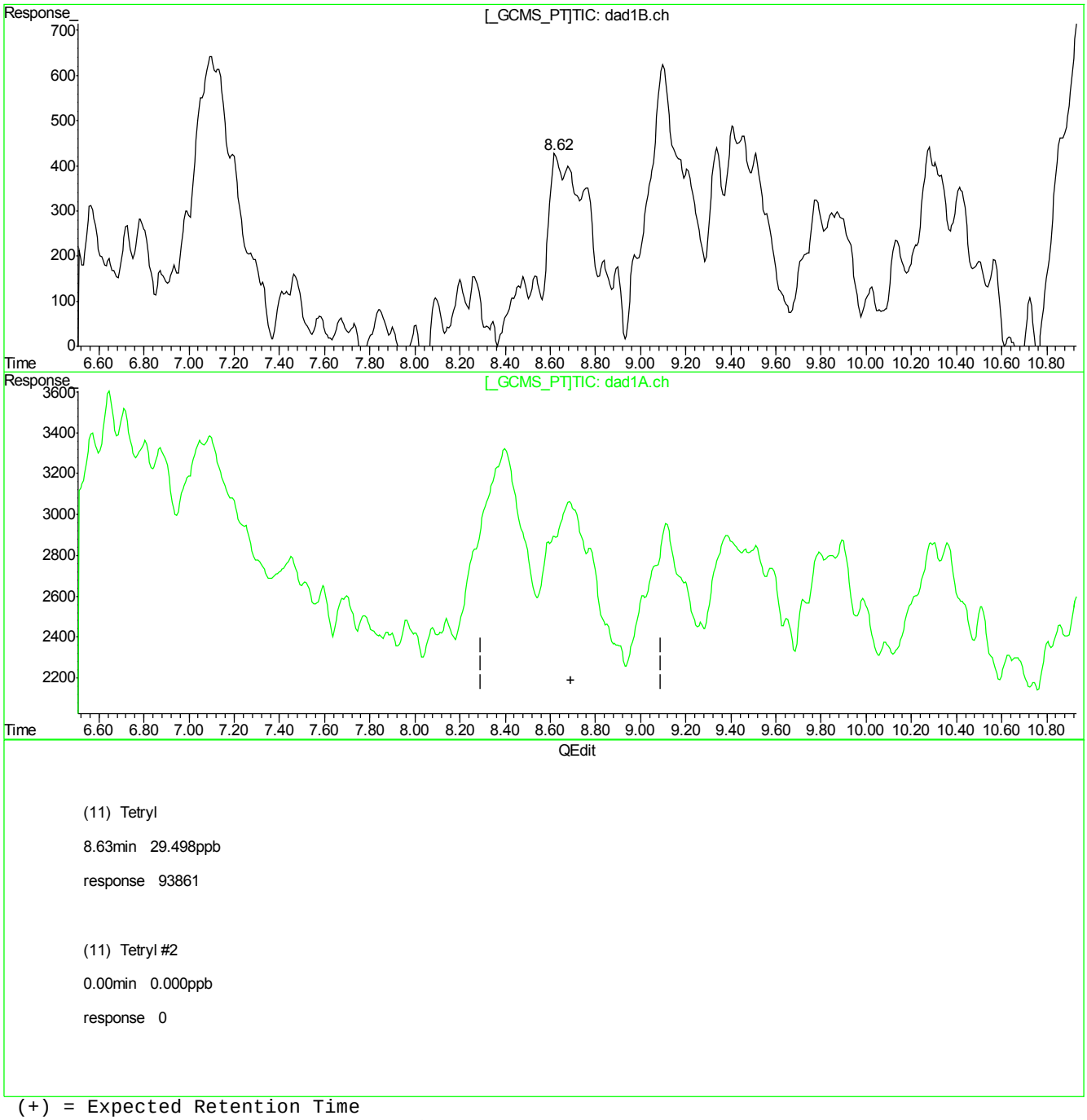
response 141549

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:49:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.63min 29.498ppb

response 93861

(11) Tetryl #2

0.00min 0.000ppb

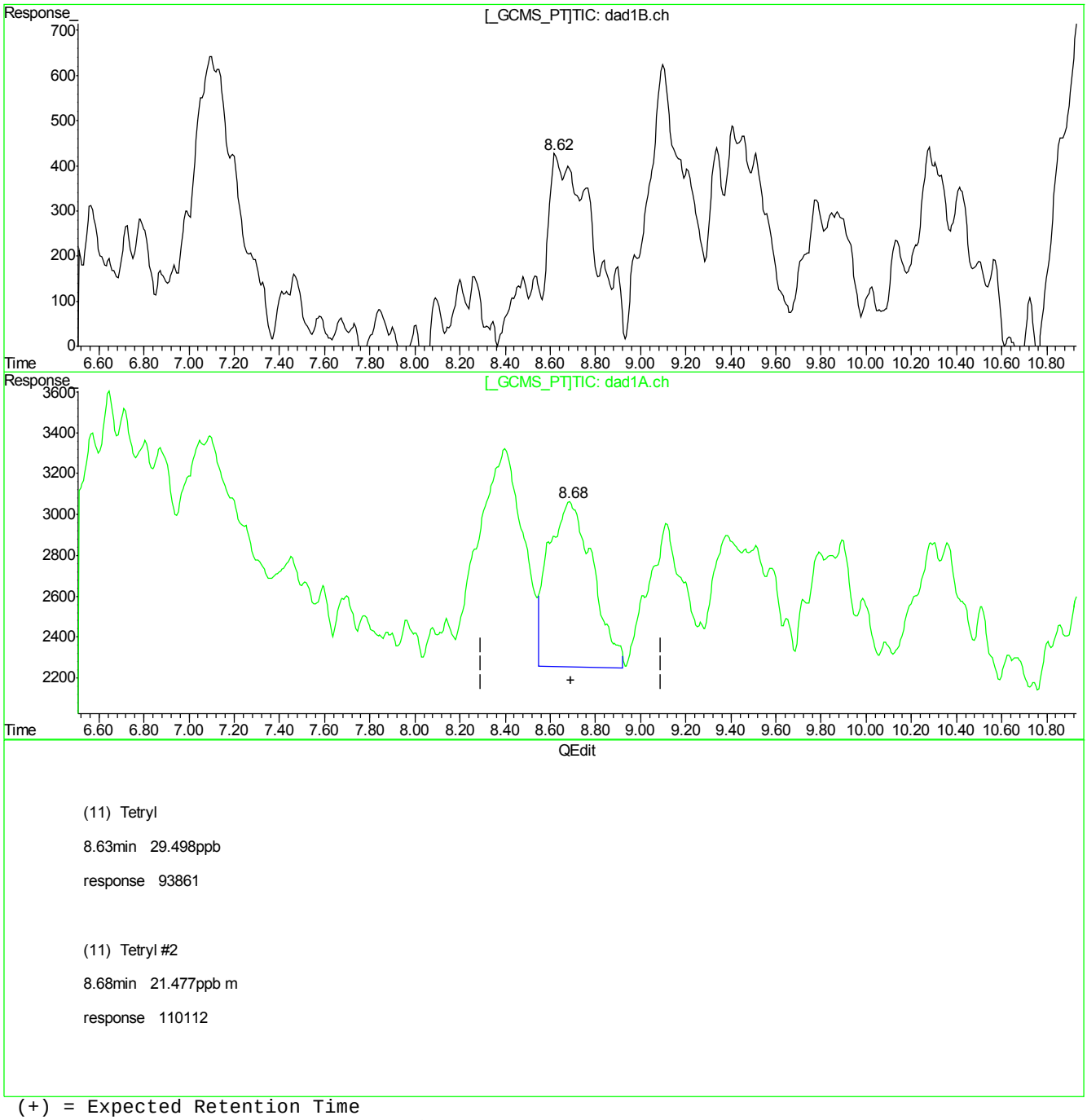
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.63min 29.498ppb

response 93861

(11) Tetryl #2

8.68min 21.477ppb m

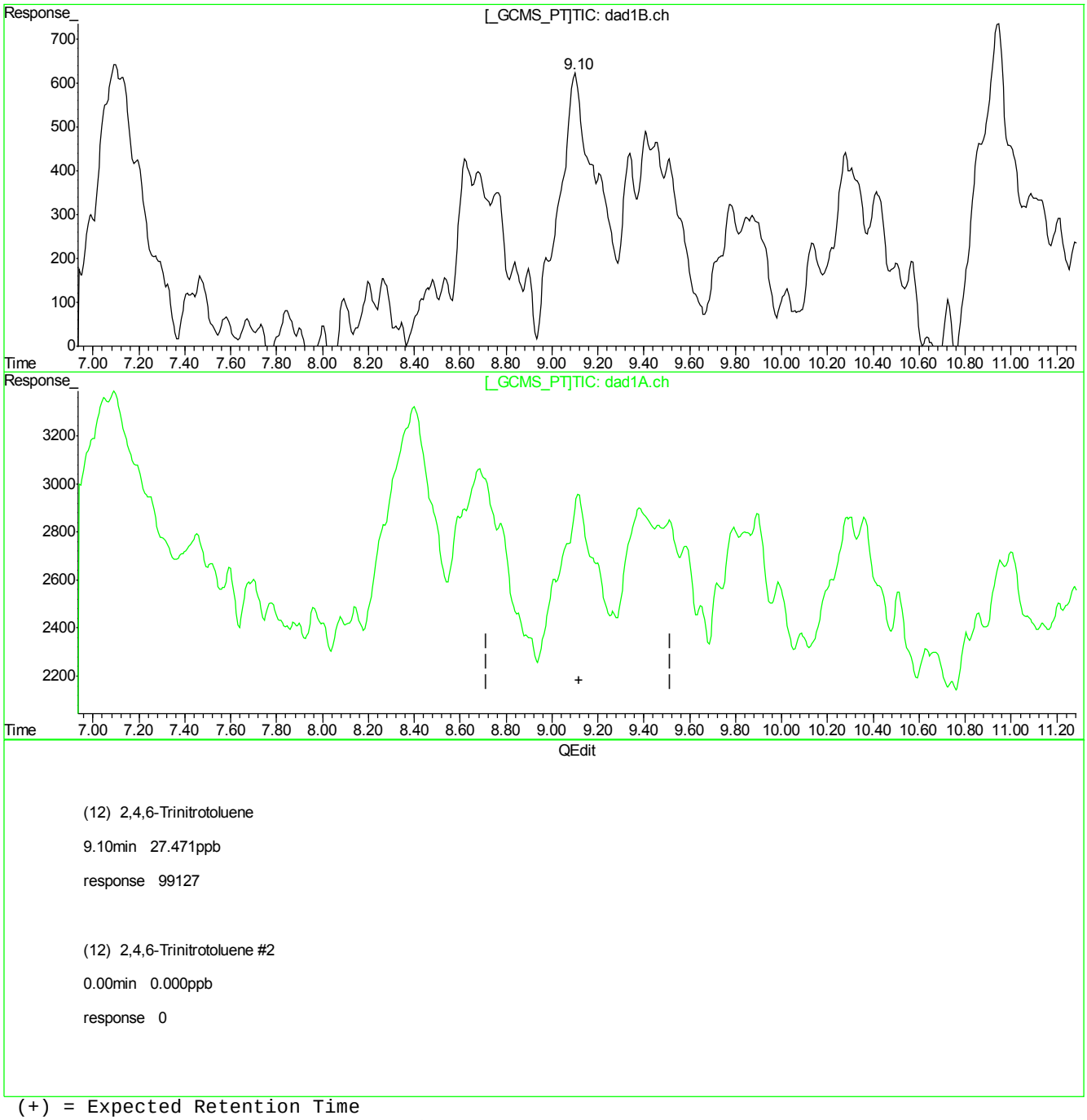
response 110112

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

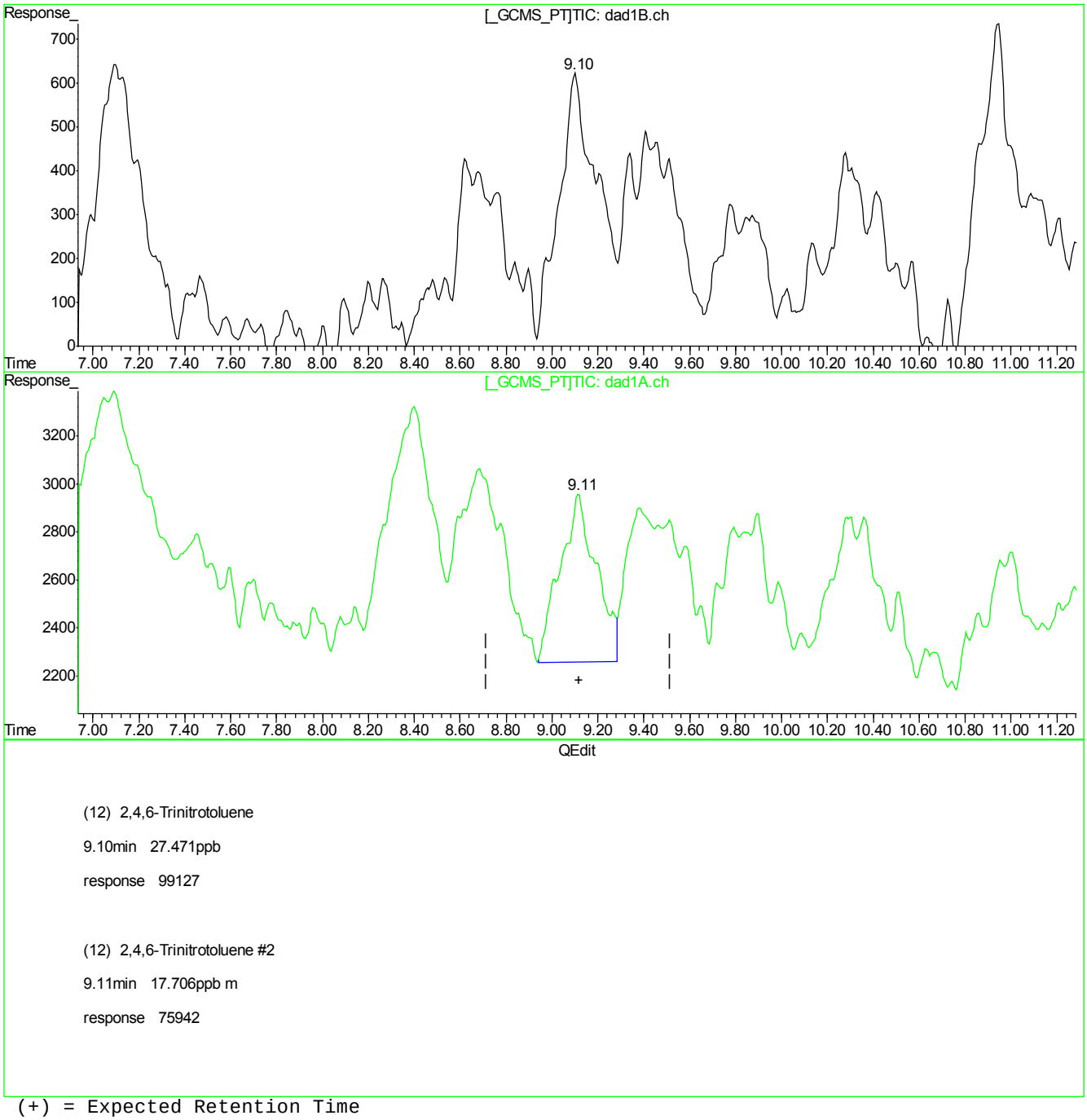


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

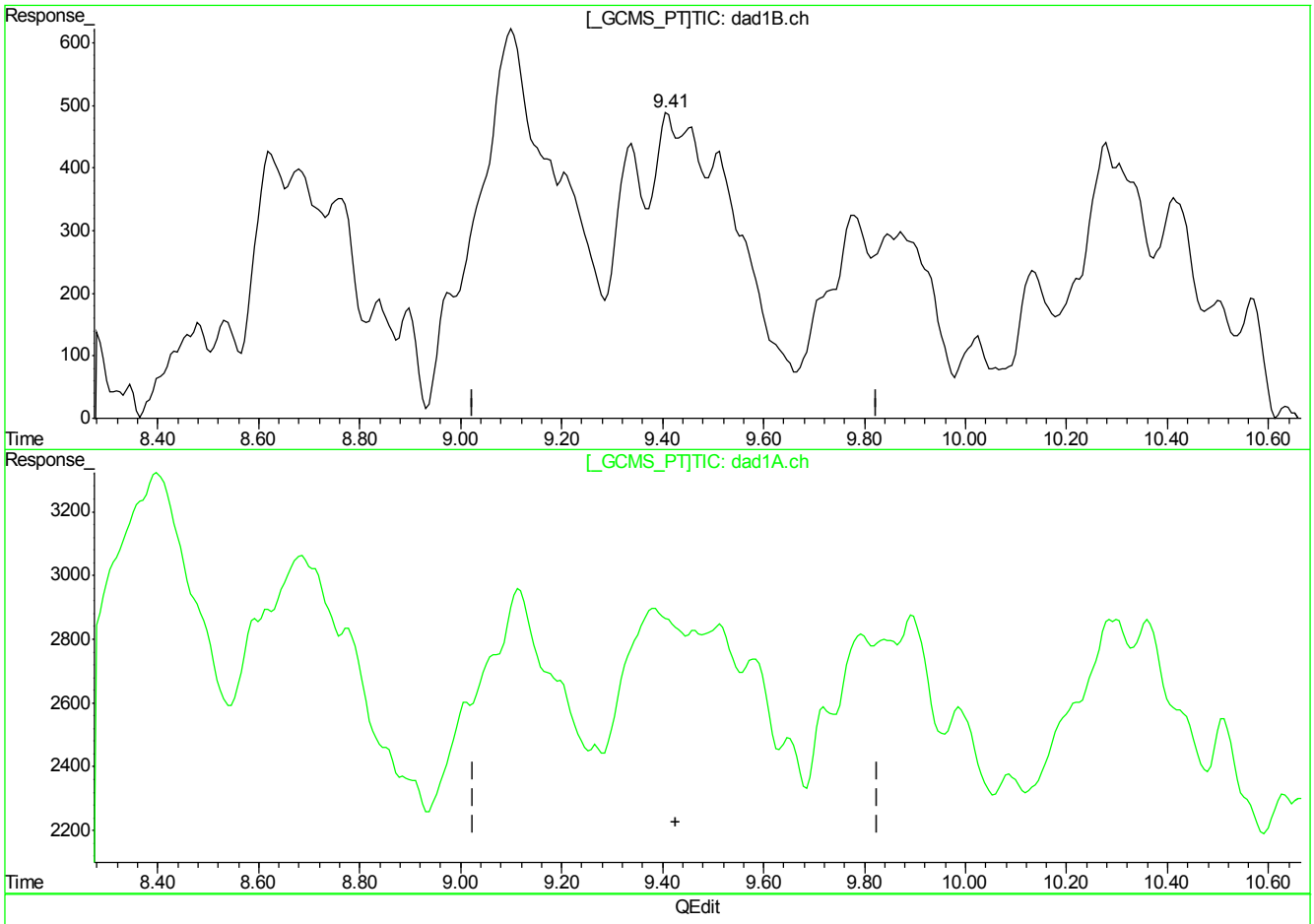


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:23 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.41min 19.475ppb

response 78176

(13) 2-Amino-4,6-Dinitrotoluene #2

0.00min 0.000ppb

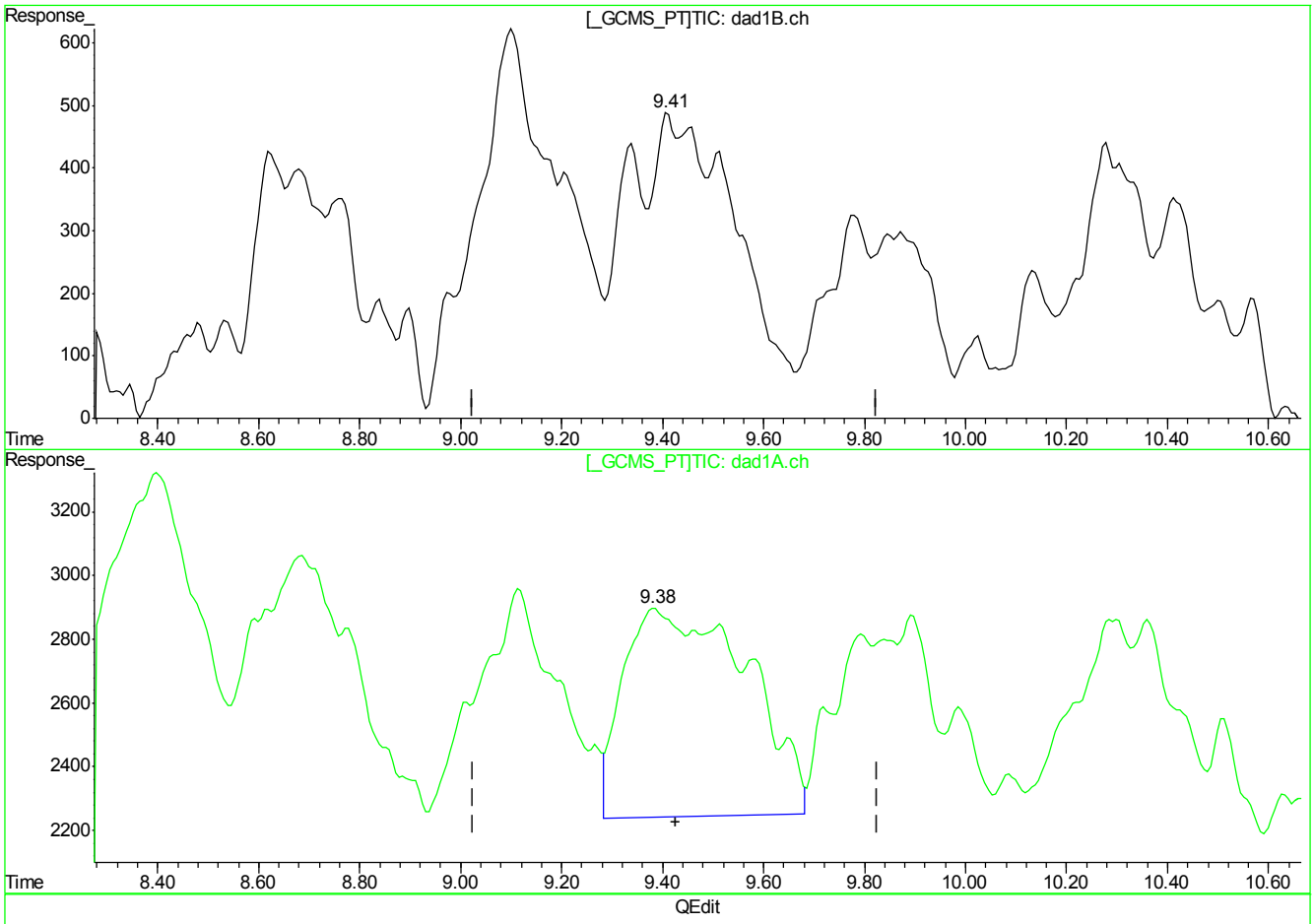
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.41min 19.475ppb

response 78176

(13) 2-Amino-4,6-Dinitrotoluene #2

9.38min 20.113ppb m

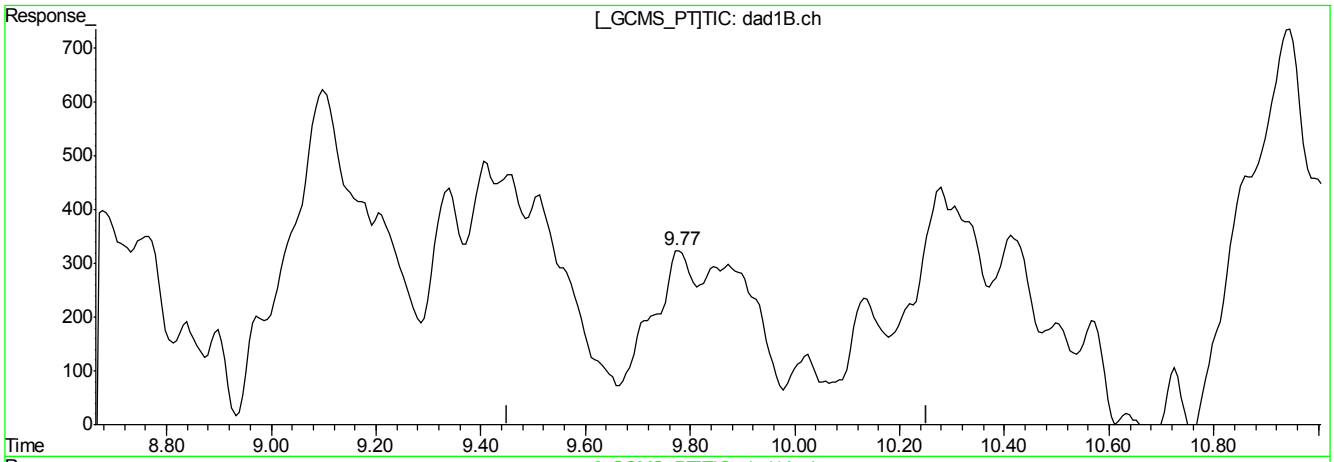
response 111824

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:31 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.78min 10.928ppb

response 30840

(14) 4-Amino-2,6-Dinitrotoluene #2

0.00min 0.000ppb

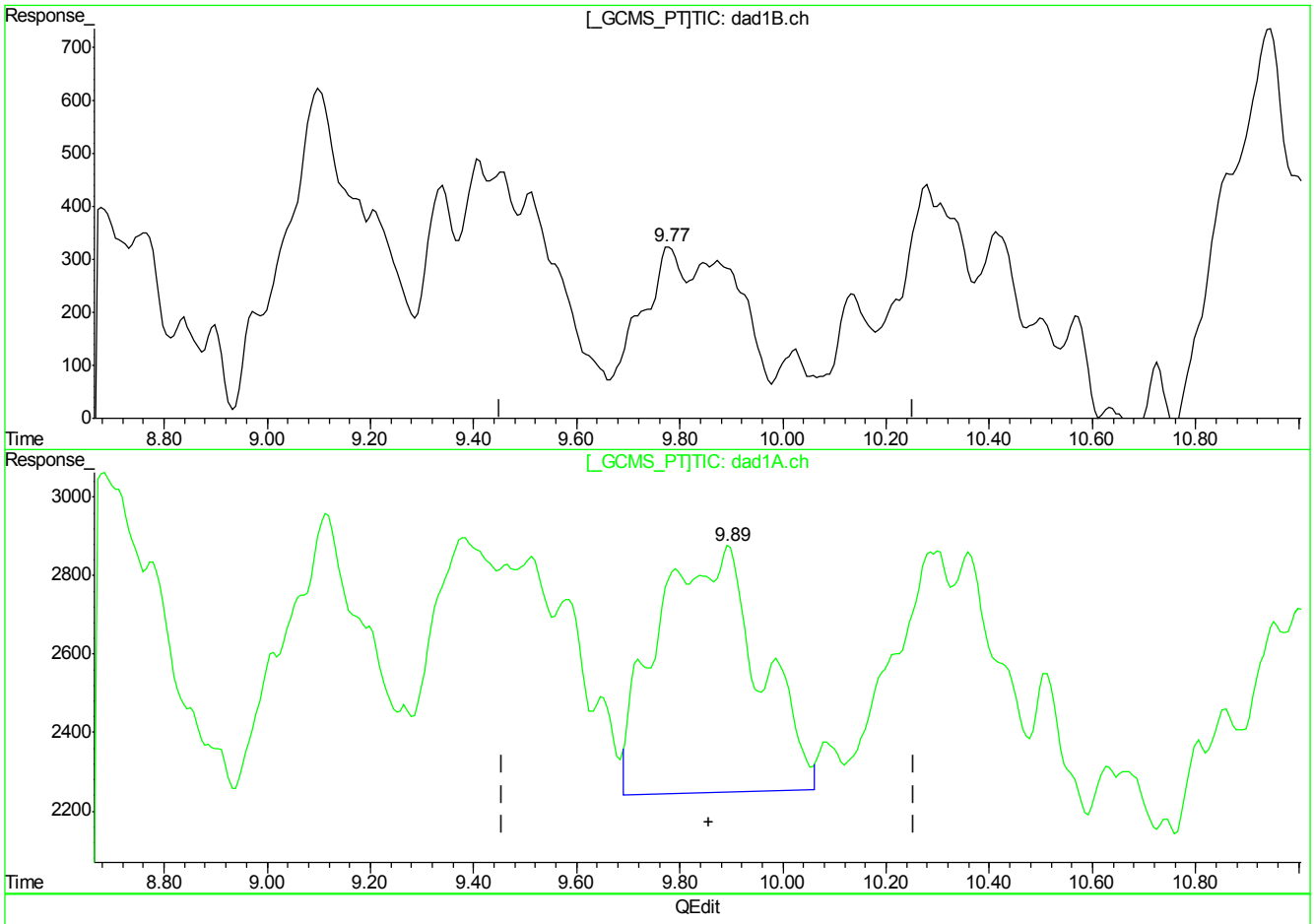
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.78min 10.928ppb

response 30840

(14) 4-Amino-2,6-Dinitrotoluene #2

9.89min 16.014ppb m

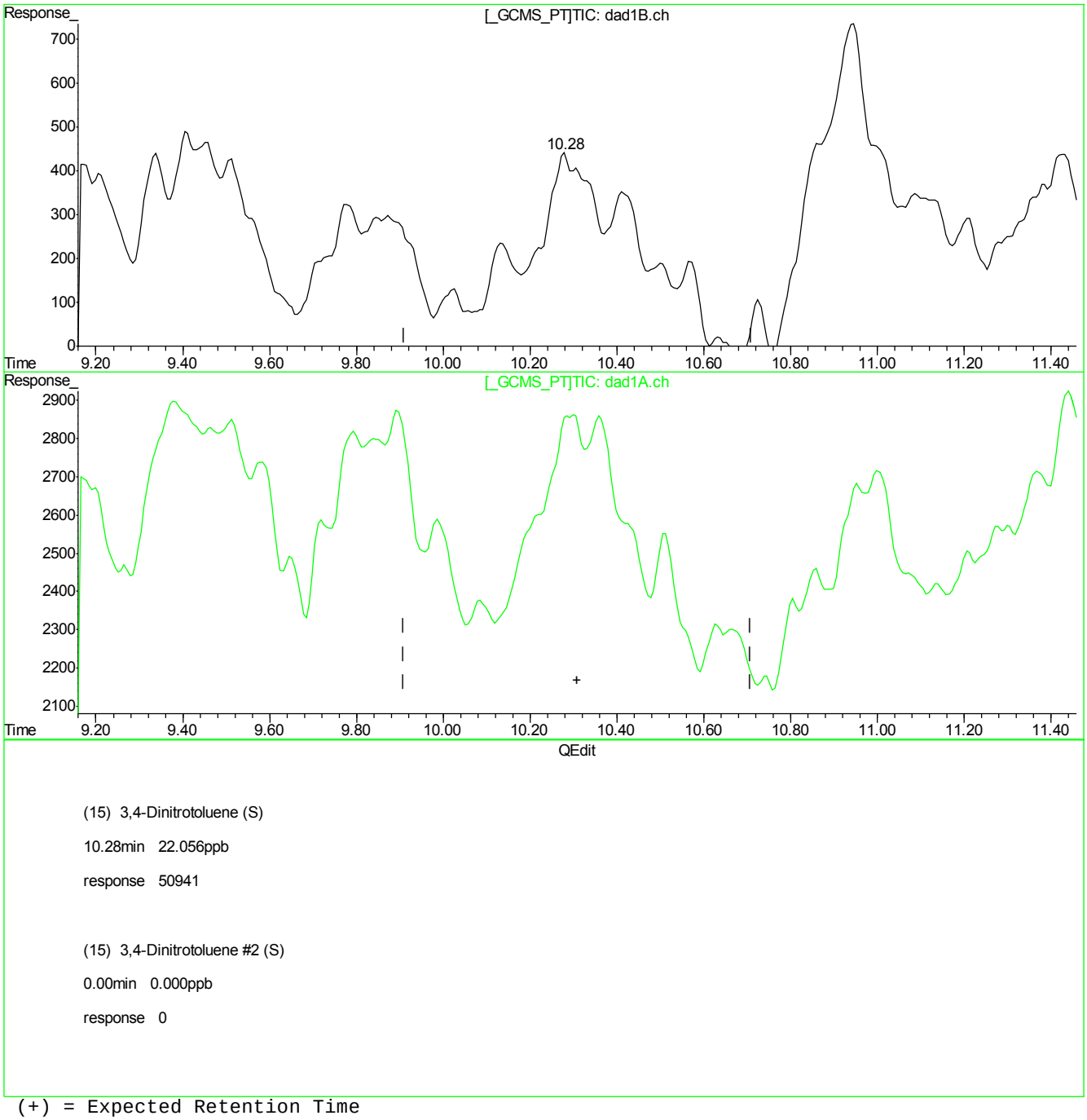
response 86551

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.28min 22.056ppb

response 50941

(15) 3,4-Dinitrotoluene #2 (S)

0.00min 0.000ppb

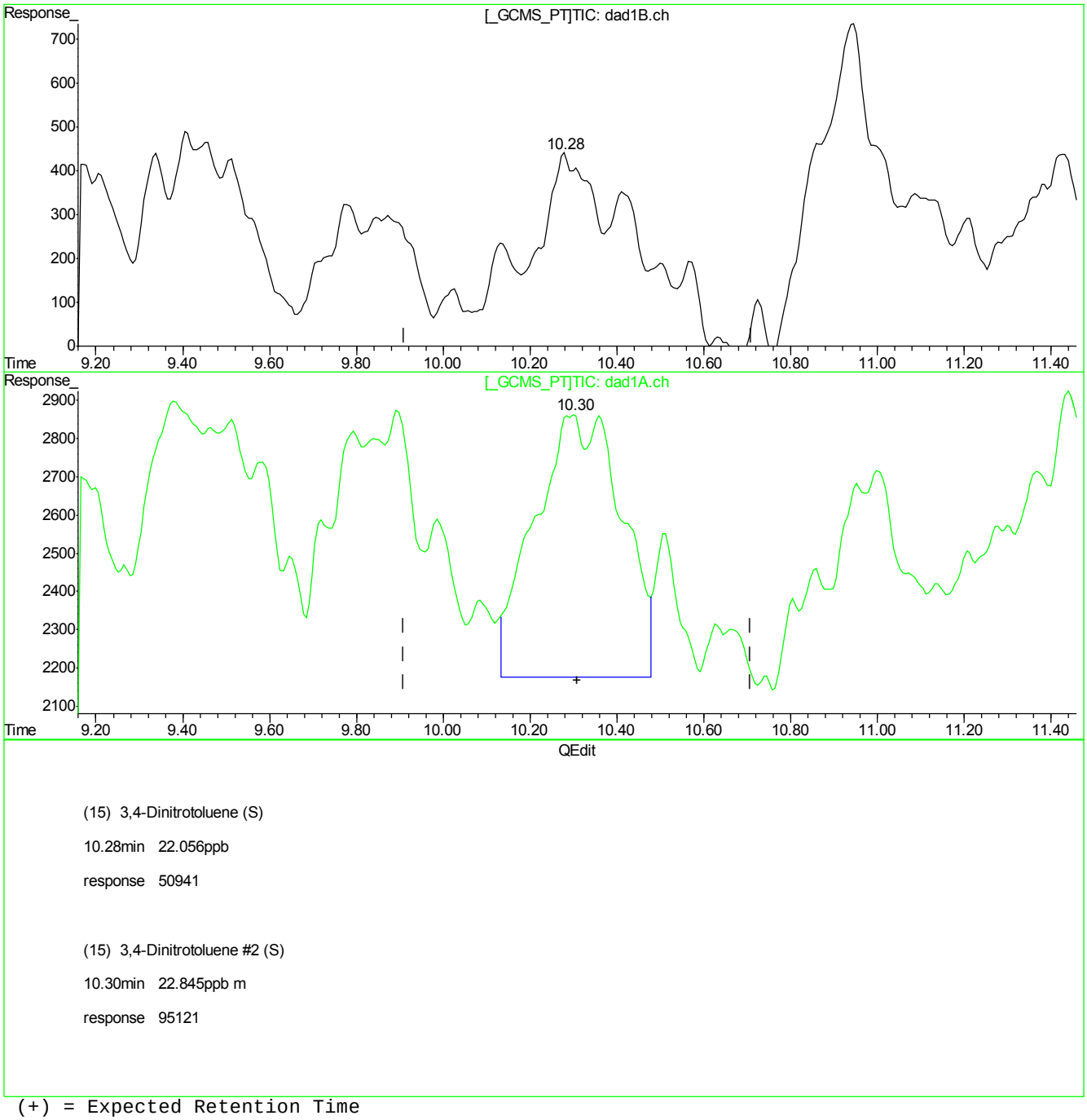
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.28min 22.056ppb

response 50941

(15) 3,4-Dinitrotoluene #2 (S)

10.30min 22.845ppb m

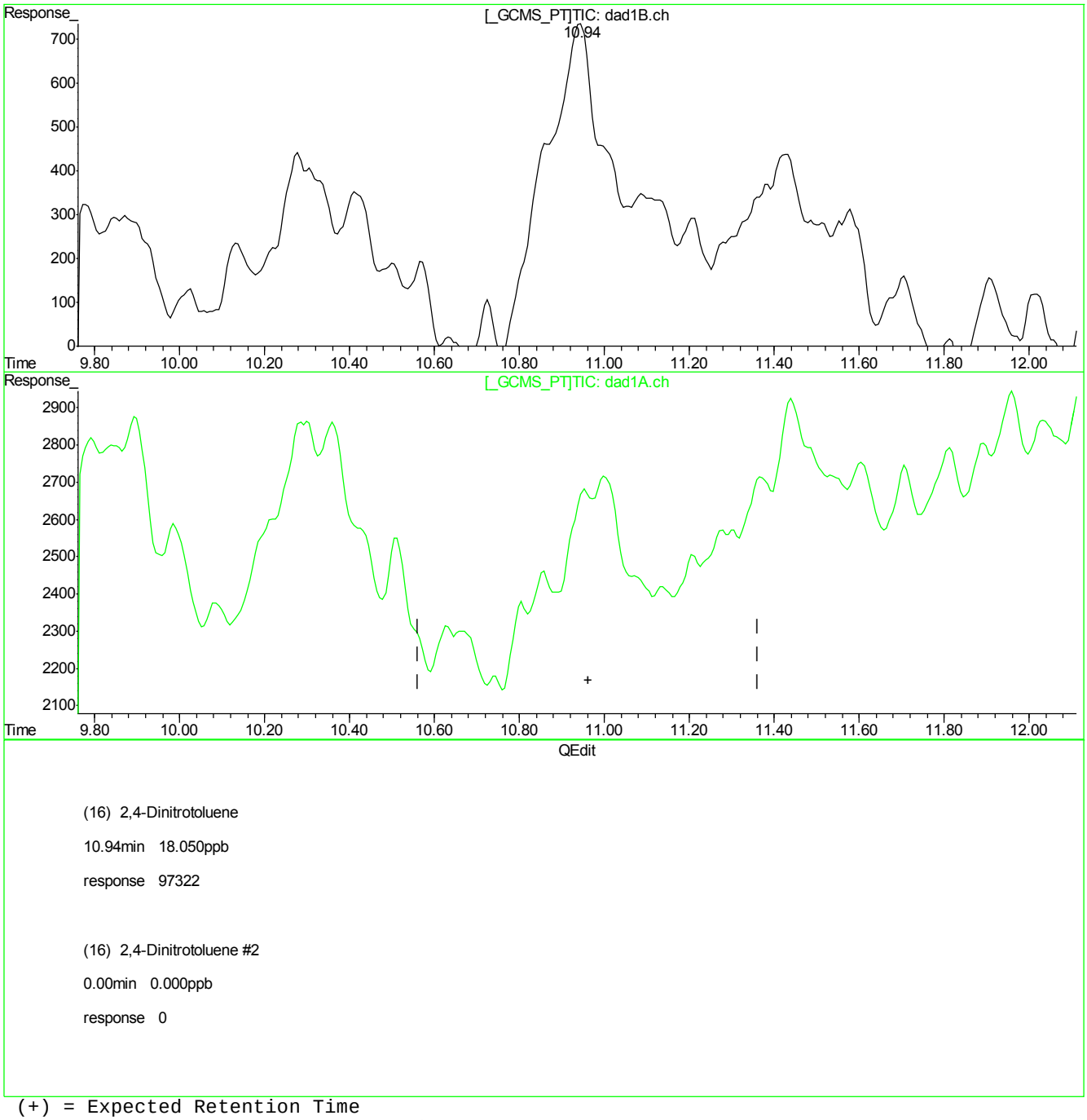
response 95121

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

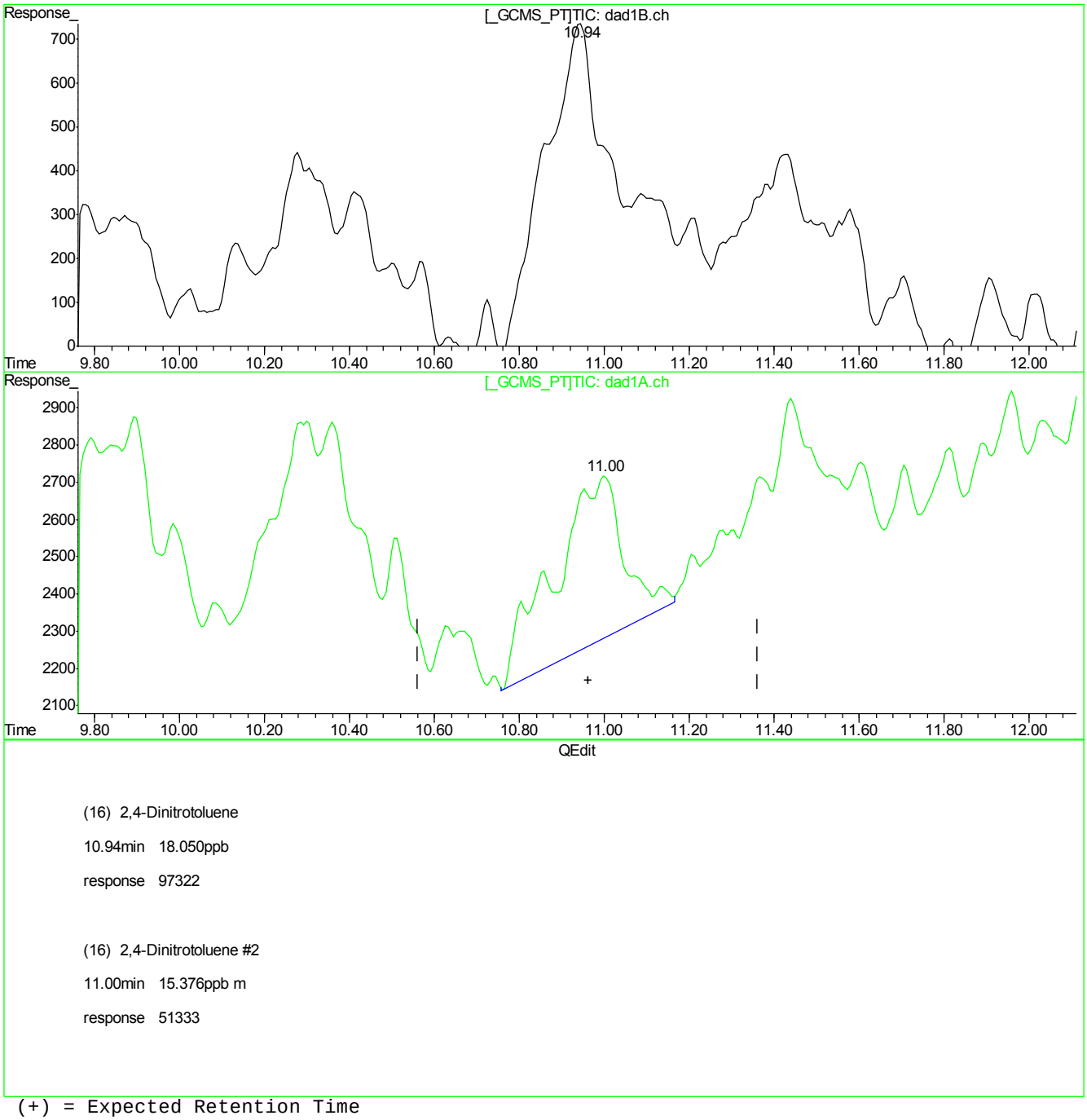


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

10.94min 18.050ppb

response 97322

(16) 2,4-Dinitrotoluene #2

11.00min 15.376ppb m

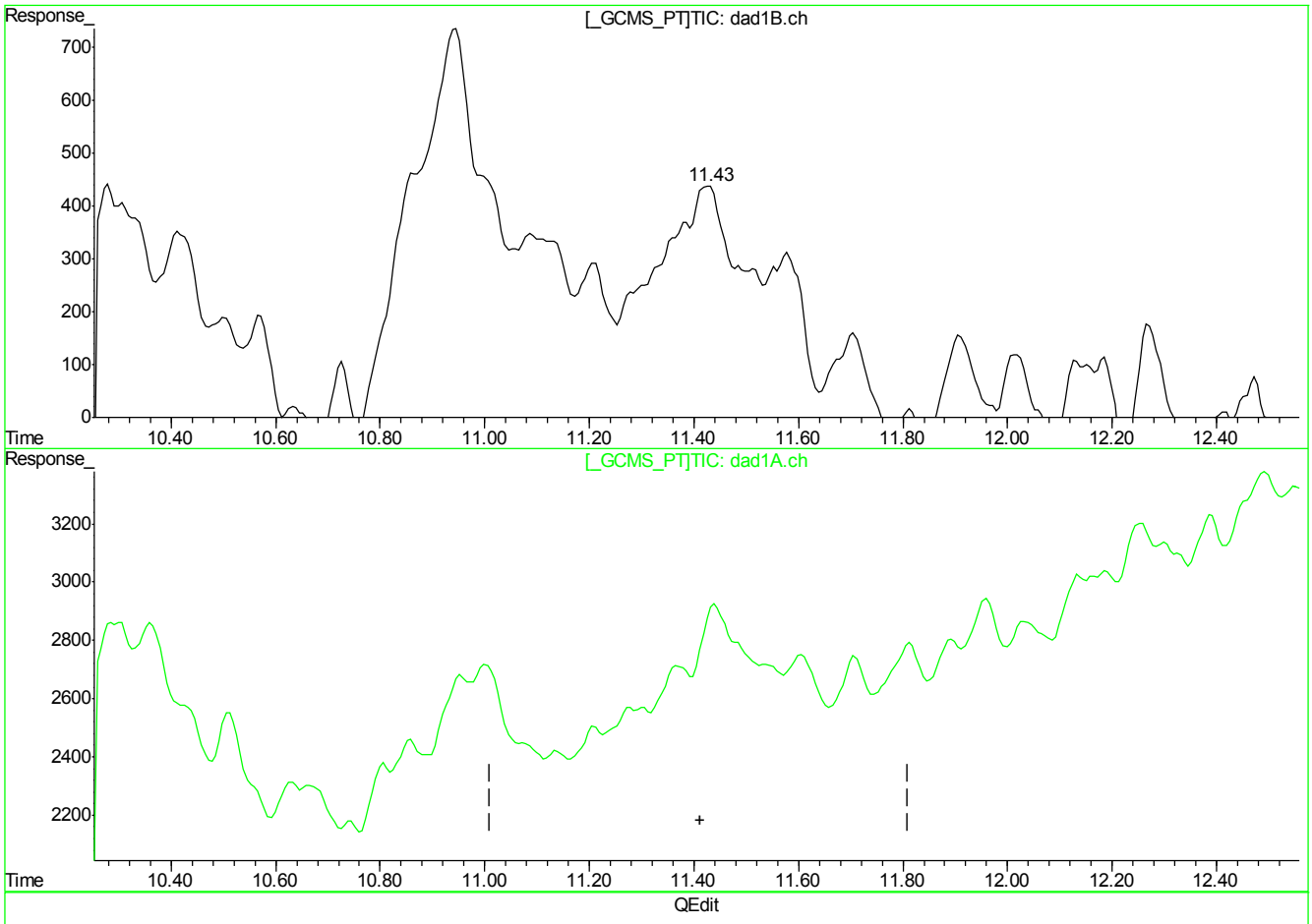
response 51333

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:50:53 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.43min 22.573ppb

response 74215

(17) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:03 2018

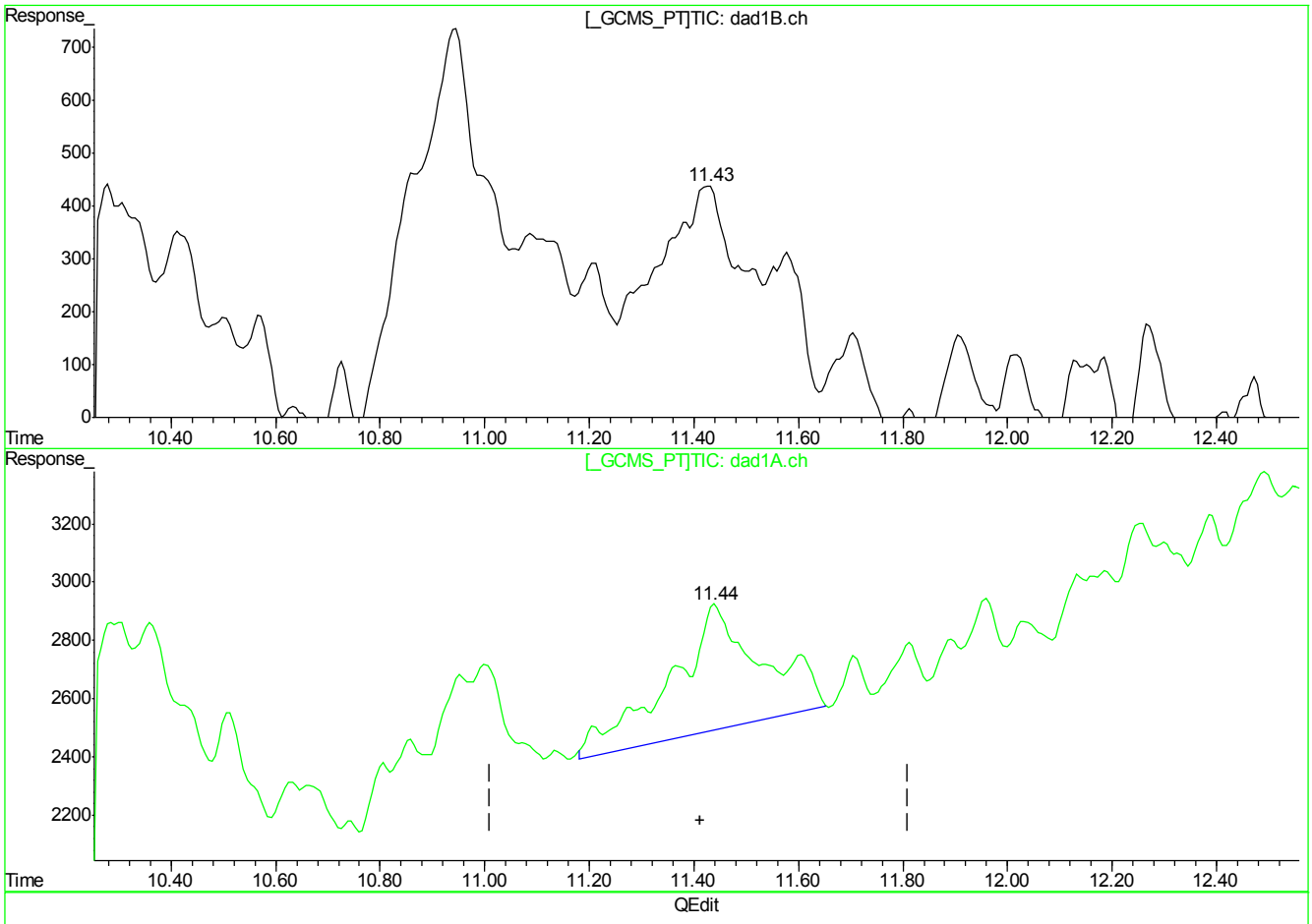
7.7.1.30

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.43min 22.573ppb

response 74215

(17) 2,6-Dinitrotoluene #2

11.44min 13.240ppb m

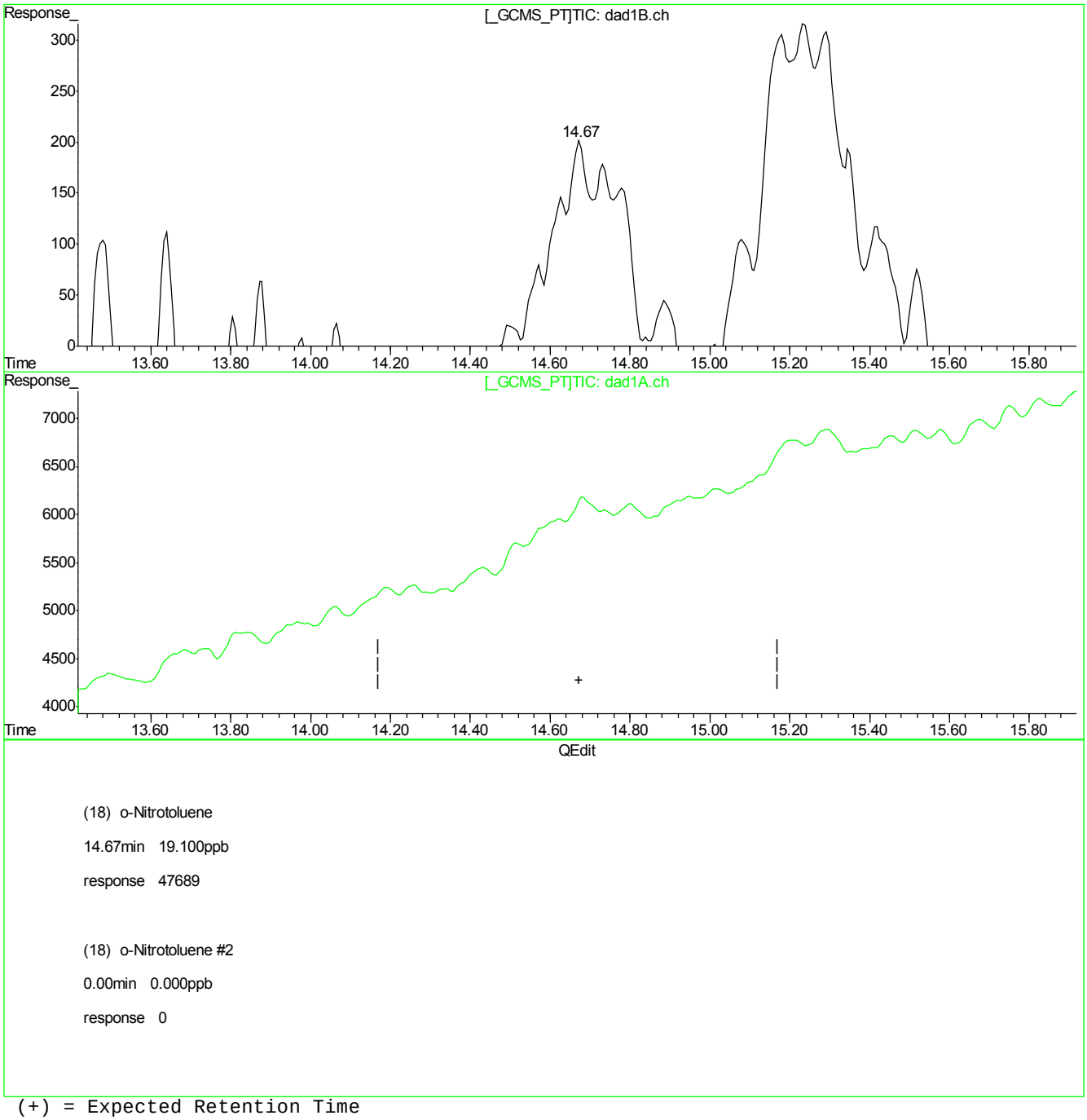
response 51922

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:07 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.67min 19.100ppb

response 47689

(18) o-Nitrotoluene #2

0.00min 0.000ppb

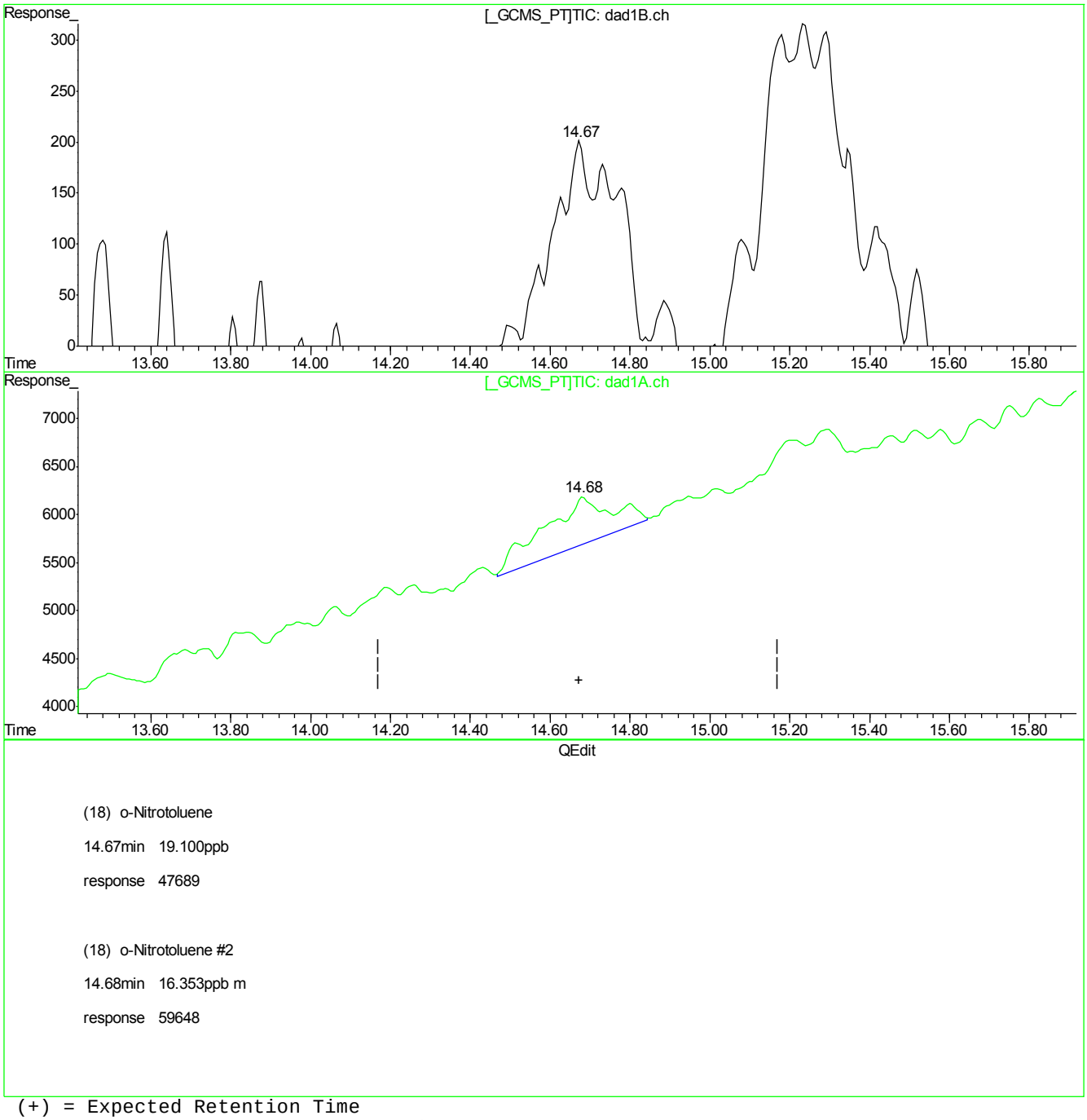
response 0

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.67min 19.100ppb

response 47689

(18) o-Nitrotoluene #2

14.68min 16.353ppb m

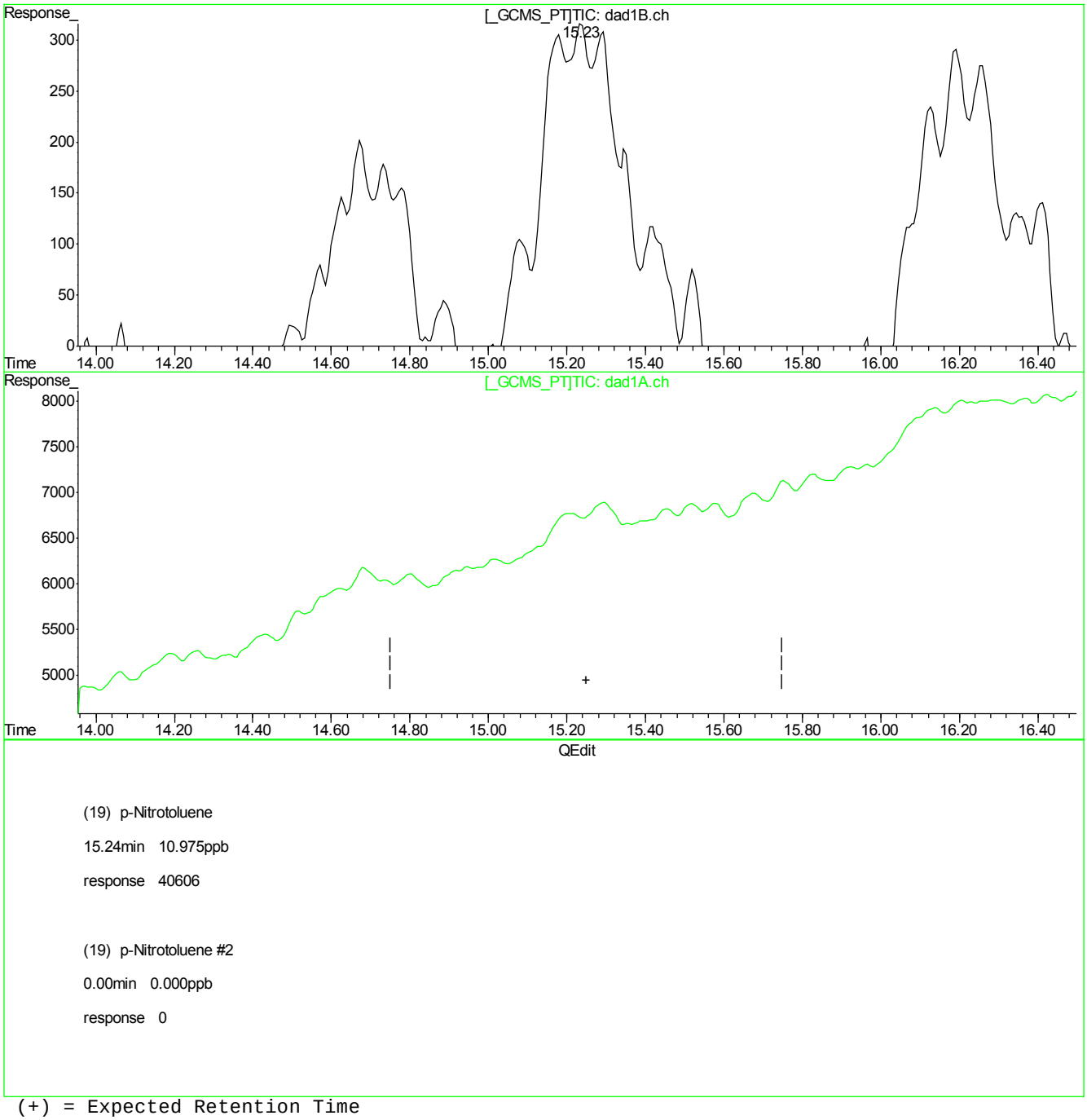
response 59648

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:14 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

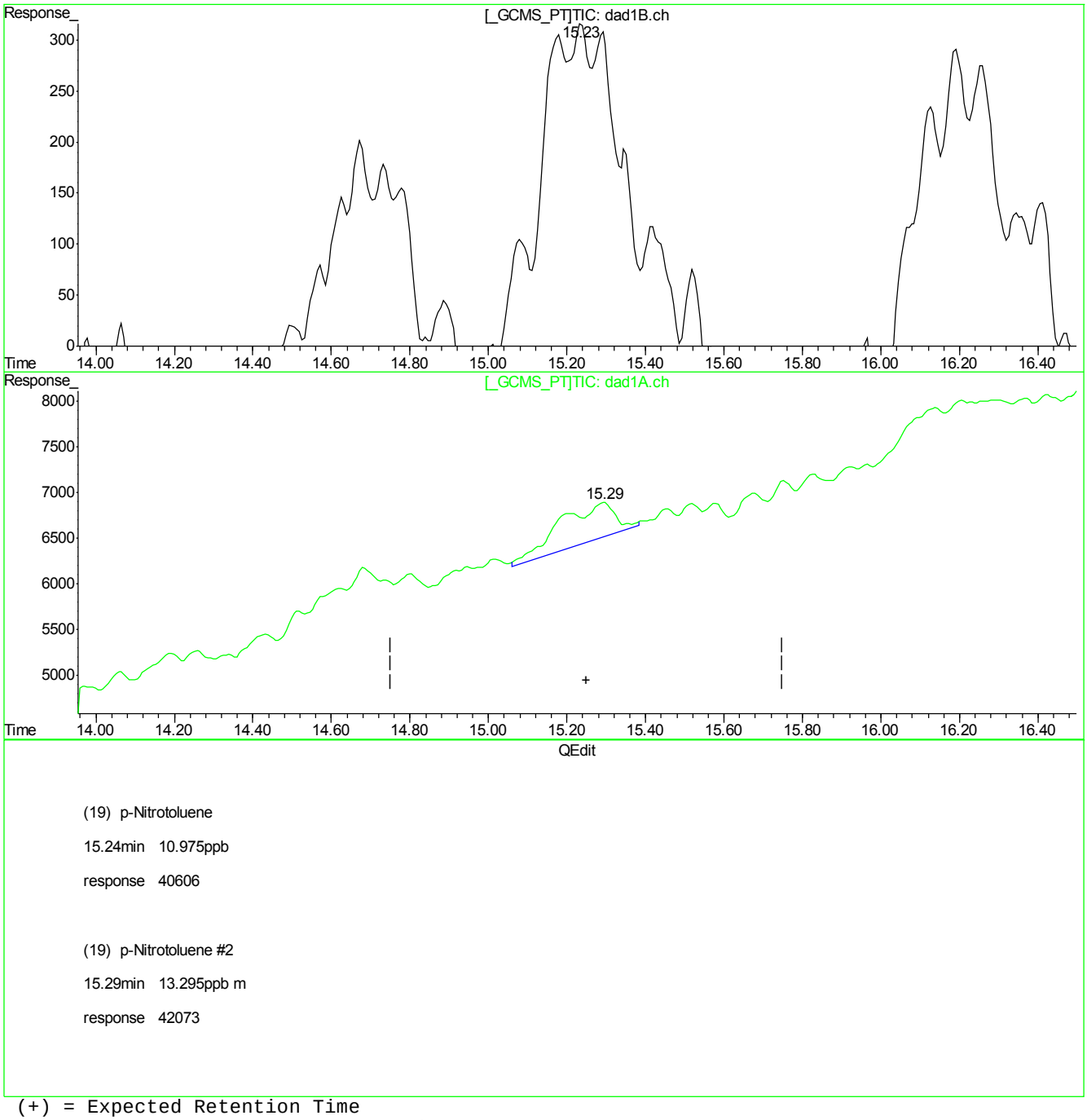


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:17 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

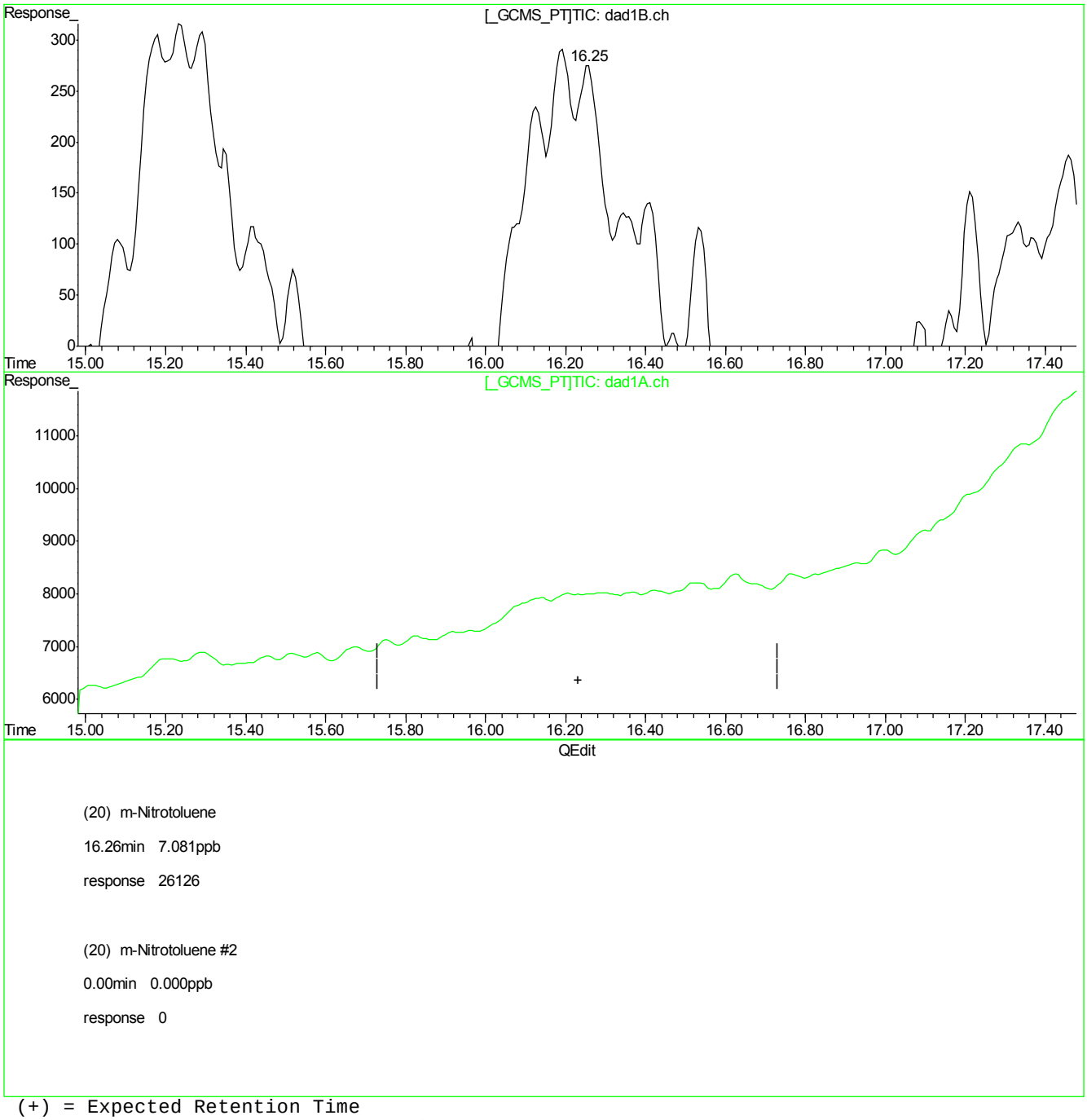


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:20 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

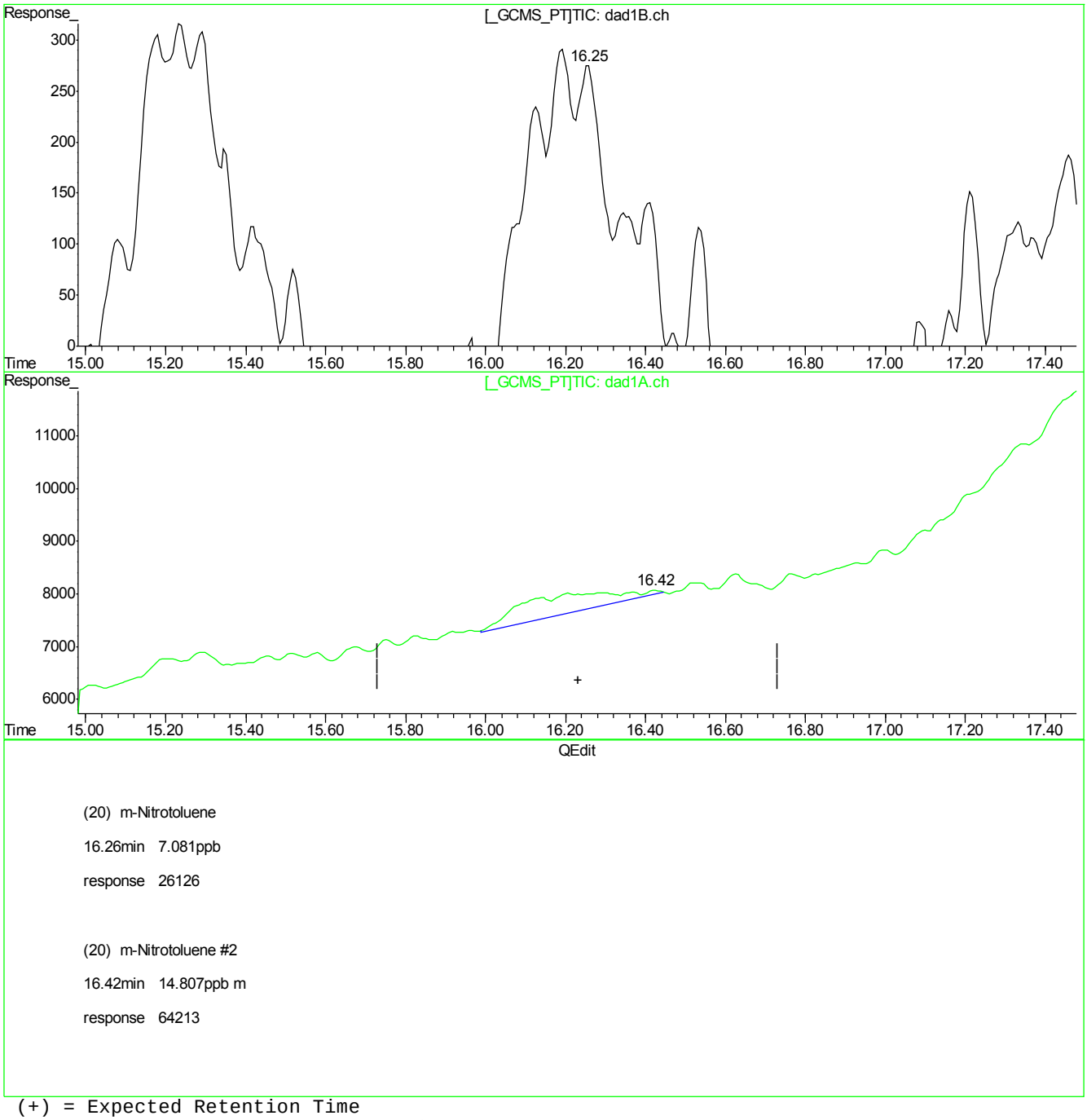


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(20) m-Nitrotoluene

16.26min 7.081ppb

response 26126

(20) m-Nitrotoluene #2

16.42min 14.807ppb m

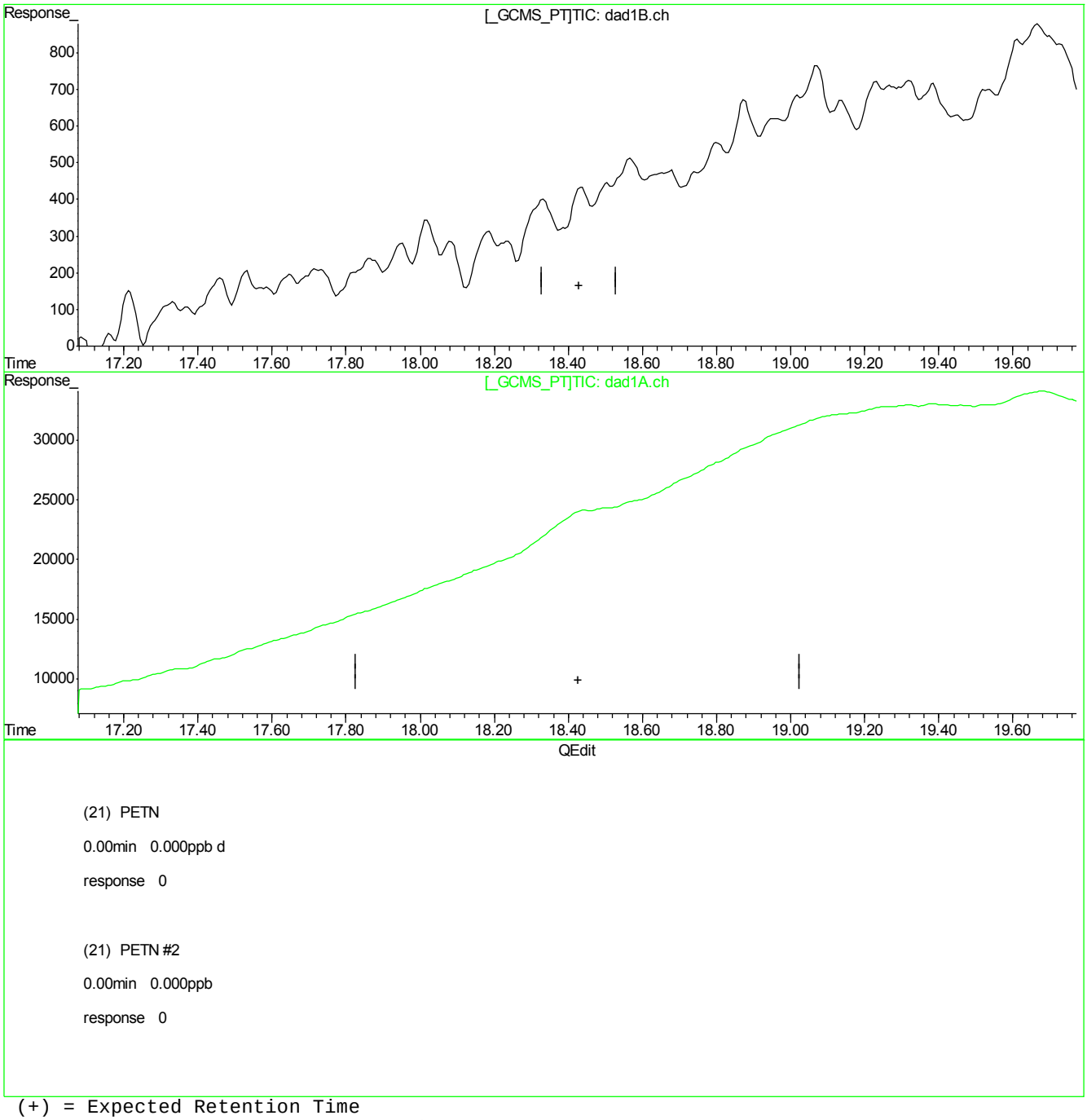
response 64213

(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration

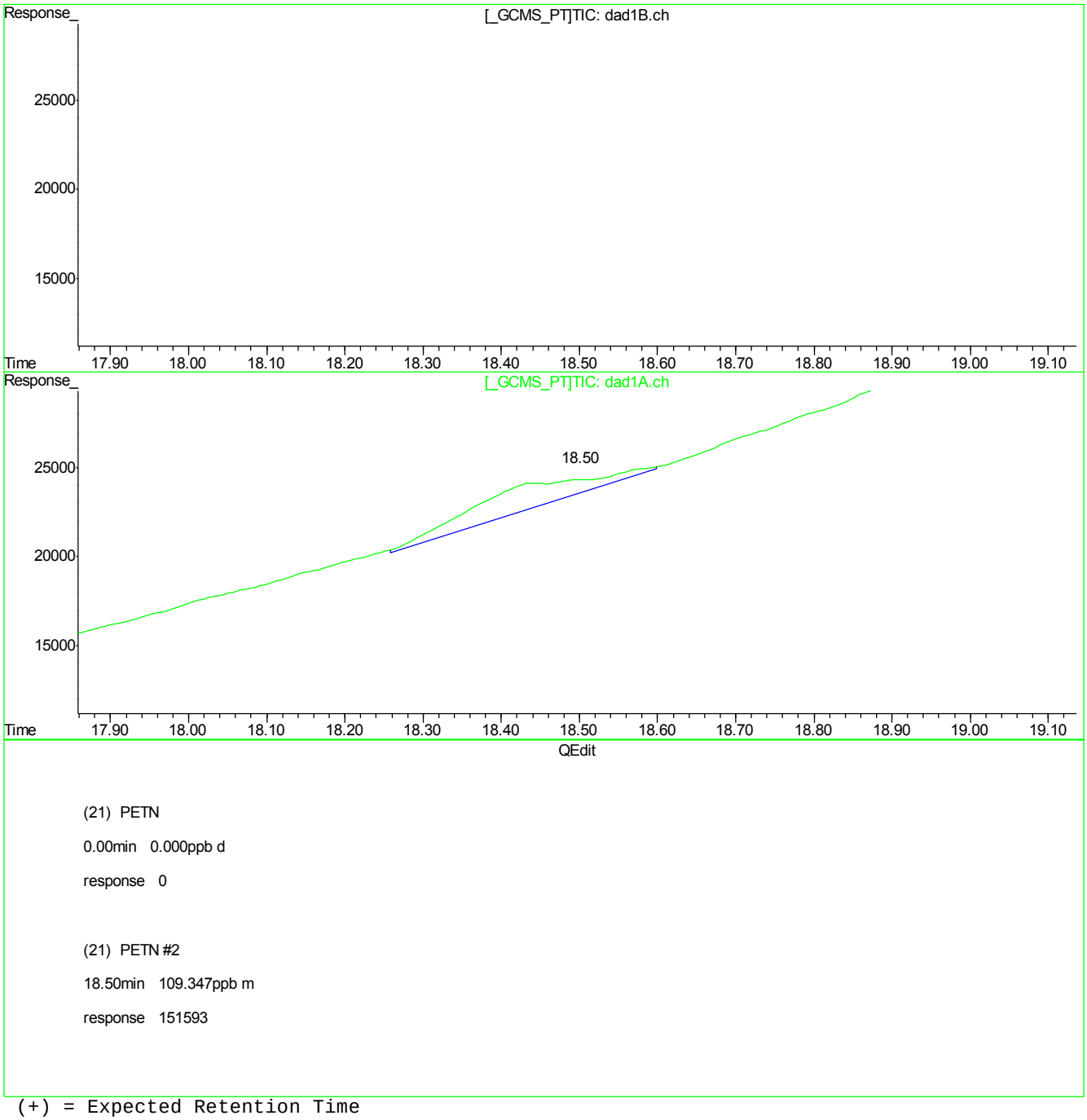


(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:51:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059464.D\dad1A.ch
Acq On : 19-Apr-2018, 10:14:00 Operator: evitam
Sample : IC1722-20 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059464.D 8330B_0419PLUS.M Thu Apr 19 13:52:01 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:45 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.32	10.31	148252	250753	64.190m	60.222m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	12.84%#	12.04%#
	Target Compounds						
1)	TNX	1.31	1.31	271857	420352	53.572m	53.933m
2)	HMX	1.44	1.44	108610	310120	55.713	59.009m
3)	DNX	1.66	1.67	183097	332602	61.821m	69.640
4)	MNX	2.20	2.20	172151	244651	55.367	52.195
5)	RDX	2.77	2.77	118381	180480	51.055	48.190
6)	1,3,5-Trinitrobe	4.42	4.42	212484	449305	43.000	49.305
7)	1,3-Dinitrobenze	5.59	5.59	306521	180727	50.221	45.866m
8)	3,5-Dinitroanili	5.89	5.90	282156	374495	61.543	47.488
9)	Nitrobenzene	7.09	7.10	223213	181960	58.508	50.753
10)	Nitroglycerin	0.00	8.39	0	336203	N.D. d	254.046m
11)	Tetryl	8.73	8.71	187659	238575	58.975	46.534
12)	2,4,6-Trinitroto	9.13	9.12	247127	209769	68.486	48.907
13)	2-Amino-4,6-Dini	9.44	9.47	217984	202574	54.303	36.436
14)	4-Amino-2,6-Dini	9.87	9.85	171280	229722	60.694	42.505m
16)	2,4-Dinitrotolue	11.00	11.01	336433	150818	62.397	45.176m
17)	2,6-Dinitrotolue	11.39	11.46	219785	175853	66.850m	44.840m
18)	o-Nitrotoluene	14.68	14.67	157597	171653	63.119	47.060m
19)	p-Nitrotoluene	15.26	15.26	247116	168598	66.793	53.275m
20)	m-Nitrotoluene	16.24	16.30	222504	208312	60.309	48.036m
21)	PETN	0.00	18.44	0	340859	N.D. d	245.869m

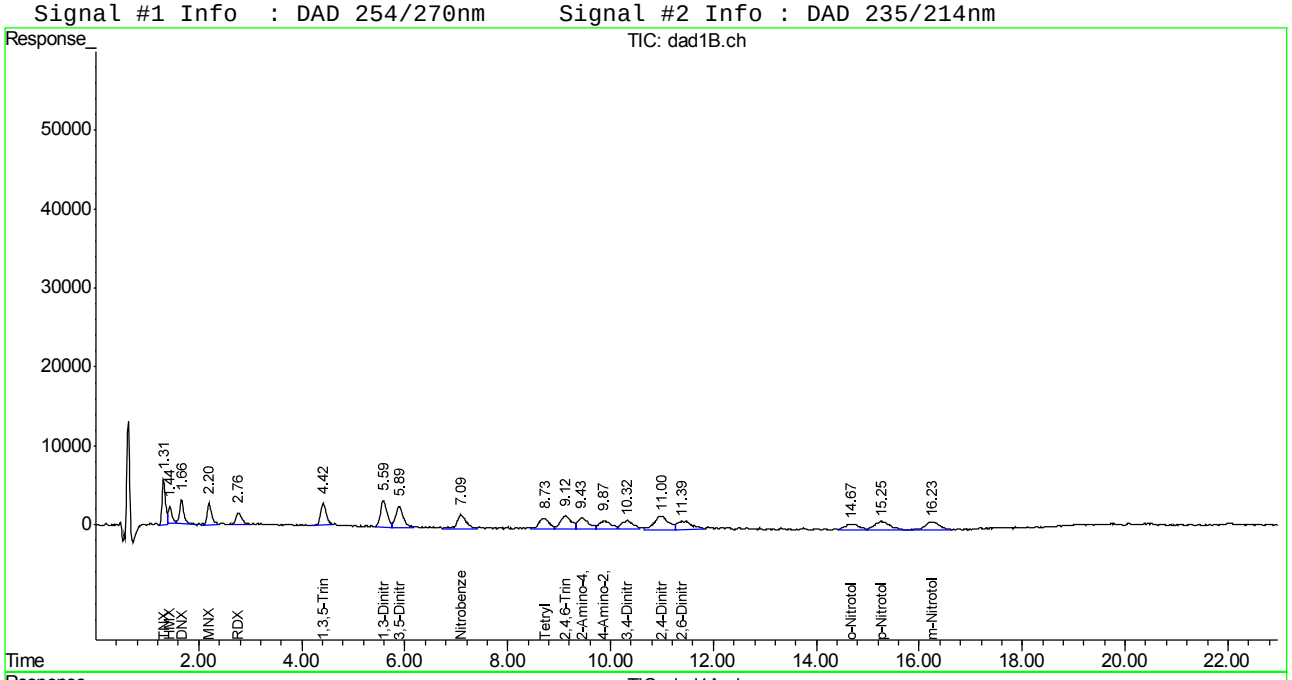
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059465.D 8330B_0419PLUS.M Fri Apr 20 08:01:19 2018 Page 1

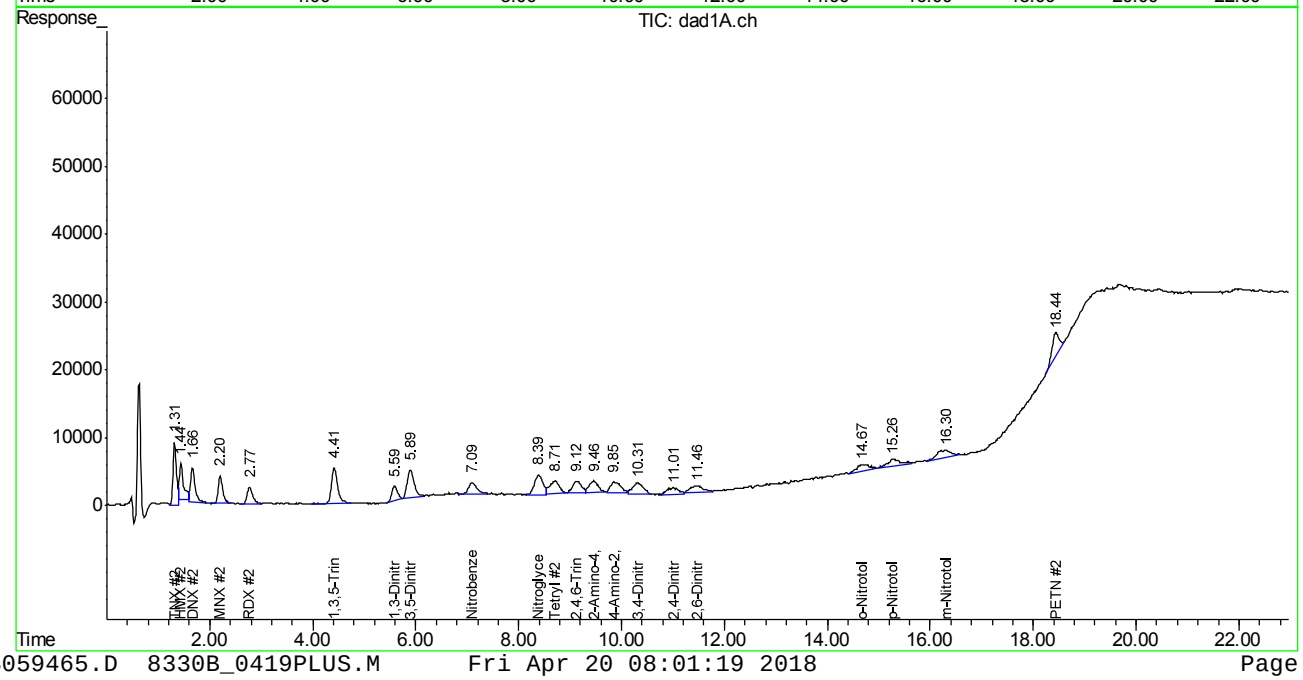
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:55 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

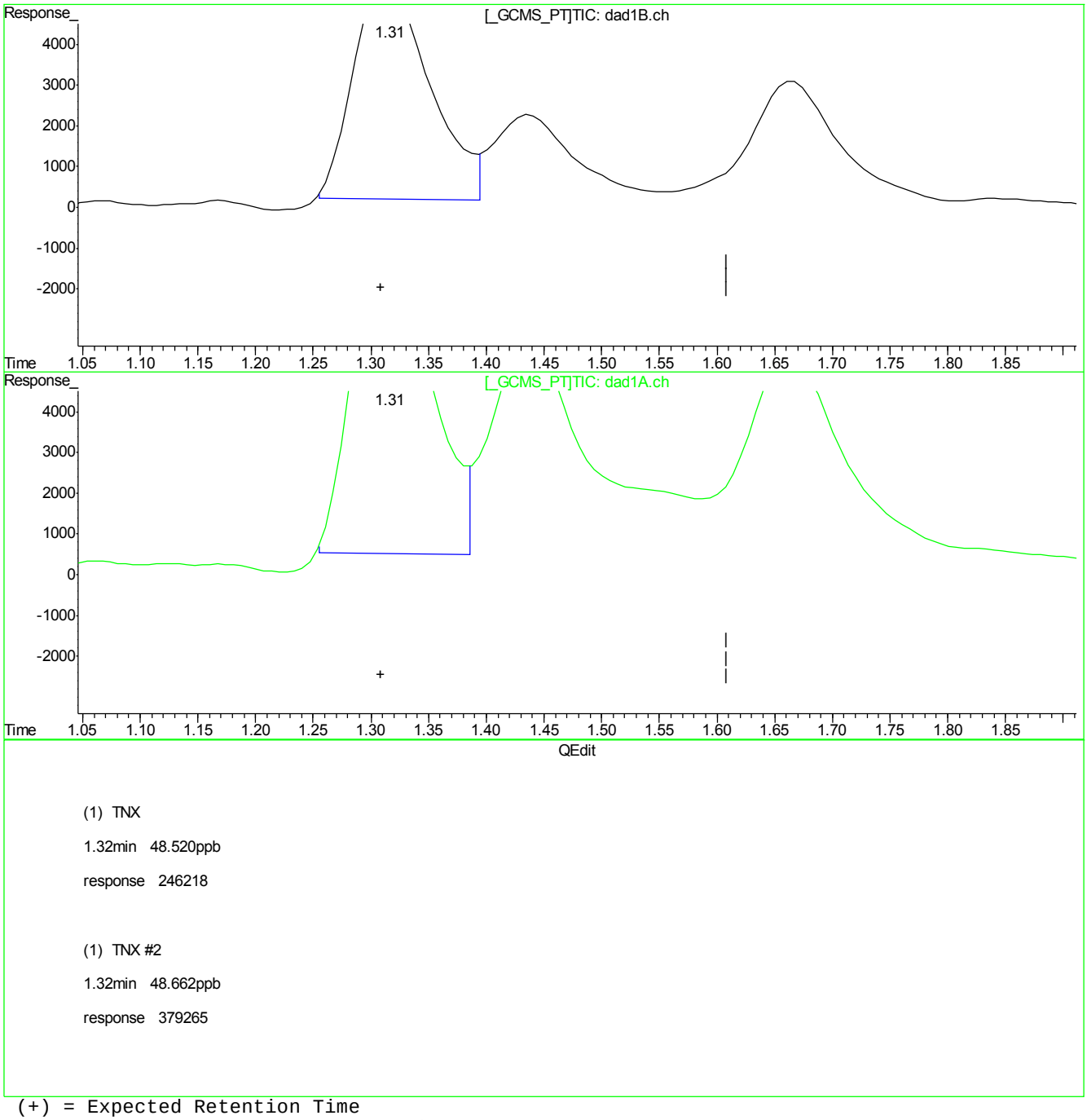
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059465.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 10:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.59	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.39	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	9.85	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.31	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.32	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.01	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.39	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.46	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.67	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.30	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration

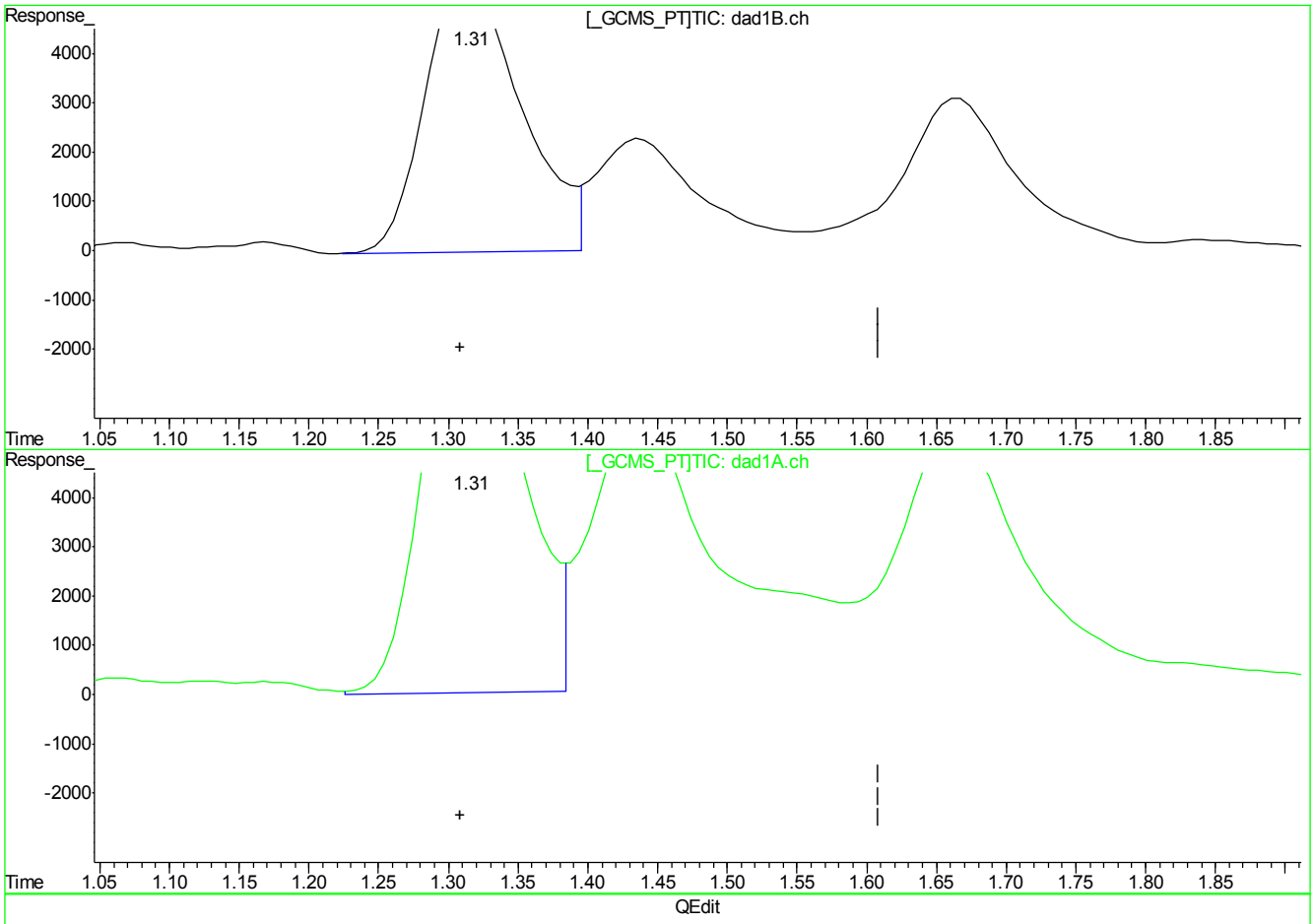


(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:52:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 53.572ppb m

response 271857

(1) TNX #2

1.31min 53.933ppb m

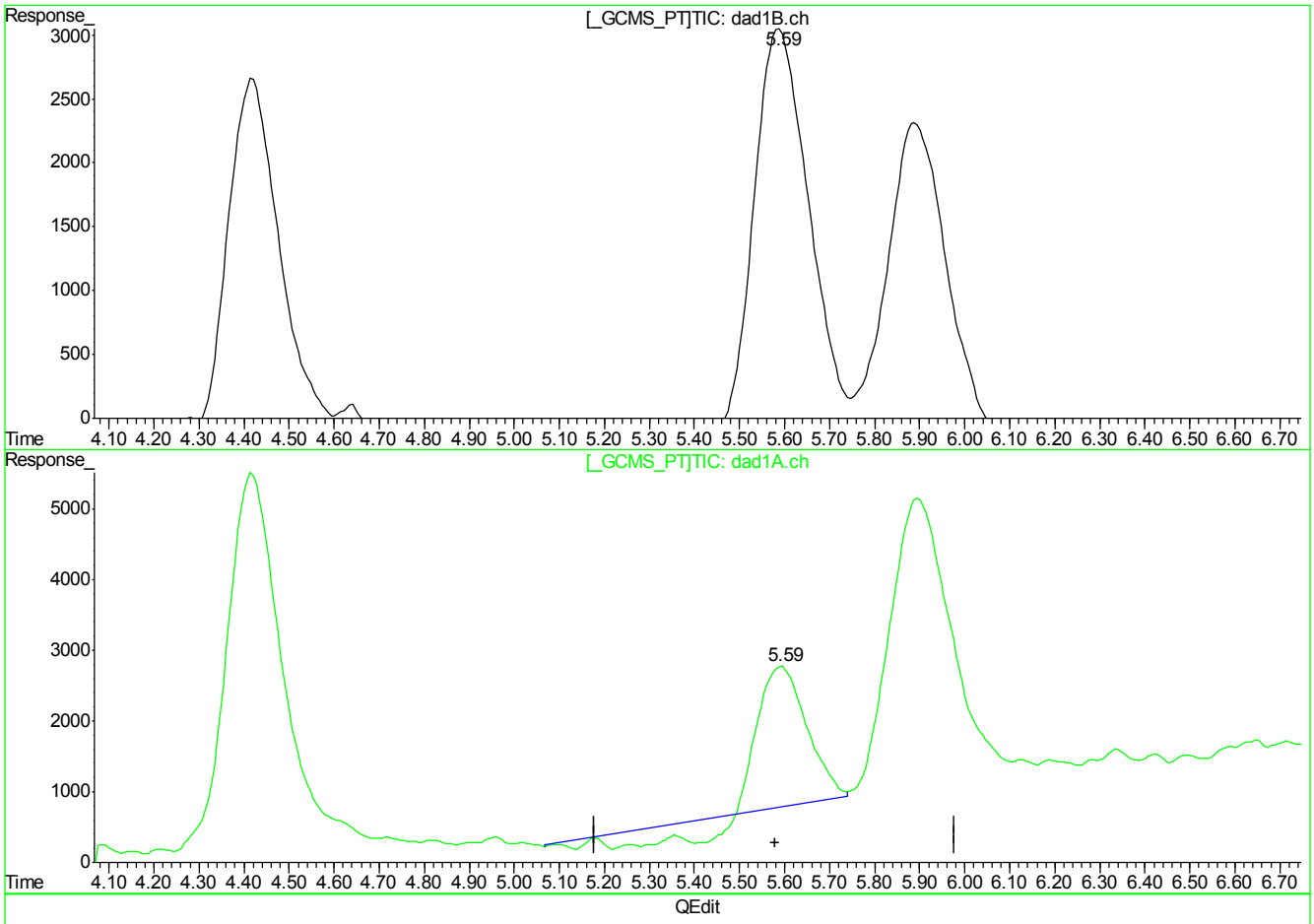
response 420352

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:52:24 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 50.221ppb

response 306521

(7) 1,3-Dinitrobenzene #2

5.59min 26.458ppb

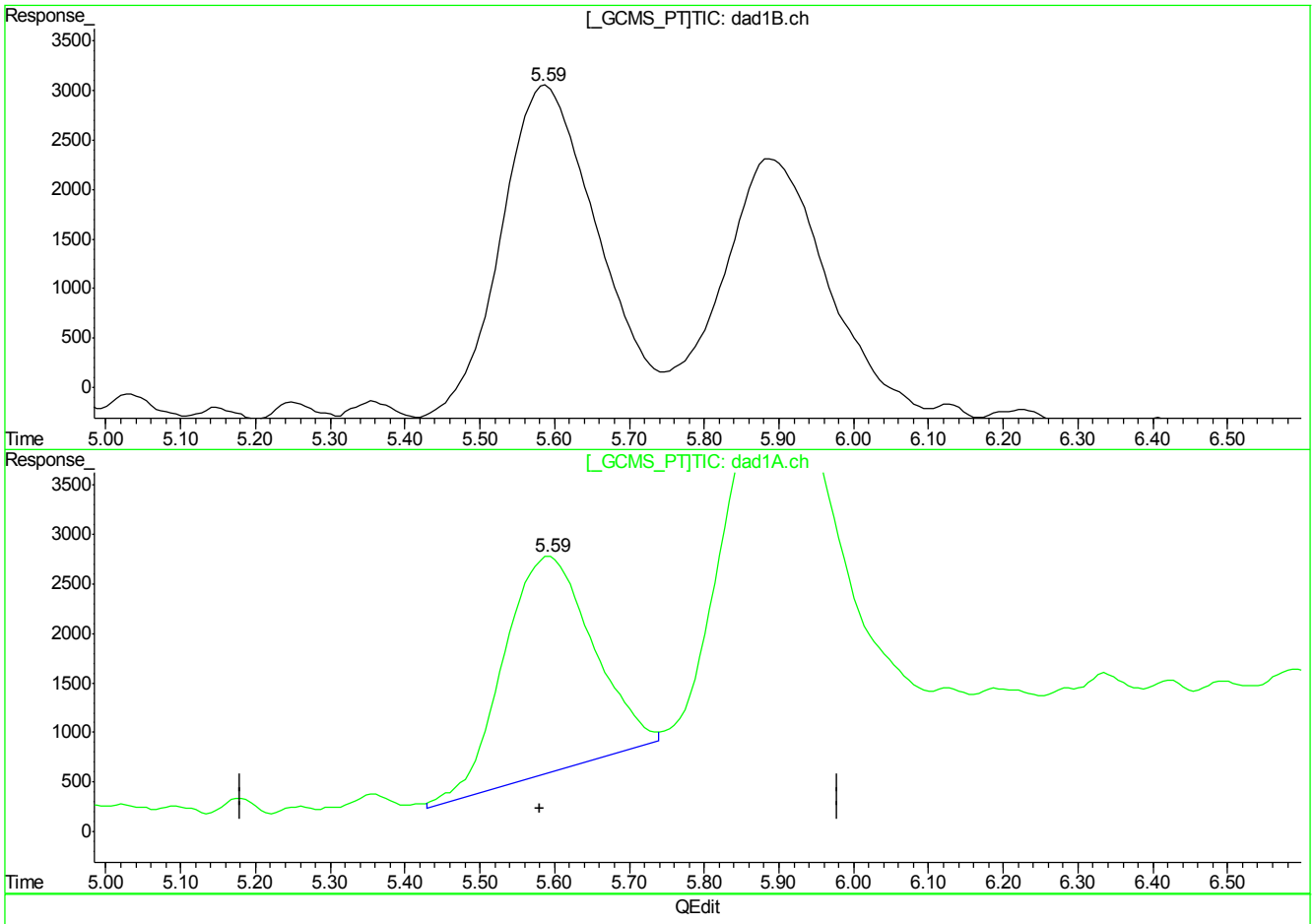
response 104252

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.59min 50.221ppb

response 306521

(7) 1,3-Dinitrobenzene #2

5.59min 45.866ppb m

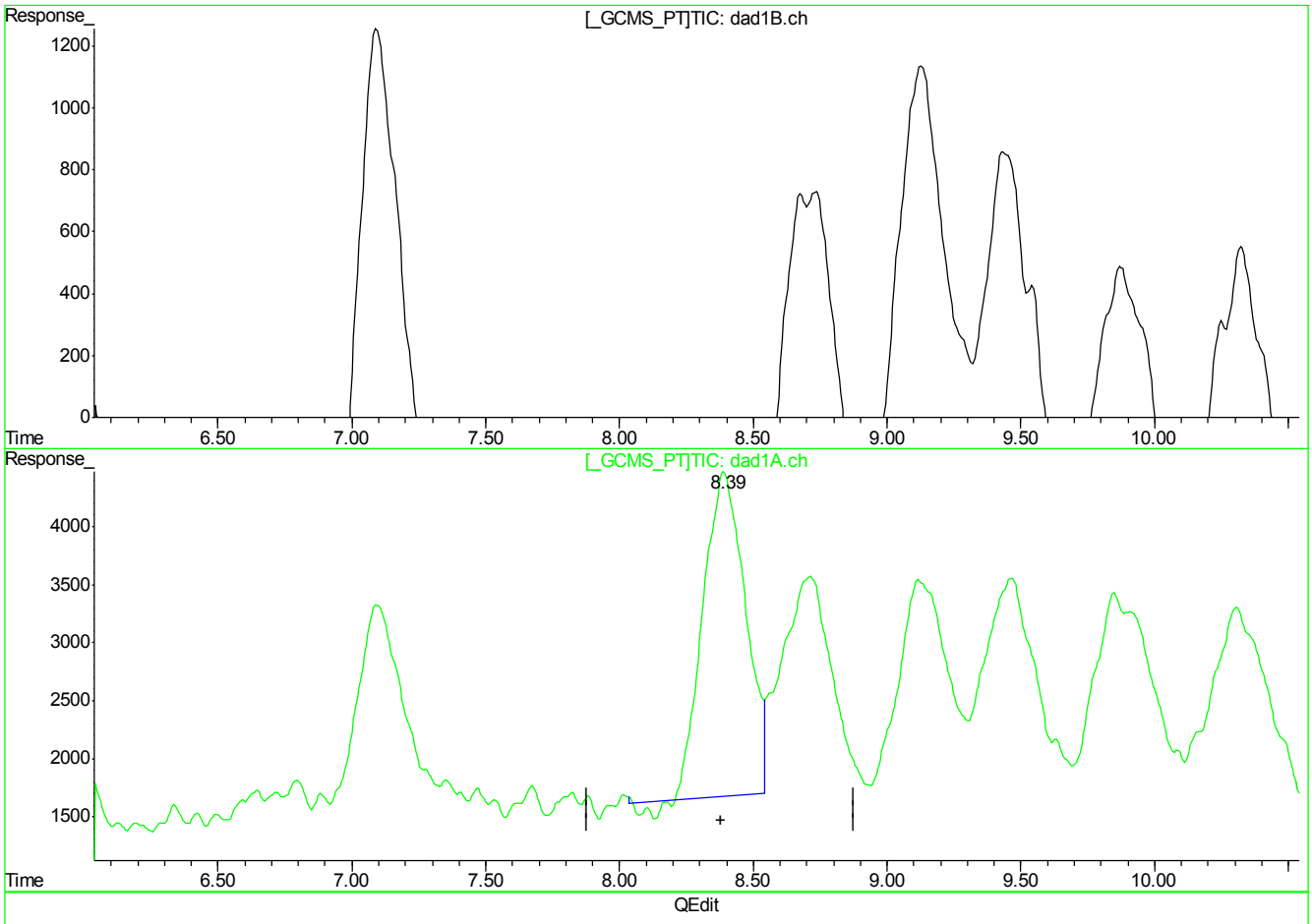
response 180727

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:21 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.39min 228.928ppb

response 302962

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:28 2018

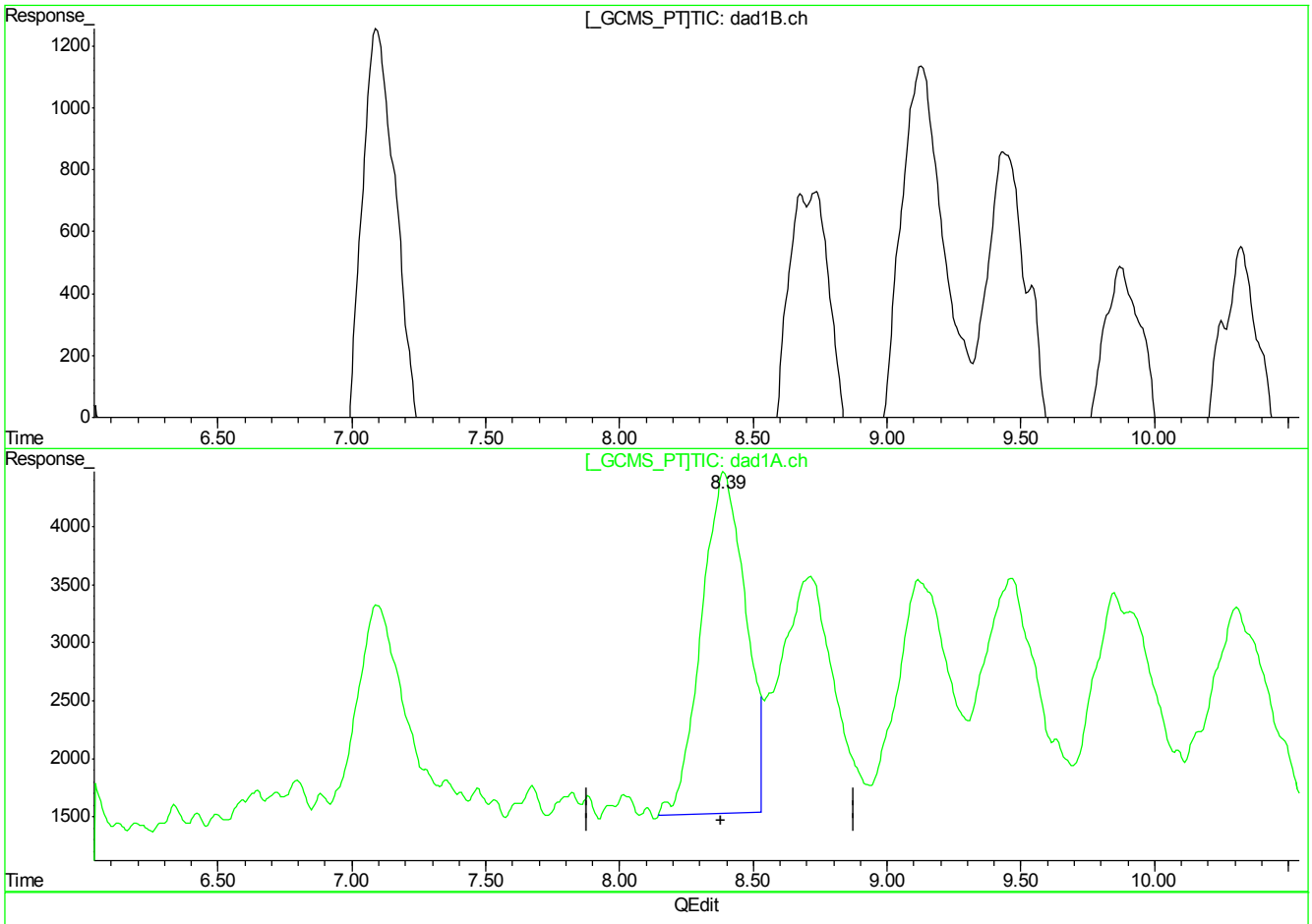
7.7.2.6

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.39min 254.046ppb m

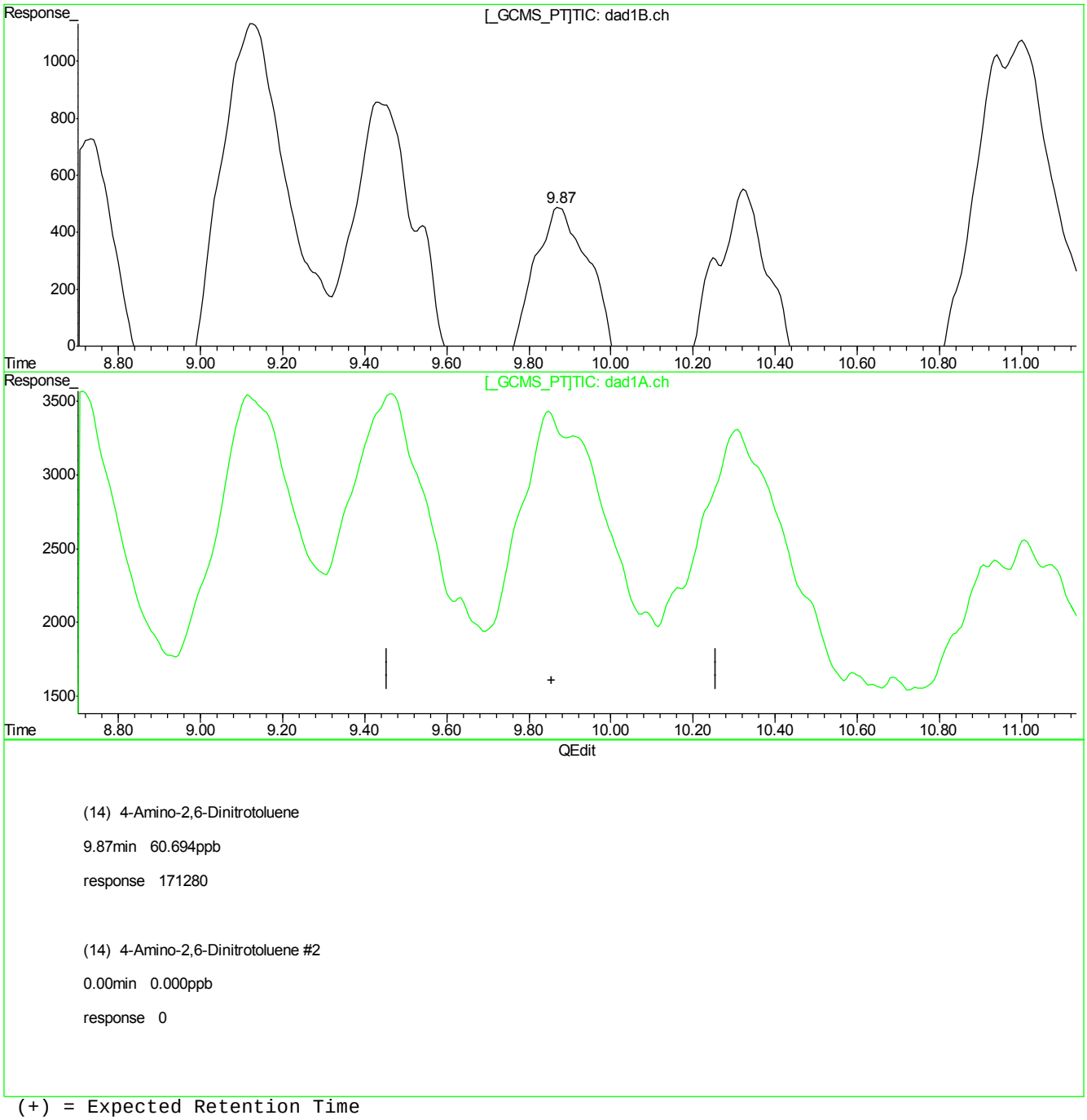
response 336203

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:53:32 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



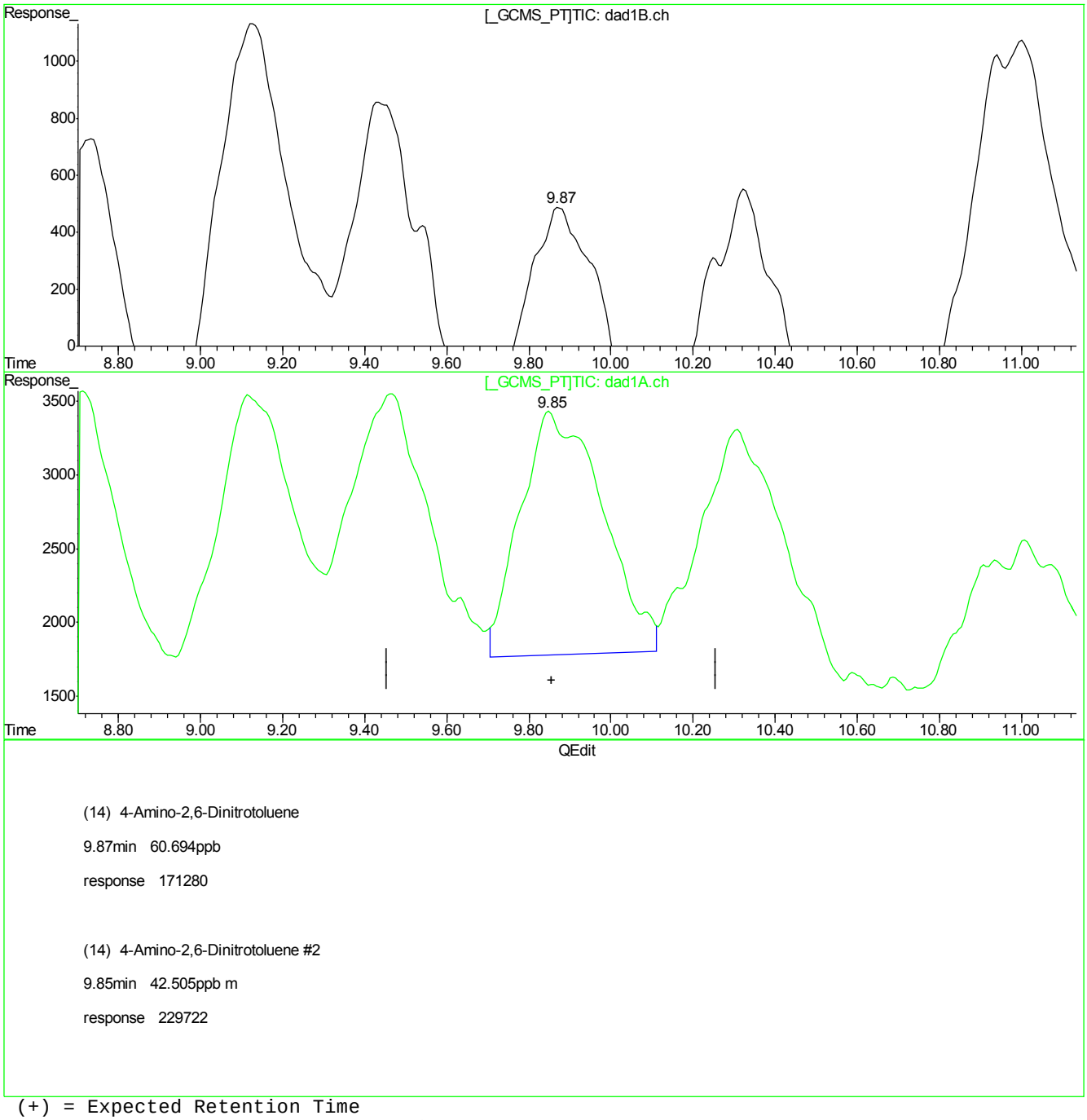
(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:04 2018

BB059465.D edits: 4-Amino-2,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

9.87min 60.694ppb

response 171280

(14) 4-Amino-2,6-Dinitrotoluene #2

9.85min 42.505ppb m

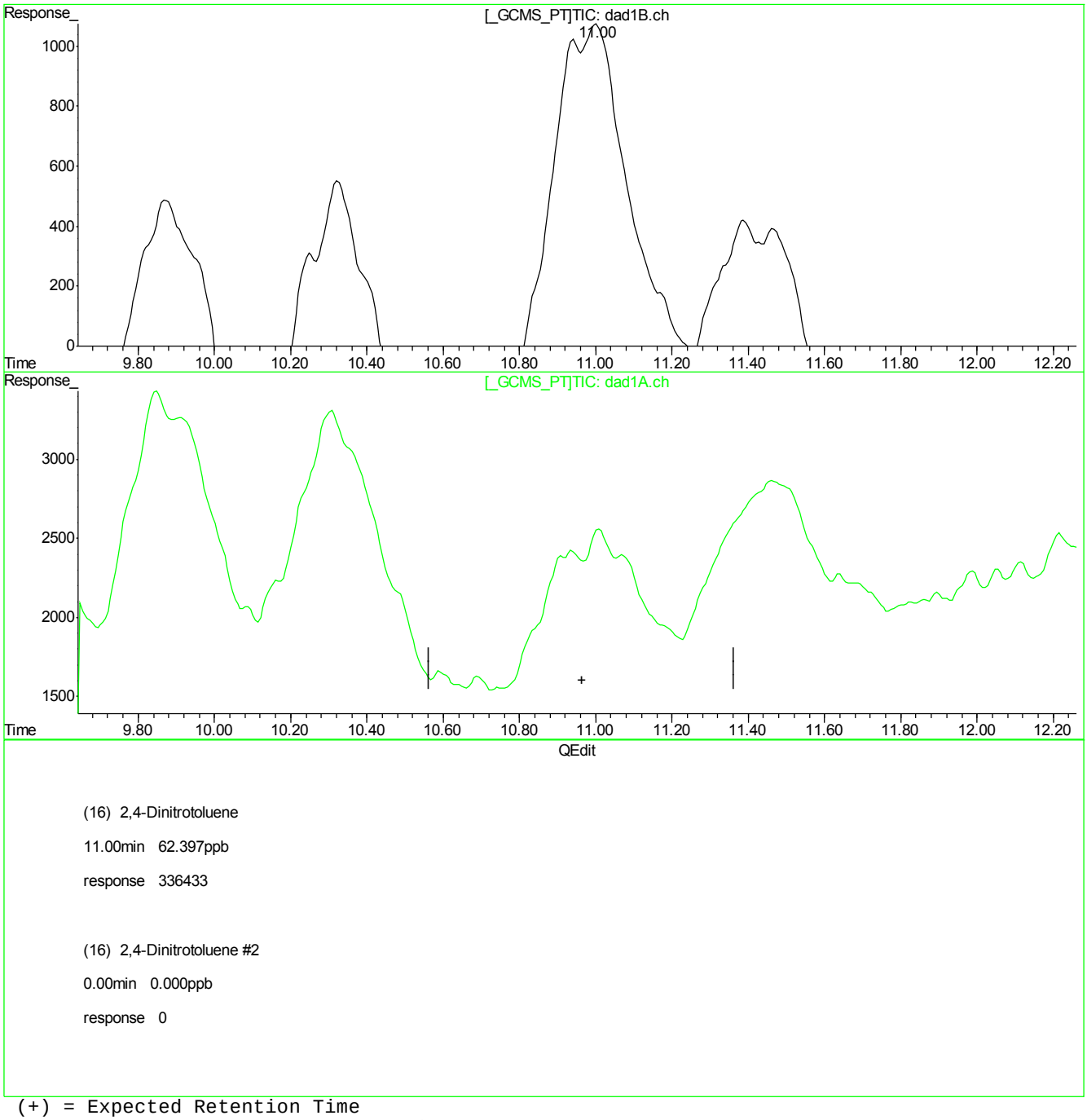
response 229722

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.00min 62.397ppb

response 336433

(16) 2,4-Dinitrotoluene #2

0.00min 0.000ppb

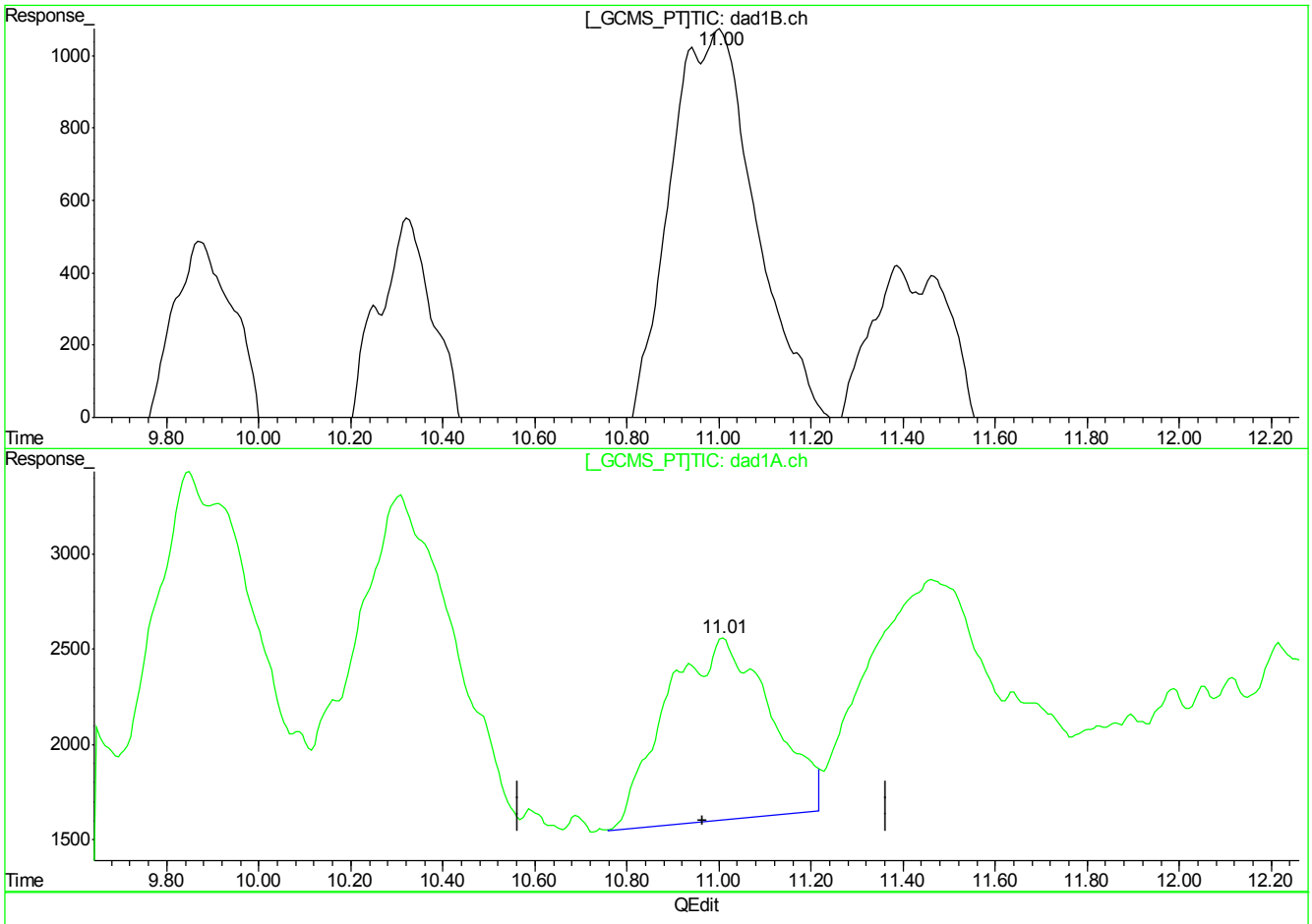
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.00min 62.397ppb

response 336433

(16) 2,4-Dinitrotoluene #2

11.01min 45.176ppb m

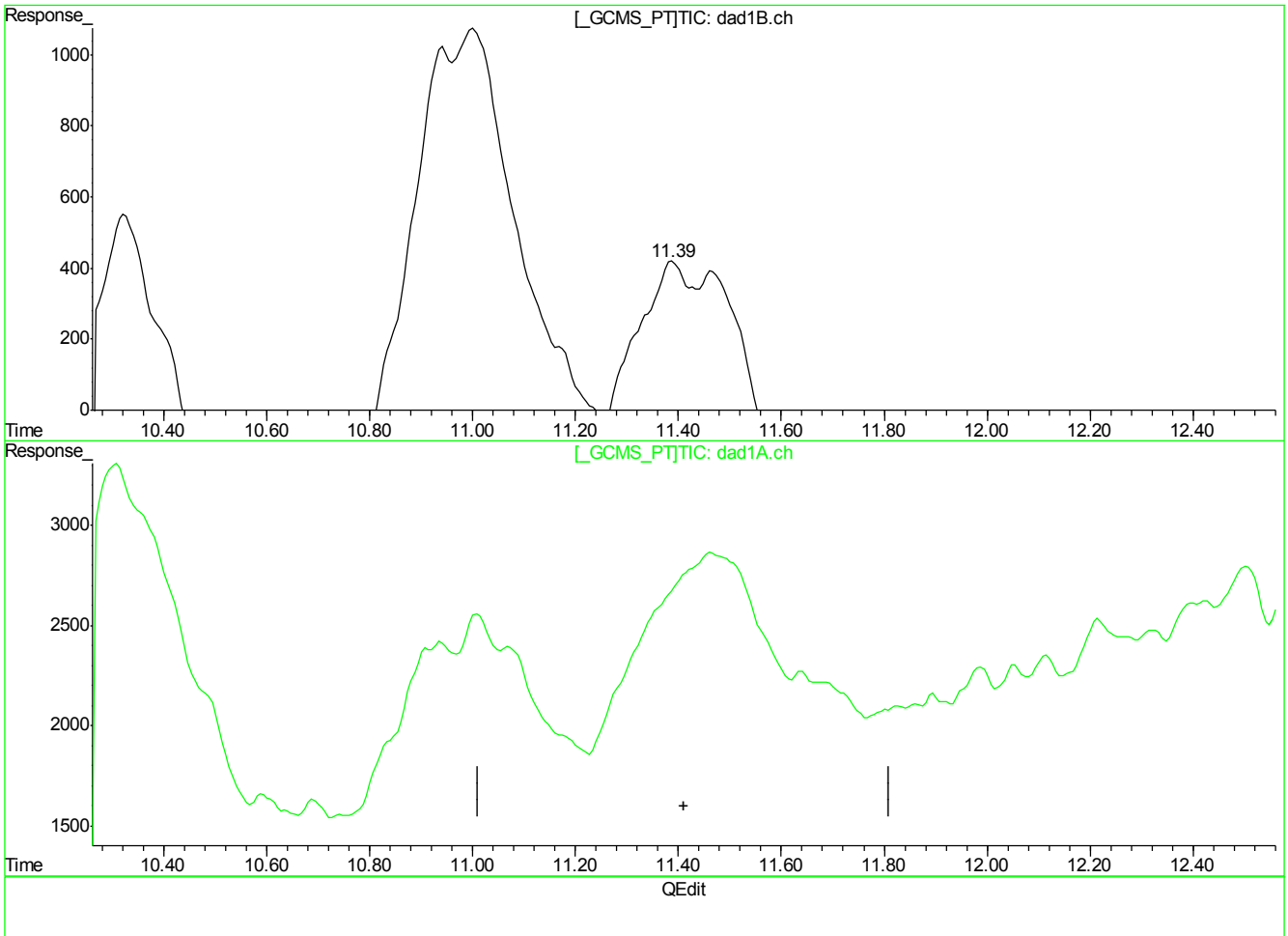
response 150818

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.39min 29.303ppb

response 96342

(17) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

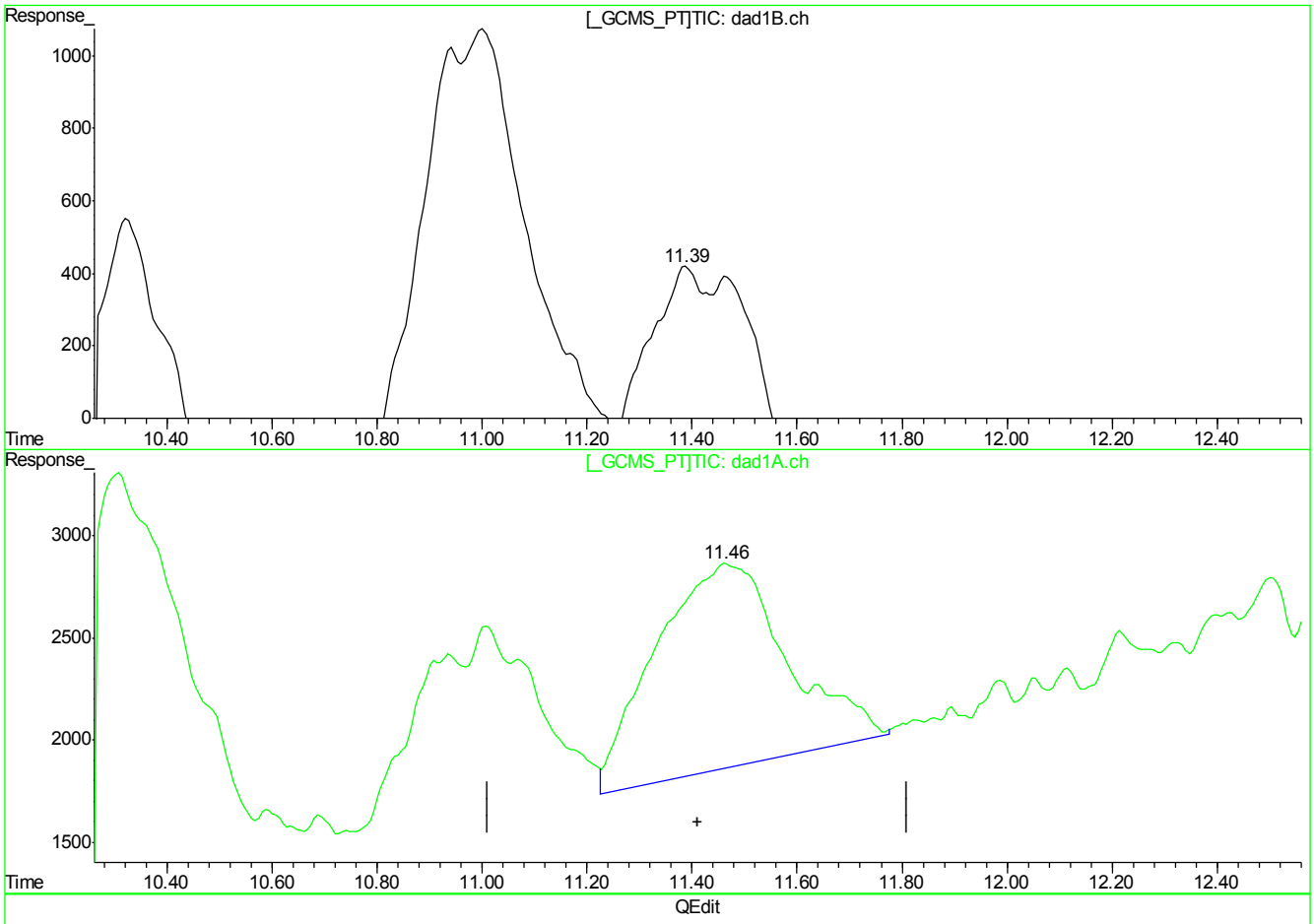
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:45 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

11.39min 29.303ppb

response 96342

(17) 2,6-Dinitrotoluene #2

11.46min 44.840ppb m

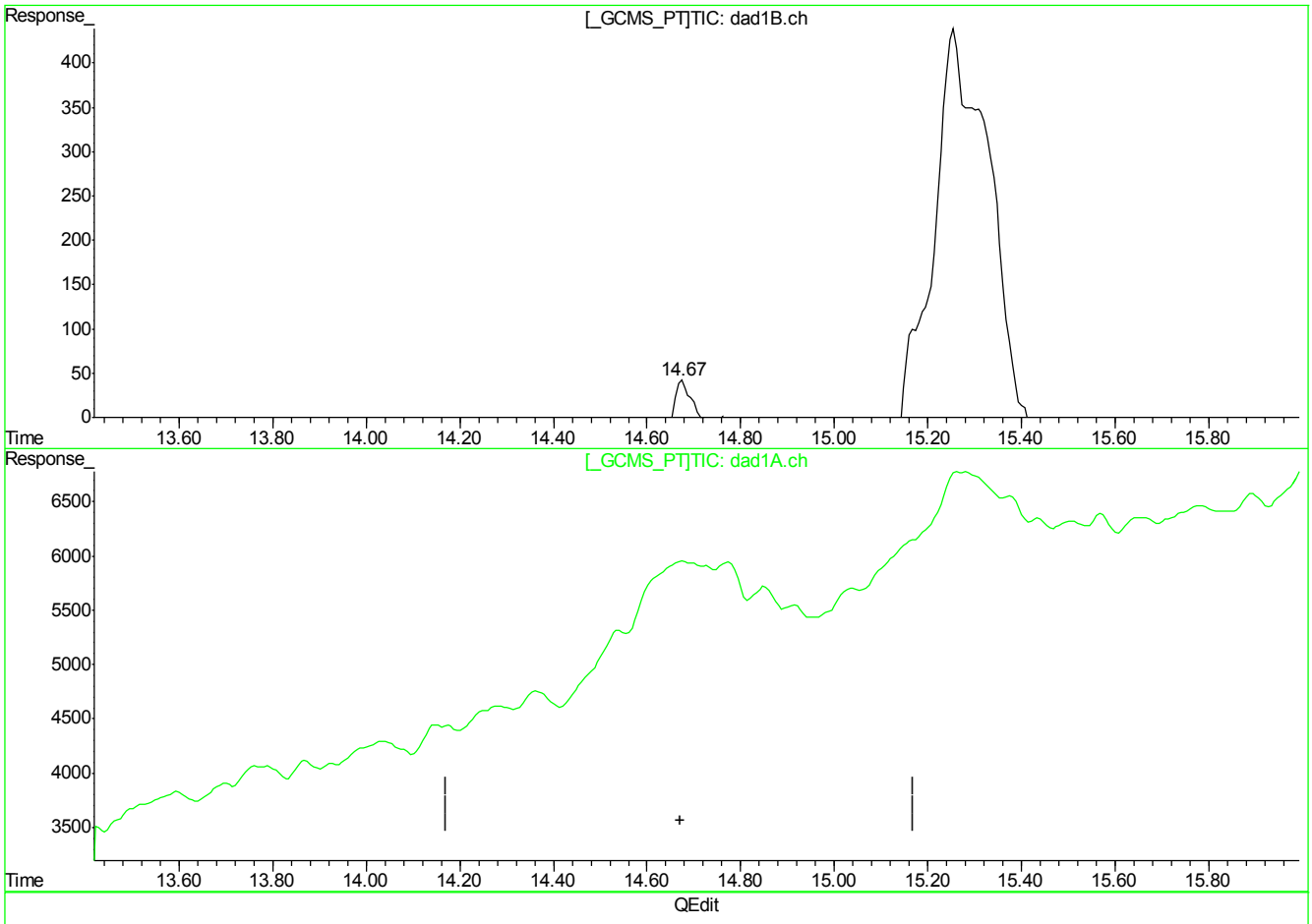
response 175853

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 63.119ppb

response 157597

(18) o-Nitrotoluene #2

0.00min 0.000ppb

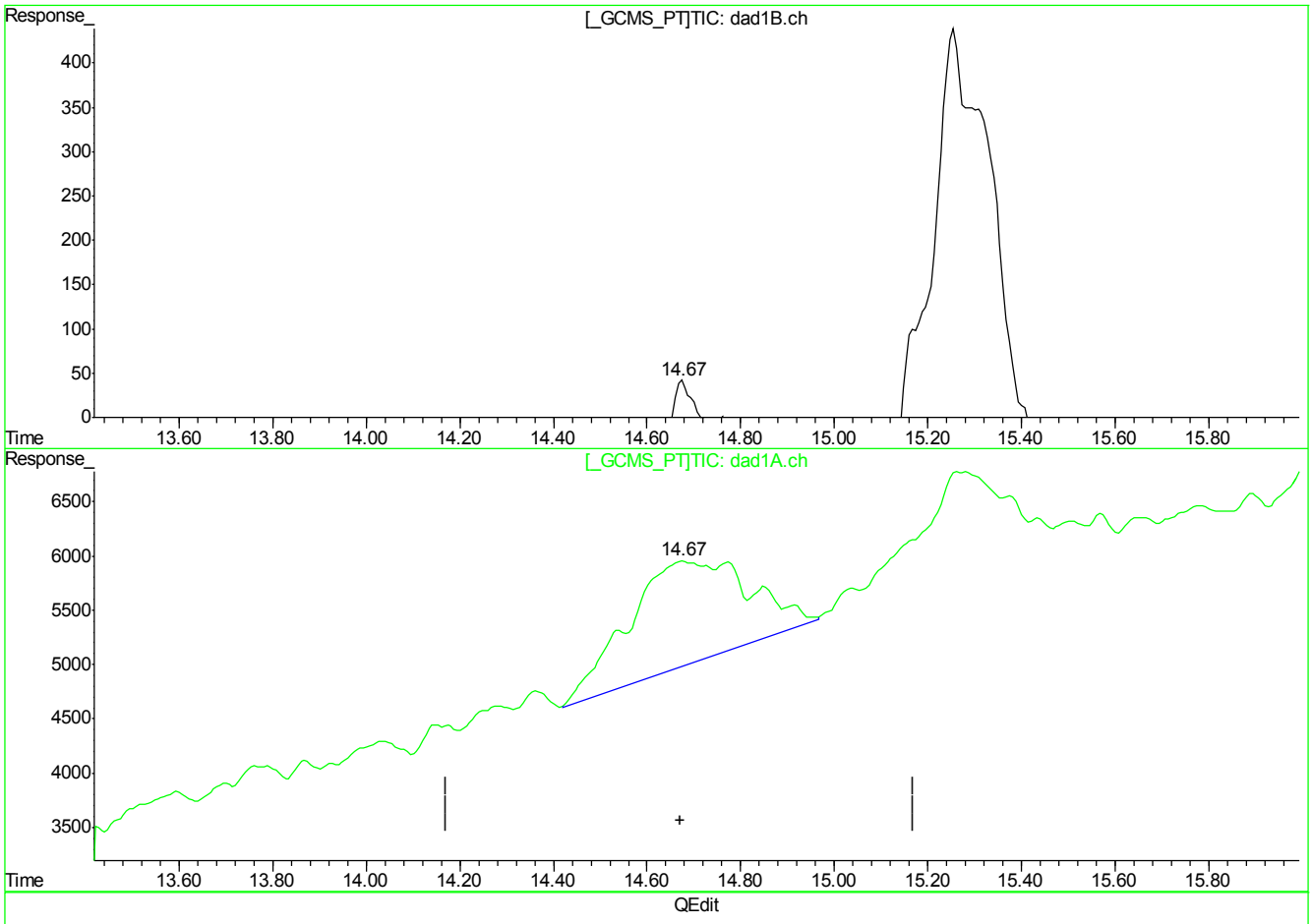
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 63.119ppb

response 157597

(18) o-Nitrotoluene #2

14.67min 47.060ppb m

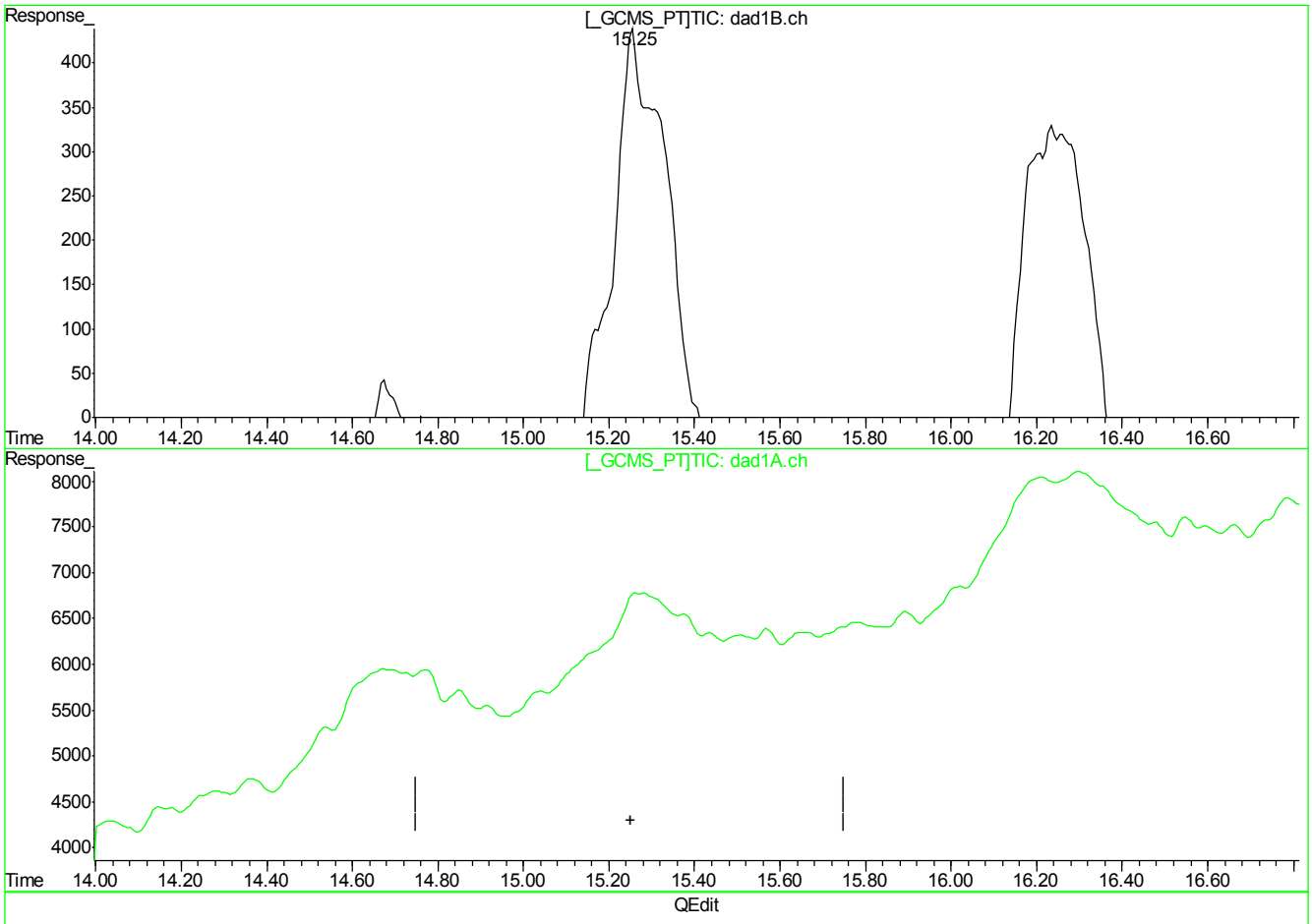
response 171653

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:54:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.26min 66.793ppb

response 247116

(19) p-Nitrotoluene #2

0.00min 0.000ppb

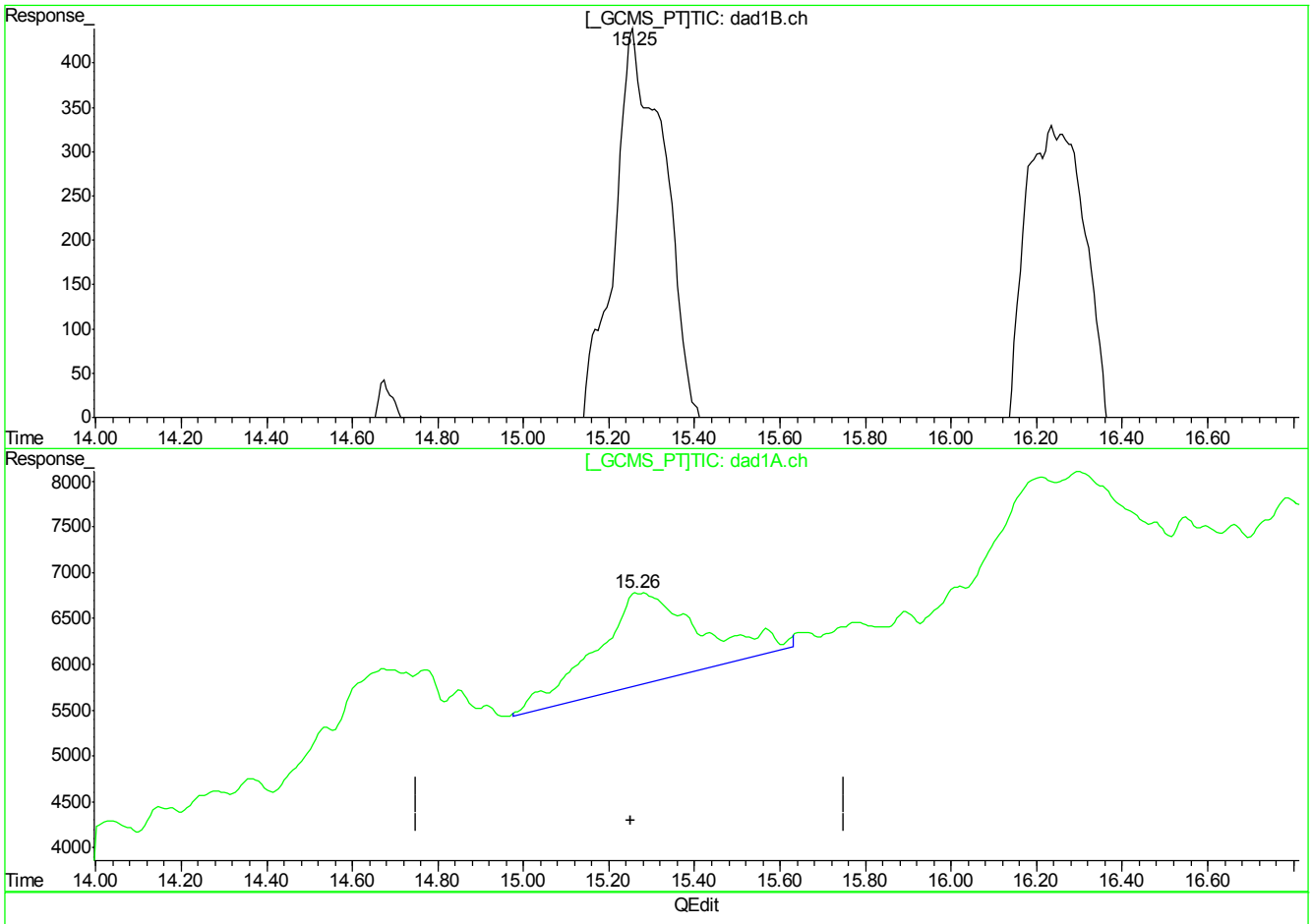
response 0

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:00 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.26min 66.793ppb

response 247116

(19) p-Nitrotoluene #2

15.26min 53.275ppb m

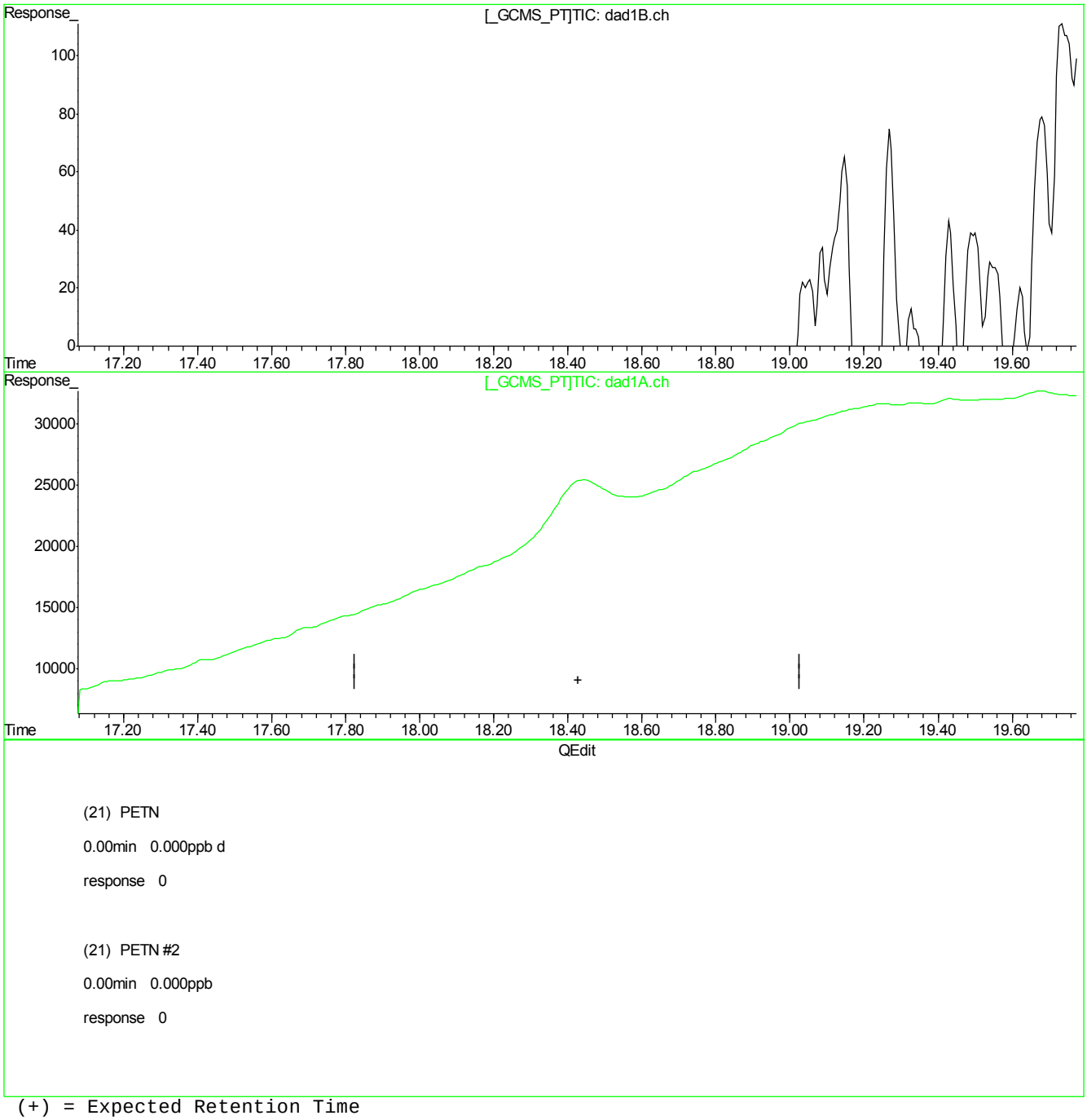
response 168598

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:04 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



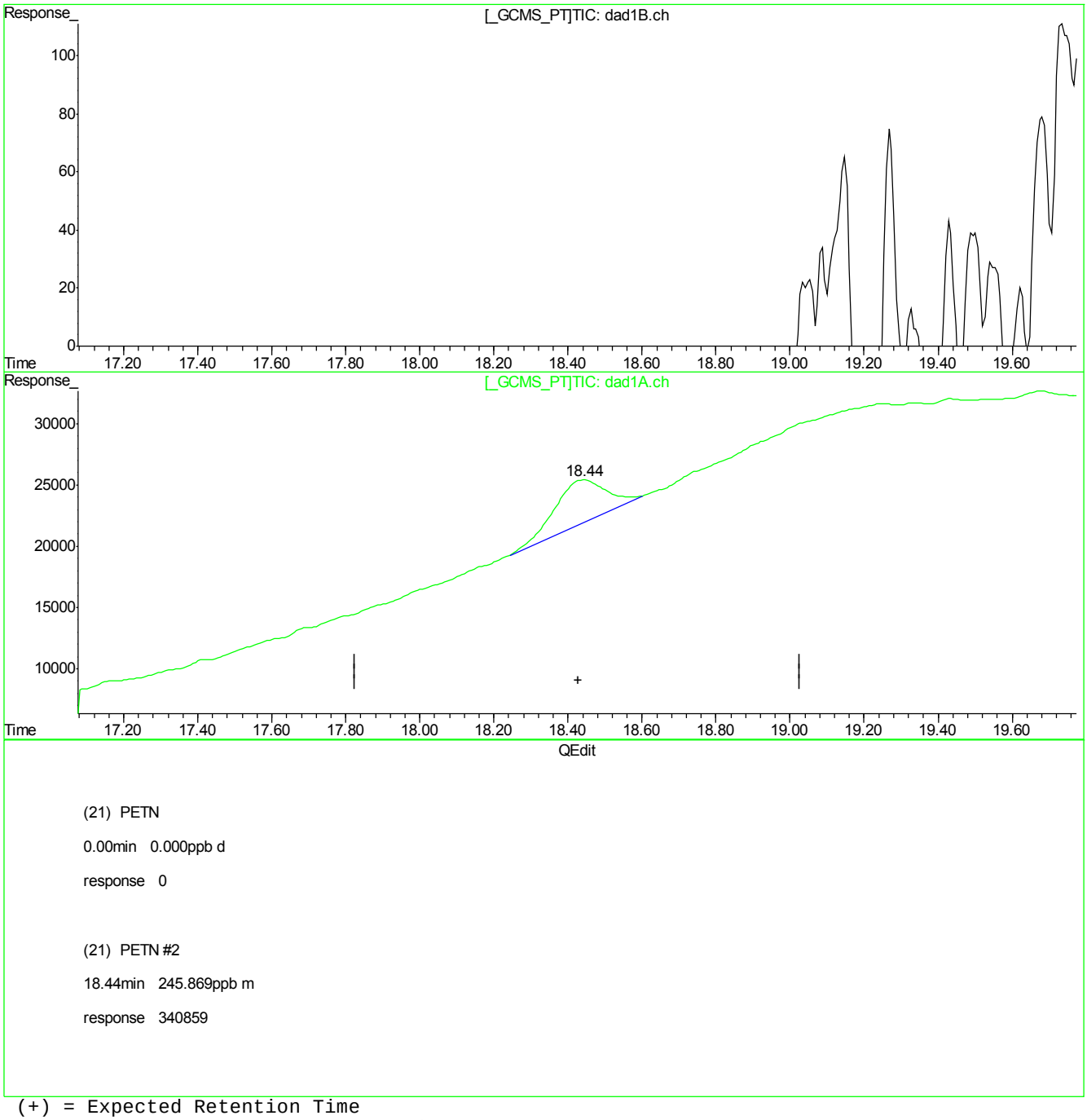
(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:13 2018

7.7.2.18
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059465.D\dad1A.ch
Acq On : 19-Apr-2018, 10:43:55 Operator: evitam
Sample : IC1722-50 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:52:10 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.44min 245.869ppb m

response 340859

(+) = Expected Retention Time
BB059465.D 8330B_0419PLUS.M Thu Apr 19 13:55:32 2018

7.7.2.19

7

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:46 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.34	10.34	272485	542828	117.981	130.369
	Spiked Amount 500.000	Range 70 - 136		Recovery =		23.60%#	26.07%#
	Target Compounds						
1)	TNX	1.31	1.32	533635	818783	105.159m	105.054m
2)	HMX	1.44	1.44	199951	561154	102.567	106.775
3)	DNX	1.67	1.67	326904	529647	110.452	110.960
4)	MNX	2.21	2.21	342440	509252	110.134	108.645
5)	RDX	2.77	2.77	242339	360585	104.634	96.279
6)	1,3,5-Trinitrobe	4.42	4.42	437968	902443	88.631	99.030
7)	1,3-Dinitrobenze	5.60	5.60	610628	401941	100.046	102.007m
8)	3,5-Dinitroanili	5.90	5.90	521888	808560	113.832	102.530
9)	Nitrobenzene	7.11	7.10	384978	333931	100.909	93.141
10)	Nitroglycerin	0.00	8.39	0	685075	N.D. d	517.665
11)	Tetryl	8.72	8.71	328974	566940	103.386	110.581
12)	2,4,6-Trinitroto	9.13	9.13	419408	524069	116.230	122.186
13)	2-Amino-4,6-Dini	9.46	9.46	386042	611330	96.169	109.955
14)	4-Amino-2,6-Dini	9.87	9.88	297874	600015	105.554	111.019
16)	2,4-Dinitrotolue	10.99	11.00	523838	300231	97.154	89.931
17)	2,6-Dinitrotolue	11.46	11.45	325135	307361	98.893	78.373
18)	o-Nitrotoluene	14.68	14.68	278959	380286	111.725	104.258
19)	p-Nitrotoluene	15.27	15.28	436597	376793	118.008	119.062
20)	m-Nitrotoluene	16.27	16.26	376321	465946	102.001	107.445
21)	PETN	0.00	18.44	0	707738	N.D. d	510.508m

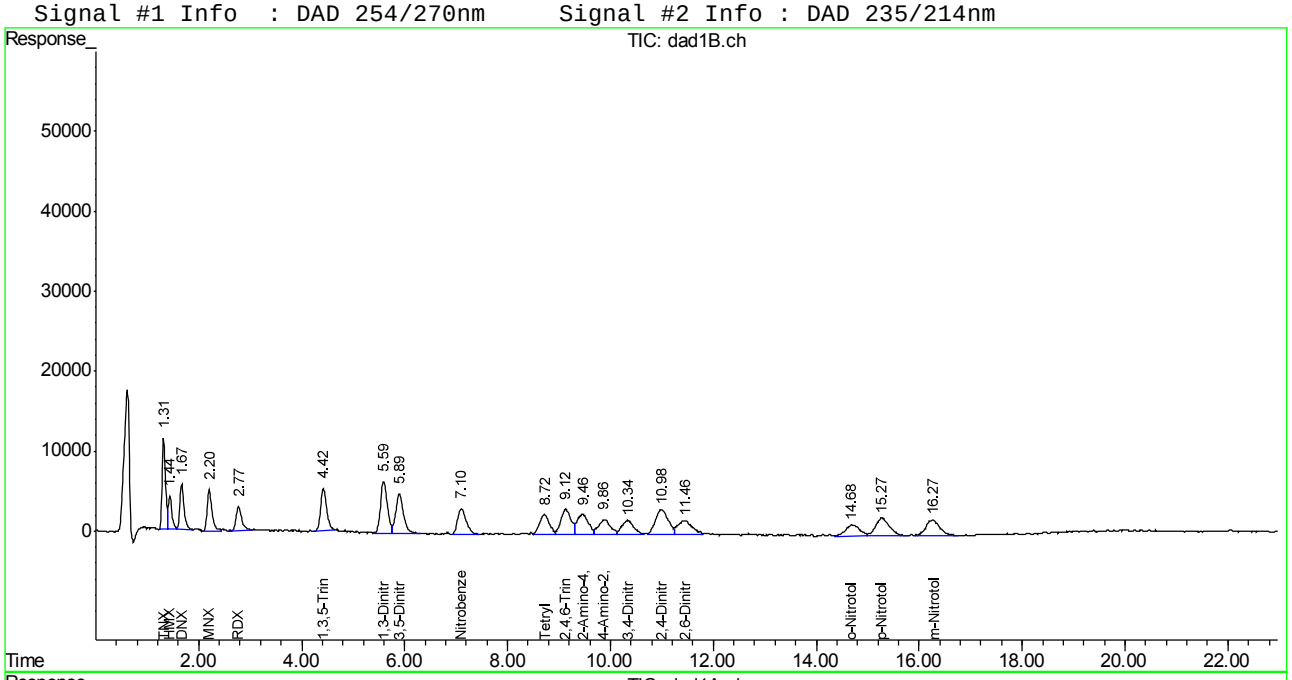
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059466.D 8330B_0419PLUS.M Fri Apr 20 08:01:20 2018 Page 1

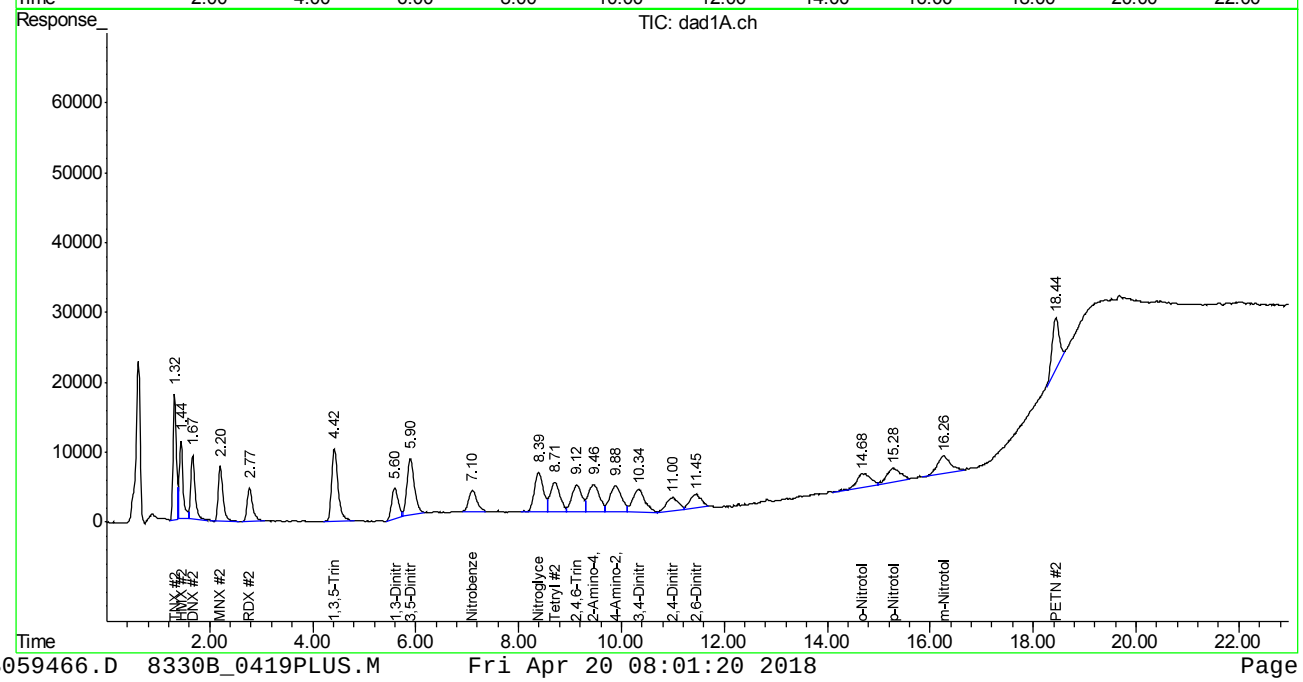
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:56 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

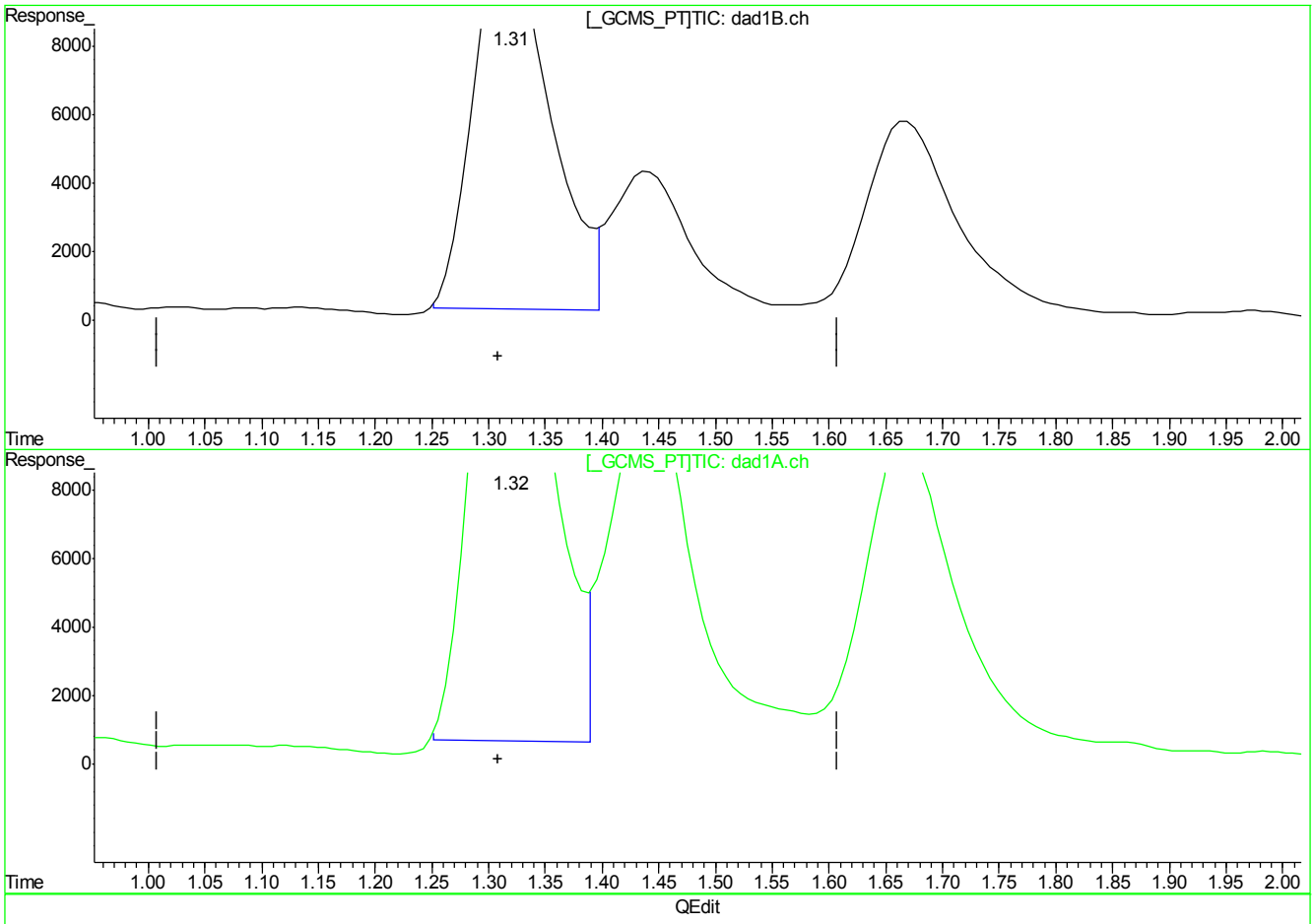
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059466.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 11:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 100.494ppb

response 509967

(1) TNX #2

1.32min 100.117ppb

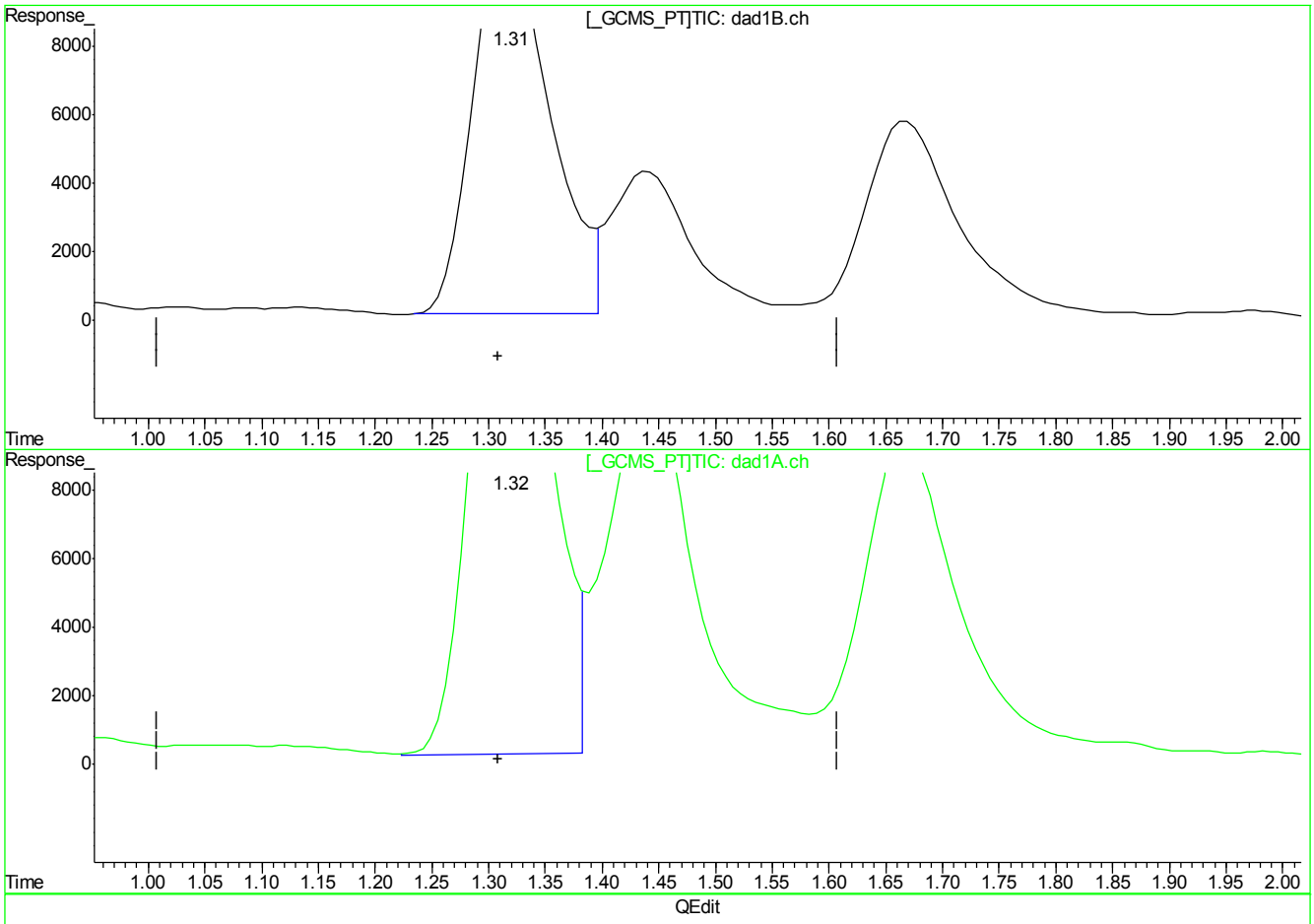
response 780302

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:55:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 105.159ppb m

response 533635

(1) TNX #2

1.32min 105.054ppb m

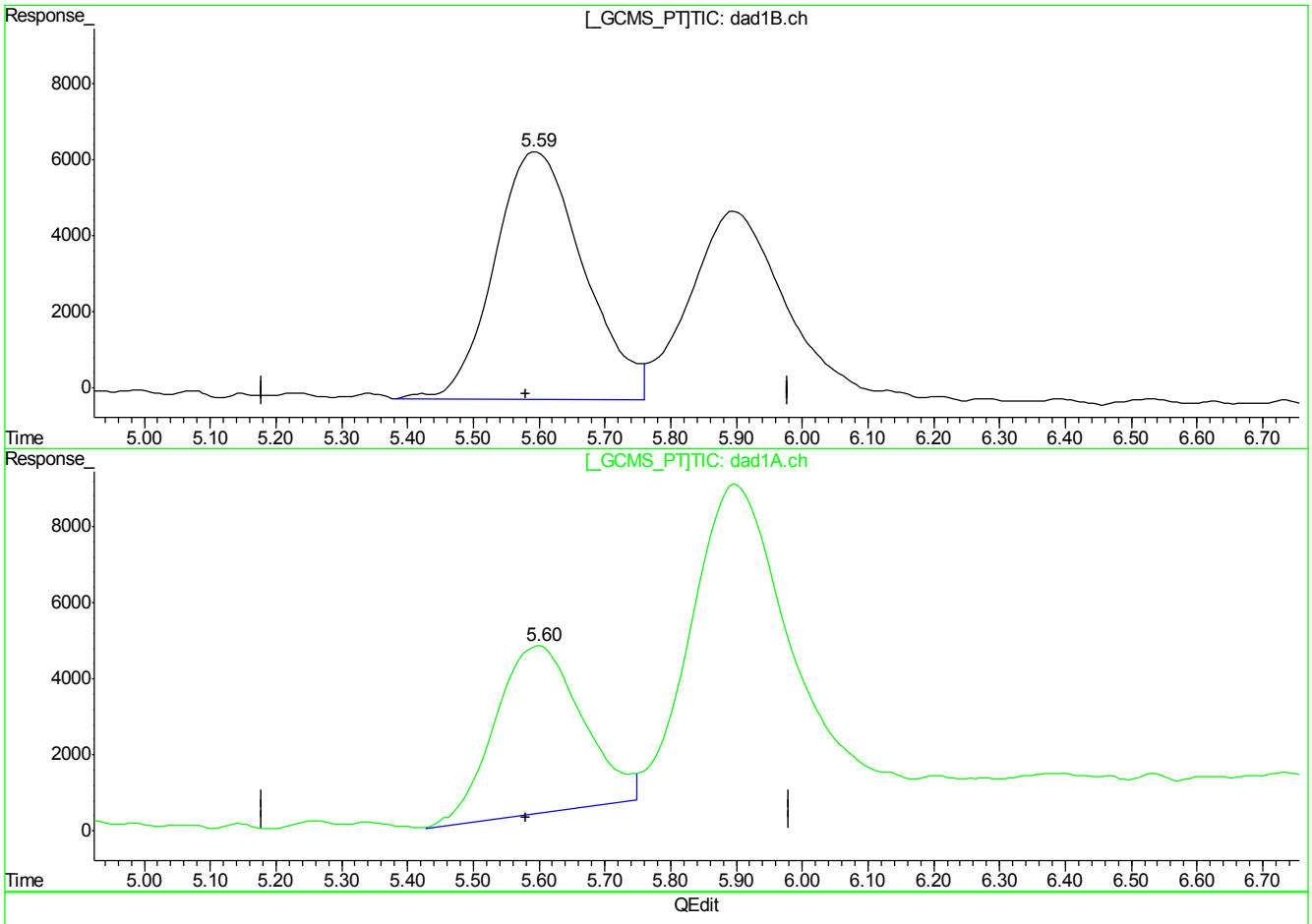
response 818783

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:55:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 100.046ppb

response 610628

(7) 1,3-Dinitrobenzene #2

5.60min 102.007ppb m

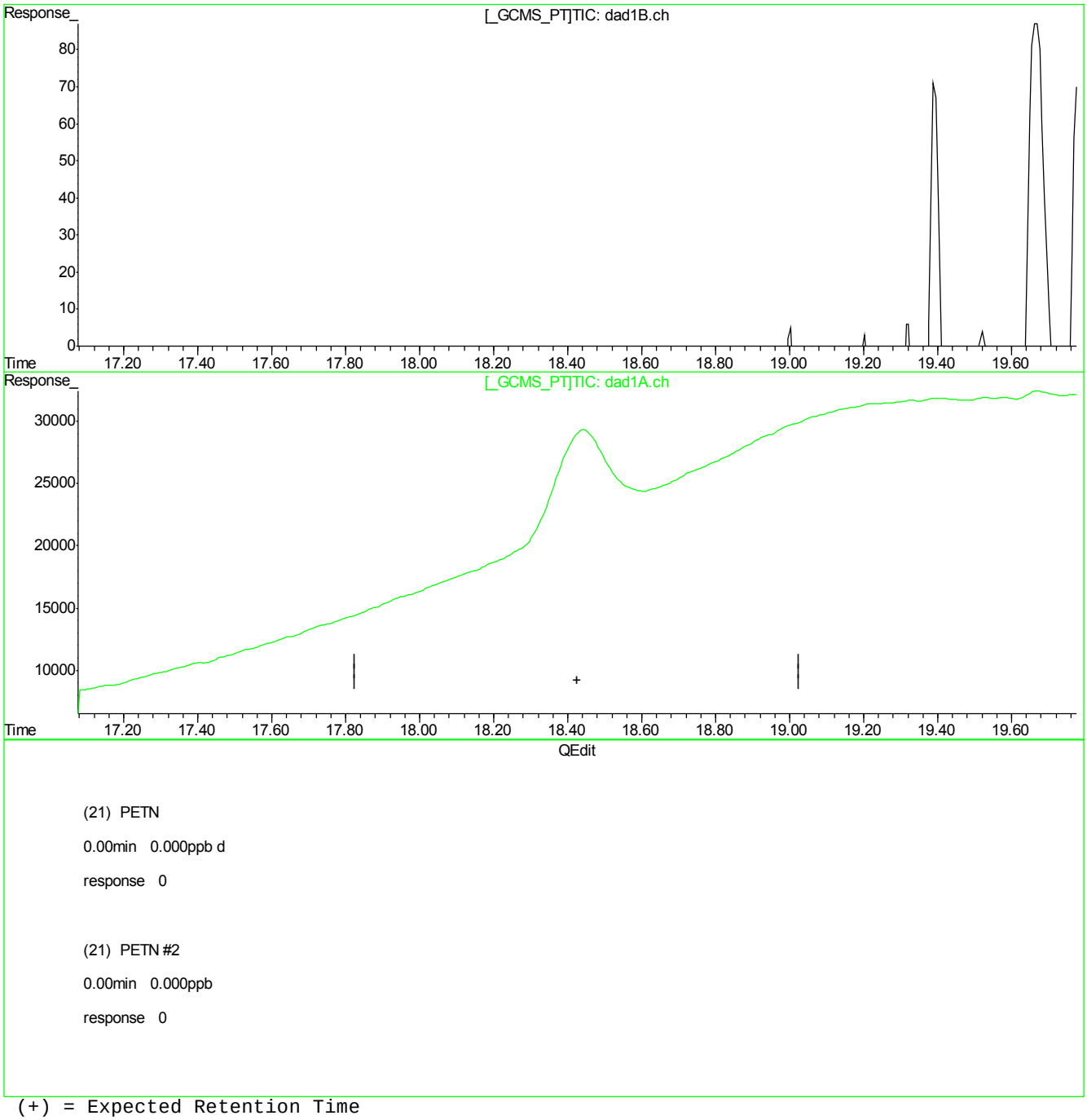
response 401941

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration

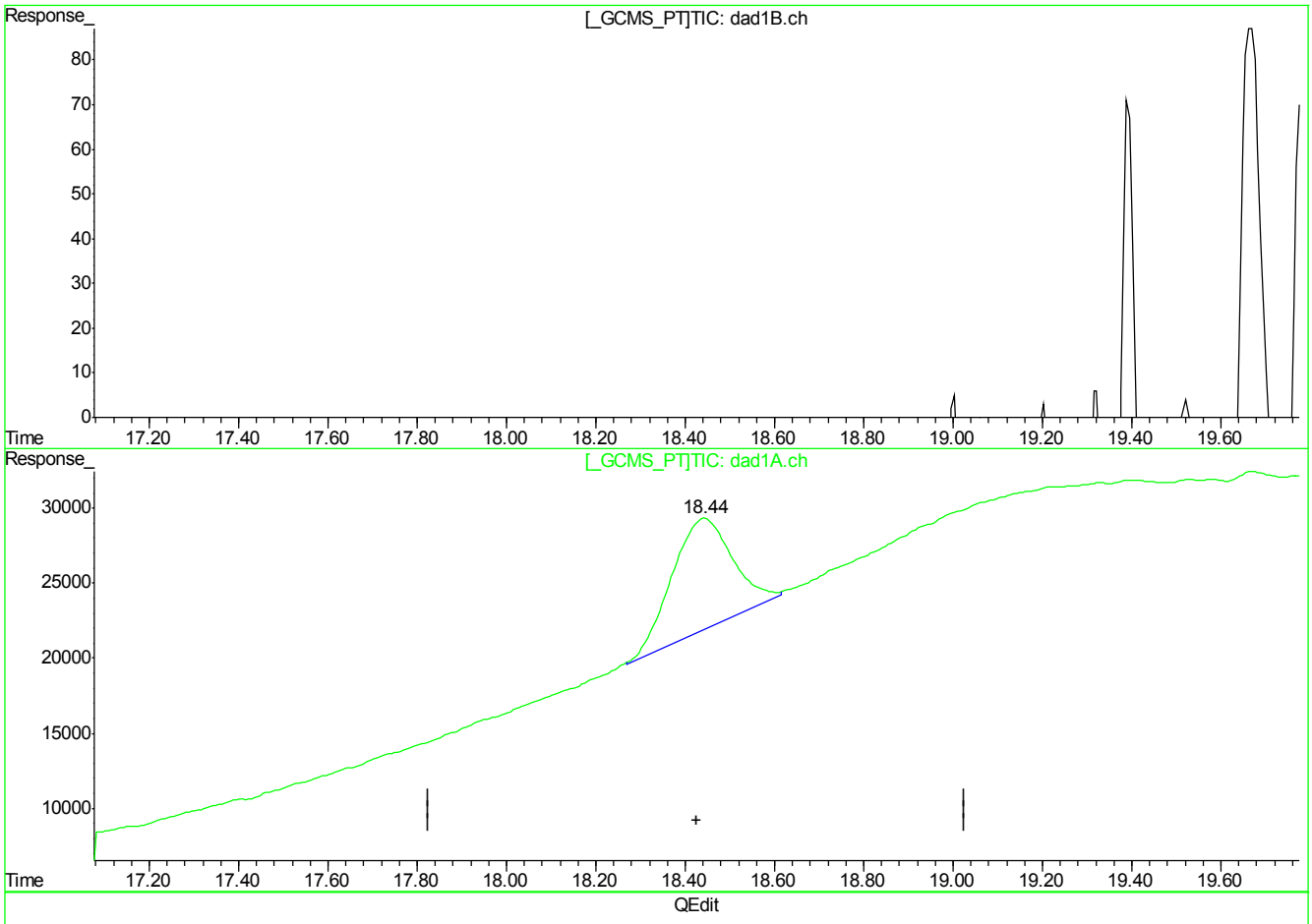


(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:22 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059466.D\dad1A.ch
Acq On : 19-Apr-2018, 11:13:51 Operator: evitam
Sample : IC1722-100 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:55:37 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.44min 510.508ppb m

response 707738

(+) = Expected Retention Time
BB059466.D 8330B_0419PLUS.M Thu Apr 19 13:56:25 2018

7.7.3.6

7

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:47 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.33	10.34	574463	864172	248.731	207.544
	Spiked Amount 500.000	Range 70 - 136		Recovery =		49.75%#	41.51%#
	Target Compounds						
1)	TNX	1.32	1.32	973915	1447277	191.920m	185.693m
2)	HMX	1.44	1.44	353288	1034890	181.222	196.916
3)	DNX	1.67	1.67	557165	973975	188.461	204.311
4)	MNX	2.21	2.21	601874	917081	193.572	195.653
5)	RDX	2.77	2.77	404360	620985	174.855	165.808
6)	1,3,5-Trinitrobe	4.42	4.42	845691	1617161	171.142	177.459
7)	1,3-Dinitrobenze	5.60	5.60	1090649	713093	178.694	180.973m
8)	3,5-Dinitroanili	5.90	5.90	925462	1488930	201.858	188.806
9)	Nitrobenzene	7.11	7.11	707824	703995	185.532	196.361
10)	Nitroglycerin	0.00	8.39	0	1191118	N.D. d	900.047
11)	Tetryl	8.72	8.71	625180	1011909	196.474	197.371
12)	2,4,6-Trinitroto	9.14	9.13	813983	914451	225.578	213.203
13)	2-Amino-4,6-Dini	9.45	9.45	729629	1080997	181.762	194.431
14)	4-Amino-2,6-Dini	9.88	9.89	567927	1041527	201.249	192.711
16)	2,4-Dinitrotolue	10.99	10.98	1040801	553443	193.033	165.778
17)	2,6-Dinitrotolue	11.44	11.43	676914	698642	205.891	178.145
18)	o-Nitrotoluene	14.69	14.69	466779	677451	186.949	185.727
19)	p-Nitrotoluene	15.28	15.27	789495	685759	213.394	216.691
20)	m-Nitrotoluene	16.24	16.26	674661	822841	182.865	189.743
21)	PETN	0.00	18.44	0	1321717	N.D. d	953.386m

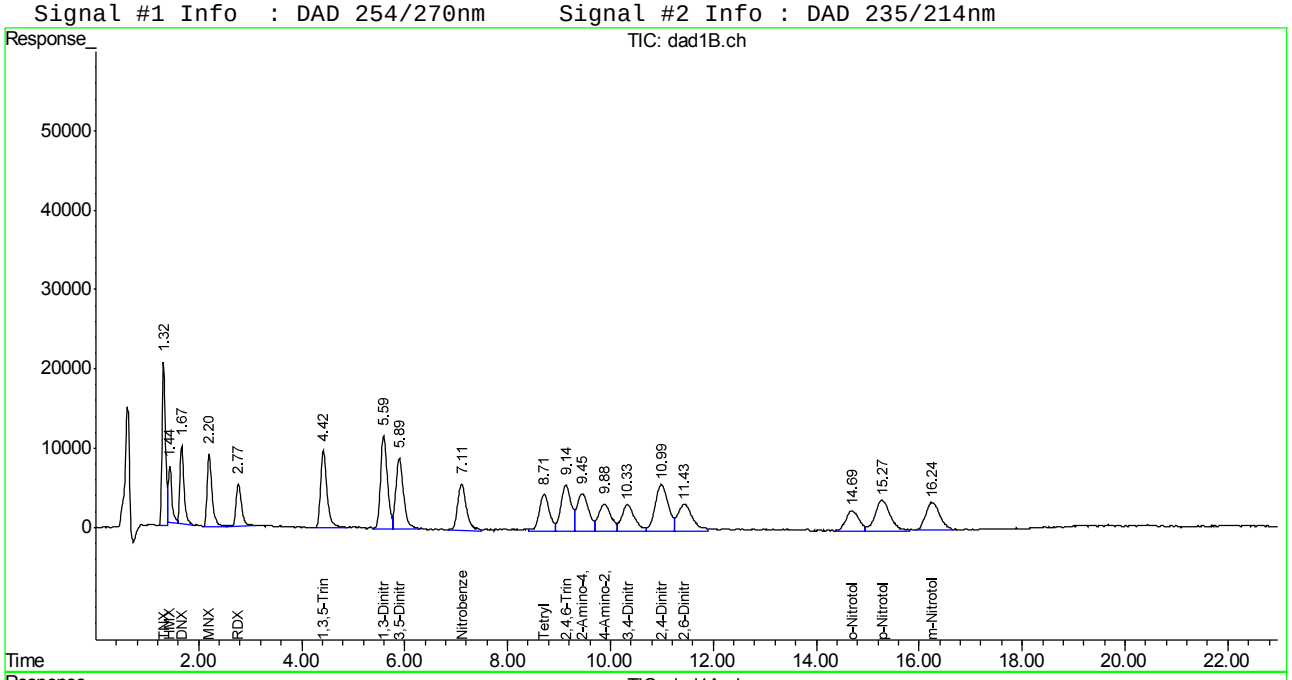
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059467.D 8330B_0419PLUS.M Fri Apr 20 08:01:21 2018 Page 1

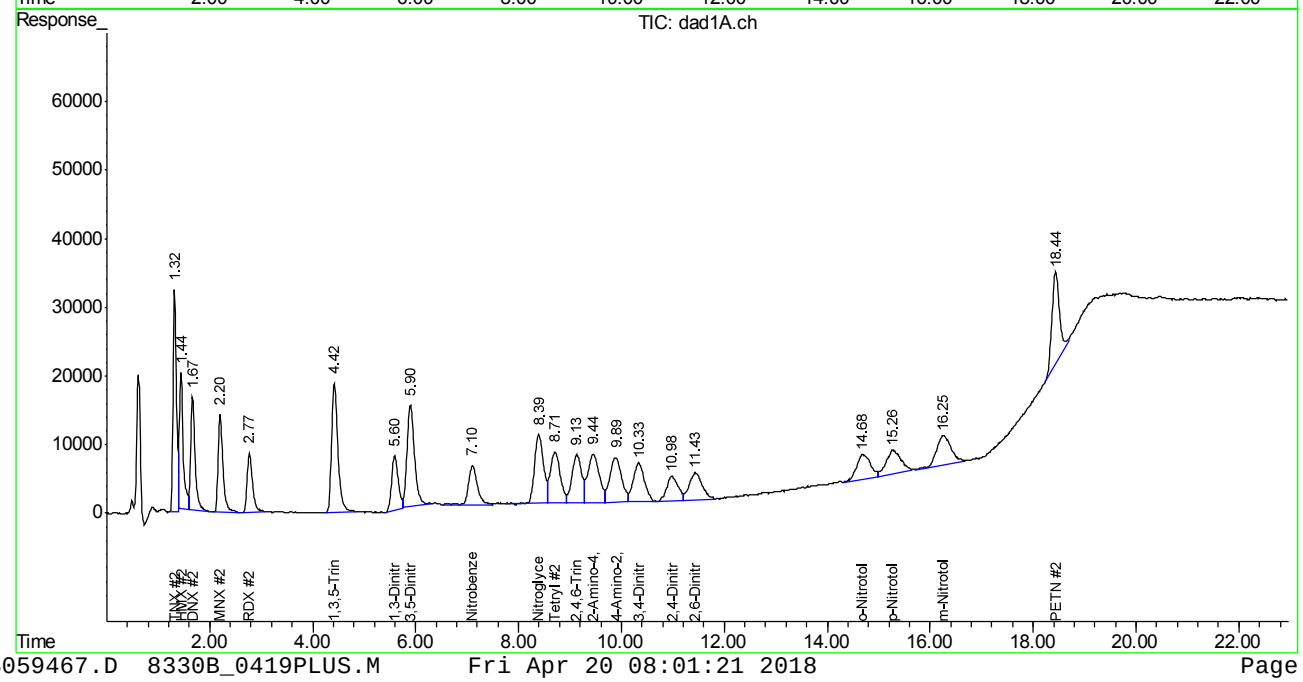
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:57 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

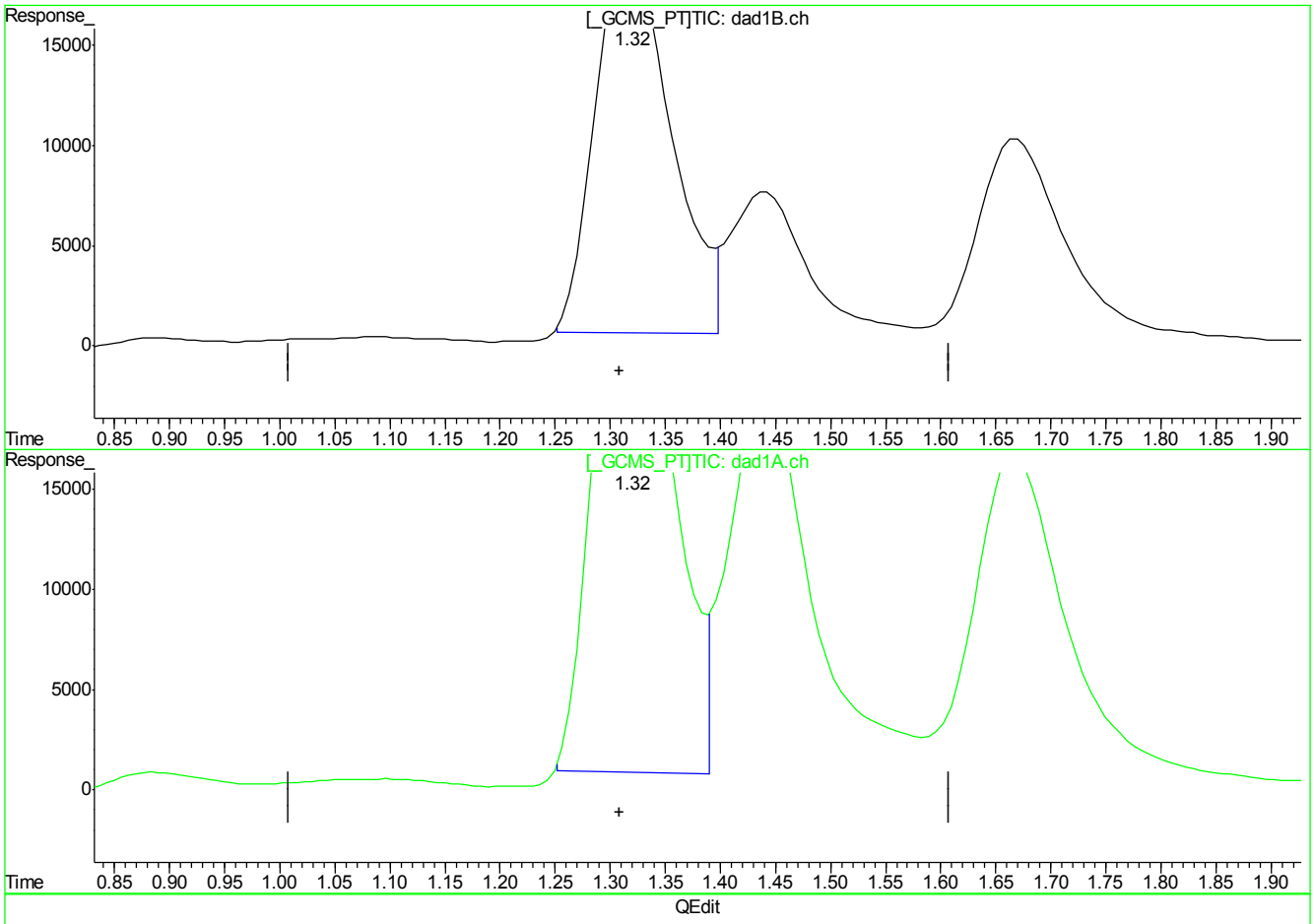
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059467.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 11:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.32	Poorly defined baseline
TNX		2	1.32	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.60	Poorly defined baseline
PETN	78-11-5	2	18.44	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 181.080ppb

response 918905

(1) TNX #2

1.32min 181.135ppb

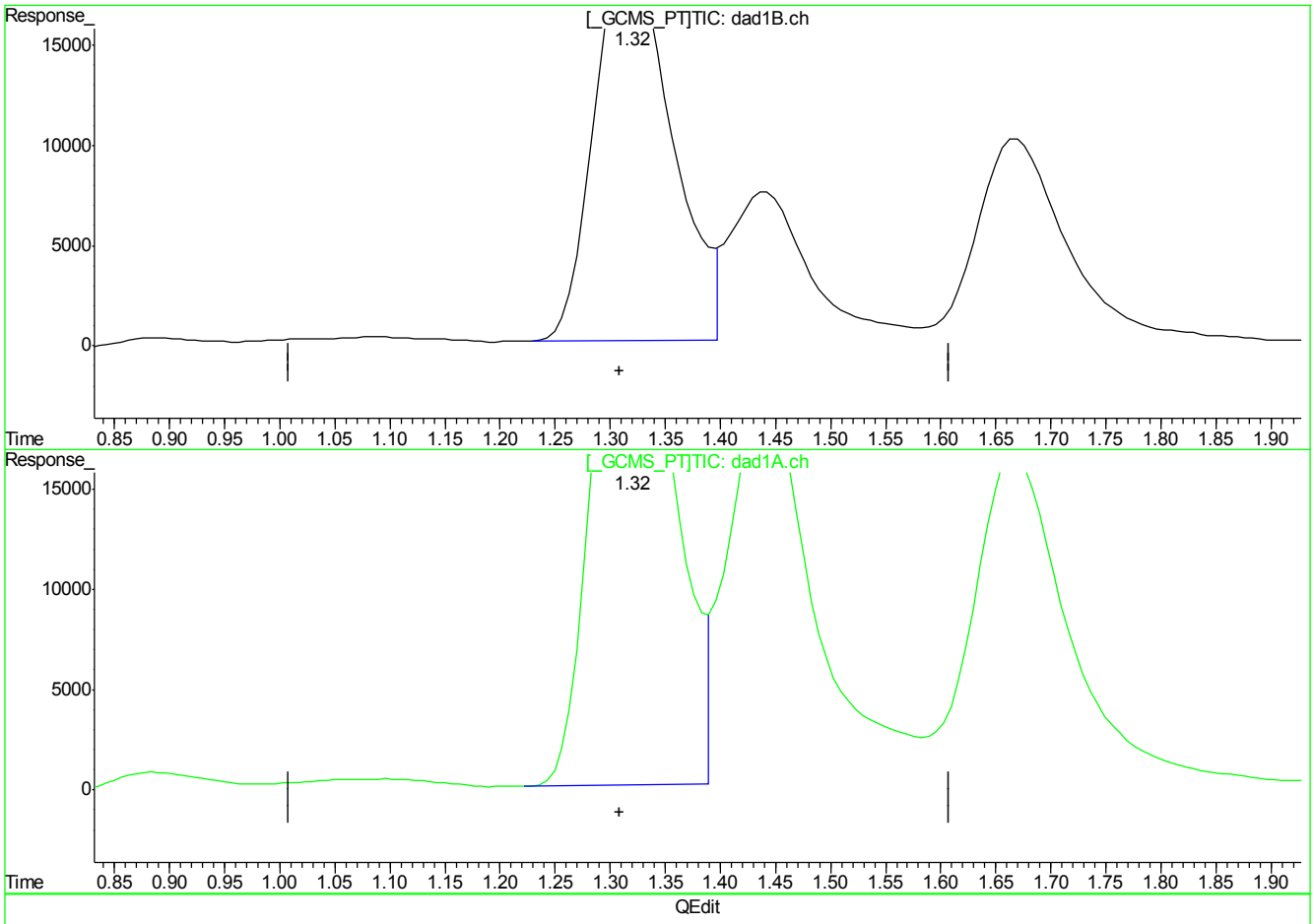
response 1411756

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 191.920ppb m

response 973915

(1) TNX #2

1.32min 185.693ppb m

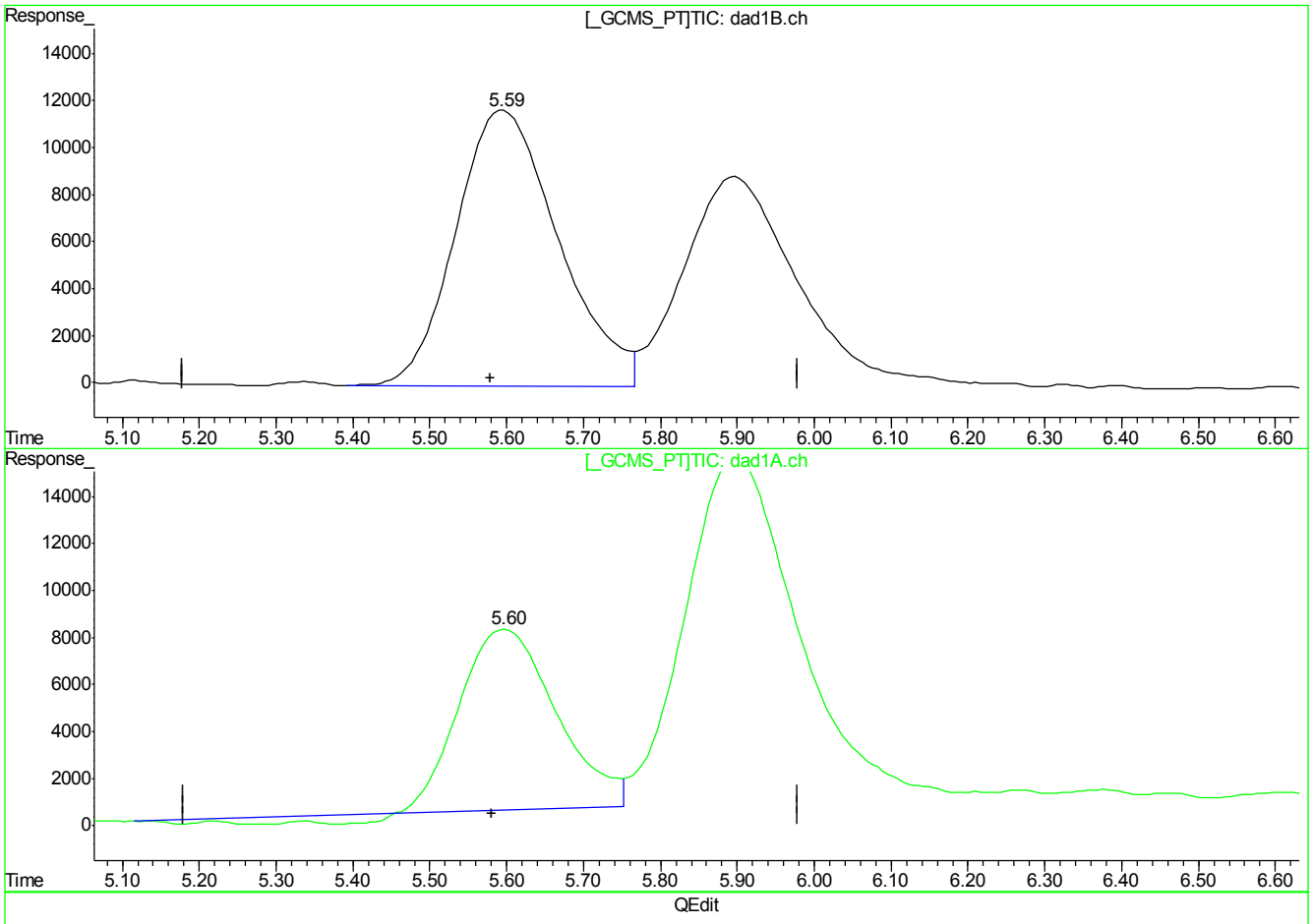
response 1447277

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:42 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 178.694ppb

response 1090649

(7) 1,3-Dinitrobenzene #2

5.60min 160.067ppb

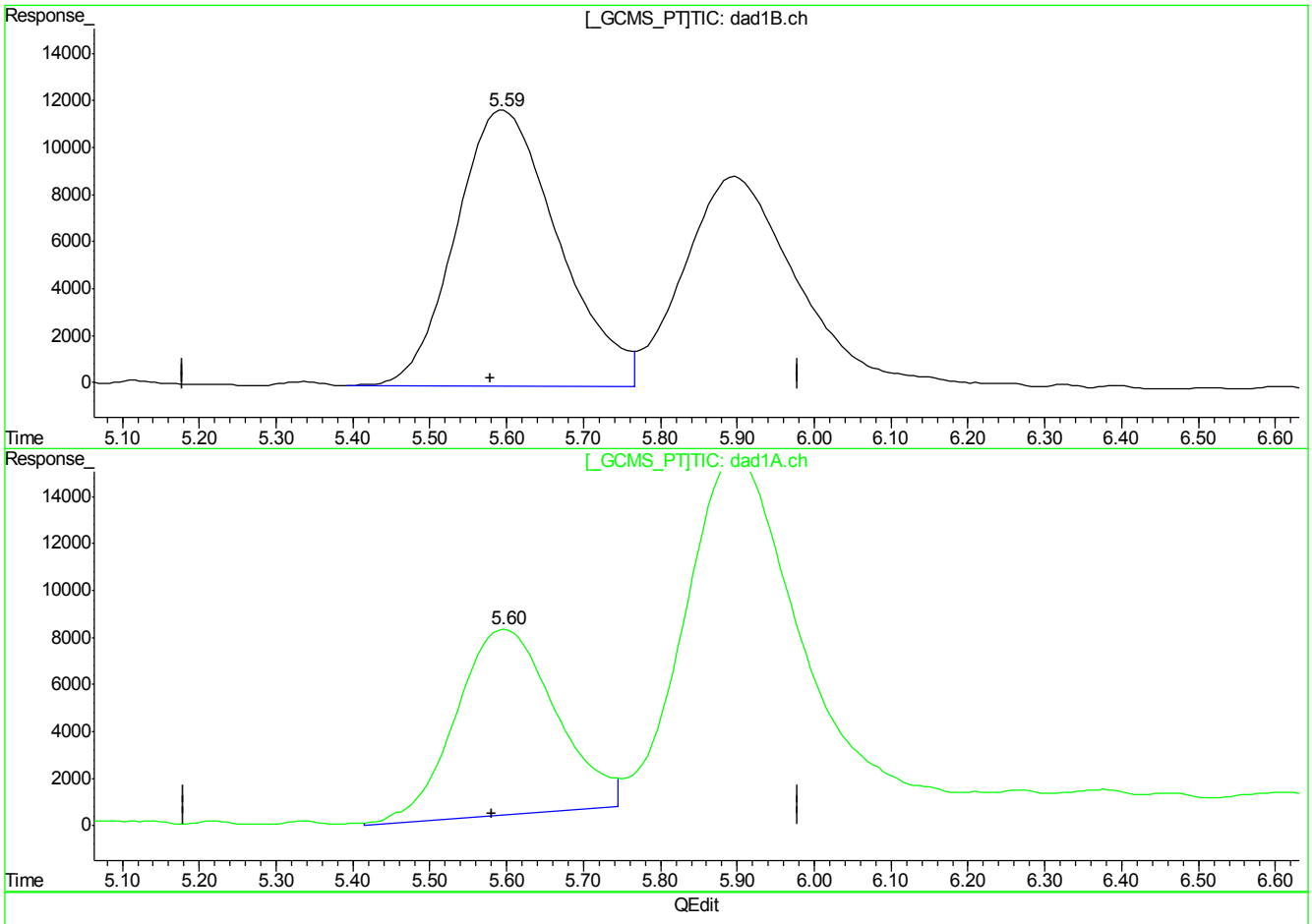
response 630718

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.60min 178.694ppb

response 1090649

(7) 1,3-Dinitrobenzene #2

5.60min 180.973ppb m

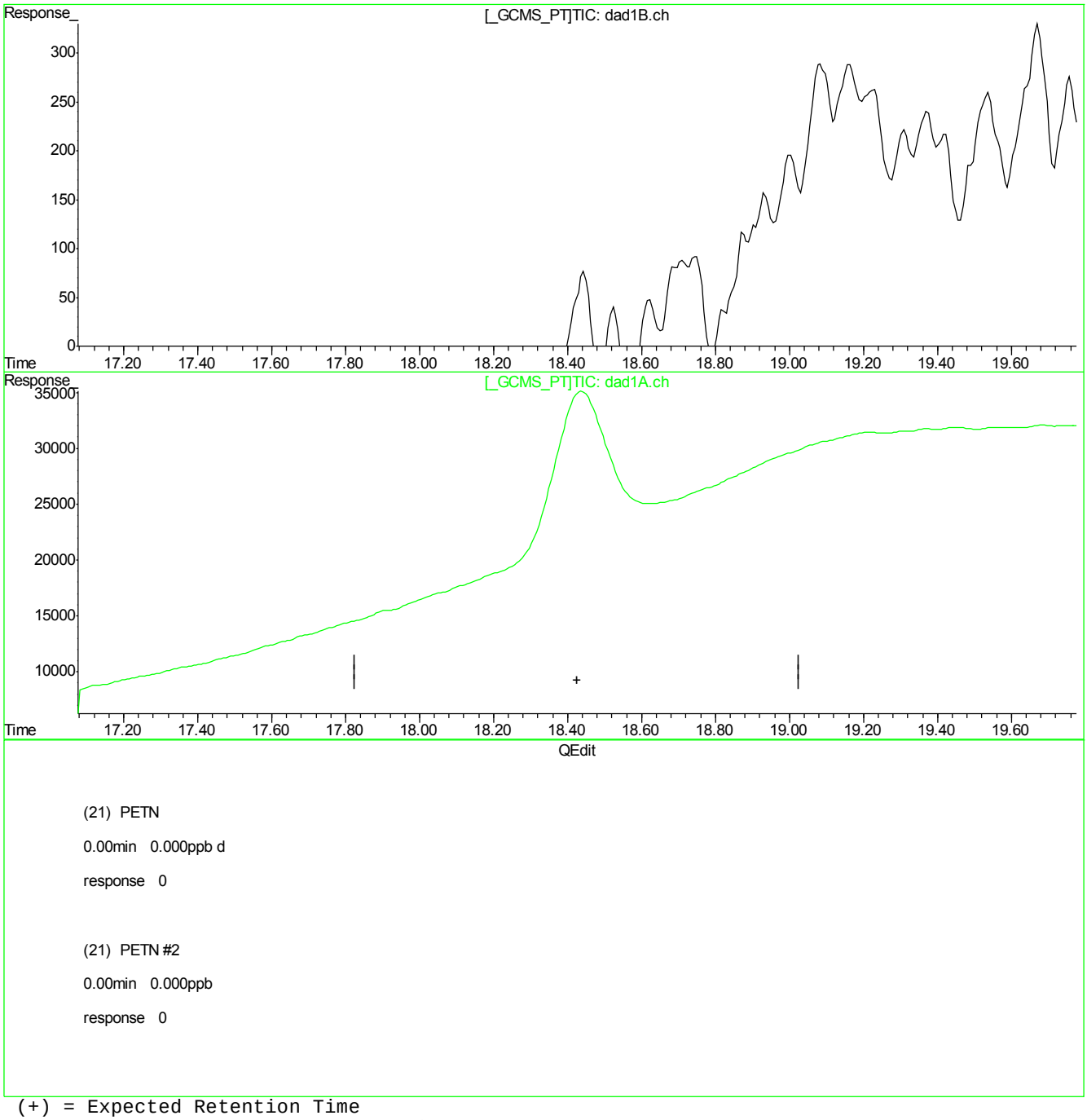
response 713093

(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:56:54 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration

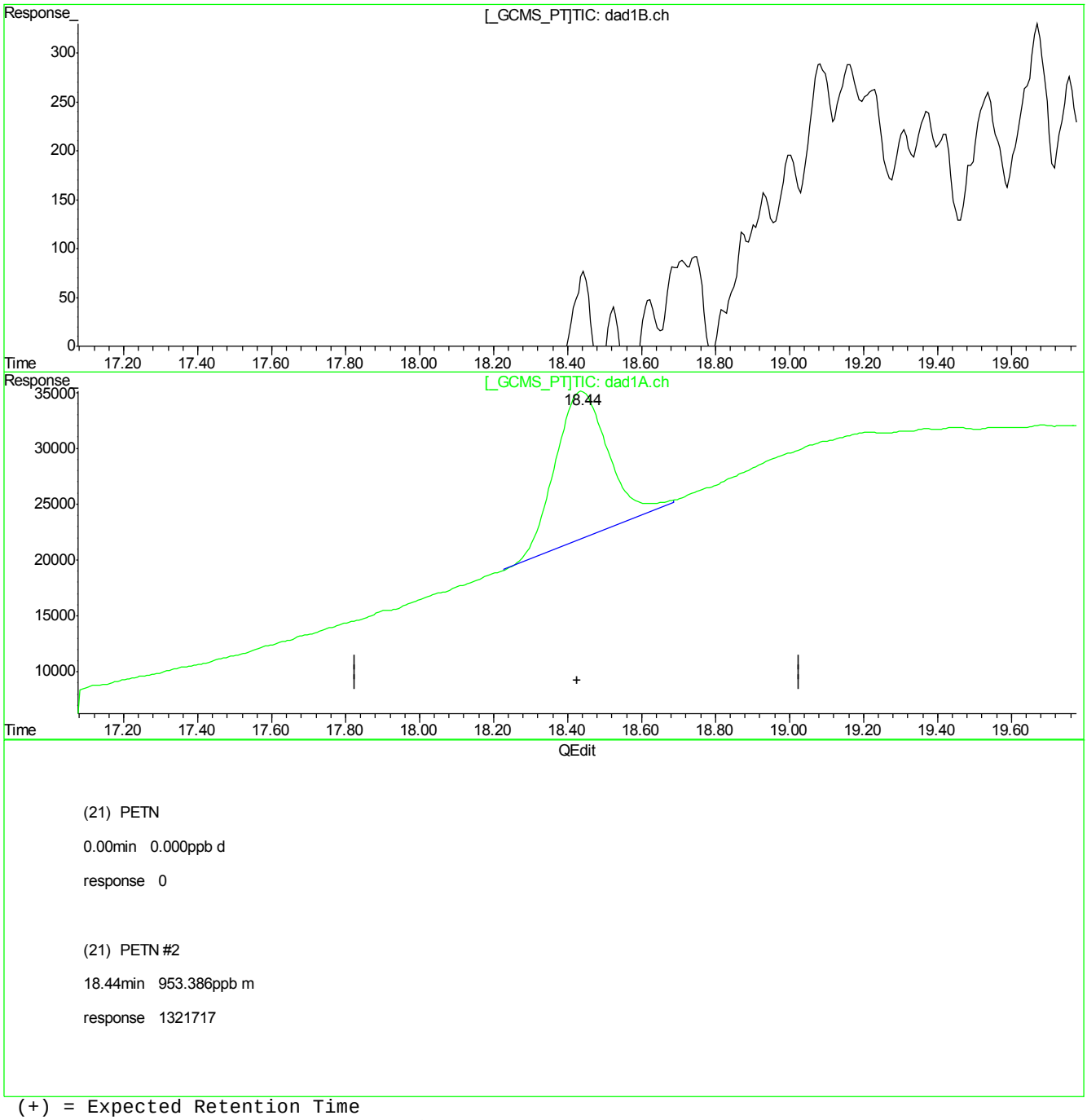


(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:57:05 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059467.D\dad1A.ch
Acq On : 19-Apr-2018, 11:43:47 Operator: evitam
Sample : IC1722-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:56:30 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059467.D 8330B_0419PLUS.M Thu Apr 19 13:57:08 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:48 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.32	10.33	1313071	2197124	568.534	527.673
Spiked Amount	500.000	Range	70 - 136	Recovery	=	113.71%	105.53%
	Target Compounds						
1)	TNX	1.31	1.31	2377327	3647073	468.478m	467.938m
2)	HMX	1.44	1.44	935456	2491099	479.850m	473.999m
3)	DNX	1.66	1.66	1433691	2272296	487.028m	478.485m
4)	MNX	2.20	2.20	1478175	2286671	475.405	487.846
5)	RDX	2.77	2.77	990527	1568605	430.703	418.831
6)	1,3,5-Trinitrobe	4.42	4.42	2066563	4004610	418.208	439.446
7)	1,3-Dinitrobenze	5.59	5.59	2679478	1782018	439.010	452.251
8)	3,5-Dinitroanili	5.89	5.89	2324806	3781357	507.077	479.500
9)	Nitrobenzene	7.10	7.10	1671085	1562470	438.019	435.811
10)	Nitroglycerin	0.00	8.39	0	3052703	N.D. d	2306.721
11)	Tetryl	8.71	8.70	1483433	2538597	466.196	495.149
12)	2,4,6-Trinitroto	9.13	9.13	1921592	2303072	532.527	536.958
13)	2-Amino-4,6-Dini	9.45	9.44	1801766	2694209	448.848	484.588
14)	4-Amino-2,6-Dini	9.88	9.88	1344823	2643442	476.547	489.110
16)	2,4-Dinitrotolue	10.98	10.98	2496550	1473568	463.023	441.393
17)	2,6-Dinitrotolue	11.43	11.43	1615025	1831379	491.226	466.979
18)	o-Nitrotoluene	14.69	14.69	1143442	1552232	457.959	425.553m
19)	p-Nitrotoluene	15.27	15.27	1852819	1583340	500.801	500.315
20)	m-Nitrotoluene	16.24	16.24	1685984	1985596	456.981	457.869
21)	PETN	0.00	18.43	0	3450516	N.D. d	2488.940m

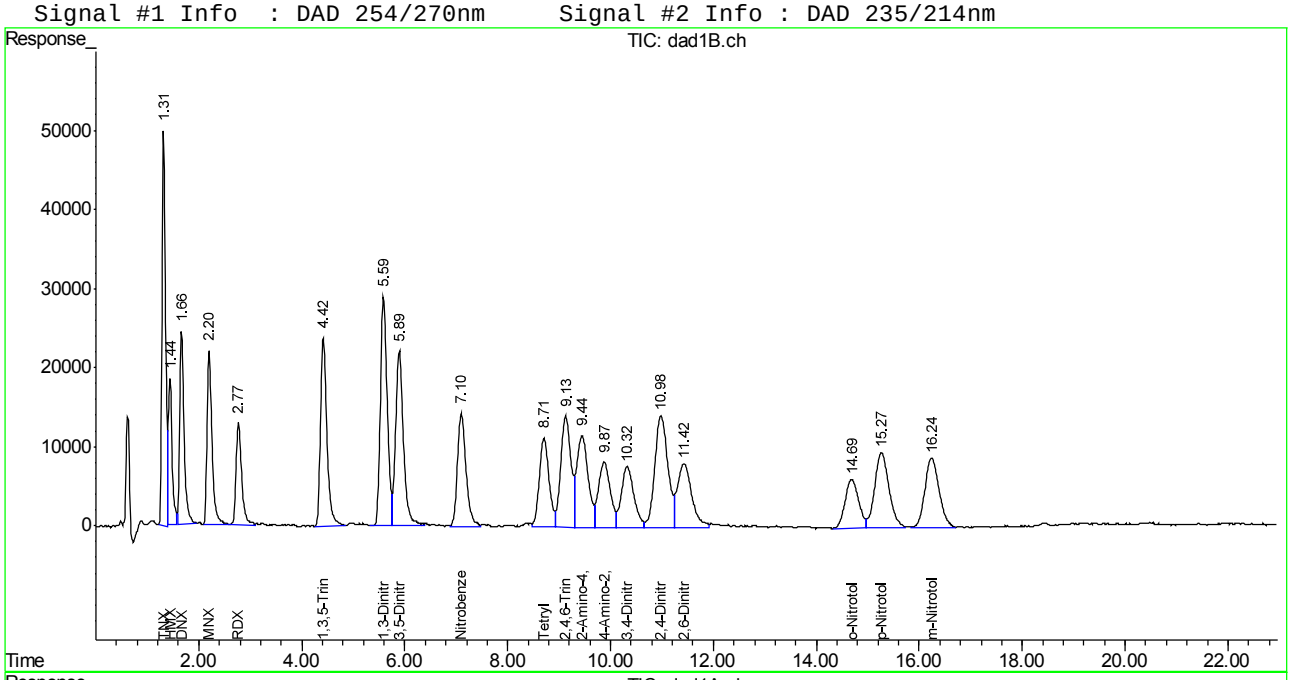
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059468.D 8330B_0419PLUS.M Fri Apr 20 08:01:22 2018 Page 1

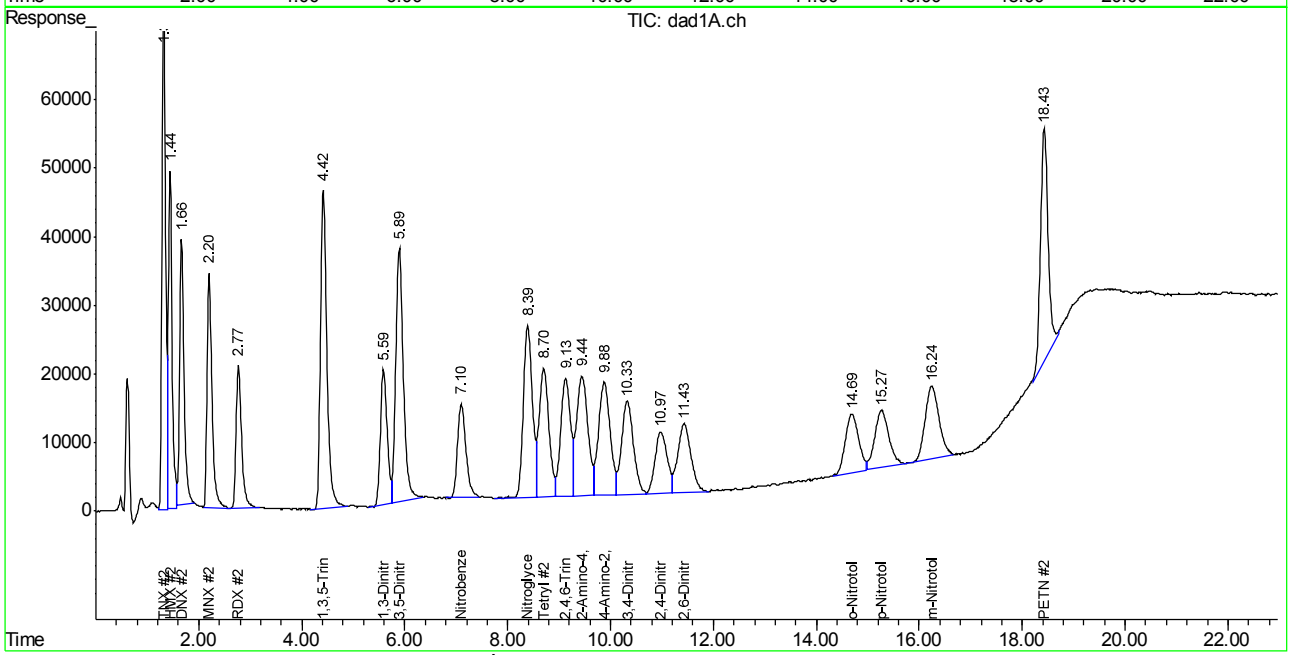
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:58 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

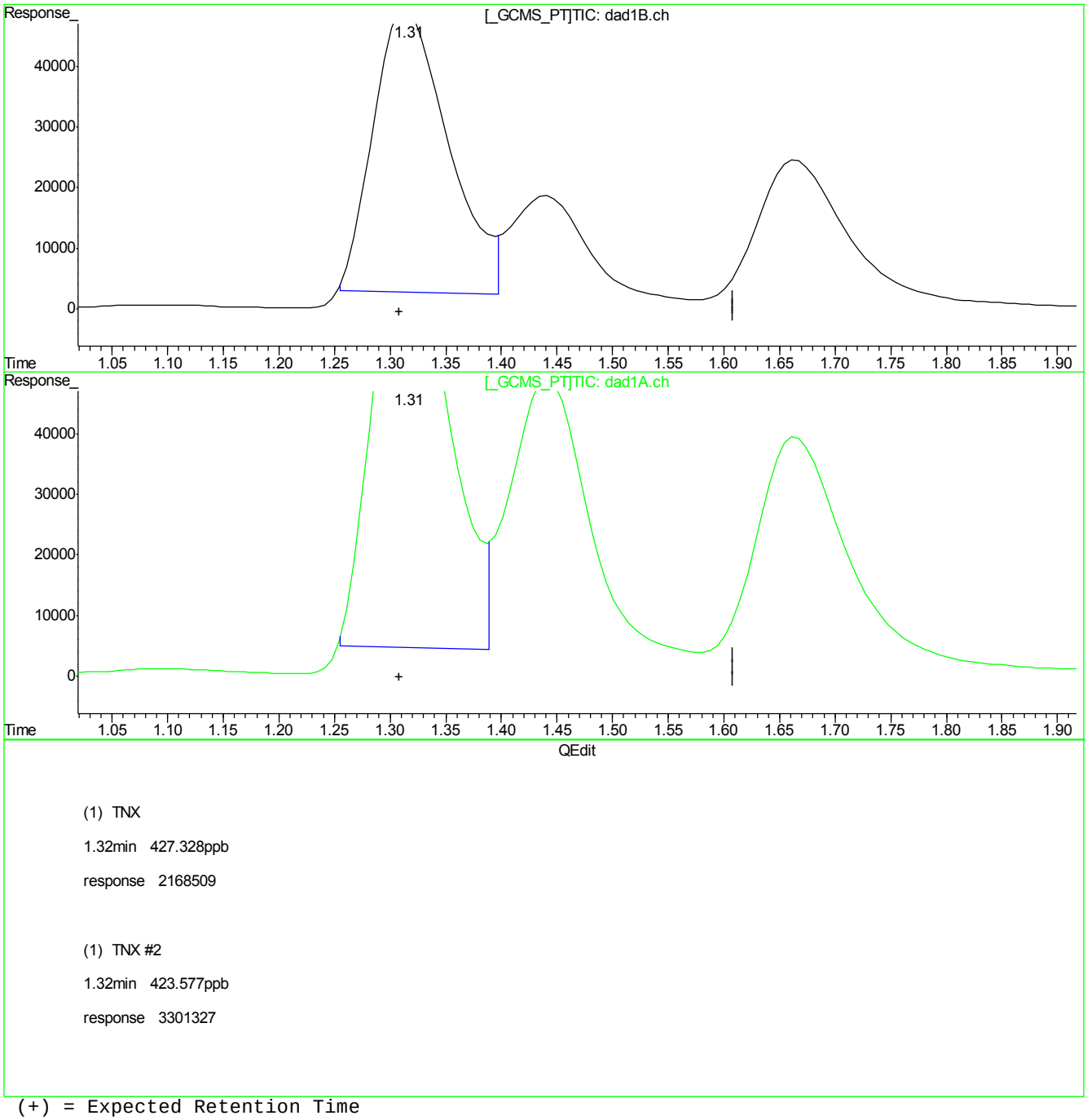
Sample Number:	GBB1722-ICC1722	**Method:**	SW846 8330B
Lab FileID:	BB059468.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 12:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.69	Poorly defined baseline
PETN	78-11-5	2	18.43	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(1) TNX

1.32min 427.328ppb

response 2168509

(1) TNX #2

1.32min 423.577ppb

response 3301327

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:20 2018

7.7.5.2

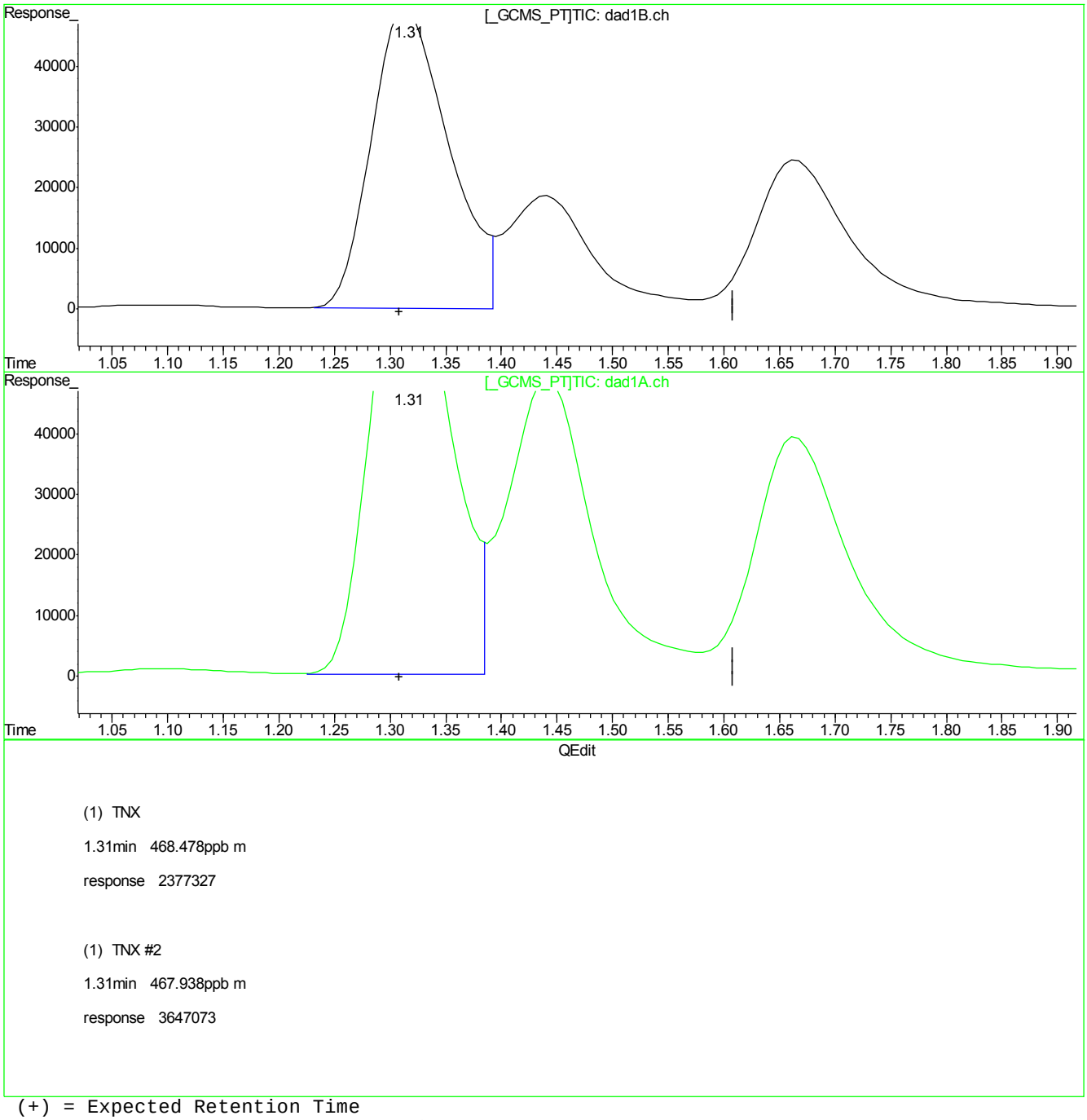
7

BB059468.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 468.478ppb m

response 2377327

(1) TNX #2

1.31min 467.938ppb m

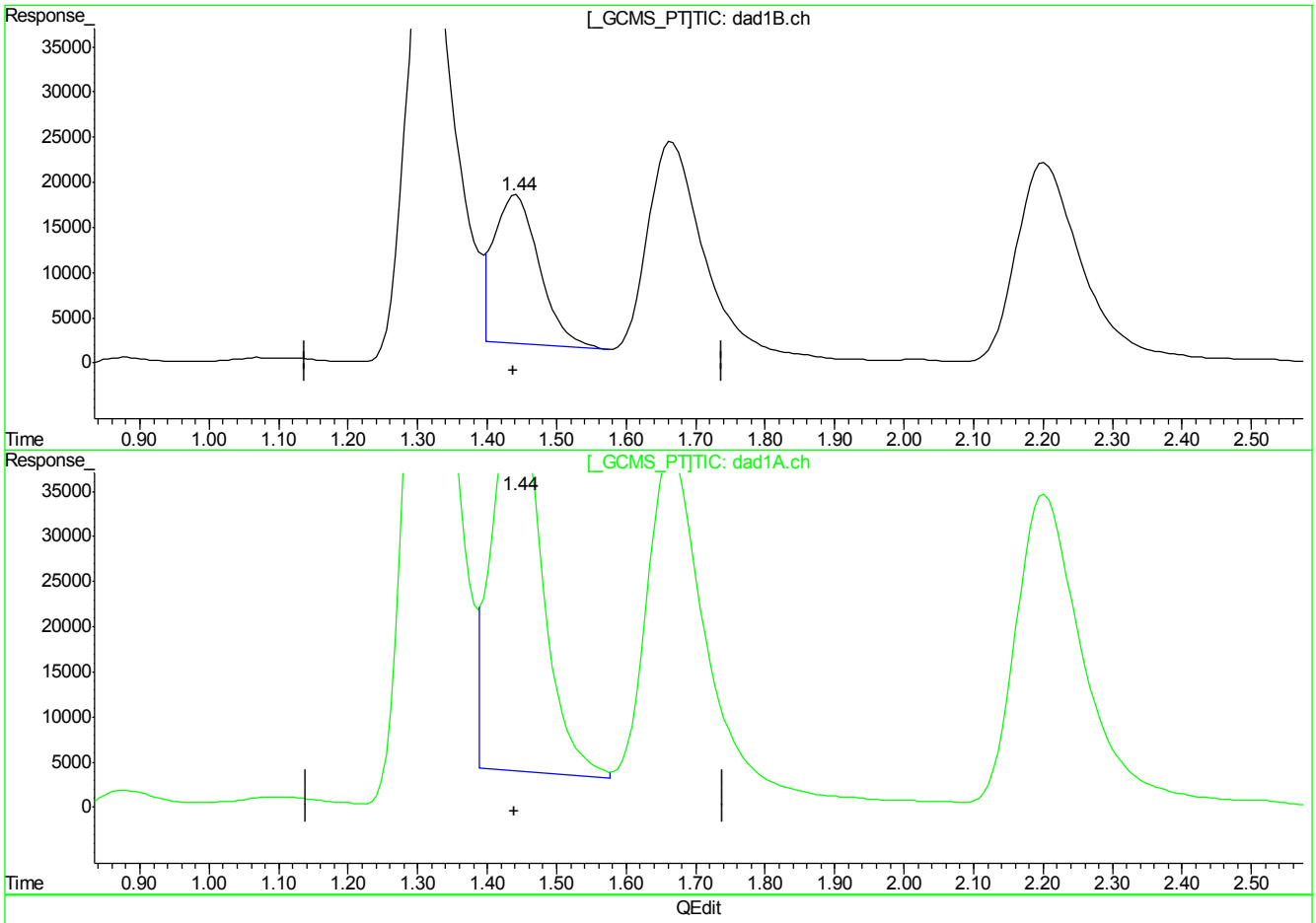
response 3647073

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 394.488ppb

response 769046

(2) HMX #2

1.44min 414.745ppb

response 2179694

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:31 2018

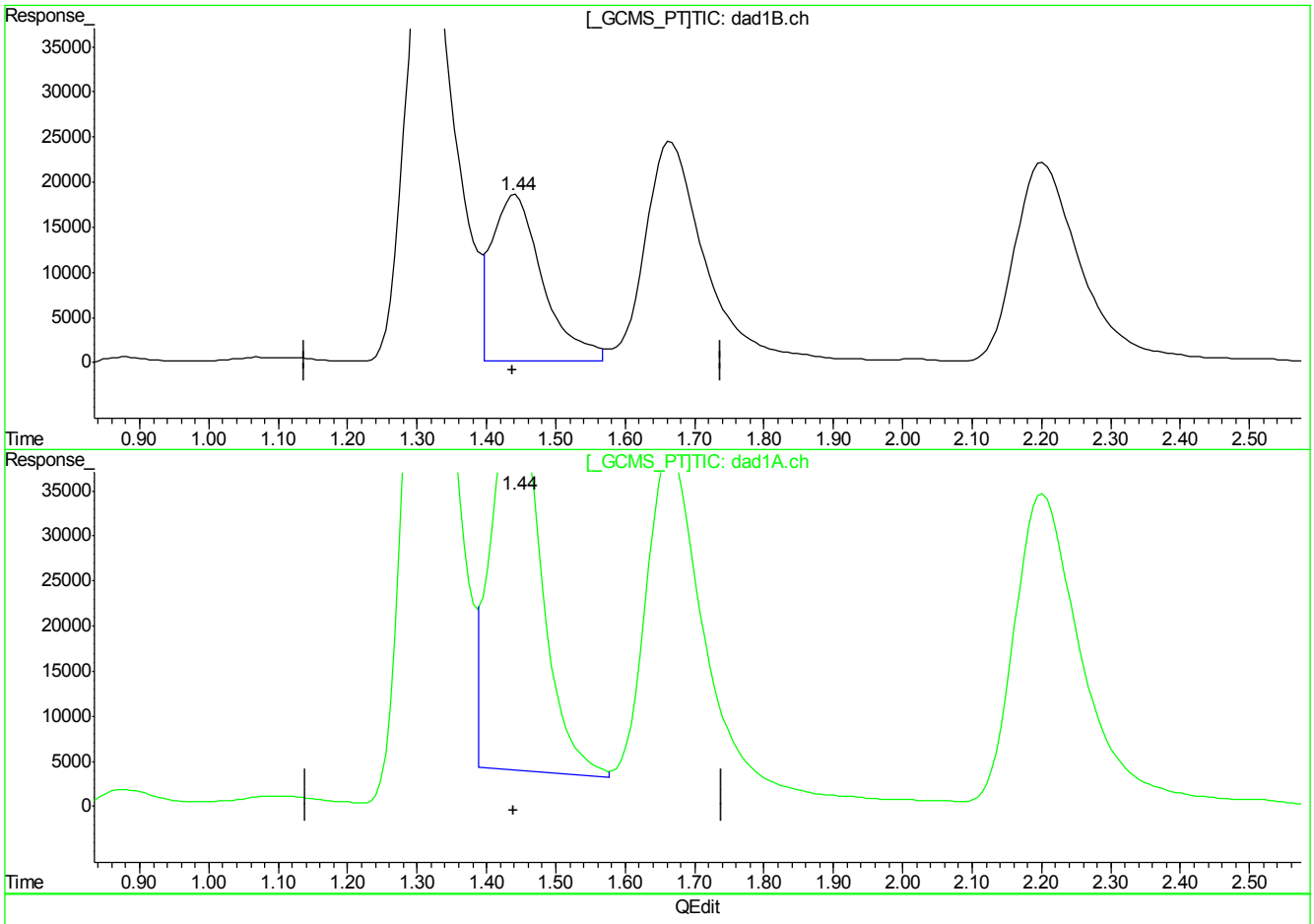
7.7.5.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 479.850ppb m

response 935456

(2) HMX #2

1.44min 414.745ppb

response 2179694

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:38 2018

7.7.5.5

7

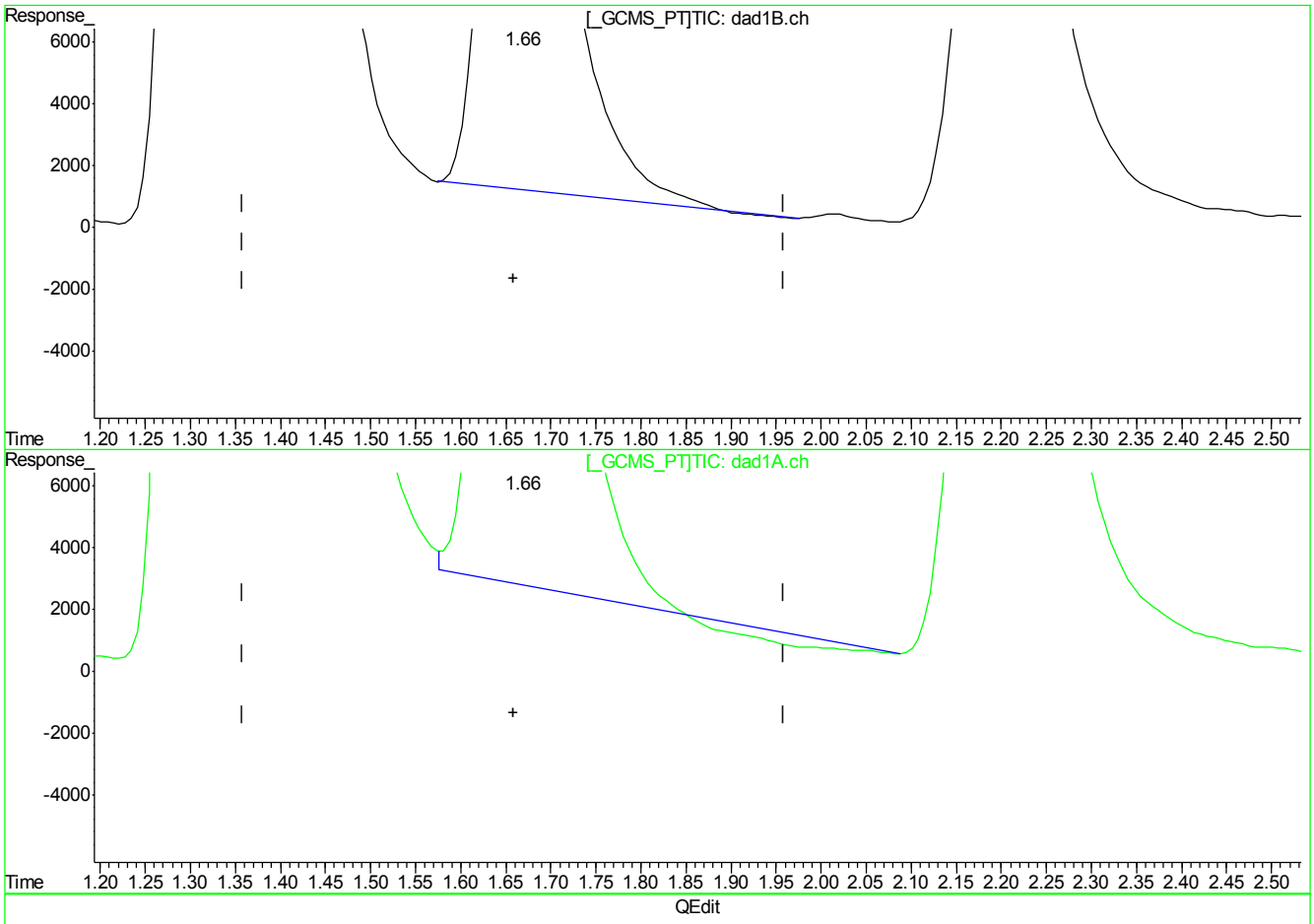
BB059468.D edits: HMX

FA53801

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(3) DNX

1.67min 437.099ppb

response 1287636

(3) DNX #2

1.67min 414.701ppb

response 1971141

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:57:55 2018

7.7.5.9

7

BB059468.D edits: DNX

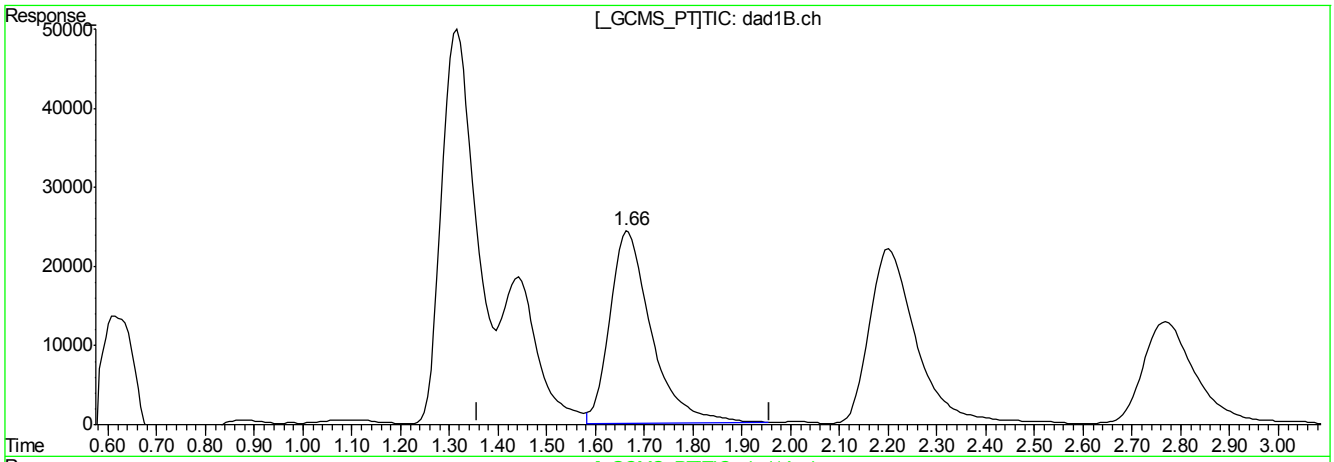
SGS

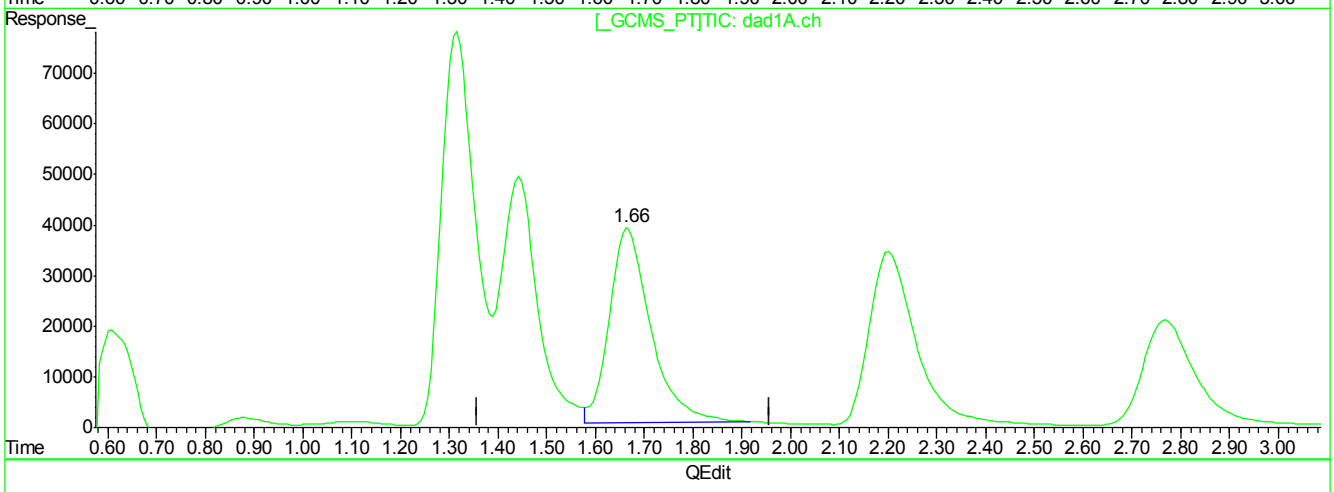
FA53801

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.66min 487.028ppb m

response 1433691

(3) DNX #2

1.66min 478.485ppb m

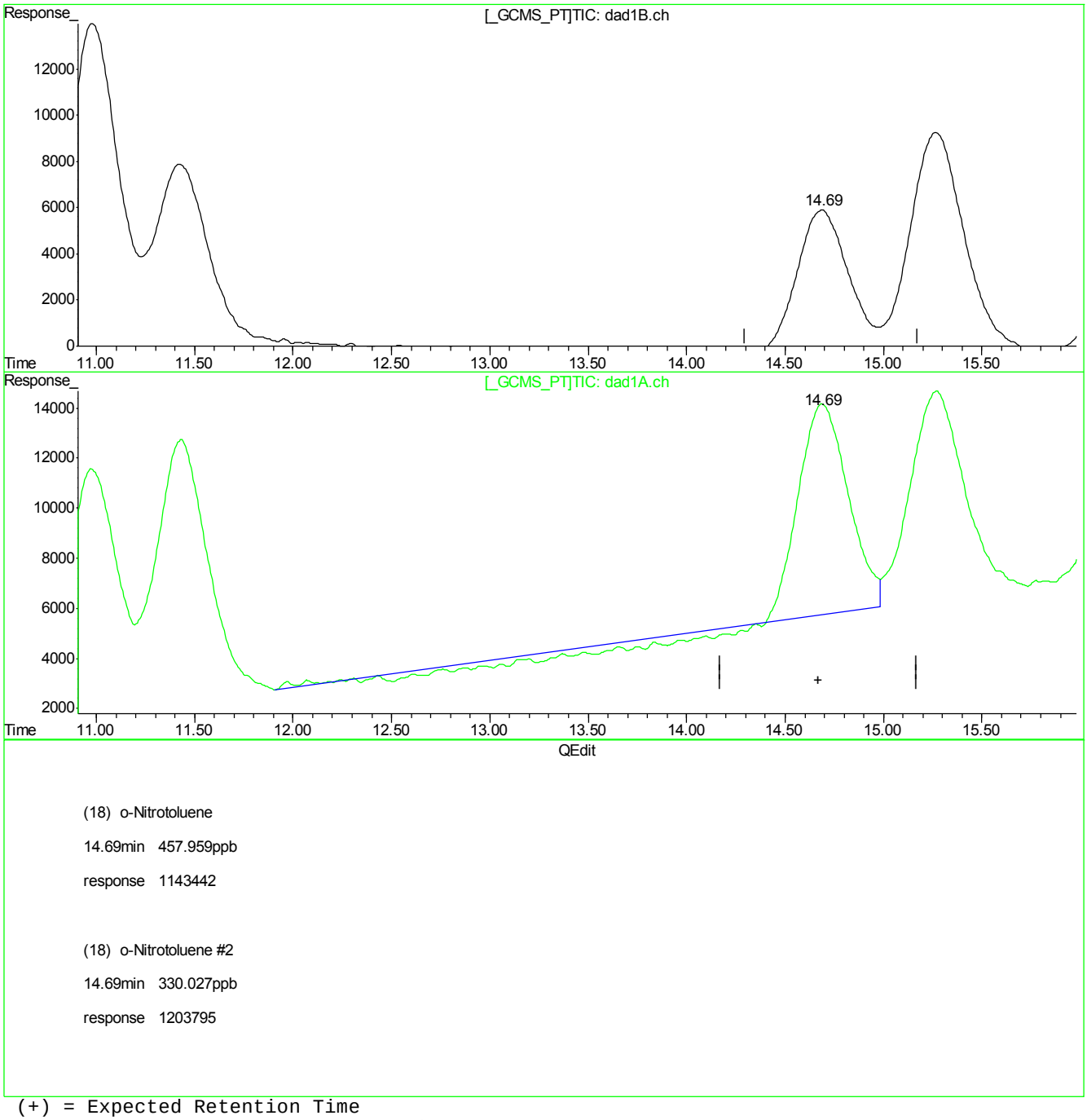
response 2272296

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 457.959ppb

response 1143442

(18) o-Nitrotoluene #2

14.69min 330.027ppb

response 1203795

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:29 2018

7.7.5.8

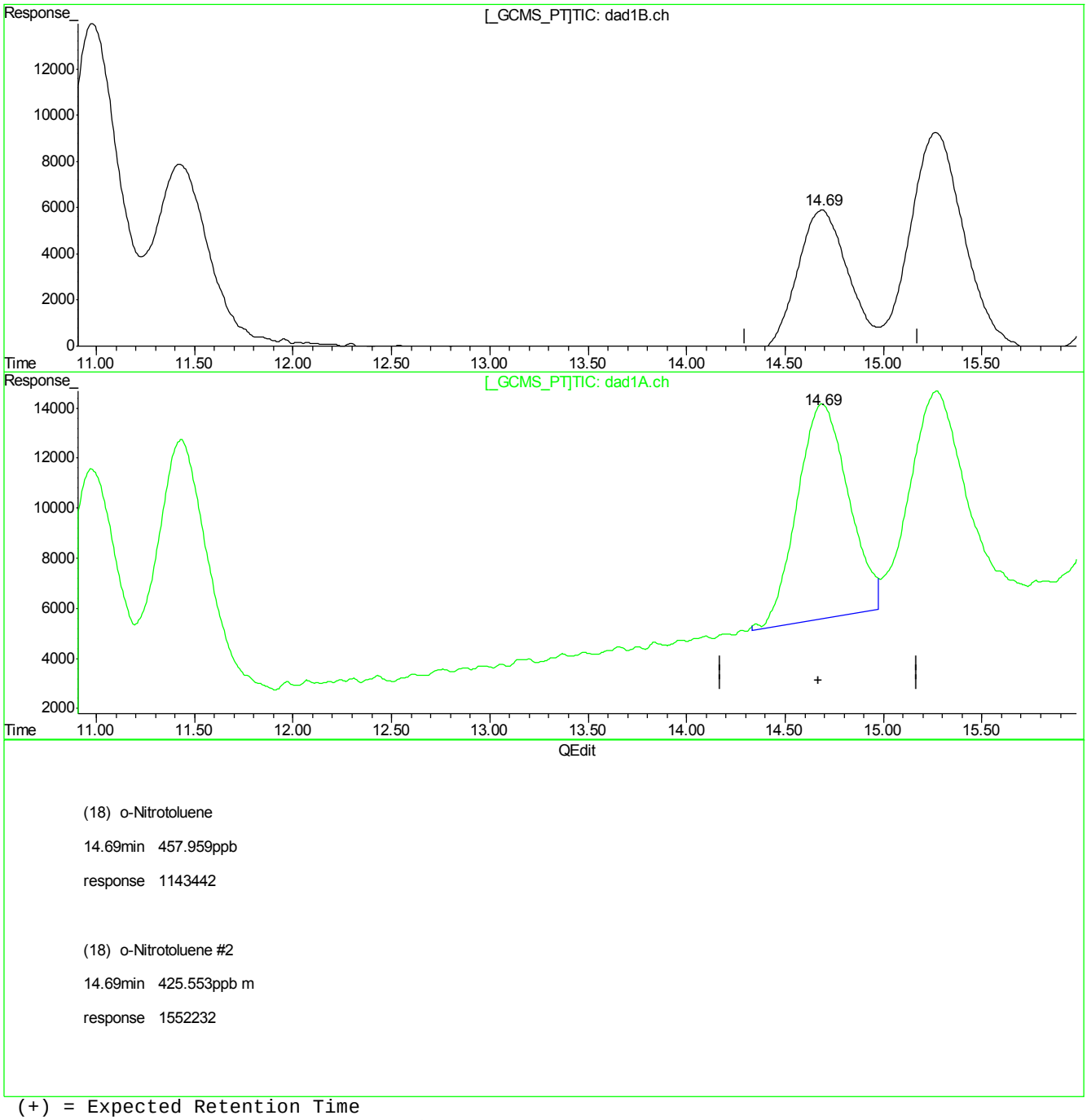
7

BB059468.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.69min 457.959ppb

response 1143442

(18) o-Nitrotoluene #2

14.69min 425.553ppb m

response 1552232

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:36 2018

7.7.5.9

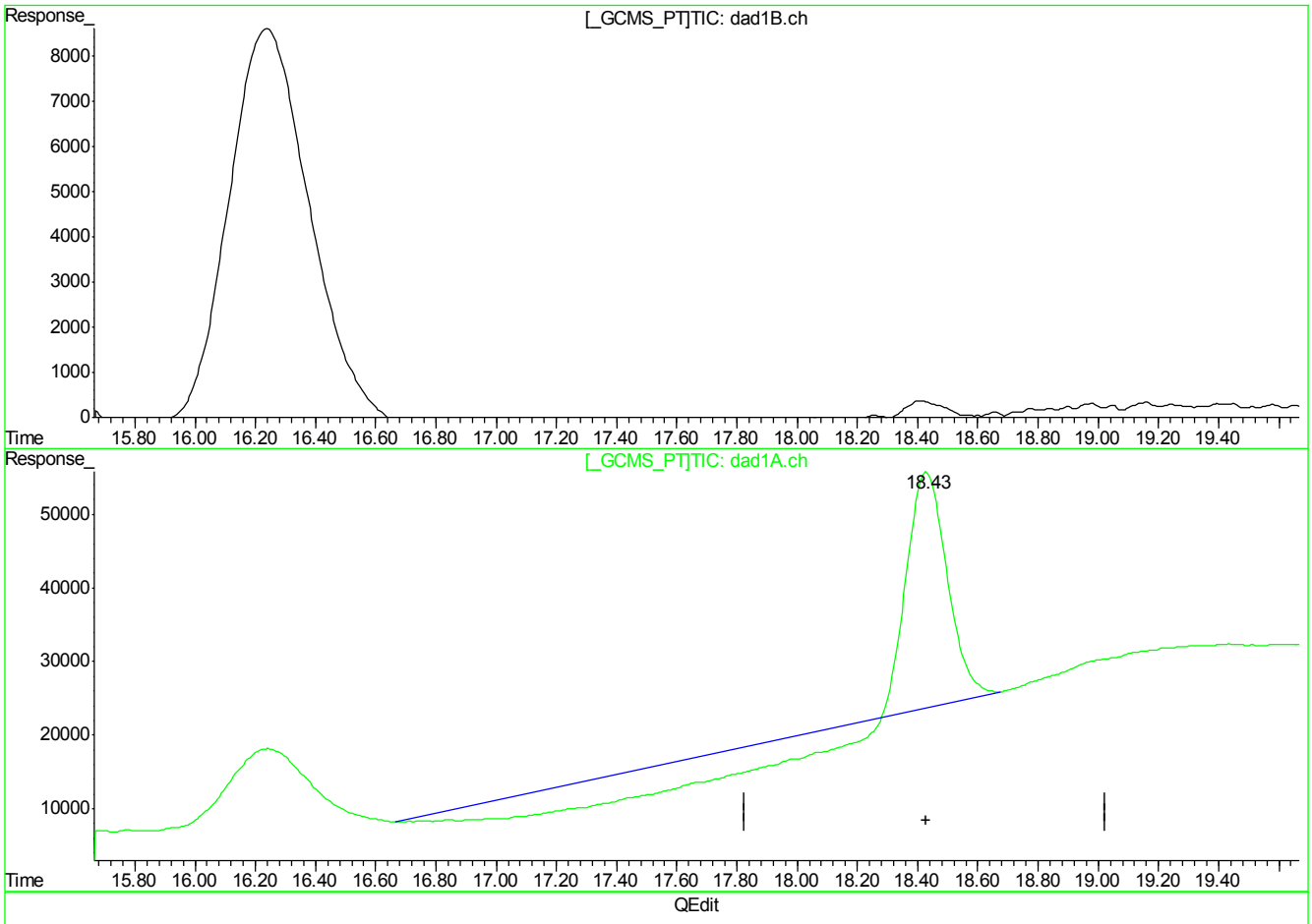
7

BB059468.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 180.022ppb

response 249572

(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:40 2018

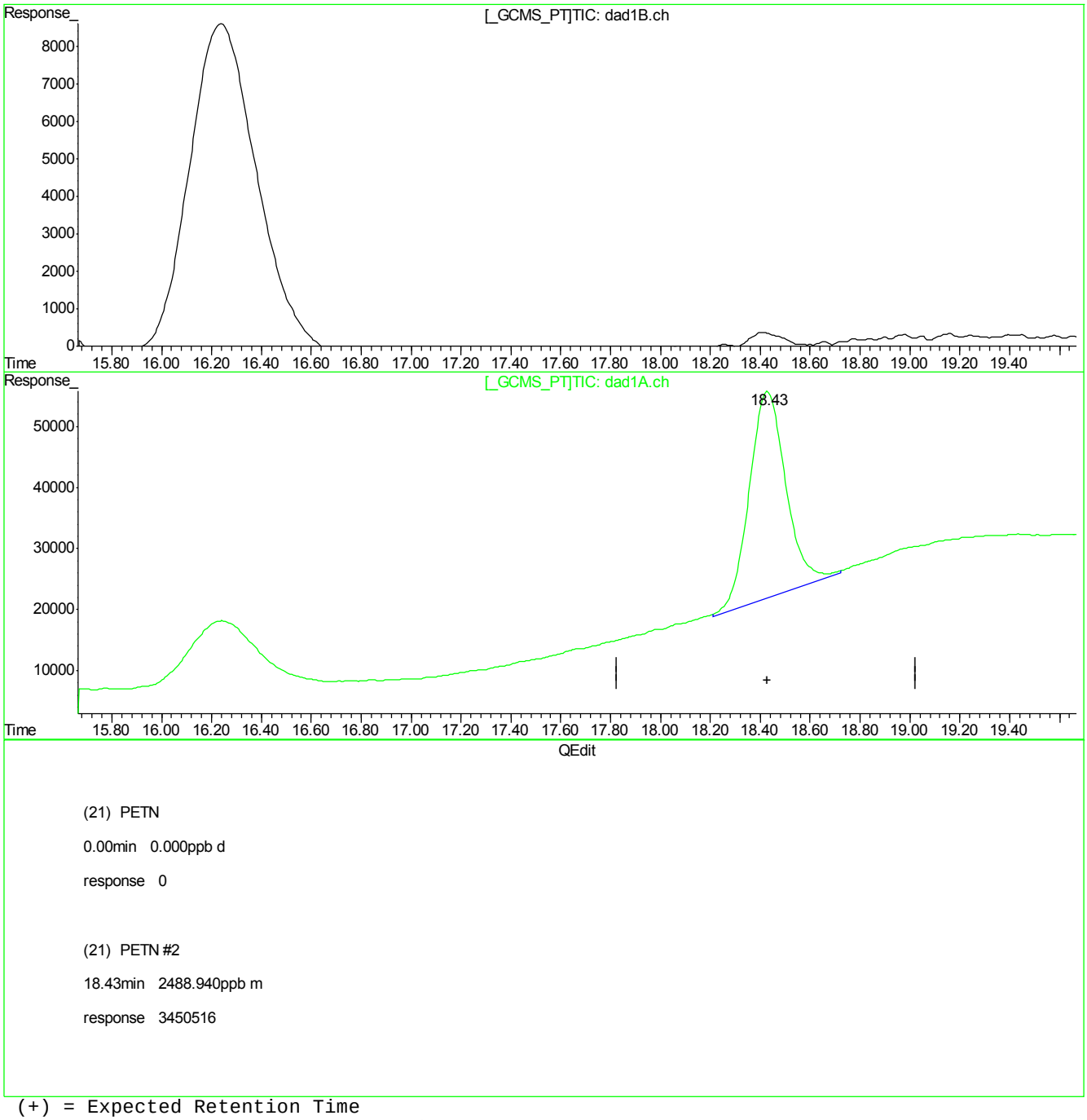
7.7.5.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059468.D\dad1A.ch
Acq On : 19-Apr-2018, 12:13:46 Operator: evitam
Sample : ICC1722-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:57:13 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059468.D 8330B_0419PLUS.M Thu Apr 19 13:58:43 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:49 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.31	10.31	2452926	4465153	1062.069	1072.376
	Spiked Amount 500.000	Range 70 - 136		Recovery =		212.41%#	214.48%#
	Target Compounds						
1)	TNX	1.31	1.31	4711834	7502705	928.517m	962.635m
2)	HMX	1.44	1.44	1896985	5080506	973.074m	966.703m
3)	DNX	1.66	1.66	2865864	4744960	980.493m	1006.582m
4)	MNX	2.20	2.20	2935667	4563791	944.158	973.654
5)	RDX	2.76	2.76	1949428	3115738	855.536	831.929
6)	1,3,5-Trinitrobe	4.41	4.41	4162990	8095208	842.461	888.329
7)	1,3-Dinitrobenze	5.58	5.58	5312977	3567135	870.487	905.285
8)	3,5-Dinitroanili	5.88	5.88	4615207	7569126	1006.649	959.813
9)	Nitrobenzene	7.09	7.09	3234435	3092232	847.799	862.498
10)	Nitroglycerin	0.00	8.38	0	6065549	N.D. d	4583.325
11)	Tetryl	8.70	8.70	2900724	5089762	911.605	992.750
12)	2,4,6-Trinitroto	9.12	9.12	3740946	4634286	1036.721	1080.478
13)	2-Amino-4,6-Dini	9.43	9.43	3532796	5448944	880.074	980.062
14)	4-Amino-2,6-Dini	9.86	9.86	2590690	5369582	918.028	993.522
16)	2,4-Dinitrotolue	10.97	10.97	4825667	3112957	894.994	932.455
17)	2,6-Dinitrotolue	11.41	11.42	2946410	3691393	896.181	941.259
18)	o-Nitrotoluene	14.68	14.67	2268482	3070855	908.548	841.892m
19)	p-Nitrotoluene	15.26	15.26	3723769	3115857	1006.502	984.570
20)	m-Nitrotoluene	16.23	16.23	3438848	3990421	932.090	920.173
21)	PETN	0.00	18.43	0	6778199	N.D. d	4889.277m

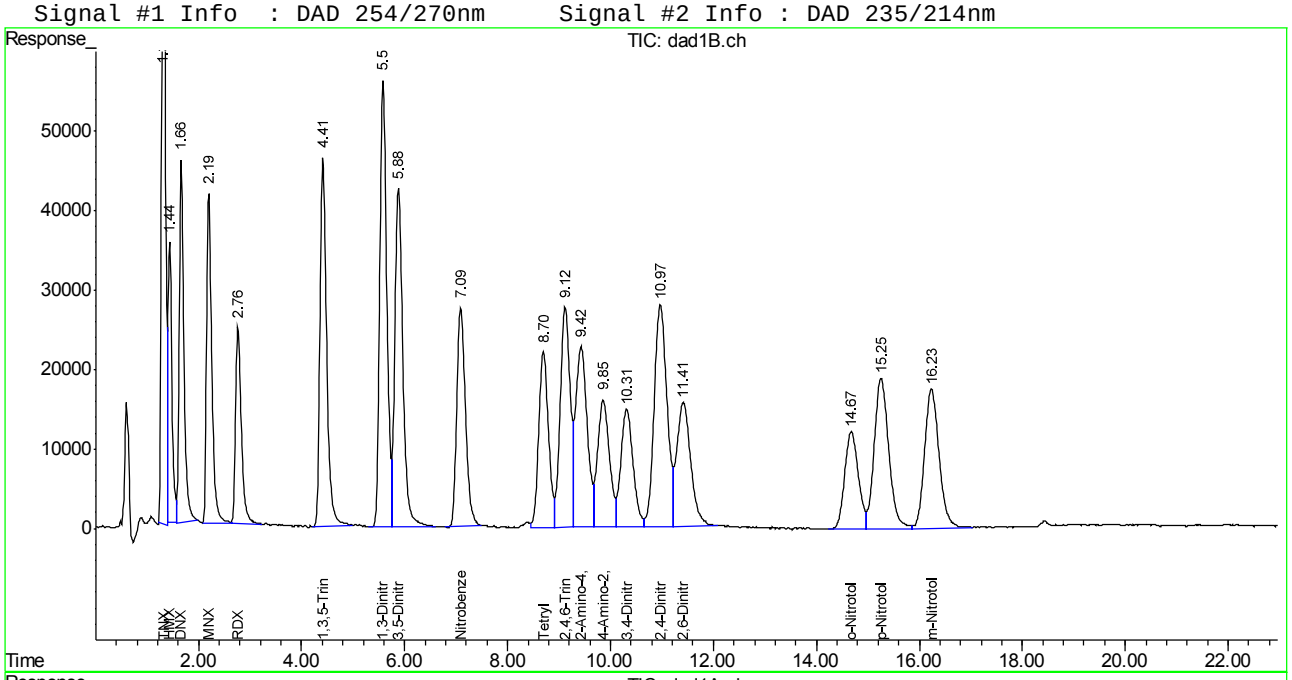
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059469.D 8330B_0419PLUS.M Fri Apr 20 08:01:23 2018 Page 1

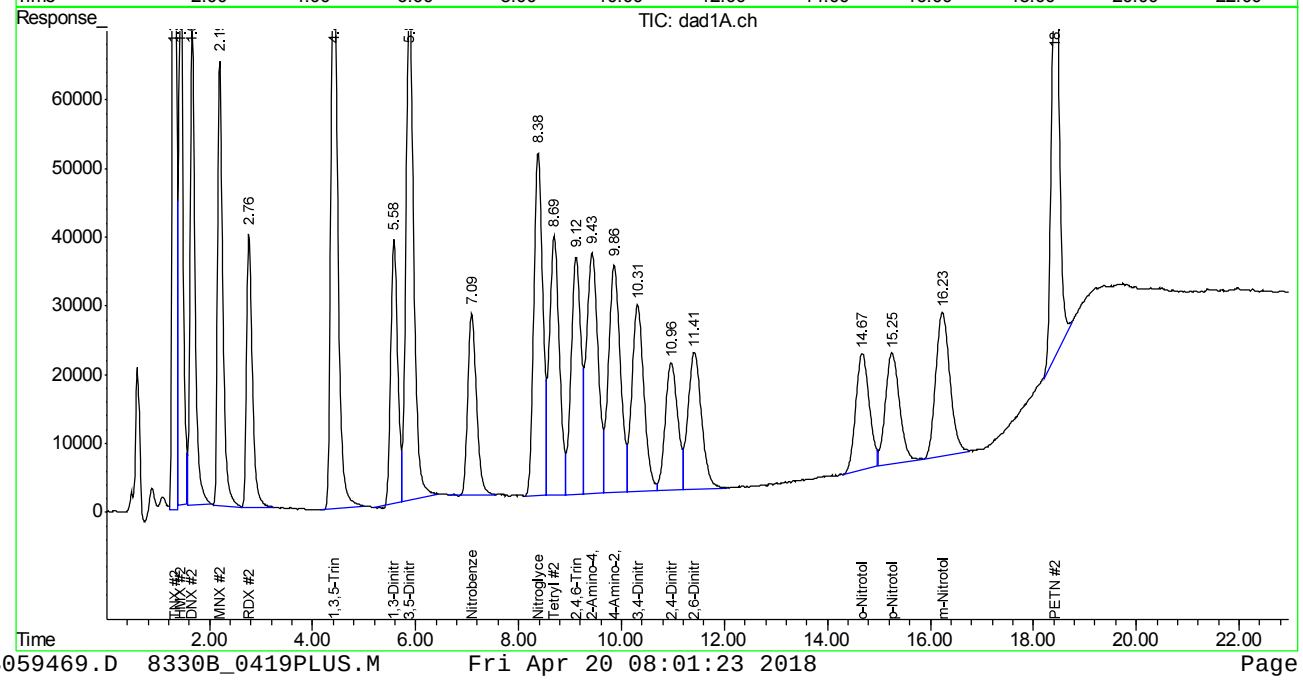
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:00 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

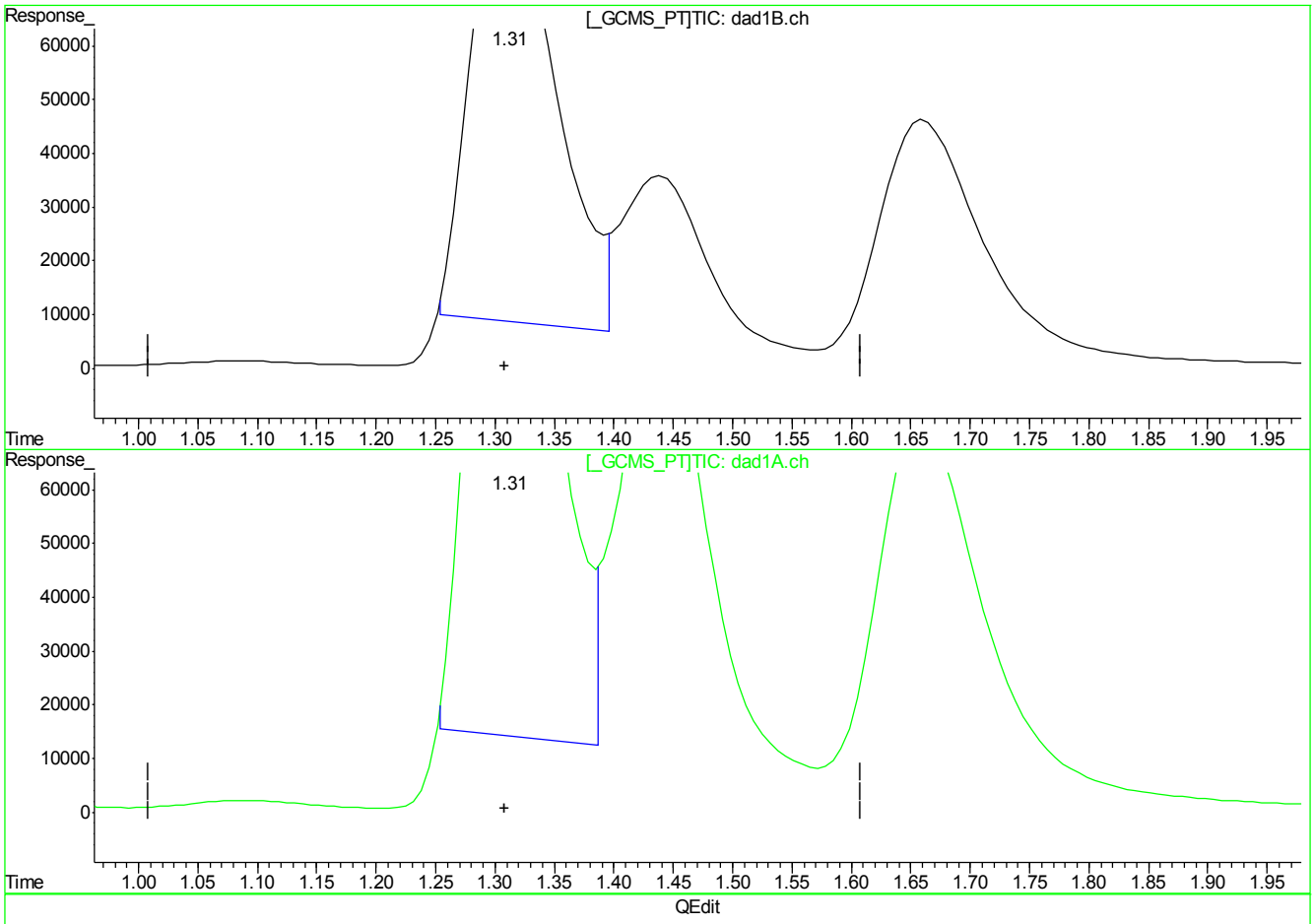
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059469.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 12:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.67	Poorly defined baseline
PETN	78-11-5	2	18.43	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 800.355ppb

response 4061464

(1) TNX #2

1.31min 788.203ppb

response 6143200

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:58:57 2018

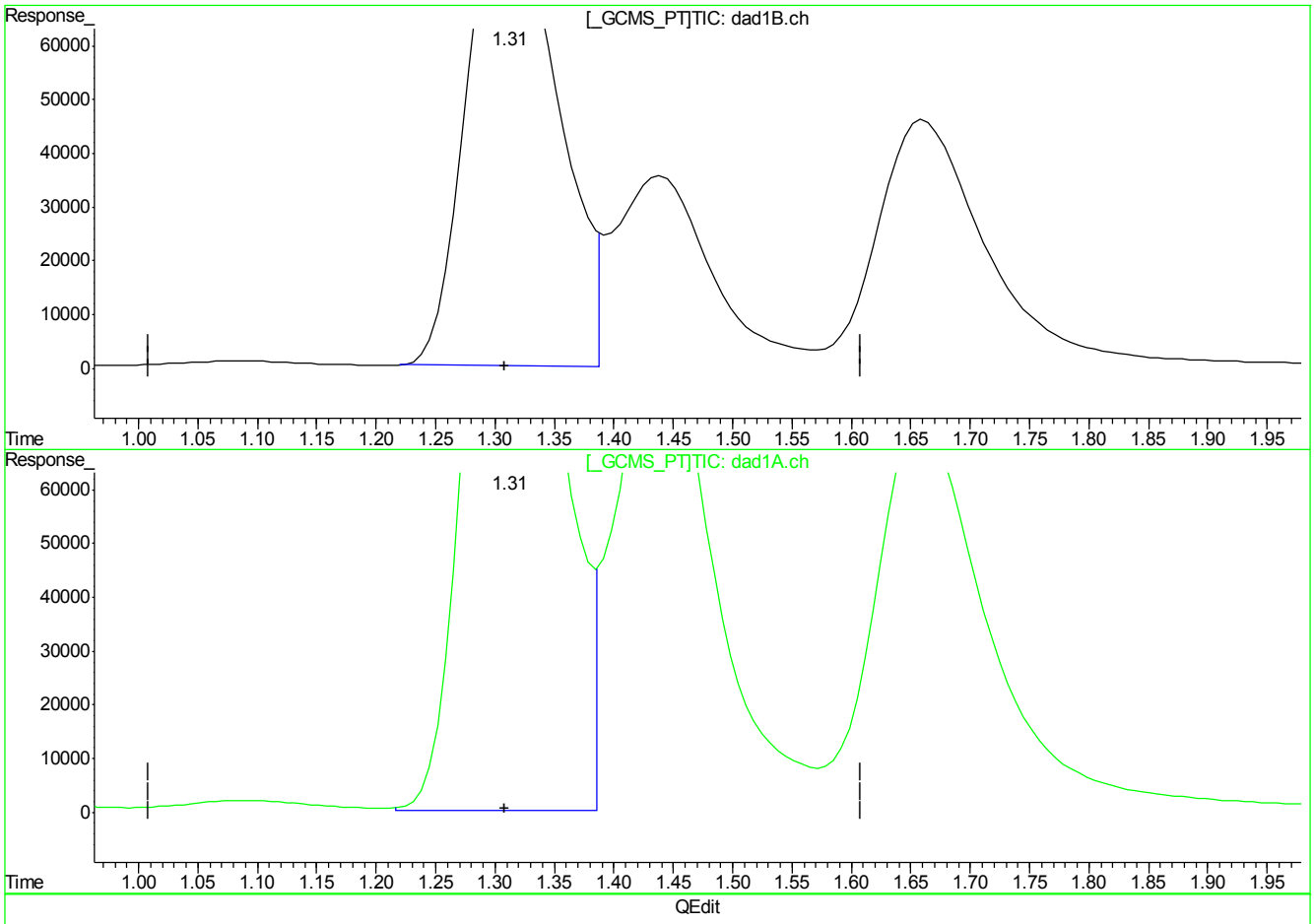
7.7.6.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 928.517ppb m

response 4711834

(1) TNX #2

1.31min 962.635ppb m

response 7502705

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:03 2018

7.7.6.3

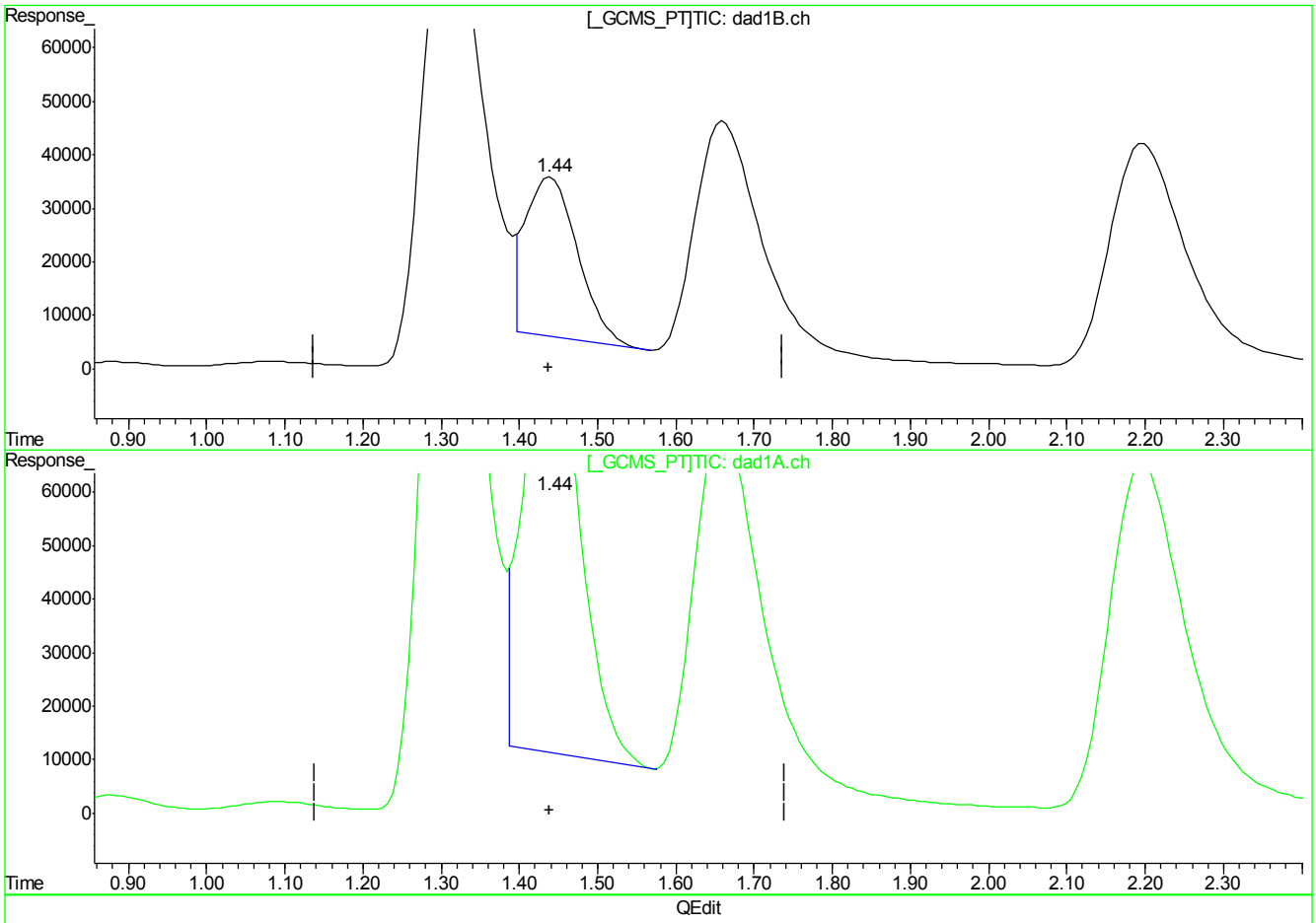
7

BB059469.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 726.666ppb

response 1416618

(2) HMX #2

1.44min 773.768ppb

response 4066540

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:06 2018

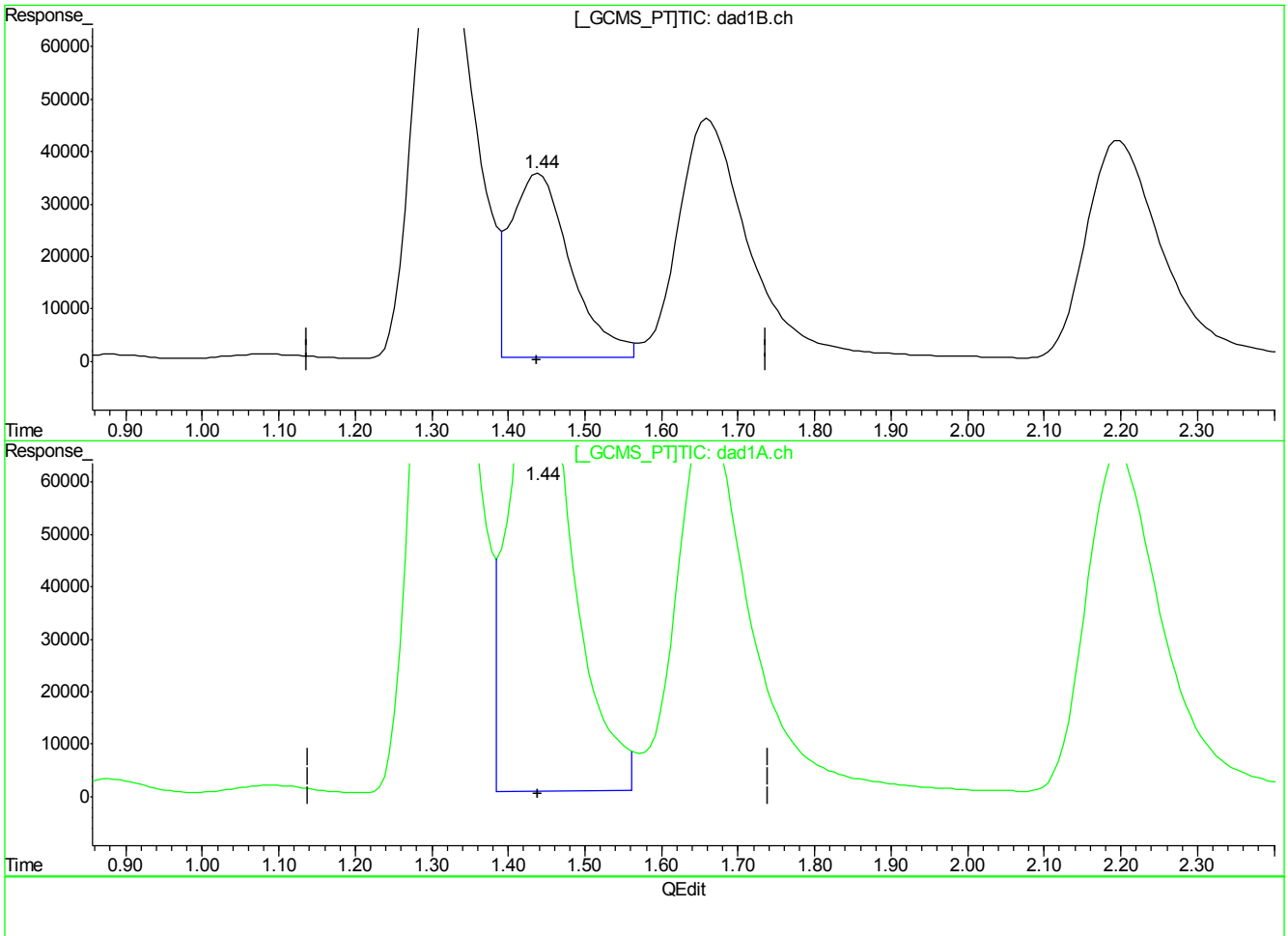
7.7.6.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 973.074ppb m

response 1896985

(2) HMX #2

1.44min 966.703ppb m

response 5080506

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:30 2018

7.7.6.5

7

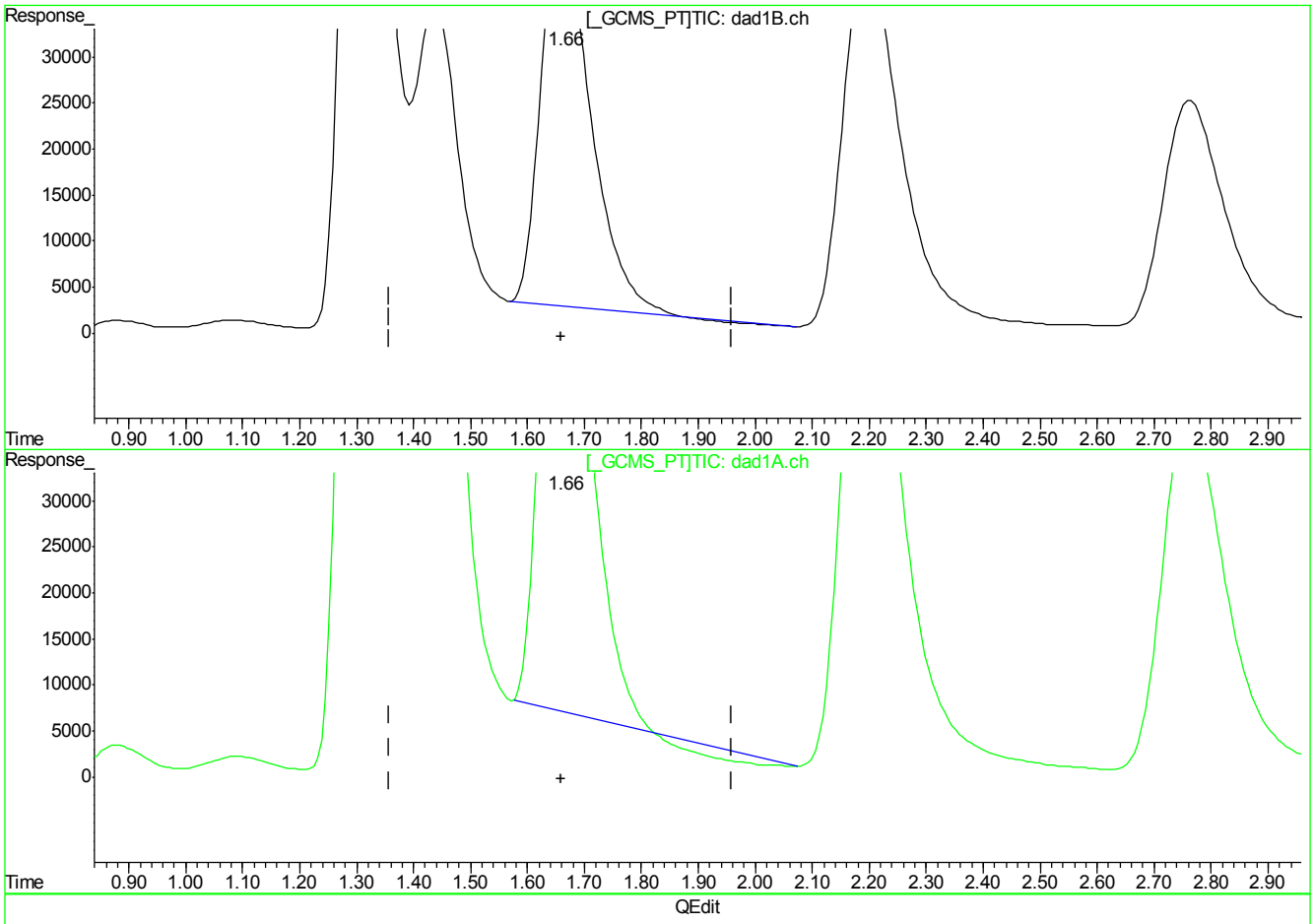
BB059469.D edits: HMX

FA53801

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 863.341ppb

response 2527721

(3) DNX #2

1.66min 781.314ppb

response 3694727

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:33 2018

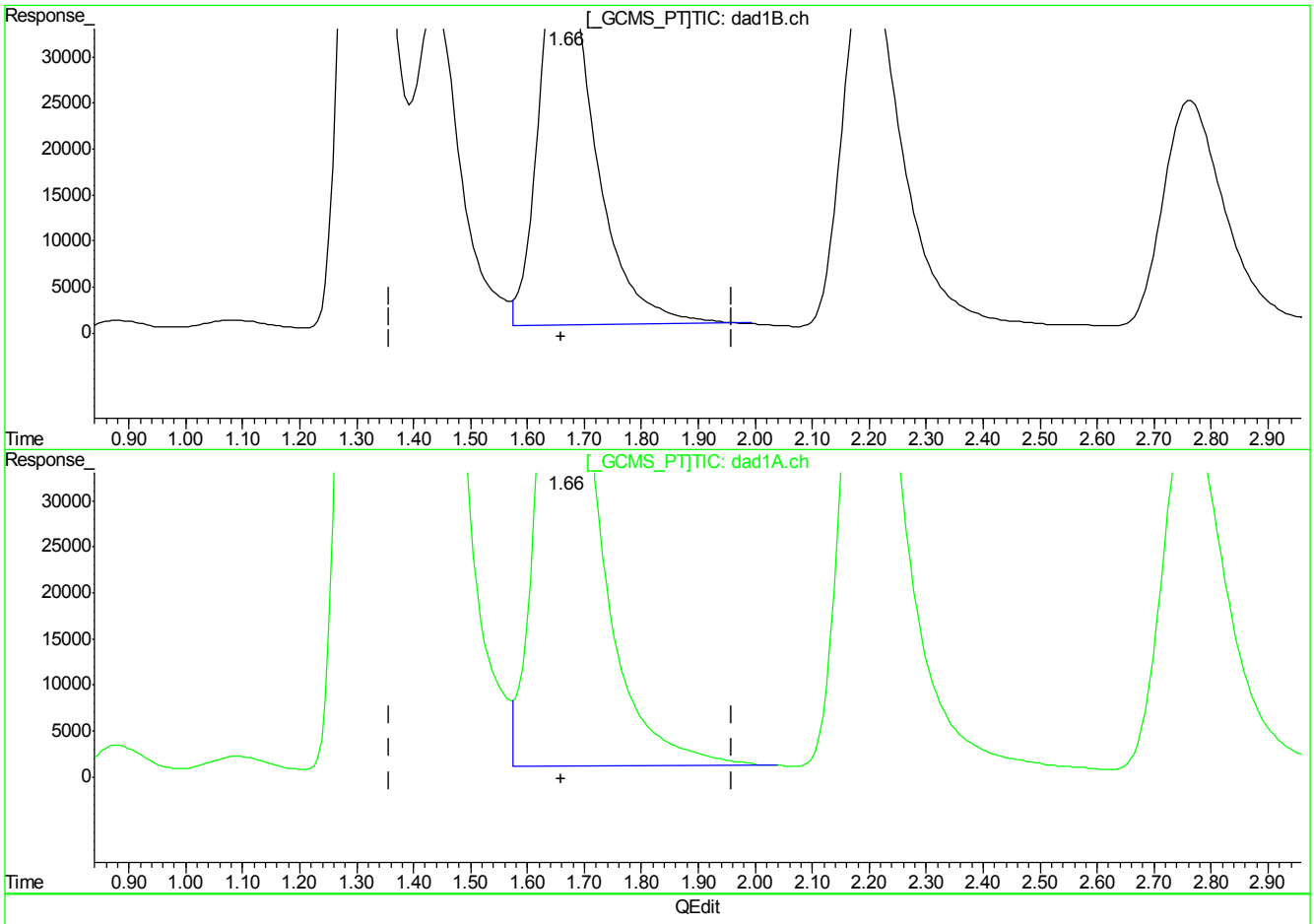
7.7.6.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 980.493ppb m

response 2865864

(3) DNX #2

1.66min 1006.582ppb m

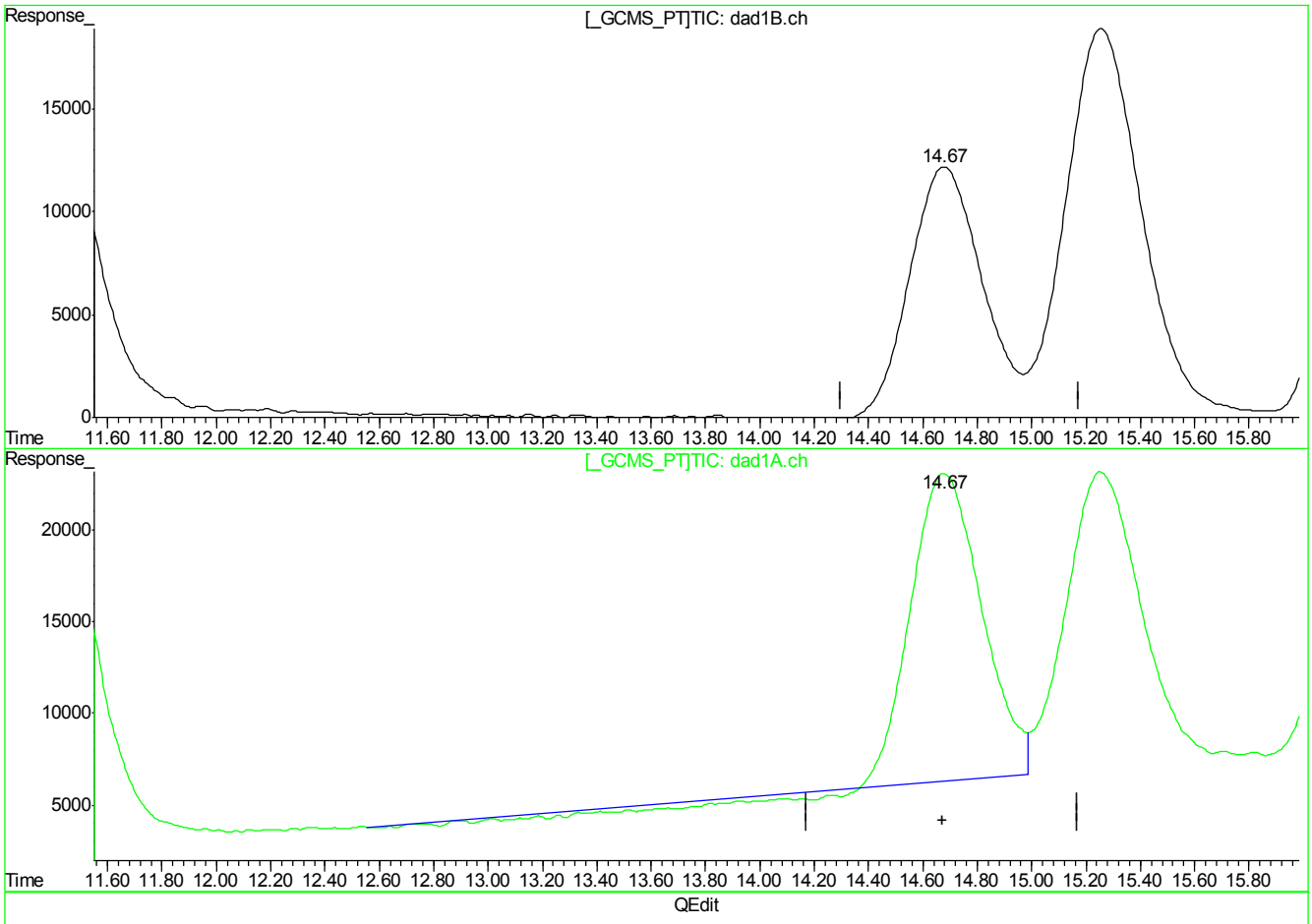
response 4744960

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 13:59:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.68min 908.548ppb

response 2268482

(18) o-Nitrotoluene #2

14.68min 775.181ppb

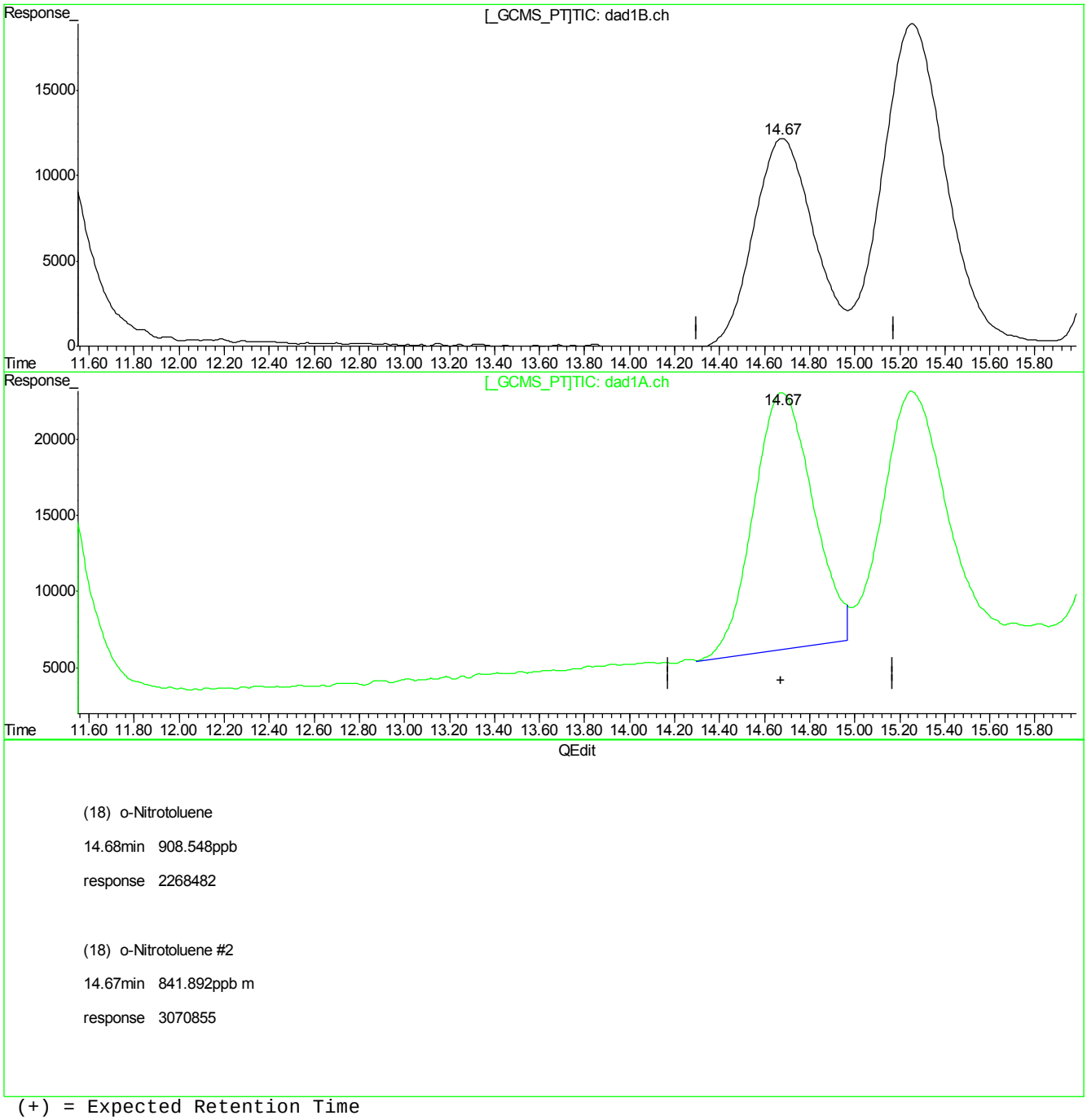
response 2827520

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:02 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:05 2018

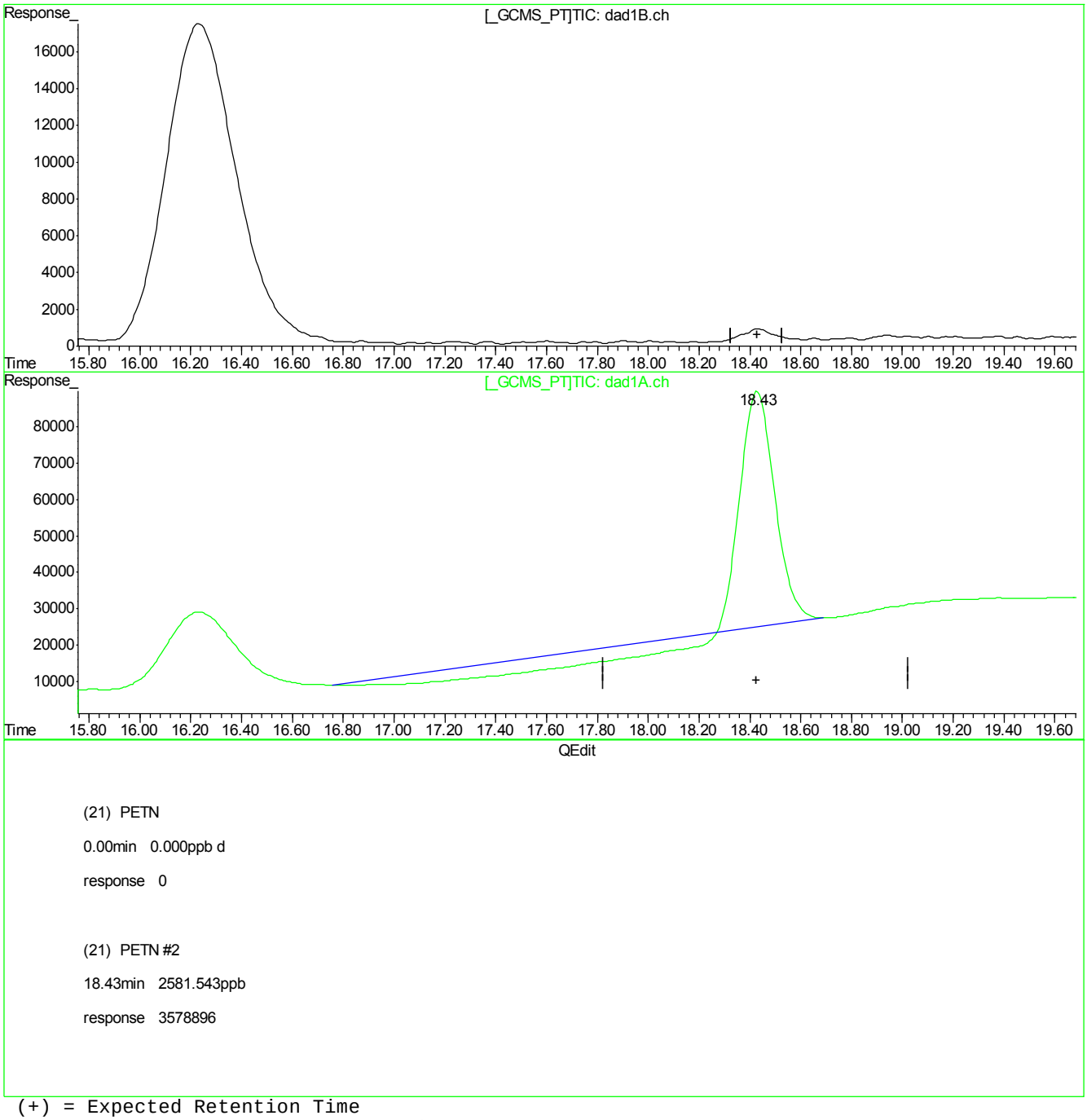
7.7.6.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 2581.543ppb

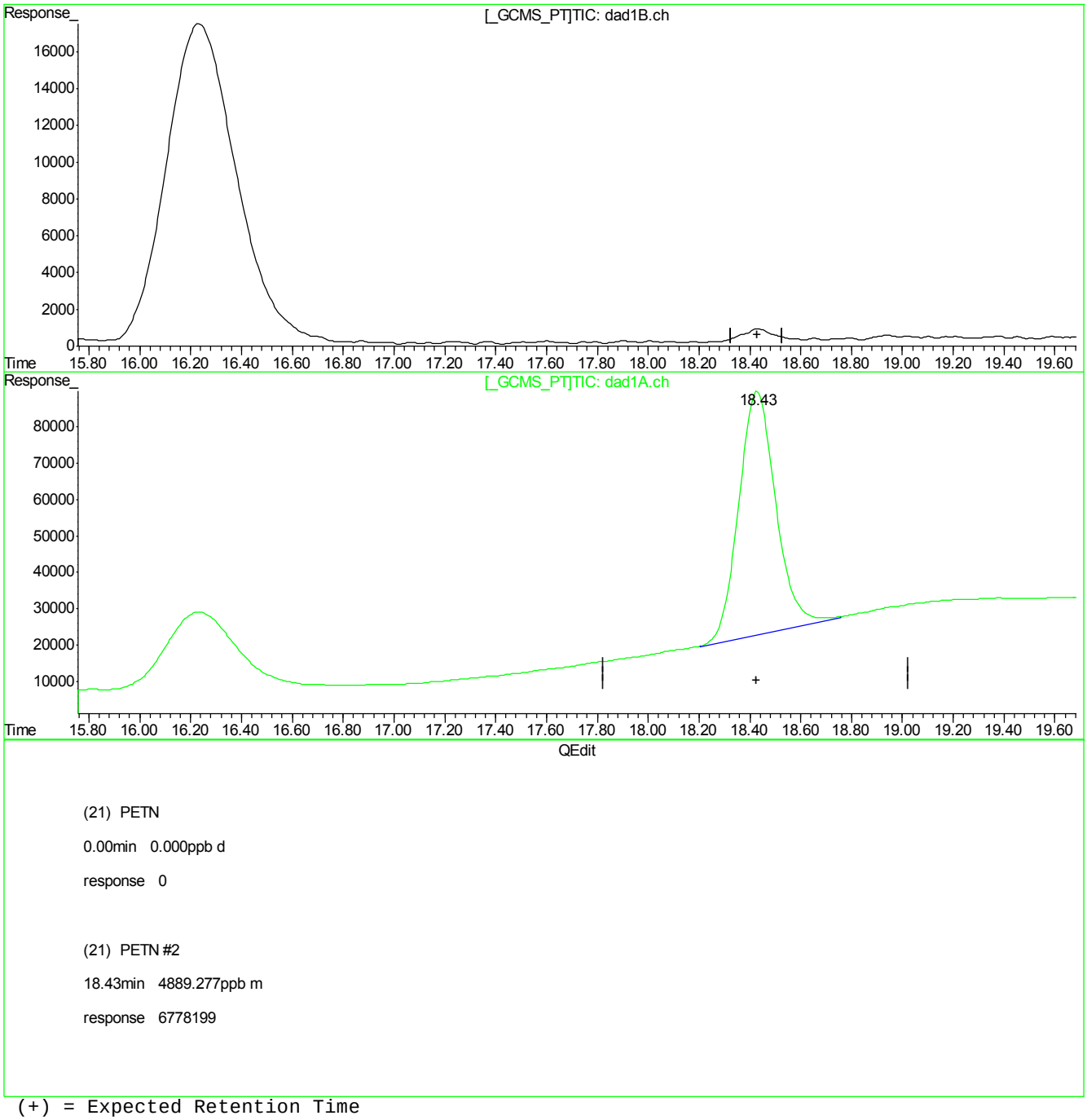
response 3578896

(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059469.D\dad1A.ch
Acq On : 19-Apr-2018, 12:43:47 Operator: evitam
Sample : IC1722-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:58:50 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059469.D 8330B_0419PLUS.M Thu Apr 19 14:00:11 2018

Manual Integrations APPROVED (compounds with "m" flag)

Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47:50 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.29	10.29	5083250	9247239	2200.948	2220.868
	Spiked Amount 500.000	Range 70 - 136		Recovery =		440.19%#	444.17%#
	Target Compounds						
1)	TNX	1.30	1.30	9211273	14491645	1815.179m	1859.350m
2)	HMX	1.43	1.44	3638718	10069253	1866.511m	1915.946m
3)	DNX	1.65	1.65	5892557	9584014	2047.638m	2063.804m
4)	MNX	2.19	2.19	5885974	9151830	1893.025	1952.481
5)	RDX	2.76	2.76	3867732	6249623	1730.557	1668.704
6)	1,3,5-Trinitrobe	4.41	4.41	8579482	16591008	1736.222	1820.617
7)	1,3-Dinitrobenze	5.57	5.57	10685649	7803739	1750.755	1980.456
8)	3,5-Dinitroanili	5.87	5.87	9524110	16795702	2077.357	2129.802
9)	Nitrobenzene	7.08	7.08	6632371	6428143	1738.453	1792.964
10)	Nitroglycerin	0.00	8.37	0	12142455	N.D. d	9175.233
11)	Tetryl	8.69	8.68	5845384	10366785	1837.017	2022.025
12)	2,4,6-Trinitroto	9.11	9.11	7588161	9366584	2102.893	2183.808
13)	2-Amino-4,6-Dini	9.40	9.40	7170099	11097154	1786.183	1995.964
14)	4-Amino-2,6-Dini	9.83	9.83	5374487	10973582	1904.486	2030.417
16)	2,4-Dinitrotolue	10.94	10.94	9942239	6519975	1843.940	1952.994
17)	2,6-Dinitrotolue	11.39	11.39	6550095	7736590	1992.279	1972.734
18)	o-Nitrotoluene	14.65	14.64	4539267	6298701	1818.018	1726.825m
19)	p-Nitrotoluene	15.23	15.22	7504319	6331384	2028.351	2000.634
20)	m-Nitrotoluene	16.20	16.20	6867225	8109895	1861.341	1870.104
21)	PETN	0.00	18.42	0	13694187	N.D. d	9877.944m

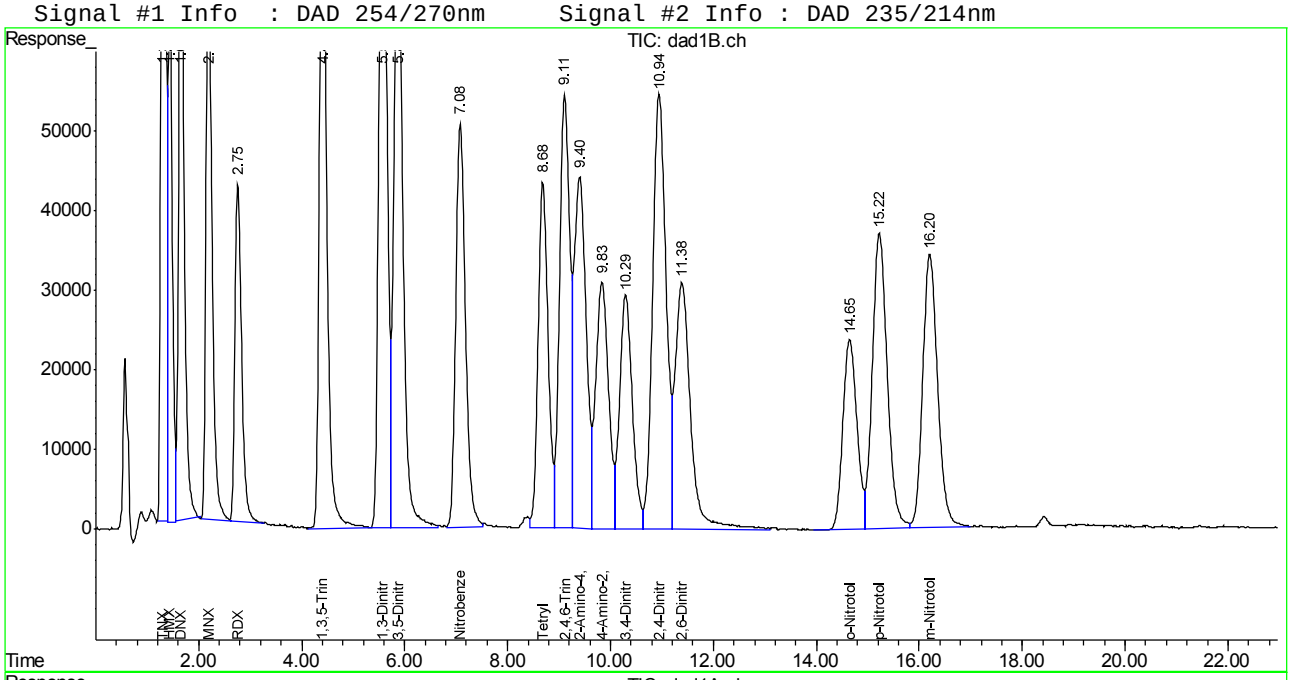
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059470.D 8330B_0419PLUS.M Fri Apr 20 08:01:24 2018 Page 1

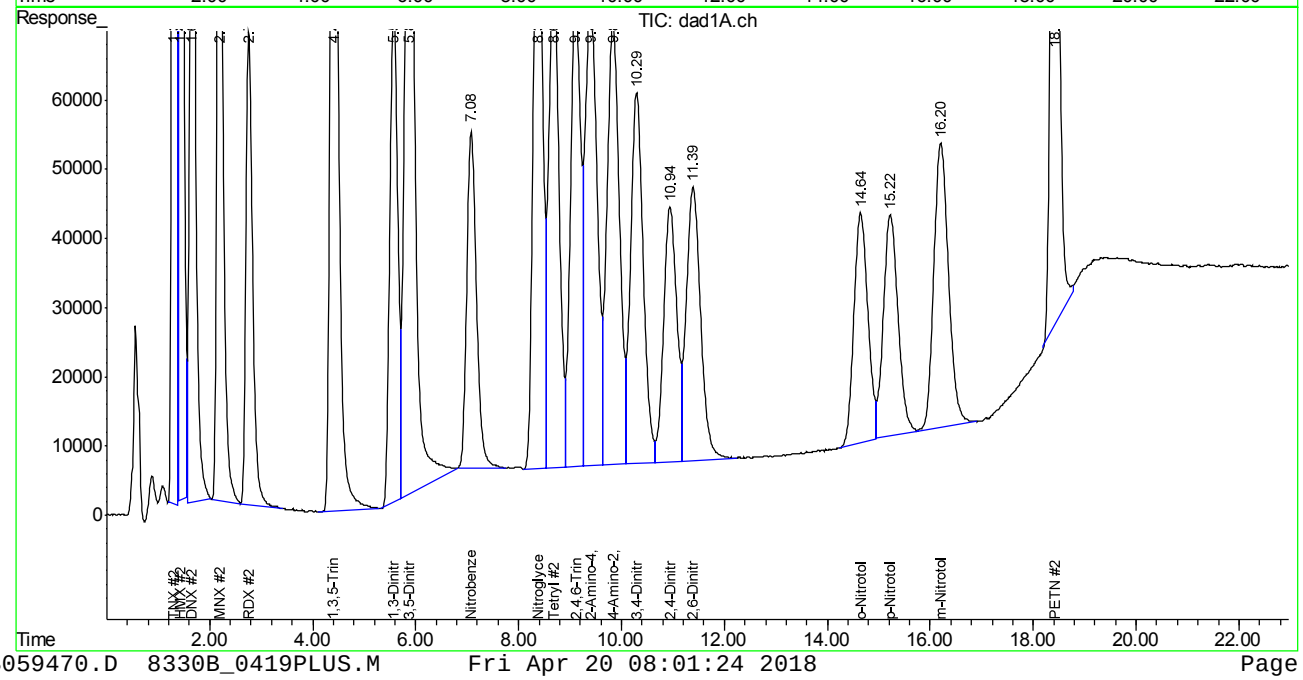
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:01 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 13:47:13 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

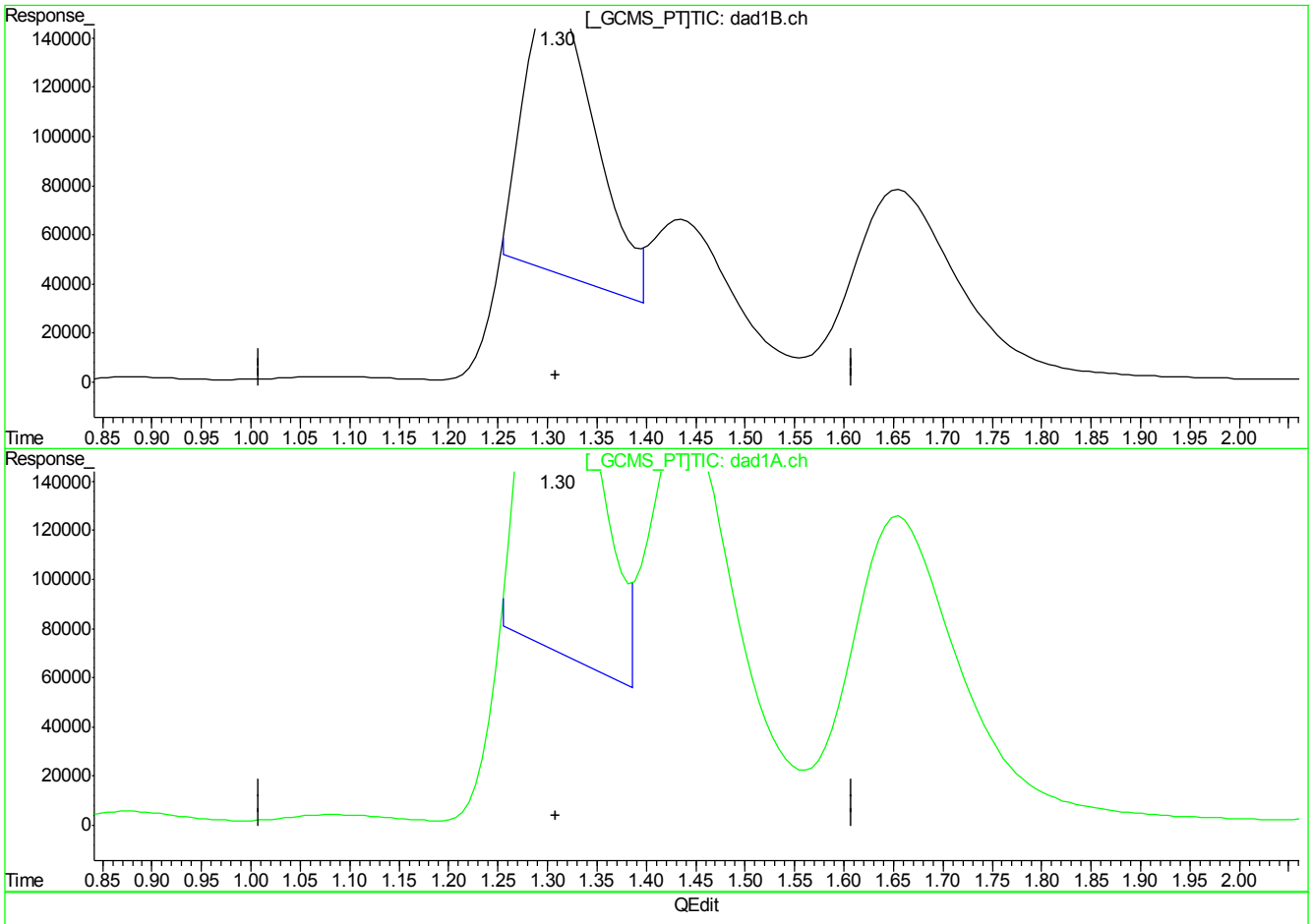
Sample Number:	GBB1722-IC1722	**Method:**	SW846 8330B
Lab FileID:	BB059470.D	**Analyst approved:**	04/20/18 08:05 Evita Martinez
Injection Time:	04/19/18 13:13	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.30	Poorly defined baseline
TNX		2	1.30	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.65	Poorly defined baseline
DNX		2	1.65	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.64	Poorly defined baseline
PETN	78-11-5	2	18.42	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 1109.709ppb

response 5631306

(1) TNX #2

1.31min 1083.207ppb

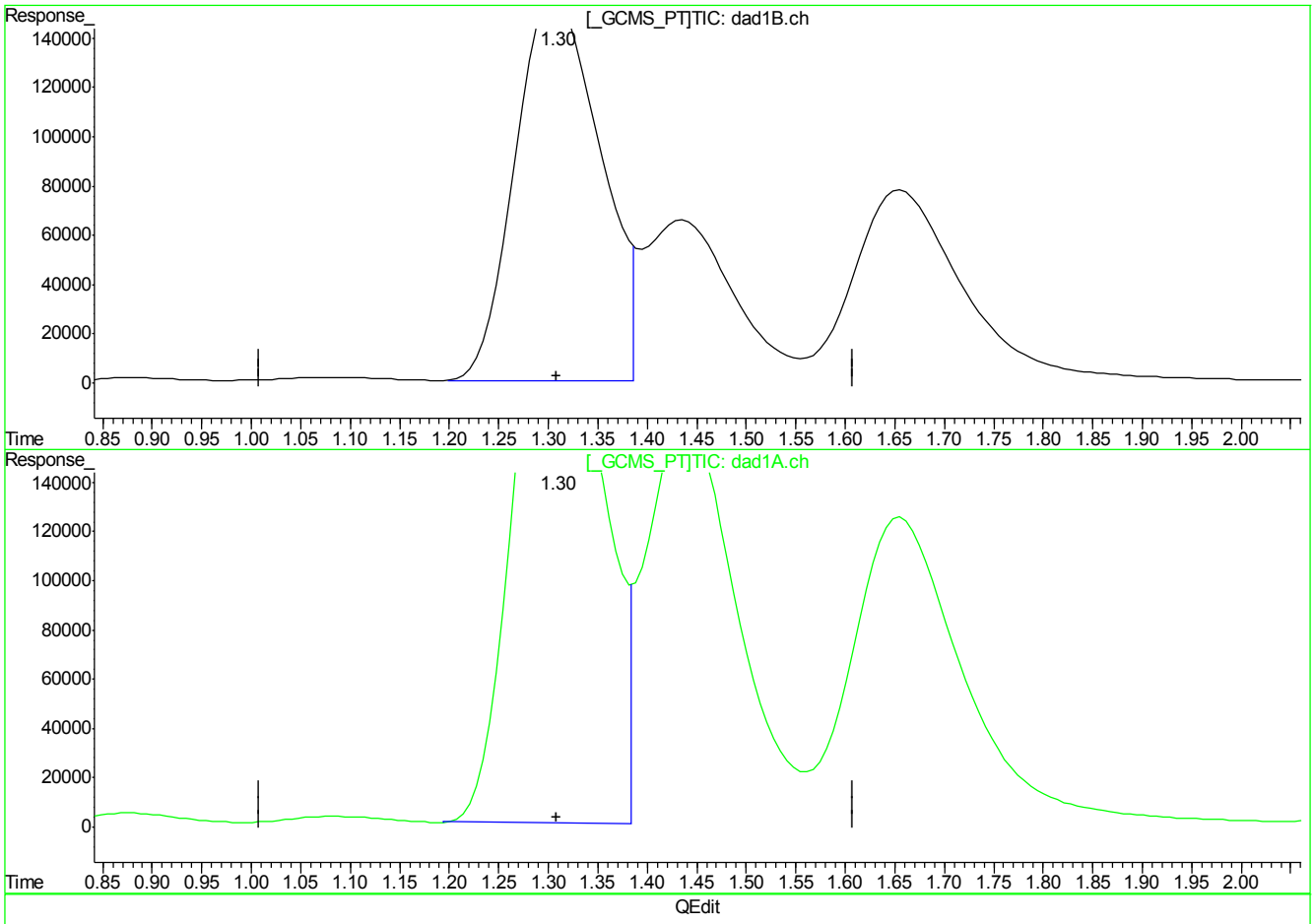
response 8442437

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(1) TNX

1.30min 1815.179ppb m

response 9211273

(1) TNX #2

1.30min 1859.350ppb m

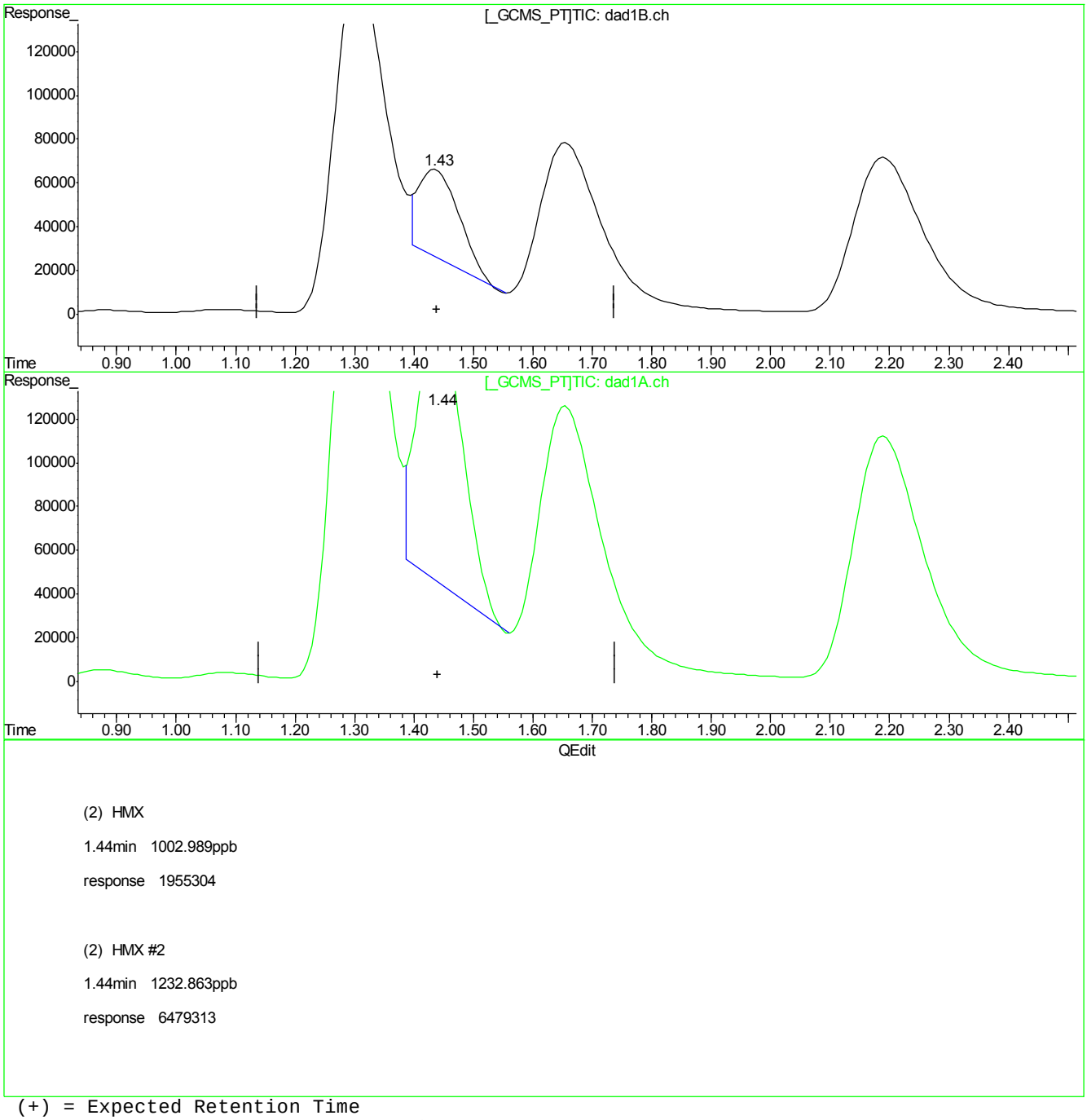
response 14491645

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 1002.989ppb

response 1955304

(2) HMX #2

1.44min 1232.863ppb

response 6479313

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:00:41 2018

7.7.7.4

7

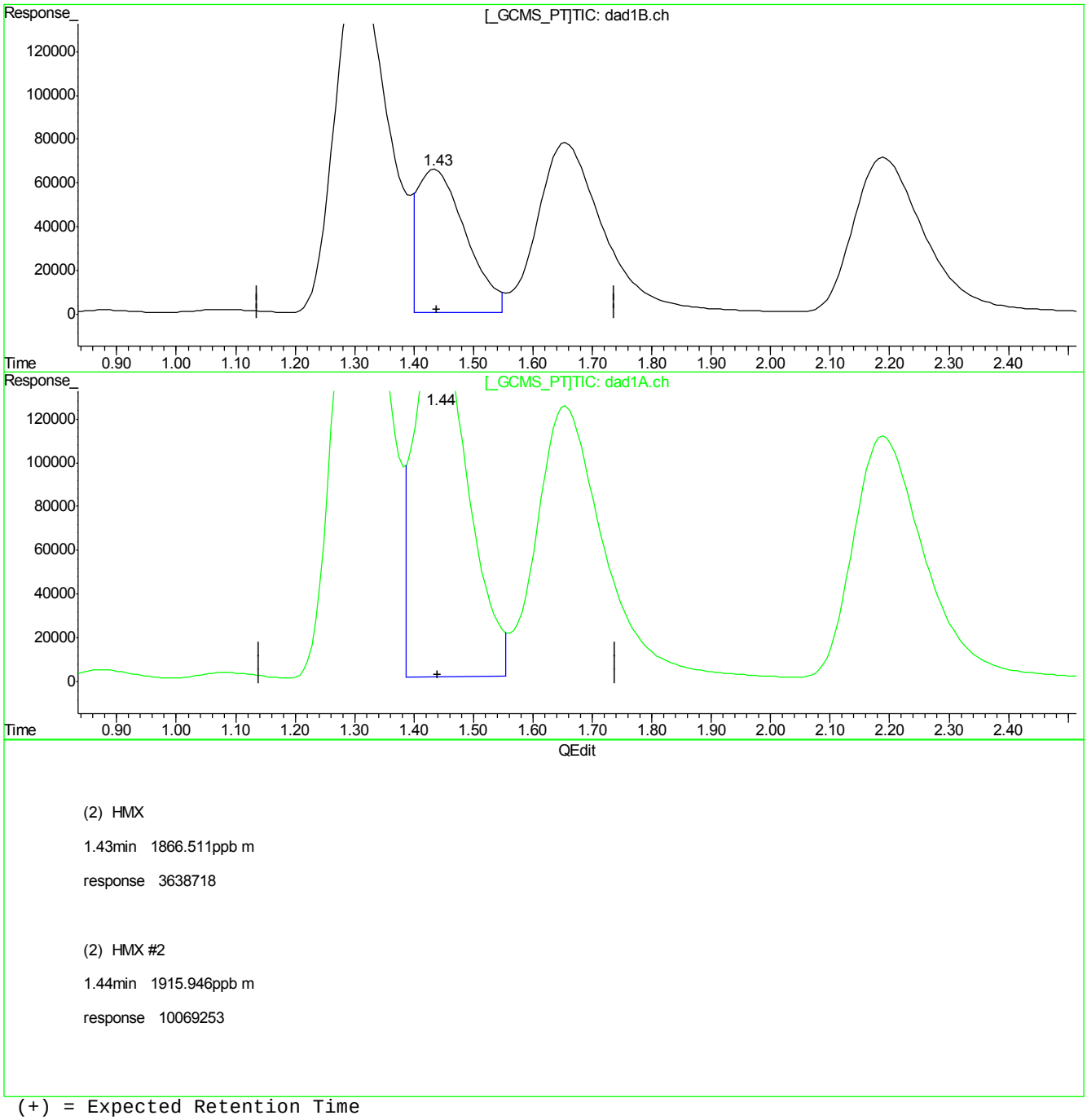
BB059470.D edits: HMX

FA53801

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(2) HMX

1.43min 1866.511ppb m

response 3638718

(2) HMX #2

1.44min 1915.946ppb m

response 10069253

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:03 2018

7.7.7.5

7

SGS

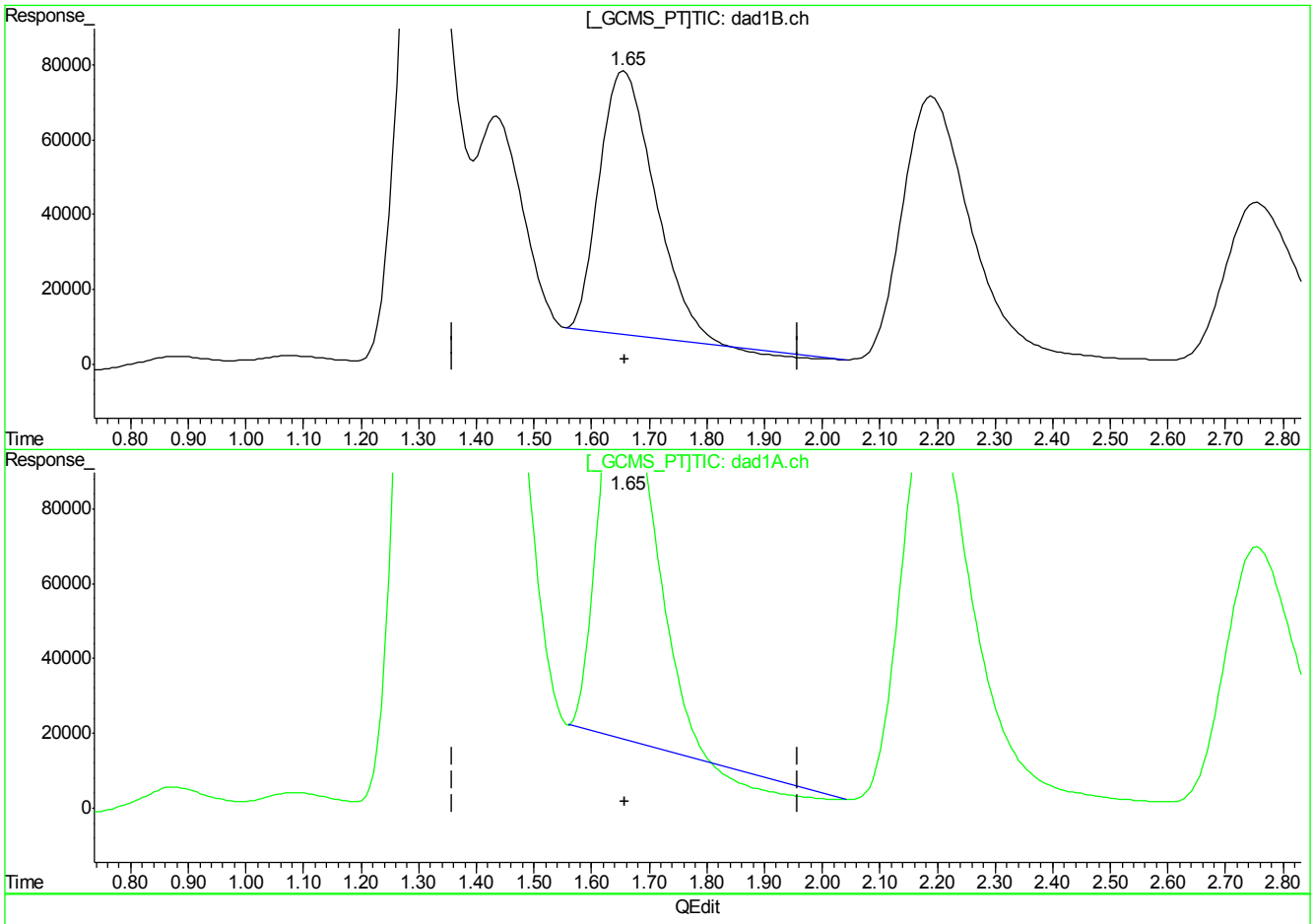
FA53801

BB059470.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 1610.843ppb

response 4665343

(3) DNX #2

1.66min 1430.253ppb

response 6701954

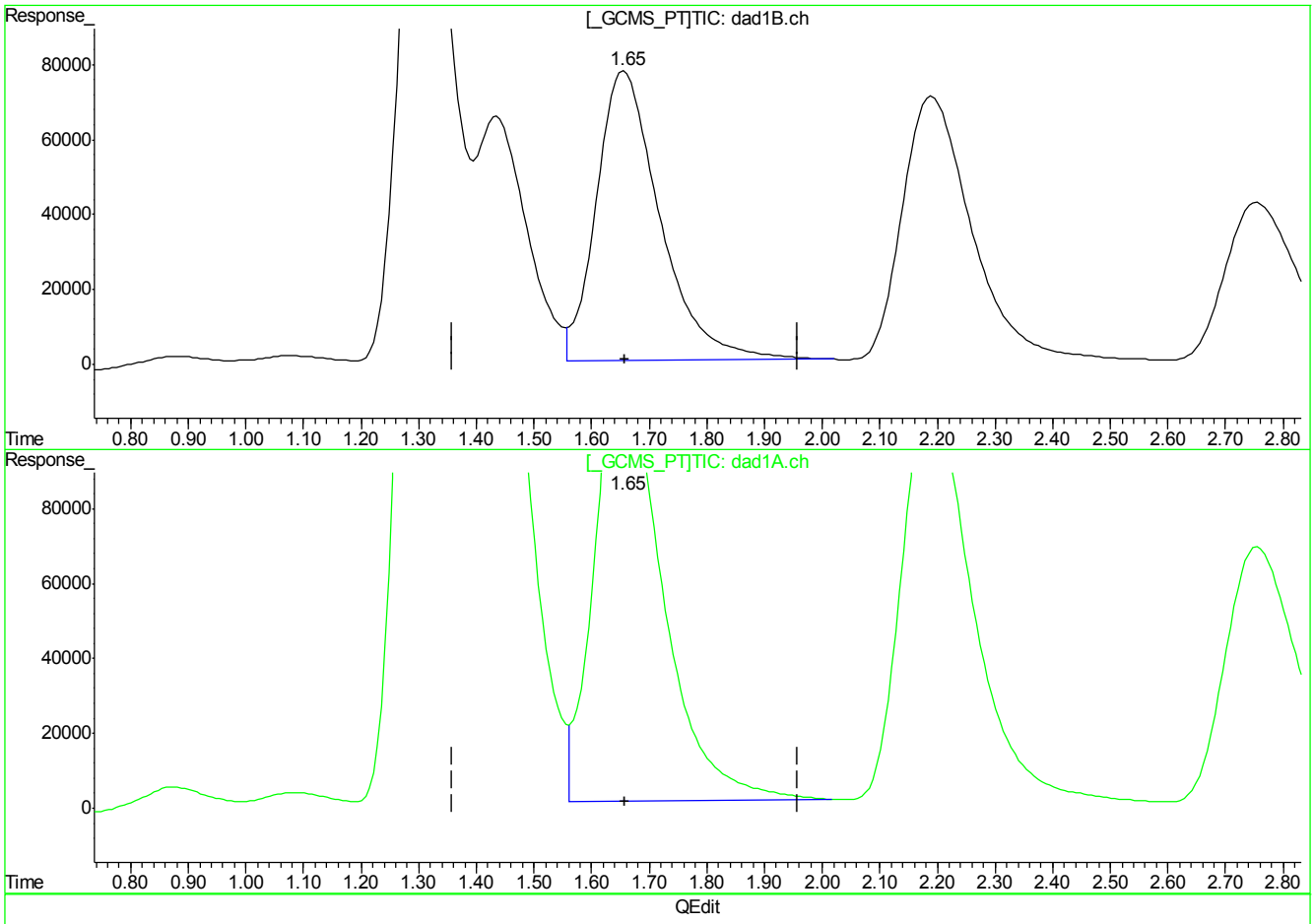
(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:06 2018

BB059470.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(3) DNX

1.65min 2047.638ppb m

response 5892557

(3) DNX #2

1.65min 2063.804ppb m

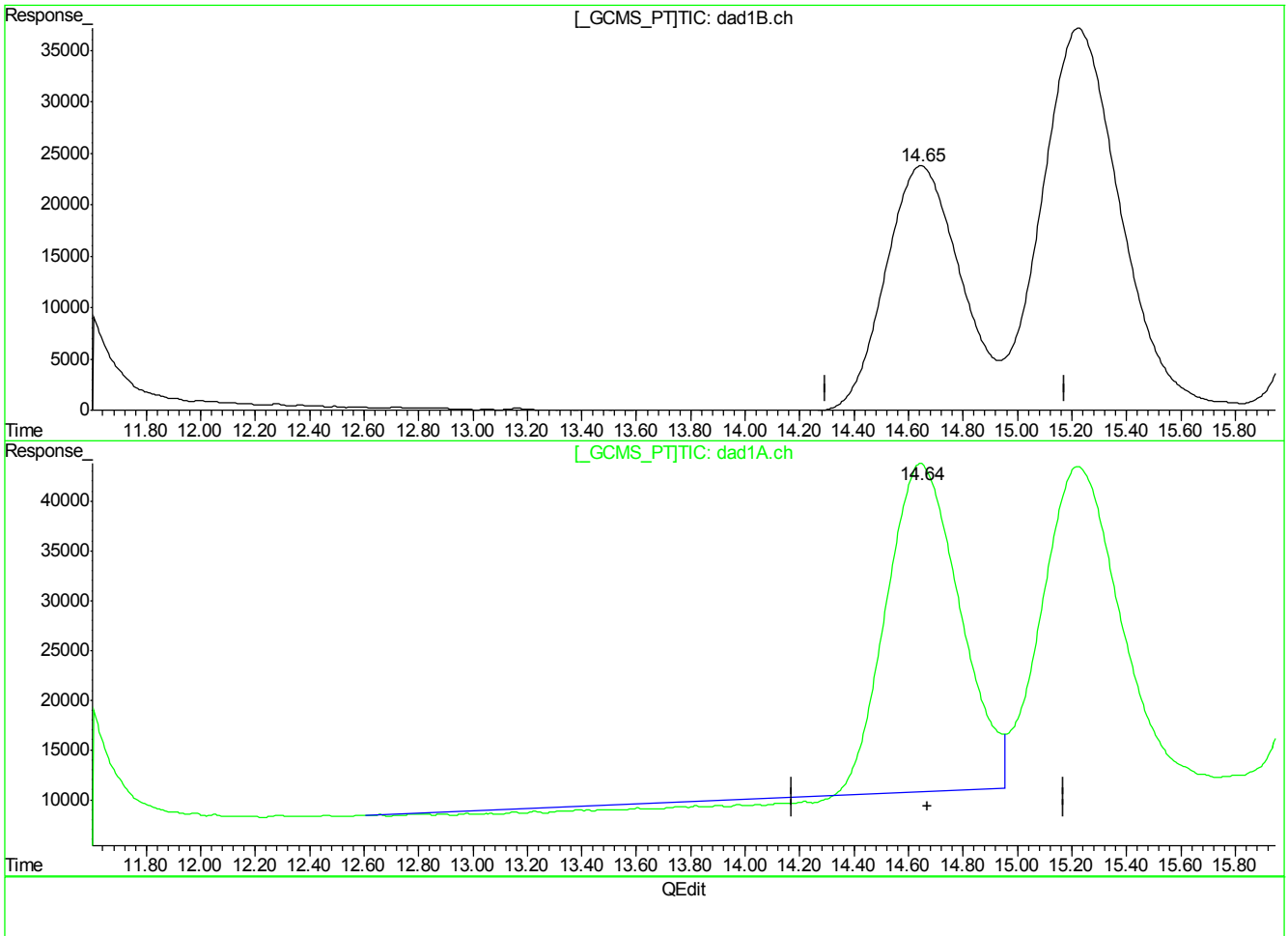
response 9584014

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.65min 1818.018ppb

response 4539267

(18) o-Nitrotoluene #2

14.65min 1563.768ppb

response 5703940

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:30 2018

7.7.7.8

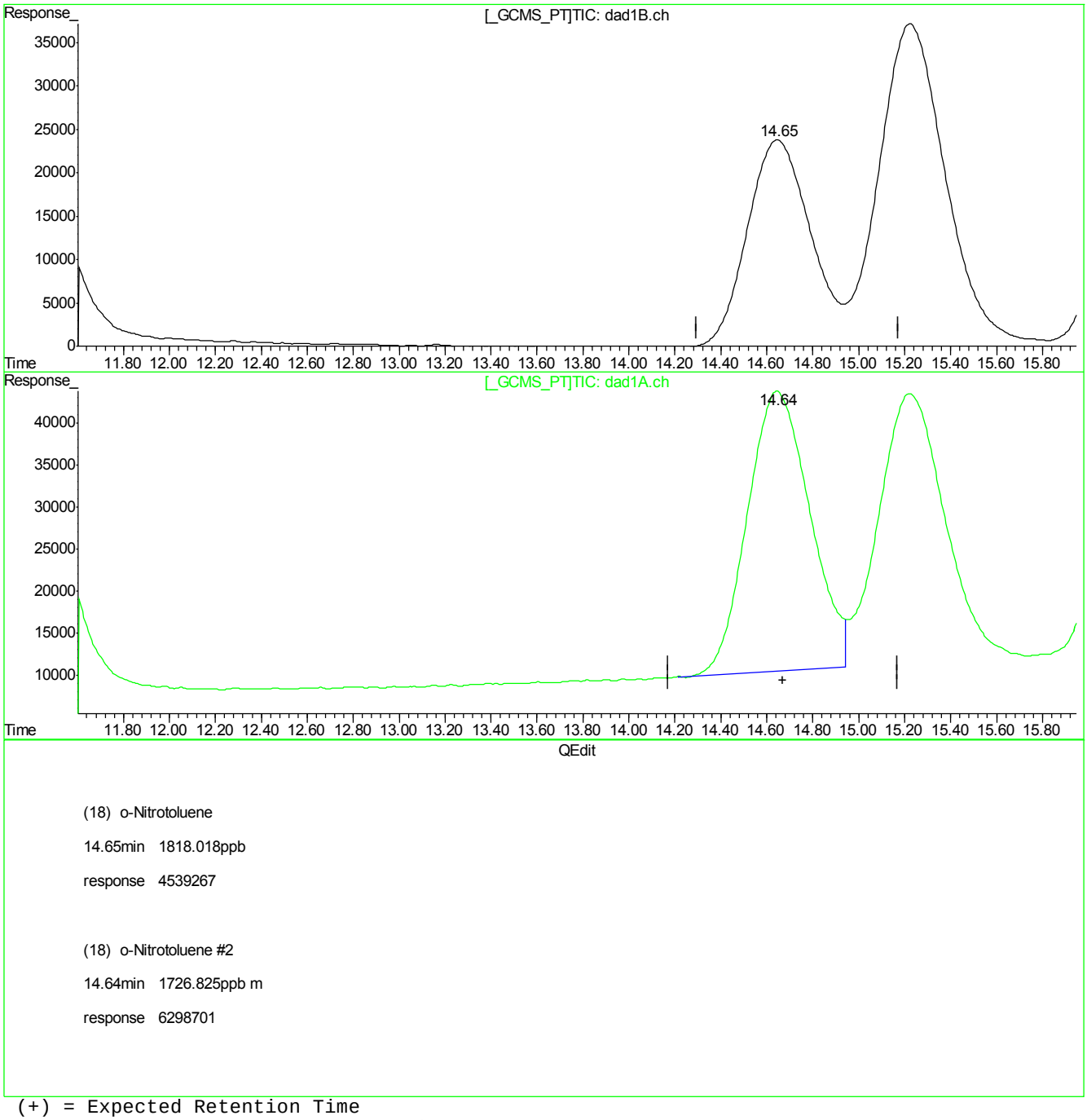
7

BB059470.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration

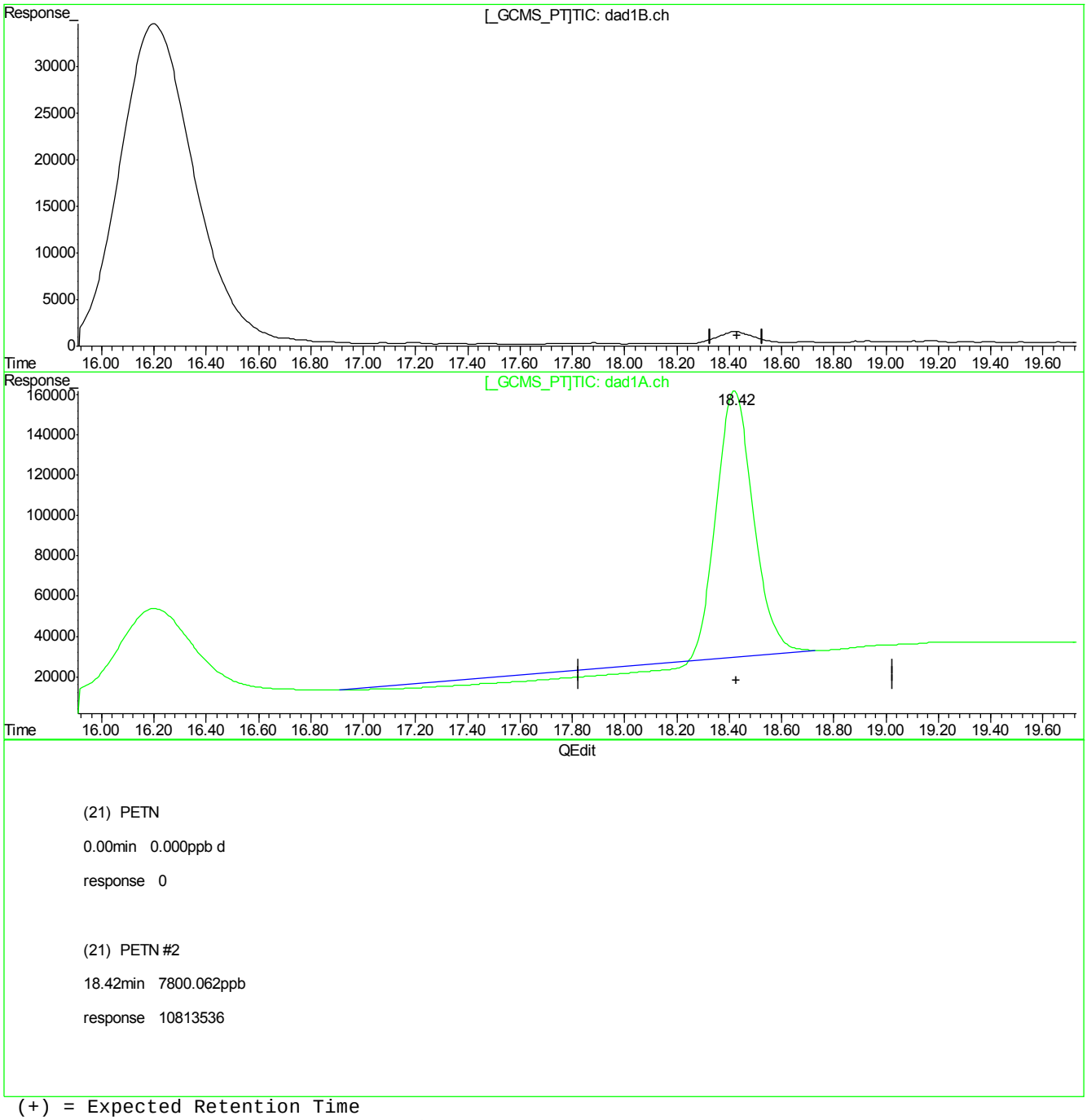


(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 7800.062ppb

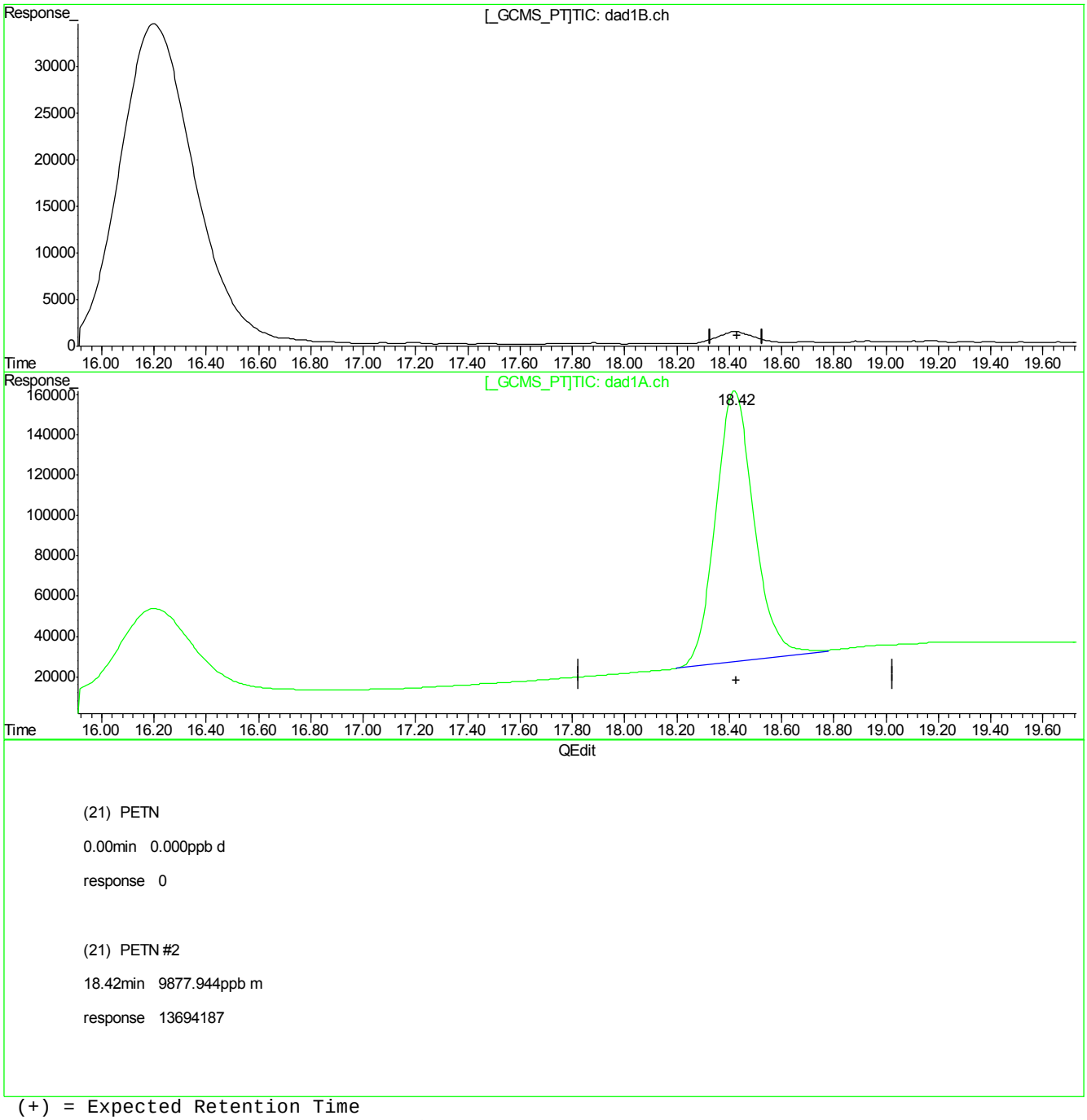
response 10813536

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059470.D\dad1A.ch
Acq On : 19-Apr-2018, 13:13:46 Operator: evitam
Sample : IC1722-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:47 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:00:18 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.42min 9877.944ppb m

response 13694187

(+) = Expected Retention Time
BB059470.D 8330B_0419PLUS.M Thu Apr 19 14:01:42 2018

Manual Integrations APPROVED (compounds with "m" flag)
Ariel Hartney
04/23/18 14:28

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10:27 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.31	1.31	2155539	3284215	446.785m	442.711m
2)	HMX	1.44	1.44	891952	2552992	476.953m	502.668m
3)	DNX	1.66	1.66	1290432	2187865	416.669m	466.541m
4)	MNX	2.20	2.20	1289423	2023915	416.410	435.357
5)	RDX	2.76	2.76	867810	1446810	405.824	435.262
6)	1,3,5-Trinitrobe	4.41	4.41	1916834	3674065	440.520	440.109
7)	1,3-Dinitrobenze	5.58	5.57	2298814	1577744	414.651	423.626m
8)	3,5-Dinitroanili	5.87	5.87	2197319	3639339	449.315	486.621
9)	Nitrobenzene	7.09	7.09	1561002	1457542	428.399	439.568
10)	Nitroglycerin	0.00	8.38	0	3011271	N.D. d	2349.932
11)	Tetryl	8.69	8.68	1316922	2243689	447.453	431.996
12)	2,4,6-Trinitroto	9.11	9.11	1546722	1951756	366.508	430.591
13)	2-Amino-4,6-Dini	9.41	9.42	1651187	2548623	436.189	475.149
14)	4-Amino-2,6-Dini	9.85	9.85	1245755	2592637	475.168	500.329
16)	2,4-Dinitrotolue	10.95	10.96	2209091	1353341	419.899	458.258
17)	2,6-Dinitrotolue	11.40	11.41	1413935	1713574	409.093	501.832
18)	o-Nitrotoluene	14.66	14.65	1040298	1453747	416.479	443.790m
19)	p-Nitrotoluene	15.24	15.25	1618644	1443654	410.091	458.274
20)	m-Nitrotoluene	16.22	16.22	1558816	1910959	436.986	474.905
21)	PETN	0.00	18.42	0	3478321	N.D. d	2504.495m

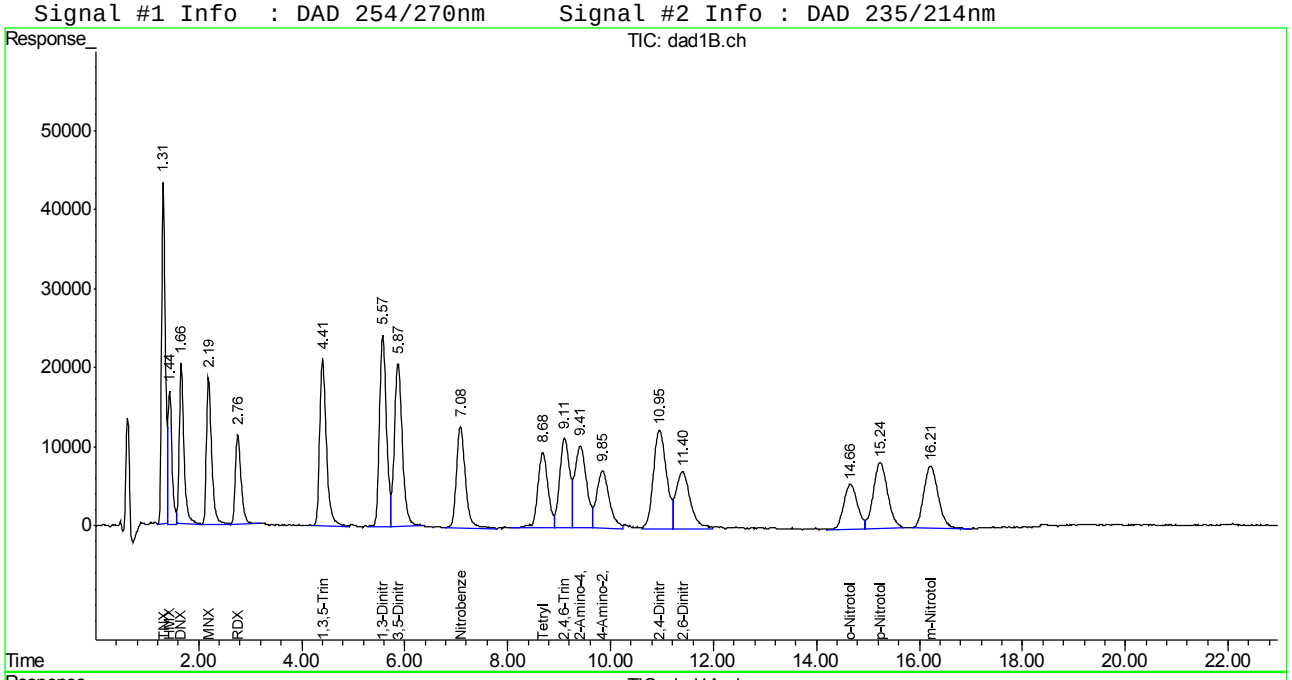
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059471.D 8330B_0419PLUS.M Mon Apr 23 08:16:05 2018 Page 1

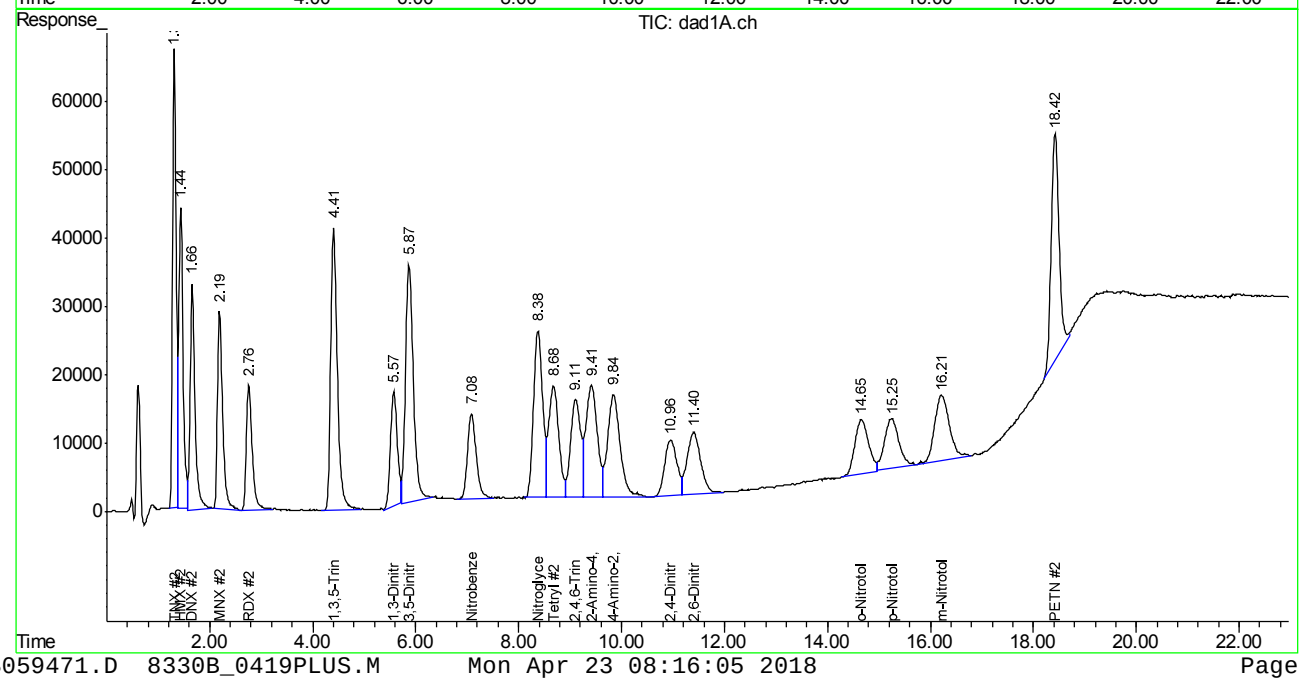
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV1722-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:43 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

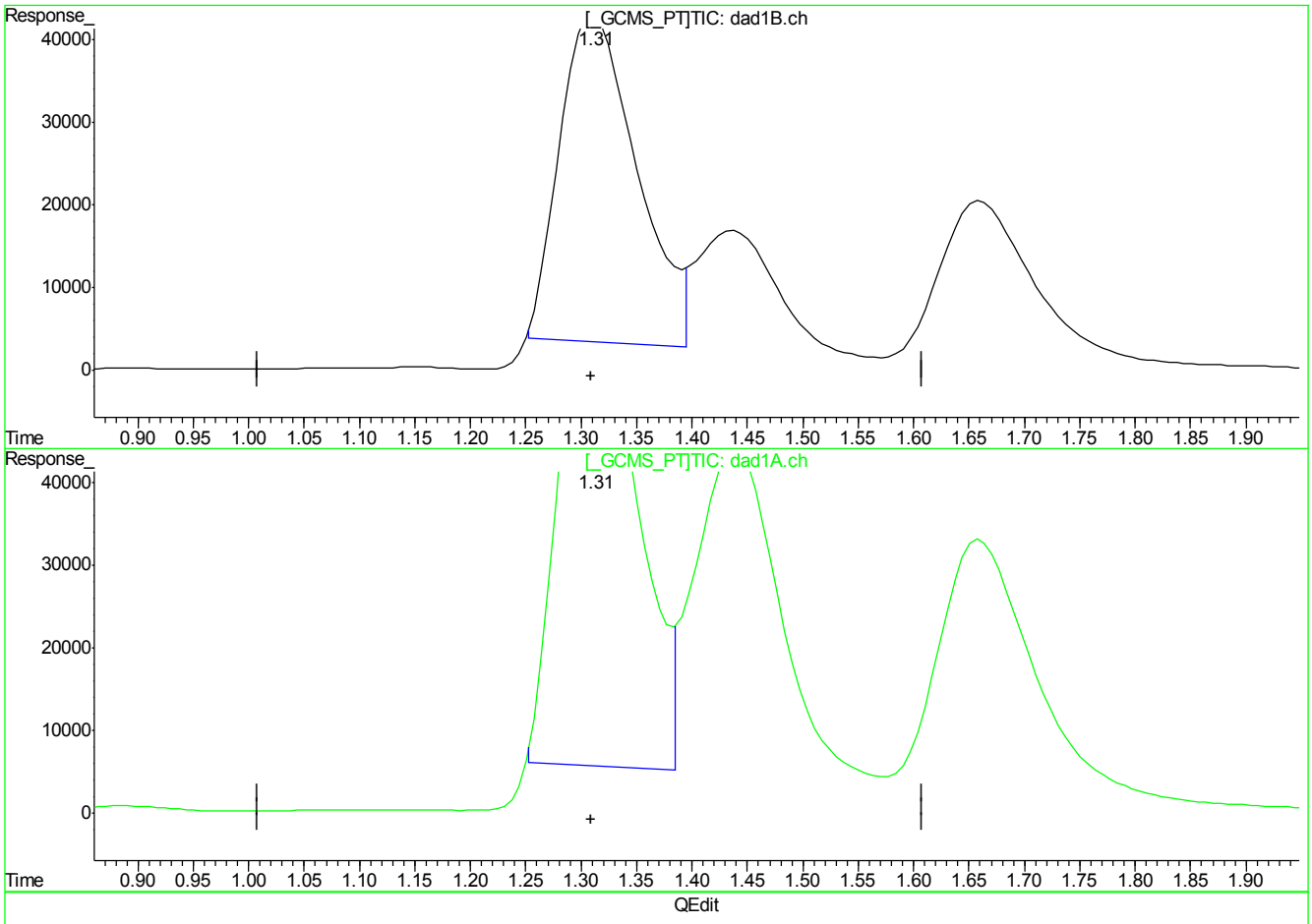
Sample Number:	GBB1722-ICV1722	**Method:**	SW846 8330B
Lab FileID:	BB059471.D	**Analyst approved:**	04/23/18 08:17 Evita Martinez
Injection Time:	04/19/18 13:43	**Supervisor approved:**	04/23/18 14:28 Ariel Hartney

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.31	Poorly defined baseline
TNX		2	1.31	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.66	Poorly defined baseline
DNX		2	1.66	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.57	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.65	Poorly defined baseline
PETN	78-11-5	2	18.42	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 394.963ppb

response 1905519

(1) TNX #2

1.31min 386.665ppb

response 2868446

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:26 2018

7.7.8.2

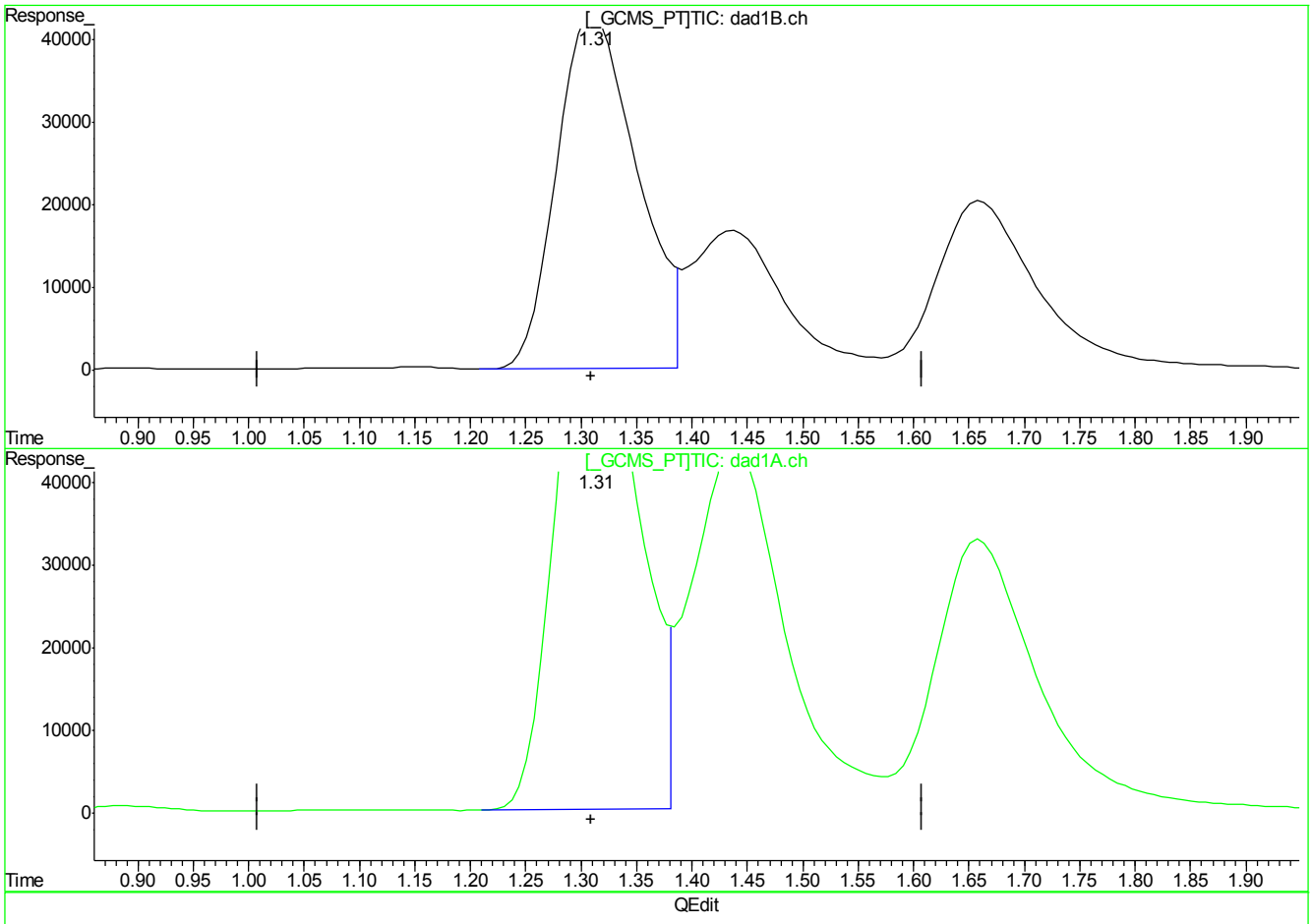
7

BB059471.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(1) TNX

1.31min 446.785ppb m

response 2155539

(1) TNX #2

1.31min 442.711ppb m

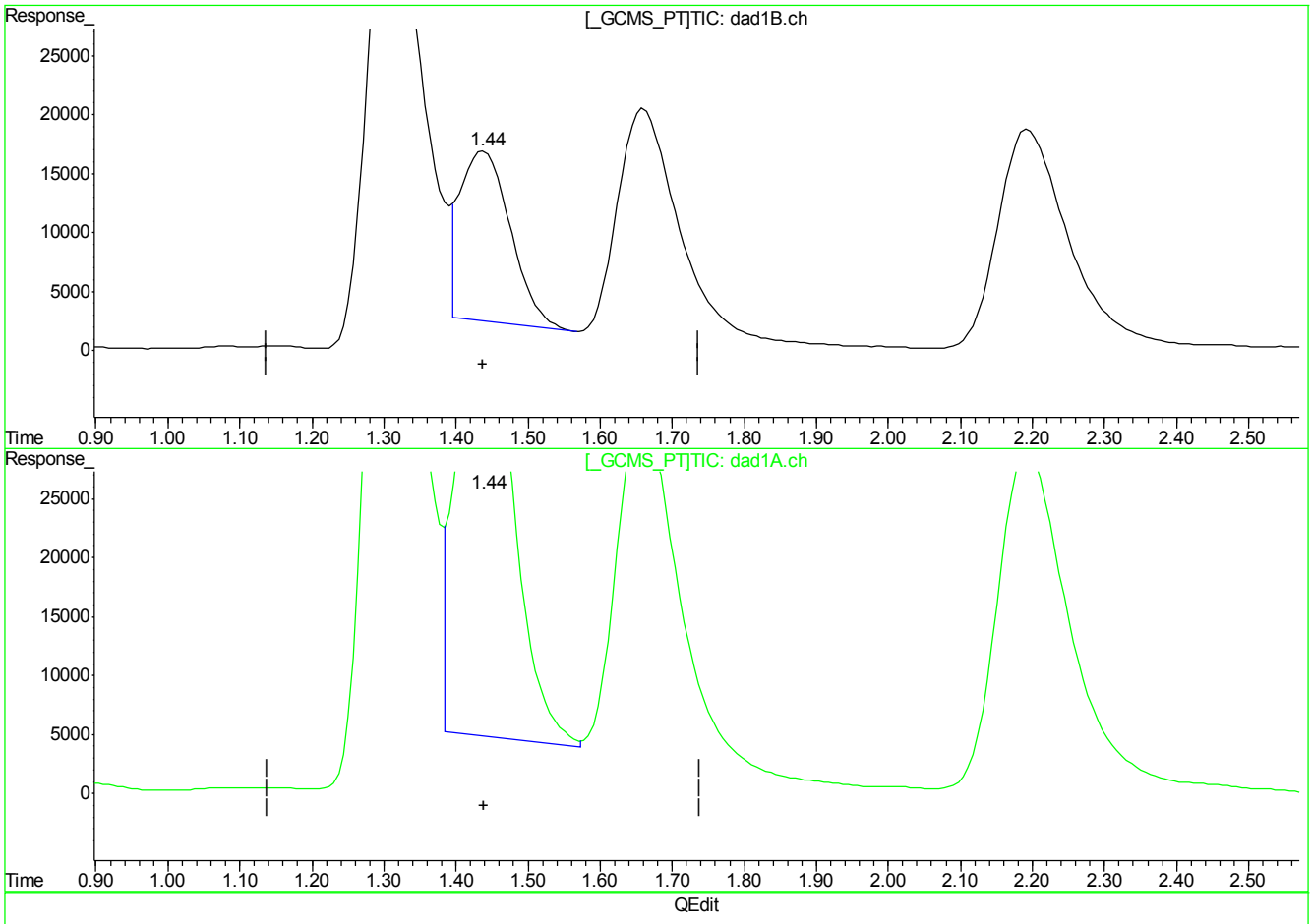
response 3284215

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 384.331ppb

response 718739

(2) HMX #2

1.44min 406.216ppb

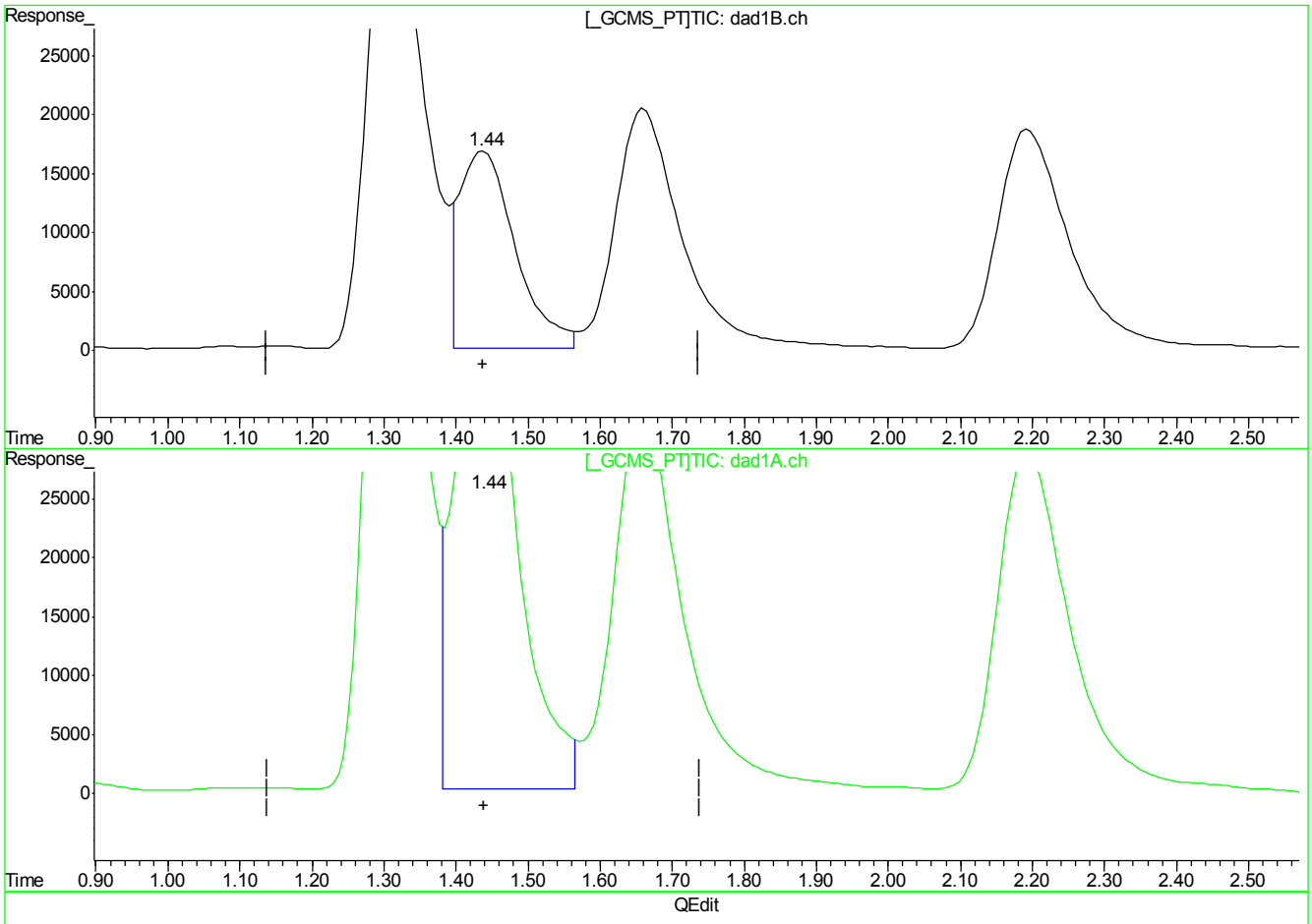
response 2064264

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:42:41 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(2) HMX

1.44min 476.953ppb m

response 891952

(2) HMX #2

1.44min 502.668ppb m

response 2552992

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:10 2018

7.7.8.5

7

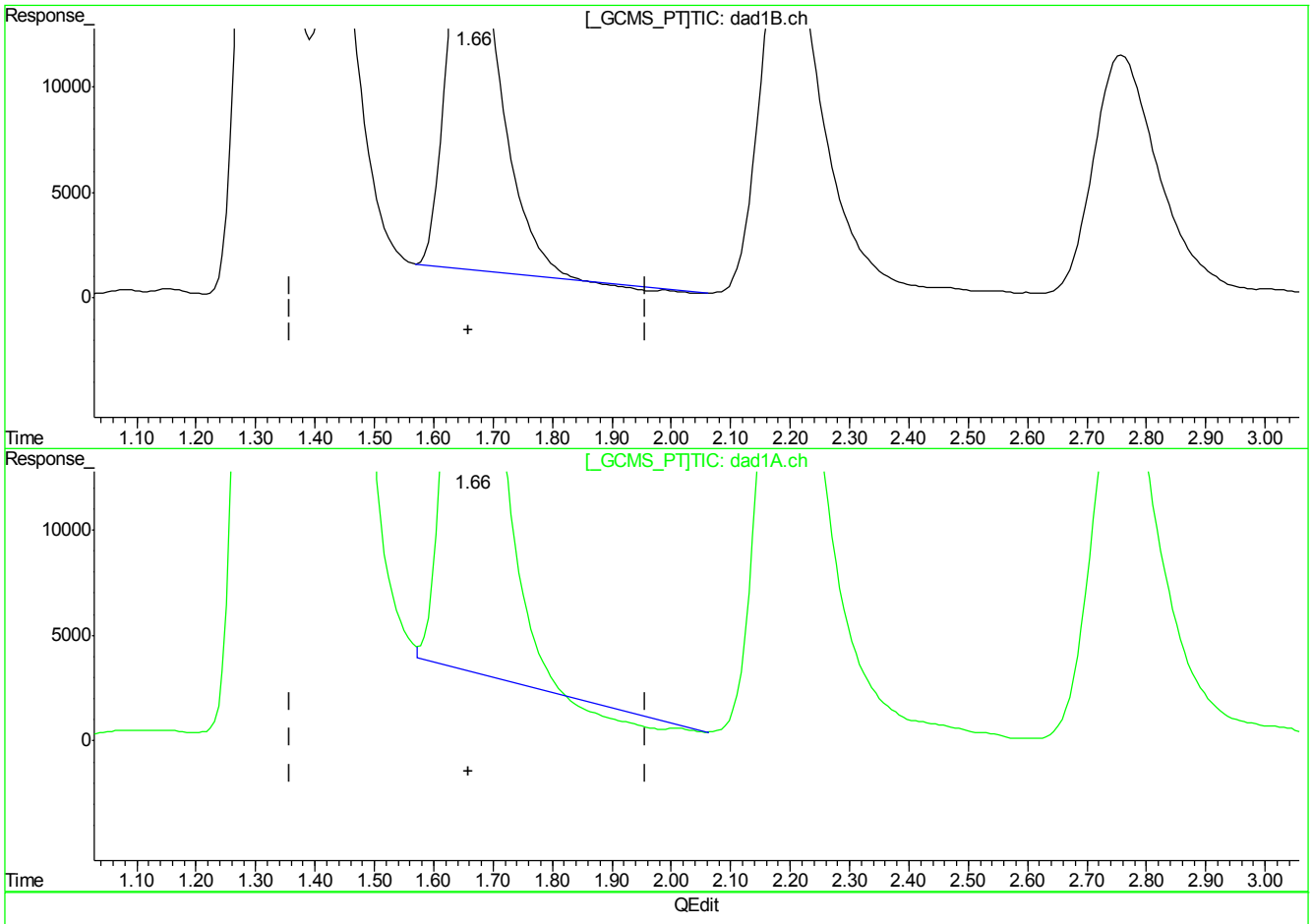
BB059471.D edits: HMX

FA53801

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 353.884ppb

response 1095983

(3) DNX #2

1.66min 351.062ppb

response 1643602

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:15 2018

7.7.8.9

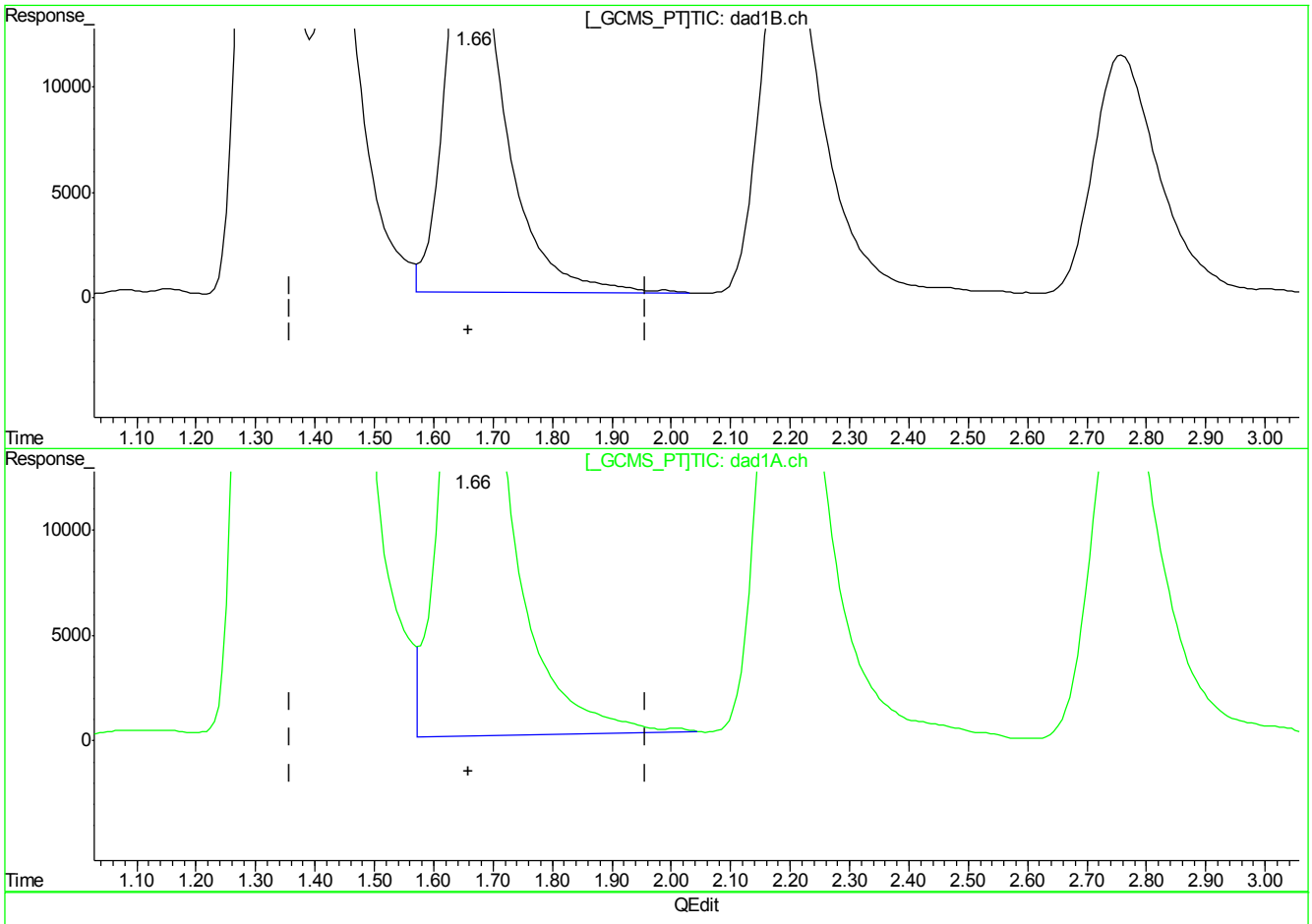
7

BB059471.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(3) DNX

1.66min 416.669ppb m

response 1290432

(3) DNX #2

1.66min 466.541ppb m

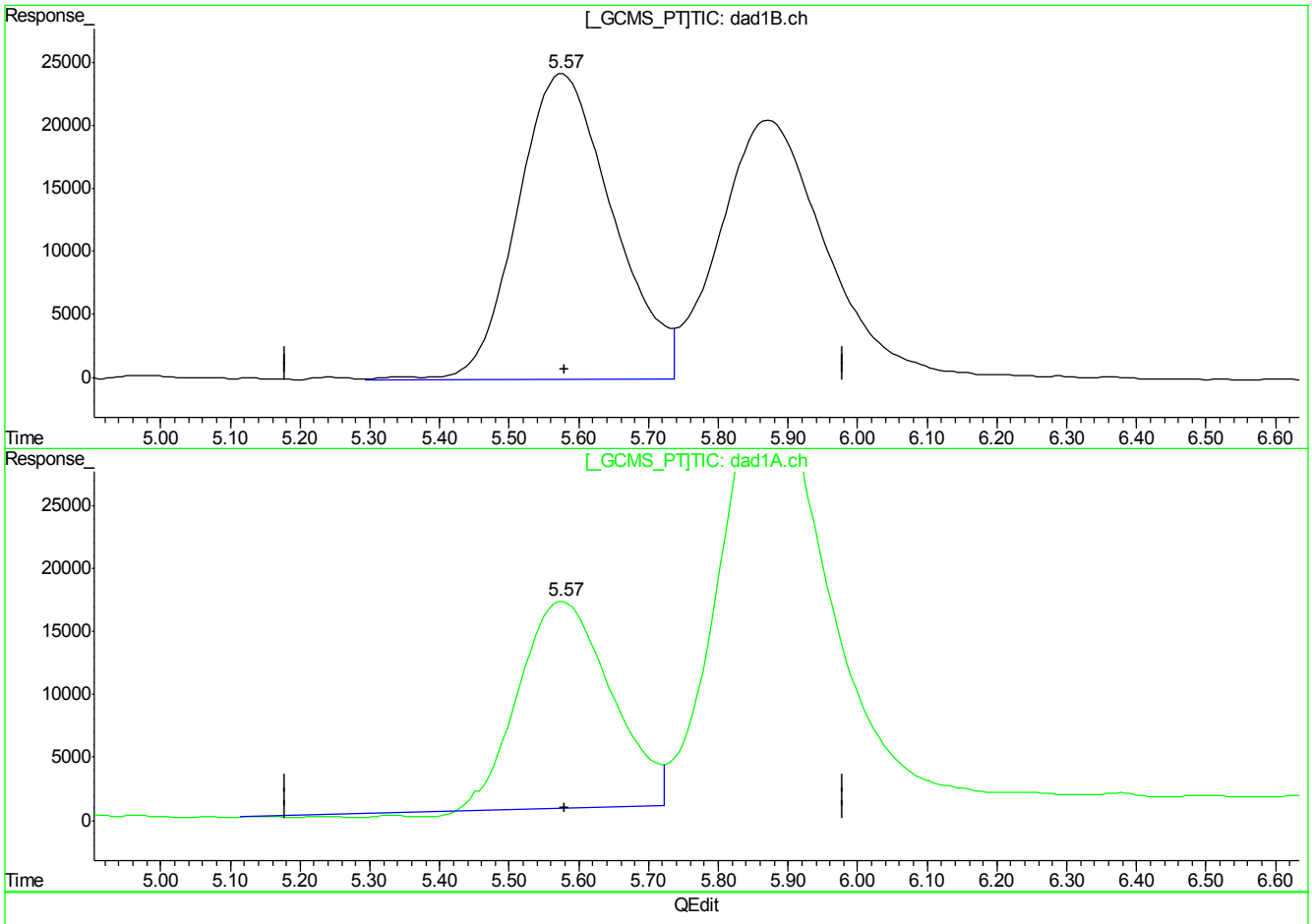
response 2187865

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.58min 414.651ppb

response 2298814

(7) 1,3-Dinitrobenzene #2

5.58min 399.114ppb

response 1486450

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:33 2018

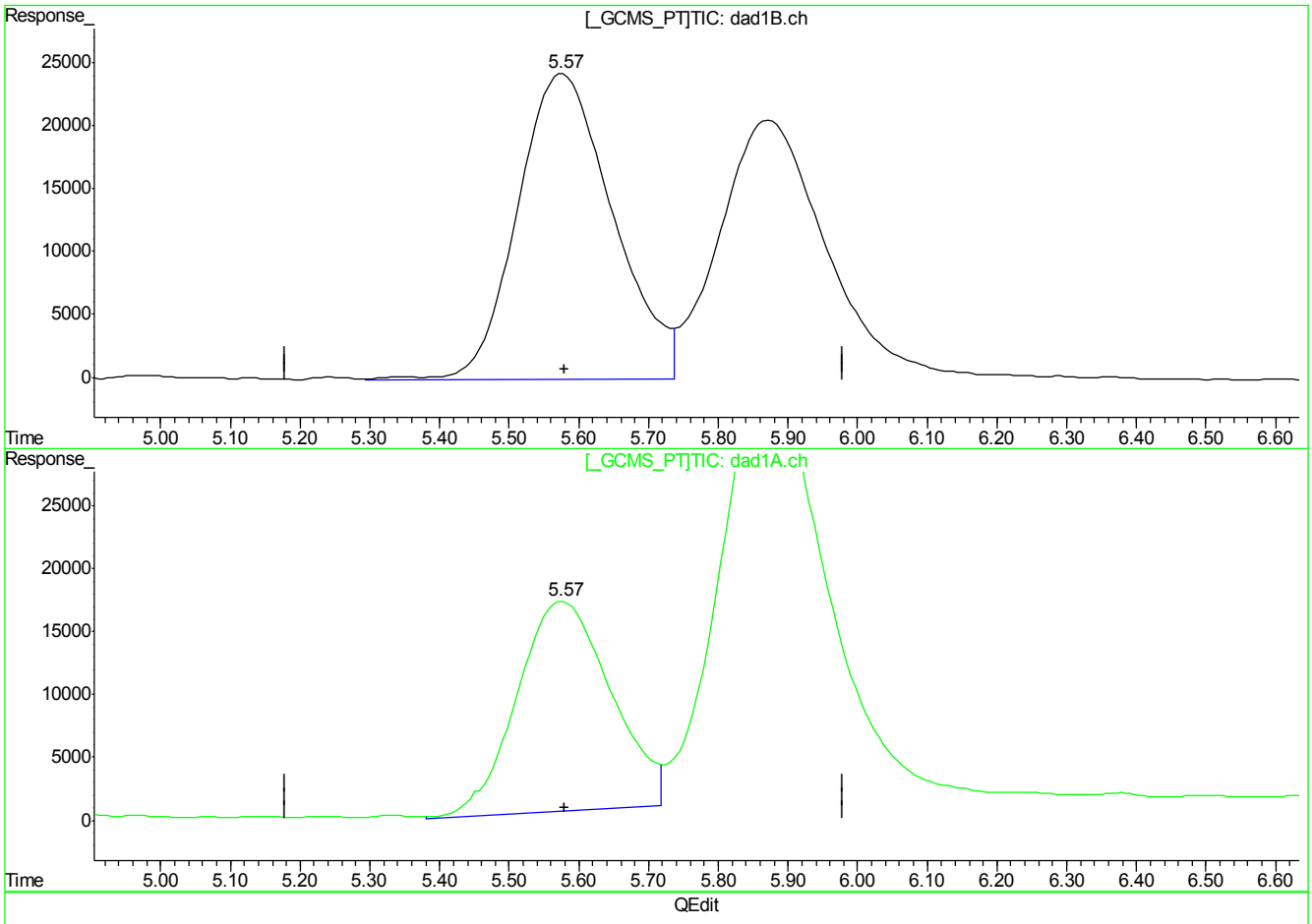
7.7.8.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.58min 414.651ppb

response 2298814

(7) 1,3-Dinitrobenzene #2

5.57min 423.626ppb m

response 1577744

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:37 2018

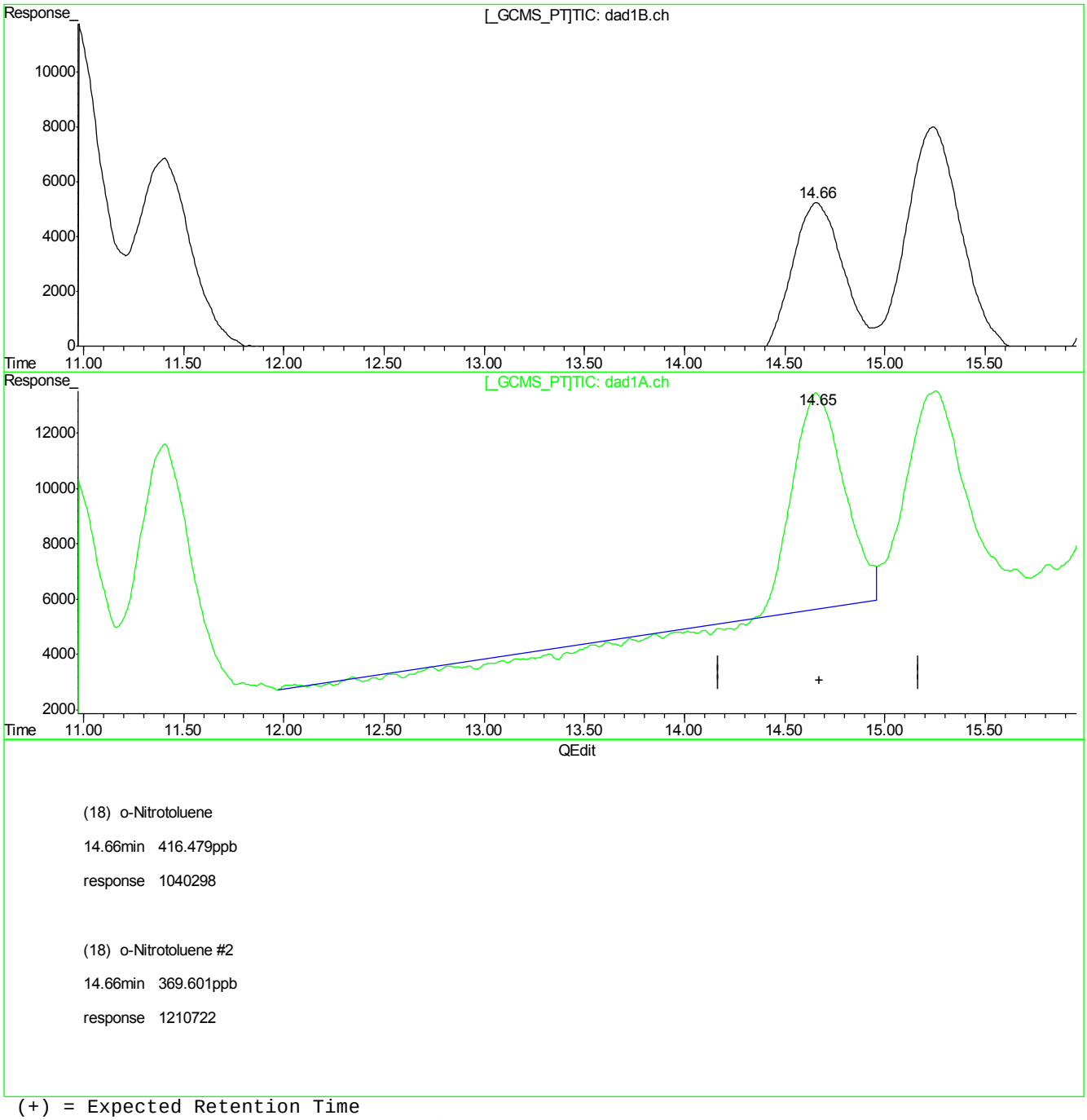
7.7.8.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.66min 416.479ppb

response 1040298

(18) o-Nitrotoluene #2

14.66min 369.601ppb

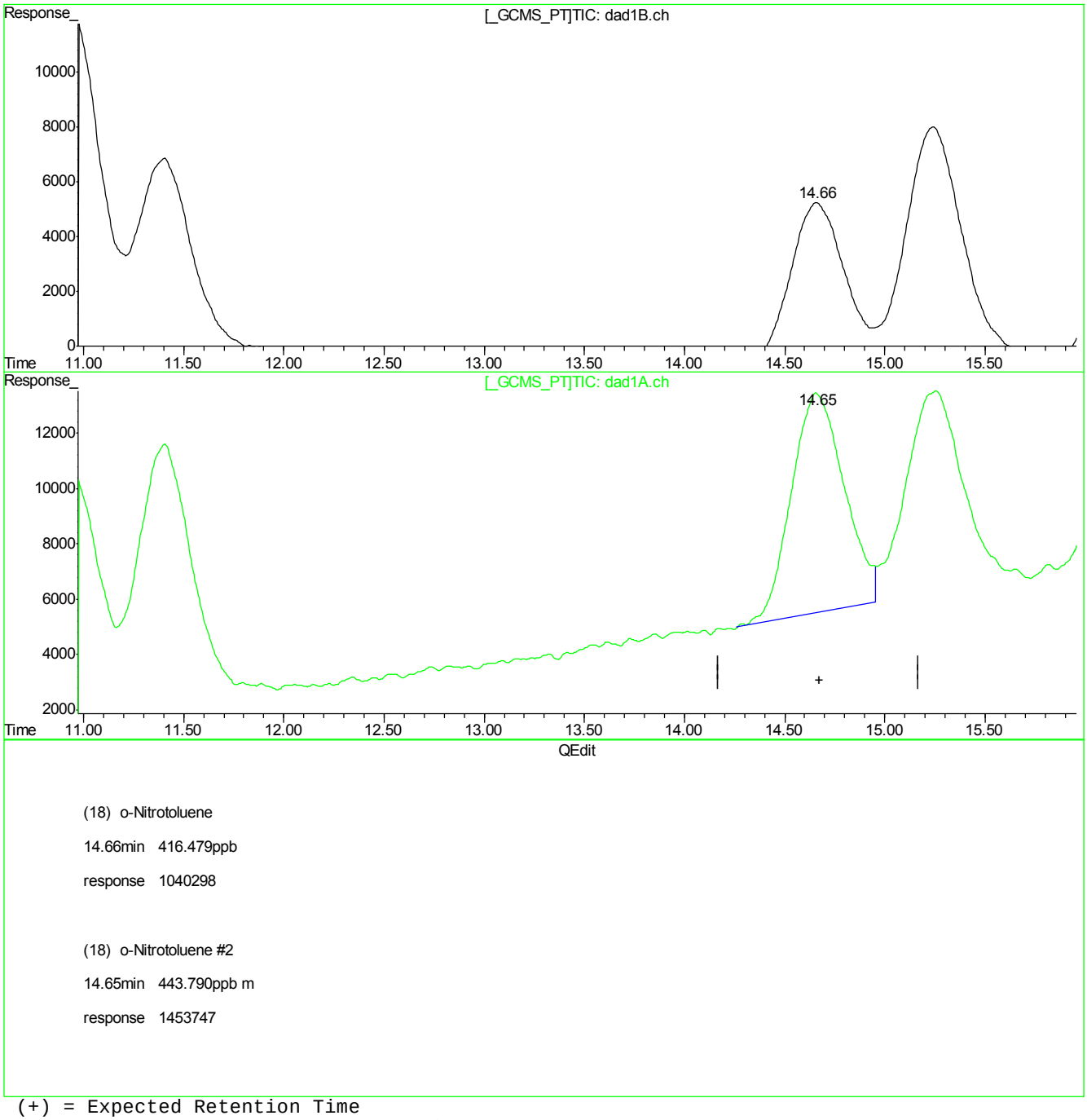
response 1210722

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:49 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.66min 416.479ppb

response 1040298

(18) o-Nitrotoluene #2

14.65min 443.790ppb m

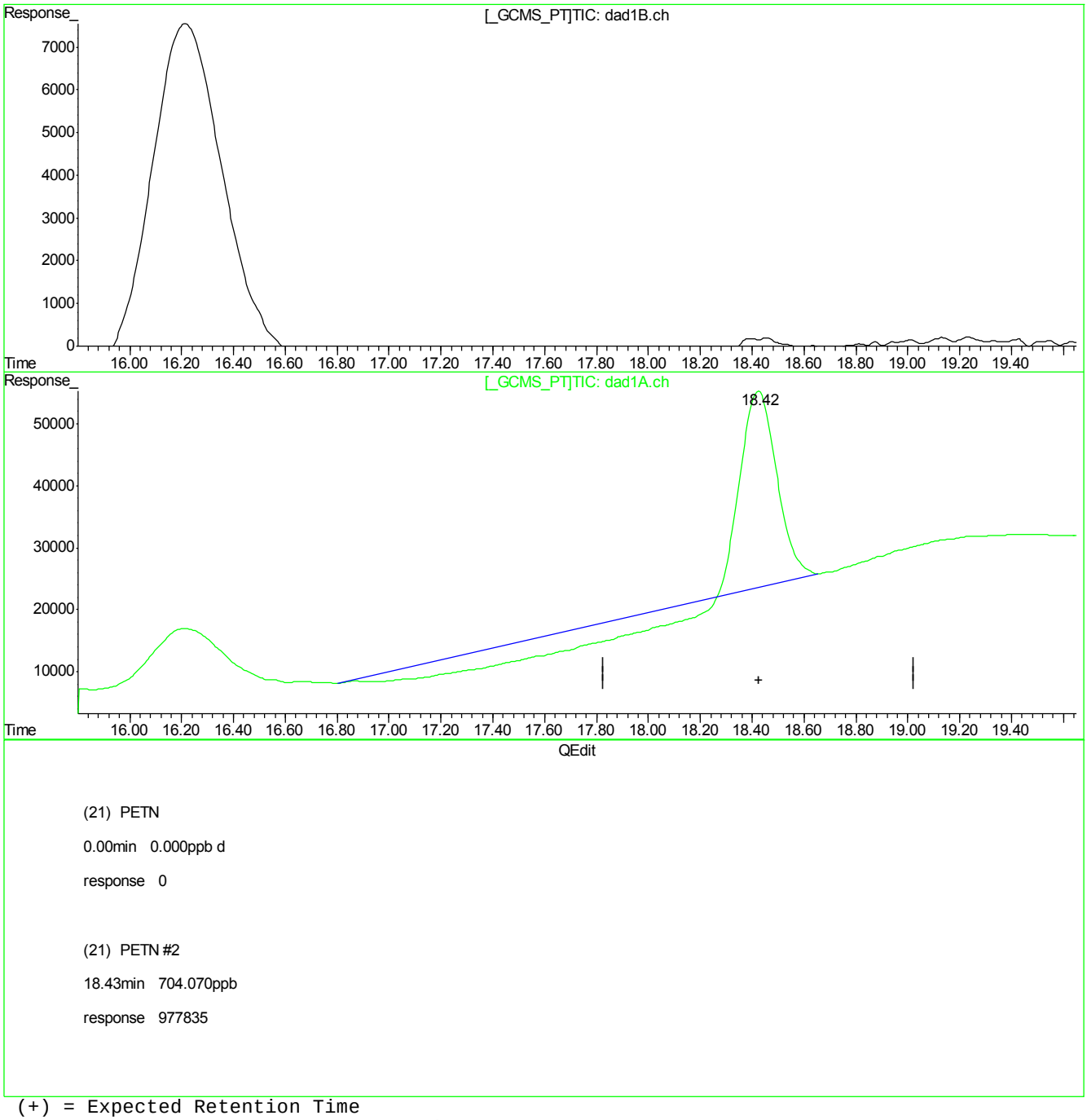
response 1453747

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:53 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.43min 704.070ppb

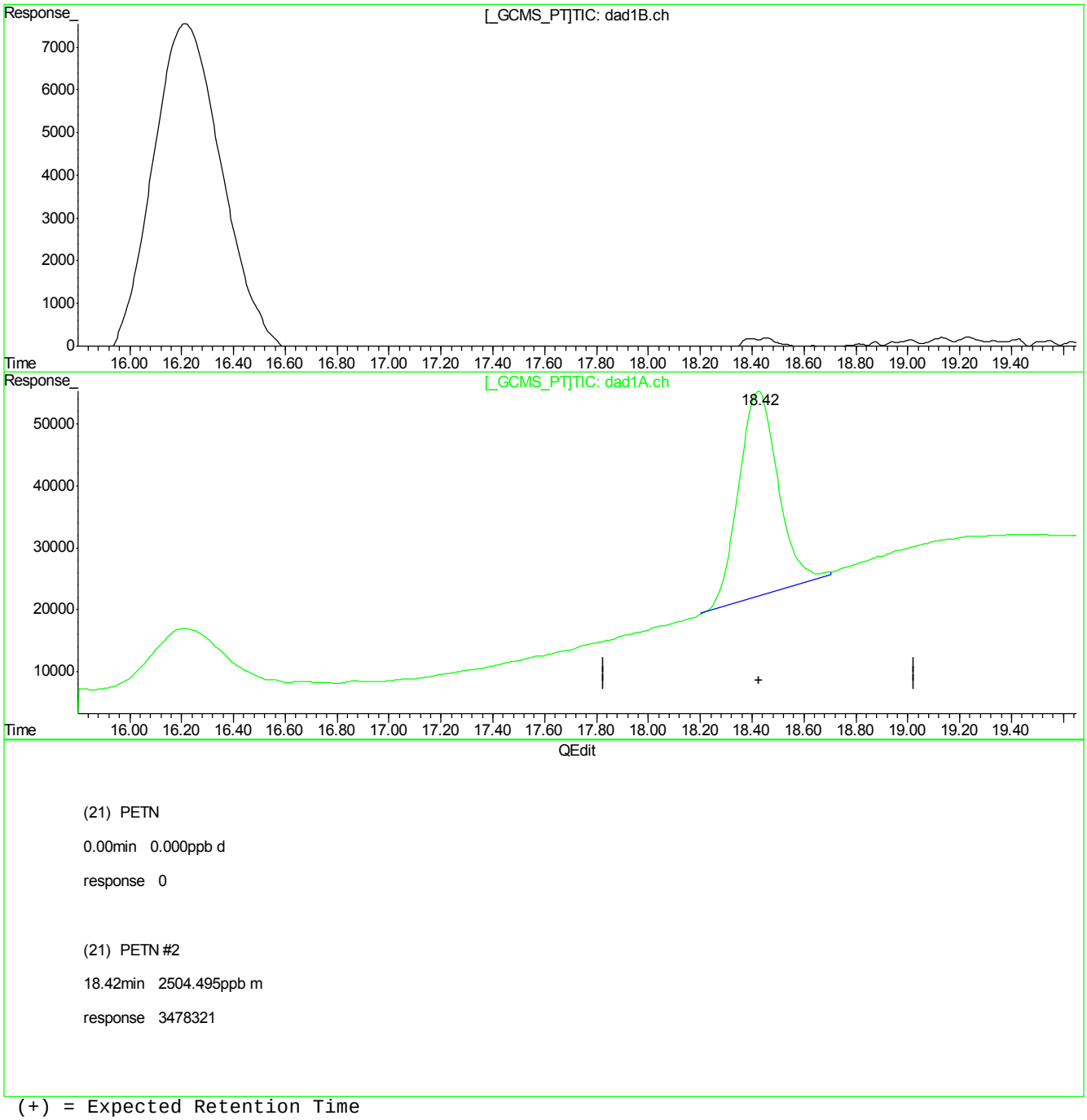
response 977835

(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\GBB1722\BB059471.D\dad1A.ch
Acq On : 19-Apr-2018, 13:43:41 Operator: evitam
Sample : ICV17132-500 Inst : G1315B
Misc : OP69499,gbb1722,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:10 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Apr 19 14:02:38 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059471.D 8330B_0419PLUS.M Fri Apr 20 07:43:58 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:10 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.89	9.89	2407895	4364730	899.911	925.760
	Spiked Amount 500.000	Range 69 - 134		Recovery =		179.98%#	185.15%#
	Target Compounds						
1)	TNX	1.27	1.27	4479144	6929032	928.405m	934.030m
2)	HMX	1.36	1.38	1752771	5200234	937.259m	1026.979m
3)	DNX	1.60	1.60	2876485	4587611	928.793m	971.248m
4)	MNX	2.11	2.11	2863770	4476451	924.834	962.912
5)	RDX	2.65	2.65	1884779	3047746	881.402	916.892
6)	1,3,5-Trinitrobe	4.25	4.25	4049477	7944958	930.637	951.711
7)	1,3-Dinitrobenze	5.39	5.40	5086083	3293182	917.407	884.223
8)	3,5-Dinitroanili	5.64	5.65	4549306	7449255	930.257	996.050
9)	Nitrobenzene	6.88	6.88	3185062	3017475	874.103	910.016
10)	Nitroglycerin	0.00	8.14	0	5538325	N.D. d	4321.991m
11)	Tetryl	8.34	8.25	2516593	4332844	856.915	834.238m
12)	2,4,6-Trinitroto	8.79	8.79	3340047	3677846	791.451	811.396
13)	2-Amino-4,6-Dini	8.97	8.98	3658705	6052541	966.508	1128.397
14)	4-Amino-2,6-Dini	9.42	9.42	2583117	5296873	977.853	1022.195
16)	2,4-Dinitrotolue	10.52	10.52	4818492	3137403	915.887	1062.363
17)	2,6-Dinitrotolue	10.95	10.96	2936031	3708992	849.480	1086.204
18)	o-Nitrotoluene	14.23	14.23	2199956	3001779	880.743	916.364m
19)	p-Nitrotoluene	14.80	14.80	3647759	3084605	924.177	977.994
20)	m-Nitrotoluene	15.78	15.78	3335835	3893286	935.141	967.547
21)	PETN	0.00	18.21	0	6654757	N.D. d	4791.624m

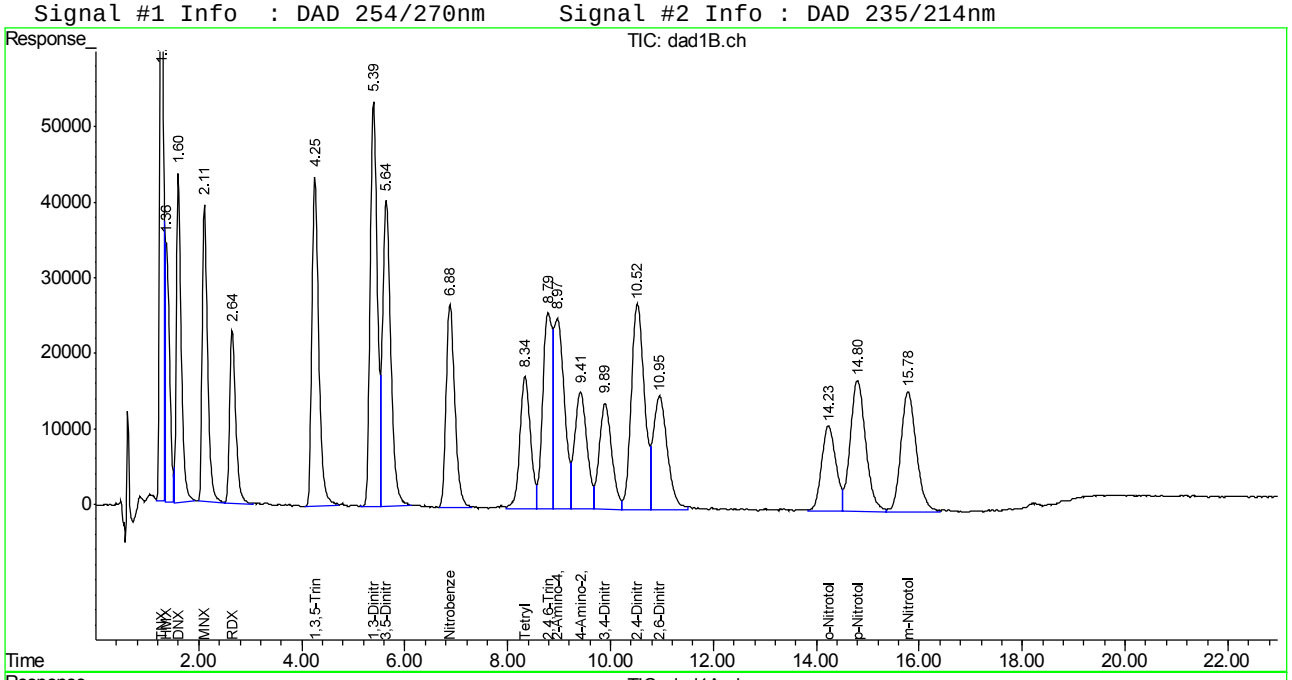
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059692.D 8330B_0419PLUS.M Fri May 11 08:38:06 2018 Page 1

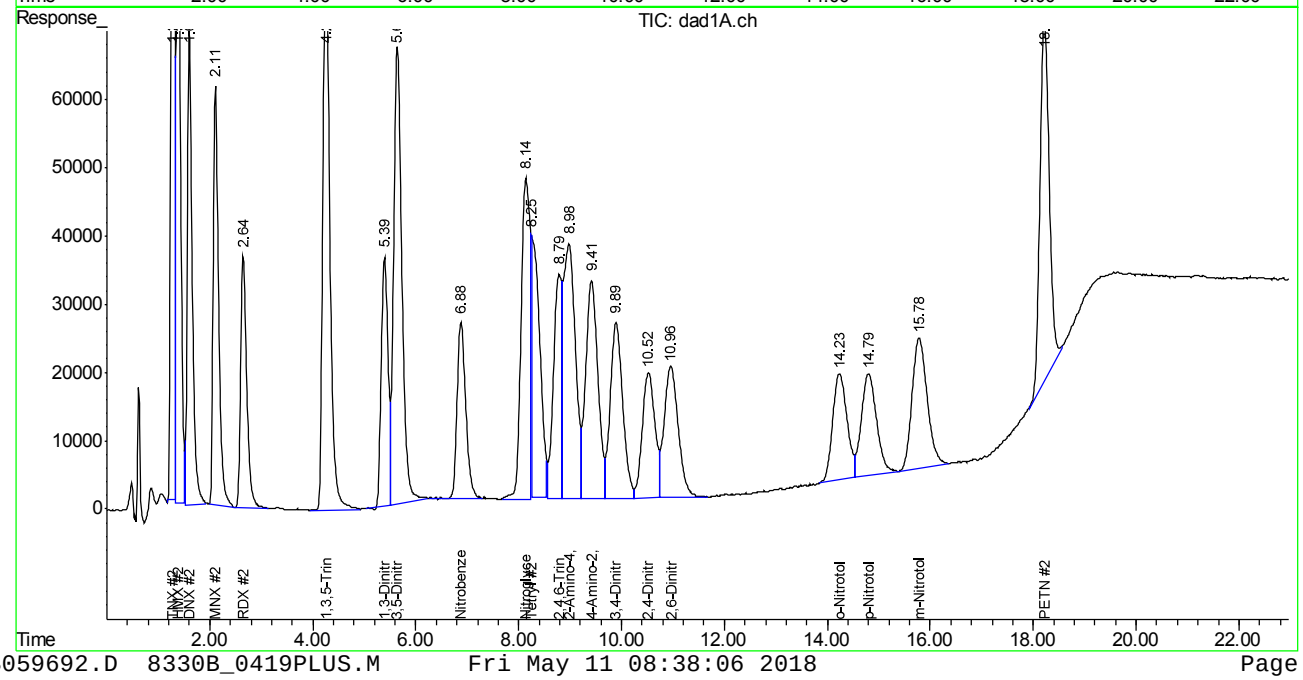
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:23 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

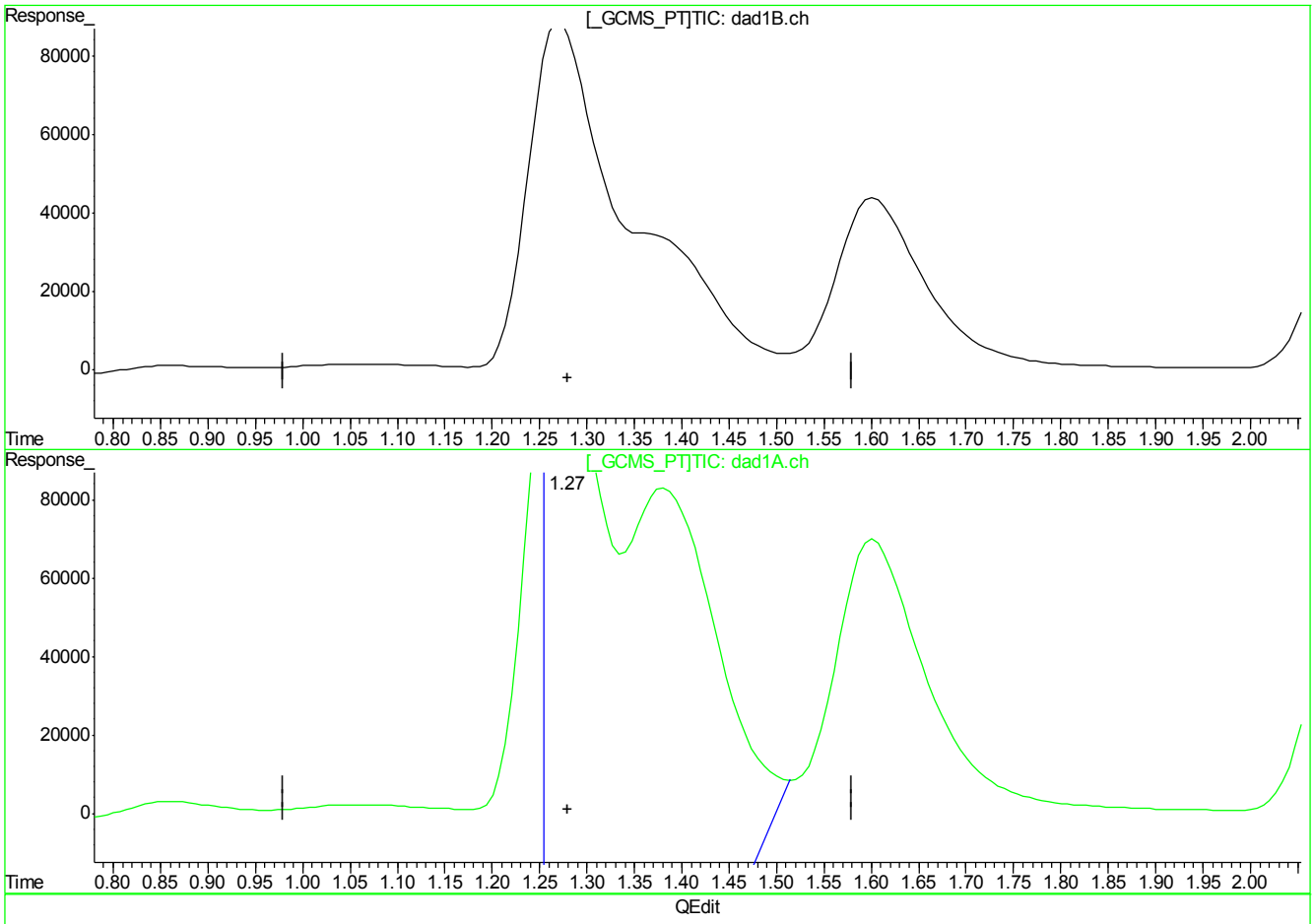
Sample Number:	GBB1730-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059692.D	**Analyst approved:**	05/11/18 08:45 Evita Martinez
Injection Time:	05/10/18 21:28	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.27	Poorly defined baseline
TNX		2	1.27	Poorly defined baseline
HMX	2691-41-0	1	1.36	Poorly defined baseline
HMX	2691-41-0	2	1.38	Poorly defined baseline
DNX		1	1.60	Poorly defined baseline
DNX		2	1.60	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.14	Poorly defined baseline
Tetryl	479-45-8	2	8.25	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.23	Poorly defined baseline
PETN	78-11-5	2	18.21	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

0.00min 0.000ppb

response 0

(1) TNX #2

1.38min 29.264ppb

response 217092

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:21:42 2018

7.7.9.2

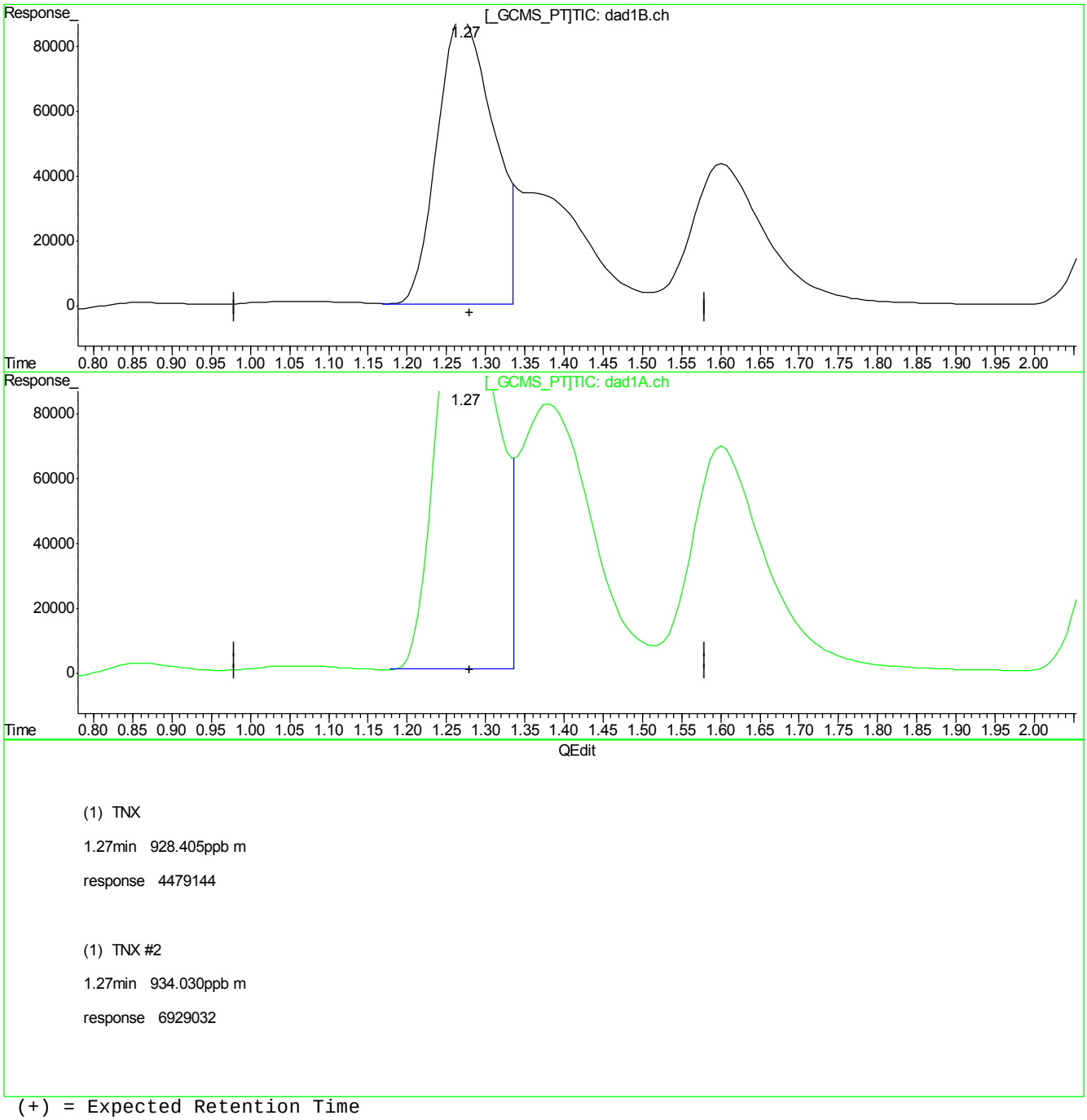
7

BB059692.D edits: TNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

1.27min 928.405ppb m

response 4479144

(1) TNX #2

1.27min 934.030ppb m

response 6929032

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:21:50 2018

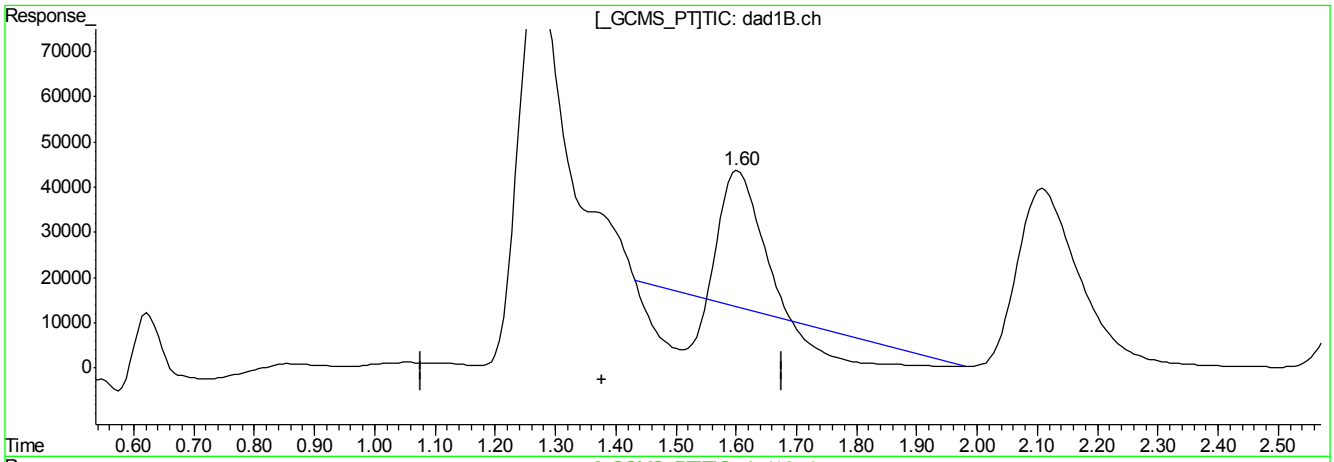
7.7.9.3

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

1.60min 209.401ppb

response 391601

(2) HMX #2

1.38min 42.632ppb

response 217092

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:21:52 2018

7.7.9.4

7

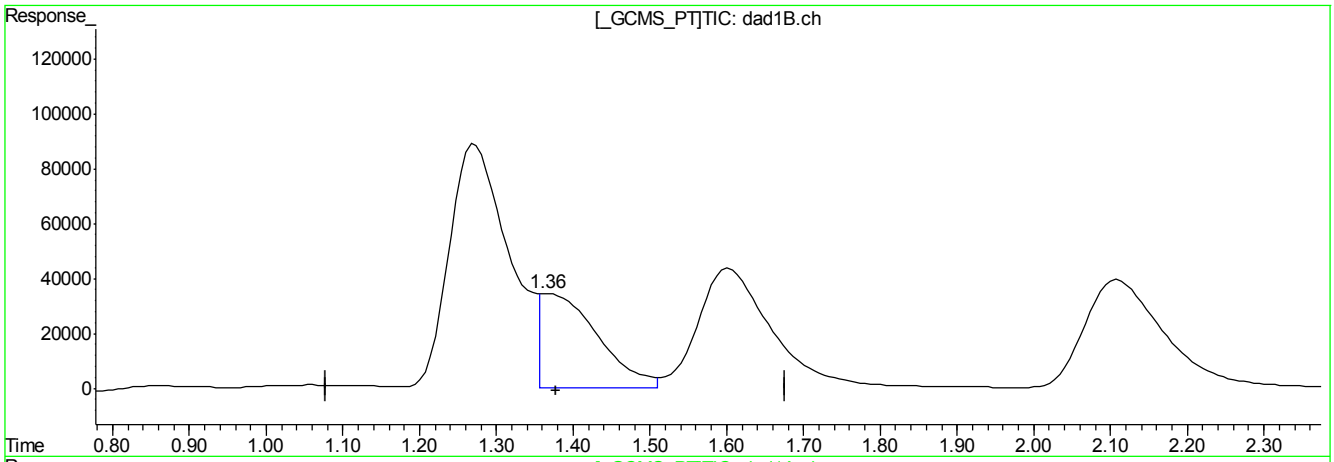
BB059692.D edits: HMX

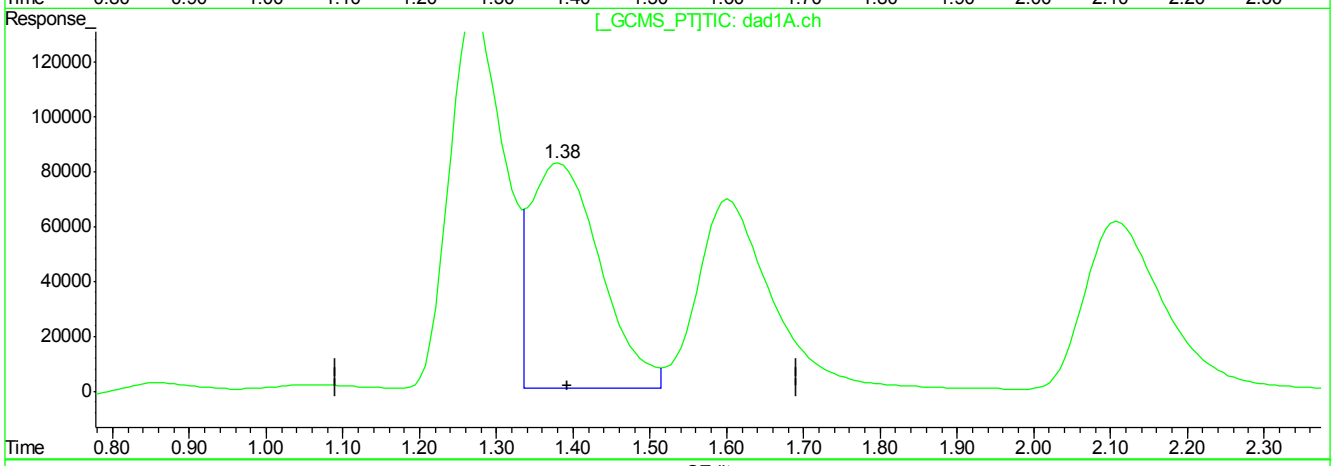
FA53801

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.36min 937.259ppb m

response 1752771

(2) HMX #2

1.38min 1026.979ppb m

response 5200234

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:13 2018

7.7.9.5

7

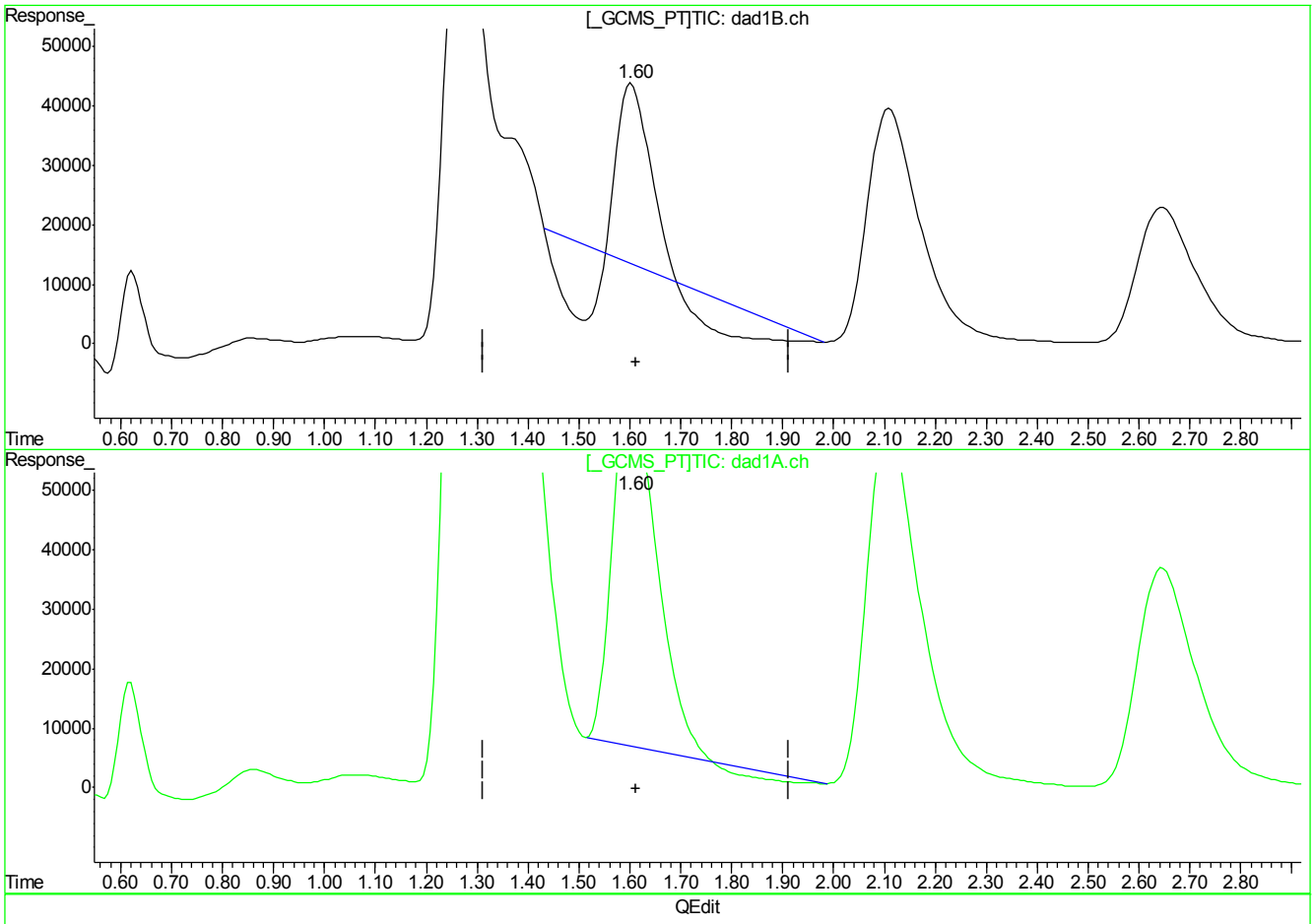
BB059692.D edits: HMX

FA53801

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(3) DNX

1.60min 126.445ppb

response 391601

(3) DNX #2

1.60min 758.083ppb

response 3569901

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:16 2018

7.7.9.6

7

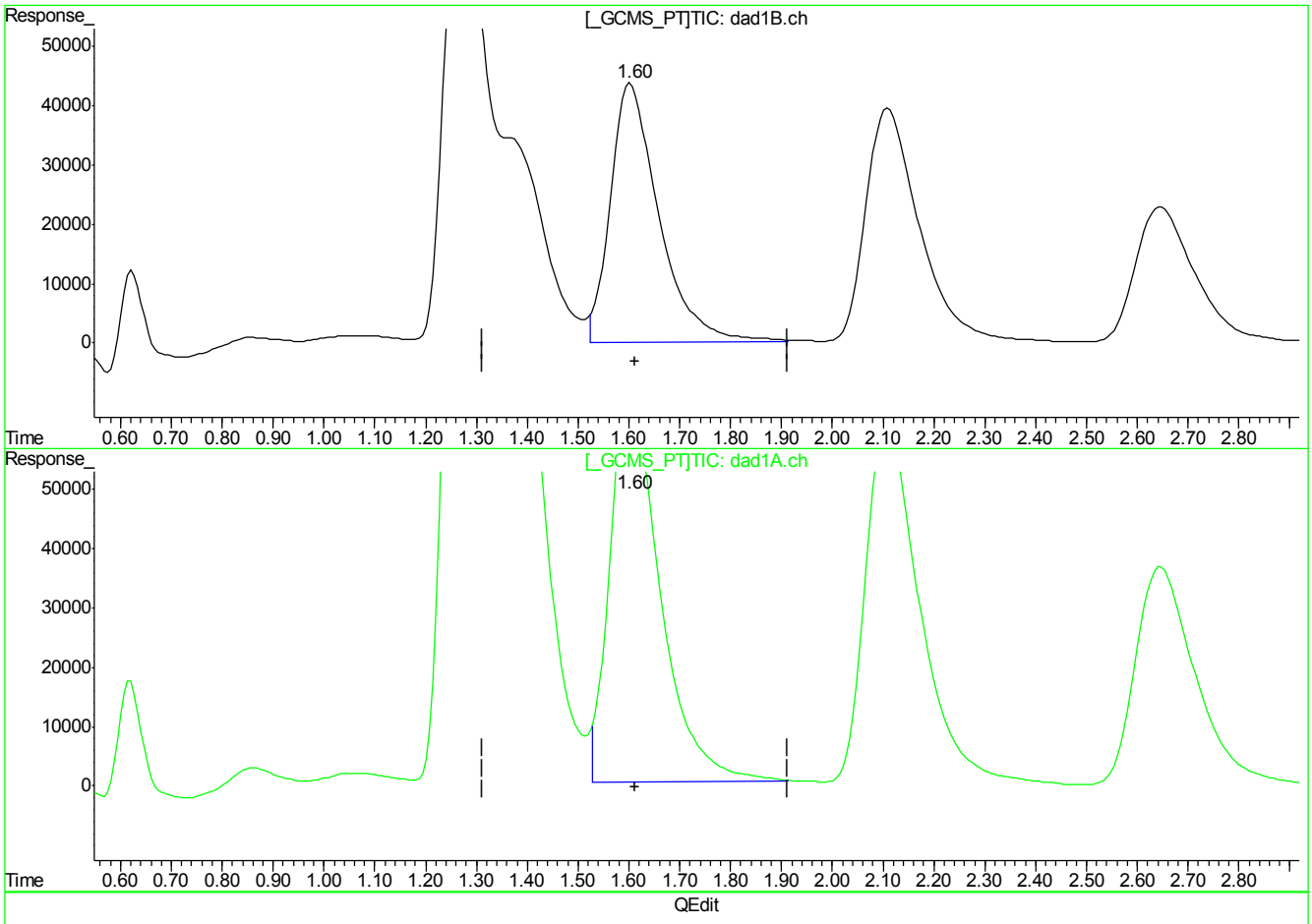
BB059692.D edits: DNX

FA53801

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(3) DNX

1.60min 928.793ppb m

response 2876485

(3) DNX #2

1.60min 971.248ppb m

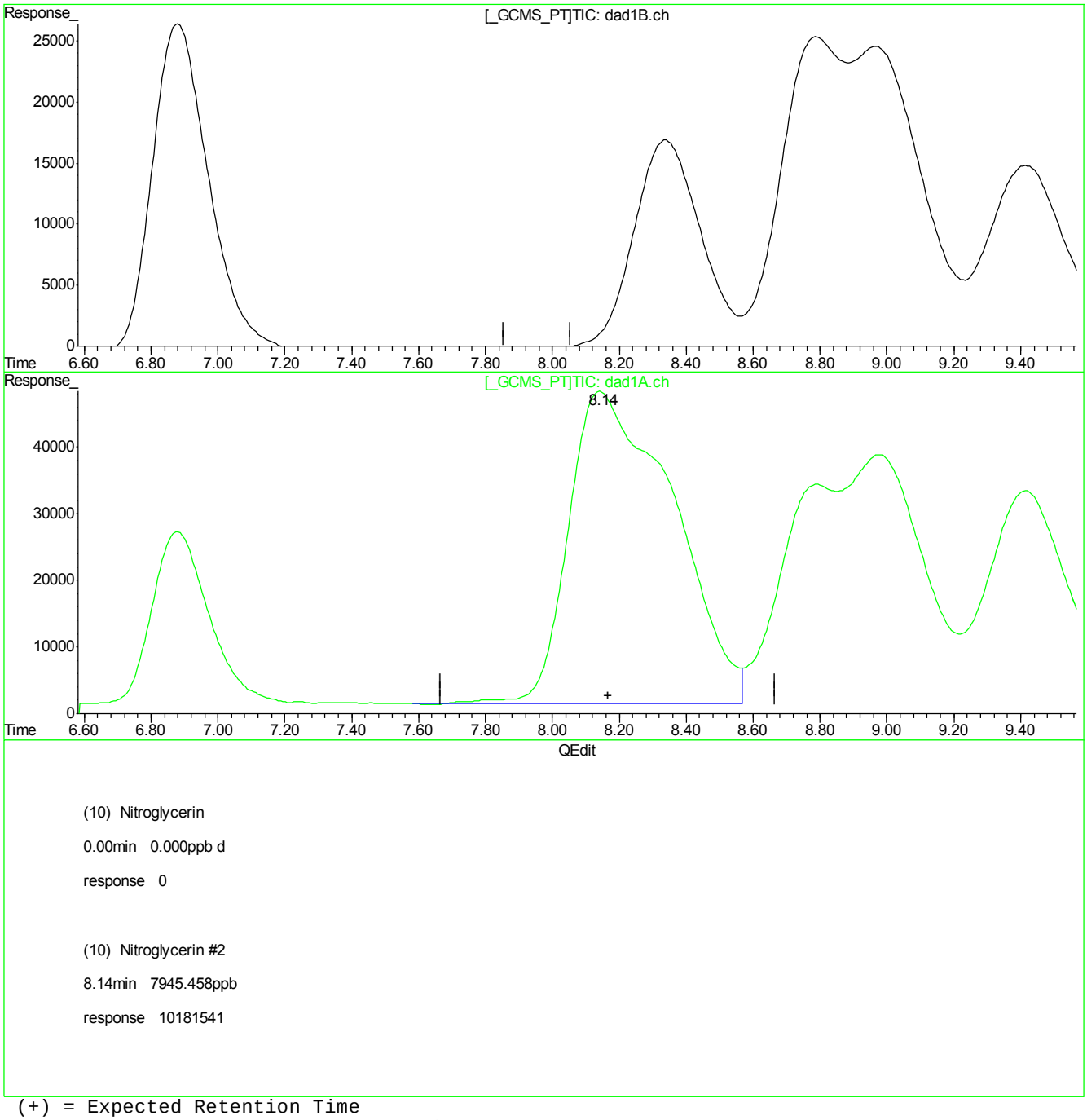
response 4587611

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:37 2018

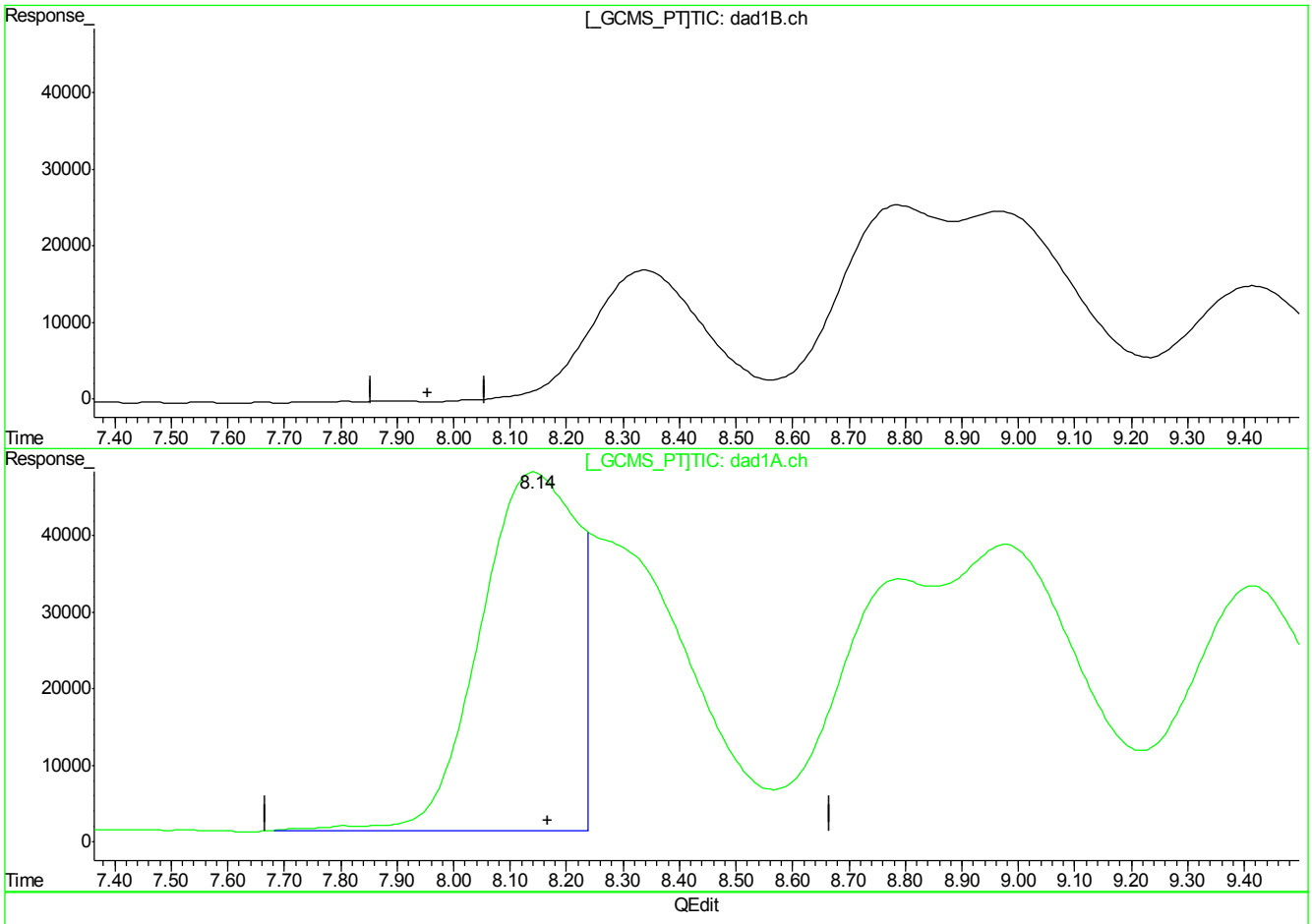
7.7.9.8

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.14min 4321.991ppb m

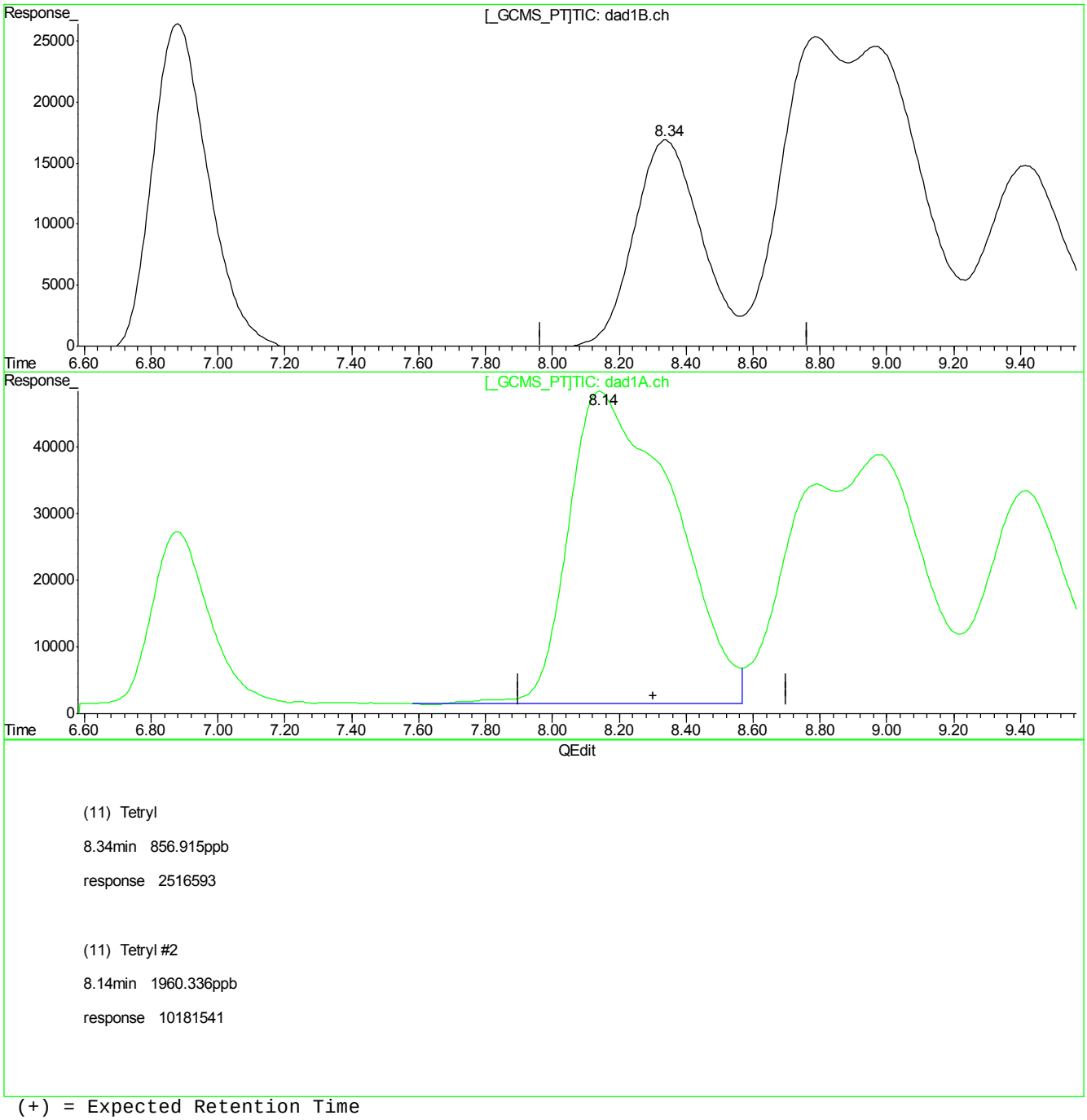
response 5538325

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:51 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:22:53 2018

7.7.9.10

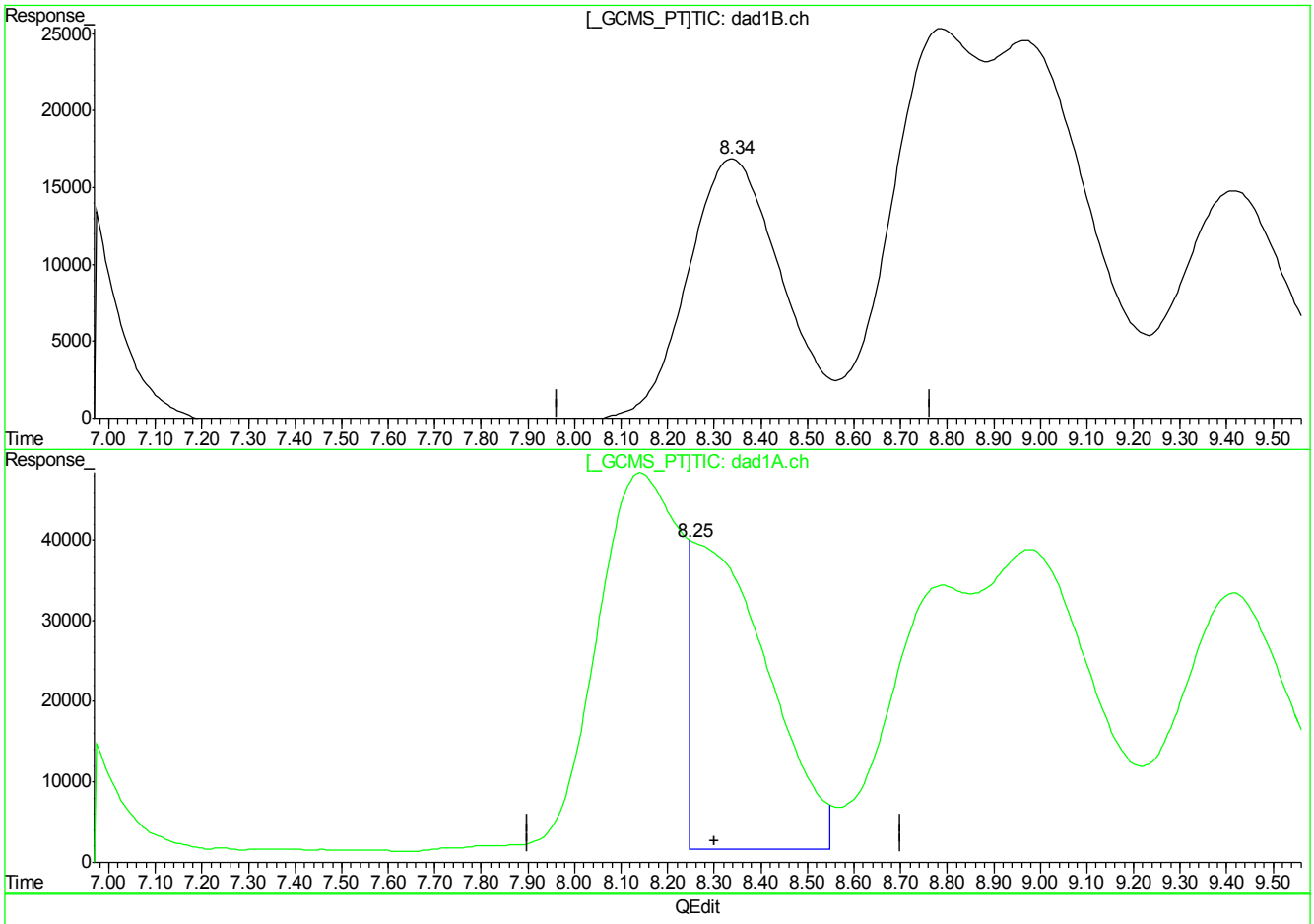
7

BB059692.D edits: Tetryl

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.34min 856.915ppb

response 2516593

(11) Tetryl #2

8.25min 834.238ppb m

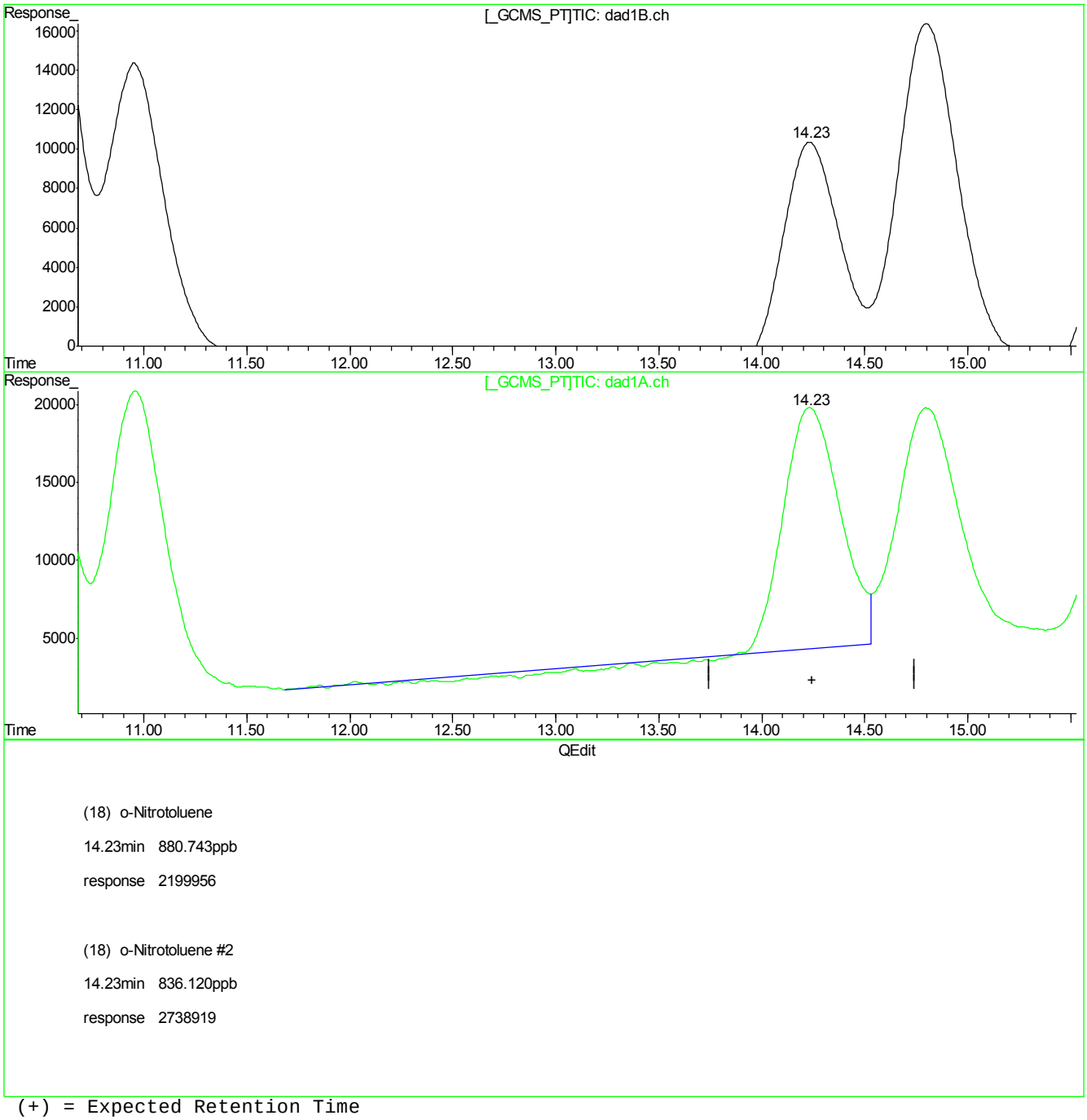
response 4332844

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:21 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.23min 880.743ppb

response 2199956

(18) o-Nitrotoluene #2

14.23min 836.120ppb

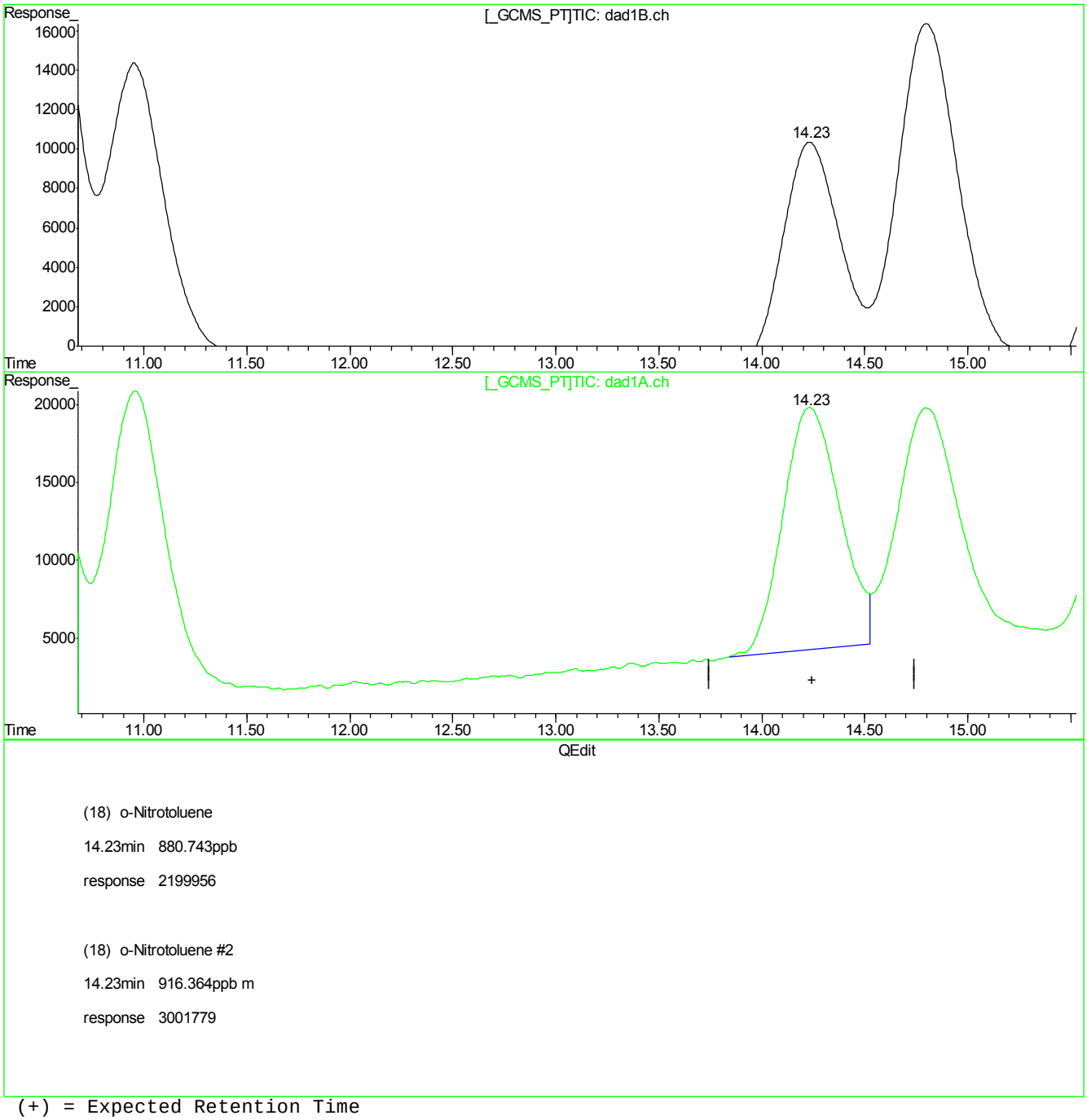
response 2738919

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.23min 880.743ppb

response 2199956

(18) o-Nitrotoluene #2

14.23min 916.364ppb m

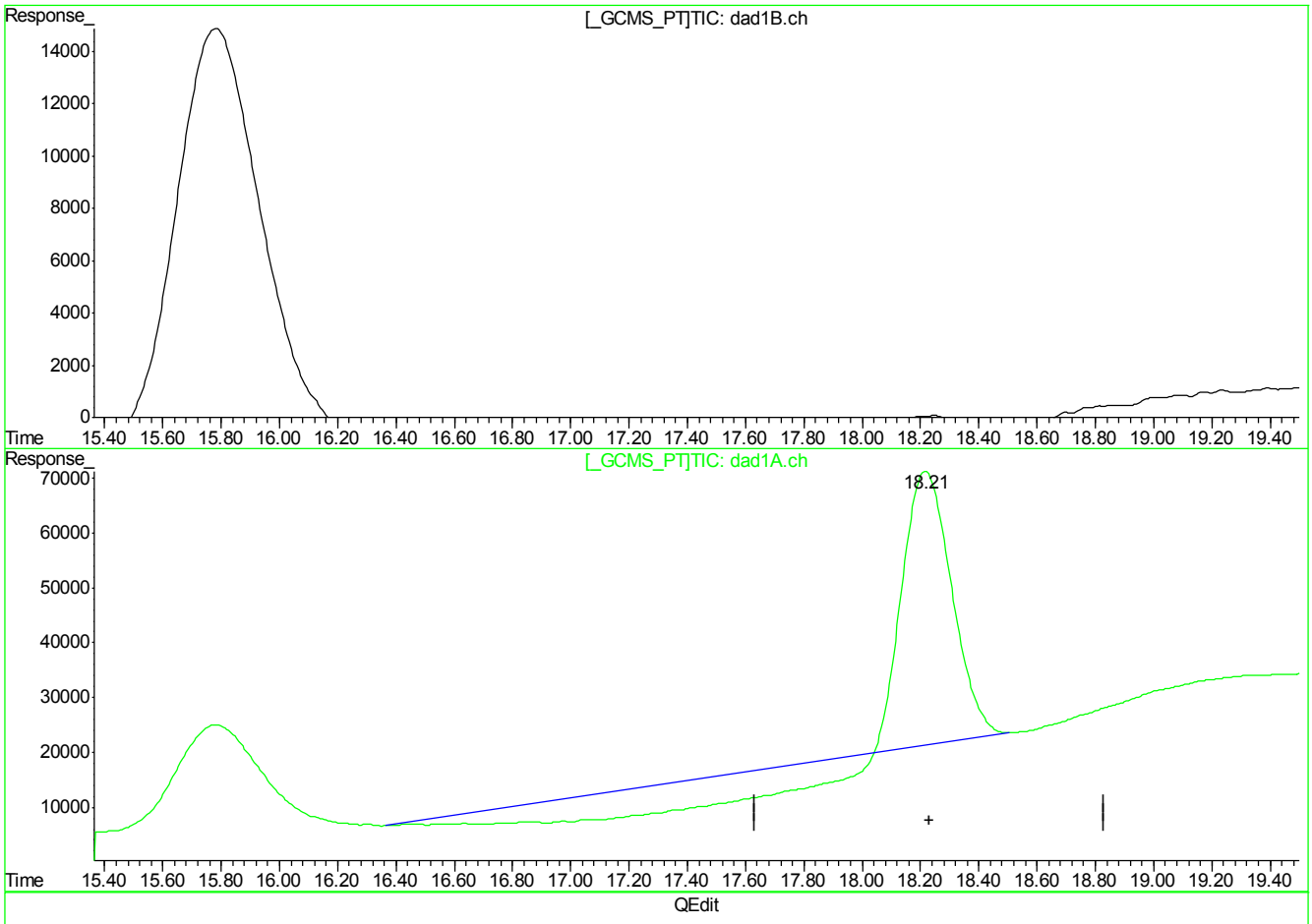
response 3001779

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:30 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.22min 1618.317ppb

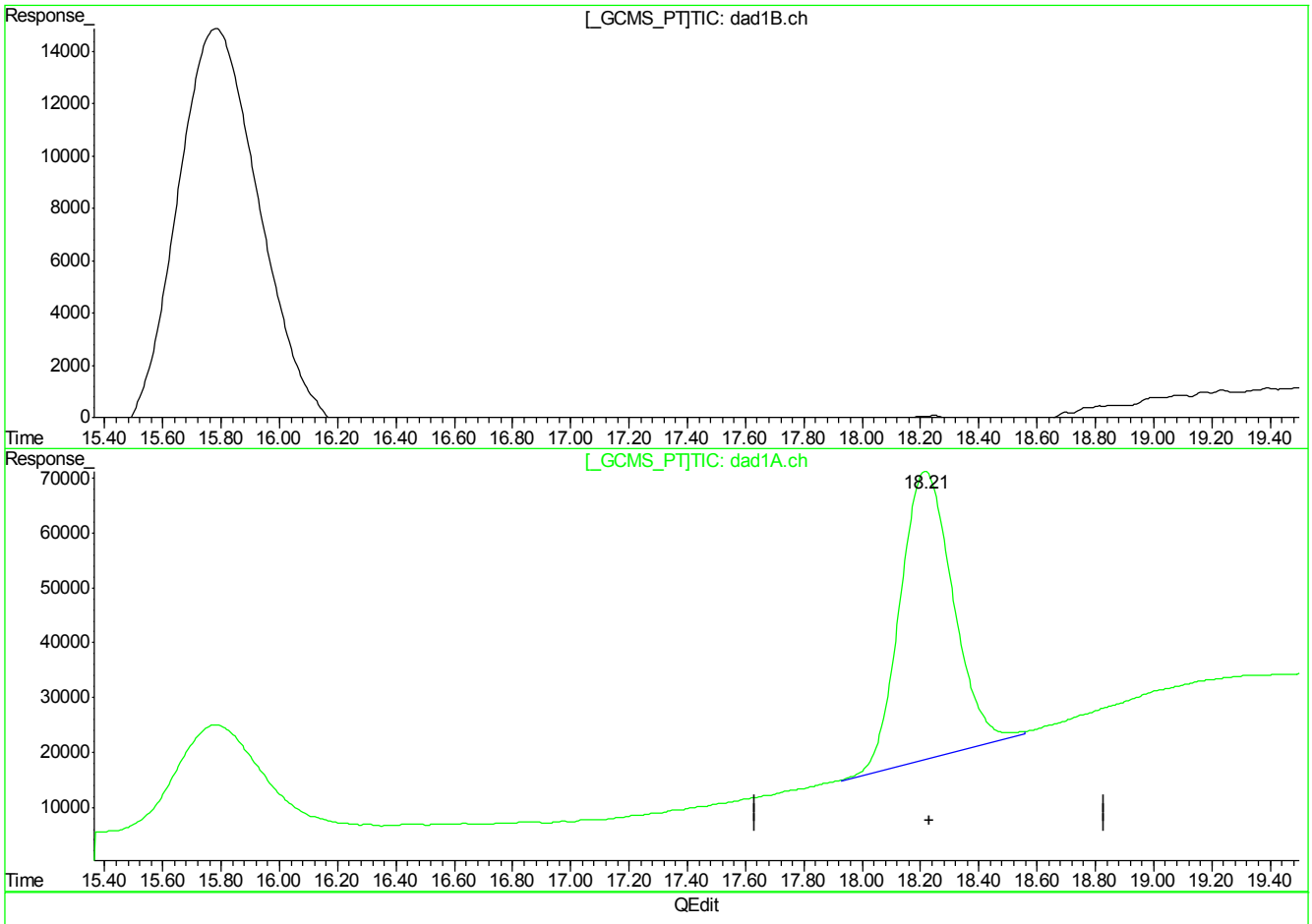
response 2247569

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059692.D\dad1A.ch
Acq On : 10-May-2018, 21:28:54 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69960,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.21min 4791.624ppb m

response 6654757

(+) = Expected Retention Time
BB059692.D 8330B_0419PLUS.M Fri May 11 08:23:39 2018

7.7.9.15

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 08:03:21 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.92	9.92	2410108	4375450	900.738	928.034
	Spiked Amount 500.000	Range 69 - 134		Recovery =		180.15%#	185.61%#
	Target Compounds						
1)	TNX	1.27	1.27	4376705	6566051	907.172m	885.101m
2)	HMX	1.37	1.38	1883645	4893443	1007.241m	966.054m
3)	DNX	1.60	1.60	2893081	4730988	934.151m	1001.176m
4)	MNX	2.11	2.11	2863044	4465985	924.600	960.661
5)	RDX	2.65	2.65	1862563	3033472	871.013	912.597
6)	1,3,5-Trinitrobe	4.26	4.26	4056632	7913485	932.281	947.941
7)	1,3-Dinitrobenze	5.40	5.40	5139851	3351796	927.106	899.961
8)	3,5-Dinitroanili	5.66	5.66	4625726	7366869	945.883	985.034
9)	Nitrobenzene	6.89	6.89	3215964	3105685	882.583	936.618
10)	Nitroglycerin	0.00	8.15	0	6206586	N.D. d	4843.488
11)	Tetryl	8.36	8.31	2528008	3973284	860.820	765.009
12)	2,4,6-Trinitroto	8.79	8.79	3391477	4036875	803.638	890.604
13)	2-Amino-4,6-Dini	9.01	9.02	3607673	5712003	953.028	1064.909
14)	4-Amino-2,6-Dini	9.45	9.45	2580340	5260669	976.817	1015.208
16)	2,4-Dinitrotolue	10.55	10.55	4840092	3122560	919.993	1057.337
17)	2,6-Dinitrotolue	10.98	10.99	2940853	3681330	850.875	1078.103
18)	o-Nitrotoluene	14.27	14.26	2079668	2970781	832.586	906.901m
19)	p-Nitrotoluene	14.83	14.83	3505705	3107327	888.187	985.181
20)	m-Nitrotoluene	15.81	15.82	3197010	3830296	896.224	951.892
21)	PETN	0.00	18.22	0	6587706	N.D. d	4743.345m

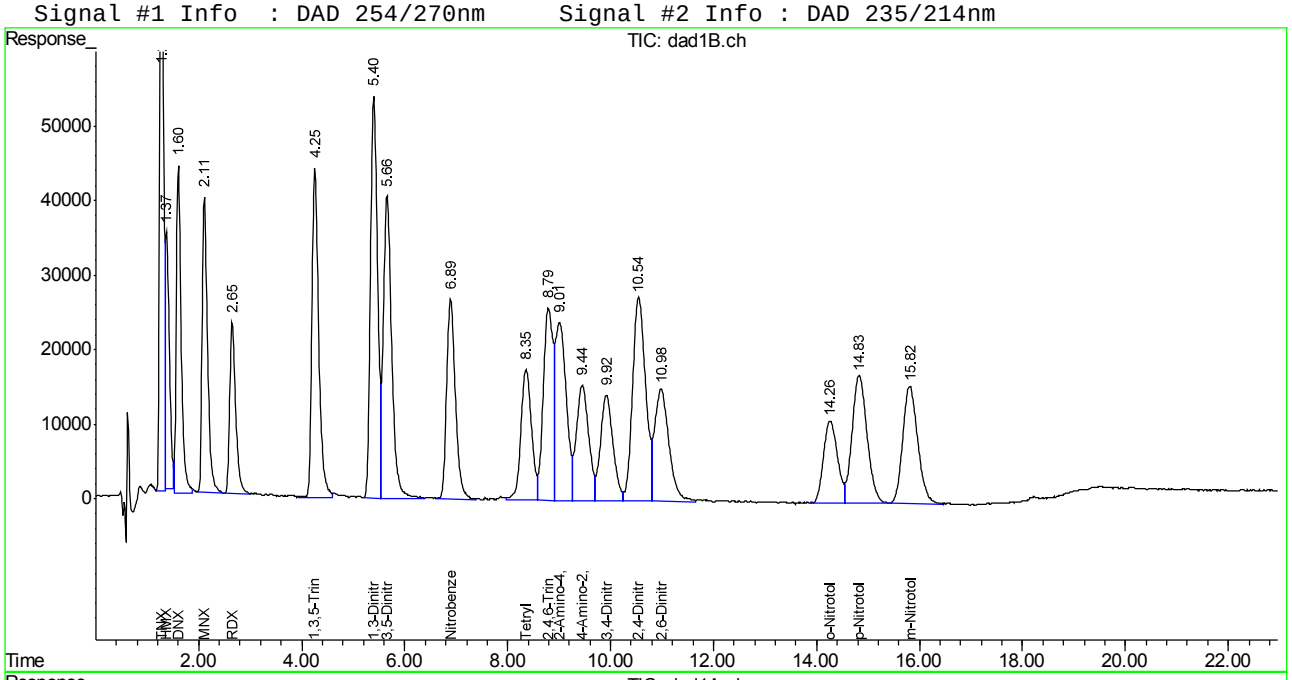
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059703.D 8330B_0419PLUS.M Fri May 11 08:38:16 2018 Page 1

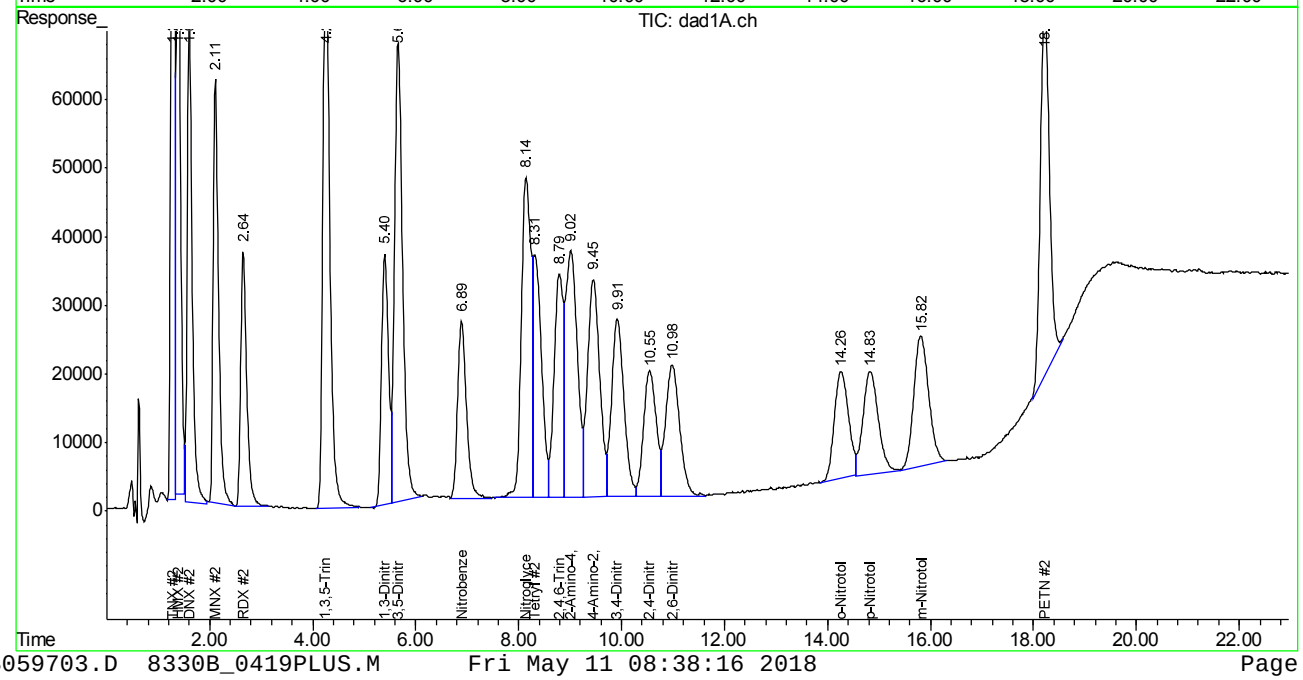
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:32 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

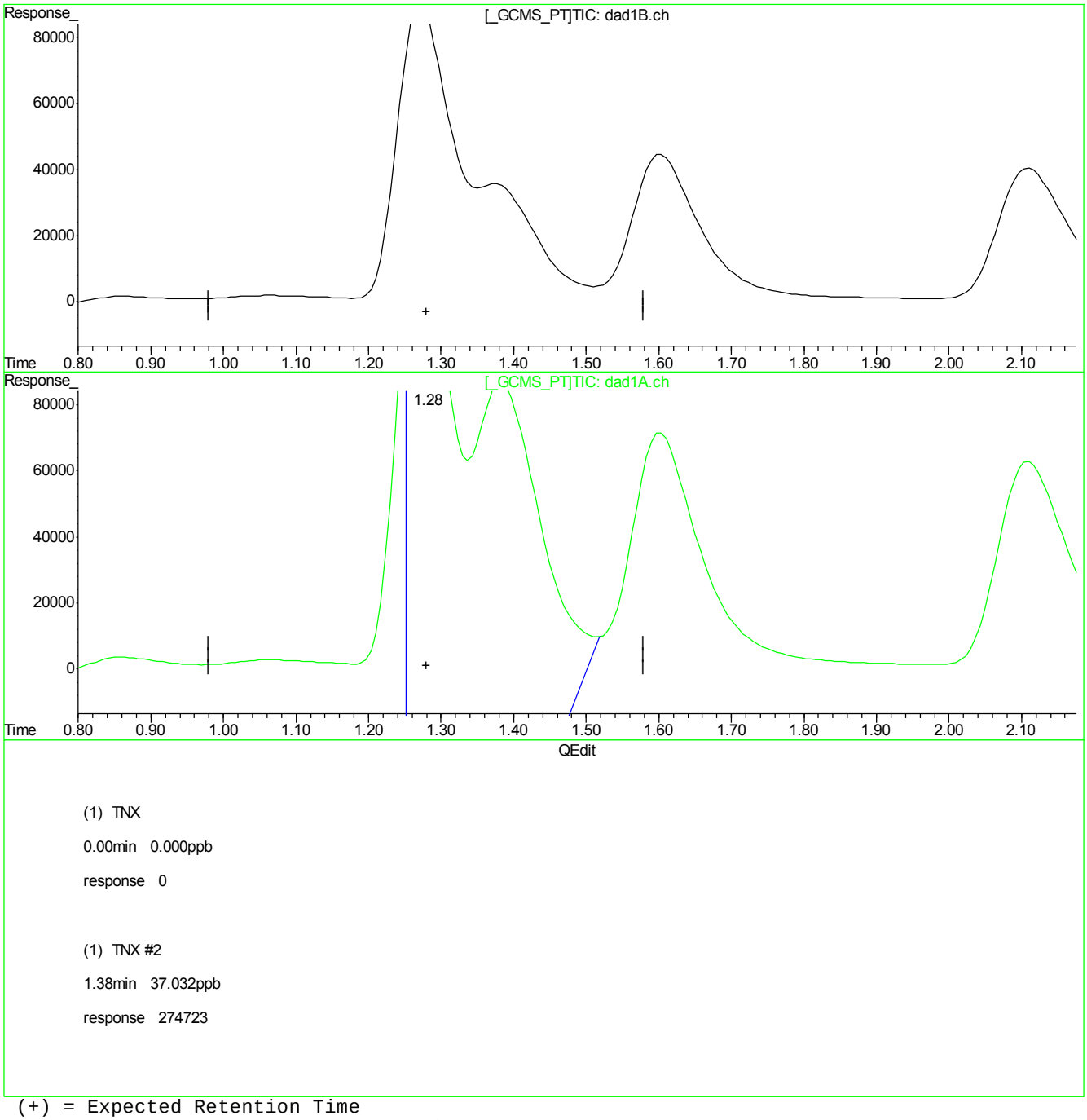
Sample Number:	GBB1730-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059703.D	**Analyst approved:**	05/11/18 08:45 Evita Martinez
Injection Time:	05/11/18 02:58	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.27	Poorly defined baseline
TNX		2	1.27	Poorly defined baseline
HMX	2691-41-0	1	1.37	Poorly defined baseline
HMX	2691-41-0	2	1.38	Poorly defined baseline
DNX		1	1.60	Poorly defined baseline
DNX		2	1.60	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.26	Poorly defined baseline
PETN	78-11-5	2	18.22	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:31:33 2018

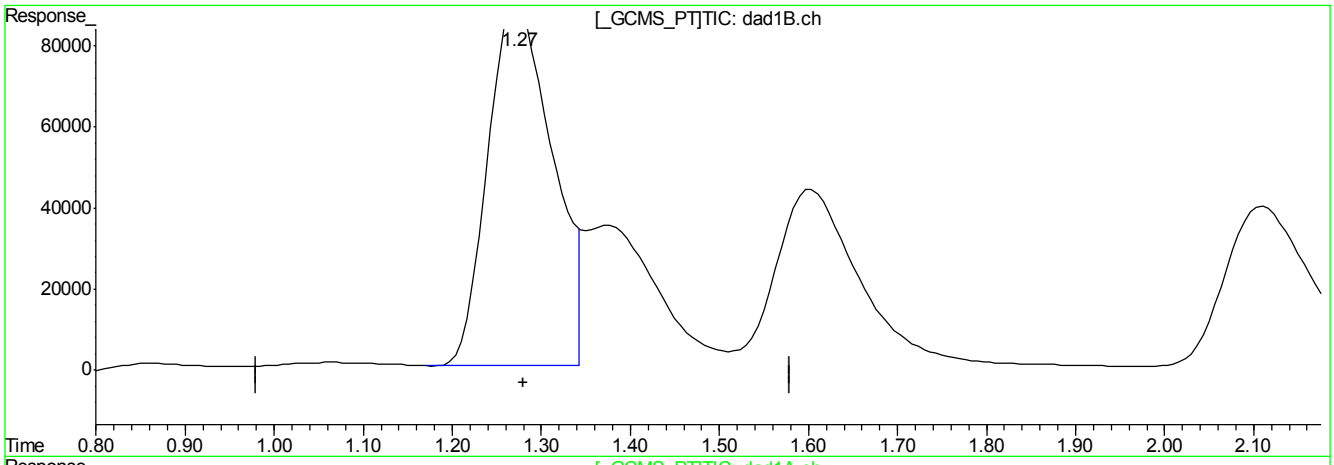
7.7.10.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



QEdit

(1) TNX

1.27min 907.172ppb m

response 4376705

(1) TNX #2

1.27min 885.101ppb m

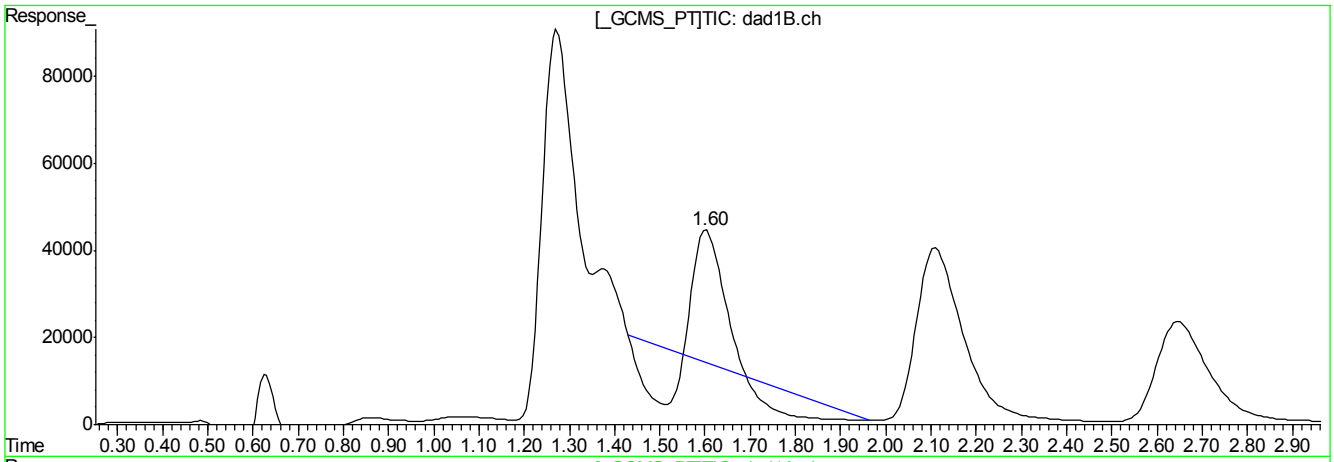
response 6566051

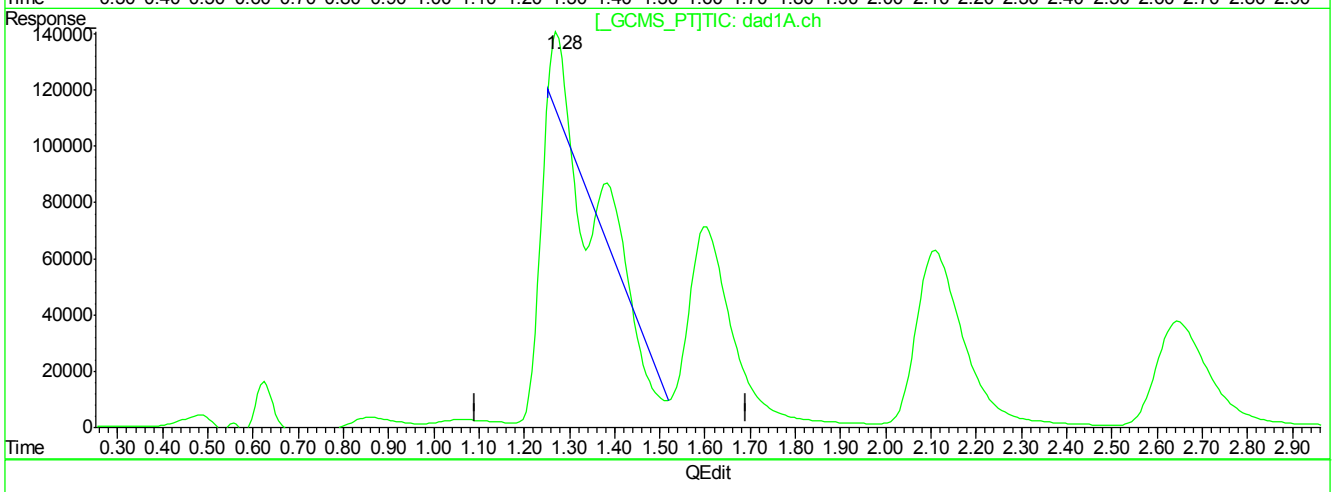
(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:31:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.60min 206.985ppb

response 387084

(2) HMX #2

1.38min 53.952ppb

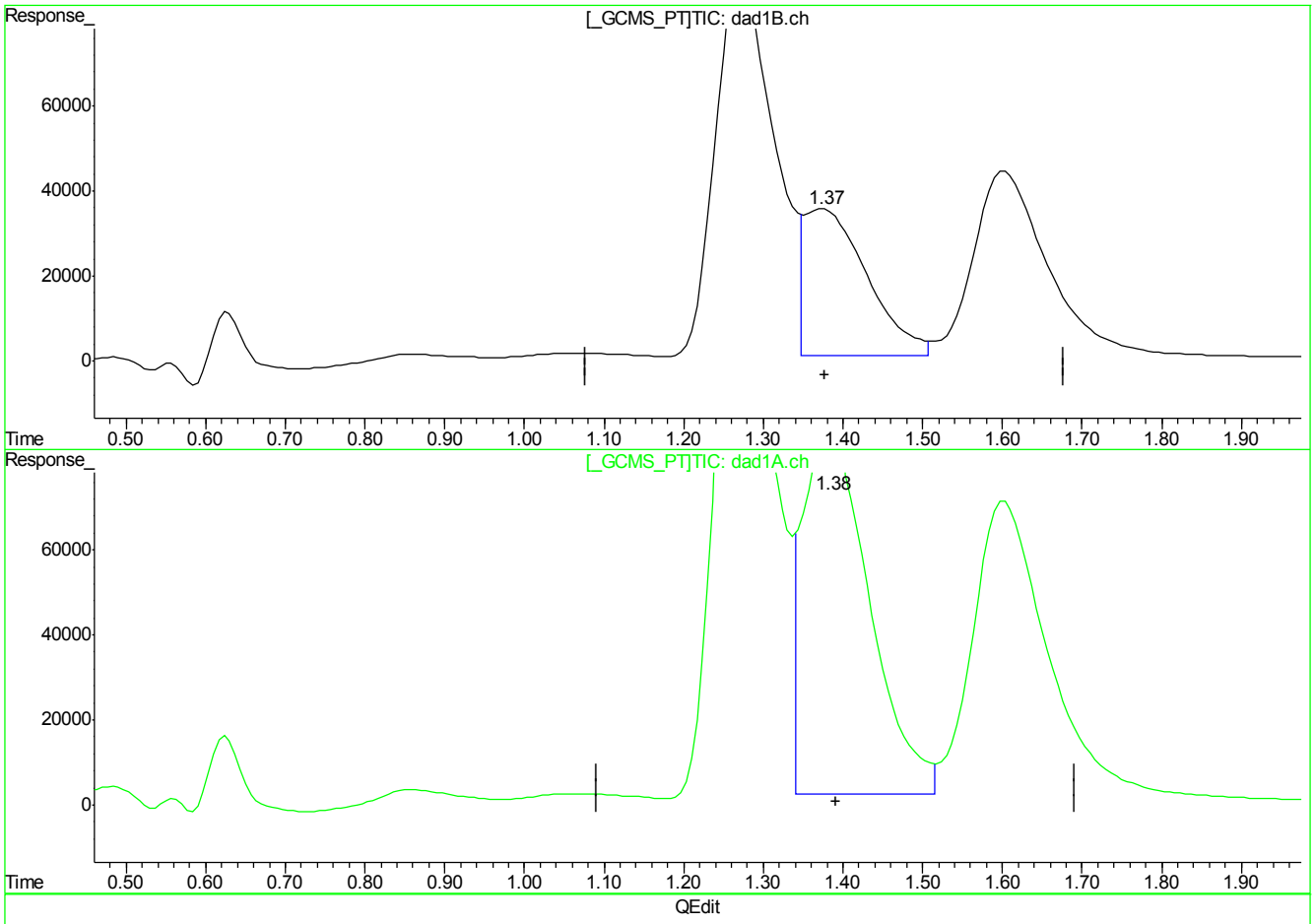
response 274723

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:31:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

1.37min 1007.241ppb m

response 1883645

(2) HMX #2

1.38min 966.054ppb m

response 4893443

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:16 2018

7.7.10.5

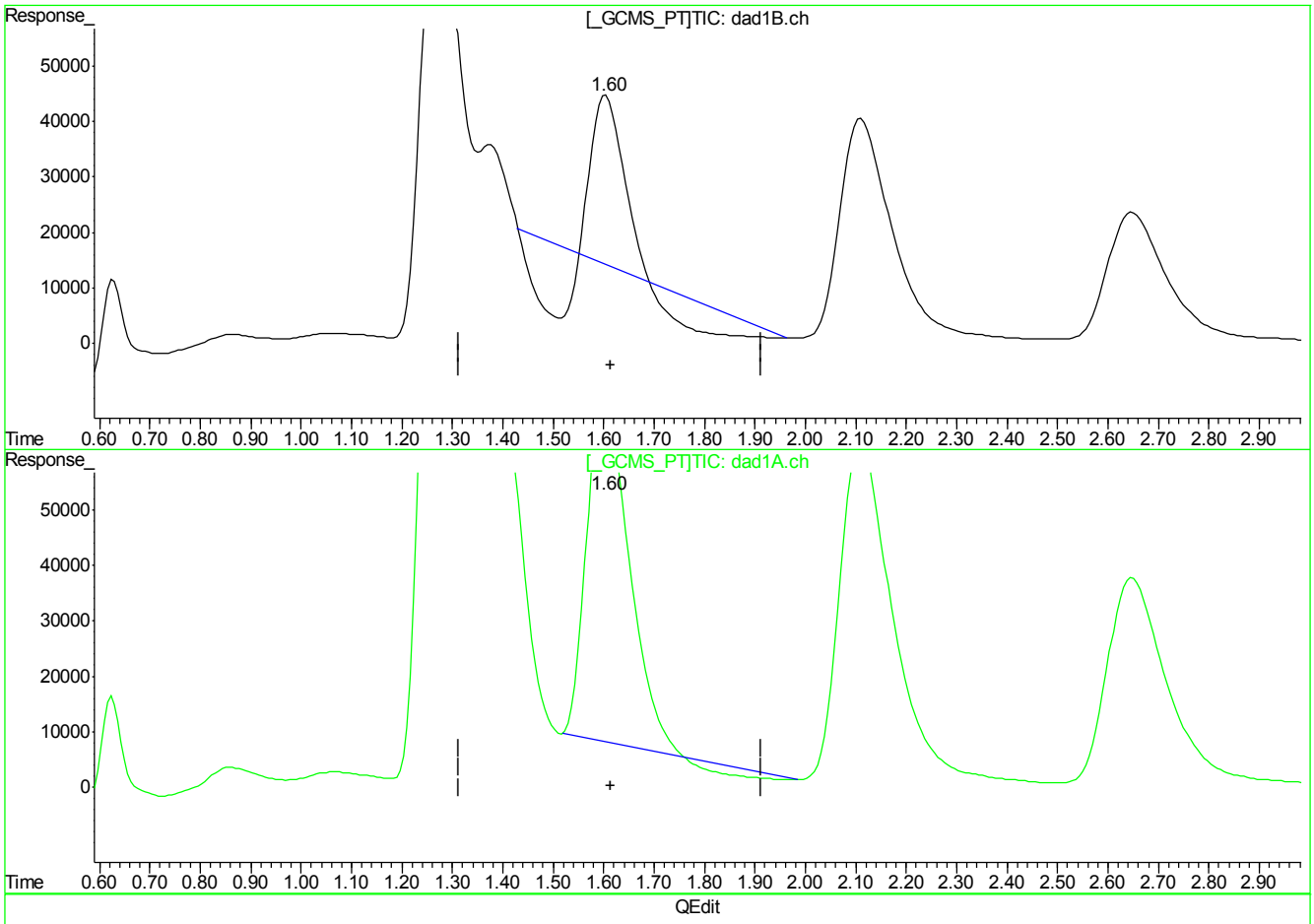
7

BB059703.D edits: HMX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(3) DNX

1.60min 124.986ppb

response 387084

(3) DNX #2

1.60min 750.668ppb

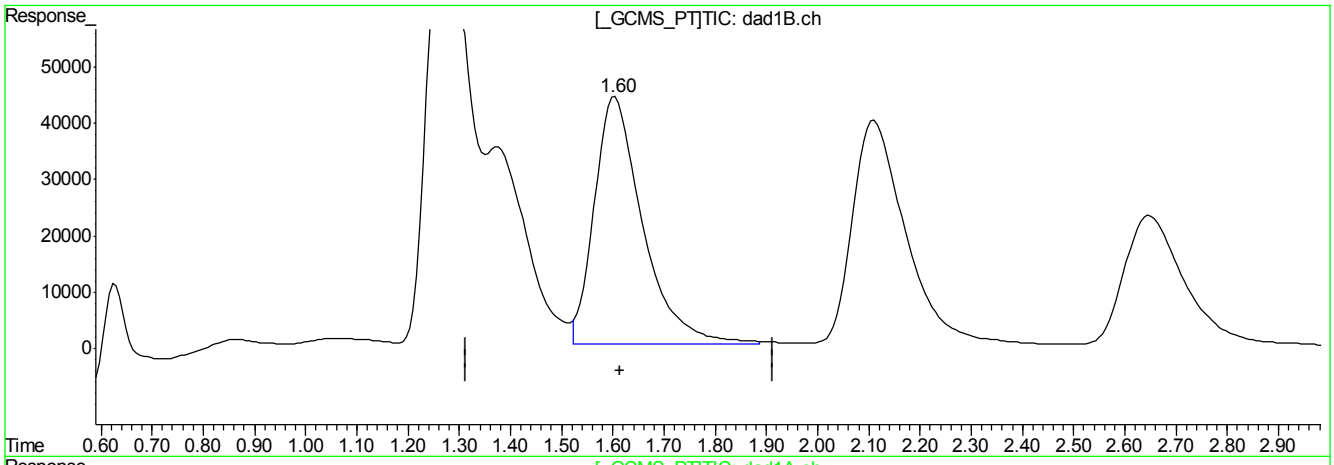
response 3534609

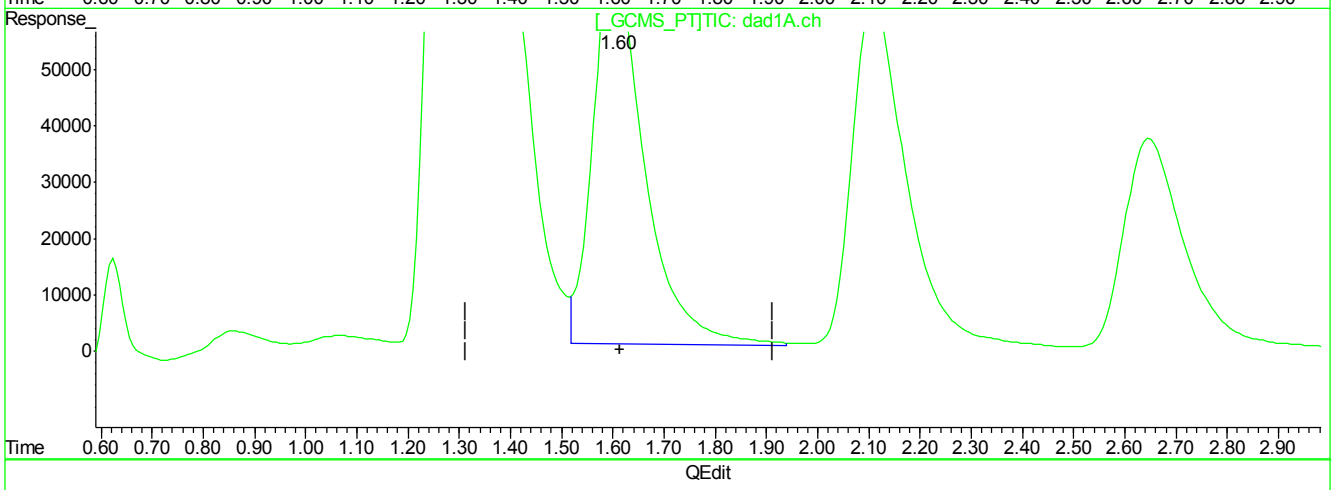
(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.60min 934.151ppb m

response 2893081

(3) DNX #2

1.60min 1001.176ppb m

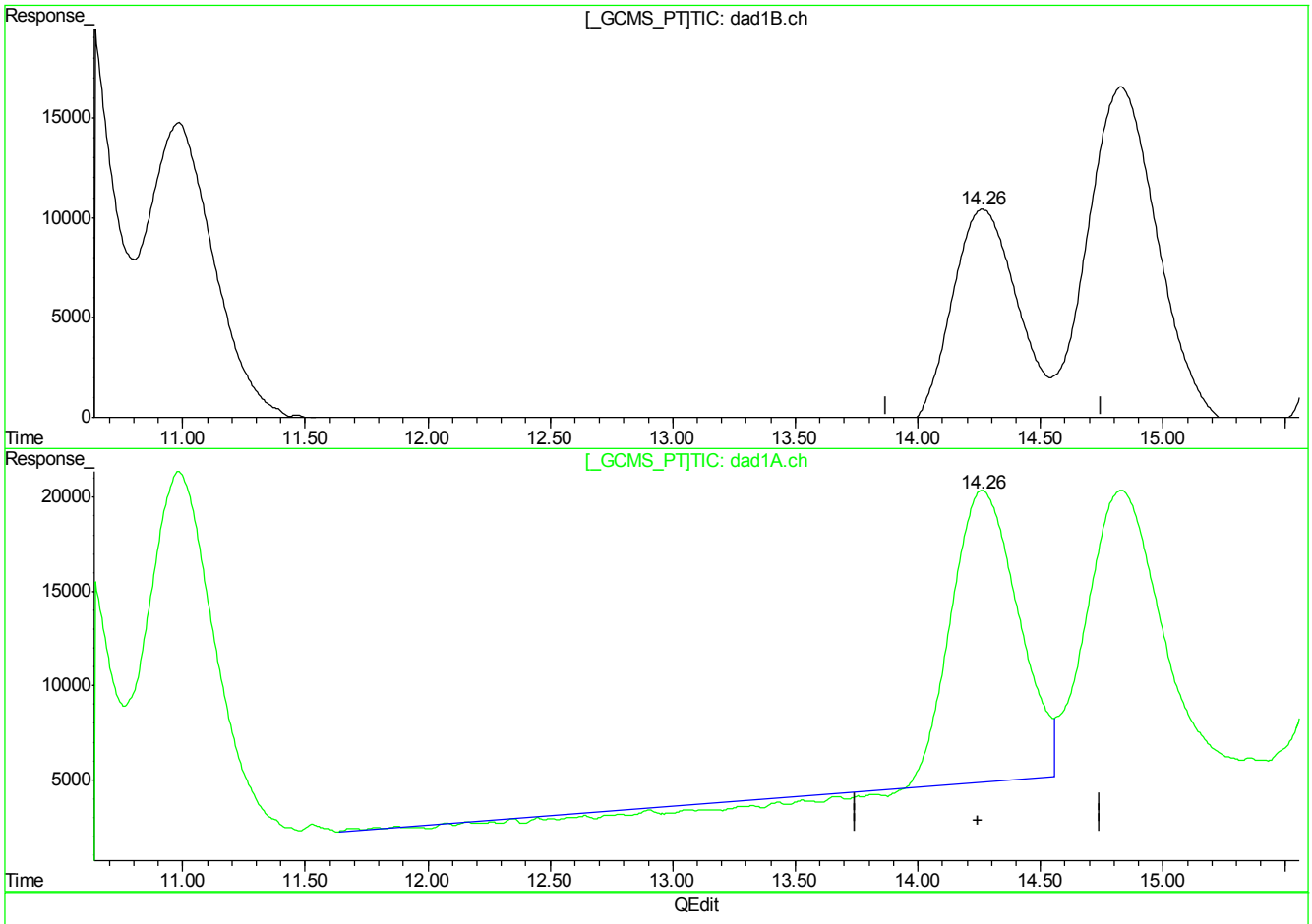
response 4730988

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.27min 832.586ppb

response 2079668

(18) o-Nitrotoluene #2

14.26min 821.405ppb

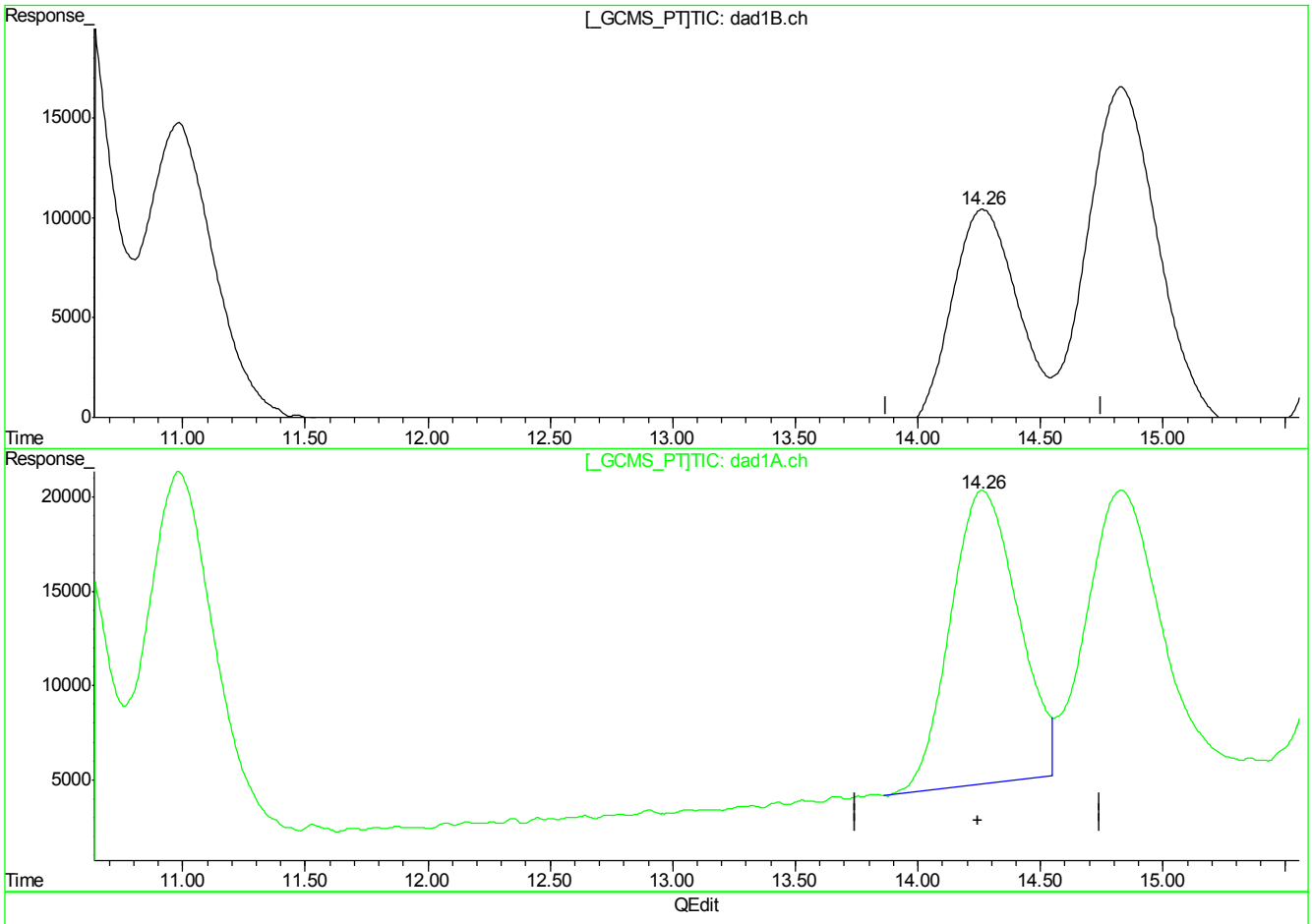
response 2690716

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.27min 832.586ppb

response 2079668

(18) o-Nitrotoluene #2

14.26min 906.901ppb m

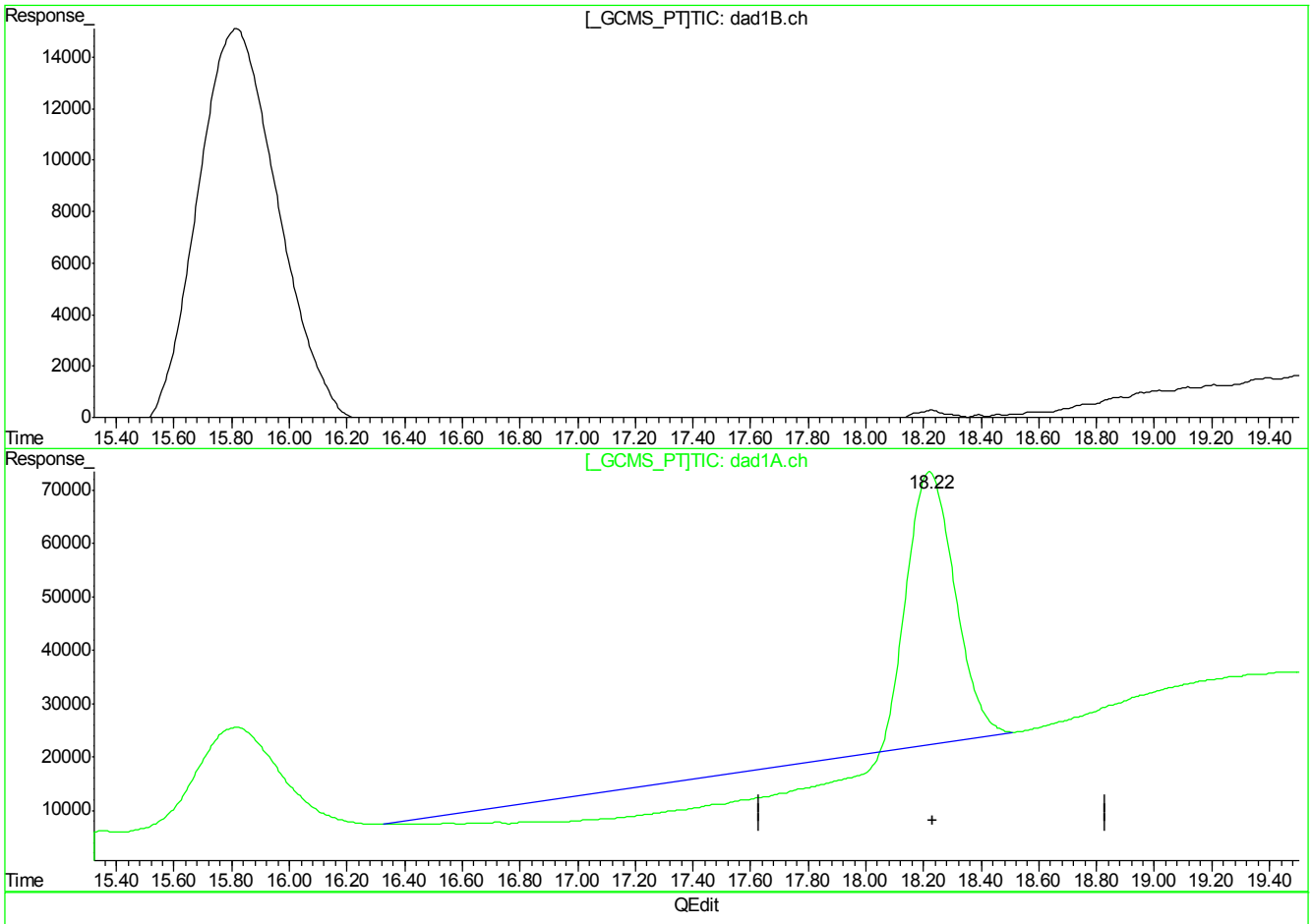
response 2970781

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:40 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.22min 1330.183ppb

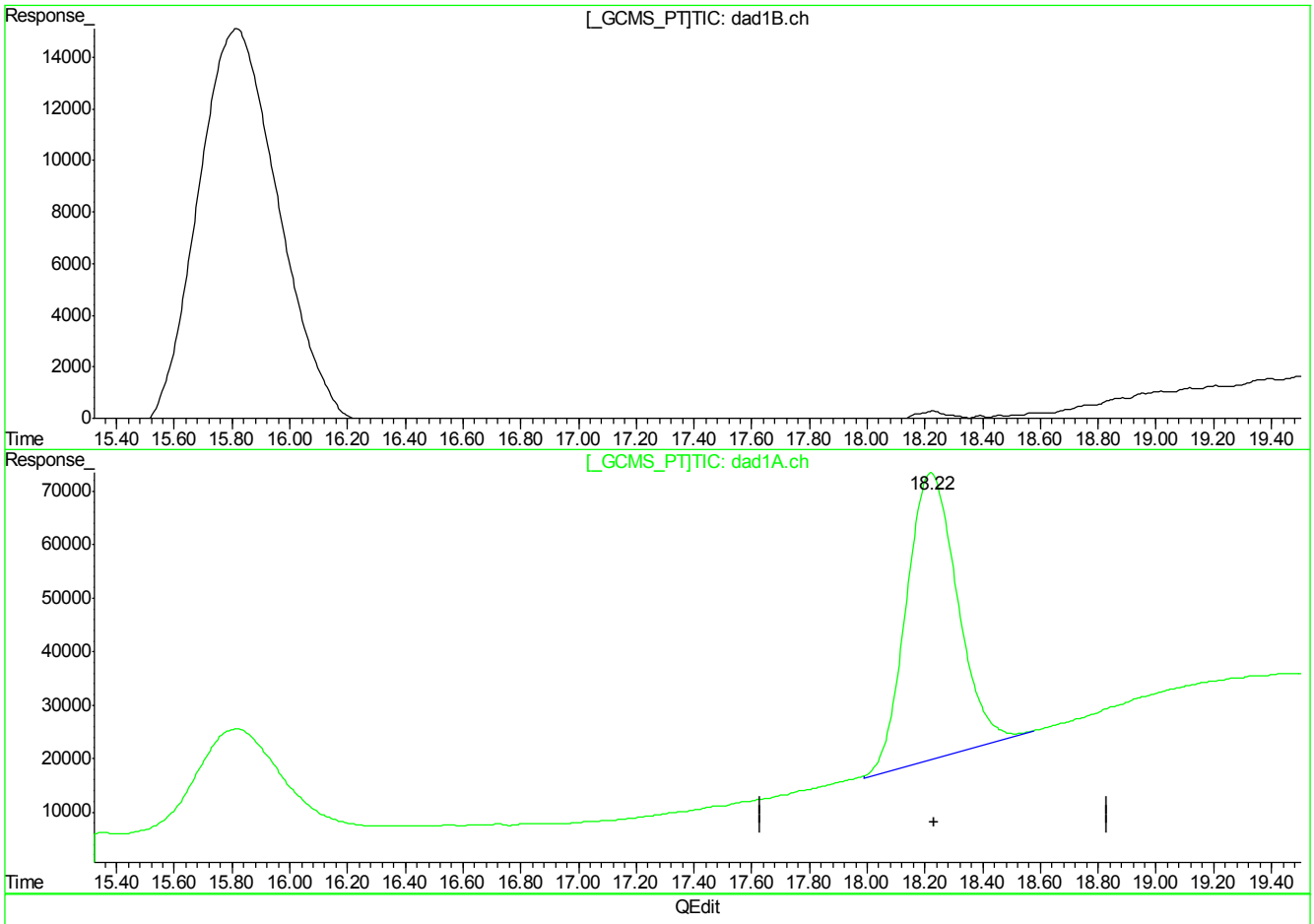
response 1847399

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:44 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059703.D\dad1A.ch
Acq On : 11-May-2018, 02:58:34 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 8:03 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.22min 4743.345ppb m

response 6587706

(+) = Expected Retention Time
BB059703.D 8330B_0419PLUS.M Fri May 11 08:32:48 2018

7.7.10.11

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/11/18 15:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01:45 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.85	9.85	2415608	4362900	902.794	925.372
	Spiked Amount 500.000	Range 69 - 134		Recovery =		180.56%#	185.07%#
	Target Compounds						
1)	TNX	1.27	1.27	4541503	6717073	941.331m	905.458m
2)	HMX	1.37	1.38	1876611	5330897	1003.479m	1052.941m
3)	DNX	1.60	1.60	2809029	4651896	907.012m	984.670m
4)	MNX	2.11	2.11	2868386	4449168	926.325	957.044
5)	RDX	2.65	2.65	1886323	3033194	882.125	912.514
6)	1,3,5-Trinitrobe	4.24	4.24	4059670	7858922	932.979	941.405
7)	1,3-Dinitrobenze	5.38	5.38	5078158	3367431	915.978	904.159
8)	3,5-Dinitroanili	5.63	5.64	4449785	7453304	909.906	996.592
9)	Nitrobenzene	6.87	6.87	3205616	3038117	879.744	916.241
10)	Nitroglycerin	0.00	8.11	0	5419204	N.D. d	4229.032m
11)	Tetryl	8.31	8.24	2533567	3847453	862.722	740.782m
12)	2,4,6-Trinitroto	8.75	8.75	3328675	3978793	788.756	877.790
13)	2-Amino-4,6-Dini	8.95	8.96	3637227	5703840	960.835	1063.387
14)	4-Amino-2,6-Dini	9.39	9.39	2592051	5294828	981.186	1021.800
16)	2,4-Dinitrotolue	10.48	10.48	4788462	3135679	910.179	1061.779
17)	2,6-Dinitrotolue	10.91	10.91	2977834	3717807	861.575	1088.786
18)	o-Nitrotoluene	14.19	14.19	2102986	3080859	841.922	940.505m
19)	p-Nitrotoluene	14.75	14.75	3512906	3132663	890.011	993.196
20)	m-Nitrotoluene	15.74	15.74	3273629	3921435	917.702	974.542
21)	PETN	0.00	18.17	0	6597504	N.D. d	4750.400m

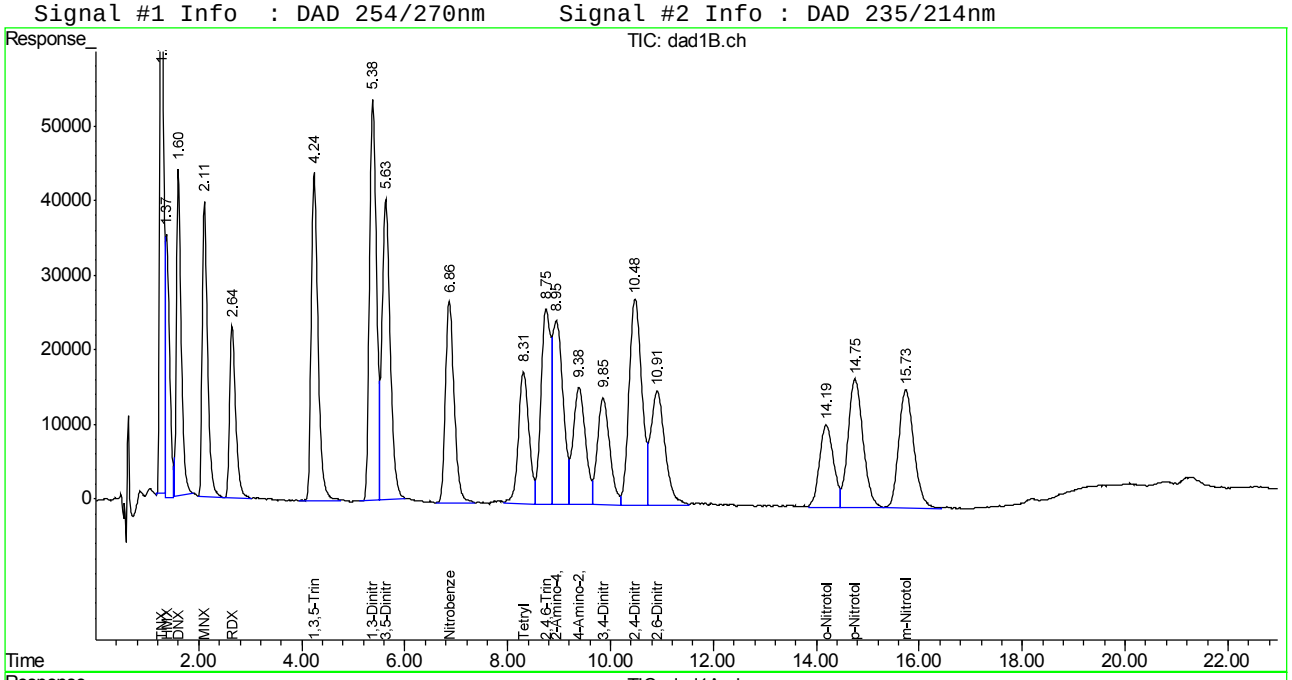
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059715.D 8330B_0419PLUS.M Fri May 11 10:39:47 2018 Page 1

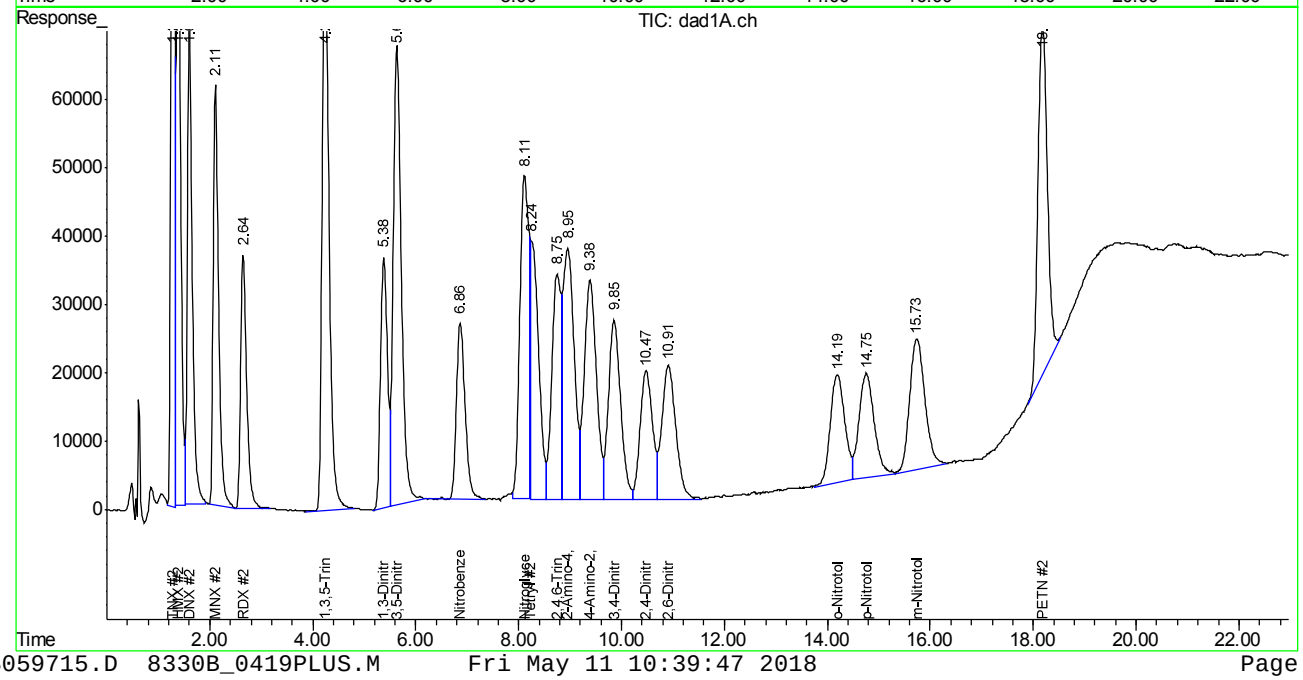
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:03 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

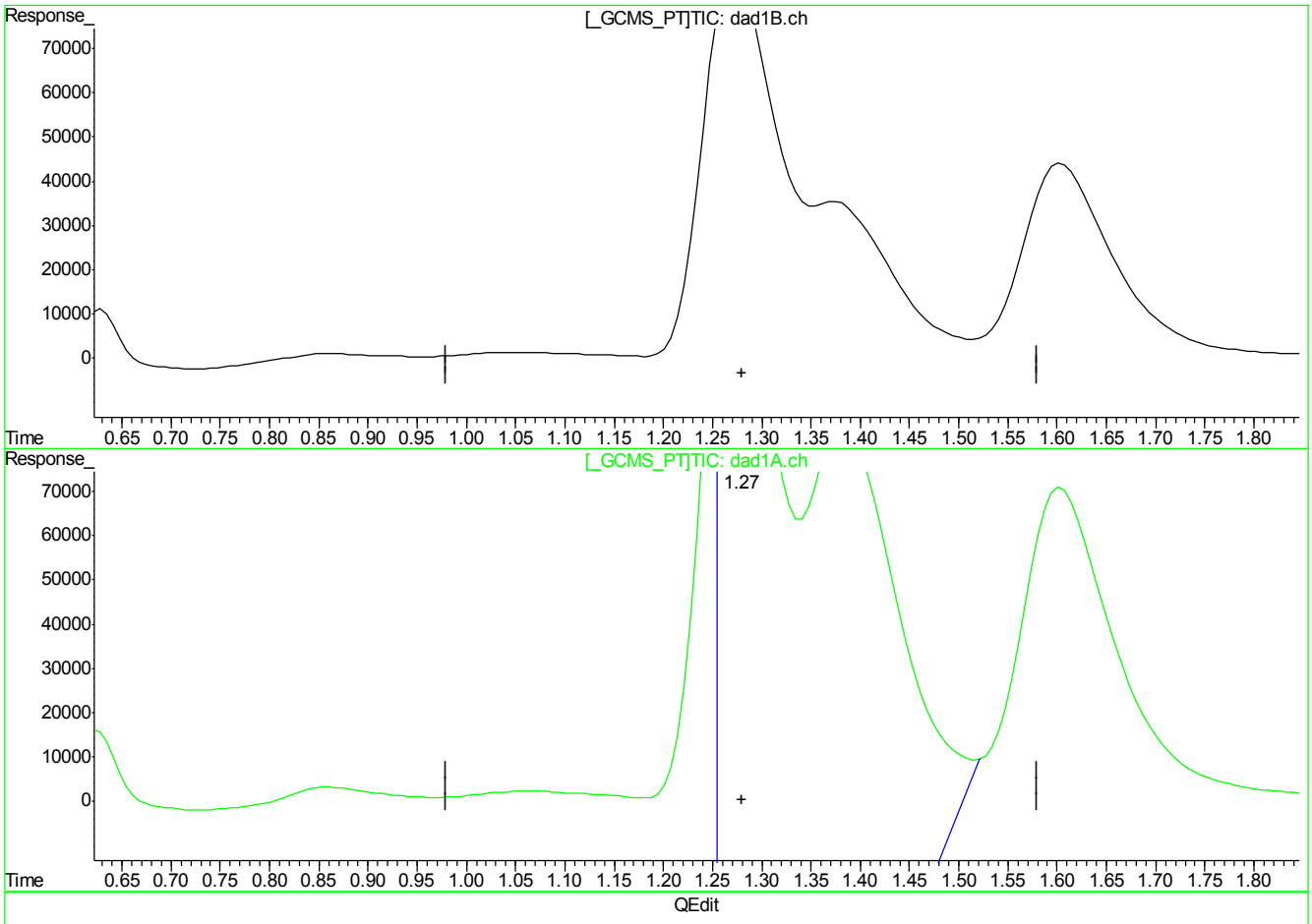
Sample Number:	GBB1730-CC1722	**Method:**	SW846 8330B
Lab FileID:	BB059715.D	**Analyst approved:**	05/11/18 10:41 Evita Martinez
Injection Time:	05/11/18 09:00	**Supervisor approved:**	05/11/18 15:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.27	Poorly defined baseline
TNX		2	1.27	Poorly defined baseline
HMX	2691-41-0	1	1.37	Poorly defined baseline
HMX	2691-41-0	2	1.38	Poorly defined baseline
DNX		1	1.60	Poorly defined baseline
DNX		2	1.60	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.11	Poorly defined baseline
Tetryl	479-45-8	2	8.24	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.19	Poorly defined baseline
PETN	78-11-5	2	18.17	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

0.00min 0.000ppb

response 0

(1) TNX #2

1.38min 3.362ppb

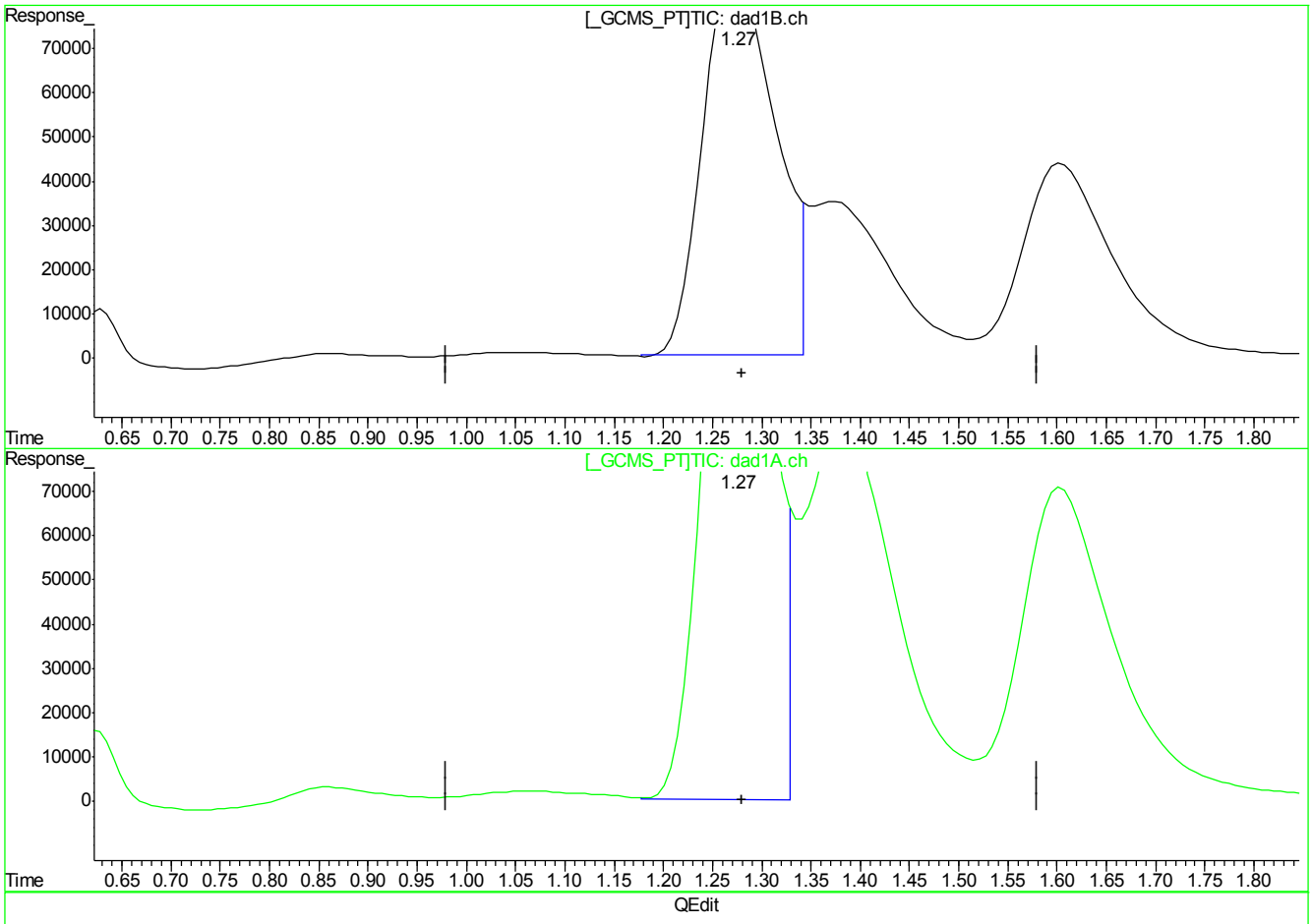
response 24942

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:01:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

1.27min 941.331ppb m

response 4541503

(1) TNX #2

1.27min 905.458ppb m

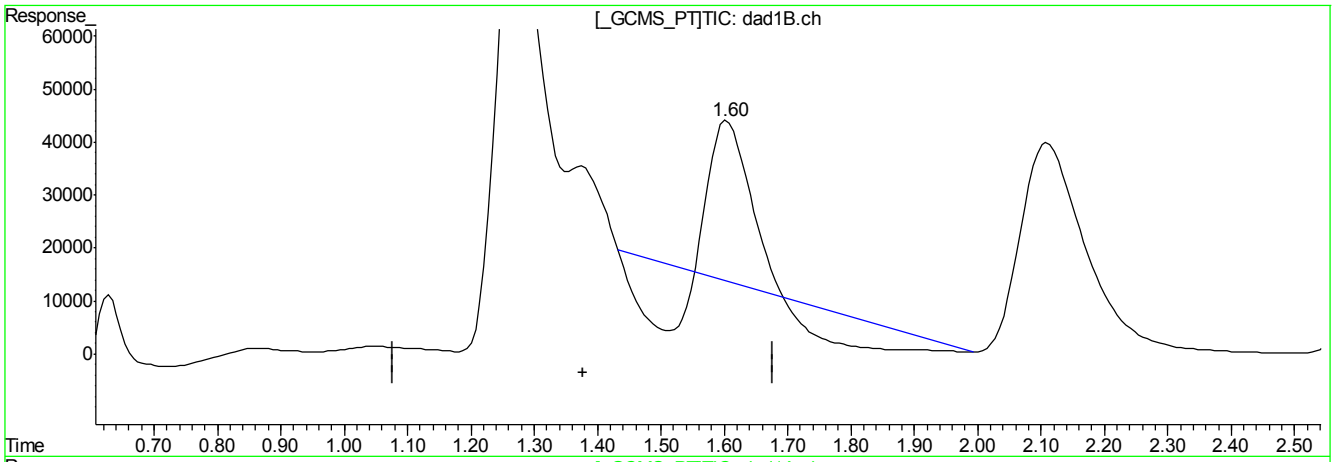
response 6717073

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:01:54 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

1.61min 172.407ppb

response 322419

(2) HMX #2

1.38min 4.897ppb

response 24942

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:01:57 2018

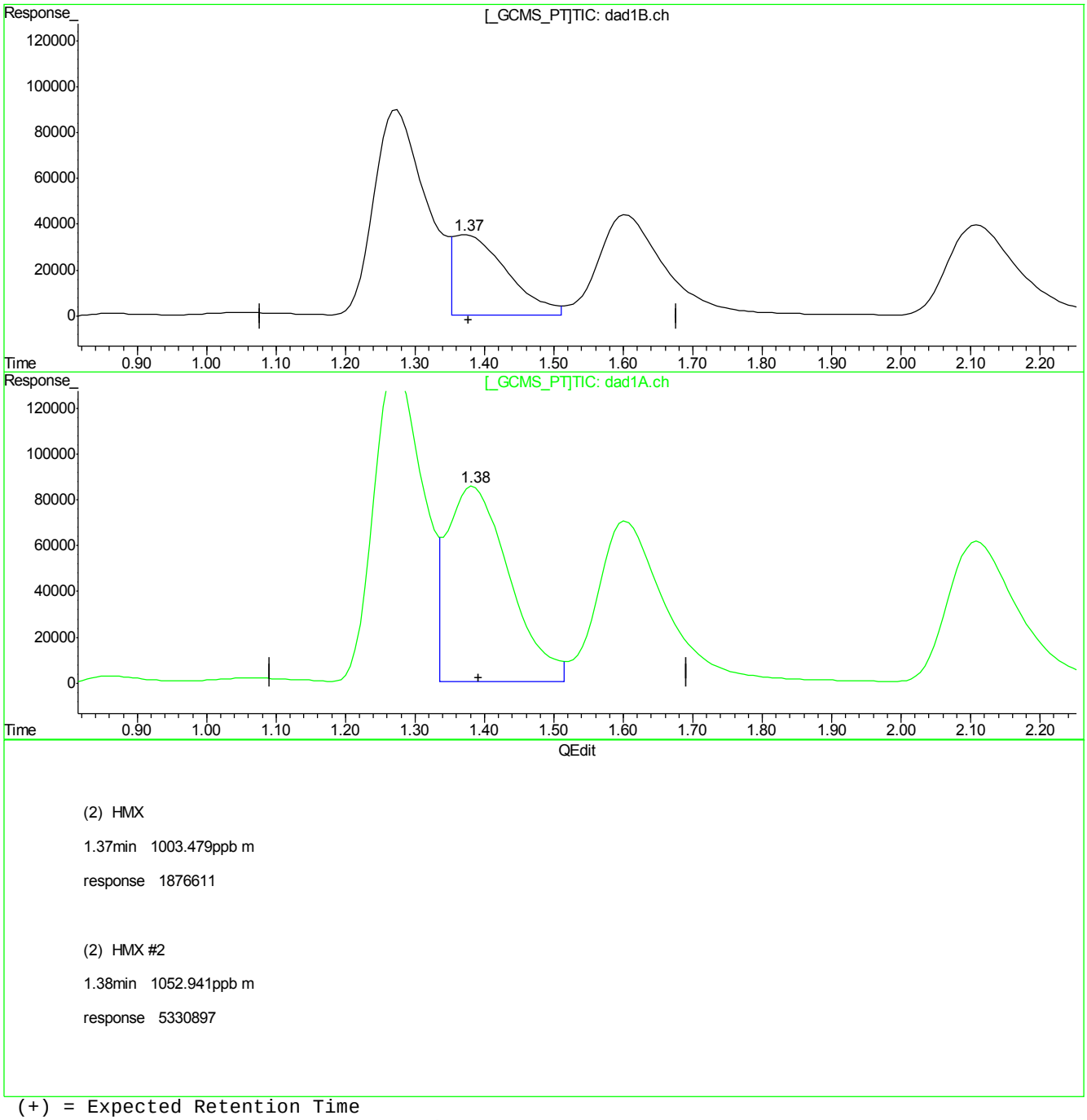
7.7.11.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

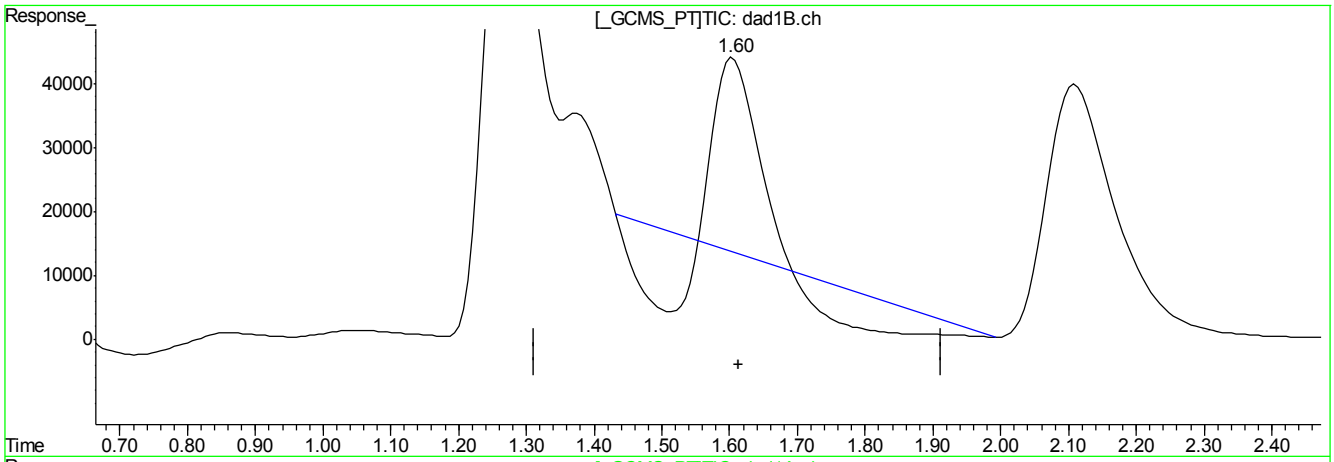


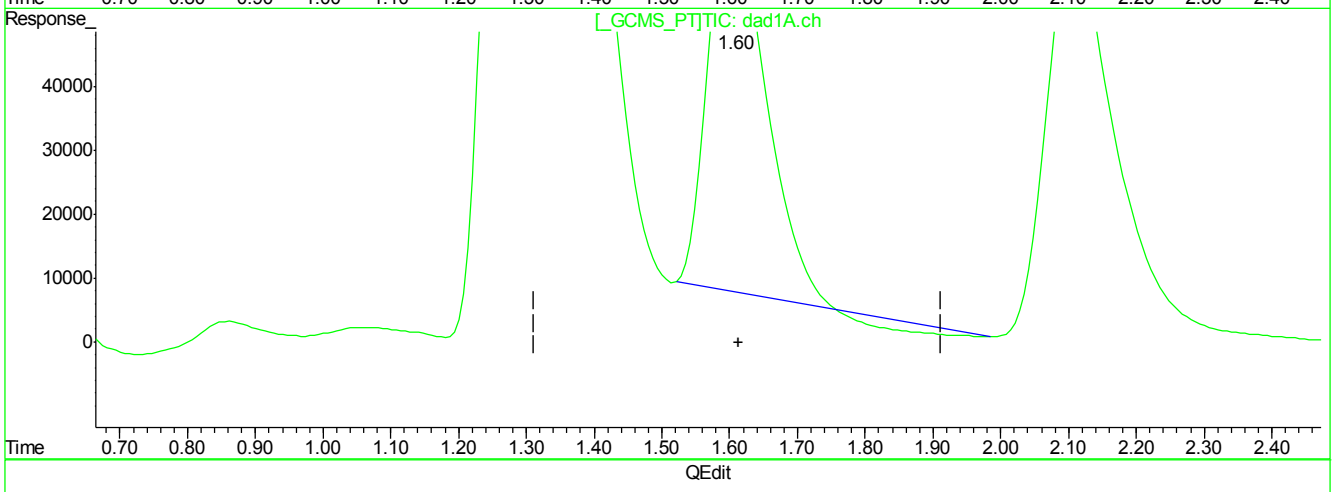
(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:02:10 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.61min 104.106ppb

response 322419

(3) DNX #2

1.61min 746.235ppb

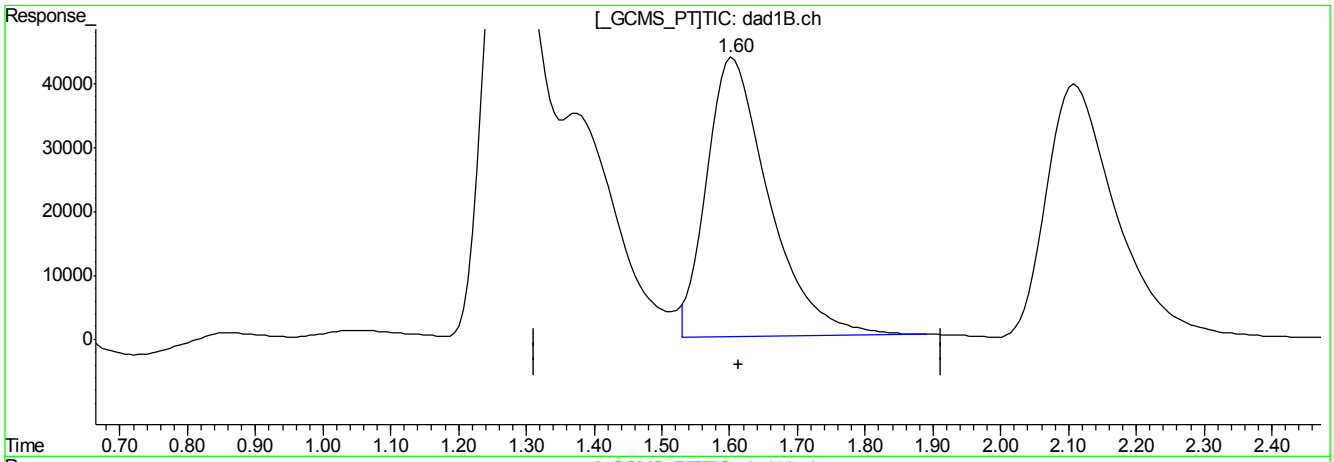
response 3513513

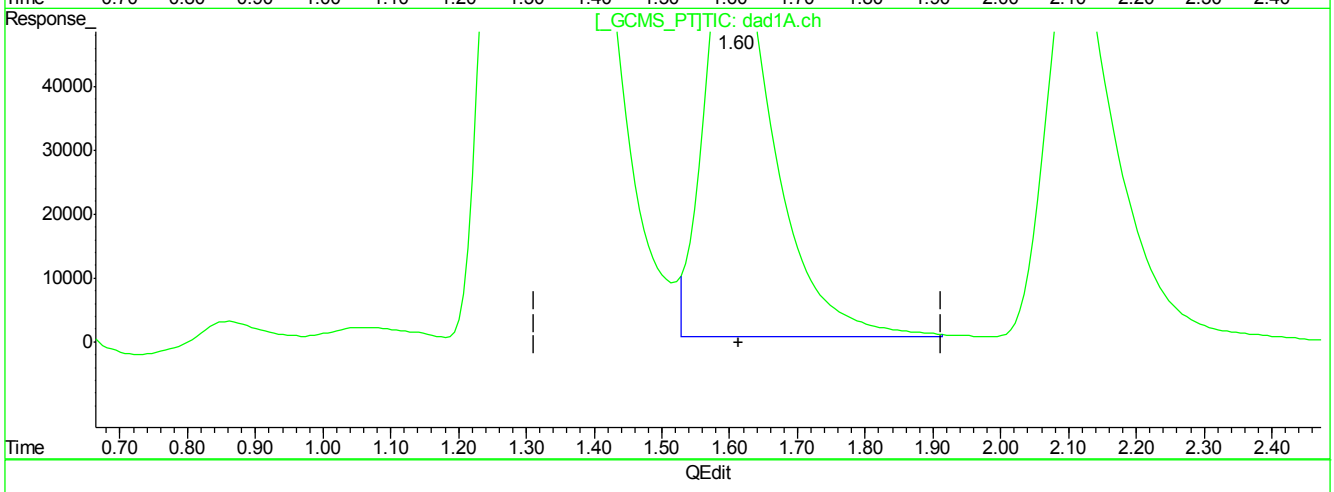
(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:02:12 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.60min 907.012ppb m

response 2809029

(3) DNX #2

1.60min 984.670ppb m

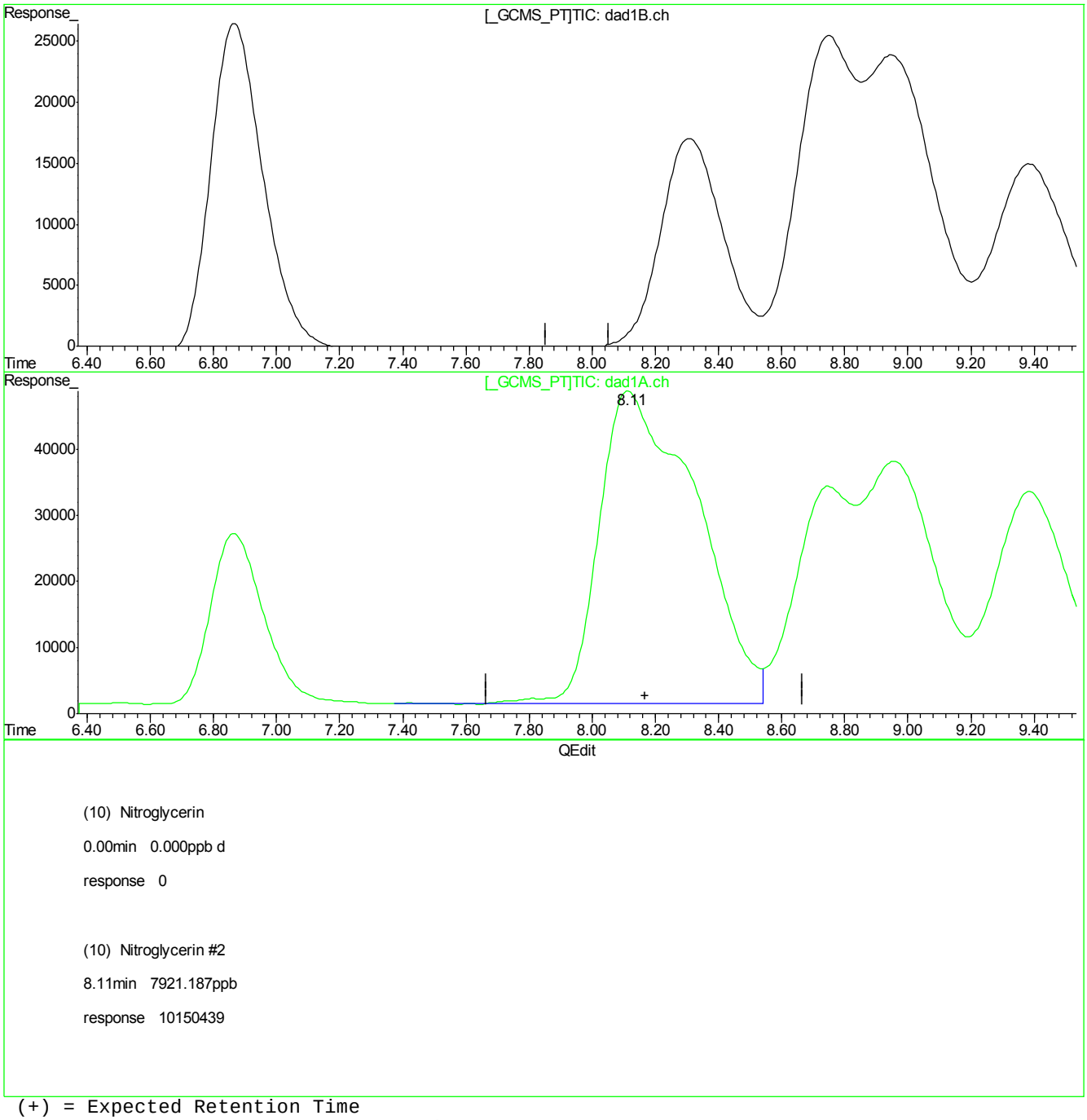
response 4651896

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:02:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration

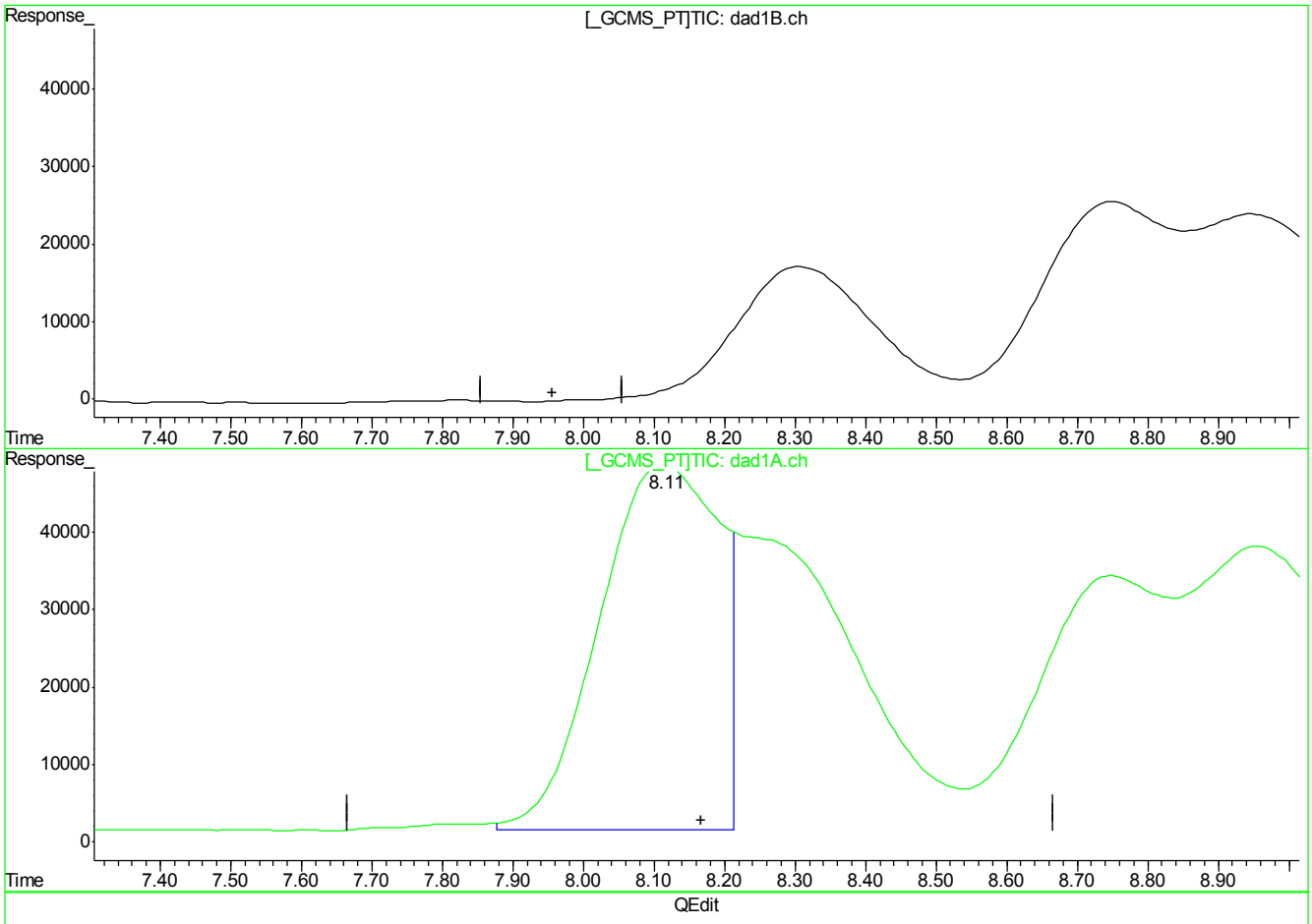


(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:02:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.11min 4229.032ppb m

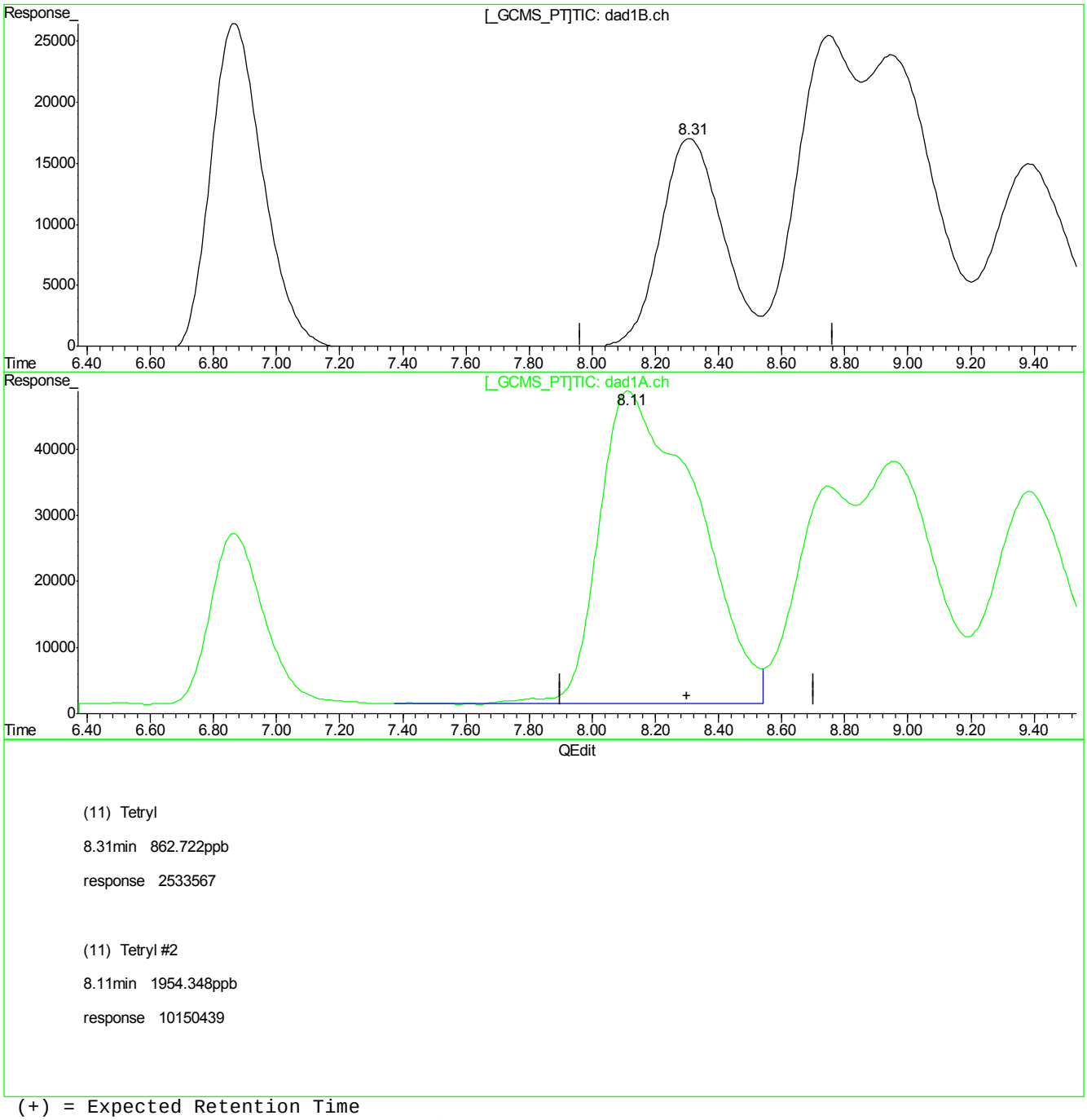
response 5419204

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:02:49 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.31min 862.722ppb

response 2533567

(11) Tetryl #2

8.11min 1954.348ppb

response 10150439

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:02:51 2018

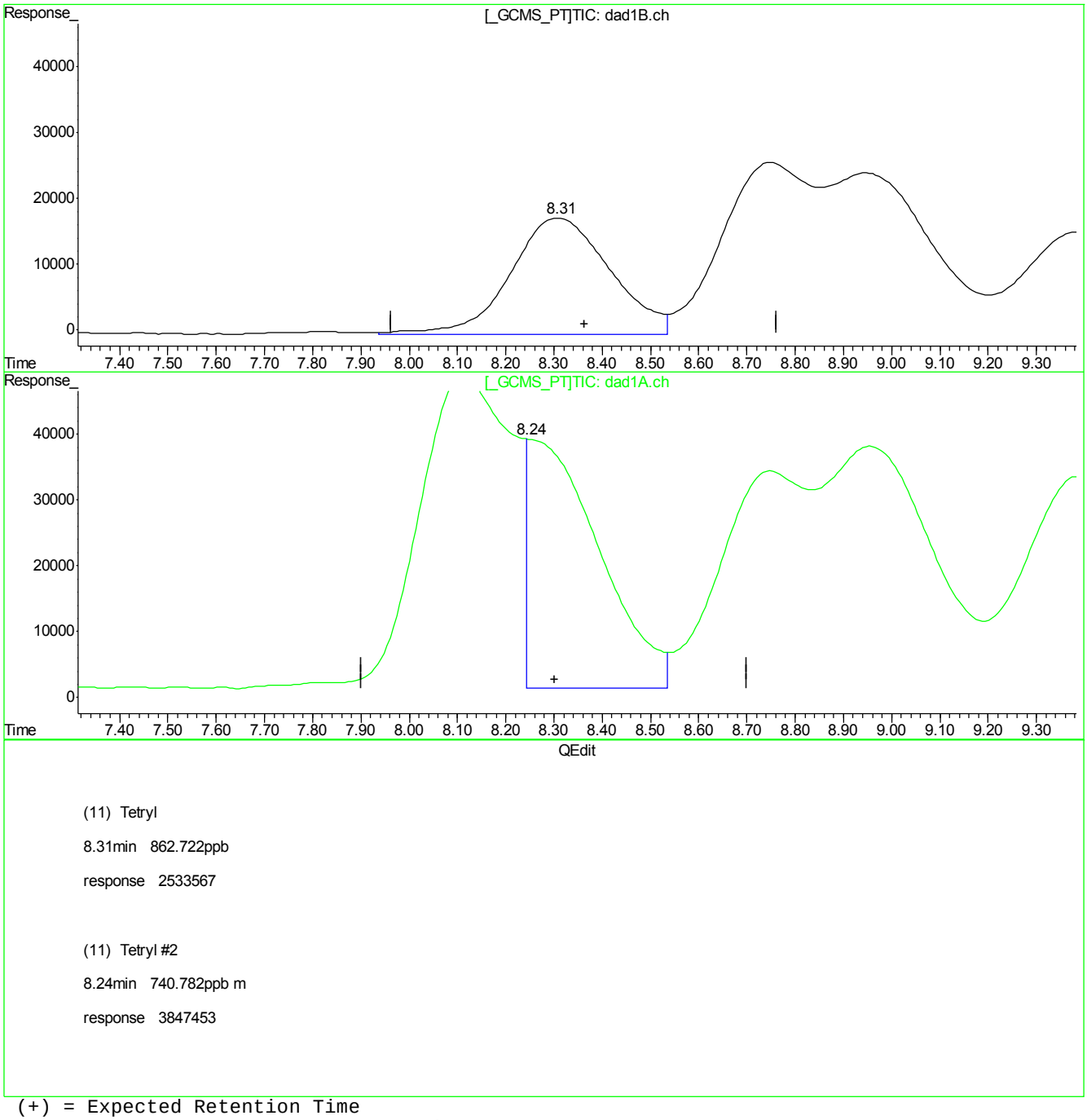
7.7.11.10

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.31min 862.722ppb

response 2533567

(11) Tetryl #2

8.24min 740.782ppb m

response 3847453

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:02:58 2018

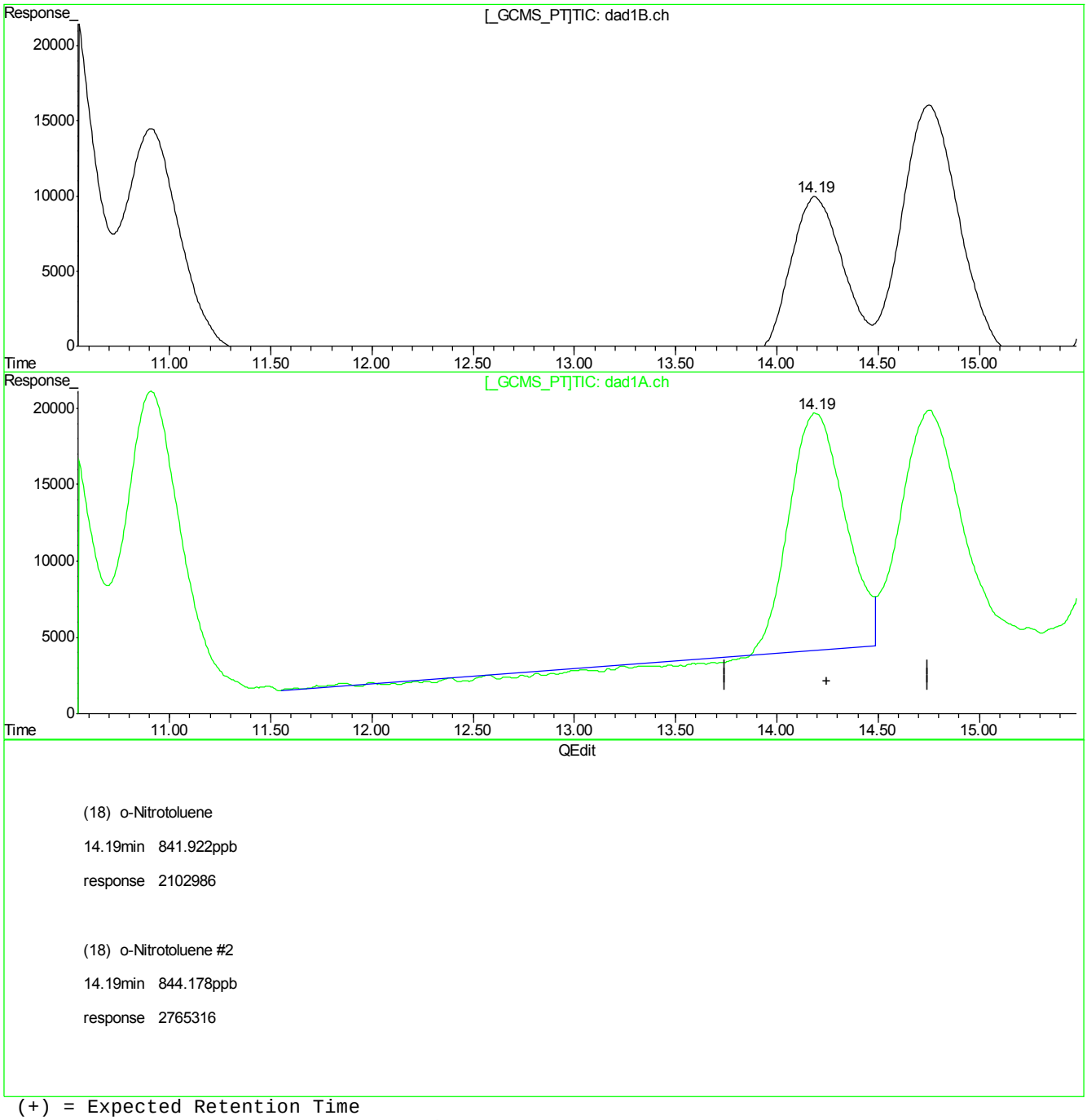
7.7.11.11

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.19min 841.922ppb

response 2102986

(18) o-Nitrotoluene #2

14.19min 844.178ppb

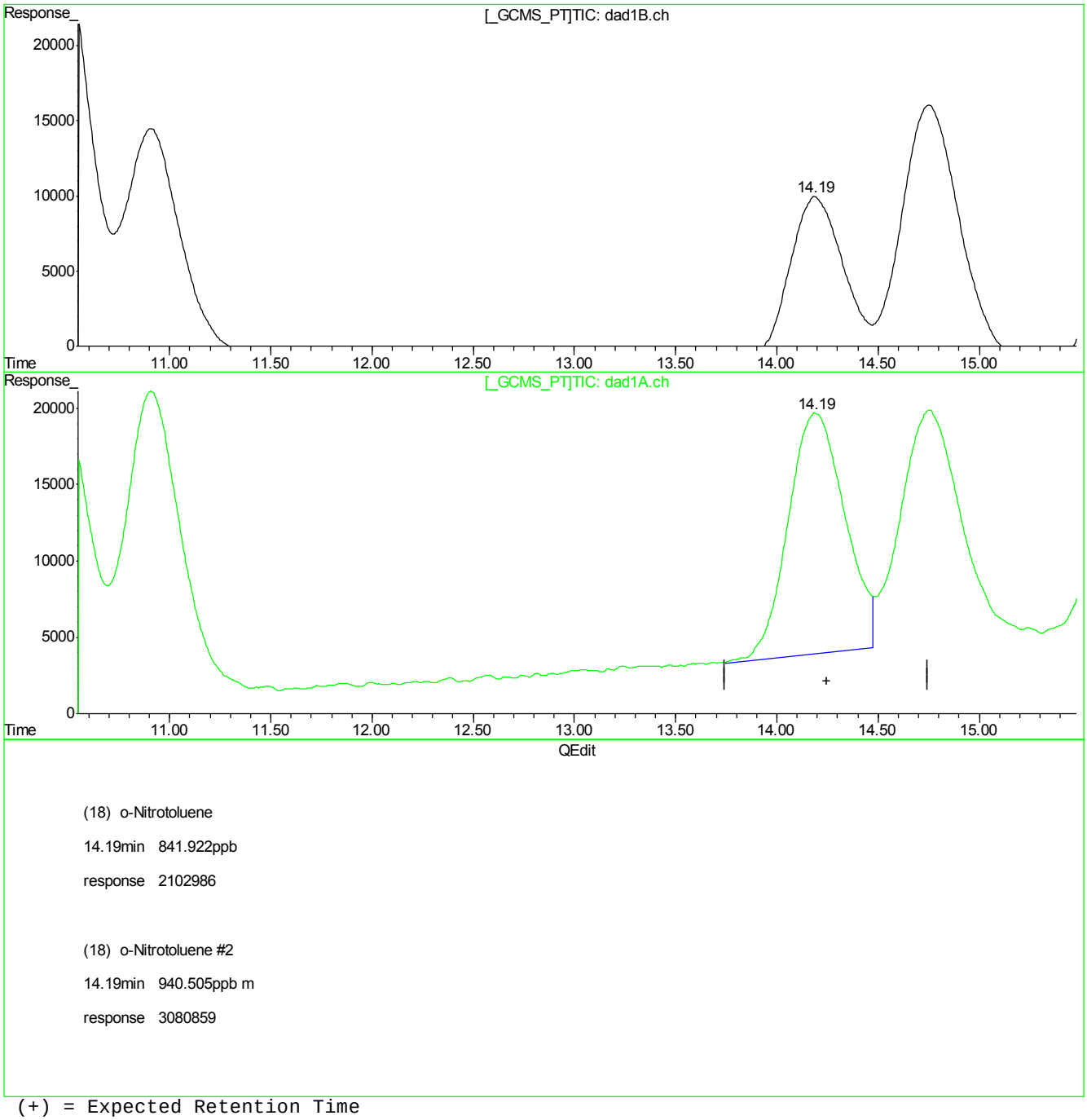
response 2765316

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:03:05 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.19min 841.922ppb

response 2102986

(18) o-Nitrotoluene #2

14.19min 940.505ppb m

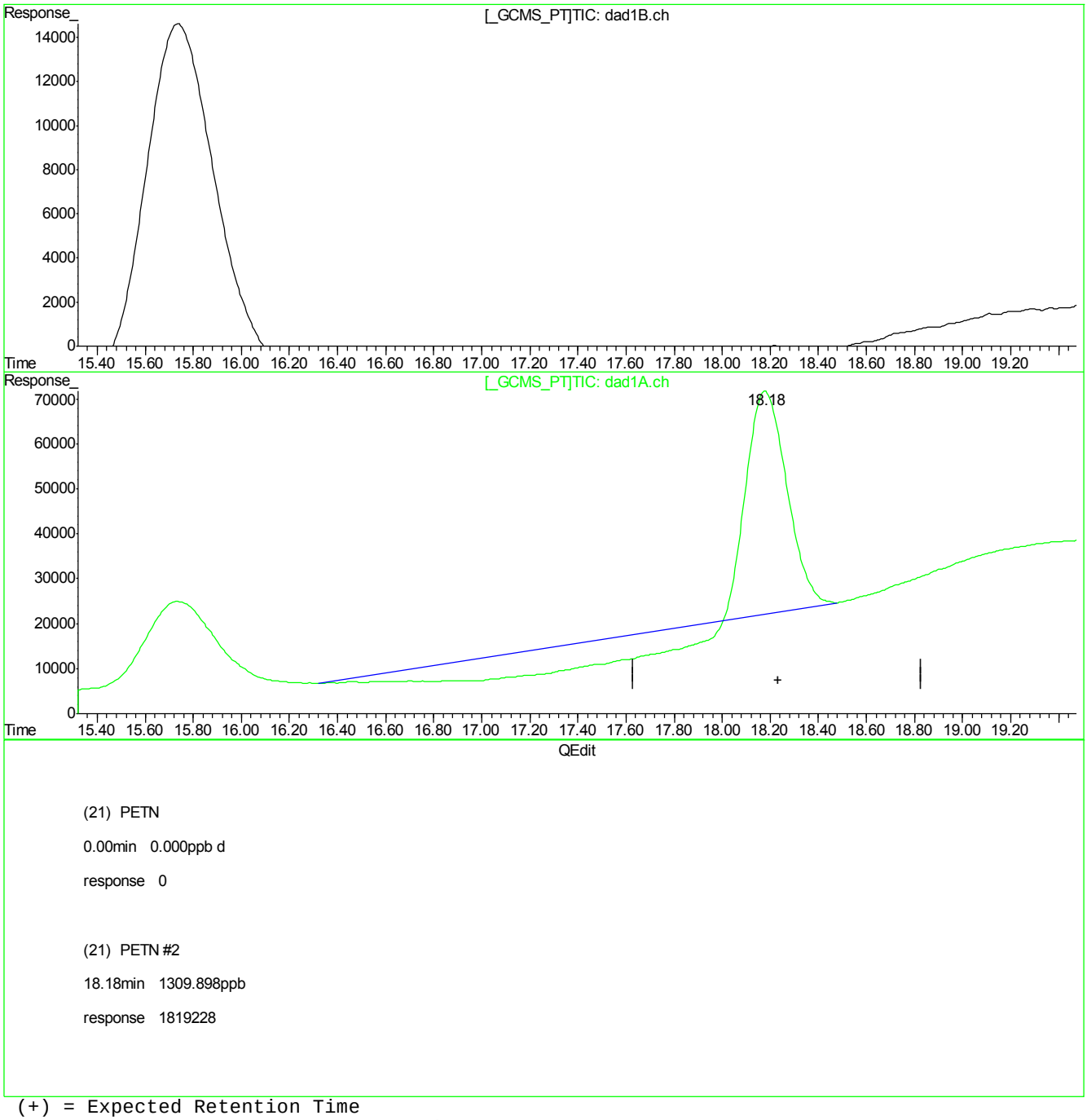
response 3080859

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:03:09 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.18min 1309.898ppb

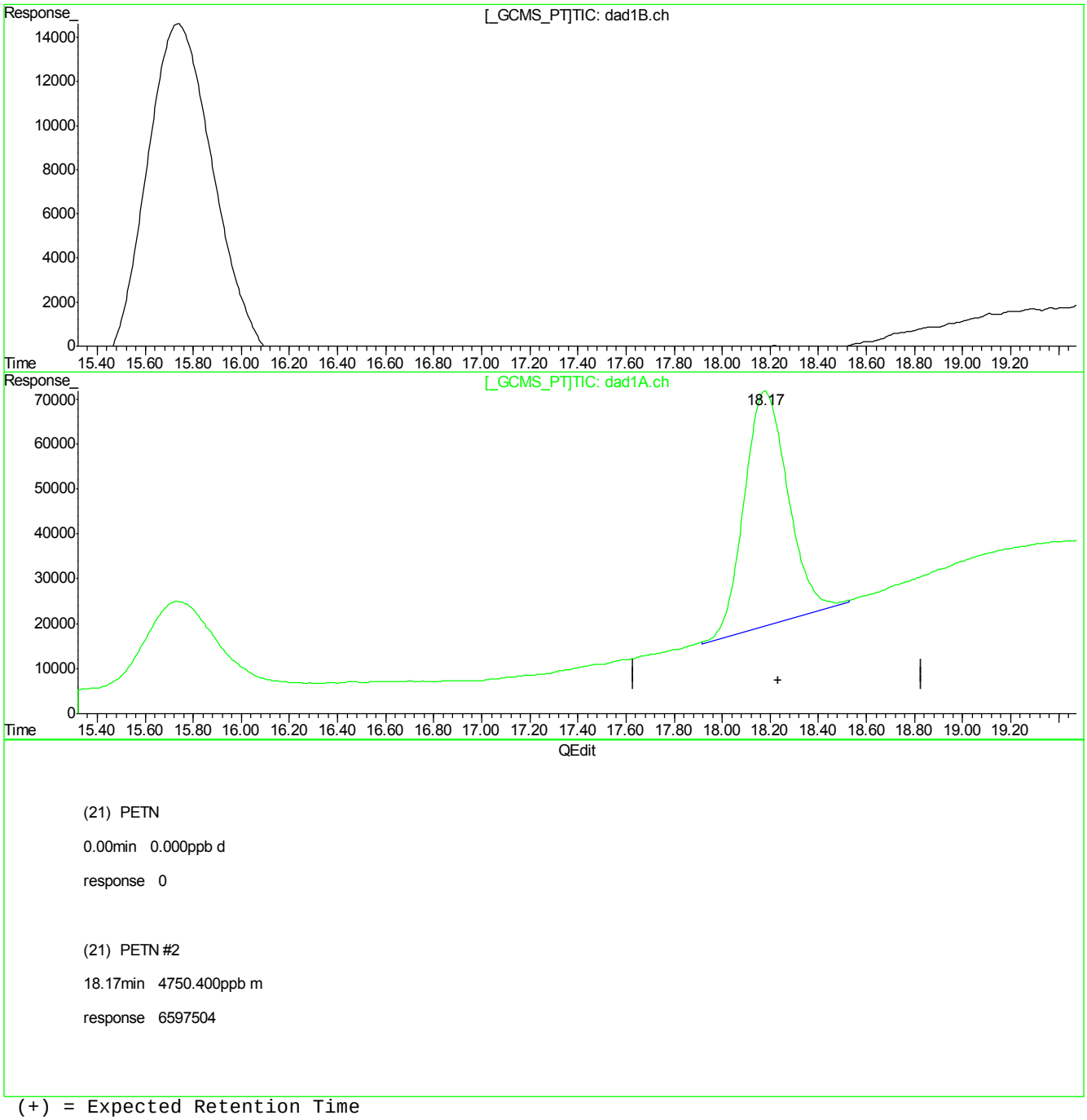
response 1819228

(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:03:12 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059715.D\dad1A.ch
Acq On : 11-May-2018, 09:00:51 Operator: evitam
Sample : cc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 11 10:01 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059715.D 8330B_0419PLUS.M Fri May 11 10:03:15 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/14/18 14:51

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 07:07:37 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	9.84	9.84	2402965	4333176	898.069	919.068
	Spiked Amount 500.000	Range 69 - 134		Recovery =		179.61%#	183.81%#
	Target Compounds						
1)	TNX	1.27	1.27	4588455	6470852	951.063m	872.268m
2)	HMX	1.37	1.38	1933283	5216707	1033.784m	1030.252m
3)	DNX	1.60	1.60	2874007	4691732	927.993m	992.984m
4)	MNX	2.11	2.11	2854350	4425508	921.792	951.954
5)	RDX	2.64	2.64	1885218	2994252	881.607	900.798
6)	1,3,5-Trinitrobe	4.23	4.23	4048062	7869464	930.312	942.667
7)	1,3-Dinitrobenze	5.38	5.37	5088667	3325503	917.873	892.902
8)	3,5-Dinitroanili	5.62	5.62	4611916	7407769	943.060	990.503
9)	Nitrobenzene	6.86	6.86	3164346	3057377	868.417	922.050
10)	Nitroglycerin	0.00	8.11	0	5753703	N.D. d	4490.068m
11)	Tetryl	8.30	8.22	2493541	4087257	849.031	786.953m
12)	2,4,6-Trinitroto	8.75	8.75	3282223	3799095	777.749	838.146
13)	2-Amino-4,6-Dini	8.93	8.93	3676758	5889452	971.278	1097.992
14)	4-Amino-2,6-Dini	9.37	9.37	2574007	5278720	974.454	1018.692
16)	2,4-Dinitrotolue	10.46	10.46	4784975	3157992	909.517	1069.334
17)	2,6-Dinitrotolue	10.90	10.90	2996330	3668300	866.926	1074.287
18)	o-Nitrotoluene	14.19	14.19	2102444	2956923	841.705	902.671m
19)	p-Nitrotoluene	14.75	14.75	3500942	3062692	886.980	971.062
20)	m-Nitrotoluene	15.74	15.74	3197442	3795300	896.345	943.195
21)	PETN	0.00	18.18	0	6601235	N.D. d	4753.087m

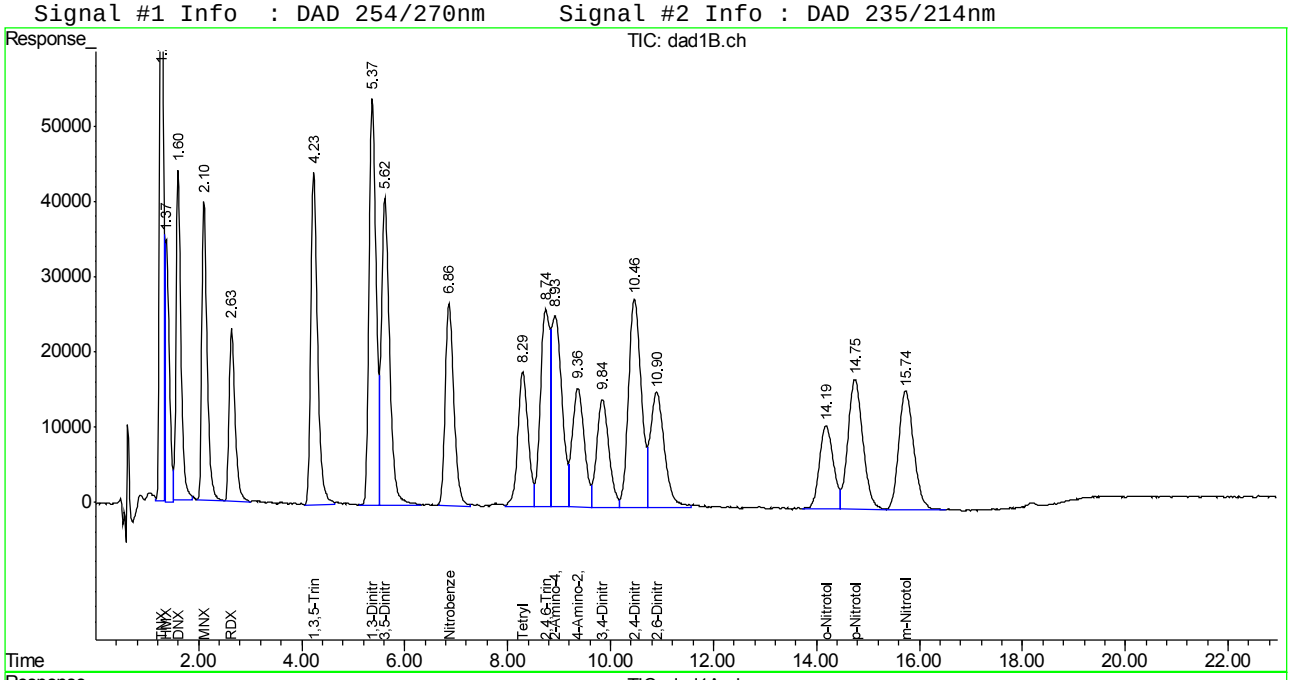
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059727.D 8330B_0419PLUS.M Mon May 14 10:51:14 2018 Page 1

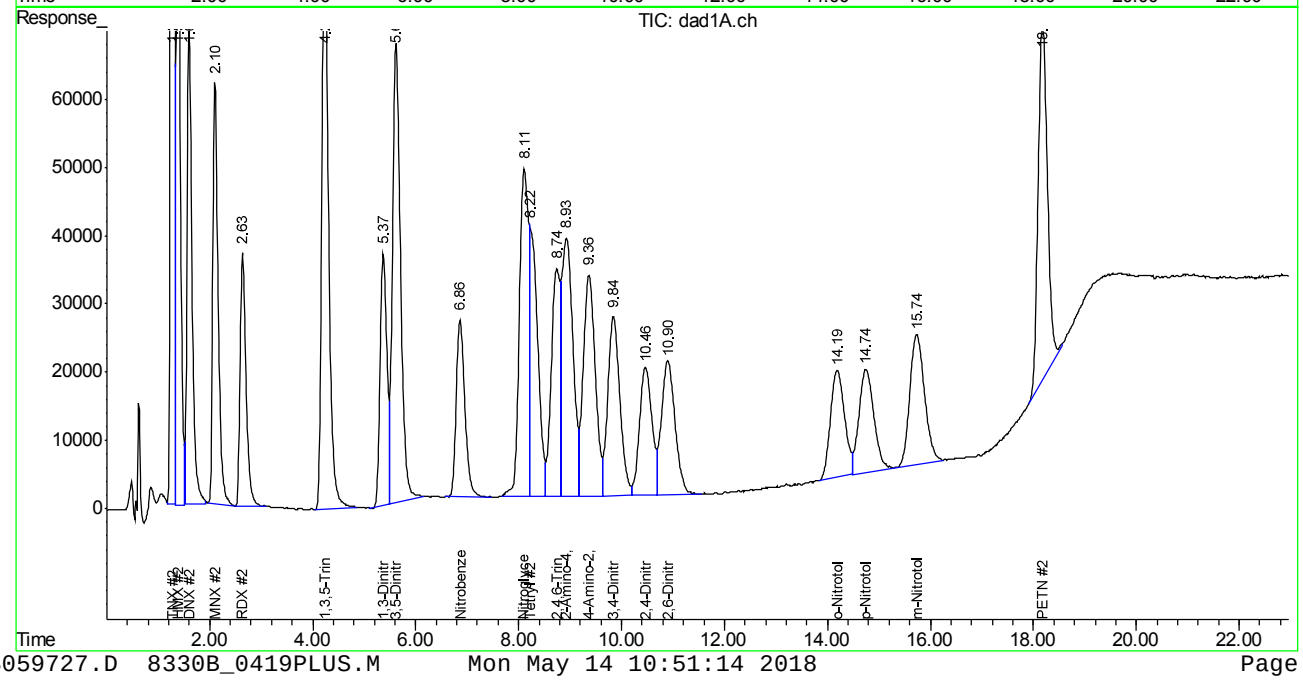
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 10:50 2018 Quant Results File: 8330B_0419PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

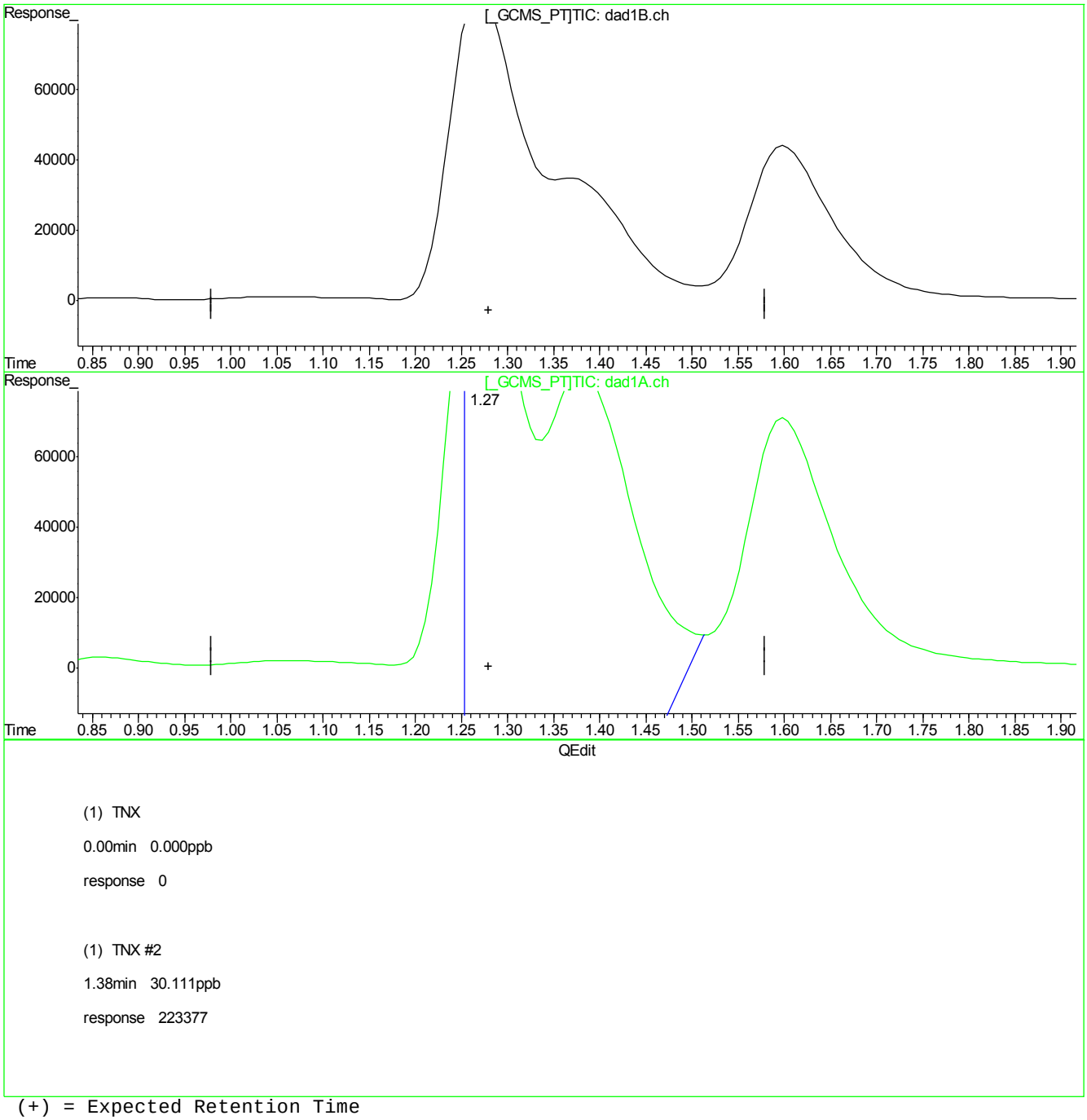
Sample Number:	GBB1730-ECC1722	**Method:**	SW846 8330B
Lab FileID:	BB059727.D	**Analyst approved:**	05/14/18 10:55 Evita Martinez
Injection Time:	05/11/18 15:00	**Supervisor approved:**	05/14/18 14:51 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.27	Poorly defined baseline
TNX		2	1.27	Poorly defined baseline
HMX	2691-41-0	1	1.37	Poorly defined baseline
HMX	2691-41-0	2	1.38	Poorly defined baseline
DNX		1	1.60	Poorly defined baseline
DNX		2	1.60	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.11	Poorly defined baseline
Tetryl	479-45-8	2	8.22	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.19	Poorly defined baseline
PETN	78-11-5	2	18.18	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

0.00min 0.000ppb

response 0

(1) TNX #2

1.38min 30.111ppb

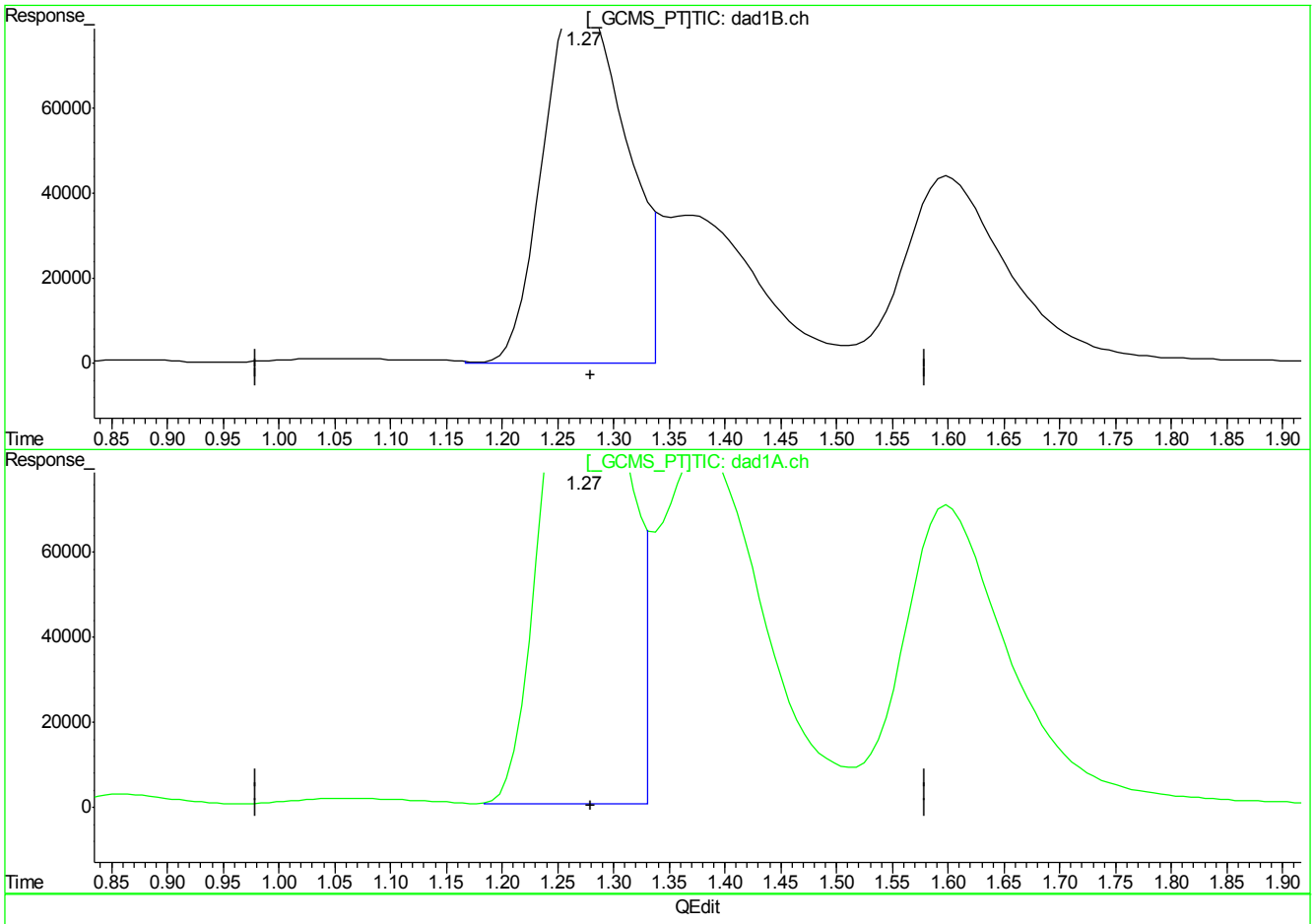
response 223377

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:48:14 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(1) TNX

1.27min 951.063ppb m

response 4588455

(1) TNX #2

1.27min 872.268ppb m

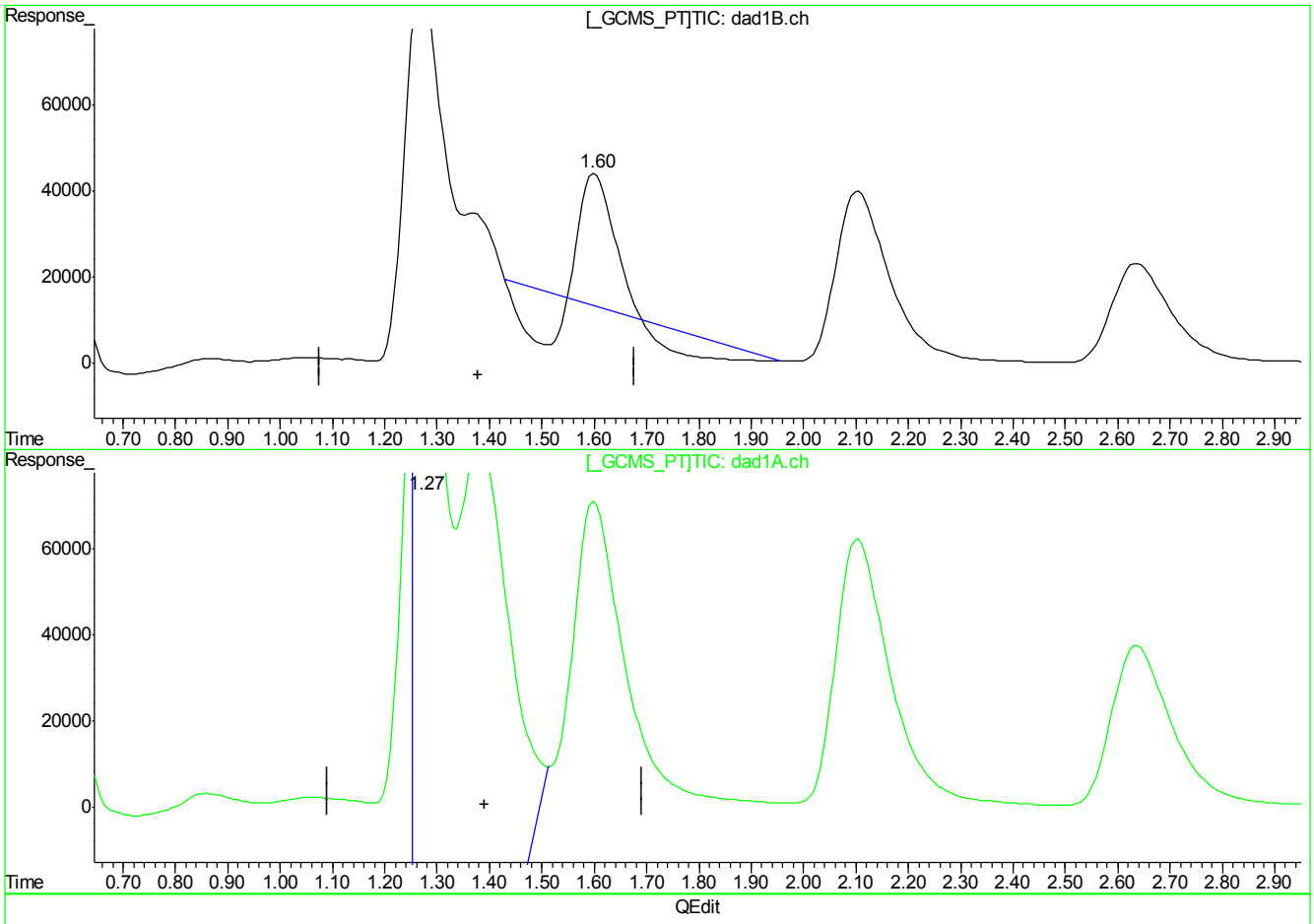
response 6470852

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:48:26 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(2) HMX

1.60min 276.580ppb

response 517234

(2) HMX #2

1.38min 43.866ppb

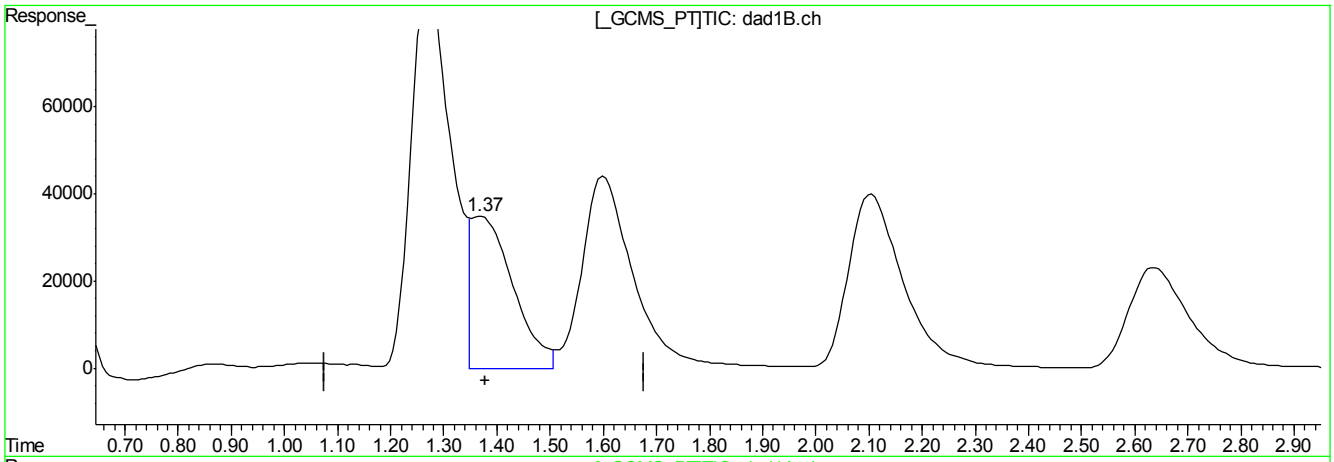
response 223377

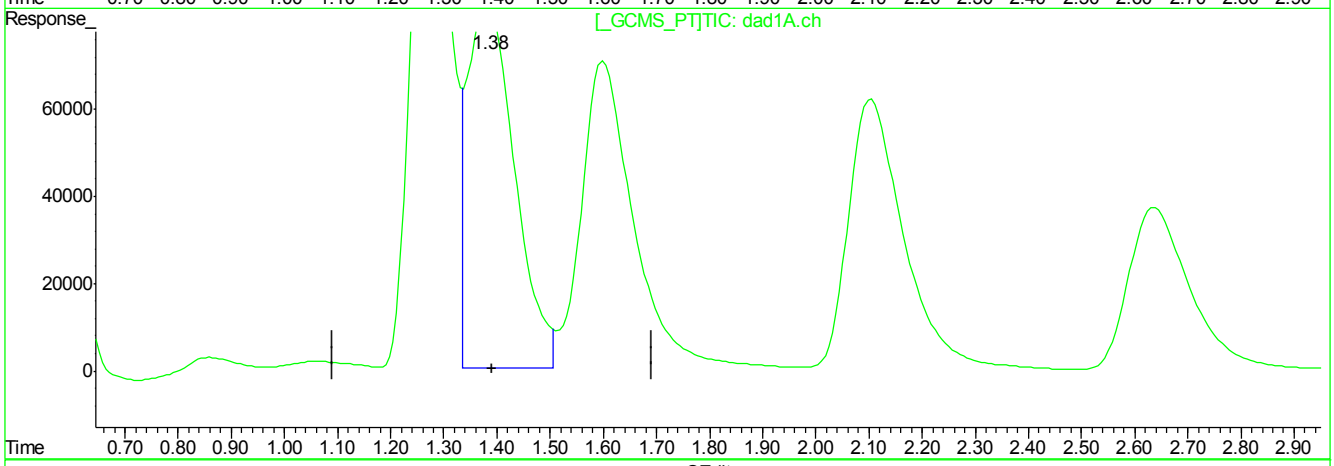
(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:48:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.37min 1033.784ppb m

response 1933283

(2) HMX #2

1.38min 1030.252ppb m

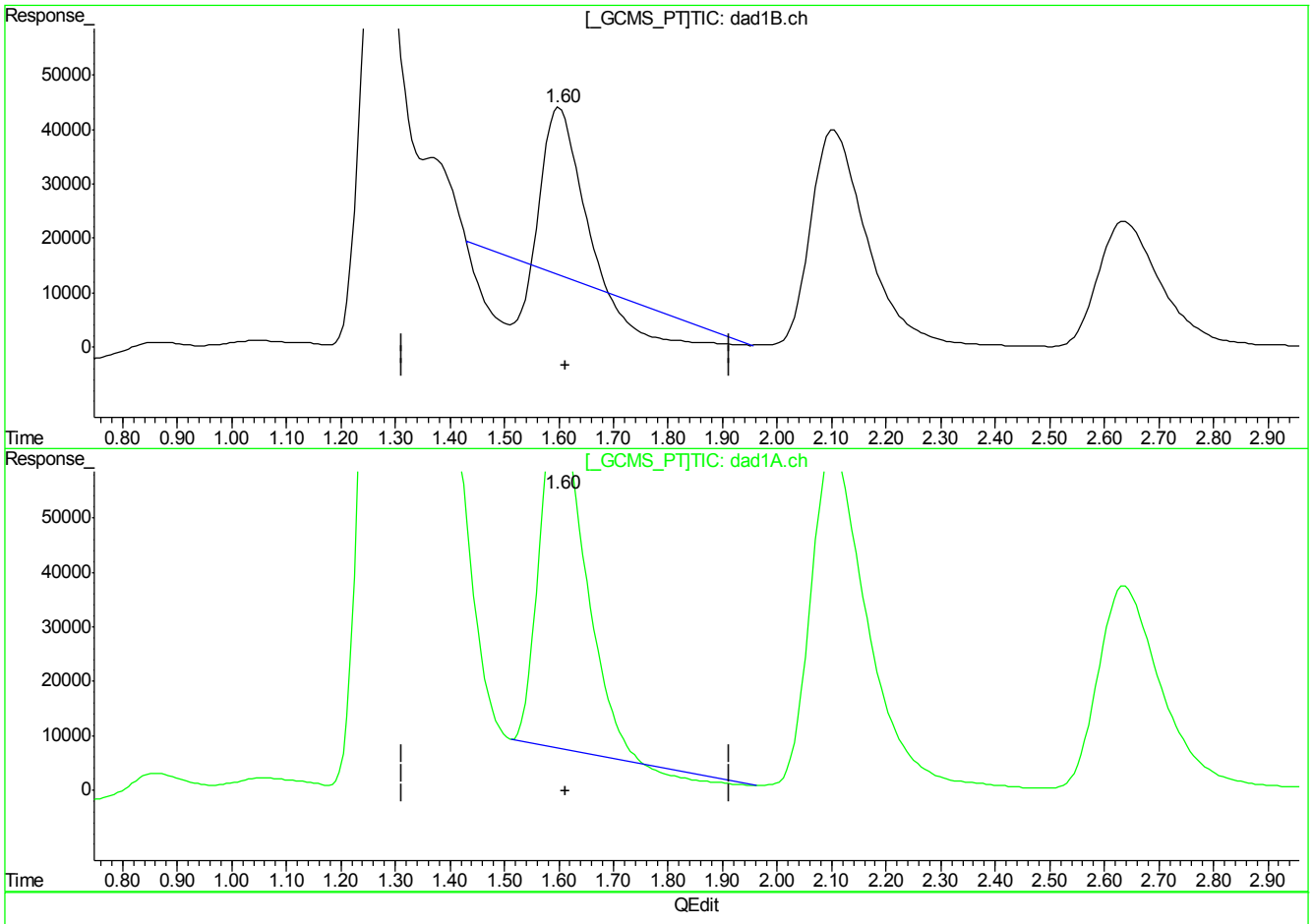
response 5216707

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:49:07 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(3) DNX

1.60min 167.010ppb

response 517234

(3) DNX #2

1.60min 759.405ppb

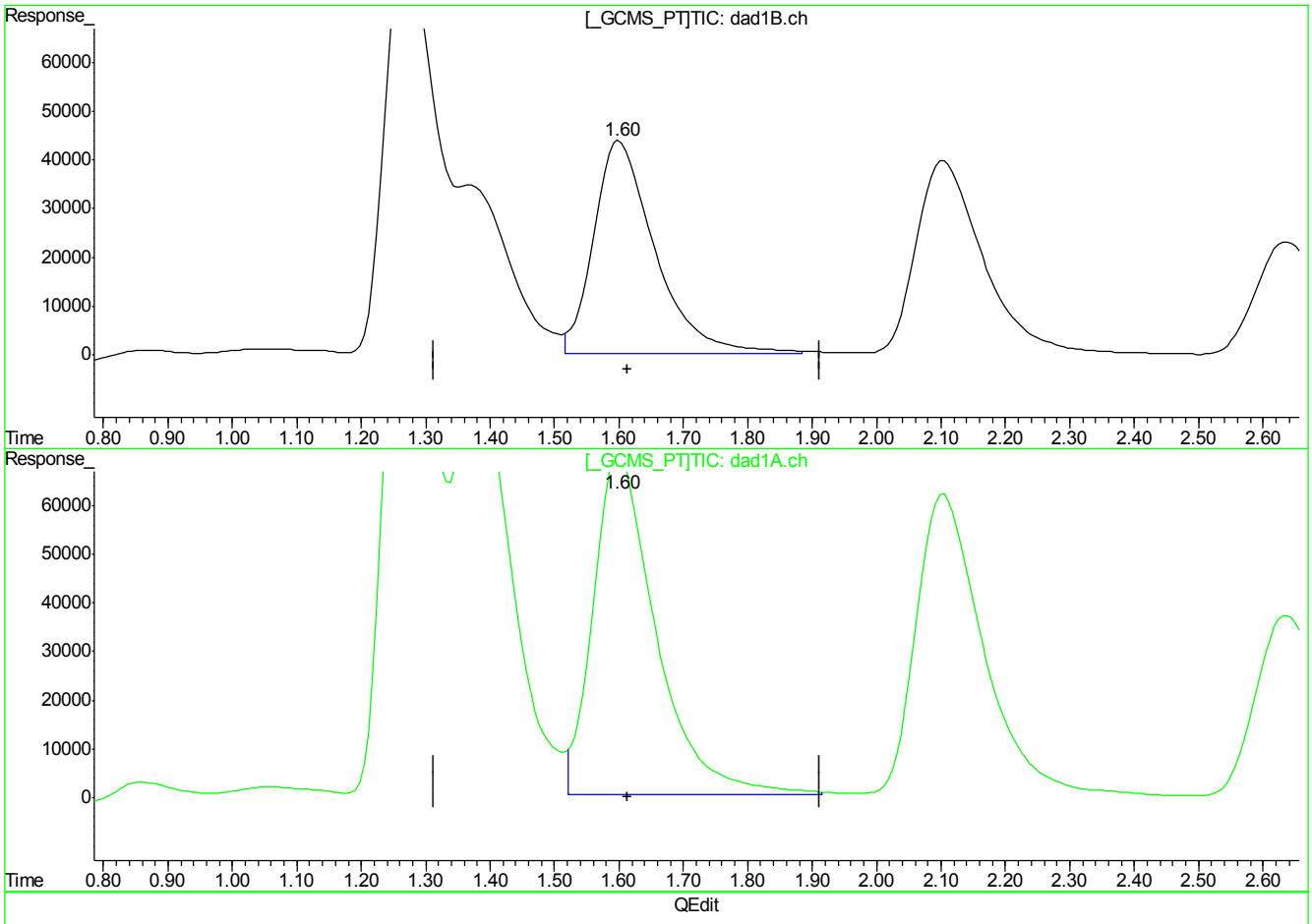
response 3576190

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:49:10 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(3) DNX

1.60min 927.993ppb m

response 2874007

(3) DNX #2

1.60min 992.984ppb m

response 4691732

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:49:30 2018

7.7.12.7

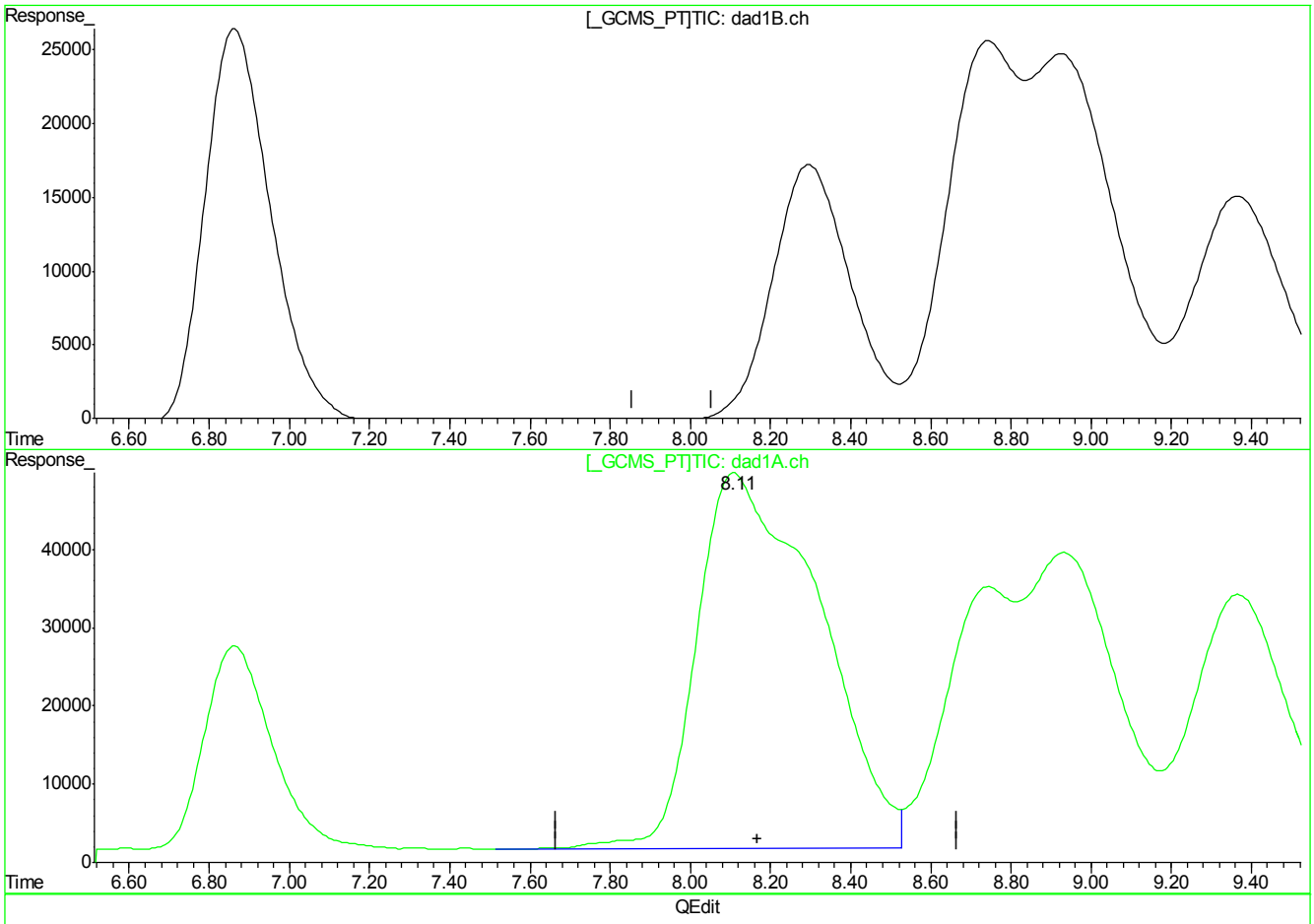
7

BB059727.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.11min 7956.017ppb

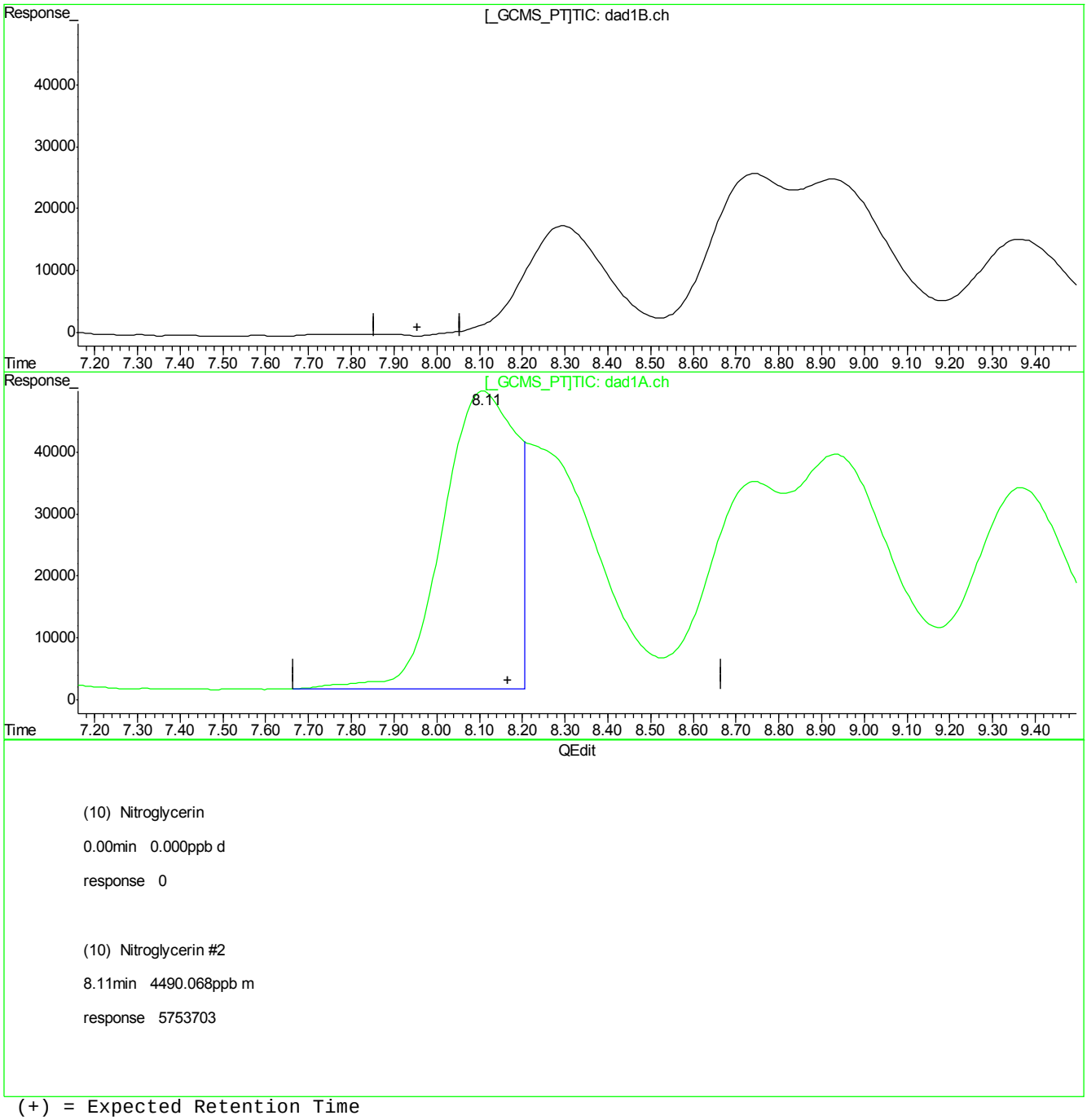
response 10195071

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:49:39 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.11min 4490.068ppb m

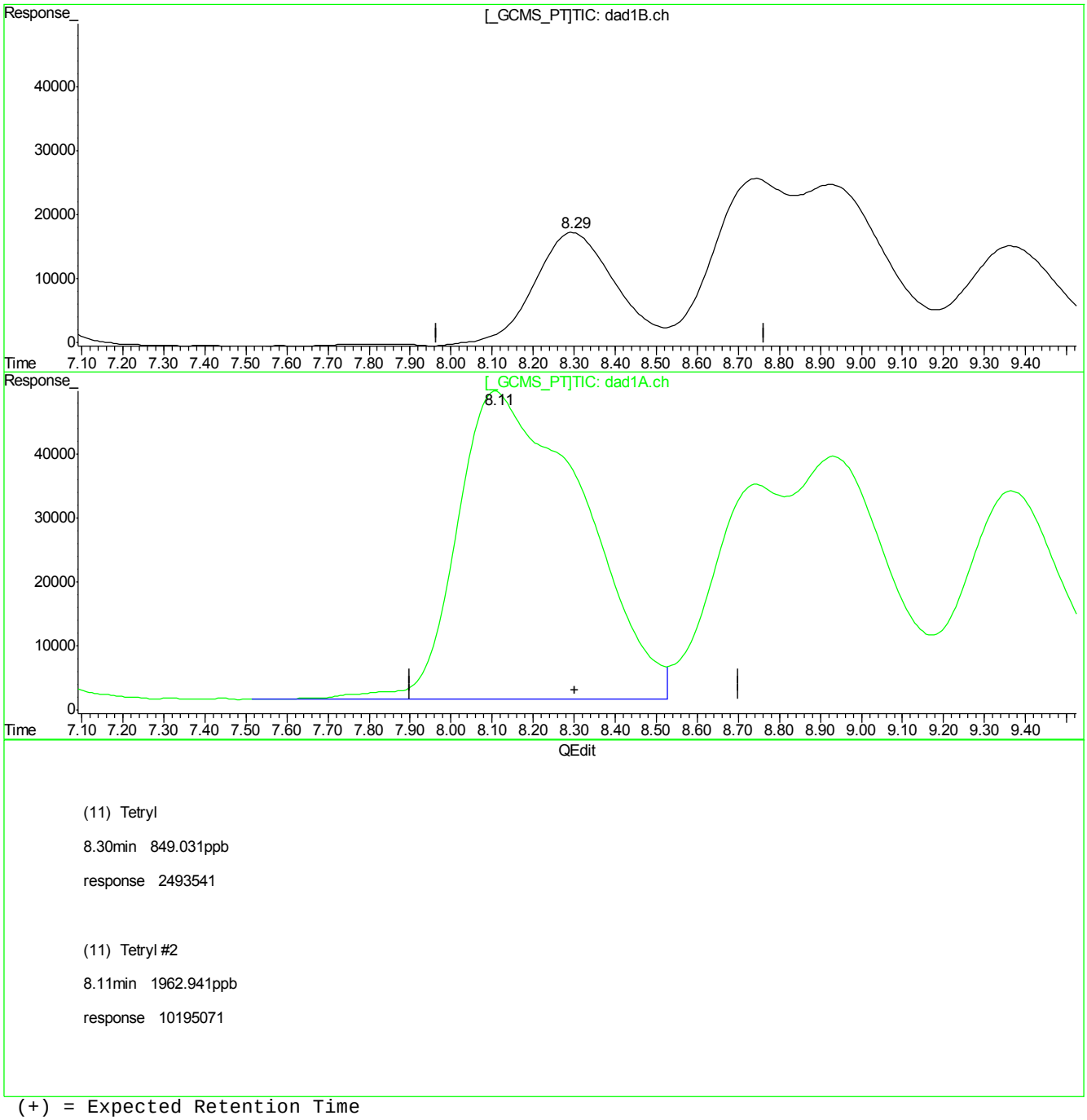
response 5753703

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:49:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.30min 849.031ppb

response 2493541

(11) Tetryl #2

8.11min 1962.941ppb

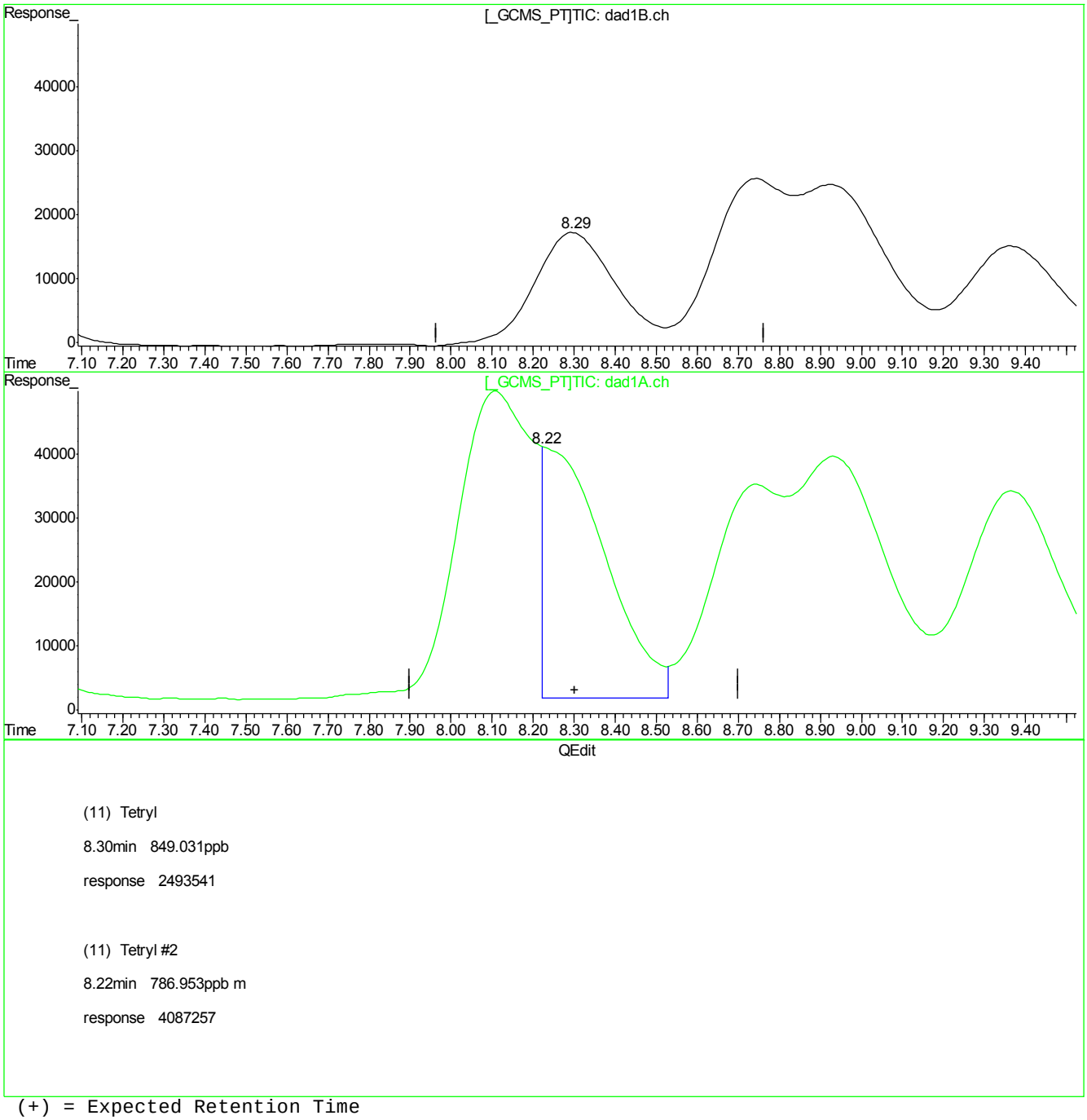
response 10195071

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:49:53 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(11) Tetryl

8.30min 849.031ppb

response 2493541

(11) Tetryl #2

8.22min 786.953ppb m

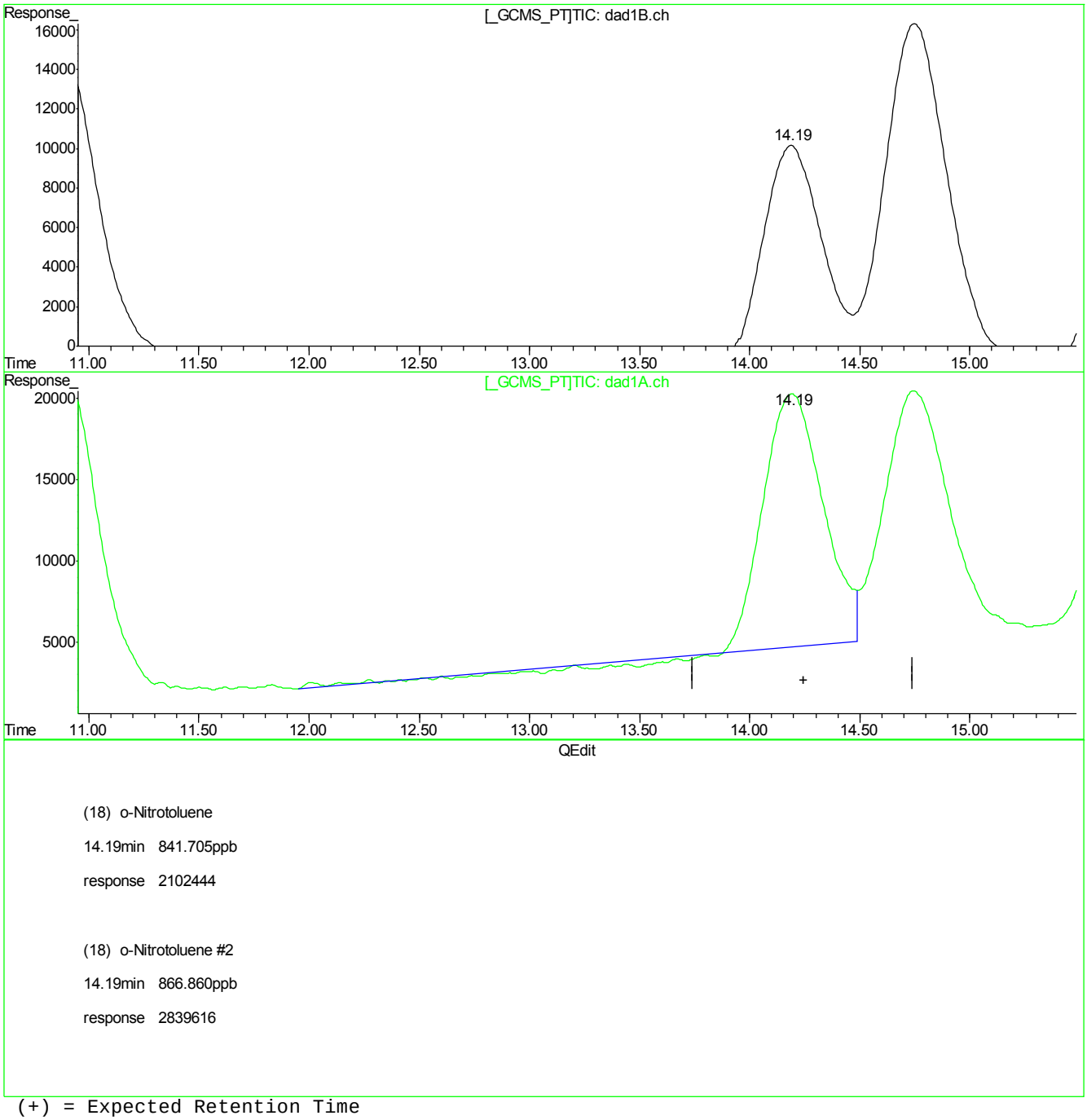
response 4087257

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:50:00 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.19min 841.705ppb

response 2102444

(18) o-Nitrotoluene #2

14.19min 866.860ppb

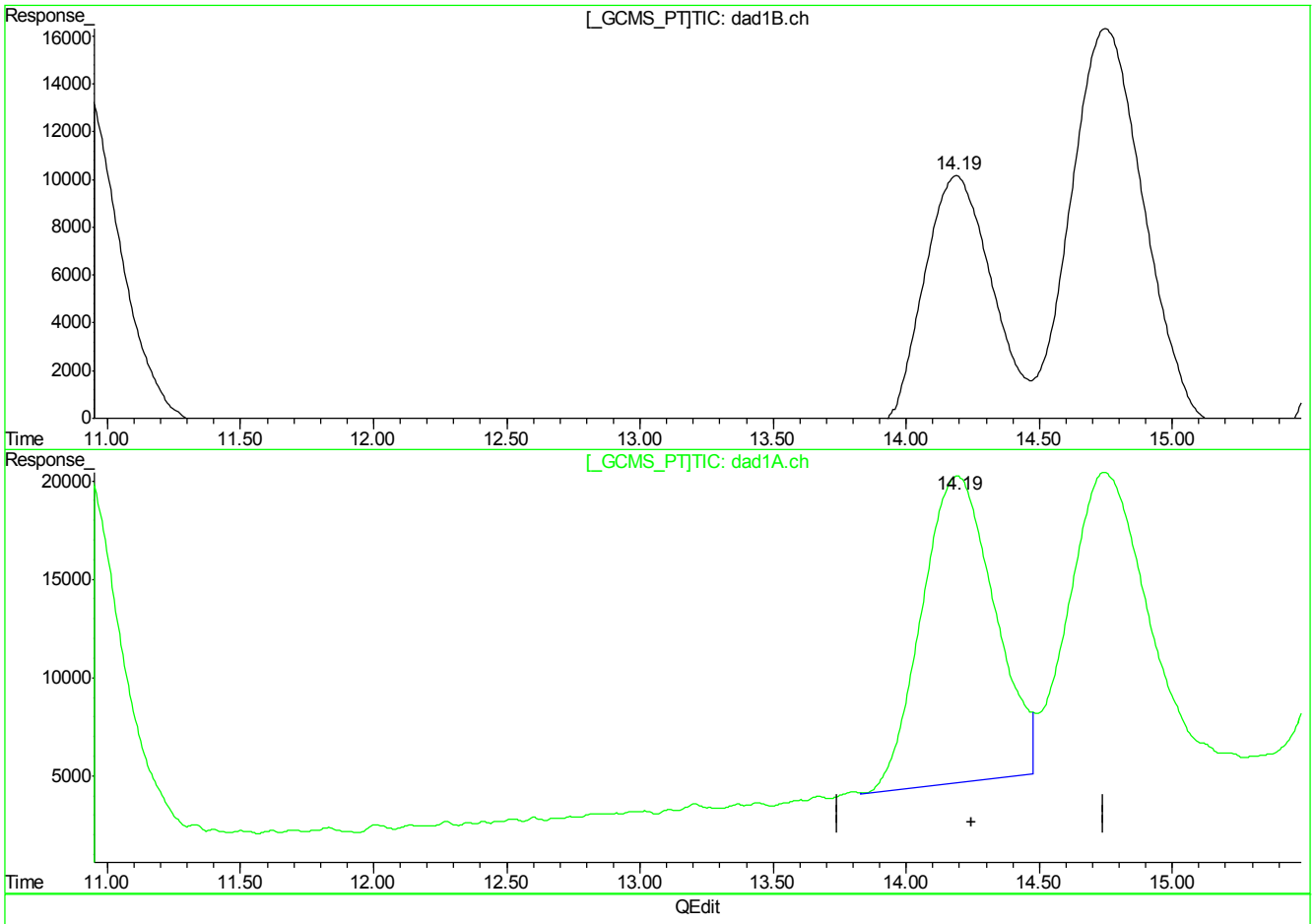
response 2839616

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:50:09 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

14.19min 841.705ppb

response 2102444

(18) o-Nitrotoluene #2

14.19min 902.671ppb m

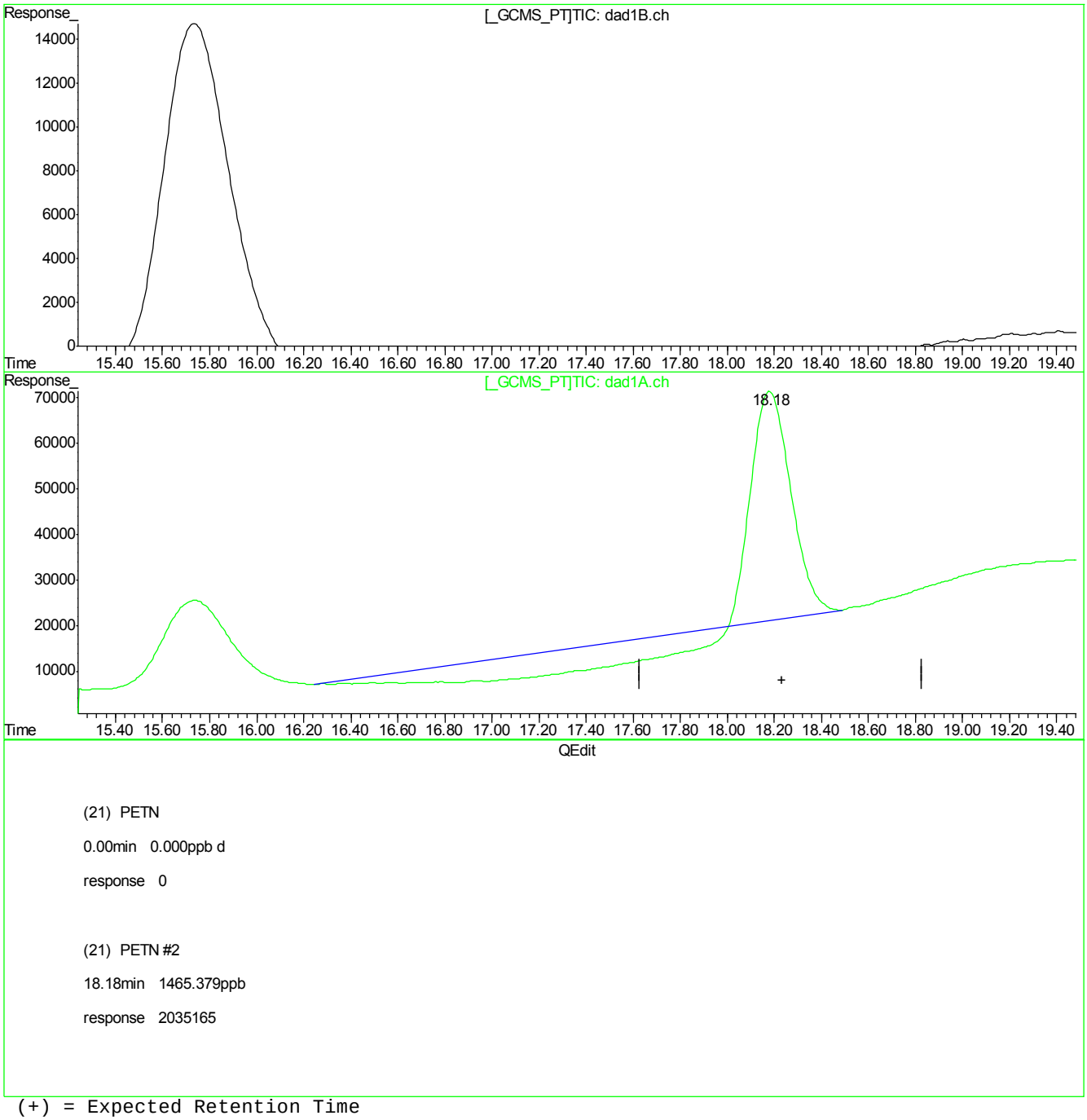
response 2956923

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:50:13 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.18min 1465.379ppb

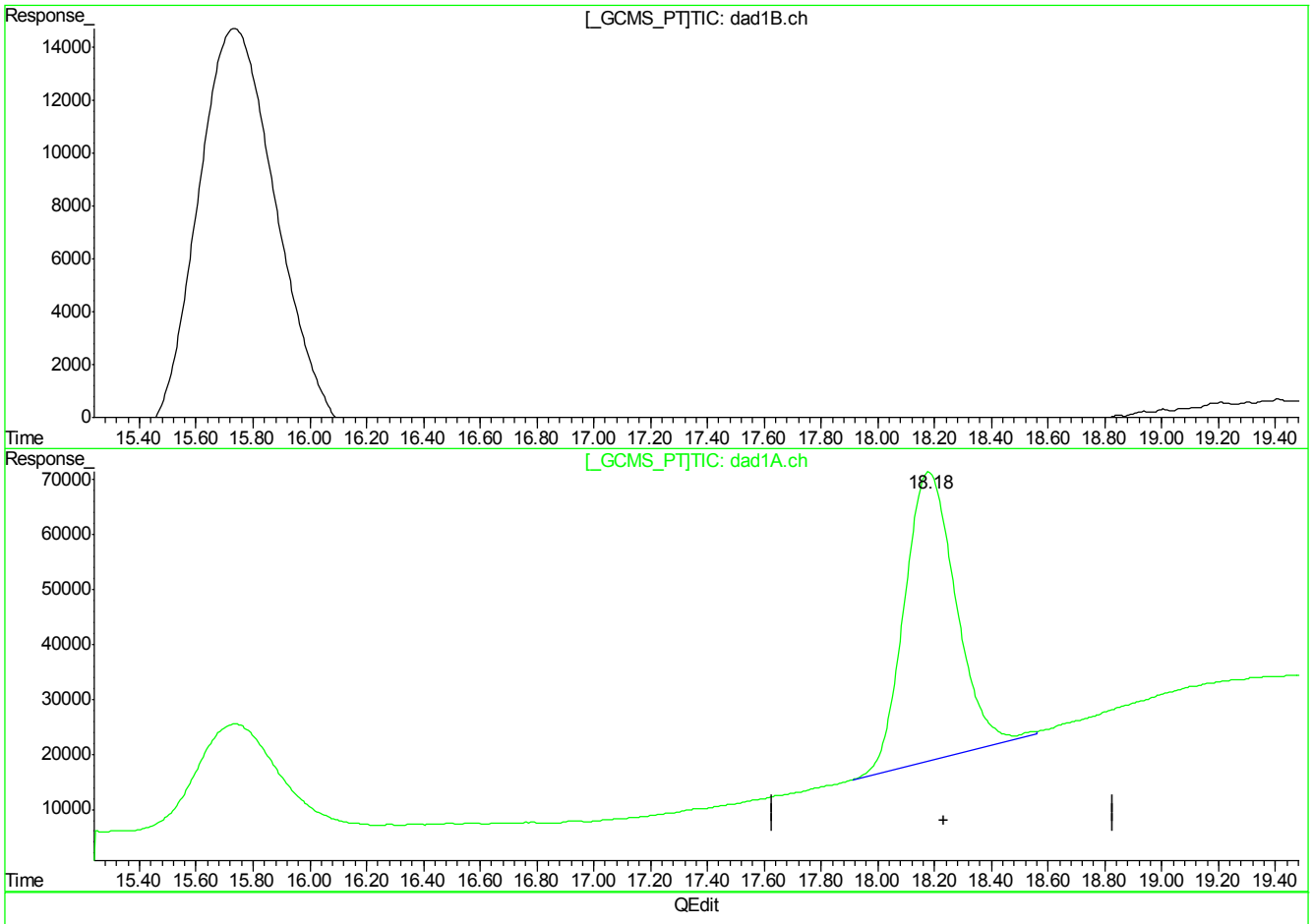
response 2035165

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:50:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\GBB1730\BB059727.D\dad1A.ch
Acq On : 11-May-2018, 15:00:20 Operator: evitam
Sample : ecc1722-1000 Inst : G1315B
Misc : OP69973,gbb1730,10.03,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 14 7:07 2018 Quant Results File: 8330B_0419PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0419PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 08:02:35 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.18min 4753.087ppb m

response 6601235

(+) = Expected Retention Time
BB059727.D 8330B_0419PLUS.M Mon May 14 10:50:20 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:57 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.58	14.60	98690	251786	16.740	20.083
	Spiked Amount 500.000	Range 70 - 136		Recovery =		3.35%#	4.02%#
	Target Compounds						
1)	TNX	5.00	5.00	270396	268585	32.146m	31.846m
2)	HMX	5.46	5.46	61139	65579	16.096m	17.142m
3)	DNX	5.58	5.58	151583	169136	23.094m	25.858m
4)	MNX	6.68	6.68	132741	132741	27.438	27.438
5)	1,3,5-Trinitrobe	7.55	7.55	208327	208327	20.402	20.410
6)	RDX	8.09	8.09	93105	93105	19.557	19.648
7)	1,3-Dinitrobenze	10.09	10.10	316123	176008	21.719	12.357m#
8)	Nitrobenzene	11.09	11.09	233656	184835	30.565	19.401m
9)	2,4,6-Trinitroto	11.89	11.89	254281	217868	24.940	13.900m#
10)	Nitroglycerin	0.00	12.72	0	268418	N.D. d	73.009m
11)	Tetryl	13.30	13.28	188129	499094	27.427	40.951m#
13)	2,6-Dinitrotolue	14.93	14.90	140836	174953	20.257	16.038
14)	2,4-Dinitrotolue	15.65	15.67	275037	489908	20.698	49.345 #
15)	o-Nitrotoluene	17.23	17.25	120053	171082	28.895	30.388
16)	3,5-Dinitroanili	16.68	16.68	287796	475677	27.156	26.561
17)	p-Nitrotoluene	18.42	18.46	235862	419386	20.499	19.889m
18)	4-Amino-2,6-Dini	18.42	18.46	235862	428039	20.499	20.299m
19)	m-Nitrotoluene	19.66	19.69	105739	204872	21.883	21.659
20)	2-Amino-4,6-Dini	20.68	20.83	168840	118490	17.600	8.755m#
21)	PETN	0.00	22.34	0	288256	N.D. d	88.948m

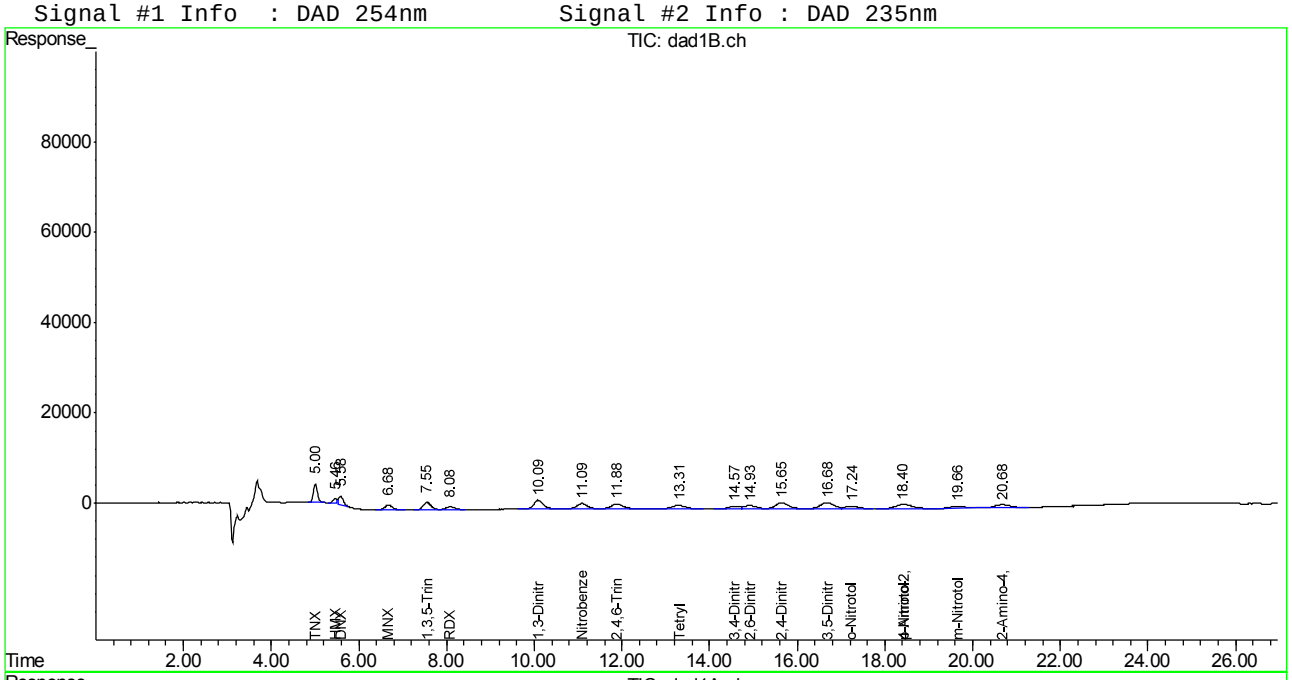
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 13:37:50 2017 Page 1

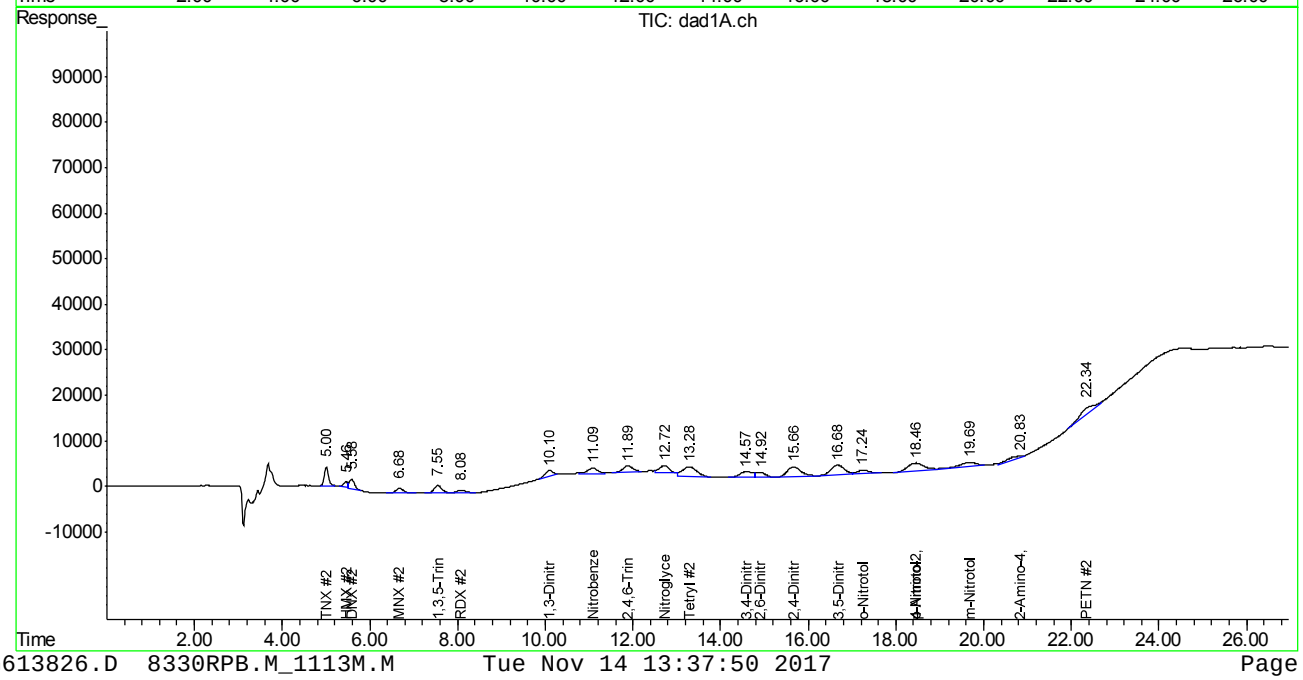
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:53 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

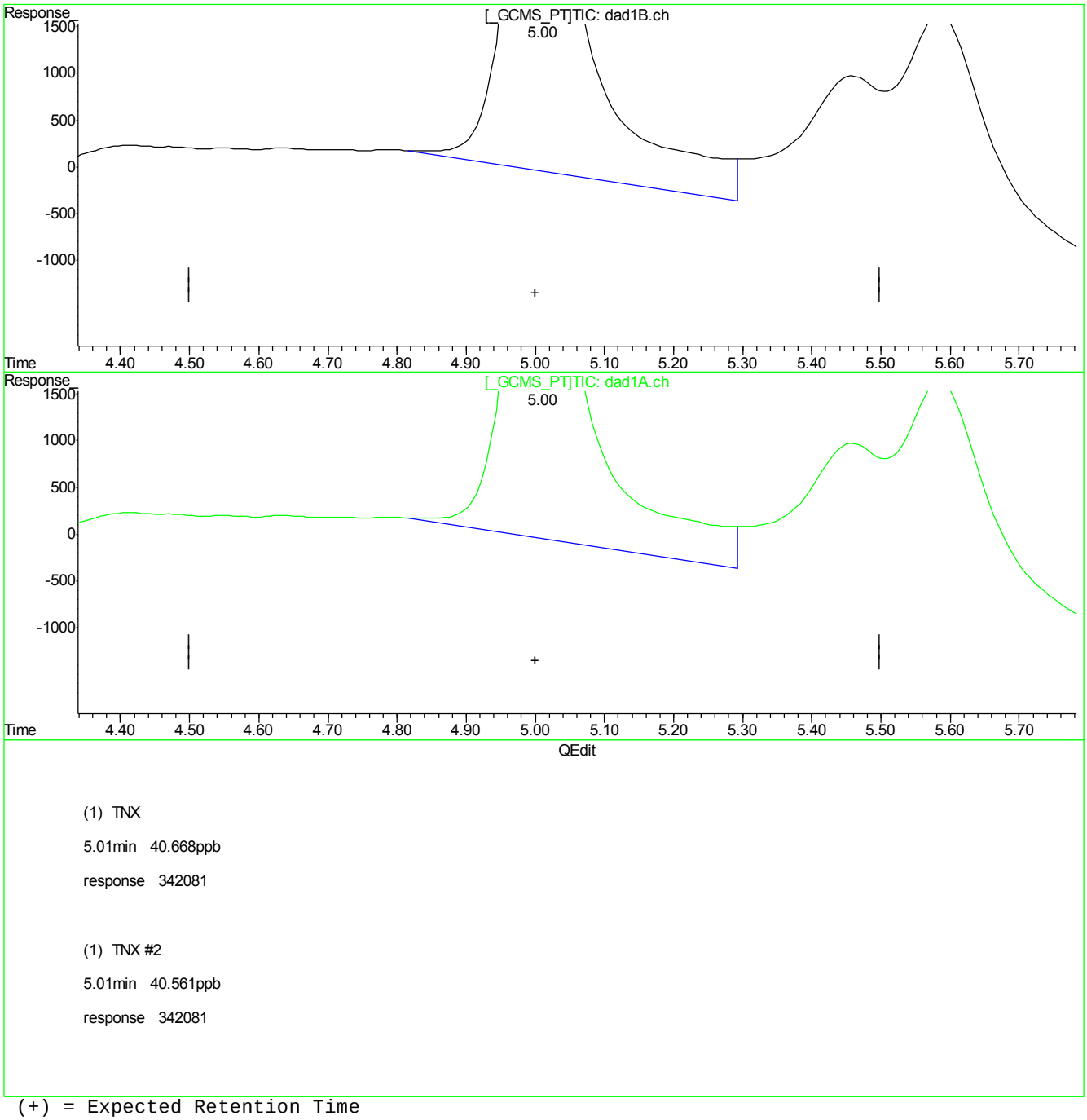
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613826.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 13:36	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.58	Poorly defined baseline
DNX		2	5.58	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.10	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.09	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.89	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.72	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.46	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.46	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.83	Poorly defined baseline
PETN	78-11-5	2	22.34	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(1) TNX

5.01min 40.668ppb

response 342081

(1) TNX #2

5.01min 40.561ppb

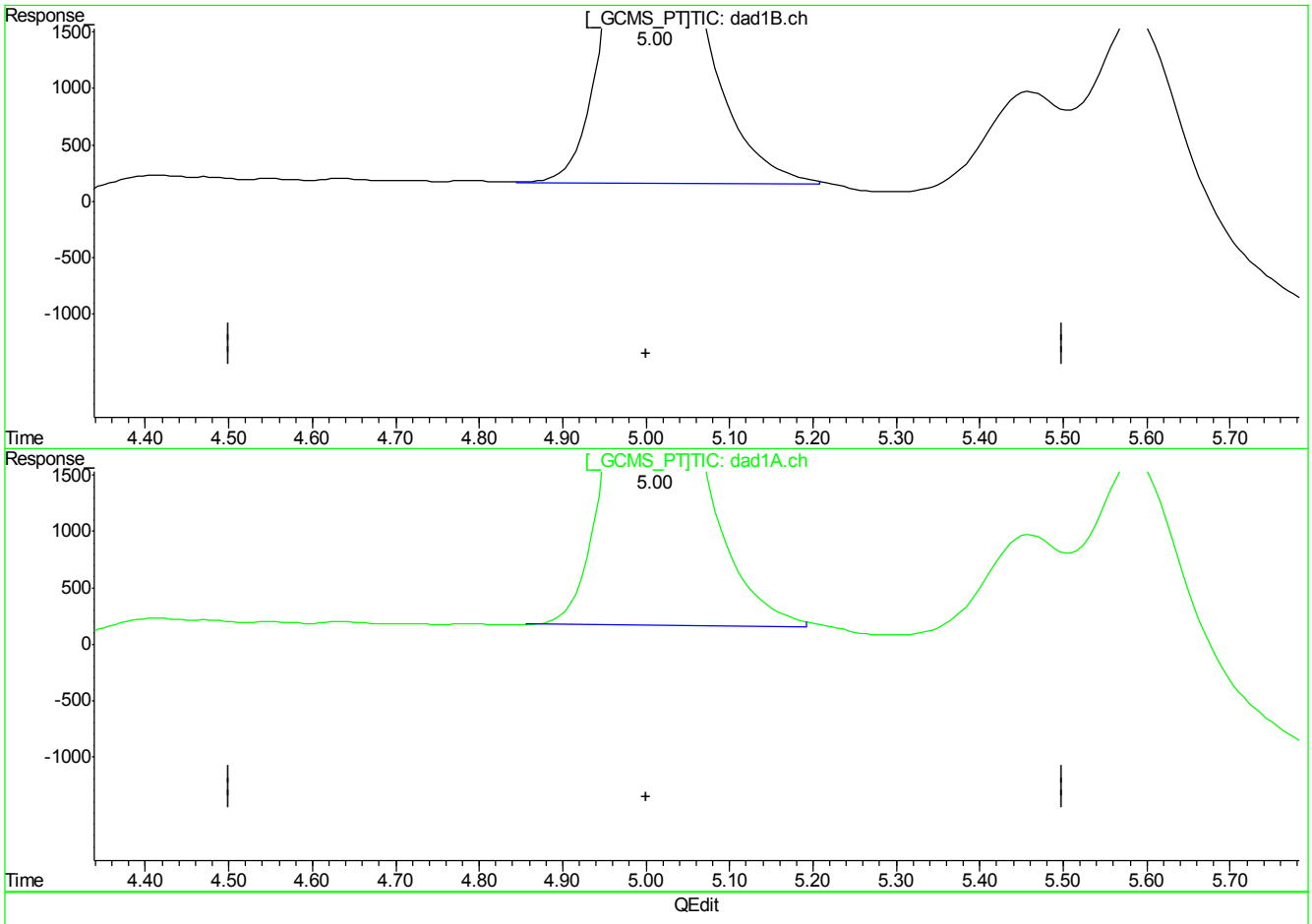
response 342081

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:24 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



QEdit

(1) TNX

5.00min 32.146ppb m

response 270396

(1) TNX #2

5.00min 31.846ppb m

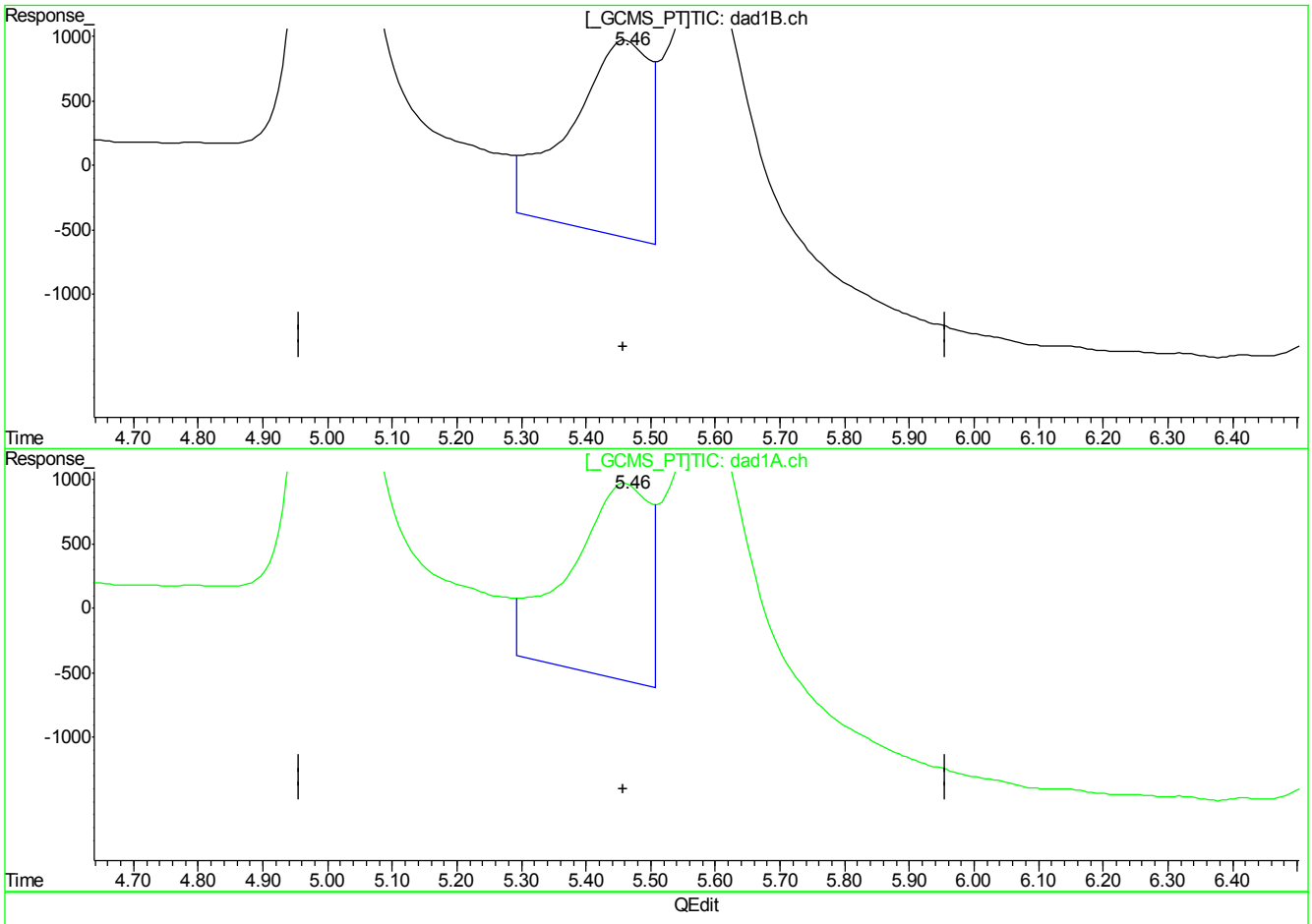
response 268585

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:29 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 33.683ppb

response 127943

(2) HMX #2

5.46min 33.445ppb

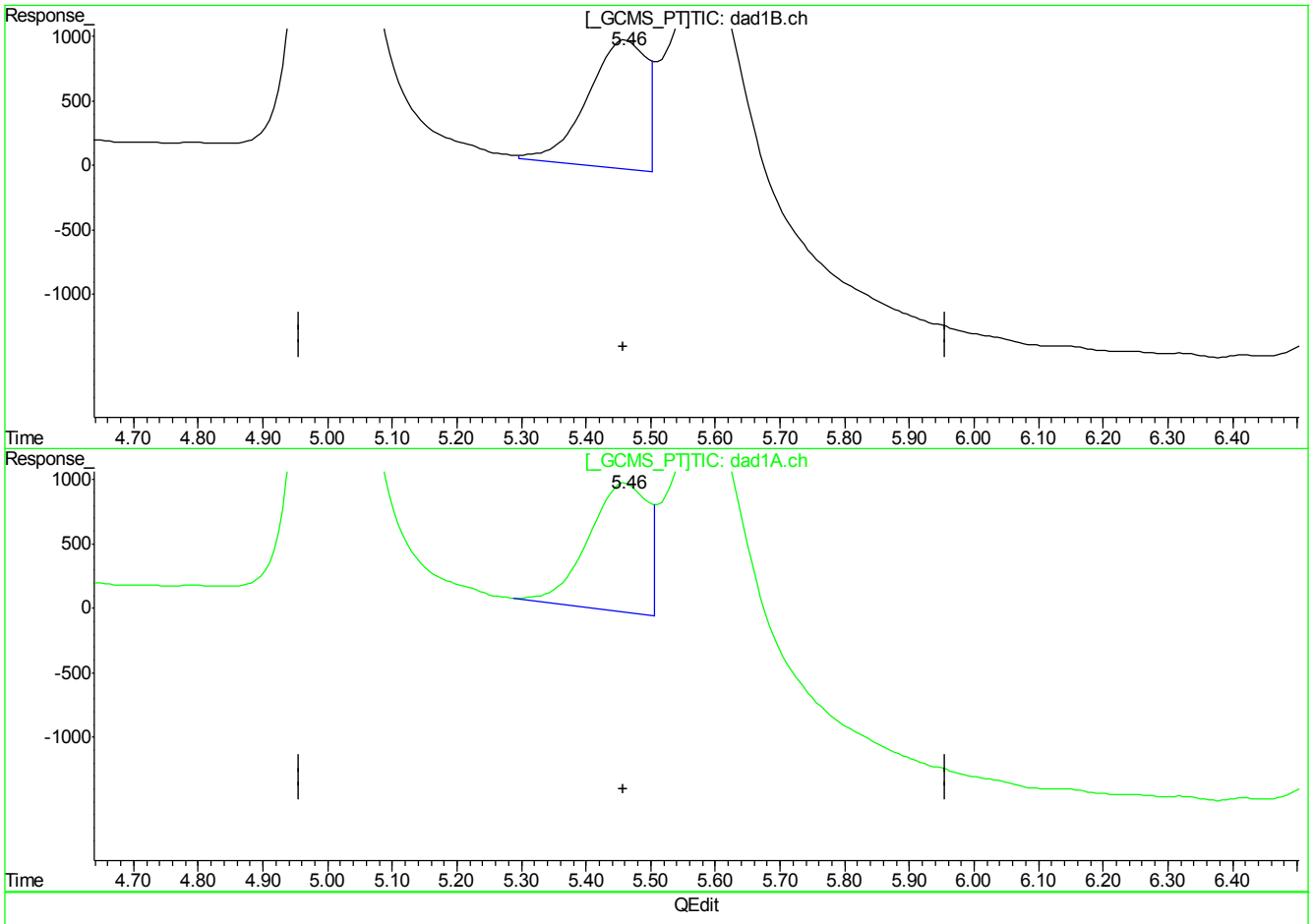
response 127943

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 16.096ppb m

response 61139

(2) HMX #2

5.46min 17.142ppb m

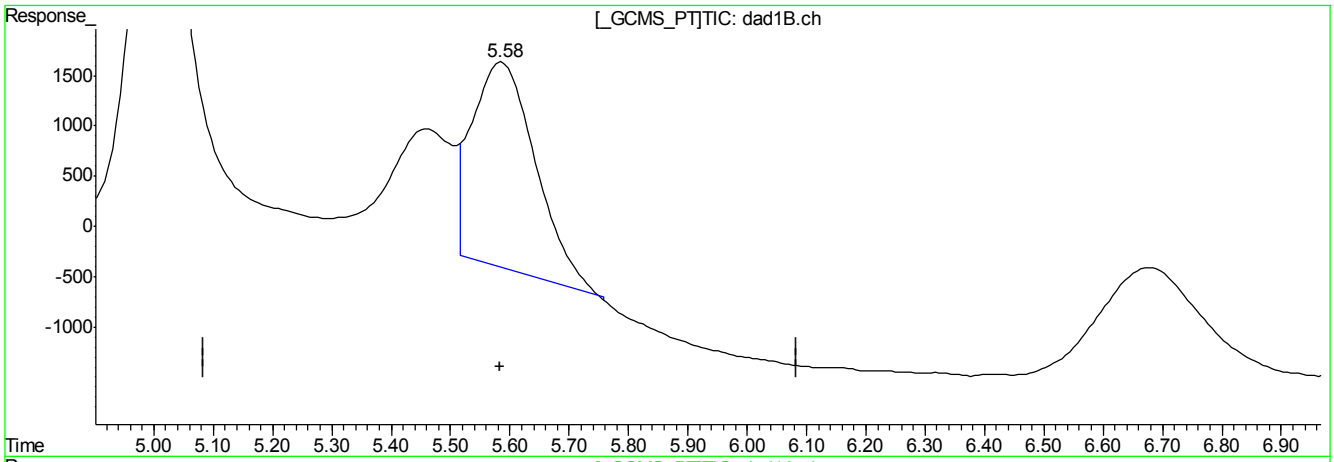
response 65579

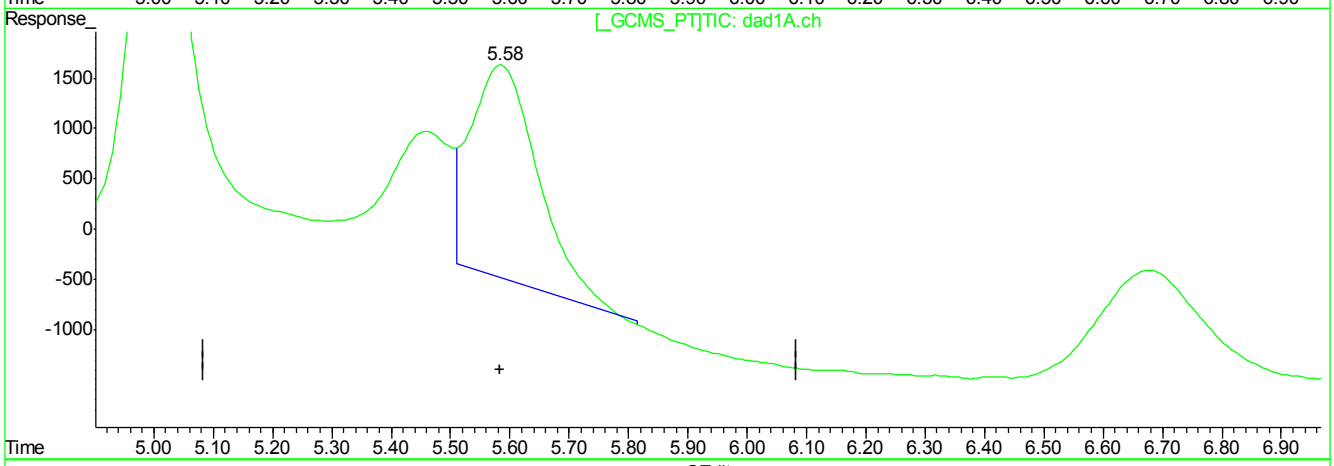
(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:39 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.58min 23.094ppb m

response 151583

(3) DNX #2

5.58min 25.858ppb m

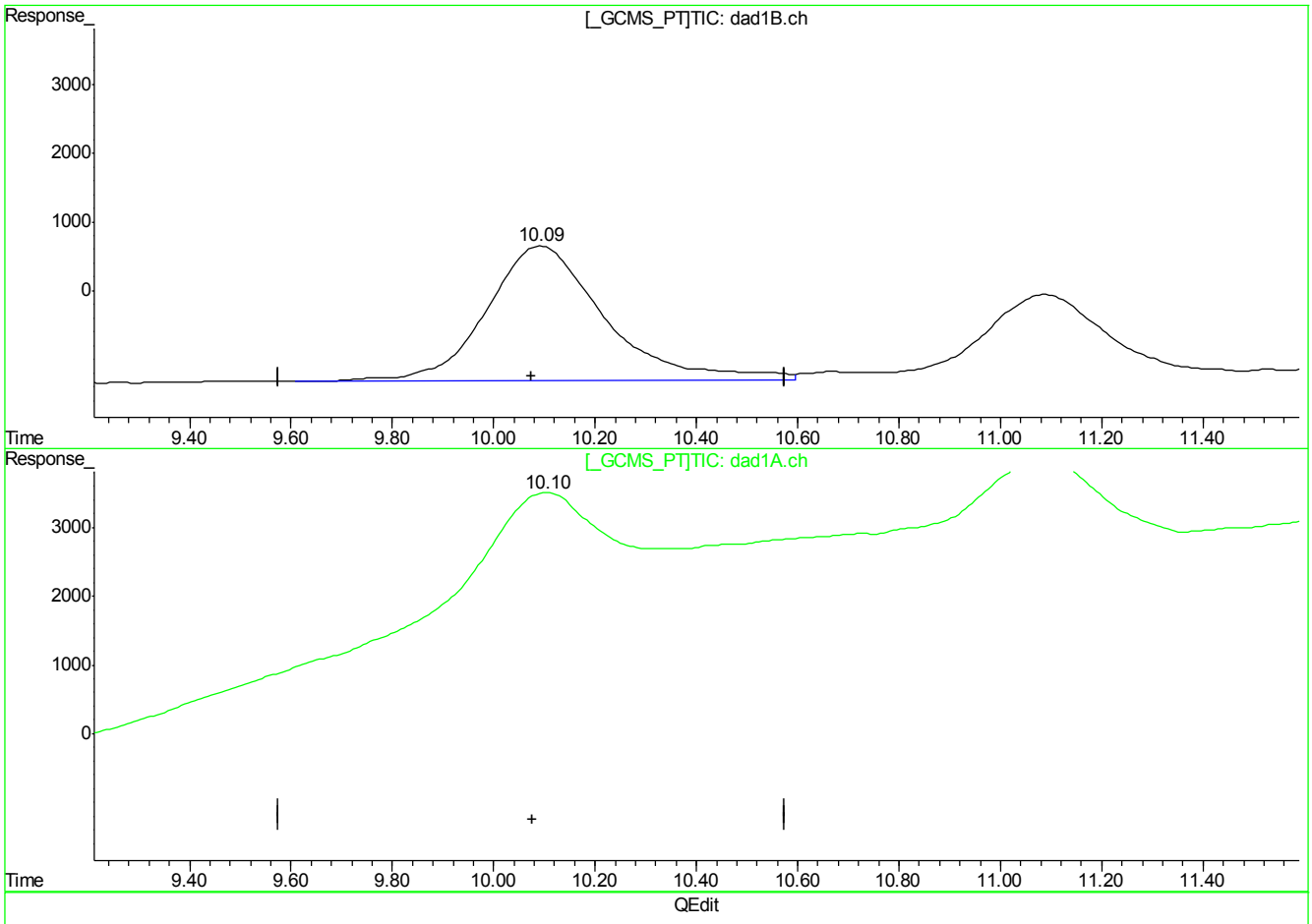
response 169136

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.11min 117.682ppb

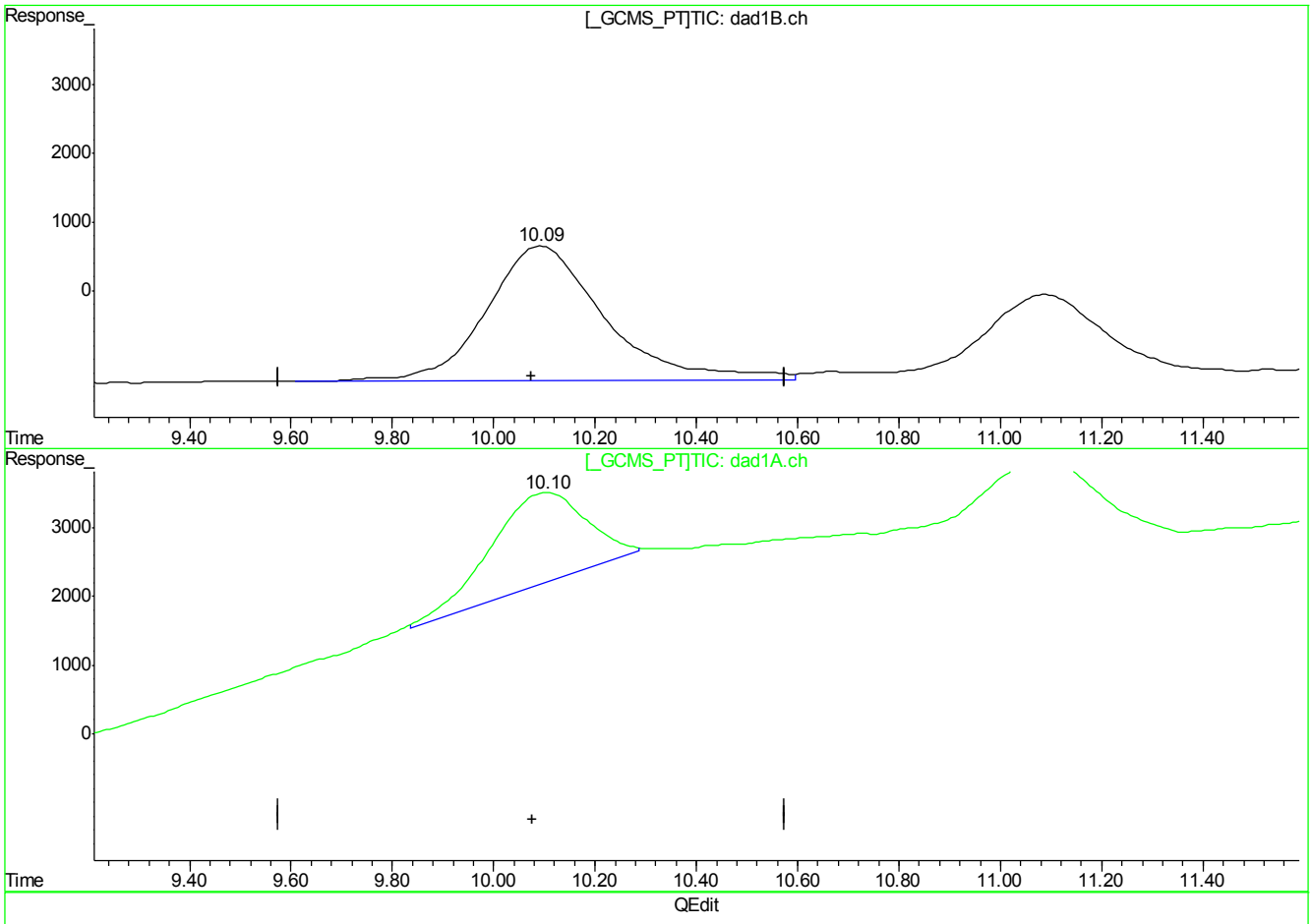
response 1660323

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:01 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.10min 12.357ppb m

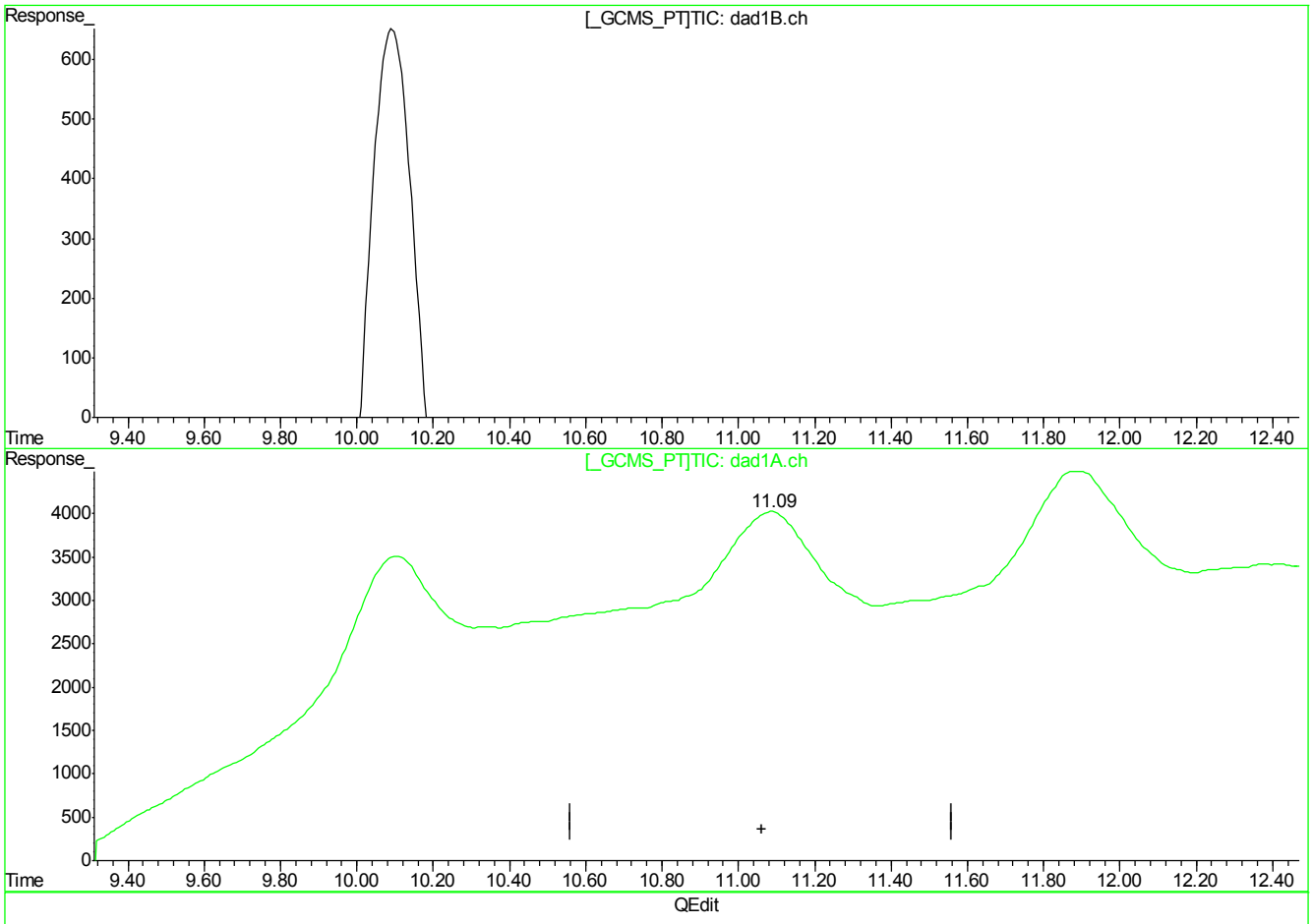
response 176008

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 206.853ppb

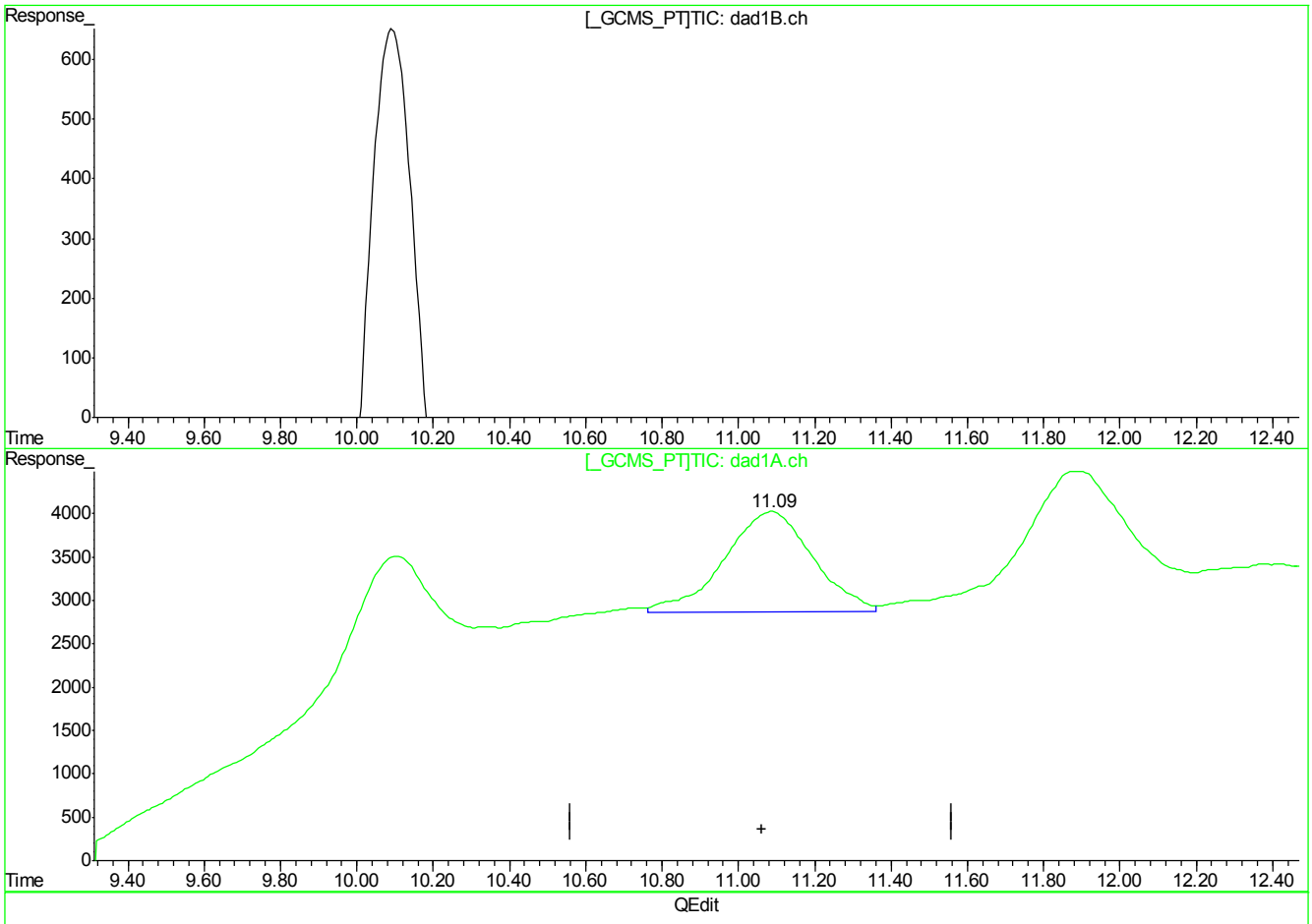
response 1961183

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 19.401ppb m

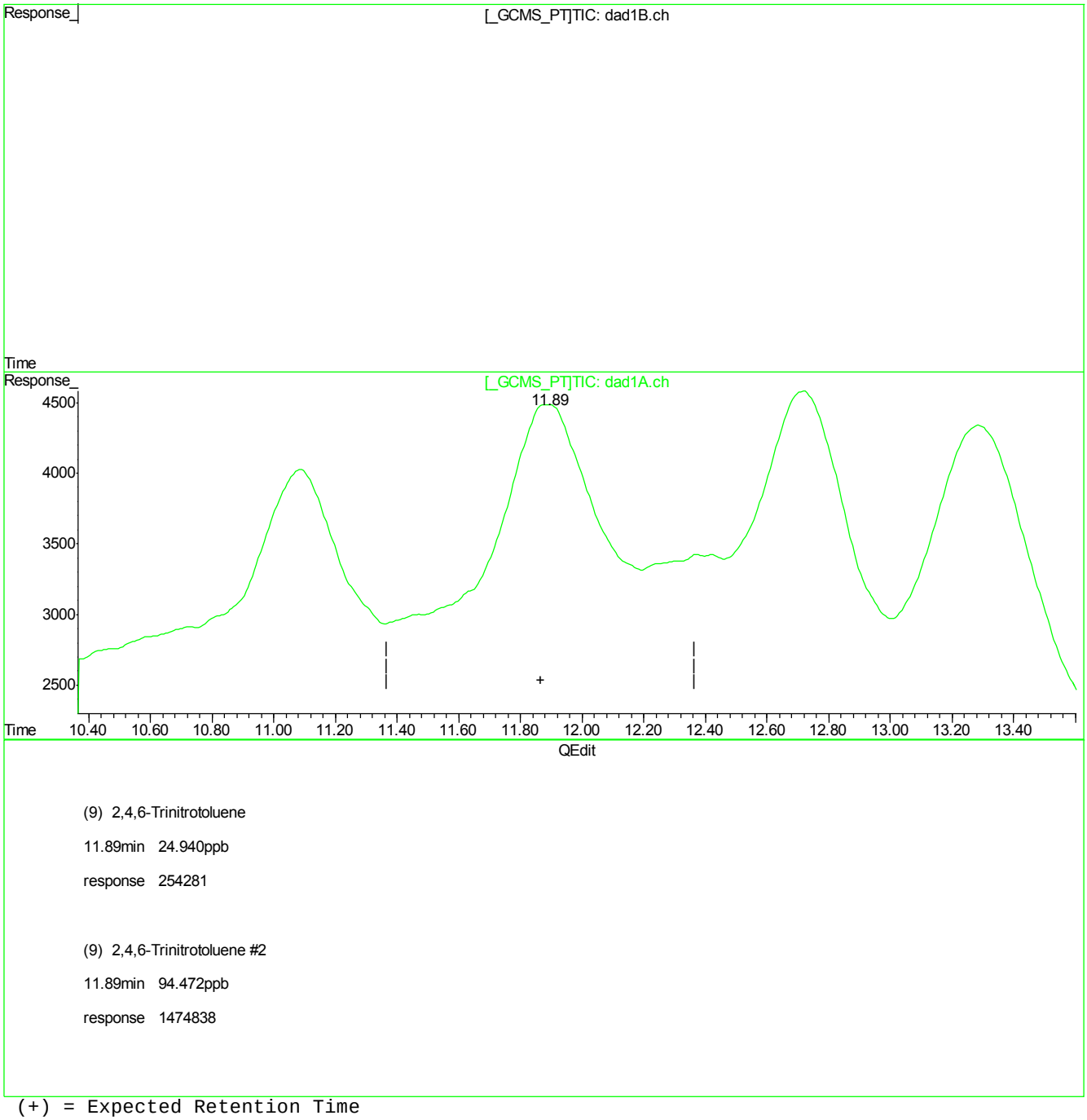
response 184835

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:15 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 94.472ppb

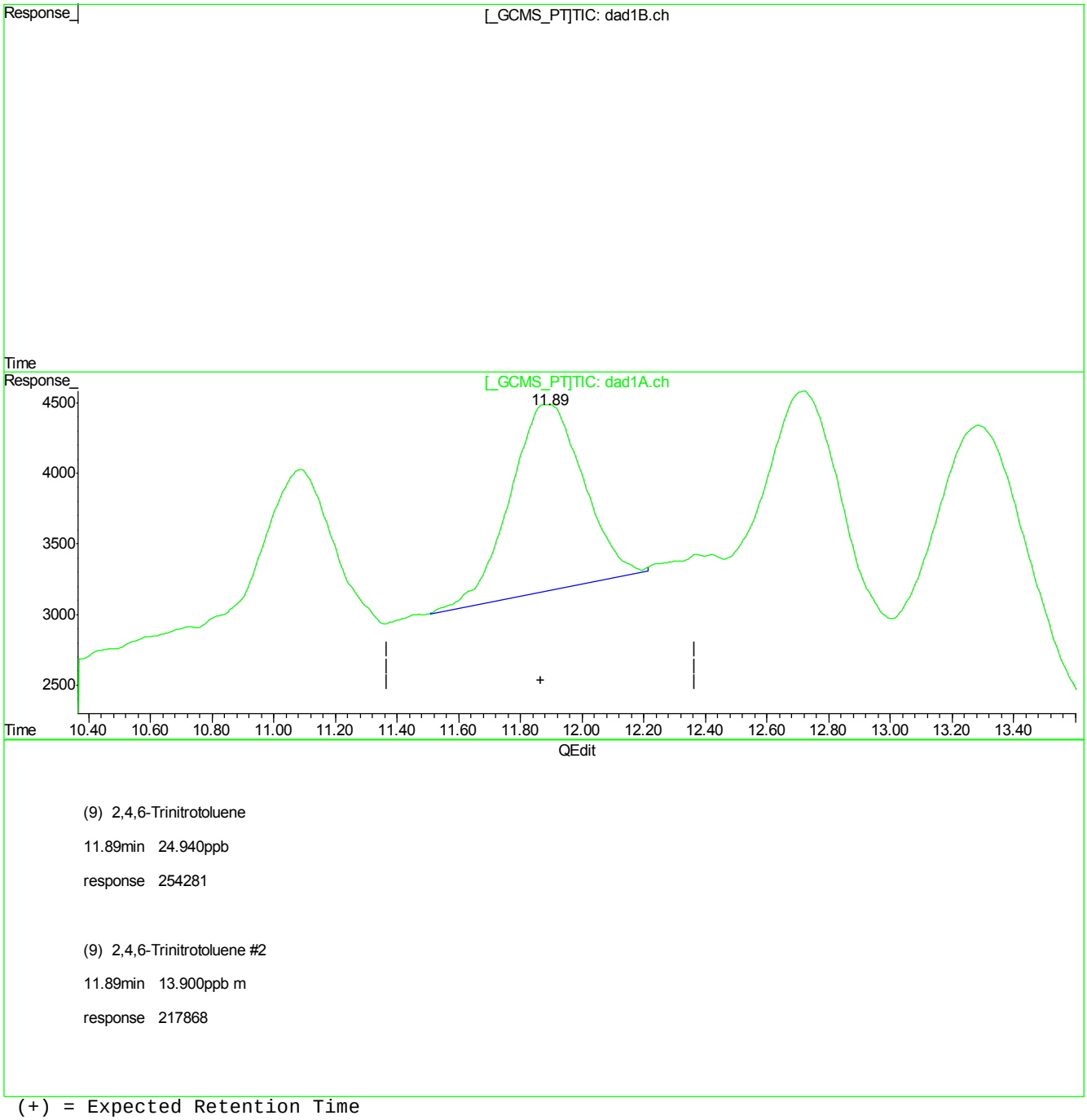
response 1474838

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:19 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 13.900ppb m

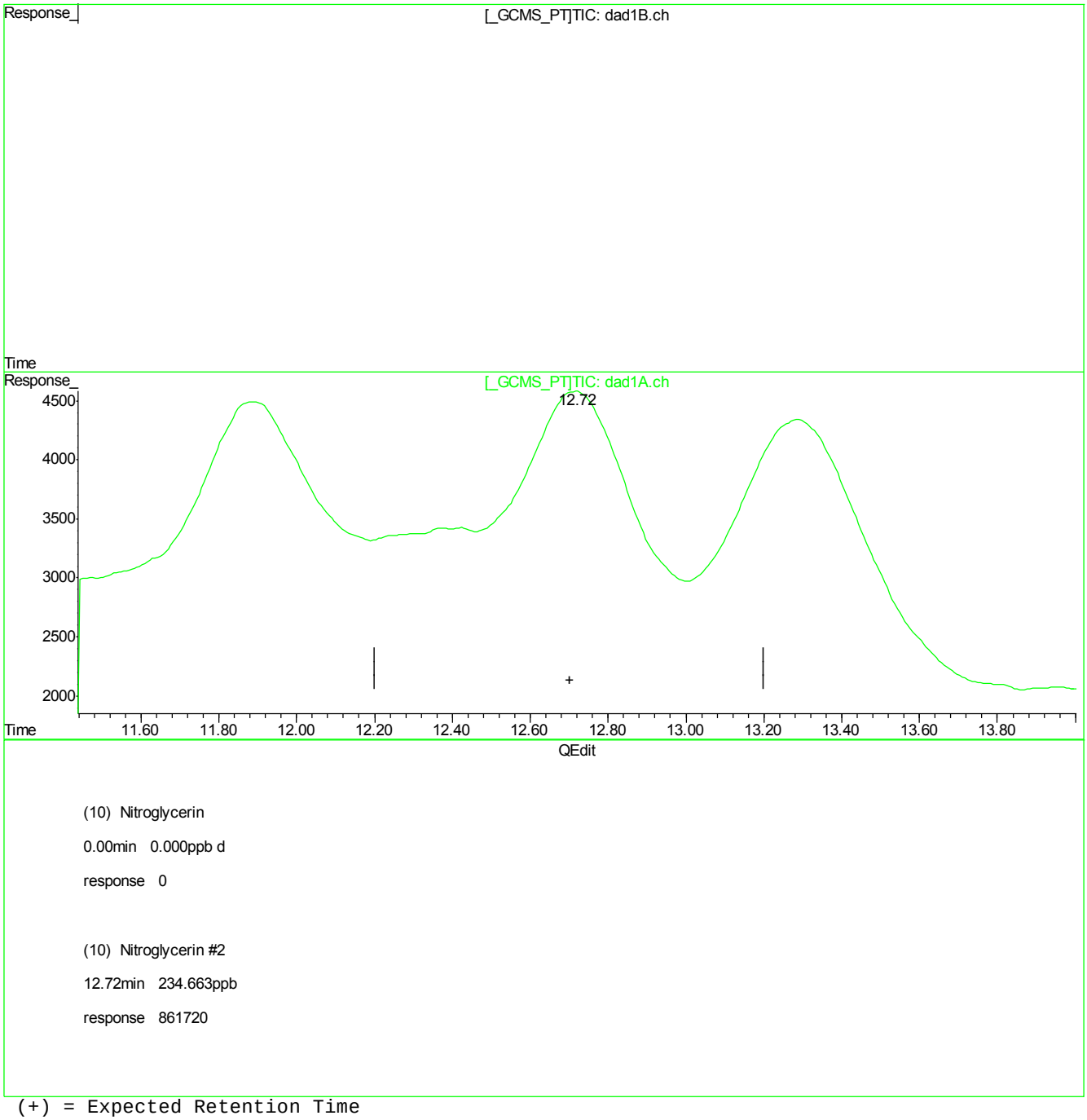
response 217868

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 234.663ppb

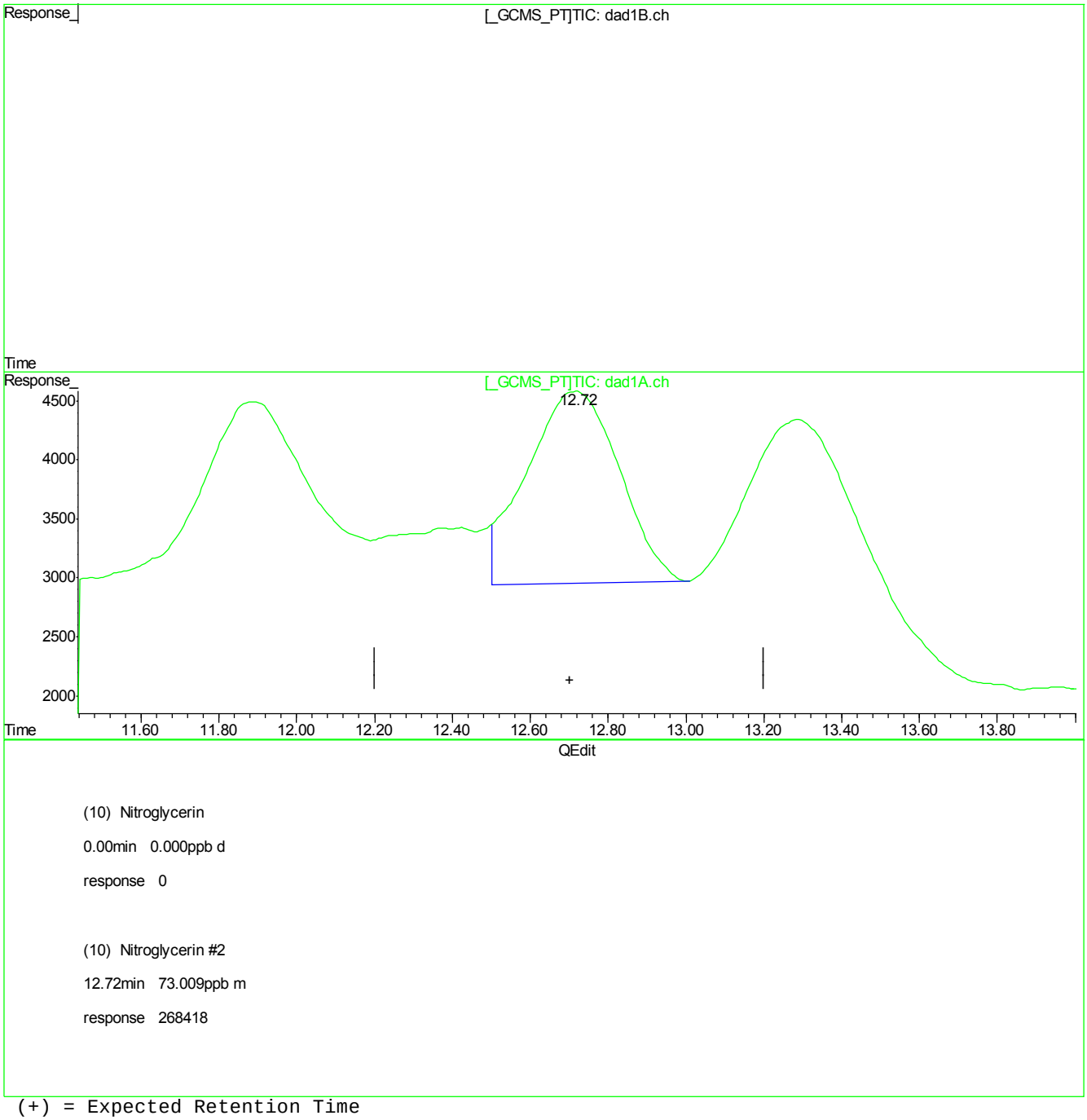
response 861720

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 73.009ppb m

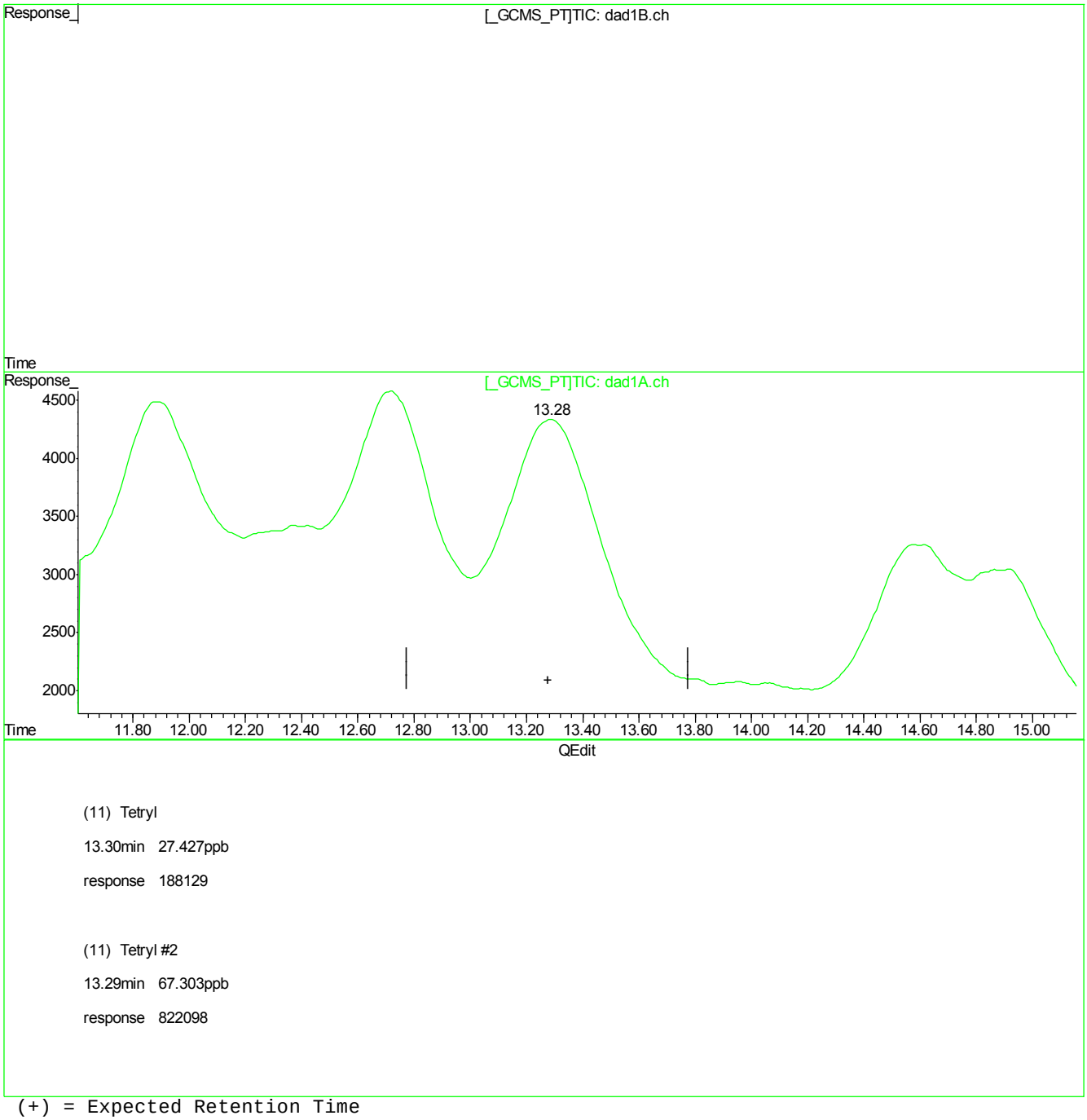
response 268418

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:31 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.30min 27.427ppb

response 188129

(11) Tetryl #2

13.29min 67.303ppb

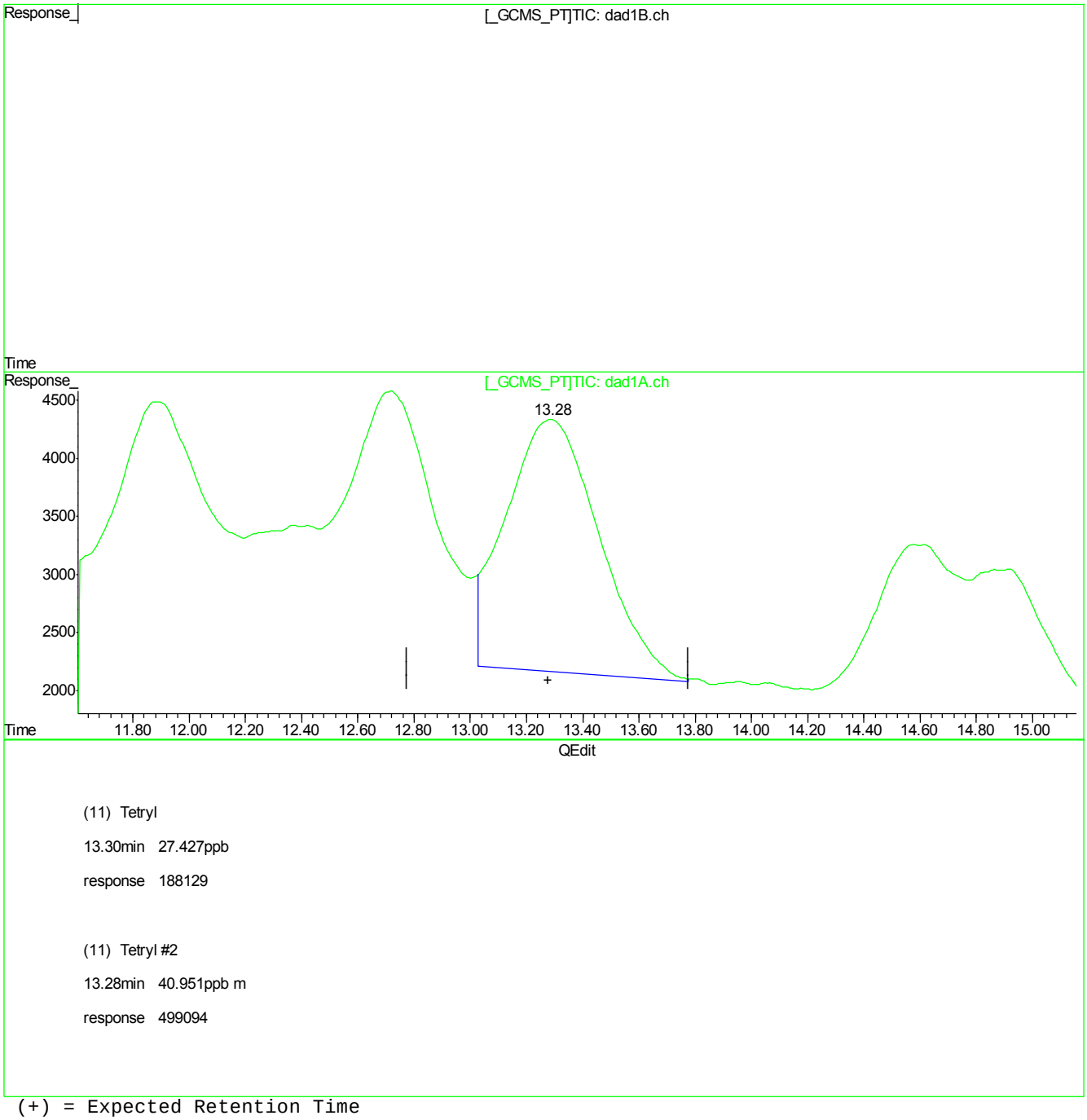
response 822098

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

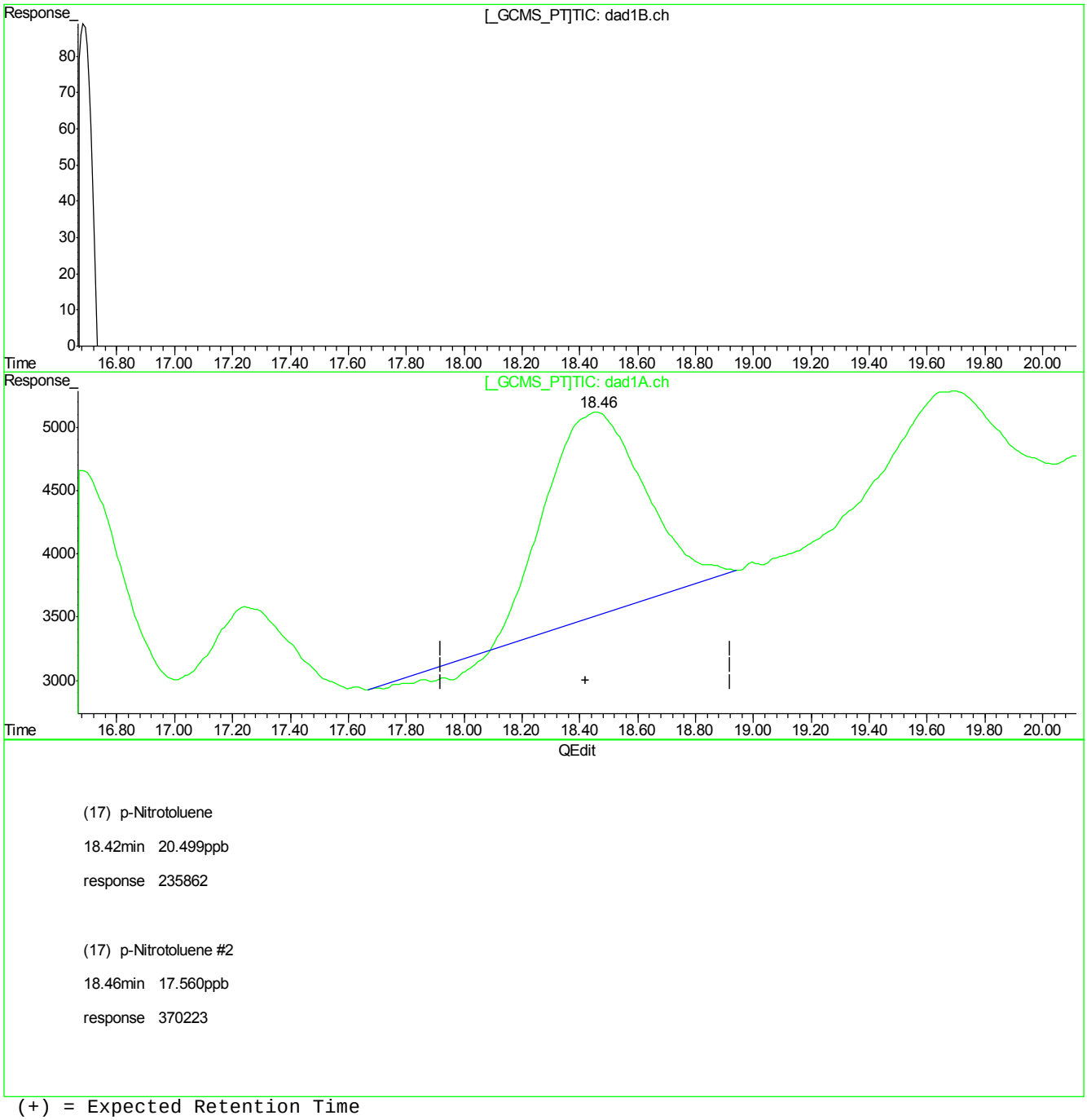


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:52:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 17.560ppb

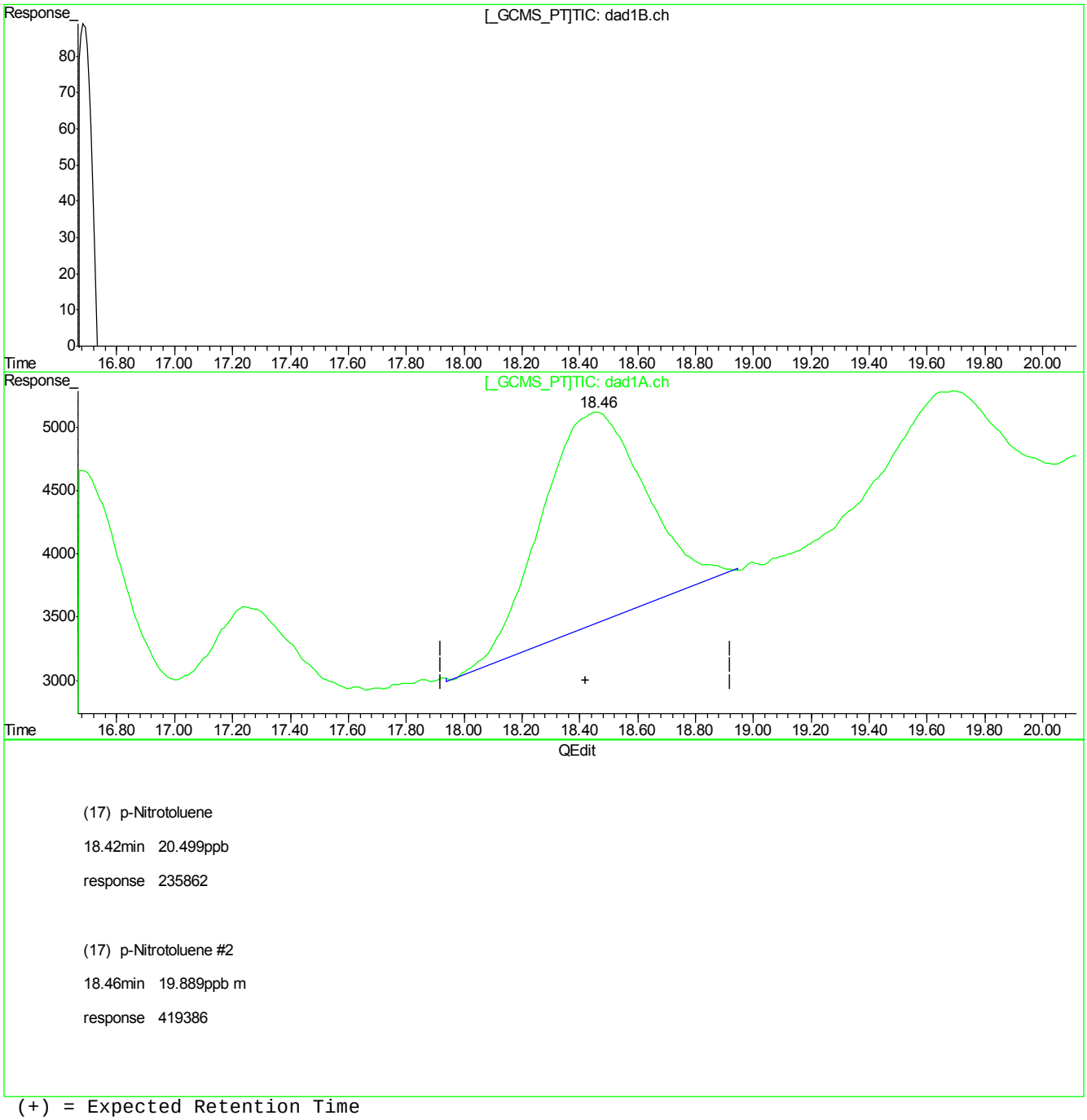
response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:26 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 19.889ppb m

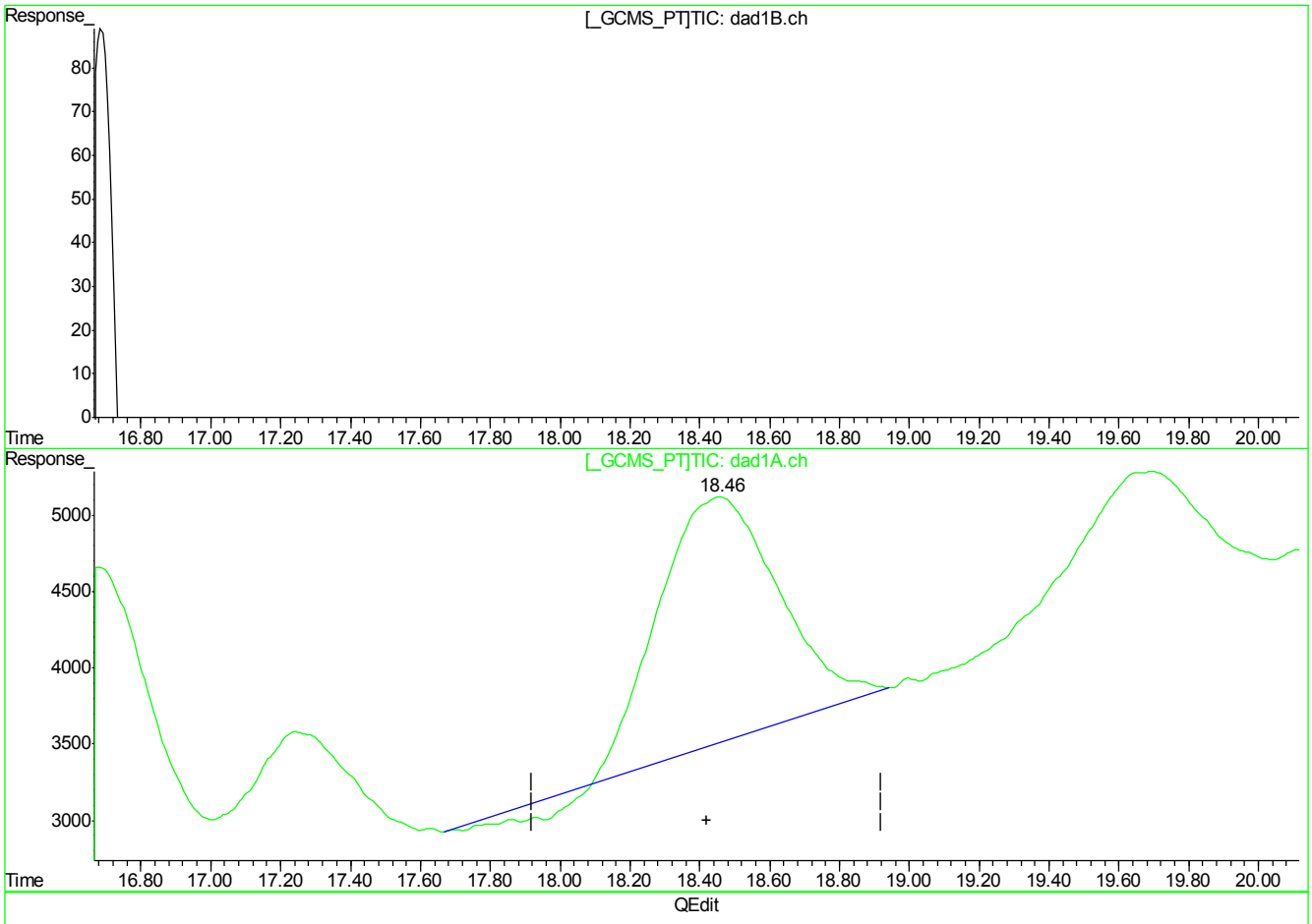
response 419386

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:29 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 17.560ppb

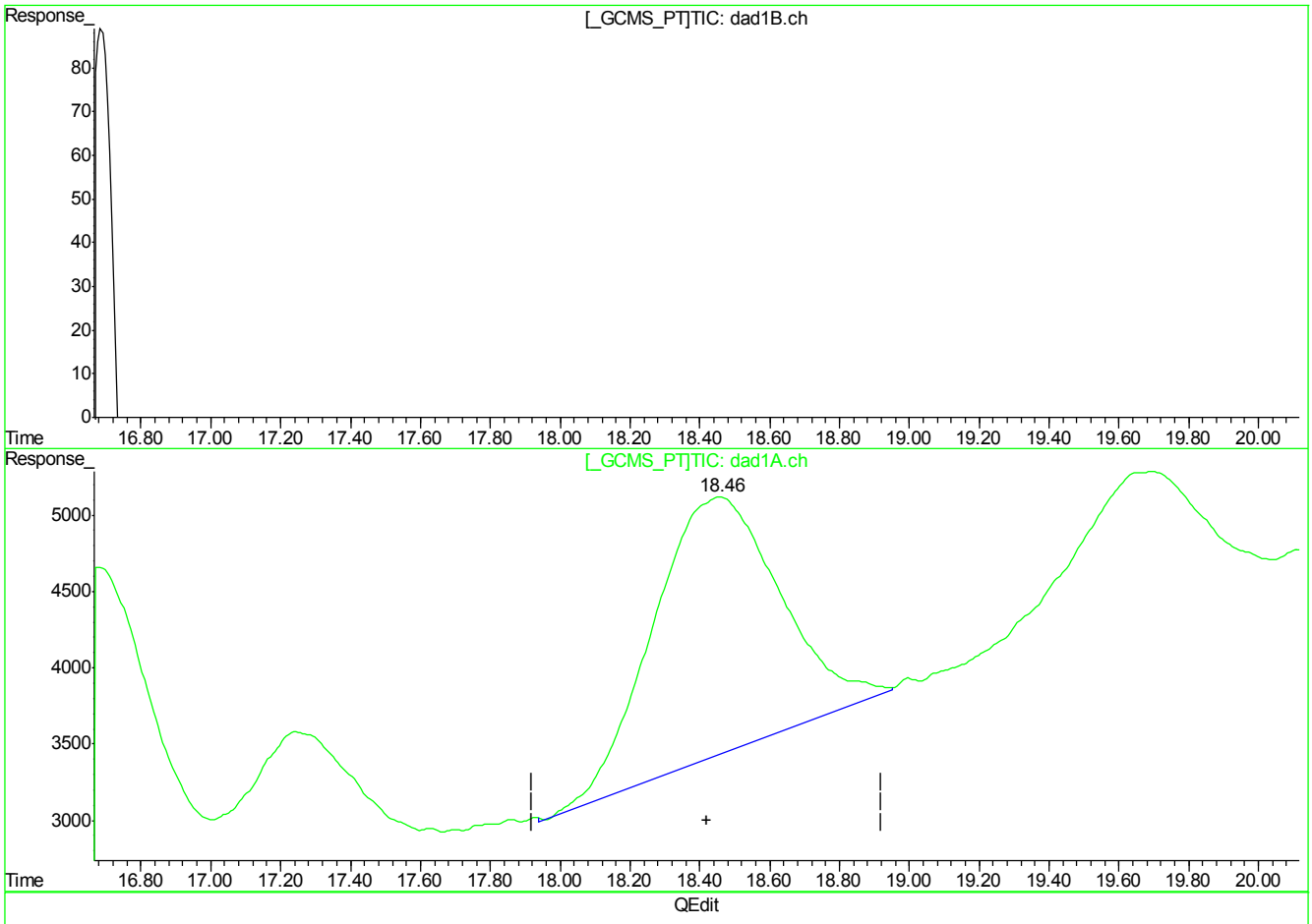
response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:32 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 20.299ppb m

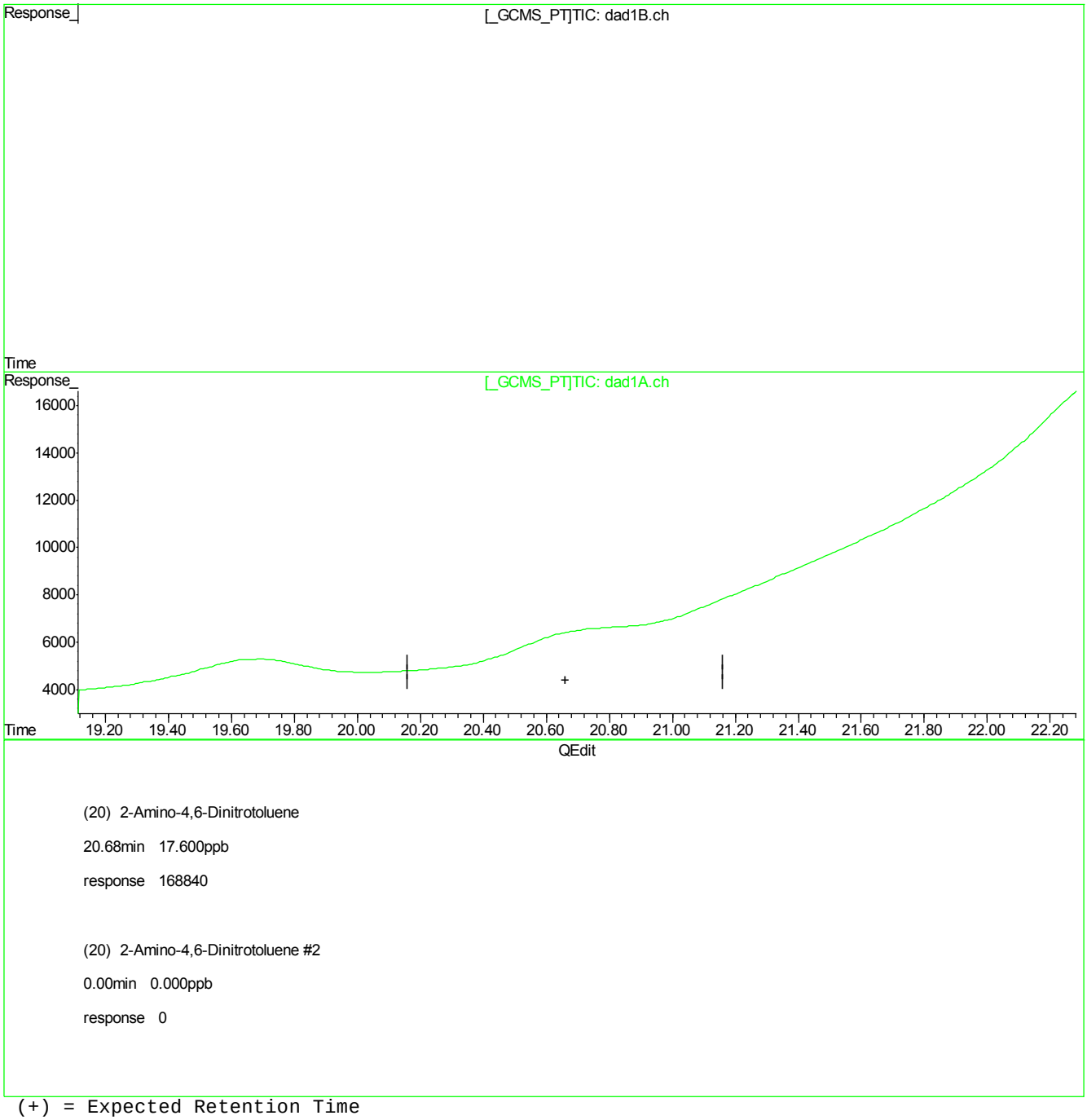
response 428039

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

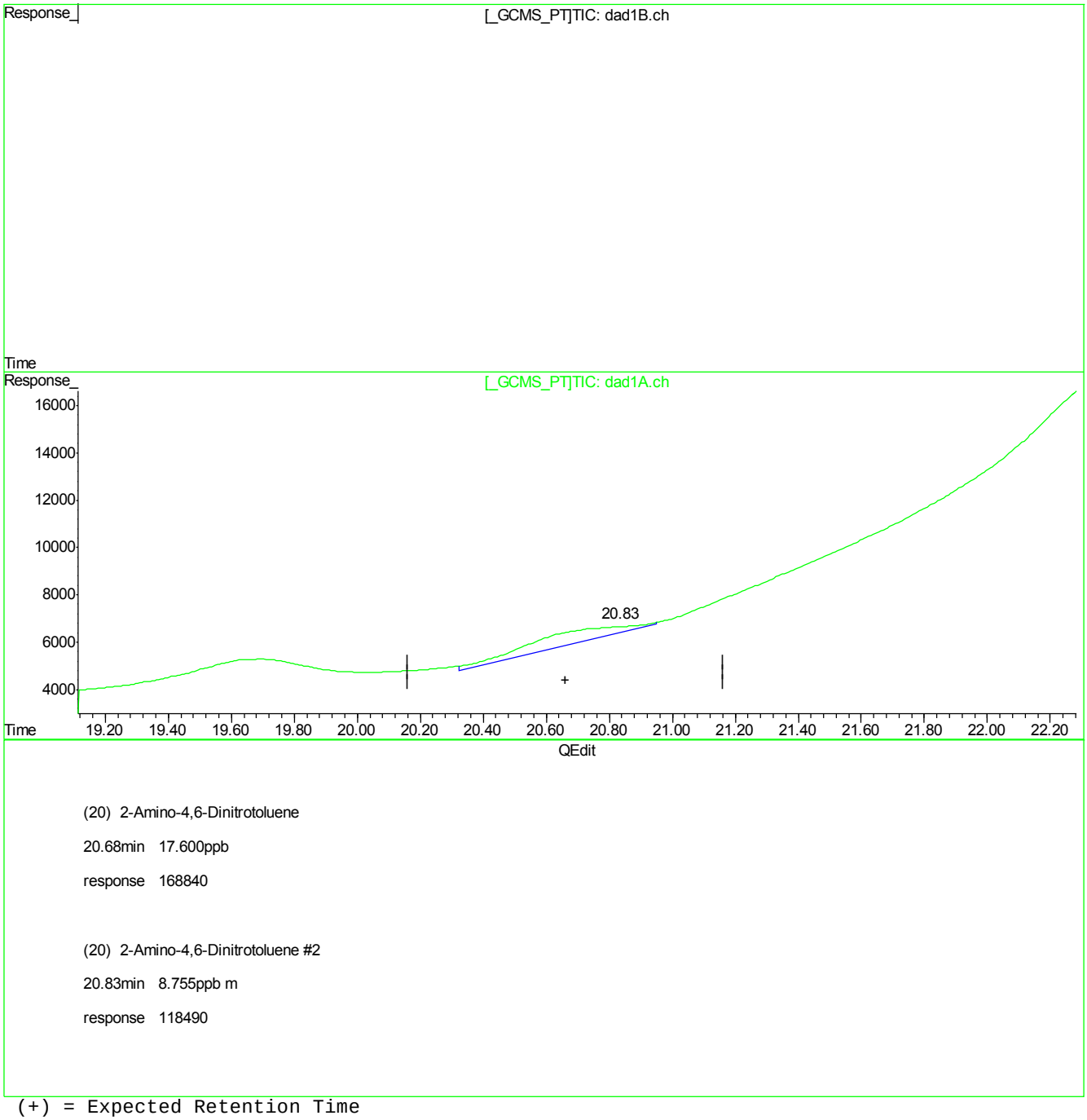


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.68min 17.600ppb

response 168840

(20) 2-Amino-4,6-Dinitrotoluene #2

20.83min 8.755ppb m

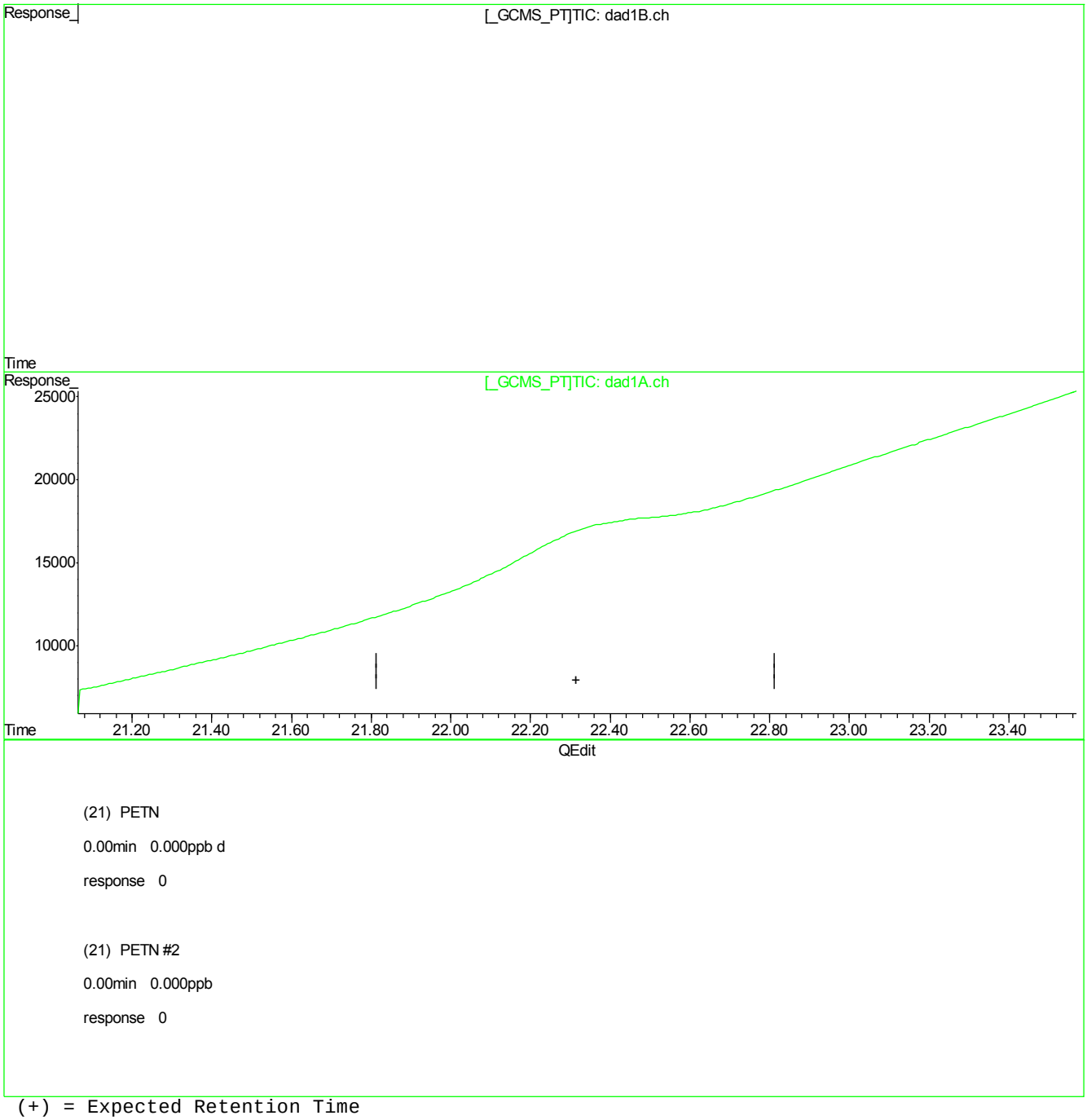
response 118490

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

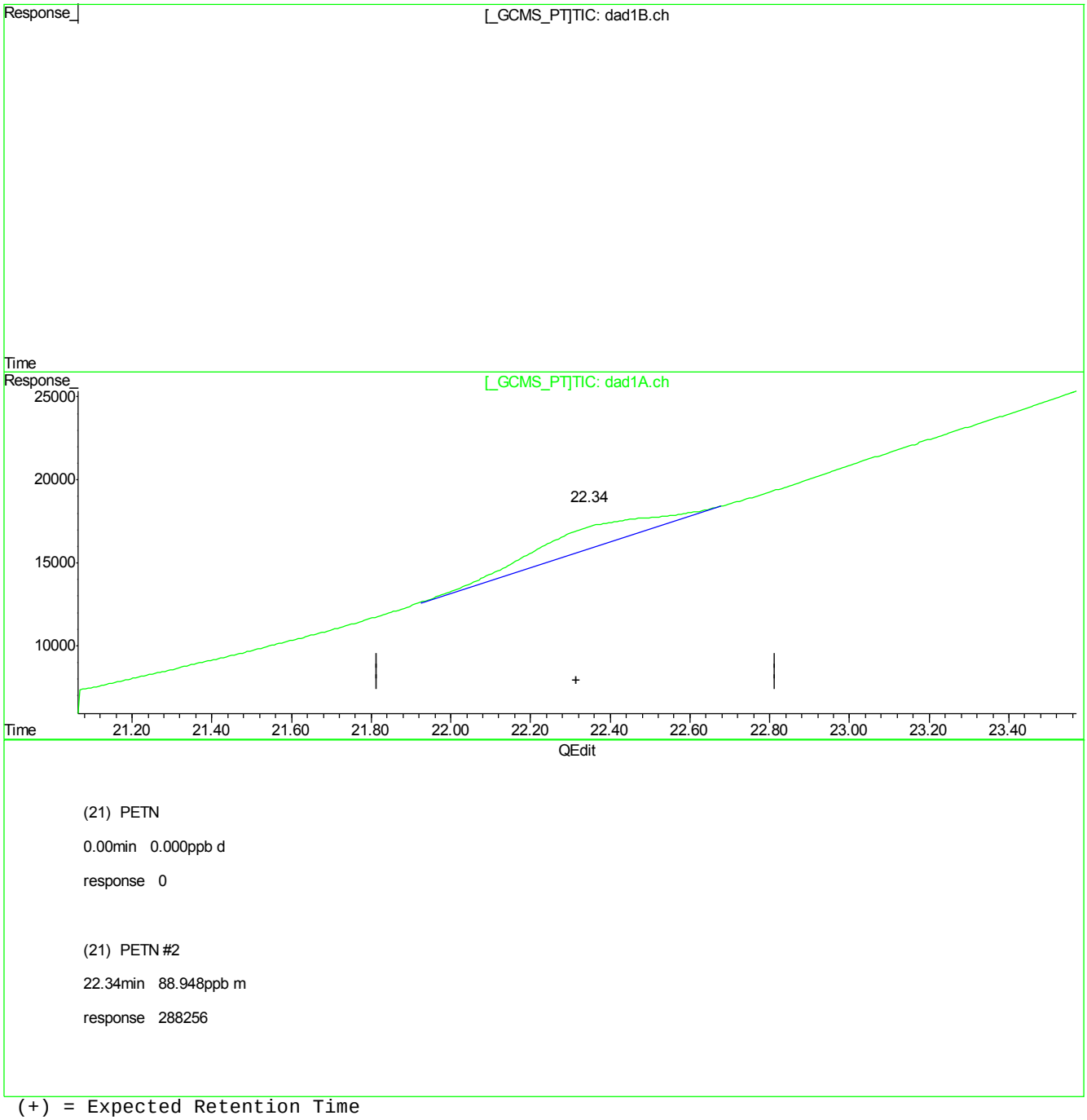


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:59 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.58	258823	507389	43.903	40.501m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		8.78%#	8.10%#
	Target Compounds						
1)	TNX	5.00	5.00	688634	692781	81.868m	82.143m
2)	HMX	5.46	5.46	164910	146764	43.415m	38.364m
3)	DNX	5.59	5.59	398344	366564	60.688m	56.040m
4)	MNX	6.67	6.67	346845	346845	71.694	71.694
5)	1,3,5-Trinitrobe	7.55	7.55	515904	514795	50.524	50.436
6)	RDX	8.08	8.08	237032	233498	49.790	49.276
7)	1,3-Dinitrobenze	10.08	10.08	693606	431067	47.654	30.312m
8)	Nitrobenzene	11.08	11.08	439122	444089	57.443	46.645m
9)	2,4,6-Trinitroto	11.88	11.87	493138	618562	48.367	39.514m
10)	Nitroglycerin	0.00	12.71	0	801043	N.D. d	218.113m
11)	Tetryl	13.28	13.27	407817	746662	59.454	61.159m
13)	2,6-Dinitrotolue	14.90	14.89	359440	552975	51.700	50.694m
14)	2,4-Dinitrotolue	15.63	15.65	660258	863855	49.688	86.988m#
15)	o-Nitrotoluene	17.23	17.24	284138	463485	67.838	81.127
16)	3,5-Dinitroanili	16.66	16.67	541983	858371	51.141	47.914
17)	p-Nitrotoluene	18.40	18.43	584278	976483	50.781	46.253
18)	4-Amino-2,6-Dini	18.40	18.43	584278	976483	50.781	46.253
19)	m-Nitrotoluene	19.66	19.66	285765	365933	58.777	38.687m
20)	2-Amino-4,6-Dini	20.66	20.66	440998	398969	45.970	29.479m
21)	PETN	0.00	22.39	0	664952	N.D. d	205.186m

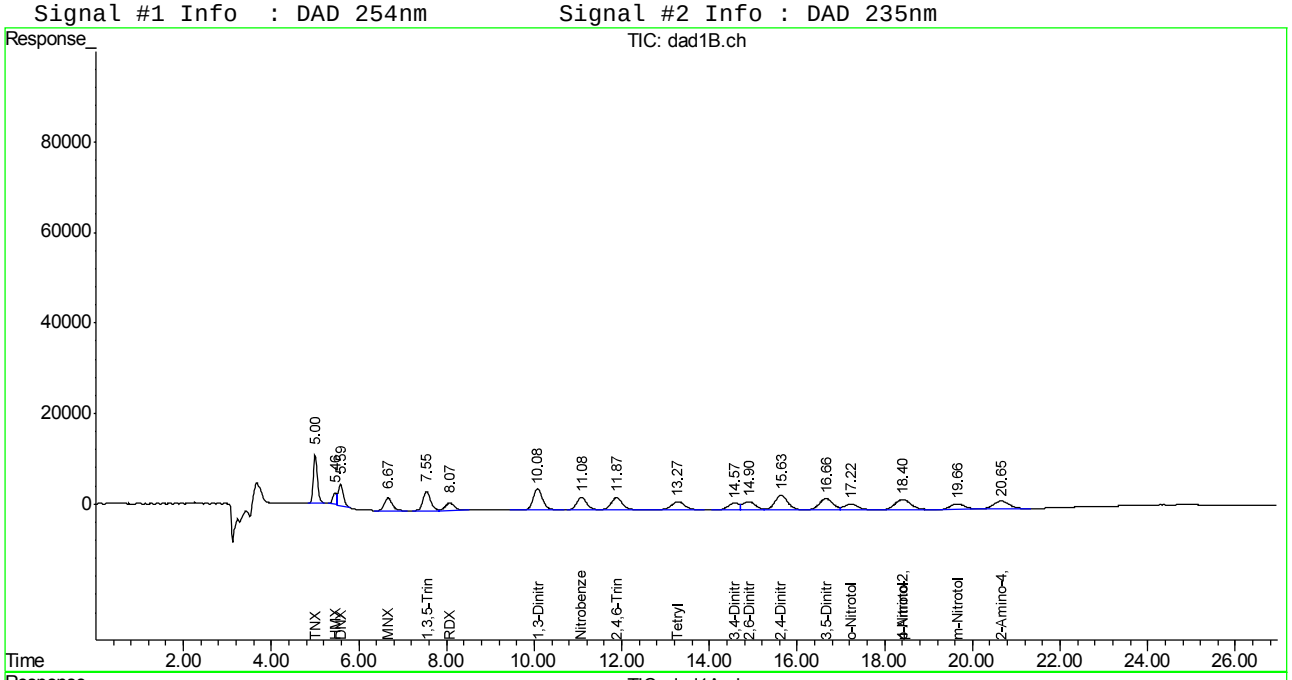
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 13:37:51 2017 Page 1

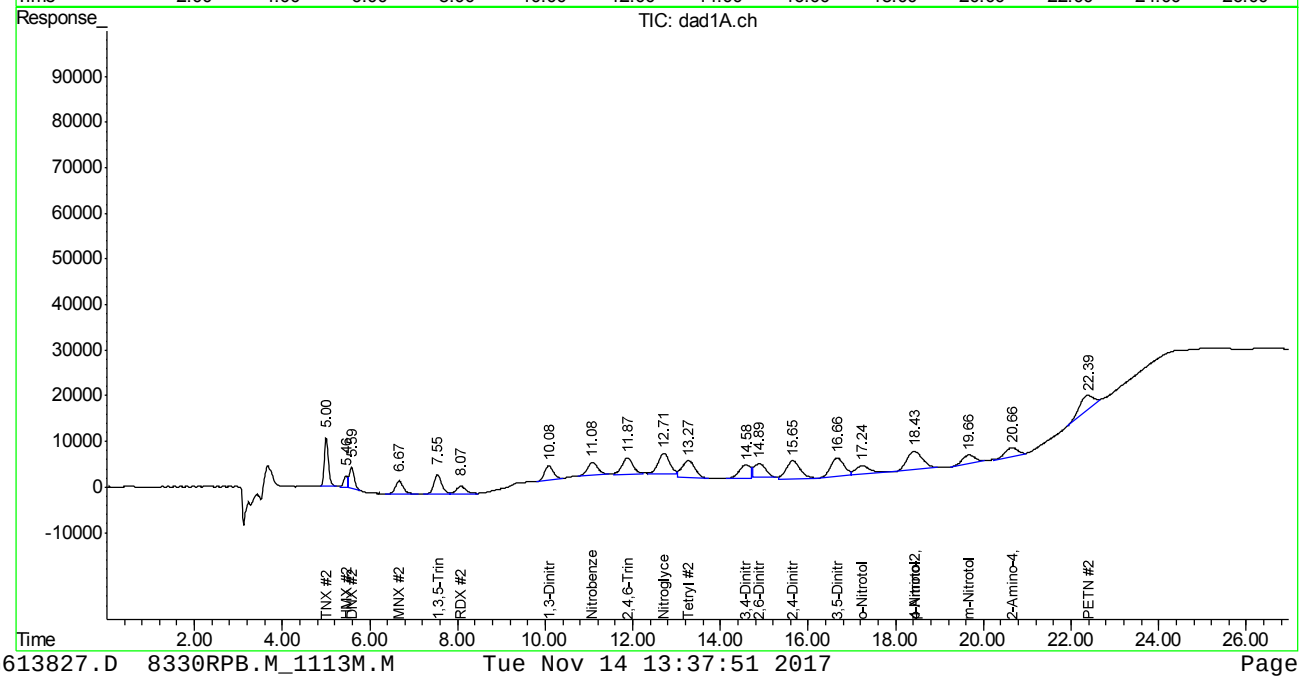
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:56 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

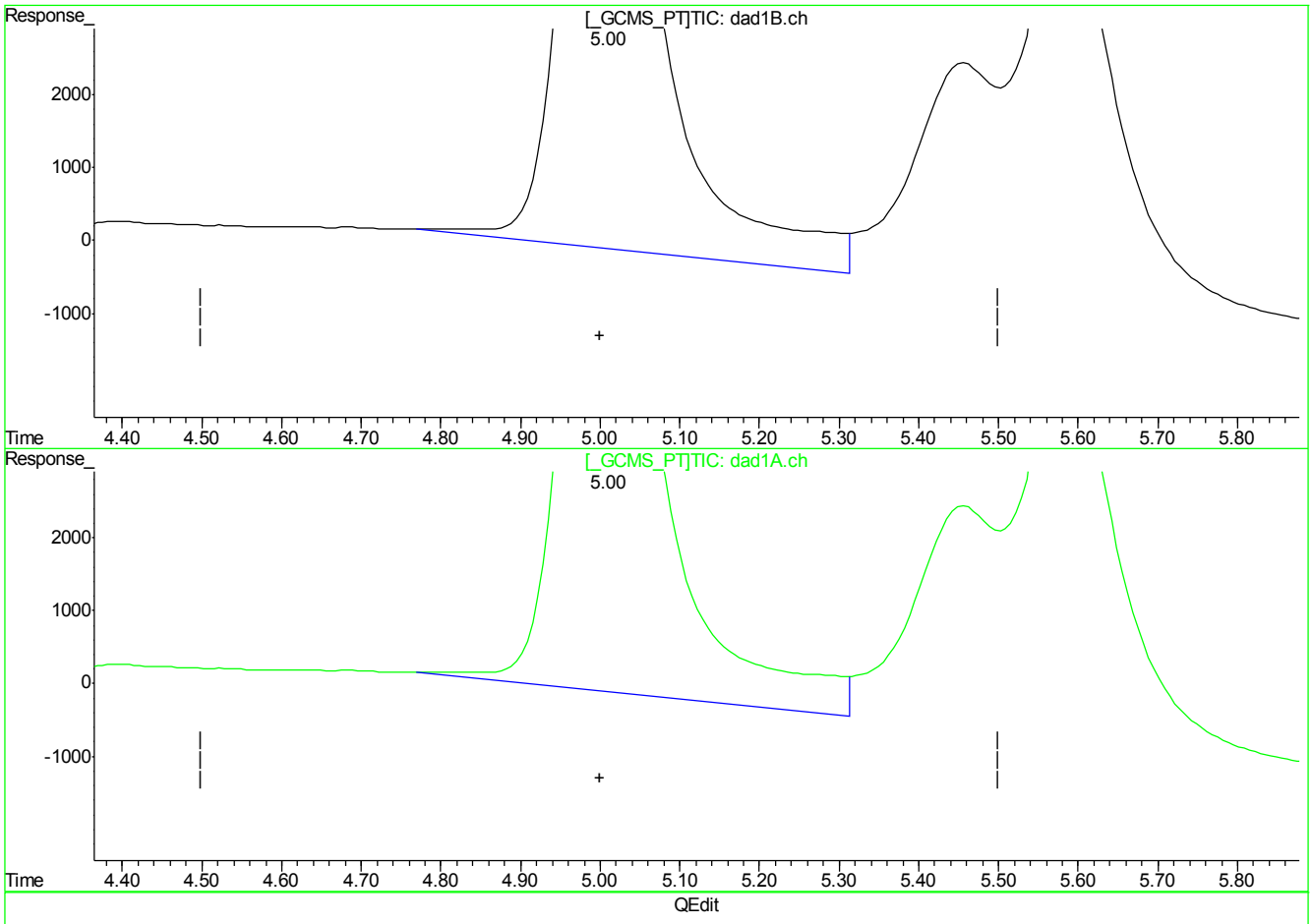
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613827.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:05	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.59	Poorly defined baseline
DNX		2	5.59	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.58	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.65	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.66	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.66	Poorly defined baseline
PETN	78-11-5	2	22.39	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.01min 93.407ppb

response 785694

(1) TNX #2

5.01min 93.160ppb

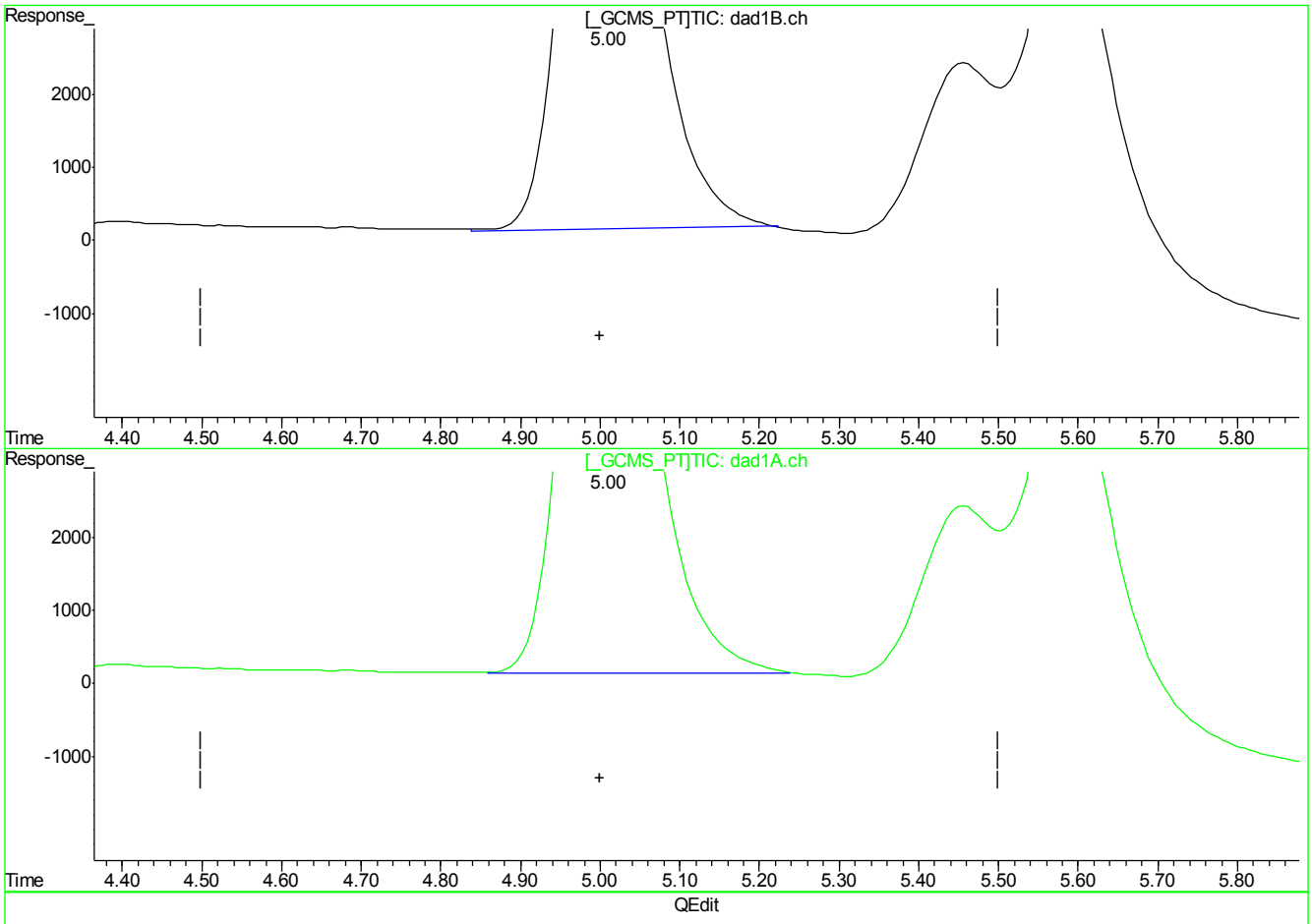
response 785694

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.00min 81.868ppb m

response 688634

(1) TNX #2

5.00min 82.143ppb m

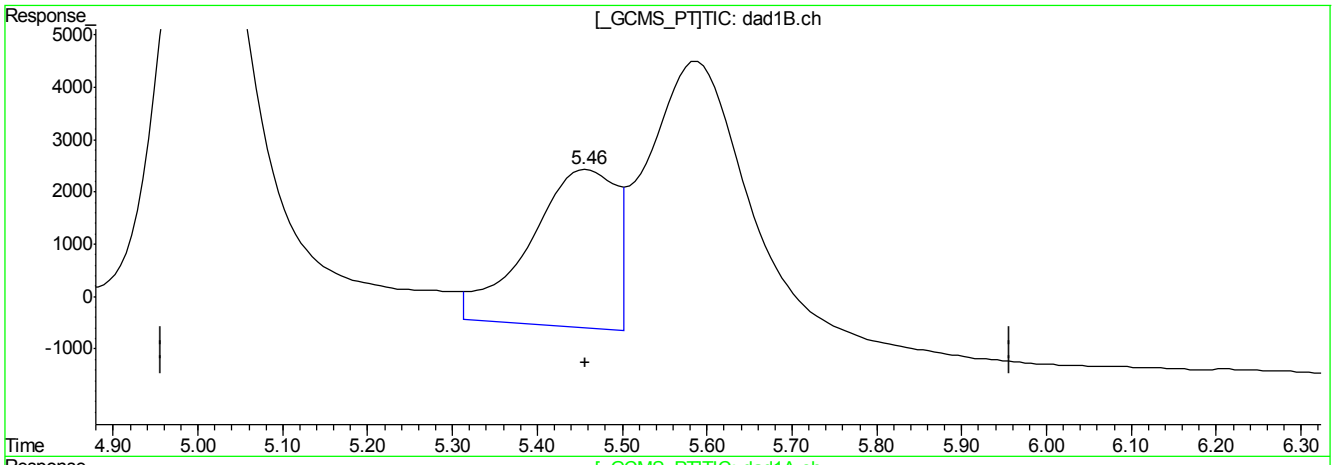
response 692781

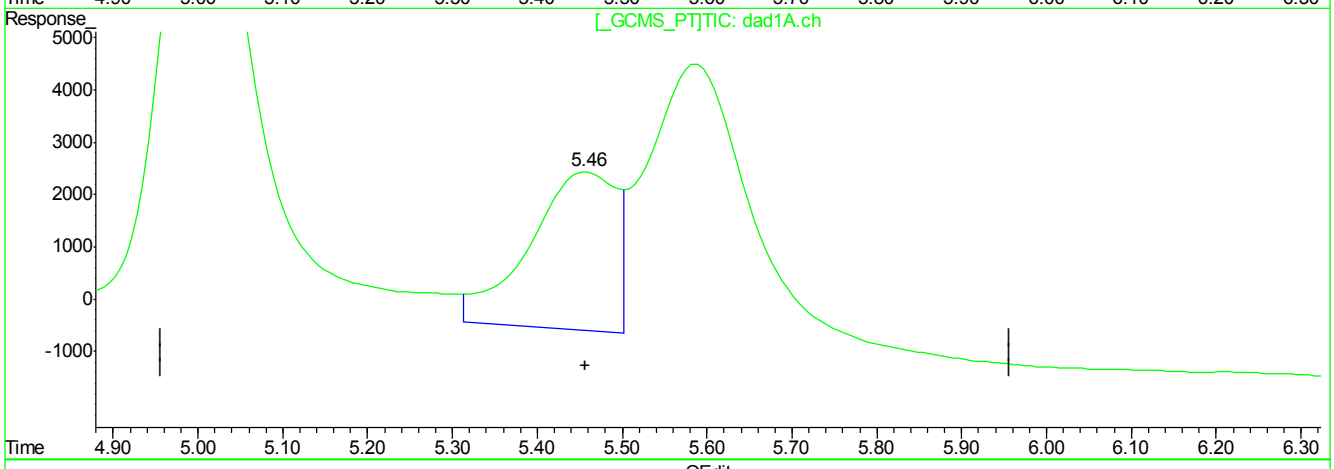
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:32 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.46min 55.811ppb

response 211996

(2) HMX #2

5.46min 55.416ppb

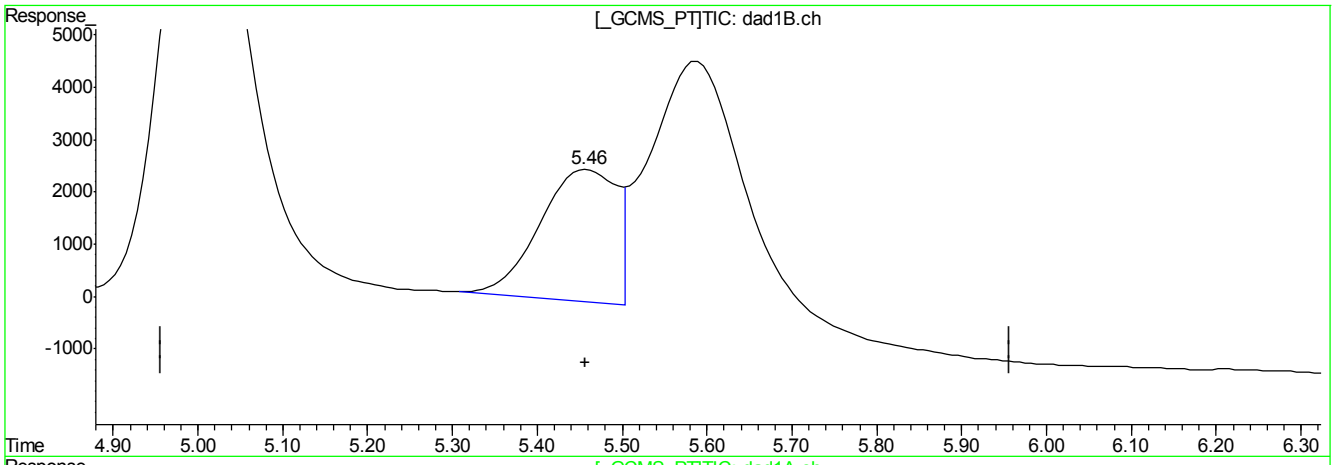
response 211996

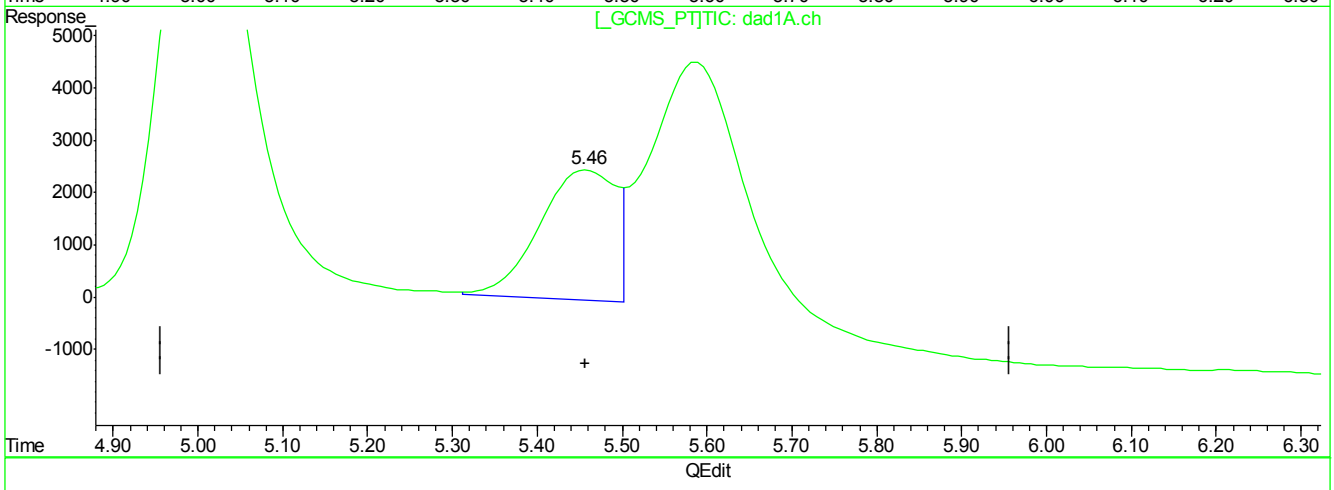
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.46min 43.415ppb m

response 164910

(2) HMX #2

5.46min 38.364ppb m

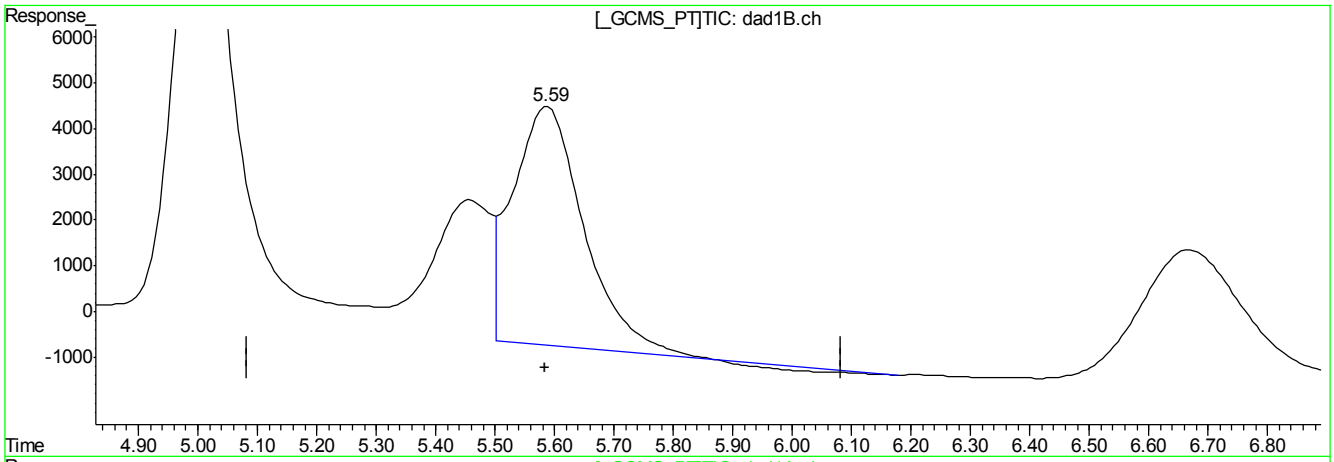
response 146764

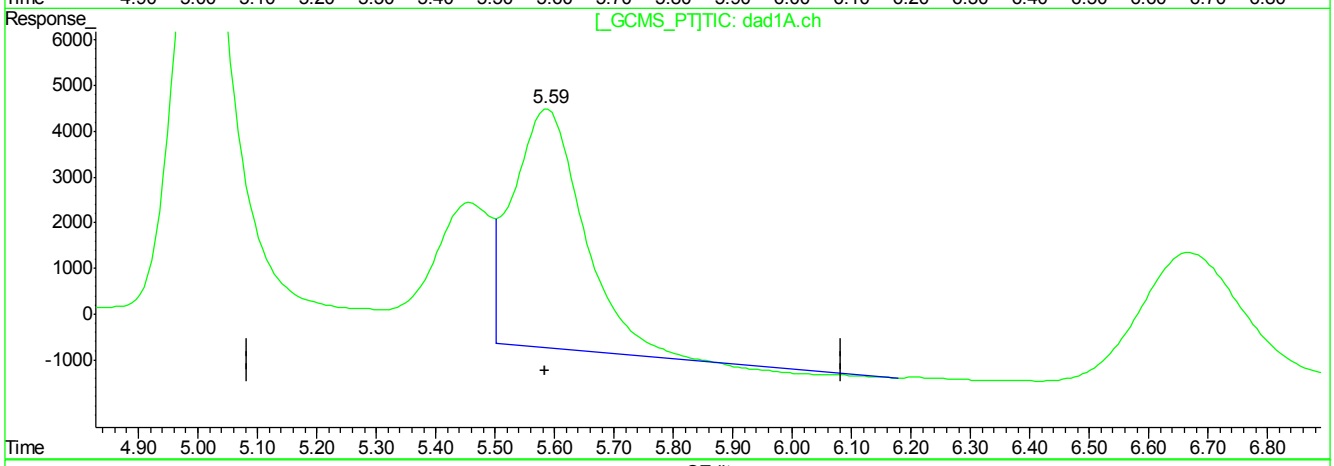
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:41 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.59min 65.551ppb

response 430267

(3) DNX #2

5.59min 65.779ppb

response 430267

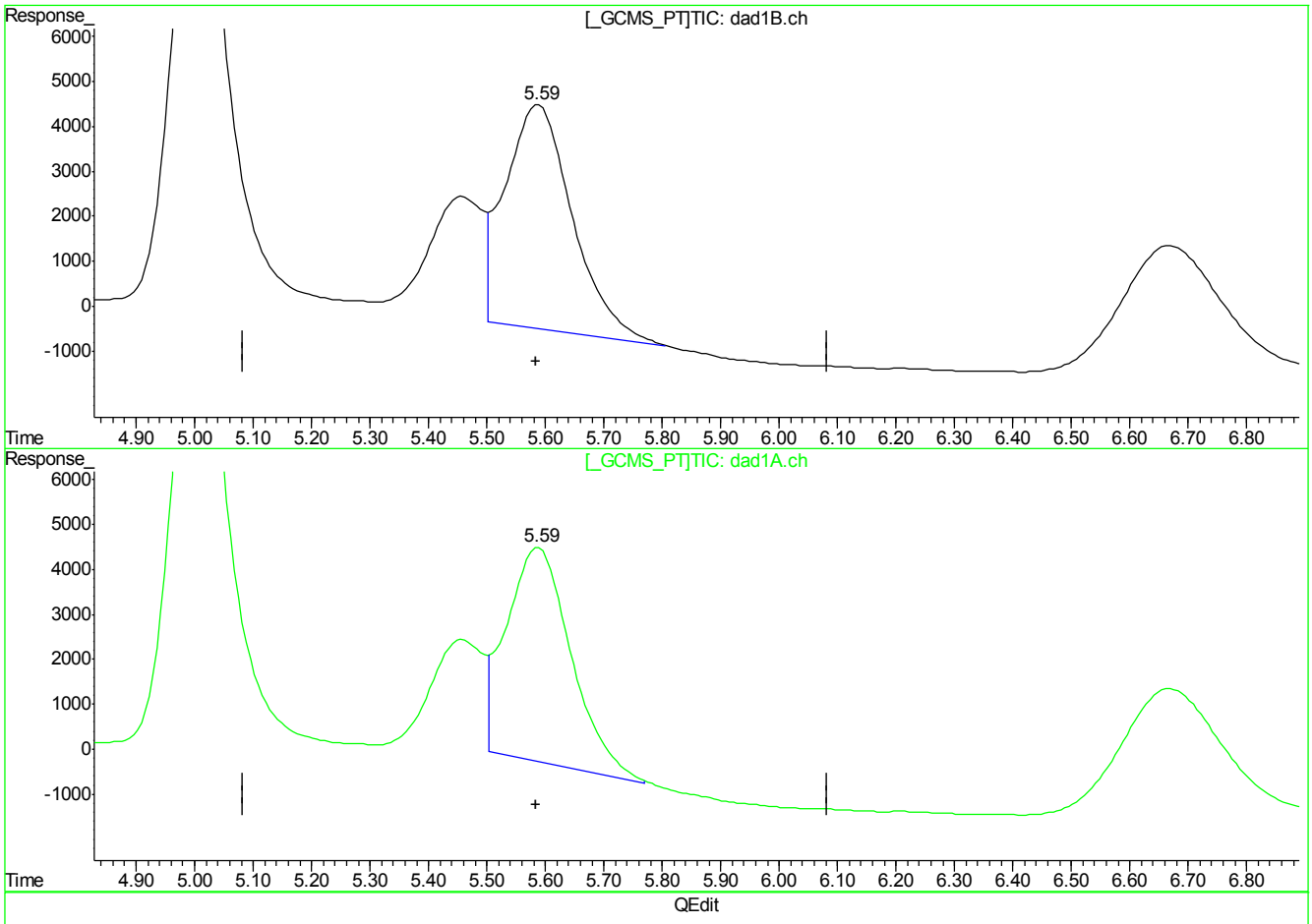
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:45 2017

GG613827.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(3) DNX

5.59min 60.688ppb m

response 398344

(3) DNX #2

5.59min 56.040ppb m

response 366564

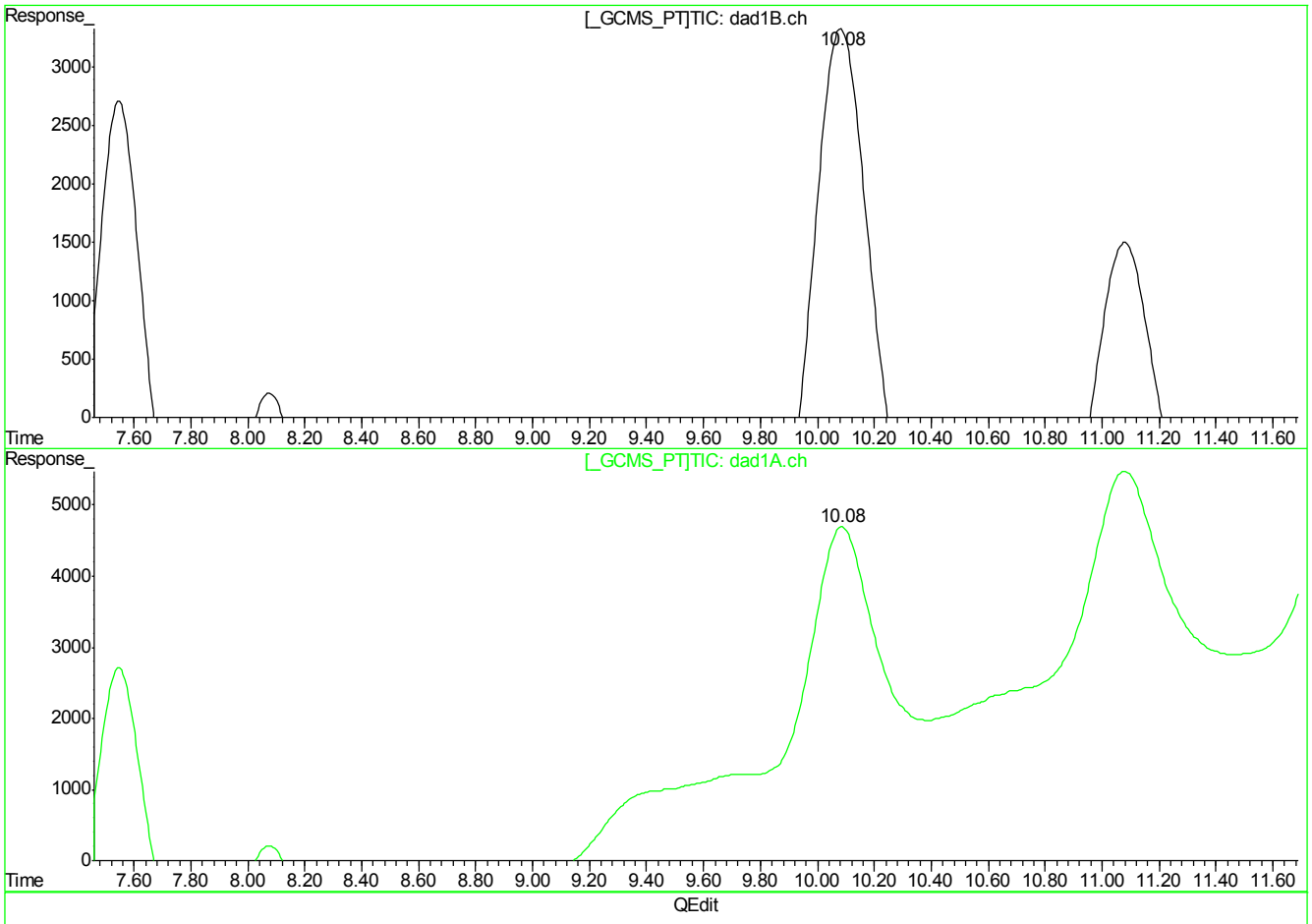
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:51 2017

GG613827.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.09min 151.649ppb

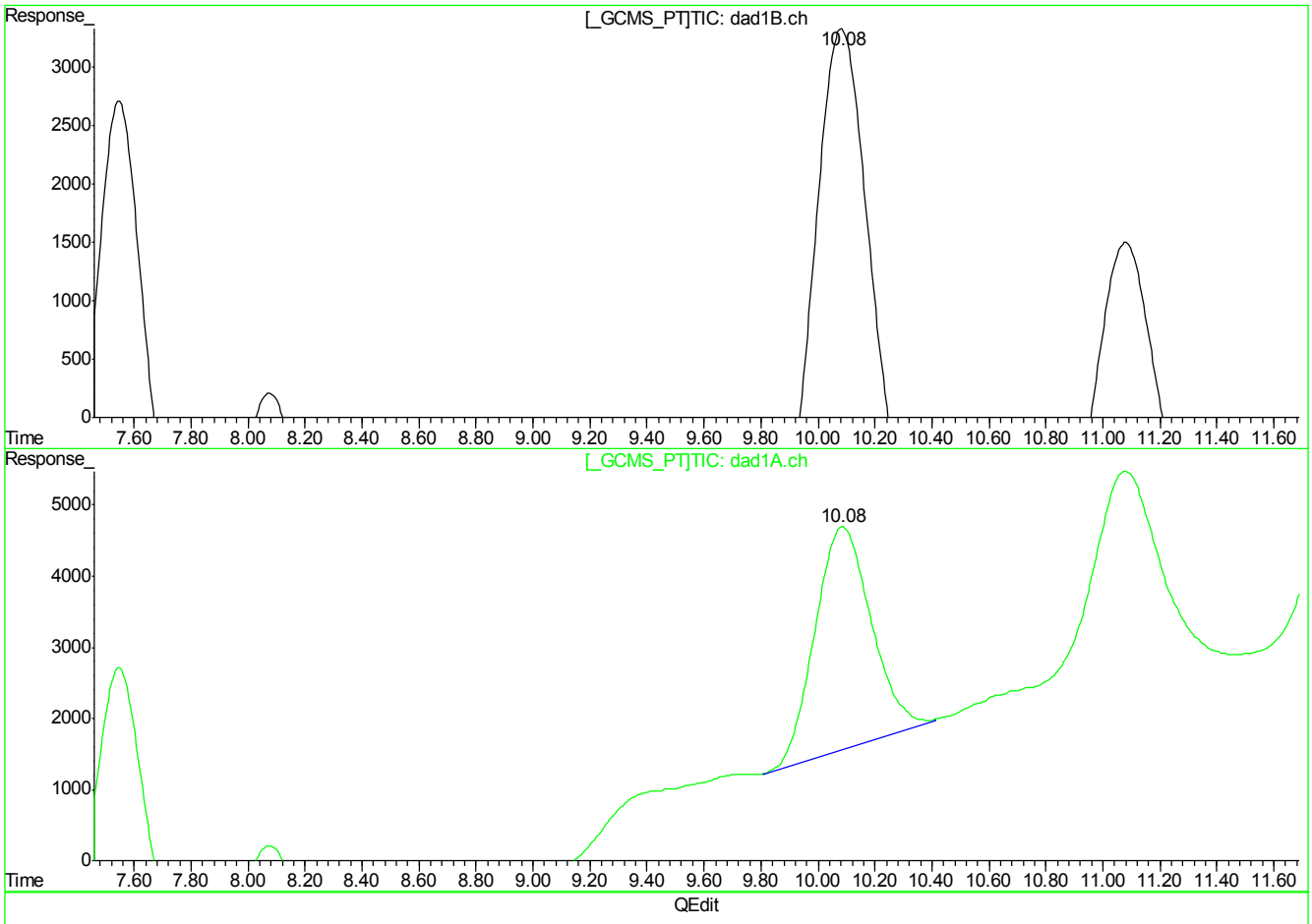
response 2132933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:00 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.08min 30.312ppb m

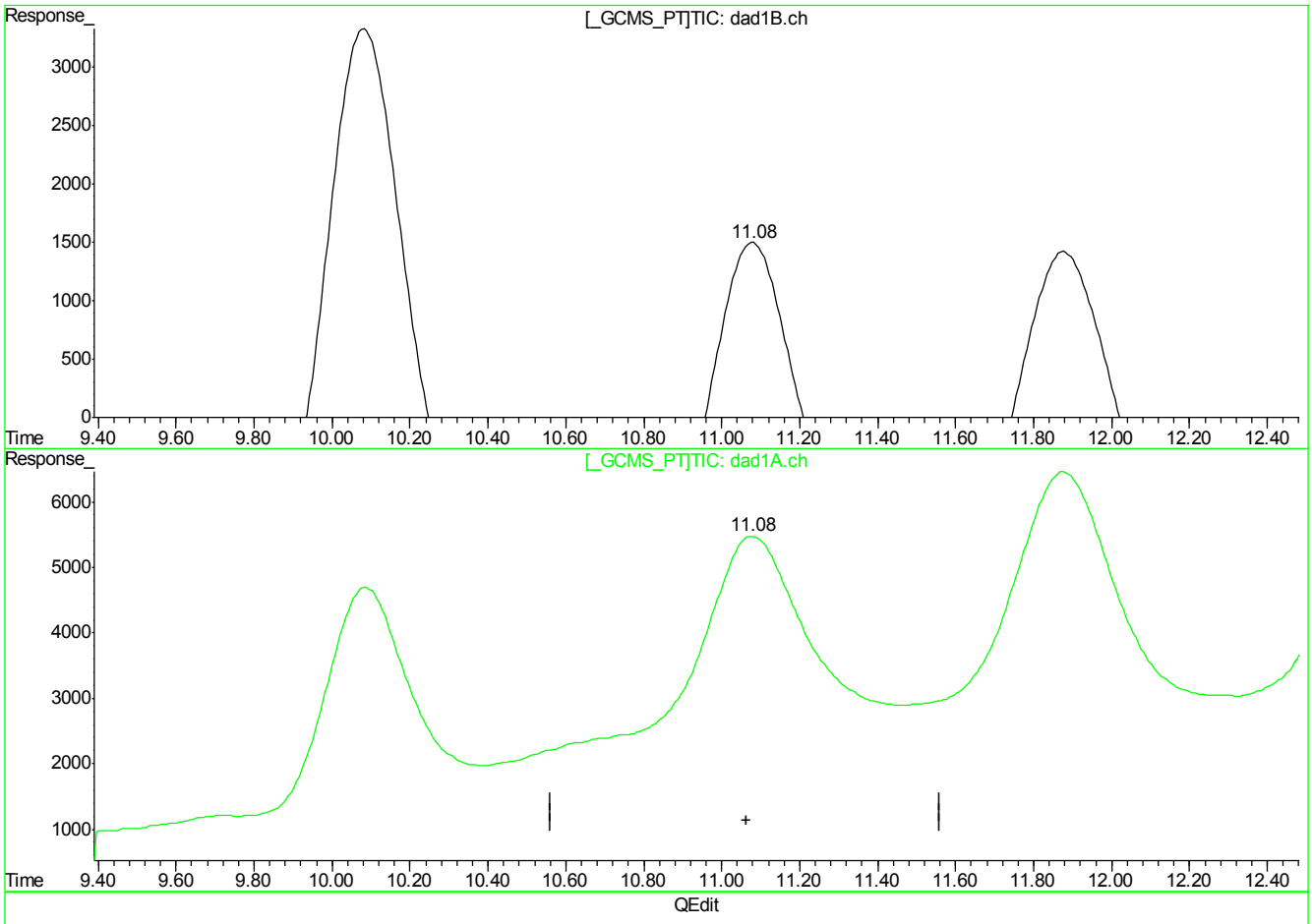
response 431067

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 240.311ppb

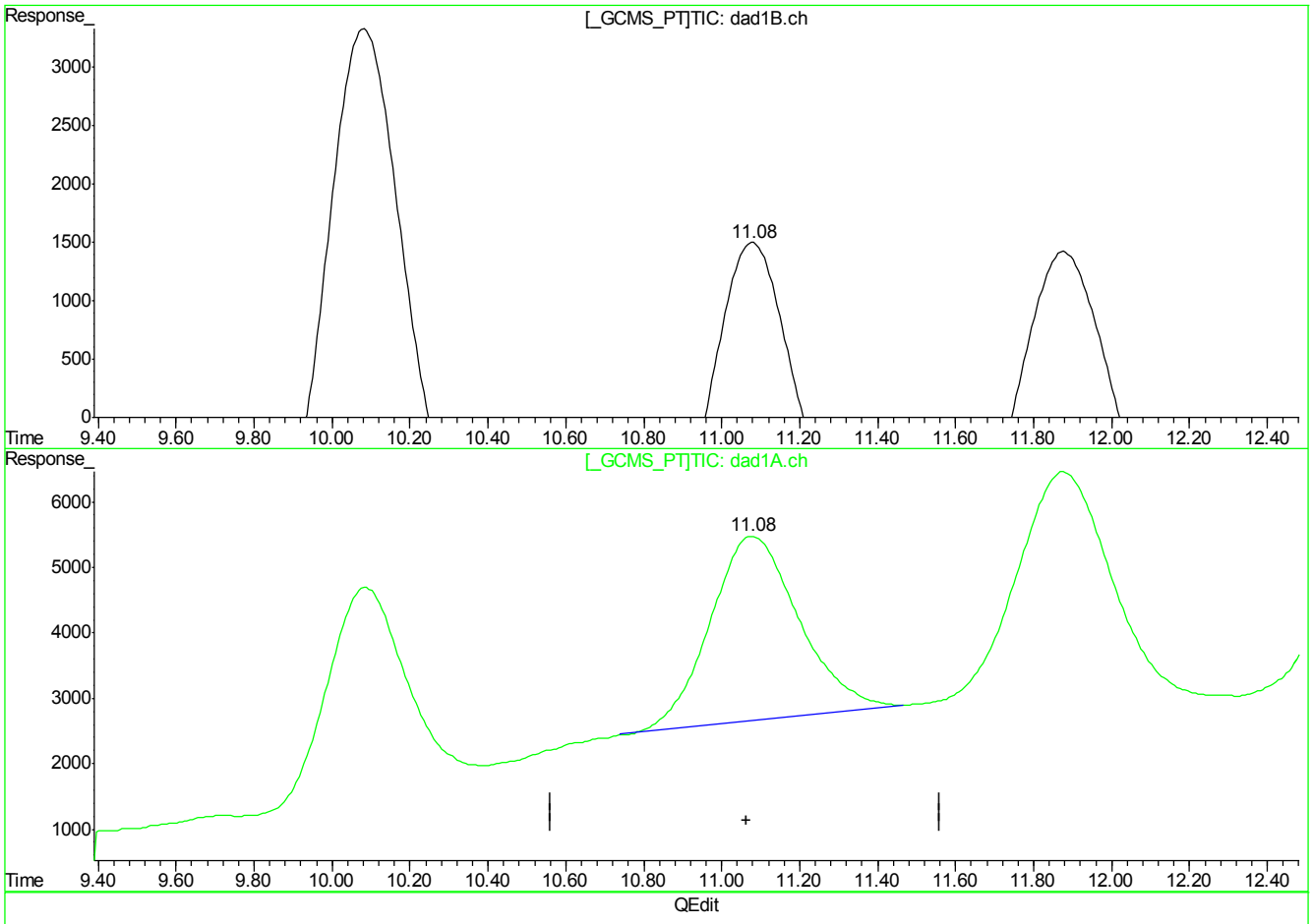
response 2276420

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 46.645ppb m

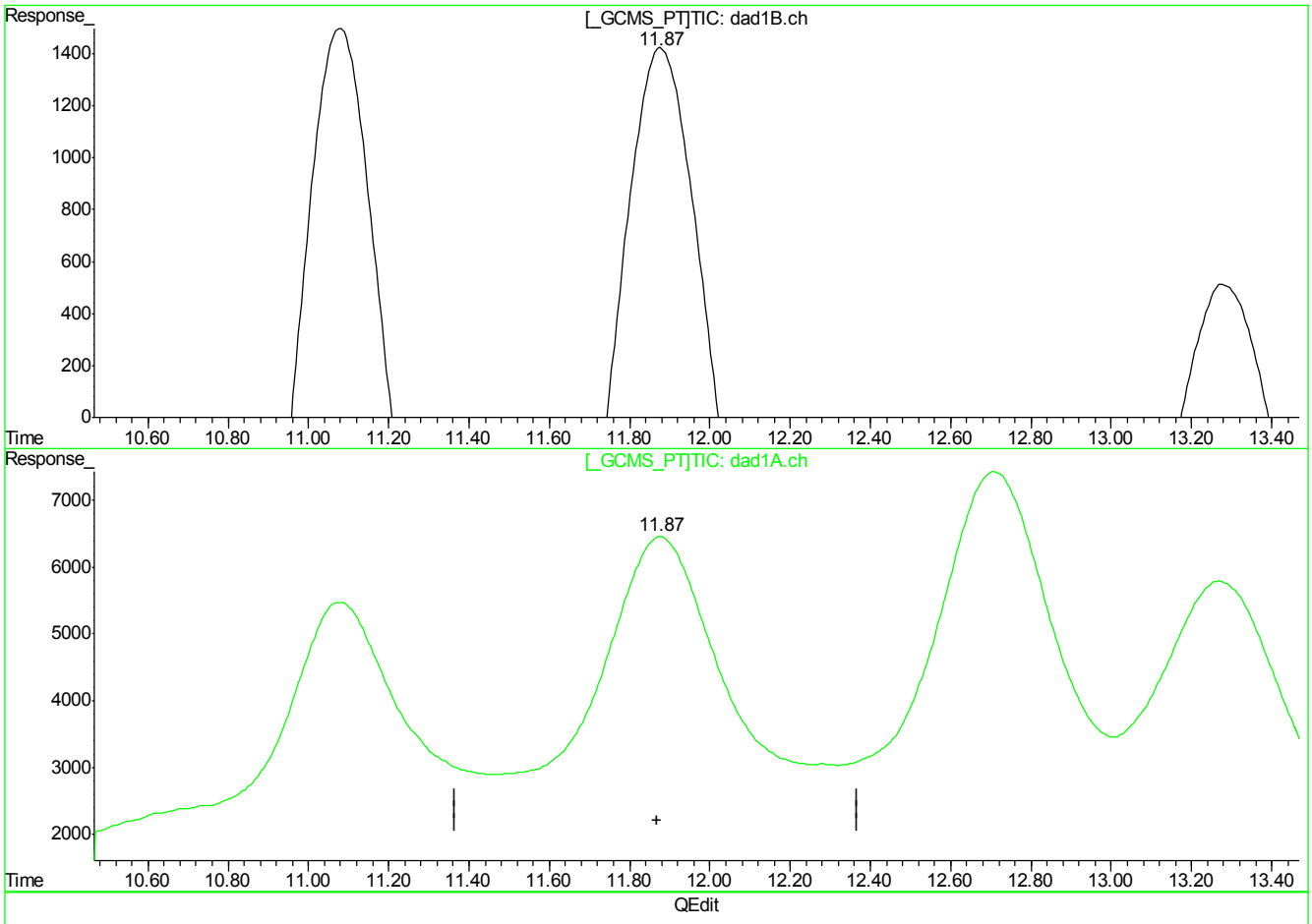
response 444089

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:13 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.88min 132.294ppb

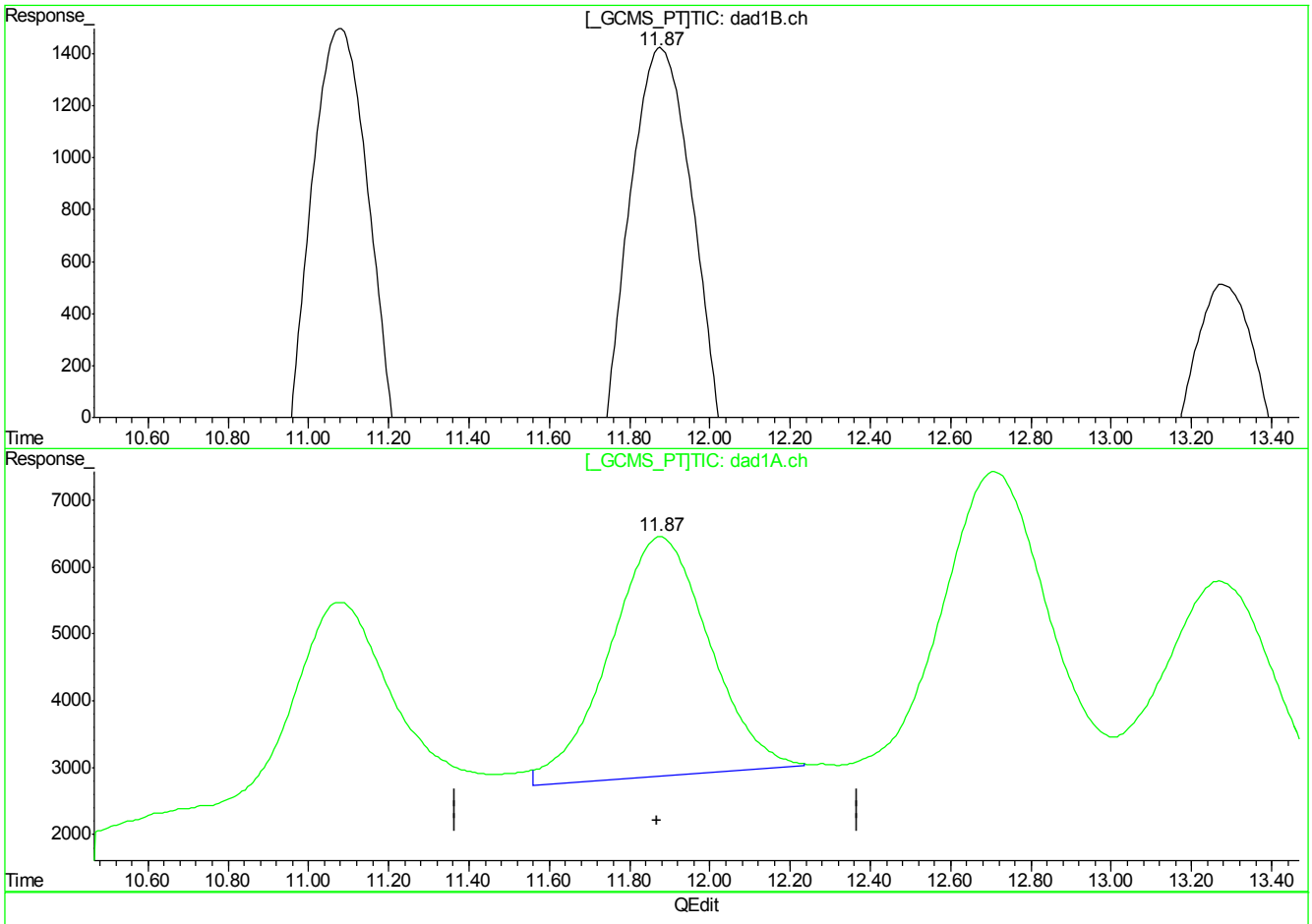
response 2061411

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:16 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.87min 39.514ppb m

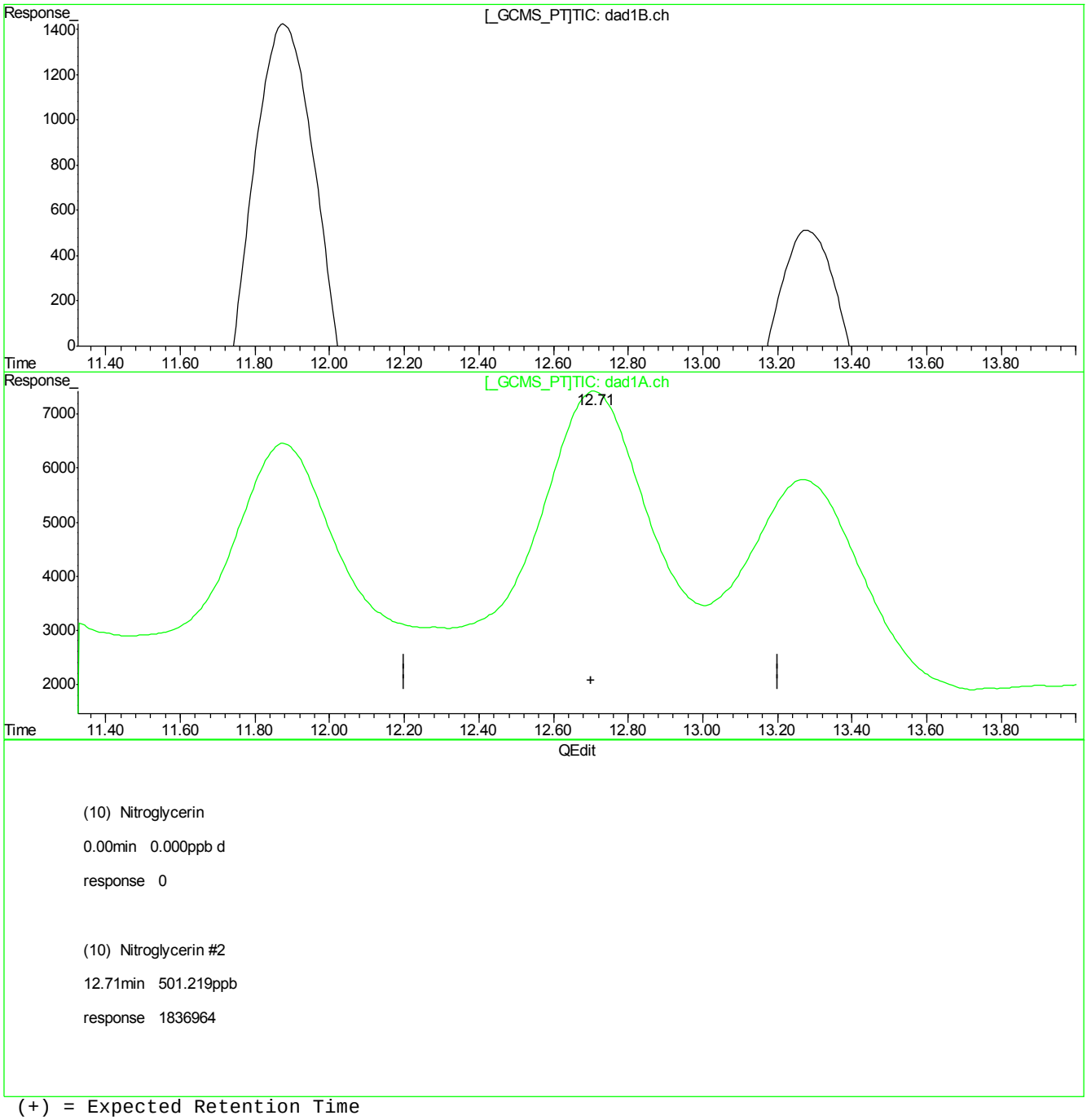
response 618562

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:20 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration

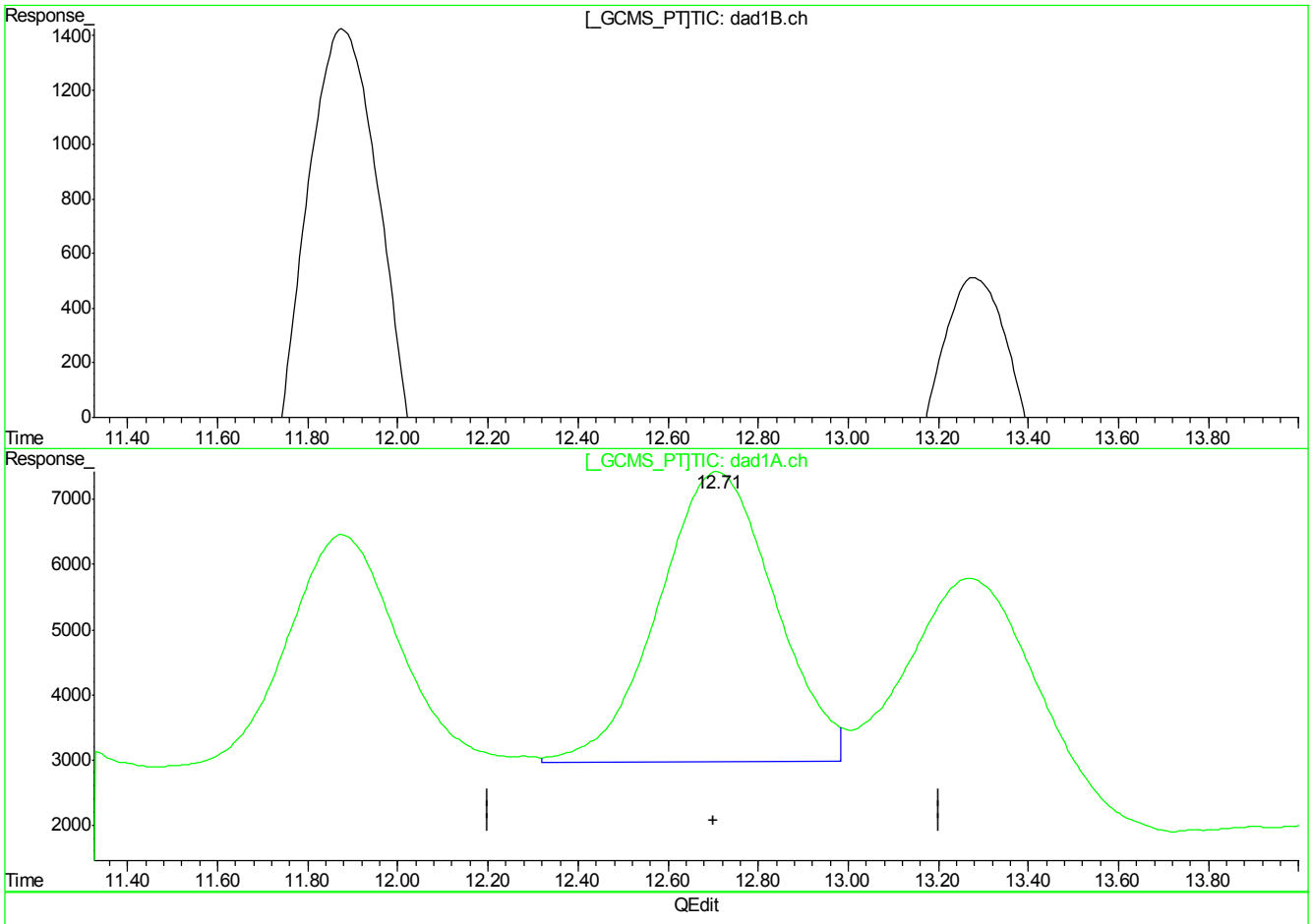


(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.71min 218.113ppb m

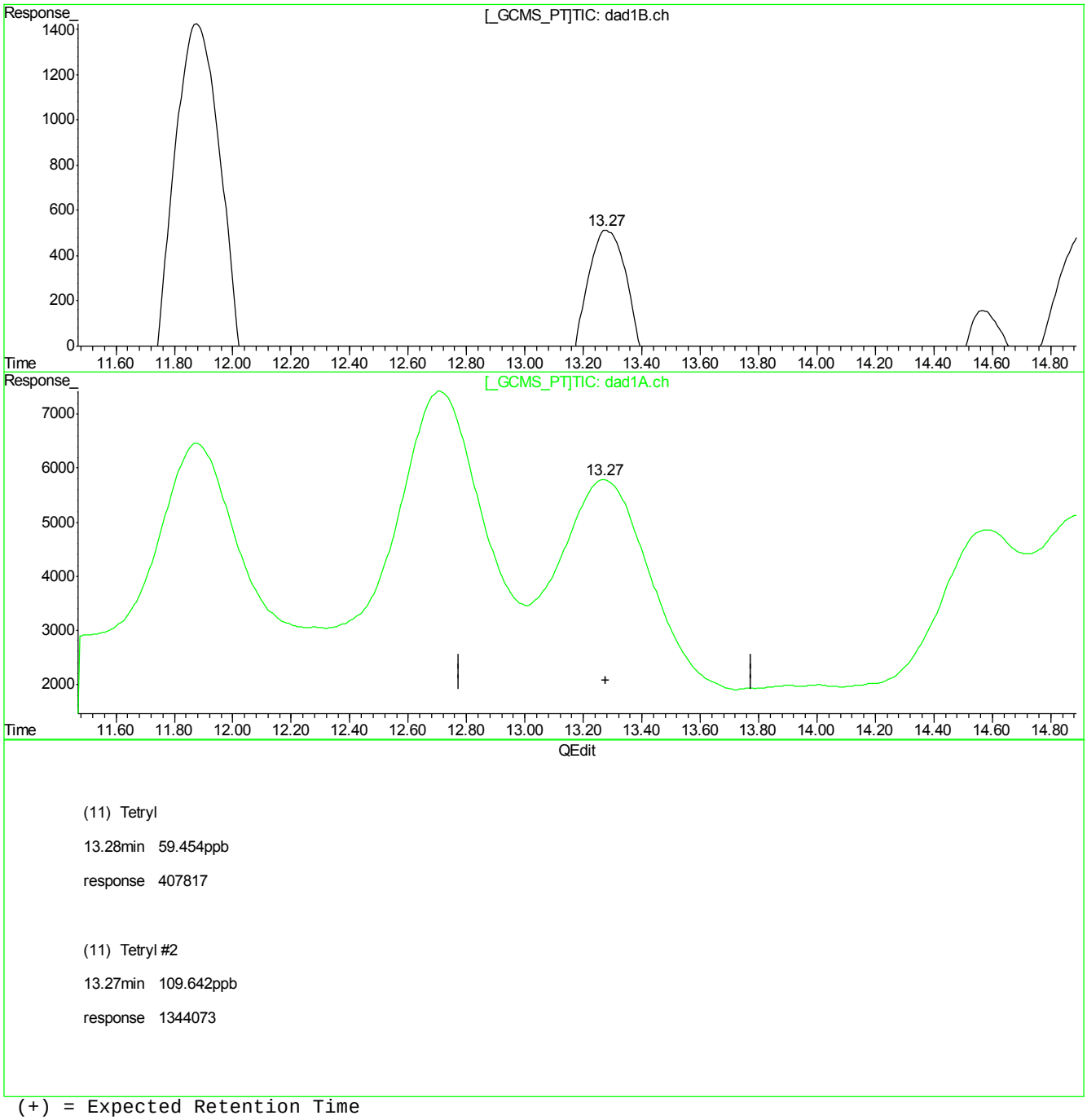
response 801043

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:27 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 109.642ppb

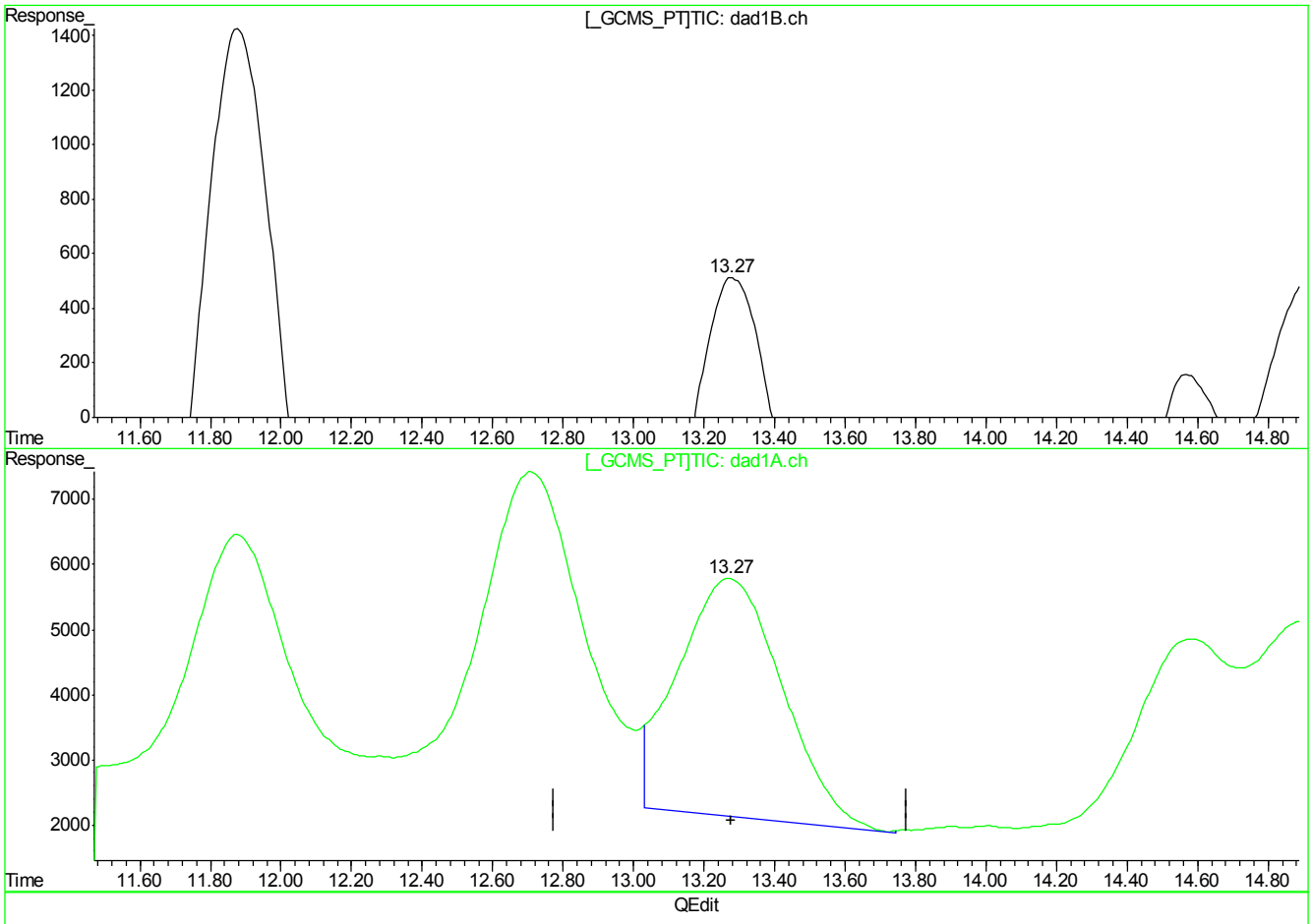
response 1344073

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:30 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 61.159ppb m

response 746662

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:33 2017

7.7.14.17

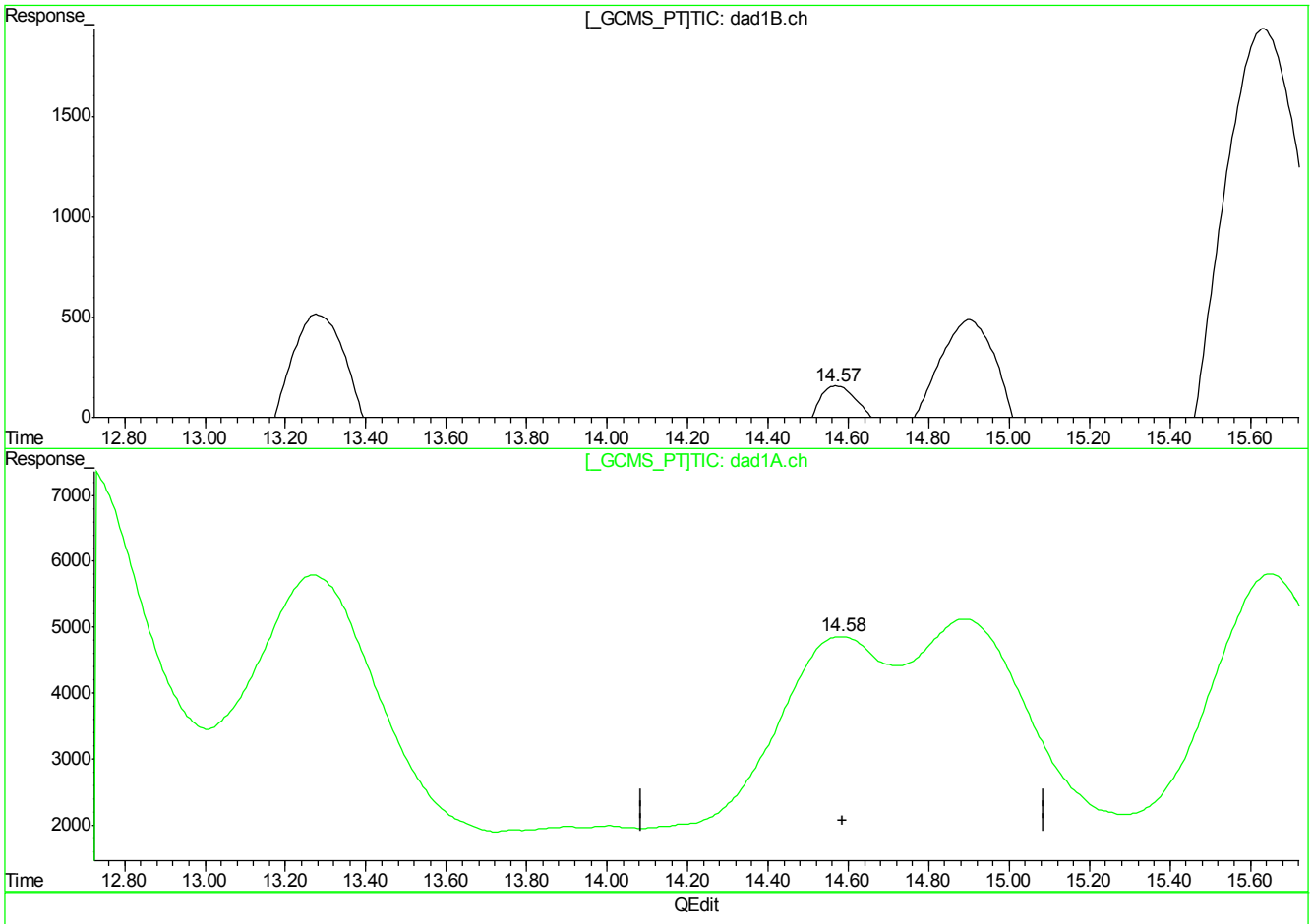
7

GG613827.D edits: Tetryl

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



QEdit

(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 82.067ppb

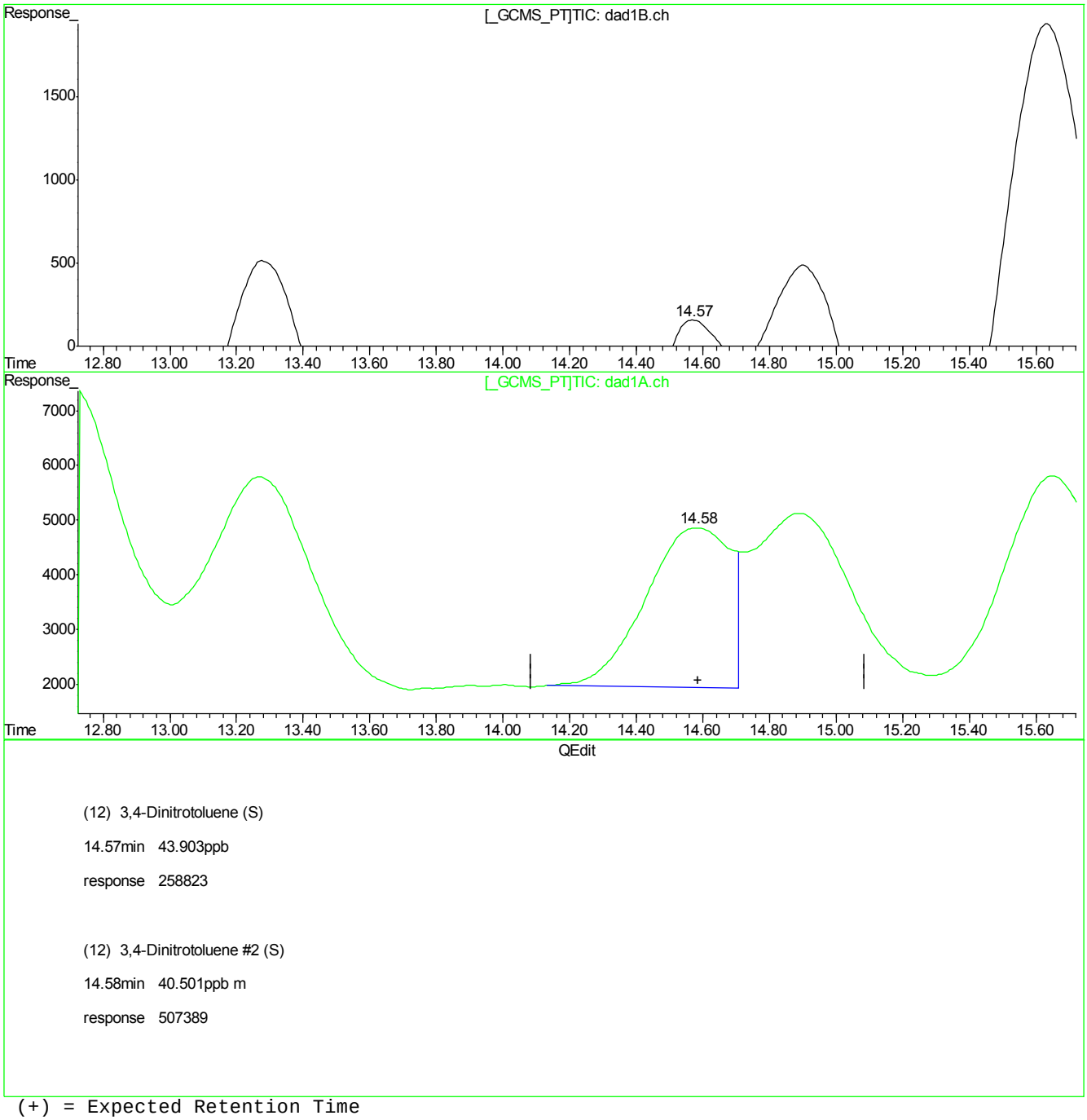
response 1026519

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:37 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 40.501ppb m

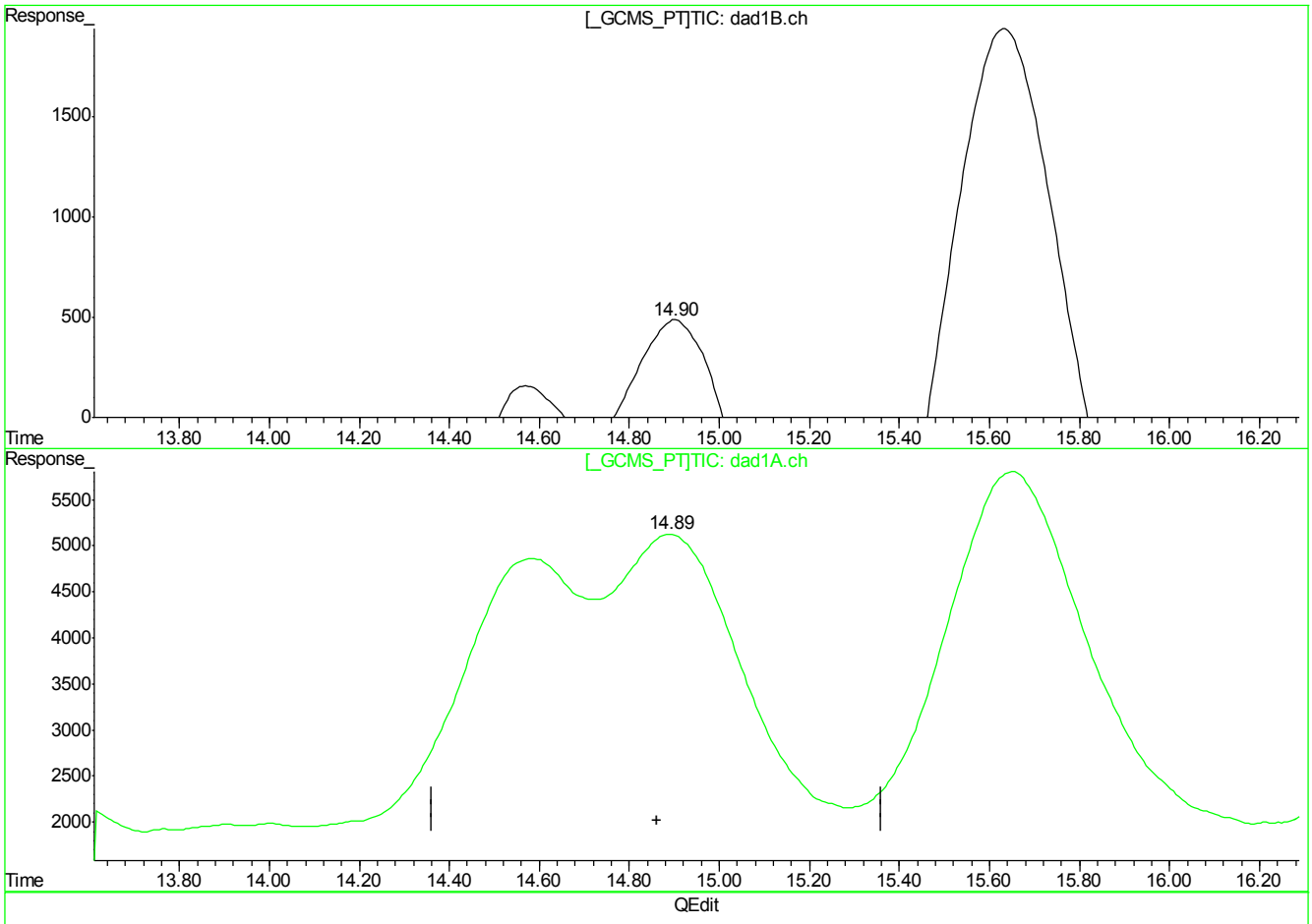
response 507389

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:40 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 73.498ppb

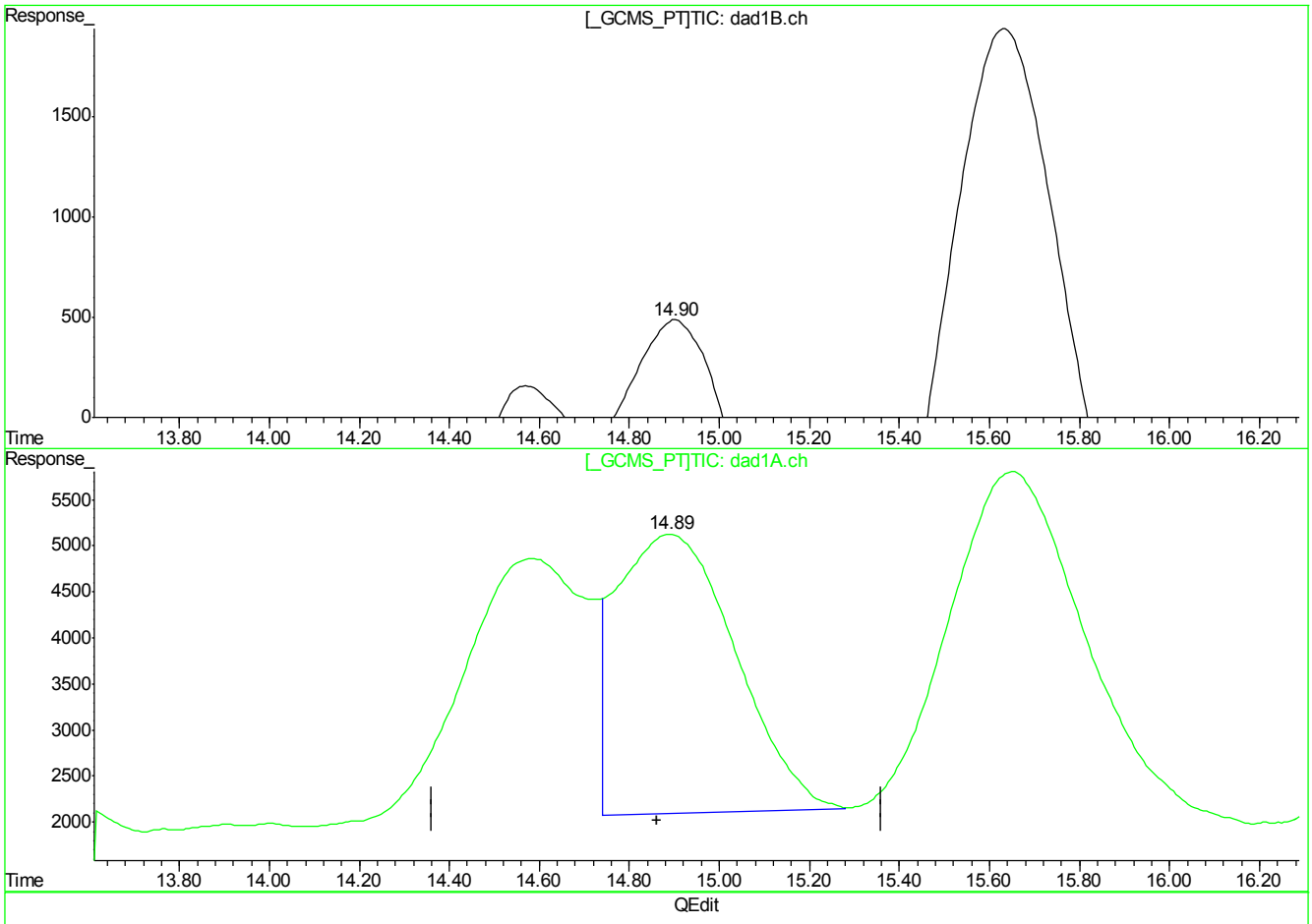
response 801693

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 50.694ppb m

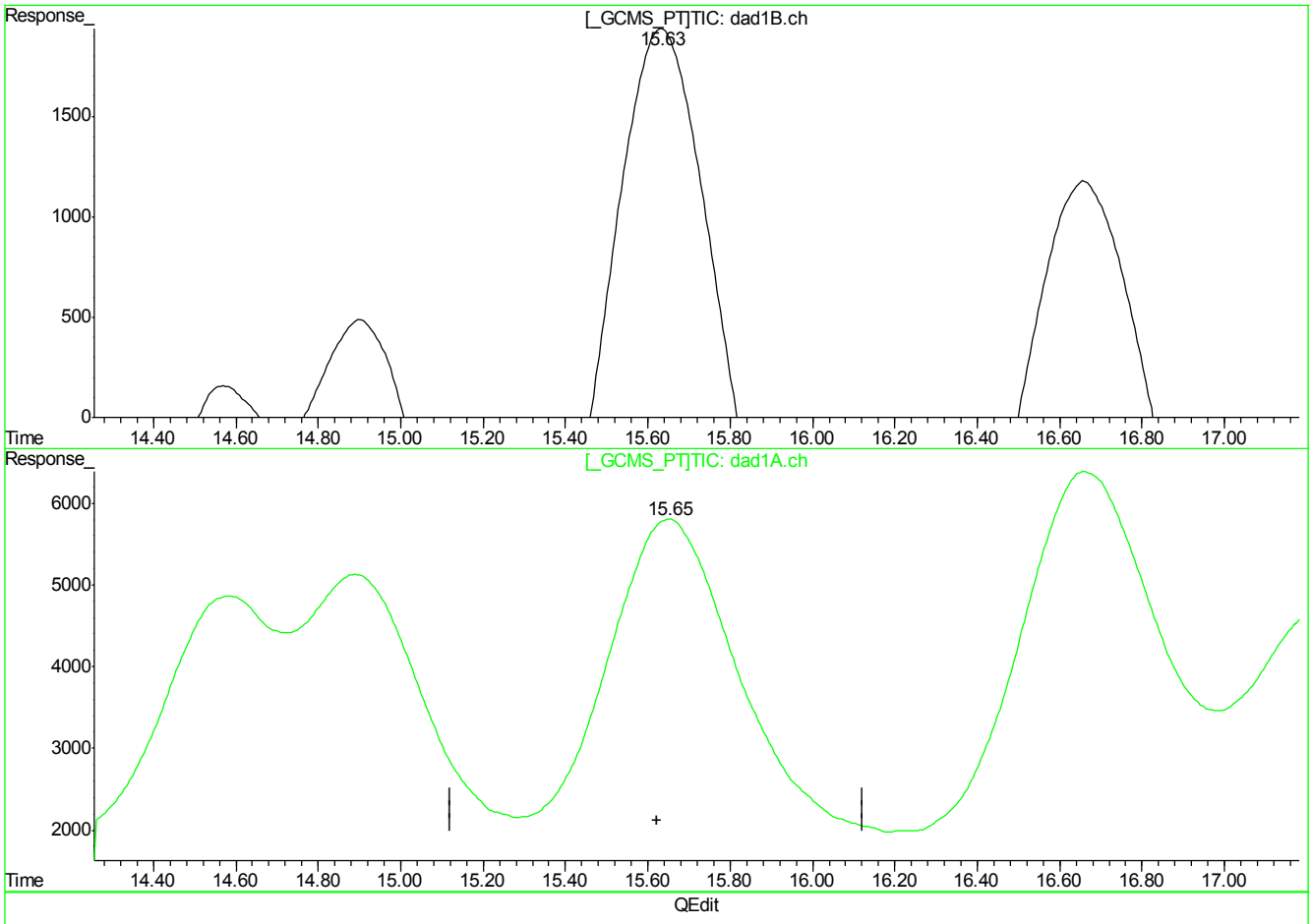
response 552975

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:47 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 93.393ppb

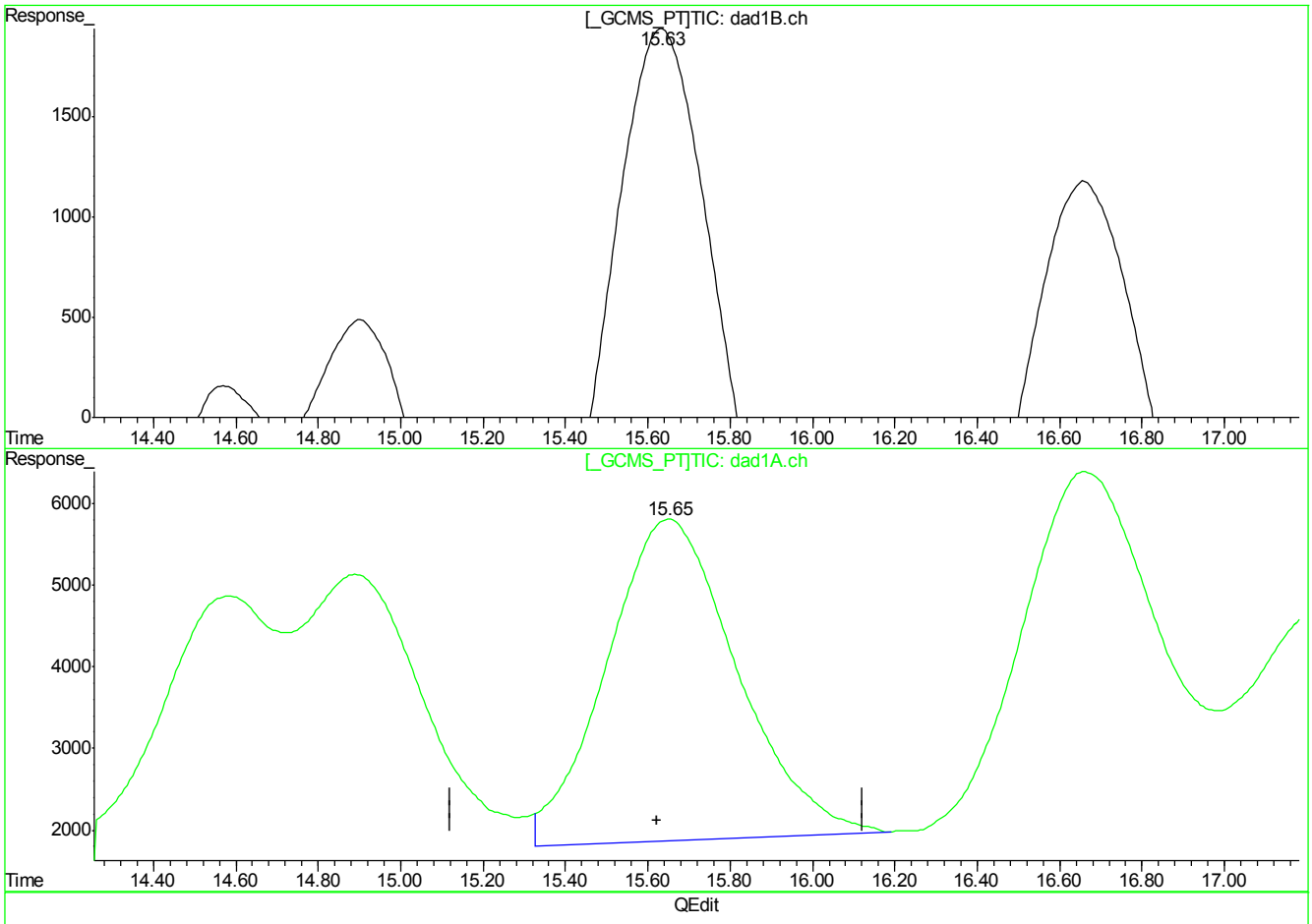
response 927502

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 86.988ppb m

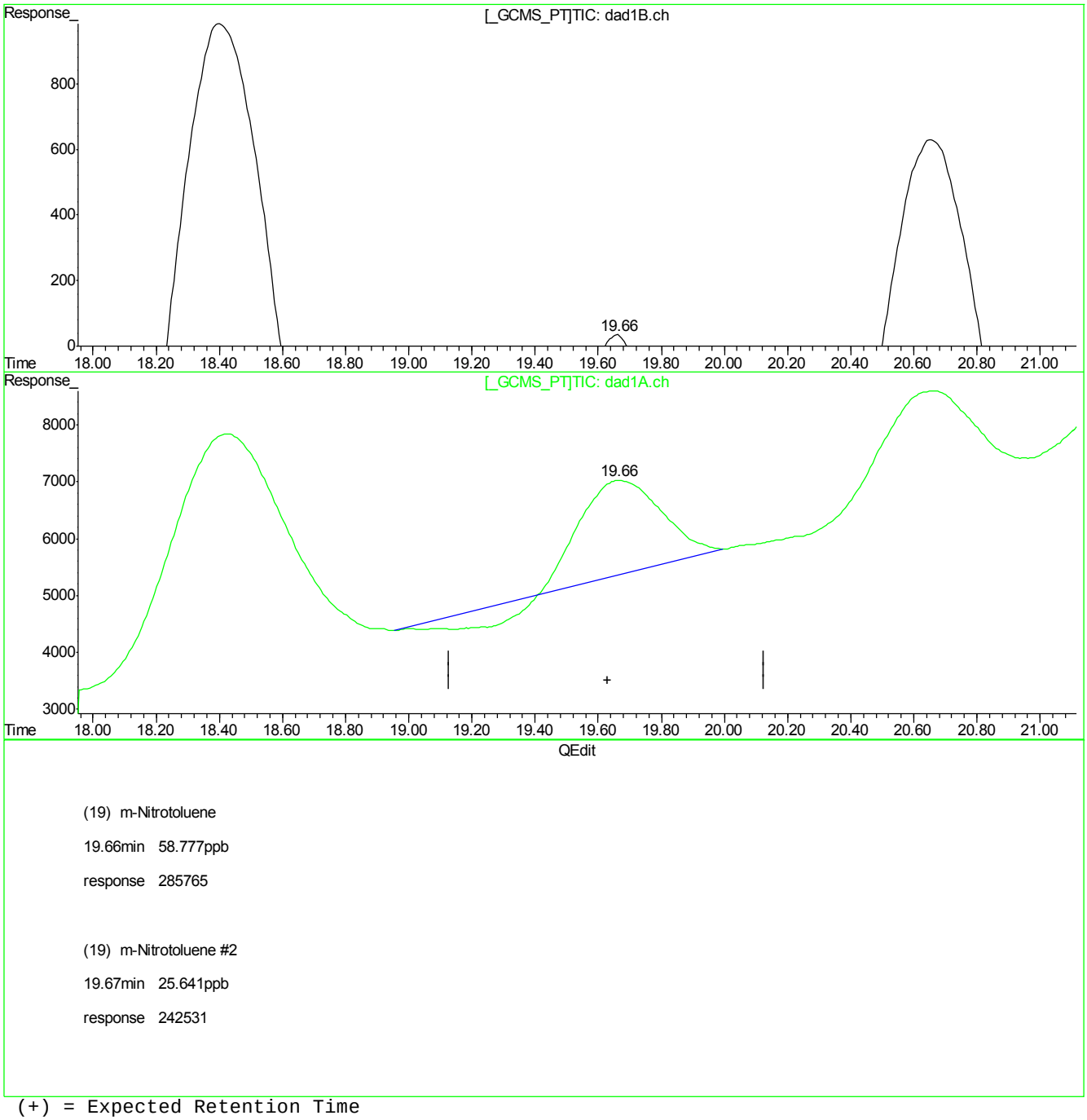
response 863855

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:53 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.67min 25.641ppb

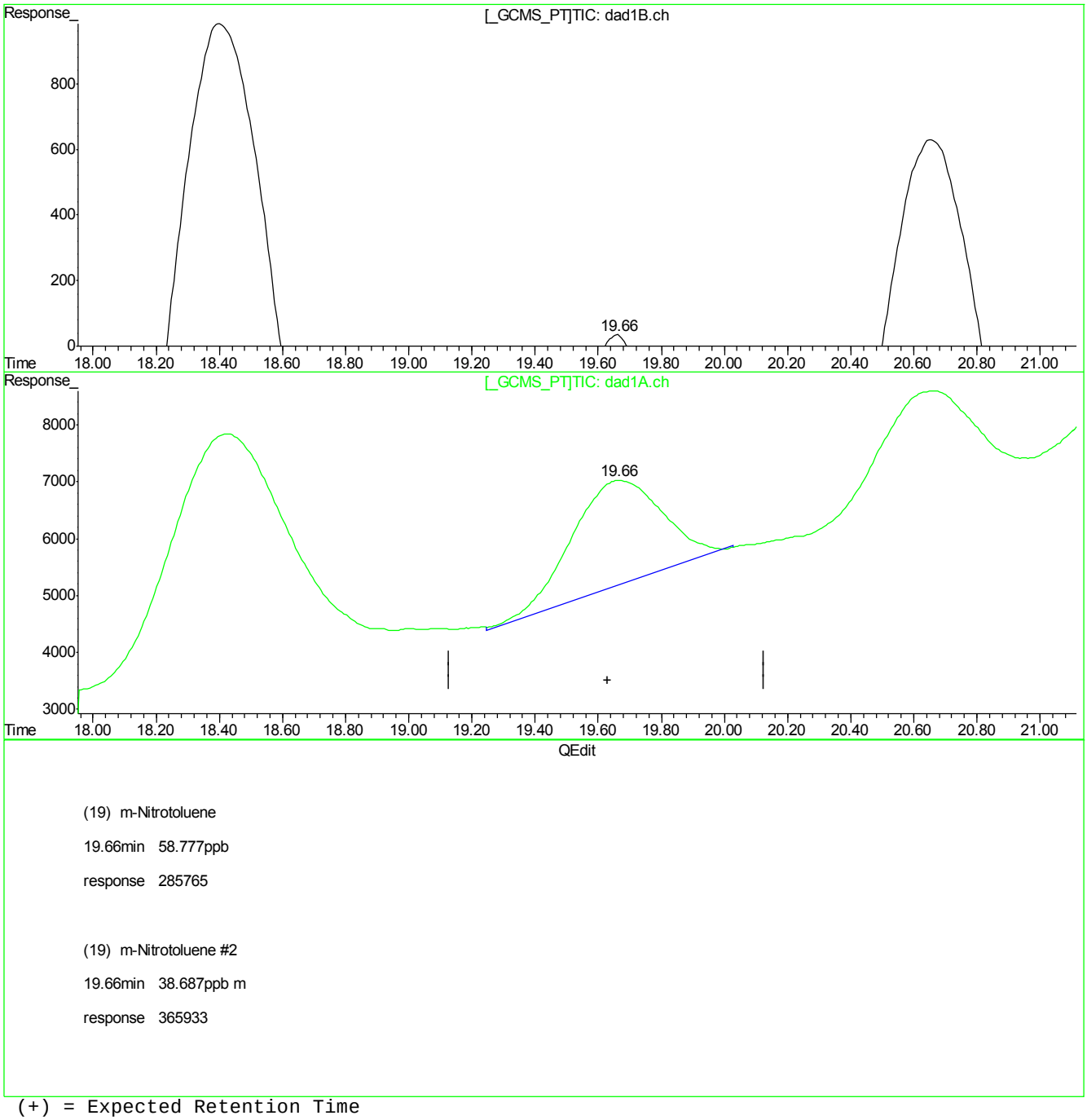
response 242531

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:01 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.66min 38.687ppb m

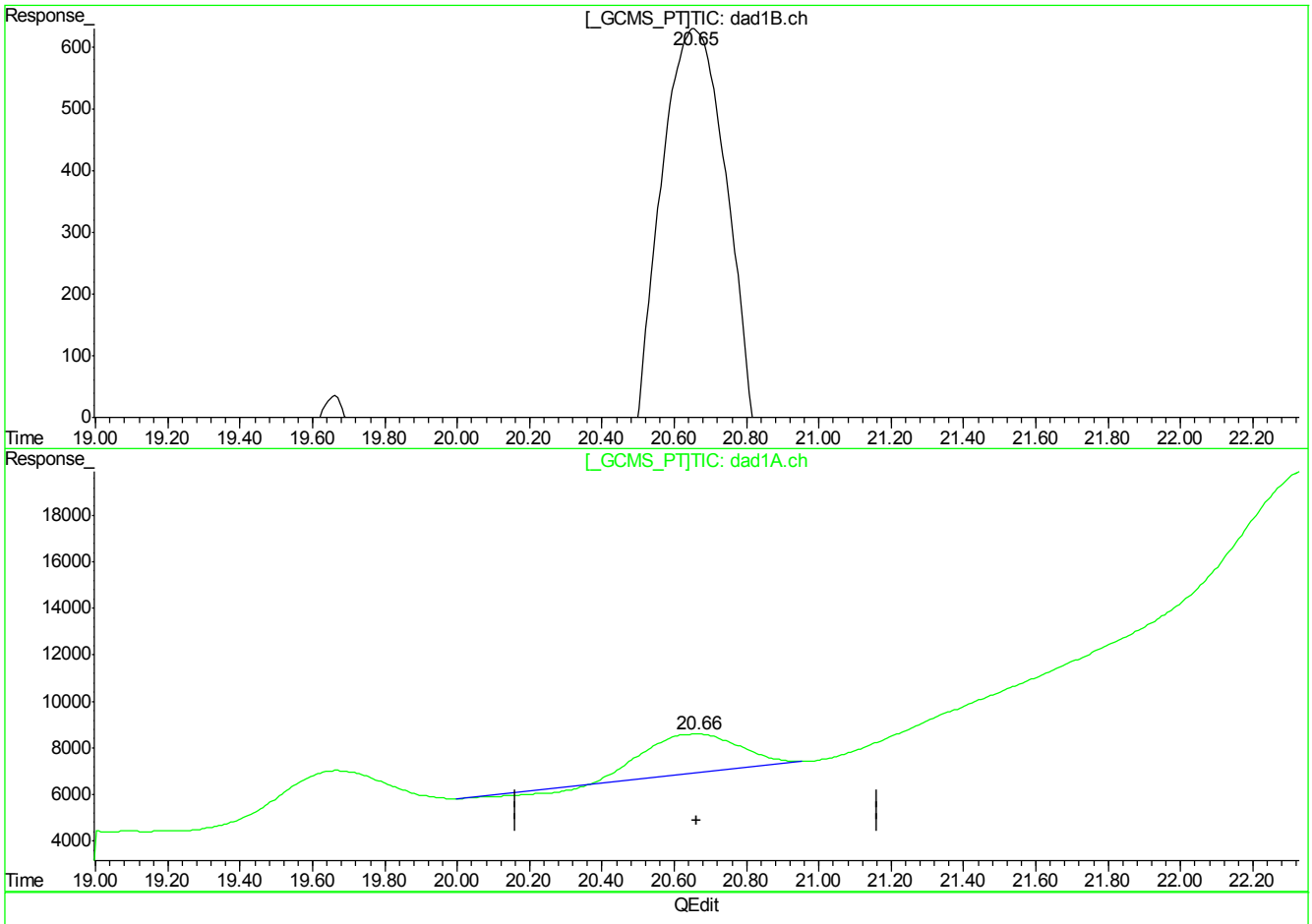
response 365933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 21.333ppb

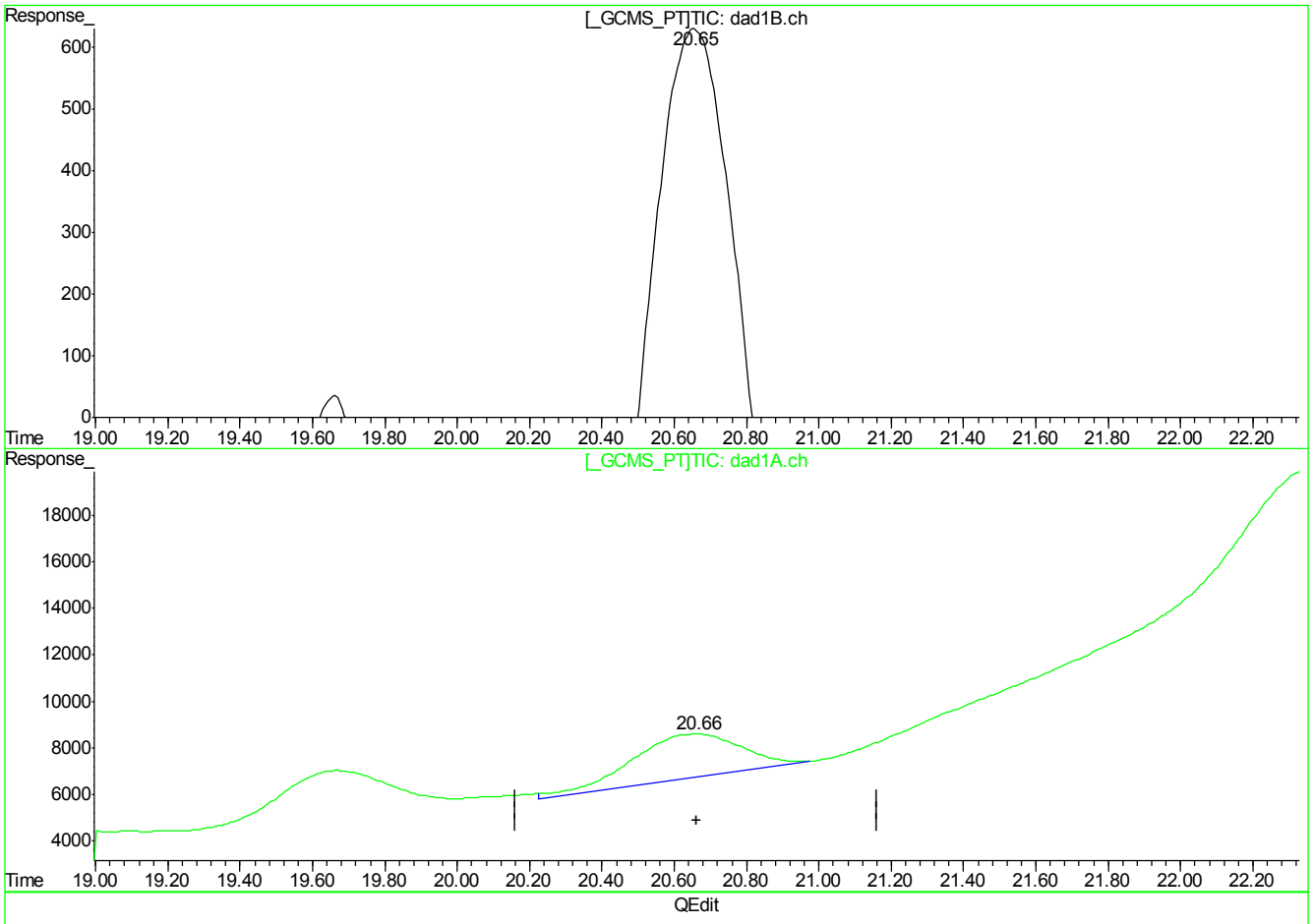
response 288721

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 29.479ppb m

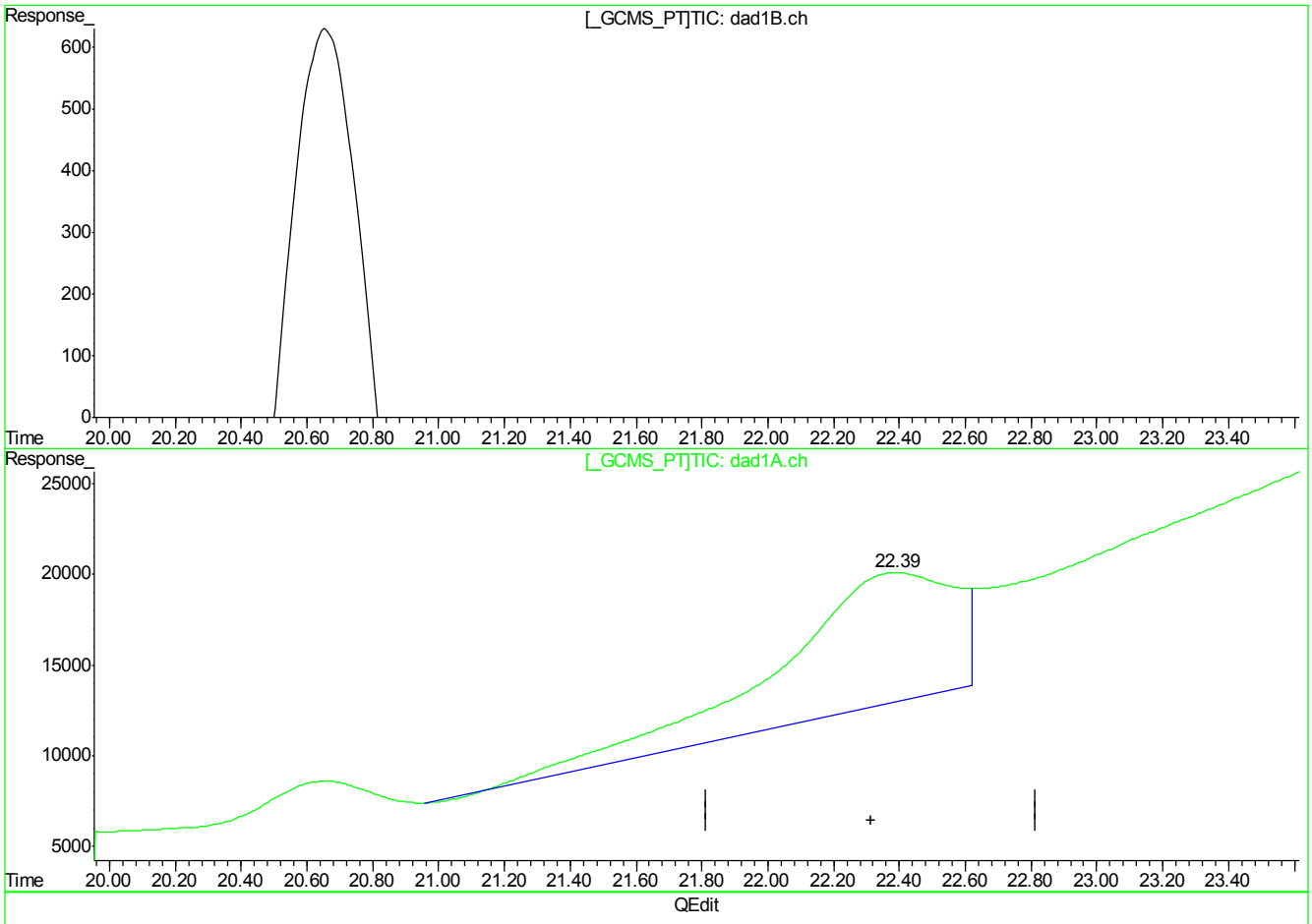
response 398969

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:09 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.39min 817.312ppb

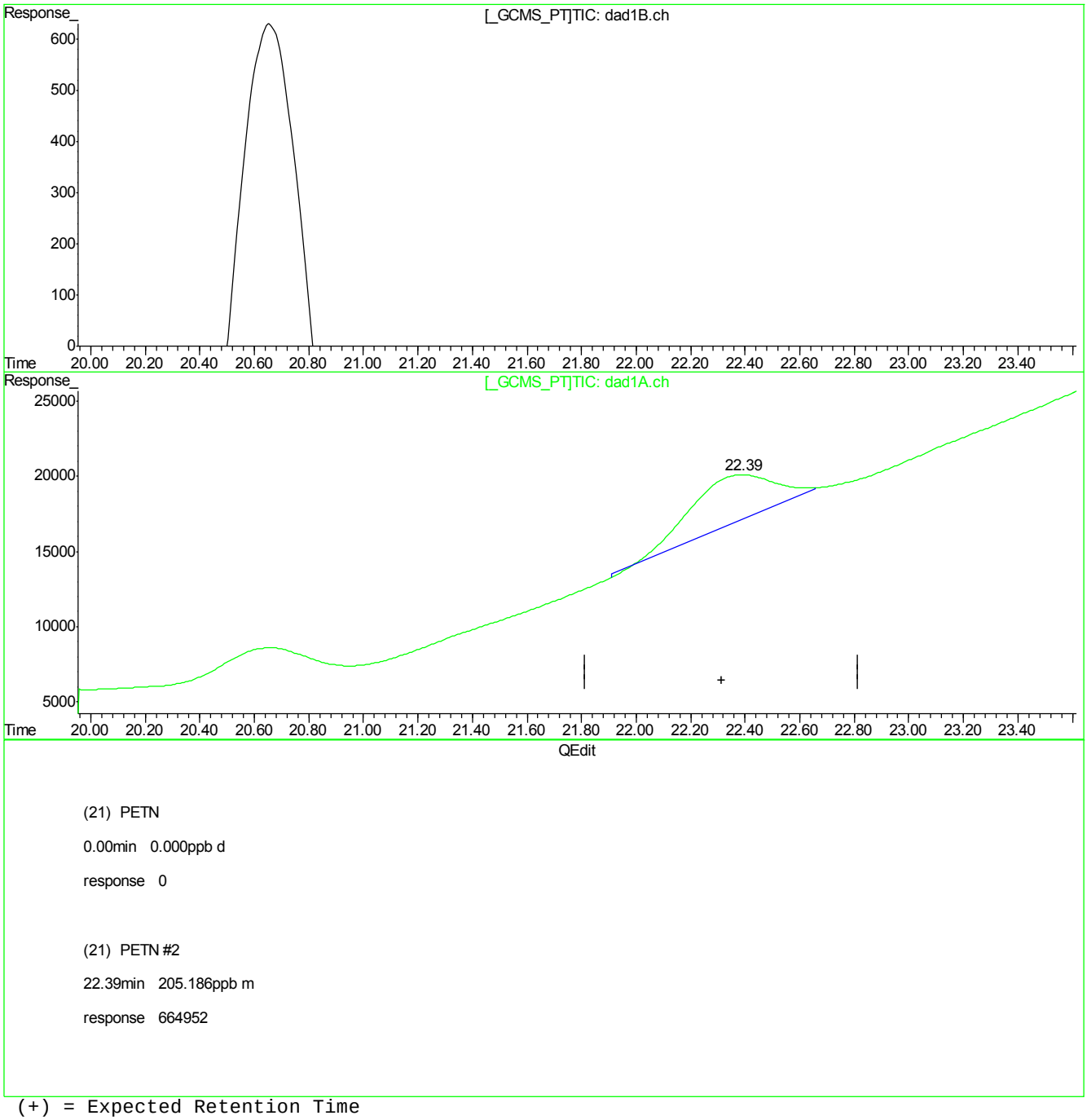
response 2648684

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.39min 205.186ppb m

response 664952

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:15 2017

7.7.14.29

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:59 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	539446	1021169	91.503	81.638m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		18.30%#	16.33%#
	Target Compounds						
1)	TNX	5.01	5.01	1509922	1509922	179.506	179.032
2)	HMX	5.46	5.46	376444	376444	99.104	98.403
3)	DNX	5.59	5.59	825106	825106	125.705	126.142
4)	MNX	6.66	6.66	719732	719732	148.771	148.771
5)	1,3,5-Trinitrobe	7.54	7.54	1066153	1062518	104.411	104.098
6)	RDX	8.07	8.07	494554	482286	103.884	101.779
7)	1,3-Dinitrobenze	10.08	10.08	1453602	1272574	99.869	89.971m
8)	Nitrobenzene	11.07	11.07	953891	901312	124.781	94.788m
9)	2,4,6-Trinitroto	11.87	11.87	1001781	1458021	98.255	93.389m
10)	Nitroglycerin	0.00	12.70	0	1702013	N.D. d	464.272m
11)	Tetryl	13.28	13.27	844790	1140150	123.159	93.137m
13)	2,6-Dinitrotolue	14.89	14.89	734094	996233	105.588	91.335m
14)	2,4-Dinitrotolue	15.62	15.63	1340479	1231048	100.879	123.933
15)	o-Nitrotoluene	17.22	17.22	599687	848130	141.042	145.750
16)	3,5-Dinitroanili	16.64	16.64	1075378	1750952	101.472	97.657
17)	p-Nitrotoluene	18.39	18.40	1208979	2157804	105.075	101.946
18)	4-Amino-2,6-Dini	18.39	18.40	1208979	2157804	105.075	101.946
19)	m-Nitrotoluene	19.64	19.64	613746	1029981	124.866	108.890
20)	2-Amino-4,6-Dini	20.64	20.66	902382	1031982	94.065	76.251
21)	PETN	0.00	22.33	0	1529945	N.D. d	472.100m

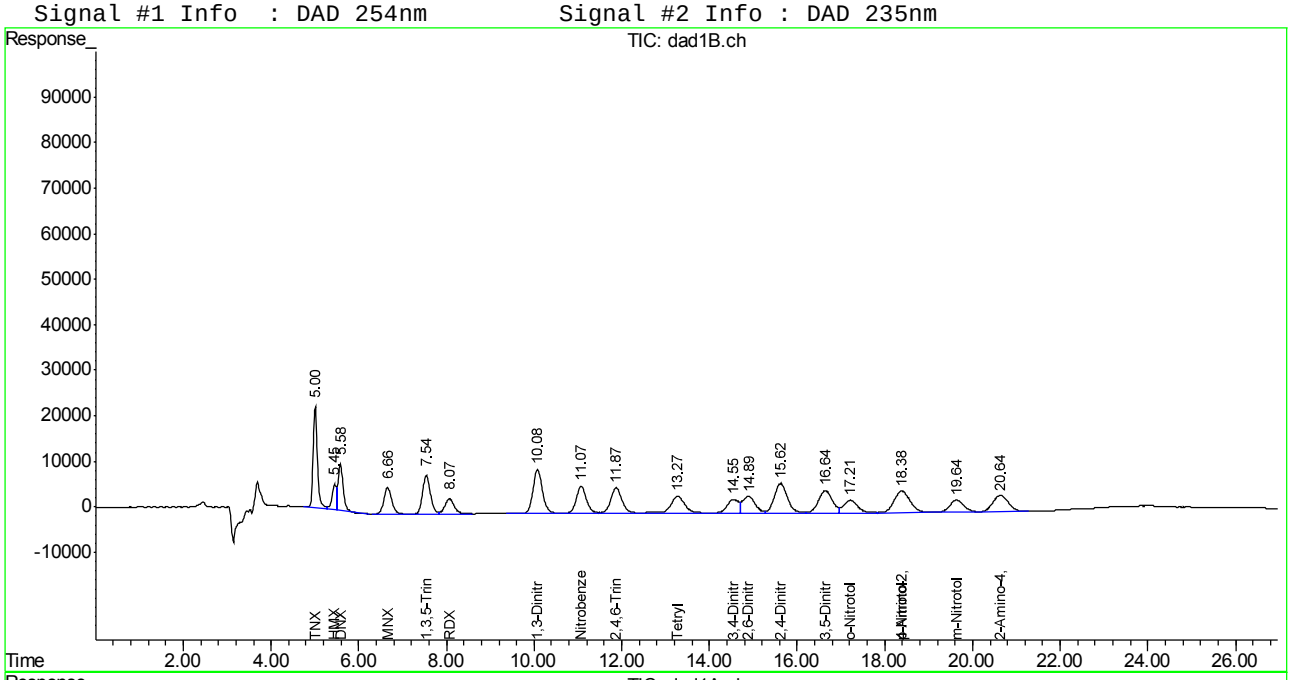
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 13:37:52 2017 Page 1

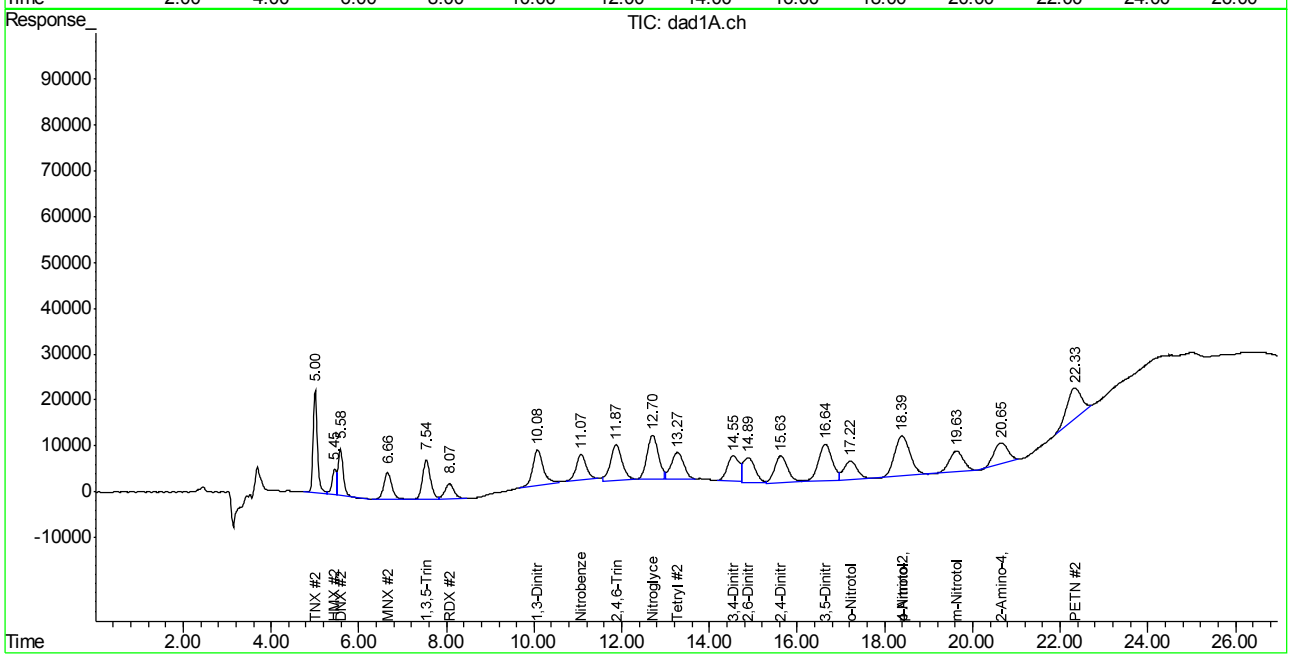
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

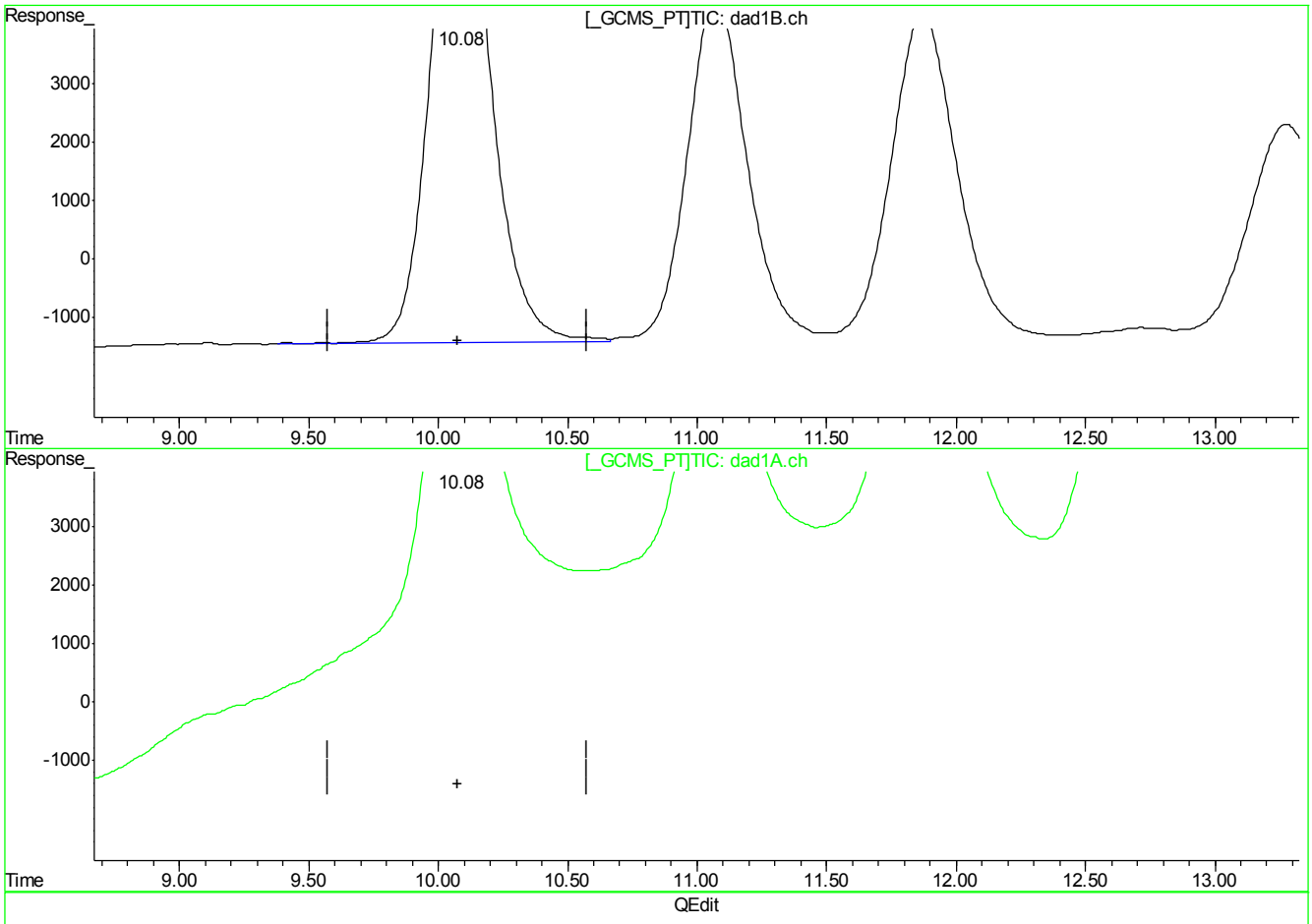
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613828.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:35	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.07	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.70	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.55	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 216.460ppb

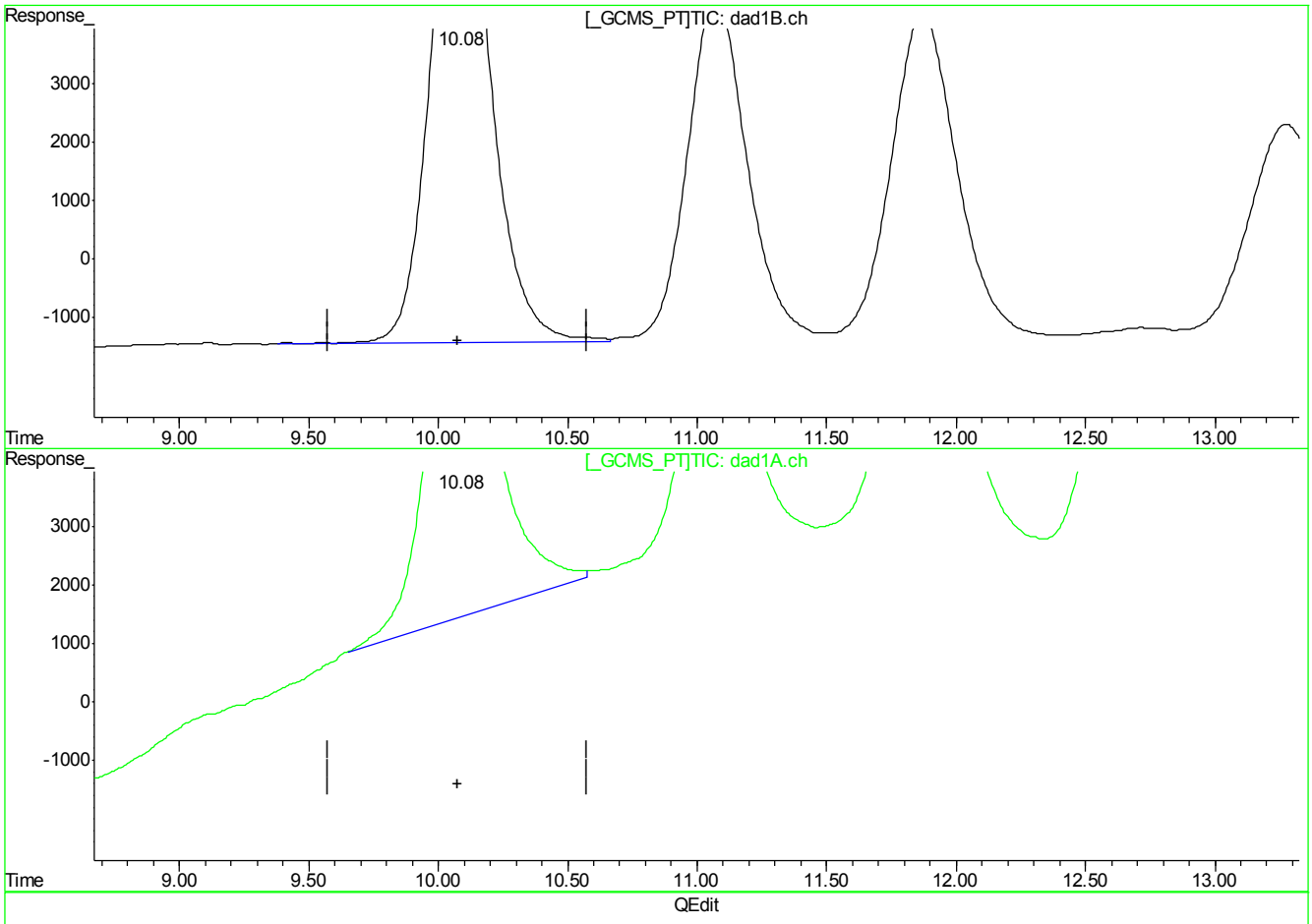
response 3026444

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 89.971ppb m

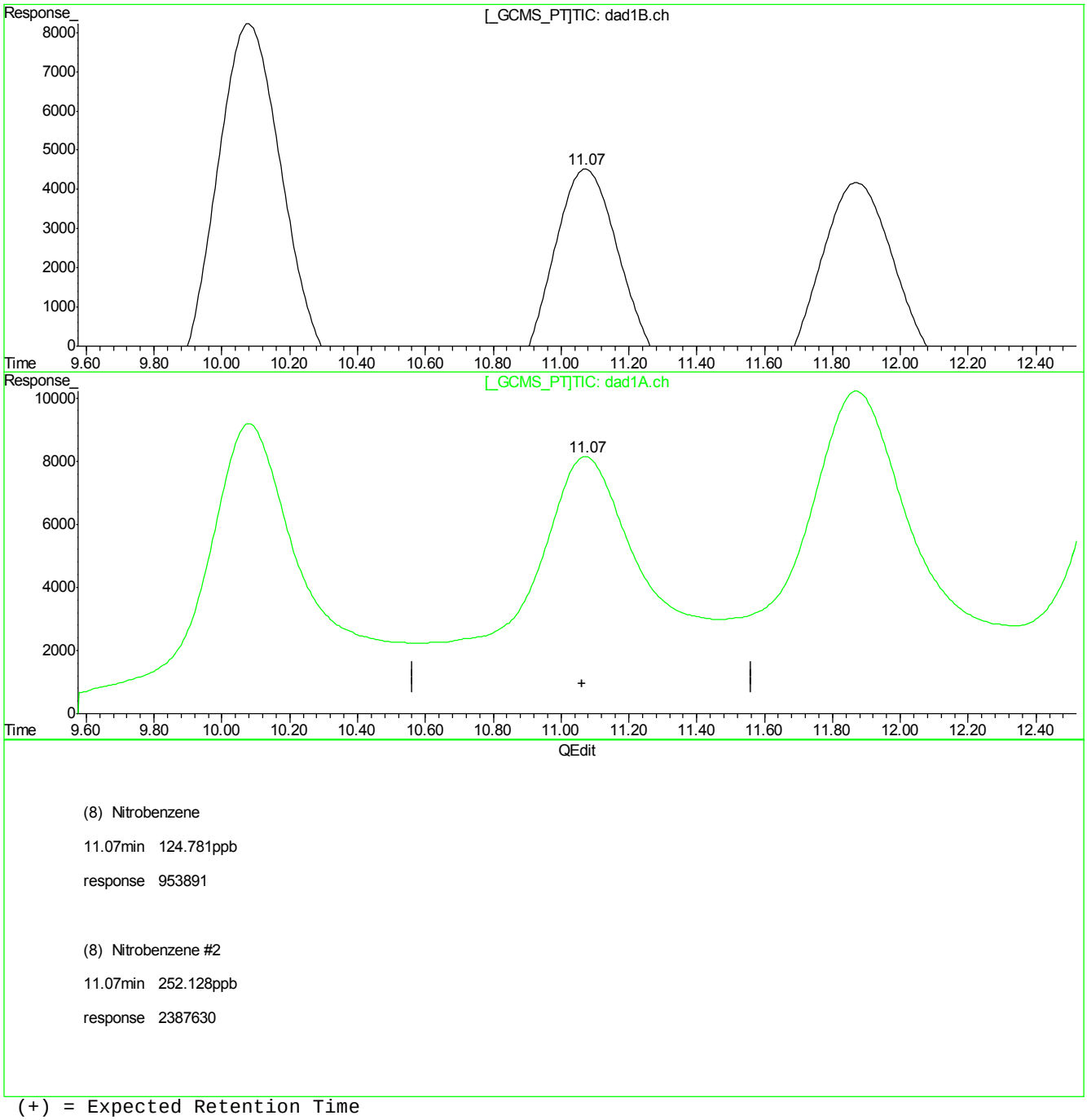
response 1272574

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration

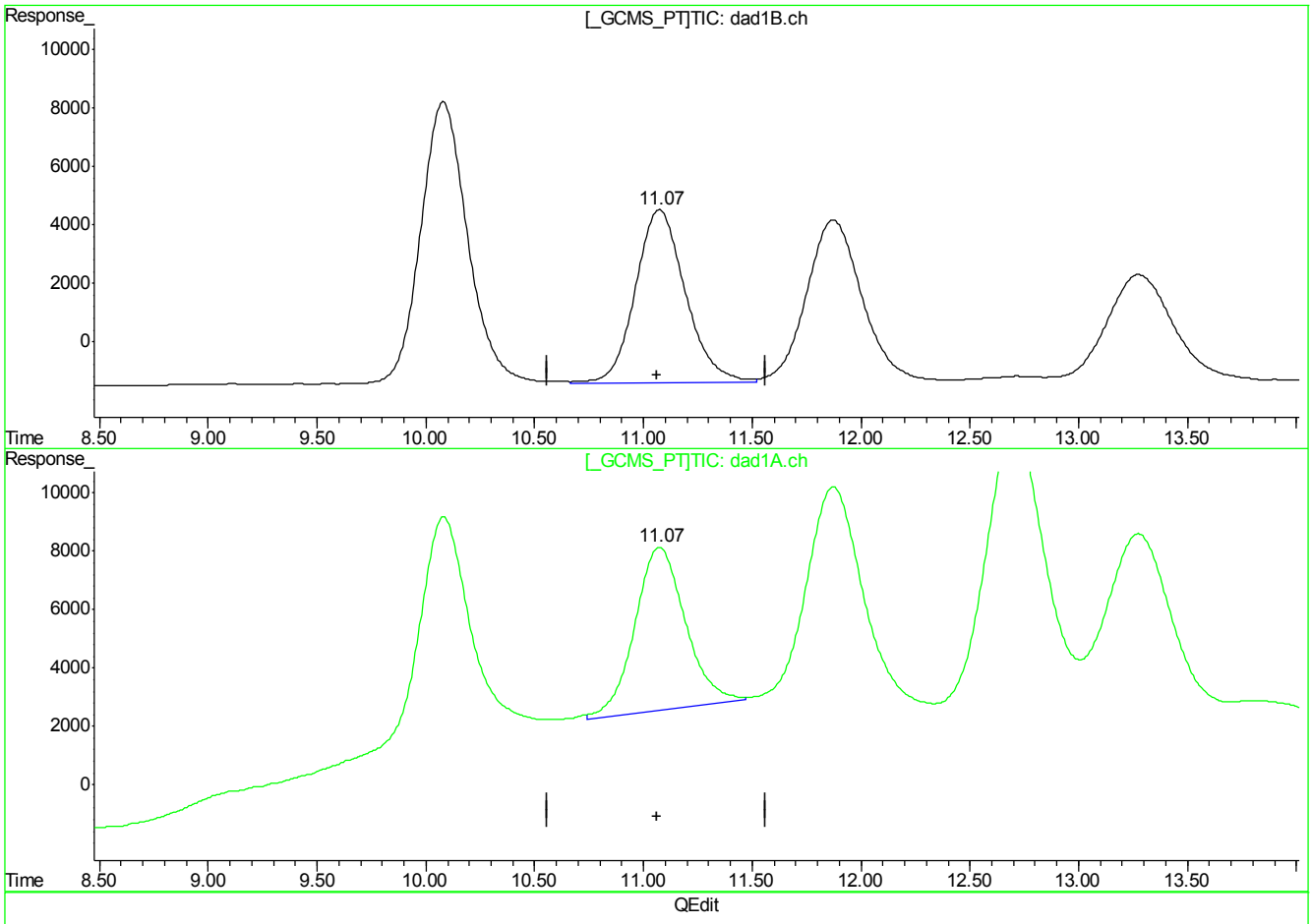


(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.07min 124.781ppb

response 953891

(8) Nitrobenzene #2

11.07min 94.788ppb m

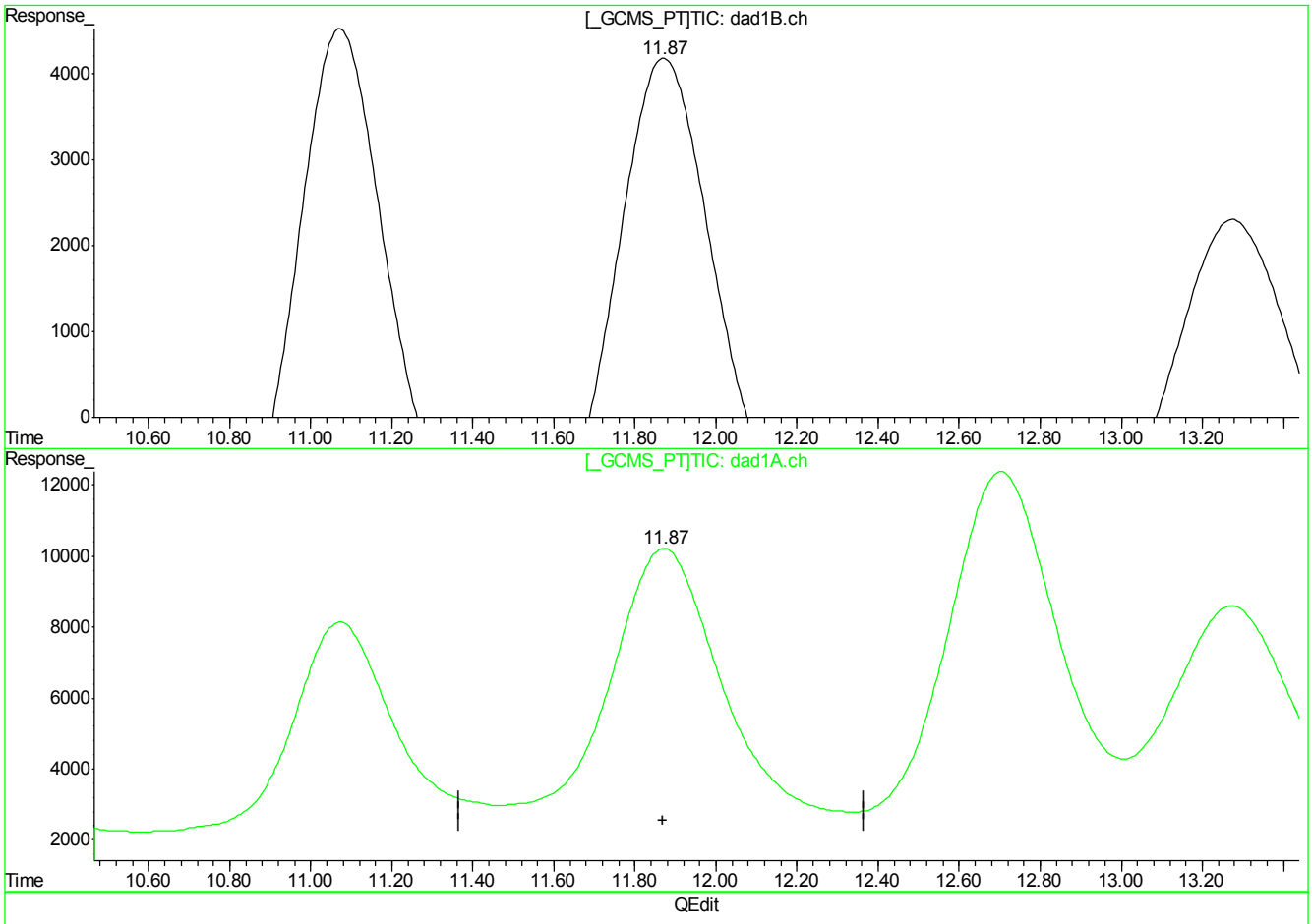
response 901312

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 174.293ppb

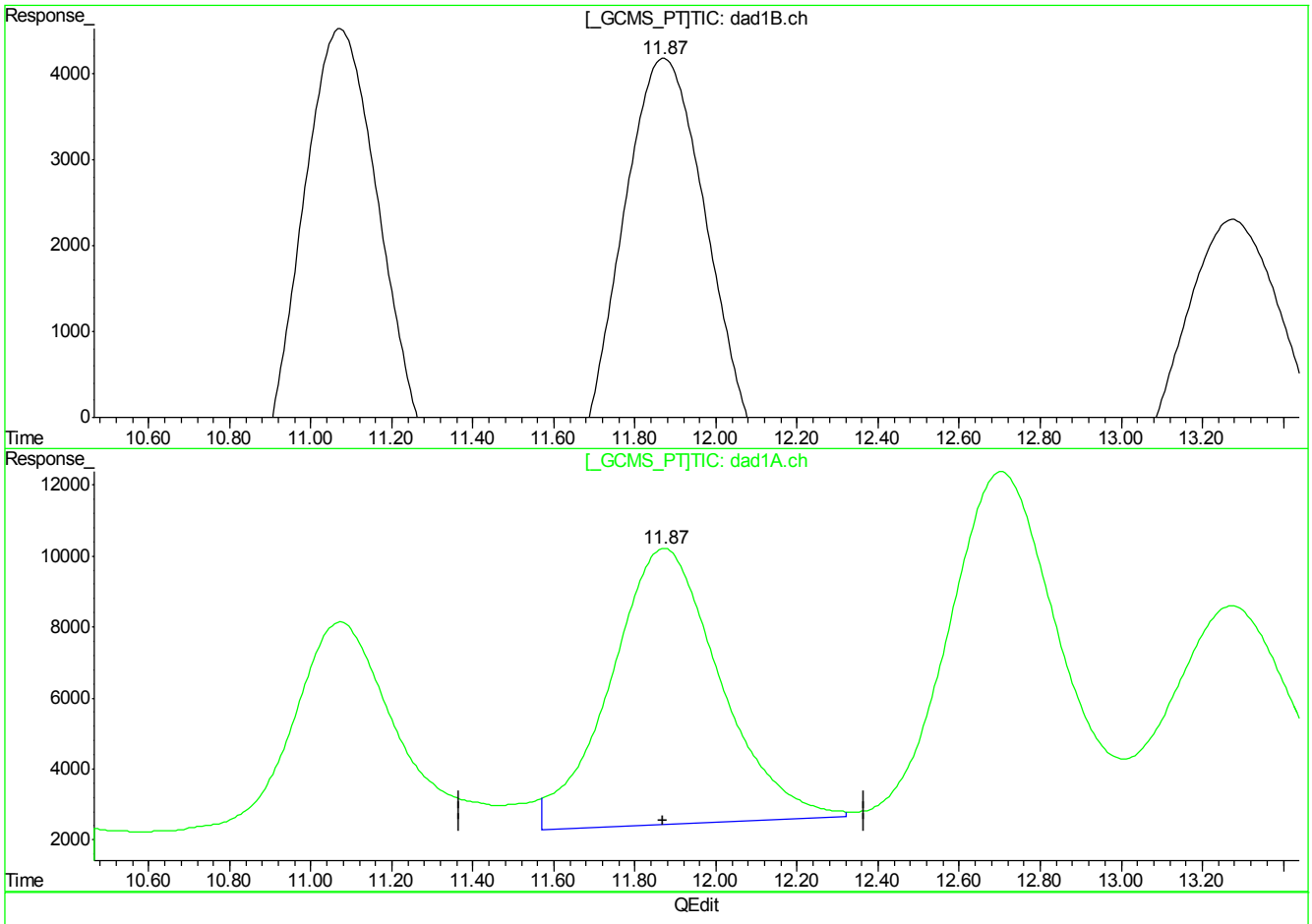
response 2710161

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:08 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 93.389ppb m

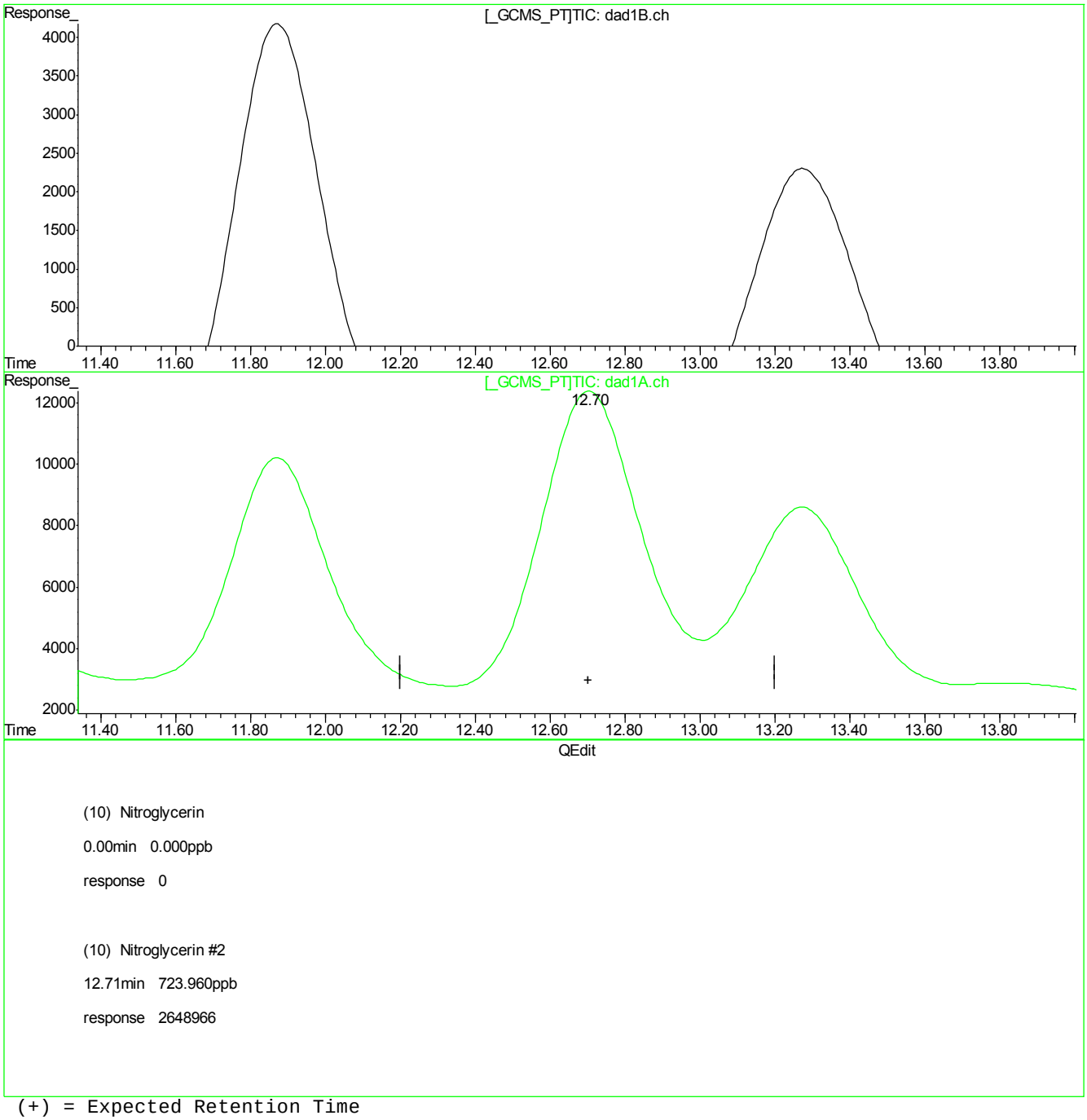
response 1458021

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration

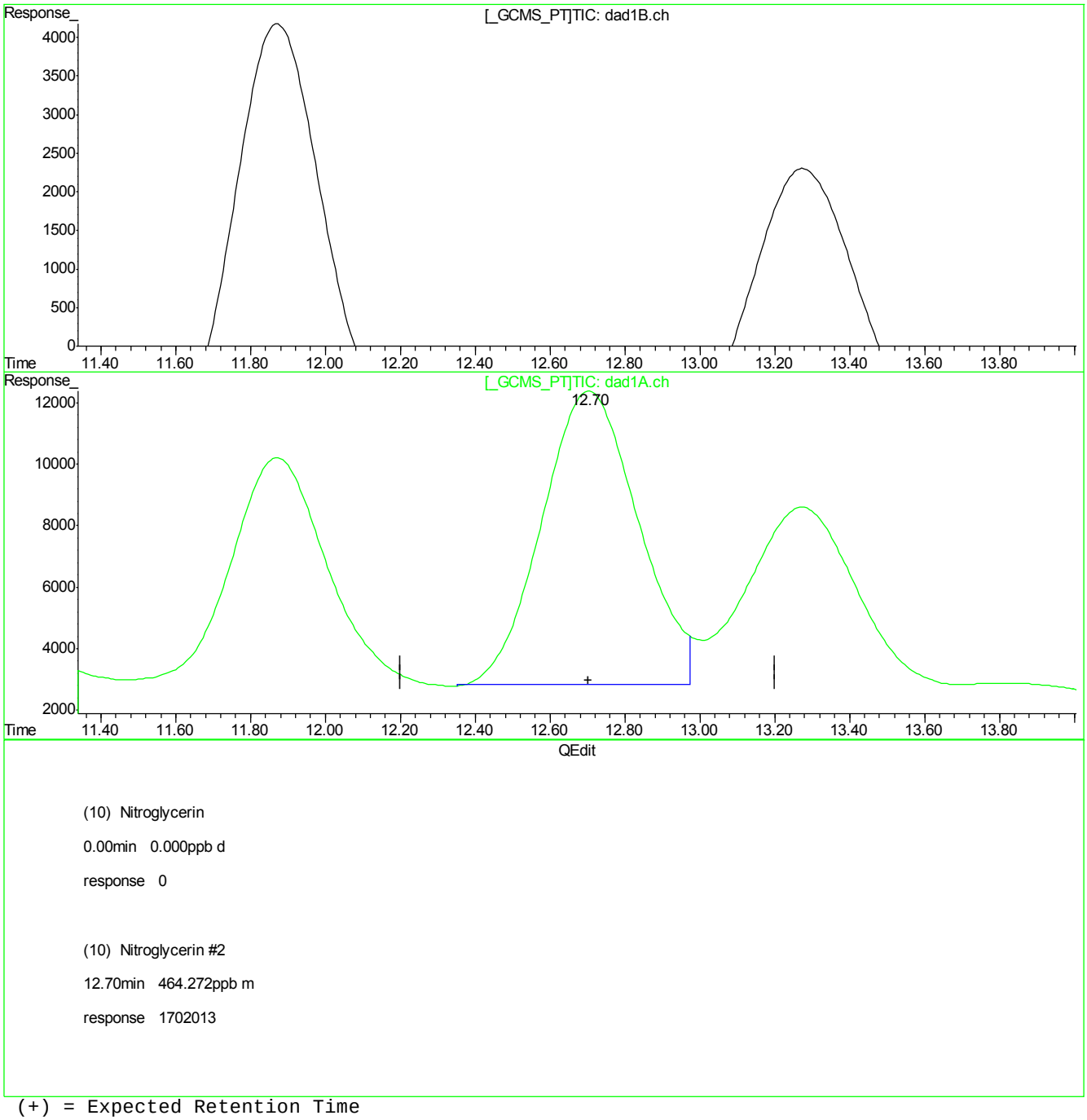


(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:14 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.70min 464.272ppb m

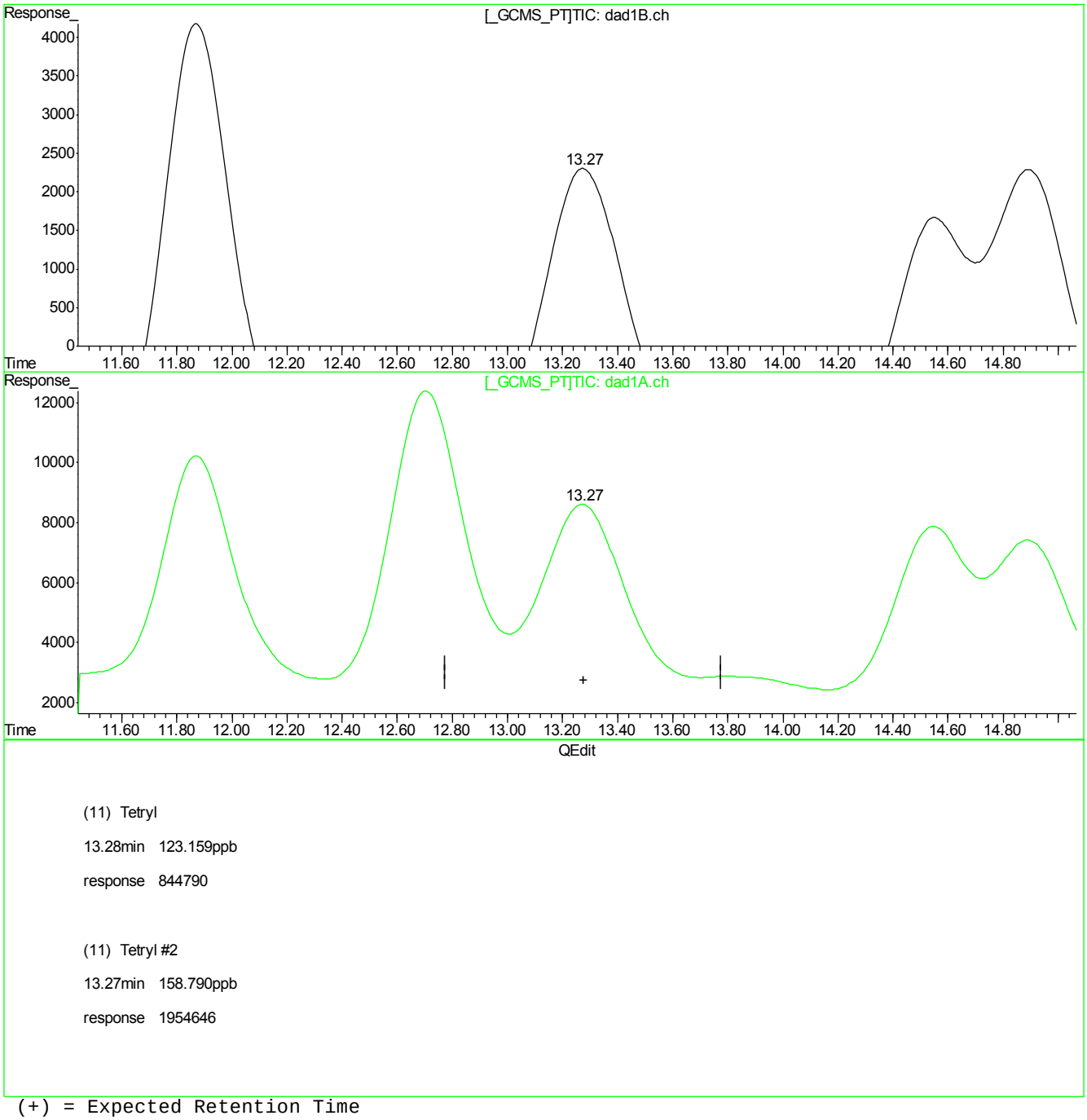
response 1702013

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:20 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 158.790ppb

response 1954646

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:22 2017

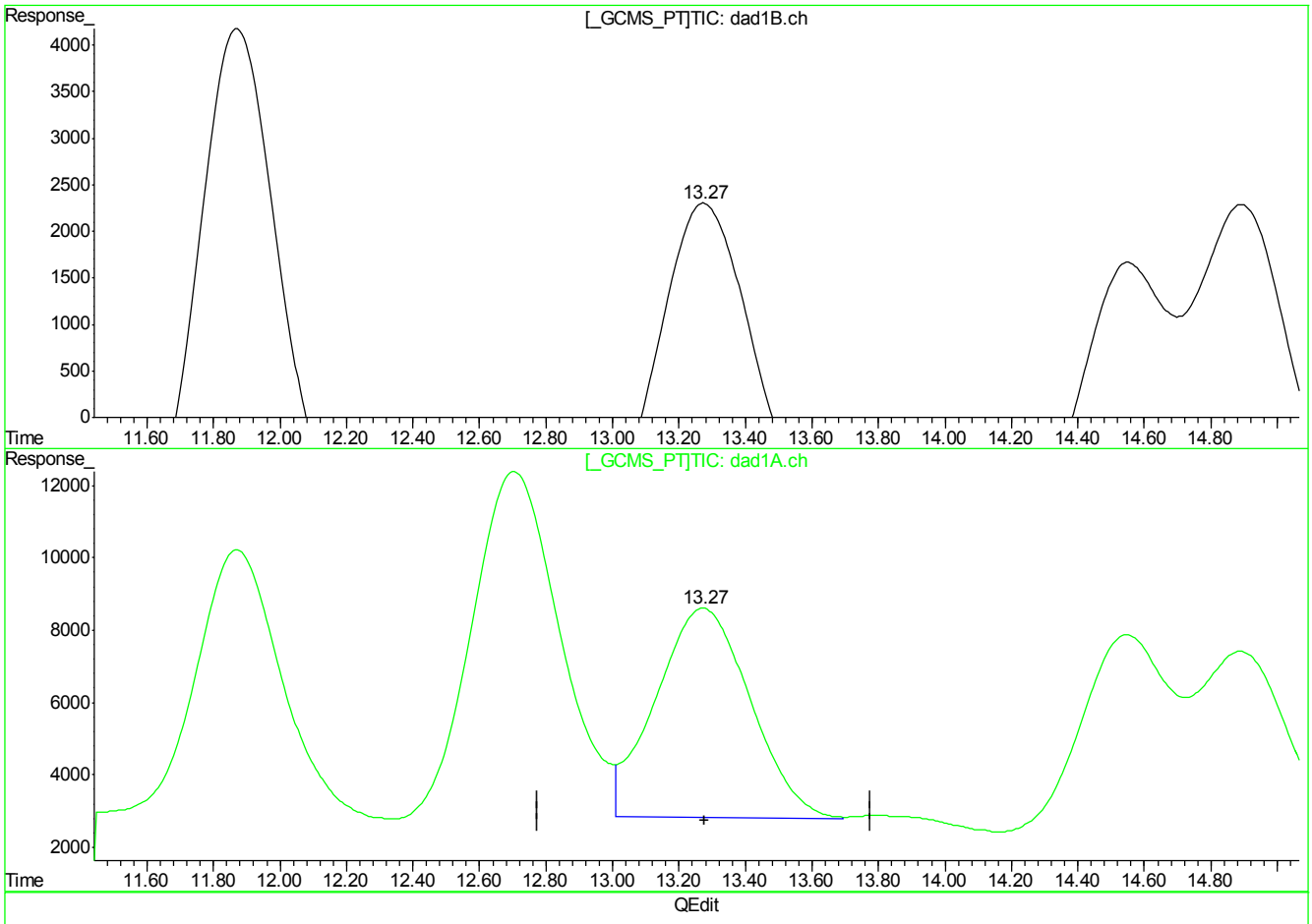
7.7.15.10

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 93.137ppb m

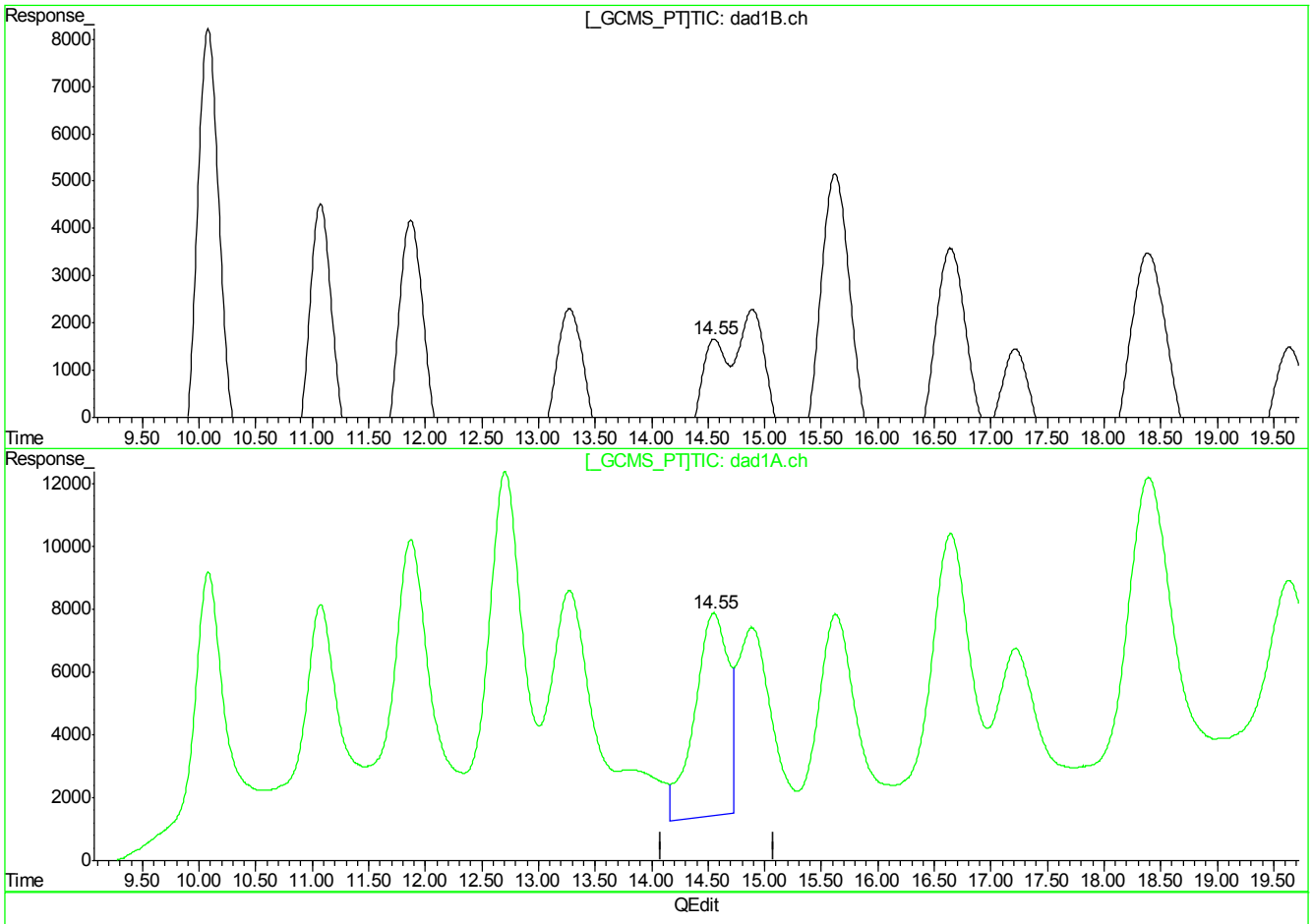
response 1140150

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:25 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 107.581ppb

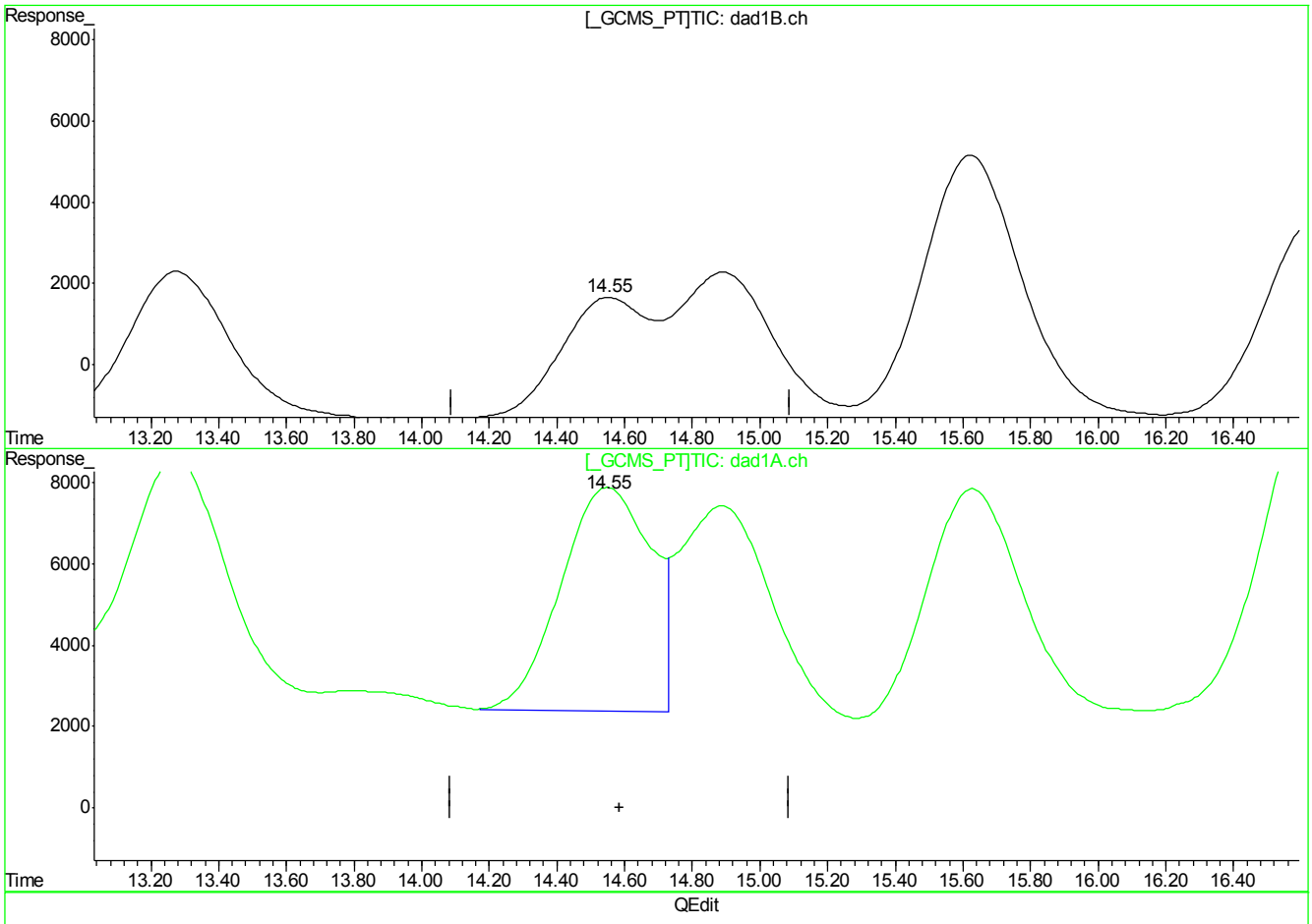
response 1344362

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



QEdit

(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 81.638ppb m

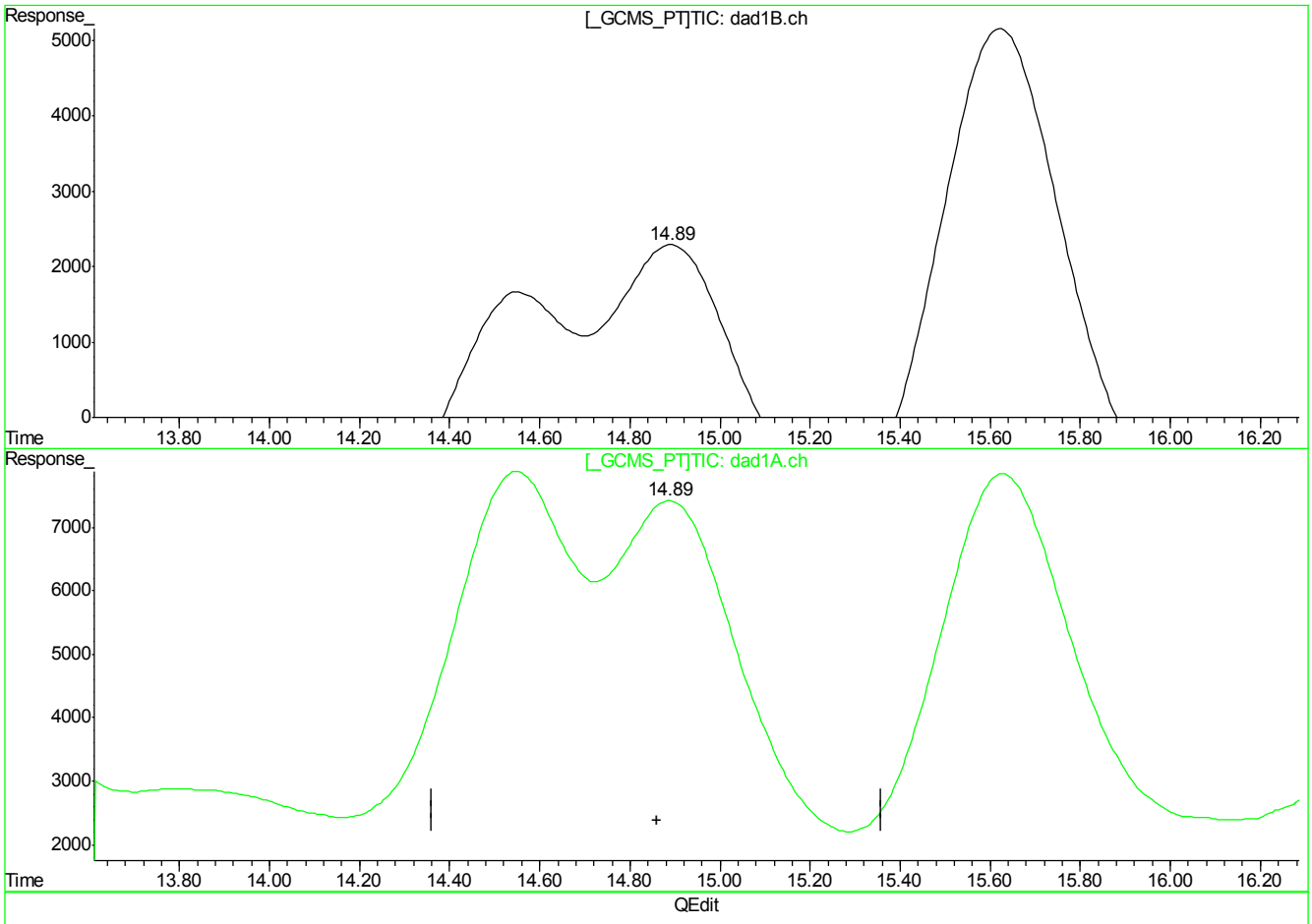
response 1021169

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:43 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 107.016ppb

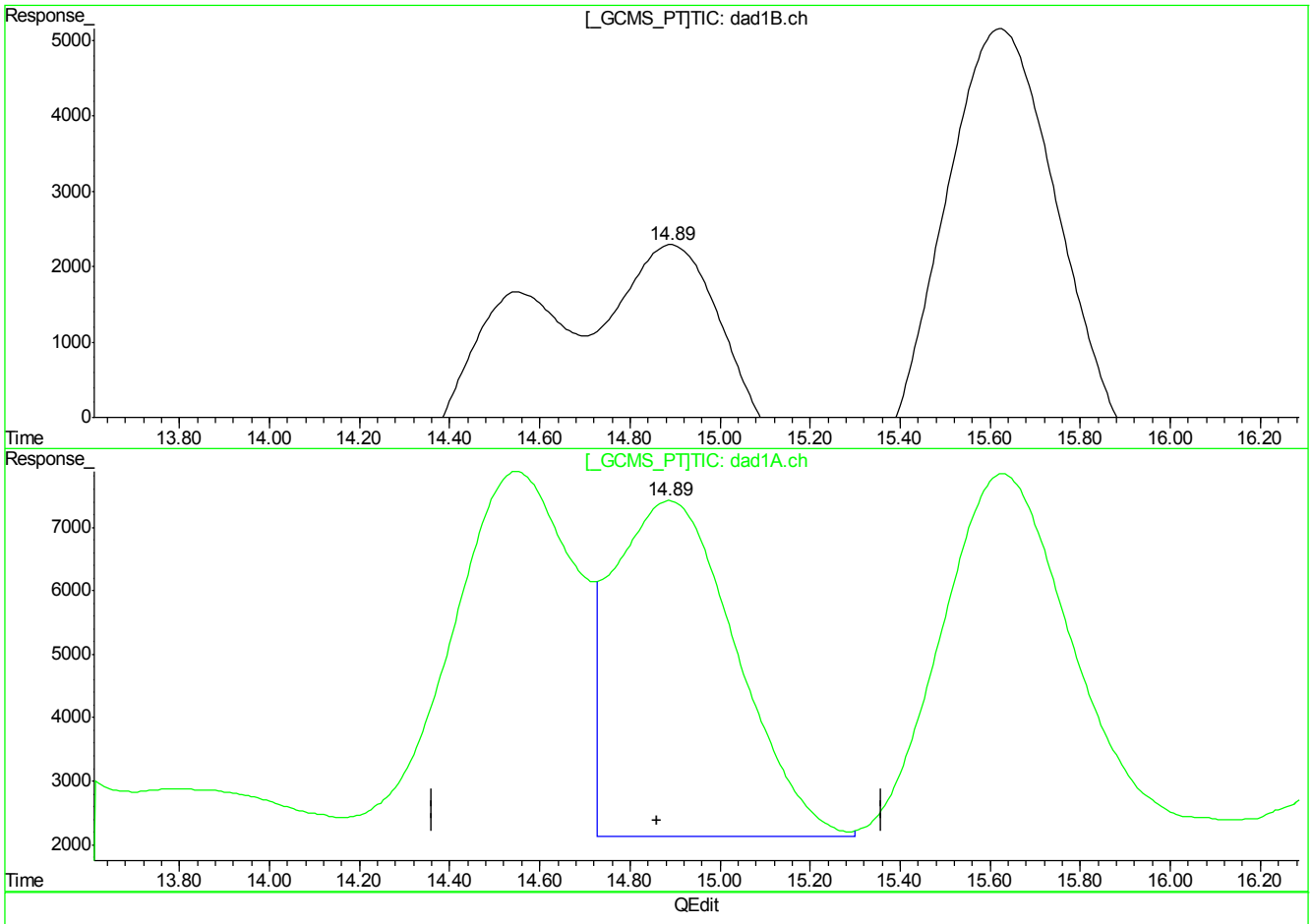
response 1167236

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 91.335ppb m

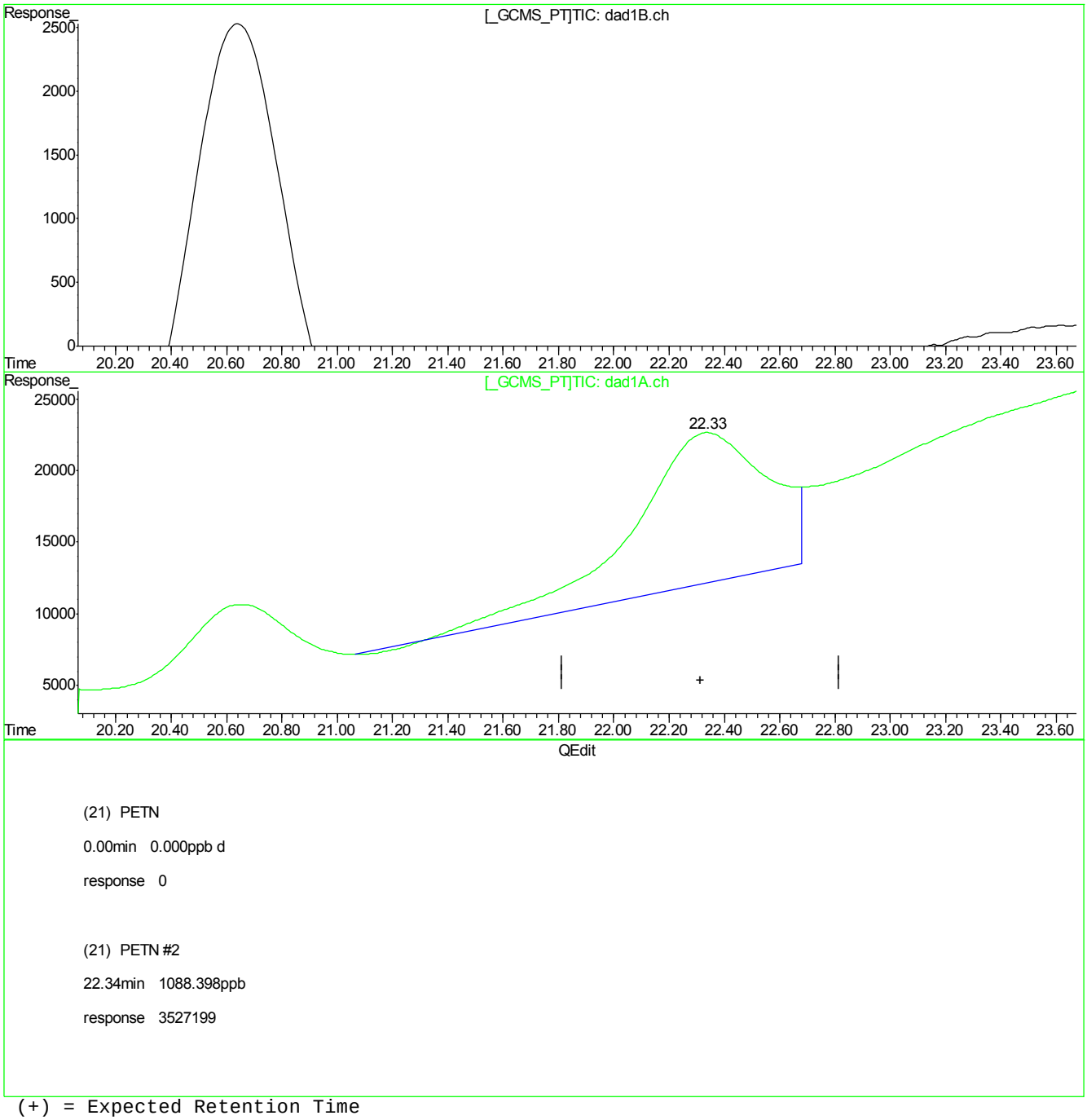
response 996233

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.34min 1088.398ppb

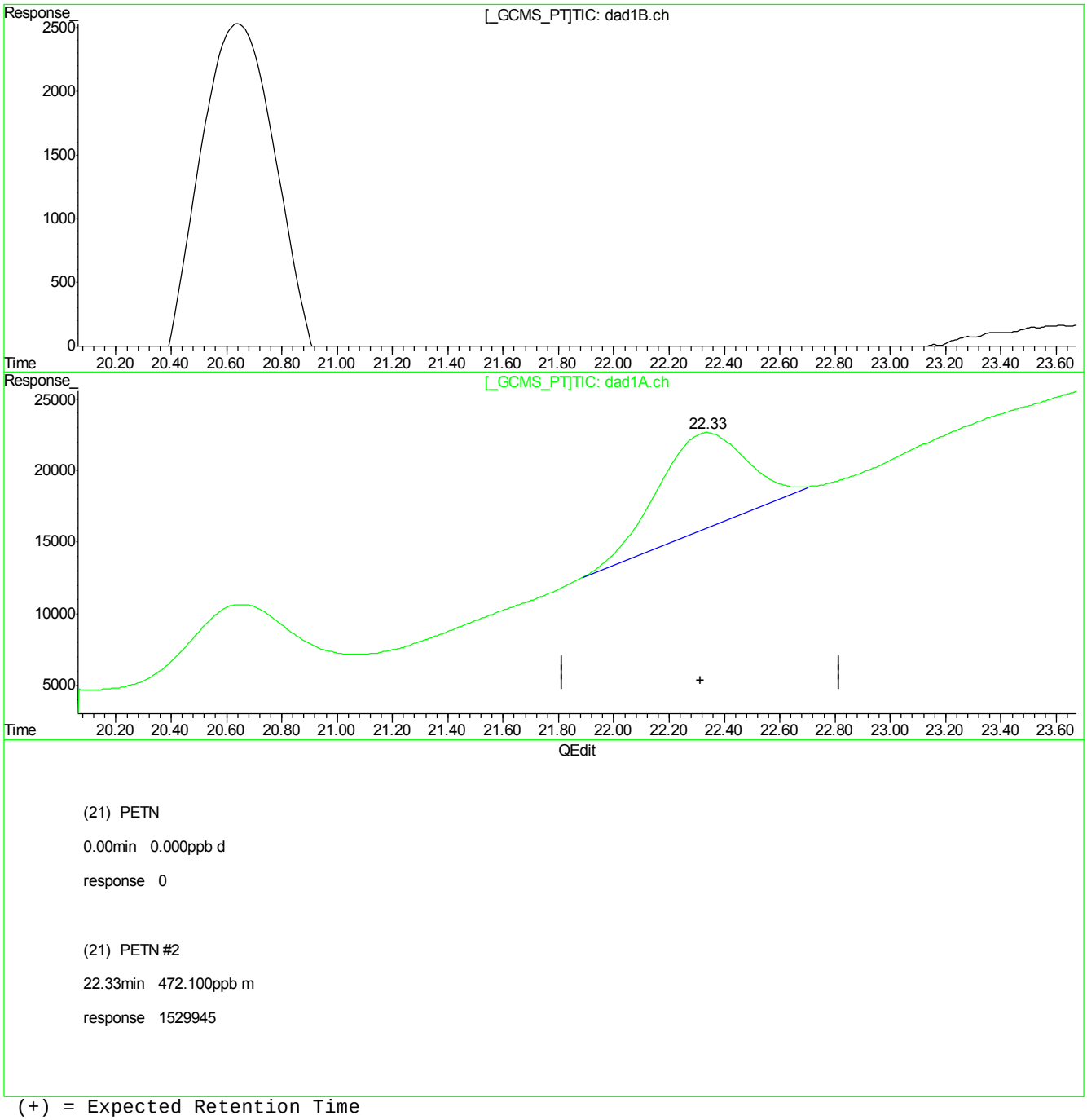
response 3527199

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:59 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 472.100ppb m

response 1529945

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:58:01 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:00 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.56	1063491	2179380	180.394	174.846m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		36.08%#	34.97%#
	Target Compounds						
1)	TNX	5.01	5.01	2917600	2917600	346.858	345.941
2)	HMX	5.46	5.46	656713	656713	172.889	171.666
3)	DNX	5.59	5.59	1519481	1519481	231.493	232.298
4)	MNX	6.67	6.67	1443328	1443328	298.340	298.340
5)	1,3,5-Trinitrobe	7.55	7.55	2106246	2100950	206.269	205.837
6)	RDX	8.07	8.07	970188	952673	203.793	201.047
7)	1,3-Dinitrobenze	10.09	10.08	2896074	2285655	198.974	162.672m
8)	Nitrobenzene	11.08	11.08	1850780	1739643	242.105	183.374m
9)	2,4,6-Trinitroto	11.88	11.87	1988673	2595550	195.051	166.860m
10)	Nitroglycerin	0.00	12.71	0	3400685	N.D. d	930.820m
11)	Tetryl	13.29	13.28	1576705	2666776	229.863	215.610m
13)	2,6-Dinitrotolue	14.91	14.90	1464572	2076245	210.655	190.384m
14)	2,4-Dinitrotolue	15.63	15.64	2633670	2111724	198.199	212.468
15)	o-Nitrotoluene	17.23	17.23	1151278	1767333	264.153	291.713
16)	3,5-Dinitroanili	16.65	16.65	2062620	3445874	194.627	191.892
17)	p-Nitrotoluene	18.40	18.40	2368549	4400784	205.856	206.913
18)	4-Amino-2,6-Dini	18.40	18.40	2368549	4400784	205.856	206.913
19)	m-Nitrotoluene	19.65	19.65	1205775	2051289	240.727	216.863
20)	2-Amino-4,6-Dini	20.64	20.65	1852313	2259776	193.086	166.971
21)	PETN	0.00	22.33	0	3416410	N.D. d	1054.212m

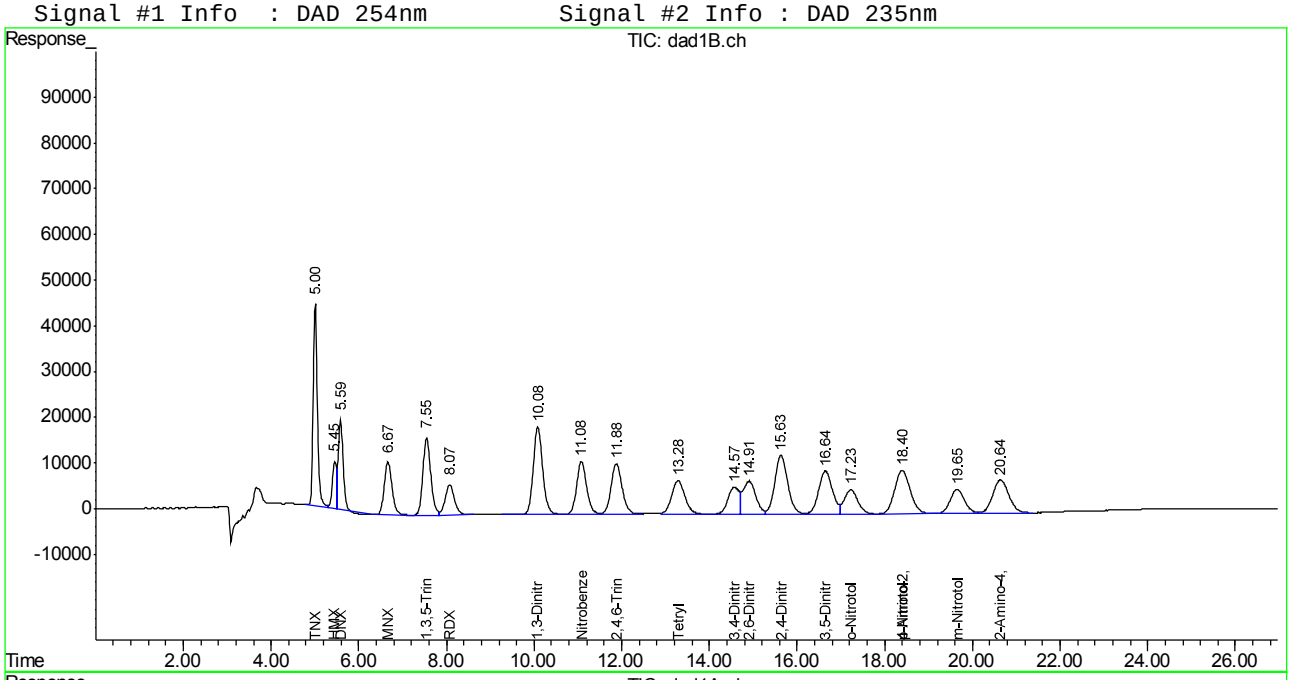
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 13:37:53 2017 Page 1

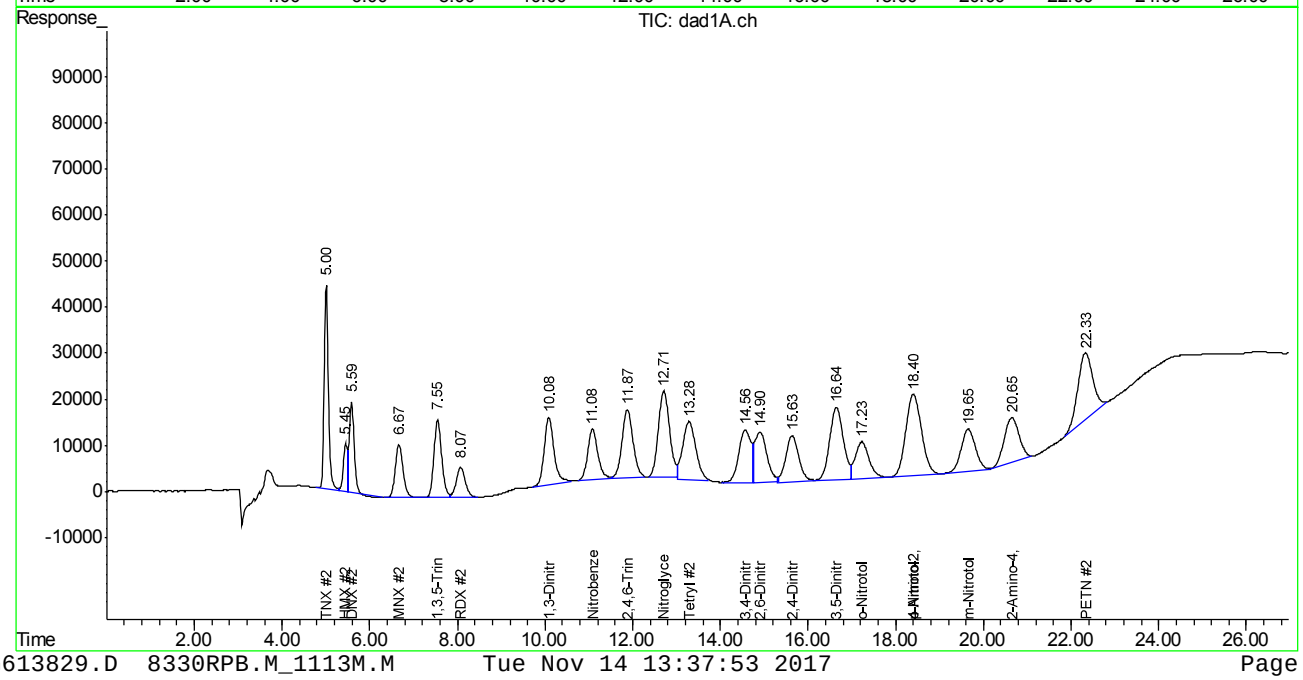
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

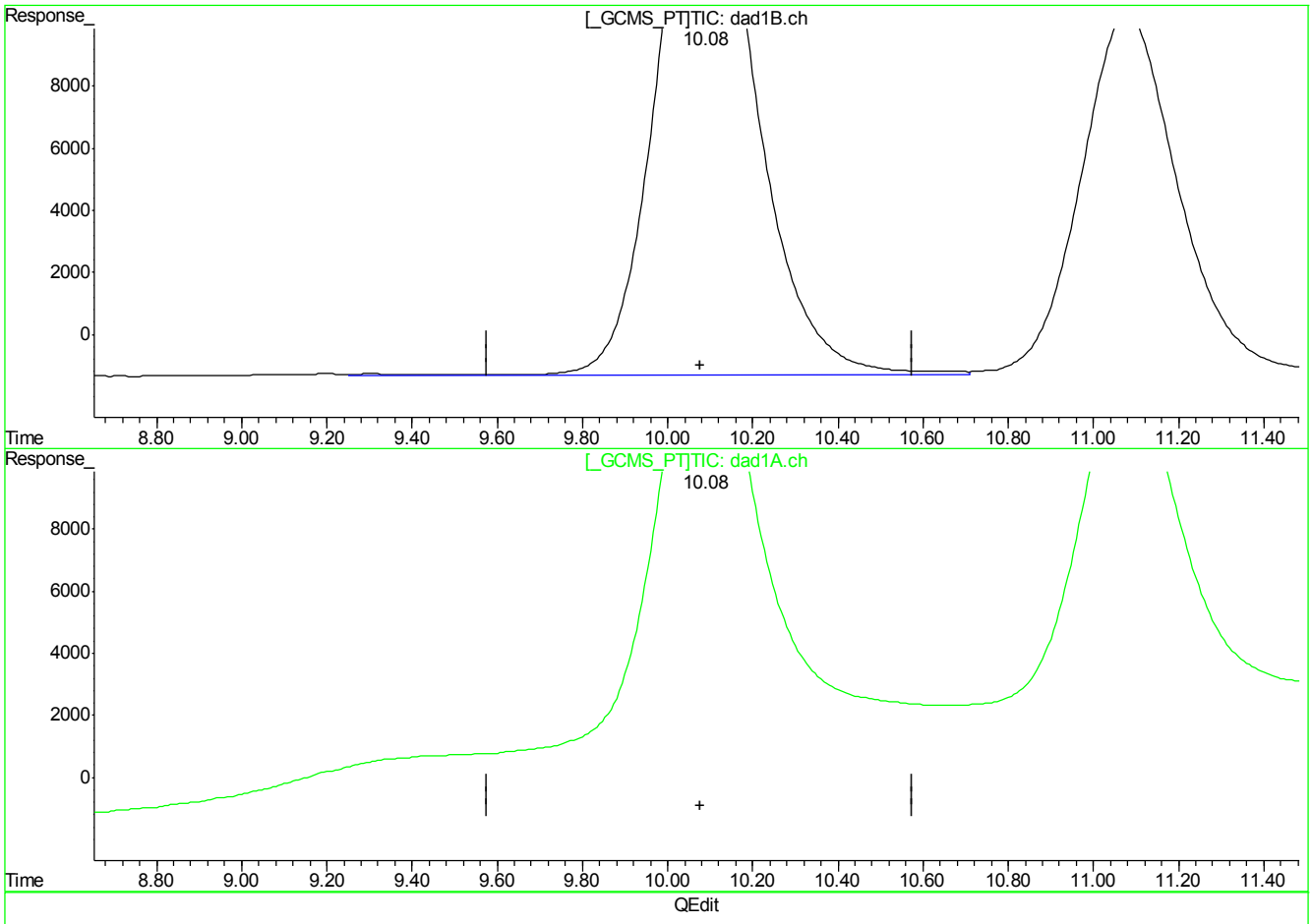
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613829.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:04	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.56	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.90	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.09min 292.876ppb

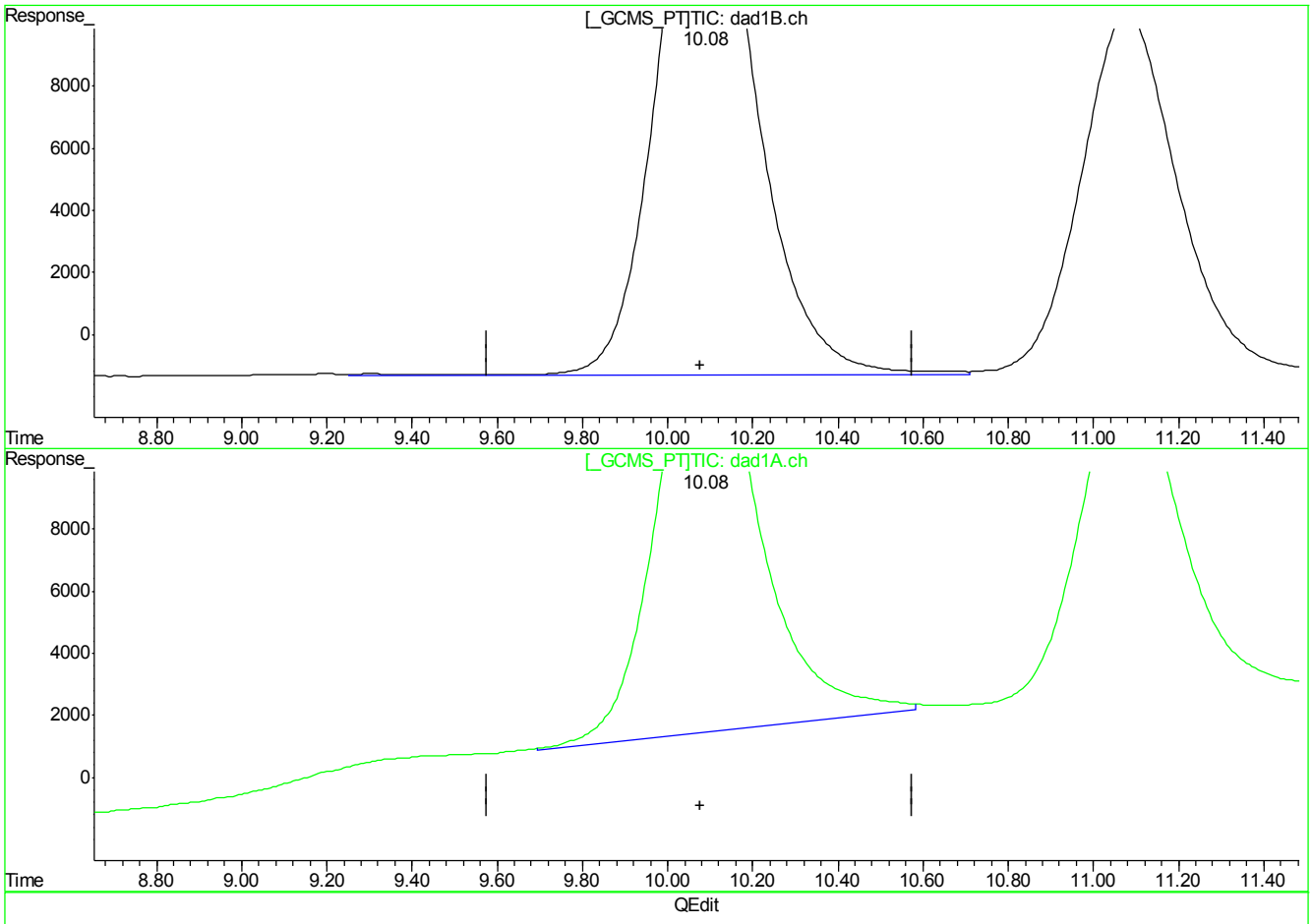
response 4066063

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:15 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.08min 162.672ppb m

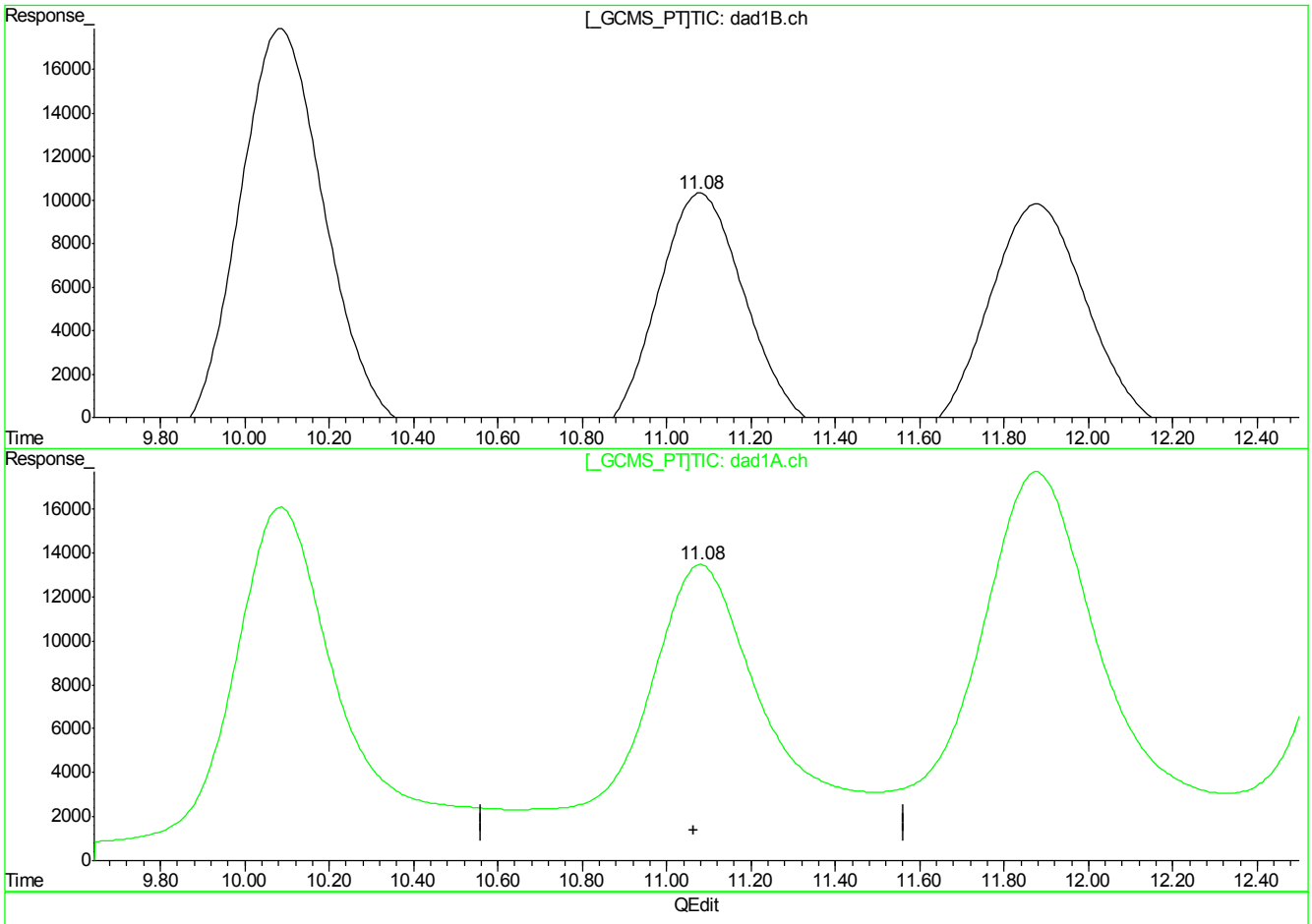
response 2285655

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 328.328ppb

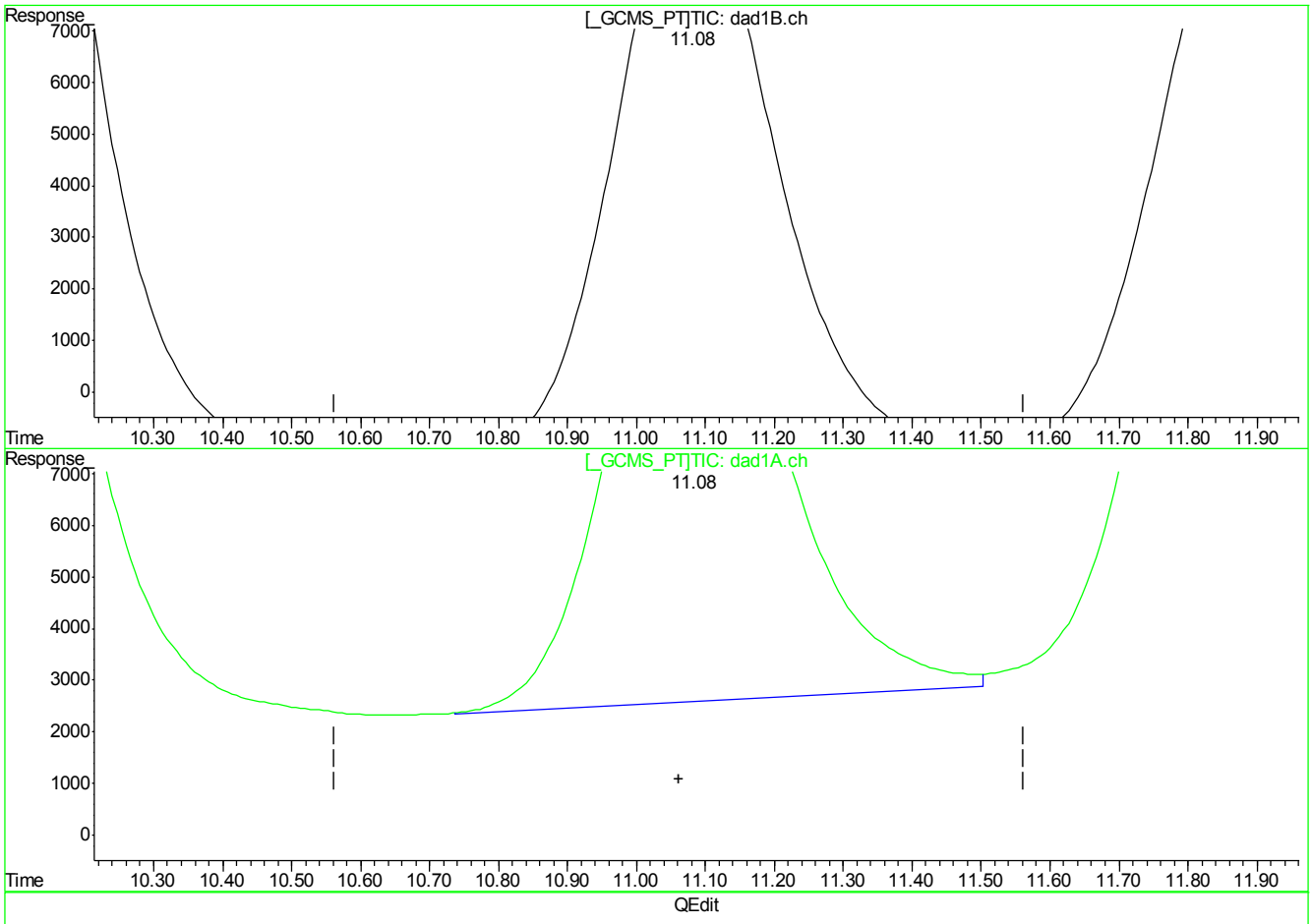
response 3103070

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:25 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 183.374ppb m

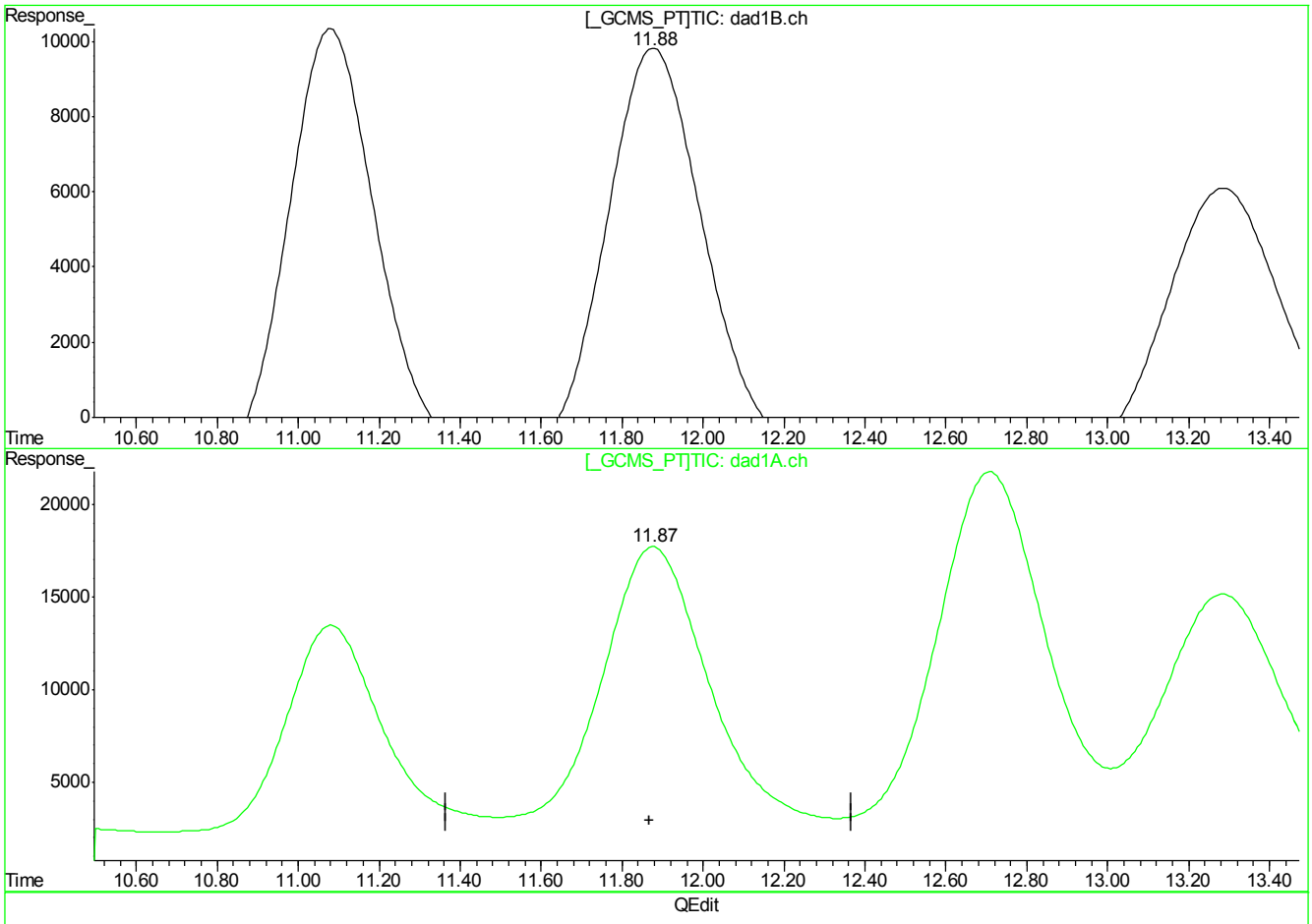
response 1739643

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:31 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.88min 253.581ppb

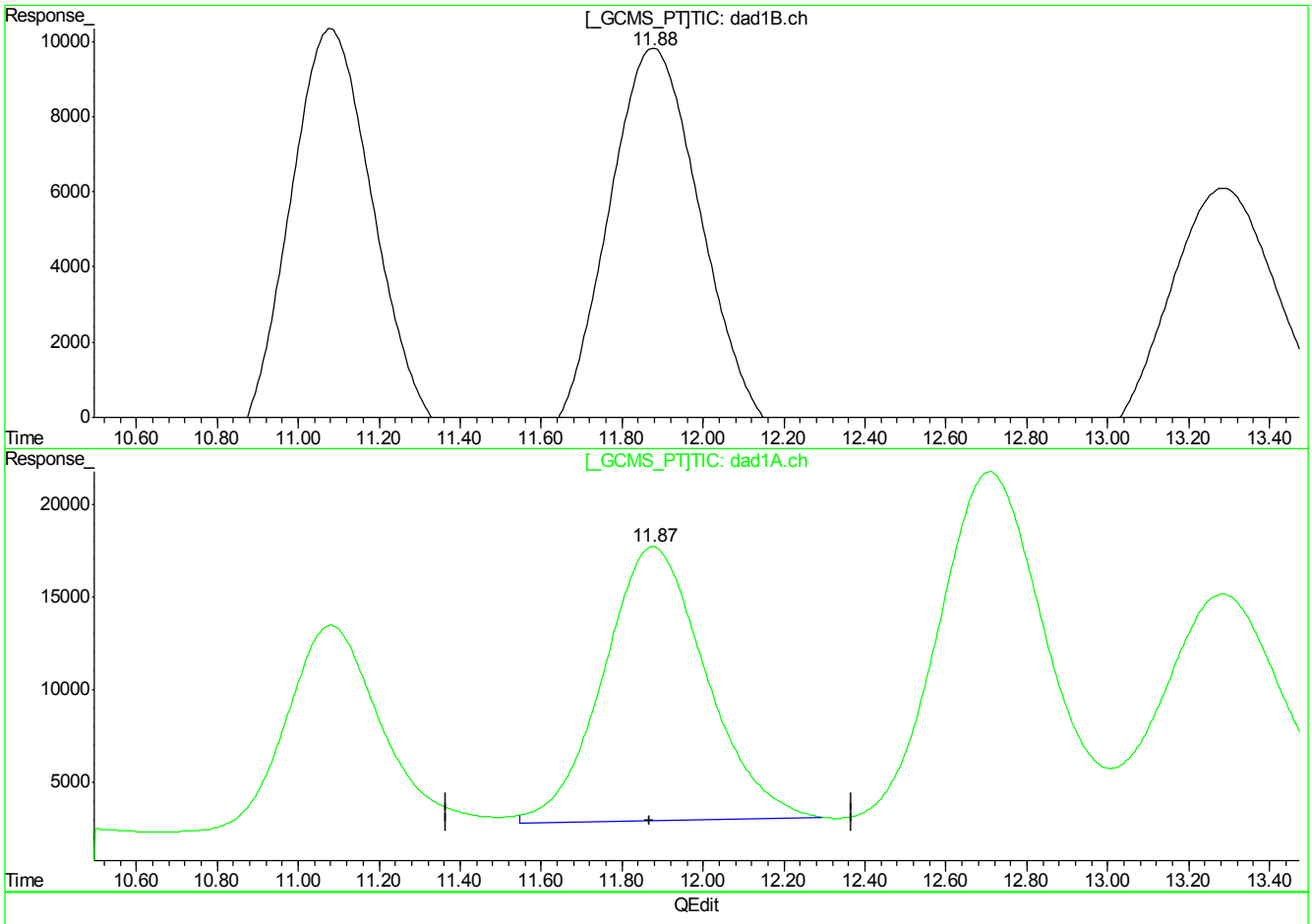
response 3927420

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:33 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.87min 166.860ppb m

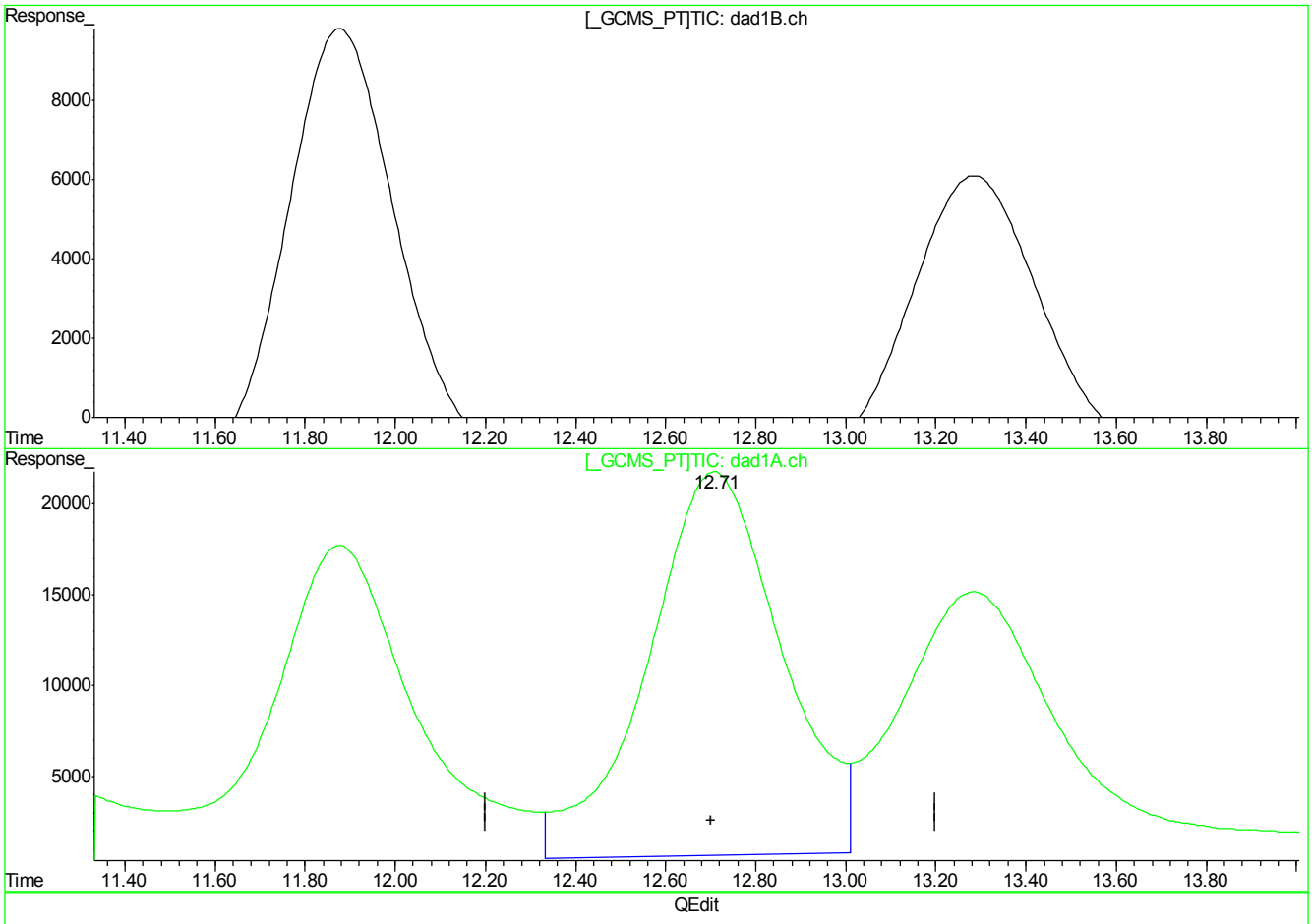
response 2595550

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 1189.969ppb

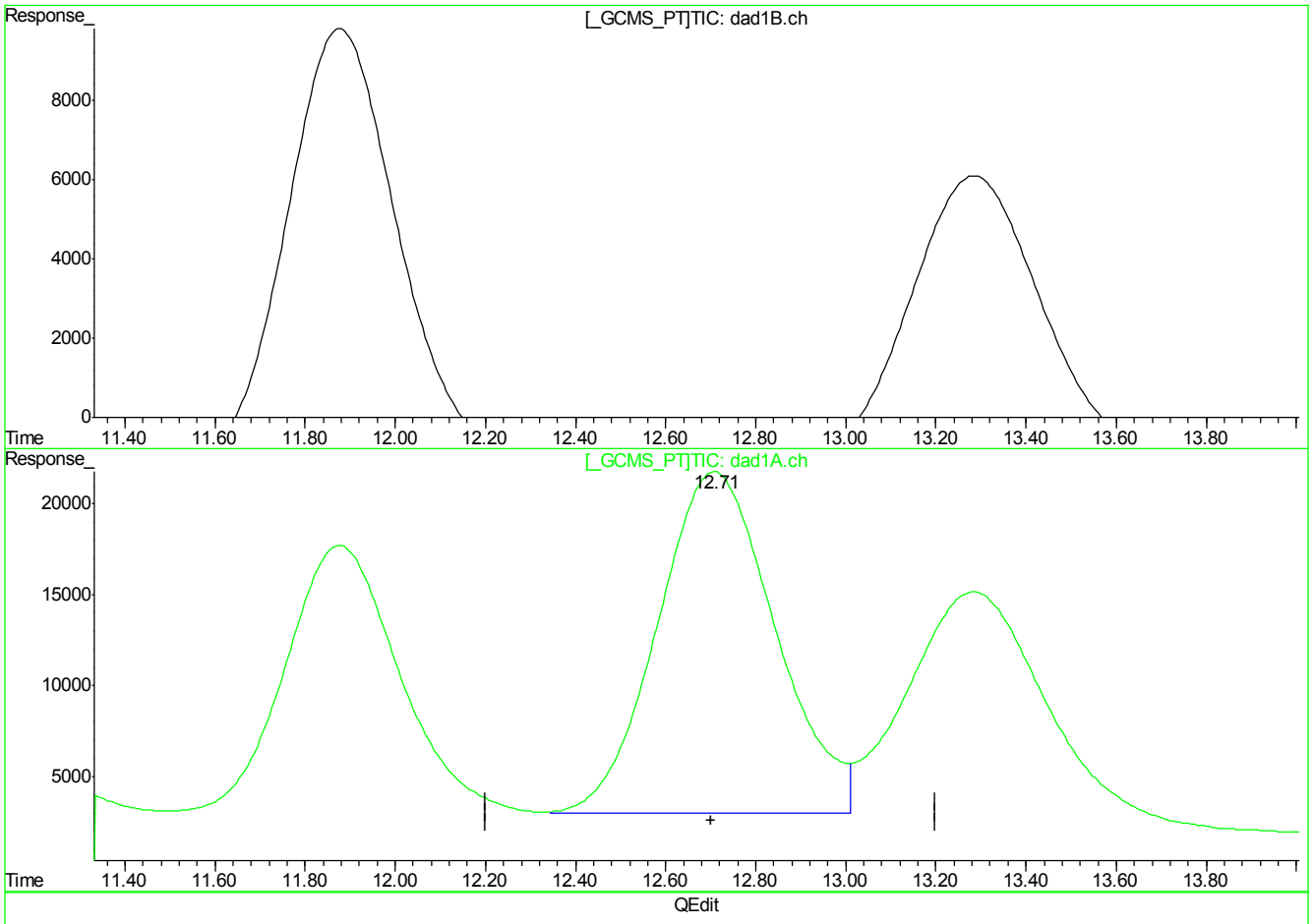
response 4339170

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:38 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 930.820ppb m

response 3400685

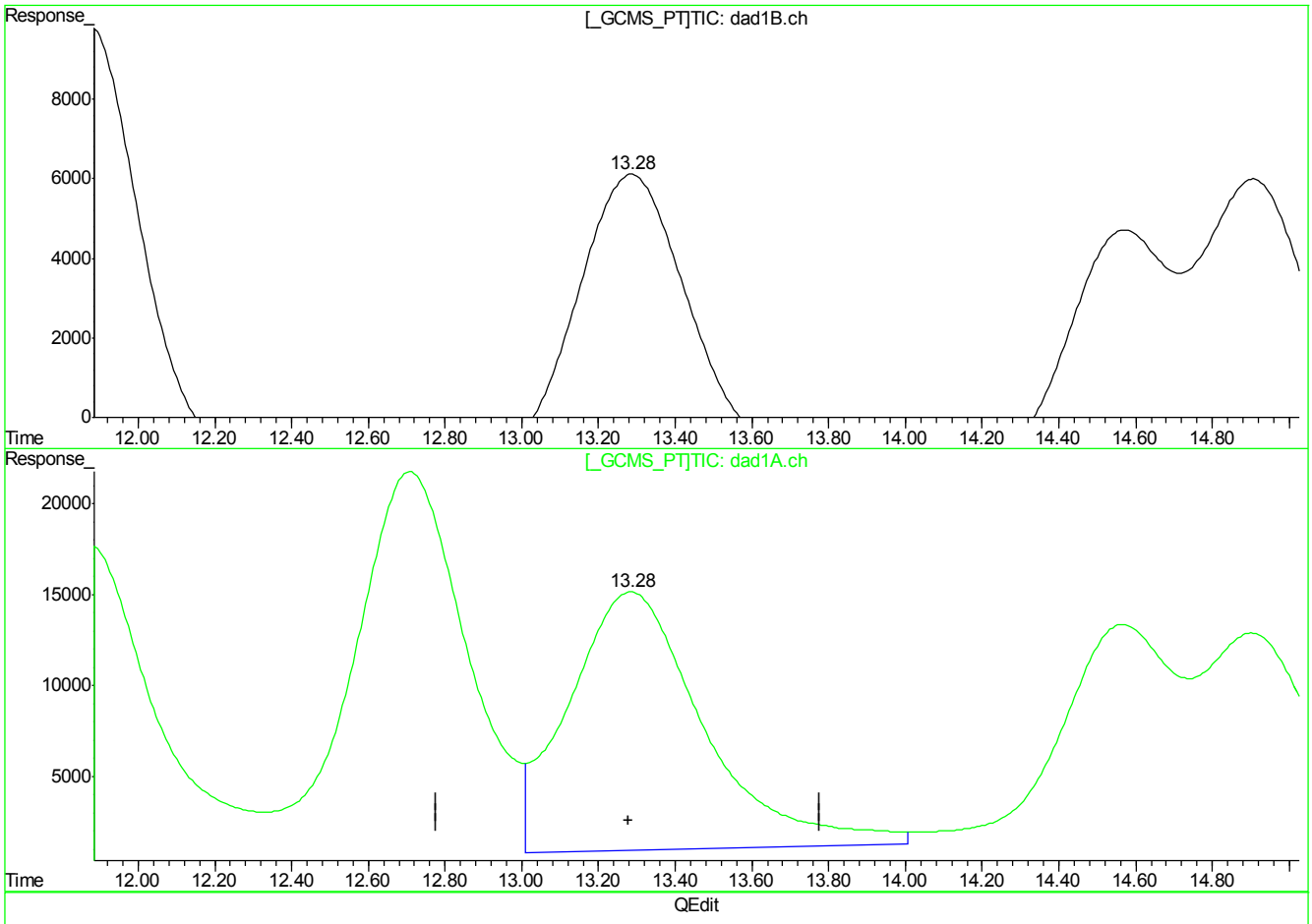
(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:42 2017

GG613829.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.29min 280.400ppb

response 3486939

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:48 2017

7.7.16.10

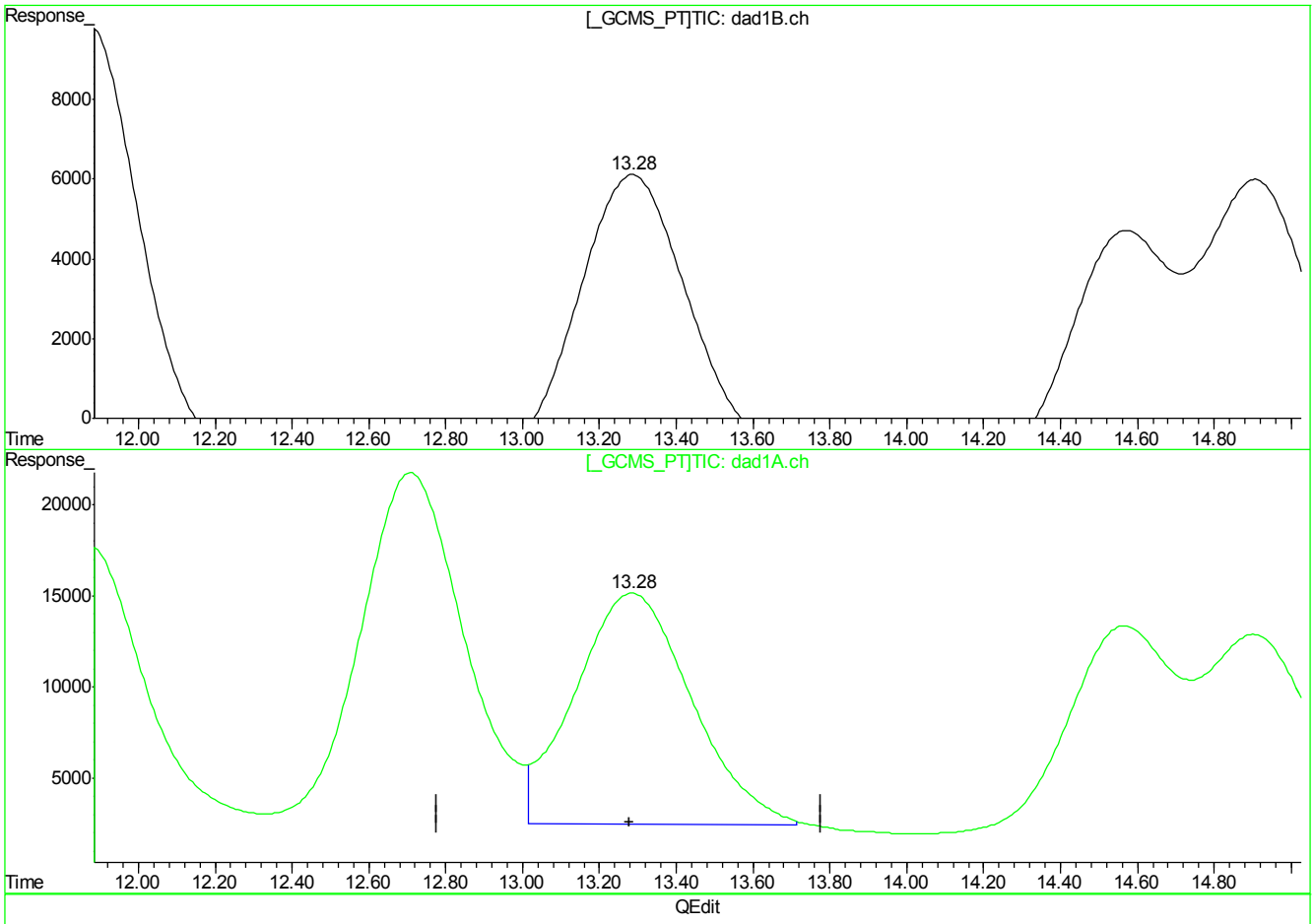
7

GG613829.D edits: Tetryl

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.28min 215.610ppb m

response 2666776

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:51 2017

7.7.16.11

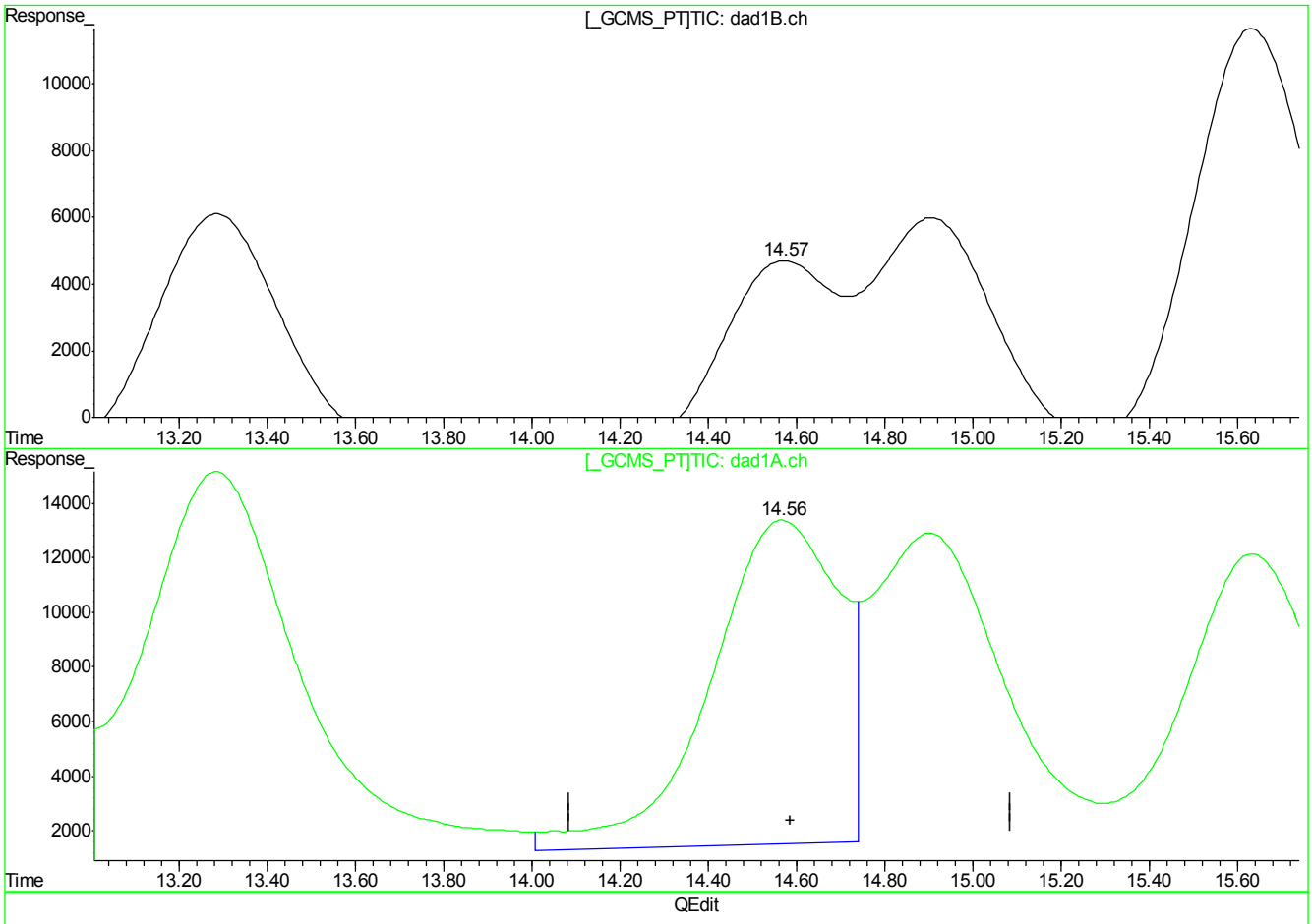
7

GG613829.D edits: Tetryl

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.57min 192.743ppb

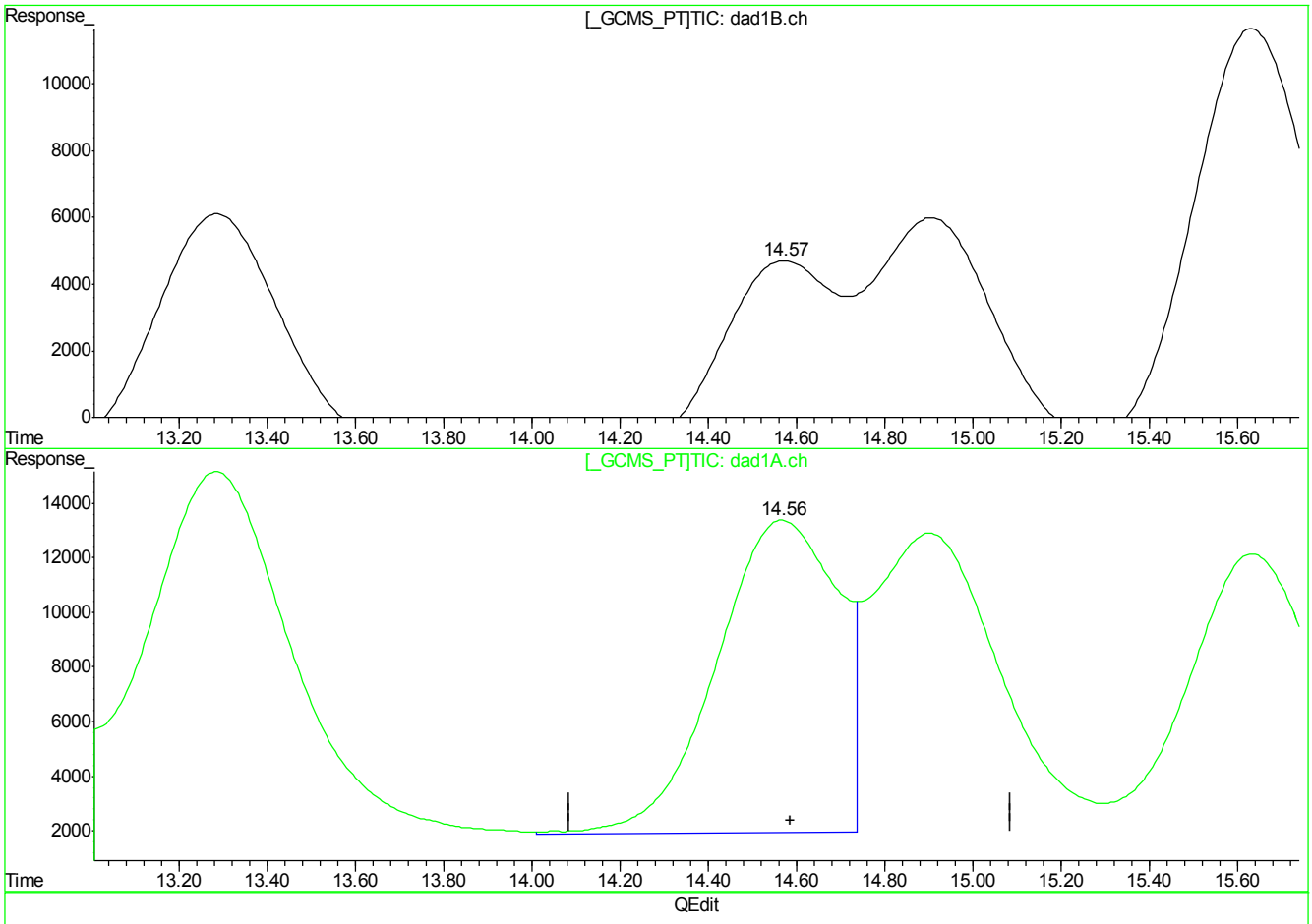
response 2400836

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:53 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.56min 174.846ppb m

response 2179380

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:57 2017

7.7.16.13

7

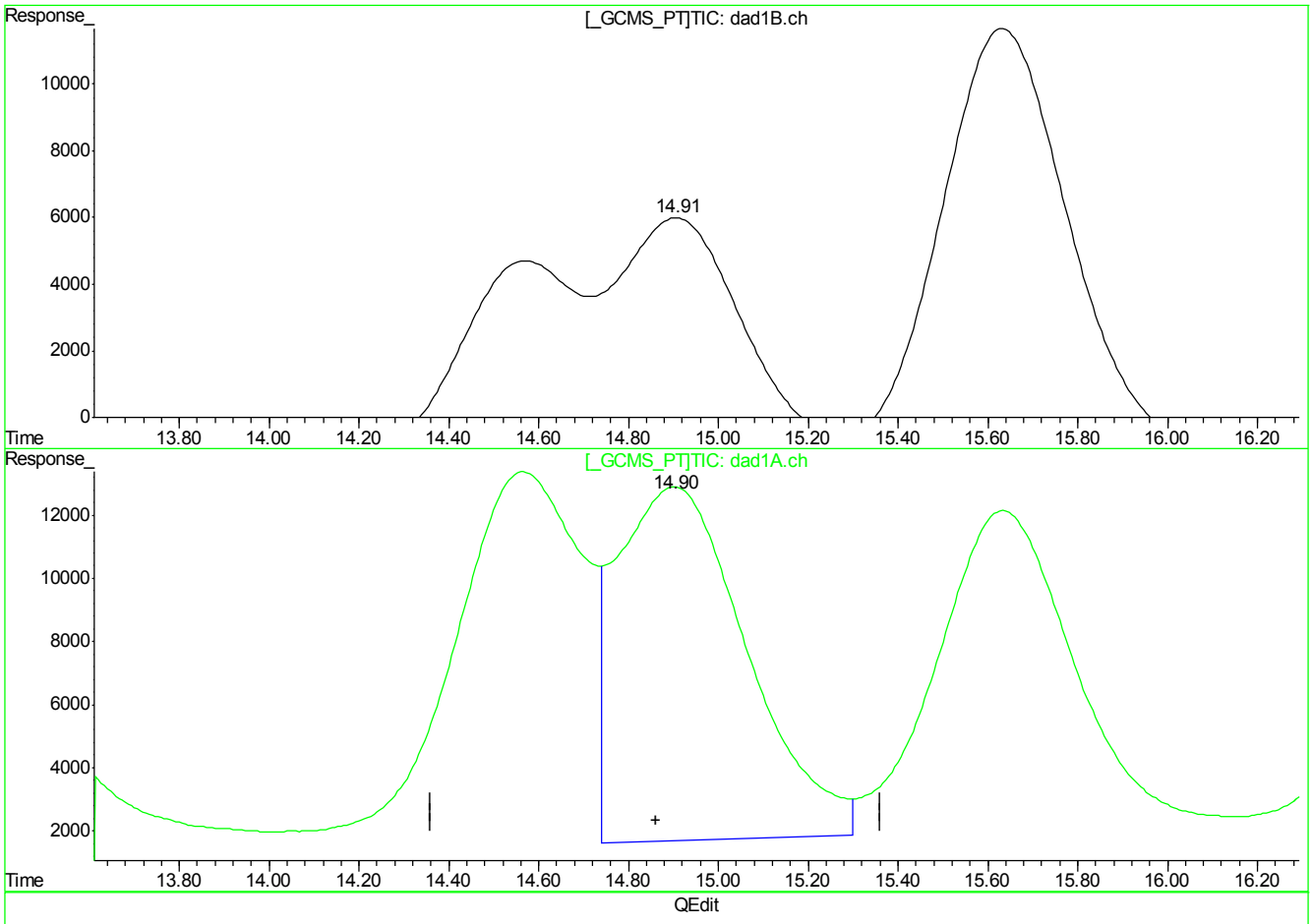
GG613829.D edits: 3,4-Dinitrotoluene

FA53801

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 206.393ppb

response 2250772

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:58 2017

7.7.16.14

7

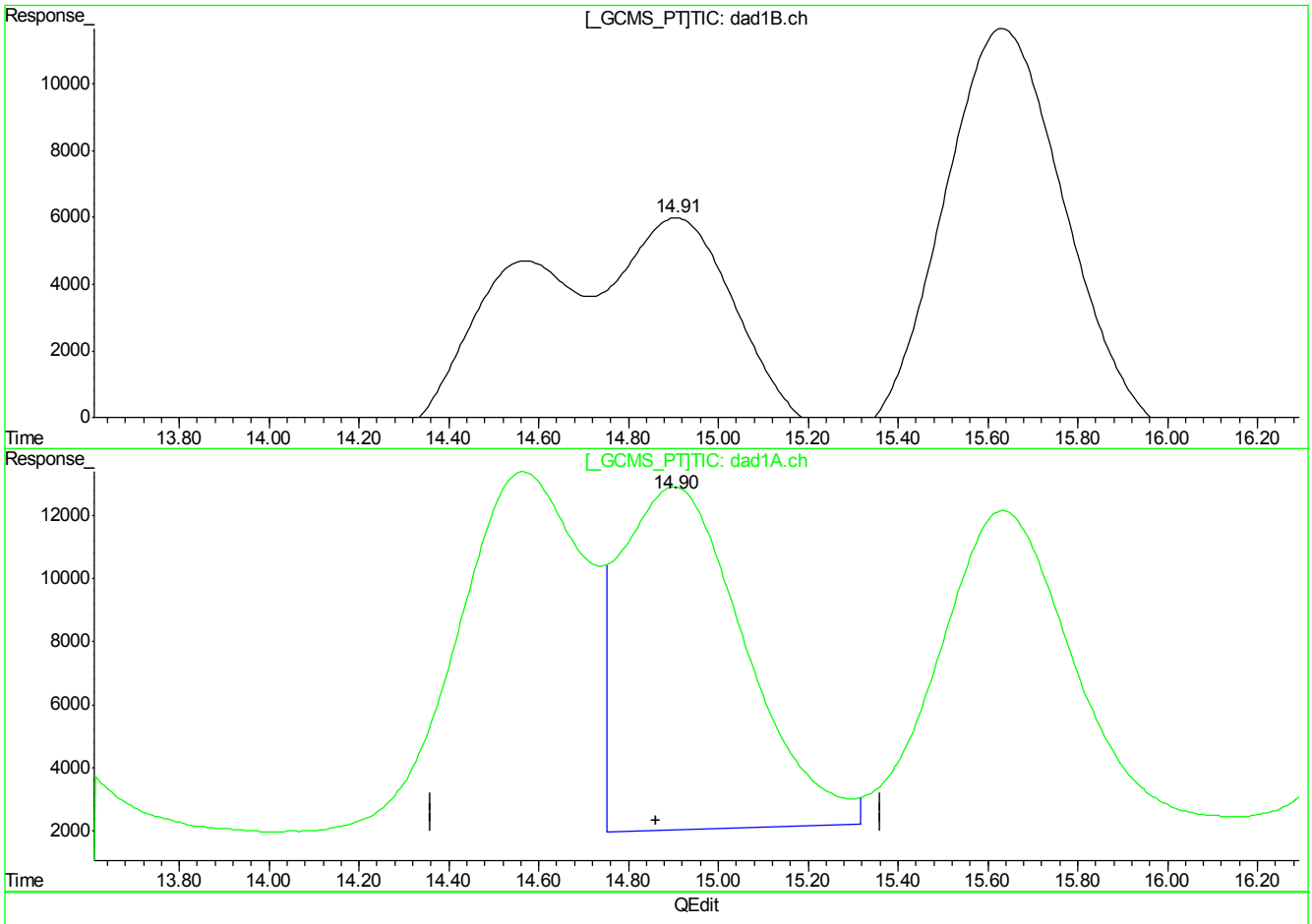
GG613829.D edits: 2,6-Dinitrotoluene

FA53801

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 190.384ppb m

response 2076245

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:09 2017

7.7.16.15

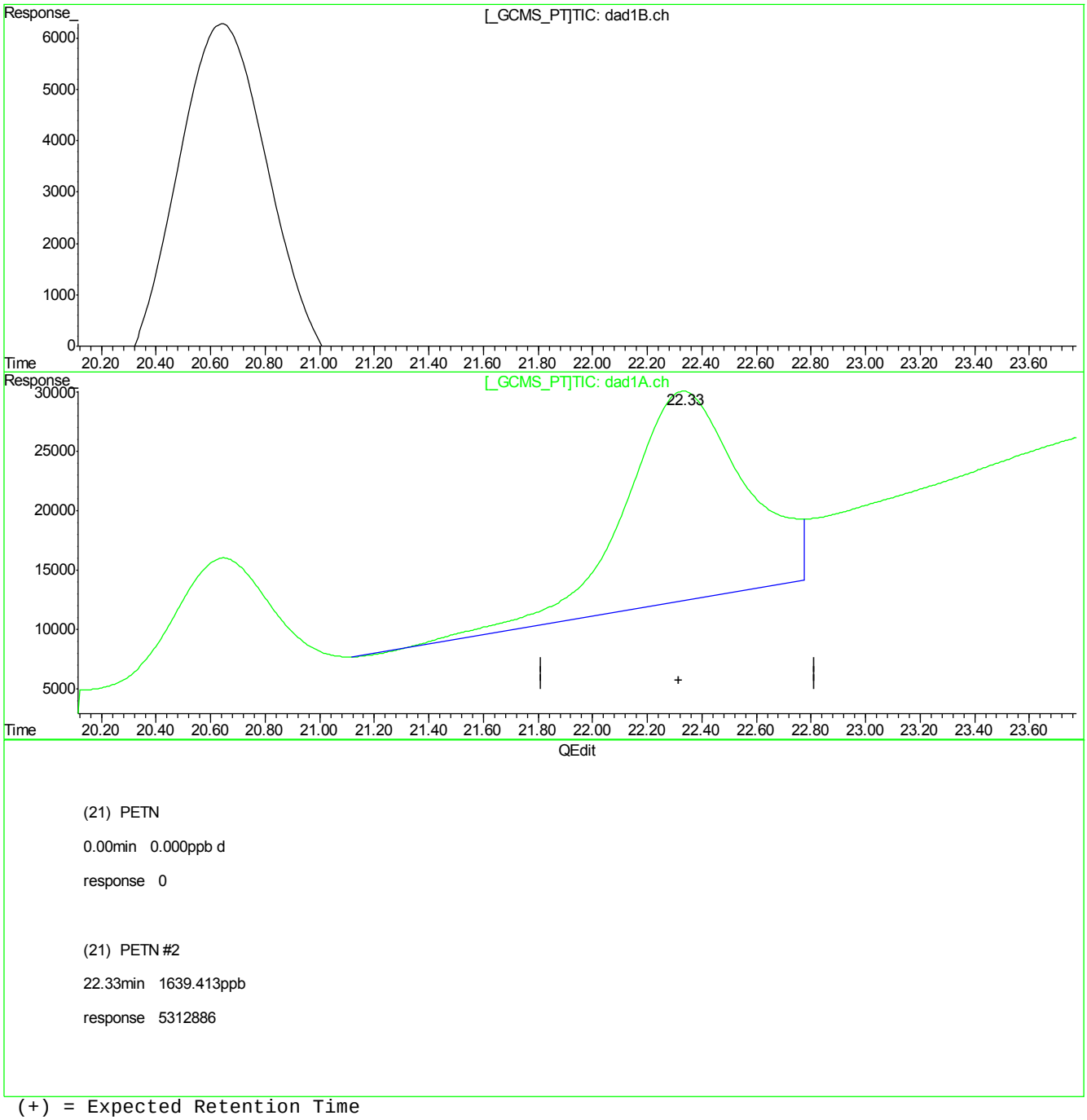
7

GG613829.D edits: 2,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:16 2017

7.7.16.16

7

GG613829.D edits: PETN

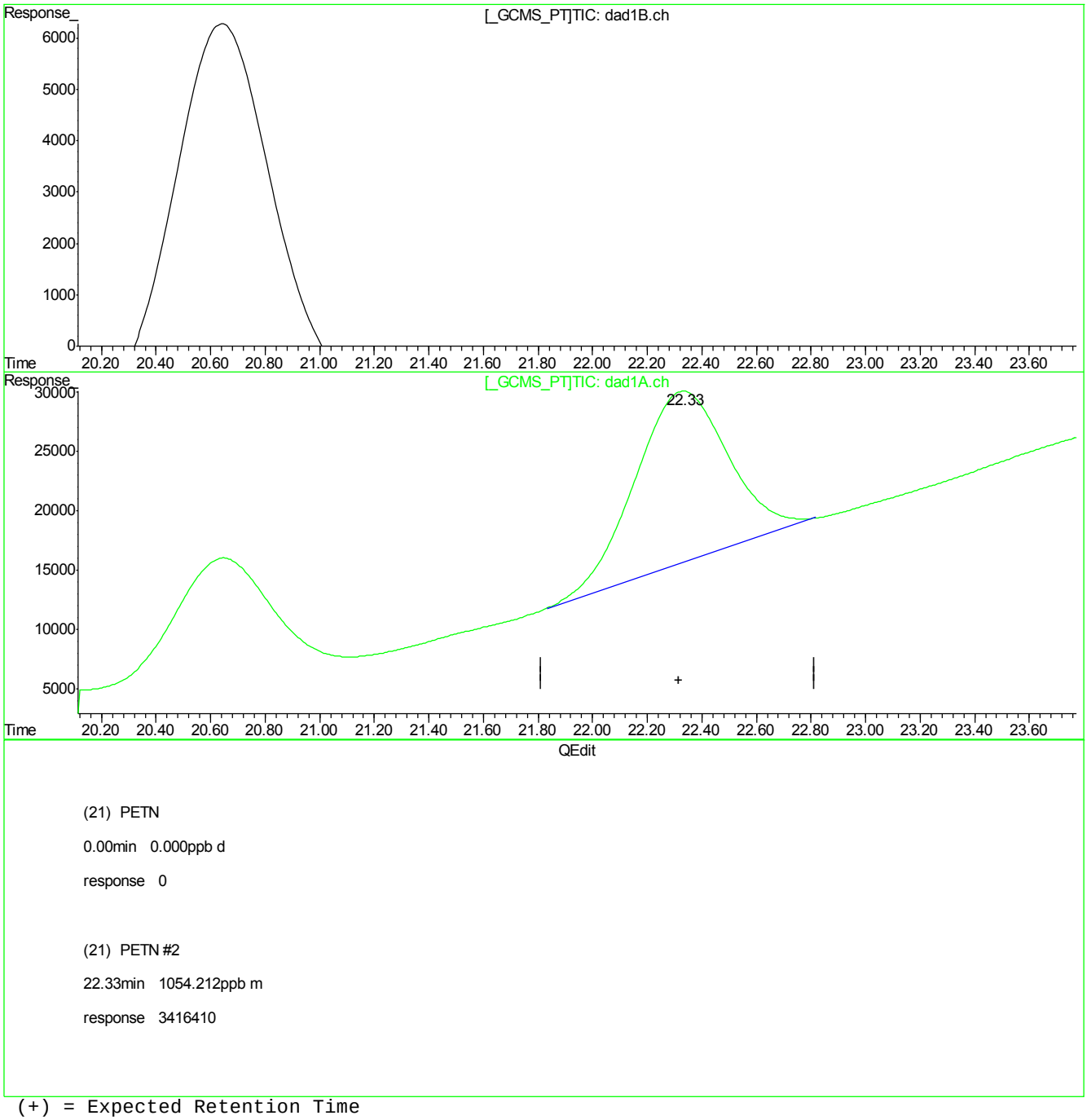
SGS

FA53801

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:18 2017

7.7.16.17

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:05 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.56	14.56	2566024	5307161	435.261	429.923
	Spiked Amount 500.000	Range 70 - 136		Recovery =		87.05%	85.98%
	Target Compounds						
1)	TNX	5.01	5.01	7178191	7178191	853.377	851.121
2)	HMX	5.46	5.46	1567471	1567471	412.659	409.740
3)	DNX	5.59	5.59	3839121	3839121	584.891	586.925
4)	MNX	6.66	6.66	3503085	3503085	724.097	724.097
5)	1,3,5-Trinitrobe	7.55	7.55	5075707	5076436	497.074	497.355
6)	RDX	8.07	8.07	2346451	2347827	492.885	495.472
7)	1,3-Dinitrobenze	10.08	10.08	6887672	6720081	473.215	493.198
8)	Nitrobenzene	11.08	11.08	4451511	5219104	582.312	555.512
9)	2,4,6-Trinitroto	11.88	11.88	4723401	7202241	463.275	470.131
10)	Nitroglycerin	0.00	12.71	0	9304341	N.D. d	2578.020
11)	Tetryl	13.28	13.28	3783586	7259516	551.597	570.016
13)	2,6-Dinitrotolue	14.90	14.90	3505597	5120931	504.224	469.790
14)	2,4-Dinitrotolue	15.63	15.63	6338975	4883124	477.045	490.411
15)	o-Nitrotoluene	17.22	17.22	2807950	4120241	603.576	623.959
16)	3,5-Dinitroanili	16.63	16.63	4900917	8015740	462.446	444.537
17)	p-Nitrotoluene	18.39	18.39	5738993	10601258	498.789	491.995
18)	4-Amino-2,6-Dini	18.39	18.39	5738993	10601258	498.789	491.995
19)	m-Nitrotoluene	19.65	19.65	2981905	4897585	565.664	517.775
20)	2-Amino-4,6-Dini	20.63	20.63	4541236	5876348	473.381	434.192
21)	PETN	0.00	22.30	0	8594642	N.D. d	2652.074m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:37:54 2017 Page 1

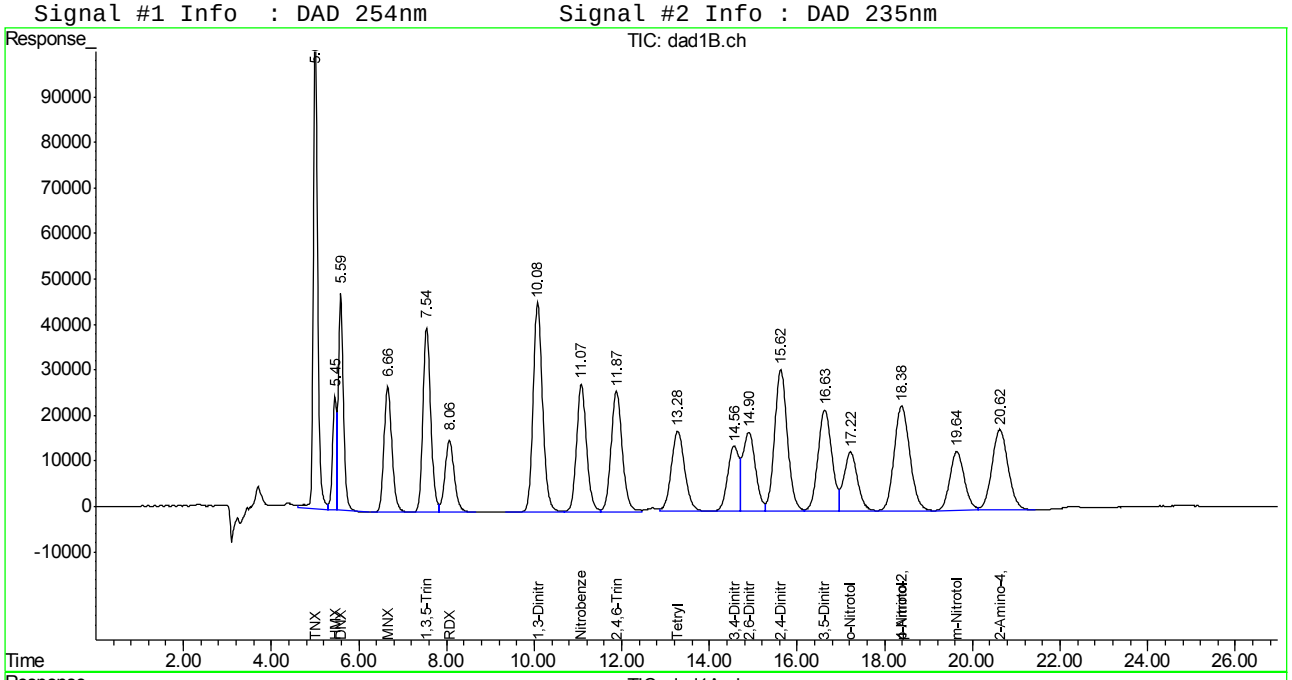
7.7.17
7

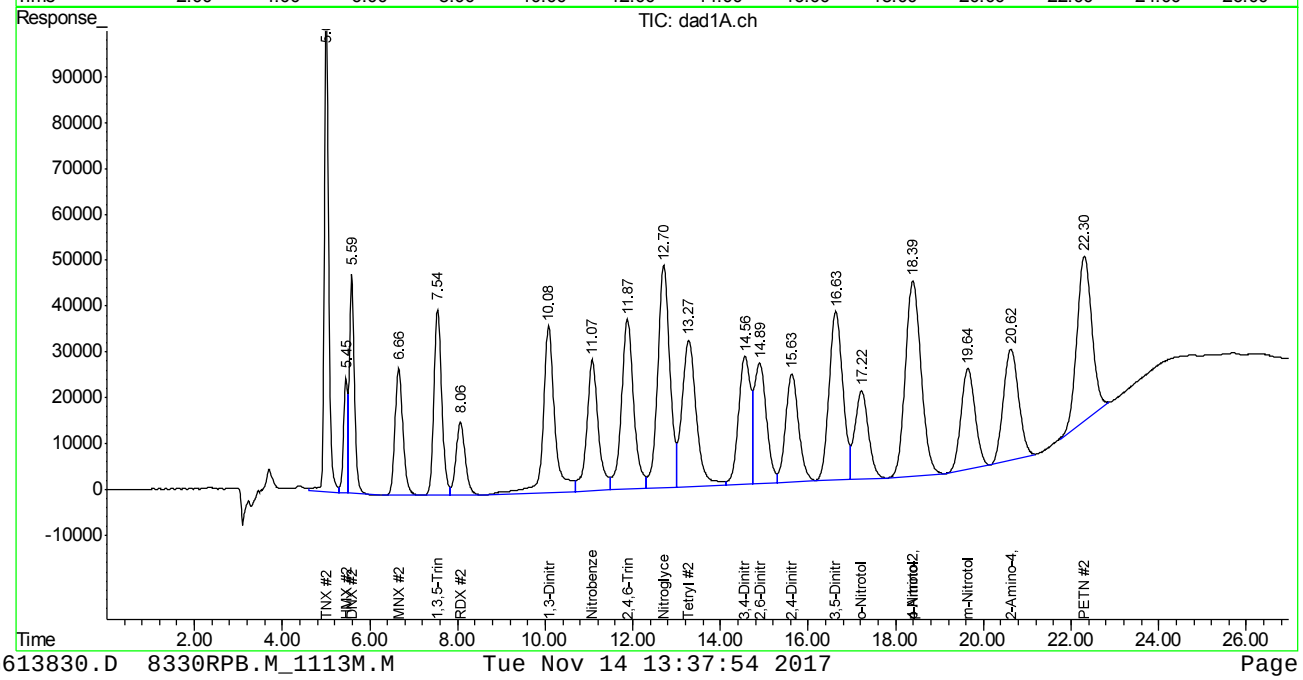
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

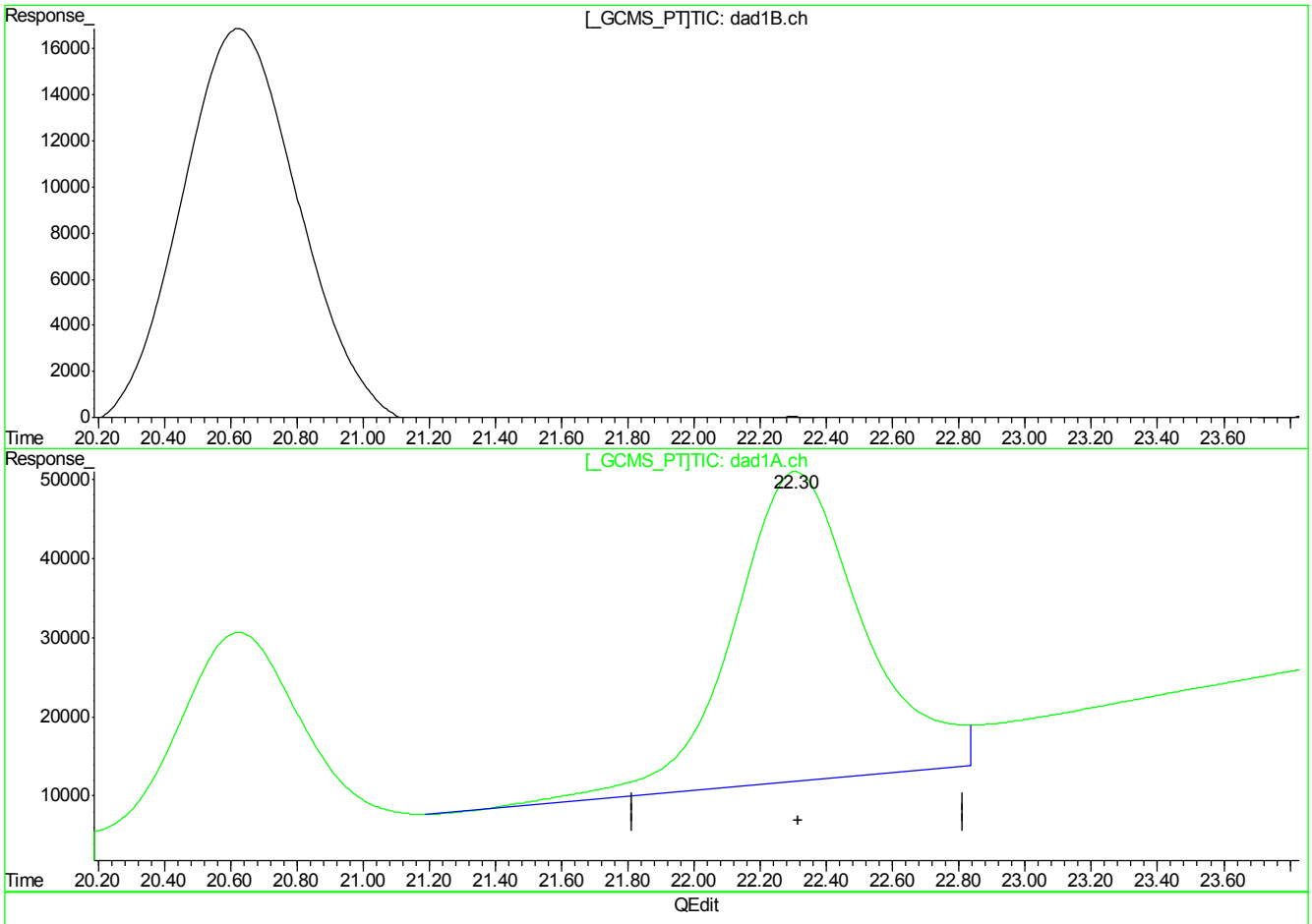
Sample Number:	GGG2571-ICC2571	**Method:**	SW846 8330A
Lab FileID:	GG613830.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:34	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.30	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 3296.542ppb

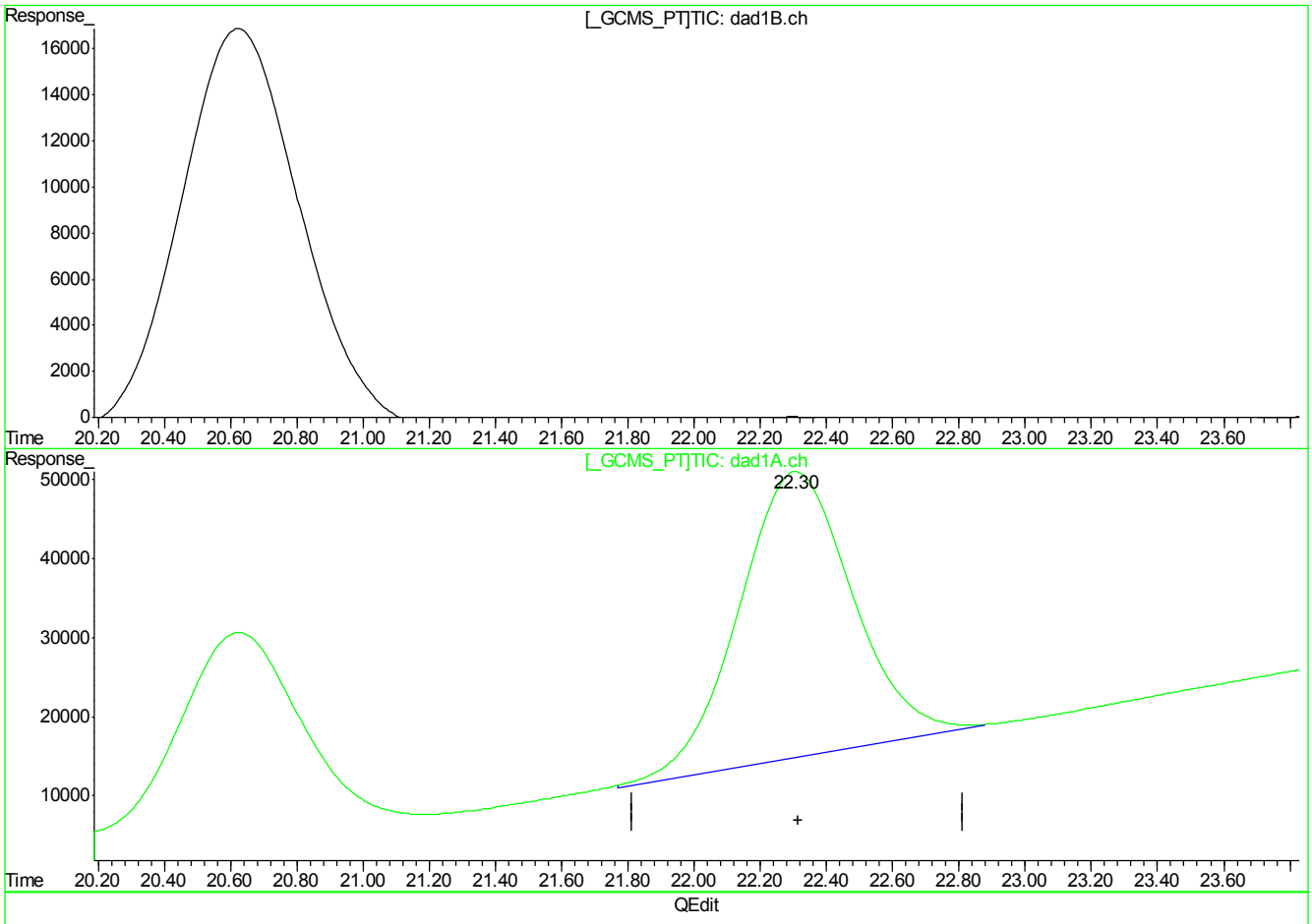
response 10683184

(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.30min 2652.074ppb m

response 8594642

(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:49 2017

7.7.17.3

7

GG613830.D edits: PETN

FA53801

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:06 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	5134237	10563524	870.893	870.355
	Spiked Amount 500.000	Range 70 - 136		Recovery =		174.18%#	174.07%#
	Target Compounds						
1)	TNX	5.01	5.01	14095710	14095710	1675.764	1671.335
2)	HMX	5.45	5.45	3075086	3075086	809.559	803.833
3)	DNX	5.59	5.59	7555662	7555662	1151.106	1155.110
4)	MNX	6.66	6.66	7011708	7021085	1449.340	1451.278
5)	1,3,5-Trinitrobe	7.54	7.54	10137190	10160510	992.756	995.458
6)	RDX	8.06	8.06	4692682	4737484	985.724	999.772
7)	1,3-Dinitrobenze	10.08	10.08	13715413	12037357	942.312	920.589
8)	Nitrobenzene	11.07	11.07	8906160	9757665	1165.035	1052.303
9)	2,4,6-Trinitroto	11.87	11.87	9383167	13474808	920.308	899.133
10)	Nitroglycerin	0.00	12.70	0	18017203	N.D. d	5087.336
11)	Tetryl	13.27	13.26	7535288	13894482	1098.545	1049.997
13)	2,6-Dinitrotolue	14.89	14.89	6992017	10221713	1005.690	938.471
14)	2,4-Dinitrotolue	15.62	15.62	12638679	9128347	951.136	914.210
15)	o-Nitrotoluene	17.22	17.21	5638423	8443365	1108.003	1134.699
16)	3,5-Dinitroanili	16.62	16.62	9768472	16313142	921.745	898.051
17)	p-Nitrotoluene	18.38	18.38	11526542	21366781	1001.798	970.537
18)	4-Amino-2,6-Dini	18.38	18.38	11526542	21366781	1001.798	970.537
19)	m-Nitrotoluene	19.64	19.64	6023786	9889615	1061.910	1045.534
20)	2-Amino-4,6-Dini	20.62	20.62	9161666	12398036	955.017	916.067
21)	PETN	0.00	22.31	0	17345332	N.D. d	5352.300m

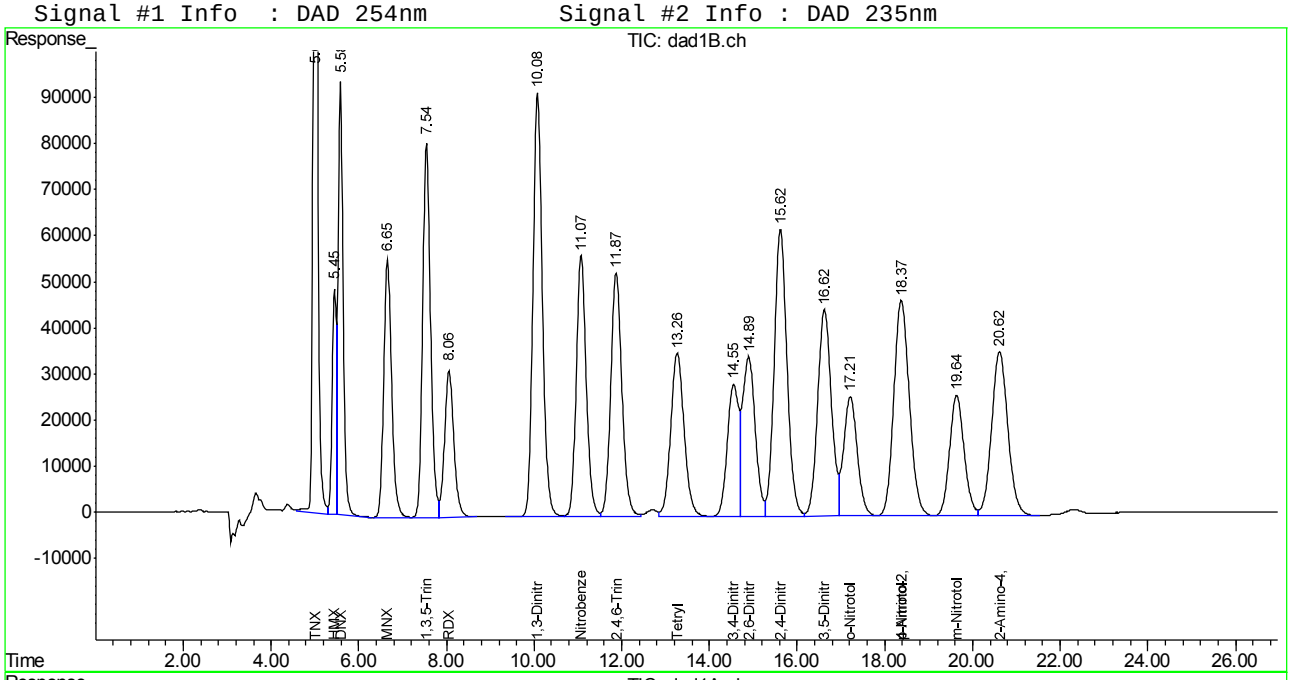
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 13:37:55 2017 Page 1

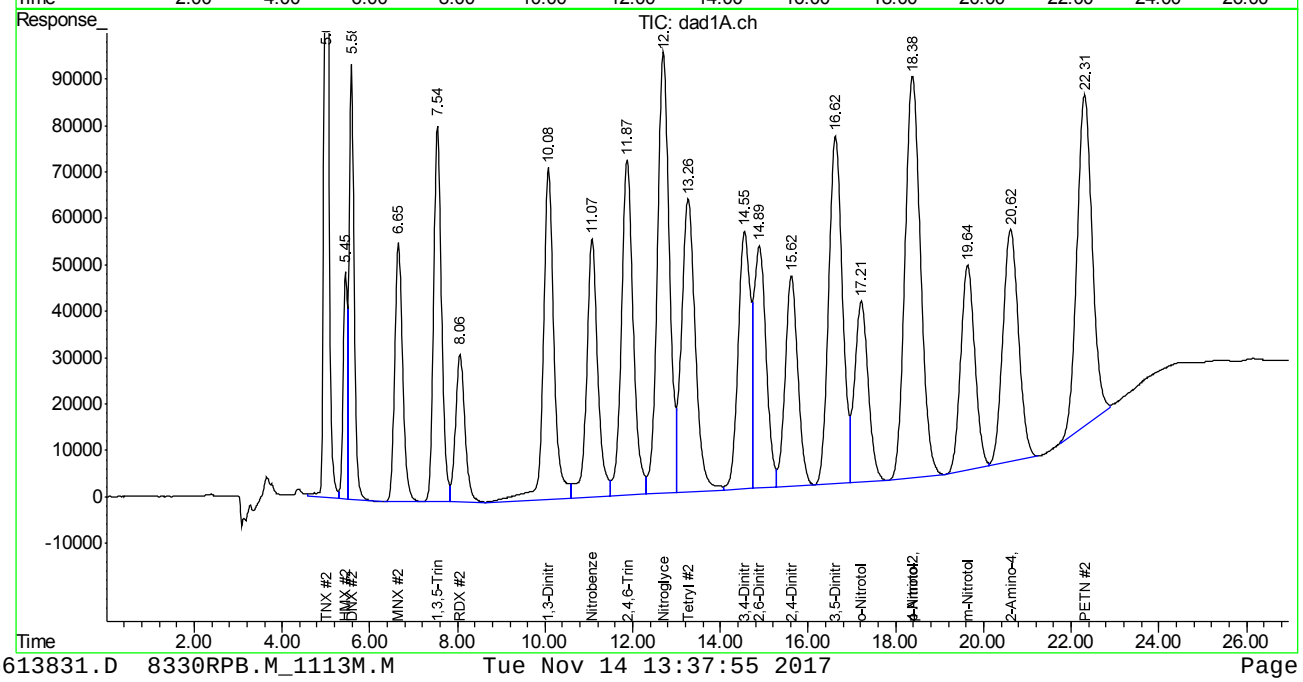
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

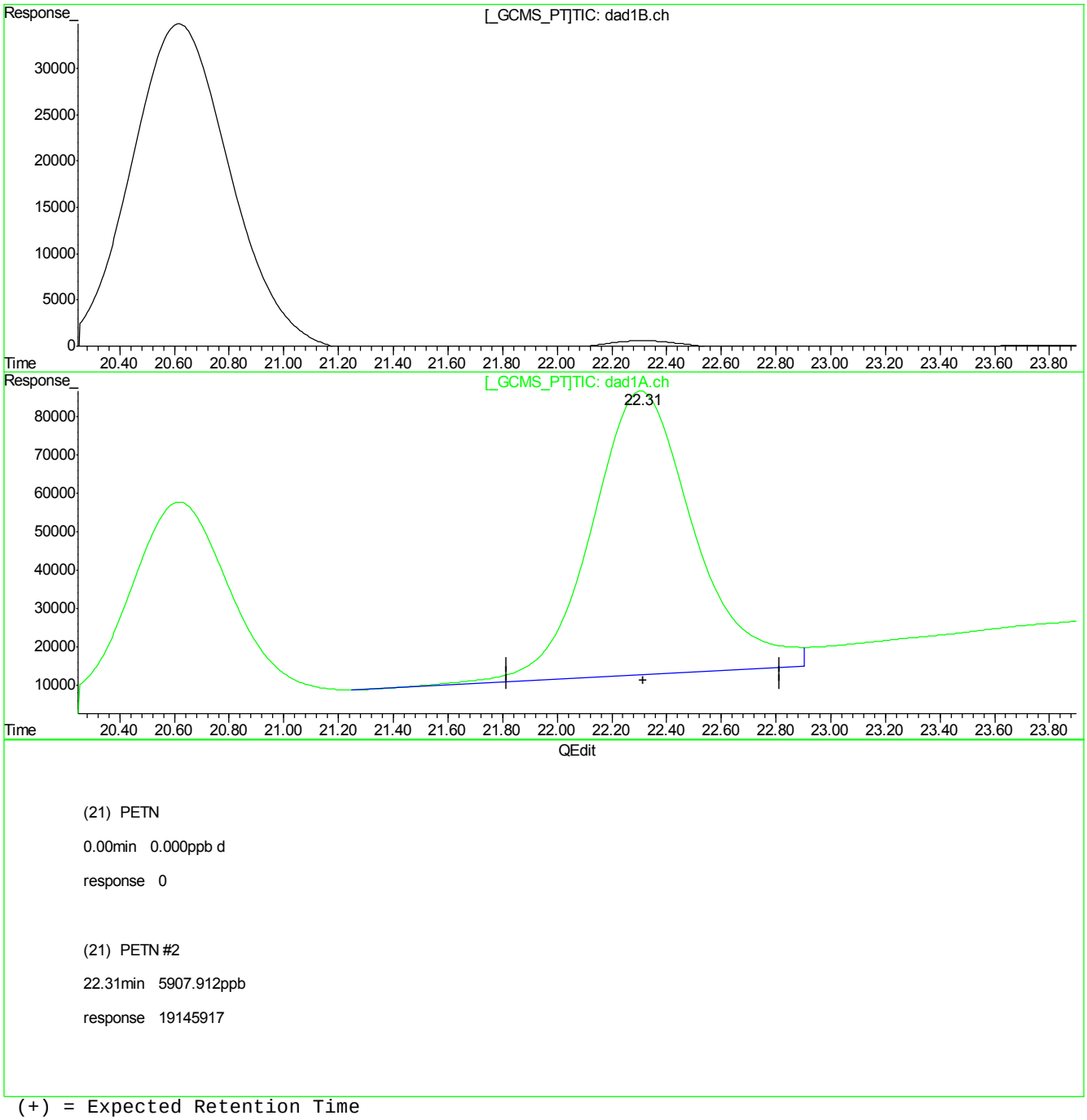
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613831.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:03	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.31	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 5907.912ppb

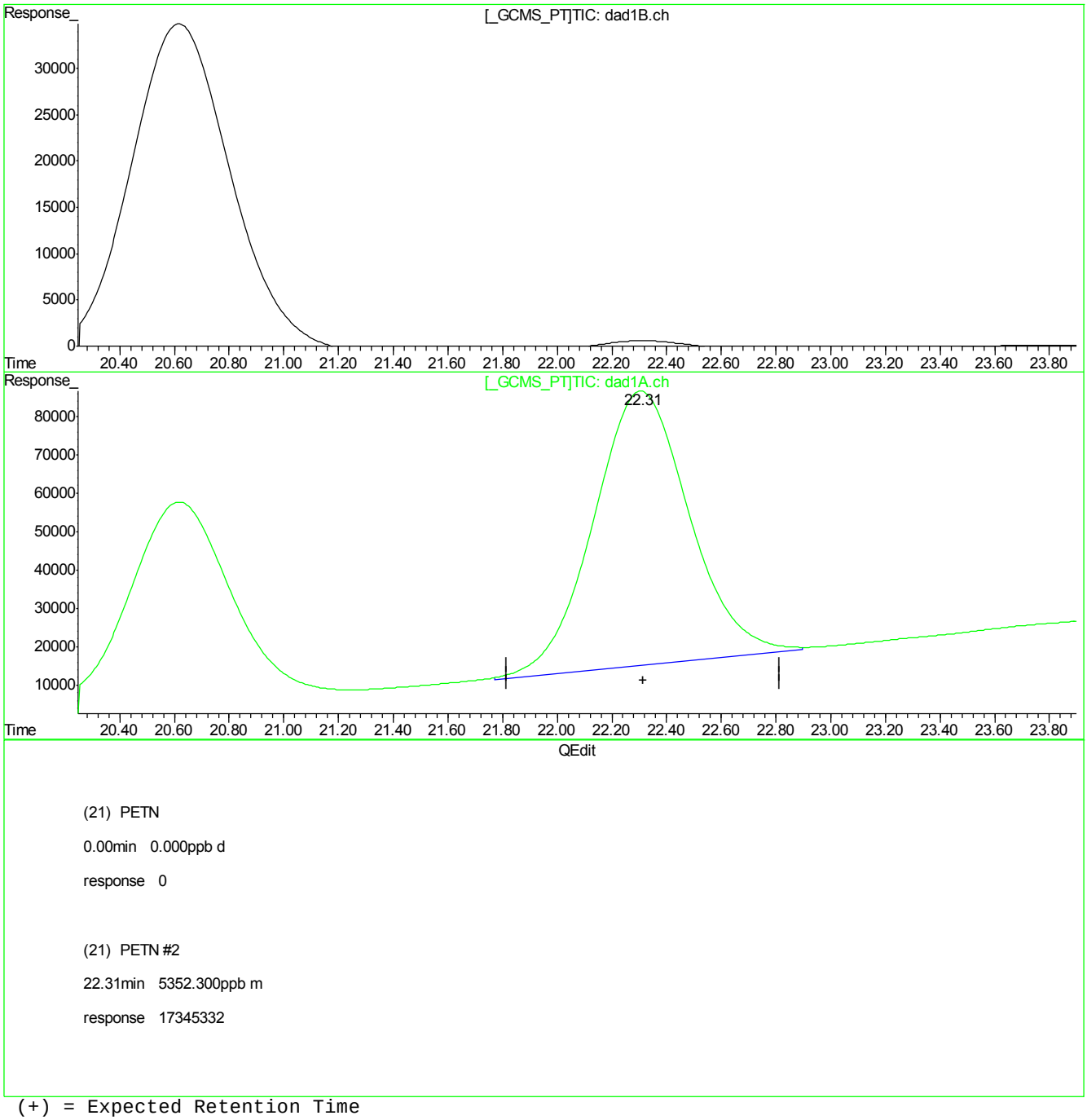
response 19145917

(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:10 2017

7.7.18.3

7

GG613832.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:07 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.57	10550046	21399713	1789.548	1831.472
	Spiked Amount 500.000	Range 70 - 136		Recovery =		357.91%#	366.29%#
	Target Compounds						
1)	TNX	5.01	5.01	28286611	28286611	3362.844	3353.956
2)	HMX	5.45	5.45	6160036	6160036	1621.715	1610.245
3)	DNX	5.59	5.59	15111963	15111963	2302.310	2310.317
4)	MNX	6.67	6.67	14319142	14379845	2959.807	2972.354
5)	1,3,5-Trinitrobe	7.55	7.55	20630748	20736361	2020.412	2031.609
6)	RDX	8.07	8.07	9542524	9714929	2004.461	2050.183
7)	1,3-Dinitrobenze	10.09	10.09	27925425	22088278	1918.604	1861.609
8)	Nitrobenzene	11.08	11.08	17989336	17591198	2353.226	1943.111
9)	2,4,6-Trinitroto	11.88	11.88	19144422	26204296	1877.700	1837.967
10)	Nitroglycerin	0.00	12.71	0	35699929	N.D. d	10513.714
11)	Tetryl	13.28	13.28	15460803	27450889	2253.980	1939.407
13)	2,6-Dinitrotolue	14.91	14.90	14299221	20816201	2056.715	1914.307
14)	2,4-Dinitrotolue	15.63	15.63	25833590	18399200	1944.131	1831.671
15)	o-Nitrotoluene	17.23	17.23	11486355	17079534	1968.871	1946.822
16)	3,5-Dinitroanili	16.63	16.63	19978063	33141066	1885.113	1798.231
17)	p-Nitrotoluene	18.40	18.40	23561706	43403899	2047.801	1893.857
18)	4-Amino-2,6-Dini	18.40	18.40	23561706	43403899	2047.801	1893.857
19)	m-Nitrotoluene	19.66	19.66	12222790	20535097	1919.977	2170.979
20)	2-Amino-4,6-Dini	20.63	20.63	18737965	26088409	1953.256	1927.623
21)	PETN	0.00	22.32	0	35262467	N.D. d	10881.043m

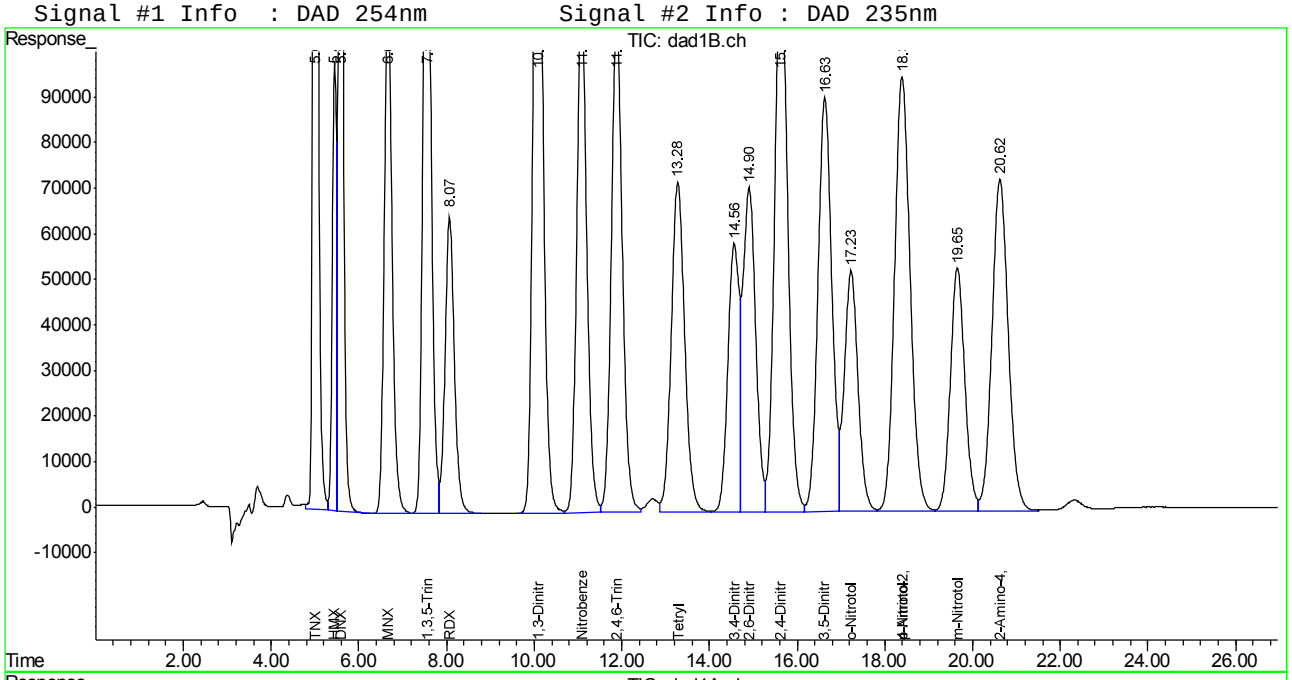
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 13:37:56 2017 Page 1

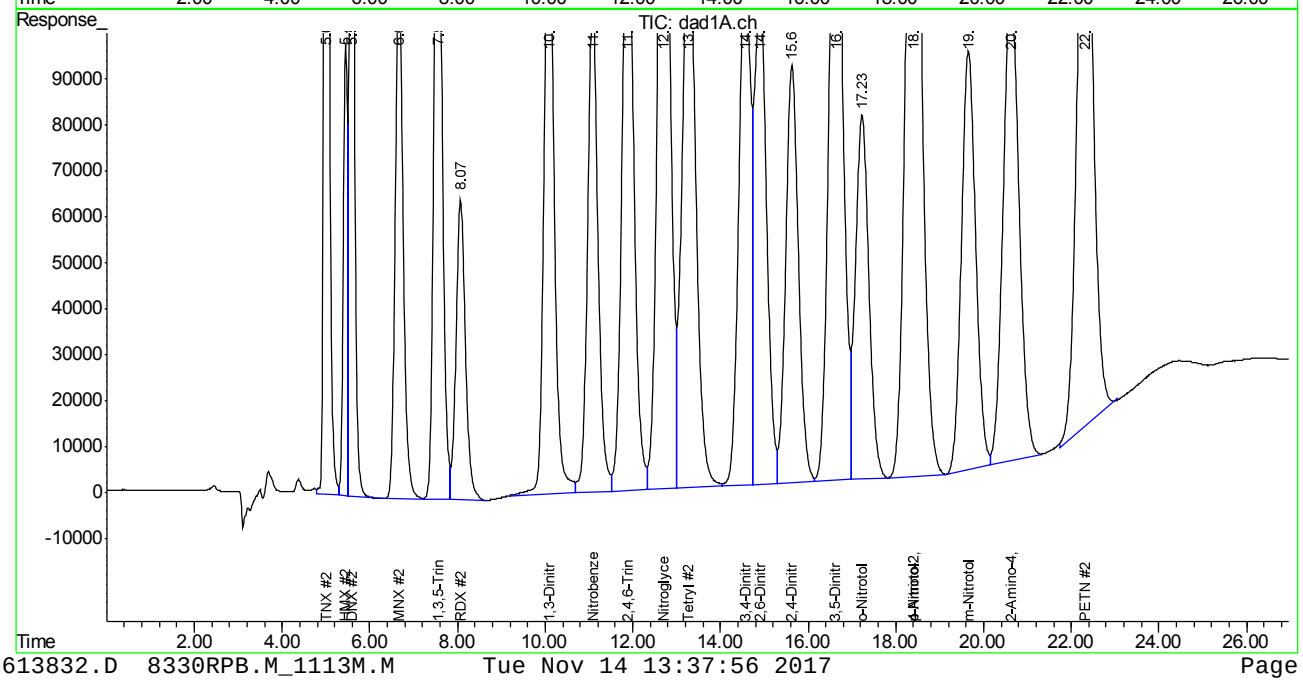
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

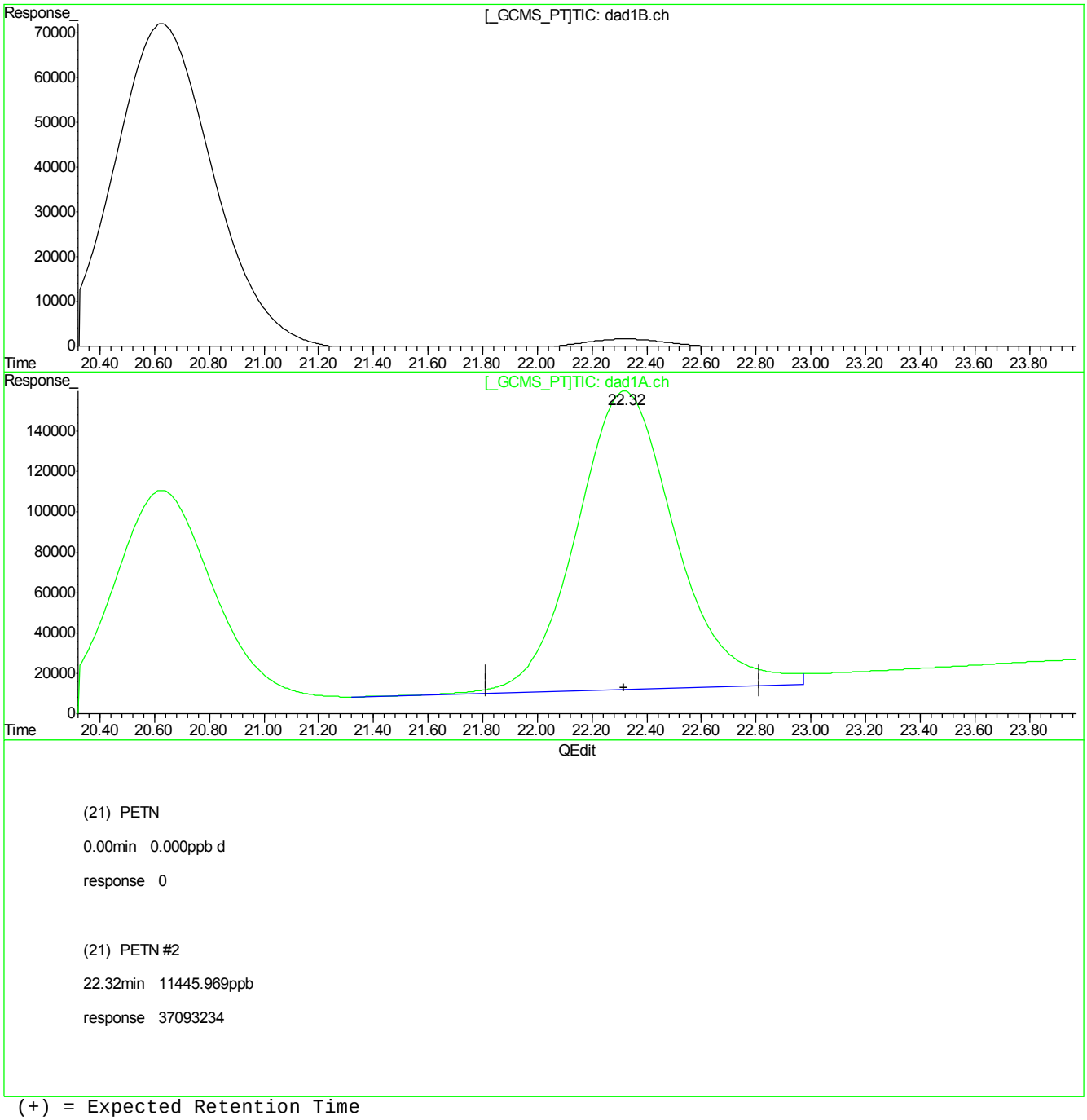
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613832.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:33	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.32	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration

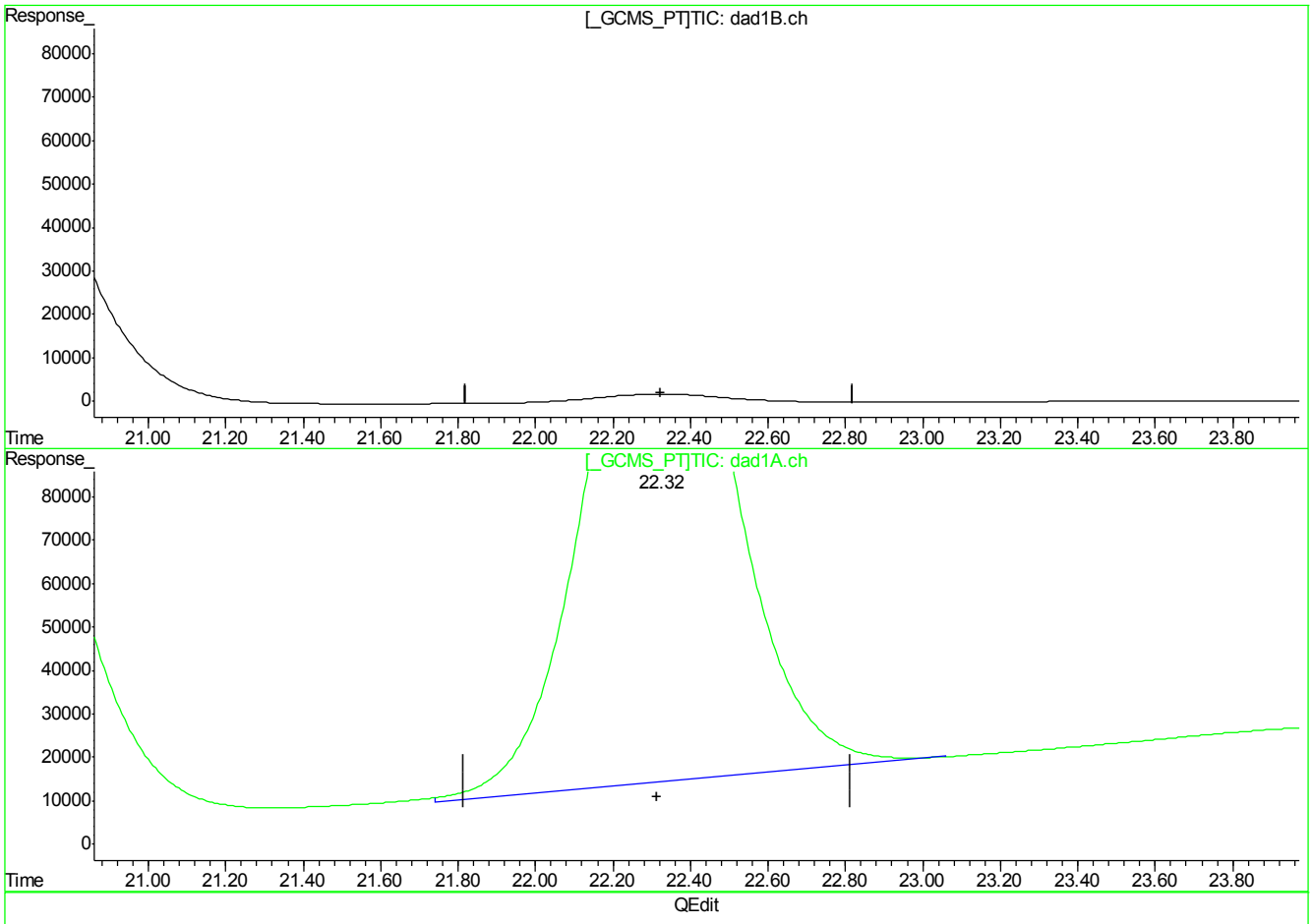


(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:30 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.32min 10881.043ppb m

response 35262467

(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:38 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15:22 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	5.00	5.00	4427614	4427614	311.255	311.279
2)	HMX	5.44	5.44	1660951	1660951	512.341	515.543
3)	DNX	5.57	5.57	3728715	3728715	481.707	479.565
4)	MNX	6.64	6.64	3500595	3500595	498.403	498.000
5)	1,3,5-Trinitrobe	7.53	7.53	5084566	5085276	490.713	490.831
6)	RDX	8.04	8.04	2404792	2408976	504.766	507.885
7)	1,3-Dinitrobenze	10.06	10.06	6578375	6672490	459.805	525.898
8)	Nitrobenzene	11.05	11.05	4554253	5345006	482.574	577.158
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	12.68	0	9322634	N.D. d	2766.568
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.89	14.89	3527390	5488834	493.369	540.982
14)	2,4-Dinitrotolue	15.60	15.60	6348698	4712292	484.298	495.523
15)	o-Nitrotoluene	17.20	17.20	2958205	4396320	512.102	509.800
16)	3,5-Dinitroanili	16.59	16.59	4689804	7872997	479.670	484.898
17)	p-Nitrotoluene	18.35	18.36	5769728	10811008	491.360	510.118
18)	4-Amino-2,6-Dini	18.35	18.36	5769728	10811008	491.360	508.634
19)	m-Nitrotoluene	19.62	19.62	3222471	5107269	546.610	525.201
20)	2-Amino-4,6-Dini	20.59	20.59	4643185	5903363	514.599	496.742
21)	PETN	0.00	22.29	0	9227376	N.D. d	2876.898m

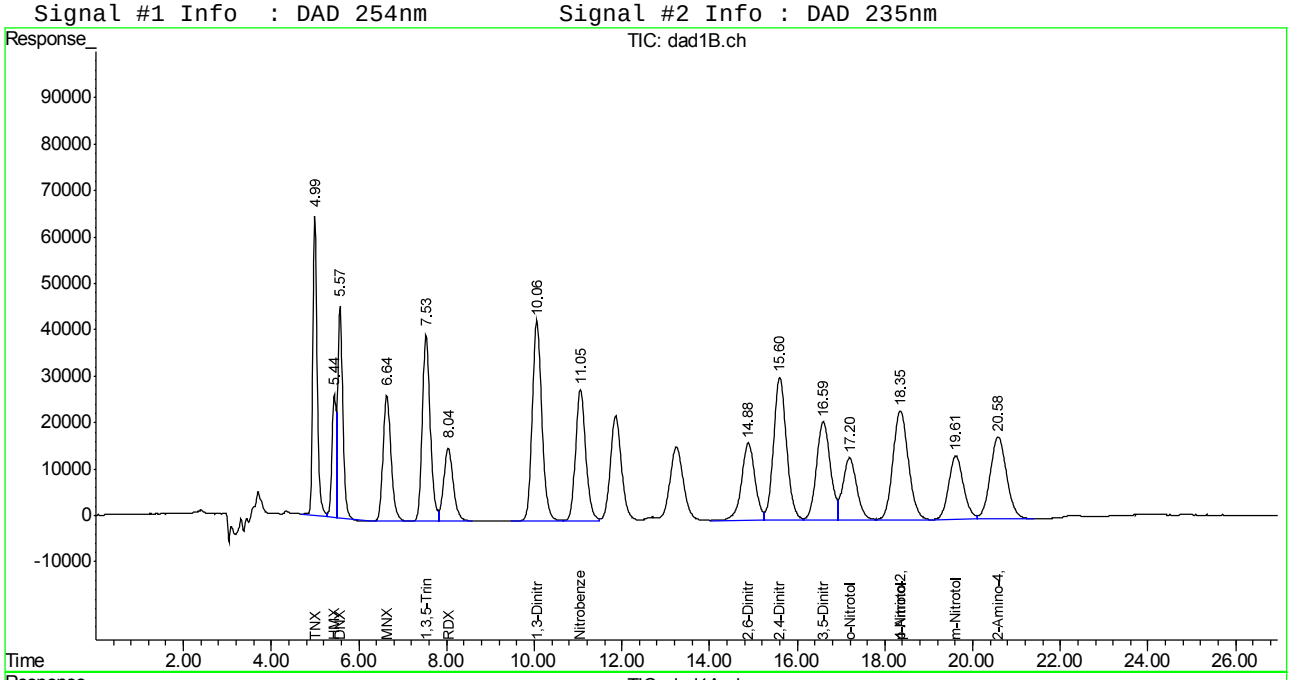
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 13:37:57 2017 Page 1

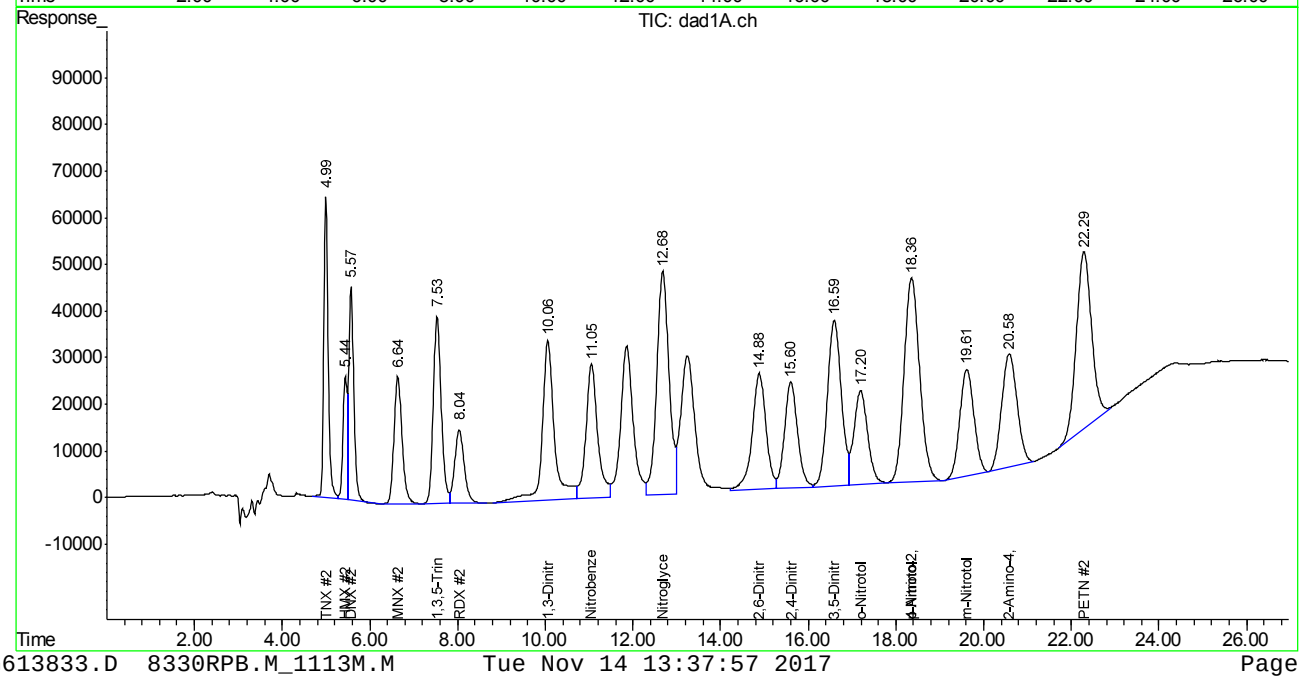
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

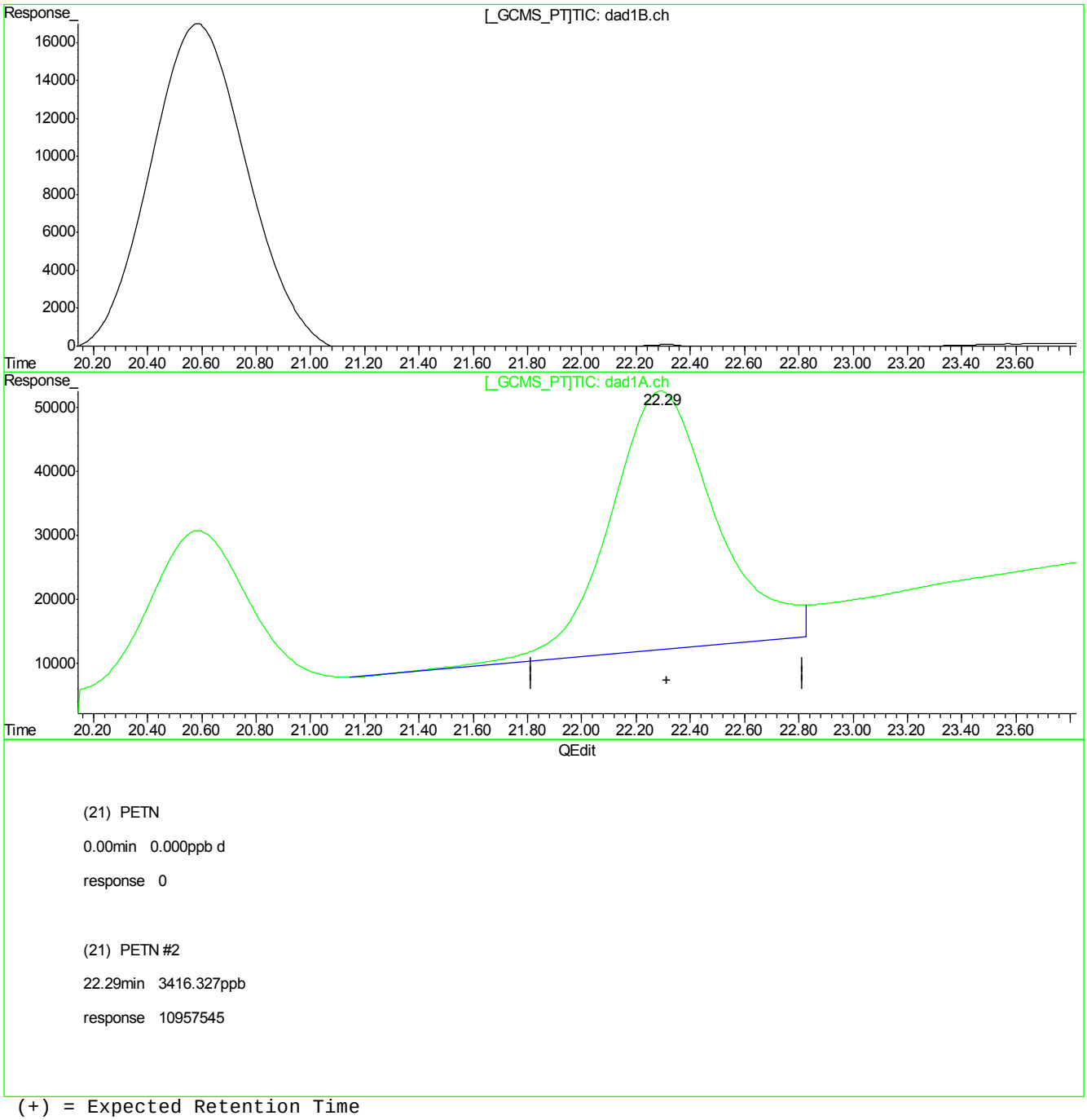
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613833.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 17:02	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.29	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

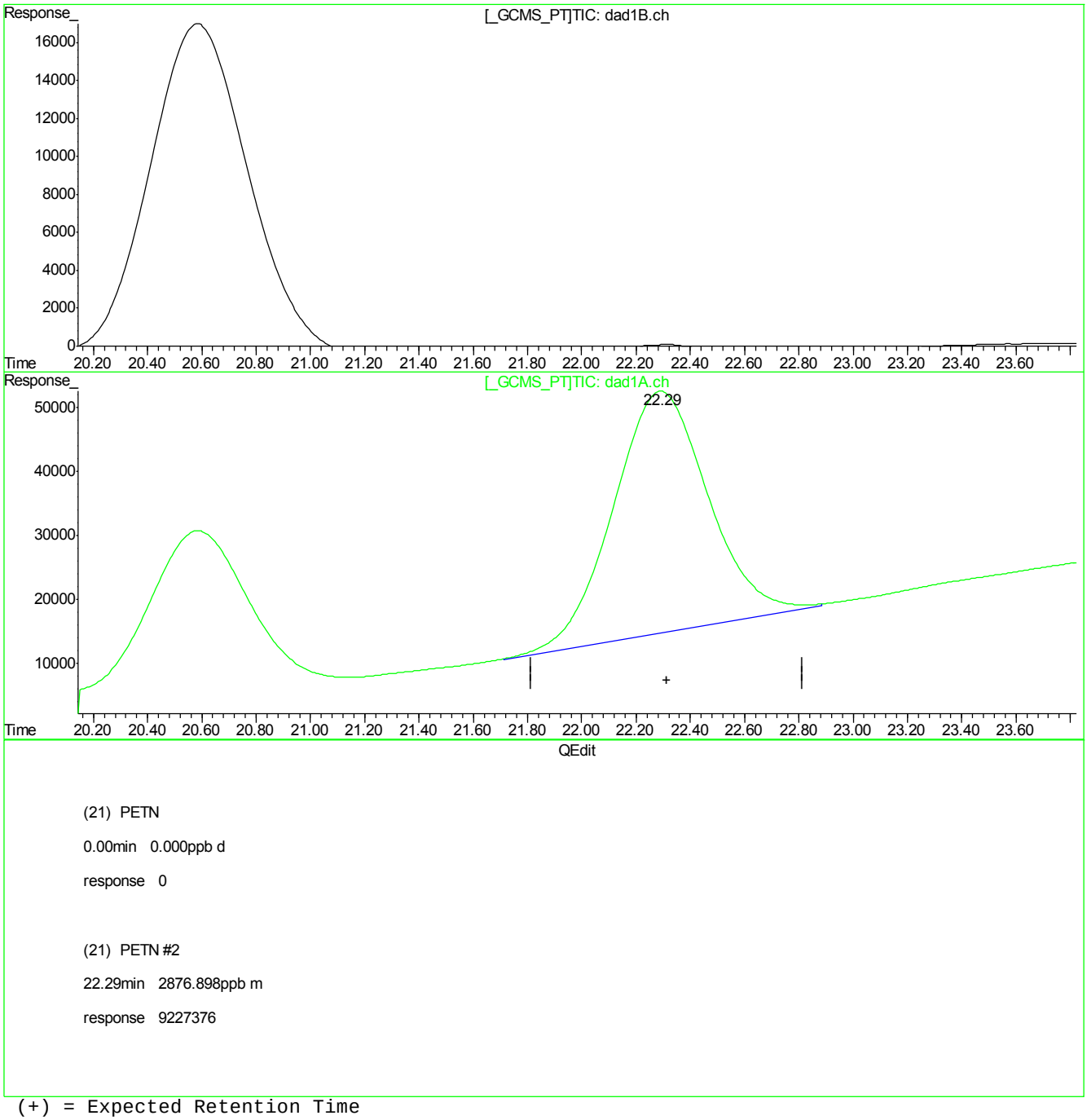


(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:14 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:16:38 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	11.88	11.87	4812246	6368475	474.847	485.592m
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	13.27	13.27	4161106	7319038	513.472	520.034m
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

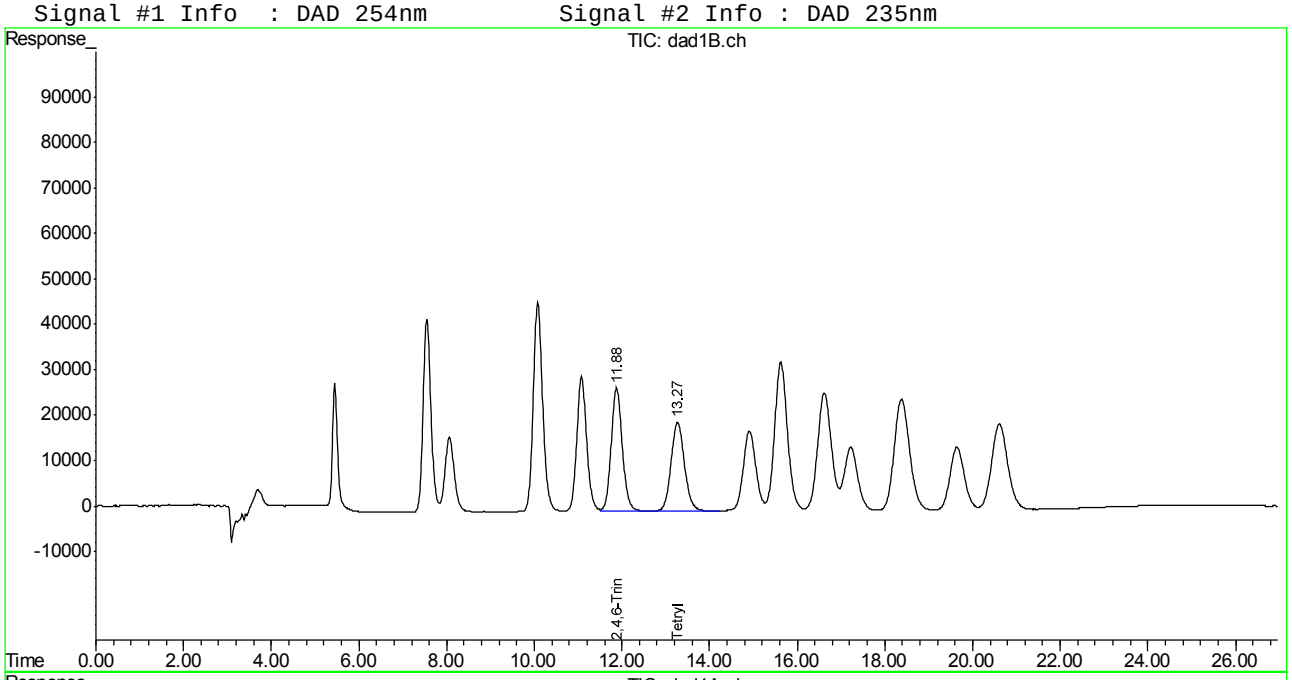
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:46:13 2017 Page 1

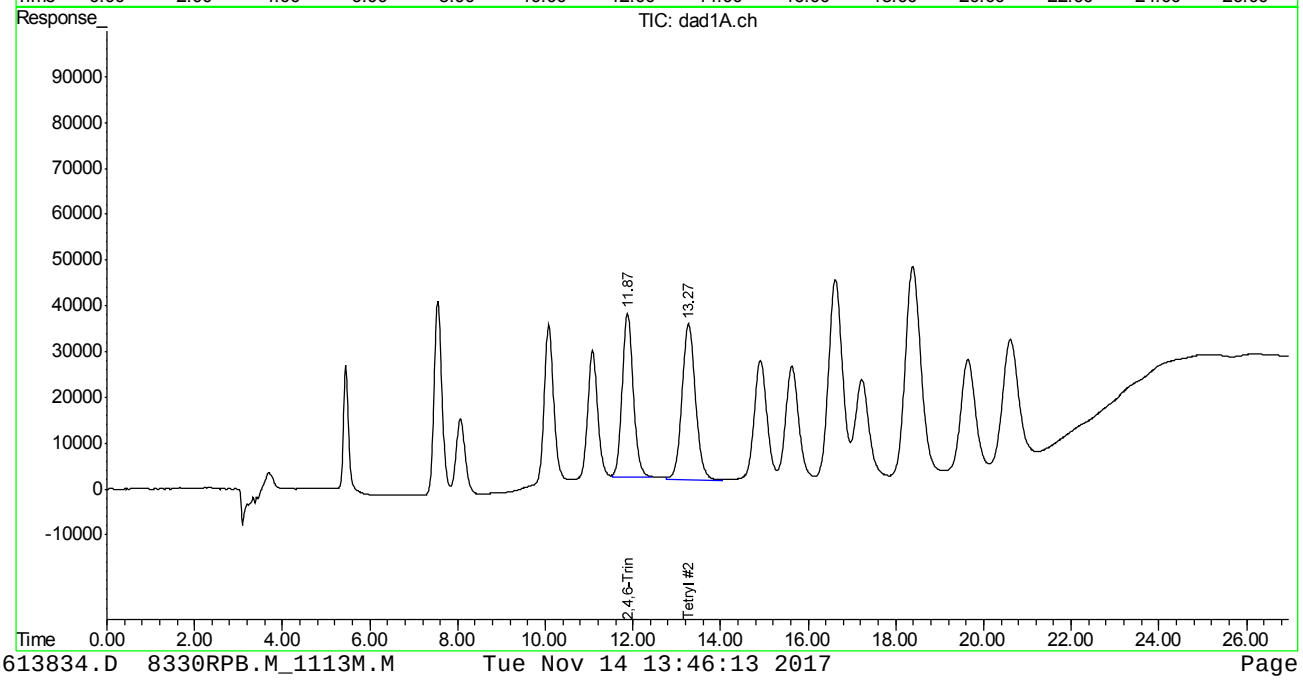
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 13:45 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:46:13 2017 Page 2

Manual Integration Approval Summary

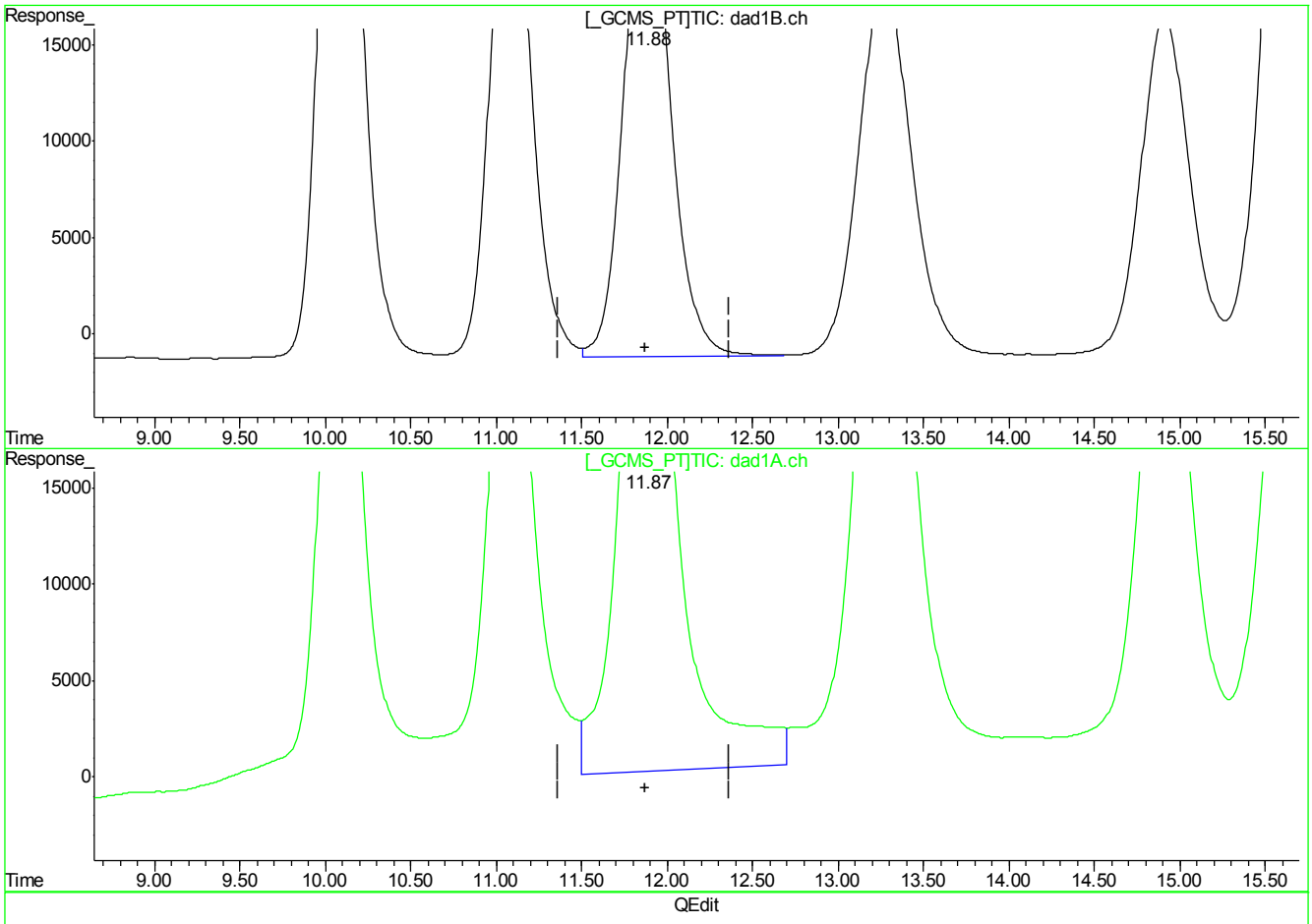
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613834.D	**Analyst approved:**	11/14/17 15:34 Evita Martinez
Injection Time:	11/13/17 17:32	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.88min 604.076ppb

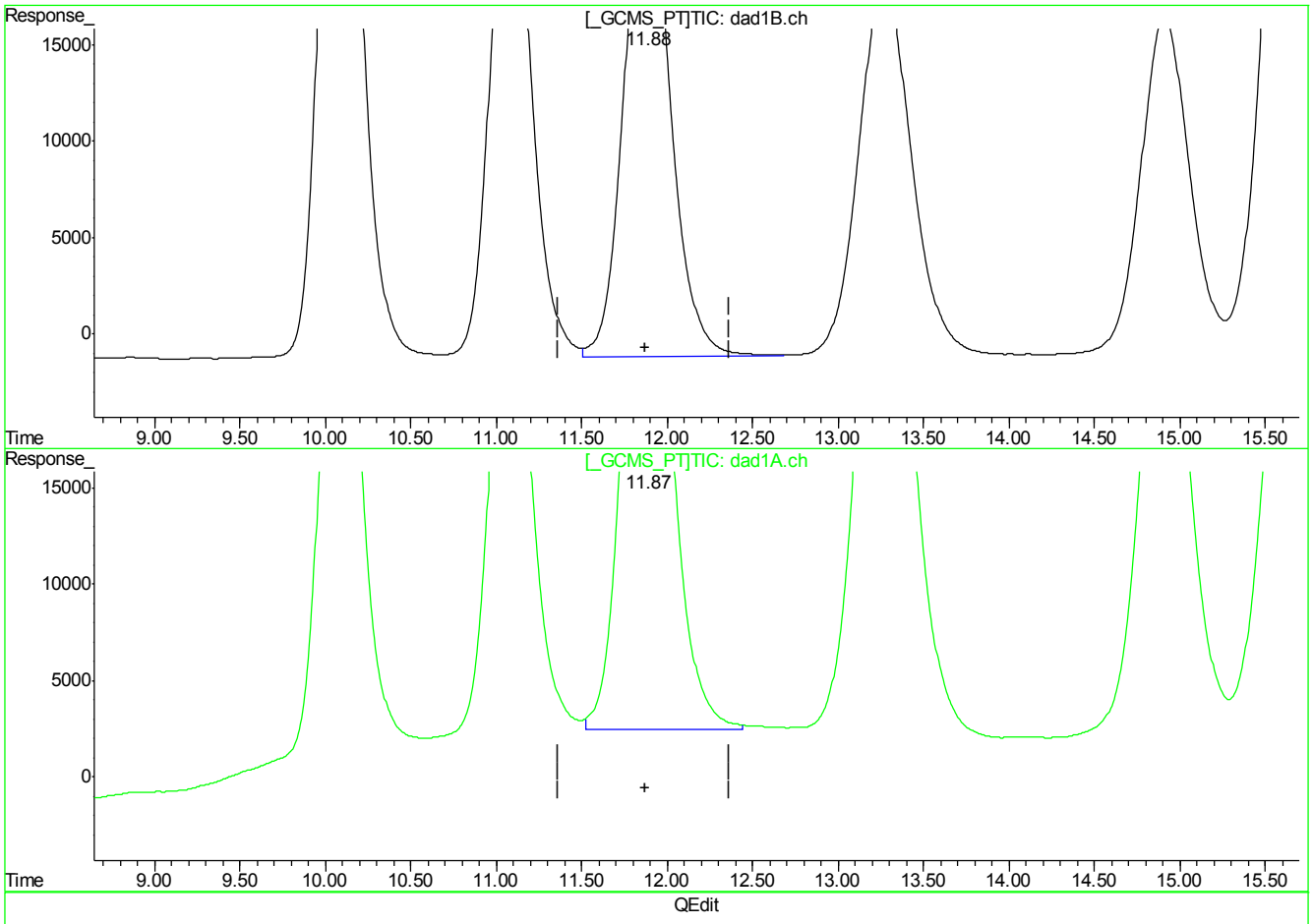
response 7922376

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.87min 485.592ppb m

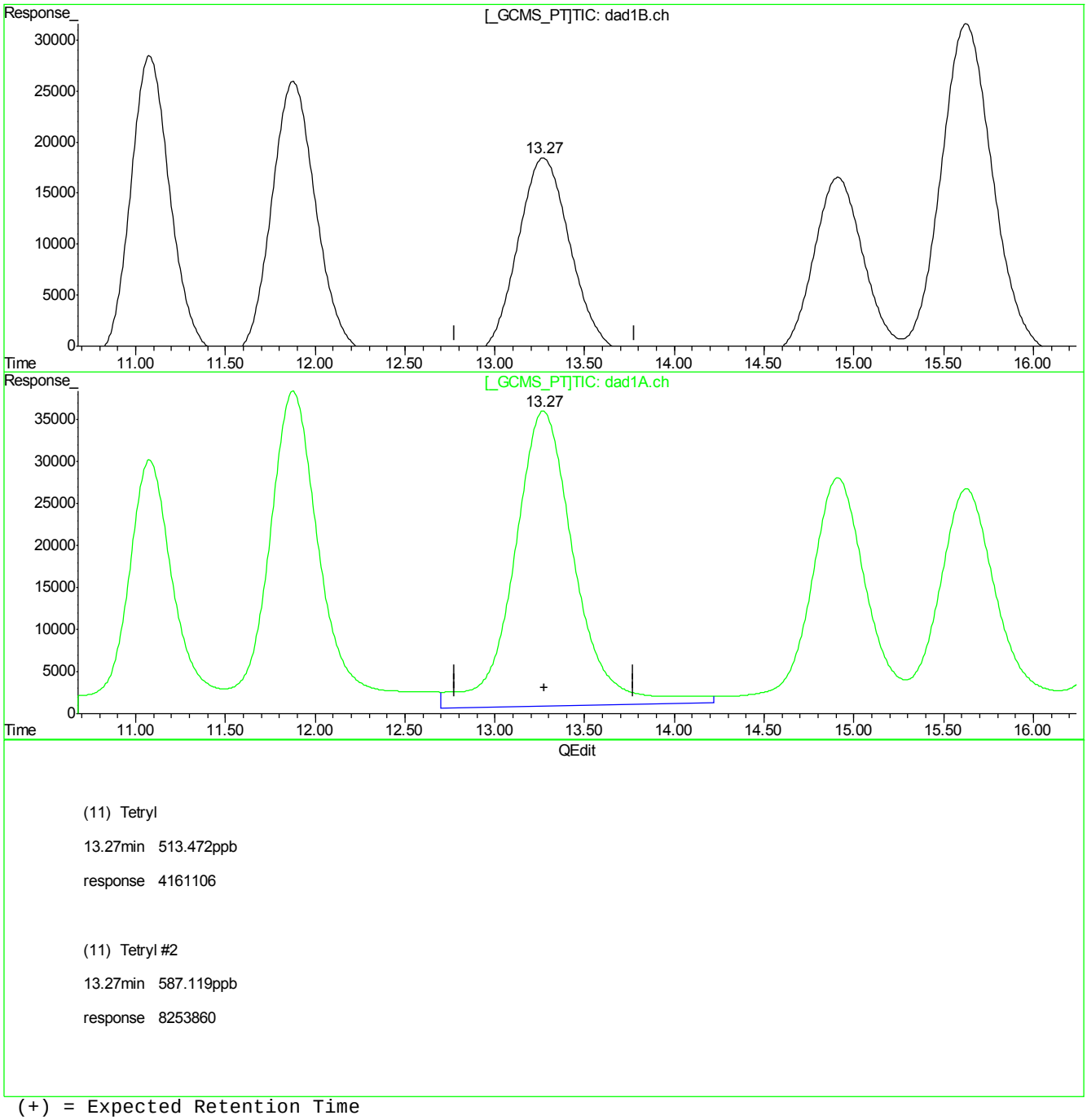
response 6368475

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 587.119ppb

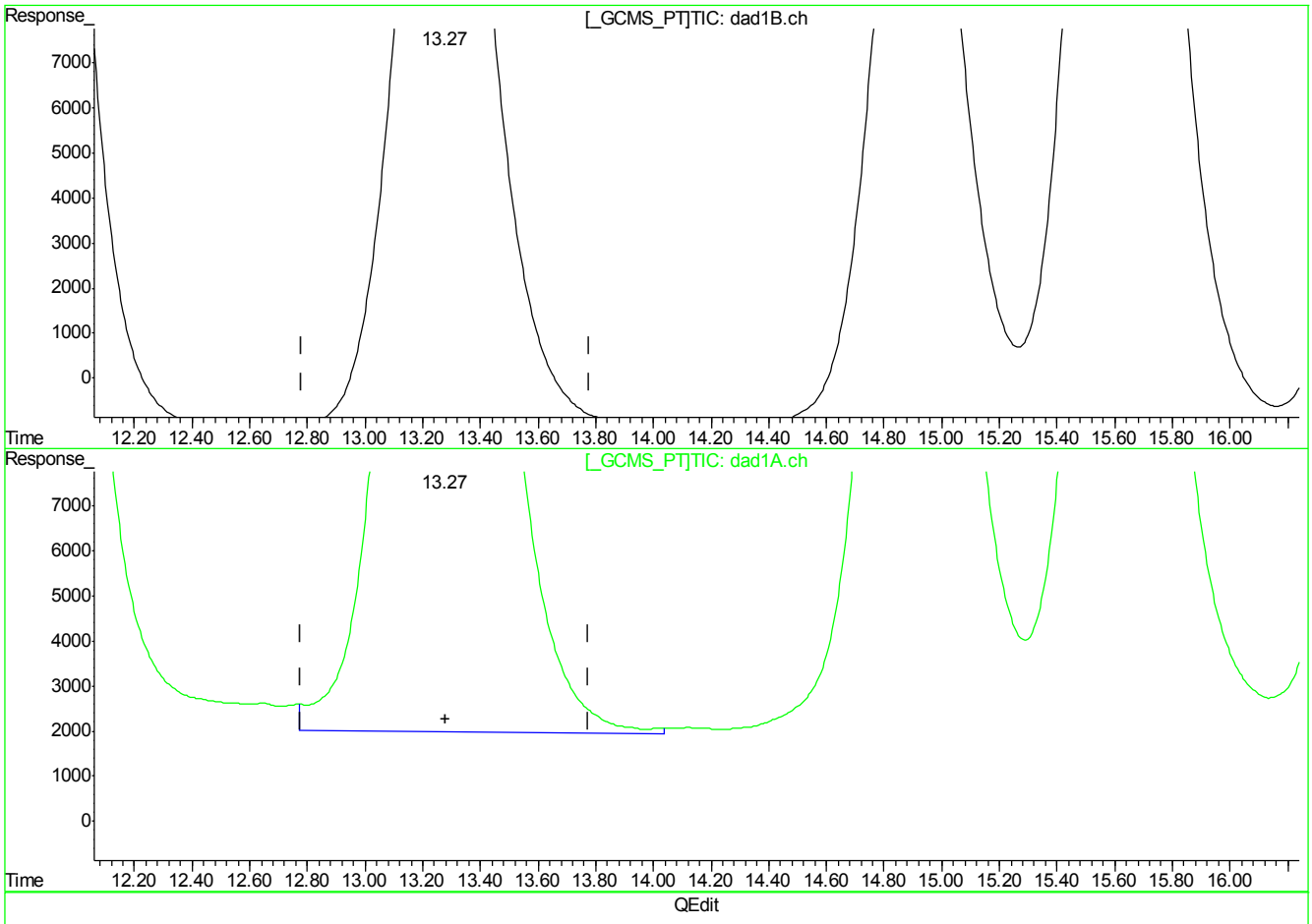
response 8253860

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:51 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 520.034ppb m

response 7319038

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:57 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.26	5807589	13085107	1117.944	1209.610
	Spiked Amount 500.000	Range 69 - 134		Recovery =		223.59%#	241.92%#
	Target Compounds						
1)	TNX	4.99	4.99	13873853	13873853	975.314	975.388
2)	HMX	5.40	5.40	3448943	3448943	1063.869	1070.517
3)	DNX	5.56	5.56	8265700	8265700	1067.834	1063.084
4)	MNX	6.57	6.57	7476804	7476804	1064.522	1063.662
5)	1,3,5-Trinitrobe	7.46	7.46	10375346	10375490	1001.327	1001.443
6)	RDX	7.92	7.92	5071848	5054743	1064.581	1065.694
7)	1,3-Dinitrobenze	9.94	9.94	14432999	11467565	1008.816	937.897
8)	Nitrobenzene	10.90	10.90	9591646	10131131	1016.342	1093.968
9)	2,4,6-Trinitroto	11.67	11.67	10081323	14401410	994.771	1098.099
10)	Nitroglycerin	0.00	12.41	0	18182257	N.D. d	5395.734
11)	Tetryl	12.94	12.94	7643769	14810756	943.225	1062.043
13)	2,6-Dinitrotolue	14.63	14.62	7332163	11161847	1025.534	1100.117
14)	2,4-Dinitrotolue	15.34	15.34	13357063	9912711	1018.917	1056.379
15)	o-Nitrotoluene	16.89	16.89	6084616	8792639	1053.323	1019.599
16)	3,5-Dinitroanili	16.30	16.30	11318619	18889248	1147.194	1153.122
17)	p-Nitrotoluene	18.05	18.05	12225978	22222921	1041.185	1048.589
18)	4-Amino-2,6-Dini	18.05	18.05	12225978	22222921	1041.185	1045.540
19)	m-Nitrotoluene	19.27	19.27	6425338	10635362	1089.895	1093.677
20)	2-Amino-4,6-Dini	20.22	20.22	9604266	13457936	1064.430	1089.986
21)	PETN	0.00	21.80	0	17816986	N.D. d	5554.954m

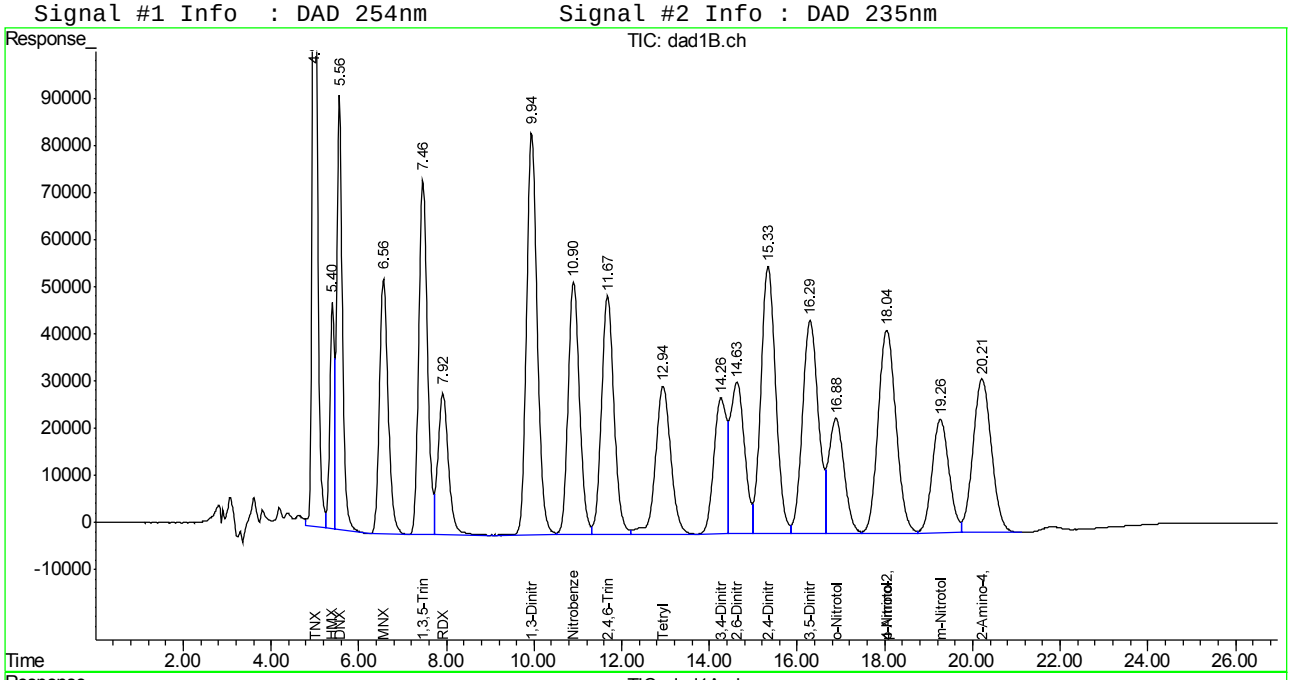
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614559.D 8330RPB.M_1113M.M Fri May 04 09:33:27 2018 Page 1

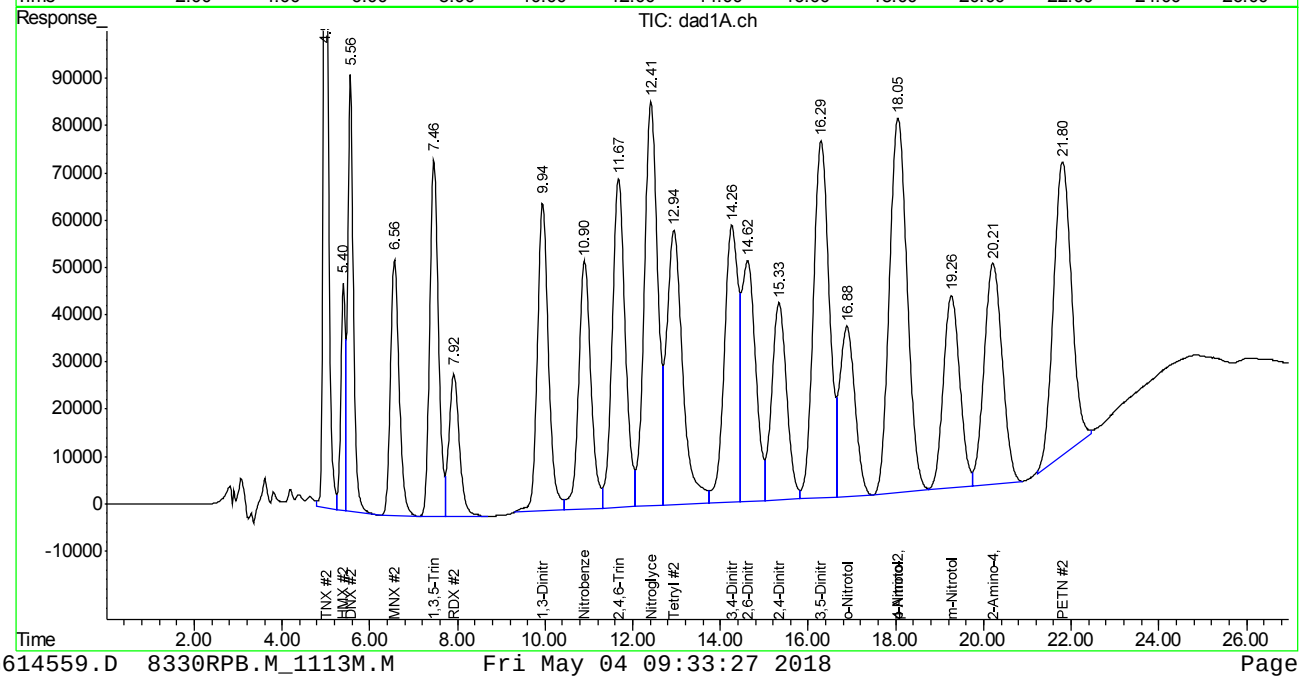
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:22 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

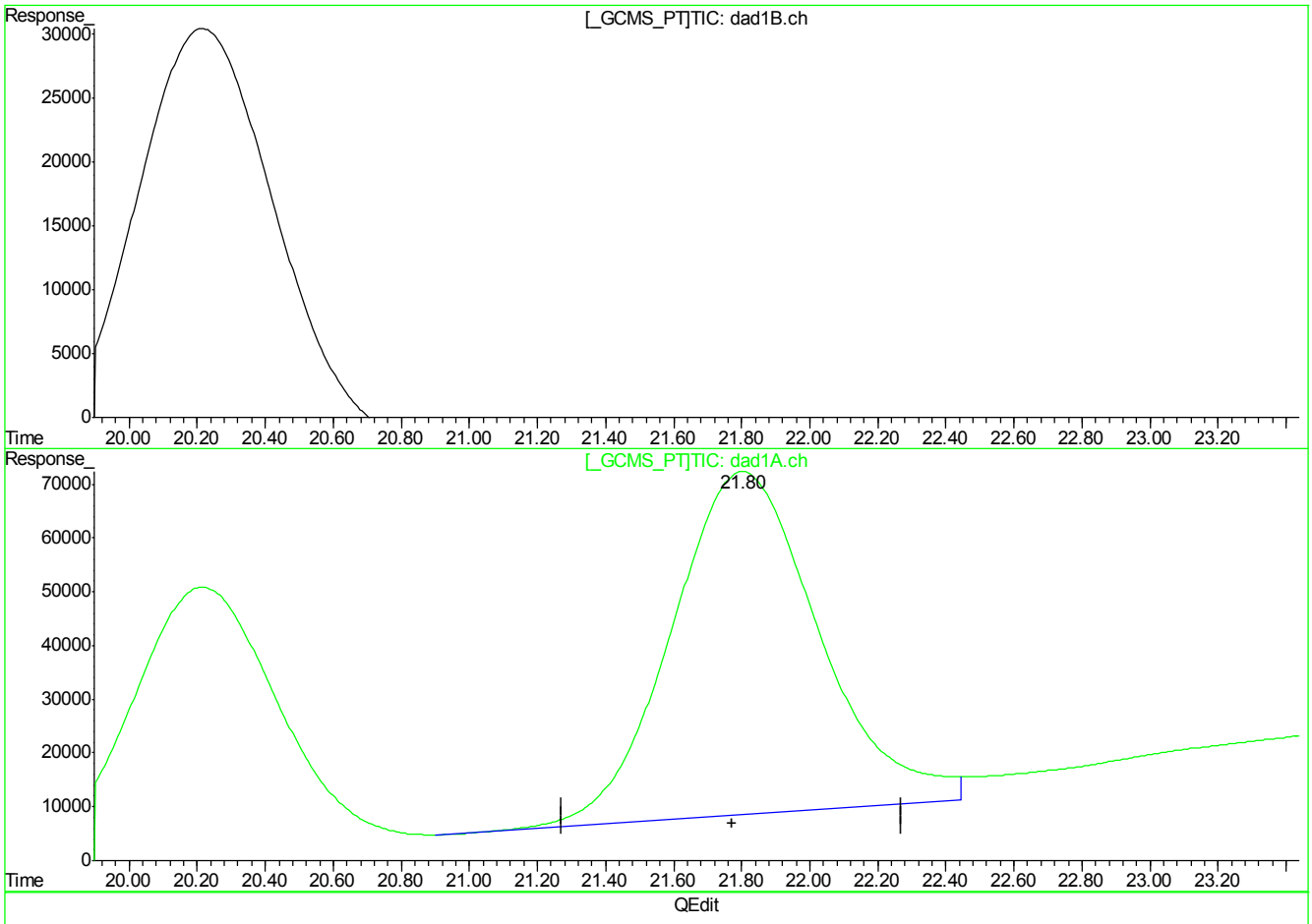
Sample Number:	GGG2624-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614559.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 22:07	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.80	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.80min 5952.541ppb

response 19092211

(+) = Expected Retention Time
GG614559.D 8330RPB.M_1113M.M Fri May 04 09:22:26 2018

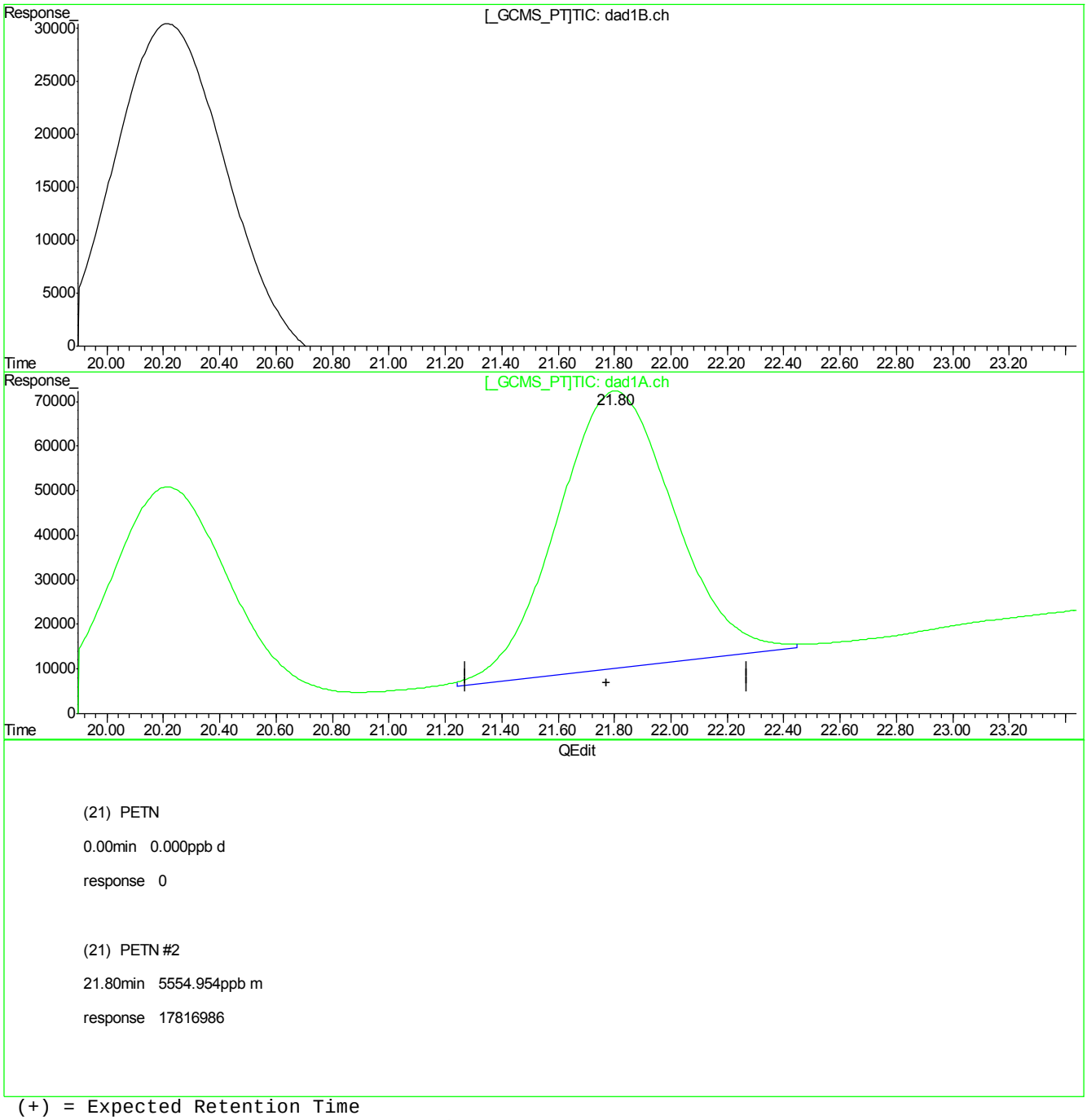
7.7.22.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614559.D 8330RPB.M_1113M.M Fri May 04 09:22:30 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:38 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	5739268	13040642	1104.792	1205.499
	Spiked Amount 500.000	Range 70 - 136		Recovery =		220.96%#	241.10%#
	Target Compounds						
1)	TNX	4.98	4.98	13587110	13587110	955.156	955.229
2)	HMX	5.39	5.39	3310136	3310136	1021.052	1027.433
3)	DNX	5.55	5.55	8061357	8061357	1041.435	1036.803
4)	MNX	6.55	6.55	7448117	7448117	1060.437	1059.581
5)	1,3,5-Trinitrobe	7.44	7.44	10326070	10333093	996.571	997.351
6)	RDX	7.90	7.90	5040572	5059644	1058.016	1066.727
7)	1,3-Dinitrobenze	9.93	9.93	14314085	11657418	1000.504	954.911
8)	Nitrobenzene	10.88	10.88	9487701	9950798	1005.328	1074.496
9)	2,4,6-Trinitroto	11.65	11.65	9990907	14448271	985.850	1101.672
10)	Nitroglycerin	0.00	12.39	0	18113090	N.D. d	5375.208
11)	Tetryl	12.92	12.92	7524220	14349611	928.473	1028.386
13)	2,6-Dinitrotolue	14.62	14.62	7327769	11180659	1024.919	1101.971
14)	2,4-Dinitrotolue	15.32	15.32	13339576	9937967	1017.583	1059.140
15)	o-Nitrotoluene	16.85	16.85	6083440	8821507	1053.119	1022.947
16)	3,5-Dinitroanili	16.29	16.29	11277122	18869869	1143.053	1151.957
17)	p-Nitrotoluene	18.02	18.02	12201587	22066997	1039.108	1041.232
18)	4-Amino-2,6-Dini	18.02	18.02	12201587	22066997	1039.108	1038.204
19)	m-Nitrotoluene	19.23	19.23	6432729	10790078	1091.149	1109.587
20)	2-Amino-4,6-Dini	20.18	20.18	9595622	13495211	1063.472	1092.810
21)	PETN	0.00	21.72	0	17750247	N.D. d	5534.146m

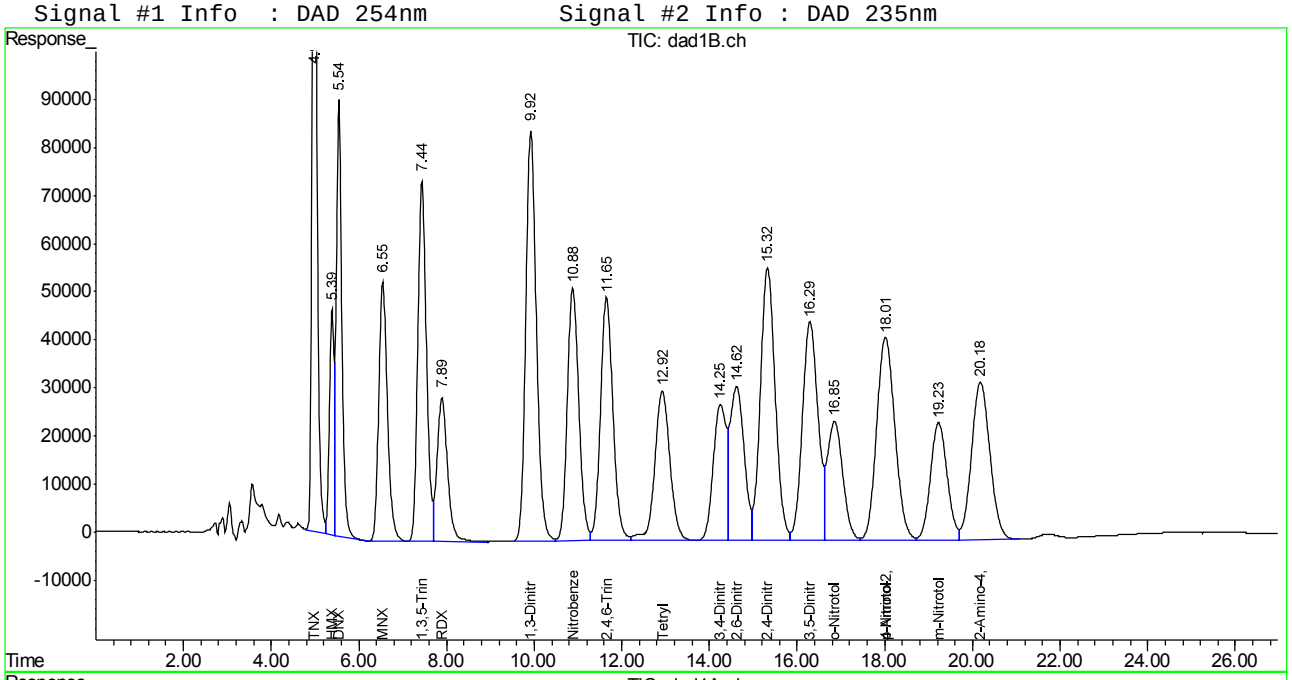
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614571.D 8330RPB.M_1113M.M Fri May 04 09:33:38 2018 Page 1

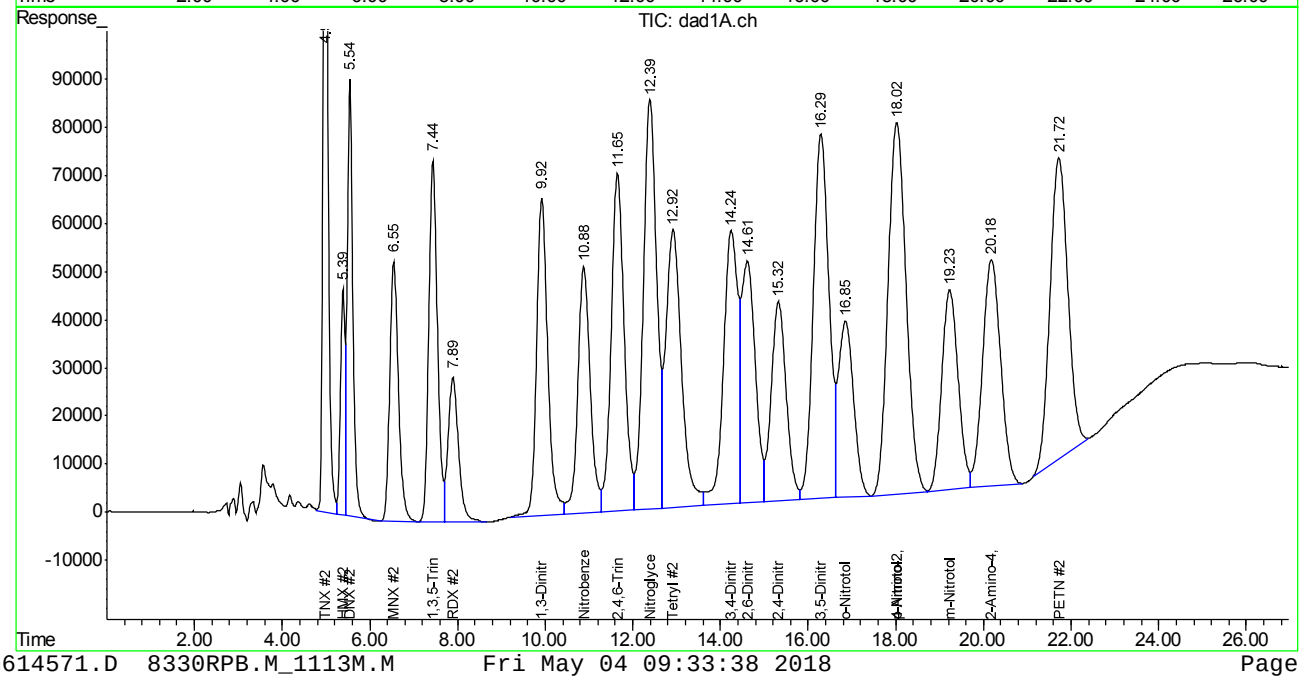
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

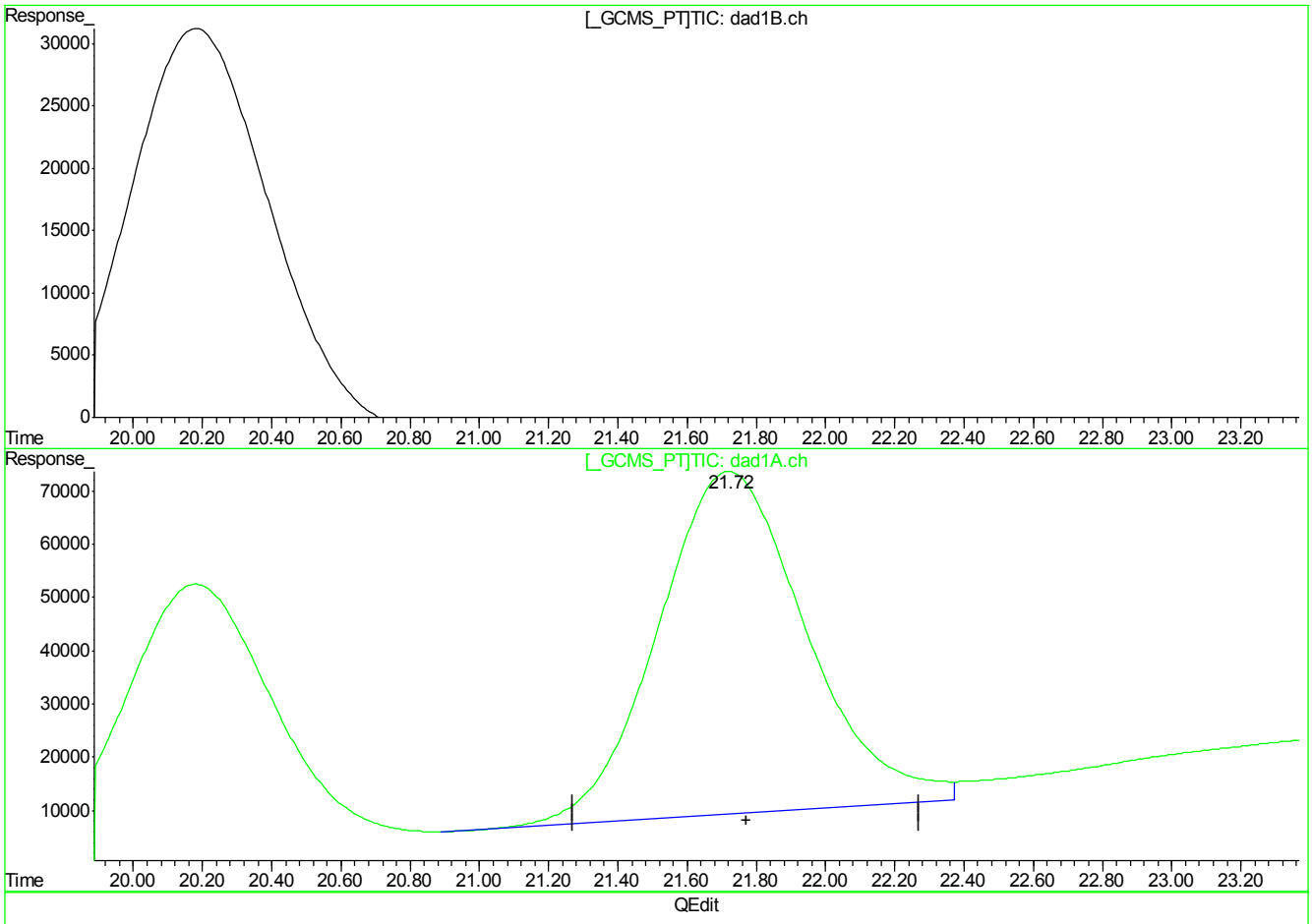
Sample Number:	GGG2624-ECC2571	**Method:**	SW846 8330B
Lab FileID:	GG614571.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/04/18 04:01	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.72	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.72min 5942.613ppb

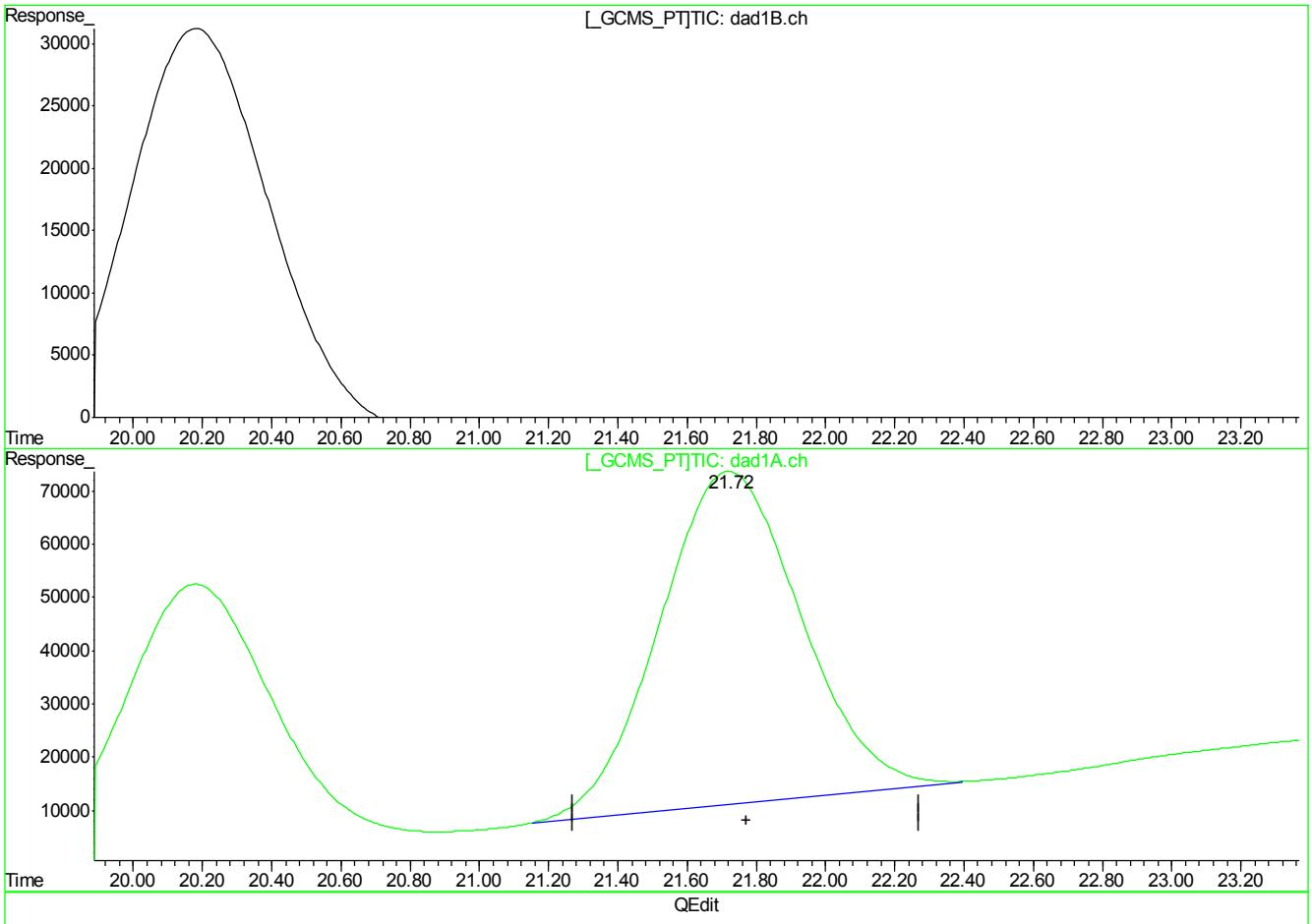
response 19060366

(+) = Expected Retention Time
GG614571.D 8330RPB.M_1113M.M Fri May 04 09:32:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.72min 5534.146ppb m

response 17750247

(+) = Expected Retention Time
GG614571.D 8330RPB.M_1113M.M Fri May 04 09:32:41 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614684.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614684.D\dad1A.ch
Acq On : 10-May-2018, 19:57:58 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.29	14.29	6653876	14294958	1280.852	1321.450
	Spiked Amount 500.000	Range 70 - 136		Recovery =		256.17%#	264.29%#
	Target Compounds						
1)	TNX	5.01	5.01	15265115	15265115	1073.118	1073.200
2)	HMX	5.42	5.42	3724769	3724769	1148.951	1156.131
3)	DNX	5.57	5.57	9093494	9093494	1174.775	1169.550
4)	MNX	6.58	6.58	8278627	8278627	1178.683	1177.731
5)	1,3,5-Trinitrobe	7.48	7.48	11336611	11336611	1094.099	1094.211
6)	RDX	7.93	7.93	5197534	5197534	1090.962	1095.798
7)	1,3-Dinitrobenze	9.96	9.96	15732126	12036644	1099.620	989.072
8)	Nitrobenzene	10.92	10.92	10088399	10076447	1068.979	1088.063
9)	2,4,6-Trinitroto	11.70	11.70	10436633	14400803	1029.831	1098.052
10)	Nitroglycerin	0.00	12.45	0	19190668	N.D. d	5694.988
11)	Tetryl	12.97	12.96	7524064	13748087	928.454	984.543
13)	2,6-Dinitrotolue	14.66	14.65	7989120	11984195	1117.421	1181.168
14)	2,4-Dinitrotolue	15.37	15.37	14611562	10983224	1114.614	1173.761
15)	o-Nitrotoluene	16.92	16.92	6406459	9391775	1109.038	1089.075
16)	3,5-Dinitroanili	16.31	16.31	12392028	21151660	1254.172	1288.922
17)	p-Nitrotoluene	18.06	18.06	13306779	24379329	1133.228	1150.339
18)	4-Amino-2,6-Dini	18.06	18.06	13306779	24379329	1133.228	1146.994
19)	m-Nitrotoluene	19.29	19.29	6791561	11153770	1152.016	1146.987
20)	2-Amino-4,6-Dini	20.22	20.22	10586825	15030566	1173.325	1208.323
21)	PETN	0.00	21.83	0	19632242	N.D. d	6120.912m

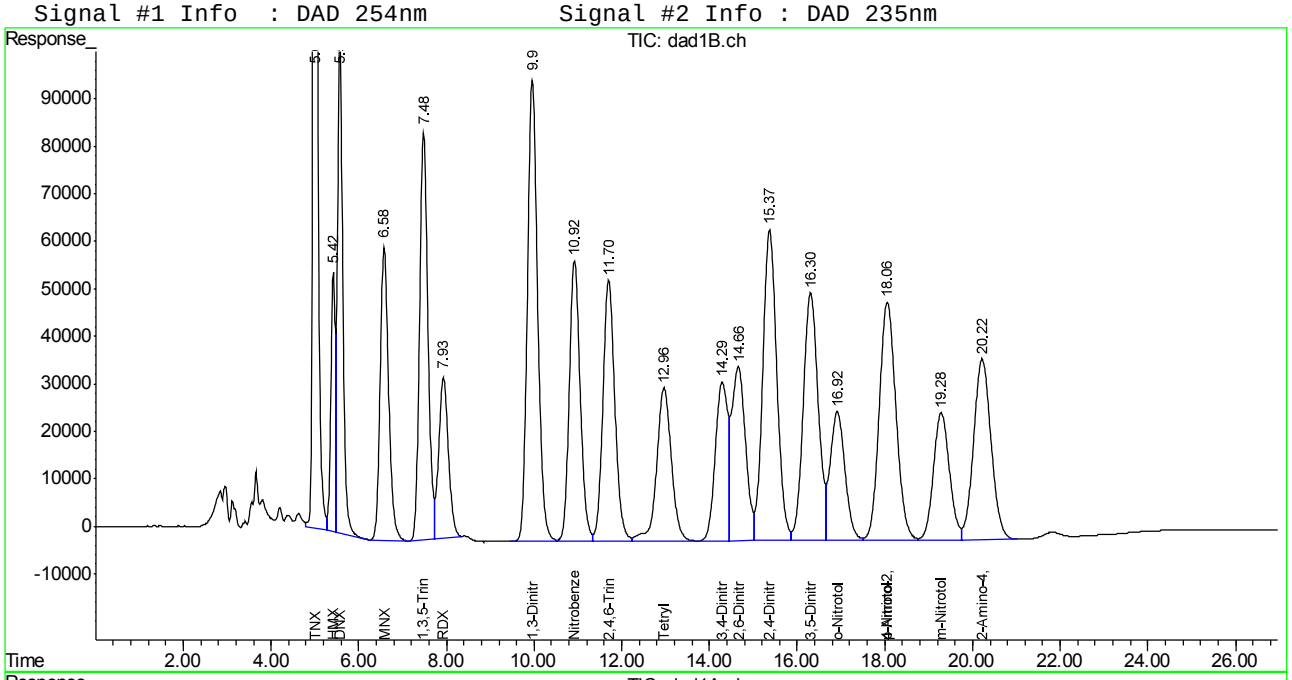
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614684.D 8330RPB.M_1113M.M Fri May 11 10:37:13 2018 Page 1

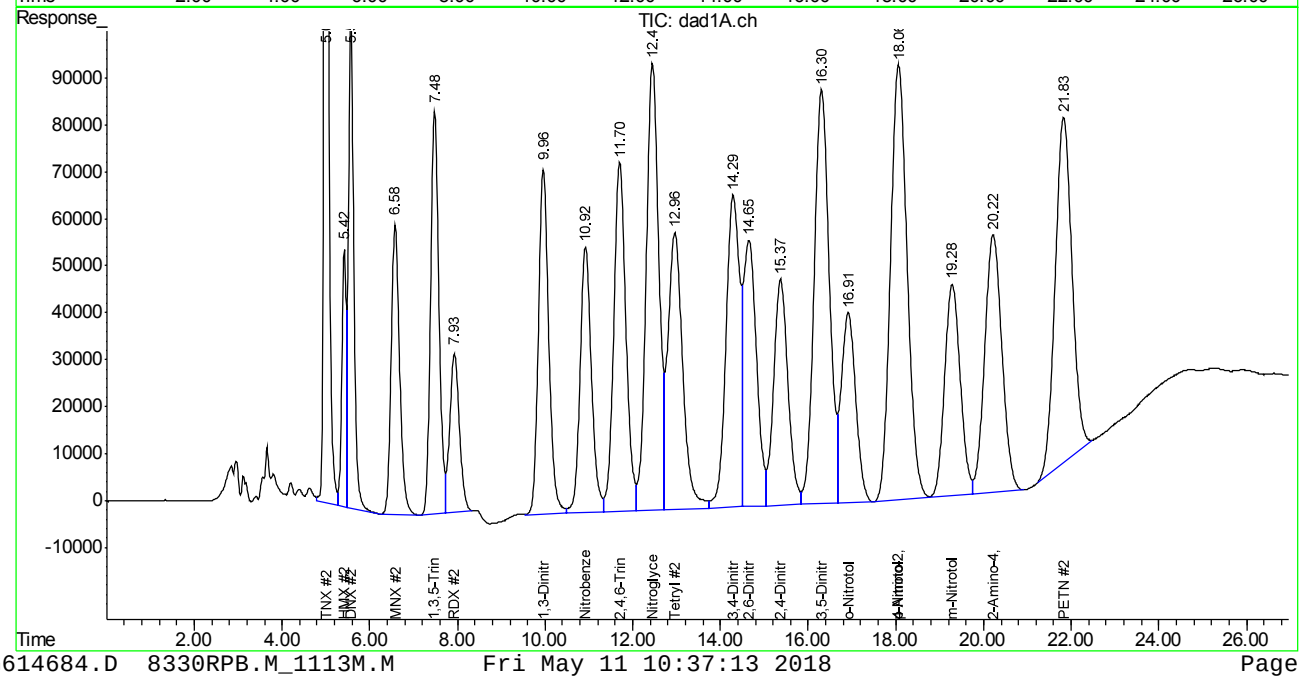
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614684.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614684.D\dad1A.ch
Acq On : 10-May-2018, 19:57:58 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:17 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

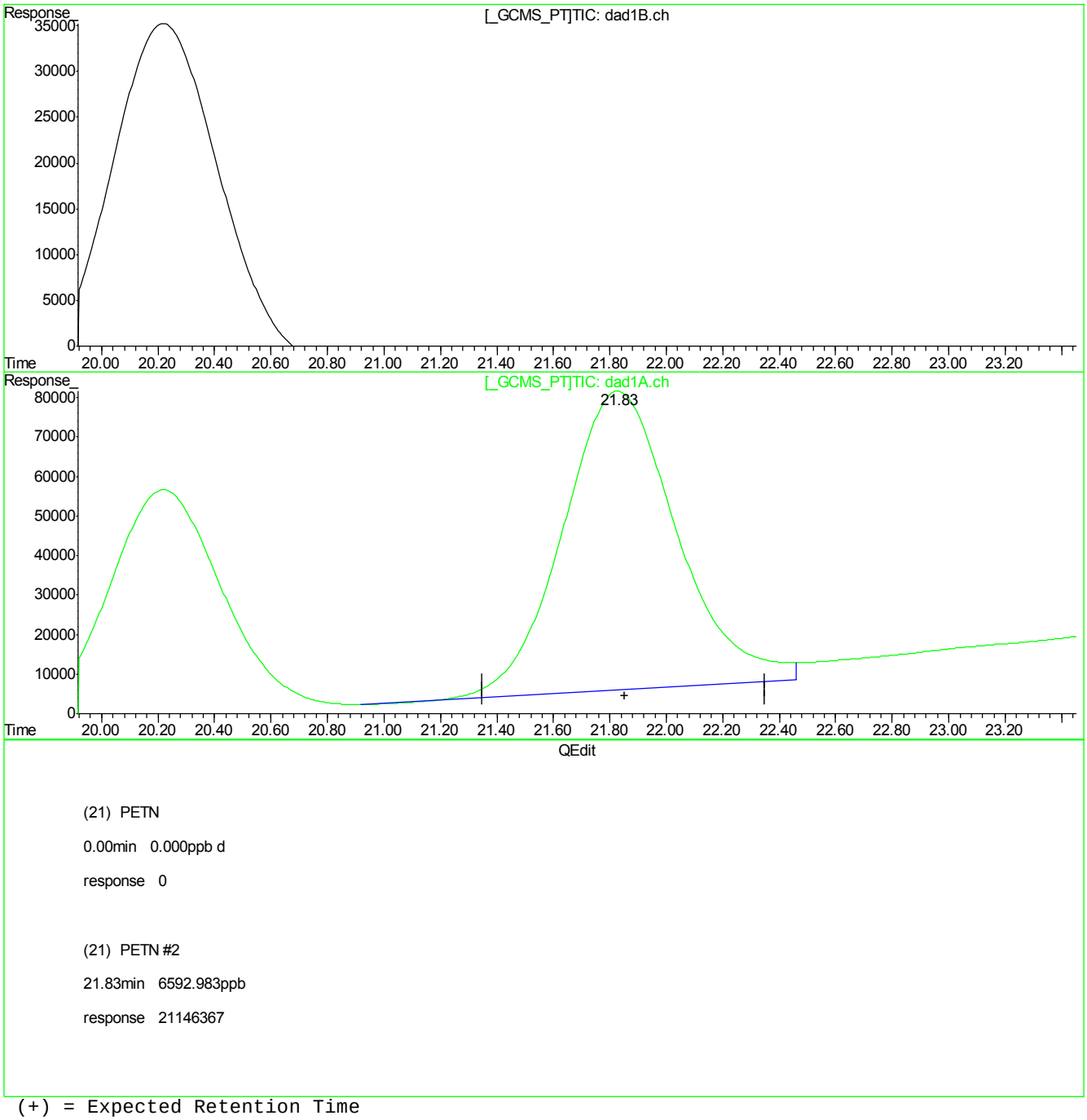
Sample Number:	GGG2627-CC2571	**Method:**	SW846 8330A
Lab FileID:	GG614684.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/10/18 19:57	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.83	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614684.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614684.D\dad1A.ch
Acq On : 10-May-2018, 19:57:58 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

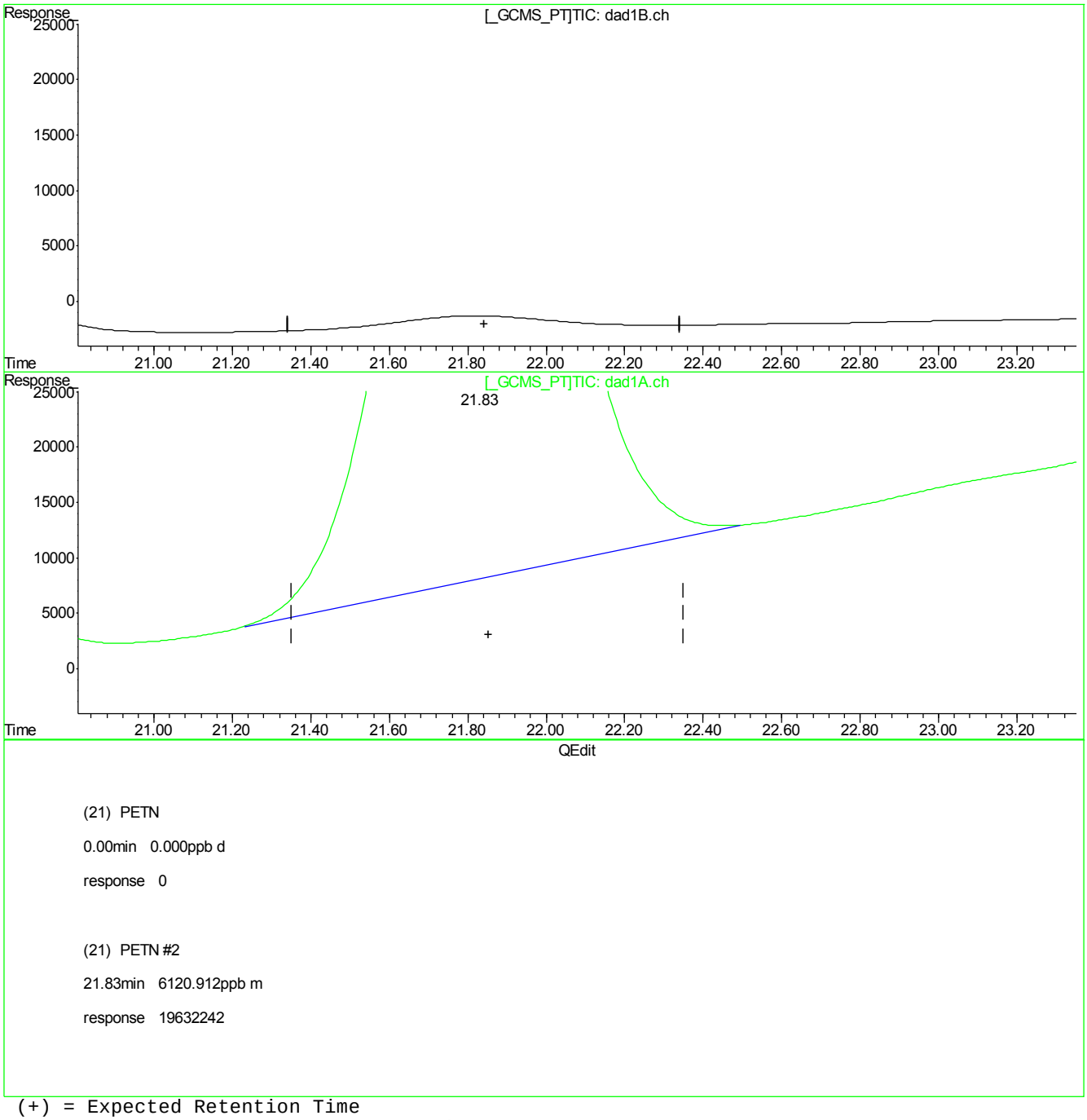


(+) = Expected Retention Time
GG614684.D 8330RPB.M_1113M.M Fri May 11 10:17:01 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614684.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614684.D\dad1A.ch
Acq On : 10-May-2018, 19:57:58 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614684.D 8330RPB.M_1113M.M Fri May 11 10:17:09 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614696.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614696.D\dad1A.ch
Acq On : 11-May-2018, 01:51:15 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.27	6624200	14558437	1275.139	1345.807
	Spiked Amount 500.000	Range 69 - 134		Recovery =		255.03%#	269.16%#
	Target Compounds						
1)	TNX	5.02	5.02	15245048	15245048	1071.707	1071.789
2)	HMX	5.43	5.43	3699822	3699822	1141.256	1148.388
3)	DNX	5.59	5.59	9075639	9075639	1172.469	1167.254
4)	MNX	6.59	6.59	8207216	8207216	1168.515	1167.572
5)	1,3,5-Trinitrobe	7.48	7.48	11219086	11219086	1082.757	1082.867
6)	RDX	7.94	7.94	5104187	5104187	1071.369	1076.118
7)	1,3-Dinitrobenze	9.96	9.96	15668665	12214206	1095.185	1005.148
8)	Nitrobenzene	10.91	10.91	10052574	10396900	1065.183	1122.666
9)	2,4,6-Trinitroto	11.69	11.69	10377359	14631327	1023.983	1115.630
10)	Nitroglycerin	0.00	12.43	0	19178547	N.D. d	5691.391
11)	Tetryl	12.96	12.96	7492059	13828117	924.504	990.373
13)	2,6-Dinitrotolue	14.65	14.64	7933629	12040703	1109.660	1186.738
14)	2,4-Dinitrotolue	15.36	15.36	14499434	11246181	1106.060	1202.699
15)	o-Nitrotoluene	16.89	16.89	6359510	9642399	1100.910	1118.138
16)	3,5-Dinitroanili	16.31	16.31	12244414	21100105	1239.478	1285.833
17)	p-Nitrotoluene	18.05	18.06	13190154	24267839	1123.296	1145.078
18)	4-Amino-2,6-Dini	18.05	18.06	13190154	24267839	1123.296	1141.749
19)	m-Nitrotoluene	19.26	19.26	6782430	11304044	1150.467	1162.441
20)	2-Amino-4,6-Dini	20.22	20.22	10483696	14990281	1161.896	1205.312
21)	PETN	0.00	21.79	0	19244015	N.D. d	5999.871m

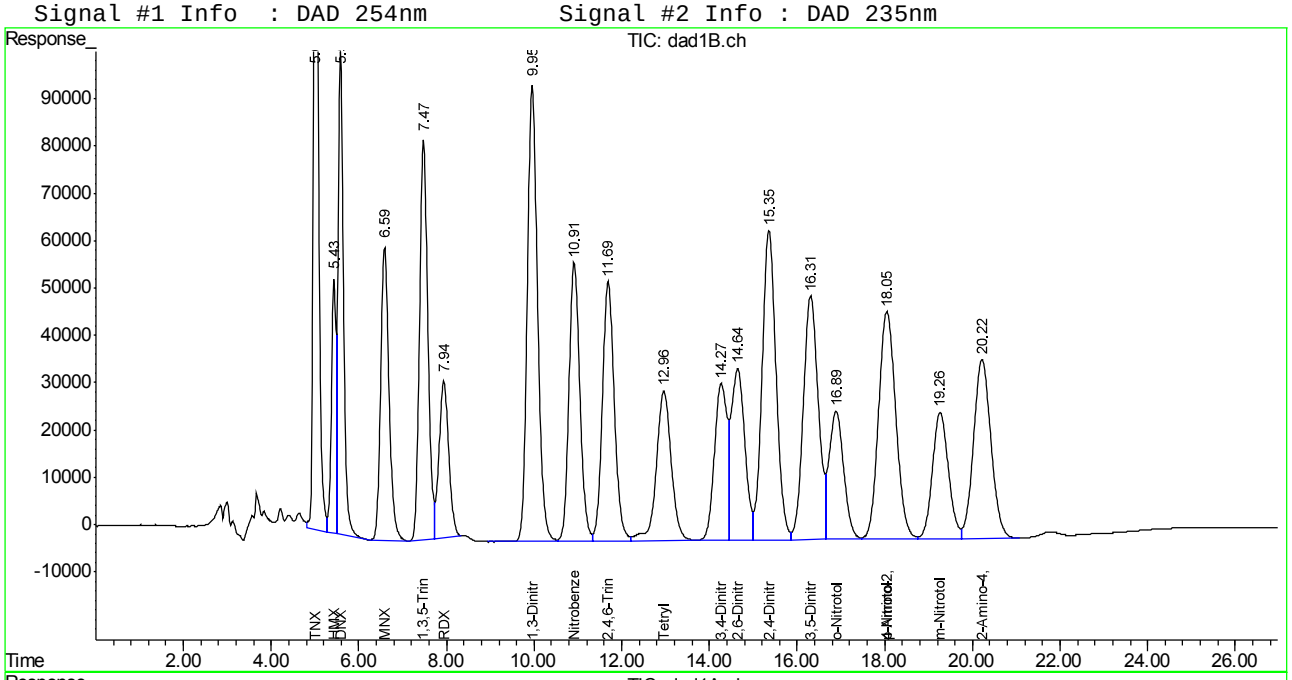
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614696.D 8330RPB.M_1113M.M Fri May 11 10:37:24 2018 Page 1

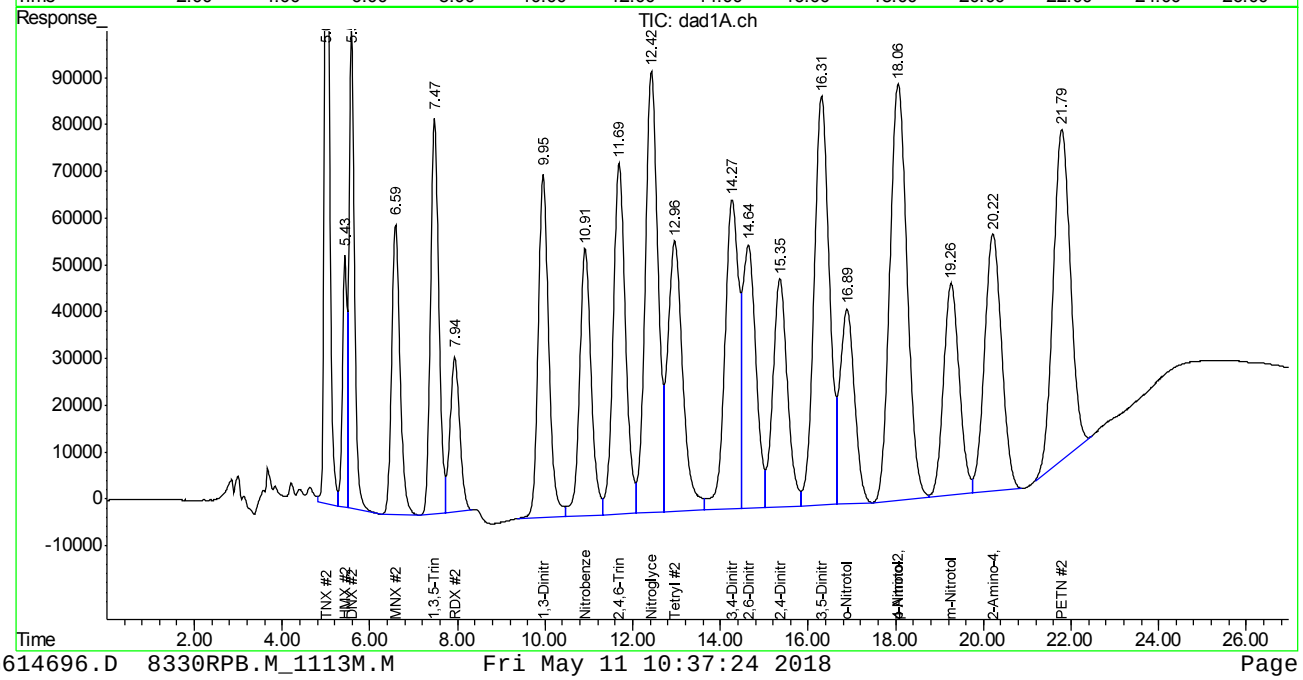
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614696.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614696.D\dad1A.ch
Acq On : 11-May-2018, 01:51:15 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

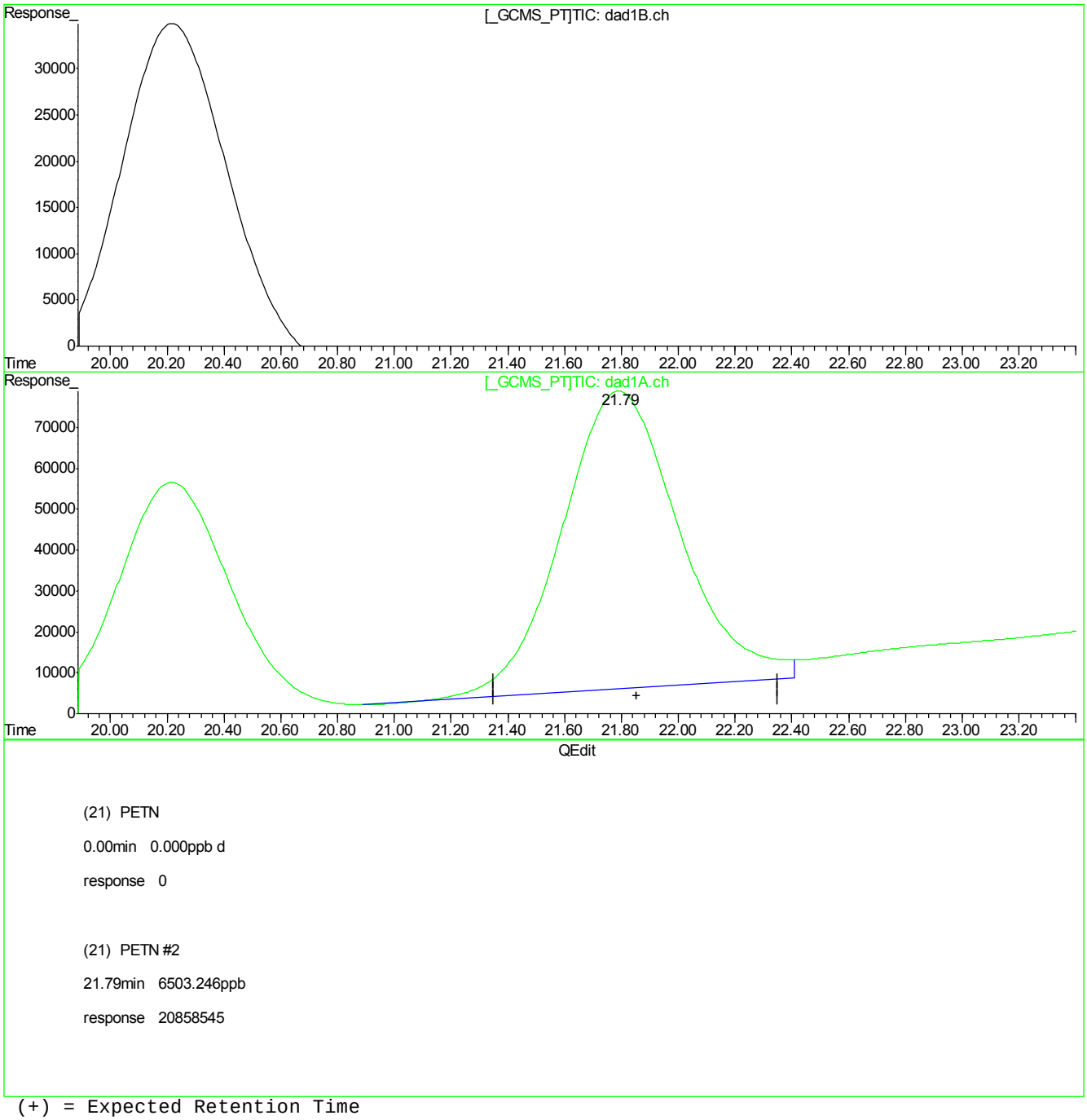
Sample Number:	GGG2627-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614696.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/11/18 01:51	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.79	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614696.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614696.D\dad1A.ch
Acq On : 11-May-2018, 01:51:15 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration

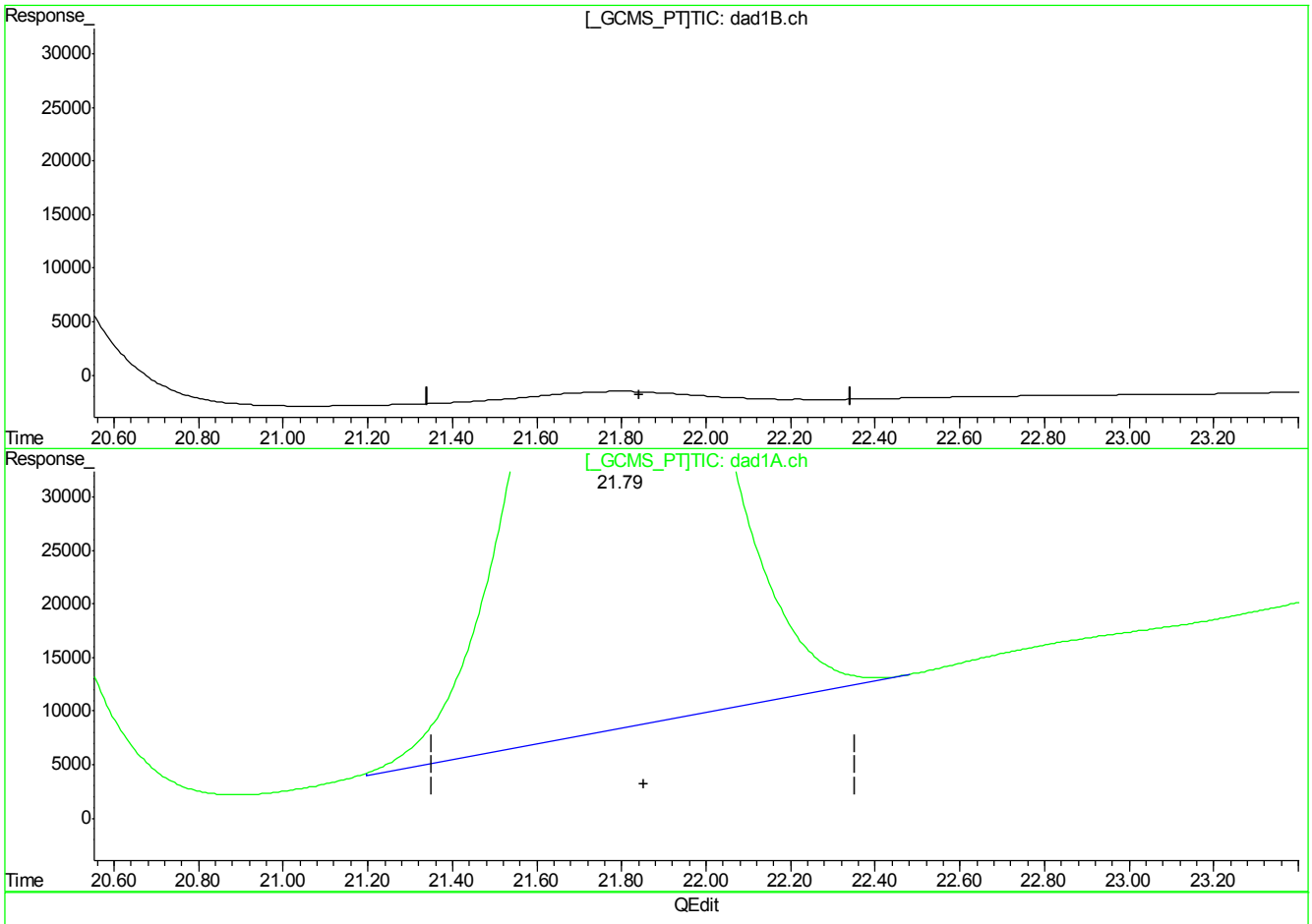


(+) = Expected Retention Time
GG614696.D 8330RPB.M_1113M.M Fri May 11 10:31:04 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614696.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614696.D\dad1A.ch
Acq On : 11-May-2018, 01:51:15 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614696.D 8330RPB.M_1113M.M Fri May 11 10:31:11 2018

7.7.25.3

7

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614706.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614706.D\dad1A.ch
Acq On : 11-May-2018, 06:45:47 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 09:47:37 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.29	14.29	6564432	14299026	1263.634	1321.826
	Spiked Amount 500.000	Range 69 - 134		Recovery =		252.73%#	264.37%#
	Target Compounds						
1)	TNX	5.02	5.02	15128271	15128271	1063.498	1063.579
2)	HMX	5.44	5.44	3608405	3608405	1113.057	1120.013
3)	DNX	5.59	5.59	9044235	9044235	1168.412	1163.215
4)	MNX	6.60	6.60	8163432	8320317	1162.282	1183.662
5)	1,3,5-Trinitrobe	7.48	7.48	11272989	11574641	1087.959	1117.185
6)	RDX	7.94	7.94	5594011	6285563	1174.183	1325.188
7)	1,3-Dinitrobenze	9.97	9.97	15720135	12357651	1098.782	1018.173
8)	Nitrobenzene	10.92	10.92	10032316	10307078	1063.036	1112.967
9)	2,4,6-Trinitroto	11.70	11.70	10347944	14345614	1021.080	1093.844
10)	Nitroglycerin	0.00	12.44	0	19184879	N.D. d	5693.270
11)	Tetryl	12.98	12.97	7479258	13576262	922.925	972.032
13)	2,6-Dinitrotolue	14.66	14.66	8039595	12162772	1124.481	1198.769
14)	2,4-Dinitrotolue	15.37	15.37	14539615	11097331	1109.126	1186.314
15)	o-Nitrotoluene	16.91	16.91	6355464	9988056	1100.210	1158.220
16)	3,5-Dinitroanili	16.35	16.35	12186604	21168495	1233.722	1289.931
17)	p-Nitrotoluene	18.08	18.08	13062798	23807674	1112.450	1123.366
18)	4-Amino-2,6-Dini	18.08	18.08	13062798	23807674	1112.450	1120.099
19)	m-Nitrotoluene	19.29	19.29	6677701	11130602	1132.702	1144.605
20)	2-Amino-4,6-Dini	20.28	20.28	10354966	14378537	1147.629	1159.458
21)	PETN	0.00	21.82	0	18968477	N.D. d	5913.964m

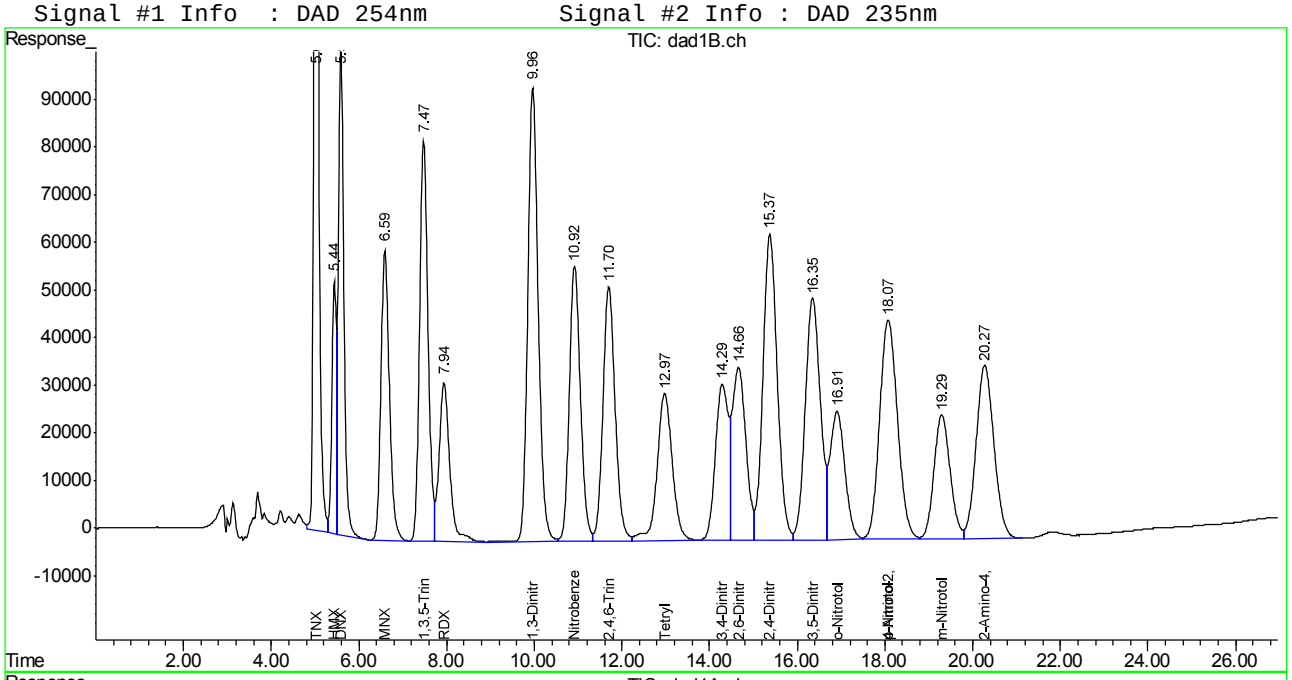
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614706.D 8330RPB.M_1113M.M Fri May 11 10:37:33 2018 Page 1

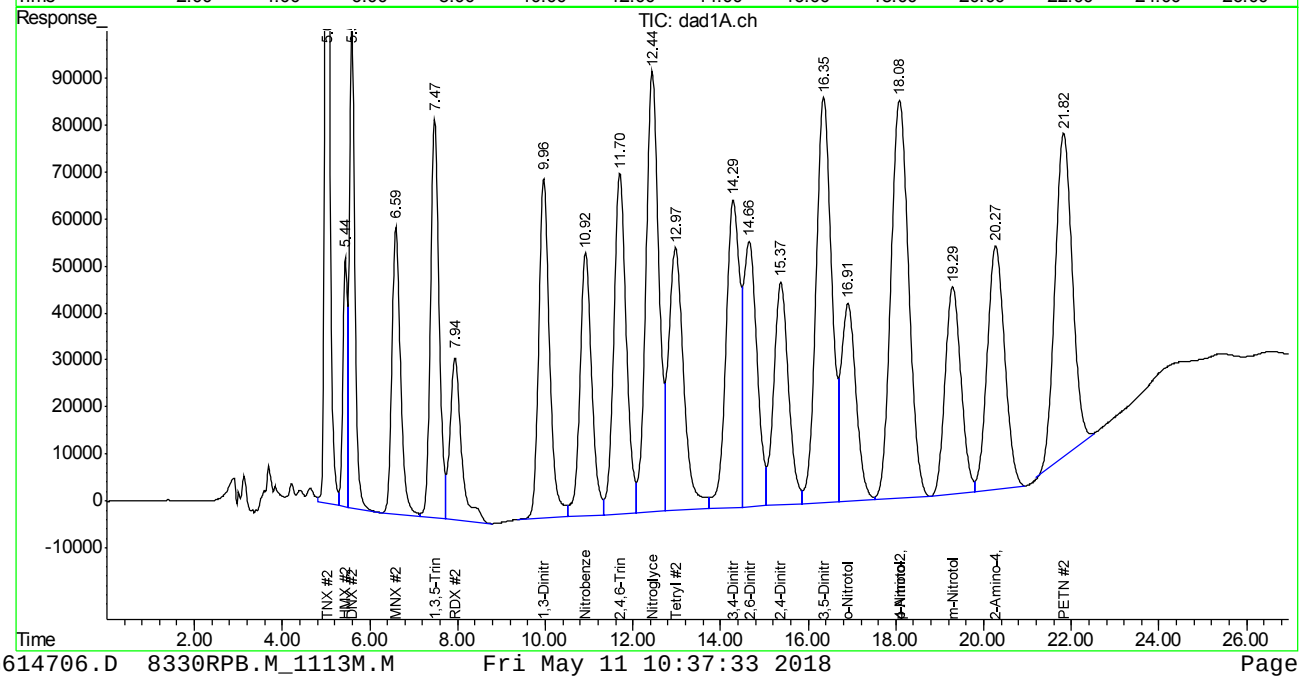
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614706.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614706.D\dad1A.ch
Acq On : 11-May-2018, 06:45:47 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:34 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

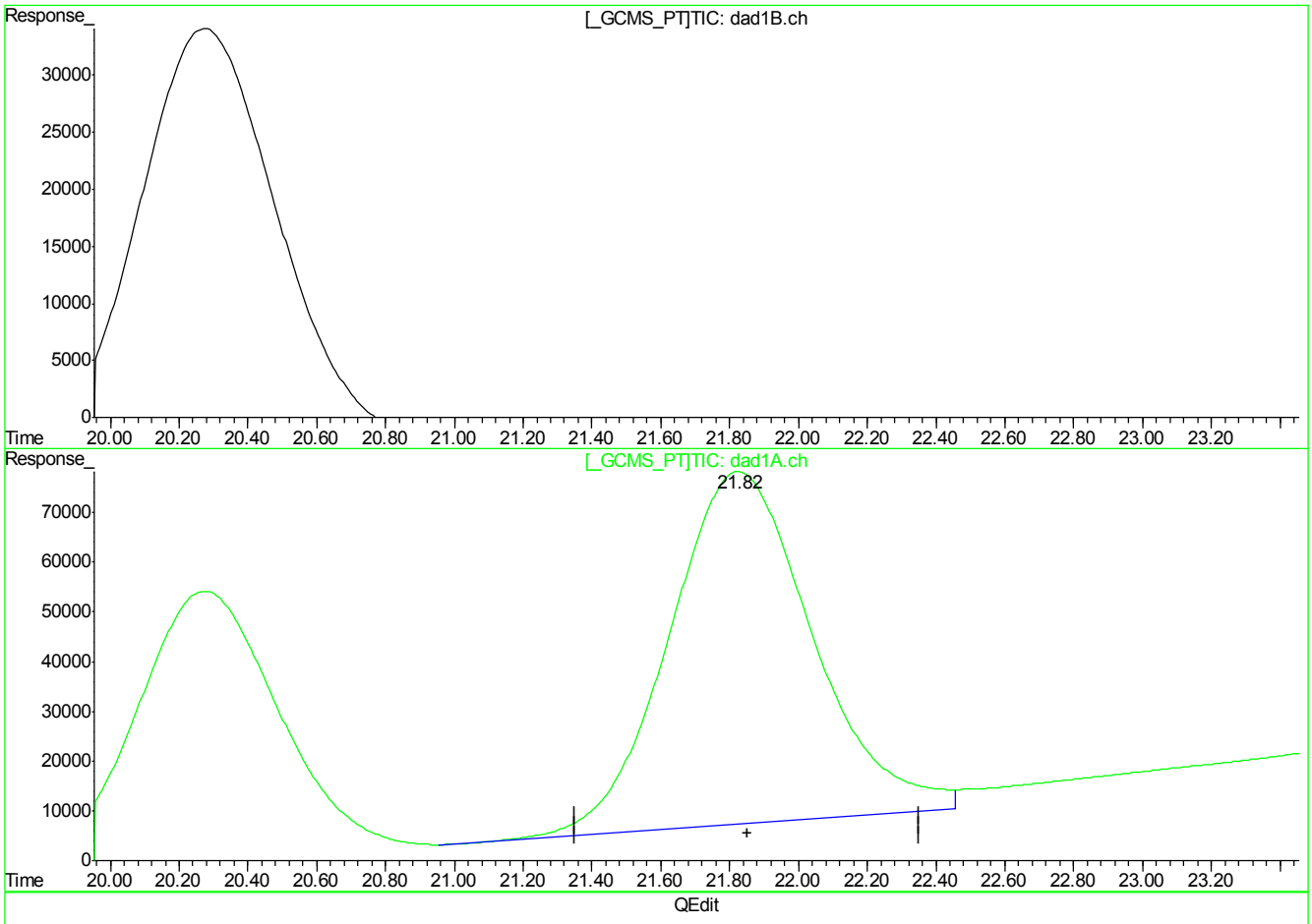
Sample Number:	GGG2627-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614706.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/11/18 06:45	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.82	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614706.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614706.D\dad1A.ch
Acq On : 11-May-2018, 06:45:47 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.83min 6370.586ppb

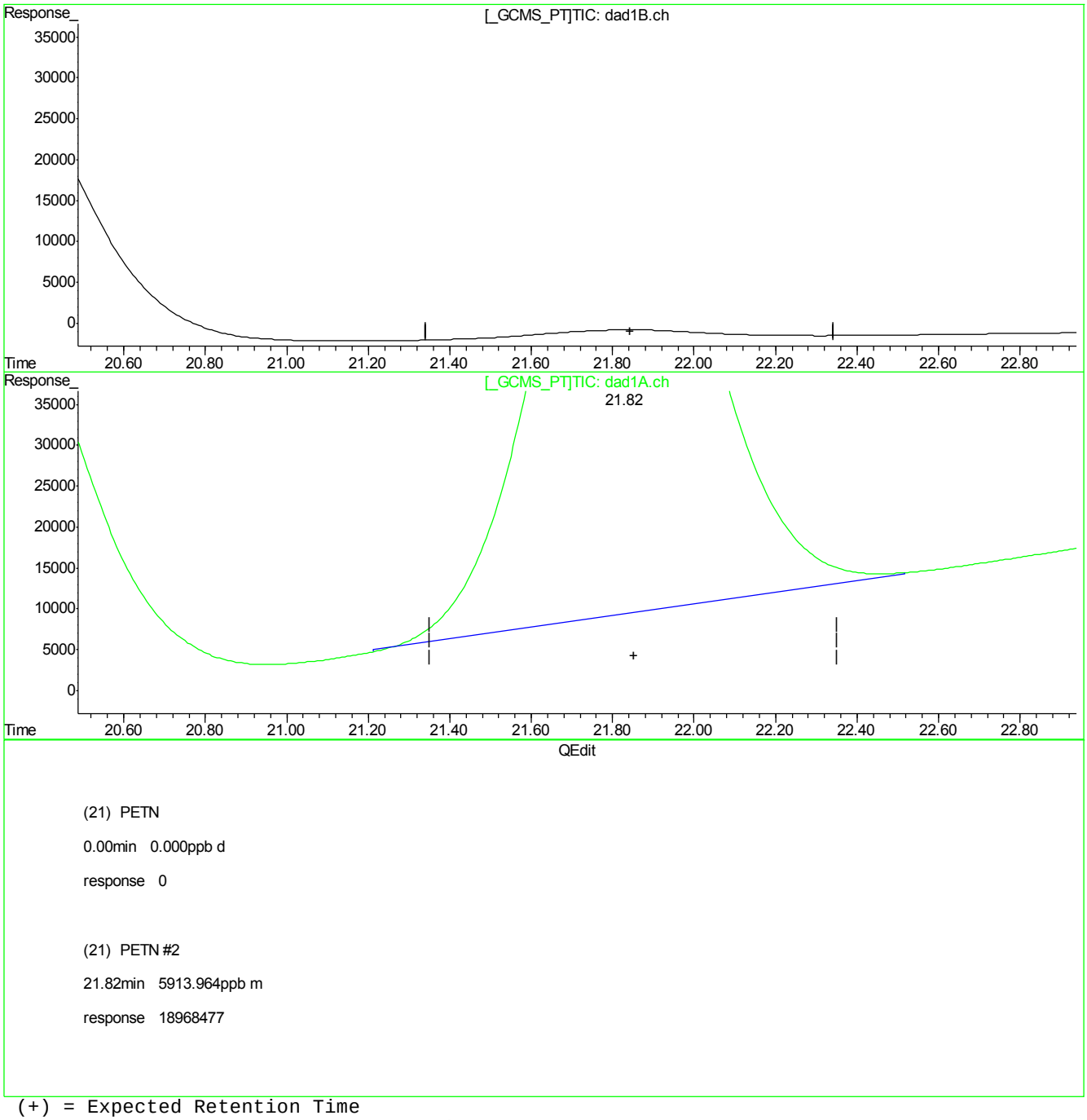
response 20433049

(+) = Expected Retention Time
GG614706.D 8330RPB.M_1113M.M Fri May 11 10:34:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614706.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614706.D\dad1A.ch
Acq On : 11-May-2018, 06:45:47 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69989,Ggg2627,10.00,,,50,1,SOIL Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 9:47 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614706.D 8330RPB.M_1113M.M Fri May 11 10:34:39 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/15/18 10:39

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614711.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614711.D\dad1A.ch
Acq On : 11-May-2018, 10:10:56 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:41:55 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.35	14.35	5947104	12831974	1144.800	1186.210
	Spiked Amount 500.000	Range 70 - 136		Recovery =		228.96%#	237.24%#
	Target Compounds						
1)	TNX	5.03	5.03	13969211	13969211	982.017	982.092
2)	HMX	5.45	5.45	3307284	3307284	1020.172	1026.548
3)	DNX	5.60	5.60	8293120	8293120	1071.376	1066.611
4)	MNX	6.63	6.63	7522476	7522476	1071.024	1070.160
5)	1,3,5-Trinitrobe	7.50	7.50	10377560	10375395	1001.541	1001.434
6)	RDX	7.98	7.98	4945032	4933697	1037.962	1040.173
7)	1,3-Dinitrobenze	9.99	9.99	14364313	11515787	1004.015	942.213
8)	Nitrobenzene	10.96	10.96	9337541	9608665	989.417	1037.552
9)	2,4,6-Trinitroto	11.74	11.74	9354657	13037614	923.068	994.110
10)	Nitroglycerin	0.00	12.49	0	17372274	N.D. d	5155.365
11)	Tetryl	13.03	13.03	6650482	12394436	820.655	886.122
13)	2,6-Dinitrotolue	14.72	14.71	7396959	10960850	1034.597	1080.307
14)	2,4-Dinitrotolue	15.42	15.42	13266732	10045032	1012.026	1070.851
15)	o-Nitrotoluene	16.96	16.96	5985431	8952480	1036.153	1038.134
16)	3,5-Dinitroanili	16.39	16.39	11126540	18940832	1128.019	1156.224
17)	p-Nitrotoluene	18.13	18.14	12120395	22078048	1032.193	1041.753
18)	4-Amino-2,6-Dini	18.13	18.14	12120395	22078048	1032.193	1038.724
19)	m-Nitrotoluene	19.34	19.34	6398610	10795288	1085.362	1110.123
20)	2-Amino-4,6-Dini	20.31	20.31	9561240	13339143	1059.661	1080.980
21)	PETN	0.00	21.85	0	17947365	N.D. d	5595.603m

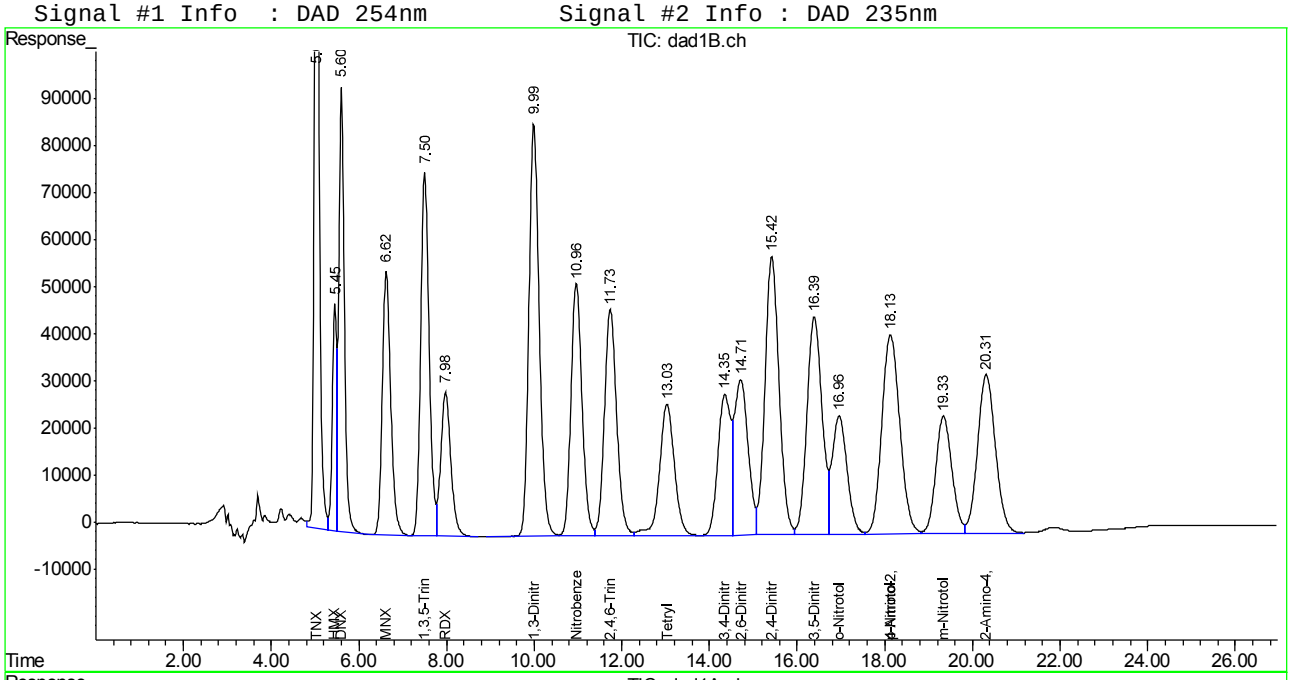
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614711.D 8330RPB.M_1113M.M Fri May 11 10:44:39 2018 Page 1

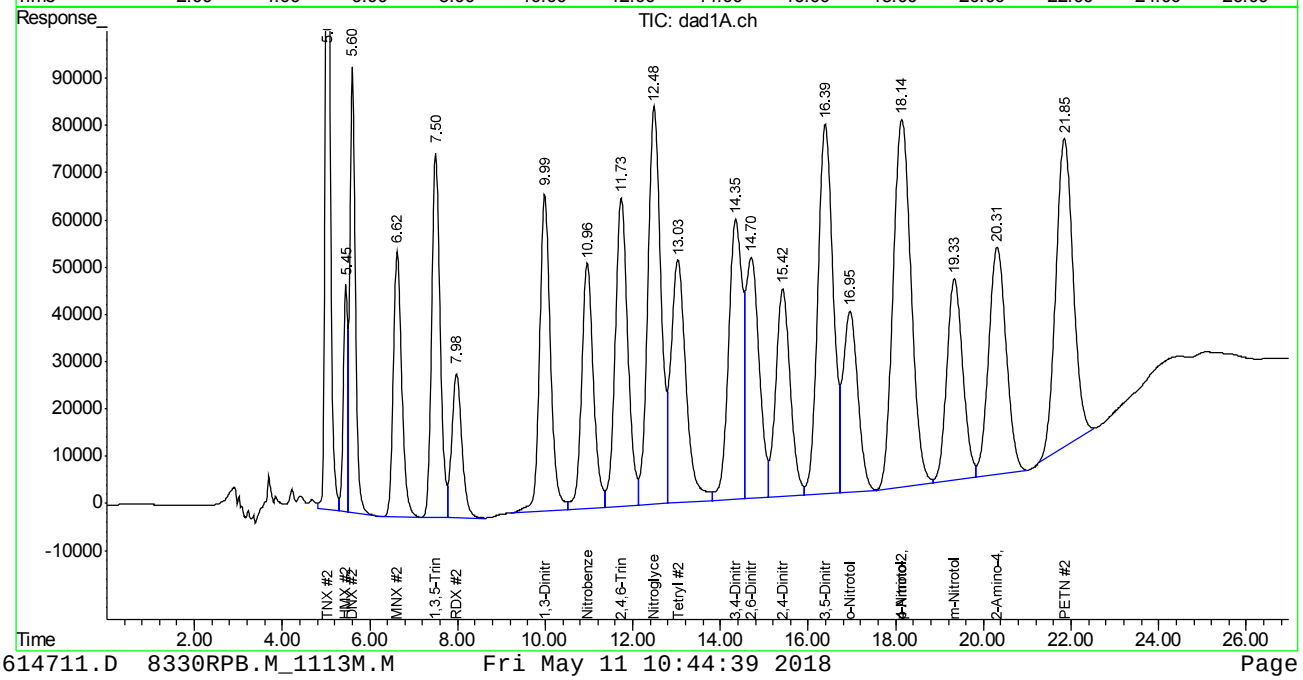
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0510RPB3\GG614711.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614711.D\dad1A.ch
Acq On : 11-May-2018, 10:10:56 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:43 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

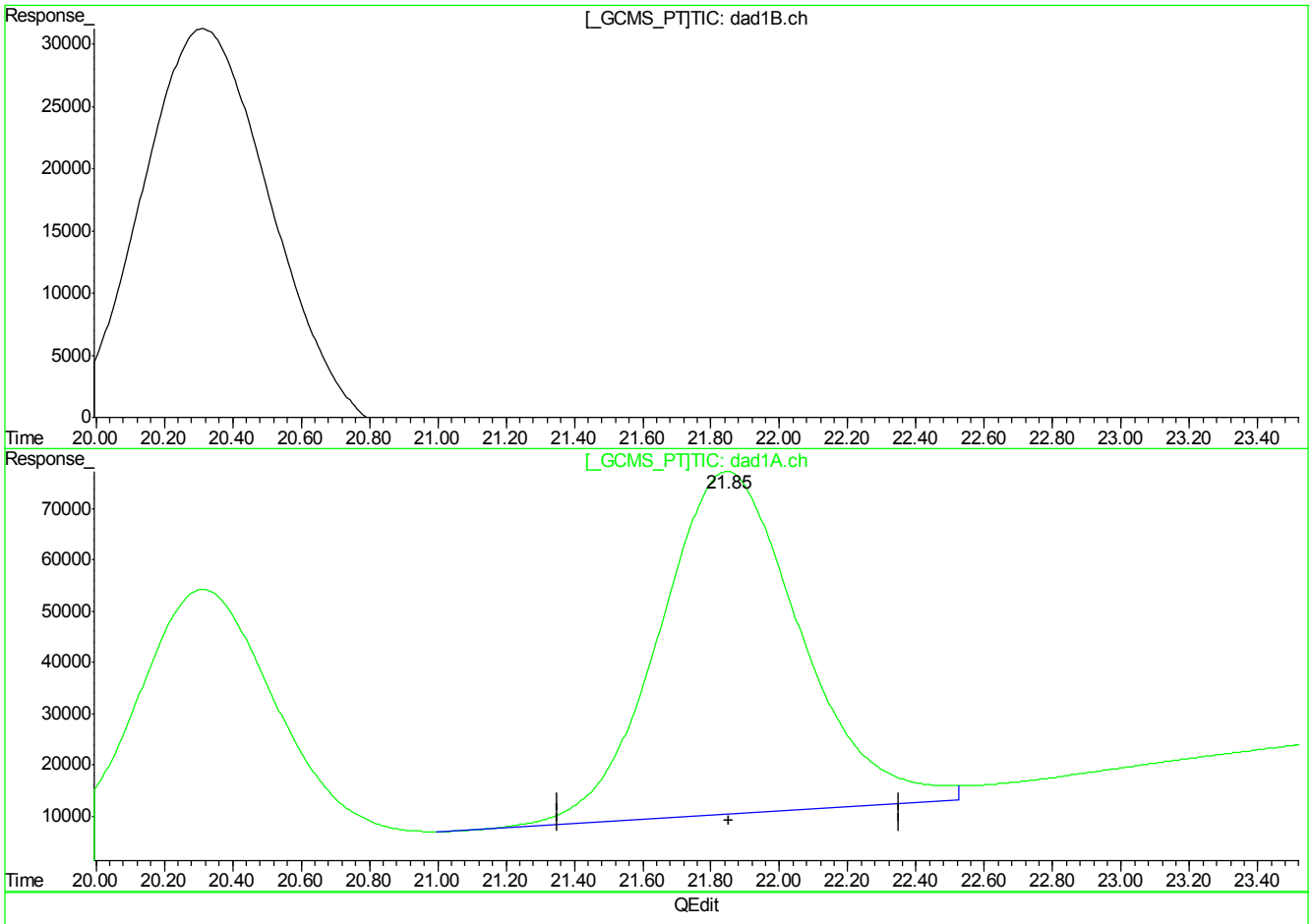
Sample Number:	GGG2627-CC2571	**Method:**	SW846 8330A
Lab FileID:	GG614711.D	**Analyst approved:**	05/11/18 10:50 Evita Martinez
Injection Time:	05/11/18 10:10	**Supervisor approved:**	05/15/18 10:39 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.85	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614711.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614711.D\dad1A.ch
Acq On : 11-May-2018, 10:10:56 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:41 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.85min 5956.667ppb

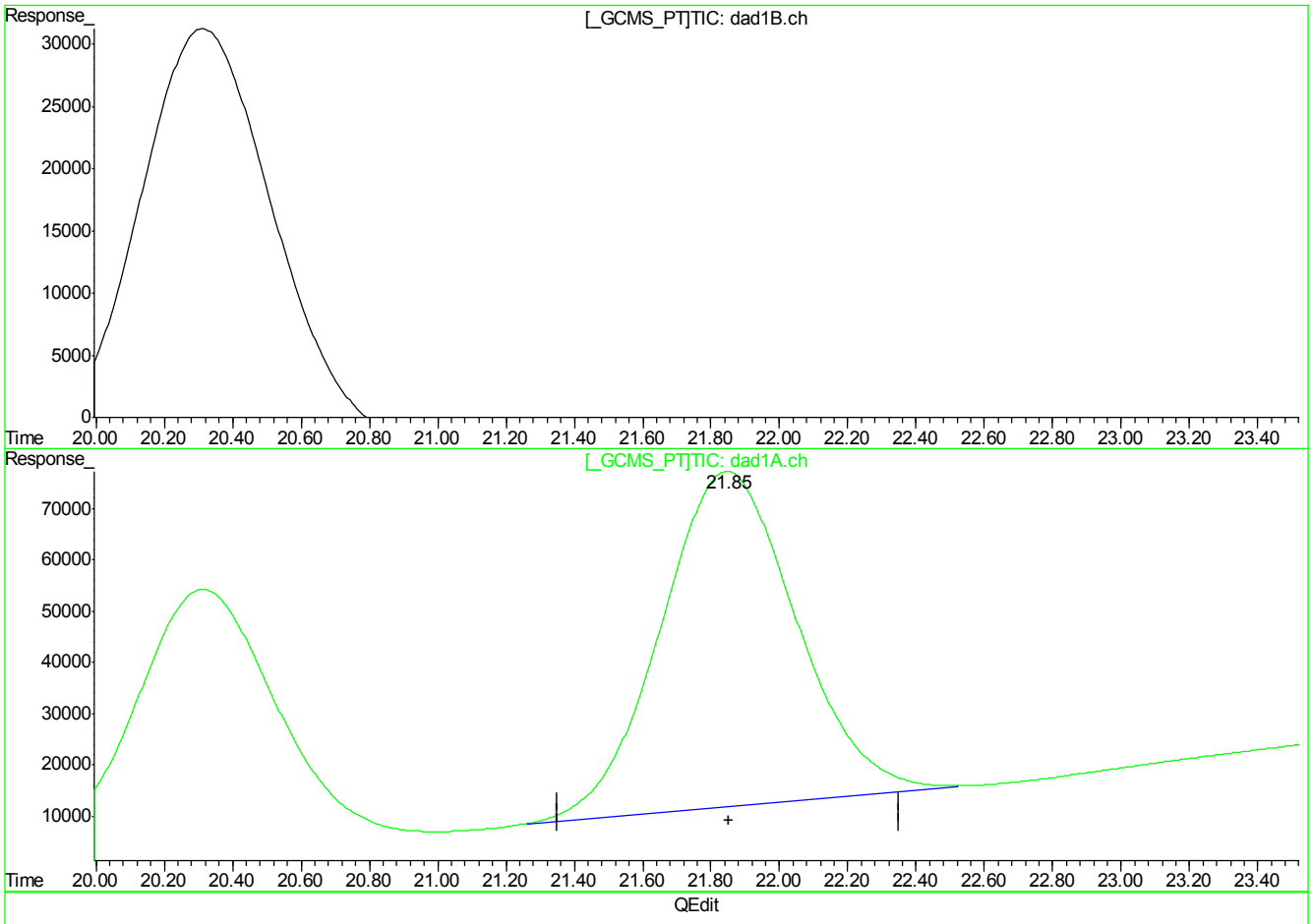
response 19105445

(+) = Expected Retention Time
GG614711.D 8330RPB.M_1113M.M Fri May 11 10:43:49 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0510RPB3\GG614711.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0510RPB3\GG614711.D\dad1A.ch
Acq On : 11-May-2018, 10:10:56 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69959,Ggg2627,1000,,,10,1,WATER Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 11 10:41 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 11 09:46:41 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.85min 5595.603ppb m

response 17947365

(+) = Expected Retention Time
GG614711.D 8330RPB.M_1113M.M Fri May 11 10:43:53 2018

SGS ACCUTEST-ORLANDO

DATE:	4/19/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 0329 plus
CALIB. DATE:	03/09/18
RUN BATCH:	GBB 1722

ANALYST:	GW
ACETONITRILE LOT #:	350
MEOH LOT #:	—
HEAD PRESSURE:	280

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059462	1	CCB	8330				ND
BB 63	20	test					✓
BB 64	21	IC 17122-20		LC1020	50+450		test
BB 65	22	↓ -50			10+90	pii	Cal curve
BB 66	23	-100			25+75		
BB 67	24	-200			50+50		
BB 68	25	ICC -500			100+300		
BB 69	26	IC -1000			200+200		
BB 70	27	-2000			1X		
BB 71	28	ICV -500		EVOL LC991 LC990 EVOL	20:25 :10mL	>1mL	
BB 72	29	↓ ↓ -500		E 6231	10/400	40X	no need
BB 73	3	OP69647 bs		OP69647	1X		✓
BB 74	4	↓ -MB					ND
BB 75	5	IAS3294-1					ND
BB 76	6	OP69647 MS				pii	✓
BB 77	7	↓ -MSD				↓	✓
BB 78	8	IAS3294-2					ND
BB 79	9	IGS3384-1					✓ RL@1X
BB 80	10	↓ -2			↓		✓ RL@1X
BB 81	26	CCI272-100	↓	LC1020	1:1	pii	pii

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: E. Maim

SGS ACCUTEST-ORLANDO

DATE:	4/19/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 0329 jks
CALIB. DATE:	3/29/18
RUN BATCH: GBB	1722

ANALYST:	EM
ACETONITRILE LOT #:	3510
MEOH LOT #:	—
HEAD PRESSURE:	200

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059 182	1	CCB	8330	—	—		MD
BB 83	11	IQ33383		OP16647	1X		RR COX
BB 84	24	QC 1722-1000		QLC1020	1:1	EM 4/19/18 pi&S	PASS
BB 85	71	E6249 spike		—	—		test only
BB 86	72	test spike stock		—	—		↓
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 06/16

Analyst's Signature: EMcAm

SGS ACCUTEST-ORLANDO

DATE:	5/10/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A16
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 04190115
CALIB. DATE:	11/9/18
RUN BATCH: GBB	1730

ANALYST:	EL
ACETONITRILE LOT #:	3520
MEOH LOT #:	2
HEAD PRESSURE:	310

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 059069	1	CCB	8330	←	→		ND
BB 70	2	cc 1722-1000		LC1020	1:1	pii	tetryl low 2nd signal
BB 71	3	op6960-BS		op6960	X		✓
BB 72	4	-DUP					✓
BB 73	5	-MS					ND
BB 74	6	FAS3800-11					ND
BB 75	7	-12					ND
BB 76	8	-13					ND
BB 77	9	-14					ND
BB 78	10	-15					ND
BB 79	11	-16					ND
BB 80	2	cc1722-1000		LC1020	1:1	pii	1st signal 2,4DT low 2nd signal tetryl low ND
BB 81	1	CCB					✓
BB 82	12	op6960.MS		op6960	1X	pii	✓
BB 83	13	-MSD					ND
BB 84	14	FAS3800-17					ND
BB 85	15	-18					ND
BB 86	16	-19					ND
BB 87	17	-20					ND
BB 88	18	-21	✓				ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 06/16

Analyst's Signature: EL

SGS ACCUTEST-ORLANDO

DATE:	5/10/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 04/19/15
CALIB. DATE:	4/9/18
RUN BATCH: GBB	1730

ANALYST:	EH
ACETONITRILE LOT #:	320
MEOH LOT #:	—
HEAD PRESSURE:	310

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 0596 89	19	FaS3800 22	8330	op69960	1x		ND
BB 90	20	op69960-dup					ND
BB 91	21	-dup2					ND
BB 92	2	CC1722-1000		LC1020	1:1	pii	Hexsigral 2,4,6 below
BB 93	1	CCB					ND
BB 94	22	FaS38002 2/3		op66960	1x		ND
EH 5/10/18 BB 95	23	-4					ND
BB 96	24	op69960-gb1					ND
BB 97	25	-gb2					ND
BB 98	26	-gb3					ND
BB 99	27	op66973-bs		op66973		pii	✓
BB 700	28	-PT1					✓
BB 01	29	-MD					ND
BB 02	30	FaS3801-1					ND
BB 03	2	CC1722-1000		LC1020	1:1	pii	2nd signal tetryl below
BB 04	1	CCB					ND
BB 05	31	op66973 MS		op66973	1x	pii	✓
BB 06	32	MSD				pii	✓
BB 07	33	FaS3801-2					ND
BB 08	34	-3					ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	5/10/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330
CALIB. DATE:	4/19/18 4/19/18
RUN BATCH:	GBB 1730

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	310

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB059709	35	FAS3801-4	8330	OP69973	1X		ND
BB 10	36	OP69973dup					ND
BB 11	37	dup2					ND
BB 12	38	FAS3801-5					ND
BB 13	39	-6					ND
BB 14	40	-7					ND
BB 15	41	CC1722-1000		LC1020	1:1	pii 5/11/18	~~ND~~ ICV signal 2,4,6 low 2nd signal ethyl low
BB 16		CCB					ND
BB 17	41	FAS3801-8		OP69973	1X		ND
BB 18	42	-9					ND
BB 19	43	-10					ND
BB 20	44	-11					ND
BB 21	45	-12					ND
BB 22	46	-13					ND
BB 23	47	-14					ND
BB 24	48	OP69973-gb1					ND
BB 25	49	-gb2					ND
BB 26	50	-gb3					ND
BB 27	2	CC1722-1000		LC1020	1:1	pii 5/11/18	ICV signal 2,4,6 low 2nd signal ethyl low
BB 29							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature

SGS ACCUTEST-ORLANDO

DATE:	11/13/19
COLUMN TYPE:	Bres RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 416
ACQ. METHOD:	8330 RPB3
PROC. METHOD:	8330 RPB-1113
CALIB. DATE:	11/13/19
RUN BATCH: GGG	2571

ANALYST:	GM
ACETONITRILE LOT #:	343
MEOH LOT #:	171102
HEAD PRESSURE:	152

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 613824	1	CCb	8330	—			ND
GG 25	2	ICC25561000		LC9409	1:1		CCU ↑ Run accuracy
GG 26	3	ic 2571-20			50/450 50/450	pii	cccu pass
GG 27	4	-50			10/390		
GG 28	5	-100			25/475		
GG 29	6	-200			50/450		
GG 30	7	icc -500			100/300		
GG 31	8	ic -1000			200/200		
GG 32	9	-2000			1X		
GG 33	10	icv -50		ES936/LC852 LC8611 & 5164	20:25 25:10	/mL	TNX/DW
GG 34	100	-500		E11098	40X		Hexyl & 246 TNT only
GG 35	11	opb7519-mB		opb7519	1X		ND
GG 36	12	Fau8150-7cf					ND not needed
GG 37	13	Fq46005-1				pii	3,5 dini >40%
GG 38	14	-3					3,5 dini >40%
GG 39	15	-5					3,5 dini >40%
GG 40	16	opb64538-mB		opb7538			ND
GG 41	17	Fau8952-1Acf				pii	✓
GG 42	18	-2Acf				pii	✓
GG ✓ 43	19	opb7536-mB	✓	opb7536	✓		ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

SGS ACCUTEST-ORLANDO

DATE:	11/3/17
COLUMN TYPE:	Bives RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330 RPB -1113
CALIB. DATE:	11/3/17
RUN BATCH:	GGG 2571

ANALYST:	EM
ACETONITRILE LOT #:	343
MEOH LOT #:	171002
HEAD PRESSURE:	52

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 013844	20	FA49040-1cf	8330	op67534	1X	pii	✓
GG 45	8	CC2571-1000		LC949	1:1	pii	PASS
GG 46	1	CCB					ND
GG 47	21	FA49040-1cf		op67534	8/400	50X pii	✓
GG 48	22	-2			1X		✓
GG 49	23	-2			10/400	4X	✓
GG 50	24	-3			1X	✓	✓
GG 51	25	-3			10/400	4X	R2 @ 10X
GG 52	26	-4			1X		✓
GG 53	27	-5			↓		TNT>40% 2,4dini
GG 54	28	-5			10/400	4X	✓
GG 55	29	FA49077-1		✓	1X		✓
GG 56	8	CC2571-1000		LC949	1:1	pii	PASS
GG 57	1	CCB					ND
GG 58	30	op67540-MB		op67540	1X		ND
GG 59	31	FA49042-1cf			↓		2Aminos 40%
GG 60	32	-1		↓	10/400	4X pii	✓
GG 61	33	op67576-MB		op67576	1X		ND
GG 62	34	FA49036-3cf					ND
GG 63	35	-10cf		↓	↓		ND
GG 64	8	CC2571-1000		LC949	1:1	pii	PASS

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	5/3/18
COLUMN TYPE:	3005 RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 RPB3
PROC. METHOD:	8330 RPB1113
CALIB. DATE:	11/13/17
RUN BATCH: GGG	2624

ANALYST:	EH
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	171

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG b1453c	1	CCB	8330	—			ND
GG 37	2	CC2571-1000		LC1000	1:1	pii	pass
GG 38	3	op69838-PTI		op69838	1X		✓
GG 39	4	↓ -BS		↓	↓	↓	✓
GG 40	5	-MB					ND
GG 41	6	FAS3518-1					ND
GG 42	7	op69838-MS				pii	✓
GG 43	8	↓ -MSD				pii	✓
GG 44	9	Fa53518-4					
GG 45	10	↓ -7		↓	↓		ND
GG 46	11	↓ -10					ND
GG 47	12	CC2571-1000		LC1000	1:1	pii	pass
GG 48	1	CCB		—			ND
GG 49	9	Fa53518-2		op69838	1X		ND
GG 50	10	op69838-dup					ND
GG 51	11	↓ -dup2					ND
GG 52	12	Fa53518-3					ND
GG 53	14	-5					ND
GG 54	15	-6					ND
GG 55	17	↓ -8	↓	↓	↓		ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

SGS ACCUTEST-ORLANDO

DATE:	5/3/18
COLUMN TYPE:	Luna RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A1B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330 RPB1113
CALIB. DATE:	11/13/17
RUN BATCH: GGG	2624

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	171

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 614556	18	FA53518-9	8330	OP69838	1		ND
GG 57	19	-10					ND
GG 58	20	-11					ND
GG 59	2	CC2571-1000		LC1020	1:1	pii	pass
GG 60	1	CCR		—			ND
GG 61	21	FA53518-12		OP69838	1		ND
GG 62	22	OP69838-GB1					ND
GG 63	23	-GB2					ND
GG 64	24	-GB3					ND
GG 65	25	test pH 5.05g					test
GG 66	26	OP69897-bs		OP69897		pii	
GG 67	27	-mb					
GG 68	28	FA53801-22					
GG 69	29	FA53816-13					
GG 70	30	-N					
GG 71	2	CC2571-1000		LC1020	1:1	pii	pass
GG							
GG							
GG						NA CCV	5/3/18
GG							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

SGS ACCUTEST-ORLANDO

DATE:	5/10/18
COLUMN TYPE:	12Uk J R P
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 2DH111314
CALIB. DATE:	11/13/17
RUN BATCH:	GGG 26267 EM 5/10/18

ANALYST:	EM
ACETONITRILE LOT #:	3546
MEOH LOT #:	
HEAD PRESSURE:	169

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 14667	2	test	8330				✓
GG 68	1	CCB	|				ND
GG 69	2	CC 2571-100	|	LCK-X	1.1	pii	1st signal 3.5 clip 2nd signal 2,4 dinitro, 2,4 dinitro, 3,5 dinitro, 2-amino & 4-amino, PETN
GG 70	3	0506947-MB	|	0506947	1X		ND
GG 71	4	F9J3815-1cf	|	↓	↓		ND CCV
GG 72	5	↓ -2	|	↓	↓		↓
GG 73	6	↓ -3	|	↓	↓		↓
GG 74	7	Fa53931-2	|	↓	↓		↓
GG 75	8	-2	|	↓	4X400	10X	↓
GG 76	9	0506959-MB	|	0506959	1X		ND
GG 77	10	LA43655-2cf	|	↓	↓	pii * EM 5/10/18	~~ND noted~~ ✓
GG 78	11	↓ -3	|	↓	↓	pii	✓
GG 79	12	↓ -4	|	↓	↓		wrong vial RR
GG 80	2	CC 2571-100	|	LC 1020	1.1	pii	1st signal 3-sclip 2nd signal ~~2,4~~ 1,3-sclip, 4-amino, PETN
GG 81	1	CCB	|				ND
GG 82	13	LA43687-1cf	|	0506954	1X		✓
GG 83	14	↓ -2cf	|	↓	↓		✓
GG 84	2	CC 2571-100	|	LC 1020	1.1	pii	1st signal 3-sclip 2nd signal 2-amino, PETN
GG 85	1	CCB	✓				ND
GG 86	15	0506951-DS		0506951	1X	pii	✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature: EM

SGS ACCUTEST-ORLANDO

DATE:	5/10/18
COLUMN TYPE:	Bthes RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 RPD-H 111318.M
CALIB. DATE:	11/13/17
RUN BATCH: GGG	2627

ANALYST:	EU
ACETONITRILE LOT #:	3520
MEOH LOT #:	-
HEAD PRESSURE:	169

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 614659	16	op 664989-PT1	8330	op664989	K	PII	✓
GG 89	17	↓ -MB					ND
GG 89	18	FA53801-15					ND
GG 90	19	↓ -16					ND
GG 91	20	op664989-MS				PII	✓
GG 92	21	↓ -MSD				PII	✓
GG 93	22	FA53801-17					ND
GG 94	23	↓ -18					ND
GG 95	24	↓ -19					ND
GG 96	2	qr 2571-1000		LCQ20	1.1	PII	for signal 3-SCL int 2nd signal 2nd, 3SCL, 2 Amnot
GG 97	1	CCB					ND
GG 98	25	op664989-dup		op664989	K		ND
GG 99	26	↓ -dup					ND
GG 100	27	FA53801-26					ND
GG 01	28	-21					ND
GG 02	29	-23					ND
GG 03	30	-24					ND
GG 04	31	↓ -25					ND
GG 05	32	op664989-pb1					ND
GG ↓ 06	2	CCZ571-1000	↓	LCQ20	1.1	PII	for signal 3-SCL int and signal 2nd, 3SCL int

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	5/10/18
COLUMN TYPE:	Blue BP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 + 6B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 P & M 11/13-M
CALIB. DATE:	11/13/17
RUN BATCH:	GGG 2627

ANALYST:	QM
ACETONITRILE LOT #:	320
MEOH LOT #:	—
HEAD PRESSURE:	169

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 64707	1	CCV	8330	—	—		ND
GG 08	33	OPCC987-CPV		OPCC183	1X		ND
GG 09	34	↓ CB3		↓	↓		ND
GG 10	2	CC2571-1005		LC1020	1:1	pii	Int Signal 3.15cA 2nd signal Rdx, 3.5cA
GG 11	3	CC2571-1000		LC1020	1:1		DAS
GG 12	4	F95355-1CT		OP64747	1X	pii	Rdx >40%
GG 13	5	↓ -2			↓		Rdx >40% 3.5dt >40%
GG 14	6	↓ -3					Rdx >40% 3.5dt >40%
GG 15	7	F95337-1					3.5dt >40% 4Amino
GG 16	8	↓ -2		↓	40/40/10X		✓
GG 17	12	IA 436JJ-4		OP66954	1X	QM 5/14/18	✓ND no need
GG 18	2	CCC2571-1002	↓	LC1020	1:1	↓	pass
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature: [signature]

SGS - ORLANDO

SPE LIQUID SAMPLE PREP REPORT

Date/Time: Started 05/03/18 0800 {mm/dd/yy 24:00}

Date/Time: Finished 05/03/18 1300 {mm/dd/yy 24:00}

Prep Method: (3535A) or 537 or 537MOD (circle)

Analytical Method: 8330B

Batch#: OP69897 Ext. By: MB Conc. By: ✓ Vialed By: MB

Sample ID	Bottle Number	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Manifold ID	Comments
OP 69897 MB	X	1000	6	N/A	250ul		10ml	N/A	
OP 69897 BS	X	1000	↓	↓	↓	25+25ul 250	↓	↓	
FA53801-22	3	1060							
FA53896-13	2	1060							
-14	3	1050							
					MB 05/03/18				
MS									
MSD									
DUP									

Comments:

Surr.1 ID: E6244B Conc: 20ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6249 Conc: 20ppm Exp. Date: 10/19/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8937C Conc: 1000ug/ml Exp. Date: 04/29/19 Inj. By: MB Ver. By MB

Spk.3 ID: 8992C Conc: 1000ug/ml Exp. Date: 04/29/19 Inj. By: MB Ver. By MB

TurboVap Temp (Therm ID): ✓ N-Evap Temp (Therm ID): ✓

Observed Temp °C: ✓ Corr. Temp °C: ✓ Observed Temp °C: ✓ Corr. Temp °C: ✓

Methanol Lot # ✓	SPE Lot # 5214-0071	pH Paper # 230017
Acetonitrile Lot # 176139	Syringe filter Lot # ✓	Reagent # ✓
Water Lot# DI H2O	Pre-filter Lot# ✓	Reagent # ✓
Solvent# ✓	Carbon Lot# ✓	Other ✓

Relinquished By: 1330 Date: 05/03/18

Accepted By: Date: 5/3/18

ORLD-EXT-0001-3-08-FORM-extwater_spe.xls 032718

7.9.1

7

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, (8330B), 537MOD (PFC) or Other_____ (circle)

Date/Time: 05/08/18 1830 Started {mm/dd/yy 24:00}

Therm. ID: ✓ Corr. Factor (±°C): ✓

Bath Temp. (High) °C: ✓ / ✓ {obs/corr}

Date/Time: 05/09/18 1230 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332): ✓

Shaker Table ID (8330B): ST

Batch#: OP69973 Ext. By: MB Vialed By:_____ Balance ID: METTLER1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69973 MB	X	10.00	1.25ml		50ml	
OP 69973 BS	X	10.00		1.25+1.25ml		
FAS3801-1	1	10.12				
-2	1	10.14				
-3	1	10.12				
-4	1	10.10				
-5	1	10.14				
-6	1	10.03				
-7	1	10.05				
-8	1	10.07				
-9	1	10.02				
-10	1	10.10				
-11	1	10.10				
-12	1	10.15				
-13	1	10.07				
-14	1	10.03				
Grinding Blank	A	10.01				
	B	10.00				
↓	C	10.00	↓		↓	
					MB 05/09/18	
MB 05/08/18 OP 69973 PT-1	X	10.00	1.25ml		50ml	
FAS3801-1 MS	1	10.10		1.25+1.25ml		
-1 MSD	1	10.12		↓		
FAS3801-4 DUP	1	10.15	↓		↓	
-4 TRP	1	10.13				

Comments:

Surr. ID: EL244H Conc: 20 ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: EL249 Conc: 20 ppm Exp. Date: 10/19/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8937F 8492D Conc: 1000 ug/ml 1000 ug/ml Exp. Date: 05/04/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 176139 Methanol Lot #: ✓ Water Lot# 180700 HPLC

Syringe Filter Lot# 121122030 Reagent # CS1 Reagent #: ✓

Relinquished By: _____ Date: 05/09/18

Accepted By: _____ Date: 5/9/18

NF 05/16 extsolid_exp 051616.xls

7.9.2 7

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, (8330B), 537MOD (PFC) or Other_____ (circle)

Date/Time: 05/09/18 1400 Started {mm/dd/yy 24:00}

Therm. ID: ___ Corr. Factor (±°C): ___

Bath Temp. (High) °C: ___ {obs/corr}

Date/Time: 05/10/18 1000 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332): ___

Shaker Table ID (8330B): ST1

Batch#: OP69989 Ext. By: MB Vialed By: MB Balance ID: METTLER 1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 69989 MB	X	10.00	1.25ml		50ml	
OP 69984 BS	X	10.00		1.25+1.25ml 1.25ml		
FA53801-15	1	10.10				
-16	1	10.11				
-17	1	10.02				
-18	1	10.07				
-19	1	10.10				
-20	1	10.17				
-21	1	10.15				
-23	1	10.11				
-24	1	10.10				
-25	1	10.00				
GRINDING BLANK	A	10.00				
	B	10.00				
	C	10.00				
OP69989 PT-1	X	5.00	1.25ml		50ml	
FA53801-16 MS	1	10.08		1.25+1.25ml 1.25ml		
-16 MSD	1	10.09				
FA53801-19 DUP	1	10.00				
-19 TRP	1	10.08				

MB 05/10/18

Comments:

Surr. ID: E6244S Conc: 20ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6264 Conc: 20ppm Exp. Date: 11/09/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8937E 8932E Conc: 1000ug/ml 1000ug/ml Exp. Date: 05/08/19 05/08/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 176139 Methanol Lot # ___ Water Lot# 180700 HPLC

Syringe Filter Lot# 160802028 Reagent # CS1 Reagent # ___

Relinquished By: [signature] 1630 Date: 05/10/18

Accepted By: [signature] Date: 5/10/18

NF 05/16 extsolid_exp 051616.xls

Prep Log OP69989 page 1 of 1

SGS ACCUTEST - ORLANDO — 8330B Air Drying Log

BALANCE ID: NeTCen 1

Sample ID	Date/Time Started 05/07/18 0800 First Weighing (grams)*	Date/Time Started 05/09/18 1000 Second Weighing (grams)*	Date/Time Started Third Weighing (grams)* If Needed
FA53801-1	10.10	10.10	
-2	10.13	10.13	
-3	10.01	10.01	
-4	10.11	10.11	
-5	10.09	10.09	
-6	10.11	10.11	
-7	10.08	10.09	
-8	10.10	10.10	
-9	10.11	10.11	
-10	10.04	10.04	
-11	10.00	10.00	
-12	10.00	10.00	
-13	10.10	10.10	
-14	10.12	10.12	
-15	10.02	10.02	
-16	10.05	10.05	
-17	10.10	10.10	
-18	10.11	10.11	
-19	10.13	10.13	
-20	10.01	10.01	
-21	10.03	10.03	
-25	10.07	10.07	
-23	10.12	10.12	
-24	10.13	10.13	

* Includes weight of the aluminum dish.

Allow at least two hours between First and Second Weighing and between Second and Third Weighing

Sample is considered dry if the difference between consecutive weighings is less that 0.1 gram

Analyst's Signature:

NF 02/16 — 8330b drying log 020116.xls

7 of 50

7.9.3

7

SGS ACCUTEST - ORLANDO

8330B Weight Log

BALANCE ID: METTLER 1

DATE: 05/11/18

Sample ID	Total Weight (grams)	Weight Remaining in #10 Sieve (grams) MB 05/11/18	Sieve ID	Comments Weight Remaining in Sieve #60	Description Weight After Sieve #60
FA53800-4A	690.36	~~10/60E~~ 61.68	10/60E	517.92	103.29
-7A	715.48	~~10/60F~~ 78.67	10/60F	~~536~~ 542.04	88.01
-8A	685.33	75.15	10/60A	497.39	100.30
-16A	660.03	66.09	10/60B	464.21	112.69
-17A	~~652.15~~ 696.41 MK 05-11-18	60.45	10/60C	494.53	129.97
FA53801-16A	726.35	66.67	10/60D	~~543.39~~ 469.21	102.77
-19A	597.10	91.17	10/60E	394.69	100.05
-7A	652.15	46.01	10/60F	474.60	118.68
-10A	765.77	15.14	10/60G	616.46	122.82
-13A	855.26	76.08	10/60A	647.39	113.51
-23A	657.90	36.77	10/60B	501.66	103.34

Analyst's Signature: CP/MK

7.9.3

7

SGS ACCUTEST - ORLANDO

8330B Weight Log

BALANCE ID: METTLER 1

DATE: 05/14/18

Sample ID	Total Weight (grams)	Weight Remaining in #10 Sieve (grams)	Sieve ID	Comments Weight remaining on sieve #60	Description Weight after sieve #60 (g)	
FA 53725-31A	739.80	91.35	10/60 F	499.24	143.86	
-32A	843.10	89.99	10/60 G	593.32	155.06	
-33A	731.31	200.33	10/60 E	381.04	143.47	
FA 53896-1A	686.66	145.90	10/60 G	427.97	94.11	05/15/18
-4A	684.86	142.02	10/60 A	416.77	120.02	
FA53800-5A	971.18	74.55	10/60 G	643.27	246.85	
-6A	997.02	234.56	10/60 F	453.69	303.11	
-9A	869.53	85.20	10/60 B	508.65	269.35	
-10A	802.45	71.97	10/60 E	501.14	223.55	
-11A	795.01	313.38	10/60 B	282.41	194.70	
-12A	763.55	363.47	10/60 F	239.15	157.86	
-18A	1043.21	236.56	10/60 C	605.23	195.43	
FA 53725-59A	579.47	27.68	10/60 G	399.33	146.45	05/16/18
FA53800-19A	1015.98	257.51	10/60 A	611.54	141.59	
-20A	1018.91	71.08	10/60 E	799.43	143.24	
-21A	1026.32	55.13	10/60 D	824.01	141.75	
FA53801-9A	726.56	7.43	10/60 F	553.41	159.52	
-11A	871.61	51.19	10/60 C	665.36	147.08	
-12A	776.22	121.51	10/60 E	497.57	150.39	
-14A	947.95	163.26	10/60 G	633.37	142.51	
-15A	954.29	472.02	10/60 D	332.70	144.59	
-17A	979.92	105.57	10/60 B	721.83	148.50	05/17/1
-18A	1046.28	165.66	10/60 A	729.78	144.86	05/16/18
-8A ~~-20A~~	693.29	2.84	10/60 B	541.10	145.47	

MK 05-16-18

Analyst's Signature: MK

7.9.3

7

SGS ACCUTEST - ORLANDO

8330B Weight Log

BALANCE ID: METTLER 1

DATE: 05/16/18

Sample ID	Total Weight (grams) MK 05-17-18	Weight Remaining in #10 Sieve (grams)	Sieve ID	Comments Weight remaining on sieve #60	Description Weight after sieve #60
FA53801-20A	770.94	120.09	10/60C	495.02	150.09
-21A	927.67	302.98	10/60D	471.34	148.74
-24A	691.20	3.58	10/60E	559.36	121.97
-25A	661.22	8.48	10/60G	496.10	151.81
~~FA53896-1A~~					
FA53896-2A	912.23	168.85	10/60D	607.88	131.12
-3A	993.19	430.90	10/60A	436.98	112.62
~~-4A~~					
-5A	933.38	155.46	10/60C	622.63	146.68
-6A	1020.51	273.64	10/60F	585.19	151.31

MK 05-16-18

05/17/18

Analyst's Signature: MK

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14875
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:14	MA14875-STD1	1		STDA
10:18	MA14875-STD2	1		STDB
10:22	MA14875-STD3	1		STDC
10:25	MA14875-STD4	1		STDD
10:29	MA14875-STD5	1		STDE
10:33	MA14875-STD6	1		STDF
10:37	MA14875-STD7	1		STDG
10:44	MA14875-HSTD1	1		
10:48	MA14875-ICV1	1		
10:51	MA14875-ICB1	1		
10:55	MA14875-CRIA1	1		
10:59	MA14875-ICSA1	1		
11:02	MA14875-ICSAB1	1		
11:10	MA14875-CCV1	1		
11:13	MA14875-CCB1	1		
11:17	MP33699-MB1	2		
11:21	MP33699-B1	2		
11:24	FA53625-18F	2		(sample used for QC only; not part of login FA53801)
11:28	MP33699-D1	2		
11:31	MP33699-SD1	10		
11:35	MP33699-S1	2		
11:39	MP33699-S2	2		
11:42	MP33699-PS1	2		
11:46	ZZZZZZ	2		
11:50	ZZZZZZ	2		
11:57	MA14875-CCV2	1		
12:01	MA14875-CCB2	1		
12:04	ZZZZZZ	2		
12:08	ZZZZZZ	2		
12:11	ZZZZZZ	2		
12:15	ZZZZZZ	2		
12:19	ZZZZZZ	2		
12:22	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14875
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:26	ZZZZZZ	2		
12:30	FA53627-1	2		(sample used for QC only; not part of login FA53801)
12:33	MP33699-D2	2		
12:37	MP33699-SD2	10		
12:44	MA14875-CCV3	1		
12:48	MA14875-CCB3	1		
12:51	MP33699-S3	2		
12:55	MP33699-S4	2		
12:59	MP33699-PS2	2		
13:02	ZZZZZZ	2		
13:06	ZZZZZZ	2		
13:09	FA53801-22	2		
---------->	Last reportable sample/prep for job FA53801			
13:13	ZZZZZZ	2		
13:17	ZZZZZZ	2		
13:20	MA14875-CRIA2	1		
13:24	MA14875-ICSA2	1		
13:31	MA14875-CCV4	1		
13:35	MA14875-CCB4	1		
13:39	MA14875-ICSAB2	1		
13:46	MA14875-CCV5	1		
13:49	MA14875-CCB5	1		
---------->	Last reportable CCB for job FA53801			
	Refer to raw data for calibration curve and standards.			

INTERNAL STANDARD SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14875
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:14	MA14875-STD1	100	100	100	100	100	100	100	100
10:18	MA14875-STD2	97	99.5	99.5	99	99.5	99.8	100.2	100.3
10:22	MA14875-STD3	95.1	98.2	97.9	98	98.2	98.3	98.9	99.1
10:25	MA14875-STD4	93.1	95.1	95	96.1	94.7	97.2	97.4	95
10:29	MA14875-STD5	87.8	93.2	93.5	93.2	92.6	96.7	94.2	90.7
10:33	MA14875-STD6	84.1	92	91.2	91.2	91.5	96	91.7	87.3
10:37	MA14875-STD7	81	92.5	90.6	90.4	90.7	94.8	88.2	81.4
10:44	MA14875-HSTD1	85.6	92.3	89.8	89.9	89.9	94.4	88.4	81.5
10:48	MA14875-ICV1	84.4	91.5	90.4	90.8	90.7	96.1	91.8	85
10:51	MA14875-ICB1	87.7	90.9	93.3	93.5	93.9	97.4	97.9	95.3
10:55	MA14875-CRIA1	89	93.9	94.3	94.5	95.6	98.8	99.3	96.2
10:59	MA14875-ICSA1	73	92.9	86	83.7	84.1	88.3	75.8	73.4
11:02	MA14875-ICSAB1	67.1 !	90.8	85.2	83.6	83.8	88.7	76.1	71.3
11:10	MA14875-CCV1	75.8	88.6	88.8	89.2	89.4	95.7	91.8	84.8
11:13	MA14875-CCB1	84.9	88.1	91	91.5	92.4	97.3	98	93.2
11:17	MP33699-MB1	78.7	81.4	81.4	81.9	85.6	94	94	67.4 !
11:21	MP33699-B1	75.8	82.2	79	79.2	83.2	92.6	87.2	64.5 !
11:24	FA53625-18F	77	82.4	81.5	82.3	84.4	93.7	90.2	65.4 !
11:28	MP33699-D1	84.9	83.5	82.3	83	85.5	94.6	90.6	66.1 !
11:31	MP33699-SD1	87	89.5	91.2	91.3	92	97.2	97.9	84.1
11:35	MP33699-S1	80.4	82	79.4	79.9	81.5	92.1	85	61.1 !
11:39	MP33699-S2	74.4	83	79.5	79.7	82.4	92.7	85.5	61.5 !
11:42	MP33699-PS1	No results reported for the elements associated with this internal standard.							
11:46	ZZZZZZ	84.7	83.7	82.7	82.8	85	94.6	90.4	65.3 !
11:50	ZZZZZZ	101.5	89.9	77.6	77	79.9	86.1	71.3	56.1 !
11:57	MA14875-CCV2	87.7	92.1	90.6	91.5	90.3	97.3	92.8	85.9
12:01	MA14875-CCB2	92.1	91	92.4	93.2	92.9	98.4	99.1	93.9
12:04	ZZZZZZ	83.8	83.1	81.4	82.3	84.5	94.1	89.9	64.4 !
12:08	ZZZZZZ	84.6	83.5	82	82.3	84.7	94.8	89.8	65.3 !
12:11	ZZZZZZ	86.3	84.4	82.4	82.6	84.7	95	89.3	63.2 !
12:15	ZZZZZZ	83.5	85.1	82.5	82.8	84.9	95.4	89.3	65 !
12:19	ZZZZZZ	82.2	82.7	80.8	80.9	83.4	93.9	88.4	63.4 !
12:22	ZZZZZZ	84.4	82.6	81.3	81.5	83.3	94.6	90	64 !

INTERNAL STANDARD SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14875
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
12:26	ZZZZZZ	86.5	83.7	83.2	83.7	86	95.8	94.6	65.1 !
12:30	FA53627-1	82.3	82.6	81.7	81.4	84.1	94.6	91	63.7 !
12:33	MP33699-D2	81.9	81.8	80.5	80.9	82.9	93.9	91.1	63.3 !
12:37	MP33699-SD2	91.4	88.2	89.4	89.9	90.1	97.2	97.6	83.1
12:44	MA14875-CCV3	83.7	90.7	88.6	89.1	88	96.5	92.2	83
12:48	MA14875-CCB3	87.5	89.5	90.1	90.3	90.9	97.5	98.1	90.7
12:51	MP33699-S3	77.2	79.3	77.6	77.9	79.3	91.3	84.8	60.9 !
12:55	MP33699-S4	76.5	81.3	78.9	78.9	80.5	92.6	86.4	62.3 !
12:59	MP33699-PS2	No results reported for the elements associated with this internal standard.							
13:02	ZZZZZZ	86.4	84	83.1	83.3	85	95.9	92.2	64.9 !
13:06	ZZZZZZ	85.2	86	84.8	85.4	87.4	96.4	95.7	67.2 !
13:09	FA53801-22	83.7	83.5	81.9	82.1	83.4	94	90	64.6 !
13:13	ZZZZZZ	81.7	83.6	81.9	81.9	83.7	94.8	90.7	64.6 !
13:17	ZZZZZZ	85.9	82.3	81.6	81	82.6	94	90.1	64.6 !
13:20	MA14875-CRIA2	93	92.7	92.9	93.1	93.3	99.7	101	92.2
13:24	MA14875-ICSA2	70.1	87.9	80.8	79.5	79.7	86.4	75.2	68.5 !
13:31	MA14875-CCV4	80.8	87.8	87.7	87	86.3	95.4	91.8	83.2
13:35	MA14875-CCB4	87	87.2	88.8	89.3	89	96.7	98.3	89.4
13:39	MA14875-ICSAB2	66 !	89.8	82.1	80.8	80.4	87.8	75.5	68.9 !
13:46	MA14875-CCV5	78.3	87.1	86.2	86.7	86.2	94.7	91.4	80
13:49	MA14875-CCB5	76.3	78.6	80.7	81.1	80.6	87.1	88.9	81.5

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium	70-130 %	70-130 %
Istd#3	Germanium (72-2)	70-130 %	70-130 %
Istd#4	Germanium (74-2)	70-130 %	70-130 %
Istd#5	Indium	70-130 %	70-130 %
Istd#6	Terbium	70-130 %	70-130 %
Istd#7	Bismuth	70-130 %	70-130 %
Istd#8	Tellurium	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14875 Units: ug/l

Time: / Sample ID:			10:51 ICB1		11:13 CCB1		12:01 CCB2		12:48 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	100	4.4								
Antimony	1.0	.1								
Arsenic	1.0	.1								
Barium	1.0	.1								
Beryllium	1.0	.1								
Cadmium	1.0	.1	anr							
Calcium	100	7.2								
Chromium	1.0	.1								
Cobalt	1.0	.1								
Copper	1.0	.1								
Iron	100	7.9	anr							
Lead	1.0	.1	0.00716	<1.0	0.00398	<1.0	0.00626	<1.0	0.0132	<1.0
Magnesium	100	5.2								
Manganese	1.0	.1								
Molybdenum	1.0	.1								
Nickel	1.0	.1								
Potassium	100	6.6								
Selenium	1.0	.11								
Silver	1.0	.1								
Sodium	100	4.8								
Strontium	1.0	.1								
Thallium	1.0	.1								
Tin	1.0	.1								
Titanium	1.0	.3								
Vanadium	1.0	.1								
Zinc	2.0	.29								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14875 Units: ug/l

Time: / Sample ID:			13:35 CCB4		13:49 CCB5	
Metal	RL	IDL	raw	final	raw	final
Aluminum	100	4.4				
Antimony	1.0	.1				
Arsenic	1.0	.1				
Barium	1.0	.1				
Beryllium	1.0	.1				
Cadmium	1.0	.1	anr			
Calcium	100	7.2				
Chromium	1.0	.1				
Cobalt	1.0	.1				
Copper	1.0	.1				
Iron	100	7.9	anr			
Lead	1.0	.1	0.0120	<1.0	0.0129	<1.0
Magnesium	100	5.2				
Manganese	1.0	.1				
Molybdenum	1.0	.1				
Nickel	1.0	.1				
Potassium	100	6.6				
Selenium	1.0	.11				
Silver	1.0	.1				
Sodium	100	4.8				
Strontium	1.0	.1				
Thallium	1.0	.1				
Tin	1.0	.1				
Titanium	1.0	.3				
Vanadium	1.0	.1				
Zinc	2.0	.29				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14875 Units: ug/l

Time:		10:48			11:10			11:57	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium									
Cobalt									
Copper									
Iron	anr								
Lead	100	99.5	99.5	100	98.7	98.7	100	99.0	99.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14875 Units: ug/l

Time: / Sample ID: / Metal	CCV True	12:44 CCV3 Results	% Rec	CCV True	13:31 CCV4 Results	% Rec	CCV True	13:46 CCV5 Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium									
Cobalt									
Copper									
Iron	anr								
Lead	100	98.5	98.5	100	98.2	98.2	100	97.6	97.6
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14875 Units: ug/l

Time:		10:44	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium	anr		
Calcium			
Chromium			
Cobalt			
Copper			
Iron	anr		
Lead	200	199	99.5
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium			
Silver			
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: CRI 70-130% CRIA 80-120% Run ID: MA14875 Units: ug/l

Time:			10:55		13:20	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100	100				
Antimony	1.0	1.0				
Arsenic	1.0	1.0				
Barium	1.0	1.0				
Beryllium	1.0	1.0				
Cadmium	1.0	1.0	anr			
Calcium	100	100				
Chromium	1.0	1.0				
Cobalt	1.0	1.0				
Copper	1.0	1.0				
Iron	100	100	anr			
Lead	1.0	1.0	0.994	99.4	0.956	95.6
Magnesium	100	100				
Manganese	1.0	1.0				
Molybdenum	1.0	1.0				
Nickel	1.0	1.0				
Potassium	100	100				
Selenium	1.0	1.0				
Silver	1.0	1.0				
Sodium	100	100				
Strontium	1.0	1.0				
Thallium	1.0	1.0				
Tin	1.0	1.0				
Titanium	1.0	1.0				
Vanadium	1.0	1.0				
Zinc	1.0	1.0				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA14875 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:59 ICSA1 Results	% Rec	11:02 ICSAB1 Results	% Rec	13:24 ICSA2 Results	% Rec	13:39 ICSAB2 Results	% Rec
Aluminum	100000	100000	97600	97.6	98100	98.1	97900	97.9	97000	97.0
Antimony			0.0586		0.0512		0.0474		0.0494	
Arsenic		20	0.0844		19.5	97.5	0.0893		19.6	98.0
Barium			0.0901		0.0803		0.0885		0.0874	
Beryllium			0.0174		0.00772		0.0145		0.0155	
Cadmium		20	0.388		18.4	92.0	0.386		18.5	92.5
Calcium	100000	100000	94900	94.9	95000	95.0	94700	94.7	94100	94.1
Chromium		20	1.30		21.3	106.5	1.31		21.5	107.5
Cobalt		20	0.0147		19.3	96.5	0.0137		19.3	96.5
Copper		20	0.0622		18.4	92.0	0.0180		18.3	91.5
Iron	100000	100000	101000	101.0	102000	102.0	105000	105.0	104000	104.0
Lead			0.117		0.131		0.112		0.127	
Magnesium	100000	100000	98900	98.9	99600	99.6	100000	100.0	99000	99.0
Manganese		20	0.196		20.2	101.0	0.225		20.4	102.0
Molybdenum	2000	2000	2060	103.0	2060	103.0	2150	107.5	2120	106.0
Nickel		20	0.0713		18.7	93.5	0.0504		18.6	93.0
Potassium	100000	100000	103000	103.0	104000	104.0	105000	105.0	104000	104.0
Selenium			0.0886		0.0456		0.0744		0.0510	
Silver		20	0.0373		17.2	86.0	0.0252		17.1	85.5
Sodium	100000	100000	99400	99.4	100000	100.0	101000	101.0	99700	99.7
Strontium			0.985		1.00		1.00		1.00	
Thallium			0.0110		0.00789		0.00509		0.00889	
Tin			0.105		0.0806		0.0798		0.0901	
Titanium	2000	2000	2020	101.0	2030	101.5	2040	102.0	2010	100.5
Vanadium			0.00276		0.00469		0.00426		0.00277	
Zinc		20	1.10		19.6	98.0	1.32		19.5	97.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:59	MA14907-STD1	1		STDA
09:03	MA14907-STD2	1		STDB
09:07	MA14907-STD3	1		STDC
09:11	MA14907-STD4	1		STDD
09:18	MA14907-HSTD1	1		
09:24	MA14907-ICV1	1		
09:31	MA14907-ICB1	1		
09:35	MA14907-CRIA1	1		
09:39	MA14907-CRIA2	1		
09:46	MA14907-ICSA1	1		
09:55	MA14907-ICSAB1	1		
10:03	MA14907-CCV1	1		
10:15	MA14907-CCB1	1		
10:20	MP33747-MB1	1		
10:24	MP33747-B1	1		
10:28	FA54170-4	5		(sample used for QC only; not part of login FA53801)
10:40	MP33747-D1	5		
10:45	MP33747-PS1	5		
10:55	MP33747-SD1	25		
11:00	MP33747-S1	5		
11:04	MP33747-S2	5		
11:08	ZZZZZZ	1		
11:13	MA14907-CCV2	1		
11:17	MA14907-CCB2	1		
11:21	ZZZZZZ	1		
11:25	MP33746-MB1	5		
11:29	MP33746-B1	5		
11:33	FA53725-34	5		(sample used for QC only; not part of login FA53801)
11:38	MP33746-D1	5		
11:42	MP33746-D2	5		
11:46	MP33746-SD1	25		
11:50	MP33746-PS1	5		
11:54	MP33746-S1	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:59	MP33746-S2	5		
12:03	MA14907-CCV3	1		
12:07	MA14907-CCB3	1		
12:11	ZZZZZZ	5		
12:15	FA53801-7A	5		
12:19	FA53801-10A	5		
12:23	FA53801-13A	5		
12:27	FA53801-16A	5		
12:32	FA53801-19A	5		
12:36	FA53801-23A	5		
---------->	Last reportable sample/prep for job FA53801			
12:40	ZZZZZZ	5		
12:47	ZZZZZZ	5		
12:51	ZZZZZZ	5		
12:55	MA14907-CCV4	1		
12:59	MA14907-CCB4	1		
13:24	MA14907-CCV5	1		
13:36	MA14907-CCB5	1		
13:39	MP33758-MB1	1		
13:44	MP33758-B1	1		
13:48	FA54232-1	5		(sample used for QC only; not part of login FA53801)
13:52	MP33758-D1	5		
13:56	MP33758-SD1	25		
14:00	MP33758-PS1	5		
14:04	MP33758-S1	5		
14:08	MP33758-S2	5		
14:13	ZZZZZZ	5		
14:17	ZZZZZZ	5		
14:21	MA14907-CCV6	1		
14:25	MA14907-CCB6	1		
14:29	ZZZZZZ	5		
14:33	ZZZZZZ	1		
14:37	ZZZZZZ	5		
14:42	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:46	ZZZZZZ	5		
14:50	ZZZZZZ	5		
14:54	ZZZZZZ	5		
14:59	ZZZZZZ	5		
15:03	ZZZZZZ	5		
15:07	ZZZZZZ	5		
15:11	MA14907-CCV7	1		
15:15	MA14907-CCB7	1		
15:20	ZZZZZZ	5		
15:24	ZZZZZZ	5		
15:28	ZZZZZZ	5		
15:32	ZZZZZZ	5		
15:37	ZZZZZZ	5		
15:41	ZZZZZZ	5		
15:45	ZZZZZZ	5		
15:49	MP33756-MB1	1		
15:54	MP33756-B1	1		
15:58	FA54229-1	1		(sample used for QC only; not part of login FA53801)
16:02	MA14907-CCV8	1		
16:06	MA14907-CCB8	1		
16:10	MP33756-D1	1		
16:15	MP33756-SD1	5		
16:19	MP33756-PS1	1		
16:23	MP33756-S1	1		
16:27	MP33756-S2	1		
16:31	ZZZZZZ	1		
16:35	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:44	ZZZZZZ	1		
16:48	ZZZZZZ	1		
16:52	MA14907-CCV9	1		
16:56	MA14907-CCB9	1		
17:00	MP33757-MB1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:05	MP33757-B1	1		
17:09	FA54160-1	1		(sample used for QC only; not part of login FA53801)
17:13	MP33757-D1	1		
17:17	MP33757-SD1	5		
17:22	MP33757-S1	1		
17:26	MP33757-S2	1		
17:30	ZZZZZZ	1		
17:34	ZZZZZZ	1		
17:38	ZZZZZZ	1		
17:43	MA14907-CCV10	1		
17:47	MA14907-CCB10	1		
17:51	FA54150-1L	1		(sample used for QC only; not part of login FA53801)
17:55	ZZZZZZ	1		
17:59	ZZZZZZ	1		
18:04	ZZZZZZ	1		
18:08	ZZZZZZ	1		
18:12	FA54199-1	1		(sample used for QC only; not part of login FA53801)
18:17	ZZZZZZ	1		
18:21	ZZZZZZ	1		
18:25	MP33757-D2	1		
18:29	MP33757-D3	1		
18:34	MA14907-CCV11	1		
18:38	MA14907-CCB11	1		
18:42	MP33757-D4	1		
18:46	MP33757-MB2	1		
18:51	MP33757-B2	1		
18:55	MP33757-MB3	1		
18:59	MP33757-B3	1		
19:03	MP33757-MB4	1		
19:07	MP33757-B4	1		
19:11	MP33739-MB1	1		
19:16	MP33739-B1	1		
19:20	FA54204-1	1		(sample used for QC only; not part of login FA53801)

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:24	MA14907-CCV12	1		
19:28	MA14907-CCB12	1		
19:32	MP33739-D1	1		
19:37	MP33739-SD1	5		
19:41	MP33739-PS1	1		
19:45	MP33739-S1	1		
19:49	MP33739-S2	1		
20:16	MA14907-CCV13	1		
20:20	MA14907-CCB13	1		
20:42	ZZZZZZ	1		
20:46	MA14907-CRIA3	1		
20:50	MA14907-ICSA2	1		
20:55	MA14907-ICSAB2	1		
20:59	MA14907-CCV14	1		
21:02	MA14907-CCB14	1		

----------> Last reportable CCB for job FA53801
Refer to raw data for calibration curve and standards.

8.2
8

INTERNAL STANDARD SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:59	MA14907-STD1	3107	23245	1518	1225
09:03	MA14907-STD2	3098	22994	1523	1163
09:07	MA14907-STD3	2941	21915	1488	1054
09:11	MA14907-STD4	2824	21292	1460	980
09:18	MA14907-HSTD1	2827	21766	1493	986
09:24	MA14907-ICV1	2914	22218	1499	1054
09:31	MA14907-ICB1	3022 R	22965 R	1494 R	1197 R
09:35	MA14907-CRIA1	3010			
09:39	MA14907-CRIA2	3000	23035	1518	1168
09:46	MA14907-ICSA1	2704	20734	1496	942
09:55	MA14907-ICSAB1	2610	20380	1461	910
10:03	MA14907-CCV1	2855	22382	1525	1048
10:15	MA14907-CCB1	3069	24206	1589	1234
10:20	MP33747-MB1	2949	23555	1537	1197
10:24	MP33747-B1	2877	22729	1518	1095
10:28	FA54170-4	2775	21844	1531	932
10:40	MP33747-D1	2840	22467	1558	922
10:45	MP33747-PS1	2732	21679	1509	915
10:55	MP33747-SD1	2797	22085	1475	1054
11:00	MP33747-S1	2890	22787	1586	943
11:04	MP33747-S2	2797	22288	1551	934
11:08	ZZZZZZ	2513	20315	1428	899
11:13	MA14907-CCV2	2811	22303	1514	1036
11:17	MA14907-CCB2	2898	22939	1477	1170
11:21	ZZZZZZ	2959	23531	1555	1141
11:25	MP33746-MB1	2922	23458	1516	1181
11:29	MP33746-B1	2855	22869	1480	1133
11:33	FA53725-34	2951	23109	1542	1123
11:38	MP33746-D1	2956	23206	1529	1122
11:42	MP33746-D2	2952	23098	1517	1119
11:46	MP33746-SD1	2936	23215	1530	1168
11:50	MP33746-PS1	2941	23162	1524	1116
11:54	MP33746-S1	2922	23040	1535	1097

INTERNAL STANDARD SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:59	MP33746-S2	2924	22944	1525	1092
12:03	MA14907-CCV3	2772	22442	1489	1027
12:07	MA14907-CCB3	2873	22884	1478	1170
12:11	ZZZZZZ	2901	23133	1517	1137
12:15	FA53801-7A	2939	23644	1535	1115
12:19	FA53801-10A	3067	24372	1609	1115
12:23	FA53801-13A	2905	23211	1528	1115
12:27	FA53801-16A	2882	23283	1512	1112
12:32	FA53801-19A	2917	23547	1517	1119
12:36	FA53801-23A	2927	23518	1536	1113
12:40	ZZZZZZ	2964	23778	1549	1103
12:47	ZZZZZZ	2928	23531	1534	1115
12:51	ZZZZZZ	2326	17908	1354	806
12:55	MA14907-CCV4	2784	22753	1544	1038
12:59	MA14907-CCB4	2872	23384	1507	1173
13:24	MA14907-CCV5	2753	22577	1529	1031
13:36	MA14907-CCB5	2836	22968	1499	1164
13:39	MP33758-MB1	2854	23440	1519	1175
13:44	MP33758-B1	2767	22488	1485	1070
13:48	FA54232-1	3044	24555	1633	1184
13:52	MP33758-D1	2894	23199	1539	1118
13:56	MP33758-SD1	2865	23072	1505	1150
14:00	MP33758-PS1	2921	23488	1565	1124
14:04	MP33758-S1	2865	22973	1548	1087
14:08	MP33758-S2	2880	22986	1525	1094
14:13	ZZZZZZ	2893	23216	1543	1120
14:17	ZZZZZZ	2846	23138	1533	1118
14:21	MA14907-CCV6	2790	22821	1534	1045
14:25	MA14907-CCB6	2849	23035	1491	1170
14:29	ZZZZZZ	2848	23086	1520	1112
14:33	ZZZZZZ	2885	23221	1556	1023
14:37	ZZZZZZ	2668	21615	1509	952
14:42	ZZZZZZ	3054	24728	1621	1145

INTERNAL STANDARD SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:46	ZZZZZZ	3136	25197	1655	1153
14:50	ZZZZZZ	3095	24705	1618	1146
14:54	ZZZZZZ	3385	27096	1788	1128
14:59	ZZZZZZ	3615	28939 !	1903 !	1166
15:03	ZZZZZZ	3157	25317	1659	1173
15:07	ZZZZZZ	3222	25661	1675	1181
15:11	MA14907-CCV7	2830	22759	1518	1069
15:15	MA14907-CCB7	2913	23219	1491	1203
15:20	ZZZZZZ	3267	25541	1674	1169
15:24	ZZZZZZ	3510	27358	1800	1175
15:28	ZZZZZZ	3541	27468	1808	1175
15:32	ZZZZZZ	3183	24704	1608	1178
15:37	ZZZZZZ	3385	25826	1688	1177
15:41	ZZZZZZ	3534	27070	1776	1168
15:45	ZZZZZZ	3744	28477	1891 !	1177
15:49	MP33756-MB1	2969	22908	1474	1208
15:54	MP33756-B1	2891	22412	1480	1110
15:58	FA54229-1	2905	22637	1492	1156
16:02	MA14907-CCV8	2920	22536	1513	1078
16:06	MA14907-CCB8	3053	23390	1508	1233
16:10	MP33756-D1	2938	22586	1486	1158
16:15	MP33756-SD1	2997	23130	1517	1209
16:19	MP33756-PS1	2916	22723	1511	1137
16:23	MP33756-S1	2897	22337	1506	1089
16:27	MP33756-S2	2895	21982	1479	1082
16:31	ZZZZZZ	2916	22129	1481	1137
16:35	ZZZZZZ	2876	21968	1480	1115
16:39	ZZZZZZ	2908	22325	1510	1130
16:44	ZZZZZZ	2972	22961	1580	1154
16:48	ZZZZZZ	2986	23018	1580	1169
16:52	MA14907-CCV9	2991	22949	1620	1104
16:56	MA14907-CCB9	3112	24107	1633	1267
17:00	MP33757-MB1	3066	24015	1594	1250

INTERNAL STANDARD SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
17:05	MP33757-B1	2944	22763	1557	1126
17:09	FA54160-1	2927	22566	1587	1129
17:13	MP33757-D1	2937	22605	1577	1126
17:17	MP33757-SD1	3060	23252	1581	1201
17:22	MP33757-S1	2964	22551	1607	1092
17:26	MP33757-S2	2964	22572	1595	1089
17:30	ZZZZZZ	2922	22307	1566	1109
17:34	ZZZZZZ	2958	22767	1606	1131
17:38	ZZZZZZ	2970	22685	1601	1137
17:43	MA14907-CCV10	3017	22904	1611	1109
17:47	MA14907-CCB10	3140	23851	1614	1265
17:51	FA54150-1L	2915	22134	1556	1105
17:55	ZZZZZZ	2918	22058	1548	1102
17:59	ZZZZZZ	2918	22145	1578	1104
18:04	ZZZZZZ	3033	23491	1592	1212
18:08	ZZZZZZ	3002	23234	1606	1186
18:12	FA54199-1	2893	22402	1599	1109
18:17	ZZZZZZ	2886	22279	1569	1109
18:21	ZZZZZZ	2927	22199	1567	1107
18:25	MP33757-D2	2949	22436	1581	1127
18:29	MP33757-D3	2890	22226	1580	1108
18:34	MA14907-CCV11	3018	23025	1616	1109
18:38	MA14907-CCB11	3139	23560	1596	1261
18:42	MP33757-D4	2899	22177	1572	1100
18:46	MP33757-MB2	3122	23731	1597	1259
18:51	MP33757-B2	3011	22824	1562	1143
18:55	MP33757-MB3	3095	23800	1601	1255
18:59	MP33757-B3	2988	22961	1560	1140
19:03	MP33757-MB4	2948	22539	1576	1134
19:07	MP33757-B4	2933	22361	1583	1090
19:11	MP33739-MB1	3157	24429	1632	1279
19:16	MP33739-B1	3015	22997	1588	1145
19:20	FA54204-1	2065	16151	1462	704 !

INTERNAL STANDARD SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
19:24	MA14907-CCV12	3022	24031	1742	1128
19:28	MA14907-CCB12	3175	25012	1758	1306
19:32	MP33739-D1	2023	15955	1464	693 !
19:37	MP33739-SD1	2586	20108	1649	936
19:41	MP33739-PS1	2084	16319	1471	701 !
19:45	MP33739-S1	2127	16537	1502	699 !
19:49	MP33739-S2	2123	16421	1491	695 !
20:16	MA14907-CCV13	3036	23843	1715	1124
20:20	MA14907-CCB13	3126	24393	1668	1272
20:42	ZZZZZZ	2816	21874	1620	1074
20:46	MA14907-CRIA3	3068	23969	1661	1227
20:50	MA14907-ICSA2	2709	21178	1617	963
20:55	MA14907-ICSAB2	2699	21141	1595	947
20:59	MA14907-CCV14	2974	23471	1671	1106
21:02	MA14907-CCB14	3087	24405	1652	1270

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			09:31 ICB1		10:15 CCB1		11:17 CCB2		12:07 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	-0.400	<5.0	0.100	<5.0	-0.500	<5.0	0.00	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			12:59 CCB4		13:36 CCB5		14:25 CCB6		15:15 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.300	<5.0	-0.300	<5.0	0.300	<5.0	0.00	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			16:06 CCB8		16:56 CCB9		17:47 CCB10		18:38 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.400	<5.0	-0.800	<5.0	-0.300	<5.0	0.100	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			19:28 CCB12		20:20 CCB13		21:02 CCB14	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	14	anr					
Antimony	6.0	1	anr					
Arsenic	10	1.3	anr					
Barium	200	1	anr					
Beryllium	4.0	.2	anr					
Cadmium	5.0	.2	anr					
Calcium	1000	50						
Chromium	10	1	anr					
Cobalt	50	.2	anr					
Copper	25	1	anr					
Iron	300	17	anr					
Lead	5.0	1	-0.700	<5.0	-0.700	<5.0	-1.20	<5.0
Magnesium	5000	35						
Manganese	15	.5	anr					
Molybdenum	50	.3	anr					
Nickel	40	.4	anr					
Potassium	10000	200						
Selenium	10	2.4	anr					
Silver	10	.7	anr					
Sodium	10000	500						
Strontium	10	.5						
Thallium	10	1.1	anr					
Tin	50	.9						
Titanium	10	.5						
Vanadium	50	.5	anr					
Zinc	20	3	anr					

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	ICV True	09:24 ICV1 Results	% Rec	CCV True	10:03 CCV1 Results	% Rec	CCV True	11:13 CCV2 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1950	97.5	2000	1930	96.5	2000	1930	96.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

8.2.3

8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	12:03 CCV3 Results	% Rec	CCV True	12:55 CCV4 Results	% Rec	CCV True	13:24 CCV5 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1930	96.5	2000	1900	95.0	2000	1950	97.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	14:21 CCV6 Results	% Rec	CCV True	15:11 CCV7 Results	% Rec	CCV True	16:02 CCV8 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1940	97.0	2000	1930	96.5	2000	1970	98.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	16:52 CCV9 Results	% Rec	CCV True	17:43 CCV10 Results	% Rec	CCV True	18:34 CCV11 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1960	98.0	2000	1960	98.0	2000	1950	97.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

8.2.3

8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	19:24 CCV12 Results	% Rec	CCV True	20:16 CCV13 Results	% Rec	CCV True	20:59 CCV14 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1920	96.0	2000	1940	97.0	2000	1960	98.0
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14907 Units: ug/l

Time:		09:18	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	3950	98.8
Magnesium			
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

8.2.4

8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CRI True	CRIA True	09:35 CRIA1 Results	% Rec	09:39 CRIA2 Results	% Rec	20:46 CRIA3 Results	% Rec
Aluminum	400	200						
Antimony	10	5.0	anr					
Arsenic	20	10						
Barium	400	200						
Beryllium	10	5.0						
Cadmium	10	5.0						
Calcium	2000	1000						
Chromium	20	10						
Cobalt	100	50						
Copper	50	25						
Iron	600	300						
Lead	10	5.0			4.70	94.0	4.50	90.0
Magnesium	10000	5000						
Manganese	30	15						
Molybdenum	100	50						
Nickel	80	40						
Potassium	20000	10000						
Selenium	20	10						
Silver	20	10						
Sodium	20000	10000						
Strontium	20	10						
Thallium	20	10						
Tin	100	50						
Titanium	20	10						
Vanadium	100	50						
Zinc	40	20						

(*) Outside of QC limits
(anr) Analyte not requested

8.2.5

8

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	09:46 ICSA1 Results	% Rec	09:55 ICSAB1 Results	% Rec	20:50 ICSA2 Results	% Rec	20:55 ICSAB2 Results	% Rec
Aluminum	500000	500000	469000	93.8	476000	95.2	553000	110.6	556000	111.2
Antimony		1000	1.40		1050	105.0	4.90		1010	101.0
Arsenic		1000	-1.40		1120	112.0	1.50		1040	104.0
Barium		500	0.300		500	100.0	0.500		540	108.0
Beryllium		500	-0.200		481	96.2	-0.200		526	105.2
Cadmium		1000	0.00		930	93.0	-0.400		921	92.1
Calcium	500000	500000	431000	86.2	435000C	87.0	496000	99.2	499000	99.8
Chromium		500	-0.300		458	91.6	-0.400		515	103.0
Cobalt		500	0.00		478	95.6	-0.200		472	94.4
Copper		500	-0.800		527	105.4	-1.40		573	114.6
Iron	200000	200000	168000	84.0	175000	87.5	184000	92.0	188000	94.0
Lead		1000	0.200		937	93.7	-30.1*(a		918	91.8
Magnesium	500000	500000	478000	95.6	493000	98.6	505000	101.0	512000	102.4
Manganese		500	-0.100		480	96.0	-0.100		488	97.6
Molybdenum		1000	0.00		912	91.2	0.500		882	88.2
Nickel		1000	-0.400		985	98.5	0.700		899	89.9
Potassium			19.7		21.3		231		190	
Selenium		1000	0.00		1010	101.0	7.10		949	94.9
Silver		1000	-0.400		1010	101.0	-0.500		1030	103.0
Sodium			168		167		1490		1300	
Strontium		1000	0.100		963	96.3	-0.300		1080	108.0
Thallium		1000	0.00		933	93.3	-0.700		931	93.1
Tin		1000	0.500		974	97.4	0.700		848	84.8
Titanium		1000	0.300		935	93.5	0.600		988	98.8
Vanadium		500	-0.500		468	93.6	-0.200		468	93.6
Zinc		1000	-0.500		932	93.2	-1.80		894	89.4

(*) Outside of QC limits
(anr) Analyte not requested
(a) Possible instrument baseline drift.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/05/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	8.7	22		
Antimony	2.0	.2	.2		
Arsenic	2.0	.2	.21		
Barium	2.0	.2	.2		
Beryllium	2.0	.2	.2		
Cadmium	2.0	.2	.2		
Calcium	200	14	36		
Chromium	2.0	.2	.2		
Cobalt	2.0	.2	.2		
Copper	2.0	.2	.2		
Iron	200	16	23		
Lead	2.0	.2	.2	0.056	<2.0
Magnesium	200	10	19		
Manganese	2.0	.2	.2		
Molybdenum	2.0	.2	.39		
Nickel	2.0	.2	.2		
Potassium	200	13	75		
Selenium	2.0	.22	.22		
Silver	2.0	.2	.2		
Sodium	200	9.6	24		
Strontium	2.0	.2	.2		
Thallium	2.0	.2	.2		
Tin	2.0	.2	.2		
Titanium	2.0	.61	.88		
Vanadium	2.0	.2	.24		
Zinc	4.0	.58	1.7		

Associated samples MP33699: FA53801-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date:			05/05/18					05/05/18	
Metal	FA53625-18F Original	DUP	RPD	QC Limits	FA53625-18F Original	MS	Spikelot MPICPMS1 % Rec		QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium									
Cobalt									
Copper									
Iron	anr								
Lead	0.0	0.0	NC	0-20	0.0	215	200	107.5	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP33699: FA53801-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/05/18

Metal	FA53625-18F Original	MSD	Spikelot MPICPMS1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium	anr					
Calcium						
Chromium						
Cobalt						
Copper						
Iron	anr					
Lead	0.0	205	200	102.5	4.8	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP33699: FA53801-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/05/18

Metal	BSP Result	Spikelot MPICPMS1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium				
Cobalt				
Copper				
Iron	anr			
Lead	207	200	103.5	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33699: FA53801-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/05/18 05/05/18

Metal	FA53625-18F Original	SDL 2:10	%DIF	QC Limits	FA53627-1 Original	SDL 2:10	%DIF	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium	anr							
Calcium								
Chromium								
Cobalt								
Copper								
Iron	anr							
Lead	0.00	0.00	NC	0-10	0.228	0.00	100.0(a)	0-10
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33699: FA53801-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	3.5		
Antimony	2.0	.1	.13		
Arsenic	1.0	.13	.2		
Barium	20	.1	.1		
Beryllium	0.50	.02	.05		
Cadmium	0.40	.02	.05		
Calcium	500	5	5		
Chromium	1.0	.1	.1		
Cobalt	5.0	.02	.05		
Copper	2.5	.1	.1		
Iron	30	1.7	1.7		
Lead	2.0	.1	.1	-0.012	<2.0
Magnesium	500	3.5	3.6		
Manganese	1.5	.05	.05		
Molybdenum	5.0	.03	.05		
Nickel	4.0	.04	.05		
Potassium	1000	20	20		
Selenium	2.0	.24	.24		
Silver	1.0	.07	.082		
Sodium	1000	50	50		
Strontium	1.0	.05	.05		
Thallium	1.0	.11	.11		
Tin	5.0	.09	.09		
Titanium	1.0	.05	.05		
Vanadium	5.0	.05	.05		
Zinc	2.0	.3	.3		

Associated samples MP33746: FA53801-7A, FA53801-10A, FA53801-13A, FA53801-16A, FA53801-19A, FA53801-23A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/16/18				05/16/18	
Metal	FA53725-34 Original	DUP	RPD	QC Limits	FA53725-34 Original	DUP	RPD	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	6.4	6.2	3.2	0-20	6.4	6.1	4.8	0-20
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33746: FA53801-7A, FA53801-10A, FA53801-13A, FA53801-16A, FA53801-19A, FA53801-23A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	FA53725-34 Original MS		Spikelot MPFLICP2 % Rec		QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	6.4	16.1	9.94	97.5	80-120
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP33746: FA53801-7A, FA53801-10A, FA53801-13A, FA53801-16A, FA53801-19A, FA53801-23A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	FA53725-34 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	6.4	17.8	9.96	114.5	10.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP33746: FA53801-7A, FA53801-10A, FA53801-13A, FA53801-16A, FA53801-19A, FA53801-23A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	10	10	100.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33746: FA53801-7A, FA53801-10A, FA53801-13A, FA53801-16A, FA53801-19A, FA53801-23A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/16/18

Metal	FA53725-34 Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	320	298	6.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33746: FA53801-7A, FA53801-10A, FA53801-13A, FA53801-16A, FA53801-19A, FA53801-23A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53801
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 05/16/18

Metal	Sample ml	Final ml	FA53725-34 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	319.8	313.404	358.5	0.2	2.5	50	90.2	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33746: FA53801-7A, FA53801-10A, FA53801-13A, FA53801-16A, FA53801-19A, FA53801-23A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: AGICPMS1 **Effective Date:** 05/21/16

Analyte	IDL ug/l
Aluminum	4.35
Antimony	.1
Arsenic	.1
Arsenic	.1
Barium	.1
Beryllium	.1
Boron	.5
Cadmium	.1
Cadmium	.1
Calcium	7.2
Calcium	7.2
Chromium	.1
Chromium	.1
Cobalt	.1
Cobalt	.1
Copper	.1
Copper	.1
Iron	7.9
Iron	7.9
Lead	.1
Magnesium	5.2
Manganese	.1
Manganese	.1
Molybdenum	.1
Nickel	.1
Nickel	.1
Potassium	6.57
Selenium	.11
Selenium	.11
Silver	.1
Sodium	4.8
Strontium	.1
Thallium	.1
Tin	.1
Tin	.1
Titanium	.303
Vanadium	.1
Vanadium	.1
Zinc	.29
Zinc	.29

The above applies to the following instrument runs:
MA14875

Instrument Detection Limits

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14907

Instrument Linear Ranges

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: AGICPMS1 **Effective Date:** 05/21/16

Analyte	Linear Range ug/l
Aluminum	100000
Antimony	1000
Arsenic	1000
Arsenic	1000
Barium	1000
Beryllium	1000
Cadmium	1000
Cadmium	1000
Calcium	100000
Calcium	100000
Chromium	1000
Chromium	1000
Cobalt	1000
Cobalt	1000
Copper	1000
Copper	1000
Iron	100000
Iron	100000
Lead	1000
Magnesium	100000
Manganese	1000
Manganese	1000
Molybdenum	1000
Nickel	1000
Nickel	1000
Potassium	100000
Selenium	1000
Selenium	1000
Silver	100
Sodium	100000
Strontium	1000
Thallium	1000
Tin	1000
Tin	1000
Titanium	1000
Vanadium	1000
Vanadium	1000
Zinc	1000
Zinc	1000

The above applies to the following instrument runs:
MA14875

Instrument Linear Ranges

Job Number: FA53801
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14907

Metals Analysis

Raw Data

Quantitation Report

File Name	001CALB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:06
Sample Name	Blank
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	-0.003	ug/l	-44.14	1,211.37	3.456E-03	Pulse	0.50	3
As			1	-0.002	ug/l	-83.17	17.67	5.040E-05	Pulse	1.00	3
Mo			1	0.001	ug/l	72.48	28.67	5.335E-05	Pulse	0.50	3
Pb			1	0.007	ug/l	16.00	4,095.50	3.511E-04	Pulse	1.00	3
Be			1	-0.001	ug/l	0.00	0.00	0.000E+00	Pulse	2.00	3
Ag			1	0.000	ug/l	105.00	100.67	1.873E-04	Pulse	0.50	3
Ba			1	0.003	ug/l	40.76	40.67	1.136E-05	Pulse	0.50	3
Tl			1	0.001	ug/l	23.55	291.33	2.497E-05	Pulse	0.50	3
Sn			1	0.013	ug/l	37.18	1,161.16	3.242E-04	Pulse	0.30	3
Sr			1	0.001	ug/l	87.07	1,339.38	3.740E-04	Pulse	0.50	3
[Pb]			1	0.007	ug/l	34.38	1,943.45	1.666E-04	Pulse	0.50	3
Ca			1	0.363	ug/l	117.85	214.00	5.075E-04	Pulse	0.50	3
Ti			1	0.012	ug/l	86.11	6.00	1.423E-05	Pulse	0.50	3
Na			1	-0.028	ug/l	-97.30	10,640.50	2.523E-02	Pulse	1.00	3
Mg			1	-0.008	ug/l	-259.49	358.33	8.498E-04	Pulse	1.00	3
K			1	0.031	ug/l	1164.70	13,080.00	3.102E-02	Pulse	1.00	3
V			1	-0.004	ug/l	-49.93	626.01	1.484E-03	Pulse	0.50	3
Mn			1	0.003	ug/l	245.18	1,555.40	4.437E-03	Pulse	0.50	3
Fe			1	0.016	ug/l	153.02	43,757.76	1.248E-01	Pulse	0.50	3
Co			1	0.000	ug/l	-118.65	54.67	1.560E-04	Pulse	0.50	3
Ni			1	0.031	ug/l	63.47	1,700.08	4.853E-03	Pulse	0.50	3
Cu			1	0.189	ug/l	17.48	23,809.40	6.794E-02	Pulse	0.50	3
Zn			1	0.297	ug/l	13.65	3,472.66	6.462E-03	Pulse	1.00	3
Cd			1	0.000	ug/l	69.71	7.33	1.364E-05	Pulse	0.50	3
Al			1	0.015	ug/l	851.12	426.67	1.012E-03	Pulse	1.00	3
Se			1	-0.006	ug/l	-516.97	22.00	7.136E-04	Pulse	3.00	3
Sb			1	-0.002	ug/l	-27.10	159.33	2.965E-04	Pulse	1.00	3
Se			1	-0.058	ug/l	-57.47	30.44	9.850E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,666,227.33	0.11	100.0	Analog	0.50	3
1	Sc		421,696.10	0.23	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		350,501.81	0.60	100.0	Pulse	0.30	3
1	In		3,581,696.80	0.19	100.0	Pulse	0.30	3
1	Tb		15,294,676.67	0.50	100.0	Analog	0.50	3
1	Lu		9,059,156.33	1.03	100.0	Analog	0.50	3
1	Ge		537,402.58	0.14	100.0	Pulse	0.30	3
1	Te		30,886.03	1.19	100.0	Pulse	0.50	3
1	Li		3,308.07	2.27	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:10
Sample Name	Blank
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	-0.004	ug/l	-142.46	1,170.04	3.391E-03	Pulse	0.50	3
As			1	-0.003	ug/l	-59.39	16.00	4.638E-05	Pulse	1.00	3
Mo			1	0.001	ug/l	163.98	40.67	7.663E-05	Pulse	0.50	3
Pb			1	0.001	ug/l	83.45	3,440.35	2.971E-04	Pulse	1.00	3
Be			1	0.007	ug/l	28.43	1.17	2.785E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	-180.74	62.67	1.182E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	515.93	24.67	6.951E-06	Pulse	0.50	3
Tl			1	0.000	ug/l	150.74	164.00	1.416E-05	Pulse	0.50	3
Sn			1	0.001	ug/l	604.45	996.70	2.807E-04	Pulse	0.30	3
Sr			1	0.007	ug/l	100.99	1,387.39	3.906E-04	Pulse	0.50	3
[Pb]			1	0.000	ug/l	290.74	1,624.08	1.402E-04	Pulse	0.50	3
Ca			1	-0.484	ug/l	-65.20	172.67	4.123E-04	Pulse	0.50	3
Ti			1	0.002	ug/l	529.28	2.00	4.803E-06	Pulse	0.50	3
Na			1	-0.051	ug/l	-56.93	10,506.76	2.509E-02	Pulse	1.00	3
Mg			1	-0.014	ug/l	-61.38	349.33	8.344E-04	Pulse	1.00	3
K			1	0.095	ug/l	123.02	13,039.31	3.114E-02	Pulse	1.00	3
V			1	-0.003	ug/l	-116.09	642.01	1.534E-03	Pulse	0.50	3
Mn			1	-0.001	ug/l	-854.16	1,495.40	4.333E-03	Pulse	0.50	3
Fe			1	0.067	ug/l	130.84	43,993.95	1.275E-01	Pulse	0.50	3
Co			1	0.001	ug/l	76.17	105.34	3.053E-04	Pulse	0.50	3
Ni			1	-0.003	ug/l	-70.88	1,278.72	3.705E-03	Pulse	0.50	3
Cu			1	0.011	ug/l	16.19	17,648.75	5.114E-02	Pulse	0.50	3
Zn			1	0.035	ug/l	112.64	2,407.82	4.542E-03	Pulse	1.00	3
Cd			1	0.001	ug/l	64.69	8.67	1.634E-05	Pulse	0.50	3
Al			1	-0.018	ug/l	-436.55	413.67	9.882E-04	Pulse	1.00	3
Se			1	-0.032	ug/l	-3.84	17.56	5.688E-04	Pulse	3.00	3
Sb			1	0.001	ug/l	100.05	202.00	3.811E-04	Pulse	1.00	3
Se			1	-0.081	ug/l	-68.33	28.44	9.215E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,580,889.00	0.63	100.0	Analog	0.50	3
1	Sc		418,693.16	0.48	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		345,103.36	0.47	100.0	Pulse	0.30	3
1	In		3,551,610.27	0.41	100.0	Pulse	0.30	3
1	Tb		15,413,710.33	0.55	100.0	Analog	0.50	3
1	Lu		8,997,360.67	1.06	100.0	Analog	0.50	3
1	Ge		530,076.72	0.31	100.0	Pulse	0.30	3
1	Te		30,863.31	0.29	100.0	Pulse	0.50	3
1	Li		3,186.94	1.78	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:14
Sample Name	CALSTD-1
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	---	1,260.71	3.621E-03	Pulse	0.50	3
As			1	0.000	ug/l	---	22.33	6.414E-05	Pulse	1.00	3
Mo			1	0.000	ug/l	---	20.00	3.757E-05	Pulse	0.50	3
Pb			1	0.000	ug/l	---	3,389.68	2.898E-04	Pulse	1.00	3
Be			1	0.000	ug/l	---	0.17	3.953E-07	Pulse	2.00	3
Ag			1	0.000	ug/l	---	69.33	1.306E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	---	23.33	6.491E-06	Pulse	0.50	3
Tl			1	0.000	ug/l	---	138.00	1.179E-05	Pulse	0.50	3
Sn			1	0.000	ug/l	---	994.48	2.771E-04	Pulse	0.30	3
Sr			1	0.000	ug/l	---	1,326.72	3.694E-04	Pulse	0.50	3
[Pb]			1	0.000	ug/l	---	1,628.08	1.392E-04	Pulse	0.50	3
Ca			1	0.000	ug/l	---	195.34	4.667E-04	Pulse	0.50	3
Ti			1	0.000	ug/l	---	1.33	3.231E-06	Pulse	0.50	3
Na			1	0.000	ug/l	---	10,623.15	2.540E-02	Pulse	1.00	3
Mg			1	0.000	ug/l	---	364.67	8.720E-04	Pulse	1.00	3
K			1	0.000	ug/l	---	12,944.91	3.096E-02	Pulse	1.00	3
V			1	0.000	ug/l	---	690.68	1.652E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	---	1,516.73	4.357E-03	Pulse	0.50	3
Fe			1	0.000	ug/l	---	43,177.80	1.240E-01	Pulse	0.50	3
Co			1	0.000	ug/l	---	66.00	1.897E-04	Pulse	0.50	3
Ni			1	0.000	ug/l	---	1,328.05	3.814E-03	Pulse	0.50	3
Cu			1	0.000	ug/l	---	17,427.21	5.006E-02	Pulse	0.50	3
Zn			1	0.000	ug/l	---	2,279.14	4.285E-03	Pulse	1.00	3
Cd			1	0.000	ug/l	---	4.00	7.502E-06	Pulse	0.50	3
Al			1	0.000	ug/l	---	418.67	1.001E-03	Pulse	1.00	3
Se			1	0.000	ug/l	---	22.67	7.456E-04	Pulse	3.00	3
Sb			1	0.000	ug/l	---	187.67	3.529E-04	Pulse	1.00	3
Se			1	0.000	ug/l	---	34.78	1.146E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,695,586.33	0.58	100.0	Analog	0.50	3
1	Sc		418,217.40	1.17	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		348,150.34	0.28	100.0	Pulse	0.30	3
1	In		3,590,281.52	0.52	100.0	Pulse	0.30	3
1	Tb		15,444,954.33	0.99	100.0	Analog	0.50	3
1	Lu		9,050,771.67	1.36	100.0	Analog	0.50	3
1	Ge		531,895.69	0.80	100.0	Pulse	0.30	3
1	Te		30,407.24	1.62	100.0	Pulse	0.50	3
1	Li		3,379.19	4.23	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:18
Sample Name	CALSTD-2
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.086	ug/l	2.54	3,207.61	9.261E-03	Pulse	0.50	3
As			1	0.098	ug/l	3.82	246.67	7.122E-04	Pulse	1.00	3
Mo			1	0.096	ug/l	3.13	1,590.07	3.019E-03	Pulse	0.50	3
Pb			1	0.134	ug/l	1.51	16,707.16	1.426E-03	Pulse	1.00	3
Be			1	0.118	ug/l	27.04	17.17	4.124E-05	Pulse	2.00	3
Ag			1	0.103	ug/l	1.23	6,548.51	1.243E-02	Pulse	0.50	3
Ba			1	0.106	ug/l	6.92	603.34	1.689E-04	Pulse	0.50	3
Tl			1	0.100	ug/l	3.30	14,897.86	1.272E-03	Pulse	0.50	3
Sn			1	0.100	ug/l	20.42	2,326.83	6.517E-04	Pulse	0.30	3
Sr			1	0.096	ug/l	7.89	2,350.16	6.580E-04	Pulse	0.50	3
[Pb]			1	0.137	ug/l	2.63	7,935.86	6.774E-04	Pulse	0.50	3
Ca			1	11.907	ug/l	1.86	750.69	1.804E-03	Pulse	0.50	3
Ti			1	0.119	ug/l	28.61	47.33	1.137E-04	Pulse	0.50	3
Na			1	10.343	ug/l	0.44	36,856.71	8.857E-02	Pulse	1.00	3
Mg			1	10.496	ug/l	0.10	11,866.52	2.852E-02	Pulse	1.00	3
K			1	10.215	ug/l	3.10	21,225.71	5.101E-02	Pulse	1.00	3
V			1	0.099	ug/l	7.32	2,292.81	5.510E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	1070.94	1,512.06	4.365E-03	Pulse	0.50	3
Fe			1	8.038	ug/l	0.84	186,476.35	5.384E-01	Pulse	0.50	3
Co			1	0.098	ug/l	2.06	4,264.48	1.231E-02	Pulse	0.50	3
Ni			1	0.085	ug/l	5.82	2,317.48	6.692E-03	Pulse	0.50	3
Cu			1	0.012	ug/l	79.28	17,718.81	5.116E-02	Pulse	0.50	3
Zn			1	0.493	ug/l	10.20	4,157.12	7.895E-03	Pulse	1.00	3
Cd			1	0.105	ug/l	6.87	782.69	1.486E-03	Pulse	0.50	3
Al			1	13.359	ug/l	2.13	4,413.49	1.061E-02	Pulse	1.00	3
Se			1	0.063	ug/l	14.56	33.22	1.090E-03	Pulse	3.00	3
Sb			1	0.100	ug/l	5.82	1,622.08	3.080E-03	Pulse	1.00	3
Se			1	-0.035	ug/l	-155.24	31.89	1.048E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,714,547.00	0.43	100.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		416,130.36	0.38	99.5	Pulse	0.30	3
1	Ge		346,345.40	0.53	99.5	Pulse	0.30	3
1	In		3,571,202.78	0.77	99.5	Pulse	0.30	3
1	Tb		15,411,322.00	0.61	99.8	Analog	0.50	3
1	Lu		8,988,049.33	0.34	99.3	Analog	0.50	3
1	Ge		526,639.91	0.46	99.0	Pulse	0.30	3
1	Te		30,494.74	2.72	100.3	Pulse	0.50	3
1	Li		3,278.06	3.20	97.0	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:22
Sample Name	CALSTD-3
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.992	ug/l	0.64	23,325.28	6.842E-02	Pulse	0.50	3
As			1	0.984	ug/l	1.26	2,232.47	6.549E-03	Pulse	1.00	3
Mo			1	0.968	ug/l	1.30	15,651.88	3.004E-02	Pulse	0.50	3
Pb			1	1.014	ug/l	0.42	102,434.58	8.860E-03	Pulse	1.00	3
Be			1	0.996	ug/l	6.63	142.17	3.462E-04	Pulse	2.00	3
Ag			1	1.021	ug/l	0.87	63,884.10	1.226E-01	Pulse	0.50	3
Ba			1	1.004	ug/l	3.54	5,466.85	1.550E-03	Pulse	0.50	3
Tl			1	0.980	ug/l	1.04	143,363.91	1.240E-02	Pulse	0.50	3
Sn			1	1.166	ug/l	2.11	16,318.40	4.628E-03	Pulse	0.30	3
Sr			1	1.000	ug/l	0.35	11,951.80	3.389E-03	Pulse	0.50	3
[Pb]			1	1.032	ug/l	1.26	48,624.12	4.206E-03	Pulse	0.50	3
Ca			1	101.648	ug/l	5.40	4,879.96	1.188E-02	Pulse	0.50	3
Ti			1	0.872	ug/l	11.34	332.67	8.101E-04	Pulse	0.50	3
Na			1	103.759	ug/l	0.62	270,654.76	6.591E-01	Pulse	1.00	3
Mg			1	103.304	ug/l	0.79	112,092.75	2.729E-01	Pulse	1.00	3
K			1	100.556	ug/l	1.19	93,772.96	2.283E-01	Pulse	1.00	3
V			1	0.960	ug/l	1.91	16,094.00	3.919E-02	Pulse	0.50	3
Mn			1	1.058	ug/l	2.37	11,662.87	3.421E-02	Pulse	0.50	3
Fe			1	99.876	ug/l	0.82	1,797,645.92	5.273E+00	Pulse	0.50	3
Co			1	1.015	ug/l	0.77	42,920.66	1.259E-01	Pulse	0.50	3
Ni			1	1.010	ug/l	1.60	12,974.40	3.806E-02	Pulse	0.50	3
Cu			1	0.991	ug/l	1.52	49,047.38	1.439E-01	Pulse	0.50	3
Zn			1	1.736	ug/l	1.82	8,865.05	1.701E-02	Pulse	1.00	3
Cd			1	1.031	ug/l	1.16	7,561.57	1.451E-02	Pulse	0.50	3
Al			1	103.075	ug/l	0.43	30,846.05	7.511E-02	Pulse	1.00	3
Se			1	0.891	ug/l	4.94	169.22	5.614E-03	Pulse	3.00	3
Sb			1	0.984	ug/l	0.17	14,220.83	2.729E-02	Pulse	1.00	3
Se			1	0.811	ug/l	3.00	102.11	3.388E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,561,376.67	0.38	98.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		410,672.66	0.33	98.2	Pulse	0.30	3
1	Ge		340,925.79	1.00	97.9	Pulse	0.30	3
1	In		3,526,544.58	0.45	98.2	Pulse	0.30	3
1	Tb		15,188,956.00	0.40	98.3	Analog	0.50	3
1	Lu		8,914,852.00	0.65	98.5	Analog	0.50	3
1	Ge		521,128.68	0.49	98.0	Pulse	0.30	3
1	Te		30,140.78	0.64	99.1	Pulse	0.50	3
1	Li		3,214.72	1.00	95.1	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:25
Sample Name	CALSTD-4
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	10.507	ug/l	0.71	228,131.81	6.899E-01	Pulse	0.50	3
As			1	10.565	ug/l	0.15	23,050.53	6.970E-02	Pulse	1.00	3
Mo			1	10.057	ug/l	0.92	159,301.95	3.117E-01	Pulse	0.50	3
Pb			1	10.294	ug/l	0.57	994,480.23	8.729E-02	Pulse	1.00	3
Be			1	11.118	ug/l	3.07	1,535.56	3.861E-03	Pulse	2.00	3
Ag			1	10.608	ug/l	0.16	650,076.19	1.272E+00	Pulse	0.50	3
Ba			1	10.366	ug/l	2.27	54,153.92	1.594E-02	Pulse	0.50	3
Tl			1	10.199	ug/l	1.56	1,468,743.33	1.289E-01	Pulse	0.50	3
Sn			1	10.379	ug/l	0.89	132,530.48	3.900E-02	Pulse	0.30	3
Sr			1	10.119	ug/l	0.60	105,039.99	3.091E-02	Pulse	0.50	3
[Pb]			1	10.330	ug/l	1.73	465,542.74	4.086E-02	Pulse	0.50	3
Ca			1	1035.463	ug/l	1.14	46,438.01	1.168E-01	Pulse	0.50	3
Ti			1	10.328	ug/l	0.74	3,803.05	9.560E-03	Pulse	0.50	3
Na			1	1052.198	ug/l	0.47	2,566,064.92	6.451E+00	Pulse	1.00	3
Mg			1	1062.212	ug/l	0.44	1,113,134.29	2.798E+00	Pulse	1.00	3
K			1	1049.186	ug/l	0.06	831,504.69	2.090E+00	Pulse	1.00	3
V			1	10.399	ug/l	0.23	162,465.03	4.084E-01	Pulse	0.50	3
Mn			1	10.515	ug/l	0.70	99,535.59	3.010E-01	Pulse	0.50	3
Fe			1	1046.438	ug/l	0.47	17,881,785.33	5.407E+01	Analog	0.50	3
Co			1	10.537	ug/l	1.03	431,834.51	1.306E+00	Pulse	0.50	3
Ni			1	10.847	ug/l	0.92	122,922.14	3.717E-01	Pulse	0.50	3
Cu			1	10.890	ug/l	0.21	357,303.82	1.080E+00	Pulse	0.50	3
Zn			1	11.590	ug/l	1.36	45,610.98	8.925E-02	Pulse	1.00	3
Cd			1	10.679	ug/l	0.69	76,745.32	1.502E-01	Pulse	0.50	3
Al			1	1064.583	ug/l	0.19	304,860.39	7.664E-01	Pulse	1.00	3
Se			1	9.866	ug/l	2.81	1,579.40	5.465E-02	Pulse	3.00	3
Sb			1	10.258	ug/l	0.55	143,746.30	2.813E-01	Pulse	1.00	3
Se			1	9.628	ug/l	3.10	801.91	2.775E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,394,043.33	1.48	97.4	Analog	0.50	3
1	Sc		397,775.72	1.09	95.1	Pulse	0.30	3
1	Ge		330,708.82	0.97	95.0	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,398,449.31	1.30	94.7	Pulse	0.30	3
1	Tb		15,013,925.33	0.60	97.2	Analog	0.50	3
1	Lu		8,794,119.67	0.24	97.2	Analog	0.50	3
1	Ge		511,084.53	0.68	96.1	Pulse	0.30	3
1	Te		28,896.09	0.80	95.0	Pulse	0.50	3
1	Li		3,145.81	6.25	93.1	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:29
Sample Name	CALSTD-5
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.207	ug/l	0.53	1,047,290.29	3.217E+00	Pulse	0.50	3
As			1	49.973	ug/l	0.49	107,240.84	3.294E-01	Pulse	1.00	3
Mo			1	48.984	ug/l	0.36	752,147.42	1.518E+00	Pulse	0.50	3
Pb			1	49.217	ug/l	0.24	4,584,578.83	4.162E-01	Pulse	1.00	3
Be			1	52.381	ug/l	0.88	7,091.74	1.819E-02	Pulse	2.00	3
Ag			1	50.297	ug/l	0.48	2,987,978.00	6.030E+00	Pulse	0.50	3
Ba			1	49.875	ug/l	0.95	254,722.85	7.666E-02	Pulse	0.50	3
Tl			1	49.028	ug/l	0.14	6,825,462.00	6.197E-01	Analog	0.50	3
Sn			1	50.485	ug/l	0.52	626,823.01	1.886E-01	Pulse	0.30	3
Sr			1	49.004	ug/l	0.78	492,710.85	1.483E-01	Pulse	0.50	3
[Pb]			1	49.624	ug/l	1.17	2,156,244.33	1.958E-01	Pulse	0.50	3
Ca			1	4970.362	ug/l	1.24	217,786.97	5.587E-01	Pulse	0.50	3
Ti			1	49.541	ug/l	0.95	17,876.18	4.585E-02	Pulse	0.50	3
Na			1	4980.893	ug/l	0.60	11,868,677.00	3.044E+01	Analog	1.00	3
Mg			1	5041.655	ug/l	0.82	5,176,952.17	1.328E+01	Analog	1.00	3
K			1	4989.268	ug/l	0.47	3,830,169.50	9.824E+00	Pulse	1.00	3
V			1	49.454	ug/l	0.89	754,800.85	1.936E+00	Pulse	0.50	3
Mn			1	49.015	ug/l	0.59	451,545.14	1.387E+00	Pulse	0.50	3
Fe			1	4933.642	ug/l	0.62	82,833,874.67	2.545E+02	Analog	0.50	3
Co			1	49.869	ug/l	0.21	2,011,548.58	6.179E+00	Pulse	0.50	3
Ni			1	50.827	ug/l	0.87	562,391.52	1.728E+00	Pulse	0.50	3
Cu			1	51.112	ug/l	0.38	1,590,459.17	4.886E+00	Pulse	0.50	3
Zn			1	52.012	ug/l	0.39	191,042.12	3.856E-01	Pulse	1.00	3
Cd			1	51.137	ug/l	0.47	356,287.95	7.190E-01	Pulse	0.50	3
Al			1	4971.404	ug/l	0.49	1,393,905.00	3.575E+00	Pulse	1.00	3
Se			1	47.756	ug/l	3.33	7,214.58	2.617E-01	Pulse	3.00	3
Sb			1	49.771	ug/l	0.85	675,470.58	1.363E+00	Pulse	1.00	3
Se			1	47.758	ug/l	1.82	3,670.80	1.331E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,014,390.67	0.25	94.2	Analog	0.50	3
1	Sc		389,880.06	1.42	93.2	Pulse	0.30	3
1	Ge		325,518.00	0.61	93.5	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,323,140.35	1.10	92.6	Pulse	0.30	3
1	Tb		14,928,530.67	0.88	96.7	Analog	0.50	3
1	Lu		8,742,090.33	0.36	96.6	Analog	0.50	3
1	Ge		495,494.13	1.20	93.2	Pulse	0.30	3
1	Te		27,582.15	2.21	90.7	Pulse	0.50	3
1	Li		2,968.02	4.27	87.8	Pulse	0.30	3

Quantitation Report

File Name 008CALS.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 10:33
Sample Name CALSTD-6
Sample Type CalStd
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	100.417	ug/l	0.69	2,082,774.63	6.562E+00	Pulse	0.50	3
As			1	100.912	ug/l	0.72	211,126.80	6.652E-01	Pulse	1.00	3
Mo			1	100.267	ug/l	1.42	1,507,296.96	3.107E+00	Pulse	0.50	3
Pb			1	99.665	ug/l	0.25	9,040,397.67	8.426E-01	Analog	1.00	3
Be			1	102.972	ug/l	1.09	13,758.30	3.576E-02	Pulse	2.00	3
Ag			1	99.791	ug/l	0.65	5,804,074.67	1.196E+01	Pulse	0.50	3
Ba			1	100.326	ug/l	0.60	506,401.26	1.542E-01	Pulse	0.50	3
Tl			1	100.065	ug/l	0.84	13,569,770.67	1.265E+00	Analog	0.50	3
Sn			1	100.782	ug/l	1.04	1,235,726.90	3.763E-01	Pulse	0.30	3
Sr			1	100.384	ug/l	0.76	996,279.65	3.034E-01	Pulse	0.50	3
[Pb]			1	100.402	ug/l	1.40	4,248,180.17	3.959E-01	Pulse	0.50	3
Ca			1	10045.296	ug/l	1.51	434,275.25	1.129E+00	Pulse	0.50	3
Ti			1	100.486	ug/l	1.05	35,783.96	9.299E-02	Pulse	0.50	3
Na			1	10124.046	ug/l	1.25	23,799,449.33	6.185E+01	Analog	1.00	3
Mg			1	10120.470	ug/l	1.06	10,256,540.00	2.666E+01	Analog	1.00	3
K			1	10057.387	ug/l	0.89	7,608,219.67	1.977E+01	Analog	1.00	3
V			1	100.220	ug/l	1.58	1,509,072.17	3.922E+00	Pulse	0.50	3
Mn			1	100.038	ug/l	0.41	897,145.77	2.827E+00	Pulse	0.50	3
Fe			1	10054.984	ug/l	0.36	164,570,917.33	5.185E+02	Analog	0.50	3
Co			1	100.591	ug/l	0.13	3,956,136.92	1.246E+01	Pulse	0.50	3
Ni			1	102.101	ug/l	0.73	1,100,283.63	3.467E+00	Pulse	0.50	3
Cu			1	102.489	ug/l	0.07	3,093,624.67	9.747E+00	Pulse	0.50	3
Zn			1	103.131	ug/l	0.32	368,824.92	7.603E-01	Pulse	1.00	3
Cd			1	102.722	ug/l	0.75	700,669.35	1.444E+00	Pulse	0.50	3
Al			1	10101.696	ug/l	1.22	2,795,045.42	7.264E+00	Pulse	1.00	3
Se			1	97.253	ug/l	1.56	14,124.76	5.321E-01	Pulse	3.00	3
Sb			1	100.675	ug/l	0.50	1,337,598.96	2.757E+00	Pulse	1.00	3
Se			1	98.557	ug/l	0.87	7,260.16	2.735E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,729,280.33	0.31	91.7	Analog	0.50	3
1	Sc		384,804.15	0.97	92.0	Pulse	0.30	3
1	Ge		317,398.73	0.66	91.2	Pulse	0.30	3
1	In		3,284,363.48	0.90	91.5	Pulse	0.30	3
1	Tb		14,832,398.33	0.88	96.0	Analog	0.50	3
1	Lu		8,759,279.67	1.18	96.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		485,116.84	0.54	91.2	Pulse	0.30	3
1	Te		26,549.26	1.77	87.3	Pulse	0.50	3
1	Li		2,842.44	3.29	84.1	Pulse	0.30	3

Quantitation Report

File Name 009CALS.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 10:37
Sample Name CALSTD-7
Sample Type CalStd
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	199.964	ug/l	0.27	4,121,949.08	1.306E+01	Pulse	0.50	3
As			1	199.523	ug/l	0.84	414,967.23	1.315E+00	Pulse	1.00	3
Mo			1	200.118	ug/l	0.60	2,982,530.50	6.201E+00	Pulse	0.50	3
Pb			1	200.348	ug/l	0.13	17,469,630.67	1.694E+00	Analog	1.00	3
Be			1	197.863	ug/l	0.45	26,583.31	6.871E-02	Pulse	2.00	3
Ag			1	140.294	ug/l	0.39	8,089,712.67	1.682E+01	Analog	0.50	3
Ba			1	199.850	ug/l	0.87	999,675.00	3.071E-01	Pulse	0.50	3
Tl			1	200.201	ug/l	0.33	26,102,612.67	2.530E+00	Analog	0.50	3
Sn			1	199.468	ug/l	0.50	2,422,980.11	7.444E-01	Pulse	0.30	3
Sr			1	200.051	ug/l	1.13	1,966,340.38	6.042E-01	Pulse	0.50	3
[Pb]			1	199.876	ug/l	0.24	8,129,810.50	7.881E-01	Analog	0.50	3
Ca			1	19982.979	ug/l	0.79	868,459.17	2.245E+00	Pulse	0.50	3
Ti			1	199.856	ug/l	0.78	71,561.84	1.849E-01	Pulse	0.50	3
Na			1	19940.125	ug/l	0.10	47,126,406.67	1.218E+02	Analog	1.00	3
Mg			1	19926.224	ug/l	0.54	20,305,510.00	5.248E+01	Analog	1.00	3
K			1	19971.527	ug/l	0.34	15,179,776.67	3.923E+01	Analog	1.00	3
V			1	200.007	ug/l	0.57	3,027,787.83	7.825E+00	Pulse	0.50	3
Mn			1	200.201	ug/l	1.17	1,783,400.58	5.652E+00	Pulse	0.50	3
Fe			1	19986.777	ug/l	0.25	325,164,458.67	1.031E+03	Analog	0.50	3
Co			1	199.710	ug/l	0.35	7,808,241.50	2.475E+01	Analog	0.50	3
Ni			1	198.700	ug/l	0.57	2,127,584.42	6.743E+00	Pulse	0.50	3
Cu			1	198.433	ug/l	1.23	5,939,490.17	1.882E+01	Analog	0.50	3
Zn			1	197.848	ug/l	0.30	699,575.58	1.455E+00	Pulse	1.00	3
Cd			1	198.321	ug/l	0.84	1,341,086.17	2.789E+00	Pulse	0.50	3
Al			1	19953.054	ug/l	0.57	5,550,992.83	1.435E+01	Analog	1.00	3
Se			1	201.942	ug/l	2.27	27,310.88	1.104E+00	Pulse	3.00	3
Sb			1	199.707	ug/l	0.42	2,630,380.67	5.469E+00	Pulse	1.00	3
Se			1	201.301	ug/l	2.49	13,787.54	5.574E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,315,690.67	0.19	88.2	Analog	0.50	3
1	Sc		386,922.63	0.99	92.5	Pulse	0.30	3
1	Ge		315,537.73	0.71	90.6	Pulse	0.30	3
1	In		3,254,855.91	1.01	90.7	Pulse	0.30	3
1	Tb		14,640,154.67	0.65	94.8	Analog	0.50	3
1	Lu		8,672,619.33	0.45	95.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		480,946.67	0.70	90.4	Pulse	0.30	3
1	Te		24,744.74	2.30	81.4	Pulse	0.50	3
1	Li		2,736.86	4.09	81.0	Pulse	0.30	3

Quantitation Report

File Name	010HSAG.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:40
Sample Name	HSTD (Ag)
Sample Type	HSTD _Ag
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	100.114	ug/l	1.66	2,064,361.13	6.542E+00	Pulse	0.50	3
As			1	100.621	ug/l	0.57	209,316.57	6.633E-01	Pulse	1.00	3
Mo			1	98.838	ug/l	1.37	1,487,148.50	3.063E+00	Pulse	0.50	3
Pb			1	98.421	ug/l	0.56	8,968,916.33	8.321E-01	Analog	1.00	3
Be			1	98.852	ug/l	1.16	13,315.18	3.433E-02	Pulse	2.00	3
Ag			1	97.918	ug/l	1.15	5,700,329.83	1.174E+01	Pulse	0.50	3
Ba			1	98.867	ug/l	0.39	501,253.37	1.519E-01	Pulse	0.50	3
Tl			1	98.960	ug/l	0.39	13,482,187.67	1.251E+00	Analog	0.50	3
Sn			1	99.256	ug/l	0.26	1,222,453.11	3.706E-01	Pulse	0.30	3
Sr			1	98.349	ug/l	0.48	980,432.50	2.972E-01	Pulse	0.50	3
[Pb]			1	97.658	ug/l	0.87	4,151,235.75	3.851E-01	Pulse	0.50	3
Ca			1	9766.713	ug/l	1.19	425,652.15	1.097E+00	Pulse	0.50	3
Ti			1	99.446	ug/l	0.37	35,702.43	9.203E-02	Pulse	0.50	3
Na			1	9827.460	ug/l	0.79	23,290,943.33	6.004E+01	Analog	1.00	3
Mg			1	9841.865	ug/l	1.32	10,055,103.67	2.592E+01	Analog	1.00	3
K			1	9826.200	ug/l	1.15	7,493,846.50	1.932E+01	Analog	1.00	3
V			1	98.317	ug/l	0.97	1,492,472.09	3.847E+00	Pulse	0.50	3
Mn			1	100.351	ug/l	1.52	894,714.25	2.835E+00	Pulse	0.50	3
Fe			1	10084.345	ug/l	1.10	164,095,349.33	5.200E+02	Analog	0.50	3
Co			1	99.143	ug/l	1.12	3,876,633.92	1.228E+01	Pulse	0.50	3
Ni			1	101.468	ug/l	1.14	1,087,162.83	3.445E+00	Pulse	0.50	3
Cu			1	101.481	ug/l	1.36	3,045,600.75	9.651E+00	Pulse	0.50	3
Zn			1	101.953	ug/l	1.57	364,945.91	7.516E-01	Pulse	1.00	3
Cd			1	100.309	ug/l	0.76	684,844.94	1.410E+00	Pulse	0.50	3
Al			1	9794.172	ug/l	0.94	2,732,019.42	7.043E+00	Pulse	1.00	3
Se			1	95.747	ug/l	2.27	14,002.34	5.239E-01	Pulse	3.00	3
Sb			1	99.344	ug/l	1.01	1,321,091.25	2.721E+00	Pulse	1.00	3
Se			1	95.590	ug/l	3.20	7,089.54	2.653E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,779,030.67	0.49	92.2	Analog	0.50	3
1	Sc		387,936.86	1.03	92.8	Pulse	0.30	3
1	Ge		315,587.12	1.14	90.6	Pulse	0.30	3
1	In		3,298,795.01	0.24	91.9	Pulse	0.30	3
1	Tb		14,784,565.67	0.80	95.7	Analog	0.50	3
1	Lu		8,730,460.33	0.67	96.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		485,570.72	0.88	91.3	Pulse	0.30	3
1	Te		26,735.52	2.02	87.9	Pulse	0.50	3
1	Li		2,767.98	4.53	81.9	Pulse	0.30	3

Quantitation Report

File Name 011HSTD.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 10:44
Sample Name HSTD
Sample Type HSTD
Comment =std 6
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	201.145	ug/l	1.02	4,107,661.83	1.314E+01	Pulse	0.50	3
As			1	200.944	ug/l	1.01	414,032.13	1.325E+00	Pulse	1.00	3
Mo			1	199.867	ug/l	0.39	2,962,735.75	6.194E+00	Pulse	0.50	3
Pb			1	199.427	ug/l	0.31	17,436,189.33	1.686E+00	Analog	1.00	3
Be			1	195.997	ug/l	0.57	26,264.22	6.806E-02	Pulse	2.00	3
Ag			1	139.616	ug/l	0.61	8,007,192.67	1.674E+01	Analog	0.50	3
Ba			1	201.937	ug/l	0.52	1,001,422.46	3.103E-01	Pulse	0.50	3
Tl			1	200.784	ug/l	0.49	26,249,551.33	2.538E+00	Analog	0.50	3
Sn			1	200.794	ug/l	1.15	2,417,986.22	7.494E-01	Pulse	0.30	3
Sr			1	201.530	ug/l	0.54	1,963,909.75	6.086E-01	Pulse	0.50	3
[Pb]			1	199.933	ug/l	1.10	8,154,016.67	7.883E-01	Analog	0.50	3
Ca			1	19869.777	ug/l	0.18	861,329.08	2.232E+00	Pulse	0.50	3
Ti			1	199.772	ug/l	1.18	71,345.16	1.849E-01	Pulse	0.50	3
Na			1	20027.879	ug/l	0.03	47,210,764.00	1.223E+02	Analog	1.00	3
Mg			1	19970.246	ug/l	0.19	20,297,956.67	5.260E+01	Analog	1.00	3
K			1	20123.506	ug/l	0.25	15,255,548.33	3.953E+01	Analog	1.00	3
V			1	199.669	ug/l	0.11	3,014,771.42	7.812E+00	Pulse	0.50	3
Mn			1	200.309	ug/l	1.40	1,767,753.42	5.655E+00	Pulse	0.50	3
Fe			1	20286.274	ug/l	0.98	326,955,584.00	1.046E+03	Analog	0.50	3
Co			1	202.720	ug/l	0.88	7,852,025.50	2.512E+01	Analog	0.50	3
Ni			1	200.882	ug/l	0.53	2,130,964.42	6.817E+00	Pulse	0.50	3
Cu			1	199.714	ug/l	0.70	5,922,411.67	1.895E+01	Analog	0.50	3
Zn			1	199.230	ug/l	0.78	700,648.81	1.465E+00	Pulse	1.00	3
Cd			1	198.574	ug/l	0.28	1,335,649.29	2.792E+00	Pulse	0.50	3
Al			1	20076.691	ug/l	0.46	5,570,961.17	1.444E+01	Analog	1.00	3
Se			1	202.530	ug/l	1.37	27,448.18	1.107E+00	Pulse	3.00	3
Sb			1	200.475	ug/l	0.37	2,626,274.67	5.490E+00	Pulse	1.00	3
Se			1	200.087	ug/l	0.94	13,734.28	5.540E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,343,537.33	0.38	88.4	Analog	0.50	3
1	Sc		385,915.10	0.56	92.3	Pulse	0.30	3
1	Ge		312,616.77	1.38	89.8	Pulse	0.30	3
1	In		3,226,845.91	1.01	89.9	Pulse	0.30	3
1	Tb		14,577,279.67	0.69	94.4	Analog	0.50	3
1	Lu		8,696,079.67	1.22	96.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		478,359.04	0.88	89.9	Pulse	0.30	3
1	Te		24,790.76	1.05	81.5	Pulse	0.50	3
1	Li		2,891.34	2.68	85.6	Pulse	0.30	3

Quantitation Report

File Name	012_ICV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:48
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	102.937	ug/l	0.44	2,117,094.42	6.727E+00	Pulse	0.50	3
As			1	103.619	ug/l	0.47	214,979.38	6.830E-01	Pulse	1.00	3
Mo			1	103.202	ug/l	0.22	1,544,658.29	3.198E+00	Pulse	0.50	3
Pb			1	99.511	ug/l	0.82	9,029,240.00	8.413E-01	Analog	1.00	3
Be			1	99.291	ug/l	2.06	13,197.77	3.448E-02	Pulse	2.00	3
Ag			1	49.280	ug/l	0.30	2,853,762.50	5.909E+00	Pulse	0.50	3
Ba			1	103.522	ug/l	0.93	518,019.73	1.591E-01	Pulse	0.50	3
Tl			1	98.840	ug/l	0.34	13,408,250.00	1.249E+00	Analog	0.50	3
Sn			1	107.863	ug/l	1.04	1,311,111.58	4.027E-01	Pulse	0.30	3
Sr			1	100.481	ug/l	0.60	988,651.90	3.036E-01	Pulse	0.50	3
[Pb]			1	98.795	ug/l	0.67	4,181,644.83	3.896E-01	Pulse	0.50	3
Ca			1	10030.439	ug/l	1.13	431,400.34	1.127E+00	Pulse	0.50	3
Ti			1	104.927	ug/l	1.87	37,171.19	9.710E-02	Pulse	0.50	3
Na			1	9924.526	ug/l	1.35	23,210,867.33	6.063E+01	Analog	1.00	3
Mg			1	10299.691	ug/l	1.18	10,384,691.33	2.713E+01	Analog	1.00	3
K			1	9928.743	ug/l	1.24	7,472,395.00	1.952E+01	Analog	1.00	3
V			1	104.064	ug/l	1.61	1,558,835.00	4.072E+00	Pulse	0.50	3
Mn			1	98.699	ug/l	0.98	877,733.23	2.789E+00	Pulse	0.50	3
Fe			1	10093.338	ug/l	0.97	163,809,898.67	5.205E+02	Analog	0.50	3
Co			1	101.129	ug/l	0.89	3,943,937.33	1.253E+01	Pulse	0.50	3
Ni			1	101.629	ug/l	0.94	1,086,025.63	3.451E+00	Pulse	0.50	3
Cu			1	103.397	ug/l	0.76	3,094,724.25	9.833E+00	Pulse	0.50	3
Zn			1	103.213	ug/l	0.67	367,487.84	7.609E-01	Pulse	1.00	3
Cd			1	101.356	ug/l	1.37	688,320.73	1.425E+00	Pulse	0.50	3
Al			1	9924.291	ug/l	1.14	2,731,914.33	7.136E+00	Pulse	1.00	3
Se			1	103.464	ug/l	1.20	14,627.14	5.660E-01	Pulse	3.00	3
Sb			1	103.189	ug/l	0.66	1,364,965.79	2.826E+00	Pulse	1.00	3
Se			1	103.409	ug/l	1.47	7,413.55	2.869E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,732,769.67	0.38	91.8	Analog	0.50	3
1	Sc		382,852.23	1.44	91.5	Pulse	0.30	3
1	Ge		314,743.75	0.60	90.4	Pulse	0.30	3
1	In		3,256,053.90	0.92	90.7	Pulse	0.30	3
1	Tb		14,849,430.67	0.51	96.1	Analog	0.50	3
1	Lu		8,773,493.33	0.28	96.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		482,988.12	0.61	90.8	Pulse	0.30	3
1	Te		25,842.94	0.82	85.0	Pulse	0.50	3
1	Li		2,851.33	3.72	84.4	Pulse	0.30	3

Quantitation Report

File Name	013_ICB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:51
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	-0.014	ug/l	-6.21	871.36	2.683E-03	Pulse	0.50	3
As			1	0.008	ug/l	31.03	37.67	1.161E-04	Pulse	1.00	3
Mo			1	0.027	ug/l	13.98	428.68	8.625E-04	Pulse	0.50	3
Pb			1	0.007	ug/l	28.27	4,010.48	3.503E-04	Pulse	1.00	3
Be			1	0.009	ug/l	24.48	1.33	3.506E-06	Pulse	2.00	3
Ag			1	0.008	ug/l	10.36	530.01	1.066E-03	Pulse	0.50	3
Ba			1	0.004	ug/l	36.04	44.67	1.326E-05	Pulse	0.50	3
Tl			1	0.031	ug/l	12.61	4,676.66	4.087E-04	Pulse	0.50	3
Sn			1	0.057	ug/l	5.78	1,650.10	4.896E-04	Pulse	0.30	3
Sr			1	-0.002	ug/l	-322.94	1,229.38	3.648E-04	Pulse	0.50	3
[Pb]			1	0.007	ug/l	18.59	1,889.45	1.650E-04	Pulse	0.50	3
Ca			1	-1.408	ug/l	-25.30	117.33	3.085E-04	Pulse	0.50	3
Ti			1	0.010	ug/l	146.42	4.67	1.226E-05	Pulse	0.50	3
Na			1	0.673	ug/l	26.49	11,225.48	2.951E-02	Pulse	1.00	3
Mg			1	0.280	ug/l	50.01	612.35	1.610E-03	Pulse	1.00	3
K			1	-0.408	ug/l	-8.84	11,468.67	3.015E-02	Pulse	1.00	3
V			1	-0.014	ug/l	-36.89	426.01	1.120E-03	Pulse	0.50	3
Mn			1	-0.128	ug/l	-1.14	240.67	7.411E-04	Pulse	0.50	3
Fe			1	0.339	ug/l	40.78	45,944.87	1.415E-01	Pulse	0.50	3
Co			1	0.004	ug/l	34.42	224.67	6.920E-04	Pulse	0.50	3
Ni			1	-0.065	ug/l	-0.60	518.01	1.595E-03	Pulse	0.50	3
Cu			1	-0.013	ug/l	-81.22	15,859.20	4.883E-02	Pulse	0.50	3
Zn			1	-0.205	ug/l	-5.05	1,384.38	2.785E-03	Pulse	1.00	3
Cd			1	0.005	ug/l	7.98	37.33	7.505E-05	Pulse	0.50	3
Al			1	0.170	ug/l	40.82	427.34	1.124E-03	Pulse	1.00	3
Se			1	0.011	ug/l	122.41	23.33	8.061E-04	Pulse	3.00	3
Sb			1	0.021	ug/l	14.57	467.34	9.397E-04	Pulse	1.00	3
Se			1	-0.055	ug/l	-108.97	28.78	9.929E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,447,340.00	0.45	97.9	Analog	0.50	3
1	Sc		380,338.22	0.11	90.9	Pulse	0.30	3

Quantitation Report

1	Ge		324,764.26	0.88	93.3	Pulse	0.30	3
1	In		3,370,476.11	0.32	93.9	Pulse	0.30	3
1	Tb		15,041,928.33	0.59	97.4	Analog	0.50	3
1	Lu		8,809,932.67	0.20	97.3	Analog	0.50	3
1	Ge		497,202.24	1.03	93.5	Pulse	0.30	3
1	Te		28,966.94	1.22	95.3	Pulse	0.50	3
1	Li		2,963.57	2.27	87.7	Pulse	0.30	3

Quantitation Report

File Name	014LCCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:55
Sample Name	CRIA
Sample Type	CRIA
Comment	=std 2
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.979	ug/l	2.44	22,181.30	6.755E-02	Pulse	0.50	3
As			1	1.010	ug/l	2.38	2,207.13	6.721E-03	Pulse	1.00	3
Mo			1	0.976	ug/l	1.30	15,231.53	3.029E-02	Pulse	0.50	3
Pb			1	0.994	ug/l	0.52	100,869.85	8.687E-03	Pulse	1.00	3
Be			1	9.358	ug/l	153.71	1,267.27	3.250E-03	Pulse	2.00	3
Ag			1	1.033	ug/l	0.67	62,343.40	1.240E-01	Pulse	0.50	3
Ba			1	0.987	ug/l	2.55	5,230.77	1.523E-03	Pulse	0.50	3
Tl			1	0.981	ug/l	1.04	144,144.56	1.241E-02	Pulse	0.50	3
Sn			1	1.206	ug/l	4.38	16,394.04	4.775E-03	Pulse	0.30	3
Sr			1	0.968	ug/l	2.50	11,304.75	3.292E-03	Pulse	0.50	3
[Pb]			1	1.010	ug/l	1.38	47,854.03	4.122E-03	Pulse	0.50	3
Ca			1	183.901	ug/l	74.06	8,264.55	2.112E-02	Pulse	0.50	3
Ti			1	1.024	ug/l	5.78	373.34	9.508E-04	Pulse	0.50	3
Na			1	101.692	ug/l	1.59	253,745.75	6.464E-01	Pulse	1.00	3
Mg			1	101.514	ug/l	0.46	105,295.32	2.682E-01	Pulse	1.00	3
K			1	99.895	ug/l	0.90	89,123.52	2.270E-01	Pulse	1.00	3
V			1	0.971	ug/l	3.68	15,557.57	3.963E-02	Pulse	0.50	3
Mn			1	0.896	ug/l	3.70	9,727.79	2.963E-02	Pulse	0.50	3
Fe			1	100.166	ug/l	1.18	1,736,450.67	5.288E+00	Pulse	0.50	3
Co			1	1.017	ug/l	1.06	41,453.56	1.262E-01	Pulse	0.50	3
Ni			1	1.002	ug/l	0.50	12,408.67	3.779E-02	Pulse	0.50	3
Cu			1	0.987	ug/l	0.90	47,113.90	1.435E-01	Pulse	0.50	3
Zn			1	1.507	ug/l	1.50	7,710.22	1.533E-02	Pulse	1.00	3
Cd			1	1.060	ug/l	1.91	7,497.55	1.491E-02	Pulse	0.50	3
Al			1	101.149	ug/l	1.30	28,942.45	7.373E-02	Pulse	1.00	3
Se			1	0.903	ug/l	4.46	166.11	5.678E-03	Pulse	3.00	3
Sb			1	1.010	ug/l	0.47	14,087.40	2.802E-02	Pulse	1.00	3
Se			1	0.803	ug/l	8.68	98.33	3.363E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,611,149.33	0.64	99.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		392,558.90	0.70	93.9	Pulse	0.30	3
1	Ge		328,388.22	1.00	94.3	Pulse	0.30	3
1	In		3,433,895.91	0.41	95.6	Pulse	0.30	3
1	Tb		15,263,797.67	1.03	98.8	Analog	0.50	3
1	Lu		8,840,590.67	0.08	97.7	Analog	0.50	3
1	Ge		502,799.44	0.88	94.5	Pulse	0.30	3
1	Te		29,247.33	1.29	96.2	Pulse	0.50	3
1	Li		3,008.02	3.04	89.0	Pulse	0.30	3

Quantitation Report

File Name	015ICSA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:59
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.298	ug/l	0.86	26,448.57	8.838E-02	Pulse	0.50	3
As			1	0.084	ug/l	9.24	185.67	6.205E-04	Pulse	1.00	3
Mo			1	2062.056	ug/l	1.34	28,455,256.67	6.390E+01	Analog	0.50	3
Pb			1	0.117	ug/l	0.44	11,358.78	1.281E-03	Pulse	1.00	3
Be			1	0.017	ug/l	74.03	2.50	6.439E-06	Pulse	2.00	3
Ag			1	0.037	ug/l	2.56	2,048.12	4.599E-03	Pulse	0.50	3
Ba			1	0.090	ug/l	15.59	437.34	1.449E-04	Pulse	0.50	3
Tl			1	0.011	ug/l	14.38	1,339.39	1.510E-04	Pulse	0.50	3
Sn			1	0.105	ug/l	0.92	2,019.01	6.690E-04	Pulse	0.30	3
Sr			1	0.985	ug/l	3.81	10,092.06	3.344E-03	Pulse	0.50	3
[Pb]			1	0.118	ug/l	5.65	5,372.86	6.061E-04	Pulse	0.50	3
Ca			1	94902.257	ug/l	0.44	4,141,969.92	1.066E+01	Pulse	0.50	3
Ti			1	2018.657	ug/l	0.81	725,941.31	1.868E+00	Pulse	0.50	3
Na			1	99419.597	ug/l	0.50	235,954,122.67	6.072E+02	Analog	1.00	3
Mg			1	98888.990	ug/l	0.74	101,211,248.00	2.604E+02	Analog	1.00	3
K			1	102653.126	ug/l	1.37	78,311,549.33	2.015E+02	Analog	1.00	3
V			1	0.003	ug/l	74.44	684.01	1.760E-03	Pulse	0.50	3
Mn			1	0.196	ug/l	11.45	2,956.24	9.878E-03	Pulse	0.50	3
Fe			1	101188.851	ug/l	0.58	1,561,155,626.67	5.217E+03	Analog	0.50	3
Co			1	0.015	ug/l	2.93	601.34	2.010E-03	Pulse	0.50	3
Ni			1	0.071	ug/l	4.77	1,865.43	6.233E-03	Pulse	0.50	3
Cu			1	0.062	ug/l	12.99	16,741.26	5.594E-02	Pulse	0.50	3
Zn			1	1.105	ug/l	0.50	5,513.79	1.238E-02	Pulse	1.00	3
Cd			1	0.388	ug/l	7.52	2,430.17	5.458E-03	Pulse	0.50	3
Al			1	97569.747	ug/l	1.19	27,260,750.00	7.015E+01	Analog	1.00	3
Se			1	0.089	ug/l	24.83	27.45	1.230E-03	Pulse	3.00	3
Sb			1	0.059	ug/l	2.88	872.02	1.958E-03	Pulse	1.00	3
Se			1	0.258	ug/l	160.82	41.56	1.859E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,865,436.33	0.46	75.8	Analog	0.50	3
1	Sc		388,620.16	0.88	92.9	Pulse	0.30	3
1	Ge		299,255.37	0.23	86.0	Pulse	0.30	3
1	In		3,018,173.77	0.14	84.1	Pulse	0.30	3
1	Tb		13,637,890.33	0.60	88.3	Analog	0.50	3
1	Lu		8,166,596.83	0.08	90.2	Analog	0.50	3
1	Ge		445,326.15	0.62	83.7	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		22,314.93	0.99	73.4	Pulse	0.50	3
1	Li		2,465.72	3.99	73.0	Pulse	0.30	3

Quantitation Report

File Name	016ICSB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:02
Sample Name	ICSAB
Sample Type	ICSAB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	21.265	ug/l	0.80	413,088.88	1.392E+00	Pulse	0.50	3
As			1	19.519	ug/l	1.14	38,181.92	1.287E-01	Pulse	1.00	3
Mo			1	2057.712	ug/l	0.69	28,351,820.67	6.377E+01	Analog	0.50	3
Pb			1	0.131	ug/l	1.15	12,394.82	1.393E-03	Pulse	1.00	3
Be			1	0.008	ug/l	158.04	1.17	3.075E-06	Pulse	2.00	3
Ag			1	17.181	ug/l	0.40	915,952.40	2.060E+00	Pulse	0.50	3
Ba			1	0.080	ug/l	6.96	390.68	1.298E-04	Pulse	0.50	3
Tl			1	0.008	ug/l	18.40	991.37	1.115E-04	Pulse	0.50	3
Sn			1	0.081	ug/l	7.35	1,738.99	5.778E-04	Pulse	0.30	3
Sr			1	1.001	ug/l	0.93	10,206.12	3.391E-03	Pulse	0.50	3
[Pb]			1	0.131	ug/l	3.96	5,831.01	6.554E-04	Pulse	0.50	3
Ca			1	95026.527	ug/l	1.00	4,053,664.92	1.067E+01	Pulse	0.50	3
Ti			1	2029.914	ug/l	0.89	713,500.81	1.878E+00	Pulse	0.50	3
Na			1	100360.456	ug/l	0.61	232,806,618.67	6.129E+02	Analog	1.00	3
Mg			1	99581.735	ug/l	1.15	99,618,242.67	2.623E+02	Analog	1.00	3
K			1	103748.591	ug/l	1.40	77,361,946.67	2.037E+02	Analog	1.00	3
V			1	0.005	ug/l	79.18	697.35	1.836E-03	Pulse	0.50	3
Mn			1	20.176	ug/l	0.18	170,141.50	5.735E-01	Pulse	0.50	3
Fe			1	101682.522	ug/l	0.88	1,555,108,778.67	5.242E+03	Analog	0.50	3
Co			1	19.338	ug/l	0.86	710,853.12	2.396E+00	Pulse	0.50	3
Ni			1	18.723	ug/l	0.84	189,508.59	6.388E-01	Pulse	0.50	3
Cu			1	18.385	ug/l	0.53	530,871.33	1.790E+00	Pulse	0.50	3
Zn			1	19.567	ug/l	0.65	65,679.80	1.477E-01	Pulse	1.00	3
Cd			1	18.446	ug/l	0.88	115,317.03	2.594E-01	Pulse	0.50	3
Al			1	98087.561	ug/l	1.07	26,787,243.33	7.052E+01	Analog	1.00	3
Se			1	0.046	ug/l	2.03	21.56	9.946E-04	Pulse	3.00	3
Sb			1	0.051	ug/l	3.37	780.35	1.755E-03	Pulse	1.00	3
Se			1	-0.025	ug/l	-134.76	23.33	1.076E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,898,147.00	0.58	76.1	Analog	0.50	3
1	Sc		379,834.44	0.29	90.8	Pulse	0.30	3
1	Ge		296,654.12	0.84	85.2	Pulse	0.30	3
1	In		3,009,968.35	0.68	83.8	Pulse	0.30	3
1	Tb		13,702,696.00	0.75	88.7	Analog	0.50	3
1	Lu		8,151,725.83	0.67	90.1	Analog	0.50	3
1	Ge		444,621.70	0.43	83.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		21,674.19	2.82	71.3	Pulse	0.50	3
1	Li		2,266.81	7.01	67.1	Pulse	0.30	3

Quantitation Report

File Name	017CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:06
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	48.866	ug/l	1.99	992,547.33	3.195E+00	Pulse	0.50	3
As			1	50.161	ug/l	1.48	102,729.71	3.307E-01	Pulse	1.00	3
Mo			1	49.449	ug/l	1.15	729,774.64	1.532E+00	Pulse	0.50	3
Pb			1	47.828	ug/l	0.39	4,468,402.17	4.045E-01	Pulse	1.00	3
Be			1	48.307	ug/l	0.63	6,132.26	1.677E-02	Pulse	2.00	3
Ag			1	50.737	ug/l	1.01	2,897,093.33	6.083E+00	Pulse	0.50	3
Ba			1	49.799	ug/l	0.44	248,033.35	7.654E-02	Pulse	0.50	3
Tl			1	48.885	ug/l	1.03	6,825,487.17	6.179E-01	Analog	0.50	3
Sn			1	49.705	ug/l	1.39	601,836.76	1.857E-01	Pulse	0.30	3
Sr			1	48.498	ug/l	0.55	475,556.70	1.467E-01	Pulse	0.50	3
[Pb]			1	48.093	ug/l	0.59	2,095,909.91	1.897E-01	Pulse	0.50	3
Ca			1	4924.436	ug/l	0.95	202,331.16	5.535E-01	Pulse	0.50	3
Ti			1	50.032	ug/l	0.67	16,926.67	4.630E-02	Pulse	0.50	3
Na			1	4925.272	ug/l	1.11	11,004,304.33	3.010E+01	Analog	1.00	3
Mg			1	4960.074	ug/l	0.72	4,775,749.33	1.306E+01	Analog	1.00	3
K			1	4907.509	ug/l	0.62	3,532,675.67	9.664E+00	Pulse	1.00	3
V			1	49.736	ug/l	1.00	711,762.48	1.947E+00	Pulse	0.50	3
Mn			1	48.669	ug/l	1.90	427,877.97	1.377E+00	Pulse	0.50	3
Fe			1	4970.402	ug/l	1.67	79,641,965.33	2.564E+02	Analog	0.50	3
Co			1	49.300	ug/l	1.48	1,897,786.33	6.109E+00	Pulse	0.50	3
Ni			1	50.564	ug/l	0.70	533,980.17	1.719E+00	Pulse	0.50	3
Cu			1	50.968	ug/l	0.57	1,513,743.08	4.872E+00	Pulse	0.50	3
Zn			1	51.434	ug/l	1.23	181,598.23	3.813E-01	Pulse	1.00	3
Cd			1	51.527	ug/l	0.69	345,048.87	7.245E-01	Pulse	0.50	3
Al			1	4784.806	ug/l	0.90	1,257,933.92	3.441E+00	Pulse	1.00	3
Se			1	46.486	ug/l	1.10	6,853.12	2.547E-01	Pulse	3.00	3
Sb			1	50.295	ug/l	0.71	656,111.86	1.378E+00	Pulse	1.00	3
Se			1	47.384	ug/l	0.72	3,553.33	1.321E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,046,791.33	0.40	94.5	Analog	0.50	3
1	Sc		365,572.23	1.12	87.4	Pulse	0.30	3
1	Ge		310,692.74	1.16	89.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,240,632.58	0.14	90.3	Pulse	0.30	3
1	Tb		14,931,792.67	0.78	96.7	Analog	0.50	3
1	Lu		8,769,391.00	0.63	96.9	Analog	0.50	3
1	Ge		476,258.38	0.75	89.5	Pulse	0.30	3
1	Te		26,903.12	0.59	88.5	Pulse	0.50	3
1	Li		2,495.72	2.18	73.9	Pulse	0.30	3

Quantitation Report

File Name	018_CCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:10
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.585	ug/l	0.59	1,991,641.75	6.442E+00	Pulse	0.50	3
As			1	101.021	ug/l	0.48	205,869.62	6.659E-01	Pulse	1.00	3
Mo			1	99.820	ug/l	0.83	1,467,874.71	3.093E+00	Pulse	0.50	3
Pb			1	98.671	ug/l	0.11	8,960,020.33	8.342E-01	Analog	1.00	3
Be			1	97.652	ug/l	0.94	12,567.21	3.391E-02	Pulse	2.00	3
Ag			1	98.929	ug/l	0.99	5,628,386.83	1.186E+01	Pulse	0.50	3
Ba			1	100.061	ug/l	0.47	493,353.45	1.538E-01	Pulse	0.50	3
Tl			1	99.109	ug/l	0.59	13,454,772.67	1.253E+00	Analog	0.50	3
Sn			1	100.498	ug/l	0.60	1,203,712.21	3.752E-01	Pulse	0.30	3
Sr			1	98.835	ug/l	0.22	958,174.77	2.987E-01	Pulse	0.50	3
[Pb]			1	96.742	ug/l	0.48	4,097,859.00	3.815E-01	Pulse	0.50	3
Ca			1	9808.444	ug/l	1.56	408,383.14	1.102E+00	Pulse	0.50	3
Ti			1	100.264	ug/l	0.26	34,390.09	9.279E-02	Pulse	0.50	3
Na			1	9909.359	ug/l	1.45	22,435,824.00	6.054E+01	Analog	1.00	3
Mg			1	9871.468	ug/l	1.15	9,635,422.67	2.600E+01	Analog	1.00	3
K			1	9974.037	ug/l	1.24	7,266,946.50	1.961E+01	Analog	1.00	3
V			1	99.947	ug/l	1.89	1,449,379.87	3.911E+00	Pulse	0.50	3
Mn			1	98.314	ug/l	0.58	858,796.73	2.778E+00	Pulse	0.50	3
Fe			1	10049.743	ug/l	0.77	160,210,672.00	5.182E+02	Analog	0.50	3
Co			1	98.274	ug/l	0.51	3,764,638.58	1.218E+01	Pulse	0.50	3
Ni			1	100.494	ug/l	0.99	1,054,857.33	3.412E+00	Pulse	0.50	3
Cu			1	100.503	ug/l	0.87	2,955,166.25	9.559E+00	Pulse	0.50	3
Zn			1	101.281	ug/l	0.45	354,344.37	7.467E-01	Pulse	1.00	3
Cd			1	101.359	ug/l	0.37	676,304.23	1.425E+00	Pulse	0.50	3
Al			1	9669.332	ug/l	0.73	2,576,905.67	6.953E+00	Pulse	1.00	3
Se			1	96.634	ug/l	0.28	13,632.96	5.287E-01	Pulse	3.00	3
Sb			1	99.952	ug/l	1.13	1,299,005.08	2.738E+00	Pulse	1.00	3
Se			1	96.295	ug/l	0.86	6,890.47	2.672E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,741,008.67	0.55	91.8	Analog	0.50	3
1	Sc		370,635.92	1.38	88.6	Pulse	0.30	3
1	Ge		309,155.71	0.34	88.8	Pulse	0.30	3
1	In		3,208,072.86	0.24	89.4	Pulse	0.30	3
1	Tb		14,780,321.33	0.38	95.7	Analog	0.50	3
1	Lu		8,656,454.67	0.84	95.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		474,537.43	0.49	89.2	Pulse	0.30	3
1	Te		25,784.84	0.31	84.8	Pulse	0.50	3
1	Li		2,561.29	3.52	75.8	Pulse	0.30	3

Quantitation Report

File Name	019_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:13
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.680	ug/l	1.47	15,226.62	4.806E-02	Pulse	0.50	3
As			1	0.009	ug/l	43.49	40.00	1.262E-04	Pulse	1.00	3
Mo			1	0.050	ug/l	6.17	768.69	1.580E-03	Pulse	0.50	3
Pb			1	0.004	ug/l	61.23	3,709.08	3.234E-04	Pulse	1.00	3
Be			1	0.017	ug/l	95.00	2.33	6.329E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	7.93	631.35	1.298E-03	Pulse	0.50	3
Ba			1	0.011	ug/l	28.11	76.67	2.313E-05	Pulse	0.50	3
Tl			1	0.024	ug/l	13.58	3,619.73	3.157E-04	Pulse	0.50	3
Sn			1	0.030	ug/l	30.82	1,285.61	3.873E-04	Pulse	0.30	3
Sr			1	0.005	ug/l	48.48	1,273.38	3.838E-04	Pulse	0.50	3
[Pb]			1	0.002	ug/l	176.50	1,704.09	1.486E-04	Pulse	0.50	3
Ca			1	1.692	ug/l	21.56	242.00	6.567E-04	Pulse	0.50	3
Ti			1	0.020	ug/l	87.84	8.00	2.166E-05	Pulse	0.50	3
Na			1	3.736	ug/l	2.74	17,768.86	4.822E-02	Pulse	1.00	3
Mg			1	2.002	ug/l	5.40	2,263.80	6.144E-03	Pulse	1.00	3
K			1	1.405	ug/l	18.33	12,422.58	3.371E-02	Pulse	1.00	3
V			1	-0.011	ug/l	-8.93	455.34	1.236E-03	Pulse	0.50	3
Mn			1	0.977	ug/l	2.33	10,110.66	3.191E-02	Pulse	0.50	3
Fe			1	2.454	ug/l	9.36	79,370.58	2.505E-01	Pulse	0.50	3
Co			1	0.008	ug/l	35.46	358.67	1.131E-03	Pulse	0.50	3
Ni			1	0.217	ug/l	8.46	3,535.67	1.116E-02	Pulse	0.50	3
Cu			1	-0.009	ug/l	-88.76	15,578.30	4.917E-02	Pulse	0.50	3
Zn			1	0.172	ug/l	16.70	2,696.86	5.544E-03	Pulse	1.00	3
Cd			1	0.004	ug/l	49.73	34.00	6.987E-05	Pulse	0.50	3
Al			1	32.153	ug/l	1.91	8,886.98	2.412E-02	Pulse	1.00	3
Se			1	-0.003	ug/l	-440.43	20.67	7.297E-04	Pulse	3.00	3
Sb			1	0.016	ug/l	9.63	379.34	7.799E-04	Pulse	1.00	3
Se			1	-0.124	ug/l	-47.11	22.78	8.025E-04	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,467,461.33	0.20	98.0	Analog	0.50	3
1	Sc		368,476.67	0.43	88.1	Pulse	0.30	3
1	Ge		316,853.52	0.88	91.0	Pulse	0.30	3
1	In		3,318,276.33	0.67	92.4	Pulse	0.30	3
1	Tb		15,021,125.00	1.19	97.3	Analog	0.50	3
1	Lu		8,791,899.00	0.43	97.1	Analog	0.50	3
1	Ge		486,434.57	0.45	91.5	Pulse	0.30	3
1	Te		28,335.24	1.26	93.2	Pulse	0.50	3
1	Li		2,870.22	3.85	84.9	Pulse	0.30	3

Quantitation Report

File Name	020_MB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:17
Sample Name	MP33699-MB1
Sample Type	MB
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.176	ug/l	3.80	2,652.86	9.358E-03	Pulse	0.50	3
As			1	0.075	ug/l	20.95	88.00	3.104E-04	Pulse	1.00	3
Mo			1	0.166	ug/l	6.63	1,134.70	2.605E-03	Pulse	0.50	3
Pb			1	0.056	ug/l	7.57	5,774.32	5.254E-04	Pulse	1.00	3
Be			1	0.017	ug/l	195.79	1.17	3.427E-06	Pulse	2.00	3
Ag			1	0.040	ug/l	6.36	1,093.37	2.510E-03	Pulse	0.50	3
Ba			1	0.053	ug/l	18.34	146.00	4.752E-05	Pulse	0.50	3
Tl			1	0.032	ug/l	15.77	2,357.51	2.147E-04	Pulse	0.50	3
Sn			1	0.725	ug/l	14.33	5,010.99	1.630E-03	Pulse	0.30	3
Sr			1	0.116	ug/l	15.55	1,673.41	5.446E-04	Pulse	0.50	3
[Pb]			1	0.048	ug/l	2.64	2,562.87	2.332E-04	Pulse	0.50	3
Ca			1	59.934	ug/l	1.22	1,305.38	3.832E-03	Pulse	0.50	3
Ti			1	0.226	ug/l	8.99	36.67	1.077E-04	Pulse	0.50	3
Na			1	17.541	ug/l	2.91	26,898.98	7.897E-02	Pulse	1.00	3
Mg			1	10.834	ug/l	5.61	5,157.34	1.514E-02	Pulse	1.00	3
K			1	3.895	ug/l	4.54	11,846.88	3.478E-02	Pulse	1.00	3
V			1	0.142	ug/l	16.15	1,506.73	4.424E-03	Pulse	0.50	3
Mn			1	-0.083	ug/l	-3.69	903.36	3.187E-03	Pulse	0.50	3
Fe			1	3.574	ug/l	10.66	61,267.65	2.161E-01	Pulse	0.50	3
Co			1	0.014	ug/l	7.30	291.33	1.028E-03	Pulse	0.50	3
Ni			1	-0.039	ug/l	-12.55	894.02	3.154E-03	Pulse	0.50	3
Cu			1	0.339	ug/l	1.43	18,740.45	6.611E-02	Pulse	0.50	3
Zn			1	1.718	ug/l	0.50	4,609.22	1.058E-02	Pulse	1.00	3
Cd			1	0.011	ug/l	27.16	37.33	8.572E-05	Pulse	0.50	3
Al			1	9.301	ug/l	8.84	1,480.06	4.345E-03	Pulse	1.00	3
Se			1	-0.003	ug/l	-1869.91	15.11	7.368E-04	Pulse	3.00	3
Sb			1	0.111	ug/l	8.87	814.02	1.869E-03	Pulse	1.00	3
Se			1	0.175	ug/l	58.41	28.44	1.388E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,992,239.67	1.35	94.0	Analog	0.50	3
1	Sc		340,637.19	0.41	81.4	Pulse	0.30	3
1	Ge		283,485.89	0.27	81.4	Pulse	0.30	3
1	In		3,072,474.46	0.67	85.6	Pulse	0.30	3
1	Tb		14,523,809.00	0.91	94.0	Analog	0.50	3
1	Lu		8,535,648.67	0.75	94.3	Analog	0.50	3
1	Ge		435,544.39	0.25	81.9	Pulse	0.30	3
1	Te		20,501.49	0.32	67.4	Pulse	0.50	3
1	Li		2,657.97	5.90	78.7	Pulse	0.30	3

Quantitation Report

File Name 021_BSP.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 11:21
Sample Name MP33699-B1
Sample Type BSP
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	213.493	ug/l	2.06	1,918,930.08	6.975E+00	Pulse	0.50	3
As			1	194.507	ug/l	0.67	176,385.00	6.411E-01	Pulse	1.00	3
Mo			1	215.766	ug/l	0.85	1,407,640.96	3.343E+00	Pulse	0.50	3
Pb			1	207.209	ug/l	0.62	8,933,875.33	8.759E-01	Analog	1.00	3
Be			1	201.210	ug/l	0.81	12,004.20	3.493E-02	Pulse	2.00	3
Ag			1	102.933	ug/l	1.98	2,597,931.33	6.171E+00	Pulse	0.50	3
Ba			1	204.808	ug/l	0.67	469,840.92	1.574E-01	Pulse	0.50	3
Tl			1	199.024	ug/l	0.70	12,828,888.33	1.258E+00	Analog	0.50	3
Sn			1	205.215	ug/l	0.86	1,143,609.16	3.831E-01	Pulse	0.30	3
Sr			1	199.153	ug/l	0.67	898,307.67	3.009E-01	Pulse	0.50	3
[Pb]			1	193.454	ug/l	0.89	3,890,813.75	3.815E-01	Pulse	0.50	3
Ca			1	18807.732	ug/l	0.79	363,043.55	1.057E+00	Pulse	0.50	3
Ti			1	201.269	ug/l	0.85	32,001.41	9.313E-02	Pulse	0.50	3
Na			1	19272.779	ug/l	1.22	20,229,090.00	5.887E+01	Analog	1.00	3
Mg			1	19348.830	ug/l	1.07	8,755,250.67	2.548E+01	Analog	1.00	3
K			1	18871.136	ug/l	1.39	6,374,324.50	1.855E+01	Analog	1.00	3
V			1	204.500	ug/l	1.39	1,374,821.37	4.001E+00	Pulse	0.50	3
Mn			1	204.626	ug/l	1.37	795,305.69	2.891E+00	Pulse	0.50	3
Fe			1	20428.854	ug/l	1.04	144,914,282.67	5.267E+02	Analog	0.50	3
Co			1	212.738	ug/l	0.68	3,626,378.50	1.318E+01	Pulse	0.50	3
Ni			1	215.404	ug/l	0.71	1,006,061.17	3.657E+00	Pulse	0.50	3
Cu			1	212.550	ug/l	1.35	2,780,124.92	1.011E+01	Pulse	0.50	3
Zn			1	188.125	ug/l	0.87	292,122.07	6.938E-01	Pulse	1.00	3
Cd			1	207.363	ug/l	1.77	613,781.09	1.458E+00	Pulse	0.50	3
Al			1	17678.970	ug/l	0.88	2,184,129.08	6.356E+00	Pulse	1.00	3
Se			1	193.381	ug/l	0.90	10,375.92	5.290E-01	Pulse	3.00	3
Sb			1	202.464	ug/l	1.19	1,167,342.29	2.773E+00	Pulse	1.00	3
Se			1	196.083	ug/l	1.43	5,335.52	2.721E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,200,025.00	0.60	87.2	Analog	0.50	3
1	Sc		343,629.72	1.16	82.2	Pulse	0.30	3
1	Ge		275,151.58	1.32	79.0	Pulse	0.30	3
1	In		2,985,325.99	0.60	83.2	Pulse	0.30	3
1	Tb		14,302,387.67	0.60	92.6	Analog	0.50	3
1	Lu		8,523,012.67	1.13	94.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		421,071.13	1.15	79.2	Pulse	0.30	3
1	Te		19,613.85	1.46	64.5	Pulse	0.50	3
1	Li		2,561.29	2.06	75.8	Pulse	0.30	3

Quantitation Report

File Name	022SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:24
Sample Name	FA53625-18F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.297	ug/l	5.97	3,784.38	1.333E-02	Pulse	0.50	3
As			1	0.299	ug/l	11.09	298.00	1.050E-03	Pulse	1.00	3
Mo			1	1.031	ug/l	2.35	7,008.66	1.602E-02	Pulse	0.50	3
Pb			1	0.095	ug/l	8.77	7,281.56	6.907E-04	Pulse	1.00	3
Be			1	0.062	ug/l	28.50	3.83	1.114E-05	Pulse	2.00	3
Ag			1	0.020	ug/l	2.96	580.01	1.326E-03	Pulse	0.50	3
Ba			1	9.895	ug/l	3.40	23,062.69	7.610E-03	Pulse	0.50	3
Tl			1	0.060	ug/l	6.89	4,107.17	3.894E-04	Pulse	0.50	3
Sn			1	0.654	ug/l	5.06	4,536.19	1.497E-03	Pulse	0.30	3
Sr			1	159.575	ug/l	1.25	730,929.96	2.412E-01	Pulse	0.50	3
[Pb]			1	0.088	ug/l	5.75	3,295.00	3.125E-04	Pulse	0.50	3
Ca			1	35021.758	ug/l	0.77	677,653.12	1.967E+00	Pulse	0.50	3
Ti			1	0.261	ug/l	1.94	42.67	1.238E-04	Pulse	0.50	3
Na			1	12189.923	ug/l	0.13	12,832,167.00	3.725E+01	Analog	1.00	3
Mg			1	6753.886	ug/l	0.51	3,064,398.83	8.895E+00	Pulse	1.00	3
K			1	3743.154	ug/l	0.66	1,276,306.67	3.705E+00	Pulse	1.00	3
V			1	0.192	ug/l	3.38	1,864.76	5.412E-03	Pulse	0.50	3
Mn			1	1194.106	ug/l	1.12	4,781,738.17	1.685E+01	Pulse	0.50	3
Fe			1	277.514	ug/l	1.10	2,065,498.92	7.277E+00	Pulse	0.50	3
Co			1	4.607	ug/l	1.43	81,069.79	2.856E-01	Pulse	0.50	3
Ni			1	1.586	ug/l	0.95	8,717.32	3.071E-02	Pulse	0.50	3
Cu			1	0.281	ug/l	11.05	17,974.40	6.333E-02	Pulse	0.50	3
Zn			1	3.163	ug/l	2.18	6,947.26	1.588E-02	Pulse	1.00	3
Cd			1	0.125	ug/l	15.25	388.67	8.888E-04	Pulse	0.50	3
Al			1	11.027	ug/l	2.84	1,710.74	4.965E-03	Pulse	1.00	3
Se			1	0.046	ug/l	46.74	17.33	8.714E-04	Pulse	3.00	3
Sb			1	0.124	ug/l	3.39	895.02	2.045E-03	Pulse	1.00	3
Se			1	0.353	ug/l	58.91	32.44	1.633E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,545,374.00	0.68	90.2	Analog	0.50	3
1	Sc		344,513.58	0.86	82.4	Pulse	0.30	3
1	Ge		283,814.45	0.41	81.5	Pulse	0.30	3
1	In		3,030,566.76	0.61	84.4	Pulse	0.30	3
1	Tb		14,471,681.00	0.79	93.7	Analog	0.50	3
1	Lu		8,484,361.67	0.39	93.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		437,569.12	0.59	82.3	Pulse	0.30	3
1	Te		19,901.52	1.36	65.4	Pulse	0.50	3
1	Li		2,602.41	2.16	77.0	Pulse	0.30	3

Quantitation Report

File Name	023SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:28
Sample Name	MP33699-D1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.301	ug/l	6.98	3,848.40	1.344E-02	Pulse	0.50	3
As			1	0.282	ug/l	3.61	284.67	9.938E-04	Pulse	1.00	3
Mo			1	0.999	ug/l	5.76	6,843.93	1.551E-02	Pulse	0.50	3
Pb			1	0.075	ug/l	2.64	6,452.23	6.088E-04	Pulse	1.00	3
Be			1	0.031	ug/l	0.81	2.00	5.724E-06	Pulse	2.00	3
Ag			1	0.013	ug/l	10.76	398.68	9.032E-04	Pulse	0.50	3
Ba			1	9.438	ug/l	0.57	22,283.05	7.259E-03	Pulse	0.50	3
Tl			1	0.019	ug/l	18.72	1,404.06	1.325E-04	Pulse	0.50	3
Sn			1	0.519	ug/l	1.75	3,822.64	1.245E-03	Pulse	0.30	3
Sr			1	160.932	ug/l	0.82	746,668.87	2.432E-01	Pulse	0.50	3
[Pb]			1	0.071	ug/l	8.80	2,958.27	2.791E-04	Pulse	0.50	3
Ca			1	35718.922	ug/l	1.31	700,898.58	2.006E+00	Pulse	0.50	3
Ti			1	0.207	ug/l	29.99	34.67	9.913E-05	Pulse	0.50	3
Na			1	12287.893	ug/l	1.35	13,117,566.00	3.755E+01	Analog	1.00	3
Mg			1	6895.782	ug/l	1.32	3,172,892.00	9.082E+00	Pulse	1.00	3
K			1	3787.528	ug/l	1.32	1,309,515.13	3.748E+00	Pulse	1.00	3
V			1	0.174	ug/l	6.76	1,770.09	5.065E-03	Pulse	0.50	3
Mn			1	1219.601	ug/l	0.43	4,928,399.67	1.721E+01	Pulse	0.50	3
Fe			1	283.387	ug/l	1.04	2,127,650.67	7.429E+00	Pulse	0.50	3
Co			1	4.734	ug/l	1.25	84,049.03	2.935E-01	Pulse	0.50	3
Ni			1	1.586	ug/l	2.59	8,795.36	3.071E-02	Pulse	0.50	3
Cu			1	0.149	ug/l	5.31	16,354.94	5.710E-02	Pulse	0.50	3
Zn			1	2.526	ug/l	0.71	5,978.60	1.354E-02	Pulse	1.00	3
Cd			1	0.119	ug/l	6.82	371.34	8.417E-04	Pulse	0.50	3
Al			1	9.946	ug/l	8.42	1,598.74	4.577E-03	Pulse	1.00	3
Se			1	0.029	ug/l	147.20	16.56	8.249E-04	Pulse	3.00	3
Sb			1	0.080	ug/l	4.04	637.34	1.444E-03	Pulse	1.00	3
Se			1	0.586	ug/l	26.20	39.22	1.955E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,598,527.67	0.57	90.6	Analog	0.50	3
1	Sc		349,394.14	0.76	83.5	Pulse	0.30	3
1	Ge		286,415.33	0.80	82.3	Pulse	0.30	3
1	In		3,069,890.36	0.83	85.5	Pulse	0.30	3
1	Tb		14,611,236.67	0.44	94.6	Analog	0.50	3
1	Lu		8,600,660.33	1.18	95.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		441,391.40	1.16	83.0	Pulse	0.30	3
1	Te		20,089.04	2.43	66.1	Pulse	0.50	3
1	Li		2,867.99	2.91	84.9	Pulse	0.30	3

Quantitation Report

File Name	024SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:31
Sample Name	MP33699-SD1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.188	ug/l	16.35	1,538.73	4.847E-03	Pulse	0.50	3
As			1	0.283	ug/l	12.52	79.67	2.509E-04	Pulse	1.00	3
Mo			1	1.071	ug/l	2.29	1,629.41	3.355E-03	Pulse	0.50	3
Pb			1	0.245	ug/l	3.66	5,687.95	4.968E-04	Pulse	1.00	3
Be			1	0.117	ug/l	100.62	1.67	4.448E-06	Pulse	2.00	3
Ag			1	0.032	ug/l	10.56	248.00	5.106E-04	Pulse	0.50	3
Ba			1	9.609	ug/l	3.30	4,900.02	1.483E-03	Pulse	0.50	3
Tl			1	0.044	ug/l	18.71	767.35	6.706E-05	Pulse	0.50	3
Sn			1	0.479	ug/l	9.47	1,505.63	4.559E-04	Pulse	0.30	3
Sr			1	165.033	ug/l	0.55	165,744.16	5.018E-02	Pulse	0.50	3
[Pb]			1	0.220	ug/l	9.29	2,588.21	2.261E-04	Pulse	0.50	3
Ca			1	37039.275	ug/l	0.78	155,820.87	4.164E-01	Pulse	0.50	3
Ti			1	0.600	ug/l	41.73	22.00	5.877E-05	Pulse	0.50	3
Na			1	12626.972	ug/l	0.64	2,894,866.00	7.737E+00	Pulse	1.00	3
Mg			1	7260.325	ug/l	0.14	715,816.77	1.913E+00	Pulse	1.00	3
K			1	3978.644	ug/l	0.68	303,804.42	8.119E-01	Pulse	1.00	3
V			1	0.132	ug/l	42.63	811.35	2.168E-03	Pulse	0.50	3
Mn			1	1226.477	ug/l	0.94	1,099,814.21	3.464E+00	Pulse	0.50	3
Fe			1	288.975	ug/l	0.66	512,321.28	1.614E+00	Pulse	0.50	3
Co			1	4.769	ug/l	1.49	18,821.18	5.929E-02	Pulse	0.50	3
Ni			1	1.123	ug/l	4.51	2,420.16	7.623E-03	Pulse	0.50	3
Cu			1	2.167	ug/l	3.60	22,399.67	7.056E-02	Pulse	0.50	3
Zn			1	4.236	ug/l	2.03	3,589.01	7.390E-03	Pulse	1.00	3
Cd			1	0.163	ug/l	12.65	114.67	2.361E-04	Pulse	0.50	3
Al			1	71.093	ug/l	3.35	2,287.13	6.113E-03	Pulse	1.00	3
Se			1	-0.187	ug/l	-119.24	16.45	6.433E-04	Pulse	3.00	3
Sb			1	0.101	ug/l	13.41	306.00	6.301E-04	Pulse	1.00	3
Se			1	0.099	ug/l	198.82	30.00	1.173E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,447,643.33	0.44	97.9	Analog	0.50	3
1	Sc		374,175.79	0.28	89.5	Pulse	0.30	3
1	Ge		317,463.70	0.12	91.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,303,022.86	0.73	92.0	Pulse	0.30	3
1	Tb		15,015,612.33	0.44	97.2	Analog	0.50	3
1	Lu		8,771,007.67	0.22	96.9	Analog	0.50	3
1	Ge		485,656.00	0.09	91.3	Pulse	0.30	3
1	Te		25,583.89	0.81	84.1	Pulse	0.50	3
1	Li		2,939.12	2.16	87.0	Pulse	0.30	3

Quantitation Report

File Name 025SMPL.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 11:35
Sample Name MP33699-S1
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	216.217	ug/l	1.41	1,952,726.13	7.064E+00	Pulse	0.50	3
As			1	196.025	ug/l	1.17	178,595.36	6.461E-01	Pulse	1.00	3
Mo			1	218.940	ug/l	1.12	1,442,057.21	3.392E+00	Pulse	0.50	3
Pb			1	214.744	ug/l	1.20	9,028,508.33	9.077E-01	Analog	1.00	3
Be			1	205.341	ug/l	1.88	12,222.33	3.565E-02	Pulse	2.00	3
Ag			1	107.316	ug/l	1.72	2,734,682.17	6.433E+00	Pulse	0.50	3
Ba			1	218.096	ug/l	0.47	490,489.95	1.676E-01	Pulse	0.50	3
Tl			1	204.878	ug/l	0.81	12,878,290.00	1.295E+00	Analog	0.50	3
Sn			1	210.551	ug/l	0.79	1,150,252.59	3.930E-01	Pulse	0.30	3
Sr			1	370.232	ug/l	0.51	1,636,256.12	5.591E-01	Pulse	0.50	3
[Pb]			1	199.745	ug/l	0.77	3,917,486.58	3.939E-01	Pulse	0.50	3
Ca			1	54972.203	ug/l	1.35	1,058,429.08	3.087E+00	Pulse	0.50	3
Ti			1	207.944	ug/l	1.13	32,988.35	9.622E-02	Pulse	0.50	3
Na			1	32307.559	ug/l	0.87	33,830,638.67	9.868E+01	Analog	1.00	3
Mg			1	26767.191	ug/l	1.47	12,084,785.33	3.525E+01	Analog	1.00	3
K			1	23314.222	ug/l	0.62	7,855,654.00	2.291E+01	Analog	1.00	3
V			1	211.043	ug/l	1.45	1,415,673.87	4.129E+00	Pulse	0.50	3
Mn			1	1470.018	ug/l	1.13	5,733,068.67	2.074E+01	Analog	0.50	3
Fe			1	20955.262	ug/l	1.88	149,344,912.00	5.403E+02	Analog	0.50	3
Co			1	217.646	ug/l	1.17	3,727,465.17	1.348E+01	Pulse	0.50	3
Ni			1	217.461	ug/l	1.14	1,020,431.75	3.691E+00	Pulse	0.50	3
Cu			1	210.328	ug/l	1.54	2,764,209.83	1.000E+01	Pulse	0.50	3
Zn			1	185.980	ug/l	1.28	291,582.15	6.859E-01	Pulse	1.00	3
Cd			1	204.402	ug/l	1.83	610,837.10	1.437E+00	Pulse	0.50	3
Al			1	18067.556	ug/l	0.88	2,227,189.58	6.496E+00	Pulse	1.00	3
Se			1	203.664	ug/l	0.36	10,348.69	5.571E-01	Pulse	3.00	3
Sb			1	202.071	ug/l	1.53	1,176,270.75	2.767E+00	Pulse	1.00	3
Se			1	203.612	ug/l	1.37	5,246.95	2.825E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,946,476.33	0.30	85.0	Analog	0.50	3
1	Sc		342,866.84	1.02	82.0	Pulse	0.30	3
1	Ge		276,442.63	0.74	79.4	Pulse	0.30	3
1	In		2,926,667.94	0.45	81.5	Pulse	0.30	3
1	Tb		14,230,729.33	0.43	92.1	Analog	0.50	3
1	Lu		8,444,354.67	0.72	93.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		425,113.66	0.86	79.9	Pulse	0.30	3
1	Te		18,575.44	0.51	61.1	Pulse	0.50	3
1	Li		2,717.98	5.61	80.4	Pulse	0.30	3

Quantitation Report

File Name	026SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:39
Sample Name	MP33699-S2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	206.832	ug/l	0.35	1,870,940.75	6.758E+00	Pulse	0.50	3
As			1	188.902	ug/l	0.67	172,372.50	6.226E-01	Pulse	1.00	3
Mo			1	210.300	ug/l	0.31	1,382,013.54	3.259E+00	Pulse	0.50	3
Pb			1	205.085	ug/l	0.94	8,670,492.00	8.669E-01	Analog	1.00	3
Be			1	197.170	ug/l	1.58	11,883.63	3.423E-02	Pulse	2.00	3
Ag			1	104.083	ug/l	0.27	2,646,388.17	6.240E+00	Pulse	0.50	3
Ba			1	207.823	ug/l	0.18	472,359.64	1.597E-01	Pulse	0.50	3
Tl			1	196.286	ug/l	1.29	12,406,562.67	1.240E+00	Analog	0.50	3
Sn			1	200.731	ug/l	0.31	1,108,312.08	3.747E-01	Pulse	0.30	3
Sr			1	354.575	ug/l	0.56	1,583,790.50	5.355E-01	Pulse	0.50	3
[Pb]			1	190.287	ug/l	1.02	3,752,799.17	3.752E-01	Pulse	0.50	3
Ca			1	53055.831	ug/l	0.34	1,034,374.04	2.980E+00	Pulse	0.50	3
Ti			1	198.382	ug/l	2.98	31,863.89	9.179E-02	Pulse	0.50	3
Na			1	30912.926	ug/l	0.58	32,775,242.00	9.442E+01	Analog	1.00	3
Mg			1	25540.542	ug/l	0.91	11,675,396.67	3.363E+01	Analog	1.00	3
K			1	22200.673	ug/l	0.87	7,574,234.67	2.182E+01	Analog	1.00	3
V			1	199.843	ug/l	0.72	1,357,355.87	3.910E+00	Pulse	0.50	3
Mn			1	1436.656	ug/l	0.89	5,611,592.83	2.027E+01	Analog	0.50	3
Fe			1	20109.792	ug/l	0.98	143,544,933.33	5.185E+02	Analog	0.50	3
Co			1	209.544	ug/l	1.11	3,594,162.00	1.298E+01	Pulse	0.50	3
Ni			1	208.339	ug/l	1.55	979,143.38	3.537E+00	Pulse	0.50	3
Cu			1	203.307	ug/l	0.29	2,676,617.67	9.668E+00	Pulse	0.50	3
Zn			1	179.175	ug/l	0.61	280,345.79	6.610E-01	Pulse	1.00	3
Cd			1	198.660	ug/l	0.76	592,356.08	1.397E+00	Pulse	0.50	3
Al			1	17166.309	ug/l	0.60	2,142,600.67	6.172E+00	Pulse	1.00	3
Se			1	193.354	ug/l	1.25	9,891.89	5.290E-01	Pulse	3.00	3
Sb			1	194.029	ug/l	0.43	1,126,923.25	2.657E+00	Pulse	1.00	3
Se			1	197.946	ug/l	1.83	5,135.70	2.746E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,001,999.33	0.66	85.5	Analog	0.50	3
1	Sc		347,141.72	0.74	83.0	Pulse	0.30	3
1	Ge		276,860.60	0.58	79.5	Pulse	0.30	3
1	In		2,957,749.61	0.36	82.4	Pulse	0.30	3
1	Tb		14,310,083.33	0.42	92.7	Analog	0.50	3
1	Lu		8,473,638.67	0.76	93.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		424,124.30	0.08	79.7	Pulse	0.30	3
1	Te		18,702.24	0.96	61.5	Pulse	0.50	3
1	Li		2,515.73	2.04	74.4	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:42
Sample Name	MP33699-PS1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	20.785	ug/l	1.27	194,876.22	6.824E-01	Pulse	0.50	3
As			1	19.212	ug/l	0.73	18,100.88	6.338E-02	Pulse	1.00	3
Mo			1	21.487	ug/l	0.14	146,413.33	3.330E-01	Pulse	0.50	3
Pb			1	19.482	ug/l	0.52	869,349.48	8.261E-02	Pulse	1.00	3
Be			1	19.817	ug/l	1.03	1,205.04	3.441E-03	Pulse	2.00	3
Ag			1	4.248	ug/l	1.14	112,046.65	2.548E-01	Pulse	0.50	3
Ba			1	29.884	ug/l	0.55	69,698.66	2.297E-02	Pulse	0.50	3
Tl			1	18.691	ug/l	0.75	1,243,042.54	1.181E-01	Pulse	0.50	3
Sn			1	21.134	ug/l	1.77	120,455.80	3.970E-02	Pulse	0.30	3
Sr			1	183.353	ug/l	1.06	840,686.23	2.771E-01	Pulse	0.50	3
[Pb]			1	18.900	ug/l	0.85	393,474.64	3.739E-02	Pulse	0.50	3
Ca			1	37928.589	ug/l	0.68	746,030.42	2.130E+00	Pulse	0.50	3
Ti			1	20.913	ug/l	1.67	3,389.64	9.680E-03	Pulse	0.50	3
Na			1	14421.176	ug/l	1.49	15,428,979.00	4.406E+01	Analog	1.00	3
Mg			1	8827.156	ug/l	1.68	4,070,800.92	1.163E+01	Pulse	1.00	3
K			1	5709.767	ug/l	0.80	1,973,301.46	5.635E+00	Pulse	1.00	3
V			1	20.426	ug/l	1.02	140,481.60	4.012E-01	Pulse	0.50	3
Mn			1	1251.578	ug/l	0.11	5,043,181.00	1.766E+01	Pulse	0.50	3
Fe			1	2327.432	ug/l	1.13	17,169,353.33	6.012E+01	Analog	0.50	3
Co			1	25.154	ug/l	0.11	445,122.79	1.559E+00	Pulse	0.50	3
Ni			1	22.286	ug/l	0.44	109,020.42	3.817E-01	Pulse	0.50	3
Cu			1	21.359	ug/l	0.92	302,865.80	1.060E+00	Pulse	0.50	3
Zn			1	21.440	ug/l	0.97	36,438.57	8.287E-02	Pulse	1.00	3
Cd			1	19.161	ug/l	0.76	59,234.90	1.347E-01	Pulse	0.50	3
Al			1	1798.296	ug/l	1.16	226,739.05	6.475E-01	Pulse	1.00	3
Se			1	18.949	ug/l	4.38	1,045.47	5.251E-02	Pulse	3.00	3
Sb			1	18.276	ug/l	0.48	110,191.00	2.506E-01	Pulse	1.00	3
Se			1	19.624	ug/l	2.88	562.68	2.826E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,522,986.33	0.78	90.0	Analog	0.50	3
1	Sc		350,221.84	1.24	83.7	Pulse	0.30	3
1	Ge		285,593.75	0.09	82.0	Pulse	0.30	3
1	In		3,034,337.31	0.90	84.5	Pulse	0.30	3
1	Tb		14,554,626.67	0.74	94.2	Analog	0.50	3
1	Lu		8,589,397.33	0.25	94.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		439,716.63	0.39	82.7	Pulse	0.30	3
1	Te		19,911.52	0.97	65.5	Pulse	0.50	3
1	Li		2,747.98	1.78	81.3	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:46
Sample Name	FA53625-10F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	12.119	ug/l	0.89	114,931.87	3.994E-01	Pulse	0.50	3
As			1	0.094	ug/l	19.77	107.33	3.730E-04	Pulse	1.00	3
Mo			1	1.379	ug/l	2.27	9,428.40	2.141E-02	Pulse	0.50	3
Pb			1	0.077	ug/l	10.59	6,486.11	6.137E-04	Pulse	1.00	3
Be			1	0.042	ug/l	40.97	2.67	7.613E-06	Pulse	2.00	3
Ag			1	0.014	ug/l	11.31	437.34	9.932E-04	Pulse	0.50	3
Ba			1	13.825	ug/l	1.57	32,436.32	1.063E-02	Pulse	0.50	3
Tl			1	0.024	ug/l	7.42	1,751.43	1.657E-04	Pulse	0.50	3
Sn			1	0.559	ug/l	7.28	4,027.14	1.320E-03	Pulse	0.30	3
Sr			1	126.876	ug/l	1.09	585,407.90	1.918E-01	Pulse	0.50	3
[Pb]			1	0.072	ug/l	6.84	2,970.94	2.811E-04	Pulse	0.50	3
Ca			1	34371.210	ug/l	0.61	676,018.96	1.930E+00	Pulse	0.50	3
Ti			1	0.137	ug/l	31.88	23.33	6.668E-05	Pulse	0.50	3
Na			1	15847.961	ug/l	1.31	16,954,130.00	4.842E+01	Analog	1.00	3
Mg			1	7510.730	ug/l	1.04	3,463,728.17	9.892E+00	Pulse	1.00	3
K			1	2847.651	ug/l	0.67	989,521.79	2.826E+00	Pulse	1.00	3
V			1	0.240	ug/l	5.76	2,221.47	6.345E-03	Pulse	0.50	3
Mn			1	22.948	ug/l	0.92	94,410.22	3.281E-01	Pulse	0.50	3
Fe			1	60.874	ug/l	2.01	487,284.22	1.693E+00	Pulse	0.50	3
Co			1	1.847	ug/l	0.37	32,990.71	1.146E-01	Pulse	0.50	3
Ni			1	92.265	ug/l	0.62	451,379.10	1.568E+00	Pulse	0.50	3
Cu			1	2.264	ug/l	0.66	45,226.04	1.572E-01	Pulse	0.50	3
Zn			1	5.152	ug/l	2.36	10,202.37	2.317E-02	Pulse	1.00	3
Cd			1	0.092	ug/l	12.23	288.67	6.555E-04	Pulse	0.50	3
Al			1	8.544	ug/l	4.23	1,426.39	4.073E-03	Pulse	1.00	3
Se			1	0.198	ug/l	48.59	25.56	1.286E-03	Pulse	3.00	3
Sb			1	0.096	ug/l	14.02	733.02	1.665E-03	Pulse	1.00	3
Se			1	0.459	ug/l	31.07	35.33	1.779E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,571,508.00	0.63	90.4	Analog	0.50	3
1	Sc		350,189.50	0.76	83.7	Pulse	0.30	3
1	Ge		287,788.34	0.11	82.7	Pulse	0.30	3
1	In		3,051,685.16	0.74	85.0	Pulse	0.30	3
1	Tb		14,617,996.33	1.01	94.6	Analog	0.50	3
1	Lu		8,630,830.33	0.57	95.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		440,342.74	0.30	82.8	Pulse	0.30	3
1	Te		19,852.77	0.88	65.3	Pulse	0.50	3
1	Li		2,861.33	1.25	84.7	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:50
Sample Name	FA53625-11F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	15.324	ug/l	0.79	136,201.89	5.040E-01	Pulse	0.50	3
As			1	0.569	ug/l	8.16	524.34	1.940E-03	Pulse	1.00	3
Mo			1	15.125	ug/l	0.98	96,037.06	2.344E-01	Pulse	0.50	3
Pb			1	1.244	ug/l	0.99	46,209.10	5.545E-03	Pulse	1.00	3
Be			1	0.018	ug/l	106.28	1.33	3.582E-06	Pulse	2.00	3
Ag			1	0.017	ug/l	12.87	459.34	1.121E-03	Pulse	0.50	3
Ba			1	1523.847	ug/l	0.43	3,357,964.83	1.171E+00	Pulse	0.50	3
Tl			1	0.022	ug/l	13.65	1,272.05	1.526E-04	Pulse	0.50	3
Sn			1	0.579	ug/l	2.92	3,890.44	1.356E-03	Pulse	0.30	3
Sr			1	39947.114	ug/l	1.35	172,876,469.33	6.029E+01	Analog	0.50	3
[Pb]			1	1.230	ug/l	1.63	21,366.00	2.564E-03	Pulse	0.50	3
Ca			1	583155.343	ug/l	0.66	12,306,266.33	3.275E+01	Analog	0.50	3
Ti			1	0.668	ug/l	31.76	117.33	3.123E-04	Pulse	0.50	3
Na			1	259711.099	ug/l	0.55	298,046,176.00	7.930E+02	Analog	1.00	3
Mg			1	40.352	ug/l	2.18	20,295.25	5.401E-02	Pulse	1.00	3
K			1	556693.395	ug/l	0.48	205,345,312.00	5.464E+02	Analog	1.00	3
V			1	4.815	ug/l	0.76	36,013.16	9.583E-02	Pulse	0.50	3
Mn			1	1.605	ug/l	0.63	7,295.39	2.700E-02	Pulse	0.50	3
Fe			1	98.249	ug/l	2.01	717,885.62	2.657E+00	Pulse	0.50	3
Co			1	12.205	ug/l	0.27	204,390.51	7.564E-01	Pulse	0.50	3
Ni			1	9.113	ug/l	1.29	42,793.78	1.584E-01	Pulse	0.50	3
Cu			1	14.154	ug/l	0.10	194,468.31	7.196E-01	Pulse	0.50	3
Zn			1	6.027	ug/l	2.25	10,806.36	2.637E-02	Pulse	1.00	3
Cd			1	7.906	ug/l	0.68	22,778.02	5.559E-02	Pulse	0.50	3
Al			1	5144.146	ug/l	0.69	695,357.29	1.850E+00	Pulse	1.00	3
Se			1	0.796	ug/l	9.99	49.78	2.919E-03	Pulse	3.00	3
Sb			1	0.113	ug/l	3.96	777.35	1.897E-03	Pulse	1.00	3
Se			1	1.953	ug/l	18.60	65.56	3.844E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,333,657.67	0.53	71.3	Analog	0.50	3
1	Sc		375,836.57	1.54	89.9	Pulse	0.30	3
1	Ge		270,230.39	0.71	77.6	Pulse	0.30	3
1	In		2,867,762.46	0.74	79.9	Pulse	0.30	3
1	Tb		13,302,524.00	0.41	86.1	Analog	0.50	3
1	Lu		8,013,995.17	0.75	88.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		409,750.54	1.07	77.0	Pulse	0.30	3
1	Te		17,061.99	1.18	56.1	Pulse	0.50	3
1	Li		3,430.32	4.29	101.5	Pulse	0.30	3

Quantitation Report

File Name	030CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:53
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.221	ug/l	1.21	1,016,297.69	3.218E+00	Pulse	0.50	3
As			1	50.013	ug/l	0.87	104,120.49	3.297E-01	Pulse	1.00	3
Mo			1	49.441	ug/l	1.50	740,844.63	1.532E+00	Pulse	0.50	3
Pb			1	47.335	ug/l	0.55	4,465,471.67	4.003E-01	Pulse	1.00	3
Be			1	52.336	ug/l	2.53	6,851.82	1.817E-02	Pulse	2.00	3
Ag			1	50.353	ug/l	0.41	2,919,310.08	6.037E+00	Pulse	0.50	3
Ba			1	49.550	ug/l	1.33	248,979.26	7.616E-02	Pulse	0.50	3
Tl			1	48.496	ug/l	0.60	6,837,479.83	6.130E-01	Analog	0.50	3
Sn			1	49.762	ug/l	0.95	607,845.18	1.859E-01	Pulse	0.30	3
Sr			1	49.152	ug/l	1.23	486,211.38	1.487E-01	Pulse	0.50	3
[Pb]			1	47.509	ug/l	1.16	2,090,772.84	1.874E-01	Pulse	0.50	3
Ca			1	4972.168	ug/l	1.14	210,730.81	5.589E-01	Pulse	0.50	3
Ti			1	49.283	ug/l	1.63	17,197.57	4.561E-02	Pulse	0.50	3
Na			1	5039.193	ug/l	2.05	11,612,452.67	3.080E+01	Analog	1.00	3
Mg			1	5065.248	ug/l	1.45	5,030,454.33	1.334E+01	Analog	1.00	3
K			1	4951.043	ug/l	1.76	3,675,924.17	9.749E+00	Pulse	1.00	3
V			1	49.795	ug/l	1.40	735,053.33	1.949E+00	Pulse	0.50	3
Mn			1	49.048	ug/l	0.59	438,367.44	1.388E+00	Pulse	0.50	3
Fe			1	5069.278	ug/l	1.28	82,566,408.00	2.615E+02	Analog	0.50	3
Co			1	49.682	ug/l	1.08	1,944,078.67	6.156E+00	Pulse	0.50	3
Ni			1	51.112	ug/l	1.42	548,608.42	1.737E+00	Pulse	0.50	3
Cu			1	51.297	ug/l	1.70	1,548,389.67	4.903E+00	Pulse	0.50	3
Zn			1	51.631	ug/l	0.54	185,092.22	3.828E-01	Pulse	1.00	3
Cd			1	50.965	ug/l	0.66	346,519.17	7.166E-01	Pulse	0.50	3
Al			1	4852.774	ug/l	1.37	1,315,976.54	3.490E+00	Pulse	1.00	3
Se			1	47.340	ug/l	1.45	6,946.04	2.594E-01	Pulse	3.00	3
Sb			1	49.612	ug/l	0.23	657,138.38	1.359E+00	Pulse	1.00	3
Se			1	46.979	ug/l	1.71	3,506.88	1.310E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,154,596.33	0.28	95.4	Analog	0.50	3
1	Sc		377,110.22	1.50	90.2	Pulse	0.30	3
1	Ge		315,812.18	1.14	90.7	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,269,367.51	0.43	91.1	Pulse	0.30	3
1	Tb		15,041,062.67	0.96	97.4	Analog	0.50	3
1	Lu		8,854,561.67	0.55	97.8	Analog	0.50	3
1	Ge		483,564.83	0.64	90.9	Pulse	0.30	3
1	Te		26,780.91	1.28	88.1	Pulse	0.50	3
1	Li		2,905.78	4.94	86.0	Pulse	0.30	3

Quantitation Report

File Name	031_CCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:57
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	99.585	ug/l	1.50	2,051,417.91	6.508E+00	Pulse	0.50	3
As			1	100.837	ug/l	1.65	209,534.46	6.647E-01	Pulse	1.00	3
Mo			1	98.598	ug/l	0.53	1,487,337.92	3.055E+00	Pulse	0.50	3
Pb			1	98.954	ug/l	0.93	9,078,704.33	8.366E-01	Analog	1.00	3
Be			1	101.497	ug/l	1.67	13,575.18	3.524E-02	Pulse	2.00	3
Ag			1	97.891	ug/l	0.35	5,713,227.17	1.174E+01	Pulse	0.50	3
Ba			1	99.257	ug/l	0.49	494,678.09	1.525E-01	Pulse	0.50	3
Tl			1	98.067	ug/l	1.64	13,450,618.00	1.240E+00	Analog	0.50	3
Sn			1	100.416	ug/l	0.15	1,215,736.13	3.749E-01	Pulse	0.30	3
Sr			1	99.716	ug/l	0.29	977,159.10	3.013E-01	Pulse	0.50	3
[Pb]			1	95.260	ug/l	0.58	4,077,024.92	3.757E-01	Pulse	0.50	3
Ca			1	9821.912	ug/l	1.47	425,065.01	1.104E+00	Pulse	0.50	3
Ti			1	99.610	ug/l	0.95	35,509.41	9.218E-02	Pulse	0.50	3
Na			1	9986.261	ug/l	1.18	23,500,939.33	6.101E+01	Analog	1.00	3
Mg			1	9985.333	ug/l	1.41	10,130,227.33	2.630E+01	Analog	1.00	3
K			1	10021.146	ug/l	1.63	7,588,547.67	1.970E+01	Analog	1.00	3
V			1	98.878	ug/l	1.53	1,490,417.63	3.869E+00	Pulse	0.50	3
Mn			1	99.127	ug/l	2.12	882,864.04	2.801E+00	Pulse	0.50	3
Fe			1	10201.444	ug/l	2.23	165,817,664.00	5.260E+02	Analog	0.50	3
Co			1	99.254	ug/l	1.88	3,876,809.42	1.230E+01	Pulse	0.50	3
Ni			1	101.414	ug/l	1.97	1,085,423.87	3.443E+00	Pulse	0.50	3
Cu			1	101.628	ug/l	1.71	3,046,847.58	9.665E+00	Pulse	0.50	3
Zn			1	100.752	ug/l	0.36	361,602.52	7.428E-01	Pulse	1.00	3
Cd			1	99.792	ug/l	0.45	683,026.46	1.403E+00	Pulse	0.50	3
Al			1	9735.899	ug/l	1.34	2,696,687.50	7.001E+00	Pulse	1.00	3
Se			1	96.382	ug/l	1.22	13,779.51	5.273E-01	Pulse	3.00	3
Sb			1	98.155	ug/l	0.18	1,308,625.83	2.688E+00	Pulse	1.00	3
Se			1	97.788	ug/l	1.02	7,090.65	2.714E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,852,902.00	1.17	92.8	Analog	0.50	3
1	Sc		385,228.62	1.23	92.1	Pulse	0.30	3
1	Ge		315,286.44	1.62	90.6	Pulse	0.30	3
1	In		3,242,789.04	0.57	90.3	Pulse	0.30	3
1	Tb		15,026,910.67	0.65	97.3	Analog	0.50	3
1	Lu		8,854,254.33	1.02	97.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		486,786.70	0.49	91.5	Pulse	0.30	3
1	Te		26,133.32	1.78	85.9	Pulse	0.50	3
1	Li		2,962.46	2.53	87.7	Pulse	0.30	3

Quantitation Report

File Name	032_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:01
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.671	ug/l	1.97	15,268.01	4.746E-02	Pulse	0.50	3
As			1	0.004	ug/l	36.79	29.33	9.122E-05	Pulse	1.00	3
Mo			1	0.034	ug/l	12.66	542.68	1.094E-03	Pulse	0.50	3
Pb			1	0.006	ug/l	28.16	3,973.13	3.427E-04	Pulse	1.00	3
Be			1	0.011	ug/l	50.09	1.67	4.375E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	14.00	644.68	1.301E-03	Pulse	0.50	3
Ba			1	0.014	ug/l	25.02	94.00	2.816E-05	Pulse	0.50	3
Tl			1	0.030	ug/l	12.61	4,546.63	3.922E-04	Pulse	0.50	3
Sn			1	0.030	ug/l	11.93	1,301.16	3.899E-04	Pulse	0.30	3
Sr			1	0.055	ug/l	1.79	1,784.76	5.348E-04	Pulse	0.50	3
[Pb]			1	0.007	ug/l	21.29	1,942.79	1.676E-04	Pulse	0.50	3
Ca			1	3.315	ug/l	8.92	319.33	8.390E-04	Pulse	0.50	3
Ti			1	0.023	ug/l	61.88	9.33	2.450E-05	Pulse	0.50	3
Na			1	4.320	ug/l	2.66	19,711.67	5.178E-02	Pulse	1.00	3
Mg			1	1.935	ug/l	1.16	2,271.80	5.968E-03	Pulse	1.00	3
K			1	3.377	ug/l	3.76	14,306.17	3.758E-02	Pulse	1.00	3
V			1	-0.009	ug/l	-26.51	488.01	1.282E-03	Pulse	0.50	3
Mn			1	1.021	ug/l	1.84	10,663.62	3.315E-02	Pulse	0.50	3
Fe			1	2.412	ug/l	7.18	79,883.85	2.484E-01	Pulse	0.50	3
Co			1	0.009	ug/l	10.60	434.68	1.352E-03	Pulse	0.50	3
Ni			1	0.195	ug/l	7.39	3,356.31	1.043E-02	Pulse	0.50	3
Cu			1	-0.007	ug/l	-55.91	15,902.57	4.943E-02	Pulse	0.50	3
Zn			1	0.206	ug/l	10.72	2,872.88	5.794E-03	Pulse	1.00	3
Cd			1	0.007	ug/l	27.31	52.67	1.062E-04	Pulse	0.50	3
Al			1	32.094	ug/l	0.44	9,164.44	2.408E-02	Pulse	1.00	3
Se			1	0.006	ug/l	126.78	22.22	7.785E-04	Pulse	3.00	3
Sb			1	0.015	ug/l	15.50	382.34	7.712E-04	Pulse	1.00	3
Se			1	-0.021	ug/l	-405.55	31.00	1.088E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,592,498.00	0.23	99.1	Analog	0.50	3
1	Sc		380,645.32	0.27	91.0	Pulse	0.30	3
1	Ge		321,698.19	0.86	92.4	Pulse	0.30	3
1	In		3,337,036.54	0.24	92.9	Pulse	0.30	3
1	Tb		15,193,808.33	0.10	98.4	Analog	0.50	3
1	Lu		8,780,863.33	0.59	97.0	Analog	0.50	3
1	Ge		495,844.96	0.36	93.2	Pulse	0.30	3
1	Te		28,539.56	1.12	93.9	Pulse	0.50	3
1	Li		3,113.59	6.63	92.1	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:04
Sample Name	FA53625-12F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	19.398	ug/l	0.70	180,632.22	6.371E-01	Pulse	0.50	3
As			1	0.099	ug/l	5.85	110.67	3.903E-04	Pulse	1.00	3
Mo			1	0.543	ug/l	1.35	3,696.38	8.444E-03	Pulse	0.50	3
Pb			1	0.059	ug/l	7.40	5,678.62	5.404E-04	Pulse	1.00	3
Be			1	0.042	ug/l	60.36	2.67	7.673E-06	Pulse	2.00	3
Ag			1	0.025	ug/l	11.90	714.68	1.633E-03	Pulse	0.50	3
Ba			1	10.954	ug/l	1.99	25,558.03	8.424E-03	Pulse	0.50	3
Tl			1	0.032	ug/l	12.53	2,273.50	2.164E-04	Pulse	0.50	3
Sn			1	0.667	ug/l	10.33	4,616.17	1.522E-03	Pulse	0.30	3
Sr			1	90.095	ug/l	1.18	413,655.64	1.363E-01	Pulse	0.50	3
[Pb]			1	0.064	ug/l	12.52	2,786.90	2.652E-04	Pulse	0.50	3
Ca			1	23679.067	ug/l	1.16	462,079.94	1.330E+00	Pulse	0.50	3
Ti			1	0.503	ug/l	39.00	82.00	2.361E-04	Pulse	0.50	3
Na			1	26227.253	ug/l	0.71	27,830,496.67	8.011E+01	Analog	1.00	3
Mg			1	7120.146	ug/l	0.67	3,257,681.50	9.377E+00	Pulse	1.00	3
K			1	2218.638	ug/l	0.37	767,221.90	2.208E+00	Pulse	1.00	3
V			1	0.259	ug/l	0.07	2,330.82	6.709E-03	Pulse	0.50	3
Mn			1	19.363	ug/l	1.67	78,677.38	2.775E-01	Pulse	0.50	3
Fe			1	158.933	ug/l	1.40	1,196,765.91	4.221E+00	Pulse	0.50	3
Co			1	0.771	ug/l	3.86	13,594.80	4.795E-02	Pulse	0.50	3
Ni			1	22.337	ug/l	0.90	108,480.85	3.826E-01	Pulse	0.50	3
Cu			1	1.784	ug/l	1.37	38,115.51	1.344E-01	Pulse	0.50	3
Zn			1	4.158	ug/l	0.91	8,546.90	1.953E-02	Pulse	1.00	3
Cd			1	0.049	ug/l	15.52	152.67	3.488E-04	Pulse	0.50	3
Al			1	27.370	ug/l	3.42	3,766.03	1.084E-02	Pulse	1.00	3
Se			1	0.280	ug/l	20.71	29.56	1.510E-03	Pulse	3.00	3
Sb			1	0.101	ug/l	10.25	757.02	1.729E-03	Pulse	1.00	3
Se			1	0.818	ug/l	13.43	44.56	2.276E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,509,303.33	0.47	89.9	Analog	0.50	3
1	Sc		347,406.63	0.14	83.1	Pulse	0.30	3
1	Ge		283,546.38	0.48	81.4	Pulse	0.30	3
1	In		3,034,335.36	0.84	84.5	Pulse	0.30	3
1	Tb		14,535,509.00	0.67	94.1	Analog	0.50	3
1	Lu		8,546,083.00	0.84	94.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		437,736.18	0.04	82.3	Pulse	0.30	3
1	Te		19,574.47	0.31	64.4	Pulse	0.50	3
1	Li		2,830.21	5.11	83.8	Pulse	0.30	3

Quantitation Report

File Name	034SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:08
Sample Name	FA53625-13F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.812	ug/l	2.37	27,253.72	9.544E-02	Pulse	0.50	3
As			1	0.493	ug/l	7.11	482.68	1.690E-03	Pulse	1.00	3
Mo			1	0.590	ug/l	2.01	4,015.78	9.173E-03	Pulse	0.50	3
Pb			1	0.132	ug/l	3.30	8,910.00	8.486E-04	Pulse	1.00	3
Be			1	0.067	ug/l	40.47	4.17	1.194E-05	Pulse	2.00	3
Ag			1	0.014	ug/l	8.75	429.34	9.807E-04	Pulse	0.50	3
Ba			1	31.411	ug/l	0.42	73,419.31	2.414E-02	Pulse	0.50	3
Tl			1	0.105	ug/l	2.71	7,082.82	6.745E-04	Pulse	0.50	3
Sn			1	0.490	ug/l	5.37	3,620.39	1.191E-03	Pulse	0.30	3
Sr			1	60.415	ug/l	0.36	278,387.36	9.154E-02	Pulse	0.50	3
[Pb]			1	0.140	ug/l	1.02	4,363.24	4.155E-04	Pulse	0.50	3
Ca			1	27233.492	ug/l	0.95	534,374.08	1.530E+00	Pulse	0.50	3
Ti			1	1.564	ug/l	3.55	254.00	7.270E-04	Pulse	0.50	3
Na			1	29557.674	ug/l	1.33	31,537,276.67	9.028E+01	Analog	1.00	3
Mg			1	7198.186	ug/l	1.35	3,311,628.50	9.480E+00	Pulse	1.00	3
K			1	1637.926	ug/l	1.07	572,382.54	1.638E+00	Pulse	1.00	3
V			1	0.341	ug/l	2.73	2,904.89	8.316E-03	Pulse	0.50	3
Mn			1	1517.682	ug/l	0.78	6,114,790.33	2.141E+01	Analog	0.50	3
Fe			1	317.043	ug/l	0.68	2,369,270.58	8.296E+00	Pulse	0.50	3
Co			1	18.965	ug/l	0.51	335,599.38	1.175E+00	Pulse	0.50	3
Ni			1	6.807	ug/l	0.97	34,053.23	1.192E-01	Pulse	0.50	3
Cu			1	0.713	ug/l	3.70	23,933.49	8.381E-02	Pulse	0.50	3
Zn			1	6.355	ug/l	1.17	12,072.78	2.758E-02	Pulse	1.00	3
Cd			1	0.258	ug/l	4.86	798.69	1.824E-03	Pulse	0.50	3
Al			1	25.231	ug/l	1.72	3,518.32	1.007E-02	Pulse	1.00	3
Se			1	0.143	ug/l	36.29	22.56	1.136E-03	Pulse	3.00	3
Sb			1	0.079	ug/l	9.01	630.68	1.441E-03	Pulse	1.00	3
Se			1	0.665	ug/l	22.14	41.00	2.064E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,500,389.33	0.39	89.8	Analog	0.50	3
1	Sc		349,349.55	0.63	83.5	Pulse	0.30	3
1	Ge		285,578.96	0.22	82.0	Pulse	0.30	3
1	In		3,041,017.66	0.56	84.7	Pulse	0.30	3
1	Tb		14,649,330.33	0.66	94.8	Analog	0.50	3
1	Lu		8,646,638.67	0.38	95.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		437,787.24	0.09	82.3	Pulse	0.30	3
1	Te		19,869.48	0.95	65.3	Pulse	0.50	3
1	Li		2,859.11	5.22	84.6	Pulse	0.30	3

Quantitation Report

File Name 035SMPL.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 12:11
Sample Name FA53625-14F
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	8.888	ug/l	0.30	84,265.51	2.939E-01	Pulse	0.50	3
As			1	0.130	ug/l	0.98	141.33	4.929E-04	Pulse	1.00	3
Mo			1	1.464	ug/l	1.83	9,981.35	2.271E-02	Pulse	0.50	3
Pb			1	0.036	ug/l	2.98	4,597.96	4.405E-04	Pulse	1.00	3
Be			1	0.014	ug/l	115.72	1.00	2.831E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	8.78	298.00	6.782E-04	Pulse	0.50	3
Ba			1	17.052	ug/l	0.28	39,843.69	1.311E-02	Pulse	0.50	3
Tl			1	0.017	ug/l	13.92	1,257.39	1.204E-04	Pulse	0.50	3
Sn			1	0.484	ug/l	4.06	3,583.71	1.179E-03	Pulse	0.30	3
Sr			1	84.988	ug/l	1.18	390,934.41	1.286E-01	Pulse	0.50	3
[Pb]			1	0.032	ug/l	2.62	2,118.14	2.029E-04	Pulse	0.50	3
Ca			1	34250.797	ug/l	1.06	678,761.87	1.924E+00	Pulse	0.50	3
Ti			1	0.798	ug/l	13.23	131.33	3.724E-04	Pulse	0.50	3
Na			1	37635.657	ug/l	0.46	40,558,002.67	1.149E+02	Analog	1.00	3
Mg			1	9221.093	ug/l	0.54	4,284,898.50	1.214E+01	Pulse	1.00	3
K			1	7115.370	ug/l	0.40	2,474,983.50	7.014E+00	Pulse	1.00	3
V			1	0.239	ug/l	4.94	2,234.81	6.333E-03	Pulse	0.50	3
Mn			1	82.331	ug/l	0.10	334,251.36	1.166E+00	Pulse	0.50	3
Fe			1	65.630	ug/l	4.25	520,658.09	1.816E+00	Pulse	0.50	3
Co			1	2.195	ug/l	1.71	39,057.90	1.362E-01	Pulse	0.50	3
Ni			1	395.963	ug/l	0.60	1,926,501.50	6.718E+00	Pulse	0.50	3
Cu			1	2.254	ug/l	2.09	44,929.36	1.567E-01	Pulse	0.50	3
Zn			1	5.763	ug/l	4.15	11,164.24	2.541E-02	Pulse	1.00	3
Cd			1	0.051	ug/l	21.97	159.33	3.625E-04	Pulse	0.50	3
Al			1	15.378	ug/l	6.95	2,304.14	6.530E-03	Pulse	1.00	3
Se			1	0.235	ug/l	3.62	26.66	1.387E-03	Pulse	3.00	3
Sb			1	0.121	ug/l	6.16	883.36	2.010E-03	Pulse	1.00	3
Se			1	0.470	ug/l	70.10	34.44	1.795E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,439,193.67	0.92	89.3	Analog	0.50	3
1	Sc		352,853.57	0.68	84.4	Pulse	0.30	3
1	Ge		286,743.02	0.44	82.4	Pulse	0.30	3
1	In		3,039,337.24	0.25	84.7	Pulse	0.30	3
1	Tb		14,675,973.67	1.14	95.0	Analog	0.50	3
1	Lu		8,612,400.33	0.49	95.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		439,433.21	0.10	82.6	Pulse	0.30	3
1	Te		19,220.78	1.45	63.2	Pulse	0.50	3
1	Li		2,915.79	4.32	86.3	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:15
Sample Name	FA53625-15F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	22.431	ug/l	0.84	211,402.03	7.361E-01	Pulse	0.50	3
As			1	0.105	ug/l	8.31	117.67	4.097E-04	Pulse	1.00	3
Mo			1	0.483	ug/l	1.69	3,310.31	7.517E-03	Pulse	0.50	3
Pb			1	0.111	ug/l	5.32	7,910.84	7.574E-04	Pulse	1.00	3
Be			1	0.019	ug/l	87.03	1.33	3.741E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	17.16	298.67	6.784E-04	Pulse	0.50	3
Ba			1	20.891	ug/l	0.53	48,940.56	1.606E-02	Pulse	0.50	3
Tl			1	0.010	ug/l	18.31	778.69	7.455E-05	Pulse	0.50	3
Sn			1	0.512	ug/l	1.49	3,752.62	1.231E-03	Pulse	0.30	3
Sr			1	314.281	ug/l	0.10	1,446,458.00	4.747E-01	Pulse	0.50	3
[Pb]			1	0.104	ug/l	8.49	3,592.39	3.439E-04	Pulse	0.50	3
Ca			1	33068.438	ug/l	0.47	660,849.85	1.857E+00	Pulse	0.50	3
Ti			1	0.191	ug/l	18.55	32.67	9.184E-05	Pulse	0.50	3
Na			1	35049.360	ug/l	0.65	38,088,109.33	1.070E+02	Analog	1.00	3
Mg			1	8933.540	ug/l	0.29	4,186,151.58	1.177E+01	Pulse	1.00	3
K			1	3270.996	ug/l	0.10	1,153,271.50	3.241E+00	Pulse	1.00	3
V			1	0.252	ug/l	1.03	2,338.81	6.573E-03	Pulse	0.50	3
Mn			1	19.735	ug/l	0.94	81,193.62	2.827E-01	Pulse	0.50	3
Fe			1	156.679	ug/l	0.75	1,195,478.83	4.163E+00	Pulse	0.50	3
Co			1	0.706	ug/l	3.23	12,615.46	4.393E-02	Pulse	0.50	3
Ni			1	14.793	ug/l	0.85	73,140.64	2.547E-01	Pulse	0.50	3
Cu			1	2.114	ug/l	2.51	43,088.55	1.500E-01	Pulse	0.50	3
Zn			1	7.590	ug/l	0.67	14,137.85	3.210E-02	Pulse	1.00	3
Cd			1	0.206	ug/l	5.06	640.68	1.455E-03	Pulse	0.50	3
Al			1	11.186	ug/l	2.57	1,787.08	5.022E-03	Pulse	1.00	3
Se			1	0.162	ug/l	60.62	23.44	1.189E-03	Pulse	3.00	3
Sb			1	0.078	ug/l	8.13	624.34	1.418E-03	Pulse	1.00	3
Se			1	0.574	ug/l	41.58	38.22	1.939E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,445,121.67	0.05	89.3	Analog	0.50	3
1	Sc		355,809.93	0.36	85.1	Pulse	0.30	3
1	Ge		287,197.01	0.78	82.5	Pulse	0.30	3
1	In		3,047,379.05	0.49	84.9	Pulse	0.30	3
1	Tb		14,730,832.67	0.38	95.4	Analog	0.50	3
1	Lu		8,659,437.00	0.88	95.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		440,374.13	0.35	82.8	Pulse	0.30	3
1	Te		19,771.37	2.47	65.0	Pulse	0.50	3
1	Li		2,821.32	6.16	83.5	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:19
Sample Name	FA53625-16F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.516	ug/l	3.13	5,758.87	2.048E-02	Pulse	0.50	3
As			1	1.608	ug/l	4.99	1,508.73	5.363E-03	Pulse	1.00	3
Mo			1	3.657	ug/l	0.96	24,397.88	5.670E-02	Pulse	0.50	3
Pb			1	0.257	ug/l	1.33	14,202.90	1.374E-03	Pulse	1.00	3
Be			1	0.020	ug/l	23.23	1.33	3.850E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	6.98	312.00	7.253E-04	Pulse	0.50	3
Ba			1	52.027	ug/l	1.15	119,797.65	3.998E-02	Pulse	0.50	3
Tl			1	0.006	ug/l	22.43	489.34	4.732E-05	Pulse	0.50	3
Sn			1	0.440	ug/l	3.67	3,290.32	1.098E-03	Pulse	0.30	3
Sr			1	223.719	ug/l	0.33	1,012,628.40	3.380E-01	Pulse	0.50	3
[Pb]			1	0.248	ug/l	3.37	6,493.25	6.282E-04	Pulse	0.50	3
Ca			1	55504.669	ug/l	0.95	1,078,182.13	3.117E+00	Pulse	0.50	3
Ti			1	0.301	ug/l	34.81	49.33	1.426E-04	Pulse	0.50	3
Na			1	22240.181	ug/l	1.27	23,497,146.67	6.794E+01	Analog	1.00	3
Mg			1	7220.306	ug/l	0.78	3,289,181.08	9.509E+00	Pulse	1.00	3
K			1	15405.285	ug/l	1.44	5,240,072.00	1.515E+01	Analog	1.00	3
V			1	0.206	ug/l	4.50	1,968.11	5.690E-03	Pulse	0.50	3
Mn			1	362.218	ug/l	0.66	1,438,353.92	5.114E+00	Pulse	0.50	3
Fe			1	570.777	ug/l	1.89	4,172,869.08	1.484E+01	Pulse	0.50	3
Co			1	0.105	ug/l	4.38	1,888.77	6.714E-03	Pulse	0.50	3
Ni			1	1.572	ug/l	2.28	8,569.92	3.047E-02	Pulse	0.50	3
Cu			1	0.950	ug/l	4.15	26,711.77	9.498E-02	Pulse	0.50	3
Zn			1	4.064	ug/l	4.68	8,250.77	1.918E-02	Pulse	1.00	3
Cd			1	0.055	ug/l	17.62	170.00	3.952E-04	Pulse	0.50	3
Al			1	10.734	ug/l	3.93	1,680.74	4.860E-03	Pulse	1.00	3
Se			1	0.025	ug/l	100.42	15.66	8.135E-04	Pulse	3.00	3
Sb			1	0.063	ug/l	12.02	521.34	1.212E-03	Pulse	1.00	3
Se			1	0.519	ug/l	3.88	35.89	1.862E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,337,146.33	0.39	88.4	Analog	0.50	3
1	Sc		345,909.30	1.22	82.7	Pulse	0.30	3
1	Ge		281,291.51	1.31	80.8	Pulse	0.30	3
1	In		2,996,049.81	0.52	83.4	Pulse	0.30	3
1	Tb		14,499,075.67	0.21	93.9	Analog	0.50	3
1	Lu		8,572,965.00	0.85	94.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		430,302.77	0.95	80.9	Pulse	0.30	3
1	Te		19,270.82	1.07	63.4	Pulse	0.50	3
1	Li		2,779.09	2.33	82.2	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:22
Sample Name	FA53625-17F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	14.676	ug/l	1.57	136,718.93	4.829E-01	Pulse	0.50	3
As			1	0.089	ug/l	20.83	101.33	3.577E-04	Pulse	1.00	3
Mo			1	0.906	ug/l	1.89	6,101.01	1.408E-02	Pulse	0.50	3
Pb			1	0.035	ug/l	11.67	4,625.97	4.397E-04	Pulse	1.00	3
Be			1	0.017	ug/l	156.26	1.17	3.407E-06	Pulse	2.00	3
Ag			1	0.008	ug/l	7.88	252.67	5.833E-04	Pulse	0.50	3
Ba			1	8.644	ug/l	2.30	19,882.27	6.648E-03	Pulse	0.50	3
Tl			1	0.005	ug/l	17.28	449.34	4.271E-05	Pulse	0.50	3
Sn			1	0.419	ug/l	7.84	3,162.52	1.058E-03	Pulse	0.30	3
Sr			1	84.580	ug/l	1.34	382,818.43	1.280E-01	Pulse	0.50	3
[Pb]			1	0.039	ug/l	16.49	2,264.83	2.153E-04	Pulse	0.50	3
Ca			1	19960.077	ug/l	0.94	387,136.18	1.121E+00	Pulse	0.50	3
Ti			1	0.240	ug/l	35.92	39.33	1.141E-04	Pulse	0.50	3
Na			1	27071.755	ug/l	1.10	28,549,328.00	8.269E+01	Analog	1.00	3
Mg			1	5339.527	ug/l	0.81	2,428,049.58	7.032E+00	Pulse	1.00	3
K			1	1767.409	ug/l	0.90	609,594.36	1.766E+00	Pulse	1.00	3
V			1	0.310	ug/l	10.99	2,664.86	7.722E-03	Pulse	0.50	3
Mn			1	6.870	ug/l	2.05	28,669.80	1.013E-01	Pulse	0.50	3
Fe			1	68.580	ug/l	3.40	535,560.62	1.892E+00	Pulse	0.50	3
Co			1	0.319	ug/l	2.68	5,644.18	1.993E-02	Pulse	0.50	3
Ni			1	16.402	ug/l	1.50	79,834.17	2.820E-01	Pulse	0.50	3
Cu			1	1.096	ug/l	3.22	28,858.17	1.019E-01	Pulse	0.50	3
Zn			1	5.672	ug/l	1.45	10,863.07	2.507E-02	Pulse	1.00	3
Cd			1	0.014	ug/l	17.60	47.33	1.093E-04	Pulse	0.50	3
Al			1	13.896	ug/l	5.09	2,070.11	5.997E-03	Pulse	1.00	3
Se			1	0.208	ug/l	31.15	25.56	1.313E-03	Pulse	3.00	3
Sb			1	0.054	ug/l	9.62	472.68	1.091E-03	Pulse	1.00	3
Se			1	0.700	ug/l	12.90	41.11	2.113E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,521,416.33	0.31	90.0	Analog	0.50	3
1	Sc		345,285.37	0.91	82.6	Pulse	0.30	3
1	Ge		283,179.57	1.44	81.3	Pulse	0.30	3
1	In		2,990,763.91	0.97	83.3	Pulse	0.30	3
1	Tb		14,607,508.00	0.49	94.6	Analog	0.50	3
1	Lu		8,576,114.00	0.33	94.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		433,260.20	0.46	81.5	Pulse	0.30	3
1	Te		19,458.38	0.14	64.0	Pulse	0.50	3
1	Li		2,851.33	2.43	84.4	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:26
Sample Name	FA53625-24F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.230	ug/l	5.58	3,227.61	1.114E-02	Pulse	0.50	3
As			1	0.051	ug/l	12.05	67.00	2.313E-04	Pulse	1.00	3
Mo			1	0.026	ug/l	10.92	196.00	4.402E-04	Pulse	0.50	3
Pb			1	0.059	ug/l	3.63	5,959.04	5.388E-04	Pulse	1.00	3
Be			1	0.020	ug/l	64.07	1.33	3.820E-06	Pulse	2.00	3
Ag			1	0.391	ug/l	13.89	10,503.69	2.359E-02	Pulse	0.50	3
Ba			1	1.206	ug/l	2.81	2,882.90	9.336E-04	Pulse	0.50	3
Tl			1	0.004	ug/l	12.07	416.68	3.768E-05	Pulse	0.50	3
Sn			1	0.441	ug/l	3.58	3,395.89	1.100E-03	Pulse	0.30	3
Sr			1	0.803	ug/l	2.43	4,883.99	1.582E-03	Pulse	0.50	3
[Pb]			1	0.055	ug/l	6.63	2,737.57	2.475E-04	Pulse	0.50	3
Ca			1	230.158	ug/l	4.03	4,683.90	1.339E-02	Pulse	0.50	3
Ti			1	0.117	ug/l	29.11	20.00	5.727E-05	Pulse	0.50	3
Na			1	970.706	ug/l	1.60	1,045,786.88	2.989E+00	Pulse	1.00	3
Mg			1	35.201	ug/l	0.77	16,522.14	4.723E-02	Pulse	1.00	3
K			1	15.697	ug/l	5.00	16,219.32	4.636E-02	Pulse	1.00	3
V			1	0.168	ug/l	2.46	1,728.08	4.939E-03	Pulse	0.50	3
Mn			1	1.286	ug/l	0.90	6,517.78	2.249E-02	Pulse	0.50	3
Fe			1	3.622	ug/l	3.49	62,994.25	2.174E-01	Pulse	0.50	3
Co			1	0.017	ug/l	21.36	363.34	1.254E-03	Pulse	0.50	3
Ni			1	-0.016	ug/l	-70.59	1,027.37	3.546E-03	Pulse	0.50	3
Cu			1	2.917	ug/l	1.62	54,491.17	1.880E-01	Pulse	0.50	3
Zn			1	1.431	ug/l	1.08	4,245.47	9.531E-03	Pulse	1.00	3
Cd			1	0.010	ug/l	29.52	33.33	7.475E-05	Pulse	0.50	3
Al			1	6.014	ug/l	1.76	1,106.70	3.163E-03	Pulse	1.00	3
Se			1	0.027	ug/l	50.60	16.22	8.195E-04	Pulse	3.00	3
Sb			1	0.063	ug/l	8.23	544.01	1.221E-03	Pulse	1.00	3
Se			1	0.320	ug/l	35.03	31.44	1.587E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,059,450.33	0.38	94.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		349,863.97	1.00	83.7	Pulse	0.30	3
1	Ge		289,780.60	0.41	83.2	Pulse	0.30	3
1	In		3,087,941.20	0.23	86.0	Pulse	0.30	3
1	Tb		14,798,351.67	0.78	95.8	Analog	0.50	3
1	Lu		8,712,067.00	0.83	96.3	Analog	0.50	3
1	Ge		445,454.01	0.74	83.7	Pulse	0.30	3
1	Te		19,793.38	1.40	65.1	Pulse	0.50	3
1	Li		2,922.45	1.82	86.5	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:30
Sample Name	FA53627-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.816	ug/l	1.09	8,610.59	3.026E-02	Pulse	0.50	3
As			1	0.130	ug/l	4.57	139.67	4.909E-04	Pulse	1.00	3
Mo			1	0.146	ug/l	4.27	998.03	2.307E-03	Pulse	0.50	3
Pb			1	0.228	ug/l	0.69	13,362.22	1.255E-03	Pulse	1.00	3
Be			1	0.051	ug/l	25.76	3.17	9.179E-06	Pulse	2.00	3
Ag			1	0.032	ug/l	5.95	899.36	2.078E-03	Pulse	0.50	3
Ba			1	25.128	ug/l	0.68	58,328.16	1.932E-02	Pulse	0.50	3
Tl			1	0.018	ug/l	9.50	1,346.73	1.265E-04	Pulse	0.50	3
Sn			1	0.671	ug/l	21.72	4,619.02	1.529E-03	Pulse	0.30	3
Sr			1	208.101	ug/l	1.00	949,461.40	3.144E-01	Pulse	0.50	3
[Pb]			1	0.234	ug/l	2.17	6,391.22	6.004E-04	Pulse	0.50	3
Ca			1	19029.211	ug/l	1.32	369,122.26	1.069E+00	Pulse	0.50	3
Ti			1	2.486	ug/l	11.57	398.01	1.153E-03	Pulse	0.50	3
Na			1	9608.017	ug/l	1.19	10,139,138.00	2.936E+01	Analog	1.00	3
Mg			1	2786.168	ug/l	1.03	1,267,225.75	3.670E+00	Pulse	1.00	3
K			1	1214.735	ug/l	1.46	422,353.51	1.223E+00	Pulse	1.00	3
V			1	0.229	ug/l	8.56	2,118.79	6.135E-03	Pulse	0.50	3
Mn			1	8.874	ug/l	1.62	36,852.81	1.295E-01	Pulse	0.50	3
Fe			1	69.857	ug/l	0.36	547,619.25	1.925E+00	Pulse	0.50	3
Co			1	0.186	ug/l	2.06	3,328.30	1.170E-02	Pulse	0.50	3
Ni			1	19.834	ug/l	1.80	96,780.06	3.402E-01	Pulse	0.50	3
Cu			1	16.690	ug/l	1.14	238,885.76	8.396E-01	Pulse	0.50	3
Zn			1	595.610	ug/l	0.78	946,547.94	2.187E+00	Pulse	1.00	3
Cd			1	5.312	ug/l	1.66	16,165.75	3.736E-02	Pulse	0.50	3
Al			1	73.247	ug/l	1.17	9,438.23	2.733E-02	Pulse	1.00	3
Se			1	0.275	ug/l	31.68	29.00	1.498E-03	Pulse	3.00	3
Sb			1	0.281	ug/l	5.65	1,814.76	4.194E-03	Pulse	1.00	3
Se			1	1.218	ug/l	25.21	54.78	2.829E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,644,728.00	0.13	91.0	Analog	0.50	3
1	Sc		345,323.34	0.85	82.6	Pulse	0.30	3
1	Ge		284,522.10	0.33	81.7	Pulse	0.30	3
1	In		3,019,806.69	0.40	84.1	Pulse	0.30	3
1	Tb		14,603,371.67	0.25	94.6	Analog	0.50	3
1	Lu		8,573,439.33	0.68	94.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		432,747.32	0.39	81.4	Pulse	0.30	3
1	Te		19,380.27	1.68	63.7	Pulse	0.50	3
1	Li		2,780.21	4.34	82.3	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:33
Sample Name	MP33699-D2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.903	ug/l	2.64	9,278.23	3.311E-02	Pulse	0.50	3
As			1	0.116	ug/l	11.55	125.33	4.474E-04	Pulse	1.00	3
Mo			1	0.149	ug/l	2.08	1,010.70	2.350E-03	Pulse	0.50	3
Pb			1	0.177	ug/l	0.48	11,045.24	1.037E-03	Pulse	1.00	3
Be			1	0.076	ug/l	56.04	4.67	1.362E-05	Pulse	2.00	3
Ag			1	0.032	ug/l	11.72	885.36	2.058E-03	Pulse	0.50	3
Ba			1	26.431	ug/l	0.72	60,479.83	2.032E-02	Pulse	0.50	3
Tl			1	0.017	ug/l	6.01	1,298.06	1.219E-04	Pulse	0.50	3
Sn			1	0.664	ug/l	4.67	4,510.58	1.515E-03	Pulse	0.30	3
Sr			1	220.213	ug/l	0.62	990,349.65	3.327E-01	Pulse	0.50	3
[Pb]			1	0.179	ug/l	1.75	5,239.49	4.920E-04	Pulse	0.50	3
Ca			1	19876.843	ug/l	0.72	381,965.38	1.117E+00	Pulse	0.50	3
Ti			1	6.617	ug/l	5.79	1,048.70	3.065E-03	Pulse	0.50	3
Na			1	10030.848	ug/l	0.54	10,486,075.00	3.065E+01	Analog	1.00	3
Mg			1	2910.738	ug/l	0.15	1,311,498.50	3.834E+00	Pulse	1.00	3
K			1	1274.956	ug/l	0.43	438,638.29	1.282E+00	Pulse	1.00	3
V			1	0.342	ug/l	1.06	2,851.55	8.336E-03	Pulse	0.50	3
Mn			1	13.315	ug/l	4.05	53,859.73	1.922E-01	Pulse	0.50	3
Fe			1	83.447	ug/l	0.86	637,552.65	2.275E+00	Pulse	0.50	3
Co			1	0.204	ug/l	3.08	3,591.68	1.282E-02	Pulse	0.50	3
Ni			1	20.732	ug/l	1.17	99,586.91	3.554E-01	Pulse	0.50	3
Cu			1	15.987	ug/l	0.17	225,973.48	8.064E-01	Pulse	0.50	3
Zn			1	625.941	ug/l	0.87	988,777.31	2.298E+00	Pulse	1.00	3
Cd			1	5.623	ug/l	1.59	17,010.51	3.954E-02	Pulse	0.50	3
Al			1	94.472	ug/l	1.40	11,960.26	3.496E-02	Pulse	1.00	3
Se			1	0.304	ug/l	14.69	30.33	1.576E-03	Pulse	3.00	3
Sb			1	0.206	ug/l	4.28	1,363.39	3.170E-03	Pulse	1.00	3
Se			1	1.235	ug/l	12.83	54.89	2.852E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,648,899.00	0.37	91.1	Analog	0.50	3
1	Sc		342,078.04	0.55	81.8	Pulse	0.30	3
1	Ge		280,243.61	0.84	80.5	Pulse	0.30	3
1	In		2,976,791.48	0.44	82.9	Pulse	0.30	3
1	Tb		14,501,186.67	0.47	93.9	Analog	0.50	3
1	Lu		8,515,090.33	0.41	94.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		430,203.07	0.83	80.9	Pulse	0.30	3
1	Te		19,261.49	1.71	63.3	Pulse	0.50	3
1	Li		2,767.98	2.91	81.9	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:37
Sample Name	MP33699-SD2
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.742	ug/l	3.29	2,636.86	8.467E-03	Pulse	0.50	3
As			1	0.156	ug/l	9.78	52.00	1.670E-04	Pulse	1.00	3
Mo			1	0.166	ug/l	3.19	264.67	5.534E-04	Pulse	0.50	3
Pb			1	0.340	ug/l	3.15	6,584.95	5.771E-04	Pulse	1.00	3
Be			1	0.054	ug/l	151.99	0.83	2.265E-06	Pulse	2.00	3
Ag			1	0.043	ug/l	21.82	307.33	6.432E-04	Pulse	0.50	3
Ba			1	27.003	ug/l	1.09	13,447.68	4.156E-03	Pulse	0.50	3
Tl			1	0.024	ug/l	15.46	487.34	4.272E-05	Pulse	0.50	3
Sn			1	0.573	ug/l	5.58	1,587.86	4.908E-04	Pulse	0.30	3
Sr			1	225.289	ug/l	1.76	221,167.60	6.837E-02	Pulse	0.50	3
[Pb]			1	0.322	ug/l	6.21	3,036.95	2.661E-04	Pulse	0.50	3
Ca			1	20736.701	ug/l	1.00	86,088.81	2.333E-01	Pulse	0.50	3
Ti			1	3.171	ug/l	18.76	109.33	2.967E-04	Pulse	0.50	3
Na			1	10256.815	ug/l	0.60	2,320,328.42	6.289E+00	Pulse	1.00	3
Mg			1	3062.755	ug/l	0.43	297,933.53	8.075E-01	Pulse	1.00	3
K			1	1342.481	ug/l	0.48	108,645.96	2.945E-01	Pulse	1.00	3
V			1	0.164	ug/l	31.35	846.02	2.294E-03	Pulse	0.50	3
Mn			1	8.357	ug/l	3.18	8,695.31	2.793E-02	Pulse	0.50	3
Fe			1	74.468	ug/l	3.35	158,122.65	5.079E-01	Pulse	0.50	3
Co			1	0.190	ug/l	7.91	793.35	2.548E-03	Pulse	0.50	3
Ni			1	20.616	ug/l	1.77	22,956.95	7.374E-02	Pulse	0.50	3
Cu			1	19.961	ug/l	3.21	74,374.39	2.389E-01	Pulse	0.50	3
Zn			1	722.747	ug/l	1.32	255,334.46	5.341E-01	Pulse	1.00	3
Cd			1	5.845	ug/l	2.86	3,932.43	8.226E-03	Pulse	0.50	3
Al			1	87.025	ug/l	1.13	2,677.85	7.258E-03	Pulse	1.00	3
Se			1	0.308	ug/l	70.99	23.11	9.140E-04	Pulse	3.00	3
Sb			1	0.317	ug/l	10.44	583.01	1.220E-03	Pulse	1.00	3
Se			1	0.791	ug/l	79.64	34.44	1.364E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,410,676.00	0.33	97.6	Analog	0.50	3
1	Sc		368,949.17	0.91	88.2	Pulse	0.30	3
1	Ge		311,393.68	1.77	89.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,235,217.44	0.69	90.1	Pulse	0.30	3
1	Tb		15,017,782.33	0.78	97.2	Analog	0.50	3
1	Lu		8,823,432.67	0.36	97.5	Analog	0.50	3
1	Ge		478,118.90	1.26	89.9	Pulse	0.30	3
1	Te		25,266.79	0.97	83.1	Pulse	0.50	3
1	Li		3,090.25	2.65	91.4	Pulse	0.30	3

Quantitation Report

File Name	043CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:40
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.981	ug/l	1.41	1,005,053.10	3.268E+00	Pulse	0.50	3
As			1	50.138	ug/l	1.57	101,654.79	3.305E-01	Pulse	1.00	3
Mo			1	49.745	ug/l	0.42	727,245.83	1.542E+00	Pulse	0.50	3
Pb			1	46.941	ug/l	0.11	4,371,657.67	3.970E-01	Pulse	1.00	3
Be			1	52.582	ug/l	1.39	6,750.62	1.826E-02	Pulse	2.00	3
Ag			1	50.553	ug/l	0.83	2,859,351.92	6.061E+00	Pulse	0.50	3
Ba			1	49.340	ug/l	1.48	240,449.17	7.583E-02	Pulse	0.50	3
Tl			1	49.169	ug/l	0.56	6,843,153.33	6.215E-01	Analog	0.50	3
Sn			1	50.091	ug/l	1.53	593,419.20	1.872E-01	Pulse	0.30	3
Sr			1	48.702	ug/l	1.32	467,263.78	1.474E-01	Pulse	0.50	3
[Pb]			1	47.063	ug/l	0.51	2,044,511.50	1.857E-01	Pulse	0.50	3
Ca			1	4895.656	ug/l	0.23	203,444.65	5.503E-01	Pulse	0.50	3
Ti			1	48.869	ug/l	1.03	16,721.15	4.523E-02	Pulse	0.50	3
Na			1	5086.613	ug/l	0.53	11,494,141.33	3.109E+01	Analog	1.00	3
Mg			1	5092.054	ug/l	0.21	4,958,674.17	1.341E+01	Analog	1.00	3
K			1	4953.815	ug/l	0.52	3,606,494.75	9.755E+00	Pulse	1.00	3
V			1	49.748	ug/l	0.33	720,067.67	1.948E+00	Pulse	0.50	3
Mn			1	49.268	ug/l	0.61	428,832.43	1.394E+00	Pulse	0.50	3
Fe			1	5084.322	ug/l	1.24	80,653,600.00	2.622E+02	Analog	0.50	3
Co			1	49.843	ug/l	1.46	1,899,500.92	6.176E+00	Pulse	0.50	3
Ni			1	51.376	ug/l	1.42	537,069.96	1.746E+00	Pulse	0.50	3
Cu			1	51.295	ug/l	1.82	1,507,937.54	4.903E+00	Pulse	0.50	3
Zn			1	51.594	ug/l	0.41	180,442.42	3.825E-01	Pulse	1.00	3
Cd			1	50.841	ug/l	0.54	337,241.76	7.149E-01	Pulse	0.50	3
Al			1	4849.208	ug/l	0.48	1,289,399.96	3.488E+00	Pulse	1.00	3
Se			1	47.393	ug/l	0.54	6,742.41	2.597E-01	Pulse	3.00	3
Sb			1	49.444	ug/l	0.56	638,935.02	1.354E+00	Pulse	1.00	3
Se			1	47.736	ug/l	1.58	3,454.31	1.331E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,011,485.67	0.35	94.2	Analog	0.50	3
1	Sc		369,717.69	0.22	88.4	Pulse	0.30	3
1	Ge		307,584.80	1.21	88.3	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,171,313.97	1.84	88.3	Pulse	0.30	3
1	Tb		14,899,737.33	0.17	96.5	Analog	0.50	3
1	Lu		8,685,258.33	0.68	96.0	Analog	0.50	3
1	Ge		471,757.54	0.28	88.7	Pulse	0.30	3
1	Te		25,965.07	1.14	85.4	Pulse	0.50	3
1	Li		2,922.45	2.39	86.5	Pulse	0.30	3

Quantitation Report

File Name	044_CCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:44
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	99.520	ug/l	1.38	2,006,303.58	6.503E+00	Pulse	0.50	3
As			1	100.010	ug/l	0.42	203,389.75	6.593E-01	Pulse	1.00	3
Mo			1	99.152	ug/l	0.51	1,455,572.04	3.073E+00	Pulse	0.50	3
Pb			1	98.545	ug/l	0.70	8,984,956.67	8.331E-01	Analog	1.00	3
Be			1	102.179	ug/l	0.86	13,462.95	3.548E-02	Pulse	2.00	3
Ag			1	97.681	ug/l	0.21	5,548,003.67	1.171E+01	Pulse	0.50	3
Ba			1	99.547	ug/l	0.43	483,358.09	1.530E-01	Pulse	0.50	3
Tl			1	98.297	ug/l	0.69	13,399,171.00	1.242E+00	Analog	0.50	3
Sn			1	100.347	ug/l	0.97	1,183,655.72	3.746E-01	Pulse	0.30	3
Sr			1	99.622	ug/l	0.35	951,126.35	3.011E-01	Pulse	0.50	3
[Pb]			1	93.639	ug/l	0.50	3,982,565.50	3.693E-01	Pulse	0.50	3
Ca			1	9763.930	ug/l	0.48	416,212.06	1.097E+00	Pulse	0.50	3
Ti			1	98.679	ug/l	2.04	34,643.92	9.132E-02	Pulse	0.50	3
Na			1	9974.103	ug/l	0.94	23,119,104.67	6.094E+01	Analog	1.00	3
Mg			1	9936.722	ug/l	1.20	9,929,296.33	2.617E+01	Analog	1.00	3
K			1	9969.366	ug/l	0.92	7,436,045.33	1.960E+01	Analog	1.00	3
V			1	98.507	ug/l	0.44	1,462,569.00	3.855E+00	Pulse	0.50	3
Mn			1	98.955	ug/l	0.41	862,605.50	2.796E+00	Pulse	0.50	3
Fe			1	10262.342	ug/l	0.85	163,259,210.67	5.292E+02	Analog	0.50	3
Co			1	99.134	ug/l	0.66	3,789,697.25	1.228E+01	Pulse	0.50	3
Ni			1	101.387	ug/l	0.20	1,062,046.17	3.442E+00	Pulse	0.50	3
Cu			1	100.817	ug/l	0.50	2,958,235.58	9.589E+00	Pulse	0.50	3
Zn			1	101.116	ug/l	0.36	353,161.17	7.455E-01	Pulse	1.00	3
Cd			1	100.033	ug/l	0.65	666,303.29	1.407E+00	Pulse	0.50	3
Al			1	9646.287	ug/l	1.06	2,631,693.58	6.937E+00	Pulse	1.00	3
Se			1	96.882	ug/l	0.99	13,371.78	5.301E-01	Pulse	3.00	3
Sb			1	98.311	ug/l	0.48	1,275,517.58	2.693E+00	Pulse	1.00	3
Se			1	96.798	ug/l	1.10	6,776.54	2.686E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,784,576.00	0.59	92.2	Analog	0.50	3
1	Sc		379,418.94	1.04	90.7	Pulse	0.30	3
1	Ge		308,518.38	0.55	88.6	Pulse	0.30	3
1	In		3,159,358.48	0.19	88.0	Pulse	0.30	3
1	Tb		14,911,698.33	0.76	96.5	Analog	0.50	3
1	Lu		8,733,712.00	0.43	96.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		473,720.97	0.22	89.1	Pulse	0.30	3
1	Te		25,226.75	0.37	83.0	Pulse	0.50	3
1	Li		2,829.10	4.63	83.7	Pulse	0.30	3

Quantitation Report

File Name	045_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:48
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.705	ug/l	3.82	15,574.92	4.964E-02	Pulse	0.50	3
As			1	0.014	ug/l	44.59	48.67	1.552E-04	Pulse	1.00	3
Mo			1	0.035	ug/l	10.49	542.01	1.128E-03	Pulse	0.50	3
Pb			1	0.013	ug/l	11.16	4,599.62	4.010E-04	Pulse	1.00	3
Be			1	0.022	ug/l	18.02	3.00	8.017E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	10.30	754.02	1.570E-03	Pulse	0.50	3
Ba			1	0.021	ug/l	19.57	128.67	3.945E-05	Pulse	0.50	3
Tl			1	0.033	ug/l	7.01	4,986.75	4.348E-04	Pulse	0.50	3
Sn			1	0.042	ug/l	9.98	1,415.62	4.338E-04	Pulse	0.30	3
Sr			1	0.043	ug/l	9.35	1,631.41	5.000E-04	Pulse	0.50	3
[Pb]			1	0.011	ug/l	25.12	2,092.14	1.824E-04	Pulse	0.50	3
Ca			1	4.998	ug/l	32.74	384.67	1.028E-03	Pulse	0.50	3
Ti			1	0.041	ug/l	56.99	15.33	4.089E-05	Pulse	0.50	3
Na			1	3.624	ug/l	1.21	17,796.89	4.754E-02	Pulse	1.00	3
Mg			1	2.746	ug/l	1.91	3,033.90	8.103E-03	Pulse	1.00	3
K			1	1.701	ug/l	2.02	12,839.50	3.429E-02	Pulse	1.00	3
V			1	0.000	ug/l	-152.01	614.01	1.640E-03	Pulse	0.50	3
Mn			1	1.072	ug/l	1.93	10,855.05	3.460E-02	Pulse	0.50	3
Fe			1	3.070	ug/l	3.49	88,570.52	2.823E-01	Pulse	0.50	3
Co			1	0.017	ug/l	1.08	712.02	2.269E-03	Pulse	0.50	3
Ni			1	0.199	ug/l	4.59	3,314.96	1.057E-02	Pulse	0.50	3
Cu			1	-0.022	ug/l	-3.97	15,050.55	4.797E-02	Pulse	0.50	3
Zn			1	0.197	ug/l	9.48	2,751.20	5.728E-03	Pulse	1.00	3
Cd			1	0.012	ug/l	18.28	81.33	1.694E-04	Pulse	0.50	3
Al			1	33.841	ug/l	1.67	9,484.26	2.533E-02	Pulse	1.00	3
Se			1	0.018	ug/l	134.02	23.34	8.449E-04	Pulse	3.00	3
Sb			1	0.023	ug/l	8.66	478.34	9.959E-04	Pulse	1.00	3
Se			1	-0.017	ug/l	-481.82	30.22	1.099E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,470,518.33	0.48	98.1	Analog	0.50	3
1	Sc		374,391.81	0.47	89.5	Pulse	0.30	3
1	Ge		313,773.03	0.51	90.1	Pulse	0.30	3
1	In		3,262,772.23	0.65	90.9	Pulse	0.30	3
1	Tb		15,051,465.67	0.92	97.5	Analog	0.50	3
1	Lu		8,716,314.00	0.46	96.3	Analog	0.50	3
1	Ge		480,269.31	0.21	90.3	Pulse	0.30	3
1	Te		27,571.42	2.04	90.7	Pulse	0.50	3
1	Li		2,955.79	4.24	87.5	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:51
Sample Name	MP33699-S3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	217.804	ug/l	1.24	1,922,507.75	7.116E+00	Pulse	0.50	3
As			1	198.882	ug/l	0.98	177,097.98	6.555E-01	Pulse	1.00	3
Mo			1	220.265	ug/l	1.21	1,414,000.71	3.413E+00	Pulse	0.50	3
Pb			1	217.449	ug/l	1.44	9,116,492.67	9.192E-01	Analog	1.00	3
Be			1	213.539	ug/l	1.97	12,299.38	3.708E-02	Pulse	2.00	3
Ag			1	109.546	ug/l	0.68	2,720,844.25	6.567E+00	Pulse	0.50	3
Ba			1	239.602	ug/l	0.90	524,208.93	1.841E-01	Pulse	0.50	3
Tl			1	208.180	ug/l	0.77	13,048,924.00	1.316E+00	Analog	0.50	3
Sn			1	216.023	ug/l	0.12	1,148,081.93	4.032E-01	Pulse	0.30	3
Sr			1	435.025	ug/l	0.95	1,870,145.75	6.569E-01	Pulse	0.50	3
[Pb]			1	199.401	ug/l	0.49	3,899,772.58	3.932E-01	Pulse	0.50	3
Ca			1	39963.947	ug/l	1.60	744,615.50	2.245E+00	Pulse	0.50	3
Ti			1	213.528	ug/l	1.41	32,778.01	9.880E-02	Pulse	0.50	3
Na			1	30725.727	ug/l	1.19	31,133,514.00	9.385E+01	Analog	1.00	3
Mg			1	23281.705	ug/l	1.61	10,171,293.33	3.066E+01	Analog	1.00	3
K			1	21236.159	ug/l	1.40	6,924,633.50	2.087E+01	Analog	1.00	3
V			1	213.694	ug/l	1.61	1,387,066.87	4.181E+00	Pulse	0.50	3
Mn			1	219.949	ug/l	0.91	839,362.88	3.107E+00	Pulse	0.50	3
Fe			1	21140.055	ug/l	1.14	147,254,565.33	5.451E+02	Analog	0.50	3
Co			1	216.292	ug/l	0.58	3,620,395.50	1.340E+01	Pulse	0.50	3
Ni			1	238.917	ug/l	0.89	1,095,620.46	4.055E+00	Pulse	0.50	3
Cu			1	228.462	ug/l	0.72	2,933,471.17	1.086E+01	Pulse	0.50	3
Zn			1	814.816	ug/l	1.36	1,239,084.79	2.991E+00	Pulse	1.00	3
Cd			1	212.639	ug/l	1.18	619,361.67	1.495E+00	Pulse	0.50	3
Al			1	18474.173	ug/l	1.57	2,203,574.50	6.642E+00	Pulse	1.00	3
Se			1	203.608	ug/l	1.22	10,306.44	5.570E-01	Pulse	3.00	3
Sb			1	204.541	ug/l	0.84	1,160,483.75	2.801E+00	Pulse	1.00	3
Se			1	204.702	ug/l	2.08	5,254.17	2.840E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,918,493.67	0.30	84.8	Analog	0.50	3
1	Sc		331,771.30	0.73	79.3	Pulse	0.30	3
1	Ge		270,170.39	0.35	77.6	Pulse	0.30	3
1	In		2,847,125.58	0.50	79.3	Pulse	0.30	3
1	Tb		14,108,046.00	0.19	91.3	Analog	0.50	3
1	Lu		8,363,165.33	0.58	92.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		414,322.08	0.56	77.9	Pulse	0.30	3
1	Te		18,507.39	1.90	60.9	Pulse	0.50	3
1	Li		2,609.07	1.09	77.2	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:55
Sample Name	MP33699-S4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	210.741	ug/l	0.79	1,891,418.71	6.885E+00	Pulse	0.50	3
As			1	191.340	ug/l	1.06	173,230.39	6.306E-01	Pulse	1.00	3
Mo			1	212.239	ug/l	0.64	1,380,029.25	3.289E+00	Pulse	0.50	3
Pb			1	208.011	ug/l	0.02	8,884,055.67	8.793E-01	Analog	1.00	3
Be			1	202.019	ug/l	0.60	11,920.16	3.507E-02	Pulse	2.00	3
Ag			1	105.528	ug/l	1.10	2,654,760.17	6.326E+00	Pulse	0.50	3
Ba			1	231.181	ug/l	0.83	513,624.47	1.777E-01	Pulse	0.50	3
Tl			1	200.087	ug/l	0.87	12,775,877.33	1.264E+00	Analog	0.50	3
Sn			1	207.498	ug/l	0.61	1,119,854.22	3.873E-01	Pulse	0.30	3
Sr			1	415.213	ug/l	0.64	1,812,700.08	6.270E-01	Pulse	0.50	3
[Pb]			1	190.356	ug/l	0.39	3,792,564.58	3.754E-01	Pulse	0.50	3
Ca			1	37866.652	ug/l	0.76	722,767.58	2.127E+00	Pulse	0.50	3
Ti			1	204.118	ug/l	1.72	32,098.90	9.445E-02	Pulse	0.50	3
Na			1	29038.217	ug/l	0.94	30,141,390.67	8.869E+01	Analog	1.00	3
Mg			1	22247.076	ug/l	1.24	9,956,181.33	2.930E+01	Analog	1.00	3
K			1	20261.502	ug/l	0.89	6,768,491.83	1.992E+01	Analog	1.00	3
V			1	204.717	ug/l	0.86	1,361,269.29	4.006E+00	Pulse	0.50	3
Mn			1	210.673	ug/l	0.69	817,502.06	2.976E+00	Pulse	0.50	3
Fe			1	20283.569	ug/l	0.91	143,656,053.33	5.230E+02	Analog	0.50	3
Co			1	207.320	ug/l	1.57	3,528,126.75	1.284E+01	Pulse	0.50	3
Ni			1	230.389	ug/l	1.47	1,074,193.13	3.911E+00	Pulse	0.50	3
Cu			1	220.336	ug/l	1.44	2,876,840.17	1.047E+01	Pulse	0.50	3
Zn			1	781.530	ug/l	0.44	1,203,866.79	2.869E+00	Pulse	1.00	3
Cd			1	206.914	ug/l	0.66	610,452.92	1.455E+00	Pulse	0.50	3
Al			1	17534.684	ug/l	0.97	2,142,567.50	6.305E+00	Pulse	1.00	3
Se			1	194.183	ug/l	1.38	10,067.87	5.312E-01	Pulse	3.00	3
Sb			1	197.587	ug/l	0.37	1,135,478.04	2.706E+00	Pulse	1.00	3
Se			1	197.428	ug/l	1.66	5,191.60	2.739E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,103,845.67	0.40	86.4	Analog	0.50	3
1	Sc		339,863.77	1.14	81.3	Pulse	0.30	3
1	Ge		274,711.06	1.19	78.9	Pulse	0.30	3
1	In		2,891,214.82	0.55	80.5	Pulse	0.30	3
1	Tb		14,306,314.67	0.41	92.6	Analog	0.50	3
1	Lu		8,426,806.50	0.58	93.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		419,650.88	0.41	78.9	Pulse	0.30	3
1	Te		18,953.17	1.10	62.3	Pulse	0.50	3
1	Li		2,583.51	3.77	76.5	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:59
Sample Name	MP33699-PS2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	20.942	ug/l	0.76	195,874.63	6.875E-01	Pulse	0.50	3
As			1	18.930	ug/l	1.18	17,792.27	6.245E-02	Pulse	1.00	3
Mo			1	20.629	ug/l	0.21	139,774.16	3.197E-01	Pulse	0.50	3
Pb			1	19.124	ug/l	0.29	862,803.98	8.110E-02	Pulse	1.00	3
Be			1	19.897	ug/l	2.27	1,207.04	3.455E-03	Pulse	2.00	3
Ag			1	4.248	ug/l	0.74	111,394.04	2.548E-01	Pulse	0.50	3
Ba			1	45.639	ug/l	0.67	105,607.53	3.508E-02	Pulse	0.50	3
Tl			1	18.173	ug/l	1.00	1,221,939.13	1.149E-01	Pulse	0.50	3
Sn			1	22.577	ug/l	1.74	127,622.68	4.239E-02	Pulse	0.30	3
Sr			1	231.174	ug/l	0.74	1,051,465.71	3.492E-01	Pulse	0.50	3
[Pb]			1	18.334	ug/l	0.98	385,956.45	3.628E-02	Pulse	0.50	3
Ca			1	21023.544	ug/l	0.67	412,615.65	1.181E+00	Pulse	0.50	3
Ti			1	22.077	ug/l	4.71	3,569.67	1.022E-02	Pulse	0.50	3
Na			1	11524.786	ug/l	0.54	12,303,639.33	3.522E+01	Analog	1.00	3
Mg			1	4717.405	ug/l	0.91	2,170,668.58	6.213E+00	Pulse	1.00	3
K			1	3099.406	ug/l	0.93	1,073,564.92	3.073E+00	Pulse	1.00	3
V			1	20.202	ug/l	1.12	138,615.15	3.968E-01	Pulse	0.50	3
Mn			1	30.829	ug/l	0.52	125,135.70	4.392E-01	Pulse	0.50	3
Fe			1	2126.452	ug/l	0.99	15,652,038.67	5.494E+01	Analog	0.50	3
Co			1	20.707	ug/l	0.22	365,561.24	1.283E+00	Pulse	0.50	3
Ni			1	40.615	ug/l	0.89	197,313.68	6.926E-01	Pulse	0.50	3
Cu			1	37.300	ug/l	0.35	516,988.95	1.815E+00	Pulse	0.50	3
Zn			1	610.346	ug/l	0.49	979,956.92	2.241E+00	Pulse	1.00	3
Cd			1	24.250	ug/l	0.97	74,543.05	1.705E-01	Pulse	0.50	3
Al			1	1868.754	ug/l	0.76	235,060.16	6.728E-01	Pulse	1.00	3
Se			1	19.103	ug/l	4.02	1,013.69	5.293E-02	Pulse	3.00	3
Sb			1	18.417	ug/l	0.93	110,407.01	2.525E-01	Pulse	1.00	3
Se			1	20.341	ug/l	2.22	560.23	2.925E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,638,729.33	0.03	91.0	Analog	0.50	3
1	Sc		349,381.82	0.53	83.5	Pulse	0.30	3
1	Ge		284,907.38	0.17	81.8	Pulse	0.30	3
1	In		3,010,697.17	0.49	83.9	Pulse	0.30	3
1	Tb		14,742,867.33	1.14	95.5	Analog	0.50	3
1	Lu		8,642,763.67	0.23	95.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		437,229.79	0.74	82.2	Pulse	0.30	3
1	Te		19,154.72	0.84	63.0	Pulse	0.50	3
1	Li		2,879.11	1.80	85.2	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:02
Sample Name	FA53627-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.761	ug/l	2.72	8,237.12	2.847E-02	Pulse	0.50	3
As			1	0.144	ug/l	4.71	156.33	5.402E-04	Pulse	1.00	3
Mo			1	0.151	ug/l	1.12	1,056.03	2.382E-03	Pulse	0.50	3
Pb			1	0.114	ug/l	2.17	8,336.04	7.730E-04	Pulse	1.00	3
Be			1	0.088	ug/l	24.12	5.50	1.564E-05	Pulse	2.00	3
Ag			1	0.051	ug/l	2.16	1,408.73	3.178E-03	Pulse	0.50	3
Ba			1	25.123	ug/l	0.68	58,910.07	1.931E-02	Pulse	0.50	3
Tl			1	0.034	ug/l	6.44	2,426.85	2.250E-04	Pulse	0.50	3
Sn			1	0.656	ug/l	10.74	4,579.49	1.501E-03	Pulse	0.30	3
Sr			1	212.586	ug/l	0.19	979,779.02	3.212E-01	Pulse	0.50	3
[Pb]			1	0.103	ug/l	1.47	3,692.42	3.424E-04	Pulse	0.50	3
Ca			1	19436.967	ug/l	0.58	383,654.99	1.092E+00	Pulse	0.50	3
Ti			1	2.178	ug/l	7.18	355.34	1.011E-03	Pulse	0.50	3
Na			1	9675.966	ug/l	0.81	10,389,928.67	2.957E+01	Analog	1.00	3
Mg			1	2803.449	ug/l	1.15	1,297,444.29	3.693E+00	Pulse	1.00	3
K			1	1234.560	ug/l	0.59	436,605.09	1.243E+00	Pulse	1.00	3
V			1	0.210	ug/l	5.61	2,024.78	5.762E-03	Pulse	0.50	3
Mn			1	8.689	ug/l	0.94	36,728.58	1.269E-01	Pulse	0.50	3
Fe			1	55.187	ug/l	1.39	447,533.93	1.547E+00	Pulse	0.50	3
Co			1	0.179	ug/l	3.48	3,259.62	1.126E-02	Pulse	0.50	3
Ni			1	19.801	ug/l	1.62	98,268.74	3.396E-01	Pulse	0.50	3
Cu			1	13.200	ug/l	0.83	195,197.35	6.745E-01	Pulse	0.50	3
Zn			1	606.761	ug/l	0.55	987,733.38	2.228E+00	Pulse	1.00	3
Cd			1	5.311	ug/l	2.23	16,554.08	3.735E-02	Pulse	0.50	3
Al			1	80.515	ug/l	7.90	10,521.45	2.995E-02	Pulse	1.00	3
Se			1	0.347	ug/l	25.98	33.44	1.694E-03	Pulse	3.00	3
Sb			1	0.212	ug/l	3.75	1,442.72	3.254E-03	Pulse	1.00	3
Se			1	0.930	ug/l	16.61	48.00	2.431E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,784,506.33	0.31	92.2	Analog	0.50	3
1	Sc		351,369.90	0.64	84.0	Pulse	0.30	3
1	Ge		289,394.29	1.00	83.1	Pulse	0.30	3
1	In		3,050,517.38	0.49	85.0	Pulse	0.30	3
1	Tb		14,807,215.00	0.28	95.9	Analog	0.50	3
1	Lu		8,709,227.33	0.65	96.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		443,297.24	0.62	83.3	Pulse	0.30	3
1	Te		19,747.33	0.08	64.9	Pulse	0.50	3
1	Li		2,920.23	2.78	86.4	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:06
Sample Name	FA53627-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.248	ug/l	4.25	3,457.66	1.171E-02	Pulse	0.50	3
As			1	0.066	ug/l	2.25	83.00	2.811E-04	Pulse	1.00	3
Mo			1	0.023	ug/l	23.28	176.67	3.894E-04	Pulse	0.50	3
Pb			1	0.014	ug/l	27.99	3,902.12	3.488E-04	Pulse	1.00	3
Be			1	0.059	ug/l	34.25	3.83	1.066E-05	Pulse	2.00	3
Ag			1	0.011	ug/l	2.96	349.34	7.695E-04	Pulse	0.50	3
Ba			1	3.573	ug/l	3.47	8,636.75	2.752E-03	Pulse	0.50	3
Tl			1	0.019	ug/l	13.01	1,470.74	1.315E-04	Pulse	0.50	3
Sn			1	0.642	ug/l	3.88	4,628.39	1.475E-03	Pulse	0.30	3
Sr			1	2.786	ug/l	0.91	14,358.81	4.574E-03	Pulse	0.50	3
[Pb]			1	0.010	ug/l	18.38	1,781.44	1.592E-04	Pulse	0.50	3
Ca			1	175.030	ug/l	2.52	3,702.36	1.030E-02	Pulse	0.50	3
Ti			1	0.125	ug/l	41.66	22.00	6.113E-05	Pulse	0.50	3
Na			1	565.313	ug/l	0.37	629,920.56	1.752E+00	Pulse	1.00	3
Mg			1	17.431	ug/l	0.31	8,568.50	2.383E-02	Pulse	1.00	3
K			1	13.513	ug/l	2.13	15,902.39	4.422E-02	Pulse	1.00	3
V			1	0.158	ug/l	7.96	1,702.75	4.735E-03	Pulse	0.50	3
Mn			1	0.862	ug/l	3.29	4,875.96	1.651E-02	Pulse	0.50	3
Fe			1	0.795	ug/l	18.46	42,656.65	1.445E-01	Pulse	0.50	3
Co			1	0.055	ug/l	4.82	1,058.03	3.584E-03	Pulse	0.50	3
Ni			1	1.290	ug/l	2.60	7,582.84	2.569E-02	Pulse	0.50	3
Cu			1	1.250	ug/l	3.00	32,240.19	1.092E-01	Pulse	0.50	3
Zn			1	1.750	ug/l	2.86	4,857.62	1.070E-02	Pulse	1.00	3
Cd			1	0.007	ug/l	29.12	24.67	5.436E-05	Pulse	0.50	3
Al			1	7.517	ug/l	3.84	1,332.05	3.704E-03	Pulse	1.00	3
Se			1	0.100	ug/l	73.41	20.78	1.018E-03	Pulse	3.00	3
Sb			1	0.147	ug/l	15.68	1,071.40	2.361E-03	Pulse	1.00	3
Se			1	0.501	ug/l	16.95	37.56	1.838E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,187,947.67	0.21	95.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		359,634.61	0.44	86.0	Pulse	0.30	3
1	Ge		295,234.57	0.89	84.8	Pulse	0.30	3
1	In		3,138,788.70	1.08	87.4	Pulse	0.30	3
1	Tb		14,886,976.67	0.73	96.4	Analog	0.50	3
1	Lu		8,739,878.67	1.38	96.6	Analog	0.50	3
1	Ge		453,981.01	0.54	85.4	Pulse	0.30	3
1	Te		20,446.78	2.26	67.2	Pulse	0.50	3
1	Li		2,879.11	4.47	85.2	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:09
Sample Name	FA53801-22
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.282	ug/l	5.37	3,654.36	1.282E-02	Pulse	0.50	3
As			1	0.193	ug/l	9.12	199.67	7.007E-04	Pulse	1.00	3
Mo			1	2.023	ug/l	0.38	13,701.01	3.138E-02	Pulse	0.50	3
Pb			1	0.252	ug/l	1.07	14,249.27	1.354E-03	Pulse	1.00	3
Be			1	0.028	ug/l	17.33	1.83	5.249E-06	Pulse	2.00	3
Ag			1	0.018	ug/l	10.27	522.01	1.196E-03	Pulse	0.50	3
Ba			1	65.752	ug/l	0.45	151,325.29	5.053E-02	Pulse	0.50	3
Tl			1	0.008	ug/l	29.58	651.35	6.190E-05	Pulse	0.50	3
Sn			1	0.572	ug/l	2.02	4,027.14	1.345E-03	Pulse	0.30	3
Sr			1	637.014	ug/l	0.48	2,879,987.75	9.617E-01	Pulse	0.50	3
[Pb]			1	0.256	ug/l	2.53	6,779.37	6.442E-04	Pulse	0.50	3
Ca			1	46731.671	ug/l	0.75	916,946.54	2.625E+00	Pulse	0.50	3
Ti			1	3.078	ug/l	1.60	498.68	1.427E-03	Pulse	0.50	3
Na			1	10210.933	ug/l	0.62	10,901,825.67	3.120E+01	Analog	1.00	3
Mg			1	8292.000	ug/l	0.40	3,815,269.50	1.092E+01	Pulse	1.00	3
K			1	923.315	ug/l	0.97	327,406.20	9.371E-01	Pulse	1.00	3
V			1	4.870	ug/l	0.52	33,851.29	9.689E-02	Pulse	0.50	3
Mn			1	4.920	ug/l	1.00	21,018.70	7.375E-02	Pulse	0.50	3
Fe			1	102.844	ug/l	1.01	790,824.48	2.775E+00	Pulse	0.50	3
Co			1	0.057	ug/l	5.87	1,060.03	3.719E-03	Pulse	0.50	3
Ni			1	0.361	ug/l	12.20	2,830.22	9.932E-03	Pulse	0.50	3
Cu			1	0.552	ug/l	2.69	21,710.20	7.618E-02	Pulse	0.50	3
Zn			1	8.347	ug/l	1.08	15,226.34	3.488E-02	Pulse	1.00	3
Cd			1	0.007	ug/l	80.63	26.00	5.956E-05	Pulse	0.50	3
Al			1	203.671	ug/l	1.19	25,930.44	7.422E-02	Pulse	1.00	3
Se			1	0.178	ug/l	10.14	24.22	1.233E-03	Pulse	3.00	3
Sb			1	0.061	ug/l	11.27	519.68	1.190E-03	Pulse	1.00	3
Se			1	0.536	ug/l	23.74	37.11	1.886E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,523,893.33	0.18	90.0	Analog	0.50	3
1	Sc		349,375.53	0.39	83.5	Pulse	0.30	3
1	Ge		284,982.78	0.24	81.9	Pulse	0.30	3
1	In		2,994,679.26	0.17	83.4	Pulse	0.30	3
1	Tb		14,525,922.67	0.79	94.0	Analog	0.50	3
1	Lu		8,486,445.00	1.13	93.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		436,575.82	0.15	82.1	Pulse	0.30	3
1	Te		19,656.58	1.37	64.6	Pulse	0.50	3
1	Li		2,826.88	2.55	83.7	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:13
Sample Name	FA53896-13
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.373	ug/l	10.76	4,507.88	1.581E-02	Pulse	0.50	3
As			1	0.091	ug/l	18.58	104.00	3.646E-04	Pulse	1.00	3
Mo			1	0.130	ug/l	5.12	894.02	2.054E-03	Pulse	0.50	3
Pb			1	0.283	ug/l	1.08	15,757.59	1.486E-03	Pulse	1.00	3
Be			1	0.020	ug/l	158.30	1.33	3.787E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	21.12	370.67	8.522E-04	Pulse	0.50	3
Ba			1	12.943	ug/l	0.72	29,918.02	9.952E-03	Pulse	0.50	3
Tl			1	0.007	ug/l	31.11	586.02	5.522E-05	Pulse	0.50	3
Sn			1	0.525	ug/l	3.53	3,779.30	1.257E-03	Pulse	0.30	3
Sr			1	645.925	ug/l	0.55	2,931,604.83	9.751E-01	Pulse	0.50	3
[Pb]			1	0.281	ug/l	0.32	7,345.60	6.927E-04	Pulse	0.50	3
Ca			1	36072.093	ug/l	1.11	708,361.44	2.026E+00	Pulse	0.50	3
Ti			1	0.356	ug/l	18.01	58.67	1.678E-04	Pulse	0.50	3
Na			1	9498.769	ug/l	1.40	10,149,663.00	2.903E+01	Analog	1.00	3
Mg			1	8521.744	ug/l	1.38	3,923,877.50	1.122E+01	Pulse	1.00	3
K			1	911.273	ug/l	1.69	323,519.41	9.253E-01	Pulse	1.00	3
V			1	0.195	ug/l	7.76	1,913.44	5.474E-03	Pulse	0.50	3
Mn			1	4.741	ug/l	2.65	20,306.58	7.123E-02	Pulse	0.50	3
Fe			1	6.102	ug/l	3.66	80,209.98	2.813E-01	Pulse	0.50	3
Co			1	0.036	ug/l	6.26	686.01	2.406E-03	Pulse	0.50	3
Ni			1	0.365	ug/l	11.22	2,854.90	1.001E-02	Pulse	0.50	3
Cu			1	1.560	ug/l	2.09	35,312.18	1.239E-01	Pulse	0.50	3
Zn			1	6.189	ug/l	1.84	11,741.92	2.697E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	31.09	12.67	2.904E-05	Pulse	0.50	3
Al			1	11.424	ug/l	5.06	1,786.42	5.108E-03	Pulse	1.00	3
Se			1	0.027	ug/l	170.30	16.11	8.198E-04	Pulse	3.00	3
Sb			1	0.049	ug/l	6.52	443.01	1.018E-03	Pulse	1.00	3
Se			1	0.592	ug/l	22.45	38.56	1.963E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,604,498.67	0.51	90.7	Analog	0.50	3
1	Sc		349,656.69	0.79	83.6	Pulse	0.30	3
1	Ge		285,129.08	0.91	81.9	Pulse	0.30	3
1	In		3,006,310.72	0.15	83.7	Pulse	0.30	3
1	Tb		14,640,776.33	0.61	94.8	Analog	0.50	3
1	Lu		8,610,271.67	0.57	95.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		435,448.08	1.10	81.9	Pulse	0.30	3
1	Te		19,645.90	0.74	64.6	Pulse	0.50	3
1	Li		2,760.20	3.78	81.7	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:17
Sample Name	FA53896-14
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.142	ug/l	29.17	11,620.33	4.093E-02	Pulse	0.50	3
As			1	0.103	ug/l	4.35	114.67	4.039E-04	Pulse	1.00	3
Mo			1	0.105	ug/l	5.74	718.69	1.668E-03	Pulse	0.50	3
Pb			1	0.184	ug/l	2.01	11,238.36	1.066E-03	Pulse	1.00	3
Be			1	0.017	ug/l	27.94	1.17	3.390E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	14.58	371.34	8.622E-04	Pulse	0.50	3
Ba			1	12.552	ug/l	1.44	28,637.95	9.652E-03	Pulse	0.50	3
Tl			1	0.004	ug/l	13.92	422.01	4.001E-05	Pulse	0.50	3
Sn			1	0.442	ug/l	1.00	3,269.20	1.102E-03	Pulse	0.30	3
Sr			1	632.483	ug/l	0.84	2,833,205.42	9.549E-01	Pulse	0.50	3
[Pb]			1	0.186	ug/l	0.78	5,324.18	5.051E-04	Pulse	0.50	3
Ca			1	35296.498	ug/l	0.62	682,198.67	1.982E+00	Pulse	0.50	3
Ti			1	0.232	ug/l	25.16	38.00	1.105E-04	Pulse	0.50	3
Na			1	9312.089	ug/l	0.60	9,793,428.33	2.846E+01	Analog	1.00	3
Mg			1	8370.586	ug/l	0.38	3,793,501.00	1.102E+01	Pulse	1.00	3
K			1	889.197	ug/l	0.72	310,961.35	9.037E-01	Pulse	1.00	3
V			1	0.196	ug/l	1.98	1,884.77	5.477E-03	Pulse	0.50	3
Mn			1	4.625	ug/l	1.51	19,757.40	6.959E-02	Pulse	0.50	3
Fe			1	44.099	ug/l	27.07	358,005.67	1.261E+00	Pulse	0.50	3
Co			1	0.050	ug/l	12.48	928.02	3.269E-03	Pulse	0.50	3
Ni			1	76.555	ug/l	25.15	369,715.35	1.302E+00	Pulse	0.50	3
Cu			1	1.339	ug/l	1.31	32,195.45	1.134E-01	Pulse	0.50	3
Zn			1	4.539	ug/l	1.39	9,016.45	2.092E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	94.87	12.67	2.932E-05	Pulse	0.50	3
Al			1	25.219	ug/l	20.82	3,464.98	1.007E-02	Pulse	1.00	3
Se			1	0.021	ug/l	65.69	15.78	8.022E-04	Pulse	3.00	3
Sb			1	0.039	ug/l	7.62	381.67	8.855E-04	Pulse	1.00	3
Se			1	0.278	ug/l	30.85	30.11	1.530E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,541,138.00	1.07	90.1	Analog	0.50	3
1	Sc		344,120.32	0.35	82.3	Pulse	0.30	3
1	Ge		283,922.43	0.80	81.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		2,967,148.01	0.18	82.6	Pulse	0.30	3
1	Tb		14,520,857.67	1.11	94.0	Analog	0.50	3
1	Lu		8,605,016.67	1.01	95.1	Analog	0.50	3
1	Ge		430,982.27	0.76	81.0	Pulse	0.30	3
1	Te		19,657.90	2.37	64.6	Pulse	0.50	3
1	Li		2,902.45	1.93	85.9	Pulse	0.30	3

Quantitation Report

File Name	054SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:20
Sample Name	CRIA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.980	ug/l	2.29	21,878.26	6.761E-02	Pulse	0.50	3
As			1	0.976	ug/l	2.50	2,102.78	6.499E-03	Pulse	1.00	3
Mo			1	0.991	ug/l	3.40	15,222.19	3.075E-02	Pulse	0.50	3
Pb			1	0.956	ug/l	1.14	98,879.19	8.371E-03	Pulse	1.00	3
Be			1	1.072	ug/l	3.80	144.50	3.726E-04	Pulse	2.00	3
Ag			1	1.027	ug/l	0.61	61,043.85	1.233E-01	Pulse	0.50	3
Ba			1	0.999	ug/l	0.26	5,164.09	1.542E-03	Pulse	0.50	3
Tl			1	0.926	ug/l	0.82	138,399.56	1.172E-02	Pulse	0.50	3
Sn			1	1.188	ug/l	0.93	15,773.51	4.710E-03	Pulse	0.30	3
Sr			1	1.035	ug/l	3.31	11,700.33	3.494E-03	Pulse	0.50	3
[Pb]			1	0.960	ug/l	1.13	46,357.88	3.925E-03	Pulse	0.50	3
Ca			1	106.845	ug/l	1.69	4,834.61	1.247E-02	Pulse	0.50	3
Ti			1	1.014	ug/l	6.01	365.34	9.419E-04	Pulse	0.50	3
Na			1	104.263	ug/l	0.84	256,770.86	6.621E-01	Pulse	1.00	3
Mg			1	103.316	ug/l	0.94	105,858.85	2.730E-01	Pulse	1.00	3
K			1	101.462	ug/l	1.21	89,237.11	2.301E-01	Pulse	1.00	3
V			1	0.991	ug/l	2.45	15,683.00	4.044E-02	Pulse	0.50	3
Mn			1	0.965	ug/l	1.96	10,220.70	3.159E-02	Pulse	0.50	3
Fe			1	100.560	ug/l	0.80	1,717,603.67	5.308E+00	Pulse	0.50	3
Co			1	1.029	ug/l	0.72	41,319.27	1.277E-01	Pulse	0.50	3
Ni			1	1.000	ug/l	3.58	12,208.54	3.773E-02	Pulse	0.50	3
Cu			1	0.965	ug/l	1.51	45,732.57	1.413E-01	Pulse	0.50	3
Zn			1	1.815	ug/l	0.72	8,708.97	1.759E-02	Pulse	1.00	3
Cd			1	1.060	ug/l	0.82	7,379.50	1.491E-02	Pulse	0.50	3
Al			1	102.424	ug/l	2.74	28,942.89	7.464E-02	Pulse	1.00	3
Se			1	0.953	ug/l	6.95	167.00	5.955E-03	Pulse	3.00	3
Sb			1	0.989	ug/l	0.94	13,580.69	2.743E-02	Pulse	1.00	3
Se			1	0.807	ug/l	10.35	94.67	3.375E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,812,071.67	0.67	101.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		387,813.38	0.95	92.7	Pulse	0.30	3
1	Ge		323,574.34	0.30	92.9	Pulse	0.30	3
1	In		3,349,089.87	0.88	93.3	Pulse	0.30	3
1	Tb		15,404,605.00	0.21	99.7	Analog	0.50	3
1	Lu		8,941,832.33	1.13	98.8	Analog	0.50	3
1	Ge		495,066.21	0.21	93.1	Pulse	0.30	3
1	Te		28,044.77	0.98	92.2	Pulse	0.50	3
1	Li		3,141.37	0.64	93.0	Pulse	0.30	3

Quantitation Report

File Name	055SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:24
Sample Name	ICSA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.308	ug/l	1.93	25,064.75	8.905E-02	Pulse	0.50	3
As			1	0.089	ug/l	10.09	183.67	6.527E-04	Pulse	1.00	3
Mo			1	2145.193	ug/l	1.30	28,111,025.33	6.648E+01	Analog	0.50	3
Pb			1	0.112	ug/l	0.77	10,861.12	1.235E-03	Pulse	1.00	3
Be			1	0.015	ug/l	71.30	2.00	5.440E-06	Pulse	2.00	3
Ag			1	0.025	ug/l	5.79	1,331.39	3.148E-03	Pulse	0.50	3
Ba			1	0.088	ug/l	10.20	407.34	1.425E-04	Pulse	0.50	3
Tl			1	0.005	ug/l	2.48	670.02	7.616E-05	Pulse	0.50	3
Sn			1	0.080	ug/l	20.20	1,643.42	5.746E-04	Pulse	0.30	3
Sr			1	1.001	ug/l	2.79	9,697.18	3.391E-03	Pulse	0.50	3
[Pb]			1	0.110	ug/l	2.49	5,028.76	5.716E-04	Pulse	0.50	3
Ca			1	94718.260	ug/l	0.43	3,911,211.33	1.064E+01	Pulse	0.50	3
Ti			1	2038.020	ug/l	0.96	693,420.48	1.886E+00	Pulse	0.50	3
Na			1	100772.326	ug/l	0.76	226,278,693.33	6.154E+02	Analog	1.00	3
Mg			1	100089.551	ug/l	0.54	96,922,317.33	2.636E+02	Analog	1.00	3
K			1	104517.132	ug/l	0.50	75,441,565.33	2.052E+02	Analog	1.00	3
V			1	0.004	ug/l	72.76	668.68	1.819E-03	Pulse	0.50	3
Mn			1	0.225	ug/l	3.70	3,010.91	1.070E-02	Pulse	0.50	3
Fe			1	105115.878	ug/l	1.07	1,525,206,272.00	5.419E+03	Analog	0.50	3
Co			1	0.014	ug/l	7.34	529.34	1.881E-03	Pulse	0.50	3
Ni			1	0.050	ug/l	2.90	1,554.74	5.524E-03	Pulse	0.50	3
Cu			1	0.018	ug/l	24.74	14,567.52	5.176E-02	Pulse	0.50	3
Zn			1	1.318	ug/l	1.81	5,896.58	1.394E-02	Pulse	1.00	3
Cd			1	0.386	ug/l	1.81	2,298.82	5.436E-03	Pulse	0.50	3
Al			1	97947.347	ug/l	0.49	25,893,190.00	7.042E+01	Analog	1.00	3
Se			1	0.074	ug/l	21.38	24.00	1.152E-03	Pulse	3.00	3
Sb			1	0.047	ug/l	11.60	698.68	1.652E-03	Pulse	1.00	3
Se			1	0.014	ug/l	256.31	24.67	1.185E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,797,596.00	0.57	75.2	Analog	0.50	3
1	Sc		367,674.97	0.22	87.9	Pulse	0.30	3
1	Ge		281,462.79	1.18	80.8	Pulse	0.30	3
1	In		2,859,837.39	1.01	79.7	Pulse	0.30	3
1	Tb		13,351,531.33	0.48	86.4	Analog	0.50	3
1	Lu		8,006,480.17	0.96	88.5	Analog	0.50	3
1	Ge		422,891.63	0.71	79.5	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		20,825.20	1.27	68.5	Pulse	0.50	3
1	Li		2,370.15	3.11	70.1	Pulse	0.30	3

Quantitation Report

File Name	056CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:28
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.716	ug/l	0.74	976,934.87	3.251E+00	Pulse	0.50	3
As			1	50.002	ug/l	0.22	99,064.28	3.296E-01	Pulse	1.00	3
Mo			1	49.993	ug/l	0.72	714,983.25	1.549E+00	Pulse	0.50	3
Pb			1	46.497	ug/l	0.78	4,318,837.17	3.933E-01	Pulse	1.00	3
Be			1	51.216	ug/l	1.11	6,370.67	1.778E-02	Pulse	2.00	3
Ag			1	50.809	ug/l	0.38	2,811,413.08	6.092E+00	Pulse	0.50	3
Ba			1	50.399	ug/l	1.50	239,688.52	7.746E-02	Pulse	0.50	3
Tl			1	48.859	ug/l	0.62	6,782,155.17	6.176E-01	Analog	0.50	3
Sn			1	50.608	ug/l	1.20	585,083.08	1.891E-01	Pulse	0.30	3
Sr			1	49.446	ug/l	0.79	462,949.51	1.496E-01	Pulse	0.50	3
[Pb]			1	46.585	ug/l	0.45	2,018,420.88	1.838E-01	Pulse	0.50	3
Ca			1	4932.385	ug/l	0.44	198,581.95	5.544E-01	Pulse	0.50	3
Ti			1	49.708	ug/l	1.38	16,478.96	4.600E-02	Pulse	0.50	3
Na			1	5026.750	ug/l	1.33	11,005,389.00	3.072E+01	Analog	1.00	3
Mg			1	5065.865	ug/l	1.08	4,779,345.83	1.334E+01	Analog	1.00	3
K			1	4938.527	ug/l	0.88	3,483,289.50	9.725E+00	Pulse	1.00	3
V			1	50.134	ug/l	0.62	703,025.29	1.963E+00	Pulse	0.50	3
Mn			1	49.150	ug/l	0.48	418,018.73	1.391E+00	Pulse	0.50	3
Fe			1	5143.198	ug/l	0.55	79,725,357.33	2.653E+02	Analog	0.50	3
Co			1	49.886	ug/l	0.59	1,857,648.87	6.182E+00	Pulse	0.50	3
Ni			1	50.804	ug/l	0.57	518,989.13	1.727E+00	Pulse	0.50	3
Cu			1	51.450	ug/l	0.57	1,477,966.00	4.918E+00	Pulse	0.50	3
Zn			1	51.711	ug/l	1.28	176,915.45	3.833E-01	Pulse	1.00	3
Cd			1	51.274	ug/l	0.87	332,722.81	7.210E-01	Pulse	0.50	3
Al			1	4819.683	ug/l	0.47	1,241,626.17	3.466E+00	Pulse	1.00	3
Se			1	47.156	ug/l	1.81	6,580.91	2.584E-01	Pulse	3.00	3
Sb			1	50.412	ug/l	0.38	637,290.16	1.381E+00	Pulse	1.00	3
Se			1	47.691	ug/l	2.91	3,385.52	1.329E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,982,518.00	0.55	93.9	Analog	0.50	3
1	Sc		358,195.94	0.86	85.6	Pulse	0.30	3
1	Ge		300,526.97	0.97	86.3	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,094,493.35	0.99	86.2	Pulse	0.30	3
1	Tb		14,744,795.00	1.02	95.5	Analog	0.50	3
1	Lu		8,656,739.00	0.78	95.6	Analog	0.50	3
1	Ge		461,509.37	0.64	86.8	Pulse	0.30	3
1	Te		25,469.73	0.24	83.8	Pulse	0.50	3
1	Li		2,680.20	3.78	79.3	Pulse	0.30	3

Quantitation Report

File Name	057_CCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:31
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.201	ug/l	0.39	1,959,366.75	6.417E+00	Pulse	0.50	3
As			1	99.487	ug/l	0.32	200,237.38	6.558E-01	Pulse	1.00	3
Mo			1	99.384	ug/l	0.58	1,425,048.75	3.080E+00	Pulse	0.50	3
Pb			1	98.247	ug/l	0.32	8,922,611.00	8.306E-01	Analog	1.00	3
Be			1	98.996	ug/l	0.57	12,617.24	3.438E-02	Pulse	2.00	3
Ag			1	98.349	ug/l	1.20	5,455,961.83	1.179E+01	Pulse	0.50	3
Ba			1	99.652	ug/l	0.94	474,574.22	1.532E-01	Pulse	0.50	3
Tl			1	97.821	ug/l	0.72	13,281,220.00	1.236E+00	Analog	0.50	3
Sn			1	100.609	ug/l	1.14	1,163,921.66	3.756E-01	Pulse	0.30	3
Sr			1	99.888	ug/l	0.28	935,325.98	3.019E-01	Pulse	0.50	3
[Pb]			1	92.864	ug/l	1.55	3,933,888.92	3.662E-01	Pulse	0.50	3
Ca			1	9742.495	ug/l	1.24	401,744.27	1.095E+00	Pulse	0.50	3
Ti			1	97.870	ug/l	0.42	33,243.46	9.057E-02	Pulse	0.50	3
Na			1	9966.921	ug/l	1.00	22,349,302.00	6.089E+01	Analog	1.00	3
Mg			1	9921.708	ug/l	0.76	9,591,220.00	2.613E+01	Analog	1.00	3
K			1	10066.573	ug/l	0.71	7,263,710.83	1.979E+01	Analog	1.00	3
V			1	99.194	ug/l	0.49	1,424,729.25	3.882E+00	Pulse	0.50	3
Mn			1	97.852	ug/l	0.42	844,200.92	2.765E+00	Pulse	0.50	3
Fe			1	10118.590	ug/l	0.39	159,313,717.33	5.218E+02	Analog	0.50	3
Co			1	97.603	ug/l	0.46	3,692,676.25	1.209E+01	Pulse	0.50	3
Ni			1	99.552	ug/l	0.06	1,032,089.77	3.380E+00	Pulse	0.50	3
Cu			1	99.843	ug/l	0.51	2,899,545.00	9.496E+00	Pulse	0.50	3
Zn			1	101.040	ug/l	0.48	344,692.04	7.450E-01	Pulse	1.00	3
Cd			1	100.989	ug/l	1.09	657,022.42	1.420E+00	Pulse	0.50	3
Al			1	9602.900	ug/l	0.85	2,534,461.75	6.905E+00	Pulse	1.00	3
Se			1	95.100	ug/l	1.07	13,158.52	5.203E-01	Pulse	3.00	3
Sb			1	99.601	ug/l	0.53	1,262,204.54	2.728E+00	Pulse	1.00	3
Se			1	96.244	ug/l	0.49	6,754.53	2.671E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,742,287.67	0.74	91.8	Analog	0.50	3
1	Sc		367,036.14	0.40	87.8	Pulse	0.30	3
1	Ge		305,333.26	0.51	87.7	Pulse	0.30	3
1	In		3,098,595.78	0.24	86.3	Pulse	0.30	3
1	Tb		14,738,724.00	0.74	95.4	Analog	0.50	3
1	Lu		8,629,407.00	0.30	95.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		462,706.27	0.25	87.0	Pulse	0.30	3
1	Te		25,289.48	0.80	83.2	Pulse	0.50	3
1	Li		2,731.31	2.51	80.8	Pulse	0.30	3

Quantitation Report

File Name	058_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:35
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.692	ug/l	3.19	15,097.88	4.883E-02	Pulse	0.50	3
As			1	0.017	ug/l	18.08	54.67	1.766E-04	Pulse	1.00	3
Mo			1	0.053	ug/l	7.41	801.36	1.686E-03	Pulse	0.50	3
Pb			1	0.012	ug/l	4.11	4,492.26	3.909E-04	Pulse	1.00	3
Be			1	0.019	ug/l	36.63	2.50	6.856E-06	Pulse	2.00	3
Ag			1	0.014	ug/l	2.47	838.02	1.763E-03	Pulse	0.50	3
Ba			1	0.019	ug/l	28.32	114.00	3.567E-05	Pulse	0.50	3
Tl			1	0.034	ug/l	4.41	5,007.42	4.357E-04	Pulse	0.50	3
Sn			1	0.045	ug/l	25.74	1,425.62	4.461E-04	Pulse	0.30	3
Sr			1	0.024	ug/l	7.58	1,414.06	4.425E-04	Pulse	0.50	3
[Pb]			1	0.011	ug/l	27.71	2,080.80	1.811E-04	Pulse	0.50	3
Ca			1	4.817	ug/l	12.77	367.34	1.008E-03	Pulse	0.50	3
Ti			1	0.042	ug/l	35.12	15.33	4.201E-05	Pulse	0.50	3
Na			1	5.035	ug/l	2.98	20,471.41	5.615E-02	Pulse	1.00	3
Mg			1	3.180	ug/l	1.82	3,371.62	9.248E-03	Pulse	1.00	3
K			1	2.569	ug/l	14.97	13,123.69	3.600E-02	Pulse	1.00	3
V			1	-0.003	ug/l	-80.71	558.68	1.533E-03	Pulse	0.50	3
Mn			1	1.084	ug/l	2.29	10,806.35	3.494E-02	Pulse	0.50	3
Fe			1	3.374	ug/l	4.36	92,129.58	2.980E-01	Pulse	0.50	3
Co			1	0.018	ug/l	4.13	750.02	2.425E-03	Pulse	0.50	3
Ni			1	0.192	ug/l	4.26	3,192.27	1.032E-02	Pulse	0.50	3
Cu			1	-0.009	ug/l	-159.96	15,217.34	4.921E-02	Pulse	0.50	3
Zn			1	0.192	ug/l	10.04	2,703.86	5.689E-03	Pulse	1.00	3
Cd			1	0.015	ug/l	3.02	106.67	2.245E-04	Pulse	0.50	3
Al			1	33.424	ug/l	2.22	9,125.75	2.503E-02	Pulse	1.00	3
Se			1	0.007	ug/l	355.80	21.22	7.827E-04	Pulse	3.00	3
Sb			1	0.023	ug/l	11.38	470.34	9.897E-04	Pulse	1.00	3
Se			1	-0.093	ug/l	-11.31	24.11	8.873E-04	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,491,989.00	0.70	98.3	Analog	0.50	3
1	Sc		364,577.63	0.48	87.2	Pulse	0.30	3
1	Ge		309,277.24	1.33	88.8	Pulse	0.30	3
1	In		3,195,778.28	0.09	89.0	Pulse	0.30	3
1	Tb		14,936,016.67	1.18	96.7	Analog	0.50	3
1	Lu		8,739,197.67	1.04	96.6	Analog	0.50	3
1	Ge		475,240.69	0.14	89.3	Pulse	0.30	3
1	Te		27,188.89	2.45	89.4	Pulse	0.50	3
1	Li		2,941.34	3.31	87.0	Pulse	0.30	3

Quantitation Report

File Name	059SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:39
Sample Name	ICSAB
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	21.541	ug/l	1.25	402,999.04	1.410E+00	Pulse	0.50	3
As			1	19.630	ug/l	0.45	36,986.28	1.295E-01	Pulse	1.00	3
Mo			1	2120.861	ug/l	1.33	28,251,717.33	6.572E+01	Analog	0.50	3
Pb			1	0.127	ug/l	1.93	12,045.91	1.365E-03	Pulse	1.00	3
Be			1	0.015	ug/l	79.34	2.17	5.760E-06	Pulse	2.00	3
Ag			1	17.055	ug/l	1.21	879,044.83	2.045E+00	Pulse	0.50	3
Ba			1	0.087	ug/l	11.58	406.68	1.408E-04	Pulse	0.50	3
Tl			1	0.009	ug/l	17.80	1,095.38	1.242E-04	Pulse	0.50	3
Sn			1	0.090	ug/l	7.35	1,771.21	6.131E-04	Pulse	0.30	3
Sr			1	1.000	ug/l	1.24	9,782.56	3.388E-03	Pulse	0.50	3
[Pb]			1	0.131	ug/l	1.20	5,785.66	6.556E-04	Pulse	0.50	3
Ca			1	94147.329	ug/l	0.19	3,972,344.83	1.057E+01	Pulse	0.50	3
Ti			1	2011.680	ug/l	0.35	699,375.23	1.862E+00	Pulse	0.50	3
Na			1	99734.257	ug/l	0.50	228,829,061.33	6.091E+02	Analog	1.00	3
Mg			1	98971.832	ug/l	0.56	97,927,717.33	2.607E+02	Analog	1.00	3
K			1	103538.279	ug/l	0.52	76,363,800.00	2.033E+02	Analog	1.00	3
V			1	0.003	ug/l	45.51	661.35	1.760E-03	Pulse	0.50	3
Mn			1	20.429	ug/l	0.93	165,913.49	5.807E-01	Pulse	0.50	3
Fe			1	104392.405	ug/l	0.94	1,537,712,426.67	5.382E+03	Analog	0.50	3
Co			1	19.297	ug/l	1.35	683,229.54	2.391E+00	Pulse	0.50	3
Ni			1	18.616	ug/l	0.64	181,488.30	6.352E-01	Pulse	0.50	3
Cu			1	18.344	ug/l	0.48	510,179.80	1.786E+00	Pulse	0.50	3
Zn			1	19.512	ug/l	0.69	63,325.67	1.473E-01	Pulse	1.00	3
Cd			1	18.470	ug/l	1.83	111,635.85	2.597E-01	Pulse	0.50	3
Al			1	97010.273	ug/l	0.32	26,203,858.00	6.975E+01	Analog	1.00	3
Se			1	0.051	ug/l	21.35	21.44	1.024E-03	Pulse	3.00	3
Sb			1	0.049	ug/l	9.42	733.35	1.706E-03	Pulse	1.00	3
Se			1	0.059	ug/l	146.73	27.44	1.309E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,825,337.67	0.76	75.5	Analog	0.50	3
1	Sc		375,683.26	0.29	89.8	Pulse	0.30	3
1	Ge		285,717.16	0.23	82.1	Pulse	0.30	3
1	In		2,888,003.01	0.99	80.4	Pulse	0.30	3
1	Tb		13,554,716.67	0.39	87.8	Analog	0.50	3
1	Lu		8,043,629.50	0.90	88.9	Analog	0.50	3
1	Ge		429,889.73	0.96	80.8	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		20,936.67	0.98	68.9	Pulse	0.50	3
1	Li		2,231.25	6.98	66.0	Pulse	0.30	3

Quantitation Report

File Name	060CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:42
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.537	ug/l	0.46	970,002.12	3.239E+00	Pulse	0.50	3
As			1	50.787	ug/l	0.28	100,269.48	3.348E-01	Pulse	1.00	3
Mo			1	49.952	ug/l	0.19	712,005.25	1.548E+00	Pulse	0.50	3
Pb			1	46.452	ug/l	1.20	4,325,282.67	3.929E-01	Pulse	1.00	3
Be			1	50.814	ug/l	0.11	6,217.95	1.764E-02	Pulse	2.00	3
Ag			1	50.591	ug/l	0.34	2,789,987.08	6.066E+00	Pulse	0.50	3
Ba			1	50.151	ug/l	0.14	239,097.38	7.708E-02	Pulse	0.50	3
Tl			1	49.125	ug/l	0.70	6,836,047.50	6.209E-01	Analog	0.50	3
Sn			1	50.423	ug/l	0.91	584,379.51	1.884E-01	Pulse	0.30	3
Sr			1	48.956	ug/l	0.56	459,485.09	1.481E-01	Pulse	0.50	3
[Pb]			1	46.734	ug/l	0.81	2,029,918.96	1.844E-01	Pulse	0.50	3
Ca			1	4982.376	ug/l	1.68	197,339.41	5.600E-01	Pulse	0.50	3
Ti			1	49.563	ug/l	2.56	16,163.36	4.587E-02	Pulse	0.50	3
Na			1	5061.294	ug/l	0.15	10,901,141.67	3.093E+01	Analog	1.00	3
Mg			1	5098.614	ug/l	0.60	4,732,443.33	1.343E+01	Analog	1.00	3
K			1	4968.865	ug/l	0.13	3,447,933.50	9.784E+00	Pulse	1.00	3
V			1	50.520	ug/l	0.30	696,971.40	1.978E+00	Pulse	0.50	3
Mn			1	49.174	ug/l	0.29	416,761.02	1.392E+00	Pulse	0.50	3
Fe			1	5124.253	ug/l	0.29	79,152,272.00	2.643E+02	Analog	0.50	3
Co			1	50.051	ug/l	0.66	1,857,310.04	6.202E+00	Pulse	0.50	3
Ni			1	51.062	ug/l	0.71	519,775.89	1.736E+00	Pulse	0.50	3
Cu			1	51.120	ug/l	0.89	1,463,460.46	4.887E+00	Pulse	0.50	3
Zn			1	51.478	ug/l	0.13	175,538.86	3.816E-01	Pulse	1.00	3
Cd			1	51.568	ug/l	0.55	333,510.42	7.251E-01	Pulse	0.50	3
Al			1	4810.202	ug/l	0.30	1,219,096.63	3.459E+00	Pulse	1.00	3
Se			1	47.161	ug/l	0.81	6,580.91	2.584E-01	Pulse	3.00	3
Sb			1	50.200	ug/l	0.30	632,468.25	1.375E+00	Pulse	1.00	3
Se			1	47.419	ug/l	1.22	3,365.96	1.322E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,009,860.67	0.49	94.1	Analog	0.50	3
1	Sc		352,394.03	0.21	84.3	Pulse	0.30	3
1	Ge		299,479.27	0.54	86.0	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,101,943.49	0.26	86.4	Pulse	0.30	3
1	Tb		14,766,298.33	0.49	95.6	Analog	0.50	3
1	Lu		8,637,300.00	0.62	95.4	Analog	0.50	3
1	Ge		459,957.34	0.25	86.5	Pulse	0.30	3
1	Te		25,466.41	0.57	83.8	Pulse	0.50	3
1	Li		2,683.53	4.86	79.4	Pulse	0.30	3

Quantitation Report

File Name	061_CCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:46
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.319	ug/l	0.96	1,927,851.46	6.425E+00	Pulse	0.50	3
As			1	99.698	ug/l	1.11	197,193.95	6.572E-01	Pulse	1.00	3
Mo			1	98.945	ug/l	1.19	1,414,384.41	3.066E+00	Pulse	0.50	3
Pb			1	97.573	ug/l	0.20	8,817,610.33	8.249E-01	Analog	1.00	3
Be			1	99.202	ug/l	1.43	12,554.04	3.445E-02	Pulse	2.00	3
Ag			1	96.951	ug/l	0.22	5,362,201.50	1.162E+01	Pulse	0.50	3
Ba			1	98.102	ug/l	1.44	466,538.51	1.508E-01	Pulse	0.50	3
Tl			1	97.064	ug/l	0.79	13,113,750.33	1.227E+00	Analog	0.50	3
Sn			1	99.522	ug/l	1.69	1,149,728.81	3.716E-01	Pulse	0.30	3
Sr			1	98.061	ug/l	0.54	917,103.81	2.963E-01	Pulse	0.50	3
[Pb]			1	92.378	ug/l	0.38	3,894,191.25	3.643E-01	Pulse	0.50	3
Ca			1	9648.836	ug/l	0.30	395,101.21	1.084E+00	Pulse	0.50	3
Ti			1	98.539	ug/l	1.88	33,233.50	9.119E-02	Pulse	0.50	3
Na			1	9861.748	ug/l	0.14	21,959,055.33	6.025E+01	Analog	1.00	3
Mg			1	9789.762	ug/l	0.31	9,397,497.67	2.578E+01	Analog	1.00	3
K			1	9929.810	ug/l	0.34	7,115,027.67	1.952E+01	Analog	1.00	3
V			1	98.048	ug/l	0.71	1,398,443.25	3.837E+00	Pulse	0.50	3
Mn			1	97.435	ug/l	0.95	826,099.73	2.753E+00	Pulse	0.50	3
Fe			1	10129.414	ug/l	0.82	156,731,776.00	5.223E+02	Analog	0.50	3
Co			1	97.735	ug/l	0.54	3,633,851.92	1.211E+01	Pulse	0.50	3
Ni			1	99.567	ug/l	0.33	1,014,431.58	3.381E+00	Pulse	0.50	3
Cu			1	99.424	ug/l	0.81	2,837,598.00	9.457E+00	Pulse	0.50	3
Zn			1	99.342	ug/l	0.93	337,900.73	7.325E-01	Pulse	1.00	3
Cd			1	99.596	ug/l	1.56	645,980.25	1.400E+00	Pulse	0.50	3
Al			1	9403.520	ug/l	0.50	2,464,556.83	6.762E+00	Pulse	1.00	3
Se			1	96.046	ug/l	0.73	12,788.61	5.255E-01	Pulse	3.00	3
Sb			1	98.524	ug/l	0.93	1,244,727.50	2.698E+00	Pulse	1.00	3
Se			1	96.667	ug/l	1.56	6,528.79	2.683E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,689,089.00	0.21	91.4	Analog	0.50	3
1	Sc		364,464.33	0.73	87.1	Pulse	0.30	3
1	Ge		300,061.41	0.43	86.2	Pulse	0.30	3
1	In		3,094,826.27	1.74	86.2	Pulse	0.30	3
1	Tb		14,619,776.33	0.39	94.7	Analog	0.50	3
1	Lu		8,597,839.67	0.79	95.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		461,307.86	0.82	86.7	Pulse	0.30	3
1	Te		24,336.89	1.19	80.0	Pulse	0.50	3
1	Li		2,644.63	5.67	78.3	Pulse	0.30	3

Quantitation Report

File Name	062_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:49
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.719	ug/l	0.38	14,211.20	5.055E-02	Pulse	0.50	3
As			1	0.021	ug/l	15.56	57.67	2.051E-04	Pulse	1.00	3
Mo			1	0.077	ug/l	14.28	1,049.38	2.435E-03	Pulse	0.50	3
Pb			1	0.013	ug/l	16.34	4,148.51	3.988E-04	Pulse	1.00	3
Be			1	0.019	ug/l	25.49	2.33	7.089E-06	Pulse	2.00	3
Ag			1	0.016	ug/l	8.83	888.03	2.059E-03	Pulse	0.50	3
Ba			1	0.021	ug/l	22.71	111.33	3.853E-05	Pulse	0.50	3
Tl			1	0.038	ug/l	12.29	5,094.11	4.899E-04	Pulse	0.50	3
Sn			1	0.051	ug/l	5.66	1,346.73	4.655E-04	Pulse	0.30	3
Sr			1	0.030	ug/l	4.95	1,330.05	4.598E-04	Pulse	0.50	3
[Pb]			1	0.013	ug/l	19.14	1,976.12	1.900E-04	Pulse	0.50	3
Ca			1	6.367	ug/l	23.14	388.67	1.182E-03	Pulse	0.50	3
Ti			1	0.049	ug/l	0.92	16.00	4.866E-05	Pulse	0.50	3
Na			1	6.901	ug/l	2.06	22,212.27	6.755E-02	Pulse	1.00	3
Mg			1	4.227	ug/l	4.47	3,948.06	1.200E-02	Pulse	1.00	3
K			1	5.108	ug/l	5.18	13,475.60	4.098E-02	Pulse	1.00	3
V			1	-0.003	ug/l	-9.96	510.01	1.551E-03	Pulse	0.50	3
Mn			1	1.034	ug/l	0.54	9,428.30	3.354E-02	Pulse	0.50	3
Fe			1	4.208	ug/l	6.19	95,842.17	3.410E-01	Pulse	0.50	3
Co			1	0.018	ug/l	13.15	686.68	2.444E-03	Pulse	0.50	3
Ni			1	0.200	ug/l	7.16	2,975.57	1.059E-02	Pulse	0.50	3
Cu			1	-0.013	ug/l	-67.23	13,728.90	4.884E-02	Pulse	0.50	3
Zn			1	0.210	ug/l	17.95	2,512.51	5.827E-03	Pulse	1.00	3
Cd			1	0.016	ug/l	22.22	98.00	2.273E-04	Pulse	0.50	3
Al			1	34.248	ug/l	1.32	8,425.45	2.563E-02	Pulse	1.00	3
Se			1	0.026	ug/l	207.98	21.89	8.862E-04	Pulse	3.00	3
Sb			1	0.030	ug/l	9.62	501.34	1.162E-03	Pulse	1.00	3
Se			1	-0.034	ug/l	-408.78	26.11	1.051E-03	Pulse	3.00	3

Quantitation Report

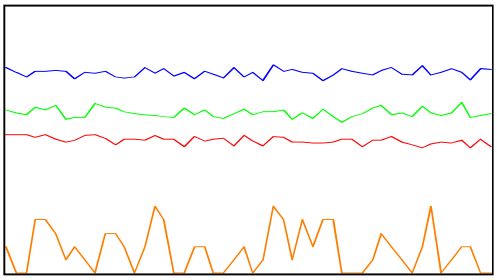
ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,400,702.67	0.90	88.9	Analog	0.50	3
1	Sc		328,814.19	0.85	78.6	Pulse	0.30	3
1	Ge		281,101.65	0.67	80.7	Pulse	0.30	3
1	In		2,892,834.61	0.87	80.6	Pulse	0.30	3
1	Tb		13,457,770.33	1.13	87.1	Analog	0.50	3
1	Lu		7,807,410.50	0.40	86.3	Analog	0.50	3
1	Ge		431,254.66	0.59	81.1	Pulse	0.30	3
1	Te		24,766.76	2.02	81.5	Pulse	0.50	3
1	Li		2,577.96	4.82	76.3	Pulse	0.30	3

Tune Report

Batch Folder	D:\2018\05-May\xa050718m1.b
Acq. Date-Time	5/7/2018 9:59
Report Comment	050718TUNE8
Instrument Name	G3281A JP12151709

[2]



Mass	Range	Count (Actual)	Response (Actual) [cps/ug/l]	Response (Required) [cps/ug/l]	Response (Flag)
59	10000	4972	49723.27	5000.00	
89	5000	3002	30016.69	5000.00	
205	20000	15016	150160.03	5000.00	
78	20	2			

Mass	Resp Ratio (Actual)	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
205		-	
78		-	

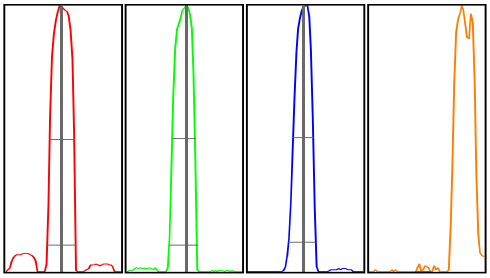
Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	2.88	8.00	
89	2.86	8.00	
205	1.97	8.00	
78	92.75		

Mass	Background (Actual)	Background (Required)	Background (Flag)
59	0.00	2	
89	0.00	2	
205	0.40	2	
78	0.00	5	

Ratio	156/140	0.254 %	
Ratio	70/140	1.645 %	

Integration Time [sec]	0.1	**Sampling Period [sec]**	0.412

Tune Report



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	W-50%	W-10% (Actual)	W-10% (Required)	W-10% (Flag)
59	4818.89	59.00	58.9 - 59.1		0.62	0.725	0.900	
89	3039.82	89.05	88.9 - 89.1		0.57	0.702	0.900	
205	15283.36	205.00	204.9 - 205.1		0.50	0.692	0.900	
78	0.00	77.90	-		0.35	0.350		

Integration Time [sec] 0.1 **Acquisition Time [sec]** 29.92 **Y Axis** Linear

Tune Parameters
Plasma Paramters

RF Power	1600 W	Nebulizer Pump	0.10 rps
RF Matching	1.70 V	S/C Temp	2 ℃
Smpl Depth	8.5 mm	Gas Switch	Dilution Gas
Carrier Gas	0.80 L/min	Makeup/Dilution Gas	0.35 L/min
Option Gas	0.0 %		

Lenses Parameters

Extract 1	0.0 V	Cell Entrance	-30 V
Extract 2	-150.0 V	Cell Exit	-70 V
Omega Bias	-80 V	Deflect	2.8 V
Omega Lens	8.3 V	Plate Bias	-60 V

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V
He Flow	5.0 mL/min	OctP RF	190 V
H2 Flow	0.0 mL/min	Energy Discrimination	3.0 V
3rd Gas Flow	0 %		

	Sensitivity										
Created Date	Channel 1 Count	Channel 1 Mass	Channel 1 RSD%	Channel 2 Count	Channel 2 Mass	Channel 2 RSD%	Channel 3 Count	Channel 3 Mass	Channel 3 RSD%	Oxide Mass	Doubly Charged Mass
5/7/2018 9:08 AM	4199.2415	7	10.628003	20903.013	89	11.830999	15119.169	205	12.403401	156/140	70/140

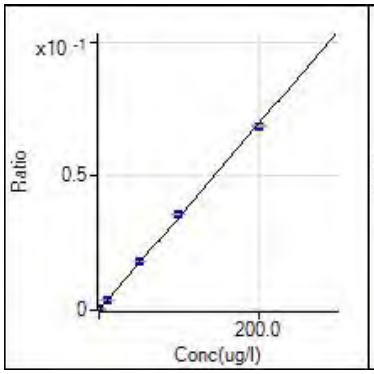
				Background							
Integration Time	Oxide Ratio	Doubly Charged Ratio	Sampling Period	Channel 1 Count	Channel 1 Mass	Channel 2 Count	Channel 2 Mass	Channel 3 Count	Channel 3 Mass	Acquisition Time	Channel 1 Mass
0.100 sec	1.08 %	15.10 %	0.311 sec	2.2500005	7	3.9000007	89	20.450019	205	00:00:23	7

Resolution/Axis

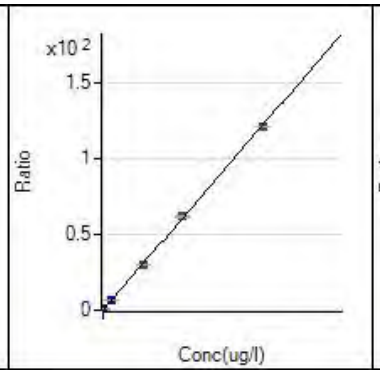
Channel 1 Axis	Channel 1 Height	Channel 1 W-10%	Channel 1 W-50%	Channel 2 Mass	Channel 2 Axis	Channel 2 Height	Integration Time	Channel 2 W-10%	Channel 2 W-50%	Channel 3 Mass	Channel 3 Axis	Channel 3 Height
7	4087.5505	0.7702075	0.6655947	89	89	20694.678	0.100 sec	0.7295561	0.5967842	205	205	14820.484

		Standard Tune Parameters Ion Lenses		
Channel 3 W-10%	Channel 3 W-50%	Extract 1	Extract 2	Omega Bias
0.7591018	0.520696	0.0 V	-190.0 V	-70 V

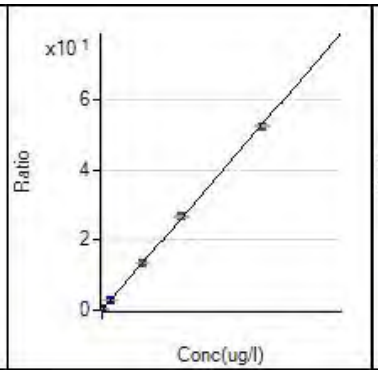
Calibration for D:\2018\05-May\xa050718m1.b\060CCVA.d



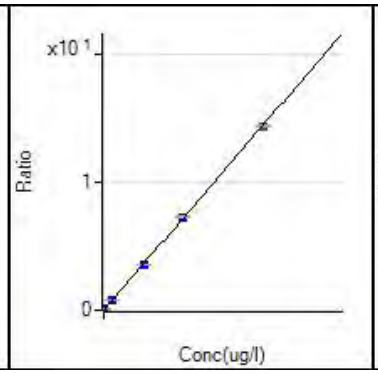
9 Be [2] / ISTD: 45 Sc
y = 3.472E-4 x + 3.953E-7
R 0.9998
DL 0.005915
BEC 0.001138



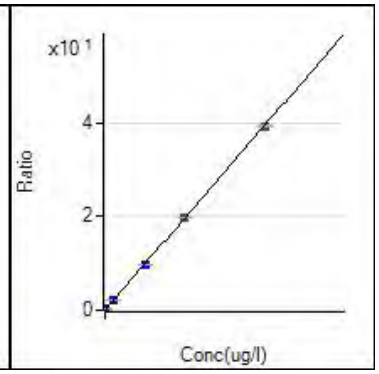
23 Na [2] / ISTD: 45 Sc
y = 6.107E-3 x + 2.540E-2
R 1.0000
DL 0.2695
BEC 4.16



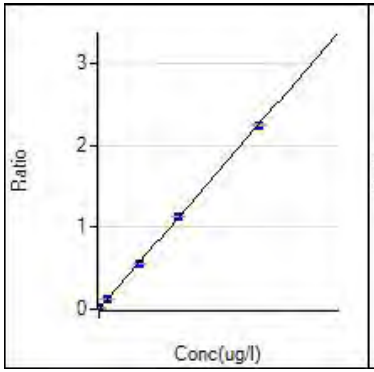
24 Mg [2] / ISTD: 45 Sc
y = 2.634E-3 x + 8.720E-4
R 1.0000
DL 0.1107
BEC 0.3311



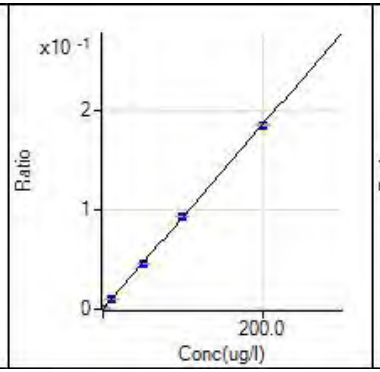
27 Al [2] / ISTD: 45 Sc
y = 7.190E-4 x + 1.001E-3
R 1.0000
DL 0.2451
BEC 1.393



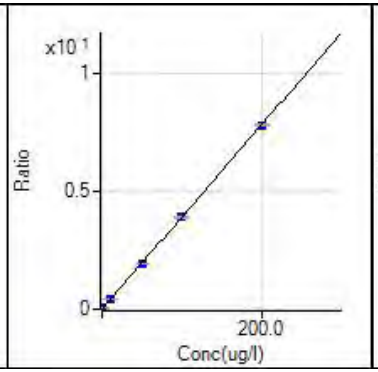
39 K [2] / ISTD: 45 Sc
y = 1.963E-3 x + 3.096E-2
R 1.0000
DL 1.496
BEC 15.77



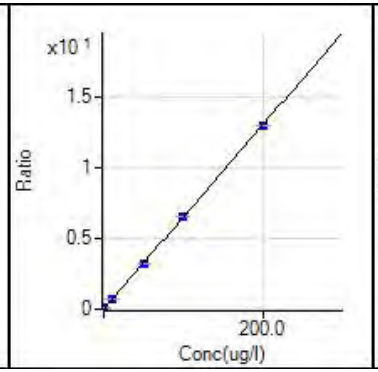
44 Ca [2] / ISTD: 45 Sc
y = 1.123E-4 x + 4.667E-4
R 1.0000
DL 1.89
BEC 4.156



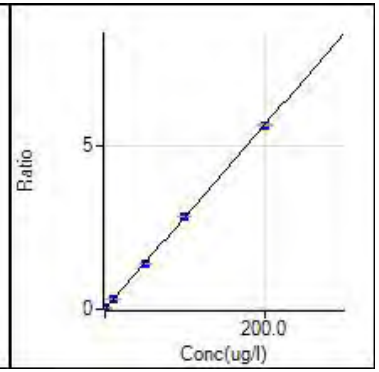
47 Ti [2] / ISTD: 45 Sc
y = 9.254E-4 x + 3.231E-6
R 1.0000
DL 0.01814
BEC 0.003492



51 V [2] / ISTD: 45 Sc
y = 3.912E-2 x + 1.652E-3
R 1.0000
DL 0.009296
BEC 0.04224

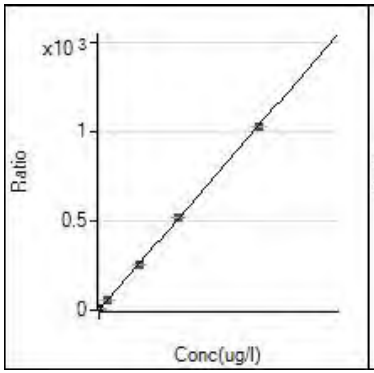


52 Cr [2] / ISTD: 72 Ge
y = 6.531E-2 x + 3.621E-3
R 1.0000
DL 0.007648
BEC 0.05544

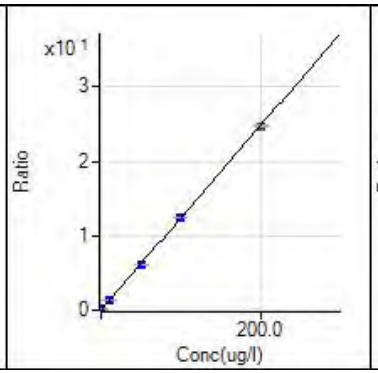


55 Mn [2] / ISTD: 72 Ge
y = 2.821E-2 x + 4.357E-3
R 1.0000
DL 0.01081
BEC 0.1544

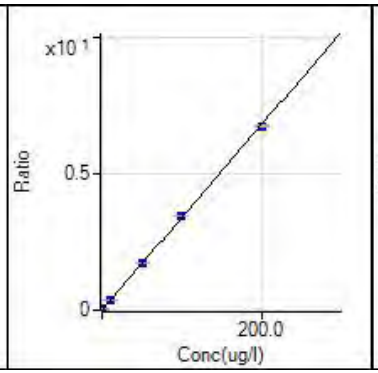
Calibration for D:\2018\05-May\xa050718m1.b\060CCVA.d



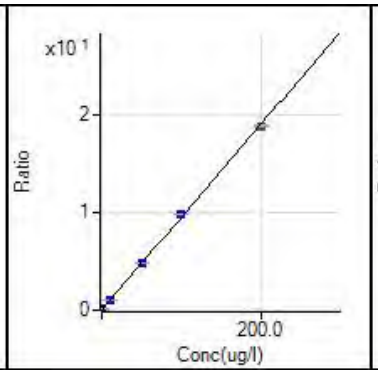
56 Fe [2] / ISTD: 72 Ge
y = 5.155E-2 x + 1.240E-1
R 1.0000
DL 0.03506
BEC 2.406



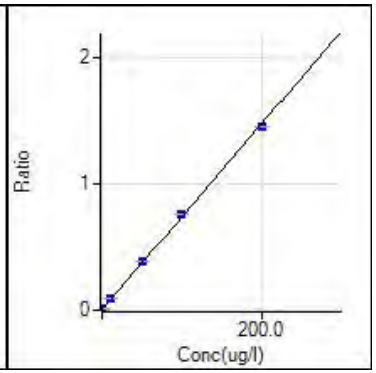
59 Co [2] / ISTD: 72 Ge
y = 1.239E-1 x + 1.897E-4
R 1.0000
DL 0.0011
BEC 0.001531



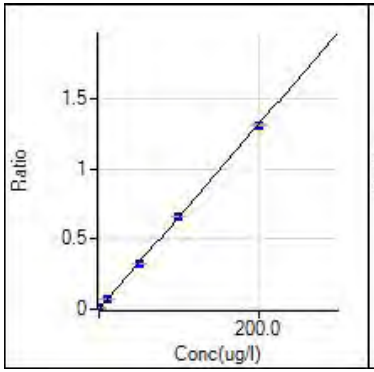
60 Ni [2] / ISTD: 72 Ge
y = 3.392E-2 x + 3.814E-3
R 0.9999
DL 0.01574
BEC 0.1125



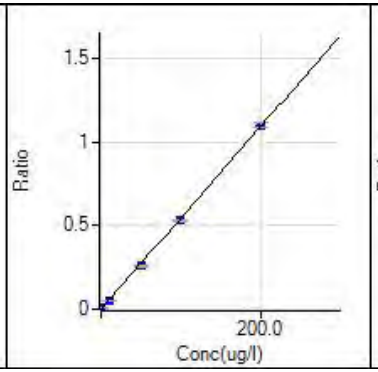
63 Cu [2] / ISTD: 72 Ge
y = 9.461E-2 x + 5.006E-2
R 0.9999
DL 0.0117
BEC 0.5291



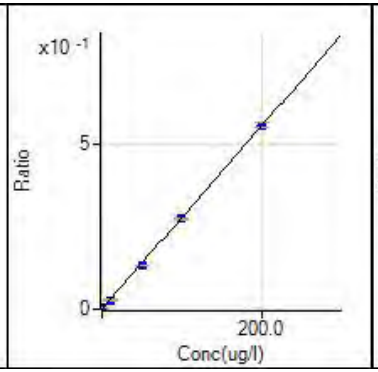
66 Zn [2] / ISTD: 74 Ge
y = 7.330E-3 x + 4.285E-3
R 0.9998
DL 0.06957
BEC 0.5845



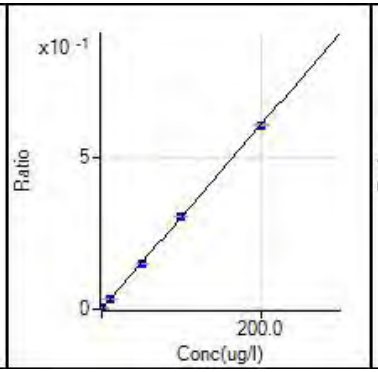
75 As [2] / ISTD: 72 Ge
y = 6.591E-3 x + 6.414E-5
R 1.0000
DL 0.002644
BEC 0.009731



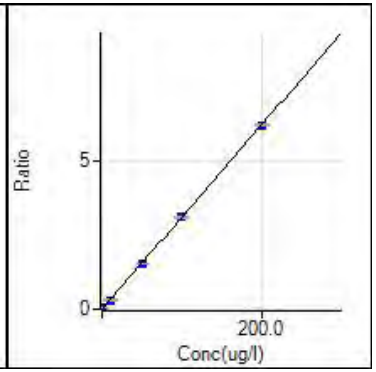
78 Se [2] / ISTD: 125 Te
y = 5.464E-3 x + 7.456E-4
R 0.9998
DL 0.04004
BEC 0.1365



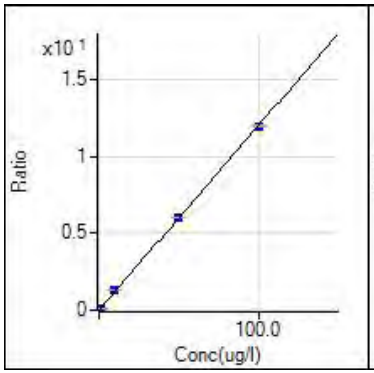
82 Se [2] / ISTD: 125 Te
y = 2.763E-3 x + 1.146E-3
R 0.9999
DL 0.1932
BEC 0.4146



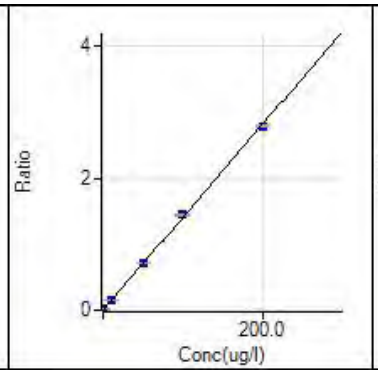
88 Sr [2] / ISTD: 115 In
y = 3.018E-3 x + 3.694E-4
R 1.0000
DL 0.0295
BEC 0.1224



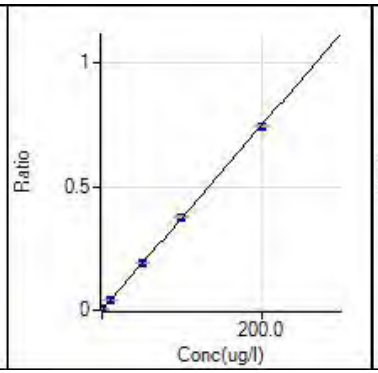
95 Mo [2] / ISTD: 74 Ge
y = 3.099E-2 x + 3.757E-5
R 1.0000
DL 0.0007084
BEC 0.001212



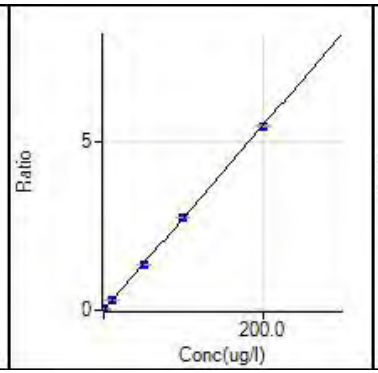
107 Ag [2] / ISTD: 74 Ge
y = 1.199E-1 x + 1.306E-4
R 1.0000
DL 0.001317
BEC 0.001089



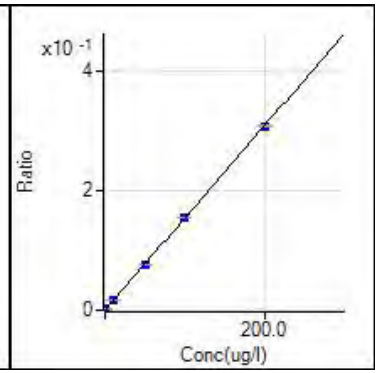
111 Cd [2] / ISTD: 74 Ge
y = 1.406E-2 x + 7.502E-6
R 0.9998
DL 0.0007914
BEC 0.0005335



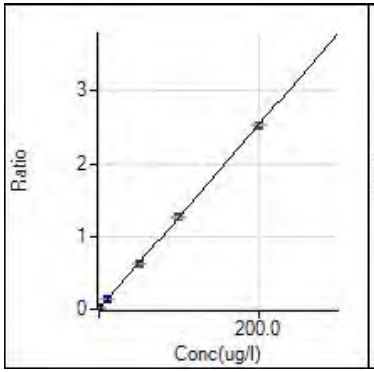
118 Sn [2] / ISTD: 115 In
y = 3.731E-3 x + 2.771E-4
R 1.0000
DL 0.01579
BEC 0.07426



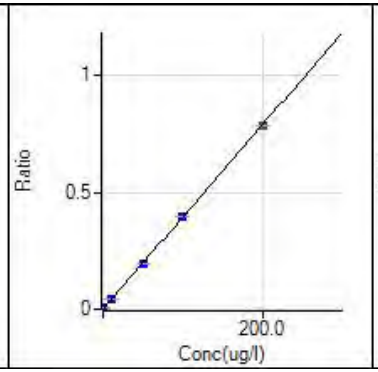
121 Sb [2] / ISTD: 74 Ge
y = 2.738E-2 x + 3.529E-4
R 1.0000
DL 0.00289
BEC 0.01289



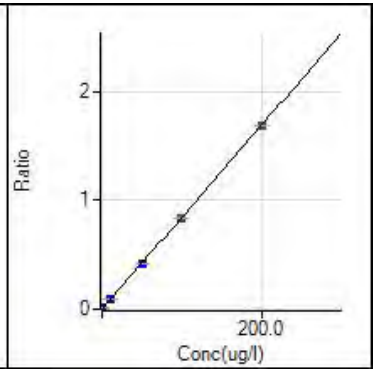
137 Ba [2] / ISTD: 115 In
y = 1.537E-3 x + 6.491E-6
R 1.0000
DL 0.009356
BEC 0.004223



205 Tl [2] / ISTD: 209 Bi
y = 1.264E-2 x + 1.179E-5
R 1.0000
DL 0.0004634
BEC 0.000933



206 [Pb] [2] / ISTD: 209 Bi
y = 3.942E-3 x + 1.392E-4
R 1.0000
DL 0.0008505
BEC 0.03531



208 Pb [2] / ISTD: 209 Bi
y = 8.451E-3 x + 2.898E-4
R 1.0000
DL 0.00222
BEC 0.03429

Inst QC: MA14907

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/17/2018 8:59:38 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	-.0058	-.0008	.0551	.0005	.0092	-.0001	.0004	.0002
Stddev	.0002	.0016	.0001	.0038	.0010	.0009	.0001	.0001	.0000
%RSD	167.3	27.45	9.856	6.805	180.8	10.05	81.67	35.45	10.95
#1	-.0001	-.0059	-.0009	.0584	.0015	.0085	-.0001	.0004	.0002
#2	.0003	-.0041	-.0007	.0511	.0005	.0088	.0000	.0003	.0002
#3	.0002	-.0073	-.0008	.0559	-.0004	.0103	-.0001	.0005	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0028	.0030	-.0025	-.0015	.0003	.0017	-.0201	-.0001	.0023
Stddev	.0001	.0002	.0088	.0003	.0001	.0000	.0076	.0002	.0002
%RSD	4.192	5.151	350.3	21.97	26.23	2.219	37.73	136.7	6.573
#1	.0028	.0031	.0033	-.0014	.0003	.0017	-.0260	-.0003	.0023
#2	.0026	.0028	.0018	-.0012	.0002	.0017	-.0115	.0001	.0024
#3	.0028	.0030	-.0126	-.0018	.0003	.0016	-.0228	-.0002	.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0001	-.0007	.0043	.0005	.0010	.0022	-.0034	-.0002	.0024
Stddev	.0001	.0001	.0001	.0000	.0006	.0001	.0006	.0001	.0003
%RSD	128.1	14.54	2.726	4.286	52.84	3.362	16.11	80.80	10.93
#1	-.0001	-.0007	.0044	.0005	.0016	.0022	-.0033	.0000	.0025
#2	-.0002	-.0007	.0043	.0005	.0009	.0021	-.0029	-.0002	.0026
#3	.0000	-.0006	.0042	.0005	.0006	.0022	-.0040	-.0003	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1225.1	3107.0	23245.	1518.1
Stddev	3.2	.8	70.	12.4
%RSD	.26256	.02640	.30050	.81711
#1	1224.5	3106.9	23314.	1516.0
#2	1228.6	3106.3	23247.	1506.8
#3	1222.3	3107.9	23175.	1531.4

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/17/2018 9:03:44 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0345	1.834	.1092	6.498	4.688	2.891	2.587	1.296	.2345	.4251
Stddev	.0000	.008	.0001	.047	.017	.012	.001	.002	.0009	.0005
%RSD	.0987	.4553	.0555	.7229	.3655	.4141	.0371	.1679	.3778	.1121
#1	.0345	1.829	.1092	6.551	4.704	2.902	2.588	1.298	.2353	.4249
#2	.0346	1.829	.1091	6.461	4.670	2.878	2.587	1.294	.2335	.4248
#3	.0345	1.844	.1091	6.483	4.689	2.893	2.587	1.296	.2346	.4256

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.389	3.240	.3035	1.334	.6382	9.047	.7391	.6368	.1340	.0794
Stddev	.002	.018	.0020	.002	.0013	.020	.0002	.0045	.0006	.0001
%RSD	.0648	.5426	.6632	.1103	.2039	.2164	.0308	.7123	.4505	.1689
#1	2.388	3.261	.3051	1.332	.6369	9.035	.7391	.6393	.1335	.0793
#2	2.388	3.232	.3041	1.335	.6381	9.037	.7390	.6316	.1346	.0795
#3	2.391	3.229	.3012	1.335	.6395	9.070	.7394	.6396	.1337	.0795

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2403	.2500	9.671	1.020	.3161	.3471	1.533
Stddev	.0003	.0003	.030	.001	.0005	.0007	.002
%RSD	.1286	.1153	.3069	.0562	.1507	.2103	.0989
#1	.2407	.2502	9.687	1.020	.3155	.3469	1.535
#2	.2402	.2502	9.637	1.020	.3162	.3464	1.533
#3	.2400	.2497	9.690	1.021	.3164	.3479	1.532

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1163.2	3097.6	22994.	1522.7
Stddev	2.6	2.0	47.	12.5
%RSD	.21928	.06484	.20245	.81962
#1	1162.5	3097.3	22999.	1522.8
#2	1166.1	3095.8	23037.	1510.2
#3	1161.1	3099.8	22945.	1535.1

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/17/2018 9:07:04 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1357	7.342	.4478	25.90	18.75	11.36	10.27	5.120	.9318	1.705
Stddev	.0009	.035	.0007	.07	.08	.09	.01	.002	.0048	.007
%RSD	.6983	.4767	.1460	.2689	.4386	.7560	.0854	.0405	.5114	.4205
#1	.1356	7.382	.4478	25.95	18.85	11.45	10.28	5.122	.9288	1.713
#2	.1347	7.328	.4484	25.82	18.73	11.37	10.27	5.121	.9294	1.699
#3	.1366	7.316	.4471	25.93	18.69	11.28	10.26	5.118	.9373	1.705

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.167	13.08	1.195	5.347	2.698	36.37	2.910	2.610	.5445	.3241
Stddev	.045	.06	.004	.047	.003	.18	.002	.004	.0012	.0004
%RSD	.4887	.4365	.3513	.8718	.1066	.4892	.0562	.1493	.2159	.1248
#1	9.208	13.15	1.199	5.344	2.695	36.53	2.908	2.614	.5433	.3236
#2	9.174	13.05	1.193	5.302	2.700	36.41	2.911	2.607	.5444	.3244
#3	9.119	13.05	1.191	5.395	2.700	36.18	2.911	2.608	.5457	.3242

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.274	1.035	40.71	4.293	1.289	1.458	6.070
Stddev	.001	.001	.15	.032	.003	.003	.006
%RSD	.0786	.1095	.3778	.7331	.2283	.2179	.1041
#1	1.274	1.034	40.84	4.294	1.291	1.461	6.077
#2	1.273	1.037	40.75	4.262	1.285	1.455	6.066
#3	1.275	1.035	40.54	4.325	1.290	1.457	6.067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1054.0	2940.9	21915.	1488.0
Stddev	1.3	1.8	106.	6.3
%RSD	.12185	.06277	.48477	.42219
#1	1054.3	2943.0	22000.	1480.7
#2	1055.2	2940.5	21949.	1491.7
#3	1052.6	2939.3	21796.	1491.5

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/17/2018 9:11:08 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2829	14.86	.9178	52.17	37.14	22.69	20.36	10.20	1.851	3.454
Stddev	.0014	.08	.0020	.22	.14	.10	.04	.03	.016	.012
%RSD	.5115	.5177	.2232	.4146	.3844	.4192	.2206	.2476	.8866	.3477
#1	.2834	14.84	.9197	52.21	37.09	22.67	20.41	10.22	1.862	3.453
#2	.2840	14.80	.9182	51.94	37.03	22.60	20.34	10.19	1.859	3.467
#3	.2813	14.95	.9156	52.37	37.30	22.79	20.33	10.17	1.832	3.443

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	18.14	26.81	2.424	10.63	5.352	73.69	5.799	5.320	1.112	.6606
Stddev	.07	.12	.010	.08	.013	.32	.015	.024	.003	.0022
%RSD	.3726	.4345	.4230	.7427	.2442	.4374	.2659	.4417	.3054	.3266
#1	18.11	26.78	2.423	10.66	5.367	73.53	5.817	5.342	1.116	.6627
#2	18.09	26.71	2.415	10.68	5.348	73.47	5.789	5.323	1.111	.6584
#3	18.22	26.94	2.435	10.54	5.341	74.06	5.791	5.295	1.109	.6606

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.739	2.050	80.07	8.540	2.599	2.905	12.02
Stddev	.005	.004	.34	.046	.014	.014	.02
%RSD	.2945	.1830	.4185	.5432	.5323	.4838	.1580
#1	1.745	2.055	79.77	8.561	2.613	2.908	12.04
#2	1.739	2.049	80.00	8.572	2.597	2.918	12.00
#3	1.735	2.047	80.43	8.487	2.586	2.890	12.01

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	979.65	2823.7	21292.	1459.6
Stddev	3.43	6.1	151.	7.0
%RSD	.35033	.21516	.71149	.48166
#1	975.94	2816.9	21238.	1458.4
#2	980.32	2828.7	21174.	1467.1
#3	982.70	2825.5	21463.	1453.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/17/2018 9:18:31 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4952	77.03	4.024	3.904	3.862	76.76	3.912	3.924	3.806	3.913
Stddev	.0016	.71	.004	.018	.025	.46	.003	.005	.006	.010
%RSD	.3326	.9225	.1046	.4573	.6433	.6049	.0744	.1327	.1674	.2504
#1	.4936	77.84	4.028	3.924	3.890	77.30	3.915	3.924	3.813	3.924
#2	.4969	76.52	4.021	3.894	3.853	76.51	3.914	3.930	3.804	3.908
#3	.4951	76.74	4.022	3.892	3.842	76.47	3.909	3.919	3.801	3.906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.19	78.44	77.70	3.873	3.958	77.37	3.969	3.953	4.014	4.029
Stddev	.28	.49	.09	.011	.006	.60	.003	.004	.009	.006
%RSD	.3692	.6278	.1167	.2930	.1604	.7718	.0854	.1000	.2220	.1447
#1	77.49	78.99	77.80	3.860	3.951	78.06	3.967	3.950	4.019	4.033
#2	77.15	78.24	77.62	3.875	3.963	77.02	3.973	3.957	4.020	4.030
#3	76.92	78.07	77.68	3.883	3.960	77.02	3.968	3.952	4.004	4.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.455	3.995	3.867	3.881	3.948	3.917	3.913
Stddev	.001	.004	.026	.002	.002	.011	.005
%RSD	.0345	.1112	.6654	.0604	.0541	.2830	.1264
#1	3.454	4.000	3.897	3.882	3.948	3.909	3.911
#2	3.455	3.994	3.855	3.884	3.945	3.912	3.919
#3	3.457	3.992	3.851	3.879	3.949	3.929	3.910
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/17/2018 9:18:31 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	985.76	2827.2	21766.	1492.8
Stddev	.77	6.8	13.	6.3
%RSD	.07828	.24108	.06181	.42116
#1	985.54	2820.4	21767.	1486.9
#2	985.13	2827.2	21779.	1492.2
#3	986.62	2834.0	21752.	1499.4

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2018 9:24:45 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2291	39.75	1.995	1.984	1.985	38.92	1.988	2.014	1.933	1.968
Stddev	.0004	.24	.004	.015	.009	.24	.001	.002	.003	.001
%RSD	.1564	.6097	.1751	.7313	.4590	.6283	.0481	.0805	.1372	.0648
#1	.2293	40.02	1.995	2.001	1.996	39.19	1.987	2.013	1.933	1.969
#2	.2287	39.56	1.999	1.980	1.978	38.71	1.988	2.016	1.931	1.968
#3	.2293	39.67	1.992	1.973	1.982	38.86	1.989	2.013	1.936	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.50	38.86	39.67	1.925	1.872	38.22	2.028	1.951	2.000	2.005
Stddev	.07	.30	.06	.001	.003	.24	.003	.002	.005	.001
%RSD	.1845	.7603	.1549	.0279	.1400	.6287	.1303	.1126	.2618	.0703
#1	38.58	39.20	39.60	1.924	1.869	38.50	2.030	1.953	2.002	2.004
#2	38.46	38.74	39.67	1.925	1.873	38.09	2.028	1.949	2.004	2.006
#3	38.46	38.65	39.73	1.925	1.873	38.08	2.025	1.952	1.994	2.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0452	2.039	1.906	1.921	2.020	1.885	1.995
Stddev	.0006	.004	.011	.001	.002	.004	.001
%RSD	1.252	.2211	.5979	.0424	.1139	.2129	.0692
#1	.0459	2.045	1.919	1.922	2.020	1.885	1.996
#2	.0450	2.037	1.898	1.921	2.022	1.881	1.995
#3	.0448	2.037	1.900	1.920	2.017	1.889	1.993
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2018 9:24:45 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1054.4	2914.0	22218.	1499.4
Stddev	1.6	3.1	41.	4.0
%RSD	.14891	.10695	.18350	.26683
#1	1053.4	2912.8	22224.	1503.0
#2	1053.5	2911.7	22255.	1500.0
#3	1056.2	2917.6	22174.	1495.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/17/2018 9:31:26 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0109	.0007	-.0001	.0000	.0012	.0001	.0001	.0001
Stddev	.0007	.0037	.0007	.0001	.0001	.0043	.0000	.0001	.0003
%RSD	292.7	33.87	98.38	39.10	2771.	346.7	22.97	74.39	245.9
#1	-.0011	.0099	.0000	-.0001	.0002	.0061	.0001	.0001	-.0002
#2	.0001	.0077	.0014	-.0001	-.0001	-.0022	.0001	.0000	.0003
#3	.0002	.0149	.0008	-.0002	-.0001	-.0002	.0001	.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0043	.0161	.0353	.0000	F.0016	.0202	.0003	-.0004
Stddev	.0001	.0022	.0166	.0276	.0001	.0003	.0064	.0001	.0011
%RSD	17.69	51.03	103.0	78.29	141.7	17.45	31.81	50.77	285.1
#1	.0003	.0067	.0343	.0523	.0000	.0019	.0134	.0003	.0004
#2	.0004	.0025	.0124	.0034	.0001	.0017	.0262	.0001	-.0017
#3	.0005	.0036	.0017	.0502	.0000	.0013	.0211	.0004	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0017	.0003	.0007	.0001	.0007	.0005	.0001	.0002
Stddev	.0017	.0011	.0002	.0003	.0000	.0002	.0004	.0000	.0000
%RSD	472.8	62.85	71.19	36.27	39.21	22.62	76.21	54.54	14.99
#1	.0022	.0011	.0006	.0010	.0002	.0006	.0004	.0001	.0001
#2	-.0013	.0029	.0002	.0007	.0001	.0009	.0009	.0001	.0002
#3	.0003	.0010	.0002	.0005	.0001	.0006	.0002	.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/17/2018 9:31:26 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1197.4	3021.5	22965.	1494.2
Stddev	2.8	6.0	135.	6.8
%RSD	.23313	.19876	.58619	.45565
#1	1195.1	3026.3	22880.	1501.3
#2	1196.4	3014.8	23120.	1493.3
#3	1200.5	3023.4	22894.	1487.8

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 9:35:35 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Sb2068
Units	ppm
Avg	F.0060
Stddev	.0019
%RSD	30.92
#1	.0080
#2	.0057
#3	.0043
Check ?	Chk Fail
Value	.0050
Range	20.00%

Int. Std.	Y_2243
Units	Cts/S
Avg	3009.5
Stddev	1.9
%RSD	.06419
#1	3011.5
#2	3009.3
#3	3007.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 9:39:29 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087	.2088	.0103	.1964	.0049	.9658	.0051	.0512	.0096	.0254
Stddev	.0005	.0209	.0004	.0017	.0000	.0049	.0000	.0002	.0001	.0002
%RSD	5.347	10.03	3.952	.8506	.6616	.5071	.5138	.4076	.6820	.8978
#1	.0088	.2326	.0103	.1978	.0048	.9682	.0051	.0510	.0096	.0252
#2	.0081	.1935	.0099	.1945	.0049	.9691	.0051	.0511	.0097	.0254
#3	.0091	.2001	.0107	.1969	.0049	.9602	.0052	.0514	.0096	.0257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2887	9.496	4.912	.0148	.0476	9.338	.0422	.0047	.0116	.0302
Stddev	.0030	.079	.028	.0001	.0002	.044	.0002	.0006	.0027	.0004
%RSD	1.035	.8364	.5735	.4530	.5195	.4702	.4076	12.85	23.19	1.414
#1	.2917	9.557	4.905	.0147	.0477	9.366	.0421	.0052	.0145	.0300
#2	.2858	9.406	4.943	.0148	.0473	9.288	.0424	.0040	.0108	.0307
#3	.2886	9.526	4.888	.0148	.0478	9.362	.0422	.0048	.0094	.0300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value										
Range										

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0528	.0095	.0094	.0101	.0469	.0204
Stddev	.0005	.0001	.0002	.0009	.0003	.0001
%RSD	1.019	1.103	2.089	9.116	.6971	.2913
#1	.0533	.0096	.0095	.0090	.0472	.0204
#2	.0522	.0094	.0092	.0108	.0466	.0204
#3	.0529	.0094	.0096	.0103	.0469	.0205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 9:39:29 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1168.1	3000.3	23035.	1518.3
Stddev	1.2	6.8	86.	2.3
%RSD	.10333	.22582	.37375	.15137
#1	1166.7	2993.0	23053.	1520.7
#2	1168.5	3001.6	23111.	1516.2
#3	1169.0	3006.3	22942.	1517.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 9:46:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	469.4	-.0014	.0003	-.0002	430.7	.0000	.0000	-.0003	-.0008
Stddev	.0001	2.6	.0019	.0002	.0000	2.5	.000	.0002	.0003	.0003
%RSD	27.52	.5502	134.4	77.82	17.03	.5814	1867.	564.0	93.22	30.96
#1	-.0005	471.5	-.0031	.0001	-.0002	431.9	.0000	.0002	-.0006	-.0009
#2	-.0004	470.1	-.0019	.0003	-.0001	432.4	-.0002	.0001	-.0002	-.0006
#3	-.0003	466.5	.0007	.0005	-.0002	427.9	.0002	-.0002	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	168.4	.0197	478.2	-.0001	.0000	.1675	-.0004	.0002	.0014	.0000
Stddev	.9	.0201	2.0	.0001	.0003	.0082	.0003	.0014	.0008	.004
%RSD	.5145	102.2	.4283	102.7	820.0	4.908	81.01	841.5	54.95	21670.
#1	168.4	.0100	478.0	-.0001	.0003	.1609	-.0007	-.0013	.0013	.0038
#2	169.3	.0427	480.3	.0000	-.0002	.1767	-.0004	.0002	.0021	-.0008
#3	167.5	.0062	476.2	-.0001	.0000	.1649	-.0001	.0015	.0006	-.0031
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0188	.0005	.0001	.0003	.0000	-.0005	-.0005
Stddev	.0009	.0008	.0000	.0001	.0014	.0000	.0002
%RSD	4.622	161.5	45.20	32.36	20870.	7.115	36.96
#1	.0182	.0003	.0000	.0003	-.0004	-.0004	-.0004
#2	.0198	.0014	.0001	.0004	-.0012	-.0005	-.0007
#3	.0184	-.0002	.0001	.0003	.0015	-.0005	-.0005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 9:46:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	942.09	2704.0	20734.	1495.8
Stddev	2.20	3.7	36.	10.1
%RSD	.23308	.13555	.17359	.67651
#1	943.86	2707.7	20736.	1497.9
#2	939.64	2703.9	20770.	1484.7
#3	942.79	2700.4	20698.	1504.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2018 9:55:45 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.013	475.8	1.118	.4997	.4812	434.9	.9304	.4780	.4579	.5272
Stddev	.010	2.8	.003	.0007	.0018	2.2	.0013	.0010	.0020	.0028
%RSD	1.007	.5929	.2559	.1355	.3839	.5139	.1380	.2196	.4272	.5346
#1	1.023	479.0	1.116	.5002	.4832	437.4	.9289	.4768	.4601	.5290
#2	1.012	473.8	1.121	.4989	.4796	433.0	.9313	.4788	.4563	.5287
#3	1.003	474.6	1.116	.5001	.4807	434.3	.9310	.4782	.4574	.5240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	175.3	.0213	493.3	.4804	.9122	.1671	.9852	.9373	1.049	1.013
Stddev	1.0	.0138	2.4	.0050	.0023	.0041	.0011	.0037	.002	.005
%RSD	.5646	64.88	.4774	1.035	.2467	2.446	.1100	.3995	.1420	.4732
#1	176.3	.0338	495.3	.4860	.9102	.1673	.9845	.9383	1.048	1.018
#2	174.4	.0065	490.7	.4784	.9117	.1711	.9847	.9332	1.051	1.012
#3	175.2	.0236	493.8	.4767	.9146	.1629	.9865	.9405	1.049	1.008
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0244	.9741	.9626	.9348	.9331	.4682	.9315
Stddev	.0016	.0038	.0044	.0062	.0022	.0022	.0012
%RSD	6.704	.3851	.4520	.6604	.2397	.4678	.1244
#1	.0225	.9699	.9666	.9416	.9352	.4702	.9306
#2	.0255	.9772	.9580	.9333	.9308	.4685	.9310
#3	.0251	.9751	.9630	.9295	.9333	.4659	.9328
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2018 9:55:45 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	909.79	2609.5	20380.	1461.0
Stddev	2.58	1.5	152.	4.1
%RSD	.28358	.05905	.74730	.28003
#1	907.94	2609.3	20207.	1459.6
#2	912.74	2611.1	20440.	1465.7
#3	908.70	2608.1	20493.	1457.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 10:03:35 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2423	36.66	2.052	1.951	1.916	36.96	1.997	2.007	1.887	1.948
Stddev	.0009	.24	.006	.014	.011	.22	.002	.004	.002	.006
%RSD	.3867	.6510	.2980	.7168	.5541	.5896	.1137	.1897	.1290	.2945
#1	.2416	36.50	2.058	1.945	1.911	36.80	2.000	2.007	1.888	1.955
#2	.2419	36.94	2.046	1.967	1.929	37.21	1.998	2.010	1.884	1.944
#3	.2434	36.56	2.052	1.941	1.910	36.86	1.995	2.003	1.887	1.945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.54	38.06	38.29	1.965	2.055	37.06	2.068	1.932	2.046	2.061
Stddev	.10	.31	.11	.007	.004	.19	.003	.003	.008	.006
%RSD	.2680	.8090	.2814	.3447	.1755	.5235	.1371	.1470	.4088	.3124
#1	38.47	37.88	38.21	1.957	2.055	36.91	2.069	1.933	2.049	2.069
#2	38.66	38.41	38.42	1.966	2.059	37.28	2.071	1.928	2.052	2.056
#3	38.50	37.88	38.26	1.971	2.052	36.99	2.065	1.933	2.037	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.656	2.117	1.921	1.961	1.967	2.000	2.001
Stddev	.005	.002	.011	.005	.002	.003	.001
%RSD	.1981	.0871	.5824	.2334	.0943	.1443	.0248
#1	2.660	2.117	1.914	1.957	1.969	2.002	2.001
#2	2.657	2.115	1.933	1.962	1.965	1.997	2.001
#3	2.650	2.118	1.914	1.966	1.967	2.001	2.001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 10:03:35 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1048.4	2854.7	22382.	1525.3
Stddev	.7	2.6	64.	6.5
%RSD	.06775	.09026	.28766	.42363
#1	1048.9	2853.4	22452.	1531.6
#2	1048.8	2852.9	22367.	1518.7
#3	1047.6	2857.6	22326.	1525.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 10:15:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0159	.0004	-.0004	.0000	.0020	.0001	.0000	-.0001	.0002
Stddev	.0003	.0060	.0005	.0004	.0001	.0007	.0000	.0001	.0003	.0003
%RSD	184.0	37.53	140.6	107.8	661.0	33.92	13.84	491.4	383.2	150.4
#1	-.0005	.0223	.0010	.0000	-.0001	.0013	.0001	.0000	.0003	.0006
#2	.0001	.0105	.0000	-.0003	.0001	.0026	.0001	.0001	-.0002	-.0001
#3	-.0001	.0148	.0001	-.0009	.0001	.0019	.0001	-.0001	-.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0031	.0076	.0341	.0001	-.0004	.0016	.0003	.0001	.0010	.0016
Stddev	.0032	.0119	.0120	.0000	.0001	.0028	.0002	.0005	.0019	.0017
%RSD	101.6	157.4	35.14	14.75	22.12	171.5	54.60	462.7	183.7	102.9
#1	-.0039	-.0026	.0206	.0001	-.0003	.0020	.0001	.0004	.0014	.0036
#2	.0004	.0046	.0433	.0001	-.0005	.0043	.0005	.0004	-.0010	.0007
#3	-.0058	.0207	.0384	.0001	-.0005	-.0013	.0003	-.0004	.0027	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0001	.0001	-.0001	.0007	.0002	.0001
Stddev	.0003	.0001	.0001	.0001	.0009	.0004	.0001
%RSD	440.5	188.6	76.29	38.72	130.5	182.1	46.57
#1	-.0001	.0001	.0000	-.0002	.0013	-.0002	.0001
#2	.0002	-.0001	.0002	-.0001	.0011	.0003	.0001
#3	-.0003	.0002	.0001	-.0001	-.0003	.0005	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 10:15:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1233.7	3069.1	24206.	1588.6
Stddev	1.3	3.7	106.	4.8
%RSD	.10263	.12057	.43724	.30374
#1	1234.2	3065.1	24166.	1586.0
#2	1234.6	3072.4	24126.	1594.1
#3	1232.3	3069.9	24326.	1585.6

Raw Data MA14907 page 21 of 211

Zoom In Zoom Out

Sample Name: MP33747-MB1 Acquired: 5/17/2018 10:20:20 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0350	.0002	-.0004	-.0001	.0321	-.0001	-.0002	.0001
Stddev	.0003	.0090	.0010	.0002	.0001	.0084	.0000	.0002	.0002
%RSD	77.11	25.69	431.2	56.03	73.69	26.11	54.92	103.1	388.2
#1	-.0004	.0266	-.0004	-.0003	-.0002	.0283	-.0001	.0000	.0000
#2	-.0006	.0445	.0013	-.0006	-.0001	.0417	.0000	-.0001	.0003
#3	-.0001	.0341	-.0002	-.0002	.0000	.0262	-.0001	-.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0191	.0372	.0758	.0004	-.0003	.0190	.0003	.0003
Stddev	.0001	.0037	.0121	.0244	.0001	.0001	.0030	.0001	.0005
%RSD	23.09	19.35	32.54	32.16	13.51	39.58	15.97	40.13	143.0
#1	.0006	.0160	.0290	.0653	.0004	-.0003	.0186	.0002	-.0002
#2	.0005	.0231	.0316	.0585	.0004	-.0002	.0162	.0005	.0006
#3	.0004	.0181	.0511	.1037	.0005	-.0004	.0222	.0003	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0021	.0166	F.0269	.0001	.0003	-.0016	-.0001	.0032
Stddev	.0013	.0030	.0003	.0004	.0000	.0000	.0006	.0002	.0000
%RSD	175.6	142.5	1.902	1.602	35.86	12.49	34.18	105.5	1.311
#1	.0019	.0036	.0165	.0270	.0001	.0003	-.0023	-.0003	.0032
#2	.0010	-.0013	.0170	.0272	.0001	.0003	-.0013	.0000	.0032
#3	-.0007	.0041	.0163	.0264	.0002	.0002	-.0013	-.0002	.0033
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Raw Data MA14907 page 22 of 211

Zoom In Zoom Out

Sample Name: MP33747-MB1 Acquired: 5/17/2018 10:20:20 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1197.1	2949.1	23555.	1536.5
Stddev	4.3	1.7	125.	16.0
%RSD	.35584	.05736	.53008	1.0425
#1	1192.5	2948.9	23533.	1522.2
#2	1198.1	2947.4	23689.	1553.8
#3	1200.8	2950.8	23442.	1533.5

Raw Data MA14907 page 23 of 211

Zoom In Zoom Out

Sample Name: MP33747-B1 Acquired: 5/17/2018 10:24:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0496	24.07	2.028	1.967	.0488	22.99	.0496	.5061	.1900	.2492
Stddev	.0005	.05	.008	.013	.0004	.13	.0000	.0016	.0006	.0005
%RSD	.9670	.2278	.4054	.6792	.7372	.5484	.0482	.3253	.3146	.2083
#1	.0491	24.03	2.019	1.964	.0492	23.06	.0496	.5042	.1901	.2487
#2	.0501	24.13	2.035	1.981	.0485	23.07	.0496	.5067	.1906	.2492
#3	.0496	24.05	2.028	1.955	.0487	22.85	.0496	.5074	.1894	.2498
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.66	23.13	23.42	.4919	.4799	22.58	.5354	.4685	.5102	2.003
Stddev	.09	.13	.27	.0007	.0009	.07	.0014	.0013	.0028	.006
%RSD	.3613	.5455	1.133	.1457	.1979	.3256	.2545	.2743	.5411	.3005
#1	24.67	23.12	23.51	.4923	.4789	22.58	.5339	.4675	.5072	1.997
#2	24.74	23.27	23.62	.4923	.4799	22.65	.5361	.4681	.5107	2.009
#3	24.57	23.01	23.12	.4911	.4808	22.50	.5364	.4700	.5127	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3647	.5406	.4731	.4769	1.881	.4745	.4963
Stddev	.0018	.0021	.0007	.0009	.002	.0003	.0018
%RSD	.4856	.3891	.1438	.1901	.0972	.0649	.3591
#1	.3630	.5382	.4724	.4762	1.880	.4744	.4948
#2	.3665	.5420	.4736	.4766	1.883	.4749	.4958
#3	.3644	.5416	.4734	.4779	1.879	.4743	.4982
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Raw Data MA14907 page 24 of 211

9.2.6

Zoom In Zoom Out

Sample Name: MP33747-B1 Acquired: 5/17/2018 10:24:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1095.4	2877.1	22729.	1518.1
Stddev	1.6	1.6	49.	13.9
%RSD	.14149	.05537	.21677	.91380
#1	1094.1	2878.7	22704.	1504.0
#2	1097.1	2877.0	22697.	1518.6
#3	1095.0	2875.5	22786.	1531.8

Zoom In Zoom Out

Sample Name: FA54170-4 Acquired: 5/17/2018 10:28:37 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0030	85.61	4.322	.2506	.0027	F4659.	.0015	.0057	.3120
Stddev	.0021	.33	.011	.0007	.0002	42.	.0003	.0004	.0019
%RSD	69.58	.3883	.2566	.2808	6.792	.9005	18.88	6.613	.5996
#1	-.0006	85.77	4.318	.2509	.0025	4611.	.0012	.0061	.3142
#2	-.0044	85.84	4.314	.2511	.0029	4677.	.0015	.0054	.3107
#3	-.0041	85.23	4.335	.2498	.0027	4689.	.0017	.0056	.3112

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3423	49.84	1.522	14.16	2.506	-.0032	13.49	.0490	.4427
Stddev	.0019	.22	.058	.20	.019	.0007	.03	.0005	.0012
%RSD	.5599	.4330	3.808	1.377	.7610	22.10	.2272	.9734	.2770
#1	.3441	50.07	1.455	14.17	2.512	-.0025	13.52	.0484	.4431
#2	.3425	49.80	1.552	14.35	2.521	-.0039	13.48	.0493	.4413
#3	.3403	49.64	1.558	13.96	2.484	-.0032	13.46	.0492	.4436

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0250	.0107	23.79	.0253	F71.23	1.176	-.0121	.1003	.1919
Stddev	.0065	.0114	.07	.0018	.94	.002	.0045	.0016	.0009
%RSD	26.19	106.2	.2803	7.309	1.326	.2018	36.92	1.609	.4911
#1	.0217	.0030	23.78	.0232	72.19	1.174	-.0169	.1019	.1912
#2	.0207	.0053	23.73	.0266	71.19	1.176	-.0111	.1002	.1914
#3	.0325	.0237	23.86	.0261	70.30	1.178	-.0082	.0987	.1929

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	931.94	2774.6	21844.	1530.5
Stddev	1.58	8.1	167.	3.4
%RSD	.16985	.29101	.76645	.22444
#1	932.26	2774.6	21765.	1526.6
#2	933.34	2782.7	21731.	1532.0
#3	930.22	2766.6	22037.	1533.0

Zoom In Zoom Out

Sample Name: MP33747-D1 Acquired: 5/17/2018 10:40:34 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	139.4	5.659	.3328	.0048	F4190.	.0024	.0092	.4475
Stddev	.0007	.9	.008	.0020	.0004	60.	.0003	.0005	.0017
%RSD	107.9	.6196	.1457	.5981	8.626	1.437	11.23	5.893	.3790
#1	-.0011	140.1	5.658	.3345	.0053	4210.	.0024	.0086	.4484
#2	.0001	139.6	5.668	.3333	.0047	4238.	.0022	.0094	.4486
#3	-.0009	138.4	5.651	.3306	.0045	4122.	.0027	.0096	.4455

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4718	73.15	2.163	18.14	2.624	-.0047	13.24	.0797	.6435
Stddev	.0019	.36	.043	.26	.007	.0005	.11	.0014	.0031
%RSD	.3968	.4878	1.980	1.455	.2557	11.74	.8005	1.813	.4833
#1	.4696	73.32	2.212	18.32	2.631	-.0046	13.21	.0814	.6405
#2	.4729	73.38	2.131	18.26	2.624	-.0041	13.36	.0789	.6434
#3	.4728	72.74	2.146	17.83	2.618	-.0052	13.15	.0788	.6467

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0247	.0159	31.42	.0251	F56.98	1.848	-.0199	.1427	.2544
Stddev	.0034	.0134	.04	.0023	.61	.023	.0101	.0006	.0010
%RSD	13.68	84.32	.1322	9.245	1.063	1.229	50.76	.4070	.3888
#1	.0235	.0149	31.42	.0239	56.81	1.875	-.0288	.1420	.2553
#2	.0221	.0031	31.37	.0278	57.66	1.837	-.0089	.1429	.2533
#3	.0286	.0299	31.46	.0236	56.49	1.834	-.0219	.1431	.2547

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	921.65	2840.1	22467.	1557.5
Stddev	1.24	6.7	26.	2.8
%RSD	.13433	.23679	.11627	.17922
#1	920.45	2832.4	22440.	1557.2
#2	922.93	2843.2	22468.	1554.9
#3	921.58	2844.8	22492.	1560.5

Zoom In Zoom Out

Sample Name: MP33747-PS1 Acquired: 5/17/2018 10:45:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.2342	452.6	22.58	2.572	.2627	F23380.	.2521	.2694
Stddev	.0062	3.6	.02	.016	.0012	59.	.0010	.0023
%RSD	2.664	.8047	.0942	.6279	.4474	.2529	.4081	.8534
#1	.2290	448.7	22.61	2.560	.2637	23380.	.2520	.2713
#2	.2326	456.0	22.56	2.591	.2630	23320.	.2511	.2701
#3	.2411	453.2	22.58	2.566	.2614	23440.	.2531	.2668

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	1.810	2.276	267.7	60.51	94.55	12.78	.4504	118.5
Stddev	.007	.010	1.3	.68	.68	.01	.0058	.8
%RSD	.3764	.4214	.4881	1.130	.7143	.0807	1.285	.6939
#1	1.817	2.273	267.1	59.86	94.17	12.79	.4438	117.8
#2	1.809	2.268	269.2	61.22	95.33	12.77	.4532	119.4
#3	1.803	2.286	266.9	60.44	94.15	12.78	.4543	118.3

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.7749	2.497	.6681	.5804	136.2	.3792	F357.4	9.094
Stddev	.0062	.012	.0248	.0568	.5	.0077	2.1	.098
%RSD	.8031	.4860	3.710	9.785	.4032	2.023	.5865	1.082
#1	.7765	2.507	.6787	.5617	136.2	.3707	357.3	9.097
#2	.7803	2.483	.6858	.6442	136.8	.3814	355.4	8.994
#3	.7681	2.500	.6398	.5354	135.7	.3856	359.6	9.191

Elem	TI1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.4014	.7591	2.213
Stddev	.0111	.0026	.006
%RSD	2.775	.3475	.2714
#1	.4037	.7570	2.212
#2	.4112	.7582	2.208
#3	.3893	.7620	2.220

Zoom In Zoom Out

Sample Name: MP33747-PS1 Acquired: 5/17/2018 10:45:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	915.37	2732.3	21679.	1509.1
Stddev	1.62	5.4	51.	12.0
%RSD	.17745	.19653	.23737	.79685
#1	913.51	2728.5	21655.	1522.9
#2	916.05	2738.5	21643.	1503.3
#3	916.53	2730.0	21738.	1501.1

Zoom In Zoom Out

Sample Name: MP33747-PS1 Acquired: 5/17/2018 10:45:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0468	90.53	4.517	.5145	.0525	F4676.	.0504	.0539	.3619
Stddev	.0012	.73	.004	.0032	.0002	12.	.0002	.0005	.0014
%RSD	2.664	.8047	.0942	.6279	.4474	.2529	.4081	.8534	.3764
#1	.0458	89.75	4.521	.5120	.0527	4676.	.0504	.0543	.3633
#2	.0465	91.19	4.513	.5181	.0526	4664.	.0502	.0540	.3618
#3	.0482	90.64	4.517	.5133	.0523	4688.	.0506	.0534	.3606

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4551	53.55	12.10	18.91	2.556	.0901	23.70	.1550	.4994
Stddev	.0019	.26	.14	.14	.002	.0012	.16	.0012	.0024
%RSD	.4214	.4881	1.130	.7143	.0807	1.285	.6939	.8031	.4860
#1	.4546	53.41	11.97	18.83	2.559	.0888	23.56	.1553	.5013
#2	.4535	53.85	12.24	19.07	2.555	.0906	23.88	.1561	.4966
#3	.4573	53.38	12.09	18.83	2.555	.0909	23.66	.1536	.5001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1336	.1161	27.24	.0758	F71.49	1.819	.0803	.1518	.4427
Stddev	.0050	.0114	.11	.0015	.42	.020	.0022	.0005	.0012
%RSD	3.710	9.785	.4032	2.023	.5865	1.082	2.775	.3475	.2714
#1	.1357	.1123	27.24	.0741	71.46	1.819	.0807	.1514	.4423
#2	.1372	.1288	27.35	.0763	71.08	1.799	.0822	.1516	.4417
#3	.1280	.1071	27.14	.0771	71.92	1.838	.0779	.1524	.4440

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	915.37	2732.3	21679.	1509.1
Stddev	1.62	5.4	51.	12.0
%RSD	.17745	.19653	.23737	.79685
#1	913.51	2728.5	21655.	1522.9
#2	916.05	2738.5	21643.	1503.3
#3	916.53	2730.0	21738.	1501.1

Zoom In Zoom Out

Sample Name: MP33747-SD1 Acquired: 5/17/2018 10:55:52 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0012	87.08	4.281	.2477	.0022	4967.	.0009	.0046	.3259	.3860
Stddev	.0035	1.40	.026	.0076	.0030	37.	.0007	.0061	.0073	.0031
%RSD	288.4	1.608	.5969	3.058	132.5	.7492	80.82	132.6	2.245	.8076
#1	-.0036	85.46	4.261	.2417	-.0006	4925.	.0009	.0002	.3184	.3864
#2	.0028	87.84	4.310	.2452	.0020	4994.	.0015	.0116	.3262	.3889
#3	-.0028	87.93	4.272	.2562	.0053	4984.	.0002	.0021	.3330	.3827

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	51.80	1.337	13.66	2.615	-.0361	13.47	.0502	.4550	.0342	.0645
Stddev	.18	.413	1.15	.015	.0038	.23	.0020	.0221	.0163	.0303
%RSD	.3472	30.87	8.388	.5741	10.46	1.705	4.001	4.857	47.52	46.98
#1	51.68	1.659	12.61	2.630	-.0317	13.22	.0485	.4714	.0230	.0870
#2	51.72	.8719	13.49	2.615	-.0380	13.67	.0524	.4298	.0268	.0766
#3	52.01	1.481	14.88	2.600	-.0385	13.51	.0497	.4637	.0529	.0300

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	27.56	.0332	73.34	1.909	-.0352	.0967	.2023
Stddev	.12	.0063	.34	.099	.0331	.0062	.0016
%RSD	.4456	18.85	.4627	5.185	93.95	6.428	.8091
#1	27.47	.0393	72.95	1.856	-.0719	.0983	.2041
#2	27.52	.0336	73.55	1.848	-.0257	.0898	.2017
#3	27.70	.0268	73.52	2.023	-.0079	.1019	.2010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1054.2	2796.9	22085.	1475.1
Stddev	1.5	7.9	100.	10.9
%RSD	.14400	.28241	.45437	.73833
#1	1053.3	2788.6	21998.	1487.6
#2	1053.2	2797.9	22062.	1468.5
#3	1055.9	2804.3	22195.	1469.1

Zoom In Zoom Out

Sample Name: MP33747-S1 Acquired: 5/17/2018 11:00:06 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0395	157.4	6.811	2.049	.0467	F4025.	.0430	.4258	.6259
Stddev	.0013	.7	.029	.007	.0004	29.	.0001	.0004	.0028
%RSD	3.311	.4540	.4180	.3280	.8538	.7139	.1766	.0990	.4526
#1	.0387	158.2	6.780	2.056	.0469	4019.	.0431	.4262	.6292
#2	.0410	157.0	6.815	2.047	.0470	4056.	.0430	.4254	.6243
#3	.0389	156.9	6.837	2.043	.0463	3999.	.0430	.4259	.6243

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6246	95.26	24.95	37.58	2.624	.3638	35.78	.5140	1.001
Stddev	.0022	.28	.11	.18	.012	.0001	.21	.0017	.010
%RSD	.3460	.2899	.4285	.4833	.4739	.0255	.5798	.3322	1.007
#1	.6248	95.44	25.00	37.38	2.611	.3637	35.91	.5126	.9969
#2	.6223	95.40	25.02	37.65	2.625	.3638	35.89	.5135	.9928
#3	.6267	94.94	24.83	37.72	2.636	.3639	35.54	.5159	1.012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4054	1.806	27.02	.4125	F57.98	2.151	1.710	.5488	.6410
Stddev	.0074	.007	.08	.0021	1.17	.006	.011	.0022	.0002
%RSD	1.832	.4037	.2879	.4977	2.024	.2653	.6152	.4067	.0349
#1	.4003	1.798	26.95	.4109	59.19	2.145	1.711	.5469	.6412
#2	.4019	1.810	27.00	.4119	56.85	2.152	1.719	.5513	.6411
#3	.4139	1.811	27.10	.4149	57.89	2.156	1.699	.5484	.6408

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	942.70	2889.7	22787.	1585.5
Stddev	2.98	6.1	54.	11.4
%RSD	.31631	.21253	.23650	.71638
#1	939.43	2894.7	22848.	1575.0
#2	943.38	2891.7	22765.	1584.1
#3	945.28	2882.9	22747.	1597.5

Zoom In Zoom Out

Sample Name: MP33747-S2 Acquired: 5/17/2018 11:04:26 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0418	123.0	6.331	2.075	.0469	F4649.	.0449	.4400	.4944
Stddev	.0011	.2	.013	.009	.0008	7.	.0003	.0009	.0017
%RSD	2.526	.1868	.1995	.4244	1.809	.1427	.7005	.2088	.3403
#1	.0425	122.9	6.329	2.075	.0460	4653.	.0446	.4411	.4924
#2	.0423	122.7	6.319	2.066	.0470	4652.	.0452	.4394	.4950
#3	.0406	123.2	6.344	2.083	.0477	4641.	.0450	.4396	.4956

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5625	74.27	24.77	38.35	2.421	.3893	33.44	.5176	.9373
Stddev	.0014	.12	.09	.09	.007	.0012	.04	.0014	.0019
%RSD	.2564	.1568	.3441	.2429	.2960	.3047	.1313	.2624	.2028
#1	.5630	74.38	24.83	38.40	2.413	.3890	33.48	.5184	.9387
#2	.5609	74.15	24.80	38.24	2.424	.3883	33.40	.5160	.9381
#3	.5637	74.26	24.67	38.41	2.426	.3906	33.44	.5184	.9352

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4332	1.898	27.17	.4555	F56.41	1.749	1.736	.5339	.6191
Stddev	.0049	.017	.05	.0019	.59	.012	.008	.0023	.0009
%RSD	1.141	.8895	.1735	.4240	1.043	.6791	.4440	.4292	.1412
#1	.4356	1.917	27.22	.4575	57.07	1.763	1.727	.5318	.6184
#2	.4275	1.884	27.12	.4554	55.95	1.744	1.741	.5363	.6188
#3	.4365	1.892	27.19	.4536	56.20	1.741	1.740	.5334	.6201

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	933.96	2796.5	22288.	1551.0
Stddev	1.80	3.8	32.	8.3
%RSD	.19284	.13581	.14452	.53536
#1	932.11	2794.0	22306.	1541.4
#2	934.06	2800.8	22251.	1556.6
#3	935.71	2794.6	22307.	1554.9

Zoom In Zoom Out

Sample Name: FA54005-1 Acquired: 5/17/2018 11:08:47 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	1.772	-.0035	.0604	.0000	F1228.	-.0001	.0007	.0012
Stddev	.0006	.030	.0010	.0007	.000	18.	.0001	.0001	.0002
%RSD	106.3	1.714	27.93	1.158	131.8	1.440	94.09	9.143	20.21
#1	-.0011	1.742	-.0046	.0605	-.0001	1208.	-.0001	.0007	.0011
#2	.0001	1.771	-.0030	.0596	-.0001	1242.	.0000	.0008	.0010
#3	-.0008	1.802	-.0029	.0610	.0000	1233.	-.0001	.0006	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1236	.9161	.5840	3.093	.0666	-.0008	1.748	.0084	.0015
Stddev	.0003	.0092	.0165	.035	.0001	.0001	.010	.0003	.0014
%RSD	.2104	1.000	2.817	1.147	.1058	8.301	.5644	3.415	94.77
#1	.1239	.9225	.5912	3.121	.0666	-.0008	1.738	.0086	.0016
#2	.1234	.9056	.5956	3.106	.0665	-.0007	1.747	.0080	.0028
#3	.1236	.9203	.5652	3.053	.0667	-.0008	1.758	.0085	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0018	.0018	.9944	.0243	F7.577	.1124	-.0051	.0096	.0099
Stddev	.0013	.0021	.0024	.0005	.026	.0004	.0022	.0003	.0001
%RSD	74.62	114.0	.2436	2.243	.3448	.3483	42.85	3.193	1.323
#1	.0032	-.0001	.9917	.0249	7.566	.1120	-.0052	.0099	.0100
#2	.0016	.0041	.9949	.0241	7.559	.1125	-.0072	.0093	.0099
#3	.0005	.0015	.9965	.0238	7.607	.1128	-.0028	.0097	.0098

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	898.99	2512.8	20315.	1427.7
Stddev	2.68	4.5	18.	7.9
%RSD	.29799	.17746	.08672	.55395
#1	896.22	2507.8	20297.	1436.0
#2	901.57	2514.1	20314.	1420.3
#3	899.18	2516.4	20332.	1426.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 11:13:08 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2457	36.32	2.090	1.945	1.893	36.50	2.007	2.025	1.873	1.963
Stddev	.0007	.14	.002	.013	.009	.16	.002	.002	.007	.005
%RSD	.2801	.3821	.1018	.6802	.4680	.4325	.1081	.0841	.3746	.2648
#1	.2464	36.48	2.088	1.940	1.892	36.62	2.009	2.026	1.870	1.968
#2	.2457	36.21	2.089	1.935	1.885	36.32	2.005	2.023	1.880	1.962
#3	.2450	36.28	2.092	1.960	1.903	36.55	2.007	2.025	1.867	1.958

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.25	38.16	37.56	1.983	2.083	36.94	2.097	1.931	2.081	2.102
Stddev	.14	.14	.14	.007	.003	.21	.001	.005	.003	.002
%RSD	.3615	.3683	.3832	.3502	.1649	.5702	.0514	.2756	.1271	.1022
#1	38.31	38.17	37.58	1.981	2.079	37.17	2.098	1.937	2.081	2.103
#2	38.09	38.01	37.41	1.990	2.085	36.76	2.096	1.926	2.084	2.102
#3	38.35	38.29	37.69	1.977	2.085	36.90	2.098	1.930	2.079	2.099

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.707	2.151	1.918	1.978	1.981	2.015	2.010
Stddev	.001	.002	.009	.005	.000	.001	.002
%RSD	.0341	.1069	.4458	.2711	.0089	.0566	.0876
#1	2.708	2.153	1.920	1.978	1.981	2.014	2.011
#2	2.706	2.149	1.909	1.983	1.982	2.016	2.008
#3	2.708	2.152	1.926	1.972	1.981	2.015	2.010

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 11:13:08 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1036.3	2811.3	22303.	1514.1
Stddev	1.4	3.7	63.	4.6
%RSD	.13594	.12986	.28063	.30332
#1	1035.5	2815.2	22368.	1512.6
#2	1035.6	2810.6	22243.	1519.3
#3	1038.0	2808.0	22297.	1510.5

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 11:17:06 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0088	-.0004	.0000	.0001	.0010	.0001	.0000	.0001
Stddev	.0004	.0126	.0006	.000	.0001	.0028	.0000	.000	.0002
%RSD	124.3	142.2	146.9	142.1	113.6	273.1	62.14	429.5	303.5
#1	.0004	.0182	-.0001	.0000	.0003	.0028	.0001	.0001	.0002
#2	-.0001	-.0055	.0000	-.0001	.0001	-.0022	.0000	.0000	.0002
#3	.0006	.0138	-.0010	.0000	.0000	.0024	.0001	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0122	.0078	.0180	.0001	F.0022	.0263	.0001	-.0005
Stddev	.0002	.0069	.0356	.0224	.0000	.0007	.0011	.0001	.0005
%RSD	11.64	56.61	455.9	124.0	76.54	32.04	4.301	113.3	113.8
#1	.0017	.0200	-.0161	.0024	.0001	.0030	.0261	.0002	-.0001
#2	.0014	.0094	-.0092	.0080	.0000	.0019	.0275	.0002	-.0010
#3	.0017	.0071	.0487	.0437	.0001	.0016	.0253	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0019	.0048	.0007	.0002	.0011	.0001	.0000	-.0002
Stddev	.0021	.0013	.0046	.0001	.0001	.0002	.0010	.000	.0001
%RSD	449.8	66.80	95.95	10.54	62.27	13.22	1135.	10710.	36.41
#1	.0017	.0028	.0023	.0007	.0001	.0013	.0004	-.0003	-.0003
#2	-.0019	.0005	.0101	.0008	.0003	.0011	-.0010	.0001	-.0001
#3	.0016	.0024	.0020	.0006	.0002	.0010	.0009	.0002	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 11:17:06 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1169.7	2898.0	22939.	1476.8
Stddev	.6	3.4	63.	3.3
%RSD	.05138	.11733	.27587	.22648
#1	1169.1	2901.5	22960.	1473.3
#2	1169.6	2894.8	22868.	1477.0
#3	1170.3	2897.6	22989.	1480.0

Zoom In Zoom Out

Sample Name: FA54112-4 Acquired: 5/17/2018 11:21:23 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	14.88	.0151	.2872	.0003	29.34	.0002	.0014	.0222	.0075
Stddev	.0006	.14	.0013	.0022	.0000	.24	.0000	.0001	.0001	.0003
%RSD	454.9	.9176	8.867	.7651	17.17	.8028	25.75	4.589	.6247	3.799
#1	.0007	15.02	.0167	.2884	.0002	29.53	.0001	.0015	.0223	.0074
#2	-.0004	14.75	.0141	.2846	.0003	29.08	.0002	.0014	.0221	.0073
#3	.0000	14.87	.0147	.2885	.0003	29.41	.0002	.0015	.0222	.0078

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	32.49	.8359	.8932	.0340	.0172	.7625	.0058	.0390	.0013	.0038
Stddev	.22	.0383	.0468	.0002	.0001	.0113	.0002	.0009	.0021	.0014
%RSD	.6913	4.581	5.242	.5307	.8458	1.487	3.108	2.352	159.6	36.30
#1	32.72	.8798	.8997	.0341	.0172	.7723	.0059	.0380	.0014	.0050
#2	32.27	.8094	.9365	.0341	.0173	.7650	.0056	.0398	.0033	.0042
#3	32.48	.8186	.8435	.0338	.0170	.7501	.0059	.0391	-.0008	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.485	.0261	.2277	.2446	.0003	.0342	.1390
Stddev	.003	.0002	.0016	.0006	.0012	.0002	.0003
%RSD	.1236	.6664	.7004	.2605	440.1	.5251	.1976
#1	2.481	.0260	.2291	.2447	-.0009	.0342	.1387
#2	2.487	.0260	.2259	.2451	.0015	.0340	.1392
#3	2.486	.0263	.2279	.2439	.0002	.0344	.1392

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1141.1	2958.8	23531.	1554.6
Stddev	1.8	.9	45.	14.1
%RSD	.15810	.03048	.19182	.90688
#1	1139.1	2958.8	23486.	1538.7
#2	1141.6	2957.8	23531.	1565.6
#3	1142.7	2959.6	23576.	1559.5

Zoom In Zoom Out

Sample Name: MP33746-MB1 Acquired: 5/17/2018 11:25:33 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	F.1435	-.0006	-.0009	-.0002	.0915	-.0003	-.0003	.0003
Stddev	.0016	.0744	.0050	.0013	.0003	.0088	.0003	.0002	.0011
%RSD	227.5	51.86	797.5	141.6	134.4	9.662	111.7	66.79	394.9
#1	-.0005	.2148	-.0055	-.0024	-.0003	.1004	-.0003	-.0006	.0001
#2	-.0025	.0663	-.0007	-.0007	-.0004	.0827	.0001	-.0003	.0015
#3	.0008	.1494	.0044	.0003	.0001	.0914	-.0005	-.0002	-.0007
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.1000							
Low Limit		-.1000							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025	.1255	.0772	.0653	.0018	-.0038	.1166	.0013	-.0006
Stddev	.0012	.0025	.0566	.0670	.0002	.0009	.0592	.0010	.0001
%RSD	49.80	1.960	73.27	102.6	13.51	23.24	50.79	77.90	14.84
#1	.0033	.1242	.0342	.1268	.0020	-.0028	.1089	.0011	-.0007
#2	.0032	.1241	.1413	-.0061	.0015	-.0039	.1793	.0004	-.0005
#3	.0011	.1284	.0561	.0753	.0018	-.0046	.0616	.0023	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0065	F.0074	.0336	F.0747	.0005	.0012	-.0031	.0003	.0080
Stddev	.0051	.0101	.0055	.0005	.0004	.0008	.0056	.0005	.0001
%RSD	78.95	136.4	16.32	.6547	76.99	65.92	179.5	189.2	1.176
#1	.0077	-.0021	.0378	.0751	.0002	.0016	-.0051	.0008	.0081
#2	.0009	.0063	.0356	.0742	.0003	.0003	-.0075	-.0002	.0079
#3	.0109	.0181	.0274	.0748	.0009	.0017	.0032	.0002	.0080
Check ?	Chk Fail	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0025	.0050		.0250					
Low Limit	-.0025	-.0050		-.0250					

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33746-MB1 Acquired: 5/17/2018 11:25:33 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1180.7	2921.7	23458.	1516.1
Stddev	1.2	1.7	141.	24.2
%RSD	.10211	.05691	.59997	1.5930
#1	1180.2	2920.5	23379.	1518.6
#2	1179.8	2921.1	23374.	1539.0
#3	1182.1	2923.6	23620.	1490.8

Zoom In Zoom Out

Sample Name: MP33746-B1 Acquired: 5/17/2018 11:29:51 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0560	26.31	2.208	2.149	.0519	25.16	.0542	.5600	.2058
Stddev	.0040	.17	.001	.023	.0002	.13	.0004	.0009	.0003
%RSD	7.175	.6469	.0443	1.085	.4373	.5336	.7342	.1638	.1699
#1	.0600	26.21	2.209	2.169	.0520	25.31	.0539	.5609	.2054
#2	.0561	26.21	2.207	2.123	.0516	25.05	.0546	.5591	.2060
#3	.0520	26.50	2.208	2.155	.0521	25.12	.0539	.5602	.2060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2730	27.29	25.39	26.27	.5486	.5275	24.81	F.6030	.4995
Stddev	.0004	.10	.31	.64	.0015	.0012	.23	.0031	.0018
%RSD	.1567	.3682	1.225	2.449	.2803	.2226	.9424	.5069	.3616
#1	.2733	27.29	25.48	26.40	.5469	.5285	24.83	.6043	.4999
#2	.2725	27.18	25.05	25.57	.5490	.5262	24.56	.6053	.5011
#3	.2733	27.38	25.65	26.84	.5499	.5278	25.03	.5995	.4976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value								.5000	
Range								20.00%	

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5620	2.210	.3976	F.6587	.5196	.5274	2.045	.5172	.5483
Stddev	.0037	.010	.0020	.0020	.0020	.0021	.004	.0017	.0013
%RSD	.6620	.4481	.5047	.3002	.3834	.4004	.1802	.3294	.2451
#1	.5603	2.212	.3967	.6600	.5206	.5251	2.047	.5171	.5498
#2	.5594	2.219	.3962	.6596	.5173	.5280	2.041	.5155	.5472
#3	.5663	2.200	.3999	.6564	.5209	.5292	2.048	.5189	.5480
Check ?	Chk Pass	Chk Pass	None	Chk Fail	None	None	Chk Pass	Chk Pass	Chk Pass
Value				.5000					
Range				20.00%					

Zoom In Zoom Out

Sample Name: MP33746-B1 Acquired: 5/17/2018 11:29:51 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1133.4	2854.6	22869.	1480.1
Stddev	.5	7.2	23.	4.7
%RSD	.04028	.25382	.09969	.32012
#1	1132.9	2852.0	22894.	1476.4
#2	1133.7	2849.0	22851.	1478.5
#3	1133.6	2862.8	22861.	1485.5

Zoom In Zoom Out

Sample Name: FA53725-34 Acquired: 5/17/2018 11:33:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0041	288.0	.0657	.5624	.0049	5.402	-.0007	.0316	.4346	.2107
Stddev	.0014	.9	.0016	.0028	.0010	.042	.0002	.0002	.0029	.0025
%RSD	34.79	.3156	2.363	.5033	20.31	.7695	34.21	.7617	.6781	1.196
#1	.0056	287.2	.0674	.5592	.0044	5.439	-.0008	.0317	.4337	.2134
#2	.0027	287.8	.0644	.5646	.0060	5.357	-.0008	.0317	.4323	.2085
#3	.0042	289.0	.0654	.5635	.0042	5.409	-.0004	.0313	.4380	.2101

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	272.9	11.22	15.89	.5086	.0114	1.894	.1952	.3198	.0101	.0184
Stddev	.6	.18	.40	.0007	.0006	.080	.0010	.0019	.0024	.0023
%RSD	.2206	1.567	2.514	.1474	5.577	4.246	.5359	.6004	23.22	12.67
#1	272.9	11.03	15.54	.5080	.0108	1.866	.1958	.3185	.0077	.0206
#2	272.3	11.37	16.32	.5084	.0114	1.831	.1958	.3220	.0102	.0188
#3	273.5	11.27	15.82	.5094	.0121	1.985	.1940	.3189	.0124	.0159

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.432	.0758	.1048	5.354	-.0018	.7049	.6032
Stddev	.061	.0023	.0010	.013	.0034	.0026	.0003
%RSD	.7286	3.018	.9389	.2395	184.0	.3742	.0440
#1	8.361	.0781	.1041	5.348	.0007	.7071	.6035
#2	8.473	.0735	.1044	5.345	-.0006	.7019	.6031
#3	8.461	.0759	.1060	5.368	-.0057	.7055	.6030

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1122.5	2951.3	23109.	1541.7
Stddev	1.3	4.2	45.	6.4
%RSD	.11460	.14224	.19335	.41826
#1	1121.4	2950.1	23074.	1549.0
#2	1123.9	2947.8	23159.	1536.8
#3	1122.2	2955.9	23093.	1539.2

Zoom In Zoom Out

Sample Name: MP33746-D1 Acquired: 5/17/2018 11:38:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	287.5	.0635	.5652	.0046	5.387	-.0004	.0316	.4334	.2111
Stddev	.0027	1.4	.0060	.0018	.0005	.071	.0003	.0010	.0001	.0022
%RSD	43.69	.5012	9.412	.3207	11.93	1.323	62.06	3.109	.0169	1.065
#1	.0081	289.1	.0676	.5646	.0044	5.438	-.0007	.0306	.4335	.2128
#2	.0071	287.0	.0664	.5638	.0042	5.418	-.0004	.0326	.4334	.2119
#3	.0031	286.3	.0567	.5672	.0052	5.305	-.0002	.0317	.4334	.2086

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	275.6	11.33	16.35	.5090	.0115	1.883	.1910	.3152	.0069	.0071
Stddev	1.6	.04	.04	.0038	.0012	.015	.0014	.0020	.0027	.0102
%RSD	.5729	.3386	.2505	.7379	10.62	.7793	.7579	.6437	38.77	145.0
#1	277.2	11.37	16.38	.5119	.0127	1.878	.1915	.3152	.0095	.0017
#2	275.3	11.29	16.31	.5104	.0114	1.871	.1893	.3132	.0042	.0188
#3	274.1	11.34	16.37	.5048	.0103	1.899	.1921	.3172	.0069	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.887	.0733	.1055	5.325	.0021	.7039	.6029
Stddev	.003	.0018	.0011	.021	.0053	.0033	.0008
%RSD	.0408	2.437	1.068	.3957	256.0	.4713	.1327
#1	7.890	.0712	.1068	5.347	.0081	.7043	.6028
#2	7.884	.0745	.1050	5.322	-.0012	.7071	.6021
#3	7.886	.0742	.1047	5.305	-.0007	.7005	.6037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1121.9	2955.8	23206.	1528.6
Stddev	1.1	2.2	156.	7.1
%RSD	.09653	.07334	.67284	.46309
#1	1122.5	2956.7	23054.	1521.1
#2	1122.5	2957.3	23197.	1535.2
#3	1120.7	2953.3	23366.	1529.5

Zoom In Zoom Out

Sample Name: MP33746-D2 Acquired: 5/17/2018 11:42:21 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	273.3	.0627	.5317	.0045	5.166	-.0009	.0293	.4059	.2011
Stddev	.0005	1.1	.0039	.0013	.0001	.064	.0002	.0003	.0037	.0012
%RSD	8.575	.4109	6.261	.2522	2.087	1.245	17.44	1.138	.9010	.5813
#1	.0056	274.4	.0625	.5329	.0046	5.192	-.0008	.0297	.4034	.2023
#2	.0062	272.1	.0667	.5303	.0046	5.092	-.0009	.0293	.4042	.2010
#3	.0066	273.4	.0589	.5320	.0044	5.213	-.0011	.0290	.4101	.2000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	258.5	10.68	15.10	.4755	.0096	1.793	.1797	.3043	.0043	.0184
Stddev	.8	.11	.26	.0028	.0005	.034	.0015	.0015	.0054	.0059
%RSD	.3025	.9955	1.751	.5904	5.638	1.883	.8178	.4977	126.2	32.34
#1	259.3	10.78	15.00	.4728	.0097	1.813	.1795	.3058	.0077	.0129
#2	257.7	10.57	14.89	.4752	.0100	1.754	.1812	.3042	.0070	.0247
#3	258.6	10.68	15.40	.4784	.0090	1.812	.1783	.3028	-.0019	.0176

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.315	.0684	.0988	5.127	.0051	.6544	.5641
Stddev	.006	.0008	.0008	.023	.0058	.0009	.0015
%RSD	.0832	1.191	.7667	.4428	113.1	.1390	.2591
#1	7.311	.0682	.0997	5.117	.0114	.6552	.5656
#2	7.311	.0694	.0984	5.110	.0000	.6548	.5640
#3	7.322	.0678	.0984	5.153	.0040	.6534	.5626

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.8	2952.1	23098.	1517.2
Stddev	2.9	5.0	133.	12.2
%RSD	.26331	.17042	.57710	.80610
#1	1115.4	2947.1	23119.	1505.0
#2	1120.2	2952.0	23219.	1529.5
#3	1120.8	2957.2	22955.	1517.0

Zoom In Zoom Out

Sample Name: MP33746-SD1 Acquired: 5/17/2018 11:46:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	279.4	.0670	.5243	.0003	5.663	-.0021	.0304	.4095	.2068
Stddev	.0171	2.1	.0056	.0063	.0039	.091	.0002	.0005	.0031	.0082
%RSD	279.5	.7538	8.402	1.198	1322.	1.609	9.561	1.529	.7590	3.942
#1	-.0096	280.1	.0732	.5315	.0036	5.758	-.0019	.0308	.4126	.2009
#2	.0244	277.0	.0659	.5206	.0013	5.654	-.0021	.0304	.4064	.2035
#3	.0037	281.1	.0621	.5206	-.0040	5.576	-.0023	.0299	.4096	.2161

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	266.4	10.36	15.38	.4924	-.0116	1.953	.1948	.2980	.0027	.0610
Stddev	2.0	.34	.17	.0041	.0046	.094	.0019	.0109	.0518	.0425
%RSD	.7587	3.240	1.135	.8400	39.29	4.813	.9502	3.645	1892.	69.73
#1	267.4	10.44	15.20	.4967	-.0148	1.855	.1939	.3010	.0418	.0428
#2	264.0	10.66	15.55	.4884	-.0136	1.961	.1937	.3070	-.0561	.1096
#3	267.6	9.996	15.38	.4920	-.0064	2.042	.1970	.2859	.0225	.0306

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.567	.0641	.1015	5.109	-.0166	.6692	.5953
Stddev	.009	.0005	.0036	.034	.0043	.0063	.0021
%RSD	.1184	.7533	3.522	.6742	25.88	.9392	.3507
#1	7.557	.0641	.1020	5.146	-.0178	.6657	.5934
#2	7.571	.0636	.0978	5.103	-.0118	.6764	.5950
#3	7.573	.0646	.1049	5.078	-.0201	.6654	.5976

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1167.8	2936.1	23215.	1529.9
Stddev	2.2	3.7	118.	19.3
%RSD	.18930	.12663	.50910	1.2647
#1	1165.8	2940.4	23085.	1548.5
#2	1170.2	2934.5	23243.	1531.3
#3	1167.4	2933.4	23316.	1509.9

Zoom In Zoom Out

Sample Name: MP33746-PS1 Acquired: 5/17/2018 11:50:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0539	281.2	.1720	.7987	.0532	9.962	.0494	.0823	.4626	.3019
Stddev	.0015	1.6	.0012	.0028	.0016	.046	.0005	.0012	.0030	.0009
%RSD	2.772	.5801	.6880	.3461	2.946	.4608	1.102	1.480	.6407	.3046
#1	.0556	282.6	.1734	.8016	.0549	9.977	.0488	.0826	.4615	.3024
#2	.0532	281.5	.1711	.7984	.0529	9.999	.0494	.0810	.4660	.3025
#3	.0528	279.4	.1716	.7961	.0519	9.911	.0499	.0834	.4604	.3008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	266.8	20.34	20.58	.5355	.1068	11.00	.2966	.3585	.1145	.1249
Stddev	1.9	.18	.13	.0026	.0003	.04	.0019	.0015	.0041	.0054
%RSD	.6955	.8840	.6248	.4802	.2846	.3688	.6334	.4233	3.549	4.284
#1	268.9	20.54	20.66	.5379	.1071	11.05	.2961	.3602	.1180	.1213
#2	266.0	20.30	20.43	.5358	.1067	11.00	.2987	.3576	.1154	.1224
#3	265.4	20.18	20.65	.5327	.1065	10.97	.2951	.3576	.1101	.1311

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.462	.1256	.1501	5.263	.0985	.7228	.8309
Stddev	.036	.0014	.0012	.013	.0076	.0034	.0031
%RSD	.4265	1.119	.8199	.2542	7.712	.4652	.3781
#1	8.439	.1264	.1513	5.278	.0900	.7261	.8290
#2	8.445	.1239	.1501	5.260	.1009	.7229	.8291
#3	8.504	.1263	.1489	5.252	.1046	.7194	.8345

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1115.5	2940.5	23162.	1523.5
Stddev	3.3	9.1	73.	10.1
%RSD	.29792	.30824	.31662	.66461
#1	1112.2	2945.8	23089.	1514.1
#2	1118.9	2945.5	23162.	1522.2
#3	1115.3	2930.0	23236.	1534.2

Zoom In Zoom Out

Sample Name: MP33746-S1 Acquired: 5/17/2018 11:54:58 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0566	399.8	2.035	2.628	.0557	30.01	.0508	.5696	.6771	.4814
Stddev	.0030	2.0	.002	.014	.0011	.05	.0003	.0005	.0019	.0027
%RSD	5.338	.5056	.0849	.5179	2.058	.1650	.6294	.0919	.2736	.5652
#1	.0596	399.6	2.035	2.643	.0570	29.97	.0508	.5691	.6779	.4833
#2	.0565	397.9	2.033	2.619	.0553	30.00	.0511	.5702	.6750	.4783
#3	.0536	401.9	2.037	2.621	.0548	30.06	.0505	.5696	.6784	.4825

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	310.6	35.37	41.98	1.055	.4176	25.49	.8362	.8123	.1349	2.015
Stddev	.7	.21	.32	.008	.0004	.11	.0008	.0087	.0054	.012
%RSD	.2338	.5817	.7531	.7706	.1028	.4299	.1015	1.073	3.985	.6043
#1	311.0	35.52	42.34	1.058	.4175	25.55	.8359	.8038	.1384	2.025
#2	309.8	35.14	41.80	1.045	.4172	25.36	.8372	.8119	.1287	2.001
#3	311.1	35.47	41.80	1.060	.4180	25.55	.8356	.8212	.1377	2.017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.764	.5939	.6115	5.395	2.001	1.228	1.152
Stddev	.011	.0006	.0012	.023	.005	.001	.003
%RSD	.1100	.1011	.1914	.4283	.2412	.0933	.2294
#1	9.761	.5943	.6128	5.401	1.998	1.230	1.152
#2	9.776	.5941	.6113	5.370	1.998	1.228	1.150
#3	9.755	.5932	.6105	5.415	2.006	1.227	1.155

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1097.2	2922.3	23040.	1534.7
Stddev	2.8	5.0	19.	4.7
%RSD	.25187	.17187	.08282	.30663
#1	1097.4	2916.5	23042.	1533.1
#2	1099.8	2924.7	23059.	1540.0
#3	1094.3	2925.6	23021.	1531.0

Zoom In Zoom Out

Sample Name: MP33746-S2 Acquired: 5/17/2018 11:59:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0644	437.8	2.219	2.931	.0624	33.10	.0546	.6185	.7468	.5250
Stddev	.0028	2.4	.004	.010	.0004	.32	.0003	.0020	.0046	.0020
%RSD	4.356	.5537	.1765	.3549	.6481	.9652	.6412	.3304	.6135	.3839
#1	.0639	438.9	2.219	2.943	.0623	33.14	.0543	.6204	.7484	.5268
#2	.0674	439.6	2.215	2.924	.0628	33.40	.0550	.6187	.7504	.5228
#3	.0619	435.1	2.223	2.926	.0620	32.76	.0545	.6163	.7417	.5252

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	343.1	39.16	46.23	1.154	.4584	28.23	.9041	.8936	.1378	2.194
Stddev	1.1	.22	.24	.008	.0026	.15	.0037	.0071	.0059	.017
%RSD	.3335	.5663	.5286	.7261	.5643	.5316	.4083	.7973	4.293	.7943
#1	343.7	39.41	46.43	1.161	.4602	28.26	.9075	.9002	.1442	2.213
#2	343.9	39.01	46.32	1.156	.4597	28.37	.9047	.8946	.1325	2.190
#3	341.8	39.05	45.96	1.145	.4555	28.07	.9002	.8861	.1367	2.179

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.586	.6421	.6777	5.933	2.183	1.345	1.247
Stddev	.117	.0007	.0034	.024	.010	.005	.003
%RSD	1.361	.1030	.4982	.4063	.4514	.3834	.2161
#1	8.701	.6418	.6795	5.956	2.194	1.347	1.250
#2	8.590	.6428	.6798	5.936	2.177	1.349	1.246
#3	8.467	.6416	.6738	5.908	2.177	1.339	1.245

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1091.9	2924.2	22944.	1525.4
Stddev	.4	3.3	142.	8.2
%RSD	.04107	.11236	.61966	.53970
#1	1091.6	2927.3	22879.	1533.5
#2	1092.4	2924.7	22846.	1517.0
#3	1091.7	2920.8	23107.	1525.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:03:04 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2465	F35.70	2.114	1.939	1.885	36.17	2.013	2.030	1.833
Stddev	.0008	.16	.001	.001	.005	.09	.004	.002	.011
%RSD	.3403	.4452	.0456	.0509	.2729	.2437	.1934	.1149	.5802
#1	.2463	35.60	2.115	1.940	1.887	36.15	2.016	2.032	1.827
#2	.2457	35.62	2.113	1.938	1.880	36.10	2.009	2.028	1.827
#3	.2474	35.88	2.115	1.939	1.890	36.27	2.015	2.031	1.846
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		40.00							
Range		-10.00%							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.950	38.34	38.05	37.99	1.984	2.102	36.53	2.131	1.930
Stddev	.003	.14	.08	.07	.009	.005	.07	.003	.007
%RSD	.1361	.3664	.2140	.1798	.4539	.2562	.1995	.1509	.3831
#1	1.951	38.24	38.02	38.06	1.987	2.098	36.55	2.132	1.937
#2	1.947	38.27	37.99	37.93	1.974	2.101	36.44	2.128	1.922
#3	1.951	38.50	38.14	37.98	1.992	2.108	36.58	2.134	1.930
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.105	2.139	2.737	2.199	1.901	1.973	1.981	2.020	2.022
Stddev	.005	.004	.002	.006	.009	.007	.004	.006	.006
%RSD	.2462	.1900	.0876	.2730	.4549	.3765	.2247	.3118	.2852
#1	2.108	2.143	2.735	2.205	1.897	1.977	1.985	2.023	2.027
#2	2.099	2.138	2.736	2.193	1.895	1.964	1.976	2.013	2.016
#3	2.107	2.135	2.740	2.200	1.911	1.978	1.982	2.025	2.022
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:03:04 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1027.0	2772.0	22442.	1488.8
Stddev	3.6	5.9	110.	5.6
%RSD	.35149	.21404	.48906	.37482
#1	1024.2	2769.6	22408.	1494.1
#2	1031.1	2778.8	22564.	1489.3
#3	1025.7	2767.7	22353.	1482.9

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:07:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0079	-.0001	-.0002	.0000	.0006	.0001	.0000	.0000
Stddev	.0004	.0106	.0003	.0000	.0002	.0079	.0000	.000	.0001
%RSD	141.5	134.0	277.2	22.96	713.2	1389.	23.94	409.5	644.4
#1	.0007	-.0033	.0001	-.0002	-.0001	.0096	.0001	.0000	.0000
#2	.0004	.0093	.0000	-.0001	-.0001	-.0044	.0001	.0001	-.0001
#3	-.0002	.0178	-.0004	-.0002	.0002	-.0035	.0001	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0164	-.0144	.0331	.0001	F .0021	.0151	.0002	.0000
Stddev	.0002	.0060	.0038	.0705	.0000	.0008	.0004	.0001	.000
%RSD	14.44	36.77	26.37	213.4	20.41	37.30	2.701	62.15	1799.
#1	.0015	.0220	-.0185	-.0186	.0001	.0030	.0156	.0002	-.0002
#2	.0014	.0100	-.0137	.0044	.0001	.0019	.0149	.0004	.0002
#3	.0011	.0171	-.0110	.1134	.0000	.0015	.0148	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0010	.0017	.0006	.0002	.0011	.0004	.0000	-.0001
Stddev	.0005	.0005	.0006	.0003	.0001	.0002	.0007	.000	.0001
%RSD	62.66	50.77	32.67	41.50	55.74	16.04	181.8	3183.	114.1
#1	.0007	.0012	.0018	.0009	.0003	.0013	-.0001	.0004	-.0001
#2	.0013	.0004	.0022	.0004	.0001	.0010	.0000	-.0003	-.0002
#3	.0003	.0014	.0011	.0006	.0002	.0009	.0012	-.0001	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:07:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1169.5	2873.2	22884.	1477.8
Stddev	2.6	.8	154.	4.2
%RSD	.21996	.02798	.67381	.28552
#1	1172.0	2873.9	22758.	1474.6
#2	1166.8	2873.5	22838.	1476.3
#3	1169.6	2872.3	23056.	1482.6

Zoom In Zoom Out

Sample Name: FA53725-68 Acquired: 5/17/2018 12:11:19 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0037	114.2	.0487	.4396	.0035	8.346	.0005	.0270	.2696	3.953
Stddev	.0013	.5	.0039	.0011	.0002	.019	.0002	.0008	.0029	.019
%RSD	36.19	.4299	7.925	.2514	7.104	.2228	45.14	2.952	1.077	.4753
#1	.0024	114.7	.0511	.4387	.0037	8.324	.0006	.0276	.2668	3.973
#2	.0036	113.9	.0507	.4408	.0036	8.358	.0005	.0261	.2726	3.936
#3	.0050	113.8	.0443	.4392	.0032	8.354	.0002	.0274	.2694	3.949

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	135.9	13.03	10.42	.6790	.0058	1.208	.1125	9.005	.1306	.0107
Stddev	.2	.10	.11	.0054	.0003	.037	.0010	.020	.0028	.0091
%RSD	.1424	.8040	1.056	.7912	5.444	3.096	.9158	.2198	2.167	85.16
#1	135.9	13.14	10.40	.6837	.0061	1.167	.1121	8.994	.1326	.0023
#2	135.8	13.04	10.54	.6731	.0055	1.239	.1136	8.994	.1320	.0095
#3	136.2	12.93	10.32	.6802	.0057	1.219	.1117	9.028	.1274	.0204

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.893	.0842	.1632	3.728	.0014	.3235	.6619
Stddev	.022	.0004	.0007	.025	.0037	.0021	.0012
%RSD	.3220	.4751	.4177	.6711	267.4	.6621	.1739
#1	6.918	.0839	.1637	3.747	-.0019	.3251	.6610
#2	6.883	.0840	.1636	3.700	.0006	.3211	.6615
#3	6.877	.0846	.1625	3.737	.0055	.3244	.6632

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1137.3	2900.5	23133.	1516.5
Stddev	2.8	8.7	67.	1.7
%RSD	.24368	.29914	.28987	.11360
#1	1134.6	2891.0	23056.	1515.2
#2	1140.1	2908.0	23177.	1515.9
#3	1137.4	2902.6	23166.	1518.5

Zoom In Zoom Out

Sample Name: FA53801-7 Acquired: 5/17/2018 12:15:30 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0066	227.8	.0511	1.883	.0067	56.70	.0042	.0641	.4308	.2929
Stddev	.0008	.6	.0019	.017	.0009	.07	.0004	.0008	.0008	.0009
%RSD	12.64	.2724	3.785	.9080	13.40	.1300	9.684	1.288	.1869	.3138
#1	.0061	228.5	.0533	1.887	.0075	56.62	.0039	.0646	.4310	.2933
#2	.0075	227.4	.0505	1.897	.0057	56.72	.0046	.0645	.4315	.2918
#3	.0061	227.5	.0496	1.864	.0067	56.77	.0040	.0631	.4299	.2935

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	232.6	22.78	21.98	5.101	.0079	2.199	.2618	1.068	.0138	.0135
Stddev	.6	.17	.14	.023	.0007	.018	.0018	.006	.0028	.0058
%RSD	.2623	.7250	.6282	.4448	8.548	.8345	.6700	.5333	20.63	43.22
#1	233.3	22.82	21.84	5.081	.0083	2.200	.2635	1.067	.0161	.0085
#2	232.1	22.92	21.99	5.125	.0071	2.216	.2600	1.063	.0106	.0121
#3	232.5	22.60	22.11	5.095	.0083	2.180	.2617	1.074	.0145	.0200

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.475	.0750	.6720	5.899	.0062	.5946	.3416
Stddev	.047	.0015	.0022	.026	.0052	.0042	.0010
%RSD	.5563	1.935	.3329	.4401	83.52	.7019	.2882
#1	8.444	.0749	.6743	5.884	.0005	.5994	.3410
#2	8.530	.0765	.6699	5.929	.0075	.5917	.3410
#3	8.453	.0736	.6717	5.884	.0107	.5927	.3427

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1114.9	2939.0	23644.	1535.0
Stddev	2.2	2.0	103.	11.3
%RSD	.19330	.06875	.43598	.73531
#1	1113.2	2939.5	23748.	1547.9
#2	1117.3	2940.7	23542.	1529.8
#3	1114.2	2936.8	23640.	1527.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA53801-10 Acquired: 5/17/2018 12:19:38 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0056	187.9	.1521	1.241	.0102	29.38	.0122	.1447	.5356	.2195
Stddev	.0015	1.0	.0045	.007	.0004	.12	.0001	.0012	.0016	.0014
%RSD	26.75	.5391	2.981	.6011	4.266	.4204	.7011	.8204	.3016	.6413
#1	.0056	189.0	.1573	1.240	.0097	29.52	.0123	.1450	.5366	.2211
#2	.0071	187.5	.1489	1.249	.0105	29.32	.0121	.1433	.5337	.2185
#3	.0041	187.1	.1501	1.234	.0104	29.30	.0122	.1456	.5364	.2190

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	287.2	42.93	46.66	4.654	.0020	2.039	.4830	.4362	.0051	.0082
Stddev	.5	.16	.32	.007	.0008	.025	.0014	.0038	.0050	.0093
%RSD	.1828	.3661	.6852	.1504	39.91	1.227	.2887	.8771	99.17	113.1
#1	287.8	43.11	46.49	4.653	.0016	2.033	.4829	.4384	.0105	-.0009
#2	286.9	42.89	47.03	4.648	.0016	2.067	.4816	.4318	.0005	.0176
#3	287.0	42.80	46.47	4.661	.0030	2.018	.4844	.4384	.0043	.0079

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.039	.0639	.4501	7.223	.0016	.5613	.5588
Stddev	.009	.0033	.0028	.011	.0035	.0016	.0006
%RSD	.1264	5.213	.6213	.1495	212.4	.2784	.1083
#1	7.034	.0636	.4491	7.225	.0018	.5602	.5582
#2	7.033	.0674	.4532	7.211	.0050	.5631	.5588
#3	7.049	.0608	.4479	7.232	-.0019	.5607	.5594

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1115.1	3067.2	24372.	1608.7
Stddev	2.0	4.8	48.	7.2
%RSD	.18369	.15490	.19776	.44717
#1	1117.2	3067.3	24332.	1601.9
#2	1115.0	3071.9	24426.	1616.2
#3	1113.1	3062.4	24358.	1607.9

Zoom In Zoom Out

Sample Name: FA53801-13 Acquired: 5/17/2018 12:23:46 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0062	206.9	.1096	1.331	.0065	21.85	.0064	.0627	.4022	.8627
Stddev	.0009	1.3	.0053	.006	.0009	.07	.0001	.0008	.0025	.0031
%RSD	14.52	.6461	4.809	.4554	13.28	.3056	2.063	1.314	.6236	.3650
#1	.0055	208.4	.1035	1.336	.0067	21.80	.0065	.0626	.3993	.8663
#2	.0072	206.4	.1128	1.334	.0071	21.93	.0062	.0619	.4037	.8614
#3	.0059	205.8	.1124	1.325	.0055	21.83	.0064	.0635	.4036	.8604

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	232.5	25.65	27.85	2.169	.0044	1.778	.2493	3.288	.0230	.0203
Stddev	.5	.05	.14	.006	.0003	.037	.0008	.005	.0081	.0030
%RSD	.2120	.2076	.5120	.2783	7.981	2.056	.3289	.1448	35.26	14.87
#1	233.1	25.60	28.01	2.173	.0045	1.819	.2485	3.293	.0138	.0193
#2	232.3	25.70	27.73	2.171	.0046	1.766	.2501	3.283	.0260	.0237
#3	232.1	25.65	27.81	2.162	.0040	1.749	.2493	3.288	.0291	.0180

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.872	.0683	.3741	5.765	.0069	.5070	.8800
Stddev	.030	.0017	.0028	.011	.0006	.0006	.0002
%RSD	.4415	2.416	.7362	.1933	9.161	.1097	.0192
#1	6.896	.0670	.3766	5.774	.0062	.5076	.8798
#2	6.882	.0701	.3744	5.768	.0069	.5067	.8801
#3	6.838	.0677	.3712	5.752	.0075	.5067	.8799

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1114.9	2905.2	23211.	1527.7
Stddev	3.5	5.9	58.	9.2
%RSD	.31439	.20237	.24865	.60080
#1	1110.9	2900.8	23166.	1531.9
#2	1116.5	2903.0	23191.	1517.1
#3	1117.3	2911.9	23276.	1533.9

Zoom In Zoom Out

Sample Name: FA53801-16 Acquired: 5/17/2018 12:27:54 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0107	223.7	.0420	2.162	.0046	64.32	.0335	.0507	.3523	2.548
Stddev	.0016	.8	.0050	.018	.0005	.40	.0006	.0011	.0023	.015
%RSD	15.12	.3448	11.83	.8121	10.06	.6232	1.830	2.227	.6580	.5673
#1	.0122	223.3	.0452	2.163	.0046	64.37	.0339	.0520	.3498	2.535
#2	.0090	223.2	.0445	2.179	.0041	63.89	.0338	.0500	.3544	2.563
#3	.0108	224.6	.0363	2.144	.0051	64.69	.0328	.0501	.3525	2.546

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	240.0	22.25	21.83	4.909	.0071	2.147	.2720	3.741	.0157	.0165
Stddev	.8	.15	.11	.067	.0002	.010	.0015	.011	.0039	.0116
%RSD	.3327	.6891	.4999	1.361	3.378	.4625	.5620	.2950	24.71	70.04
#1	239.7	22.24	21.95	4.861	.0071	2.136	.2733	3.749	.0134	.0293
#2	239.5	22.40	21.74	4.986	.0074	2.154	.2703	3.729	.0202	.0068
#3	241.0	22.10	21.80	4.881	.0069	2.152	.2723	3.747	.0136	.0134

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.819	.0825	.9665	6.116	-.0024	.5395	1.210
Stddev	.142	.0026	.0004	.065	.0034	.0034	.004
%RSD	1.820	3.162	.0454	1.054	140.4	.6218	.2851
#1	7.983	.0845	.9664	6.076	.0015	.5379	1.213
#2	7.744	.0795	.9661	6.191	-.0042	.5434	1.206
#3	7.729	.0833	.9669	6.082	-.0046	.5373	1.212

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1112.1	2882.4	23283.	1512.4
Stddev	2.1	6.6	217.	4.0
%RSD	.18616	.22795	.92998	.26554
#1	1111.4	2883.3	23413.	1507.9
#2	1114.4	2888.5	23033.	1515.6
#3	1110.4	2875.5	23403.	1513.7

Zoom In Zoom Out

Sample Name: FA53801-19 Acquired: 5/17/2018 12:32:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0118	223.4	.0392	2.025	.0051	57.97	.0575	.0578	.3600	4.204
Stddev	.0016	.3	.0022	.010	.0000	.33	.0006	.0003	.0016	.007
%RSD	13.19	.1445	5.562	.5108	.7202	.5649	1.032	.4496	.4557	.1790
#1	.0128	223.4	.0380	2.031	.0051	58.33	.0568	.0581	.3611	4.204
#2	.0100	223.1	.0417	2.013	.0051	57.70	.0579	.0578	.3581	4.212
#3	.0127	223.7	.0379	2.032	.0052	57.88	.0579	.0576	.3606	4.197

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	228.8	20.75	21.82	5.226	.0069	2.581	.2670	6.422	.0323	.0160
Stddev	1.1	.06	.24	.012	.0001	.029	.0008	.034	.0003	.0043
%RSD	.5020	.2956	1.113	.2258	1.394	1.106	.2955	.5313	.8163	27.15
#1	230.0	20.77	22.06	5.219	.0069	2.596	.2661	6.383	.0322	.0166
#2	227.7	20.68	21.57	5.239	.0068	2.548	.2676	6.446	.0321	.0200
#3	228.6	20.80	21.84	5.219	.0069	2.599	.2674	6.437	.0326	.0114

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.315	.0926	.7251	5.438	.0055	.4853	3.284
Stddev	.024	.0023	.0034	.009	.0026	.0006	.002
%RSD	.3295	2.486	.4650	.1659	47.16	.1318	.0739
#1	7.328	.0937	.7281	5.446	.0067	.4851	3.284
#2	7.287	.0900	.7215	5.439	.0072	.4860	3.286
#3	7.330	.0942	.7258	5.428	.0025	.4848	3.281

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.6	2916.9	23547.	1516.8
Stddev	.6	11.0	44.	19.8
%RSD	.05563	.37756	.18483	1.3076
#1	1119.3	2906.0	23507.	1495.4
#2	1118.0	2928.0	23593.	1534.6
#3	1118.4	2916.8	23541.	1520.3

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA53801-23 Acquired: 5/17/2018 12:36:08 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0051	226.0	.0535	1.829	.0066	55.75	.0046	.0635	.4142	.2462
Stddev	.0012	.5	.0023	.011	.0001	.04	.0004	.0009	.0012	.0033
%RSD	23.55	.2100	4.303	.6069	1.440	.0724	9.217	1.415	.2822	1.350
#1	.0054	226.1	.0550	1.821	.0065	55.80	.0051	.0641	.4139	.2499
#2	.0062	226.3	.0508	1.842	.0067	55.73	.0042	.0639	.4133	.2434
#3	.0038	225.4	.0546	1.824	.0066	55.73	.0044	.0624	.4155	.2454

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	225.0	22.49	21.68	5.051	.0060	2.128	.2569	1.002	.0104	.0190
Stddev	1.1	.17	.18	.028	.0003	.051	.0004	.004	.0053	.0018
%RSD	.4876	.7443	.8096	.5445	5.576	2.397	.1716	.4367	51.24	9.370
#1	225.2	22.39	21.84	5.025	.0058	2.088	.2573	.9978	.0133	.0187
#2	226.0	22.69	21.71	5.049	.0057	2.111	.2564	1.001	.0136	.0209
#3	223.9	22.41	21.49	5.080	.0063	2.186	.2570	1.006	.0042	.0174

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.648	.0784	.6718	5.677	-.0024	.5812	.3123
Stddev	.056	.0021	.0030	.013	.0027	.0026	.0011
%RSD	.6458	2.674	.4402	.2230	111.2	.4454	.3595
#1	8.698	.0796	.6687	5.666	-.0007	.5782	.3134
#2	8.658	.0796	.6745	5.675	-.0010	.5830	.3111
#3	8.588	.0760	.6723	5.691	-.0055	.5823	.3124

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1112.9	2926.7	23518.	1536.0
Stddev	1.8	6.5	141.	5.7
%RSD	.16149	.22263	.60023	.36986
#1	1111.2	2919.8	23671.	1535.2
#2	1112.6	2927.4	23491.	1530.8
#3	1114.8	2932.8	23393.	1542.0

Zoom In Zoom Out

Sample Name: FA53896-1 Acquired: 5/17/2018 12:40:16 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0234	341.4	.0481	4.643	.0081	144.0	.0270	.0925	.4600	.5966
Stddev	.0027	1.0	.0055	.025	.0006	.9	.0001	.0006	.0005	.0023
%RSD	11.67	.3042	11.51	.5475	7.663	.6395	.5375	.6383	.1076	.3803
#1	.0266	340.4	.0510	4.617	.0085	143.5	.0269	.0920	.4595	.5976
#2	.0216	342.5	.0417	4.668	.0083	145.1	.0270	.0923	.4599	.5983
#3	.0221	341.4	.0516	4.644	.0074	143.5	.0272	.0932	.4605	.5940

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	287.2	25.02	35.10	10.72	.0088	2.978	.4061	.6337	.0116	.0170
Stddev	.8	.17	.22	.06	.0003	.019	.0016	.0016	.0043	.0099
%RSD	.2883	.6750	.6344	.5141	3.462	.6431	.3840	.2464	36.93	58.59
#1	286.4	25.09	34.87	10.73	.0087	2.956	.4047	.6335	.0165	.0117
#2	288.1	25.15	35.31	10.65	.0086	2.985	.4059	.6322	.0097	.0284
#3	287.1	24.83	35.13	10.76	.0092	2.992	.4078	.6353	.0086	.0107

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.837	.0757	1.901	7.788	.0008	.6509	.6610
Stddev	.022	.0005	.002	.017	.0019	.0020	.0035
%RSD	.2838	.5968	.1007	.2156	235.1	.3127	.5309
#1	7.824	.0761	1.902	7.782	-.0014	.6487	.6576
#2	7.824	.0752	1.902	7.776	.0018	.6514	.6609
#3	7.863	.0759	1.899	7.807	.0021	.6527	.6646

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1103.3	2964.3	23778.	1548.6
Stddev	.6	2.2	19.	15.1
%RSD	.05695	.07419	.08101	.97546
#1	1103.4	2962.4	23764.	1564.8
#2	1102.7	2966.7	23770.	1534.9
#3	1104.0	2963.7	23800.	1546.2

Zoom In Zoom Out

Sample Name: FA53896-4 Acquired: 5/17/2018 12:47:18 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0114	231.5	.0387	3.243	.0043	97.17	.0100	.0601	.3505	.2296
Stddev	.0014	1.0	.0028	.013	.0002	.40	.0001	.0004	.0034	.0010
%RSD	11.91	.4509	7.243	.4145	3.925	.4162	1.216	.6464	.9724	.4145
#1	.0127	232.7	.0419	3.258	.0044	97.52	.0100	.0596	.3540	.2305
#2	.0116	231.0	.0374	3.237	.0045	97.25	.0101	.0601	.3501	.2286
#3	.0100	230.7	.0367	3.233	.0041	96.73	.0098	.0604	.3473	.2298

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	219.1	22.78	26.02	7.294	.0056	2.363	.2790	.5020	.0046	.0129
Stddev	.7	.13	.11	.026	.0007	.007	.0014	.0009	.0009	.0070
%RSD	.3225	.5745	.4038	.3588	12.88	.3195	.4893	.1833	18.89	54.42
#1	219.5	22.93	25.98	7.310	.0051	2.354	.2789	.5020	.0044	.0110
#2	219.6	22.73	26.14	7.263	.0053	2.366	.2777	.5011	.0038	.0071
#3	218.3	22.69	25.95	7.308	.0064	2.368	.2805	.5030	.0055	.0207

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.952	.0747	1.218	5.848	.0027	.5008	.3777
Stddev	.009	.0007	.006	.013	.0032	.0007	.0012
%RSD	.1091	.9967	.5219	.2170	116.7	.1360	.3058
#1	7.958	.0754	1.220	5.849	-.0010	.5002	.3790
#2	7.956	.0739	1.224	5.834	.0047	.5007	.3768
#3	7.942	.0749	1.211	5.860	.0045	.5016	.3774

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1115.4	2927.6	23531.	1534.0
Stddev	2.8	7.4	39.	11.3
%RSD	.25481	.25321	.16713	.73706
#1	1112.2	2920.7	23487.	1521.8
#2	1116.5	2926.7	23562.	1536.2
#3	1117.6	2935.4	23546.	1544.1

Zoom In Zoom Out

Sample Name: FA54114-1 Acquired: 5/17/2018 12:51:29 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0219	2.184	.0044	.1254	-.0003	101.9	.1458	.0209	.0375
Stddev	.0023	.047	.0006	.0009	.0005	.2	.0005	.0008	.0021
%RSD	10.75	2.171	13.38	.7368	196.4	.1500	.3582	3.947	5.479
#1	.0196	2.140	.0046	.1249	-.0009	101.9	.1461	.0202	.0367
#2	.0243	2.177	.0038	.1265	.0001	102.0	.1462	.0206	.0359
#3	.0217	2.234	.0049	.1249	.0000	101.7	.1452	.0218	.0398

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6891	.8277	78.17	62.55	1.483	.2012	F7609.	.3521	.0180
Stddev	.0038	.0239	.02	.12	.004	.0010	443.	.0019	.0066
%RSD	.5490	2.884	.0293	.1929	.2605	.4995	5.822	.5336	36.63
#1	.6935	.8509	78.15	62.43	1.487	.2023	7932.	.3500	.0115
#2	.6869	.8290	78.16	62.56	1.482	.2004	7790.	.3536	.0180
#3	.6869	.8032	78.19	62.67	1.480	.2009	7104.	.3528	.0247

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0054	.0112	5.985	.0252	1.614	.0253	-.0163	.0122	.4395
Stddev	.0065	.0109	.005	.0021	.002	.0004	.0057	.0006	.0007
%RSD	120.2	97.21	.0879	8.186	.1446	1.693	34.84	5.283	.1496
#1	-.0020	.0031	5.984	.0230	1.614	.0257	-.0176	.0116	.4397
#2	.0103	.0069	5.979	.0271	1.617	.0255	-.0101	.0121	.4388
#3	.0080	.0236	5.990	.0255	1.612	.0249	-.0212	.0128	.4401

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	805.53	2325.6	17908.	1354.1
Stddev	3.04	2.0	55.	7.1
%RSD	.37688	.08764	.30842	.52457
#1	802.68	2323.3	17875.	1360.3
#2	808.72	2327.1	17879.	1346.3
#3	805.20	2326.5	17972.	1355.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:55:49 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2437	F35.48	2.103	1.945	1.873	F35.65	1.991	2.016	1.809
Stddev	.0012	.22	.003	.018	.015	.29	.006	.004	.005
%RSD	.4770	.6095	.1415	.9063	.8103	.8151	.2934	.2021	.3017
#1	.2449	35.61	2.100	1.957	1.887	35.84	1.985	2.012	1.814
#2	.2426	35.59	2.105	1.953	1.876	35.79	1.992	2.017	1.803
#3	.2436	35.23	2.104	1.924	1.857	35.31	1.996	2.020	1.810
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value		40.00				40.00			
Range		-10.00%				-10.00%			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.955	37.78	37.52	37.15	1.944	2.091	F34.16	2.111	1.901
Stddev	.009	.21	.24	.31	.012	.008	.16	.006	.001
%RSD	.4751	.5641	.6490	.8355	.6180	.3691	.4614	.3015	.0579
#1	1.962	37.98	37.66	37.49	1.950	2.084	34.24	2.104	1.900
#2	1.944	37.81	37.65	37.08	1.930	2.090	34.27	2.111	1.901
#3	1.958	37.56	37.23	36.88	1.952	2.100	33.98	2.117	1.902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							40.00		
Range							-10.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.107	2.125	2.735	2.178	1.896	1.947	1.961	1.987	1.990
Stddev	.002	.005	.003	.010	.014	.009	.005	.004	.008
%RSD	.0865	.2152	.0995	.4536	.7572	.4466	.2809	.1900	.4230
#1	2.109	2.124	2.734	2.170	1.906	1.952	1.955	1.992	1.981
#2	2.106	2.121	2.733	2.177	1.902	1.937	1.962	1.985	1.992
#3	2.107	2.130	2.738	2.189	1.879	1.953	1.966	1.985	1.998
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:55:49 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1037.7	2784.3	22753.	1544.1
Stddev	1.5	7.9	70.	17.7
%RSD	.14041	.28412	.30915	1.1469
#1	1039.3	2792.4	22681.	1523.7
#2	1036.5	2783.7	22822.	1554.1
#3	1037.2	2776.6	22757.	1554.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:59:46 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0093	.0002	-.0002	.0000	.0009	.0001	-.0001	.0003
Stddev	.0001	.0133	.0002	.0003	.0002	.0049	.0000	.0001	.0003
%RSD	76.24	143.5	142.0	139.6	2794.	569.2	29.19	104.9	82.80
#1	.0000	.0002	-.0001	-.0003	.0000	.0041	.0001	-.0001	.0005
#2	-.0002	.0246	.0002	-.0006	-.0001	-.0048	.0000	-.0001	.0000
#3	-.0003	.0031	.0004	.0001	.0002	.0033	.0000	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0171	.0354	.0464	.0001	F.0024	.1519	.0004	.0003
Stddev	.0001	.0099	.0074	.0167	.0000	.0010	.0060	.0000	.0002
%RSD	7.619	57.96	20.93	35.97	63.40	41.56	3.926	10.43	86.59
#1	.0016	.0286	.0356	.0592	.0001	.0035	.1559	.0004	.0001
#2	.0016	.0107	.0427	.0275	.0000	.0024	.1548	.0003	.0002
#3	.0014	.0122	.0279	.0525	.0001	.0015	.1451	.0004	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0012	.0014	.0003	.0001	.0015	.0019	-.0001	-.0001
Stddev	.0012	.0007	.0004	.0002	.0002	.0001	.0005	.0001	.0001
%RSD	139.0	53.07	30.65	55.08	117.9	9.692	27.07	95.15	85.65
#1	-.0004	.0006	.0012	.0005	.0002	.0017	.0015	.0000	-.0002
#2	.0019	.0019	.0019	.0003	.0003	.0014	.0025	-.0001	-.0001
#3	.0011	.0013	.0011	.0002	.0000	.0014	.0016	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:59:46 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1173.1	2872.1	23384.	1506.9
Stddev	3.6	4.4	72.	6.0
%RSD	.30314	.15180	.30907	.39829
#1	1168.9	2867.1	23360.	1511.7
#2	1175.2	2875.0	23327.	1500.2
#3	1175.0	2874.2	23466.	1508.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 13:24:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2437	38.99	1.977	1.981	1.990	39.26	1.989	1.988	1.990	1.984
Stddev	.0023	.22	.006	.003	.002	.27	.002	.001	.009	.002
%RSD	.9616	.5711	.3040	.1602	.1141	.6919	.0908	.0728	.4641	.0999
#1	.2446	39.21	1.977	1.985	1.992	39.49	1.987	1.988	1.983	1.985
#2	.2455	39.01	1.972	1.979	1.990	39.33	1.989	1.987	2.000	1.985
#3	.2411	38.76	1.984	1.980	1.988	38.96	1.991	1.990	1.986	1.982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.72	39.10	39.21	2.009	2.013	39.12	2.003	1.950	1.970	1.988
Stddev	.14	.14	.15	.014	.002	.26	.002	.005	.002	.002
%RSD	.3629	.3455	.3902	.7141	.1103	.6590	.1150	.2784	.1140	.1046
#1	39.88	39.22	39.38	2.006	2.012	39.37	2.001	1.944	1.969	1.990
#2	39.63	39.12	39.14	2.024	2.011	39.13	2.002	1.954	1.968	1.986
#3	39.64	38.96	39.10	1.996	2.015	38.86	2.005	1.952	1.972	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.563	2.025	2.009	2.013	1.971	2.017	1.993
Stddev	.005	.005	.005	.012	.003	.004	.004
%RSD	.1870	.2606	.2452	.6020	.1661	.1877	.2103
#1	2.562	2.021	2.014	2.007	1.968	2.021	1.988
#2	2.558	2.022	2.010	2.026	1.974	2.017	1.993
#3	2.568	2.031	2.004	2.004	1.970	2.013	1.997
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 13:24:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1030.9	2752.7	22577.	1528.8
Stddev	1.6	3.0	106.	13.0
%RSD	.15375	.10932	.46817	.85091
#1	1032.6	2753.7	22556.	1513.8
#2	1029.5	2755.0	22484.	1537.6
#3	1030.4	2749.3	22692.	1534.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 13:36:14 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0020	-.0002	.0003	.0001	.0085	.0001	.0000	.0003
Stddev	.0002	.0177	.0003	.0002	.0001	.0028	.0000	.0001	.0003
%RSD	119.9	901.9	142.0	77.73	199.3	32.84	60.80	421.8	100.7
#1	.0004	.0048	.0001	.0005	.0001	.0053	.0000	.0001	.0007
#2	.0000	.0180	-.0004	.0000	.0002	.0105	.0001	.0000	.0002
#3	.0002	-.0170	-.0004	.0003	-.0001	.0096	.0001	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0102	.0071	.0053	.0001	F.0014	-.0525	.0003	-.0003
Stddev	.0001	.0030	.0160	.0594	.0001	.0002	.0060	.0002	.0005
%RSD	27.43	29.94	225.3	1130.	47.84	15.24	11.52	52.43	158.4
#1	.0005	.0082	.0098	.0410	.0001	.0016	-.0482	.0002	-.0003
#2	.0005	.0087	.0216	.0381	.0002	.0015	-.0498	.0005	.0002
#3	.0003	.0137	-.0101	-.0633	.0001	.0012	-.0594	.0002	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	.0005	.0007	.0002	.0008	.0012	.0001	.0000
Stddev	.0005	.0011	.0001	.0003	.0001	.0001	.0008	.0003	.000
%RSD	2166.	1344.	25.55	36.94	45.51	16.06	62.53	279.5	157.0
#1	.0003	.0004	.0006	.0006	.0003	.0009	.0008	-.0001	-.0001
#2	-.0006	.0010	.0004	.0010	.0001	.0007	.0021	.0000	.0000
#3	.0003	-.0011	.0004	.0005	.0003	.0007	.0008	.0004	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 13:36:14 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1163.8	2835.9	22968.	1499.1
Stddev	1.9	4.4	55.	7.7
%RSD	.16241	.15594	.23981	.51316
#1	1164.2	2836.4	22913.	1490.2
#2	1161.8	2831.2	23024.	1503.4
#3	1165.5	2840.0	22968.	1503.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33758-MB1 Acquired: 5/17/2018 13:39:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0222	-.0016	.0003	.0000	.0277	.0000	-.0002	.0008
Stddev	.0002	.0127	.0005	.0002	.000	.0009	.000	.0000	.0002
%RSD	38.87	56.99	31.95	73.44	351.0	3.160	107.2	7.031	28.56
#1	-.0003	.0141	-.0019	.0001	.0001	.0281	.0000	-.0002	.0008
#2	-.0006	.0158	-.0018	.0005	.0000	.0267	.0000	-.0002	.0006
#3	-.0008	.0368	-.0010	.0004	-.0002	.0283	.0000	-.0002	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0268	.0312	.0596	.0011	.0005	-.0447	.0004	-.0005
Stddev	.0002	.0026	.0159	.0180	.0000	.0001	.0096	.0001	.0005
%RSD	21.80	9.868	50.97	30.23	2.719	17.18	21.50	14.39	86.12
#1	-.0011	.0295	.0235	.0398	.0011	.0006	-.0553	.0004	-.0008
#2	-.0008	.0267	.0207	.0639	.0011	.0004	-.0366	.0004	.0000
#3	-.0008	.0242	.0496	.0751	.0012	.0005	-.0421	.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0021	.0152	F.0272	.0001	.0008	.0003	-.0001	.0023
Stddev	.0010	.0015	.0002	.0004	.0000	.0000	.0008	.0001	.0001
%RSD	1710.	72.07	1.169	1.342	25.33	3.834	258.1	140.7	2.252
#1	-.0010	.0036	.0151	.0273	.0001	.0008	.0002	.0000	.0024
#2	.0005	.0019	.0152	.0267	.0001	.0008	-.0004	-.0001	.0023
#3	.0007	.0007	.0154	.0274	.0001	.0008	.0012	-.0001	.0023
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Zoom In Zoom Out

Sample Name: MP33758-MB1 Acquired: 5/17/2018 13:39:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1174.8	2853.8	23440.	1518.6
Stddev	.7	2.9	59.	6.8
%RSD	.06349	.10032	.25382	.44882
#1	1175.7	2851.1	23431.	1517.1
#2	1174.3	2856.8	23385.	1512.6
#3	1174.5	2853.6	23503.	1526.0

Zoom In Zoom Out

Sample Name: MP33758-B1 Acquired: 5/17/2018 13:44:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0512	26.64	1.981	2.062	.0526	25.31	.0506	.5129	.2100	.2593
Stddev	.0002	.11	.001	.010	.0002	.16	.0000	.0005	.0011	.0004
%RSD	.4523	.3973	.0230	.4733	.3894	.6302	.0603	.1041	.5249	.1430
#1	.0510	26.55	1.981	2.056	.0525	25.23	.0506	.5123	.2106	.2589
#2	.0510	26.75	1.981	2.073	.0524	25.49	.0506	.5130	.2106	.2595
#3	.0514	26.61	1.982	2.057	.0528	25.20	.0506	.5133	.2087	.2596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.21	24.53	24.98	.5214	.4798	24.88	.5283	.4873	.4888	1.965
Stddev	.10	.09	.10	.0029	.0012	.11	.0017	.0023	.0065	.004
%RSD	.3784	.3607	.4055	.5529	.2479	.4529	.3294	.4697	1.329	.1843
#1	26.17	24.48	25.09	.5191	.4785	24.84	.5266	.4898	.4817	1.961
#2	26.32	24.63	24.89	.5246	.4806	25.01	.5301	.4852	.4904	1.968
#3	26.13	24.47	24.95	.5203	.4805	24.79	.5282	.4869	.4944	1.966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3633	.5263	.5031	.5057	1.934	.4923	.5063
Stddev	.0003	.0021	.0005	.0027	.007	.0020	.0012
%RSD	.0827	.3942	.1082	.5311	.3879	.4021	.2297
#1	.3630	.5243	.5029	.5040	1.941	.4940	.5053
#2	.3635	.5284	.5037	.5088	1.926	.4928	.5076
#3	.3635	.5263	.5027	.5043	1.934	.4901	.5060
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33758-B1 Acquired: 5/17/2018 13:44:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1070.1	2766.8	22488.	1485.1
Stddev	3.9	7.5	30.	9.9
%RSD	.36352	.27060	.13362	.66611
#1	1065.6	2768.6	22469.	1485.5
#2	1071.9	2758.6	22472.	1475.0
#3	1072.7	2773.3	22522.	1494.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54232-1 Acquired: 5/17/2018 13:48:17 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0040	115.4	.0329	.6397	.0011	71.44	-.0014	.1706	3.104	1.329
Stddev	.0032	1.0	.0031	.0023	.0008	.59	.0001	.0008	.007	.001
%RSD	80.03	.8382	9.419	.3643	67.62	.8247	8.132	.4880	.2384	.0989
#1	.0015	115.2	.0352	.6424	.0020	71.15	-.0012	.1715	3.106	1.328
#2	.0030	114.6	.0341	.6386	.0008	71.05	-.0014	.1701	3.096	1.329
#3	.0076	116.5	.0294	.6382	.0006	72.12	-.0014	.1701	3.111	1.331

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	471.7	1.780	30.60	4.778	.2643	1.785	1.775	.0914	.0308	.0137
Stddev	2.7	.050	.28	.027	.0005	.053	.002	.0029	.0147	.0038
%RSD	.5636	2.832	.9211	.5708	.2026	2.971	.0925	3.154	47.92	27.85
#1	470.7	1.803	30.72	4.765	.2649	1.846	1.773	.0909	.0469	.0103
#2	469.8	1.723	30.28	4.810	.2642	1.750	1.776	.0945	.0274	.0179
#3	474.8	1.815	30.81	4.760	.2638	1.759	1.774	.0888	.0180	.0129

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.286	.0476	.2762	4.060	.0156	.4988	.6627
Stddev	.180	.0013	.0032	.111	.0043	.0011	.0011
%RSD	1.944	2.786	1.174	2.739	27.77	.2168	.1664
#1	9.494	.0462	.2761	3.960	.0159	.4976	.6621
#2	9.196	.0480	.2795	4.042	.0198	.4991	.6621
#3	9.168	.0487	.2730	4.180	.0112	.4997	.6640

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1183.7	3044.3	24555.	1633.3
Stddev	1.3	8.2	128.	14.3
%RSD	.11133	.27018	.52045	.87275
#1	1185.1	3035.0	24588.	1638.9
#2	1182.5	3050.4	24414.	1643.9
#3	1183.5	3047.7	24663.	1617.1

Zoom In Zoom Out

Sample Name: MP33758-D1 Acquired: 5/17/2018 13:52:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0055	128.7	.0364	.7080	.0006	78.61	-.0020	.1846	3.158	1.528
Stddev	.0007	.9	.0044	.0032	.0004	.53	.0003	.0013	.033	.005
%RSD	13.14	.6996	12.15	.4481	55.95	.6701	15.41	.7043	1.046	.3126
#1	.0062	129.6	.0365	.7112	.0009	79.07	-.0024	.1834	3.122	1.526
#2	.0056	128.8	.0408	.7081	.0008	78.74	-.0018	.1845	3.187	1.534
#3	.0048	127.8	.0320	.7048	.0002	78.04	-.0020	.1860	3.164	1.525

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	533.9	1.644	33.62	5.212	.2679	1.871	1.792	.1047	.0135	.0102
Stddev	3.5	.146	.30	.044	.0011	.074	.005	.0056	.0046	.0046
%RSD	.6483	8.907	.8964	.8395	.3936	3.969	.2545	5.318	33.87	45.09
#1	536.8	1.703	33.87	5.162	.2690	1.942	1.797	.1088	.0088	.0057
#2	534.7	1.753	33.71	5.242	.2670	1.794	1.791	.1070	.0179	.0100
#3	530.1	1.478	33.28	5.232	.2677	1.877	1.788	.0984	.0136	.0149

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.813	.0524	.2849	4.366	.0110	.5568	.7530
Stddev	.151	.0018	.0009	.040	.0028	.0037	.0006
%RSD	1.535	3.488	.3099	.9246	25.74	.6648	.0841
#1	9.838	.0508	.2859	4.327	.0079	.5525	.7530
#2	9.949	.0544	.2843	4.363	.0134	.5592	.7524
#3	9.651	.0519	.2845	4.407	.0117	.5586	.7536

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.4	2894.3	23199.	1539.2
Stddev	1.8	6.5	143.	13.1
%RSD	.16354	.22599	.61612	.85359
#1	1117.2	2889.1	23363.	1530.0
#2	1120.5	2901.6	23108.	1533.4
#3	1117.4	2892.1	23124.	1554.2

Zoom In Zoom Out

Sample Name: MP33758-SD1 Acquired: 5/17/2018 13:56:30 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0058	123.9	.0134	.6888	-.0010	77.38	-.0044	.1838	3.351	1.424
Stddev	.0065	1.2	.0141	.0082	.0022	.42	.0012	.0045	.014	.002
%RSD	111.1	.9618	104.9	1.192	222.3	.5484	28.02	2.432	.4039	.1408
#1	-.0013	125.0	.0297	.6932	.0015	77.87	-.0059	.1801	3.367	1.425
#2	.0073	124.0	.0052	.6938	-.0022	77.17	-.0039	.1887	3.341	1.422
#3	.0115	122.6	.0054	.6793	-.0022	77.10	-.0036	.1825	3.347	1.426

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	519.8	1.521	34.40	5.161	.2745	.2165	1.934	.0917	.0314	.0339
Stddev	3.1	.633	1.34	.031	.0031	.0539	.012	.0106	.0168	.0387
%RSD	.5987	41.63	3.881	.5941	1.140	24.87	.6352	11.58	53.66	114.0
#1	523.4	.9156	35.50	5.161	.2720	.1710	1.925	.0920	.0174	-.0093
#2	518.4	1.469	32.92	5.131	.2736	.2760	1.928	.1021	.0501	.0458
#3	517.6	2.179	34.79	5.192	.2780	.2026	1.948	.0809	.0266	.0653

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.708	.0568	.3044	4.181	.0082	.5322	.7152
Stddev	.351	.0021	.0081	.059	.0090	.0052	.0020
%RSD	3.620	3.625	2.657	1.406	109.6	.9722	.2728
#1	9.983	.0545	.2965	4.245	.0105	.5320	.7131
#2	9.829	.0583	.3127	4.128	-.0017	.5271	.7155
#3	9.312	.0577	.3040	4.172	.0159	.5375	.7169

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1150.4	2865.4	23072.	1504.8
Stddev	1.3	6.7	33.	14.3
%RSD	.11412	.23432	.14102	.94887
#1	1148.9	2866.3	23055.	1488.3
#2	1150.8	2871.6	23051.	1513.4
#3	1151.4	2858.3	23109.	1512.6

Zoom In Zoom Out

Sample Name: MP33758-PS1 Acquired: 5/17/2018 14:00:43 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0494	136.5	.1340	.9959	.0513	88.13	.0469	.2473	3.684	1.648
Stddev	.0019	.4	.0038	.0086	.0008	.26	.0003	.0007	.012	.003
%RSD	3.927	.3206	2.807	.8649	1.614	.2908	.7146	.2800	.3360	.1961
#1	.0506	136.2	.1347	1.003	.0523	87.84	.0469	.2467	3.696	1.649
#2	.0472	137.0	.1373	.9985	.0510	88.27	.0466	.2481	3.671	1.650
#3	.0505	136.3	.1299	.9862	.0508	88.29	.0473	.2472	3.685	1.644

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	550.3	11.30	40.30	5.575	.3946	11.66	2.146	.1545	.1010	.1062
Stddev	.8	.03	.50	.020	.0010	.02	.007	.0028	.0030	.0022
%RSD	.1496	.2497	1.229	.3612	.2519	.1857	.3071	1.823	2.995	2.103
#1	549.9	11.30	39.77	5.574	.3951	11.67	2.142	.1562	.1039	.1079
#2	551.2	11.32	40.38	5.596	.3935	11.67	2.142	.1512	.1012	.1069
#3	549.7	11.27	40.75	5.555	.3953	11.64	2.154	.1560	.0979	.1037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.58	.1034	.3662	4.766	.1060	.6259	1.012
Stddev	.18	.0007	.0008	.059	.0035	.0013	.002
%RSD	1.743	.6460	.2213	1.228	3.307	.2030	.2223
#1	10.60	.1027	.3663	4.827	.1100	.6257	1.012
#2	10.75	.1039	.3669	4.711	.1044	.6247	1.010
#3	10.39	.1037	.3653	4.760	.1036	.6272	1.015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1124.1	2920.7	23488.	1565.0
Stddev	3.2	7.0	48.	8.5
%RSD	.28472	.23848	.20429	.54493
#1	1121.1	2920.0	23536.	1555.2
#2	1127.5	2928.0	23440.	1569.9
#3	1123.9	2914.1	23487.	1570.0

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33758-S1 Acquired: 5/17/2018 14:04:50 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0611	213.3	2.023	2.962	.0540	147.5	.0499	.7692	3.875	2.105
Stddev	.0012	.9	.009	.015	.0011	1.1	.0008	.0006	.035	.010
%RSD	1.905	.4388	.4500	.5129	1.994	.7352	1.664	.0816	.9162	.4808
#1	.0617	214.4	2.028	2.979	.0540	148.7	.0493	.7692	3.911	2.116
#2	.0618	212.6	2.029	2.949	.0551	146.5	.0509	.7685	3.840	2.103
#3	.0598	212.9	2.012	2.957	.0529	147.4	.0497	.7698	3.875	2.096

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	709.4	27.05	76.30	7.935	.7847	29.00	2.597	.6282	.1021	1.989
Stddev	3.9	.13	.33	.062	.0012	.14	.002	.0029	.0042	.019
%RSD	.5462	.4824	.4296	.7869	.1518	.4882	.0771	.4678	4.147	.9510
#1	713.7	27.19	76.68	7.990	.7848	29.15	2.595	.6264	.0981	2.001
#2	706.2	26.94	76.10	7.867	.7858	28.86	2.599	.6316	.1065	1.998
#3	708.3	27.00	76.12	7.948	.7834	29.00	2.596	.6265	.1017	1.967

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.18	.5408	.8698	5.865	2.025	1.259	1.488
Stddev	.05	.0018	.0060	.019	.006	.006	.004
%RSD	.4281	.3410	.6943	.3250	.3109	.5036	.2460
#1	12.13	.5393	.8765	5.876	2.018	1.266	1.489
#2	12.23	.5429	.8647	5.843	2.026	1.254	1.484
#3	12.18	.5403	.8683	5.877	2.030	1.256	1.491

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1087.4	2865.0	22973.	1547.5
Stddev	3.1	6.9	218.	9.9
%RSD	.28781	.24063	.94835	.63806
#1	1083.7	2858.1	22790.	1536.3
#2	1089.1	2864.8	23214.	1555.0
#3	1089.2	2871.9	22914.	1551.3

Zoom In Zoom Out

Sample Name: MP33758-S2 Acquired: 5/17/2018 14:08:55 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0576	186.8	1.954	2.725	.0528	124.7	.0476	.6981	2.760	1.831
Stddev	.0008	.8	.010	.002	.0014	.1	.0004	.0010	.008	.008
%RSD	1.397	.4223	.4954	.0622	2.734	.0858	.7542	.1476	.2859	.4500
#1	.0571	187.6	1.943	2.727	.0539	124.8	.0480	.6969	2.764	1.840
#2	.0585	186.0	1.959	2.724	.0533	124.7	.0474	.6989	2.751	1.829
#3	.0571	186.9	1.961	2.725	.0512	124.6	.0473	.6985	2.765	1.824

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	615.7	26.05	67.54	6.635	.6719	27.37	1.935	.5995	.1007	1.918
Stddev	.9	.06	.47	.004	.0017	.15	.002	.0029	.0012	.011
%RSD	.1470	.2466	.6957	.0640	.2566	.5509	.1032	.4776	1.208	.5699
#1	616.5	26.13	67.07	6.640	.6700	27.54	1.934	.6017	.1019	1.907
#2	614.7	26.03	68.01	6.633	.6735	27.25	1.937	.5963	.1007	1.919
#3	615.9	26.00	67.54	6.632	.6721	27.34	1.934	.6006	.0994	1.929

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.35	.5250	.8040	5.035	1.961	1.117	1.285
Stddev	.08	.0043	.0018	.057	.009	.004	.003
%RSD	.7573	.8177	.2204	1.130	.4758	.3575	.2627
#1	10.44	.5216	.8051	4.992	1.956	1.113	1.281
#2	10.30	.5236	.8019	5.099	1.954	1.121	1.288
#3	10.31	.5299	.8048	5.012	1.971	1.115	1.286

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1094.0	2880.2	22986.	1524.6
Stddev	1.2	5.6	31.	2.5
%RSD	.10957	.19277	.13524	.16480
#1	1095.3	2882.0	22951.	1521.8
#2	1093.1	2874.0	23004.	1526.7
#3	1093.5	2884.6	23005.	1525.4

Zoom In Zoom Out

Sample Name: FA54232-2 Acquired: 5/17/2018 14:13:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0017	92.27	.0193	.4361	.0007	157.2	.0004	.0694	1.540	.4246
Stddev	.0011	.28	.0040	.0022	.0001	.2	.0002	.0007	.012	.0025
%RSD	61.35	.2983	20.60	.5147	14.09	.1362	36.63	.9535	.7491	.5859
#1	.0021	91.98	.0224	.4336	.0007	157.0	.0006	.0702	1.527	.4268
#2	.0026	92.52	.0148	.4380	.0007	157.3	.0004	.0689	1.542	.4251
#3	.0005	92.30	.0207	.4366	.0008	157.4	.0003	.0691	1.550	.4219

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	219.2	1.377	19.20	2.756	.0991	1.302	.8213	.1492	.0085	.0114
Stddev	.3	.127	.22	.011	.0013	.035	.0060	.0021	.0039	.0089
%RSD	.1403	9.251	1.128	.3981	1.344	2.727	.7291	1.387	46.34	78.21
#1	219.6	1.388	19.28	2.751	.1006	1.301	.8269	.1473	.0053	.0040
#2	219.0	1.498	18.95	2.749	.0983	1.267	.8150	.1514	.0129	.0088
#3	219.1	1.244	19.36	2.769	.0984	1.338	.8221	.1490	.0073	.0213

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.29	.0429	.5974	3.055	.0095	.2546	.8177
Stddev	.43	.0012	.0035	.061	.0082	.0031	.0014
%RSD	2.997	2.864	.5802	2.005	85.94	1.216	.1710
#1	14.08	.0415	.5976	3.068	.0104	.2576	.8193
#2	14.01	.0436	.5939	3.109	.0172	.2548	.8170
#3	14.78	.0436	.6008	2.988	.0009	.2514	.8168

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1119.5	2892.5	23216.	1542.5
Stddev	.8	2.7	83.	6.8
%RSD	.07097	.09389	.35724	.43801
#1	1120.1	2890.3	23245.	1546.8
#2	1119.8	2895.6	23281.	1534.7
#3	1118.6	2891.7	23123.	1545.9

Zoom In Zoom Out

Sample Name: FA54232-3 Acquired: 5/17/2018 14:17:11 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0043	163.6	.0235	.7968	.0006	79.75	.0004	.1801	4.266	.9422
Stddev	.0006	.9	.0042	.0067	.0003	.36	.0003	.0013	.018	.0026
%RSD	13.96	.5537	17.74	.8427	46.93	.4504	94.96	.7198	.4204	.2744
#1	.0044	162.6	.0189	.7890	.0005	79.34	.0007	.1795	4.263	.9405
#2	.0049	164.2	.0245	.8007	.0004	79.92	.0000	.1792	4.250	.9452
#3	.0037	164.1	.0271	.8006	.0009	79.99	.0004	.1816	4.285	.9410

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	457.1	2.415	36.40	5.296	.2810	2.352	2.311	.0895	.0038	.0157
Stddev	1.7	.023	.16	.033	.0004	.051	.003	.0009	.0020	.0066
%RSD	.3609	.9555	.4284	.6173	.1327	2.178	.1295	1.011	52.63	42.28
#1	455.2	2.440	36.24	5.275	.2807	2.318	2.308	.0886	.0055	.0093
#2	458.1	2.396	36.56	5.279	.2810	2.327	2.314	.0894	.0016	.0153
#3	458.1	2.409	36.41	5.334	.2814	2.411	2.312	.0904	.0043	.0226

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.95	.0468	.3563	4.739	.0084	.5141	.6945
Stddev	.15	.0007	.0026	.055	.0018	.0023	.0027
%RSD	1.052	1.598	.7356	1.154	21.95	.4423	.3947
#1	14.04	.0476	.3534	4.763	.0096	.5115	.6928
#2	13.78	.0461	.3584	4.778	.0063	.5152	.6931
#3	14.03	.0469	.3572	4.676	.0093	.5156	.6977

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.3	2846.1	23138.	1532.7
Stddev	2.2	3.6	63.	6.9
%RSD	.19566	.12749	.27300	.45277
#1	1115.9	2842.0	23162.	1535.3
#2	1120.3	2849.0	23186.	1538.0
#3	1118.6	2847.4	23067.	1524.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 14:21:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2428	38.30	1.962	1.955	1.962	38.79	1.979	1.971	1.982	1.954
Stddev	.0004	.21	.004	.006	.005	.18	.004	.002	.014	.003
%RSD	.1674	.5436	.2310	.2967	.2808	.4632	.1794	.0964	.7176	.1329
#1	.2424	38.45	1.957	1.949	1.966	38.93	1.975	1.969	1.983	1.957
#2	.2429	38.06	1.964	1.959	1.955	38.59	1.979	1.971	1.967	1.952
#3	.2432	38.39	1.965	1.958	1.963	38.85	1.982	1.973	1.995	1.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.30	38.66	39.14	2.016	1.992	38.99	1.994	1.937	1.951	1.970
Stddev	.18	.03	.10	.016	.006	.18	.004	.004	.003	.006
%RSD	.4673	.0663	.2453	.7948	.2804	.4612	.2266	.2053	.1666	.3027
#1	39.45	38.69	39.19	2.014	1.986	39.16	1.990	1.933	1.951	1.977
#2	39.10	38.64	39.03	2.001	1.992	38.80	1.993	1.936	1.947	1.967
#3	39.37	38.65	39.20	2.033	1.997	39.01	1.999	1.941	1.953	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.537	2.026	1.973	2.004	1.952	2.009	1.993
Stddev	.003	.005	.009	.012	.002	.010	.005
%RSD	.1074	.2598	.4308	.5897	.0860	.4994	.2601
#1	2.534	2.020	1.979	2.007	1.951	2.007	1.987
#2	2.539	2.026	1.963	1.992	1.952	2.000	1.996
#3	2.538	2.031	1.975	2.015	1.954	2.020	1.996
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 14:21:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1044.5	2789.8	22821.	1533.7
Stddev	3.5	8.0	66.	9.2
%RSD	.33234	.28708	.28967	.59756
#1	1048.5	2799.0	22780.	1523.1
#2	1042.6	2785.9	22897.	1539.9
#3	1042.4	2784.4	22785.	1537.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 14:25:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0036	-.0008	.0003	.0002	.0052	.0000	.0000	.0004
Stddev	.0002	.0182	.0011	.0003	.0001	.0045	.0001	.000	.0005
%RSD	182.4	501.3	138.3	106.0	74.86	86.71	194.3	128.9	126.6
#1	-.0001	-.0244	.0004	.0001	.0003	.0082	.0001	-.0001	.0009
#2	.0002	.0098	-.0011	.0002	.0001	.0074	.0001	-.0001	.0005
#3	.0003	.0037	-.0016	.0006	.0002	.0000	.0000	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0271	.0000	.0234	.0002	F.0025	-.0846	.0001	.0003
Stddev	.0001	.0093	.0327	.0099	.0001	.0008	.0087	.0001	.0003
%RSD	32.33	34.51	66370.	42.38	53.93	31.94	10.31	70.47	86.24
#1	.0005	.0368	.0374	.0120	.0002	.0033	-.0775	.0002	.0006
#2	.0003	.0261	-.0133	.0277	.0001	.0025	-.0944	.0000	.0003
#3	.0004	.0182	-.0239	.0304	.0001	.0017	-.0820	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0019	.0008	.0004	.0002	.0014	.0007	-.0001	.0000
Stddev	.0012	.0010	.0003	.0004	.0001	.0003	.0010	.0004	.0000
%RSD	221.6	54.47	37.74	99.38	35.53	21.27	140.3	398.4	173.9
#1	.0005	.0028	.0006	.0004	.0002	.0016	.0019	-.0005	.0001
#2	-.0006	.0008	.0005	.0008	.0002	.0015	.0001	.0002	.0000
#3	.0018	.0019	.0011	.0000	.0001	.0011	.0002	.0000	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 14:25:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1170.0	2849.3	23035.	1490.5
Stddev	.6	6.3	71.	7.4
%RSD	.05265	.22033	.30731	.49568
#1	1170.3	2843.7	22957.	1498.9
#2	1169.3	2848.1	23052.	1487.0
#3	1170.5	2856.1	23096.	1485.5

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54232-4 Acquired: 5/17/2018 14:29:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0064	124.3	.0252	.6212	.0006	128.0	.0003	.2244	7.360	1.270
Stddev	.0008	.7	.0029	.0057	.0003	.8	.0003	.0006	.052	.005
%RSD	12.83	.5753	11.49	.9137	54.11	.6399	99.72	.2794	.7117	.4362
#1	.0059	123.5	.0272	.6147	.0002	127.1	.0005	.2242	7.414	1.275
#2	.0074	124.4	.0265	.6237	.0008	128.1	.0006	.2239	7.355	1.269
#3	.0060	124.9	.0219	.6251	.0009	128.7	.0000	.2251	7.310	1.264

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	482.8	2.780	36.27	5.505	.4557	2.562	3.932	.1301	-.0039	.0108
Stddev	3.0	.115	.55	.037	.0022	.013	.008	.0021	.0053	.0150
%RSD	.6275	4.141	1.524	.6760	.4724	.5153	.2149	1.581	136.9	138.8
#1	479.7	2.679	35.64	5.548	.4580	2.576	3.934	.1285	-.0029	.0064
#2	485.7	2.755	36.67	5.490	.4554	2.562	3.940	.1295	-.0097	.0276
#3	482.9	2.905	36.50	5.478	.4537	2.549	3.923	.1324	.0009	-.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.53	.0510	.4697	5.021	.0146	.5447	1.217
Stddev	.11	.0009	.0003	.079	.0074	.0027	.004
%RSD	.7347	1.694	.0741	1.574	50.70	.5045	.3083
#1	15.41	.0515	.4701	5.025	.0224	.5478	1.218
#2	15.53	.0500	.4694	5.097	.0077	.5427	1.219
#3	15.64	.0514	.4697	4.940	.0138	.5436	1.212

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1111.9	2847.5	23086.	1520.1
Stddev	.6	8.8	187.	2.4
%RSD	.05028	.30899	.81011	.15939
#1	1112.3	2841.2	22871.	1518.6
#2	1111.3	2843.9	23206.	1522.9
#3	1112.1	2857.6	23182.	1518.8

Zoom In Zoom Out

Sample Name: FA54233-1 Acquired: 5/17/2018 14:33:41 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	19.88	.0056	.3723	.0006	314.5	.0036	.0113	.1501	.1062
Stddev	.001	.03	.0003	.0028	.0001	.3	.0000	.0002	.0010	.0008
%RSD	12190.	.1464	5.489	.7395	12.53	.1069	1.133	1.459	.6924	.7512
#1	-.0006	19.85	.0059	.3731	.0006	314.5	.0036	.0111	.1491	.1069
#2	.0002	19.87	.0054	.3745	.0006	314.9	.0036	.0114	.1511	.1054
#3	.0004	19.91	.0055	.3692	.0005	314.2	.0037	.0113	.1502	.1065

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	38.26	.3485	2.815	.3784	.0084	2.804	.0781	.2806	.0006	.0041
Stddev	.09	.0243	.080	.0017	.0001	.013	.0003	.0020	.0008	.0022
%RSD	.2342	6.965	2.829	.4433	1.754	.4498	.4128	.7172	126.5	53.17
#1	38.37	.3261	2.892	.3780	.0083	2.794	.0778	.2828	.0012	.0016
#2	38.21	.3743	2.821	.3770	.0085	2.818	.0784	.2803	-.0003	.0053
#3	38.21	.3453	2.733	.3802	.0085	2.800	.0781	.2788	.0008	.0054

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.348	.0252	1.226	.6743	-.0015	.0415	.7363
Stddev	.001	.0002	.004	.0018	.0009	.0002	.0017
%RSD	.0715	.8786	.3245	.2709	62.26	.5779	.2318
#1	1.347	.0250	1.224	.6745	-.0010	.0418	.7347
#2	1.349	.0255	1.231	.6724	-.0025	.0414	.7381
#3	1.348	.0252	1.224	.6760	-.0009	.0413	.7360

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1022.7	2885.0	23221.	1555.7
Stddev	2.7	3.7	80.	13.6
%RSD	.26614	.12888	.34502	.87637
#1	1019.6	2885.7	23286.	1551.2
#2	1024.8	2881.0	23245.	1544.9
#3	1023.8	2888.4	23131.	1571.0

Zoom In Zoom Out

Sample Name: FA54170-2 Acquired: 5/17/2018 14:37:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0025	22.92	.0328	.0964	.0007	F5065.	.0003	.0020	.1104
Stddev	.0006	.25	.0059	.0006	.0005	43.	.0002	.0009	.0011
%RSD	24.81	1.080	18.05	.5759	73.23	.8485	54.53	44.05	.9998
#1	-.0027	22.73	.0281	.0958	.0001	5103.	.0004	.0030	.1093
#2	-.0018	22.82	.0394	.0969	.0012	5019.	.0005	.0018	.1105
#3	-.0030	23.20	.0308	.0965	.0009	5073.	.0001	.0012	.1115

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0169	12.53	1.218	16.92	.3182	-.0030	8.642	.0283	.0751
Stddev	.0010	.08	.049	.11	.0024	.0005	.111	.0008	.0023
%RSD	6.051	.6543	3.996	.6709	.7591	17.04	1.286	2.808	3.048
#1	.0174	12.51	1.198	16.80	.3209	-.0035	8.524	.0274	.0776
#2	.0158	12.46	1.183	17.03	.3174	-.0025	8.659	.0284	.0732
#3	.0177	12.62	1.274	16.93	.3162	-.0030	8.744	.0290	.0744

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0106	-.0109	12.06	.0245	F45.74	.3175	-.0123	.0561	.0846
Stddev	.0042	.0042	.01	.0012	.21	.0027	.0057	.0018	.0012
%RSD	39.87	38.41	.0788	4.737	.4502	.8623	46.01	3.283	1.466
#1	.0150	-.0149	12.06	.0252	45.53	.3192	-.0123	.0572	.0832
#2	.0065	-.0112	12.05	.0251	45.75	.3190	-.0180	.0570	.0850
#3	.0103	-.0066	12.06	.0231	45.94	.3143	-.0067	.0540	.0856

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	952.44	2668.3	21615.	1509.3
Stddev	1.29	.2	156.	11.0
%RSD	.13537	.00599	.72363	.72888
#1	951.22	2668.4	21437.	1501.7
#2	952.29	2668.4	21673.	1521.9
#3	953.79	2668.1	21733.	1504.2

Zoom In Zoom Out

Sample Name: FA54241-1 Acquired: 5/17/2018 14:42:13 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0021	95.26	.0385	1.415	.0027	34.91	.0076	.0133	.1531	.2418
Stddev	.0008	.50	.0033	.004	.0002	.11	.0002	.0004	.0005	.0021
%RSD	39.81	.5277	8.567	.2563	8.214	.3181	2.506	2.778	.3398	.8750
#1	.0029	95.45	.0347	1.418	.0025	34.94	.0077	.0129	.1525	.2436
#2	.0012	95.63	.0402	1.411	.0027	35.00	.0078	.0136	.1534	.2424
#3	.0021	94.69	.0406	1.416	.0029	34.78	.0074	.0134	.1534	.2395

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	66.63	2.734	6.041	2.785	.0026	.5353	.0519	.8424	.0063	-.0039
Stddev	.31	.046	.182	.008	.0006	.0603	.0005	.0049	.0070	.0030
%RSD	.4589	1.691	3.013	.2924	22.92	11.25	.9213	.5776	111.5	77.42
#1	66.96	2.787	6.072	2.781	.0031	.5202	.0513	.8392	.0112	-.0035
#2	66.58	2.702	5.846	2.779	.0020	.4841	.0521	.8401	.0093	-.0072
#3	66.36	2.713	6.206	2.794	.0028	.6017	.0522	.8480	-.0017	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.224	.0651	.4067	.6708	.0011	.1137	3.093
Stddev	.005	.0010	.0008	.0012	.0057	.0016	.004
%RSD	.2193	1.518	.1855	.1855	507.8	1.405	.1288
#1	2.222	.0647	.4076	.6694	-.0043	.1148	3.092
#2	2.230	.0662	.4063	.6713	.0005	.1145	3.090
#3	2.221	.0644	.4062	.6717	.0072	.1119	3.097

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1145.0	3054.3	24728.	1620.6
Stddev	2.9	4.9	91.	11.7
%RSD	.25694	.15898	.36632	.72099
#1	1143.5	3055.4	24658.	1632.2
#2	1148.3	3048.9	24696.	1608.9
#3	1143.0	3058.4	24831.	1620.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-2 Acquired: 5/17/2018 14:46:25 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	121.3	.0172	.8207	.0028	8.416	-.0006	.0108	.0860	.0334
Stddev	.0021	.7	.0016	.0014	.0004	.036	.0002	.0003	.0012	.0010
%RSD	149.8	.5699	9.183	.1734	15.29	.4266	31.98	2.327	1.399	2.857
#1	-.0010	120.6	.0190	.8216	.0026	8.399	-.0007	.0108	.0858	.0345
#2	.0021	121.9	.0162	.8191	.0033	8.457	-.0004	.0106	.0873	.0329
#3	.0031	121.3	.0164	.8215	.0025	8.392	-.0007	.0111	.0849	.0328

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	51.64	2.156	4.447	2.416	-.0013	.1044	.0449	.0730	.0034	.0006
Stddev	.14	.099	.268	.021	.0005	.0172	.0005	.0017	.0026	.0088
%RSD	.2808	4.586	6.017	.8847	38.84	16.46	1.107	2.356	76.67	1457.
#1	51.53	2.051	4.180	2.407	-.0008	.1032	.0444	.0736	.0064	-.0001
#2	51.81	2.171	4.716	2.401	-.0013	.1222	.0454	.0711	.0022	-.0079
#3	51.59	2.247	4.445	2.441	-.0018	.0879	.0451	.0744	.0016	.0098

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.053	.0271	.4466	.8380	.0008	.0962	.1042
Stddev	.006	.0020	.0018	.0075	.0051	.0010	.0004
%RSD	.3061	7.478	.3984	.8987	642.6	1.070	.3873
#1	2.051	.0250	.4447	.8331	.0064	.0954	.1039
#2	2.048	.0290	.4482	.8342	-.0035	.0974	.1047
#3	2.060	.0273	.4468	.8467	-.0006	.0959	.1042

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1152.9	3135.5	25197.	1654.9
Stddev	2.6	7.0	152.	10.9
%RSD	.22740	.22189	.60464	.65762
#1	1153.7	3134.2	25279.	1644.2
#2	1149.9	3129.3	25290.	1654.6
#3	1154.9	3143.0	25021.	1666.0

Zoom In Zoom Out

Sample Name: FA54241-3 Acquired: 5/17/2018 14:50:40 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	187.0	.0225	1.220	.0037	10.01	-.0009	.0081	.1757	.0424
Stddev	.0004	.8	.0027	.007	.0002	.02	.0002	.0004	.0018	.0012
%RSD	161.3	.4455	12.19	.6076	5.817	.2401	27.26	4.654	1.041	2.751
#1	.0004	187.9	.0203	1.223	.0038	10.02	-.0006	.0080	.1769	.0437
#2	.0006	186.2	.0255	1.212	.0038	10.02	-.0009	.0078	.1736	.0415
#3	-.0002	186.9	.0216	1.226	.0034	9.979	-.0011	.0085	.1767	.0420

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	88.36	3.546	6.202	.2926	.0018	-.2211	.0670	.1070	.0008	.0058
Stddev	.21	.092	.309	.0002	.0004	.0178	.0004	.0028	.0039	.0087
%RSD	.2373	2.605	4.978	.0725	24.46	8.029	.6127	2.584	460.7	149.6
#1	88.39	3.440	6.542	.2927	.0021	-.2189	.0674	.1083	-.0036	.0107
#2	88.14	3.608	5.940	.2924	.0013	-.2399	.0666	.1039	.0034	.0110
#3	88.56	3.590	6.124	.2928	.0021	-.2046	.0668	.1089	.0028	-.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.75	.0293	.8179	1.836	-.0016	.1762	.1227
Stddev	.12	.0009	.0026	.006	.0021	.0009	.0010
%RSD	1.120	2.953	.3142	.3519	129.8	.4922	.7896
#1	10.73	.0295	.8201	1.837	-.0012	.1764	.1226
#2	10.87	.0283	.8151	1.841	-.0038	.1753	.1217
#3	10.63	.0300	.8186	1.829	.0003	.1770	.1237

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1146.1	3094.7	24705.	1617.6
Stddev	1.0	16.3	58.	5.8
%RSD	.08676	.52747	.23280	.35574
#1	1146.7	3090.0	24643.	1612.6
#2	1144.9	3112.8	24757.	1623.9
#3	1146.6	3081.2	24716.	1616.3

Zoom In Zoom Out

Sample Name: FA54241-4 Acquired: 5/17/2018 14:54:55 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0018	288.9	.0614	2.715	.0043	9.739	-.0015	.0064	.3710	.0457
Stddev	.0018	1.5	.0071	.008	.0003	.071	.0004	.0007	.0037	.0015
%RSD	98.03	.5093	11.54	.2861	7.442	.7342	27.68	11.33	.9970	3.289
#1	-.0001	289.2	.0545	2.712	.0042	9.821	-.0020	.0072	.3741	.0470
#2	.0021	290.2	.0687	2.724	.0040	9.712	-.0014	.0064	.3719	.0440
#3	.0035	287.3	.0609	2.710	.0046	9.685	-.0012	.0057	.3669	.0461

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	199.1	3.818	7.465	.0996	.0071	-.2217	.0735	.3239	.0030	.0021
Stddev	.8	.020	.320	.0009	.0014	.0364	.0013	.0038	.0041	.0039
%RSD	.4104	.5165	4.284	.8898	19.12	16.44	1.788	1.170	135.9	190.8
#1	199.4	3.837	7.137	.0996	.0071	-.2587	.0748	.3199	.0074	.0061
#2	199.7	3.819	7.776	.1005	.0085	-.1858	.0722	.3274	.0022	-.0018
#3	198.2	3.798	7.480	.0987	.0058	-.2206	.0737	.3245	-.0006	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.584	.0369	2.355	1.569	-.0107	.5079	.1195
Stddev	.030	.0016	.007	.026	.0048	.0024	.0008
%RSD	.6492	4.302	.2936	1.690	45.15	.4690	.6682
#1	4.581	.0369	2.358	1.574	-.0114	.5106	.1189
#2	4.556	.0385	2.361	1.592	-.0055	.5060	.1192
#3	4.615	.0353	2.347	1.540	-.0151	.5071	.1204

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1128.4	3385.1	27096.	1787.5
Stddev	1.5	2.3	180.	15.7
%RSD	.13685	.06918	.66248	.87767
#1	1127.6	3386.0	27077.	1785.9
#2	1127.4	3382.5	26928.	1772.6
#3	1130.2	3386.9	27285.	1803.9

Zoom In Zoom Out

Sample Name: FA54241-5 Acquired: 5/17/2018 14:59:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	258.5	.0433	3.190	.0047	8.312	-.0010	.0058	.3183	.0346
Stddev	.0014	2.1	.0022	.017	.0003	.066	.0001	.0005	.0032	.0010
%RSD	113.4	.8189	4.974	.5294	6.297	.7992	12.72	8.515	1.016	2.891
#1	.0027	260.6	.0421	3.204	.0050	8.387	-.0011	.0064	.3213	.0335
#2	.0011	258.7	.0458	3.194	.0048	8.260	-.0011	.0054	.3186	.0353
#3	-.0001	256.3	.0421	3.171	.0044	8.288	-.0009	.0057	.3149	.0351

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	98.93	3.391	6.926	.0840	.0007	-.2332	.0642	.3233	.0029	.0088
Stddev	.35	.101	.122	.0010	.0003	.0128	.0010	.0051	.0023	.0054
%RSD	.3582	2.963	1.754	1.246	47.49	5.509	1.550	1.584	79.32	61.11
#1	99.20	3.493	6.812	.0852	.0004	-.2204	.0646	.3217	.0056	.0142
#2	99.06	3.387	7.054	.0831	.0010	-.2460	.0649	.3290	.0017	.0035
#3	98.53	3.292	6.913	.0839	.0005	-.2332	.0631	.3192	.0015	.0086

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.965	.0328	2.789	2.038	-.0047	.2854	.1011
Stddev	.161	.0010	.008	.027	.0033	.0005	.0008
%RSD	1.795	3.198	.2830	1.316	71.52	.1675	.7879
#1	8.824	.0330	2.795	2.038	-.0012	.2856	.1013
#2	8.930	.0316	2.791	2.011	-.0050	.2848	.1018
#3	9.140	.0337	2.780	2.065	-.0078	.2857	.1002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1166.2	3614.5	28939.	1903.2
Stddev	1.2	3.7	130.	17.0
%RSD	.10125	.10339	.44780	.89169
#1	1166.7	3618.8	28808.	1892.2
#2	1164.9	3612.8	28943.	1894.5
#3	1167.1	3612.0	29067.	1922.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-6 Acquired: 5/17/2018 15:03:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0036	121.8	.0245	1.765	.0035	28.26	.0027	.0119	.1550	.1924
Stddev	.0009	.5	.0015	.007	.0003	.17	.0001	.0001	.0019	.0007
%RSD	24.44	.4501	5.948	.4158	7.775	.6142	1.905	.7738	1.212	.3612
#1	.0026	121.7	.0252	1.770	.0031	28.43	.0027	.0119	.1539	.1931
#2	.0040	121.3	.0254	1.756	.0036	28.08	.0027	.0118	.1572	.1925
#3	.0042	122.4	.0228	1.768	.0036	28.26	.0028	.0120	.1540	.1917

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	90.89	3.203	4.819	5.001	-.0002	.2788	.0565	1.013	.0089	.0102
Stddev	.48	.129	.023	.040	.0004	.0338	.0006	.011	.0025	.0100
%RSD	.5252	4.012	.4696	.8056	176.7	12.12	1.123	1.065	28.09	97.67
#1	91.44	3.140	4.845	5.048	.0002	.3179	.0569	1.004	.0117	.0120
#2	90.55	3.119	4.802	4.976	-.0002	.2583	.0558	1.025	.0069	.0191
#3	90.69	3.351	4.811	4.980	-.0006	.2604	.0569	1.010	.0082	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.444	.1392	.5900	.7356	.0033	.0962	2.008
Stddev	.007	.0014	.0011	.0057	.0066	.0012	.005
%RSD	.2885	1.018	.1832	.7725	203.2	1.246	.2375
#1	2.449	.1408	.5888	.7422	.0079	.0969	2.006
#2	2.436	.1385	.5907	.7317	-.0043	.0949	2.014
#3	2.448	.1382	.5905	.7331	.0061	.0970	2.005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1172.6	3156.7	25317.	1658.6
Stddev	2.9	7.6	94.	14.3
%RSD	.24746	.23979	.36952	.86238
#1	1173.3	3149.0	25210.	1642.2
#2	1169.5	3157.1	25381.	1668.6
#3	1175.2	3164.1	25361.	1664.9

Zoom In Zoom Out

Sample Name: FA54241-7 Acquired: 5/17/2018 15:07:36 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	137.7	.0153	.8842	.0033	8.773	-.0005	.0094	.1122	.0403
Stddev	.001	.4	.0021	.0073	.0002	.039	.0002	.0006	.0020	.0002
%RSD	8999.	.2998	13.97	.8220	7.472	.4400	42.39	5.885	1.801	.4919
#1	-.0008	137.4	.0155	.8762	.0036	8.734	-.0007	.0100	.1122	.0406
#2	-.0005	137.6	.0174	.8860	.0031	8.775	-.0003	.0093	.1102	.0403
#3	.0012	138.2	.0131	.8903	.0032	8.811	-.0006	.0089	.1143	.0402

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	58.52	2.277	4.569	2.673	-.0016	-.2357	.0485	.1203	.0027	.0097
Stddev	.13	.128	.138	.009	.0004	.0197	.0008	.0045	.0038	.0088
%RSD	.2143	5.615	3.023	.3442	21.91	8.354	1.724	3.722	140.4	91.37
#1	58.55	2.152	4.423	2.684	-.0014	-.2216	.0488	.1254	.0049	.0028
#2	58.38	2.408	4.588	2.666	-.0020	-.2272	.0476	.1177	.0049	.0065
#3	58.63	2.271	4.698	2.670	-.0014	-.2582	.0492	.1176	-.0017	.0197

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.45	.0279	.5032	1.725	-.0034	.1111	.1329
Stddev	.14	.0008	.0019	.041	.0021	.0008	.0004
%RSD	1.215	2.738	.3717	2.386	63.20	.7646	.3003
#1	11.61	.0283	.5047	1.752	-.0052	.1115	.1333
#2	11.40	.0285	.5011	1.678	-.0040	.1101	.1328
#3	11.34	.0271	.5037	1.745	-.0010	.1117	.1325

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1180.7	3221.5	25661.	1675.4
Stddev	2.5	5.4	35.	3.7
%RSD	.20885	.16802	.13679	.22292
#1	1178.2	3217.6	25624.	1679.6
#2	1183.1	3219.2	25694.	1674.3
#3	1180.7	3227.7	25664.	1672.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 15:11:50 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2420	39.90	1.941	1.995	2.011	40.32	1.985	1.975	2.032	1.978
Stddev	.0003	.14	.007	.007	.012	.27	.004	.002	.007	.007
%RSD	.1419	.3387	.3404	.3340	.5750	.6749	.2095	.1089	.3633	.3620
#1	.2418	40.02	1.940	2.001	2.024	40.60	1.984	1.975	2.034	1.984
#2	.2424	39.94	1.934	1.988	2.005	40.31	1.981	1.973	2.038	1.980
#3	.2419	39.76	1.948	1.997	2.002	40.05	1.989	1.977	2.024	1.970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.11	39.59	39.76	2.012	1.983	40.34	1.967	1.927	1.930	1.939
Stddev	.22	.17	.29	.005	.007	.24	.004	.002	.001	.004
%RSD	.5545	.4307	.7344	.2521	.3582	.6063	.1818	.1010	.0647	.2063
#1	40.37	39.78	40.10	2.013	1.979	40.58	1.968	1.928	1.931	1.941
#2	40.03	39.47	39.60	2.017	1.979	40.35	1.962	1.925	1.929	1.935
#3	39.95	39.51	39.59	2.007	1.991	40.09	1.969	1.929	1.931	1.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.509	1.989	2.024	2.012	1.929	2.012	1.997
Stddev	.005	.008	.008	.006	.001	.004	.003
%RSD	.2085	.4004	.3867	.3147	.0276	.1902	.1727
#1	2.512	1.987	2.033	2.017	1.929	2.011	1.998
#2	2.503	1.982	2.021	2.015	1.929	2.016	1.993
#3	2.513	1.997	2.018	2.005	1.930	2.008	2.000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 15:11:50 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1069.4	2829.8	22759.	1518.0
Stddev	1.9	10.2	54.	14.1
%RSD	.17744	.35994	.23507	.92928
#1	1067.9	2832.0	22802.	1502.5
#2	1071.5	2838.7	22699.	1521.3
#3	1068.7	2818.7	22776.	1530.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 15:15:47 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0043	.0002	.0004	.0003	.0094	.0001	.0000	.0005
Stddev	.0004	.0255	.0006	.0002	.0001	.0030	.0000	.0001	.0001
%RSD	367.9	587.7	400.8	58.09	57.10	31.80	38.52	293.5	13.96
#1	.0003	-.0086	.0004	.0005	.0003	.0129	.0001	-.0001	.0004
#2	-.0003	-.0275	.0006	.0001	.0004	.0079	.0001	.0000	.0005
#3	-.0004	.0230	-.0006	.0006	.0001	.0075	.0001	.0002	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0265	-.0134	.0281	.0002	F.0026	-.0904	.0002	.0000
Stddev	.0002	.0095	.0289	.0032	.0001	.0010	.0059	.0002	.001
%RSD	188.3	35.78	216.2	11.28	33.98	38.40	6.573	101.0	3231.
#1	.0001	.0365	-.0032	.0283	.0002	.0037	-.0840	.0003	.0003
#2	-.0002	.0253	-.0460	.0249	.0002	.0026	-.0915	.0000	.0003
#3	-.0002	.0177	.0091	.0312	.0001	.0016	-.0958	.0003	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0008	.0009	.0007	.0002	.0012	F.0020	.0000	.0001
Stddev	.0004	.0003	.0005	.0001	.0001	.0002	.0010	.000	.0000
%RSD	69.43	40.07	58.11	21.21	57.02	18.16	50.44	2699.	33.32
#1	.0006	.0010	.0015	.0008	.0003	.0014	.0019	-.0001	.0001
#2	.0010	.0010	.0007	.0005	.0003	.0012	.0031	.0002	.0001
#3	.0002	.0004	.0005	.0007	.0001	.0010	.0011	-.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 15:15:47 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1203.1	2912.6	23219.	1491.3
Stddev	2.9	8.5	44.	1.5
%RSD	.24499	.29116	.18884	.10048
#1	1201.1	2904.3	23177.	1492.2
#2	1201.8	2912.3	23216.	1492.1
#3	1206.5	2921.2	23265.	1489.6

Zoom In Zoom Out

Sample Name: FA54241-8 Acquired: 5/17/2018 15:20:06 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0010	217.8	.0311	1.951	.0052	15.21	-.0018	.0084	.2374	.0407
Stddev	.0013	1.6	.0039	.019	.0004	.12	.0002	.0000	.0008	.0011
%RSD	133.3	.7193	12.60	.9575	6.887	.7893	12.92	.2401	.3421	2.602
#1	.0004	218.2	.0328	1.948	.0049	15.30	-.0020	.0085	.2372	.0414
#2	.0025	219.1	.0266	1.972	.0056	15.26	-.0018	.0084	.2383	.0412
#3	.0001	216.1	.0338	1.935	.0053	15.08	-.0016	.0084	.2367	.0395

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	119.2	3.724	6.185	.2139	.0041	-.1649	.0638	.1761	.0074	.0092
Stddev	.4	.044	.271	.0006	.0004	.0225	.0009	.0033	.0045	.0004
%RSD	.3150	1.194	4.375	.3036	10.06	13.62	1.380	1.865	60.33	4.633
#1	119.2	3.766	6.121	.2146	.0040	-.1899	.0629	.1736	.0115	.0090
#2	119.6	3.728	5.952	.2139	.0045	-.1465	.0639	.1749	.0082	.0096
#3	118.9	3.677	6.482	.2133	.0037	-.1583	.0646	.1798	.0026	.0088

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.238	.0320	1.445	1.575	.0022	.2653	.1046
Stddev	.034	.0023	.005	.029	.0027	.0025	.0002
%RSD	.6563	7.192	.3428	1.845	121.5	.9583	.1578
#1	5.207	.0346	1.446	1.608	.0005	.2625	.1044
#2	5.232	.0309	1.450	1.551	.0053	.2675	.1046
#3	5.275	.0305	1.440	1.566	.0008	.2658	.1048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1168.6	3266.5	25541.	1673.6
Stddev	1.2	2.7	168.	15.6
%RSD	.10343	.08275	.65715	.93507
#1	1168.9	3265.1	25383.	1657.7
#2	1169.7	3264.7	25523.	1674.0
#3	1167.3	3269.6	25717.	1689.0

Zoom In Zoom Out

Sample Name: FA54241-9 Acquired: 5/17/2018 15:24:21 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	248.3	.0360	2.705	.0035	9.045	-.0019	.0054	.3432	.0285
Stddev	.0015	1.3	.0010	.003	.0004	.049	.0001	.0003	.0021	.0012
%RSD	123.2	.5268	2.903	.0960	10.41	.5387	5.113	5.847	.6261	4.355
#1	.0006	249.7	.0356	2.707	.0035	9.097	-.0018	.0058	.3410	.0274
#2	.0002	247.9	.0352	2.702	.0039	9.035	-.0020	.0052	.3453	.0298
#3	.0029	247.2	.0372	2.705	.0032	9.001	-.0020	.0053	.3432	.0282

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	114.2	2.831	5.521	.0759	.0036	-.2881	.0586	.2877	-.0027	.0093
Stddev	.3	.070	.248	.0002	.0008	.0140	.0004	.0005	.0050	.0066
%RSD	.2395	2.489	4.490	.2081	23.76	4.862	.6544	.1881	188.1	71.32
#1	114.1	2.909	5.240	.0760	.0033	-.2823	.0582	.2876	.0009	.0115
#2	114.0	2.772	5.707	.0757	.0045	-.2779	.0589	.2882	-.0084	.0145
#3	114.5	2.812	5.617	.0759	.0029	-.3041	.0587	.2871	-.0005	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.722	.0310	2.361	1.449	-.0011	.3265	.0858
Stddev	.004	.0007	.005	.006	.0046	.0007	.0004
%RSD	.1023	2.314	.1952	.3970	414.1	.2029	.4546
#1	3.724	.0304	2.366	1.446	-.0051	.3267	.0860
#2	3.717	.0318	2.361	1.444	-.0022	.3257	.0860
#3	3.724	.0309	2.357	1.455	.0039	.3270	.0853

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1175.2	3510.3	27358.	1799.8
Stddev	3.9	4.9	105.	12.5
%RSD	.32865	.14026	.38224	.69631
#1	1179.6	3504.6	27340.	1785.3
#2	1172.2	3513.2	27471.	1806.3
#3	1173.9	3513.1	27264.	1807.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-10 Acquired: 5/17/2018 15:28:37 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	216.3	.0348	2.645	.0038	6.639	-.0018	.0034	.3309	.0299
Stddev	.0017	.6	.0042	.004	.0005	.022	.0001	.0003	.0009	.0009
%RSD	232.3	.2564	12.03	.1674	13.01	.3279	7.577	9.685	.2721	3.117
#1	.0013	216.9	.0318	2.641	.0038	6.662	-.0018	.0030	.3319	.0288
#2	.0021	216.1	.0396	2.644	.0043	6.618	-.0018	.0036	.3302	.0304
#3	-.0012	215.9	.0331	2.650	.0033	6.639	-.0016	.0036	.3305	.0305

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	105.2	2.737	4.441	.0536	.0020	-.3097	.0459	.2610	-.0031	.0064
Stddev	.1	.111	.124	.0004	.0007	.0367	.0004	.0050	.0048	.0044
%RSD	.0664	4.052	2.800	.6946	36.71	11.86	.9121	1.928	154.4	68.15
#1	105.2	2.864	4.341	.0538	.0021	-.2950	.0457	.2586	.0006	.0054
#2	105.2	2.658	4.402	.0532	.0012	-.3515	.0456	.2668	-.0014	.0027
#3	105.1	2.689	4.580	.0538	.0026	-.2827	.0464	.2576	-.0085	.0112

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.214	.0304	2.293	1.490	-.0025	.3488	.0703
Stddev	.032	.0018	.005	.019	.0016	.0021	.0004
%RSD	.6108	5.848	.2004	1.304	63.70	.5923	.5506
#1	5.241	.0302	2.299	1.484	-.0043	.3504	.0700
#2	5.179	.0287	2.291	1.511	-.0011	.3496	.0708
#3	5.222	.0323	2.291	1.474	-.0022	.3465	.0702

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1174.9	3540.7	27468.	1807.7
Stddev	2.2	4.3	119.	11.1
%RSD	.18798	.12120	.43246	.61621
#1	1173.5	3537.0	27605.	1804.7
#2	1173.7	3545.4	27400.	1798.3
#3	1177.4	3539.7	27399.	1820.0

Zoom In Zoom Out

Sample Name: FA54241-11 Acquired: 5/17/2018 15:32:52 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	105.5	.0721	1.263	.0054	21.62	-.0003	.0483	.1942	.2415
Stddev	.0010	.2	.0020	.004	.0004	.12	.0002	.0005	.0023	.0011
%RSD	70.27	.1710	2.736	.3385	6.621	.5769	53.06	1.016	1.207	.4377
#1	.0026	105.5	.0699	1.263	.0051	21.76	-.0005	.0479	.1917	.2424
#2	.0010	105.4	.0737	1.259	.0058	21.53	-.0002	.0488	.1963	.2403
#3	.0007	105.7	.0728	1.268	.0053	21.56	-.0004	.0481	.1946	.2416

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	174.2	3.613	5.610	1.726	.0113	.4187	.1264	1.858	.0059	.0135
Stddev	.3	.123	.076	.006	.0004	.0495	.0008	.007	.0019	.0044
%RSD	.1619	3.403	1.360	.3624	3.648	11.83	.6064	.3582	33.22	32.82
#1	174.5	3.588	5.663	1.729	.0118	.4033	.1256	1.862	.0076	.0086
#2	174.2	3.505	5.643	1.718	.0112	.3787	.1267	1.850	.0038	.0144
#3	173.9	3.747	5.522	1.730	.0110	.4741	.1271	1.862	.0062	.0173

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.941	.0364	.6987	2.161	.0028	.2012	.6759
Stddev	.007	.0007	.0011	.009	.0055	.0002	.0014
%RSD	.0740	1.807	.1615	.3967	196.2	.0917	.2040
#1	8.944	.0371	.7000	2.167	.0023	.2014	.6747
#2	8.945	.0358	.6981	2.151	-.0024	.2011	.6756
#3	8.933	.0363	.6980	2.164	.0086	.2012	.6774

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1177.6	3183.3	24704.	1607.5
Stddev	2.2	.6	28.	6.2
%RSD	.18996	.01940	.11337	.38747
#1	1175.4	3182.7	24700.	1603.7
#2	1179.9	3183.3	24734.	1604.1
#3	1177.6	3183.9	24678.	1614.7

Zoom In Zoom Out

Sample Name: FA54241-12 Acquired: 5/17/2018 15:37:03 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	233.4	.0388	2.077	.0055	15.42	-.0024	.0091	.2967	.0406
Stddev	.0022	1.1	.0013	.005	.0006	.12	.0001	.0007	.0033	.0006
%RSD	165.4	.4722	3.302	.2448	10.71	.8090	3.920	7.189	1.112	1.463
#1	.0016	232.7	.0401	2.080	.0050	15.28	-.0023	.0087	.2931	.0406
#2	-.0010	232.9	.0387	2.071	.0053	15.46	-.0024	.0088	.2996	.0412
#3	.0035	234.7	.0375	2.080	.0061	15.52	-.0025	.0099	.2974	.0400

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	141.4	4.731	6.926	.4633	.0010	-.1325	.0679	.2335	.0044	-.0003
Stddev	.4	.099	.456	.0044	.0004	.0604	.0008	.0057	.0037	.0040
%RSD	.3070	2.090	6.582	.9540	36.08	45.61	1.157	2.454	85.47	1232.
#1	140.9	4.816	6.467	.4583	.0014	-.1255	.0675	.2325	.0006	-.0046
#2	141.4	4.754	7.378	.4649	.0011	-.0759	.0675	.2284	.0044	.0032
#3	141.8	4.622	6.934	.4667	.0006	-.1961	.0688	.2397	.0081	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.321	.0327	1.679	1.329	-.0010	.3123	.1705
Stddev	.006	.0013	.006	.004	.0006	.0020	.0004
%RSD	.1852	4.065	.3342	.3344	67.63	.6363	.2094
#1	3.315	.0321	1.673	1.334	-.0009	.3101	.1704
#2	3.327	.0318	1.679	1.326	-.0017	.3140	.1702
#3	3.320	.0342	1.684	1.326	-.0004	.3127	.1708

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1176.8	3385.3	25826.	1687.6
Stddev	2.7	3.2	93.	6.4
%RSD	.23152	.09518	.35907	.38130
#1	1174.0	3383.4	25923.	1695.0
#2	1179.4	3383.4	25739.	1683.7
#3	1177.1	3389.0	25815.	1684.1

Zoom In Zoom Out

Sample Name: FA54241-13 Acquired: 5/17/2018 15:41:17 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	255.6	.0509	2.794	.0052	15.53	-.0032	.0061	.3572	.0361
Stddev	.0020	1.2	.0005	.004	.0006	.10	.0002	.0002	.0025	.0002
%RSD	444.8	.4582	1.035	.1334	10.86	.6293	6.913	3.185	.7055	.6427
#1	-.0018	256.9	.0506	2.791	.0046	15.64	-.0029	.0058	.3601	.0359
#2	.0013	255.0	.0516	2.798	.0057	15.46	-.0033	.0062	.3554	.0363
#3	.0019	254.8	.0507	2.795	.0052	15.49	-.0032	.0062	.3561	.0360

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	168.2	4.462	7.421	.1021	.0044	-.2383	.0567	.2997	-.0031	.0137
Stddev	.9	.030	.319	.0006	.0006	.0067	.0012	.0017	.0064	.0054
%RSD	.5158	.6700	4.299	.6362	14.93	2.806	2.100	.5774	207.8	39.33
#1	169.0	4.476	7.178	.1028	.0051	-.2310	.0575	.2978	.0025	.0137
#2	168.2	4.428	7.782	.1015	.0040	-.2399	.0572	.3010	-.0017	.0191
#3	167.3	4.482	7.304	.1019	.0039	-.2441	.0553	.3004	-.0100	.0083

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.985	.0309	2.453	1.281	-.0041	.3860	.0941
Stddev	.019	.0004	.008	.008	.0039	.0018	.0002
%RSD	.6427	1.444	.3387	.6557	95.14	.4717	.2355
#1	2.990	.0314	2.462	1.289	-.0052	.3850	.0943
#2	2.964	.0309	2.447	1.273	-.0074	.3881	.0939
#3	3.001	.0305	2.449	1.282	.0002	.3848	.0942

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1168.0	3534.2	27070.	1776.4
Stddev	3.4	1.4	69.	20.3
%RSD	.29443	.03937	.25499	1.1440
#1	1165.5	3534.2	26995.	1764.2
#2	1166.6	3532.7	27083.	1765.0
#3	1171.9	3535.5	27132.	1799.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-14 Acquired: 5/17/2018 15:45:31 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0016	230.4	.0440	3.523	.0049	5.547	-.0026	.0036	.2861	.0256
Stddev	.0016	.1	.0061	.012	.0005	.029	.0002	.0007	.0014	.0009
%RSD	99.63	.0442	13.96	.3447	9.488	.5220	7.481	18.37	.4756	3.400
#1	-.0025	230.3	.0510	3.529	.0052	5.579	-.0028	.0032	.2861	.0266
#2	-.0026	230.5	.0411	3.509	.0052	5.537	-.0024	.0033	.2847	.0251
#3	.0002	230.4	.0398	3.531	.0044	5.523	-.0026	.0044	.2874	.0252

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	120.0	3.301	4.337	.0519	.0007	-.3421	.0388	.3428	.0015	.0117
Stddev	.2	.110	.178	.0005	.0003	.0203	.0007	.0023	.0046	.0113
%RSD	.1622	3.326	4.116	.8985	38.33	5.943	1.693	.6798	306.8	97.05
#1	120.2	3.423	4.503	.0515	.0004	-.3559	.0392	.3406	-.0001	.0167
#2	119.8	3.272	4.148	.0524	.0007	-.3517	.0391	.3452	-.0021	-.0013
#3	119.9	3.209	4.361	.0519	.0009	-.3188	.0380	.3427	.0067	.0197

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.752	.0312	3.157	1.190	-.0067	.2202	.0595
Stddev	.039	.0017	.002	.005	.0047	.0018	.0000
%RSD	1.032	5.424	.0685	.4067	70.34	.8134	.0642
#1	3.788	.0319	3.159	1.184	-.0100	.2199	.0595
#2	3.756	.0324	3.155	1.191	-.0013	.2186	.0595
#3	3.711	.0292	3.157	1.193	-.0087	.2221	.0595

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1177.0	3744.0	28477.	1890.8
Stddev	2.0	4.0	92.	18.1
%RSD	.16905	.10603	.32461	.95606
#1	1176.1	3743.2	28544.	1871.6
#2	1179.3	3748.3	28516.	1893.5
#3	1175.6	3740.5	28372.	1907.4

Zoom In Zoom Out

Sample Name: MP33756-MB1 Acquired: 5/17/2018 15:49:48 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0032	-.0014	.0006	-.0002	.0140	-.0001	-.0002	.0004
Stddev	.0004	.0085	.0009	.0002	.0002	.0028	.0000	.0001	.0003
%RSD	129.0	261.8	66.57	33.21	73.44	19.98	32.90	72.22	79.70
#1	-.0008	.0001	-.0007	.0004	-.0003	.0110	-.0001	-.0001	.0001
#2	.0000	-.0032	-.0024	.0007	.0000	.0165	-.0001	-.0001	.0004
#3	-.0001	.0128	-.0011	.0008	-.0004	.0146	.0000	-.0003	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0230	.0082	.0022	.0631	.0001	-.0006	-.0974	-.0002	.0011
Stddev	.0003	.0014	.0415	.0083	.0000	.0000	.0036	.0001	.0004
%RSD	1.276	16.73	1911.	13.16	31.85	6.665	3.726	47.83	34.11
#1	.0233	.0070	-.0317	.0613	.0001	-.0005	-.1015	-.0002	.0015
#2	.0228	.0097	.0485	.0721	.0001	-.0006	-.0954	-.0002	.0008
#3	.0229	.0078	-.0103	.0558	.0001	-.0006	-.0951	-.0001	.0010
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0125								
Low Limit	-.0125								

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0003	.0207	.0000	.0000	-.0002	-.0012	-.0001	F.0154
Stddev	.0010	.0011	.0004	.000	.0001	.0001	.0001	.0001	.0001
%RSD	128.0	444.8	1.746	1924.	20660.	37.48	10.66	45.71	.5958
#1	.0011	-.0008	.0203	.0000	-.0001	-.0001	-.0012	-.0002	.0155
#2	-.0003	.0002	.0210	.0003	-.0001	-.0003	-.0011	-.0001	.0155
#3	.0015	.0014	.0208	-.0004	.0002	-.0002	-.0013	-.0001	.0153
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit									.0100
Low Limit									-.0100

Zoom In Zoom Out

Sample Name: MP33756-MB1 Acquired: 5/17/2018 15:49:48 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1208.0	2968.7	22908.	1474.1
Stddev	5.4	10.7	62.	6.4
%RSD	.45031	.35958	.27011	.43216
#1	1202.7	2957.7	22936.	1479.6
#2	1207.8	2969.2	22951.	1467.1
#3	1213.6	2979.0	22837.	1475.5

Zoom In Zoom Out

Sample Name: MP33756-B1 Acquired: 5/17/2018 15:54:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0501	28.13	1.878	2.081	.0536	26.69	.0499	.5043	.2199	.2596
Stddev	.0007	.20	.002	.028	.0004	.17	.0001	.0005	.0010	.0006
%RSD	1.395	.7252	.1197	1.343	.6669	.6328	.1863	.1045	.4356	.2174
#1	.0494	27.95	1.876	2.055	.0532	26.55	.0500	.5038	.2193	.2597
#2	.0508	28.35	1.878	2.111	.0537	26.88	.0499	.5048	.2210	.2602
#3	.0502	28.08	1.881	2.078	.0538	26.64	.0499	.5042	.2194	.2590
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.57	25.06	25.35	.5135	.4637	26.11	.5003	.4845	.4793	1.852
Stddev	.17	.24	.25	.0022	.0015	.15	.0004	.0017	.0019	.005
%RSD	.6227	.9744	.9934	.4209	.3198	.5744	.0835	.3528	.3954	.2809
#1	26.40	24.87	25.07	.5142	.4620	26.01	.4999	.4826	.4791	1.854
#2	26.73	25.33	25.54	.5153	.4644	26.28	.5007	.4855	.4812	1.846
#3	26.58	24.98	25.45	.5111	.4646	26.03	.5004	.4856	.4774	1.856
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3715	.4723	.5193	.5046	1.894	.4842	.5021
Stddev	.0016	.0014	.0050	.0019	.003	.0005	.0009
%RSD	.4210	.2904	.9638	.3747	.1727	.1020	.1700
#1	.3697	.4707	.5146	.5047	1.895	.4838	.5015
#2	.3721	.4731	.5245	.5064	1.890	.4841	.5031
#3	.3726	.4730	.5189	.5026	1.896	.4847	.5018
Check ?	None	Chk Pass	None	None	Chk PassChk PassChk Pass		
Value							
Range							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33756-B1 Acquired: 5/17/2018 15:54:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1110.3	2891.2	22412.	1480.2
Stddev	1.2	.4	43.	5.9
%RSD	.10836	.01352	.19122	.39847
#1	1109.3	2891.6	22378.	1485.2
#2	1111.6	2890.8	22398.	1473.7
#3	1109.9	2891.1	22460.	1481.7

Zoom In Zoom Out

Sample Name: FA54229-1 Acquired: 5/17/2018 15:58:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2236	.0003	.0167	-.0002	63.11	-.0001	-.0003	.0010	-.0008
Stddev	.0006	.0096	.0009	.0003	.0001	.38	.0001	.0001	.0002	.0002
%RSD	956.8	4.301	344.8	2.074	32.44	.6030	67.71	57.39	17.68	19.33
#1	-.0005	.2196	.0007	.0169	-.0003	63.21	-.0001	-.0001	.0010	-.0010
#2	.0000	.2346	-.0008	.0163	-.0001	62.69	-.0001	-.0004	.0012	-.0007
#3	.0007	.2166	.0009	.0169	-.0002	63.42	.0000	-.0003	.0009	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0509	1.651	4.056	.0205	.0018	6.158	.0006	.0015	.0014	.0029
Stddev	.0025	.031	.031	.0001	.0001	.067	.0002	.0000	.0021	.0018
%RSD	4.952	1.897	.7571	.4802	7.387	1.088	29.48	2.391	147.2	60.78
#1	.0531	1.654	4.089	.0206	.0017	6.186	.0004	.0016	.0006	.0016
#2	.0482	1.618	4.028	.0205	.0019	6.082	.0007	.0016	.0038	.0050
#3	.0516	1.681	4.051	.0205	.0017	6.207	.0005	.0015	-.0002	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.422	-.0002	.2626	.0170	.0007	.0095	.0102
Stddev	.014	.0003	.0021	.0021	.0007	.0002	.0001
%RSD	.2629	151.5	.7909	12.49	113.8	2.144	1.005
#1	5.417	.0001	.2623	.0155	.0009	.0093	.0102
#2	5.412	-.0003	.2607	.0161	.0012	.0094	.0101
#3	5.438	-.0004	.2648	.0195	-.0002	.0097	.0103

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1155.8	2905.0	22637.	1491.6
Stddev	1.7	9.6	107.	11.5
%RSD	.14731	.33122	.47223	.77118
#1	1154.4	2900.4	22539.	1481.0
#2	1157.7	2916.0	22621.	1503.8
#3	1155.4	2898.5	22751.	1490.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:02:27 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2423	42.51	1.875	2.029	2.082	42.73	1.994	1.973	2.140	2.016
Stddev	.0013	.17	.002	.004	.005	.17	.003	.003	.009	.005
%RSD	.5542	.4078	.0780	.1998	.2601	.3911	.1443	.1260	.4224	.2527
#1	.2424	42.49	1.876	2.033	2.077	42.63	1.992	1.971	2.146	2.020
#2	.2435	42.35	1.874	2.025	2.080	42.63	1.997	1.976	2.145	2.016
#3	.2409	42.70	1.875	2.028	2.088	42.92	1.992	1.972	2.130	2.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.15	40.61	40.69	2.017	1.955	42.45	1.900	1.971	1.886	1.874
Stddev	.18	.03	.14	.015	.004	.26	.003	.005	.001	.002
%RSD	.4402	.0838	.3350	.7364	.1825	.6024	.1706	.2575	.0643	.0820
#1	41.01	40.60	40.68	2.023	1.951	42.28	1.899	1.972	1.886	1.874
#2	41.09	40.59	40.84	2.029	1.957	42.32	1.904	1.966	1.887	1.873
#3	41.35	40.65	40.56	2.001	1.957	42.74	1.897	1.976	1.885	1.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.427	1.891	2.102	2.045	1.958	2.015	1.994
Stddev	.002	.003	.006	.011	.007	.003	.006
%RSD	.0632	.1698	.2910	.5211	.3418	.1281	.3228
#1	2.429	1.890	2.097	2.048	1.959	2.017	1.989
#2	2.426	1.895	2.101	2.053	1.951	2.017	2.002
#3	2.426	1.889	2.109	2.033	1.964	2.012	1.992
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:02:27 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1078.2	2919.6	22536.	1513.3
Stddev	.8	7.7	131.	3.7
%RSD	.07586	.26237	.58012	.24633
#1	1078.1	2923.3	22473.	1509.0
#2	1079.1	2910.8	22448.	1515.0
#3	1077.4	2924.7	22686.	1515.9

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:06:25 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0006	.0000	.0006	.0001	.0022	.0000	.0001	.0002
Stddev	.0003	.0006	.0006	.0004	.0002	.0030	.000	.0002	.0005
%RSD	59.18	105.5	1381.	71.79	284.8	139.4	1241.	215.5	227.0
#1	-.0006	.0006	.0007	.0002	.0000	.0047	.0000	.0000	.0002
#2	-.0008	.0012	-.0005	.0011	.0003	.0030	-.0001	-.0001	-.0003
#3	-.0002	-.0001	.0000	.0005	-.0001	-.0012	.0001	.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0169	.0144	.0432	.0001	F .0028	-.0848	.0000	.0004
Stddev	.0001	.0054	.0246	.0353	.0001	.0009	.0144	.0001	.0006
%RSD	8.887	31.78	171.1	81.74	88.37	31.18	17.03	4389.	150.8
#1	-.0012	.0192	.0020	.0817	.0001	.0037	-.0690	-.0001	.0010
#2	-.0011	.0208	-.0015	.0122	.0000	.0027	-.0973	.0002	.0005
#3	-.0011	.0108	.0427	.0357	.0000	.0020	-.0882	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0007	-.0004	.0002	.0001	.0009	.0020	.0000	.0002
Stddev	.0005	.0011	.0002	.0005	.0000	.0001	.0003	.000	.0001
%RSD	132.8	159.7	43.30	222.0	50.62	7.541	13.93	587.2	36.40
#1	-.0001	.0013	-.0005	.0007	.0001	.0010	.0020	-.0002	.0001
#2	.0003	-.0006	-.0002	.0002	.0000	.0009	.0017	.0000	.0002
#3	.0009	.0013	-.0004	-.0003	.0001	.0008	.0023	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:06:25 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1233.4	3052.9	23390.	1508.4
Stddev	2.0	5.7	125.	4.9
%RSD	.15971	.18579	.53335	.32588
#1	1235.7	3050.2	23505.	1504.0
#2	1232.6	3049.1	23407.	1507.4
#3	1232.1	3059.5	23258.	1513.7

Zoom In Zoom Out

Sample Name: MP33756-D1 Acquired: 5/17/2018 16:10:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.2246	-.0004	.0163	.0000	63.39	-.0001	-.0001	.0012	-.0009
Stddev	.0007	.0110	.0002	.0002	.0001	.27	.0001	.0001	.0005	.0002
%RSD	160.0	4.903	40.04	.9732	296.8	.4272	145.4	111.4	43.79	24.38
#1	-.0012	.2121	-.0006	.0163	-.0001	63.20	.0000	-.0001	.0006	-.0006
#2	-.0004	.2286	-.0003	.0161	.0001	63.27	-.0001	.0000	.0017	-.0010
#3	.0003	.2330	-.0003	.0165	.0001	63.70	-.0001	.0000	.0014	-.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0519	1.640	4.011	.0203	.0023	6.190	.0004	.0014	.0022	.0016
Stddev	.0080	.010	.002	.0002	.0003	.023	.0001	.0003	.0004	.0007
%RSD	15.36	.6209	.0400	.8514	14.09	.3731	15.64	23.14	19.57	44.49
#1	.0610	1.648	4.013	.0201	.0026	6.189	.0004	.0011	.0019	.0020
#2	.0478	1.629	4.009	.0204	.0022	6.168	.0005	.0017	.0020	.0020
#3	.0468	1.644	4.010	.0204	.0020	6.214	.0003	.0013	.0027	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.379	-.0002	.2620	.0193	.0004	.0093	.0100
Stddev	.013	.0002	.0009	.0001	.0006	.0000	.0000
%RSD	.2408	104.0	.3283	.6681	150.8	.3968	.1427
#1	5.390	-.0005	.2621	.0194	.0003	.0094	.0100
#2	5.364	.0000	.2610	.0192	-.0002	.0093	.0100
#3	5.382	-.0002	.2627	.0194	.0010	.0093	.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1158.3	2937.7	22586.	1486.4
Stddev	2.9	7.1	148.	7.2
%RSD	.24618	.24171	.65664	.48120
#1	1155.5	2930.7	22666.	1490.5
#2	1158.3	2944.9	22415.	1490.7
#3	1161.2	2937.4	22677.	1478.2

Zoom In Zoom Out

Sample Name: MP33756-SD1 Acquired: 5/17/2018 16:15:00 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0009	.2107	-.0038	.0182	-.0004	65.32	-.0005	-.0002	.0020	-.0015
Stddev	.0006	.0249	.0043	.0012	.0003	.23	.0004	.0005	.0014	.0007
%RSD	66.24	11.79	112.6	6.387	80.76	.3488	82.06	322.1	69.43	48.10
#1	-.0002	.2252	-.0011	.0196	-.0006	65.50	-.0007	.0004	.0030	-.0023
#2	-.0013	.1820	-.0016	.0175	.0000	65.40	.0000	-.0006	.0004	-.0014
#3	-.0012	.2249	-.0088	.0176	-.0005	65.06	-.0006	-.0003	.0027	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0533	1.663	4.208	.0221	.0005	5.812	-.0008	.0015	.0004	-.0070
Stddev	.0208	.173	.137	.0002	.0004	.040	.0003	.0043	.0044	.0089
%RSD	38.95	10.44	3.264	.9666	93.17	.6949	37.83	294.0	990.5	127.0
#1	.0696	1.779	4.271	.0220	.0000	5.775	-.0007	-.0017	-.0007	.0032
#2	.0299	1.463	4.303	.0223	.0005	5.805	-.0006	.0064	.0053	-.0134
#3	.0604	1.745	4.051	.0220	.0008	5.855	-.0012	-.0003	-.0033	-.0107

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.457	-.0007	.2669	.0159	.0015	.0089	.0109
Stddev	.010	.0009	.0015	.0029	.0017	.0005	.0003
%RSD	.1808	130.4	.5656	17.94	114.7	5.540	2.531
#1	5.447	.0003	.2674	.0187	-.0005	.0094	.0106
#2	5.467	-.0011	.2681	.0160	.0024	.0086	.0108
#3	5.458	-.0013	.2652	.0130	.0026	.0086	.0111

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1208.5	2997.0	23130.	1516.7
Stddev	1.2	5.6	23.	9.0
%RSD	.10295	.18787	.10061	.59031
#1	1207.8	2996.1	23137.	1510.8
#2	1210.0	3003.1	23105.	1512.2
#3	1207.8	2991.9	23150.	1527.0

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33756-PS1 Acquired: 5/17/2018 16:19:19 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0443	2.801	.0960	.2714	.0521	66.38	.0482	.0486	.0527	.1006
Stddev	.0005	.013	.0002	.0017	.0001	.23	.0001	.0002	.0005	.0003
%RSD	1.025	.4620	.2096	.6396	.2761	.3516	.1978	.3503	.9272	.2971
#1	.0446	2.809	.0960	.2733	.0521	66.58	.0483	.0488	.0532	.1003
#2	.0446	2.786	.0958	.2699	.0523	66.12	.0481	.0484	.0528	.1008
#3	.0438	2.808	.0962	.2711	.0520	66.43	.0481	.0487	.0522	.1008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.051	11.48	8.898	.0688	.0913	16.16	.0962	.0461	.0926	.0884
Stddev	.015	.08	.041	.0007	.0004	.07	.0001	.0005	.0005	.0003
%RSD	.4883	.6779	.4583	1.046	.4174	.4358	.1243	1.087	.5756	.2923
#1	3.053	11.56	8.917	.0693	.0917	16.22	.0962	.0465	.0927	.0887
#2	3.035	11.41	8.851	.0691	.0910	16.08	.0962	.0463	.0931	.0882
#3	3.065	11.46	8.925	.0680	.0911	16.17	.0960	.0455	.0921	.0885

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.334	.0451	.3061	.1170	.0906	.0566	.2500
Stddev	.016	.0006	.0008	.0017	.0005	.0002	.0005
%RSD	.2978	1.277	.2501	1.419	.5700	.3920	.1930
#1	5.349	.0450	.3069	.1187	.0909	.0565	.2505
#2	5.336	.0457	.3054	.1169	.0908	.0569	.2498
#3	5.317	.0445	.3059	.1154	.0900	.0565	.2496

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1136.7	2915.8	22723.	1511.0
Stddev	2.0	8.9	98.	10.5
%RSD	.17997	.30380	.43230	.69459
#1	1134.3	2906.9	22670.	1501.4
#2	1137.8	2915.8	22662.	1522.2
#3	1137.9	2924.7	22836.	1509.4

Zoom In Zoom Out

Sample Name: MP33756-S1 Acquired: 5/17/2018 16:23:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0488	28.22	1.838	2.050	.0527	87.93	.0482	.4861	.2157	.2541
Stddev	.0004	.09	.010	.014	.0004	.18	.0001	.0004	.0004	.0008
%RSD	.7235	.3251	.5480	.6824	.7444	.2090	.2904	.0914	.1942	.3309
#1	.0488	28.12	1.846	2.052	.0526	87.89	.0482	.4856	.2161	.2541
#2	.0484	28.24	1.827	2.063	.0531	88.13	.0481	.4861	.2158	.2533
#3	.0491	28.30	1.842	2.035	.0523	87.76	.0484	.4865	.2152	.2550

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.00	26.41	28.47	.5145	.4519	32.01	.4777	.4770	.4695	1.799
Stddev	.13	.10	.22	.0016	.0005	.03	.0011	.0012	.0023	.003
%RSD	.5042	.3686	.7604	.3016	.1188	.0853	.2207	.2588	.4856	.1634
#1	25.96	26.39	28.61	.5128	.4518	31.98	.4777	.4776	.4706	1.798
#2	26.14	26.51	28.58	.5158	.4514	32.04	.4766	.4756	.4669	1.796
#3	25.88	26.32	28.22	.5150	.4525	32.01	.4787	.4779	.4711	1.802

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.723	.4507	.7662	.5068	1.856	.4808	.4926
Stddev	.018	.0023	.0028	.0015	.004	.0010	.0011
%RSD	.3099	.5054	.3707	.3024	.2208	.2052	.2321
#1	5.739	.4517	.7651	.5058	1.853	.4817	.4918
#2	5.704	.4481	.7694	.5059	1.854	.4810	.4921
#3	5.727	.4523	.7641	.5085	1.861	.4797	.4939

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1088.9	2896.6	22337.	1506.3
Stddev	1.1	5.1	77.	10.9
%RSD	.10240	.17593	.34623	.72558
#1	1087.6	2891.4	22343.	1493.7
#2	1089.6	2901.6	22257.	1512.2
#3	1089.5	2896.9	22411.	1513.0

Zoom In Zoom Out

Sample Name: MP33756-S2 Acquired: 5/17/2018 16:27:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0501	29.42	1.872	2.130	.0550	90.51	.0492	.4982	.2236	.2621
Stddev	.0002	.19	.002	.006	.0003	.67	.0003	.0006	.0019	.0015
%RSD	.4542	.6592	.0834	.2832	.4814	.7366	.5093	.1246	.8716	.5843
#1	.0500	29.61	1.873	2.135	.0553	91.01	.0491	.4975	.2247	.2632
#2	.0504	29.23	1.870	2.131	.0547	89.75	.0491	.4987	.2248	.2628
#3	.0500	29.42	1.873	2.123	.0551	90.76	.0495	.4985	.2214	.2603

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.99	27.27	29.45	.5319	.4629	33.23	.4885	.4907	.4791	1.834
Stddev	.16	.08	.18	.0033	.0015	.28	.0012	.0011	.0015	.001
%RSD	.5944	.2841	.6206	.6154	.3146	.8477	.2489	.2140	.3163	.0750
#1	27.11	27.36	29.65	.5339	.4612	33.38	.4872	.4896	.4791	1.835
#2	26.81	27.21	29.29	.5335	.4638	32.90	.4886	.4916	.4807	1.834
#3	27.04	27.24	29.42	.5281	.4637	33.40	.4896	.4911	.4777	1.833

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.774	.4580	.7917	.5264	1.909	.4955	.5029
Stddev	.005	.0007	.0057	.0015	.009	.0017	.0010
%RSD	.0919	.1473	.7162	.2852	.4474	.3494	.1922
#1	5.768	.4588	.7960	.5256	1.900	.4970	.5019
#2	5.775	.4576	.7853	.5255	1.912	.4960	.5032
#3	5.778	.4576	.7938	.5282	1.916	.4936	.5037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1081.9	2894.9	21982.	1479.2
Stddev	3.9	5.3	110.	8.2
%RSD	.36414	.18406	.49989	.55577
#1	1086.5	2901.0	21948.	1470.3
#2	1079.4	2892.0	21892.	1481.0
#3	1079.9	2891.6	22104.	1486.4

Zoom In Zoom Out

Sample Name: FA54229-2 Acquired: 5/17/2018 16:31:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.2483	.0004	.0169	-.0002	72.33	-.0001	-.0001	.0010	-.0005
Stddev	.0001	.0235	.0014	.0001	.0001	.32	.0000	.0001	.0002	.0003
%RSD	14.11	9.464	356.3	.8687	44.19	.4377	24.72	90.68	25.13	51.94
#1	-.0006	.2438	-.0003	.0170	-.0003	72.65	-.0001	-.0002	.0012	-.0004
#2	-.0006	.2737	.0020	.0168	-.0001	72.02	.0000	.0000	.0009	-.0003
#3	-.0008	.2273	-.0005	.0167	-.0002	72.31	-.0001	-.0001	.0008	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1677	13.08	13.08	.0101	.0025	8.765	.0001	.0015	.0019	.0030
Stddev	.0062	.04	.01	.0000	.0001	.008	.0001	.0005	.0013	.0022
%RSD	3.705	.3026	.0889	.2185	2.547	.0914	184.3	29.51	68.68	72.83
#1	.1746	13.13	13.08	.0101	.0025	8.774	-.0001	.0018	.0016	.0047
#2	.1624	13.06	13.09	.0101	.0024	8.758	.0001	.0018	.0034	.0036
#3	.1662	13.06	13.07	.0102	.0025	8.763	.0001	.0010	.0008	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.688	-.0002	.9468	.0274	.0008	.0088	.0181
Stddev	.014	.0002	.0032	.0020	.0007	.0002	.0000
%RSD	.2435	112.7	.3337	7.165	92.66	2.453	.0773
#1	5.686	-.0003	.9504	.0296	.0000	.0088	.0181
#2	5.674	-.0002	.9453	.0259	.0013	.0086	.0181
#3	5.702	.0000	.9447	.0266	.0011	.0090	.0181

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1137.0	2916.4	22129.	1480.5
Stddev	1.3	6.1	113.	11.4
%RSD	.11614	.20821	.50940	.76678
#1	1135.8	2917.5	22126.	1470.0
#2	1138.4	2921.8	22017.	1492.5
#3	1136.8	2909.8	22243.	1479.0

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54239-1 Acquired: 5/17/2018 16:35:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0034	.0022	.0969	.0000	83.03	-.0001	-.0003	.0147	-.0018
Stddev	.0006	.0068	.0013	.0007	.000	.40	.0000	.0002	.0001	.0002
%RSD	740.5	202.3	62.47	.6762	272.5	.4817	77.54	55.75	.8957	8.625
#1	.0001	.0080	.0006	.0962	-.0001	82.96	.0000	-.0001	.0146	-.0016
#2	-.0006	-.0044	.0027	.0973	.0000	82.66	-.0001	-.0004	.0148	-.0018
#3	.0007	.0065	.0032	.0973	.0000	83.45	.0000	-.0003	.0145	-.0020

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0064	2.437	16.24	.0059	.0240	49.69	-.0005	.0020	.0008	.0027
Stddev	.0017	.018	.14	.0001	.0002	.21	.0003	.0007	.0008	.0025
%RSD	26.32	.7458	.8785	.8862	.6332	.4196	50.30	32.74	105.6	91.43
#1	.0045	2.417	16.10	.0059	.0238	49.65	-.0005	.0013	.0000	.0012
#2	.0078	2.441	16.24	.0060	.0240	49.51	-.0007	.0027	.0006	.0013
#3	.0070	2.452	16.39	.0059	.0241	49.92	-.0002	.0022	.0016	.0055

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.816	.0001	1.063	.0014	-.0006	.0053	.0482
Stddev	.018	.0004	.005	.0002	.0003	.0001	.0001
%RSD	.1986	631.9	.4854	11.59	54.69	2.105	.1761
#1	8.805	-.0004	1.060	.0013	-.0002	.0054	.0483
#2	8.807	.0004	1.060	.0016	-.0006	.0052	.0481
#3	8.837	.0001	1.069	.0013	-.0008	.0053	.0481

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1114.5	2876.3	21968.	1479.9
Stddev	4.3	4.9	88.	13.4
%RSD	.38375	.16919	.40091	.90652
#1	1109.9	2870.7	21911.	1475.6
#2	1118.3	2879.5	21923.	1494.9
#3	1115.3	2878.6	22069.	1469.1

Zoom In Zoom Out

Sample Name: FA54239-2 Acquired: 5/17/2018 16:39:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0068	.0029	.1017	.0000	85.10	.0000	-.0003	.0162	-.0017
Stddev	.0004	.0026	.0013	.0004	.000	.20	.000	.0001	.0004	.0002
%RSD	99.27	37.49	44.17	.3796	884.4	.2314	45.69	23.00	2.716	10.31
#1	-.0009	.0039	.0043	.1017	-.0003	85.19	-.0001	-.0004	.0158	-.0019
#2	-.0003	.0083	.0019	.1021	.0002	85.24	-.0001	-.0003	.0166	-.0018
#3	-.0001	.0084	.0024	.1013	.0001	84.87	.0000	-.0003	.0162	-.0015

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0013	2.482	16.36	.0000	.0248	50.96	-.0003	.0018	.0008	.0028
Stddev	.0021	.024	.03	.000	.0002	.04	.0001	.0002	.0003	.0015
%RSD	158.0	.9516	.1796	108.8	.9751	.0720	50.39	10.49	32.64	52.26
#1	.0004	2.457	16.40	.0000	.0251	51.00	-.0001	.0020	.0011	.0045
#2	-.0007	2.504	16.35	.0000	.0247	50.97	-.0004	.0017	.0006	.0020
#3	-.0036	2.487	16.35	.0000	.0246	50.93	-.0003	.0016	.0008	.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.205	-.0006	1.090	.0013	.0001	.0057	.0113
Stddev	.016	.0003	.002	.0000	.0012	.0002	.0001
%RSD	.1715	50.50	.1455	2.144	1539.	4.085	.5616
#1	9.221	-.0007	1.091	.0013	-.0012	.0060	.0113
#2	9.189	-.0008	1.092	.0012	.0004	.0058	.0114
#3	9.205	-.0003	1.089	.0013	.0011	.0055	.0113

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1129.7	2908.4	22325.	1510.3
Stddev	2.8	6.2	32.	14.4
%RSD	.24561	.21168	.14360	.95406
#1	1127.8	2902.0	22298.	1496.6
#2	1128.5	2908.9	22360.	1509.1
#3	1132.9	2914.3	22317.	1525.4

Zoom In Zoom Out

Sample Name: FA54236-1 Acquired: 5/17/2018 16:44:15 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	4.961	.0018	.1500	.0000	66.77	.0030	.0052	.0272	.2090
Stddev	.0003	.026	.0010	.0006	.0000	.17	.0001	.0001	.0004	.0007
%RSD	2665.	.5296	51.94	.4271	183.5	.2609	2.628	1.914	1.584	.3411
#1	-.0004	4.991	.0016	.1508	.0000	66.92	.0030	.0051	.0267	.2097
#2	.0003	4.943	.0029	.1496	.0001	66.81	.0031	.0053	.0275	.2089
#3	.0001	4.948	.0010	.1498	.0000	66.58	.0029	.0052	.0274	.2083

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	9.124	11.42	4.676	.1707	.0274	21.30	.0226	.2044	.0125	.0026
Stddev	.041	.07	.028	.0013	.0001	.04	.0002	.0010	.0007	.0013
%RSD	.4540	.6387	.5969	.7811	.3308	.2001	.7991	.4684	5.603	48.72
#1	9.171	11.50	4.647	.1715	.0274	21.34	.0226	.2034	.0117	.0038
#2	9.104	11.38	4.703	.1691	.0274	21.26	.0228	.2052	.0126	.0027
#3	9.096	11.37	4.678	.1714	.0273	21.31	.0225	.2046	.0131	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.404	.0133	.2242	.0875	-.0005	.0116	1.389
Stddev	.055	.0004	.0012	.0015	.0012	.0002	.002
%RSD	2.305	3.237	.5140	1.667	213.6	2.049	.1178
#1	2.456	.0133	.2250	.0861	-.0019	.0116	1.389
#2	2.410	.0138	.2229	.0890	-.0002	.0113	1.387
#3	2.345	.0129	.2247	.0875	.0004	.0118	1.390

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1153.7	2972.0	22961.	1580.0
Stddev	.6	9.4	80.	10.7
%RSD	.05127	.31646	.34814	.67824
#1	1153.7	2961.6	22883.	1572.9
#2	1153.1	2974.5	23043.	1574.8
#3	1154.3	2979.9	22958.	1592.3

Zoom In Zoom Out

Sample Name: FA54236-2 Acquired: 5/17/2018 16:48:26 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	2.120	-.0001	.1147	-.0001	53.41	.0021	.0023	.0121	.0985
Stddev	.0002	.041	.0005	.0010	.0001	.15	.0000	.0001	.0003	.0003
%RSD	88.50	1.919	592.2	.8911	96.30	.2720	1.697	2.231	2.599	.3396
#1	-.0001	2.120	.0005	.1157	-.0001	53.35	.0020	.0023	.0118	.0982
#2	-.0003	2.162	-.0004	.1146	.0000	53.58	.0021	.0023	.0124	.0988
#3	-.0001	2.080	-.0004	.1137	-.0001	53.31	.0020	.0024	.0121	.0983

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.744	8.515	5.146	.0799	.0351	18.87	.0117	.0873	.0106	.0012
Stddev	.023	.056	.025	.0001	.0001	.06	.0002	.0001	.0010	.0013
%RSD	.6170	.6540	.4964	.1125	.2804	.2984	1.689	.1243	9.001	106.9
#1	3.736	8.558	5.121	.0798	.0352	18.87	.0115	.0872	.0097	.0025
#2	3.770	8.536	5.146	.0800	.0350	18.93	.0117	.0874	.0116	-.0001
#3	3.725	8.452	5.172	.0800	.0350	18.82	.0119	.0873	.0106	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.688	.0056	.1998	.0430	.0000	.0053	.6832
Stddev	.020	.0005	.0007	.0021	.0008	.0002	.0015
%RSD	1.182	9.507	.3615	4.988	1855.	2.952	.2184
#1	1.711	.0059	.2000	.0408	.0008	.0051	.6846
#2	1.678	.0059	.2004	.0431	-.0001	.0054	.6832
#3	1.674	.0050	.1990	.0450	-.0007	.0053	.6817

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1168.5	2985.9	23018.	1579.6
Stddev	1.2	11.1	30.	5.8
%RSD	.10079	.37119	.13034	.36834
#1	1167.4	2973.4	23052.	1575.0
#2	1168.3	2990.1	23001.	1586.1
#3	1169.8	2994.3	23000.	1577.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:52:40 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2437	43.42	1.866	2.063	2.119	43.34	1.982	1.973	2.166	2.068
Stddev	.0025	.34	.005	.005	.012	.32	.002	.004	.016	.010
%RSD	1.006	.7892	.2571	.2525	.5711	.7357	.1062	.1819	.7439	.4785
#1	.2410	43.74	1.865	2.066	2.127	43.56	1.980	1.972	2.164	2.060
#2	.2457	43.06	1.862	2.057	2.105	42.97	1.981	1.970	2.183	2.079
#3	.2446	43.47	1.871	2.067	2.125	43.47	1.984	1.977	2.151	2.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.38	40.91	40.21	2.019	1.956	43.22	1.870	1.961	1.903	1.875
Stddev	.26	.16	.26	.017	.008	.29	.007	.006	.004	.007
%RSD	.6387	.3844	.6485	.8404	.4042	.6741	.3835	.2914	.1925	.3542
#1	41.52	41.05	40.50	2.008	1.950	43.43	1.871	1.955	1.904	1.879
#2	41.07	40.74	40.01	2.038	1.953	42.89	1.863	1.966	1.899	1.867
#3	41.54	40.94	40.12	2.010	1.965	43.35	1.877	1.961	1.906	1.878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.454	1.846	2.155	2.074	1.964	2.008	1.948
Stddev	.006	.007	.012	.014	.005	.004	.003
%RSD	.2422	.3585	.5434	.6715	.2354	.2113	.1316
#1	2.457	1.848	2.161	2.066	1.959	2.005	1.946
#2	2.447	1.838	2.141	2.090	1.965	2.013	1.946
#3	2.458	1.851	2.162	2.066	1.968	2.007	1.950
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:52:40 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1104.0	2991.2	22949.	1620.3
Stddev	.6	7.5	147.	14.5
%RSD	.05813	.24916	.63880	.89551
#1	1103.7	2988.5	23059.	1605.2
#2	1104.7	2999.6	22782.	1634.2
#3	1103.6	2985.5	23006.	1621.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:56:38 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0105	.0002	.0000	.0001	.0047	.0000	.0001	.0003
Stddev	.0002	.0120	.0013	.0002	.0001	.0042	.0000	.0001	.0002
%RSD	164.0	114.4	684.4	3741.	63.35	91.18	88.19	98.55	53.89
#1	-.0001	-.0033	.0016	.0003	.0001	.0028	.0001	.0001	.0004
#2	-.0004	.0179	-.0008	-.0001	.0002	.0017	.0000	.0003	.0005
#3	.0001	.0168	-.0003	-.0002	.0001	.0095	.0000	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0176	.0289	.0316	.0001	F.0029	-.0780	-.0001	-.0008
Stddev	.0003	.0023	.0140	.0266	.0001	.0009	.0020	.0002	.0007
%RSD	23.60	13.17	48.28	84.26	109.0	30.33	2.504	318.9	93.42
#1	-.0012	.0202	.0195	.0489	.0002	.0038	-.0765	-.0002	-.0015
#2	-.0012	.0160	.0450	.0009	.0001	.0028	-.0772	.0002	-.0001
#3	-.0008	.0165	.0223	.0448	.0000	.0020	-.0802	-.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	F.0023	.0011	.0006	.0001	.0010	.0017	.0002	.0002
Stddev	.0007	.0009	.0004	.0002	.0000	.0001	.0003	.0002	.0000
%RSD	133.4	37.71	36.42	31.12	32.18	8.122	20.05	96.27	11.62
#1	.0011	.0033	.0015	.0007	.0002	.0011	.0019	.0003	.0002
#2	-.0002	.0016	.0008	.0004	.0001	.0010	.0019	.0002	.0002
#3	.0006	.0021	.0009	.0006	.0001	.0009	.0013	.0000	.0002
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:56:38 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1267.3	3111.5	24107.	1633.1
Stddev	1.5	4.6	43.	10.9
%RSD	.11570	.14705	.17815	.66872
#1	1266.7	3114.2	24057.	1635.5
#2	1266.3	3106.2	24130.	1621.1
#3	1269.0	3114.0	24133.	1642.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-MB1 Acquired: 5/17/2018 17:00:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0002	-.0015	.0004	-.0001	.0131	-.0001	-.0002	.0003	-.0013
Stddev	.0001	.0120	.0006	.0000	.0002	.0043	.0000	.0001	.0004	.0000
%RSD	53.14	5452.	40.16	13.87	183.1	32.54	31.16	55.85	139.2	3.190
#1	-.0003	-.0092	-.0017	.0004	-.0001	.0103	-.0001	-.0003	.0007	-.0012
#2	-.0002	-.0039	-.0020	.0003	-.0003	.0110	-.0001	-.0001	.0003	-.0013
#3	-.0001	.0137	-.0008	.0003	.0001	.0180	-.0001	-.0001	-.0001	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156	.0114	.0339	.0003	.0004	-.0687	-.0001	.0006	.0003	.0028
Stddev	.0037	.0150	.0241	.0000	.0002	.0101	.0002	.0003	.0005	.0012
%RSD	23.53	131.7	71.19	6.128	37.80	14.67	425.3	52.32	151.7	41.01
#1	.0167	.0093	.0111	.0002	.0006	-.0702	.0002	.0007	-.0002	.0036
#2	.0186	.0274	.0592	.0003	.0003	-.0580	-.0001	.0002	.0004	.0034
#3	.0115	-.0025	.0315	.0003	.0004	-.0780	-.0003	.0008	.0007	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0221	.0000	.0000	.0000	-.0006	-.0001	.0013
Stddev	.0003	.0003	.0000	.0001	.0005	.0001	.0001
%RSD	1.299	596.6	107.5	6855.	74.87	100.9	4.701
#1	.0219	.0001	.0001	.0001	-.0012	-.0003	.0013
#2	.0224	.0003	.0000	.0000	-.0003	-.0001	.0014
#3	.0219	-.0003	.0001	-.0001	-.0004	.0000	.0013
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Raw Data MA14907 page 133 of 211

Zoom In Zoom Out

Sample Name: MP33757-MB1 Acquired: 5/17/2018 17:00:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1249.8	3066.0	24015.	1593.6
Stddev	1.8	5.0	60.	5.8
%RSD	.14621	.16456	.25131	.36094
#1	1247.7	3060.3	23959.	1587.1
#2	1250.9	3069.6	24007.	1595.3
#3	1250.9	3068.2	24079.	1598.2

Raw Data MA14907 page 134 of 211

Zoom In Zoom Out

Sample Name: MP33757-B1 Acquired: 5/17/2018 17:05:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0498	29.30	1.878	2.146	.0556	27.50	.0502	.5094	.2243	.2668
Stddev	.0006	.34	.007	.015	.0005	.28	.0003	.0018	.0016	.0015
%RSD	1.185	1.168	.3819	.6917	.9570	1.021	.5677	.3583	.6953	.5483
#1	.0502	29.27	1.876	2.155	.0555	27.40	.0501	.5082	.2258	.2678
#2	.0492	28.97	1.885	2.129	.0551	27.28	.0505	.5115	.2245	.2652
#3	.0502	29.65	1.871	2.154	.0561	27.81	.0499	.5084	.2227	.2675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.10	25.51	25.47	.5107	.4664	27.04	.4955	.4884	.4855	1.861
Stddev	.16	.21	.15	.0011	.0017	.28	.0011	.0018	.0012	.009
%RSD	.5924	.8157	.5775	.2182	.3698	1.035	.2185	.3642	.2423	.4802
#1	27.04	25.61	25.49	.5119	.4651	26.95	.4946	.4870	.4844	1.856
#2	26.98	25.27	25.31	.5103	.4684	26.82	.4967	.4904	.4854	1.872
#3	27.29	25.65	25.60	.5098	.4658	27.35	.4952	.4879	.4867	1.856
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3775	.4587	.5377	.5086	1.920	.4851	.4966
Stddev	.0016	.0010	.0036	.0015	.007	.0021	.0014
%RSD	.4152	.2082	.6752	.2889	.3866	.4410	.2820
#1	.3758	.4587	.5373	.5103	1.911	.4869	.4953
#2	.3789	.4597	.5342	.5075	1.924	.4856	.4981
#3	.3777	.4578	.5415	.5081	1.924	.4827	.4964
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Raw Data MA14907 page 135 of 211

Zoom In Zoom Out

Sample Name: MP33757-B1 Acquired: 5/17/2018 17:05:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1125.9	2943.6	22763.	1557.1
Stddev	1.5	9.4	170.	8.9
%RSD	.13096	.31874	.74881	.57225
#1	1127.2	2942.8	22635.	1567.2
#2	1124.3	2934.6	22697.	1553.9
#3	1126.0	2953.3	22956.	1550.3

Raw Data MA14907 page 136 of 211

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54160-1 Acquired: 5/17/2018 17:09:16 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.0107	-.0007	.0086	-.0002	7.343	.0000	.0006	.0012
Stddev	.0001	.0095	.0004	.0003	.0001	.029	.000	.0001	.0003
%RSD	20.27	88.34	52.03	3.846	74.23	.3921	155.0	17.77	23.76
#1	-.0007	.0016	-.0005	.0087	-.0002	7.336	-.0001	.0006	.0010
#2	-.0007	.0206	-.0005	.0083	.0000	7.375	.0000	.0006	.0016
#3	-.0005	.0100	-.0011	.0089	-.0002	7.318	.0000	.0008	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0027	.0697	7.086	1.818	.0260	.0005	F162.6	.0056	.0006
Stddev	.0006	.0069	.043	.043	.0001	.0003	.8	.0002	.0008
%RSD	23.63	9.933	.6039	2.365	.2938	62.29	.5169	2.833	138.6
#1	.0034	.0776	7.135	1.846	.0259	.0006	163.2	.0057	.0004
#2	.0021	.0664	7.058	1.840	.0260	.0006	163.0	.0056	-.0001
#3	.0026	.0650	7.065	1.769	.0260	.0001	161.7	.0054	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0036	.1640	.0010	.0077	.0005	.0001	-.0004	.0618
Stddev	.0006	.0007	.0095	.0003	.0001	.0000	.0007	.0000	.0001
%RSD	72.24	19.15	5.773	32.09	.9552	6.680	896.4	10.68	.1855
#1	.0004	.0028	.1576	.0012	.0077	.0005	.0008	-.0003	.0618
#2	.0006	.0040	.1595	.0013	.0076	.0005	-.0005	-.0003	.0617
#3	.0016	.0039	.1749	.0007	.0078	.0006	.0000	-.0004	.0620

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1128.8	2926.7	22566.	1587.4
Stddev	3.4	4.7	72.	2.4
%RSD	.30306	.16037	.31958	.15362
#1	1125.1	2921.3	22577.	1587.6
#2	1129.4	2929.8	22490.	1589.8
#3	1131.8	2929.1	22633.	1584.9

Zoom In Zoom Out

Sample Name: MP33757-D1 Acquired: 5/17/2018 17:13:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0229	-.0010	.0085	-.0001	7.335	-.0001	.0005	.0012
Stddev	.0005	.0127	.0001	.0003	.0000	.012	.0000	.0001	.0006
%RSD	121.5	55.61	13.33	3.017	40.27	.1656	26.82	13.12	44.82
#1	-.0004	.0188	-.0011	.0086	-.0001	7.346	-.0001	.0006	.0010
#2	.0001	.0371	-.0008	.0086	.0000	7.336	-.0001	.0005	.0019
#3	-.0009	.0127	-.0009	.0082	-.0001	7.322	-.0001	.0005	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0028	.0585	7.079	1.822	.0259	.0002	F160.7	.0054	.0001
Stddev	.0004	.0021	.032	.043	.0001	.0000	.7	.0002	.0004
%RSD	13.94	3.593	.4532	2.336	.1991	3.988	.4498	3.365	397.7
#1	.0033	.0605	7.062	1.792	.0259	.0002	161.5	.0052	-.0003
#2	.0025	.0563	7.059	1.871	.0259	.0002	160.7	.0055	.0000
#3	.0027	.0587	7.116	1.802	.0258	.0002	160.1	.0056	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0015	.1581	.0013	.0075	.0002	-.0001	.0001	.0614
Stddev	.0014	.0019	.0045	.0003	.0001	.0001	.0012	.0003	.0002
%RSD	160.6	129.7	2.815	23.89	1.084	39.73	1506.	208.4	.2529
#1	.0025	.0033	.1632	.0014	.0076	.0003	-.0001	.0004	.0614
#2	-.0002	-.0004	.1556	.0015	.0075	.0001	.0012	.0001	.0612
#3	.0003	.0015	.1555	.0009	.0074	.0002	-.0013	-.0001	.0615

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1125.9	2936.9	22605.	1576.7
Stddev	4.1	3.3	42.	10.0
%RSD	.36120	.11339	.18413	.63496
#1	1121.3	2936.6	22557.	1572.1
#2	1128.8	2933.8	22622.	1588.2
#3	1127.7	2940.4	22635.	1569.9

Zoom In Zoom Out

Sample Name: MP33757-SD1 Acquired: 5/17/2018 17:17:50 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0033	.0332	.0007	.0083	-.0011	7.803	-.0007	-.0001	.0009	.0029
Stddev	.0011	.0787	.0039	.0009	.0008	.068	.0002	.0002	.0021	.0006
%RSD	34.19	237.2	584.5	11.10	74.25	.8730	22.99	286.6	223.4	19.15
#1	-.0033	-.0577	-.0005	.0076	-.0009	7.749	-.0008	.0002	.0010	.0025
#2	-.0022	.0786	.0050	.0094	-.0020	7.781	-.0005	-.0002	.0029	.0027
#3	-.0045	.0785	-.0025	.0080	-.0004	7.880	-.0007	-.0003	-.0012	.0035

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0625	7.321	1.921	.0277	-.0024	171.3	.0050	-.0003	.0065	.0037
Stddev	.0108	.074	.226	.0000	.0007	.5	.0005	.0026	.0036	.0047
%RSD	17.27	1.013	11.75	.0913	27.86	.3199	10.08	850.7	54.64	128.2
#1	.0503	7.281	1.662	.0277	-.0018	171.0	.0048	.0027	.0029	.0063
#2	.0667	7.276	2.028	.0277	-.0024	170.9	.0046	-.0015	.0100	-.0018
#3	.0706	7.407	2.074	.0277	-.0031	171.9	.0056	-.0021	.0067	.0064

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1645	.0021	.0087	-.0011	.0005	-.0016	.0661
Stddev	.0046	.0011	.0002	.0005	.0050	.0003	.0005
%RSD	2.806	50.34	1.836	45.76	1081.	21.17	.7131
#1	.1636	.0016	.0088	-.0006	.0055	-.0013	.0666
#2	.1694	.0014	.0085	-.0016	.0003	-.0015	.0658
#3	.1603	.0033	.0088	-.0010	-.0045	-.0020	.0658

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1201.0	3059.5	23252.	1581.1
Stddev	4.0	4.5	93.	9.5
%RSD	.32984	.14553	.40187	.60077
#1	1197.0	3055.6	23186.	1587.2
#2	1204.9	3064.3	23211.	1570.2
#3	1201.1	3058.7	23359.	1585.9

Zoom In Zoom Out

Sample Name: MP33757-S1 Acquired: 5/17/2018 17:22:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0501	28.65	1.837	2.067	.0539	33.66	.0478	.4842	.2186
Stddev	.0009	.20	.005	.012	.0004	.31	.0002	.0009	.0003
%RSD	1.790	.7000	.2896	.5583	.6790	.9253	.3619	.1816	.1526
#1	.0493	28.58	1.843	2.056	.0542	33.63	.0480	.4850	.2185
#2	.0499	28.49	1.832	2.066	.0535	33.36	.0477	.4844	.2183
#3	.0511	28.87	1.835	2.079	.0540	33.98	.0477	.4833	.2189

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2664	26.44	31.85	26.03	.5183	.4463	F180.6	.4734	.4740
Stddev	.0007	.18	.16	.18	.0014	.0008	.8	.0011	.0028
%RSD	.2747	.6690	.5063	.6836	.2688	.1759	.4595	.2278	.5864
#1	.2655	26.35	31.77	25.85	.5170	.4471	181.1	.4746	.4723
#2	.2668	26.33	31.75	26.02	.5182	.4465	179.6	.4732	.4772
#3	.2668	26.65	32.04	26.20	.5197	.4455	181.0	.4724	.4725

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4718	1.851	.4983	.4318	.5292	.4959	1.847	.4672	.5320
Stddev	.0024	.002	.0012	.0012	.0025	.0020	.002	.0014	.0009
%RSD	.5045	.1261	.2358	.2887	.4802	.4075	.1234	.2957	.1622
#1	.4743	1.853	.4987	.4327	.5293	.4939	1.847	.4676	.5330
#2	.4695	1.851	.4970	.4323	.5266	.4960	1.844	.4656	.5314
#3	.4717	1.848	.4992	.4304	.5316	.4979	1.849	.4682	.5316

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1091.9	2964.3	22551.	1606.5
Stddev	1.4	8.8	105.	12.0
%RSD	.13047	.29557	.46466	.74724
#1	1092.0	2955.2	22539.	1604.5
#2	1090.4	2964.9	22662.	1619.4
#3	1093.2	2972.7	22454.	1595.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-S2 Acquired: 5/17/2018 17:26:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0497	28.84	1.858	2.096	.0547	34.18	.0485	.4916	.2215
Stddev	.0002	.17	.004	.005	.0001	.16	.0001	.0006	.0022
%RSD	.3278	.5773	.2088	.2631	.1909	.4551	.1258	.1246	1.015
#1	.0495	28.77	1.853	2.092	.0549	34.01	.0484	.4909	.2197
#2	.0499	29.04	1.859	2.093	.0547	34.32	.0485	.4921	.2240
#3	.0497	28.73	1.860	2.102	.0547	34.19	.0486	.4918	.2207

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2688	26.78	32.33	26.37	.5220	.4552	F184.9	.4788	.4842
Stddev	.0008	.09	.04	.22	.0027	.0014	1.0	.0009	.0017
%RSD	.3050	.3490	.1318	.8482	.5154	.2966	.5403	.1781	.3477
#1	.2679	26.69	32.30	26.13	.5193	.4537	184.7	.4778	.4842
#2	.2695	26.88	32.30	26.41	.5246	.4563	186.0	.4794	.4825
#3	.2691	26.77	32.38	26.57	.5221	.4556	184.1	.4792	.4859

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4774	1.868	.5111	.4388	.5396	.5033	1.873	.4741	.5418
Stddev	.0034	.004	.0024	.0012	.0023	.0031	.005	.0003	.0003
%RSD	.7204	.2374	.4615	.2690	.4207	.6062	.2739	.0725	.0600
#1	.4735	1.863	.5113	.4382	.5376	.5005	1.868	.4737	.5414
#2	.4799	1.872	.5087	.4380	.5420	.5066	1.874	.4743	.5420
#3	.4787	1.870	.5134	.4401	.5392	.5027	1.878	.4744	.5418

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1088.6	2964.3	22572.	1594.7
Stddev	1.2	3.0	69.	4.2
%RSD	.11124	.10007	.30412	.26079
#1	1088.8	2963.7	22604.	1599.3
#2	1089.7	2961.7	22493.	1593.5
#3	1087.3	2967.5	22619.	1591.3

Zoom In Zoom Out

Sample Name: FA54190-1L Acquired: 5/17/2018 17:30:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0177	-.0014	.0569	-.0001	53.77	.0003	.0006	.0006
Stddev	.0005	.0031	.0019	.0005	.0002	.16	.0000	.0000	.0001
%RSD	145.3	17.66	130.8	.8344	195.9	.2975	15.53	6.243	19.49
#1	.0000	.0153	-.0031	.0567	-.0001	53.78	.0003	.0006	.0006
#2	-.0001	.0165	.0005	.0574	.0001	53.92	.0003	.0007	.0008
#3	-.0009	.0212	-.0017	.0565	-.0002	53.61	.0004	.0006	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0005	.0089	.7200	.5418	.0880	-.0002	F168.7	.0002	.0012
Stddev	.0001	.0045	.0178	.0225	.0003	.0001	1.0	.0002	.0003
%RSD	30.30	50.63	2.476	4.151	.3094	39.10	.5932	86.89	26.57
#1	-.0003	.0140	.7405	.5465	.0878	-.0001	168.8	.0002	.0016
#2	-.0006	.0052	.7121	.5617	.0883	-.0003	169.7	.0001	.0009
#3	-.0005	.0076	.7076	.5174	.0879	-.0003	167.7	.0004	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0017	.1563	.0000	.2033	.0012	.0010	.0000	.0177
Stddev	.0007	.0007	.0005	.000	.0003	.0001	.0016	.000	.0002
%RSD	75.48	39.85	.3377	325.7	.1583	9.185	156.1	675.2	.9022
#1	.0018	.0025	.1558	-.0002	.2035	.0013	.0012	-.0002	.0175
#2	.0004	.0012	.1561	.0001	.2035	.0011	-.0007	.0003	.0178
#3	.0007	.0014	.1568	-.0001	.2030	.0013	.0026	-.0003	.0178

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1108.8	2921.9	22307.	1565.9
Stddev	1.7	5.2	86.	5.6
%RSD	.15285	.17785	.38520	.35849
#1	1107.0	2916.3	22401.	1559.7
#2	1108.9	2926.5	22232.	1570.7
#3	1110.4	2922.9	22289.	1567.2

Zoom In Zoom Out

Sample Name: FA54165-1 Acquired: 5/17/2018 17:34:26 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.3596	-.0006	.0129	.0000	.6942	-.0001	.0003	.0013
Stddev	.0005	.0212	.0005	.0001	.0001	.0092	.0001	.0000	.0004
%RSD	123.2	5.899	81.50	.8826	881.9	1.329	60.81	14.62	29.39
#1	.0001	.3358	-.0007	.0129	.0000	.6838	-.0001	.0003	.0009
#2	-.0010	.3766	-.0010	.0129	.0001	.7016	.0000	.0003	.0012
#3	-.0004	.3663	-.0001	.0127	.0000	.6970	-.0001	.0004	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	1.090	.3767	.0993	.0188	-.0004	F164.4	.0024	.0000
Stddev	.0002	.005	.0106	.0277	.0001	.0001	.8	.0000	.0004
%RSD	66.86	.4333	2.806	27.91	.7319	12.25	.4998	1.251	1375.
#1	-.0004	1.094	.3650	.0699	.0188	-.0004	164.7	.0023	.0000
#2	-.0002	1.091	.3798	.1249	.0187	-.0005	165.1	.0024	.0004
#3	-.0001	1.085	.3855	.1031	.0189	-.0004	163.5	.0024	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0010	.0037	.1717	.0003	.0036	.0004	-.0012	.0000	.0066
Stddev	.0009	.0007	.0018	.0003	.0001	.0001	.0007	.000	.0000
%RSD	93.32	20.25	1.036	110.1	3.340	17.37	54.12	140.6	.6962
#1	.0021	.0042	.1713	-.0001	.0035	.0004	-.0009	.0000	.0066
#2	.0005	.0028	.1737	.0006	.0037	.0004	-.0008	.0000	.0065
#3	.0004	.0040	.1702	.0004	.0035	.0005	-.0020	-.0001	.0066

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1131.4	2958.3	22767.	1605.7
Stddev	3.2	6.8	34.	7.2
%RSD	.27865	.22885	.15131	.45037
#1	1133.9	2965.7	22737.	1599.6
#2	1127.9	2957.0	22761.	1603.9
#3	1132.6	2952.3	22805.	1613.7

Zoom In Zoom Out

Sample Name: FA54166-1 Acquired: 5/17/2018 17:38:45 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.2068	-.0013	.0095	-.0002	.4966	-.0001	.0000	.0007
Stddev	.0000	.0062	.0001	.0001	.0000	.0091	.0000	.000	.0005
%RSD	2.297	2.975	11.25	1.252	10.95	1.834	25.93	1090.	65.93
#1	-.0007	.2001	-.0012	.0094	-.0002	.4923	-.0001	-.0001	.0012
#2	-.0007	.2080	-.0013	.0096	-.0002	.5071	-.0001	.0001	.0002
#3	-.0007	.2123	-.0015	.0096	-.0002	.4905	-.0001	-.0001	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0041	.7856	.3469	.0486	.0131	-.0005	F160.2	.0010	.0003
Stddev	.0002	.0103	.0239	.0380	.0002	.0001	.8	.0000	.0005
%RSD	5.209	1.310	6.881	78.11	1.313	14.01	.5015	3.998	156.1
#1	.0040	.7784	.3199	.0048	.0132	-.0005	160.5	.0010	-.0002
#2	.0043	.7974	.3553	.0705	.0131	-.0004	160.8	.0010	.0009
#3	.0039	.7811	.3654	.0706	.0129	-.0005	159.3	.0010	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	.0018	.1459	.0001	.0025	-.0003	-.0008	-.0004	.0087
Stddev	.0004	.0010	.0012	.0002	.0000	.0002	.0003	.0002	.0001
%RSD	27.52	55.17	.8399	285.9	1.828	51.92	38.65	53.29	1.049
#1	.0017	.0015	.1448	.0002	.0025	-.0001	-.0006	-.0006	.0086
#2	.0010	.0029	.1472	.0002	.0025	-.0003	-.0007	-.0002	.0088
#3	.0012	.0010	.1458	-.0002	.0024	-.0004	-.0012	-.0005	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1137.3	2970.1	22685.	1601.3
Stddev	2.4	9.7	40.	4.6
%RSD	.21510	.32810	.17443	.28759
#1	1135.8	2960.2	22655.	1606.6
#2	1136.1	2970.4	22730.	1598.6
#3	1140.2	2979.6	22670.	1598.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 17:43:05 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2441	43.59	1.852	2.035	2.114	43.46	1.977	1.966	2.178	2.065
Stddev	.0007	.22	.009	.016	.013	.18	.002	.003	.010	.001
%RSD	.2762	.4991	.5145	.7914	.6045	.4087	.1006	.1703	.4686	.0283
#1	.2435	43.44	1.841	2.027	2.108	43.35	1.974	1.962	2.188	2.065
#2	.2449	43.49	1.855	2.025	2.106	43.36	1.978	1.967	2.168	2.065
#3	.2441	43.84	1.860	2.054	2.129	43.66	1.978	1.968	2.177	2.064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.63	40.59	40.18	2.027	1.949	42.68	1.863	1.964	1.893	1.868
Stddev	.12	.22	.31	.003	.006	.26	.004	.008	.008	.009
%RSD	.2983	.5446	.7800	.1279	.2865	.6095	.2253	.3857	.4002	.4779
#1	41.60	40.45	40.03	2.024	1.942	42.66	1.859	1.969	1.885	1.859
#2	41.53	40.47	39.97	2.027	1.951	42.43	1.867	1.955	1.900	1.871
#3	41.77	40.85	40.54	2.029	1.952	42.95	1.864	1.968	1.894	1.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.423	1.829	2.155	2.080	1.962	2.007	1.947
Stddev	.006	.006	.013	.002	.006	.004	.001
%RSD	.2652	.3505	.5891	.0746	.2936	.2199	.0273
#1	2.416	1.822	2.153	2.080	1.964	2.005	1.947
#2	2.428	1.835	2.144	2.082	1.956	2.003	1.947
#3	2.426	1.830	2.169	2.079	1.967	2.011	1.948
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 17:43:05 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1109.0	3016.5	22904.	1610.6
Stddev	2.0	4.2	46.	10.0
%RSD	.17643	.13811	.20173	.62230
#1	1106.8	3021.1	22851.	1618.5
#2	1110.7	3012.9	22935.	1599.4
#3	1109.4	3015.5	22925.	1614.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 17:47:03 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0085	-.0003	.0004	.0001	.0045	.0001	.0001	.0006
Stddev	.0002	.0158	.0017	.0002	.0001	.0046	.0000	.0000	.0001
%RSD	292.7	185.2	495.4	50.99	219.4	101.5	17.92	58.40	22.17
#1	-.0001	.0015	-.0006	.0003	.0001	.0001	.0001	.0000	.0005
#2	.0002	.0266	.0015	.0006	.0002	.0042	.0001	.0001	.0007
#3	.0000	-.0025	-.0019	.0002	-.0001	.0093	.0001	.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	.0220	.0043	.0416	.0001	F.0031	-.0327	.0001	-.0003
Stddev	.0002	.0056	.0202	.0228	.0000	.0008	.0080	.0001	.0003
%RSD	19.51	25.34	474.4	54.83	30.81	27.39	24.37	156.2	101.8
#1	-.0012	.0284	.0244	.0666	.0001	.0039	-.0359	.0000	-.0001
#2	-.0009	.0196	.0043	.0364	.0001	.0030	-.0236	.0000	-.0006
#3	-.0009	.0181	-.0159	.0219	.0002	.0023	-.0386	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0007	.0000	.0003	.0003	.0013	F.0021	.0002	.0003
Stddev	.0003	.0005	.000	.0002	.0001	.0002	.0002	.0000	.0000
%RSD	242.1	71.31	774.0	55.94	35.12	13.31	7.453	22.40	10.91
#1	-.0001	.0002	-.0001	.0001	.0003	.0015	.0023	.0001	.0003
#2	.0000	.0012	.0001	.0005	.0004	.0013	.0021	.0001	.0003
#3	.0005	.0007	-.0001	.0004	.0002	.0012	.0020	.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 17:47:03 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1265.4	3140.3	23851.	1613.7
Stddev	1.5	4.1	79.	9.5
%RSD	.11481	.12993	.32982	.58728
#1	1264.0	3140.2	23897.	1605.2
#2	1266.9	3136.3	23896.	1624.0
#3	1265.3	3144.4	23761.	1611.9

Zoom In Zoom Out

Sample Name: FA54150-1L Acquired: 5/17/2018 17:51:21 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0072	-.0014	.0811	-.0001	81.68	.0000	-.0001	.0004
Stddev	.0004	.0132	.0010	.0003	.0002	.54	.000	.0001	.0004
%RSD	660.8	184.4	70.92	.3450	323.4	.6621	77.27	52.64	105.7
#1	-.0003	-.0068	-.0015	.0808	.0000	81.21	.0000	-.0001	.0003
#2	-.0003	.0087	-.0003	.0811	.0001	81.56	.0000	-.0002	.0008
#3	.0004	.0195	-.0023	.0813	-.0003	82.28	.0000	-.0001	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	.0021	.9168	3.410	.0707	.0003	F155.8	.0004	.0003
Stddev	.0002	.0033	.0263	.039	.0004	.0003	.7	.0002	.0007
%RSD	15.82	153.8	2.869	1.140	.5786	78.38	.4326	51.27	207.9
#1	-.0010	.0043	.8937	3.371	.0702	.0006	155.5	.0004	.0008
#2	-.0014	-.0016	.9112	3.410	.0711	.0003	155.3	.0006	.0008
#3	-.0012	.0036	.9454	3.448	.0707	.0001	156.6	.0002	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0027	.4578	.0000	.2223	.0017	.0000	.0009	.0028
Stddev	.0008	.0015	.0014	.0002	.0002	.0000	.001	.0002	.0001
%RSD	72.63	56.09	.3017	1025.	.0932	2.203	5070.	19.82	2.918
#1	.0005	.0045	.4574	.0002	.2221	.0018	-.0009	.0010	.0027
#2	.0019	.0015	.4566	.0001	.2222	.0017	-.0006	.0007	.0029
#3	.0008	.0022	.4593	-.0002	.2225	.0017	.0014	.0011	.0028

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1104.7	2915.3	22134.	1556.1
Stddev	4.4	1.9	32.	14.0
%RSD	.39403	.06600	.14435	.90279
#1	1101.1	2913.9	22164.	1568.7
#2	1103.5	2914.4	22137.	1558.7
#3	1109.5	2917.5	22100.	1541.0

Zoom In Zoom Out

Sample Name: FA54150-2L Acquired: 5/17/2018 17:55:37 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	-.0042	-.0019	.0881	-.0001	86.99	-.0001	-.0001	.0008
Stddev	.0004	.0079	.0004	.0003	.0001	.69	.0000	.0001	.0004
%RSD	89.91	188.9	19.99	.3065	89.03	.7883	14.24	228.9	47.20
#1	-.0009	-.0006	-.0018	.0878	-.0002	86.33	-.0001	-.0001	.0004
#2	-.0002	.0013	-.0022	.0884	-.0001	87.70	-.0001	-.0002	.0011
#3	-.0002	-.0133	-.0015	.0882	.0000	86.95	-.0001	.0001	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	-.0061	.8754	2.750	.0557	-.0002	F156.3	.0001	.0010
Stddev	.0004	.0037	.0203	.023	.0004	.0001	1.0	.0001	.0003
%RSD	29.22	59.99	2.324	.8426	.6757	54.74	.6540	107.1	33.42
#1	-.0009	-.0095	.8584	2.762	.0555	-.0001	155.5	.0000	.0013
#2	-.0016	-.0022	.8979	2.765	.0555	-.0002	157.5	.0002	.0011
#3	-.0012	-.0067	.8699	2.724	.0561	-.0003	156.1	.0002	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0025	.4699	-.0001	.1520	.0013	-.0013	.0005	.0013
Stddev	.0014	.0007	.0018	.0003	.0010	.0000	.0011	.0002	.0001
%RSD	137.1	28.64	.3879	314.3	.6792	2.036	84.20	43.01	7.714
#1	.0009	.0023	.4711	.0001	.1508	.0013	-.0011	.0008	.0012
#2	.0026	.0033	.4678	-.0004	.1527	.0013	-.0024	.0004	.0014
#3	-.0003	.0019	.4706	.0000	.1524	.0013	-.0003	.0004	.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1101.5	2918.4	22058.	1548.3
Stddev	2.2	7.6	62.	5.3
%RSD	.19764	.26177	.28117	.34051
#1	1101.8	2910.7	22115.	1550.8
#2	1099.2	2926.0	22066.	1542.3
#3	1103.5	2918.6	21992.	1551.9

Zoom In Zoom Out

Sample Name: FA54150-3L Acquired: 5/17/2018 17:59:53 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0027	-.0012	.0643	-.0001	83.30	-.0001	-.0002	.0038
Stddev	.0002	.0210	.0006	.0006	.0002	.70	.0000	.0001	.0003
%RSD	34.16	765.7	51.86	.9180	194.3	.8398	61.53	65.89	8.609
#1	-.0010	-.0170	-.0018	.0640	.0000	83.41	.0000	-.0002	.0041
#2	-.0005	.0248	-.0005	.0650	-.0004	83.94	-.0001	-.0001	.0035
#3	-.0006	.0004	-.0014	.0639	.0000	82.55	-.0001	-.0003	.0038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	-.0052	1.073	2.881	.0286	-.0002	F155.2	.0003	.0012
Stddev	.0003	.0032	.009	.062	.0002	.0001	1.5	.0000	.0006
%RSD	26.69	61.13	.8094	2.148	.6460	46.96	.9528	8.406	55.61
#1	-.0015	-.0068	1.077	2.931	.0284	-.0001	155.9	.0003	.0011
#2	-.0009	-.0073	1.063	2.900	.0286	-.0003	156.2	.0003	.0005
#3	-.0012	-.0015	1.079	2.812	.0287	-.0002	153.5	.0003	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0023	1.900	-.0001	.1969	.0012	-.0007	.0011	.0015
Stddev	.0003	.0007	.004	.0005	.0015	.0001	.0007	.0003	.0001
%RSD	33.96	32.15	.2040	329.8	.7760	10.74	105.1	29.40	4.314
#1	.0012	.0020	1.897	-.0003	.1973	.0012	-.0002	.0015	.0014
#2	.0010	.0031	1.899	.0004	.1981	.0014	-.0003	.0010	.0014
#3	.0006	.0017	1.904	-.0005	.1952	.0011	-.0015	.0008	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1103.8	2918.1	22145.	1578.3
Stddev	3.1	1.1	102.	11.6
%RSD	.28203	.03601	.46171	.73319
#1	1101.4	2918.7	22257.	1569.9
#2	1102.8	2916.9	22122.	1573.6
#3	1107.3	2918.7	22056.	1591.5

Zoom In Zoom Out

Sample Name: FA54150-4L Acquired: 5/17/2018 18:04:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.0000	-.0015	.0160	.0000	18.15	-.0001	.0000	.0036	-.0006
Stddev	.0004	.015	.0002	.0002	.0001	.05	.0001	.000	.0002	.0001
%RSD	73.03	50620.	13.04	1.558	658.1	.2964	68.15	667.6	4.302	22.33
#1	-.0009	.0033	-.0014	.0160	.0001	18.10	-.0001	.0001	.0035	-.0008
#2	-.0006	-.0159	-.0018	.0162	.0000	18.20	-.0001	.0000	.0038	-.0006
#3	-.0001	.0125	-.0015	.0157	.0000	18.16	.0000	-.0001	.0035	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0343	1.266	3.010	.0069	.0014	16.49	.0001	.0005	.0008	.0007
Stddev	.0035	.013	.047	.0001	.0001	.08	.0000	.0007	.0012	.0022
%RSD	10.19	1.055	1.565	1.600	9.664	.4770	7.351	149.2	138.4	327.7
#1	.0303	1.260	3.054	.0070	.0015	16.48	.0001	.0013	.0010	.0019
#2	.0368	1.257	2.961	.0068	.0013	16.57	.0001	.0000	-.0004	-.0018
#3	.0358	1.281	3.016	.0068	.0013	16.41	.0001	.0001	.0019	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7951	-.0001	.1644	.0006	-.0005	.0012	.0036
Stddev	.0026	.0000	.0003	.0001	.0009	.0001	.0001
%RSD	.3287	21.27	.1874	22.14	178.1	11.36	2.257
#1	.7922	-.0001	.1641	.0008	.0005	.0010	.0036
#2	.7960	-.0001	.1647	.0007	-.0013	.0013	.0037
#3	.7972	-.0001	.1644	.0005	-.0007	.0011	.0036

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1211.6	3032.5	23491.	1591.9
Stddev	4.9	7.7	188.	14.3
%RSD	.40827	.25381	.80237	.89632
#1	1206.0	3026.5	23289.	1575.6
#2	1213.6	3029.7	23662.	1598.7
#3	1215.2	3041.1	23521.	1601.6

Zoom In Zoom Out

Sample Name: FA54150-5L Acquired: 5/17/2018 18:08:27 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0278	-.0011	.0170	-.0001	50.05	-.0001	-.0001	.0052	-.0007
Stddev	.0003	.0063	.0006	.0004	.0001	.30	.0001	.0001	.0004	.0002
%RSD	104.0	22.73	57.96	2.414	162.8	.6067	61.00	54.73	8.046	35.10
#1	-.0006	.0293	-.0013	.0168	-.0002	49.86	.0000	-.0001	.0056	-.0007
#2	-.0004	.0208	-.0004	.0175	.0000	50.40	-.0002	-.0001	.0053	-.0009
#3	.0000	.0332	-.0016	.0169	.0000	49.88	-.0001	-.0002	.0048	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0058	1.758	7.098	.0104	.0018	17.19	-.0001	.0009	.0008	.0031
Stddev	.0028	.019	.028	.0001	.0002	.09	.0001	.0009	.0012	.0012
%RSD	48.84	1.101	.3972	.8530	9.382	.5325	126.2	104.7	155.8	39.87
#1	.0033	1.737	7.102	.0105	.0017	17.12	-.0001	.0019	-.0006	.0019
#2	.0089	1.775	7.123	.0104	.0020	17.30	-.0001	.0006	.0017	.0029
#3	.0052	1.761	7.068	.0104	.0017	17.17	.0000	.0001	.0012	.0044

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7871	.0001	.3403	.0010	.0000	.0006	.0016
Stddev	.0005	.0003	.0022	.0001	.001	.0003	.0001
%RSD	.0661	494.6	.6421	7.767	1910.	49.01	4.759
#1	.7871	-.0002	.3399	.0010	.0008	.0008	.0015
#2	.7865	.0001	.3427	.0011	-.0005	.0008	.0017
#3	.7876	.0003	.3384	.0009	-.0005	.0003	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1185.9	3002.4	23234.	1605.8
Stddev	3.4	7.8	157.	8.2
%RSD	.28924	.26022	.67636	.51363
#1	1182.2	2994.1	23159.	1613.8
#2	1189.0	3009.6	23414.	1597.4
#3	1186.4	3003.5	23128.	1606.1

Zoom In Zoom Out

Sample Name: FA54199-1 Acquired: 5/17/2018 18:12:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.4129	-.0023	.7423	.0000	186.3	-.0001	-.0002	.0003	-.0014
Stddev	.0002	.0110	.0007	.0012	.000	.6	.0001	.0001	.0003	.0003
%RSD	48.68	2.658	28.58	.1582	268.2	.3248	75.47	56.53	107.8	18.14
#1	-.0007	.4013	-.0019	.7427	.0000	185.8	-.0002	-.0003	-.0001	-.0016
#2	-.0003	.4143	-.0031	.7410	.0000	187.0	-.0001	-.0001	.0005	-.0015
#3	-.0004	.4232	-.0020	.7432	-.0001	186.1	.0000	-.0004	.0004	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0025	16.77	.0166	.0001	-.0008	48.52	-.0003	.0010	.0010	.0025
Stddev	.0030	.05	.0414	.0001	.0002	.13	.0001	.0004	.0002	.0011
%RSD	122.7	.2865	249.8	74.98	22.02	.2778	23.98	42.82	22.39	44.12
#1	.0006	16.80	.0626	.0001	-.0010	48.49	-.0002	.0006	.0008	.0018
#2	-.0025	16.78	-.0179	.0000	-.0006	48.66	-.0003	.0009	.0012	.0019
#3	-.0055	16.71	.0051	.0001	-.0008	48.39	-.0003	.0015	.0009	.0038

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0811	.0001	.8257	.0013	-.0007	.0002	.0006
Stddev	.0008	.0003	.0015	.0001	.0003	.0003	.0000
%RSD	.9378	482.6	.1803	8.577	42.25	160.4	1.333
#1	.0820	.0001	.8245	.0013	-.0008	-.0001	.0006
#2	.0805	-.0002	.8252	.0014	-.0004	.0003	.0006
#3	.0809	.0003	.8273	.0012	-.0009	.0004	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1109.3	2892.7	22402.	1599.2
Stddev	1.1	6.9	57.	12.9
%RSD	.10344	.23708	.25530	.80497
#1	1108.1	2894.1	22374.	1607.6
#2	1109.4	2885.2	22467.	1584.4
#3	1110.4	2898.7	22363.	1605.6

Zoom In Zoom Out

Sample Name: FA54116-1 Acquired: 5/17/2018 18:17:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0506	-.0019	.5690	-.0001	257.1	-.0001	-.0002	.0009	-.0010
Stddev	.0003	.0311	.0008	.0018	.0000	1.1	.0000	.0001	.0003	.0002
%RSD	90.35	61.39	44.36	.3099	45.12	.4173	17.00	46.84	36.87	23.54
#1	-.0001	.0830	-.0012	.5705	-.0001	256.1	-.0001	-.0002	.0013	-.0009
#2	-.0002	.0211	-.0028	.5671	-.0001	257.1	-.0001	-.0001	.0008	-.0012
#3	-.0006	.0476	-.0017	.5695	-.0001	258.2	-.0001	-.0002	.0006	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0053	2.170	.0290	.0000	-.0003	9.361	-.0003	.0008	.0007	.0052
Stddev	.0044	.029	.0445	.0001	.0002	.043	.0001	.0005	.0011	.0009
%RSD	82.77	1.318	153.5	587.0	78.87	.4605	27.29	68.54	150.1	16.37
#1	-.0002	2.166	-.0206	.0001	-.0002	9.320	-.0004	.0013	.0006	.0052
#2	-.0079	2.144	.0655	-.0001	-.0001	9.356	-.0003	.0008	-.0003	.0044
#3	-.0078	2.200	.0421	.0000	-.0006	9.406	-.0002	.0002	.0019	.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0857	.0001	.3577	.0011	-.0007	-.0003	.0016
Stddev	.0040	.0001	.0008	.0000	.0011	.0002	.0000
%RSD	4.715	74.01	.2361	4.137	152.5	83.25	1.637
#1	.0844	.0000	.3569	.0012	-.0020	.0000	.0016
#2	.0824	.0001	.3576	.0011	.0002	-.0004	.0015
#3	.0902	.0001	.3586	.0011	-.0005	-.0003	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1109.3	2886.1	22279.	1569.4
Stddev	2.2	6.8	27.	8.6
%RSD	.19629	.23586	.11961	.54838
#1	1107.4	2882.7	22260.	1572.2
#2	1111.7	2881.7	22268.	1559.8
#3	1108.8	2894.0	22309.	1576.3

Zoom In Zoom Out

Sample Name: FA54233-1L Acquired: 5/17/2018 18:21:18 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0027	-.0018	.0612	-.0001	80.42	.0001	-.0001	.0006
Stddev	.0005	.0137	.0010	.0007	.0001	.57	.0000	.0000	.0002
%RSD	97.01	514.8	55.28	1.121	127.6	.7111	59.98	29.40	26.22
#1	.0000	-.0130	-.0028	.0604	-.0001	79.83	.0001	-.0001	.0005
#2	-.0006	.0121	-.0008	.0617	-.0002	80.45	.0001	-.0001	.0008
#3	-.0009	.0089	-.0018	.0615	.0000	80.97	.0000	-.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0011	-.0026	.3013	.3114	.0077	-.0009	F154.8	-.0003	.0004
Stddev	.0002	.0006	.0220	.0320	.0001	.0001	1.0	.0004	.0004
%RSD	15.18	23.18	7.301	10.27	.7915	15.47	.6527	141.6	93.90
#1	-.0011	-.0027	.2832	.2840	.0077	-.0007	153.7	-.0007	.0007
#2	-.0009	-.0032	.2950	.3037	.0078	-.0009	155.5	.0000	.0006
#3	-.0012	-.0020	.3258	.3465	.0077	-.0010	155.3	-.0001	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0026	.0837	.0001	.1712	.0013	-.0003	.0000	.0156
Stddev	.0008	.0011	.0034	.0003	.0014	.0000	.0007	.000	.0000
%RSD	215.2	40.41	4.014	529.5	.8203	1.722	260.5	1843.	.2095
#1	.0004	.0014	.0876	-.0001	.1696	.0013	-.0011	.0000	.0157
#2	-.0004	.0035	.0819	-.0001	.1717	.0013	.0002	.0002	.0156
#3	.0011	.0030	.0816	.0004	.1723	.0012	.0001	-.0002	.0157

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1106.8	2926.5	22199.	1567.4
Stddev	2.2	10.4	124.	15.3
%RSD	.20113	.35578	.55881	.97344
#1	1108.0	2918.5	22337.	1576.6
#2	1108.2	2938.3	22095.	1575.8
#3	1104.2	2922.6	22166.	1549.8

Zoom In Zoom Out

Sample Name: MP33757-D2 Acquired: 5/17/2018 18:25:36 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0060	-.0009	.0084	-.0001	7.298	-.0001	.0006	.0009
Stddev	.0001	.0152	.0006	.0001	.0003	.051	.0000	.0002	.0001
%RSD	16.27	252.1	66.24	.7078	287.9	.7049	26.21	28.92	17.42
#1	-.0004	-.0115	-.0016	.0084	-.0002	7.269	-.0001	.0006	.0007
#2	-.0005	.0149	-.0004	.0084	-.0002	7.358	-.0001	.0004	.0009
#3	-.0004	.0146	-.0007	.0083	.0002	7.268	-.0002	.0007	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0022	.0491	6.626	1.634	.0255	-.0002	F 158.6	.0051	-.0002
Stddev	.0001	.0029	.037	.013	.0003	.0002	.7	.0000	.0003
%RSD	5.031	5.825	.5613	.7636	1.164	122.0	.4395	.9429	142.8
#1	.0023	.0495	6.616	1.639	.0252	-.0002	158.8	.0051	-.0005
#2	.0022	.0518	6.667	1.644	.0258	-.0004	159.1	.0051	.0001
#3	.0021	.0461	6.595	1.620	.0254	.0001	157.8	.0052	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0031	.1484	.0009	.0076	.0001	-.0012	.0000	.0604
Stddev	.0005	.0007	.0006	.0003	.0001	.0001	.0003	.0005	.0002
%RSD	59.36	22.96	.3832	33.04	1.795	115.4	26.49	3779.	.3839
#1	.0013	.0024	.1480	.0012	.0074	.0002	-.0016	-.0002	.0606
#2	.0005	.0038	.1482	.0009	.0076	.0001	-.0009	-.0004	.0601
#3	.0005	.0029	.1491	.0006	.0077	.0000	-.0011	.0006	.0604

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1126.8	2949.4	22436.	1581.0
Stddev	1.7	6.0	109.	5.2
%RSD	.14813	.20321	.48511	.33084
#1	1125.7	2942.8	22537.	1578.5
#2	1126.0	2951.0	22321.	1577.4
#3	1128.7	2954.5	22451.	1587.0

Zoom In Zoom Out

Sample Name: MP33757-D3 Acquired: 5/17/2018 18:29:54 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.4022	-.0018	.7382	.0000	187.2	-.0001	-.0001	.0004	-.0014
Stddev	.0003	.0178	.0005	.0038	.000	.5	.0000	.0000	.0001	.0003
%RSD	124.6	4.417	25.31	.5083	66.61	.2429	15.07	33.49	29.86	19.80
#1	.0001	.4153	-.0023	.7416	.0000	187.5	-.0001	-.0002	.0005	-.0013
#2	-.0004	.3820	-.0014	.7387	.0000	187.5	-.0001	-.0001	.0004	-.0012
#3	-.0005	.4093	-.0017	.7342	-.0001	186.7	-.0001	-.0001	.0003	-.0017

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0011	16.70	.0196	.0000	-.0007	48.23	-.0003	.0005	.0016	.0005
Stddev	.0019	.06	.0108	.0000	.0001	.18	.0002	.0008	.0008	.0011
%RSD	173.1	.3713	54.87	226.3	7.903	.3789	74.62	167.2	52.73	212.2
#1	-.0024	16.74	.0280	.0000	-.0006	48.41	-.0002	.0013	.0020	-.0007
#2	-.0020	16.73	.0234	.0000	-.0007	48.23	-.0006	.0006	.0006	.0011
#3	.0011	16.63	.0075	.0001	-.0008	48.05	-.0002	-.0004	.0021	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0803	-.0002	.8248	.0011	-.0019	.0001	.0018
Stddev	.0011	.0002	.0014	.0001	.0004	.0002	.0000
%RSD	1.423	107.3	.1732	6.501	23.45	297.8	1.711
#1	.0795	-.0005	.8265	.0012	-.0019	.0002	.0018
#2	.0816	.0000	.8240	.0012	-.0023	-.0002	.0018
#3	.0798	-.0001	.8240	.0010	-.0014	.0002	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1108.2	2890.0	22226.	1580.0
Stddev	1.5	4.6	47.	5.4
%RSD	.13942	.16076	.21106	.34310
#1	1107.0	2886.9	22173.	1580.5
#2	1109.9	2887.9	22264.	1574.3
#3	1107.7	2895.4	22240.	1585.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 18:34:11 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2412	43.44	1.842	2.053	2.116	43.47	1.968	1.957	2.165	2.049
Stddev	.0013	.27	.004	.014	.013	.34	.003	.003	.009	.003
%RSD	.5362	.6143	.2455	.6999	.6275	.7856	.1572	.1488	.4353	.1386
#1	.2426	43.28	1.839	2.043	2.108	43.28	1.964	1.954	2.176	2.047
#2	.2410	43.75	1.847	2.070	2.132	43.87	1.970	1.959	2.160	2.052
#3	.2400	43.30	1.841	2.047	2.109	43.27	1.969	1.957	2.159	2.048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.37	40.75	40.16	2.001	1.938	42.77	1.852	1.954	1.875	1.853
Stddev	.20	.33	.46	.014	.005	.28	.004	.005	.003	.010
%RSD	.4727	.7980	1.144	.7037	.2639	.6521	.2297	.2736	.1654	.5294
#1	41.24	40.64	39.89	2.017	1.932	42.74	1.848	1.951	1.874	1.849
#2	41.60	41.11	40.69	1.997	1.939	43.06	1.851	1.951	1.879	1.847
#3	41.28	40.49	39.90	1.990	1.942	42.51	1.857	1.960	1.873	1.865

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.405	1.820	2.151	2.056	1.949	1.994	1.942
Stddev	.004	.003	.011	.009	.007	.004	.004
%RSD	.1561	.1817	.5083	.4485	.3542	.2079	.1998
#1	2.401	1.817	2.145	2.064	1.948	1.998	1.938
#2	2.409	1.824	2.163	2.058	1.943	1.990	1.943
#3	2.404	1.820	2.144	2.046	1.957	1.993	1.946

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 18:34:11 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1108.9	3018.4	23025.	1615.8
Stddev	3.0	4.8	128.	24.0
%RSD	.27025	.15848	.55436	1.4836
#1	1109.6	3023.8	22879.	1627.8
#2	1111.6	3015.0	23085.	1588.2
#3	1105.7	3016.3	23112.	1631.4

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 18:38:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0138	.0001	.0006	.0001	.0075	.0001	.0000	.0006
Stddev	.0003	.0076	.0008	.0002	.0000	.0041	.0001	.0001	.0001
%RSD	48.91	54.89	578.5	41.03	34.00	55.26	56.79	314.4	14.03
#1	-.0006	.0054	.0004	.0008	.0001	.0115	.0002	.0000	.0006
#2	-.0009	.0200	.0007	.0003	.0001	.0032	.0001	.0001	.0006
#3	-.0003	.0160	-.0007	.0007	.0001	.0077	.0001	.0000	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0013	.0240	.0376	.0419	.0001	F.0032	-.0381	-.0002	.0001
Stddev	.0002	.0052	.0314	.0269	.0000	.0011	.0125	.0002	.0003
%RSD	15.31	21.69	83.61	64.13	33.59	34.58	32.69	139.3	272.5
#1	-.0011	.0299	.0413	.0594	.0002	.0044	-.0239	-.0004	.0003
#2	-.0014	.0215	.0045	.0555	.0002	.0032	-.0470	-.0001	.0002
#3	-.0015	.0204	.0670	.0110	.0001	.0021	-.0435	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0011	.0001	.0004	.0003	.0015	.0015	.0000	.0002
Stddev	.0006	.0009	.0004	.0002	.0001	.0001	.0002	.0001	.0000
%RSD	66.96	84.68	252.6	44.42	30.68	6.453	12.18	203.6	14.52
#1	.0003	.0021	.0005	.0005	.0003	.0015	.0017	.0000	.0002
#2	.0008	.0010	.0002	.0004	.0003	.0016	.0015	.0002	.0002
#3	.0014	.0002	-.0002	.0002	.0005	.0014	.0013	.0000	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 18:38:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1261.1	3139.4	23560.	1596.2
Stddev	1.2	6.1	100.	16.1
%RSD	.09617	.19451	.42595	1.0101
#1	1262.4	3146.0	23514.	1579.0
#2	1260.1	3138.1	23492.	1611.0
#3	1260.9	3134.0	23676.	1598.4

Zoom In Zoom Out

Sample Name: MP33757-D4 Acquired: 5/17/2018 18:42:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.0167	-.0009	.0817	.0000	81.59	.0000	-.0001	.0010
Stddev	.0005	.0016	.0002	.0008	.000	.29	.000	.0001	.0006
%RSD	84.37	9.286	17.72	.9791	766.6	.3561	70.30	61.91	56.74
#1	-.0001	.0151	-.0010	.0810	.0001	81.35	.0000	-.0001	.0004
#2	-.0012	.0168	-.0010	.0825	.0000	81.91	-.0001	-.0001	.0015
#3	-.0006	.0182	-.0007	.0815	-.0001	81.50	.0000	-.0002	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0008	.0018	.9138	3.370	.0714	.0004	F156.2	.0002	.0003
Stddev	.0002	.0039	.0208	.034	.0003	.0001	.2	.0001	.0001
%RSD	24.63	218.8	2.276	1.009	.3941	36.07	.1554	43.74	32.41
#1	-.0008	.0017	.8900	3.350	.0717	.0004	156.1	.0003	.0004
#2	-.0010	.0058	.9286	3.410	.0713	.0005	156.5	.0002	.0002
#3	-.0006	-.0021	.9228	3.351	.0712	.0002	156.0	.0001	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0000	.0025	.4646	-.0001	.2241	.0018	-.0001	.0009	.0025
Stddev	.0003	.0016	.0014	.0002	.0009	.0001	.0015	.0001	.0001
%RSD	760.4	65.00	.3099	128.7	.3847	3.135	1035.	12.55	3.827
#1	.0003	.0041	.4652	-.0003	.2237	.0017	-.0004	.0010	.0026
#2	.0002	.0010	.4656	.0000	.2251	.0018	-.0015	.0008	.0025
#3	-.0003	.0023	.4629	-.0001	.2235	.0018	.0015	.0008	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1099.6	2898.9	22177.	1571.5
Stddev	5.0	4.6	56.	14.9
%RSD	.45563	.15821	.25083	.94895
#1	1093.8	2893.9	22115.	1585.9
#2	1102.0	2900.0	22197.	1556.1
#3	1103.0	2902.9	22220.	1572.5

Zoom In Zoom Out

Sample Name: MP33757-MB2 Acquired: 5/17/2018 18:46:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	-.0011	-.0008	.0000	-.0002	.0128	-.0001	-.0001	.0002	-.0012
Stddev	.0001	.0193	.0013	.001	.0001	.0044	.0000	.0001	.0001	.0002
%RSD	9.523	1691.	162.0	2020.	38.78	34.00	23.57	103.9	35.42	17.88
#1	-.0007	.0212	.0007	.0005	-.0002	.0133	-.0001	-.0002	.0002	-.0010
#2	-.0008	-.0129	-.0017	-.0002	-.0002	.0169	-.0001	.0000	.0002	-.0011
#3	-.0009	-.0117	-.0014	-.0004	-.0001	.0082	-.0001	-.0001	.0003	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0048	.0182	.0383	.0000	-.0003	-.0044	-.0002	-.0005	.0005	.0012
Stddev	.0012	.0132	.0044	.000	.0001	.0060	.0002	.0005	.0005	.0003
%RSD	24.86	72.36	11.48	152.8	22.19	137.5	133.0	98.52	99.82	23.20
#1	-.0036	.0033	.0430	-.0001	-.0004	.0026	.0000	.0000	.0001	.0010
#2	-.0060	.0282	.0342	.0000	-.0003	-.0076	-.0004	-.0004	.0011	.0015
#3	-.0047	.0231	.0377	.0000	-.0004	-.0081	-.0001	-.0010	.0004	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0198	.0001	.0001	-.0003	-.0006	-.0002	.0012
Stddev	.0006	.0001	.0001	.0000	.0007	.0000	.0001
%RSD	2.940	92.19	108.4	19.03	118.3	17.08	8.636
#1	.0197	.0000	.0000	-.0002	-.0010	-.0002	.0011
#2	.0192	.0001	.0000	-.0002	.0002	-.0002	.0013
#3	.0204	.0003	.0003	-.0003	-.0011	-.0002	.0012
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33757-MB2 Acquired: 5/17/2018 18:46:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1258.7	3122.3	23731.	1597.2
Stddev	5.4	12.9	98.	13.3
%RSD	.42727	.41249	.41468	.83227
#1	1253.0	3107.5	23800.	1583.2
#2	1263.7	3131.4	23774.	1609.7
#3	1259.4	3127.9	23618.	1598.8

Zoom In Zoom Out

Sample Name: MP33757-B2 Acquired: 5/17/2018 18:51:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0490	28.97	1.797	2.068	.0545	27.21	.0485	.4915	.2214	.2611
Stddev	.0001	.19	.003	.009	.0003	.18	.0001	.0002	.0010	.0008
%RSD	.1897	.6429	.1850	.4560	.4824	.6521	.2722	.0379	.4393	.3111
#1	.0489	28.96	1.795	2.059	.0547	27.22	.0485	.4914	.2223	.2620
#2	.0490	29.15	1.801	2.078	.0545	27.39	.0483	.4914	.2204	.2604
#3	.0491	28.78	1.796	2.068	.0542	27.03	.0486	.4917	.2215	.2607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.65	24.93	24.84	.5000	.4516	26.53	.4746	.4726	.4665	1.799
Stddev	.13	.12	.07	.0040	.0004	.14	.0003	.0026	.0012	.004
%RSD	.4977	.4679	.2793	.7960	.0869	.5196	.0528	.5458	.2472	.2165
#1	26.60	24.93	24.81	.5044	.4515	26.55	.4748	.4756	.4676	1.797
#2	26.80	25.04	24.79	.4968	.4512	26.65	.4743	.4717	.4667	1.796
#3	26.55	24.81	24.92	.4988	.4520	26.38	.4748	.4707	.4653	1.803
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3586	.4372	.5285	.5014	1.861	.4707	.4794
Stddev	.0015	.0009	.0023	.0019	.003	.0019	.0006
%RSD	.4125	.2065	.4412	.3788	.1679	.3992	.1334
#1	.3594	.4362	.5280	.5033	1.864	.4728	.4801
#2	.3569	.4380	.5310	.4995	1.858	.4696	.4791
#3	.3594	.4375	.5265	.5014	1.862	.4696	.4789
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33757-B2 Acquired: 5/17/2018 18:51:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1143.2	3010.7	22824.	1561.7
Stddev	3.6	4.4	117.	8.1
%RSD	.31878	.14752	.51274	.51582
#1	1139.7	3006.9	22689.	1565.4
#2	1143.0	3009.8	22889.	1552.4
#3	1146.9	3015.6	22894.	1567.2

Zoom In Zoom Out

Sample Name: MP33757-MB3 Acquired: 5/17/2018 18:55:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0044	-.0015	.0001	-.0001	.0046	-.0001	-.0002	.0002	-.0014
Stddev	.0001	.0169	.0003	.0001	.0001	.0056	.0000	.0001	.0003	.0003
%RSD	32.15	384.0	16.83	67.95	187.1	121.2	19.86	32.65	148.5	19.46
#1	-.0003	.0136	-.0016	.0001	.0001	.0108	-.0001	-.0002	.0002	-.0016
#2	-.0002	-.0199	-.0012	.0003	-.0001	-.0002	-.0001	-.0002	-.0001	-.0011
#3	-.0002	-.0069	-.0016	.0001	-.0002	.0033	-.0001	-.0001	.0006	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071	-.0045	.0362	.0000	-.0001	-.0444	-.0003	.0001	.0010	.0011
Stddev	.0011	.0137	.0294	.000	.0001	.0066	.0001	.0008	.0011	.0015
%RSD	15.61	306.1	81.25	336.4	223.4	14.94	23.10	1000.	103.6	136.0
#1	.0064	.0033	.0681	.0000	.0001	-.0368	-.0003	.0004	.0012	.0017
#2	.0084	.0036	.0303	.0000	-.0001	-.0484	-.0004	-.0008	.0020	.0023
#3	.0066	-.0203	.0102	.0000	-.0002	-.0481	-.0003	.0006	-.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0193	-.0003	.0000	-.0001	.0000	.0000	.0011
Stddev	.0003	.0002	.0000	.0001	.0009	.000	.0001
%RSD	1.354	71.52	35.54	83.60	17120.	1047.	9.286
#1	.0190	-.0001	.0000	.0000	.0004	.0001	.0009
#2	.0194	-.0002	.0001	-.0001	.0006	-.0005	.0011
#3	.0194	-.0005	.0000	-.0001	-.0010	.0003	.0011
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-MB3 Acquired: 5/17/2018 18:55:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1255.4	3094.6	23800.	1600.8
Stddev	1.1	3.9	37.	10.6
%RSD	.08745	.12501	.15364	.66072
#1	1255.4	3090.3	23793.	1611.9
#2	1254.3	3095.8	23840.	1599.9
#3	1256.5	3097.8	23768.	1590.8

Zoom In Zoom Out

Sample Name: MP33757-B3 Acquired: 5/17/2018 18:59:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0495	29.04	1.859	2.108	.0548	27.36	.0497	.5031	.2235	.2631
Stddev	.0001	.07	.004	.003	.0003	.06	.0001	.0010	.0010	.0009
%RSD	.1701	.2538	.1941	.1375	.5826	.2352	.2975	.1994	.4309	.3561
#1	.0494	29.07	1.855	2.110	.0548	27.33	.0495	.5020	.2225	.2621
#2	.0496	28.95	1.859	2.110	.0552	27.32	.0498	.5035	.2244	.2635
#3	.0495	29.09	1.862	2.105	.0546	27.43	.0498	.5039	.2236	.2638
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.87	25.24	25.28	.5063	.4631	26.63	.4895	.4836	.4797	1.839
Stddev	.07	.07	.06	.0035	.0014	.10	.0011	.0007	.0025	.005
%RSD	.2473	.2595	.2192	.6982	.3000	.3620	.2238	.1372	.5300	.2746
#1	26.80	25.30	25.23	.5023	.4615	26.71	.4883	.4843	.4796	1.835
#2	26.87	25.17	25.34	.5091	.4641	26.52	.4901	.4831	.4772	1.836
#3	26.93	25.24	25.27	.5073	.4636	26.66	.4902	.4833	.4823	1.845
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3711	.4566	.5338	.5075	1.904	.4795	.4931
Stddev	.0006	.0017	.0008	.0039	.007	.0012	.0017
%RSD	.1517	.3627	.1533	.7742	.3519	.2515	.3476
#1	.3705	.4547	.5329	.5030	1.904	.4784	.4912
#2	.3712	.4576	.5339	.5105	1.897	.4794	.4941
#3	.3716	.4576	.5345	.5088	1.910	.4808	.4941
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33757-B3 Acquired: 5/17/2018 18:59:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1139.6	2987.8	22961.	1560.4
Stddev	.8	3.2	80.	2.6
%RSD	.07436	.10684	.34779	.16414
#1	1139.0	2989.2	23050.	1560.0
#2	1140.6	2990.0	22894.	1558.1
#3	1139.4	2984.1	22940.	1563.2

Zoom In Zoom Out

Sample Name: MP33757-MB4 Acquired: 5/17/2018 19:03:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0103	-.0011	.0014	-.0001	.0607	-.0001	-.0001	.0002
Stddev	.0003	.0031	.0002	.0002	.0001	.0027	.0001	.0000	.0003
%RSD	99.89	29.53	14.75	12.64	94.44	4.485	85.99	23.05	170.3
#1	-.0006	.0079	-.0013	.0012	-.0001	.0633	-.0002	-.0001	.0001
#2	-.0002	.0094	-.0012	.0013	-.0001	.0579	-.0001	-.0002	.0006
#3	-.0001	.0138	-.0010	.0015	.0000	.0610	.0000	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0179	.2527	.0237	.0006	-.0002	F155.2	-.0002	-.0001
Stddev	.0002	.0018	.0088	.0053	.0000	.0001	.3	.0000	.0007
%RSD	21.27	10.20	3.487	22.33	5.911	60.71	.1617	15.75	692.7
#1	-.0014	.0195	.2594	.0209	.0006	-.0001	154.9	-.0002	.0000
#2	-.0010	.0184	.2427	.0298	.0006	-.0003	155.4	-.0002	.0005
#3	-.0010	.0159	.2561	.0204	.0006	-.0002	155.2	-.0002	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0032	.0379	.0003	.0016	.0000	.0004	-.0001	.0032
Stddev	.0006	.0009	.0019	.0002	.0001	.000	.0007	.0002	.0001
%RSD	205.8	29.29	4.981	78.48	6.447	4742.	153.2	154.2	2.491
#1	.0004	.0027	.0391	.0001	.0016	.0000	.0003	.0000	.0031
#2	-.0009	.0026	.0389	.0002	.0017	.0001	-.0001	-.0003	.0033
#3	-.0004	.0042	.0357	.0006	.0015	-.0001	.0012	-.0001	.0032
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-MB4 Acquired: 5/17/2018 19:03:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1134.1	2947.8	22539.	1575.7
Stddev	1.5	6.3	204.	13.2
%RSD	.13510	.21326	.90398	.83882
#1	1133.2	2950.8	22732.	1587.8
#2	1133.3	2940.5	22326.	1561.6
#3	1135.9	2952.0	22559.	1577.6

Zoom In Zoom Out

Sample Name: MP33757-B4 Acquired: 5/17/2018 19:07:43 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0512	28.92	1.899	2.101	.0547	27.15	.0496	.4994	.2234
Stddev	.0006	.11	.001	.006	.0001	.03	.0002	.0006	.0014
%RSD	1.090	.3827	.0731	.2793	.2076	.1286	.3108	.1228	.6235
#1	.0518	28.88	1.900	2.108	.0546	27.13	.0497	.4999	.2220
#2	.0510	28.84	1.897	2.100	.0548	27.13	.0494	.4987	.2248
#3	.0508	29.05	1.898	2.096	.0548	27.19	.0496	.4995	.2235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2666	27.01	25.91	24.92	.5126	.4641	F180.5	.4877	.4883
Stddev	.0012	.09	.04	.20	.0025	.0008	.2	.0008	.0017
%RSD	.4528	.3347	.1711	.8142	.4897	.1734	.1369	.1539	.3448
#1	.2675	26.91	25.92	24.91	.5121	.4636	180.2	.4885	.4898
#2	.2671	27.07	25.96	24.71	.5153	.4650	180.5	.4870	.4865
#3	.2653	27.06	25.87	25.12	.5104	.4636	180.7	.4877	.4886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4866	1.910	.3924	.4519	.5352	.5149	1.893	.4831	.4961
Stddev	.0014	.009	.0014	.0006	.0018	.0017	.002	.0006	.0006
%RSD	.2826	.4994	.3673	.1392	.3277	.3311	.1070	.1273	.1295
#1	.4851	1.905	.3936	.4525	.5332	.5149	1.891	.4827	.4963
#2	.4871	1.921	.3908	.4520	.5366	.5166	1.895	.4838	.4966
#3	.4877	1.904	.3928	.4512	.5357	.5132	1.892	.4829	.4953
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33757-B4 Acquired: 5/17/2018 19:07:43 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1089.6	2933.0	22361.	1582.9
Stddev	2.4	8.8	101.	8.6
%RSD	.21980	.30168	.45077	.54150
#1	1087.0	2923.7	22376.	1588.2
#2	1091.7	2933.9	22254.	1587.6
#3	1090.1	2941.3	22454.	1573.0

Zoom In Zoom Out

Sample Name: MP33739-MB1 Acquired: 5/17/2018 19:11:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0040	-.0014	.0001	-.0001	.0056	-.0001	-.0002	.0000	-.0016
Stddev	.0002	.0156	.0005	.0002	.0001	.0040	.0000	.0001	.0004	.0001
%RSD	34.65	385.3	38.51	316.7	109.6	71.16	23.90	70.41	873.7	7.295
#1	-.0008	-.0139	-.0017	-.0001	.0000	.0053	-.0001	-.0003	-.0002	-.0015
#2	-.0008	.0133	-.0008	.0003	-.0002	.0018	-.0001	.0000	-.0001	-.0016
#3	-.0004	.0128	-.0017	.0000	.0000	.0097	-.0001	-.0003	.0005	-.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075	.0208	.0410	.0000	-.0002	.0148	-.0001	-.0004	.0003	.0023
Stddev	.0008	.0386	.0123	.0000	.0000	.0059	.0002	.0005	.0012	.0007
%RSD	10.43	185.3	30.01	59.75	22.65	39.78	141.9	124.2	345.4	30.62
#1	.0071	-.0012	.0304	.0000	-.0002	.0209	.0000	-.0003	.0002	.0019
#2	.0084	.0654	.0545	.0000	-.0001	.0141	-.0001	.0000	-.0008	.0031
#3	.0069	-.0018	.0381	.0000	-.0002	.0092	-.0003	-.0010	.0016	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0196	.0002	.0000	-.0002	.0013	.0000	.0017
Stddev	.0005	.0001	.000	.0000	.0007	.0003	.0000
%RSD	2.310	45.26	131.7	10.41	52.93	1354.	1.292
#1	.0193	.0002	-.0001	-.0002	.0005	.0003	.0016
#2	.0201	.0001	.0000	-.0002	.0017	.0000	.0017
#3	.0194	.0003	.0000	-.0002	.0017	-.0002	.0016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33739-MB1 Acquired: 5/17/2018 19:11:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1279.1	3156.9	24429.	1632.2
Stddev	2.4	10.4	116.	9.0
%RSD	.18919	.32958	.47331	.55188
#1	1278.3	3156.6	24300.	1635.6
#2	1277.2	3146.7	24524.	1639.0
#3	1281.8	3167.5	24463.	1622.0

Zoom In Zoom Out

Sample Name: MP33739-B1 Acquired: 5/17/2018 19:16:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0502	28.99	1.857	2.136	.0556	27.14	.0501	.5077	.2275	.2683
Stddev	.0007	.10	.004	.005	.0001	.07	.0002	.0011	.0006	.0006
%RSD	1.477	.3524	.2279	.2363	.2254	.2763	.3988	.2096	.2813	.2107
#1	.0506	28.89	1.859	2.139	.0555	27.05	.0502	.5081	.2281	.2678
#2	.0493	28.99	1.852	2.130	.0557	27.18	.0499	.5065	.2277	.2683
#3	.0506	29.09	1.860	2.139	.0557	27.18	.0502	.5084	.2268	.2689
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.69	25.07	24.92	.5141	.4686	26.47	.4923	.4906	.4827	1.845
Stddev	.09	.02	.16	.0022	.0008	.06	.0016	.0005	.0015	.005
%RSD	.3372	.0823	.6405	.4298	.1761	.2395	.3239	.0943	.3045	.2703
#1	26.59	25.06	24.78	.5151	.4680	26.40	.4925	.4903	.4836	1.851
#2	26.74	25.06	25.09	.5116	.4683	26.53	.4906	.4912	.4810	1.841
#3	26.75	25.09	24.91	.5157	.4696	26.47	.4938	.4905	.4834	1.843
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3565	.4578	.5444	.5177	1.931	.4852	.4967
Stddev	.0011	.0017	.0014	.0006	.005	.0010	.0010
%RSD	.3079	.3750	.2603	.1111	.2714	.2055	.2091
#1	.3559	.4587	.5431	.5183	1.926	.4861	.4976
#2	.3559	.4558	.5441	.5171	1.933	.4841	.4956
#3	.3578	.4589	.5459	.5178	1.936	.4852	.4970
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33739-B1 Acquired: 5/17/2018 19:16:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1145.4	3015.1	22997.	1588.2
Stddev	2.2	4.8	96.	4.4
%RSD	.19291	.16082	.41817	.27753
#1	1145.9	3009.5	22926.	1589.1
#2	1143.0	3018.3	23106.	1583.4
#3	1147.3	3017.4	22959.	1592.1

Zoom In Zoom Out

Sample Name: FA54204-1 Acquired: 5/17/2018 19:20:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.0648	-.0015	.0139	-.0001	288.4	-.0002	.0001	.0009
Stddev	.0004	.0068	.0014	.0003	.0001	1.3	.0000	.0002	.0002
%RSD	20.39	10.49	88.49	1.841	95.14	.4568	12.64	169.9	17.74
#1	-.0018	.0582	-.0003	.0142	-.0002	287.6	-.0002	.0000	.0007
#2	-.0014	.0644	-.0030	.0137	.0000	287.6	-.0001	.0003	.0010
#3	-.0021	.0718	-.0013	.0138	-.0002	289.9	-.0002	.0000	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0537	.1505	F255.2	F802.1	.0014	.0071	F1309.	.0100	.0008
Stddev	.0002	.0024	1.3	4.5	.0001	.0002	101.	.0004	.0014
%RSD	.4334	1.577	.4948	.5655	4.909	3.269	7.686	3.722	165.0
#1	.0538	.1524	254.8	799.3	.0014	.0072	1425.	.0104	-.0007
#2	.0534	.1478	254.2	799.6	.0013	.0073	1262.	.0098	.0015
#3	.0538	.1514	256.6	807.3	.0014	.0068	1241.	.0097	.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0041	.0043	2.905	-.0003	F6.561	.0018	-.0027	.0416	.0196
Stddev	.0011	.0028	.006	.0001	.013	.0000	.0017	.0007	.0001
%RSD	26.77	65.82	.2107	41.99	.1999	1.114	63.72	1.766	.4890
#1	.0053	.0047	2.912	-.0003	6.548	.0018	-.0028	.0408	.0196
#2	.0038	.0013	2.905	-.0002	6.574	.0018	-.0009	.0422	.0195
#3	.0032	.0068	2.900	-.0005	6.560	.0018	-.0043	.0419	.0196

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	703.55	2064.6	16151.	1461.6
Stddev	1.34	4.1	61.	12.6
%RSD	.19102	.19961	.37813	.86450
#1	702.29	2061.0	16188.	1461.3
#2	704.97	2063.8	16184.	1474.4
#3	703.39	2069.1	16080.	1449.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 19:24:26 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2428	42.23	1.887	2.045	2.072	41.77	1.952	1.965	2.084	2.089
Stddev	.0016	.15	.004	.018	.016	.22	.002	.002	.012	.002
%RSD	.6425	.3548	.2372	.9012	.7706	.5310	.1138	.0835	.5818	.0880
#1	.2437	42.30	1.885	2.045	2.077	41.92	1.953	1.966	2.091	2.091
#2	.2437	42.06	1.892	2.026	2.054	41.52	1.949	1.963	2.091	2.089
#3	.2410	42.33	1.883	2.063	2.085	41.88	1.952	1.965	2.070	2.087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.59	39.59	38.76	1.967	1.965	36.86	1.868	1.921	1.951	1.915
Stddev	.14	.25	.24	.015	.004	.37	.003	.004	.001	.003
%RSD	.3373	.6428	.6232	.7821	.1978	.9985	.1473	.2148	.0621	.1722
#1	40.71	39.64	38.85	1.972	1.961	36.58	1.871	1.923	1.952	1.913
#2	40.44	39.32	38.49	1.980	1.965	36.73	1.866	1.916	1.950	1.919
#3	40.62	39.83	38.96	1.950	1.969	37.28	1.866	1.924	1.952	1.912
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.498	1.840	2.131	2.047	1.949	1.971	1.888
Stddev	.003	.003	.010	.012	.002	.006	.002
%RSD	.1040	.1697	.4844	.5640	.0931	.2900	.0951
#1	2.499	1.843	2.138	2.050	1.949	1.975	1.890
#2	2.499	1.842	2.119	2.056	1.951	1.974	1.886
#3	2.495	1.837	2.136	2.034	1.948	1.964	1.887
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 19:24:26 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1128.4	3022.4	24031.	1741.5
Stddev	1.7	2.6	173.	19.9
%RSD	.14814	.08492	.71821	1.1404
#1	1128.2	3019.8	23991.	1729.9
#2	1130.2	3022.4	23881.	1764.5
#3	1126.9	3024.9	24220.	1730.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 19:28:24 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0111	.0001	-.0002	.0001	.0062	.0002	.0000	.0001
Stddev	.0005	.0084	.0006	.0004	.0001	.0035	.0000	.0001	.0003
%RSD	92.22	75.60	842.4	179.8	62.66	57.27	13.72	110.7	246.2
#1	-.0003	.0184	.0007	-.0003	.0001	.0033	.0002	.0000	.0004
#2	-.0002	.0131	-.0001	-.0005	.0003	.0101	.0001	.0000	.0001
#3	-.0011	.0019	-.0004	.0002	.0001	.0051	.0002	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0252	.0642	.0424	.0002	F.0032	.2376	.0001	-.0007
Stddev	.0001	.0075	.0104	.0251	.0000	.0010	.0014	.0002	.0004
%RSD	11.74	29.61	16.26	59.21	14.57	30.01	.5837	182.9	52.21
#1	-.0009	.0268	.0721	.0186	.0002	.0042	.2372	.0003	-.0003
#2	-.0011	.0318	.0524	.0399	.0003	.0032	.2365	.0001	-.0010
#3	-.0012	.0171	.0681	.0686	.0002	.0023	.2392	-.0001	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	F.0021	.0003	.0004	.0003	.0014	F.0021	.0001	.0003
Stddev	.0009	.0007	.0003	.0003	.0000	.0002	.0003	.0001	.0000
%RSD	83.34	31.62	99.14	64.38	11.83	10.97	13.66	37.40	13.97
#1	.0020	.0018	.0002	.0006	.0004	.0015	.0018	.0001	.0003
#2	.0008	.0028	.0000	.0006	.0003	.0014	.0024	.0002	.0003
#3	.0003	.0017	.0006	.0001	.0003	.0012	.0020	.0001	.0003
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.0020					.0020		
Low Limit		-.0020					-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 19:28:24 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1305.9	3174.7	25012.	1758.3
Stddev	1.1	6.1	115.	6.3
%RSD	.08073	.19083	.45967	.35824
#1	1307.1	3171.3	24992.	1753.5
#2	1305.4	3181.7	24908.	1755.9
#3	1305.1	3171.1	25135.	1765.4

Zoom In Zoom Out

Sample Name: MP33739-D1 Acquired: 5/17/2018 19:32:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0011	.0770	-.0017	.0145	.0000	290.1	-.0002	.0000	.0008
Stddev	.0009	.0107	.0010	.0004	.000	2.9	.0001	.0001	.0004
%RSD	84.92	13.91	62.86	2.928	1825.	1.017	29.64	738.7	45.77
#1	-.0020	.0684	-.0009	.0149	.0001	291.0	-.0001	.0000	.0005
#2	-.0010	.0735	-.0012	.0144	-.0001	292.5	-.0002	-.0001	.0008
#3	-.0002	.0890	-.0028	.0141	.0000	286.8	-.0002	.0001	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0549	.1518	F275.4	F807.9	.0014	.0078	F1158.	.0102	.0011
Stddev	.0001	.0068	2.2	7.9	.0001	.0001	104.	.0004	.0020
%RSD	.2247	4.468	.8143	.9820	9.533	1.023	8.966	3.688	185.8
#1	.0548	.1440	276.9	810.0	.0014	.0078	1261.	.0098	-.0011
#2	.0549	.1551	276.4	814.5	.0013	.0077	1159.	.0103	.0029
#3	.0551	.1563	272.8	799.1	.0016	.0078	1053.	.0106	.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0037	.0029	2.999	-.0002	F6.676	.0020	-.0035	.0421	.0195
Stddev	.0008	.0011	.008	.0005	.029	.0002	.0012	.0005	.0001
%RSD	20.87	37.48	.2779	250.1	.4279	8.042	34.85	1.188	.5625
#1	.0043	.0016	2.990	-.0007	6.679	.0021	-.0047	.0415	.0196
#2	.0028	.0037	3.006	.0002	6.703	.0019	-.0022	.0424	.0194
#3	.0040	.0034	3.000	-.0001	6.646	.0022	-.0038	.0423	.0195

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	692.75	2023.0	15955.	1464.2
Stddev	1.81	2.9	86.	23.7
%RSD	.26058	.14322	.53994	1.6163
#1	691.15	2022.8	16021.	1453.1
#2	692.39	2020.3	15986.	1448.1
#3	694.70	2026.0	15858.	1491.3

Zoom In Zoom Out

Sample Name: MP33739-SD1 Acquired: 5/17/2018 19:37:08 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.0607	-.0043	.0119	-.0002	303.8	-.0005	-.0007	.0052
Stddev	.0010	.0519	.0077	.0007	.0003	1.0	.0002	.0003	.0010
%RSD	57.16	85.39	180.3	5.972	135.6	.3373	30.52	46.71	18.65
#1	-.0018	.0626	-.0126	.0120	-.0001	303.1	-.0007	-.0005	.0058
#2	-.0028	.1116	-.0028	.0112	.0000	303.3	-.0005	-.0011	.0057
#3	-.0008	.0080	.0026	.0126	-.0006	305.0	-.0004	-.0006	.0041

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0511	.1466	280.2	819.8	.0021	.0045	F3569.	.0097	.0048
Stddev	.0016	.0045	.6	4.0	.0002	.0008	90.	.0005	.0046
%RSD	3.182	3.088	.2290	.4844	7.707	17.96	2.536	5.554	95.23
#1	.0528	.1490	280.9	816.5	.0020	.0038	3552.	.0098	.0094
#2	.0508	.1495	279.8	818.5	.0023	.0054	3666.	.0092	.0050
#3	.0496	.1414	279.9	824.2	.0020	.0043	3488.	.0103	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0026	2.706	-.0022	6.557	.0079	-.0052	.0432	.0214
Stddev	.0030	.0023	.005	.0018	.011	.0007	.0004	.0003	.0003
%RSD	133.8	88.45	.1787	81.61	.1744	8.564	7.909	.7235	1.466
#1	-.0004	.0007	2.702	-.0002	6.559	.0084	-.0049	.0436	.0217
#2	.0055	.0019	2.706	-.0029	6.545	.0071	-.0057	.0430	.0215
#3	.0017	.0052	2.711	-.0037	6.568	.0081	-.0051	.0431	.0211

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	935.74	2585.5	20108.	1648.7
Stddev	.83	2.7	77.	1.6
%RSD	.08835	.10587	.38448	.09962
#1	935.04	2582.9	20057.	1650.6
#2	935.52	2585.1	20197.	1648.0
#3	936.65	2588.3	20070.	1647.6

Zoom In Zoom Out

Sample Name: MP33739-PS1 Acquired: 5/17/2018 19:41:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0571	2.757	.1107	.2705	.0490	288.0	.0421	.0422	.0490
Stddev	.0009	.009	.0003	.0004	.0001	1.0	.0001	.0000	.0006
%RSD	1.661	.3291	.2349	.1376	.2815	.3510	.1640	.1152	1.306
#1	.0571	2.753	.1109	.2703	.0491	287.8	.0421	.0422	.0496
#2	.0581	2.768	.1104	.2709	.0488	287.1	.0422	.0422	.0491
#3	.0562	2.751	.1106	.2702	.0490	289.1	.0422	.0423	.0483

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1741	2.901	F283.5	F785.3	.0476	.0907	F1022.	.0892	.0446
Stddev	.0015	.016	.1	1.7	.0006	.0003	69.	.0003	.0015
%RSD	.8437	.5641	.0439	.2127	1.167	.2813	6.721	.3819	3.345
#1	.1724	2.920	283.6	785.9	.0481	.0905	1095.	.0888	.0436
#2	.1750	2.894	283.4	783.5	.0478	.0906	959.7	.0894	.0437
#3	.1748	2.890	283.5	786.6	.0470	.0910	1009.	.0893	.0463

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1130	.1094	2.852	.0362	F6.539	.0983	.0779	.0845	.2290
Stddev	.0019	.0034	.017	.0006	.010	.0007	.0010	.0005	.0011
%RSD	1.646	3.134	.5933	1.685	.1496	.7263	1.301	.6170	.4669
#1	.1143	.1133	2.866	.0356	6.550	.0984	.0770	.0849	.2278
#2	.1109	.1068	2.833	.0368	6.531	.0990	.0790	.0846	.2298
#3	.1138	.1081	2.857	.0364	6.535	.0975	.0778	.0839	.2294

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	701.27	2083.6	16319.	1471.3
Stddev	2.43	9.4	112.	9.0
%RSD	.34626	.44976	.68732	.60876
#1	700.19	2074.4	16262.	1463.6
#2	704.05	2093.1	16248.	1481.1
#3	699.58	2083.4	16449.	1469.2

Zoom In Zoom Out

Sample Name: MP33739-S1 Acquired: 5/17/2018 19:45:51 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0630	24.21	2.165	2.120	.0513	303.1	.0438	.4368	.2012
Stddev	.0003	.12	.005	.004	.0001	1.0	.0000	.0008	.0007
%RSD	.4936	.5056	.2538	.2112	.1364	.3322	.1115	.1910	.3529
#1	.0628	24.32	2.159	2.122	.0514	304.0	.0438	.4370	.2005
#2	.0634	24.08	2.168	2.115	.0513	302.0	.0438	.4358	.2019
#3	.0629	24.22	2.169	2.124	.0512	303.3	.0439	.4374	.2014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3577	19.93	F295.7	F793.6	.4667	.4407	F1015.	.4195	.4613
Stddev	.0010	.06	1.8	2.7	.0029	.0013	11.	.0010	.0020
%RSD	.2770	.2934	.6031	.3375	.6197	.2938	1.070	.2350	.4426
#1	.3566	19.96	296.9	791.1	.4637	.4394	1021.	.4186	.4612
#2	.3584	19.86	293.7	793.3	.4694	.4408	1021.	.4194	.4593
#3	.3582	19.96	296.6	796.4	.4670	.4419	1002.	.4205	.4634

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5625	2.188	3.218	.3795	F7.069	.4933	1.729	.4912	.4484
Stddev	.0037	.004	.009	.0011	.027	.0032	.012	.0022	.0020
%RSD	.6490	.1976	.2905	.3006	.3785	.6473	.6866	.4484	.4494
#1	.5584	2.183	3.208	.3807	7.092	.4897	1.718	.4887	.4488
#2	.5643	2.191	3.227	.3785	7.040	.4957	1.727	.4922	.4463
#3	.5650	2.191	3.218	.3792	7.076	.4946	1.741	.4927	.4503

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	698.71	2126.8	16537.	1502.1
Stddev	3.04	3.2	56.	5.7
%RSD	.43567	.15209	.33592	.37854
#1	701.45	2130.0	16601.	1495.6
#2	695.44	2123.5	16498.	1504.5
#3	699.24	2127.1	16513.	1506.2

Zoom In Zoom Out

Sample Name: MP33739-S2 Acquired: 5/17/2018 19:49:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0626	30.91	2.169	2.163	.0524	314.4	.0439	.4375	.2035
Stddev	.0004	.22	.006	.013	.0001	2.5	.0001	.0016	.0011
%RSD	.6816	.6956	.2858	.6051	.2719	.8012	.1941	.3597	.5496
#1	.0631	30.72	2.174	2.148	.0523	313.0	.0439	.4384	.2027
#2	.0625	30.87	2.170	2.170	.0523	313.0	.0439	.4384	.2030
#3	.0623	31.14	2.162	2.172	.0525	317.4	.0438	.4357	.2048

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3617	25.41	F309.5	F810.1	.4690	.4401	F1004.	.4204	.4656
Stddev	.0007	.17	1.9	7.6	.0029	.0013	32.	.0014	.0008
%RSD	.2026	.6829	.6236	.9439	.6214	.2904	3.211	.3354	.1677
#1	.3615	25.33	308.0	805.1	.4721	.4409	1040.	.4211	.4662
#2	.3611	25.29	308.8	806.3	.4687	.4409	977.0	.4212	.4648
#3	.3625	25.61	311.7	818.9	.4663	.4387	995.7	.4187	.4659

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5657	2.196	3.253	.3779	F7.215	.4949	1.736	.4933	.4477
Stddev	.0009	.005	.008	.0019	.035	.0023	.008	.0009	.0023
%RSD	.1666	.2371	.2323	.5126	.4879	.4558	.4379	.1846	.5102
#1	.5650	2.191	3.259	.3800	7.189	.4975	1.735	.4923	.4487
#2	.5668	2.195	3.254	.3775	7.201	.4939	1.744	.4941	.4493
#3	.5655	2.202	3.244	.3761	7.255	.4933	1.729	.4934	.4451

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	695.36	2122.9	16421.	1491.0
Stddev	2.57	7.5	47.	17.3
%RSD	.36922	.35533	.28673	1.1577
#1	693.92	2116.5	16373.	1495.3
#2	693.83	2121.0	16424.	1505.7
#3	698.32	2131.2	16467.	1472.0

Zoom In Zoom Out

Sample Name: FA54204-2 Acquired: 5/17/2018 19:54:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0010	.0574	-.0016	.0129	.0000	229.2	-.0001	.0000	.0008
Stddev	.0004	.0114	.0006	.0002	.000	1.0	.0001	.000	.0005
%RSD	46.40	19.93	34.76	1.932	961.2	.4203	55.33	72.13	59.71
#1	-.0008	.0561	-.0022	.0130	.0001	229.7	-.0001	.0000	.0003
#2	-.0006	.0467	-.0011	.0126	-.0002	229.8	-.0001	.0000	.0009
#3	-.0015	.0695	-.0015	.0131	.0000	228.1	-.0002	.0000	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1740	.1252	F223.6	F621.0	.0032	.0054	F962.6	.0088	-.0004
Stddev	.0006	.0037	1.7	1.7	.0001	.0003	42.0	.0001	.0008
%RSD	.3680	2.942	.7495	.2806	3.267	4.981	4.363	1.155	186.9
#1	.1735	.1222	224.8	622.1	.0032	.0057	1005.	.0087	-.0014
#2	.1747	.1241	224.2	621.9	.0033	.0051	921.3	.0088	.0000
#3	.1737	.1293	221.7	619.0	.0031	.0054	961.2	.0089	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0028	.0026	2.238	-.0007	F5.231	.0020	-.0023	.0488	.0238
Stddev	.0014	.0011	.005	.0004	.033	.0001	.0012	.0004	.0001
%RSD	50.76	41.14	.2444	58.06	.6236	5.942	51.39	.8853	.5556
#1	.0033	.0017	2.244	-.0002	5.237	.0021	-.0010	.0485	.0238
#2	.0012	.0038	2.233	-.0010	5.261	.0019	-.0034	.0493	.0239
#3	.0039	.0022	2.237	-.0009	5.197	.0019	-.0025	.0487	.0237

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	746.14	2184.1	16854.	1532.0
Stddev	2.26	7.7	68.	9.9
%RSD	.30263	.35408	.40409	.64765
#1	743.53	2175.4	16852.	1522.6
#2	747.37	2190.1	16788.	1531.0
#3	747.51	2186.7	16924.	1542.4

Zoom In Zoom Out

Sample Name: FA54204-3 Acquired: 5/17/2018 19:58:34 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0019	.1247	-.0010	.0130	-.0001	288.5	-.0001	.0001	.0012
Stddev	.0002	.0063	.0008	.0003	.0001	1.8	.0000	.0001	.0005
%RSD	8.243	5.063	78.18	2.524	85.84	.6158	26.43	102.3	43.48
#1	-.0018	.1236	-.0019	.0134	.0000	290.4	-.0001	.0002	.0017
#2	-.0018	.1315	-.0005	.0128	-.0001	286.8	-.0001	.0001	.0011
#3	-.0021	.1190	-.0006	.0128	-.0002	288.3	-.0001	.0000	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0676	.2342	F286.7	F790.6	.0037	.0070	F848.3	.0104	.0037
Stddev	.0006	.0042	1.7	3.8	.0002	.0002	24.4	.0001	.0009
%RSD	.8920	1.787	.5825	.4761	4.927	2.241	2.879	.8052	23.44
#1	.0678	.2369	288.6	793.6	.0035	.0071	859.0	.0104	.0044
#2	.0669	.2294	285.9	786.4	.0039	.0070	820.4	.0103	.0041
#3	.0681	.2363	285.5	792.0	.0036	.0068	865.6	.0105	.0027

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0014	3.133	-.0003	F6.648	.0028	-.0031	.0348	.0249
Stddev	.0016	.0040	.010	.0002	.027	.0001	.0009	.0005	.0001
%RSD	70.71	294.5	.3207	70.56	.4123	3.483	29.72	1.561	.6014
#1	.0005	-.0005	3.122	-.0001	6.679	.0029	-.0025	.0351	.0248
#2	.0028	-.0014	3.136	-.0004	6.637	.0028	-.0026	.0352	.0248
#3	.0035	.0060	3.142	-.0005	6.628	.0027	-.0041	.0342	.0250

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	702.91	2076.1	16253.	1506.7
Stddev	3.49	1.6	69.	11.5
%RSD	.49636	.07616	.42230	.76202
#1	706.23	2077.2	16294.	1495.1
#2	699.27	2074.3	16174.	1518.0
#3	703.24	2076.8	16292.	1507.1

Zoom In Zoom Out

Sample Name: FA54204-4 Acquired: 5/17/2018 20:02:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0017	.2681	-.0028	.0137	.0000	290.0	-.0002	.0003	.0020
Stddev	.0005	.0087	.0009	.0002	.000	.7	.0001	.0001	.0001
%RSD	28.23	3.255	32.37	1.790	688.4	.2549	37.40	44.15	4.854
#1	-.0019	.2592	-.0038	.0136	.0000	290.4	-.0001	.0003	.0020
#2	-.0022	.2766	-.0024	.0134	-.0002	289.1	-.0002	.0003	.0021
#3	-.0012	.2686	-.0021	.0139	.0001	290.4	-.0002	.0001	.0019

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0862	.4054	F292.9	F803.1	.0053	.0068	F857.5	.0157	.0062
Stddev	.0007	.0034	.6	1.7	.0001	.0001	16.0	.0002	.0008
%RSD	.8242	.8367	.1932	.2125	1.110	.9354	1.862	1.070	13.67
#1	.0861	.4087	293.5	804.6	.0052	.0068	859.8	.0159	.0063
#2	.0869	.4019	292.9	801.3	.0053	.0069	840.5	.0156	.0053
#3	.0855	.4056	292.4	803.4	.0052	.0068	872.2	.0157	.0070

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0046	3.458	-.0002	F6.813	.0061	-.0037	.0423	.0327
Stddev	.0008	.0028	.021	.0005	.014	.0001	.0014	.0004	.0001
%RSD	44.34	60.33	.5930	243.3	.2014	2.244	37.04	.8318	.3655
#1	.0013	.0071	3.478	-.0007	6.828	.0060	-.0053	.0419	.0326
#2	.0029	.0049	3.437	.0001	6.803	.0062	-.0032	.0425	.0328
#3	.0016	.0016	3.460	.0000	6.807	.0062	-.0027	.0426	.0326

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	691.51	2022.7	16163.	1503.9
Stddev	2.21	13.7	127.	5.4
%RSD	.31929	.67813	.78371	.35825
#1	689.13	2008.3	16166.	1498.7
#2	693.48	2035.6	16035.	1509.5
#3	691.93	2024.2	16288.	1503.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54204-5 Acquired: 5/17/2018 20:07:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.1865	-.0023	.0132	-.0001	289.0	-.0002	.0001	.0014
Stddev	.0004	.0041	.0006	.0001	.0001	.8	.0001	.0001	.0004
%RSD	23.02	2.218	25.85	1.127	107.7	.2930	34.11	140.4	26.70
#1	-.0013	.1893	-.0021	.0133	-.0001	289.9	-.0001	.0000	.0015
#2	-.0021	.1817	-.0029	.0130	-.0002	288.8	-.0002	.0001	.0010
#3	-.0020	.1884	-.0018	.0133	.0000	288.3	-.0001	.0001	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0799	.2914	F290.0	F803.8	.0044	.0069	F871.1	.0125	.0053
Stddev	.0006	.0055	1.5	.9	.0001	.0000	10.5	.0004	.0005
%RSD	.6961	1.893	.5323	.1107	1.290	.7011	1.211	3.582	9.300
#1	.0794	.2978	291.1	803.9	.0045	.0069	871.9	.0125	.0053
#2	.0798	.2886	288.2	804.7	.0044	.0068	860.1	.0120	.0048
#3	.0805	.2879	290.6	802.9	.0044	.0069	881.2	.0129	.0057

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0042	3.294	-.0003	F6.732	.0045	-.0038	.0360	.0286
Stddev	.0010	.0032	.006	.0007	.022	.0003	.0015	.0004	.0002
%RSD	44.96	75.50	.1933	224.6	.3322	7.572	39.38	1.010	.8681
#1	.0015	.0041	3.301	.0005	6.758	.0041	-.0054	.0359	.0284
#2	.0033	.0075	3.295	-.0005	6.717	.0045	-.0025	.0364	.0288
#3	.0017	.0011	3.288	-.0009	6.722	.0048	-.0034	.0357	.0287

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	695.75	2048.6	16123.	1502.3
Stddev	.97	3.8	22.	5.1
%RSD	.13947	.18666	.13447	.33816
#1	695.04	2045.0	16139.	1497.4
#2	695.36	2048.2	16098.	1501.9
#3	696.86	2052.6	16130.	1507.5

Zoom In Zoom Out

Sample Name: FA54204-6 Acquired: 5/17/2018 20:11:48 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0014	.0902	-.0025	.0125	-.0001	279.5	-.0001	.0002	.0011
Stddev	.0003	.0230	.0004	.0003	.0000	1.4	.0001	.0001	.0002
%RSD	21.29	25.49	16.67	2.176	45.86	.5081	65.87	76.03	20.01
#1	-.0017	.0999	-.0024	.0123	-.0001	280.5	-.0001	.0003	.0010
#2	-.0012	.0640	-.0022	.0125	.0000	280.1	-.0002	.0001	.0010
#3	-.0012	.1068	-.0030	.0128	-.0001	277.9	-.0001	.0000	.0014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0831	.2342	F281.7	F779.6	.0034	.0068	F881.0	.0094	.0070
Stddev	.0010	.0036	1.1	1.5	.0000	.0002	10.6	.0001	.0001
%RSD	1.194	1.526	.3951	.1987	1.026	2.709	1.207	1.184	1.313
#1	.0820	.2301	281.2	779.7	.0034	.0068	874.4	.0093	.0069
#2	.0832	.2362	280.9	781.1	.0034	.0071	893.3	.0095	.0069
#3	.0840	.2364	283.0	778.0	.0035	.0067	875.4	.0095	.0071

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0025	.0016	3.021	-.0004	F6.486	.0019	-.0018	.0355	.0249
Stddev	.0006	.0017	.007	.0001	.015	.0001	.0028	.0004	.0001
%RSD	23.42	104.2	.2245	33.58	.2373	7.182	155.8	1.085	.2035
#1	.0031	.0018	3.022	-.0005	6.470	.0018	-.0049	.0353	.0250
#2	.0023	-.0002	3.027	-.0003	6.487	.0020	-.0007	.0360	.0249
#3	.0020	.0033	3.014	-.0004	6.501	.0017	.0003	.0353	.0249

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	708.17	2074.2	16429.	1504.7
Stddev	1.29	3.7	100.	8.1
%RSD	.18271	.17810	.60768	.54108
#1	709.63	2073.1	16539.	1497.9
#2	707.73	2071.3	16345.	1502.4
#3	707.16	2078.4	16402.	1513.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:16:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2435	42.94	1.865	2.085	2.095	42.67	1.961	1.969	2.124
Stddev	.0018	.16	.002	.012	.009	.03	.004	.002	.002
%RSD	.7549	.3694	.0824	.5810	.4396	.0672	.2156	.0851	.0739
#1	.2456	42.78	1.864	2.073	2.085	42.65	1.956	1.967	2.123
#2	.2424	43.10	1.863	2.085	2.095	42.70	1.963	1.969	2.126
#3	.2425	42.95	1.866	2.097	2.104	42.65	1.964	1.970	2.124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.106	41.41	40.71	39.16	1.976	1.964	F35.01	1.855	1.938
Stddev	.008	.14	.15	.05	.012	.008	.40	.004	.002
%RSD	.3896	.3476	.3694	.1223	.6112	.4091	1.135	.2192	.1214
#1	2.115	41.28	40.54	39.14	1.990	1.954	34.55	1.851	1.936
#2	2.100	41.56	40.80	39.12	1.968	1.967	35.24	1.857	1.940
#3	2.102	41.40	40.80	39.21	1.970	1.969	35.24	1.858	1.938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							40.00		
Range							-10.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.934	1.894	2.473	1.813	2.171	2.064	1.959	1.980	1.898
Stddev	.002	.004	.002	.002	.003	.010	.003	.003	.006
%RSD	.0779	.2263	.0658	.1120	.1535	.4670	.1439	.1631	.3088
#1	1.935	1.889	2.471	1.811	2.168	2.075	1.958	1.983	1.892
#2	1.935	1.894	2.474	1.815	2.171	2.060	1.963	1.980	1.898
#3	1.932	1.898	2.474	1.814	2.174	2.058	1.957	1.976	1.904
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:16:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1123.6	3035.5	23843.	1714.9
Stddev	3.0	9.8	63.	6.5
%RSD	.26341	.32294	.26263	.37910
#1	1125.4	3046.6	23774.	1709.4
#2	1120.1	3028.2	23859.	1713.3
#3	1125.1	3031.5	23896.	1722.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 20:20:12 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0142	-.0013	.0000	.0000	.0040	-.0001	-.0001	.0005
Stddev	.0002	.0093	.0007	.0002	.000	.0029	.0000	.0001	.0003
%RSD	40.15	65.35	58.86	495.9	2960.	72.56	34.54	101.7	61.11
#1	-.0007	.0246	-.0013	.0002	.0001	.0050	.0000	.0000	.0007
#2	-.0003	.0108	-.0005	.0001	-.0001	.0007	-.0001	-.0002	.0001
#3	-.0004	.0071	-.0020	-.0002	.0000	.0064	-.0001	-.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0290	.1302	.0504	.0000	F.0029	.8274	-.0001	-.0007
Stddev	.0001	.0067	.0108	.0320	.0000	.0010	.0199	.0002	.0002
%RSD	39.06	23.13	8.335	63.55	195.1	35.36	2.410	343.2	35.62
#1	.0002	.0362	.1368	.0612	.0000	.0040	.8486	-.0001	-.0005
#2	.0003	.0277	.1176	.0756	.0000	.0028	.8245	-.0002	-.0006
#3	.0004	.0230	.1361	.0144	.0000	.0019	.8090	.0002	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0014	.0008	.0003	.0000	.0015	.0014	-.0003	.0000
Stddev	.0005	.0021	.0005	.0001	.0001	.0002	.0006	.0002	.000
%RSD	26.84	146.9	61.65	42.23	236.6	15.04	45.48	59.74	118.9
#1	.0013	.0038	.0003	.0002	.0000	.0017	.0017	-.0002	-.0001
#2	.0019	.0006	.0007	.0004	.0001	.0016	.0006	-.0004	.0000
#3	.0022	-.0001	.0013	.0003	.0000	.0013	.0018	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 20:20:12 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1271.6	3126.2	24393.	1667.6
Stddev	1.5	10.1	91.	16.7
%RSD	.11606	.32342	.37261	1.0013
#1	1269.9	3114.8	24448.	1654.9
#2	1272.4	3129.5	24288.	1661.4
#3	1272.5	3134.2	24444.	1686.5

Zoom In Zoom Out

Sample Name: FA54204-7 Acquired: 5/17/2018 20:24:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0012	.0557	-.0016	.0142	.0000	294.3	-.0001	-.0001	.0006
Stddev	.0003	.0184	.0005	.0003	.0001	2.1	.0001	.0003	.0006
%RSD	23.38	33.01	29.69	2.004	1874.	.7246	60.14	450.4	94.37
#1	-.0009	.0723	-.0014	.0139	-.0001	293.1	-.0002	.0000	.0007
#2	-.0014	.0588	-.0012	.0143	.0001	292.9	.0000	-.0004	.0000
#3	-.0011	.0359	-.0021	.0145	.0000	296.7	-.0002	.0002	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0449	.0942	F291.8	F803.6	.0010	.0072	F1123.	.0074	.0007
Stddev	.0007	.0061	2.0	6.8	.0000	.0002	48.	.0001	.0006
%RSD	1.645	6.510	.6984	.8476	.8680	3.180	4.280	1.866	84.30
#1	.0441	.0965	289.5	799.2	.0010	.0074	1177.	.0074	.0008
#2	.0452	.0988	292.4	800.1	.0011	.0073	1086.	.0076	.0001
#3	.0455	.0872	293.4	811.4	.0010	.0070	1105.	.0073	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0014	.0040	2.920	-.0006	F6.736	.0013	-.0023	.0352	.0156
Stddev	.0006	.0009	.014	.0003	.056	.0002	.0012	.0003	.0001
%RSD	40.69	21.12	.4662	47.32	.8297	16.14	53.67	.9497	.3315
#1	.0019	.0047	2.906	-.0003	6.677	.0015	-.0036	.0351	.0156
#2	.0016	.0031	2.933	-.0005	6.742	.0013	-.0023	.0356	.0157
#3	.0008	.0043	2.921	-.0008	6.788	.0011	-.0011	.0350	.0156

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	694.05	2046.4	15911.	1446.9
Stddev	.47	5.6	44.	14.5
%RSD	.06827	.27415	.27451	1.0019
#1	694.06	2048.9	15962.	1440.2
#2	694.53	2039.9	15887.	1463.5
#3	693.58	2050.3	15885.	1437.0

Zoom In Zoom Out

Sample Name: FA54204-8 Acquired: 5/17/2018 20:28:58 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.0127	-.0021	.0146	-.0002	299.7	-.0001	-.0003	.0005
Stddev	.0003	.0198	.0004	.0001	.0001	.8	.0001	.0001	.0003
%RSD	15.33	155.8	18.41	.8873	72.21	.2706	53.96	41.13	69.72
#1	-.0021	.0038	-.0026	.0145	-.0001	300.1	-.0002	-.0004	.0008
#2	-.0016	-.0010	-.0021	.0146	-.0003	298.7	.0000	-.0003	.0002
#3	-.0017	.0354	-.0018	.0148	-.0001	300.1	-.0001	-.0002	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0022	.0256	F309.8	F844.4	.0019	.0071	F934.8	.0004	-.0003
Stddev	.0004	.0030	.2	.9	.0000	.0004	83.5	.0005	.0001
%RSD	18.93	11.61	.0696	.1063	1.584	5.192	8.931	129.1	22.46
#1	.0019	.0270	309.8	843.5	.0019	.0073	1031.	.0005	-.0004
#2	.0021	.0222	310.1	845.3	.0019	.0067	895.5	.0009	-.0004
#3	.0027	.0276	309.7	844.5	.0019	.0074	878.1	-.0002	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0026	.0032	3.607	-.0006	F7.688	-.0007	-.0035	.0028	.0127
Stddev	.0010	.0009	.007	.0004	.017	.0001	.0011	.0001	.0000
%RSD	38.84	27.35	.2063	59.42	.2161	15.95	30.98	3.140	.2523
#1	.0034	.0034	3.613	-.0011	7.699	-.0008	-.0022	.0029	.0127
#2	.0029	.0022	3.610	-.0005	7.669	-.0006	-.0042	.0027	.0127
#3	.0015	.0039	3.599	-.0004	7.696	-.0007	-.0039	.0027	.0127

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	680.57	1996.2	15913.	1476.6
Stddev	4.63	7.8	41.	5.4
%RSD	.68071	.39142	.25557	.36641
#1	675.41	1990.1	15959.	1471.5
#2	681.92	1993.4	15881.	1476.0
#3	684.37	2005.0	15899.	1482.2

Zoom In Zoom Out

Sample Name: FA54204-9 Acquired: 5/17/2018 20:33:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0016	.0083	.0021	.0149	-.0001	262.2	-.0002	-.0001	.0015
Stddev	.0008	.0123	.0013	.0003	.0000	1.0	.0001	.0001	.0004
%RSD	49.90	149.2	60.87	2.128	5.703	.3751	36.93	111.9	23.94
#1	-.0026	-.0043	.0007	.0146	-.0001	261.4	-.0002	-.0001	.0016
#2	-.0011	.0203	.0031	.0152	-.0001	263.3	-.0001	.0000	.0018
#3	-.0012	.0088	.0025	.0148	-.0001	262.0	-.0002	-.0001	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0009	.0712	F265.9	F725.7	.0043	.0081	F898.6	.0053	.0026
Stddev	.0000	.0053	2.5	5.1	.0001	.0001	26.4	.0003	.0007
%RSD	3.304	7.476	.9527	.7090	1.418	1.116	2.940	6.184	28.45
#1	-.0009	.0659	266.1	720.1	.0044	.0081	915.0	.0050	.0027
#2	-.0009	.0766	268.3	730.2	.0044	.0080	912.7	.0052	.0033
#3	-.0009	.0710	263.2	726.9	.0043	.0082	868.1	.0057	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0044	.0040	2.949	-.0003	F7.281	.0001	-.0035	.0021	.0936
Stddev	.0012	.0028	.013	.0002	.061	.0002	.0006	.0005	.0004
%RSD	26.21	71.05	.4491	64.42	.8371	177.8	17.35	22.51	.4300
#1	.0049	.0017	2.940	-.0003	7.314	.0002	-.0042	.0020	.0937
#2	.0052	.0071	2.943	-.0001	7.318	-.0001	-.0030	.0017	.0940
#3	.0031	.0030	2.964	-.0005	7.210	.0002	-.0033	.0026	.0932

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	714.46	2086.7	16348.	1505.5
Stddev	1.50	4.2	41.	16.6
%RSD	.20930	.20073	.25111	1.1012
#1	714.27	2087.7	16395.	1523.6
#2	713.07	2090.4	16329.	1501.8
#3	716.04	2082.2	16320.	1491.0

Zoom In Zoom Out

Sample Name: FA54204-10 Acquired: 5/17/2018 20:37:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.1639	.0075	.0326	-.0001	67.38	-.0001	.0005	.0019
Stddev	.0002	.0118	.0009	.0002	.0000	.38	.0000	.0001	.0008
%RSD	58.76	7.206	12.53	.5233	56.89	.5710	33.58	28.20	43.99
#1	.0001	.1705	.0065	.0327	.0000	67.07	-.0001	.0004	.0027
#2	.0004	.1708	.0082	.0327	.0000	67.81	-.0001	.0004	.0010
#3	.0004	.1502	.0080	.0324	-.0001	67.25	-.0001	.0006	.0021

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0051	.2060	28.69	54.82	.0412	.0118	F390.2	.0181	.0012
Stddev	.0004	.0032	.17	.15	.0004	.0001	18.8	.0003	.0006
%RSD	7.406	1.530	.5804	.2734	.9035	.5979	4.819	1.474	47.97
#1	.0053	.2079	28.66	54.70	.0416	.0118	368.8	.0184	.0006
#2	.0053	.2078	28.87	54.99	.0411	.0117	398.0	.0178	.0018
#3	.0047	.2024	28.54	54.78	.0409	.0117	403.9	.0180	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0675	.0026	2.201	.0003	.4760	.0020	-.0018	.1228	.0404
Stddev	.0010	.0016	.002	.0004	.0027	.0002	.0006	.0004	.0001
%RSD	1.436	61.73	.1083	138.7	.5773	11.98	35.48	.2939	.2653
#1	.0664	.0035	2.203	-.0001	.4771	.0022	-.0024	.1232	.0402
#2	.0678	.0035	2.201	.0007	.4780	.0021	-.0017	.1225	.0404
#3	.0682	.0007	2.198	.0003	.4728	.0017	-.0012	.1227	.0404

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1000.2	2745.5	21077.	1600.3
Stddev	1.5	5.4	160.	5.7
%RSD	.15041	.19613	.76089	.35735
#1	1000.7	2739.7	20935.	1602.9
#2	998.46	2746.4	21044.	1593.7
#3	1001.3	2750.4	21251.	1604.2

Zoom In Zoom Out

Sample Name: FA54150-4 Acquired: 5/17/2018 20:42:14 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.1737	.0001	.1481	.0000	178.7	.0000	.0007	.0321
Stddev	.0004	.0150	.0002	.0007	.000	1.3	.0000	.0001	.0003
%RSD	81.47	8.639	159.8	.4538	136.6	.7060	214.9	17.97	1.060
#1	-.0007	.1896	.0003	.1484	.0000	178.0	.0000	.0008	.0324
#2	-.0007	.1715	-.0001	.1487	.0000	180.2	.0000	.0006	.0322
#3	.0000	.1598	.0001	.1474	.0000	178.0	.0000	.0009	.0317

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0041	.0826	14.19	28.75	.0725	.0190	F127.9	.0020	.0010
Stddev	.0003	.0020	.07	.25	.0003	.0001	2.6	.0003	.0004
%RSD	8.146	2.421	.5180	.8584	.4638	.5507	2.066	12.26	35.40
#1	.0045	.0823	14.15	28.79	.0724	.0190	125.0	.0020	.0012
#2	.0039	.0808	14.27	28.98	.0729	.0189	130.2	.0023	.0006
#3	.0038	.0847	14.15	28.49	.0723	.0191	128.5	.0018	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0020	.0048	8.292	.0000	1.701	.0026	-.0006	.0098	.0216
Stddev	.0002	.0002	.002	.0002	.010	.0001	.0004	.0000	.0002
%RSD	9.024	4.332	.0208	843.0	.5704	4.909	75.90	.2805	.9188
#1	.0019	.0049	8.290	.0002	1.695	.0026	-.0011	.0098	.0215
#2	.0019	.0046	8.292	-.0001	1.713	.0028	-.0004	.0098	.0215
#3	.0022	.0049	8.294	.0000	1.697	.0025	-.0003	.0097	.0219

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1074.0	2816.1	21874.	1619.5
Stddev	2.2	3.4	70.	18.8
%RSD	.20927	.11898	.31825	1.1620
#1	1071.4	2812.3	21873.	1624.2
#2	1075.7	2818.2	21805.	1598.8
#3	1074.9	2818.0	21944.	1635.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 20:46:30 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0087	.2137	.0089	.2143	.0055	1.125	.0051	.0520	.0114	.0262
Stddev	.0004	.0014	.0005	.0010	.0001	.010	.0000	.0002	.0002	.0003
%RSD	4.430	.6316	5.299	.4773	2.697	.9110	.2094	.4611	1.444	1.167
#1	.0088	.2126	.0092	.2131	.0054	1.121	.0051	.0518	.0113	.0259
#2	.0083	.2152	.0091	.2147	.0053	1.118	.0051	.0522	.0115	.0263
#3	.0091	.2134	.0084	.2150	.0056	1.137	.0051	.0522	.0112	.0264

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3189	10.47	5.116	.0154	.0472	10.17	.0399	.0045	.0050	.0107
Stddev	.0029	.09	.032	.0001	.0001	.05	.0003	.0006	.0006	.0023
%RSD	.9163	.8667	.6264	.6516	.1344	.4748	.7060	14.21	12.41	21.90
#1	.3172	10.37	5.079	.0154	.0473	10.13	.0398	.0053	.0056	.0100
#2	.3173	10.49	5.136	.0154	.0472	10.15	.0397	.0043	.0044	.0133
#3	.3223	10.55	5.134	.0153	.0472	10.22	.0402	.0040	.0052	.0088

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0324	.0484	.0109	.0098	.0104	.0483	.0203
Stddev	.0003	.0003	.0000	.0001	.0016	.0002	.0002
%RSD	1.077	.5657	.3928	.7702	15.06	.4389	.7516
#1	.0326	.0487	.0109	.0097	.0105	.0484	.0204
#2	.0326	.0481	.0108	.0099	.0088	.0480	.0202
#3	.0320	.0485	.0109	.0098	.0119	.0484	.0202

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1226.9	3068.2	23969.	1660.8
Stddev	3.9	4.0	86.	22.8
%RSD	.31724	.13032	.35954	1.3710
#1	1223.8	3072.6	23979.	1670.6
#2	1231.3	3067.3	23877.	1677.0
#3	1225.6	3064.7	24049.	1634.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 20:50:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0005	F552.6	.0015	.0005	-.0002	495.9	-.0004	-.0002
Stddev	.0005	3.1	.0016	.0002	.0001	3.4	.0002	.0001
%RSD	113.3	.5624	105.7	34.70	55.84	.6783	49.78	23.75
#1	.0001	555.5	.0008	.0004	-.0003	498.9	-.0006	-.0003
#2	-.0010	553.1	.0004	.0005	-.0001	496.6	-.0003	-.0002
#3	-.0005	549.3	.0034	.0007	-.0002	492.3	-.0003	-.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	-.0004	-.0014	183.5	.2308	F505.1	-.0001	.0005	1.485
Stddev	.0002	.0003	1.0	.0175	2.7	.0000	.0001	.032
%RSD	57.07	20.68	.5292	7.589	.5272	46.60	22.11	2.172
#1	-.0002	-.0017	184.2	.2476	507.6	-.0001	.0006	1.454
#2	-.0006	-.0011	183.9	.2127	505.5	.0000	.0005	1.485
#3	-.0004	-.0014	182.4	.2322	502.3	-.0001	.0004	1.518

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0007	F-.0301	.0049	.0071	.0182	.0007	-.0003	.0006
Stddev	.0003	.0019	.0029	.0024	.0012	.0007	.0001	.0001
%RSD	48.73	6.398	59.57	34.47	6.630	91.85	20.83	13.42
#1	.0010	-.0306	.0080	.0091	.0172	.0014	-.0003	.0005
#2	.0005	-.0318	.0023	.0044	.0195	.0001	-.0003	.0007
#3	.0004	-.0280	.0043	.0078	.0180	.0007	-.0002	.0006

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	-.0002	-.0018
Stddev	.0035	.0002	.0001
%RSD	472.3	84.84	6.845
#1	.0005	-.0002	-.0018
#2	.0019	.0000	-.0020
#3	-.0046	-.0004	-.0018

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 20:50:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	963.27	2709.4	21178.	1617.3
Stddev	1.68	1.8	76.	13.3
%RSD	.17471	.06758	.35931	.82399
#1	961.37	2707.4	21101.	1603.9
#2	964.59	2710.9	21180.	1617.5
#3	963.84	2710.0	21253.	1630.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2018 20:55:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.031	F555.6	1.040	.5398	.5259	498.6	.9211	.4719	.5152
Stddev	.002	3.4	.003	.0029	.0044	4.1	.0022	.0010	.0036
%RSD	.1495	.6065	.2802	.5318	.8401	.8171	.2351	.2179	.6985
#1	1.032	556.2	1.039	.5386	.5267	498.9	.9230	.4718	.5130
#2	1.029	552.0	1.038	.5377	.5212	494.5	.9188	.4709	.5133
#3	1.030	558.6	1.043	.5431	.5299	502.6	.9217	.4730	.5194

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5734	187.9	.1900	F512.3	.4884	.8819	1.297	.8994	.9178
Stddev	.0026	1.4	.0244	4.3	.0014	.0014	.020	.0012	.0034
%RSD	.4525	.7396	12.83	.8302	.2882	.1628	1.519	.1284	.3752
#1	.5764	187.7	.1965	511.7	.4883	.8827	1.316	.9004	.9207
#2	.5716	186.7	.2105	508.4	.4871	.8802	1.277	.8981	.9187
#3	.5723	189.4	.1630	516.9	.4899	.8828	1.297	.8995	.9140

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.007	.9494	.0215	.8481	1.081	.9882	.9314	.4682	.8939
Stddev	.001	.0061	.0004	.0013	.007	.0038	.0028	.0010	.0026
%RSD	.0998	.6409	1.995	.1540	.6455	.3879	.2956	.2144	.2948
#1	1.007	.9541	.0212	.8491	1.081	.9910	.9335	.4680	.8963
#2	1.008	.9425	.0220	.8466	1.073	.9839	.9324	.4673	.8911
#3	1.006	.9515	.0214	.8486	1.087	.9898	.9283	.4693	.8943

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	946.85	2698.6	21141.	1594.5
Stddev	.82	6.5	69.	16.2
%RSD	.08695	.23959	.32415	1.0134
#1	946.15	2692.6	21164.	1597.6
#2	946.64	2705.4	21195.	1608.8
#3	947.76	2697.9	21064.	1577.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:59:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2485	42.79	1.912	2.077	2.093	42.67	1.990	2.000	2.133	2.132
Stddev	.0003	.16	.000	.012	.011	.15	.001	.002	.006	.006
%RSD	.1254	.3730	.0167	.5968	.5441	.3594	.0523	.0832	.2798	.2753
#1	.2482	42.62	1.912	2.064	2.081	42.50	1.991	2.001	2.139	2.137
#2	.2488	42.83	1.913	2.077	2.094	42.70	1.989	1.998	2.130	2.126
#3	.2484	42.93	1.913	2.089	2.104	42.80	1.989	2.001	2.128	2.134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.74	40.86	39.47	2.014	2.003	39.93	1.907	1.964	1.978	1.943
Stddev	.15	.17	.28	.001	.002	.11	.002	.006	.003	.002
%RSD	.3481	.4218	.7130	.0508	.0883	.2760	.1205	.3099	.1301	.1027
#1	41.64	40.69	39.15	2.015	2.001	39.82	1.910	1.960	1.975	1.945
#2	41.68	40.86	39.61	2.014	2.003	39.91	1.905	1.961	1.981	1.943
#3	41.91	41.03	39.66	2.013	2.005	40.04	1.907	1.971	1.978	1.941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.529	1.878	2.173	2.094	1.991	2.015	1.935
Stddev	.001	.004	.008	.002	.002	.003	.003
%RSD	.0279	.1856	.3826	.1113	.0925	.1513	.1339
#1	2.529	1.882	2.166	2.096	1.992	2.015	1.938
#2	2.530	1.875	2.171	2.093	1.989	2.017	1.933
#3	2.528	1.877	2.182	2.091	1.991	2.011	1.935
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:59:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1105.8	2974.2	23471.	1670.5
Stddev	1.5	4.4	82.	3.0
%RSD	.14010	.14800	.35072	.18256
#1	1106.3	2969.3	23379.	1673.9
#2	1107.0	2975.4	23498.	1669.7
#3	1104.0	2977.8	23537.	1667.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 21:02:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0165	-.0005	-.0001	.0001	.0162	.0000	.0000
Stddev	.0003	.0070	.0006	.0001	.0000	.0068	.000	.000
%RSD	44.45	42.40	123.1	110.0	43.82	42.32	66.45	225.2
#1	-.0006	.0160	.0002	.0000	.0001	.0230	.0000	.0000
#2	-.0005	.0098	-.0006	.0000	.0002	.0093	.0000	.0000
#3	-.0011	.0238	-.0009	-.0001	.0001	.0162	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0004	.0458	.0311	.0210	.0001	F.0031	.3191
Stddev	.0003	.0002	.0097	.0203	.0253	.0000	.0010	.0050
%RSD	69.62	42.40	21.14	65.30	120.3	26.80	31.64	1.553
#1	.0009	.0006	.0547	.0219	.0493	.0001	.0040	.3242
#2	.0002	.0003	.0472	.0544	.0007	.0001	.0030	.3143
#3	.0004	.0004	.0355	.0170	.0130	.0001	.0021	.3188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F-.0012	.0013	.0007	.0010	.0004	.0003	.0015
Stddev	.000	.0004	.0007	.0011	.0001	.0002	.0000	.0002
%RSD	138.8	36.80	56.55	160.9	14.38	52.79	15.46	16.43
#1	-.0001	-.0012	.0021	.0017	.0012	.0006	.0004	.0017
#2	-.0001	-.0016	.0011	-.0005	.0009	.0004	.0003	.0015
#3	.0000	-.0007	.0007	.0008	.0009	.0002	.0003	.0012
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 21:02:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0012	.0001	-.0001
Stddev	.0005	.0001	.0001
%RSD	46.46	224.3	77.35
#1	.0016	.0002	.0000
#2	.0013	-.0001	-.0001
#3	.0006	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1270.1	3087.0	24405.	1652.0
Stddev	3.2	7.7	89.	22.1
%RSD	.25076	.24796	.36414	1.3359
#1	1268.9	3082.5	24447.	1642.2
#2	1267.7	3095.9	24466.	1636.6
#3	1273.7	3082.7	24303.	1677.3

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	V	-0.009834	0.000000	No
			Fe	0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.035224	0.000000	No
As 189.042 {478}	☒	5	Fe	-0.000108	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000003	0.000000	No
Be 313.042 {108}	☒	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000110	0.000000	No
			Ca	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Ti	0.000000	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000008	0.000000	No
Cr 267.716 {126}	☒	3	Al	0.000007	0.000000	No
			Fe	-0.000017	0.000000	No
			Ca	0.000004	0.000000	No
Cu 324.754 {104}	☒	10	Fe	-0.000144	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000006	0.000000	No
			Mg	0.000005	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000015	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000026	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	☒	9	Al	0.000292	0.000000	No
			Fe	-0.000093	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000016	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000002	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000018	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000033	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000058	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000008	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000008	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000016	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000024	0.000000	No
			As	0.001128	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000147	0.604393	0.000000	1.000000
Al 396.152 { 85}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.005795	0.184722	0.000000	1.000000
As 189.042 {478}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000799	0.227780	0.000000	1.000000
Ba 455.403 { 74}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.055079	12.983623	0.000000	1.000000
Be 313.042 {108}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000563	9.319704	0.000000	1.000000
Ca 317.933 {106}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.009238	0.283971	0.000000	1.000000
Cd 226.502 {449}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000041	5.098499	0.000000	1.000000
Co 228.616 {447}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000395	2.550486	0.000000	1.000000
Cr 267.716 {126}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000236	0.464133	0.000000	1.000000
Cu 324.754 {104}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002750	0.860648	0.000000	1.000000
Fe 259.940 {130}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.003063	0.228356	0.000000	1.000000
In 230.606 {446}*	5/17/2018 9:54:41	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.002601	0.331886	0.000000	1.000000
Mg 279.079 {121}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.001469	0.030205	0.000000	1.000000
Mn 257.610 {131}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000298	2.662660	0.000000	1.000000
Mo 202.030 {467}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.001656	1.336353	0.000000	1.000000
Na 589.592 { 57}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.020229	0.916647	0.000000	1.000000
Ni 231.604 {445}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000125	1.454289	0.000000	1.000000
Pb 220.353 {453}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002265	1.311182	0.000000	1.000000
Sb 206.833 {463}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000093	0.276434	0.000000	1.000000
Se 196.090 {472}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000661	0.164017	0.000000	1.000000
Si 212.412 {459}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.004325	0.489271	0.000000	1.000000
Sn 189.989 {477}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000518	0.512949	0.000000	1.000000
Sr 407.771 { 83}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000803	20.045498	0.000000	1.000000
Ti 334.941 {101}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002144	2.130722	0.000000	1.000000
Tl 190.856 {477}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.003439	0.674963	0.000000	1.000000
V 292.402 {115}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000176	0.730827	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002437	3.015344	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999812	0.000109	0.000525	0.001751	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999984	0.001662	0.015793	0.052643	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999899	0.000260	0.000942	0.003141	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999990	0.004564	0.000317	0.001057	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999989	0.003573	0.000139	0.000462	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999991	0.001982	0.005364	0.017880	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999986	0.002187	0.000061	0.000204	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999990	0.000928	0.000132	0.000440	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999992	0.000153	0.000391	0.001303	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999971	0.000522	0.000328	0.001093	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999905	0.005067	0.003868	0.012893	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999919	0.006825	0.025731	0.085771	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999977	0.000333	0.034685	0.115616	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999996	0.000626	0.000059	0.000196	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999901	0.001516	0.000159	0.000530	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999979	0.009603	0.008501	0.028336	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999986	0.000612	0.000226	0.000755	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999906	0.001452	0.000675	0.002249	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999925	0.000271	0.001212	0.004042	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999944	0.000139	0.001959	0.006531	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.983584	0.007368	0.000485	0.001617	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999960	0.000371	0.000354	0.001179	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999916	0.020976	0.000124	0.000412	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999916	0.002223	0.000137	0.000458	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999987	0.000270	0.000891	0.002969	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999926	0.000709	0.000329	0.001097	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999982	0.001478	0.000078	0.000258	OK.	1.000000	0.000000	1	0

MS
DOD

SGS Accutest - Orlando **Metals Digestion Log Water**

Method of digestion(circle one): (SW846-3010A) / SW846-3005A / EPA 200.7 / EPA 200.8 / SM3030C

MP #: 33699

Prep Date/Time (mm/dd/yy 24:00): 05/05/18 0740.

HotBlock I.D. 9

Thermometer I.D. 6071

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 92 / 91

pH paper lot# 230315

Added [B]:

Lot#

	Volume	
Spk. Sol. [A]	Used(ml)	Pipette #
ACC 1074	0.05	MU 45274
ACC 1051	0.2	METALS#19
MET 5963	1.0	METALS#19

Dig. Tube Lot#: MP3088

	HNO_3	HCL
Lot#	0000187388	0000189306

Sample #		Initial Volume(ml)	pH<2	Final Volume(ml)	Comments
Method Blank(MB)		50.0	N/A	50.0	
Spike Blank(SB)			N/A		
Matrix Spike(MS)			✓		
Matrix Spike Dup(MSD)			✓		
Duplicate(DUP)			✓		
1 QC [C] FA53625-18F	[D] 19		✓		
2 -10F	10		✓		
3 -11F			✓		
4 -12F			✓		
5 -13F			✓		
6 -14F			✓		
7 -15F			✓		
8 -16F			✓		
9 -17F			✓		
10 -24F	↓		✓		
11 S3 FA53627-1	1		✓		MS3
12 S4			✓		MSD
13 DL			✓		DUP
14 QC			✓		
15 FA53627-2			✓		
16 -3			✓		
17 FA53801-22			✓		
18 FA53896-13			✓		
19 -14	↓	↓	✓	↓	
20					
21 [E] 05-05-18 19					
22 [E]					
23 [E]					
24 [E]					

Analyst: Date: 05-05-18

QC Review: Date: 5.9.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 103, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional matrix QC

5g dry sieve DOD (MS)

SGS Accutest - Orlando Metals Digestion Log Soil

MP #: 33746 Method of Digestion: SW846-3050B

		Spk. Sol. [A]	Volume Used(ml)	Pipette #
Prep Date/Time (mm/dd/yy 24:00):	05/16/18 08:00	ACC18062	1.0	19
HotBlock I.D.	9	ACC18051	0.5	19
Thermometer I.D.	213	MET6015	0.5	19
Correction Factor (°C)	-1			
Temperature Observed/Corrected (°C)	94 / 93	Filter Lot#:	170112102	
Balance I.D.	ADVPRO3	Dig. Tube Lot#	MP3988	

Added [B]:	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	177290	000018738B	000018 9306	23430173

Sample #		Wt., g	Final Volume(ml)	Comments
Method Blank(MB)		5.0	100.0	① 5x reagents used
Spike Blank(SB)		↓	↓	↓
Matrix Spike(MS)		5.03		
Matrix Spike Dup(MSD)		5.02		
Duplicate(DUP)		5.08		
1 QC[C] D2-FA53725-34	1	5.02		
2 QC[C] FA53725-34 -68	1	5.00		
3 ↓ -68	1	5.01		
4 FA53801 -7		5.06		
5 -10		5.01		
6 -13		5.02		
7 -16		5.03		
8 -19		5.01		
9 ↓ -23	↓	5.00		
10 FA53896 -1	2	5.05		
11 ↓ -4	2	5.02	↓	↓
12				
13				
14				
15				
16				
17		JC		
18			05/16/18	
19				
20				
21 [E]				
22 [E]				
23 [E]				
24 [E]				

Analyst: [signature] Date: 05-16-18

QC Review: [signature] Date: 5.17.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

* JC 05/16/18

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kemron Environmental Services, Inc

Ft Ord; CA

07202.2001

SGS Job Number: FA53896

Sampling Date: 04/30/18

Report to:

Kemron Environmental Services, Inc
4522 Joe Lloyd Way
Monterey, CA 93944
EDawson@GilbaneCo.com; TBeer@GilbaneCo.com

ATTN: Evenlyn Dawson

Total number of pages in report: 644

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **6**
Section 4: Sample Results **7**
4.1: FA53896-1: 25-04SC0000 8
4.2: FA53896-1A: 25-04SC0000 9
4.3: FA53896-4: 25-05SC0000 10
4.4: FA53896-4A: 25-05SC0000 11
4.5: FA53896-7: 28-04SC0000 12
4.6: FA53896-10: 28-06SC0000 13
4.7: FA53896-13: 28-ER02SC 14
4.8: FA53896-14: 28-ER03SC 16
Section 5: Misc. Forms **18**
5.1: Chain of Custody 19
5.2: QC Evaluation: DOD QSM5 Limits 22
Section 6: GC/LC Semi-volatiles - QC Data Summaries **23**
6.1: Method Blank Summary 24
6.2: Blank Spike Summary 29
6.3: Laboratory Control Sample Summary 31
6.4: Matrix Spike/Matrix Spike Duplicate Summary 32
6.5: Surrogate Recovery Summaries 33
6.6: GC Surrogate Retention Time Summaries 35
6.7: Initial and Continuing Calibration Summaries 38
Section 7: GC/LC Semi-volatiles - Raw Data **56**
7.1: Samples 57
7.2: Method Blanks 72
7.3: Blank Spikes 85
7.4: Laboratory Control Samples 95
7.5: Matrix Spike/Matrix Spike Duplicates 104
7.6: Initial and Continuing Calibrations 130
7.7: Instrument Run Logs 394
7.8: Prep Logs 400
Section 8: Metals Analysis - QC Data Summaries **402**
8.1: Inst QC MA14875: Pb 403
8.2: Inst QC MA14907: Pb 414
8.3: Prep QC MP33699: Pb 436
8.4: Prep QC MP33746: Pb 441
8.5: IDL and Linear Range Summaries 448
Section 9: Metals Analysis - Raw Data **452**
9.1: Raw Data MA14875 453
9.2: Raw Data MA14907 586
9.3: Prep Logs 643

Sample Summary

Kemron Environmental Services, Inc

Job No: FA53896

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53896-1	04/30/18	09:46	RPLF	05/02/18	SO	Soil	25-04SC0000
FA53896-1A	04/30/18	09:46	RPLF	05/02/18	SO	Soil	25-04SC0000
FA53896-2	04/30/18	10:11	RPLF	05/02/18	SO	Soil	25-04SC0001
FA53896-2A	04/30/18	10:11	RPLF	05/02/18	SO	Soil	25-04SC0001
FA53896-3	04/30/18	10:44	RPLF	05/02/18	SO	Soil	25-04SC0002
FA53896-3A	04/30/18	10:44	RPLF	05/02/18	SO	Soil	25-04SC0002
FA53896-4	04/30/18	08:14	RPLF	05/02/18	SO	Soil	25-05SC0000
FA53896-4A	04/30/18	08:14	RPLF	05/02/18	SO	Soil	25-05SC0000
FA53896-5	04/30/18	08:35	RPLF	05/02/18	SO	Soil	25-05SC0001
FA53896-5A	04/30/18	08:35	RPLF	05/02/18	SO	Soil	25-05SC0001
FA53896-6	04/30/18	09:06	RPLF	05/02/18	SO	Soil	25-05SC0002
FA53896-6A	04/30/18	09:06	RPLF	05/02/18	SO	Soil	25-05SC0002
FA53896-7	04/30/18	12:28	RPLF	05/02/18	SO	Soil	28-04SC0000

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Kemron Environmental Services, Inc

Job No: FA53896

Ft Ord; CA
Project No: 07202.2001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA53896-8	04/30/18	12:43	RPLF	05/02/18	SO	Soil	28-04SC0001
FA53896-9	04/30/18	13:03	RPLF	05/02/18	SO	Soil	28-04SC0002
FA53896-10	04/30/18	13:46	RPLF	05/02/18	SO	Soil	28-06SC0000
FA53896-11	04/30/18	14:28	RPLF	05/02/18	SO	Soil	28-06SC0001
FA53896-12	04/30/18	15:05	RPLF	05/02/18	SO	Soil	28-06SC0002
FA53896-13	04/30/18	07:00	RPLF	05/02/18	AQ	Equipment Blank	28-ER02SC
FA53896-14	04/30/18	15:40	RPLF	05/02/18	AQ	Equipment Blank	28-ER03SC

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Kemron Environmental Services, Inc **Job No:** FA53896

Site: Ft Ord; CA **Report Date:** 5/18/2018 3:16:28

6 Sample(s) were collected on 04/30/2018 and were received at SGS North America Inc - Orlando on 05/02/2018 properly preserved, at 4.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA53896. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

GC/LC Semi-volatiles By Method SW846 8330B

Matrix: AQ **Batch ID:** OP69897

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

OP69897-BS: Insufficient sample for MS/MSD.

Matrix: SO **Batch ID:** OP70034

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53896-1MS, FA53896-1MSD were used as the QC samples indicated.

Metals Analysis By Method SW846 6010C

Matrix: SO **Batch ID:** MP33746

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53725-34DUP, FA53725-34MS, FA53725-34MSD, FA53725-34PS, FA53725-34SDL were used as the QC samples for metals.

Metals Analysis By Method SW846 6020A

Matrix: AQ **Batch ID:** MP33699

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA53625-18FDUP, FA53625-18FMS, FA53625-18FMSD, FA53625-18FSDL, FA53627-1SDL were used as the QC samples for metals.

RPD(s) for Serial Dilution for Lead are outside control limits for sample MP33699-SD2. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA53896
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/30/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA53896-1	**25-04SC0000**					
No hits reported in this sample.						
FA53896-1A	**25-04SC0000**					
Lead		12.5	2.0	0.40	mg/kg	SW846 6010C
FA53896-4	**25-05SC0000**					
No hits reported in this sample.						
FA53896-4A	**25-05SC0000**					
Lead		10.0	2.0	0.40	mg/kg	SW846 6010C
FA53896-7	**28-04SC0000**					
No hits reported in this sample.						
FA53896-10	**28-06SC0000**					
No hits reported in this sample.						
FA53896-13	**28-ER02SC**					
Lead		0.28 J	2.0	1.0	ug/l	SW846 6020A
FA53896-14	**28-ER03SC**					
No hits reported in this sample.						

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-04SC0000		
Lab Sample ID:	FA53896-1	**Date Sampled:**	04/30/18
Matrix:	SO - Soil	**Date Received:**	05/02/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059770.D	1	05/16/18 14:43	EM	05/14/18 14:00	OP70034	GBB1732
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	98	74	50	ug/kg	
121-82-4	RDX	74 U	98	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	98	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	78%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-04SC0000		
Lab Sample ID:	FA53896-1A	**Date Sampled:**	04/30/18
Matrix:	SO - Soil	**Date Received:**	05/02/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	12.5	2.0	0.40	0.099	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) All results reported on a wet weight basis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	25-05SC0000		
Lab Sample ID:	FA53896-4	**Date Sampled:**	04/30/18
Matrix:	SO - Soil	**Date Received:**	05/02/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059773.D	1	05/16/18 16:13	EM	05/14/18 14:00	OP70034	GBB1732
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	81%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-05SC0000		
Lab Sample ID:	FA53896-4A	**Date Sampled:**	04/30/18
Matrix:	SO - Soil	**Date Received:**	05/02/18
		Percent Solids:	n/a [a]
Project:	Ft Ord; CA		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	10.0	2.0	0.40	0.10	mg/kg	5	05/16/18	05/17/18	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA14907
(2) Prep QC Batch: MP33746

(a) All results reported on a wet weight basis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-04SC0000		
Lab Sample ID:	FA53896-7	**Date Sampled:**	04/30/18
Matrix:	SO - Soil	**Date Received:**	05/02/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059774.D	1	05/16/18 16:43	EM	05/14/18 14:00	OP70034	GBB1732
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	49	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	81%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-06SC0000		
Lab Sample ID:	FA53896-10	**Date Sampled:**	04/30/18
Matrix:	SO - Soil	**Date Received:**	05/02/18
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB059775.D	1	05/16/18 17:13	EM	05/14/18 14:00	OP70034	GBB1732
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	74 U	99	74	50	ug/kg	
121-82-4	RDX	74 U	99	74	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	74 U	99	74	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	81%		69-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-ER02SC		
Lab Sample ID:	FA53896-13	**Date Sampled:**	04/30/18
Matrix:	AQ - Equipment Blank	**Date Received:**	05/02/18
Method:	SW846 8330B SW846 3535A	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614569.D	1	05/04/18 03:02	EM	05/03/18 08:00	OP69897	GGG2624
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	0.094 U	0.19	0.094	0.075	ug/l	
121-82-4	RDX	0.094 U	0.19	0.094	0.075	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.094 U	0.19	0.094	0.075	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	108%		70-136%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	28-ER02SC		
Lab Sample ID:	FA53896-13	**Date Sampled:**	04/30/18
Matrix:	AQ - Equipment Blank	**Date Received:**	05/02/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	0.28 J	2.0	1.0	0.20	ug/l	2	05/05/18	05/07/18	DM	SW846 6020A [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14875
(2) Prep QC Batch: MP33699

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	28-ER03SC		
Lab Sample ID:	FA53896-14	**Date Sampled:**	04/30/18
Matrix:	AQ - Equipment Blank	**Date Received:**	05/02/18
Method:	SW846 8330B SW846 3535A	**Percent Solids:**	n/a
Project:	Ft Ord; CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG614570.D	1	05/04/18 03:31	EM	05/03/18 08:00	OP69897	GGG2624
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	0.095 U	0.19	0.095	0.076	ug/l	
121-82-4	RDX	0.095 U	0.19	0.095	0.076	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.095 U	0.19	0.095	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	108%		70-136%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	28-ER03SC		
Lab Sample ID:	FA53896-14	**Date Sampled:**	04/30/18
Matrix:	AQ - Equipment Blank	**Date Received:**	05/02/18
		Percent Solids:	n/a
Project:	Ft Ord; CA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	1.0 U	2.0	1.0	0.20	ug/l	2	05/05/18	05/07/18	DM	SW846 6020A [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA14875
(2) Prep QC Batch: MP33699

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result >= DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC # D43018-01
FA53896

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
1	154	25-045L00000	SO	4/30/18	BD/LF		X		X	25-04	N1	0	.5	
2	155	25-045L00001								25-04	N1	1.0	1.5	HOLD
3	156	25-045L00002								25-04	N1	2.0	2.5	HOLD
4	157	25-055L00000								25-05		0	.5	
5	158	25-055L00001								25-05		1.0	1.5	HOLD
6	159	25-055L00002								25-05		2.0	2.5	HOLD
7	160	28-045L00000								28-04		0	.5	
8	161	28-045L00001								28-04		1	1.5	HOLD
9	162	28-045L00002								28-04		2	2.5	HOLD

Cooler #

Turnaround Time: 14 Days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	5/1/18	0900	FEDEX	5/1/18	0900
FX			J. CORRE	05-02-18	09:15

Shipping Date / Carrier / Airbill Number

8133 7208 3510

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

4.2

Page 18 of 18

FA53896: Chain of Custody
Page 1 of 3

CHAIN-OF-CUSTODY RECORD

Gilbane
Thomas Beer
1655 Grant Street, Suite 1200, Concord, CA 94520
(925) 946-3296, add extension TBeer@gilbaneco.com

COC# 043018-02
FA53896

Gilbane

Project Name: BRA Kemron Soil Sampling	Laboratory: SGS NORTH AMERICA, INC., ORLANDO, FL
Project Number: J202200224	Point of contact: Jean Dent-Smith 407-702-5754 jean.dent-smith@sgs.com
WBS Code: J202200224	Ship to: 4405 Vineland Road, Suite C-15, Orlando, FL 32811

Comments:

Equipment:

Code	Matrix
SO	SOIL
WQ	WATER QUALITY CONTROL MATRIX

Code	Container/Preservative
8	2* 1-L Amber, Less than or equal to 6 degrees C
11	1* , 250mL poly with HNO3
13	1* Ziploc bag, 1.0 - 1.5 kilogram bag

Event ID: Basewide Range Assessment April 2018

	Sample ID	Matrix	Date	Time	Samp Init.	SW6010C - Lead by ISM (11)	SW6010C - Lead by ISM (13)	SW8330B - Explosives by ISM (8)	SW8330B - Explosives by ISM (13)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	
10	154	28-06SC0000	SO	4/30/18	RHF				X	28-06	N1	0	.5	
11	155	28-06SC0001	↓	↓	↓				↓	28-06	N1	1	1.5	HOLD
12	156	28-06SC0002	↓	↓	↓				↓	28-06	N1	2	2.5	HOLD
13	157	28-ER02SC	WQ	↓	↓	X		X		FIELD QC	EB1	—	—	
14	158	28-ER03SC	WQ	↓	↓	X		X		FIELD QC	EB1	—	—	
	159													
	160													
	161						5/1/18							
	162													

Cooler # | **Turnaround Time: 14 Days**

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
	5/1/18	0900	FedEx	5/1/18	0900
FX			- Corpe	05-02-18	09:15

Shipping Date / Carrier / Airbill Number
8133 7208 3510

Received by Laboratory: *(Signature, Date, Time)* **& condition**

ENV.COC_Record
April 13, 2018

Page 18 of 18

FA53896: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: FA53896 **Client:** GILBANE **Project:** BRA KEMRON

Date / Time Received: 5/2/2018 9:15:00 AM **Delivery Method:** FX **Airbill #'s:** 1002258380160003281100813372083510

Therm ID: IR 1; **Therm CF:** 0.4; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (4.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: JORGEC Date: 5/2/2018 9:15:00 AM Reviewer: P.H Date: 5/2/2018

5.1
5

FA53896: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5 Limits

Job Number: FA53896
Account: Kemron Environmental Services, Inc
Project: Ft Ord; CA
Collected: 04/30/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP69897	SW846 8330B						
OP69897-BS	2691-41-0	HMX	BSP	REC	134	%	65-135
OP69897-BS	121-82-4	RDX	BSP	REC	90	%	68-130
OP69897-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	86	%	71-123
OP70034	SW846 8330B						
OP70034-BS	2691-41-0	HMX	BSP	REC	90	%	74-124
OP70034-BS	121-82-4	RDX	BSP	REC	103	%	67-129
OP70034-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	103	%	71-120
OP70034-MS	2691-41-0	HMX	MS	REC	88	%	74-124
OP70034-MS	121-82-4	RDX	MS	REC	84	%	67-129
OP70034-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	84	%	71-120
OP70034-MSD	2691-41-0	HMX	MSD	REC	84	%	74-124
OP70034-MSD	2691-41-0	HMX	MSD	RPD	4	%	20
OP70034-MSD	121-82-4	RDX	MSD	REC	86	%	67-129
OP70034-MSD	121-82-4	RDX	MSD	RPD	2	%	20
OP70034-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	80	%	71-120
OP70034-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	4	%	20
MP33699	SW846 6020A						
MP33699-B1	7439-92-1	Lead	BSP	REC	103.5	%	88-115
MP33699-S1*	7439-92-1	Lead	MS	REC	107.5	%	88-115
MP33699-S2*	7439-92-1	Lead	MSD	REC	102.5	%	88-115
MP33699-S2*	7439-92-1	Lead	MSD	RPD	4.8	%	20
MP33699-D1*	7439-92-1	Lead	DUP	RPD	0	%	20
MP33746	SW846 6010C						
MP33746-B1	7439-92-1	Lead	BSP	REC	100	%	81-112
MP33746-S1*	7439-92-1	Lead	MS	REC	97.5	%	81-112
MP33746-S2*	7439-92-1	Lead	MSD	REC	114.45	%	81-112
MP33746-S2*	7439-92-1	Lead	MSD	RPD	10	%	20
MP33746-D1*	7439-92-1	Lead	DUP	RPD	3.2	%	20
MP33746-D2*	7439-92-1	Lead	DUP	RPD	4.8	%	20

* Sample used for QC is not from job FA53896

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69897-MB	GG614567.D	1	05/04/18	EM	05/03/18	OP69897	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53896-13, FA53896-14

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	103%	70-136%

Method Blank Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP70034-MB	BB059769.D	1	05/16/18	EM	05/14/18	OP70034	GBB1732

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53896-1, FA53896-4, FA53896-7, FA53896-10

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	90%	69-134%

Method Blank Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP70034-GB2	BB059778.D	1	05/16/18	EM	05/14/18	OP70034	GBB1732

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53896-1, FA53896-4, FA53896-7, FA53896-10

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	83%	69-134%

Method Blank Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP70034-GB3	BB059779.D	1	05/16/18	EM	05/14/18	OP70034	GBB1732

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53896-1, FA53896-4, FA53896-7, FA53896-10

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	75%	69-134%

Method Blank Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP70034-GB1	BB059780.D	1	05/16/18	EM	05/14/18	OP70034	GBB1732

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53896-1, FA53896-4, FA53896-7, FA53896-10

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	51	ug/kg	
121-82-4	RDX	ND	100	50	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	81%	69-134%

Blank Spike Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP69897-BS [a]	GG614566.D	1	05/04/18	EM	05/03/18	OP69897	GGG2624

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53896-13, FA53896-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	6.7	134	77-144
121-82-4	RDX	5	4.5	90	77-125
118-96-7	2,4,6-Trinitrotoluene	5	4.3	86	72-112

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	97%	70-136%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP70034-BS	BB059767.D	1	05/16/18	EM	05/14/18	OP70034	GBB1732

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53896-1, FA53896-4, FA53896-7, FA53896-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2250	90	75-147
121-82-4	RDX	2500	2570	103	79-126
118-96-7	2,4,6-Trinitrotoluene	2500	2580	103	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	92%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP70034-PT1	BB059768.D	1	05/16/18	EM	05/14/18	OP70034	GBB1732

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53896-1, FA53896-4, FA53896-7, FA53896-10

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	3750	3270	87	74-124
121-82-4	RDX	3200	2650	83	67-129
118-96-7	2,4,6-Trinitrotoluene	520	404	78	71-120

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	88%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP70034-MS	BB059771.D	1	05/16/18	EM	05/14/18	OP70034	GBB1732
OP70034-MSD	BB059772.D	1	05/16/18	EM	05/14/18	OP70034	GBB1732
FA53896-1	BB059770.D	1	05/16/18	EM	05/14/18	OP70034	GBB1732

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA53896-1, FA53896-4, FA53896-7, FA53896-10

CAS No.	Compound	FA53896-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	98	U	2480	2170	88	2470	2080	84	4	75-147/22
121-82-4	RDX	98	U	2480	2070	84	2470	2120	86	2	79-126/21
118-96-7	2,4,6-Trinitrotoluene	98	U	2480	2070	84	2470	1980	80	4	70-123/16

CAS No.	Surrogate Recoveries	MS	MSD	FA53896-1	Limits
610-39-9	3,4-Dinitrotoluene	76%	78%	78%	69-134%

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA53896-13	GG614569.D	108
FA53896-14	GG614570.D	108
OP69897-BS	GG614566.D	97
OP69897-MB	GG614567.D	103

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

Surrogate Recovery Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Method: SW846 8330B	**Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA53896-1	BB059770.D	78
FA53896-4	BB059773.D	81
FA53896-7	BB059774.D	81
FA53896-10	BB059775.D	81
OP70034-BS	BB059767.D	92
OP70034-GB1	BB059780.D	81
OP70034-GB2	BB059778.D	83
OP70034-GB3	BB059779.D	75
OP70034-MB	BB059769.D	90
OP70034-MS	BB059771.D	76
OP70034-MSD	BB059772.D	78
OP70034-PT1	BB059768.D	88

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1732-ICC1732	**Injection Date:**	05/16/18
Lab File ID:	BB059763.D	**Injection Time:**	11:14
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	10.87

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP70034-BS	BB059767.D	05/16/18	13:14	10.92
OP70034-PT1	BB059768.D	05/16/18	13:44	10.93
OP70034-MB	BB059769.D	05/16/18	14:13	10.94
FA53896-1	BB059770.D	05/16/18	14:43	10.91
OP70034-MS	BB059771.D	05/16/18	15:13	10.89
OP70034-MSD	BB059772.D	05/16/18	15:43	10.86
FA53896-4	BB059773.D	05/16/18	16:13	10.86
FA53896-7	BB059774.D	05/16/18	16:43	10.86
FA53896-10	BB059775.D	05/16/18	17:13	10.88

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GBB1732-CC1732	**Injection Date:**	05/16/18
Lab File ID:	BB059776.D	**Injection Time:**	17:43
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT
Check Std	10.91

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP70034-GB2	BB059778.D	05/16/18	18:43	10.96
OP70034-GB3	BB059779.D	05/16/18	19:13	10.98
OP70034-GB1	BB059780.D	05/16/18	19:43	10.95

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Check Std:	GGG2624-CC2571	**Injection Date:**	05/03/18
Lab File ID:	GG614559.D	**Injection Time:**	22:07
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	14.26	14.27

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP69838-GB1	GG614562.D	05/03/18	23:36		14.27
OP69838-GB2	GG614563.D	05/04/18	00:05		14.31
OP69838-GB3	GG614564.D	05/04/18	00:35		14.22
OP69897-BS	GG614566.D	05/04/18	01:33		14.33
OP69897-MB	GG614567.D	05/04/18	02:03		14.27
ZZZZZZ	GG614568.D	05/04/18	02:32		14.28
FA53896-13	GG614569.D	05/04/18	03:02		14.25
FA53896-14	GG614570.D	05/04/18	03:31		14.28
GGG2624-ECC2571	GG614571.D	05/04/18	04:01	14.25	14.25

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA53896 **Sample:** GBB1732-ICC1732
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059763.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration

Calibration Files
20 =BB059759.D 50 =BB059760.D 100 =BB059761.D 200 =BB059762.D
500 =BB059763.D 1000=BB059764.D 2000=BB059765.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	4.106	4.864	4.897	5.116	5.037	5.035	5.205	4.894	E3	7.50
2)	HMX	1.437	1.887	1.770	1.956	1.849	1.838	1.916	1.808	E3	9.62
3)	DNX	3.391	3.179	3.143	2.988	2.932	2.886	3.008	3.075	E3	5.68
4)	MNX	3.799	3.043	2.899	3.055	3.038	2.951	3.090	3.125	E3	9.74
5)	RDX	3.379	2.392	2.059	1.977	2.038	1.954	2.038	2.263	E3	22.70
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998										
	Response Ratio = 0.00000 + 1942.37255 *A + 0.04642 *A^2										
6)	1,3,5-Trinitroben	5.153	4.143	4.225	4.219	4.214	4.186	4.361	4.357	E3	8.20
7)	1,3-Dinitrobenzen	7.043	5.905	5.636	5.688	5.454	5.445	5.632	5.829	E3	9.56
8)	3,5-Dinitroanilin	4.692	5.265	4.529	4.584	4.516	4.456	4.688	4.676	E3	5.87
9)	Nitrobenzene	4.764	3.844	3.652	3.636	3.424	3.391	3.482	3.742	E3	12.75
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	3.274	3.178	3.030	3.002	2.780	2.692	2.760	2.959	E3	7.52
12)	2,4,6-Trinitrotol	4.707	4.096	3.729	3.653	3.667	3.605	3.961	3.917	E3	10.02
13)	2-Amino-4,6-Dinit	3.547	4.102	3.972	4.014	3.703	3.662	3.140	3.734	E3	8.91
14)	4-Amino-2,6-Dinit	1.866	3.493	2.855	2.716	2.712	2.655	2.741	2.720	E3	17.44
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 2635.18044 *A + 0.05136 *A^2										
15)S	3,4-Dinitrotoluen	1.786	2.771	2.797	2.566	2.514	2.452	2.534	2.489	E3	13.51
16)	2,4-Dinitrotoluen	4.803	5.619	5.394	5.156	5.102	5.029	5.214	5.188	E3	5.04
17)	2,6-Dinitrotoluen	1.949	3.541	2.958	2.860	3.105	2.951	3.065	2.918	E3	16.49
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997										
	Response Ratio = 0.00000 + 2935.83456 *A + 0.06259 *A^2										
18)	o-Nitrotoluene	3.012	2.799	2.587	2.448	2.451	2.365	2.427	2.584	E3	9.19
19)	p-Nitrotoluene	4.839	4.032	4.044	3.699	3.785	3.734	3.840	3.996	E3	9.90
20)	m-Nitrotoluene	1.927	3.503	3.582	3.334	3.489	3.464	3.553	3.265	E3	18.23
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999										
	Response Ratio = 0.00000 + 3404.94356 *A + 0.07362 *A^2										
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	6.999	7.717	7.669	7.840	7.701	7.673	7.831	7.633	E3	3.78
2)	HMX	4.447	4.986	4.860	5.086	5.019	4.988	5.252	4.948	E3	5.07
3)	DNX	5.300	5.549	5.428	4.972	4.794	4.645	4.803	5.070	E3	6.97
4)	MNX	5.138	4.594	4.474	4.666	4.668	4.650	4.816	4.715	E3	4.51
5)	RDX	3.559	3.465	3.099	3.147	3.123	3.170	3.264	3.261	E3	5.56
6)	1,3,5-Trinitroben	8.268	7.891	8.168	8.239	8.259	8.123	8.434	8.197	E3	2.03
7)	1,3-Dinitrobenzen	2.532	5.199	3.909	4.189	3.905	3.749	3.765	3.893	E3	20.13
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997										
	Response Ratio = 0.00000 + 3855.99085 *A + -0.04855 *A^2										
8)	3,5-Dinitroanilin	6.743	9.195	7.995	7.761	7.656	7.501	7.873	7.818	E3	9.37

Job Number: FA53896 **Sample:** GBB1732-ICC1732
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059763.D
Project: Ft Ord; CA

```
 9)  Nitrobenzene      4.603 3.896 3.195 3.351 3.242 3.173 3.298 3.537 E3  15.02
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 3140.09532 *A + 0.07668 *A^2

10)  Nitroglycerin     1.412 1.305 1.311 1.196 1.228 1.212 1.282 1.278 E3   5.85
11)  Tetryl            3.457 4.132 3.988 4.452 4.290 4.264 4.392 4.139 E3   8.18
12)  2,4,6-Trinitrotol 4.868 4.297 3.986 4.136 4.002 3.968 4.678 4.276 E3   8.46
13)  2-Amino-4,6-Dinit 5.267 5.274 5.767 5.922 5.959 5.946 5.064 5.600 E3   6.85
14)  4-Amino-2,6-Dinit 5.630 4.943 5.235 5.307 5.340 5.265 5.594 5.330 E3   4.35
15)S 3,4-Dinitrotoluen 4.417 3.764 3.961 4.391 4.211 4.197 4.502 4.206 E3   6.30
16)  2,4-Dinitrotoluen 2.597 2.649 3.649 3.353 3.269 3.200 3.369 3.155 E3  12.35
17)  2,6-Dinitrotoluen 2.913 3.611 3.943 3.739 3.857 3.803 3.963 3.690 E3   9.85
18)  o-Nitrotoluene    2.958 3.659 3.149 3.565 3.376 3.310 3.298 3.331 E3   7.13
19)  p-Nitrotoluene    2.600 3.204 2.979 3.456 3.333 3.237 3.358 3.167 E3   9.20
20)  m-Nitrotoluene    4.134 2.599 2.858 3.211 3.729 3.831 4.118 3.497 E3  17.53
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
               Response Ratio = 0.00000 + 3507.18655 *A + 0.30668 *A^2

21)  PETN              1.016 1.324 1.248 1.378 1.399 1.416 1.445 1.318 E3  11.26
------------------------------------------------------------------------------
(#) = Out of Range

          8330B_0516PLUS.M        Thu May 17 08:40:05 2018
```

Initial Calibration Verification

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GBB1732-ICV1732
Lab FileID: BB059766.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1B.ch Vial: 88
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1A.ch
Acq On : 16-May-2018, 12:44:05 Operator: evitam
Sample : icv1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	471.517	5.7	92	0.00	1.08- 1.68
2	HMX	500.000	552.219	-10.4	108	0.00	1.20- 1.80
3	DNX	500.000	420.879	15.8	88	0.00	1.45- 2.05
4	MNX	500.000	426.761	14.6	88	0.00	2.03- 2.63
	----------	Amount	Calc.	%Drift			
5	RDX	500.000	496.019	0.8	96	-0.01	2.54- 3.34
	----------	Amount	Calc.	%Drift			
6	1,3,5-Trinitrobenzene	500.000	468.259	6.3	97	-0.03	4.32- 5.12
7	1,3-Dinitrobenzene	500.000	428.928	14.2	92	-0.03	5.52- 6.32
8	3,5-Dinitroaniline	500.000	493.214	1.4	102	-0.04	5.80- 6.60
9	Nitrobenzene	500.000	438.785	12.2	96	-0.03	7.10- 7.90
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	505.630	-1.1	108	-0.05	8.81- 9.61
12	2,4,6-Trinitrotoluene	500.000	406.348	18.7	87	-0.04	9.35-10.15
13	2-Amino-4,6-Dinitrotol	500.000	505.114	-1.0	102	-0.08	9.55-10.35
	----------	Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	500.000	494.788	1.0	97	-0.07	10.04-10.84
	----------	Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	474.861	5.0	97	-0.06	11.26-12.06
	----------	Amount	Calc.	%Drift			
17	2,6-Dinitrotoluene	500.000	485.261	2.9	93	-0.05	11.70-12.50
	----------	Amount	Calc.	%Drift			
18	o-Nitrotoluene	500.000	463.070	7.4	98	-0.05	14.96-15.84
19	p-Nitrotoluene	500.000	444.565	11.1	94	-0.05	15.44-16.44
	----------	Amount	Calc.	%Drift			
20	m-Nitrotoluene	500.000	488.269	2.3	96	-0.05	16.41-17.41
	----------	Amount	Calc.	%Drift			
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	461.292	7.7	91	0.00	1.08- 1.68

Job Number: FA53896 **Sample:** GBB1732-ICV1732
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059766.D
Project: Ft Ord; CA

2	HMX	500.000	533.045	-6.6	105	0.00	1.20- 1.80
3	DNX	500.000	413.911	17.2	88	0.00	1.45- 2.05
4	MNX	500.000	439.670	12.1	89	0.00	2.03- 2.63
5	RDX	500.000	472.728	5.5	99	-0.01	2.54- 3.34
6	1,3,5-Trinitrobenzene	500.000	481.040	3.8	95	-0.03	4.33- 5.13
		Amount	Calc.	%Drift			
7	1,3-Dinitrobenzene	500.000	470.033	6.0	92	-0.03	5.51- 6.32
		Amount	Calc.	%Drift			
8	3,5-Dinitroaniline	500.000	498.036	0.4	102	-0.04	5.80- 6.60
		Amount	Calc.	%Drift			
9	Nitrobenzene	500.000	489.443	2.1	96	-0.03	7.10- 7.90
		Amount	Calc.	%Drift			
10	Nitroglycerin	2500.000	2506.374	-0.3	104	-0.03	8.44- 9.44
11	Tetryl	500.000	589.822	-18.0	114	-0.07	8.80- 9.60
12	2,4,6-Trinitrotoluene	500.000	455.634	8.9	97	0.01	9.35-10.15
13	2-Amino-4,6-Dinitrotol	500.000	496.661	0.7	93	-0.08	9.56-10.36
14	4-Amino-2,6-Dinitrotol	500.000	504.929	-1.0	101	-0.07	10.03-10.83
15 S	3,4-Dinitrotoluene			NA			
16	2,4-Dinitrotoluene	500.000	493.154	1.4	95	-0.06	11.26-12.06
17	2,6-Dinitrotoluene	500.000	506.398	-1.3	97	-0.05	11.70-12.50
18	o-Nitrotoluene	500.000	502.030	-0.4	99	-0.04	14.84-15.84
19	p-Nitrotoluene	500.000	497.643	0.5	95	-0.06	15.45-16.45
		Amount	Calc.	%Drift			
20	m-Nitrotoluene	500.000	483.550	3.3	95	-0.05	16.41-17.41
		Amount	Calc.	%Drift			
21	PETN	2500.000	2892.920	-15.7	109	-0.02	18.22-19.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059763.D 8330B_0516PLUS.M Thu May 17 08:39:52 2018

Continuing Calibration Summary

Job Number: FA53896 **Sample:** GBB1732-CC1732
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059776.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1A.ch
Acq On : 16-May-2018, 17:43:44 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1026.460	-2.6	100	0.00	1.08- 1.68
2	HMX	1000.000	1011.701	-1.2	100	0.00	1.20- 1.80
3	DNX	1000.000	945.608	5.4	101	0.00	1.45- 2.05
4	MNX	1000.000	961.346	3.9	102	-0.01	2.03- 2.63
	----------	Amount	Calc.	%Drift			----------
5	RDX	1000.000	992.540	0.7	101	-0.02	2.54- 3.34
	----------	Amount	Calc.	%Drift			----------
6	1,3,5-Trinitrobenzene	1000.000	946.542	5.3	99	-0.02	4.32- 5.12
7	1,3-Dinitrobenzene	1000.000	932.274	6.8	100	-0.02	5.52- 6.32
8	3,5-Dinitroaniline	1000.000	959.741	4.0	101	-0.03	5.80- 6.60
9	Nitrobenzene	1000.000	921.536	7.8	102	-0.02	7.10- 7.90
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	896.376	10.4	99	-0.04	8.81- 9.61
12	2,4,6-Trinitrotoluene	1000.000	896.308	10.4	97	-0.03	9.35-10.15
13	2-Amino-4,6-Dinitrotol	1000.000	1000.247	-0.0	102	-0.07	9.55-10.35
	----------	Amount	Calc.	%Drift			----------
14	4-Amino-2,6-Dinitrotol	1000.000	983.187	1.7	99	-0.05	10.04-10.84
	----------	Amount	Calc.	%Drift			----------
15 S	3,4-Dinitrotoluene	1000.000	973.005	2.7	99	-0.04	10.55-11.35
16	2,4-Dinitrotoluene	1000.000	964.845	3.5	100	-0.04	11.26-12.06
	----------	Amount	Calc.	%Drift			----------
17	2,6-Dinitrotoluene	1000.000	975.555	2.4	99	-0.04	11.70-12.50
	----------	Amount	Calc.	%Drift			----------
18	o-Nitrotoluene	1000.000	920.017	8.0	101	-0.03	14.96-15.84
19	p-Nitrotoluene	1000.000	933.121	6.7	100	-0.04	15.44-16.44
	----------	Amount	Calc.	%Drift			----------
20	m-Nitrotoluene	1000.000	981.708	1.8	99	-0.03	16.41-17.41
	----------	Amount	Calc.	%Drift			----------
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	1000.355	-0.0	100	0.00	1.08- 1.68

Continuing Calibration Summary

Job Number: FA53896 **Sample:** GBB1732-CC1732
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059776.D
Project: Ft Ord; CA

2	HMX	1000.000	1001.448	-0.1	99	0.00	1.20- 1.80	
3	DNX	1000.000	909.976	9.0	99	0.00	1.45- 2.05	
4	MNX	1000.000	982.423	1.8	100	-0.01	2.03- 2.63	
5	RDX	1000.000	961.150	3.9	99	-0.02	2.54- 3.34	
6	1,3,5-Trinitrobenzene	1000.000	986.915	1.3	100	-0.02	4.33- 5.13	
		Amount	Calc.	%Drift				
7	1,3-Dinitrobenzene	1000.000	982.877	1.7	100	-0.02	5.51- 6.32	
		Amount	Calc.	%Drift				
8	3,5-Dinitroaniline	1000.000	960.495	4.0	100	-0.03	5.80- 6.60	
		Amount	Calc.	%Drift				
9	Nitrobenzene	1000.000	1011.795	-1.2	103	-0.02	7.10- 7.90	
		Amount	Calc.	%Drift				
10	Nitroglycerin	5000.000	4757.243	4.9	100	-0.02	8.44- 9.44	
11	Tetryl	1000.000	1014.149	-1.4	98	-0.05	8.80- 9.60	
12	2,4,6-Trinitrotoluene	1000.000	908.135	9.2	98	-0.03	9.35-10.15	
13	2-Amino-4,6-Dinitrotol	1000.000	1074.474	-7.4	101	-0.06	9.56-10.36	
14	4-Amino-2,6-Dinitrotol	1000.000	990.125	1.0	100	-0.05	10.03-10.83	
15 S	3,4-Dinitrotoluene	1000.000	996.265	0.4	100	-0.04	10.54-11.34	
16	2,4-Dinitrotoluene	1000.000	1009.092	-0.9	99	-0.04	11.26-12.06	
17	2,6-Dinitrotoluene	1000.000	999.907	0.0	97	-0.03	11.70-12.50	
18	o-Nitrotoluene	1000.000	1012.811	-1.3	102	-0.02	14.84-15.84	
19	p-Nitrotoluene	1000.000	1034.710	-3.5	101	-0.04	15.45-16.45	
		Amount	Calc.	%Drift				
20	m-Nitrotoluene	1000.000	1017.197	-1.7	101	-0.04	16.41-17.41	
		Amount	Calc.	%Drift				
21	PETN	5000.000	5149.434	-3.0	96	0.00	18.22-19.42	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059764.D 8330B_0516PLUS.M Thu May 17 08:42:35 2018

Continuing Calibration Summary

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GBB1732-CC1732
Lab FileID: BB059788.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1A.ch
Acq On : 16-May-2018, 23:43:15 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1018.859	-1.9	99	0.00	1.08- 1.68
2	HMX	1000.000	1012.182	-1.2	100	0.00	1.20- 1.80
3	DNX	1000.000	931.574	6.8	99	0.00	1.45- 2.05
4	MNX	1000.000	956.436	4.4	101	0.00	2.03- 2.63
	Compound	Amount	Calc.	%Drift			
5	RDX	1000.000	993.563	0.6	101	-0.01	2.54- 3.34
	Compound	Amount	Calc.	%Drift			
6	1,3,5-Trinitrobenzene	1000.000	953.245	4.7	99	-0.03	4.32- 5.12
7	1,3-Dinitrobenzene	1000.000	925.867	7.4	99	-0.03	5.52- 6.32
8	3,5-Dinitroaniline	1000.000	958.682	4.1	101	-0.03	5.80- 6.60
9	Nitrobenzene	1000.000	901.656	9.8	99	-0.03	7.10- 7.90
10	Nitroglycerin			NA			
11	Tetryl	1000.000	874.404	12.6	96	-0.06	8.81- 9.61
12	2,4,6-Trinitrotoluene	1000.000	880.213	12.0	96	-0.06	9.35-10.15
13	2-Amino-4,6-Dinitrotol	1000.000	1004.500	-0.4	102	-0.09	9.55-10.35
	Compound	Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	1000.000	975.221	2.5	99	-0.07	10.04-10.84
	Compound	Amount	Calc.	%Drift			
15 S	3,4-Dinitrotoluene	1000.000	975.490	2.5	99	-0.07	10.55-11.35
16	2,4-Dinitrotoluene	1000.000	959.214	4.1	99	-0.08	11.26-12.06
	Compound	Amount	Calc.	%Drift			
17	2,6-Dinitrotoluene	1000.000	983.245	1.7	100	-0.07	11.70-12.50
	Compound	Amount	Calc.	%Drift			
18	o-Nitrotoluene	1000.000	907.813	9.2	99	-0.05	14.96-15.84
19	p-Nitrotoluene	1000.000	932.098	6.8	100	-0.06	15.44-16.44
	Compound	Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	978.535	2.1	98	-0.06	16.41-17.41
	Compound	Amount	Calc.	%Drift			
21	PETN			NA			
*****	Signal #2 *****						
1	TNX	1000.000	994.470	0.6	99	0.00	1.08- 1.68

Continuing Calibration Summary

Job Number: FA53896 **Sample:** GBB1732-CC1732
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** BB059788.D
Project: Ft Ord; CA

2	HMX	1000.000	1002.911	-0.3	99	0.00	1.20- 1.80	
3	DNX	1000.000	908.664	9.1	99	0.00	1.45- 2.05	
4	MNX	1000.000	980.843	1.9	99	0.00	2.03- 2.63	
5	RDX	1000.000	961.897	3.8	99	-0.01	2.54- 3.34	
6	1,3,5-Trinitrobenzene	1000.000	978.947	2.1	99	-0.03	4.33- 5.13	
		Amount	Calc.	%Drift				
7	1,3-Dinitrobenzene	1000.000	984.346	1.6	100	-0.03	5.51- 6.32	
		Amount	Calc.	%Drift				
8	3,5-Dinitroaniline	1000.000	968.426	3.2	101	-0.03	5.80- 6.60	
		Amount	Calc.	%Drift				
9	Nitrobenzene	1000.000	1000.747	-0.1	101	-0.03	7.10- 7.90	
		Amount	Calc.	%Drift				
10	Nitroglycerin	5000.000	4685.935	6.3	99	-0.04	8.44- 9.44	
11	Tetryl	1000.000	1018.087	-1.8	99	-0.07	8.80- 9.60	
12	2,4,6-Trinitrotoluene	1000.000	895.510	10.4	97	-0.05	9.35-10.15	
13	2-Amino-4,6-Dinitrotol	1000.000	1068.629	-6.9	101	-0.08	9.56-10.36	
14	4-Amino-2,6-Dinitrotol	1000.000	980.962	1.9	99	-0.07	10.03-10.83	
15 S	3,4-Dinitrotoluene	1000.000	992.372	0.8	99	-0.07	10.54-11.34	
16	2,4-Dinitrotoluene	1000.000	991.749	0.8	98	-0.07	11.26-12.06	
17	2,6-Dinitrotoluene	1000.000	1010.495	-1.0	98	-0.07	11.70-12.50	
18	o-Nitrotoluene	1000.000	982.501	1.7	99	-0.05	14.84-15.84	
19	p-Nitrotoluene	1000.000	1023.204	-2.3	100	-0.07	15.45-16.45	
		Amount	Calc.	%Drift				
20	m-Nitrotoluene	1000.000	1010.985	-1.1	101	-0.06	16.41-17.41	
		Amount	Calc.	%Drift				
21	PETN	5000.000	5075.661	-1.5	94	-0.03	18.22-19.42	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB059764.D 8330B_0516PLUS.M Thu May 17 08:42:36 2018

Initial Calibration Summary

Job Number: FA53896 **Sample:** GGG2571-ICC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613830.D
Project: Ft Ord; CA

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration

Calibration Files
20 =GG613826.D 50 =GG613827.D 100 =GG613828.D 200 =GG613829.D
500 =GG613830.D 1000=GG613831.D 2000=GG613832.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	1.352	1.377	1.510	1.459	1.436	1.410	1.414	1.423	E4	3.67
2)	HMX	3.057	3.298	3.764	3.284	3.135	3.075	3.080	3.242	E3	7.74
3)	DNX	7.579	7.967	8.251	7.597	7.678	7.556	7.556	7.741	E3	3.46
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.012	7.160	7.024	E3	2.87
5)	1,3,5-Trinitroben	1.042	1.032	1.066	1.053	1.015	1.014	1.032	1.036	E4	1.85
6)	RDX	4.655	4.741	4.946	4.851	4.693	4.693	4.771	4.764	E3	2.15
7)	1,3-Dinitrobenzen	1.581	1.387	1.454	1.448	1.378	1.372	1.396	1.431	E4	5.16
8)	Nitrobenzene	1.168	0.878	0.954	0.925	0.890	0.891	0.899	0.944	E4	10.84
9)	2,4,6-Trinitrotol	1.271	0.986	1.002	0.994	0.945	0.938	0.957	1.013	E4	11.49
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	9.406	8.156	8.448	7.884	7.567	7.535	7.730	8.104	E3	8.15
12)S	3,4-Dinitrotoluen	4.934	5.176	5.394	5.317	5.132	5.134	5.275	5.195	E3	2.91
13)	2,6-Dinitrotoluen	7.042	7.189	7.341	7.323	7.011	6.992	7.150	7.150	E3	2.01
14)	2,4-Dinitrotoluen	1.375	1.321	1.340	1.317	1.268	1.264	1.292	1.311	E4	3.05
15)	o-Nitrotoluene	6.003	5.683	5.997	5.756	5.616	5.638	5.743	5.777	E3	2.78
16)	3,5-Dinitroanilin	1.439	1.084	1.075	1.031	0.980	0.977	0.999	1.084	E4	14.99

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999
Response Ratio = 0.00000 + 9713.03096 *A + 0.13365 *A^2

17)	p-Nitrotoluene	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
18)	4-Amino-2,6-Dinit	1.179	1.169	1.209	1.184	1.148	1.153	1.178	1.174	E4	1.75
19)	m-Nitrotoluene	5.287	5.715	6.137	6.029	5.964	6.024	6.111	5.895	E3	5.12
20)	2-Amino-4,6-Dinit	8.442	8.820	9.024	9.262	9.082	9.162	9.369	9.023	E3	3.44
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	1.343	1.386	1.510	1.459	1.436	1.410	1.414	1.422	E4	3.75
2)	HMX	3.279	2.935	3.764	3.284	3.135	3.075	3.080	3.222	E3	8.34
3)	DNX	8.457	7.331	8.251	7.597	7.678	7.556	7.556	7.775	E3	5.32
4)	MNX	6.637	6.937	7.197	7.217	7.006	7.021	7.190	7.029	E3	2.92
5)	1,3,5-Trinitroben	1.042	1.030	1.063	1.050	1.015	1.016	1.037	1.036	E4	1.68
6)	RDX	4.655	4.670	4.823	4.763	4.696	4.737	4.857	4.743	E3	1.61
7)	1,3-Dinitrobenzen	0.880	0.862	1.273	1.143	1.344	1.204	1.104	1.116	E4	16.58

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993
Response Ratio = 0.00000 + 13276.14205 *A + -1.11873 *A^2

8)	Nitrobenzene	0.924	0.888	0.901	0.870	1.044	0.976	0.880	0.926	E4	6.79
9)	2,4,6-Trinitrotol	1.089	1.237	1.458	1.298	1.440	1.347	1.310	1.311	E4	9.57
10)	Nitroglycerin	2.684	3.204	3.404	3.401	3.722	3.603	3.570	3.370	E3	10.27
11)	Tetryl	2.495	1.493	1.140	1.333	1.452	1.389	1.373	1.525	E4	29.01

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 14197.55319 *A + -0.23730 *A^2

12)S	3,4-Dinitrotoluen	1.259	1.015	1.021	1.090	1.061	1.056	1.070	1.082	E4	7.62
13)	2,6-Dinitrotoluen	0.875	1.106	0.996	1.038	1.024	1.022	1.041	1.015	E4	6.93
14)	2,4-Dinitrotoluen	2.450	1.728	1.231	1.056	0.977	0.913	0.920	1.325	E4	43.18

Job Number: FA53896 **Sample:** GGG2571-ICC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613830.D
Project: Ft Ord; CA

```
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 9621.10583 *A + -0.22476 *A^2

 15)  o-Nitrotoluene    8.554 9.270 8.481 8.837 8.240 8.443 8.540 8.624 E3   3.89
 16)  3,5-Dinitroanilin 2.378 1.717 1.751 1.723 1.603 1.631 1.657 1.780 E4  15.12
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 16131.47839 *A + 0.21636 *A^2

 17)  p-Nitrotoluene    2.097 1.953 2.158 2.200 2.120 2.137 2.170 2.119 E4   3.81
 18)  4-Amino-2,6-Dinit 2.140 1.953 2.158 2.200 2.120 2.137 2.170 2.125 E4   3.78
 19)  m-Nitrotoluene    1.024 0.732 1.030 1.026 0.980 0.989 1.027 0.972 E4  11.11
 20)  2-Amino-4,6-Dinit 0.592 0.798 1.032 1.130 1.175 1.240 1.304 1.039 E4  24.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 11496.69993 *A + 0.78000 *A^2

 21)  PETN              2.883 2.660 3.060 3.416 3.438 3.469 3.526 3.207 E3  10.60
 ------------------------------------------------------------------------------
 (#) = Out of Range

          8330RPB.M_1113M.M        Tue Nov 14 13:38:28 2017
```

Initial Calibration Verification

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICV2571
Lab FileID: GG613833.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	311.255	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	512.341	-2.5	106	-0.01	4.96- 5.96
3	DNX	500.000	481.707	3.7	97	0.00	5.08- 6.08
4	MNX	500.000	498.403	0.3	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.713	1.9	100	0.00	7.04- 8.04
6	RDX	500.000	504.766	-1.0	102	-0.03	7.57- 8.57
7	1,3-Dinitrobenzene	500.000	459.805	8.0	96	-0.01	9.58-10.58
8	Nitrobenzene	500.000	482.574	3.5	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene	500.000	493.369	1.3	101	0.00	14.38-15.38
14	2,4-Dinitrotoluene	500.000	484.298	3.1	100	-0.02	15.12-16.12
15	o-Nitrotoluene	500.000	512.102	-2.4	105	0.00	16.70-17.70
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	500.000	479.670	4.1	96	-0.07	16.16-17.16
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	500.000	491.360	1.7	101	-0.06	17.91-18.91
18	4-Amino-2,6-Dinitrotol	500.000	491.360	1.7	101	-0.06	17.91-18.91
19	m-Nitrotoluene	500.000	546.610	-9.3	108	0.00	19.13-20.13
20	2-Amino-4,6-Dinitrotol	500.000	514.599	-2.9	102	-0.07	20.16-21.16
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	311.279	37.7#	62	0.00	4.50- 5.50
2	HMX	500.000	515.543	-3.1	106	-0.01	4.96- 5.96
3	DNX	500.000	479.565	4.1	97	0.00	5.08- 6.08
4	MNX	500.000	498.000	0.4	100	-0.02	6.16- 7.16
5	1,3,5-Trinitrobenzene	500.000	490.831	1.8	100	0.00	7.04- 8.04
6	RDX	500.000	507.885	-1.6	103	-0.03	7.57- 8.57
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	500.000	525.898	-5.2	99	-0.01	9.57-10.57
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	500.000	577.158	-15.4#	102	0.00	10.56-11.56
9	2,4,6-Trinitrotoluene		----------NA----------				

Job Number: FA53896 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613833.D
Project: Ft Ord; CA

10	Nitroglycerin	2500.000	2766.568	-10.7	100	-0.02	12.20-13.20
		Amount	Calc.	%Drift			
11	Tetryl			NA			
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene			NA			
13	2,6-Dinitrotoluene	500.000	540.982	-8.2	107	0.03	14.36-15.36
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	500.000	495.523	0.9	97	-0.02	15.12-16.12
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	500.000	509.800	-2.0	107	0.00	16.70-17.70
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	500.000	484.898	3.0	98	-0.07	16.16-17.16
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	500.000	510.118	-2.0	102	-0.06	17.92-18.92
18	4-Amino-2,6-Dinitrotol	500.000	508.634	-1.7	102	-0.06	17.92-18.92
19	m-Nitrotoluene	500.000	525.201	-5.0	104	-0.01	19.13-20.13
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	500.000	496.742	0.7	100	-0.07	20.16-21.16
		Amount	Calc.	%Drift			
21	PETN	2500.000	2876.898	-15.1#	107	-0.02	21.81-22.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:38:14 2017

Initial Calibration Verification

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA
Sample: GGG2571-ICV2571
Lab FileID: GG613834.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX		----------NA----------				
2	HMX		----------NA----------				
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	1,3,5-Trinitrobenzene		----------NA----------				
6	RDX		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	Nitrobenzene		----------NA----------				
9	2,4,6-Trinitrotoluene	500.000	474.847	5.0	102	0.00	11.37-12.37
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	513.472	-2.7	110	0.00	12.78-13.78
12 S	3,4-Dinitrotoluene		----------NA----------				
13	2,6-Dinitrotoluene		----------NA----------				
14	2,4-Dinitrotoluene		----------NA----------				
15	o-Nitrotoluene		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene		----------NA----------				
18	4-Amino-2,6-Dinitrotoluen		----------NA----------				
19	m-Nitrotoluene		----------NA----------				
20	2-Amino-4,6-Dinitrotoluen		----------NA----------				
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX		----------NA----------				
2	HMX		----------NA----------				
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	1,3,5-Trinitrobenzene		----------NA----------				
6	RDX		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene		----------NA----------				
9	2,4,6-Trinitrotoluene	500.000	485.592	2.9	88	0.00	11.37-12.37

Job Number: FA53896 **Sample:** GGG2571-ICV2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG613834.D
Project: Ft Ord; CA

10	Nitroglycerin			NA				
		Amount	Calc.	%Drift				
11	Tetryl	500.000	520.034	-4.0	101	0.00	12.78-13.78	
		Amount	Calc.	%Drift				
12 S	3,4-Dinitrotoluene			NA				
13	2,6-Dinitrotoluene			NA				
		Amount	Calc.	%Drift				
14	2,4-Dinitrotoluene			NA				
		Amount	Calc.	%Drift				
15	o-Nitrotoluene			NA				
		Amount	Calc.	%Drift				
16	3,5-Dinitroaniline			NA				
		Amount	Calc.	%Drift				
17	p-Nitrotoluene			NA				
18	4-Amino-2,6-Dinitrotoluen			NA				
19	m-Nitrotoluene			NA				
		Amount	Calc.	%Drift				
20	2-Amino-4,6-Dinitrotoluen			NA				
		Amount	Calc.	%Drift				
21	PETN			NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:46:22 2017

Continuing Calibration Summary

Job Number: FA53896 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614559.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	975.314	2.5	98	0.01	4.48- 5.48
2	HMX	1000.000	1063.869	-6.4	112	0.02	4.88- 5.88
3	DNX	1000.000	1067.834	-6.8	109	0.02	5.05- 6.05
4	MNX	1000.000	1064.522	-6.5	107	0.03	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1001.327	-0.1	102	0.02	6.94- 7.94
6	RDX	1000.000	1064.581	-6.5	108	0.03	7.39- 8.39
7	1,3-Dinitrobenzene	1000.000	1008.816	-0.9	105	0.02	9.42-10.42
8	Nitrobenzene	1000.000	1016.342	-1.6	108	0.02	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	994.771	0.5	107	0.01	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	943.225	5.7	101	0.02	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1117.944	-11.8	113	0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1025.534	-2.6	105	0.02	14.11-15.11
14	2,4-Dinitrotoluene	1000.000	1018.917	-1.9	106	0.02	14.82-15.82
15	o-Nitrotoluene	1000.000	1053.323	-5.3	108	0.02	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1147.194	-14.7	116	0.04	15.75-16.75
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1041.185	-4.1	106	0.05	17.50-18.50
18	4-Amino-2,6-Dinitrotol	1000.000	1041.185	-4.1	106	0.05	17.50-18.50
19	m-Nitrotoluene	1000.000	1089.895	-9.0	107	0.03	18.73-19.73
20	2-Amino-4,6-Dinitrotol	1000.000	1064.430	-6.4	105	0.06	19.66-20.66
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	975.388	2.5	98	0.01	4.48- 5.48
2	HMX	1000.000	1070.517	-7.1	112	0.02	4.88- 5.88
3	DNX	1000.000	1063.084	-6.3	109	0.02	5.05- 6.05
4	MNX	1000.000	1063.662	-6.4	106	0.03	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	1001.443	-0.1	102	0.02	6.94- 7.94
6	RDX	1000.000	1065.694	-6.6	107	0.03	7.39- 8.39
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	937.897	6.2	95	0.02	9.42-10.42
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1093.968	-9.4	104	0.02	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1098.099	-9.8	107	0.01	11.16-12.16

Continuing Calibration Summary

Job Number: FA53896 **Sample:** GGG2624-CC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614559.D
Project: Ft Ord; CA

10	Nitroglycerin	5000.000	5395.734	-7.9	101	0.01	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1062.043	-6.2	107	0.02	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1209.610	-21.0#	124	0.02	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1100.117	-10.0	109	0.02	14.10-15.10
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1056.379	-5.6	109	0.02	14.82-15.82
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1019.599	-2.0	104	0.02	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1153.122	-15.3	116	0.04	15.75-16.75
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1048.589	-4.9	104	0.05	17.51-18.51
18	4-Amino-2,6-Dinitrotol	1000.000	1045.540	-4.6	104	0.05	17.51-18.51
19	m-Nitrotoluene	1000.000	1093.677	-9.4	108	0.03	18.73-19.73
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1089.986	-9.0	109	0.06	19.66-20.66
		Amount	Calc.	%Drift			
21	PETN	5000.000	5554.954	-11.1	103	0.03	21.27-22.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 04 09:38:34 2018

6.7.8

6

Continuing Calibration Summary

Job Number: FA53896 **Sample:** GGG2624-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614571.D
Project: Ft Ord; CA

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	955.156	4.5	96	0.00	4.48- 5.48
2	HMX	1000.000	1021.052	-2.1	108	0.00	4.88- 5.88
3	DNX	1000.000	1041.435	-4.1	107	0.00	5.05- 6.05
4	MNX	1000.000	1060.437	-6.0	106	0.00	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	996.571	0.3	102	0.00	6.94- 7.94
6	RDX	1000.000	1058.016	-5.8	107	0.00	7.39- 8.39
7	1,3-Dinitrobenzene	1000.000	1000.504	-0.1	104	0.00	9.42-10.42
8	Nitrobenzene	1000.000	1005.328	-0.5	107	0.00	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	985.850	1.4	106	-0.01	11.16-12.16
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	928.473	7.2	100	0.00	12.42-13.42
12 S	3,4-Dinitrotoluene	1000.000	1104.792	-10.5	112	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1024.919	-2.5	105	0.01	14.11-15.11
14	2,4-Dinitrotoluene	1000.000	1017.583	-1.8	106	0.00	14.82-15.82
15	o-Nitrotoluene	1000.000	1053.119	-5.3	108	-0.01	16.37-17.37
	----------	Amount	Calc.	%Drift	----------		
16	3,5-Dinitroaniline	1000.000	1143.053	-14.3	115	0.04	15.75-16.75
	----------	Amount	Calc.	%Drift	----------		
17	p-Nitrotoluene	1000.000	1039.108	-3.9	106	0.02	17.50-18.50
18	4-Amino-2,6-Dinitrotol	1000.000	1039.108	-3.9	106	0.02	17.50-18.50
19	m-Nitrotoluene	1000.000	1091.149	-9.1	107	0.00	18.73-19.73
20	2-Amino-4,6-Dinitrotol	1000.000	1063.472	-6.3	105	0.03	19.66-20.66
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	955.229	4.5	96	0.00	4.48- 5.48
2	HMX	1000.000	1027.433	-2.7	108	0.00	4.88- 5.88
3	DNX	1000.000	1036.803	-3.7	107	0.00	5.05- 6.05
4	MNX	1000.000	1059.581	-6.0	106	0.00	6.04- 7.04
5	1,3,5-Trinitrobenzene	1000.000	997.351	0.3	102	0.00	6.94- 7.94
6	RDX	1000.000	1066.727	-6.7	107	0.00	7.39- 8.39
	----------	Amount	Calc.	%Drift	----------		
7	1,3-Dinitrobenzene	1000.000	954.911	4.5	97	0.00	9.42-10.42
	----------	Amount	Calc.	%Drift	----------		
8	Nitrobenzene	1000.000	1074.496	-7.4	102	0.00	10.38-11.38
9	2,4,6-Trinitrotoluene	1000.000	1101.672	-10.2	107	-0.01	11.16-12.16

Continuing Calibration Summary

Job Number: FA53896 **Sample:** GGG2624-ECC2571
Account: KEMCAM Kemron Environmental Services, Inc **Lab FileID:** GG614571.D
Project: Ft Ord; CA

		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	5375.208	-7.5	101	-0.01	11.90-12.90
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	1028.386	-2.8	103	0.00	12.42-13.42
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1205.499	-20.5#	123	0.00	13.75-14.75
13	2,6-Dinitrotoluene	1000.000	1101.971	-10.2	109	0.02	14.10-15.10
		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	1059.140	-5.9	109	0.00	14.82-15.82
		Amount	Calc.	%Drift			
15	o-Nitrotoluene	1000.000	1022.947	-2.3	104	-0.01	16.37-17.37
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	1151.957	-15.2	116	0.04	15.75-16.75
		Amount	Calc.	%Drift			
17	p-Nitrotoluene	1000.000	1041.232	-4.1	103	0.02	17.51-18.51
18	4-Amino-2,6-Dinitrotol	1000.000	1038.204	-3.8	103	0.02	17.51-18.51
19	m-Nitrotoluene	1000.000	1109.587	-11.0	109	0.00	18.73-19.73
		Amount	Calc.	%Drift			
20	2-Amino-4,6-Dinitrotol	1000.000	1092.810	-9.3	109	0.02	19.66-20.66
		Amount	Calc.	%Drift			
21	PETN	5000.000	5534.146	-10.7	102	-0.05	21.27-22.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG613831.D 8330RPB.M_1113M.M Fri May 04 09:38:35 2018

6.7.9

6

GC/LC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059770.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059770.D\dad1A.ch
Acq On : 16-May-2018, 14:43:53 Operator: evitam
Sample : fa53896-1 Inst : G1315B
Misc : OP70034,gbb1732,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:39 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.91	10.91	972976	1741152	390.986	413.953
	Spiked Amount 500.000	Range 69 - 134		Recovery =		78.20%	82.79%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

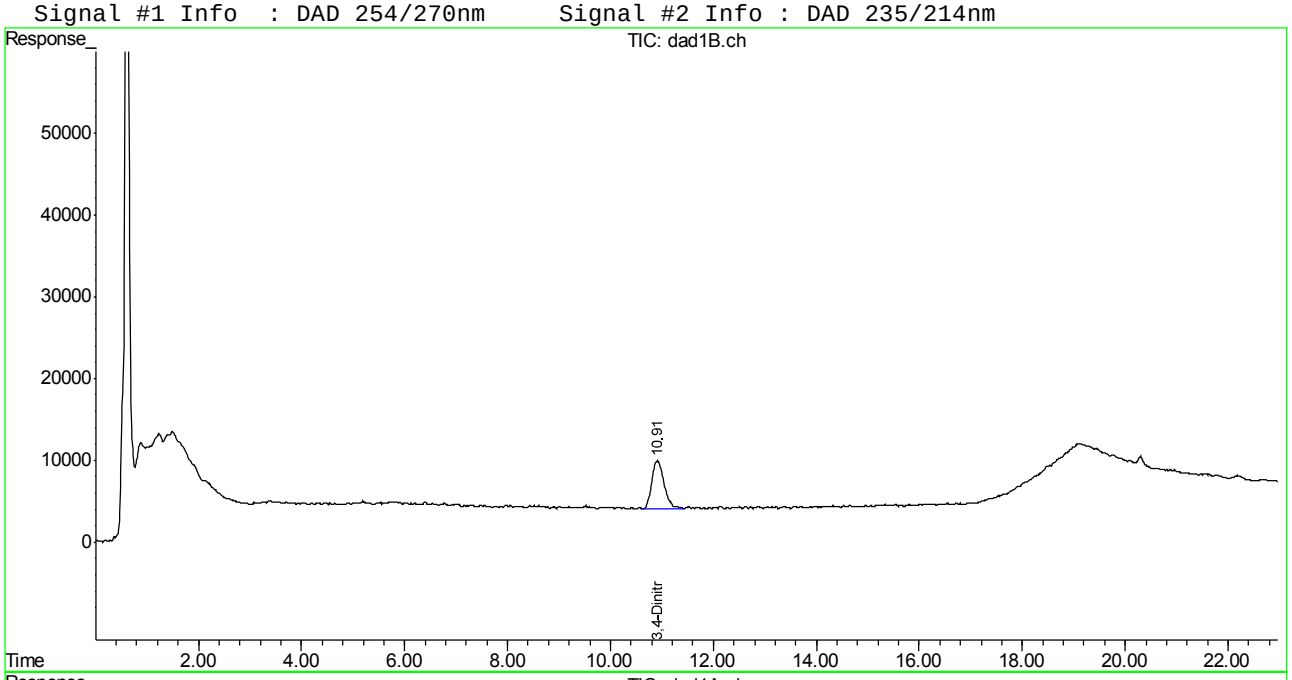
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059770.D 8330B_0516PLUS.M Thu May 17 08:38:15 2018 Page 1

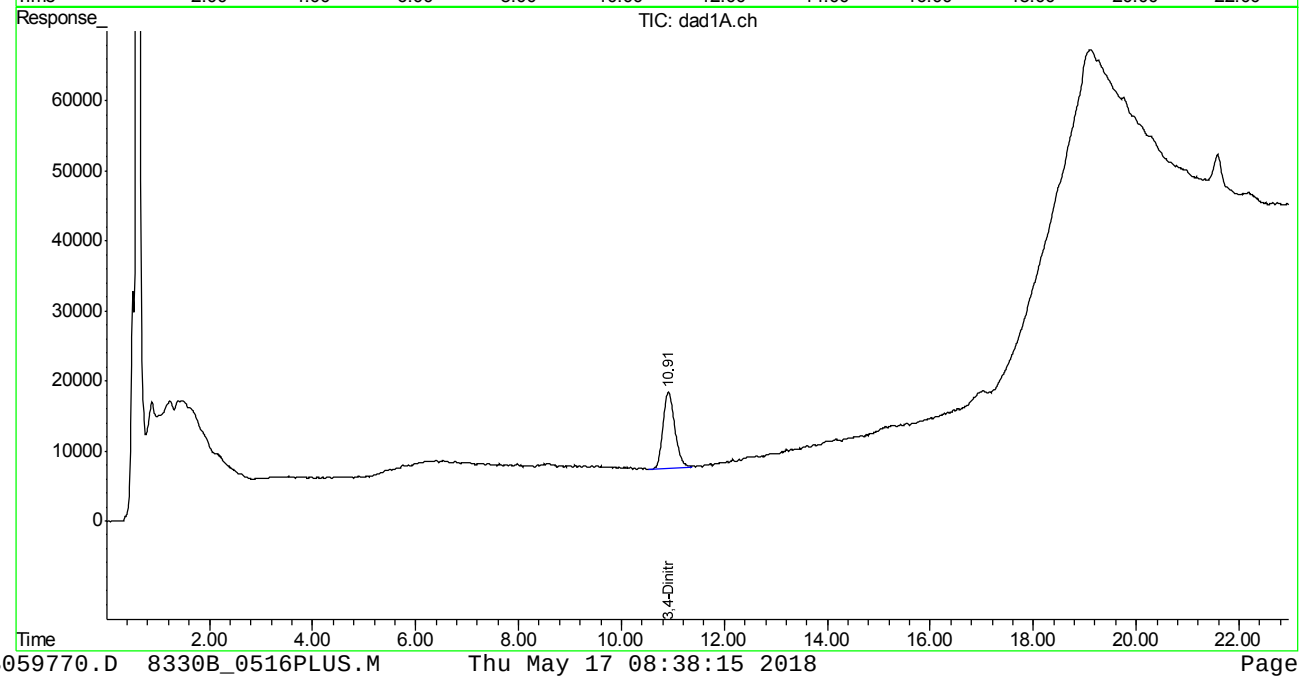
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059770.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059770.D\dad1A.ch
Acq On : 16-May-2018, 14:43:53 Operator: evitam
Sample : fa53896-1 Inst : G1315B
Misc : OP70034,gbb1732,10.16,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:31 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059770.D 8330B_0516PLUS.M Thu May 17 08:38:15 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059773.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059773.D\dad1A.ch
Acq On : 16-May-2018, 16:13:49 Operator: evitam
Sample : fa53896-4 Inst : G1315B
Misc : OP70034,gbb1732,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:42 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.86	10.86	1009759	1751755	405.767	416.473
	Spiked Amount 500.000	Range 69 - 134		Recovery =		81.15%	83.29%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

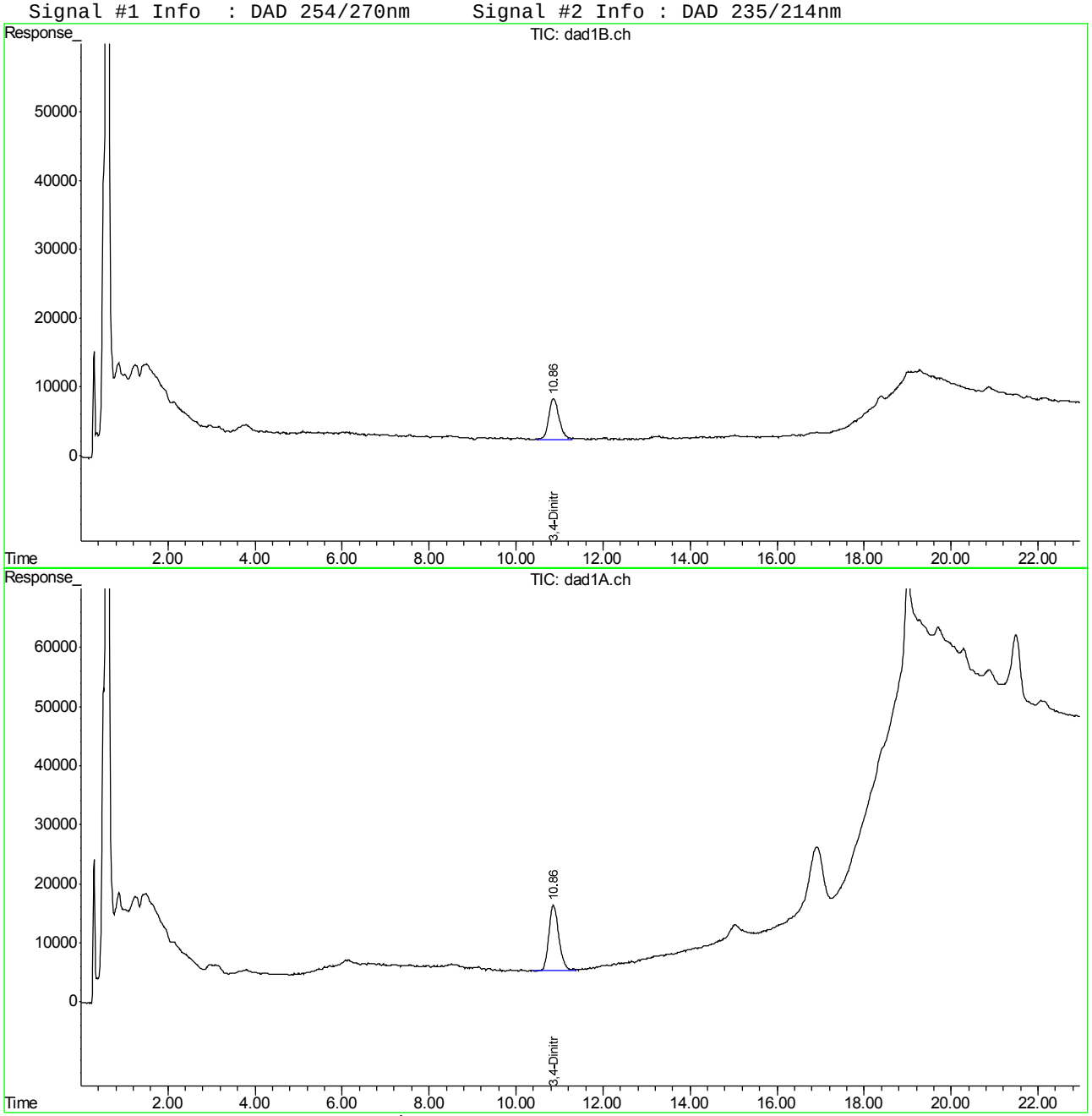
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059773.D 8330B_0516PLUS.M Thu May 17 08:38:18 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059773.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059773.D\dad1A.ch
Acq On : 16-May-2018, 16:13:49 Operator: evitam
Sample : fa53896-4 Inst : G1315B
Misc : OP70034,gbb1732,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:34 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059774.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059774.D\dad1A.ch
Acq On : 16-May-2018, 16:43:48 Operator: evitam
Sample : fa53896-7 Inst : G1315B
Misc : OP70034,gbb1732,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:43 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
15) S 3,4-Dinitrotolue	10.86	10.86	1003925	1710814	403.423	406.740m
Spiked Amount 500.000	Range 69 - 134		Recovery =		80.68%	81.35%
Target Compounds						
1) TNX	0.00	0.00	0	0	N.D. d	N.D. d
2) HMX	0.00	0.00	0	0	N.D. d	N.D. d
3) DNX	0.00	0.00	0	0	N.D. d	N.D. d
4) MNX	0.00	0.00	0	0	N.D. d	N.D. d
5) RDX	0.00	0.00	0	0	N.D. d	N.D. d
6) 1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7) 1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8) 3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9) Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10) Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11) Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12) 2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13) 2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14) 4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16) 2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17) 2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18) o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19) p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20) m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21) PETN	0.00	0.00	0	0	N.D. d	N.D. d

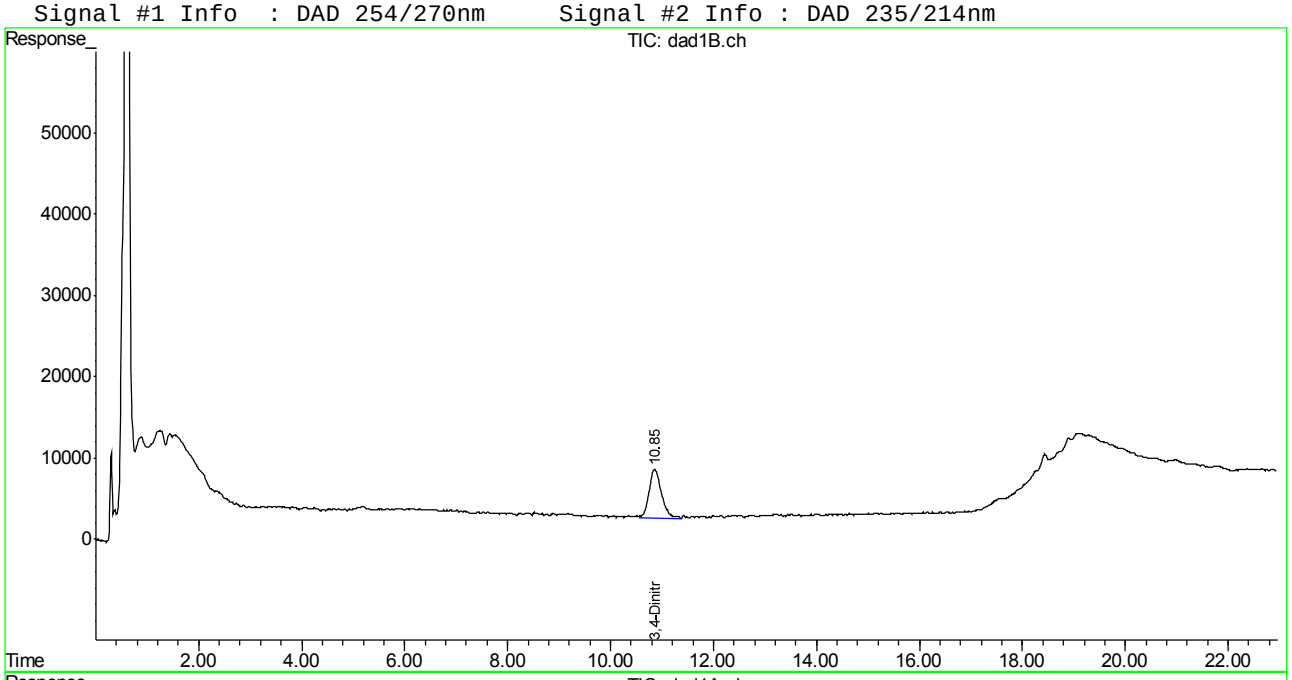
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059774.D 8330B_0516PLUS.M Thu May 17 08:44:24 2018 Page 1

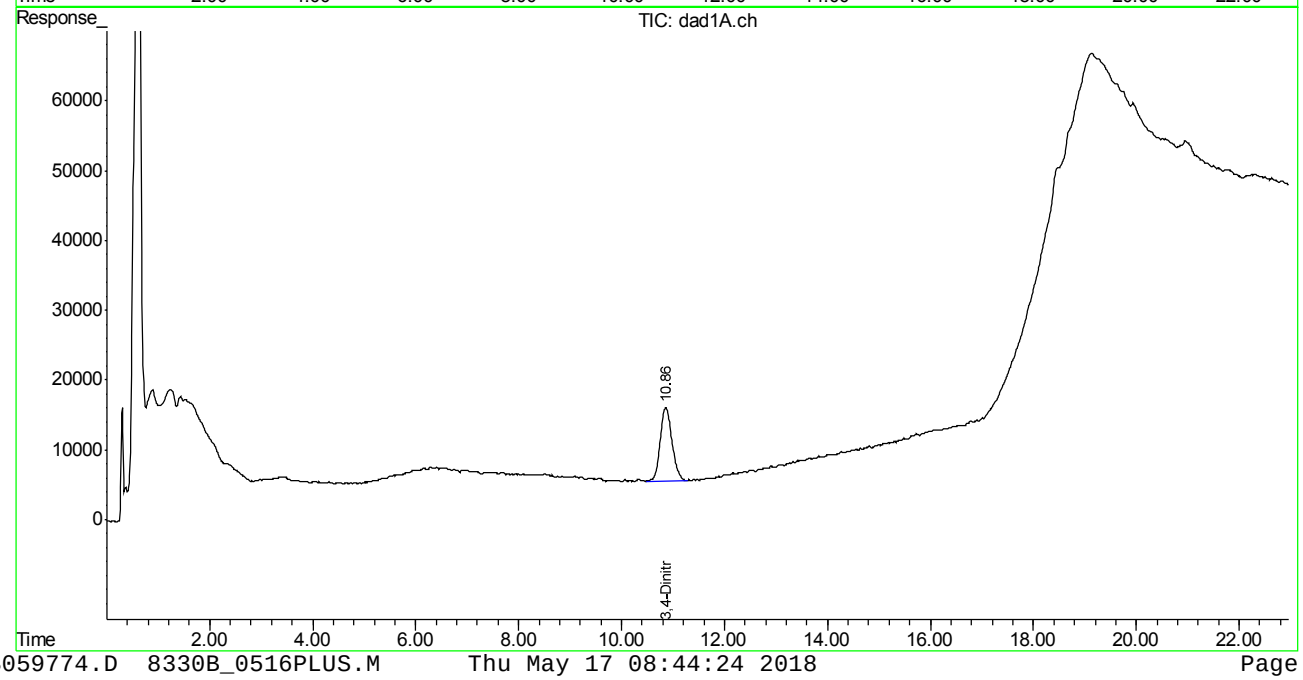
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059774.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059774.D\dad1A.ch
Acq On : 16-May-2018, 16:43:48 Operator: evitam
Sample : fa53896-7 Inst : G1315B
Misc : OP70034,gbb1732,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:44 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059774.D 8330B_0516PLUS.M Thu May 17 08:44:24 2018 Page 2

Manual Integration Approval Summary

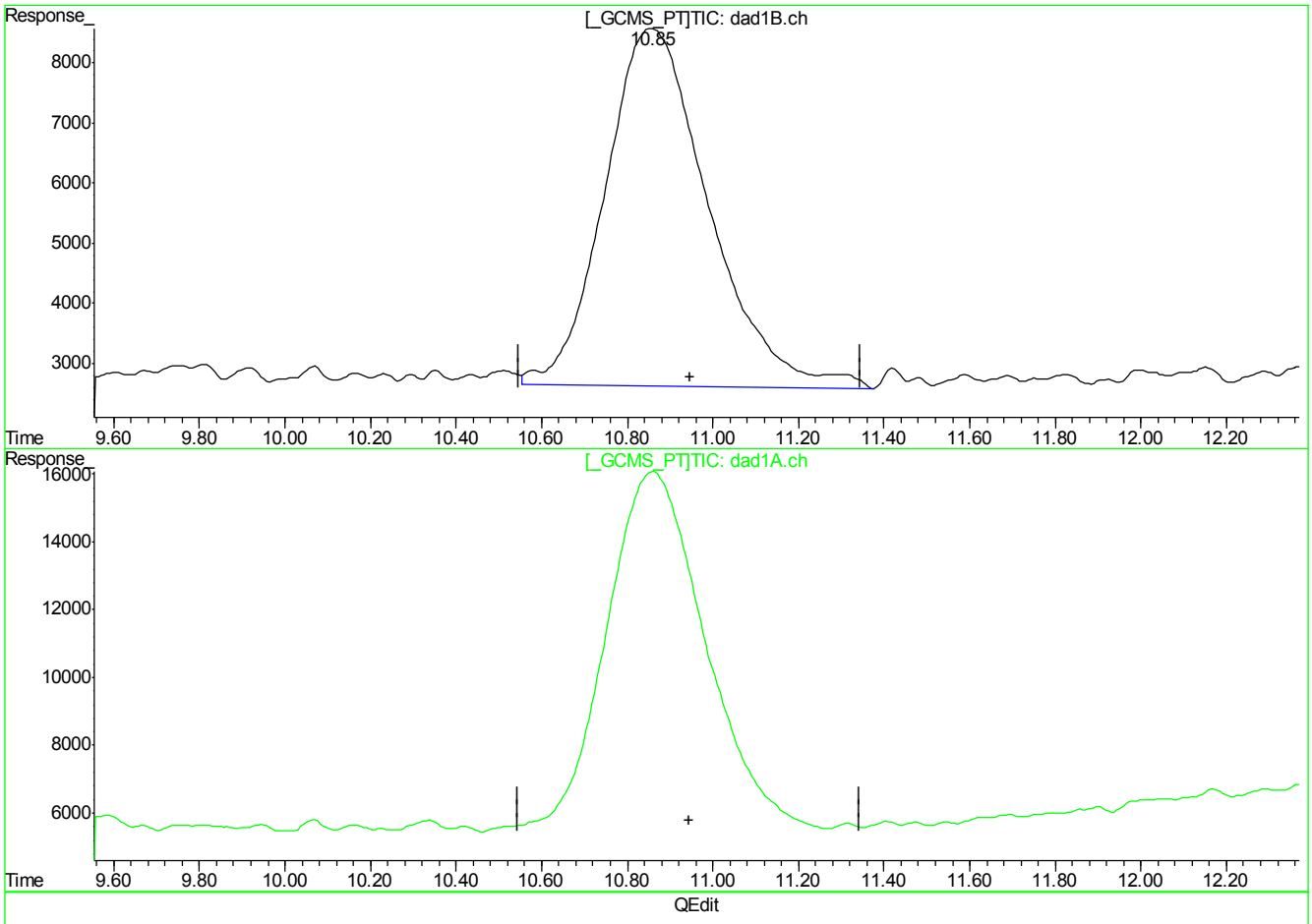
Sample Number:	FA53896-7	**Method:**	SW846 8330B
Lab FileID:	BB059774.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 16:43	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	10.86	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059774.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059774.D\dad1A.ch
Acq On : 16-May-2018, 16:43:48 Operator: evitam
Sample : fa53896-7 Inst : G1315B
Misc : OP70034,gbb1732,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:35 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.86min 403.423ppb

response 1003925

(15) 3,4-Dinitrotoluene #2 (S)

0.00min 0.000ppb d

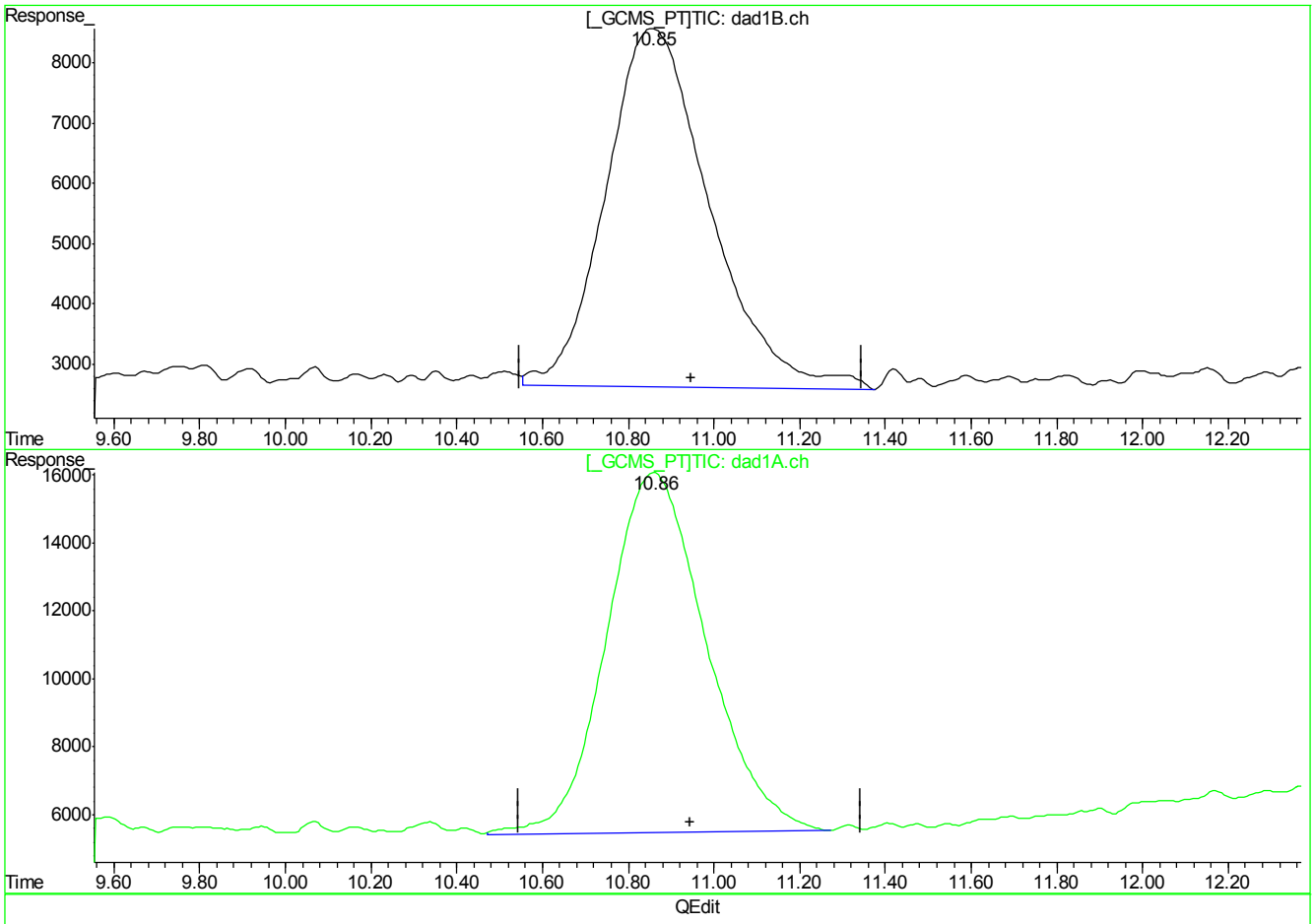
response 0

(+) = Expected Retention Time
BB059774.D 8330B_0516PLUS.M Thu May 17 08:44:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059774.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059774.D\dad1A.ch
Acq On : 16-May-2018, 16:43:48 Operator: evitam
Sample : fa53896-7 Inst : G1315B
Misc : OP70034,gbb1732,10.12,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:35 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.86min 403.423ppb

response 1003925

(15) 3,4-Dinitrotoluene #2 (S)

10.86min 406.740ppb m

response 1710814

(+) = Expected Retention Time
BB059774.D 8330B_0516PLUS.M Thu May 17 08:44:12 2018

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059775.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059775.D\dad1A.ch
Acq On : 16-May-2018, 17:13:47 Operator: evitam
Sample : fa53896-10 Inst : G1315B
Misc : OP70034,gbb1732,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:44 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
15) S 3,4-Dinitrotolue	10.88	10.89	1008241	1751392	405.157	416.387
Spiked Amount 500.000	Range 69 - 134		Recovery =		81.03%	83.28%
Target Compounds						
1) TNX	0.00	0.00	0	0	N.D. d	N.D. d
2) HMX	0.00	0.00	0	0	N.D. d	N.D. d
3) DNX	0.00	0.00	0	0	N.D. d	N.D. d
4) MNX	0.00	0.00	0	0	N.D. d	N.D. d
5) RDX	0.00	0.00	0	0	N.D. d	N.D. d
6) 1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7) 1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8) 3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9) Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10) Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11) Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12) 2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13) 2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14) 4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16) 2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17) 2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18) o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19) p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20) m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21) PETN	0.00	0.00	0	0	N.D. d	N.D. d

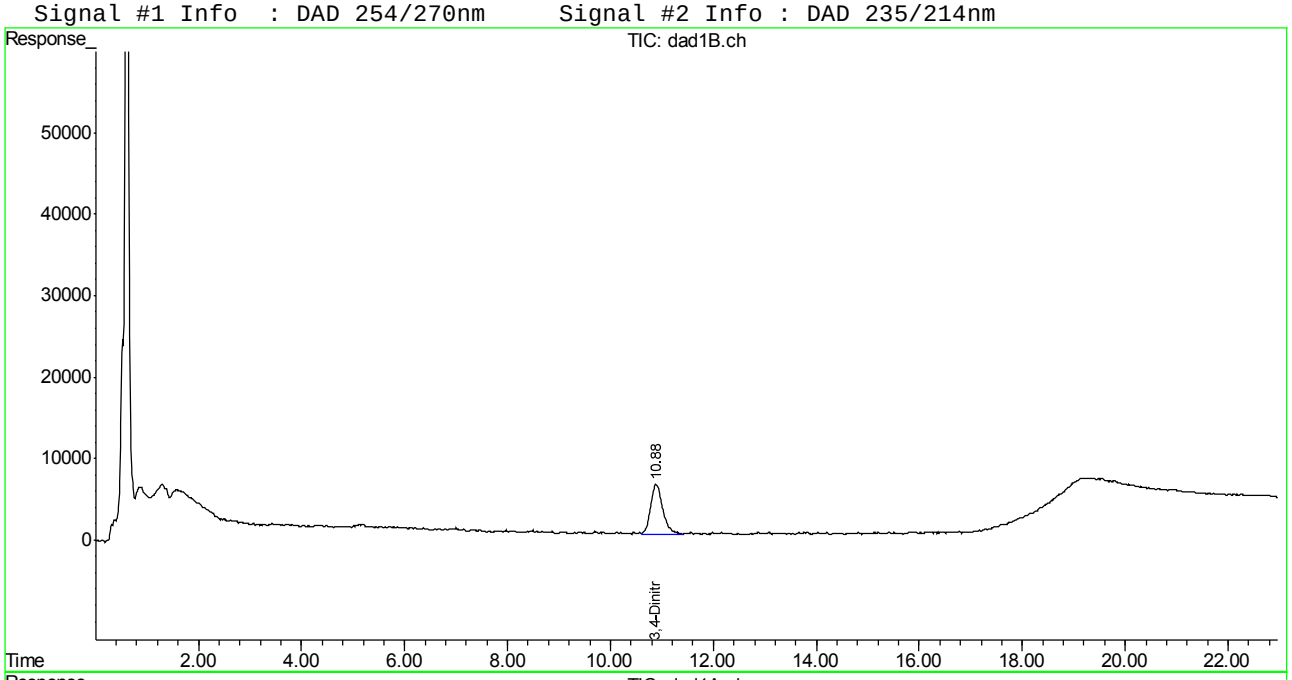
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059775.D 8330B_0516PLUS.M Thu May 17 08:38:20 2018 Page 1

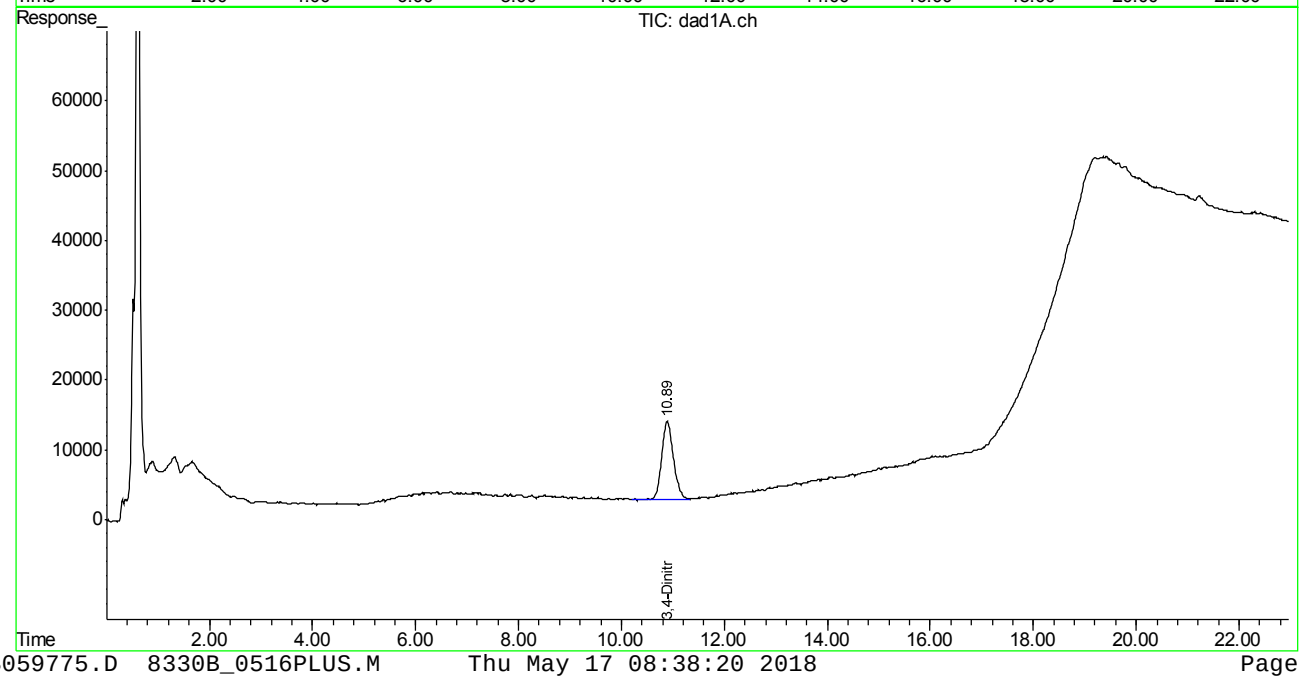
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059775.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059775.D\dad1A.ch
Acq On : 16-May-2018, 17:13:47 Operator: evitam
Sample : fa53896-10 Inst : G1315B
Misc : OP70034,gbb1732,10.09,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:35 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614569.D\dad1B.ch Vial: 29
Signal #2 : G:\DATA\0503RPB3\GG614569.D\dad1A.ch
Acq On : 04-May-2018, 03:02:24 Operator: evitam
Sample : fa53896-13 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:36 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	2808325	5769859	540.594	533.376
	Spiked Amount 500.000	Range 70 - 136		Recovery =		108.12%	106.68%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

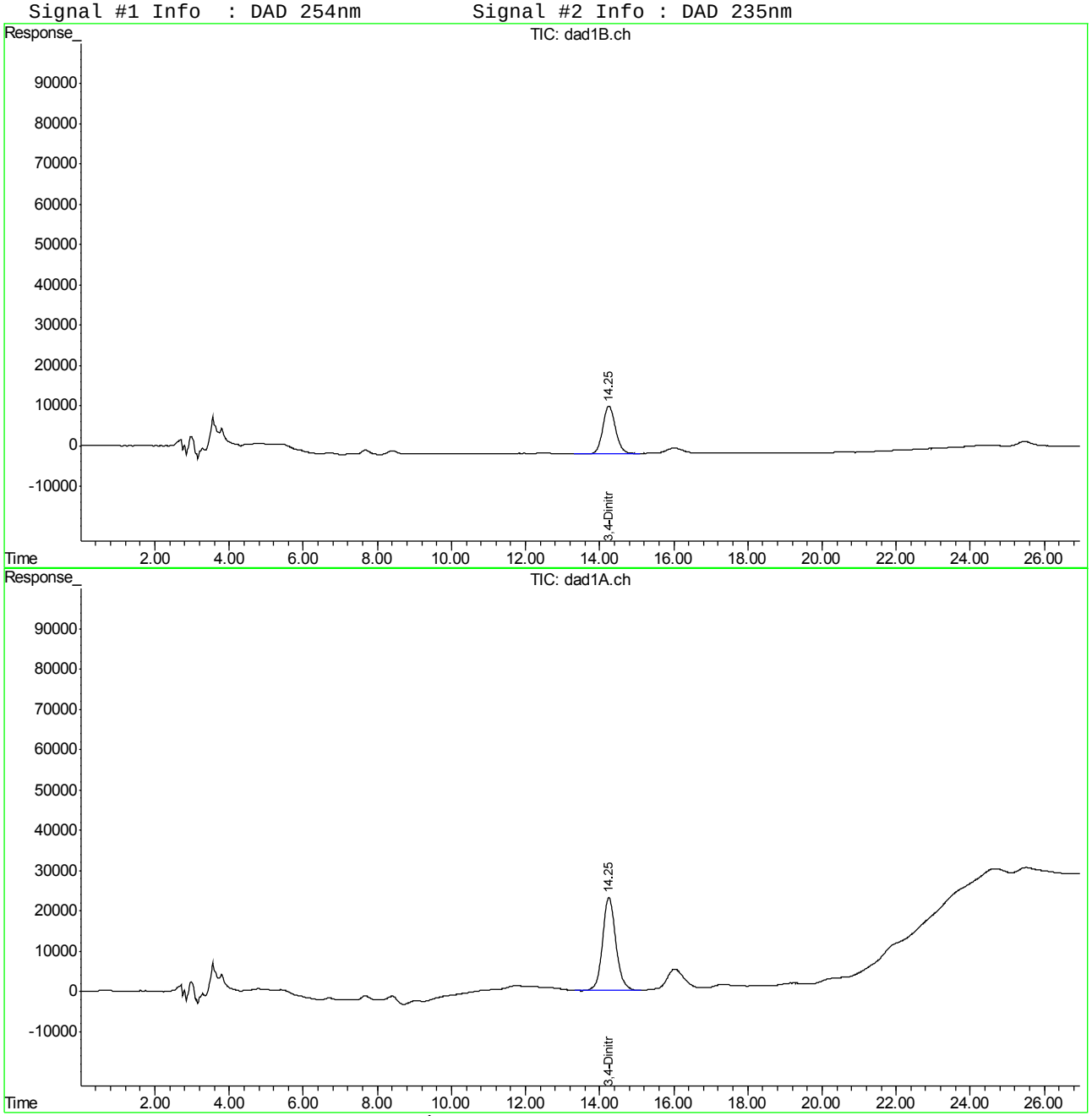
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614569.D 8330RPB.M_1113M.M Fri May 04 13:23:48 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614569.D\dad1B.ch Vial: 29
Signal #2 : G:\DATA\0503RPB3\GG614569.D\dad1A.ch
Acq On : 04-May-2018, 03:02:24 Operator: evitam
Sample : fa53896-13 Inst : G1315B
Misc : op69897,Ggg2624,1060,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 13:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614570.D\dad1B.ch Vial: 30
Signal #2 : G:\DATA\0503RPB3\GG614570.D\dad1A.ch
Acq On : 04-May-2018, 03:31:51 Operator: evitam
Sample : fa53896-14 Inst : G1315B
Misc : op69897,Ggg2624,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:37 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.28	14.28	2795870	6021386	538.197	556.627
	Spiked Amount 500.000	Range 70 - 136		Recovery =		107.64%	111.33%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

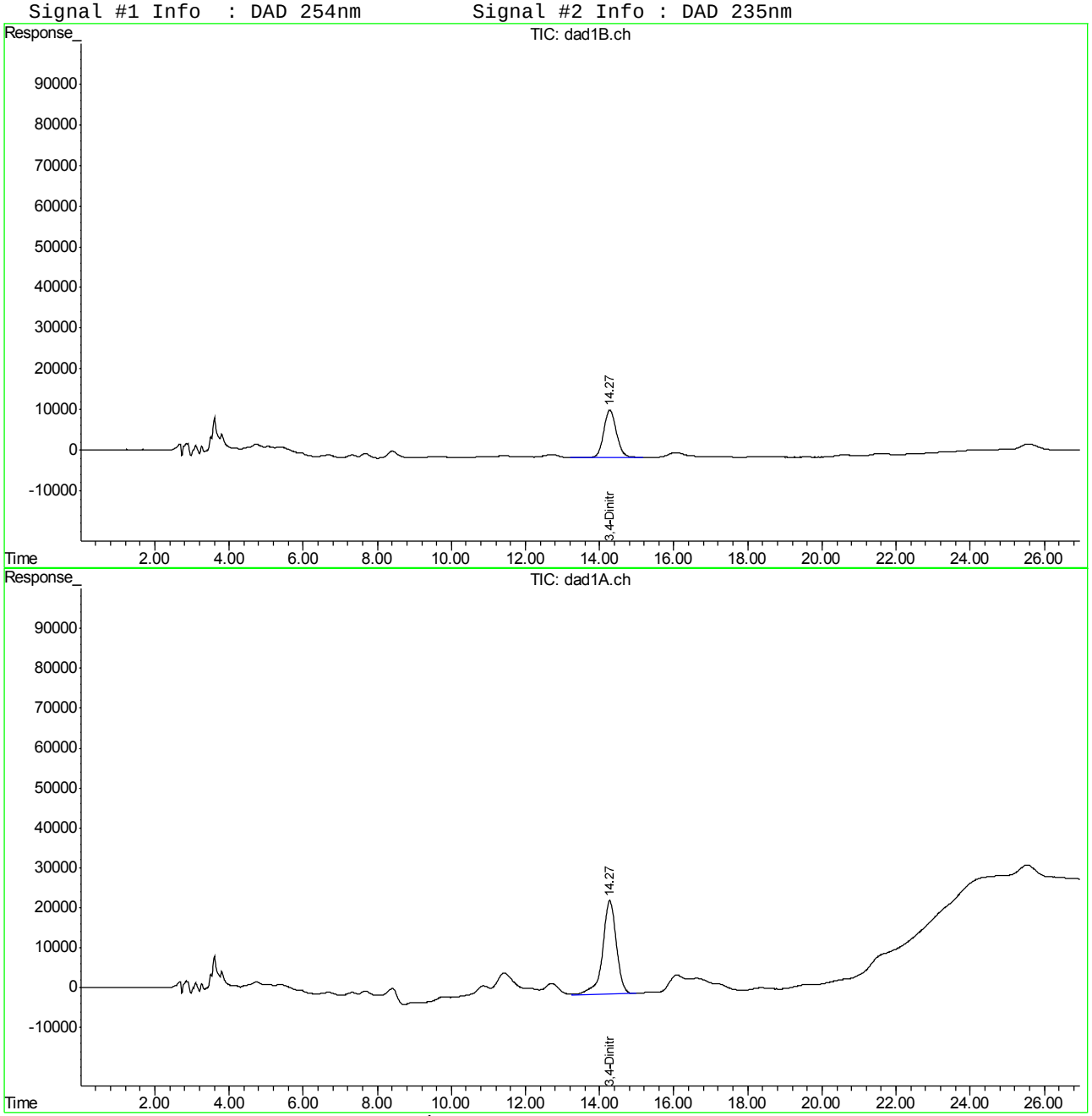
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614570.D 8330RPB.M_1113M.M Fri May 04 13:23:49 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614570.D\dad1B.ch Vial: 30
Signal #2 : G:\DATA\0503RPB3\GG614570.D\dad1A.ch
Acq On : 04-May-2018, 03:31:51 Operator: evitam
Sample : fa53896-14 Inst : G1315B
Misc : op69897,Ggg2624,1050,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 13:23 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614567.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0503RPB3\GG614567.D\dad1A.ch
Acq On : 04-May-2018, 02:03:29 Operator: evitam
Sample : op69897-mb Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:34 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.27	2673491	5273029	514.639	487.448m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		102.93%	97.49%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

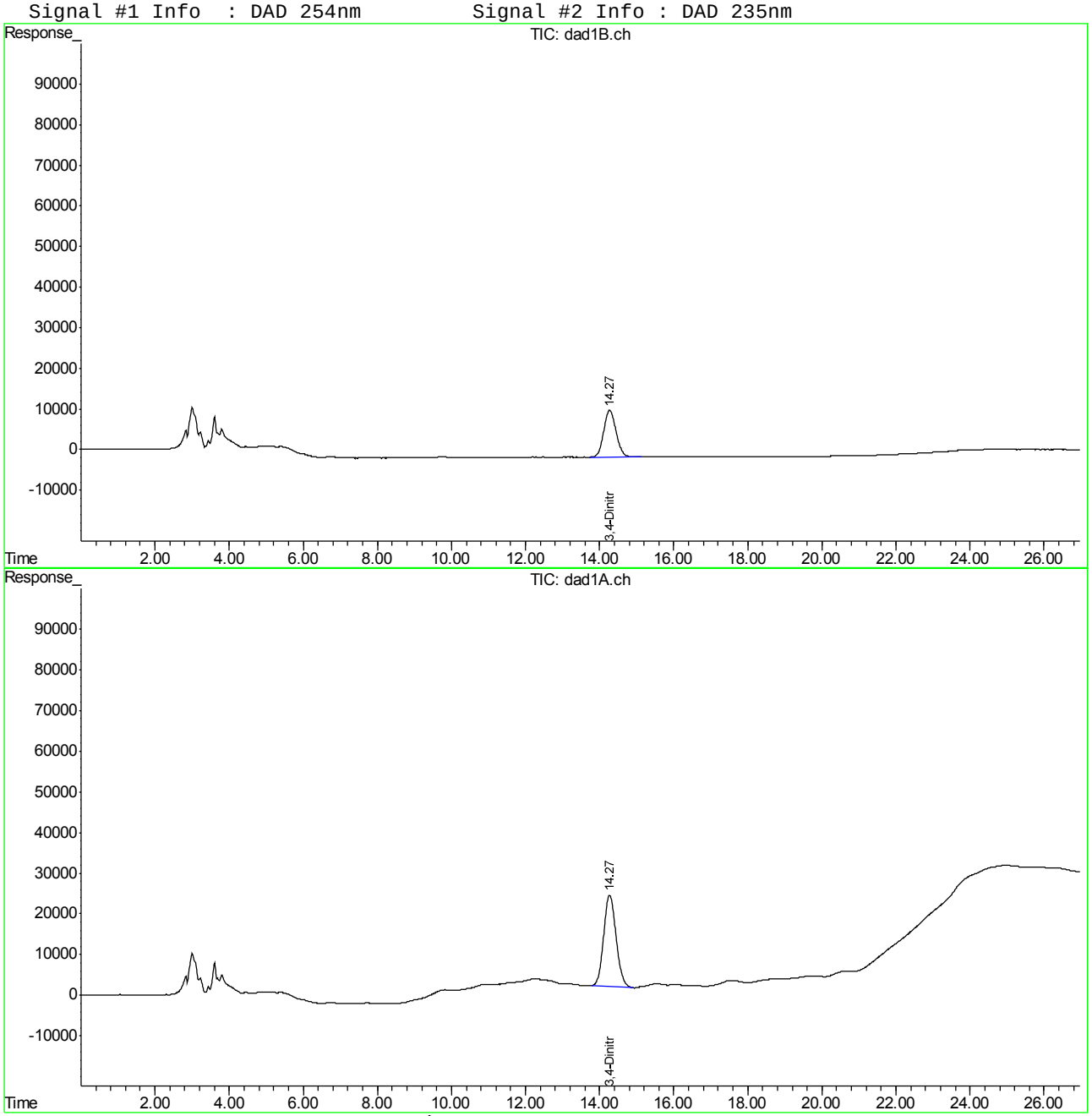
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614567.D 8330RPB.M_1113M.M Fri May 04 09:33:34 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614567.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0503RPB3\GG614567.D\dad1A.ch
Acq On : 04-May-2018, 02:03:29 Operator: evitam
Sample : op69897-mb Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:28 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm



Manual Integration Approval Summary

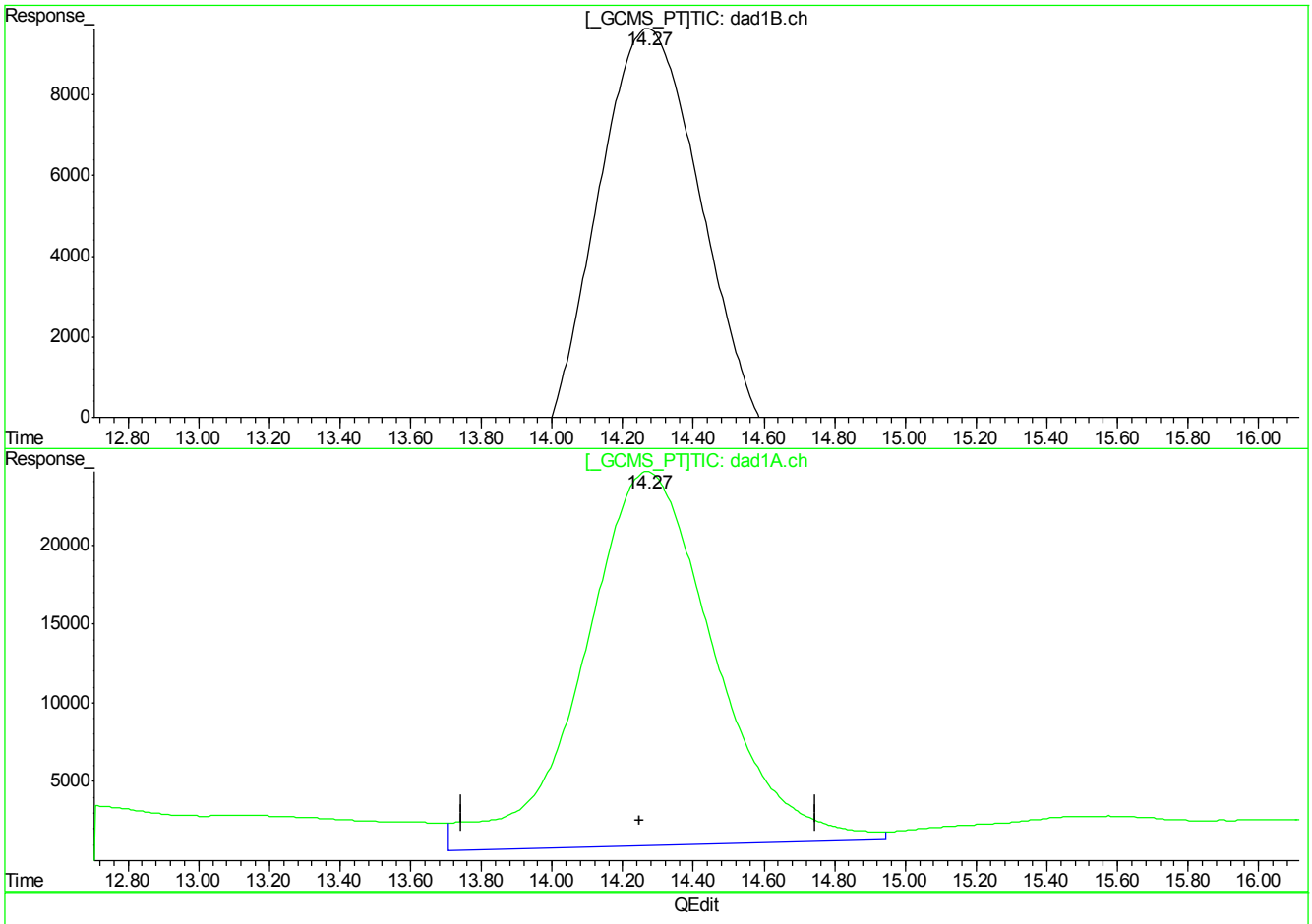
Sample Number:	OP69897-MB	**Method:**	SW846 8330B
Lab FileID:	GG614567.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/04/18 02:03	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	14.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614567.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0503RPB3\GG614567.D\dad1A.ch
Acq On : 04-May-2018, 02:03:29 Operator: evitam
Sample : op69897-mb Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.27min 514.639ppb

response 2673491

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 564.341ppb

response 6104836

(+) = Expected Retention Time
GG614567.D 8330RPB.M_1113M.M Fri May 04 09:28:05 2018

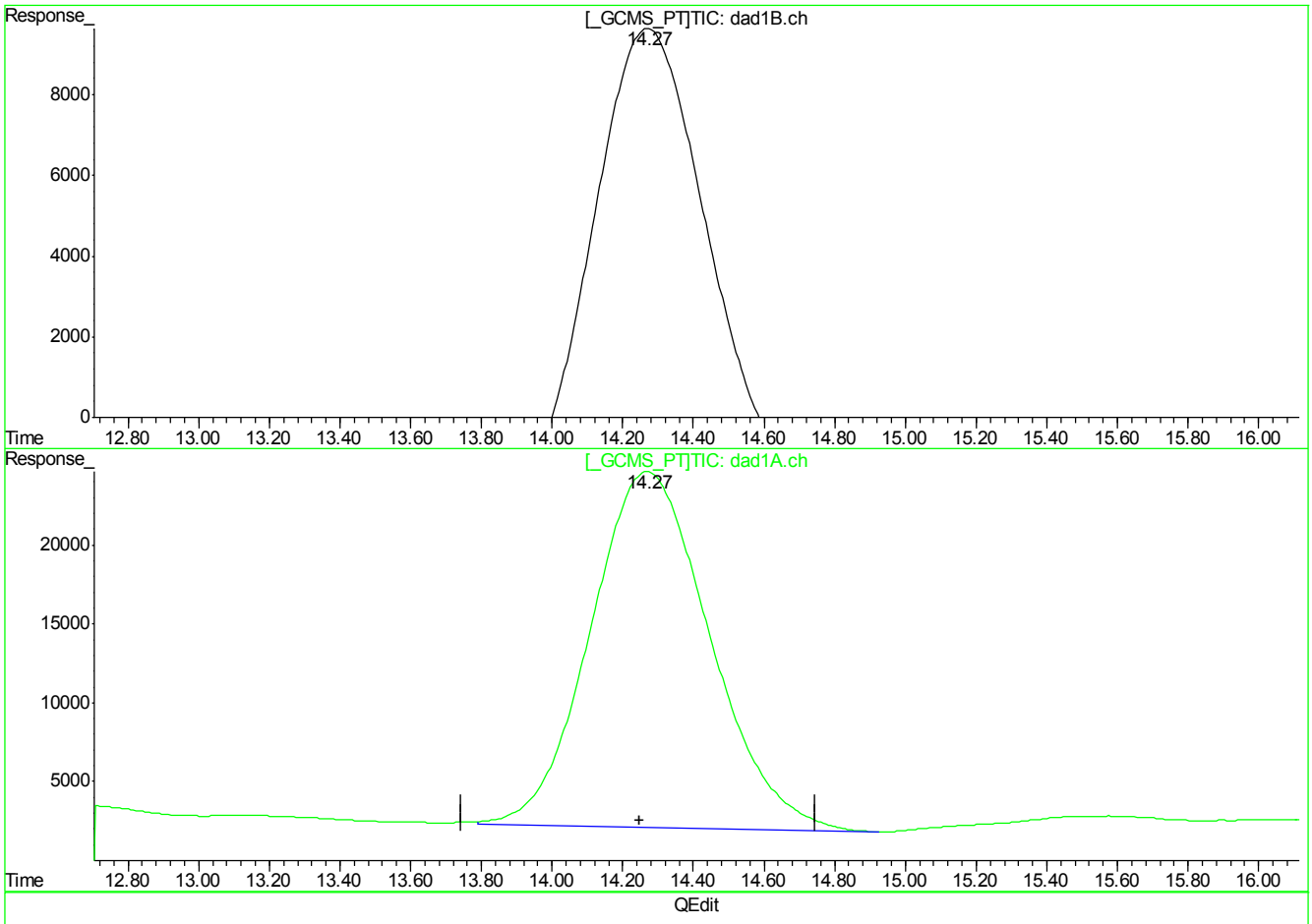
7.2.1.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614567.D\dad1B.ch Vial: 27
Signal #2 : G:\DATA\0503RPB3\GG614567.D\dad1A.ch
Acq On : 04-May-2018, 02:03:29 Operator: evitam
Sample : op69897-mb Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.27min 514.639ppb

response 2673491

(12) 3,4-Dinitrotoluene #2 (S)

14.27min 487.448ppb m

response 5273029

(+) = Expected Retention Time
GG614567.D 8330RPB.M_1113M.M Fri May 04 09:28:08 2018

7.2.1.3

7

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059769.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059769.D\dad1A.ch
Acq On : 16-May-2018, 14:13:57 Operator: evitam
Sample : op70034-mb Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:38 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.94	10.94	1117530	1868973	449.074	444.342
	Spiked Amount 500.000	Range 69 - 134		Recovery =		89.81%	88.87%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

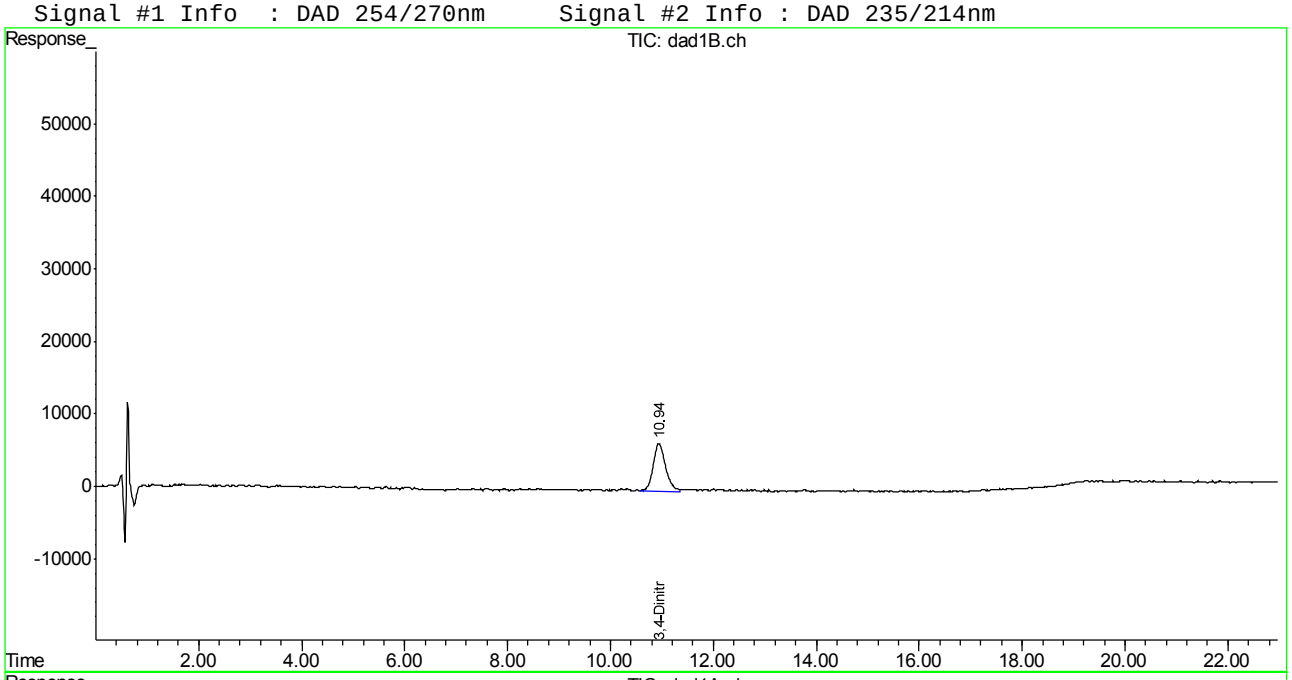
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059769.D 8330B_0516PLUS.M Thu May 17 08:38:14 2018 Page 1

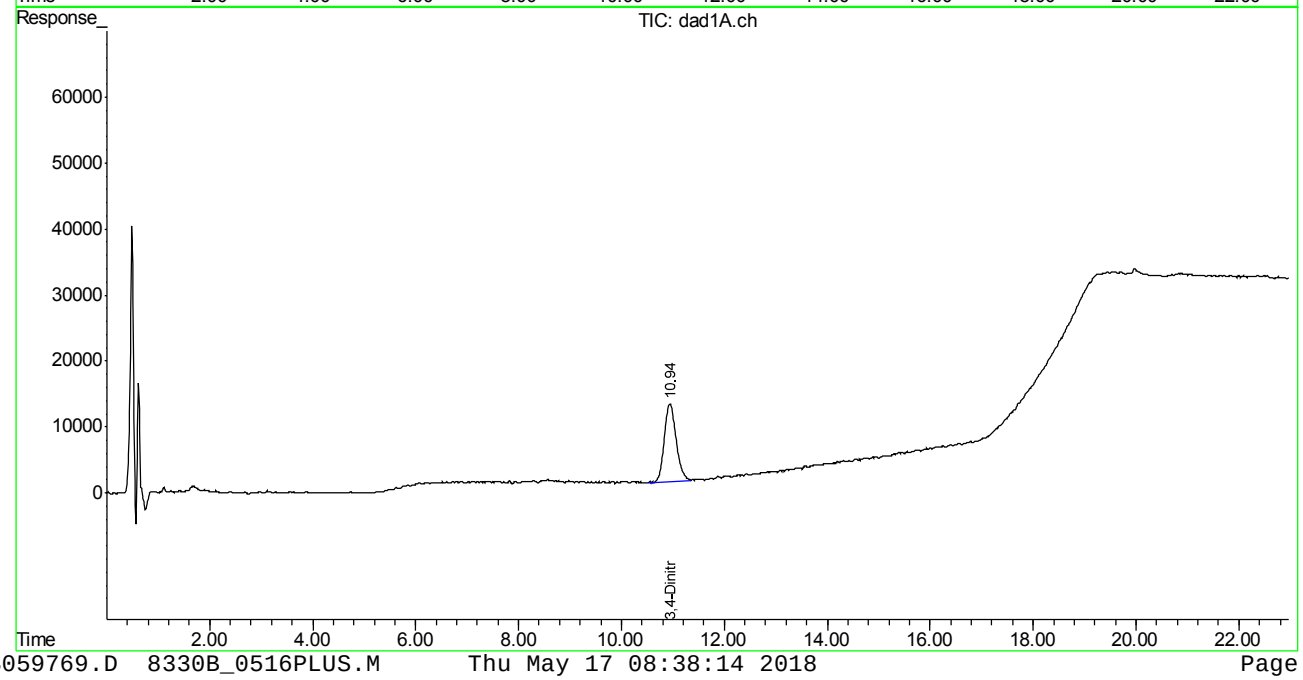
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059769.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059769.D\dad1A.ch
Acq On : 16-May-2018, 14:13:57 Operator: evitam
Sample : op70034-mb Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:31 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059769.D 8330B_0516PLUS.M Thu May 17 08:38:14 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059778.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059778.D\dad1A.ch
Acq On : 16-May-2018, 18:43:37 Operator: evitam
Sample : op70034-gb2 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:47 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.96	10.95	1034354	1773963	415.650	421.753
	Spiked Amount 500.000	Range 69 - 134		Recovery =		83.13%	84.35%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

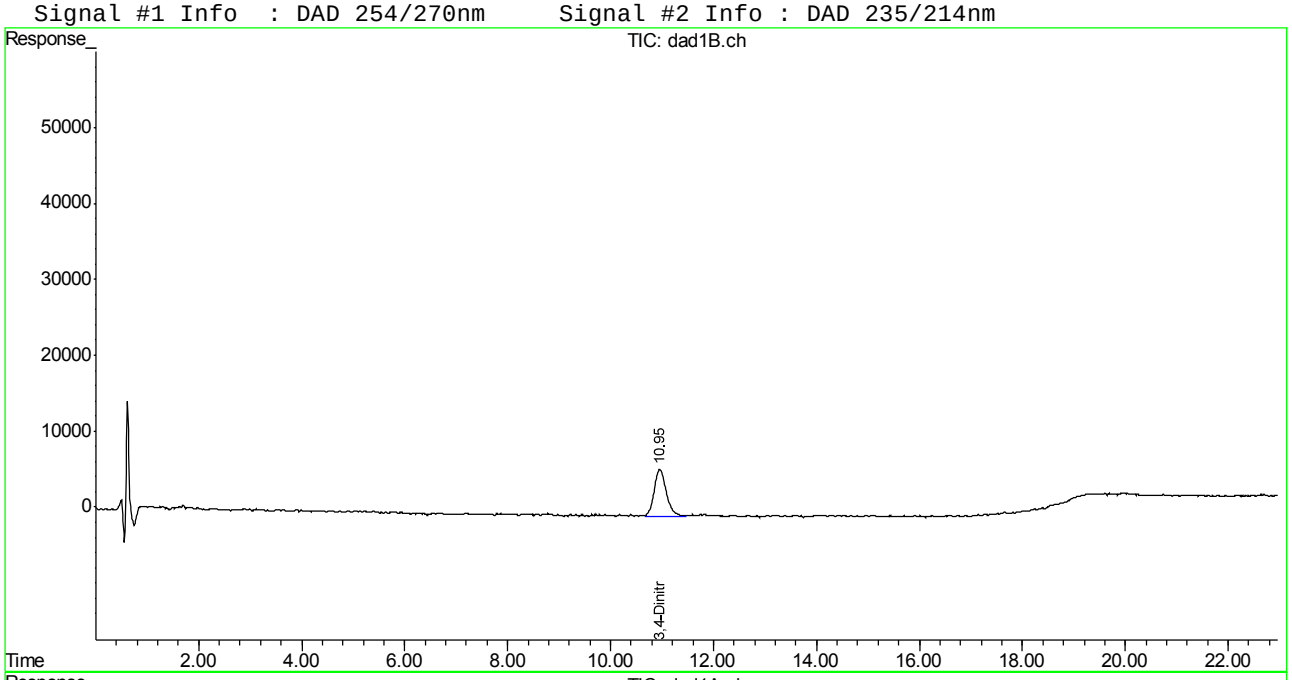
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059778.D 8330B_0516PLUS.M Thu May 17 08:38:22 2018 Page 1

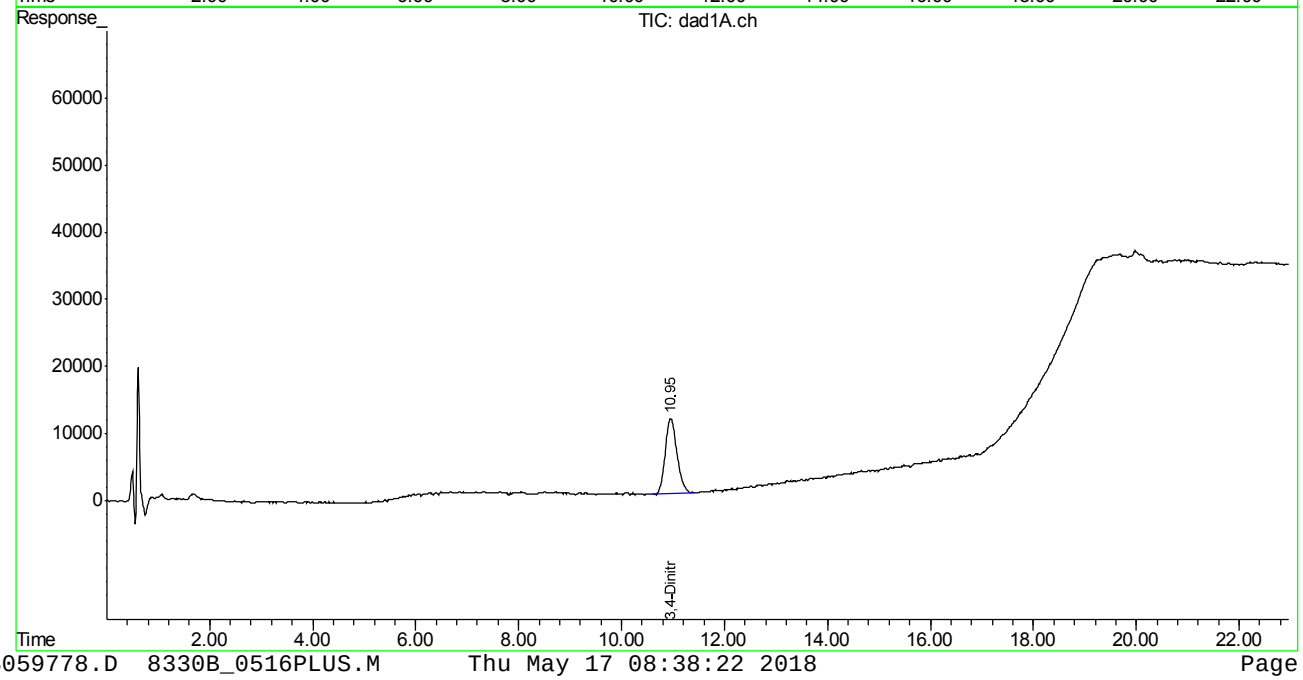
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059778.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059778.D\dad1A.ch
Acq On : 16-May-2018, 18:43:37 Operator: evitam
Sample : op70034-gb2 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:36 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059778.D 8330B_0516PLUS.M Thu May 17 08:38:22 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059779.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059779.D\dad1A.ch
Acq On : 16-May-2018, 19:13:33 Operator: evitam
Sample : op70034-gb3 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:48 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.98	10.98	937667	1672423	376.797	397.612
	Spiked Amount 500.000	Range 69 - 134		Recovery =		75.36%	79.52%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

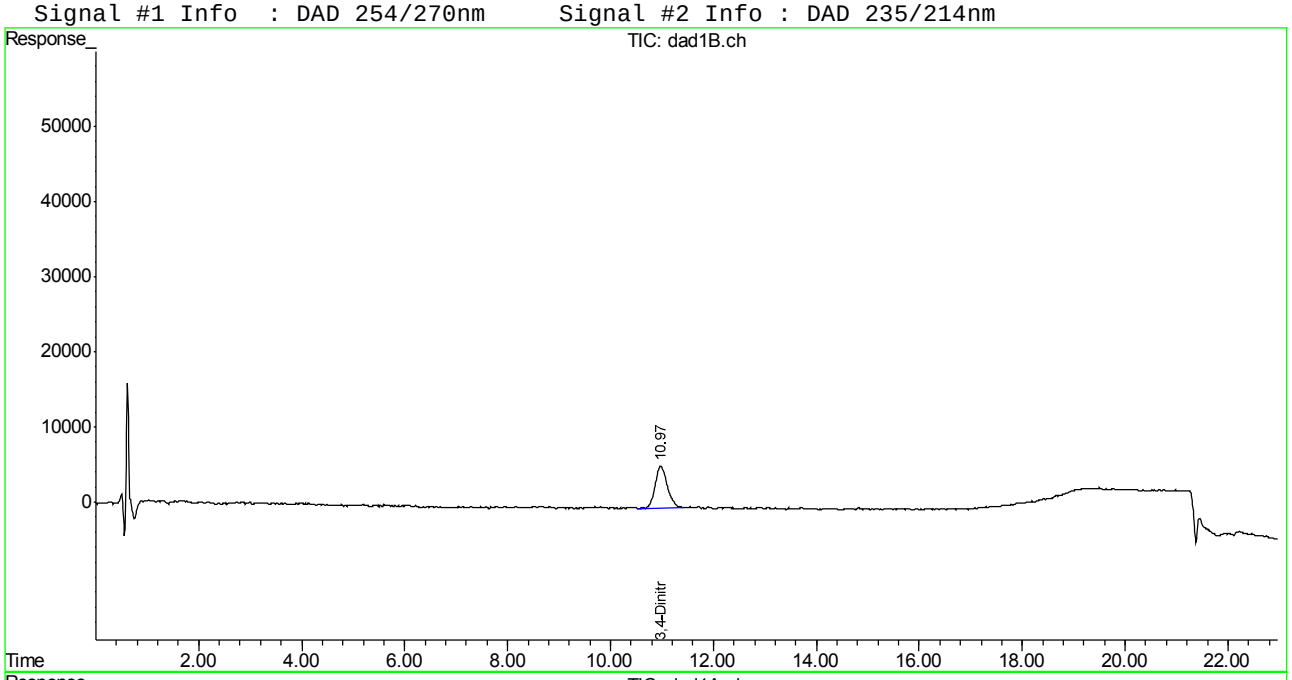
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059779.D 8330B_0516PLUS.M Thu May 17 08:38:23 2018 Page 1

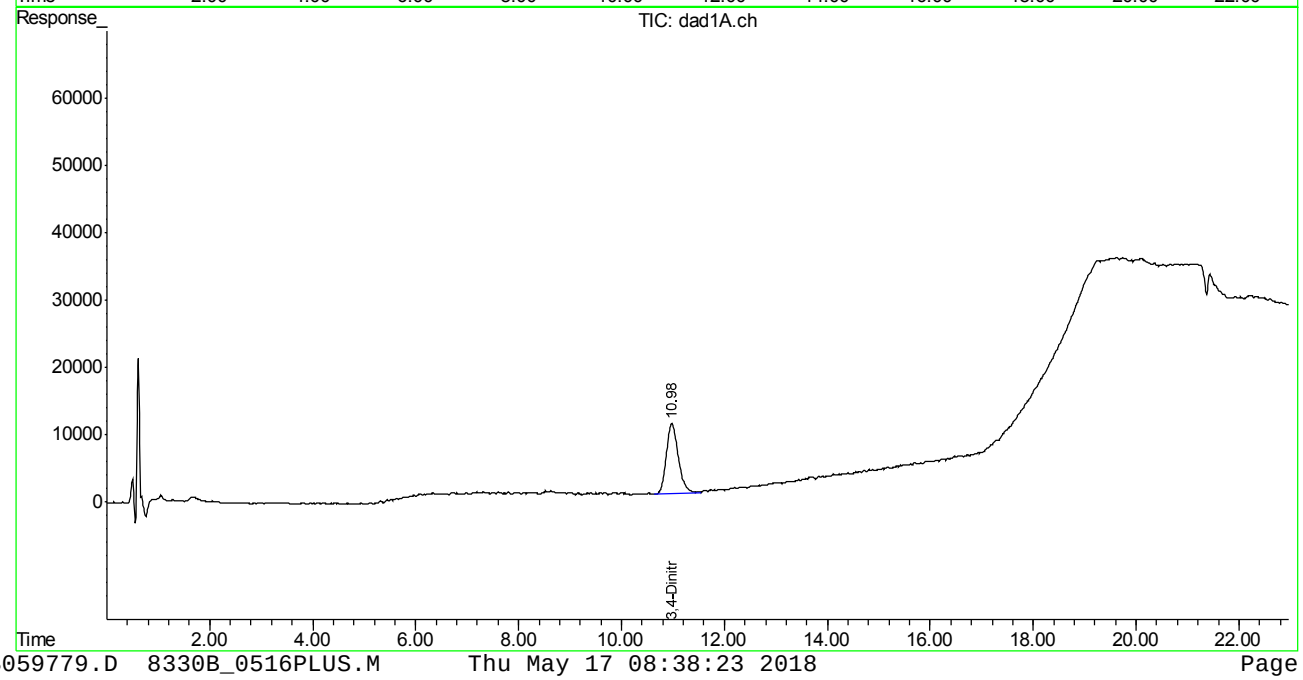
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059779.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059779.D\dad1A.ch
Acq On : 16-May-2018, 19:13:33 Operator: evitam
Sample : op70034-gb3 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:36 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059779.D 8330B_0516PLUS.M Thu May 17 08:38:23 2018 Page 2

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059780.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059780.D\dad1A.ch
Acq On : 16-May-2018, 19:43:32 Operator: evitam
Sample : op70034-gb1 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:49 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.95	10.94	1001951	1719121	402.629	408.715
	Spiked Amount 500.000	Range 69 - 134		Recovery =		80.53%	81.74%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

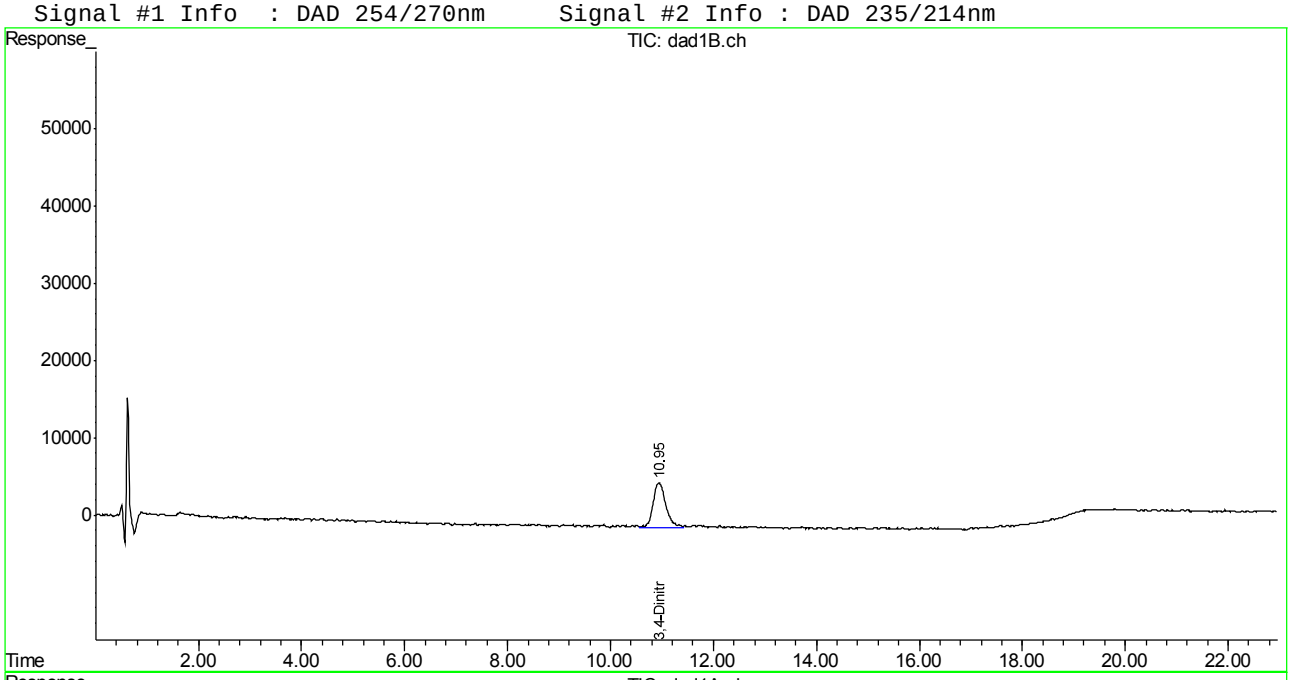
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059780.D 8330B_0516PLUS.M Thu May 17 08:38:24 2018 Page 1

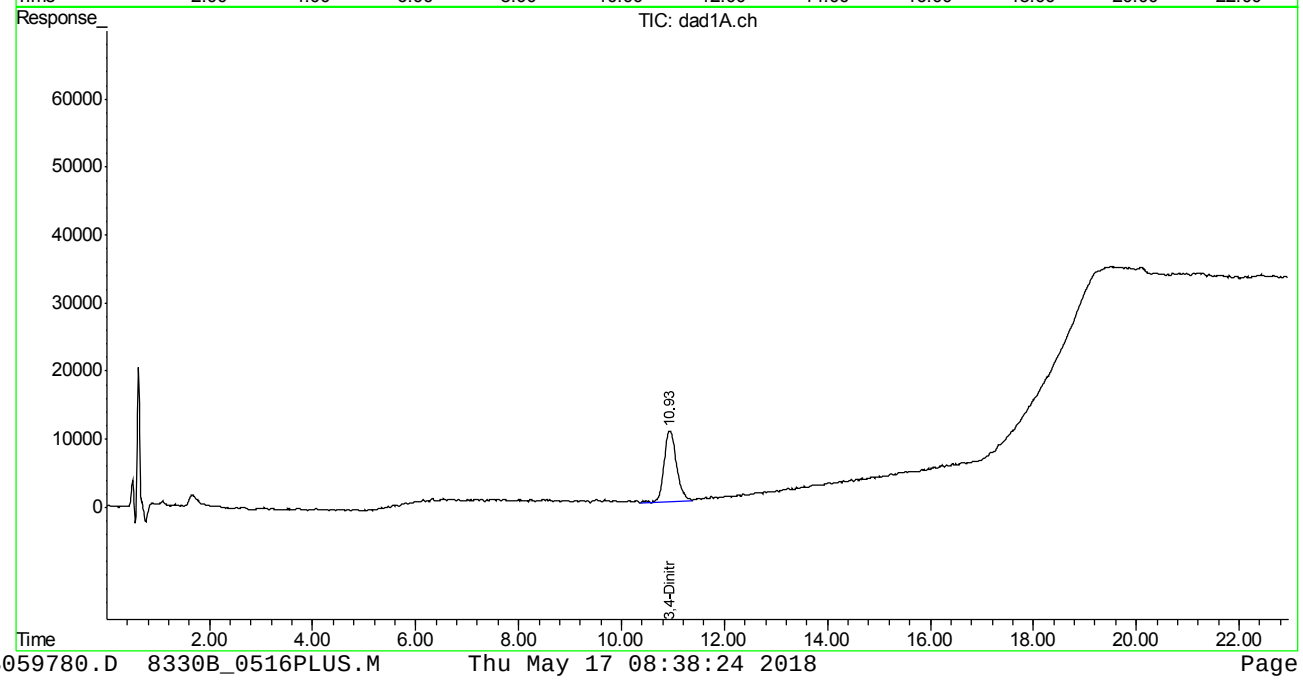
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059780.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059780.D\dad1A.ch
Acq On : 16-May-2018, 19:43:32 Operator: evitam
Sample : op70034-gb1 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:36 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059780.D 8330B_0516PLUS.M Thu May 17 08:38:24 2018 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614566.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0503RPB3\GG614566.D\dad1A.ch
Acq On : 04-May-2018, 01:33:57 Operator: evitam
Sample : op69897-bs Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:27:38 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.33	14.33	2510101	5678774	483.187	524.956
	Spiked Amount 500.000	Range 70 - 136		Recovery =		96.64%	104.99%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	5.40	5.40	2165208	2165208	667.885	672.059
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	7.46	7.46	4491944	4486499	433.519	433.037
6)	RDX	7.93	7.93	2123665	2102329	445.757	443.235
7)	1,3-Dinitrobenze	9.96	9.96	6253428	6331452	437.093	497.785
8)	Nitrobenzene	10.93	10.93	4028274	5046819	426.841	544.960
9)	2,4,6-Trinitroto	11.70	11.70	4382994	7142716	432.491	544.628
10)	Nitroglycerin	0.00	12.45	0	10232286	N.D. d	3036.515
11)	Tetryl	12.99	12.99	2926918	6147284	361.176	436.162
13)	2,6-Dinitrotolue	14.68	14.67	3320826	5048030	464.477	497.536
14)	2,4-Dinitrotolue	15.39	15.39	5778681	4118777	440.815	432.467
15)	o-Nitrotoluene	16.94	16.94	2606102	3911230	451.149	453.548
16)	3,5-Dinitroanili	16.37	16.37	5151682	8740291	526.574	537.935
17)	p-Nitrotoluene	18.11	18.12	5213451	9713297	443.986	458.322
18)	4-Amino-2,6-Dini	18.11	18.12	5213451	9713297	443.986	456.989
19)	m-Nitrotoluene	19.33	19.33	2743029	4393227	465.285	451.773
20)	2-Amino-4,6-Dini	20.30	20.31	4231765	5830692	469.002	490.818
21)	PETN	0.00	21.84	0	8765381	N.D. d	2732.857m

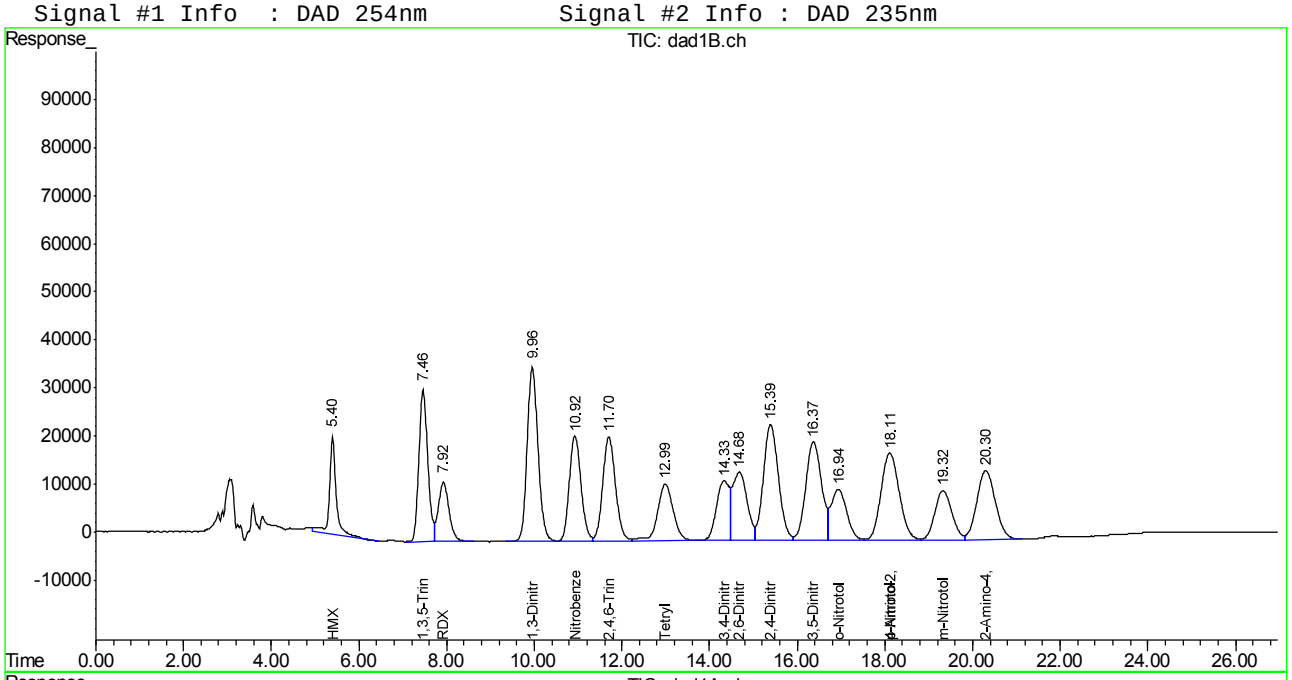
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614566.D 8330RPB.M_1113M.M Fri May 04 09:45:49 2018 Page 1

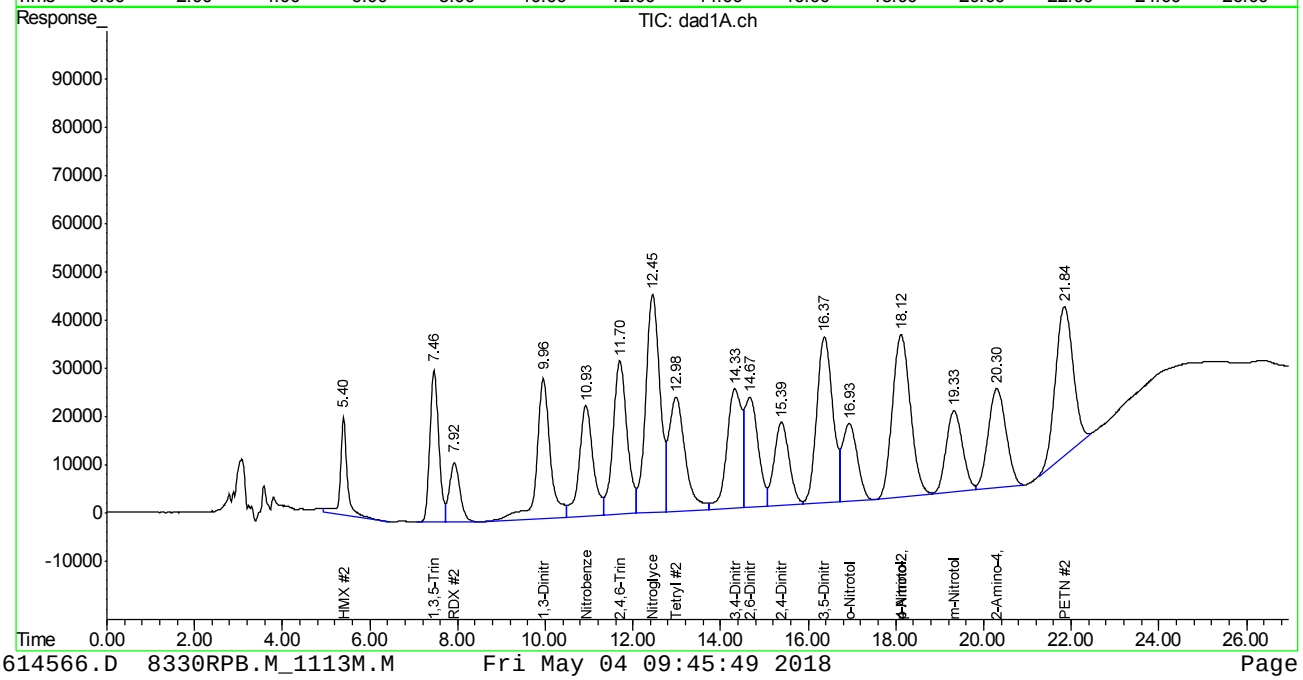
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614566.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0503RPB3\GG614566.D\dad1A.ch
Acq On : 04-May-2018, 01:33:57 Operator: evitam
Sample : op69897-bs Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:45 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

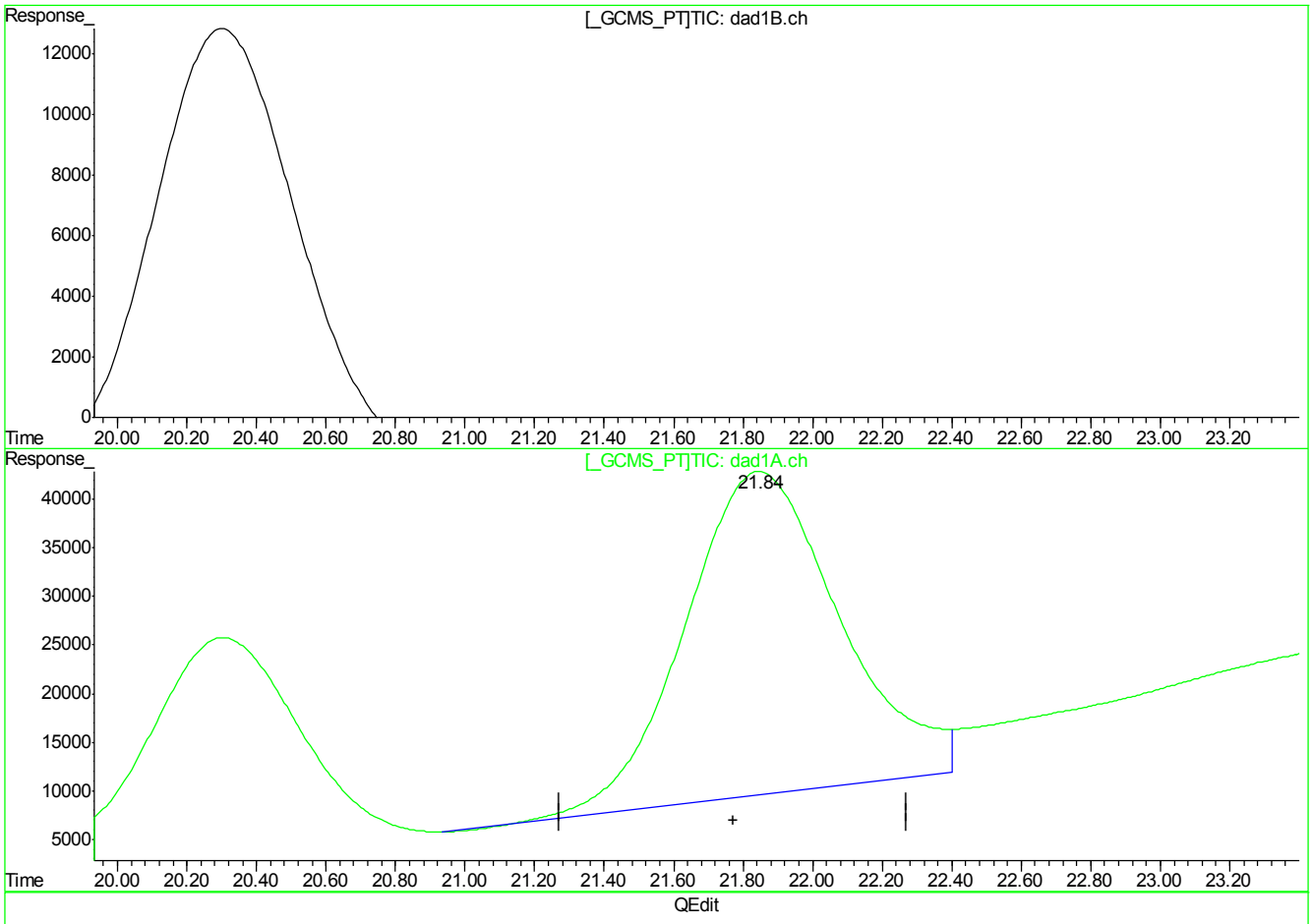
Sample Number:	OP69897-BS	**Method:**	SW846 8330B
Lab FileID:	GG614566.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/04/18 01:33	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.84	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614566.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0503RPB3\GG614566.D\dad1A.ch
Acq On : 04-May-2018, 01:33:57 Operator: evitam
Sample : op69897-bs Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.85min 3185.308ppb

response 10216574

(+) = Expected Retention Time
GG614566.D 8330RPB.M_1113M.M Fri May 04 09:27:15 2018

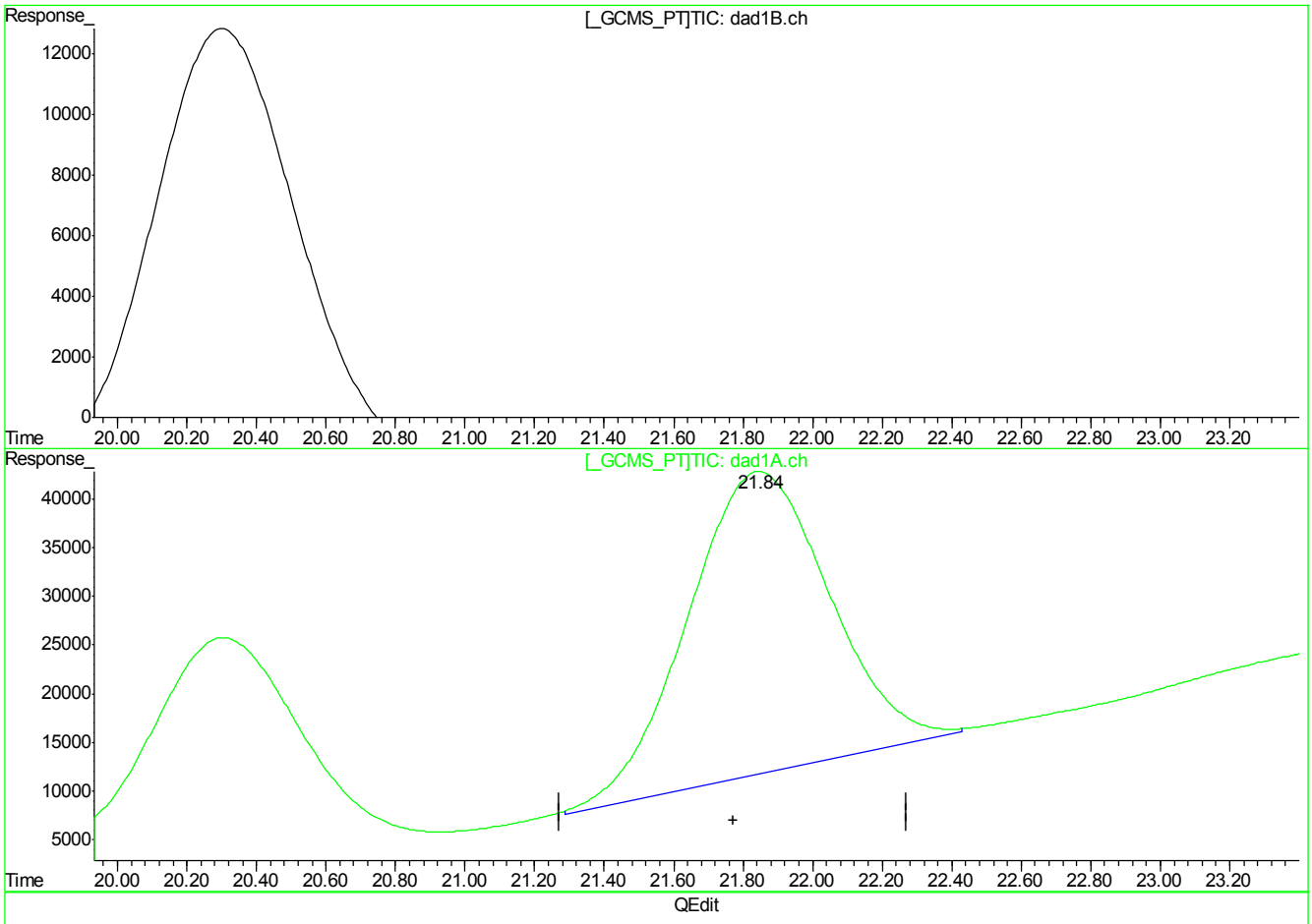
7.3.1.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614566.D\dad1B.ch Vial: 26
Signal #2 : G:\DATA\0503RPB3\GG614566.D\dad1A.ch
Acq On : 04-May-2018, 01:33:57 Operator: evitam
Sample : op69897-bs Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:27 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614566.D 8330RPB.M_1113M.M Fri May 04 09:27:46 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059767.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059767.D\dad1A.ch
Acq On : 16-May-2018, 13:14:03 Operator: evitam
Sample : op70034-bs Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:36 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.92	10.92	1141762	1914869	458.812	455.253
	Spiked Amount 500.000	Range 69 - 134		Recovery =		91.76%	91.05%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	813194	2286497	449.873	462.068
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	1009988	1498113	513.671	459.415
6)	1,3,5-Trinitrobe	4.71	4.71	2012724	3904921	461.900	476.366
7)	1,3-Dinitrobenze	5.90	5.90	2610224	1883337	447.797	491.460
8)	3,5-Dinitroanili	6.18	6.18	2117832	3614113	452.942	462.295
9)	Nitrobenzene	7.49	7.49	1622962	1517356	433.707	477.648
10)	Nitroglycerin	0.00	8.94	0	2889856	N.D. d	2261.584
11)	Tetryl	9.19	9.18	1482573	2399868	500.965	579.782
12)	2,4,6-Trinitroto	9.73	9.74	2020892	2247495	515.936	525.574
13)	2-Amino-4,6-Dini	9.89	9.91	1688746	2773577	452.227	495.311
14)	4-Amino-2,6-Dini	10.41	10.41	1276637	2497244	479.969	468.505
16)	2,4-Dinitrotolue	11.63	11.63	2434205	1539473	469.183	487.907
17)	2,6-Dinitrotolue	12.08	12.08	1468587	1864050	495.004	505.185
18)	o-Nitrotoluene	15.33	15.33	1135628	1577348	439.484	473.555
19)	p-Nitrotoluene	15.93	15.93	1764658	1503898	441.586	474.915
20)	m-Nitrotoluene	16.90	16.90	1630700	1685953	474.062	462.046
21)	PETN	0.00	18.82	0	3368975	N.D. d	2556.566m

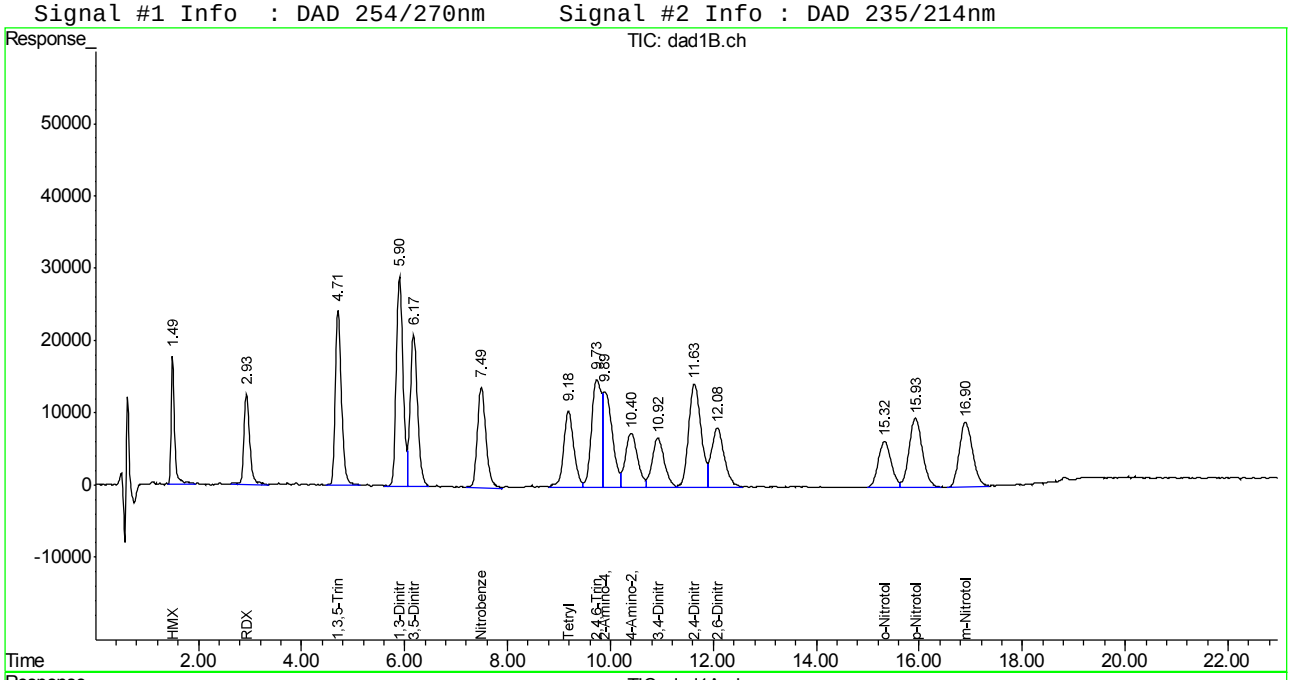
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059767.D 8330B_0516PLUS.M Thu May 17 08:38:12 2018 Page 1

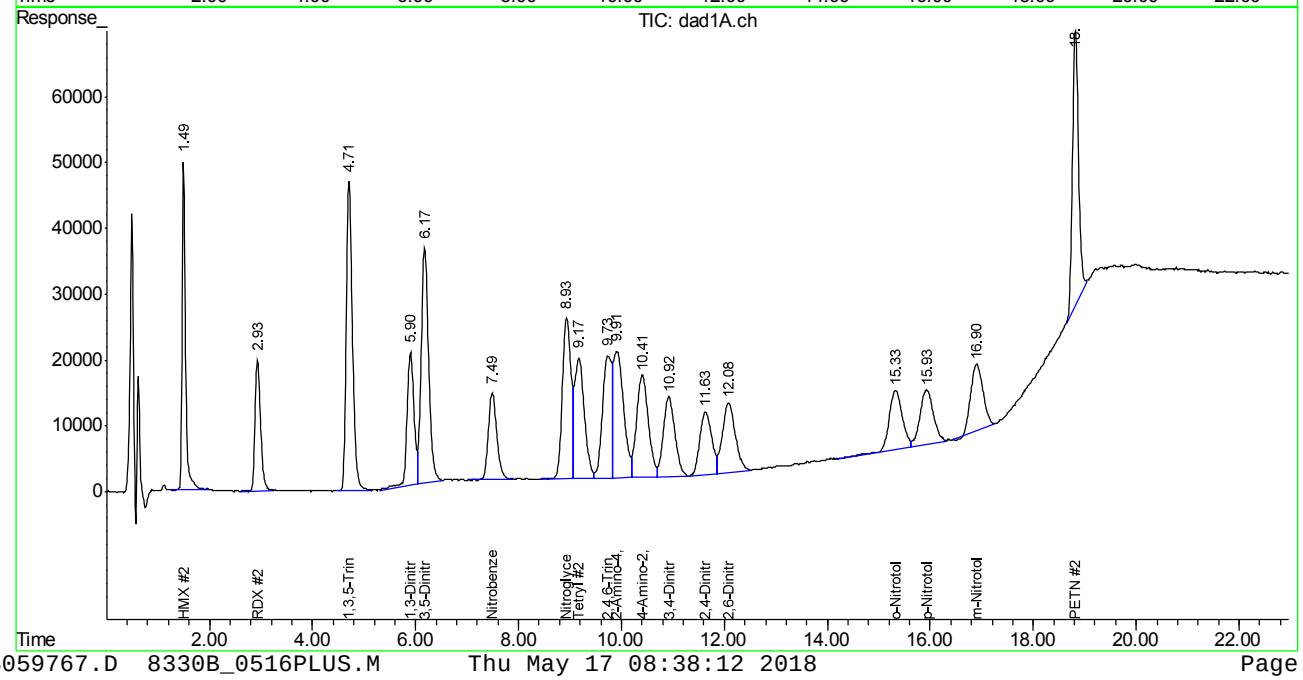
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059767.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059767.D\dad1A.ch
Acq On : 16-May-2018, 13:14:03 Operator: evitam
Sample : op70034-bs Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:29 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

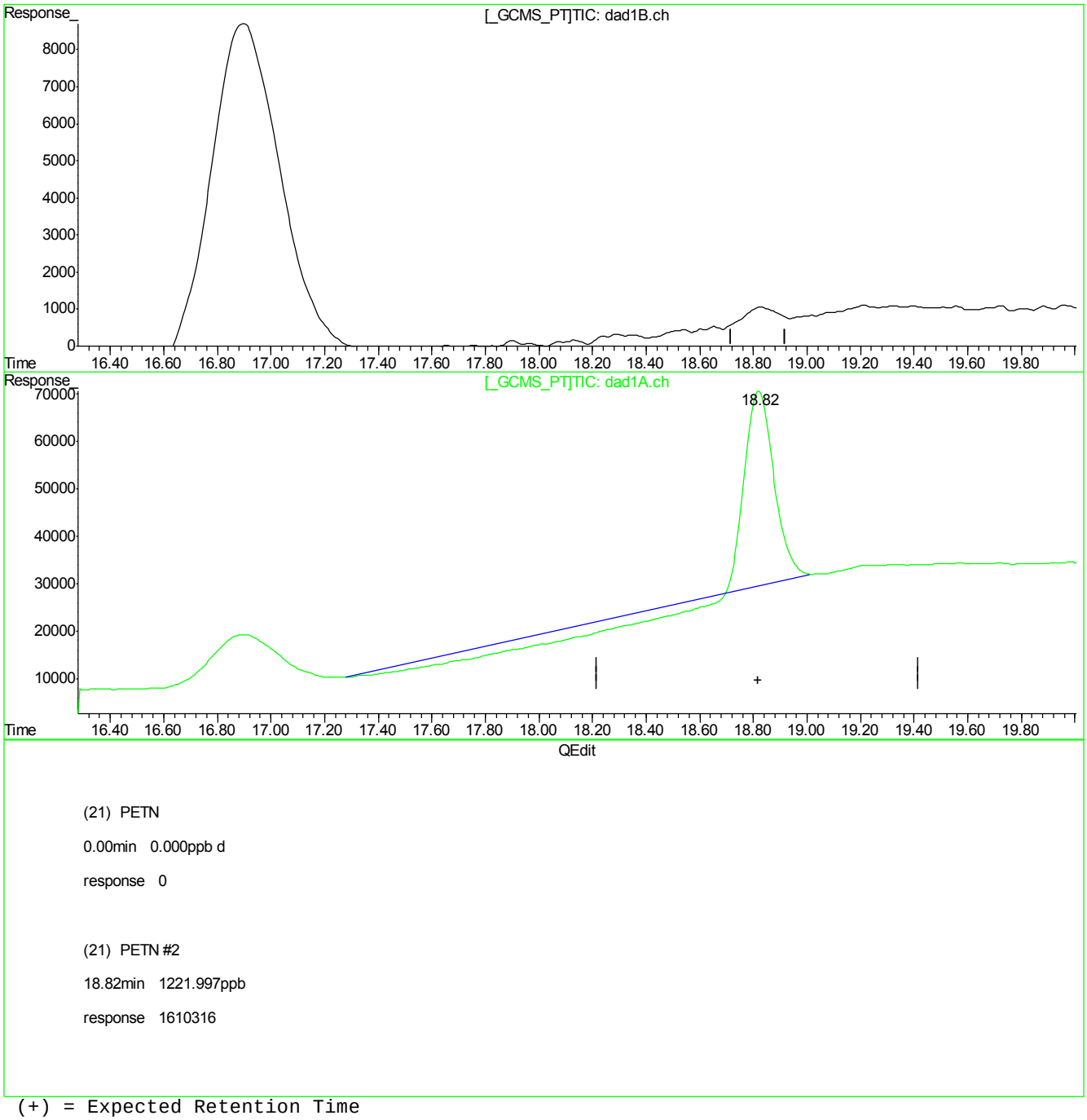
Sample Number:	OP70034-BS	**Method:**	SW846 8330B
Lab FileID:	BB059767.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 13:14	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	18.82	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059767.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059767.D\dad1A.ch
Acq On : 16-May-2018, 13:14:03 Operator: evitam
Sample : op70034-bs Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.82min 1221.997ppb

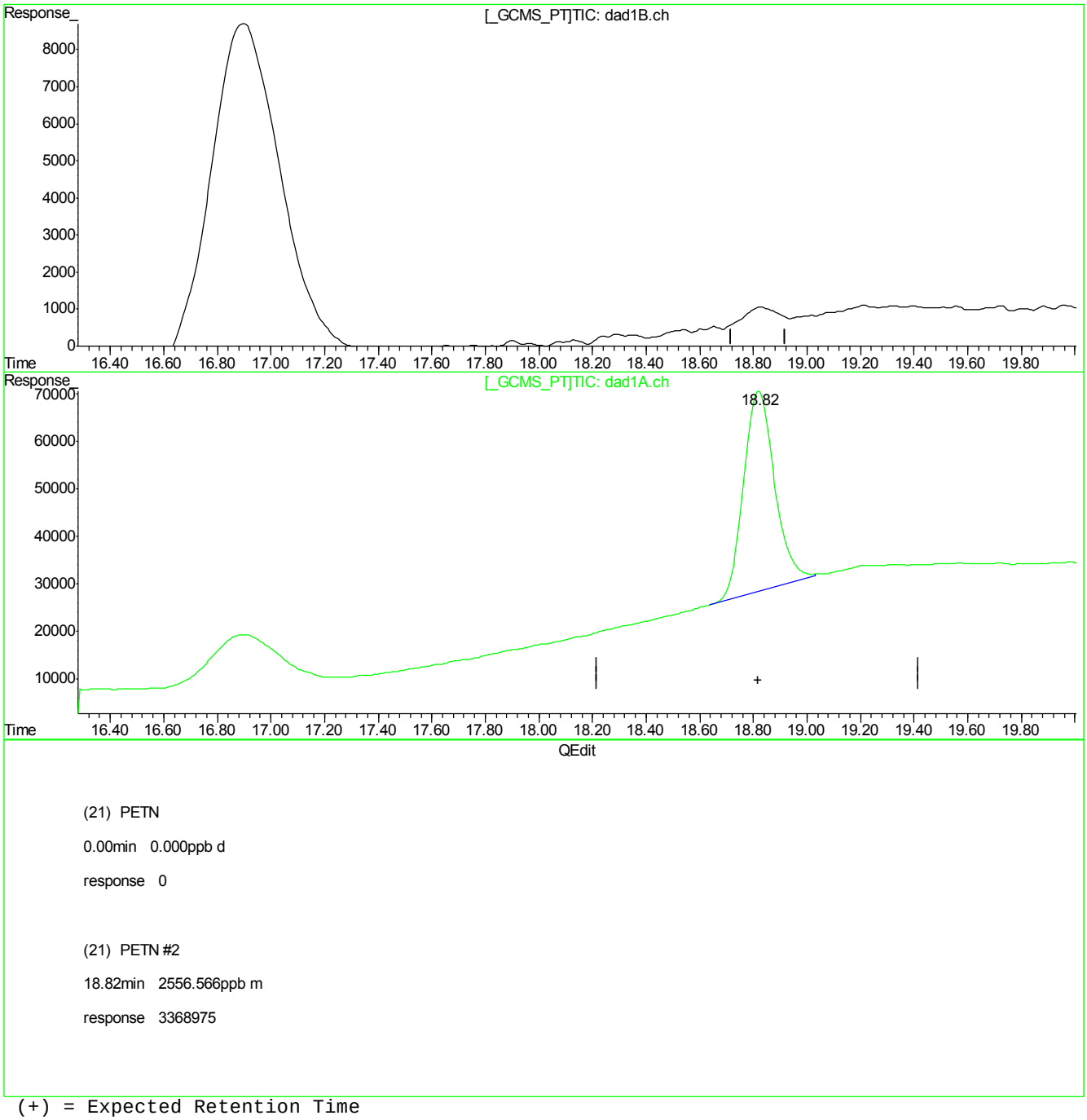
response 1610316

(+) = Expected Retention Time
BB059767.D 8330B_0516PLUS.M Thu May 17 08:29:09 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059767.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059767.D\dad1A.ch
Acq On : 16-May-2018, 13:14:03 Operator: evitam
Sample : op70034-bs Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059767.D 8330B_0516PLUS.M Thu May 17 08:29:12 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1A.ch
Acq On : 16-May-2018, 13:44:00 Operator: evitam
Sample : op70034-pt1 Inst : G1315B
Misc : OP70034,gbb1732,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:37 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.93	10.93	1091502	1814207	438.615	431.321
	Spiked Amount 500.000	Range 69 - 134		Recovery =		87.72%	86.26%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	590352	1708456	326.592	345.255
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.94	2.94	517534	795769	264.769	244.032
6)	1,3,5-Trinitrobe	4.72	4.72	711749	1360362	163.339	165.952
7)	1,3-Dinitrobenze	5.91	5.91	688139	600763	118.054	156.107
8)	3,5-Dinitroanili	6.18	6.18	870949	1555375	186.270	198.954
9)	Nitrobenzene	7.50	7.50	722504	688013	193.076	217.946
10)	Nitroglycerin	0.00	8.94	0	277973	N.D. d	217.540
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	9.75	9.73	158143	155274	40.374m	36.311m
13)	2-Amino-4,6-Dini	9.93	9.94	1428923	2103365	382.649m	375.623m
14)	4-Amino-2,6-Dini	10.40	10.44	189473	316086	71.801	59.300
16)	2,4-Dinitrotolue	11.64	11.66	467081	274337	90.028	86.946
17)	2,6-Dinitrotolue	12.09	12.09	884578	1097743	299.393	297.505
18)	o-Nitrotoluene	15.35	15.34	511575	715216	197.977	214.724
19)	p-Nitrotoluene	15.94	15.95	1551561	1372079	388.261	433.288
20)	m-Nitrotoluene	16.92	16.92	1077093	1100568	314.198	305.635
21)	PETN	0.00	18.83	0	363915	N.D. d	276.159m

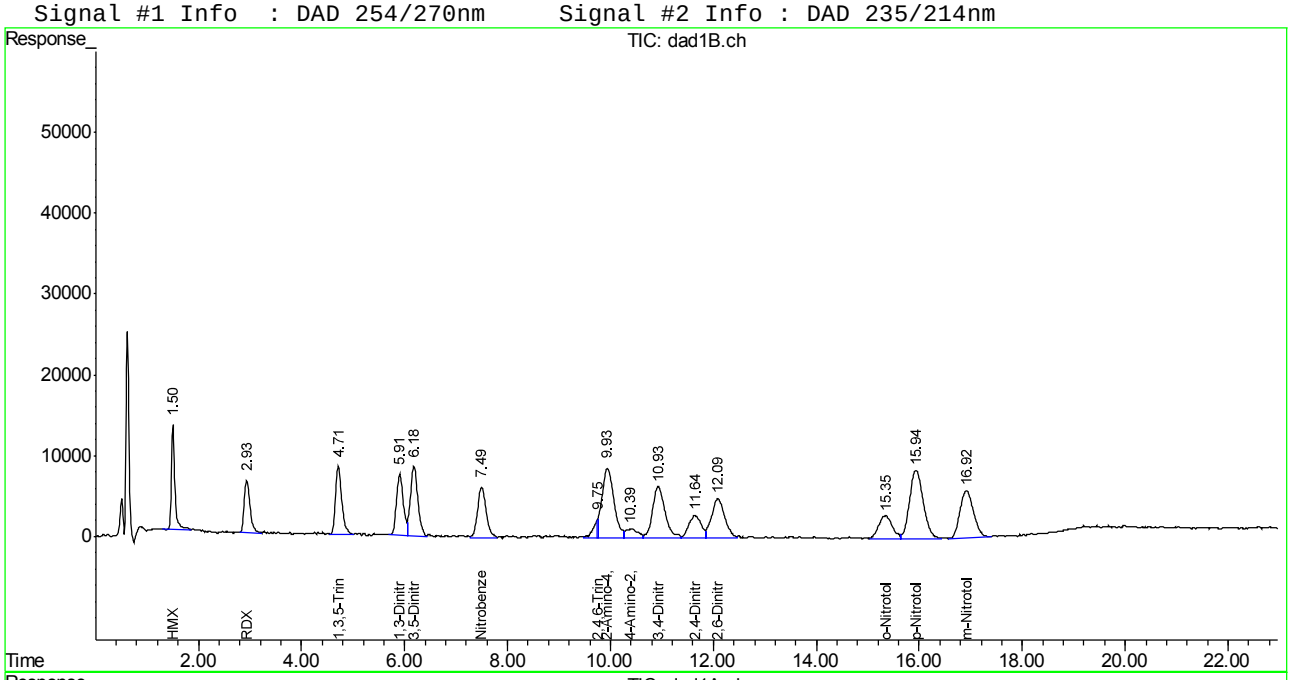
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059768.D 8330B_0516PLUS.M Thu May 17 08:38:13 2018 Page 1

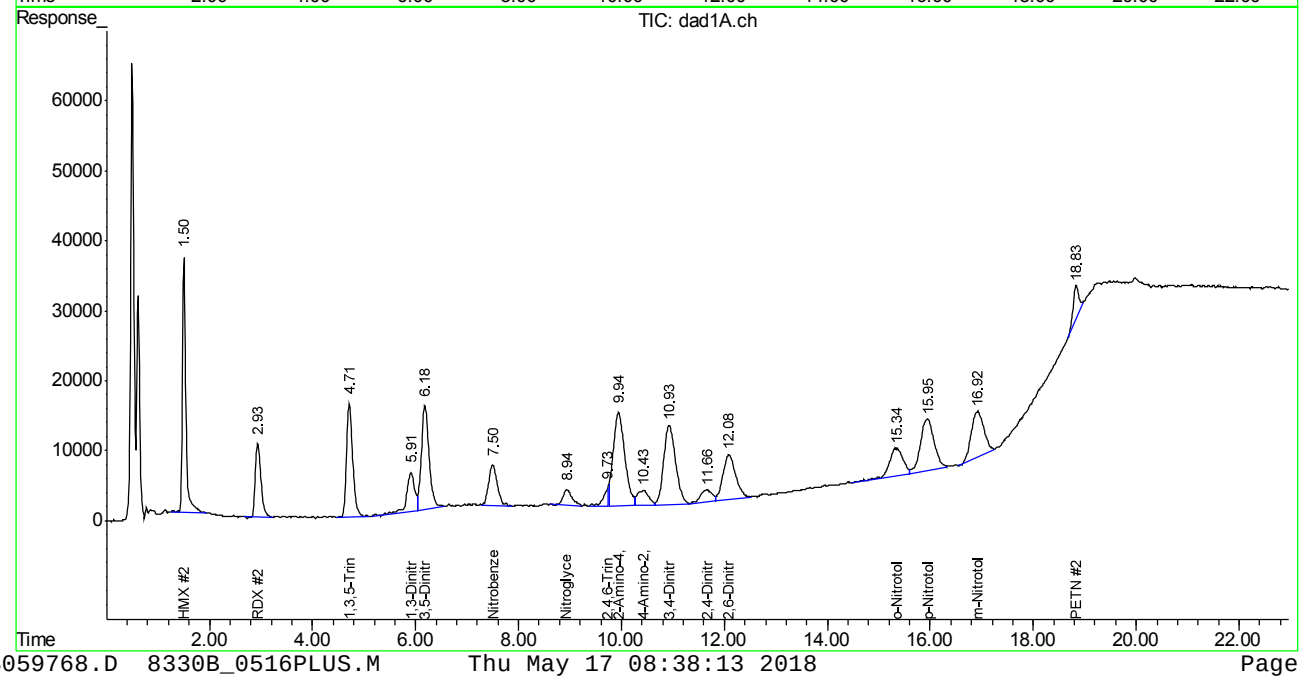
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1A.ch
Acq On : 16-May-2018, 13:44:00 Operator: evitam
Sample : op70034-pt1 Inst : G1315B
Misc : OP70034,gbb1732,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:30 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

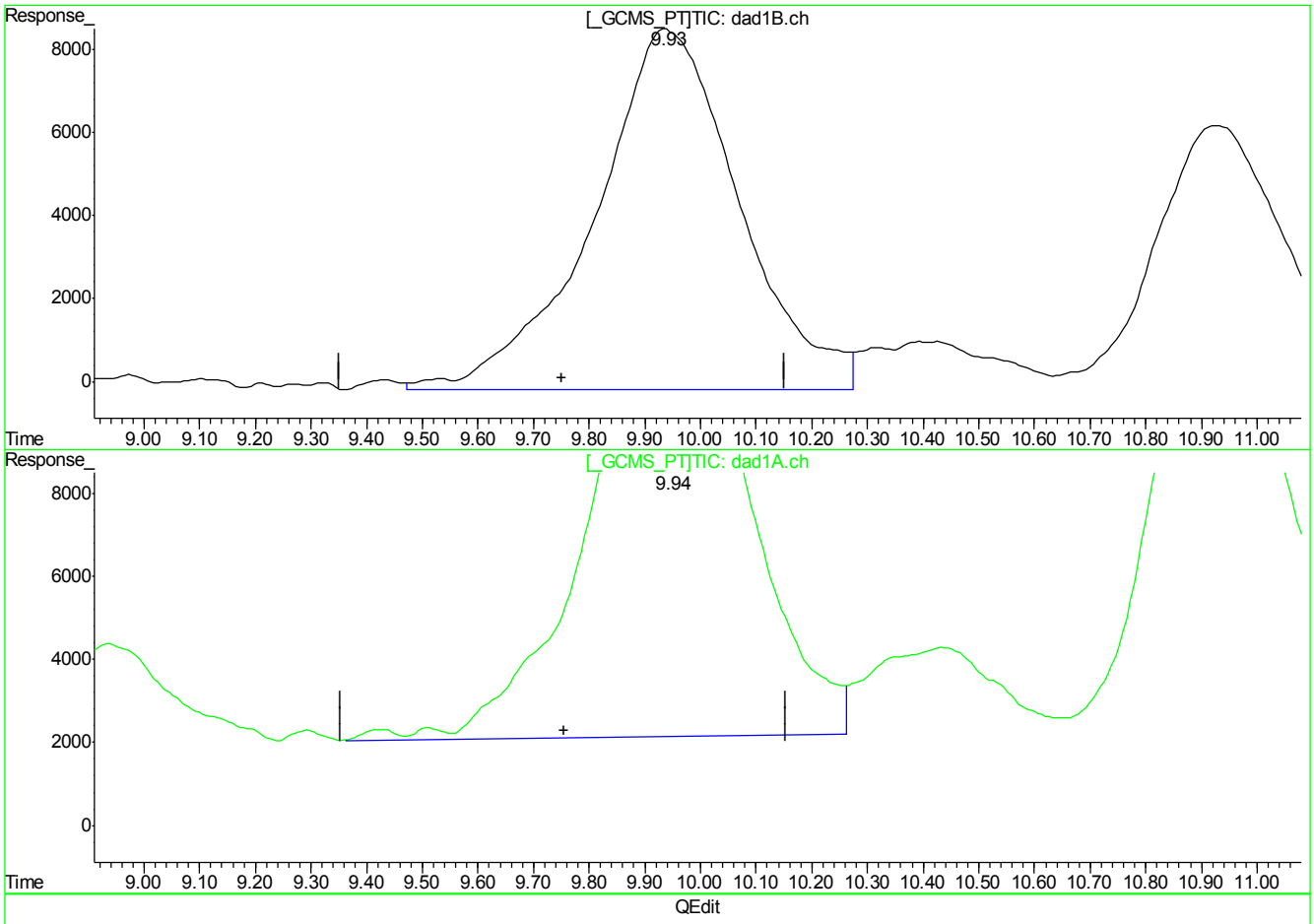
Sample Number:	OP70034-PT1	**Method:**	SW846 8330B
Lab FileID:	BB059768.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 13:44	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4,6-Trinitrotoluene	118-96-7	2	9.73	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.75	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	9.93	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.94	Poorly defined baseline
PETN	78-11-5	2	18.83	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1A.ch
Acq On : 16-May-2018, 13:44:00 Operator: evitam
Sample : op70034-pt1 Inst : G1315B
Misc : OP70034,gbb1732,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.94min 400.580ppb

response 1569047

(12) 2,4,6-Trinitrotoluene #2

9.94min 535.003ppb

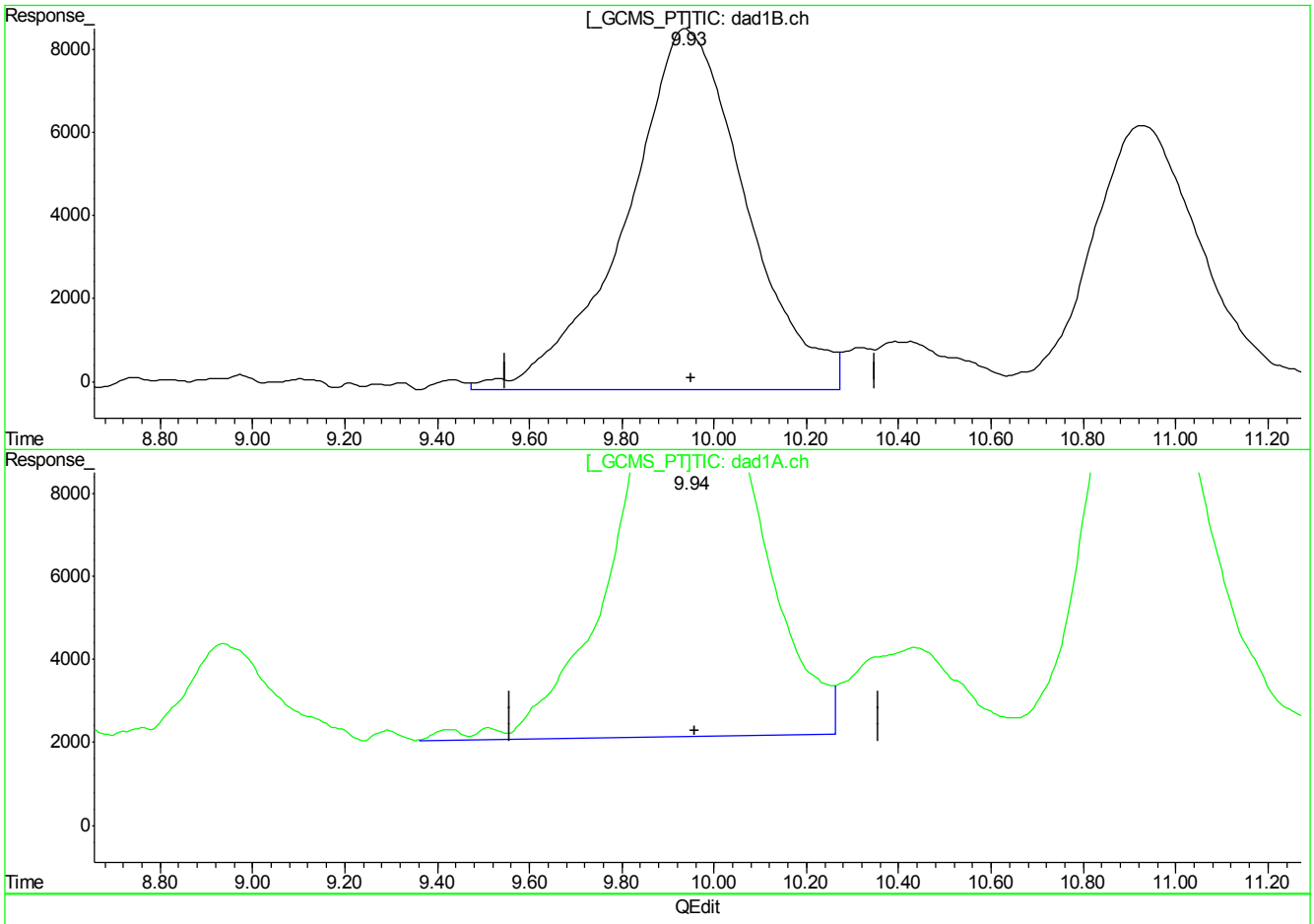
response 2287817

(+) = Expected Retention Time
BB059768.D 8330B_0516PLUS.M Thu May 17 08:29:45 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1A.ch
Acq On : 16-May-2018, 13:44:00 Operator: evitam
Sample : op70034-pt1 Inst : G1315B
Misc : OP70034,gbb1732,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.94min 420.173ppb

response 1569047

(13) 2-Amino-4,6-Dinitrotoluene #2

9.94min 408.563ppb

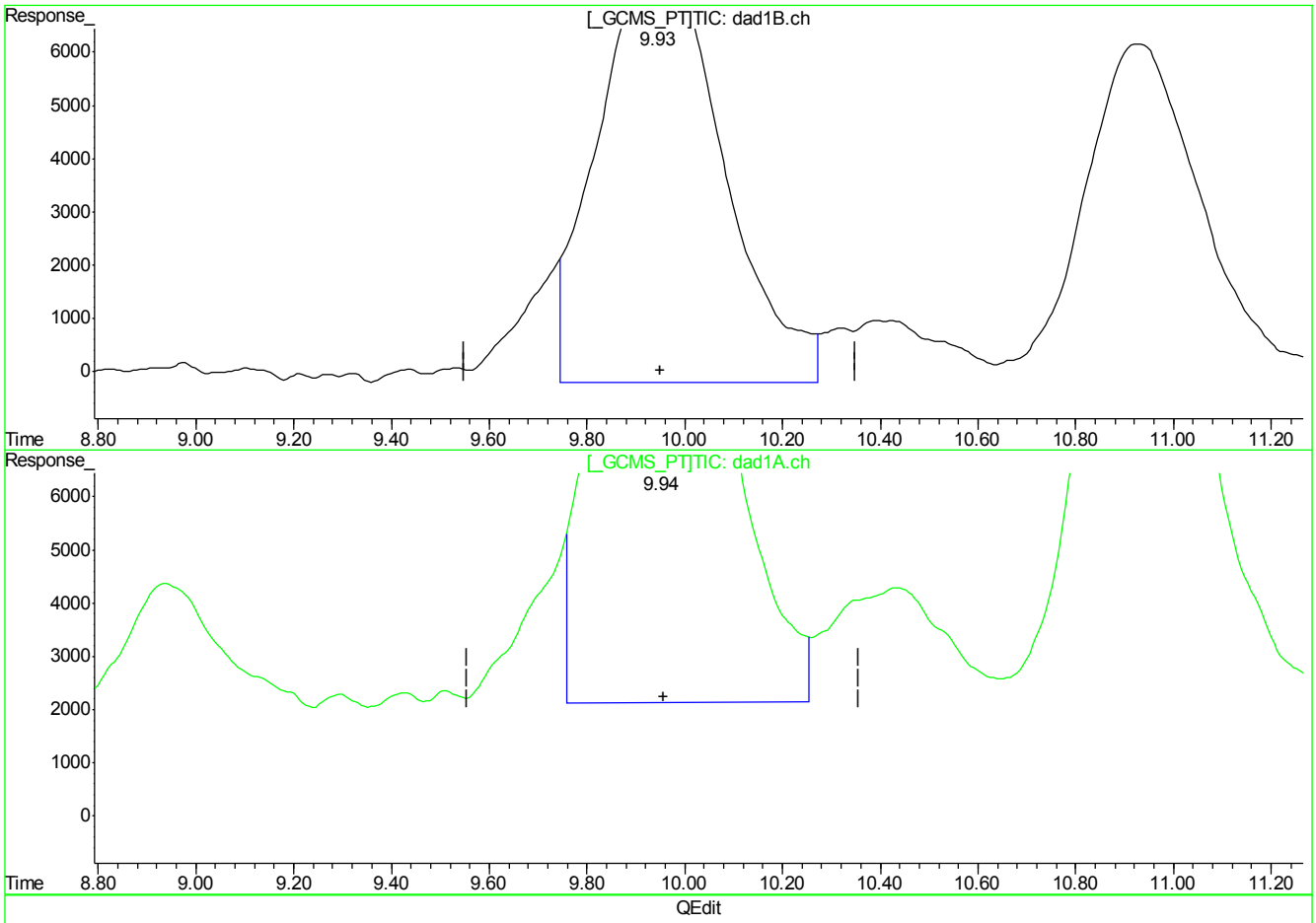
response 2287817

(+) = Expected Retention Time
BB059768.D 8330B_0516PLUS.M Thu May 17 08:30:06 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1A.ch
Acq On : 16-May-2018, 13:44:00 Operator: evitam
Sample : op70034-pt1 Inst : G1315B
Misc : OP70034,gbb1732,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.93min 382.649ppb m

response 1428923

(13) 2-Amino-4,6-Dinitrotoluene #2

9.94min 375.623ppb m

response 2103365

(+) = Expected Retention Time
BB059768.D 8330B_0516PLUS.M Thu May 17 08:30:35 2018

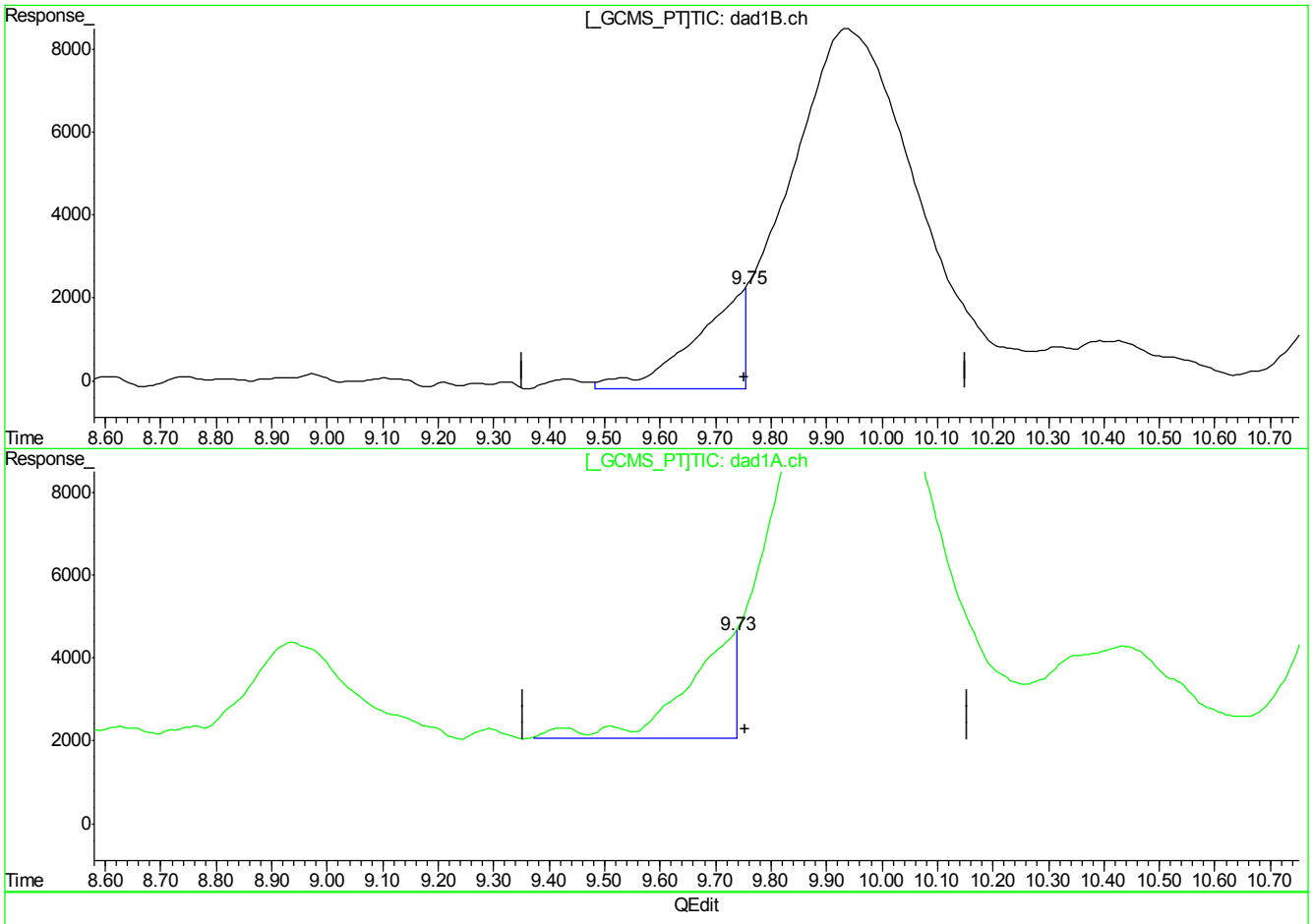
7.4.1.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1A.ch
Acq On : 16-May-2018, 13:44:00 Operator: evitam
Sample : op70034-pt1 Inst : G1315B
Misc : OP70034,gbb1732,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.75min 40.374ppb m

response 158143

(12) 2,4,6-Trinitrotoluene #2

9.73min 36.311ppb m

response 155274

(+) = Expected Retention Time
BB059768.D 8330B_0516PLUS.M Thu May 17 08:30:39 2018

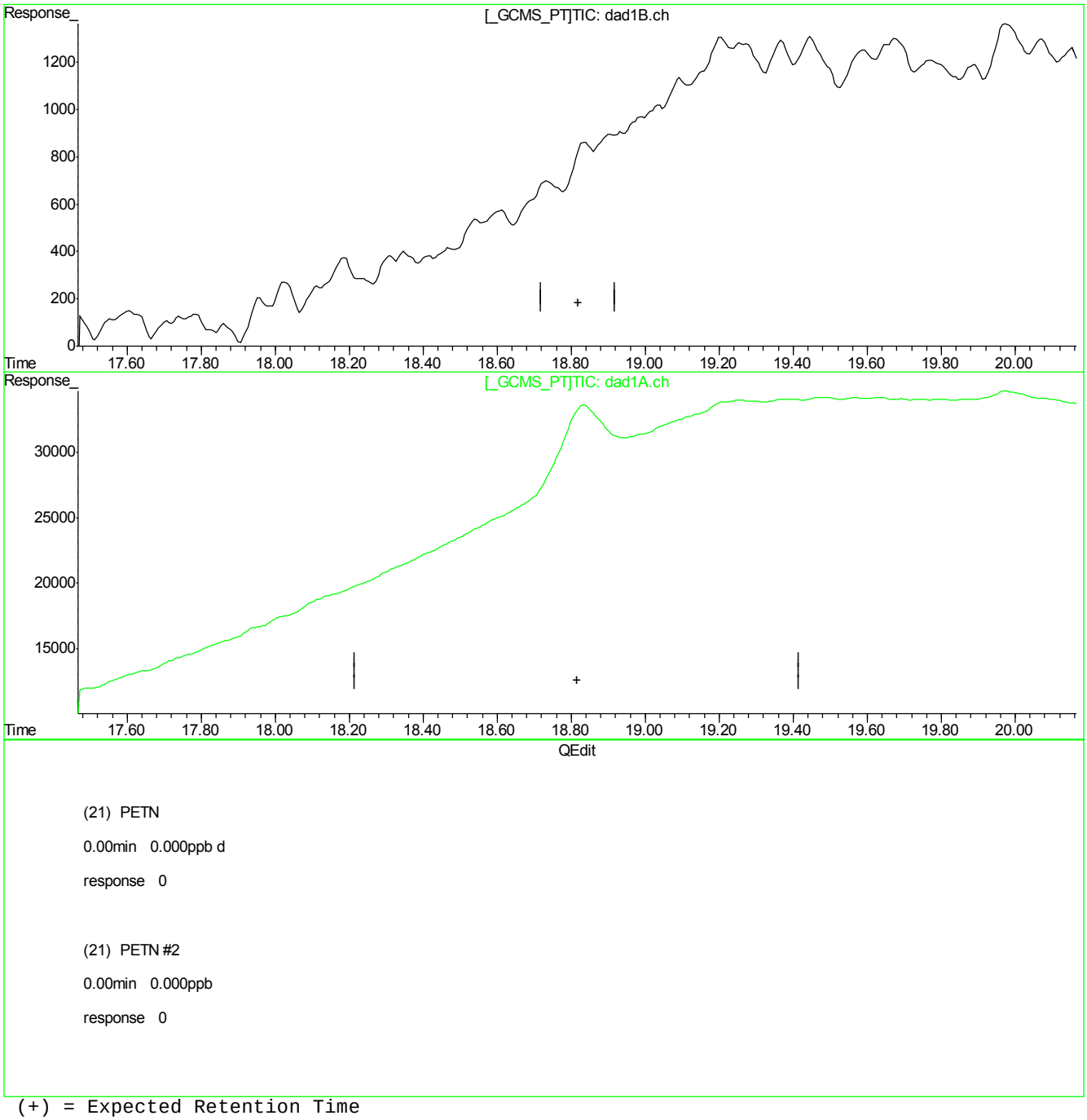
7.4.1.5

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1A.ch
Acq On : 16-May-2018, 13:44:00 Operator: evitam
Sample : op70034-pt1 Inst : G1315B
Misc : OP70034,gbb1732,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration

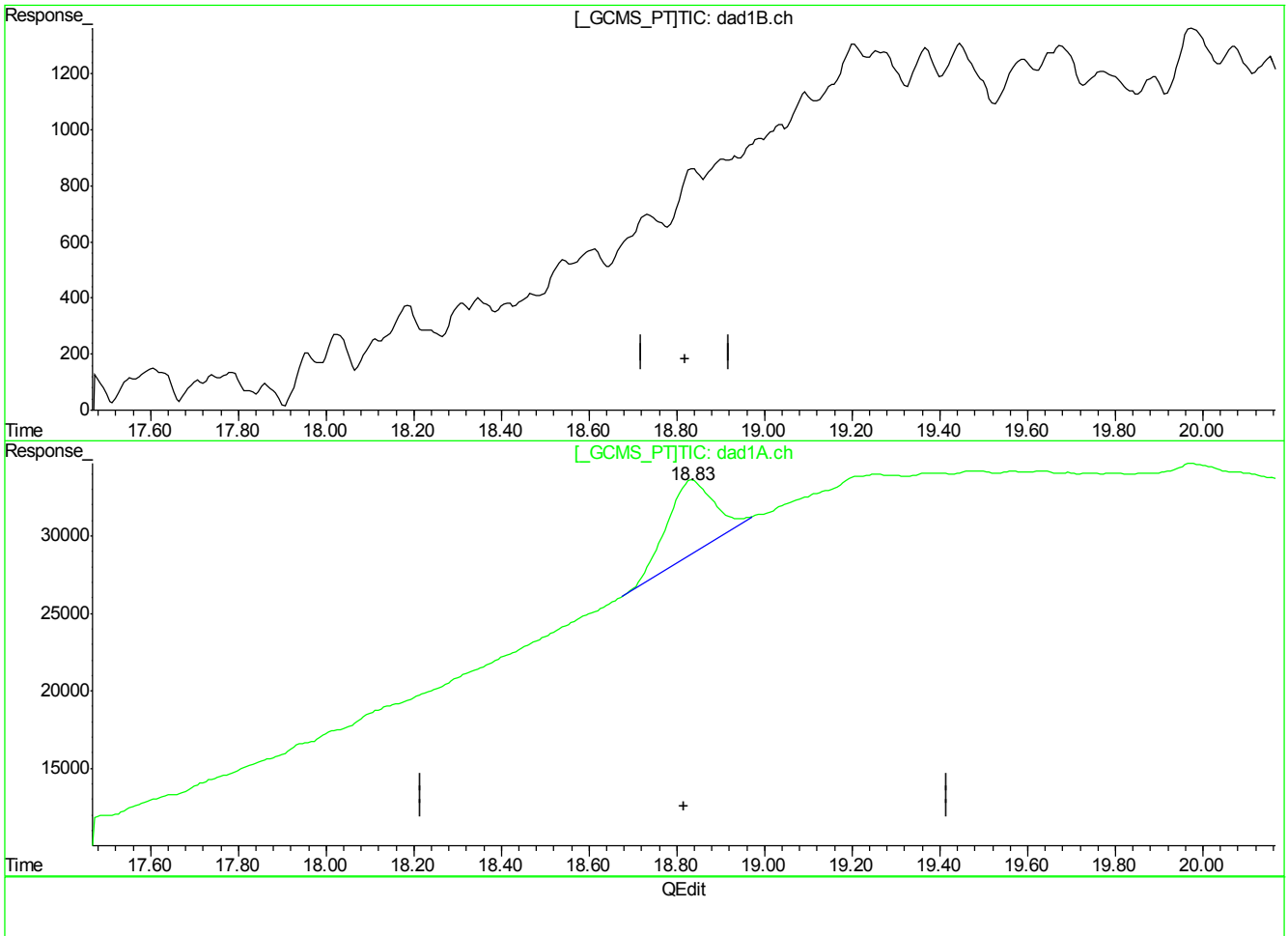


(+) = Expected Retention Time
BB059768.D 8330B_0516PLUS.M Thu May 17 08:30:49 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059768.D\dad1A.ch
Acq On : 16-May-2018, 13:44:00 Operator: evitam
Sample : op70034-pt1 Inst : G1315B
Misc : OP70034,gbb1732,5.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.83min 276.159ppb m

response 363915

(+) = Expected Retention Time
BB059768.D 8330B_0516PLUS.M Thu May 17 08:30:52 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:40 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.89	10.89	940201	1661331	377.816	394.975
	Spiked Amount 500.000	Range 69 - 134		Recovery =		75.56%	79.00%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.49	1.49	791766	1967110	438.018m	397.525m
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.92	2.92	821684	1359836	418.839	417.010
6)	1,3,5-Trinitrobe	4.70	4.70	1692503	3239660	388.412	395.210
7)	1,3-Dinitrobenze	5.89	5.89	2309308	1653024	396.173	431.029
8)	3,5-Dinitroanili	6.16	6.16	1709409	2945360	365.592	376.752
9)	Nitrobenzene	7.47	7.47	1459103	1361418	389.918	429.064
10)	Nitroglycerin	0.00	8.92	0	2616063	N.D. d	2047.315
11)	Tetryl	9.15	9.14	1300806	2144881	439.545	518.180
12)	2,4,6-Trinitroto	9.70	9.72	1636691	1855169	417.849m	433.829
13)	2-Amino-4,6-Dini	9.81	9.86	1389718	2254703	372.151m	402.649
14)	4-Amino-2,6-Dini	10.36	10.37	984445	1986341	370.897	372.655
16)	2,4-Dinitrotolue	11.60	11.60	2031674	1269718	391.597	402.413
17)	2,6-Dinitrotolue	12.04	12.04	1292121	1616576	436.067	438.116
18)	o-Nitrotoluene	15.28	15.27	1030896	1384655	398.953	415.704m
19)	p-Nitrotoluene	15.89	15.88	1517753	1241190	379.801	391.955
20)	m-Nitrotoluene	16.86	16.87	1380315	1703747	401.893	466.738m
21)	PETN	0.00	18.80	0	2685876	N.D. d	2038.192m

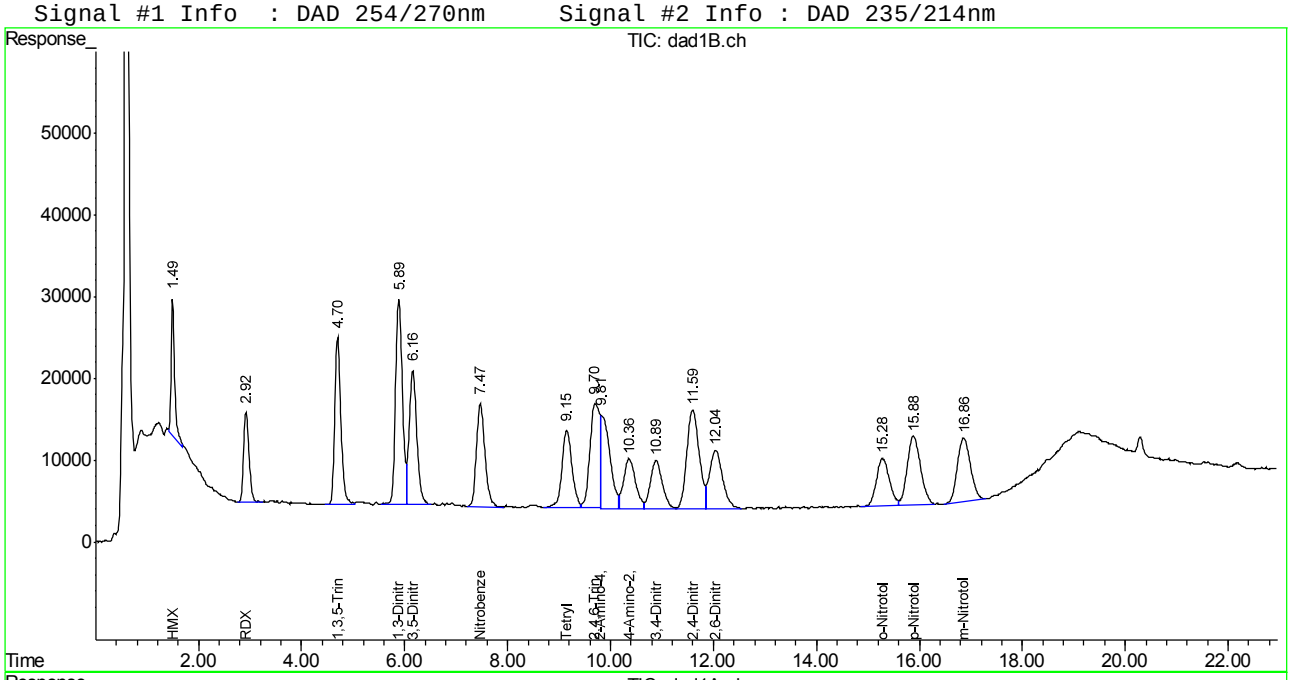
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059771.D 8330B_0516PLUS.M Thu May 17 08:38:16 2018 Page 1

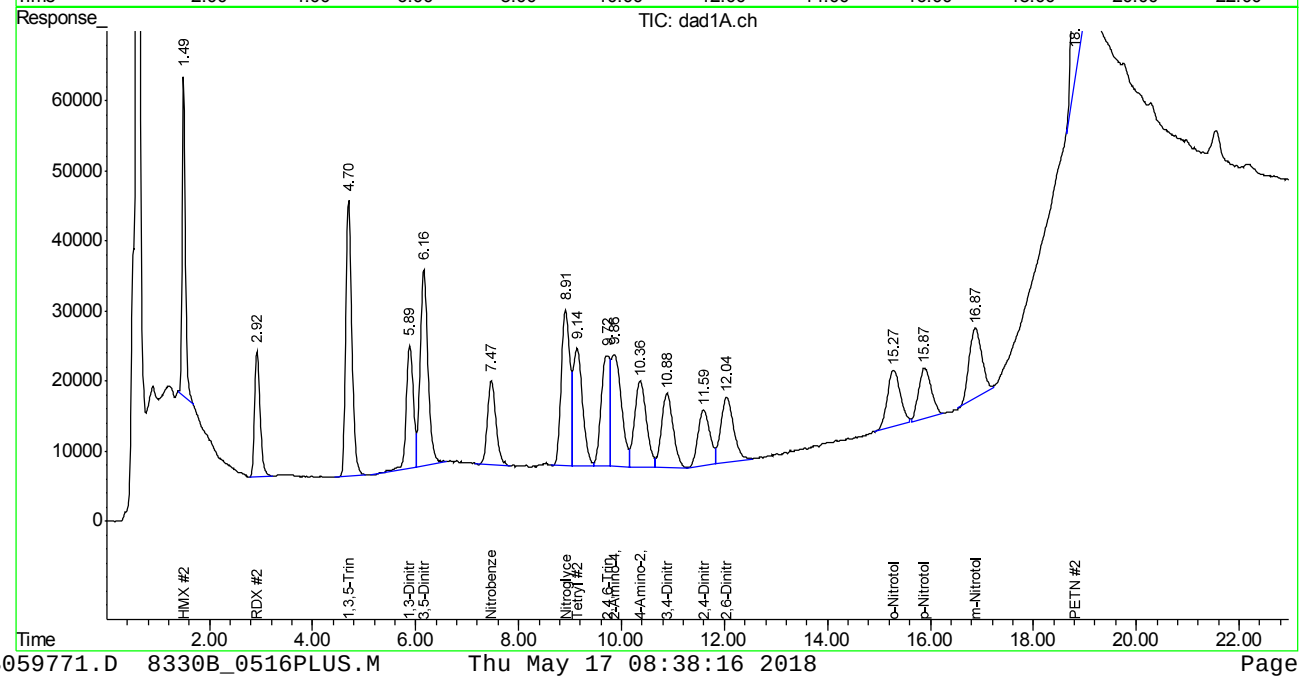
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:32 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

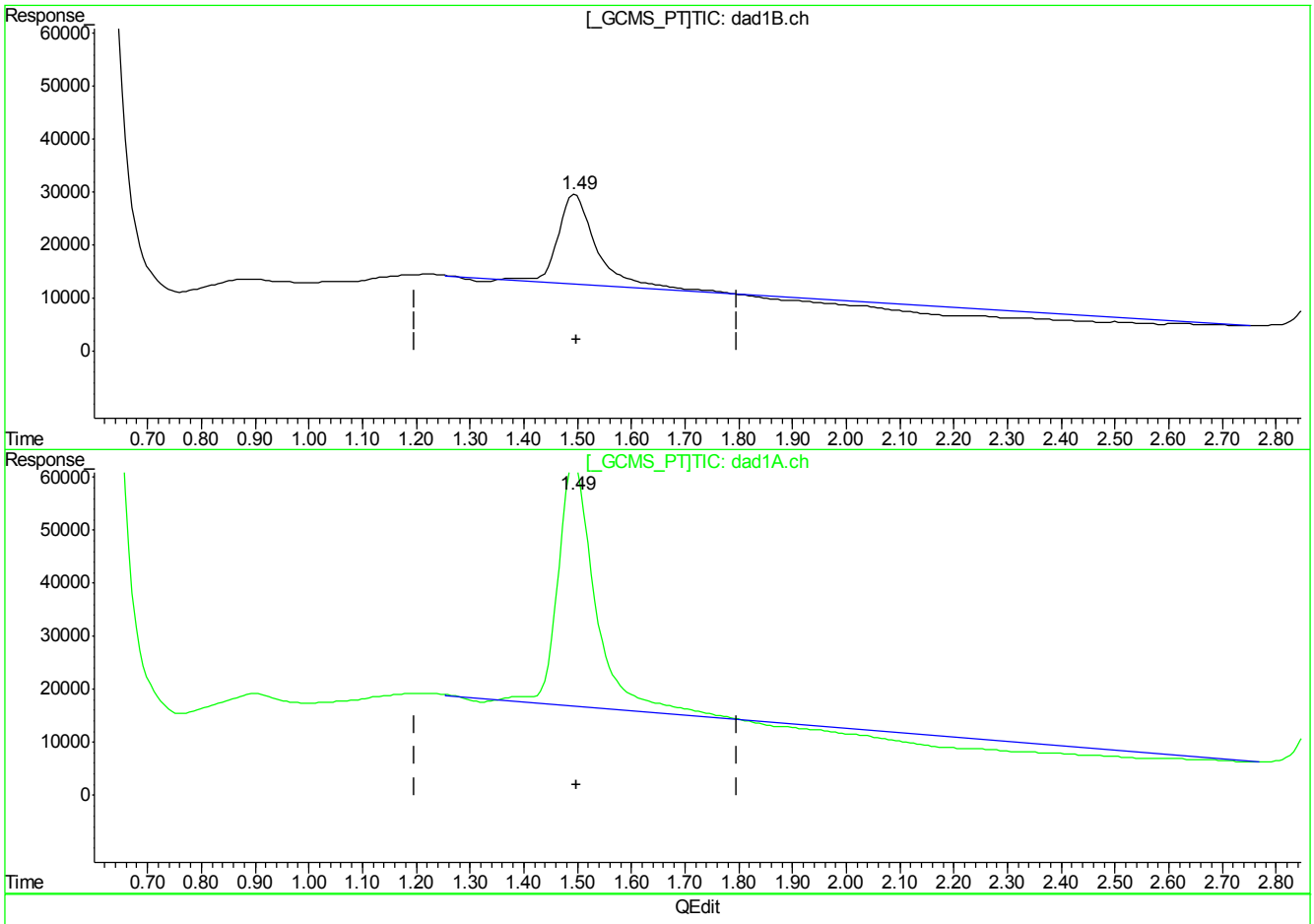
Sample Number:	OP70034-MS	**Method:**	SW846 8330B
Lab FileID:	BB059771.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 15:13	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.49	Poorly defined baseline
HMX	2691-41-0	2	1.49	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.70	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	9.81	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	15.27	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.87	Poorly defined baseline
PETN	78-11-5	2	18.80	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(2) HMX

1.50min 200.167ppb

response 361824

(2) HMX #2

1.50min 323.902ppb

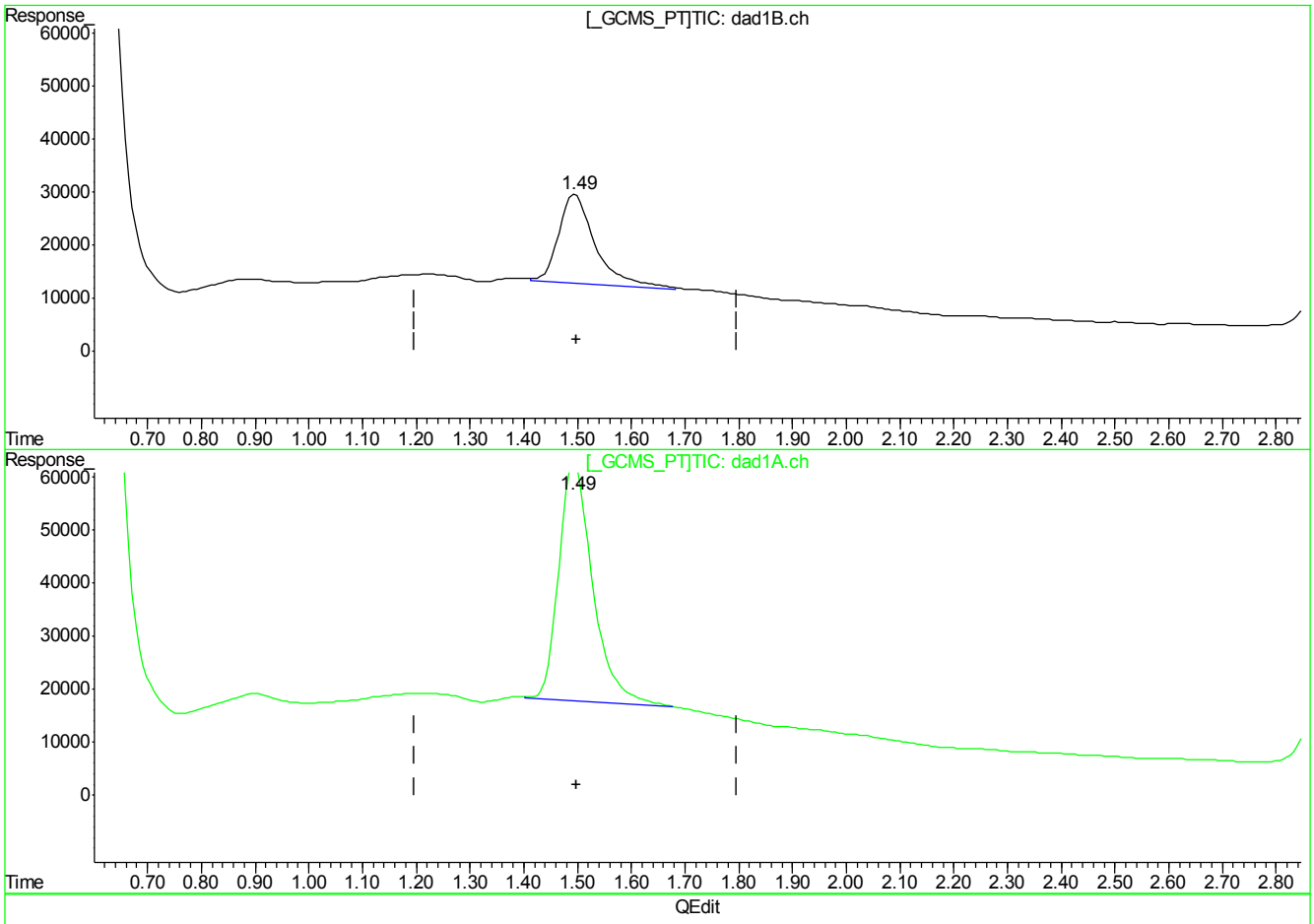
response 1602797

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:31:47 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(2) HMX

1.49min 438.018ppb m

response 791766

(2) HMX #2

1.49min 397.525ppb m

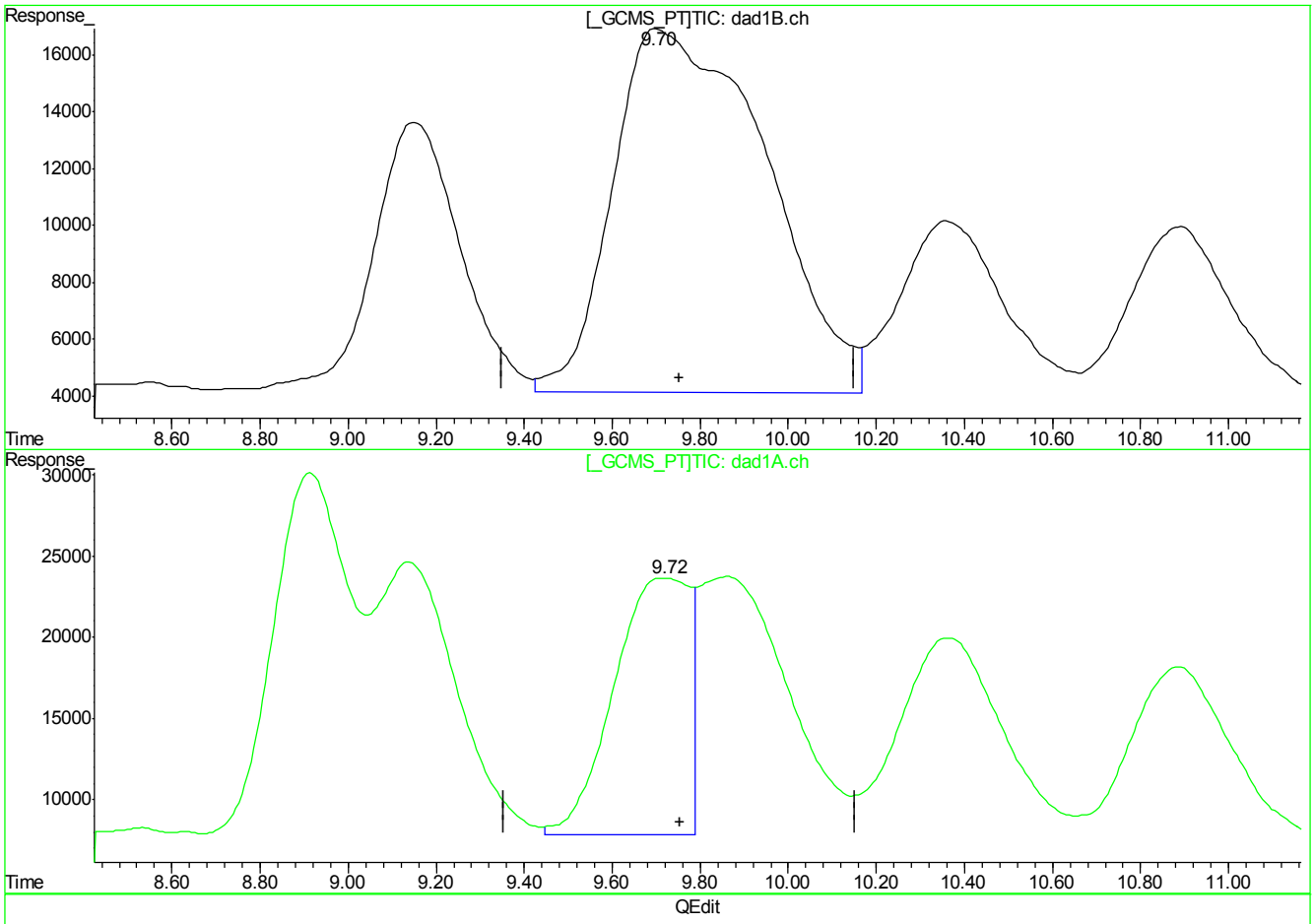
response 1967110

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:31:52 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.70min 788.638ppb

response 3089050

(12) 2,4,6-Trinitrotoluene #2

9.72min 433.829ppb

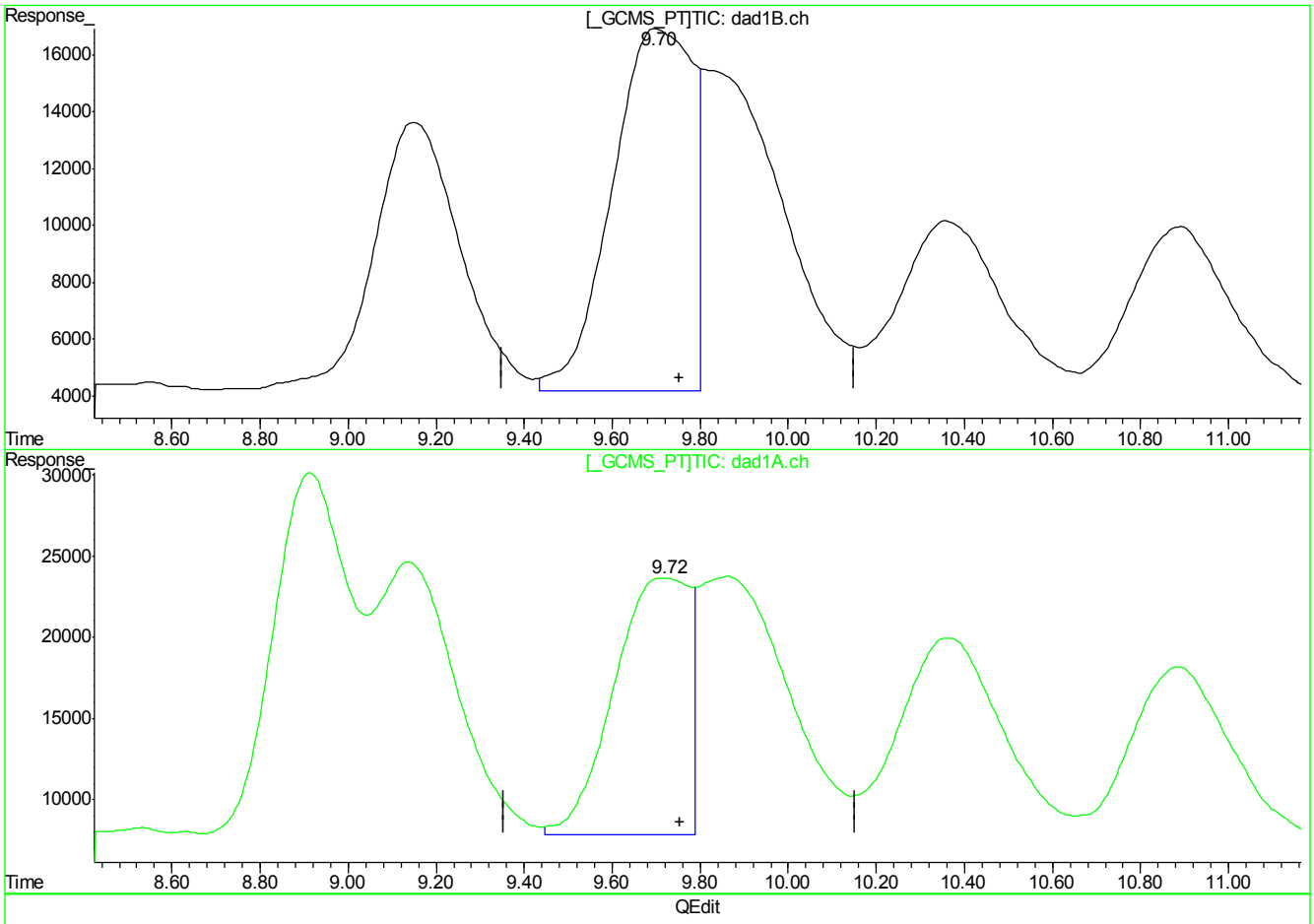
response 1855169

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:31:59 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.70min 417.849ppb m

response 1636691

(12) 2,4,6-Trinitrotoluene #2

9.72min 433.829ppb

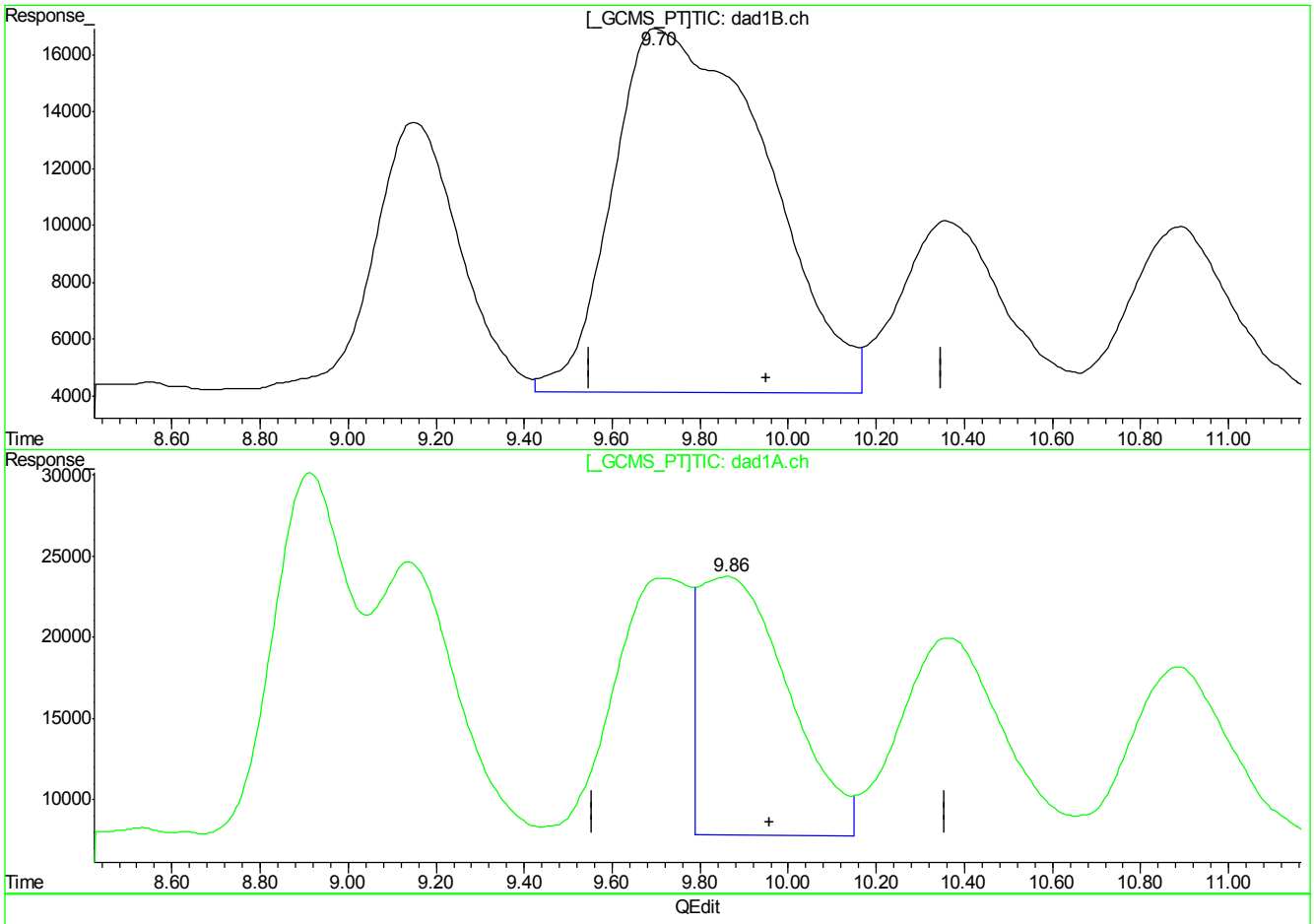
response 1855169

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:32:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.70min 827.212ppb

response 3089050

(13) 2-Amino-4,6-Dinitrotoluene #2

9.86min 402.649ppb

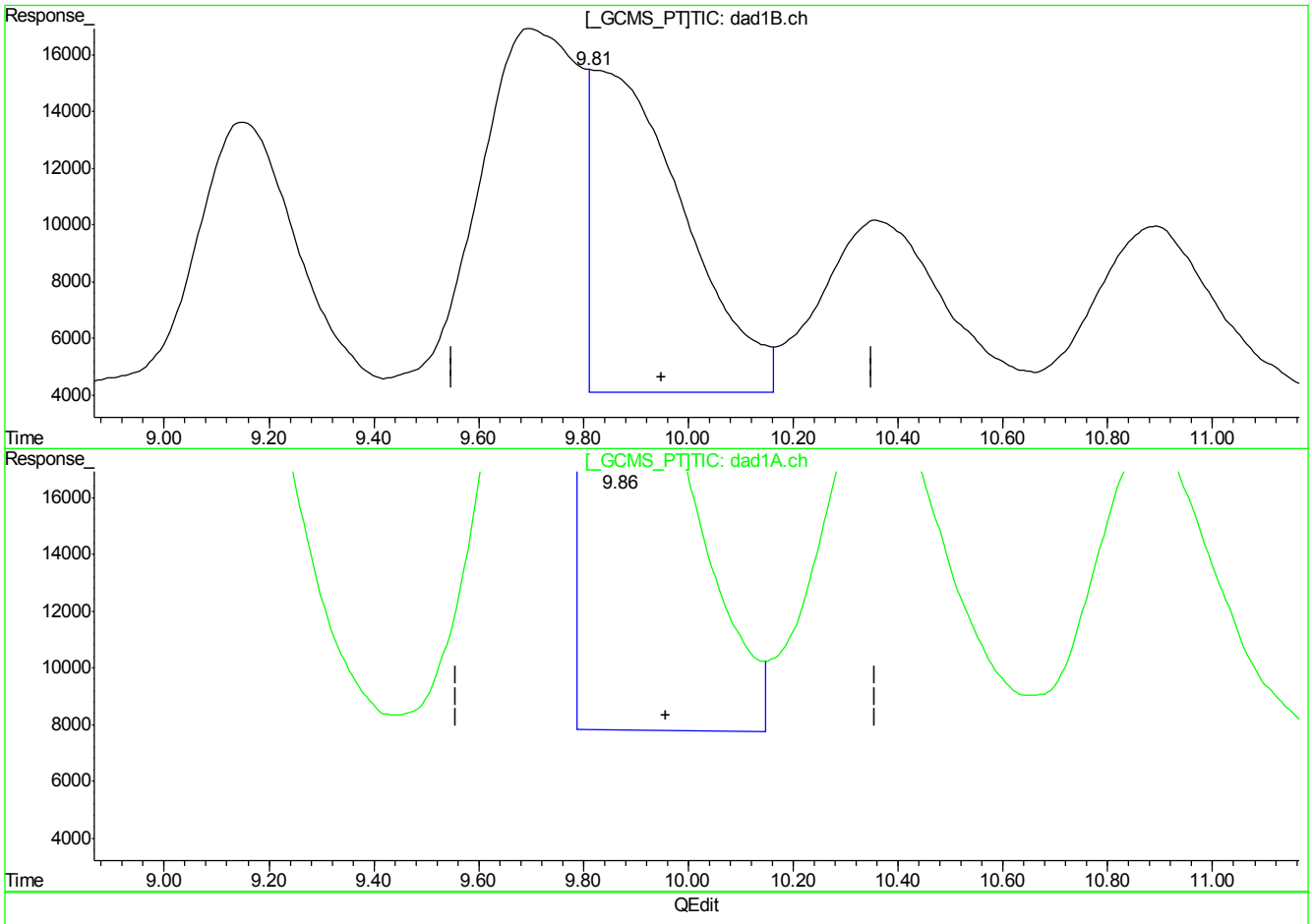
response 2254703

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:32:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.81min 372.151ppb m

response 1389718

(13) 2-Amino-4,6-Dinitrotoluene #2

9.86min 402.649ppb

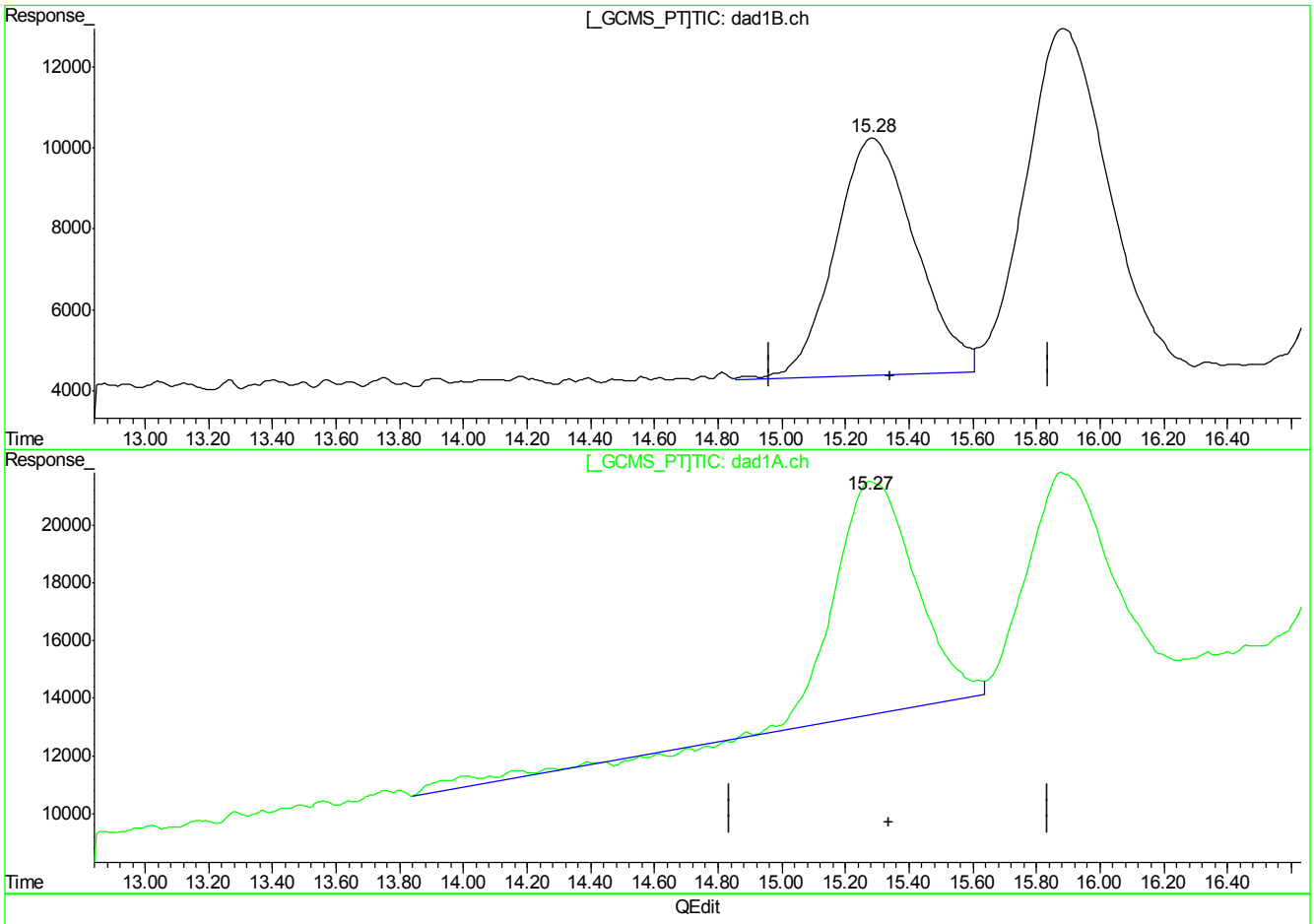
response 2254703

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:32:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.28min 398.953ppb

response 1030896

(18) o-Nitrotoluene #2

15.28min 439.586ppb

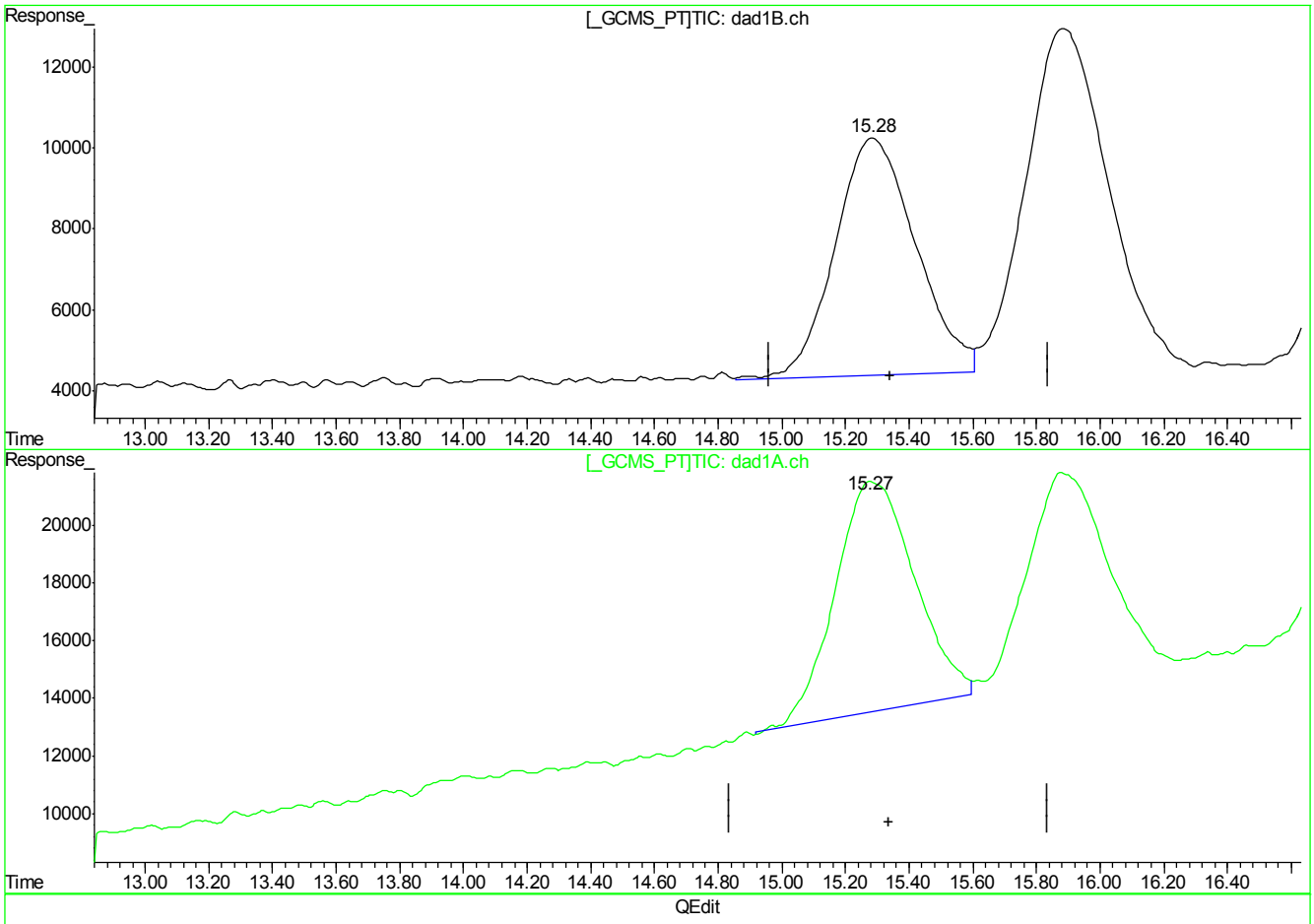
response 1464203

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:32:24 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.28min 398.953ppb

response 1030896

(18) o-Nitrotoluene #2

15.27min 415.704ppb m

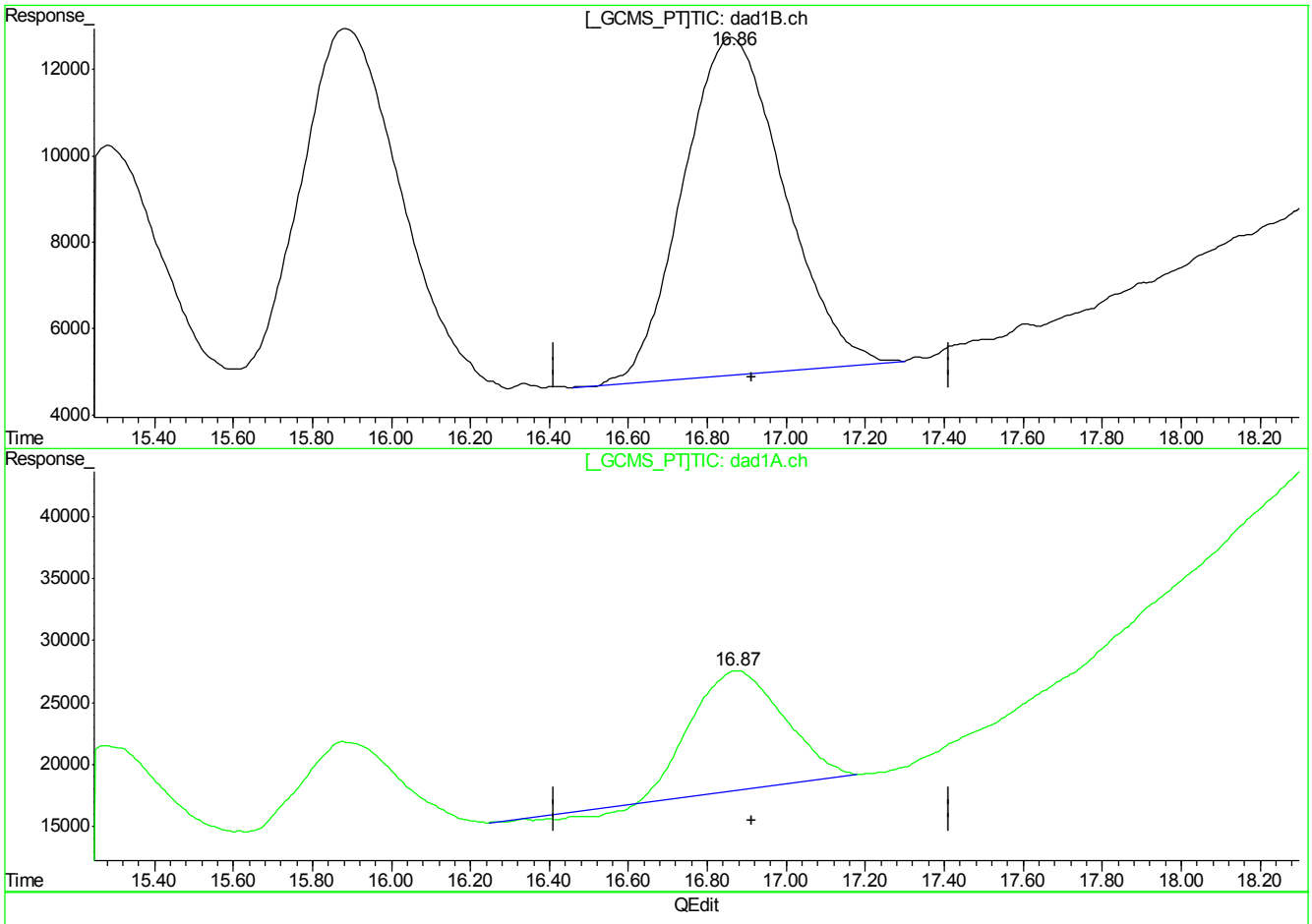
response 1384655

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:32:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(20) m-Nitrotoluene

16.86min 401.893ppb

response 1380315

(20) m-Nitrotoluene #2

16.88min 413.263ppb

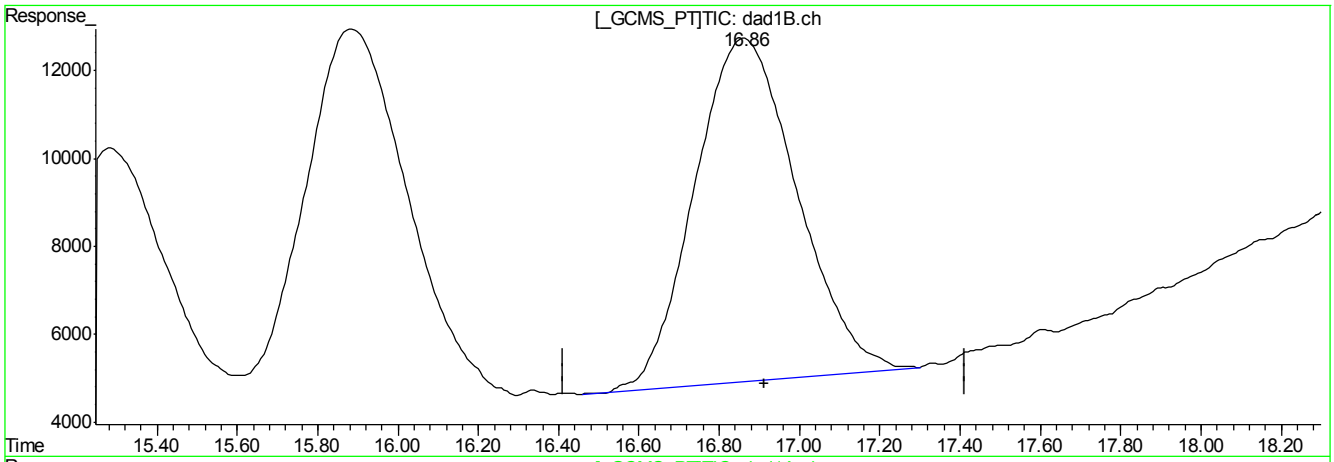
response 1501767

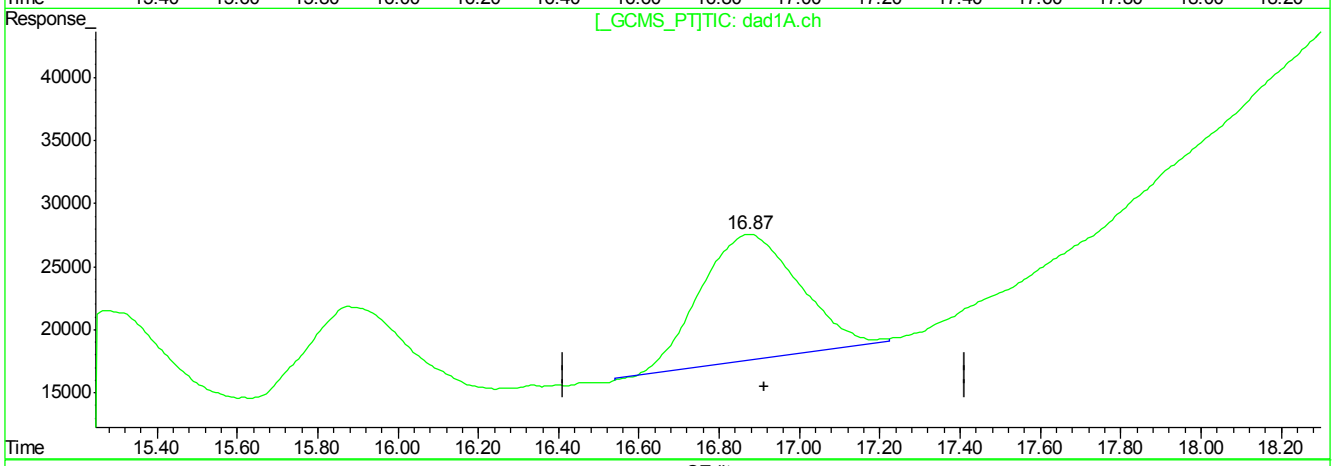
(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:32:31 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration





QEdit

(20) m-Nitrotoluene

16.86min 401.893ppb

response 1380315

(20) m-Nitrotoluene #2

16.87min 466.738ppb m

response 1703747

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:32:34 2018

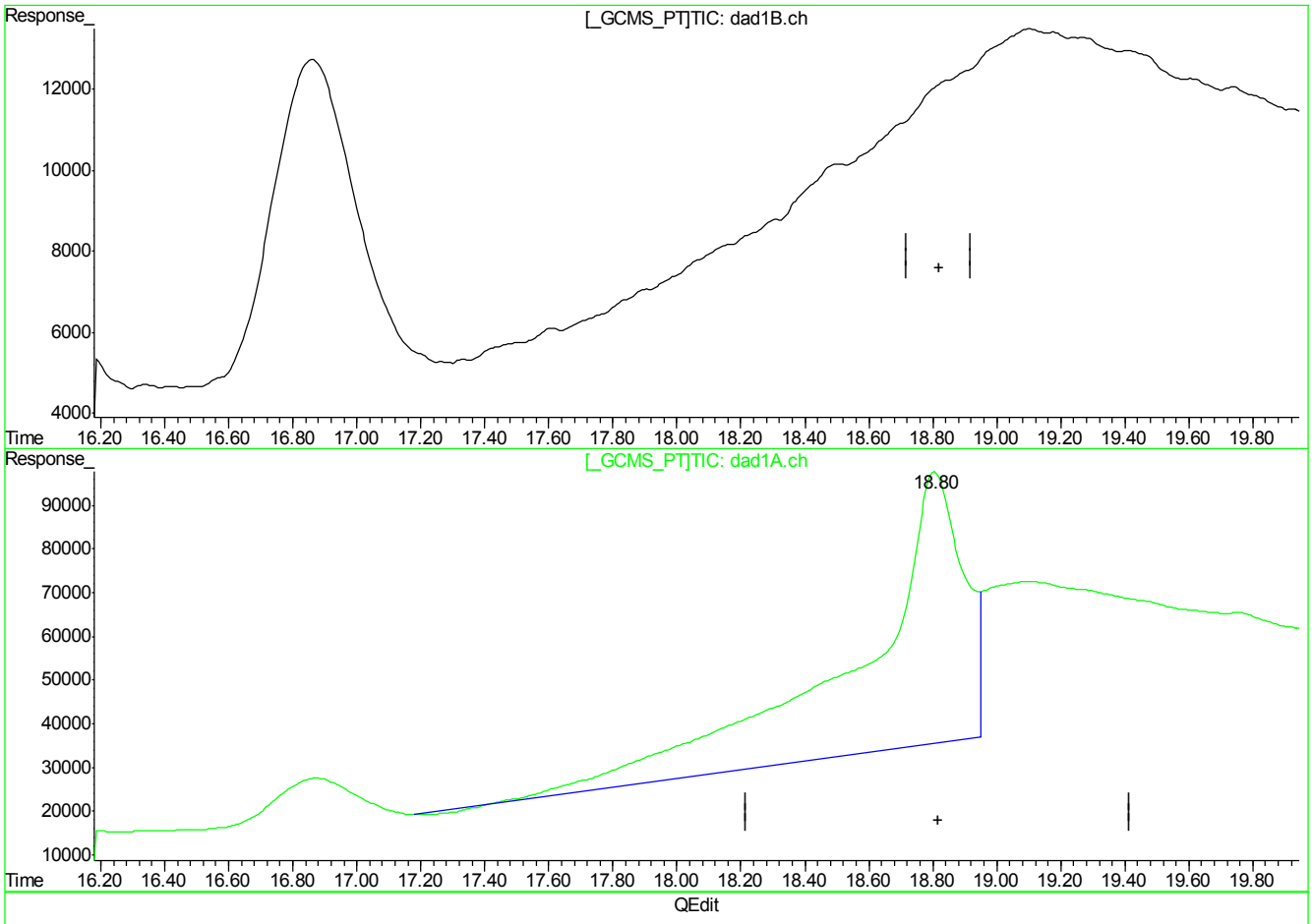
7.5.1.11

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.81min 10584.059ppb

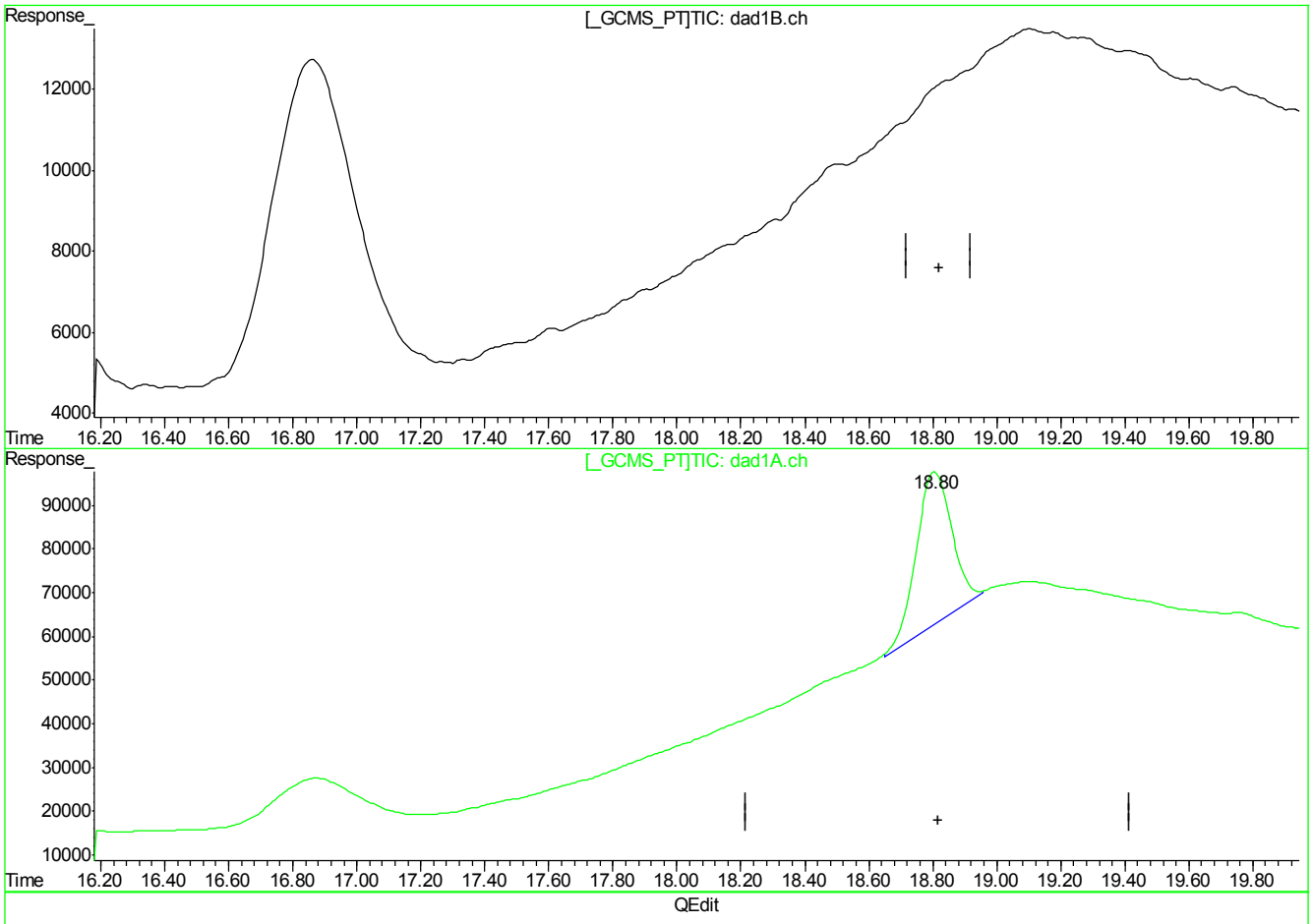
response 13947391

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:32:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059771.D\dad1A.ch
Acq On : 16-May-2018, 15:13:49 Operator: evitam
Sample : op70034-ms Inst : G1315B
Misc : OP70034,gbb1732,10.10,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.80min 2038.192ppb m

response 2685876

(+) = Expected Retention Time
BB059771.D 8330B_0516PLUS.M Thu May 17 08:32:40 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:41 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.86	10.85	964457	1704993	387.563	405.356
	Spiked Amount 500.000	Range 69 - 134		Recovery =		77.51%	81.07%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.49	1.49	763916	2003156	422.611m	404.809m
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.92	2.92	844188	1363570	430.194	418.155
6)	1,3,5-Trinitrobe	4.70	4.70	1760141	3321206	403.935	405.158
7)	1,3-Dinitrobenze	5.89	5.89	2324529	1643310	398.784	428.482
8)	3,5-Dinitroanili	6.15	6.15	1705455	2924860	364.746	374.130
9)	Nitrobenzene	7.47	7.47	1444590	1421878	386.040	447.914
10)	Nitroglycerin	0.00	8.90	0	2683575	N.D. d	2100.150
11)	Tetryl	9.13	9.12	1334017	2150763	450.767	519.601
12)	2,4,6-Trinitroto	9.68	9.69	1570420	1817352	400.930m	424.985
13)	2-Amino-4,6-Dini	9.79	9.82	1325643	2386752	354.992m	426.231
14)	4-Amino-2,6-Dini	10.32	10.33	1031933	2052372	388.655	385.043
16)	2,4-Dinitrotolue	11.56	11.56	2069660	1318796	398.919	417.967
17)	2,6-Dinitrotolue	12.00	12.01	1290594	1678283	435.556	454.840
18)	o-Nitrotoluene	15.25	15.24	1051320	1454873	406.857	436.785
19)	p-Nitrotoluene	15.85	15.86	1559402	1285940	390.223	406.086
20)	m-Nitrotoluene	16.82	16.84	1409552	1671269	410.332	458.171
21)	PETN	0.00	18.79	0	2762548	N.D. d	2096.376m

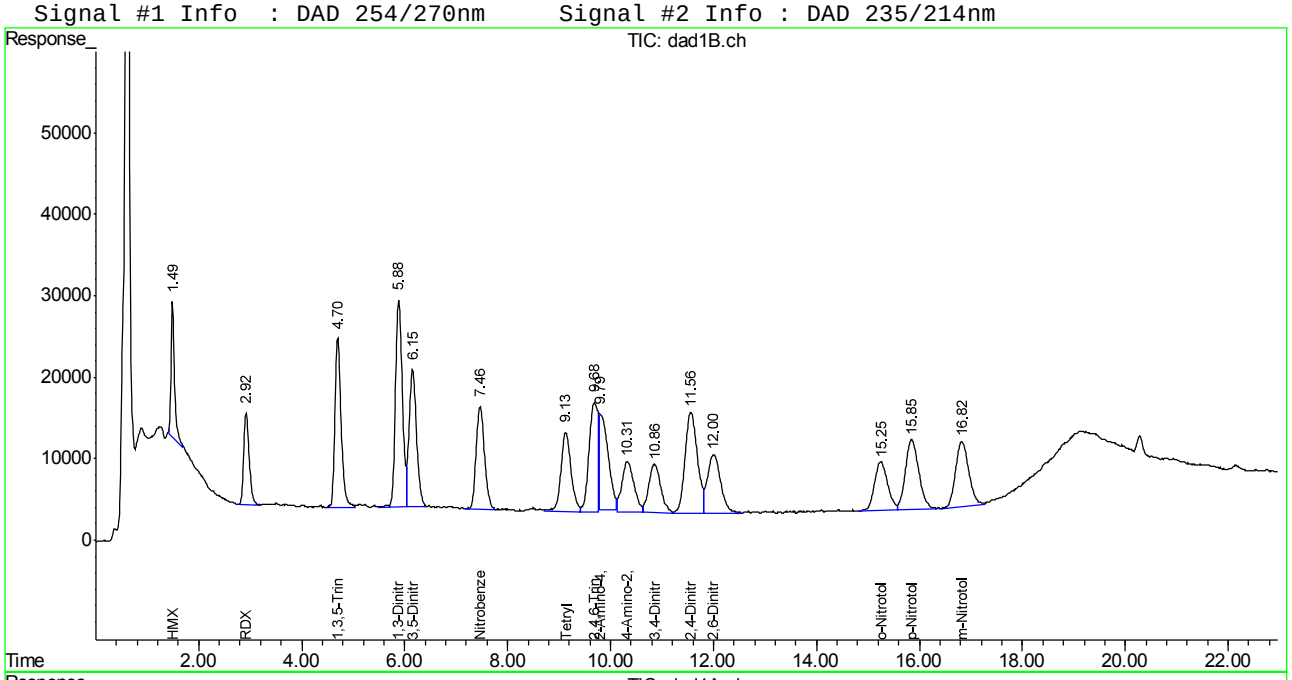
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059772.D 8330B_0516PLUS.M Thu May 17 08:38:17 2018 Page 1

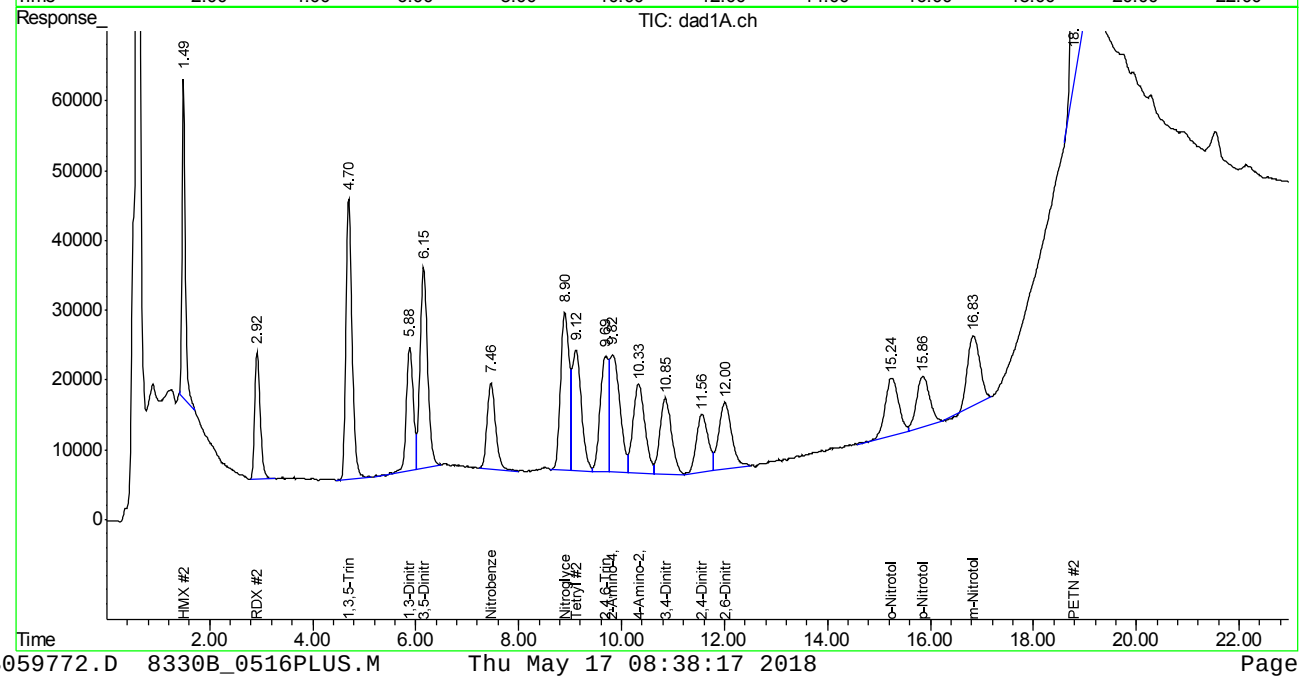
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:34 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





BB059772.D 8330B_0516PLUS.M Thu May 17 08:38:17 2018 Page 2

Manual Integration Approval Summary

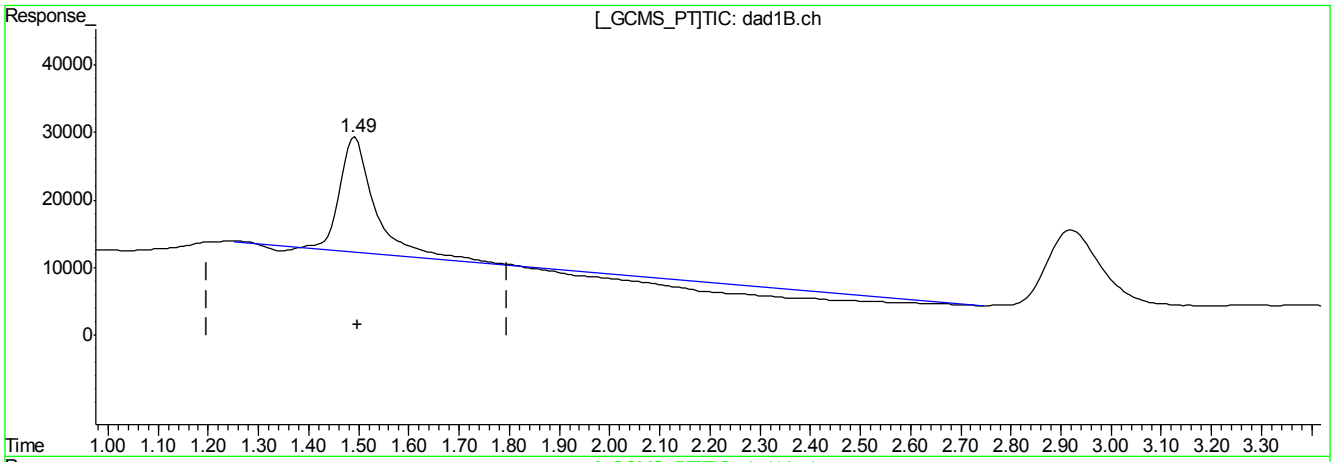
Sample Number:	OP70034-MSD	**Method:**	SW846 8330B
Lab FileID:	BB059772.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 15:43	**Supervisor approved:**	05/17/18 17:17 Mike Eger

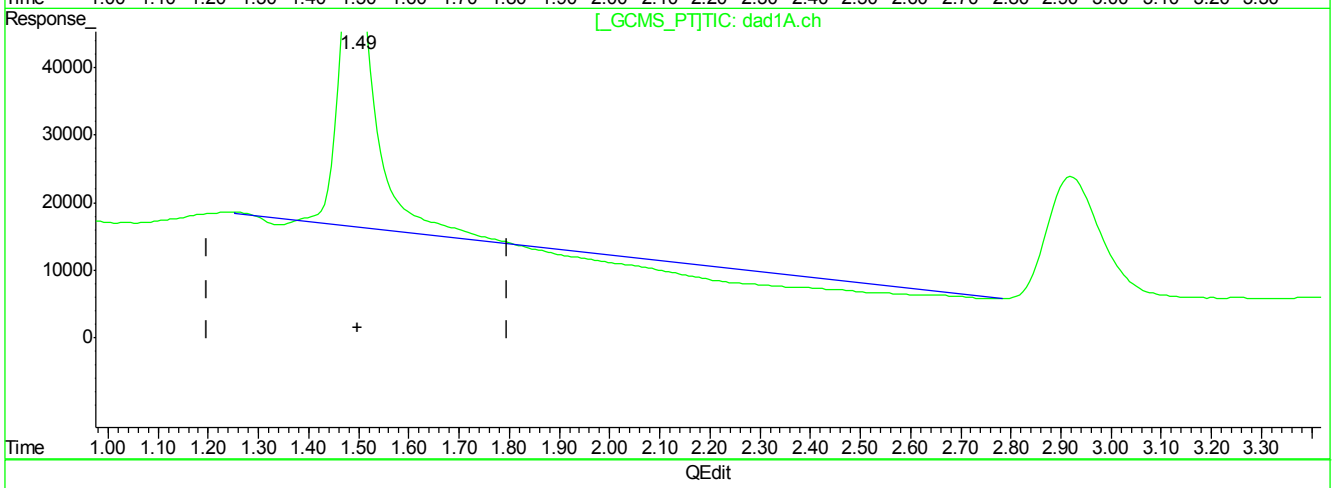
Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.49	Poorly defined baseline
HMX	2691-41-0	2	1.49	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.68	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	9.79	Poorly defined baseline
PETN	78-11-5	2	18.79	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.49min 220.325ppb

response 398262

(2) HMX #2

1.49min 305.791ppb

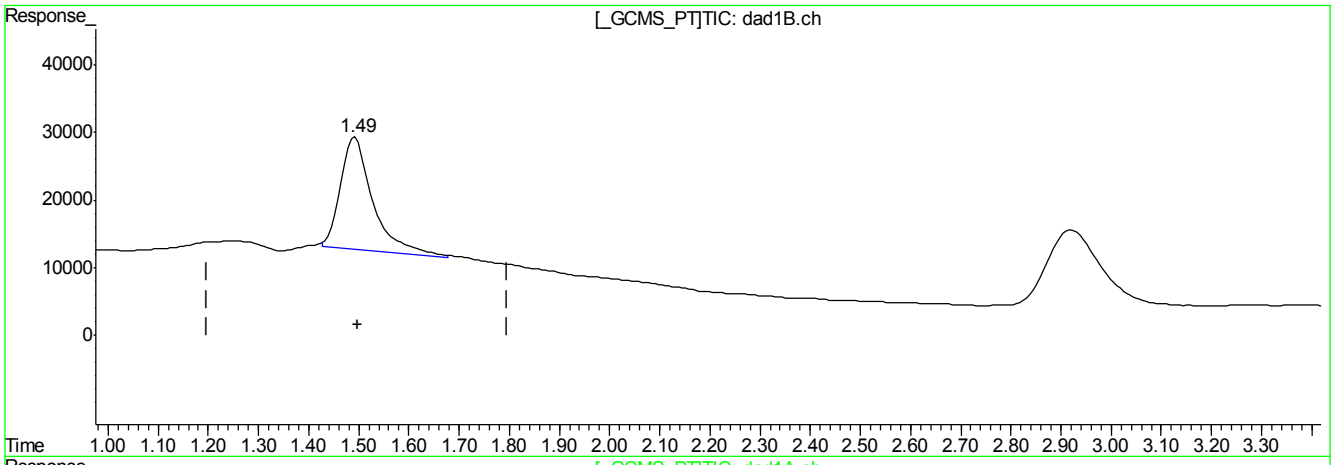
response 1513176

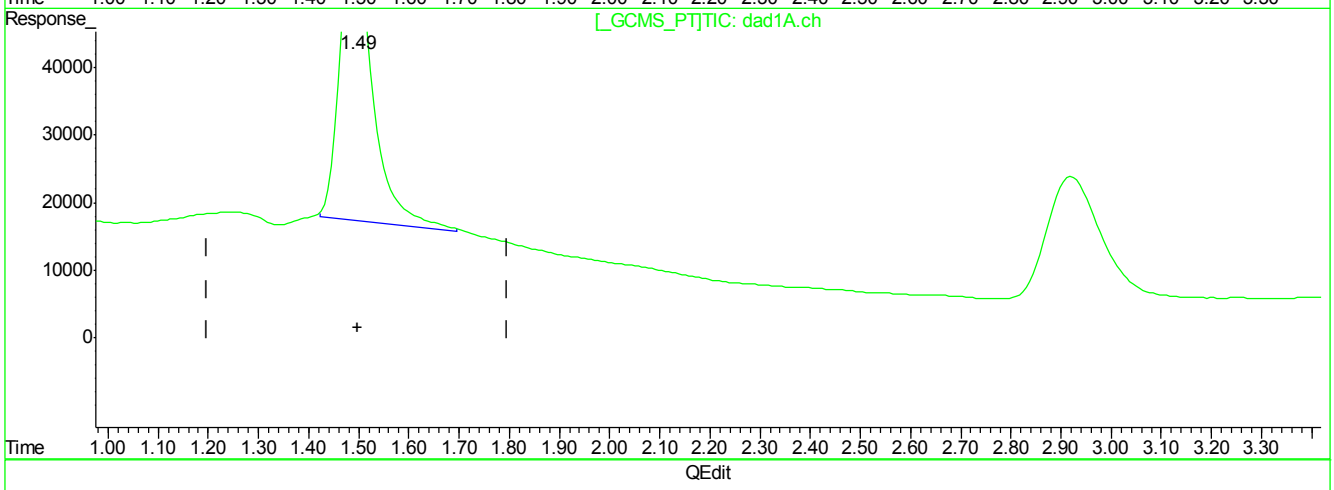
(+) = Expected Retention Time
BB059772.D 8330B_0516PLUS.M Thu May 17 08:32:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration





QEdit

(2) HMX

1.49min 422.611ppb m

response 763916

(2) HMX #2

1.49min 404.809ppb m

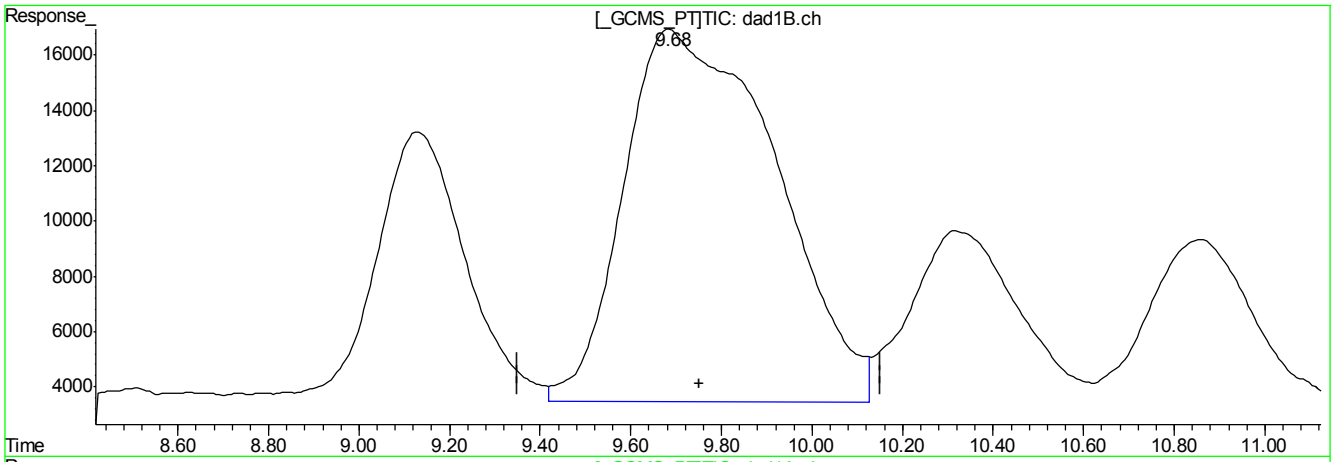
response 2003156

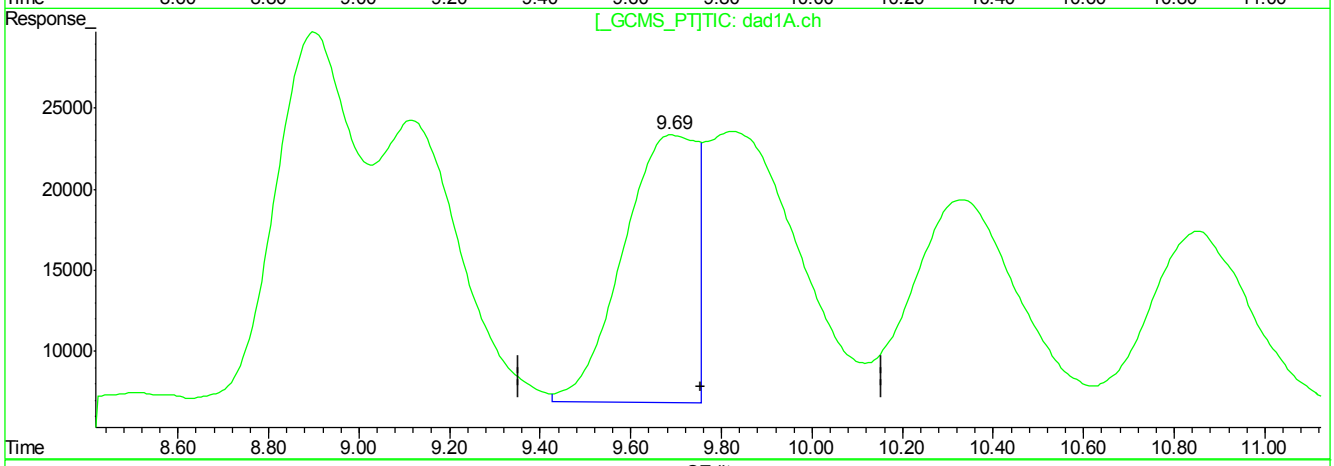
(+) = Expected Retention Time
BB059772.D 8330B_0516PLUS.M Thu May 17 08:33:02 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration





QEdit

(12) 2,4,6-Trinitrotoluene

9.69min 802.629ppb

response 3143851

(12) 2,4,6-Trinitrotoluene #2

9.69min 424.985ppb

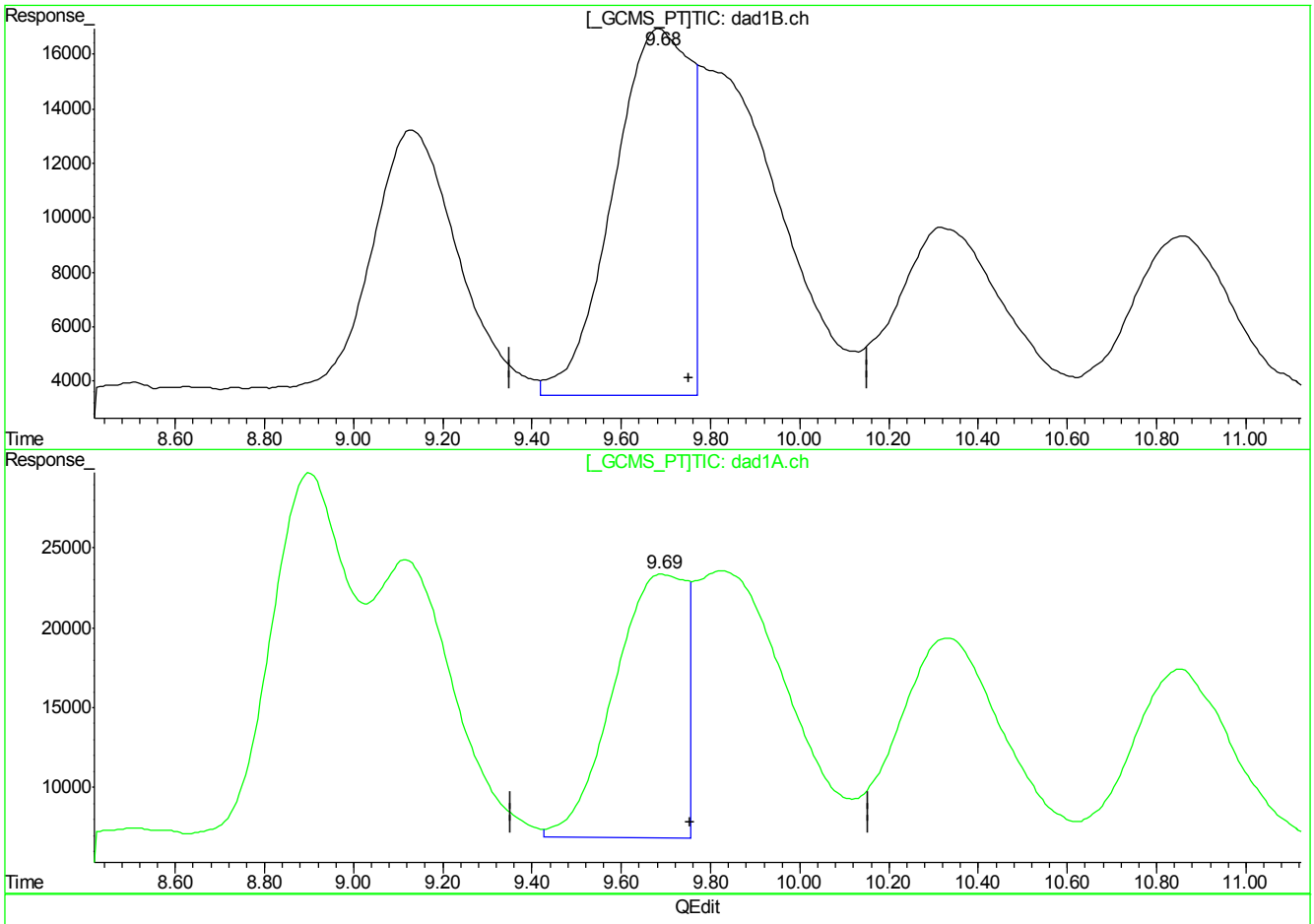
response 1817352

(+) = Expected Retention Time
BB059772.D 8330B_0516PLUS.M Thu May 17 08:33:09 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.68min 400.930ppb m

response 1570420

(12) 2,4,6-Trinitrotoluene #2

9.69min 424.985ppb

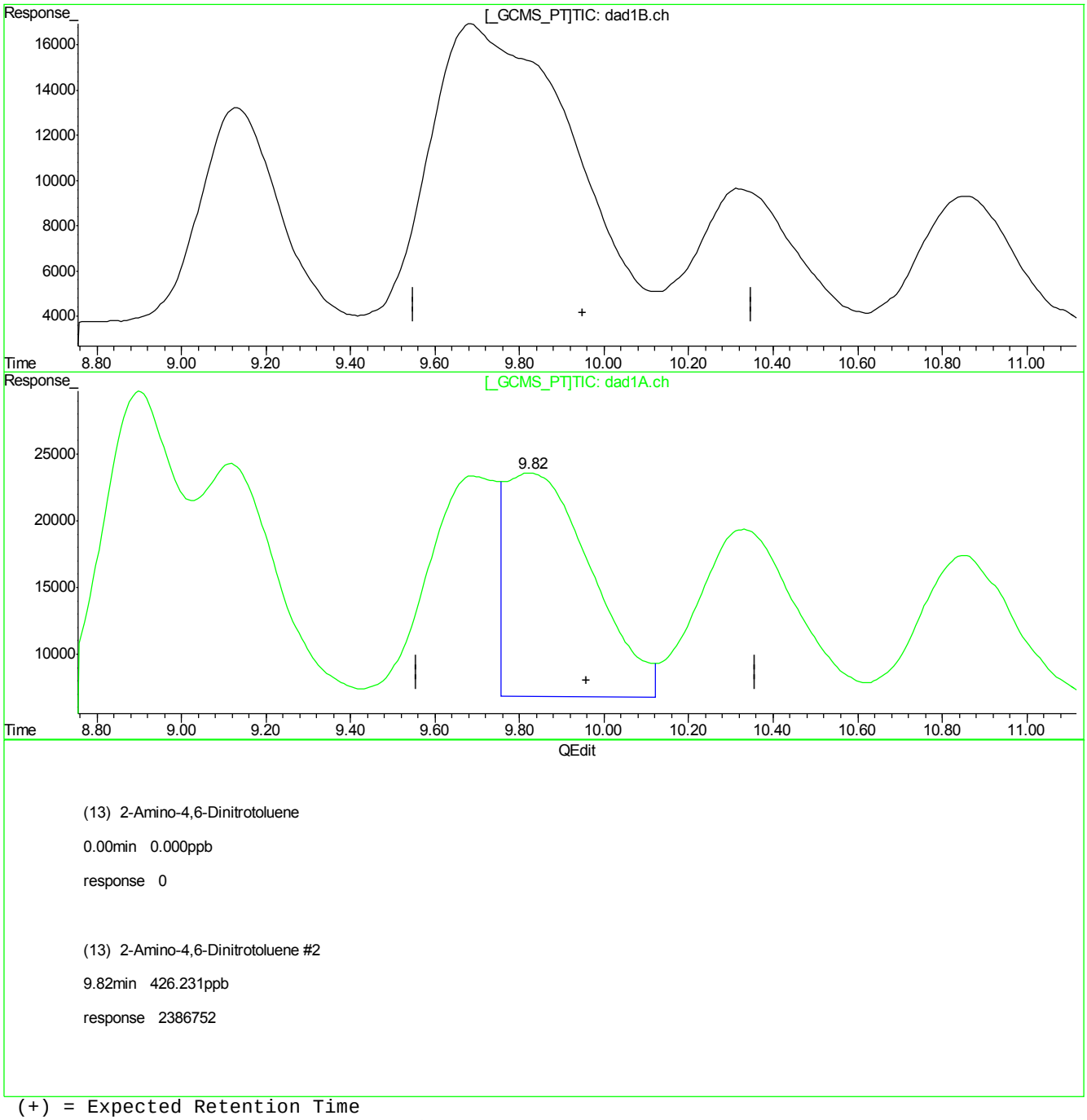
response 1817352

(+) = Expected Retention Time
BB059772.D 8330B_0516PLUS.M Thu May 17 08:33:20 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

0.00min 0.000ppb

response 0

(13) 2-Amino-4,6-Dinitrotoluene #2

9.82min 426.231ppb

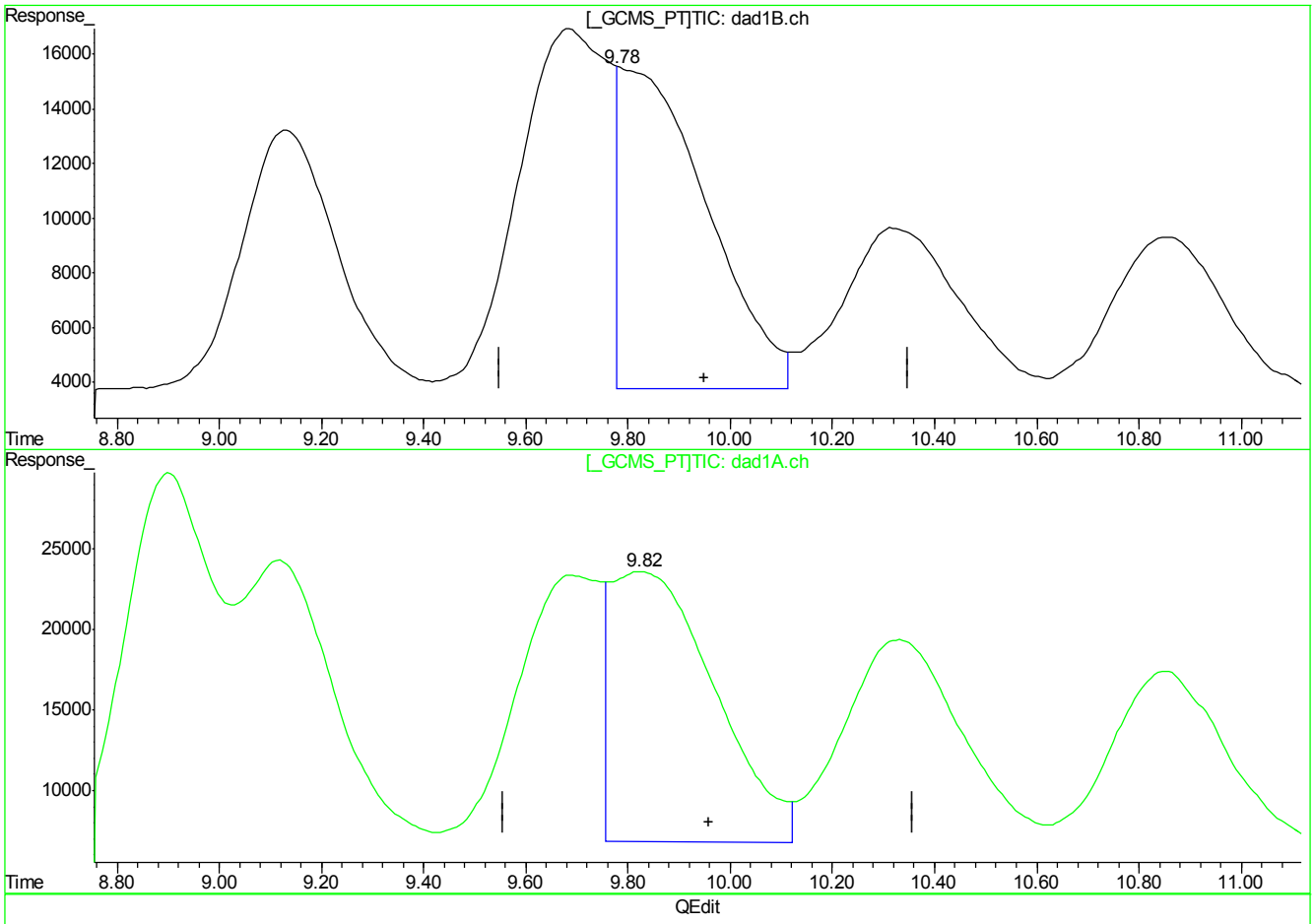
response 2386752

(+) = Expected Retention Time
BB059772.D 8330B_0516PLUS.M Thu May 17 08:33:22 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.78min 374.779ppb m

response 1399533

(13) 2-Amino-4,6-Dinitrotoluene #2

9.82min 426.231ppb

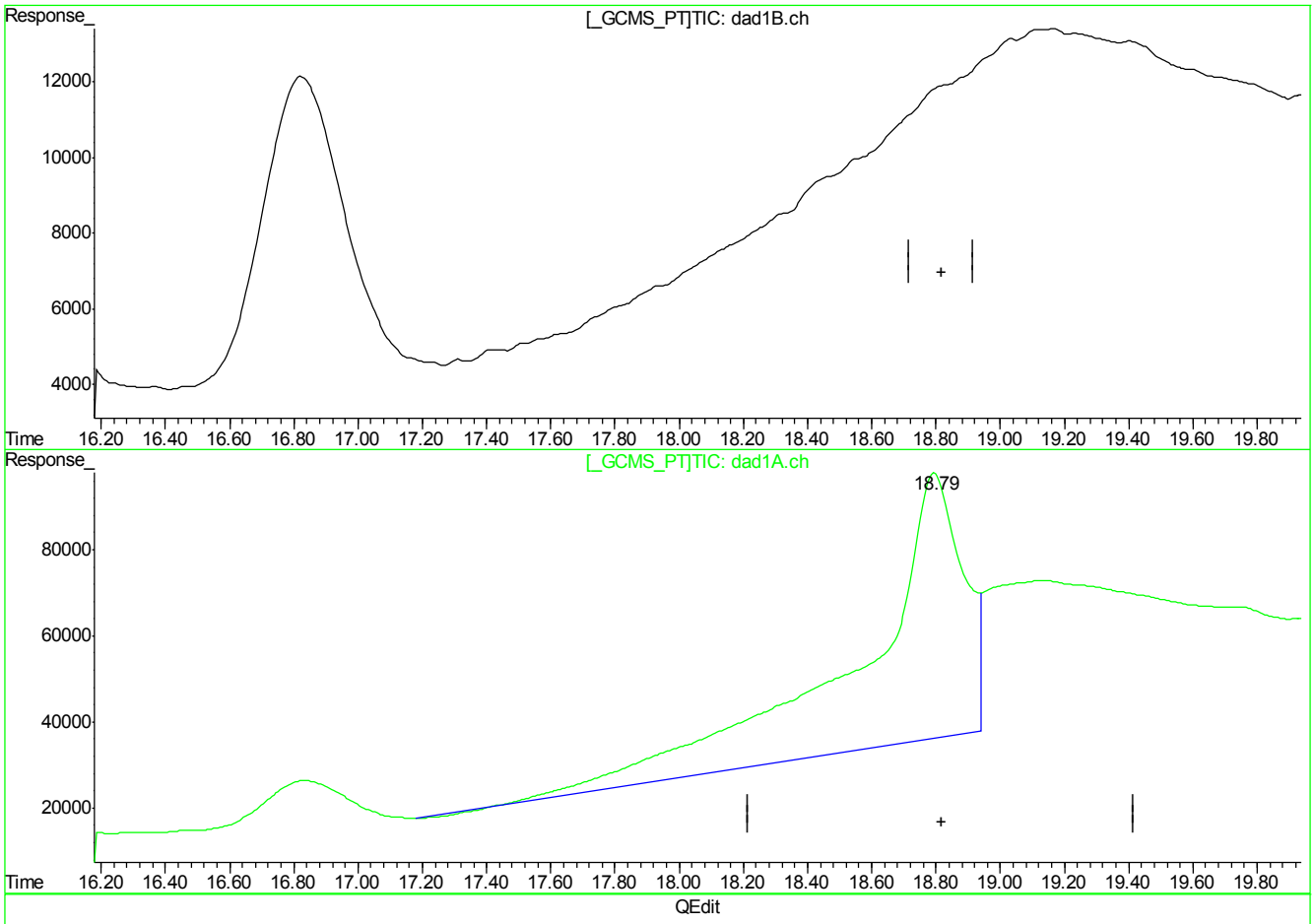
response 2386752

(+) = Expected Retention Time
BB059772.D 8330B_0516PLUS.M Thu May 17 08:33:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.80min 10335.719ppb

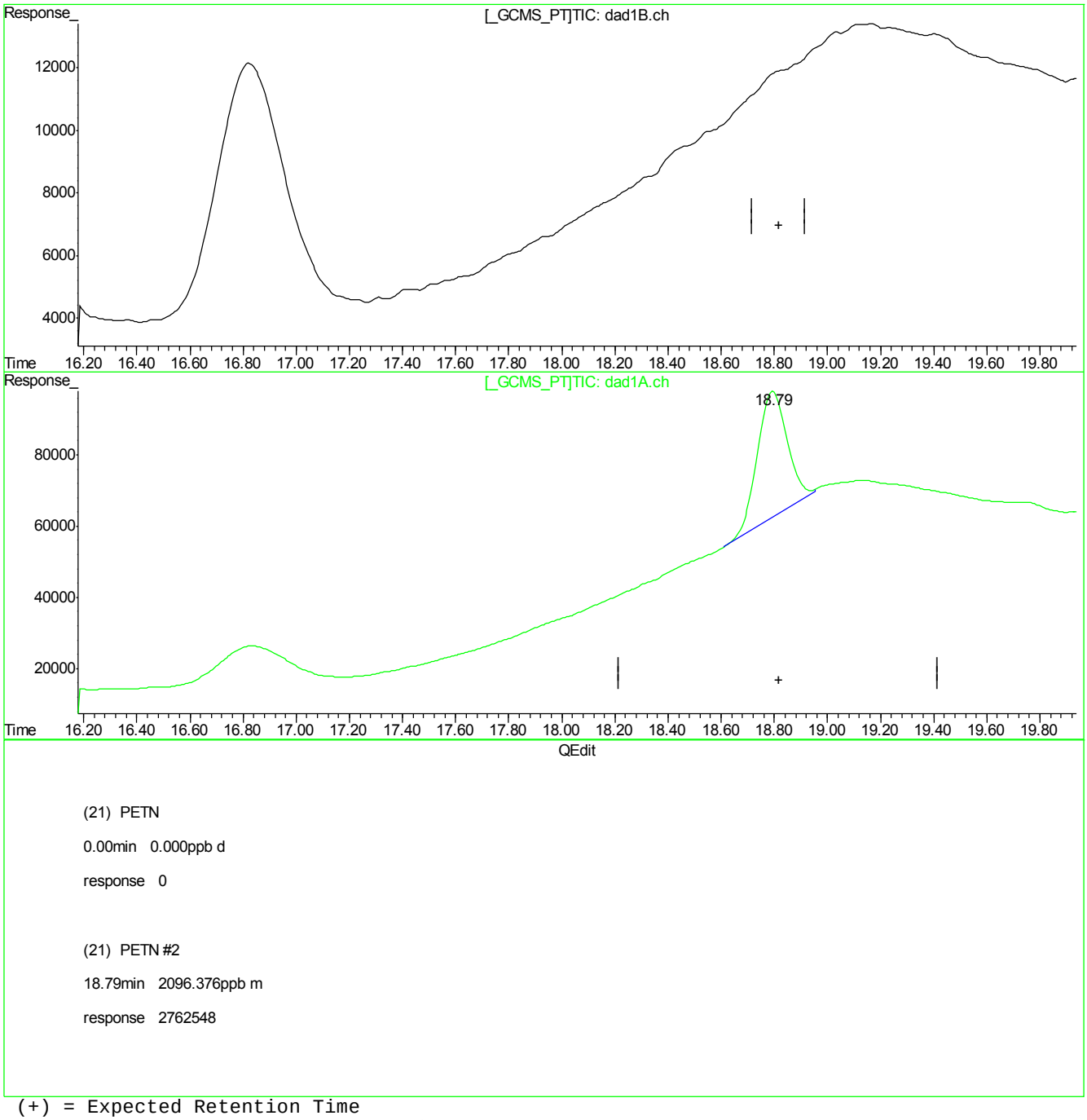
response 13620135

(+) = Expected Retention Time
BB059772.D 8330B_0516PLUS.M Thu May 17 08:34:05 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059772.D\dad1A.ch
Acq On : 16-May-2018, 15:43:47 Operator: evitam
Sample : op70034-msd Inst : G1315B
Misc : OP70034,gbb1732,10.14,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.79min 2096.376ppb m

response 2762548

(+) = Expected Retention Time
BB059772.D 8330B_0516PLUS.M Thu May 17 08:34:08 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59:45 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.90	10.92	35717	88342	13.349m	18.737m#
	Spiked Amount 500.000	Range 70 - 136		Recovery =		2.67%#	3.75%#
	Target Compounds						
1)	TNX	1.38	1.38	82119	139987	17.021	18.870
2)	HMX	1.50	1.50	28737	88941	15.367	17.463
3)	DNX	1.76	1.75	67814	106005	21.896	22.749m
4)	MNX	2.34	2.34	75971	102760	24.534	22.104m
5)	RDX	2.94	2.94	67589	71182	31.607	21.415m
6)	1,3,5-Trinitrobe	4.71	4.71	103064	165366	23.686	19.809
7)	1,3-Dinitrobenze	5.90	5.90	140865	50632	25.409	13.595m#
8)	3,5-Dinitroanili	6.18	6.18	93847	134853	19.190	18.031m
9)	Nitrobenzene	7.45	7.50	95282	92054	26.149	27.762m
10)	Nitroglycerin	0.00	8.93	0	141211	N.D. d	110.198m
11)	Tetryl	9.19	9.19	65489	69134	22.201	13.311m#
12)	2,4,6-Trinitroto	9.75	9.68	94150	97350	22.310	21.477m
13)	2-Amino-4,6-Dini	9.93	9.94	70948	105343	18.742	19.640m
14)	4-Amino-2,6-Dini	10.38	10.38	37314	112591	14.332	21.728m#
16)	2,4-Dinitrotolue	11.56	11.79	96068	51939	18.260	17.587m
17)	2,6-Dinitrotolue	12.02	12.02	38990	58251	11.281	17.059m#
18)	o-Nitrotoluene	15.30	15.42	60247	59156	24.119m	18.059m
19)	p-Nitrotoluene	15.89	15.97	96776	52008	24.519	16.526m
20)	m-Nitrotoluene	16.82	16.82	38531	82682	10.802m	20.548m#
21)	PETN	0.00	18.83	0	101580	N.D. d	73.141m

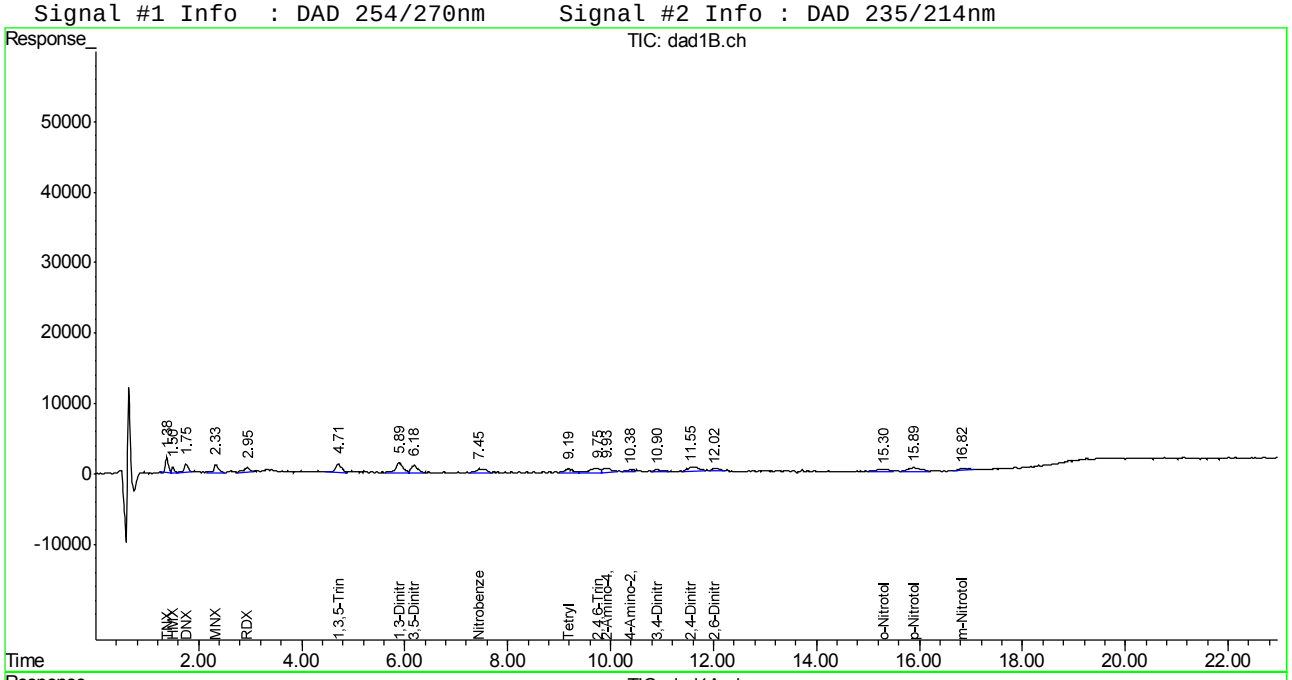
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059759.D 8330B_0516PLUS.M Thu May 17 08:38:04 2018 Page 1

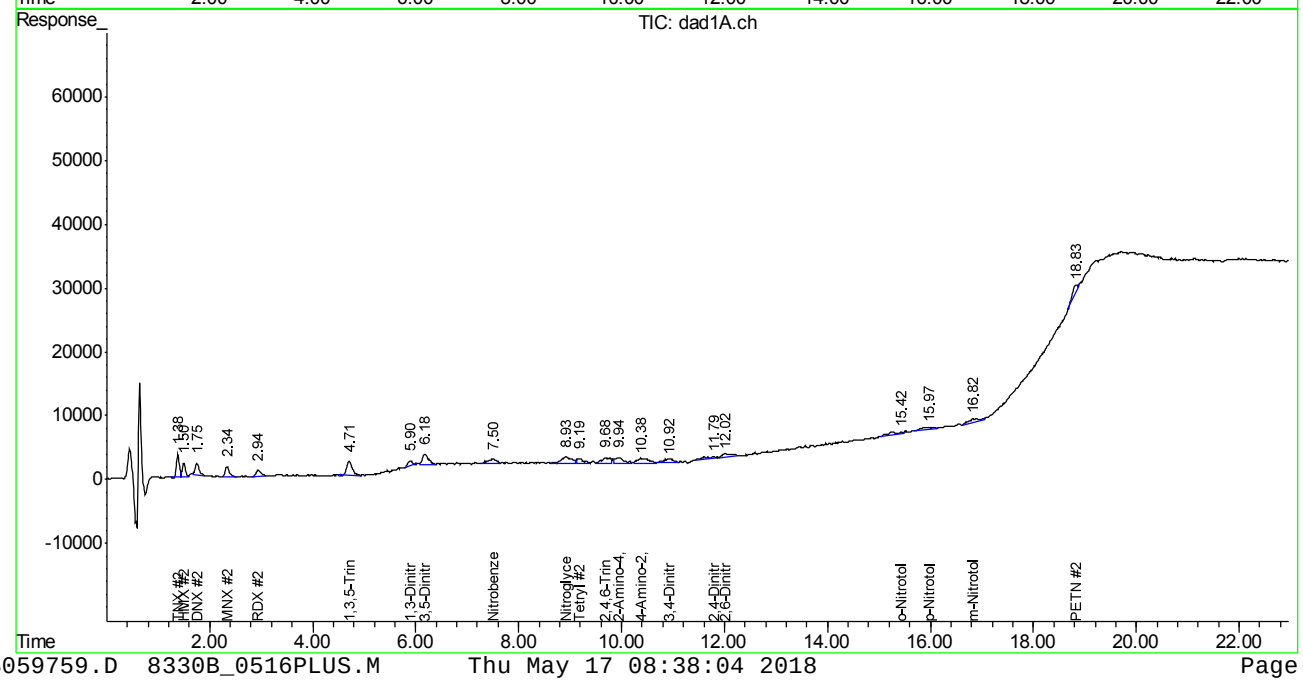
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:02 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

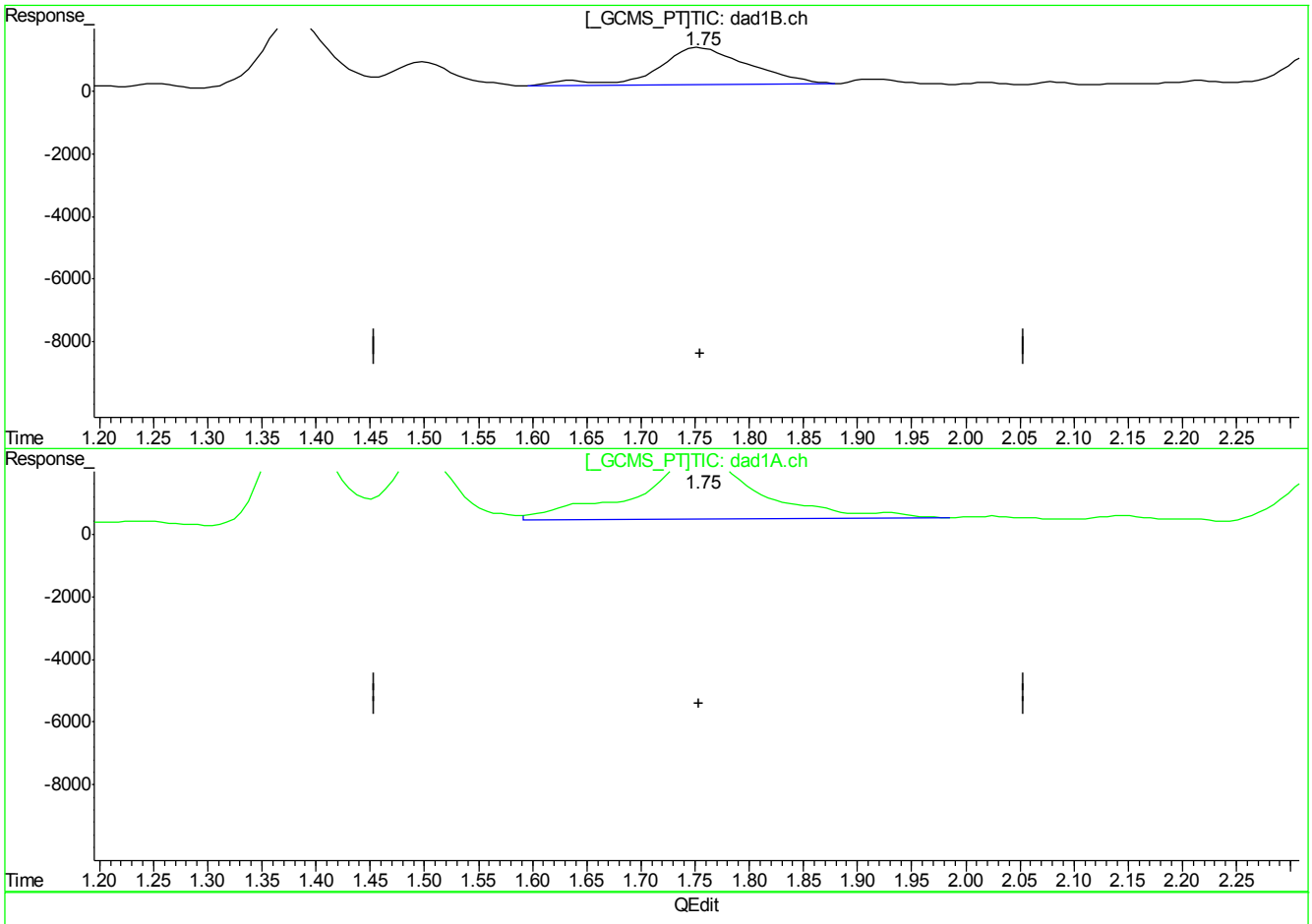
Sample Number:	GBB1732-IC1732	**Method:**	SW846 8330B
Lab FileID:	BB059759.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 09:14	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
DNX		2	1.75	Poorly defined baseline
MNX		2	2.34	Poorly defined baseline
RDX	121-82-4	2	2.94	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.90	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.18	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.50	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.93	Poorly defined baseline
Tetryl	479-45-8	2	9.19	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.68	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.94	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.38	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.90	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.92	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.79	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.02	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	15.30	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	15.42	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.97	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	16.82	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.82	Poorly defined baseline
PETN	78-11-5	2	18.83	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(3) DNX

1.76min 21.896ppb

response 67814

(3) DNX #2

1.76min 32.975ppb

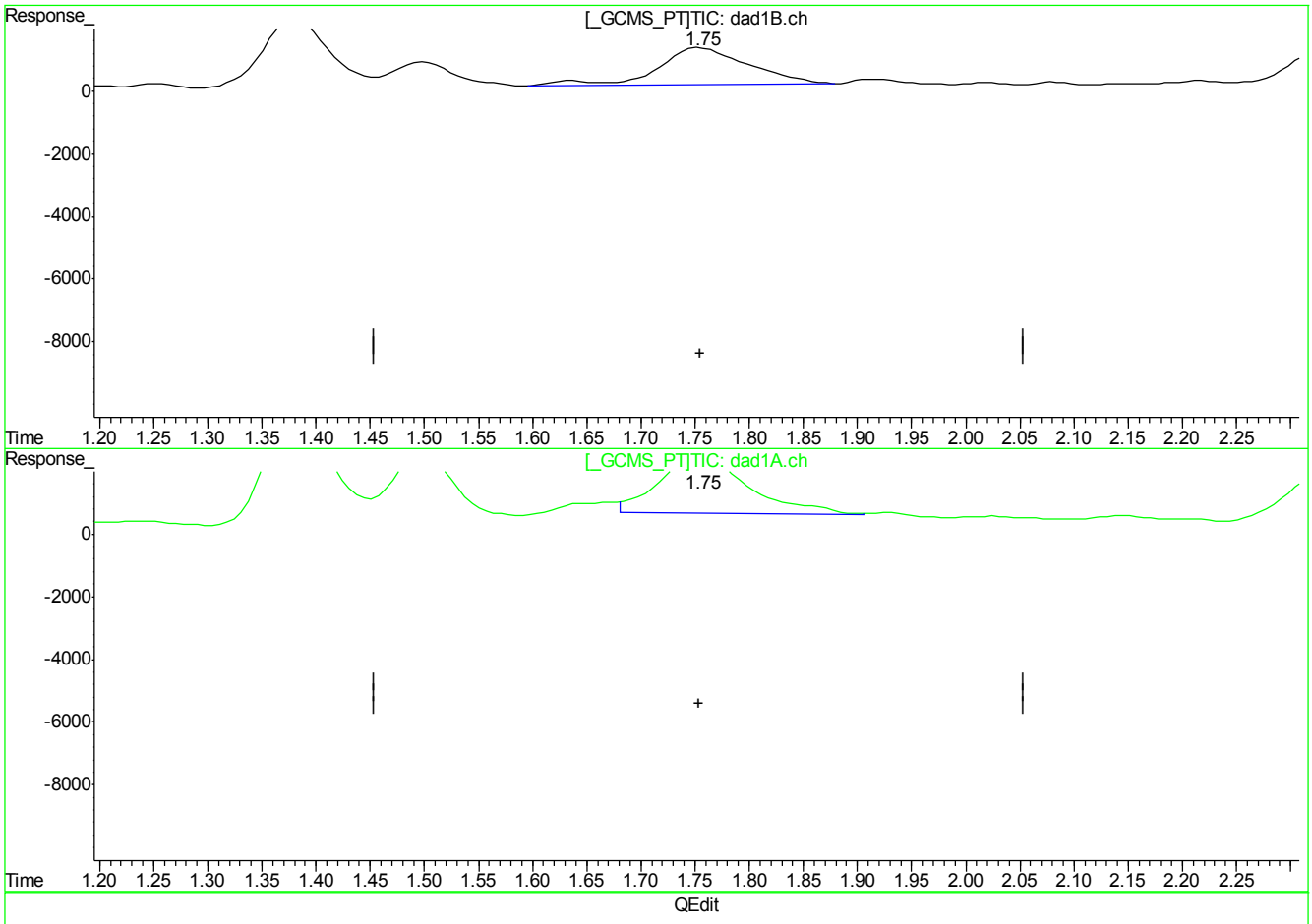
response 153681

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(3) DNX

1.76min 21.896ppb

response 67814

(3) DNX #2

1.75min 22.749ppb m

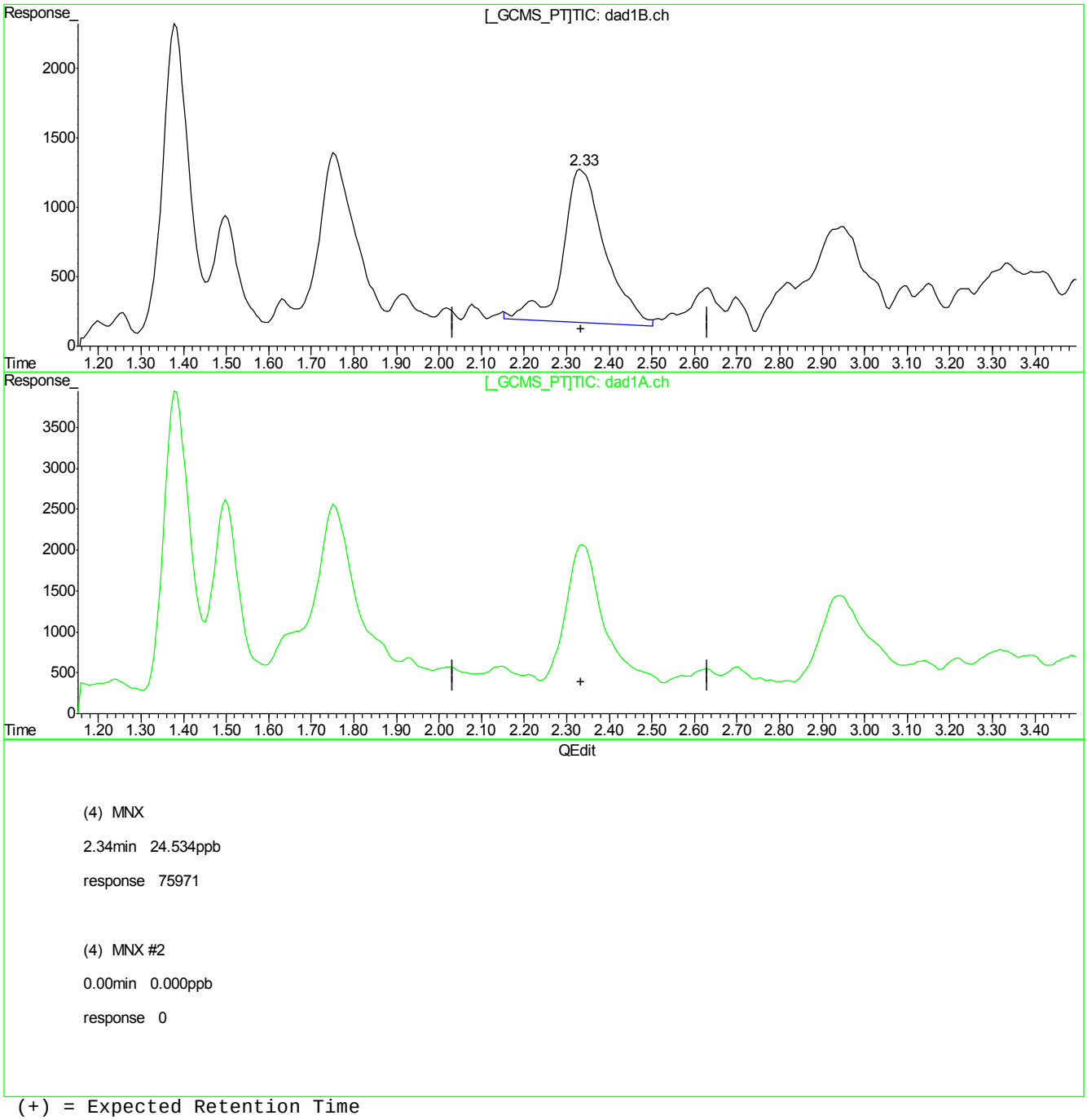
response 106005

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:12 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:14 2018

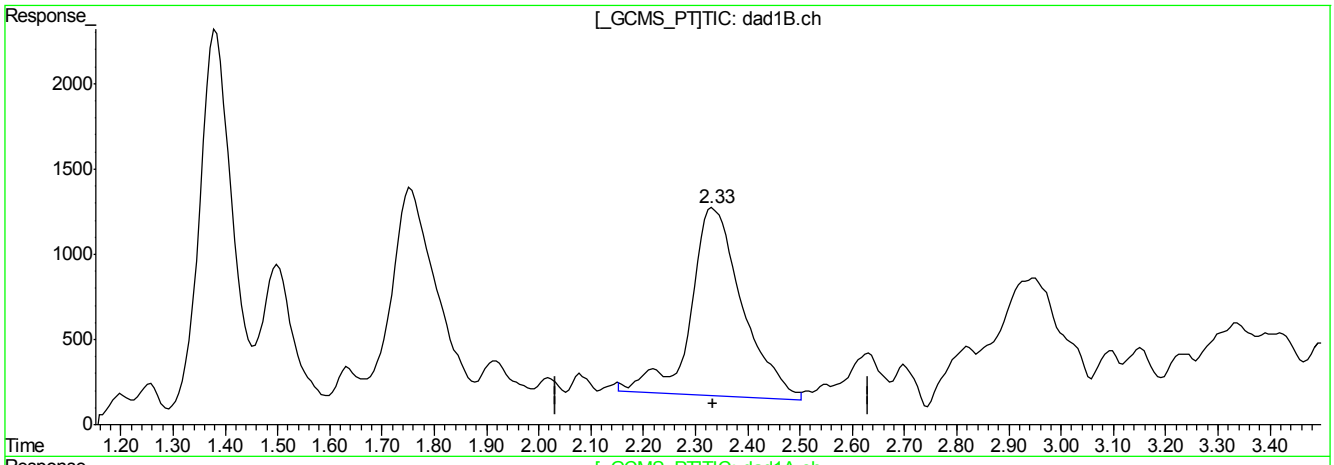
7.6.1.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(4) MNX

2.34min 24.534ppb

response 75971

(4) MNX #2

2.34min 22.104ppb m

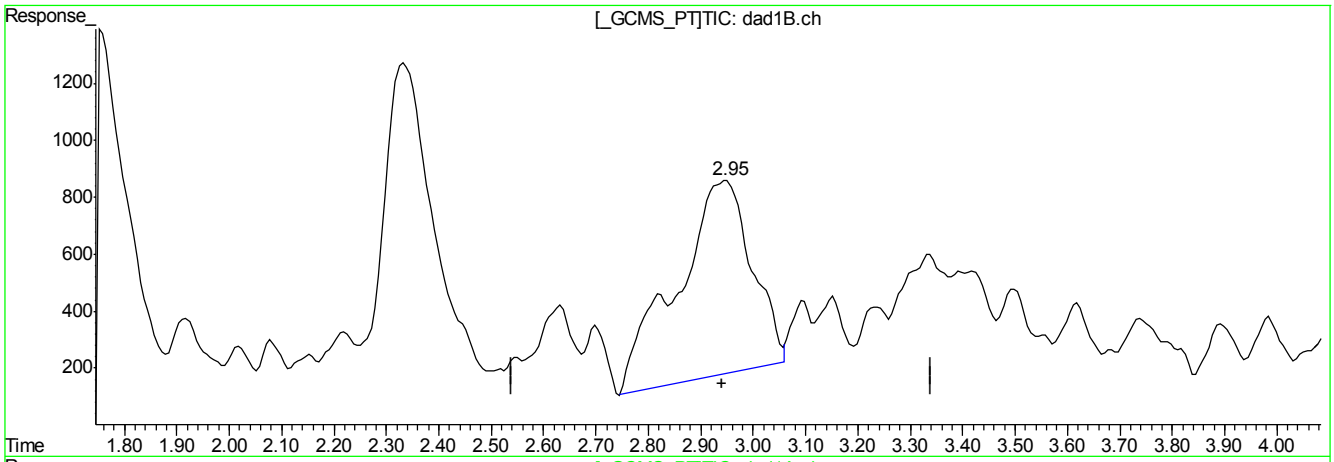
response 102760

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:18 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(5) RDX

2.94min 31.607ppb

response 67589

(5) RDX #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:20 2018

7.6.1.6

7

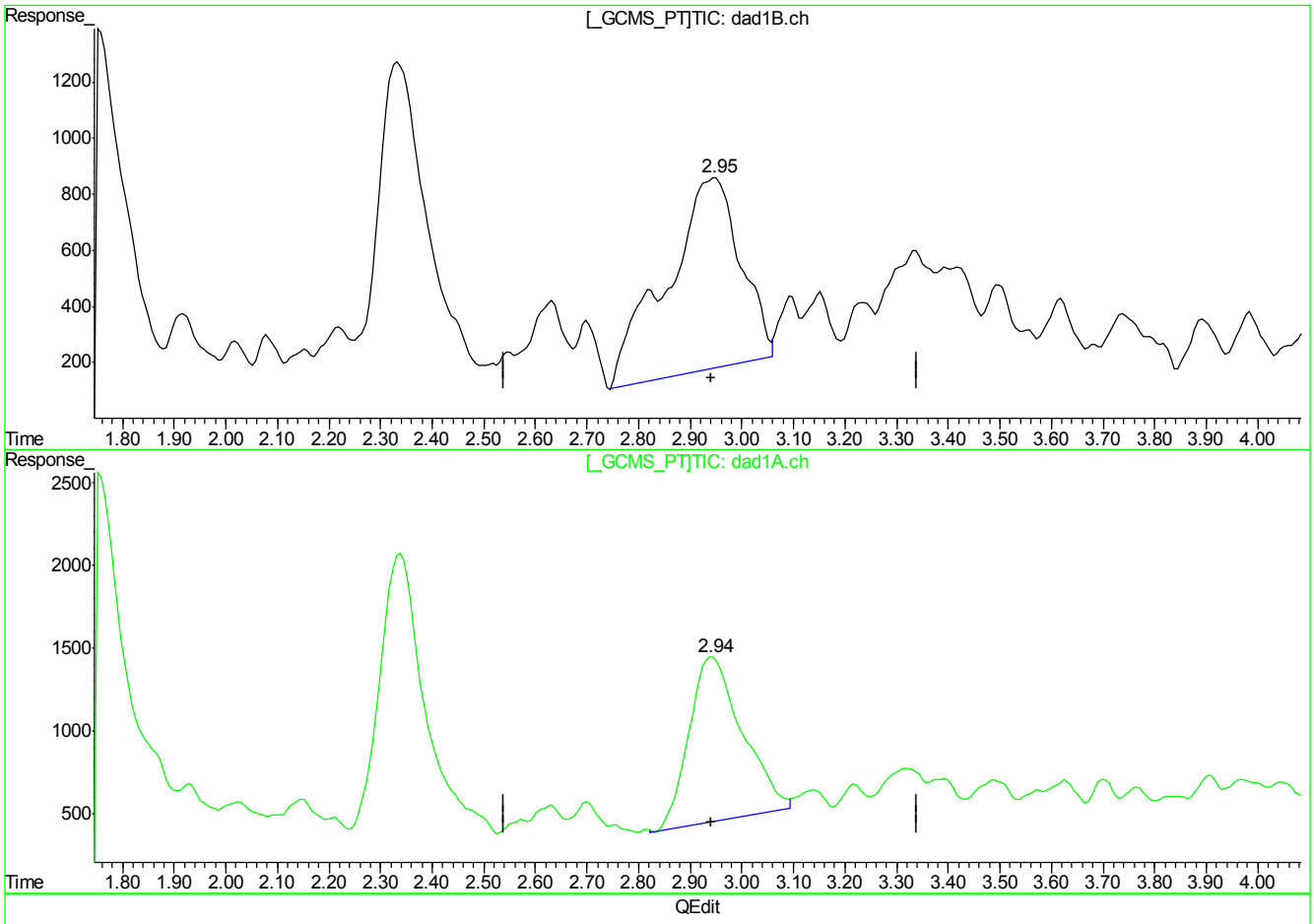
FA53896

BB059759.D edits: RDX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(5) RDX

2.94min 31.607ppb

response 67589

(5) RDX #2

2.94min 21.415ppb m

response 71182

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:23 2018

7.6.1.7

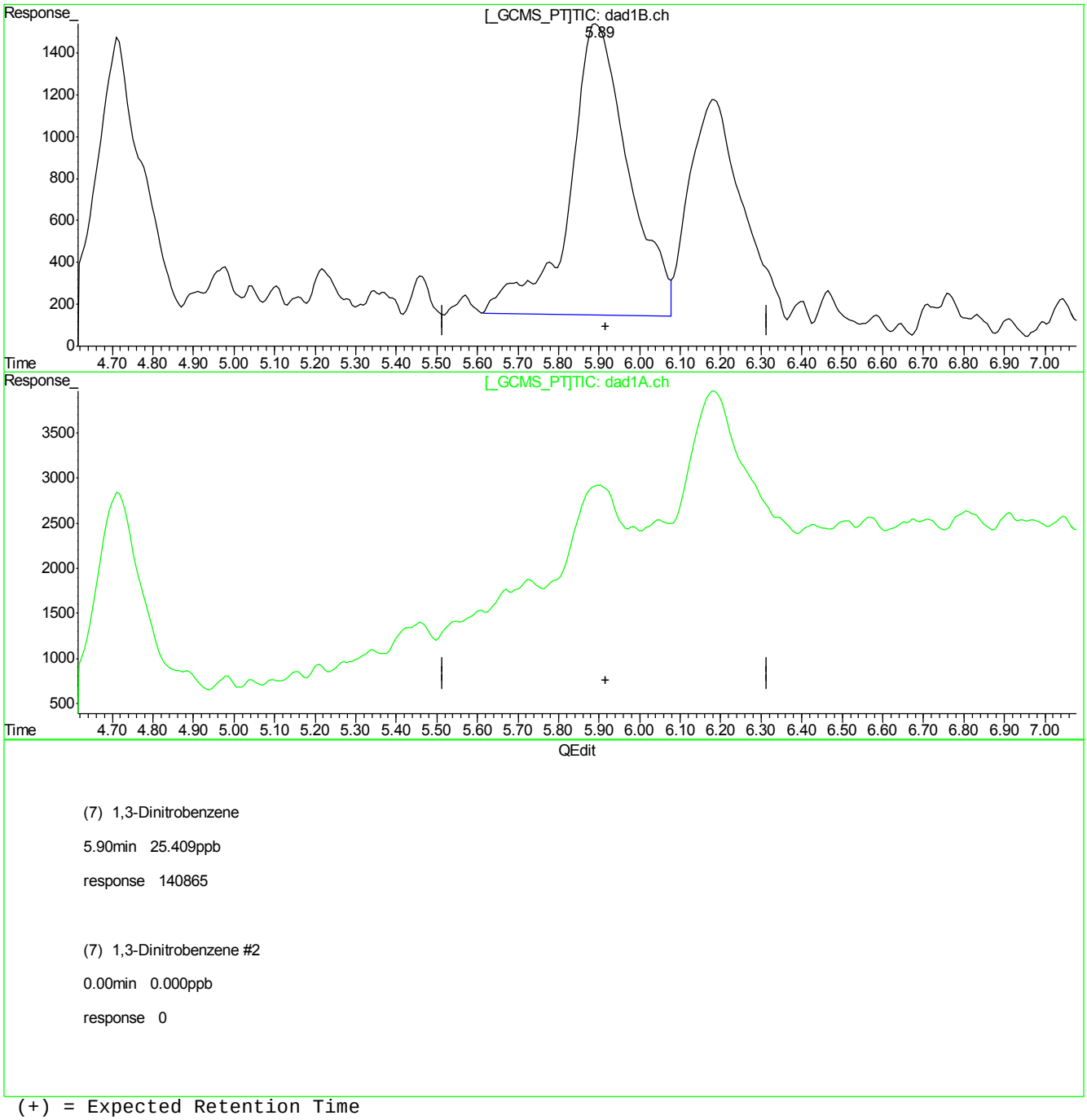
7

BB059759.D edits: RDX

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.90min 25.409ppb

response 140865

(7) 1,3-Dinitrobenzene #2

0.00min 0.000ppb

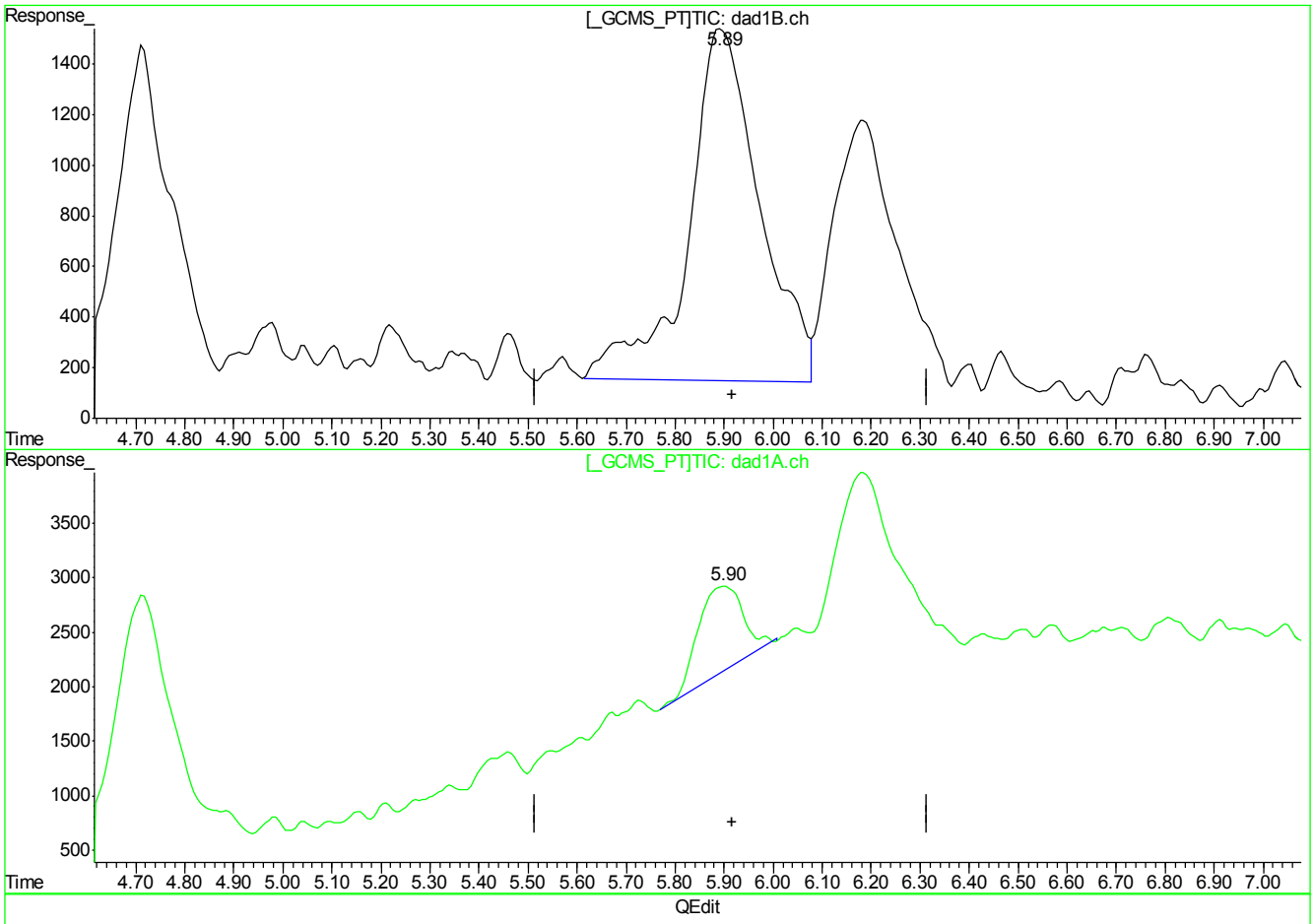
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:28 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.90min 25.409ppb

response 140865

(7) 1,3-Dinitrobenzene #2

5.90min 13.595ppb m

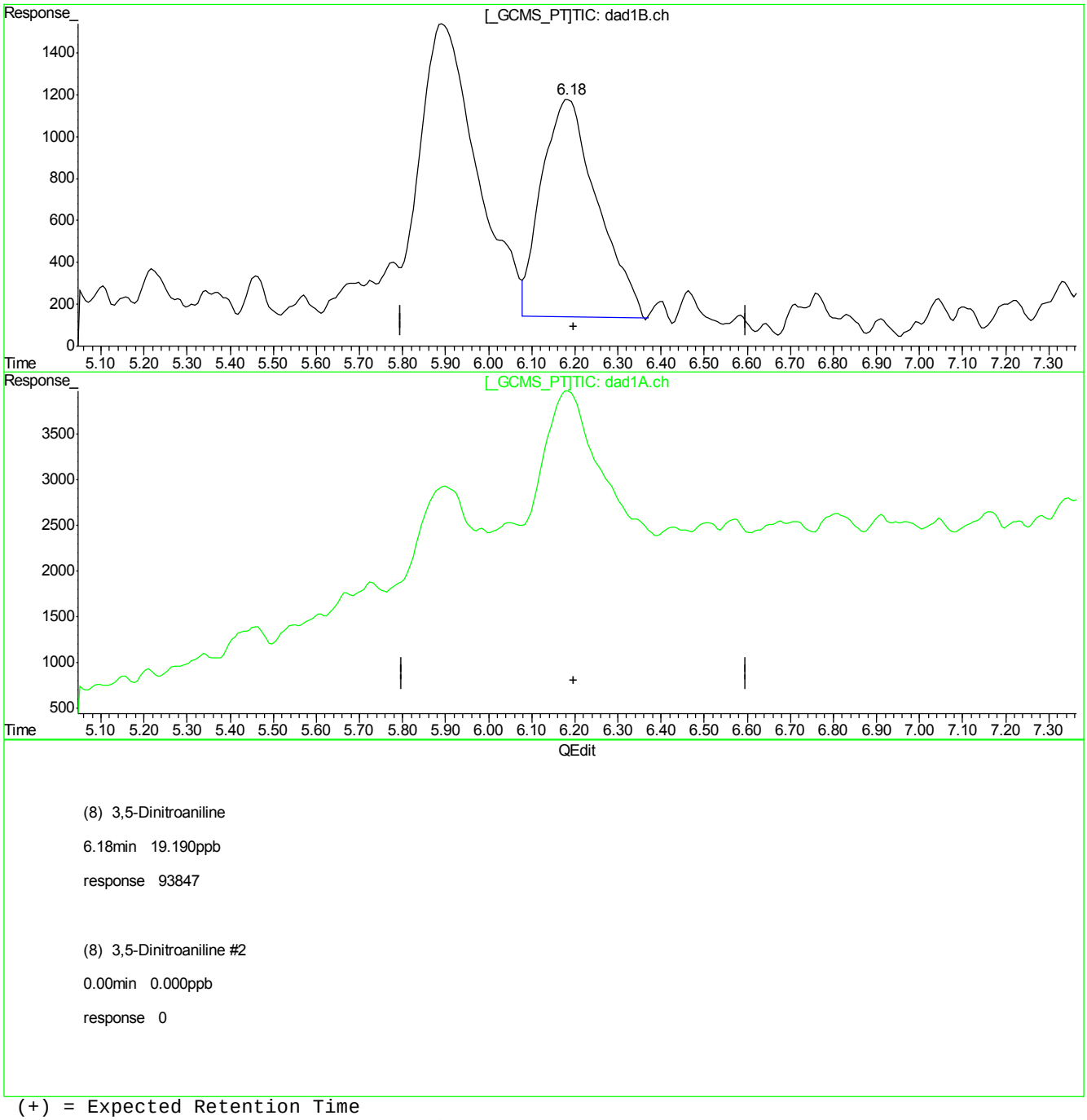
response 50632

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:31 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

6.18min 19.190ppb

response 93847

(8) 3,5-Dinitroaniline #2

0.00min 0.000ppb

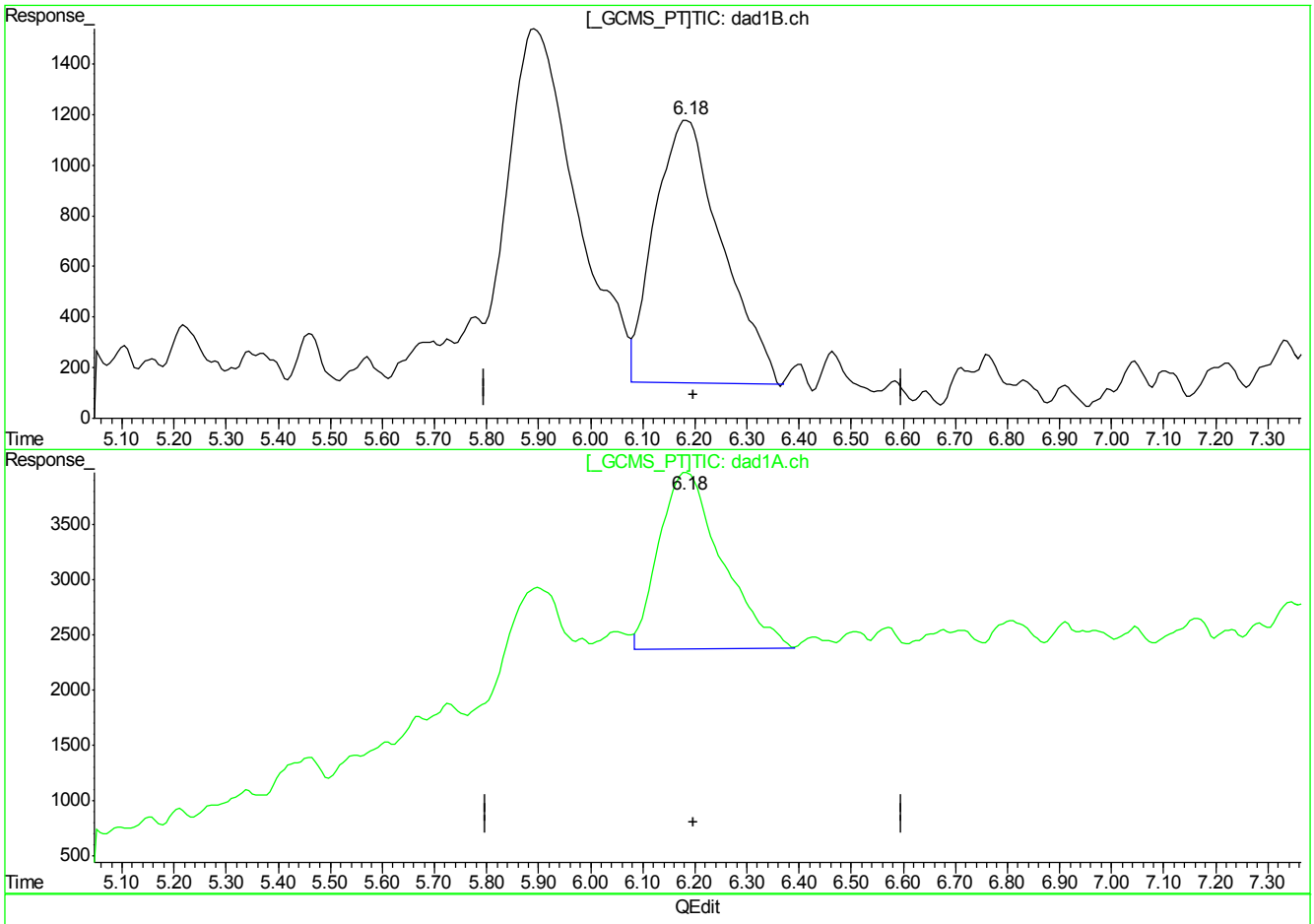
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:33 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

6.18min 19.190ppb

response 93847

(8) 3,5-Dinitroaniline #2

6.18min 18.031ppb m

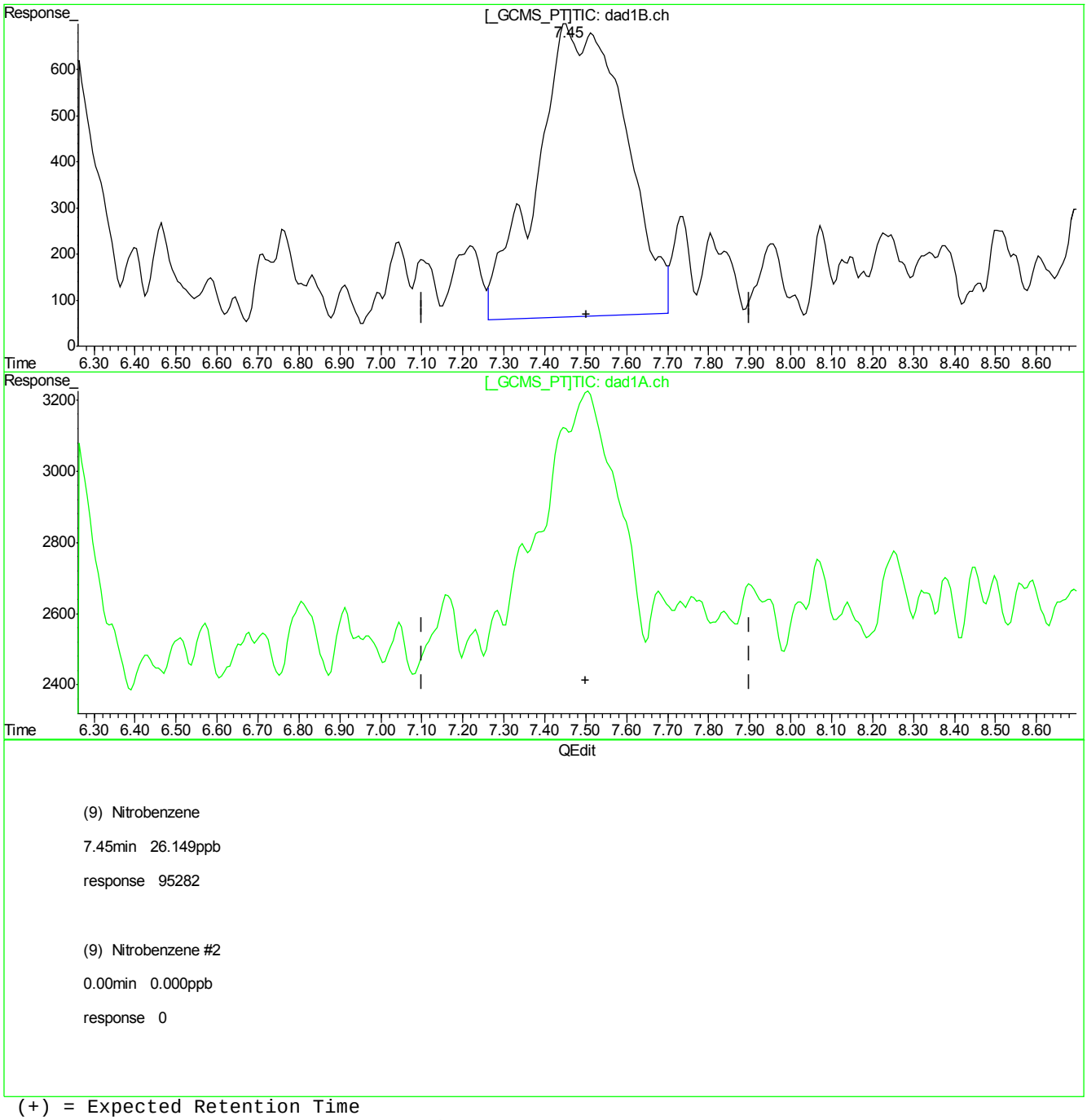
response 134853

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.45min 26.149ppb

response 95282

(9) Nitrobenzene #2

0.00min 0.000ppb

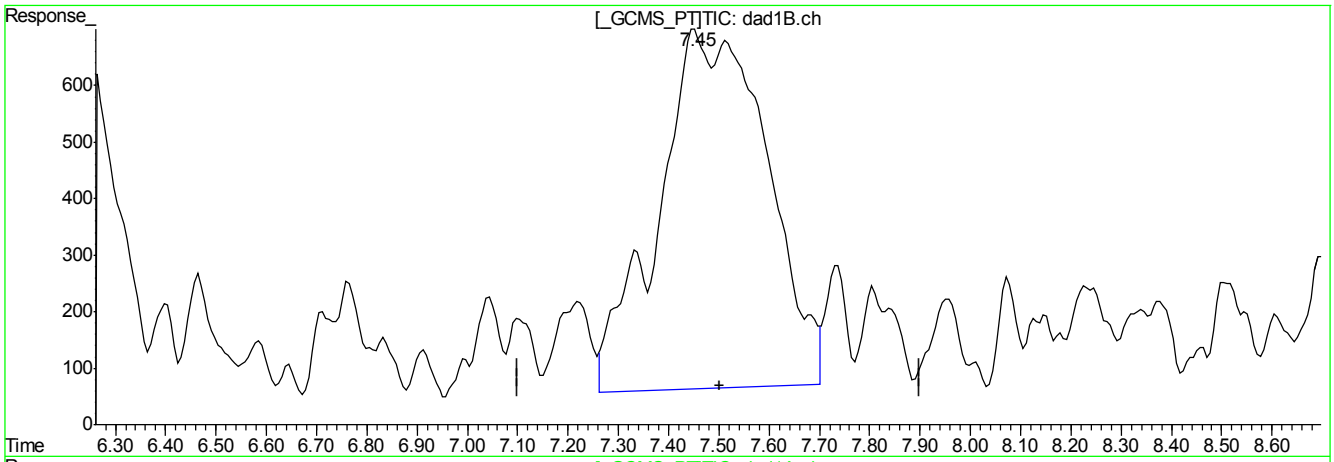
response 0

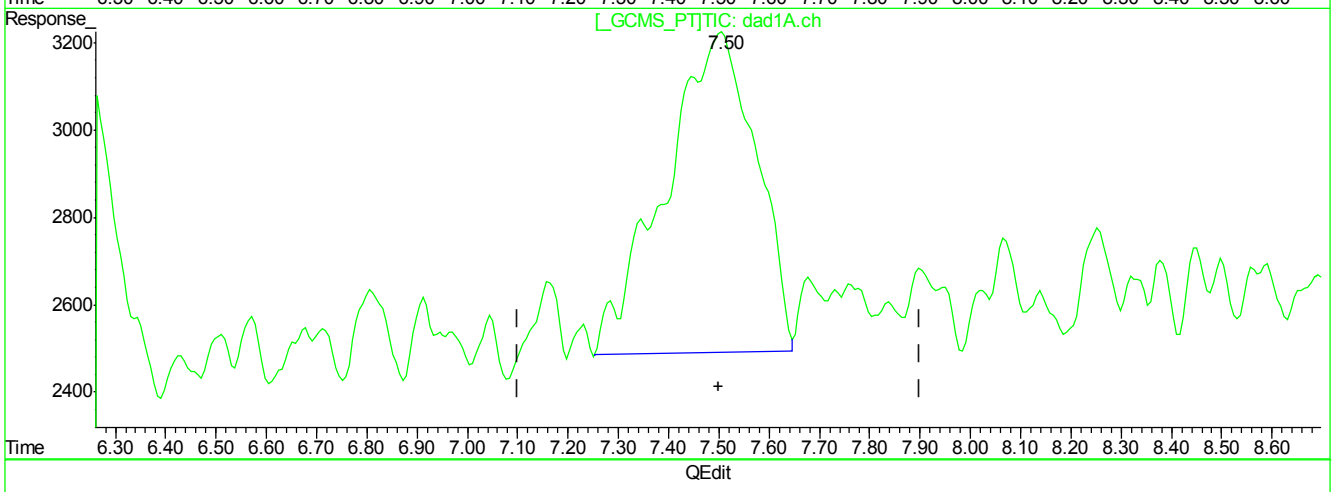
(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:39 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration





QEdit

(9) Nitrobenzene

7.45min 26.149ppb

response 95282

(9) Nitrobenzene #2

7.50min 27.762ppb m

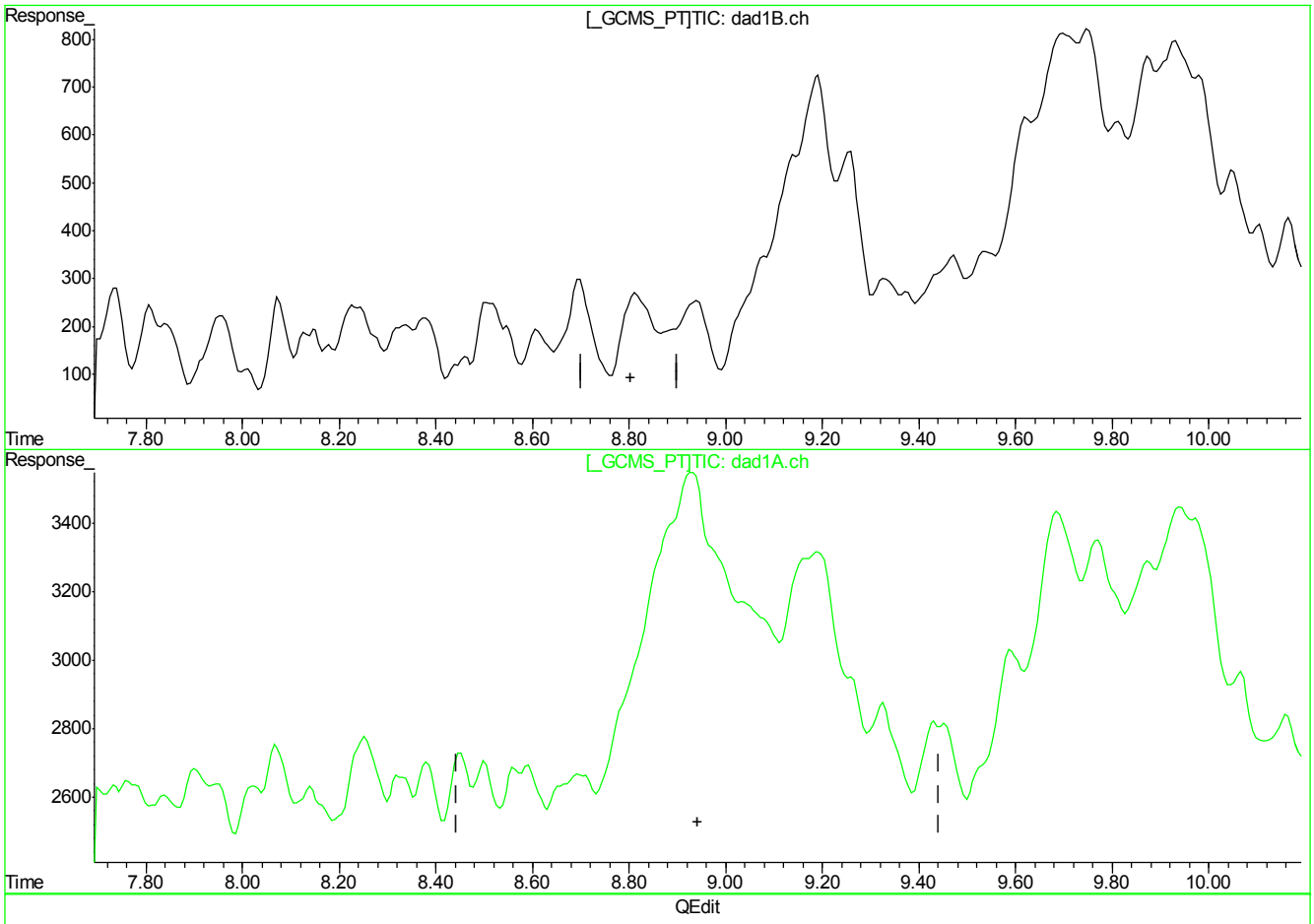
response 92054

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:44 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

0.00min 0.000ppb

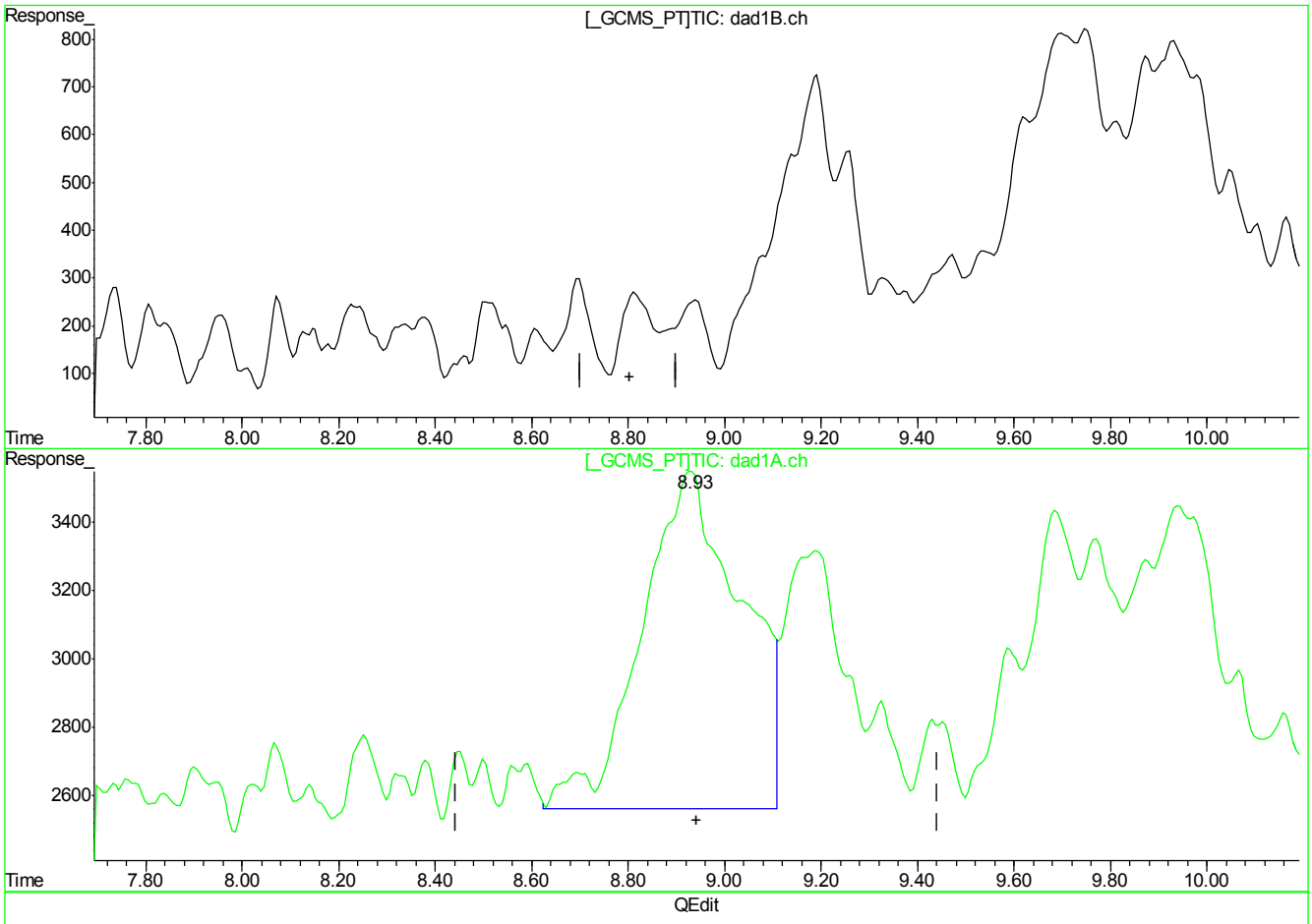
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:48 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.93min 110.198ppb m

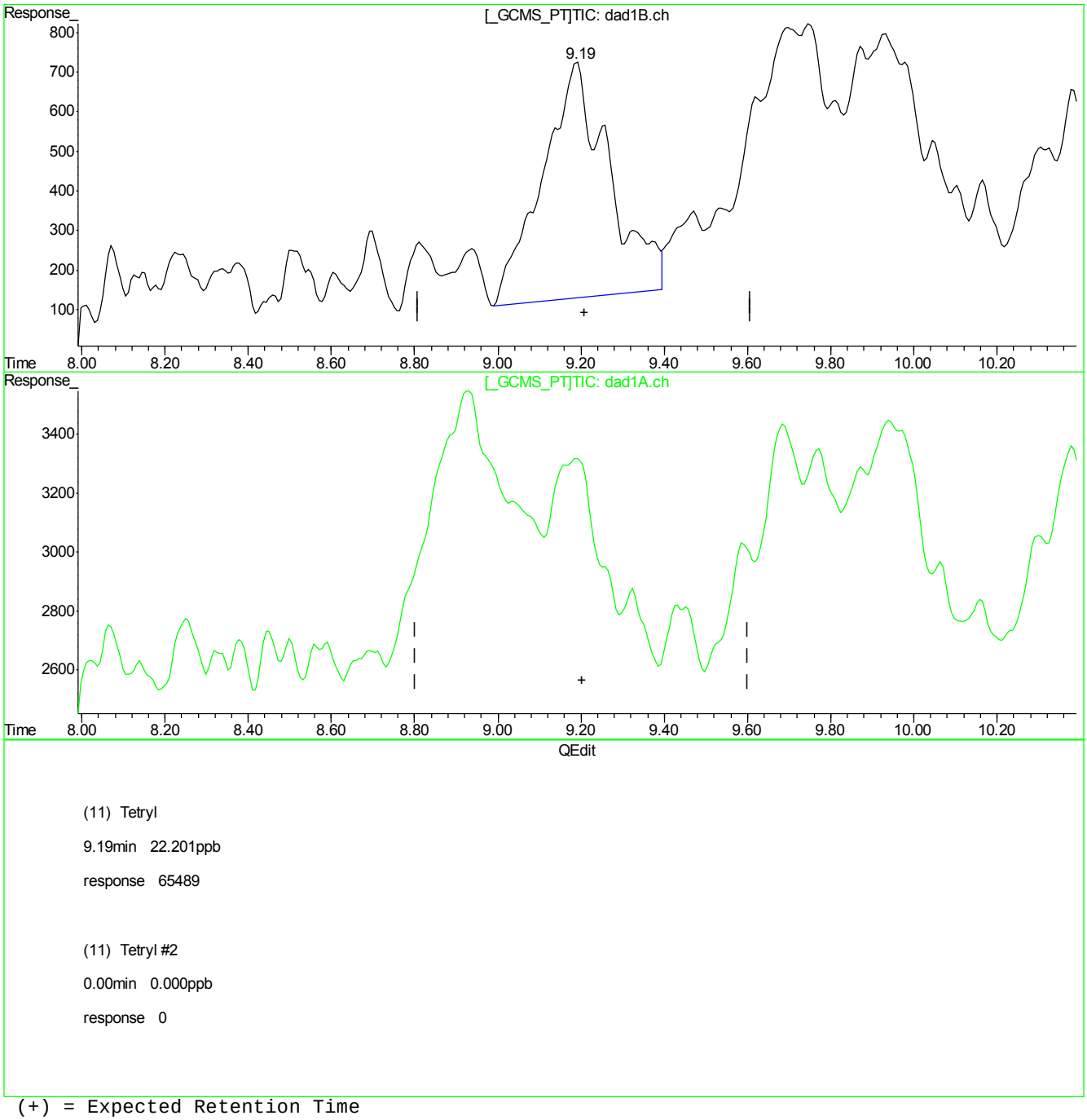
response 141211

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:00:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(11) Tetryl

9.19min 22.201ppb

response 65489

(11) Tetryl #2

0.00min 0.000ppb

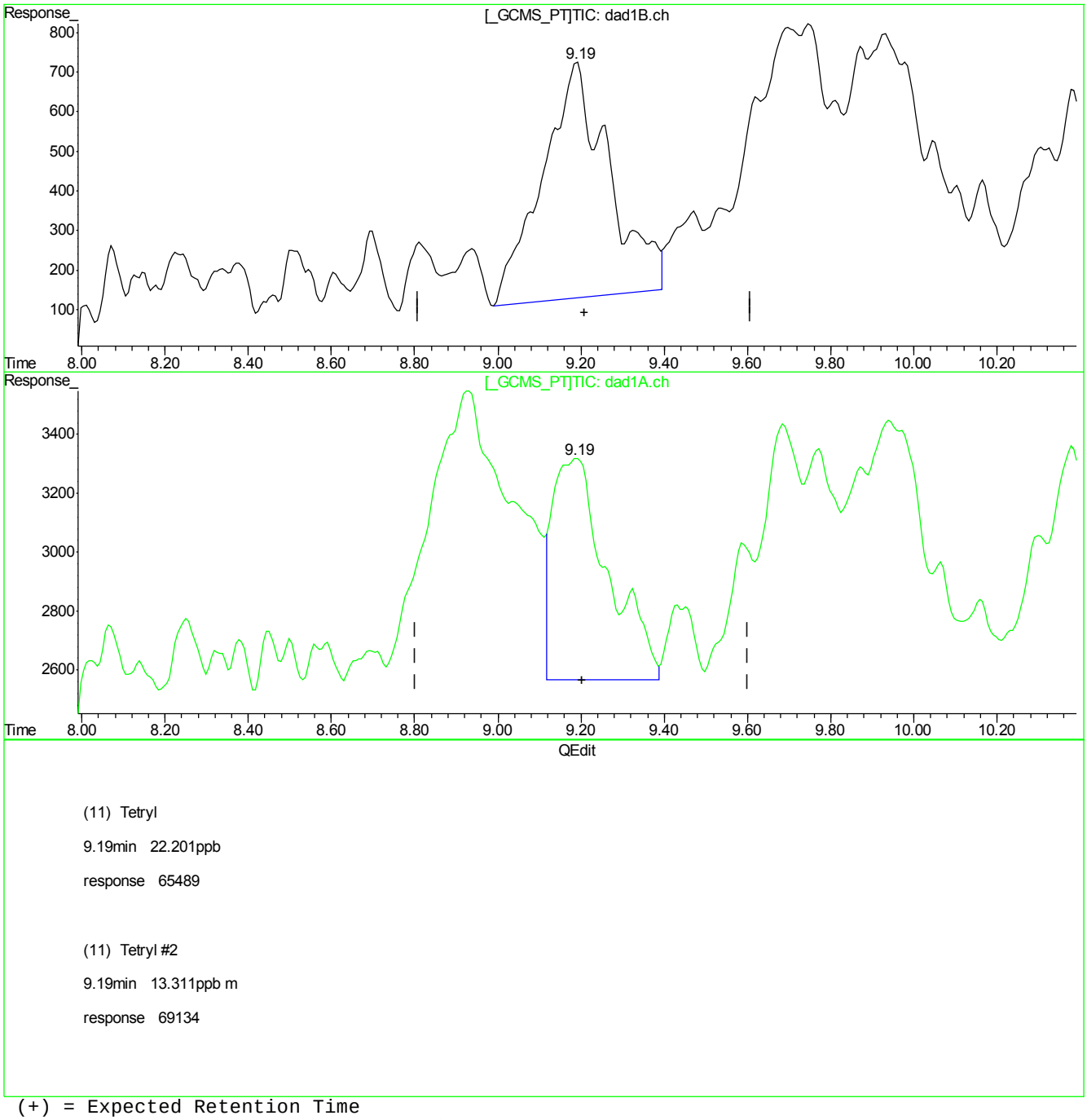
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:00 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(11) Tetryl

9.19min 22.201ppb

response 65489

(11) Tetryl #2

9.19min 13.311ppb m

response 69134

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:09 2018

7.6.1.17

7

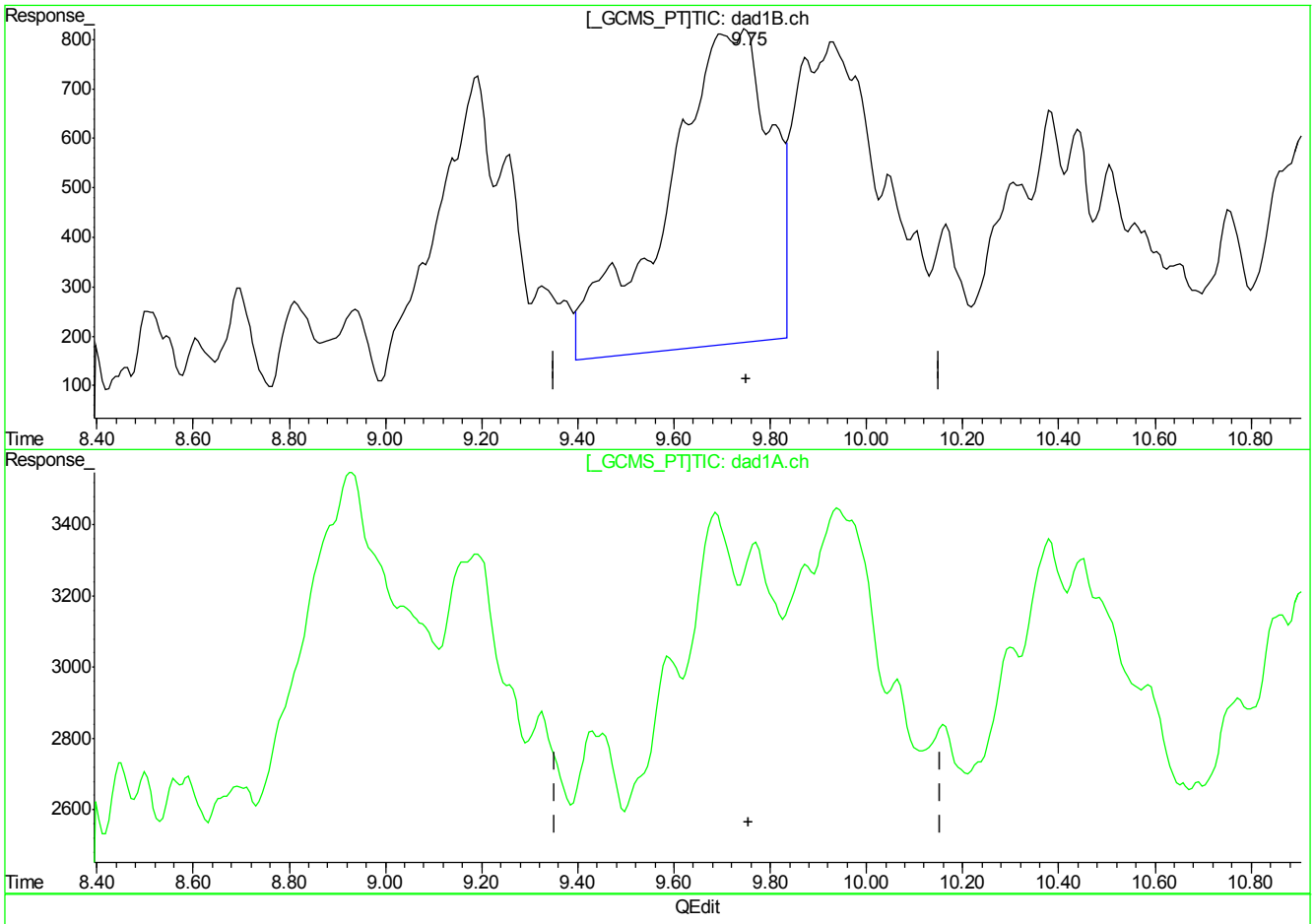
BB059759.D edits: Tetryl

FA53896

Quantitation Report (Qedit)

```
Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On    : 16-May-2018, 09:14:24                    Operator: evitam
Sample    : ic1732-20                                Inst    : G1315B
Misc      : OP69878,gbb1732,1000,,,10,1,water        Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018  Quant Results File: 8330B_0516PLUS.RES

Method       : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title        : Explosives by 8330A,8330B,8332
Last Update  : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration
```



(12) 2,4,6-Trinitrotoluene

9.75min 22.310ppb

response 94150

(12) 2,4,6-Trinitrotoluene #2

0.00min 0.000ppb

response 0

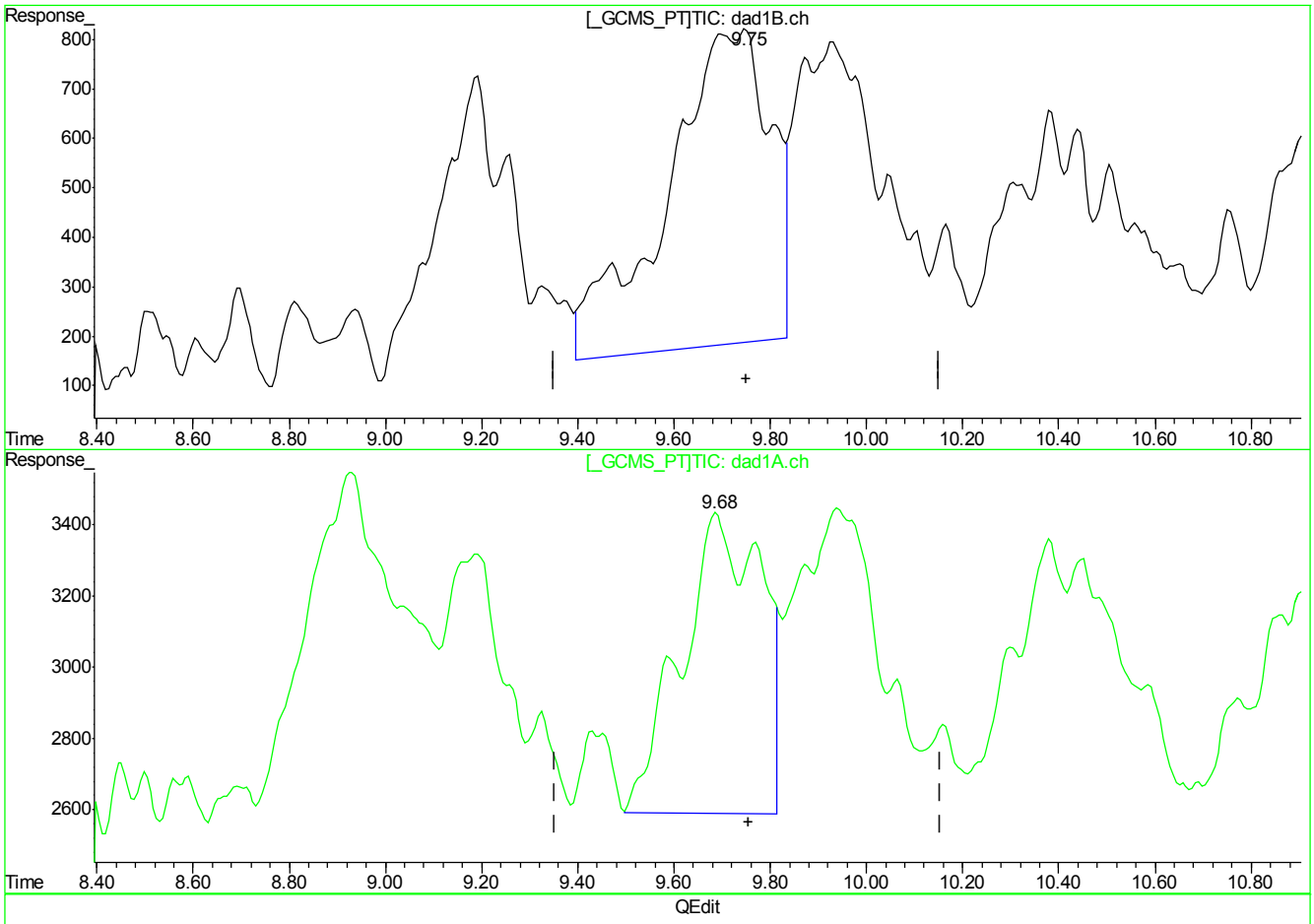
(+) = Expected Retention Time

BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:12 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.75min 22.310ppb

response 94150

(12) 2,4,6-Trinitrotoluene #2

9.68min 21.477ppb m

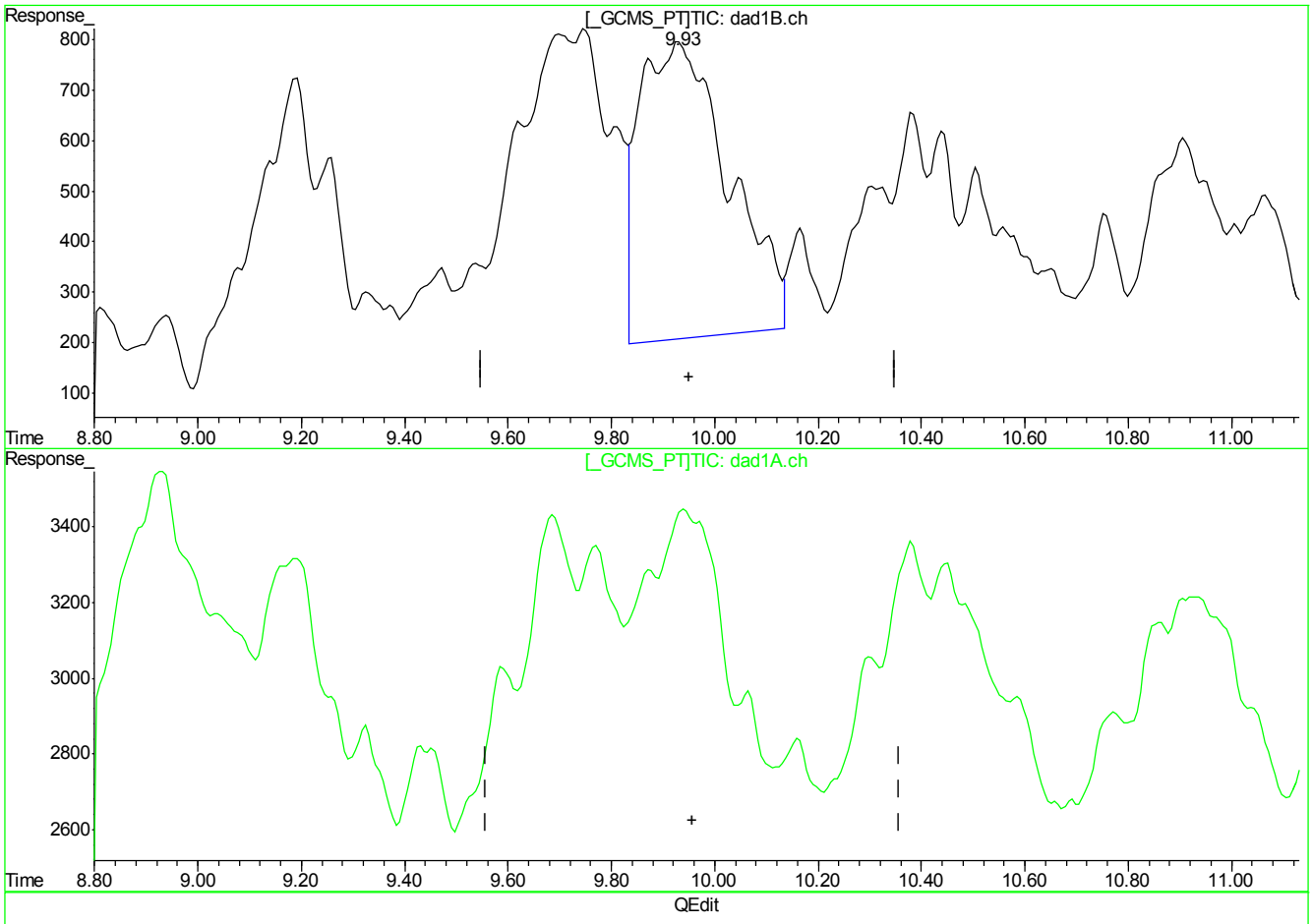
response 97350

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:15 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.93min 18.742ppb

response 70948

(13) 2-Amino-4,6-Dinitrotoluene #2

0.00min 0.000ppb

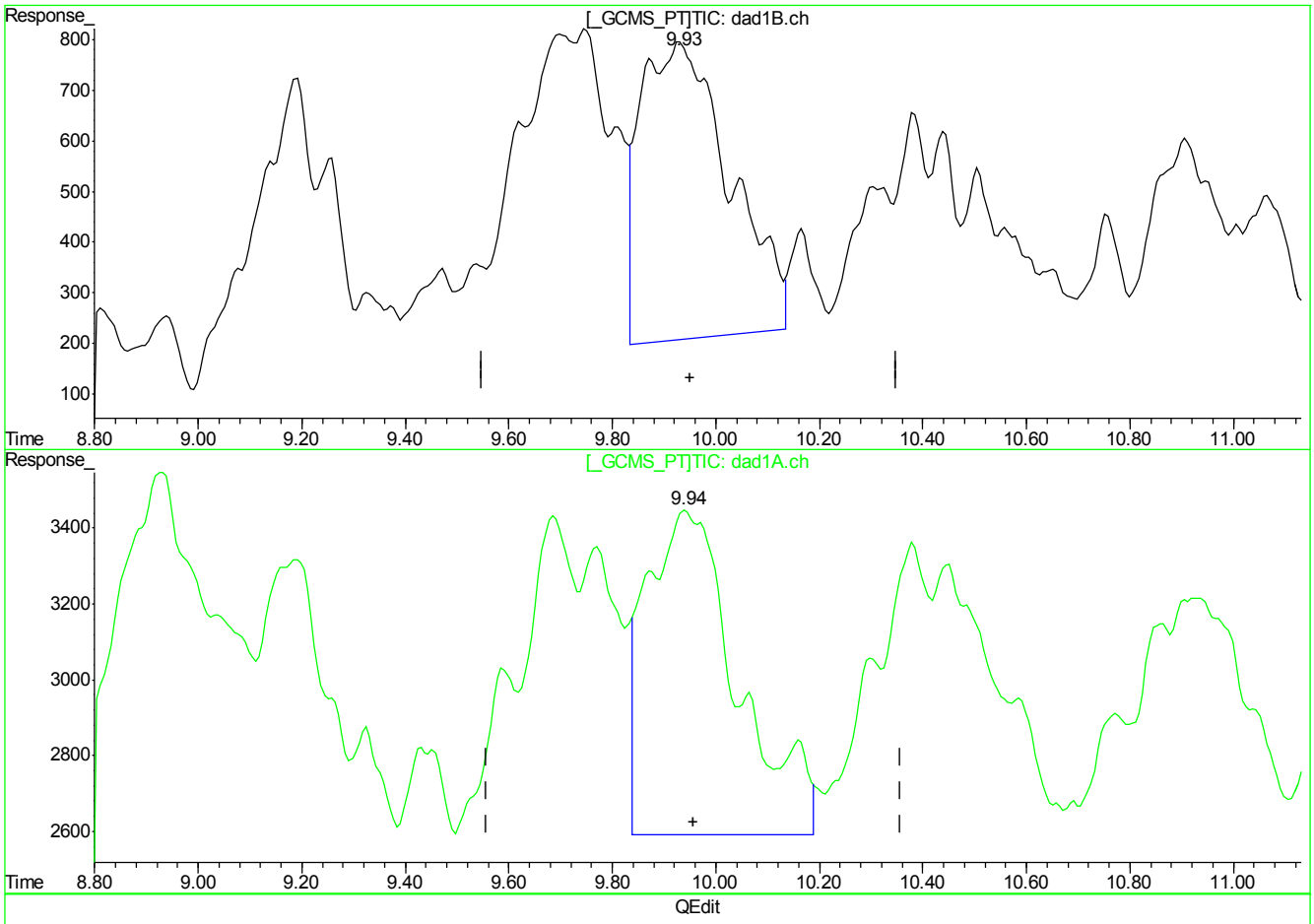
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:17 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



QEdit

(13) 2-Amino-4,6-Dinitrotoluene

9.93min 18.742ppb

response 70948

(13) 2-Amino-4,6-Dinitrotoluene #2

9.94min 19.640ppb m

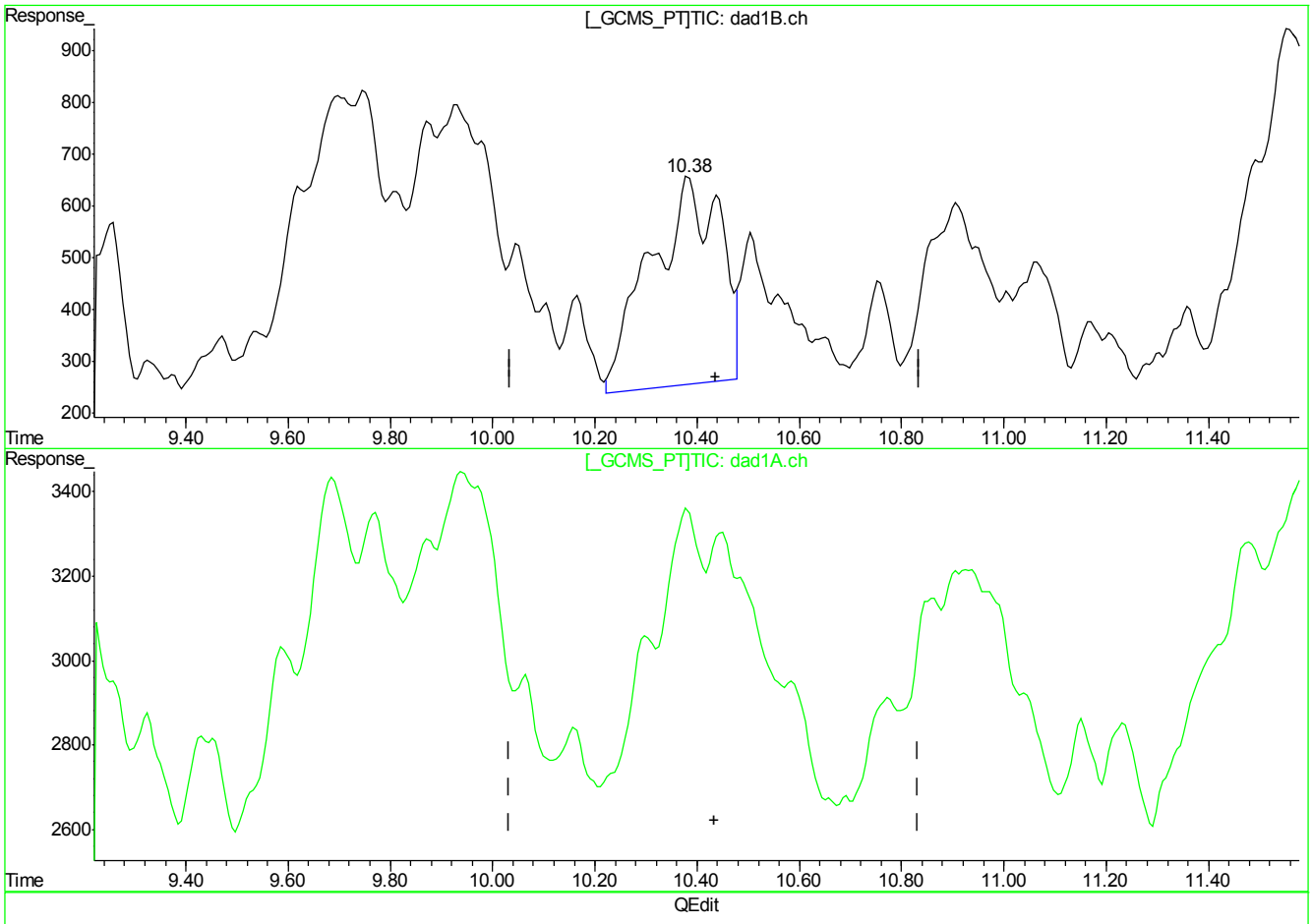
response 105343

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:24 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

10.38min 14.332ppb

response 37314

(14) 4-Amino-2,6-Dinitrotoluene #2

0.00min 0.000ppb

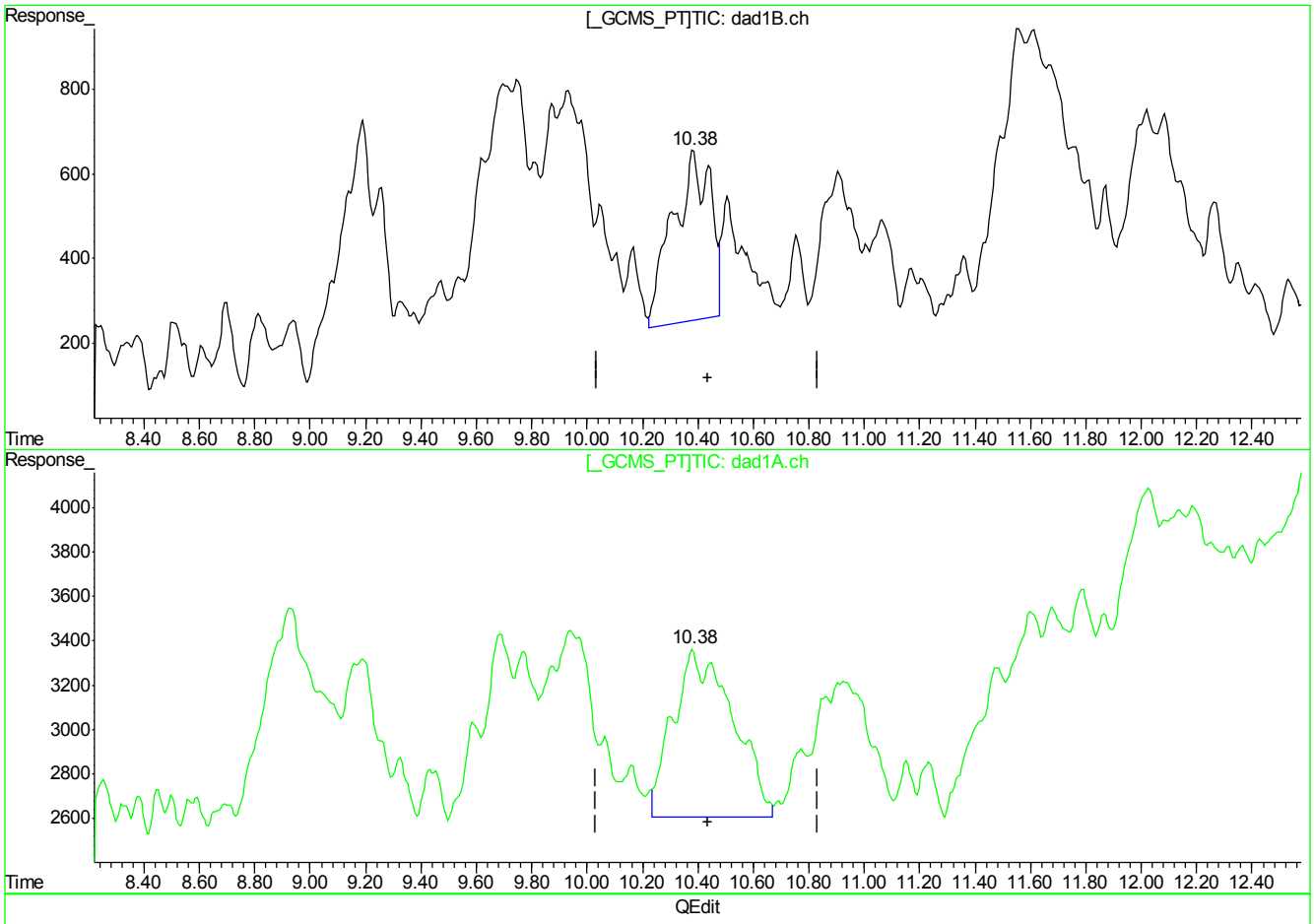
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

10.38min 14.332ppb

response 37314

(14) 4-Amino-2,6-Dinitrotoluene #2

10.38min 21.728ppb m

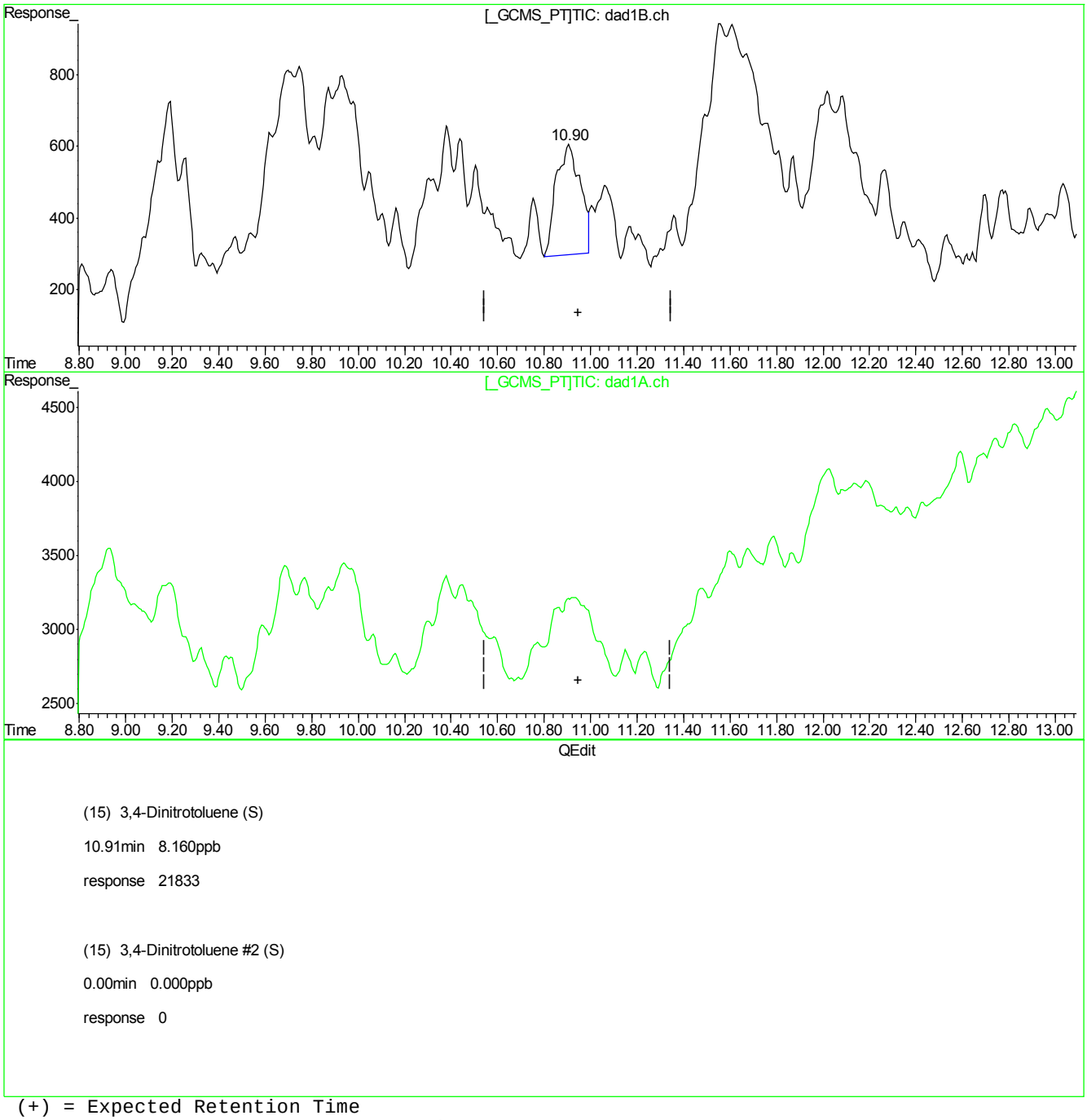
response 112591

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:34 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.91min 8.160ppb

response 21833

(15) 3,4-Dinitrotoluene #2 (S)

0.00min 0.000ppb

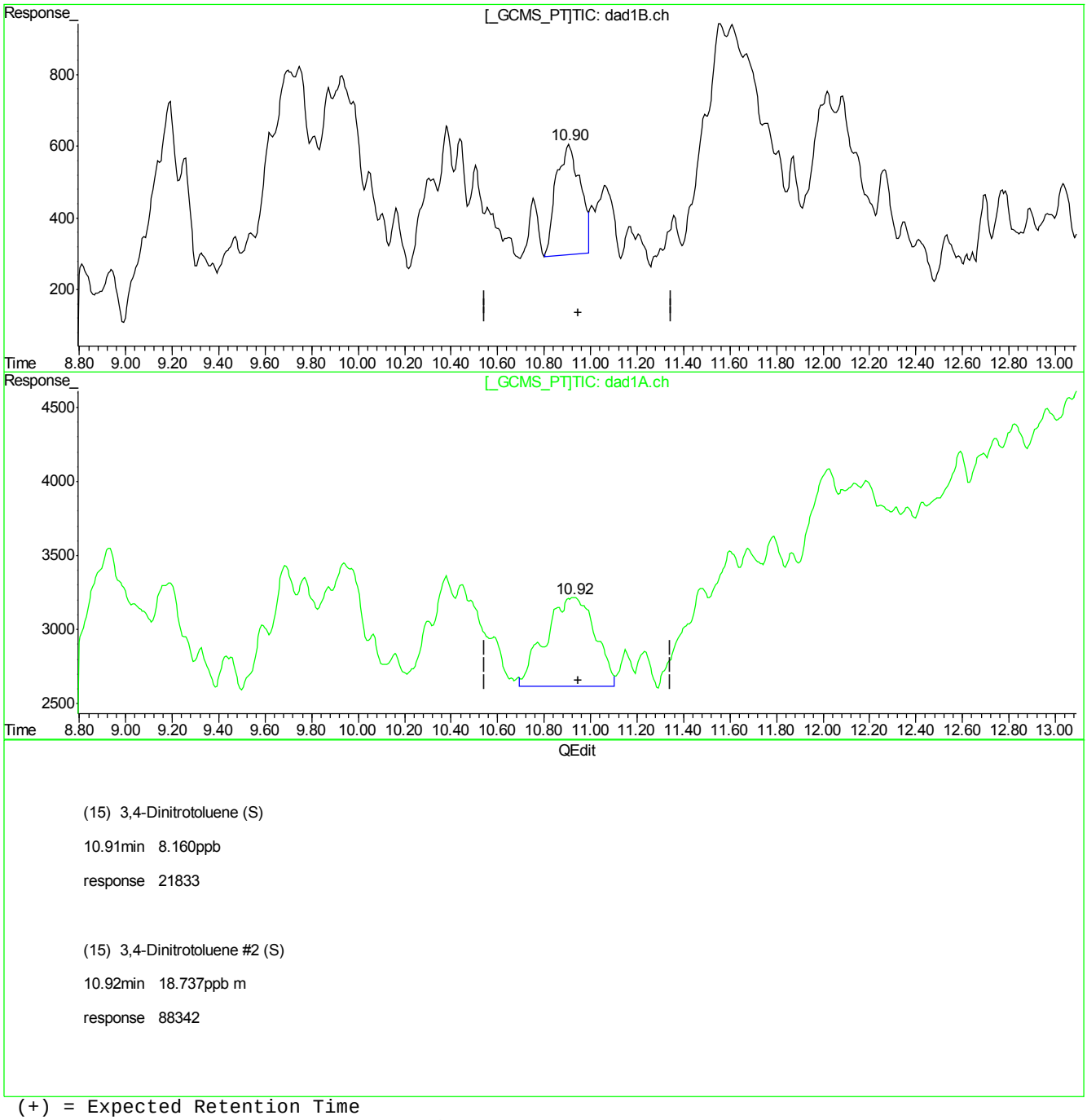
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:37 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.91min 8.160ppb

response 21833

(15) 3,4-Dinitrotoluene #2 (S)

10.92min 18.737ppb m

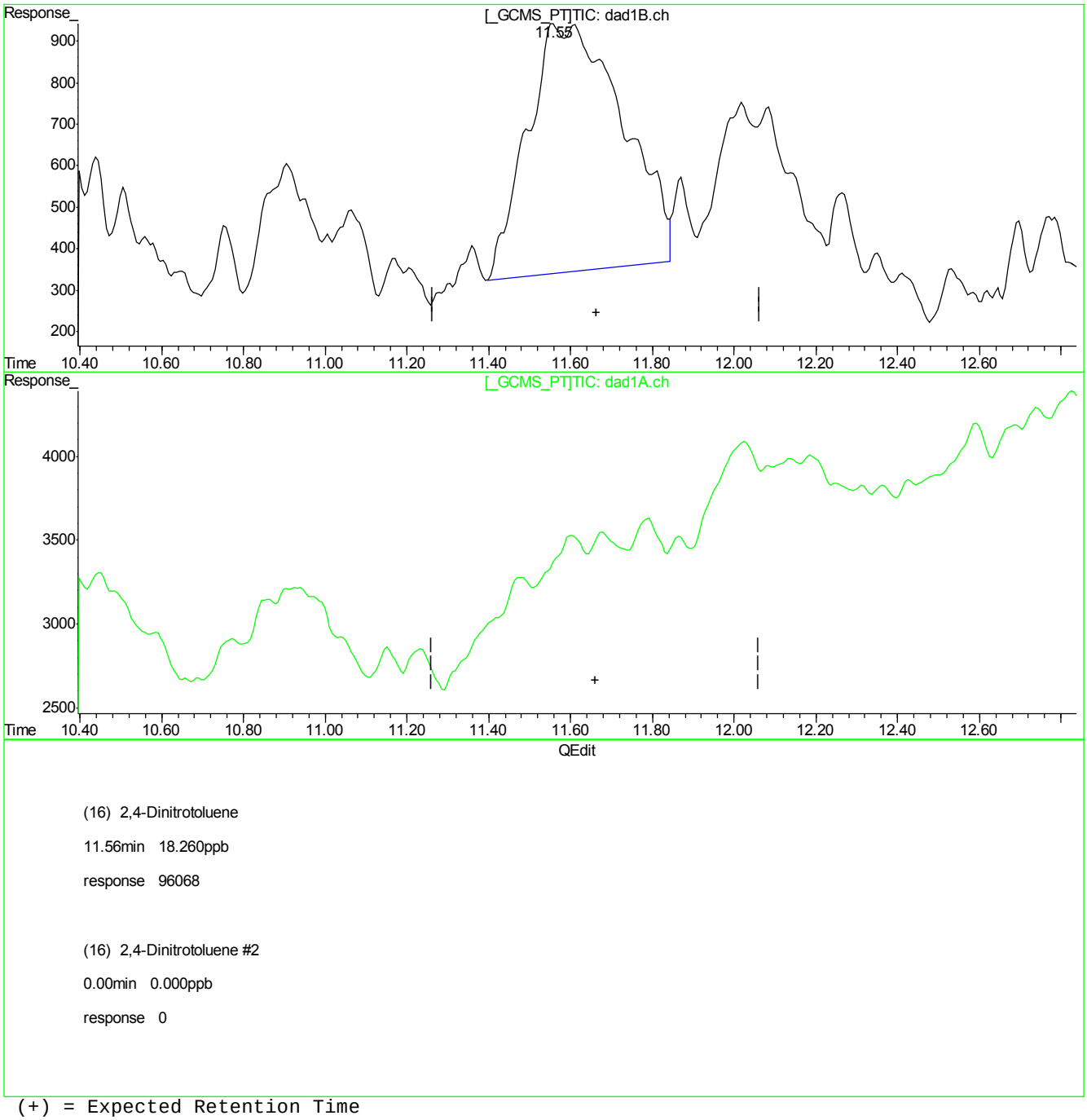
response 88342

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:41 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration

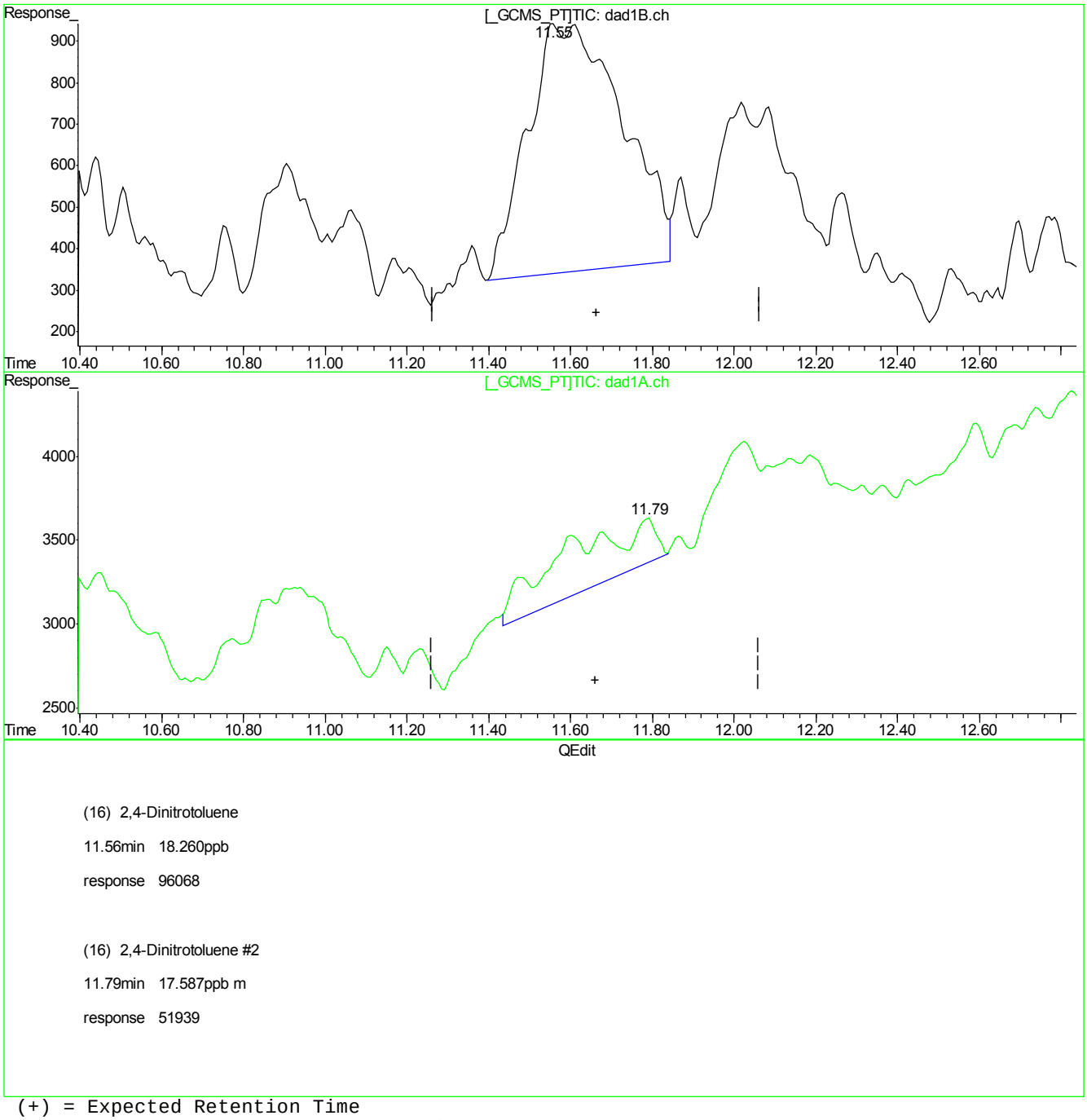


(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:01:47 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration

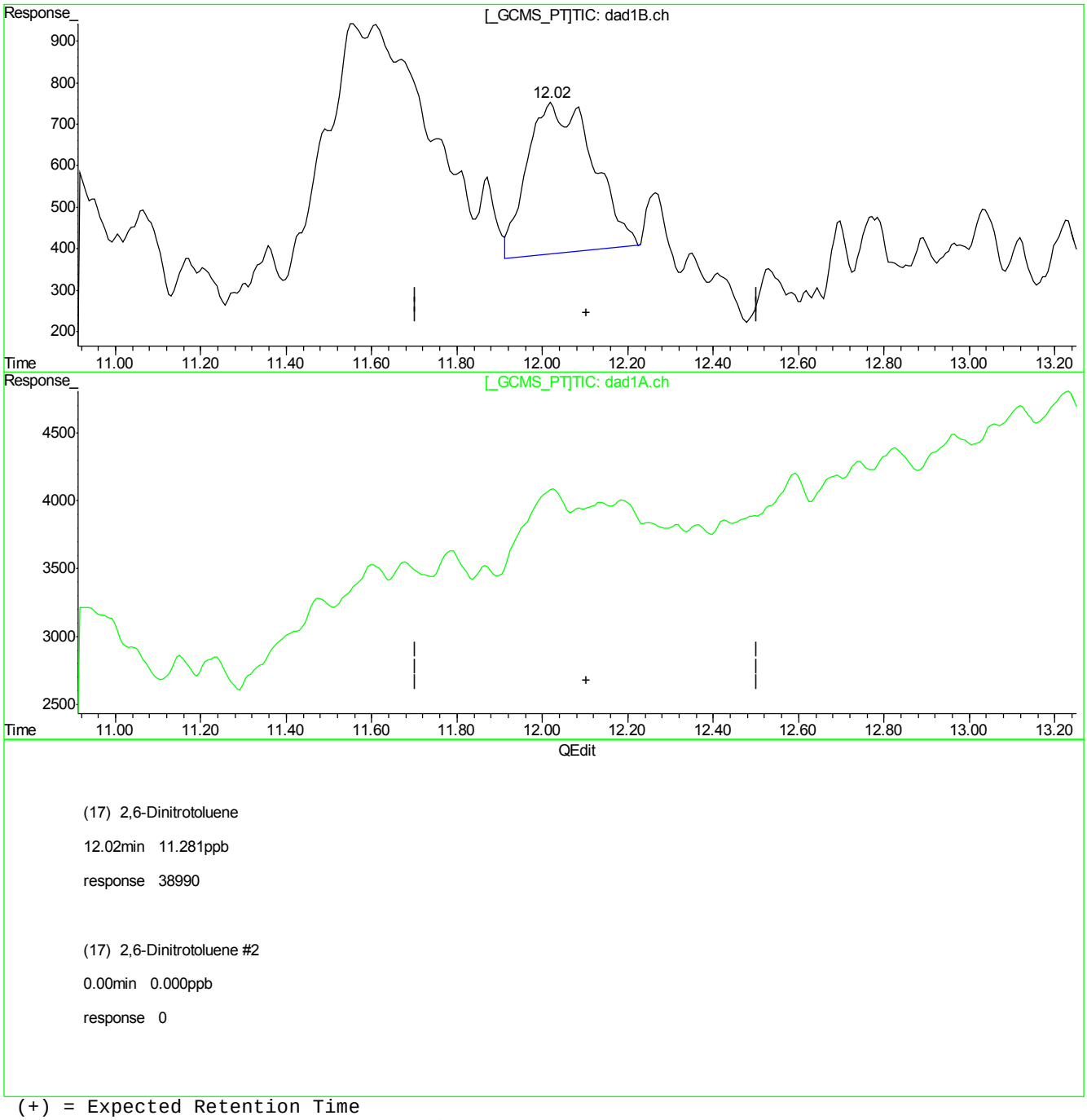


(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:02:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



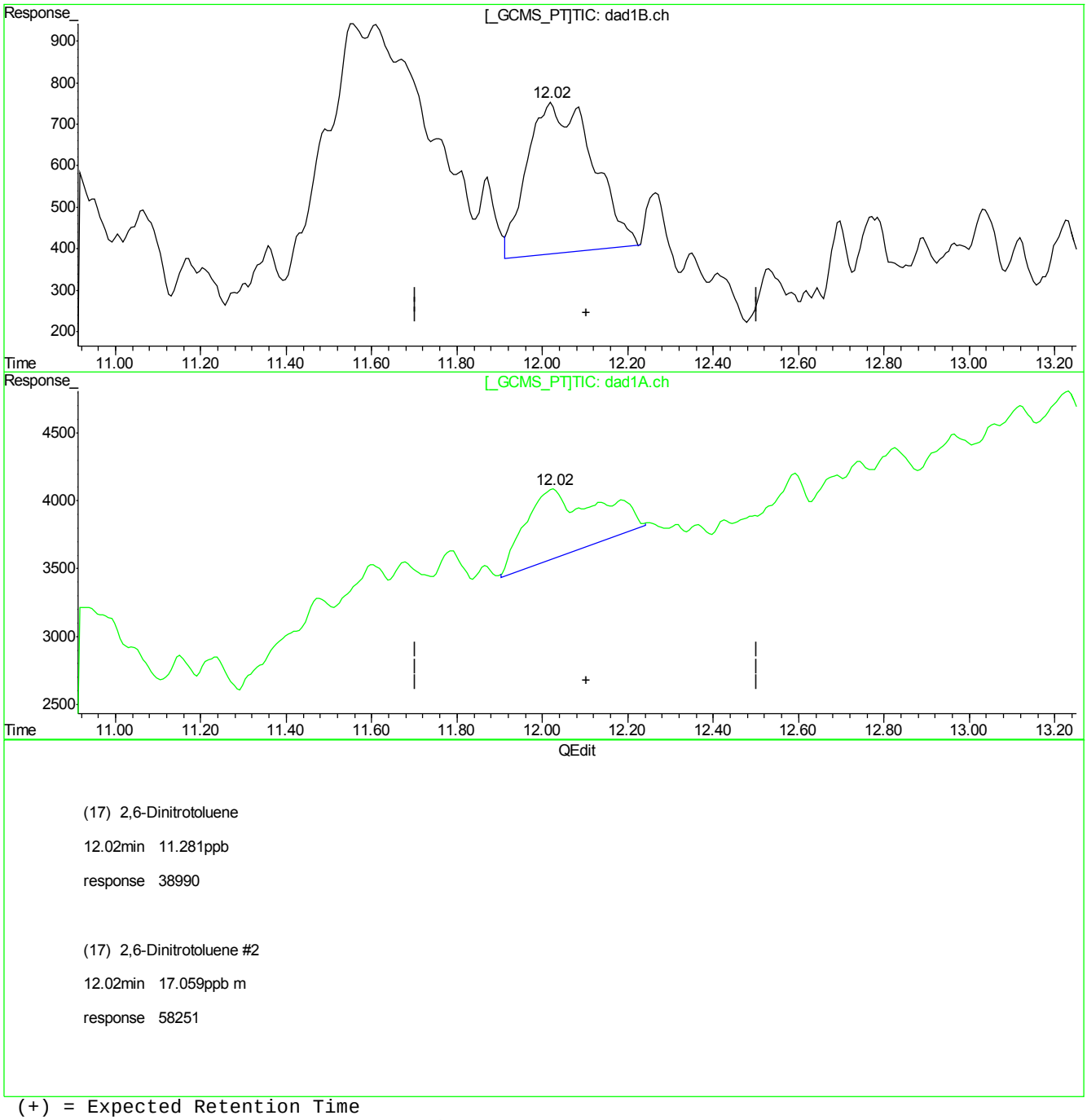
(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:02:06 2018

7.6.1.28
7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

12.02min 11.281ppb

response 38990

(17) 2,6-Dinitrotoluene #2

12.02min 17.059ppb m

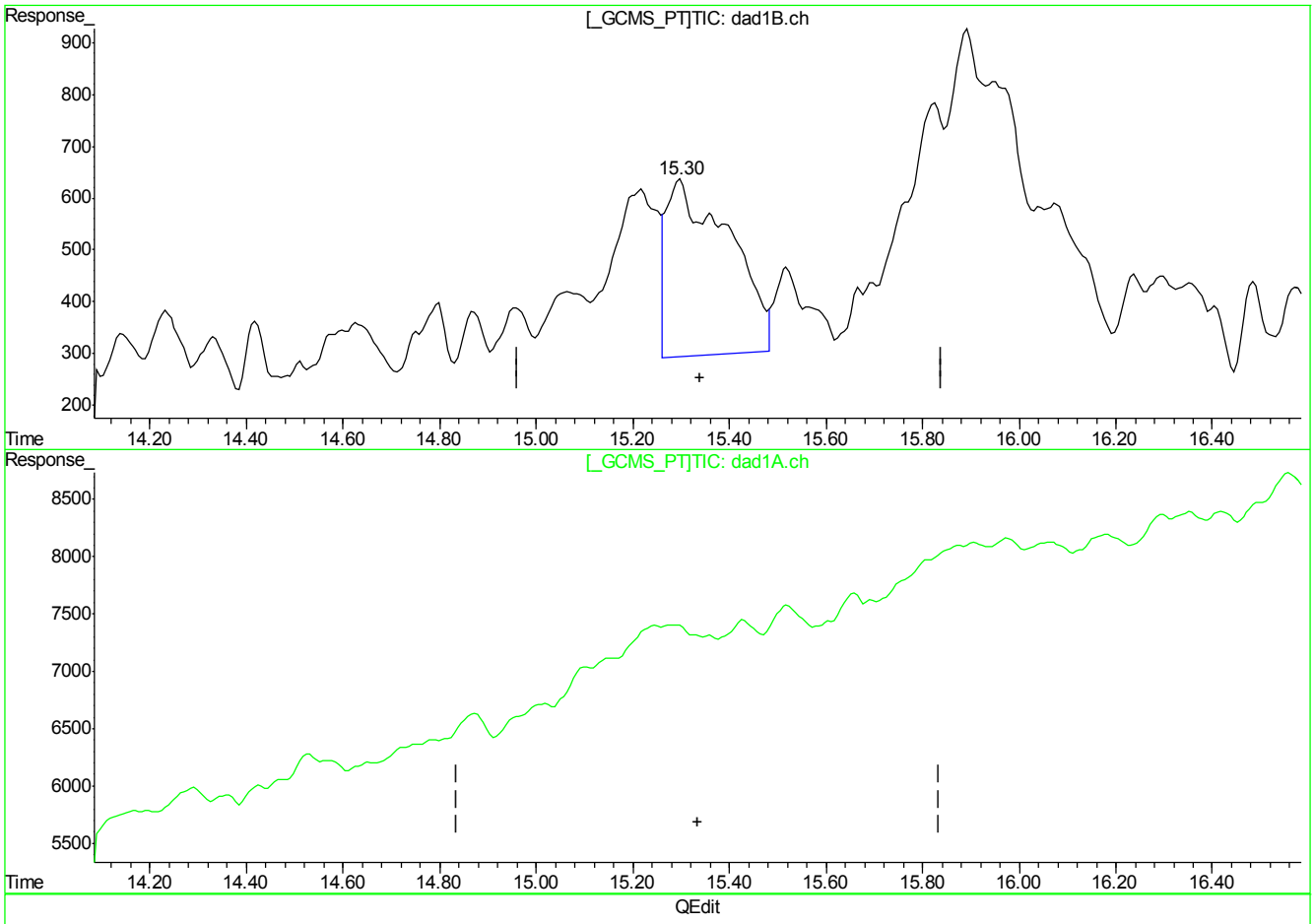
response 58251

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:02:09 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.30min 12.535ppb

response 31312

(18) o-Nitrotoluene #2

0.00min 0.000ppb

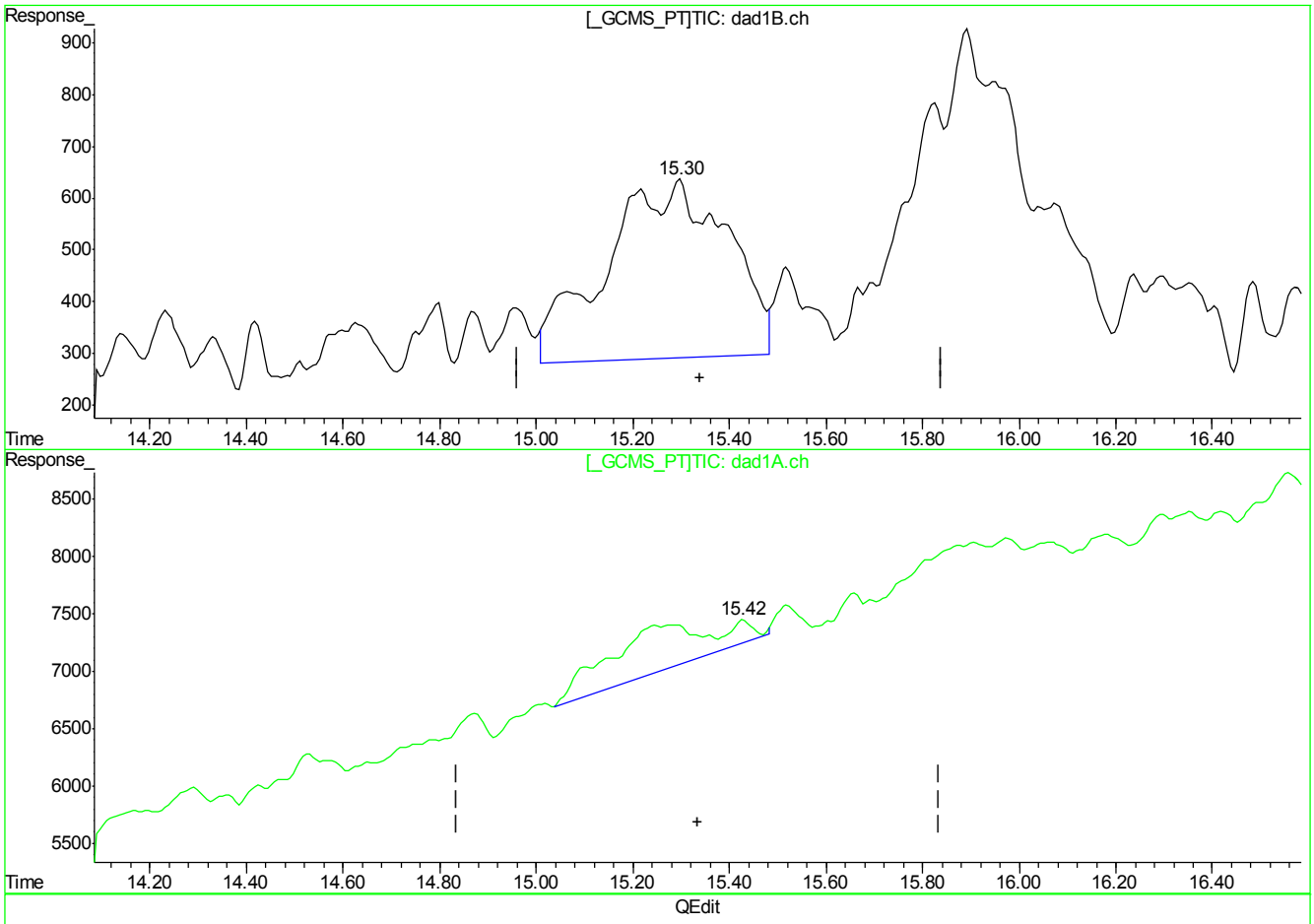
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:02:12 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.30min 24.119ppb m

response 60247

(18) o-Nitrotoluene #2

15.42min 18.059ppb m

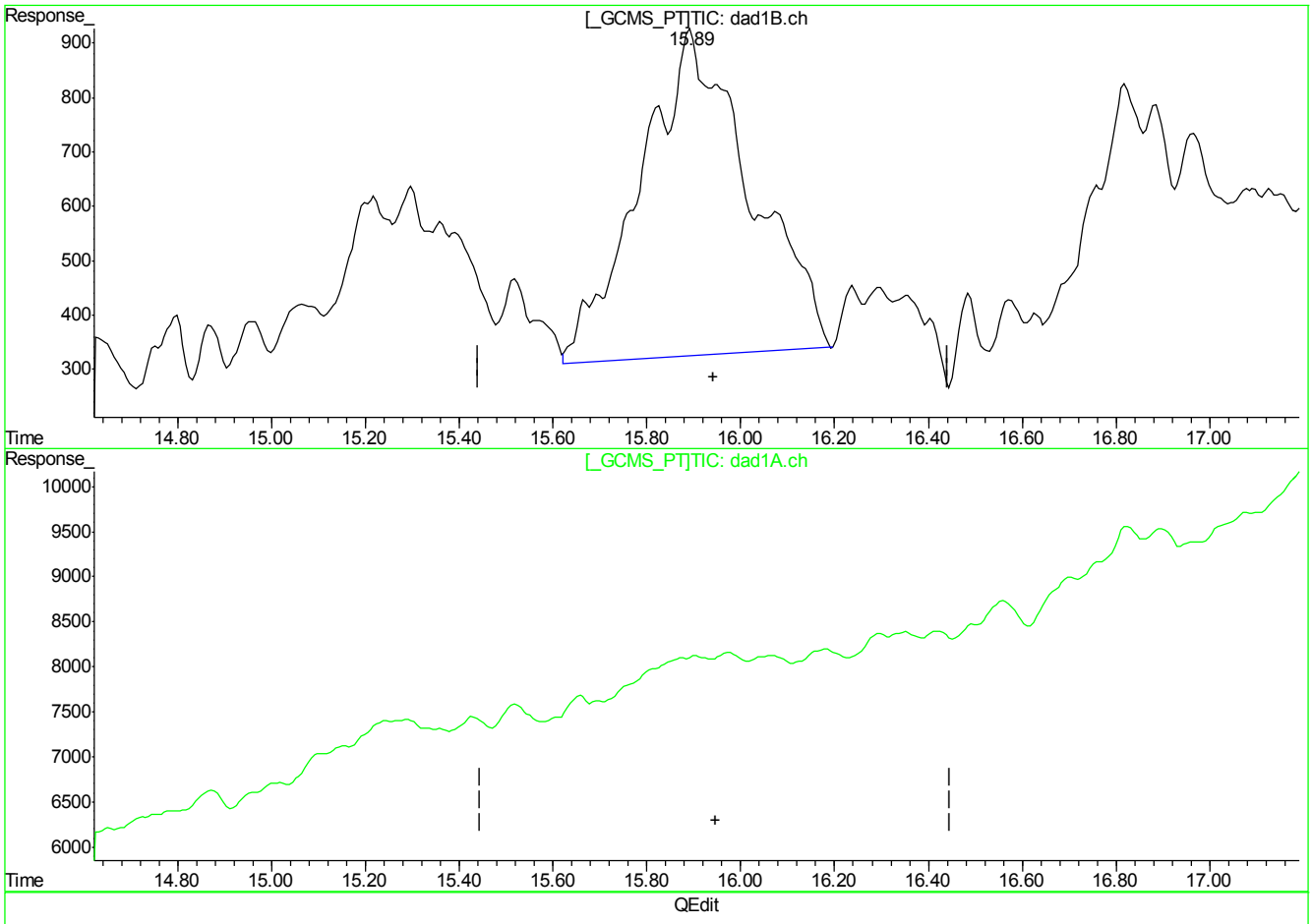
response 59156

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:02:21 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



QEdit

(19) p-Nitrotoluene

15.89min 24.519ppb

response 96776

(19) p-Nitrotoluene #2

0.00min 0.000ppb

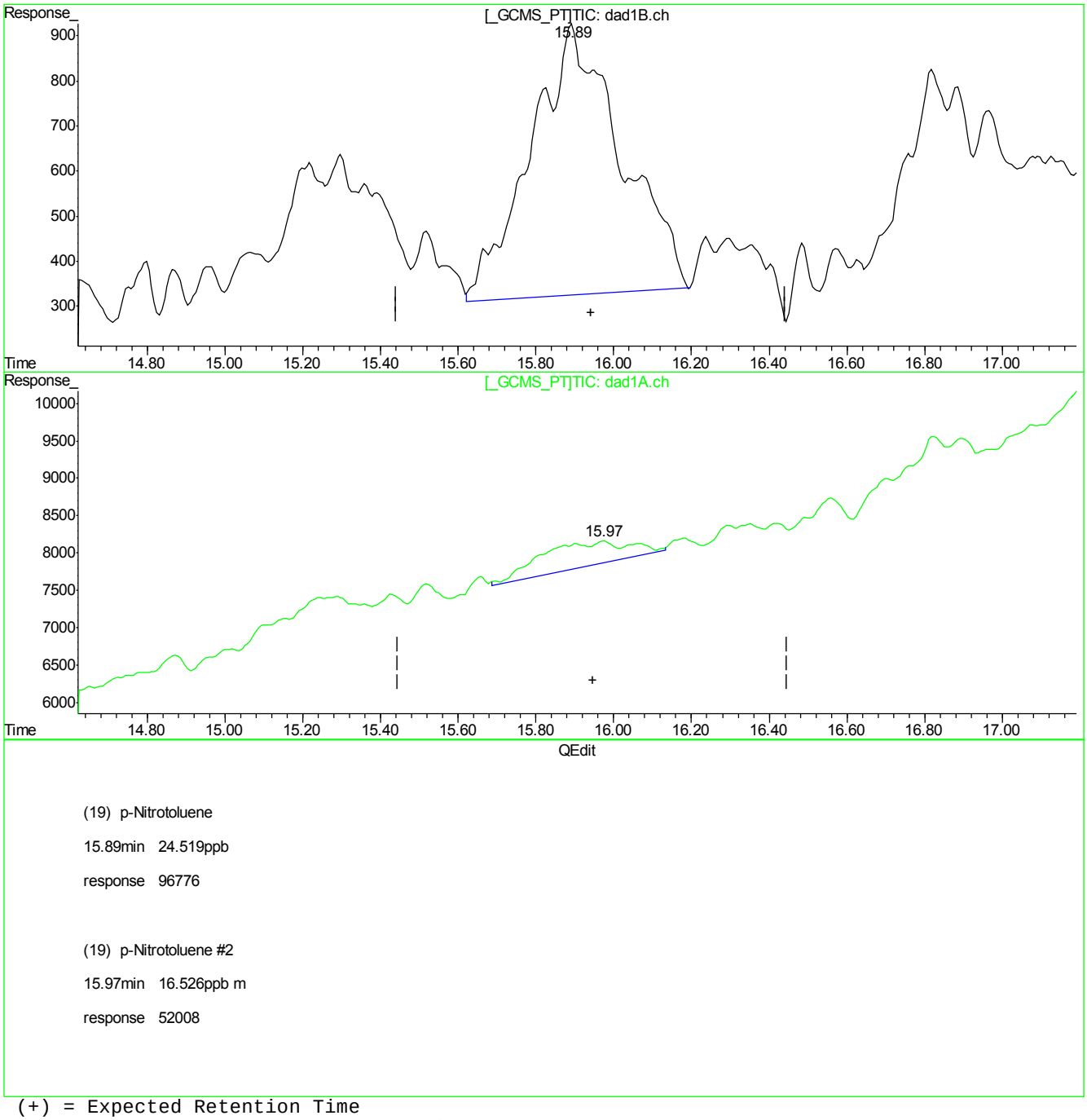
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:02:23 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.89min 24.519ppb

response 96776

(19) p-Nitrotoluene #2

15.97min 16.526ppb m

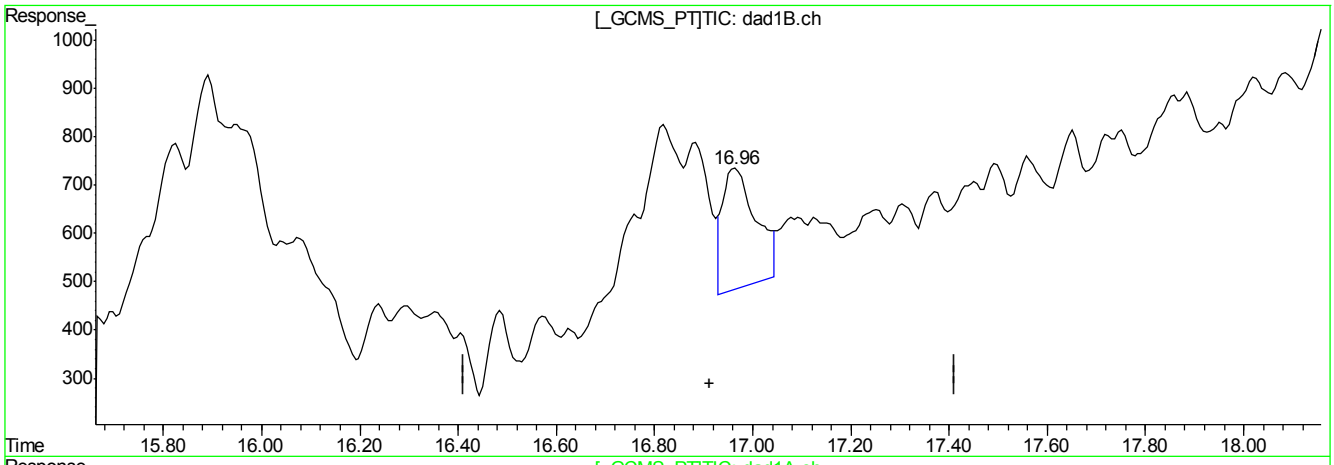
response 52008

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:02:27 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



QEdit

(20) m-Nitrotoluene

16.97min 3.332ppb

response 11887

(20) m-Nitrotoluene #2

0.00min 0.000ppb

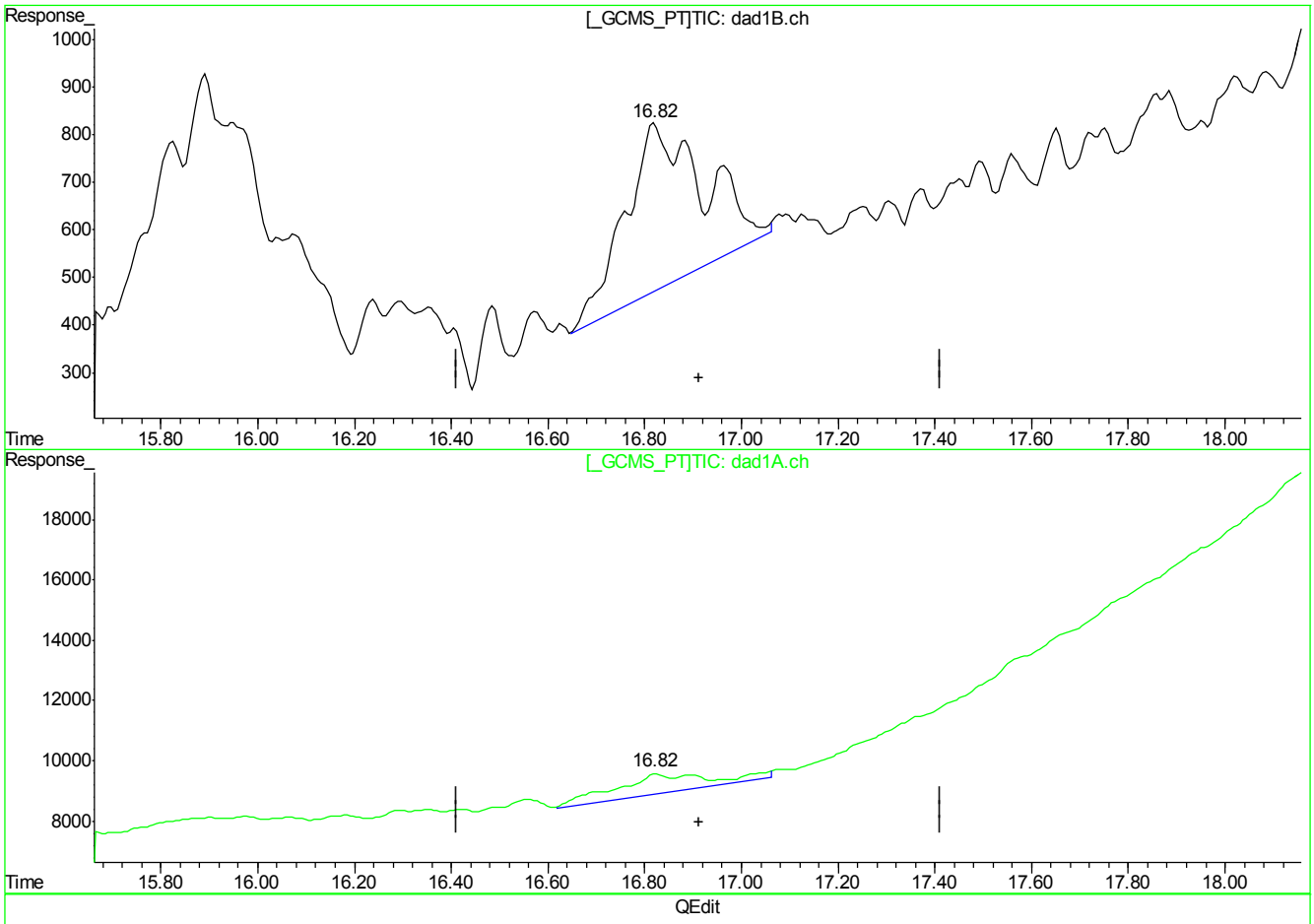
response 0

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:02:29 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1B.ch Vial: 81
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059759.D\dad1A.ch
Acq On : 16-May-2018, 09:14:24 Operator: evitam
Sample : ic1732-20 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration



(20) m-Nitrotoluene

16.82min 10.802ppb m

response 38531

(20) m-Nitrotoluene #2

16.82min 20.548ppb m

response 82682

(+) = Expected Retention Time
BB059759.D 8330B_0516PLUS.M Wed May 16 13:02:34 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59:46 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.91	10.94	138558	188204	51.784	39.918m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		10.36%#	7.98%#
	Target Compounds						
1)	TNX	1.38	1.38	243224	385871	50.414	52.015
2)	HMX	1.49	1.50	94362	249311	50.458	48.960
3)	DNX	1.76	1.75	158972	277449	51.331	59.510m
4)	MNX	2.33	2.33	152151	229694	49.136	49.409
5)	RDX	2.94	2.94	119605	173273	55.932	52.128
6)	1,3,5-Trinitrobe	4.72	4.72	207149	394526	47.606	47.260
7)	1,3-Dinitrobenze	5.91	5.92	295240	259974	53.254	69.803m
8)	3,5-Dinitroanili	6.20	6.20	263253	459752	53.831	61.474
9)	Nitrobenzene	7.50	7.51	192210	194787	52.750	58.744m
10)	Nitroglycerin	0.00	8.93	0	326150	N.D. d	254.521
11)	Tetryl	9.21	9.19	158889	206587	53.874	39.776m
12)	2,4,6-Trinitroto	9.72	9.71	204796	214852	48.528	47.400m
13)	2-Amino-4,6-Dini	9.92	9.91	205101	263712	54.181	49.165m
14)	4-Amino-2,6-Dini	10.45	10.43	174633	247131	67.024	47.691m
16)	2,4-Dinitrotolue	11.65	11.65	280940	132474	53.400	44.857m
17)	2,6-Dinitrotolue	12.07	12.09	177070	180572	51.231	52.882m
18)	o-Nitrotoluene	15.38	15.37	139937	182961	56.023m	55.853m
19)	p-Nitrotoluene	15.96	15.93	201606	160210	51.078	50.905m
20)	m-Nitrotoluene	16.90	16.94	175142	129940	49.098	32.292m
21)	PETN	0.00	18.83	0	330960	N.D. d	238.301m

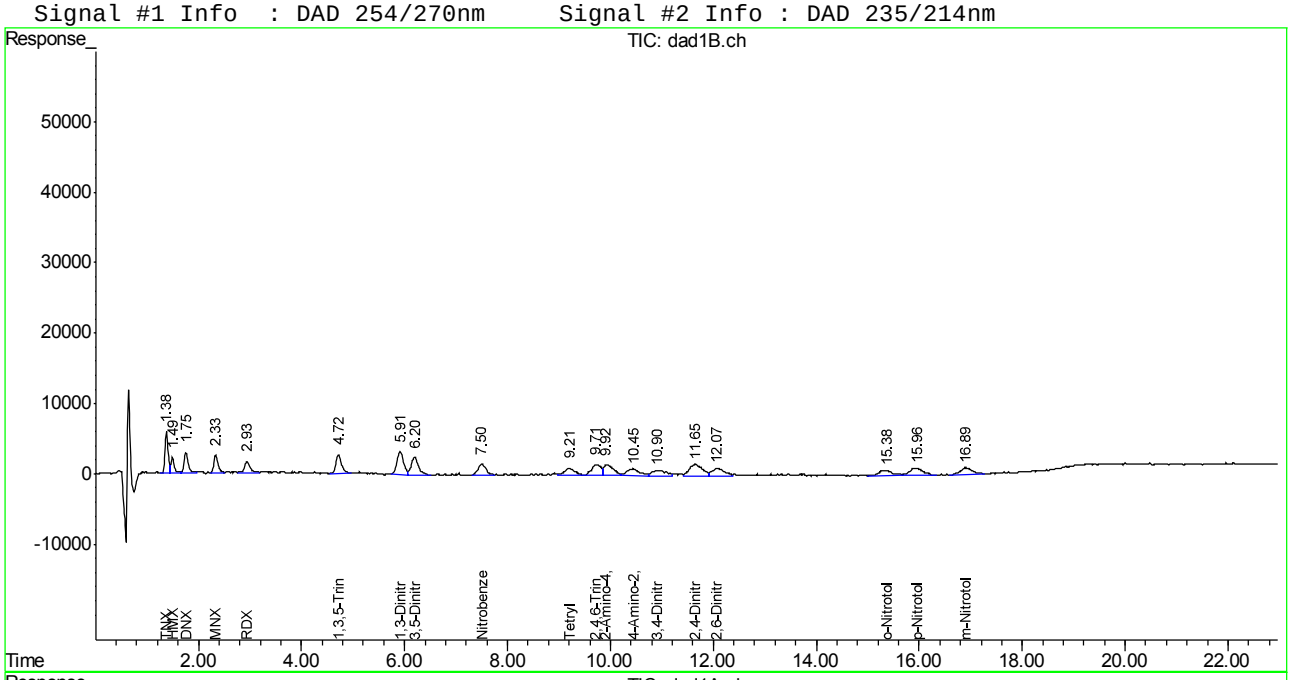
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059760.D 8330B_0516PLUS.M Thu May 17 08:38:05 2018 Page 1

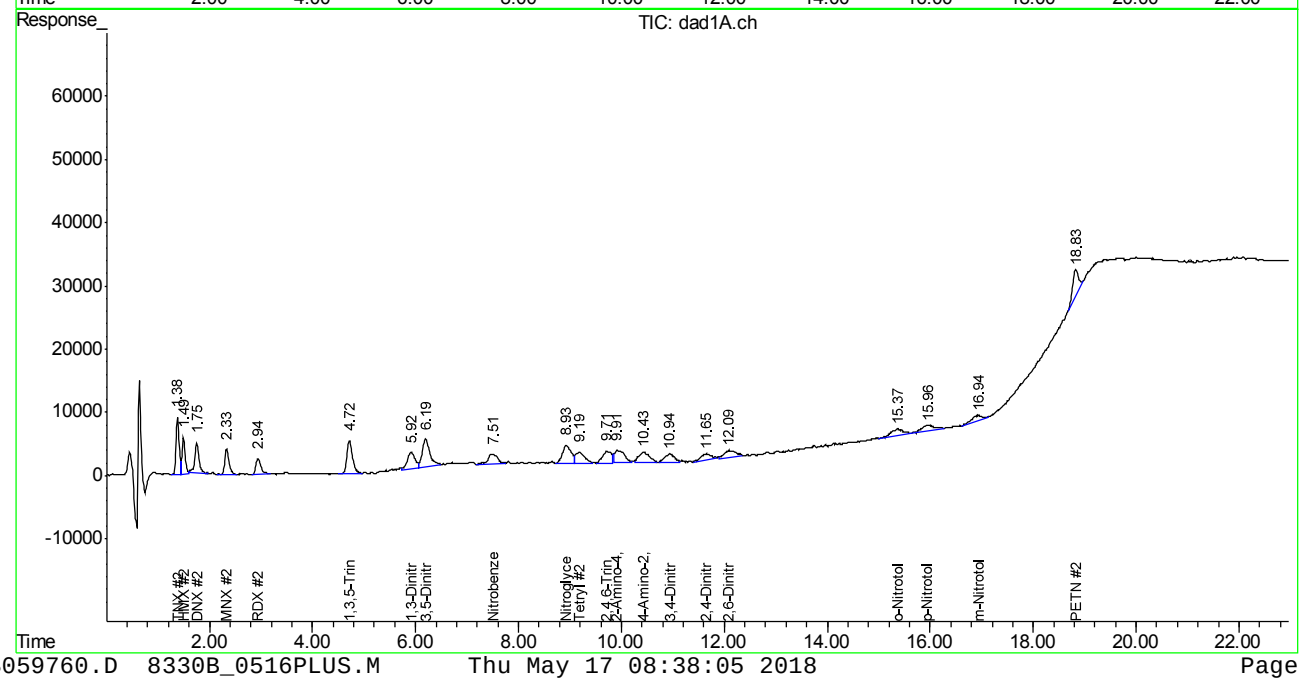
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:05 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

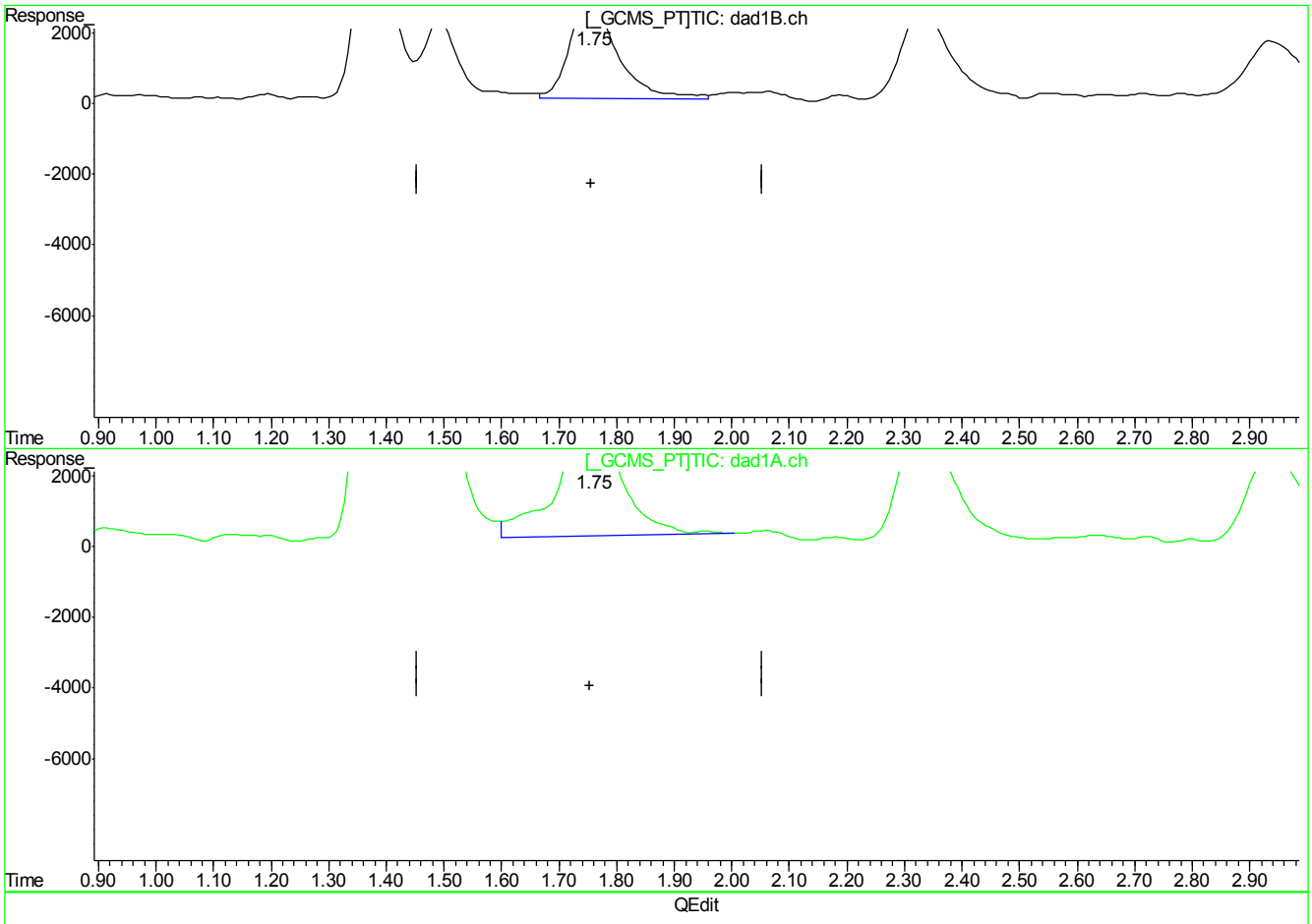
Sample Number:	GBB1732-IC1732	**Method:**	SW846 8330B
Lab FileID:	BB059760.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 09:44	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
DNX		2	1.75	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.92	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
Tetryl	479-45-8	2	9.19	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.71	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.91	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.43	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.94	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.65	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.09	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	15.37	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	15.38	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	15.93	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.94	Poorly defined baseline
PETN	78-11-5	2	18.83	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(3) DNX

1.76min 51.331ppb

response 158972

(3) DNX #2

1.75min 64.595ppb

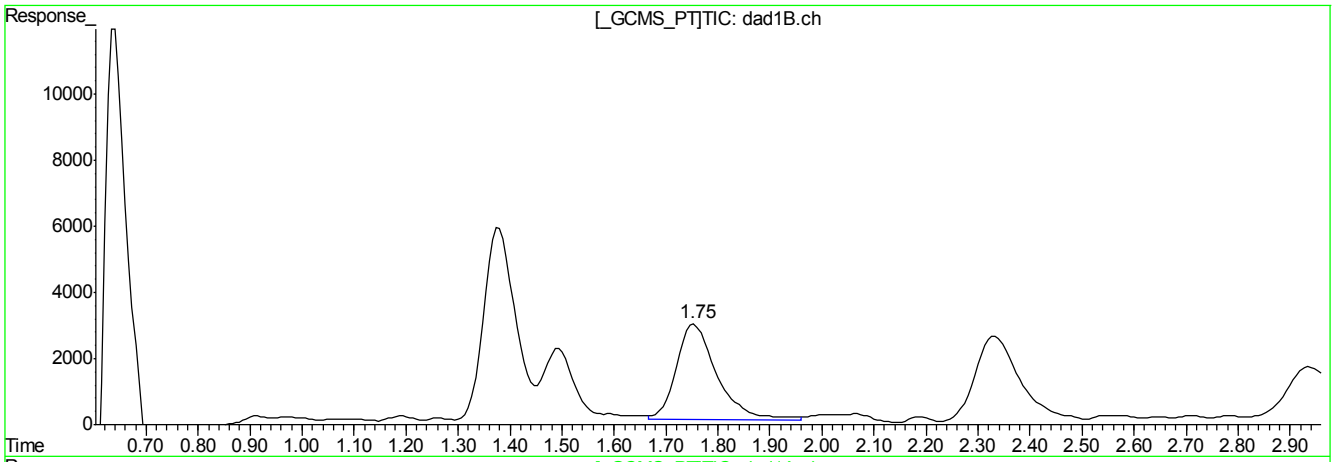
response 301180

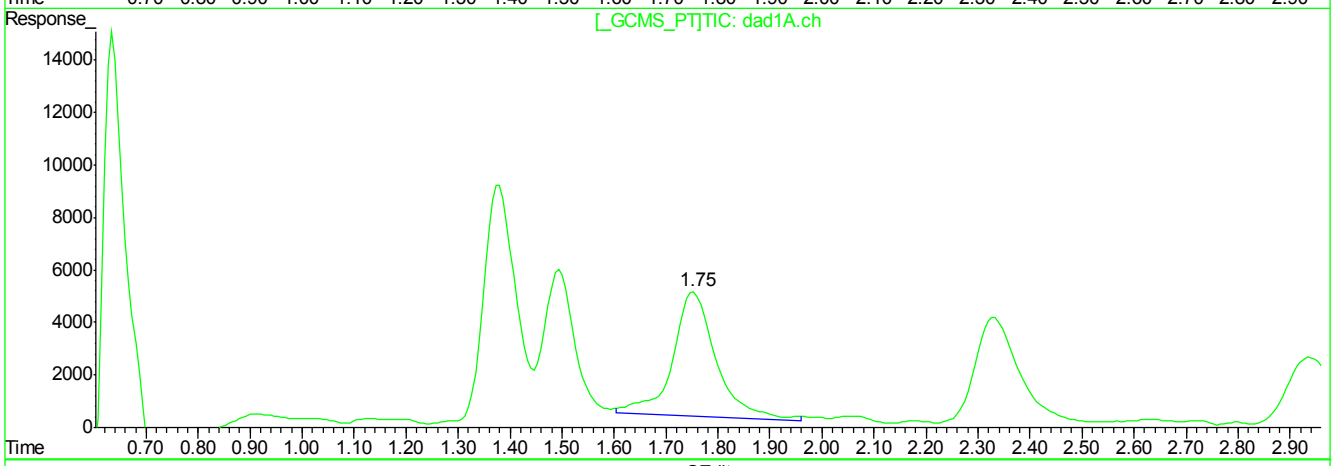
(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:07 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration





QEdit

(3) DNX

1.76min 51.331ppb

response 158972

(3) DNX #2

1.75min 59.510ppb m

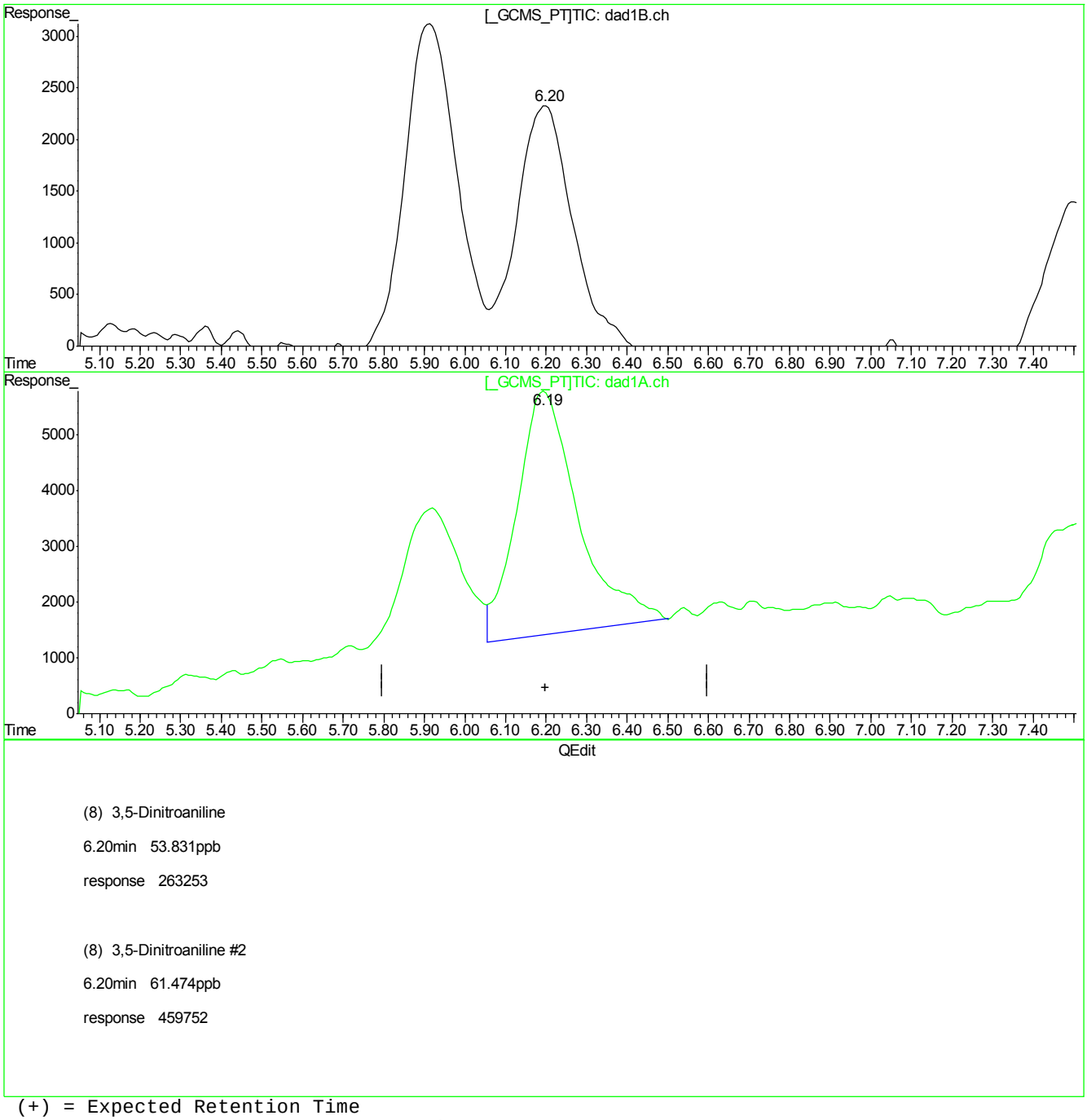
response 277449

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

6.20min 53.831ppb

response 263253

(8) 3,5-Dinitroaniline #2

6.20min 61.474ppb

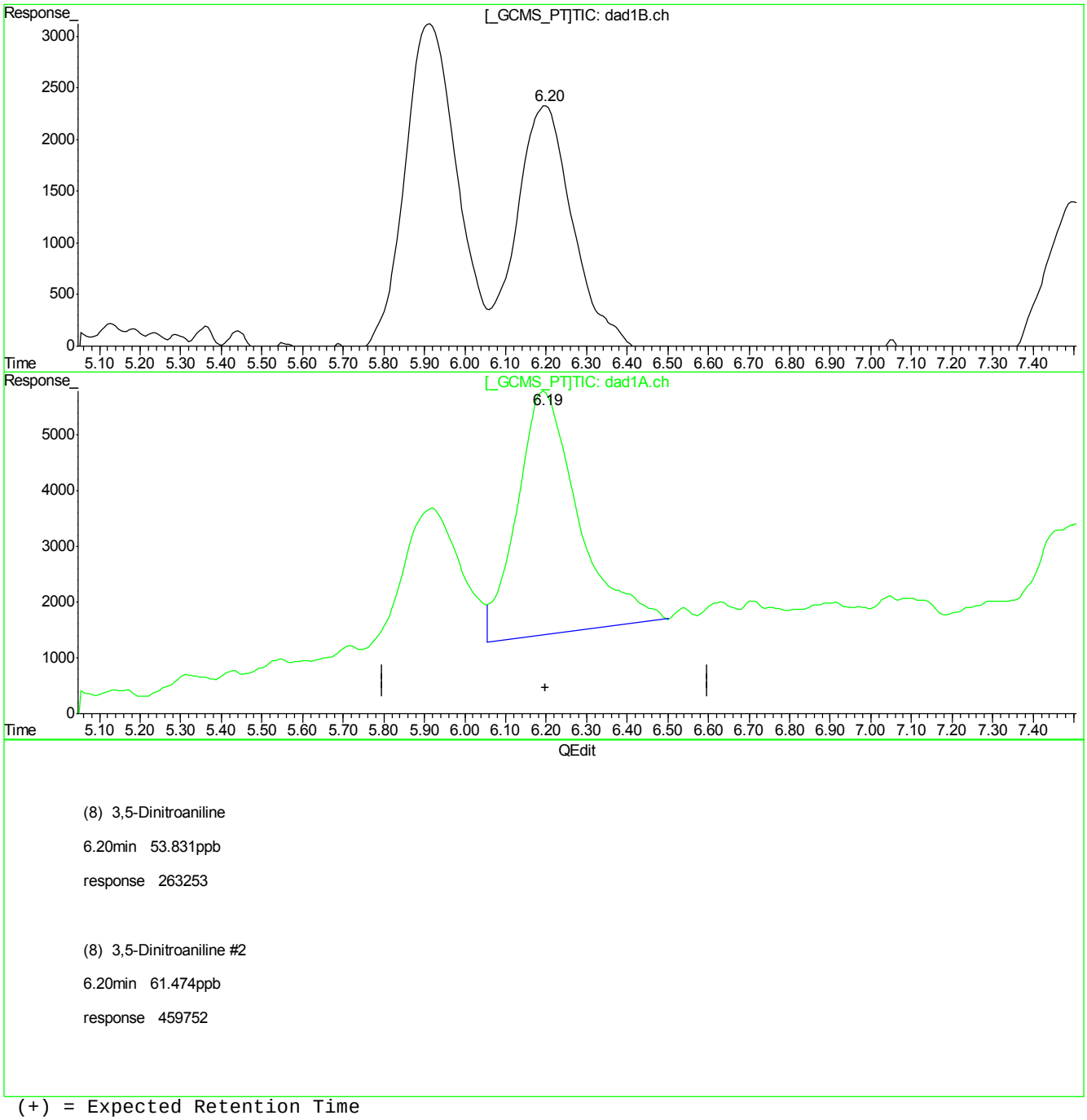
response 459752

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:20 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(8) 3,5-Dinitroaniline

6.20min 53.831ppb

response 263253

(8) 3,5-Dinitroaniline #2

6.20min 61.474ppb

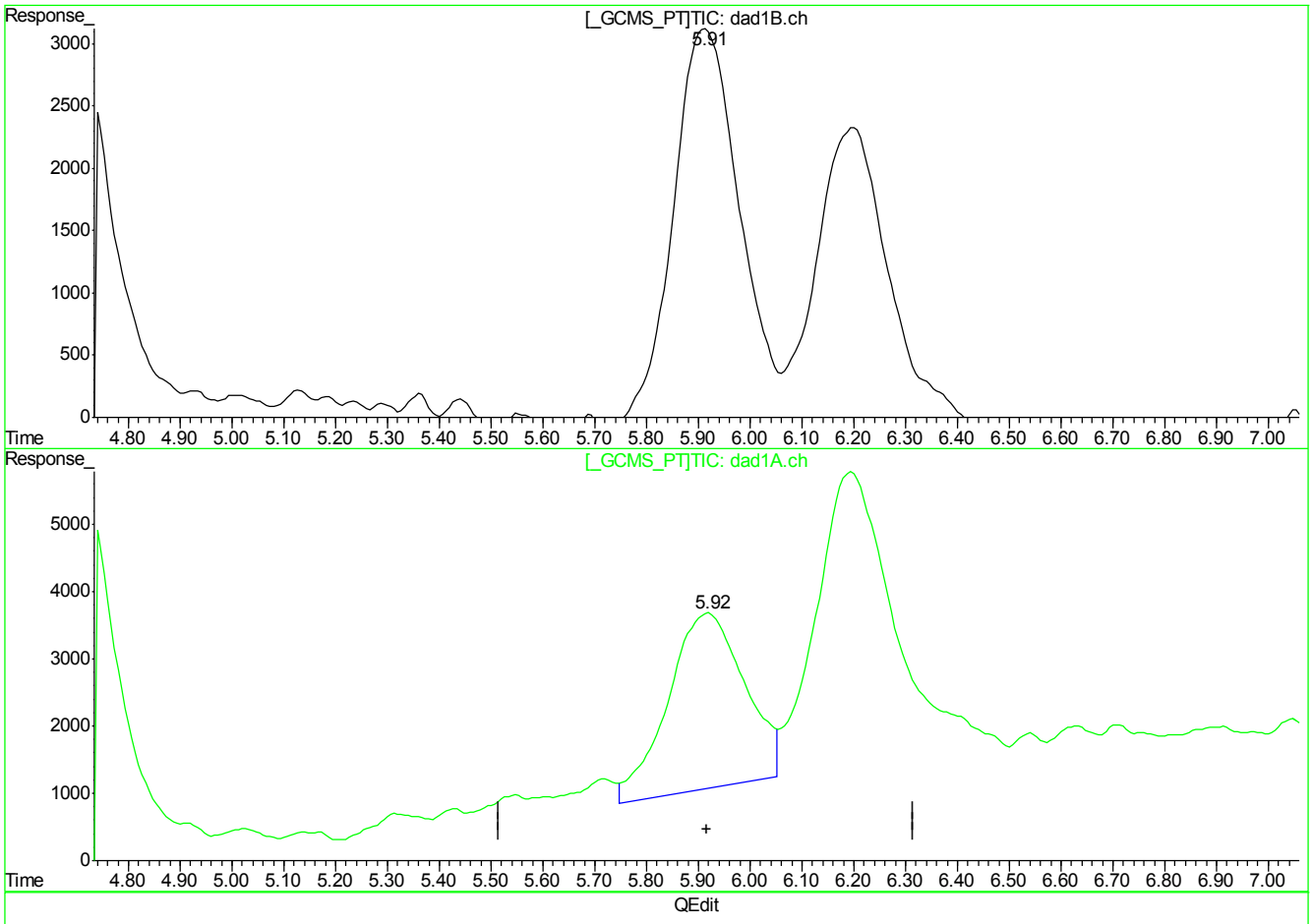
response 459752

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:24 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.91min 53.254ppb

response 295240

(7) 1,3-Dinitrobenzene #2

5.92min 71.785ppb m

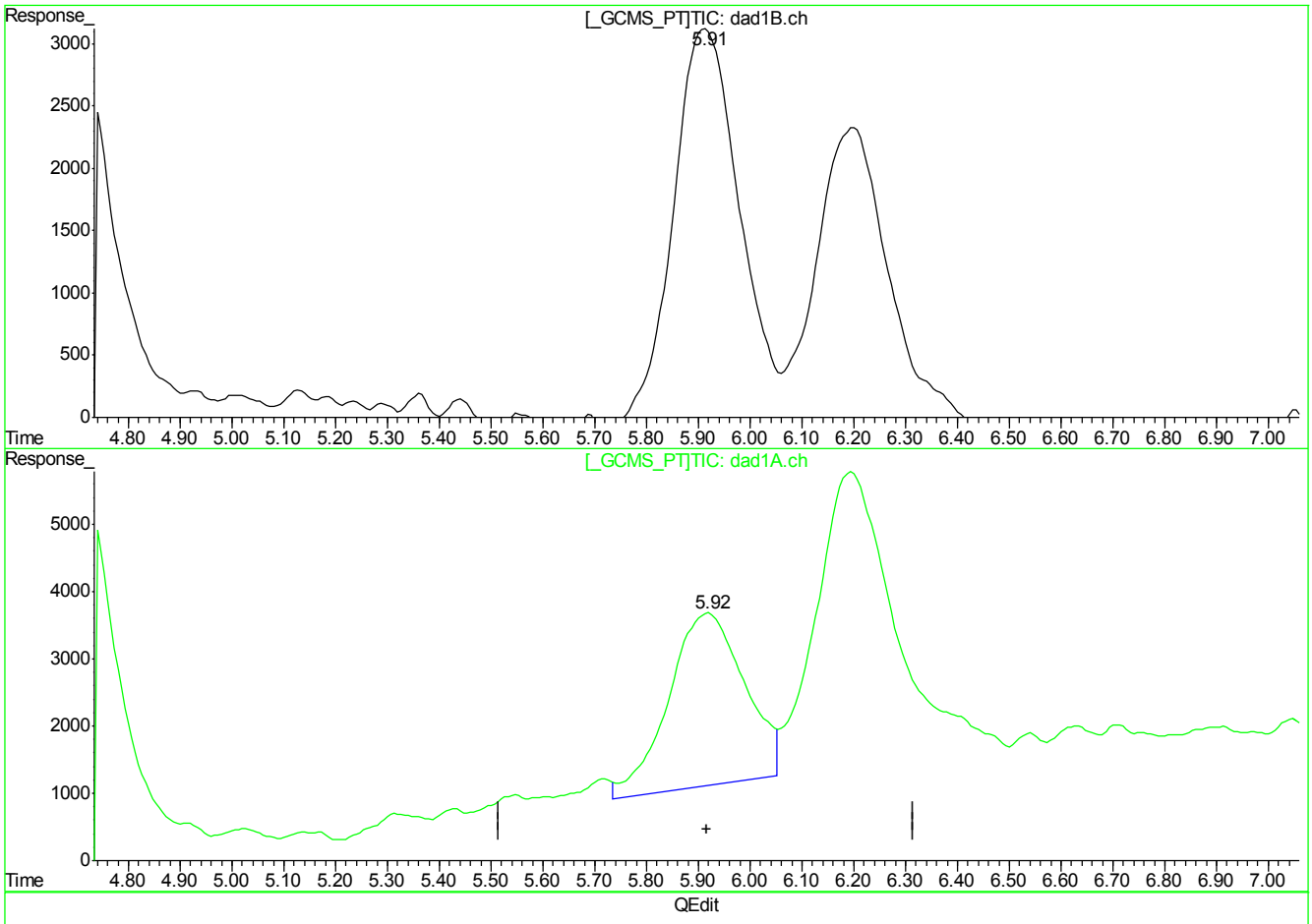
response 267354

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:26 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.91min 53.254ppb

response 295240

(7) 1,3-Dinitrobenzene #2

5.92min 69.803ppb m

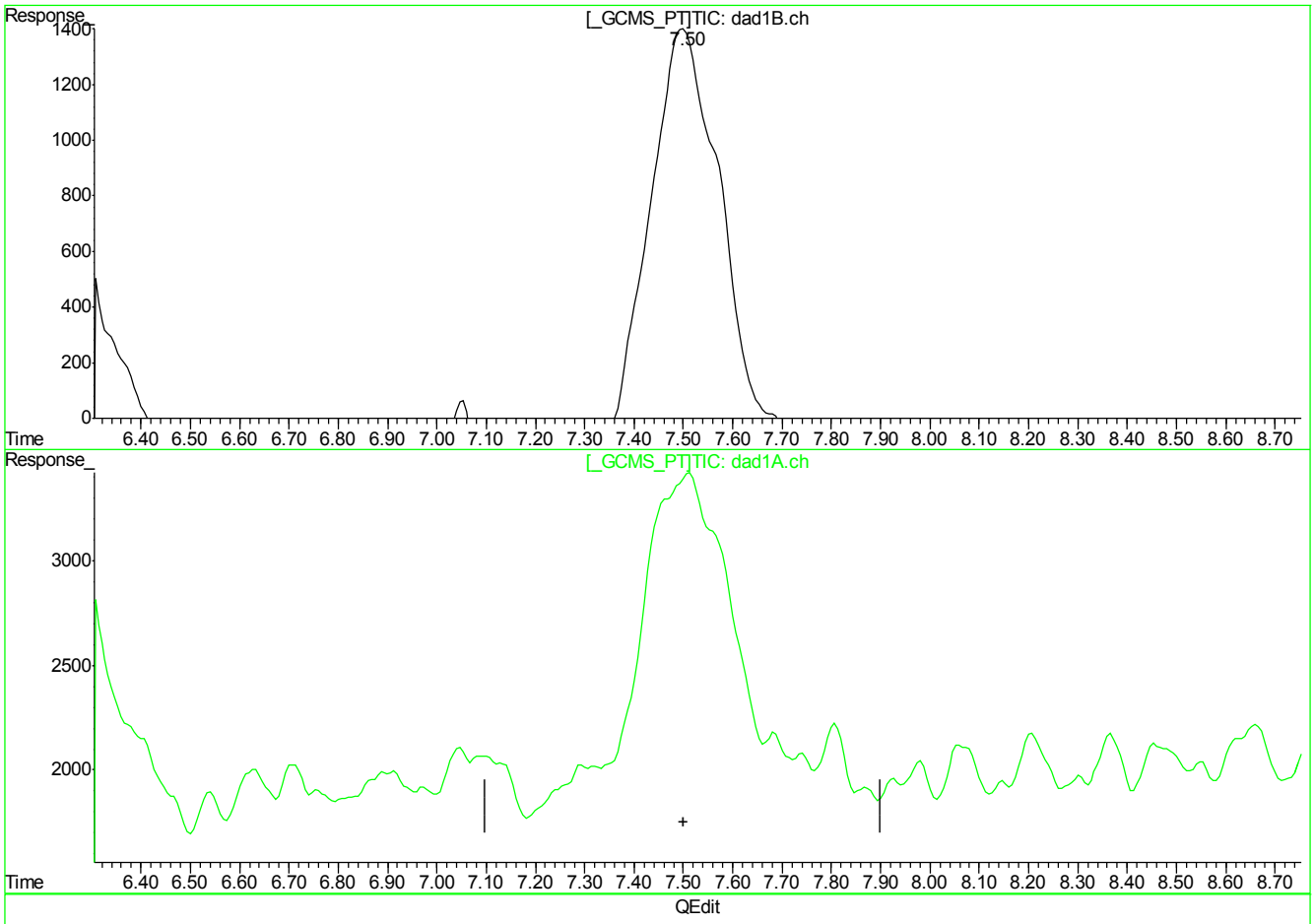
response 259974

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:31 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.50min 52.750ppb

response 192210

(9) Nitrobenzene #2

0.00min 0.000ppb

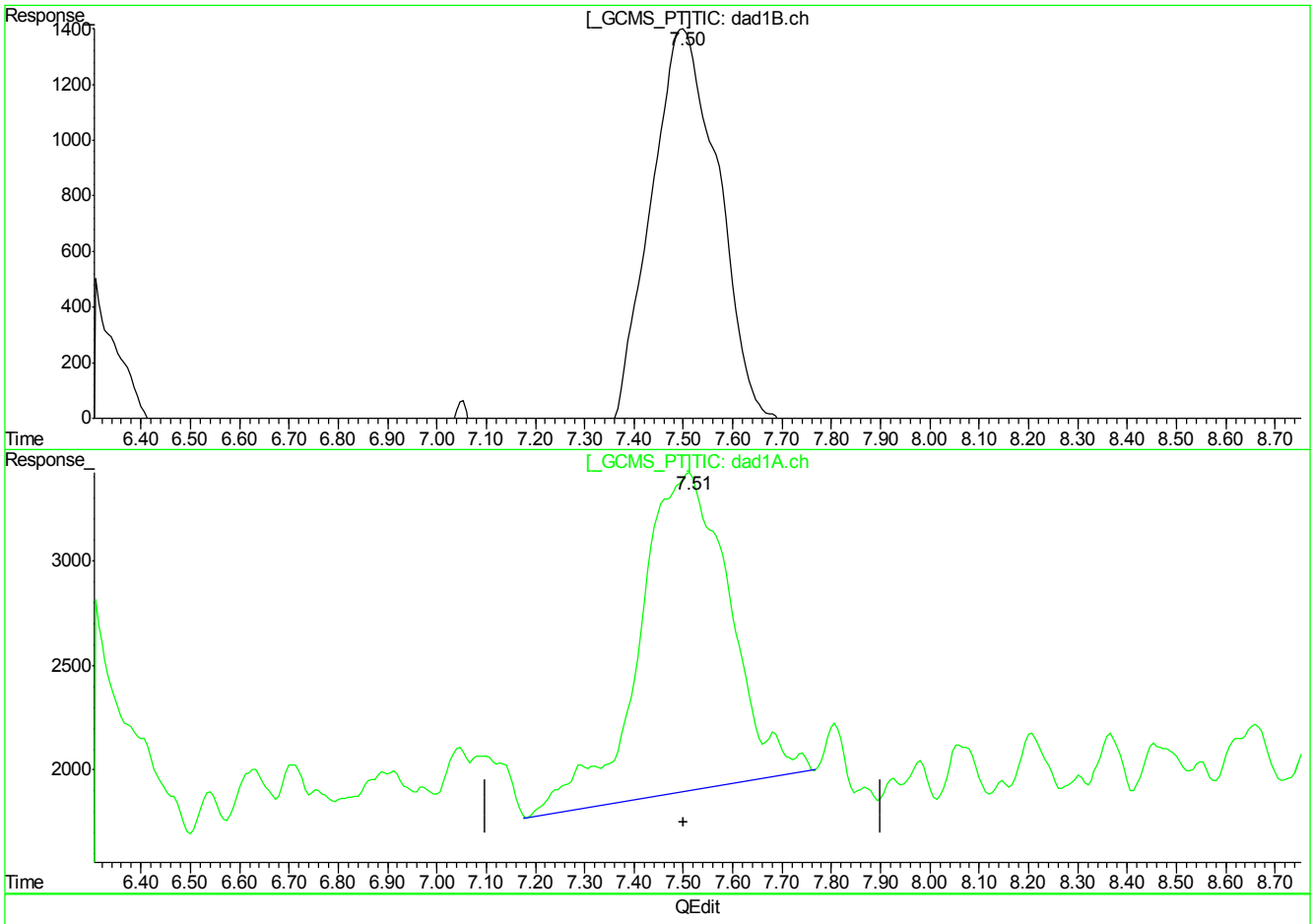
response 0

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:35 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(9) Nitrobenzene

7.50min 52.750ppb

response 192210

(9) Nitrobenzene #2

7.51min 58.744ppb m

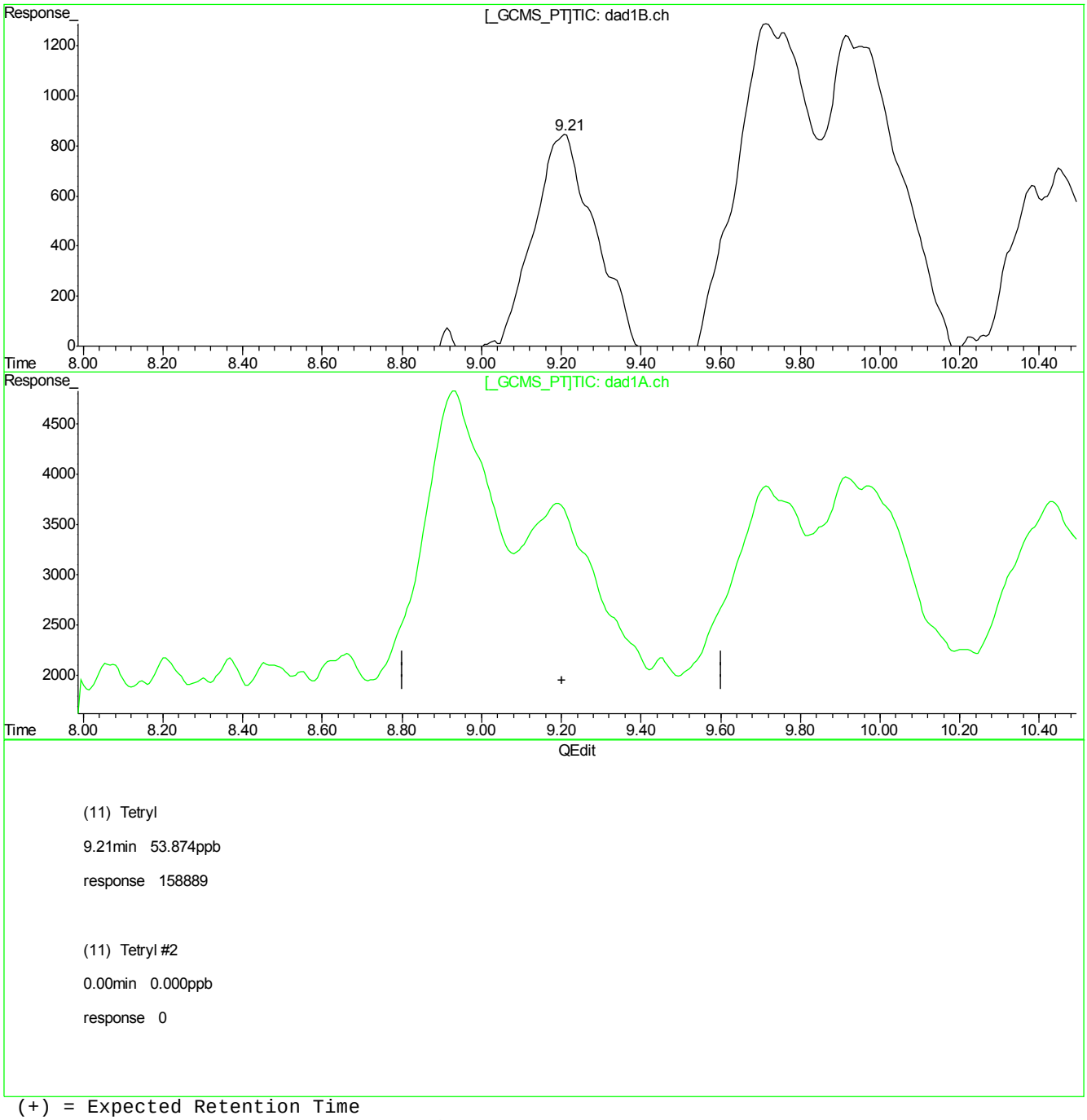
response 194787

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:38 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(11) Tetryl

9.21min 53.874ppb

response 158889

(11) Tetryl #2

0.00min 0.000ppb

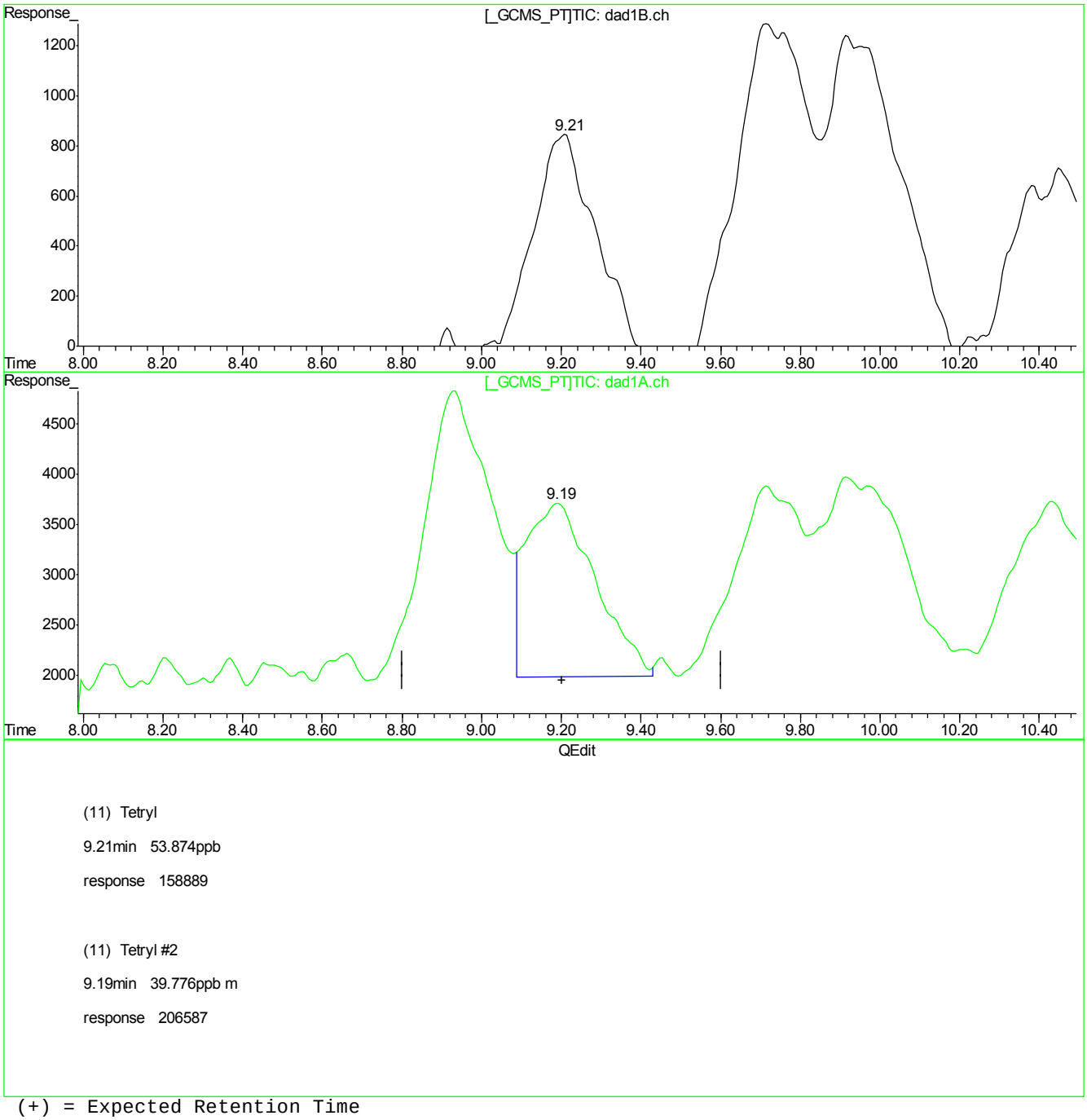
response 0

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:44 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(11) Tetryl

9.21min 53.874ppb

response 158889

(11) Tetryl #2

9.19min 39.776ppb m

response 206587

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:50 2018

7.6.2.11

7

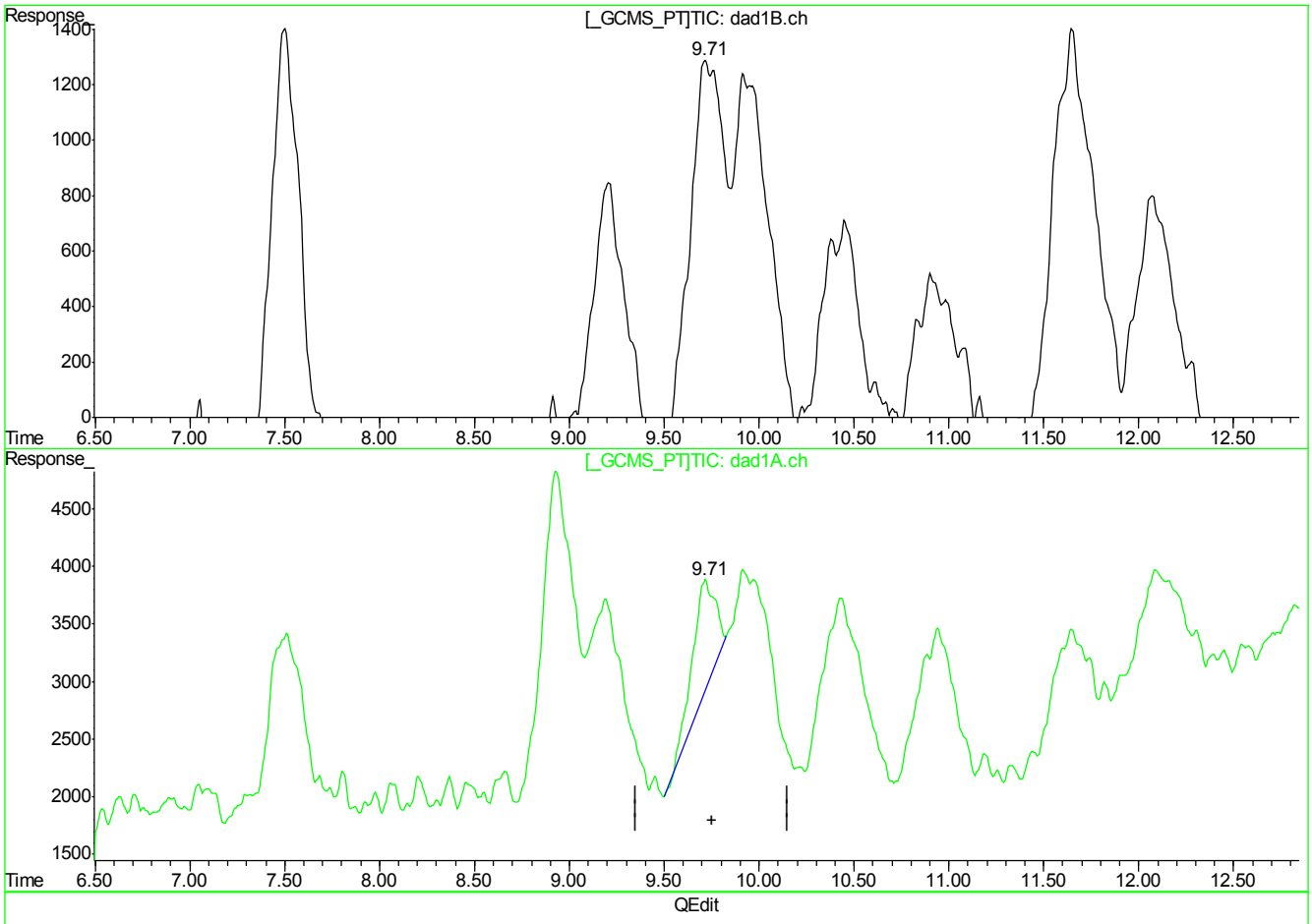
FA53896

BB059760.D edits: Tetryl

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.72min 48.528ppb

response 204796

(12) 2,4,6-Trinitrotoluene #2

9.72min 16.791ppb

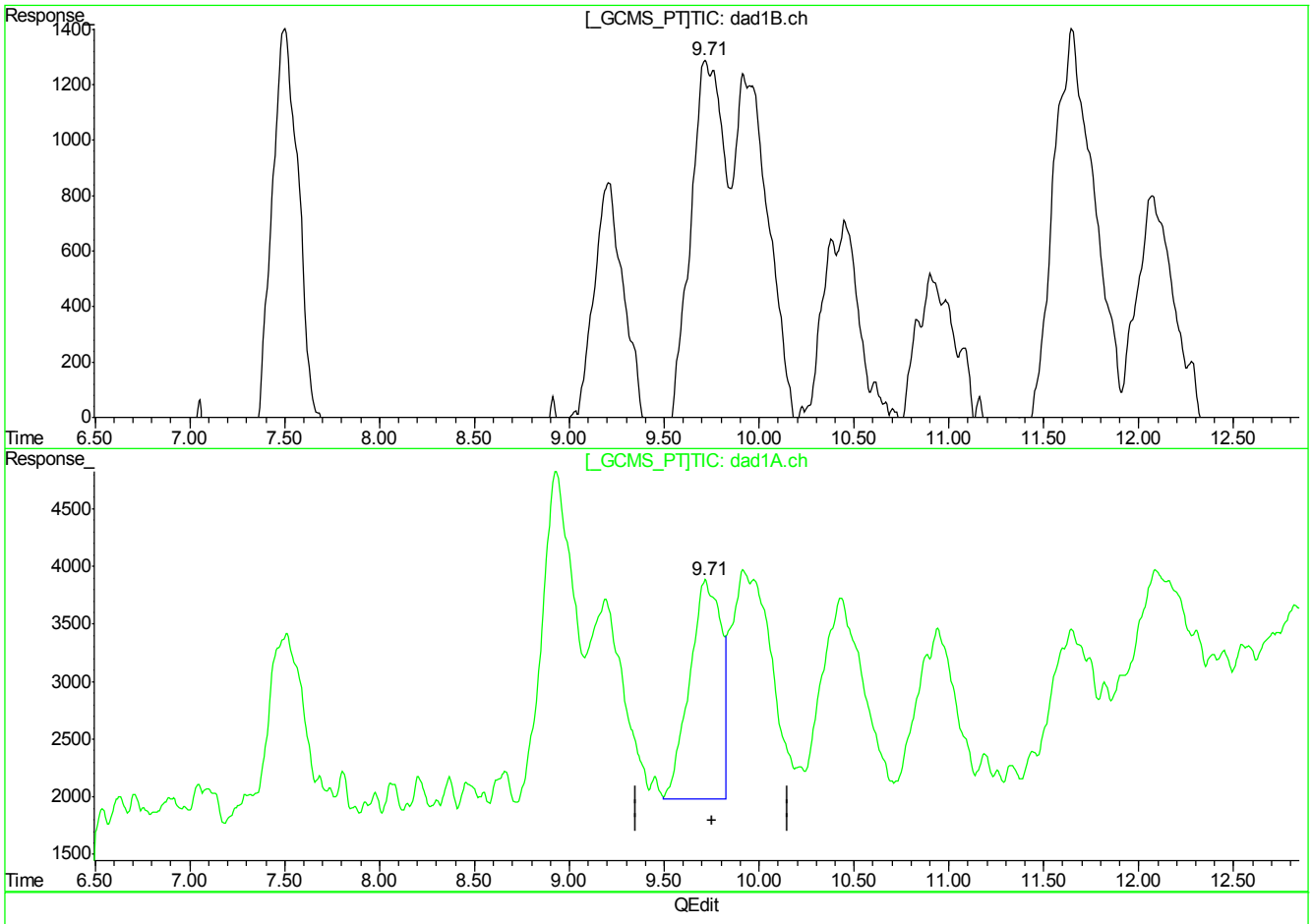
response 76109

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:03:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.72min 48.528ppb

response 204796

(12) 2,4,6-Trinitrotoluene #2

9.71min 47.400ppb m

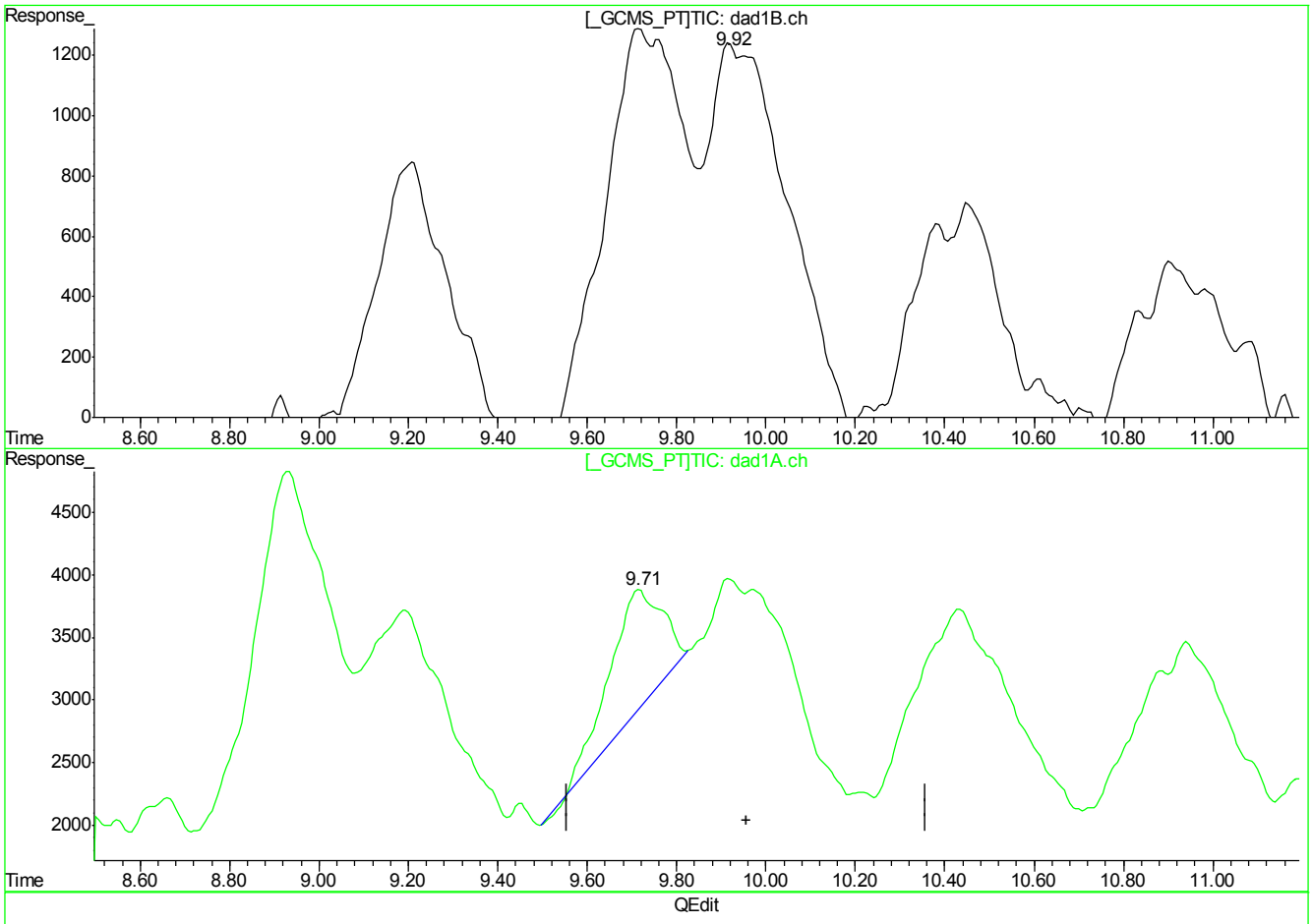
response 214852

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:05 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.92min 54.181ppb

response 205101

(13) 2-Amino-4,6-Dinitrotoluene #2

9.72min 14.189ppb

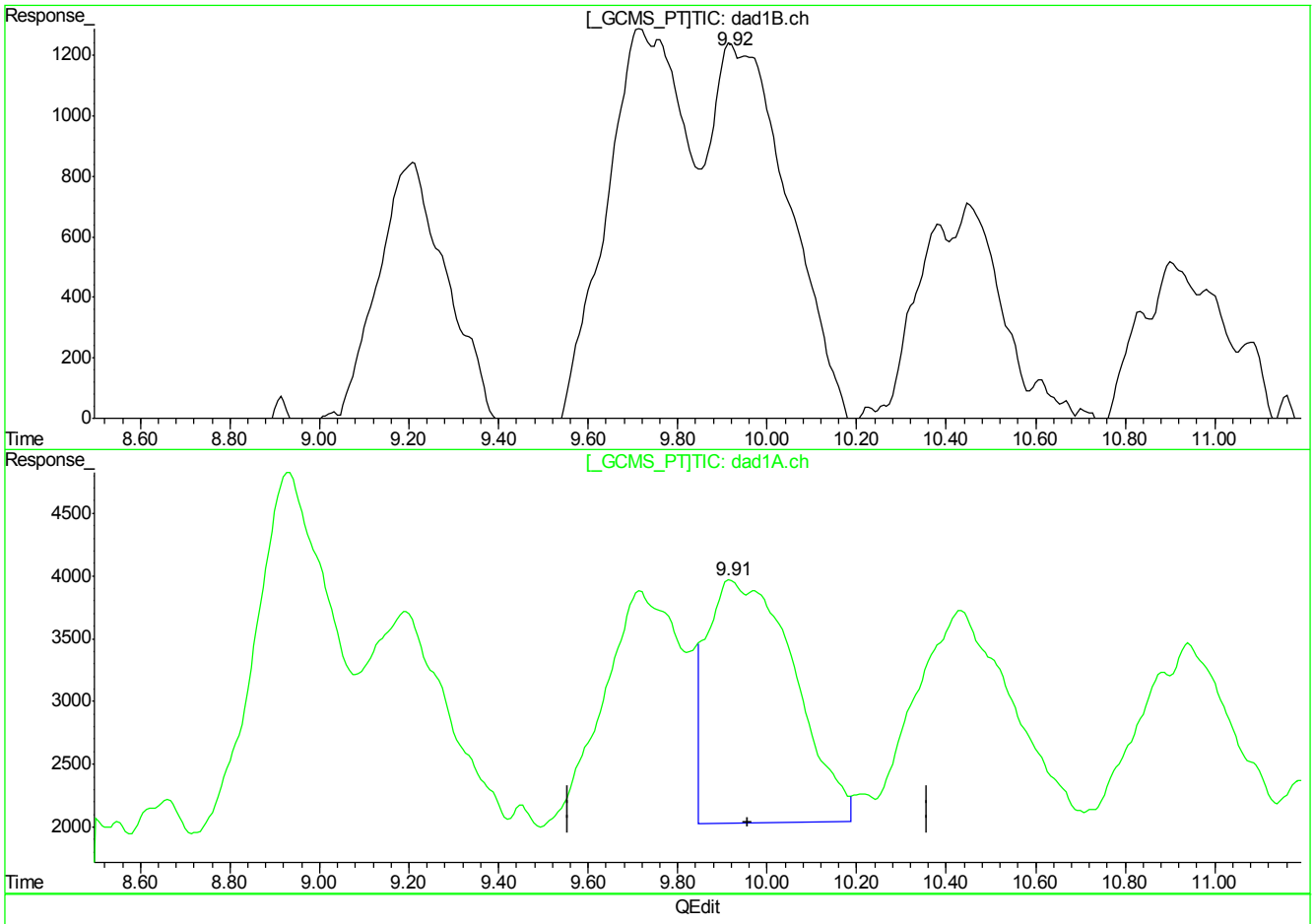
response 76109

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:08 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.92min 54.181ppb

response 205101

(13) 2-Amino-4,6-Dinitrotoluene #2

9.91min 49.165ppb m

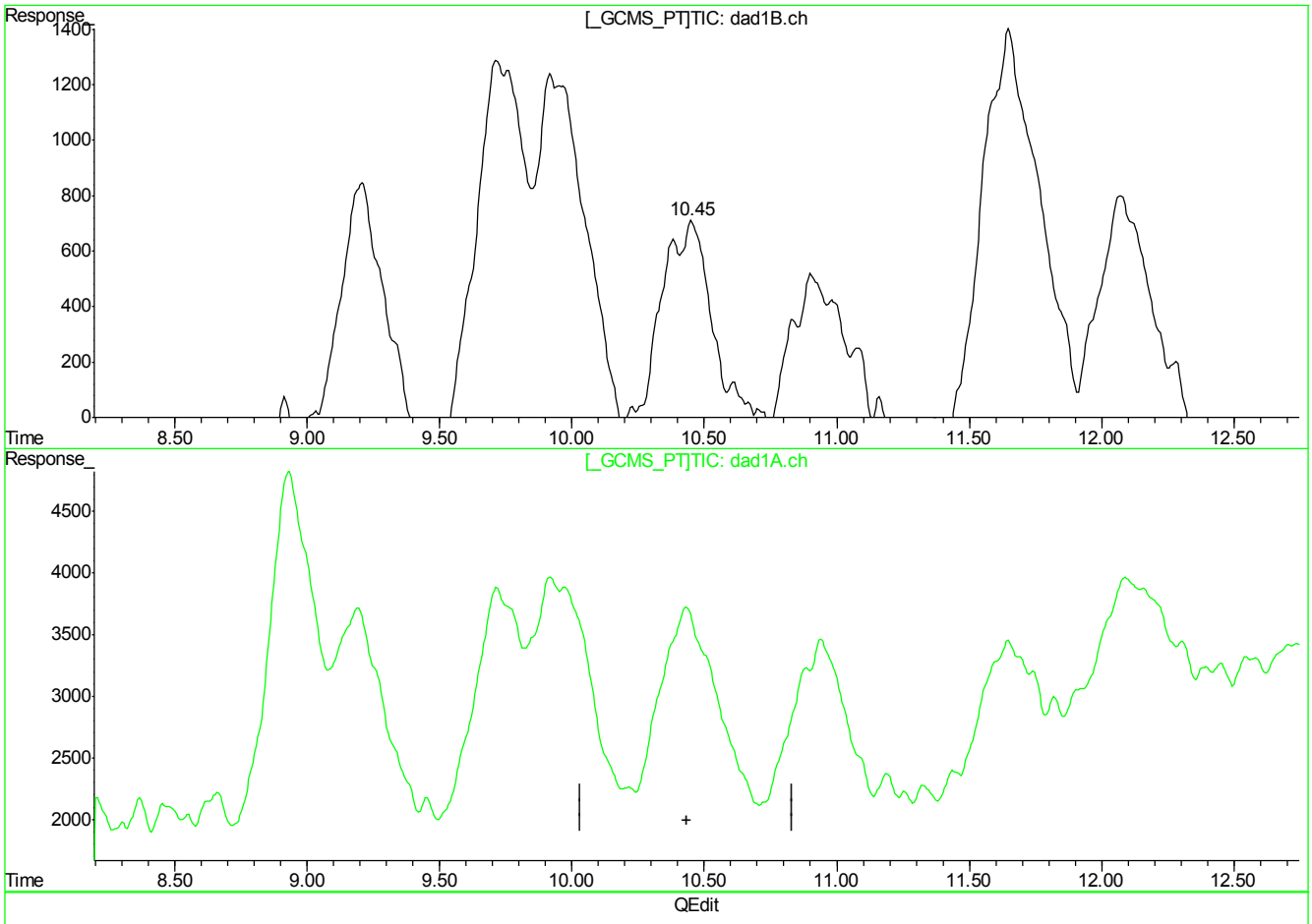
response 263712

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

10.45min 67.024ppb

response 174633

(14) 4-Amino-2,6-Dinitrotoluene #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:24 2018

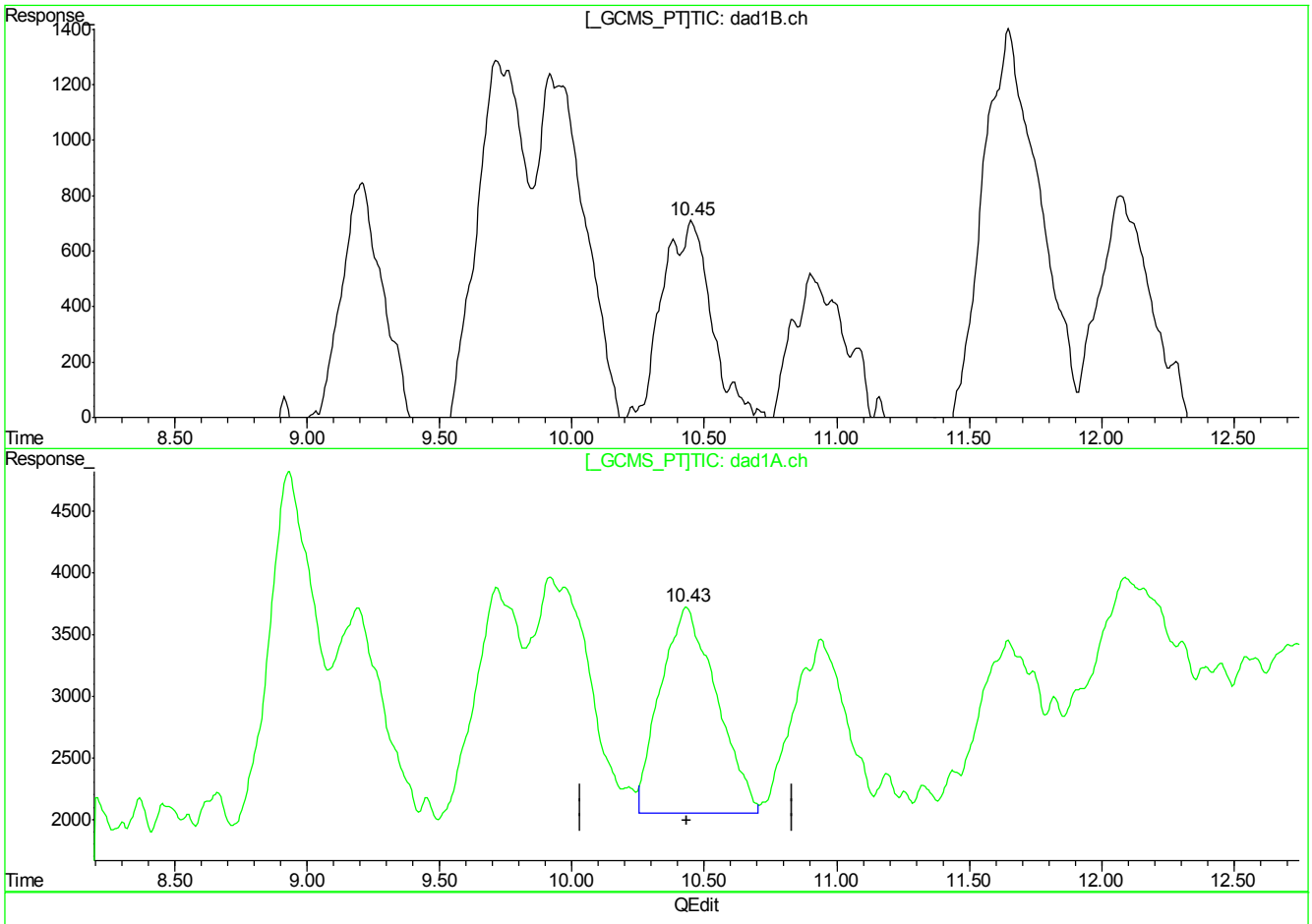
7.6.2.16

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(14) 4-Amino-2,6-Dinitrotoluene

10.45min 67.024ppb

response 174633

(14) 4-Amino-2,6-Dinitrotoluene #2

10.43min 47.691ppb m

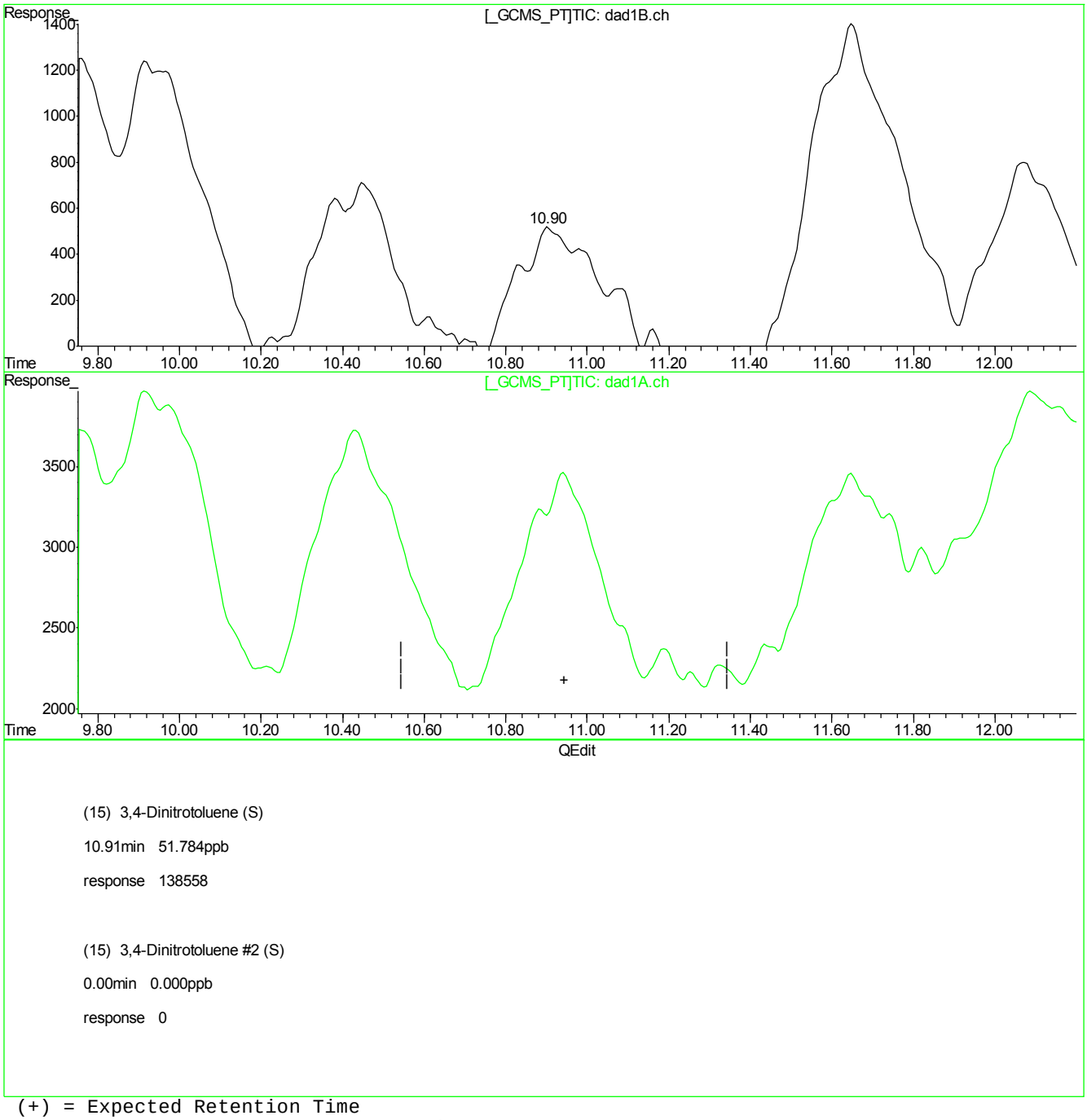
response 247131

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:29 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.91min 51.784ppb

response 138558

(15) 3,4-Dinitrotoluene #2 (S)

0.00min 0.000ppb

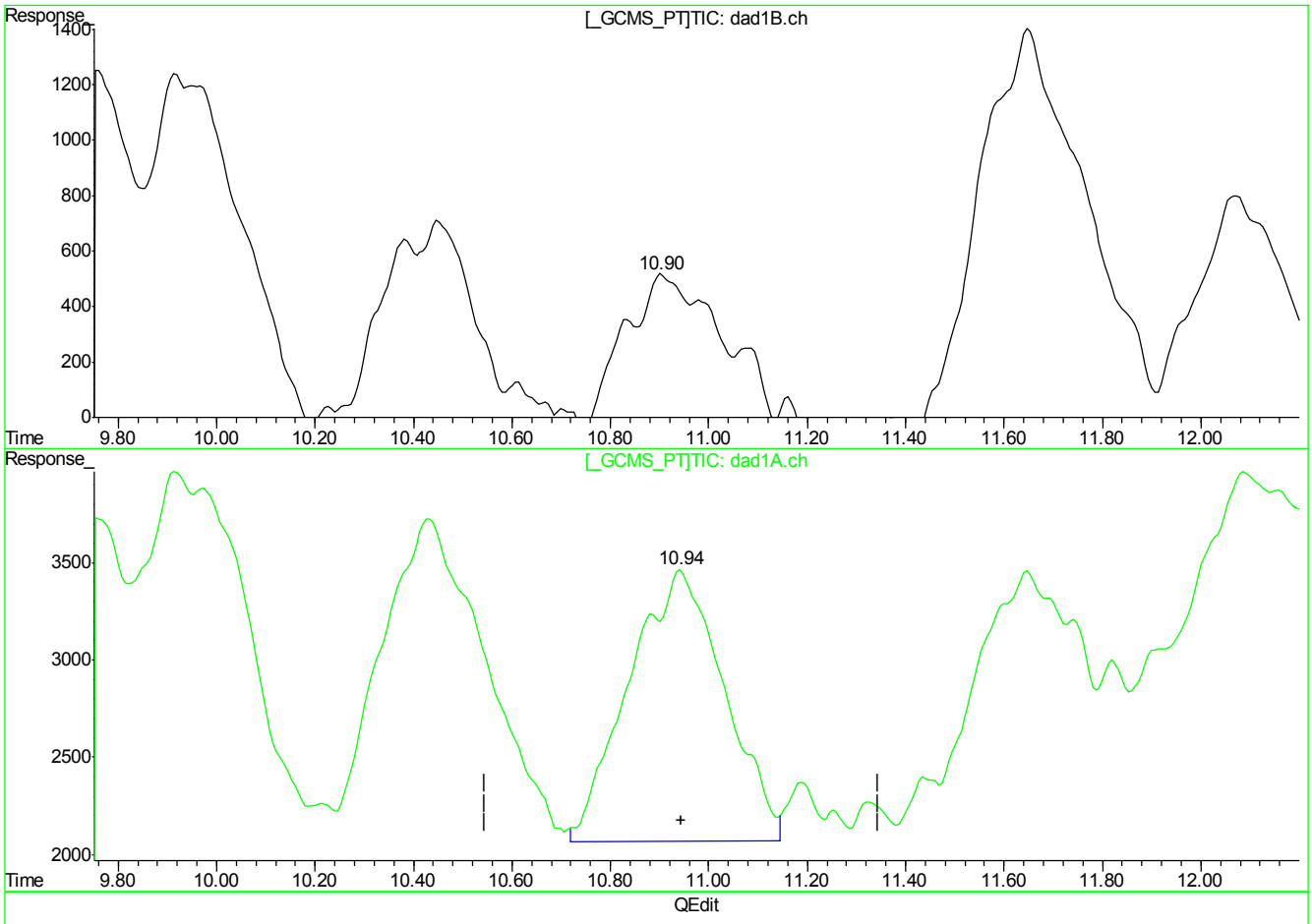
response 0

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:33 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(15) 3,4-Dinitrotoluene (S)

10.91min 51.784ppb

response 138558

(15) 3,4-Dinitrotoluene #2 (S)

10.94min 39.918ppb m

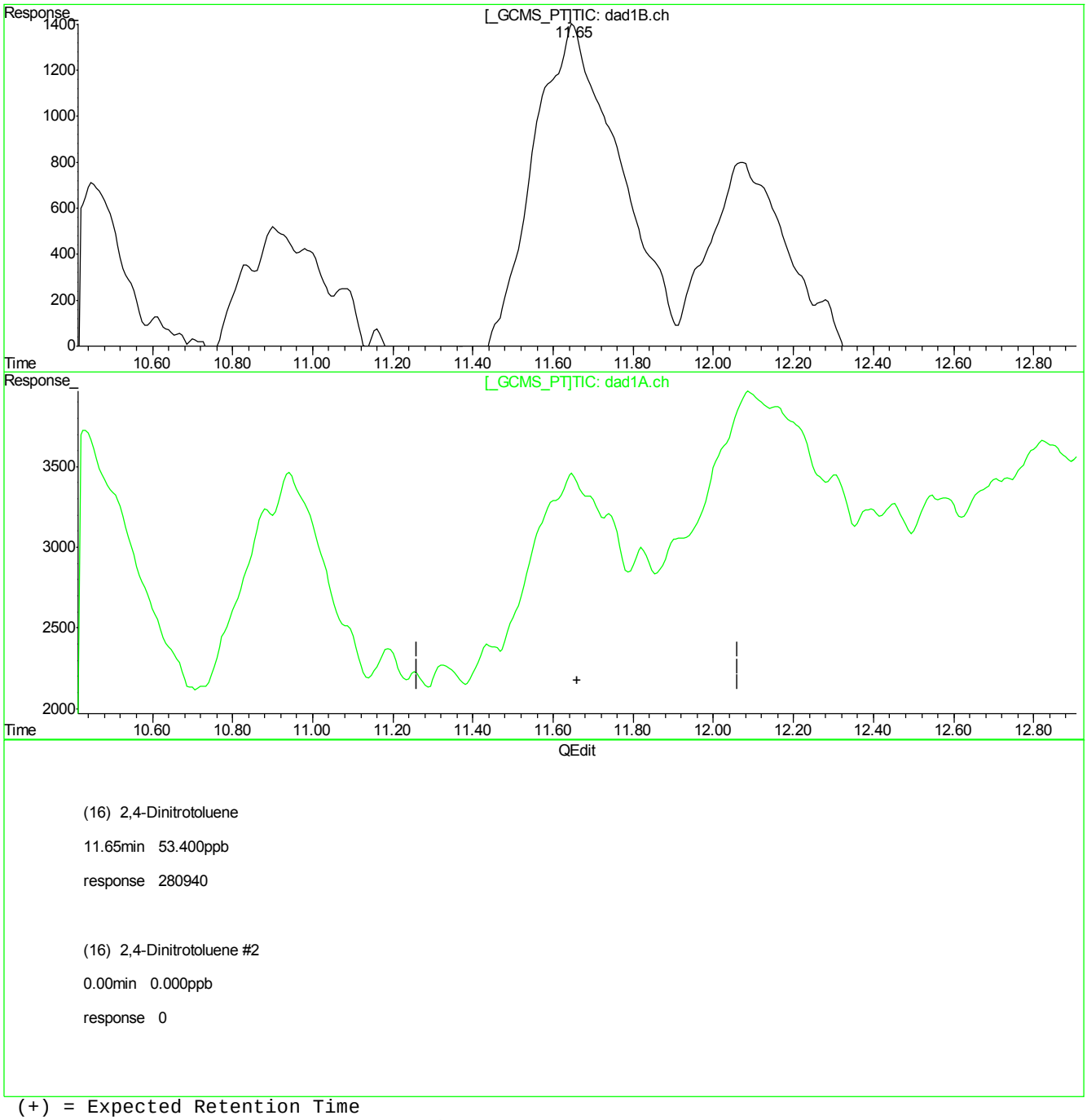
response 188204

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:36 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.65min 53.400ppb

response 280940

(16) 2,4-Dinitrotoluene #2

0.00min 0.000ppb

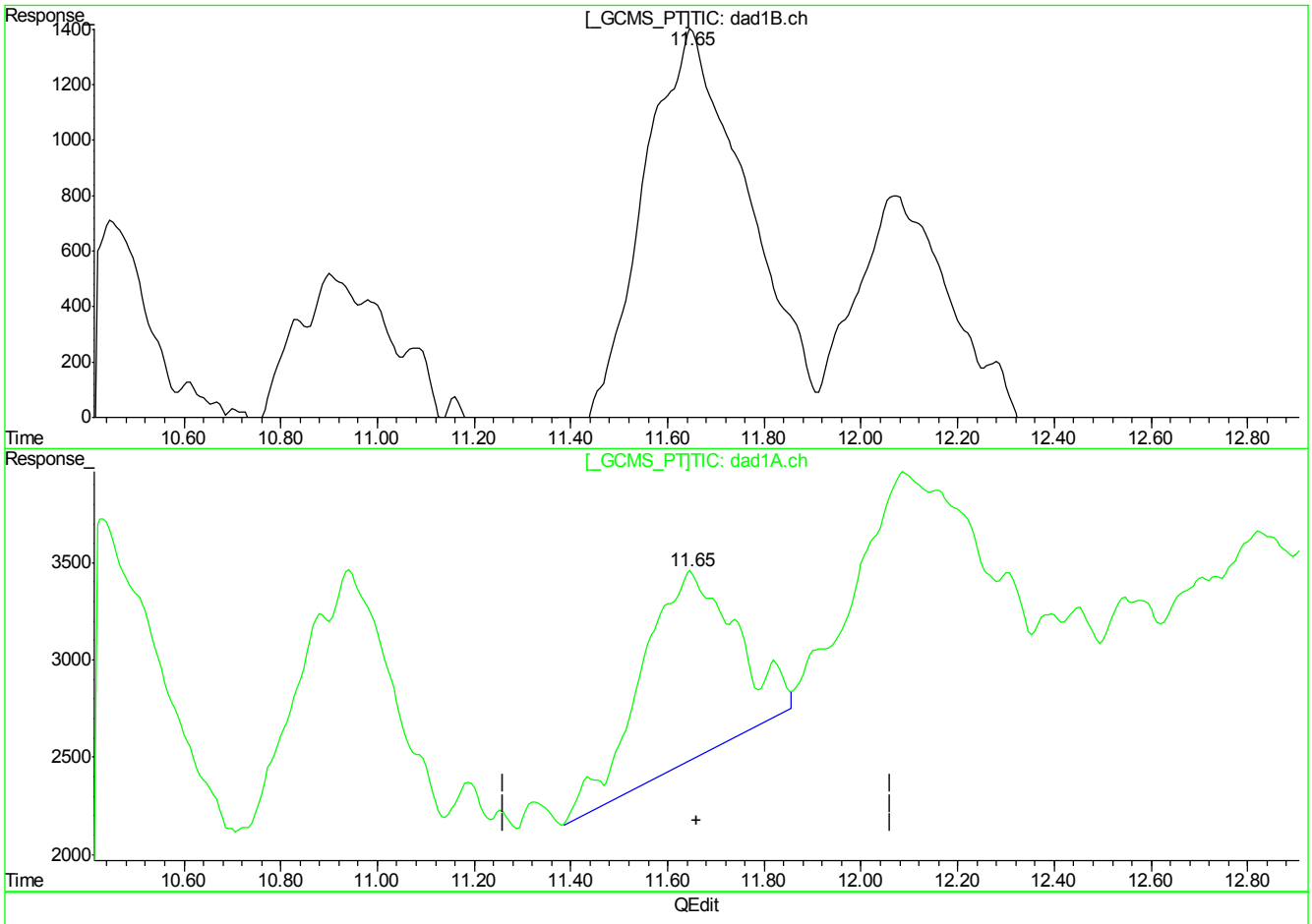
response 0

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:39 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(16) 2,4-Dinitrotoluene

11.65min 53.400ppb

response 280940

(16) 2,4-Dinitrotoluene #2

11.65min 44.857ppb m

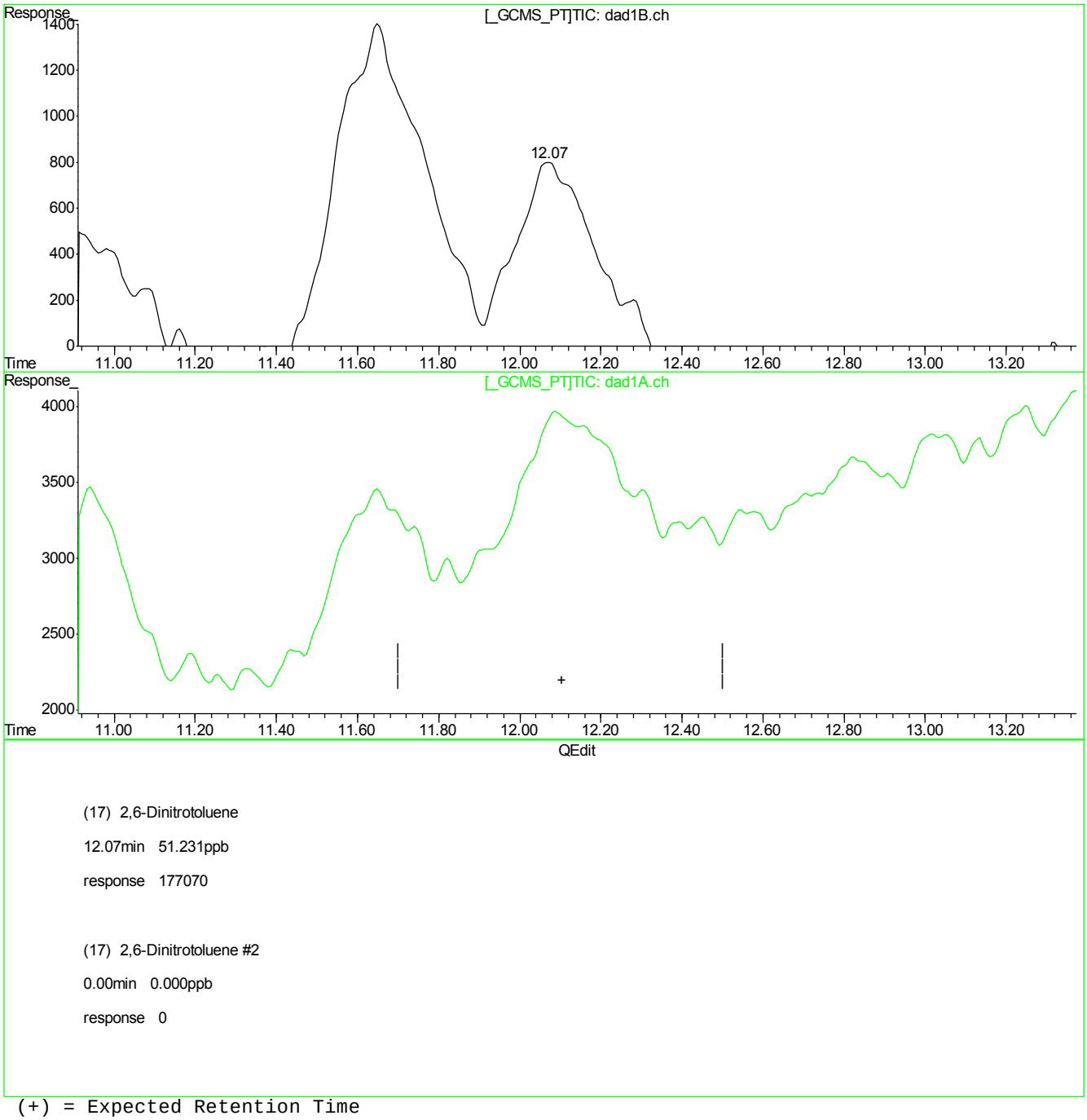
response 132474

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:43 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

12.07min 51.231ppb

response 177070

(17) 2,6-Dinitrotoluene #2

0.00min 0.000ppb

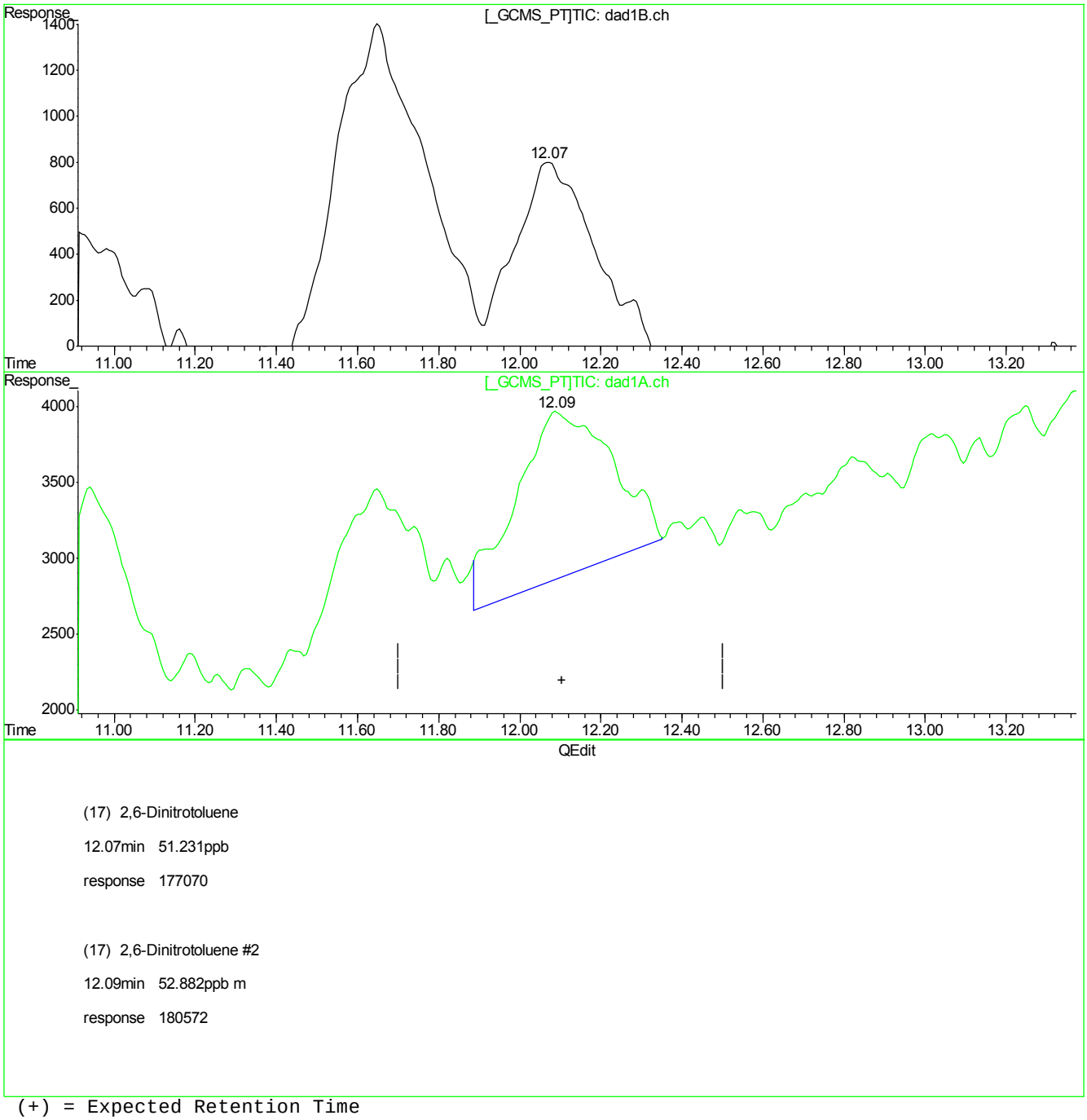
response 0

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:45 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(17) 2,6-Dinitrotoluene

12.07min 51.231ppb

response 177070

(17) 2,6-Dinitrotoluene #2

12.09min 52.882ppb m

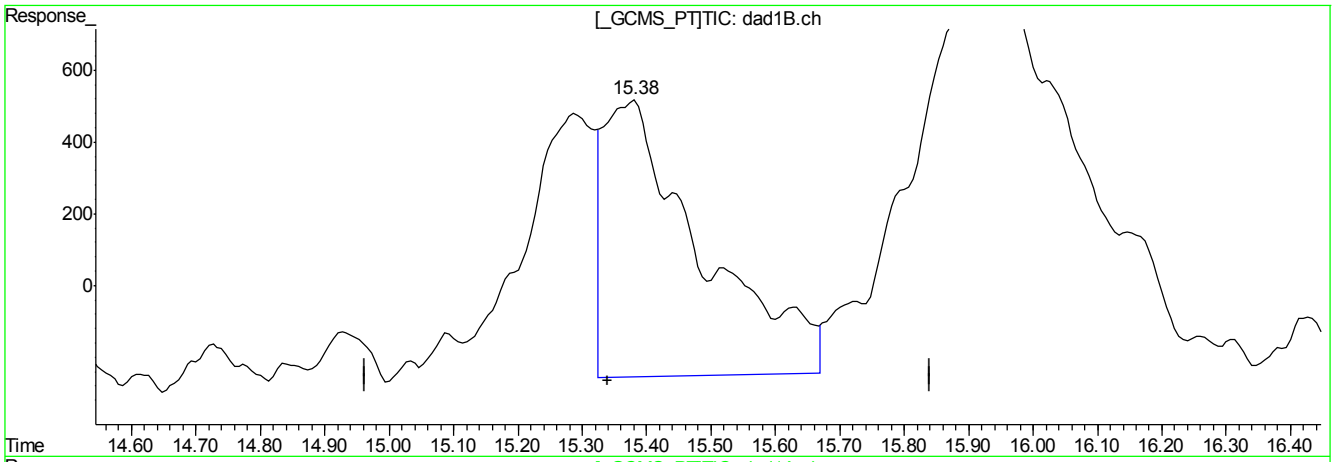
response 180572

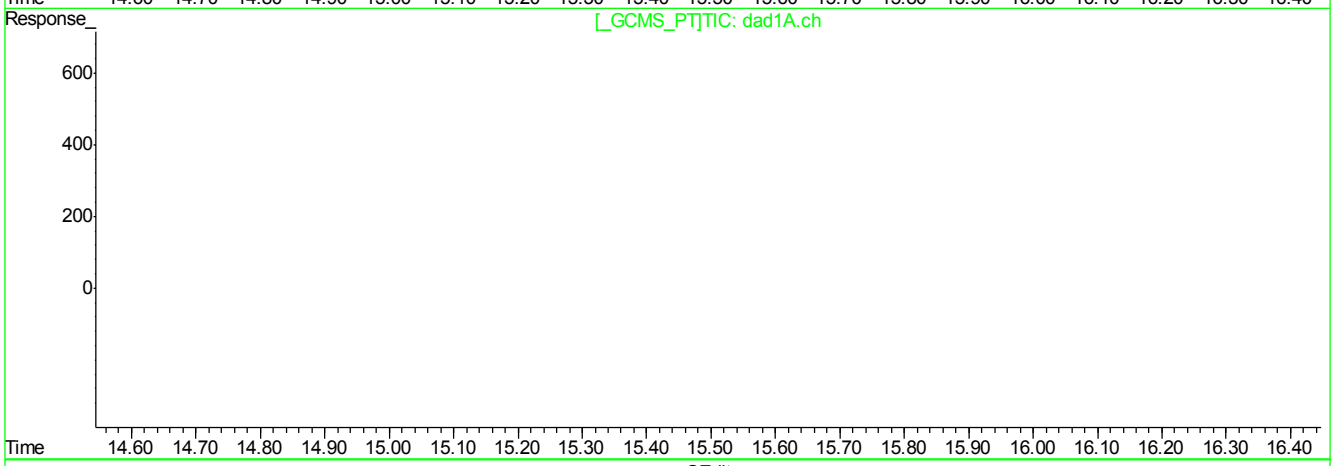
(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration





QEdit

(18) o-Nitrotoluene

15.37min 33.017ppb

response 82472

(18) o-Nitrotoluene #2

0.00min 0.000ppb

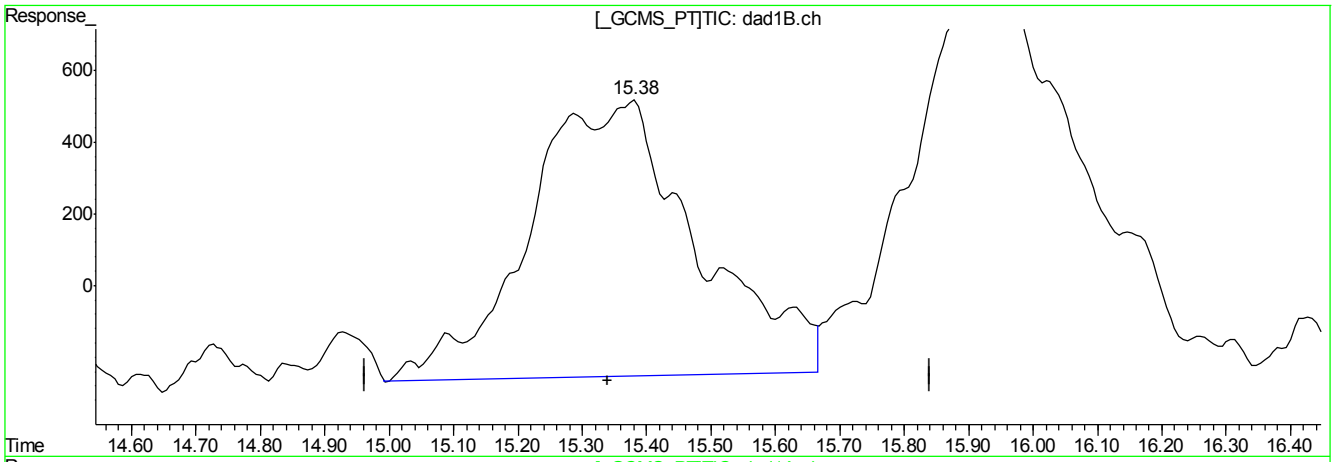
response 0

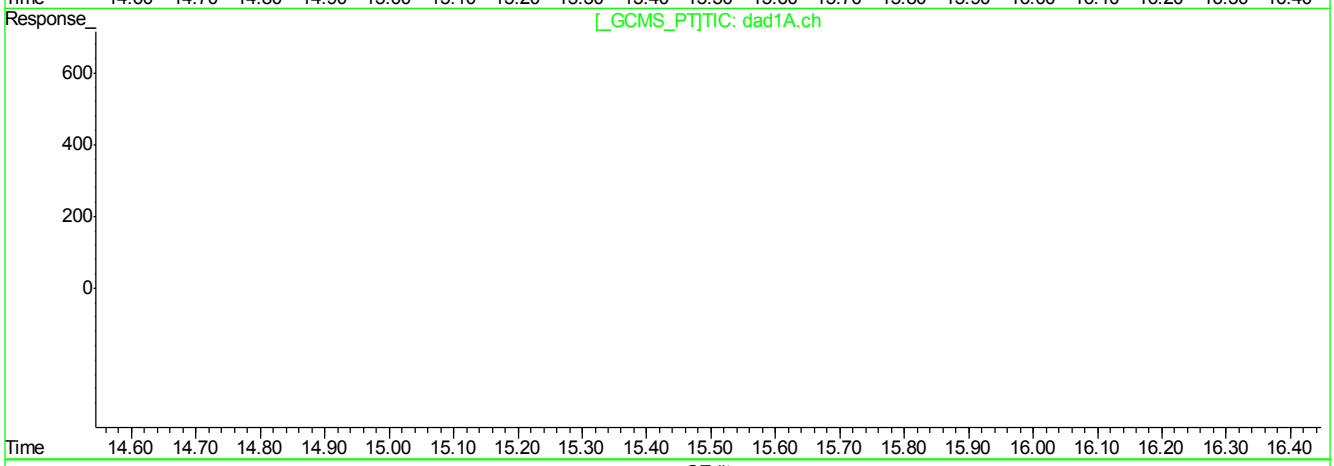
(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration





QEdit

(18) o-Nitrotoluene

15.38min 56.023ppb m

response 139937

(18) o-Nitrotoluene #2

0.00min 0.000ppb

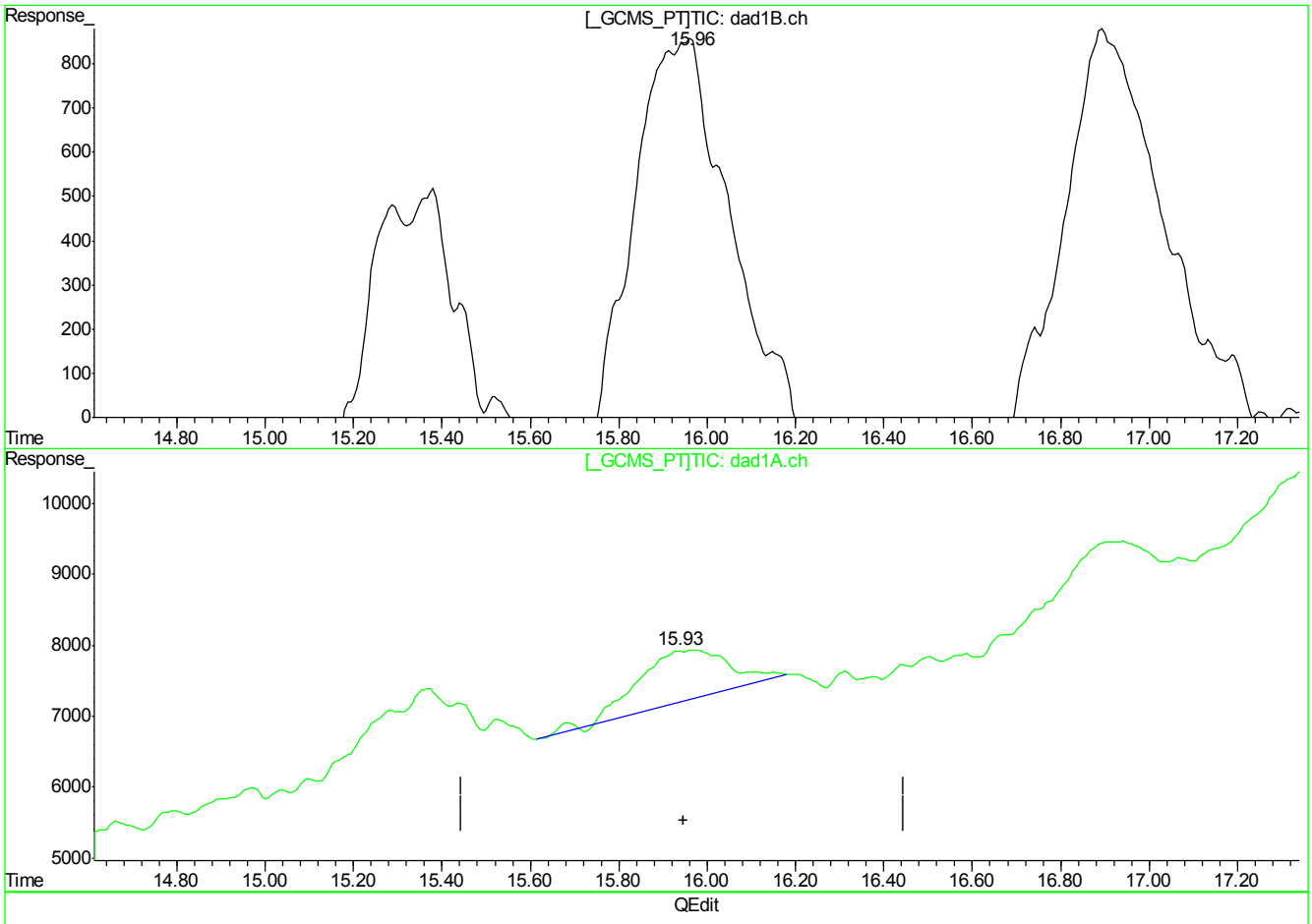
response 0

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:04:59 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(19) p-Nitrotoluene

15.96min 51.078ppb

response 201606

(19) p-Nitrotoluene #2

15.97min 31.467ppb

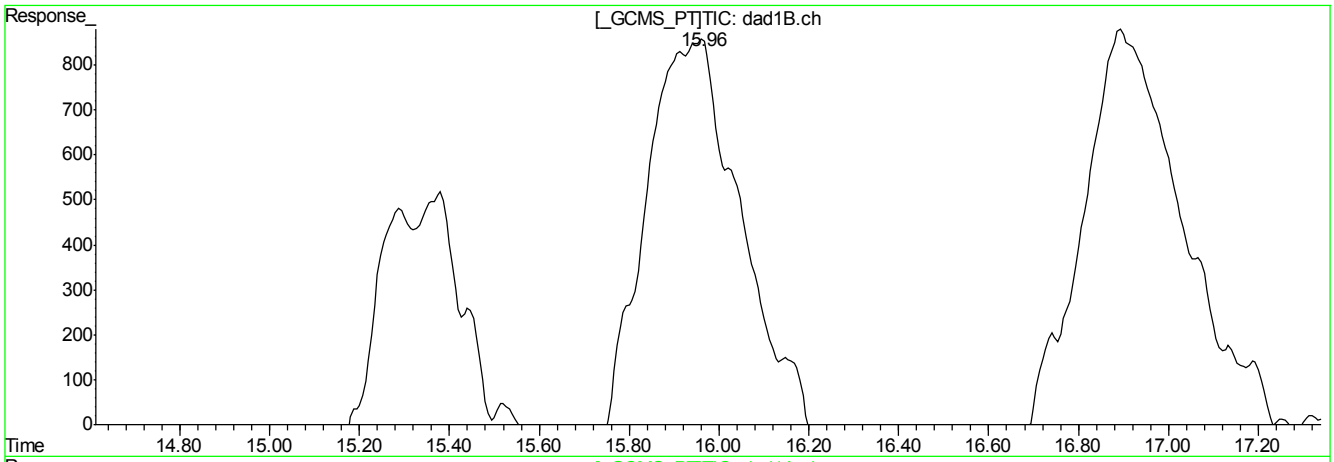
response 99028

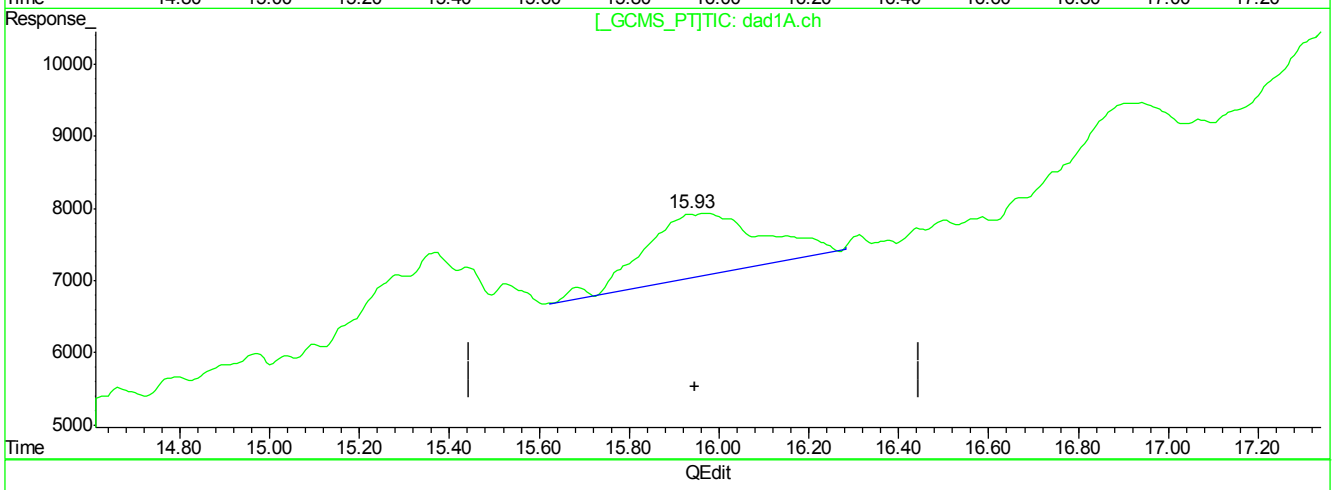
(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:05:07 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration





QEdit

(19) p-Nitrotoluene

15.96min 51.078ppb

response 201606

(19) p-Nitrotoluene #2

15.93min 50.905ppb m

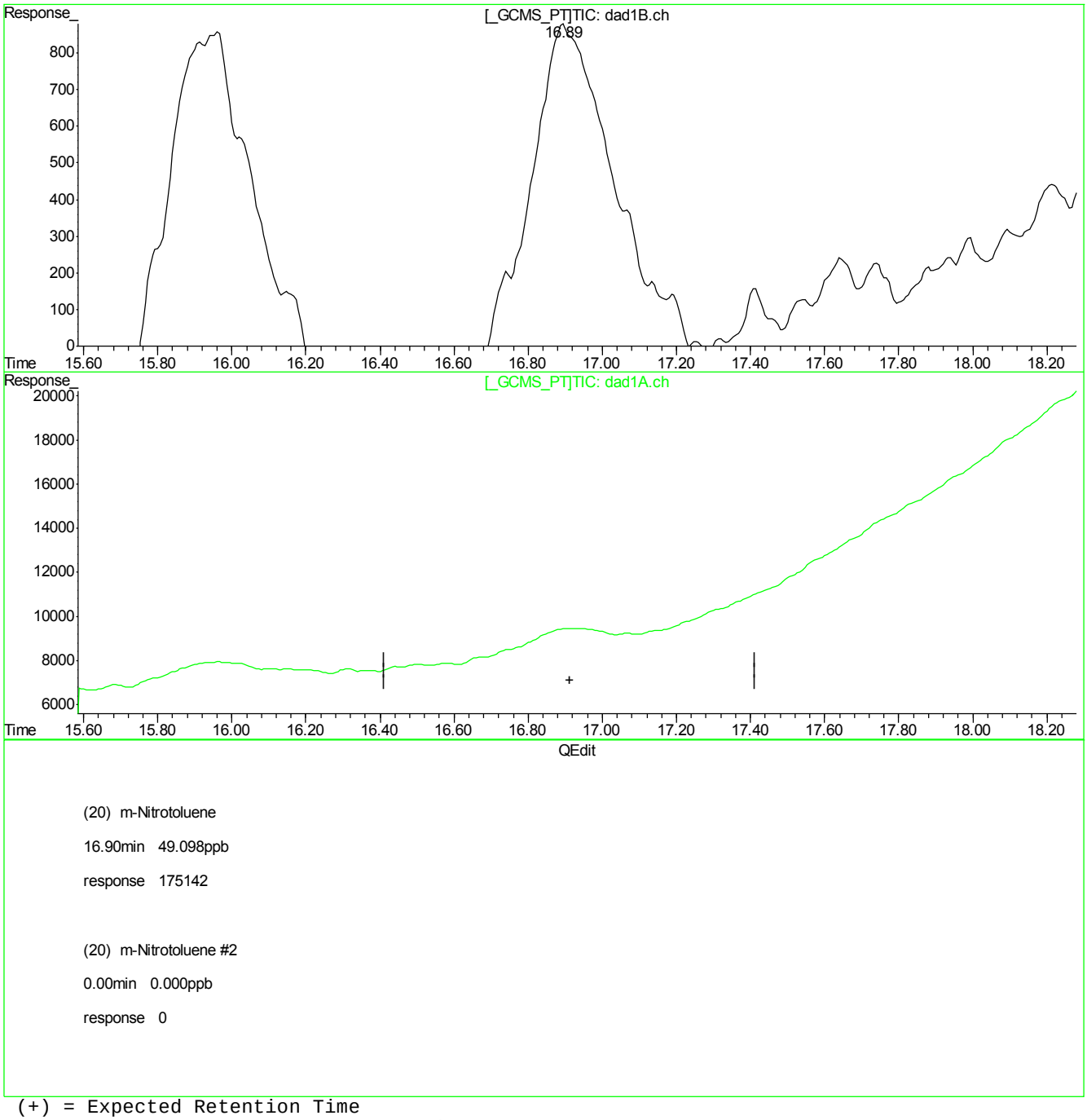
response 160210

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:05:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration

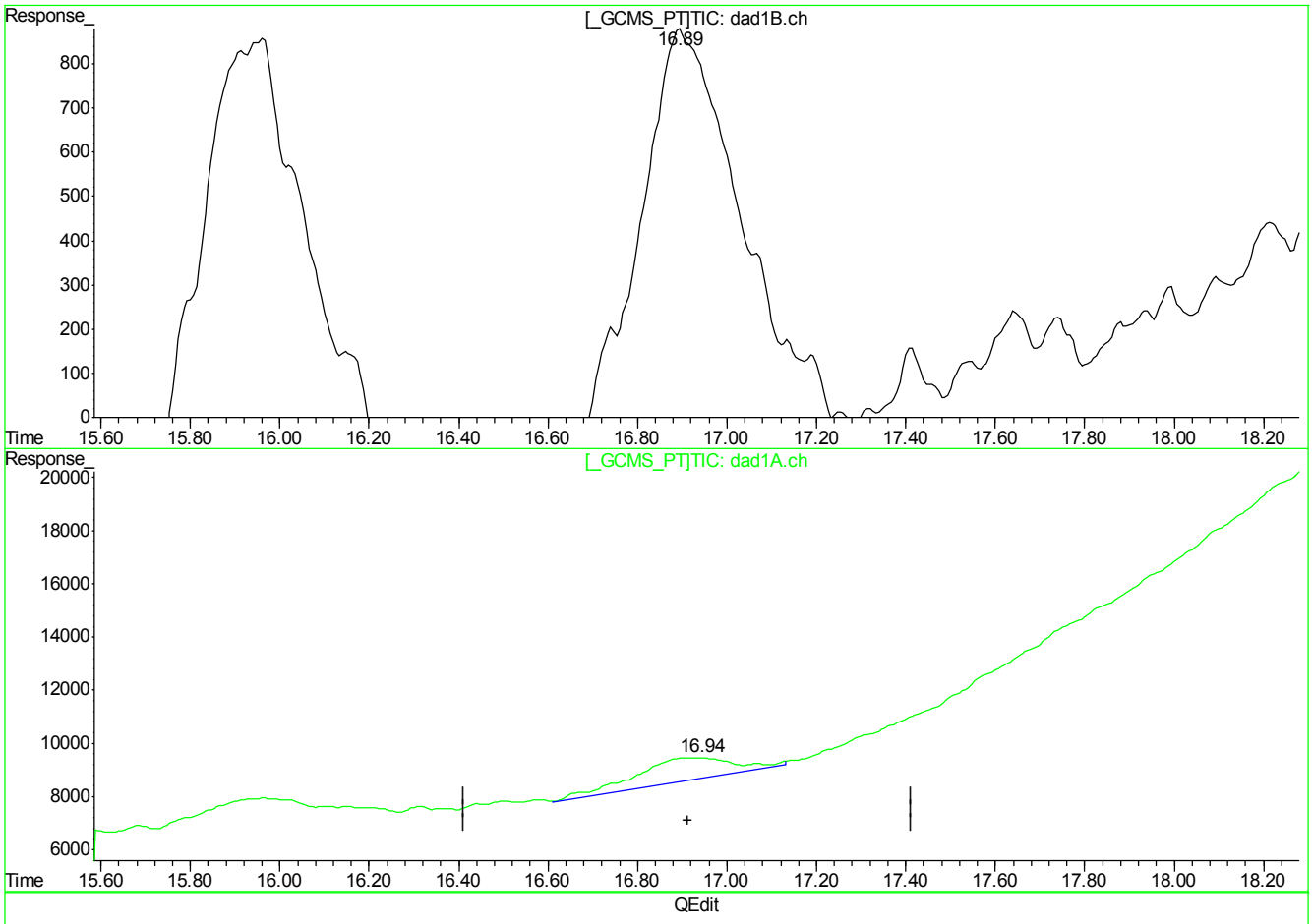


(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:05:14 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(20) m-Nitrotoluene

16.90min 49.098ppb

response 175142

(20) m-Nitrotoluene #2

16.94min 32.292ppb m

response 129940

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:05:18 2018

7.6.2.29

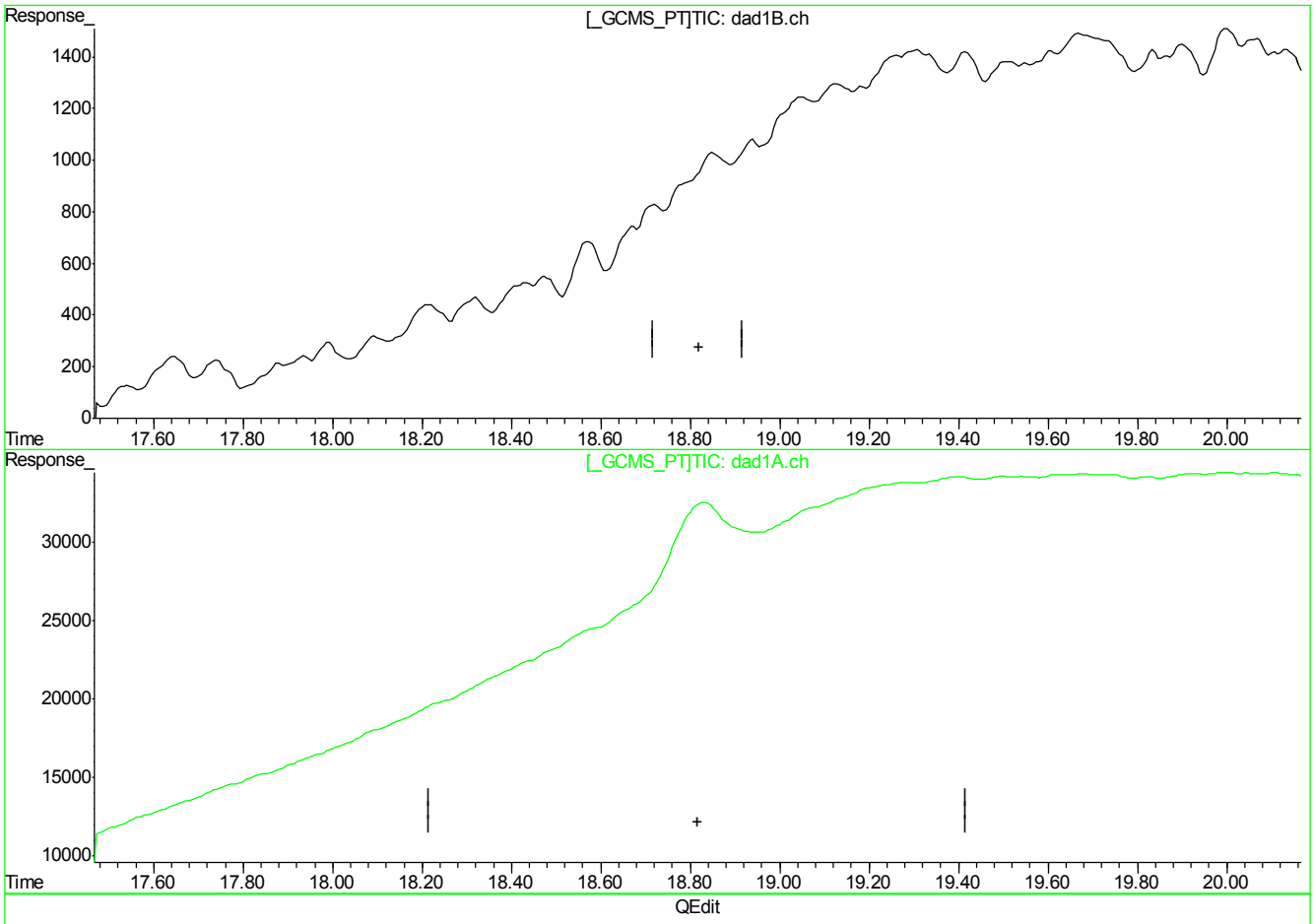
7

BB059760.D edits: m-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

0.00min 0.000ppb

response 0

(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:05:20 2018

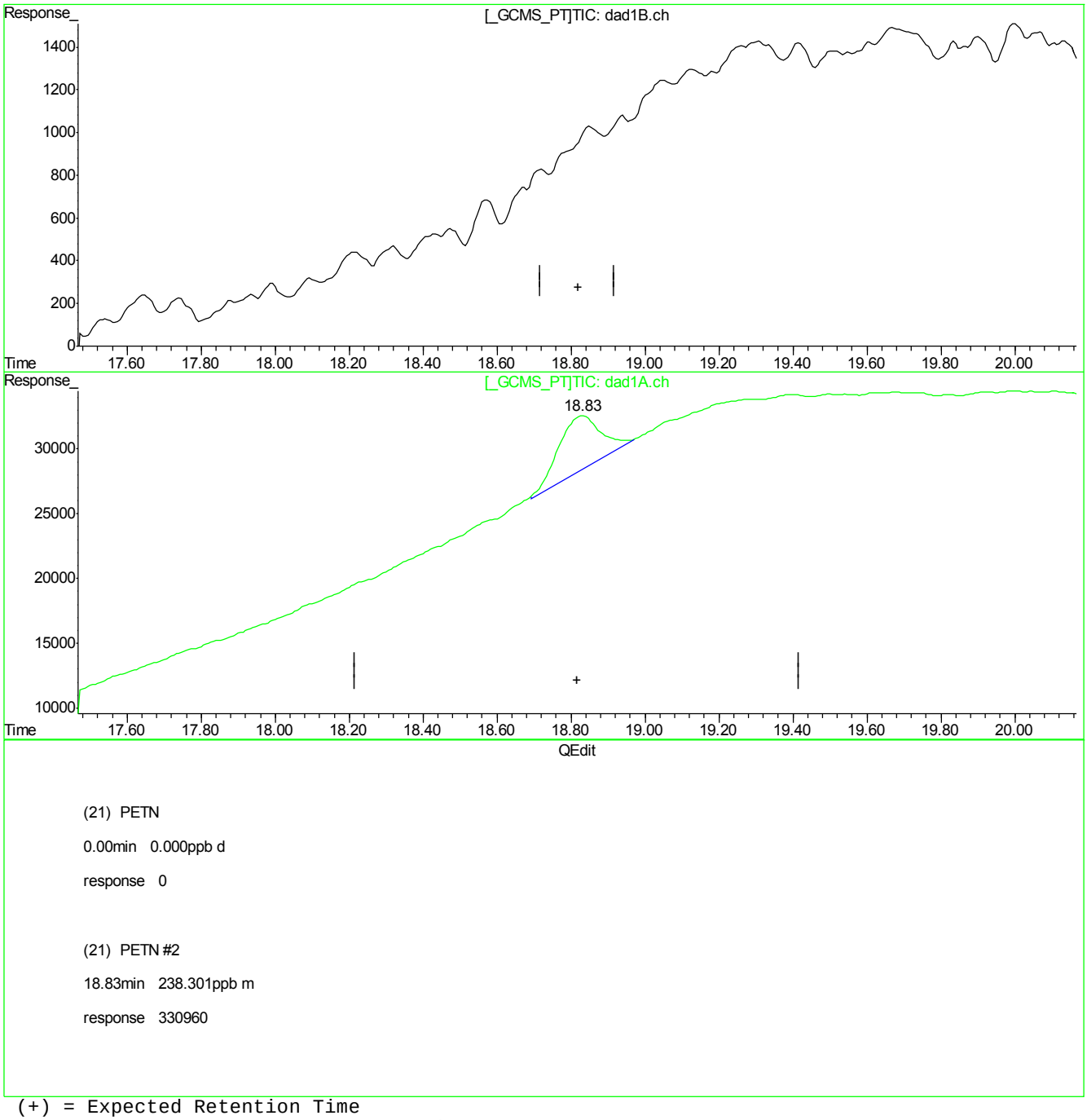
7.6.2.30

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1B.ch Vial: 82
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059760.D\dad1A.ch
Acq On : 16-May-2018, 09:44:20 Operator: evitam
Sample : ic1732-50 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:02:58 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059760.D 8330B_0516PLUS.M Wed May 16 13:05:24 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59:47 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.95	10.95	279657	396107	104.517	84.014
	Spiked Amount 500.000	Range 70 - 136		Recovery =		20.90%#	16.80%#
	Target Compounds						
1)	TNX	1.38	1.38	489682	766943	101.498	103.384
2)	HMX	1.50	1.50	177029	485989	94.663	95.465
3)	DNX	1.76	1.75	314275	542807	101.477	116.331m
4)	MNX	2.34	2.34	289943	447366	93.635	96.231
5)	RDX	2.94	2.94	205939	309851	96.306	93.216
6)	1,3,5-Trinitrobe	4.73	4.73	422519	816794	97.102	97.842
7)	1,3-Dinitrobenze	5.92	5.92	563630	390930	101.665	104.965m
8)	3,5-Dinitroanili	6.21	6.21	452904	799532	92.611	106.906
9)	Nitrobenzene	7.52	7.53	365206	319533	100.227	96.365
10)	Nitroglycerin	0.00	8.95	0	655327	N.D. d	511.403m
11)	Tetryl	9.20	9.20	303015	398847	102.769	76.793
12)	2,4,6-Trinitroto	9.75	9.75	372904	398621	88.363	87.943
13)	2-Amino-4,6-Dini	9.98	9.97	397167	576673	104.918	107.511
14)	4-Amino-2,6-Dini	10.45	10.46	285483	523506	109.497	101.027
16)	2,4-Dinitrotolue	11.67	11.68	539375	364890	102.523	123.556
17)	2,6-Dinitrotolue	12.10	12.11	295788	394311	85.580	115.477
18)	o-Nitrotoluene	15.36	15.35	258657	314916	103.552	96.136m
19)	p-Nitrotoluene	15.94	15.95	404442	297914	102.467	94.650
20)	m-Nitrotoluene	16.92	16.94	358155	285771	100.402	71.019m
21)	PETN	0.00	18.83	0	623895	N.D. d	449.223m

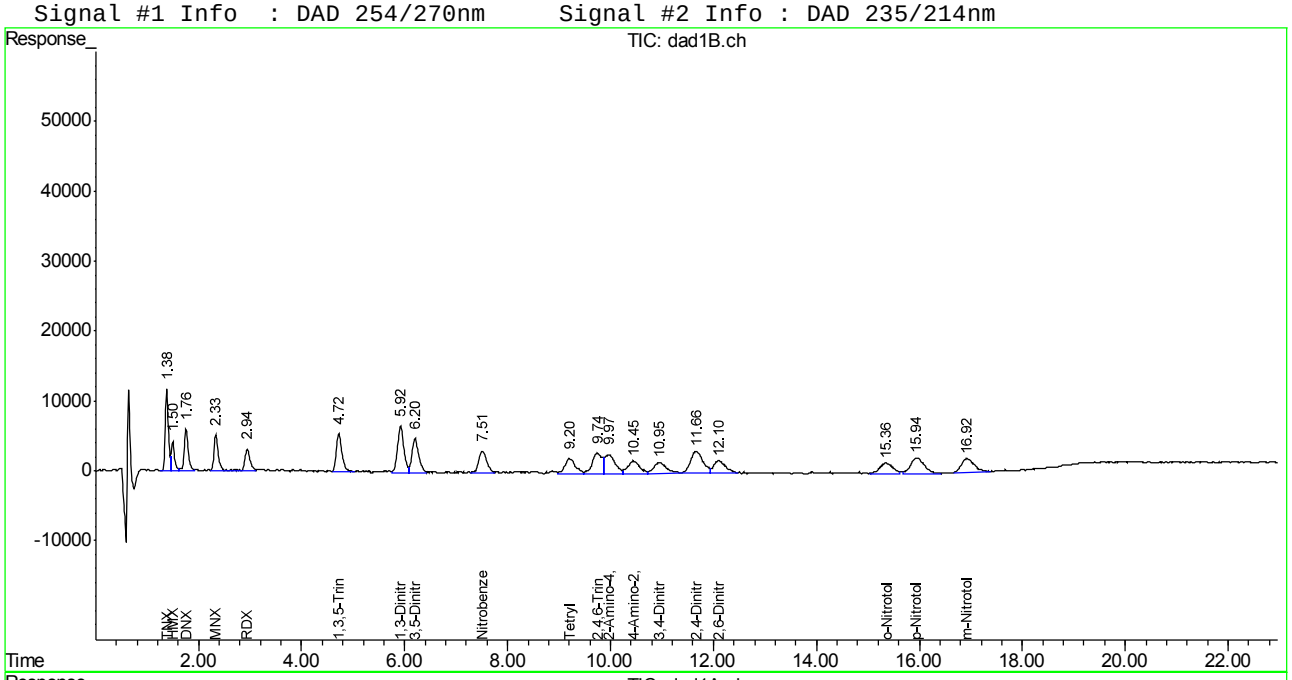
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059761.D 8330B_0516PLUS.M Thu May 17 08:38:06 2018 Page 1

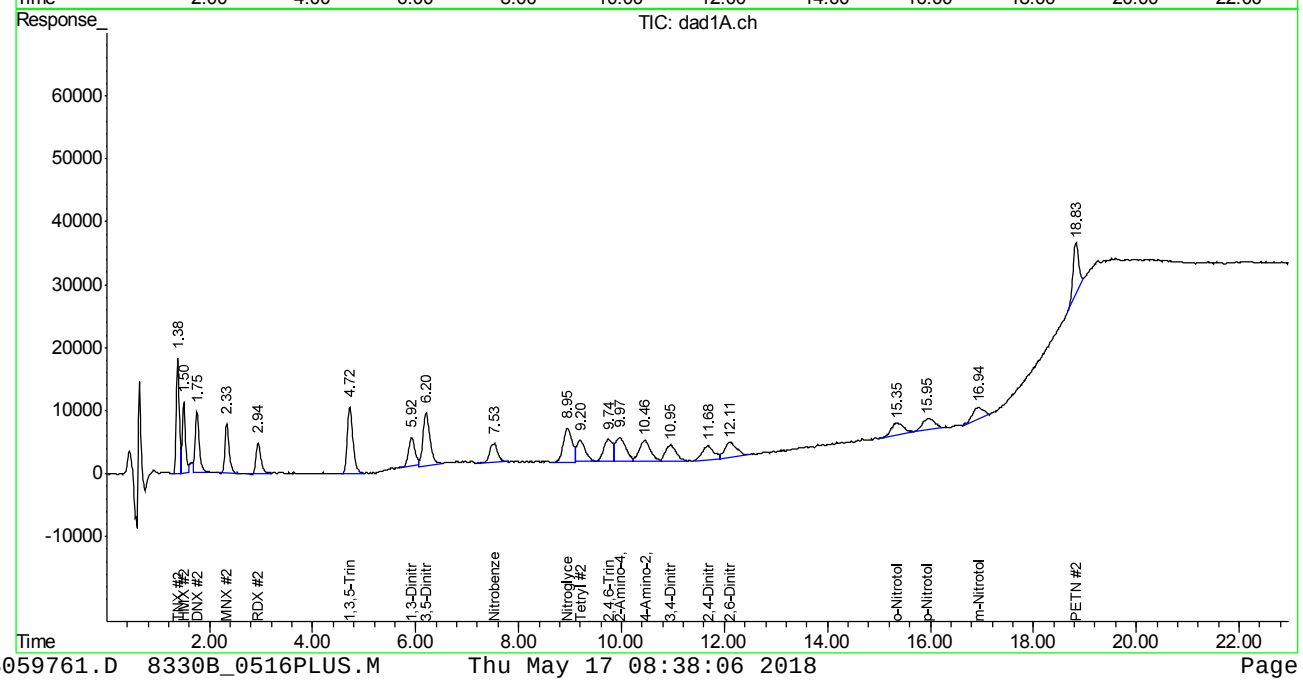
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:06 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

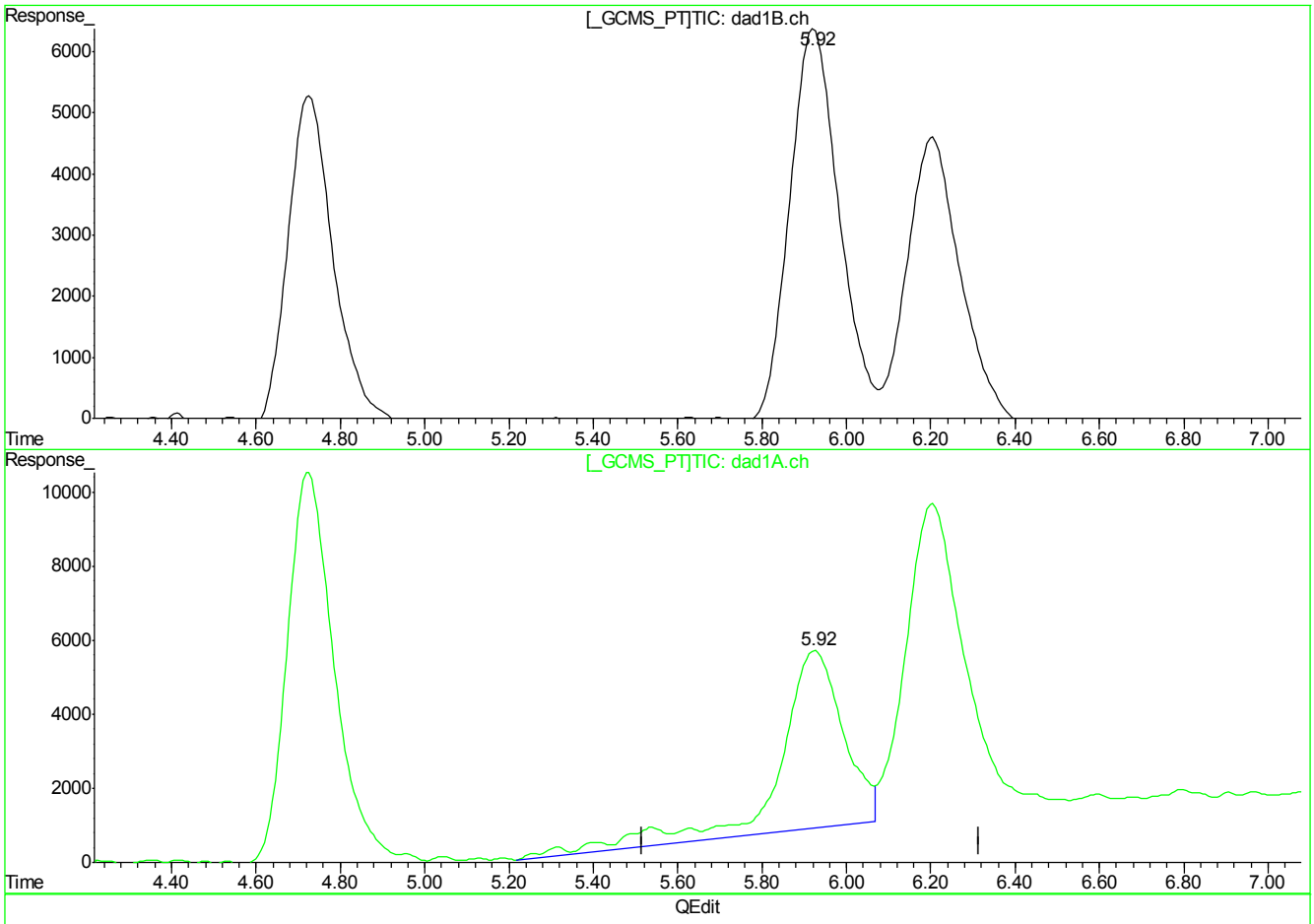
Sample Number:	GBB1732-IC1732	**Method:**	SW846 8330B
Lab FileID:	BB059761.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 10:14	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
DNX		2	1.75	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.92	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.95	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	15.35	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	16.94	Poorly defined baseline
PETN	78-11-5	2	18.83	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.92min 101.665ppb

response 563630

(7) 1,3-Dinitrobenzene #2

5.93min 138.609ppb

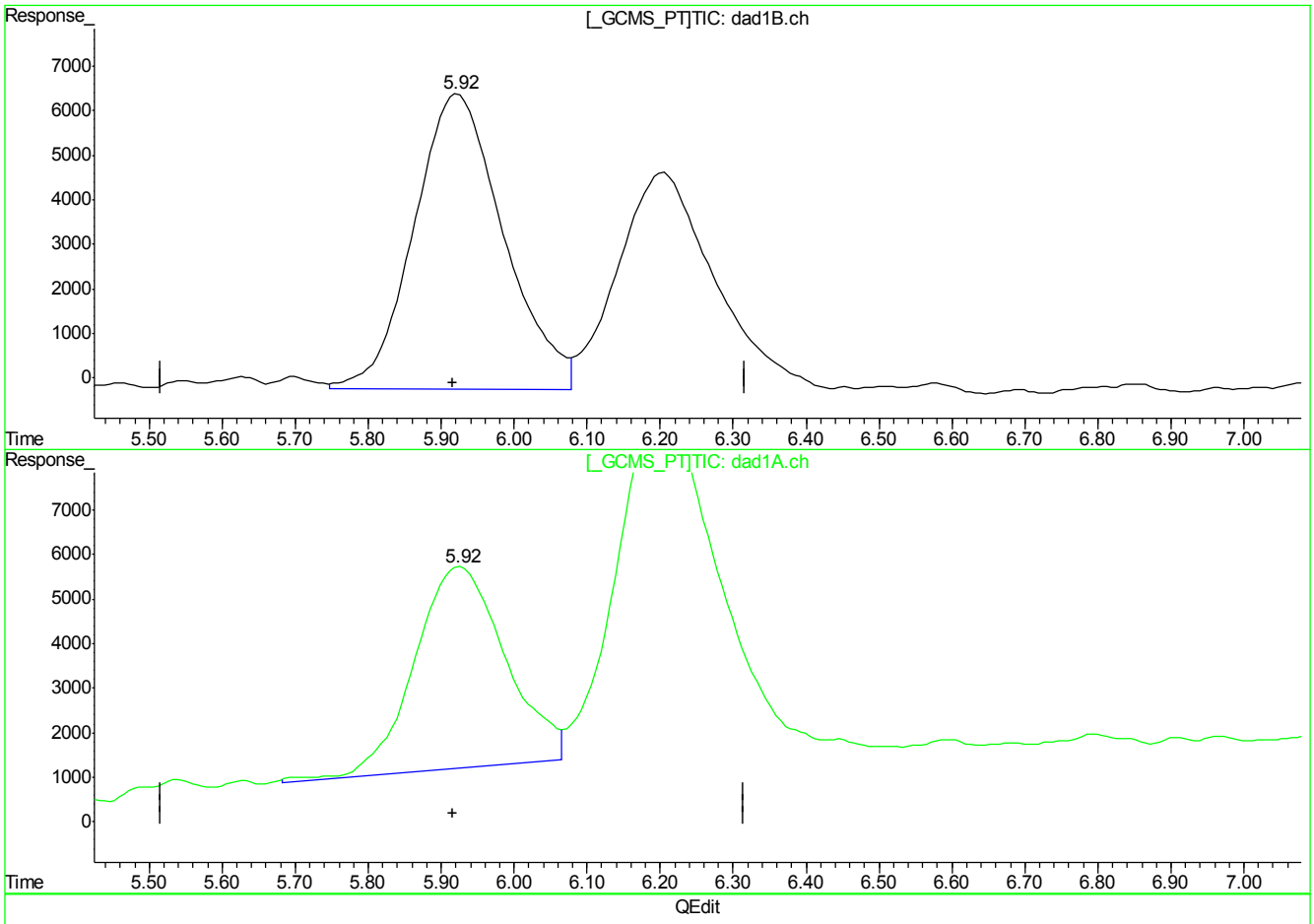
response 516231

(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:05:50 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

5.92min 101.665ppb

response 563630

(7) 1,3-Dinitrobenzene #2

5.92min 104.965ppb m

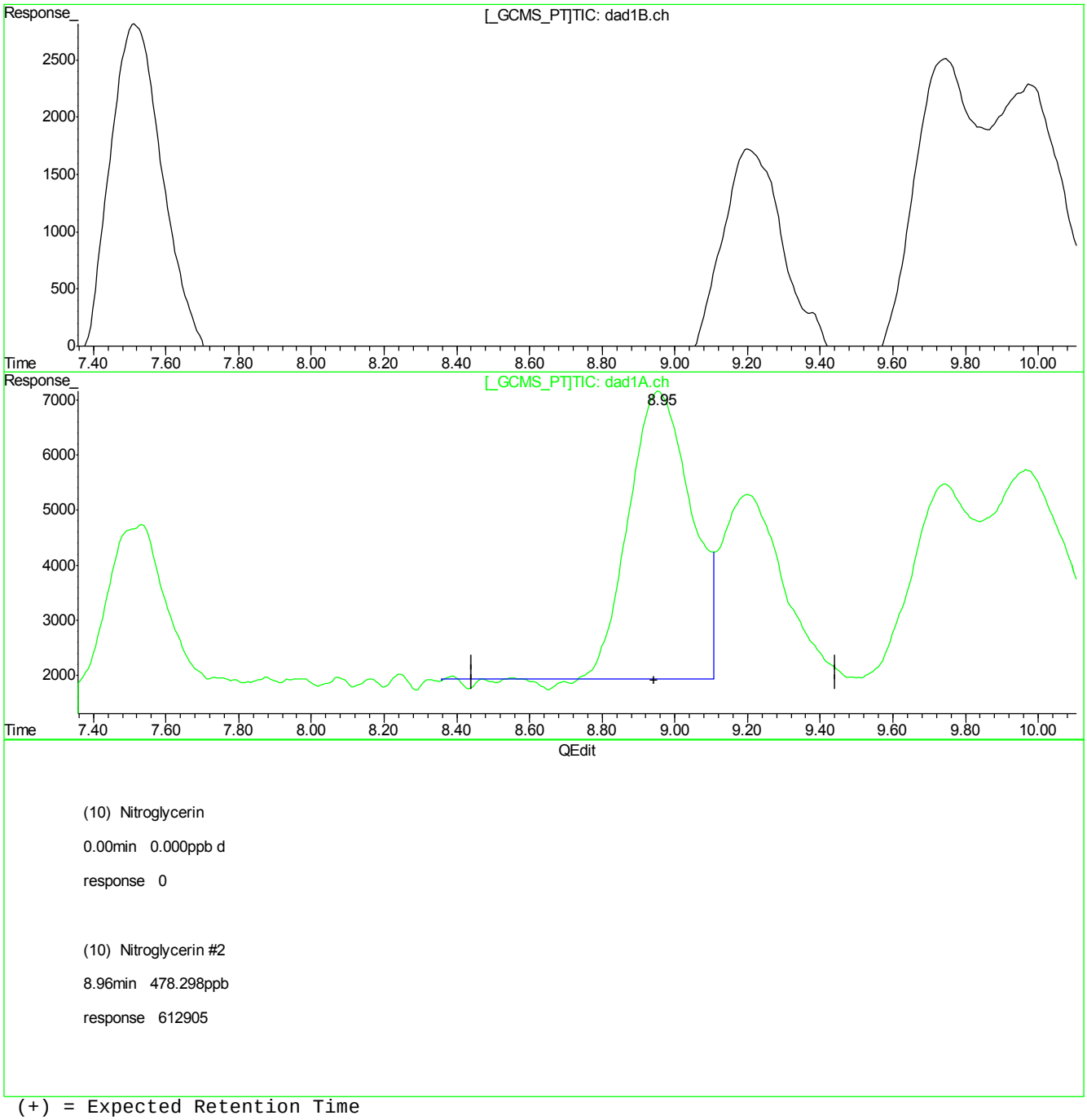
response 390930

(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:05:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration

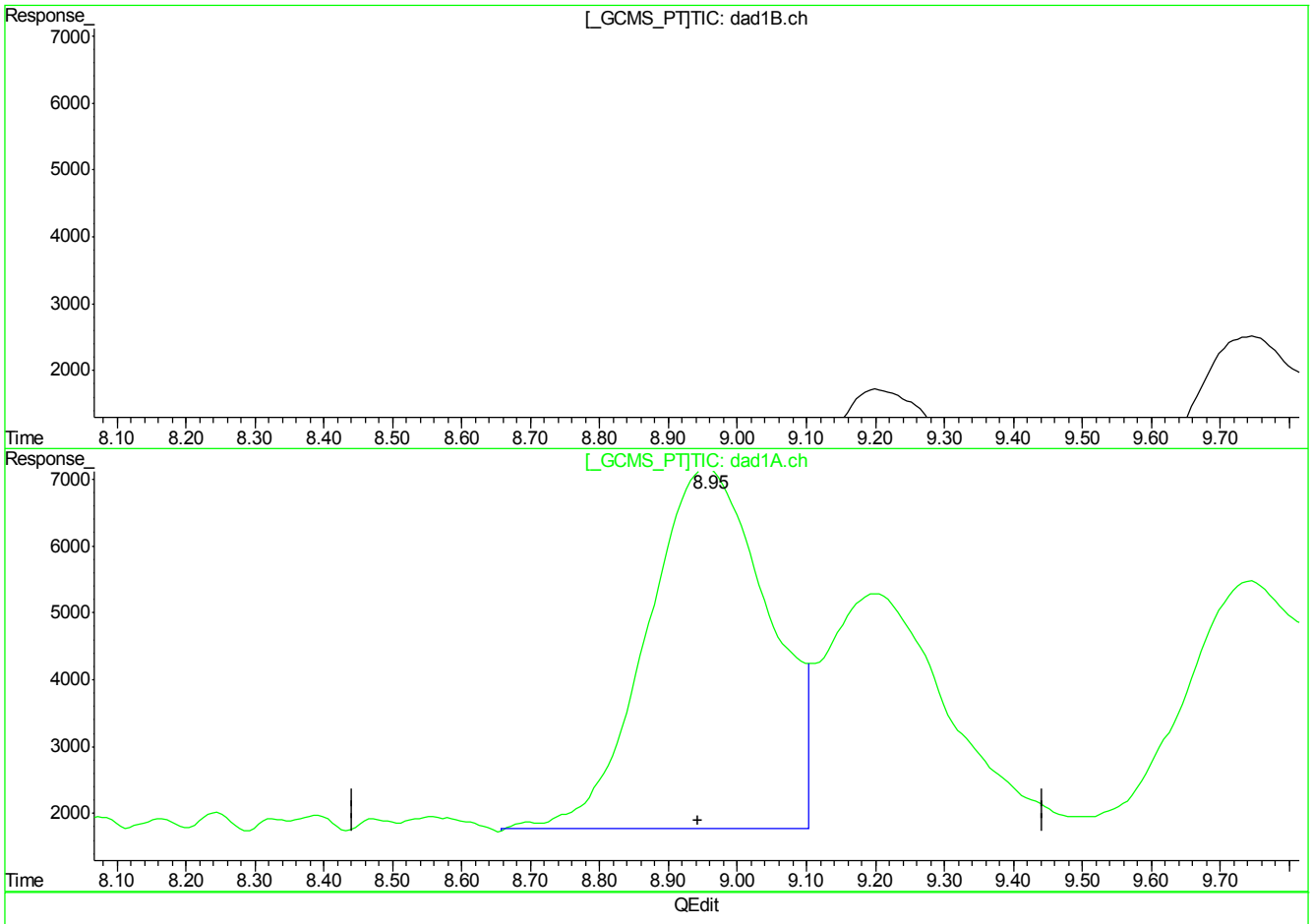


(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:06:02 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

8.95min 511.403ppb m

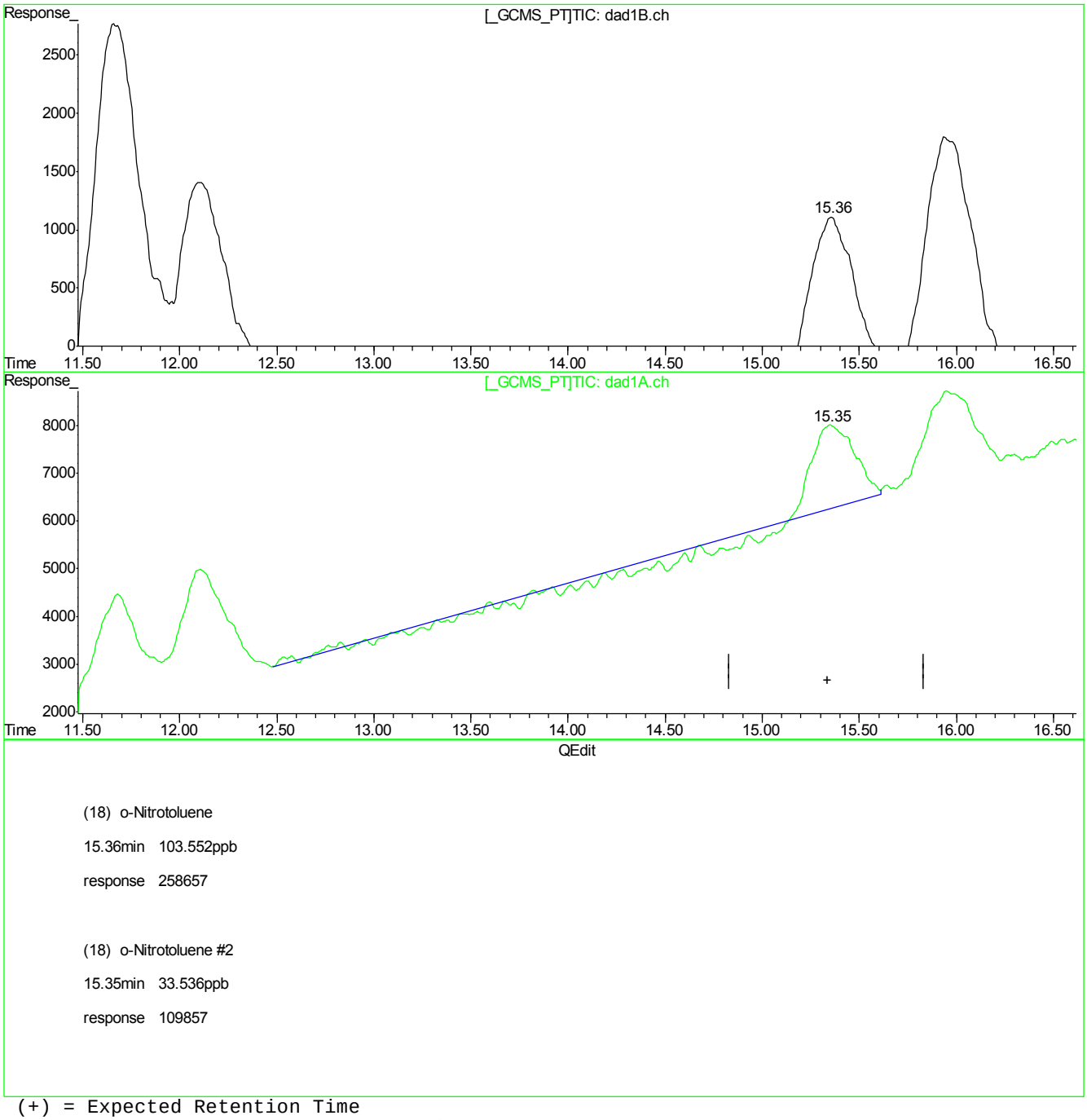
response 655327

(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:06:09 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.36min 103.552ppb

response 258657

(18) o-Nitrotoluene #2

15.35min 33.536ppb

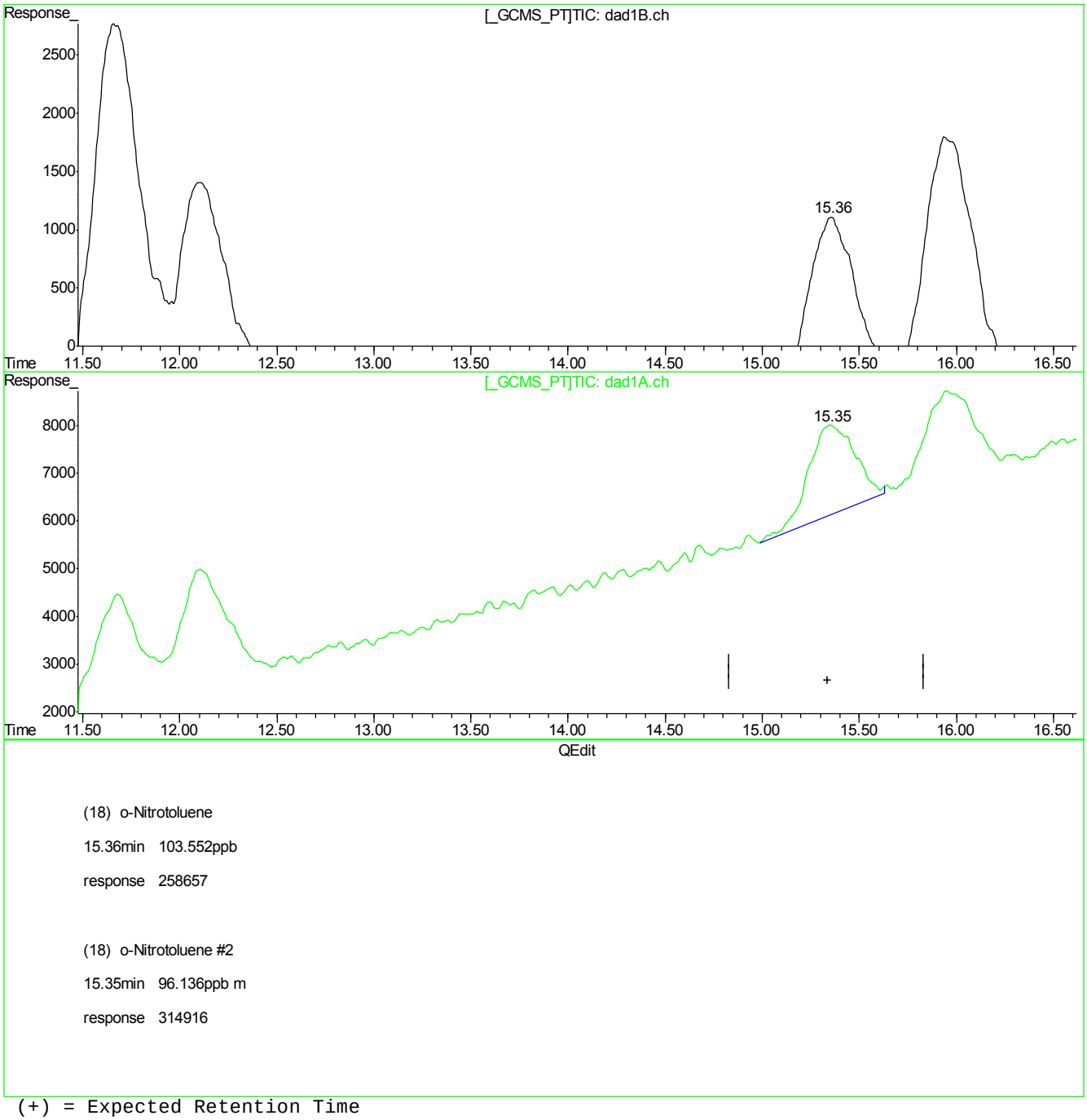
response 109857

(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:06:16 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.36min 103.552ppb

response 258657

(18) o-Nitrotoluene #2

15.35min 96.136ppb m

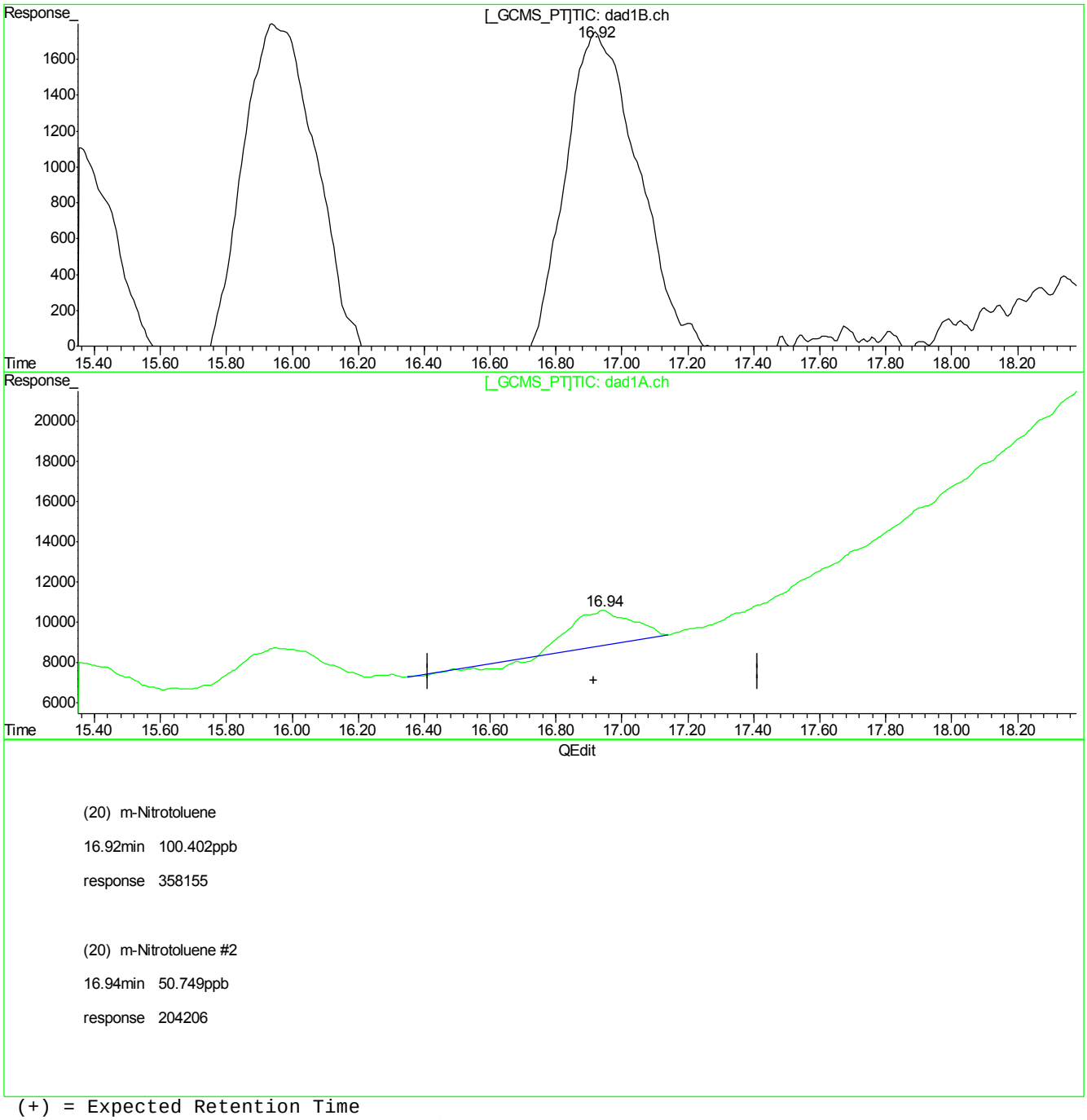
response 314916

(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:06:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration

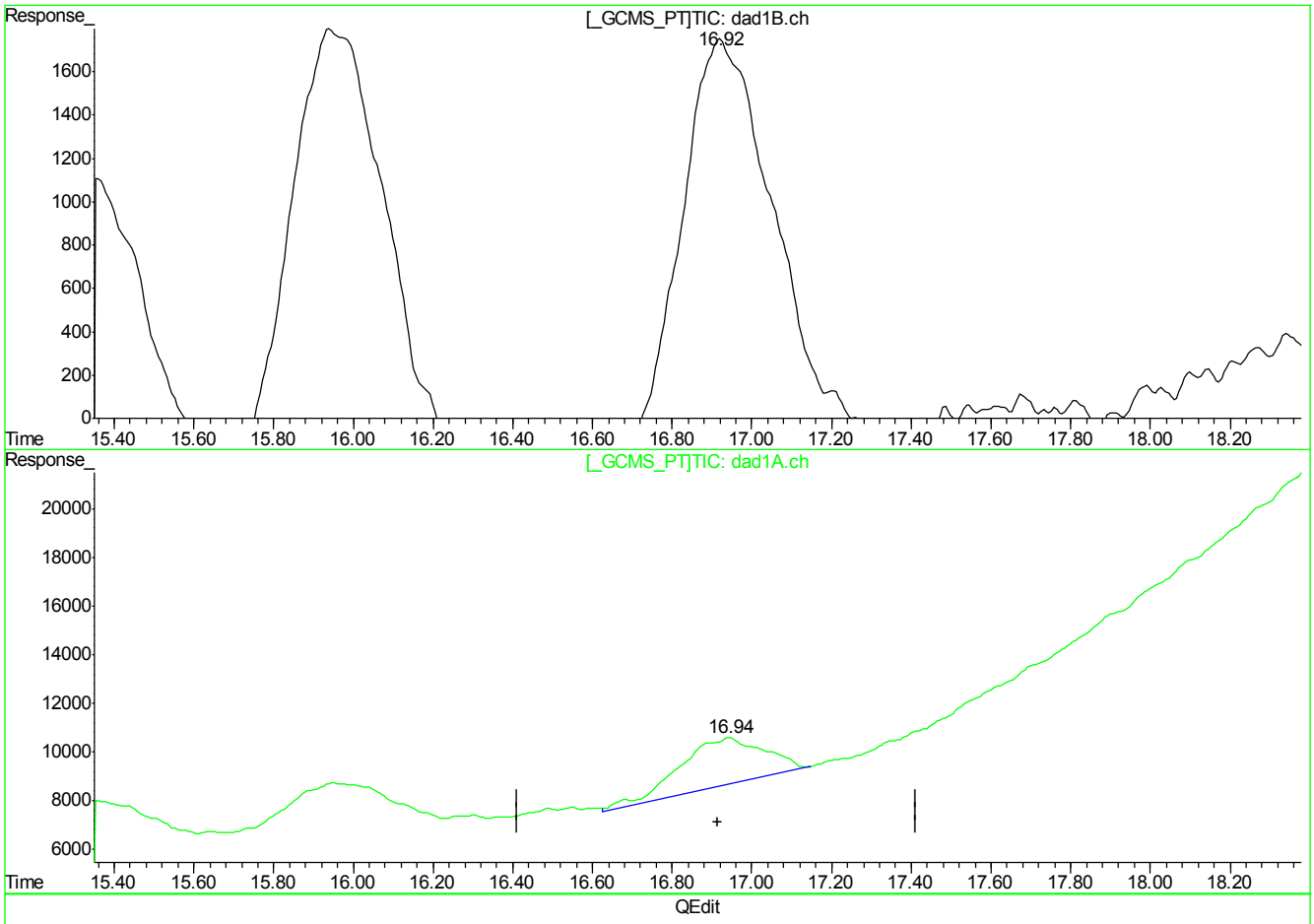


(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:06:22 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration



(20) m-Nitrotoluene

16.92min 100.402ppb

response 358155

(20) m-Nitrotoluene #2

16.94min 71.019ppb m

response 285771

(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:06:25 2018

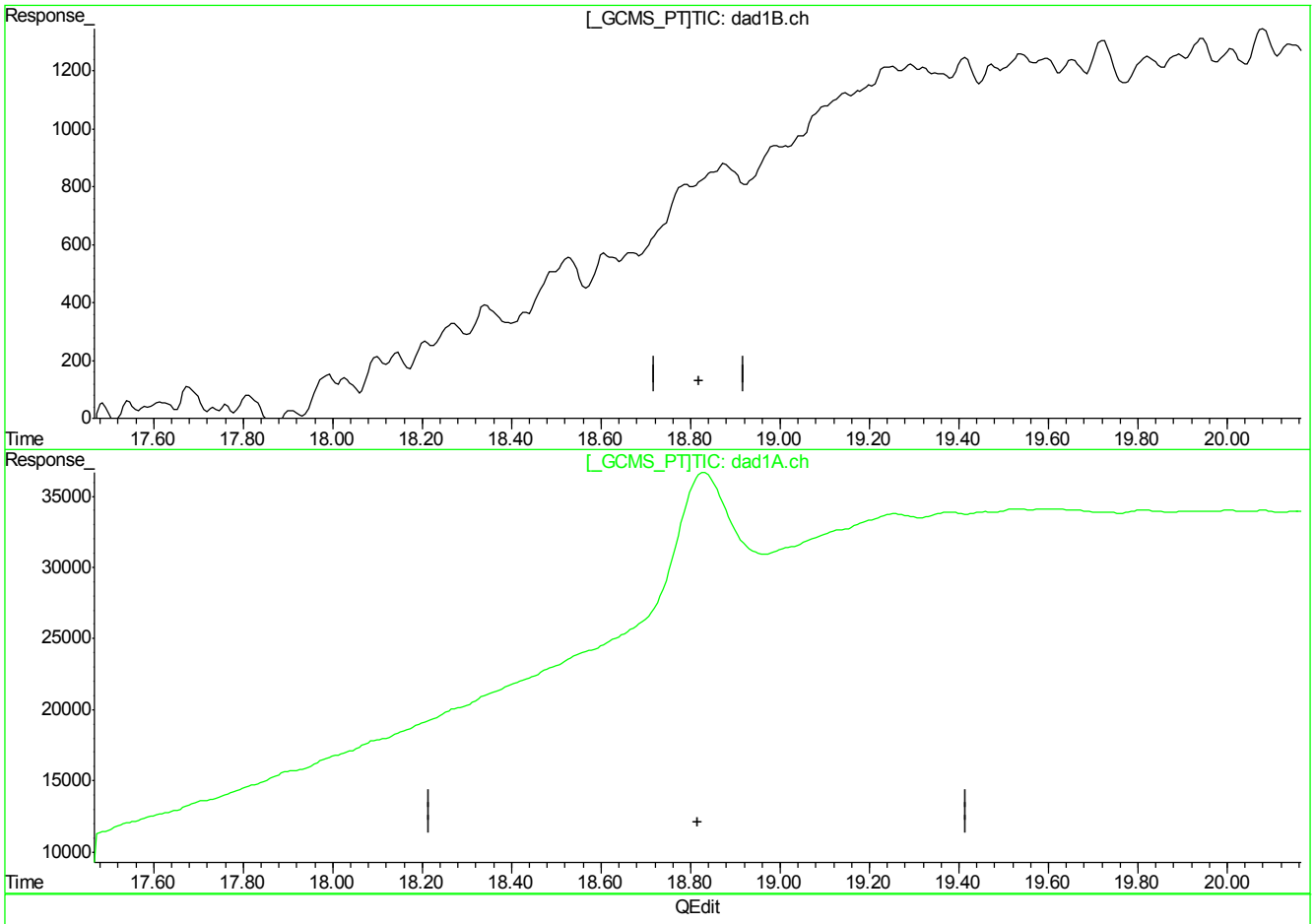
7.6.3.9

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

0.00min 0.000ppb

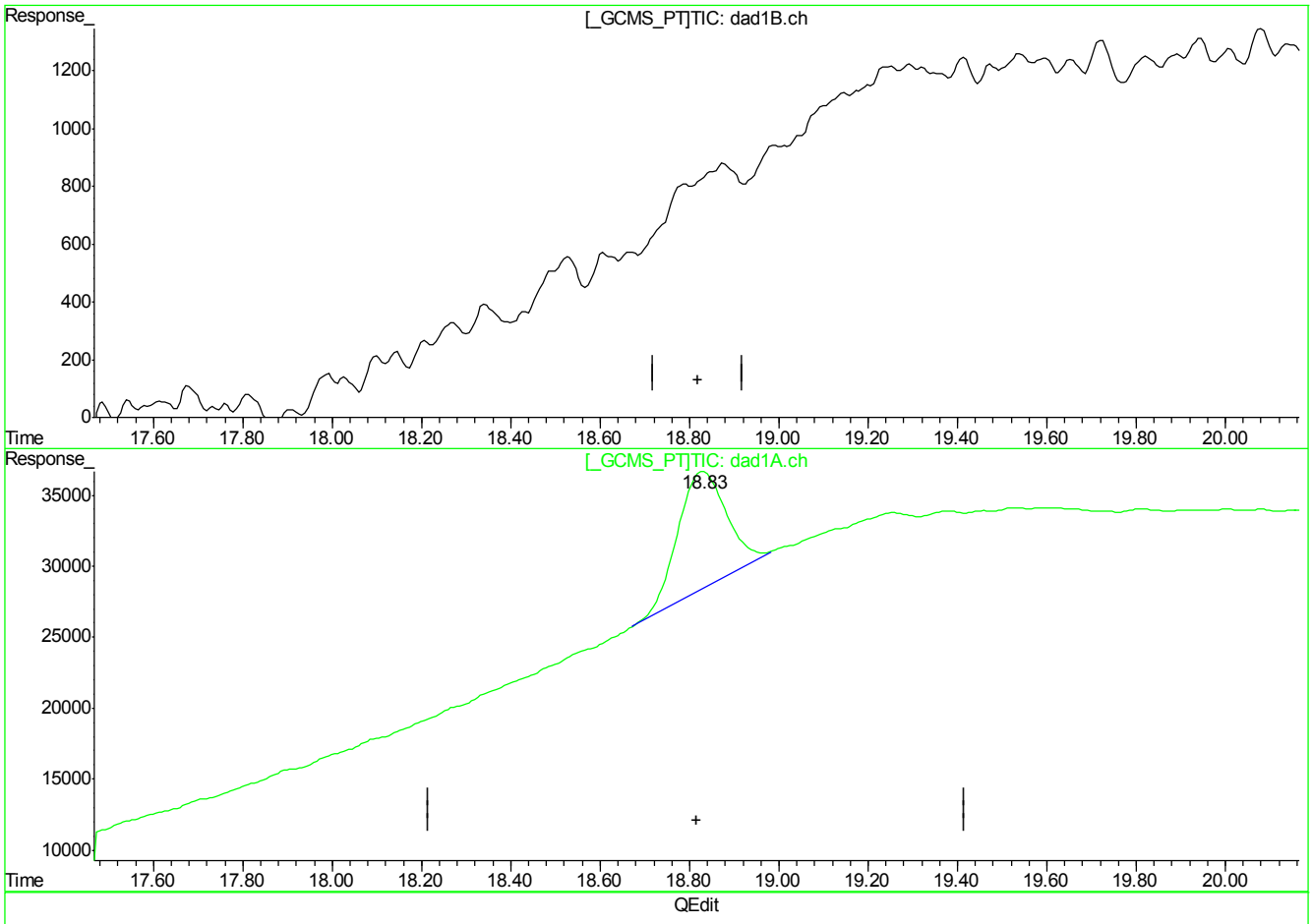
response 0

(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:06:29 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1B.ch Vial: 83
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059761.D\dad1A.ch
Acq On : 16-May-2018, 10:14:15 Operator: evitam
Sample : ic1732-100 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:05:29 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.83min 449.223ppb m

response 623895

(+) = Expected Retention Time
BB059761.D 8330B_0516PLUS.M Wed May 16 13:06:31 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1B.ch Vial: 84
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1A.ch
Acq On : 16-May-2018, 10:44:13 Operator: evitam
Sample : ic1732-200 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59:48 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.93	10.93	513189	878188	191.796	186.264
	Spiked Amount 500.000	Range 70 - 136		Recovery =		38.36%#	37.25%#
	Target Compounds						
1)	TNX	1.39	1.39	1023141	1568079	212.069	211.376
2)	HMX	1.50	1.50	391109	1017221	209.137	199.937
3)	DNX	1.76	1.76	597696	994471	192.991	212.834
4)	MNX	2.34	2.34	611100	933199	197.350	200.737
5)	RDX	2.94	2.94	395492	629444	184.949	189.364
6)	1,3,5-Trinitrobe	4.72	4.72	843872	1647778	193.936	197.384
7)	1,3-Dinitrobenze	5.92	5.92	1137553	837800	205.187	224.950
8)	3,5-Dinitroanili	6.20	6.20	916856	1552158	187.482	207.541
9)	Nitrobenzene	7.51	7.51	727293	670169	199.597	202.111
10)	Nitroglycerin	0.00	8.95	0	1195656	N.D. d	933.065
11)	Tetryl	9.19	9.18	600362	890350	203.724	171.427
12)	2,4,6-Trinitroto	9.73	9.74	730690	827109	173.143	182.474
13)	2-Amino-4,6-Dini	9.95	9.95	802885	1184315	212.096	220.796
14)	4-Amino-2,6-Dini	10.43	10.44	543249	1061359	208.051	204.822
16)	2,4-Dinitrotolue	11.66	11.66	1031249	670595	196.017	227.072
17)	2,6-Dinitrotolue	12.09	12.10	571959	747840	165.485	219.010
18)	o-Nitrotoluene	15.34	15.34	489522	713084	195.978	217.686m
19)	p-Nitrotoluene	15.95	15.95	739761	691112	187.422	219.509
20)	m-Nitrotoluene	16.92	16.92	666738	642262	186.908	159.613
21)	PETN	0.00	18.82	0	1377732	N.D. d	992.008m

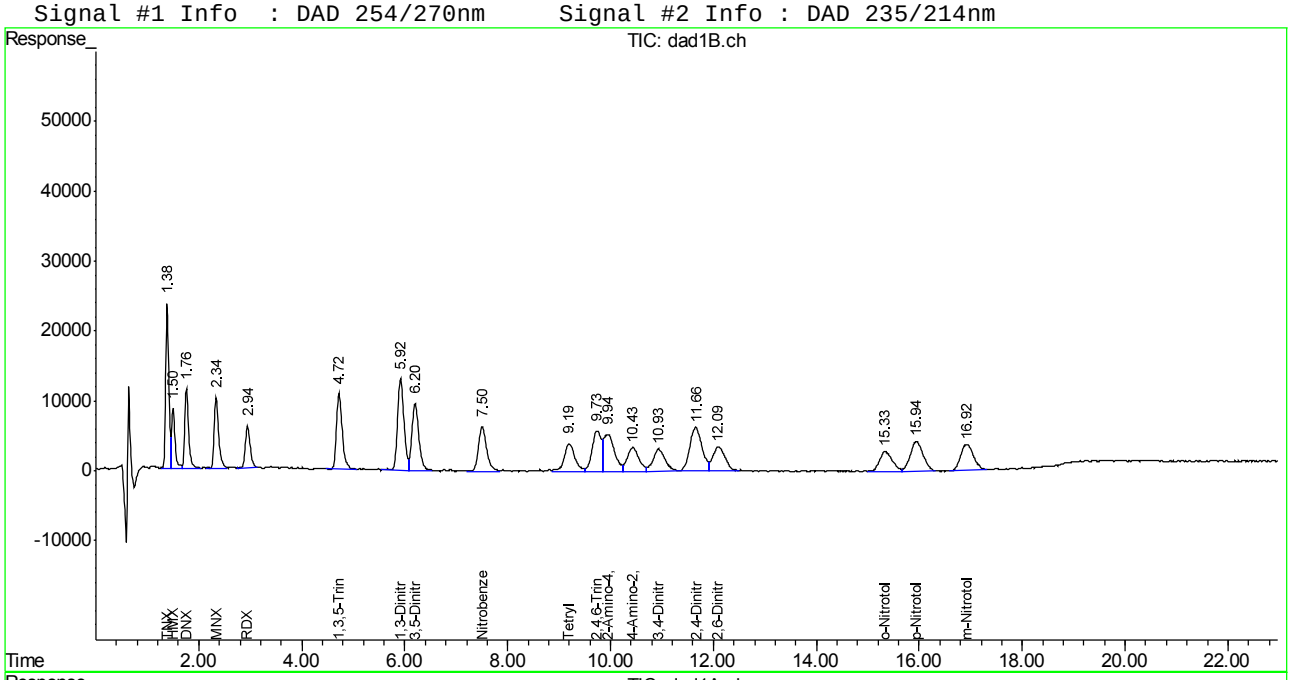
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059762.D 8330B_0516PLUS.M Thu May 17 08:38:07 2018 Page 1

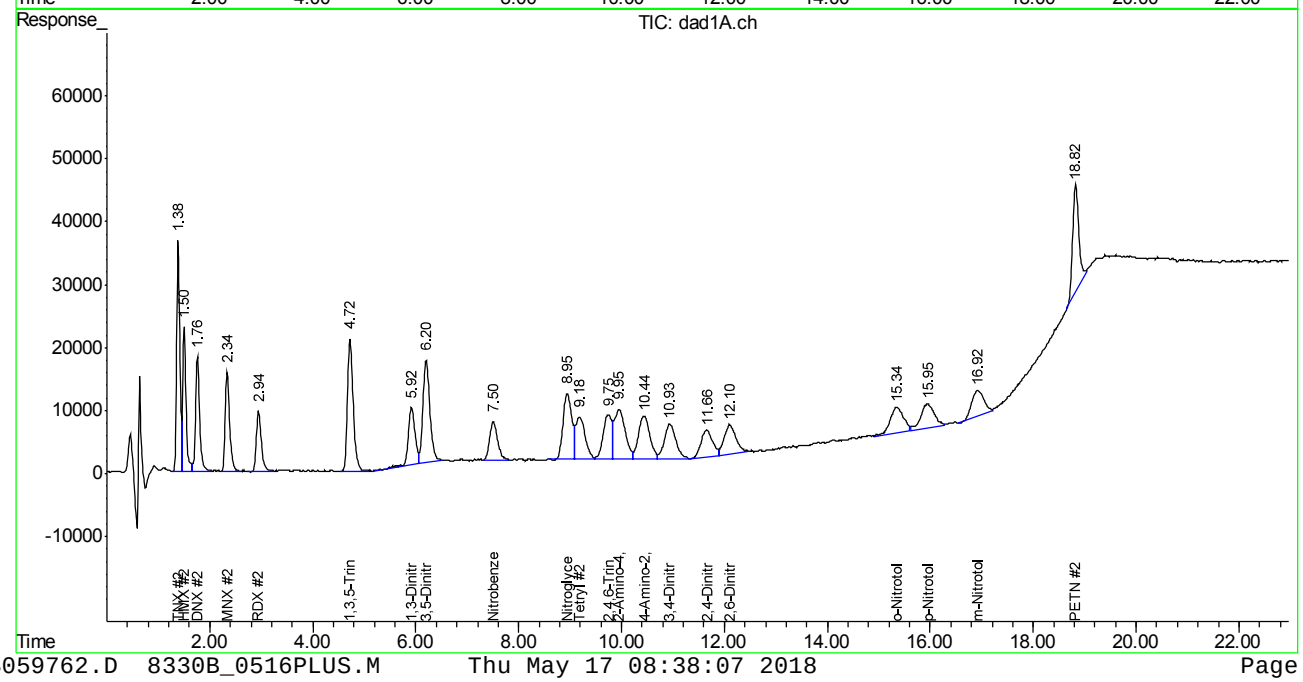
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1B.ch Vial: 84
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1A.ch
Acq On : 16-May-2018, 10:44:13 Operator: evitam
Sample : ic1732-200 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:07 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

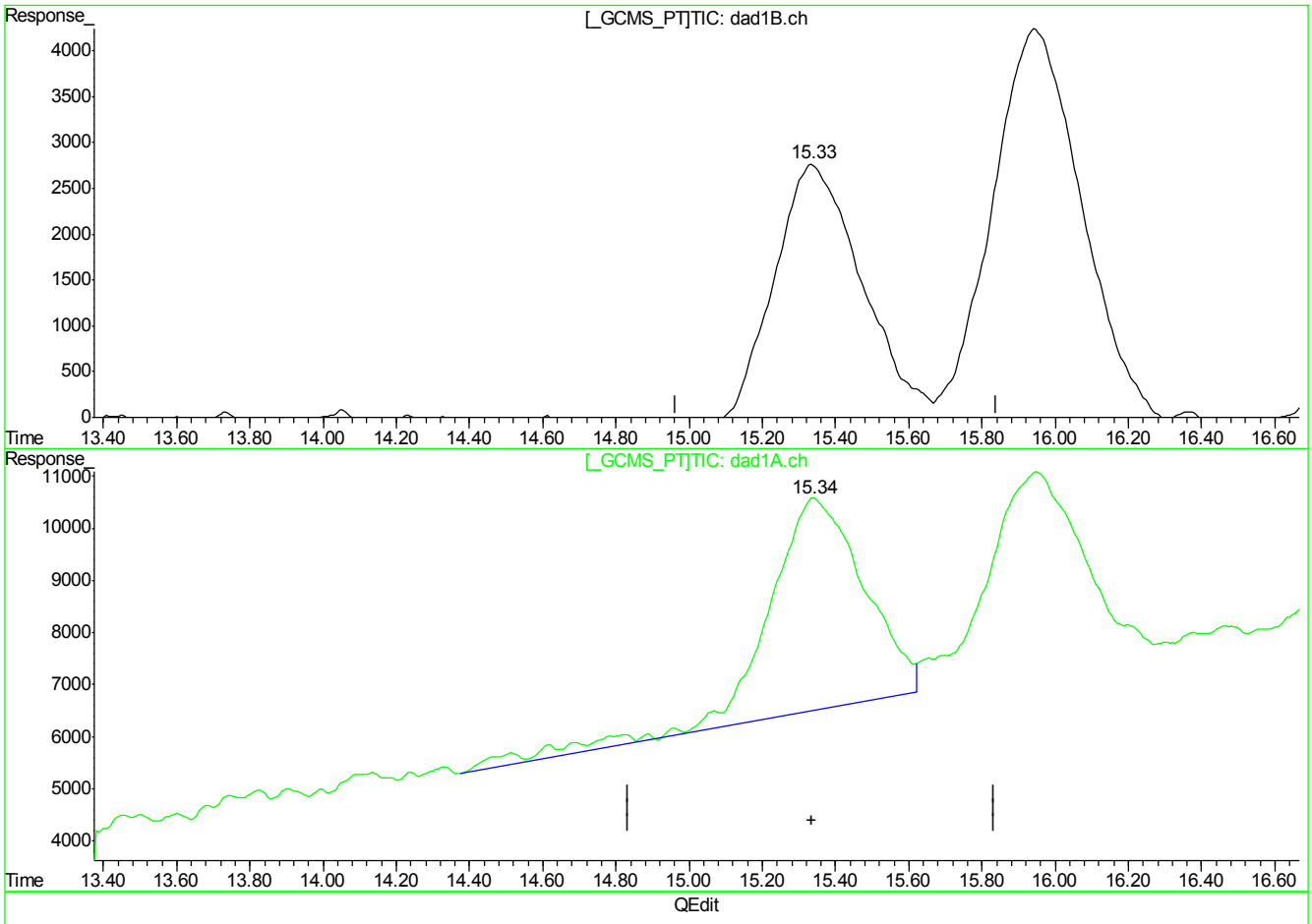
Sample Number:	GBB1732-IC1732	**Method:**	SW846 8330B
Lab FileID:	BB059762.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 10:44	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	15.34	Poorly defined baseline
PETN	78-11-5	2	18.82	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1B.ch Vial: 84
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1A.ch
Acq On : 16-May-2018, 10:44:13 Operator: evitam
Sample : ic1732-200 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:06:37 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.34min 195.978ppb

response 489522

(18) o-Nitrotoluene #2

15.34min 230.667ppb

response 755608

(+) = Expected Retention Time
BB059762.D 8330B_0516PLUS.M Wed May 16 13:06:52 2018

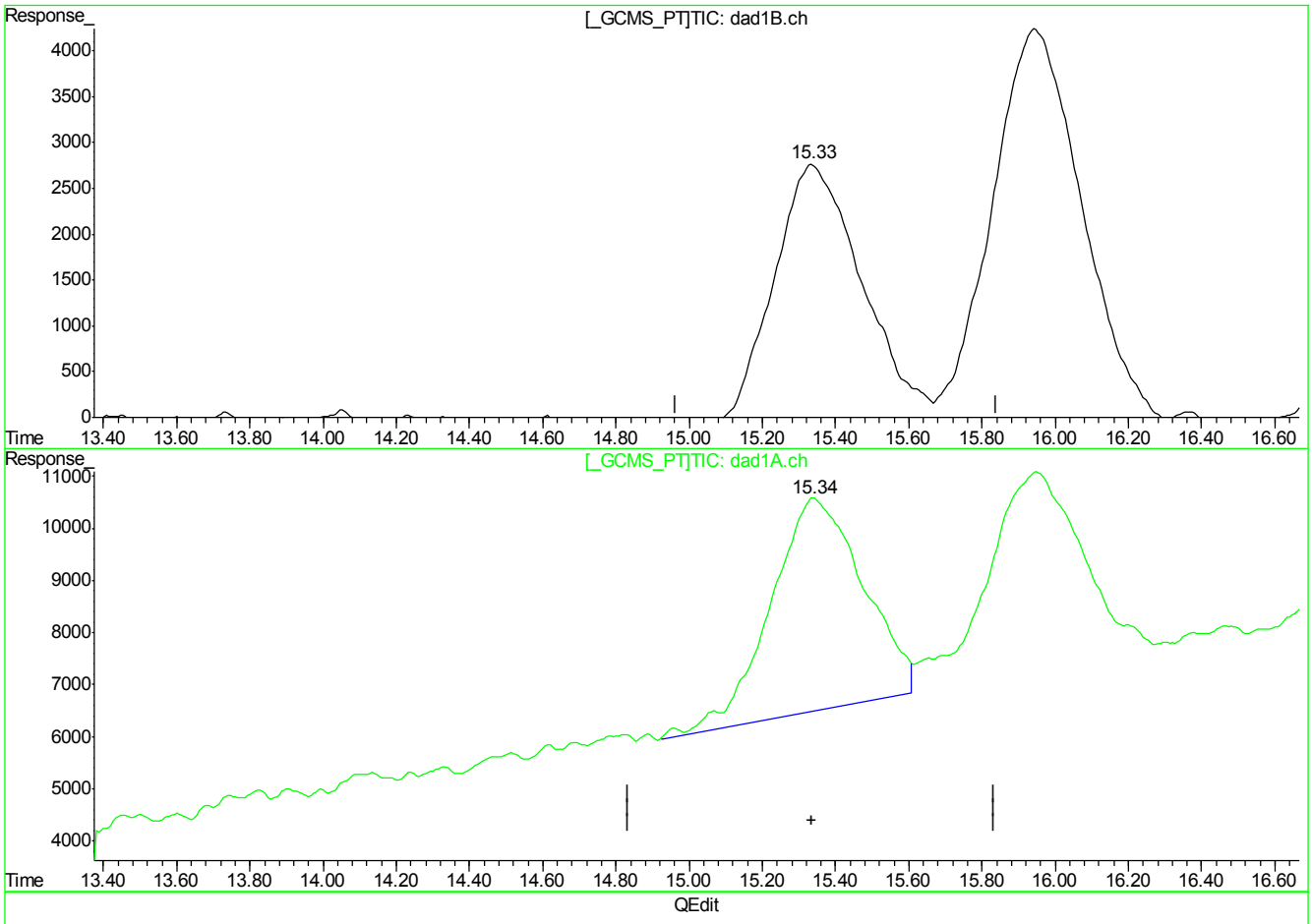
7.6.4.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1B.ch Vial: 84
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1A.ch
Acq On : 16-May-2018, 10:44:13 Operator: evitam
Sample : ic1732-200 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:06:37 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.34min 195.978ppb

response 489522

(18) o-Nitrotoluene #2

15.34min 217.686ppb m

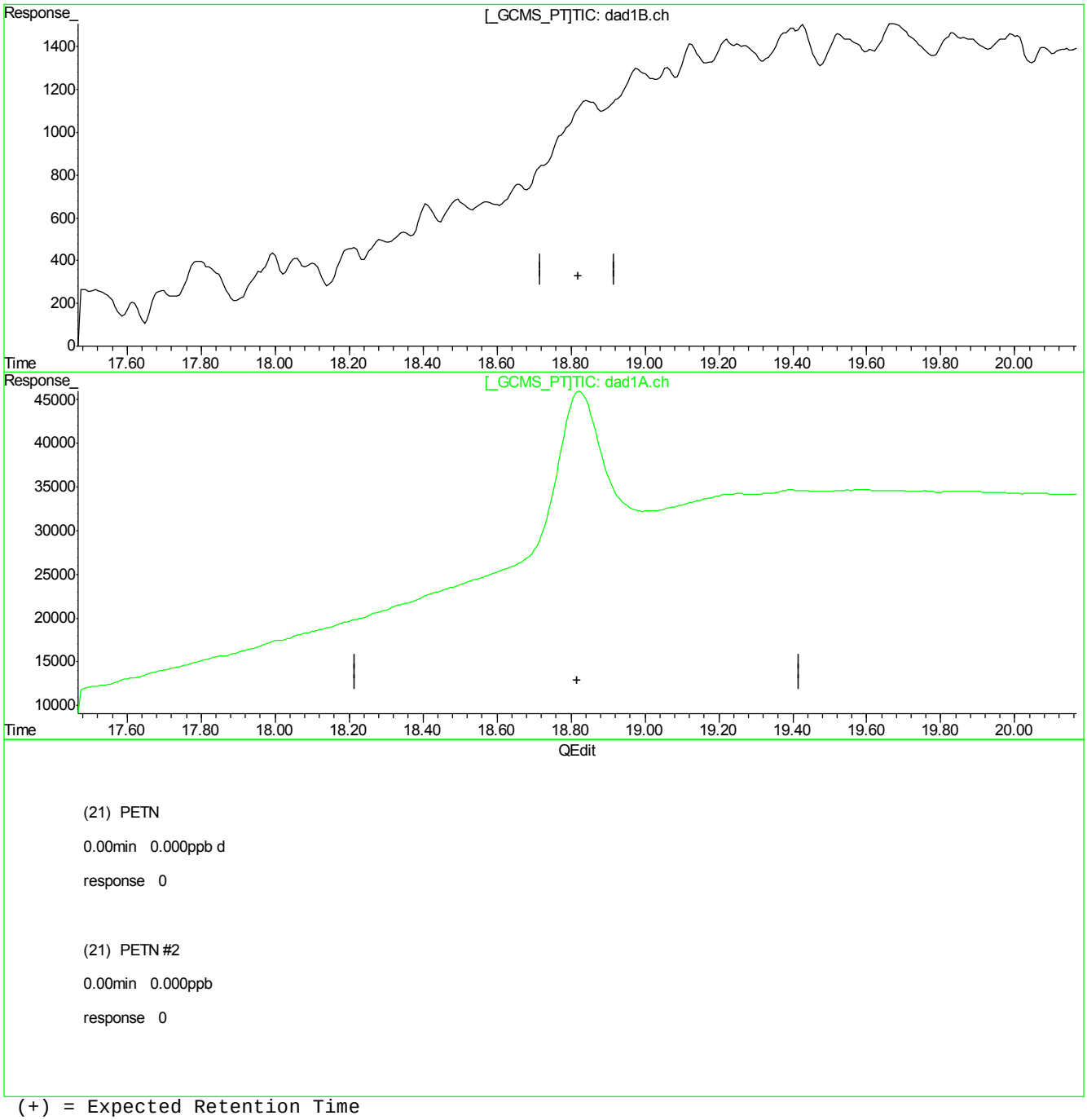
response 713084

(+) = Expected Retention Time
BB059762.D 8330B_0516PLUS.M Wed May 16 13:06:55 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1B.ch Vial: 84
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1A.ch
Acq On : 16-May-2018, 10:44:13 Operator: evitam
Sample : ic1732-200 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:06:37 2018
Response via : Multiple Level Calibration

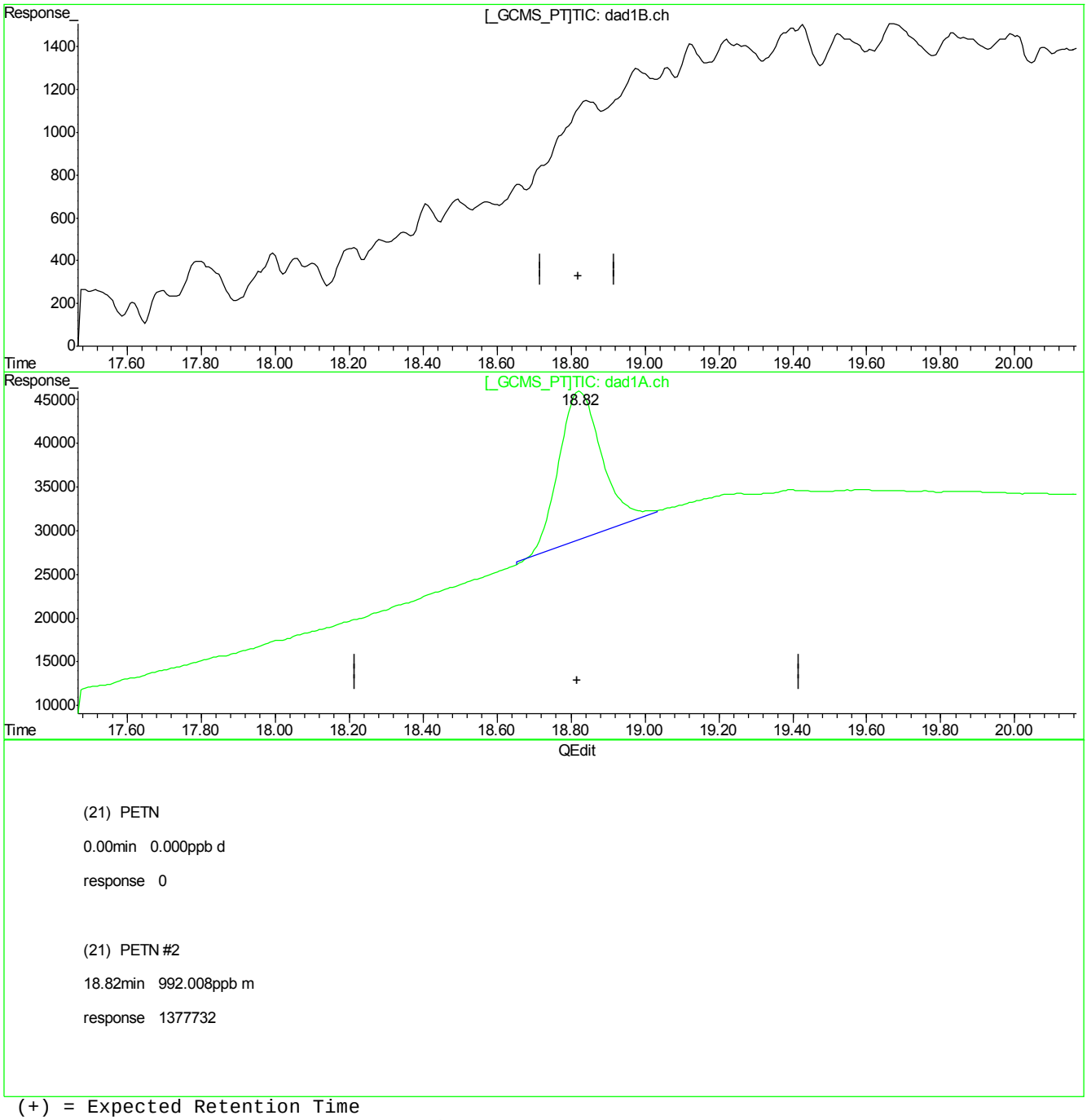


(+) = Expected Retention Time
BB059762.D 8330B_0516PLUS.M Wed May 16 13:06:59 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1B.ch Vial: 84
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059762.D\dad1A.ch
Acq On : 16-May-2018, 10:44:13 Operator: evitam
Sample : ic1732-200 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:06:37 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059762.D 8330B_0516PLUS.M Wed May 16 13:07:02 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059763.D\dad1B.ch Vial: 85
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059763.D\dad1A.ch
Acq On : 16-May-2018, 11:14:11 Operator: evitam
Sample : icc1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59:49 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.87	10.88	1257004	2105490	469.785	446.575
	Spiked Amount 500.000	Range 70 - 136		Recovery =		93.96%	89.31%
	Target Compounds						
1)	TNX	1.39	1.39	2518744	3850396	522.067	519.032
2)	HMX	1.51	1.51	924698	2509609	494.463	494.102
3)	DNX	1.77	1.77	1465948	2396955	473.342	510.804
4)	MNX	2.34	2.34	1518843	2334071	490.500	502.073
5)	RDX	2.94	2.94	1019176	1561287	476.610	469.701
6)	1,3,5-Trinitrobe	4.71	4.71	2107092	4129267	484.245	494.637
7)	1,3-Dinitrobenze	5.90	5.90	2726933	1952397	491.873	524.221
8)	3,5-Dinitroanili	6.17	6.17	2257774	3828122	461.677	511.863
9)	Nitrobenzene	7.47	7.47	1712107	1620751	469.868	488.789
10)	Nitroglycerin	0.00	8.91	0	3068802	N.D. d	2394.828
11)	Tetryl	9.14	9.13	1390159	2144756	472.399	412.948
12)	2,4,6-Trinitroto	9.69	9.70	1833430	2000902	434.446	441.434
13)	2-Amino-4,6-Dini	9.87	9.88	1851360	2979351	489.068	555.451
14)	4-Amino-2,6-Dini	10.36	10.36	1355916	2669780	516.862	515.216
16)	2,4-Dinitrotolue	11.59	11.59	2550890	1634611	484.867	553.499
17)	2,6-Dinitrotolue	12.03	12.04	1552393	1928462	449.153	564.764
18)	o-Nitrotoluene	15.28	15.28	1225465	1688188	490.610	515.359
19)	p-Nitrotoluene	15.88	15.88	1892442	1666400	479.459	528.896
20)	m-Nitrotoluene	16.86	16.86	1744603	1864588	489.068	463.381
21)	PETN	0.00	18.80	0	3497132	N.D. d	2518.039m

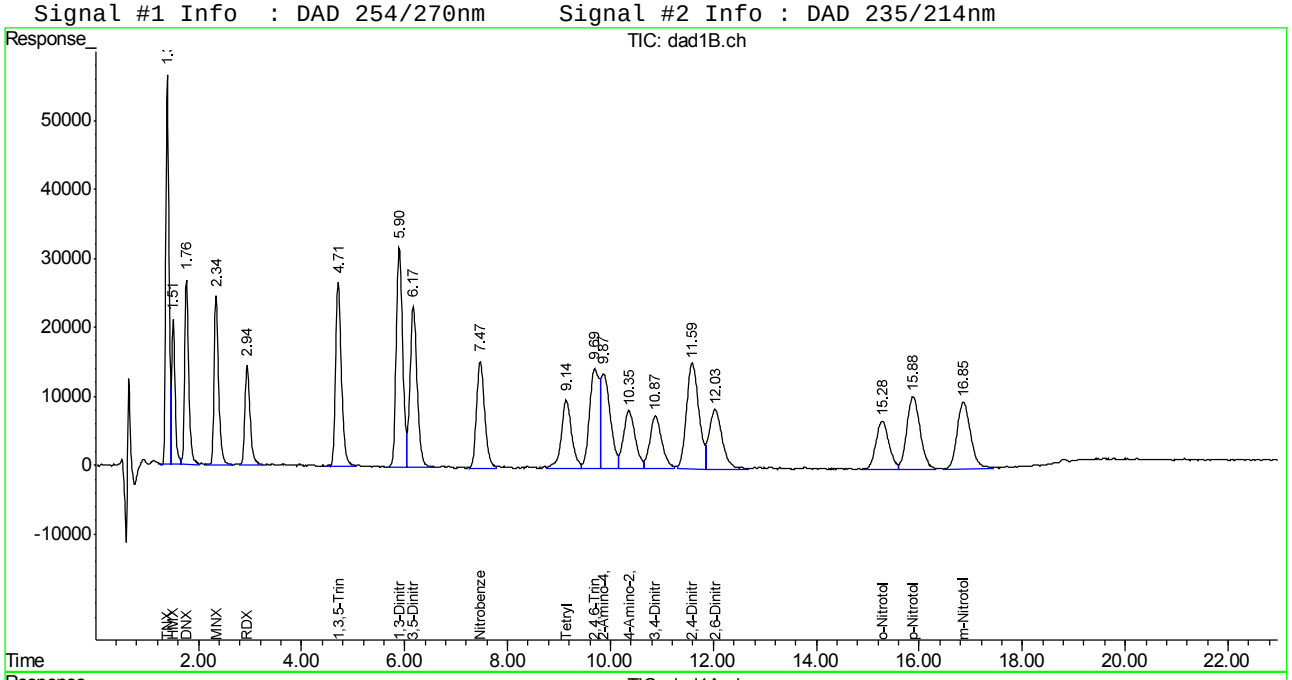
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059763.D 8330B_0516PLUS.M Thu May 17 08:42:12 2018 Page 1

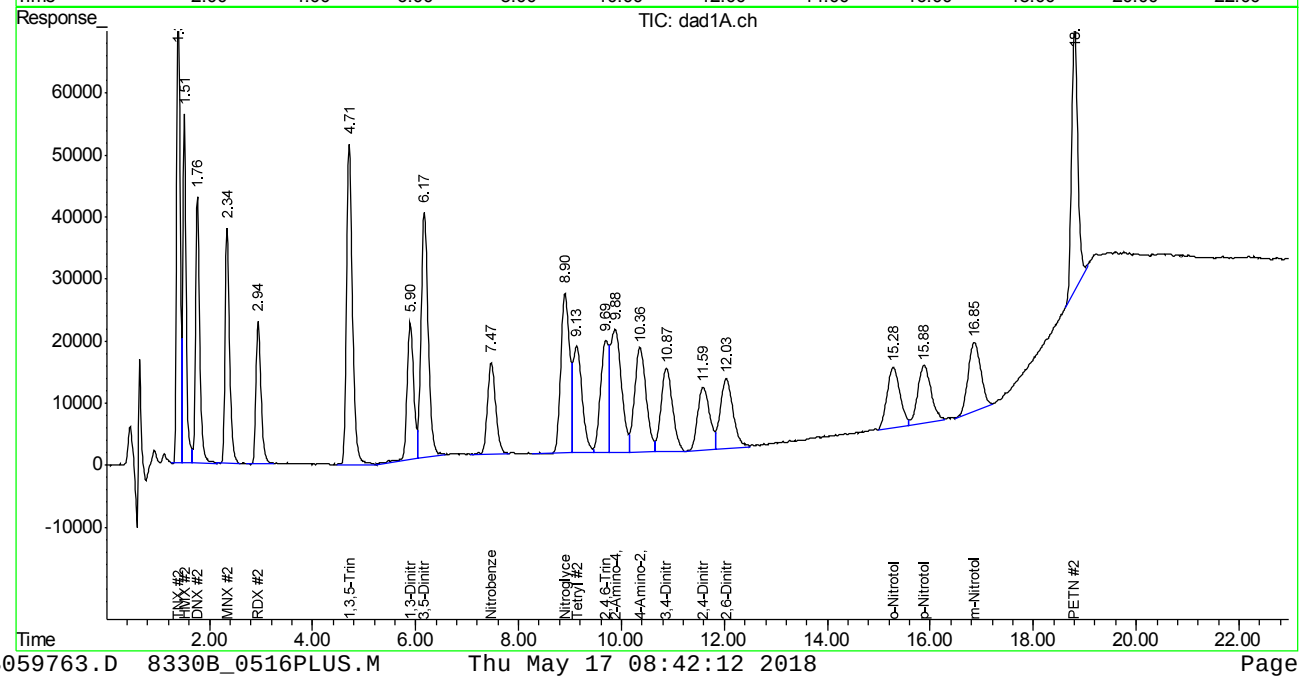
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059763.D\dad1B.ch Vial: 85
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059763.D\dad1A.ch
Acq On : 16-May-2018, 11:14:11 Operator: evitam
Sample : icc1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:07 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

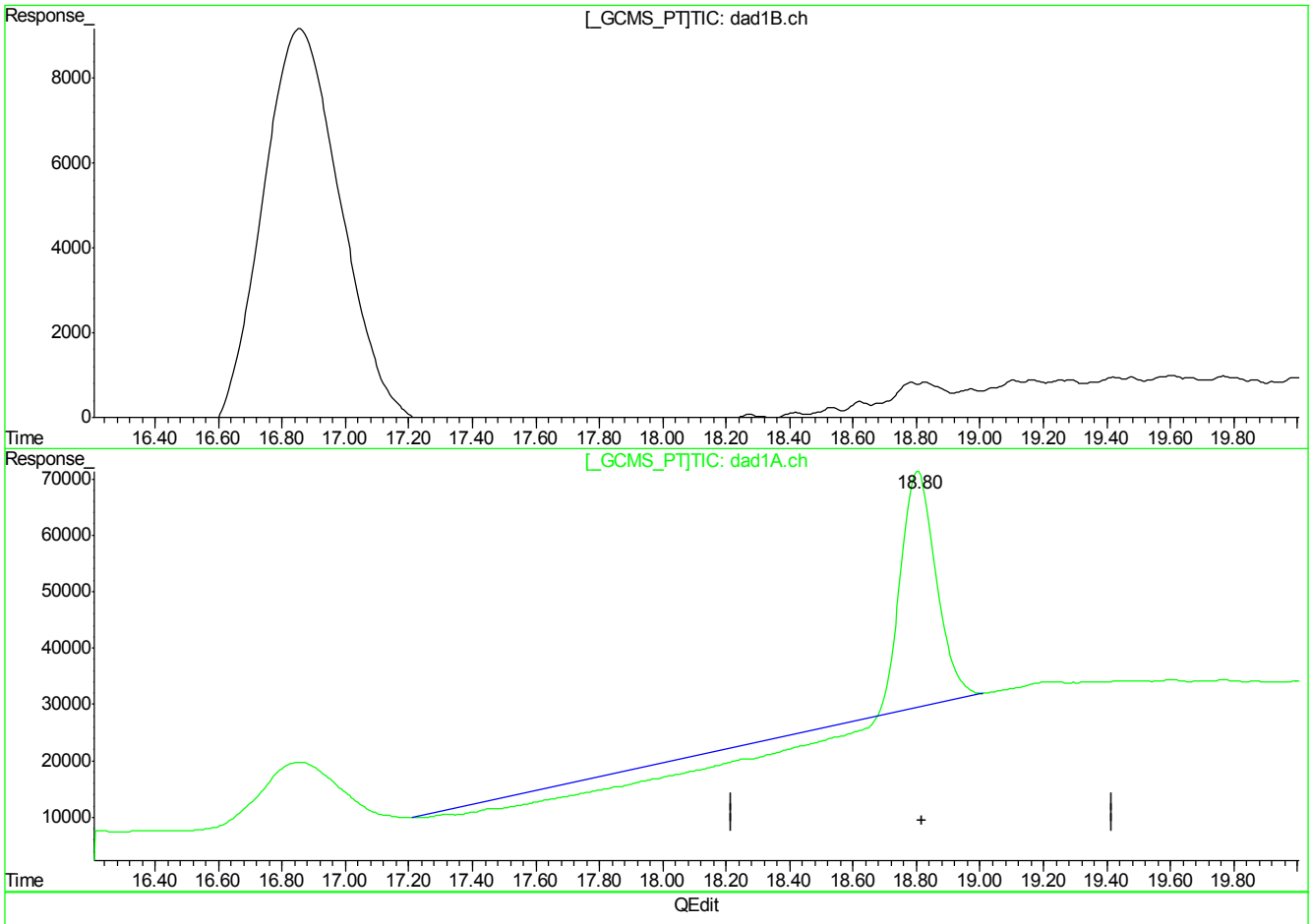
Sample Number:	GBB1732-ICC1732	**Method:**	SW846 8330B
Lab FileID:	BB059763.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 11:14	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	18.80	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059763.D\dad1B.ch Vial: 85
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059763.D\dad1A.ch
Acq On : 16-May-2018, 11:14:11 Operator: evitam
Sample : ic1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:06:37 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.81min 1062.350ppb

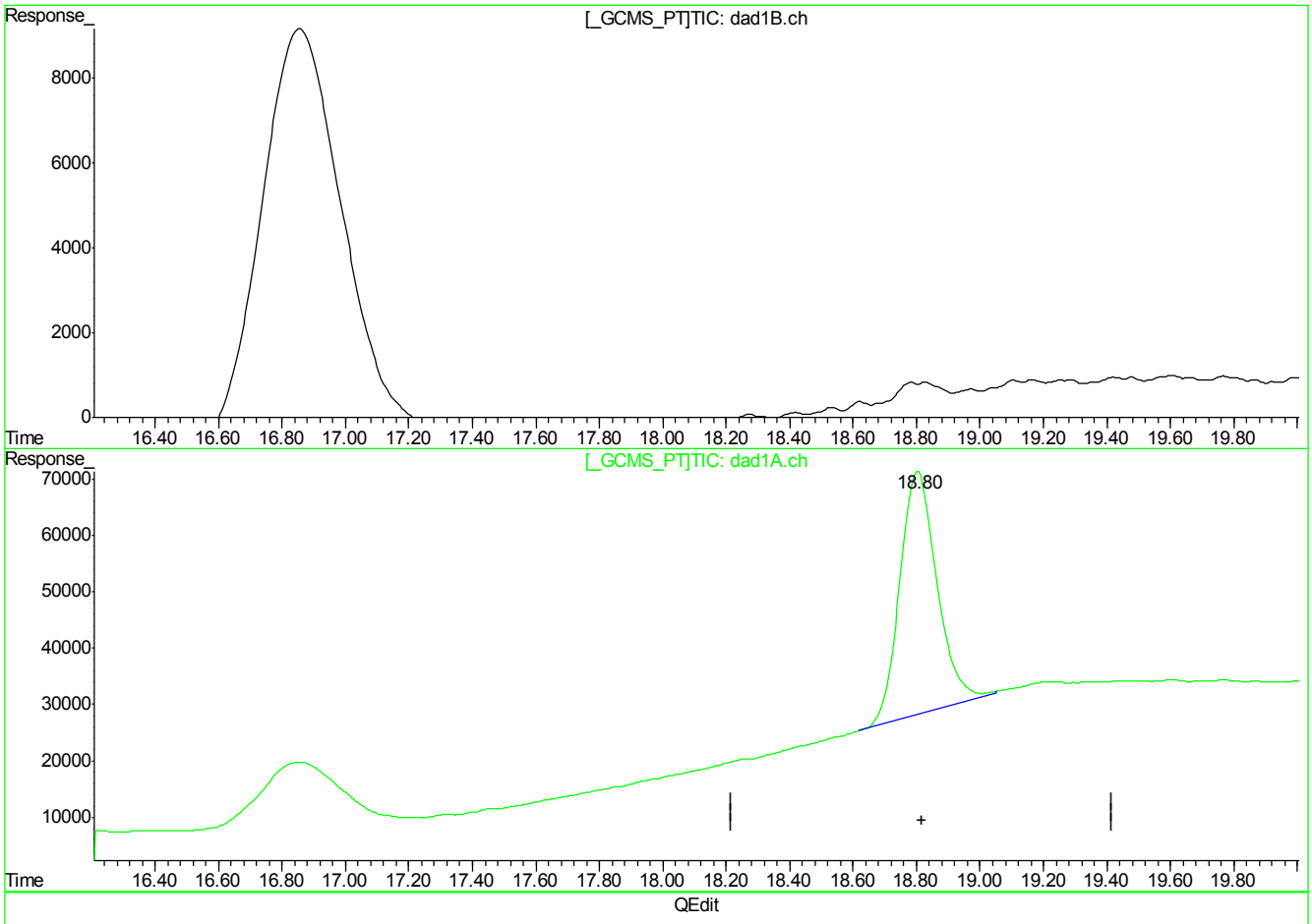
response 1475425

(+) = Expected Retention Time
BB059763.D 8330B_0516PLUS.M Wed May 16 13:07:25 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059763.D\dad1B.ch Vial: 85
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059763.D\dad1A.ch
Acq On : 16-May-2018, 11:14:11 Operator: evitam
Sample : ic1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:06:37 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.80min 2518.039ppb m

response 3497132

(+) = Expected Retention Time
BB059763.D 8330B_0516PLUS.M Wed May 16 13:07:31 2018

7.6.5.3

7

BB059763.D edits: PETN

FA53896

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1A.ch
Acq On : 16-May-2018, 11:44:09 Operator: evitam
Sample : ic1732-1000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59:50 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.94	10.93	2452044	4197345	916.411	890.258
	Spiked Amount 500.000	Range 70 - 136		Recovery =		183.28%#	178.05%#
	Target Compounds						
1)	TNX	1.38	1.38	5034912	7672979	1043.601	1034.314
2)	HMX	1.50	1.50	1837921	4988234	982.791	984.873
3)	DNX	1.76	1.76	2885936	4644959	931.844	983.222
4)	MNX	2.33	2.33	2950587	4649749	952.871	1000.190
5)	RDX	2.93	2.93	1954191	3169511	913.862	953.524
6)	1,3,5-Trinitrobe	4.71	4.71	4186252	8123306	962.070	973.075
7)	1,3-Dinitrobenze	5.90	5.90	5445054	3748744	982.157	1006.542
8)	3,5-Dinitroanili	6.18	6.18	4455759	7500890	911.128	1002.954
9)	Nitrobenzene	7.49	7.49	3391235	3173330	930.685	957.019
10)	Nitroglycerin	0.00	8.94	0	6058417	N.D. d	4727.860
11)	Tetryl	9.19	9.18	2691859	4264483	916.885	821.076
12)	2,4,6-Trinitroto	9.74	9.74	3604947	3968235	854.221	875.461
13)	2-Amino-4,6-Dini	9.92	9.93	3662028	5945644	967.386	1108.468
14)	4-Amino-2,6-Dini	10.41	10.42	2654695	5264537	1004.547	1015.955
16)	2,4-Dinitrotolue	11.65	11.65	5028979	3200098	955.896	1083.592
17)	2,6-Dinitrotolue	12.09	12.09	2950724	3802600	853.731	1113.618
18)	o-Nitrotoluene	15.34	15.34	2364583	3310037	946.651	1010.467m
19)	p-Nitrotoluene	15.94	15.94	3734381	3236742	946.123	1026.115
20)	m-Nitrotoluene	16.91	16.91	3464453	3830772	971.196	952.011
21)	PETN	0.00	18.82	0	7078435	N.D. d	5096.685m

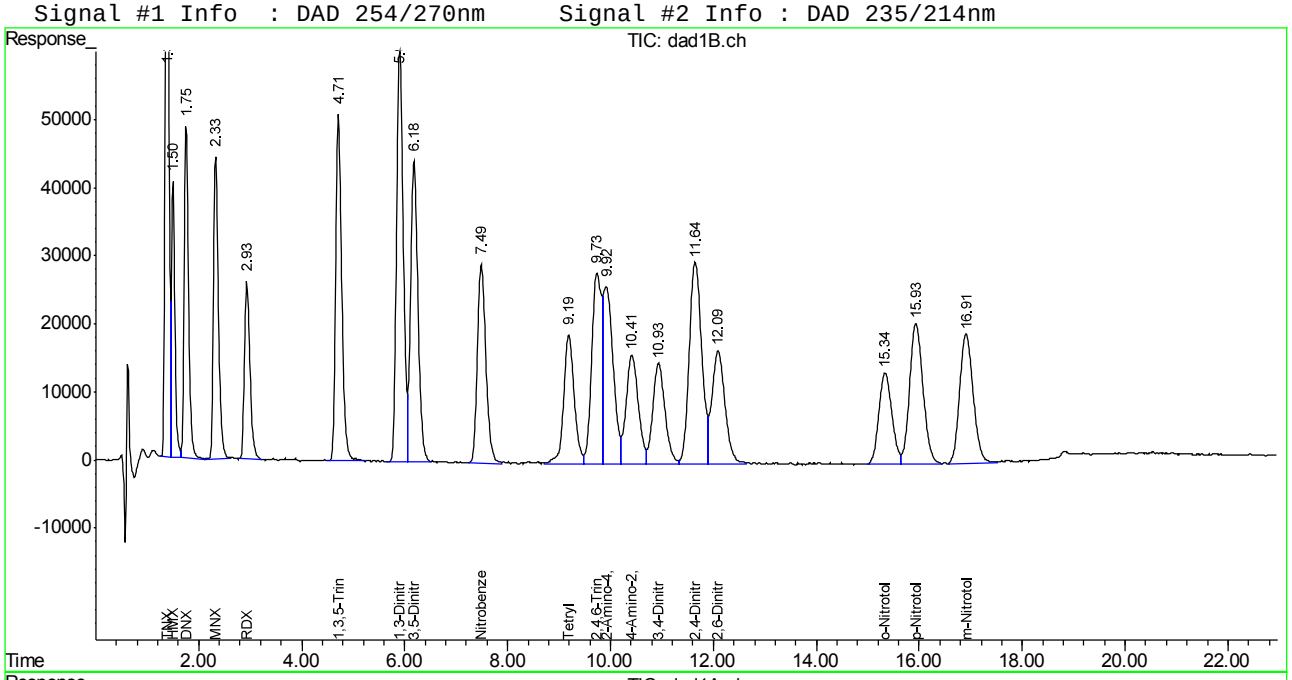
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059764.D 8330B_0516PLUS.M Thu May 17 08:38:09 2018 Page 1

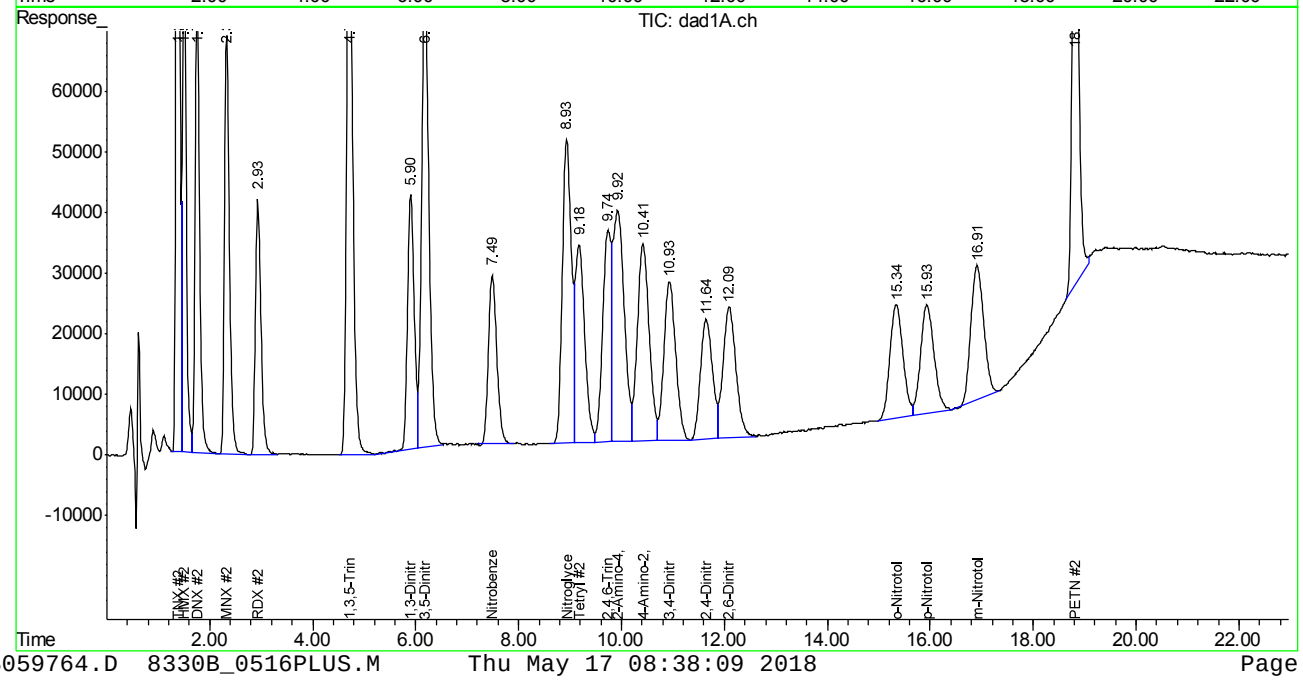
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1A.ch
Acq On : 16-May-2018, 11:44:09 Operator: evitam
Sample : ic1732-1000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:08 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

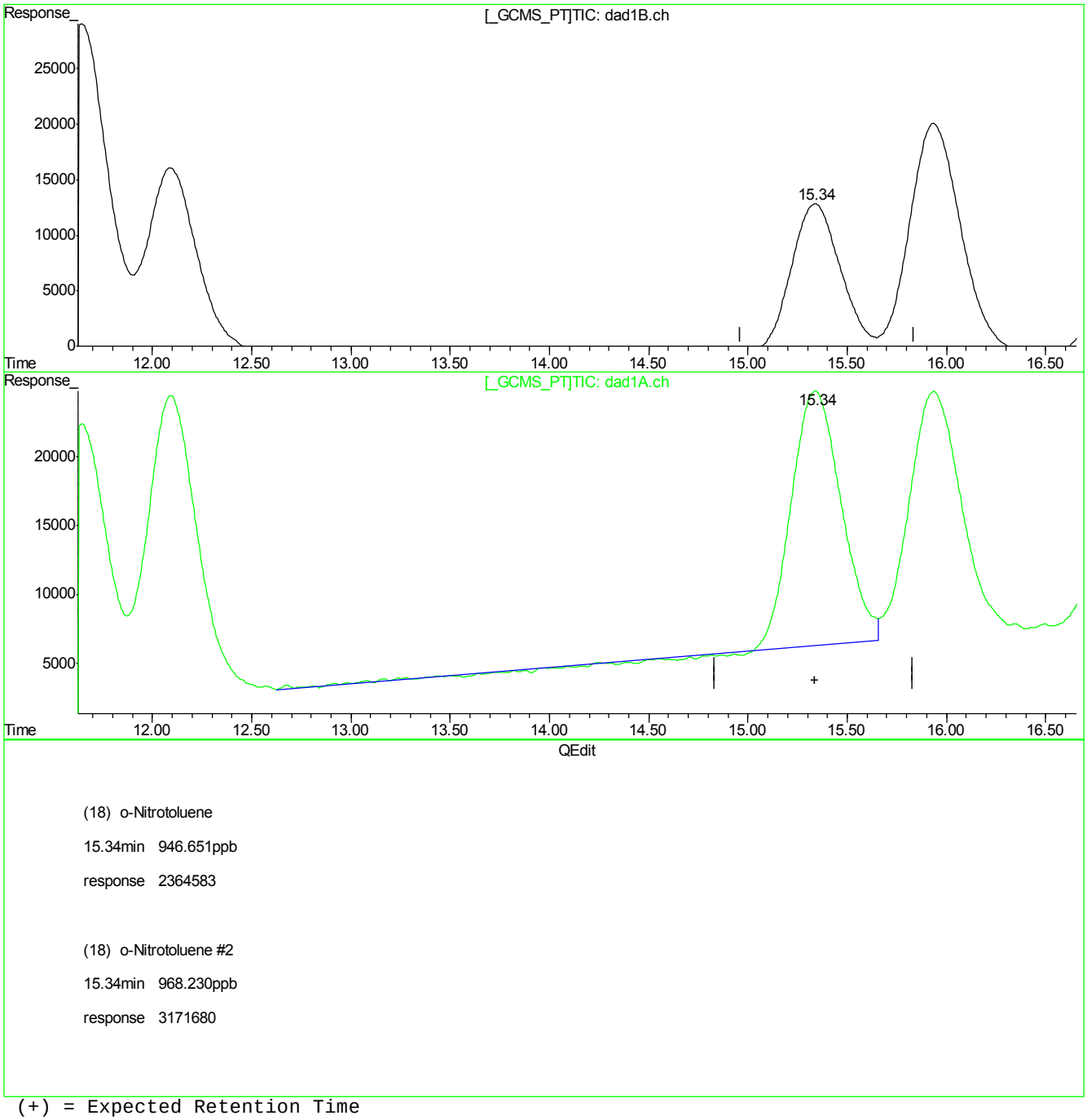
Sample Number:	GBB1732-IC1732	**Method:**	SW846 8330B
Lab FileID:	BB059764.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 11:44	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	15.34	Poorly defined baseline
PETN	78-11-5	2	18.82	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1A.ch
Acq On : 16-May-2018, 11:44:09 Operator: evitam
Sample : ic1732-1000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:02 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.34min 946.651ppb

response 2364583

(18) o-Nitrotoluene #2

15.34min 968.230ppb

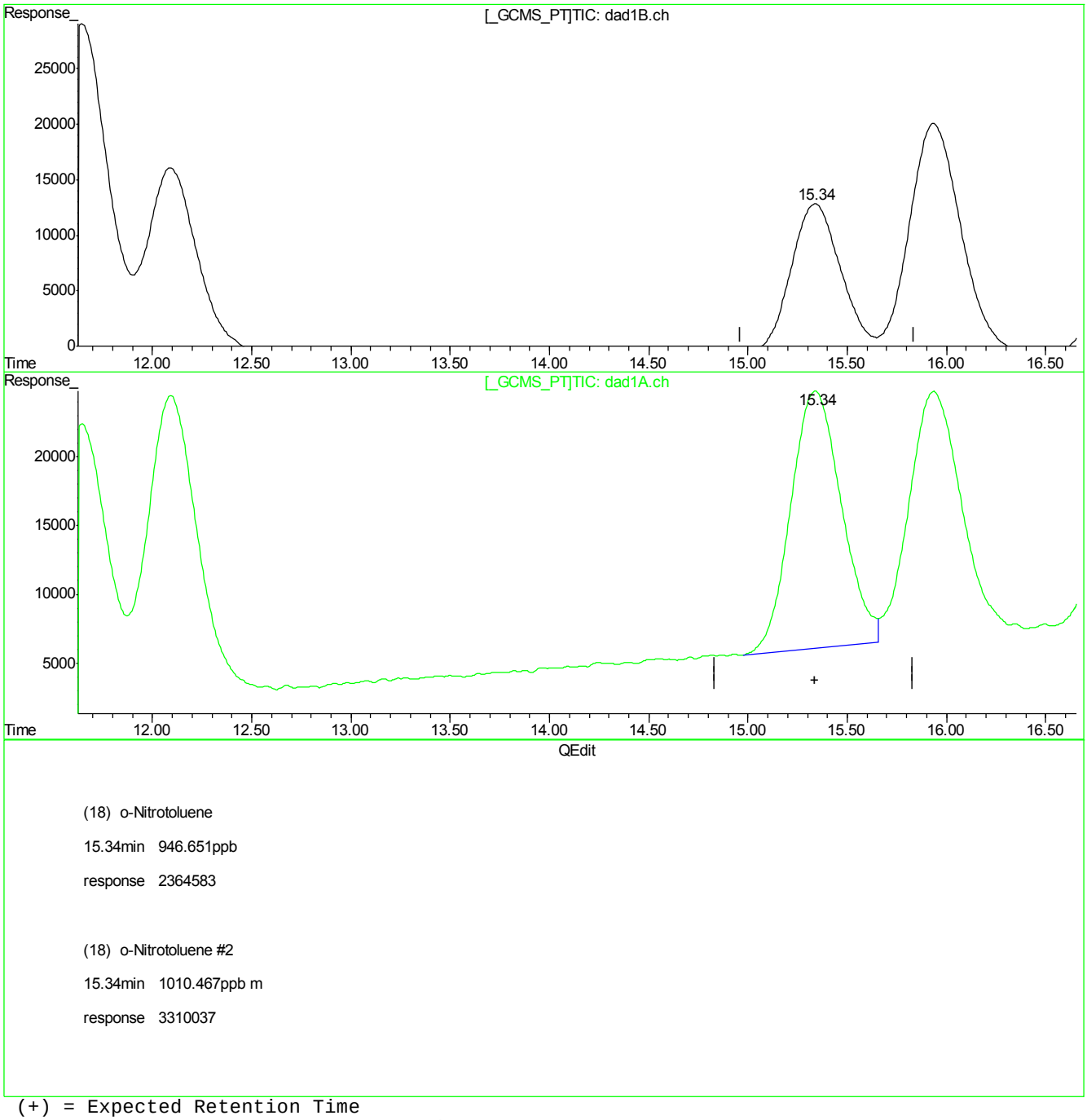
response 3171680

(+) = Expected Retention Time
BB059764.D 8330B_0516PLUS.M Wed May 16 13:08:19 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1A.ch
Acq On : 16-May-2018, 11:44:09 Operator: evitam
Sample : ic1732-1000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:02 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.34min 946.651ppb

response 2364583

(18) o-Nitrotoluene #2

15.34min 1010.467ppb m

response 3310037

(+) = Expected Retention Time
BB059764.D 8330B_0516PLUS.M Wed May 16 13:08:23 2018

7.6.6.3

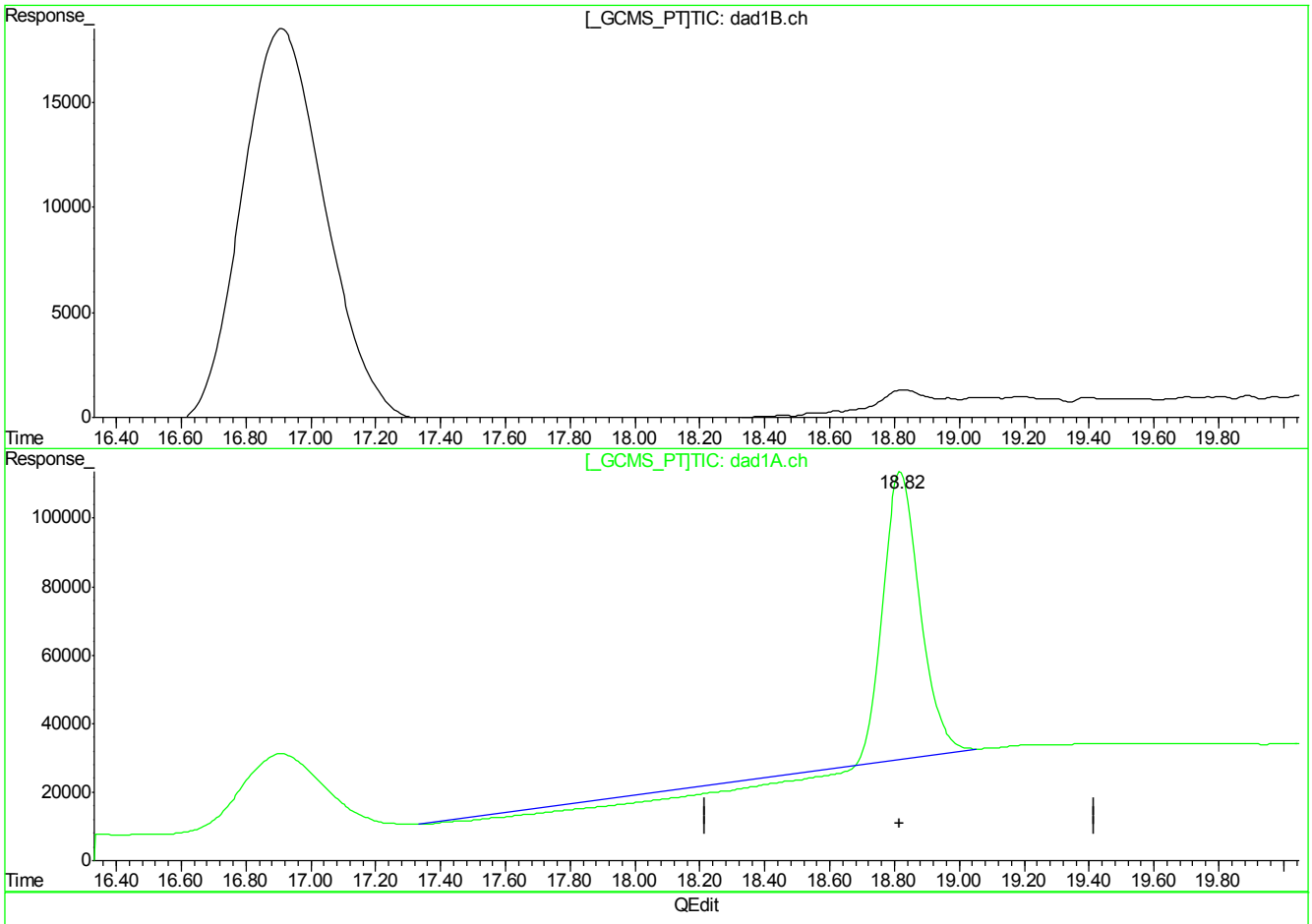
7

BB059764.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1A.ch
Acq On : 16-May-2018, 11:44:09 Operator: evitam
Sample : ic1732-1000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:02 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.82min 3790.267ppb

response 5264041

(+) = Expected Retention Time
BB059764.D 8330B_0516PLUS.M Wed May 16 13:08:26 2018

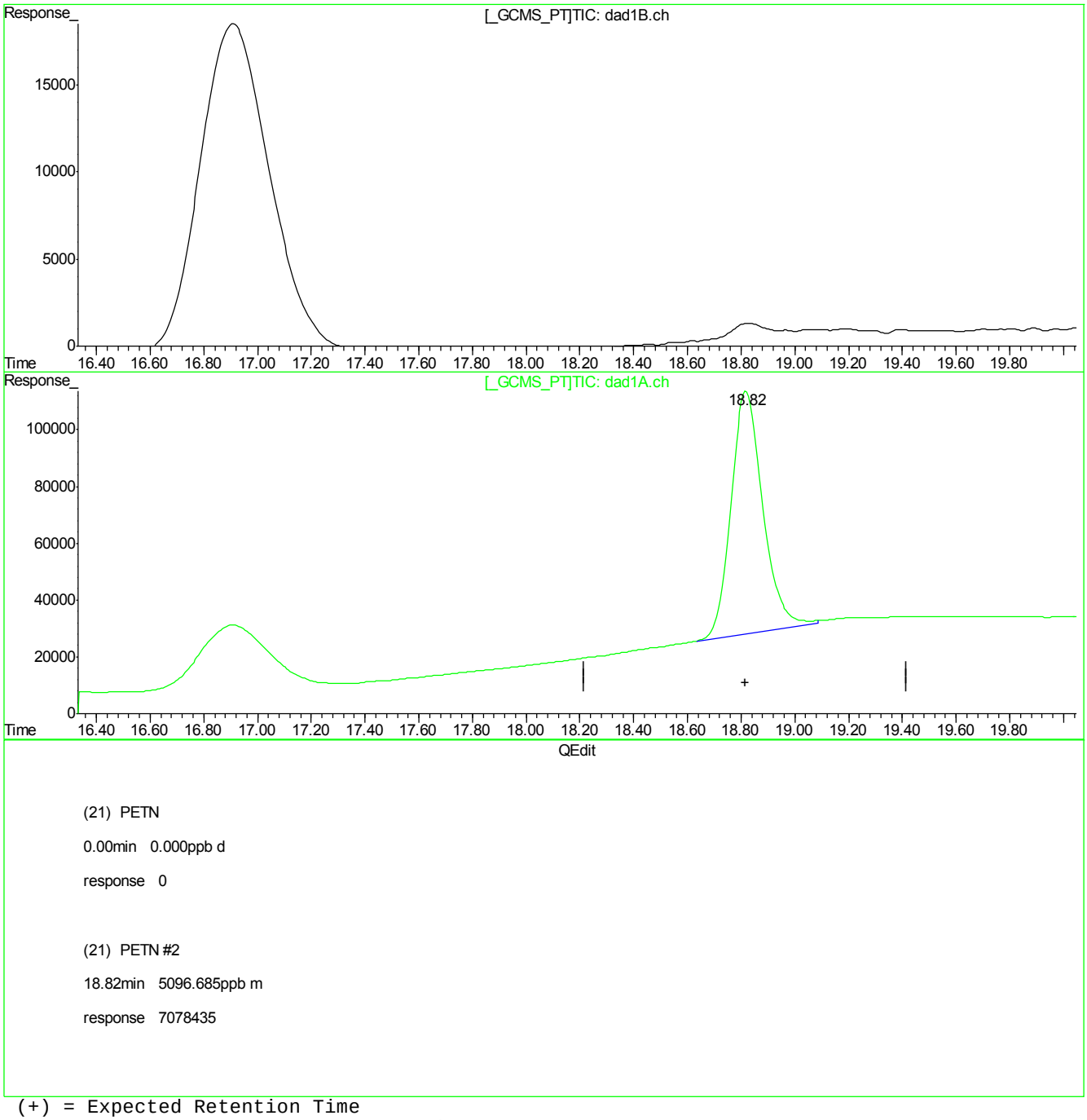
7.6.6.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059764.D\dad1A.ch
Acq On : 16-May-2018, 11:44:09 Operator: evitam
Sample : ic1732-1000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:02 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059764.D 8330B_0516PLUS.M Wed May 16 13:08:30 2018

7.6.6.5

7

BB059764.D edits: PETN

FA53896

BB059765.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59:51 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.88	10.88	5068138	9003262	1894.134	1909.594
	Spiked Amount 500.000	Range 70 - 136		Recovery =		378.83%#	381.92%#
	Target Compounds						
1)	TNX	1.37	1.37	10410971	15661773	2157.912	2111.199
2)	HMX	1.49	1.49	3832040	10504085	2049.105	2087.143
3)	DNX	1.74	1.74	6016841	9605459	1942.787	2004.166
4)	MNX	2.31	2.31	6179070	9631041	1995.487	2071.697
5)	RDX	2.91	2.91	4076700	6528080	1906.437	1963.924
6)	1,3,5-Trinitrobe	4.69	4.69	8722515	16867381	2004.578	2020.510
7)	1,3-Dinitrobenze	5.88	5.88	11264474	7529438	2031.840	2021.663
8)	3,5-Dinitroanili	6.15	6.15	9376131	15746787	1917.262	2105.525
9)	Nitrobenzene	7.46	7.46	6964505	6595374	1911.326	1989.046
10)	Nitroglycerin	0.00	8.90	0	12823845	N.D. d	10007.456
11)	Tetryl	9.15	9.13	5519389	8784316	1889.691	1691.317
12)	2,4,6-Trinitroto	9.72	9.78	7921792	9355096	1877.133m	2063.896m
13)	2-Amino-4,6-Dini	9.82	9.81	6279491	10127282	1658.833m	1888.066m
14)	4-Amino-2,6-Dini	10.36	10.36	5481945	11187218	2042.614	2158.919
16)	2,4-Dinitrotolue	11.59	11.59	10428520	6738433	1982.228	2281.715
17)	2,6-Dinitrotolue	12.04	12.04	6129806	7926027	1773.533	2321.192
18)	o-Nitrotoluene	15.29	15.29	4854541	6596107	1943.495	2013.617m
19)	p-Nitrotoluene	15.90	15.90	7679671	6715710	1945.681	2123.597
20)	m-Nitrotoluene	16.87	16.87	7106531	8235617	1992.186	2046.688
21)	PETN	0.00	18.81	0	14447122	N.D. d	10402.360m

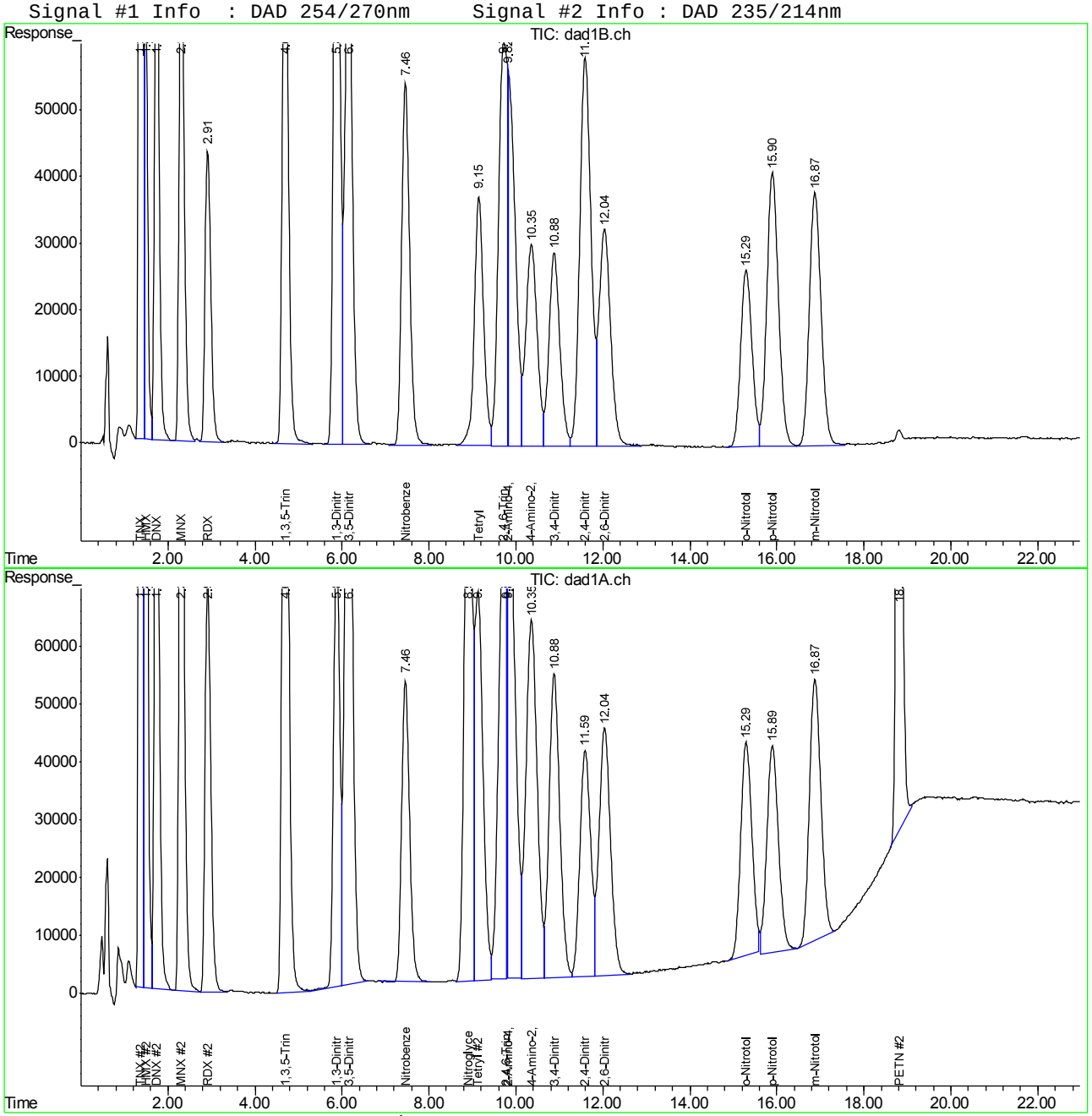
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059765.D 8330B_0516PLUS.M Thu May 17 08:38:10 2018 Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:10 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue May 15 13:58:34 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm



Manual Integration Approval Summary

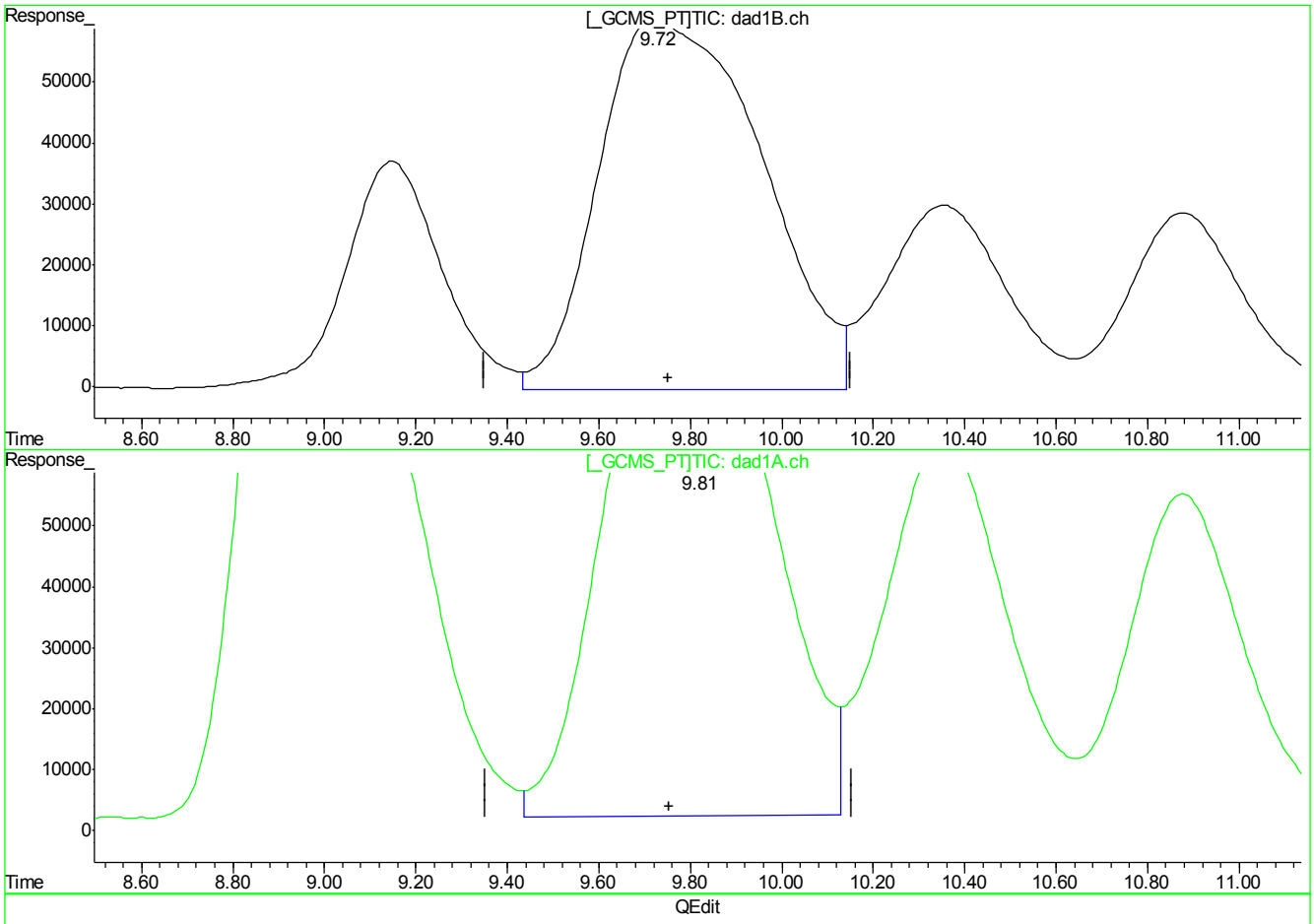
Sample Number:	GBB1732-IC1732	**Method:**	SW846 8330B
Lab FileID:	BB059765.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 12:14	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4,6-Trinitrotoluene	118-96-7	1	9.72	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.78	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.81	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	9.82	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	15.29	Poorly defined baseline
PETN	78-11-5	2	18.81	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:37 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.72min 3558.605ppb

response 15017865

(12) 2,4,6-Trinitrotoluene #2

9.81min 4573.946ppb

response 20732494

(+) = Expected Retention Time
BB059765.D 8330B_0516PLUS.M Wed May 16 13:08:56 2018

7.6.7.2

7

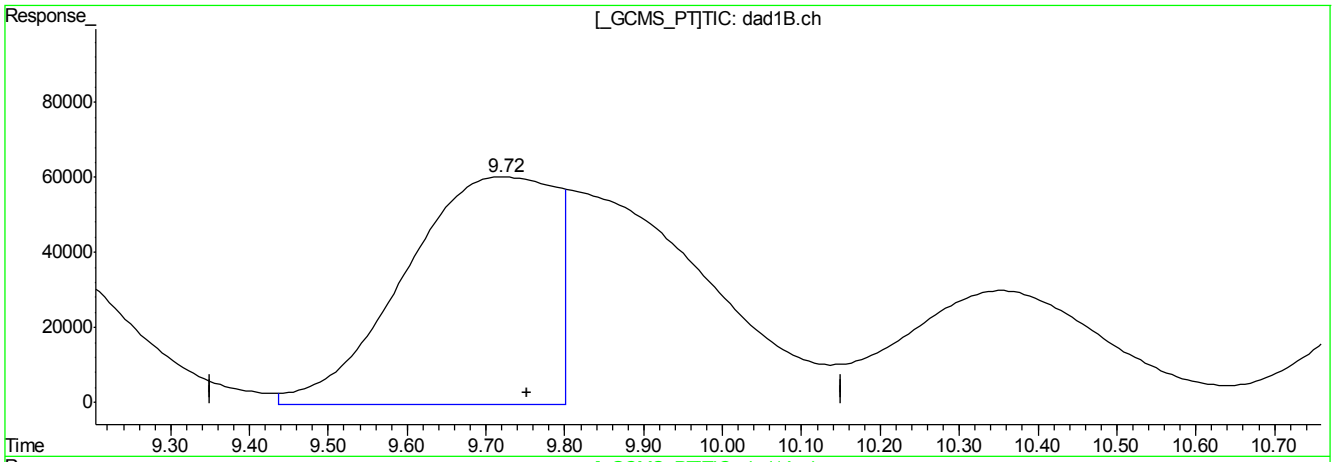
BB059765.D edits: 2,4,6-Trinitrotoluene

FA53896

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:37 2018
Response via : Multiple Level Calibration



(12) 2,4,6-Trinitrotoluene

9.72min 1877.133ppb m

response 7921792

(12) 2,4,6-Trinitrotoluene #2

9.78min 2063.896ppb m

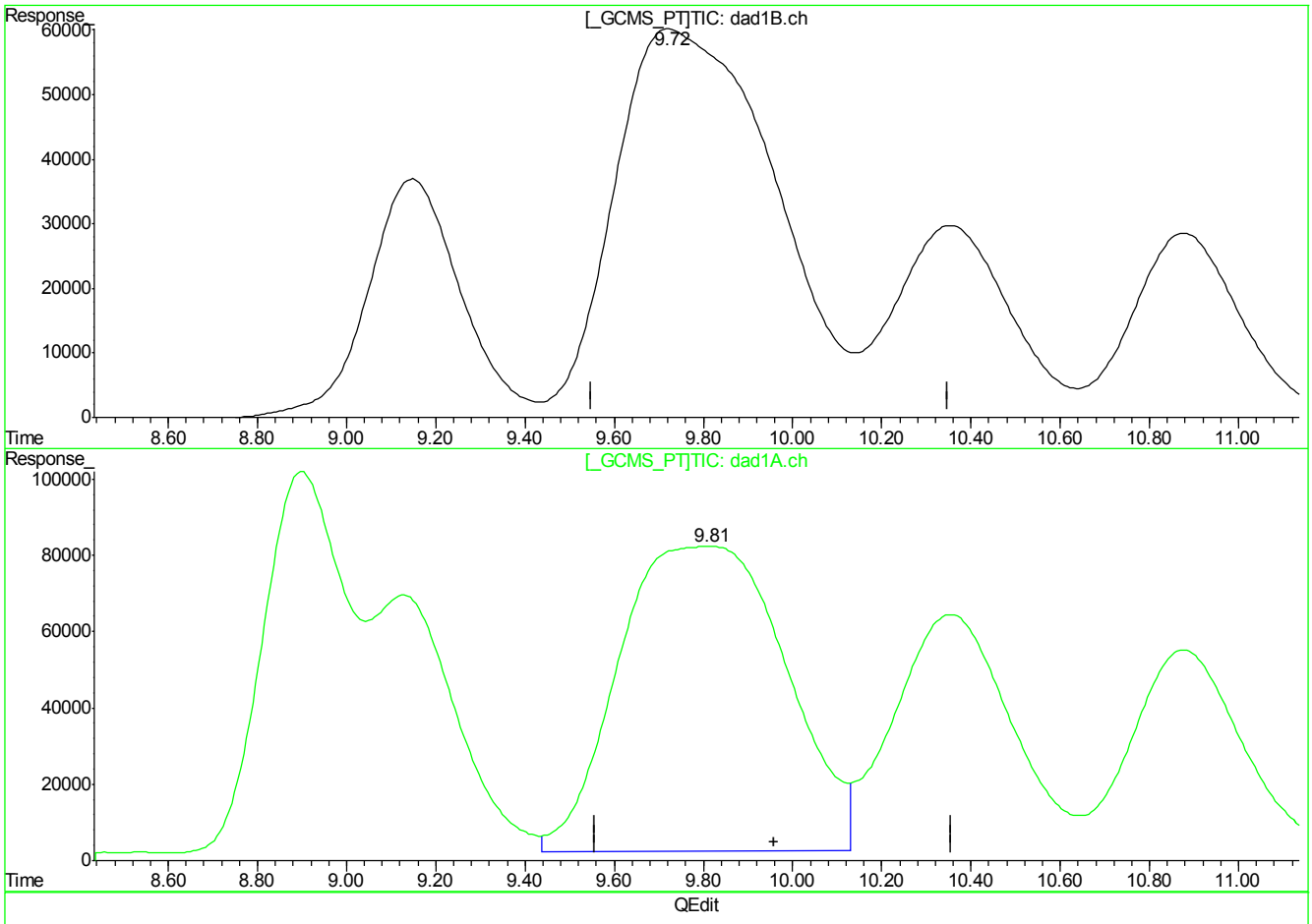
response 9355096

(+) = Expected Retention Time
BB059765.D 8330B_0516PLUS.M Wed May 16 13:09:22 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:37 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.72min 3967.222ppb

response 15017865

(13) 2-Amino-4,6-Dinitrotoluene #2

9.81min 3865.234ppb

response 20732494

(+) = Expected Retention Time
BB059765.D 8330B_0516PLUS.M Wed May 16 13:09:25 2018

7.6.7.4

7

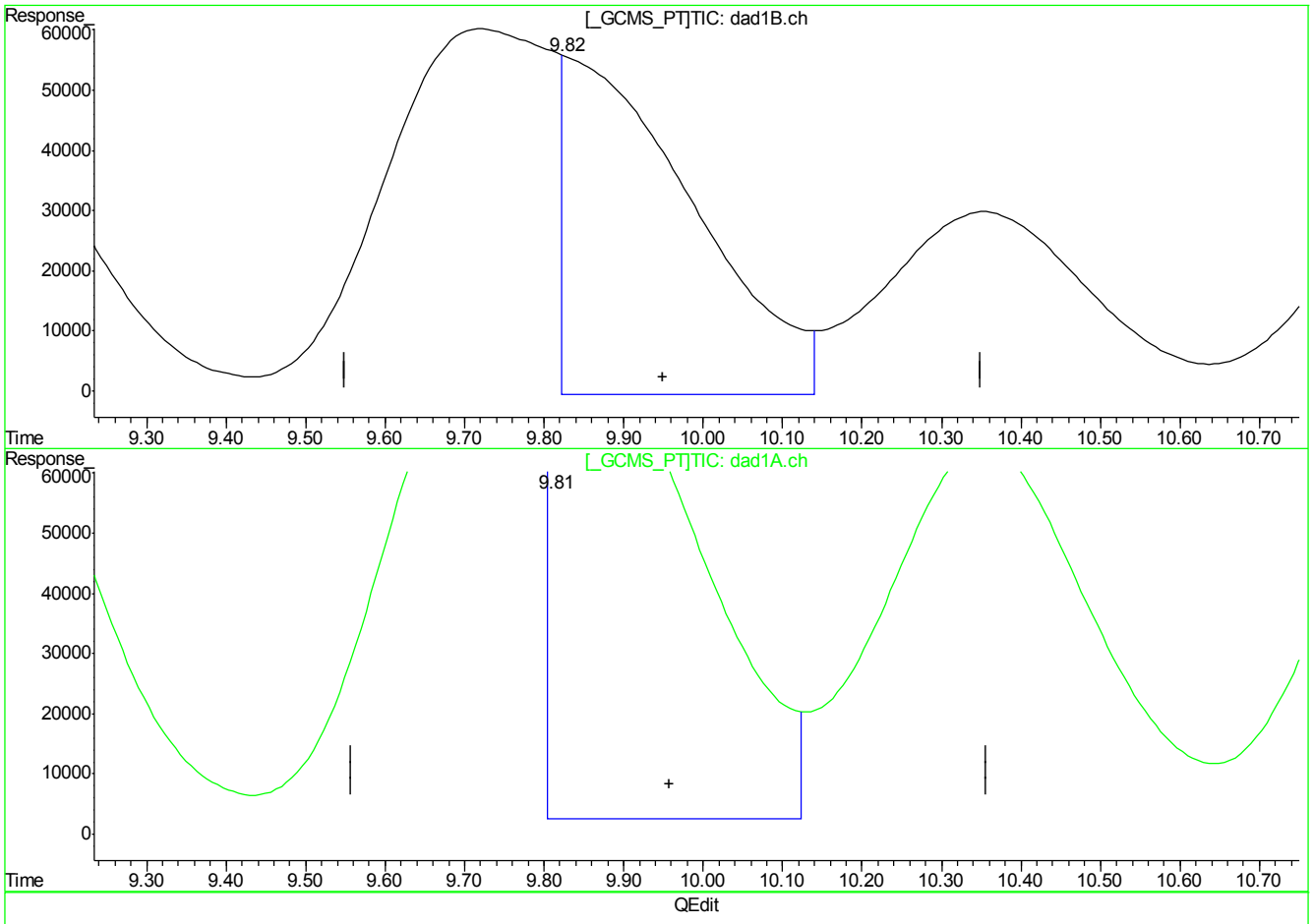
BB059765.D edits: 2-Amino-4,6-Dinitrotoluene

FA53896

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:37 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.82min 1658.833ppb m

response 6279491

(13) 2-Amino-4,6-Dinitrotoluene #2

9.81min 1888.066ppb m

response 10127282

(+) = Expected Retention Time
BB059765.D 8330B_0516PLUS.M Wed May 16 13:09:58 2018

7.6.7.5

7

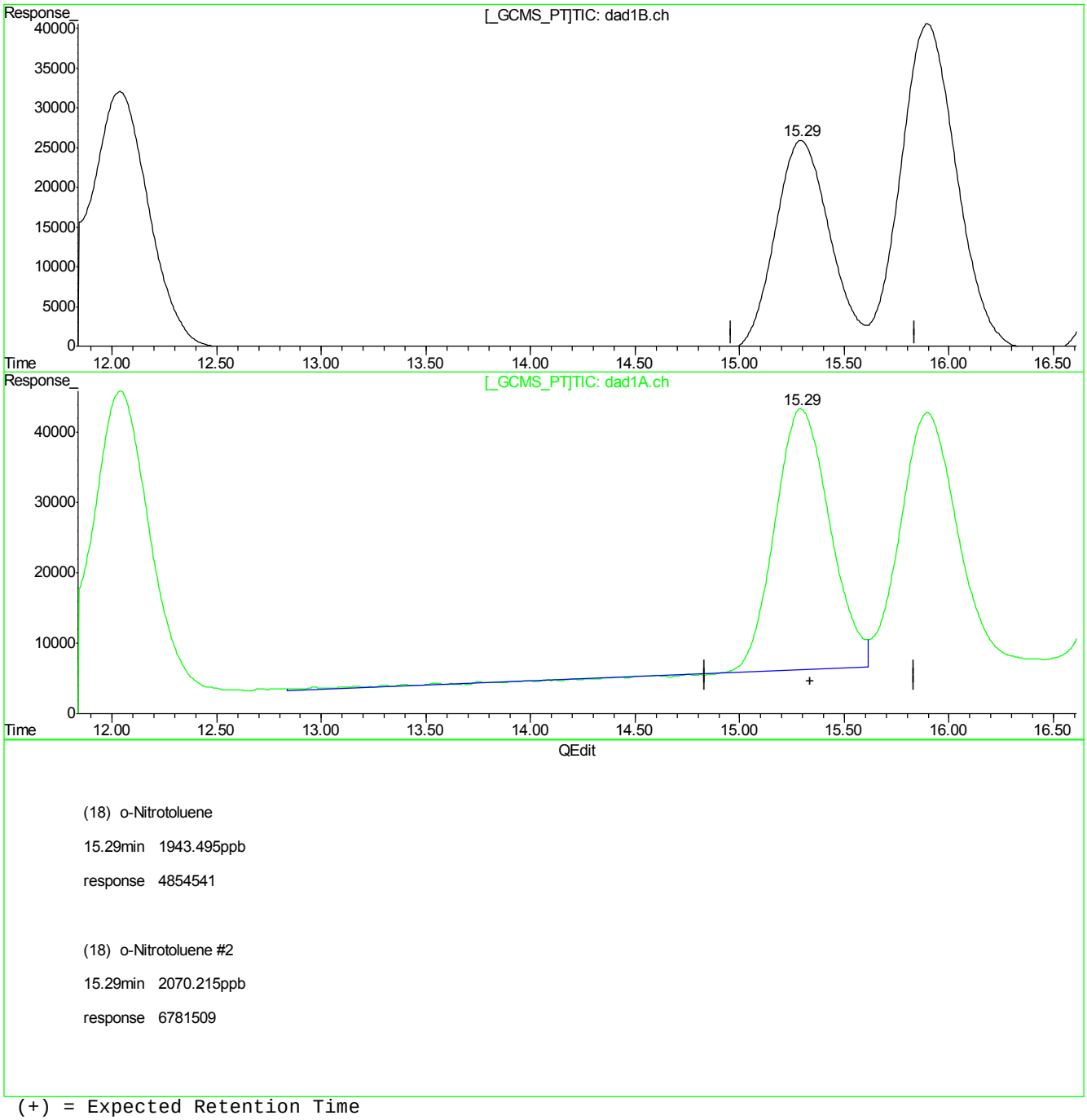
FA53896

BB059765.D edits: 2-Amino-4,6-Dinitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:37 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.29min 1943.495ppb

response 4854541

(18) o-Nitrotoluene #2

15.29min 2070.215ppb

response 6781509

(+) = Expected Retention Time
BB059765.D 8330B_0516PLUS.M Wed May 16 13:10:03 2018

7.7.9.6

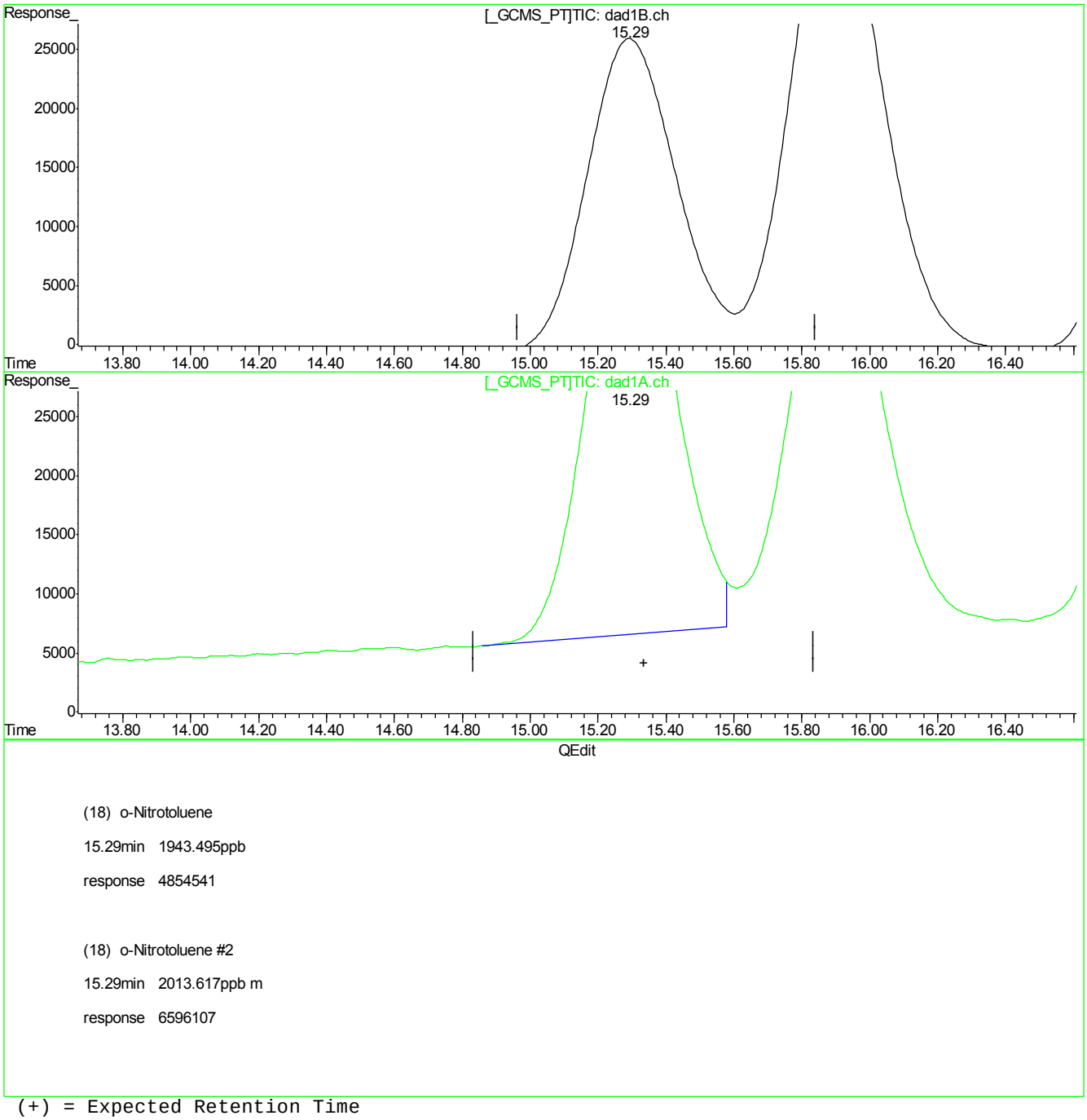
7

BB059765.D edits: o-Nitrotoluene

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:37 2018
Response via : Multiple Level Calibration



(18) o-Nitrotoluene

15.29min 1943.495ppb

response 4854541

(18) o-Nitrotoluene #2

15.29min 2013.617ppb m

response 6596107

(+) = Expected Retention Time
BB059765.D 8330B_0516PLUS.M Wed May 16 13:10:08 2018

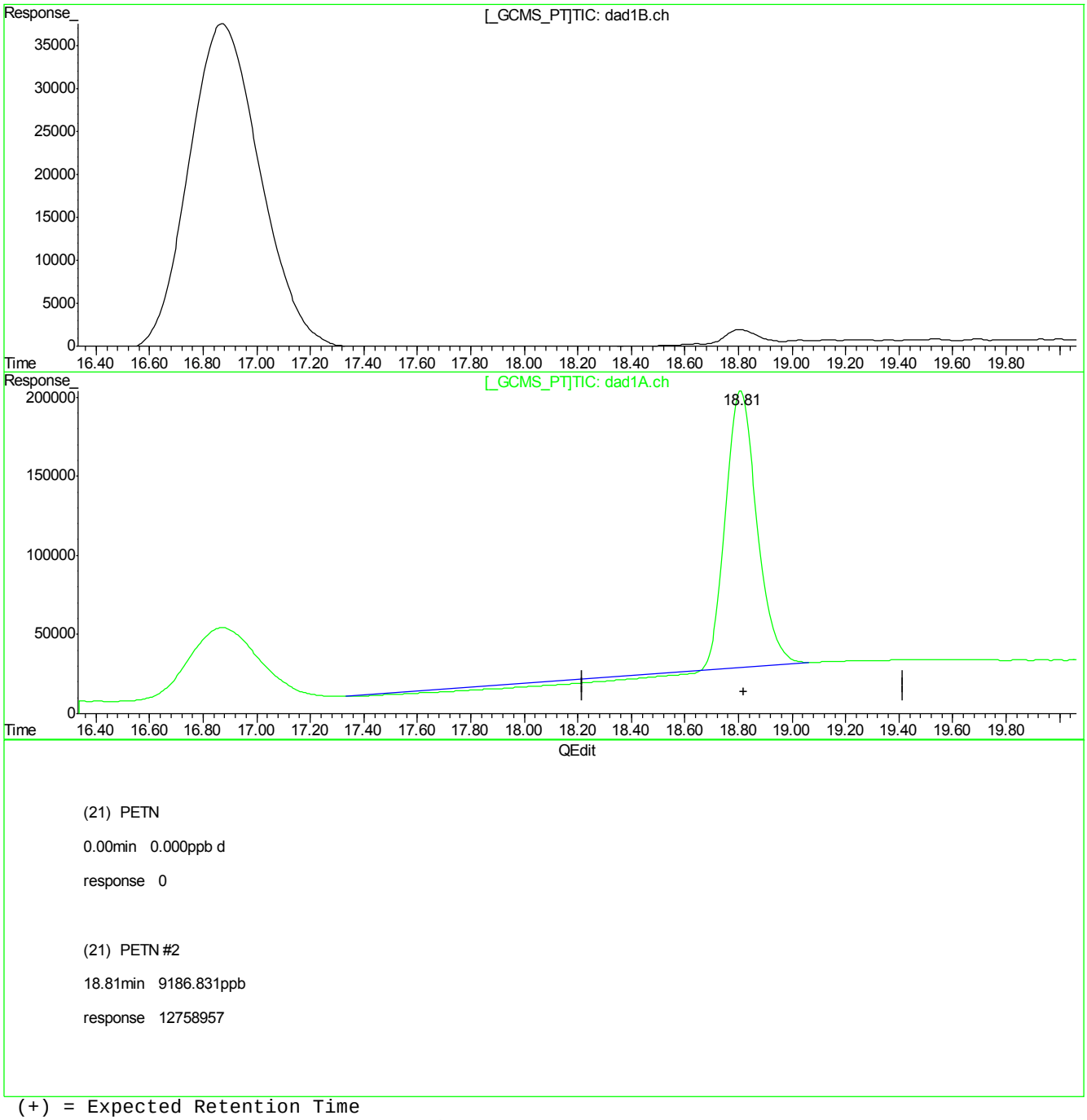
7.6.7.7

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:37 2018
Response via : Multiple Level Calibration

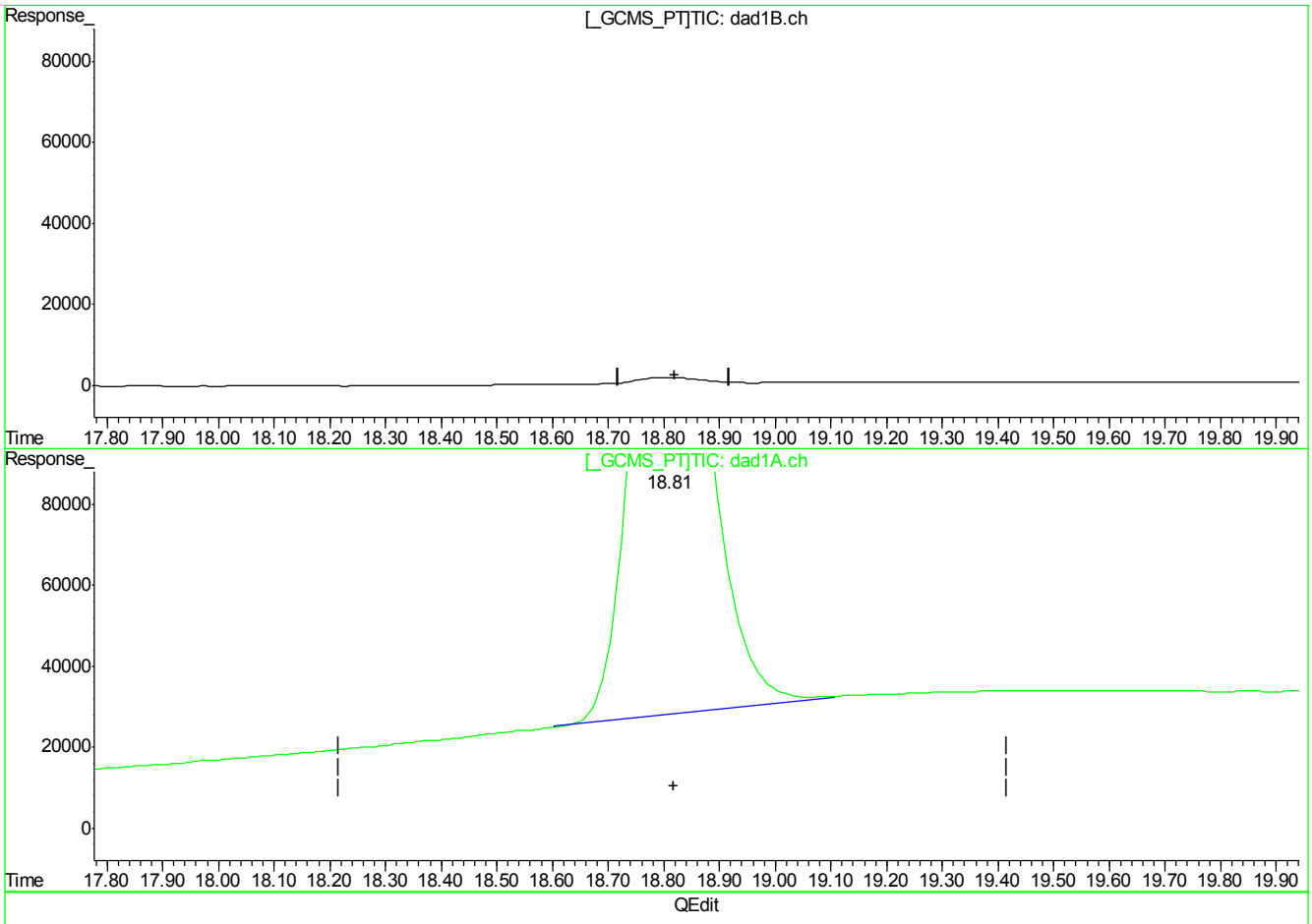


(+) = Expected Retention Time
BB059765.D 8330B_0516PLUS.M Wed May 16 13:10:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1B.ch Vial: 87
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059765.D\dad1A.ch
Acq On : 16-May-2018, 12:14:06 Operator: evitam
Sample : ic1732-2000 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 12:59 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:08:37 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.81min 10402.360ppb m

response 14447122

(+) = Expected Retention Time
BB059765.D 8330B_0516PLUS.M Wed May 16 13:10:15 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1B.ch Vial: 88
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1A.ch
Acq On : 16-May-2018, 12:44:05 Operator: evitam
Sample : icv1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:11:45 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D.
Spiked Amount	500.000	Range	70 - 136	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.38	1.38	2307794	3521060	471.517	461.292
2)	HMX	1.50	1.50	998197	2637718	552.219	533.045
3)	DNX	1.75	1.75	1294357	2098600	420.879	413.911
4)	MNX	2.32	2.32	1333589	2073039	426.761	439.670
5)	RDX	2.92	2.93	974875	1541528	496.019	472.728
6)	1,3,5-Trinitrobe	4.70	4.70	2040433	3943234	468.259	481.040
7)	1,3-Dinitrobenze	5.89	5.89	2500240	1801717	428.928	470.033
8)	3,5-Dinitroanili	6.16	6.16	2306133	3893526	493.214	498.036
9)	Nitrobenzene	7.47	7.47	1641967	1555267	438.785	489.443
10)	Nitroglycerin	0.00	8.91	0	3202648	N.D. d	2506.374
11)	Tetryl	9.15	9.14	1496381	2441424	505.630	589.822
12)	2,4,6-Trinitroto	9.71	9.77	1591640	1948414	406.348	455.634m
13)	2-Amino-4,6-Dini	9.87	9.88	1886242	2781139	505.114	496.661m
14)	4-Amino-2,6-Dini	10.36	10.37	1316428	2691393	494.788	504.929
16)	2,4-Dinitrotolue	11.60	11.60	2463662	1556030	474.861	493.154
17)	2,6-Dinitrotolue	12.06	12.06	1439385	1868524	485.261	506.398
18)	o-Nitrotoluene	15.29	15.29	1196575	1672196	463.070	502.030
19)	p-Nitrotoluene	15.89	15.89	1776564	1575871	444.565	497.643
20)	m-Nitrotoluene	16.86	16.87	1680081	1767607	488.269	483.550
21)	PETN	0.00	18.80	0	3812213	N.D. d	2892.920m

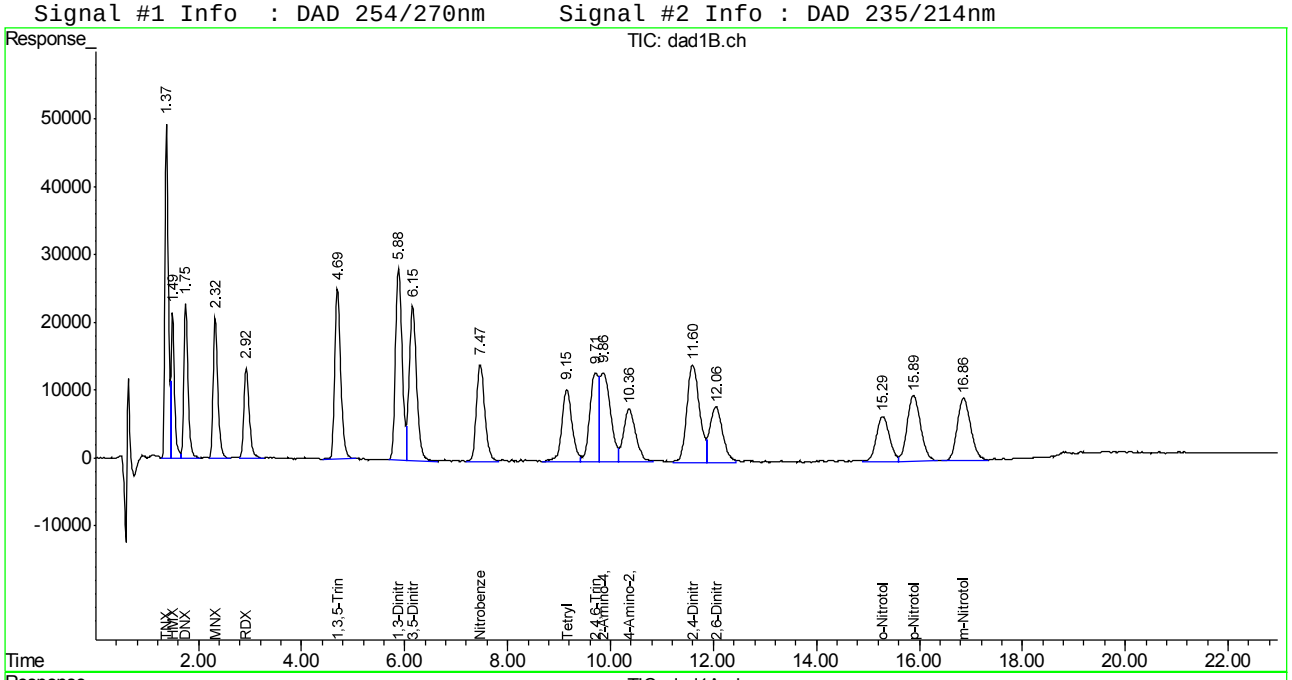
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059766.D 8330B_0516PLUS.M Thu May 17 08:38:11 2018 Page 1

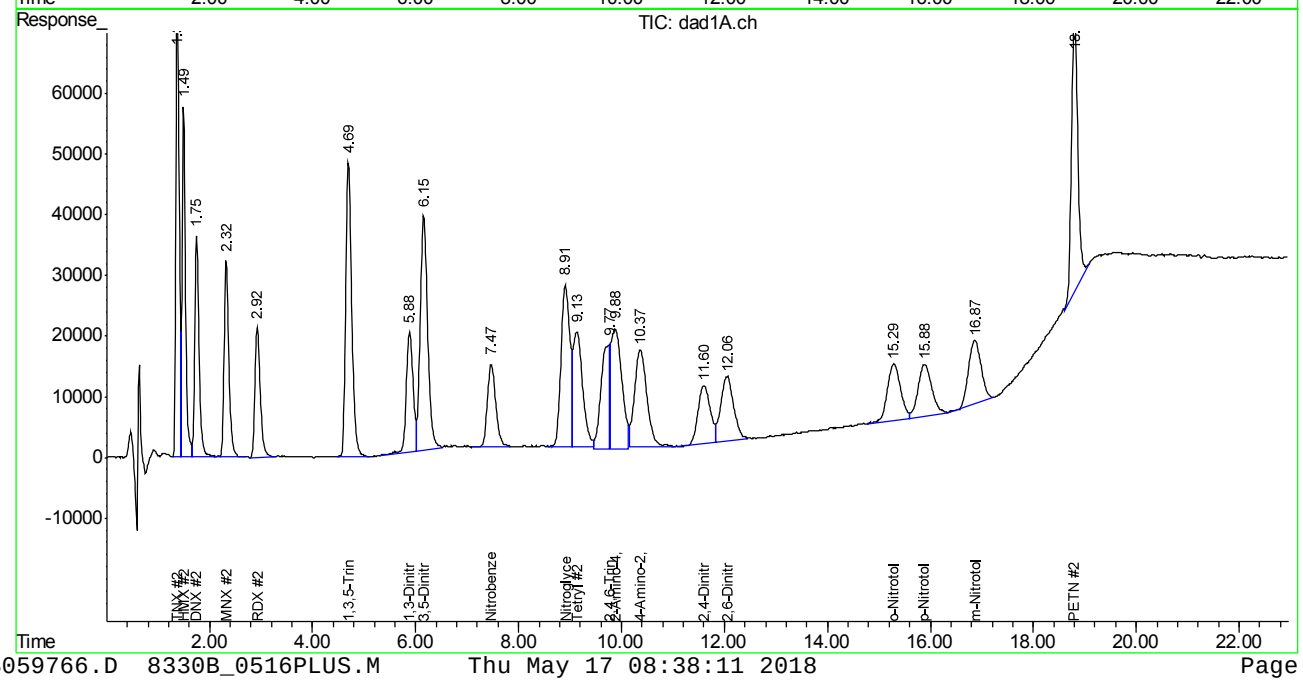
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1B.ch Vial: 88
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1A.ch
Acq On : 16-May-2018, 12:44:05 Operator: evitam
Sample : icv1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:12 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

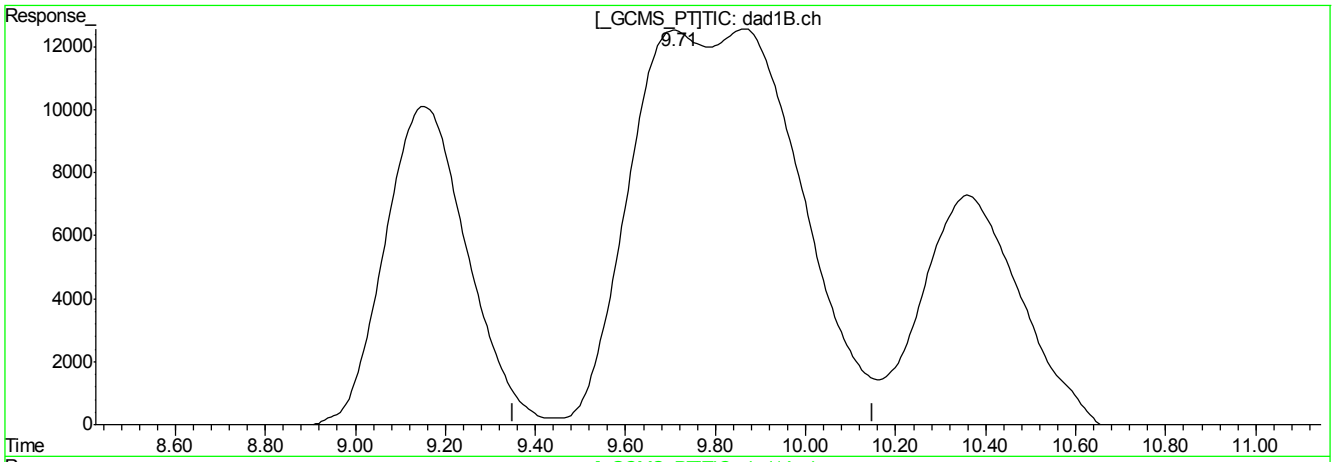
Sample Number:	GBB1732-ICV1732	**Method:**	SW846 8330B
Lab FileID:	BB059766.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 12:44	**Supervisor approved:**	05/17/18 17:17 Mike Eger

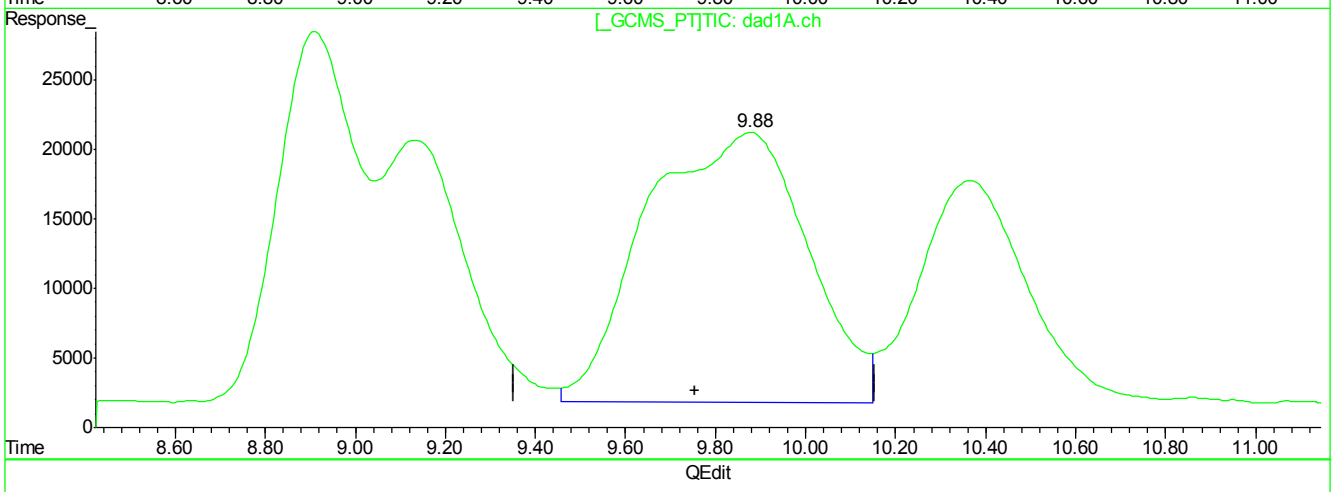
Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4,6-Trinitrotoluene	118-96-7	2	9.77	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.88	Poorly defined baseline
PETN	78-11-5	2	18.80	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1B.ch Vial: 88
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1A.ch
Acq On : 16-May-2018, 12:44:05 Operator: evitam
Sample : icv1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:11 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration





QEdit

(12) 2,4,6-Trinitrotoluene

9.71min 406.348ppb

response 1591640

(12) 2,4,6-Trinitrotoluene #2

9.88min 1124.738ppb

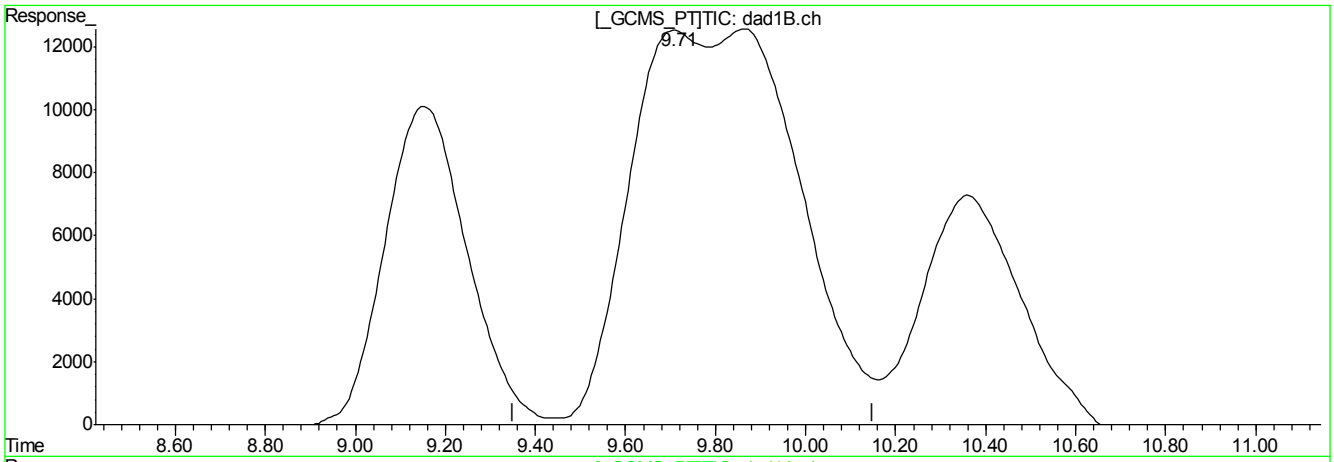
response 4809687

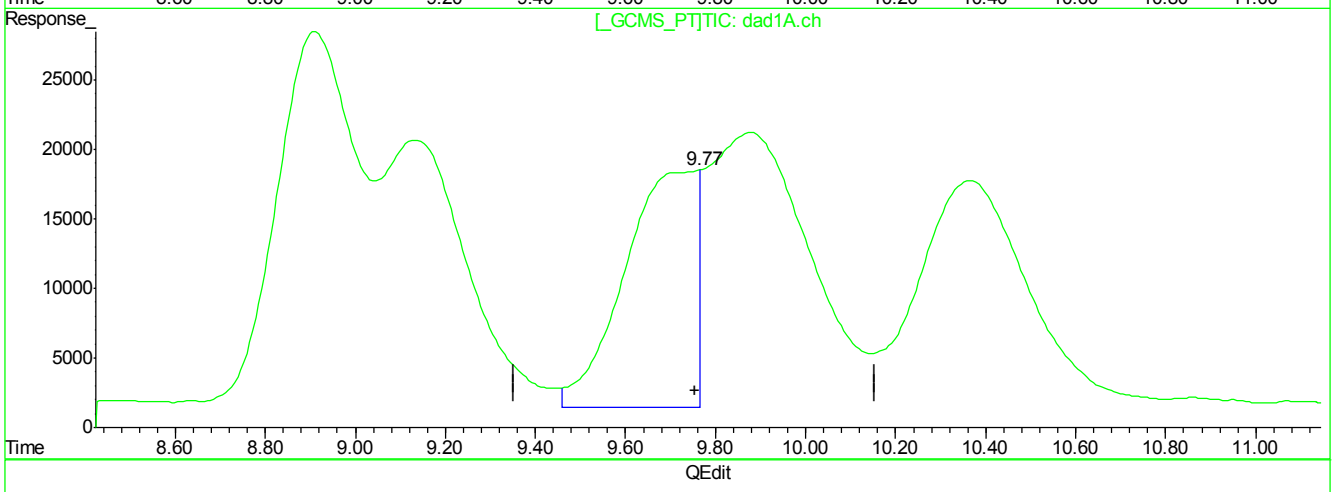
(+) = Expected Retention Time
BB059766.D 8330B_0516PLUS.M Wed May 16 13:11:58 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1B.ch Vial: 88
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1A.ch
Acq On : 16-May-2018, 12:44:05 Operator: evitam
Sample : icv1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:11 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration





QEdit

(12) 2,4,6-Trinitrotoluene

9.71min 406.348ppb

response 1591640

(12) 2,4,6-Trinitrotoluene #2

9.77min 455.634ppb m

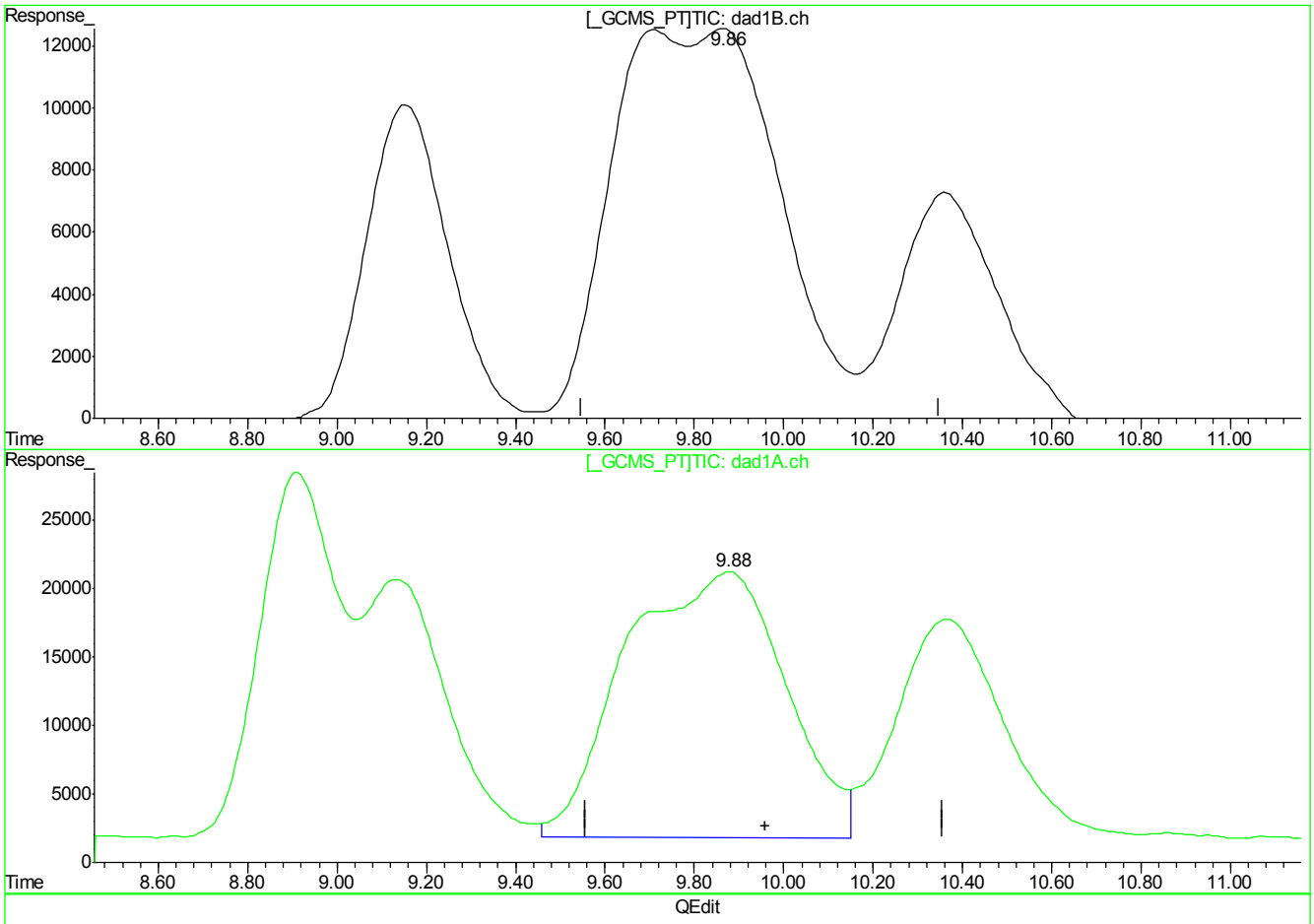
response 1948414

(+) = Expected Retention Time
BB059766.D 8330B_0516PLUS.M Wed May 16 13:12:03 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1B.ch Vial: 88
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1A.ch
Acq On : 16-May-2018, 12:44:05 Operator: evitam
Sample : icv1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:11 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.87min 505.114ppb

response 1886242

(13) 2-Amino-4,6-Dinitrotoluene #2

9.88min 858.923ppb

response 4809687

(+) = Expected Retention Time
BB059766.D 8330B_0516PLUS.M Wed May 16 13:12:06 2018

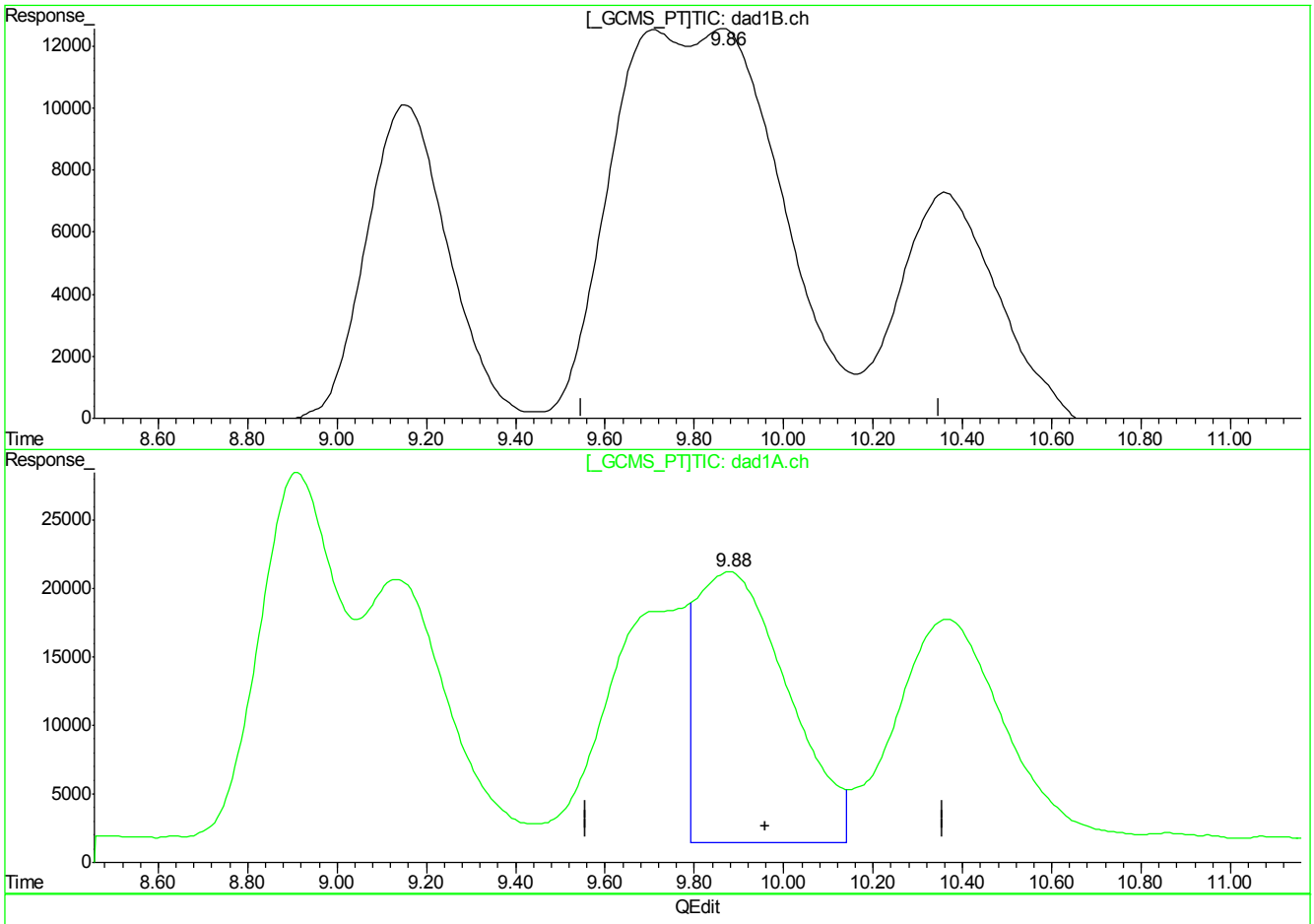
7.6.8.4

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1B.ch Vial: 88
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1A.ch
Acq On : 16-May-2018, 12:44:05 Operator: evitam
Sample : icv1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:11 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(13) 2-Amino-4,6-Dinitrotoluene

9.87min 505.114ppb

response 1886242

(13) 2-Amino-4,6-Dinitrotoluene #2

9.88min 496.661ppb m

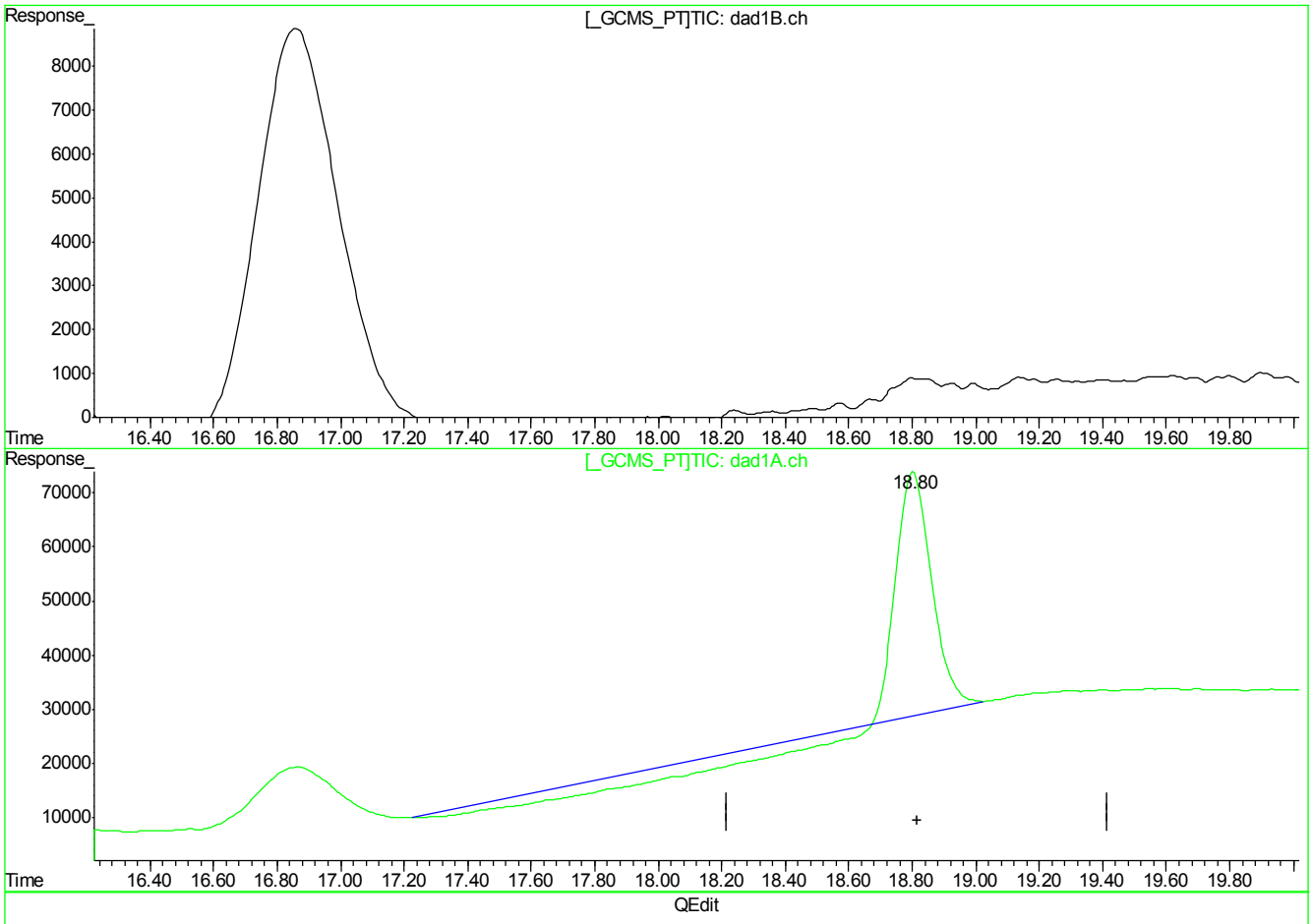
response 2781139

(+) = Expected Retention Time
BB059766.D 8330B_0516PLUS.M Wed May 16 13:12:11 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1B.ch Vial: 88
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1A.ch
Acq On : 16-May-2018, 12:44:05 Operator: evitam
Sample : icv1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:11 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.80min 1444.021ppb

response 1902893

(+) = Expected Retention Time
BB059766.D 8330B_0516PLUS.M Wed May 16 13:12:18 2018

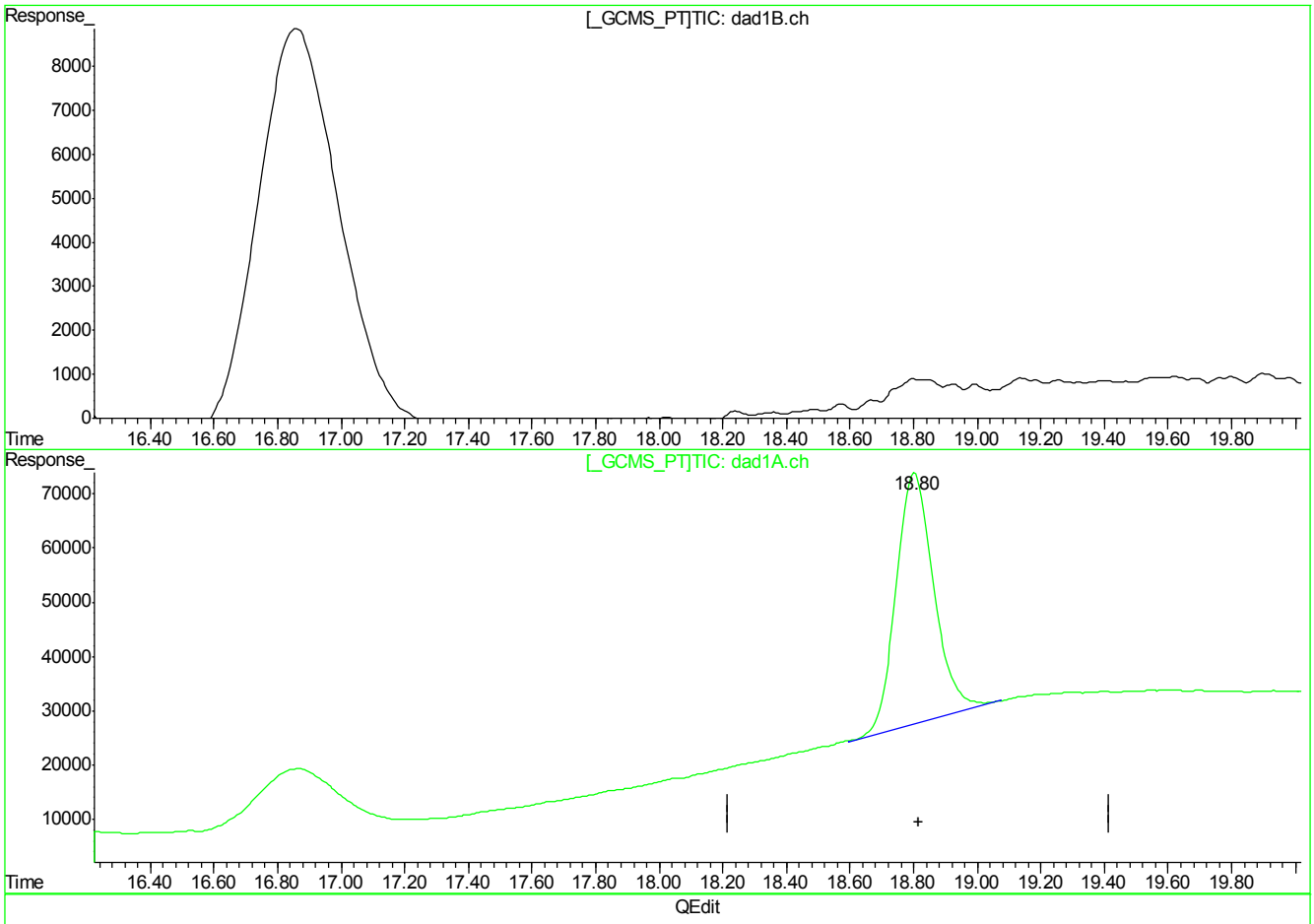
7.6.8.6

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1B.ch Vial: 88
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059766.D\dad1A.ch
Acq On : 16-May-2018, 12:44:05 Operator: evitam
Sample : icv1732-500 Inst : G1315B
Misc : OP69878,gbb1732,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 16 13:11 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.80min 2892.920ppb m

response 3812213

(+) = Expected Retention Time
BB059766.D 8330B_0516PLUS.M Wed May 16 13:12:22 2018

Manual Integrations APPROVED
(compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1A.ch
Acq On : 16-May-2018, 17:43:44 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:45 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.91	10.91	2421342	4190452	973.005	996.265
	Spiked Amount 500.000	Range 69 - 134		Recovery =		194.60%#	199.25%#
	Target Compounds						
1)	TNX	1.37	1.37	5023911	7635746	1026.460	1000.355
2)	HMX	1.49	1.49	1828762	4955561	1011.701	1001.448
3)	DNX	1.75	1.75	2908094	4613740	945.608	909.976
4)	MNX	2.32	2.32	3004117	4632118	961.346	982.423
5)	RDX	2.92	2.92	1973611	3134230	992.540	961.150
6)	1,3,5-Trinitrobe	4.70	4.70	4124548	8090047	946.542	986.915
7)	1,3-Dinitrobenze	5.89	5.89	5434260	3743065	932.274	982.877
8)	3,5-Dinitroanili	6.16	6.16	4487489	7508925	959.741	960.495
9)	Nitrobenzene	7.48	7.48	3448458	3255632	921.536	1011.795
10)	Nitroglycerin	0.00	8.92	0	6078812	N.D. d	4757.243
11)	Tetryl	9.17	9.16	2652769	4197824	896.376	1014.149
12)	2,4,6-Trinitroto	9.72	9.72	3510785	3883431	896.308	908.135
13)	2-Amino-4,6-Dini	9.88	9.89	3735215	6016700	1000.247	1074.474
14)	4-Amino-2,6-Dini	10.39	10.39	2640522	5277609	983.187	990.125
16)	2,4-Dinitrotolue	11.62	11.62	5005783	3183950	964.845	1009.092
17)	2,6-Dinitrotolue	12.07	12.07	2923635	3689493	975.555	999.907
18)	o-Nitrotoluene	15.31	15.31	2377327	3373537	920.017	1012.811
19)	p-Nitrotoluene	15.91	15.90	3728921	3276583	933.121	1034.710
20)	m-Nitrotoluene	16.88	16.88	3413611	3884815	981.708	1017.197
21)	PETN	0.00	18.81	0	6785787	N.D. d	5149.434m

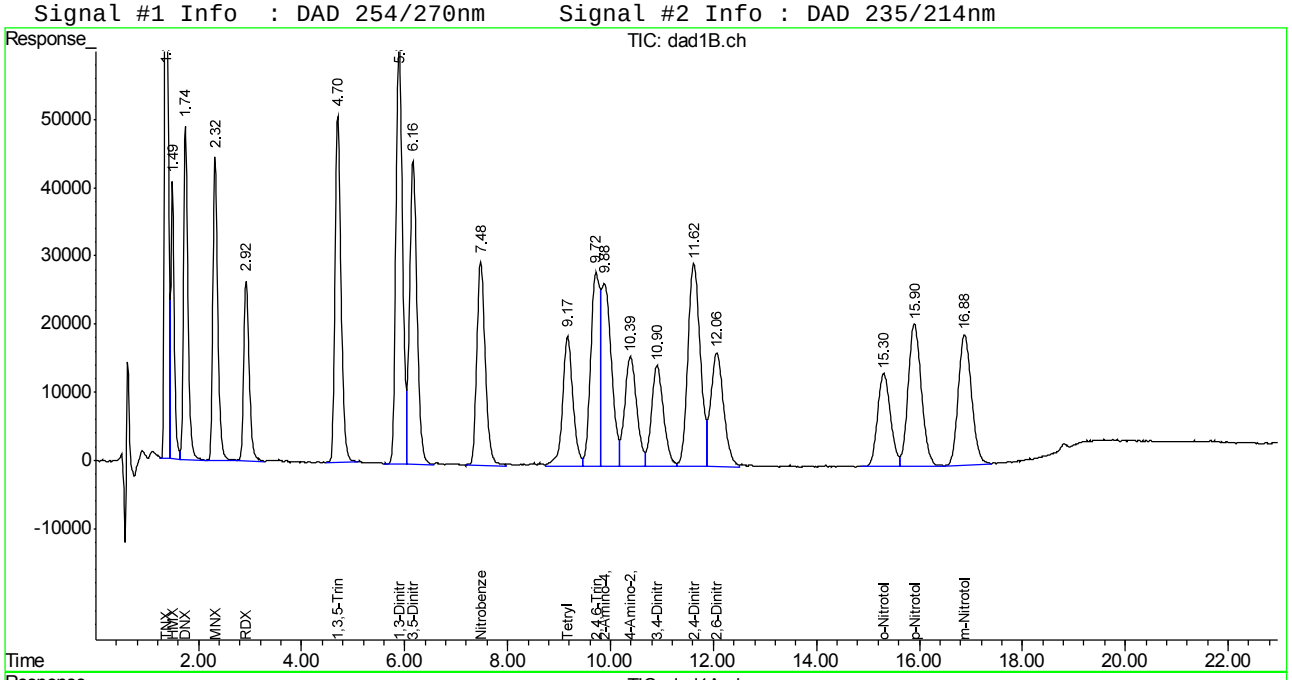
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059776.D 8330B_0516PLUS.M Thu May 17 08:42:13 2018 Page 1

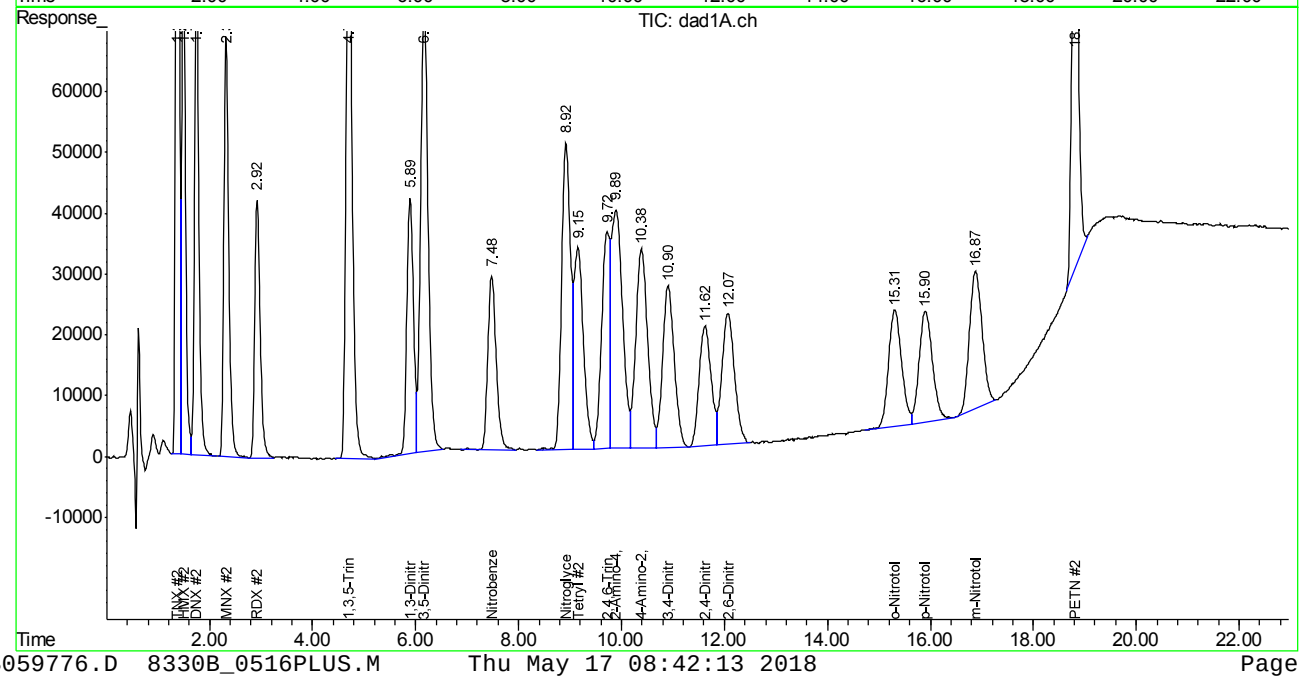
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1A.ch
Acq On : 16-May-2018, 17:43:44 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:35 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

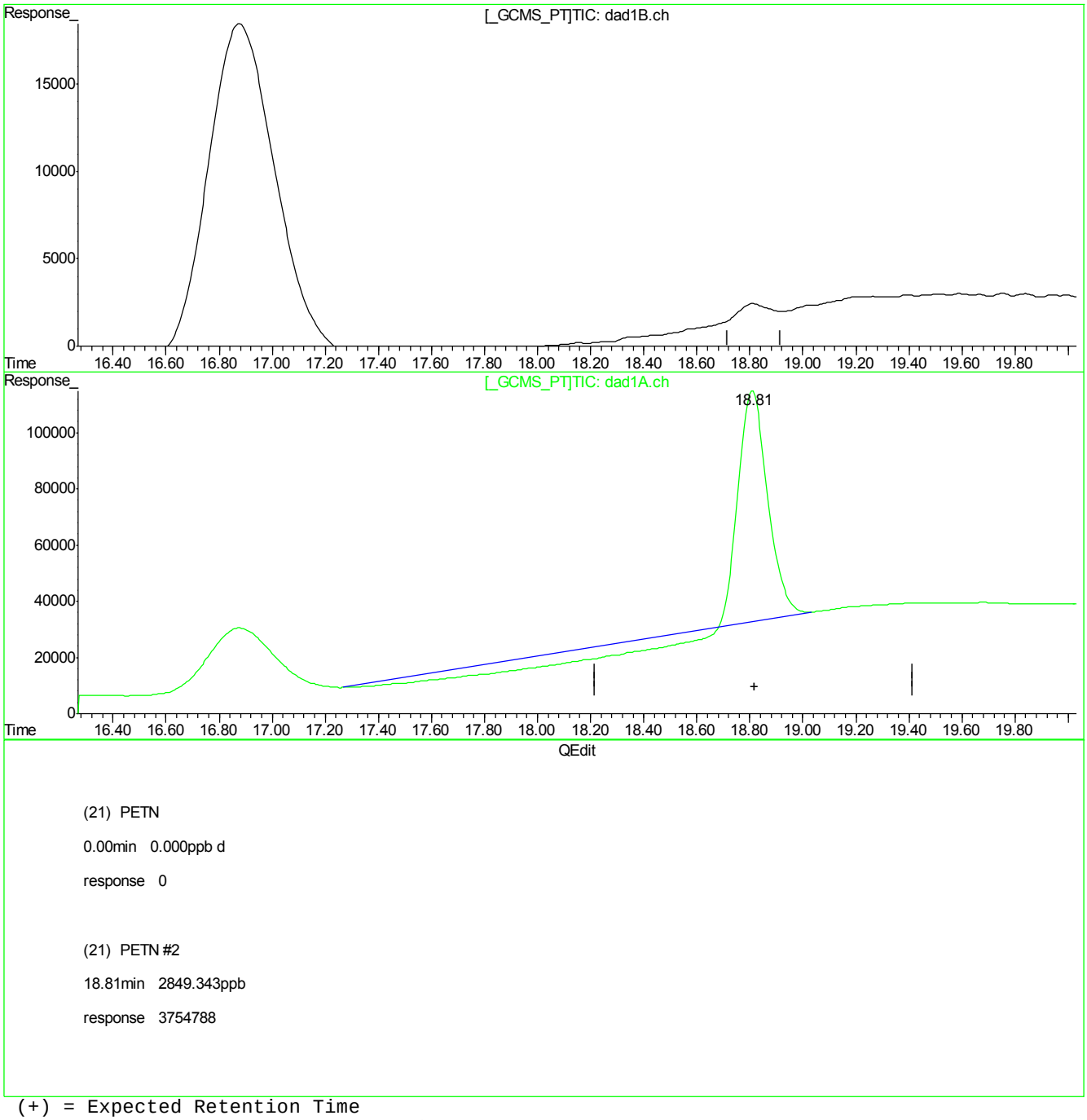
Sample Number:	GBB1732-CC1732	**Method:**	SW846 8330B
Lab FileID:	BB059776.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 17:43	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	18.81	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1A.ch
Acq On : 16-May-2018, 17:43:44 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059776.D 8330B_0516PLUS.M Thu May 17 08:35:45 2018

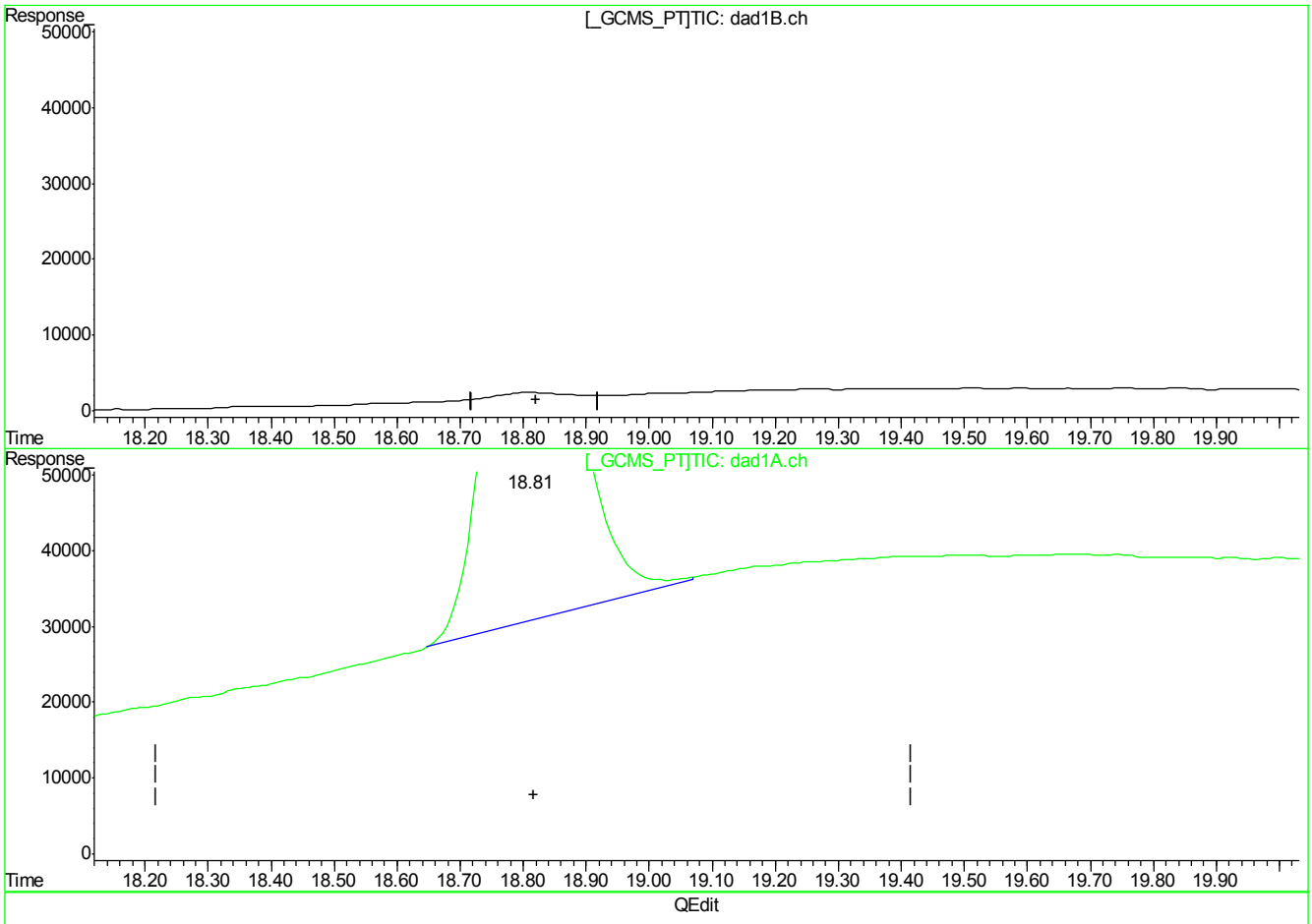
7.6.9.2

7

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059776.D\dad1A.ch
Acq On : 16-May-2018, 17:43:44 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.81min 5149.434ppb m

response 6785787

(+) = Expected Retention Time
BB059776.D 8330B_0516PLUS.M Thu May 17 08:35:52 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/17/18 17:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1A.ch
Acq On : 16-May-2018, 23:43:15 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 08:00:57 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.88	10.88	2427527	4174078	975.490	992.372
	Spiked Amount 500.000	Range 69 - 134		Recovery =		195.10%#	198.47%#
	Target Compounds						
1)	TNX	1.38	1.38	4986709	7590827	1018.859	994.470
2)	HMX	1.50	1.50	1829631	4962801	1012.182	1002.911
3)	DNX	1.75	1.75	2864936	4607088	931.574	908.664
4)	MNX	2.32	2.32	2988772	4624667	956.436	980.843
5)	RDX	2.93	2.93	1975692	3136668	993.563	961.897
6)	1,3,5-Trinitrobe	4.70	4.70	4153753	8024737	953.245	978.947
7)	1,3-Dinitrobenze	5.89	5.89	5396911	3748589	925.867	984.346
8)	3,5-Dinitroanili	6.16	6.16	4482539	7570925	958.682	968.426
9)	Nitrobenzene	7.47	7.47	3374062	3219236	901.656	1000.747
10)	Nitroglycerin	0.00	8.90	0	5987695	N.D. d	4685.935
11)	Tetryl	9.15	9.13	2587742	4214123	874.404	1018.087
12)	2,4,6-Trinitroto	9.69	9.70	3447742	3829443	880.213	895.510
13)	2-Amino-4,6-Dini	9.86	9.88	3751097	5983971	1004.500	1068.629
14)	4-Amino-2,6-Dini	10.36	10.37	2618728	5228768	975.221	980.962
16)	2,4-Dinitrotolue	11.59	11.59	4976569	3129230	959.214	991.749
17)	2,6-Dinitrotolue	12.03	12.04	2947153	3728559	983.245	1010.495
18)	o-Nitrotoluene	15.29	15.29	2345791	3272579	907.813	982.501
19)	p-Nitrotoluene	15.88	15.88	3724833	3240146	932.098	1023.204
20)	m-Nitrotoluene	16.85	16.85	3402349	3859163	978.535	1010.985
21)	PETN	0.00	18.79	0	6688571	N.D. d	5075.661m

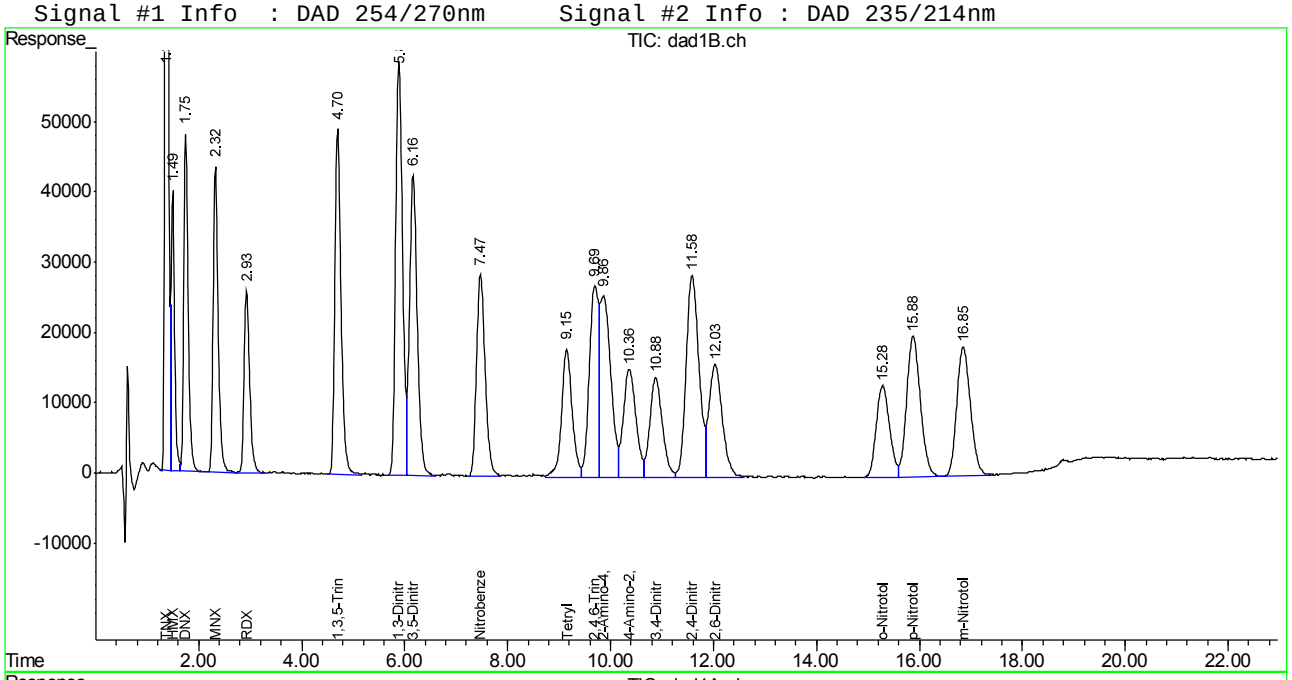
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB059788.D 8330B_0516PLUS.M Thu May 17 08:42:14 2018 Page 1

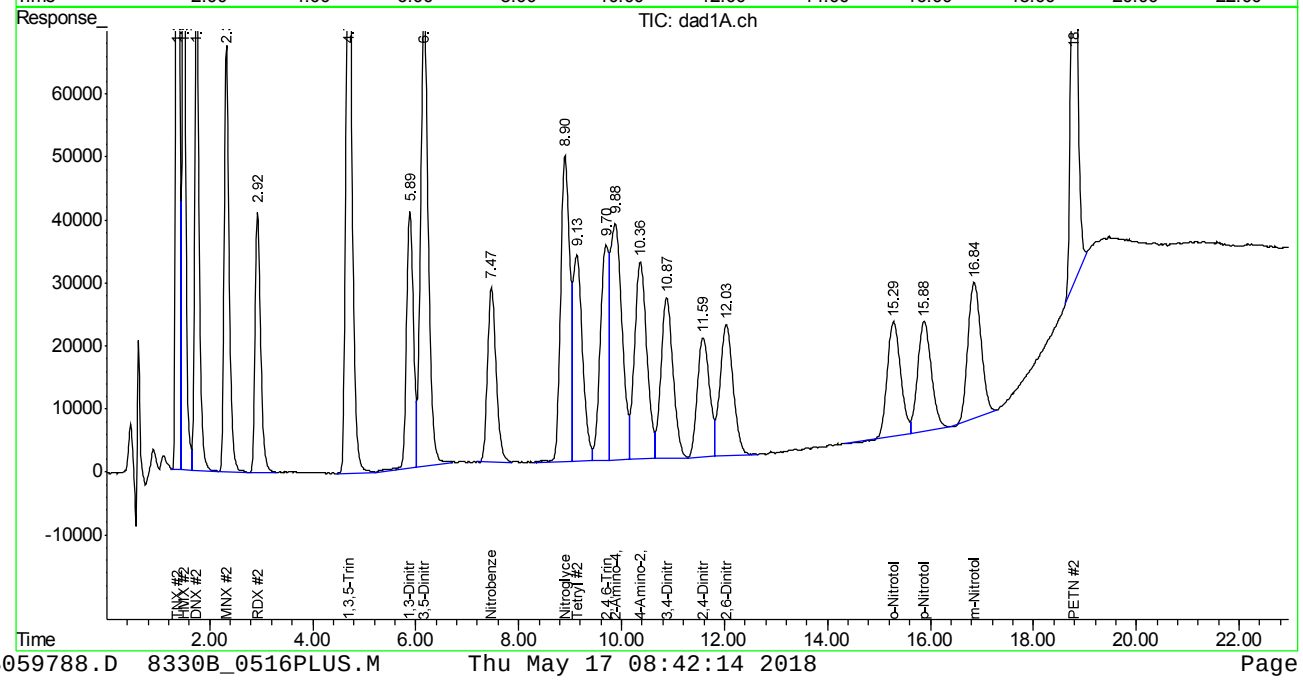
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1A.ch
Acq On : 16-May-2018, 23:43:15 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:37 2018 Quant Results File: 8330B_0516PLUS.RES

Quant Method : D:\MSDCHEM\1...\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 254/270nm Signal #2 Info : DAD 235/214nm





Manual Integration Approval Summary

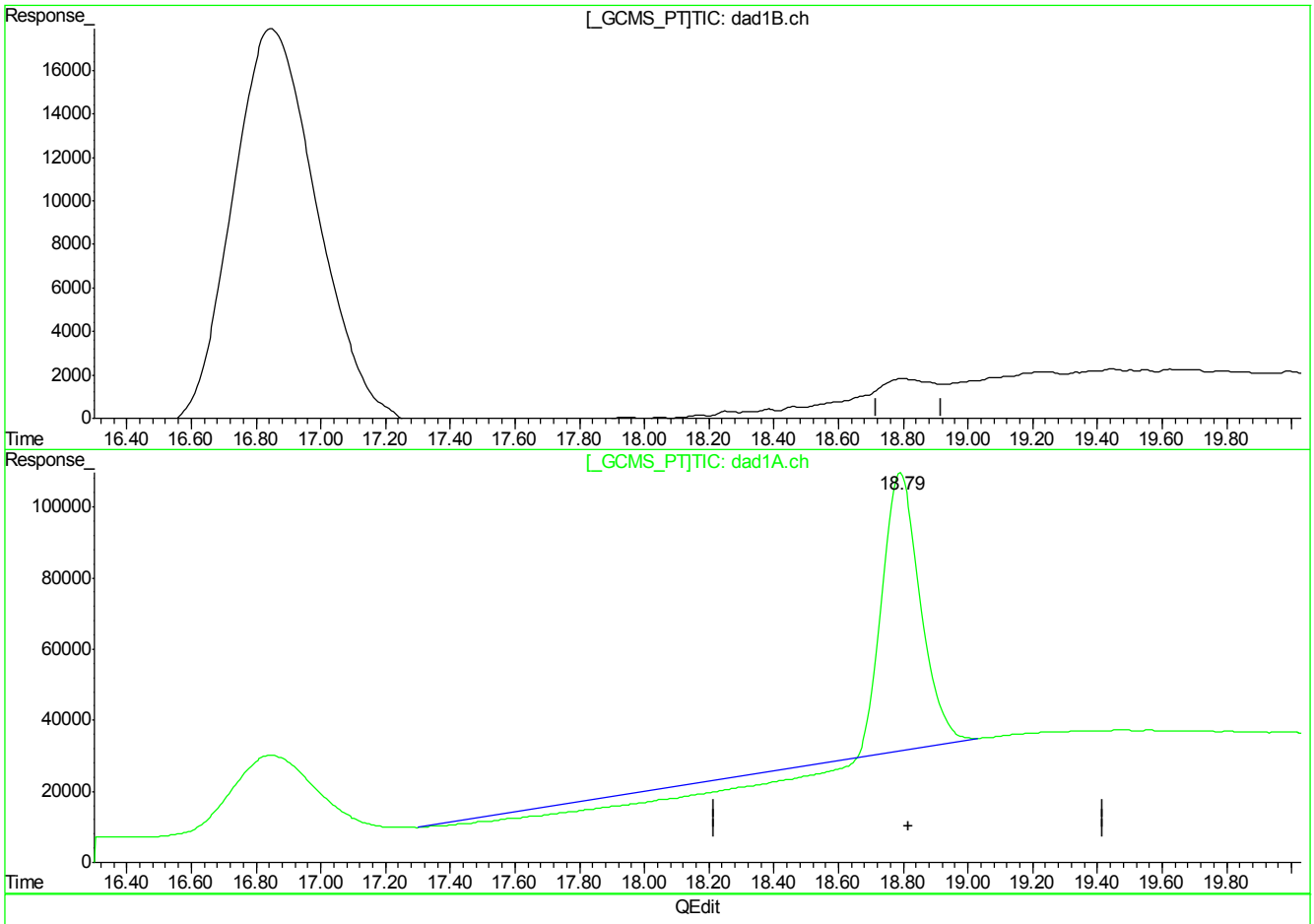
Sample Number:	GBB1732-CC1732	**Method:**	SW846 8330B
Lab FileID:	BB059788.D	**Analyst approved:**	05/17/18 08:46 Evita Martinez
Injection Time:	05/16/18 23:43	**Supervisor approved:**	05/17/18 17:17 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	18.79	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1A.ch
Acq On : 16-May-2018, 23:43:15 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

18.79min 3376.674ppb

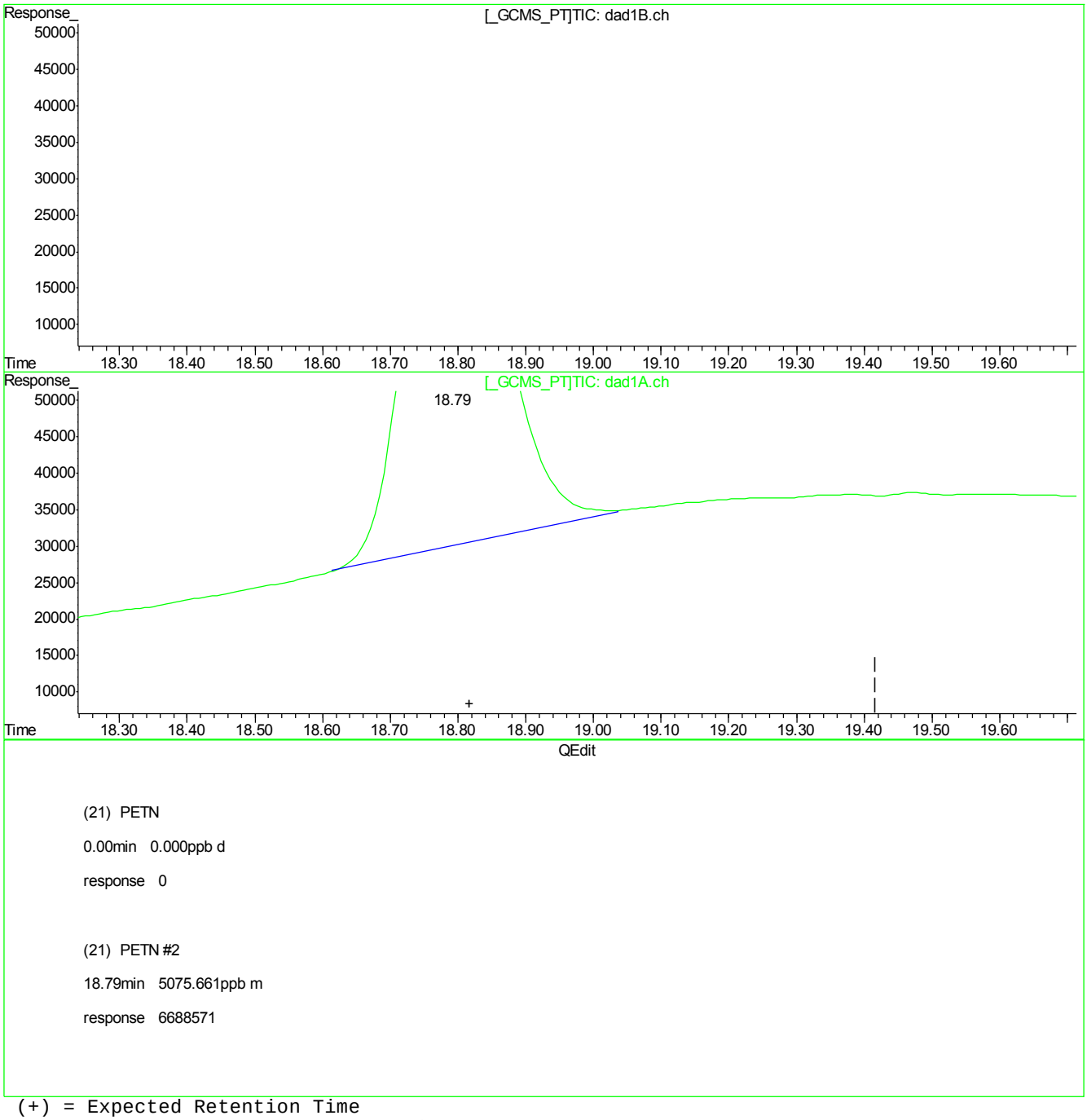
response 4449692

(+) = Expected Retention Time
BB059788.D 8330B_0516PLUS.M Thu May 17 08:36:56 2018

Quantitation Report (Qedit)

Signal #1 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1B.ch Vial: 86
Signal #2 : C:\HPCHEM\1\DATA\GBB1732\BB059788.D\dad1A.ch
Acq On : 16-May-2018, 23:43:15 Operator: evitam
Sample : cc1732-1000 Inst : G1315B
Misc : OP70034,gbb1732,10.00,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 17 8:00 2018 Quant Results File: 8330B_0516PLUS.RES

Method : D:\MSDCHEM\1\METHODS\8330B_0516PLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed May 16 13:11:28 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
BB059788.D 8330B_0516PLUS.M Thu May 17 08:37:04 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:57 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.58	14.60	98690	251786	16.740	20.083
	Spiked Amount 500.000	Range 70 - 136		Recovery =		3.35%#	4.02%#
	Target Compounds						
1)	TNX	5.00	5.00	270396	268585	32.146m	31.846m
2)	HMX	5.46	5.46	61139	65579	16.096m	17.142m
3)	DNX	5.58	5.58	151583	169136	23.094m	25.858m
4)	MNX	6.68	6.68	132741	132741	27.438	27.438
5)	1,3,5-Trinitrobe	7.55	7.55	208327	208327	20.402	20.410
6)	RDX	8.09	8.09	93105	93105	19.557	19.648
7)	1,3-Dinitrobenze	10.09	10.10	316123	176008	21.719	12.357m#
8)	Nitrobenzene	11.09	11.09	233656	184835	30.565	19.401m
9)	2,4,6-Trinitroto	11.89	11.89	254281	217868	24.940	13.900m#
10)	Nitroglycerin	0.00	12.72	0	268418	N.D. d	73.009m
11)	Tetryl	13.30	13.28	188129	499094	27.427	40.951m#
13)	2,6-Dinitrotolue	14.93	14.90	140836	174953	20.257	16.038
14)	2,4-Dinitrotolue	15.65	15.67	275037	489908	20.698	49.345 #
15)	o-Nitrotoluene	17.23	17.25	120053	171082	28.895	30.388
16)	3,5-Dinitroanili	16.68	16.68	287796	475677	27.156	26.561
17)	p-Nitrotoluene	18.42	18.46	235862	419386	20.499	19.889m
18)	4-Amino-2,6-Dini	18.42	18.46	235862	428039	20.499	20.299m
19)	m-Nitrotoluene	19.66	19.69	105739	204872	21.883	21.659
20)	2-Amino-4,6-Dini	20.68	20.83	168840	118490	17.600	8.755m#
21)	PETN	0.00	22.34	0	288256	N.D. d	88.948m

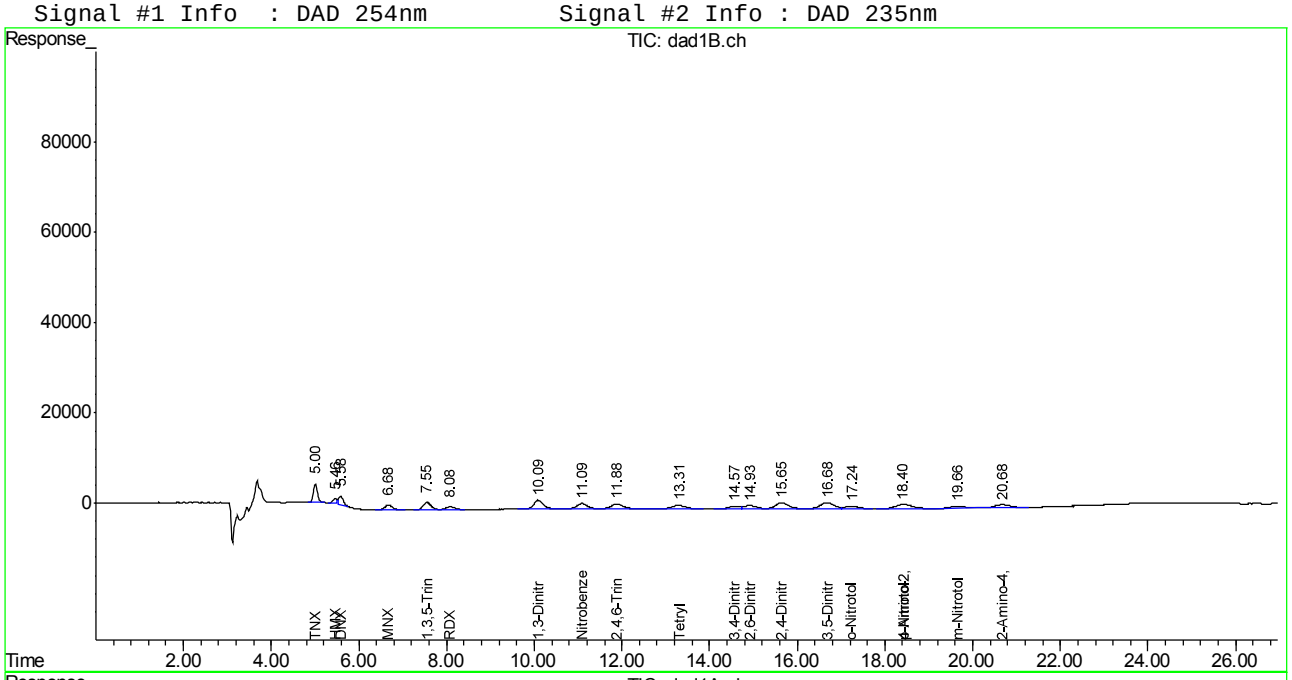
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

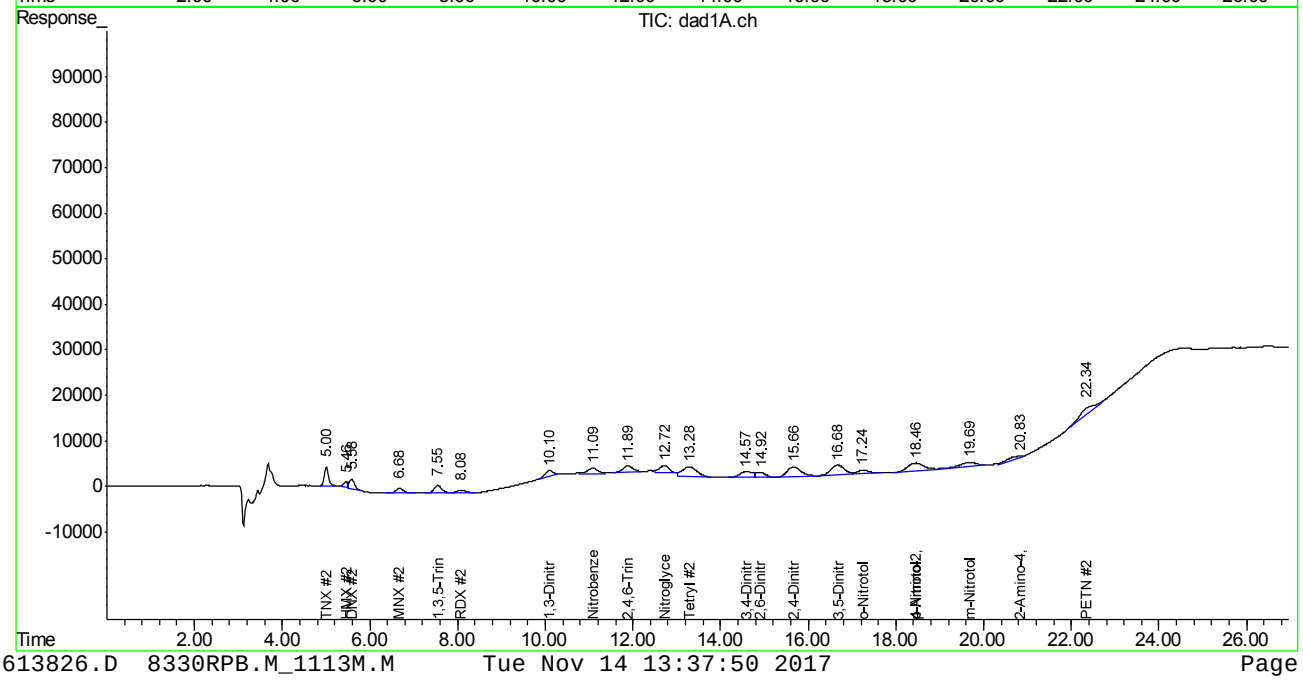
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:53 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

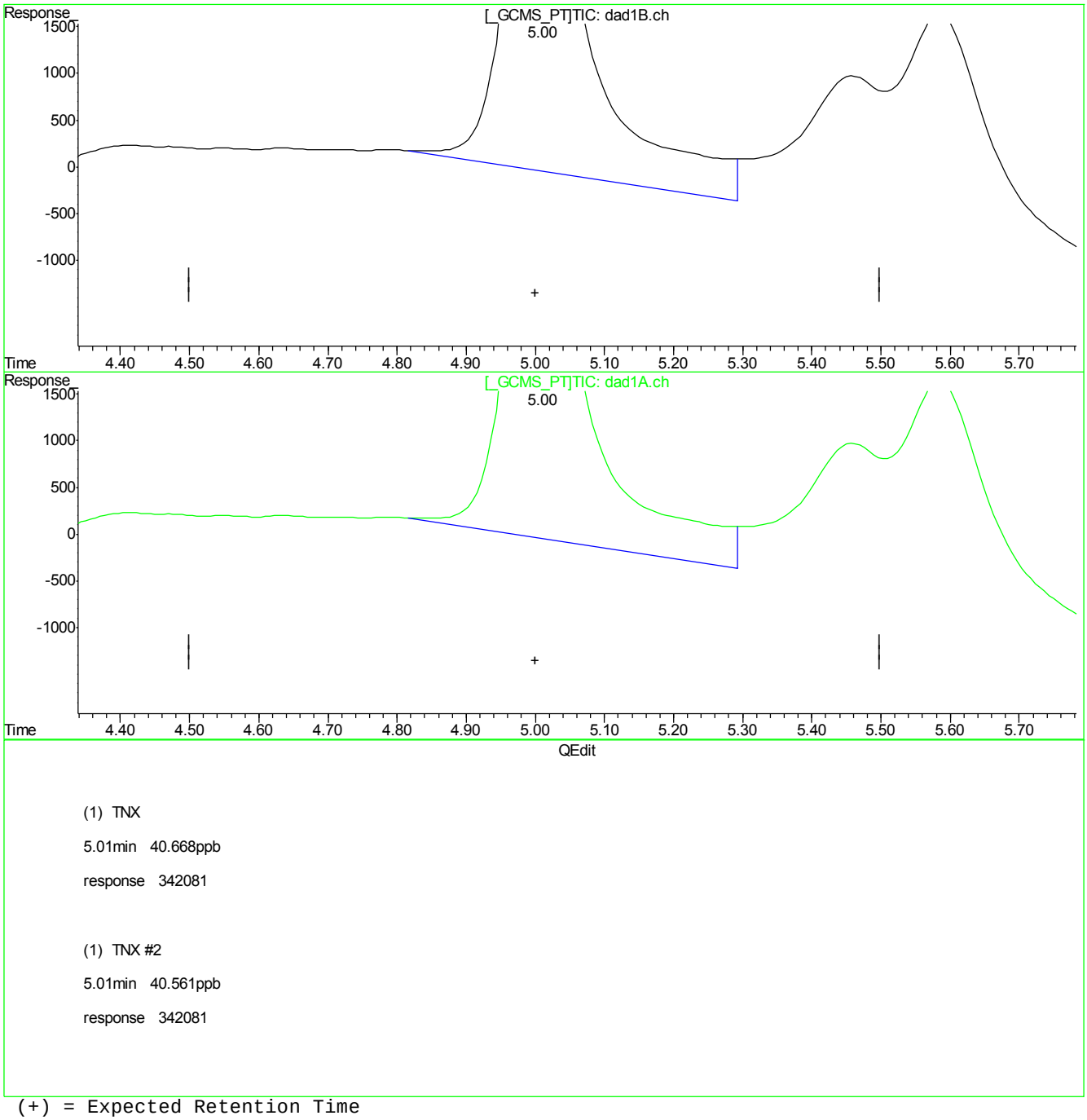
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613826.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 13:36	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.58	Poorly defined baseline
DNX		2	5.58	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.10	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.09	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.89	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.72	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	18.46	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	18.46	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.83	Poorly defined baseline
PETN	78-11-5	2	22.34	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(1) TNX

5.01min 40.668ppb

response 342081

(1) TNX #2

5.01min 40.561ppb

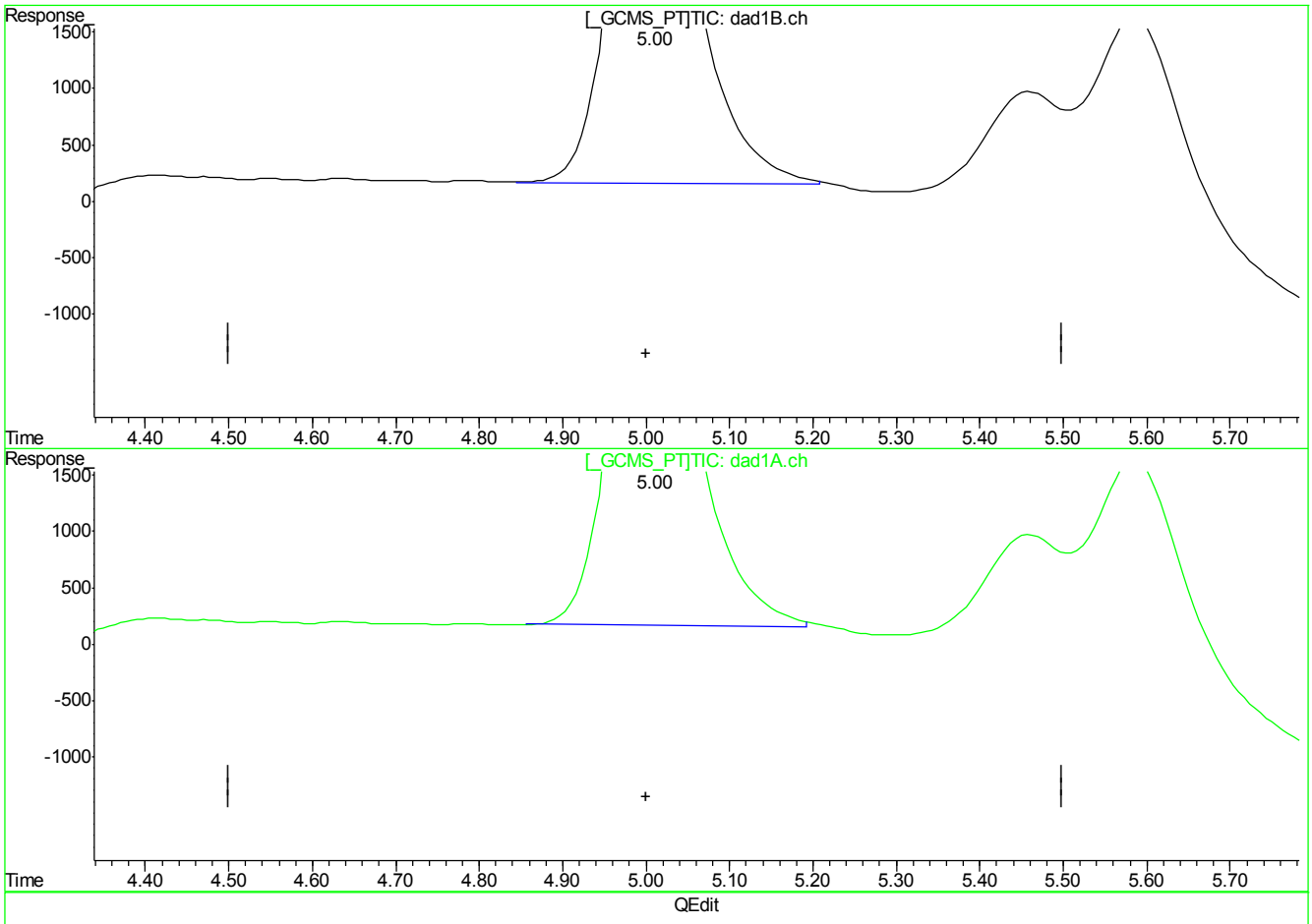
response 342081

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:24 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(1) TNX

5.00min 32.146ppb m

response 270396

(1) TNX #2

5.00min 31.846ppb m

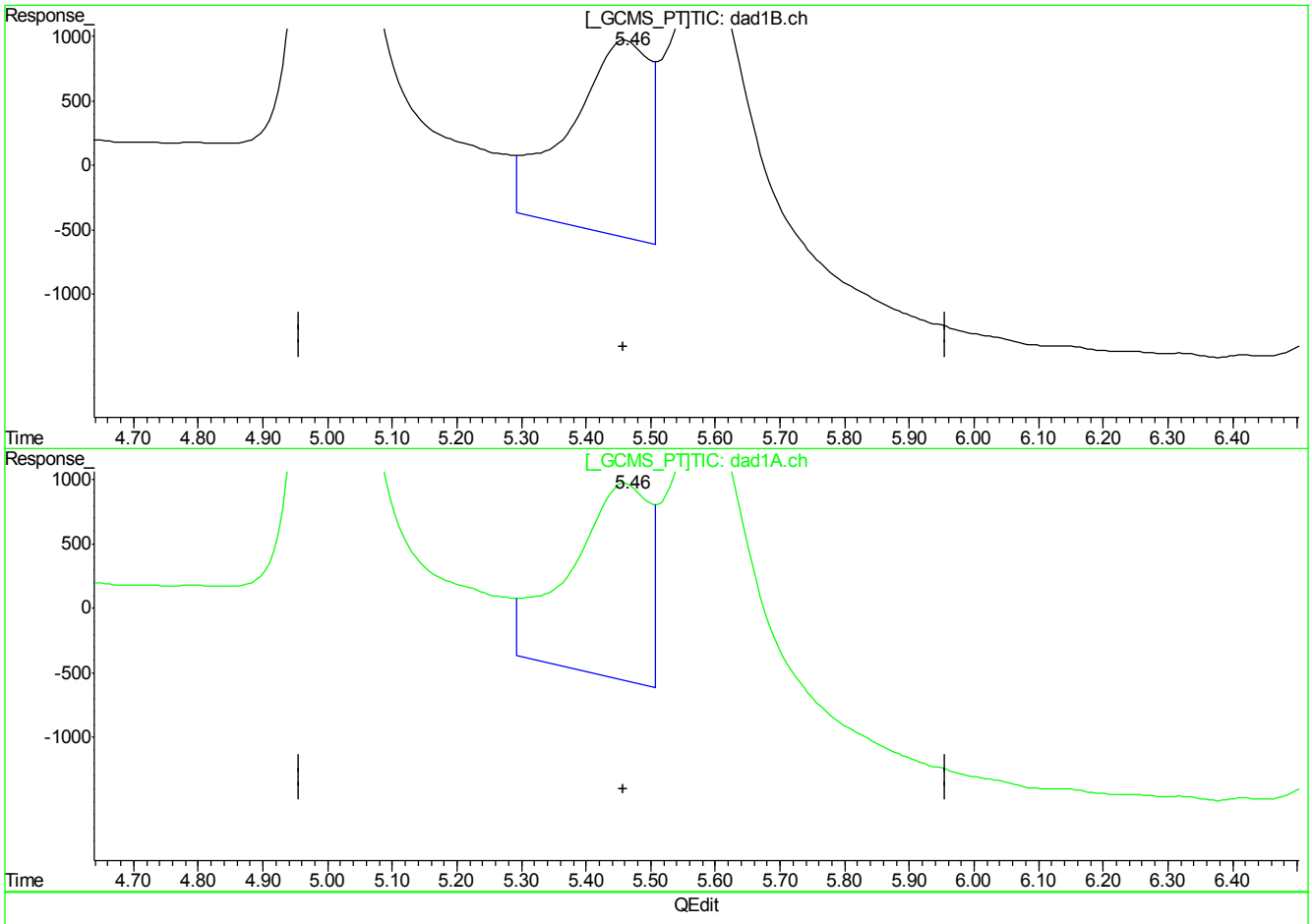
response 268585

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:29 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 33.683ppb

response 127943

(2) HMX #2

5.46min 33.445ppb

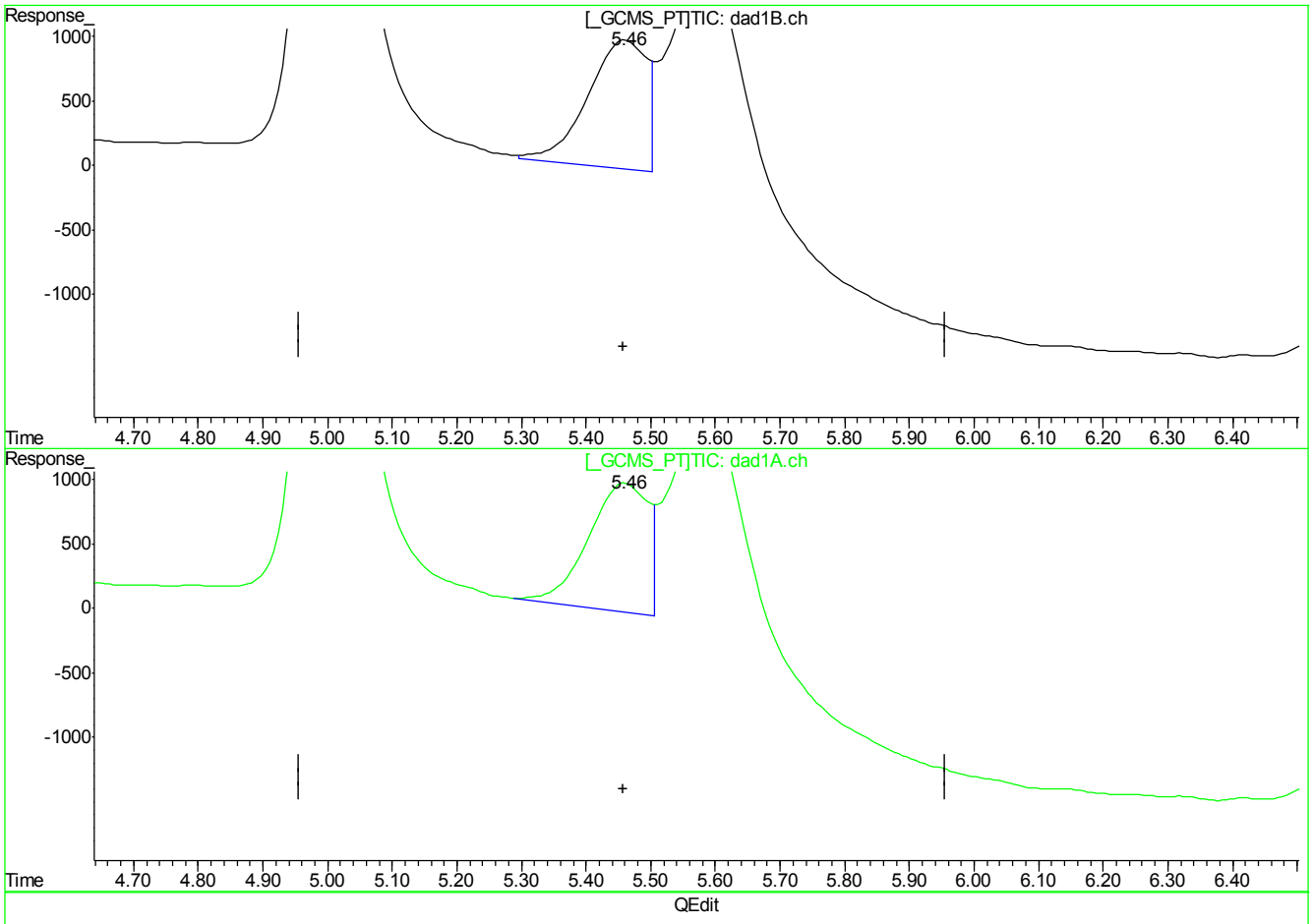
response 127943

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 16.096ppb m

response 61139

(2) HMX #2

5.46min 17.142ppb m

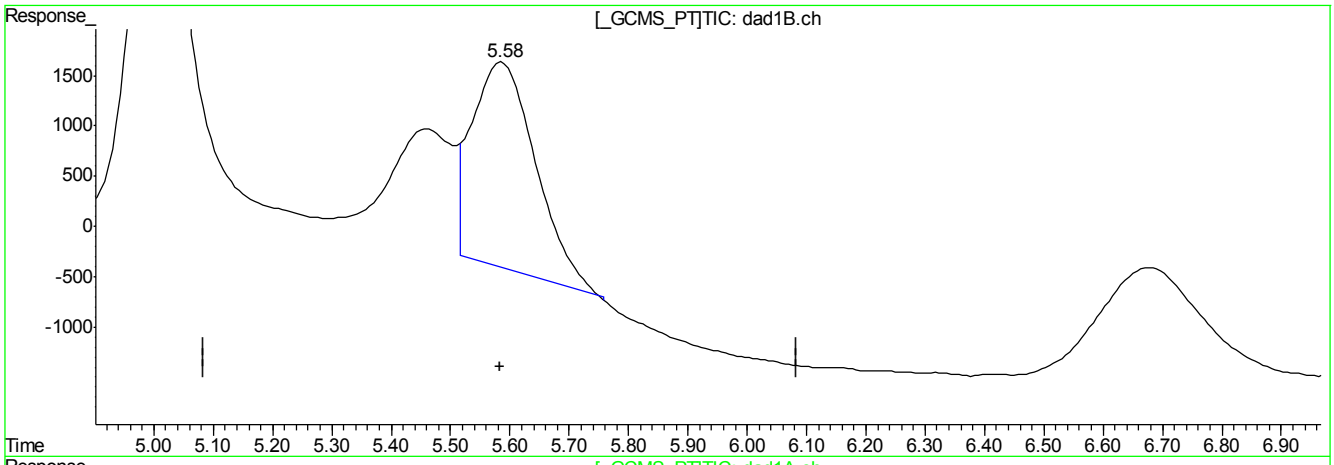
response 65579

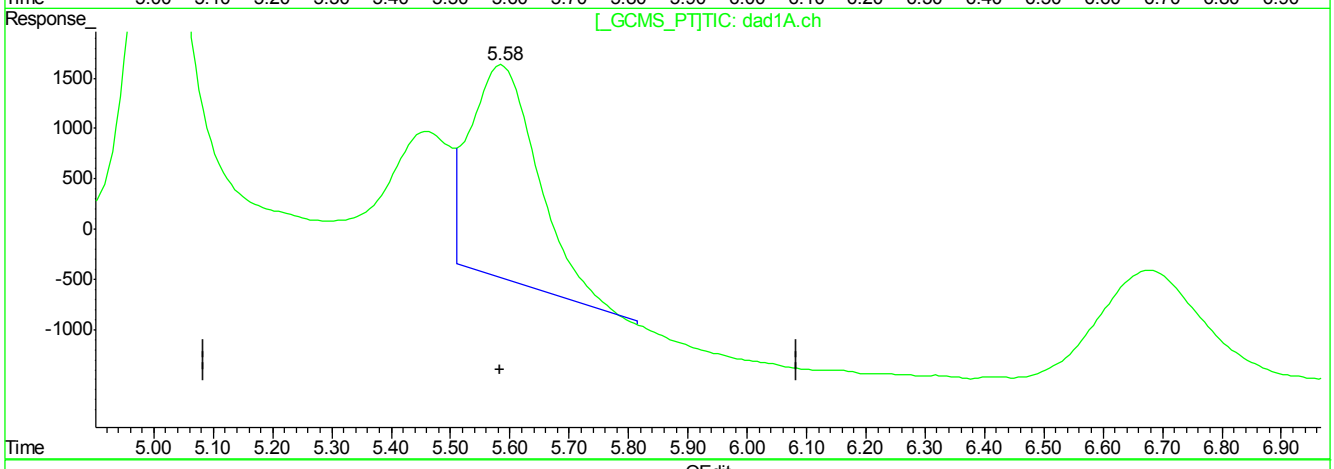
(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:39 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.58min 23.094ppb m

response 151583

(3) DNX #2

5.58min 25.858ppb m

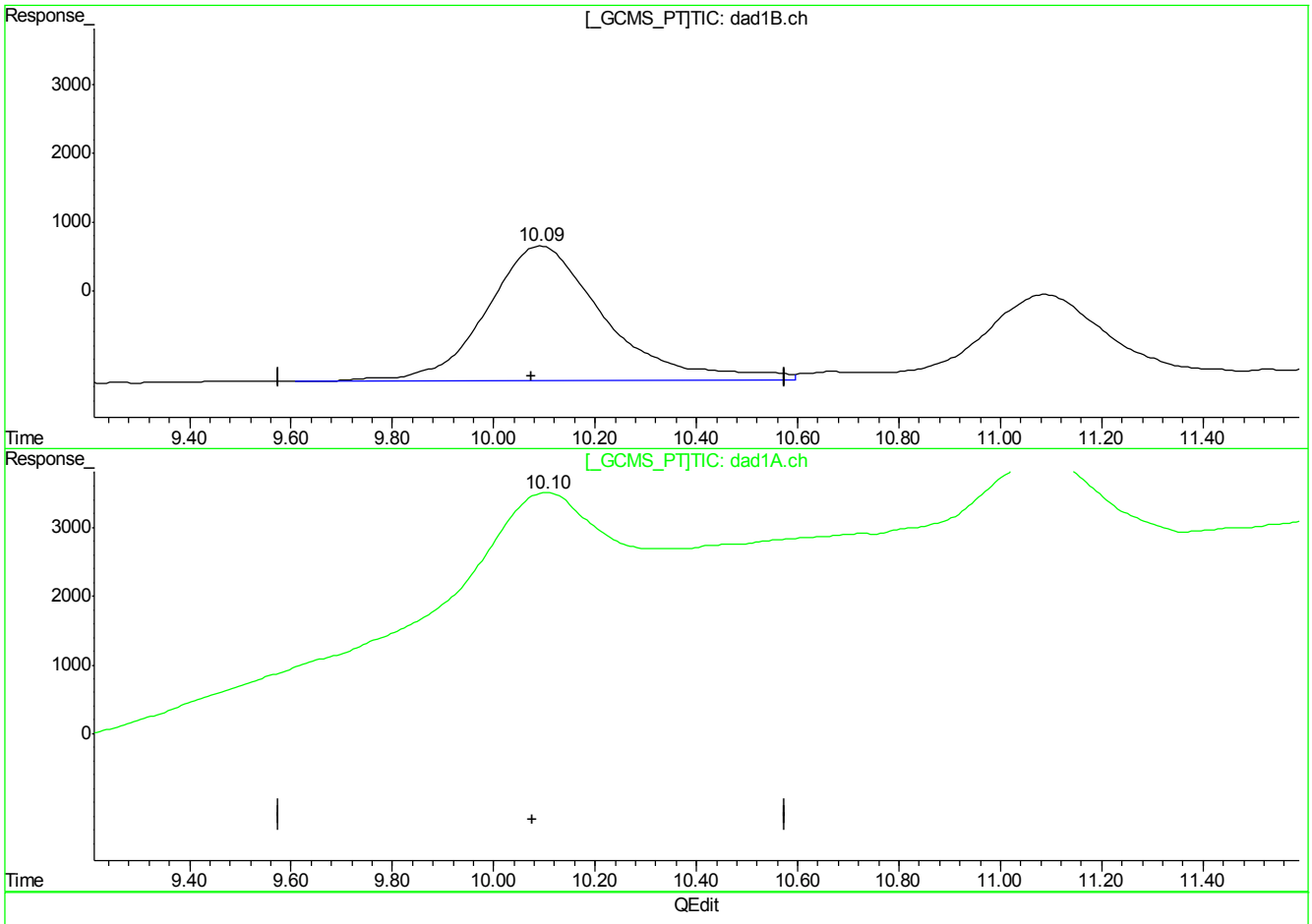
response 169136

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:50:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.11min 117.682ppb

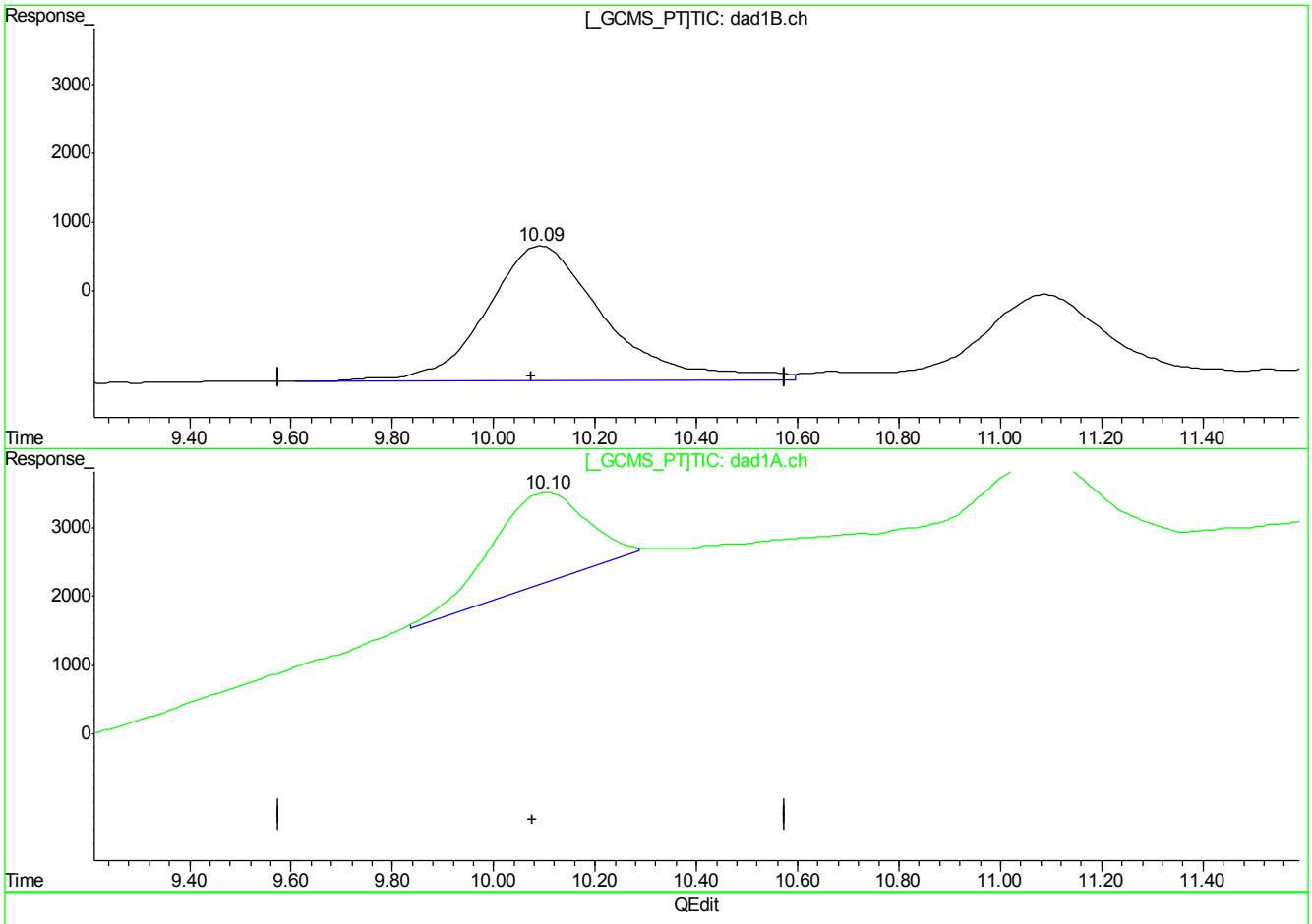
response 1660323

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:01 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 21.719ppb

response 316123

(7) 1,3-Dinitrobenzene #2

10.10min 12.357ppb m

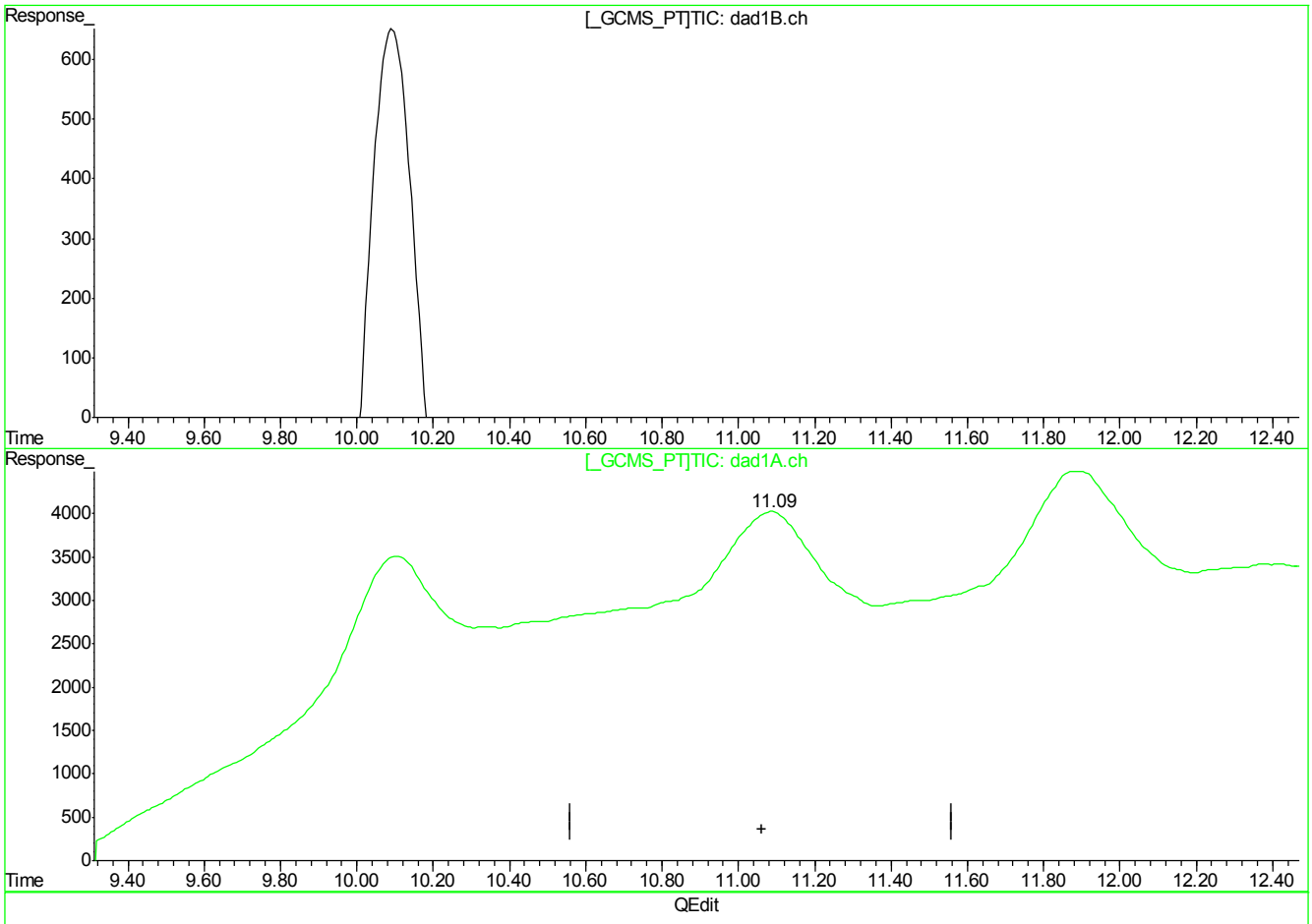
response 176008

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 206.853ppb

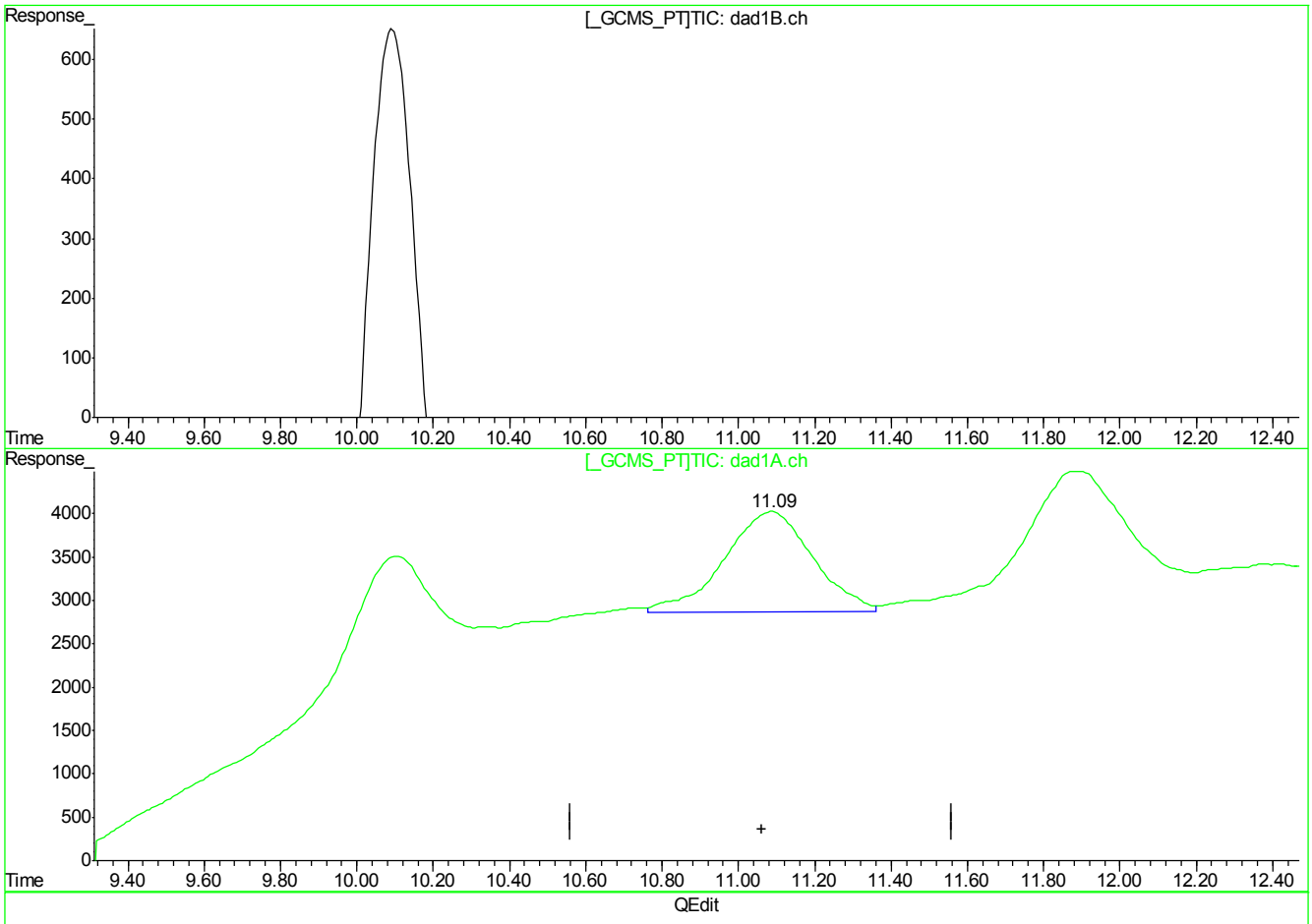
response 1961183

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.09min 30.565ppb

response 233656

(8) Nitrobenzene #2

11.09min 19.401ppb m

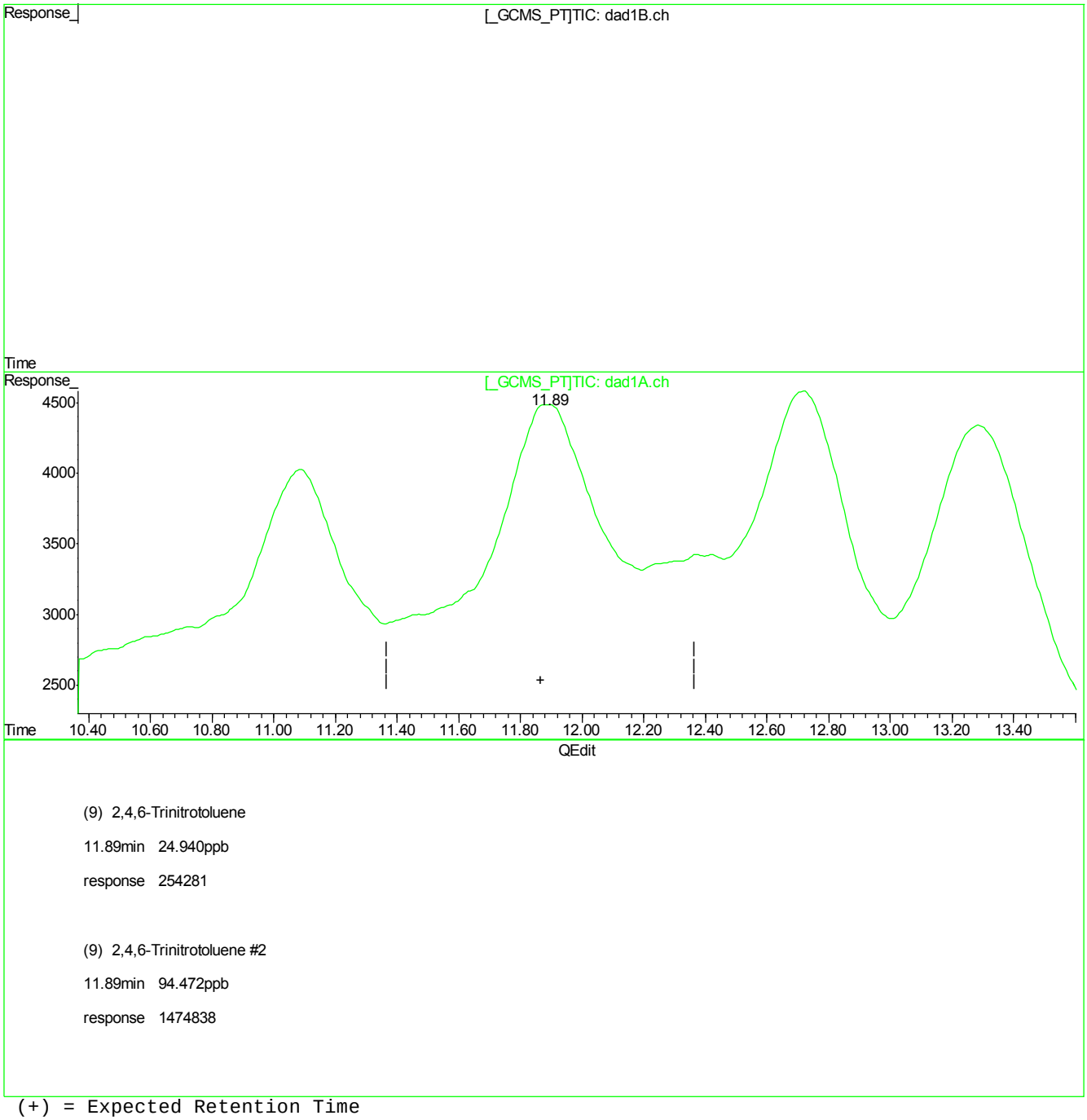
response 184835

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:15 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 94.472ppb

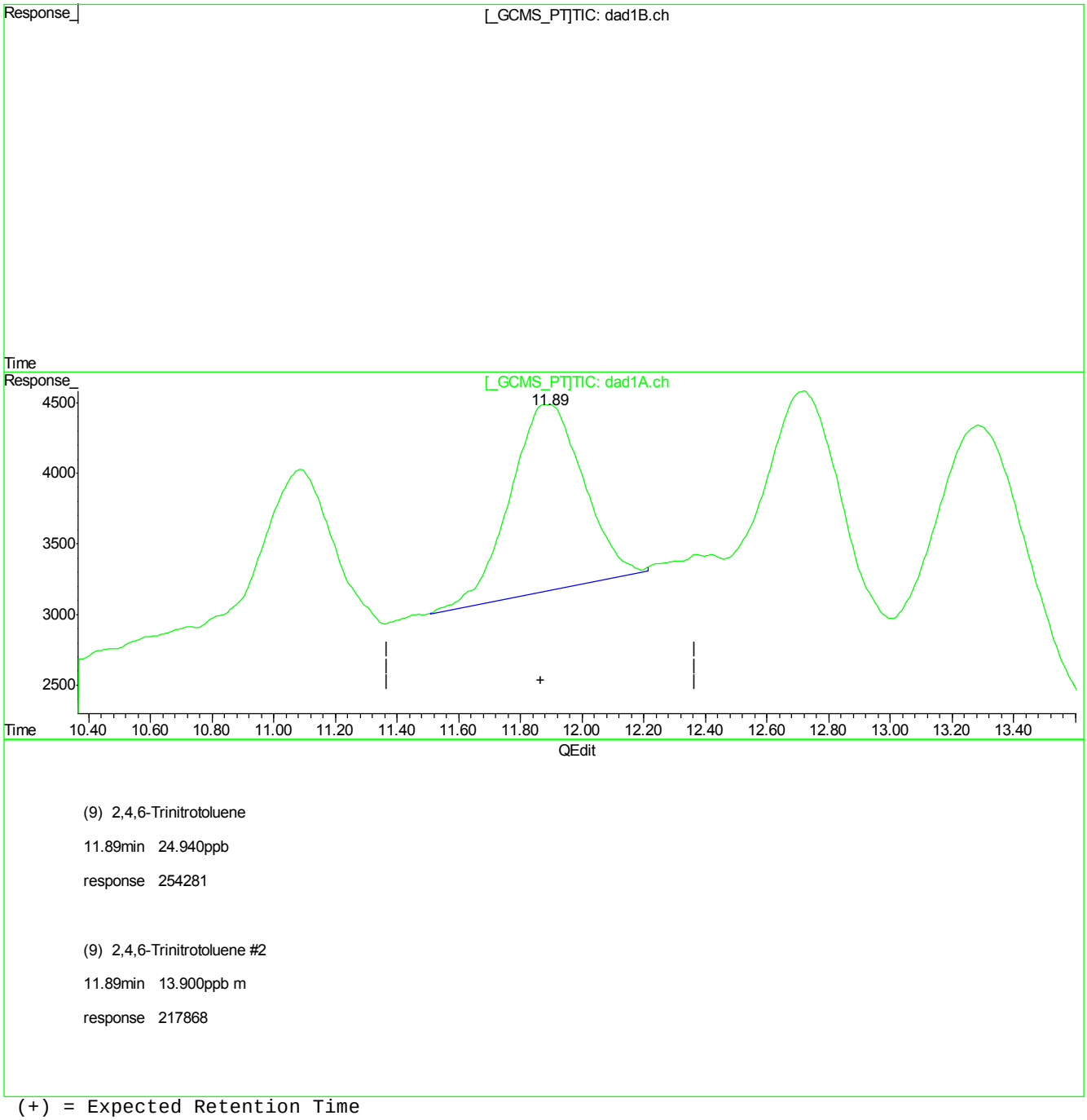
response 1474838

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:19 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.89min 24.940ppb

response 254281

(9) 2,4,6-Trinitrotoluene #2

11.89min 13.900ppb m

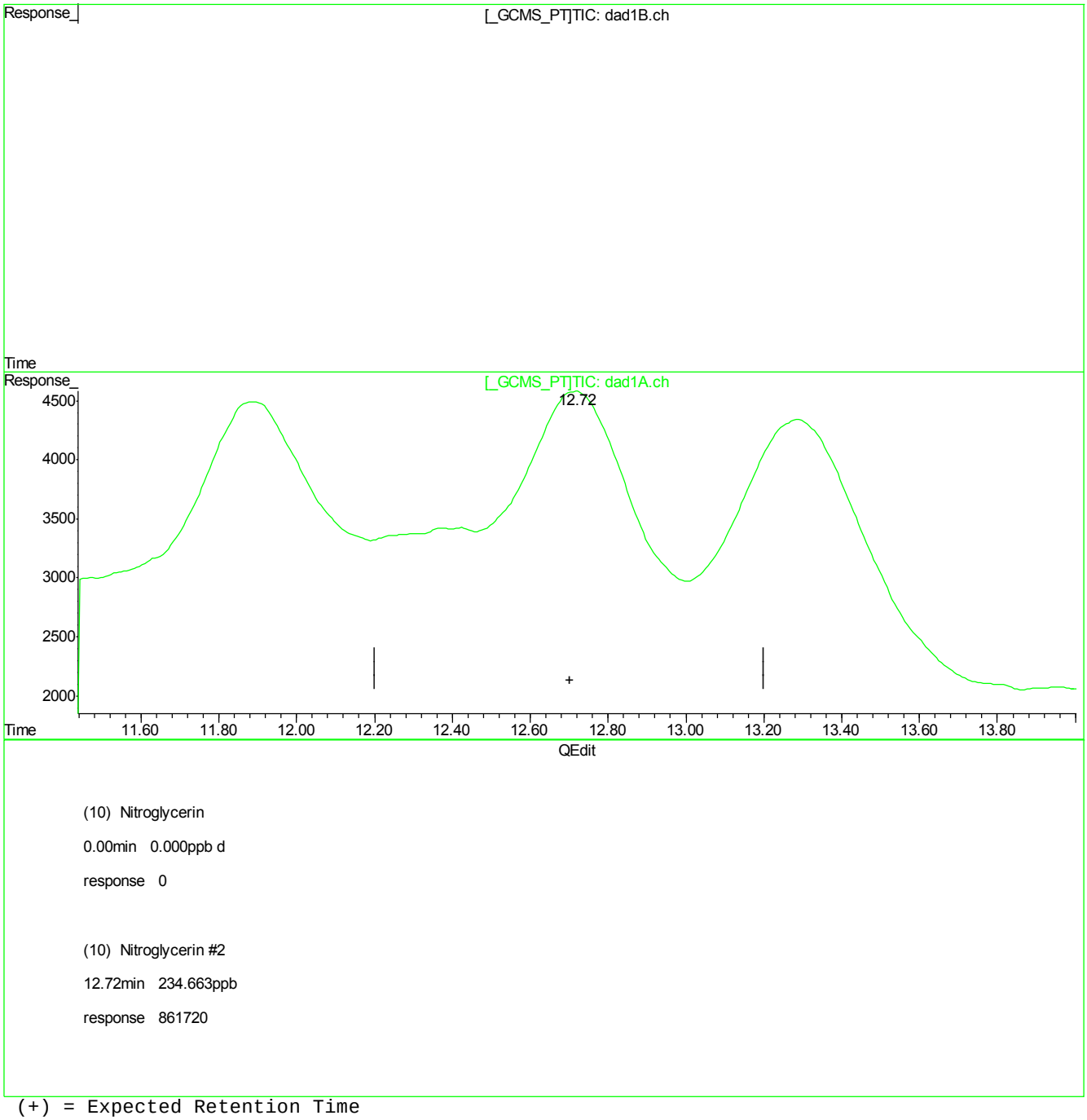
response 217868

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 234.663ppb

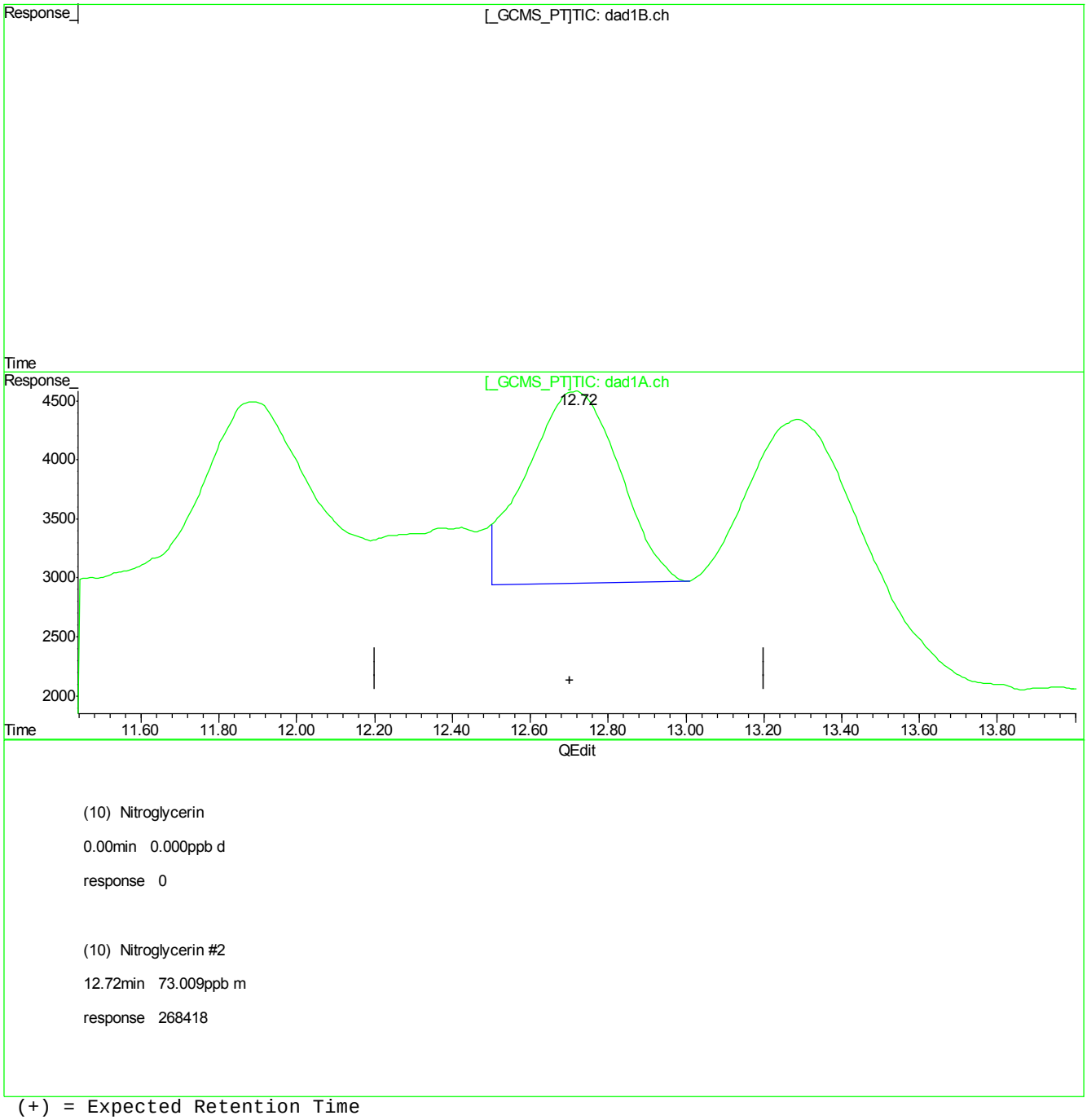
response 861720

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.72min 73.009ppb m

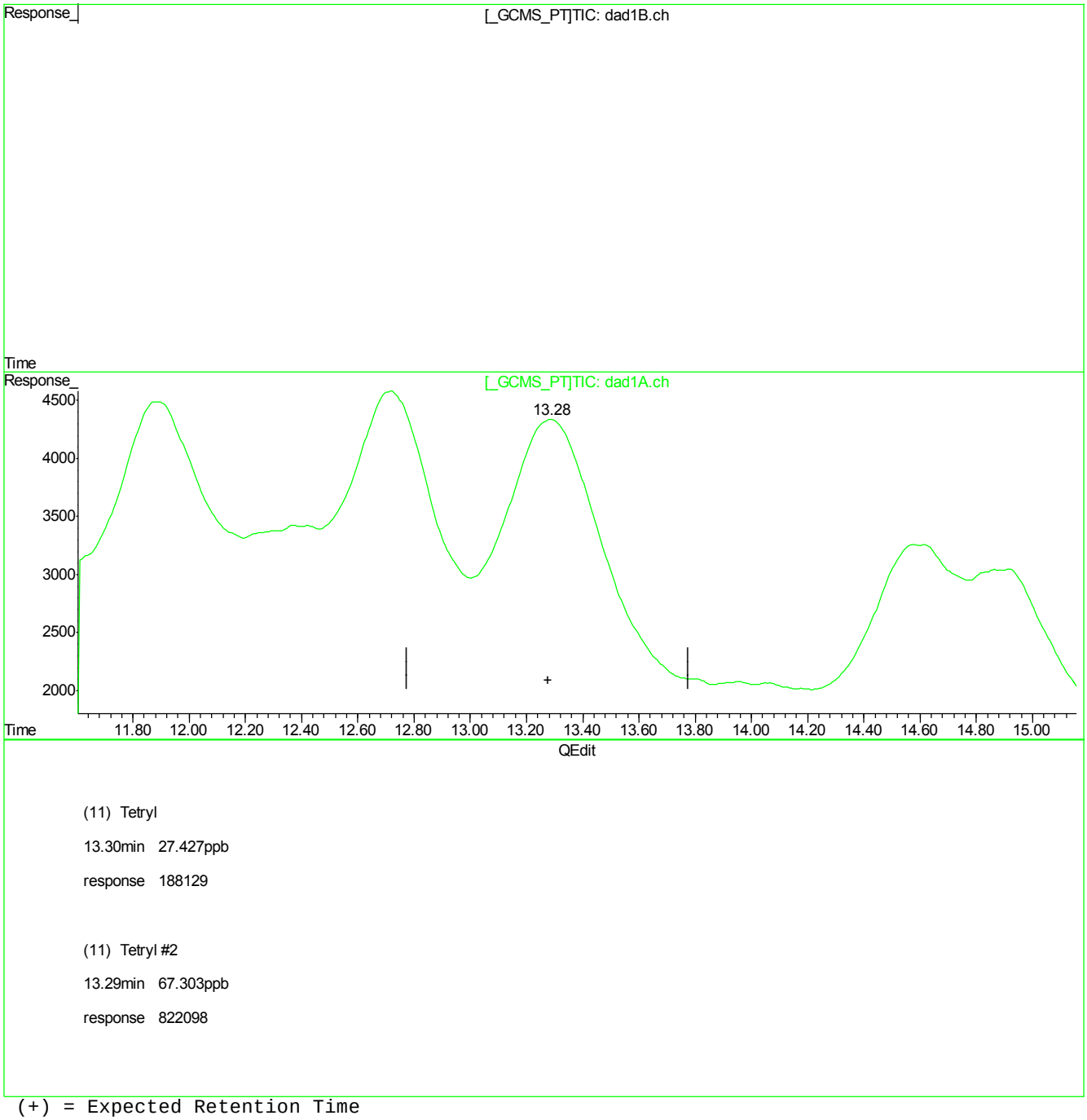
response 268418

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:31 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.30min 27.427ppb

response 188129

(11) Tetryl #2

13.29min 67.303ppb

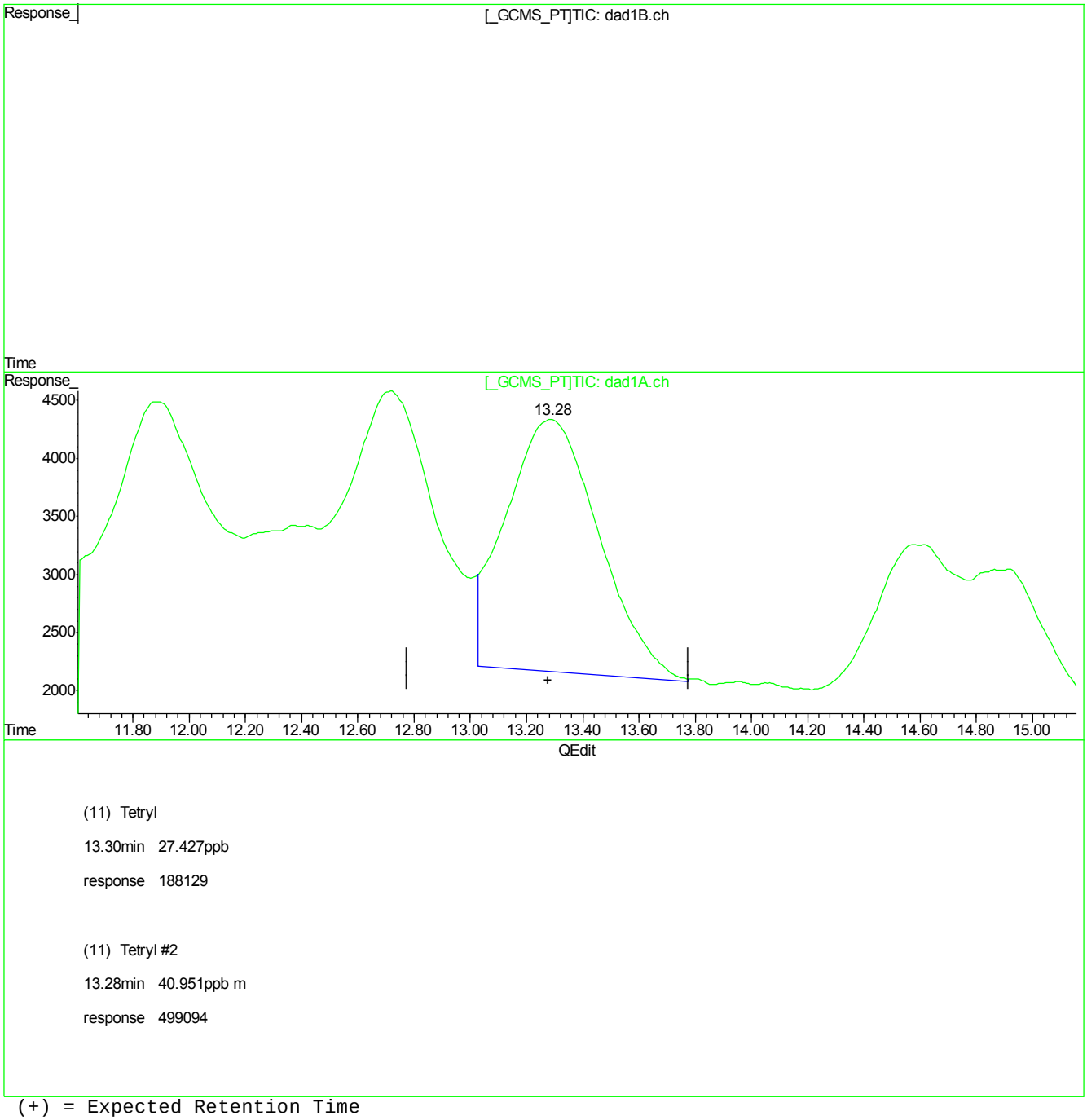
response 822098

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:51:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

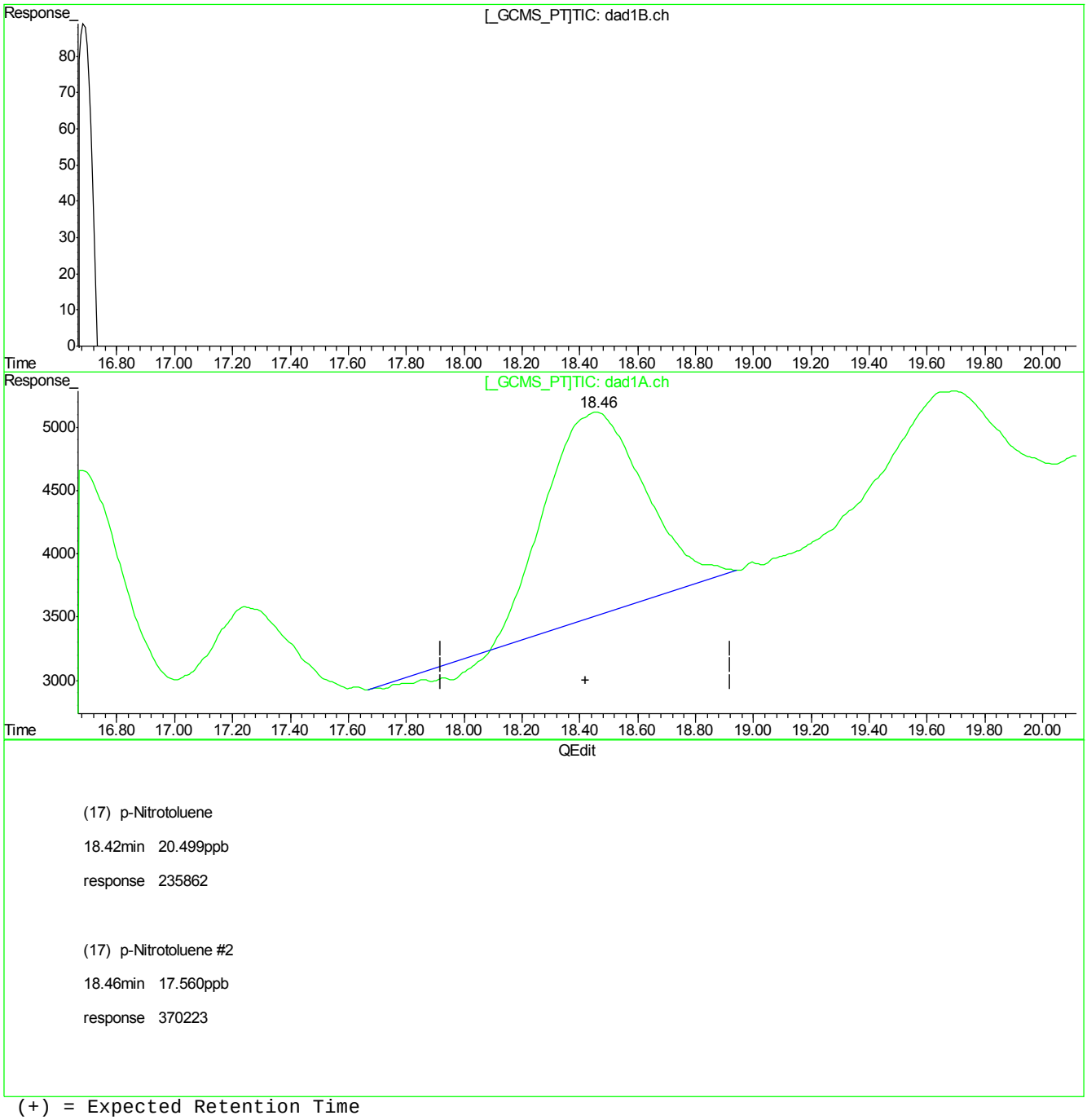


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:52:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 17.560ppb

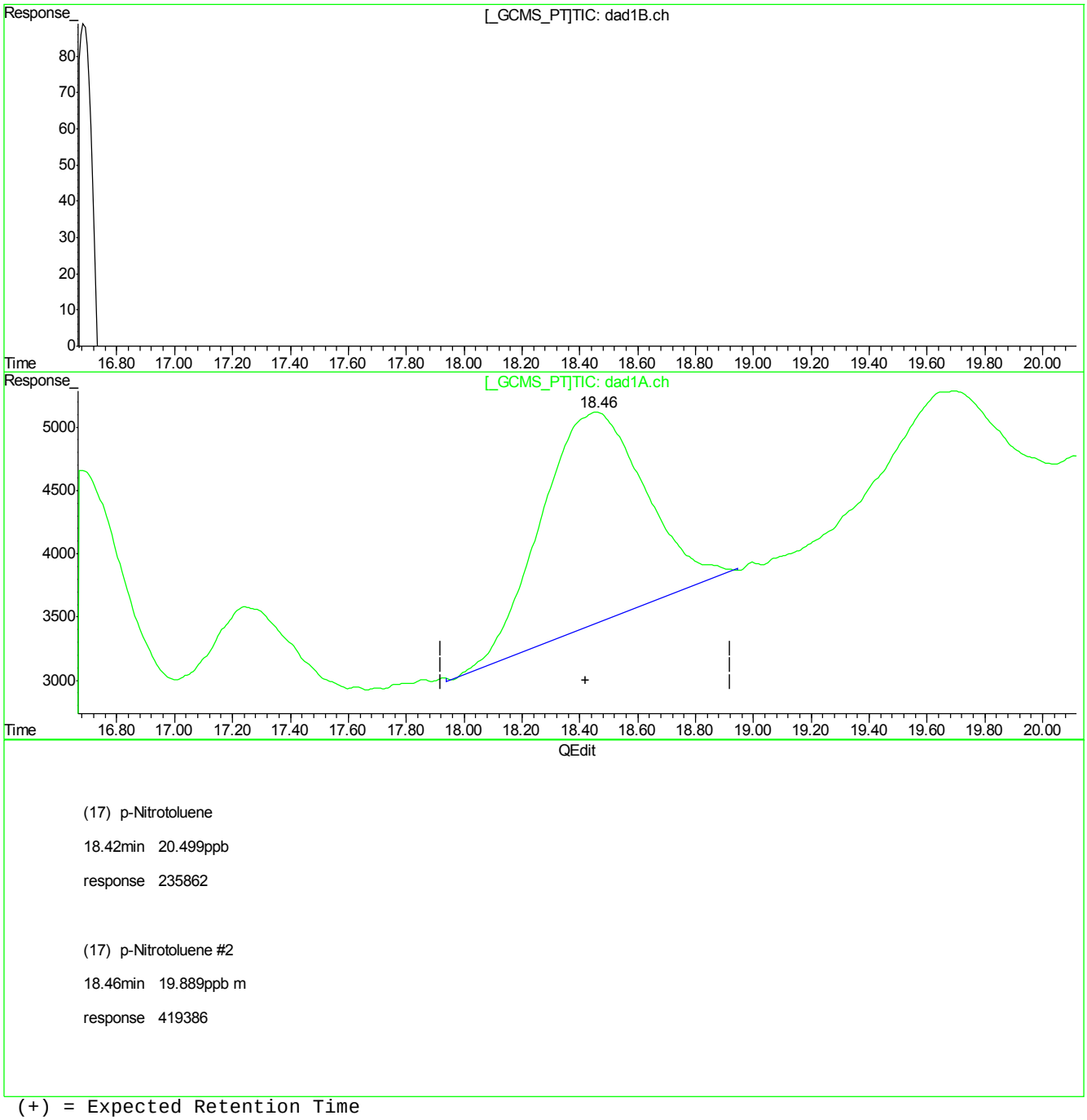
response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:26 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(17) p-Nitrotoluene

18.42min 20.499ppb

response 235862

(17) p-Nitrotoluene #2

18.46min 19.889ppb m

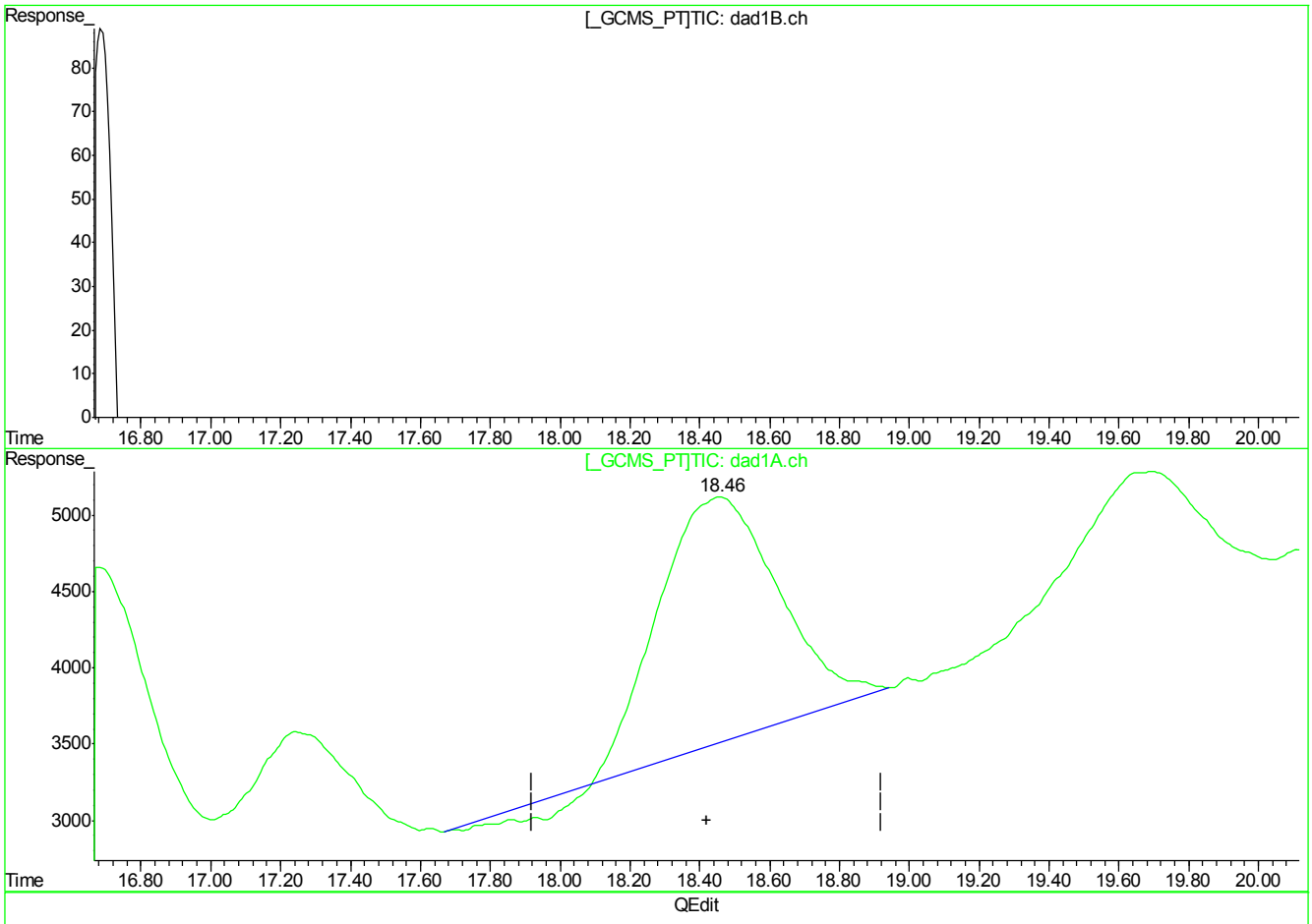
response 419386

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:29 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 17.560ppb

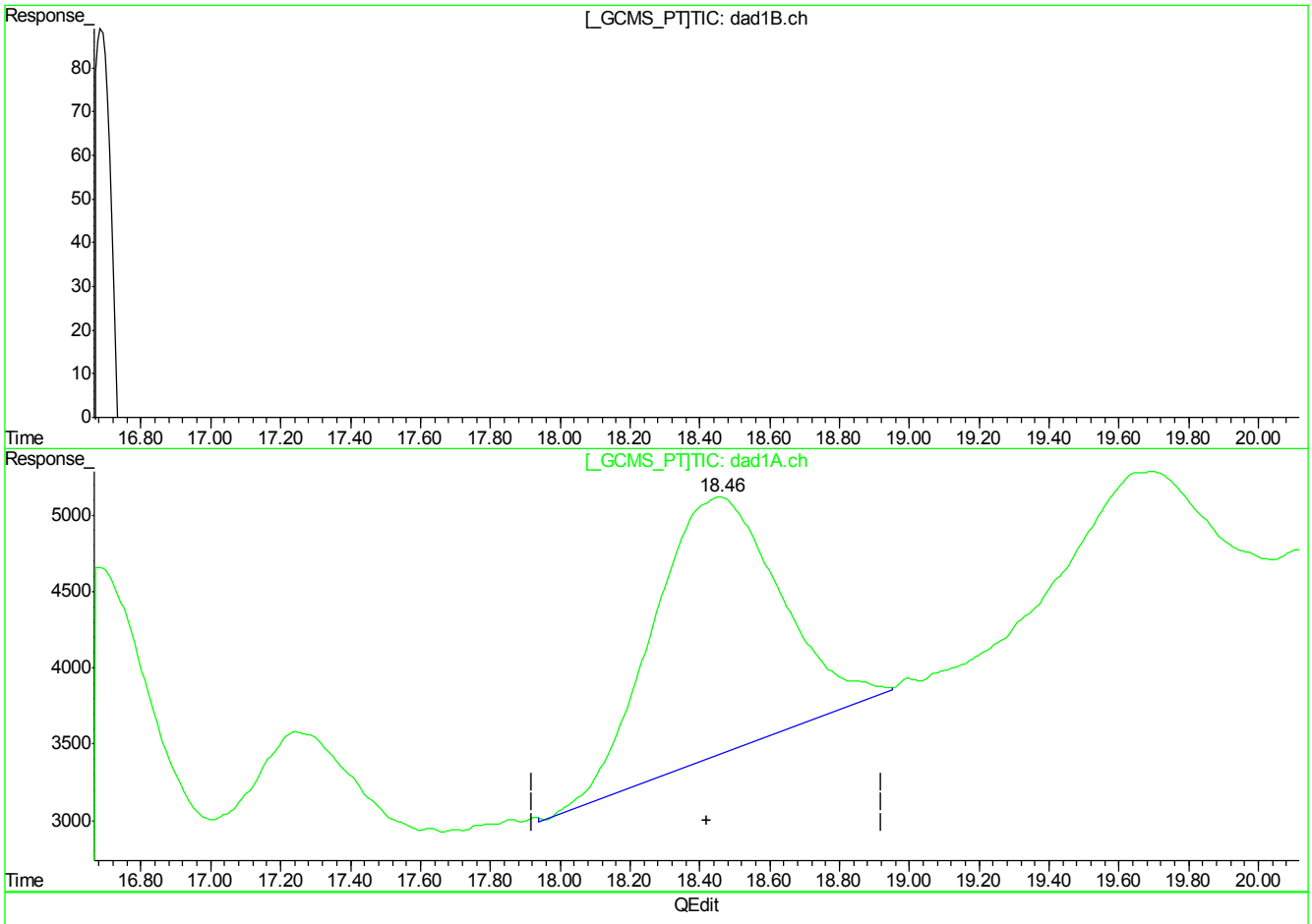
response 370223

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:32 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(18) 4-Amino-2,6-Dinitrotoluene

18.42min 20.499ppb

response 235862

(18) 4-Amino-2,6-Dinitrotoluene #2

18.46min 20.299ppb m

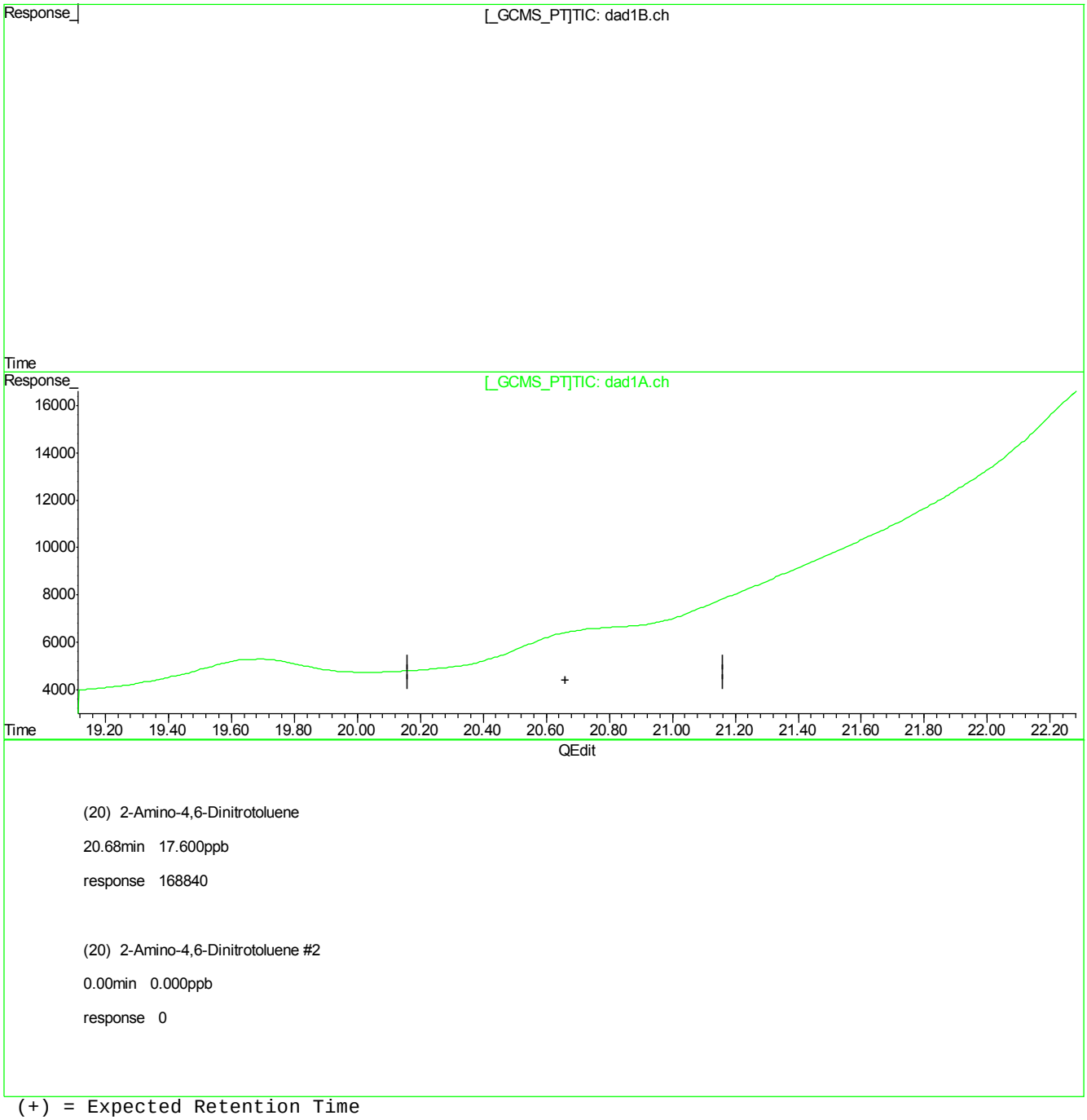
response 428039

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.68min 17.600ppb

response 168840

(20) 2-Amino-4,6-Dinitrotoluene #2

0.00min 0.000ppb

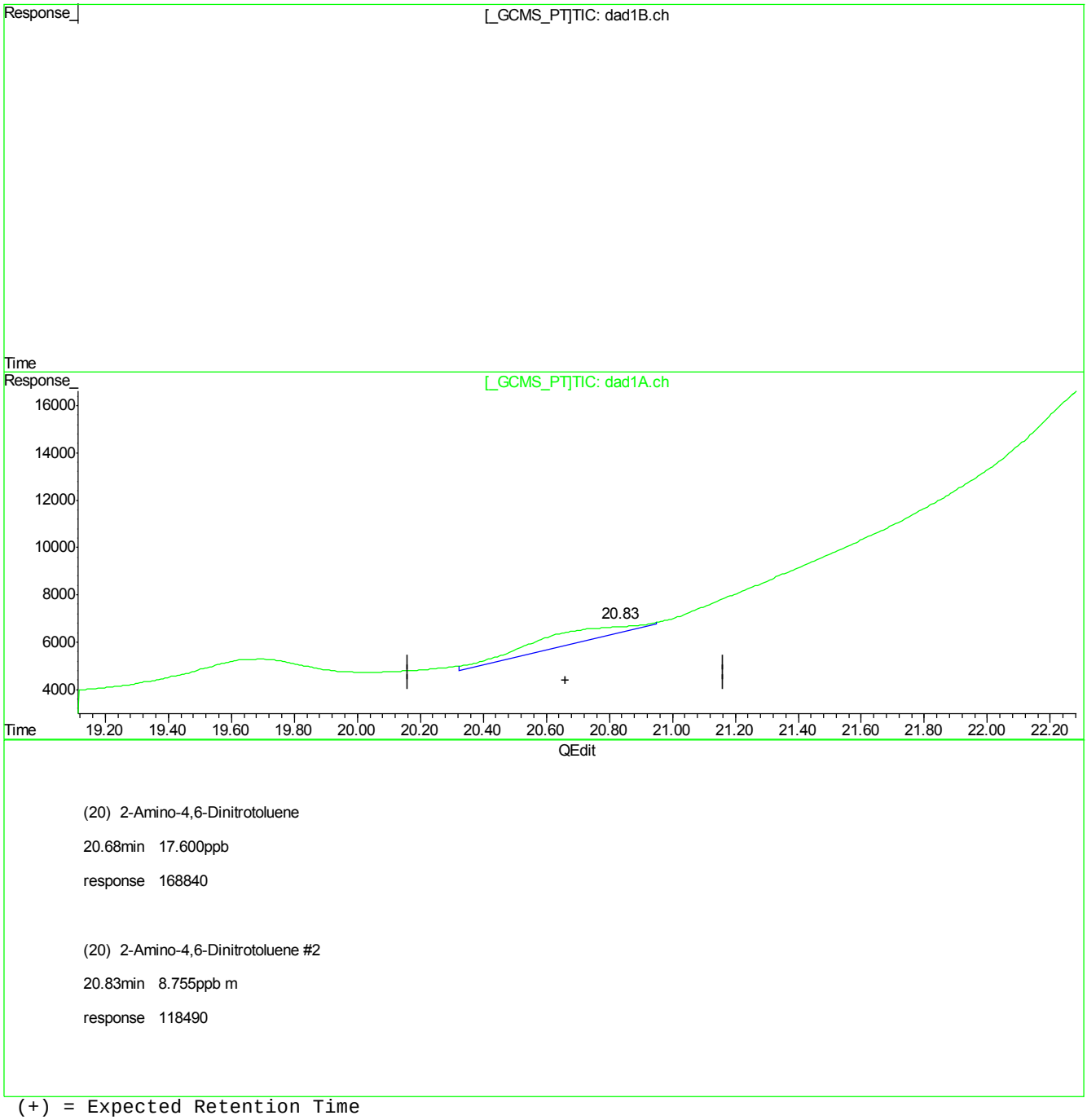
response 0

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.68min 17.600ppb

response 168840

(20) 2-Amino-4,6-Dinitrotoluene #2

20.83min 8.755ppb m

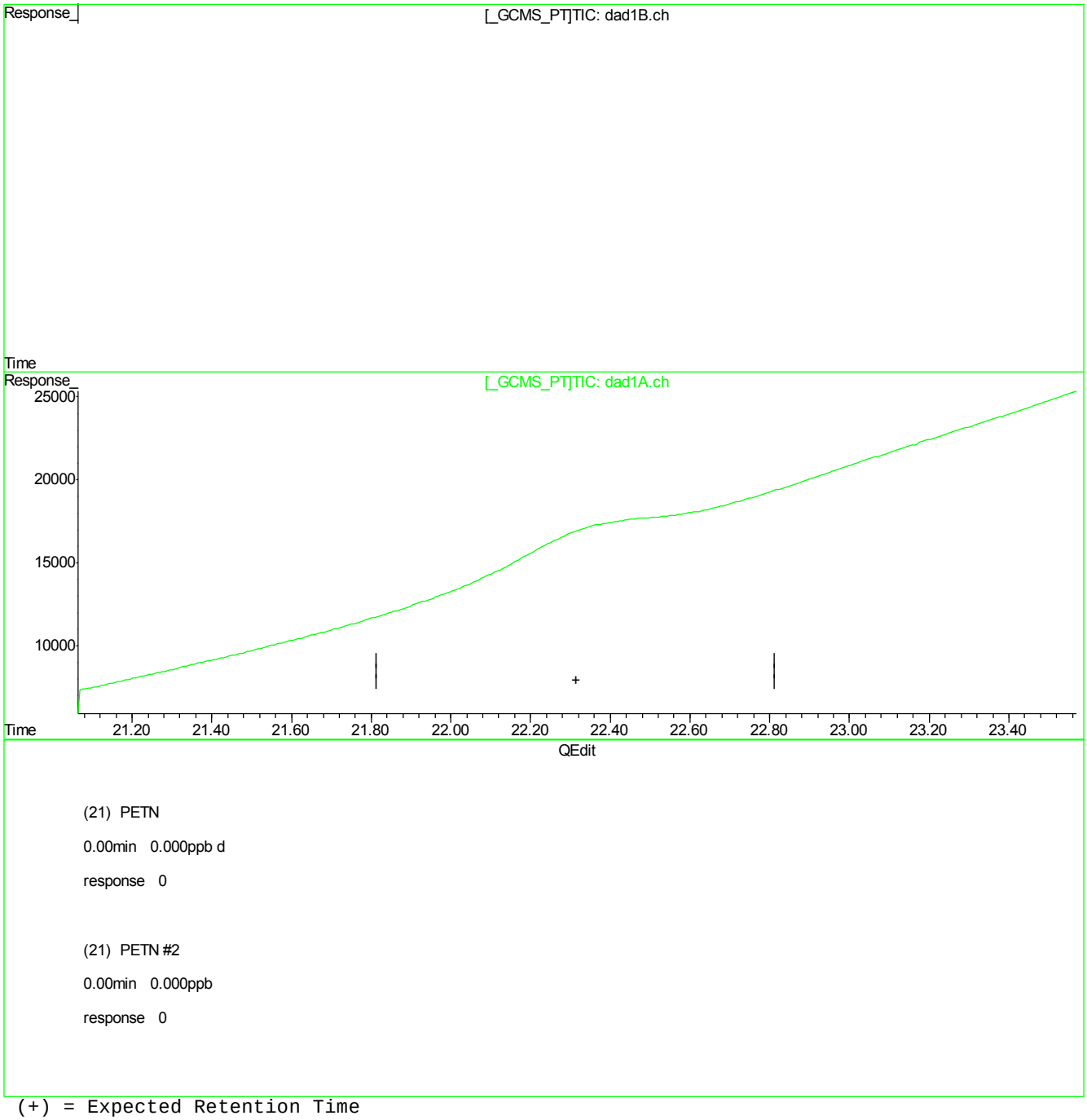
response 118490

(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration

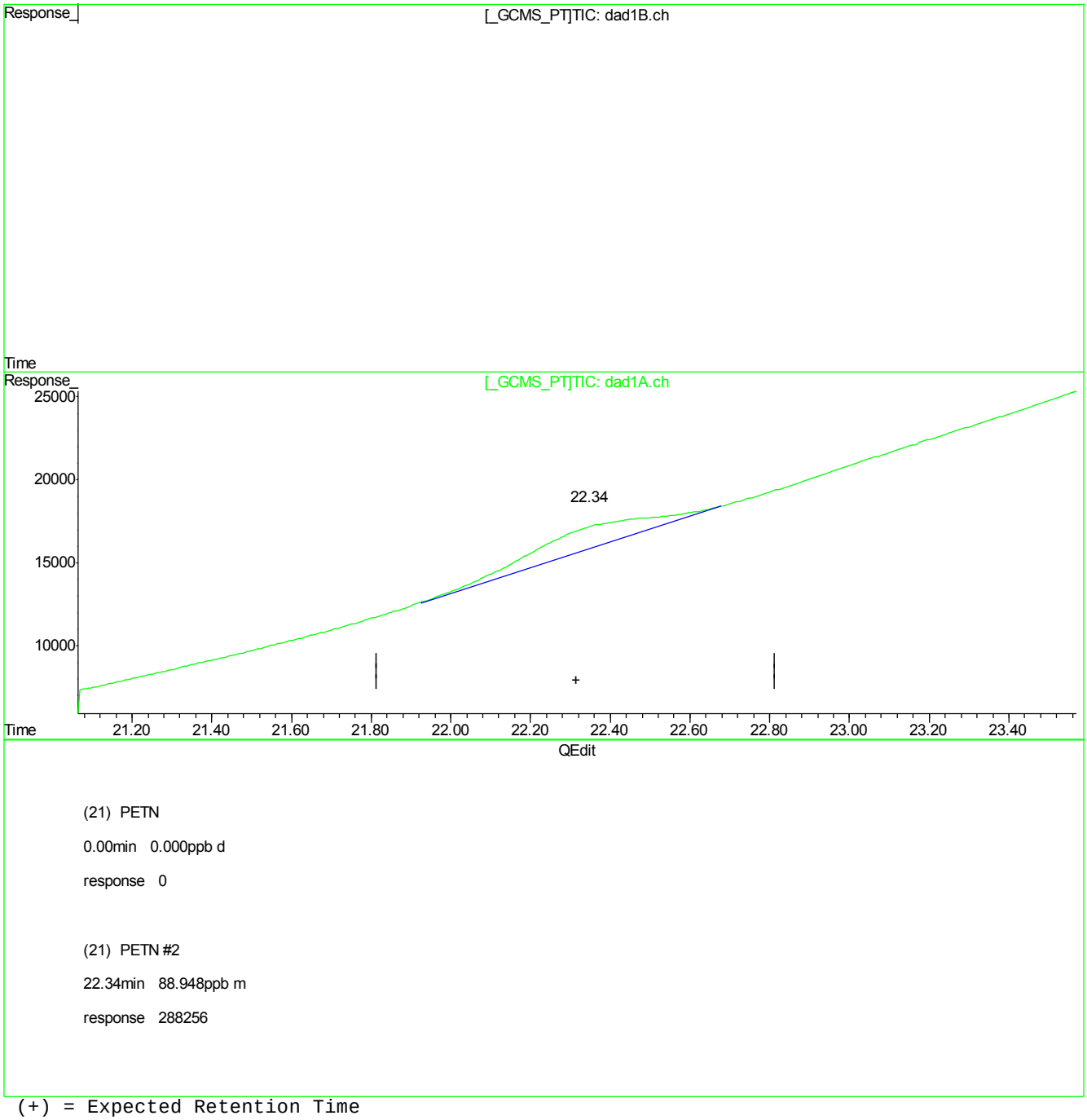


(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613826.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\1113RPB3\GG613826.D\dad1A.ch
Acq On : 13-Nov-2017, 13:36:32 Operator: evitam
Sample : ic2571-20 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613826.D 8330RPB.M_1113M.M Tue Nov 14 11:53:59 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.58	258823	507389	43.903	40.501m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		8.78%#	8.10%#
	Target Compounds						
1)	TNX	5.00	5.00	688634	692781	81.868m	82.143m
2)	HMX	5.46	5.46	164910	146764	43.415m	38.364m
3)	DNX	5.59	5.59	398344	366564	60.688m	56.040m
4)	MNX	6.67	6.67	346845	346845	71.694	71.694
5)	1,3,5-Trinitrobe	7.55	7.55	515904	514795	50.524	50.436
6)	RDX	8.08	8.08	237032	233498	49.790	49.276
7)	1,3-Dinitrobenze	10.08	10.08	693606	431067	47.654	30.312m
8)	Nitrobenzene	11.08	11.08	439122	444089	57.443	46.645m
9)	2,4,6-Trinitroto	11.88	11.87	493138	618562	48.367	39.514m
10)	Nitroglycerin	0.00	12.71	0	801043	N.D. d	218.113m
11)	Tetryl	13.28	13.27	407817	746662	59.454	61.159m
13)	2,6-Dinitrotolue	14.90	14.89	359440	552975	51.700	50.694m
14)	2,4-Dinitrotolue	15.63	15.65	660258	863855	49.688	86.988m#
15)	o-Nitrotoluene	17.23	17.24	284138	463485	67.838	81.127
16)	3,5-Dinitroanili	16.66	16.67	541983	858371	51.141	47.914
17)	p-Nitrotoluene	18.40	18.43	584278	976483	50.781	46.253
18)	4-Amino-2,6-Dini	18.40	18.43	584278	976483	50.781	46.253
19)	m-Nitrotoluene	19.66	19.66	285765	365933	58.777	38.687m
20)	2-Amino-4,6-Dini	20.66	20.66	440998	398969	45.970	29.479m
21)	PETN	0.00	22.39	0	664952	N.D. d	205.186m

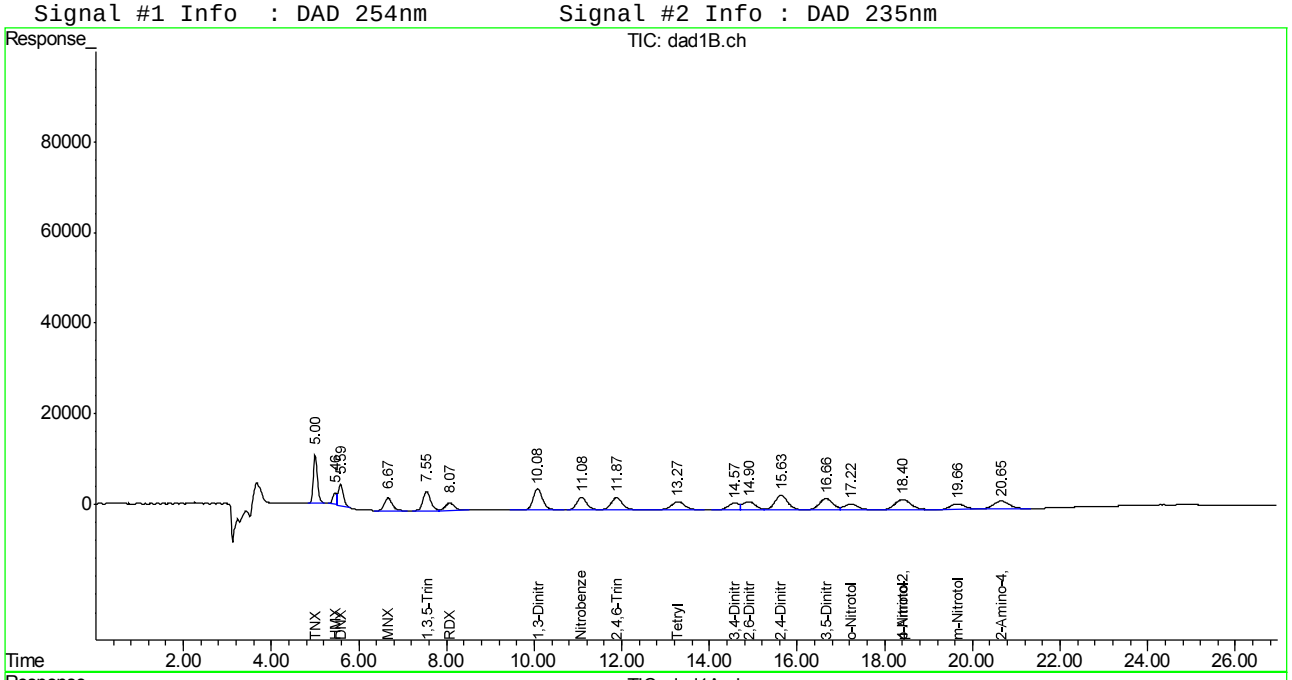
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 13:37:51 2017 Page 1

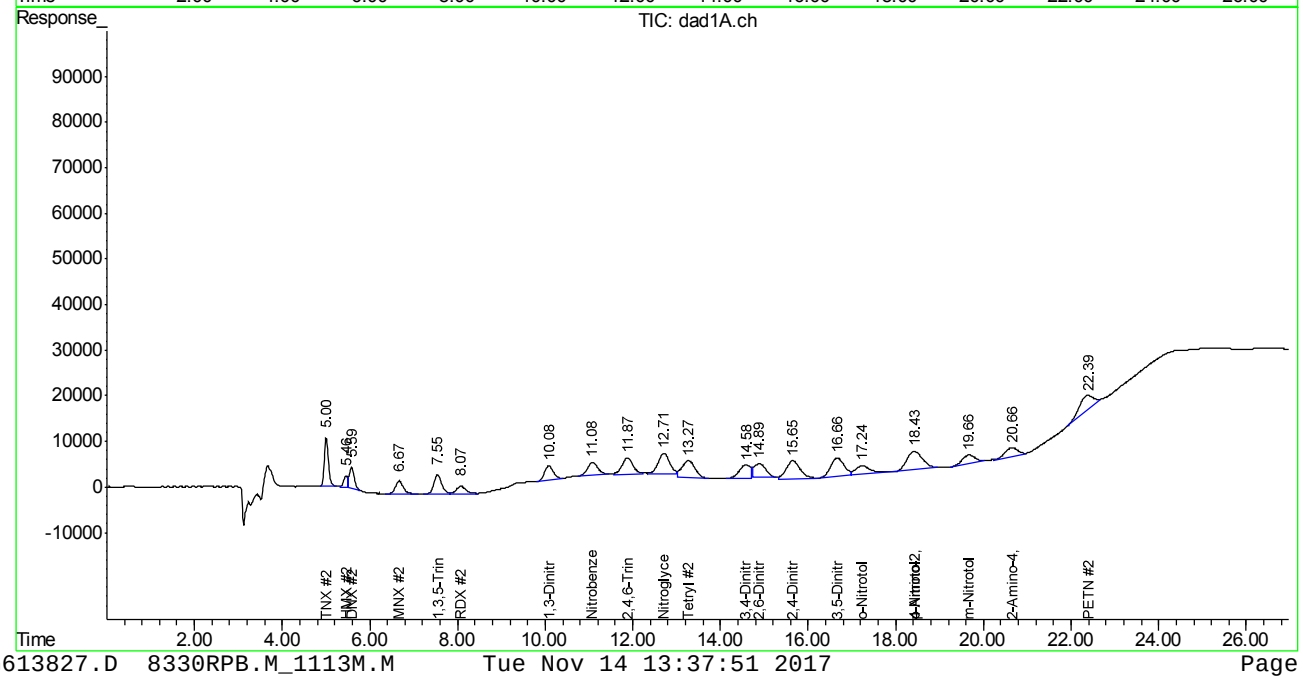
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:56 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

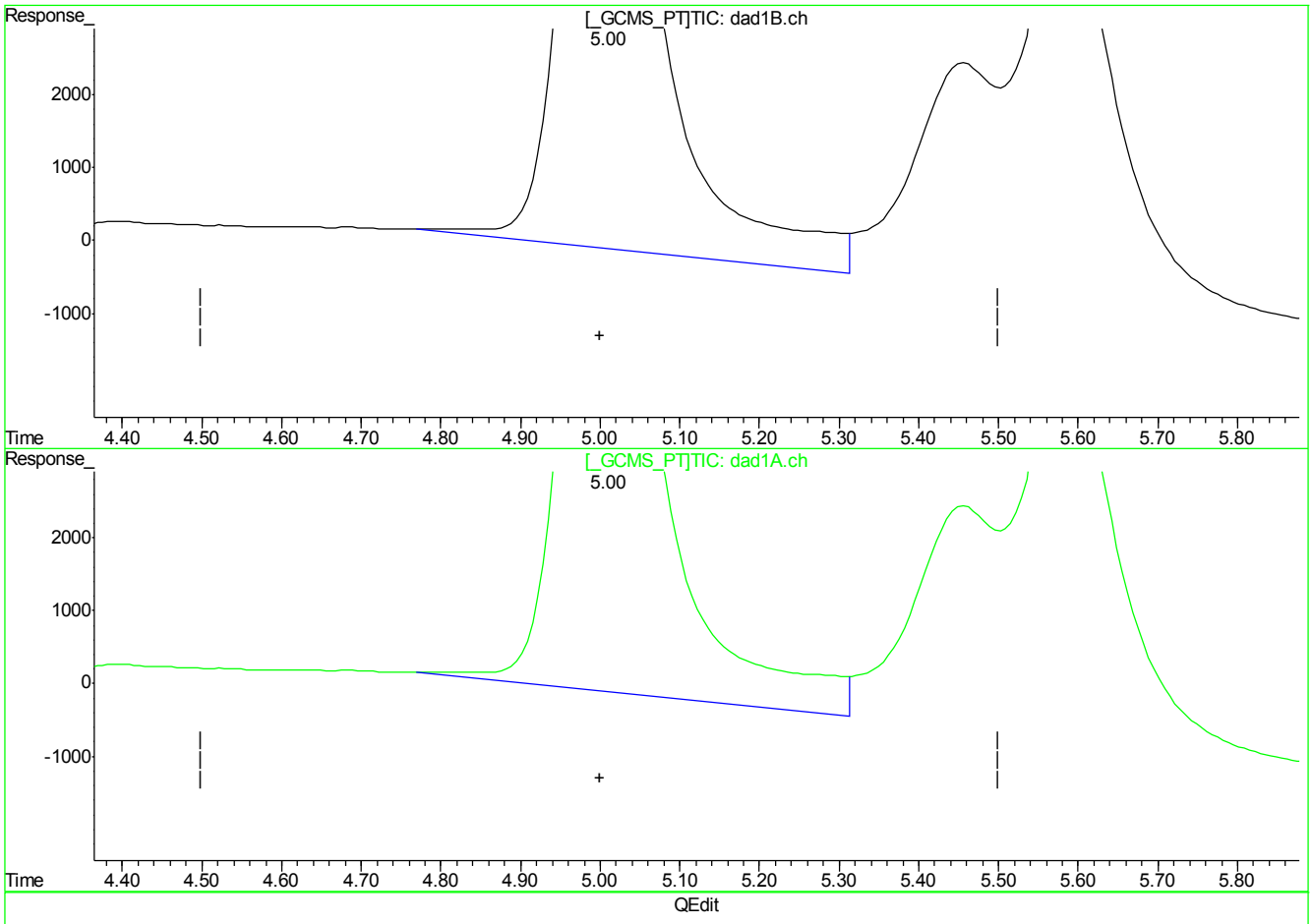
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613827.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:05	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.00	Poorly defined baseline
TNX		2	5.00	Poorly defined baseline
HMX	2691-41-0	1	5.46	Poorly defined baseline
HMX	2691-41-0	2	5.46	Poorly defined baseline
DNX		1	5.59	Poorly defined baseline
DNX		2	5.59	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.58	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	15.65	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	19.66	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	20.66	Poorly defined baseline
PETN	78-11-5	2	22.39	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.01min 93.407ppb

response 785694

(1) TNX #2

5.01min 93.160ppb

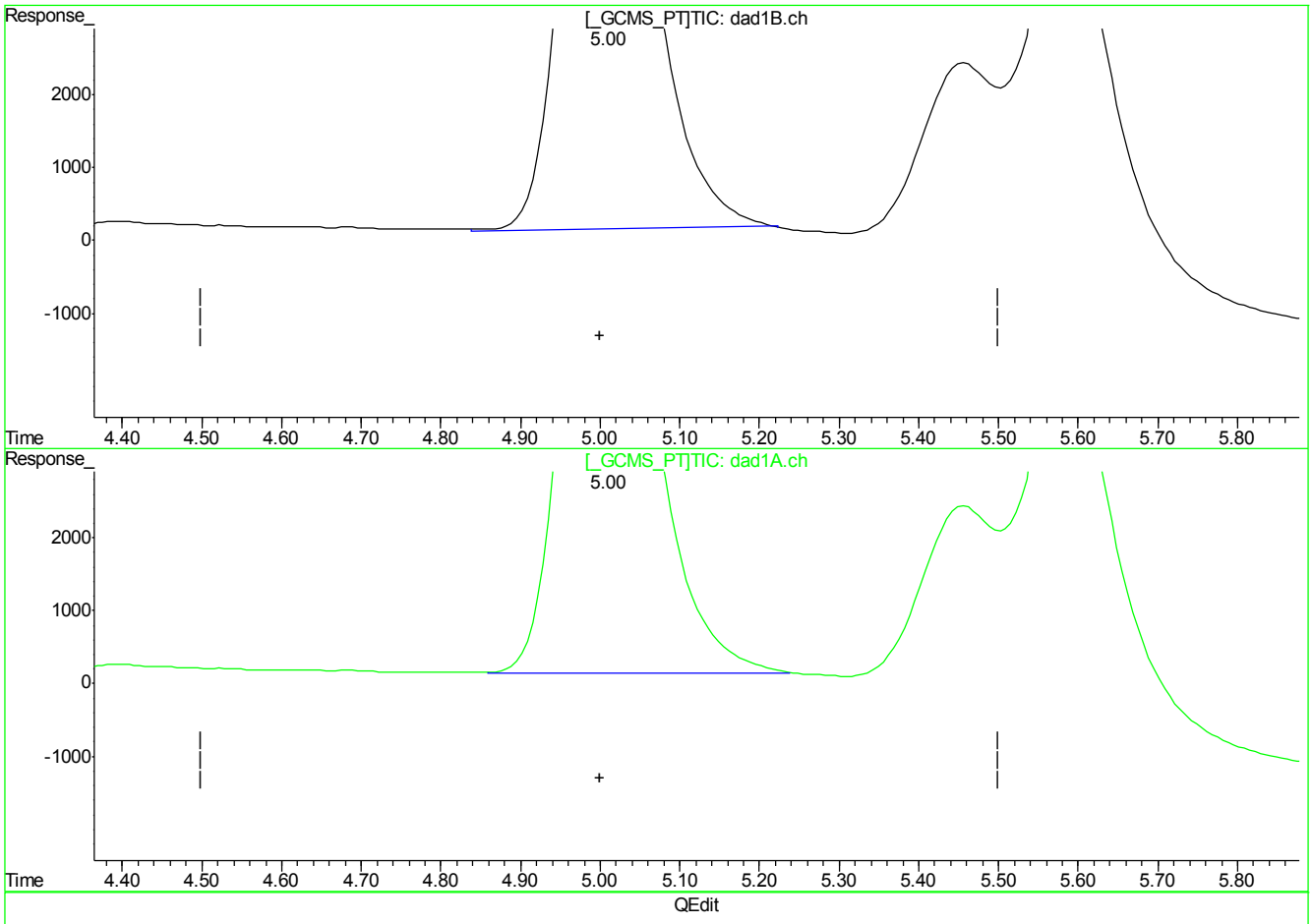
response 785694

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:28 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(1) TNX

5.00min 81.868ppb m

response 688634

(1) TNX #2

5.00min 82.143ppb m

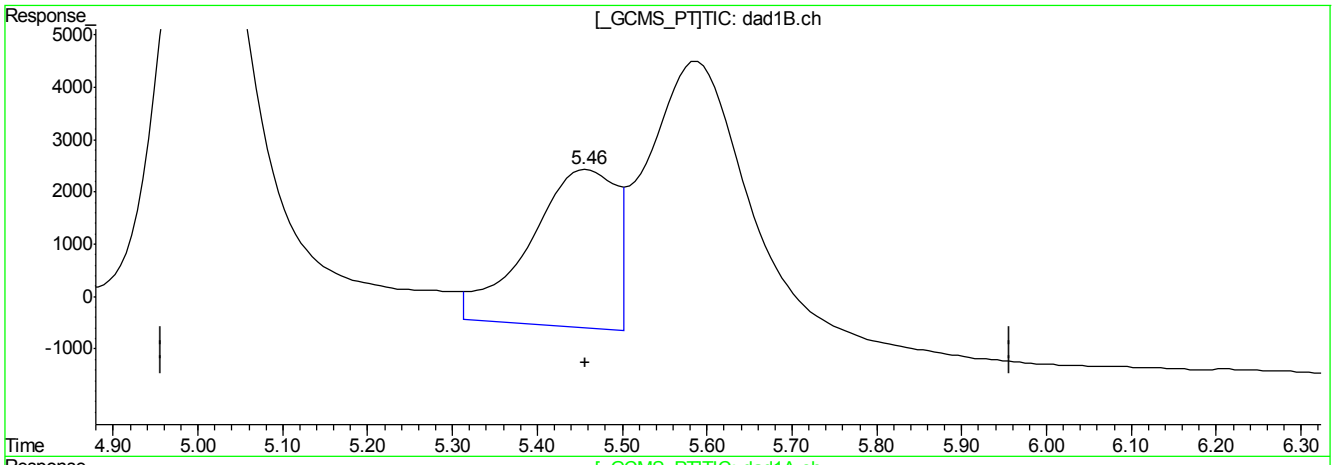
response 692781

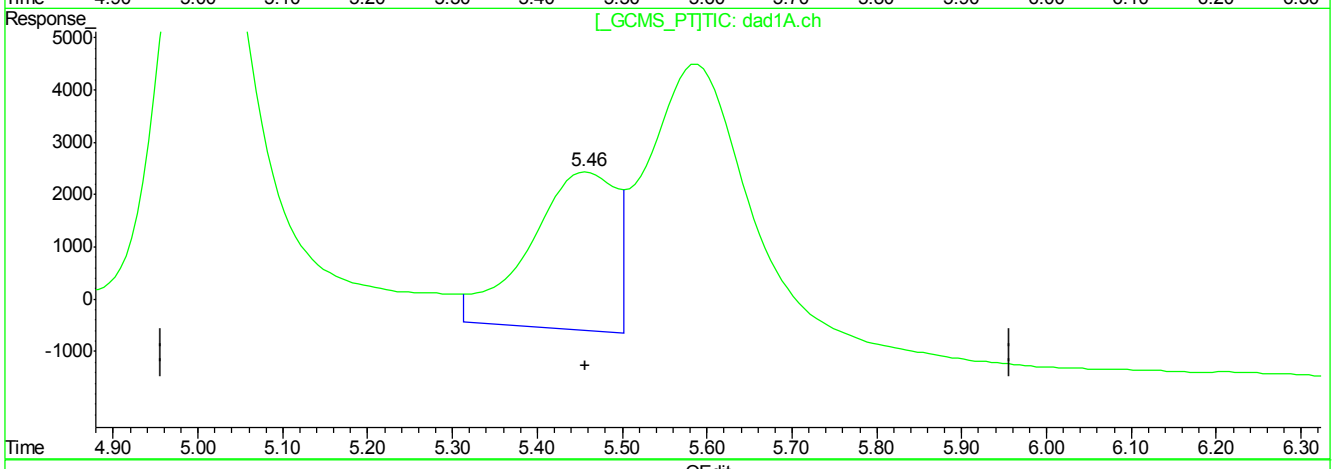
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:32 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(2) HMX

5.46min 55.811ppb

response 211996

(2) HMX #2

5.46min 55.416ppb

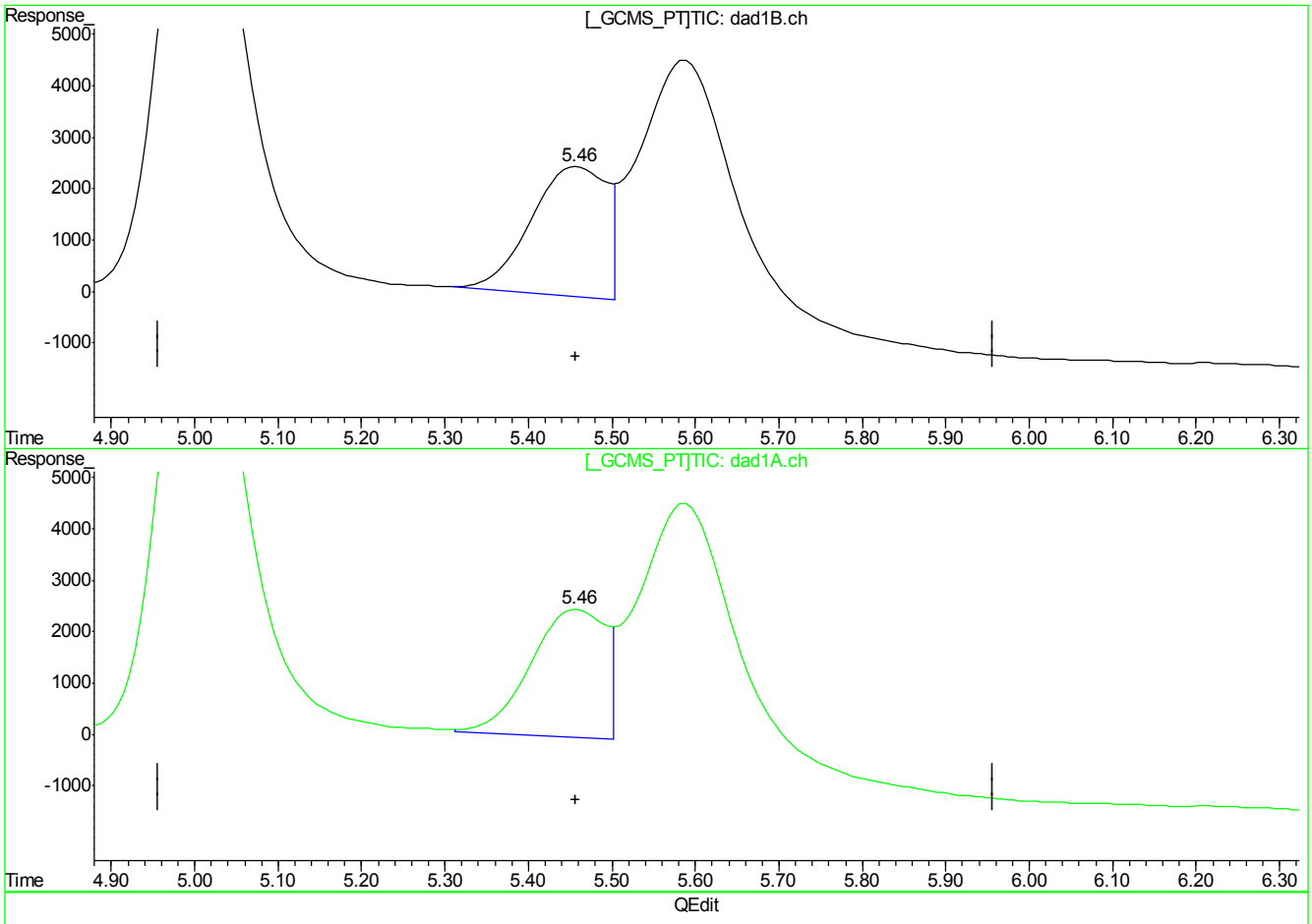
response 211996

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:35 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(2) HMX

5.46min 43.415ppb m

response 164910

(2) HMX #2

5.46min 38.364ppb m

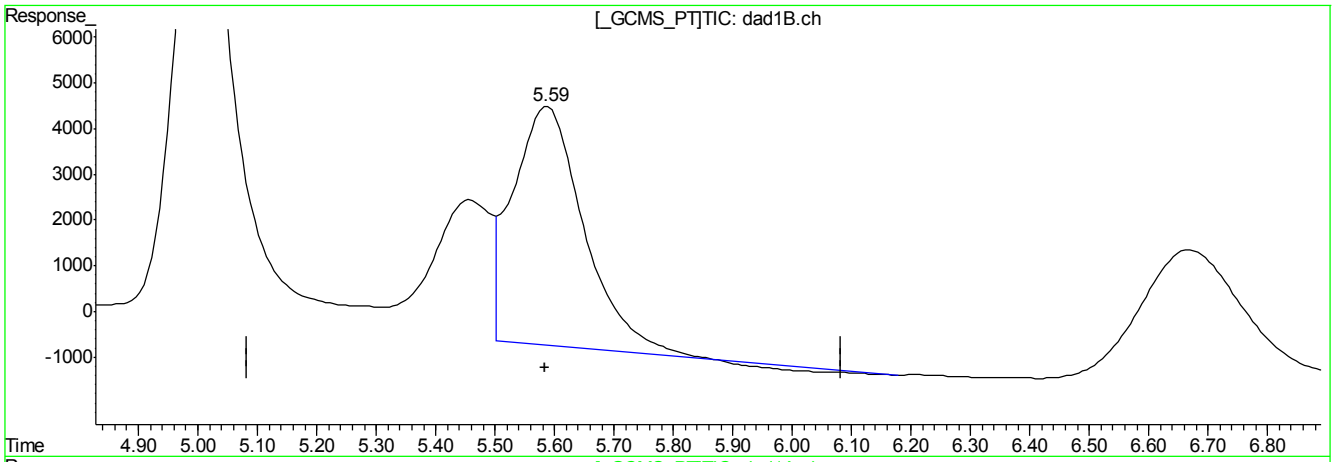
response 146764

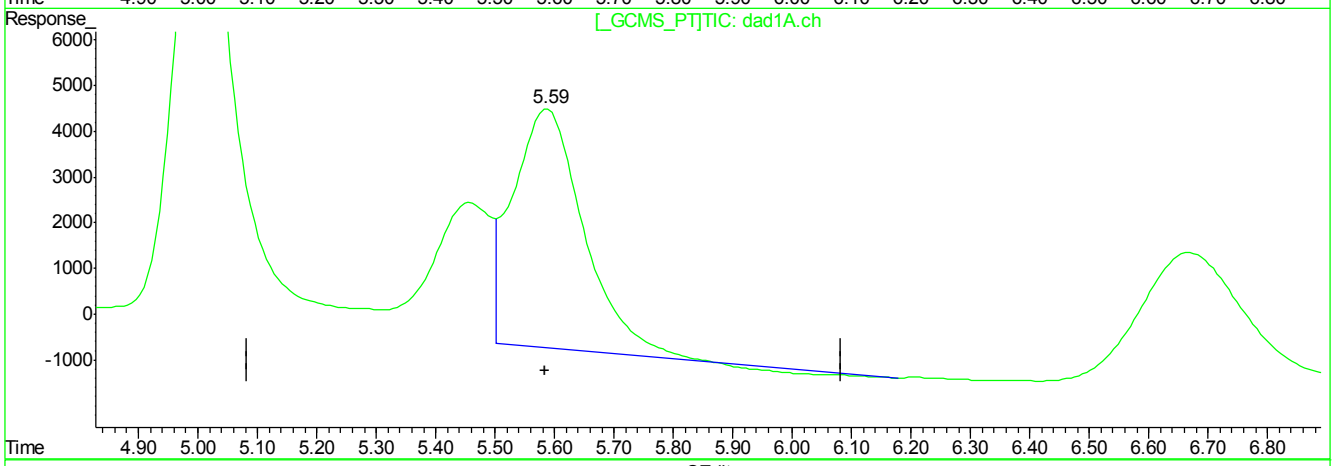
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:41 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.59min 65.551ppb

response 430267

(3) DNX #2

5.59min 65.779ppb

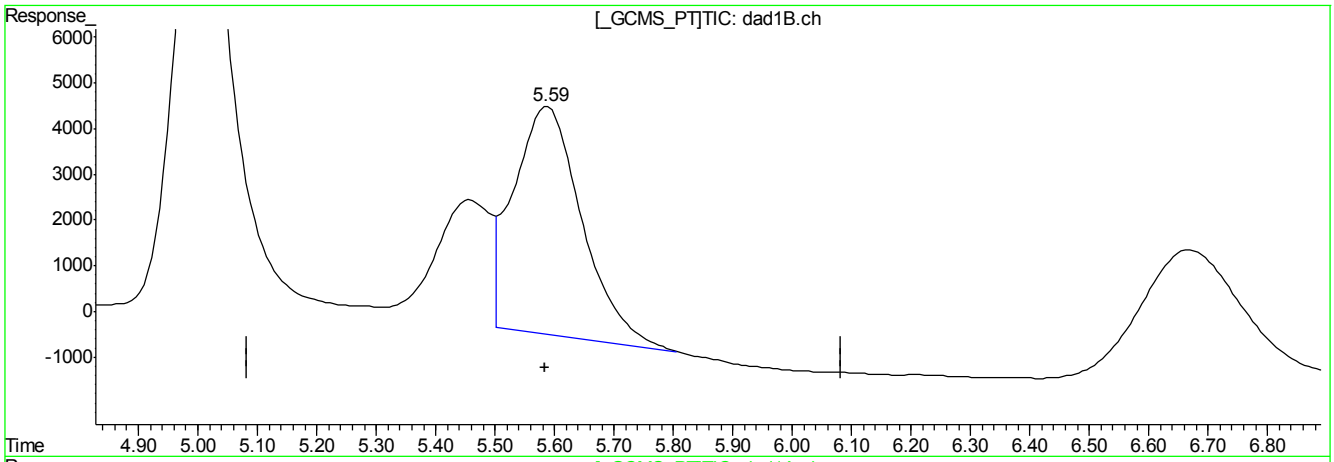
response 430267

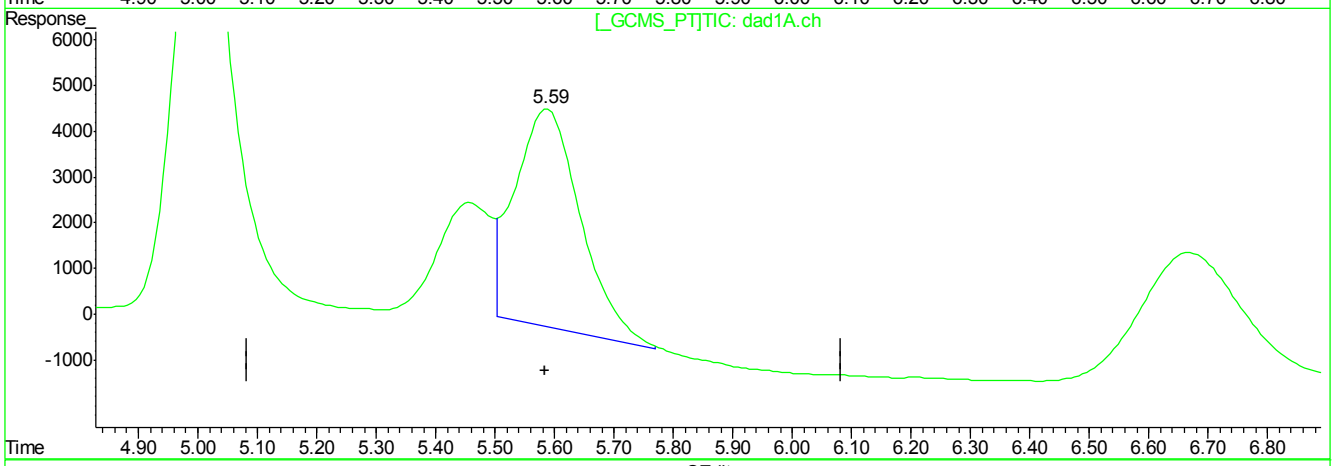
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration





QEdit

(3) DNX

5.59min 60.688ppb m

response 398344

(3) DNX #2

5.59min 56.040ppb m

response 366564

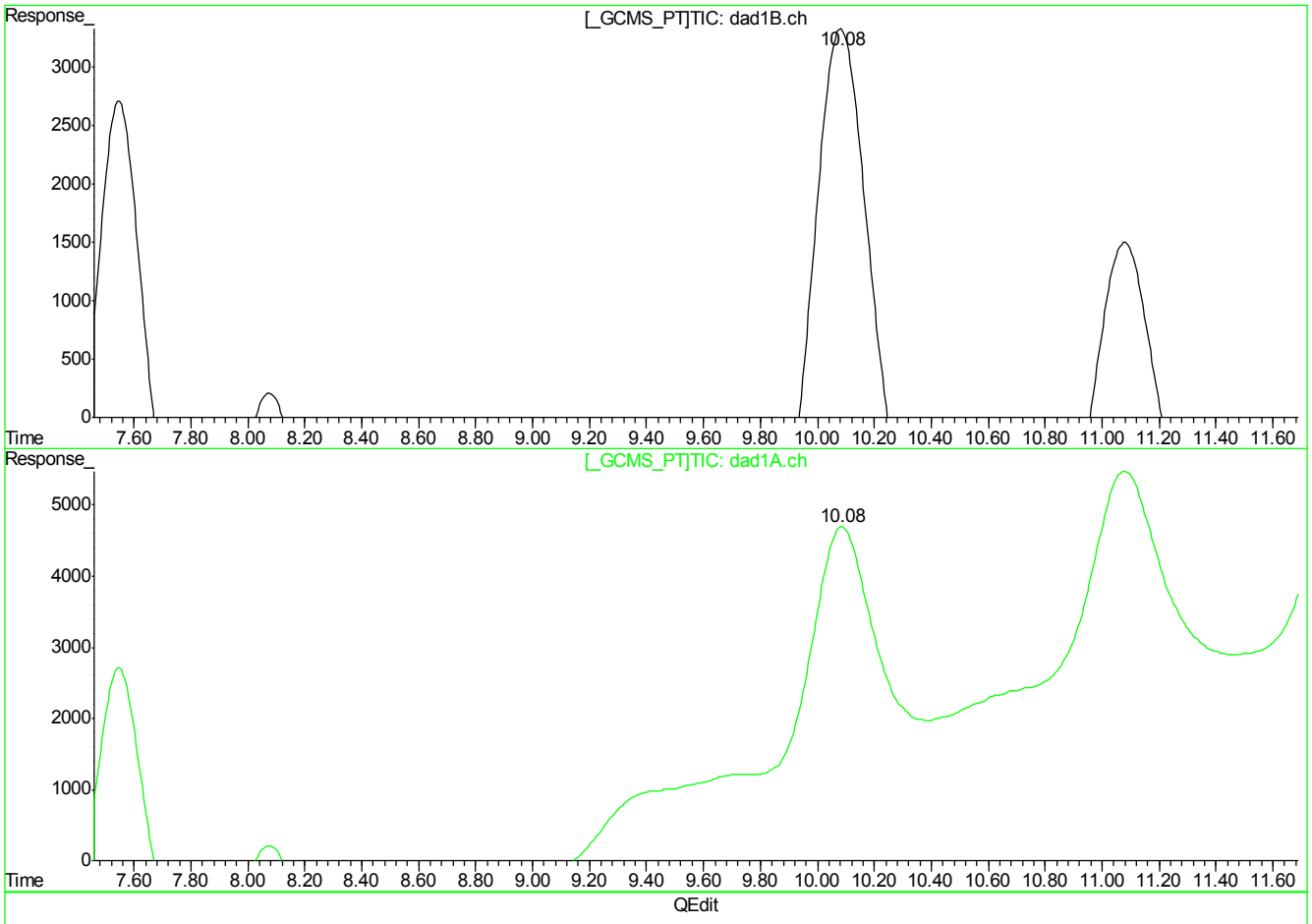
(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:54:51 2017

GG613827.D edits: DNX

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.09min 151.649ppb

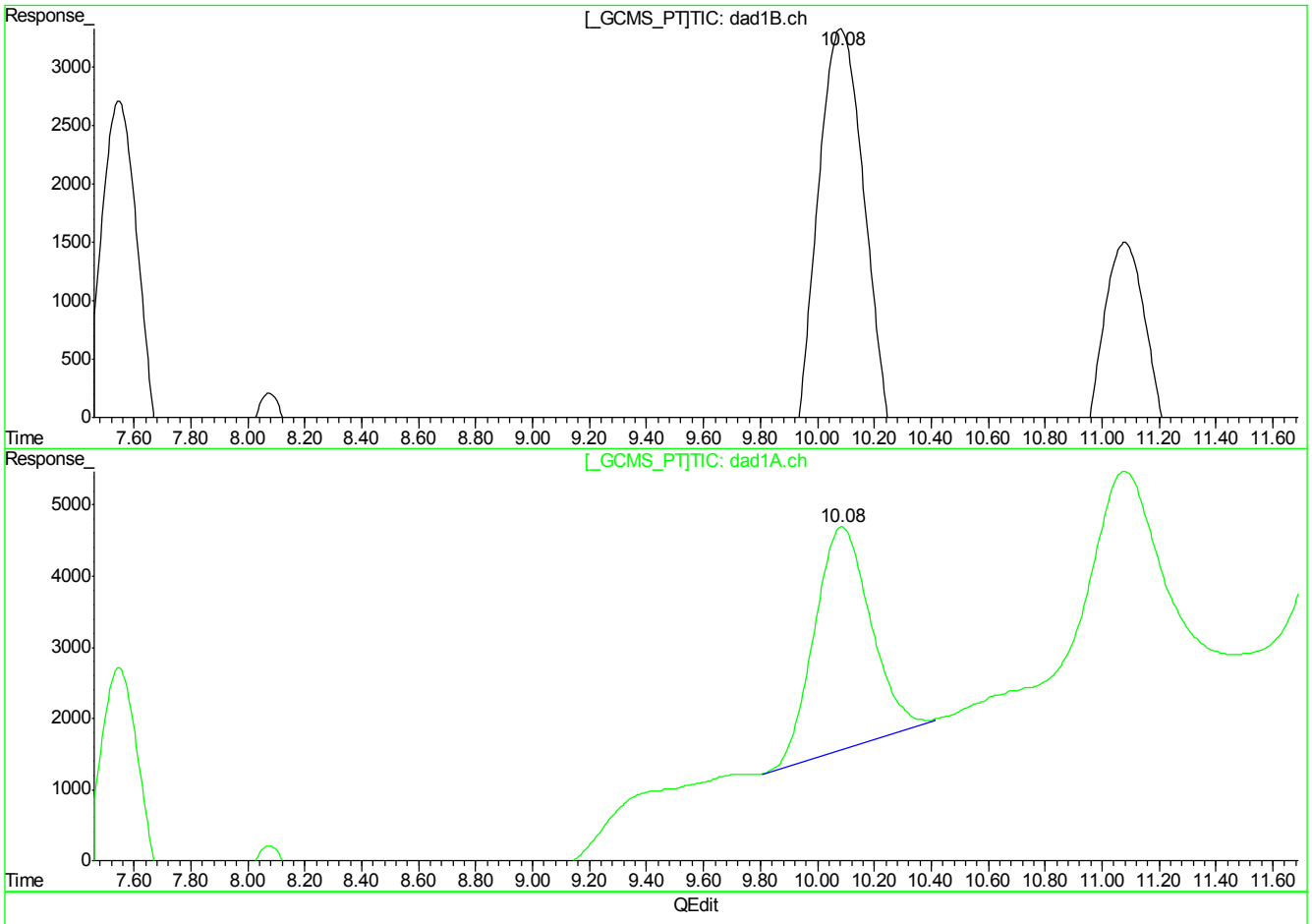
response 2132933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:00 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 47.654ppb

response 693606

(7) 1,3-Dinitrobenzene #2

10.08min 30.312ppb m

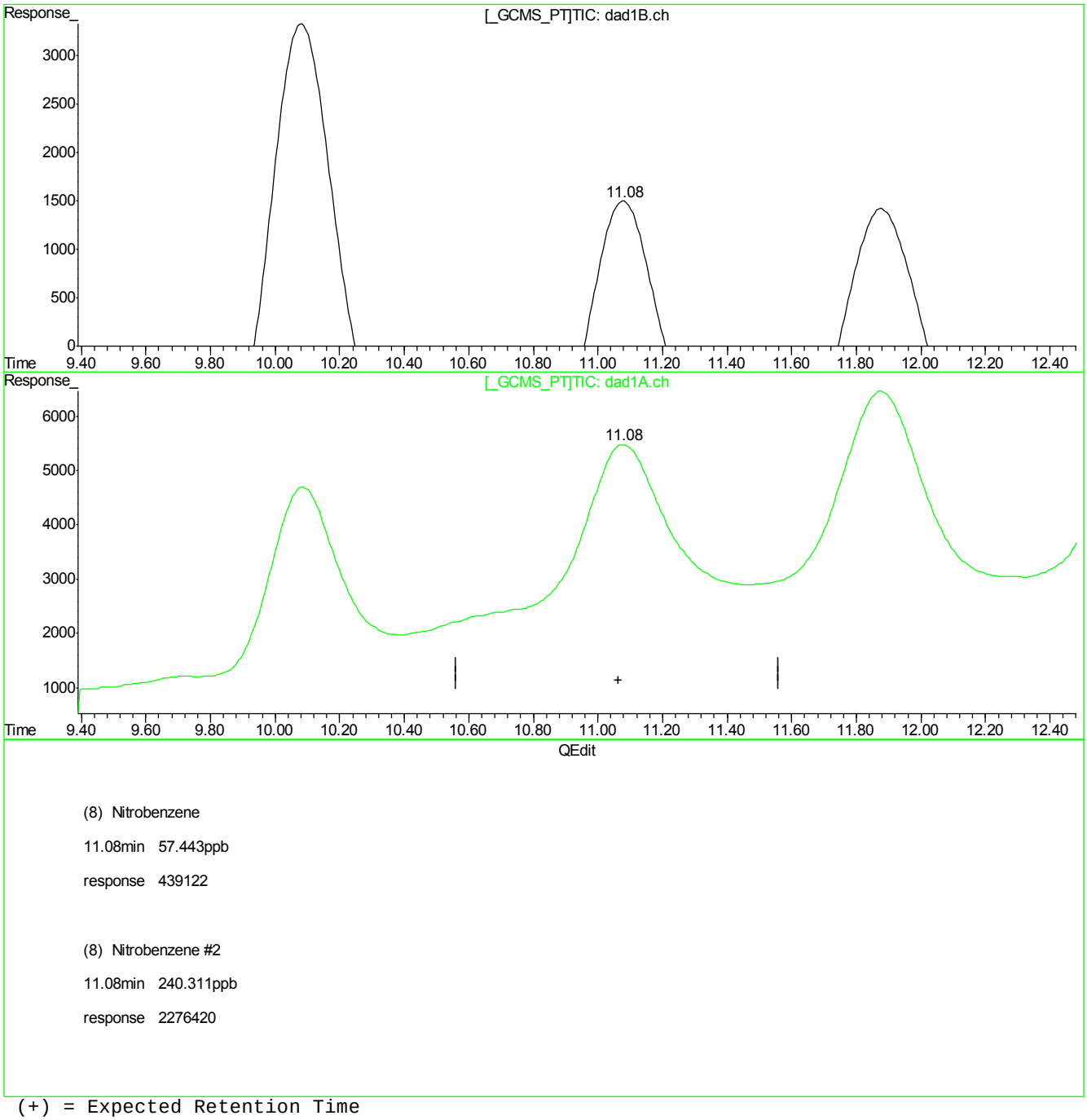
response 431067

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 240.311ppb

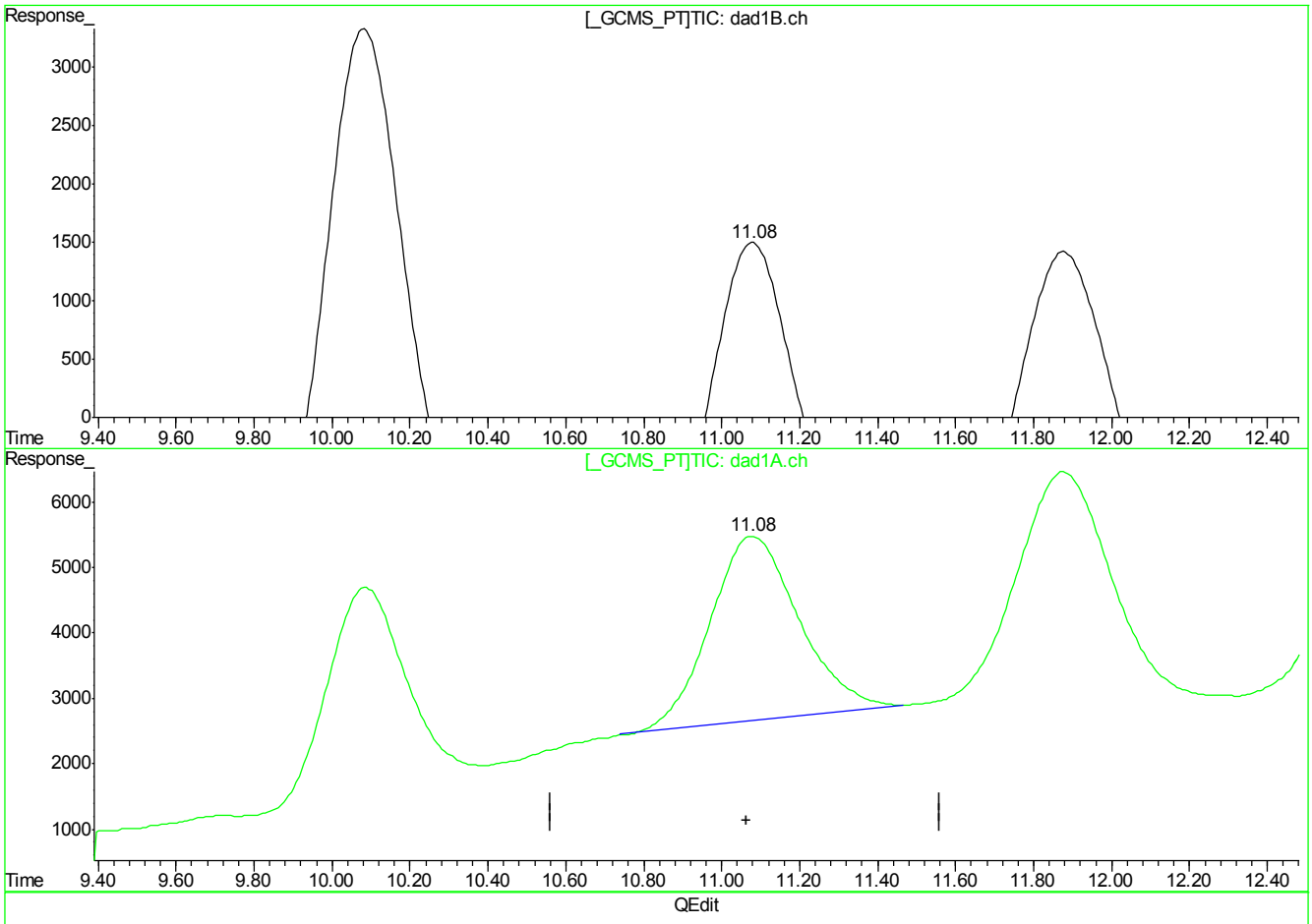
response 2276420

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 57.443ppb

response 439122

(8) Nitrobenzene #2

11.08min 46.645ppb m

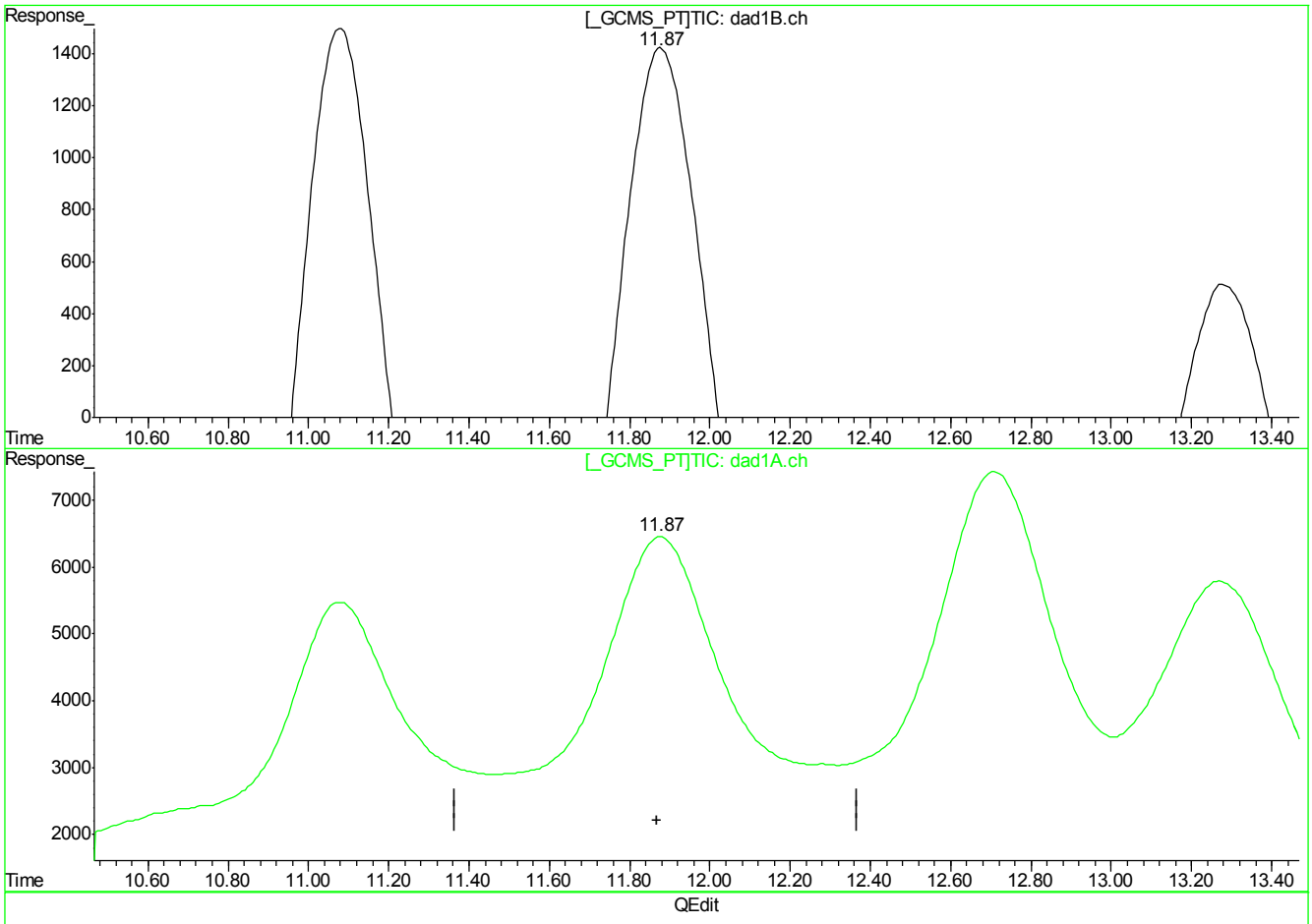
response 444089

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:13 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.88min 132.294ppb

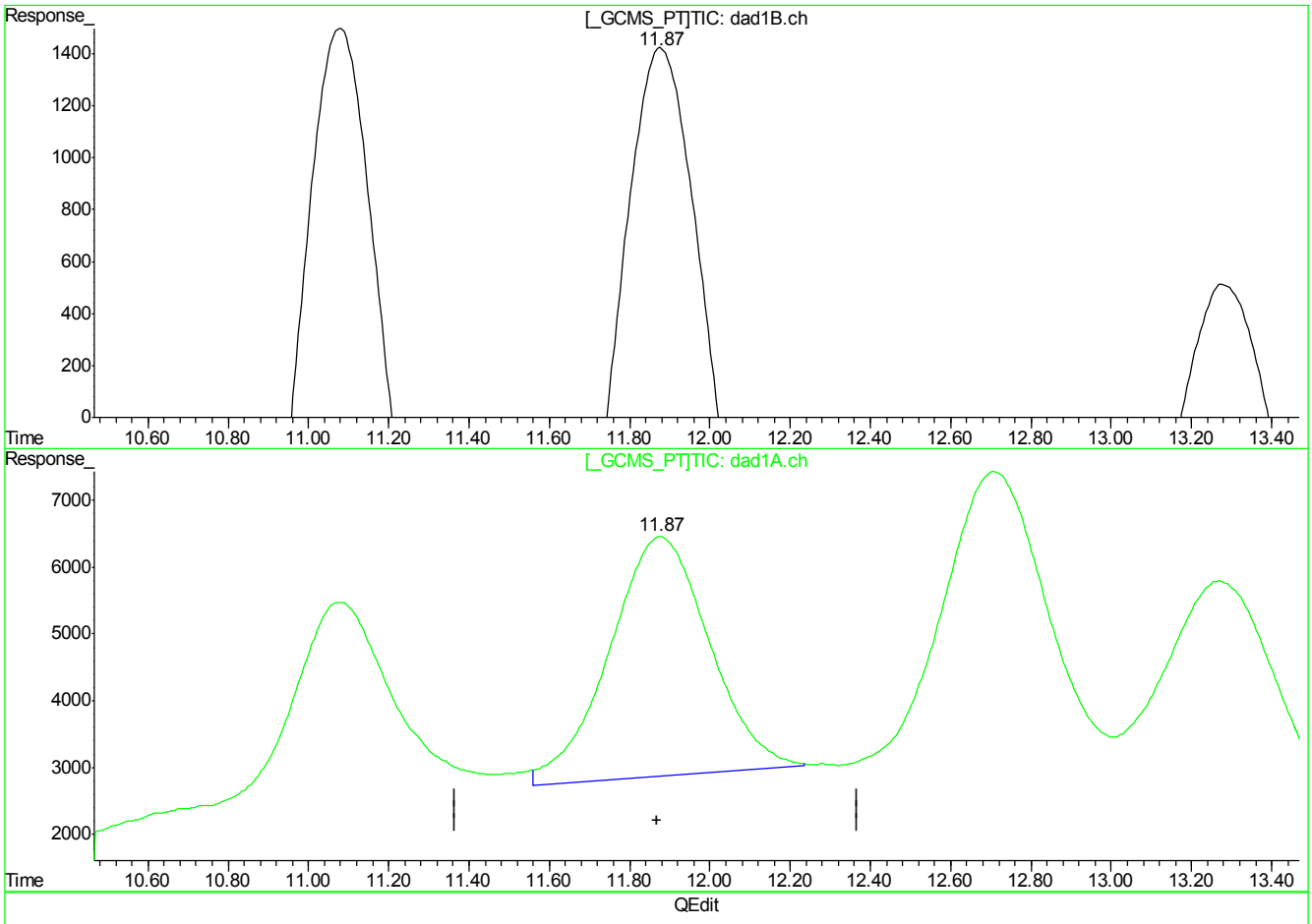
response 2061411

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:16 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 48.367ppb

response 493138

(9) 2,4,6-Trinitrotoluene #2

11.87min 39.514ppb m

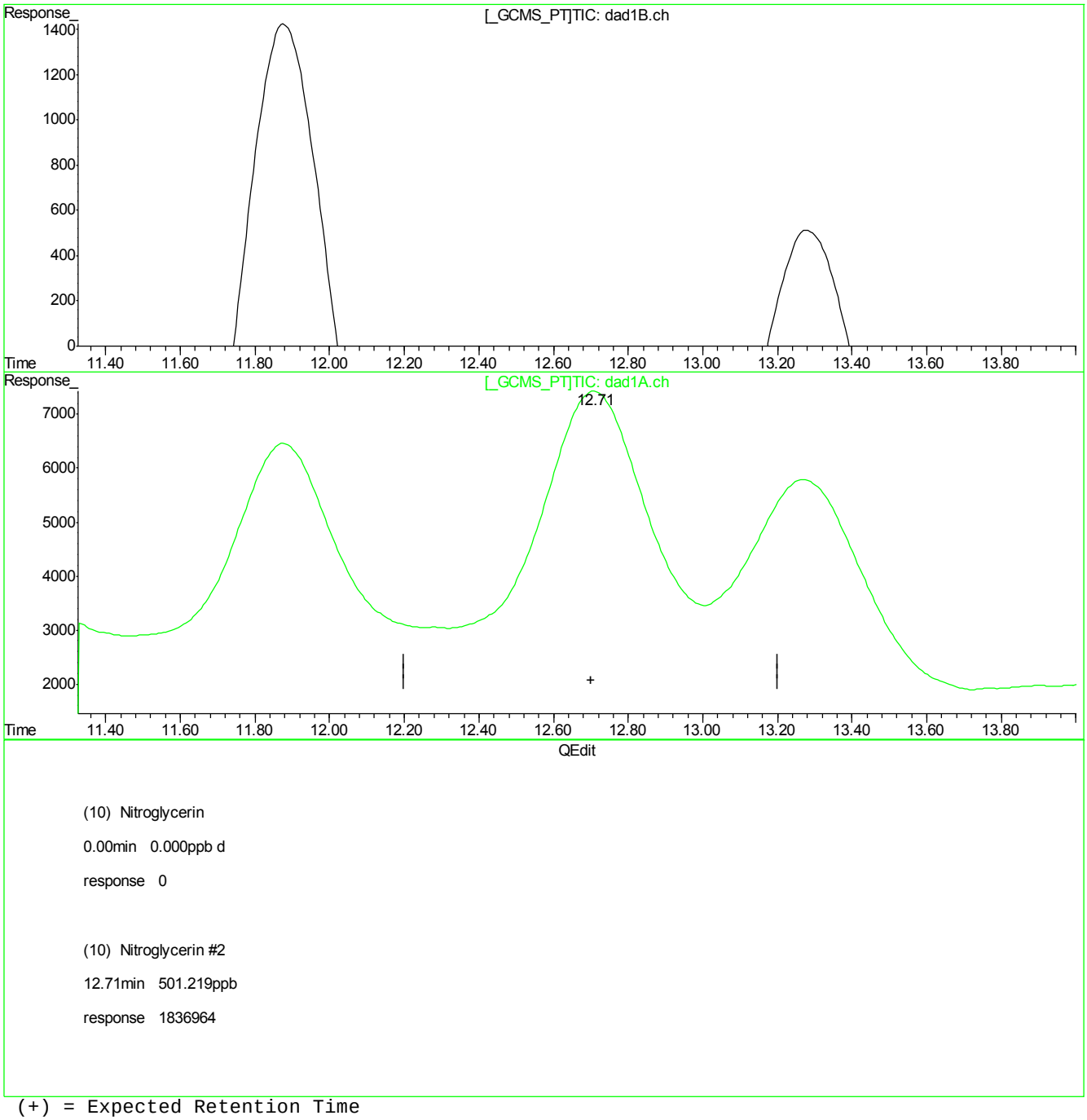
response 618562

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:20 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration

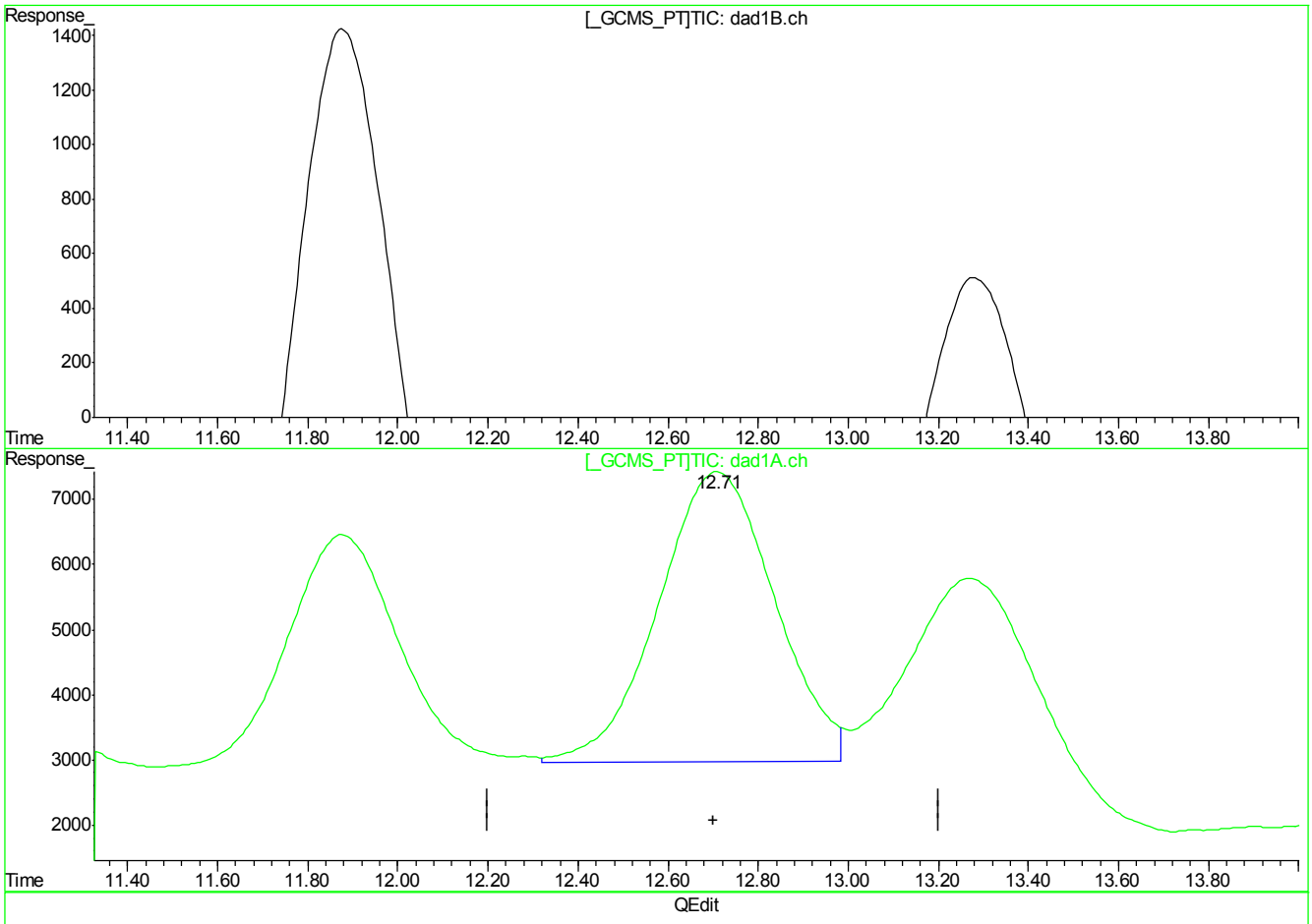


(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb d

response 0

(10) Nitroglycerin #2

12.71min 218.113ppb m

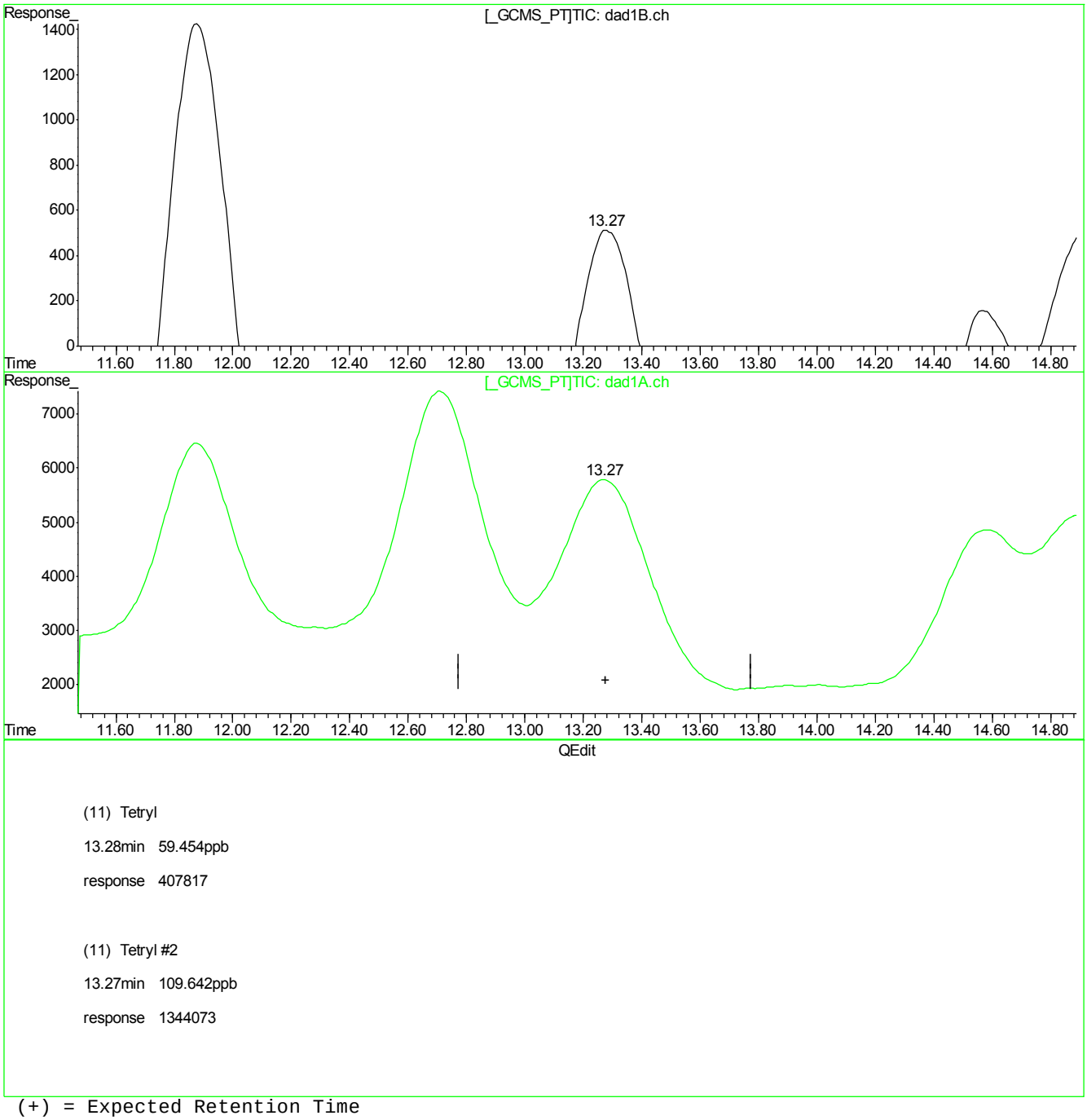
response 801043

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:27 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 109.642ppb

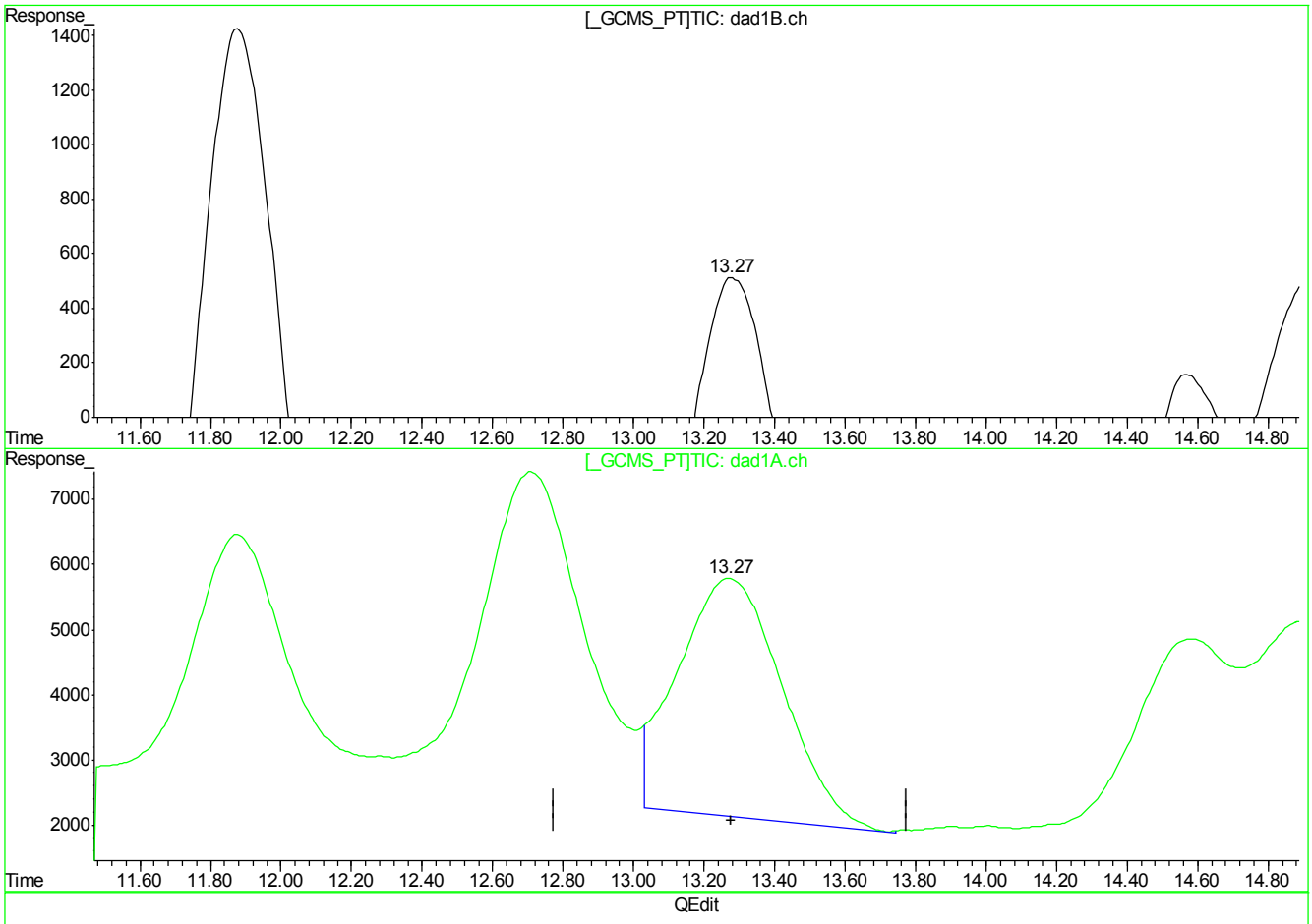
response 1344073

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:30 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 59.454ppb

response 407817

(11) Tetryl #2

13.27min 61.159ppb m

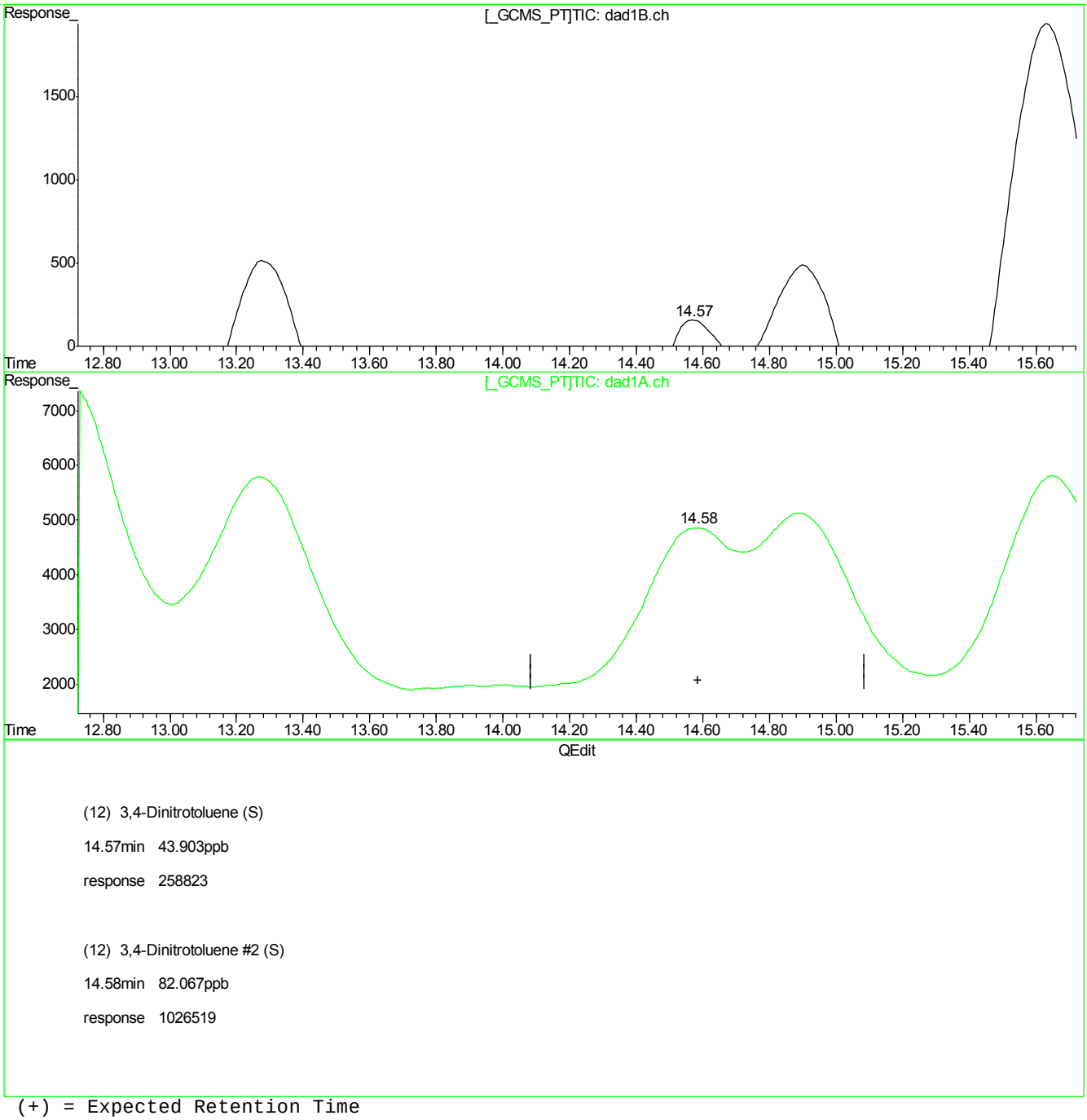
response 746662

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:33 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 82.067ppb

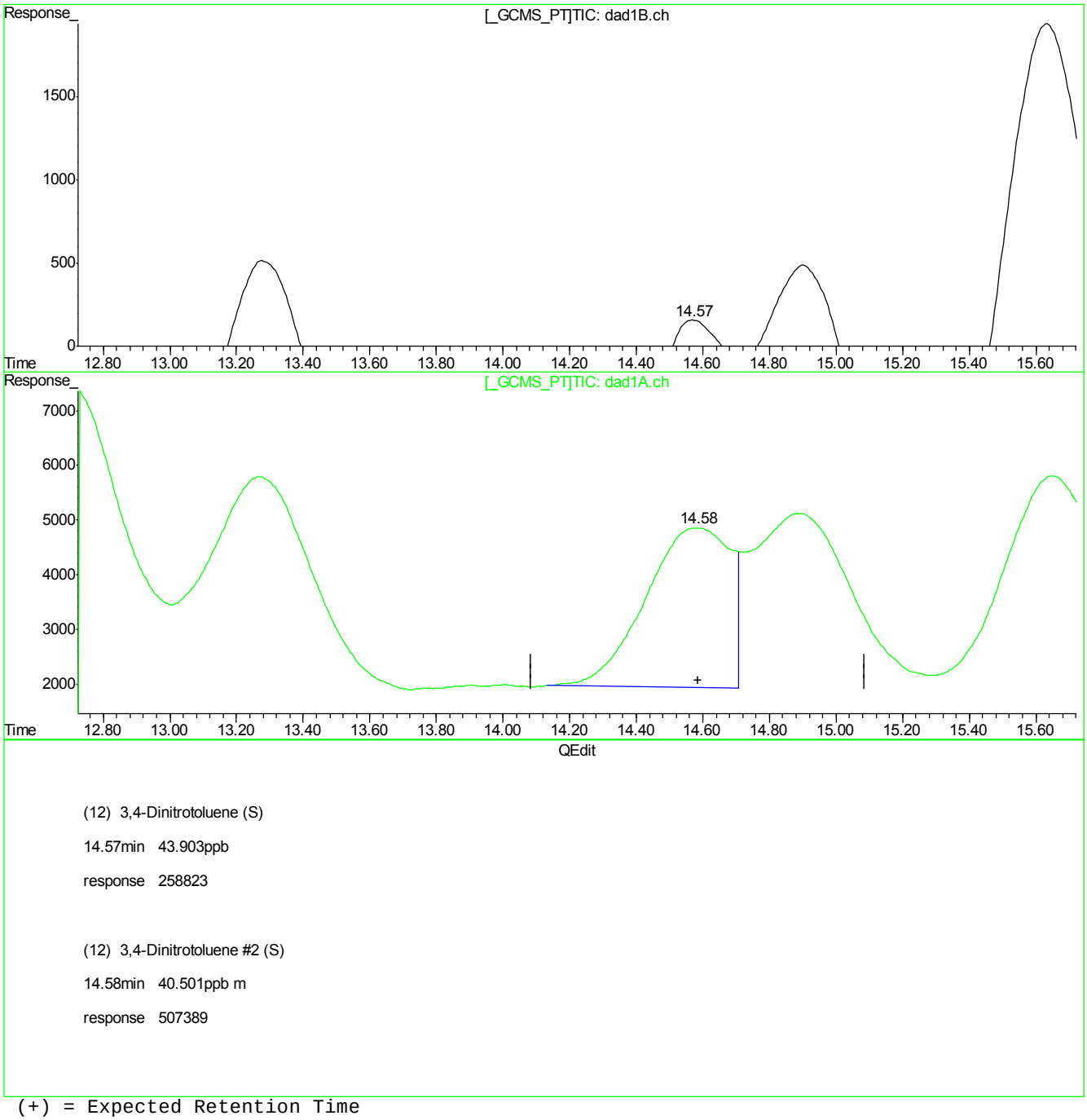
response 1026519

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:37 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 43.903ppb

response 258823

(12) 3,4-Dinitrotoluene #2 (S)

14.58min 40.501ppb m

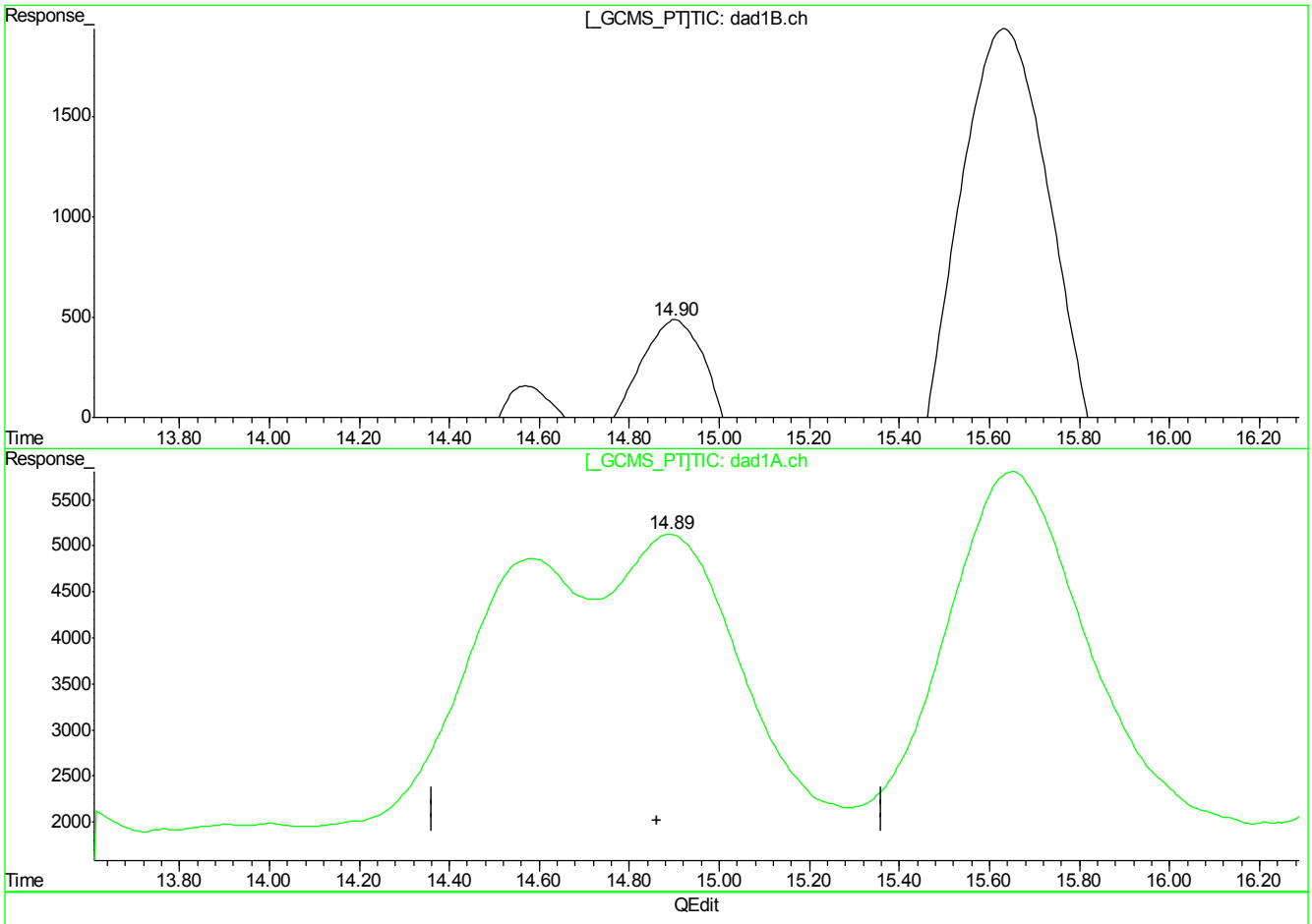
response 507389

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:40 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 73.498ppb

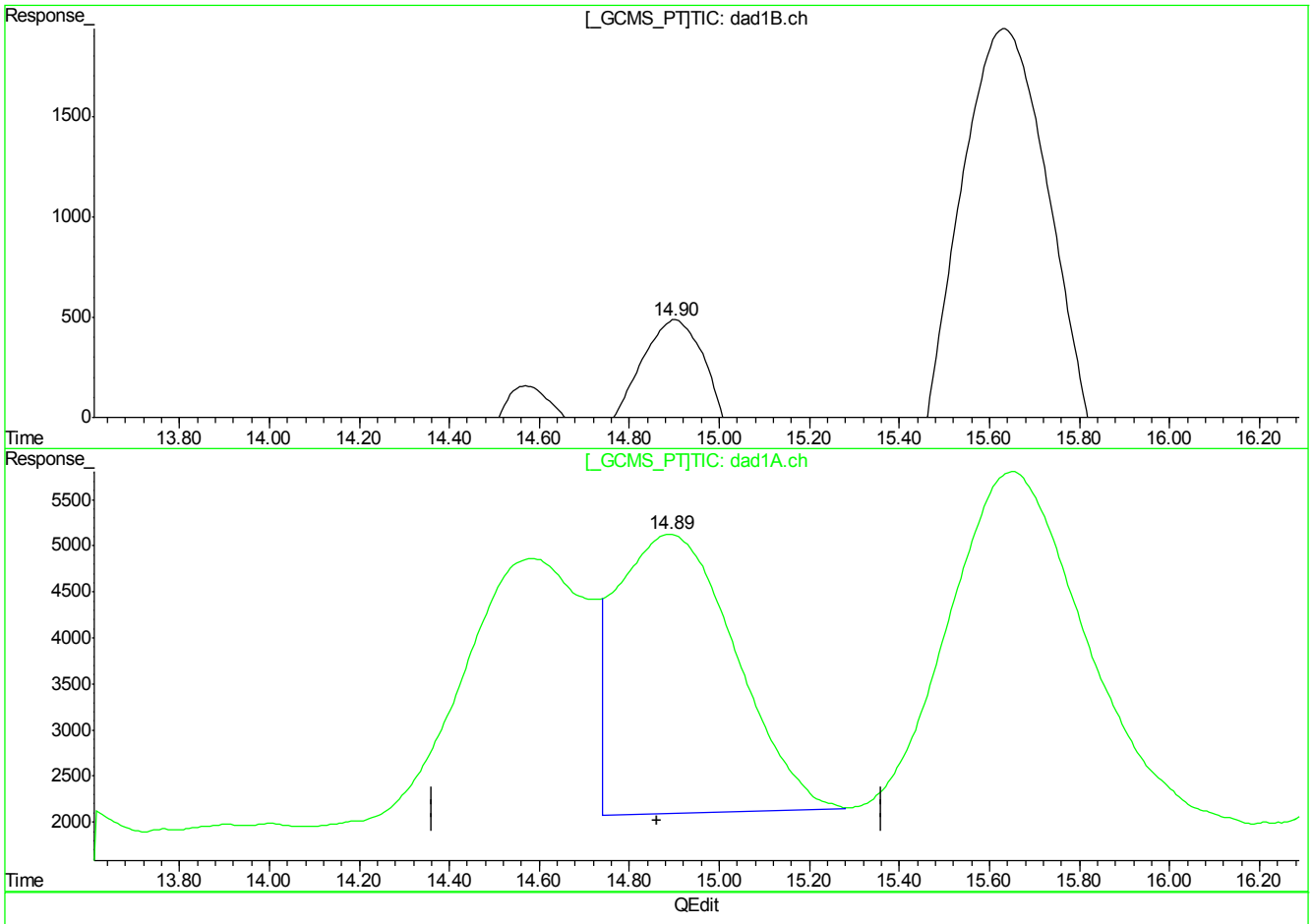
response 801693

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.90min 51.700ppb

response 359440

(13) 2,6-Dinitrotoluene #2

14.89min 50.694ppb m

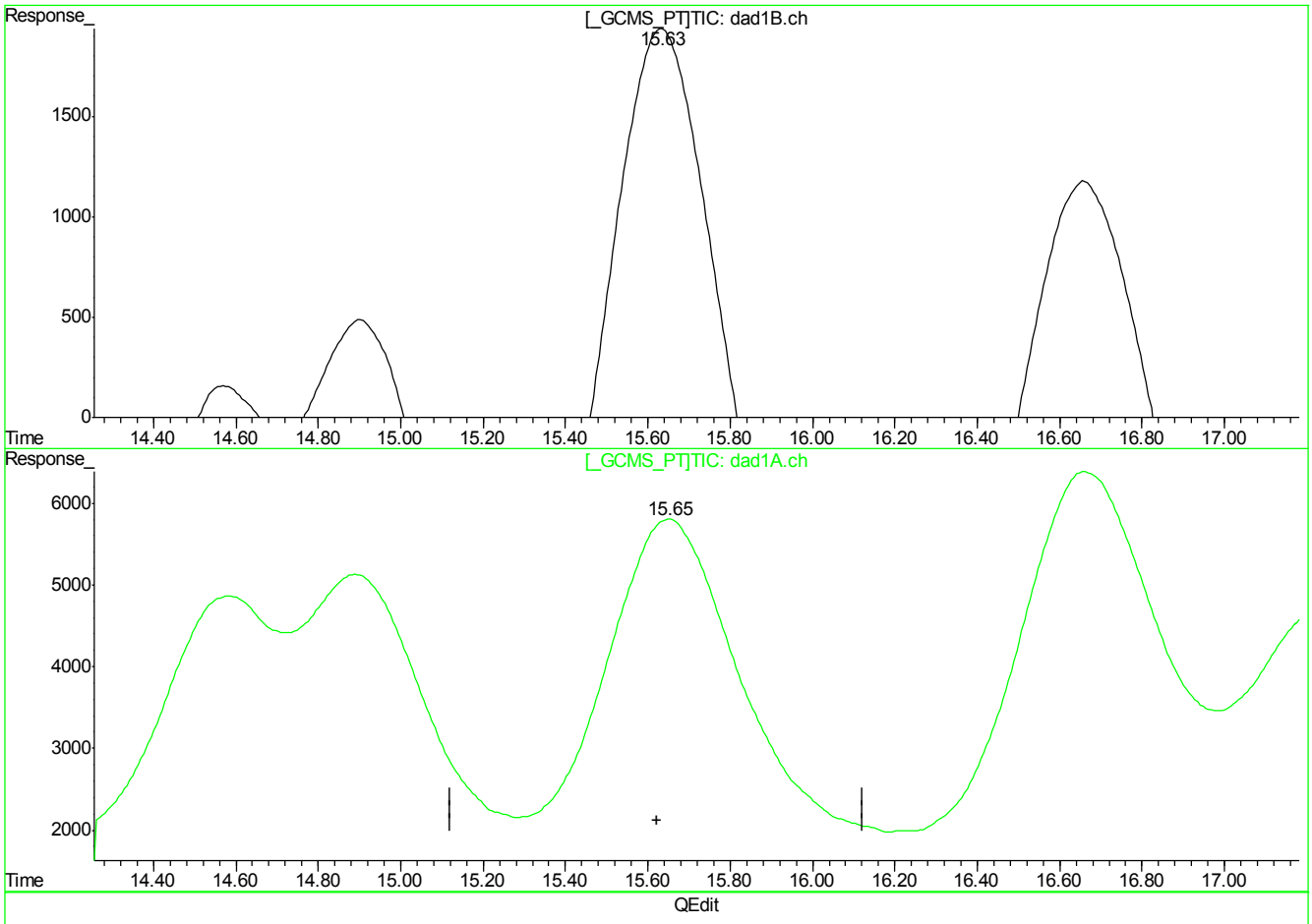
response 552975

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:47 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 93.393ppb

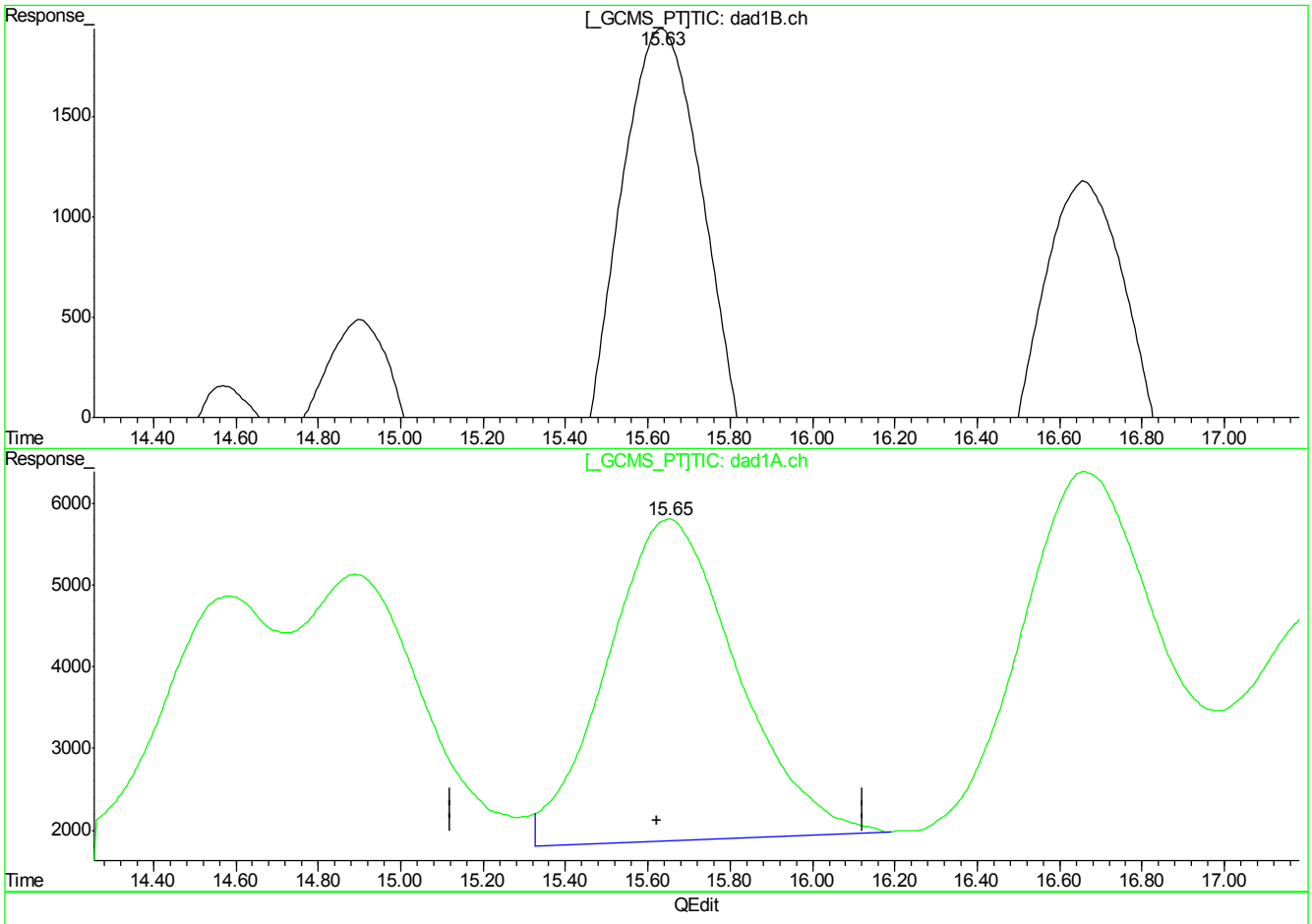
response 927502

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:50 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(14) 2,4-Dinitrotoluene

15.63min 49.688ppb

response 660258

(14) 2,4-Dinitrotoluene #2

15.65min 86.988ppb m

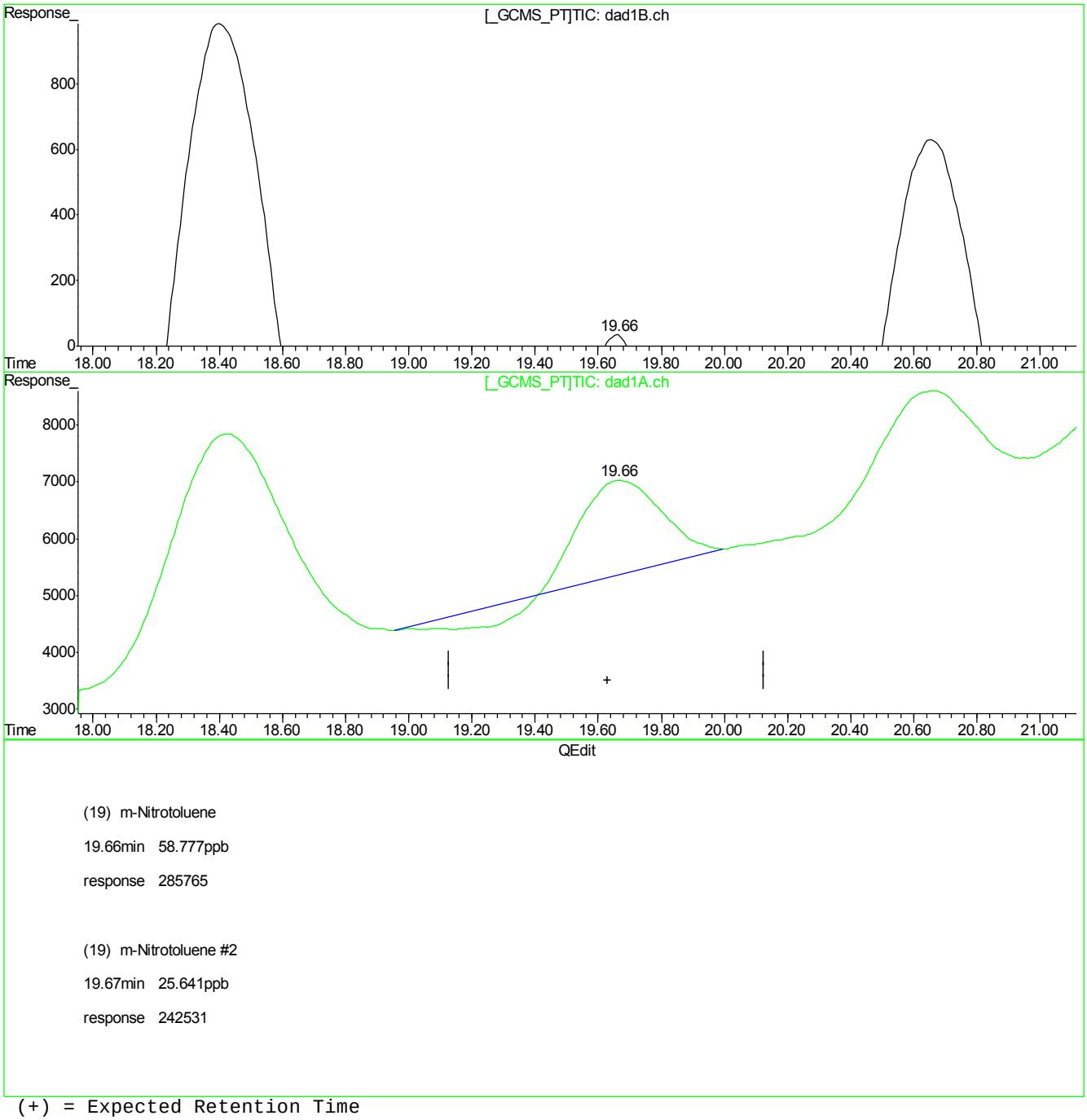
response 863855

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:55:53 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.67min 25.641ppb

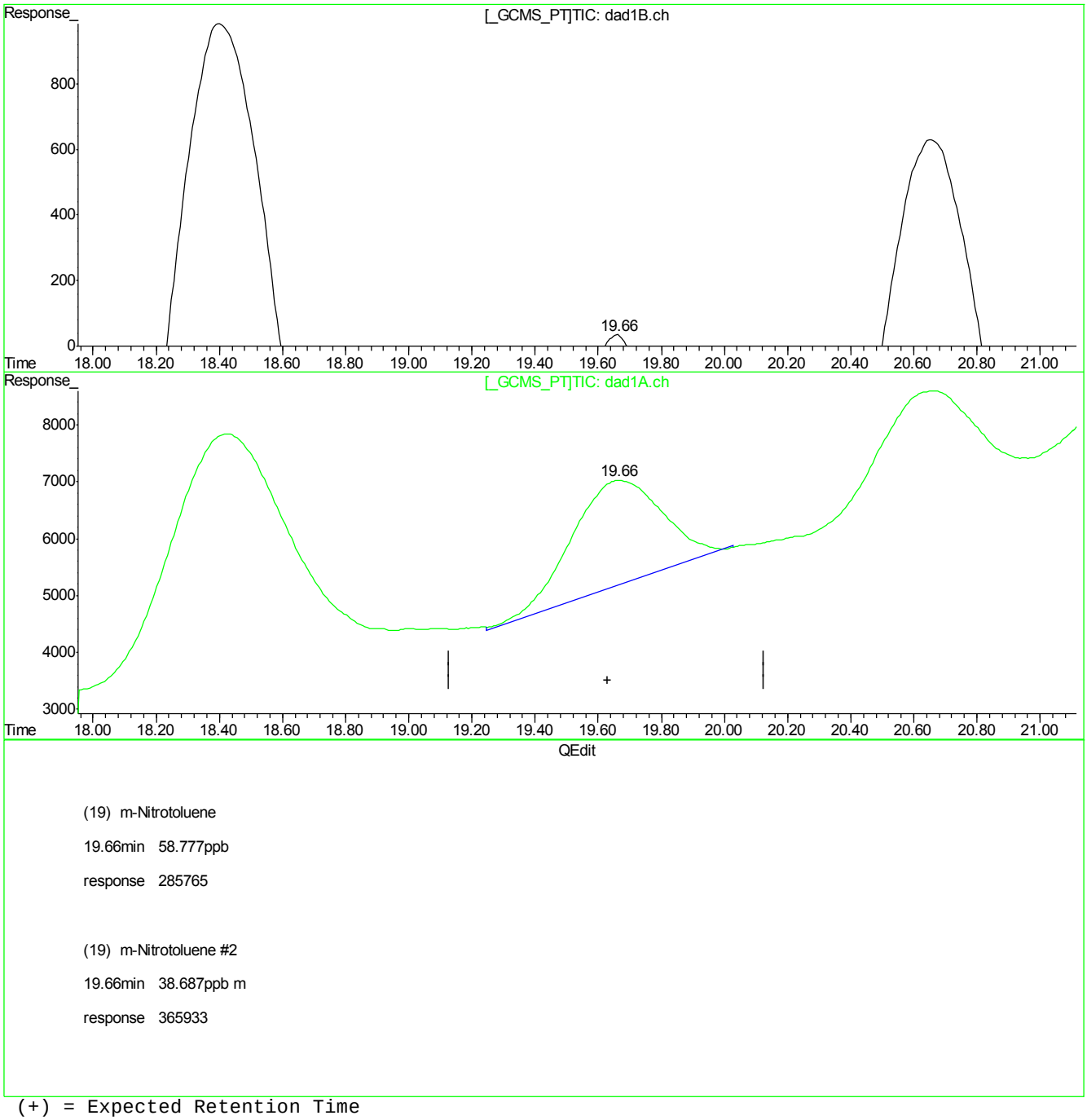
response 242531

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:01 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(19) m-Nitrotoluene

19.66min 58.777ppb

response 285765

(19) m-Nitrotoluene #2

19.66min 38.687ppb m

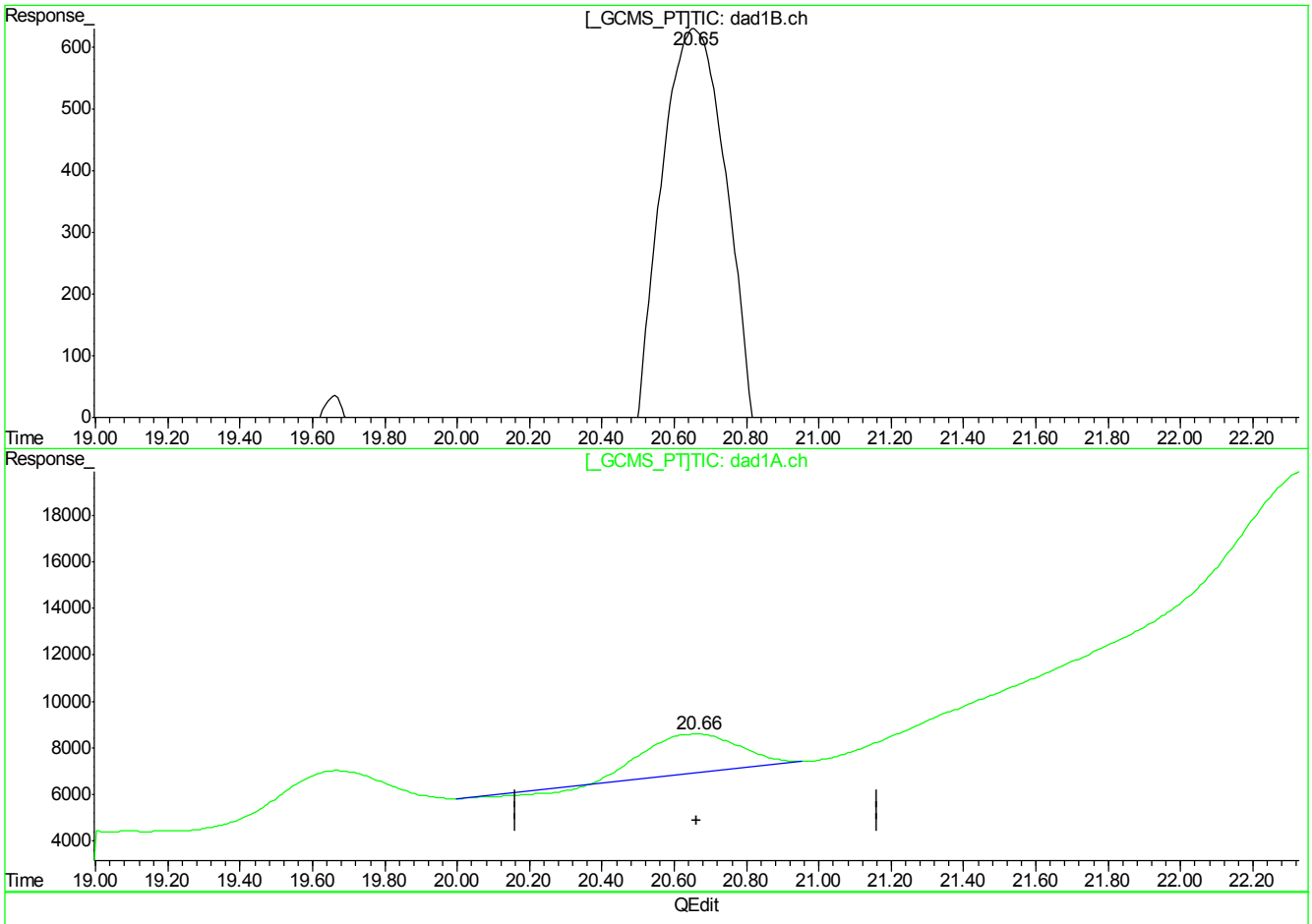
response 365933

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:03 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 21.333ppb

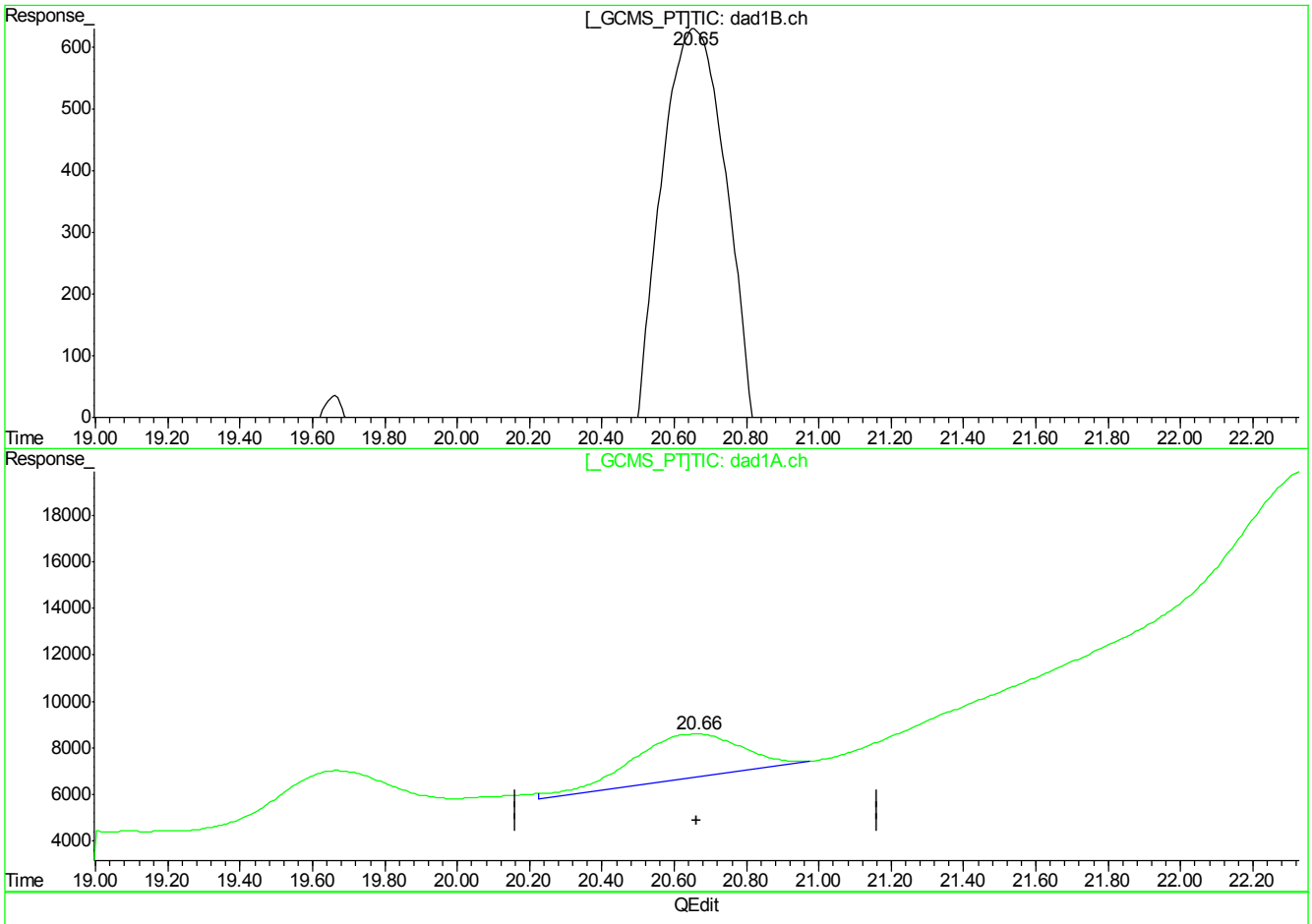
response 288721

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(20) 2-Amino-4,6-Dinitrotoluene

20.66min 45.970ppb

response 440998

(20) 2-Amino-4,6-Dinitrotoluene #2

20.66min 29.479ppb m

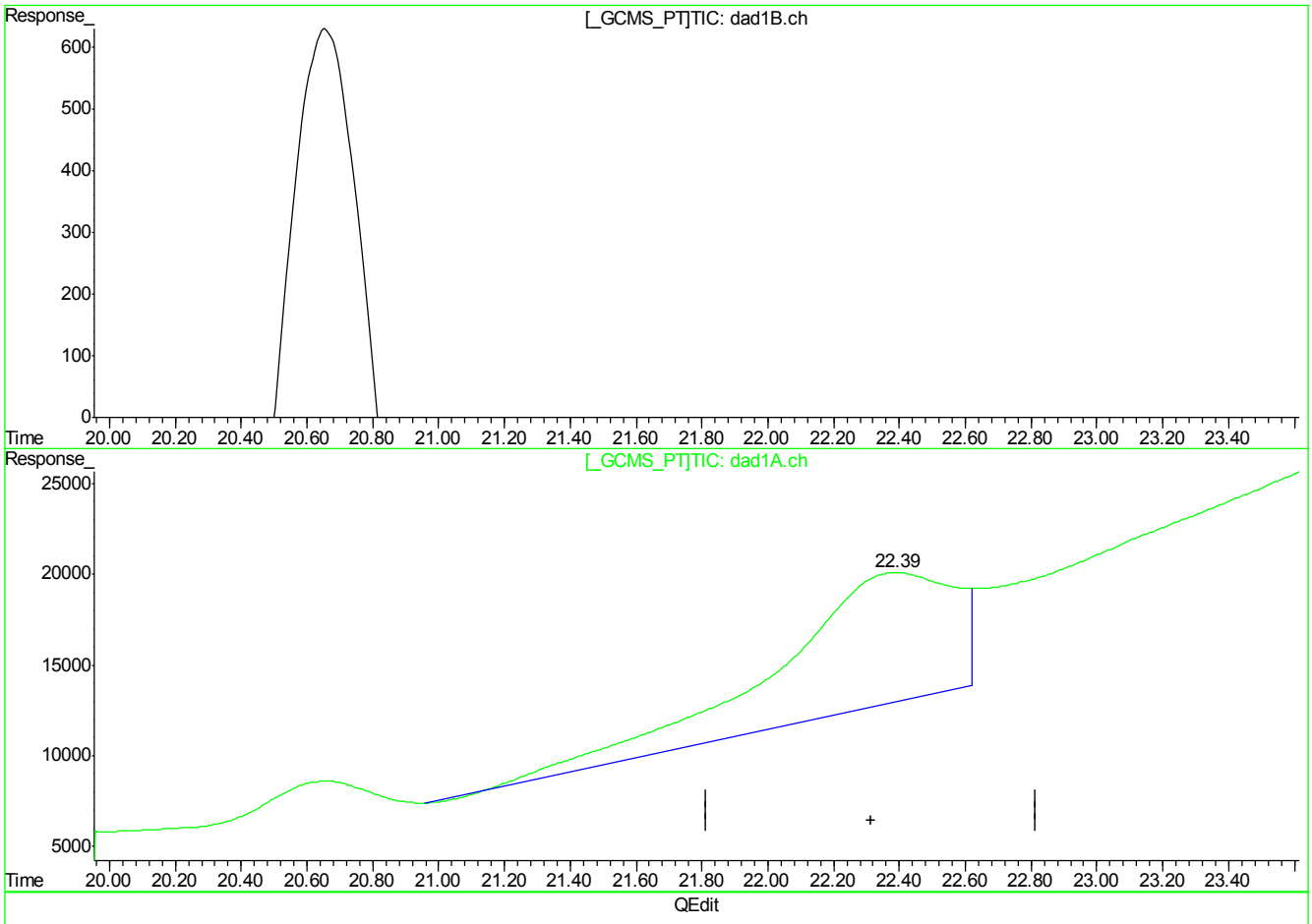
response 398969

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:09 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.39min 817.312ppb

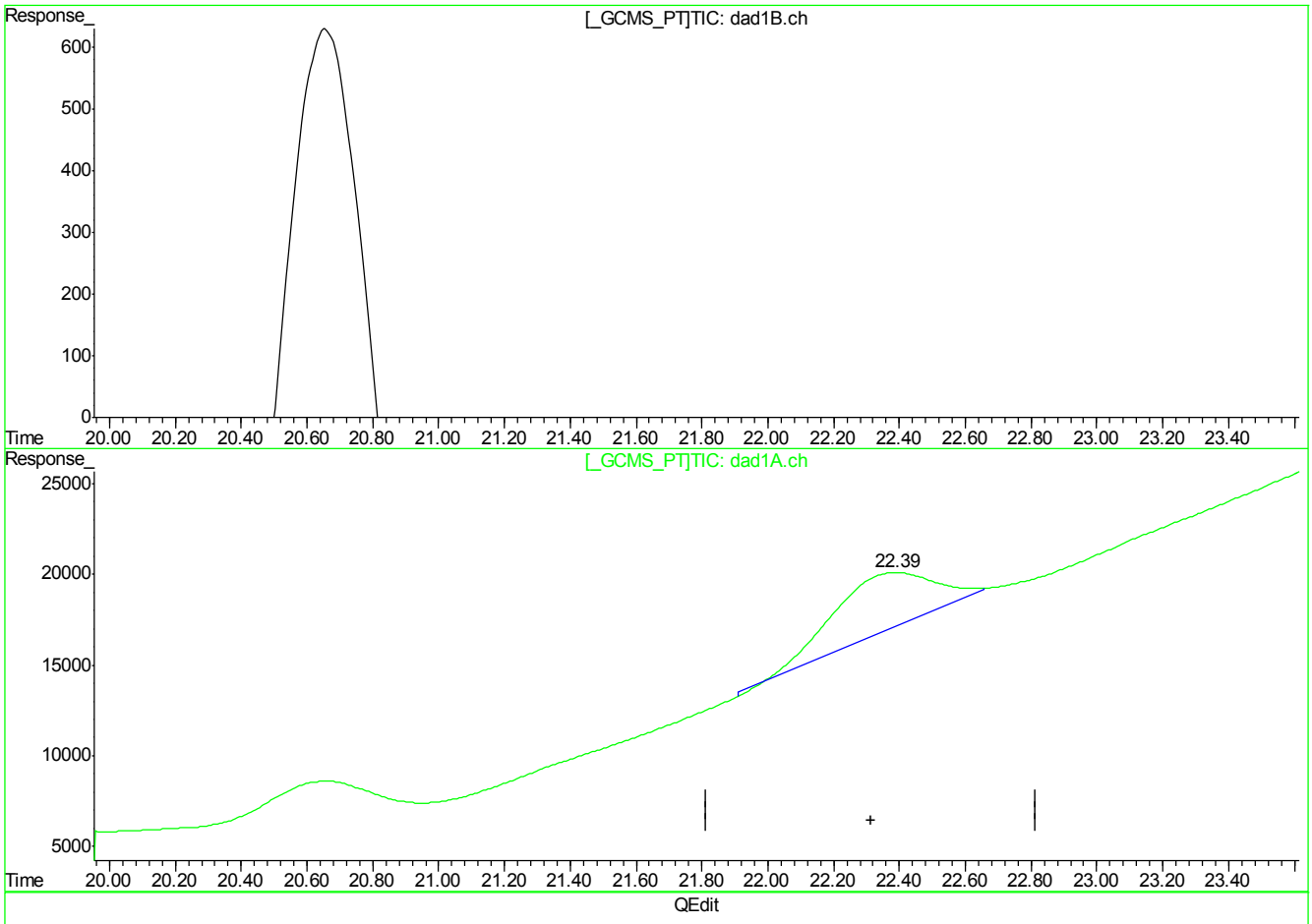
response 2648684

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613827.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\1113RPB3\GG613827.D\dad1A.ch
Acq On : 13-Nov-2017, 14:05:59 Operator: evitam
Sample : ic2571-50 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:54:19 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.39min 205.186ppb m

response 664952

(+) = Expected Retention Time
GG613827.D 8330RPB.M_1113M.M Tue Nov 14 11:56:15 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49:59 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	539446	1021169	91.503	81.638m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		18.30%#	16.33%#
	Target Compounds						
1)	TNX	5.01	5.01	1509922	1509922	179.506	179.032
2)	HMX	5.46	5.46	376444	376444	99.104	98.403
3)	DNX	5.59	5.59	825106	825106	125.705	126.142
4)	MNX	6.66	6.66	719732	719732	148.771	148.771
5)	1,3,5-Trinitrobe	7.54	7.54	1066153	1062518	104.411	104.098
6)	RDX	8.07	8.07	494554	482286	103.884	101.779
7)	1,3-Dinitrobenze	10.08	10.08	1453602	1272574	99.869	89.971m
8)	Nitrobenzene	11.07	11.07	953891	901312	124.781	94.788m
9)	2,4,6-Trinitroto	11.87	11.87	1001781	1458021	98.255	93.389m
10)	Nitroglycerin	0.00	12.70	0	1702013	N.D. d	464.272m
11)	Tetryl	13.28	13.27	844790	1140150	123.159	93.137m
13)	2,6-Dinitrotolue	14.89	14.89	734094	996233	105.588	91.335m
14)	2,4-Dinitrotolue	15.62	15.63	1340479	1231048	100.879	123.933
15)	o-Nitrotoluene	17.22	17.22	599687	848130	141.042	145.750
16)	3,5-Dinitroanili	16.64	16.64	1075378	1750952	101.472	97.657
17)	p-Nitrotoluene	18.39	18.40	1208979	2157804	105.075	101.946
18)	4-Amino-2,6-Dini	18.39	18.40	1208979	2157804	105.075	101.946
19)	m-Nitrotoluene	19.64	19.64	613746	1029981	124.866	108.890
20)	2-Amino-4,6-Dini	20.64	20.66	902382	1031982	94.065	76.251
21)	PETN	0.00	22.33	0	1529945	N.D. d	472.100m

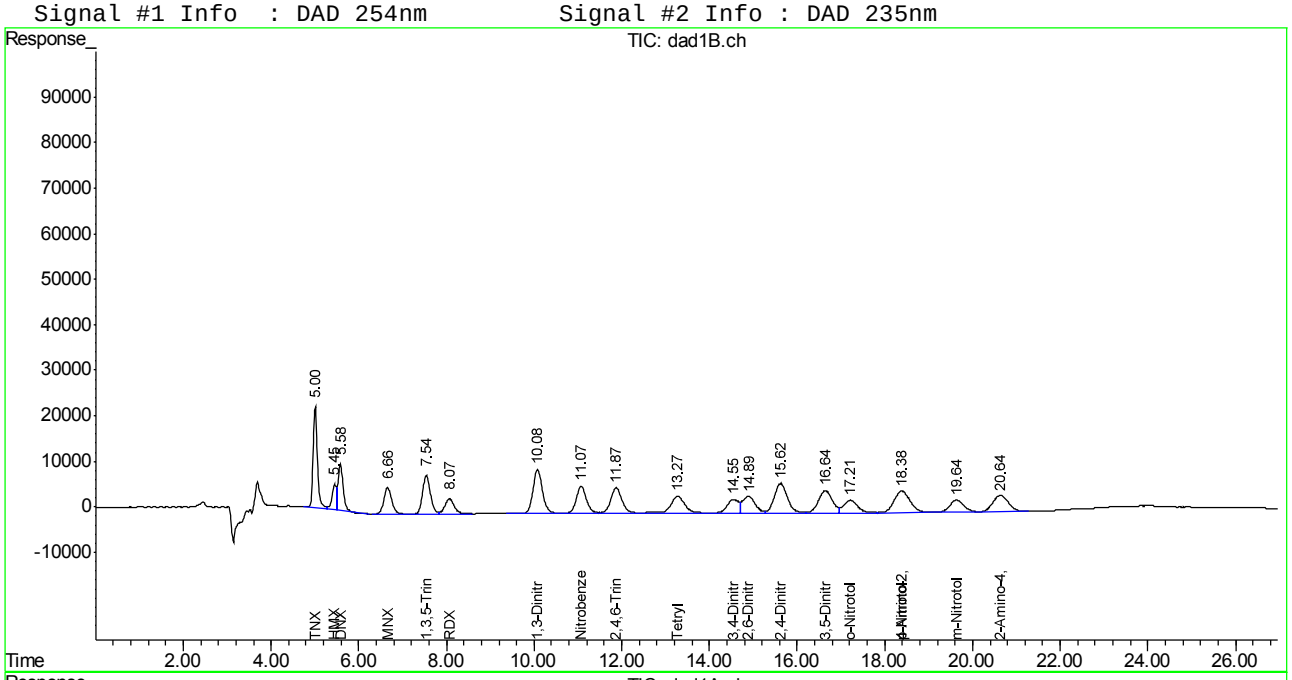
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 13:37:52 2017 Page 1

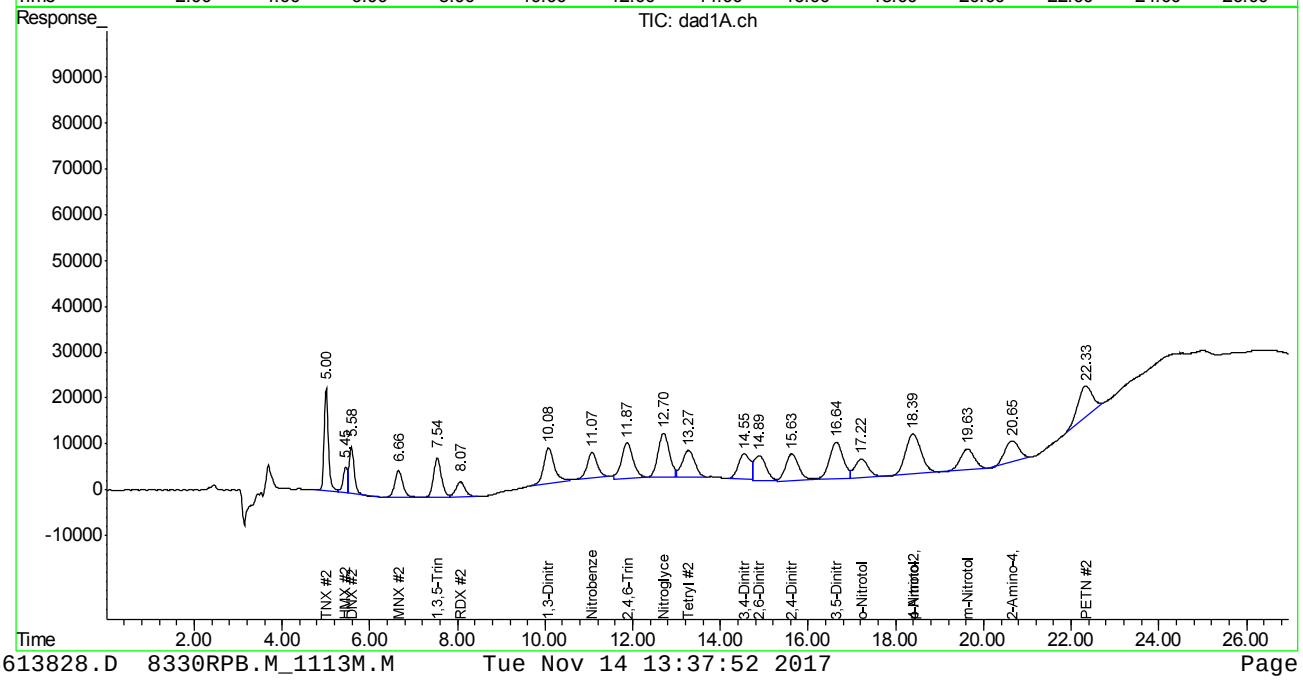
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:58 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

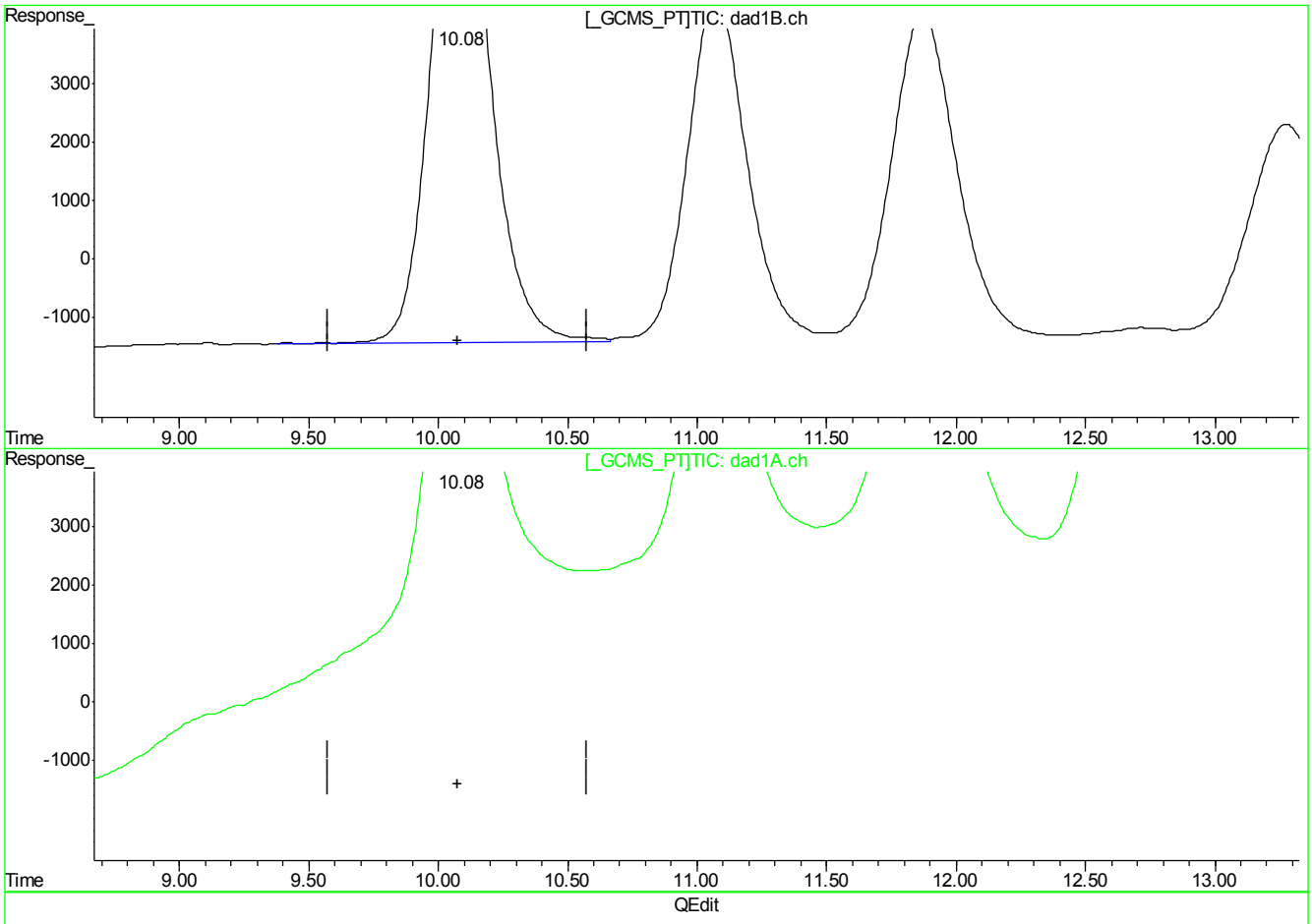
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613828.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 14:35	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.07	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.70	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.55	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.89	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 216.460ppb

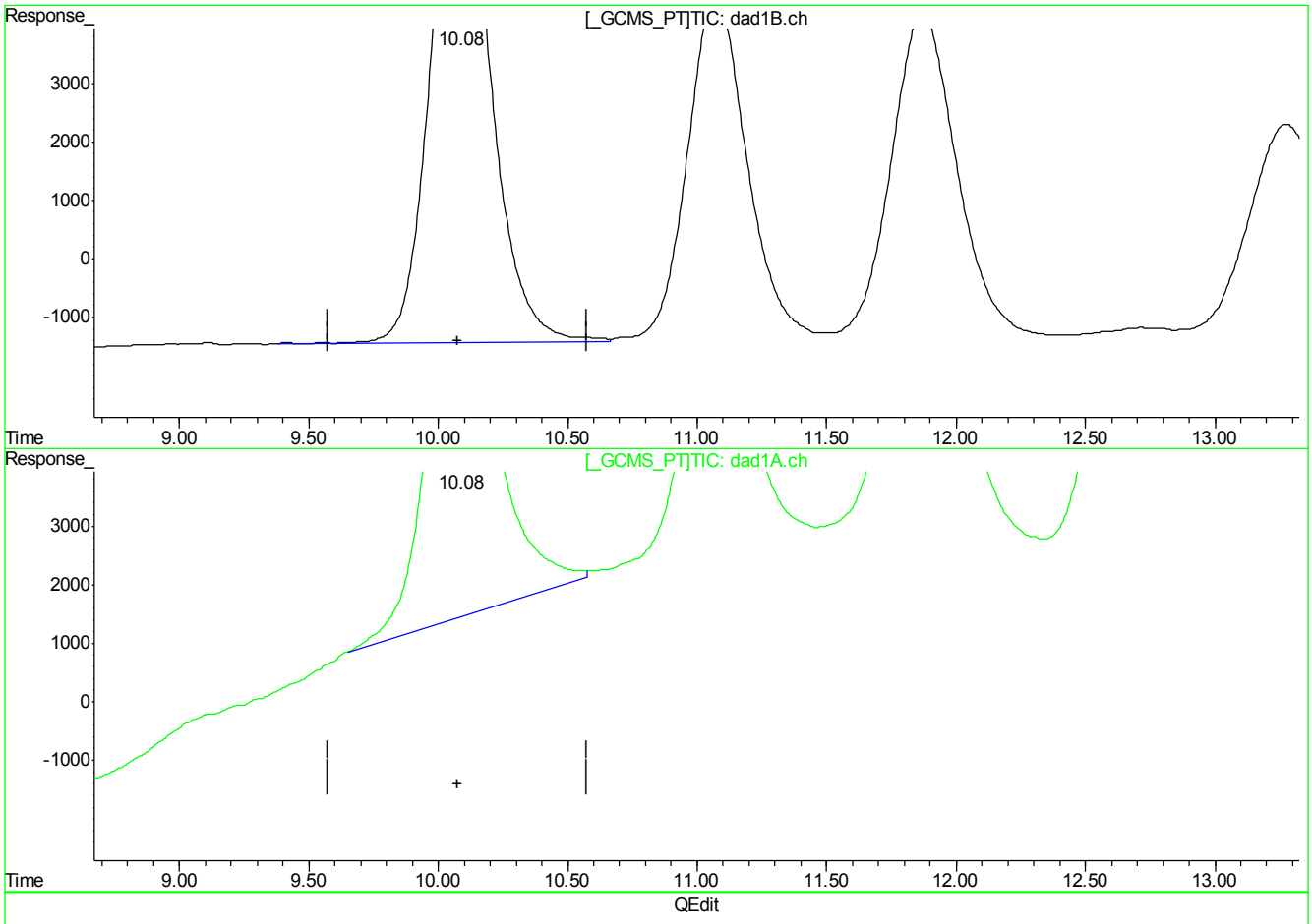
response 3026444

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.08min 99.869ppb

response 1453602

(7) 1,3-Dinitrobenzene #2

10.08min 89.971ppb m

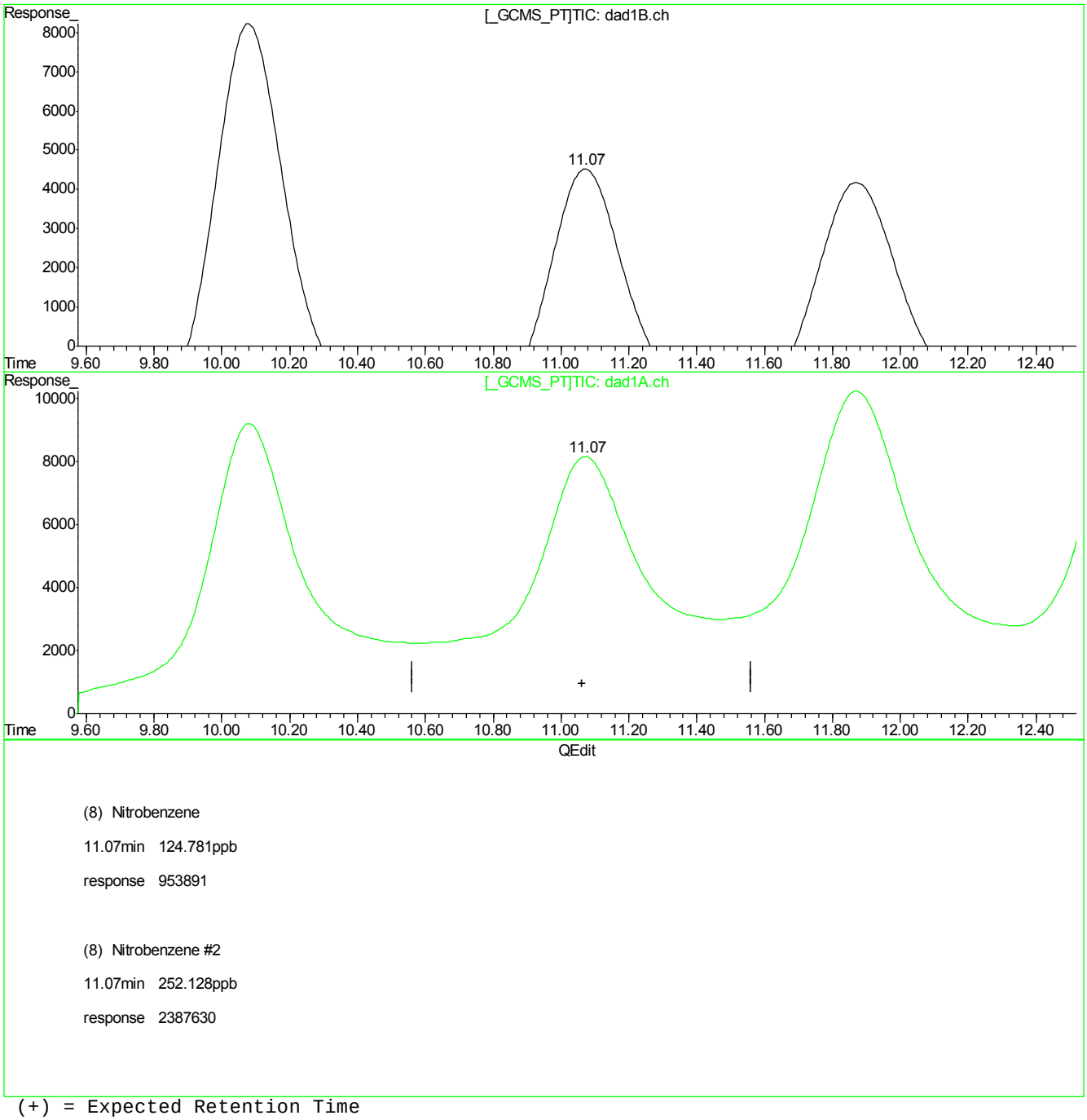
response 1272574

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration

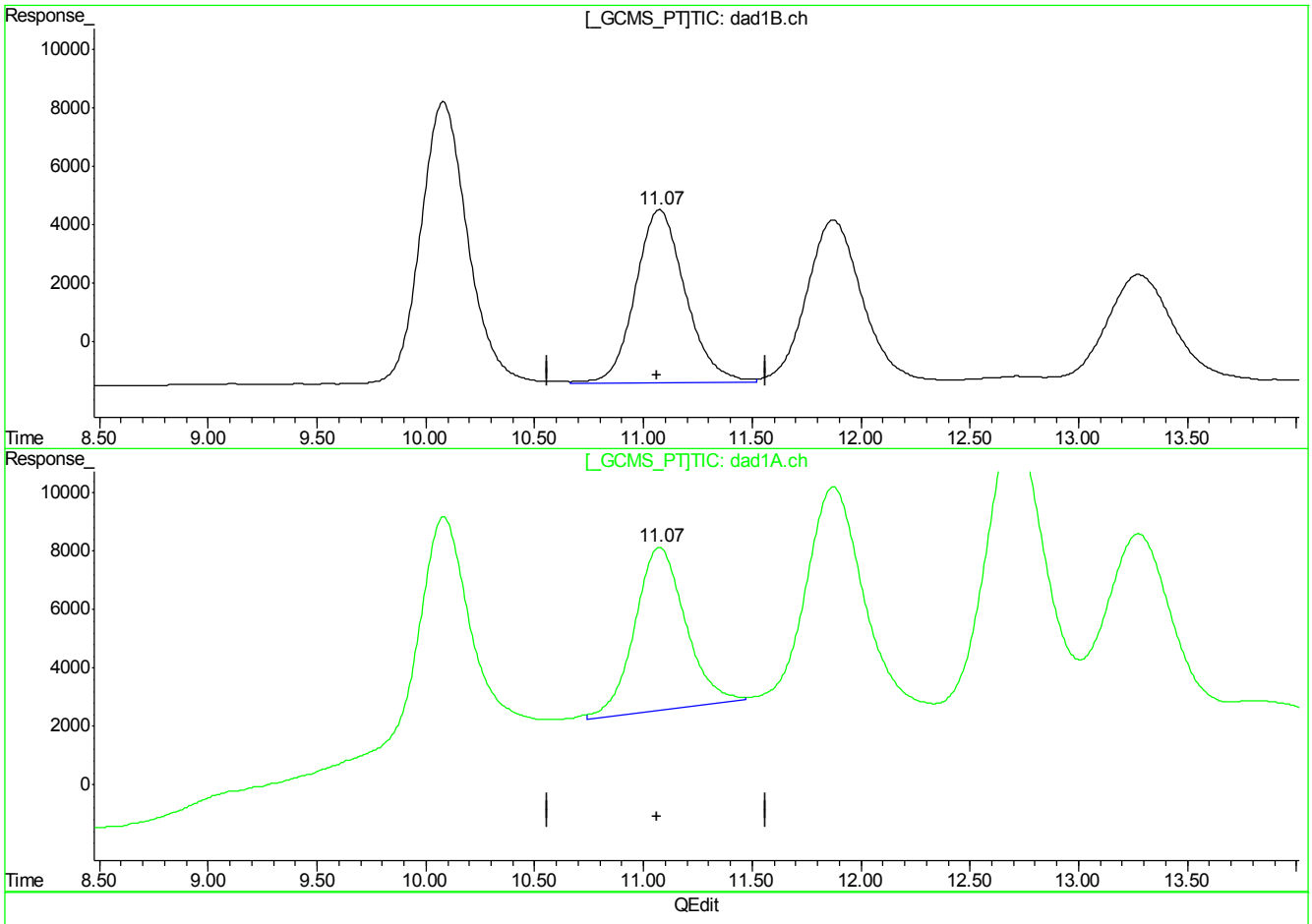


(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:56:56 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.07min 124.781ppb

response 953891

(8) Nitrobenzene #2

11.07min 94.788ppb m

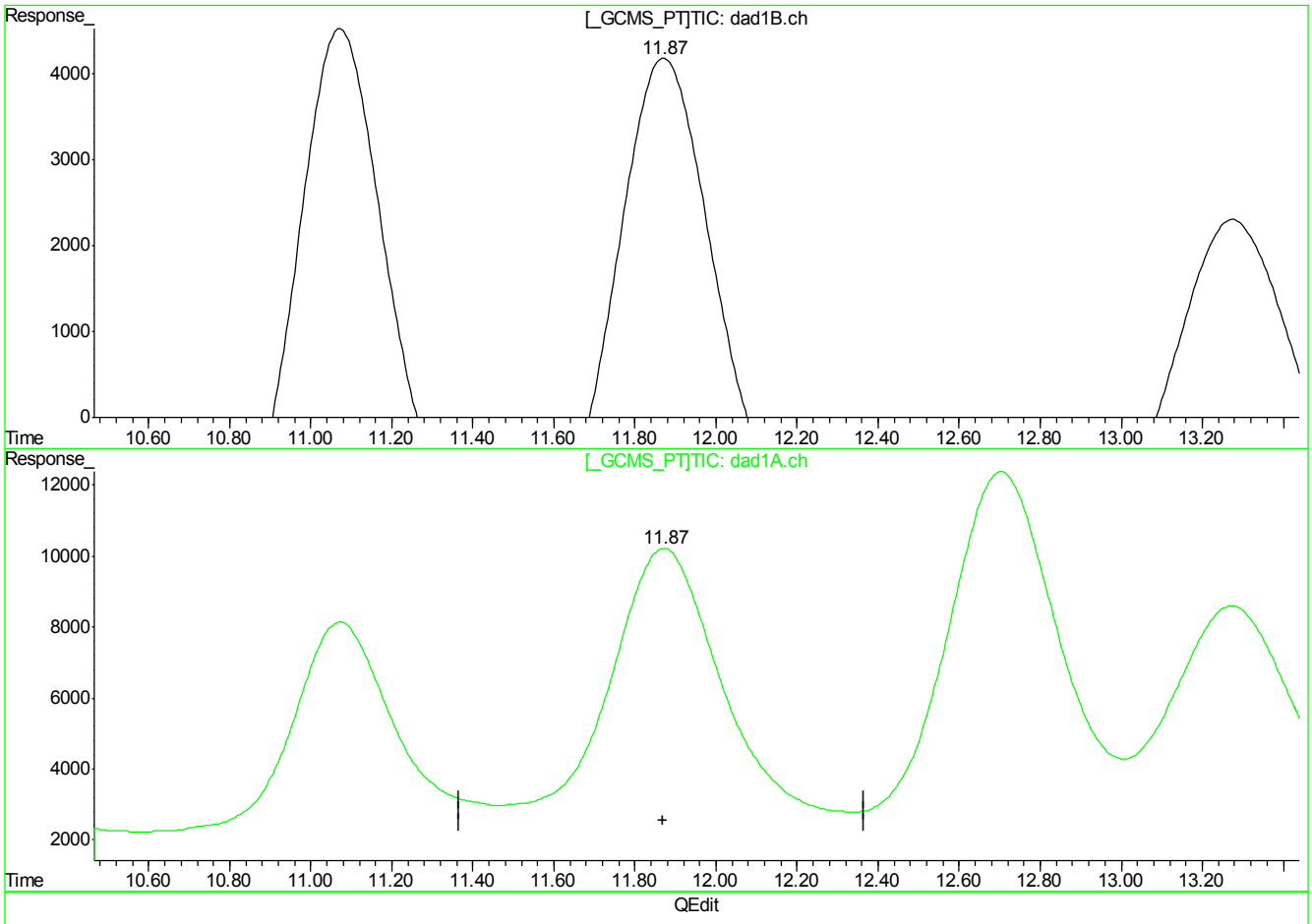
response 901312

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:06 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 174.293ppb

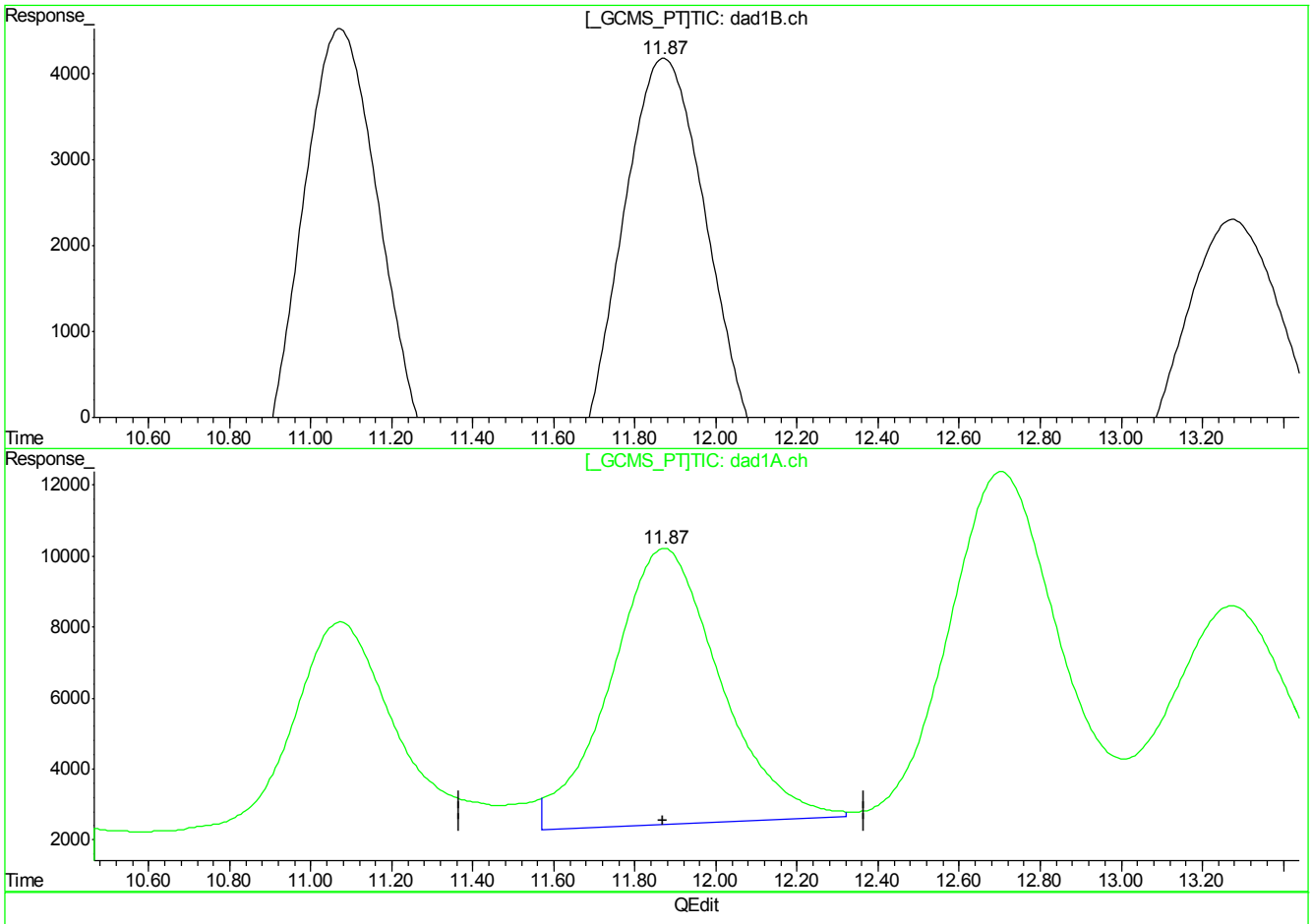
response 2710161

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:08 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.87min 98.255ppb

response 1001781

(9) 2,4,6-Trinitrotoluene #2

11.87min 93.389ppb m

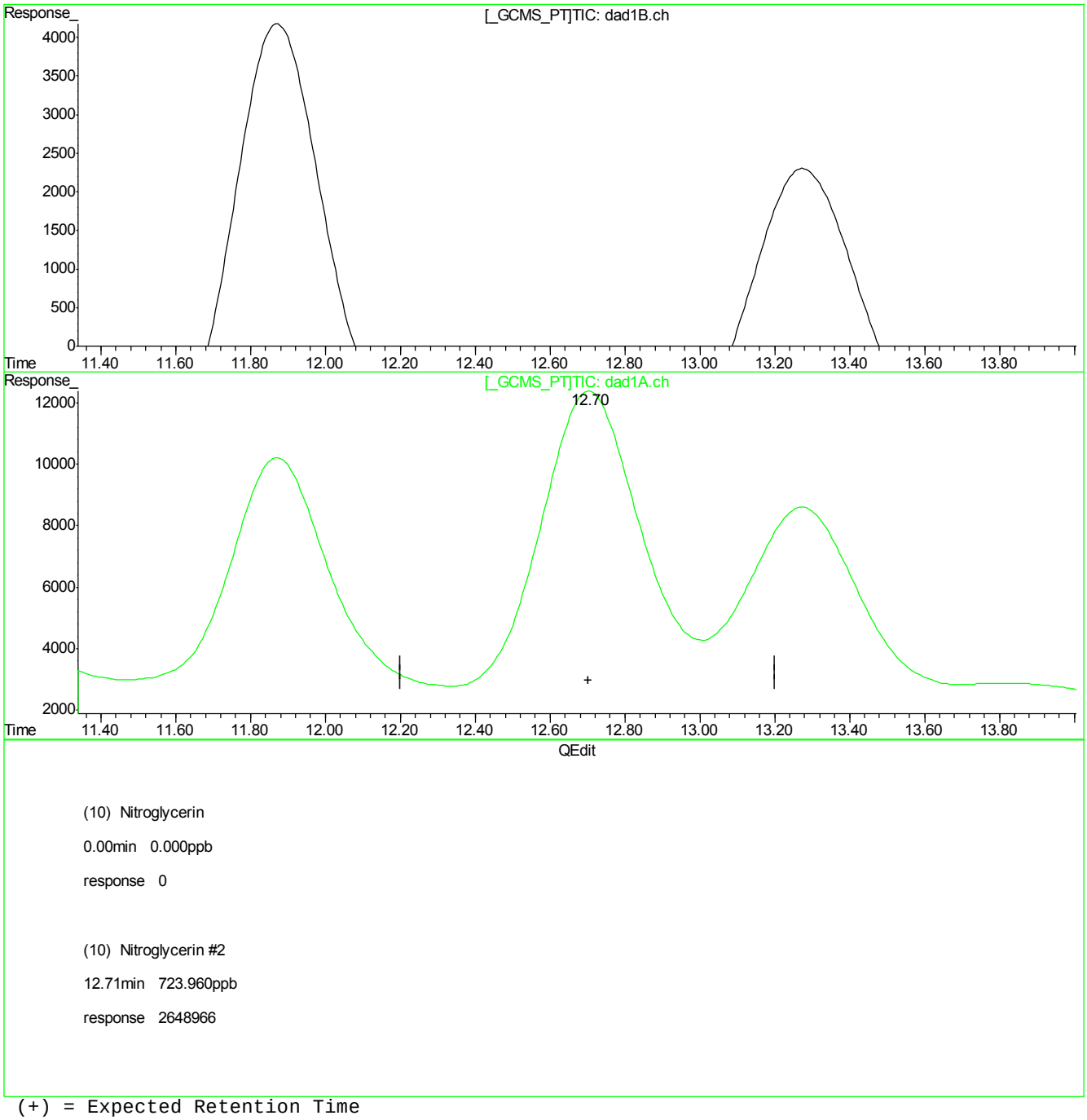
response 1458021

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:12 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration

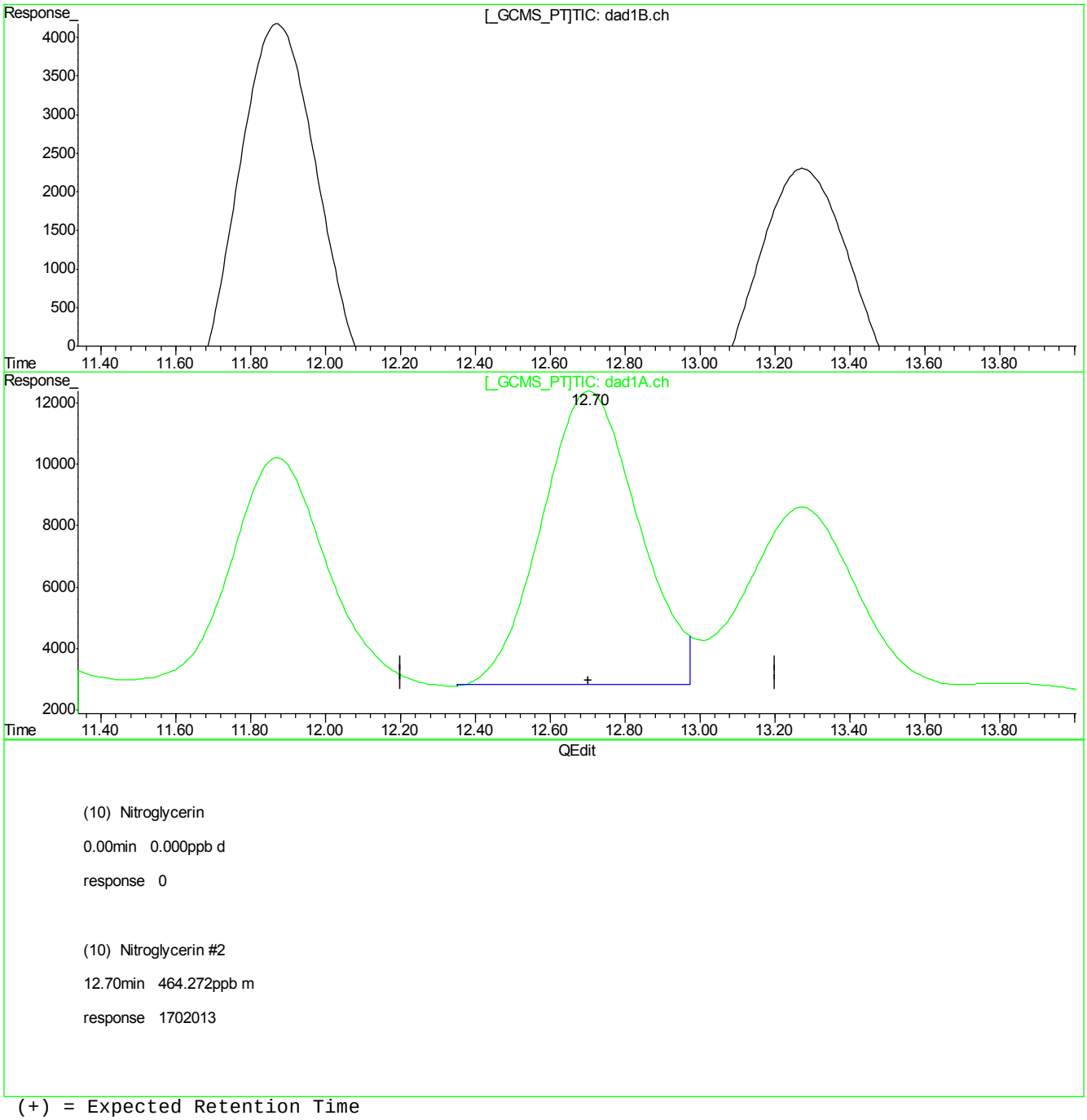


(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:14 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



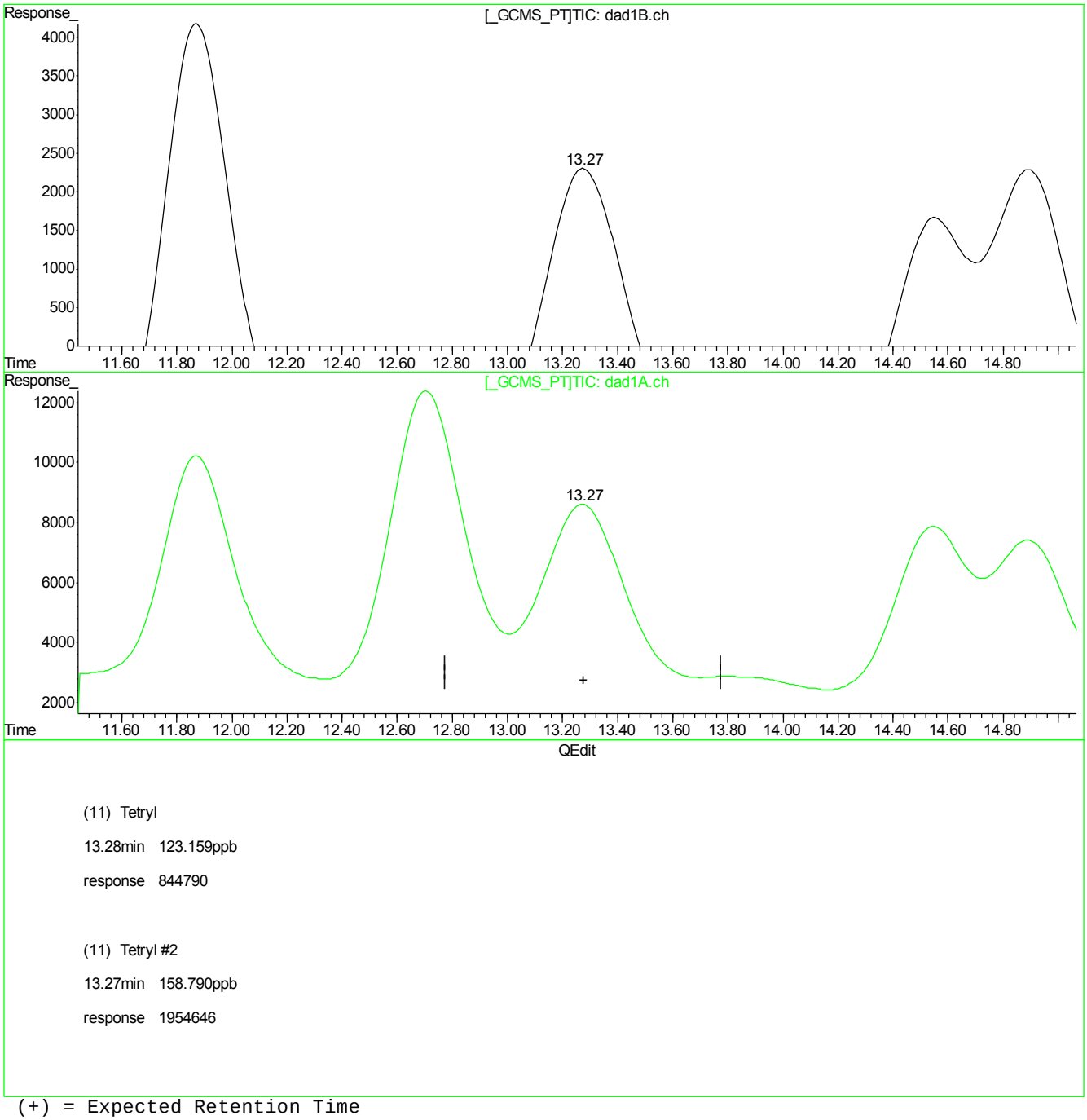
(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:20 2017

GG613828.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 158.790ppb

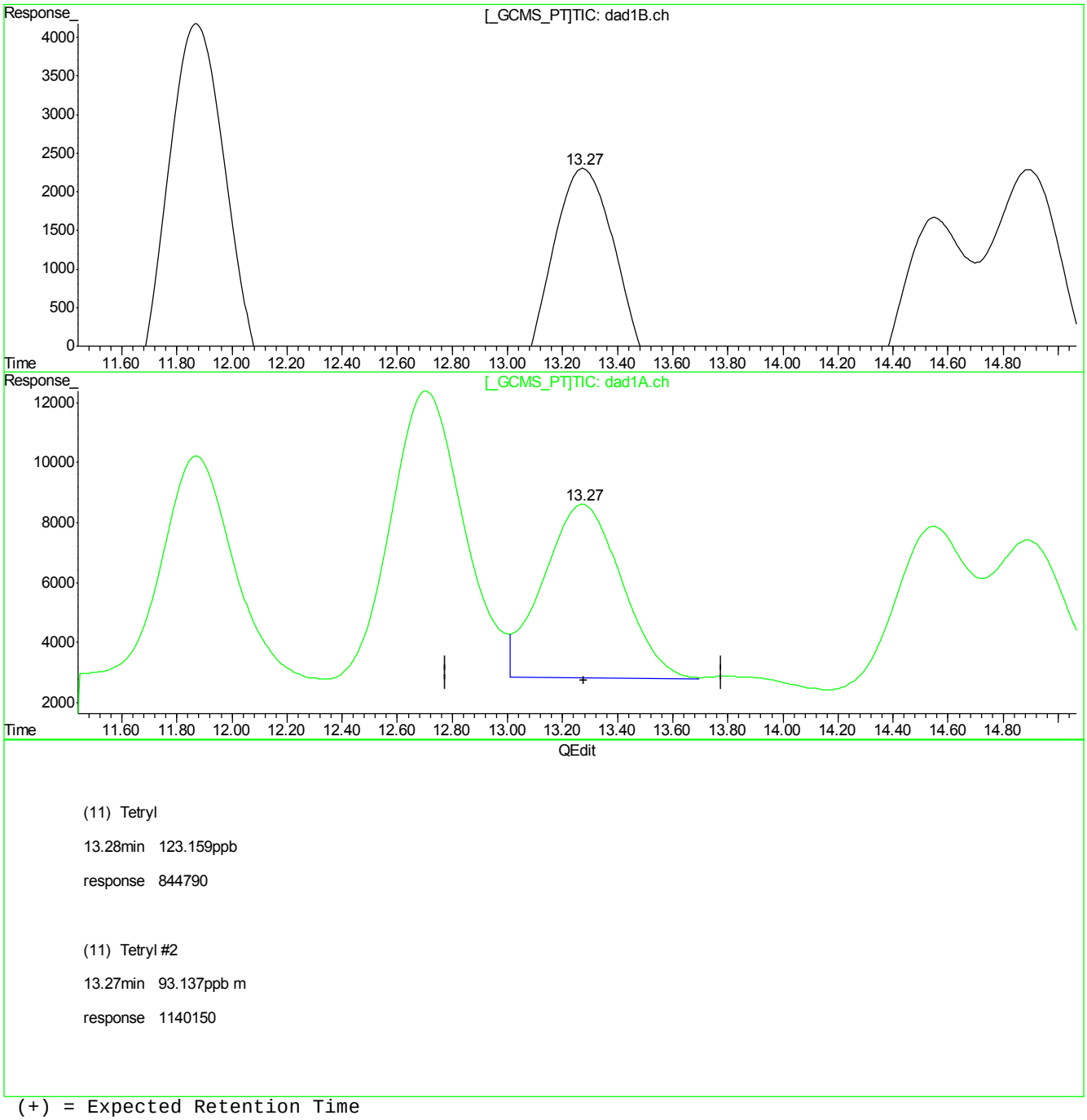
response 1954646

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:22 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.28min 123.159ppb

response 844790

(11) Tetryl #2

13.27min 93.137ppb m

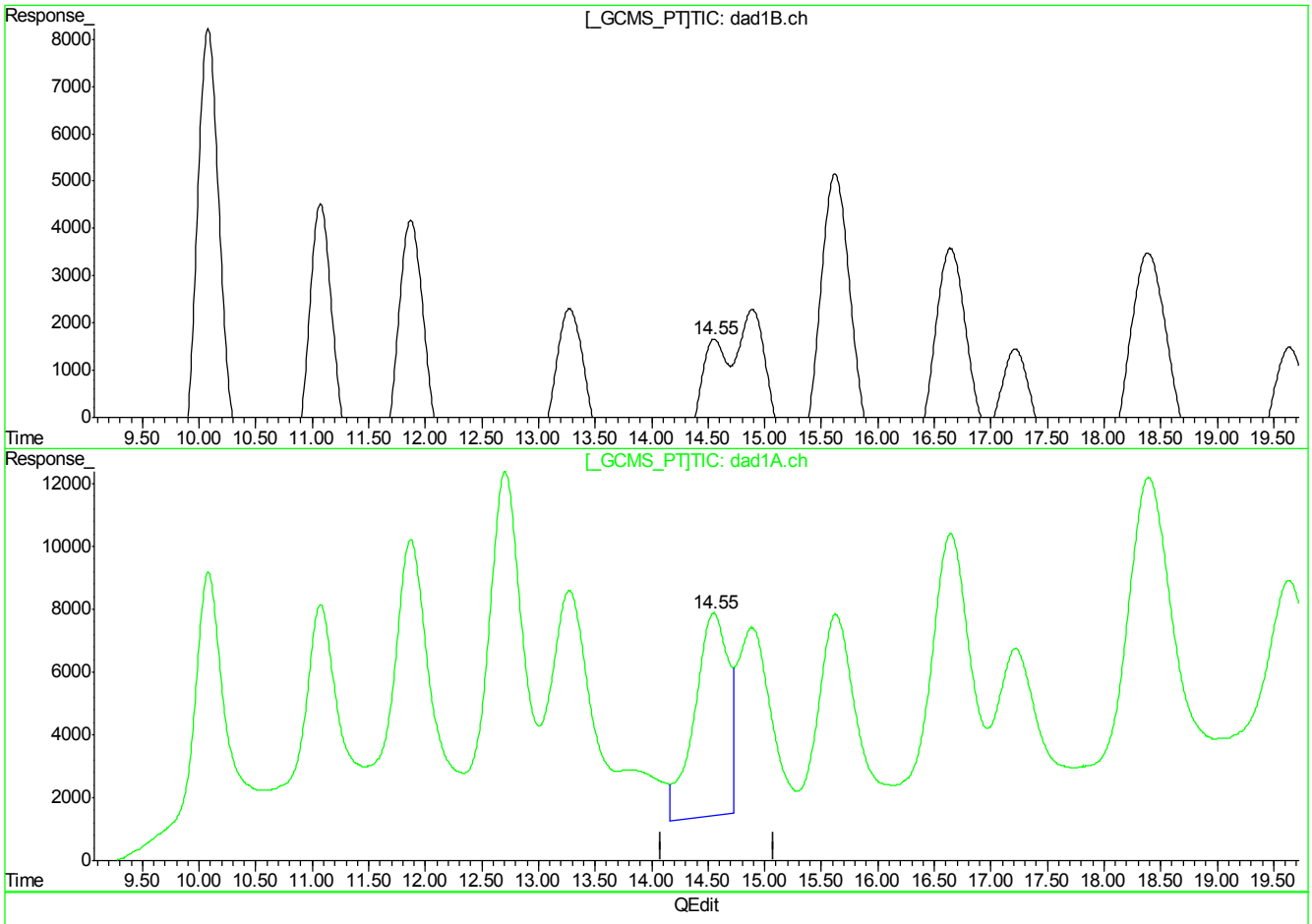
response 1140150

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:25 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 107.581ppb

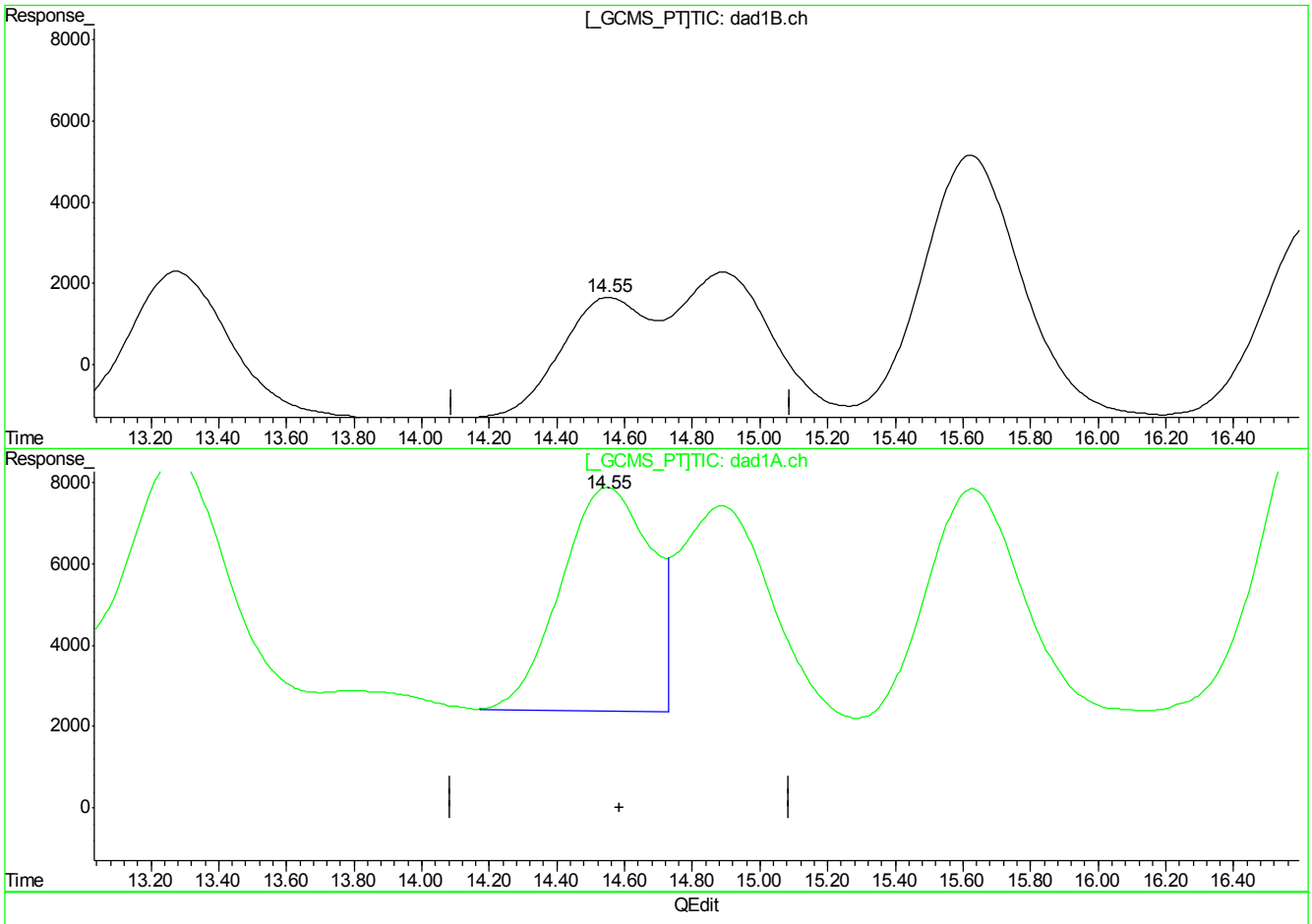
response 1344362

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.55min 91.503ppb

response 539446

(12) 3,4-Dinitrotoluene #2 (S)

14.55min 81.638ppb m

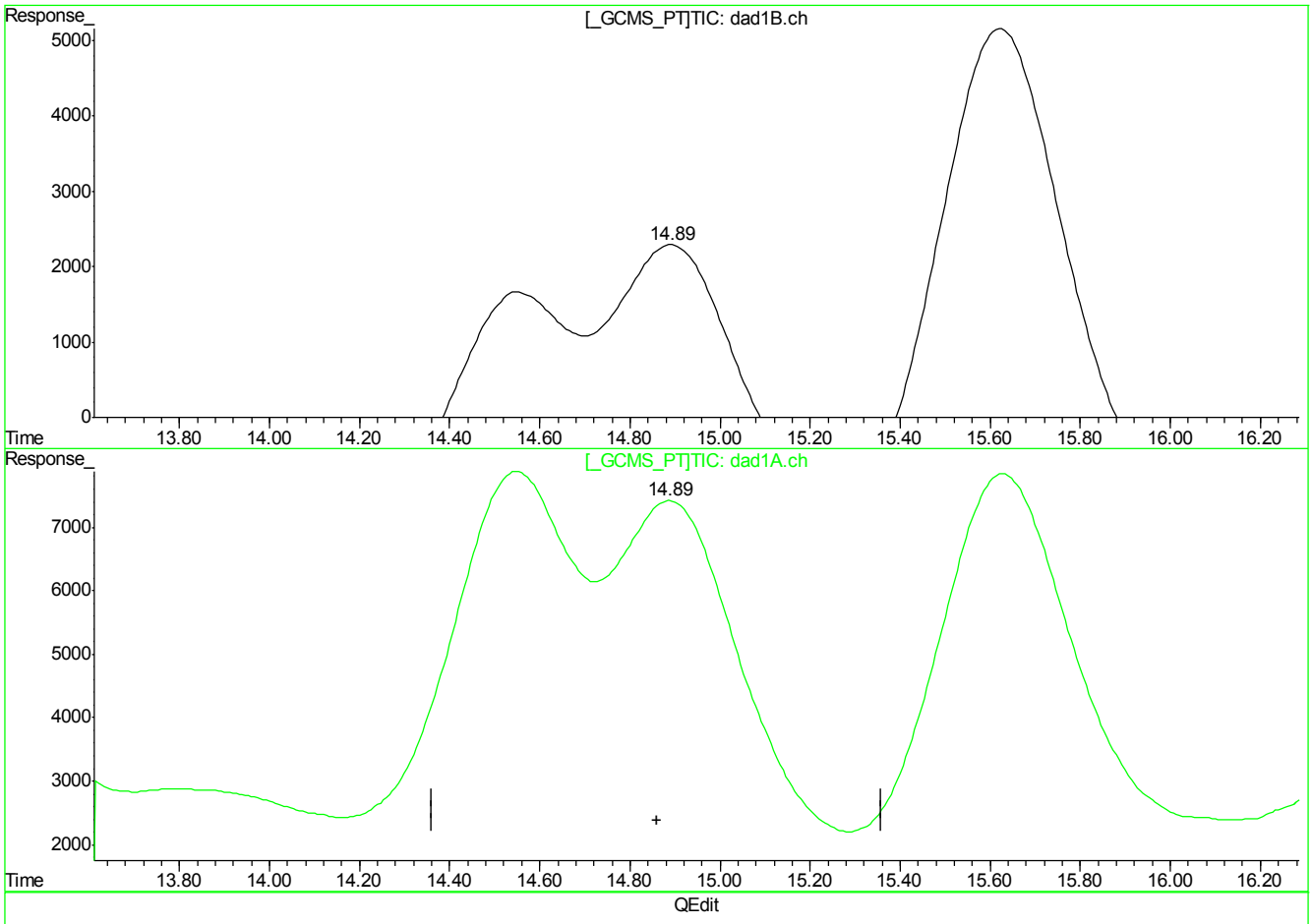
response 1021169

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:43 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 107.016ppb

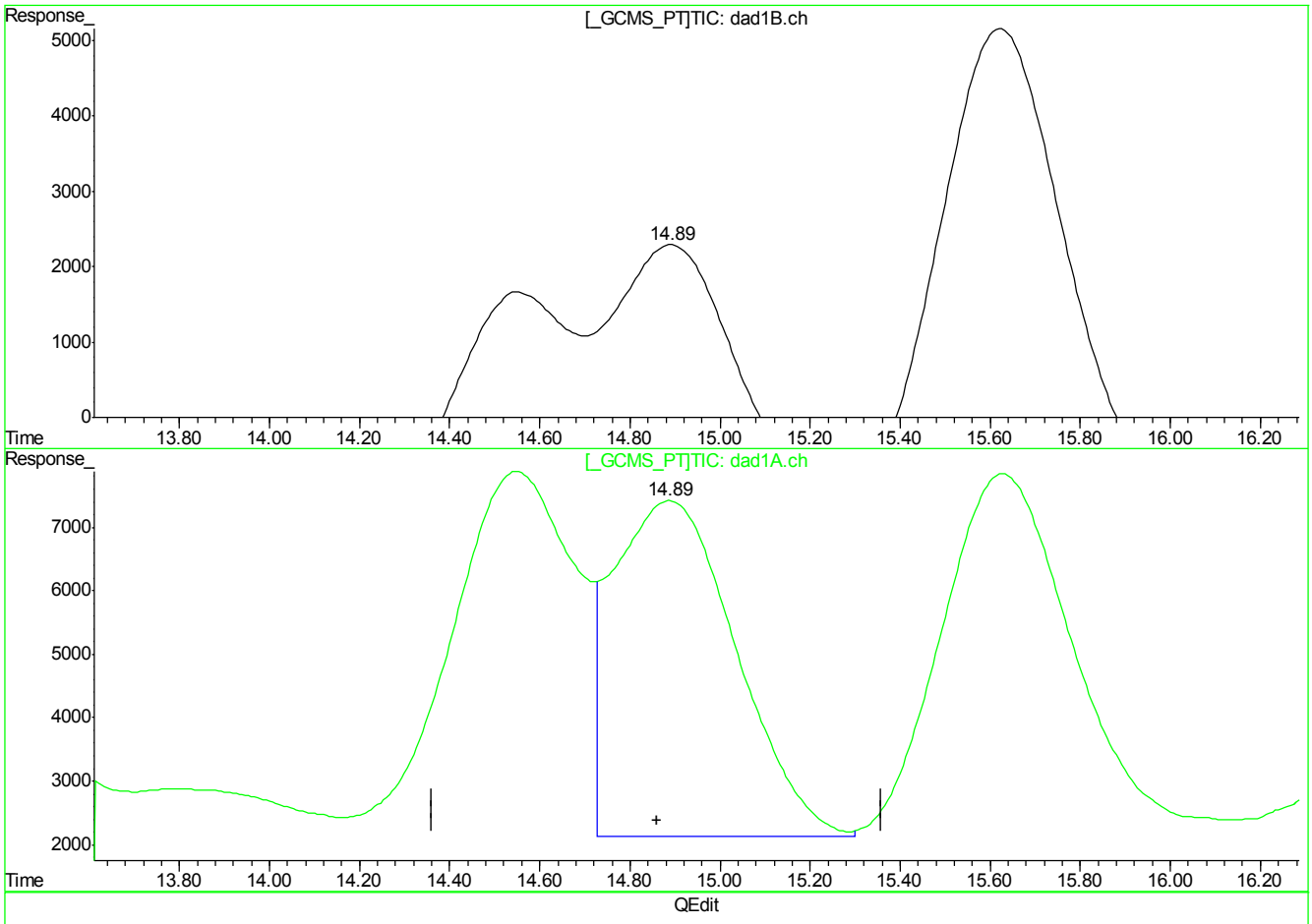
response 1167236

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.89min 105.588ppb

response 734094

(13) 2,6-Dinitrotoluene #2

14.89min 91.335ppb m

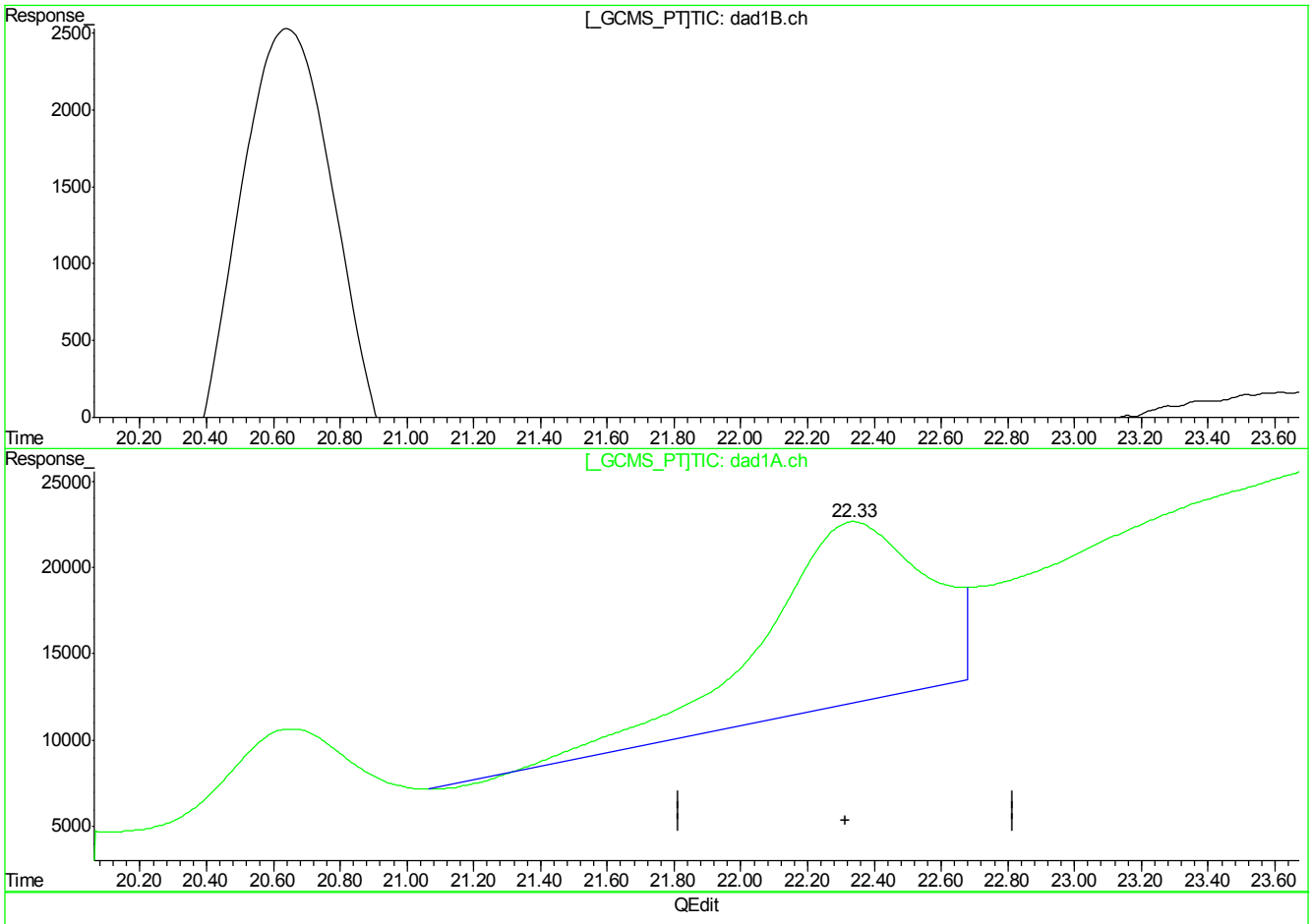
response 996233

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:52 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.34min 1088.398ppb

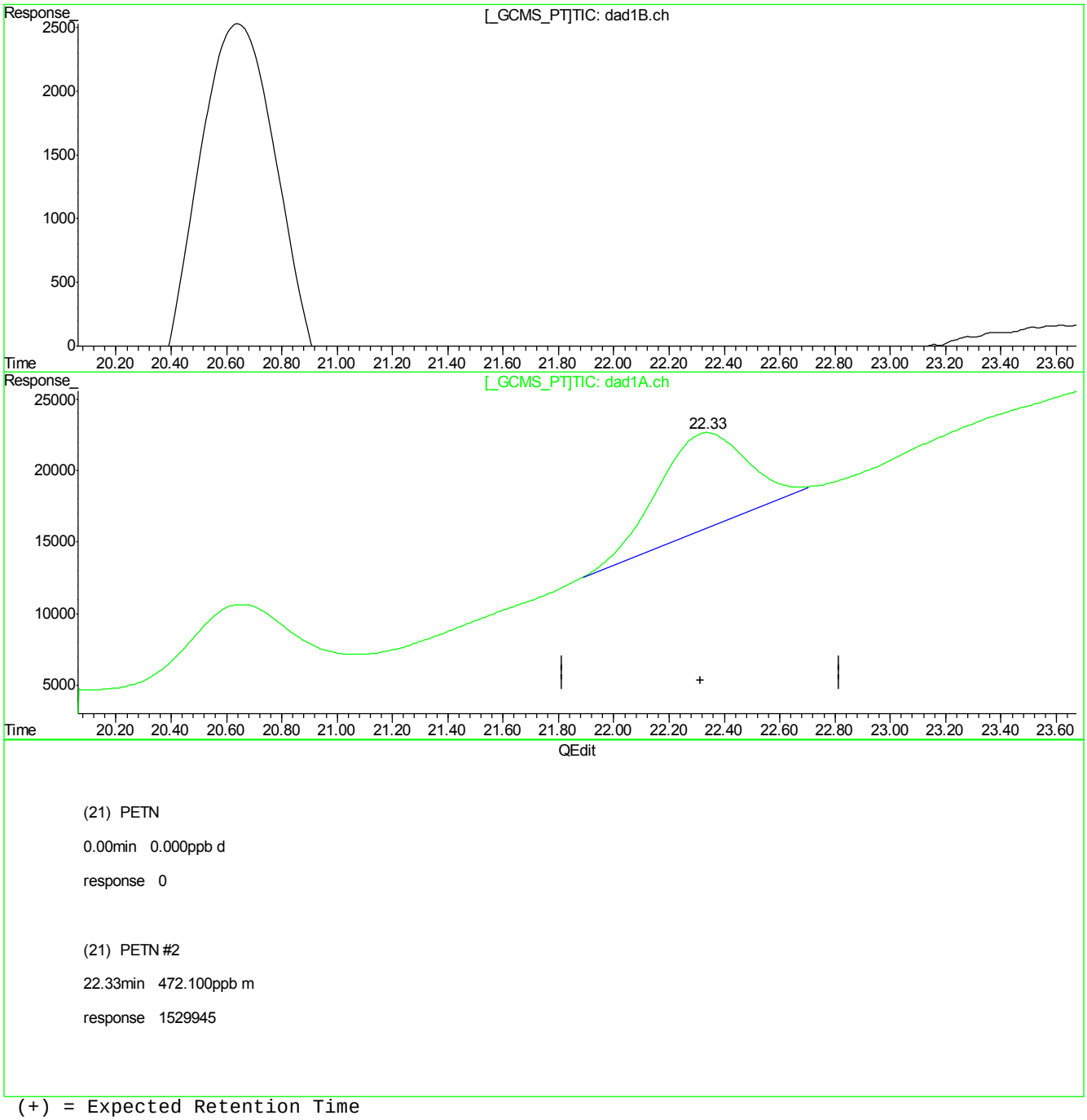
response 3527199

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:57:59 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613828.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1113RPB3\GG613828.D\dad1A.ch
Acq On : 13-Nov-2017, 14:35:27 Operator: evitam
Sample : ic2571-100 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:49 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:56:22 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 472.100ppb m

response 1529945

(+) = Expected Retention Time
GG613828.D 8330RPB.M_1113M.M Tue Nov 14 11:58:01 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:00 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.56	1063491	2179380	180.394	174.846m
	Spiked Amount 500.000	Range 70 - 136		Recovery =		36.08%#	34.97%#
	Target Compounds						
1)	TNX	5.01	5.01	2917600	2917600	346.858	345.941
2)	HMX	5.46	5.46	656713	656713	172.889	171.666
3)	DNX	5.59	5.59	1519481	1519481	231.493	232.298
4)	MNX	6.67	6.67	1443328	1443328	298.340	298.340
5)	1,3,5-Trinitrobe	7.55	7.55	2106246	2100950	206.269	205.837
6)	RDX	8.07	8.07	970188	952673	203.793	201.047
7)	1,3-Dinitrobenze	10.09	10.08	2896074	2285655	198.974	162.672m
8)	Nitrobenzene	11.08	11.08	1850780	1739643	242.105	183.374m
9)	2,4,6-Trinitroto	11.88	11.87	1988673	2595550	195.051	166.860m
10)	Nitroglycerin	0.00	12.71	0	3400685	N.D. d	930.820m
11)	Tetryl	13.29	13.28	1576705	2666776	229.863	215.610m
13)	2,6-Dinitrotolue	14.91	14.90	1464572	2076245	210.655	190.384m
14)	2,4-Dinitrotolue	15.63	15.64	2633670	2111724	198.199	212.468
15)	o-Nitrotoluene	17.23	17.23	1151278	1767333	264.153	291.713
16)	3,5-Dinitroanili	16.65	16.65	2062620	3445874	194.627	191.892
17)	p-Nitrotoluene	18.40	18.40	2368549	4400784	205.856	206.913
18)	4-Amino-2,6-Dini	18.40	18.40	2368549	4400784	205.856	206.913
19)	m-Nitrotoluene	19.65	19.65	1205775	2051289	240.727	216.863
20)	2-Amino-4,6-Dini	20.64	20.65	1852313	2259776	193.086	166.971
21)	PETN	0.00	22.33	0	3416410	N.D. d	1054.212m

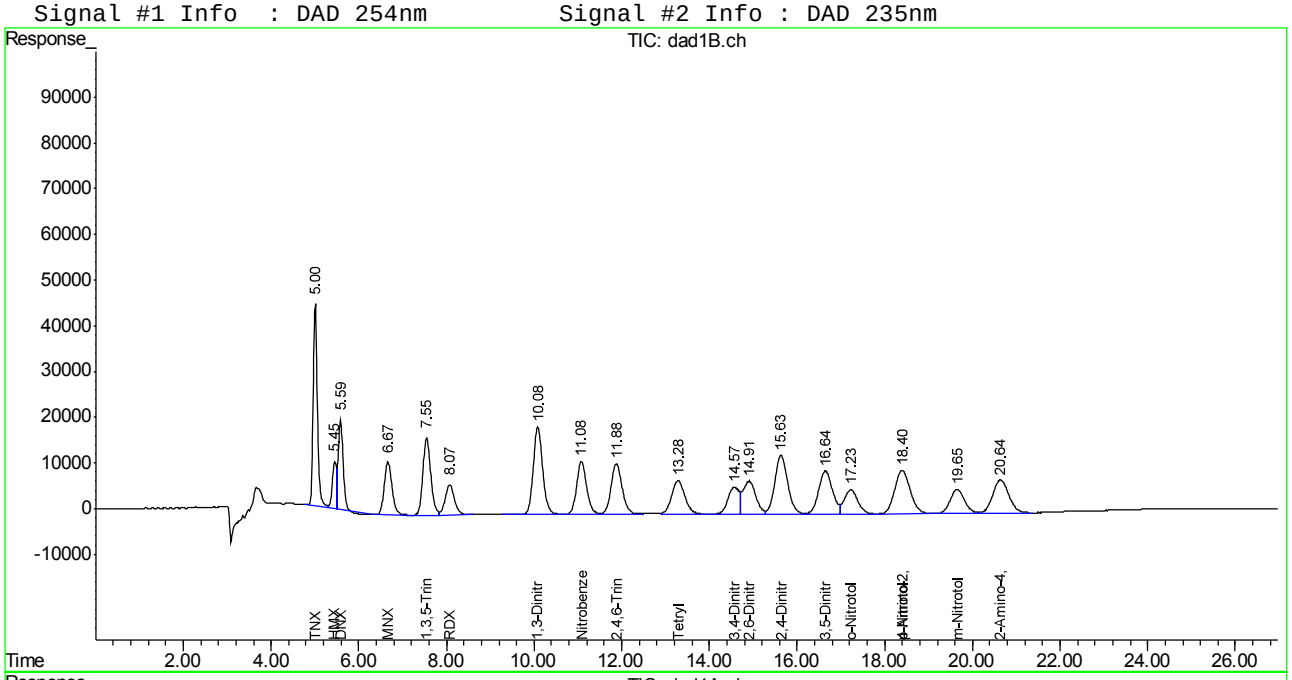
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 13:37:53 2017 Page 1

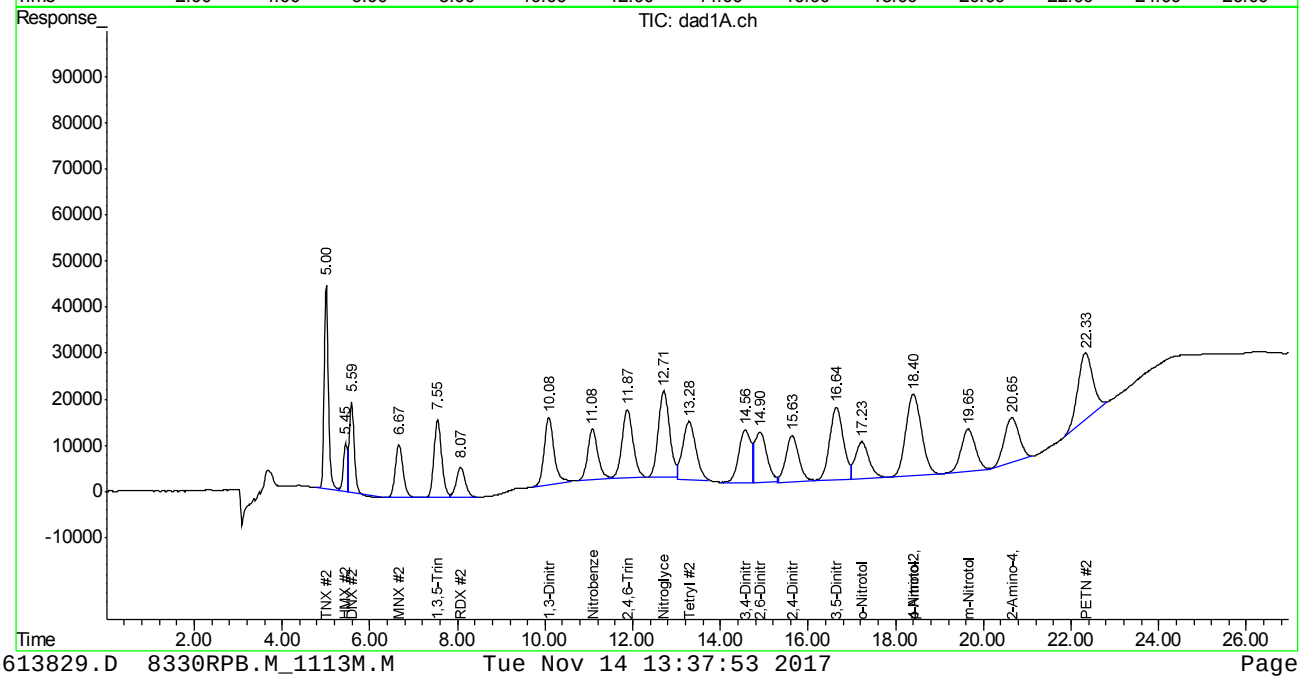
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

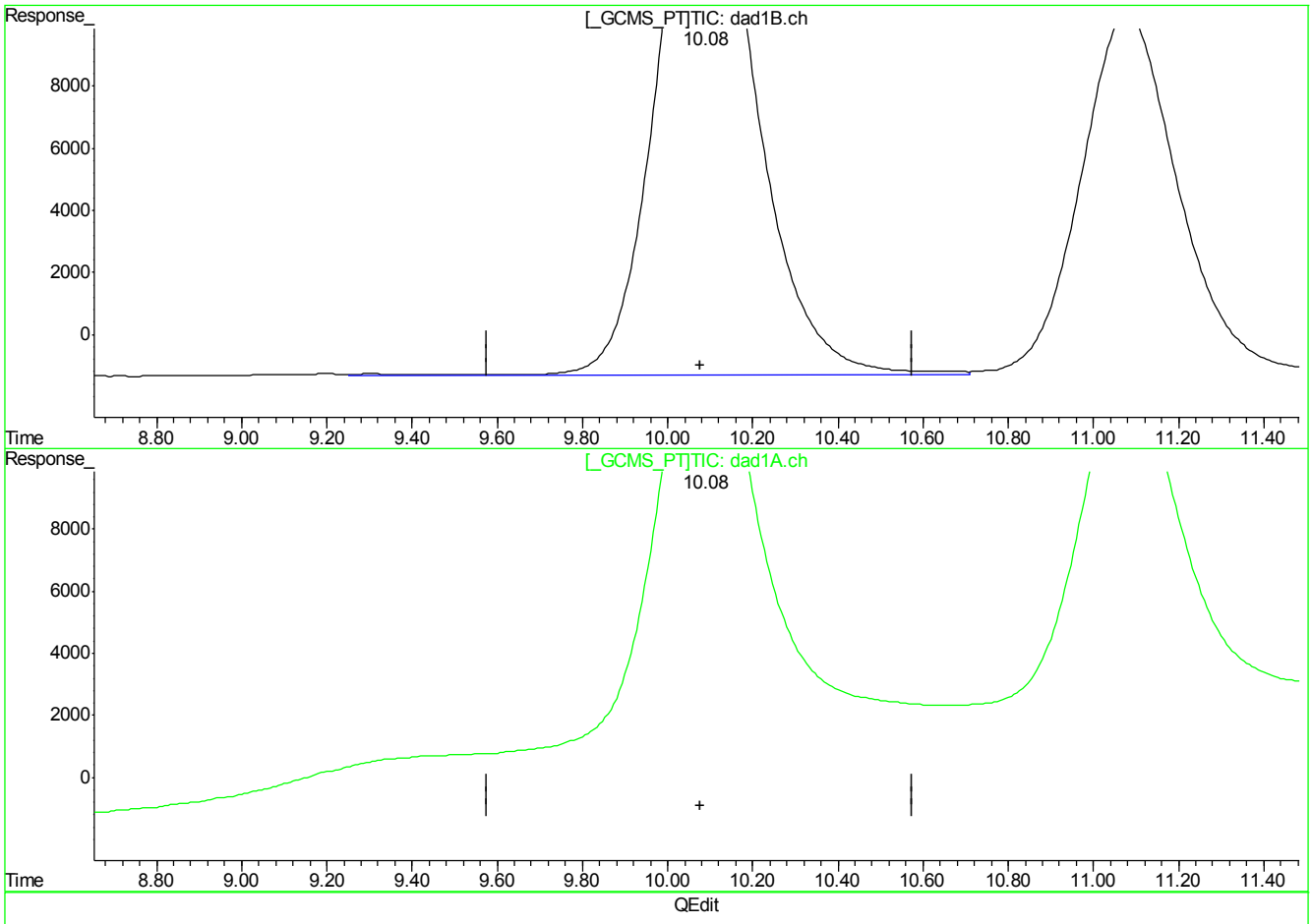
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613829.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:04	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	10.08	Poorly defined baseline
Nitrobenzene	98-95-3	2	11.08	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Nitroglycerine	55-63-0	2	12.71	Poorly defined baseline
Tetryl	479-45-8	2	13.28	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	14.56	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	14.90	Poorly defined baseline
PETN	78-11-5	2	22.33	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.09min 292.876ppb

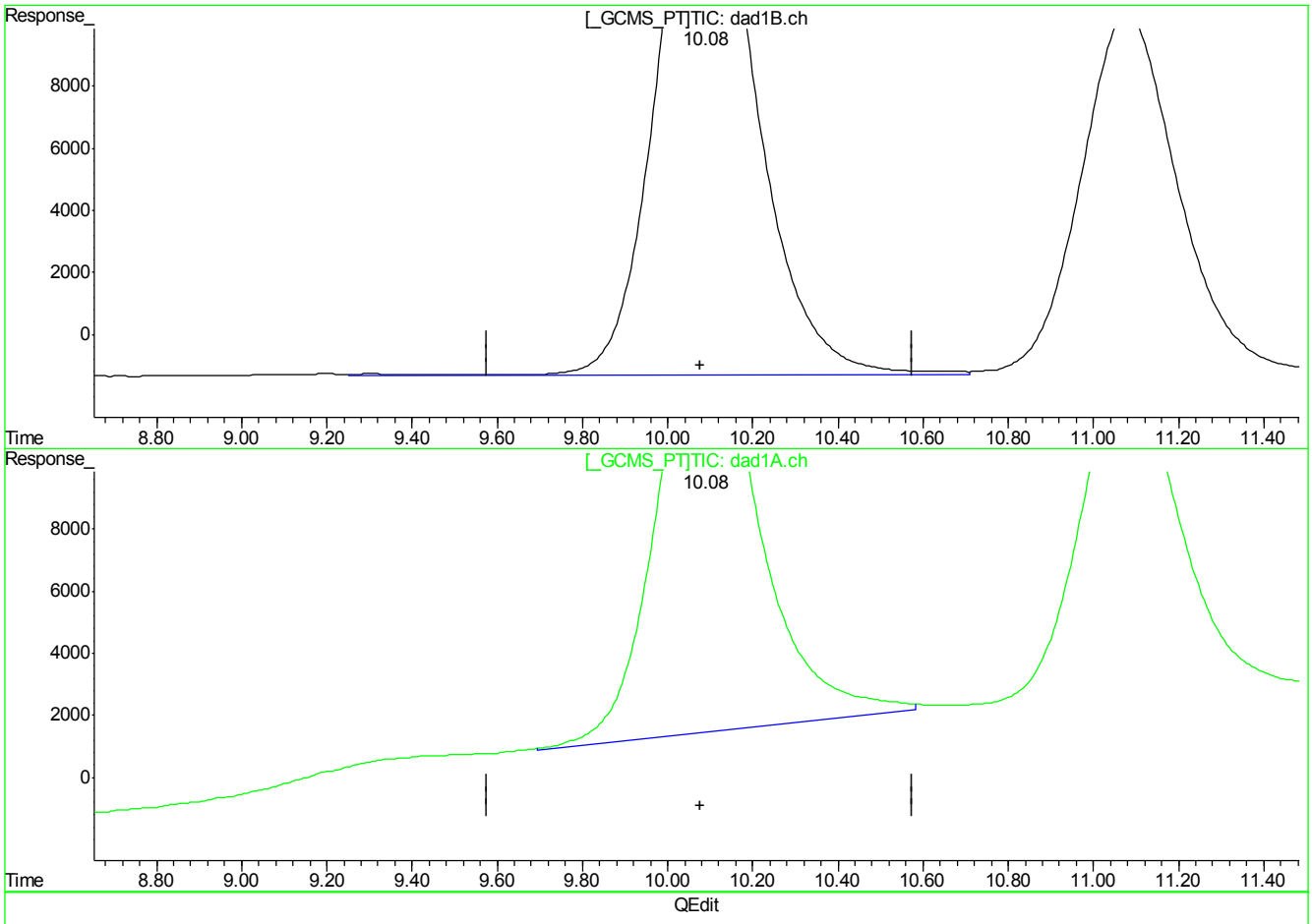
response 4066063

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:15 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(7) 1,3-Dinitrobenzene

10.09min 198.974ppb

response 2896074

(7) 1,3-Dinitrobenzene #2

10.08min 162.672ppb m

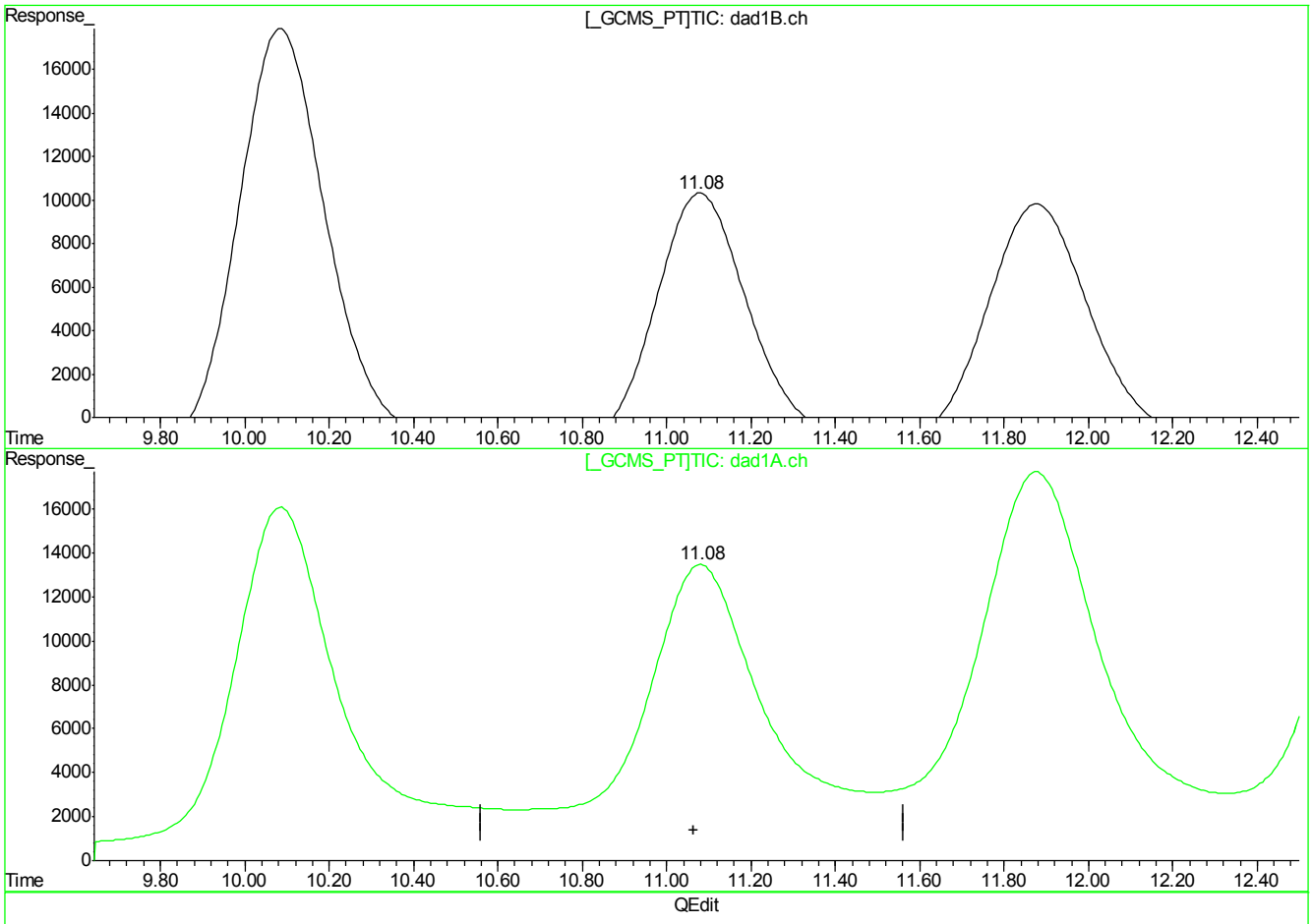
response 2285655

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:23 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 328.328ppb

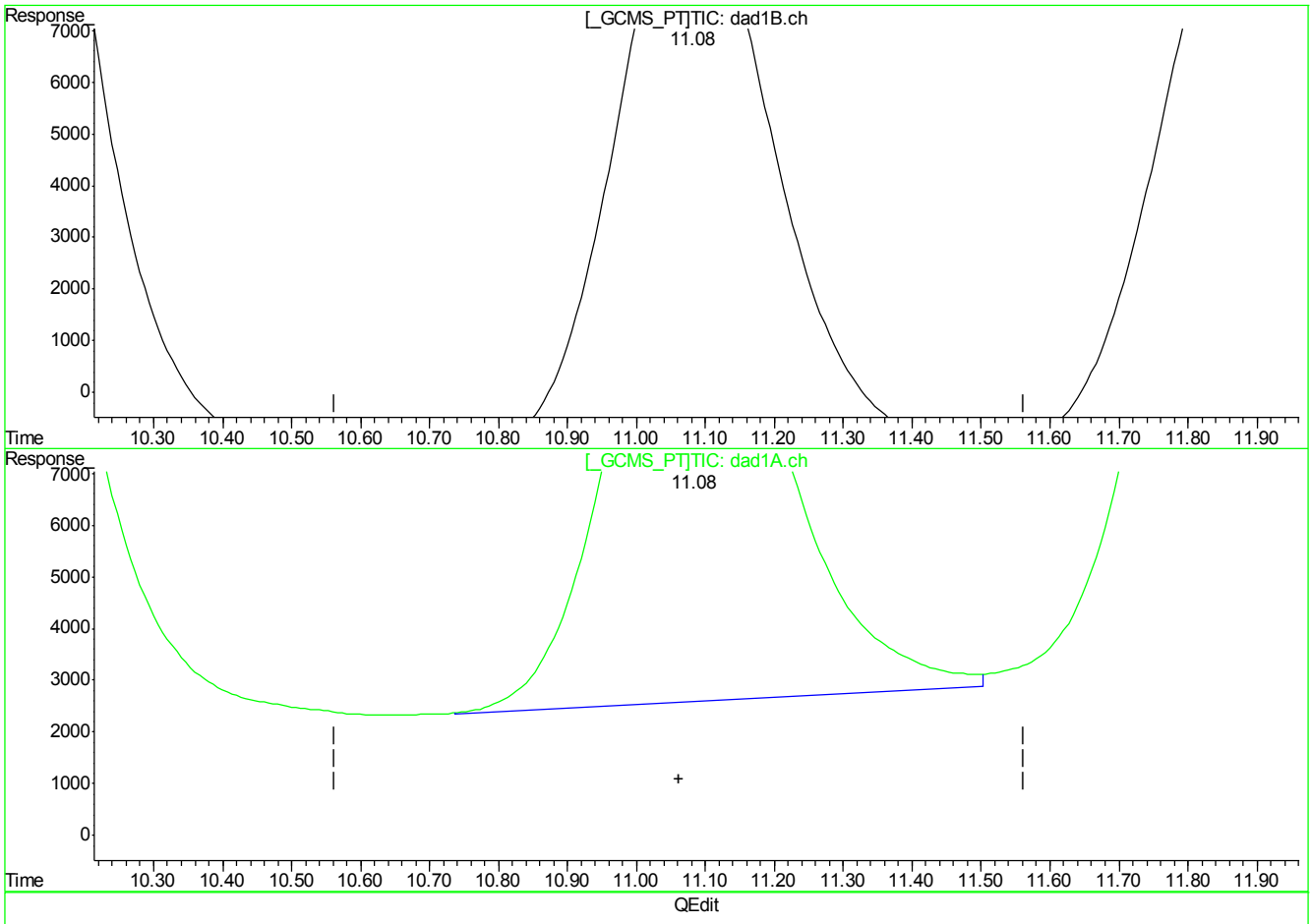
response 3103070

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:25 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(8) Nitrobenzene

11.08min 242.105ppb

response 1850780

(8) Nitrobenzene #2

11.08min 183.374ppb m

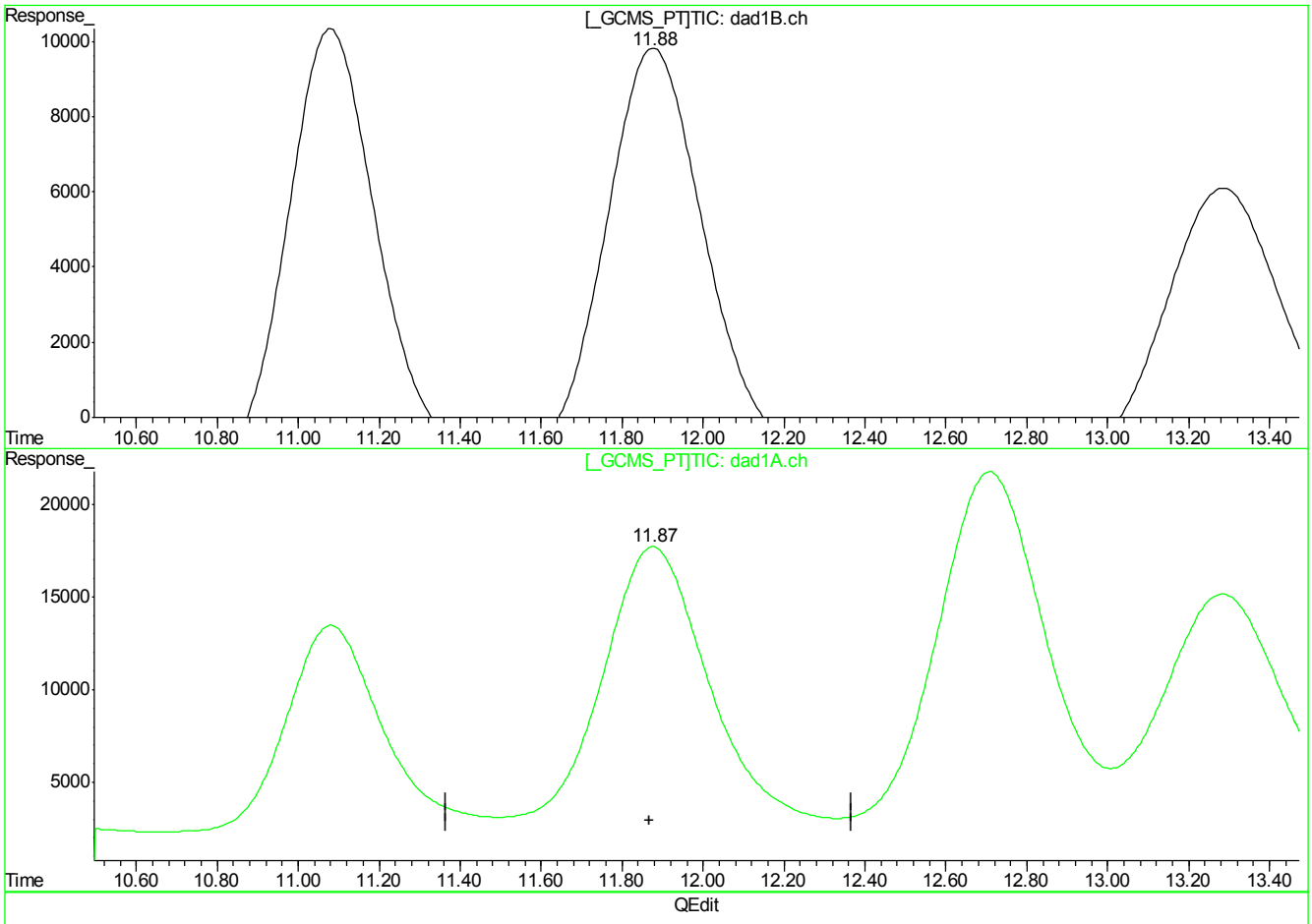
response 1739643

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:31 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.88min 253.581ppb

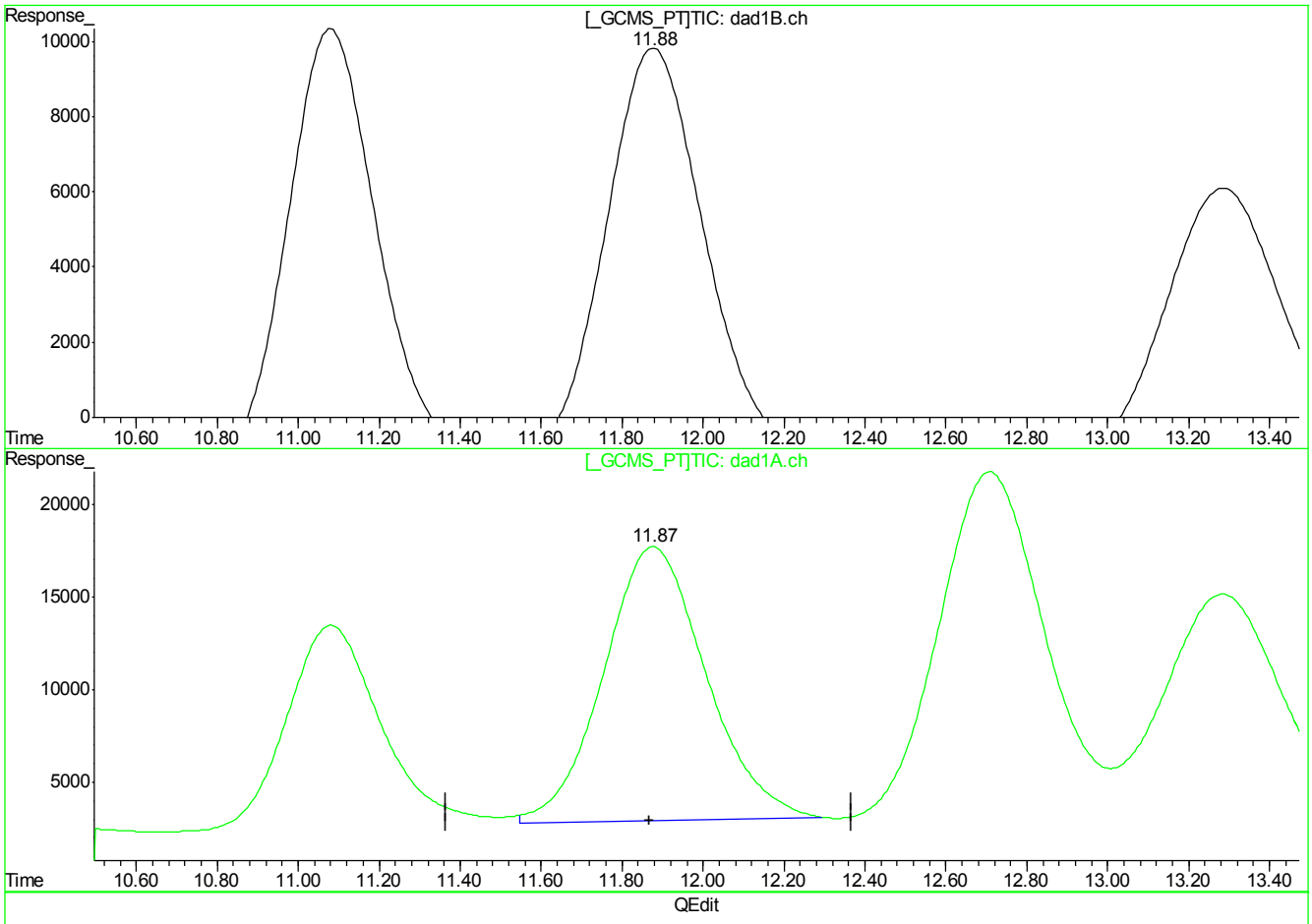
response 3927420

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:33 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 195.051ppb

response 1988673

(9) 2,4,6-Trinitrotoluene #2

11.87min 166.860ppb m

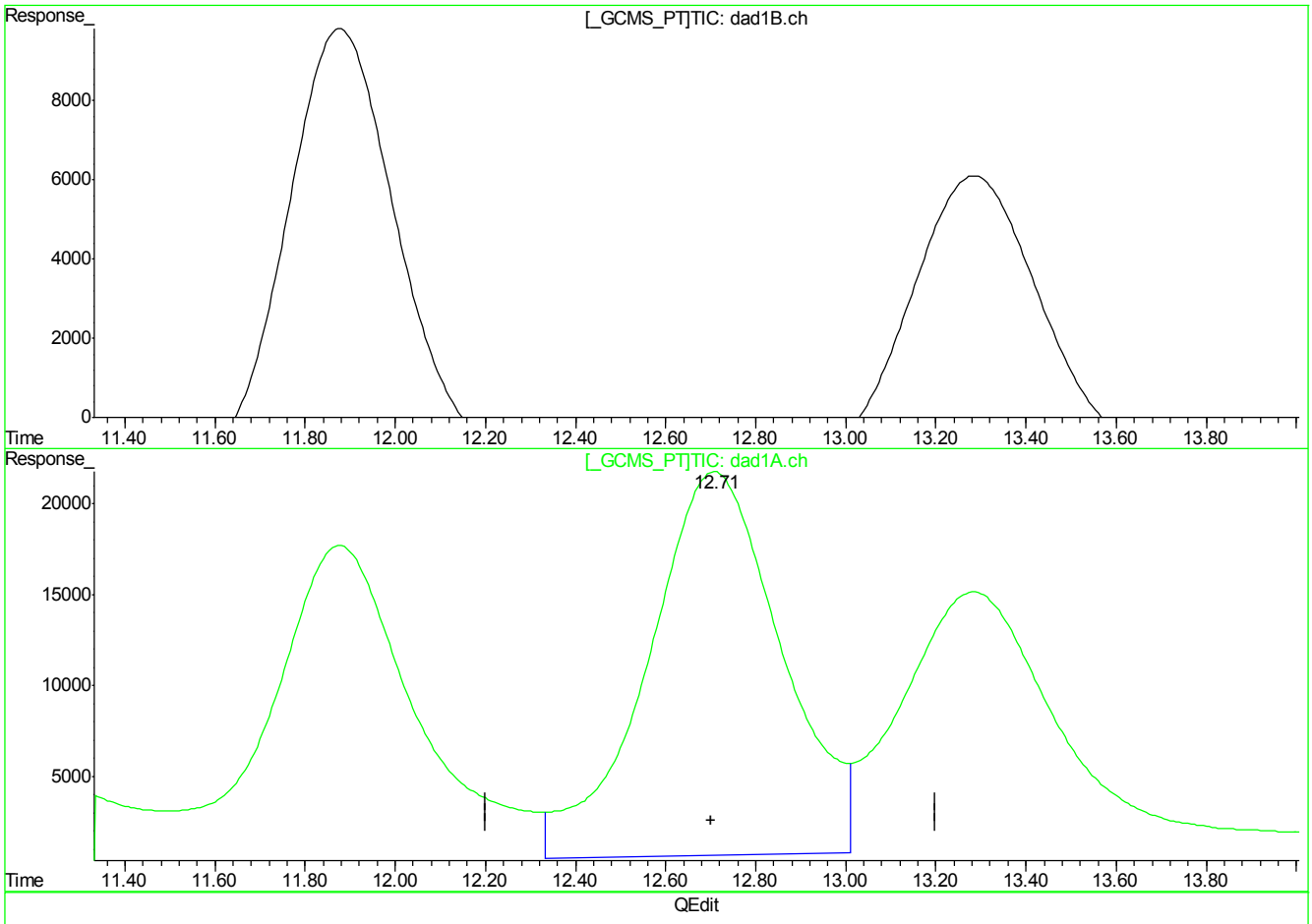
response 2595550

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:36 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 1189.969ppb

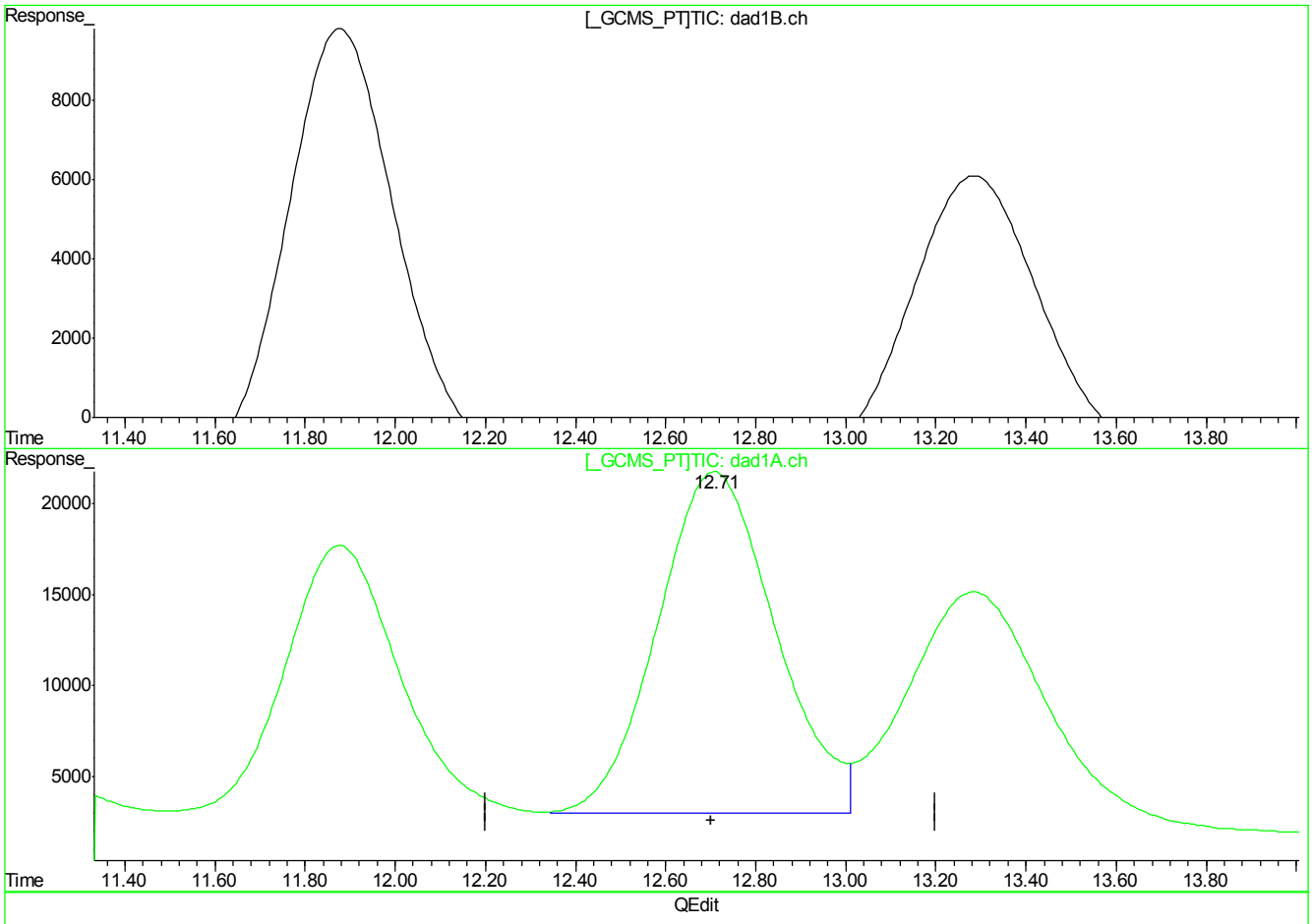
response 4339170

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:38 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(10) Nitroglycerin

0.00min 0.000ppb

response 0

(10) Nitroglycerin #2

12.71min 930.820ppb m

response 3400685

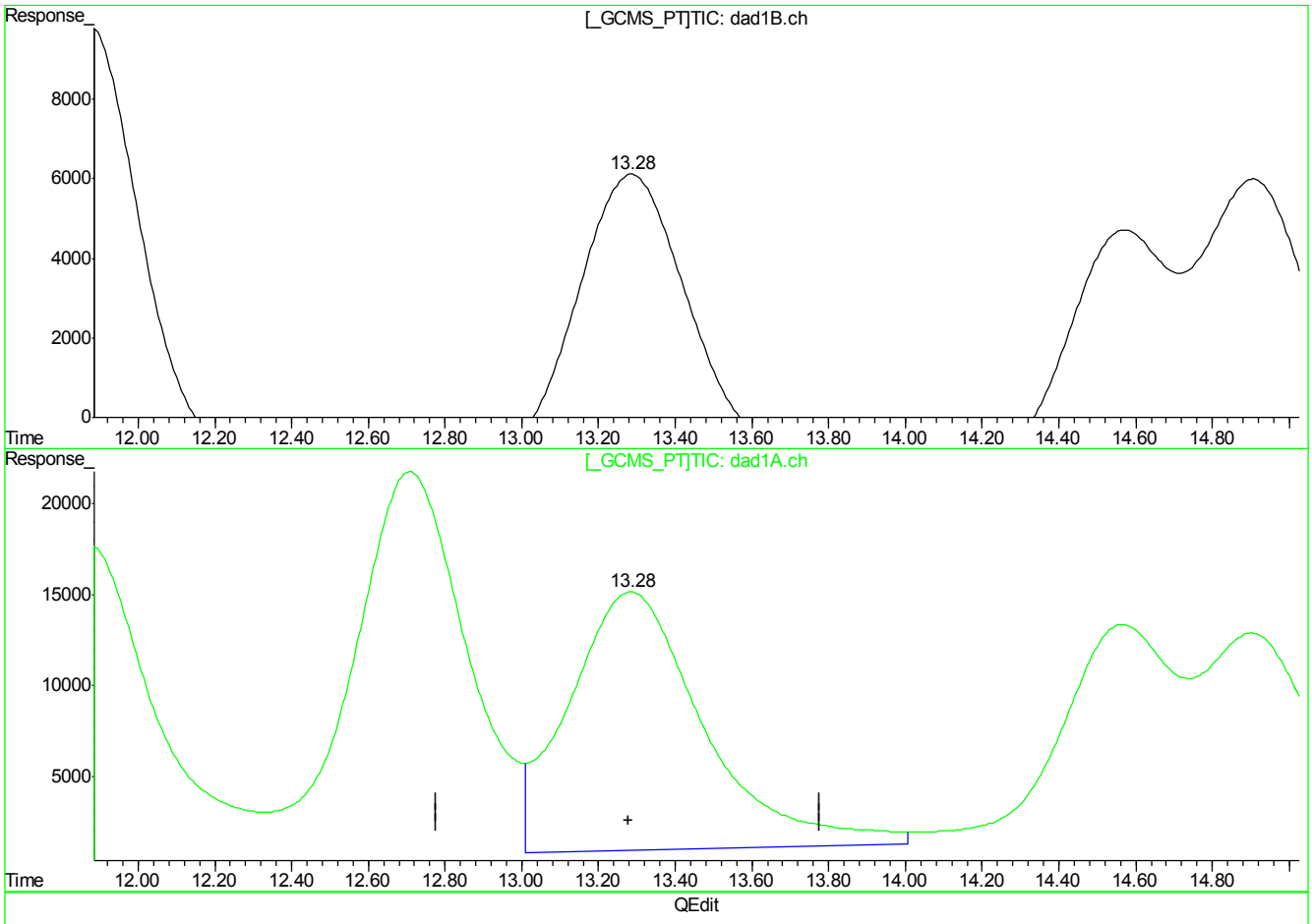
(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:42 2017

GG613829.D edits: Nitroglycerin

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.29min 280.400ppb

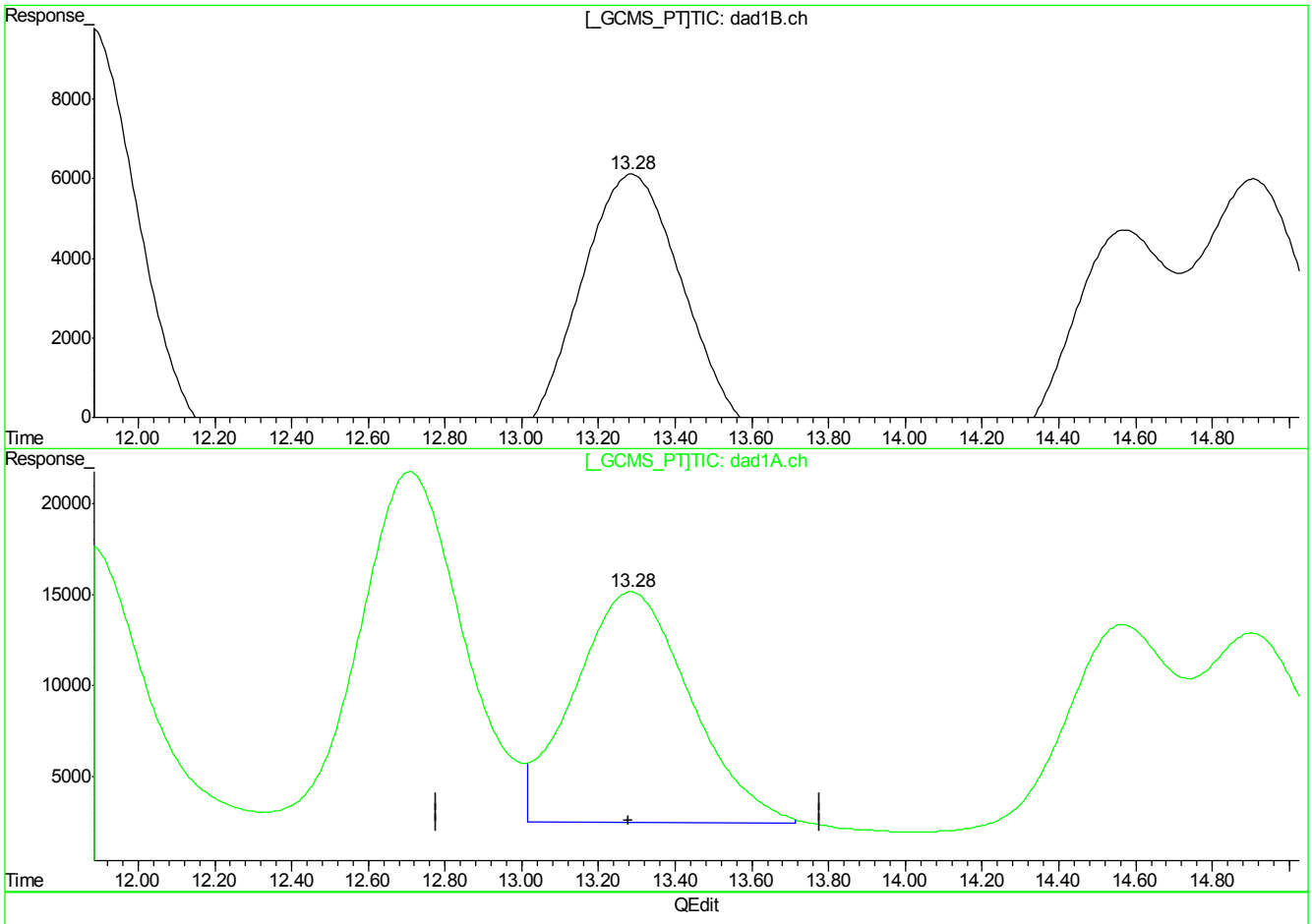
response 3486939

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:48 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.29min 229.863ppb

response 1576705

(11) Tetryl #2

13.28min 215.610ppb m

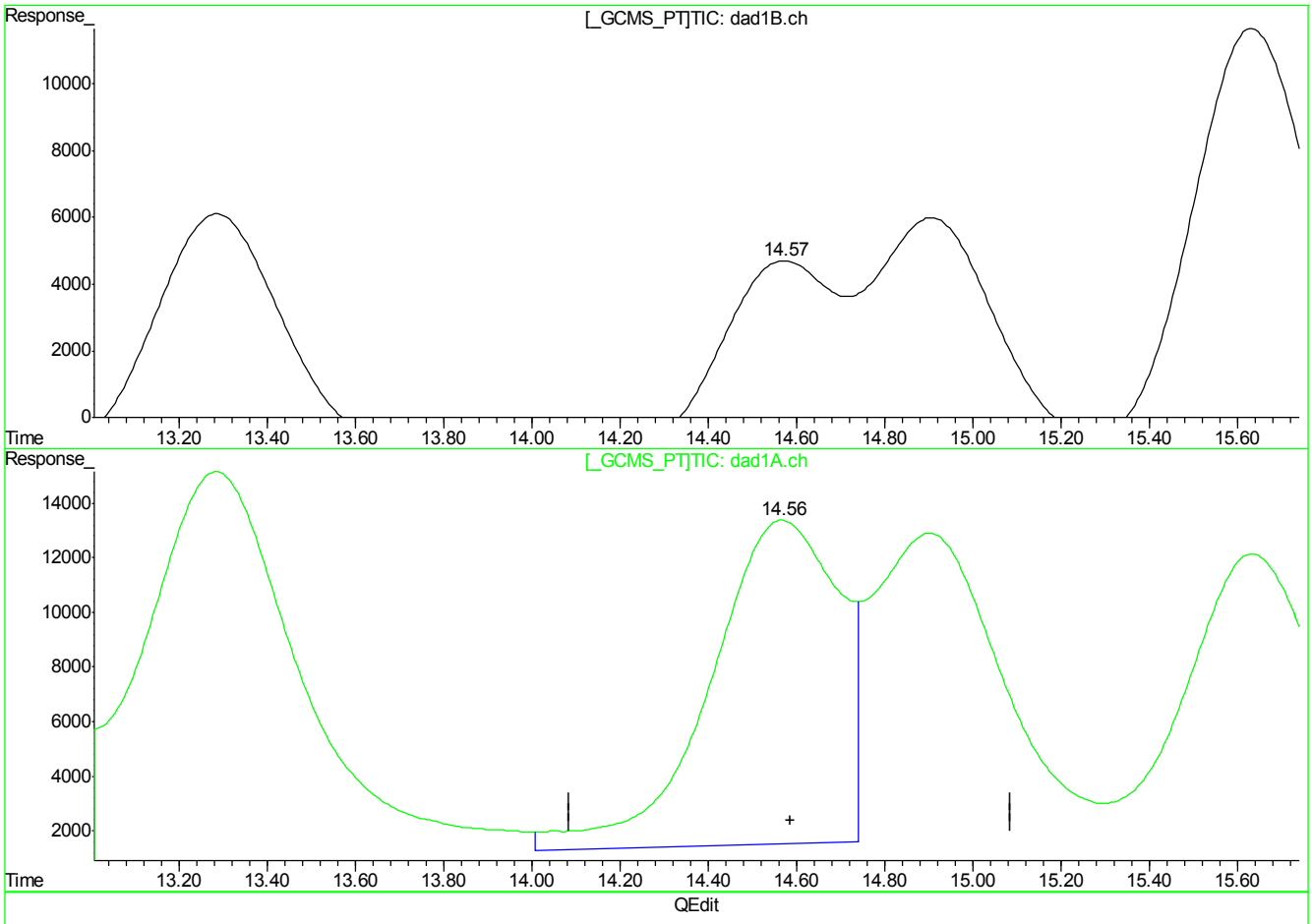
response 2666776

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:51 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.57min 192.743ppb

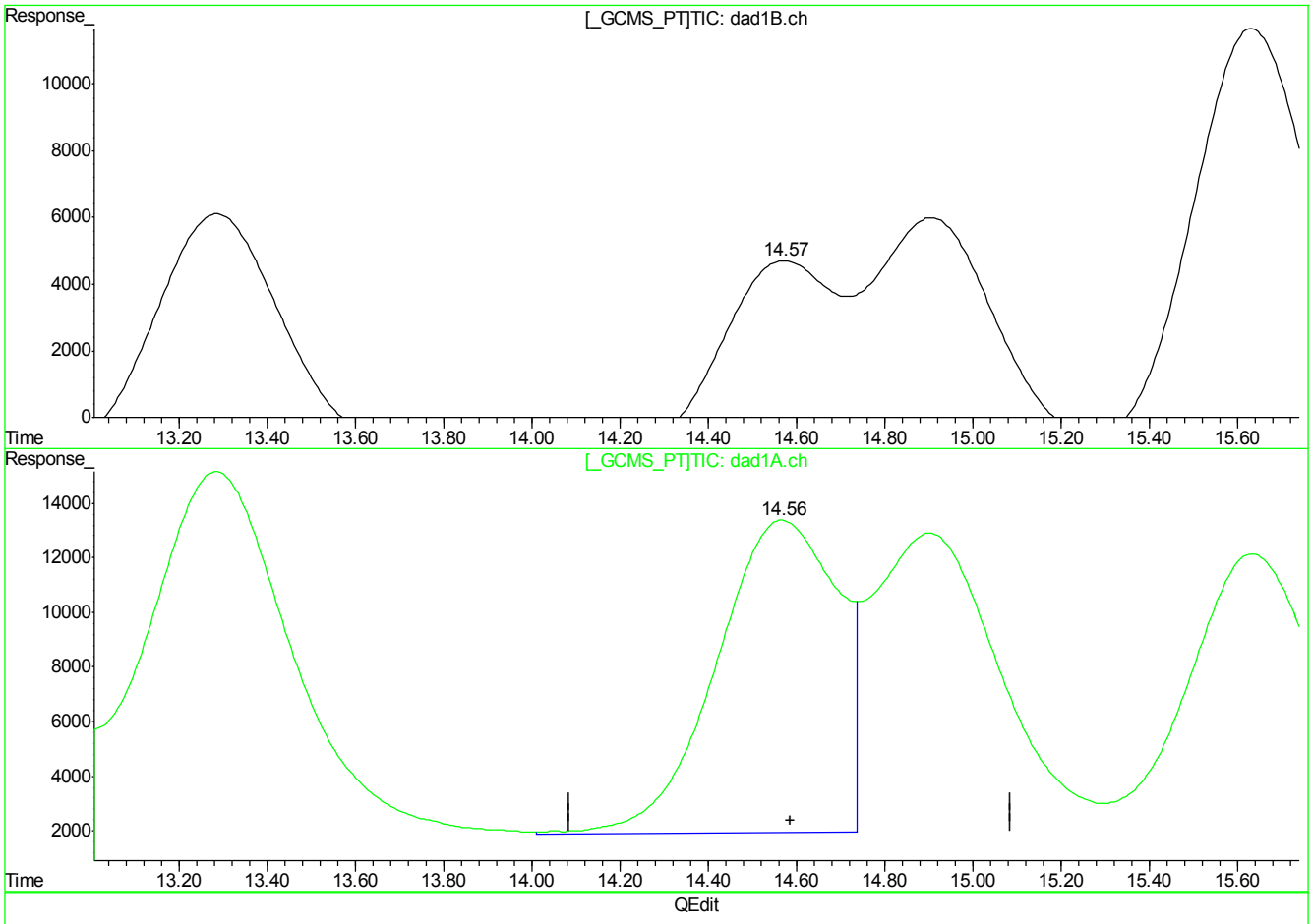
response 2400836

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:53 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(12) 3,4-Dinitrotoluene (S)

14.57min 180.394ppb

response 1063491

(12) 3,4-Dinitrotoluene #2 (S)

14.56min 174.846ppb m

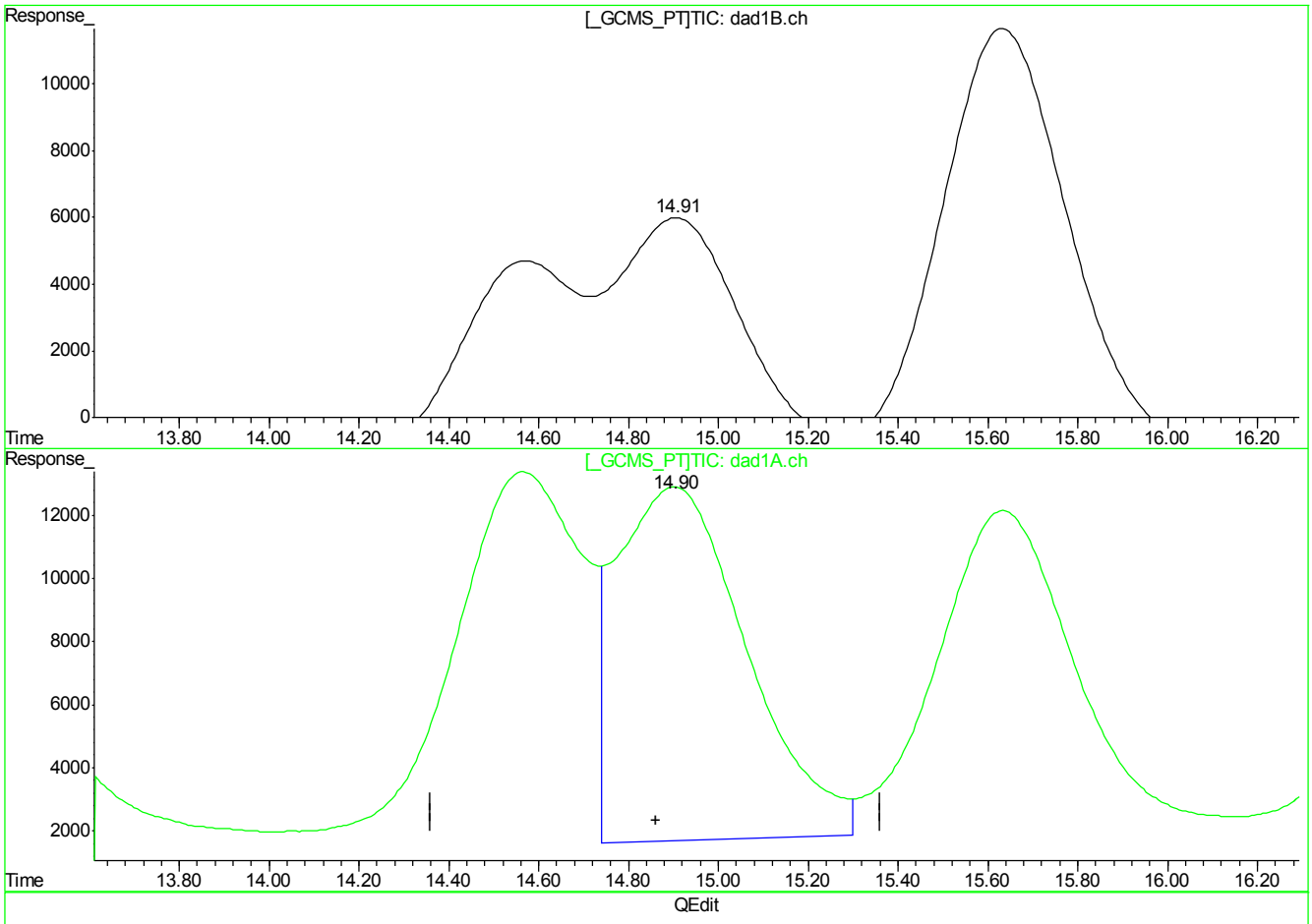
response 2179380

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:57 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 206.393ppb

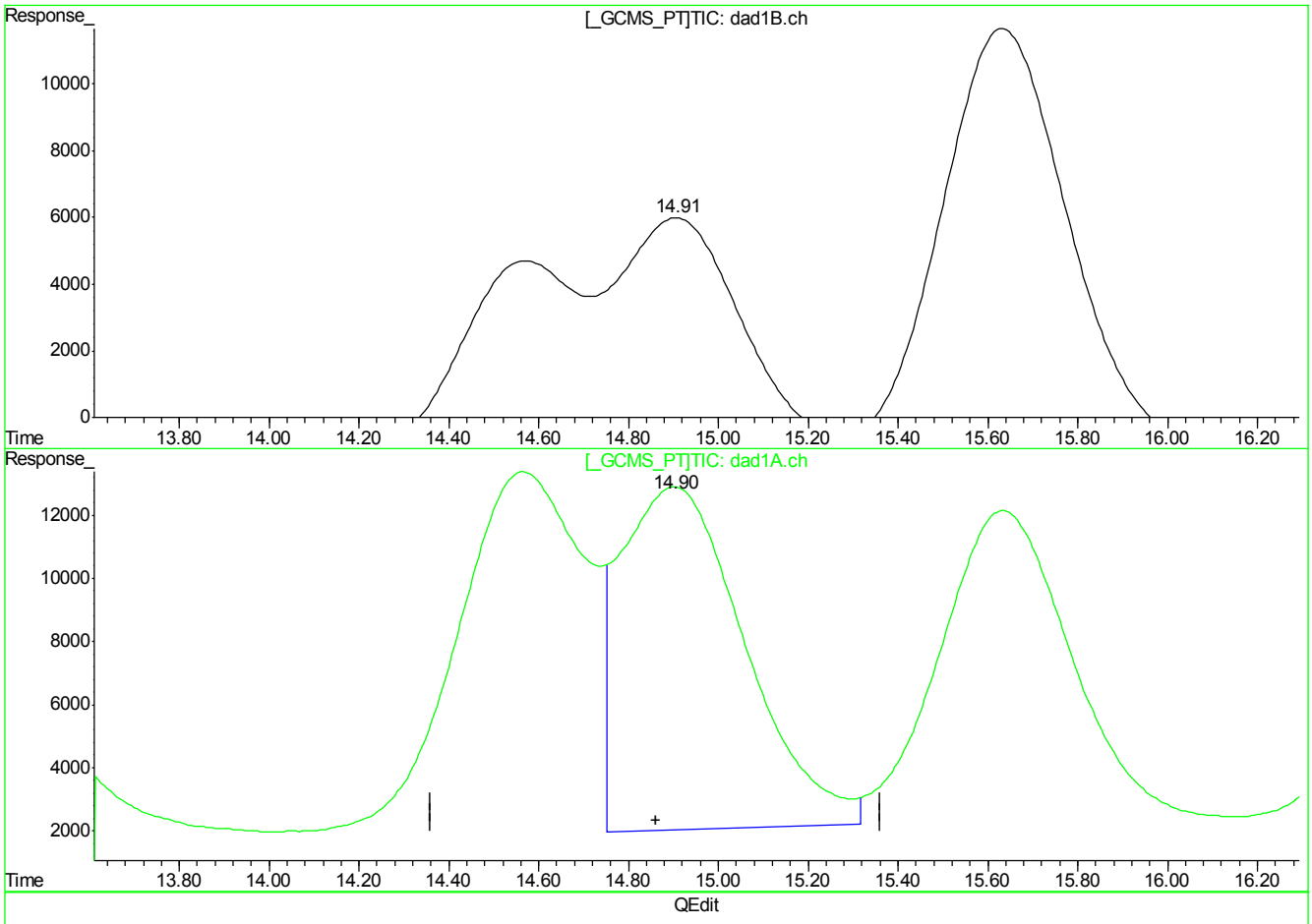
response 2250772

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:00:58 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(13) 2,6-Dinitrotoluene

14.91min 210.655ppb

response 1464572

(13) 2,6-Dinitrotoluene #2

14.90min 190.384ppb m

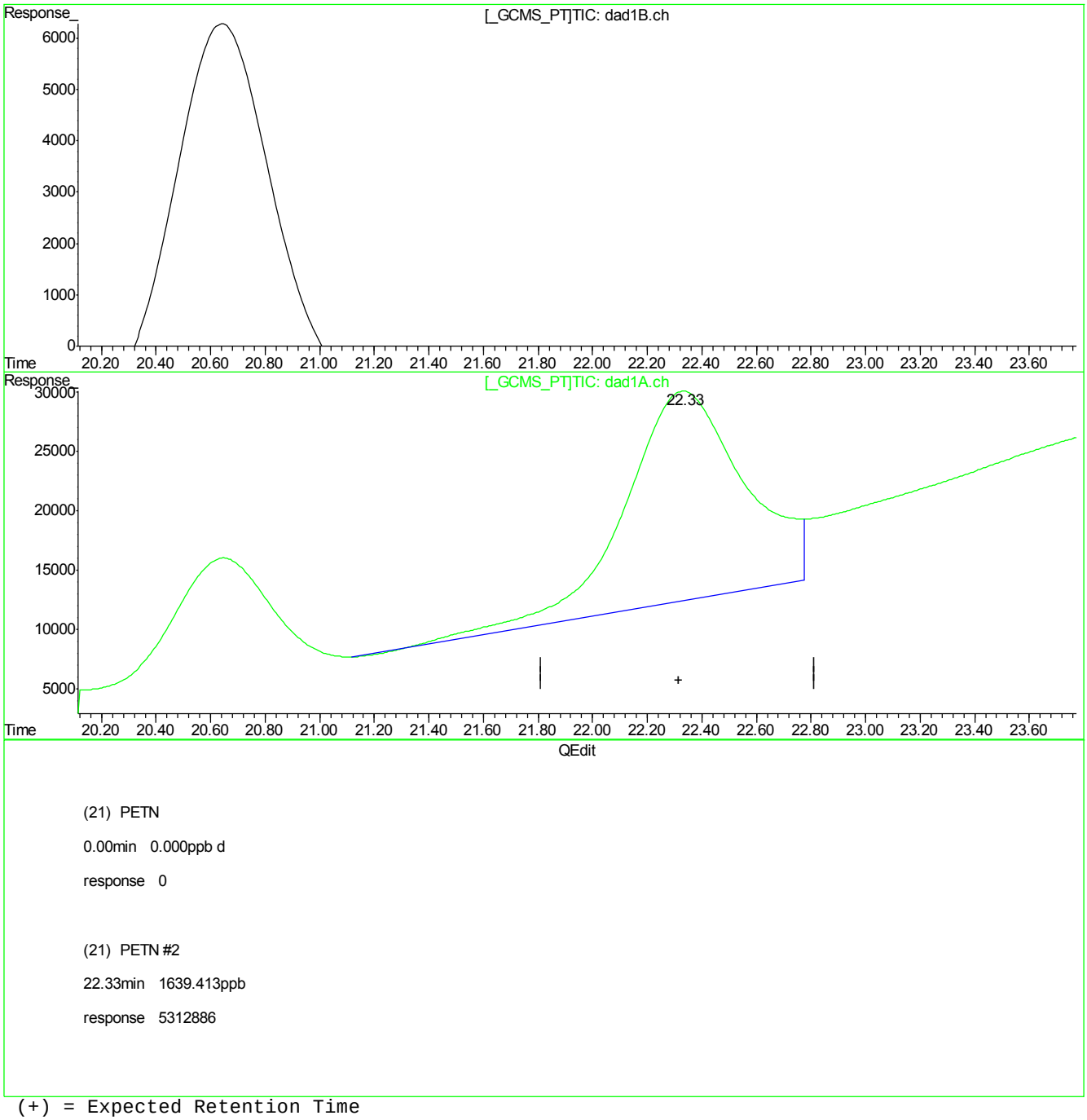
response 2076245

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:09 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.33min 1639.413ppb

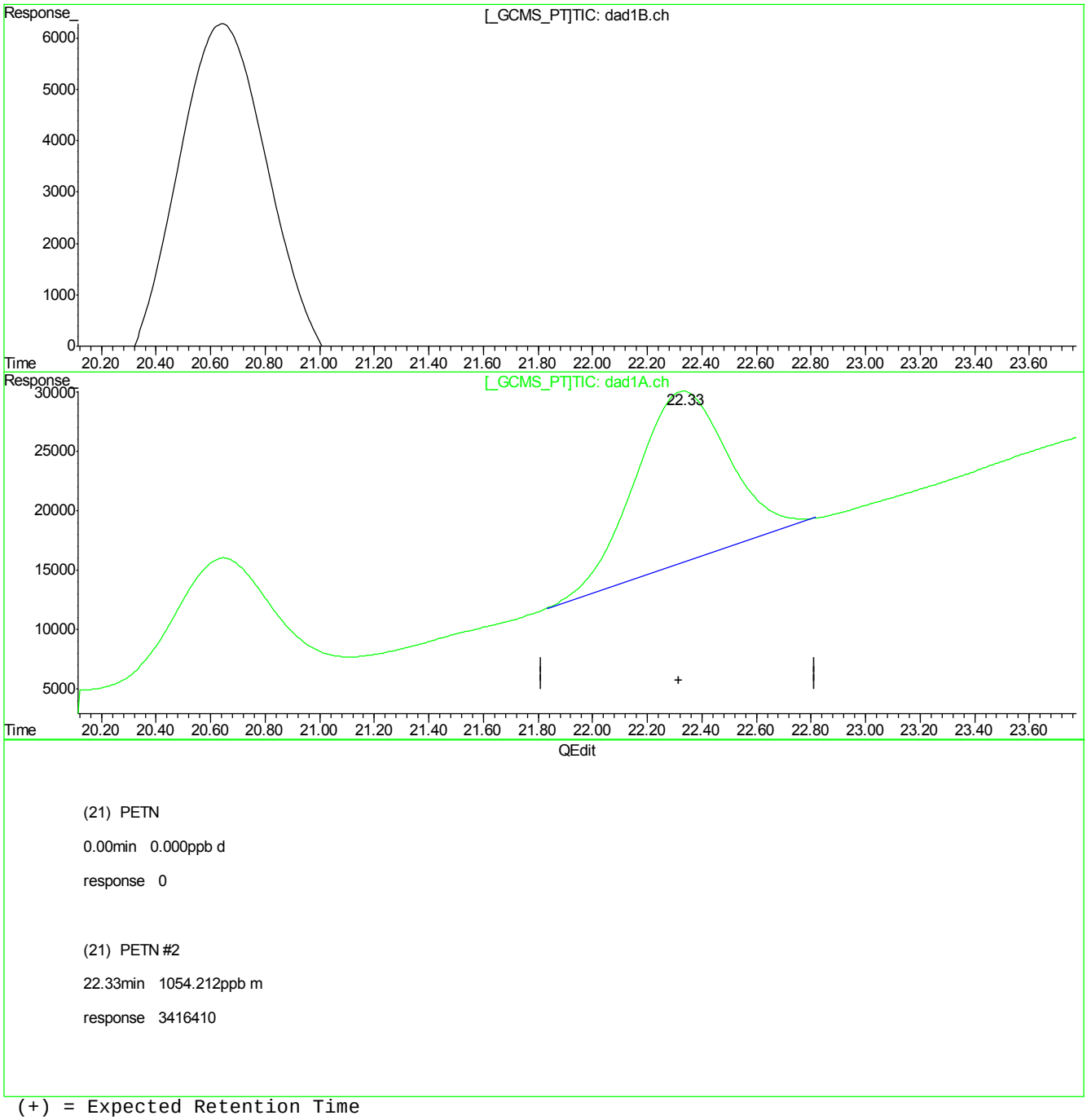
response 5312886

(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:16 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613829.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1113RPB3\GG613829.D\dad1A.ch
Acq On : 13-Nov-2017, 15:04:54 Operator: evitam
Sample : ic2571-200 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:59:57 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613829.D 8330RPB.M_1113M.M Tue Nov 14 12:01:18 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:05 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.56	14.56	2566024	5307161	435.261	429.923
	Spiked Amount 500.000	Range 70 - 136		Recovery =		87.05%	85.98%
	Target Compounds						
1)	TNX	5.01	5.01	7178191	7178191	853.377	851.121
2)	HMX	5.46	5.46	1567471	1567471	412.659	409.740
3)	DNX	5.59	5.59	3839121	3839121	584.891	586.925
4)	MNX	6.66	6.66	3503085	3503085	724.097	724.097
5)	1,3,5-Trinitrobe	7.55	7.55	5075707	5076436	497.074	497.355
6)	RDX	8.07	8.07	2346451	2347827	492.885	495.472
7)	1,3-Dinitrobenze	10.08	10.08	6887672	6720081	473.215	493.198
8)	Nitrobenzene	11.08	11.08	4451511	5219104	582.312	555.512
9)	2,4,6-Trinitroto	11.88	11.88	4723401	7202241	463.275	470.131
10)	Nitroglycerin	0.00	12.71	0	9304341	N.D. d	2578.020
11)	Tetryl	13.28	13.28	3783586	7259516	551.597	570.016
13)	2,6-Dinitrotolue	14.90	14.90	3505597	5120931	504.224	469.790
14)	2,4-Dinitrotolue	15.63	15.63	6338975	4883124	477.045	490.411
15)	o-Nitrotoluene	17.22	17.22	2807950	4120241	603.576	623.959
16)	3,5-Dinitroanili	16.63	16.63	4900917	8015740	462.446	444.537
17)	p-Nitrotoluene	18.39	18.39	5738993	10601258	498.789	491.995
18)	4-Amino-2,6-Dini	18.39	18.39	5738993	10601258	498.789	491.995
19)	m-Nitrotoluene	19.65	19.65	2981905	4897585	565.664	517.775
20)	2-Amino-4,6-Dini	20.63	20.63	4541236	5876348	473.381	434.192
21)	PETN	0.00	22.30	0	8594642	N.D. d	2652.074m

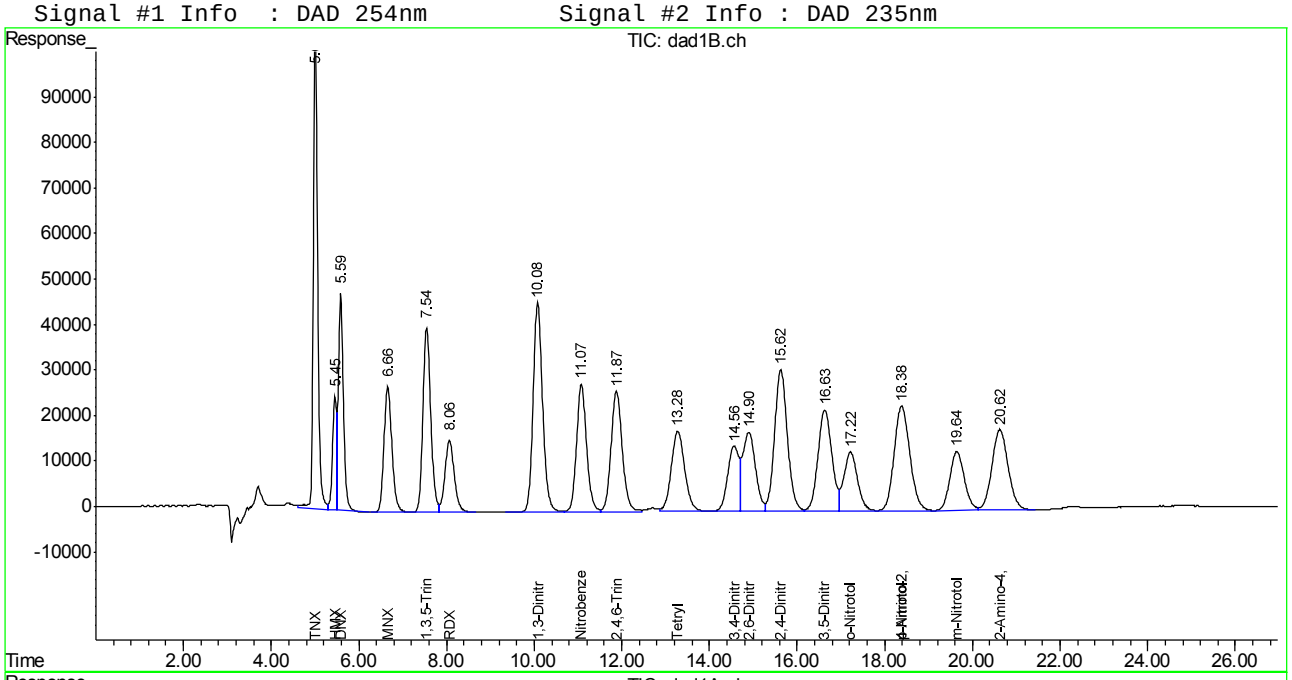
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 13:37:54 2017 Page 1

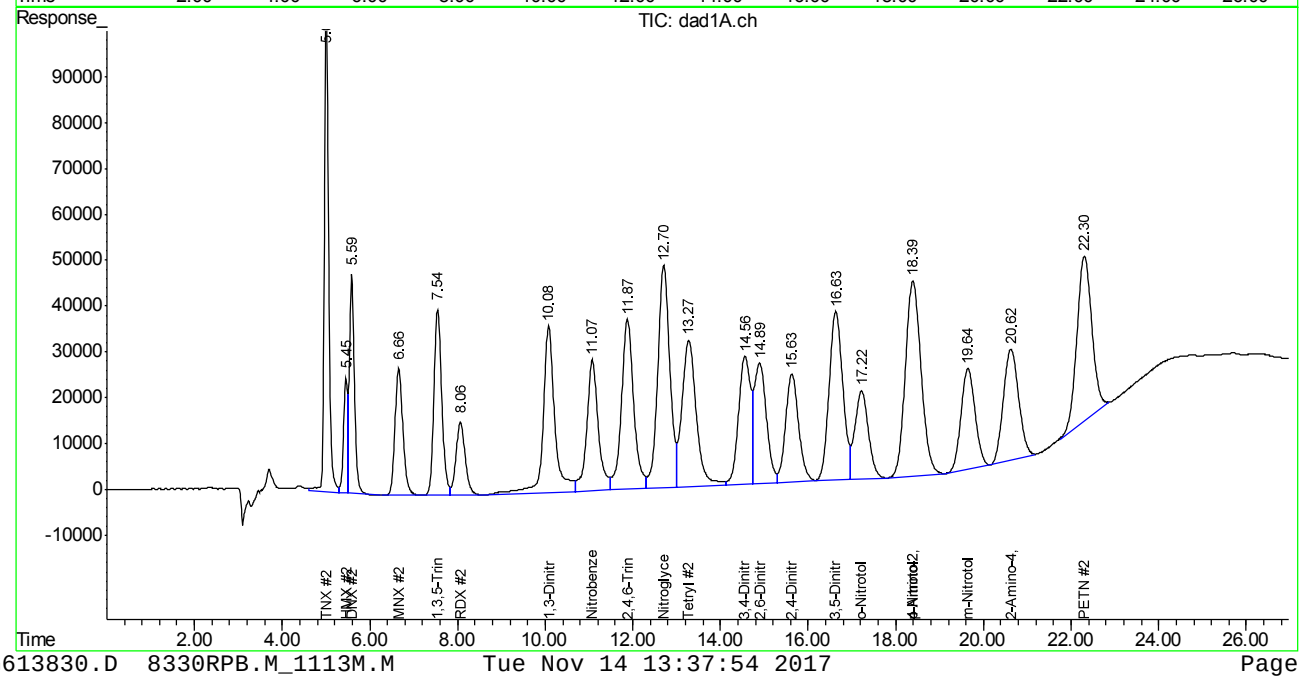
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:01 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

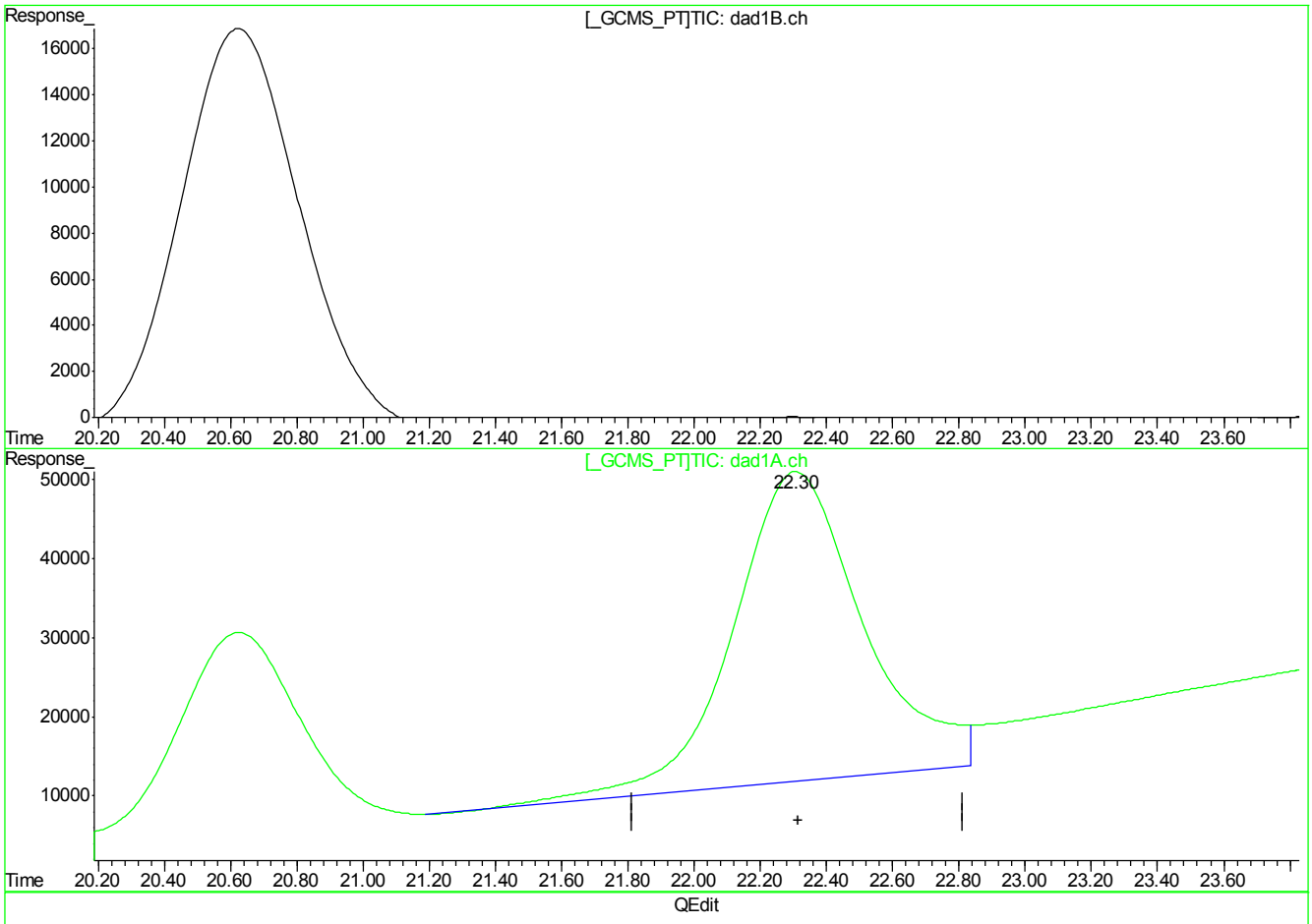
Sample Number:	GGG2571-ICC2571	**Method:**	SW846 8330A
Lab FileID:	GG613830.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 15:34	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.30	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



QEdit

(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 3296.542ppb

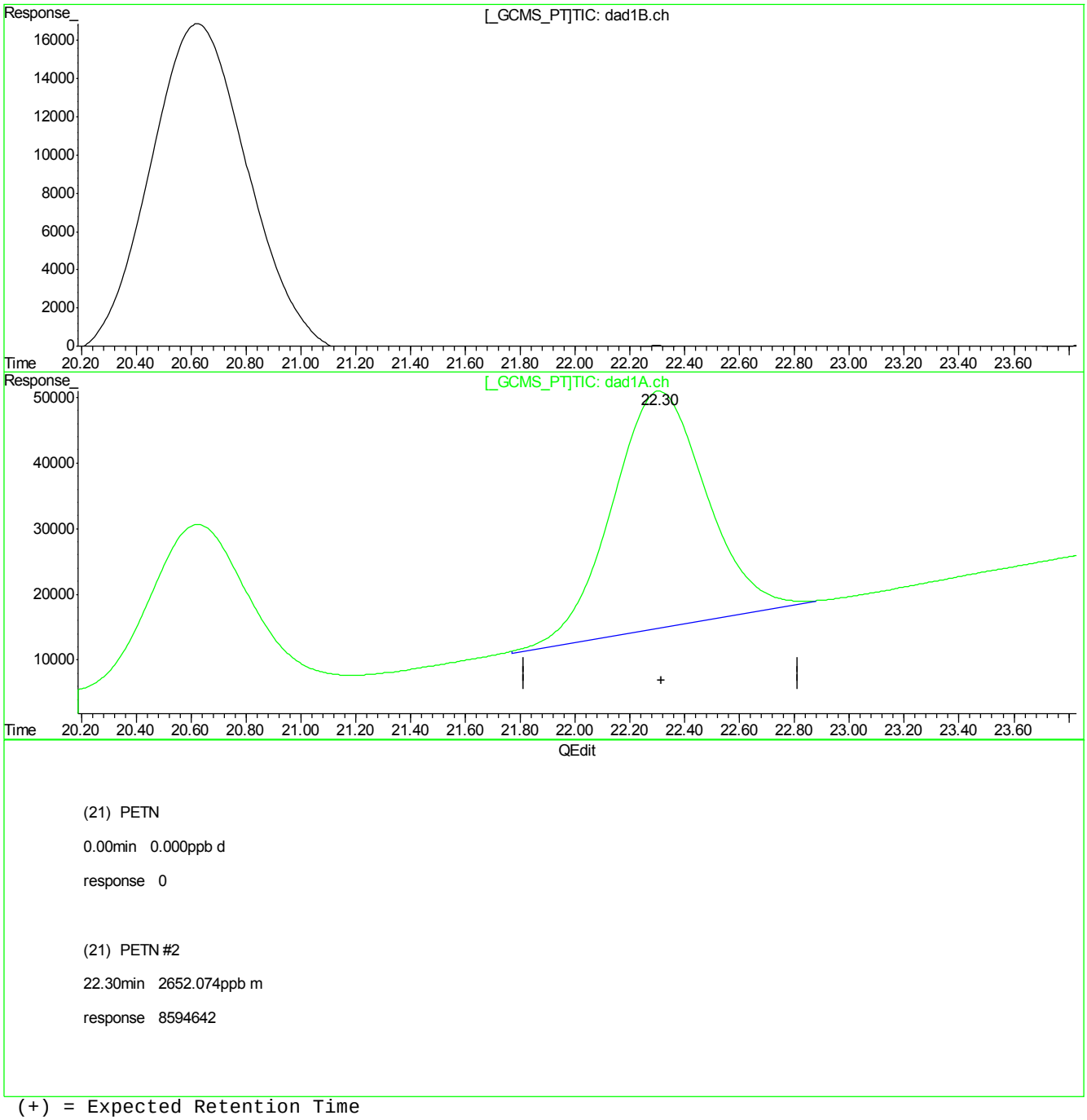
response 10683184

(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613830.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1113RPB3\GG613830.D\dad1A.ch
Acq On : 13-Nov-2017, 15:34:22 Operator: evitam
Sample : icc2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:25 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG613830.D 8330RPB.M_1113M.M Tue Nov 14 12:01:49 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:06 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.55	14.55	5134237	10563524	870.893	870.355
	Spiked Amount 500.000	Range 70 - 136		Recovery =		174.18%#	174.07%#
	Target Compounds						
1)	TNX	5.01	5.01	14095710	14095710	1675.764	1671.335
2)	HMX	5.45	5.45	3075086	3075086	809.559	803.833
3)	DNX	5.59	5.59	7555662	7555662	1151.106	1155.110
4)	MNX	6.66	6.66	7011708	7021085	1449.340	1451.278
5)	1,3,5-Trinitrobe	7.54	7.54	10137190	10160510	992.756	995.458
6)	RDX	8.06	8.06	4692682	4737484	985.724	999.772
7)	1,3-Dinitrobenze	10.08	10.08	13715413	12037357	942.312	920.589
8)	Nitrobenzene	11.07	11.07	8906160	9757665	1165.035	1052.303
9)	2,4,6-Trinitroto	11.87	11.87	9383167	13474808	920.308	899.133
10)	Nitroglycerin	0.00	12.70	0	18017203	N.D. d	5087.336
11)	Tetryl	13.27	13.26	7535288	13894482	1098.545	1049.997
13)	2,6-Dinitrotolue	14.89	14.89	6992017	10221713	1005.690	938.471
14)	2,4-Dinitrotolue	15.62	15.62	12638679	9128347	951.136	914.210
15)	o-Nitrotoluene	17.22	17.21	5638423	8443365	1108.003	1134.699
16)	3,5-Dinitroanili	16.62	16.62	9768472	16313142	921.745	898.051
17)	p-Nitrotoluene	18.38	18.38	11526542	21366781	1001.798	970.537
18)	4-Amino-2,6-Dini	18.38	18.38	11526542	21366781	1001.798	970.537
19)	m-Nitrotoluene	19.64	19.64	6023786	9889615	1061.910	1045.534
20)	2-Amino-4,6-Dini	20.62	20.62	9161666	12398036	955.017	916.067
21)	PETN	0.00	22.31	0	17345332	N.D. d	5352.300m

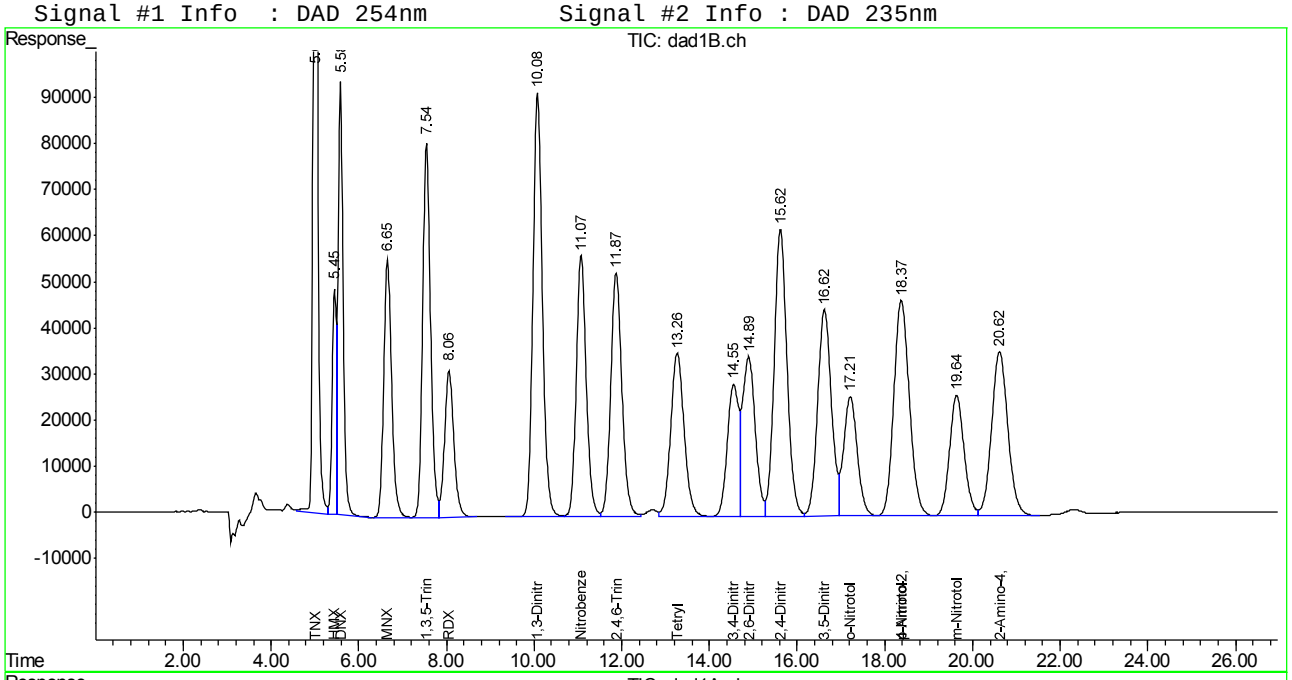
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 13:37:55 2017 Page 1

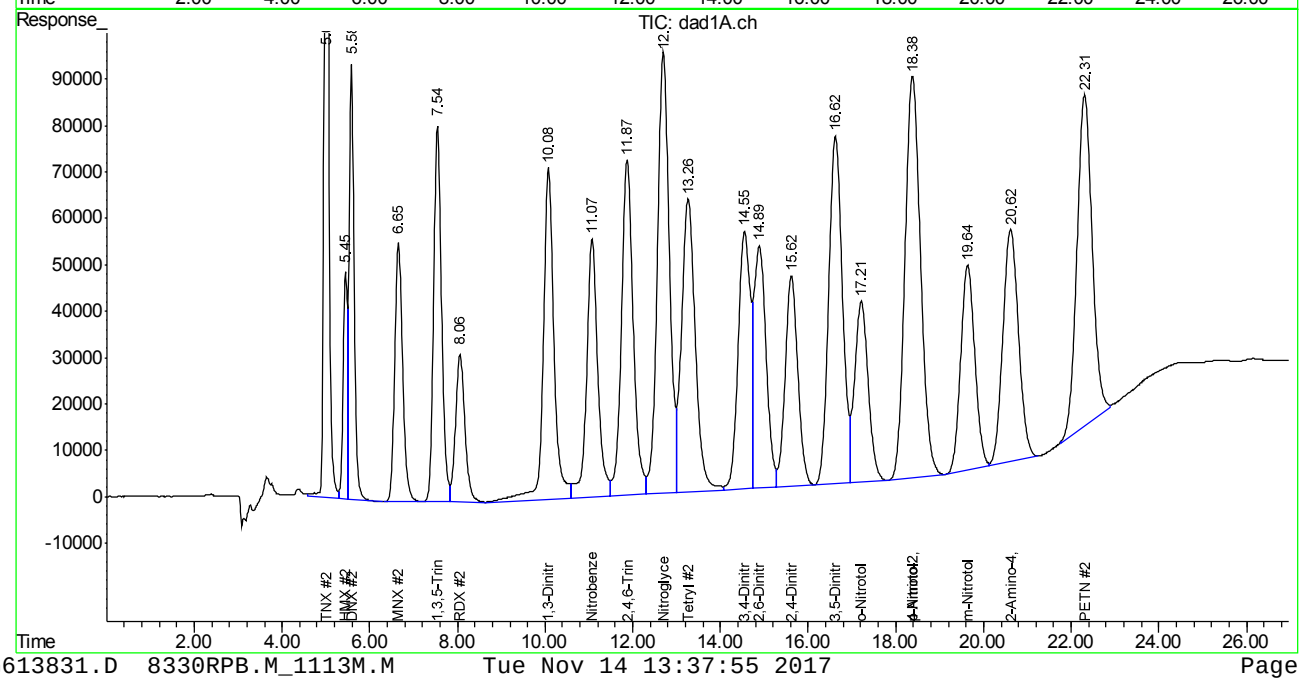
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

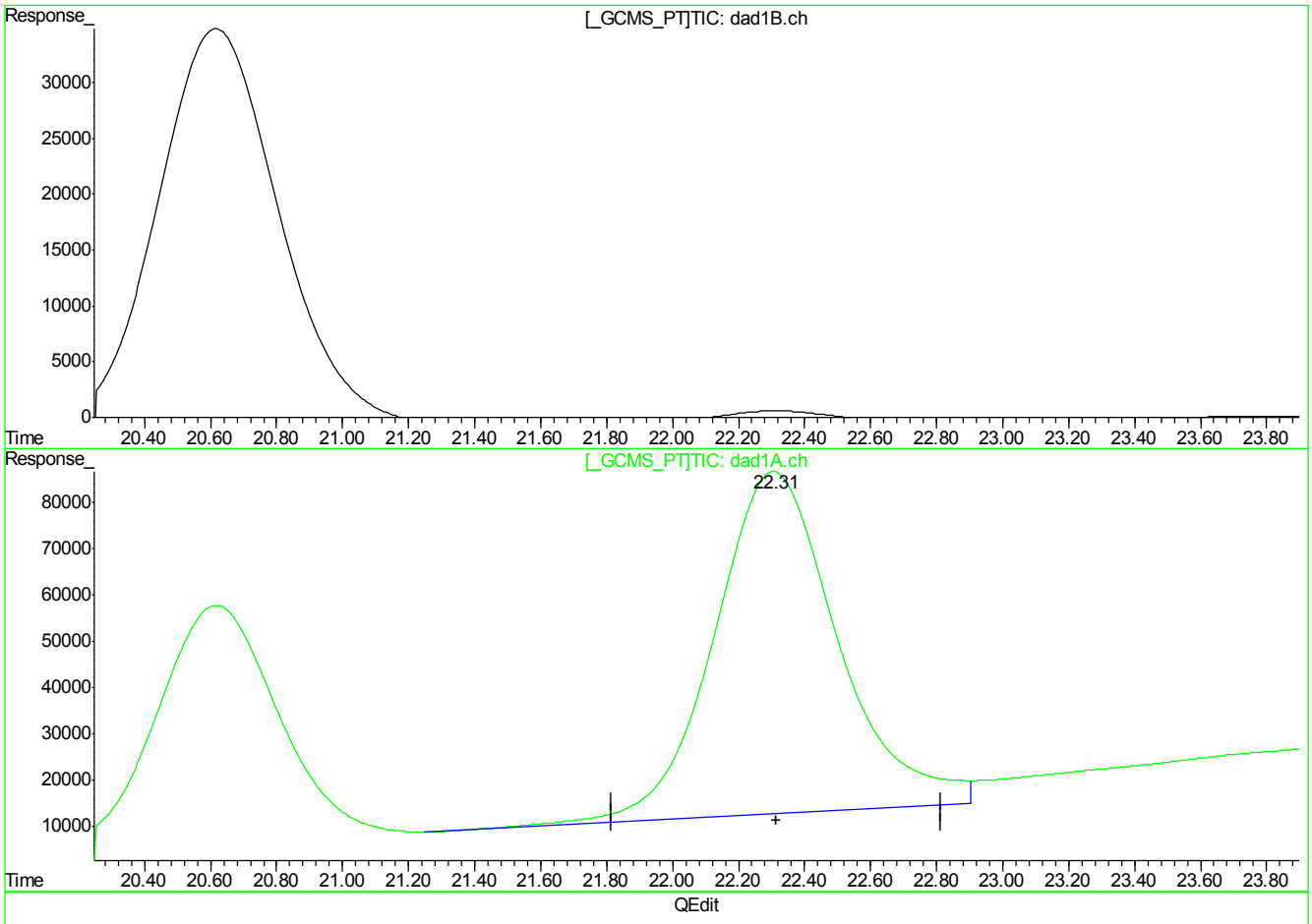
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613831.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:03	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.31	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 5907.912ppb

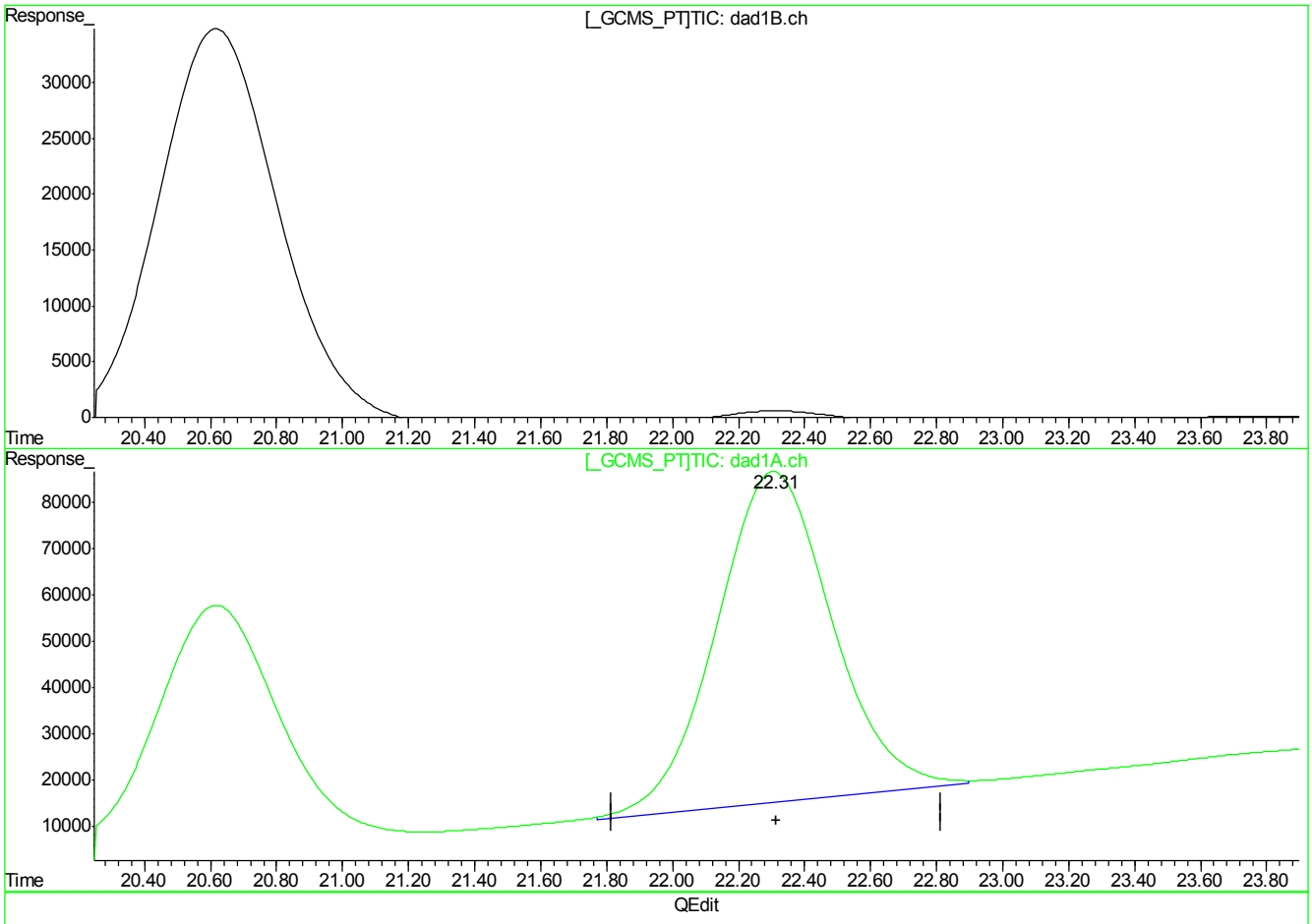
response 19145917

(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:07 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613831.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1113RPB3\GG613831.D\dad1A.ch
Acq On : 13-Nov-2017, 16:03:51 Operator: evitam
Sample : ic2571-1000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:01:54 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.31min 5352.300ppb m

response 17345332

(+) = Expected Retention Time
GG613831.D 8330RPB.M_1113M.M Tue Nov 14 12:02:10 2017

GG613832.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50:07 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.57	14.57	10550046	21399713	1789.548	1831.472
	Spiked Amount 500.000	Range 70 - 136		Recovery =		357.91%#	366.29%#
	Target Compounds						
1)	TNX	5.01	5.01	28286611	28286611	3362.844	3353.956
2)	HMX	5.45	5.45	6160036	6160036	1621.715	1610.245
3)	DNX	5.59	5.59	15111963	15111963	2302.310	2310.317
4)	MNX	6.67	6.67	14319142	14379845	2959.807	2972.354
5)	1,3,5-Trinitrobe	7.55	7.55	20630748	20736361	2020.412	2031.609
6)	RDX	8.07	8.07	9542524	9714929	2004.461	2050.183
7)	1,3-Dinitrobenze	10.09	10.09	27925425	22088278	1918.604	1861.609
8)	Nitrobenzene	11.08	11.08	17989336	17591198	2353.226	1943.111
9)	2,4,6-Trinitroto	11.88	11.88	19144422	26204296	1877.700	1837.967
10)	Nitroglycerin	0.00	12.71	0	35699929	N.D. d	10513.714
11)	Tetryl	13.28	13.28	15460803	27450889	2253.980	1939.407
13)	2,6-Dinitrotolue	14.91	14.90	14299221	20816201	2056.715	1914.307
14)	2,4-Dinitrotolue	15.63	15.63	25833590	18399200	1944.131	1831.671
15)	o-Nitrotoluene	17.23	17.23	11486355	17079534	1968.871	1946.822
16)	3,5-Dinitroanili	16.63	16.63	19978063	33141066	1885.113	1798.231
17)	p-Nitrotoluene	18.40	18.40	23561706	43403899	2047.801	1893.857
18)	4-Amino-2,6-Dini	18.40	18.40	23561706	43403899	2047.801	1893.857
19)	m-Nitrotoluene	19.66	19.66	12222790	20535097	1919.977	2170.979
20)	2-Amino-4,6-Dini	20.63	20.63	18737965	26088409	1953.256	1927.623
21)	PETN	0.00	22.32	0	35262467	N.D. d	10881.043m

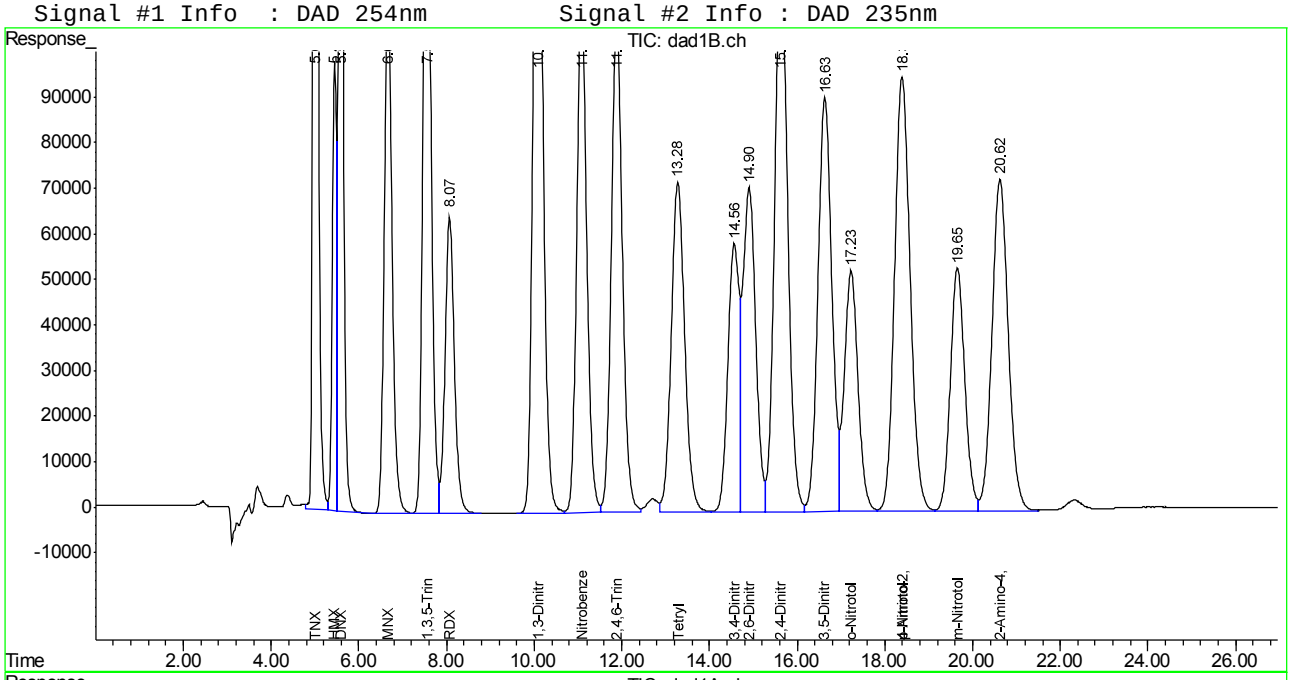
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 13:37:56 2017 Page 1

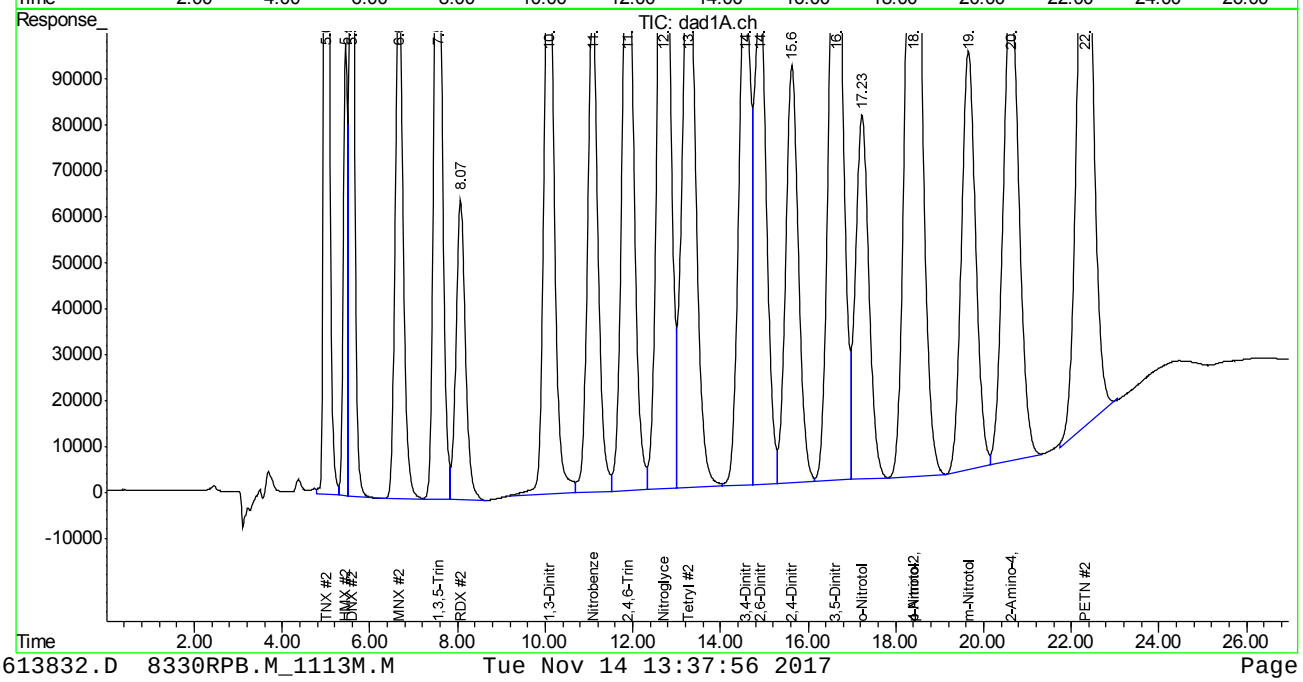
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:02 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 11:49:33 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

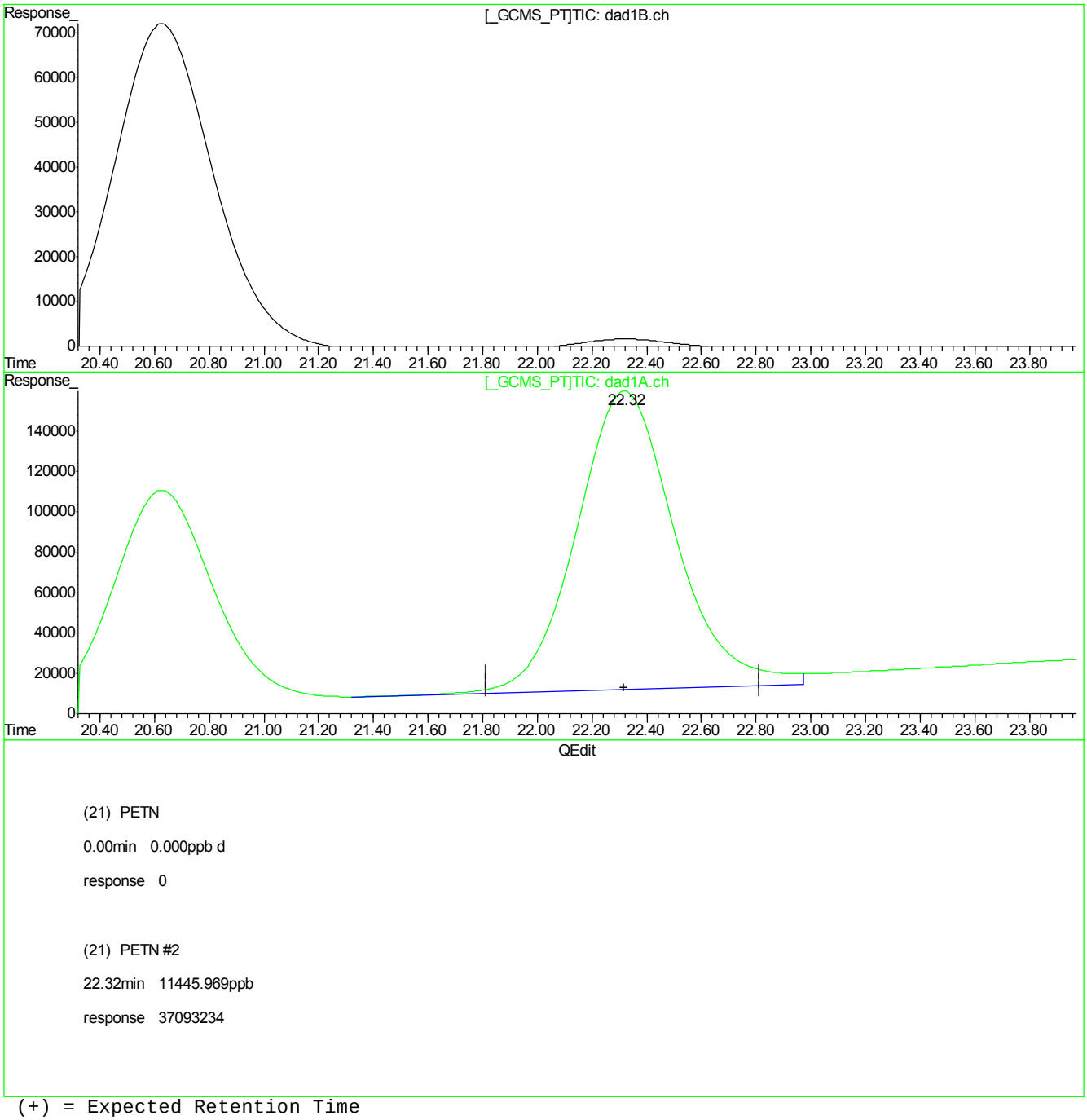
Sample Number:	GGG2571-IC2571	**Method:**	SW846 8330A
Lab FileID:	GG613832.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 16:33	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.32	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration

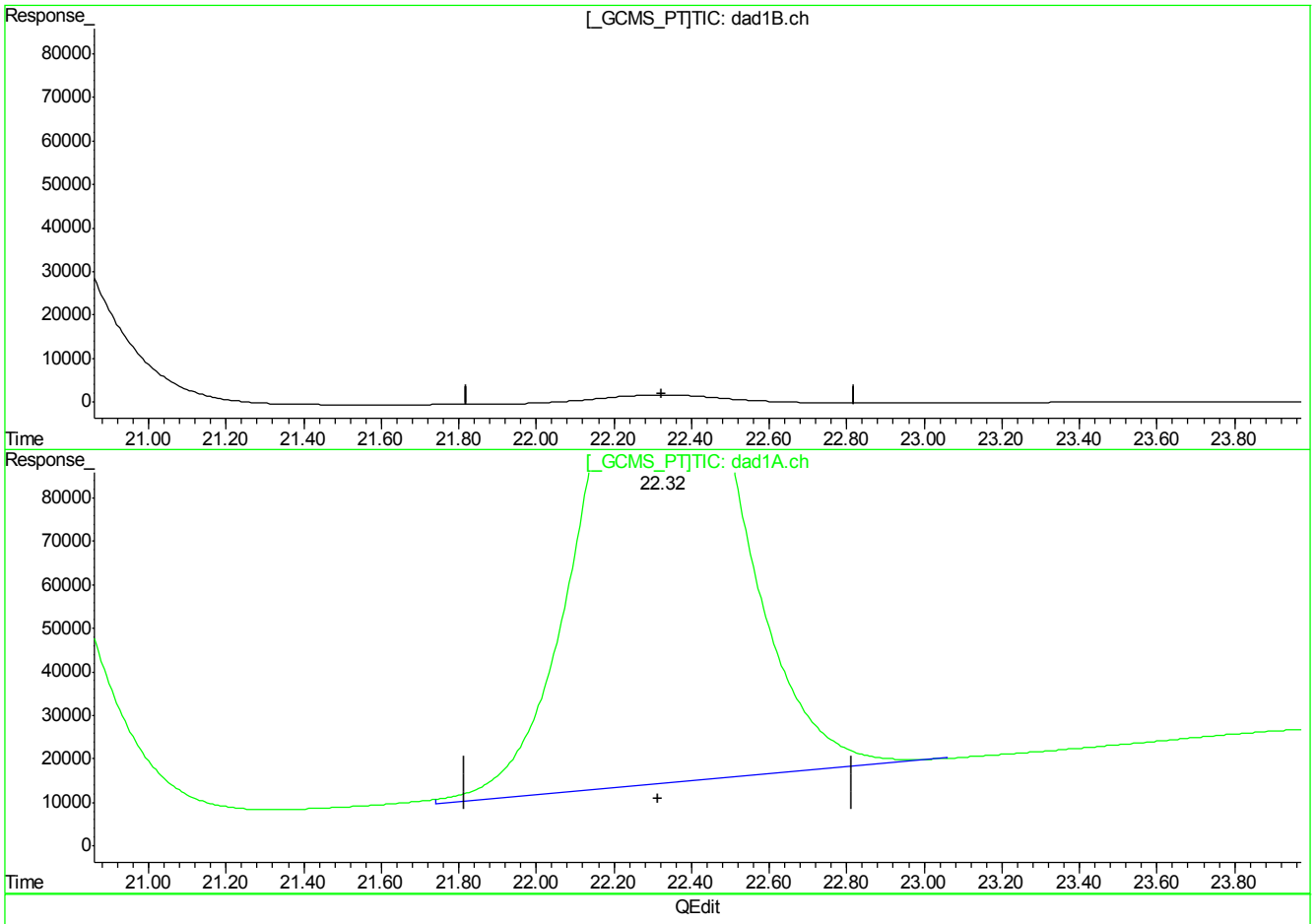


(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:30 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613832.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1113RPB3\GG613832.D\dad1A.ch
Acq On : 13-Nov-2017, 16:33:19 Operator: evitam
Sample : ic2571-2000 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 11:50 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:02:16 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.32min 10881.043ppb m

response 35262467

(+) = Expected Retention Time
GG613832.D 8330RPB.M_1113M.M Tue Nov 14 12:02:38 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15:22 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	5.00	5.00	4427614	4427614	311.255	311.279
2)	HMX	5.44	5.44	1660951	1660951	512.341	515.543
3)	DNX	5.57	5.57	3728715	3728715	481.707	479.565
4)	MNX	6.64	6.64	3500595	3500595	498.403	498.000
5)	1,3,5-Trinitrobe	7.53	7.53	5084566	5085276	490.713	490.831
6)	RDX	8.04	8.04	2404792	2408976	504.766	507.885
7)	1,3-Dinitrobenze	10.06	10.06	6578375	6672490	459.805	525.898
8)	Nitrobenzene	11.05	11.05	4554253	5345006	482.574	577.158
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	12.68	0	9322634	N.D. d	2766.568
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
13)	2,6-Dinitrotolue	14.89	14.89	3527390	5488834	493.369	540.982
14)	2,4-Dinitrotolue	15.60	15.60	6348698	4712292	484.298	495.523
15)	o-Nitrotoluene	17.20	17.20	2958205	4396320	512.102	509.800
16)	3,5-Dinitroanili	16.59	16.59	4689804	7872997	479.670	484.898
17)	p-Nitrotoluene	18.35	18.36	5769728	10811008	491.360	510.118
18)	4-Amino-2,6-Dini	18.35	18.36	5769728	10811008	491.360	508.634
19)	m-Nitrotoluene	19.62	19.62	3222471	5107269	546.610	525.201
20)	2-Amino-4,6-Dini	20.59	20.59	4643185	5903363	514.599	496.742
21)	PETN	0.00	22.29	0	9227376	N.D. d	2876.898m

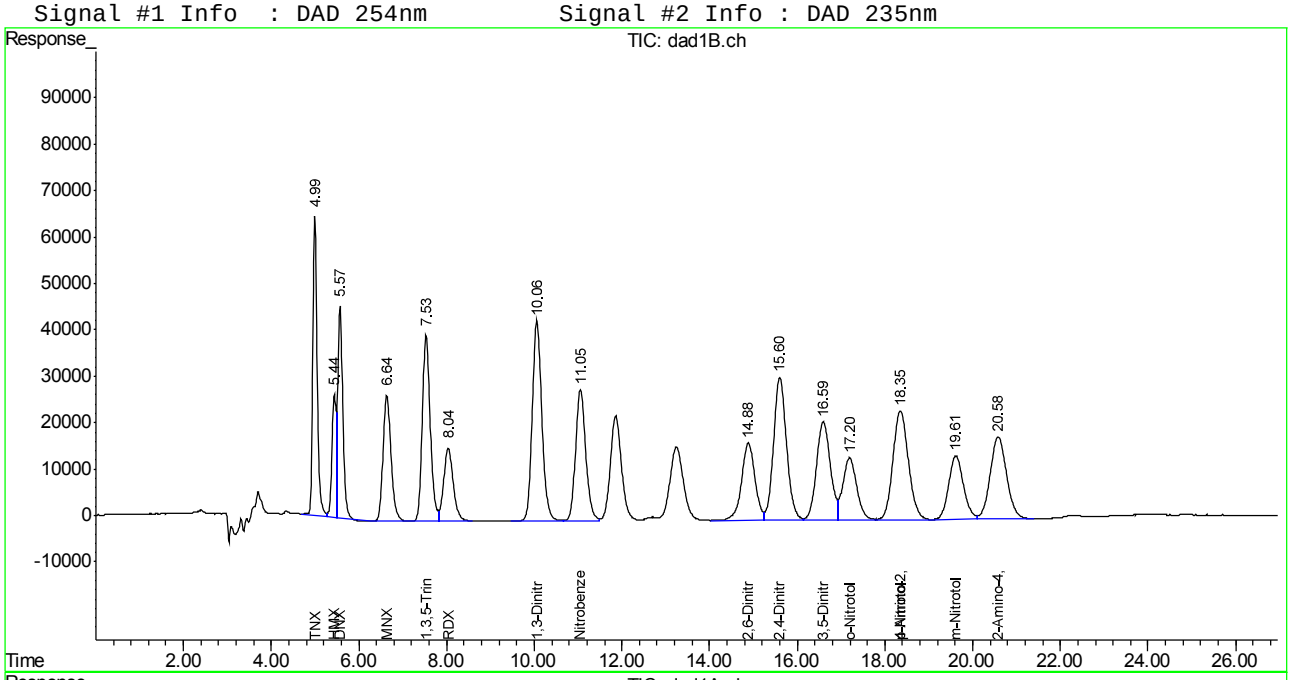
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 13:37:57 2017 Page 1

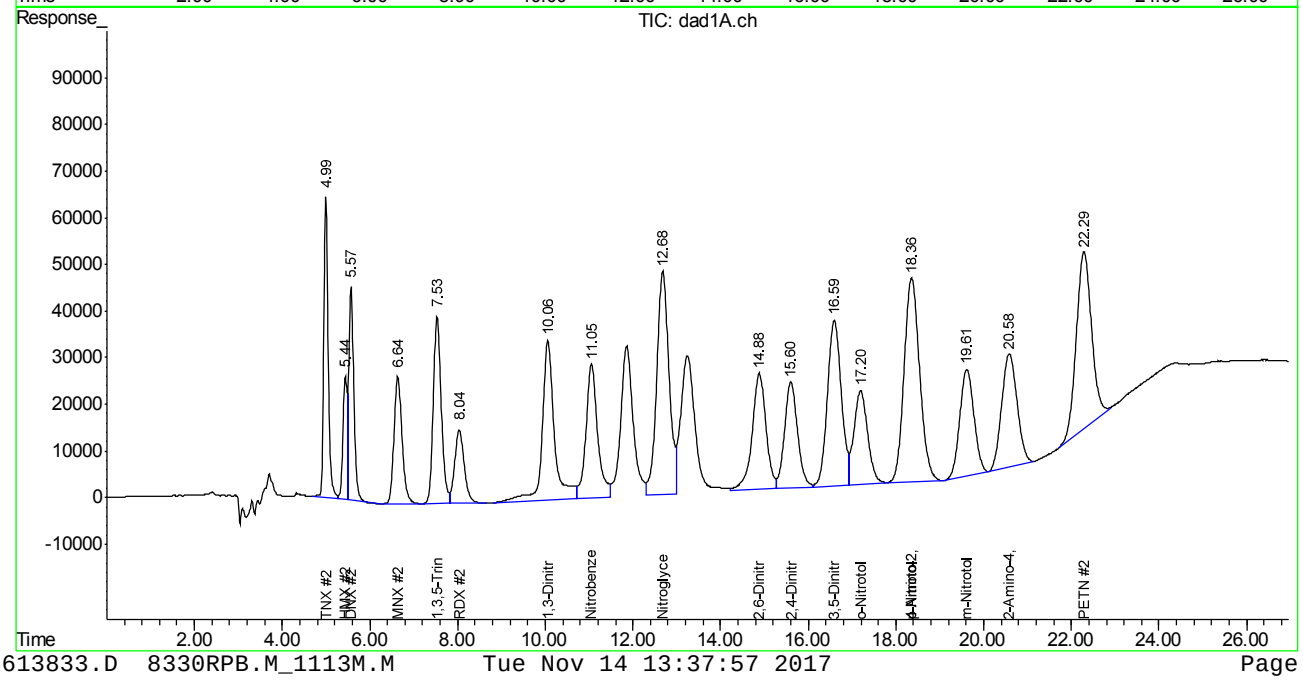
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

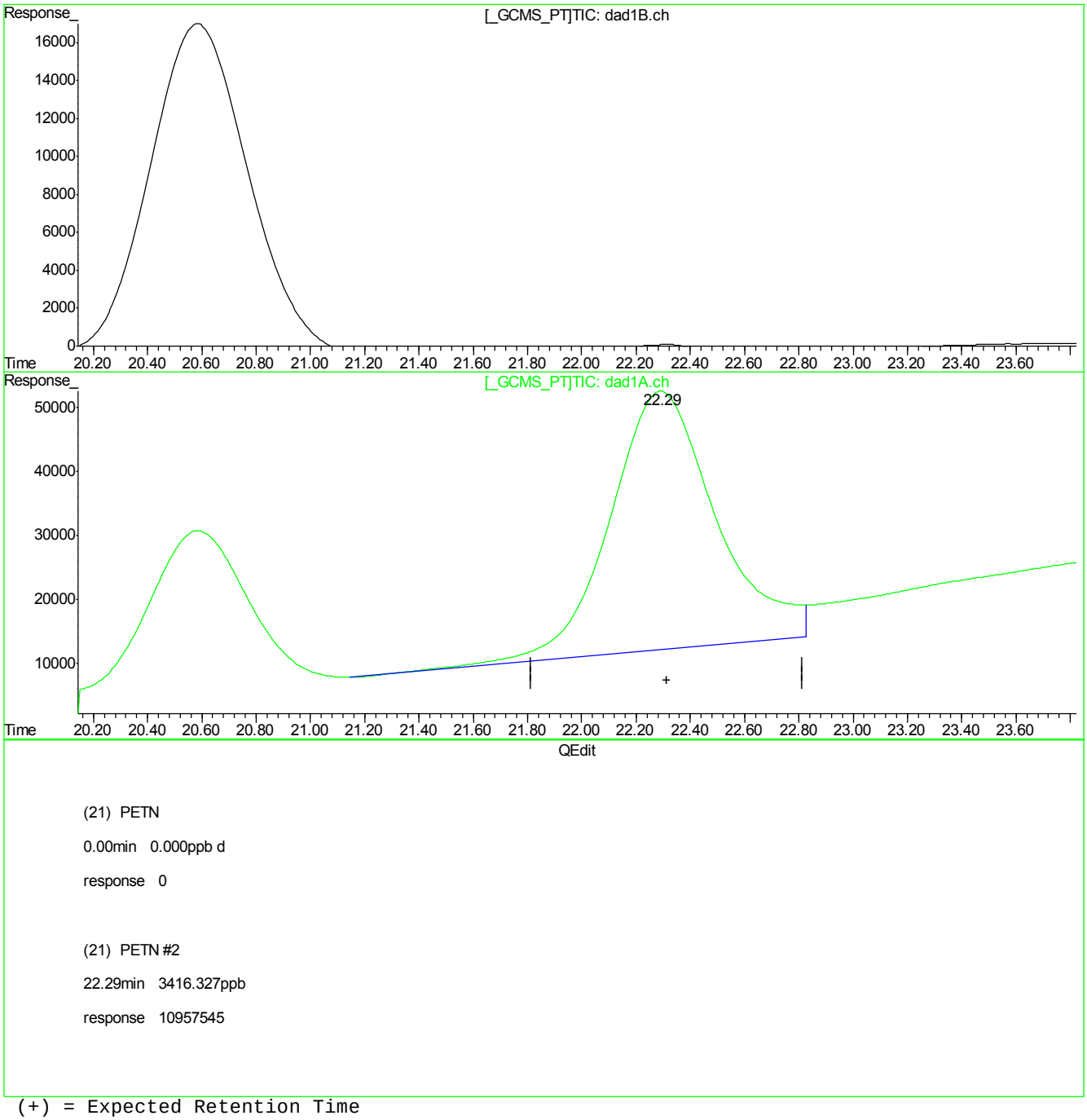
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613833.D	**Analyst approved:**	11/14/17 13:39 Evita Martinez
Injection Time:	11/13/17 17:02	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	22.29	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration

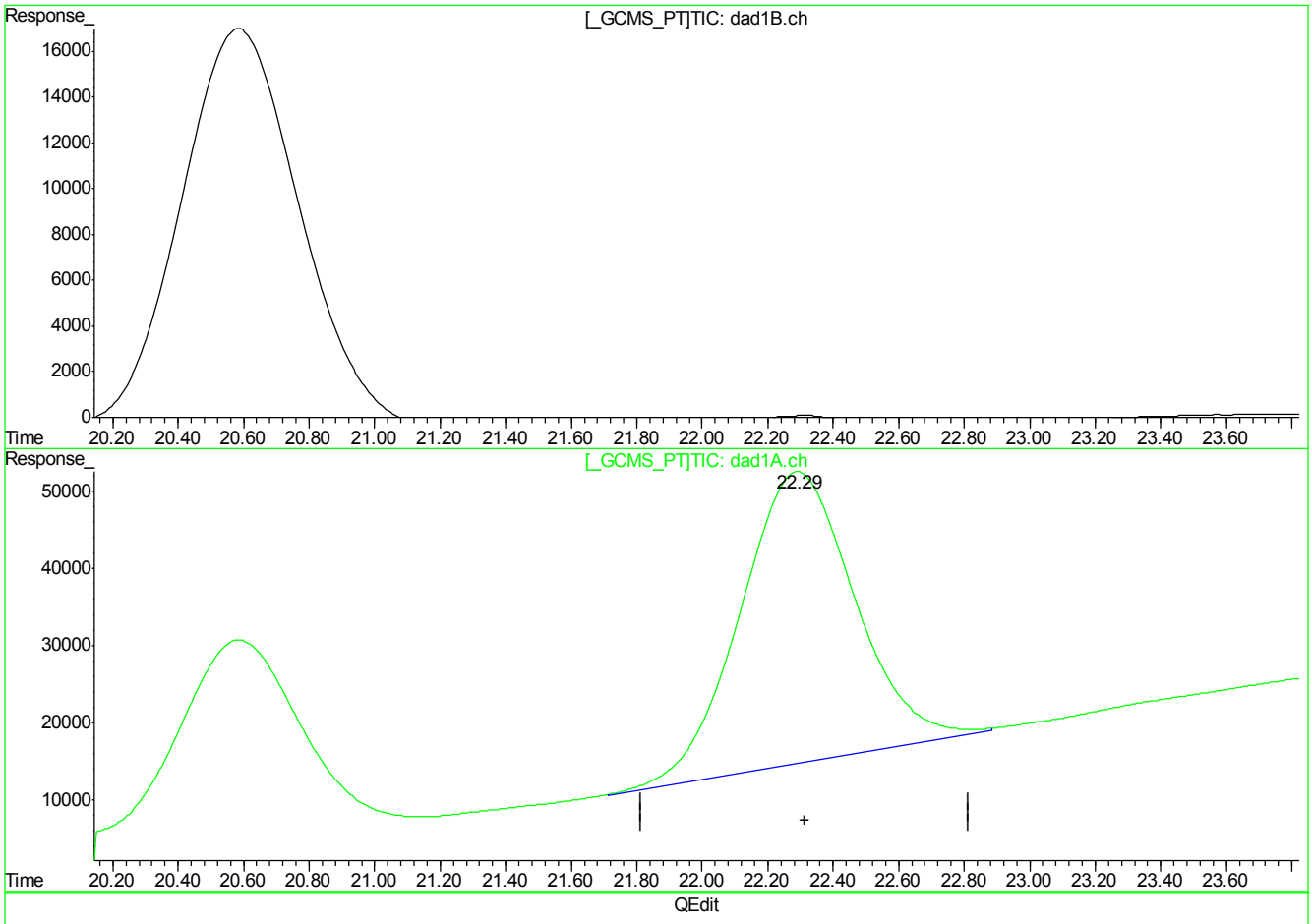


(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:10 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613833.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1113RPB3\GG613833.D\dad1A.ch
Acq On : 13-Nov-2017, 17:02:48 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:15 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

22.29min 2876.898ppb m

response 9227376

(+) = Expected Retention Time
GG613833.D 8330RPB.M_1113M.M Tue Nov 14 12:16:14 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
11/15/17 16:31

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:16:38 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
9)	2,4,6-Trinitroto	11.88	11.87	4812246	6368475	474.847	485.592m
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	13.27	13.27	4161106	7319038	513.472	520.034m
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

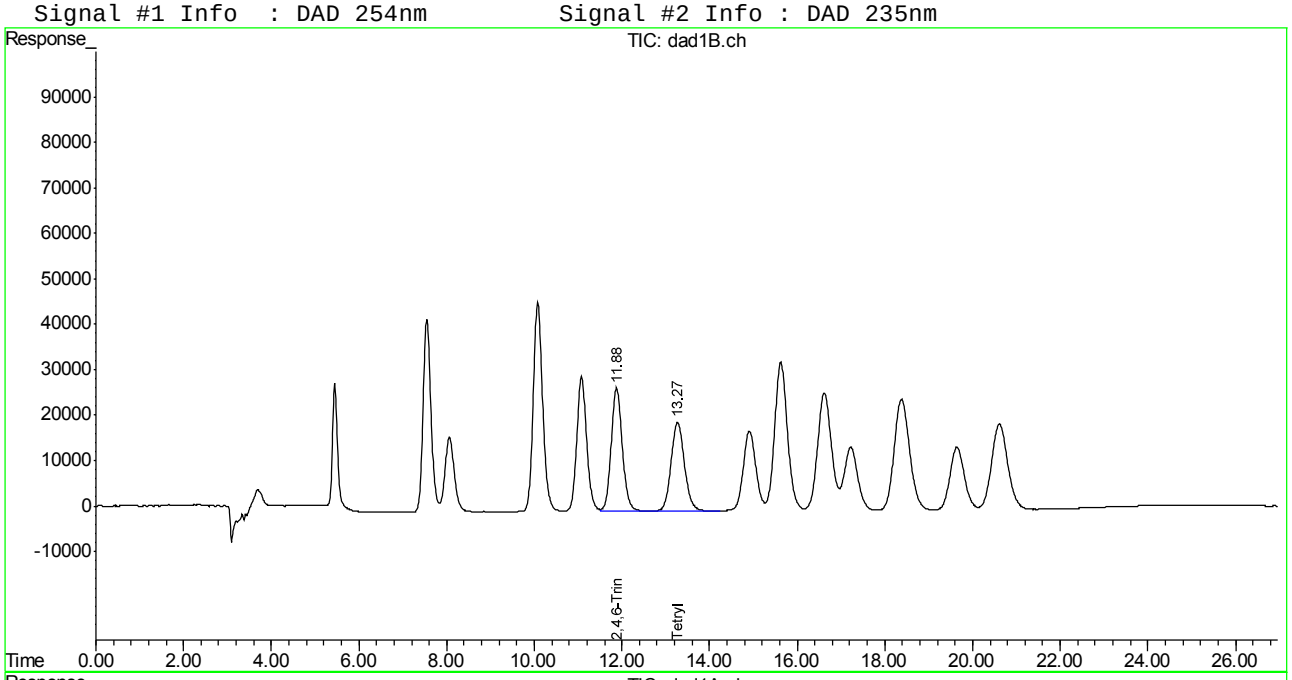
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:46:13 2017 Page 1

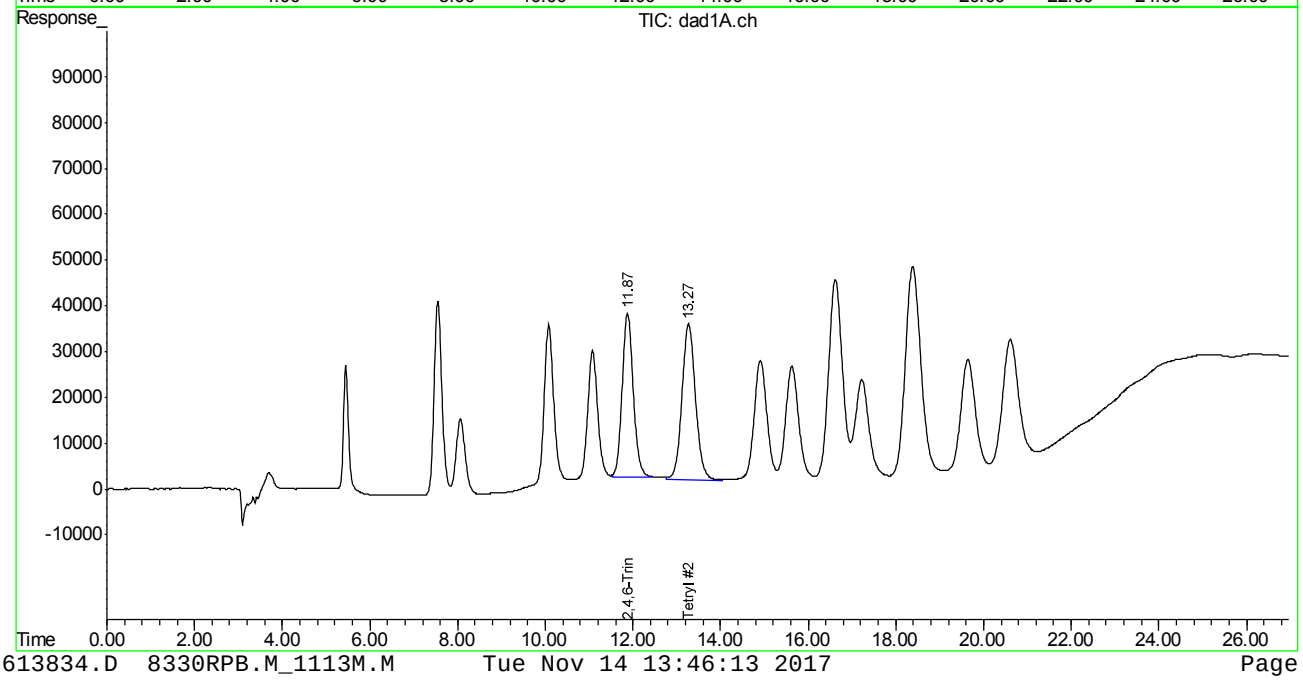
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 13:45 2017 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

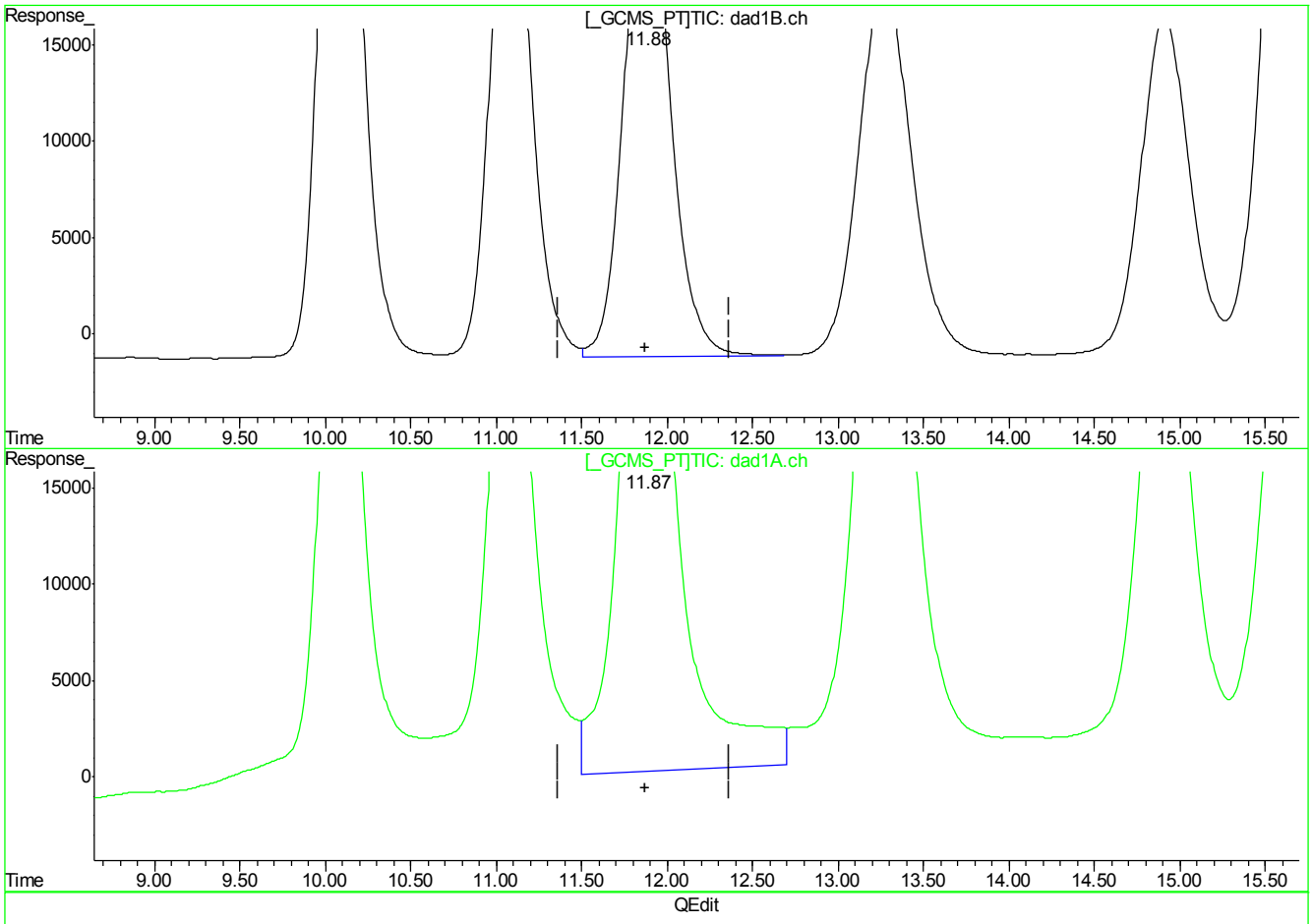
Sample Number:	GGG2571-ICV2571	**Method:**	SW846 8330A
Lab FileID:	GG613834.D	**Analyst approved:**	11/14/17 15:34 Evita Martinez
Injection Time:	11/13/17 17:32	**Supervisor approved:**	11/15/17 16:31 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4,6-Trinitrotoluene	118-96-7	2	11.87	Poorly defined baseline
Tetryl	479-45-8	2	13.27	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.88min 604.076ppb

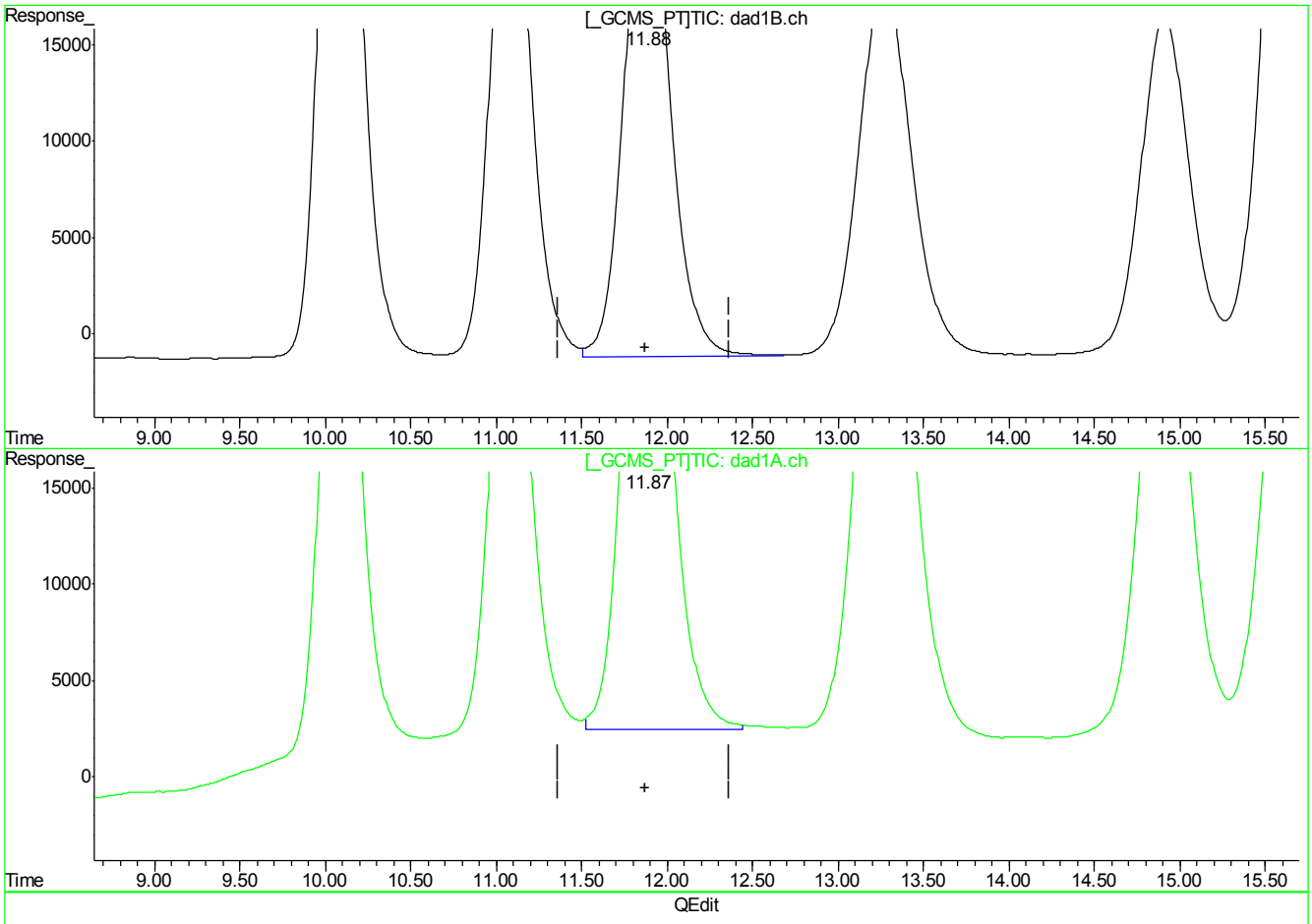
response 7922376

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:42 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(9) 2,4,6-Trinitrotoluene

11.88min 474.847ppb

response 4812246

(9) 2,4,6-Trinitrotoluene #2

11.87min 485.592ppb m

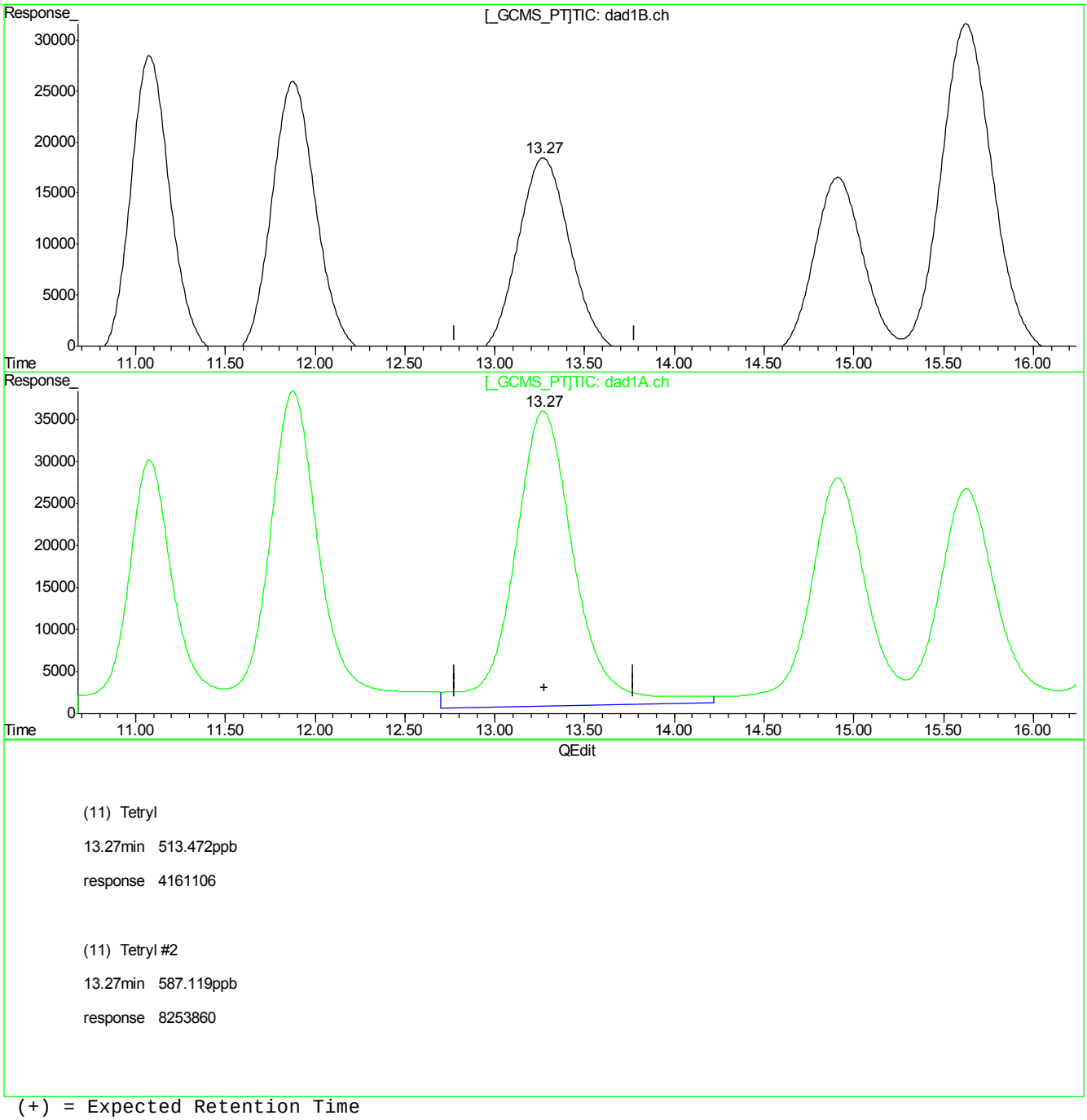
response 6368475

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:45 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 587.119ppb

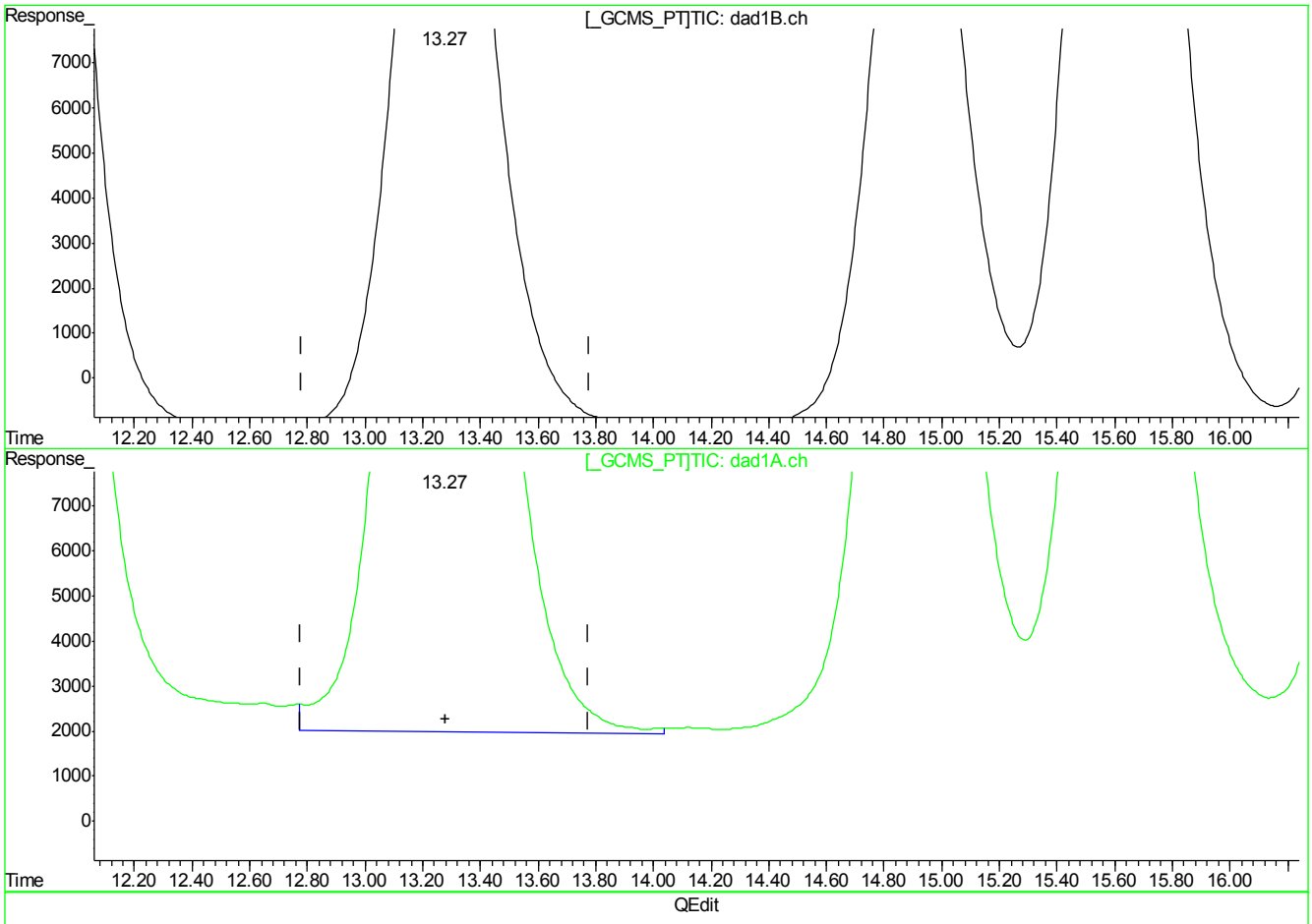
response 8253860

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:51 2017

Quantitation Report (Qedit)

Signal #1 : G:\DATA\1113RPB3\GG613834.D\dad1B.ch Vial: 100
Signal #2 : G:\DATA\1113RPB3\GG613834.D\dad1A.ch
Acq On : 13-Nov-2017, 17:32:20 Operator: evitam
Sample : icv2571-500 Inst : G1315B
Misc : Op67468,Ggg2571,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Nov 14 12:17 2017 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Nov 14 12:15:13 2017
Response via : Multiple Level Calibration



(11) Tetryl

13.27min 513.472ppb

response 4161106

(11) Tetryl #2

13.27min 520.034ppb m

response 7319038

(+) = Expected Retention Time
GG613834.D 8330RPB.M_1113M.M Tue Nov 14 13:45:57 2017

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:31 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.27	14.26	5807589	13085107	1117.944	1209.610
	Spiked Amount 500.000	Range 69 - 134		Recovery =		223.59%#	241.92%#
	Target Compounds						
1)	TNX	4.99	4.99	13873853	13873853	975.314	975.388
2)	HMX	5.40	5.40	3448943	3448943	1063.869	1070.517
3)	DNX	5.56	5.56	8265700	8265700	1067.834	1063.084
4)	MNX	6.57	6.57	7476804	7476804	1064.522	1063.662
5)	1,3,5-Trinitrobe	7.46	7.46	10375346	10375490	1001.327	1001.443
6)	RDX	7.92	7.92	5071848	5054743	1064.581	1065.694
7)	1,3-Dinitrobenze	9.94	9.94	14432999	11467565	1008.816	937.897
8)	Nitrobenzene	10.90	10.90	9591646	10131131	1016.342	1093.968
9)	2,4,6-Trinitroto	11.67	11.67	10081323	14401410	994.771	1098.099
10)	Nitroglycerin	0.00	12.41	0	18182257	N.D. d	5395.734
11)	Tetryl	12.94	12.94	7643769	14810756	943.225	1062.043
13)	2,6-Dinitrotolue	14.63	14.62	7332163	11161847	1025.534	1100.117
14)	2,4-Dinitrotolue	15.34	15.34	13357063	9912711	1018.917	1056.379
15)	o-Nitrotoluene	16.89	16.89	6084616	8792639	1053.323	1019.599
16)	3,5-Dinitroanili	16.30	16.30	11318619	18889248	1147.194	1153.122
17)	p-Nitrotoluene	18.05	18.05	12225978	22222921	1041.185	1048.589
18)	4-Amino-2,6-Dini	18.05	18.05	12225978	22222921	1041.185	1045.540
19)	m-Nitrotoluene	19.27	19.27	6425338	10635362	1089.895	1093.677
20)	2-Amino-4,6-Dini	20.22	20.22	9604266	13457936	1064.430	1089.986
21)	PETN	0.00	21.80	0	17816986	N.D. d	5554.954m

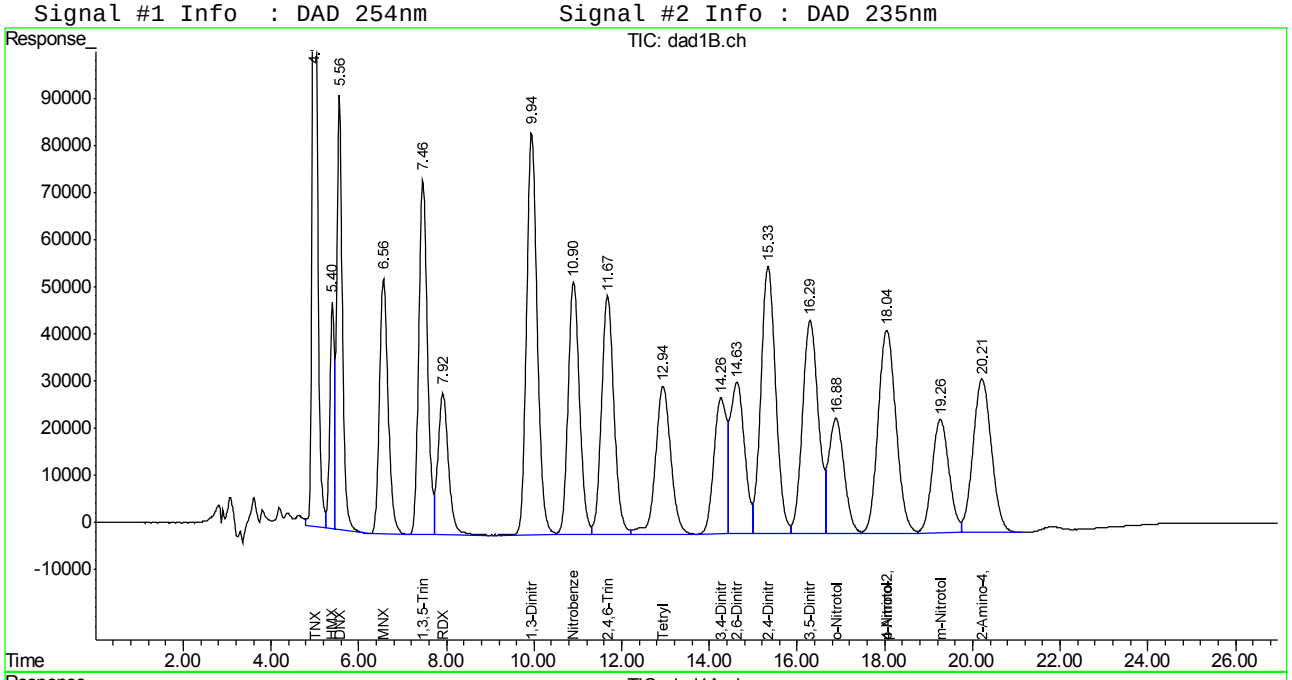
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614559.D 8330RPB.M_1113M.M Fri May 04 09:33:27 2018 Page 1

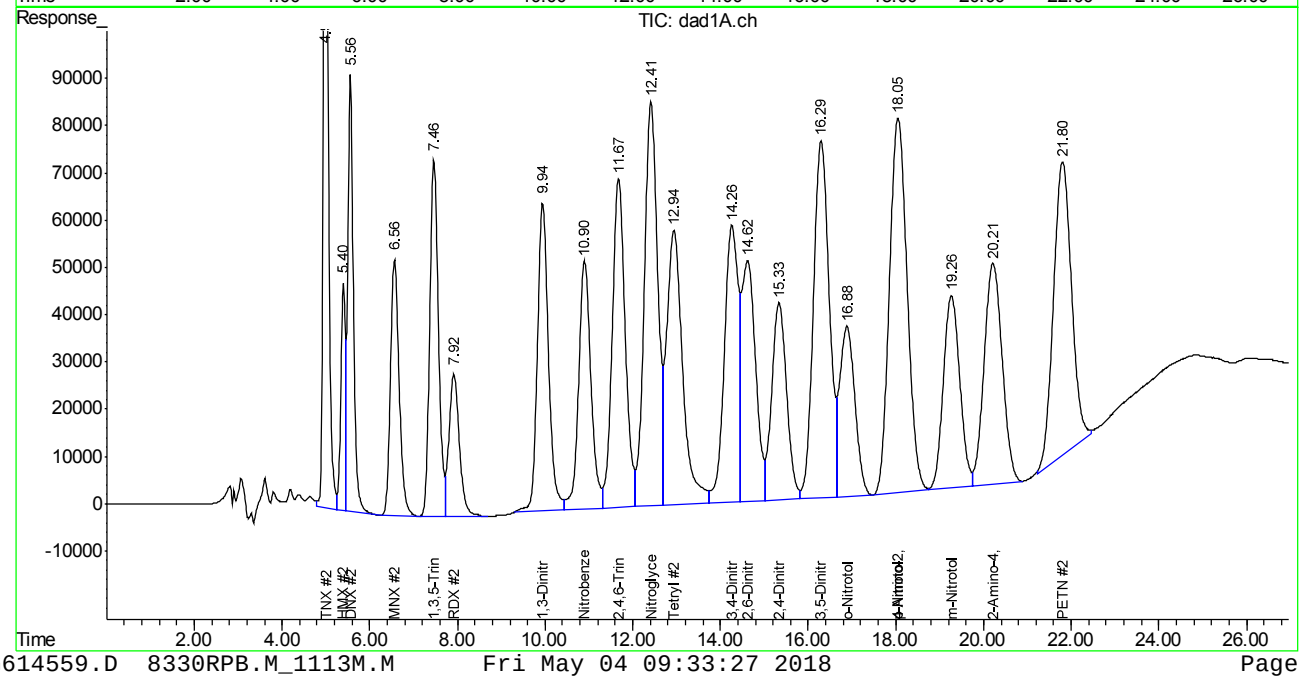
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:22 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

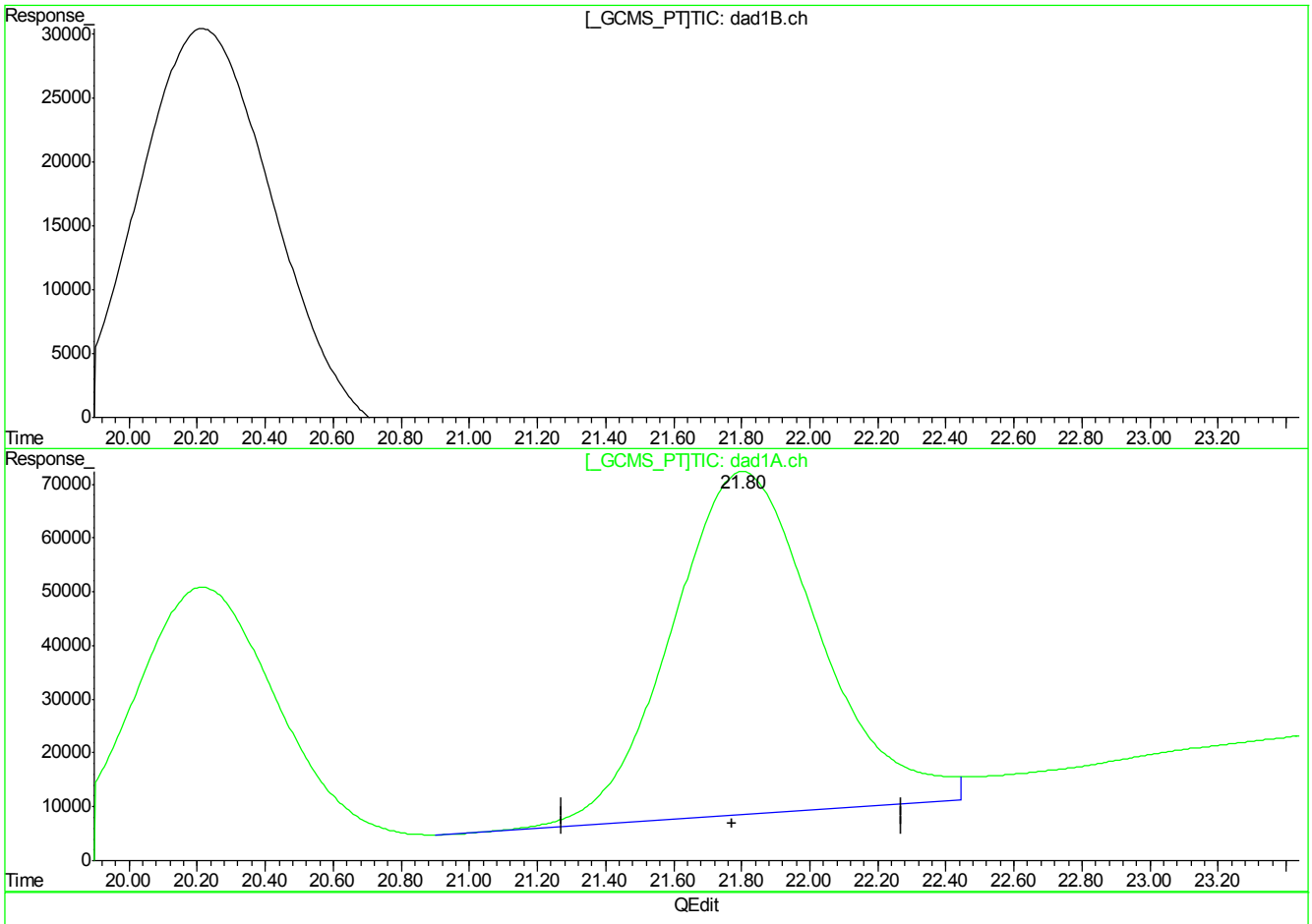
Sample Number:	GGG2624-CC2571	**Method:**	SW846 8330B
Lab FileID:	GG614559.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/03/18 22:07	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.80	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614559.D 8330RPB.M_1113M.M Fri May 04 09:22:26 2018

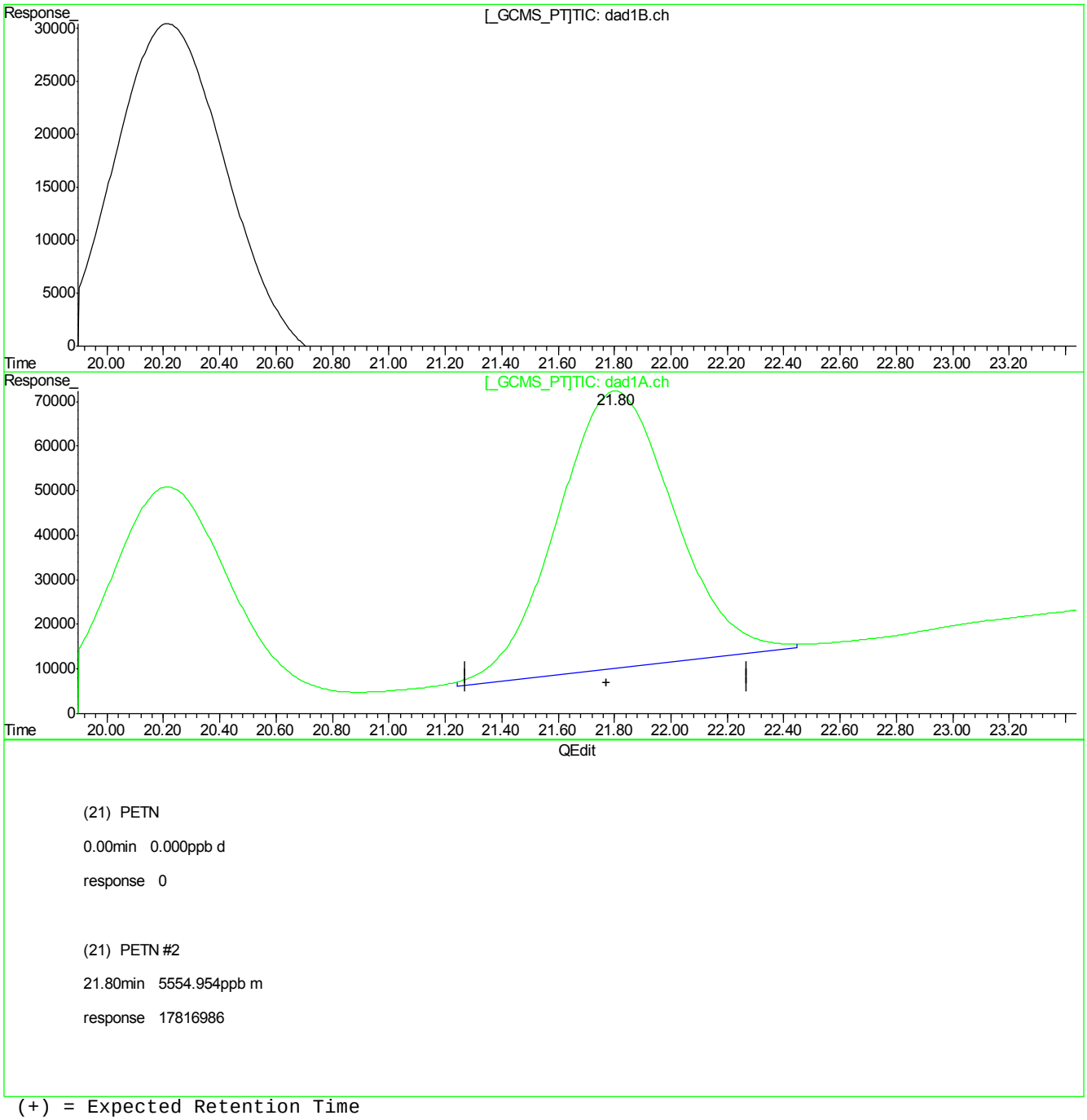
7.6.20.2

7

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614559.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614559.D\dad1A.ch
Acq On : 03-May-2018, 22:07:51 Operator: evitam
Sample : cc2571-1000 Inst : G1315B
Misc : op69838,Ggg2624,10.75,,,50,1,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(+) = Expected Retention Time
GG614559.D 8330RPB.M_1113M.M Fri May 04 09:22:30 2018

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
05/04/18 14:20

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 04 09:15:38 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Initial Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	14.25	14.25	5739268	13040642	1104.792	1205.499
	Spiked Amount 500.000	Range 70 - 136		Recovery =		220.96%#	241.10%#
	Target Compounds						
1)	TNX	4.98	4.98	13587110	13587110	955.156	955.229
2)	HMX	5.39	5.39	3310136	3310136	1021.052	1027.433
3)	DNX	5.55	5.55	8061357	8061357	1041.435	1036.803
4)	MNX	6.55	6.55	7448117	7448117	1060.437	1059.581
5)	1,3,5-Trinitrobe	7.44	7.44	10326070	10333093	996.571	997.351
6)	RDX	7.90	7.90	5040572	5059644	1058.016	1066.727
7)	1,3-Dinitrobenze	9.93	9.93	14314085	11657418	1000.504	954.911
8)	Nitrobenzene	10.88	10.88	9487701	9950798	1005.328	1074.496
9)	2,4,6-Trinitroto	11.65	11.65	9990907	14448271	985.850	1101.672
10)	Nitroglycerin	0.00	12.39	0	18113090	N.D. d	5375.208
11)	Tetryl	12.92	12.92	7524220	14349611	928.473	1028.386
13)	2,6-Dinitrotolue	14.62	14.62	7327769	11180659	1024.919	1101.971
14)	2,4-Dinitrotolue	15.32	15.32	13339576	9937967	1017.583	1059.140
15)	o-Nitrotoluene	16.85	16.85	6083440	8821507	1053.119	1022.947
16)	3,5-Dinitroanili	16.29	16.29	11277122	18869869	1143.053	1151.957
17)	p-Nitrotoluene	18.02	18.02	12201587	22066997	1039.108	1041.232
18)	4-Amino-2,6-Dini	18.02	18.02	12201587	22066997	1039.108	1038.204
19)	m-Nitrotoluene	19.23	19.23	6432729	10790078	1091.149	1109.587
20)	2-Amino-4,6-Dini	20.18	20.18	9595622	13495211	1063.472	1092.810
21)	PETN	0.00	21.72	0	17750247	N.D. d	5534.146m

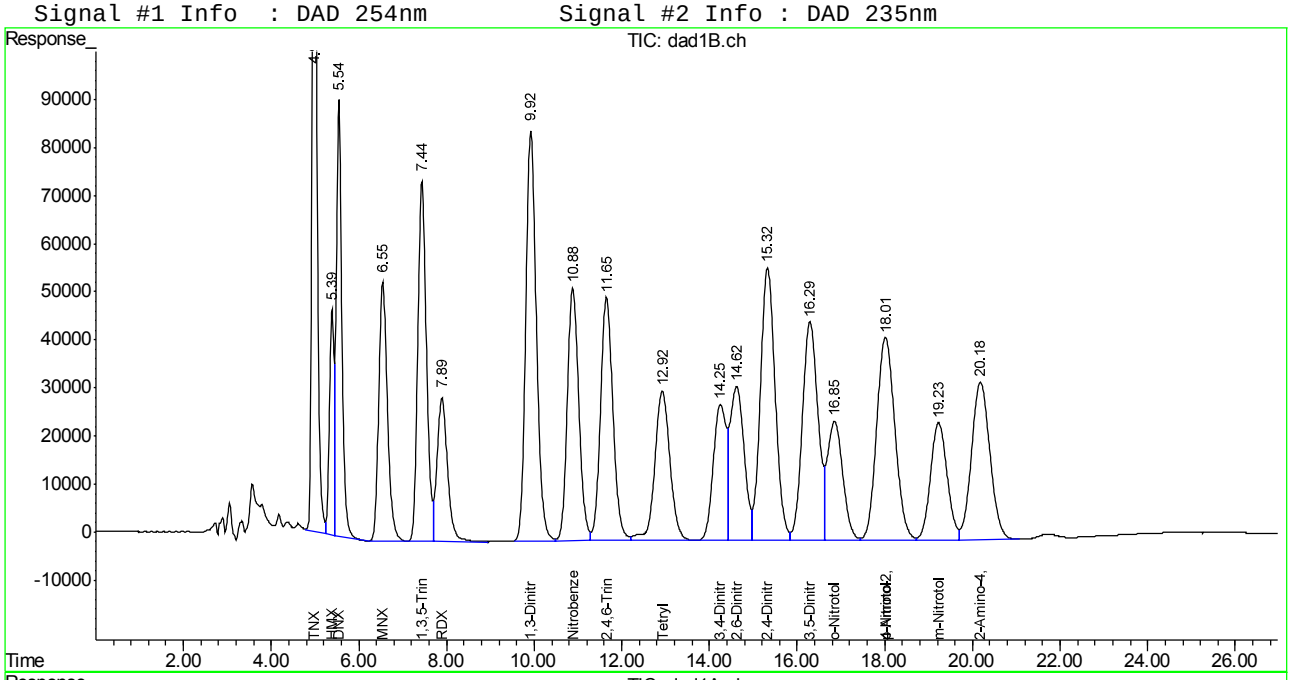
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG614571.D 8330RPB.M_1113M.M Fri May 04 09:33:38 2018 Page 1

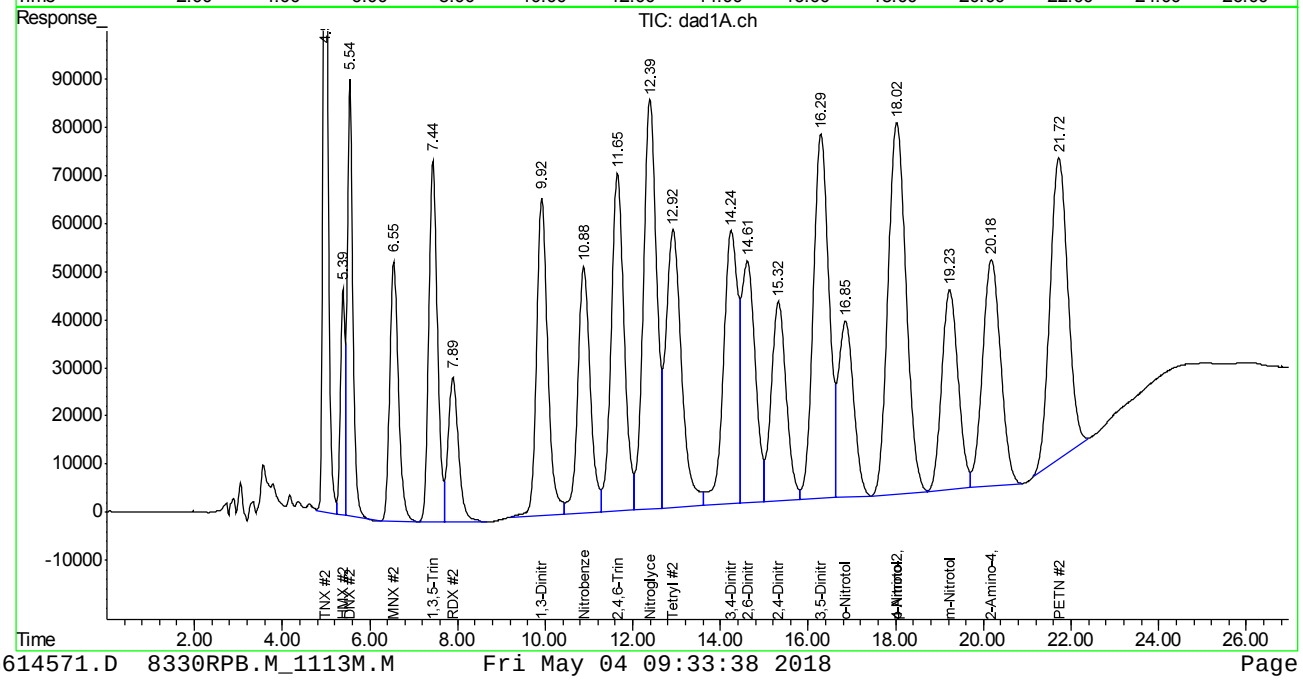
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:32 2018 Quant Results File: 8330RPB.M_1113M.RES

Quant Method : C:\MSDCHEM\1...\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB3.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

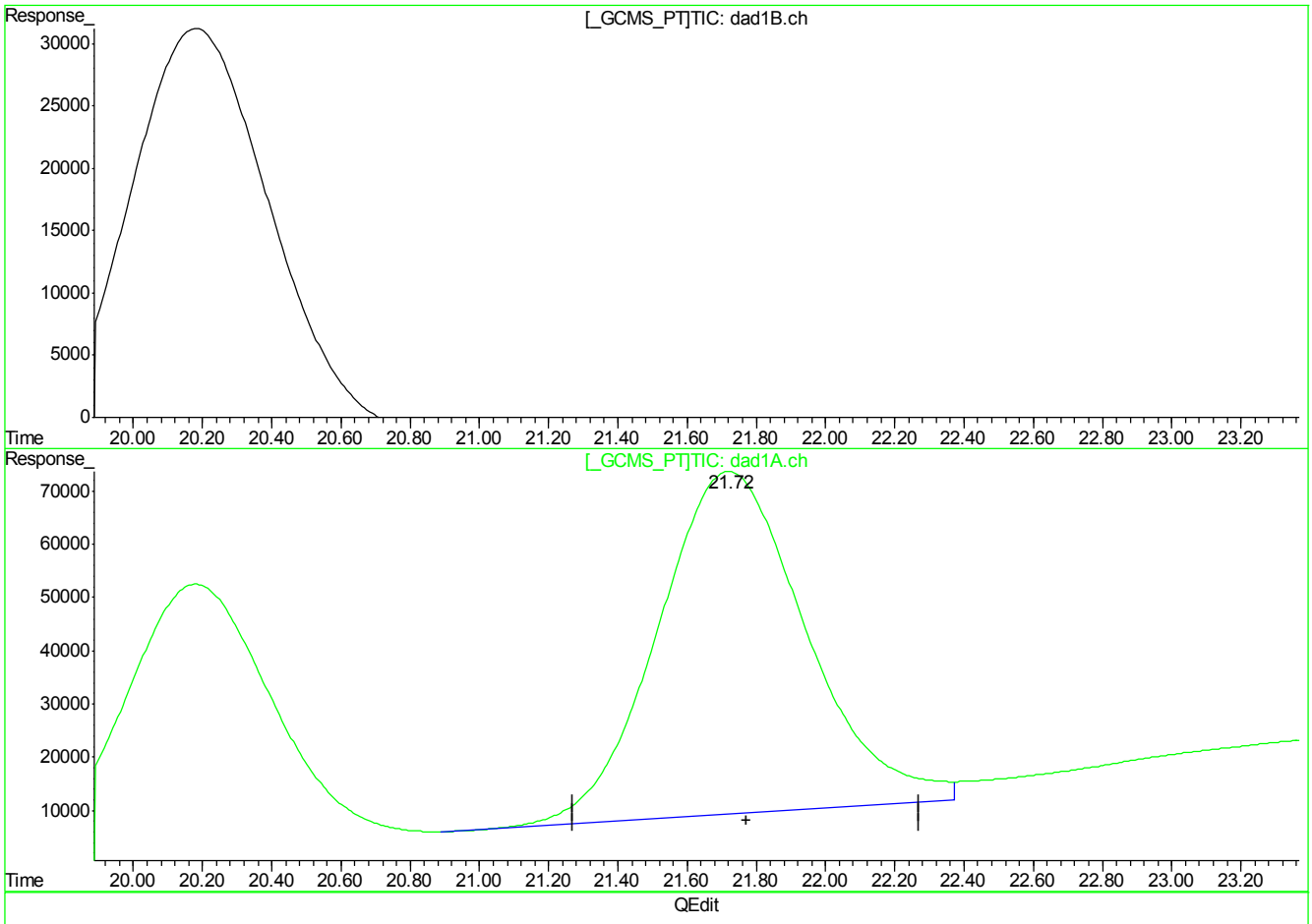
Sample Number:	GGG2624-ECC2571	**Method:**	SW846 8330B
Lab FileID:	GG614571.D	**Analyst approved:**	05/04/18 09:47 Evita Martinez
Injection Time:	05/04/18 04:01	**Supervisor approved:**	05/04/18 14:20 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	21.72	Poorly defined baseline

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.72min 5942.613ppb

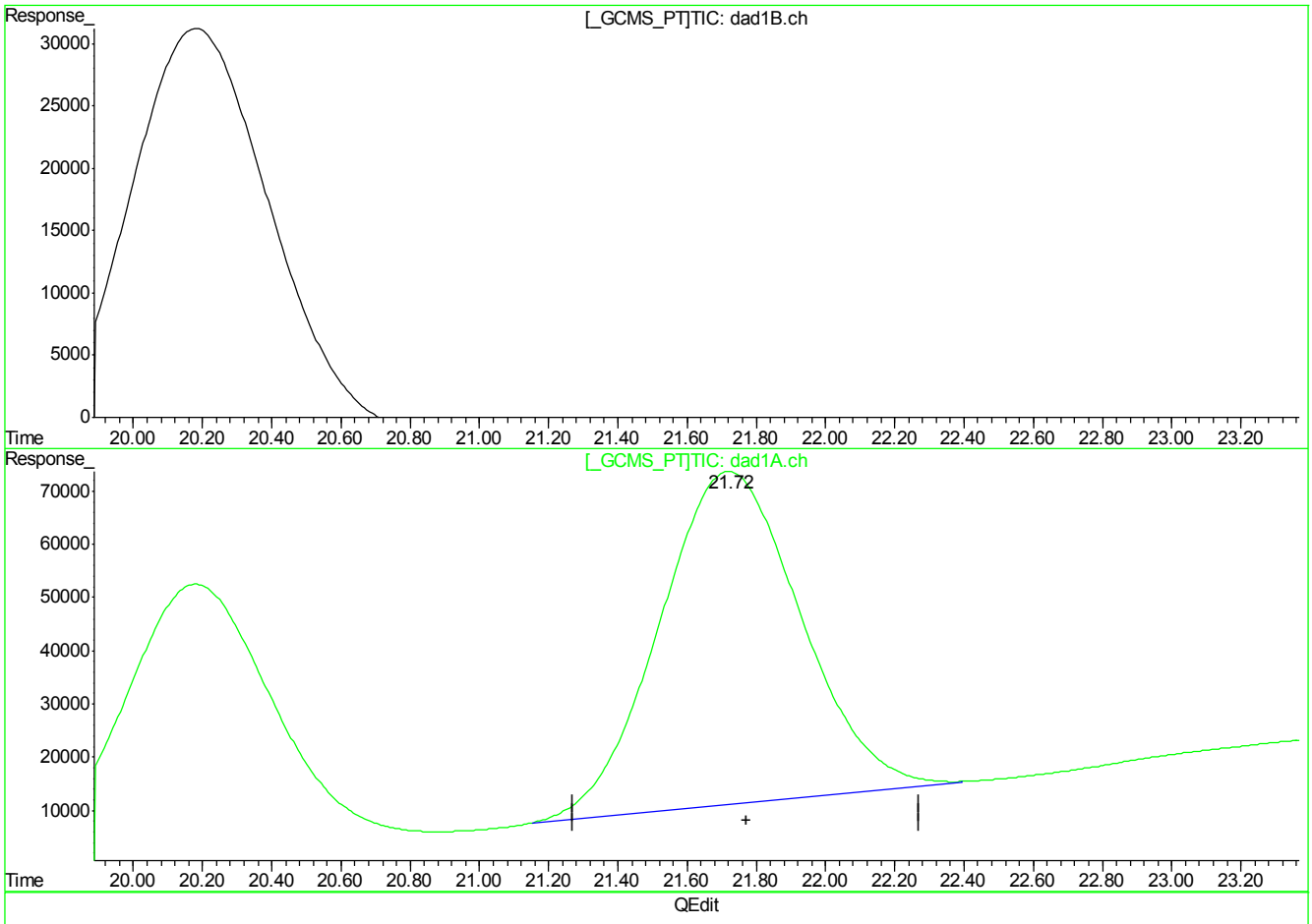
response 19060366

(+) = Expected Retention Time
GG614571.D 8330RPB.M_1113M.M Fri May 04 09:32:33 2018

Quantitation Report (Qedit)

Signal #1 : G:\DATA\0503RPB3\GG614571.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0503RPB3\GG614571.D\dad1A.ch
Acq On : 04-May-2018, 04:01:23 Operator: evitam
Sample : ecc2571-1000 Inst : G1315B
Misc : op69897,Ggg2624,1000,,,10,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 9:15 2018 Quant Results File: 8330RPB.M_1113M.RES

Method : C:\MSDCHEM\1\METHODS\8330RPB.M_1113M.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 04 09:14:58 2018
Response via : Multiple Level Calibration



(21) PETN

0.00min 0.000ppb d

response 0

(21) PETN #2

21.72min 5534.146ppb m

response 17750247

(+) = Expected Retention Time
GG614571.D 8330RPB.M_1113M.M Fri May 04 09:32:41 2018

SGS ACCUTEST-ORLANDO

DATE:	5/16/18
COLUMN TYPE:	Extend C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330A/B
ACQ. METHOD:	8330B
PROC. METHOD:	8330 5516 PLCS
CALIB. DATE:	5/16/18
RUN BATCH: GBB	1732

ANALYST:	CM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	511

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB059759	1	CCB	8330				ND
BB 59	81	ic1732-20		LC1020	50+450 50+450	pii	pass
BB 60	82	-50			10+390		
BB 61	83	-100			25+475		
BB 62	84	-200			50+450		
BB 63	85	icc -500			100+400		
BB 64	86	ic -1000			200+200		
BB 65	87	↓ -2000			1X		
BB 66	88	icv -500		LCS/LCSD/MS/MSD	20.25 25 Rec	Fill strike 1mL	
BB 67	3	op70034-bs		op70034	1X		✓
BB 68	4	-PTI					✓
BB 69	5	-MB					ND
BB 70	6	FAS3896-1					ND
BB 71	7	op70034 MS				pii	✓
BB 72	8	-msd					✓
BB 73	11	FAS3896-2					ND
BB 74	16	-7					ND
BB 75	~~86~~ 14	-10					ND
BB 76	+84	CC1732-1000		LC1020	1.1	pii	pass
BB 77	23	CCB					ND

calib A

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature:

SGS ACCUTEST-ORLANDO

DATE:	5/16/18
COLUMN TYPE:	Evo C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 B
PROC. METHOD:	8330 Agilent Plus
CALIB. DATE:	5/16/18
RUN BATCH:	GBB 1732

ANALYST:	EM
ACETONITRILE LOT #:	355120
MEOH LOT #:	
HEAD PRESSURE:	

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB059778	23	op70034-gb2	8330	op70034	1		ND
BB 79	24	-gb3					ND
BB 80	22	-gb1					ND
BB 81	9	FAS38962					ND
BB 82	10	-3					ND
BB 83	12	op70034-dup					ND
BB 84	13	-dup2					ND
BB 85	14	FAS38965		LC1020 op70034	1:1	EM 5/16/18	ND
BB 86	15	-6					ND
BB 87	11	-8					ND
BB 88	86	CCC1732-1000		LC1020	1:1	pii	pass
BB 89	1	CCB					ND
BB 90	18	FAS38946-9		op70034	1		ND
BB 91	20	-11					ND
BB 92	21	-12					ND
BB 93	86	CCC1732-1000		LC1020	1:1	pii	pass
BB							
BB							
BB							
BB							

NA EM 5/16/18

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: EMains

SGS ACCUTEST-ORLANDO

DATE:	11/13/19
COLUMN TYPE:	Bres RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 416
ACQ. METHOD:	8330 RPB3
PROC. METHOD:	8330 RPB-1113
CALIB. DATE:	11/13/19
RUN BATCH: GGG	2571

ANALYST:	GM
ACETONITRILE LOT #:	343
MEOH LOT #:	171102
HEAD PRESSURE:	152

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 613824	1	CCb	8330	—			ND
GG 25	2	ICC25561000		LC9409	1:1		CCU ↑ Run accuracy
GG 26	3	ic 2571-20			50/450 50/450	pii	cccu pass
GG 27	4	-50			10/390		
GG 28	5	-100			25/475		
GG 29	6	-200			50/450		
GG 30	7	icc -500			100/300		
GG 31	8	ic -1000			200/200		
GG 32	9	-2000			1X		
GG 33	10	icv -50		ES936/LC852 LC8611 & 5164	20:25 25:10	X mL	TNX/DW
GG 34	100	-500		E11098	40X		Hexyl & 246 TONB
GG 35	11	opb7519-mB		opb7519	1X		ND
GG 36	12	FAU8150-7cf					ND not needed
GG 37	13	FAU4005-1				pii	3,5 dini >40%
GG 38	14	-3					3,5 dini >40%
GG 39	15	-5					3,5 dini >40%
GG 40	16	opb64538-mB		opb7538			ND
GG 41	17	FAU8952-1Acf				pii	✓
GG 42	18	-2Acf				pii	✓
GG ✓ 43	19	opb7536-mB	✓	opb7536	✓		ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

SGS ACCUTEST-ORLANDO

DATE:	11/3/17
COLUMN TYPE:	Bives RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330 RPB -1113
CALIB. DATE:	11/3/17
RUN BATCH:	GGG 2571

ANALYST:	EM
ACETONITRILE LOT #:	343
MEOH LOT #:	171002
HEAD PRESSURE:	52

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 0138[illegible]	20	FA49040-1cf	8330	op67534	1X	pii	✓
GG 45	8	CC2571-1000		LC949	1:1	pii	PASS
GG 46	1	CCB					ND
GG 47	21	FA49040-1cf		op67534	8/400	50X pii	✓
GG 48	22	-2			1X		✓
GG 49	23	-2			10/400	4X	✓
GG 50	24	-3			1X	✓	✓
GG 51	25	-3			10/400	4X	R2 @ 10X
GG 52	26	-4			1X		✓
GG 53	27	-5			↓		TNT>40% 2,4dini
GG 54	28	-5			10/400	4X	✓
GG 55	29	FA49077-1		✓	1X		✓
GG 56	8	CC2571-1000		LC949	1:1	pii	PASS
GG 57	1	CCB					ND
GG 58	30	op67540-MB		op67540	1X		ND
GG 59	31	FA49042-1cf			↓		2Amino 40%
GG 60	32	-1		↓	10/400	4X pii	✓
GG 61	33	op67576-MB		op67576	1X		ND
GG 62	34	FA49036-3cf					ND
GG 63	35	-10cf		↓	↓		ND
GG 64	8	CC2571-1000		LC949	1:1	pii	PASS

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	5/3/18
COLUMN TYPE:	3005 RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A/B
ACQ. METHOD:	8330 RPB3
PROC. METHOD:	8330 RPB1113
CALIB. DATE:	11/3/17
RUN BATCH: GGG	2624

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	171

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG b1453c	1	CCB	8330	—			ND
GG 37	2	CC2571-1000		LC1000	1:1	pii	pass
GG 38	3	op69838-PTI		op69838	1X		✓
GG 39	4	↓ -BS		↓	↓	↓	✓
GG 40	5	-MB					ND
GG 41	6	FAS3518-1					ND
GG 42	7	op69838-MS				pii	✓
GG 43	8	↓ -MSD				pii	✓
GG 44	9	Fa53518-4					
GG 45	10	↓ -7					ND
GG 46	11	↓ -10		↓	↓		ND
GG 47	12	CC2571-1000		LC1000	1:1	pii	pass
GG 48	1	CCB		—			ND
GG 49	9	Fa53518-2		op69838	1X		ND
GG 50	10	op69838-dup		↓	↓		ND
GG 51	11	↓ -dup2					ND
GG 52	12	Fa53518-3					ND
GG 53	14	-5					ND
GG 54	15	-6					ND
GG 55	17	↓ -8	↓	↓	↓		ND

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: E Lewis

SGS ACCUTEST-ORLANDO

DATE:	5/3/18
COLUMN TYPE:	Luna RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS:	8330 A1B
ACQ. METHOD:	8330 RP B3
PROC. METHOD:	8330 RPB1113
CALIB. DATE:	11/13/17
RUN BATCH: GGG	2624

ANALYST:	EM
ACETONITRILE LOT #:	3520
MEOH LOT #:	—
HEAD PRESSURE:	171

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 614556	18	FA53518-9	8330	OP69838	1		ND
GG 57	19	-10					ND
GG 58	20	-11					ND
GG 59	2	CC2571-1000		LC1020	1:1	PII	PASS
GG 60	1	CCR		—			ND
GG 61	21	FA53518-12		OP69838	1		ND
GG 62	22	OP69838-GB1					ND
GG 63	23	-GB2					ND
GG 64	24	-GB3					ND
GG 65	25	test pH 5.05g					test
GG 66	26	OP69897-BS		OP69897		PII	
GG 67	27	-MB					
GG 68	28	FA53801-22					
GG 69	29	FA53816-13					
GG 70	30	-N					
GG 71	2	CC2571-1000		LC1020	1:1	PII	PASS
GG							
GG							
GG						NA CCV	5/3/18
GG							

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

SGS - ORLANDO

SPE LIQUID SAMPLE PREP REPORT

Date/Time: Started 05/03/18 0800 {mm/dd/yy 24:00}

Date/Time: Finished 05/03/18 1300 {mm/dd/yy 24:00}

Prep Method: (3535A) or 537 or 537MOD (circle)

Analytical Method: 8330B

Batch#: OP69897 Ext. By: MB Conc. By: ✓ Vialed By: MB

Sample ID	Bottle Number	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Manifold ID	Comments
OP 69897 MB	X	1000	6	N/A	250ul		10ml	N/A	
OP 69897 BS	X	1000	↓	↓	↓	25+25ul 250	↓	↓	
FA53801-22	3	1060							
FA53896-13	2	1060							
-14	3	1050							
					MB 05/03/18				
MS									
MSD									
DUP									

Comments:

Surr.1 ID: E6244B Conc: 20ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6249 Conc: 20ppm Exp. Date: 10/19/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8937C Conc: 1000ug/ml Exp. Date: 04/29/19 Inj. By: MB Ver. By MB

Spk.3 ID: 8992C Conc: 1000ug/ml Exp. Date: 04/29/19 Inj. By: MB Ver. By MB

TurboVap Temp (Therm ID): ✓

Observed Temp °C: ✓ Corr. Temp °C: ✓

N-Evap Temp (Therm ID): ✓

Observed Temp °C: ✓ Corr. Temp °C: ✓

Methanol Lot # ✓

Acetonitrile Lot # 176139

Water Lot# DI H2O

Solvent# ✓

SPE Lot # 5214-0071

Syringe filter Lot # ✓

Pre-filter Lot# ✓

Carbon Lot# ✓

pH Paper # 230017

Reagent # ✓

Reagent # ✓

Other ✓

Relinquished By: 1330 Date: 05/03/18

Accepted By: Date: 5/3/18

ORLD-EXT-0001-3-08-FORM-extwater_spe.xls 032718

7.8.1

7

SGS ACCUTEST - ORLANDO **EXP/PFC SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B, 537MOD (PFC) or Other — (circle)

Date/Time: 05/14/18 1400 Started {mm/dd/yy 24:00}

Therm. ID: — Corr. Factor (±°C): —

Bath Temp. (High) °C : —/— {obs/corr}

Date/Time: 05/15/18 0930 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332): —

Shaker Table ID (8330B): ST1

Batch#: OP 70034 Ext. By: MB Vialed By: MB Balance ID: METTLER 1

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 70034 MB	X	10.00	1.25ml		50 ml	
OP 70034 BS	X	10.00		125+125ul 1.25ml		
FA53896-1	1	10.16				
-2	1	10.03				
-3	1	10.15				
-4	1	10.12				
-5	1	10.08				
-6	1	10.12				
-7	1	10.12				
-8	1	10.01				
-9	1	10.05				
-10	1	10.09				
-11	1	10.07				
-12	1	10.05				
GRINDING BLANK	A	10.00				
	B	10.00				
	C	10.00				
				MB	05/15/18	
OP 70034 PT-1	X	5.00	1.25ml		50 ml	
FA53896 MS	1	10.10		125+125ul 1.25ml		
-1 MSD	1	10.14				
FA53896-4 DUP	1	10.15				
-4 TRP	1	10.14				

Comments:

Surr. ID: E6744J Conc: 20ppm Exp. Date: 10/17/18 Inj. By: MB Ver. By MB

Spk.1 ID: E6264 Conc: 20ppm Exp. Date: 11/09/18 Inj. By: MB Ver. By MB

Spk.2 ID: 8992E 8937E Conc: 1000ng/ml 1000ng/ml Exp. Date: 05/08/19 Inj. By: MB Ver. By MB

Acetonitrile Lot # 176139 Methanol Lot # — Water Lot# 180700 HPLC

Syringe Filter Lot# 160802028 Reagent # CS1 Reagent # C MB 05/14/18

Relinquished By: Date: 05/15/18

Accepted By: 1016 Date: 5/15/18

NF 05/16 extsolid_exp 051616.xls

7.8.2 7

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14875
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:14	MA14875-STD1	1		STDA
10:18	MA14875-STD2	1		STDB
10:22	MA14875-STD3	1		STDC
10:25	MA14875-STD4	1		STDD
10:29	MA14875-STD5	1		STDE
10:33	MA14875-STD6	1		STDF
10:37	MA14875-STD7	1		STDG
10:44	MA14875-HSTD1	1		
10:48	MA14875-ICV1	1		
10:51	MA14875-ICB1	1		
10:55	MA14875-CRIA1	1		
10:59	MA14875-ICSA1	1		
11:02	MA14875-ICSAB1	1		
11:10	MA14875-CCV1	1		
11:13	MA14875-CCB1	1		
11:17	MP33699-MB1	2		
11:21	MP33699-B1	2		
11:24	FA53625-18F	2		(sample used for QC only; not part of login FA53896)
11:28	MP33699-D1	2		
11:31	MP33699-SD1	10		
11:35	MP33699-S1	2		
11:39	MP33699-S2	2		
11:42	MP33699-PS1	2		
11:46	ZZZZZZ	2		
11:50	ZZZZZZ	2		
11:57	MA14875-CCV2	1		
12:01	MA14875-CCB2	1		
12:04	ZZZZZZ	2		
12:08	ZZZZZZ	2		
12:11	ZZZZZZ	2		
12:15	ZZZZZZ	2		
12:19	ZZZZZZ	2		
12:22	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14875
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:26	ZZZZZZ	2		
12:30	FA53627-1	2		(sample used for QC only; not part of login FA53896)
12:33	MP33699-D2	2		
12:37	MP33699-SD2	10		
12:44	MA14875-CCV3	1		
12:48	MA14875-CCB3	1		
12:51	MP33699-S3	2		
12:55	MP33699-S4	2		
12:59	MP33699-PS2	2		
13:02	ZZZZZZ	2		
13:06	ZZZZZZ	2		
13:09	ZZZZZZ	2		
13:13	FA53896-13	2		
13:17	FA53896-14	2		
---------->	Last reportable sample/prep for job FA53896			
13:20	MA14875-CRIA2	1		
13:24	MA14875-ICSA2	1		
13:31	MA14875-CCV4	1		
13:35	MA14875-CCB4	1		
13:39	MA14875-ICSAB2	1		
13:46	MA14875-CCV5	1		
13:49	MA14875-CCB5	1		
---------->	Last reportable CCB for job FA53896			

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14875
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:14	MA14875-STD1	100	100	100	100	100	100	100	100
10:18	MA14875-STD2	97	99.5	99.5	99	99.5	99.8	100.2	100.3
10:22	MA14875-STD3	95.1	98.2	97.9	98	98.2	98.3	98.9	99.1
10:25	MA14875-STD4	93.1	95.1	95	96.1	94.7	97.2	97.4	95
10:29	MA14875-STD5	87.8	93.2	93.5	93.2	92.6	96.7	94.2	90.7
10:33	MA14875-STD6	84.1	92	91.2	91.2	91.5	96	91.7	87.3
10:37	MA14875-STD7	81	92.5	90.6	90.4	90.7	94.8	88.2	81.4
10:44	MA14875-HSTD1	85.6	92.3	89.8	89.9	89.9	94.4	88.4	81.5
10:48	MA14875-ICV1	84.4	91.5	90.4	90.8	90.7	96.1	91.8	85
10:51	MA14875-ICB1	87.7	90.9	93.3	93.5	93.9	97.4	97.9	95.3
10:55	MA14875-CRIA1	89	93.9	94.3	94.5	95.6	98.8	99.3	96.2
10:59	MA14875-ICSA1	73	92.9	86	83.7	84.1	88.3	75.8	73.4
11:02	MA14875-ICSAB1	67.1 !	90.8	85.2	83.6	83.8	88.7	76.1	71.3
11:10	MA14875-CCV1	75.8	88.6	88.8	89.2	89.4	95.7	91.8	84.8
11:13	MA14875-CCB1	84.9	88.1	91	91.5	92.4	97.3	98	93.2
11:17	MP33699-MB1	78.7	81.4	81.4	81.9	85.6	94	94	67.4 !
11:21	MP33699-B1	75.8	82.2	79	79.2	83.2	92.6	87.2	64.5 !
11:24	FA53625-18F	77	82.4	81.5	82.3	84.4	93.7	90.2	65.4 !
11:28	MP33699-D1	84.9	83.5	82.3	83	85.5	94.6	90.6	66.1 !
11:31	MP33699-SD1	87	89.5	91.2	91.3	92	97.2	97.9	84.1
11:35	MP33699-S1	80.4	82	79.4	79.9	81.5	92.1	85	61.1 !
11:39	MP33699-S2	74.4	83	79.5	79.7	82.4	92.7	85.5	61.5 !
11:42	MP33699-PS1	No results reported for the elements associated with this internal standard.							
11:46	ZZZZZZ	84.7	83.7	82.7	82.8	85	94.6	90.4	65.3 !
11:50	ZZZZZZ	101.5	89.9	77.6	77	79.9	86.1	71.3	56.1 !
11:57	MA14875-CCV2	87.7	92.1	90.6	91.5	90.3	97.3	92.8	85.9
12:01	MA14875-CCB2	92.1	91	92.4	93.2	92.9	98.4	99.1	93.9
12:04	ZZZZZZ	83.8	83.1	81.4	82.3	84.5	94.1	89.9	64.4 !
12:08	ZZZZZZ	84.6	83.5	82	82.3	84.7	94.8	89.8	65.3 !
12:11	ZZZZZZ	86.3	84.4	82.4	82.6	84.7	95	89.3	63.2 !
12:15	ZZZZZZ	83.5	85.1	82.5	82.8	84.9	95.4	89.3	65 !
12:19	ZZZZZZ	82.2	82.7	80.8	80.9	83.4	93.9	88.4	63.4 !
12:22	ZZZZZZ	84.4	82.6	81.3	81.5	83.3	94.6	90	64 !

INTERNAL STANDARD SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
Analyst: DM Run ID: MA14875
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
12:26	ZZZZZZ	86.5	83.7	83.2	83.7	86	95.8	94.6	65.1 !
12:30	FA53627-1	82.3	82.6	81.7	81.4	84.1	94.6	91	63.7 !
12:33	MP33699-D2	81.9	81.8	80.5	80.9	82.9	93.9	91.1	63.3 !
12:37	MP33699-SD2	91.4	88.2	89.4	89.9	90.1	97.2	97.6	83.1
12:44	MA14875-CCV3	83.7	90.7	88.6	89.1	88	96.5	92.2	83
12:48	MA14875-CCB3	87.5	89.5	90.1	90.3	90.9	97.5	98.1	90.7
12:51	MP33699-S3	77.2	79.3	77.6	77.9	79.3	91.3	84.8	60.9 !
12:55	MP33699-S4	76.5	81.3	78.9	78.9	80.5	92.6	86.4	62.3 !
12:59	MP33699-PS2	No results reported for the elements associated with this internal standard.							
13:02	ZZZZZZ	86.4	84	83.1	83.3	85	95.9	92.2	64.9 !
13:06	ZZZZZZ	85.2	86	84.8	85.4	87.4	96.4	95.7	67.2 !
13:09	ZZZZZZ	83.7	83.5	81.9	82.1	83.4	94	90	64.6 !
13:13	FA53896-13	81.7	83.6	81.9	81.9	83.7	94.8	90.7	64.6 !
13:17	FA53896-14	85.9	82.3	81.6	81	82.6	94	90.1	64.6 !
13:20	MA14875-CRIA2	93	92.7	92.9	93.1	93.3	99.7	101	92.2
13:24	MA14875-ICSA2	70.1	87.9	80.8	79.5	79.7	86.4	75.2	68.5 !
13:31	MA14875-CCV4	80.8	87.8	87.7	87	86.3	95.4	91.8	83.2
13:35	MA14875-CCB4	87	87.2	88.8	89.3	89	96.7	98.3	89.4
13:39	MA14875-ICSAB2	66 !	89.8	82.1	80.8	80.4	87.8	75.5	68.9 !
13:46	MA14875-CCV5	78.3	87.1	86.2	86.7	86.2	94.7	91.4	80
13:49	MA14875-CCB5	76.3	78.6	80.7	81.1	80.6	87.1	88.9	81.5

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium	70-130 %	70-130 %
Istd#3	Germanium (72-2)	70-130 %	70-130 %
Istd#4	Germanium (74-2)	70-130 %	70-130 %
Istd#5	Indium	70-130 %	70-130 %
Istd#6	Terbium	70-130 %	70-130 %
Istd#7	Bismuth	70-130 %	70-130 %
Istd#8	Tellurium	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14875 Units: ug/l

Time: / Sample ID:			10:51 ICB1		11:13 CCB1		12:01 CCB2		12:48 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	100	4.4								
Antimony	1.0	.1								
Arsenic	1.0	.1								
Barium	1.0	.1								
Beryllium	1.0	.1								
Cadmium	1.0	.1	anr							
Calcium	100	7.2								
Chromium	1.0	.1								
Cobalt	1.0	.1								
Copper	1.0	.1								
Iron	100	7.9	anr							
Lead	1.0	.1	0.00716	<1.0	0.00398	<1.0	0.00626	<1.0	0.0132	<1.0
Magnesium	100	5.2								
Manganese	1.0	.1								
Molybdenum	1.0	.1								
Nickel	1.0	.1								
Potassium	100	6.6								
Selenium	1.0	.11								
Silver	1.0	.1								
Sodium	100	4.8								
Strontium	1.0	.1								
Thallium	1.0	.1								
Tin	1.0	.1								
Titanium	1.0	.3								
Vanadium	1.0	.1								
Zinc	2.0	.29								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: result < RL Run ID: MA14875 Units: ug/l

Time: / Sample ID:			13:35 CCB4		13:49 CCB5	
Metal	RL	IDL	raw	final	raw	final
Aluminum	100	4.4				
Antimony	1.0	.1				
Arsenic	1.0	.1				
Barium	1.0	.1				
Beryllium	1.0	.1				
Cadmium	1.0	.1	anr			
Calcium	100	7.2				
Chromium	1.0	.1				
Cobalt	1.0	.1				
Copper	1.0	.1				
Iron	100	7.9	anr			
Lead	1.0	.1	0.0120	<1.0	0.0129	<1.0
Magnesium	100	5.2				
Manganese	1.0	.1				
Molybdenum	1.0	.1				
Nickel	1.0	.1				
Potassium	100	6.6				
Selenium	1.0	.11				
Silver	1.0	.1				
Sodium	100	4.8				
Strontium	1.0	.1				
Thallium	1.0	.1				
Tin	1.0	.1				
Titanium	1.0	.3				
Vanadium	1.0	.1				
Zinc	2.0	.29				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14875 Units: ug/l

Time:		10:48			11:10			11:57	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium									
Cobalt									
Copper									
Iron	anr								
Lead	100	99.5	99.5	100	98.7	98.7	100	99.0	99.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14875 Units: ug/l

Time: / Sample ID: / Metal	CCV True	12:44 CCV3 Results	% Rec	CCV True	13:31 CCV4 Results	% Rec	CCV True	13:46 CCV5 Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium									
Cobalt									
Copper									
Iron	anr								
Lead	100	98.5	98.5	100	98.2	98.2	100	97.6	97.6
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA14875 Units: ug/l

Time:		10:44	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium	anr		
Calcium			
Chromium			
Cobalt			
Copper			
Iron	anr		
Lead	200	199	99.5
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium			
Silver			
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: CRI 70-130% CRIA 80-120% Run ID: MA14875 Units: ug/l

Time:			10:55		13:20	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100	100				
Antimony	1.0	1.0				
Arsenic	1.0	1.0				
Barium	1.0	1.0				
Beryllium	1.0	1.0				
Cadmium	1.0	1.0	anr			
Calcium	100	100				
Chromium	1.0	1.0				
Cobalt	1.0	1.0				
Copper	1.0	1.0				
Iron	100	100	anr			
Lead	1.0	1.0	0.994	99.4	0.956	95.6
Magnesium	100	100				
Manganese	1.0	1.0				
Molybdenum	1.0	1.0				
Nickel	1.0	1.0				
Potassium	100	100				
Selenium	1.0	1.0				
Silver	1.0	1.0				
Sodium	100	100				
Strontium	1.0	1.0				
Thallium	1.0	1.0				
Tin	1.0	1.0				
Titanium	1.0	1.0				
Vanadium	1.0	1.0				
Zinc	1.0	1.0				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: XA050718M1.CSV Date Analyzed: 05/07/18 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA14875 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	10:59 ICSA1 Results	% Rec	11:02 ICSAB1 Results	% Rec	13:24 ICSA2 Results	% Rec	13:39 ICSAB2 Results	% Rec
Aluminum	100000	100000	97600	97.6	98100	98.1	97900	97.9	97000	97.0
Antimony			0.0586		0.0512		0.0474		0.0494	
Arsenic		20	0.0844		19.5	97.5	0.0893		19.6	98.0
Barium			0.0901		0.0803		0.0885		0.0874	
Beryllium			0.0174		0.00772		0.0145		0.0155	
Cadmium		20	0.388		18.4	92.0	0.386		18.5	92.5
Calcium	100000	100000	94900	94.9	95000	95.0	94700	94.7	94100	94.1
Chromium		20	1.30		21.3	106.5	1.31		21.5	107.5
Cobalt		20	0.0147		19.3	96.5	0.0137		19.3	96.5
Copper		20	0.0622		18.4	92.0	0.0180		18.3	91.5
Iron	100000	100000	101000	101.0	102000	102.0	105000	105.0	104000	104.0
Lead			0.117		0.131		0.112		0.127	
Magnesium	100000	100000	98900	98.9	99600	99.6	100000	100.0	99000	99.0
Manganese		20	0.196		20.2	101.0	0.225		20.4	102.0
Molybdenum	2000	2000	2060	103.0	2060	103.0	2150	107.5	2120	106.0
Nickel		20	0.0713		18.7	93.5	0.0504		18.6	93.0
Potassium	100000	100000	103000	103.0	104000	104.0	105000	105.0	104000	104.0
Selenium			0.0886		0.0456		0.0744		0.0510	
Silver		20	0.0373		17.2	86.0	0.0252		17.1	85.5
Sodium	100000	100000	99400	99.4	100000	100.0	101000	101.0	99700	99.7
Strontium			0.985		1.00		1.00		1.00	
Thallium			0.0110		0.00789		0.00509		0.00889	
Tin			0.105		0.0806		0.0798		0.0901	
Titanium	2000	2000	2020	101.0	2030	101.5	2040	102.0	2010	100.5
Vanadium			0.00276		0.00469		0.00426		0.00277	
Zinc		20	1.10		19.6	98.0	1.32		19.5	97.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:59	MA14907-STD1	1		STDA
09:03	MA14907-STD2	1		STDB
09:07	MA14907-STD3	1		STDC
09:11	MA14907-STD4	1		STDD
09:18	MA14907-HSTD1	1		
09:24	MA14907-ICV1	1		
09:31	MA14907-ICB1	1		
09:35	MA14907-CRIA1	1		
09:39	MA14907-CRIA2	1		
09:46	MA14907-ICSA1	1		
09:55	MA14907-ICSAB1	1		
10:03	MA14907-CCV1	1		
10:15	MA14907-CCB1	1		
10:20	MP33747-MB1	1		
10:24	MP33747-B1	1		
10:28	FA54170-4	5		(sample used for QC only; not part of login FA53896)
10:40	MP33747-D1	5		
10:45	MP33747-PS1	5		
10:55	MP33747-SD1	25		
11:00	MP33747-S1	5		
11:04	MP33747-S2	5		
11:08	ZZZZZZ	1		
11:13	MA14907-CCV2	1		
11:17	MA14907-CCB2	1		
11:21	ZZZZZZ	1		
11:25	MP33746-MB1	5		
11:29	MP33746-B1	5		
11:33	FA53725-34	5		(sample used for QC only; not part of login FA53896)
11:38	MP33746-D1	5		
11:42	MP33746-D2	5		
11:46	MP33746-SD1	25		
11:50	MP33746-PS1	5		
11:54	MP33746-S1	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:59	MP33746-S2	5		
12:03	MA14907-CCV3	1		
12:07	MA14907-CCB3	1		
12:11	ZZZZZZ	5		
12:15	ZZZZZZ	5		
12:19	ZZZZZZ	5		
12:23	ZZZZZZ	5		
12:27	ZZZZZZ	5		
12:32	ZZZZZZ	5		
12:36	ZZZZZZ	5		
12:40	FA53896-1A	5		
12:47	FA53896-4A	5		
---------->	Last reportable sample/prep for job FA53896			
12:51	ZZZZZZ	5		
12:55	MA14907-CCV4	1		
12:59	MA14907-CCB4	1		
13:24	MA14907-CCV5	1		
13:36	MA14907-CCB5	1		
13:39	MP33758-MB1	1		
13:44	MP33758-B1	1		
13:48	FA54232-1	5		(sample used for QC only; not part of login FA53896)
13:52	MP33758-D1	5		
13:56	MP33758-SD1	25		
14:00	MP33758-PS1	5		
14:04	MP33758-S1	5		
14:08	MP33758-S2	5		
14:13	ZZZZZZ	5		
14:17	ZZZZZZ	5		
14:21	MA14907-CCV6	1		
14:25	MA14907-CCB6	1		
14:29	ZZZZZZ	5		
14:33	ZZZZZZ	1		
14:37	ZZZZZZ	5		
14:42	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:46	ZZZZZZ	5		
14:50	ZZZZZZ	5		
14:54	ZZZZZZ	5		
14:59	ZZZZZZ	5		
15:03	ZZZZZZ	5		
15:07	ZZZZZZ	5		
15:11	MA14907-CCV7	1		
15:15	MA14907-CCB7	1		
15:20	ZZZZZZ	5		
15:24	ZZZZZZ	5		
15:28	ZZZZZZ	5		
15:32	ZZZZZZ	5		
15:37	ZZZZZZ	5		
15:41	ZZZZZZ	5		
15:45	ZZZZZZ	5		
15:49	MP33756-MB1	1		
15:54	MP33756-B1	1		
15:58	FA54229-1	1		(sample used for QC only; not part of login FA53896)
16:02	MA14907-CCV8	1		
16:06	MA14907-CCB8	1		
16:10	MP33756-D1	1		
16:15	MP33756-SD1	5		
16:19	MP33756-PS1	1		
16:23	MP33756-S1	1		
16:27	MP33756-S2	1		
16:31	ZZZZZZ	1		
16:35	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:44	ZZZZZZ	1		
16:48	ZZZZZZ	1		
16:52	MA14907-CCV9	1		
16:56	MA14907-CCB9	1		
17:00	MP33757-MB1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:05	MP33757-B1	1		
17:09	FA54160-1	1		(sample used for QC only; not part of login FA53896)
17:13	MP33757-D1	1		
17:17	MP33757-SD1	5		
17:22	MP33757-S1	1		
17:26	MP33757-S2	1		
17:30	ZZZZZZ	1		
17:34	ZZZZZZ	1		
17:38	ZZZZZZ	1		
17:43	MA14907-CCV10	1		
17:47	MA14907-CCB10	1		
17:51	FA54150-1L	1		(sample used for QC only; not part of login FA53896)
17:55	ZZZZZZ	1		
17:59	ZZZZZZ	1		
18:04	ZZZZZZ	1		
18:08	ZZZZZZ	1		
18:12	FA54199-1	1		(sample used for QC only; not part of login FA53896)
18:17	ZZZZZZ	1		
18:21	ZZZZZZ	1		
18:25	MP33757-D2	1		
18:29	MP33757-D3	1		
18:34	MA14907-CCV11	1		
18:38	MA14907-CCB11	1		
18:42	MP33757-D4	1		
18:46	MP33757-MB2	1		
18:51	MP33757-B2	1		
18:55	MP33757-MB3	1		
18:59	MP33757-B3	1		
19:03	MP33757-MB4	1		
19:07	MP33757-B4	1		
19:11	MP33739-MB1	1		
19:16	MP33739-B1	1		
19:20	FA54204-1	1		(sample used for QC only; not part of login FA53896)

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:24	MA14907-CCV12	1		
19:28	MA14907-CCB12	1		
19:32	MP33739-D1	1		
19:37	MP33739-SD1	5		
19:41	MP33739-PS1	1		
19:45	MP33739-S1	1		
19:49	MP33739-S2	1		
20:16	MA14907-CCV13	1		
20:20	MA14907-CCB13	1		
20:42	ZZZZZZ	1		
20:46	MA14907-CRIA3	1		
20:50	MA14907-ICSA2	1		
20:55	MA14907-ICSAB2	1		
20:59	MA14907-CCV14	1		
21:02	MA14907-CCB14	1		

----------> Last reportable CCB for job FA53896
Refer to raw data for calibration curve and standards.

8.2
8

INTERNAL STANDARD SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:59	MA14907-STD1	3107	23245	1518	1225
09:03	MA14907-STD2	3098	22994	1523	1163
09:07	MA14907-STD3	2941	21915	1488	1054
09:11	MA14907-STD4	2824	21292	1460	980
09:18	MA14907-HSTD1	2827	21766	1493	986
09:24	MA14907-ICV1	2914	22218	1499	1054
09:31	MA14907-ICB1	3022 R	22965 R	1494 R	1197 R
09:35	MA14907-CRIA1	3010			
09:39	MA14907-CRIA2	3000	23035	1518	1168
09:46	MA14907-ICSA1	2704	20734	1496	942
09:55	MA14907-ICSAB1	2610	20380	1461	910
10:03	MA14907-CCV1	2855	22382	1525	1048
10:15	MA14907-CCB1	3069	24206	1589	1234
10:20	MP33747-MB1	2949	23555	1537	1197
10:24	MP33747-B1	2877	22729	1518	1095
10:28	FA54170-4	2775	21844	1531	932
10:40	MP33747-D1	2840	22467	1558	922
10:45	MP33747-PS1	2732	21679	1509	915
10:55	MP33747-SD1	2797	22085	1475	1054
11:00	MP33747-S1	2890	22787	1586	943
11:04	MP33747-S2	2797	22288	1551	934
11:08	ZZZZZZ	2513	20315	1428	899
11:13	MA14907-CCV2	2811	22303	1514	1036
11:17	MA14907-CCB2	2898	22939	1477	1170
11:21	ZZZZZZ	2959	23531	1555	1141
11:25	MP33746-MB1	2922	23458	1516	1181
11:29	MP33746-B1	2855	22869	1480	1133
11:33	FA53725-34	2951	23109	1542	1123
11:38	MP33746-D1	2956	23206	1529	1122
11:42	MP33746-D2	2952	23098	1517	1119
11:46	MP33746-SD1	2936	23215	1530	1168
11:50	MP33746-PS1	2941	23162	1524	1116
11:54	MP33746-S1	2922	23040	1535	1097

INTERNAL STANDARD SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:59	MP33746-S2	2924	22944	1525	1092
12:03	MA14907-CCV3	2772	22442	1489	1027
12:07	MA14907-CCB3	2873	22884	1478	1170
12:11	ZZZZZZ	2901	23133	1517	1137
12:15	ZZZZZZ	2939	23644	1535	1115
12:19	ZZZZZZ	3067	24372	1609	1115
12:23	ZZZZZZ	2905	23211	1528	1115
12:27	ZZZZZZ	2882	23283	1512	1112
12:32	ZZZZZZ	2917	23547	1517	1119
12:36	ZZZZZZ	2927	23518	1536	1113
12:40	FA53896-1A	2964	23778	1549	1103
12:47	FA53896-4A	2928	23531	1534	1115
12:51	ZZZZZZ	2326	17908	1354	806
12:55	MA14907-CCV4	2784	22753	1544	1038
12:59	MA14907-CCB4	2872	23384	1507	1173
13:24	MA14907-CCV5	2753	22577	1529	1031
13:36	MA14907-CCB5	2836	22968	1499	1164
13:39	MP33758-MB1	2854	23440	1519	1175
13:44	MP33758-B1	2767	22488	1485	1070
13:48	FA54232-1	3044	24555	1633	1184
13:52	MP33758-D1	2894	23199	1539	1118
13:56	MP33758-SD1	2865	23072	1505	1150
14:00	MP33758-PS1	2921	23488	1565	1124
14:04	MP33758-S1	2865	22973	1548	1087
14:08	MP33758-S2	2880	22986	1525	1094
14:13	ZZZZZZ	2893	23216	1543	1120
14:17	ZZZZZZ	2846	23138	1533	1118
14:21	MA14907-CCV6	2790	22821	1534	1045
14:25	MA14907-CCB6	2849	23035	1491	1170
14:29	ZZZZZZ	2848	23086	1520	1112
14:33	ZZZZZZ	2885	23221	1556	1023
14:37	ZZZZZZ	2668	21615	1509	952
14:42	ZZZZZZ	3054	24728	1621	1145

INTERNAL STANDARD SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:46	ZZZZZZ	3136	25197	1655	1153
14:50	ZZZZZZ	3095	24705	1618	1146
14:54	ZZZZZZ	3385	27096	1788	1128
14:59	ZZZZZZ	3615	28939 !	1903 !	1166
15:03	ZZZZZZ	3157	25317	1659	1173
15:07	ZZZZZZ	3222	25661	1675	1181
15:11	MA14907-CCV7	2830	22759	1518	1069
15:15	MA14907-CCB7	2913	23219	1491	1203
15:20	ZZZZZZ	3267	25541	1674	1169
15:24	ZZZZZZ	3510	27358	1800	1175
15:28	ZZZZZZ	3541	27468	1808	1175
15:32	ZZZZZZ	3183	24704	1608	1178
15:37	ZZZZZZ	3385	25826	1688	1177
15:41	ZZZZZZ	3534	27070	1776	1168
15:45	ZZZZZZ	3744	28477	1891 !	1177
15:49	MP33756-MB1	2969	22908	1474	1208
15:54	MP33756-B1	2891	22412	1480	1110
15:58	FA54229-1	2905	22637	1492	1156
16:02	MA14907-CCV8	2920	22536	1513	1078
16:06	MA14907-CCB8	3053	23390	1508	1233
16:10	MP33756-D1	2938	22586	1486	1158
16:15	MP33756-SD1	2997	23130	1517	1209
16:19	MP33756-PS1	2916	22723	1511	1137
16:23	MP33756-S1	2897	22337	1506	1089
16:27	MP33756-S2	2895	21982	1479	1082
16:31	ZZZZZZ	2916	22129	1481	1137
16:35	ZZZZZZ	2876	21968	1480	1115
16:39	ZZZZZZ	2908	22325	1510	1130
16:44	ZZZZZZ	2972	22961	1580	1154
16:48	ZZZZZZ	2986	23018	1580	1169
16:52	MA14907-CCV9	2991	22949	1620	1104
16:56	MA14907-CCB9	3112	24107	1633	1267
17:00	MP33757-MB1	3066	24015	1594	1250

INTERNAL STANDARD SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
17:05	MP33757-B1	2944	22763	1557	1126
17:09	FA54160-1	2927	22566	1587	1129
17:13	MP33757-D1	2937	22605	1577	1126
17:17	MP33757-SD1	3060	23252	1581	1201
17:22	MP33757-S1	2964	22551	1607	1092
17:26	MP33757-S2	2964	22572	1595	1089
17:30	ZZZZZZ	2922	22307	1566	1109
17:34	ZZZZZZ	2958	22767	1606	1131
17:38	ZZZZZZ	2970	22685	1601	1137
17:43	MA14907-CCV10	3017	22904	1611	1109
17:47	MA14907-CCB10	3140	23851	1614	1265
17:51	FA54150-1L	2915	22134	1556	1105
17:55	ZZZZZZ	2918	22058	1548	1102
17:59	ZZZZZZ	2918	22145	1578	1104
18:04	ZZZZZZ	3033	23491	1592	1212
18:08	ZZZZZZ	3002	23234	1606	1186
18:12	FA54199-1	2893	22402	1599	1109
18:17	ZZZZZZ	2886	22279	1569	1109
18:21	ZZZZZZ	2927	22199	1567	1107
18:25	MP33757-D2	2949	22436	1581	1127
18:29	MP33757-D3	2890	22226	1580	1108
18:34	MA14907-CCV11	3018	23025	1616	1109
18:38	MA14907-CCB11	3139	23560	1596	1261
18:42	MP33757-D4	2899	22177	1572	1100
18:46	MP33757-MB2	3122	23731	1597	1259
18:51	MP33757-B2	3011	22824	1562	1143
18:55	MP33757-MB3	3095	23800	1601	1255
18:59	MP33757-B3	2988	22961	1560	1140
19:03	MP33757-MB4	2948	22539	1576	1134
19:07	MP33757-B4	2933	22361	1583	1090
19:11	MP33739-MB1	3157	24429	1632	1279
19:16	MP33739-B1	3015	22997	1588	1145
19:20	FA54204-1	2065	16151	1462	704 !

INTERNAL STANDARD SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
Analyst: LM Run ID: MA14907
Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
19:24	MA14907-CCV12	3022	24031	1742	1128
19:28	MA14907-CCB12	3175	25012	1758	1306
19:32	MP33739-D1	2023	15955	1464	693 !
19:37	MP33739-SD1	2586	20108	1649	936
19:41	MP33739-PS1	2084	16319	1471	701 !
19:45	MP33739-S1	2127	16537	1502	699 !
19:49	MP33739-S2	2123	16421	1491	695 !
20:16	MA14907-CCV13	3036	23843	1715	1124
20:20	MA14907-CCB13	3126	24393	1668	1272
20:42	ZZZZZZ	2816	21874	1620	1074
20:46	MA14907-CRIA3	3068	23969	1661	1227
20:50	MA14907-ICSA2	2709	21178	1617	963
20:55	MA14907-ICSAB2	2699	21141	1595	947
20:59	MA14907-CCV14	2974	23471	1671	1106
21:02	MA14907-CCB14	3087	24405	1652	1270

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			09:31 ICB1		10:15 CCB1		11:17 CCB2		12:07 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	-0.400	<5.0	0.100	<5.0	-0.500	<5.0	0.00	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			12:59 CCB4		13:36 CCB5		14:25 CCB6		15:15 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.300	<5.0	-0.300	<5.0	0.300	<5.0	0.00	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			16:06 CCB8		16:56 CCB9		17:47 CCB10		18:38 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.400	<5.0	-0.800	<5.0	-0.300	<5.0	0.100	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA14907 Units: ug/l

Time: / Sample ID:			19:28 CCB12		20:20 CCB13		21:02 CCB14	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	14	anr					
Antimony	6.0	1	anr					
Arsenic	10	1.3	anr					
Barium	200	1	anr					
Beryllium	4.0	.2	anr					
Cadmium	5.0	.2	anr					
Calcium	1000	50						
Chromium	10	1	anr					
Cobalt	50	.2	anr					
Copper	25	1	anr					
Iron	300	17	anr					
Lead	5.0	1	-0.700	<5.0	-0.700	<5.0	-1.20	<5.0
Magnesium	5000	35						
Manganese	15	.5	anr					
Molybdenum	50	.3	anr					
Nickel	40	.4	anr					
Potassium	10000	200						
Selenium	10	2.4	anr					
Silver	10	.7	anr					
Sodium	10000	500						
Strontium	10	.5						
Thallium	10	1.1	anr					
Tin	50	.9						
Titanium	10	.5						
Vanadium	50	.5	anr					
Zinc	20	3	anr					

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	ICV True	09:24 ICV1 Results	% Rec	CCV True	10:03 CCV1 Results	% Rec	CCV True	11:13 CCV2 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1950	97.5	2000	1930	96.5	2000	1930	96.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	12:03 CCV3 Results	% Rec	CCV True	12:55 CCV4 Results	% Rec	CCV True	13:24 CCV5 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1930	96.5	2000	1900	95.0	2000	1950	97.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	14:21 CCV6 Results	% Rec	CCV True	15:11 CCV7 Results	% Rec	CCV True	16:02 CCV8 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1940	97.0	2000	1930	96.5	2000	1970	98.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	16:52 CCV9 Results	% Rec	CCV True	17:43 CCV10 Results	% Rec	CCV True	18:34 CCV11 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1960	98.0	2000	1960	98.0	2000	1950	97.5
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

8.2.3

8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CCV True	19:24 CCV12 Results	% Rec	CCV True	20:16 CCV13 Results	% Rec	CCV True	20:59 CCV14 Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1920	96.0	2000	1940	97.0	2000	1960	98.0
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

8.2.3

8

HIGH STANDARD CHECK SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA14907 Units: ug/l

Time:		09:18	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	3950	98.8
Magnesium			
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	CRI True	CRIA True	09:35 CRIA1 Results	% Rec	09:39 CRIA2 Results	% Rec	20:46 CRIA3 Results	% Rec
Aluminum	400	200						
Antimony	10	5.0	anr					
Arsenic	20	10						
Barium	400	200						
Beryllium	10	5.0						
Cadmium	10	5.0						
Calcium	2000	1000						
Chromium	20	10						
Cobalt	100	50						
Copper	50	25						
Iron	600	300						
Lead	10	5.0			4.70	94.0	4.50	90.0
Magnesium	10000	5000						
Manganese	30	15						
Molybdenum	100	50						
Nickel	80	40						
Potassium	20000	10000						
Selenium	20	10						
Silver	20	10						
Sodium	20000	10000						
Strontium	20	10						
Thallium	20	10						
Tin	100	50						
Titanium	20	10						
Vanadium	100	50						
Zinc	40	20						

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

File ID: SB051718M1.ICP Date Analyzed: 05/17/18 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA14907 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	09:46 ICSA1 Results	% Rec	09:55 ICSAB1 Results	% Rec	20:50 ICSA2 Results	% Rec	20:55 ICSAB2 Results	% Rec
Aluminum	500000	500000	469000	93.8	476000	95.2	553000	110.6	556000	111.2
Antimony		1000	1.40		1050	105.0	4.90		1010	101.0
Arsenic		1000	-1.40		1120	112.0	1.50		1040	104.0
Barium		500	0.300		500	100.0	0.500		540	108.0
Beryllium		500	-0.200		481	96.2	-0.200		526	105.2
Cadmium		1000	0.00		930	93.0	-0.400		921	92.1
Calcium	500000	500000	431000	86.2	435000C	87.0	496000	99.2	499000	99.8
Chromium		500	-0.300		458	91.6	-0.400		515	103.0
Cobalt		500	0.00		478	95.6	-0.200		472	94.4
Copper		500	-0.800		527	105.4	-1.40		573	114.6
Iron	200000	200000	168000	84.0	175000	87.5	184000	92.0	188000	94.0
Lead		1000	0.200		937	93.7	-30.1*(a		918	91.8
Magnesium	500000	500000	478000	95.6	493000	98.6	505000	101.0	512000	102.4
Manganese		500	-0.100		480	96.0	-0.100		488	97.6
Molybdenum		1000	0.00		912	91.2	0.500		882	88.2
Nickel		1000	-0.400		985	98.5	0.700		899	89.9
Potassium			19.7		21.3		231		190	
Selenium		1000	0.00		1010	101.0	7.10		949	94.9
Silver		1000	-0.400		1010	101.0	-0.500		1030	103.0
Sodium			168		167		1490		1300	
Strontium		1000	0.100		963	96.3	-0.300		1080	108.0
Thallium		1000	0.00		933	93.3	-0.700		931	93.1
Tin		1000	0.500		974	97.4	0.700		848	84.8
Titanium		1000	0.300		935	93.5	0.600		988	98.8
Vanadium		500	-0.500		468	93.6	-0.200		468	93.6
Zinc		1000	-0.500		932	93.2	-1.80		894	89.4

(*) Outside of QC limits
(anr) Analyte not requested
(a) Possible instrument baseline drift.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/05/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	8.7	22		
Antimony	2.0	.2	.2		
Arsenic	2.0	.2	.21		
Barium	2.0	.2	.2		
Beryllium	2.0	.2	.2		
Cadmium	2.0	.2	.2		
Calcium	200	14	36		
Chromium	2.0	.2	.2		
Cobalt	2.0	.2	.2		
Copper	2.0	.2	.2		
Iron	200	16	23		
Lead	2.0	.2	.2	0.056	<2.0
Magnesium	200	10	19		
Manganese	2.0	.2	.2		
Molybdenum	2.0	.2	.39		
Nickel	2.0	.2	.2		
Potassium	200	13	75		
Selenium	2.0	.22	.22		
Silver	2.0	.2	.2		
Sodium	200	9.6	24		
Strontium	2.0	.2	.2		
Thallium	2.0	.2	.2		
Tin	2.0	.2	.2		
Titanium	2.0	.61	.88		
Vanadium	2.0	.2	.24		
Zinc	4.0	.58	1.7		

Associated samples MP33699: FA53896-13, FA53896-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/05/18 05/05/18

Metal	FA53625-18F Original	DUP	RPD	QC Limits	FA53625-18F Original	MS	Spikelot MPICPMS1 % Rec	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium	anr							
Calcium								
Chromium								
Cobalt								
Copper								
Iron	anr							
Lead	0.0	0.0	NC	0-20	0.0	215	200 107.5	80-120
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33699: FA53896-13, FA53896-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699 Methods: SW846 6020A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/05/18

Metal	FA53625-18F Original	MSD	Spikelot MPICPMS1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium	anr					
Calcium						
Chromium						
Cobalt						
Copper						
Iron	anr					
Lead	0.0	205	200	102.5	4.8	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP33699: FA53896-13, FA53896-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/05/18

Metal	BSP Result	Spikelot MPICPMS1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium				
Cobalt				
Copper				
Iron	anr			
Lead	207	200	103.5	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33699: FA53896-13, FA53896-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33699
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/05/18 05/05/18

Metal	FA53625-18F Original	SDL 2:10	%DIF	QC Limits	FA53627-1 Original	SDL 2:10	%DIF	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium	anr							
Calcium								
Chromium								
Cobalt								
Copper								
Iron	anr							
Lead	0.00	0.00	NC	0-10	0.228	0.00	100.0(a)	0-10
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33699: FA53896-13, FA53896-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	3.5		
Antimony	2.0	.1	.13		
Arsenic	1.0	.13	.2		
Barium	20	.1	.1		
Beryllium	0.50	.02	.05		
Cadmium	0.40	.02	.05		
Calcium	500	5	5		
Chromium	1.0	.1	.1		
Cobalt	5.0	.02	.05		
Copper	2.5	.1	.1		
Iron	30	1.7	1.7		
Lead	2.0	.1	.1	-0.012	<2.0
Magnesium	500	3.5	3.6		
Manganese	1.5	.05	.05		
Molybdenum	5.0	.03	.05		
Nickel	4.0	.04	.05		
Potassium	1000	20	20		
Selenium	2.0	.24	.24		
Silver	1.0	.07	.082		
Sodium	1000	50	50		
Strontium	1.0	.05	.05		
Thallium	1.0	.11	.11		
Tin	5.0	.09	.09		
Titanium	1.0	.05	.05		
Vanadium	5.0	.05	.05		
Zinc	2.0	.3	.3		

Associated samples MP33746: FA53896-1A, FA53896-4A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/16/18				05/16/18	
Metal	FA53725-34 Original	DUP	RPD	QC Limits	FA53725-34 Original	DUP	RPD	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	6.4	6.2	3.2	0-20	6.4	6.1	4.8	0-20
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP33746: FA53896-1A, FA53896-4A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	FA53725-34 Original MS		Spikelot MPFLICP2 % Rec		QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	6.4	16.1	9.94	97.5	80-120
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP33746: FA53896-1A, FA53896-4A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	FA53725-34 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	6.4	17.8	9.96	114.5	10.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP33746: FA53896-1A, FA53896-4A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/16/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	10	10	100.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33746: FA53896-1A, FA53896-4A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/16/18

Metal	FA53725-34 Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	320	298	6.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP33746: FA53896-1A, FA53896-4A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA53896
Account: KEMCAM - Kemron Environmental Services, Inc
Project: Ft Ord; CA

QC Batch ID: MP33746
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/16/18

Metal	Sample ml	Final ml	FA53725-34 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	319.8	313.404	358.5	0.2	2.5	50	90.2	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP33746: FA53896-1A, FA53896-4A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: AGICPMS1 **Effective Date:** 05/21/16

Analyte	IDL ug/l
Aluminum	4.35
Antimony	.1
Arsenic	.1
Arsenic	.1
Barium	.1
Beryllium	.1
Boron	.5
Cadmium	.1
Cadmium	.1
Calcium	7.2
Calcium	7.2
Chromium	.1
Chromium	.1
Cobalt	.1
Cobalt	.1
Copper	.1
Copper	.1
Iron	7.9
Iron	7.9
Lead	.1
Magnesium	5.2
Manganese	.1
Manganese	.1
Molybdenum	.1
Nickel	.1
Nickel	.1
Potassium	6.57
Selenium	.11
Selenium	.11
Silver	.1
Sodium	4.8
Strontium	.1
Thallium	.1
Tin	.1
Tin	.1
Titanium	.303
Vanadium	.1
Vanadium	.1
Zinc	.29
Zinc	.29

The above applies to the following instrument runs:
MA14875

Instrument Detection Limits

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA14907

Instrument Linear Ranges

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: AGICPMS1 **Effective Date:** 05/21/16

Analyte	Linear Range ug/l
Aluminum	100000
Antimony	1000
Arsenic	1000
Arsenic	1000
Barium	1000
Beryllium	1000
Cadmium	1000
Cadmium	1000
Calcium	100000
Calcium	100000
Chromium	1000
Chromium	1000
Cobalt	1000
Cobalt	1000
Copper	1000
Copper	1000
Iron	100000
Iron	100000
Lead	1000
Magnesium	100000
Manganese	1000
Manganese	1000
Molybdenum	1000
Nickel	1000
Nickel	1000
Potassium	100000
Selenium	1000
Selenium	1000
Silver	100
Sodium	100000
Strontium	1000
Thallium	1000
Tin	1000
Tin	1000
Titanium	1000
Vanadium	1000
Vanadium	1000
Zinc	1000
Zinc	1000

The above applies to the following instrument runs:
MA14875

Instrument Linear Ranges

Job Number: FA53896
Account: KEMCAM Kemron Environmental Services, Inc
Project: Ft Ord; CA

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA14907

Metals Analysis

Raw Data

Quantitation Report

File Name	001CALB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:06
Sample Name	Blank
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	-0.003	ug/l	-44.14	1,211.37	3.456E-03	Pulse	0.50	3
As			1	-0.002	ug/l	-83.17	17.67	5.040E-05	Pulse	1.00	3
Mo			1	0.001	ug/l	72.48	28.67	5.335E-05	Pulse	0.50	3
Pb			1	0.007	ug/l	16.00	4,095.50	3.511E-04	Pulse	1.00	3
Be			1	-0.001	ug/l	0.00	0.00	0.000E+00	Pulse	2.00	3
Ag			1	0.000	ug/l	105.00	100.67	1.873E-04	Pulse	0.50	3
Ba			1	0.003	ug/l	40.76	40.67	1.136E-05	Pulse	0.50	3
Tl			1	0.001	ug/l	23.55	291.33	2.497E-05	Pulse	0.50	3
Sn			1	0.013	ug/l	37.18	1,161.16	3.242E-04	Pulse	0.30	3
Sr			1	0.001	ug/l	87.07	1,339.38	3.740E-04	Pulse	0.50	3
[Pb]			1	0.007	ug/l	34.38	1,943.45	1.666E-04	Pulse	0.50	3
Ca			1	0.363	ug/l	117.85	214.00	5.075E-04	Pulse	0.50	3
Ti			1	0.012	ug/l	86.11	6.00	1.423E-05	Pulse	0.50	3
Na			1	-0.028	ug/l	-97.30	10,640.50	2.523E-02	Pulse	1.00	3
Mg			1	-0.008	ug/l	-259.49	358.33	8.498E-04	Pulse	1.00	3
K			1	0.031	ug/l	1164.70	13,080.00	3.102E-02	Pulse	1.00	3
V			1	-0.004	ug/l	-49.93	626.01	1.484E-03	Pulse	0.50	3
Mn			1	0.003	ug/l	245.18	1,555.40	4.437E-03	Pulse	0.50	3
Fe			1	0.016	ug/l	153.02	43,757.76	1.248E-01	Pulse	0.50	3
Co			1	0.000	ug/l	-118.65	54.67	1.560E-04	Pulse	0.50	3
Ni			1	0.031	ug/l	63.47	1,700.08	4.853E-03	Pulse	0.50	3
Cu			1	0.189	ug/l	17.48	23,809.40	6.794E-02	Pulse	0.50	3
Zn			1	0.297	ug/l	13.65	3,472.66	6.462E-03	Pulse	1.00	3
Cd			1	0.000	ug/l	69.71	7.33	1.364E-05	Pulse	0.50	3
Al			1	0.015	ug/l	851.12	426.67	1.012E-03	Pulse	1.00	3
Se			1	-0.006	ug/l	-516.97	22.00	7.136E-04	Pulse	3.00	3
Sb			1	-0.002	ug/l	-27.10	159.33	2.965E-04	Pulse	1.00	3
Se			1	-0.058	ug/l	-57.47	30.44	9.850E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,666,227.33	0.11	100.0	Analog	0.50	3
1	Sc		421,696.10	0.23	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		350,501.81	0.60	100.0	Pulse	0.30	3
1	In		3,581,696.80	0.19	100.0	Pulse	0.30	3
1	Tb		15,294,676.67	0.50	100.0	Analog	0.50	3
1	Lu		9,059,156.33	1.03	100.0	Analog	0.50	3
1	Ge		537,402.58	0.14	100.0	Pulse	0.30	3
1	Te		30,886.03	1.19	100.0	Pulse	0.50	3
1	Li		3,308.07	2.27	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:10
Sample Name	Blank
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	-0.004	ug/l	-142.46	1,170.04	3.391E-03	Pulse	0.50	3
As			1	-0.003	ug/l	-59.39	16.00	4.638E-05	Pulse	1.00	3
Mo			1	0.001	ug/l	163.98	40.67	7.663E-05	Pulse	0.50	3
Pb			1	0.001	ug/l	83.45	3,440.35	2.971E-04	Pulse	1.00	3
Be			1	0.007	ug/l	28.43	1.17	2.785E-06	Pulse	2.00	3
Ag			1	0.000	ug/l	-180.74	62.67	1.182E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	515.93	24.67	6.951E-06	Pulse	0.50	3
Tl			1	0.000	ug/l	150.74	164.00	1.416E-05	Pulse	0.50	3
Sn			1	0.001	ug/l	604.45	996.70	2.807E-04	Pulse	0.30	3
Sr			1	0.007	ug/l	100.99	1,387.39	3.906E-04	Pulse	0.50	3
[Pb]			1	0.000	ug/l	290.74	1,624.08	1.402E-04	Pulse	0.50	3
Ca			1	-0.484	ug/l	-65.20	172.67	4.123E-04	Pulse	0.50	3
Ti			1	0.002	ug/l	529.28	2.00	4.803E-06	Pulse	0.50	3
Na			1	-0.051	ug/l	-56.93	10,506.76	2.509E-02	Pulse	1.00	3
Mg			1	-0.014	ug/l	-61.38	349.33	8.344E-04	Pulse	1.00	3
K			1	0.095	ug/l	123.02	13,039.31	3.114E-02	Pulse	1.00	3
V			1	-0.003	ug/l	-116.09	642.01	1.534E-03	Pulse	0.50	3
Mn			1	-0.001	ug/l	-854.16	1,495.40	4.333E-03	Pulse	0.50	3
Fe			1	0.067	ug/l	130.84	43,993.95	1.275E-01	Pulse	0.50	3
Co			1	0.001	ug/l	76.17	105.34	3.053E-04	Pulse	0.50	3
Ni			1	-0.003	ug/l	-70.88	1,278.72	3.705E-03	Pulse	0.50	3
Cu			1	0.011	ug/l	16.19	17,648.75	5.114E-02	Pulse	0.50	3
Zn			1	0.035	ug/l	112.64	2,407.82	4.542E-03	Pulse	1.00	3
Cd			1	0.001	ug/l	64.69	8.67	1.634E-05	Pulse	0.50	3
Al			1	-0.018	ug/l	-436.55	413.67	9.882E-04	Pulse	1.00	3
Se			1	-0.032	ug/l	-3.84	17.56	5.688E-04	Pulse	3.00	3
Sb			1	0.001	ug/l	100.05	202.00	3.811E-04	Pulse	1.00	3
Se			1	-0.081	ug/l	-68.33	28.44	9.215E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,580,889.00	0.63	100.0	Analog	0.50	3
1	Sc		418,693.16	0.48	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		345,103.36	0.47	100.0	Pulse	0.30	3
1	In		3,551,610.27	0.41	100.0	Pulse	0.30	3
1	Tb		15,413,710.33	0.55	100.0	Analog	0.50	3
1	Lu		8,997,360.67	1.06	100.0	Analog	0.50	3
1	Ge		530,076.72	0.31	100.0	Pulse	0.30	3
1	Te		30,863.31	0.29	100.0	Pulse	0.50	3
1	Li		3,186.94	1.78	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:14
Sample Name	CALSTD-1
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.000	ug/l	---	1,260.71	3.621E-03	Pulse	0.50	3
As			1	0.000	ug/l	---	22.33	6.414E-05	Pulse	1.00	3
Mo			1	0.000	ug/l	---	20.00	3.757E-05	Pulse	0.50	3
Pb			1	0.000	ug/l	---	3,389.68	2.898E-04	Pulse	1.00	3
Be			1	0.000	ug/l	---	0.17	3.953E-07	Pulse	2.00	3
Ag			1	0.000	ug/l	---	69.33	1.306E-04	Pulse	0.50	3
Ba			1	0.000	ug/l	---	23.33	6.491E-06	Pulse	0.50	3
Tl			1	0.000	ug/l	---	138.00	1.179E-05	Pulse	0.50	3
Sn			1	0.000	ug/l	---	994.48	2.771E-04	Pulse	0.30	3
Sr			1	0.000	ug/l	---	1,326.72	3.694E-04	Pulse	0.50	3
[Pb]			1	0.000	ug/l	---	1,628.08	1.392E-04	Pulse	0.50	3
Ca			1	0.000	ug/l	---	195.34	4.667E-04	Pulse	0.50	3
Ti			1	0.000	ug/l	---	1.33	3.231E-06	Pulse	0.50	3
Na			1	0.000	ug/l	---	10,623.15	2.540E-02	Pulse	1.00	3
Mg			1	0.000	ug/l	---	364.67	8.720E-04	Pulse	1.00	3
K			1	0.000	ug/l	---	12,944.91	3.096E-02	Pulse	1.00	3
V			1	0.000	ug/l	---	690.68	1.652E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	---	1,516.73	4.357E-03	Pulse	0.50	3
Fe			1	0.000	ug/l	---	43,177.80	1.240E-01	Pulse	0.50	3
Co			1	0.000	ug/l	---	66.00	1.897E-04	Pulse	0.50	3
Ni			1	0.000	ug/l	---	1,328.05	3.814E-03	Pulse	0.50	3
Cu			1	0.000	ug/l	---	17,427.21	5.006E-02	Pulse	0.50	3
Zn			1	0.000	ug/l	---	2,279.14	4.285E-03	Pulse	1.00	3
Cd			1	0.000	ug/l	---	4.00	7.502E-06	Pulse	0.50	3
Al			1	0.000	ug/l	---	418.67	1.001E-03	Pulse	1.00	3
Se			1	0.000	ug/l	---	22.67	7.456E-04	Pulse	3.00	3
Sb			1	0.000	ug/l	---	187.67	3.529E-04	Pulse	1.00	3
Se			1	0.000	ug/l	---	34.78	1.146E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,695,586.33	0.58	100.0	Analog	0.50	3
1	Sc		418,217.40	1.17	100.0	Pulse	0.30	3

Quantitation Report

1	Ge		348,150.34	0.28	100.0	Pulse	0.30	3
1	In		3,590,281.52	0.52	100.0	Pulse	0.30	3
1	Tb		15,444,954.33	0.99	100.0	Analog	0.50	3
1	Lu		9,050,771.67	1.36	100.0	Analog	0.50	3
1	Ge		531,895.69	0.80	100.0	Pulse	0.30	3
1	Te		30,407.24	1.62	100.0	Pulse	0.50	3
1	Li		3,379.19	4.23	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:18
Sample Name	CALSTD-2
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.086	ug/l	2.54	3,207.61	9.261E-03	Pulse	0.50	3
As			1	0.098	ug/l	3.82	246.67	7.122E-04	Pulse	1.00	3
Mo			1	0.096	ug/l	3.13	1,590.07	3.019E-03	Pulse	0.50	3
Pb			1	0.134	ug/l	1.51	16,707.16	1.426E-03	Pulse	1.00	3
Be			1	0.118	ug/l	27.04	17.17	4.124E-05	Pulse	2.00	3
Ag			1	0.103	ug/l	1.23	6,548.51	1.243E-02	Pulse	0.50	3
Ba			1	0.106	ug/l	6.92	603.34	1.689E-04	Pulse	0.50	3
Tl			1	0.100	ug/l	3.30	14,897.86	1.272E-03	Pulse	0.50	3
Sn			1	0.100	ug/l	20.42	2,326.83	6.517E-04	Pulse	0.30	3
Sr			1	0.096	ug/l	7.89	2,350.16	6.580E-04	Pulse	0.50	3
[Pb]			1	0.137	ug/l	2.63	7,935.86	6.774E-04	Pulse	0.50	3
Ca			1	11.907	ug/l	1.86	750.69	1.804E-03	Pulse	0.50	3
Ti			1	0.119	ug/l	28.61	47.33	1.137E-04	Pulse	0.50	3
Na			1	10.343	ug/l	0.44	36,856.71	8.857E-02	Pulse	1.00	3
Mg			1	10.496	ug/l	0.10	11,866.52	2.852E-02	Pulse	1.00	3
K			1	10.215	ug/l	3.10	21,225.71	5.101E-02	Pulse	1.00	3
V			1	0.099	ug/l	7.32	2,292.81	5.510E-03	Pulse	0.50	3
Mn			1	0.000	ug/l	1070.94	1,512.06	4.365E-03	Pulse	0.50	3
Fe			1	8.038	ug/l	0.84	186,476.35	5.384E-01	Pulse	0.50	3
Co			1	0.098	ug/l	2.06	4,264.48	1.231E-02	Pulse	0.50	3
Ni			1	0.085	ug/l	5.82	2,317.48	6.692E-03	Pulse	0.50	3
Cu			1	0.012	ug/l	79.28	17,718.81	5.116E-02	Pulse	0.50	3
Zn			1	0.493	ug/l	10.20	4,157.12	7.895E-03	Pulse	1.00	3
Cd			1	0.105	ug/l	6.87	782.69	1.486E-03	Pulse	0.50	3
Al			1	13.359	ug/l	2.13	4,413.49	1.061E-02	Pulse	1.00	3
Se			1	0.063	ug/l	14.56	33.22	1.090E-03	Pulse	3.00	3
Sb			1	0.100	ug/l	5.82	1,622.08	3.080E-03	Pulse	1.00	3
Se			1	-0.035	ug/l	-155.24	31.89	1.048E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,714,547.00	0.43	100.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		416,130.36	0.38	99.5	Pulse	0.30	3
1	Ge		346,345.40	0.53	99.5	Pulse	0.30	3
1	In		3,571,202.78	0.77	99.5	Pulse	0.30	3
1	Tb		15,411,322.00	0.61	99.8	Analog	0.50	3
1	Lu		8,988,049.33	0.34	99.3	Analog	0.50	3
1	Ge		526,639.91	0.46	99.0	Pulse	0.30	3
1	Te		30,494.74	2.72	100.3	Pulse	0.50	3
1	Li		3,278.06	3.20	97.0	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:22
Sample Name	CALSTD-3
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.992	ug/l	0.64	23,325.28	6.842E-02	Pulse	0.50	3
As			1	0.984	ug/l	1.26	2,232.47	6.549E-03	Pulse	1.00	3
Mo			1	0.968	ug/l	1.30	15,651.88	3.004E-02	Pulse	0.50	3
Pb			1	1.014	ug/l	0.42	102,434.58	8.860E-03	Pulse	1.00	3
Be			1	0.996	ug/l	6.63	142.17	3.462E-04	Pulse	2.00	3
Ag			1	1.021	ug/l	0.87	63,884.10	1.226E-01	Pulse	0.50	3
Ba			1	1.004	ug/l	3.54	5,466.85	1.550E-03	Pulse	0.50	3
Tl			1	0.980	ug/l	1.04	143,363.91	1.240E-02	Pulse	0.50	3
Sn			1	1.166	ug/l	2.11	16,318.40	4.628E-03	Pulse	0.30	3
Sr			1	1.000	ug/l	0.35	11,951.80	3.389E-03	Pulse	0.50	3
[Pb]			1	1.032	ug/l	1.26	48,624.12	4.206E-03	Pulse	0.50	3
Ca			1	101.648	ug/l	5.40	4,879.96	1.188E-02	Pulse	0.50	3
Ti			1	0.872	ug/l	11.34	332.67	8.101E-04	Pulse	0.50	3
Na			1	103.759	ug/l	0.62	270,654.76	6.591E-01	Pulse	1.00	3
Mg			1	103.304	ug/l	0.79	112,092.75	2.729E-01	Pulse	1.00	3
K			1	100.556	ug/l	1.19	93,772.96	2.283E-01	Pulse	1.00	3
V			1	0.960	ug/l	1.91	16,094.00	3.919E-02	Pulse	0.50	3
Mn			1	1.058	ug/l	2.37	11,662.87	3.421E-02	Pulse	0.50	3
Fe			1	99.876	ug/l	0.82	1,797,645.92	5.273E+00	Pulse	0.50	3
Co			1	1.015	ug/l	0.77	42,920.66	1.259E-01	Pulse	0.50	3
Ni			1	1.010	ug/l	1.60	12,974.40	3.806E-02	Pulse	0.50	3
Cu			1	0.991	ug/l	1.52	49,047.38	1.439E-01	Pulse	0.50	3
Zn			1	1.736	ug/l	1.82	8,865.05	1.701E-02	Pulse	1.00	3
Cd			1	1.031	ug/l	1.16	7,561.57	1.451E-02	Pulse	0.50	3
Al			1	103.075	ug/l	0.43	30,846.05	7.511E-02	Pulse	1.00	3
Se			1	0.891	ug/l	4.94	169.22	5.614E-03	Pulse	3.00	3
Sb			1	0.984	ug/l	0.17	14,220.83	2.729E-02	Pulse	1.00	3
Se			1	0.811	ug/l	3.00	102.11	3.388E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,561,376.67	0.38	98.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		410,672.66	0.33	98.2	Pulse	0.30	3
1	Ge		340,925.79	1.00	97.9	Pulse	0.30	3
1	In		3,526,544.58	0.45	98.2	Pulse	0.30	3
1	Tb		15,188,956.00	0.40	98.3	Analog	0.50	3
1	Lu		8,914,852.00	0.65	98.5	Analog	0.50	3
1	Ge		521,128.68	0.49	98.0	Pulse	0.30	3
1	Te		30,140.78	0.64	99.1	Pulse	0.50	3
1	Li		3,214.72	1.00	95.1	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:25
Sample Name	CALSTD-4
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	10.507	ug/l	0.71	228,131.81	6.899E-01	Pulse	0.50	3
As			1	10.565	ug/l	0.15	23,050.53	6.970E-02	Pulse	1.00	3
Mo			1	10.057	ug/l	0.92	159,301.95	3.117E-01	Pulse	0.50	3
Pb			1	10.294	ug/l	0.57	994,480.23	8.729E-02	Pulse	1.00	3
Be			1	11.118	ug/l	3.07	1,535.56	3.861E-03	Pulse	2.00	3
Ag			1	10.608	ug/l	0.16	650,076.19	1.272E+00	Pulse	0.50	3
Ba			1	10.366	ug/l	2.27	54,153.92	1.594E-02	Pulse	0.50	3
Tl			1	10.199	ug/l	1.56	1,468,743.33	1.289E-01	Pulse	0.50	3
Sn			1	10.379	ug/l	0.89	132,530.48	3.900E-02	Pulse	0.30	3
Sr			1	10.119	ug/l	0.60	105,039.99	3.091E-02	Pulse	0.50	3
[Pb]			1	10.330	ug/l	1.73	465,542.74	4.086E-02	Pulse	0.50	3
Ca			1	1035.463	ug/l	1.14	46,438.01	1.168E-01	Pulse	0.50	3
Ti			1	10.328	ug/l	0.74	3,803.05	9.560E-03	Pulse	0.50	3
Na			1	1052.198	ug/l	0.47	2,566,064.92	6.451E+00	Pulse	1.00	3
Mg			1	1062.212	ug/l	0.44	1,113,134.29	2.798E+00	Pulse	1.00	3
K			1	1049.186	ug/l	0.06	831,504.69	2.090E+00	Pulse	1.00	3
V			1	10.399	ug/l	0.23	162,465.03	4.084E-01	Pulse	0.50	3
Mn			1	10.515	ug/l	0.70	99,535.59	3.010E-01	Pulse	0.50	3
Fe			1	1046.438	ug/l	0.47	17,881,785.33	5.407E+01	Analog	0.50	3
Co			1	10.537	ug/l	1.03	431,834.51	1.306E+00	Pulse	0.50	3
Ni			1	10.847	ug/l	0.92	122,922.14	3.717E-01	Pulse	0.50	3
Cu			1	10.890	ug/l	0.21	357,303.82	1.080E+00	Pulse	0.50	3
Zn			1	11.590	ug/l	1.36	45,610.98	8.925E-02	Pulse	1.00	3
Cd			1	10.679	ug/l	0.69	76,745.32	1.502E-01	Pulse	0.50	3
Al			1	1064.583	ug/l	0.19	304,860.39	7.664E-01	Pulse	1.00	3
Se			1	9.866	ug/l	2.81	1,579.40	5.465E-02	Pulse	3.00	3
Sb			1	10.258	ug/l	0.55	143,746.30	2.813E-01	Pulse	1.00	3
Se			1	9.628	ug/l	3.10	801.91	2.775E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,394,043.33	1.48	97.4	Analog	0.50	3
1	Sc		397,775.72	1.09	95.1	Pulse	0.30	3
1	Ge		330,708.82	0.97	95.0	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,398,449.31	1.30	94.7	Pulse	0.30	3
1	Tb		15,013,925.33	0.60	97.2	Analog	0.50	3
1	Lu		8,794,119.67	0.24	97.2	Analog	0.50	3
1	Ge		511,084.53	0.68	96.1	Pulse	0.30	3
1	Te		28,896.09	0.80	95.0	Pulse	0.50	3
1	Li		3,145.81	6.25	93.1	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:29
Sample Name	CALSTD-5
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.207	ug/l	0.53	1,047,290.29	3.217E+00	Pulse	0.50	3
As			1	49.973	ug/l	0.49	107,240.84	3.294E-01	Pulse	1.00	3
Mo			1	48.984	ug/l	0.36	752,147.42	1.518E+00	Pulse	0.50	3
Pb			1	49.217	ug/l	0.24	4,584,578.83	4.162E-01	Pulse	1.00	3
Be			1	52.381	ug/l	0.88	7,091.74	1.819E-02	Pulse	2.00	3
Ag			1	50.297	ug/l	0.48	2,987,978.00	6.030E+00	Pulse	0.50	3
Ba			1	49.875	ug/l	0.95	254,722.85	7.666E-02	Pulse	0.50	3
Tl			1	49.028	ug/l	0.14	6,825,462.00	6.197E-01	Analog	0.50	3
Sn			1	50.485	ug/l	0.52	626,823.01	1.886E-01	Pulse	0.30	3
Sr			1	49.004	ug/l	0.78	492,710.85	1.483E-01	Pulse	0.50	3
[Pb]			1	49.624	ug/l	1.17	2,156,244.33	1.958E-01	Pulse	0.50	3
Ca			1	4970.362	ug/l	1.24	217,786.97	5.587E-01	Pulse	0.50	3
Ti			1	49.541	ug/l	0.95	17,876.18	4.585E-02	Pulse	0.50	3
Na			1	4980.893	ug/l	0.60	11,868,677.00	3.044E+01	Analog	1.00	3
Mg			1	5041.655	ug/l	0.82	5,176,952.17	1.328E+01	Analog	1.00	3
K			1	4989.268	ug/l	0.47	3,830,169.50	9.824E+00	Pulse	1.00	3
V			1	49.454	ug/l	0.89	754,800.85	1.936E+00	Pulse	0.50	3
Mn			1	49.015	ug/l	0.59	451,545.14	1.387E+00	Pulse	0.50	3
Fe			1	4933.642	ug/l	0.62	82,833,874.67	2.545E+02	Analog	0.50	3
Co			1	49.869	ug/l	0.21	2,011,548.58	6.179E+00	Pulse	0.50	3
Ni			1	50.827	ug/l	0.87	562,391.52	1.728E+00	Pulse	0.50	3
Cu			1	51.112	ug/l	0.38	1,590,459.17	4.886E+00	Pulse	0.50	3
Zn			1	52.012	ug/l	0.39	191,042.12	3.856E-01	Pulse	1.00	3
Cd			1	51.137	ug/l	0.47	356,287.95	7.190E-01	Pulse	0.50	3
Al			1	4971.404	ug/l	0.49	1,393,905.00	3.575E+00	Pulse	1.00	3
Se			1	47.756	ug/l	3.33	7,214.58	2.617E-01	Pulse	3.00	3
Sb			1	49.771	ug/l	0.85	675,470.58	1.363E+00	Pulse	1.00	3
Se			1	47.758	ug/l	1.82	3,670.80	1.331E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,014,390.67	0.25	94.2	Analog	0.50	3
1	Sc		389,880.06	1.42	93.2	Pulse	0.30	3
1	Ge		325,518.00	0.61	93.5	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,323,140.35	1.10	92.6	Pulse	0.30	3
1	Tb		14,928,530.67	0.88	96.7	Analog	0.50	3
1	Lu		8,742,090.33	0.36	96.6	Analog	0.50	3
1	Ge		495,494.13	1.20	93.2	Pulse	0.30	3
1	Te		27,582.15	2.21	90.7	Pulse	0.50	3
1	Li		2,968.02	4.27	87.8	Pulse	0.30	3

Quantitation Report

File Name 008CALS.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 10:33
Sample Name CALSTD-6
Sample Type CalStd
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	100.417	ug/l	0.69	2,082,774.63	6.562E+00	Pulse	0.50	3
As			1	100.912	ug/l	0.72	211,126.80	6.652E-01	Pulse	1.00	3
Mo			1	100.267	ug/l	1.42	1,507,296.96	3.107E+00	Pulse	0.50	3
Pb			1	99.665	ug/l	0.25	9,040,397.67	8.426E-01	Analog	1.00	3
Be			1	102.972	ug/l	1.09	13,758.30	3.576E-02	Pulse	2.00	3
Ag			1	99.791	ug/l	0.65	5,804,074.67	1.196E+01	Pulse	0.50	3
Ba			1	100.326	ug/l	0.60	506,401.26	1.542E-01	Pulse	0.50	3
Tl			1	100.065	ug/l	0.84	13,569,770.67	1.265E+00	Analog	0.50	3
Sn			1	100.782	ug/l	1.04	1,235,726.90	3.763E-01	Pulse	0.30	3
Sr			1	100.384	ug/l	0.76	996,279.65	3.034E-01	Pulse	0.50	3
[Pb]			1	100.402	ug/l	1.40	4,248,180.17	3.959E-01	Pulse	0.50	3
Ca			1	10045.296	ug/l	1.51	434,275.25	1.129E+00	Pulse	0.50	3
Ti			1	100.486	ug/l	1.05	35,783.96	9.299E-02	Pulse	0.50	3
Na			1	10124.046	ug/l	1.25	23,799,449.33	6.185E+01	Analog	1.00	3
Mg			1	10120.470	ug/l	1.06	10,256,540.00	2.666E+01	Analog	1.00	3
K			1	10057.387	ug/l	0.89	7,608,219.67	1.977E+01	Analog	1.00	3
V			1	100.220	ug/l	1.58	1,509,072.17	3.922E+00	Pulse	0.50	3
Mn			1	100.038	ug/l	0.41	897,145.77	2.827E+00	Pulse	0.50	3
Fe			1	10054.984	ug/l	0.36	164,570,917.33	5.185E+02	Analog	0.50	3
Co			1	100.591	ug/l	0.13	3,956,136.92	1.246E+01	Pulse	0.50	3
Ni			1	102.101	ug/l	0.73	1,100,283.63	3.467E+00	Pulse	0.50	3
Cu			1	102.489	ug/l	0.07	3,093,624.67	9.747E+00	Pulse	0.50	3
Zn			1	103.131	ug/l	0.32	368,824.92	7.603E-01	Pulse	1.00	3
Cd			1	102.722	ug/l	0.75	700,669.35	1.444E+00	Pulse	0.50	3
Al			1	10101.696	ug/l	1.22	2,795,045.42	7.264E+00	Pulse	1.00	3
Se			1	97.253	ug/l	1.56	14,124.76	5.321E-01	Pulse	3.00	3
Sb			1	100.675	ug/l	0.50	1,337,598.96	2.757E+00	Pulse	1.00	3
Se			1	98.557	ug/l	0.87	7,260.16	2.735E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,729,280.33	0.31	91.7	Analog	0.50	3
1	Sc		384,804.15	0.97	92.0	Pulse	0.30	3
1	Ge		317,398.73	0.66	91.2	Pulse	0.30	3
1	In		3,284,363.48	0.90	91.5	Pulse	0.30	3
1	Tb		14,832,398.33	0.88	96.0	Analog	0.50	3
1	Lu		8,759,279.67	1.18	96.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		485,116.84	0.54	91.2	Pulse	0.30	3
1	Te		26,549.26	1.77	87.3	Pulse	0.50	3
1	Li		2,842.44	3.29	84.1	Pulse	0.30	3

Quantitation Report

File Name 009CALS.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 10:37
Sample Name CALSTD-7
Sample Type CalStd
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	199.964	ug/l	0.27	4,121,949.08	1.306E+01	Pulse	0.50	3
As			1	199.523	ug/l	0.84	414,967.23	1.315E+00	Pulse	1.00	3
Mo			1	200.118	ug/l	0.60	2,982,530.50	6.201E+00	Pulse	0.50	3
Pb			1	200.348	ug/l	0.13	17,469,630.67	1.694E+00	Analog	1.00	3
Be			1	197.863	ug/l	0.45	26,583.31	6.871E-02	Pulse	2.00	3
Ag			1	140.294	ug/l	0.39	8,089,712.67	1.682E+01	Analog	0.50	3
Ba			1	199.850	ug/l	0.87	999,675.00	3.071E-01	Pulse	0.50	3
Tl			1	200.201	ug/l	0.33	26,102,612.67	2.530E+00	Analog	0.50	3
Sn			1	199.468	ug/l	0.50	2,422,980.11	7.444E-01	Pulse	0.30	3
Sr			1	200.051	ug/l	1.13	1,966,340.38	6.042E-01	Pulse	0.50	3
[Pb]			1	199.876	ug/l	0.24	8,129,810.50	7.881E-01	Analog	0.50	3
Ca			1	19982.979	ug/l	0.79	868,459.17	2.245E+00	Pulse	0.50	3
Ti			1	199.856	ug/l	0.78	71,561.84	1.849E-01	Pulse	0.50	3
Na			1	19940.125	ug/l	0.10	47,126,406.67	1.218E+02	Analog	1.00	3
Mg			1	19926.224	ug/l	0.54	20,305,510.00	5.248E+01	Analog	1.00	3
K			1	19971.527	ug/l	0.34	15,179,776.67	3.923E+01	Analog	1.00	3
V			1	200.007	ug/l	0.57	3,027,787.83	7.825E+00	Pulse	0.50	3
Mn			1	200.201	ug/l	1.17	1,783,400.58	5.652E+00	Pulse	0.50	3
Fe			1	19986.777	ug/l	0.25	325,164,458.67	1.031E+03	Analog	0.50	3
Co			1	199.710	ug/l	0.35	7,808,241.50	2.475E+01	Analog	0.50	3
Ni			1	198.700	ug/l	0.57	2,127,584.42	6.743E+00	Pulse	0.50	3
Cu			1	198.433	ug/l	1.23	5,939,490.17	1.882E+01	Analog	0.50	3
Zn			1	197.848	ug/l	0.30	699,575.58	1.455E+00	Pulse	1.00	3
Cd			1	198.321	ug/l	0.84	1,341,086.17	2.789E+00	Pulse	0.50	3
Al			1	19953.054	ug/l	0.57	5,550,992.83	1.435E+01	Analog	1.00	3
Se			1	201.942	ug/l	2.27	27,310.88	1.104E+00	Pulse	3.00	3
Sb			1	199.707	ug/l	0.42	2,630,380.67	5.469E+00	Pulse	1.00	3
Se			1	201.301	ug/l	2.49	13,787.54	5.574E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,315,690.67	0.19	88.2	Analog	0.50	3
1	Sc		386,922.63	0.99	92.5	Pulse	0.30	3
1	Ge		315,537.73	0.71	90.6	Pulse	0.30	3
1	In		3,254,855.91	1.01	90.7	Pulse	0.30	3
1	Tb		14,640,154.67	0.65	94.8	Analog	0.50	3
1	Lu		8,672,619.33	0.45	95.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		480,946.67	0.70	90.4	Pulse	0.30	3
1	Te		24,744.74	2.30	81.4	Pulse	0.50	3
1	Li		2,736.86	4.09	81.0	Pulse	0.30	3

Quantitation Report

File Name	010HSAG.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:40
Sample Name	HSTD (Ag)
Sample Type	HSTD _Ag
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	100.114	ug/l	1.66	2,064,361.13	6.542E+00	Pulse	0.50	3
As			1	100.621	ug/l	0.57	209,316.57	6.633E-01	Pulse	1.00	3
Mo			1	98.838	ug/l	1.37	1,487,148.50	3.063E+00	Pulse	0.50	3
Pb			1	98.421	ug/l	0.56	8,968,916.33	8.321E-01	Analog	1.00	3
Be			1	98.852	ug/l	1.16	13,315.18	3.433E-02	Pulse	2.00	3
Ag			1	97.918	ug/l	1.15	5,700,329.83	1.174E+01	Pulse	0.50	3
Ba			1	98.867	ug/l	0.39	501,253.37	1.519E-01	Pulse	0.50	3
Tl			1	98.960	ug/l	0.39	13,482,187.67	1.251E+00	Analog	0.50	3
Sn			1	99.256	ug/l	0.26	1,222,453.11	3.706E-01	Pulse	0.30	3
Sr			1	98.349	ug/l	0.48	980,432.50	2.972E-01	Pulse	0.50	3
[Pb]			1	97.658	ug/l	0.87	4,151,235.75	3.851E-01	Pulse	0.50	3
Ca			1	9766.713	ug/l	1.19	425,652.15	1.097E+00	Pulse	0.50	3
Ti			1	99.446	ug/l	0.37	35,702.43	9.203E-02	Pulse	0.50	3
Na			1	9827.460	ug/l	0.79	23,290,943.33	6.004E+01	Analog	1.00	3
Mg			1	9841.865	ug/l	1.32	10,055,103.67	2.592E+01	Analog	1.00	3
K			1	9826.200	ug/l	1.15	7,493,846.50	1.932E+01	Analog	1.00	3
V			1	98.317	ug/l	0.97	1,492,472.09	3.847E+00	Pulse	0.50	3
Mn			1	100.351	ug/l	1.52	894,714.25	2.835E+00	Pulse	0.50	3
Fe			1	10084.345	ug/l	1.10	164,095,349.33	5.200E+02	Analog	0.50	3
Co			1	99.143	ug/l	1.12	3,876,633.92	1.228E+01	Pulse	0.50	3
Ni			1	101.468	ug/l	1.14	1,087,162.83	3.445E+00	Pulse	0.50	3
Cu			1	101.481	ug/l	1.36	3,045,600.75	9.651E+00	Pulse	0.50	3
Zn			1	101.953	ug/l	1.57	364,945.91	7.516E-01	Pulse	1.00	3
Cd			1	100.309	ug/l	0.76	684,844.94	1.410E+00	Pulse	0.50	3
Al			1	9794.172	ug/l	0.94	2,732,019.42	7.043E+00	Pulse	1.00	3
Se			1	95.747	ug/l	2.27	14,002.34	5.239E-01	Pulse	3.00	3
Sb			1	99.344	ug/l	1.01	1,321,091.25	2.721E+00	Pulse	1.00	3
Se			1	95.590	ug/l	3.20	7,089.54	2.653E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,779,030.67	0.49	92.2	Analog	0.50	3
1	Sc		387,936.86	1.03	92.8	Pulse	0.30	3
1	Ge		315,587.12	1.14	90.6	Pulse	0.30	3
1	In		3,298,795.01	0.24	91.9	Pulse	0.30	3
1	Tb		14,784,565.67	0.80	95.7	Analog	0.50	3
1	Lu		8,730,460.33	0.67	96.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		485,570.72	0.88	91.3	Pulse	0.30	3
1	Te		26,735.52	2.02	87.9	Pulse	0.50	3
1	Li		2,767.98	4.53	81.9	Pulse	0.30	3

Quantitation Report

File Name 011HSTD.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 10:44
Sample Name HSTD
Sample Type HSTD
Comment =std 6
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	201.145	ug/l	1.02	4,107,661.83	1.314E+01	Pulse	0.50	3
As			1	200.944	ug/l	1.01	414,032.13	1.325E+00	Pulse	1.00	3
Mo			1	199.867	ug/l	0.39	2,962,735.75	6.194E+00	Pulse	0.50	3
Pb			1	199.427	ug/l	0.31	17,436,189.33	1.686E+00	Analog	1.00	3
Be			1	195.997	ug/l	0.57	26,264.22	6.806E-02	Pulse	2.00	3
Ag			1	139.616	ug/l	0.61	8,007,192.67	1.674E+01	Analog	0.50	3
Ba			1	201.937	ug/l	0.52	1,001,422.46	3.103E-01	Pulse	0.50	3
Tl			1	200.784	ug/l	0.49	26,249,551.33	2.538E+00	Analog	0.50	3
Sn			1	200.794	ug/l	1.15	2,417,986.22	7.494E-01	Pulse	0.30	3
Sr			1	201.530	ug/l	0.54	1,963,909.75	6.086E-01	Pulse	0.50	3
[Pb]			1	199.933	ug/l	1.10	8,154,016.67	7.883E-01	Analog	0.50	3
Ca			1	19869.777	ug/l	0.18	861,329.08	2.232E+00	Pulse	0.50	3
Ti			1	199.772	ug/l	1.18	71,345.16	1.849E-01	Pulse	0.50	3
Na			1	20027.879	ug/l	0.03	47,210,764.00	1.223E+02	Analog	1.00	3
Mg			1	19970.246	ug/l	0.19	20,297,956.67	5.260E+01	Analog	1.00	3
K			1	20123.506	ug/l	0.25	15,255,548.33	3.953E+01	Analog	1.00	3
V			1	199.669	ug/l	0.11	3,014,771.42	7.812E+00	Pulse	0.50	3
Mn			1	200.309	ug/l	1.40	1,767,753.42	5.655E+00	Pulse	0.50	3
Fe			1	20286.274	ug/l	0.98	326,955,584.00	1.046E+03	Analog	0.50	3
Co			1	202.720	ug/l	0.88	7,852,025.50	2.512E+01	Analog	0.50	3
Ni			1	200.882	ug/l	0.53	2,130,964.42	6.817E+00	Pulse	0.50	3
Cu			1	199.714	ug/l	0.70	5,922,411.67	1.895E+01	Analog	0.50	3
Zn			1	199.230	ug/l	0.78	700,648.81	1.465E+00	Pulse	1.00	3
Cd			1	198.574	ug/l	0.28	1,335,649.29	2.792E+00	Pulse	0.50	3
Al			1	20076.691	ug/l	0.46	5,570,961.17	1.444E+01	Analog	1.00	3
Se			1	202.530	ug/l	1.37	27,448.18	1.107E+00	Pulse	3.00	3
Sb			1	200.475	ug/l	0.37	2,626,274.67	5.490E+00	Pulse	1.00	3
Se			1	200.087	ug/l	0.94	13,734.28	5.540E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,343,537.33	0.38	88.4	Analog	0.50	3
1	Sc		385,915.10	0.56	92.3	Pulse	0.30	3
1	Ge		312,616.77	1.38	89.8	Pulse	0.30	3
1	In		3,226,845.91	1.01	89.9	Pulse	0.30	3
1	Tb		14,577,279.67	0.69	94.4	Analog	0.50	3
1	Lu		8,696,079.67	1.22	96.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		478,359.04	0.88	89.9	Pulse	0.30	3
1	Te		24,790.76	1.05	81.5	Pulse	0.50	3
1	Li		2,891.34	2.68	85.6	Pulse	0.30	3

Quantitation Report

File Name	012_ICV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:48
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	102.937	ug/l	0.44	2,117,094.42	6.727E+00	Pulse	0.50	3
As			1	103.619	ug/l	0.47	214,979.38	6.830E-01	Pulse	1.00	3
Mo			1	103.202	ug/l	0.22	1,544,658.29	3.198E+00	Pulse	0.50	3
Pb			1	99.511	ug/l	0.82	9,029,240.00	8.413E-01	Analog	1.00	3
Be			1	99.291	ug/l	2.06	13,197.77	3.448E-02	Pulse	2.00	3
Ag			1	49.280	ug/l	0.30	2,853,762.50	5.909E+00	Pulse	0.50	3
Ba			1	103.522	ug/l	0.93	518,019.73	1.591E-01	Pulse	0.50	3
Tl			1	98.840	ug/l	0.34	13,408,250.00	1.249E+00	Analog	0.50	3
Sn			1	107.863	ug/l	1.04	1,311,111.58	4.027E-01	Pulse	0.30	3
Sr			1	100.481	ug/l	0.60	988,651.90	3.036E-01	Pulse	0.50	3
[Pb]			1	98.795	ug/l	0.67	4,181,644.83	3.896E-01	Pulse	0.50	3
Ca			1	10030.439	ug/l	1.13	431,400.34	1.127E+00	Pulse	0.50	3
Ti			1	104.927	ug/l	1.87	37,171.19	9.710E-02	Pulse	0.50	3
Na			1	9924.526	ug/l	1.35	23,210,867.33	6.063E+01	Analog	1.00	3
Mg			1	10299.691	ug/l	1.18	10,384,691.33	2.713E+01	Analog	1.00	3
K			1	9928.743	ug/l	1.24	7,472,395.00	1.952E+01	Analog	1.00	3
V			1	104.064	ug/l	1.61	1,558,835.00	4.072E+00	Pulse	0.50	3
Mn			1	98.699	ug/l	0.98	877,733.23	2.789E+00	Pulse	0.50	3
Fe			1	10093.338	ug/l	0.97	163,809,898.67	5.205E+02	Analog	0.50	3
Co			1	101.129	ug/l	0.89	3,943,937.33	1.253E+01	Pulse	0.50	3
Ni			1	101.629	ug/l	0.94	1,086,025.63	3.451E+00	Pulse	0.50	3
Cu			1	103.397	ug/l	0.76	3,094,724.25	9.833E+00	Pulse	0.50	3
Zn			1	103.213	ug/l	0.67	367,487.84	7.609E-01	Pulse	1.00	3
Cd			1	101.356	ug/l	1.37	688,320.73	1.425E+00	Pulse	0.50	3
Al			1	9924.291	ug/l	1.14	2,731,914.33	7.136E+00	Pulse	1.00	3
Se			1	103.464	ug/l	1.20	14,627.14	5.660E-01	Pulse	3.00	3
Sb			1	103.189	ug/l	0.66	1,364,965.79	2.826E+00	Pulse	1.00	3
Se			1	103.409	ug/l	1.47	7,413.55	2.869E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,732,769.67	0.38	91.8	Analog	0.50	3
1	Sc		382,852.23	1.44	91.5	Pulse	0.30	3
1	Ge		314,743.75	0.60	90.4	Pulse	0.30	3
1	In		3,256,053.90	0.92	90.7	Pulse	0.30	3
1	Tb		14,849,430.67	0.51	96.1	Analog	0.50	3
1	Lu		8,773,493.33	0.28	96.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		482,988.12	0.61	90.8	Pulse	0.30	3
1	Te		25,842.94	0.82	85.0	Pulse	0.50	3
1	Li		2,851.33	3.72	84.4	Pulse	0.30	3

Quantitation Report

File Name	013_ICB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:51
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	-0.014	ug/l	-6.21	871.36	2.683E-03	Pulse	0.50	3
As			1	0.008	ug/l	31.03	37.67	1.161E-04	Pulse	1.00	3
Mo			1	0.027	ug/l	13.98	428.68	8.625E-04	Pulse	0.50	3
Pb			1	0.007	ug/l	28.27	4,010.48	3.503E-04	Pulse	1.00	3
Be			1	0.009	ug/l	24.48	1.33	3.506E-06	Pulse	2.00	3
Ag			1	0.008	ug/l	10.36	530.01	1.066E-03	Pulse	0.50	3
Ba			1	0.004	ug/l	36.04	44.67	1.326E-05	Pulse	0.50	3
Tl			1	0.031	ug/l	12.61	4,676.66	4.087E-04	Pulse	0.50	3
Sn			1	0.057	ug/l	5.78	1,650.10	4.896E-04	Pulse	0.30	3
Sr			1	-0.002	ug/l	-322.94	1,229.38	3.648E-04	Pulse	0.50	3
[Pb]			1	0.007	ug/l	18.59	1,889.45	1.650E-04	Pulse	0.50	3
Ca			1	-1.408	ug/l	-25.30	117.33	3.085E-04	Pulse	0.50	3
Ti			1	0.010	ug/l	146.42	4.67	1.226E-05	Pulse	0.50	3
Na			1	0.673	ug/l	26.49	11,225.48	2.951E-02	Pulse	1.00	3
Mg			1	0.280	ug/l	50.01	612.35	1.610E-03	Pulse	1.00	3
K			1	-0.408	ug/l	-8.84	11,468.67	3.015E-02	Pulse	1.00	3
V			1	-0.014	ug/l	-36.89	426.01	1.120E-03	Pulse	0.50	3
Mn			1	-0.128	ug/l	-1.14	240.67	7.411E-04	Pulse	0.50	3
Fe			1	0.339	ug/l	40.78	45,944.87	1.415E-01	Pulse	0.50	3
Co			1	0.004	ug/l	34.42	224.67	6.920E-04	Pulse	0.50	3
Ni			1	-0.065	ug/l	-0.60	518.01	1.595E-03	Pulse	0.50	3
Cu			1	-0.013	ug/l	-81.22	15,859.20	4.883E-02	Pulse	0.50	3
Zn			1	-0.205	ug/l	-5.05	1,384.38	2.785E-03	Pulse	1.00	3
Cd			1	0.005	ug/l	7.98	37.33	7.505E-05	Pulse	0.50	3
Al			1	0.170	ug/l	40.82	427.34	1.124E-03	Pulse	1.00	3
Se			1	0.011	ug/l	122.41	23.33	8.061E-04	Pulse	3.00	3
Sb			1	0.021	ug/l	14.57	467.34	9.397E-04	Pulse	1.00	3
Se			1	-0.055	ug/l	-108.97	28.78	9.929E-04	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,447,340.00	0.45	97.9	Analog	0.50	3
1	Sc		380,338.22	0.11	90.9	Pulse	0.30	3

Quantitation Report

1	Ge		324,764.26	0.88	93.3	Pulse	0.30	3
1	In		3,370,476.11	0.32	93.9	Pulse	0.30	3
1	Tb		15,041,928.33	0.59	97.4	Analog	0.50	3
1	Lu		8,809,932.67	0.20	97.3	Analog	0.50	3
1	Ge		497,202.24	1.03	93.5	Pulse	0.30	3
1	Te		28,966.94	1.22	95.3	Pulse	0.50	3
1	Li		2,963.57	2.27	87.7	Pulse	0.30	3

Quantitation Report

File Name	014LCCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:55
Sample Name	CRIA
Sample Type	CRIA
Comment	=std 2
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.979	ug/l	2.44	22,181.30	6.755E-02	Pulse	0.50	3
As			1	1.010	ug/l	2.38	2,207.13	6.721E-03	Pulse	1.00	3
Mo			1	0.976	ug/l	1.30	15,231.53	3.029E-02	Pulse	0.50	3
Pb			1	0.994	ug/l	0.52	100,869.85	8.687E-03	Pulse	1.00	3
Be			1	9.358	ug/l	153.71	1,267.27	3.250E-03	Pulse	2.00	3
Ag			1	1.033	ug/l	0.67	62,343.40	1.240E-01	Pulse	0.50	3
Ba			1	0.987	ug/l	2.55	5,230.77	1.523E-03	Pulse	0.50	3
Tl			1	0.981	ug/l	1.04	144,144.56	1.241E-02	Pulse	0.50	3
Sn			1	1.206	ug/l	4.38	16,394.04	4.775E-03	Pulse	0.30	3
Sr			1	0.968	ug/l	2.50	11,304.75	3.292E-03	Pulse	0.50	3
[Pb]			1	1.010	ug/l	1.38	47,854.03	4.122E-03	Pulse	0.50	3
Ca			1	183.901	ug/l	74.06	8,264.55	2.112E-02	Pulse	0.50	3
Ti			1	1.024	ug/l	5.78	373.34	9.508E-04	Pulse	0.50	3
Na			1	101.692	ug/l	1.59	253,745.75	6.464E-01	Pulse	1.00	3
Mg			1	101.514	ug/l	0.46	105,295.32	2.682E-01	Pulse	1.00	3
K			1	99.895	ug/l	0.90	89,123.52	2.270E-01	Pulse	1.00	3
V			1	0.971	ug/l	3.68	15,557.57	3.963E-02	Pulse	0.50	3
Mn			1	0.896	ug/l	3.70	9,727.79	2.963E-02	Pulse	0.50	3
Fe			1	100.166	ug/l	1.18	1,736,450.67	5.288E+00	Pulse	0.50	3
Co			1	1.017	ug/l	1.06	41,453.56	1.262E-01	Pulse	0.50	3
Ni			1	1.002	ug/l	0.50	12,408.67	3.779E-02	Pulse	0.50	3
Cu			1	0.987	ug/l	0.90	47,113.90	1.435E-01	Pulse	0.50	3
Zn			1	1.507	ug/l	1.50	7,710.22	1.533E-02	Pulse	1.00	3
Cd			1	1.060	ug/l	1.91	7,497.55	1.491E-02	Pulse	0.50	3
Al			1	101.149	ug/l	1.30	28,942.45	7.373E-02	Pulse	1.00	3
Se			1	0.903	ug/l	4.46	166.11	5.678E-03	Pulse	3.00	3
Sb			1	1.010	ug/l	0.47	14,087.40	2.802E-02	Pulse	1.00	3
Se			1	0.803	ug/l	8.68	98.33	3.363E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,611,149.33	0.64	99.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		392,558.90	0.70	93.9	Pulse	0.30	3
1	Ge		328,388.22	1.00	94.3	Pulse	0.30	3
1	In		3,433,895.91	0.41	95.6	Pulse	0.30	3
1	Tb		15,263,797.67	1.03	98.8	Analog	0.50	3
1	Lu		8,840,590.67	0.08	97.7	Analog	0.50	3
1	Ge		502,799.44	0.88	94.5	Pulse	0.30	3
1	Te		29,247.33	1.29	96.2	Pulse	0.50	3
1	Li		3,008.02	3.04	89.0	Pulse	0.30	3

Quantitation Report

File Name	015ICSA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 10:59
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.298	ug/l	0.86	26,448.57	8.838E-02	Pulse	0.50	3
As			1	0.084	ug/l	9.24	185.67	6.205E-04	Pulse	1.00	3
Mo			1	2062.056	ug/l	1.34	28,455,256.67	6.390E+01	Analog	0.50	3
Pb			1	0.117	ug/l	0.44	11,358.78	1.281E-03	Pulse	1.00	3
Be			1	0.017	ug/l	74.03	2.50	6.439E-06	Pulse	2.00	3
Ag			1	0.037	ug/l	2.56	2,048.12	4.599E-03	Pulse	0.50	3
Ba			1	0.090	ug/l	15.59	437.34	1.449E-04	Pulse	0.50	3
Tl			1	0.011	ug/l	14.38	1,339.39	1.510E-04	Pulse	0.50	3
Sn			1	0.105	ug/l	0.92	2,019.01	6.690E-04	Pulse	0.30	3
Sr			1	0.985	ug/l	3.81	10,092.06	3.344E-03	Pulse	0.50	3
[Pb]			1	0.118	ug/l	5.65	5,372.86	6.061E-04	Pulse	0.50	3
Ca			1	94902.257	ug/l	0.44	4,141,969.92	1.066E+01	Pulse	0.50	3
Ti			1	2018.657	ug/l	0.81	725,941.31	1.868E+00	Pulse	0.50	3
Na			1	99419.597	ug/l	0.50	235,954,122.67	6.072E+02	Analog	1.00	3
Mg			1	98888.990	ug/l	0.74	101,211,248.00	2.604E+02	Analog	1.00	3
K			1	102653.126	ug/l	1.37	78,311,549.33	2.015E+02	Analog	1.00	3
V			1	0.003	ug/l	74.44	684.01	1.760E-03	Pulse	0.50	3
Mn			1	0.196	ug/l	11.45	2,956.24	9.878E-03	Pulse	0.50	3
Fe			1	101188.851	ug/l	0.58	1,561,155,626.67	5.217E+03	Analog	0.50	3
Co			1	0.015	ug/l	2.93	601.34	2.010E-03	Pulse	0.50	3
Ni			1	0.071	ug/l	4.77	1,865.43	6.233E-03	Pulse	0.50	3
Cu			1	0.062	ug/l	12.99	16,741.26	5.594E-02	Pulse	0.50	3
Zn			1	1.105	ug/l	0.50	5,513.79	1.238E-02	Pulse	1.00	3
Cd			1	0.388	ug/l	7.52	2,430.17	5.458E-03	Pulse	0.50	3
Al			1	97569.747	ug/l	1.19	27,260,750.00	7.015E+01	Analog	1.00	3
Se			1	0.089	ug/l	24.83	27.45	1.230E-03	Pulse	3.00	3
Sb			1	0.059	ug/l	2.88	872.02	1.958E-03	Pulse	1.00	3
Se			1	0.258	ug/l	160.82	41.56	1.859E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,865,436.33	0.46	75.8	Analog	0.50	3
1	Sc		388,620.16	0.88	92.9	Pulse	0.30	3
1	Ge		299,255.37	0.23	86.0	Pulse	0.30	3
1	In		3,018,173.77	0.14	84.1	Pulse	0.30	3
1	Tb		13,637,890.33	0.60	88.3	Analog	0.50	3
1	Lu		8,166,596.83	0.08	90.2	Analog	0.50	3
1	Ge		445,326.15	0.62	83.7	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		22,314.93	0.99	73.4	Pulse	0.50	3
1	Li		2,465.72	3.99	73.0	Pulse	0.30	3

Quantitation Report

File Name	016ICSB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:02
Sample Name	ICSAB
Sample Type	ICSAB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	21.265	ug/l	0.80	413,088.88	1.392E+00	Pulse	0.50	3
As			1	19.519	ug/l	1.14	38,181.92	1.287E-01	Pulse	1.00	3
Mo			1	2057.712	ug/l	0.69	28,351,820.67	6.377E+01	Analog	0.50	3
Pb			1	0.131	ug/l	1.15	12,394.82	1.393E-03	Pulse	1.00	3
Be			1	0.008	ug/l	158.04	1.17	3.075E-06	Pulse	2.00	3
Ag			1	17.181	ug/l	0.40	915,952.40	2.060E+00	Pulse	0.50	3
Ba			1	0.080	ug/l	6.96	390.68	1.298E-04	Pulse	0.50	3
Tl			1	0.008	ug/l	18.40	991.37	1.115E-04	Pulse	0.50	3
Sn			1	0.081	ug/l	7.35	1,738.99	5.778E-04	Pulse	0.30	3
Sr			1	1.001	ug/l	0.93	10,206.12	3.391E-03	Pulse	0.50	3
[Pb]			1	0.131	ug/l	3.96	5,831.01	6.554E-04	Pulse	0.50	3
Ca			1	95026.527	ug/l	1.00	4,053,664.92	1.067E+01	Pulse	0.50	3
Ti			1	2029.914	ug/l	0.89	713,500.81	1.878E+00	Pulse	0.50	3
Na			1	100360.456	ug/l	0.61	232,806,618.67	6.129E+02	Analog	1.00	3
Mg			1	99581.735	ug/l	1.15	99,618,242.67	2.623E+02	Analog	1.00	3
K			1	103748.591	ug/l	1.40	77,361,946.67	2.037E+02	Analog	1.00	3
V			1	0.005	ug/l	79.18	697.35	1.836E-03	Pulse	0.50	3
Mn			1	20.176	ug/l	0.18	170,141.50	5.735E-01	Pulse	0.50	3
Fe			1	101682.522	ug/l	0.88	1,555,108,778.67	5.242E+03	Analog	0.50	3
Co			1	19.338	ug/l	0.86	710,853.12	2.396E+00	Pulse	0.50	3
Ni			1	18.723	ug/l	0.84	189,508.59	6.388E-01	Pulse	0.50	3
Cu			1	18.385	ug/l	0.53	530,871.33	1.790E+00	Pulse	0.50	3
Zn			1	19.567	ug/l	0.65	65,679.80	1.477E-01	Pulse	1.00	3
Cd			1	18.446	ug/l	0.88	115,317.03	2.594E-01	Pulse	0.50	3
Al			1	98087.561	ug/l	1.07	26,787,243.33	7.052E+01	Analog	1.00	3
Se			1	0.046	ug/l	2.03	21.56	9.946E-04	Pulse	3.00	3
Sb			1	0.051	ug/l	3.37	780.35	1.755E-03	Pulse	1.00	3
Se			1	-0.025	ug/l	-134.76	23.33	1.076E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,898,147.00	0.58	76.1	Analog	0.50	3
1	Sc		379,834.44	0.29	90.8	Pulse	0.30	3
1	Ge		296,654.12	0.84	85.2	Pulse	0.30	3
1	In		3,009,968.35	0.68	83.8	Pulse	0.30	3
1	Tb		13,702,696.00	0.75	88.7	Analog	0.50	3
1	Lu		8,151,725.83	0.67	90.1	Analog	0.50	3
1	Ge		444,621.70	0.43	83.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		21,674.19	2.82	71.3	Pulse	0.50	3
1	Li		2,266.81	7.01	67.1	Pulse	0.30	3

Quantitation Report

File Name	017CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:06
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	48.866	ug/l	1.99	992,547.33	3.195E+00	Pulse	0.50	3
As			1	50.161	ug/l	1.48	102,729.71	3.307E-01	Pulse	1.00	3
Mo			1	49.449	ug/l	1.15	729,774.64	1.532E+00	Pulse	0.50	3
Pb			1	47.828	ug/l	0.39	4,468,402.17	4.045E-01	Pulse	1.00	3
Be			1	48.307	ug/l	0.63	6,132.26	1.677E-02	Pulse	2.00	3
Ag			1	50.737	ug/l	1.01	2,897,093.33	6.083E+00	Pulse	0.50	3
Ba			1	49.799	ug/l	0.44	248,033.35	7.654E-02	Pulse	0.50	3
Tl			1	48.885	ug/l	1.03	6,825,487.17	6.179E-01	Analog	0.50	3
Sn			1	49.705	ug/l	1.39	601,836.76	1.857E-01	Pulse	0.30	3
Sr			1	48.498	ug/l	0.55	475,556.70	1.467E-01	Pulse	0.50	3
[Pb]			1	48.093	ug/l	0.59	2,095,909.91	1.897E-01	Pulse	0.50	3
Ca			1	4924.436	ug/l	0.95	202,331.16	5.535E-01	Pulse	0.50	3
Ti			1	50.032	ug/l	0.67	16,926.67	4.630E-02	Pulse	0.50	3
Na			1	4925.272	ug/l	1.11	11,004,304.33	3.010E+01	Analog	1.00	3
Mg			1	4960.074	ug/l	0.72	4,775,749.33	1.306E+01	Analog	1.00	3
K			1	4907.509	ug/l	0.62	3,532,675.67	9.664E+00	Pulse	1.00	3
V			1	49.736	ug/l	1.00	711,762.48	1.947E+00	Pulse	0.50	3
Mn			1	48.669	ug/l	1.90	427,877.97	1.377E+00	Pulse	0.50	3
Fe			1	4970.402	ug/l	1.67	79,641,965.33	2.564E+02	Analog	0.50	3
Co			1	49.300	ug/l	1.48	1,897,786.33	6.109E+00	Pulse	0.50	3
Ni			1	50.564	ug/l	0.70	533,980.17	1.719E+00	Pulse	0.50	3
Cu			1	50.968	ug/l	0.57	1,513,743.08	4.872E+00	Pulse	0.50	3
Zn			1	51.434	ug/l	1.23	181,598.23	3.813E-01	Pulse	1.00	3
Cd			1	51.527	ug/l	0.69	345,048.87	7.245E-01	Pulse	0.50	3
Al			1	4784.806	ug/l	0.90	1,257,933.92	3.441E+00	Pulse	1.00	3
Se			1	46.486	ug/l	1.10	6,853.12	2.547E-01	Pulse	3.00	3
Sb			1	50.295	ug/l	0.71	656,111.86	1.378E+00	Pulse	1.00	3
Se			1	47.384	ug/l	0.72	3,553.33	1.321E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,046,791.33	0.40	94.5	Analog	0.50	3
1	Sc		365,572.23	1.12	87.4	Pulse	0.30	3
1	Ge		310,692.74	1.16	89.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,240,632.58	0.14	90.3	Pulse	0.30	3
1	Tb		14,931,792.67	0.78	96.7	Analog	0.50	3
1	Lu		8,769,391.00	0.63	96.9	Analog	0.50	3
1	Ge		476,258.38	0.75	89.5	Pulse	0.30	3
1	Te		26,903.12	0.59	88.5	Pulse	0.50	3
1	Li		2,495.72	2.18	73.9	Pulse	0.30	3

Quantitation Report

File Name	018_CCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:10
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.585	ug/l	0.59	1,991,641.75	6.442E+00	Pulse	0.50	3
As			1	101.021	ug/l	0.48	205,869.62	6.659E-01	Pulse	1.00	3
Mo			1	99.820	ug/l	0.83	1,467,874.71	3.093E+00	Pulse	0.50	3
Pb			1	98.671	ug/l	0.11	8,960,020.33	8.342E-01	Analog	1.00	3
Be			1	97.652	ug/l	0.94	12,567.21	3.391E-02	Pulse	2.00	3
Ag			1	98.929	ug/l	0.99	5,628,386.83	1.186E+01	Pulse	0.50	3
Ba			1	100.061	ug/l	0.47	493,353.45	1.538E-01	Pulse	0.50	3
Tl			1	99.109	ug/l	0.59	13,454,772.67	1.253E+00	Analog	0.50	3
Sn			1	100.498	ug/l	0.60	1,203,712.21	3.752E-01	Pulse	0.30	3
Sr			1	98.835	ug/l	0.22	958,174.77	2.987E-01	Pulse	0.50	3
[Pb]			1	96.742	ug/l	0.48	4,097,859.00	3.815E-01	Pulse	0.50	3
Ca			1	9808.444	ug/l	1.56	408,383.14	1.102E+00	Pulse	0.50	3
Ti			1	100.264	ug/l	0.26	34,390.09	9.279E-02	Pulse	0.50	3
Na			1	9909.359	ug/l	1.45	22,435,824.00	6.054E+01	Analog	1.00	3
Mg			1	9871.468	ug/l	1.15	9,635,422.67	2.600E+01	Analog	1.00	3
K			1	9974.037	ug/l	1.24	7,266,946.50	1.961E+01	Analog	1.00	3
V			1	99.947	ug/l	1.89	1,449,379.87	3.911E+00	Pulse	0.50	3
Mn			1	98.314	ug/l	0.58	858,796.73	2.778E+00	Pulse	0.50	3
Fe			1	10049.743	ug/l	0.77	160,210,672.00	5.182E+02	Analog	0.50	3
Co			1	98.274	ug/l	0.51	3,764,638.58	1.218E+01	Pulse	0.50	3
Ni			1	100.494	ug/l	0.99	1,054,857.33	3.412E+00	Pulse	0.50	3
Cu			1	100.503	ug/l	0.87	2,955,166.25	9.559E+00	Pulse	0.50	3
Zn			1	101.281	ug/l	0.45	354,344.37	7.467E-01	Pulse	1.00	3
Cd			1	101.359	ug/l	0.37	676,304.23	1.425E+00	Pulse	0.50	3
Al			1	9669.332	ug/l	0.73	2,576,905.67	6.953E+00	Pulse	1.00	3
Se			1	96.634	ug/l	0.28	13,632.96	5.287E-01	Pulse	3.00	3
Sb			1	99.952	ug/l	1.13	1,299,005.08	2.738E+00	Pulse	1.00	3
Se			1	96.295	ug/l	0.86	6,890.47	2.672E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,741,008.67	0.55	91.8	Analog	0.50	3
1	Sc		370,635.92	1.38	88.6	Pulse	0.30	3
1	Ge		309,155.71	0.34	88.8	Pulse	0.30	3
1	In		3,208,072.86	0.24	89.4	Pulse	0.30	3
1	Tb		14,780,321.33	0.38	95.7	Analog	0.50	3
1	Lu		8,656,454.67	0.84	95.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		474,537.43	0.49	89.2	Pulse	0.30	3
1	Te		25,784.84	0.31	84.8	Pulse	0.50	3
1	Li		2,561.29	3.52	75.8	Pulse	0.30	3

Quantitation Report

File Name	019_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:13
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.680	ug/l	1.47	15,226.62	4.806E-02	Pulse	0.50	3
As			1	0.009	ug/l	43.49	40.00	1.262E-04	Pulse	1.00	3
Mo			1	0.050	ug/l	6.17	768.69	1.580E-03	Pulse	0.50	3
Pb			1	0.004	ug/l	61.23	3,709.08	3.234E-04	Pulse	1.00	3
Be			1	0.017	ug/l	95.00	2.33	6.329E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	7.93	631.35	1.298E-03	Pulse	0.50	3
Ba			1	0.011	ug/l	28.11	76.67	2.313E-05	Pulse	0.50	3
Tl			1	0.024	ug/l	13.58	3,619.73	3.157E-04	Pulse	0.50	3
Sn			1	0.030	ug/l	30.82	1,285.61	3.873E-04	Pulse	0.30	3
Sr			1	0.005	ug/l	48.48	1,273.38	3.838E-04	Pulse	0.50	3
[Pb]			1	0.002	ug/l	176.50	1,704.09	1.486E-04	Pulse	0.50	3
Ca			1	1.692	ug/l	21.56	242.00	6.567E-04	Pulse	0.50	3
Ti			1	0.020	ug/l	87.84	8.00	2.166E-05	Pulse	0.50	3
Na			1	3.736	ug/l	2.74	17,768.86	4.822E-02	Pulse	1.00	3
Mg			1	2.002	ug/l	5.40	2,263.80	6.144E-03	Pulse	1.00	3
K			1	1.405	ug/l	18.33	12,422.58	3.371E-02	Pulse	1.00	3
V			1	-0.011	ug/l	-8.93	455.34	1.236E-03	Pulse	0.50	3
Mn			1	0.977	ug/l	2.33	10,110.66	3.191E-02	Pulse	0.50	3
Fe			1	2.454	ug/l	9.36	79,370.58	2.505E-01	Pulse	0.50	3
Co			1	0.008	ug/l	35.46	358.67	1.131E-03	Pulse	0.50	3
Ni			1	0.217	ug/l	8.46	3,535.67	1.116E-02	Pulse	0.50	3
Cu			1	-0.009	ug/l	-88.76	15,578.30	4.917E-02	Pulse	0.50	3
Zn			1	0.172	ug/l	16.70	2,696.86	5.544E-03	Pulse	1.00	3
Cd			1	0.004	ug/l	49.73	34.00	6.987E-05	Pulse	0.50	3
Al			1	32.153	ug/l	1.91	8,886.98	2.412E-02	Pulse	1.00	3
Se			1	-0.003	ug/l	-440.43	20.67	7.297E-04	Pulse	3.00	3
Sb			1	0.016	ug/l	9.63	379.34	7.799E-04	Pulse	1.00	3
Se			1	-0.124	ug/l	-47.11	22.78	8.025E-04	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,467,461.33	0.20	98.0	Analog	0.50	3
1	Sc		368,476.67	0.43	88.1	Pulse	0.30	3
1	Ge		316,853.52	0.88	91.0	Pulse	0.30	3
1	In		3,318,276.33	0.67	92.4	Pulse	0.30	3
1	Tb		15,021,125.00	1.19	97.3	Analog	0.50	3
1	Lu		8,791,899.00	0.43	97.1	Analog	0.50	3
1	Ge		486,434.57	0.45	91.5	Pulse	0.30	3
1	Te		28,335.24	1.26	93.2	Pulse	0.50	3
1	Li		2,870.22	3.85	84.9	Pulse	0.30	3

Quantitation Report

File Name	020_MB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:17
Sample Name	MP33699-MB1
Sample Type	MB
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.176	ug/l	3.80	2,652.86	9.358E-03	Pulse	0.50	3
As			1	0.075	ug/l	20.95	88.00	3.104E-04	Pulse	1.00	3
Mo			1	0.166	ug/l	6.63	1,134.70	2.605E-03	Pulse	0.50	3
Pb			1	0.056	ug/l	7.57	5,774.32	5.254E-04	Pulse	1.00	3
Be			1	0.017	ug/l	195.79	1.17	3.427E-06	Pulse	2.00	3
Ag			1	0.040	ug/l	6.36	1,093.37	2.510E-03	Pulse	0.50	3
Ba			1	0.053	ug/l	18.34	146.00	4.752E-05	Pulse	0.50	3
Tl			1	0.032	ug/l	15.77	2,357.51	2.147E-04	Pulse	0.50	3
Sn			1	0.725	ug/l	14.33	5,010.99	1.630E-03	Pulse	0.30	3
Sr			1	0.116	ug/l	15.55	1,673.41	5.446E-04	Pulse	0.50	3
[Pb]			1	0.048	ug/l	2.64	2,562.87	2.332E-04	Pulse	0.50	3
Ca			1	59.934	ug/l	1.22	1,305.38	3.832E-03	Pulse	0.50	3
Ti			1	0.226	ug/l	8.99	36.67	1.077E-04	Pulse	0.50	3
Na			1	17.541	ug/l	2.91	26,898.98	7.897E-02	Pulse	1.00	3
Mg			1	10.834	ug/l	5.61	5,157.34	1.514E-02	Pulse	1.00	3
K			1	3.895	ug/l	4.54	11,846.88	3.478E-02	Pulse	1.00	3
V			1	0.142	ug/l	16.15	1,506.73	4.424E-03	Pulse	0.50	3
Mn			1	-0.083	ug/l	-3.69	903.36	3.187E-03	Pulse	0.50	3
Fe			1	3.574	ug/l	10.66	61,267.65	2.161E-01	Pulse	0.50	3
Co			1	0.014	ug/l	7.30	291.33	1.028E-03	Pulse	0.50	3
Ni			1	-0.039	ug/l	-12.55	894.02	3.154E-03	Pulse	0.50	3
Cu			1	0.339	ug/l	1.43	18,740.45	6.611E-02	Pulse	0.50	3
Zn			1	1.718	ug/l	0.50	4,609.22	1.058E-02	Pulse	1.00	3
Cd			1	0.011	ug/l	27.16	37.33	8.572E-05	Pulse	0.50	3
Al			1	9.301	ug/l	8.84	1,480.06	4.345E-03	Pulse	1.00	3
Se			1	-0.003	ug/l	-1869.91	15.11	7.368E-04	Pulse	3.00	3
Sb			1	0.111	ug/l	8.87	814.02	1.869E-03	Pulse	1.00	3
Se			1	0.175	ug/l	58.41	28.44	1.388E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,992,239.67	1.35	94.0	Analog	0.50	3
1	Sc		340,637.19	0.41	81.4	Pulse	0.30	3
1	Ge		283,485.89	0.27	81.4	Pulse	0.30	3
1	In		3,072,474.46	0.67	85.6	Pulse	0.30	3
1	Tb		14,523,809.00	0.91	94.0	Analog	0.50	3
1	Lu		8,535,648.67	0.75	94.3	Analog	0.50	3
1	Ge		435,544.39	0.25	81.9	Pulse	0.30	3
1	Te		20,501.49	0.32	67.4	Pulse	0.50	3
1	Li		2,657.97	5.90	78.7	Pulse	0.30	3

Quantitation Report

File Name	021_BSP.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:21
Sample Name	MP33699-B1
Sample Type	BSP
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	213.493	ug/l	2.06	1,918,930.08	6.975E+00	Pulse	0.50	3
As			1	194.507	ug/l	0.67	176,385.00	6.411E-01	Pulse	1.00	3
Mo			1	215.766	ug/l	0.85	1,407,640.96	3.343E+00	Pulse	0.50	3
Pb			1	207.209	ug/l	0.62	8,933,875.33	8.759E-01	Analog	1.00	3
Be			1	201.210	ug/l	0.81	12,004.20	3.493E-02	Pulse	2.00	3
Ag			1	102.933	ug/l	1.98	2,597,931.33	6.171E+00	Pulse	0.50	3
Ba			1	204.808	ug/l	0.67	469,840.92	1.574E-01	Pulse	0.50	3
Tl			1	199.024	ug/l	0.70	12,828,888.33	1.258E+00	Analog	0.50	3
Sn			1	205.215	ug/l	0.86	1,143,609.16	3.831E-01	Pulse	0.30	3
Sr			1	199.153	ug/l	0.67	898,307.67	3.009E-01	Pulse	0.50	3
[Pb]			1	193.454	ug/l	0.89	3,890,813.75	3.815E-01	Pulse	0.50	3
Ca			1	18807.732	ug/l	0.79	363,043.55	1.057E+00	Pulse	0.50	3
Ti			1	201.269	ug/l	0.85	32,001.41	9.313E-02	Pulse	0.50	3
Na			1	19272.779	ug/l	1.22	20,229,090.00	5.887E+01	Analog	1.00	3
Mg			1	19348.830	ug/l	1.07	8,755,250.67	2.548E+01	Analog	1.00	3
K			1	18871.136	ug/l	1.39	6,374,324.50	1.855E+01	Analog	1.00	3
V			1	204.500	ug/l	1.39	1,374,821.37	4.001E+00	Pulse	0.50	3
Mn			1	204.626	ug/l	1.37	795,305.69	2.891E+00	Pulse	0.50	3
Fe			1	20428.854	ug/l	1.04	144,914,282.67	5.267E+02	Analog	0.50	3
Co			1	212.738	ug/l	0.68	3,626,378.50	1.318E+01	Pulse	0.50	3
Ni			1	215.404	ug/l	0.71	1,006,061.17	3.657E+00	Pulse	0.50	3
Cu			1	212.550	ug/l	1.35	2,780,124.92	1.011E+01	Pulse	0.50	3
Zn			1	188.125	ug/l	0.87	292,122.07	6.938E-01	Pulse	1.00	3
Cd			1	207.363	ug/l	1.77	613,781.09	1.458E+00	Pulse	0.50	3
Al			1	17678.970	ug/l	0.88	2,184,129.08	6.356E+00	Pulse	1.00	3
Se			1	193.381	ug/l	0.90	10,375.92	5.290E-01	Pulse	3.00	3
Sb			1	202.464	ug/l	1.19	1,167,342.29	2.773E+00	Pulse	1.00	3
Se			1	196.083	ug/l	1.43	5,335.52	2.721E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,200,025.00	0.60	87.2	Analog	0.50	3
1	Sc		343,629.72	1.16	82.2	Pulse	0.30	3
1	Ge		275,151.58	1.32	79.0	Pulse	0.30	3
1	In		2,985,325.99	0.60	83.2	Pulse	0.30	3
1	Tb		14,302,387.67	0.60	92.6	Analog	0.50	3
1	Lu		8,523,012.67	1.13	94.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		421,071.13	1.15	79.2	Pulse	0.30	3
1	Te		19,613.85	1.46	64.5	Pulse	0.50	3
1	Li		2,561.29	2.06	75.8	Pulse	0.30	3

Quantitation Report

File Name	022SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:24
Sample Name	FA53625-18F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.297	ug/l	5.97	3,784.38	1.333E-02	Pulse	0.50	3
As			1	0.299	ug/l	11.09	298.00	1.050E-03	Pulse	1.00	3
Mo			1	1.031	ug/l	2.35	7,008.66	1.602E-02	Pulse	0.50	3
Pb			1	0.095	ug/l	8.77	7,281.56	6.907E-04	Pulse	1.00	3
Be			1	0.062	ug/l	28.50	3.83	1.114E-05	Pulse	2.00	3
Ag			1	0.020	ug/l	2.96	580.01	1.326E-03	Pulse	0.50	3
Ba			1	9.895	ug/l	3.40	23,062.69	7.610E-03	Pulse	0.50	3
Tl			1	0.060	ug/l	6.89	4,107.17	3.894E-04	Pulse	0.50	3
Sn			1	0.654	ug/l	5.06	4,536.19	1.497E-03	Pulse	0.30	3
Sr			1	159.575	ug/l	1.25	730,929.96	2.412E-01	Pulse	0.50	3
[Pb]			1	0.088	ug/l	5.75	3,295.00	3.125E-04	Pulse	0.50	3
Ca			1	35021.758	ug/l	0.77	677,653.12	1.967E+00	Pulse	0.50	3
Ti			1	0.261	ug/l	1.94	42.67	1.238E-04	Pulse	0.50	3
Na			1	12189.923	ug/l	0.13	12,832,167.00	3.725E+01	Analog	1.00	3
Mg			1	6753.886	ug/l	0.51	3,064,398.83	8.895E+00	Pulse	1.00	3
K			1	3743.154	ug/l	0.66	1,276,306.67	3.705E+00	Pulse	1.00	3
V			1	0.192	ug/l	3.38	1,864.76	5.412E-03	Pulse	0.50	3
Mn			1	1194.106	ug/l	1.12	4,781,738.17	1.685E+01	Pulse	0.50	3
Fe			1	277.514	ug/l	1.10	2,065,498.92	7.277E+00	Pulse	0.50	3
Co			1	4.607	ug/l	1.43	81,069.79	2.856E-01	Pulse	0.50	3
Ni			1	1.586	ug/l	0.95	8,717.32	3.071E-02	Pulse	0.50	3
Cu			1	0.281	ug/l	11.05	17,974.40	6.333E-02	Pulse	0.50	3
Zn			1	3.163	ug/l	2.18	6,947.26	1.588E-02	Pulse	1.00	3
Cd			1	0.125	ug/l	15.25	388.67	8.888E-04	Pulse	0.50	3
Al			1	11.027	ug/l	2.84	1,710.74	4.965E-03	Pulse	1.00	3
Se			1	0.046	ug/l	46.74	17.33	8.714E-04	Pulse	3.00	3
Sb			1	0.124	ug/l	3.39	895.02	2.045E-03	Pulse	1.00	3
Se			1	0.353	ug/l	58.91	32.44	1.633E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,545,374.00	0.68	90.2	Analog	0.50	3
1	Sc		344,513.58	0.86	82.4	Pulse	0.30	3
1	Ge		283,814.45	0.41	81.5	Pulse	0.30	3
1	In		3,030,566.76	0.61	84.4	Pulse	0.30	3
1	Tb		14,471,681.00	0.79	93.7	Analog	0.50	3
1	Lu		8,484,361.67	0.39	93.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		437,569.12	0.59	82.3	Pulse	0.30	3
1	Te		19,901.52	1.36	65.4	Pulse	0.50	3
1	Li		2,602.41	2.16	77.0	Pulse	0.30	3

Quantitation Report

File Name	023SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:28
Sample Name	MP33699-D1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.301	ug/l	6.98	3,848.40	1.344E-02	Pulse	0.50	3
As			1	0.282	ug/l	3.61	284.67	9.938E-04	Pulse	1.00	3
Mo			1	0.999	ug/l	5.76	6,843.93	1.551E-02	Pulse	0.50	3
Pb			1	0.075	ug/l	2.64	6,452.23	6.088E-04	Pulse	1.00	3
Be			1	0.031	ug/l	0.81	2.00	5.724E-06	Pulse	2.00	3
Ag			1	0.013	ug/l	10.76	398.68	9.032E-04	Pulse	0.50	3
Ba			1	9.438	ug/l	0.57	22,283.05	7.259E-03	Pulse	0.50	3
Tl			1	0.019	ug/l	18.72	1,404.06	1.325E-04	Pulse	0.50	3
Sn			1	0.519	ug/l	1.75	3,822.64	1.245E-03	Pulse	0.30	3
Sr			1	160.932	ug/l	0.82	746,668.87	2.432E-01	Pulse	0.50	3
[Pb]			1	0.071	ug/l	8.80	2,958.27	2.791E-04	Pulse	0.50	3
Ca			1	35718.922	ug/l	1.31	700,898.58	2.006E+00	Pulse	0.50	3
Ti			1	0.207	ug/l	29.99	34.67	9.913E-05	Pulse	0.50	3
Na			1	12287.893	ug/l	1.35	13,117,566.00	3.755E+01	Analog	1.00	3
Mg			1	6895.782	ug/l	1.32	3,172,892.00	9.082E+00	Pulse	1.00	3
K			1	3787.528	ug/l	1.32	1,309,515.13	3.748E+00	Pulse	1.00	3
V			1	0.174	ug/l	6.76	1,770.09	5.065E-03	Pulse	0.50	3
Mn			1	1219.601	ug/l	0.43	4,928,399.67	1.721E+01	Pulse	0.50	3
Fe			1	283.387	ug/l	1.04	2,127,650.67	7.429E+00	Pulse	0.50	3
Co			1	4.734	ug/l	1.25	84,049.03	2.935E-01	Pulse	0.50	3
Ni			1	1.586	ug/l	2.59	8,795.36	3.071E-02	Pulse	0.50	3
Cu			1	0.149	ug/l	5.31	16,354.94	5.710E-02	Pulse	0.50	3
Zn			1	2.526	ug/l	0.71	5,978.60	1.354E-02	Pulse	1.00	3
Cd			1	0.119	ug/l	6.82	371.34	8.417E-04	Pulse	0.50	3
Al			1	9.946	ug/l	8.42	1,598.74	4.577E-03	Pulse	1.00	3
Se			1	0.029	ug/l	147.20	16.56	8.249E-04	Pulse	3.00	3
Sb			1	0.080	ug/l	4.04	637.34	1.444E-03	Pulse	1.00	3
Se			1	0.586	ug/l	26.20	39.22	1.955E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,598,527.67	0.57	90.6	Analog	0.50	3
1	Sc		349,394.14	0.76	83.5	Pulse	0.30	3
1	Ge		286,415.33	0.80	82.3	Pulse	0.30	3
1	In		3,069,890.36	0.83	85.5	Pulse	0.30	3
1	Tb		14,611,236.67	0.44	94.6	Analog	0.50	3
1	Lu		8,600,660.33	1.18	95.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		441,391.40	1.16	83.0	Pulse	0.30	3
1	Te		20,089.04	2.43	66.1	Pulse	0.50	3
1	Li		2,867.99	2.91	84.9	Pulse	0.30	3

Quantitation Report

File Name	024SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:31
Sample Name	MP33699-SD1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.188	ug/l	16.35	1,538.73	4.847E-03	Pulse	0.50	3
As			1	0.283	ug/l	12.52	79.67	2.509E-04	Pulse	1.00	3
Mo			1	1.071	ug/l	2.29	1,629.41	3.355E-03	Pulse	0.50	3
Pb			1	0.245	ug/l	3.66	5,687.95	4.968E-04	Pulse	1.00	3
Be			1	0.117	ug/l	100.62	1.67	4.448E-06	Pulse	2.00	3
Ag			1	0.032	ug/l	10.56	248.00	5.106E-04	Pulse	0.50	3
Ba			1	9.609	ug/l	3.30	4,900.02	1.483E-03	Pulse	0.50	3
Tl			1	0.044	ug/l	18.71	767.35	6.706E-05	Pulse	0.50	3
Sn			1	0.479	ug/l	9.47	1,505.63	4.559E-04	Pulse	0.30	3
Sr			1	165.033	ug/l	0.55	165,744.16	5.018E-02	Pulse	0.50	3
[Pb]			1	0.220	ug/l	9.29	2,588.21	2.261E-04	Pulse	0.50	3
Ca			1	37039.275	ug/l	0.78	155,820.87	4.164E-01	Pulse	0.50	3
Ti			1	0.600	ug/l	41.73	22.00	5.877E-05	Pulse	0.50	3
Na			1	12626.972	ug/l	0.64	2,894,866.00	7.737E+00	Pulse	1.00	3
Mg			1	7260.325	ug/l	0.14	715,816.77	1.913E+00	Pulse	1.00	3
K			1	3978.644	ug/l	0.68	303,804.42	8.119E-01	Pulse	1.00	3
V			1	0.132	ug/l	42.63	811.35	2.168E-03	Pulse	0.50	3
Mn			1	1226.477	ug/l	0.94	1,099,814.21	3.464E+00	Pulse	0.50	3
Fe			1	288.975	ug/l	0.66	512,321.28	1.614E+00	Pulse	0.50	3
Co			1	4.769	ug/l	1.49	18,821.18	5.929E-02	Pulse	0.50	3
Ni			1	1.123	ug/l	4.51	2,420.16	7.623E-03	Pulse	0.50	3
Cu			1	2.167	ug/l	3.60	22,399.67	7.056E-02	Pulse	0.50	3
Zn			1	4.236	ug/l	2.03	3,589.01	7.390E-03	Pulse	1.00	3
Cd			1	0.163	ug/l	12.65	114.67	2.361E-04	Pulse	0.50	3
Al			1	71.093	ug/l	3.35	2,287.13	6.113E-03	Pulse	1.00	3
Se			1	-0.187	ug/l	-119.24	16.45	6.433E-04	Pulse	3.00	3
Sb			1	0.101	ug/l	13.41	306.00	6.301E-04	Pulse	1.00	3
Se			1	0.099	ug/l	198.82	30.00	1.173E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,447,643.33	0.44	97.9	Analog	0.50	3
1	Sc		374,175.79	0.28	89.5	Pulse	0.30	3
1	Ge		317,463.70	0.12	91.2	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,303,022.86	0.73	92.0	Pulse	0.30	3
1	Tb		15,015,612.33	0.44	97.2	Analog	0.50	3
1	Lu		8,771,007.67	0.22	96.9	Analog	0.50	3
1	Ge		485,656.00	0.09	91.3	Pulse	0.30	3
1	Te		25,583.89	0.81	84.1	Pulse	0.50	3
1	Li		2,939.12	2.16	87.0	Pulse	0.30	3

Quantitation Report

File Name	025SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:35
Sample Name	MP33699-S1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	216.217	ug/l	1.41	1,952,726.13	7.064E+00	Pulse	0.50	3
As			1	196.025	ug/l	1.17	178,595.36	6.461E-01	Pulse	1.00	3
Mo			1	218.940	ug/l	1.12	1,442,057.21	3.392E+00	Pulse	0.50	3
Pb			1	214.744	ug/l	1.20	9,028,508.33	9.077E-01	Analog	1.00	3
Be			1	205.341	ug/l	1.88	12,222.33	3.565E-02	Pulse	2.00	3
Ag			1	107.316	ug/l	1.72	2,734,682.17	6.433E+00	Pulse	0.50	3
Ba			1	218.096	ug/l	0.47	490,489.95	1.676E-01	Pulse	0.50	3
Tl			1	204.878	ug/l	0.81	12,878,290.00	1.295E+00	Analog	0.50	3
Sn			1	210.551	ug/l	0.79	1,150,252.59	3.930E-01	Pulse	0.30	3
Sr			1	370.232	ug/l	0.51	1,636,256.12	5.591E-01	Pulse	0.50	3
[Pb]			1	199.745	ug/l	0.77	3,917,486.58	3.939E-01	Pulse	0.50	3
Ca			1	54972.203	ug/l	1.35	1,058,429.08	3.087E+00	Pulse	0.50	3
Ti			1	207.944	ug/l	1.13	32,988.35	9.622E-02	Pulse	0.50	3
Na			1	32307.559	ug/l	0.87	33,830,638.67	9.868E+01	Analog	1.00	3
Mg			1	26767.191	ug/l	1.47	12,084,785.33	3.525E+01	Analog	1.00	3
K			1	23314.222	ug/l	0.62	7,855,654.00	2.291E+01	Analog	1.00	3
V			1	211.043	ug/l	1.45	1,415,673.87	4.129E+00	Pulse	0.50	3
Mn			1	1470.018	ug/l	1.13	5,733,068.67	2.074E+01	Analog	0.50	3
Fe			1	20955.262	ug/l	1.88	149,344,912.00	5.403E+02	Analog	0.50	3
Co			1	217.646	ug/l	1.17	3,727,465.17	1.348E+01	Pulse	0.50	3
Ni			1	217.461	ug/l	1.14	1,020,431.75	3.691E+00	Pulse	0.50	3
Cu			1	210.328	ug/l	1.54	2,764,209.83	1.000E+01	Pulse	0.50	3
Zn			1	185.980	ug/l	1.28	291,582.15	6.859E-01	Pulse	1.00	3
Cd			1	204.402	ug/l	1.83	610,837.10	1.437E+00	Pulse	0.50	3
Al			1	18067.556	ug/l	0.88	2,227,189.58	6.496E+00	Pulse	1.00	3
Se			1	203.664	ug/l	0.36	10,348.69	5.571E-01	Pulse	3.00	3
Sb			1	202.071	ug/l	1.53	1,176,270.75	2.767E+00	Pulse	1.00	3
Se			1	203.612	ug/l	1.37	5,246.95	2.825E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,946,476.33	0.30	85.0	Analog	0.50	3
1	Sc		342,866.84	1.02	82.0	Pulse	0.30	3
1	Ge		276,442.63	0.74	79.4	Pulse	0.30	3
1	In		2,926,667.94	0.45	81.5	Pulse	0.30	3
1	Tb		14,230,729.33	0.43	92.1	Analog	0.50	3
1	Lu		8,444,354.67	0.72	93.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		425,113.66	0.86	79.9	Pulse	0.30	3
1	Te		18,575.44	0.51	61.1	Pulse	0.50	3
1	Li		2,717.98	5.61	80.4	Pulse	0.30	3

Quantitation Report

File Name 026SMPL.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 11:39
Sample Name MP33699-S2
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	206.832	ug/l	0.35	1,870,940.75	6.758E+00	Pulse	0.50	3
As			1	188.902	ug/l	0.67	172,372.50	6.226E-01	Pulse	1.00	3
Mo			1	210.300	ug/l	0.31	1,382,013.54	3.259E+00	Pulse	0.50	3
Pb			1	205.085	ug/l	0.94	8,670,492.00	8.669E-01	Analog	1.00	3
Be			1	197.170	ug/l	1.58	11,883.63	3.423E-02	Pulse	2.00	3
Ag			1	104.083	ug/l	0.27	2,646,388.17	6.240E+00	Pulse	0.50	3
Ba			1	207.823	ug/l	0.18	472,359.64	1.597E-01	Pulse	0.50	3
Tl			1	196.286	ug/l	1.29	12,406,562.67	1.240E+00	Analog	0.50	3
Sn			1	200.731	ug/l	0.31	1,108,312.08	3.747E-01	Pulse	0.30	3
Sr			1	354.575	ug/l	0.56	1,583,790.50	5.355E-01	Pulse	0.50	3
[Pb]			1	190.287	ug/l	1.02	3,752,799.17	3.752E-01	Pulse	0.50	3
Ca			1	53055.831	ug/l	0.34	1,034,374.04	2.980E+00	Pulse	0.50	3
Ti			1	198.382	ug/l	2.98	31,863.89	9.179E-02	Pulse	0.50	3
Na			1	30912.926	ug/l	0.58	32,775,242.00	9.442E+01	Analog	1.00	3
Mg			1	25540.542	ug/l	0.91	11,675,396.67	3.363E+01	Analog	1.00	3
K			1	22200.673	ug/l	0.87	7,574,234.67	2.182E+01	Analog	1.00	3
V			1	199.843	ug/l	0.72	1,357,355.87	3.910E+00	Pulse	0.50	3
Mn			1	1436.656	ug/l	0.89	5,611,592.83	2.027E+01	Analog	0.50	3
Fe			1	20109.792	ug/l	0.98	143,544,933.33	5.185E+02	Analog	0.50	3
Co			1	209.544	ug/l	1.11	3,594,162.00	1.298E+01	Pulse	0.50	3
Ni			1	208.339	ug/l	1.55	979,143.38	3.537E+00	Pulse	0.50	3
Cu			1	203.307	ug/l	0.29	2,676,617.67	9.668E+00	Pulse	0.50	3
Zn			1	179.175	ug/l	0.61	280,345.79	6.610E-01	Pulse	1.00	3
Cd			1	198.660	ug/l	0.76	592,356.08	1.397E+00	Pulse	0.50	3
Al			1	17166.309	ug/l	0.60	2,142,600.67	6.172E+00	Pulse	1.00	3
Se			1	193.354	ug/l	1.25	9,891.89	5.290E-01	Pulse	3.00	3
Sb			1	194.029	ug/l	0.43	1,126,923.25	2.657E+00	Pulse	1.00	3
Se			1	197.946	ug/l	1.83	5,135.70	2.746E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,001,999.33	0.66	85.5	Analog	0.50	3
1	Sc		347,141.72	0.74	83.0	Pulse	0.30	3
1	Ge		276,860.60	0.58	79.5	Pulse	0.30	3
1	In		2,957,749.61	0.36	82.4	Pulse	0.30	3
1	Tb		14,310,083.33	0.42	92.7	Analog	0.50	3
1	Lu		8,473,638.67	0.76	93.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		424,124.30	0.08	79.7	Pulse	0.30	3
1	Te		18,702.24	0.96	61.5	Pulse	0.50	3
1	Li		2,515.73	2.04	74.4	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:42
Sample Name	MP33699-PS1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	20.785	ug/l	1.27	194,876.22	6.824E-01	Pulse	0.50	3
As			1	19.212	ug/l	0.73	18,100.88	6.338E-02	Pulse	1.00	3
Mo			1	21.487	ug/l	0.14	146,413.33	3.330E-01	Pulse	0.50	3
Pb			1	19.482	ug/l	0.52	869,349.48	8.261E-02	Pulse	1.00	3
Be			1	19.817	ug/l	1.03	1,205.04	3.441E-03	Pulse	2.00	3
Ag			1	4.248	ug/l	1.14	112,046.65	2.548E-01	Pulse	0.50	3
Ba			1	29.884	ug/l	0.55	69,698.66	2.297E-02	Pulse	0.50	3
Tl			1	18.691	ug/l	0.75	1,243,042.54	1.181E-01	Pulse	0.50	3
Sn			1	21.134	ug/l	1.77	120,455.80	3.970E-02	Pulse	0.30	3
Sr			1	183.353	ug/l	1.06	840,686.23	2.771E-01	Pulse	0.50	3
[Pb]			1	18.900	ug/l	0.85	393,474.64	3.739E-02	Pulse	0.50	3
Ca			1	37928.589	ug/l	0.68	746,030.42	2.130E+00	Pulse	0.50	3
Ti			1	20.913	ug/l	1.67	3,389.64	9.680E-03	Pulse	0.50	3
Na			1	14421.176	ug/l	1.49	15,428,979.00	4.406E+01	Analog	1.00	3
Mg			1	8827.156	ug/l	1.68	4,070,800.92	1.163E+01	Pulse	1.00	3
K			1	5709.767	ug/l	0.80	1,973,301.46	5.635E+00	Pulse	1.00	3
V			1	20.426	ug/l	1.02	140,481.60	4.012E-01	Pulse	0.50	3
Mn			1	1251.578	ug/l	0.11	5,043,181.00	1.766E+01	Pulse	0.50	3
Fe			1	2327.432	ug/l	1.13	17,169,353.33	6.012E+01	Analog	0.50	3
Co			1	25.154	ug/l	0.11	445,122.79	1.559E+00	Pulse	0.50	3
Ni			1	22.286	ug/l	0.44	109,020.42	3.817E-01	Pulse	0.50	3
Cu			1	21.359	ug/l	0.92	302,865.80	1.060E+00	Pulse	0.50	3
Zn			1	21.440	ug/l	0.97	36,438.57	8.287E-02	Pulse	1.00	3
Cd			1	19.161	ug/l	0.76	59,234.90	1.347E-01	Pulse	0.50	3
Al			1	1798.296	ug/l	1.16	226,739.05	6.475E-01	Pulse	1.00	3
Se			1	18.949	ug/l	4.38	1,045.47	5.251E-02	Pulse	3.00	3
Sb			1	18.276	ug/l	0.48	110,191.00	2.506E-01	Pulse	1.00	3
Se			1	19.624	ug/l	2.88	562.68	2.826E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,522,986.33	0.78	90.0	Analog	0.50	3
1	Sc		350,221.84	1.24	83.7	Pulse	0.30	3
1	Ge		285,593.75	0.09	82.0	Pulse	0.30	3
1	In		3,034,337.31	0.90	84.5	Pulse	0.30	3
1	Tb		14,554,626.67	0.74	94.2	Analog	0.50	3
1	Lu		8,589,397.33	0.25	94.9	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		439,716.63	0.39	82.7	Pulse	0.30	3
1	Te		19,911.52	0.97	65.5	Pulse	0.50	3
1	Li		2,747.98	1.78	81.3	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:46
Sample Name	FA53625-10F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	12.119	ug/l	0.89	114,931.87	3.994E-01	Pulse	0.50	3
As			1	0.094	ug/l	19.77	107.33	3.730E-04	Pulse	1.00	3
Mo			1	1.379	ug/l	2.27	9,428.40	2.141E-02	Pulse	0.50	3
Pb			1	0.077	ug/l	10.59	6,486.11	6.137E-04	Pulse	1.00	3
Be			1	0.042	ug/l	40.97	2.67	7.613E-06	Pulse	2.00	3
Ag			1	0.014	ug/l	11.31	437.34	9.932E-04	Pulse	0.50	3
Ba			1	13.825	ug/l	1.57	32,436.32	1.063E-02	Pulse	0.50	3
Tl			1	0.024	ug/l	7.42	1,751.43	1.657E-04	Pulse	0.50	3
Sn			1	0.559	ug/l	7.28	4,027.14	1.320E-03	Pulse	0.30	3
Sr			1	126.876	ug/l	1.09	585,407.90	1.918E-01	Pulse	0.50	3
[Pb]			1	0.072	ug/l	6.84	2,970.94	2.811E-04	Pulse	0.50	3
Ca			1	34371.210	ug/l	0.61	676,018.96	1.930E+00	Pulse	0.50	3
Ti			1	0.137	ug/l	31.88	23.33	6.668E-05	Pulse	0.50	3
Na			1	15847.961	ug/l	1.31	16,954,130.00	4.842E+01	Analog	1.00	3
Mg			1	7510.730	ug/l	1.04	3,463,728.17	9.892E+00	Pulse	1.00	3
K			1	2847.651	ug/l	0.67	989,521.79	2.826E+00	Pulse	1.00	3
V			1	0.240	ug/l	5.76	2,221.47	6.345E-03	Pulse	0.50	3
Mn			1	22.948	ug/l	0.92	94,410.22	3.281E-01	Pulse	0.50	3
Fe			1	60.874	ug/l	2.01	487,284.22	1.693E+00	Pulse	0.50	3
Co			1	1.847	ug/l	0.37	32,990.71	1.146E-01	Pulse	0.50	3
Ni			1	92.265	ug/l	0.62	451,379.10	1.568E+00	Pulse	0.50	3
Cu			1	2.264	ug/l	0.66	45,226.04	1.572E-01	Pulse	0.50	3
Zn			1	5.152	ug/l	2.36	10,202.37	2.317E-02	Pulse	1.00	3
Cd			1	0.092	ug/l	12.23	288.67	6.555E-04	Pulse	0.50	3
Al			1	8.544	ug/l	4.23	1,426.39	4.073E-03	Pulse	1.00	3
Se			1	0.198	ug/l	48.59	25.56	1.286E-03	Pulse	3.00	3
Sb			1	0.096	ug/l	14.02	733.02	1.665E-03	Pulse	1.00	3
Se			1	0.459	ug/l	31.07	35.33	1.779E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,571,508.00	0.63	90.4	Analog	0.50	3
1	Sc		350,189.50	0.76	83.7	Pulse	0.30	3
1	Ge		287,788.34	0.11	82.7	Pulse	0.30	3
1	In		3,051,685.16	0.74	85.0	Pulse	0.30	3
1	Tb		14,617,996.33	1.01	94.6	Analog	0.50	3
1	Lu		8,630,830.33	0.57	95.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		440,342.74	0.30	82.8	Pulse	0.30	3
1	Te		19,852.77	0.88	65.3	Pulse	0.50	3
1	Li		2,861.33	1.25	84.7	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:50
Sample Name	FA53625-11F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	15.324	ug/l	0.79	136,201.89	5.040E-01	Pulse	0.50	3
As			1	0.569	ug/l	8.16	524.34	1.940E-03	Pulse	1.00	3
Mo			1	15.125	ug/l	0.98	96,037.06	2.344E-01	Pulse	0.50	3
Pb			1	1.244	ug/l	0.99	46,209.10	5.545E-03	Pulse	1.00	3
Be			1	0.018	ug/l	106.28	1.33	3.582E-06	Pulse	2.00	3
Ag			1	0.017	ug/l	12.87	459.34	1.121E-03	Pulse	0.50	3
Ba			1	1523.847	ug/l	0.43	3,357,964.83	1.171E+00	Pulse	0.50	3
Tl			1	0.022	ug/l	13.65	1,272.05	1.526E-04	Pulse	0.50	3
Sn			1	0.579	ug/l	2.92	3,890.44	1.356E-03	Pulse	0.30	3
Sr			1	39947.114	ug/l	1.35	172,876,469.33	6.029E+01	Analog	0.50	3
[Pb]			1	1.230	ug/l	1.63	21,366.00	2.564E-03	Pulse	0.50	3
Ca			1	583155.343	ug/l	0.66	12,306,266.33	3.275E+01	Analog	0.50	3
Ti			1	0.668	ug/l	31.76	117.33	3.123E-04	Pulse	0.50	3
Na			1	259711.099	ug/l	0.55	298,046,176.00	7.930E+02	Analog	1.00	3
Mg			1	40.352	ug/l	2.18	20,295.25	5.401E-02	Pulse	1.00	3
K			1	556693.395	ug/l	0.48	205,345,312.00	5.464E+02	Analog	1.00	3
V			1	4.815	ug/l	0.76	36,013.16	9.583E-02	Pulse	0.50	3
Mn			1	1.605	ug/l	0.63	7,295.39	2.700E-02	Pulse	0.50	3
Fe			1	98.249	ug/l	2.01	717,885.62	2.657E+00	Pulse	0.50	3
Co			1	12.205	ug/l	0.27	204,390.51	7.564E-01	Pulse	0.50	3
Ni			1	9.113	ug/l	1.29	42,793.78	1.584E-01	Pulse	0.50	3
Cu			1	14.154	ug/l	0.10	194,468.31	7.196E-01	Pulse	0.50	3
Zn			1	6.027	ug/l	2.25	10,806.36	2.637E-02	Pulse	1.00	3
Cd			1	7.906	ug/l	0.68	22,778.02	5.559E-02	Pulse	0.50	3
Al			1	5144.146	ug/l	0.69	695,357.29	1.850E+00	Pulse	1.00	3
Se			1	0.796	ug/l	9.99	49.78	2.919E-03	Pulse	3.00	3
Sb			1	0.113	ug/l	3.96	777.35	1.897E-03	Pulse	1.00	3
Se			1	1.953	ug/l	18.60	65.56	3.844E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,333,657.67	0.53	71.3	Analog	0.50	3
1	Sc		375,836.57	1.54	89.9	Pulse	0.30	3
1	Ge		270,230.39	0.71	77.6	Pulse	0.30	3
1	In		2,867,762.46	0.74	79.9	Pulse	0.30	3
1	Tb		13,302,524.00	0.41	86.1	Analog	0.50	3
1	Lu		8,013,995.17	0.75	88.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		409,750.54	1.07	77.0	Pulse	0.30	3
1	Te		17,061.99	1.18	56.1	Pulse	0.50	3
1	Li		3,430.32	4.29	101.5	Pulse	0.30	3

Quantitation Report

File Name	030CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:53
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.221	ug/l	1.21	1,016,297.69	3.218E+00	Pulse	0.50	3
As			1	50.013	ug/l	0.87	104,120.49	3.297E-01	Pulse	1.00	3
Mo			1	49.441	ug/l	1.50	740,844.63	1.532E+00	Pulse	0.50	3
Pb			1	47.335	ug/l	0.55	4,465,471.67	4.003E-01	Pulse	1.00	3
Be			1	52.336	ug/l	2.53	6,851.82	1.817E-02	Pulse	2.00	3
Ag			1	50.353	ug/l	0.41	2,919,310.08	6.037E+00	Pulse	0.50	3
Ba			1	49.550	ug/l	1.33	248,979.26	7.616E-02	Pulse	0.50	3
Tl			1	48.496	ug/l	0.60	6,837,479.83	6.130E-01	Analog	0.50	3
Sn			1	49.762	ug/l	0.95	607,845.18	1.859E-01	Pulse	0.30	3
Sr			1	49.152	ug/l	1.23	486,211.38	1.487E-01	Pulse	0.50	3
[Pb]			1	47.509	ug/l	1.16	2,090,772.84	1.874E-01	Pulse	0.50	3
Ca			1	4972.168	ug/l	1.14	210,730.81	5.589E-01	Pulse	0.50	3
Ti			1	49.283	ug/l	1.63	17,197.57	4.561E-02	Pulse	0.50	3
Na			1	5039.193	ug/l	2.05	11,612,452.67	3.080E+01	Analog	1.00	3
Mg			1	5065.248	ug/l	1.45	5,030,454.33	1.334E+01	Analog	1.00	3
K			1	4951.043	ug/l	1.76	3,675,924.17	9.749E+00	Pulse	1.00	3
V			1	49.795	ug/l	1.40	735,053.33	1.949E+00	Pulse	0.50	3
Mn			1	49.048	ug/l	0.59	438,367.44	1.388E+00	Pulse	0.50	3
Fe			1	5069.278	ug/l	1.28	82,566,408.00	2.615E+02	Analog	0.50	3
Co			1	49.682	ug/l	1.08	1,944,078.67	6.156E+00	Pulse	0.50	3
Ni			1	51.112	ug/l	1.42	548,608.42	1.737E+00	Pulse	0.50	3
Cu			1	51.297	ug/l	1.70	1,548,389.67	4.903E+00	Pulse	0.50	3
Zn			1	51.631	ug/l	0.54	185,092.22	3.828E-01	Pulse	1.00	3
Cd			1	50.965	ug/l	0.66	346,519.17	7.166E-01	Pulse	0.50	3
Al			1	4852.774	ug/l	1.37	1,315,976.54	3.490E+00	Pulse	1.00	3
Se			1	47.340	ug/l	1.45	6,946.04	2.594E-01	Pulse	3.00	3
Sb			1	49.612	ug/l	0.23	657,138.38	1.359E+00	Pulse	1.00	3
Se			1	46.979	ug/l	1.71	3,506.88	1.310E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,154,596.33	0.28	95.4	Analog	0.50	3
1	Sc		377,110.22	1.50	90.2	Pulse	0.30	3
1	Ge		315,812.18	1.14	90.7	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,269,367.51	0.43	91.1	Pulse	0.30	3
1	Tb		15,041,062.67	0.96	97.4	Analog	0.50	3
1	Lu		8,854,561.67	0.55	97.8	Analog	0.50	3
1	Ge		483,564.83	0.64	90.9	Pulse	0.30	3
1	Te		26,780.91	1.28	88.1	Pulse	0.50	3
1	Li		2,905.78	4.94	86.0	Pulse	0.30	3

Quantitation Report

File Name	031_CCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 11:57
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	99.585	ug/l	1.50	2,051,417.91	6.508E+00	Pulse	0.50	3
As			1	100.837	ug/l	1.65	209,534.46	6.647E-01	Pulse	1.00	3
Mo			1	98.598	ug/l	0.53	1,487,337.92	3.055E+00	Pulse	0.50	3
Pb			1	98.954	ug/l	0.93	9,078,704.33	8.366E-01	Analog	1.00	3
Be			1	101.497	ug/l	1.67	13,575.18	3.524E-02	Pulse	2.00	3
Ag			1	97.891	ug/l	0.35	5,713,227.17	1.174E+01	Pulse	0.50	3
Ba			1	99.257	ug/l	0.49	494,678.09	1.525E-01	Pulse	0.50	3
Tl			1	98.067	ug/l	1.64	13,450,618.00	1.240E+00	Analog	0.50	3
Sn			1	100.416	ug/l	0.15	1,215,736.13	3.749E-01	Pulse	0.30	3
Sr			1	99.716	ug/l	0.29	977,159.10	3.013E-01	Pulse	0.50	3
[Pb]			1	95.260	ug/l	0.58	4,077,024.92	3.757E-01	Pulse	0.50	3
Ca			1	9821.912	ug/l	1.47	425,065.01	1.104E+00	Pulse	0.50	3
Ti			1	99.610	ug/l	0.95	35,509.41	9.218E-02	Pulse	0.50	3
Na			1	9986.261	ug/l	1.18	23,500,939.33	6.101E+01	Analog	1.00	3
Mg			1	9985.333	ug/l	1.41	10,130,227.33	2.630E+01	Analog	1.00	3
K			1	10021.146	ug/l	1.63	7,588,547.67	1.970E+01	Analog	1.00	3
V			1	98.878	ug/l	1.53	1,490,417.63	3.869E+00	Pulse	0.50	3
Mn			1	99.127	ug/l	2.12	882,864.04	2.801E+00	Pulse	0.50	3
Fe			1	10201.444	ug/l	2.23	165,817,664.00	5.260E+02	Analog	0.50	3
Co			1	99.254	ug/l	1.88	3,876,809.42	1.230E+01	Pulse	0.50	3
Ni			1	101.414	ug/l	1.97	1,085,423.87	3.443E+00	Pulse	0.50	3
Cu			1	101.628	ug/l	1.71	3,046,847.58	9.665E+00	Pulse	0.50	3
Zn			1	100.752	ug/l	0.36	361,602.52	7.428E-01	Pulse	1.00	3
Cd			1	99.792	ug/l	0.45	683,026.46	1.403E+00	Pulse	0.50	3
Al			1	9735.899	ug/l	1.34	2,696,687.50	7.001E+00	Pulse	1.00	3
Se			1	96.382	ug/l	1.22	13,779.51	5.273E-01	Pulse	3.00	3
Sb			1	98.155	ug/l	0.18	1,308,625.83	2.688E+00	Pulse	1.00	3
Se			1	97.788	ug/l	1.02	7,090.65	2.714E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,852,902.00	1.17	92.8	Analog	0.50	3
1	Sc		385,228.62	1.23	92.1	Pulse	0.30	3
1	Ge		315,286.44	1.62	90.6	Pulse	0.30	3
1	In		3,242,789.04	0.57	90.3	Pulse	0.30	3
1	Tb		15,026,910.67	0.65	97.3	Analog	0.50	3
1	Lu		8,854,254.33	1.02	97.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		486,786.70	0.49	91.5	Pulse	0.30	3
1	Te		26,133.32	1.78	85.9	Pulse	0.50	3
1	Li		2,962.46	2.53	87.7	Pulse	0.30	3

Quantitation Report

File Name	032_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:01
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.671	ug/l	1.97	15,268.01	4.746E-02	Pulse	0.50	3
As			1	0.004	ug/l	36.79	29.33	9.122E-05	Pulse	1.00	3
Mo			1	0.034	ug/l	12.66	542.68	1.094E-03	Pulse	0.50	3
Pb			1	0.006	ug/l	28.16	3,973.13	3.427E-04	Pulse	1.00	3
Be			1	0.011	ug/l	50.09	1.67	4.375E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	14.00	644.68	1.301E-03	Pulse	0.50	3
Ba			1	0.014	ug/l	25.02	94.00	2.816E-05	Pulse	0.50	3
Tl			1	0.030	ug/l	12.61	4,546.63	3.922E-04	Pulse	0.50	3
Sn			1	0.030	ug/l	11.93	1,301.16	3.899E-04	Pulse	0.30	3
Sr			1	0.055	ug/l	1.79	1,784.76	5.348E-04	Pulse	0.50	3
[Pb]			1	0.007	ug/l	21.29	1,942.79	1.676E-04	Pulse	0.50	3
Ca			1	3.315	ug/l	8.92	319.33	8.390E-04	Pulse	0.50	3
Ti			1	0.023	ug/l	61.88	9.33	2.450E-05	Pulse	0.50	3
Na			1	4.320	ug/l	2.66	19,711.67	5.178E-02	Pulse	1.00	3
Mg			1	1.935	ug/l	1.16	2,271.80	5.968E-03	Pulse	1.00	3
K			1	3.377	ug/l	3.76	14,306.17	3.758E-02	Pulse	1.00	3
V			1	-0.009	ug/l	-26.51	488.01	1.282E-03	Pulse	0.50	3
Mn			1	1.021	ug/l	1.84	10,663.62	3.315E-02	Pulse	0.50	3
Fe			1	2.412	ug/l	7.18	79,883.85	2.484E-01	Pulse	0.50	3
Co			1	0.009	ug/l	10.60	434.68	1.352E-03	Pulse	0.50	3
Ni			1	0.195	ug/l	7.39	3,356.31	1.043E-02	Pulse	0.50	3
Cu			1	-0.007	ug/l	-55.91	15,902.57	4.943E-02	Pulse	0.50	3
Zn			1	0.206	ug/l	10.72	2,872.88	5.794E-03	Pulse	1.00	3
Cd			1	0.007	ug/l	27.31	52.67	1.062E-04	Pulse	0.50	3
Al			1	32.094	ug/l	0.44	9,164.44	2.408E-02	Pulse	1.00	3
Se			1	0.006	ug/l	126.78	22.22	7.785E-04	Pulse	3.00	3
Sb			1	0.015	ug/l	15.50	382.34	7.712E-04	Pulse	1.00	3
Se			1	-0.021	ug/l	-405.55	31.00	1.088E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,592,498.00	0.23	99.1	Analog	0.50	3
1	Sc		380,645.32	0.27	91.0	Pulse	0.30	3
1	Ge		321,698.19	0.86	92.4	Pulse	0.30	3
1	In		3,337,036.54	0.24	92.9	Pulse	0.30	3
1	Tb		15,193,808.33	0.10	98.4	Analog	0.50	3
1	Lu		8,780,863.33	0.59	97.0	Analog	0.50	3
1	Ge		495,844.96	0.36	93.2	Pulse	0.30	3
1	Te		28,539.56	1.12	93.9	Pulse	0.50	3
1	Li		3,113.59	6.63	92.1	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:04
Sample Name	FA53625-12F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	19.398	ug/l	0.70	180,632.22	6.371E-01	Pulse	0.50	3
As			1	0.099	ug/l	5.85	110.67	3.903E-04	Pulse	1.00	3
Mo			1	0.543	ug/l	1.35	3,696.38	8.444E-03	Pulse	0.50	3
Pb			1	0.059	ug/l	7.40	5,678.62	5.404E-04	Pulse	1.00	3
Be			1	0.042	ug/l	60.36	2.67	7.673E-06	Pulse	2.00	3
Ag			1	0.025	ug/l	11.90	714.68	1.633E-03	Pulse	0.50	3
Ba			1	10.954	ug/l	1.99	25,558.03	8.424E-03	Pulse	0.50	3
Tl			1	0.032	ug/l	12.53	2,273.50	2.164E-04	Pulse	0.50	3
Sn			1	0.667	ug/l	10.33	4,616.17	1.522E-03	Pulse	0.30	3
Sr			1	90.095	ug/l	1.18	413,655.64	1.363E-01	Pulse	0.50	3
[Pb]			1	0.064	ug/l	12.52	2,786.90	2.652E-04	Pulse	0.50	3
Ca			1	23679.067	ug/l	1.16	462,079.94	1.330E+00	Pulse	0.50	3
Ti			1	0.503	ug/l	39.00	82.00	2.361E-04	Pulse	0.50	3
Na			1	26227.253	ug/l	0.71	27,830,496.67	8.011E+01	Analog	1.00	3
Mg			1	7120.146	ug/l	0.67	3,257,681.50	9.377E+00	Pulse	1.00	3
K			1	2218.638	ug/l	0.37	767,221.90	2.208E+00	Pulse	1.00	3
V			1	0.259	ug/l	0.07	2,330.82	6.709E-03	Pulse	0.50	3
Mn			1	19.363	ug/l	1.67	78,677.38	2.775E-01	Pulse	0.50	3
Fe			1	158.933	ug/l	1.40	1,196,765.91	4.221E+00	Pulse	0.50	3
Co			1	0.771	ug/l	3.86	13,594.80	4.795E-02	Pulse	0.50	3
Ni			1	22.337	ug/l	0.90	108,480.85	3.826E-01	Pulse	0.50	3
Cu			1	1.784	ug/l	1.37	38,115.51	1.344E-01	Pulse	0.50	3
Zn			1	4.158	ug/l	0.91	8,546.90	1.953E-02	Pulse	1.00	3
Cd			1	0.049	ug/l	15.52	152.67	3.488E-04	Pulse	0.50	3
Al			1	27.370	ug/l	3.42	3,766.03	1.084E-02	Pulse	1.00	3
Se			1	0.280	ug/l	20.71	29.56	1.510E-03	Pulse	3.00	3
Sb			1	0.101	ug/l	10.25	757.02	1.729E-03	Pulse	1.00	3
Se			1	0.818	ug/l	13.43	44.56	2.276E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,509,303.33	0.47	89.9	Analog	0.50	3
1	Sc		347,406.63	0.14	83.1	Pulse	0.30	3
1	Ge		283,546.38	0.48	81.4	Pulse	0.30	3
1	In		3,034,335.36	0.84	84.5	Pulse	0.30	3
1	Tb		14,535,509.00	0.67	94.1	Analog	0.50	3
1	Lu		8,546,083.00	0.84	94.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		437,736.18	0.04	82.3	Pulse	0.30	3
1	Te		19,574.47	0.31	64.4	Pulse	0.50	3
1	Li		2,830.21	5.11	83.8	Pulse	0.30	3

Quantitation Report

File Name	034SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:08
Sample Name	FA53625-13F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	2.812	ug/l	2.37	27,253.72	9.544E-02	Pulse	0.50	3
As			1	0.493	ug/l	7.11	482.68	1.690E-03	Pulse	1.00	3
Mo			1	0.590	ug/l	2.01	4,015.78	9.173E-03	Pulse	0.50	3
Pb			1	0.132	ug/l	3.30	8,910.00	8.486E-04	Pulse	1.00	3
Be			1	0.067	ug/l	40.47	4.17	1.194E-05	Pulse	2.00	3
Ag			1	0.014	ug/l	8.75	429.34	9.807E-04	Pulse	0.50	3
Ba			1	31.411	ug/l	0.42	73,419.31	2.414E-02	Pulse	0.50	3
Tl			1	0.105	ug/l	2.71	7,082.82	6.745E-04	Pulse	0.50	3
Sn			1	0.490	ug/l	5.37	3,620.39	1.191E-03	Pulse	0.30	3
Sr			1	60.415	ug/l	0.36	278,387.36	9.154E-02	Pulse	0.50	3
[Pb]			1	0.140	ug/l	1.02	4,363.24	4.155E-04	Pulse	0.50	3
Ca			1	27233.492	ug/l	0.95	534,374.08	1.530E+00	Pulse	0.50	3
Ti			1	1.564	ug/l	3.55	254.00	7.270E-04	Pulse	0.50	3
Na			1	29557.674	ug/l	1.33	31,537,276.67	9.028E+01	Analog	1.00	3
Mg			1	7198.186	ug/l	1.35	3,311,628.50	9.480E+00	Pulse	1.00	3
K			1	1637.926	ug/l	1.07	572,382.54	1.638E+00	Pulse	1.00	3
V			1	0.341	ug/l	2.73	2,904.89	8.316E-03	Pulse	0.50	3
Mn			1	1517.682	ug/l	0.78	6,114,790.33	2.141E+01	Analog	0.50	3
Fe			1	317.043	ug/l	0.68	2,369,270.58	8.296E+00	Pulse	0.50	3
Co			1	18.965	ug/l	0.51	335,599.38	1.175E+00	Pulse	0.50	3
Ni			1	6.807	ug/l	0.97	34,053.23	1.192E-01	Pulse	0.50	3
Cu			1	0.713	ug/l	3.70	23,933.49	8.381E-02	Pulse	0.50	3
Zn			1	6.355	ug/l	1.17	12,072.78	2.758E-02	Pulse	1.00	3
Cd			1	0.258	ug/l	4.86	798.69	1.824E-03	Pulse	0.50	3
Al			1	25.231	ug/l	1.72	3,518.32	1.007E-02	Pulse	1.00	3
Se			1	0.143	ug/l	36.29	22.56	1.136E-03	Pulse	3.00	3
Sb			1	0.079	ug/l	9.01	630.68	1.441E-03	Pulse	1.00	3
Se			1	0.665	ug/l	22.14	41.00	2.064E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,500,389.33	0.39	89.8	Analog	0.50	3
1	Sc		349,349.55	0.63	83.5	Pulse	0.30	3
1	Ge		285,578.96	0.22	82.0	Pulse	0.30	3
1	In		3,041,017.66	0.56	84.7	Pulse	0.30	3
1	Tb		14,649,330.33	0.66	94.8	Analog	0.50	3
1	Lu		8,646,638.67	0.38	95.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		437,787.24	0.09	82.3	Pulse	0.30	3
1	Te		19,869.48	0.95	65.3	Pulse	0.50	3
1	Li		2,859.11	5.22	84.6	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:11
Sample Name	FA53625-14F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	8.888	ug/l	0.30	84,265.51	2.939E-01	Pulse	0.50	3
As			1	0.130	ug/l	0.98	141.33	4.929E-04	Pulse	1.00	3
Mo			1	1.464	ug/l	1.83	9,981.35	2.271E-02	Pulse	0.50	3
Pb			1	0.036	ug/l	2.98	4,597.96	4.405E-04	Pulse	1.00	3
Be			1	0.014	ug/l	115.72	1.00	2.831E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	8.78	298.00	6.782E-04	Pulse	0.50	3
Ba			1	17.052	ug/l	0.28	39,843.69	1.311E-02	Pulse	0.50	3
Tl			1	0.017	ug/l	13.92	1,257.39	1.204E-04	Pulse	0.50	3
Sn			1	0.484	ug/l	4.06	3,583.71	1.179E-03	Pulse	0.30	3
Sr			1	84.988	ug/l	1.18	390,934.41	1.286E-01	Pulse	0.50	3
[Pb]			1	0.032	ug/l	2.62	2,118.14	2.029E-04	Pulse	0.50	3
Ca			1	34250.797	ug/l	1.06	678,761.87	1.924E+00	Pulse	0.50	3
Ti			1	0.798	ug/l	13.23	131.33	3.724E-04	Pulse	0.50	3
Na			1	37635.657	ug/l	0.46	40,558,002.67	1.149E+02	Analog	1.00	3
Mg			1	9221.093	ug/l	0.54	4,284,898.50	1.214E+01	Pulse	1.00	3
K			1	7115.370	ug/l	0.40	2,474,983.50	7.014E+00	Pulse	1.00	3
V			1	0.239	ug/l	4.94	2,234.81	6.333E-03	Pulse	0.50	3
Mn			1	82.331	ug/l	0.10	334,251.36	1.166E+00	Pulse	0.50	3
Fe			1	65.630	ug/l	4.25	520,658.09	1.816E+00	Pulse	0.50	3
Co			1	2.195	ug/l	1.71	39,057.90	1.362E-01	Pulse	0.50	3
Ni			1	395.963	ug/l	0.60	1,926,501.50	6.718E+00	Pulse	0.50	3
Cu			1	2.254	ug/l	2.09	44,929.36	1.567E-01	Pulse	0.50	3
Zn			1	5.763	ug/l	4.15	11,164.24	2.541E-02	Pulse	1.00	3
Cd			1	0.051	ug/l	21.97	159.33	3.625E-04	Pulse	0.50	3
Al			1	15.378	ug/l	6.95	2,304.14	6.530E-03	Pulse	1.00	3
Se			1	0.235	ug/l	3.62	26.66	1.387E-03	Pulse	3.00	3
Sb			1	0.121	ug/l	6.16	883.36	2.010E-03	Pulse	1.00	3
Se			1	0.470	ug/l	70.10	34.44	1.795E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,439,193.67	0.92	89.3	Analog	0.50	3
1	Sc		352,853.57	0.68	84.4	Pulse	0.30	3
1	Ge		286,743.02	0.44	82.4	Pulse	0.30	3
1	In		3,039,337.24	0.25	84.7	Pulse	0.30	3
1	Tb		14,675,973.67	1.14	95.0	Analog	0.50	3
1	Lu		8,612,400.33	0.49	95.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		439,433.21	0.10	82.6	Pulse	0.30	3
1	Te		19,220.78	1.45	63.2	Pulse	0.50	3
1	Li		2,915.79	4.32	86.3	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:15
Sample Name	FA53625-15F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	22.431	ug/l	0.84	211,402.03	7.361E-01	Pulse	0.50	3
As			1	0.105	ug/l	8.31	117.67	4.097E-04	Pulse	1.00	3
Mo			1	0.483	ug/l	1.69	3,310.31	7.517E-03	Pulse	0.50	3
Pb			1	0.111	ug/l	5.32	7,910.84	7.574E-04	Pulse	1.00	3
Be			1	0.019	ug/l	87.03	1.33	3.741E-06	Pulse	2.00	3
Ag			1	0.009	ug/l	17.16	298.67	6.784E-04	Pulse	0.50	3
Ba			1	20.891	ug/l	0.53	48,940.56	1.606E-02	Pulse	0.50	3
Tl			1	0.010	ug/l	18.31	778.69	7.455E-05	Pulse	0.50	3
Sn			1	0.512	ug/l	1.49	3,752.62	1.231E-03	Pulse	0.30	3
Sr			1	314.281	ug/l	0.10	1,446,458.00	4.747E-01	Pulse	0.50	3
[Pb]			1	0.104	ug/l	8.49	3,592.39	3.439E-04	Pulse	0.50	3
Ca			1	33068.438	ug/l	0.47	660,849.85	1.857E+00	Pulse	0.50	3
Ti			1	0.191	ug/l	18.55	32.67	9.184E-05	Pulse	0.50	3
Na			1	35049.360	ug/l	0.65	38,088,109.33	1.070E+02	Analog	1.00	3
Mg			1	8933.540	ug/l	0.29	4,186,151.58	1.177E+01	Pulse	1.00	3
K			1	3270.996	ug/l	0.10	1,153,271.50	3.241E+00	Pulse	1.00	3
V			1	0.252	ug/l	1.03	2,338.81	6.573E-03	Pulse	0.50	3
Mn			1	19.735	ug/l	0.94	81,193.62	2.827E-01	Pulse	0.50	3
Fe			1	156.679	ug/l	0.75	1,195,478.83	4.163E+00	Pulse	0.50	3
Co			1	0.706	ug/l	3.23	12,615.46	4.393E-02	Pulse	0.50	3
Ni			1	14.793	ug/l	0.85	73,140.64	2.547E-01	Pulse	0.50	3
Cu			1	2.114	ug/l	2.51	43,088.55	1.500E-01	Pulse	0.50	3
Zn			1	7.590	ug/l	0.67	14,137.85	3.210E-02	Pulse	1.00	3
Cd			1	0.206	ug/l	5.06	640.68	1.455E-03	Pulse	0.50	3
Al			1	11.186	ug/l	2.57	1,787.08	5.022E-03	Pulse	1.00	3
Se			1	0.162	ug/l	60.62	23.44	1.189E-03	Pulse	3.00	3
Sb			1	0.078	ug/l	8.13	624.34	1.418E-03	Pulse	1.00	3
Se			1	0.574	ug/l	41.58	38.22	1.939E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,445,121.67	0.05	89.3	Analog	0.50	3
1	Sc		355,809.93	0.36	85.1	Pulse	0.30	3
1	Ge		287,197.01	0.78	82.5	Pulse	0.30	3
1	In		3,047,379.05	0.49	84.9	Pulse	0.30	3
1	Tb		14,730,832.67	0.38	95.4	Analog	0.50	3
1	Lu		8,659,437.00	0.88	95.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		440,374.13	0.35	82.8	Pulse	0.30	3
1	Te		19,771.37	2.47	65.0	Pulse	0.50	3
1	Li		2,821.32	6.16	83.5	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:19
Sample Name	FA53625-16F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.516	ug/l	3.13	5,758.87	2.048E-02	Pulse	0.50	3
As			1	1.608	ug/l	4.99	1,508.73	5.363E-03	Pulse	1.00	3
Mo			1	3.657	ug/l	0.96	24,397.88	5.670E-02	Pulse	0.50	3
Pb			1	0.257	ug/l	1.33	14,202.90	1.374E-03	Pulse	1.00	3
Be			1	0.020	ug/l	23.23	1.33	3.850E-06	Pulse	2.00	3
Ag			1	0.010	ug/l	6.98	312.00	7.253E-04	Pulse	0.50	3
Ba			1	52.027	ug/l	1.15	119,797.65	3.998E-02	Pulse	0.50	3
Tl			1	0.006	ug/l	22.43	489.34	4.732E-05	Pulse	0.50	3
Sn			1	0.440	ug/l	3.67	3,290.32	1.098E-03	Pulse	0.30	3
Sr			1	223.719	ug/l	0.33	1,012,628.40	3.380E-01	Pulse	0.50	3
[Pb]			1	0.248	ug/l	3.37	6,493.25	6.282E-04	Pulse	0.50	3
Ca			1	55504.669	ug/l	0.95	1,078,182.13	3.117E+00	Pulse	0.50	3
Ti			1	0.301	ug/l	34.81	49.33	1.426E-04	Pulse	0.50	3
Na			1	22240.181	ug/l	1.27	23,497,146.67	6.794E+01	Analog	1.00	3
Mg			1	7220.306	ug/l	0.78	3,289,181.08	9.509E+00	Pulse	1.00	3
K			1	15405.285	ug/l	1.44	5,240,072.00	1.515E+01	Analog	1.00	3
V			1	0.206	ug/l	4.50	1,968.11	5.690E-03	Pulse	0.50	3
Mn			1	362.218	ug/l	0.66	1,438,353.92	5.114E+00	Pulse	0.50	3
Fe			1	570.777	ug/l	1.89	4,172,869.08	1.484E+01	Pulse	0.50	3
Co			1	0.105	ug/l	4.38	1,888.77	6.714E-03	Pulse	0.50	3
Ni			1	1.572	ug/l	2.28	8,569.92	3.047E-02	Pulse	0.50	3
Cu			1	0.950	ug/l	4.15	26,711.77	9.498E-02	Pulse	0.50	3
Zn			1	4.064	ug/l	4.68	8,250.77	1.918E-02	Pulse	1.00	3
Cd			1	0.055	ug/l	17.62	170.00	3.952E-04	Pulse	0.50	3
Al			1	10.734	ug/l	3.93	1,680.74	4.860E-03	Pulse	1.00	3
Se			1	0.025	ug/l	100.42	15.66	8.135E-04	Pulse	3.00	3
Sb			1	0.063	ug/l	12.02	521.34	1.212E-03	Pulse	1.00	3
Se			1	0.519	ug/l	3.88	35.89	1.862E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,337,146.33	0.39	88.4	Analog	0.50	3
1	Sc		345,909.30	1.22	82.7	Pulse	0.30	3
1	Ge		281,291.51	1.31	80.8	Pulse	0.30	3
1	In		2,996,049.81	0.52	83.4	Pulse	0.30	3
1	Tb		14,499,075.67	0.21	93.9	Analog	0.50	3
1	Lu		8,572,965.00	0.85	94.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		430,302.77	0.95	80.9	Pulse	0.30	3
1	Te		19,270.82	1.07	63.4	Pulse	0.50	3
1	Li		2,779.09	2.33	82.2	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:22
Sample Name	FA53625-17F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	14.676	ug/l	1.57	136,718.93	4.829E-01	Pulse	0.50	3
As			1	0.089	ug/l	20.83	101.33	3.577E-04	Pulse	1.00	3
Mo			1	0.906	ug/l	1.89	6,101.01	1.408E-02	Pulse	0.50	3
Pb			1	0.035	ug/l	11.67	4,625.97	4.397E-04	Pulse	1.00	3
Be			1	0.017	ug/l	156.26	1.17	3.407E-06	Pulse	2.00	3
Ag			1	0.008	ug/l	7.88	252.67	5.833E-04	Pulse	0.50	3
Ba			1	8.644	ug/l	2.30	19,882.27	6.648E-03	Pulse	0.50	3
Tl			1	0.005	ug/l	17.28	449.34	4.271E-05	Pulse	0.50	3
Sn			1	0.419	ug/l	7.84	3,162.52	1.058E-03	Pulse	0.30	3
Sr			1	84.580	ug/l	1.34	382,818.43	1.280E-01	Pulse	0.50	3
[Pb]			1	0.039	ug/l	16.49	2,264.83	2.153E-04	Pulse	0.50	3
Ca			1	19960.077	ug/l	0.94	387,136.18	1.121E+00	Pulse	0.50	3
Ti			1	0.240	ug/l	35.92	39.33	1.141E-04	Pulse	0.50	3
Na			1	27071.755	ug/l	1.10	28,549,328.00	8.269E+01	Analog	1.00	3
Mg			1	5339.527	ug/l	0.81	2,428,049.58	7.032E+00	Pulse	1.00	3
K			1	1767.409	ug/l	0.90	609,594.36	1.766E+00	Pulse	1.00	3
V			1	0.310	ug/l	10.99	2,664.86	7.722E-03	Pulse	0.50	3
Mn			1	6.870	ug/l	2.05	28,669.80	1.013E-01	Pulse	0.50	3
Fe			1	68.580	ug/l	3.40	535,560.62	1.892E+00	Pulse	0.50	3
Co			1	0.319	ug/l	2.68	5,644.18	1.993E-02	Pulse	0.50	3
Ni			1	16.402	ug/l	1.50	79,834.17	2.820E-01	Pulse	0.50	3
Cu			1	1.096	ug/l	3.22	28,858.17	1.019E-01	Pulse	0.50	3
Zn			1	5.672	ug/l	1.45	10,863.07	2.507E-02	Pulse	1.00	3
Cd			1	0.014	ug/l	17.60	47.33	1.093E-04	Pulse	0.50	3
Al			1	13.896	ug/l	5.09	2,070.11	5.997E-03	Pulse	1.00	3
Se			1	0.208	ug/l	31.15	25.56	1.313E-03	Pulse	3.00	3
Sb			1	0.054	ug/l	9.62	472.68	1.091E-03	Pulse	1.00	3
Se			1	0.700	ug/l	12.90	41.11	2.113E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,521,416.33	0.31	90.0	Analog	0.50	3
1	Sc		345,285.37	0.91	82.6	Pulse	0.30	3
1	Ge		283,179.57	1.44	81.3	Pulse	0.30	3
1	In		2,990,763.91	0.97	83.3	Pulse	0.30	3
1	Tb		14,607,508.00	0.49	94.6	Analog	0.50	3
1	Lu		8,576,114.00	0.33	94.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		433,260.20	0.46	81.5	Pulse	0.30	3
1	Te		19,458.38	0.14	64.0	Pulse	0.50	3
1	Li		2,851.33	2.43	84.4	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:26
Sample Name	FA53625-24F
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.230	ug/l	5.58	3,227.61	1.114E-02	Pulse	0.50	3
As			1	0.051	ug/l	12.05	67.00	2.313E-04	Pulse	1.00	3
Mo			1	0.026	ug/l	10.92	196.00	4.402E-04	Pulse	0.50	3
Pb			1	0.059	ug/l	3.63	5,959.04	5.388E-04	Pulse	1.00	3
Be			1	0.020	ug/l	64.07	1.33	3.820E-06	Pulse	2.00	3
Ag			1	0.391	ug/l	13.89	10,503.69	2.359E-02	Pulse	0.50	3
Ba			1	1.206	ug/l	2.81	2,882.90	9.336E-04	Pulse	0.50	3
Tl			1	0.004	ug/l	12.07	416.68	3.768E-05	Pulse	0.50	3
Sn			1	0.441	ug/l	3.58	3,395.89	1.100E-03	Pulse	0.30	3
Sr			1	0.803	ug/l	2.43	4,883.99	1.582E-03	Pulse	0.50	3
[Pb]			1	0.055	ug/l	6.63	2,737.57	2.475E-04	Pulse	0.50	3
Ca			1	230.158	ug/l	4.03	4,683.90	1.339E-02	Pulse	0.50	3
Ti			1	0.117	ug/l	29.11	20.00	5.727E-05	Pulse	0.50	3
Na			1	970.706	ug/l	1.60	1,045,786.88	2.989E+00	Pulse	1.00	3
Mg			1	35.201	ug/l	0.77	16,522.14	4.723E-02	Pulse	1.00	3
K			1	15.697	ug/l	5.00	16,219.32	4.636E-02	Pulse	1.00	3
V			1	0.168	ug/l	2.46	1,728.08	4.939E-03	Pulse	0.50	3
Mn			1	1.286	ug/l	0.90	6,517.78	2.249E-02	Pulse	0.50	3
Fe			1	3.622	ug/l	3.49	62,994.25	2.174E-01	Pulse	0.50	3
Co			1	0.017	ug/l	21.36	363.34	1.254E-03	Pulse	0.50	3
Ni			1	-0.016	ug/l	-70.59	1,027.37	3.546E-03	Pulse	0.50	3
Cu			1	2.917	ug/l	1.62	54,491.17	1.880E-01	Pulse	0.50	3
Zn			1	1.431	ug/l	1.08	4,245.47	9.531E-03	Pulse	1.00	3
Cd			1	0.010	ug/l	29.52	33.33	7.475E-05	Pulse	0.50	3
Al			1	6.014	ug/l	1.76	1,106.70	3.163E-03	Pulse	1.00	3
Se			1	0.027	ug/l	50.60	16.22	8.195E-04	Pulse	3.00	3
Sb			1	0.063	ug/l	8.23	544.01	1.221E-03	Pulse	1.00	3
Se			1	0.320	ug/l	35.03	31.44	1.587E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,059,450.33	0.38	94.6	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		349,863.97	1.00	83.7	Pulse	0.30	3
1	Ge		289,780.60	0.41	83.2	Pulse	0.30	3
1	In		3,087,941.20	0.23	86.0	Pulse	0.30	3
1	Tb		14,798,351.67	0.78	95.8	Analog	0.50	3
1	Lu		8,712,067.00	0.83	96.3	Analog	0.50	3
1	Ge		445,454.01	0.74	83.7	Pulse	0.30	3
1	Te		19,793.38	1.40	65.1	Pulse	0.50	3
1	Li		2,922.45	1.82	86.5	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:30
Sample Name	FA53627-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.816	ug/l	1.09	8,610.59	3.026E-02	Pulse	0.50	3
As			1	0.130	ug/l	4.57	139.67	4.909E-04	Pulse	1.00	3
Mo			1	0.146	ug/l	4.27	998.03	2.307E-03	Pulse	0.50	3
Pb			1	0.228	ug/l	0.69	13,362.22	1.255E-03	Pulse	1.00	3
Be			1	0.051	ug/l	25.76	3.17	9.179E-06	Pulse	2.00	3
Ag			1	0.032	ug/l	5.95	899.36	2.078E-03	Pulse	0.50	3
Ba			1	25.128	ug/l	0.68	58,328.16	1.932E-02	Pulse	0.50	3
Tl			1	0.018	ug/l	9.50	1,346.73	1.265E-04	Pulse	0.50	3
Sn			1	0.671	ug/l	21.72	4,619.02	1.529E-03	Pulse	0.30	3
Sr			1	208.101	ug/l	1.00	949,461.40	3.144E-01	Pulse	0.50	3
[Pb]			1	0.234	ug/l	2.17	6,391.22	6.004E-04	Pulse	0.50	3
Ca			1	19029.211	ug/l	1.32	369,122.26	1.069E+00	Pulse	0.50	3
Ti			1	2.486	ug/l	11.57	398.01	1.153E-03	Pulse	0.50	3
Na			1	9608.017	ug/l	1.19	10,139,138.00	2.936E+01	Analog	1.00	3
Mg			1	2786.168	ug/l	1.03	1,267,225.75	3.670E+00	Pulse	1.00	3
K			1	1214.735	ug/l	1.46	422,353.51	1.223E+00	Pulse	1.00	3
V			1	0.229	ug/l	8.56	2,118.79	6.135E-03	Pulse	0.50	3
Mn			1	8.874	ug/l	1.62	36,852.81	1.295E-01	Pulse	0.50	3
Fe			1	69.857	ug/l	0.36	547,619.25	1.925E+00	Pulse	0.50	3
Co			1	0.186	ug/l	2.06	3,328.30	1.170E-02	Pulse	0.50	3
Ni			1	19.834	ug/l	1.80	96,780.06	3.402E-01	Pulse	0.50	3
Cu			1	16.690	ug/l	1.14	238,885.76	8.396E-01	Pulse	0.50	3
Zn			1	595.610	ug/l	0.78	946,547.94	2.187E+00	Pulse	1.00	3
Cd			1	5.312	ug/l	1.66	16,165.75	3.736E-02	Pulse	0.50	3
Al			1	73.247	ug/l	1.17	9,438.23	2.733E-02	Pulse	1.00	3
Se			1	0.275	ug/l	31.68	29.00	1.498E-03	Pulse	3.00	3
Sb			1	0.281	ug/l	5.65	1,814.76	4.194E-03	Pulse	1.00	3
Se			1	1.218	ug/l	25.21	54.78	2.829E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,644,728.00	0.13	91.0	Analog	0.50	3
1	Sc		345,323.34	0.85	82.6	Pulse	0.30	3
1	Ge		284,522.10	0.33	81.7	Pulse	0.30	3
1	In		3,019,806.69	0.40	84.1	Pulse	0.30	3
1	Tb		14,603,371.67	0.25	94.6	Analog	0.50	3
1	Lu		8,573,439.33	0.68	94.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		432,747.32	0.39	81.4	Pulse	0.30	3
1	Te		19,380.27	1.68	63.7	Pulse	0.50	3
1	Li		2,780.21	4.34	82.3	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:33
Sample Name	MP33699-D2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.903	ug/l	2.64	9,278.23	3.311E-02	Pulse	0.50	3
As			1	0.116	ug/l	11.55	125.33	4.474E-04	Pulse	1.00	3
Mo			1	0.149	ug/l	2.08	1,010.70	2.350E-03	Pulse	0.50	3
Pb			1	0.177	ug/l	0.48	11,045.24	1.037E-03	Pulse	1.00	3
Be			1	0.076	ug/l	56.04	4.67	1.362E-05	Pulse	2.00	3
Ag			1	0.032	ug/l	11.72	885.36	2.058E-03	Pulse	0.50	3
Ba			1	26.431	ug/l	0.72	60,479.83	2.032E-02	Pulse	0.50	3
Tl			1	0.017	ug/l	6.01	1,298.06	1.219E-04	Pulse	0.50	3
Sn			1	0.664	ug/l	4.67	4,510.58	1.515E-03	Pulse	0.30	3
Sr			1	220.213	ug/l	0.62	990,349.65	3.327E-01	Pulse	0.50	3
[Pb]			1	0.179	ug/l	1.75	5,239.49	4.920E-04	Pulse	0.50	3
Ca			1	19876.843	ug/l	0.72	381,965.38	1.117E+00	Pulse	0.50	3
Ti			1	6.617	ug/l	5.79	1,048.70	3.065E-03	Pulse	0.50	3
Na			1	10030.848	ug/l	0.54	10,486,075.00	3.065E+01	Analog	1.00	3
Mg			1	2910.738	ug/l	0.15	1,311,498.50	3.834E+00	Pulse	1.00	3
K			1	1274.956	ug/l	0.43	438,638.29	1.282E+00	Pulse	1.00	3
V			1	0.342	ug/l	1.06	2,851.55	8.336E-03	Pulse	0.50	3
Mn			1	13.315	ug/l	4.05	53,859.73	1.922E-01	Pulse	0.50	3
Fe			1	83.447	ug/l	0.86	637,552.65	2.275E+00	Pulse	0.50	3
Co			1	0.204	ug/l	3.08	3,591.68	1.282E-02	Pulse	0.50	3
Ni			1	20.732	ug/l	1.17	99,586.91	3.554E-01	Pulse	0.50	3
Cu			1	15.987	ug/l	0.17	225,973.48	8.064E-01	Pulse	0.50	3
Zn			1	625.941	ug/l	0.87	988,777.31	2.298E+00	Pulse	1.00	3
Cd			1	5.623	ug/l	1.59	17,010.51	3.954E-02	Pulse	0.50	3
Al			1	94.472	ug/l	1.40	11,960.26	3.496E-02	Pulse	1.00	3
Se			1	0.304	ug/l	14.69	30.33	1.576E-03	Pulse	3.00	3
Sb			1	0.206	ug/l	4.28	1,363.39	3.170E-03	Pulse	1.00	3
Se			1	1.235	ug/l	12.83	54.89	2.852E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,648,899.00	0.37	91.1	Analog	0.50	3
1	Sc		342,078.04	0.55	81.8	Pulse	0.30	3
1	Ge		280,243.61	0.84	80.5	Pulse	0.30	3
1	In		2,976,791.48	0.44	82.9	Pulse	0.30	3
1	Tb		14,501,186.67	0.47	93.9	Analog	0.50	3
1	Lu		8,515,090.33	0.41	94.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		430,203.07	0.83	80.9	Pulse	0.30	3
1	Te		19,261.49	1.71	63.3	Pulse	0.50	3
1	Li		2,767.98	2.91	81.9	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:37
Sample Name	MP33699-SD2
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.742	ug/l	3.29	2,636.86	8.467E-03	Pulse	0.50	3
As			1	0.156	ug/l	9.78	52.00	1.670E-04	Pulse	1.00	3
Mo			1	0.166	ug/l	3.19	264.67	5.534E-04	Pulse	0.50	3
Pb			1	0.340	ug/l	3.15	6,584.95	5.771E-04	Pulse	1.00	3
Be			1	0.054	ug/l	151.99	0.83	2.265E-06	Pulse	2.00	3
Ag			1	0.043	ug/l	21.82	307.33	6.432E-04	Pulse	0.50	3
Ba			1	27.003	ug/l	1.09	13,447.68	4.156E-03	Pulse	0.50	3
Tl			1	0.024	ug/l	15.46	487.34	4.272E-05	Pulse	0.50	3
Sn			1	0.573	ug/l	5.58	1,587.86	4.908E-04	Pulse	0.30	3
Sr			1	225.289	ug/l	1.76	221,167.60	6.837E-02	Pulse	0.50	3
[Pb]			1	0.322	ug/l	6.21	3,036.95	2.661E-04	Pulse	0.50	3
Ca			1	20736.701	ug/l	1.00	86,088.81	2.333E-01	Pulse	0.50	3
Ti			1	3.171	ug/l	18.76	109.33	2.967E-04	Pulse	0.50	3
Na			1	10256.815	ug/l	0.60	2,320,328.42	6.289E+00	Pulse	1.00	3
Mg			1	3062.755	ug/l	0.43	297,933.53	8.075E-01	Pulse	1.00	3
K			1	1342.481	ug/l	0.48	108,645.96	2.945E-01	Pulse	1.00	3
V			1	0.164	ug/l	31.35	846.02	2.294E-03	Pulse	0.50	3
Mn			1	8.357	ug/l	3.18	8,695.31	2.793E-02	Pulse	0.50	3
Fe			1	74.468	ug/l	3.35	158,122.65	5.079E-01	Pulse	0.50	3
Co			1	0.190	ug/l	7.91	793.35	2.548E-03	Pulse	0.50	3
Ni			1	20.616	ug/l	1.77	22,956.95	7.374E-02	Pulse	0.50	3
Cu			1	19.961	ug/l	3.21	74,374.39	2.389E-01	Pulse	0.50	3
Zn			1	722.747	ug/l	1.32	255,334.46	5.341E-01	Pulse	1.00	3
Cd			1	5.845	ug/l	2.86	3,932.43	8.226E-03	Pulse	0.50	3
Al			1	87.025	ug/l	1.13	2,677.85	7.258E-03	Pulse	1.00	3
Se			1	0.308	ug/l	70.99	23.11	9.140E-04	Pulse	3.00	3
Sb			1	0.317	ug/l	10.44	583.01	1.220E-03	Pulse	1.00	3
Se			1	0.791	ug/l	79.64	34.44	1.364E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,410,676.00	0.33	97.6	Analog	0.50	3
1	Sc		368,949.17	0.91	88.2	Pulse	0.30	3
1	Ge		311,393.68	1.77	89.4	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,235,217.44	0.69	90.1	Pulse	0.30	3
1	Tb		15,017,782.33	0.78	97.2	Analog	0.50	3
1	Lu		8,823,432.67	0.36	97.5	Analog	0.50	3
1	Ge		478,118.90	1.26	89.9	Pulse	0.30	3
1	Te		25,266.79	0.97	83.1	Pulse	0.50	3
1	Li		3,090.25	2.65	91.4	Pulse	0.30	3

Quantitation Report

File Name	043CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:40
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.981	ug/l	1.41	1,005,053.10	3.268E+00	Pulse	0.50	3
As			1	50.138	ug/l	1.57	101,654.79	3.305E-01	Pulse	1.00	3
Mo			1	49.745	ug/l	0.42	727,245.83	1.542E+00	Pulse	0.50	3
Pb			1	46.941	ug/l	0.11	4,371,657.67	3.970E-01	Pulse	1.00	3
Be			1	52.582	ug/l	1.39	6,750.62	1.826E-02	Pulse	2.00	3
Ag			1	50.553	ug/l	0.83	2,859,351.92	6.061E+00	Pulse	0.50	3
Ba			1	49.340	ug/l	1.48	240,449.17	7.583E-02	Pulse	0.50	3
Tl			1	49.169	ug/l	0.56	6,843,153.33	6.215E-01	Analog	0.50	3
Sn			1	50.091	ug/l	1.53	593,419.20	1.872E-01	Pulse	0.30	3
Sr			1	48.702	ug/l	1.32	467,263.78	1.474E-01	Pulse	0.50	3
[Pb]			1	47.063	ug/l	0.51	2,044,511.50	1.857E-01	Pulse	0.50	3
Ca			1	4895.656	ug/l	0.23	203,444.65	5.503E-01	Pulse	0.50	3
Ti			1	48.869	ug/l	1.03	16,721.15	4.523E-02	Pulse	0.50	3
Na			1	5086.613	ug/l	0.53	11,494,141.33	3.109E+01	Analog	1.00	3
Mg			1	5092.054	ug/l	0.21	4,958,674.17	1.341E+01	Analog	1.00	3
K			1	4953.815	ug/l	0.52	3,606,494.75	9.755E+00	Pulse	1.00	3
V			1	49.748	ug/l	0.33	720,067.67	1.948E+00	Pulse	0.50	3
Mn			1	49.268	ug/l	0.61	428,832.43	1.394E+00	Pulse	0.50	3
Fe			1	5084.322	ug/l	1.24	80,653,600.00	2.622E+02	Analog	0.50	3
Co			1	49.843	ug/l	1.46	1,899,500.92	6.176E+00	Pulse	0.50	3
Ni			1	51.376	ug/l	1.42	537,069.96	1.746E+00	Pulse	0.50	3
Cu			1	51.295	ug/l	1.82	1,507,937.54	4.903E+00	Pulse	0.50	3
Zn			1	51.594	ug/l	0.41	180,442.42	3.825E-01	Pulse	1.00	3
Cd			1	50.841	ug/l	0.54	337,241.76	7.149E-01	Pulse	0.50	3
Al			1	4849.208	ug/l	0.48	1,289,399.96	3.488E+00	Pulse	1.00	3
Se			1	47.393	ug/l	0.54	6,742.41	2.597E-01	Pulse	3.00	3
Sb			1	49.444	ug/l	0.56	638,935.02	1.354E+00	Pulse	1.00	3
Se			1	47.736	ug/l	1.58	3,454.31	1.331E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,011,485.67	0.35	94.2	Analog	0.50	3
1	Sc		369,717.69	0.22	88.4	Pulse	0.30	3
1	Ge		307,584.80	1.21	88.3	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,171,313.97	1.84	88.3	Pulse	0.30	3
1	Tb		14,899,737.33	0.17	96.5	Analog	0.50	3
1	Lu		8,685,258.33	0.68	96.0	Analog	0.50	3
1	Ge		471,757.54	0.28	88.7	Pulse	0.30	3
1	Te		25,965.07	1.14	85.4	Pulse	0.50	3
1	Li		2,922.45	2.39	86.5	Pulse	0.30	3

Quantitation Report

File Name	044_CCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:44
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	99.520	ug/l	1.38	2,006,303.58	6.503E+00	Pulse	0.50	3
As			1	100.010	ug/l	0.42	203,389.75	6.593E-01	Pulse	1.00	3
Mo			1	99.152	ug/l	0.51	1,455,572.04	3.073E+00	Pulse	0.50	3
Pb			1	98.545	ug/l	0.70	8,984,956.67	8.331E-01	Analog	1.00	3
Be			1	102.179	ug/l	0.86	13,462.95	3.548E-02	Pulse	2.00	3
Ag			1	97.681	ug/l	0.21	5,548,003.67	1.171E+01	Pulse	0.50	3
Ba			1	99.547	ug/l	0.43	483,358.09	1.530E-01	Pulse	0.50	3
Tl			1	98.297	ug/l	0.69	13,399,171.00	1.242E+00	Analog	0.50	3
Sn			1	100.347	ug/l	0.97	1,183,655.72	3.746E-01	Pulse	0.30	3
Sr			1	99.622	ug/l	0.35	951,126.35	3.011E-01	Pulse	0.50	3
[Pb]			1	93.639	ug/l	0.50	3,982,565.50	3.693E-01	Pulse	0.50	3
Ca			1	9763.930	ug/l	0.48	416,212.06	1.097E+00	Pulse	0.50	3
Ti			1	98.679	ug/l	2.04	34,643.92	9.132E-02	Pulse	0.50	3
Na			1	9974.103	ug/l	0.94	23,119,104.67	6.094E+01	Analog	1.00	3
Mg			1	9936.722	ug/l	1.20	9,929,296.33	2.617E+01	Analog	1.00	3
K			1	9969.366	ug/l	0.92	7,436,045.33	1.960E+01	Analog	1.00	3
V			1	98.507	ug/l	0.44	1,462,569.00	3.855E+00	Pulse	0.50	3
Mn			1	98.955	ug/l	0.41	862,605.50	2.796E+00	Pulse	0.50	3
Fe			1	10262.342	ug/l	0.85	163,259,210.67	5.292E+02	Analog	0.50	3
Co			1	99.134	ug/l	0.66	3,789,697.25	1.228E+01	Pulse	0.50	3
Ni			1	101.387	ug/l	0.20	1,062,046.17	3.442E+00	Pulse	0.50	3
Cu			1	100.817	ug/l	0.50	2,958,235.58	9.589E+00	Pulse	0.50	3
Zn			1	101.116	ug/l	0.36	353,161.17	7.455E-01	Pulse	1.00	3
Cd			1	100.033	ug/l	0.65	666,303.29	1.407E+00	Pulse	0.50	3
Al			1	9646.287	ug/l	1.06	2,631,693.58	6.937E+00	Pulse	1.00	3
Se			1	96.882	ug/l	0.99	13,371.78	5.301E-01	Pulse	3.00	3
Sb			1	98.311	ug/l	0.48	1,275,517.58	2.693E+00	Pulse	1.00	3
Se			1	96.798	ug/l	1.10	6,776.54	2.686E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,784,576.00	0.59	92.2	Analog	0.50	3
1	Sc		379,418.94	1.04	90.7	Pulse	0.30	3
1	Ge		308,518.38	0.55	88.6	Pulse	0.30	3
1	In		3,159,358.48	0.19	88.0	Pulse	0.30	3
1	Tb		14,911,698.33	0.76	96.5	Analog	0.50	3
1	Lu		8,733,712.00	0.43	96.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		473,720.97	0.22	89.1	Pulse	0.30	3
1	Te		25,226.75	0.37	83.0	Pulse	0.50	3
1	Li		2,829.10	4.63	83.7	Pulse	0.30	3

Quantitation Report

File Name	045_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:48
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.705	ug/l	3.82	15,574.92	4.964E-02	Pulse	0.50	3
As			1	0.014	ug/l	44.59	48.67	1.552E-04	Pulse	1.00	3
Mo			1	0.035	ug/l	10.49	542.01	1.128E-03	Pulse	0.50	3
Pb			1	0.013	ug/l	11.16	4,599.62	4.010E-04	Pulse	1.00	3
Be			1	0.022	ug/l	18.02	3.00	8.017E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	10.30	754.02	1.570E-03	Pulse	0.50	3
Ba			1	0.021	ug/l	19.57	128.67	3.945E-05	Pulse	0.50	3
Tl			1	0.033	ug/l	7.01	4,986.75	4.348E-04	Pulse	0.50	3
Sn			1	0.042	ug/l	9.98	1,415.62	4.338E-04	Pulse	0.30	3
Sr			1	0.043	ug/l	9.35	1,631.41	5.000E-04	Pulse	0.50	3
[Pb]			1	0.011	ug/l	25.12	2,092.14	1.824E-04	Pulse	0.50	3
Ca			1	4.998	ug/l	32.74	384.67	1.028E-03	Pulse	0.50	3
Ti			1	0.041	ug/l	56.99	15.33	4.089E-05	Pulse	0.50	3
Na			1	3.624	ug/l	1.21	17,796.89	4.754E-02	Pulse	1.00	3
Mg			1	2.746	ug/l	1.91	3,033.90	8.103E-03	Pulse	1.00	3
K			1	1.701	ug/l	2.02	12,839.50	3.429E-02	Pulse	1.00	3
V			1	0.000	ug/l	-152.01	614.01	1.640E-03	Pulse	0.50	3
Mn			1	1.072	ug/l	1.93	10,855.05	3.460E-02	Pulse	0.50	3
Fe			1	3.070	ug/l	3.49	88,570.52	2.823E-01	Pulse	0.50	3
Co			1	0.017	ug/l	1.08	712.02	2.269E-03	Pulse	0.50	3
Ni			1	0.199	ug/l	4.59	3,314.96	1.057E-02	Pulse	0.50	3
Cu			1	-0.022	ug/l	-3.97	15,050.55	4.797E-02	Pulse	0.50	3
Zn			1	0.197	ug/l	9.48	2,751.20	5.728E-03	Pulse	1.00	3
Cd			1	0.012	ug/l	18.28	81.33	1.694E-04	Pulse	0.50	3
Al			1	33.841	ug/l	1.67	9,484.26	2.533E-02	Pulse	1.00	3
Se			1	0.018	ug/l	134.02	23.34	8.449E-04	Pulse	3.00	3
Sb			1	0.023	ug/l	8.66	478.34	9.959E-04	Pulse	1.00	3
Se			1	-0.017	ug/l	-481.82	30.22	1.099E-03	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,470,518.33	0.48	98.1	Analog	0.50	3
1	Sc		374,391.81	0.47	89.5	Pulse	0.30	3
1	Ge		313,773.03	0.51	90.1	Pulse	0.30	3
1	In		3,262,772.23	0.65	90.9	Pulse	0.30	3
1	Tb		15,051,465.67	0.92	97.5	Analog	0.50	3
1	Lu		8,716,314.00	0.46	96.3	Analog	0.50	3
1	Ge		480,269.31	0.21	90.3	Pulse	0.30	3
1	Te		27,571.42	2.04	90.7	Pulse	0.50	3
1	Li		2,955.79	4.24	87.5	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:51
Sample Name	MP33699-S3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	217.804	ug/l	1.24	1,922,507.75	7.116E+00	Pulse	0.50	3
As			1	198.882	ug/l	0.98	177,097.98	6.555E-01	Pulse	1.00	3
Mo			1	220.265	ug/l	1.21	1,414,000.71	3.413E+00	Pulse	0.50	3
Pb			1	217.449	ug/l	1.44	9,116,492.67	9.192E-01	Analog	1.00	3
Be			1	213.539	ug/l	1.97	12,299.38	3.708E-02	Pulse	2.00	3
Ag			1	109.546	ug/l	0.68	2,720,844.25	6.567E+00	Pulse	0.50	3
Ba			1	239.602	ug/l	0.90	524,208.93	1.841E-01	Pulse	0.50	3
Tl			1	208.180	ug/l	0.77	13,048,924.00	1.316E+00	Analog	0.50	3
Sn			1	216.023	ug/l	0.12	1,148,081.93	4.032E-01	Pulse	0.30	3
Sr			1	435.025	ug/l	0.95	1,870,145.75	6.569E-01	Pulse	0.50	3
[Pb]			1	199.401	ug/l	0.49	3,899,772.58	3.932E-01	Pulse	0.50	3
Ca			1	39963.947	ug/l	1.60	744,615.50	2.245E+00	Pulse	0.50	3
Ti			1	213.528	ug/l	1.41	32,778.01	9.880E-02	Pulse	0.50	3
Na			1	30725.727	ug/l	1.19	31,133,514.00	9.385E+01	Analog	1.00	3
Mg			1	23281.705	ug/l	1.61	10,171,293.33	3.066E+01	Analog	1.00	3
K			1	21236.159	ug/l	1.40	6,924,633.50	2.087E+01	Analog	1.00	3
V			1	213.694	ug/l	1.61	1,387,066.87	4.181E+00	Pulse	0.50	3
Mn			1	219.949	ug/l	0.91	839,362.88	3.107E+00	Pulse	0.50	3
Fe			1	21140.055	ug/l	1.14	147,254,565.33	5.451E+02	Analog	0.50	3
Co			1	216.292	ug/l	0.58	3,620,395.50	1.340E+01	Pulse	0.50	3
Ni			1	238.917	ug/l	0.89	1,095,620.46	4.055E+00	Pulse	0.50	3
Cu			1	228.462	ug/l	0.72	2,933,471.17	1.086E+01	Pulse	0.50	3
Zn			1	814.816	ug/l	1.36	1,239,084.79	2.991E+00	Pulse	1.00	3
Cd			1	212.639	ug/l	1.18	619,361.67	1.495E+00	Pulse	0.50	3
Al			1	18474.173	ug/l	1.57	2,203,574.50	6.642E+00	Pulse	1.00	3
Se			1	203.608	ug/l	1.22	10,306.44	5.570E-01	Pulse	3.00	3
Sb			1	204.541	ug/l	0.84	1,160,483.75	2.801E+00	Pulse	1.00	3
Se			1	204.702	ug/l	2.08	5,254.17	2.840E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		9,918,493.67	0.30	84.8	Analog	0.50	3
1	Sc		331,771.30	0.73	79.3	Pulse	0.30	3
1	Ge		270,170.39	0.35	77.6	Pulse	0.30	3
1	In		2,847,125.58	0.50	79.3	Pulse	0.30	3
1	Tb		14,108,046.00	0.19	91.3	Analog	0.50	3
1	Lu		8,363,165.33	0.58	92.4	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		414,322.08	0.56	77.9	Pulse	0.30	3
1	Te		18,507.39	1.90	60.9	Pulse	0.50	3
1	Li		2,609.07	1.09	77.2	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:55
Sample Name	MP33699-S4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	210.741	ug/l	0.79	1,891,418.71	6.885E+00	Pulse	0.50	3
As			1	191.340	ug/l	1.06	173,230.39	6.306E-01	Pulse	1.00	3
Mo			1	212.239	ug/l	0.64	1,380,029.25	3.289E+00	Pulse	0.50	3
Pb			1	208.011	ug/l	0.02	8,884,055.67	8.793E-01	Analog	1.00	3
Be			1	202.019	ug/l	0.60	11,920.16	3.507E-02	Pulse	2.00	3
Ag			1	105.528	ug/l	1.10	2,654,760.17	6.326E+00	Pulse	0.50	3
Ba			1	231.181	ug/l	0.83	513,624.47	1.777E-01	Pulse	0.50	3
Tl			1	200.087	ug/l	0.87	12,775,877.33	1.264E+00	Analog	0.50	3
Sn			1	207.498	ug/l	0.61	1,119,854.22	3.873E-01	Pulse	0.30	3
Sr			1	415.213	ug/l	0.64	1,812,700.08	6.270E-01	Pulse	0.50	3
[Pb]			1	190.356	ug/l	0.39	3,792,564.58	3.754E-01	Pulse	0.50	3
Ca			1	37866.652	ug/l	0.76	722,767.58	2.127E+00	Pulse	0.50	3
Ti			1	204.118	ug/l	1.72	32,098.90	9.445E-02	Pulse	0.50	3
Na			1	29038.217	ug/l	0.94	30,141,390.67	8.869E+01	Analog	1.00	3
Mg			1	22247.076	ug/l	1.24	9,956,181.33	2.930E+01	Analog	1.00	3
K			1	20261.502	ug/l	0.89	6,768,491.83	1.992E+01	Analog	1.00	3
V			1	204.717	ug/l	0.86	1,361,269.29	4.006E+00	Pulse	0.50	3
Mn			1	210.673	ug/l	0.69	817,502.06	2.976E+00	Pulse	0.50	3
Fe			1	20283.569	ug/l	0.91	143,656,053.33	5.230E+02	Analog	0.50	3
Co			1	207.320	ug/l	1.57	3,528,126.75	1.284E+01	Pulse	0.50	3
Ni			1	230.389	ug/l	1.47	1,074,193.13	3.911E+00	Pulse	0.50	3
Cu			1	220.336	ug/l	1.44	2,876,840.17	1.047E+01	Pulse	0.50	3
Zn			1	781.530	ug/l	0.44	1,203,866.79	2.869E+00	Pulse	1.00	3
Cd			1	206.914	ug/l	0.66	610,452.92	1.455E+00	Pulse	0.50	3
Al			1	17534.684	ug/l	0.97	2,142,567.50	6.305E+00	Pulse	1.00	3
Se			1	194.183	ug/l	1.38	10,067.87	5.312E-01	Pulse	3.00	3
Sb			1	197.587	ug/l	0.37	1,135,478.04	2.706E+00	Pulse	1.00	3
Se			1	197.428	ug/l	1.66	5,191.60	2.739E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,103,845.67	0.40	86.4	Analog	0.50	3
1	Sc		339,863.77	1.14	81.3	Pulse	0.30	3
1	Ge		274,711.06	1.19	78.9	Pulse	0.30	3
1	In		2,891,214.82	0.55	80.5	Pulse	0.30	3
1	Tb		14,306,314.67	0.41	92.6	Analog	0.50	3
1	Lu		8,426,806.50	0.58	93.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		419,650.88	0.41	78.9	Pulse	0.30	3
1	Te		18,953.17	1.10	62.3	Pulse	0.50	3
1	Li		2,583.51	3.77	76.5	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 12:59
Sample Name	MP33699-PS2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	20.942	ug/l	0.76	195,874.63	6.875E-01	Pulse	0.50	3
As			1	18.930	ug/l	1.18	17,792.27	6.245E-02	Pulse	1.00	3
Mo			1	20.629	ug/l	0.21	139,774.16	3.197E-01	Pulse	0.50	3
Pb			1	19.124	ug/l	0.29	862,803.98	8.110E-02	Pulse	1.00	3
Be			1	19.897	ug/l	2.27	1,207.04	3.455E-03	Pulse	2.00	3
Ag			1	4.248	ug/l	0.74	111,394.04	2.548E-01	Pulse	0.50	3
Ba			1	45.639	ug/l	0.67	105,607.53	3.508E-02	Pulse	0.50	3
Tl			1	18.173	ug/l	1.00	1,221,939.13	1.149E-01	Pulse	0.50	3
Sn			1	22.577	ug/l	1.74	127,622.68	4.239E-02	Pulse	0.30	3
Sr			1	231.174	ug/l	0.74	1,051,465.71	3.492E-01	Pulse	0.50	3
[Pb]			1	18.334	ug/l	0.98	385,956.45	3.628E-02	Pulse	0.50	3
Ca			1	21023.544	ug/l	0.67	412,615.65	1.181E+00	Pulse	0.50	3
Ti			1	22.077	ug/l	4.71	3,569.67	1.022E-02	Pulse	0.50	3
Na			1	11524.786	ug/l	0.54	12,303,639.33	3.522E+01	Analog	1.00	3
Mg			1	4717.405	ug/l	0.91	2,170,668.58	6.213E+00	Pulse	1.00	3
K			1	3099.406	ug/l	0.93	1,073,564.92	3.073E+00	Pulse	1.00	3
V			1	20.202	ug/l	1.12	138,615.15	3.968E-01	Pulse	0.50	3
Mn			1	30.829	ug/l	0.52	125,135.70	4.392E-01	Pulse	0.50	3
Fe			1	2126.452	ug/l	0.99	15,652,038.67	5.494E+01	Analog	0.50	3
Co			1	20.707	ug/l	0.22	365,561.24	1.283E+00	Pulse	0.50	3
Ni			1	40.615	ug/l	0.89	197,313.68	6.926E-01	Pulse	0.50	3
Cu			1	37.300	ug/l	0.35	516,988.95	1.815E+00	Pulse	0.50	3
Zn			1	610.346	ug/l	0.49	979,956.92	2.241E+00	Pulse	1.00	3
Cd			1	24.250	ug/l	0.97	74,543.05	1.705E-01	Pulse	0.50	3
Al			1	1868.754	ug/l	0.76	235,060.16	6.728E-01	Pulse	1.00	3
Se			1	19.103	ug/l	4.02	1,013.69	5.293E-02	Pulse	3.00	3
Sb			1	18.417	ug/l	0.93	110,407.01	2.525E-01	Pulse	1.00	3
Se			1	20.341	ug/l	2.22	560.23	2.925E-02	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,638,729.33	0.03	91.0	Analog	0.50	3
1	Sc		349,381.82	0.53	83.5	Pulse	0.30	3
1	Ge		284,907.38	0.17	81.8	Pulse	0.30	3
1	In		3,010,697.17	0.49	83.9	Pulse	0.30	3
1	Tb		14,742,867.33	1.14	95.5	Analog	0.50	3
1	Lu		8,642,763.67	0.23	95.5	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		437,229.79	0.74	82.2	Pulse	0.30	3
1	Te		19,154.72	0.84	63.0	Pulse	0.50	3
1	Li		2,879.11	1.80	85.2	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:02
Sample Name	FA53627-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.761	ug/l	2.72	8,237.12	2.847E-02	Pulse	0.50	3
As			1	0.144	ug/l	4.71	156.33	5.402E-04	Pulse	1.00	3
Mo			1	0.151	ug/l	1.12	1,056.03	2.382E-03	Pulse	0.50	3
Pb			1	0.114	ug/l	2.17	8,336.04	7.730E-04	Pulse	1.00	3
Be			1	0.088	ug/l	24.12	5.50	1.564E-05	Pulse	2.00	3
Ag			1	0.051	ug/l	2.16	1,408.73	3.178E-03	Pulse	0.50	3
Ba			1	25.123	ug/l	0.68	58,910.07	1.931E-02	Pulse	0.50	3
Tl			1	0.034	ug/l	6.44	2,426.85	2.250E-04	Pulse	0.50	3
Sn			1	0.656	ug/l	10.74	4,579.49	1.501E-03	Pulse	0.30	3
Sr			1	212.586	ug/l	0.19	979,779.02	3.212E-01	Pulse	0.50	3
[Pb]			1	0.103	ug/l	1.47	3,692.42	3.424E-04	Pulse	0.50	3
Ca			1	19436.967	ug/l	0.58	383,654.99	1.092E+00	Pulse	0.50	3
Ti			1	2.178	ug/l	7.18	355.34	1.011E-03	Pulse	0.50	3
Na			1	9675.966	ug/l	0.81	10,389,928.67	2.957E+01	Analog	1.00	3
Mg			1	2803.449	ug/l	1.15	1,297,444.29	3.693E+00	Pulse	1.00	3
K			1	1234.560	ug/l	0.59	436,605.09	1.243E+00	Pulse	1.00	3
V			1	0.210	ug/l	5.61	2,024.78	5.762E-03	Pulse	0.50	3
Mn			1	8.689	ug/l	0.94	36,728.58	1.269E-01	Pulse	0.50	3
Fe			1	55.187	ug/l	1.39	447,533.93	1.547E+00	Pulse	0.50	3
Co			1	0.179	ug/l	3.48	3,259.62	1.126E-02	Pulse	0.50	3
Ni			1	19.801	ug/l	1.62	98,268.74	3.396E-01	Pulse	0.50	3
Cu			1	13.200	ug/l	0.83	195,197.35	6.745E-01	Pulse	0.50	3
Zn			1	606.761	ug/l	0.55	987,733.38	2.228E+00	Pulse	1.00	3
Cd			1	5.311	ug/l	2.23	16,554.08	3.735E-02	Pulse	0.50	3
Al			1	80.515	ug/l	7.90	10,521.45	2.995E-02	Pulse	1.00	3
Se			1	0.347	ug/l	25.98	33.44	1.694E-03	Pulse	3.00	3
Sb			1	0.212	ug/l	3.75	1,442.72	3.254E-03	Pulse	1.00	3
Se			1	0.930	ug/l	16.61	48.00	2.431E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,784,506.33	0.31	92.2	Analog	0.50	3
1	Sc		351,369.90	0.64	84.0	Pulse	0.30	3
1	Ge		289,394.29	1.00	83.1	Pulse	0.30	3
1	In		3,050,517.38	0.49	85.0	Pulse	0.30	3
1	Tb		14,807,215.00	0.28	95.9	Analog	0.50	3
1	Lu		8,709,227.33	0.65	96.2	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		443,297.24	0.62	83.3	Pulse	0.30	3
1	Te		19,747.33	0.08	64.9	Pulse	0.50	3
1	Li		2,920.23	2.78	86.4	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:06
Sample Name	FA53627-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.248	ug/l	4.25	3,457.66	1.171E-02	Pulse	0.50	3
As			1	0.066	ug/l	2.25	83.00	2.811E-04	Pulse	1.00	3
Mo			1	0.023	ug/l	23.28	176.67	3.894E-04	Pulse	0.50	3
Pb			1	0.014	ug/l	27.99	3,902.12	3.488E-04	Pulse	1.00	3
Be			1	0.059	ug/l	34.25	3.83	1.066E-05	Pulse	2.00	3
Ag			1	0.011	ug/l	2.96	349.34	7.695E-04	Pulse	0.50	3
Ba			1	3.573	ug/l	3.47	8,636.75	2.752E-03	Pulse	0.50	3
Tl			1	0.019	ug/l	13.01	1,470.74	1.315E-04	Pulse	0.50	3
Sn			1	0.642	ug/l	3.88	4,628.39	1.475E-03	Pulse	0.30	3
Sr			1	2.786	ug/l	0.91	14,358.81	4.574E-03	Pulse	0.50	3
[Pb]			1	0.010	ug/l	18.38	1,781.44	1.592E-04	Pulse	0.50	3
Ca			1	175.030	ug/l	2.52	3,702.36	1.030E-02	Pulse	0.50	3
Ti			1	0.125	ug/l	41.66	22.00	6.113E-05	Pulse	0.50	3
Na			1	565.313	ug/l	0.37	629,920.56	1.752E+00	Pulse	1.00	3
Mg			1	17.431	ug/l	0.31	8,568.50	2.383E-02	Pulse	1.00	3
K			1	13.513	ug/l	2.13	15,902.39	4.422E-02	Pulse	1.00	3
V			1	0.158	ug/l	7.96	1,702.75	4.735E-03	Pulse	0.50	3
Mn			1	0.862	ug/l	3.29	4,875.96	1.651E-02	Pulse	0.50	3
Fe			1	0.795	ug/l	18.46	42,656.65	1.445E-01	Pulse	0.50	3
Co			1	0.055	ug/l	4.82	1,058.03	3.584E-03	Pulse	0.50	3
Ni			1	1.290	ug/l	2.60	7,582.84	2.569E-02	Pulse	0.50	3
Cu			1	1.250	ug/l	3.00	32,240.19	1.092E-01	Pulse	0.50	3
Zn			1	1.750	ug/l	2.86	4,857.62	1.070E-02	Pulse	1.00	3
Cd			1	0.007	ug/l	29.12	24.67	5.436E-05	Pulse	0.50	3
Al			1	7.517	ug/l	3.84	1,332.05	3.704E-03	Pulse	1.00	3
Se			1	0.100	ug/l	73.41	20.78	1.018E-03	Pulse	3.00	3
Sb			1	0.147	ug/l	15.68	1,071.40	2.361E-03	Pulse	1.00	3
Se			1	0.501	ug/l	16.95	37.56	1.838E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,187,947.67	0.21	95.7	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		359,634.61	0.44	86.0	Pulse	0.30	3
1	Ge		295,234.57	0.89	84.8	Pulse	0.30	3
1	In		3,138,788.70	1.08	87.4	Pulse	0.30	3
1	Tb		14,886,976.67	0.73	96.4	Analog	0.50	3
1	Lu		8,739,878.67	1.38	96.6	Analog	0.50	3
1	Ge		453,981.01	0.54	85.4	Pulse	0.30	3
1	Te		20,446.78	2.26	67.2	Pulse	0.50	3
1	Li		2,879.11	4.47	85.2	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:09
Sample Name	FA53801-22
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.282	ug/l	5.37	3,654.36	1.282E-02	Pulse	0.50	3
As			1	0.193	ug/l	9.12	199.67	7.007E-04	Pulse	1.00	3
Mo			1	2.023	ug/l	0.38	13,701.01	3.138E-02	Pulse	0.50	3
Pb			1	0.252	ug/l	1.07	14,249.27	1.354E-03	Pulse	1.00	3
Be			1	0.028	ug/l	17.33	1.83	5.249E-06	Pulse	2.00	3
Ag			1	0.018	ug/l	10.27	522.01	1.196E-03	Pulse	0.50	3
Ba			1	65.752	ug/l	0.45	151,325.29	5.053E-02	Pulse	0.50	3
Tl			1	0.008	ug/l	29.58	651.35	6.190E-05	Pulse	0.50	3
Sn			1	0.572	ug/l	2.02	4,027.14	1.345E-03	Pulse	0.30	3
Sr			1	637.014	ug/l	0.48	2,879,987.75	9.617E-01	Pulse	0.50	3
[Pb]			1	0.256	ug/l	2.53	6,779.37	6.442E-04	Pulse	0.50	3
Ca			1	46731.671	ug/l	0.75	916,946.54	2.625E+00	Pulse	0.50	3
Ti			1	3.078	ug/l	1.60	498.68	1.427E-03	Pulse	0.50	3
Na			1	10210.933	ug/l	0.62	10,901,825.67	3.120E+01	Analog	1.00	3
Mg			1	8292.000	ug/l	0.40	3,815,269.50	1.092E+01	Pulse	1.00	3
K			1	923.315	ug/l	0.97	327,406.20	9.371E-01	Pulse	1.00	3
V			1	4.870	ug/l	0.52	33,851.29	9.689E-02	Pulse	0.50	3
Mn			1	4.920	ug/l	1.00	21,018.70	7.375E-02	Pulse	0.50	3
Fe			1	102.844	ug/l	1.01	790,824.48	2.775E+00	Pulse	0.50	3
Co			1	0.057	ug/l	5.87	1,060.03	3.719E-03	Pulse	0.50	3
Ni			1	0.361	ug/l	12.20	2,830.22	9.932E-03	Pulse	0.50	3
Cu			1	0.552	ug/l	2.69	21,710.20	7.618E-02	Pulse	0.50	3
Zn			1	8.347	ug/l	1.08	15,226.34	3.488E-02	Pulse	1.00	3
Cd			1	0.007	ug/l	80.63	26.00	5.956E-05	Pulse	0.50	3
Al			1	203.671	ug/l	1.19	25,930.44	7.422E-02	Pulse	1.00	3
Se			1	0.178	ug/l	10.14	24.22	1.233E-03	Pulse	3.00	3
Sb			1	0.061	ug/l	11.27	519.68	1.190E-03	Pulse	1.00	3
Se			1	0.536	ug/l	23.74	37.11	1.886E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,523,893.33	0.18	90.0	Analog	0.50	3
1	Sc		349,375.53	0.39	83.5	Pulse	0.30	3
1	Ge		284,982.78	0.24	81.9	Pulse	0.30	3
1	In		2,994,679.26	0.17	83.4	Pulse	0.30	3
1	Tb		14,525,922.67	0.79	94.0	Analog	0.50	3
1	Lu		8,486,445.00	1.13	93.8	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		436,575.82	0.15	82.1	Pulse	0.30	3
1	Te		19,656.58	1.37	64.6	Pulse	0.50	3
1	Li		2,826.88	2.55	83.7	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:13
Sample Name	FA53896-13
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.373	ug/l	10.76	4,507.88	1.581E-02	Pulse	0.50	3
As			1	0.091	ug/l	18.58	104.00	3.646E-04	Pulse	1.00	3
Mo			1	0.130	ug/l	5.12	894.02	2.054E-03	Pulse	0.50	3
Pb			1	0.283	ug/l	1.08	15,757.59	1.486E-03	Pulse	1.00	3
Be			1	0.020	ug/l	158.30	1.33	3.787E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	21.12	370.67	8.522E-04	Pulse	0.50	3
Ba			1	12.943	ug/l	0.72	29,918.02	9.952E-03	Pulse	0.50	3
Tl			1	0.007	ug/l	31.11	586.02	5.522E-05	Pulse	0.50	3
Sn			1	0.525	ug/l	3.53	3,779.30	1.257E-03	Pulse	0.30	3
Sr			1	645.925	ug/l	0.55	2,931,604.83	9.751E-01	Pulse	0.50	3
[Pb]			1	0.281	ug/l	0.32	7,345.60	6.927E-04	Pulse	0.50	3
Ca			1	36072.093	ug/l	1.11	708,361.44	2.026E+00	Pulse	0.50	3
Ti			1	0.356	ug/l	18.01	58.67	1.678E-04	Pulse	0.50	3
Na			1	9498.769	ug/l	1.40	10,149,663.00	2.903E+01	Analog	1.00	3
Mg			1	8521.744	ug/l	1.38	3,923,877.50	1.122E+01	Pulse	1.00	3
K			1	911.273	ug/l	1.69	323,519.41	9.253E-01	Pulse	1.00	3
V			1	0.195	ug/l	7.76	1,913.44	5.474E-03	Pulse	0.50	3
Mn			1	4.741	ug/l	2.65	20,306.58	7.123E-02	Pulse	0.50	3
Fe			1	6.102	ug/l	3.66	80,209.98	2.813E-01	Pulse	0.50	3
Co			1	0.036	ug/l	6.26	686.01	2.406E-03	Pulse	0.50	3
Ni			1	0.365	ug/l	11.22	2,854.90	1.001E-02	Pulse	0.50	3
Cu			1	1.560	ug/l	2.09	35,312.18	1.239E-01	Pulse	0.50	3
Zn			1	6.189	ug/l	1.84	11,741.92	2.697E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	31.09	12.67	2.904E-05	Pulse	0.50	3
Al			1	11.424	ug/l	5.06	1,786.42	5.108E-03	Pulse	1.00	3
Se			1	0.027	ug/l	170.30	16.11	8.198E-04	Pulse	3.00	3
Sb			1	0.049	ug/l	6.52	443.01	1.018E-03	Pulse	1.00	3
Se			1	0.592	ug/l	22.45	38.56	1.963E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,604,498.67	0.51	90.7	Analog	0.50	3
1	Sc		349,656.69	0.79	83.6	Pulse	0.30	3
1	Ge		285,129.08	0.91	81.9	Pulse	0.30	3
1	In		3,006,310.72	0.15	83.7	Pulse	0.30	3
1	Tb		14,640,776.33	0.61	94.8	Analog	0.50	3
1	Lu		8,610,271.67	0.57	95.1	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		435,448.08	1.10	81.9	Pulse	0.30	3
1	Te		19,645.90	0.74	64.6	Pulse	0.50	3
1	Li		2,760.20	3.78	81.7	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:17
Sample Name	FA53896-14
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.142	ug/l	29.17	11,620.33	4.093E-02	Pulse	0.50	3
As			1	0.103	ug/l	4.35	114.67	4.039E-04	Pulse	1.00	3
Mo			1	0.105	ug/l	5.74	718.69	1.668E-03	Pulse	0.50	3
Pb			1	0.184	ug/l	2.01	11,238.36	1.066E-03	Pulse	1.00	3
Be			1	0.017	ug/l	27.94	1.17	3.390E-06	Pulse	2.00	3
Ag			1	0.012	ug/l	14.58	371.34	8.622E-04	Pulse	0.50	3
Ba			1	12.552	ug/l	1.44	28,637.95	9.652E-03	Pulse	0.50	3
Tl			1	0.004	ug/l	13.92	422.01	4.001E-05	Pulse	0.50	3
Sn			1	0.442	ug/l	1.00	3,269.20	1.102E-03	Pulse	0.30	3
Sr			1	632.483	ug/l	0.84	2,833,205.42	9.549E-01	Pulse	0.50	3
[Pb]			1	0.186	ug/l	0.78	5,324.18	5.051E-04	Pulse	0.50	3
Ca			1	35296.498	ug/l	0.62	682,198.67	1.982E+00	Pulse	0.50	3
Ti			1	0.232	ug/l	25.16	38.00	1.105E-04	Pulse	0.50	3
Na			1	9312.089	ug/l	0.60	9,793,428.33	2.846E+01	Analog	1.00	3
Mg			1	8370.586	ug/l	0.38	3,793,501.00	1.102E+01	Pulse	1.00	3
K			1	889.197	ug/l	0.72	310,961.35	9.037E-01	Pulse	1.00	3
V			1	0.196	ug/l	1.98	1,884.77	5.477E-03	Pulse	0.50	3
Mn			1	4.625	ug/l	1.51	19,757.40	6.959E-02	Pulse	0.50	3
Fe			1	44.099	ug/l	27.07	358,005.67	1.261E+00	Pulse	0.50	3
Co			1	0.050	ug/l	12.48	928.02	3.269E-03	Pulse	0.50	3
Ni			1	76.555	ug/l	25.15	369,715.35	1.302E+00	Pulse	0.50	3
Cu			1	1.339	ug/l	1.31	32,195.45	1.134E-01	Pulse	0.50	3
Zn			1	4.539	ug/l	1.39	9,016.45	2.092E-02	Pulse	1.00	3
Cd			1	0.003	ug/l	94.87	12.67	2.932E-05	Pulse	0.50	3
Al			1	25.219	ug/l	20.82	3,464.98	1.007E-02	Pulse	1.00	3
Se			1	0.021	ug/l	65.69	15.78	8.022E-04	Pulse	3.00	3
Sb			1	0.039	ug/l	7.62	381.67	8.855E-04	Pulse	1.00	3
Se			1	0.278	ug/l	30.85	30.11	1.530E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,541,138.00	1.07	90.1	Analog	0.50	3
1	Sc		344,120.32	0.35	82.3	Pulse	0.30	3
1	Ge		283,922.43	0.80	81.6	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		2,967,148.01	0.18	82.6	Pulse	0.30	3
1	Tb		14,520,857.67	1.11	94.0	Analog	0.50	3
1	Lu		8,605,016.67	1.01	95.1	Analog	0.50	3
1	Ge		430,982.27	0.76	81.0	Pulse	0.30	3
1	Te		19,657.90	2.37	64.6	Pulse	0.50	3
1	Li		2,902.45	1.93	85.9	Pulse	0.30	3

Quantitation Report

File Name	054SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:20
Sample Name	CRIA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.980	ug/l	2.29	21,878.26	6.761E-02	Pulse	0.50	3
As			1	0.976	ug/l	2.50	2,102.78	6.499E-03	Pulse	1.00	3
Mo			1	0.991	ug/l	3.40	15,222.19	3.075E-02	Pulse	0.50	3
Pb			1	0.956	ug/l	1.14	98,879.19	8.371E-03	Pulse	1.00	3
Be			1	1.072	ug/l	3.80	144.50	3.726E-04	Pulse	2.00	3
Ag			1	1.027	ug/l	0.61	61,043.85	1.233E-01	Pulse	0.50	3
Ba			1	0.999	ug/l	0.26	5,164.09	1.542E-03	Pulse	0.50	3
Tl			1	0.926	ug/l	0.82	138,399.56	1.172E-02	Pulse	0.50	3
Sn			1	1.188	ug/l	0.93	15,773.51	4.710E-03	Pulse	0.30	3
Sr			1	1.035	ug/l	3.31	11,700.33	3.494E-03	Pulse	0.50	3
[Pb]			1	0.960	ug/l	1.13	46,357.88	3.925E-03	Pulse	0.50	3
Ca			1	106.845	ug/l	1.69	4,834.61	1.247E-02	Pulse	0.50	3
Ti			1	1.014	ug/l	6.01	365.34	9.419E-04	Pulse	0.50	3
Na			1	104.263	ug/l	0.84	256,770.86	6.621E-01	Pulse	1.00	3
Mg			1	103.316	ug/l	0.94	105,858.85	2.730E-01	Pulse	1.00	3
K			1	101.462	ug/l	1.21	89,237.11	2.301E-01	Pulse	1.00	3
V			1	0.991	ug/l	2.45	15,683.00	4.044E-02	Pulse	0.50	3
Mn			1	0.965	ug/l	1.96	10,220.70	3.159E-02	Pulse	0.50	3
Fe			1	100.560	ug/l	0.80	1,717,603.67	5.308E+00	Pulse	0.50	3
Co			1	1.029	ug/l	0.72	41,319.27	1.277E-01	Pulse	0.50	3
Ni			1	1.000	ug/l	3.58	12,208.54	3.773E-02	Pulse	0.50	3
Cu			1	0.965	ug/l	1.51	45,732.57	1.413E-01	Pulse	0.50	3
Zn			1	1.815	ug/l	0.72	8,708.97	1.759E-02	Pulse	1.00	3
Cd			1	1.060	ug/l	0.82	7,379.50	1.491E-02	Pulse	0.50	3
Al			1	102.424	ug/l	2.74	28,942.89	7.464E-02	Pulse	1.00	3
Se			1	0.953	ug/l	6.95	167.00	5.955E-03	Pulse	3.00	3
Sb			1	0.989	ug/l	0.94	13,580.69	2.743E-02	Pulse	1.00	3
Se			1	0.807	ug/l	10.35	94.67	3.375E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,812,071.67	0.67	101.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		387,813.38	0.95	92.7	Pulse	0.30	3
1	Ge		323,574.34	0.30	92.9	Pulse	0.30	3
1	In		3,349,089.87	0.88	93.3	Pulse	0.30	3
1	Tb		15,404,605.00	0.21	99.7	Analog	0.50	3
1	Lu		8,941,832.33	1.13	98.8	Analog	0.50	3
1	Ge		495,066.21	0.21	93.1	Pulse	0.30	3
1	Te		28,044.77	0.98	92.2	Pulse	0.50	3
1	Li		3,141.37	0.64	93.0	Pulse	0.30	3

Quantitation Report

File Name	055SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:24
Sample Name	ICSA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	1.308	ug/l	1.93	25,064.75	8.905E-02	Pulse	0.50	3
As			1	0.089	ug/l	10.09	183.67	6.527E-04	Pulse	1.00	3
Mo			1	2145.193	ug/l	1.30	28,111,025.33	6.648E+01	Analog	0.50	3
Pb			1	0.112	ug/l	0.77	10,861.12	1.235E-03	Pulse	1.00	3
Be			1	0.015	ug/l	71.30	2.00	5.440E-06	Pulse	2.00	3
Ag			1	0.025	ug/l	5.79	1,331.39	3.148E-03	Pulse	0.50	3
Ba			1	0.088	ug/l	10.20	407.34	1.425E-04	Pulse	0.50	3
Tl			1	0.005	ug/l	2.48	670.02	7.616E-05	Pulse	0.50	3
Sn			1	0.080	ug/l	20.20	1,643.42	5.746E-04	Pulse	0.30	3
Sr			1	1.001	ug/l	2.79	9,697.18	3.391E-03	Pulse	0.50	3
[Pb]			1	0.110	ug/l	2.49	5,028.76	5.716E-04	Pulse	0.50	3
Ca			1	94718.260	ug/l	0.43	3,911,211.33	1.064E+01	Pulse	0.50	3
Ti			1	2038.020	ug/l	0.96	693,420.48	1.886E+00	Pulse	0.50	3
Na			1	100772.326	ug/l	0.76	226,278,693.33	6.154E+02	Analog	1.00	3
Mg			1	100089.551	ug/l	0.54	96,922,317.33	2.636E+02	Analog	1.00	3
K			1	104517.132	ug/l	0.50	75,441,565.33	2.052E+02	Analog	1.00	3
V			1	0.004	ug/l	72.76	668.68	1.819E-03	Pulse	0.50	3
Mn			1	0.225	ug/l	3.70	3,010.91	1.070E-02	Pulse	0.50	3
Fe			1	105115.878	ug/l	1.07	1,525,206,272.00	5.419E+03	Analog	0.50	3
Co			1	0.014	ug/l	7.34	529.34	1.881E-03	Pulse	0.50	3
Ni			1	0.050	ug/l	2.90	1,554.74	5.524E-03	Pulse	0.50	3
Cu			1	0.018	ug/l	24.74	14,567.52	5.176E-02	Pulse	0.50	3
Zn			1	1.318	ug/l	1.81	5,896.58	1.394E-02	Pulse	1.00	3
Cd			1	0.386	ug/l	1.81	2,298.82	5.436E-03	Pulse	0.50	3
Al			1	97947.347	ug/l	0.49	25,893,190.00	7.042E+01	Analog	1.00	3
Se			1	0.074	ug/l	21.38	24.00	1.152E-03	Pulse	3.00	3
Sb			1	0.047	ug/l	11.60	698.68	1.652E-03	Pulse	1.00	3
Se			1	0.014	ug/l	256.31	24.67	1.185E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,797,596.00	0.57	75.2	Analog	0.50	3
1	Sc		367,674.97	0.22	87.9	Pulse	0.30	3
1	Ge		281,462.79	1.18	80.8	Pulse	0.30	3
1	In		2,859,837.39	1.01	79.7	Pulse	0.30	3
1	Tb		13,351,531.33	0.48	86.4	Analog	0.50	3
1	Lu		8,006,480.17	0.96	88.5	Analog	0.50	3
1	Ge		422,891.63	0.71	79.5	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		20,825.20	1.27	68.5	Pulse	0.50	3
1	Li		2,370.15	3.11	70.1	Pulse	0.30	3

Quantitation Report

File Name	056CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:28
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.716	ug/l	0.74	976,934.87	3.251E+00	Pulse	0.50	3
As			1	50.002	ug/l	0.22	99,064.28	3.296E-01	Pulse	1.00	3
Mo			1	49.993	ug/l	0.72	714,983.25	1.549E+00	Pulse	0.50	3
Pb			1	46.497	ug/l	0.78	4,318,837.17	3.933E-01	Pulse	1.00	3
Be			1	51.216	ug/l	1.11	6,370.67	1.778E-02	Pulse	2.00	3
Ag			1	50.809	ug/l	0.38	2,811,413.08	6.092E+00	Pulse	0.50	3
Ba			1	50.399	ug/l	1.50	239,688.52	7.746E-02	Pulse	0.50	3
Tl			1	48.859	ug/l	0.62	6,782,155.17	6.176E-01	Analog	0.50	3
Sn			1	50.608	ug/l	1.20	585,083.08	1.891E-01	Pulse	0.30	3
Sr			1	49.446	ug/l	0.79	462,949.51	1.496E-01	Pulse	0.50	3
[Pb]			1	46.585	ug/l	0.45	2,018,420.88	1.838E-01	Pulse	0.50	3
Ca			1	4932.385	ug/l	0.44	198,581.95	5.544E-01	Pulse	0.50	3
Ti			1	49.708	ug/l	1.38	16,478.96	4.600E-02	Pulse	0.50	3
Na			1	5026.750	ug/l	1.33	11,005,389.00	3.072E+01	Analog	1.00	3
Mg			1	5065.865	ug/l	1.08	4,779,345.83	1.334E+01	Analog	1.00	3
K			1	4938.527	ug/l	0.88	3,483,289.50	9.725E+00	Pulse	1.00	3
V			1	50.134	ug/l	0.62	703,025.29	1.963E+00	Pulse	0.50	3
Mn			1	49.150	ug/l	0.48	418,018.73	1.391E+00	Pulse	0.50	3
Fe			1	5143.198	ug/l	0.55	79,725,357.33	2.653E+02	Analog	0.50	3
Co			1	49.886	ug/l	0.59	1,857,648.87	6.182E+00	Pulse	0.50	3
Ni			1	50.804	ug/l	0.57	518,989.13	1.727E+00	Pulse	0.50	3
Cu			1	51.450	ug/l	0.57	1,477,966.00	4.918E+00	Pulse	0.50	3
Zn			1	51.711	ug/l	1.28	176,915.45	3.833E-01	Pulse	1.00	3
Cd			1	51.274	ug/l	0.87	332,722.81	7.210E-01	Pulse	0.50	3
Al			1	4819.683	ug/l	0.47	1,241,626.17	3.466E+00	Pulse	1.00	3
Se			1	47.156	ug/l	1.81	6,580.91	2.584E-01	Pulse	3.00	3
Sb			1	50.412	ug/l	0.38	637,290.16	1.381E+00	Pulse	1.00	3
Se			1	47.691	ug/l	2.91	3,385.52	1.329E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,982,518.00	0.55	93.9	Analog	0.50	3
1	Sc		358,195.94	0.86	85.6	Pulse	0.30	3
1	Ge		300,526.97	0.97	86.3	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,094,493.35	0.99	86.2	Pulse	0.30	3
1	Tb		14,744,795.00	1.02	95.5	Analog	0.50	3
1	Lu		8,656,739.00	0.78	95.6	Analog	0.50	3
1	Ge		461,509.37	0.64	86.8	Pulse	0.30	3
1	Te		25,469.73	0.24	83.8	Pulse	0.50	3
1	Li		2,680.20	3.78	79.3	Pulse	0.30	3

Quantitation Report

File Name	057_CCV.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:31
Sample Name	CCV
Sample Type	CCV
Comment	=std 5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.201	ug/l	0.39	1,959,366.75	6.417E+00	Pulse	0.50	3
As			1	99.487	ug/l	0.32	200,237.38	6.558E-01	Pulse	1.00	3
Mo			1	99.384	ug/l	0.58	1,425,048.75	3.080E+00	Pulse	0.50	3
Pb			1	98.247	ug/l	0.32	8,922,611.00	8.306E-01	Analog	1.00	3
Be			1	98.996	ug/l	0.57	12,617.24	3.438E-02	Pulse	2.00	3
Ag			1	98.349	ug/l	1.20	5,455,961.83	1.179E+01	Pulse	0.50	3
Ba			1	99.652	ug/l	0.94	474,574.22	1.532E-01	Pulse	0.50	3
Tl			1	97.821	ug/l	0.72	13,281,220.00	1.236E+00	Analog	0.50	3
Sn			1	100.609	ug/l	1.14	1,163,921.66	3.756E-01	Pulse	0.30	3
Sr			1	99.888	ug/l	0.28	935,325.98	3.019E-01	Pulse	0.50	3
[Pb]			1	92.864	ug/l	1.55	3,933,888.92	3.662E-01	Pulse	0.50	3
Ca			1	9742.495	ug/l	1.24	401,744.27	1.095E+00	Pulse	0.50	3
Ti			1	97.870	ug/l	0.42	33,243.46	9.057E-02	Pulse	0.50	3
Na			1	9966.921	ug/l	1.00	22,349,302.00	6.089E+01	Analog	1.00	3
Mg			1	9921.708	ug/l	0.76	9,591,220.00	2.613E+01	Analog	1.00	3
K			1	10066.573	ug/l	0.71	7,263,710.83	1.979E+01	Analog	1.00	3
V			1	99.194	ug/l	0.49	1,424,729.25	3.882E+00	Pulse	0.50	3
Mn			1	97.852	ug/l	0.42	844,200.92	2.765E+00	Pulse	0.50	3
Fe			1	10118.590	ug/l	0.39	159,313,717.33	5.218E+02	Analog	0.50	3
Co			1	97.603	ug/l	0.46	3,692,676.25	1.209E+01	Pulse	0.50	3
Ni			1	99.552	ug/l	0.06	1,032,089.77	3.380E+00	Pulse	0.50	3
Cu			1	99.843	ug/l	0.51	2,899,545.00	9.496E+00	Pulse	0.50	3
Zn			1	101.040	ug/l	0.48	344,692.04	7.450E-01	Pulse	1.00	3
Cd			1	100.989	ug/l	1.09	657,022.42	1.420E+00	Pulse	0.50	3
Al			1	9602.900	ug/l	0.85	2,534,461.75	6.905E+00	Pulse	1.00	3
Se			1	95.100	ug/l	1.07	13,158.52	5.203E-01	Pulse	3.00	3
Sb			1	99.601	ug/l	0.53	1,262,204.54	2.728E+00	Pulse	1.00	3
Se			1	96.244	ug/l	0.49	6,754.53	2.671E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,742,287.67	0.74	91.8	Analog	0.50	3
1	Sc		367,036.14	0.40	87.8	Pulse	0.30	3
1	Ge		305,333.26	0.51	87.7	Pulse	0.30	3
1	In		3,098,595.78	0.24	86.3	Pulse	0.30	3
1	Tb		14,738,724.00	0.74	95.4	Analog	0.50	3
1	Lu		8,629,407.00	0.30	95.3	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		462,706.27	0.25	87.0	Pulse	0.30	3
1	Te		25,289.48	0.80	83.2	Pulse	0.50	3
1	Li		2,731.31	2.51	80.8	Pulse	0.30	3

Quantitation Report

File Name	058_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:35
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.692	ug/l	3.19	15,097.88	4.883E-02	Pulse	0.50	3
As			1	0.017	ug/l	18.08	54.67	1.766E-04	Pulse	1.00	3
Mo			1	0.053	ug/l	7.41	801.36	1.686E-03	Pulse	0.50	3
Pb			1	0.012	ug/l	4.11	4,492.26	3.909E-04	Pulse	1.00	3
Be			1	0.019	ug/l	36.63	2.50	6.856E-06	Pulse	2.00	3
Ag			1	0.014	ug/l	2.47	838.02	1.763E-03	Pulse	0.50	3
Ba			1	0.019	ug/l	28.32	114.00	3.567E-05	Pulse	0.50	3
Tl			1	0.034	ug/l	4.41	5,007.42	4.357E-04	Pulse	0.50	3
Sn			1	0.045	ug/l	25.74	1,425.62	4.461E-04	Pulse	0.30	3
Sr			1	0.024	ug/l	7.58	1,414.06	4.425E-04	Pulse	0.50	3
[Pb]			1	0.011	ug/l	27.71	2,080.80	1.811E-04	Pulse	0.50	3
Ca			1	4.817	ug/l	12.77	367.34	1.008E-03	Pulse	0.50	3
Ti			1	0.042	ug/l	35.12	15.33	4.201E-05	Pulse	0.50	3
Na			1	5.035	ug/l	2.98	20,471.41	5.615E-02	Pulse	1.00	3
Mg			1	3.180	ug/l	1.82	3,371.62	9.248E-03	Pulse	1.00	3
K			1	2.569	ug/l	14.97	13,123.69	3.600E-02	Pulse	1.00	3
V			1	-0.003	ug/l	-80.71	558.68	1.533E-03	Pulse	0.50	3
Mn			1	1.084	ug/l	2.29	10,806.35	3.494E-02	Pulse	0.50	3
Fe			1	3.374	ug/l	4.36	92,129.58	2.980E-01	Pulse	0.50	3
Co			1	0.018	ug/l	4.13	750.02	2.425E-03	Pulse	0.50	3
Ni			1	0.192	ug/l	4.26	3,192.27	1.032E-02	Pulse	0.50	3
Cu			1	-0.009	ug/l	-159.96	15,217.34	4.921E-02	Pulse	0.50	3
Zn			1	0.192	ug/l	10.04	2,703.86	5.689E-03	Pulse	1.00	3
Cd			1	0.015	ug/l	3.02	106.67	2.245E-04	Pulse	0.50	3
Al			1	33.424	ug/l	2.22	9,125.75	2.503E-02	Pulse	1.00	3
Se			1	0.007	ug/l	355.80	21.22	7.827E-04	Pulse	3.00	3
Sb			1	0.023	ug/l	11.38	470.34	9.897E-04	Pulse	1.00	3
Se			1	-0.093	ug/l	-11.31	24.11	8.873E-04	Pulse	3.00	3

Quantitation Report

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,491,989.00	0.70	98.3	Analog	0.50	3
1	Sc		364,577.63	0.48	87.2	Pulse	0.30	3
1	Ge		309,277.24	1.33	88.8	Pulse	0.30	3
1	In		3,195,778.28	0.09	89.0	Pulse	0.30	3
1	Tb		14,936,016.67	1.18	96.7	Analog	0.50	3
1	Lu		8,739,197.67	1.04	96.6	Analog	0.50	3
1	Ge		475,240.69	0.14	89.3	Pulse	0.30	3
1	Te		27,188.89	2.45	89.4	Pulse	0.50	3
1	Li		2,941.34	3.31	87.0	Pulse	0.30	3

Quantitation Report

File Name	059SMPL.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:39
Sample Name	ICSAB
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	21.541	ug/l	1.25	402,999.04	1.410E+00	Pulse	0.50	3
As			1	19.630	ug/l	0.45	36,986.28	1.295E-01	Pulse	1.00	3
Mo			1	2120.861	ug/l	1.33	28,251,717.33	6.572E+01	Analog	0.50	3
Pb			1	0.127	ug/l	1.93	12,045.91	1.365E-03	Pulse	1.00	3
Be			1	0.015	ug/l	79.34	2.17	5.760E-06	Pulse	2.00	3
Ag			1	17.055	ug/l	1.21	879,044.83	2.045E+00	Pulse	0.50	3
Ba			1	0.087	ug/l	11.58	406.68	1.408E-04	Pulse	0.50	3
Tl			1	0.009	ug/l	17.80	1,095.38	1.242E-04	Pulse	0.50	3
Sn			1	0.090	ug/l	7.35	1,771.21	6.131E-04	Pulse	0.30	3
Sr			1	1.000	ug/l	1.24	9,782.56	3.388E-03	Pulse	0.50	3
[Pb]			1	0.131	ug/l	1.20	5,785.66	6.556E-04	Pulse	0.50	3
Ca			1	94147.329	ug/l	0.19	3,972,344.83	1.057E+01	Pulse	0.50	3
Ti			1	2011.680	ug/l	0.35	699,375.23	1.862E+00	Pulse	0.50	3
Na			1	99734.257	ug/l	0.50	228,829,061.33	6.091E+02	Analog	1.00	3
Mg			1	98971.832	ug/l	0.56	97,927,717.33	2.607E+02	Analog	1.00	3
K			1	103538.279	ug/l	0.52	76,363,800.00	2.033E+02	Analog	1.00	3
V			1	0.003	ug/l	45.51	661.35	1.760E-03	Pulse	0.50	3
Mn			1	20.429	ug/l	0.93	165,913.49	5.807E-01	Pulse	0.50	3
Fe			1	104392.405	ug/l	0.94	1,537,712,426.67	5.382E+03	Analog	0.50	3
Co			1	19.297	ug/l	1.35	683,229.54	2.391E+00	Pulse	0.50	3
Ni			1	18.616	ug/l	0.64	181,488.30	6.352E-01	Pulse	0.50	3
Cu			1	18.344	ug/l	0.48	510,179.80	1.786E+00	Pulse	0.50	3
Zn			1	19.512	ug/l	0.69	63,325.67	1.473E-01	Pulse	1.00	3
Cd			1	18.470	ug/l	1.83	111,635.85	2.597E-01	Pulse	0.50	3
Al			1	97010.273	ug/l	0.32	26,203,858.00	6.975E+01	Analog	1.00	3
Se			1	0.051	ug/l	21.35	21.44	1.024E-03	Pulse	3.00	3
Sb			1	0.049	ug/l	9.42	733.35	1.706E-03	Pulse	1.00	3
Se			1	0.059	ug/l	146.73	27.44	1.309E-03	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		8,825,337.67	0.76	75.5	Analog	0.50	3
1	Sc		375,683.26	0.29	89.8	Pulse	0.30	3
1	Ge		285,717.16	0.23	82.1	Pulse	0.30	3
1	In		2,888,003.01	0.99	80.4	Pulse	0.30	3
1	Tb		13,554,716.67	0.39	87.8	Analog	0.50	3
1	Lu		8,043,629.50	0.90	88.9	Analog	0.50	3
1	Ge		429,889.73	0.96	80.8	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Te		20,936.67	0.98	68.9	Pulse	0.50	3
1	Li		2,231.25	6.98	66.0	Pulse	0.30	3

Quantitation Report

File Name	060CCVA.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:42
Sample Name	CCV (Ag)
Sample Type	CCV_Ag
Comment	=std 4
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	49.537	ug/l	0.46	970,002.12	3.239E+00	Pulse	0.50	3
As			1	50.787	ug/l	0.28	100,269.48	3.348E-01	Pulse	1.00	3
Mo			1	49.952	ug/l	0.19	712,005.25	1.548E+00	Pulse	0.50	3
Pb			1	46.452	ug/l	1.20	4,325,282.67	3.929E-01	Pulse	1.00	3
Be			1	50.814	ug/l	0.11	6,217.95	1.764E-02	Pulse	2.00	3
Ag			1	50.591	ug/l	0.34	2,789,987.08	6.066E+00	Pulse	0.50	3
Ba			1	50.151	ug/l	0.14	239,097.38	7.708E-02	Pulse	0.50	3
Tl			1	49.125	ug/l	0.70	6,836,047.50	6.209E-01	Analog	0.50	3
Sn			1	50.423	ug/l	0.91	584,379.51	1.884E-01	Pulse	0.30	3
Sr			1	48.956	ug/l	0.56	459,485.09	1.481E-01	Pulse	0.50	3
[Pb]			1	46.734	ug/l	0.81	2,029,918.96	1.844E-01	Pulse	0.50	3
Ca			1	4982.376	ug/l	1.68	197,339.41	5.600E-01	Pulse	0.50	3
Ti			1	49.563	ug/l	2.56	16,163.36	4.587E-02	Pulse	0.50	3
Na			1	5061.294	ug/l	0.15	10,901,141.67	3.093E+01	Analog	1.00	3
Mg			1	5098.614	ug/l	0.60	4,732,443.33	1.343E+01	Analog	1.00	3
K			1	4968.865	ug/l	0.13	3,447,933.50	9.784E+00	Pulse	1.00	3
V			1	50.520	ug/l	0.30	696,971.40	1.978E+00	Pulse	0.50	3
Mn			1	49.174	ug/l	0.29	416,761.02	1.392E+00	Pulse	0.50	3
Fe			1	5124.253	ug/l	0.29	79,152,272.00	2.643E+02	Analog	0.50	3
Co			1	50.051	ug/l	0.66	1,857,310.04	6.202E+00	Pulse	0.50	3
Ni			1	51.062	ug/l	0.71	519,775.89	1.736E+00	Pulse	0.50	3
Cu			1	51.120	ug/l	0.89	1,463,460.46	4.887E+00	Pulse	0.50	3
Zn			1	51.478	ug/l	0.13	175,538.86	3.816E-01	Pulse	1.00	3
Cd			1	51.568	ug/l	0.55	333,510.42	7.251E-01	Pulse	0.50	3
Al			1	4810.202	ug/l	0.30	1,219,096.63	3.459E+00	Pulse	1.00	3
Se			1	47.161	ug/l	0.81	6,580.91	2.584E-01	Pulse	3.00	3
Sb			1	50.200	ug/l	0.30	632,468.25	1.375E+00	Pulse	1.00	3
Se			1	47.419	ug/l	1.22	3,365.96	1.322E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		11,009,860.67	0.49	94.1	Analog	0.50	3
1	Sc		352,394.03	0.21	84.3	Pulse	0.30	3
1	Ge		299,479.27	0.54	86.0	Pulse	0.30	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	In		3,101,943.49	0.26	86.4	Pulse	0.30	3
1	Tb		14,766,298.33	0.49	95.6	Analog	0.50	3
1	Lu		8,637,300.00	0.62	95.4	Analog	0.50	3
1	Ge		459,957.34	0.25	86.5	Pulse	0.30	3
1	Te		25,466.41	0.57	83.8	Pulse	0.50	3
1	Li		2,683.53	4.86	79.4	Pulse	0.30	3

Quantitation Report

File Name 061_CCV.d
File Path D:\2018\05-May\xa050718m1.b
Method File
Method Path
Acq Time 5/7/2018 13:46
Sample Name CCV
Sample Type CCV
Comment =std 5
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 5/7/2018 10:39
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	98.319	ug/l	0.96	1,927,851.46	6.425E+00	Pulse	0.50	3
As			1	99.698	ug/l	1.11	197,193.95	6.572E-01	Pulse	1.00	3
Mo			1	98.945	ug/l	1.19	1,414,384.41	3.066E+00	Pulse	0.50	3
Pb			1	97.573	ug/l	0.20	8,817,610.33	8.249E-01	Analog	1.00	3
Be			1	99.202	ug/l	1.43	12,554.04	3.445E-02	Pulse	2.00	3
Ag			1	96.951	ug/l	0.22	5,362,201.50	1.162E+01	Pulse	0.50	3
Ba			1	98.102	ug/l	1.44	466,538.51	1.508E-01	Pulse	0.50	3
Tl			1	97.064	ug/l	0.79	13,113,750.33	1.227E+00	Analog	0.50	3
Sn			1	99.522	ug/l	1.69	1,149,728.81	3.716E-01	Pulse	0.30	3
Sr			1	98.061	ug/l	0.54	917,103.81	2.963E-01	Pulse	0.50	3
[Pb]			1	92.378	ug/l	0.38	3,894,191.25	3.643E-01	Pulse	0.50	3
Ca			1	9648.836	ug/l	0.30	395,101.21	1.084E+00	Pulse	0.50	3
Ti			1	98.539	ug/l	1.88	33,233.50	9.119E-02	Pulse	0.50	3
Na			1	9861.748	ug/l	0.14	21,959,055.33	6.025E+01	Analog	1.00	3
Mg			1	9789.762	ug/l	0.31	9,397,497.67	2.578E+01	Analog	1.00	3
K			1	9929.810	ug/l	0.34	7,115,027.67	1.952E+01	Analog	1.00	3
V			1	98.048	ug/l	0.71	1,398,443.25	3.837E+00	Pulse	0.50	3
Mn			1	97.435	ug/l	0.95	826,099.73	2.753E+00	Pulse	0.50	3
Fe			1	10129.414	ug/l	0.82	156,731,776.00	5.223E+02	Analog	0.50	3
Co			1	97.735	ug/l	0.54	3,633,851.92	1.211E+01	Pulse	0.50	3
Ni			1	99.567	ug/l	0.33	1,014,431.58	3.381E+00	Pulse	0.50	3
Cu			1	99.424	ug/l	0.81	2,837,598.00	9.457E+00	Pulse	0.50	3
Zn			1	99.342	ug/l	0.93	337,900.73	7.325E-01	Pulse	1.00	3
Cd			1	99.596	ug/l	1.56	645,980.25	1.400E+00	Pulse	0.50	3
Al			1	9403.520	ug/l	0.50	2,464,556.83	6.762E+00	Pulse	1.00	3
Se			1	96.046	ug/l	0.73	12,788.61	5.255E-01	Pulse	3.00	3
Sb			1	98.524	ug/l	0.93	1,244,727.50	2.698E+00	Pulse	1.00	3
Se			1	96.667	ug/l	1.56	6,528.79	2.683E-01	Pulse	3.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,689,089.00	0.21	91.4	Analog	0.50	3
1	Sc		364,464.33	0.73	87.1	Pulse	0.30	3
1	Ge		300,061.41	0.43	86.2	Pulse	0.30	3
1	In		3,094,826.27	1.74	86.2	Pulse	0.30	3
1	Tb		14,619,776.33	0.39	94.7	Analog	0.50	3
1	Lu		8,597,839.67	0.79	95.0	Analog	0.50	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		461,307.86	0.82	86.7	Pulse	0.30	3
1	Te		24,336.89	1.19	80.0	Pulse	0.50	3
1	Li		2,644.63	5.67	78.3	Pulse	0.30	3

Quantitation Report

File Name	062_CCB.d
File Path	D:\2018\05-May\xa050718m1.b
Method File	
Method Path	
Acq Time	5/7/2018 13:49
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	5/7/2018 10:39
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cr			1	0.719	ug/l	0.38	14,211.20	5.055E-02	Pulse	0.50	3
As			1	0.021	ug/l	15.56	57.67	2.051E-04	Pulse	1.00	3
Mo			1	0.077	ug/l	14.28	1,049.38	2.435E-03	Pulse	0.50	3
Pb			1	0.013	ug/l	16.34	4,148.51	3.988E-04	Pulse	1.00	3
Be			1	0.019	ug/l	25.49	2.33	7.089E-06	Pulse	2.00	3
Ag			1	0.016	ug/l	8.83	888.03	2.059E-03	Pulse	0.50	3
Ba			1	0.021	ug/l	22.71	111.33	3.853E-05	Pulse	0.50	3
Tl			1	0.038	ug/l	12.29	5,094.11	4.899E-04	Pulse	0.50	3
Sn			1	0.051	ug/l	5.66	1,346.73	4.655E-04	Pulse	0.30	3
Sr			1	0.030	ug/l	4.95	1,330.05	4.598E-04	Pulse	0.50	3
[Pb]			1	0.013	ug/l	19.14	1,976.12	1.900E-04	Pulse	0.50	3
Ca			1	6.367	ug/l	23.14	388.67	1.182E-03	Pulse	0.50	3
Ti			1	0.049	ug/l	0.92	16.00	4.866E-05	Pulse	0.50	3
Na			1	6.901	ug/l	2.06	22,212.27	6.755E-02	Pulse	1.00	3
Mg			1	4.227	ug/l	4.47	3,948.06	1.200E-02	Pulse	1.00	3
K			1	5.108	ug/l	5.18	13,475.60	4.098E-02	Pulse	1.00	3
V			1	-0.003	ug/l	-9.96	510.01	1.551E-03	Pulse	0.50	3
Mn			1	1.034	ug/l	0.54	9,428.30	3.354E-02	Pulse	0.50	3
Fe			1	4.208	ug/l	6.19	95,842.17	3.410E-01	Pulse	0.50	3
Co			1	0.018	ug/l	13.15	686.68	2.444E-03	Pulse	0.50	3
Ni			1	0.200	ug/l	7.16	2,975.57	1.059E-02	Pulse	0.50	3
Cu			1	-0.013	ug/l	-67.23	13,728.90	4.884E-02	Pulse	0.50	3
Zn			1	0.210	ug/l	17.95	2,512.51	5.827E-03	Pulse	1.00	3
Cd			1	0.016	ug/l	22.22	98.00	2.273E-04	Pulse	0.50	3
Al			1	34.248	ug/l	1.32	8,425.45	2.563E-02	Pulse	1.00	3
Se			1	0.026	ug/l	207.98	21.89	8.862E-04	Pulse	3.00	3
Sb			1	0.030	ug/l	9.62	501.34	1.162E-03	Pulse	1.00	3
Se			1	-0.034	ug/l	-408.78	26.11	1.051E-03	Pulse	3.00	3

Quantitation Report

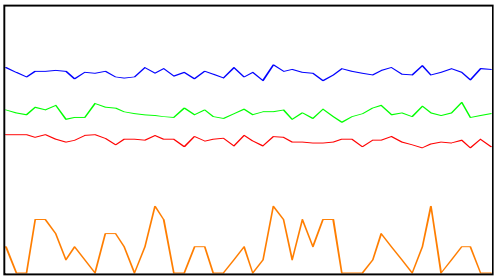
ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		10,400,702.67	0.90	88.9	Analog	0.50	3
1	Sc		328,814.19	0.85	78.6	Pulse	0.30	3
1	Ge		281,101.65	0.67	80.7	Pulse	0.30	3
1	In		2,892,834.61	0.87	80.6	Pulse	0.30	3
1	Tb		13,457,770.33	1.13	87.1	Analog	0.50	3
1	Lu		7,807,410.50	0.40	86.3	Analog	0.50	3
1	Ge		431,254.66	0.59	81.1	Pulse	0.30	3
1	Te		24,766.76	2.02	81.5	Pulse	0.50	3
1	Li		2,577.96	4.82	76.3	Pulse	0.30	3

Tune Report

Batch Folder	D:\2018\05-May\xa050718m1.b
Acq. Date-Time	5/7/2018 9:59
Report Comment	050718TUNE8
Instrument Name	G3281A JP12151709

[2]



Mass	Range	Count (Actual)	Response (Actual) [cps/ug/l]	Response (Required) [cps/ug/l]	Response (Flag)
59	10000	4972	49723.27	5000.00	
89	5000	3002	30016.69	5000.00	
205	20000	15016	150160.03	5000.00	
78	20	2			

Mass	Resp Ratio (Actual)	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
205		-	
78		-	

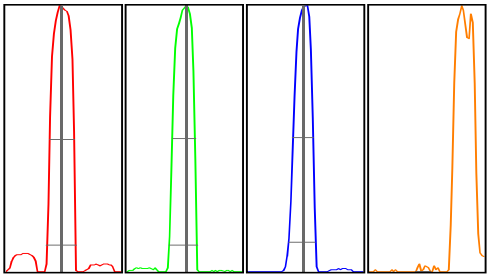
Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	2.88	8.00	
89	2.86	8.00	
205	1.97	8.00	
78	92.75		

Mass	Background (Actual)	Background (Required)	Background (Flag)
59	0.00	2	
89	0.00	2	
205	0.40	2	
78	0.00	5	

Ratio	156/140	0.254 %	
Ratio	70/140	1.645 %	

Integration Time [sec]	0.1	**Sampling Period [sec]**	0.412

Tune Report



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	W-50%	W-10% (Actual)	W-10% (Required)	W-10% (Flag)
59	4818.89	59.00	58.9 - 59.1		0.62	0.725	0.900	
89	3039.82	89.05	88.9 - 89.1		0.57	0.702	0.900	
205	15283.36	205.00	204.9 - 205.1		0.50	0.692	0.900	
78	0.00	77.90	-		0.35	0.350		

Integration Time [sec] 0.1 **Acquisition Time [sec]** 29.92 **Y Axis** Linear

Tune Parameters
Plasma Paramters

RF Power	1600 W	Nebulizer Pump	0.10 rps
RF Matching	1.70 V	S/C Temp	2 ℃
Smpl Depth	8.5 mm	Gas Switch	Dilution Gas
Carrier Gas	0.80 L/min	Makeup/Dilution Gas	0.35 L/min
Option Gas	0.0 %		

Lenses Parameters

Extract 1	0.0 V	Cell Entrance	-30 V
Extract 2	-150.0 V	Cell Exit	-70 V
Omega Bias	-80 V	Deflect	2.8 V
Omega Lens	8.3 V	Plate Bias	-60 V

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V
He Flow	5.0 mL/min	OctP RF	190 V
H2 Flow	0.0 mL/min	Energy Discrimination	3.0 V
3rd Gas Flow	0 %		

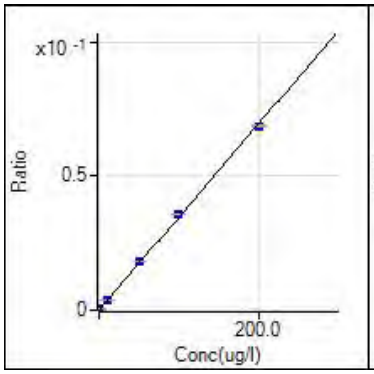
	Sensitivity										
Created Date	Channel 1 Count	Channel 1 Mass	Channel 1 RSD%	Channel 2 Count	Channel 2 Mass	Channel 2 RSD%	Channel 3 Count	Channel 3 Mass	Channel 3 RSD%	Oxide Mass	Doubly Charged Mass
5/7/2018 9:08 AM	4199.2415	7	10.628003	20903.013	89	11.830999	15119.169	205	12.403401	156/140	70/140

				Background							
Integration Time	Oxide Ratio	Doubly Charged Ratio	Sampling Period	Channel 1 Count	Channel 1 Mass	Channel 2 Count	Channel 2 Mass	Channel 3 Count	Channel 3 Mass	Acquisition Time	Channel 1 Mass
0.100 sec	1.08 %	15.10 %	0.311 sec	2.2500005	7	3.9000007	89	20.450019	205	00:00:23	7

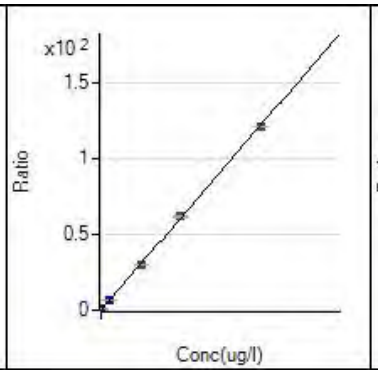
Resolution/Axis

Channel 1 Axis	Channel 1 Height	Channel 1 W-10%	Channel 1 W-50%	Channel 2 Mass	Channel 2 Axis	Channel 2 Height	Integration Time	Channel 2 W-10%	Channel 2 W-50%	Channel 3 Mass	Channel 3 Axis	Channel 3 Height
7	4087.5505	0.7702075	0.6655947	89	89	20694.678	0.100 sec	0.7295561	0.5967842	205	205	14820.484

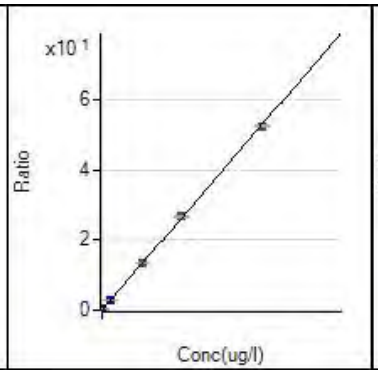
		Standard Tune Parameters Ion Lenses		
Channel 3 W-10%	Channel 3 W-50%	Extract 1	Extract 2	Omega Bias
0.7591018	0.520696	0.0 V	-190.0 V	-70 V



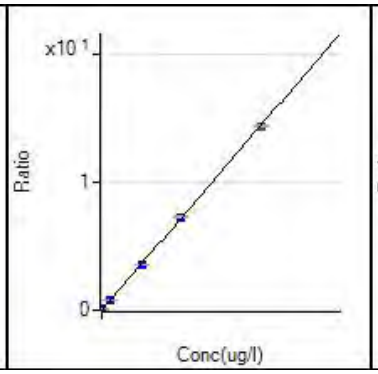
9 Be [2] / ISTD: 45 Sc
y = 3.472E-4 x + 3.953E-7
R 0.9998
DL 0.005915
BEC 0.001138



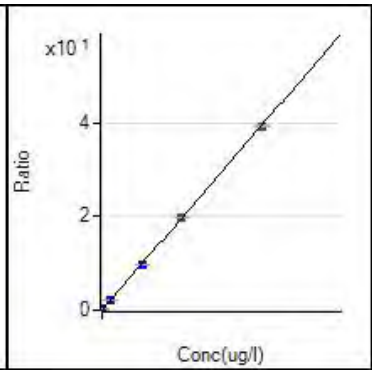
23 Na [2] / ISTD: 45 Sc
y = 6.107E-3 x + 2.540E-2
R 1.0000
DL 0.2695
BEC 4.16



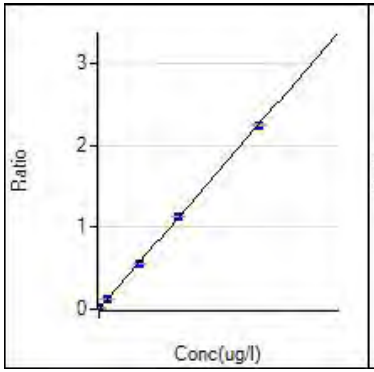
24 Mg [2] / ISTD: 45 Sc
y = 2.634E-3 x + 8.720E-4
R 1.0000
DL 0.1107
BEC 0.3311



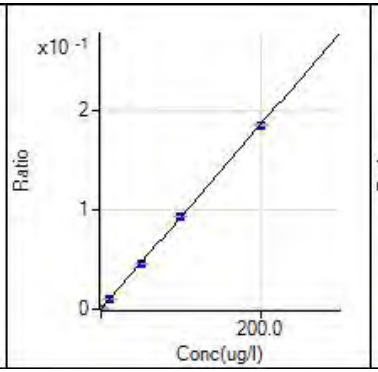
27 Al [2] / ISTD: 45 Sc
y = 7.190E-4 x + 1.001E-3
R 1.0000
DL 0.2451
BEC 1.393



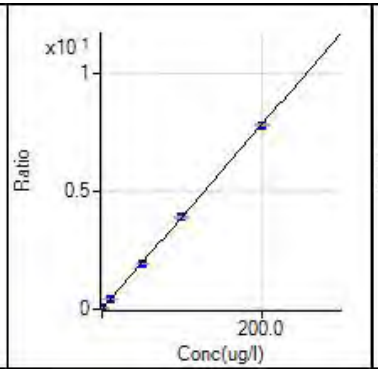
39 K [2] / ISTD: 45 Sc
y = 1.963E-3 x + 3.096E-2
R 1.0000
DL 1.496
BEC 15.77



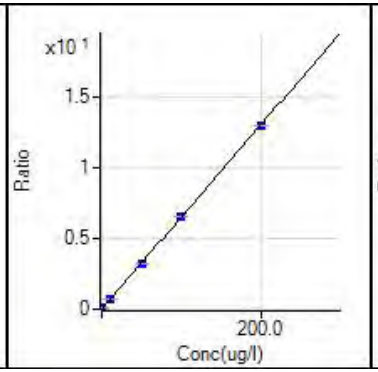
44 Ca [2] / ISTD: 45 Sc
y = 1.123E-4 x + 4.667E-4
R 1.0000
DL 1.89
BEC 4.156



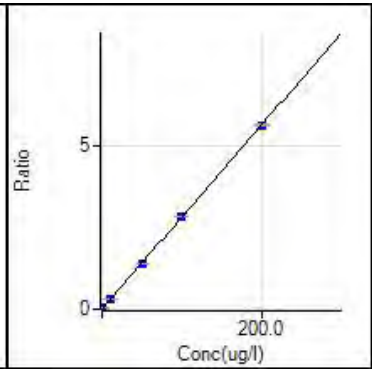
47 Ti [2] / ISTD: 45 Sc
y = 9.254E-4 x + 3.231E-6
R 1.0000
DL 0.01814
BEC 0.003492



51 V [2] / ISTD: 45 Sc
y = 3.912E-2 x + 1.652E-3
R 1.0000
DL 0.009296
BEC 0.04224

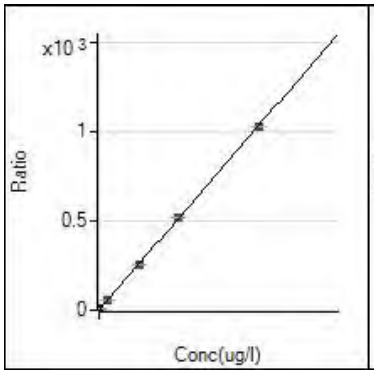


52 Cr [2] / ISTD: 72 Ge
y = 6.531E-2 x + 3.621E-3
R 1.0000
DL 0.007648
BEC 0.05544

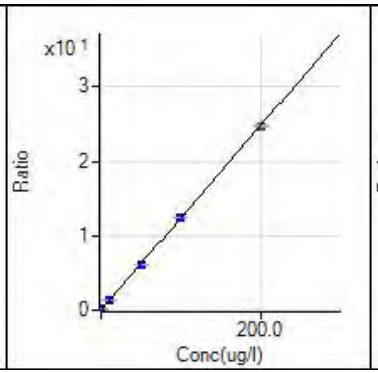


55 Mn [2] / ISTD: 72 Ge
y = 2.821E-2 x + 4.357E-3
R 1.0000
DL 0.01081
BEC 0.1544

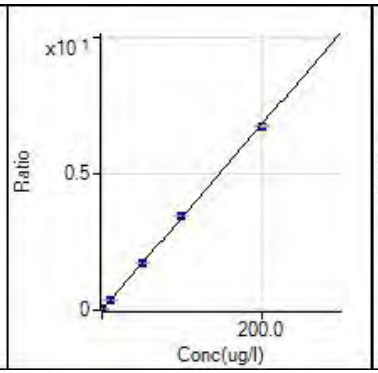
Calibration for D:\2018\05-May\xa050718m1.b\060CCVA.d



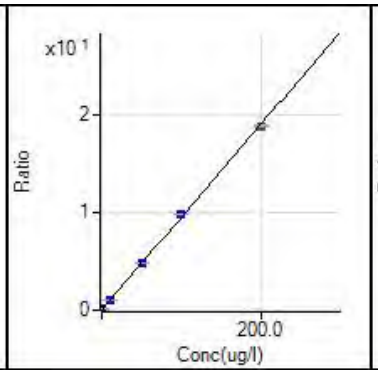
56 Fe [2] / ISTD: 72 Ge
y = 5.155E-2 x + 1.240E-1
R 1.0000
DL 0.03506
BEC 2.406



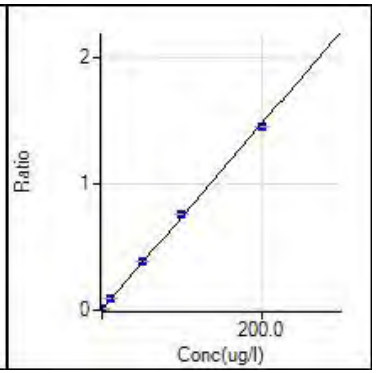
59 Co [2] / ISTD: 72 Ge
y = 1.239E-1 x + 1.897E-4
R 1.0000
DL 0.0011
BEC 0.001531



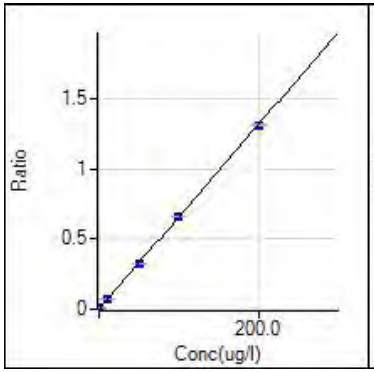
60 Ni [2] / ISTD: 72 Ge
y = 3.392E-2 x + 3.814E-3
R 0.9999
DL 0.01574
BEC 0.1125



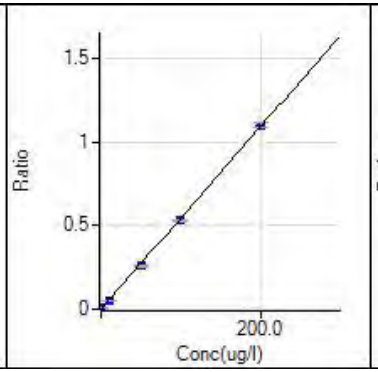
63 Cu [2] / ISTD: 72 Ge
y = 9.461E-2 x + 5.006E-2
R 0.9999
DL 0.0117
BEC 0.5291



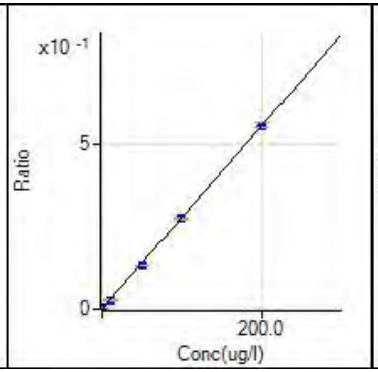
66 Zn [2] / ISTD: 74 Ge
y = 7.330E-3 x + 4.285E-3
R 0.9998
DL 0.06957
BEC 0.5845



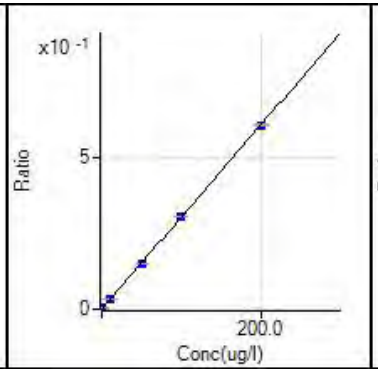
75 As [2] / ISTD: 72 Ge
y = 6.591E-3 x + 6.414E-5
R 1.0000
DL 0.002644
BEC 0.009731



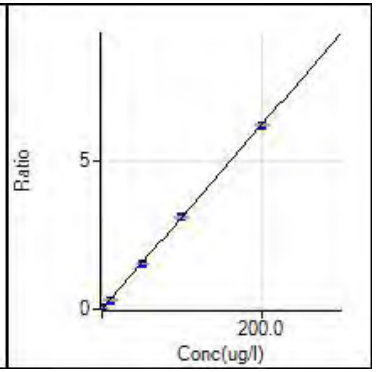
78 Se [2] / ISTD: 125 Te
y = 5.464E-3 x + 7.456E-4
R 0.9998
DL 0.04004
BEC 0.1365



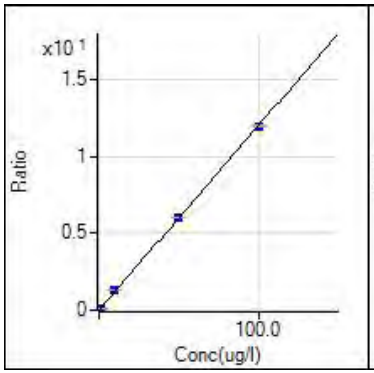
82 Se [2] / ISTD: 125 Te
y = 2.763E-3 x + 1.146E-3
R 0.9999
DL 0.1932
BEC 0.4146



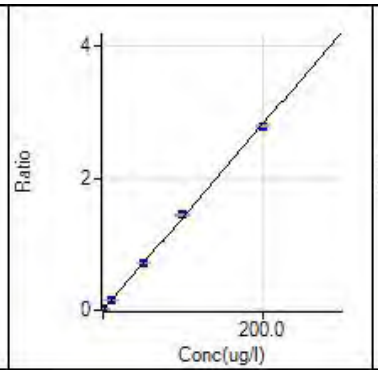
88 Sr [2] / ISTD: 115 In
y = 3.018E-3 x + 3.694E-4
R 1.0000
DL 0.0295
BEC 0.1224



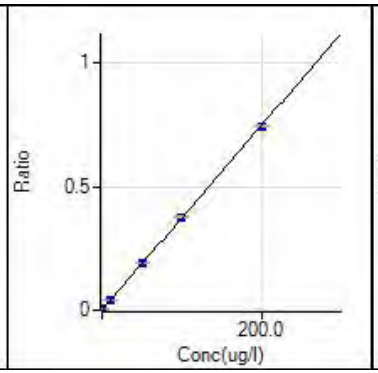
95 Mo [2] / ISTD: 74 Ge
y = 3.099E-2 x + 3.757E-5
R 1.0000
DL 0.0007084
BEC 0.001212



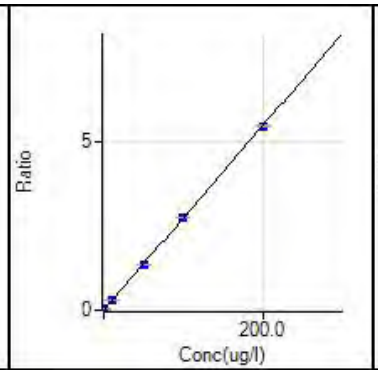
107 Ag [2] / ISTD: 74 Ge
y = 1.199E-1 x + 1.306E-4
R 1.0000
DL 0.001317
BEC 0.001089



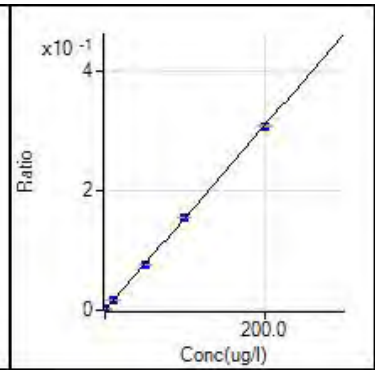
111 Cd [2] / ISTD: 74 Ge
y = 1.406E-2 x + 7.502E-6
R 0.9998
DL 0.0007914
BEC 0.0005335



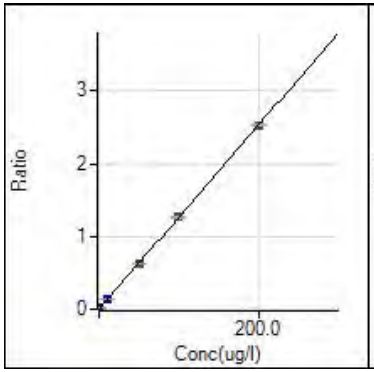
118 Sn [2] / ISTD: 115 In
y = 3.731E-3 x + 2.771E-4
R 1.0000
DL 0.01579
BEC 0.07426



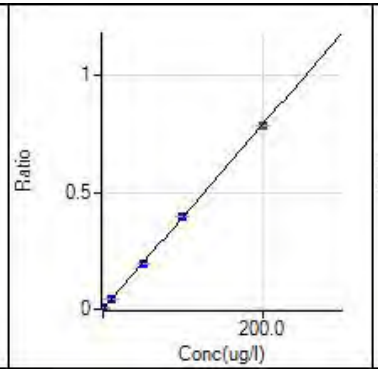
121 Sb [2] / ISTD: 74 Ge
y = 2.738E-2 x + 3.529E-4
R 1.0000
DL 0.00289
BEC 0.01289



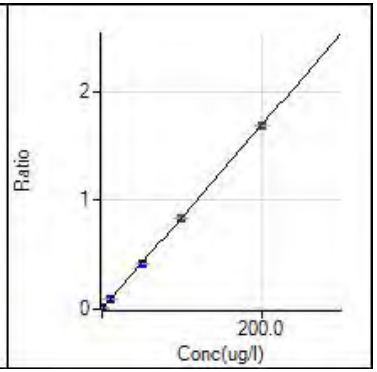
137 Ba [2] / ISTD: 115 In
y = 1.537E-3 x + 6.491E-6
R 1.0000
DL 0.009356
BEC 0.004223



205 Tl [2] / ISTD: 209 Bi
y = 1.264E-2 x + 1.179E-5
R 1.0000
DL 0.0004634
BEC 0.000933



206 [Pb] [2] / ISTD: 209 Bi
y = 3.942E-3 x + 1.392E-4
R 1.0000
DL 0.0008505
BEC 0.03531



208 Pb [2] / ISTD: 209 Bi
y = 8.451E-3 x + 2.898E-4
R 1.0000
DL 0.00222
BEC 0.03429

Inst QC: MA14907

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/17/2018 8:59:38 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	-.0058	-.0008	.0551	.0005	.0092	-.0001	.0004	.0002
Stddev	.0002	.0016	.0001	.0038	.0010	.0009	.0001	.0001	.0000
%RSD	167.3	27.45	9.856	6.805	180.8	10.05	81.67	35.45	10.95
#1	-.0001	-.0059	-.0009	.0584	.0015	.0085	-.0001	.0004	.0002
#2	.0003	-.0041	-.0007	.0511	.0005	.0088	.0000	.0003	.0002
#3	.0002	-.0073	-.0008	.0559	-.0004	.0103	-.0001	.0005	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0028	.0030	-.0025	-.0015	.0003	.0017	-.0201	-.0001	.0023
Stddev	.0001	.0002	.0088	.0003	.0001	.0000	.0076	.0002	.0002
%RSD	4.192	5.151	350.3	21.97	26.23	2.219	37.73	136.7	6.573
#1	.0028	.0031	.0033	-.0014	.0003	.0017	-.0260	-.0003	.0023
#2	.0026	.0028	.0018	-.0012	.0002	.0017	-.0115	.0001	.0024
#3	.0028	.0030	-.0126	-.0018	.0003	.0016	-.0228	-.0002	.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0001	-.0007	.0043	.0005	.0010	.0022	-.0034	-.0002	.0024
Stddev	.0001	.0001	.0001	.0000	.0006	.0001	.0006	.0001	.0003
%RSD	128.1	14.54	2.726	4.286	52.84	3.362	16.11	80.80	10.93
#1	-.0001	-.0007	.0044	.0005	.0016	.0022	-.0033	.0000	.0025
#2	-.0002	-.0007	.0043	.0005	.0009	.0021	-.0029	-.0002	.0026
#3	.0000	-.0006	.0042	.0005	.0006	.0022	-.0040	-.0003	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1225.1	3107.0	23245.	1518.1
Stddev	3.2	.8	70.	12.4
%RSD	.26256	.02640	.30050	.81711
#1	1224.5	3106.9	23314.	1516.0
#2	1228.6	3106.3	23247.	1506.8
#3	1222.3	3107.9	23175.	1531.4

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/17/2018 9:03:44 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0345	1.834	.1092	6.498	4.688	2.891	2.587	1.296	.2345	.4251
Stddev	.0000	.008	.0001	.047	.017	.012	.001	.002	.0009	.0005
%RSD	.0987	.4553	.0555	.7229	.3655	.4141	.0371	.1679	.3778	.1121
#1	.0345	1.829	.1092	6.551	4.704	2.902	2.588	1.298	.2353	.4249
#2	.0346	1.829	.1091	6.461	4.670	2.878	2.587	1.294	.2335	.4248
#3	.0345	1.844	.1091	6.483	4.689	2.893	2.587	1.296	.2346	.4256

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.389	3.240	.3035	1.334	.6382	9.047	.7391	.6368	.1340	.0794
Stddev	.002	.018	.0020	.002	.0013	.020	.0002	.0045	.0006	.0001
%RSD	.0648	.5426	.6632	.1103	.2039	.2164	.0308	.7123	.4505	.1689
#1	2.388	3.261	.3051	1.332	.6369	9.035	.7391	.6393	.1335	.0793
#2	2.388	3.232	.3041	1.335	.6381	9.037	.7390	.6316	.1346	.0795
#3	2.391	3.229	.3012	1.335	.6395	9.070	.7394	.6396	.1337	.0795

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2403	.2500	9.671	1.020	.3161	.3471	1.533
Stddev	.0003	.0003	.030	.001	.0005	.0007	.002
%RSD	.1286	.1153	.3069	.0562	.1507	.2103	.0989
#1	.2407	.2502	9.687	1.020	.3155	.3469	1.535
#2	.2402	.2502	9.637	1.020	.3162	.3464	1.533
#3	.2400	.2497	9.690	1.021	.3164	.3479	1.532

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1163.2	3097.6	22994.	1522.7
Stddev	2.6	2.0	47.	12.5
%RSD	.21928	.06484	.20245	.81962
#1	1162.5	3097.3	22999.	1522.8
#2	1166.1	3095.8	23037.	1510.2
#3	1161.1	3099.8	22945.	1535.1

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/17/2018 9:07:04 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1357	7.342	.4478	25.90	18.75	11.36	10.27	5.120	.9318	1.705
Stddev	.0009	.035	.0007	.07	.08	.09	.01	.002	.0048	.007
%RSD	.6983	.4767	.1460	.2689	.4386	.7560	.0854	.0405	.5114	.4205
#1	.1356	7.382	.4478	25.95	18.85	11.45	10.28	5.122	.9288	1.713
#2	.1347	7.328	.4484	25.82	18.73	11.37	10.27	5.121	.9294	1.699
#3	.1366	7.316	.4471	25.93	18.69	11.28	10.26	5.118	.9373	1.705

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.167	13.08	1.195	5.347	2.698	36.37	2.910	2.610	.5445	.3241
Stddev	.045	.06	.004	.047	.003	.18	.002	.004	.0012	.0004
%RSD	.4887	.4365	.3513	.8718	.1066	.4892	.0562	.1493	.2159	.1248
#1	9.208	13.15	1.199	5.344	2.695	36.53	2.908	2.614	.5433	.3236
#2	9.174	13.05	1.193	5.302	2.700	36.41	2.911	2.607	.5444	.3244
#3	9.119	13.05	1.191	5.395	2.700	36.18	2.911	2.608	.5457	.3242

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.274	1.035	40.71	4.293	1.289	1.458	6.070
Stddev	.001	.001	.15	.032	.003	.003	.006
%RSD	.0786	.1095	.3778	.7331	.2283	.2179	.1041
#1	1.274	1.034	40.84	4.294	1.291	1.461	6.077
#2	1.273	1.037	40.75	4.262	1.285	1.455	6.066
#3	1.275	1.035	40.54	4.325	1.290	1.457	6.067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1054.0	2940.9	21915.	1488.0
Stddev	1.3	1.8	106.	6.3
%RSD	.12185	.06277	.48477	.42219
#1	1054.3	2943.0	22000.	1480.7
#2	1055.2	2940.5	21949.	1491.7
#3	1052.6	2939.3	21796.	1491.5

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/17/2018 9:11:08 Type: Cal
Method: 60102007_041712(v215) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2829	14.86	.9178	52.17	37.14	22.69	20.36	10.20	1.851	3.454
Stddev	.0014	.08	.0020	.22	.14	.10	.04	.03	.016	.012
%RSD	.5115	.5177	.2232	.4146	.3844	.4192	.2206	.2476	.8866	.3477
#1	.2834	14.84	.9197	52.21	37.09	22.67	20.41	10.22	1.862	3.453
#2	.2840	14.80	.9182	51.94	37.03	22.60	20.34	10.19	1.859	3.467
#3	.2813	14.95	.9156	52.37	37.30	22.79	20.33	10.17	1.832	3.443

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	18.14	26.81	2.424	10.63	5.352	73.69	5.799	5.320	1.112	.6606
Stddev	.07	.12	.010	.08	.013	.32	.015	.024	.003	.0022
%RSD	.3726	.4345	.4230	.7427	.2442	.4374	.2659	.4417	.3054	.3266
#1	18.11	26.78	2.423	10.66	5.367	73.53	5.817	5.342	1.116	.6627
#2	18.09	26.71	2.415	10.68	5.348	73.47	5.789	5.323	1.111	.6584
#3	18.22	26.94	2.435	10.54	5.341	74.06	5.791	5.295	1.109	.6606

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.739	2.050	80.07	8.540	2.599	2.905	12.02
Stddev	.005	.004	.34	.046	.014	.014	.02
%RSD	.2945	.1830	.4185	.5432	.5323	.4838	.1580
#1	1.745	2.055	79.77	8.561	2.613	2.908	12.04
#2	1.739	2.049	80.00	8.572	2.597	2.918	12.00
#3	1.735	2.047	80.43	8.487	2.586	2.890	12.01

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	979.65	2823.7	21292.	1459.6
Stddev	3.43	6.1	151.	7.0
%RSD	.35033	.21516	.71149	.48166
#1	975.94	2816.9	21238.	1458.4
#2	980.32	2828.7	21174.	1467.1
#3	982.70	2825.5	21463.	1453.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/17/2018 9:18:31 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4952	77.03	4.024	3.904	3.862	76.76	3.912	3.924	3.806	3.913
Stddev	.0016	.71	.004	.018	.025	.46	.003	.005	.006	.010
%RSD	.3326	.9225	.1046	.4573	.6433	.6049	.0744	.1327	.1674	.2504
#1	.4936	77.84	4.028	3.924	3.890	77.30	3.915	3.924	3.813	3.924
#2	.4969	76.52	4.021	3.894	3.853	76.51	3.914	3.930	3.804	3.908
#3	.4951	76.74	4.022	3.892	3.842	76.47	3.909	3.919	3.801	3.906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.19	78.44	77.70	3.873	3.958	77.37	3.969	3.953	4.014	4.029
Stddev	.28	.49	.09	.011	.006	.60	.003	.004	.009	.006
%RSD	.3692	.6278	.1167	.2930	.1604	.7718	.0854	.1000	.2220	.1447
#1	77.49	78.99	77.80	3.860	3.951	78.06	3.967	3.950	4.019	4.033
#2	77.15	78.24	77.62	3.875	3.963	77.02	3.973	3.957	4.020	4.030
#3	76.92	78.07	77.68	3.883	3.960	77.02	3.968	3.952	4.004	4.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.455	3.995	3.867	3.881	3.948	3.917	3.913
Stddev	.001	.004	.026	.002	.002	.011	.005
%RSD	.0345	.1112	.6654	.0604	.0541	.2830	.1264
#1	3.454	4.000	3.897	3.882	3.948	3.909	3.911
#2	3.455	3.994	3.855	3.884	3.945	3.912	3.919
#3	3.457	3.992	3.851	3.879	3.949	3.929	3.910
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/17/2018 9:18:31 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	985.76	2827.2	21766.	1492.8
Stddev	.77	6.8	13.	6.3
%RSD	.07828	.24108	.06181	.42116
#1	985.54	2820.4	21767.	1486.9
#2	985.13	2827.2	21779.	1492.2
#3	986.62	2834.0	21752.	1499.4

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2018 9:24:45 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2291	39.75	1.995	1.984	1.985	38.92	1.988	2.014	1.933	1.968
Stddev	.0004	.24	.004	.015	.009	.24	.001	.002	.003	.001
%RSD	.1564	.6097	.1751	.7313	.4590	.6283	.0481	.0805	.1372	.0648
#1	.2293	40.02	1.995	2.001	1.996	39.19	1.987	2.013	1.933	1.969
#2	.2287	39.56	1.999	1.980	1.978	38.71	1.988	2.016	1.931	1.968
#3	.2293	39.67	1.992	1.973	1.982	38.86	1.989	2.013	1.936	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.50	38.86	39.67	1.925	1.872	38.22	2.028	1.951	2.000	2.005
Stddev	.07	.30	.06	.001	.003	.24	.003	.002	.005	.001
%RSD	.1845	.7603	.1549	.0279	.1400	.6287	.1303	.1126	.2618	.0703
#1	38.58	39.20	39.60	1.924	1.869	38.50	2.030	1.953	2.002	2.004
#2	38.46	38.74	39.67	1.925	1.873	38.09	2.028	1.949	2.004	2.006
#3	38.46	38.65	39.73	1.925	1.873	38.08	2.025	1.952	1.994	2.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0452	2.039	1.906	1.921	2.020	1.885	1.995
Stddev	.0006	.004	.011	.001	.002	.004	.001
%RSD	1.252	.2211	.5979	.0424	.1139	.2129	.0692
#1	.0459	2.045	1.919	1.922	2.020	1.885	1.996
#2	.0450	2.037	1.898	1.921	2.022	1.881	1.995
#3	.0448	2.037	1.900	1.920	2.017	1.889	1.993
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2018 9:24:45 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1054.4	2914.0	22218.	1499.4
Stddev	1.6	3.1	41.	4.0
%RSD	.14891	.10695	.18350	.26683
#1	1053.4	2912.8	22224.	1503.0
#2	1053.5	2911.7	22255.	1500.0
#3	1056.2	2917.6	22174.	1495.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/17/2018 9:31:26 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0109	.0007	-.0001	.0000	.0012	.0001	.0001	.0001
Stddev	.0007	.0037	.0007	.0001	.0001	.0043	.0000	.0001	.0003
%RSD	292.7	33.87	98.38	39.10	2771.	346.7	22.97	74.39	245.9
#1	-.0011	.0099	.0000	-.0001	.0002	.0061	.0001	.0001	-.0002
#2	.0001	.0077	.0014	-.0001	-.0001	-.0022	.0001	.0000	.0003
#3	.0002	.0149	.0008	-.0002	-.0001	-.0002	.0001	.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0043	.0161	.0353	.0000	F.0016	.0202	.0003	-.0004
Stddev	.0001	.0022	.0166	.0276	.0001	.0003	.0064	.0001	.0011
%RSD	17.69	51.03	103.0	78.29	141.7	17.45	31.81	50.77	285.1
#1	.0003	.0067	.0343	.0523	.0000	.0019	.0134	.0003	.0004
#2	.0004	.0025	.0124	.0034	.0001	.0017	.0262	.0001	-.0017
#3	.0005	.0036	.0017	.0502	.0000	.0013	.0211	.0004	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0017	.0003	.0007	.0001	.0007	.0005	.0001	.0002
Stddev	.0017	.0011	.0002	.0003	.0000	.0002	.0004	.0000	.0000
%RSD	472.8	62.85	71.19	36.27	39.21	22.62	76.21	54.54	14.99
#1	.0022	.0011	.0006	.0010	.0002	.0006	.0004	.0001	.0001
#2	-.0013	.0029	.0002	.0007	.0001	.0009	.0009	.0001	.0002
#3	.0003	.0010	.0002	.0005	.0001	.0006	.0002	.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/17/2018 9:31:26 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1197.4	3021.5	22965.	1494.2
Stddev	2.8	6.0	135.	6.8
%RSD	.23313	.19876	.58619	.45565
#1	1195.1	3026.3	22880.	1501.3
#2	1196.4	3014.8	23120.	1493.3
#3	1200.5	3023.4	22894.	1487.8

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 9:35:35 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Sb2068
Units	ppm
Avg	F.0060
Stddev	.0019
%RSD	30.92
#1	.0080
#2	.0057
#3	.0043
Check ?	Chk Fail
Value	.0050
Range	20.00%

Int. Std.	Y_2243
Units	Cts/S
Avg	3009.5
Stddev	1.9
%RSD	.06419
#1	3011.5
#2	3009.3
#3	3007.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 9:39:29 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087	.2088	.0103	.1964	.0049	.9658	.0051	.0512	.0096	.0254
Stddev	.0005	.0209	.0004	.0017	.0000	.0049	.0000	.0002	.0001	.0002
%RSD	5.347	10.03	3.952	.8506	.6616	.5071	.5138	.4076	.6820	.8978
#1	.0088	.2326	.0103	.1978	.0048	.9682	.0051	.0510	.0096	.0252
#2	.0081	.1935	.0099	.1945	.0049	.9691	.0051	.0511	.0097	.0254
#3	.0091	.2001	.0107	.1969	.0049	.9602	.0052	.0514	.0096	.0257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2887	9.496	4.912	.0148	.0476	9.338	.0422	.0047	.0116	.0302
Stddev	.0030	.079	.028	.0001	.0002	.044	.0002	.0006	.0027	.0004
%RSD	1.035	.8364	.5735	.4530	.5195	.4702	.4076	12.85	23.19	1.414
#1	.2917	9.557	4.905	.0147	.0477	9.366	.0421	.0052	.0145	.0300
#2	.2858	9.406	4.943	.0148	.0473	9.288	.0424	.0040	.0108	.0307
#3	.2886	9.526	4.888	.0148	.0478	9.362	.0422	.0048	.0094	.0300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value										
Range										

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0528	.0095	.0094	.0101	.0469	.0204
Stddev	.0005	.0001	.0002	.0009	.0003	.0001
%RSD	1.019	1.103	2.089	9.116	.6971	.2913
#1	.0533	.0096	.0095	.0090	.0472	.0204
#2	.0522	.0094	.0092	.0108	.0466	.0204
#3	.0529	.0094	.0096	.0103	.0469	.0205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 9:39:29 Type: QC
Method: 60102007_041712(v215) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1168.1	3000.3	23035.	1518.3
Stddev	1.2	6.8	86.	2.3
%RSD	.10333	.22582	.37375	.15137
#1	1166.7	2993.0	23053.	1520.7
#2	1168.5	3001.6	23111.	1516.2
#3	1169.0	3006.3	22942.	1517.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 9:46:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	469.4	-.0014	.0003	-.0002	430.7	.0000	.0000	-.0003	-.0008
Stddev	.0001	2.6	.0019	.0002	.0000	2.5	.000	.0002	.0003	.0003
%RSD	27.52	.5502	134.4	77.82	17.03	.5814	1867.	564.0	93.22	30.96
#1	-.0005	471.5	-.0031	.0001	-.0002	431.9	.0000	.0002	-.0006	-.0009
#2	-.0004	470.1	-.0019	.0003	-.0001	432.4	-.0002	.0001	-.0002	-.0006
#3	-.0003	466.5	.0007	.0005	-.0002	427.9	.0002	-.0002	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	168.4	.0197	478.2	-.0001	.0000	.1675	-.0004	.0002	.0014	.0000
Stddev	.9	.0201	2.0	.0001	.0003	.0082	.0003	.0014	.0008	.004
%RSD	.5145	102.2	.4283	102.7	820.0	4.908	81.01	841.5	54.95	21670.
#1	168.4	.0100	478.0	-.0001	.0003	.1609	-.0007	-.0013	.0013	.0038
#2	169.3	.0427	480.3	.0000	-.0002	.1767	-.0004	.0002	.0021	-.0008
#3	167.5	.0062	476.2	-.0001	.0000	.1649	-.0001	.0015	.0006	-.0031
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0188	.0005	.0001	.0003	.0000	-.0005	-.0005
Stddev	.0009	.0008	.0000	.0001	.0014	.0000	.0002
%RSD	4.622	161.5	45.20	32.36	20870.	7.115	36.96
#1	.0182	.0003	.0000	.0003	-.0004	-.0004	-.0004
#2	.0198	.0014	.0001	.0004	-.0012	-.0005	-.0007
#3	.0184	-.0002	.0001	.0003	.0015	-.0005	-.0005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 9:46:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	942.09	2704.0	20734.	1495.8
Stddev	2.20	3.7	36.	10.1
%RSD	.23308	.13555	.17359	.67651
#1	943.86	2707.7	20736.	1497.9
#2	939.64	2703.9	20770.	1484.7
#3	942.79	2700.4	20698.	1504.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2018 9:55:45 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.013	475.8	1.118	.4997	.4812	434.9	.9304	.4780	.4579	.5272
Stddev	.010	2.8	.003	.0007	.0018	2.2	.0013	.0010	.0020	.0028
%RSD	1.007	.5929	.2559	.1355	.3839	.5139	.1380	.2196	.4272	.5346
#1	1.023	479.0	1.116	.5002	.4832	437.4	.9289	.4768	.4601	.5290
#2	1.012	473.8	1.121	.4989	.4796	433.0	.9313	.4788	.4563	.5287
#3	1.003	474.6	1.116	.5001	.4807	434.3	.9310	.4782	.4574	.5240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	175.3	.0213	493.3	.4804	.9122	.1671	.9852	.9373	1.049	1.013
Stddev	1.0	.0138	2.4	.0050	.0023	.0041	.0011	.0037	.002	.005
%RSD	.5646	64.88	.4774	1.035	.2467	2.446	.1100	.3995	.1420	.4732
#1	176.3	.0338	495.3	.4860	.9102	.1673	.9845	.9383	1.048	1.018
#2	174.4	.0065	490.7	.4784	.9117	.1711	.9847	.9332	1.051	1.012
#3	175.2	.0236	493.8	.4767	.9146	.1629	.9865	.9405	1.049	1.008
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0244	.9741	.9626	.9348	.9331	.4682	.9315
Stddev	.0016	.0038	.0044	.0062	.0022	.0022	.0012
%RSD	6.704	.3851	.4520	.6604	.2397	.4678	.1244
#1	.0225	.9699	.9666	.9416	.9352	.4702	.9306
#2	.0255	.9772	.9580	.9333	.9308	.4685	.9310
#3	.0251	.9751	.9630	.9295	.9333	.4659	.9328
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2018 9:55:45 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	909.79	2609.5	20380.	1461.0
Stddev	2.58	1.5	152.	4.1
%RSD	.28358	.05905	.74730	.28003
#1	907.94	2609.3	20207.	1459.6
#2	912.74	2611.1	20440.	1465.7
#3	908.70	2608.1	20493.	1457.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 10:03:35 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2423	36.66	2.052	1.951	1.916	36.96	1.997	2.007	1.887	1.948
Stddev	.0009	.24	.006	.014	.011	.22	.002	.004	.002	.006
%RSD	.3867	.6510	.2980	.7168	.5541	.5896	.1137	.1897	.1290	.2945
#1	.2416	36.50	2.058	1.945	1.911	36.80	2.000	2.007	1.888	1.955
#2	.2419	36.94	2.046	1.967	1.929	37.21	1.998	2.010	1.884	1.944
#3	.2434	36.56	2.052	1.941	1.910	36.86	1.995	2.003	1.887	1.945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.54	38.06	38.29	1.965	2.055	37.06	2.068	1.932	2.046	2.061
Stddev	.10	.31	.11	.007	.004	.19	.003	.003	.008	.006
%RSD	.2680	.8090	.2814	.3447	.1755	.5235	.1371	.1470	.4088	.3124
#1	38.47	37.88	38.21	1.957	2.055	36.91	2.069	1.933	2.049	2.069
#2	38.66	38.41	38.42	1.966	2.059	37.28	2.071	1.928	2.052	2.056
#3	38.50	37.88	38.26	1.971	2.052	36.99	2.065	1.933	2.037	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.656	2.117	1.921	1.961	1.967	2.000	2.001
Stddev	.005	.002	.011	.005	.002	.003	.001
%RSD	.1981	.0871	.5824	.2334	.0943	.1443	.0248
#1	2.660	2.117	1.914	1.957	1.969	2.002	2.001
#2	2.657	2.115	1.933	1.962	1.965	1.997	2.001
#3	2.650	2.118	1.914	1.966	1.967	2.001	2.001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 10:03:35 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1048.4	2854.7	22382.	1525.3
Stddev	.7	2.6	64.	6.5
%RSD	.06775	.09026	.28766	.42363
#1	1048.9	2853.4	22452.	1531.6
#2	1048.8	2852.9	22367.	1518.7
#3	1047.6	2857.6	22326.	1525.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 10:15:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0159	.0004	-.0004	.0000	.0020	.0001	.0000	-.0001	.0002
Stddev	.0003	.0060	.0005	.0004	.0001	.0007	.0000	.0001	.0003	.0003
%RSD	184.0	37.53	140.6	107.8	661.0	33.92	13.84	491.4	383.2	150.4
#1	-.0005	.0223	.0010	.0000	-.0001	.0013	.0001	.0000	.0003	.0006
#2	.0001	.0105	.0000	-.0003	.0001	.0026	.0001	.0001	-.0002	-.0001
#3	-.0001	.0148	.0001	-.0009	.0001	.0019	.0001	-.0001	-.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0031	.0076	.0341	.0001	-.0004	.0016	.0003	.0001	.0010	.0016
Stddev	.0032	.0119	.0120	.0000	.0001	.0028	.0002	.0005	.0019	.0017
%RSD	101.6	157.4	35.14	14.75	22.12	171.5	54.60	462.7	183.7	102.9
#1	-.0039	-.0026	.0206	.0001	-.0003	.0020	.0001	.0004	.0014	.0036
#2	.0004	.0046	.0433	.0001	-.0005	.0043	.0005	.0004	-.0010	.0007
#3	-.0058	.0207	.0384	.0001	-.0005	-.0013	.0003	-.0004	.0027	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0001	.0001	-.0001	.0007	.0002	.0001
Stddev	.0003	.0001	.0001	.0001	.0009	.0004	.0001
%RSD	440.5	188.6	76.29	38.72	130.5	182.1	46.57
#1	-.0001	.0001	.0000	-.0002	.0013	-.0002	.0001
#2	.0002	-.0001	.0002	-.0001	.0011	.0003	.0001
#3	-.0003	.0002	.0001	-.0001	-.0003	.0005	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 10:15:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1233.7	3069.1	24206.	1588.6
Stddev	1.3	3.7	106.	4.8
%RSD	.10263	.12057	.43724	.30374
#1	1234.2	3065.1	24166.	1586.0
#2	1234.6	3072.4	24126.	1594.1
#3	1232.3	3069.9	24326.	1585.6

Raw Data MA14907 page 21 of 211

Zoom In Zoom Out

Sample Name: MP33747-MB1 Acquired: 5/17/2018 10:20:20 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0350	.0002	-.0004	-.0001	.0321	-.0001	-.0002	.0001
Stddev	.0003	.0090	.0010	.0002	.0001	.0084	.0000	.0002	.0002
%RSD	77.11	25.69	431.2	56.03	73.69	26.11	54.92	103.1	388.2
#1	-.0004	.0266	-.0004	-.0003	-.0002	.0283	-.0001	.0000	.0000
#2	-.0006	.0445	.0013	-.0006	-.0001	.0417	.0000	-.0001	.0003
#3	-.0001	.0341	-.0002	-.0002	.0000	.0262	-.0001	-.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0191	.0372	.0758	.0004	-.0003	.0190	.0003	.0003
Stddev	.0001	.0037	.0121	.0244	.0001	.0001	.0030	.0001	.0005
%RSD	23.09	19.35	32.54	32.16	13.51	39.58	15.97	40.13	143.0
#1	.0006	.0160	.0290	.0653	.0004	-.0003	.0186	.0002	-.0002
#2	.0005	.0231	.0316	.0585	.0004	-.0002	.0162	.0005	.0006
#3	.0004	.0181	.0511	.1037	.0005	-.0004	.0222	.0003	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0021	.0166	F.0269	.0001	.0003	-.0016	-.0001	.0032
Stddev	.0013	.0030	.0003	.0004	.0000	.0000	.0006	.0002	.0000
%RSD	175.6	142.5	1.902	1.602	35.86	12.49	34.18	105.5	1.311
#1	.0019	.0036	.0165	.0270	.0001	.0003	-.0023	-.0003	.0032
#2	.0010	-.0013	.0170	.0272	.0001	.0003	-.0013	.0000	.0032
#3	-.0007	.0041	.0163	.0264	.0002	.0002	-.0013	-.0002	.0033
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Raw Data MA14907 page 22 of 211

Zoom In Zoom Out

Sample Name: MP33747-MB1 Acquired: 5/17/2018 10:20:20 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1197.1	2949.1	23555.	1536.5
Stddev	4.3	1.7	125.	16.0
%RSD	.35584	.05736	.53008	1.0425
#1	1192.5	2948.9	23533.	1522.2
#2	1198.1	2947.4	23689.	1553.8
#3	1200.8	2950.8	23442.	1533.5

Raw Data MA14907 page 23 of 211

Zoom In Zoom Out

Sample Name: MP33747-B1 Acquired: 5/17/2018 10:24:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0496	24.07	2.028	1.967	.0488	22.99	.0496	.5061	.1900	.2492
Stddev	.0005	.05	.008	.013	.0004	.13	.0000	.0016	.0006	.0005
%RSD	.9670	.2278	.4054	.6792	.7372	.5484	.0482	.3253	.3146	.2083
#1	.0491	24.03	2.019	1.964	.0492	23.06	.0496	.5042	.1901	.2487
#2	.0501	24.13	2.035	1.981	.0485	23.07	.0496	.5067	.1906	.2492
#3	.0496	24.05	2.028	1.955	.0487	22.85	.0496	.5074	.1894	.2498
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.66	23.13	23.42	.4919	.4799	22.58	.5354	.4685	.5102	2.003
Stddev	.09	.13	.27	.0007	.0009	.07	.0014	.0013	.0028	.006
%RSD	.3613	.5455	1.133	.1457	.1979	.3256	.2545	.2743	.5411	.3005
#1	24.67	23.12	23.51	.4923	.4789	22.58	.5339	.4675	.5072	1.997
#2	24.74	23.27	23.62	.4923	.4799	22.65	.5361	.4681	.5107	2.009
#3	24.57	23.01	23.12	.4911	.4808	22.50	.5364	.4700	.5127	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3647	.5406	.4731	.4769	1.881	.4745	.4963
Stddev	.0018	.0021	.0007	.0009	.002	.0003	.0018
%RSD	.4856	.3891	.1438	.1901	.0972	.0649	.3591
#1	.3630	.5382	.4724	.4762	1.880	.4744	.4948
#2	.3665	.5420	.4736	.4766	1.883	.4749	.4958
#3	.3644	.5416	.4734	.4779	1.879	.4743	.4982
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Raw Data MA14907 page 24 of 211

9.2.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33747-B1 Acquired: 5/17/2018 10:24:39 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1095.4	2877.1	22729.	1518.1
Stddev	1.6	1.6	49.	13.9
%RSD	.14149	.05537	.21677	.91380
#1	1094.1	2878.7	22704.	1504.0
#2	1097.1	2877.0	22697.	1518.6
#3	1095.0	2875.5	22786.	1531.8

Zoom In Zoom Out

Sample Name: FA54170-4 Acquired: 5/17/2018 10:28:37 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0030	85.61	4.322	.2506	.0027	F4659.	.0015	.0057	.3120
Stddev	.0021	.33	.011	.0007	.0002	42.	.0003	.0004	.0019
%RSD	69.58	.3883	.2566	.2808	6.792	.9005	18.88	6.613	.5996
#1	-.0006	85.77	4.318	.2509	.0025	4611.	.0012	.0061	.3142
#2	-.0044	85.84	4.314	.2511	.0029	4677.	.0015	.0054	.3107
#3	-.0041	85.23	4.335	.2498	.0027	4689.	.0017	.0056	.3112

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3423	49.84	1.522	14.16	2.506	-.0032	13.49	.0490	.4427
Stddev	.0019	.22	.058	.20	.019	.0007	.03	.0005	.0012
%RSD	.5599	.4330	3.808	1.377	.7610	22.10	.2272	.9734	.2770
#1	.3441	50.07	1.455	14.17	2.512	-.0025	13.52	.0484	.4431
#2	.3425	49.80	1.552	14.35	2.521	-.0039	13.48	.0493	.4413
#3	.3403	49.64	1.558	13.96	2.484	-.0032	13.46	.0492	.4436

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0250	.0107	23.79	.0253	F71.23	1.176	-.0121	.1003	.1919
Stddev	.0065	.0114	.07	.0018	.94	.002	.0045	.0016	.0009
%RSD	26.19	106.2	.2803	7.309	1.326	.2018	36.92	1.609	.4911
#1	.0217	.0030	23.78	.0232	72.19	1.174	-.0169	.1019	.1912
#2	.0207	.0053	23.73	.0266	71.19	1.176	-.0111	.1002	.1914
#3	.0325	.0237	23.86	.0261	70.30	1.178	-.0082	.0987	.1929

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	931.94	2774.6	21844.	1530.5
Stddev	1.58	8.1	167.	3.4
%RSD	.16985	.29101	.76645	.22444
#1	932.26	2774.6	21765.	1526.6
#2	933.34	2782.7	21731.	1532.0
#3	930.22	2766.6	22037.	1533.0

Zoom In Zoom Out

Sample Name: MP33747-D1 Acquired: 5/17/2018 10:40:34 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	139.4	5.659	.3328	.0048	F4190.	.0024	.0092	.4475
Stddev	.0007	.9	.008	.0020	.0004	60.	.0003	.0005	.0017
%RSD	107.9	.6196	.1457	.5981	8.626	1.437	11.23	5.893	.3790
#1	-.0011	140.1	5.658	.3345	.0053	4210.	.0024	.0086	.4484
#2	.0001	139.6	5.668	.3333	.0047	4238.	.0022	.0094	.4486
#3	-.0009	138.4	5.651	.3306	.0045	4122.	.0027	.0096	.4455

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4718	73.15	2.163	18.14	2.624	-.0047	13.24	.0797	.6435
Stddev	.0019	.36	.043	.26	.007	.0005	.11	.0014	.0031
%RSD	.3968	.4878	1.980	1.455	.2557	11.74	.8005	1.813	.4833
#1	.4696	73.32	2.212	18.32	2.631	-.0046	13.21	.0814	.6405
#2	.4729	73.38	2.131	18.26	2.624	-.0041	13.36	.0789	.6434
#3	.4728	72.74	2.146	17.83	2.618	-.0052	13.15	.0788	.6467

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0247	.0159	31.42	.0251	F56.98	1.848	-.0199	.1427	.2544
Stddev	.0034	.0134	.04	.0023	.61	.023	.0101	.0006	.0010
%RSD	13.68	84.32	.1322	9.245	1.063	1.229	50.76	.4070	.3888
#1	.0235	.0149	31.42	.0239	56.81	1.875	-.0288	.1420	.2553
#2	.0221	.0031	31.37	.0278	57.66	1.837	-.0089	.1429	.2533
#3	.0286	.0299	31.46	.0236	56.49	1.834	-.0219	.1431	.2547

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	921.65	2840.1	22467.	1557.5
Stddev	1.24	6.7	26.	2.8
%RSD	.13433	.23679	.11627	.17922
#1	920.45	2832.4	22440.	1557.2
#2	922.93	2843.2	22468.	1554.9
#3	921.58	2844.8	22492.	1560.5

Zoom In Zoom Out

Sample Name: MP33747-PS1 Acquired: 5/17/2018 10:45:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.2342	452.6	22.58	2.572	.2627	F23380.	.2521	.2694
Stddev	.0062	3.6	.02	.016	.0012	59.	.0010	.0023
%RSD	2.664	.8047	.0942	.6279	.4474	.2529	.4081	.8534
#1	.2290	448.7	22.61	2.560	.2637	23380.	.2520	.2713
#2	.2326	456.0	22.56	2.591	.2630	23320.	.2511	.2701
#3	.2411	453.2	22.58	2.566	.2614	23440.	.2531	.2668

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	1.810	2.276	267.7	60.51	94.55	12.78	.4504	118.5
Stddev	.007	.010	1.3	.68	.68	.01	.0058	.8
%RSD	.3764	.4214	.4881	1.130	.7143	.0807	1.285	.6939
#1	1.817	2.273	267.1	59.86	94.17	12.79	.4438	117.8
#2	1.809	2.268	269.2	61.22	95.33	12.77	.4532	119.4
#3	1.803	2.286	266.9	60.44	94.15	12.78	.4543	118.3

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.7749	2.497	.6681	.5804	136.2	.3792	F357.4	9.094
Stddev	.0062	.012	.0248	.0568	.5	.0077	2.1	.098
%RSD	.8031	.4860	3.710	9.785	.4032	2.023	.5865	1.082
#1	.7765	2.507	.6787	.5617	136.2	.3707	357.3	9.097
#2	.7803	2.483	.6858	.6442	136.8	.3814	355.4	8.994
#3	.7681	2.500	.6398	.5354	135.7	.3856	359.6	9.191

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.4014	.7591	2.213
Stddev	.0111	.0026	.006
%RSD	2.775	.3475	.2714
#1	.4037	.7570	2.212
#2	.4112	.7582	2.208
#3	.3893	.7620	2.220

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33747-PS1 Acquired: 5/17/2018 10:45:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	915.37	2732.3	21679.	1509.1
Stddev	1.62	5.4	51.	12.0
%RSD	.17745	.19653	.23737	.79685
#1	913.51	2728.5	21655.	1522.9
#2	916.05	2738.5	21643.	1503.3
#3	916.53	2730.0	21738.	1501.1

Zoom In Zoom Out

Sample Name: MP33747-PS1 Acquired: 5/17/2018 10:45:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0468	90.53	4.517	.5145	.0525	F4676.	.0504	.0539	.3619
Stddev	.0012	.73	.004	.0032	.0002	12.	.0002	.0005	.0014
%RSD	2.664	.8047	.0942	.6279	.4474	.2529	.4081	.8534	.3764
#1	.0458	89.75	4.521	.5120	.0527	4676.	.0504	.0543	.3633
#2	.0465	91.19	4.513	.5181	.0526	4664.	.0502	.0540	.3618
#3	.0482	90.64	4.517	.5133	.0523	4688.	.0506	.0534	.3606

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4551	53.55	12.10	18.91	2.556	.0901	23.70	.1550	.4994
Stddev	.0019	.26	.14	.14	.002	.0012	.16	.0012	.0024
%RSD	.4214	.4881	1.130	.7143	.0807	1.285	.6939	.8031	.4860
#1	.4546	53.41	11.97	18.83	2.559	.0888	23.56	.1553	.5013
#2	.4535	53.85	12.24	19.07	2.555	.0906	23.88	.1561	.4966
#3	.4573	53.38	12.09	18.83	2.555	.0909	23.66	.1536	.5001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1336	.1161	27.24	.0758	F71.49	1.819	.0803	.1518	.4427
Stddev	.0050	.0114	.11	.0015	.42	.020	.0022	.0005	.0012
%RSD	3.710	9.785	.4032	2.023	.5865	1.082	2.775	.3475	.2714
#1	.1357	.1123	27.24	.0741	71.46	1.819	.0807	.1514	.4423
#2	.1372	.1288	27.35	.0763	71.08	1.799	.0822	.1516	.4417
#3	.1280	.1071	27.14	.0771	71.92	1.838	.0779	.1524	.4440

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	915.37	2732.3	21679.	1509.1
Stddev	1.62	5.4	51.	12.0
%RSD	.17745	.19653	.23737	.79685
#1	913.51	2728.5	21655.	1522.9
#2	916.05	2738.5	21643.	1503.3
#3	916.53	2730.0	21738.	1501.1

Zoom In Zoom Out

Sample Name: MP33747-SD1 Acquired: 5/17/2018 10:55:52 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0012	87.08	4.281	.2477	.0022	4967.	.0009	.0046	.3259	.3860
Stddev	.0035	1.40	.026	.0076	.0030	37.	.0007	.0061	.0073	.0031
%RSD	288.4	1.608	.5969	3.058	132.5	.7492	80.82	132.6	2.245	.8076
#1	-.0036	85.46	4.261	.2417	-.0006	4925.	.0009	.0002	.3184	.3864
#2	.0028	87.84	4.310	.2452	.0020	4994.	.0015	.0116	.3262	.3889
#3	-.0028	87.93	4.272	.2562	.0053	4984.	.0002	.0021	.3330	.3827

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	51.80	1.337	13.66	2.615	-.0361	13.47	.0502	.4550	.0342	.0645
Stddev	.18	.413	1.15	.015	.0038	.23	.0020	.0221	.0163	.0303
%RSD	.3472	30.87	8.388	.5741	10.46	1.705	4.001	4.857	47.52	46.98
#1	51.68	1.659	12.61	2.630	-.0317	13.22	.0485	.4714	.0230	.0870
#2	51.72	.8719	13.49	2.615	-.0380	13.67	.0524	.4298	.0268	.0766
#3	52.01	1.481	14.88	2.600	-.0385	13.51	.0497	.4637	.0529	.0300

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	27.56	.0332	73.34	1.909	-.0352	.0967	.2023
Stddev	.12	.0063	.34	.099	.0331	.0062	.0016
%RSD	.4456	18.85	.4627	5.185	93.95	6.428	.8091
#1	27.47	.0393	72.95	1.856	-.0719	.0983	.2041
#2	27.52	.0336	73.55	1.848	-.0257	.0898	.2017
#3	27.70	.0268	73.52	2.023	-.0079	.1019	.2010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1054.2	2796.9	22085.	1475.1
Stddev	1.5	7.9	100.	10.9
%RSD	.14400	.28241	.45437	.73833
#1	1053.3	2788.6	21998.	1487.6
#2	1053.2	2797.9	22062.	1468.5
#3	1055.9	2804.3	22195.	1469.1

Zoom In Zoom Out

Sample Name: MP33747-S1 Acquired: 5/17/2018 11:00:06 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0395	157.4	6.811	2.049	.0467	F4025.	.0430	.4258	.6259
Stddev	.0013	.7	.029	.007	.0004	29.	.0001	.0004	.0028
%RSD	3.311	.4540	.4180	.3280	.8538	.7139	.1766	.0990	.4526
#1	.0387	158.2	6.780	2.056	.0469	4019.	.0431	.4262	.6292
#2	.0410	157.0	6.815	2.047	.0470	4056.	.0430	.4254	.6243
#3	.0389	156.9	6.837	2.043	.0463	3999.	.0430	.4259	.6243

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6246	95.26	24.95	37.58	2.624	.3638	35.78	.5140	1.001
Stddev	.0022	.28	.11	.18	.012	.0001	.21	.0017	.010
%RSD	.3460	.2899	.4285	.4833	.4739	.0255	.5798	.3322	1.007
#1	.6248	95.44	25.00	37.38	2.611	.3637	35.91	.5126	.9969
#2	.6223	95.40	25.02	37.65	2.625	.3638	35.89	.5135	.9928
#3	.6267	94.94	24.83	37.72	2.636	.3639	35.54	.5159	1.012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4054	1.806	27.02	.4125	F57.98	2.151	1.710	.5488	.6410
Stddev	.0074	.007	.08	.0021	1.17	.006	.011	.0022	.0002
%RSD	1.832	.4037	.2879	.4977	2.024	.2653	.6152	.4067	.0349
#1	.4003	1.798	26.95	.4109	59.19	2.145	1.711	.5469	.6412
#2	.4019	1.810	27.00	.4119	56.85	2.152	1.719	.5513	.6411
#3	.4139	1.811	27.10	.4149	57.89	2.156	1.699	.5484	.6408

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	942.70	2889.7	22787.	1585.5
Stddev	2.98	6.1	54.	11.4
%RSD	.31631	.21253	.23650	.71638
#1	939.43	2894.7	22848.	1575.0
#2	943.38	2891.7	22765.	1584.1
#3	945.28	2882.9	22747.	1597.5

Zoom In Zoom Out

Sample Name: MP33747-S2 Acquired: 5/17/2018 11:04:26 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0418	123.0	6.331	2.075	.0469	F4649.	.0449	.4400	.4944
Stddev	.0011	.2	.013	.009	.0008	7.	.0003	.0009	.0017
%RSD	2.526	.1868	.1995	.4244	1.809	.1427	.7005	.2088	.3403
#1	.0425	122.9	6.329	2.075	.0460	4653.	.0446	.4411	.4924
#2	.0423	122.7	6.319	2.066	.0470	4652.	.0452	.4394	.4950
#3	.0406	123.2	6.344	2.083	.0477	4641.	.0450	.4396	.4956

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5625	74.27	24.77	38.35	2.421	.3893	33.44	.5176	.9373
Stddev	.0014	.12	.09	.09	.007	.0012	.04	.0014	.0019
%RSD	.2564	.1568	.3441	.2429	.2960	.3047	.1313	.2624	.2028
#1	.5630	74.38	24.83	38.40	2.413	.3890	33.48	.5184	.9387
#2	.5609	74.15	24.80	38.24	2.424	.3883	33.40	.5160	.9381
#3	.5637	74.26	24.67	38.41	2.426	.3906	33.44	.5184	.9352

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4332	1.898	27.17	.4555	F56.41	1.749	1.736	.5339	.6191
Stddev	.0049	.017	.05	.0019	.59	.012	.008	.0023	.0009
%RSD	1.141	.8895	.1735	.4240	1.043	.6791	.4440	.4292	.1412
#1	.4356	1.917	27.22	.4575	57.07	1.763	1.727	.5318	.6184
#2	.4275	1.884	27.12	.4554	55.95	1.744	1.741	.5363	.6188
#3	.4365	1.892	27.19	.4536	56.20	1.741	1.740	.5334	.6201

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	933.96	2796.5	22288.	1551.0
Stddev	1.80	3.8	32.	8.3
%RSD	.19284	.13581	.14452	.53536
#1	932.11	2794.0	22306.	1541.4
#2	934.06	2800.8	22251.	1556.6
#3	935.71	2794.6	22307.	1554.9

Zoom In Zoom Out

Sample Name: FA54005-1 Acquired: 5/17/2018 11:08:47 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	1.772	-.0035	.0604	.0000	F1228.	-.0001	.0007	.0012
Stddev	.0006	.030	.0010	.0007	.000	18.	.0001	.0001	.0002
%RSD	106.3	1.714	27.93	1.158	131.8	1.440	94.09	9.143	20.21
#1	-.0011	1.742	-.0046	.0605	-.0001	1208.	-.0001	.0007	.0011
#2	.0001	1.771	-.0030	.0596	-.0001	1242.	.0000	.0008	.0010
#3	-.0008	1.802	-.0029	.0610	.0000	1233.	-.0001	.0006	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1236	.9161	.5840	3.093	.0666	-.0008	1.748	.0084	.0015
Stddev	.0003	.0092	.0165	.035	.0001	.0001	.010	.0003	.0014
%RSD	.2104	1.000	2.817	1.147	.1058	8.301	.5644	3.415	94.77
#1	.1239	.9225	.5912	3.121	.0666	-.0008	1.738	.0086	.0016
#2	.1234	.9056	.5956	3.106	.0665	-.0007	1.747	.0080	.0028
#3	.1236	.9203	.5652	3.053	.0667	-.0008	1.758	.0085	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0018	.0018	.9944	.0243	F7.577	.1124	-.0051	.0096	.0099
Stddev	.0013	.0021	.0024	.0005	.026	.0004	.0022	.0003	.0001
%RSD	74.62	114.0	.2436	2.243	.3448	.3483	42.85	3.193	1.323
#1	.0032	-.0001	.9917	.0249	7.566	.1120	-.0052	.0099	.0100
#2	.0016	.0041	.9949	.0241	7.559	.1125	-.0072	.0093	.0099
#3	.0005	.0015	.9965	.0238	7.607	.1128	-.0028	.0097	.0098

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	898.99	2512.8	20315.	1427.7
Stddev	2.68	4.5	18.	7.9
%RSD	.29799	.17746	.08672	.55395
#1	896.22	2507.8	20297.	1436.0
#2	901.57	2514.1	20314.	1420.3
#3	899.18	2516.4	20332.	1426.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 11:13:08 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2457	36.32	2.090	1.945	1.893	36.50	2.007	2.025	1.873	1.963
Stddev	.0007	.14	.002	.013	.009	.16	.002	.002	.007	.005
%RSD	.2801	.3821	.1018	.6802	.4680	.4325	.1081	.0841	.3746	.2648
#1	.2464	36.48	2.088	1.940	1.892	36.62	2.009	2.026	1.870	1.968
#2	.2457	36.21	2.089	1.935	1.885	36.32	2.005	2.023	1.880	1.962
#3	.2450	36.28	2.092	1.960	1.903	36.55	2.007	2.025	1.867	1.958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.25	38.16	37.56	1.983	2.083	36.94	2.097	1.931	2.081	2.102
Stddev	.14	.14	.14	.007	.003	.21	.001	.005	.003	.002
%RSD	.3615	.3683	.3832	.3502	.1649	.5702	.0514	.2756	.1271	.1022
#1	38.31	38.17	37.58	1.981	2.079	37.17	2.098	1.937	2.081	2.103
#2	38.09	38.01	37.41	1.990	2.085	36.76	2.096	1.926	2.084	2.102
#3	38.35	38.29	37.69	1.977	2.085	36.90	2.098	1.930	2.079	2.099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.707	2.151	1.918	1.978	1.981	2.015	2.010
Stddev	.001	.002	.009	.005	.000	.001	.002
%RSD	.0341	.1069	.4458	.2711	.0089	.0566	.0876
#1	2.708	2.153	1.920	1.978	1.981	2.014	2.011
#2	2.706	2.149	1.909	1.983	1.982	2.016	2.008
#3	2.708	2.152	1.926	1.972	1.981	2.015	2.010
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 11:13:08 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1036.3	2811.3	22303.	1514.1
Stddev	1.4	3.7	63.	4.6
%RSD	.13594	.12986	.28063	.30332
#1	1035.5	2815.2	22368.	1512.6
#2	1035.6	2810.6	22243.	1519.3
#3	1038.0	2808.0	22297.	1510.5

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 11:17:06 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0088	-.0004	.0000	.0001	.0010	.0001	.0000	.0001
Stddev	.0004	.0126	.0006	.000	.0001	.0028	.0000	.000	.0002
%RSD	124.3	142.2	146.9	142.1	113.6	273.1	62.14	429.5	303.5
#1	.0004	.0182	-.0001	.0000	.0003	.0028	.0001	.0001	.0002
#2	-.0001	-.0055	.0000	-.0001	.0001	-.0022	.0000	.0000	.0002
#3	.0006	.0138	-.0010	.0000	.0000	.0024	.0001	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0122	.0078	.0180	.0001	F.0022	.0263	.0001	-.0005
Stddev	.0002	.0069	.0356	.0224	.0000	.0007	.0011	.0001	.0005
%RSD	11.64	56.61	455.9	124.0	76.54	32.04	4.301	113.3	113.8
#1	.0017	.0200	-.0161	.0024	.0001	.0030	.0261	.0002	-.0001
#2	.0014	.0094	-.0092	.0080	.0000	.0019	.0275	.0002	-.0010
#3	.0017	.0071	.0487	.0437	.0001	.0016	.0253	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0019	.0048	.0007	.0002	.0011	.0001	.0000	-.0002
Stddev	.0021	.0013	.0046	.0001	.0001	.0002	.0010	.000	.0001
%RSD	449.8	66.80	95.95	10.54	62.27	13.22	1135.	10710.	36.41
#1	.0017	.0028	.0023	.0007	.0001	.0013	.0004	-.0003	-.0003
#2	-.0019	.0005	.0101	.0008	.0003	.0011	-.0010	.0001	-.0001
#3	.0016	.0024	.0020	.0006	.0002	.0010	.0009	.0002	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 11:17:06 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1169.7	2898.0	22939.	1476.8
Stddev	.6	3.4	63.	3.3
%RSD	.05138	.11733	.27587	.22648
#1	1169.1	2901.5	22960.	1473.3
#2	1169.6	2894.8	22868.	1477.0
#3	1170.3	2897.6	22989.	1480.0

Zoom In Zoom Out

Sample Name: FA54112-4 Acquired: 5/17/2018 11:21:23 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	14.88	.0151	.2872	.0003	29.34	.0002	.0014	.0222	.0075
Stddev	.0006	.14	.0013	.0022	.0000	.24	.0000	.0001	.0001	.0003
%RSD	454.9	.9176	8.867	.7651	17.17	.8028	25.75	4.589	.6247	3.799
#1	.0007	15.02	.0167	.2884	.0002	29.53	.0001	.0015	.0223	.0074
#2	-.0004	14.75	.0141	.2846	.0003	29.08	.0002	.0014	.0221	.0073
#3	.0000	14.87	.0147	.2885	.0003	29.41	.0002	.0015	.0222	.0078

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	32.49	.8359	.8932	.0340	.0172	.7625	.0058	.0390	.0013	.0038
Stddev	.22	.0383	.0468	.0002	.0001	.0113	.0002	.0009	.0021	.0014
%RSD	.6913	4.581	5.242	.5307	.8458	1.487	3.108	2.352	159.6	36.30
#1	32.72	.8798	.8997	.0341	.0172	.7723	.0059	.0380	.0014	.0050
#2	32.27	.8094	.9365	.0341	.0173	.7650	.0056	.0398	.0033	.0042
#3	32.48	.8186	.8435	.0338	.0170	.7501	.0059	.0391	-.0008	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.485	.0261	.2277	.2446	.0003	.0342	.1390
Stddev	.003	.0002	.0016	.0006	.0012	.0002	.0003
%RSD	.1236	.6664	.7004	.2605	440.1	.5251	.1976
#1	2.481	.0260	.2291	.2447	-.0009	.0342	.1387
#2	2.487	.0260	.2259	.2451	.0015	.0340	.1392
#3	2.486	.0263	.2279	.2439	.0002	.0344	.1392

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1141.1	2958.8	23531.	1554.6
Stddev	1.8	.9	45.	14.1
%RSD	.15810	.03048	.19182	.90688
#1	1139.1	2958.8	23486.	1538.7
#2	1141.6	2957.8	23531.	1565.6
#3	1142.7	2959.6	23576.	1559.5

Zoom In Zoom Out

Sample Name: MP33746-MB1 Acquired: 5/17/2018 11:25:33 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	F.1435	-.0006	-.0009	-.0002	.0915	-.0003	-.0003	.0003
Stddev	.0016	.0744	.0050	.0013	.0003	.0088	.0003	.0002	.0011
%RSD	227.5	51.86	797.5	141.6	134.4	9.662	111.7	66.79	394.9
#1	-.0005	.2148	-.0055	-.0024	-.0003	.1004	-.0003	-.0006	.0001
#2	-.0025	.0663	-.0007	-.0007	-.0004	.0827	.0001	-.0003	.0015
#3	.0008	.1494	.0044	.0003	.0001	.0914	-.0005	-.0002	-.0007
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.1000							
Low Limit		-.1000							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025	.1255	.0772	.0653	.0018	-.0038	.1166	.0013	-.0006
Stddev	.0012	.0025	.0566	.0670	.0002	.0009	.0592	.0010	.0001
%RSD	49.80	1.960	73.27	102.6	13.51	23.24	50.79	77.90	14.84
#1	.0033	.1242	.0342	.1268	.0020	-.0028	.1089	.0011	-.0007
#2	.0032	.1241	.1413	-.0061	.0015	-.0039	.1793	.0004	-.0005
#3	.0011	.1284	.0561	.0753	.0018	-.0046	.0616	.0023	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0065	F.0074	.0336	F.0747	.0005	.0012	-.0031	.0003	.0080
Stddev	.0051	.0101	.0055	.0005	.0004	.0008	.0056	.0005	.0001
%RSD	78.95	136.4	16.32	.6547	76.99	65.92	179.5	189.2	1.176
#1	.0077	-.0021	.0378	.0751	.0002	.0016	-.0051	.0008	.0081
#2	.0009	.0063	.0356	.0742	.0003	.0003	-.0075	-.0002	.0079
#3	.0109	.0181	.0274	.0748	.0009	.0017	.0032	.0002	.0080
Check ?	Chk Fail	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0025	.0050		.0250					
Low Limit	-.0025	-.0050		-.0250					

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33746-MB1 Acquired: 5/17/2018 11:25:33 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1180.7	2921.7	23458.	1516.1
Stddev	1.2	1.7	141.	24.2
%RSD	.10211	.05691	.59997	1.5930
#1	1180.2	2920.5	23379.	1518.6
#2	1179.8	2921.1	23374.	1539.0
#3	1182.1	2923.6	23620.	1490.8

Zoom In Zoom Out

Sample Name: MP33746-B1 Acquired: 5/17/2018 11:29:51 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0560	26.31	2.208	2.149	.0519	25.16	.0542	.5600	.2058
Stddev	.0040	.17	.001	.023	.0002	.13	.0004	.0009	.0003
%RSD	7.175	.6469	.0443	1.085	.4373	.5336	.7342	.1638	.1699
#1	.0600	26.21	2.209	2.169	.0520	25.31	.0539	.5609	.2054
#2	.0561	26.21	2.207	2.123	.0516	25.05	.0546	.5591	.2060
#3	.0520	26.50	2.208	2.155	.0521	25.12	.0539	.5602	.2060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2730	27.29	25.39	26.27	.5486	.5275	24.81	F.6030	.4995
Stddev	.0004	.10	.31	.64	.0015	.0012	.23	.0031	.0018
%RSD	.1567	.3682	1.225	2.449	.2803	.2226	.9424	.5069	.3616
#1	.2733	27.29	25.48	26.40	.5469	.5285	24.83	.6043	.4999
#2	.2725	27.18	25.05	25.57	.5490	.5262	24.56	.6053	.5011
#3	.2733	27.38	25.65	26.84	.5499	.5278	25.03	.5995	.4976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value								.5000	
Range								20.00%	

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5620	2.210	.3976	F.6587	.5196	.5274	2.045	.5172	.5483
Stddev	.0037	.010	.0020	.0020	.0020	.0021	.004	.0017	.0013
%RSD	.6620	.4481	.5047	.3002	.3834	.4004	.1802	.3294	.2451
#1	.5603	2.212	.3967	.6600	.5206	.5251	2.047	.5171	.5498
#2	.5594	2.219	.3962	.6596	.5173	.5280	2.041	.5155	.5472
#3	.5663	2.200	.3999	.6564	.5209	.5292	2.048	.5189	.5480
Check ?	Chk Pass	Chk Pass	None	Chk Fail	None	None	Chk Pass	Chk Pass	Chk Pass
Value				.5000					
Range				20.00%					

Zoom In Zoom Out

Sample Name: MP33746-B1 Acquired: 5/17/2018 11:29:51 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1133.4	2854.6	22869.	1480.1
Stddev	.5	7.2	23.	4.7
%RSD	.04028	.25382	.09969	.32012
#1	1132.9	2852.0	22894.	1476.4
#2	1133.7	2849.0	22851.	1478.5
#3	1133.6	2862.8	22861.	1485.5

Zoom In Zoom Out

Sample Name: FA53725-34 Acquired: 5/17/2018 11:33:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0041	288.0	.0657	.5624	.0049	5.402	-.0007	.0316	.4346	.2107
Stddev	.0014	.9	.0016	.0028	.0010	.042	.0002	.0002	.0029	.0025
%RSD	34.79	.3156	2.363	.5033	20.31	.7695	34.21	.7617	.6781	1.196
#1	.0056	287.2	.0674	.5592	.0044	5.439	-.0008	.0317	.4337	.2134
#2	.0027	287.8	.0644	.5646	.0060	5.357	-.0008	.0317	.4323	.2085
#3	.0042	289.0	.0654	.5635	.0042	5.409	-.0004	.0313	.4380	.2101

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	272.9	11.22	15.89	.5086	.0114	1.894	.1952	.3198	.0101	.0184
Stddev	.6	.18	.40	.0007	.0006	.080	.0010	.0019	.0024	.0023
%RSD	.2206	1.567	2.514	.1474	5.577	4.246	.5359	.6004	23.22	12.67
#1	272.9	11.03	15.54	.5080	.0108	1.866	.1958	.3185	.0077	.0206
#2	272.3	11.37	16.32	.5084	.0114	1.831	.1958	.3220	.0102	.0188
#3	273.5	11.27	15.82	.5094	.0121	1.985	.1940	.3189	.0124	.0159

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.432	.0758	.1048	5.354	-.0018	.7049	.6032
Stddev	.061	.0023	.0010	.013	.0034	.0026	.0003
%RSD	.7286	3.018	.9389	.2395	184.0	.3742	.0440
#1	8.361	.0781	.1041	5.348	.0007	.7071	.6035
#2	8.473	.0735	.1044	5.345	-.0006	.7019	.6031
#3	8.461	.0759	.1060	5.368	-.0057	.7055	.6030

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1122.5	2951.3	23109.	1541.7
Stddev	1.3	4.2	45.	6.4
%RSD	.11460	.14224	.19335	.41826
#1	1121.4	2950.1	23074.	1549.0
#2	1123.9	2947.8	23159.	1536.8
#3	1122.2	2955.9	23093.	1539.2

Zoom In Zoom Out

Sample Name: MP33746-D1 Acquired: 5/17/2018 11:38:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	287.5	.0635	.5652	.0046	5.387	-.0004	.0316	.4334	.2111
Stddev	.0027	1.4	.0060	.0018	.0005	.071	.0003	.0010	.0001	.0022
%RSD	43.69	.5012	9.412	.3207	11.93	1.323	62.06	3.109	.0169	1.065
#1	.0081	289.1	.0676	.5646	.0044	5.438	-.0007	.0306	.4335	.2128
#2	.0071	287.0	.0664	.5638	.0042	5.418	-.0004	.0326	.4334	.2119
#3	.0031	286.3	.0567	.5672	.0052	5.305	-.0002	.0317	.4334	.2086

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	275.6	11.33	16.35	.5090	.0115	1.883	.1910	.3152	.0069	.0071
Stddev	1.6	.04	.04	.0038	.0012	.015	.0014	.0020	.0027	.0102
%RSD	.5729	.3386	.2505	.7379	10.62	.7793	.7579	.6437	38.77	145.0
#1	277.2	11.37	16.38	.5119	.0127	1.878	.1915	.3152	.0095	.0017
#2	275.3	11.29	16.31	.5104	.0114	1.871	.1893	.3132	.0042	.0188
#3	274.1	11.34	16.37	.5048	.0103	1.899	.1921	.3172	.0069	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.887	.0733	.1055	5.325	.0021	.7039	.6029
Stddev	.003	.0018	.0011	.021	.0053	.0033	.0008
%RSD	.0408	2.437	1.068	.3957	256.0	.4713	.1327
#1	7.890	.0712	.1068	5.347	.0081	.7043	.6028
#2	7.884	.0745	.1050	5.322	-.0012	.7071	.6021
#3	7.886	.0742	.1047	5.305	-.0007	.7005	.6037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1121.9	2955.8	23206.	1528.6
Stddev	1.1	2.2	156.	7.1
%RSD	.09653	.07334	.67284	.46309
#1	1122.5	2956.7	23054.	1521.1
#2	1122.5	2957.3	23197.	1535.2
#3	1120.7	2953.3	23366.	1529.5

Zoom In Zoom Out

Sample Name: MP33746-D2 Acquired: 5/17/2018 11:42:21 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	273.3	.0627	.5317	.0045	5.166	-.0009	.0293	.4059	.2011
Stddev	.0005	1.1	.0039	.0013	.0001	.064	.0002	.0003	.0037	.0012
%RSD	8.575	.4109	6.261	.2522	2.087	1.245	17.44	1.138	.9010	.5813
#1	.0056	274.4	.0625	.5329	.0046	5.192	-.0008	.0297	.4034	.2023
#2	.0062	272.1	.0667	.5303	.0046	5.092	-.0009	.0293	.4042	.2010
#3	.0066	273.4	.0589	.5320	.0044	5.213	-.0011	.0290	.4101	.2000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	258.5	10.68	15.10	.4755	.0096	1.793	.1797	.3043	.0043	.0184
Stddev	.8	.11	.26	.0028	.0005	.034	.0015	.0015	.0054	.0059
%RSD	.3025	.9955	1.751	.5904	5.638	1.883	.8178	.4977	126.2	32.34
#1	259.3	10.78	15.00	.4728	.0097	1.813	.1795	.3058	.0077	.0129
#2	257.7	10.57	14.89	.4752	.0100	1.754	.1812	.3042	.0070	.0247
#3	258.6	10.68	15.40	.4784	.0090	1.812	.1783	.3028	-.0019	.0176

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.315	.0684	.0988	5.127	.0051	.6544	.5641
Stddev	.006	.0008	.0008	.023	.0058	.0009	.0015
%RSD	.0832	1.191	.7667	.4428	113.1	.1390	.2591
#1	7.311	.0682	.0997	5.117	.0114	.6552	.5656
#2	7.311	.0694	.0984	5.110	.0000	.6548	.5640
#3	7.322	.0678	.0984	5.153	.0040	.6534	.5626

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.8	2952.1	23098.	1517.2
Stddev	2.9	5.0	133.	12.2
%RSD	.26331	.17042	.57710	.80610
#1	1115.4	2947.1	23119.	1505.0
#2	1120.2	2952.0	23219.	1529.5
#3	1120.8	2957.2	22955.	1517.0

Zoom In Zoom Out

Sample Name: MP33746-SD1 Acquired: 5/17/2018 11:46:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	279.4	.0670	.5243	.0003	5.663	-.0021	.0304	.4095	.2068
Stddev	.0171	2.1	.0056	.0063	.0039	.091	.0002	.0005	.0031	.0082
%RSD	279.5	.7538	8.402	1.198	1322.	1.609	9.561	1.529	.7590	3.942
#1	-.0096	280.1	.0732	.5315	.0036	5.758	-.0019	.0308	.4126	.2009
#2	.0244	277.0	.0659	.5206	.0013	5.654	-.0021	.0304	.4064	.2035
#3	.0037	281.1	.0621	.5206	-.0040	5.576	-.0023	.0299	.4096	.2161

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	266.4	10.36	15.38	.4924	-.0116	1.953	.1948	.2980	.0027	.0610
Stddev	2.0	.34	.17	.0041	.0046	.094	.0019	.0109	.0518	.0425
%RSD	.7587	3.240	1.135	.8400	39.29	4.813	.9502	3.645	1892.	69.73
#1	267.4	10.44	15.20	.4967	-.0148	1.855	.1939	.3010	.0418	.0428
#2	264.0	10.66	15.55	.4884	-.0136	1.961	.1937	.3070	-.0561	.1096
#3	267.6	9.996	15.38	.4920	-.0064	2.042	.1970	.2859	.0225	.0306

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.567	.0641	.1015	5.109	-.0166	.6692	.5953
Stddev	.009	.0005	.0036	.034	.0043	.0063	.0021
%RSD	.1184	.7533	3.522	.6742	25.88	.9392	.3507
#1	7.557	.0641	.1020	5.146	-.0178	.6657	.5934
#2	7.571	.0636	.0978	5.103	-.0118	.6764	.5950
#3	7.573	.0646	.1049	5.078	-.0201	.6654	.5976

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1167.8	2936.1	23215.	1529.9
Stddev	2.2	3.7	118.	19.3
%RSD	.18930	.12663	.50910	1.2647
#1	1165.8	2940.4	23085.	1548.5
#2	1170.2	2934.5	23243.	1531.3
#3	1167.4	2933.4	23316.	1509.9

Zoom In Zoom Out

Sample Name: MP33746-PS1 Acquired: 5/17/2018 11:50:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0539	281.2	.1720	.7987	.0532	9.962	.0494	.0823	.4626	.3019
Stddev	.0015	1.6	.0012	.0028	.0016	.046	.0005	.0012	.0030	.0009
%RSD	2.772	.5801	.6880	.3461	2.946	.4608	1.102	1.480	.6407	.3046
#1	.0556	282.6	.1734	.8016	.0549	9.977	.0488	.0826	.4615	.3024
#2	.0532	281.5	.1711	.7984	.0529	9.999	.0494	.0810	.4660	.3025
#3	.0528	279.4	.1716	.7961	.0519	9.911	.0499	.0834	.4604	.3008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	266.8	20.34	20.58	.5355	.1068	11.00	.2966	.3585	.1145	.1249
Stddev	1.9	.18	.13	.0026	.0003	.04	.0019	.0015	.0041	.0054
%RSD	.6955	.8840	.6248	.4802	.2846	.3688	.6334	.4233	3.549	4.284
#1	268.9	20.54	20.66	.5379	.1071	11.05	.2961	.3602	.1180	.1213
#2	266.0	20.30	20.43	.5358	.1067	11.00	.2987	.3576	.1154	.1224
#3	265.4	20.18	20.65	.5327	.1065	10.97	.2951	.3576	.1101	.1311

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.462	.1256	.1501	5.263	.0985	.7228	.8309
Stddev	.036	.0014	.0012	.013	.0076	.0034	.0031
%RSD	.4265	1.119	.8199	.2542	7.712	.4652	.3781
#1	8.439	.1264	.1513	5.278	.0900	.7261	.8290
#2	8.445	.1239	.1501	5.260	.1009	.7229	.8291
#3	8.504	.1263	.1489	5.252	.1046	.7194	.8345

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1115.5	2940.5	23162.	1523.5
Stddev	3.3	9.1	73.	10.1
%RSD	.29792	.30824	.31662	.66461
#1	1112.2	2945.8	23089.	1514.1
#2	1118.9	2945.5	23162.	1522.2
#3	1115.3	2930.0	23236.	1534.2

Zoom In Zoom Out

Sample Name: MP33746-S1 Acquired: 5/17/2018 11:54:58 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0566	399.8	2.035	2.628	.0557	30.01	.0508	.5696	.6771	.4814
Stddev	.0030	2.0	.002	.014	.0011	.05	.0003	.0005	.0019	.0027
%RSD	5.338	.5056	.0849	.5179	2.058	.1650	.6294	.0919	.2736	.5652
#1	.0596	399.6	2.035	2.643	.0570	29.97	.0508	.5691	.6779	.4833
#2	.0565	397.9	2.033	2.619	.0553	30.00	.0511	.5702	.6750	.4783
#3	.0536	401.9	2.037	2.621	.0548	30.06	.0505	.5696	.6784	.4825

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	310.6	35.37	41.98	1.055	.4176	25.49	.8362	.8123	.1349	2.015
Stddev	.7	.21	.32	.008	.0004	.11	.0008	.0087	.0054	.012
%RSD	.2338	.5817	.7531	.7706	.1028	.4299	.1015	1.073	3.985	.6043
#1	311.0	35.52	42.34	1.058	.4175	25.55	.8359	.8038	.1384	2.025
#2	309.8	35.14	41.80	1.045	.4172	25.36	.8372	.8119	.1287	2.001
#3	311.1	35.47	41.80	1.060	.4180	25.55	.8356	.8212	.1377	2.017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.764	.5939	.6115	5.395	2.001	1.228	1.152
Stddev	.011	.0006	.0012	.023	.005	.001	.003
%RSD	.1100	.1011	.1914	.4283	.2412	.0933	.2294
#1	9.761	.5943	.6128	5.401	1.998	1.230	1.152
#2	9.776	.5941	.6113	5.370	1.998	1.228	1.150
#3	9.755	.5932	.6105	5.415	2.006	1.227	1.155

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1097.2	2922.3	23040.	1534.7
Stddev	2.8	5.0	19.	4.7
%RSD	.25187	.17187	.08282	.30663
#1	1097.4	2916.5	23042.	1533.1
#2	1099.8	2924.7	23059.	1540.0
#3	1094.3	2925.6	23021.	1531.0

Zoom In Zoom Out

Sample Name: MP33746-S2 Acquired: 5/17/2018 11:59:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0644	437.8	2.219	2.931	.0624	33.10	.0546	.6185	.7468	.5250
Stddev	.0028	2.4	.004	.010	.0004	.32	.0003	.0020	.0046	.0020
%RSD	4.356	.5537	.1765	.3549	.6481	.9652	.6412	.3304	.6135	.3839
#1	.0639	438.9	2.219	2.943	.0623	33.14	.0543	.6204	.7484	.5268
#2	.0674	439.6	2.215	2.924	.0628	33.40	.0550	.6187	.7504	.5228
#3	.0619	435.1	2.223	2.926	.0620	32.76	.0545	.6163	.7417	.5252

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	343.1	39.16	46.23	1.154	.4584	28.23	.9041	.8936	.1378	2.194
Stddev	1.1	.22	.24	.008	.0026	.15	.0037	.0071	.0059	.017
%RSD	.3335	.5663	.5286	.7261	.5643	.5316	.4083	.7973	4.293	.7943
#1	343.7	39.41	46.43	1.161	.4602	28.26	.9075	.9002	.1442	2.213
#2	343.9	39.01	46.32	1.156	.4597	28.37	.9047	.8946	.1325	2.190
#3	341.8	39.05	45.96	1.145	.4555	28.07	.9002	.8861	.1367	2.179

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.586	.6421	.6777	5.933	2.183	1.345	1.247
Stddev	.117	.0007	.0034	.024	.010	.005	.003
%RSD	1.361	.1030	.4982	.4063	.4514	.3834	.2161
#1	8.701	.6418	.6795	5.956	2.194	1.347	1.250
#2	8.590	.6428	.6798	5.936	2.177	1.349	1.246
#3	8.467	.6416	.6738	5.908	2.177	1.339	1.245

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1091.9	2924.2	22944.	1525.4
Stddev	.4	3.3	142.	8.2
%RSD	.04107	.11236	.61966	.53970
#1	1091.6	2927.3	22879.	1533.5
#2	1092.4	2924.7	22846.	1517.0
#3	1091.7	2920.8	23107.	1525.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:03:04 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2465	F35.70	2.114	1.939	1.885	36.17	2.013	2.030	1.833
Stddev	.0008	.16	.001	.001	.005	.09	.004	.002	.011
%RSD	.3403	.4452	.0456	.0509	.2729	.2437	.1934	.1149	.5802
#1	.2463	35.60	2.115	1.940	1.887	36.15	2.016	2.032	1.827
#2	.2457	35.62	2.113	1.938	1.880	36.10	2.009	2.028	1.827
#3	.2474	35.88	2.115	1.939	1.890	36.27	2.015	2.031	1.846
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		40.00							
Range		-10.00%							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.950	38.34	38.05	37.99	1.984	2.102	36.53	2.131	1.930
Stddev	.003	.14	.08	.07	.009	.005	.07	.003	.007
%RSD	.1361	.3664	.2140	.1798	.4539	.2562	.1995	.1509	.3831
#1	1.951	38.24	38.02	38.06	1.987	2.098	36.55	2.132	1.937
#2	1.947	38.27	37.99	37.93	1.974	2.101	36.44	2.128	1.922
#3	1.951	38.50	38.14	37.98	1.992	2.108	36.58	2.134	1.930
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.105	2.139	2.737	2.199	1.901	1.973	1.981	2.020	2.022
Stddev	.005	.004	.002	.006	.009	.007	.004	.006	.006
%RSD	.2462	.1900	.0876	.2730	.4549	.3765	.2247	.3118	.2852
#1	2.108	2.143	2.735	2.205	1.897	1.977	1.985	2.023	2.027
#2	2.099	2.138	2.736	2.193	1.895	1.964	1.976	2.013	2.016
#3	2.107	2.135	2.740	2.200	1.911	1.978	1.982	2.025	2.022
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:03:04 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1027.0	2772.0	22442.	1488.8
Stddev	3.6	5.9	110.	5.6
%RSD	.35149	.21404	.48906	.37482
#1	1024.2	2769.6	22408.	1494.1
#2	1031.1	2778.8	22564.	1489.3
#3	1025.7	2767.7	22353.	1482.9

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:07:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0079	-.0001	-.0002	.0000	.0006	.0001	.0000	.0000
Stddev	.0004	.0106	.0003	.0000	.0002	.0079	.0000	.000	.0001
%RSD	141.5	134.0	277.2	22.96	713.2	1389.	23.94	409.5	644.4
#1	.0007	-.0033	.0001	-.0002	-.0001	.0096	.0001	.0000	.0000
#2	.0004	.0093	.0000	-.0001	-.0001	-.0044	.0001	.0001	-.0001
#3	-.0002	.0178	-.0004	-.0002	.0002	-.0035	.0001	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0164	-.0144	.0331	.0001	F .0021	.0151	.0002	.0000
Stddev	.0002	.0060	.0038	.0705	.0000	.0008	.0004	.0001	.000
%RSD	14.44	36.77	26.37	213.4	20.41	37.30	2.701	62.15	1799.
#1	.0015	.0220	-.0185	-.0186	.0001	.0030	.0156	.0002	-.0002
#2	.0014	.0100	-.0137	.0044	.0001	.0019	.0149	.0004	.0002
#3	.0011	.0171	-.0110	.1134	.0000	.0015	.0148	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0010	.0017	.0006	.0002	.0011	.0004	.0000	-.0001
Stddev	.0005	.0005	.0006	.0003	.0001	.0002	.0007	.000	.0001
%RSD	62.66	50.77	32.67	41.50	55.74	16.04	181.8	3183.	114.1
#1	.0007	.0012	.0018	.0009	.0003	.0013	-.0001	.0004	-.0001
#2	.0013	.0004	.0022	.0004	.0001	.0010	.0000	-.0003	-.0002
#3	.0003	.0014	.0011	.0006	.0002	.0009	.0012	-.0001	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:07:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1169.5	2873.2	22884.	1477.8
Stddev	2.6	.8	154.	4.2
%RSD	.21996	.02798	.67381	.28552
#1	1172.0	2873.9	22758.	1474.6
#2	1166.8	2873.5	22838.	1476.3
#3	1169.6	2872.3	23056.	1482.6

Zoom In Zoom Out

Sample Name: FA53725-68 Acquired: 5/17/2018 12:11:19 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0037	114.2	.0487	.4396	.0035	8.346	.0005	.0270	.2696	3.953
Stddev	.0013	.5	.0039	.0011	.0002	.019	.0002	.0008	.0029	.019
%RSD	36.19	.4299	7.925	.2514	7.104	.2228	45.14	2.952	1.077	.4753
#1	.0024	114.7	.0511	.4387	.0037	8.324	.0006	.0276	.2668	3.973
#2	.0036	113.9	.0507	.4408	.0036	8.358	.0005	.0261	.2726	3.936
#3	.0050	113.8	.0443	.4392	.0032	8.354	.0002	.0274	.2694	3.949

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	135.9	13.03	10.42	.6790	.0058	1.208	.1125	9.005	.1306	.0107
Stddev	.2	.10	.11	.0054	.0003	.037	.0010	.020	.0028	.0091
%RSD	.1424	.8040	1.056	.7912	5.444	3.096	.9158	.2198	2.167	85.16
#1	135.9	13.14	10.40	.6837	.0061	1.167	.1121	8.994	.1326	.0023
#2	135.8	13.04	10.54	.6731	.0055	1.239	.1136	8.994	.1320	.0095
#3	136.2	12.93	10.32	.6802	.0057	1.219	.1117	9.028	.1274	.0204

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.893	.0842	.1632	3.728	.0014	.3235	.6619
Stddev	.022	.0004	.0007	.025	.0037	.0021	.0012
%RSD	.3220	.4751	.4177	.6711	267.4	.6621	.1739
#1	6.918	.0839	.1637	3.747	-.0019	.3251	.6610
#2	6.883	.0840	.1636	3.700	.0006	.3211	.6615
#3	6.877	.0846	.1625	3.737	.0055	.3244	.6632

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1137.3	2900.5	23133.	1516.5
Stddev	2.8	8.7	67.	1.7
%RSD	.24368	.29914	.28987	.11360
#1	1134.6	2891.0	23056.	1515.2
#2	1140.1	2908.0	23177.	1515.9
#3	1137.4	2902.6	23166.	1518.5

Zoom In Zoom Out

Sample Name: FA53801-7 Acquired: 5/17/2018 12:15:30 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0066	227.8	.0511	1.883	.0067	56.70	.0042	.0641	.4308	.2929
Stddev	.0008	.6	.0019	.017	.0009	.07	.0004	.0008	.0008	.0009
%RSD	12.64	.2724	3.785	.9080	13.40	.1300	9.684	1.288	.1869	.3138
#1	.0061	228.5	.0533	1.887	.0075	56.62	.0039	.0646	.4310	.2933
#2	.0075	227.4	.0505	1.897	.0057	56.72	.0046	.0645	.4315	.2918
#3	.0061	227.5	.0496	1.864	.0067	56.77	.0040	.0631	.4299	.2935

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	232.6	22.78	21.98	5.101	.0079	2.199	.2618	1.068	.0138	.0135
Stddev	.6	.17	.14	.023	.0007	.018	.0018	.006	.0028	.0058
%RSD	.2623	.7250	.6282	.4448	8.548	.8345	.6700	.5333	20.63	43.22
#1	233.3	22.82	21.84	5.081	.0083	2.200	.2635	1.067	.0161	.0085
#2	232.1	22.92	21.99	5.125	.0071	2.216	.2600	1.063	.0106	.0121
#3	232.5	22.60	22.11	5.095	.0083	2.180	.2617	1.074	.0145	.0200

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.475	.0750	.6720	5.899	.0062	.5946	.3416
Stddev	.047	.0015	.0022	.026	.0052	.0042	.0010
%RSD	.5563	1.935	.3329	.4401	83.52	.7019	.2882
#1	8.444	.0749	.6743	5.884	.0005	.5994	.3410
#2	8.530	.0765	.6699	5.929	.0075	.5917	.3410
#3	8.453	.0736	.6717	5.884	.0107	.5927	.3427

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1114.9	2939.0	23644.	1535.0
Stddev	2.2	2.0	103.	11.3
%RSD	.19330	.06875	.43598	.73531
#1	1113.2	2939.5	23748.	1547.9
#2	1117.3	2940.7	23542.	1529.8
#3	1114.2	2936.8	23640.	1527.2

Zoom In Zoom Out

Sample Name: FA53801-10 Acquired: 5/17/2018 12:19:38 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0056	187.9	.1521	1.241	.0102	29.38	.0122	.1447	.5356	.2195
Stddev	.0015	1.0	.0045	.007	.0004	.12	.0001	.0012	.0016	.0014
%RSD	26.75	.5391	2.981	.6011	4.266	.4204	.7011	.8204	.3016	.6413
#1	.0056	189.0	.1573	1.240	.0097	29.52	.0123	.1450	.5366	.2211
#2	.0071	187.5	.1489	1.249	.0105	29.32	.0121	.1433	.5337	.2185
#3	.0041	187.1	.1501	1.234	.0104	29.30	.0122	.1456	.5364	.2190

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	287.2	42.93	46.66	4.654	.0020	2.039	.4830	.4362	.0051	.0082
Stddev	.5	.16	.32	.007	.0008	.025	.0014	.0038	.0050	.0093
%RSD	.1828	.3661	.6852	.1504	39.91	1.227	.2887	.8771	99.17	113.1
#1	287.8	43.11	46.49	4.653	.0016	2.033	.4829	.4384	.0105	-.0009
#2	286.9	42.89	47.03	4.648	.0016	2.067	.4816	.4318	.0005	.0176
#3	287.0	42.80	46.47	4.661	.0030	2.018	.4844	.4384	.0043	.0079

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.039	.0639	.4501	7.223	.0016	.5613	.5588
Stddev	.009	.0033	.0028	.011	.0035	.0016	.0006
%RSD	.1264	5.213	.6213	.1495	212.4	.2784	.1083
#1	7.034	.0636	.4491	7.225	.0018	.5602	.5582
#2	7.033	.0674	.4532	7.211	.0050	.5631	.5588
#3	7.049	.0608	.4479	7.232	-.0019	.5607	.5594

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1115.1	3067.2	24372.	1608.7
Stddev	2.0	4.8	48.	7.2
%RSD	.18369	.15490	.19776	.44717
#1	1117.2	3067.3	24332.	1601.9
#2	1115.0	3071.9	24426.	1616.2
#3	1113.1	3062.4	24358.	1607.9

Zoom In Zoom Out

Sample Name: FA53801-13 Acquired: 5/17/2018 12:23:46 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0062	206.9	.1096	1.331	.0065	21.85	.0064	.0627	.4022	.8627
Stddev	.0009	1.3	.0053	.006	.0009	.07	.0001	.0008	.0025	.0031
%RSD	14.52	.6461	4.809	.4554	13.28	.3056	2.063	1.314	.6236	.3650
#1	.0055	208.4	.1035	1.336	.0067	21.80	.0065	.0626	.3993	.8663
#2	.0072	206.4	.1128	1.334	.0071	21.93	.0062	.0619	.4037	.8614
#3	.0059	205.8	.1124	1.325	.0055	21.83	.0064	.0635	.4036	.8604

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	232.5	25.65	27.85	2.169	.0044	1.778	.2493	3.288	.0230	.0203
Stddev	.5	.05	.14	.006	.0003	.037	.0008	.005	.0081	.0030
%RSD	.2120	.2076	.5120	.2783	7.981	2.056	.3289	.1448	35.26	14.87
#1	233.1	25.60	28.01	2.173	.0045	1.819	.2485	3.293	.0138	.0193
#2	232.3	25.70	27.73	2.171	.0046	1.766	.2501	3.283	.0260	.0237
#3	232.1	25.65	27.81	2.162	.0040	1.749	.2493	3.288	.0291	.0180

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.872	.0683	.3741	5.765	.0069	.5070	.8800
Stddev	.030	.0017	.0028	.011	.0006	.0006	.0002
%RSD	.4415	2.416	.7362	.1933	9.161	.1097	.0192
#1	6.896	.0670	.3766	5.774	.0062	.5076	.8798
#2	6.882	.0701	.3744	5.768	.0069	.5067	.8801
#3	6.838	.0677	.3712	5.752	.0075	.5067	.8799

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1114.9	2905.2	23211.	1527.7
Stddev	3.5	5.9	58.	9.2
%RSD	.31439	.20237	.24865	.60080
#1	1110.9	2900.8	23166.	1531.9
#2	1116.5	2903.0	23191.	1517.1
#3	1117.3	2911.9	23276.	1533.9

Zoom In Zoom Out

Sample Name: FA53801-16 Acquired: 5/17/2018 12:27:54 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0107	223.7	.0420	2.162	.0046	64.32	.0335	.0507	.3523	2.548
Stddev	.0016	.8	.0050	.018	.0005	.40	.0006	.0011	.0023	.015
%RSD	15.12	.3448	11.83	.8121	10.06	.6232	1.830	2.227	.6580	.5673
#1	.0122	223.3	.0452	2.163	.0046	64.37	.0339	.0520	.3498	2.535
#2	.0090	223.2	.0445	2.179	.0041	63.89	.0338	.0500	.3544	2.563
#3	.0108	224.6	.0363	2.144	.0051	64.69	.0328	.0501	.3525	2.546

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	240.0	22.25	21.83	4.909	.0071	2.147	.2720	3.741	.0157	.0165
Stddev	.8	.15	.11	.067	.0002	.010	.0015	.011	.0039	.0116
%RSD	.3327	.6891	.4999	1.361	3.378	.4625	.5620	.2950	24.71	70.04
#1	239.7	22.24	21.95	4.861	.0071	2.136	.2733	3.749	.0134	.0293
#2	239.5	22.40	21.74	4.986	.0074	2.154	.2703	3.729	.0202	.0068
#3	241.0	22.10	21.80	4.881	.0069	2.152	.2723	3.747	.0136	.0134

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.819	.0825	.9665	6.116	-.0024	.5395	1.210
Stddev	.142	.0026	.0004	.065	.0034	.0034	.004
%RSD	1.820	3.162	.0454	1.054	140.4	.6218	.2851
#1	7.983	.0845	.9664	6.076	.0015	.5379	1.213
#2	7.744	.0795	.9661	6.191	-.0042	.5434	1.206
#3	7.729	.0833	.9669	6.082	-.0046	.5373	1.212

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1112.1	2882.4	23283.	1512.4
Stddev	2.1	6.6	217.	4.0
%RSD	.18616	.22795	.92998	.26554
#1	1111.4	2883.3	23413.	1507.9
#2	1114.4	2888.5	23033.	1515.6
#3	1110.4	2875.5	23403.	1513.7

Zoom In Zoom Out

Sample Name: FA53801-19 Acquired: 5/17/2018 12:32:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0118	223.4	.0392	2.025	.0051	57.97	.0575	.0578	.3600	4.204
Stddev	.0016	.3	.0022	.010	.0000	.33	.0006	.0003	.0016	.007
%RSD	13.19	.1445	5.562	.5108	.7202	.5649	1.032	.4496	.4557	.1790
#1	.0128	223.4	.0380	2.031	.0051	58.33	.0568	.0581	.3611	4.204
#2	.0100	223.1	.0417	2.013	.0051	57.70	.0579	.0578	.3581	4.212
#3	.0127	223.7	.0379	2.032	.0052	57.88	.0579	.0576	.3606	4.197

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	228.8	20.75	21.82	5.226	.0069	2.581	.2670	6.422	.0323	.0160
Stddev	1.1	.06	.24	.012	.0001	.029	.0008	.034	.0003	.0043
%RSD	.5020	.2956	1.113	.2258	1.394	1.106	.2955	.5313	.8163	27.15
#1	230.0	20.77	22.06	5.219	.0069	2.596	.2661	6.383	.0322	.0166
#2	227.7	20.68	21.57	5.239	.0068	2.548	.2676	6.446	.0321	.0200
#3	228.6	20.80	21.84	5.219	.0069	2.599	.2674	6.437	.0326	.0114

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.315	.0926	.7251	5.438	.0055	.4853	3.284
Stddev	.024	.0023	.0034	.009	.0026	.0006	.002
%RSD	.3295	2.486	.4650	.1659	47.16	.1318	.0739
#1	7.328	.0937	.7281	5.446	.0067	.4851	3.284
#2	7.287	.0900	.7215	5.439	.0072	.4860	3.286
#3	7.330	.0942	.7258	5.428	.0025	.4848	3.281

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.6	2916.9	23547.	1516.8
Stddev	.6	11.0	44.	19.8
%RSD	.05563	.37756	.18483	1.3076
#1	1119.3	2906.0	23507.	1495.4
#2	1118.0	2928.0	23593.	1534.6
#3	1118.4	2916.8	23541.	1520.3

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA53801-23 Acquired: 5/17/2018 12:36:08 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0051	226.0	.0535	1.829	.0066	55.75	.0046	.0635	.4142	.2462
Stddev	.0012	.5	.0023	.011	.0001	.04	.0004	.0009	.0012	.0033
%RSD	23.55	.2100	4.303	.6069	1.440	.0724	9.217	1.415	.2822	1.350
#1	.0054	226.1	.0550	1.821	.0065	55.80	.0051	.0641	.4139	.2499
#2	.0062	226.3	.0508	1.842	.0067	55.73	.0042	.0639	.4133	.2434
#3	.0038	225.4	.0546	1.824	.0066	55.73	.0044	.0624	.4155	.2454

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	225.0	22.49	21.68	5.051	.0060	2.128	.2569	1.002	.0104	.0190
Stddev	1.1	.17	.18	.028	.0003	.051	.0004	.004	.0053	.0018
%RSD	.4876	.7443	.8096	.5445	5.576	2.397	.1716	.4367	51.24	9.370
#1	225.2	22.39	21.84	5.025	.0058	2.088	.2573	.9978	.0133	.0187
#2	226.0	22.69	21.71	5.049	.0057	2.111	.2564	1.001	.0136	.0209
#3	223.9	22.41	21.49	5.080	.0063	2.186	.2570	1.006	.0042	.0174

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.648	.0784	.6718	5.677	-.0024	.5812	.3123
Stddev	.056	.0021	.0030	.013	.0027	.0026	.0011
%RSD	.6458	2.674	.4402	.2230	111.2	.4454	.3595
#1	8.698	.0796	.6687	5.666	-.0007	.5782	.3134
#2	8.658	.0796	.6745	5.675	-.0010	.5830	.3111
#3	8.588	.0760	.6723	5.691	-.0055	.5823	.3124

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1112.9	2926.7	23518.	1536.0
Stddev	1.8	6.5	141.	5.7
%RSD	.16149	.22263	.60023	.36986
#1	1111.2	2919.8	23671.	1535.2
#2	1112.6	2927.4	23491.	1530.8
#3	1114.8	2932.8	23393.	1542.0

Zoom In Zoom Out

Sample Name: FA53896-1 Acquired: 5/17/2018 12:40:16 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0234	341.4	.0481	4.643	.0081	144.0	.0270	.0925	.4600	.5966
Stddev	.0027	1.0	.0055	.025	.0006	.9	.0001	.0006	.0005	.0023
%RSD	11.67	.3042	11.51	.5475	7.663	.6395	.5375	.6383	.1076	.3803
#1	.0266	340.4	.0510	4.617	.0085	143.5	.0269	.0920	.4595	.5976
#2	.0216	342.5	.0417	4.668	.0083	145.1	.0270	.0923	.4599	.5983
#3	.0221	341.4	.0516	4.644	.0074	143.5	.0272	.0932	.4605	.5940

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	287.2	25.02	35.10	10.72	.0088	2.978	.4061	.6337	.0116	.0170
Stddev	.8	.17	.22	.06	.0003	.019	.0016	.0016	.0043	.0099
%RSD	.2883	.6750	.6344	.5141	3.462	.6431	.3840	.2464	36.93	58.59
#1	286.4	25.09	34.87	10.73	.0087	2.956	.4047	.6335	.0165	.0117
#2	288.1	25.15	35.31	10.65	.0086	2.985	.4059	.6322	.0097	.0284
#3	287.1	24.83	35.13	10.76	.0092	2.992	.4078	.6353	.0086	.0107

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.837	.0757	1.901	7.788	.0008	.6509	.6610
Stddev	.022	.0005	.002	.017	.0019	.0020	.0035
%RSD	.2838	.5968	.1007	.2156	235.1	.3127	.5309
#1	7.824	.0761	1.902	7.782	-.0014	.6487	.6576
#2	7.824	.0752	1.902	7.776	.0018	.6514	.6609
#3	7.863	.0759	1.899	7.807	.0021	.6527	.6646

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1103.3	2964.3	23778.	1548.6
Stddev	.6	2.2	19.	15.1
%RSD	.05695	.07419	.08101	.97546
#1	1103.4	2962.4	23764.	1564.8
#2	1102.7	2966.7	23770.	1534.9
#3	1104.0	2963.7	23800.	1546.2

Zoom In Zoom Out

Sample Name: FA53896-4 Acquired: 5/17/2018 12:47:18 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0114	231.5	.0387	3.243	.0043	97.17	.0100	.0601	.3505	.2296
Stddev	.0014	1.0	.0028	.013	.0002	.40	.0001	.0004	.0034	.0010
%RSD	11.91	.4509	7.243	.4145	3.925	.4162	1.216	.6464	.9724	.4145
#1	.0127	232.7	.0419	3.258	.0044	97.52	.0100	.0596	.3540	.2305
#2	.0116	231.0	.0374	3.237	.0045	97.25	.0101	.0601	.3501	.2286
#3	.0100	230.7	.0367	3.233	.0041	96.73	.0098	.0604	.3473	.2298

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	219.1	22.78	26.02	7.294	.0056	2.363	.2790	.5020	.0046	.0129
Stddev	.7	.13	.11	.026	.0007	.007	.0014	.0009	.0009	.0070
%RSD	.3225	.5745	.4038	.3588	12.88	.3195	.4893	.1833	18.89	54.42
#1	219.5	22.93	25.98	7.310	.0051	2.354	.2789	.5020	.0044	.0110
#2	219.6	22.73	26.14	7.263	.0053	2.366	.2777	.5011	.0038	.0071
#3	218.3	22.69	25.95	7.308	.0064	2.368	.2805	.5030	.0055	.0207

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.952	.0747	1.218	5.848	.0027	.5008	.3777
Stddev	.009	.0007	.006	.013	.0032	.0007	.0012
%RSD	.1091	.9967	.5219	.2170	116.7	.1360	.3058
#1	7.958	.0754	1.220	5.849	-.0010	.5002	.3790
#2	7.956	.0739	1.224	5.834	.0047	.5007	.3768
#3	7.942	.0749	1.211	5.860	.0045	.5016	.3774

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1115.4	2927.6	23531.	1534.0
Stddev	2.8	7.4	39.	11.3
%RSD	.25481	.25321	.16713	.73706
#1	1112.2	2920.7	23487.	1521.8
#2	1116.5	2926.7	23562.	1536.2
#3	1117.6	2935.4	23546.	1544.1

Zoom In Zoom Out

Sample Name: FA54114-1 Acquired: 5/17/2018 12:51:29 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0219	2.184	.0044	.1254	-.0003	101.9	.1458	.0209	.0375
Stddev	.0023	.047	.0006	.0009	.0005	.2	.0005	.0008	.0021
%RSD	10.75	2.171	13.38	.7368	196.4	.1500	.3582	3.947	5.479
#1	.0196	2.140	.0046	.1249	-.0009	101.9	.1461	.0202	.0367
#2	.0243	2.177	.0038	.1265	.0001	102.0	.1462	.0206	.0359
#3	.0217	2.234	.0049	.1249	.0000	101.7	.1452	.0218	.0398

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6891	.8277	78.17	62.55	1.483	.2012	F7609.	.3521	.0180
Stddev	.0038	.0239	.02	.12	.004	.0010	443.	.0019	.0066
%RSD	.5490	2.884	.0293	.1929	.2605	.4995	5.822	.5336	36.63
#1	.6935	.8509	78.15	62.43	1.487	.2023	7932.	.3500	.0115
#2	.6869	.8290	78.16	62.56	1.482	.2004	7790.	.3536	.0180
#3	.6869	.8032	78.19	62.67	1.480	.2009	7104.	.3528	.0247

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0054	.0112	5.985	.0252	1.614	.0253	-.0163	.0122	.4395
Stddev	.0065	.0109	.005	.0021	.002	.0004	.0057	.0006	.0007
%RSD	120.2	97.21	.0879	8.186	.1446	1.693	34.84	5.283	.1496
#1	-.0020	.0031	5.984	.0230	1.614	.0257	-.0176	.0116	.4397
#2	.0103	.0069	5.979	.0271	1.617	.0255	-.0101	.0121	.4388
#3	.0080	.0236	5.990	.0255	1.612	.0249	-.0212	.0128	.4401

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	805.53	2325.6	17908.	1354.1
Stddev	3.04	2.0	55.	7.1
%RSD	.37688	.08764	.30842	.52457
#1	802.68	2323.3	17875.	1360.3
#2	808.72	2327.1	17879.	1346.3
#3	805.20	2326.5	17972.	1355.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:55:49 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2437	F35.48	2.103	1.945	1.873	F35.65	1.991	2.016	1.809
Stddev	.0012	.22	.003	.018	.015	.29	.006	.004	.005
%RSD	.4770	.6095	.1415	.9063	.8103	.8151	.2934	.2021	.3017
#1	.2449	35.61	2.100	1.957	1.887	35.84	1.985	2.012	1.814
#2	.2426	35.59	2.105	1.953	1.876	35.79	1.992	2.017	1.803
#3	.2436	35.23	2.104	1.924	1.857	35.31	1.996	2.020	1.810
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value		40.00				40.00			
Range		-10.00%				-10.00%			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.955	37.78	37.52	37.15	1.944	2.091	F34.16	2.111	1.901
Stddev	.009	.21	.24	.31	.012	.008	.16	.006	.001
%RSD	.4751	.5641	.6490	.8355	.6180	.3691	.4614	.3015	.0579
#1	1.962	37.98	37.66	37.49	1.950	2.084	34.24	2.104	1.900
#2	1.944	37.81	37.65	37.08	1.930	2.090	34.27	2.111	1.901
#3	1.958	37.56	37.23	36.88	1.952	2.100	33.98	2.117	1.902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							40.00		
Range							-10.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.107	2.125	2.735	2.178	1.896	1.947	1.961	1.987	1.990
Stddev	.002	.005	.003	.010	.014	.009	.005	.004	.008
%RSD	.0865	.2152	.0995	.4536	.7572	.4466	.2809	.1900	.4230
#1	2.109	2.124	2.734	2.170	1.906	1.952	1.955	1.992	1.981
#2	2.106	2.121	2.733	2.177	1.902	1.937	1.962	1.985	1.992
#3	2.107	2.130	2.738	2.189	1.879	1.953	1.966	1.985	1.998
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 12:55:49 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1037.7	2784.3	22753.	1544.1
Stddev	1.5	7.9	70.	17.7
%RSD	.14041	.28412	.30915	1.1469
#1	1039.3	2792.4	22681.	1523.7
#2	1036.5	2783.7	22822.	1554.1
#3	1037.2	2776.6	22757.	1554.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:59:46 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0093	.0002	-.0002	.0000	.0009	.0001	-.0001	.0003
Stddev	.0001	.0133	.0002	.0003	.0002	.0049	.0000	.0001	.0003
%RSD	76.24	143.5	142.0	139.6	2794.	569.2	29.19	104.9	82.80
#1	.0000	.0002	-.0001	-.0003	.0000	.0041	.0001	-.0001	.0005
#2	-.0002	.0246	.0002	-.0006	-.0001	-.0048	.0000	-.0001	.0000
#3	-.0003	.0031	.0004	.0001	.0002	.0033	.0000	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0171	.0354	.0464	.0001	F.0024	.1519	.0004	.0003
Stddev	.0001	.0099	.0074	.0167	.0000	.0010	.0060	.0000	.0002
%RSD	7.619	57.96	20.93	35.97	63.40	41.56	3.926	10.43	86.59
#1	.0016	.0286	.0356	.0592	.0001	.0035	.1559	.0004	.0001
#2	.0016	.0107	.0427	.0275	.0000	.0024	.1548	.0003	.0002
#3	.0014	.0122	.0279	.0525	.0001	.0015	.1451	.0004	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0012	.0014	.0003	.0001	.0015	.0019	-.0001	-.0001
Stddev	.0012	.0007	.0004	.0002	.0002	.0001	.0005	.0001	.0001
%RSD	139.0	53.07	30.65	55.08	117.9	9.692	27.07	95.15	85.65
#1	-.0004	.0006	.0012	.0005	.0002	.0017	.0015	.0000	-.0002
#2	.0019	.0019	.0019	.0003	.0003	.0014	.0025	-.0001	-.0001
#3	.0011	.0013	.0011	.0002	.0000	.0014	.0016	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 12:59:46 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1173.1	2872.1	23384.	1506.9
Stddev	3.6	4.4	72.	6.0
%RSD	.30314	.15180	.30907	.39829
#1	1168.9	2867.1	23360.	1511.7
#2	1175.2	2875.0	23327.	1500.2
#3	1175.0	2874.2	23466.	1508.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 13:24:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2437	38.99	1.977	1.981	1.990	39.26	1.989	1.988	1.990	1.984
Stddev	.0023	.22	.006	.003	.002	.27	.002	.001	.009	.002
%RSD	.9616	.5711	.3040	.1602	.1141	.6919	.0908	.0728	.4641	.0999
#1	.2446	39.21	1.977	1.985	1.992	39.49	1.987	1.988	1.983	1.985
#2	.2455	39.01	1.972	1.979	1.990	39.33	1.989	1.987	2.000	1.985
#3	.2411	38.76	1.984	1.980	1.988	38.96	1.991	1.990	1.986	1.982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.72	39.10	39.21	2.009	2.013	39.12	2.003	1.950	1.970	1.988
Stddev	.14	.14	.15	.014	.002	.26	.002	.005	.002	.002
%RSD	.3629	.3455	.3902	.7141	.1103	.6590	.1150	.2784	.1140	.1046
#1	39.88	39.22	39.38	2.006	2.012	39.37	2.001	1.944	1.969	1.990
#2	39.63	39.12	39.14	2.024	2.011	39.13	2.002	1.954	1.968	1.986
#3	39.64	38.96	39.10	1.996	2.015	38.86	2.005	1.952	1.972	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.563	2.025	2.009	2.013	1.971	2.017	1.993
Stddev	.005	.005	.005	.012	.003	.004	.004
%RSD	.1870	.2606	.2452	.6020	.1661	.1877	.2103
#1	2.562	2.021	2.014	2.007	1.968	2.021	1.988
#2	2.558	2.022	2.010	2.026	1.974	2.017	1.993
#3	2.568	2.031	2.004	2.004	1.970	2.013	1.997
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 13:24:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1030.9	2752.7	22577.	1528.8
Stddev	1.6	3.0	106.	13.0
%RSD	.15375	.10932	.46817	.85091
#1	1032.6	2753.7	22556.	1513.8
#2	1029.5	2755.0	22484.	1537.6
#3	1030.4	2749.3	22692.	1534.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 13:36:14 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0020	-.0002	.0003	.0001	.0085	.0001	.0000	.0003
Stddev	.0002	.0177	.0003	.0002	.0001	.0028	.0000	.0001	.0003
%RSD	119.9	901.9	142.0	77.73	199.3	32.84	60.80	421.8	100.7
#1	.0004	.0048	.0001	.0005	.0001	.0053	.0000	.0001	.0007
#2	.0000	.0180	-.0004	.0000	.0002	.0105	.0001	.0000	.0002
#3	.0002	-.0170	-.0004	.0003	-.0001	.0096	.0001	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0102	.0071	.0053	.0001	F.0014	-.0525	.0003	-.0003
Stddev	.0001	.0030	.0160	.0594	.0001	.0002	.0060	.0002	.0005
%RSD	27.43	29.94	225.3	1130.	47.84	15.24	11.52	52.43	158.4
#1	.0005	.0082	.0098	.0410	.0001	.0016	-.0482	.0002	-.0003
#2	.0005	.0087	.0216	.0381	.0002	.0015	-.0498	.0005	.0002
#3	.0003	.0137	-.0101	-.0633	.0001	.0012	-.0594	.0002	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	.0005	.0007	.0002	.0008	.0012	.0001	.0000
Stddev	.0005	.0011	.0001	.0003	.0001	.0001	.0008	.0003	.000
%RSD	2166.	1344.	25.55	36.94	45.51	16.06	62.53	279.5	157.0
#1	.0003	.0004	.0006	.0006	.0003	.0009	.0008	-.0001	-.0001
#2	-.0006	.0010	.0004	.0010	.0001	.0007	.0021	.0000	.0000
#3	.0003	-.0011	.0004	.0005	.0003	.0007	.0008	.0004	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 13:36:14 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1163.8	2835.9	22968.	1499.1
Stddev	1.9	4.4	55.	7.7
%RSD	.16241	.15594	.23981	.51316
#1	1164.2	2836.4	22913.	1490.2
#2	1161.8	2831.2	23024.	1503.4
#3	1165.5	2840.0	22968.	1503.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33758-MB1 Acquired: 5/17/2018 13:39:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0222	-.0016	.0003	.0000	.0277	.0000	-.0002	.0008
Stddev	.0002	.0127	.0005	.0002	.000	.0009	.000	.0000	.0002
%RSD	38.87	56.99	31.95	73.44	351.0	3.160	107.2	7.031	28.56
#1	-.0003	.0141	-.0019	.0001	.0001	.0281	.0000	-.0002	.0008
#2	-.0006	.0158	-.0018	.0005	.0000	.0267	.0000	-.0002	.0006
#3	-.0008	.0368	-.0010	.0004	-.0002	.0283	.0000	-.0002	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0268	.0312	.0596	.0011	.0005	-.0447	.0004	-.0005
Stddev	.0002	.0026	.0159	.0180	.0000	.0001	.0096	.0001	.0005
%RSD	21.80	9.868	50.97	30.23	2.719	17.18	21.50	14.39	86.12
#1	-.0011	.0295	.0235	.0398	.0011	.0006	-.0553	.0004	-.0008
#2	-.0008	.0267	.0207	.0639	.0011	.0004	-.0366	.0004	.0000
#3	-.0008	.0242	.0496	.0751	.0012	.0005	-.0421	.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0021	.0152	F.0272	.0001	.0008	.0003	-.0001	.0023
Stddev	.0010	.0015	.0002	.0004	.0000	.0000	.0008	.0001	.0001
%RSD	1710.	72.07	1.169	1.342	25.33	3.834	258.1	140.7	2.252
#1	-.0010	.0036	.0151	.0273	.0001	.0008	.0002	.0000	.0024
#2	.0005	.0019	.0152	.0267	.0001	.0008	-.0004	-.0001	.0023
#3	.0007	.0007	.0154	.0274	.0001	.0008	.0012	-.0001	.0023
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0250					
Low Limit				-.0250					

Zoom In Zoom Out

Sample Name: MP33758-MB1 Acquired: 5/17/2018 13:39:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1174.8	2853.8	23440.	1518.6
Stddev	.7	2.9	59.	6.8
%RSD	.06349	.10032	.25382	.44882
#1	1175.7	2851.1	23431.	1517.1
#2	1174.3	2856.8	23385.	1512.6
#3	1174.5	2853.6	23503.	1526.0

Zoom In Zoom Out

Sample Name: MP33758-B1 Acquired: 5/17/2018 13:44:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0512	26.64	1.981	2.062	.0526	25.31	.0506	.5129	.2100	.2593
Stddev	.0002	.11	.001	.010	.0002	.16	.0000	.0005	.0011	.0004
%RSD	.4523	.3973	.0230	.4733	.3894	.6302	.0603	.1041	.5249	.1430
#1	.0510	26.55	1.981	2.056	.0525	25.23	.0506	.5123	.2106	.2589
#2	.0510	26.75	1.981	2.073	.0524	25.49	.0506	.5130	.2106	.2595
#3	.0514	26.61	1.982	2.057	.0528	25.20	.0506	.5133	.2087	.2596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.21	24.53	24.98	.5214	.4798	24.88	.5283	.4873	.4888	1.965
Stddev	.10	.09	.10	.0029	.0012	.11	.0017	.0023	.0065	.004
%RSD	.3784	.3607	.4055	.5529	.2479	.4529	.3294	.4697	1.329	.1843
#1	26.17	24.48	25.09	.5191	.4785	24.84	.5266	.4898	.4817	1.961
#2	26.32	24.63	24.89	.5246	.4806	25.01	.5301	.4852	.4904	1.968
#3	26.13	24.47	24.95	.5203	.4805	24.79	.5282	.4869	.4944	1.966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3633	.5263	.5031	.5057	1.934	.4923	.5063
Stddev	.0003	.0021	.0005	.0027	.007	.0020	.0012
%RSD	.0827	.3942	.1082	.5311	.3879	.4021	.2297
#1	.3630	.5243	.5029	.5040	1.941	.4940	.5053
#2	.3635	.5284	.5037	.5088	1.926	.4928	.5076
#3	.3635	.5263	.5027	.5043	1.934	.4901	.5060
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33758-B1 Acquired: 5/17/2018 13:44:18 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1070.1	2766.8	22488.	1485.1
Stddev	3.9	7.5	30.	9.9
%RSD	.36352	.27060	.13362	.66611
#1	1065.6	2768.6	22469.	1485.5
#2	1071.9	2758.6	22472.	1475.0
#3	1072.7	2773.3	22522.	1494.8

Zoom In Zoom Out

Sample Name: FA54232-1 Acquired: 5/17/2018 13:48:17 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0040	115.4	.0329	.6397	.0011	71.44	-.0014	.1706	3.104	1.329
Stddev	.0032	1.0	.0031	.0023	.0008	.59	.0001	.0008	.007	.001
%RSD	80.03	.8382	9.419	.3643	67.62	.8247	8.132	.4880	.2384	.0989
#1	.0015	115.2	.0352	.6424	.0020	71.15	-.0012	.1715	3.106	1.328
#2	.0030	114.6	.0341	.6386	.0008	71.05	-.0014	.1701	3.096	1.329
#3	.0076	116.5	.0294	.6382	.0006	72.12	-.0014	.1701	3.111	1.331

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	471.7	1.780	30.60	4.778	.2643	1.785	1.775	.0914	.0308	.0137
Stddev	2.7	.050	.28	.027	.0005	.053	.002	.0029	.0147	.0038
%RSD	.5636	2.832	.9211	.5708	.2026	2.971	.0925	3.154	47.92	27.85
#1	470.7	1.803	30.72	4.765	.2649	1.846	1.773	.0909	.0469	.0103
#2	469.8	1.723	30.28	4.810	.2642	1.750	1.776	.0945	.0274	.0179
#3	474.8	1.815	30.81	4.760	.2638	1.759	1.774	.0888	.0180	.0129

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.286	.0476	.2762	4.060	.0156	.4988	.6627
Stddev	.180	.0013	.0032	.111	.0043	.0011	.0011
%RSD	1.944	2.786	1.174	2.739	27.77	.2168	.1664
#1	9.494	.0462	.2761	3.960	.0159	.4976	.6621
#2	9.196	.0480	.2795	4.042	.0198	.4991	.6621
#3	9.168	.0487	.2730	4.180	.0112	.4997	.6640

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1183.7	3044.3	24555.	1633.3
Stddev	1.3	8.2	128.	14.3
%RSD	.11133	.27018	.52045	.87275
#1	1185.1	3035.0	24588.	1638.9
#2	1182.5	3050.4	24414.	1643.9
#3	1183.5	3047.7	24663.	1617.1

Zoom In Zoom Out

Sample Name: MP33758-D1 Acquired: 5/17/2018 13:52:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0055	128.7	.0364	.7080	.0006	78.61	-.0020	.1846	3.158	1.528
Stddev	.0007	.9	.0044	.0032	.0004	.53	.0003	.0013	.033	.005
%RSD	13.14	.6996	12.15	.4481	55.95	.6701	15.41	.7043	1.046	.3126
#1	.0062	129.6	.0365	.7112	.0009	79.07	-.0024	.1834	3.122	1.526
#2	.0056	128.8	.0408	.7081	.0008	78.74	-.0018	.1845	3.187	1.534
#3	.0048	127.8	.0320	.7048	.0002	78.04	-.0020	.1860	3.164	1.525

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	533.9	1.644	33.62	5.212	.2679	1.871	1.792	.1047	.0135	.0102
Stddev	3.5	.146	.30	.044	.0011	.074	.005	.0056	.0046	.0046
%RSD	.6483	8.907	.8964	.8395	.3936	3.969	.2545	5.318	33.87	45.09
#1	536.8	1.703	33.87	5.162	.2690	1.942	1.797	.1088	.0088	.0057
#2	534.7	1.753	33.71	5.242	.2670	1.794	1.791	.1070	.0179	.0100
#3	530.1	1.478	33.28	5.232	.2677	1.877	1.788	.0984	.0136	.0149

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.813	.0524	.2849	4.366	.0110	.5568	.7530
Stddev	.151	.0018	.0009	.040	.0028	.0037	.0006
%RSD	1.535	3.488	.3099	.9246	25.74	.6648	.0841
#1	9.838	.0508	.2859	4.327	.0079	.5525	.7530
#2	9.949	.0544	.2843	4.363	.0134	.5592	.7524
#3	9.651	.0519	.2845	4.407	.0117	.5586	.7536

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.4	2894.3	23199.	1539.2
Stddev	1.8	6.5	143.	13.1
%RSD	.16354	.22599	.61612	.85359
#1	1117.2	2889.1	23363.	1530.0
#2	1120.5	2901.6	23108.	1533.4
#3	1117.4	2892.1	23124.	1554.2

Zoom In Zoom Out

Sample Name: MP33758-SD1 Acquired: 5/17/2018 13:56:30 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0058	123.9	.0134	.6888	-.0010	77.38	-.0044	.1838	3.351	1.424
Stddev	.0065	1.2	.0141	.0082	.0022	.42	.0012	.0045	.014	.002
%RSD	111.1	.9618	104.9	1.192	222.3	.5484	28.02	2.432	.4039	.1408
#1	-.0013	125.0	.0297	.6932	.0015	77.87	-.0059	.1801	3.367	1.425
#2	.0073	124.0	.0052	.6938	-.0022	77.17	-.0039	.1887	3.341	1.422
#3	.0115	122.6	.0054	.6793	-.0022	77.10	-.0036	.1825	3.347	1.426

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	519.8	1.521	34.40	5.161	.2745	.2165	1.934	.0917	.0314	.0339
Stddev	3.1	.633	1.34	.031	.0031	.0539	.012	.0106	.0168	.0387
%RSD	.5987	41.63	3.881	.5941	1.140	24.87	.6352	11.58	53.66	114.0
#1	523.4	.9156	35.50	5.161	.2720	.1710	1.925	.0920	.0174	-.0093
#2	518.4	1.469	32.92	5.131	.2736	.2760	1.928	.1021	.0501	.0458
#3	517.6	2.179	34.79	5.192	.2780	.2026	1.948	.0809	.0266	.0653

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.708	.0568	.3044	4.181	.0082	.5322	.7152
Stddev	.351	.0021	.0081	.059	.0090	.0052	.0020
%RSD	3.620	3.625	2.657	1.406	109.6	.9722	.2728
#1	9.983	.0545	.2965	4.245	.0105	.5320	.7131
#2	9.829	.0583	.3127	4.128	-.0017	.5271	.7155
#3	9.312	.0577	.3040	4.172	.0159	.5375	.7169

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1150.4	2865.4	23072.	1504.8
Stddev	1.3	6.7	33.	14.3
%RSD	.11412	.23432	.14102	.94887
#1	1148.9	2866.3	23055.	1488.3
#2	1150.8	2871.6	23051.	1513.4
#3	1151.4	2858.3	23109.	1512.6

Zoom In Zoom Out

Sample Name: MP33758-PS1 Acquired: 5/17/2018 14:00:43 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0494	136.5	.1340	.9959	.0513	88.13	.0469	.2473	3.684	1.648
Stddev	.0019	.4	.0038	.0086	.0008	.26	.0003	.0007	.012	.003
%RSD	3.927	.3206	2.807	.8649	1.614	.2908	.7146	.2800	.3360	.1961
#1	.0506	136.2	.1347	1.003	.0523	87.84	.0469	.2467	3.696	1.649
#2	.0472	137.0	.1373	.9985	.0510	88.27	.0466	.2481	3.671	1.650
#3	.0505	136.3	.1299	.9862	.0508	88.29	.0473	.2472	3.685	1.644

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	550.3	11.30	40.30	5.575	.3946	11.66	2.146	.1545	.1010	.1062
Stddev	.8	.03	.50	.020	.0010	.02	.007	.0028	.0030	.0022
%RSD	.1496	.2497	1.229	.3612	.2519	.1857	.3071	1.823	2.995	2.103
#1	549.9	11.30	39.77	5.574	.3951	11.67	2.142	.1562	.1039	.1079
#2	551.2	11.32	40.38	5.596	.3935	11.67	2.142	.1512	.1012	.1069
#3	549.7	11.27	40.75	5.555	.3953	11.64	2.154	.1560	.0979	.1037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.58	.1034	.3662	4.766	.1060	.6259	1.012
Stddev	.18	.0007	.0008	.059	.0035	.0013	.002
%RSD	1.743	.6460	.2213	1.228	3.307	.2030	.2223
#1	10.60	.1027	.3663	4.827	.1100	.6257	1.012
#2	10.75	.1039	.3669	4.711	.1044	.6247	1.010
#3	10.39	.1037	.3653	4.760	.1036	.6272	1.015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1124.1	2920.7	23488.	1565.0
Stddev	3.2	7.0	48.	8.5
%RSD	.28472	.23848	.20429	.54493
#1	1121.1	2920.0	23536.	1555.2
#2	1127.5	2928.0	23440.	1569.9
#3	1123.9	2914.1	23487.	1570.0

Zoom In Zoom Out

Sample Name: MP33758-S1 Acquired: 5/17/2018 14:04:50 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0611	213.3	2.023	2.962	.0540	147.5	.0499	.7692	3.875	2.105
Stddev	.0012	.9	.009	.015	.0011	1.1	.0008	.0006	.035	.010
%RSD	1.905	.4388	.4500	.5129	1.994	.7352	1.664	.0816	.9162	.4808
#1	.0617	214.4	2.028	2.979	.0540	148.7	.0493	.7692	3.911	2.116
#2	.0618	212.6	2.029	2.949	.0551	146.5	.0509	.7685	3.840	2.103
#3	.0598	212.9	2.012	2.957	.0529	147.4	.0497	.7698	3.875	2.096

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	709.4	27.05	76.30	7.935	.7847	29.00	2.597	.6282	.1021	1.989
Stddev	3.9	.13	.33	.062	.0012	.14	.002	.0029	.0042	.019
%RSD	.5462	.4824	.4296	.7869	.1518	.4882	.0771	.4678	4.147	.9510
#1	713.7	27.19	76.68	7.990	.7848	29.15	2.595	.6264	.0981	2.001
#2	706.2	26.94	76.10	7.867	.7858	28.86	2.599	.6316	.1065	1.998
#3	708.3	27.00	76.12	7.948	.7834	29.00	2.596	.6265	.1017	1.967

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.18	.5408	.8698	5.865	2.025	1.259	1.488
Stddev	.05	.0018	.0060	.019	.006	.006	.004
%RSD	.4281	.3410	.6943	.3250	.3109	.5036	.2460
#1	12.13	.5393	.8765	5.876	2.018	1.266	1.489
#2	12.23	.5429	.8647	5.843	2.026	1.254	1.484
#3	12.18	.5403	.8683	5.877	2.030	1.256	1.491

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1087.4	2865.0	22973.	1547.5
Stddev	3.1	6.9	218.	9.9
%RSD	.28781	.24063	.94835	.63806
#1	1083.7	2858.1	22790.	1536.3
#2	1089.1	2864.8	23214.	1555.0
#3	1089.2	2871.9	22914.	1551.3

Zoom In Zoom Out

Sample Name: MP33758-S2 Acquired: 5/17/2018 14:08:55 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0576	186.8	1.954	2.725	.0528	124.7	.0476	.6981	2.760	1.831
Stddev	.0008	.8	.010	.002	.0014	.1	.0004	.0010	.008	.008
%RSD	1.397	.4223	.4954	.0622	2.734	.0858	.7542	.1476	.2859	.4500
#1	.0571	187.6	1.943	2.727	.0539	124.8	.0480	.6969	2.764	1.840
#2	.0585	186.0	1.959	2.724	.0533	124.7	.0474	.6989	2.751	1.829
#3	.0571	186.9	1.961	2.725	.0512	124.6	.0473	.6985	2.765	1.824

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	615.7	26.05	67.54	6.635	.6719	27.37	1.935	.5995	.1007	1.918
Stddev	.9	.06	.47	.004	.0017	.15	.002	.0029	.0012	.011
%RSD	.1470	.2466	.6957	.0640	.2566	.5509	.1032	.4776	1.208	.5699
#1	616.5	26.13	67.07	6.640	.6700	27.54	1.934	.6017	.1019	1.907
#2	614.7	26.03	68.01	6.633	.6735	27.25	1.937	.5963	.1007	1.919
#3	615.9	26.00	67.54	6.632	.6721	27.34	1.934	.6006	.0994	1.929

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.35	.5250	.8040	5.035	1.961	1.117	1.285
Stddev	.08	.0043	.0018	.057	.009	.004	.003
%RSD	.7573	.8177	.2204	1.130	.4758	.3575	.2627
#1	10.44	.5216	.8051	4.992	1.956	1.113	1.281
#2	10.30	.5236	.8019	5.099	1.954	1.121	1.288
#3	10.31	.5299	.8048	5.012	1.971	1.115	1.286

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1094.0	2880.2	22986.	1524.6
Stddev	1.2	5.6	31.	2.5
%RSD	.10957	.19277	.13524	.16480
#1	1095.3	2882.0	22951.	1521.8
#2	1093.1	2874.0	23004.	1526.7
#3	1093.5	2884.6	23005.	1525.4

Zoom In Zoom Out

Sample Name: FA54232-2 Acquired: 5/17/2018 14:13:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0017	92.27	.0193	.4361	.0007	157.2	.0004	.0694	1.540	.4246
Stddev	.0011	.28	.0040	.0022	.0001	.2	.0002	.0007	.012	.0025
%RSD	61.35	.2983	20.60	.5147	14.09	.1362	36.63	.9535	.7491	.5859
#1	.0021	91.98	.0224	.4336	.0007	157.0	.0006	.0702	1.527	.4268
#2	.0026	92.52	.0148	.4380	.0007	157.3	.0004	.0689	1.542	.4251
#3	.0005	92.30	.0207	.4366	.0008	157.4	.0003	.0691	1.550	.4219

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	219.2	1.377	19.20	2.756	.0991	1.302	.8213	.1492	.0085	.0114
Stddev	.3	.127	.22	.011	.0013	.035	.0060	.0021	.0039	.0089
%RSD	.1403	9.251	1.128	.3981	1.344	2.727	.7291	1.387	46.34	78.21
#1	219.6	1.388	19.28	2.751	.1006	1.301	.8269	.1473	.0053	.0040
#2	219.0	1.498	18.95	2.749	.0983	1.267	.8150	.1514	.0129	.0088
#3	219.1	1.244	19.36	2.769	.0984	1.338	.8221	.1490	.0073	.0213

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.29	.0429	.5974	3.055	.0095	.2546	.8177
Stddev	.43	.0012	.0035	.061	.0082	.0031	.0014
%RSD	2.997	2.864	.5802	2.005	85.94	1.216	.1710
#1	14.08	.0415	.5976	3.068	.0104	.2576	.8193
#2	14.01	.0436	.5939	3.109	.0172	.2548	.8170
#3	14.78	.0436	.6008	2.988	.0009	.2514	.8168

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1119.5	2892.5	23216.	1542.5
Stddev	.8	2.7	83.	6.8
%RSD	.07097	.09389	.35724	.43801
#1	1120.1	2890.3	23245.	1546.8
#2	1119.8	2895.6	23281.	1534.7
#3	1118.6	2891.7	23123.	1545.9

Zoom In Zoom Out

Sample Name: FA54232-3 Acquired: 5/17/2018 14:17:11 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0043	163.6	.0235	.7968	.0006	79.75	.0004	.1801	4.266	.9422
Stddev	.0006	.9	.0042	.0067	.0003	.36	.0003	.0013	.018	.0026
%RSD	13.96	.5537	17.74	.8427	46.93	.4504	94.96	.7198	.4204	.2744
#1	.0044	162.6	.0189	.7890	.0005	79.34	.0007	.1795	4.263	.9405
#2	.0049	164.2	.0245	.8007	.0004	79.92	.0000	.1792	4.250	.9452
#3	.0037	164.1	.0271	.8006	.0009	79.99	.0004	.1816	4.285	.9410

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	457.1	2.415	36.40	5.296	.2810	2.352	2.311	.0895	.0038	.0157
Stddev	1.7	.023	.16	.033	.0004	.051	.003	.0009	.0020	.0066
%RSD	.3609	.9555	.4284	.6173	.1327	2.178	.1295	1.011	52.63	42.28
#1	455.2	2.440	36.24	5.275	.2807	2.318	2.308	.0886	.0055	.0093
#2	458.1	2.396	36.56	5.279	.2810	2.327	2.314	.0894	.0016	.0153
#3	458.1	2.409	36.41	5.334	.2814	2.411	2.312	.0904	.0043	.0226

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.95	.0468	.3563	4.739	.0084	.5141	.6945
Stddev	.15	.0007	.0026	.055	.0018	.0023	.0027
%RSD	1.052	1.598	.7356	1.154	21.95	.4423	.3947
#1	14.04	.0476	.3534	4.763	.0096	.5115	.6928
#2	13.78	.0461	.3584	4.778	.0063	.5152	.6931
#3	14.03	.0469	.3572	4.676	.0093	.5156	.6977

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1118.3	2846.1	23138.	1532.7
Stddev	2.2	3.6	63.	6.9
%RSD	.19566	.12749	.27300	.45277
#1	1115.9	2842.0	23162.	1535.3
#2	1120.3	2849.0	23186.	1538.0
#3	1118.6	2847.4	23067.	1524.9

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 14:21:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2428	38.30	1.962	1.955	1.962	38.79	1.979	1.971	1.982	1.954
Stddev	.0004	.21	.004	.006	.005	.18	.004	.002	.014	.003
%RSD	.1674	.5436	.2310	.2967	.2808	.4632	.1794	.0964	.7176	.1329
#1	.2424	38.45	1.957	1.949	1.966	38.93	1.975	1.969	1.983	1.957
#2	.2429	38.06	1.964	1.959	1.955	38.59	1.979	1.971	1.967	1.952
#3	.2432	38.39	1.965	1.958	1.963	38.85	1.982	1.973	1.995	1.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.30	38.66	39.14	2.016	1.992	38.99	1.994	1.937	1.951	1.970
Stddev	.18	.03	.10	.016	.006	.18	.004	.004	.003	.006
%RSD	.4673	.0663	.2453	.7948	.2804	.4612	.2266	.2053	.1666	.3027
#1	39.45	38.69	39.19	2.014	1.986	39.16	1.990	1.933	1.951	1.977
#2	39.10	38.64	39.03	2.001	1.992	38.80	1.993	1.936	1.947	1.967
#3	39.37	38.65	39.20	2.033	1.997	39.01	1.999	1.941	1.953	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.537	2.026	1.973	2.004	1.952	2.009	1.993
Stddev	.003	.005	.009	.012	.002	.010	.005
%RSD	.1074	.2598	.4308	.5897	.0860	.4994	.2601
#1	2.534	2.020	1.979	2.007	1.951	2.007	1.987
#2	2.539	2.026	1.963	1.992	1.952	2.000	1.996
#3	2.538	2.031	1.975	2.015	1.954	2.020	1.996
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 14:21:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1044.5	2789.8	22821.	1533.7
Stddev	3.5	8.0	66.	9.2
%RSD	.33234	.28708	.28967	.59756
#1	1048.5	2799.0	22780.	1523.1
#2	1042.6	2785.9	22897.	1539.9
#3	1042.4	2784.4	22785.	1537.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 14:25:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0036	-.0008	.0003	.0002	.0052	.0000	.0000	.0004
Stddev	.0002	.0182	.0011	.0003	.0001	.0045	.0001	.000	.0005
%RSD	182.4	501.3	138.3	106.0	74.86	86.71	194.3	128.9	126.6
#1	-.0001	-.0244	.0004	.0001	.0003	.0082	.0001	-.0001	.0009
#2	.0002	.0098	-.0011	.0002	.0001	.0074	.0001	-.0001	.0005
#3	.0003	.0037	-.0016	.0006	.0002	.0000	.0000	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0271	.0000	.0234	.0002	F.0025	-.0846	.0001	.0003
Stddev	.0001	.0093	.0327	.0099	.0001	.0008	.0087	.0001	.0003
%RSD	32.33	34.51	66370.	42.38	53.93	31.94	10.31	70.47	86.24
#1	.0005	.0368	.0374	.0120	.0002	.0033	-.0775	.0002	.0006
#2	.0003	.0261	-.0133	.0277	.0001	.0025	-.0944	.0000	.0003
#3	.0004	.0182	-.0239	.0304	.0001	.0017	-.0820	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0019	.0008	.0004	.0002	.0014	.0007	-.0001	.0000
Stddev	.0012	.0010	.0003	.0004	.0001	.0003	.0010	.0004	.0000
%RSD	221.6	54.47	37.74	99.38	35.53	21.27	140.3	398.4	173.9
#1	.0005	.0028	.0006	.0004	.0002	.0016	.0019	-.0005	.0001
#2	-.0006	.0008	.0005	.0008	.0002	.0015	.0001	.0002	.0000
#3	.0018	.0019	.0011	.0000	.0001	.0011	.0002	.0000	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 14:25:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1170.0	2849.3	23035.	1490.5
Stddev	.6	6.3	71.	7.4
%RSD	.05265	.22033	.30731	.49568
#1	1170.3	2843.7	22957.	1498.9
#2	1169.3	2848.1	23052.	1487.0
#3	1170.5	2856.1	23096.	1485.5

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54232-4 Acquired: 5/17/2018 14:29:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0064	124.3	.0252	.6212	.0006	128.0	.0003	.2244	7.360	1.270
Stddev	.0008	.7	.0029	.0057	.0003	.8	.0003	.0006	.052	.005
%RSD	12.83	.5753	11.49	.9137	54.11	.6399	99.72	.2794	.7117	.4362
#1	.0059	123.5	.0272	.6147	.0002	127.1	.0005	.2242	7.414	1.275
#2	.0074	124.4	.0265	.6237	.0008	128.1	.0006	.2239	7.355	1.269
#3	.0060	124.9	.0219	.6251	.0009	128.7	.0000	.2251	7.310	1.264

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	482.8	2.780	36.27	5.505	.4557	2.562	3.932	.1301	-.0039	.0108
Stddev	3.0	.115	.55	.037	.0022	.013	.008	.0021	.0053	.0150
%RSD	.6275	4.141	1.524	.6760	.4724	.5153	.2149	1.581	136.9	138.8
#1	479.7	2.679	35.64	5.548	.4580	2.576	3.934	.1285	-.0029	.0064
#2	485.7	2.755	36.67	5.490	.4554	2.562	3.940	.1295	-.0097	.0276
#3	482.9	2.905	36.50	5.478	.4537	2.549	3.923	.1324	.0009	-.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.53	.0510	.4697	5.021	.0146	.5447	1.217
Stddev	.11	.0009	.0003	.079	.0074	.0027	.004
%RSD	.7347	1.694	.0741	1.574	50.70	.5045	.3083
#1	15.41	.0515	.4701	5.025	.0224	.5478	1.218
#2	15.53	.0500	.4694	5.097	.0077	.5427	1.219
#3	15.64	.0514	.4697	4.940	.0138	.5436	1.212

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1111.9	2847.5	23086.	1520.1
Stddev	.6	8.8	187.	2.4
%RSD	.05028	.30899	.81011	.15939
#1	1112.3	2841.2	22871.	1518.6
#2	1111.3	2843.9	23206.	1522.9
#3	1112.1	2857.6	23182.	1518.8

Zoom In Zoom Out

Sample Name: FA54233-1 Acquired: 5/17/2018 14:33:41 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	19.88	.0056	.3723	.0006	314.5	.0036	.0113	.1501	.1062
Stddev	.001	.03	.0003	.0028	.0001	.3	.0000	.0002	.0010	.0008
%RSD	12190.	.1464	5.489	.7395	12.53	.1069	1.133	1.459	.6924	.7512
#1	-.0006	19.85	.0059	.3731	.0006	314.5	.0036	.0111	.1491	.1069
#2	.0002	19.87	.0054	.3745	.0006	314.9	.0036	.0114	.1511	.1054
#3	.0004	19.91	.0055	.3692	.0005	314.2	.0037	.0113	.1502	.1065

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	38.26	.3485	2.815	.3784	.0084	2.804	.0781	.2806	.0006	.0041
Stddev	.09	.0243	.080	.0017	.0001	.013	.0003	.0020	.0008	.0022
%RSD	.2342	6.965	2.829	.4433	1.754	.4498	.4128	.7172	126.5	53.17
#1	38.37	.3261	2.892	.3780	.0083	2.794	.0778	.2828	.0012	.0016
#2	38.21	.3743	2.821	.3770	.0085	2.818	.0784	.2803	-.0003	.0053
#3	38.21	.3453	2.733	.3802	.0085	2.800	.0781	.2788	.0008	.0054

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.348	.0252	1.226	.6743	-.0015	.0415	.7363
Stddev	.001	.0002	.004	.0018	.0009	.0002	.0017
%RSD	.0715	.8786	.3245	.2709	62.26	.5779	.2318
#1	1.347	.0250	1.224	.6745	-.0010	.0418	.7347
#2	1.349	.0255	1.231	.6724	-.0025	.0414	.7381
#3	1.348	.0252	1.224	.6760	-.0009	.0413	.7360

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1022.7	2885.0	23221.	1555.7
Stddev	2.7	3.7	80.	13.6
%RSD	.26614	.12888	.34502	.87637
#1	1019.6	2885.7	23286.	1551.2
#2	1024.8	2881.0	23245.	1544.9
#3	1023.8	2888.4	23131.	1571.0

Zoom In Zoom Out

Sample Name: FA54170-2 Acquired: 5/17/2018 14:37:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0025	22.92	.0328	.0964	.0007	F5065.	.0003	.0020	.1104
Stddev	.0006	.25	.0059	.0006	.0005	43.	.0002	.0009	.0011
%RSD	24.81	1.080	18.05	.5759	73.23	.8485	54.53	44.05	.9998
#1	-.0027	22.73	.0281	.0958	.0001	5103.	.0004	.0030	.1093
#2	-.0018	22.82	.0394	.0969	.0012	5019.	.0005	.0018	.1105
#3	-.0030	23.20	.0308	.0965	.0009	5073.	.0001	.0012	.1115

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0169	12.53	1.218	16.92	.3182	-.0030	8.642	.0283	.0751
Stddev	.0010	.08	.049	.11	.0024	.0005	.111	.0008	.0023
%RSD	6.051	.6543	3.996	.6709	.7591	17.04	1.286	2.808	3.048
#1	.0174	12.51	1.198	16.80	.3209	-.0035	8.524	.0274	.0776
#2	.0158	12.46	1.183	17.03	.3174	-.0025	8.659	.0284	.0732
#3	.0177	12.62	1.274	16.93	.3162	-.0030	8.744	.0290	.0744

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0106	-.0109	12.06	.0245	F45.74	.3175	-.0123	.0561	.0846
Stddev	.0042	.0042	.01	.0012	.21	.0027	.0057	.0018	.0012
%RSD	39.87	38.41	.0788	4.737	.4502	.8623	46.01	3.283	1.466
#1	.0150	-.0149	12.06	.0252	45.53	.3192	-.0123	.0572	.0832
#2	.0065	-.0112	12.05	.0251	45.75	.3190	-.0180	.0570	.0850
#3	.0103	-.0066	12.06	.0231	45.94	.3143	-.0067	.0540	.0856

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	952.44	2668.3	21615.	1509.3
Stddev	1.29	.2	156.	11.0
%RSD	.13537	.00599	.72363	.72888
#1	951.22	2668.4	21437.	1501.7
#2	952.29	2668.4	21673.	1521.9
#3	953.79	2668.1	21733.	1504.2

Zoom In Zoom Out

Sample Name: FA54241-1 Acquired: 5/17/2018 14:42:13 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0021	95.26	.0385	1.415	.0027	34.91	.0076	.0133	.1531	.2418
Stddev	.0008	.50	.0033	.004	.0002	.11	.0002	.0004	.0005	.0021
%RSD	39.81	.5277	8.567	.2563	8.214	.3181	2.506	2.778	.3398	.8750
#1	.0029	95.45	.0347	1.418	.0025	34.94	.0077	.0129	.1525	.2436
#2	.0012	95.63	.0402	1.411	.0027	35.00	.0078	.0136	.1534	.2424
#3	.0021	94.69	.0406	1.416	.0029	34.78	.0074	.0134	.1534	.2395

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	66.63	2.734	6.041	2.785	.0026	.5353	.0519	.8424	.0063	-.0039
Stddev	.31	.046	.182	.008	.0006	.0603	.0005	.0049	.0070	.0030
%RSD	.4589	1.691	3.013	.2924	22.92	11.25	.9213	.5776	111.5	77.42
#1	66.96	2.787	6.072	2.781	.0031	.5202	.0513	.8392	.0112	-.0035
#2	66.58	2.702	5.846	2.779	.0020	.4841	.0521	.8401	.0093	-.0072
#3	66.36	2.713	6.206	2.794	.0028	.6017	.0522	.8480	-.0017	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.224	.0651	.4067	.6708	.0011	.1137	3.093
Stddev	.005	.0010	.0008	.0012	.0057	.0016	.004
%RSD	.2193	1.518	.1855	.1855	507.8	1.405	.1288
#1	2.222	.0647	.4076	.6694	-.0043	.1148	3.092
#2	2.230	.0662	.4063	.6713	.0005	.1145	3.090
#3	2.221	.0644	.4062	.6717	.0072	.1119	3.097

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1145.0	3054.3	24728.	1620.6
Stddev	2.9	4.9	91.	11.7
%RSD	.25694	.15898	.36632	.72099
#1	1143.5	3055.4	24658.	1632.2
#2	1148.3	3048.9	24696.	1608.9
#3	1143.0	3058.4	24831.	1620.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-2 Acquired: 5/17/2018 14:46:25 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	121.3	.0172	.8207	.0028	8.416	-.0006	.0108	.0860	.0334
Stddev	.0021	.7	.0016	.0014	.0004	.036	.0002	.0003	.0012	.0010
%RSD	149.8	.5699	9.183	.1734	15.29	.4266	31.98	2.327	1.399	2.857
#1	-.0010	120.6	.0190	.8216	.0026	8.399	-.0007	.0108	.0858	.0345
#2	.0021	121.9	.0162	.8191	.0033	8.457	-.0004	.0106	.0873	.0329
#3	.0031	121.3	.0164	.8215	.0025	8.392	-.0007	.0111	.0849	.0328

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	51.64	2.156	4.447	2.416	-.0013	.1044	.0449	.0730	.0034	.0006
Stddev	.14	.099	.268	.021	.0005	.0172	.0005	.0017	.0026	.0088
%RSD	.2808	4.586	6.017	.8847	38.84	16.46	1.107	2.356	76.67	1457.
#1	51.53	2.051	4.180	2.407	-.0008	.1032	.0444	.0736	.0064	-.0001
#2	51.81	2.171	4.716	2.401	-.0013	.1222	.0454	.0711	.0022	-.0079
#3	51.59	2.247	4.445	2.441	-.0018	.0879	.0451	.0744	.0016	.0098

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.053	.0271	.4466	.8380	.0008	.0962	.1042
Stddev	.006	.0020	.0018	.0075	.0051	.0010	.0004
%RSD	.3061	7.478	.3984	.8987	642.6	1.070	.3873
#1	2.051	.0250	.4447	.8331	.0064	.0954	.1039
#2	2.048	.0290	.4482	.8342	-.0035	.0974	.1047
#3	2.060	.0273	.4468	.8467	-.0006	.0959	.1042

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1152.9	3135.5	25197.	1654.9
Stddev	2.6	7.0	152.	10.9
%RSD	.22740	.22189	.60464	.65762
#1	1153.7	3134.2	25279.	1644.2
#2	1149.9	3129.3	25290.	1654.6
#3	1154.9	3143.0	25021.	1666.0

Zoom In Zoom Out

Sample Name: FA54241-3 Acquired: 5/17/2018 14:50:40 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	187.0	.0225	1.220	.0037	10.01	-.0009	.0081	.1757	.0424
Stddev	.0004	.8	.0027	.007	.0002	.02	.0002	.0004	.0018	.0012
%RSD	161.3	.4455	12.19	.6076	5.817	.2401	27.26	4.654	1.041	2.751
#1	.0004	187.9	.0203	1.223	.0038	10.02	-.0006	.0080	.1769	.0437
#2	.0006	186.2	.0255	1.212	.0038	10.02	-.0009	.0078	.1736	.0415
#3	-.0002	186.9	.0216	1.226	.0034	9.979	-.0011	.0085	.1767	.0420

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	88.36	3.546	6.202	.2926	.0018	-.2211	.0670	.1070	.0008	.0058
Stddev	.21	.092	.309	.0002	.0004	.0178	.0004	.0028	.0039	.0087
%RSD	.2373	2.605	4.978	.0725	24.46	8.029	.6127	2.584	460.7	149.6
#1	88.39	3.440	6.542	.2927	.0021	-.2189	.0674	.1083	-.0036	.0107
#2	88.14	3.608	5.940	.2924	.0013	-.2399	.0666	.1039	.0034	.0110
#3	88.56	3.590	6.124	.2928	.0021	-.2046	.0668	.1089	.0028	-.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.75	.0293	.8179	1.836	-.0016	.1762	.1227
Stddev	.12	.0009	.0026	.006	.0021	.0009	.0010
%RSD	1.120	2.953	.3142	.3519	129.8	.4922	.7896
#1	10.73	.0295	.8201	1.837	-.0012	.1764	.1226
#2	10.87	.0283	.8151	1.841	-.0038	.1753	.1217
#3	10.63	.0300	.8186	1.829	.0003	.1770	.1237

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1146.1	3094.7	24705.	1617.6
Stddev	1.0	16.3	58.	5.8
%RSD	.08676	.52747	.23280	.35574
#1	1146.7	3090.0	24643.	1612.6
#2	1144.9	3112.8	24757.	1623.9
#3	1146.6	3081.2	24716.	1616.3

Zoom In Zoom Out

Sample Name: FA54241-4 Acquired: 5/17/2018 14:54:55 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0018	288.9	.0614	2.715	.0043	9.739	-.0015	.0064	.3710	.0457
Stddev	.0018	1.5	.0071	.008	.0003	.071	.0004	.0007	.0037	.0015
%RSD	98.03	.5093	11.54	.2861	7.442	.7342	27.68	11.33	.9970	3.289
#1	-.0001	289.2	.0545	2.712	.0042	9.821	-.0020	.0072	.3741	.0470
#2	.0021	290.2	.0687	2.724	.0040	9.712	-.0014	.0064	.3719	.0440
#3	.0035	287.3	.0609	2.710	.0046	9.685	-.0012	.0057	.3669	.0461

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	199.1	3.818	7.465	.0996	.0071	-.2217	.0735	.3239	.0030	.0021
Stddev	.8	.020	.320	.0009	.0014	.0364	.0013	.0038	.0041	.0039
%RSD	.4104	.5165	4.284	.8898	19.12	16.44	1.788	1.170	135.9	190.8
#1	199.4	3.837	7.137	.0996	.0071	-.2587	.0748	.3199	.0074	.0061
#2	199.7	3.819	7.776	.1005	.0085	-.1858	.0722	.3274	.0022	-.0018
#3	198.2	3.798	7.480	.0987	.0058	-.2206	.0737	.3245	-.0006	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.584	.0369	2.355	1.569	-.0107	.5079	.1195
Stddev	.030	.0016	.007	.026	.0048	.0024	.0008
%RSD	.6492	4.302	.2936	1.690	45.15	.4690	.6682
#1	4.581	.0369	2.358	1.574	-.0114	.5106	.1189
#2	4.556	.0385	2.361	1.592	-.0055	.5060	.1192
#3	4.615	.0353	2.347	1.540	-.0151	.5071	.1204

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1128.4	3385.1	27096.	1787.5
Stddev	1.5	2.3	180.	15.7
%RSD	.13685	.06918	.66248	.87767
#1	1127.6	3386.0	27077.	1785.9
#2	1127.4	3382.5	26928.	1772.6
#3	1130.2	3386.9	27285.	1803.9

Zoom In Zoom Out

Sample Name: FA54241-5 Acquired: 5/17/2018 14:59:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	258.5	.0433	3.190	.0047	8.312	-.0010	.0058	.3183	.0346
Stddev	.0014	2.1	.0022	.017	.0003	.066	.0001	.0005	.0032	.0010
%RSD	113.4	.8189	4.974	.5294	6.297	.7992	12.72	8.515	1.016	2.891
#1	.0027	260.6	.0421	3.204	.0050	8.387	-.0011	.0064	.3213	.0335
#2	.0011	258.7	.0458	3.194	.0048	8.260	-.0011	.0054	.3186	.0353
#3	-.0001	256.3	.0421	3.171	.0044	8.288	-.0009	.0057	.3149	.0351

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	98.93	3.391	6.926	.0840	.0007	-.2332	.0642	.3233	.0029	.0088
Stddev	.35	.101	.122	.0010	.0003	.0128	.0010	.0051	.0023	.0054
%RSD	.3582	2.963	1.754	1.246	47.49	5.509	1.550	1.584	79.32	61.11
#1	99.20	3.493	6.812	.0852	.0004	-.2204	.0646	.3217	.0056	.0142
#2	99.06	3.387	7.054	.0831	.0010	-.2460	.0649	.3290	.0017	.0035
#3	98.53	3.292	6.913	.0839	.0005	-.2332	.0631	.3192	.0015	.0086

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.965	.0328	2.789	2.038	-.0047	.2854	.1011
Stddev	.161	.0010	.008	.027	.0033	.0005	.0008
%RSD	1.795	3.198	.2830	1.316	71.52	.1675	.7879
#1	8.824	.0330	2.795	2.038	-.0012	.2856	.1013
#2	8.930	.0316	2.791	2.011	-.0050	.2848	.1018
#3	9.140	.0337	2.780	2.065	-.0078	.2857	.1002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1166.2	3614.5	28939.	1903.2
Stddev	1.2	3.7	130.	17.0
%RSD	.10125	.10339	.44780	.89169
#1	1166.7	3618.8	28808.	1892.2
#2	1164.9	3612.8	28943.	1894.5
#3	1167.1	3612.0	29067.	1922.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-6 Acquired: 5/17/2018 15:03:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0036	121.8	.0245	1.765	.0035	28.26	.0027	.0119	.1550	.1924
Stddev	.0009	.5	.0015	.007	.0003	.17	.0001	.0001	.0019	.0007
%RSD	24.44	.4501	5.948	.4158	7.775	.6142	1.905	.7738	1.212	.3612
#1	.0026	121.7	.0252	1.770	.0031	28.43	.0027	.0119	.1539	.1931
#2	.0040	121.3	.0254	1.756	.0036	28.08	.0027	.0118	.1572	.1925
#3	.0042	122.4	.0228	1.768	.0036	28.26	.0028	.0120	.1540	.1917

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	90.89	3.203	4.819	5.001	-.0002	.2788	.0565	1.013	.0089	.0102
Stddev	.48	.129	.023	.040	.0004	.0338	.0006	.011	.0025	.0100
%RSD	.5252	4.012	.4696	.8056	176.7	12.12	1.123	1.065	28.09	97.67
#1	91.44	3.140	4.845	5.048	.0002	.3179	.0569	1.004	.0117	.0120
#2	90.55	3.119	4.802	4.976	-.0002	.2583	.0558	1.025	.0069	.0191
#3	90.69	3.351	4.811	4.980	-.0006	.2604	.0569	1.010	.0082	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.444	.1392	.5900	.7356	.0033	.0962	2.008
Stddev	.007	.0014	.0011	.0057	.0066	.0012	.005
%RSD	.2885	1.018	.1832	.7725	203.2	1.246	.2375
#1	2.449	.1408	.5888	.7422	.0079	.0969	2.006
#2	2.436	.1385	.5907	.7317	-.0043	.0949	2.014
#3	2.448	.1382	.5905	.7331	.0061	.0970	2.005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1172.6	3156.7	25317.	1658.6
Stddev	2.9	7.6	94.	14.3
%RSD	.24746	.23979	.36952	.86238
#1	1173.3	3149.0	25210.	1642.2
#2	1169.5	3157.1	25381.	1668.6
#3	1175.2	3164.1	25361.	1664.9

Zoom In Zoom Out

Sample Name: FA54241-7 Acquired: 5/17/2018 15:07:36 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	137.7	.0153	.8842	.0033	8.773	-.0005	.0094	.1122	.0403
Stddev	.001	.4	.0021	.0073	.0002	.039	.0002	.0006	.0020	.0002
%RSD	8999.	.2998	13.97	.8220	7.472	.4400	42.39	5.885	1.801	.4919
#1	-.0008	137.4	.0155	.8762	.0036	8.734	-.0007	.0100	.1122	.0406
#2	-.0005	137.6	.0174	.8860	.0031	8.775	-.0003	.0093	.1102	.0403
#3	.0012	138.2	.0131	.8903	.0032	8.811	-.0006	.0089	.1143	.0402

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	58.52	2.277	4.569	2.673	-.0016	-.2357	.0485	.1203	.0027	.0097
Stddev	.13	.128	.138	.009	.0004	.0197	.0008	.0045	.0038	.0088
%RSD	.2143	5.615	3.023	.3442	21.91	8.354	1.724	3.722	140.4	91.37
#1	58.55	2.152	4.423	2.684	-.0014	-.2216	.0488	.1254	.0049	.0028
#2	58.38	2.408	4.588	2.666	-.0020	-.2272	.0476	.1177	.0049	.0065
#3	58.63	2.271	4.698	2.670	-.0014	-.2582	.0492	.1176	-.0017	.0197

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.45	.0279	.5032	1.725	-.0034	.1111	.1329
Stddev	.14	.0008	.0019	.041	.0021	.0008	.0004
%RSD	1.215	2.738	.3717	2.386	63.20	.7646	.3003
#1	11.61	.0283	.5047	1.752	-.0052	.1115	.1333
#2	11.40	.0285	.5011	1.678	-.0040	.1101	.1328
#3	11.34	.0271	.5037	1.745	-.0010	.1117	.1325

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1180.7	3221.5	25661.	1675.4
Stddev	2.5	5.4	35.	3.7
%RSD	.20885	.16802	.13679	.22292
#1	1178.2	3217.6	25624.	1679.6
#2	1183.1	3219.2	25694.	1674.3
#3	1180.7	3227.7	25664.	1672.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 15:11:50 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2420	39.90	1.941	1.995	2.011	40.32	1.985	1.975	2.032	1.978
Stddev	.0003	.14	.007	.007	.012	.27	.004	.002	.007	.007
%RSD	.1419	.3387	.3404	.3340	.5750	.6749	.2095	.1089	.3633	.3620
#1	.2418	40.02	1.940	2.001	2.024	40.60	1.984	1.975	2.034	1.984
#2	.2424	39.94	1.934	1.988	2.005	40.31	1.981	1.973	2.038	1.980
#3	.2419	39.76	1.948	1.997	2.002	40.05	1.989	1.977	2.024	1.970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.11	39.59	39.76	2.012	1.983	40.34	1.967	1.927	1.930	1.939
Stddev	.22	.17	.29	.005	.007	.24	.004	.002	.001	.004
%RSD	.5545	.4307	.7344	.2521	.3582	.6063	.1818	.1010	.0647	.2063
#1	40.37	39.78	40.10	2.013	1.979	40.58	1.968	1.928	1.931	1.941
#2	40.03	39.47	39.60	2.017	1.979	40.35	1.962	1.925	1.929	1.935
#3	39.95	39.51	39.59	2.007	1.991	40.09	1.969	1.929	1.931	1.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.509	1.989	2.024	2.012	1.929	2.012	1.997
Stddev	.005	.008	.008	.006	.001	.004	.003
%RSD	.2085	.4004	.3867	.3147	.0276	.1902	.1727
#1	2.512	1.987	2.033	2.017	1.929	2.011	1.998
#2	2.503	1.982	2.021	2.015	1.929	2.016	1.993
#3	2.513	1.997	2.018	2.005	1.930	2.008	2.000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 15:11:50 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1069.4	2829.8	22759.	1518.0
Stddev	1.9	10.2	54.	14.1
%RSD	.17744	.35994	.23507	.92928
#1	1067.9	2832.0	22802.	1502.5
#2	1071.5	2838.7	22699.	1521.3
#3	1068.7	2818.7	22776.	1530.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 15:15:47 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0043	.0002	.0004	.0003	.0094	.0001	.0000	.0005
Stddev	.0004	.0255	.0006	.0002	.0001	.0030	.0000	.0001	.0001
%RSD	367.9	587.7	400.8	58.09	57.10	31.80	38.52	293.5	13.96
#1	.0003	-.0086	.0004	.0005	.0003	.0129	.0001	-.0001	.0004
#2	-.0003	-.0275	.0006	.0001	.0004	.0079	.0001	.0000	.0005
#3	-.0004	.0230	-.0006	.0006	.0001	.0075	.0001	.0002	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0265	-.0134	.0281	.0002	F.0026	-.0904	.0002	.0000
Stddev	.0002	.0095	.0289	.0032	.0001	.0010	.0059	.0002	.001
%RSD	188.3	35.78	216.2	11.28	33.98	38.40	6.573	101.0	3231.
#1	.0001	.0365	-.0032	.0283	.0002	.0037	-.0840	.0003	.0003
#2	-.0002	.0253	-.0460	.0249	.0002	.0026	-.0915	.0000	.0003
#3	-.0002	.0177	.0091	.0312	.0001	.0016	-.0958	.0003	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0008	.0009	.0007	.0002	.0012	F.0020	.0000	.0001
Stddev	.0004	.0003	.0005	.0001	.0001	.0002	.0010	.000	.0000
%RSD	69.43	40.07	58.11	21.21	57.02	18.16	50.44	2699.	33.32
#1	.0006	.0010	.0015	.0008	.0003	.0014	.0019	-.0001	.0001
#2	.0010	.0010	.0007	.0005	.0003	.0012	.0031	.0002	.0001
#3	.0002	.0004	.0005	.0007	.0001	.0010	.0011	-.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 15:15:47 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1203.1	2912.6	23219.	1491.3
Stddev	2.9	8.5	44.	1.5
%RSD	.24499	.29116	.18884	.10048
#1	1201.1	2904.3	23177.	1492.2
#2	1201.8	2912.3	23216.	1492.1
#3	1206.5	2921.2	23265.	1489.6

Zoom In Zoom Out

Sample Name: FA54241-8 Acquired: 5/17/2018 15:20:06 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0010	217.8	.0311	1.951	.0052	15.21	-.0018	.0084	.2374	.0407
Stddev	.0013	1.6	.0039	.019	.0004	.12	.0002	.0000	.0008	.0011
%RSD	133.3	.7193	12.60	.9575	6.887	.7893	12.92	.2401	.3421	2.602
#1	.0004	218.2	.0328	1.948	.0049	15.30	-.0020	.0085	.2372	.0414
#2	.0025	219.1	.0266	1.972	.0056	15.26	-.0018	.0084	.2383	.0412
#3	.0001	216.1	.0338	1.935	.0053	15.08	-.0016	.0084	.2367	.0395

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	119.2	3.724	6.185	.2139	.0041	-.1649	.0638	.1761	.0074	.0092
Stddev	.4	.044	.271	.0006	.0004	.0225	.0009	.0033	.0045	.0004
%RSD	.3150	1.194	4.375	.3036	10.06	13.62	1.380	1.865	60.33	4.633
#1	119.2	3.766	6.121	.2146	.0040	-.1899	.0629	.1736	.0115	.0090
#2	119.6	3.728	5.952	.2139	.0045	-.1465	.0639	.1749	.0082	.0096
#3	118.9	3.677	6.482	.2133	.0037	-.1583	.0646	.1798	.0026	.0088

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.238	.0320	1.445	1.575	.0022	.2653	.1046
Stddev	.034	.0023	.005	.029	.0027	.0025	.0002
%RSD	.6563	7.192	.3428	1.845	121.5	.9583	.1578
#1	5.207	.0346	1.446	1.608	.0005	.2625	.1044
#2	5.232	.0309	1.450	1.551	.0053	.2675	.1046
#3	5.275	.0305	1.440	1.566	.0008	.2658	.1048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1168.6	3266.5	25541.	1673.6
Stddev	1.2	2.7	168.	15.6
%RSD	.10343	.08275	.65715	.93507
#1	1168.9	3265.1	25383.	1657.7
#2	1169.7	3264.7	25523.	1674.0
#3	1167.3	3269.6	25717.	1689.0

Zoom In Zoom Out

Sample Name: FA54241-9 Acquired: 5/17/2018 15:24:21 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	248.3	.0360	2.705	.0035	9.045	-.0019	.0054	.3432	.0285
Stddev	.0015	1.3	.0010	.003	.0004	.049	.0001	.0003	.0021	.0012
%RSD	123.2	.5268	2.903	.0960	10.41	.5387	5.113	5.847	.6261	4.355
#1	.0006	249.7	.0356	2.707	.0035	9.097	-.0018	.0058	.3410	.0274
#2	.0002	247.9	.0352	2.702	.0039	9.035	-.0020	.0052	.3453	.0298
#3	.0029	247.2	.0372	2.705	.0032	9.001	-.0020	.0053	.3432	.0282

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	114.2	2.831	5.521	.0759	.0036	-.2881	.0586	.2877	-.0027	.0093
Stddev	.3	.070	.248	.0002	.0008	.0140	.0004	.0005	.0050	.0066
%RSD	.2395	2.489	4.490	.2081	23.76	4.862	.6544	.1881	188.1	71.32
#1	114.1	2.909	5.240	.0760	.0033	-.2823	.0582	.2876	.0009	.0115
#2	114.0	2.772	5.707	.0757	.0045	-.2779	.0589	.2882	-.0084	.0145
#3	114.5	2.812	5.617	.0759	.0029	-.3041	.0587	.2871	-.0005	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.722	.0310	2.361	1.449	-.0011	.3265	.0858
Stddev	.004	.0007	.005	.006	.0046	.0007	.0004
%RSD	.1023	2.314	.1952	.3970	414.1	.2029	.4546
#1	3.724	.0304	2.366	1.446	-.0051	.3267	.0860
#2	3.717	.0318	2.361	1.444	-.0022	.3257	.0860
#3	3.724	.0309	2.357	1.455	.0039	.3270	.0853

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1175.2	3510.3	27358.	1799.8
Stddev	3.9	4.9	105.	12.5
%RSD	.32865	.14026	.38224	.69631
#1	1179.6	3504.6	27340.	1785.3
#2	1172.2	3513.2	27471.	1806.3
#3	1173.9	3513.1	27264.	1807.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-10 Acquired: 5/17/2018 15:28:37 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	216.3	.0348	2.645	.0038	6.639	-.0018	.0034	.3309	.0299
Stddev	.0017	.6	.0042	.004	.0005	.022	.0001	.0003	.0009	.0009
%RSD	232.3	.2564	12.03	.1674	13.01	.3279	7.577	9.685	.2721	3.117
#1	.0013	216.9	.0318	2.641	.0038	6.662	-.0018	.0030	.3319	.0288
#2	.0021	216.1	.0396	2.644	.0043	6.618	-.0018	.0036	.3302	.0304
#3	-.0012	215.9	.0331	2.650	.0033	6.639	-.0016	.0036	.3305	.0305

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	105.2	2.737	4.441	.0536	.0020	-.3097	.0459	.2610	-.0031	.0064
Stddev	.1	.111	.124	.0004	.0007	.0367	.0004	.0050	.0048	.0044
%RSD	.0664	4.052	2.800	.6946	36.71	11.86	.9121	1.928	154.4	68.15
#1	105.2	2.864	4.341	.0538	.0021	-.2950	.0457	.2586	.0006	.0054
#2	105.2	2.658	4.402	.0532	.0012	-.3515	.0456	.2668	-.0014	.0027
#3	105.1	2.689	4.580	.0538	.0026	-.2827	.0464	.2576	-.0085	.0112

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.214	.0304	2.293	1.490	-.0025	.3488	.0703
Stddev	.032	.0018	.005	.019	.0016	.0021	.0004
%RSD	.6108	5.848	.2004	1.304	63.70	.5923	.5506
#1	5.241	.0302	2.299	1.484	-.0043	.3504	.0700
#2	5.179	.0287	2.291	1.511	-.0011	.3496	.0708
#3	5.222	.0323	2.291	1.474	-.0022	.3465	.0702

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1174.9	3540.7	27468.	1807.7
Stddev	2.2	4.3	119.	11.1
%RSD	.18798	.12120	.43246	.61621
#1	1173.5	3537.0	27605.	1804.7
#2	1173.7	3545.4	27400.	1798.3
#3	1177.4	3539.7	27399.	1820.0

Zoom In Zoom Out

Sample Name: FA54241-11 Acquired: 5/17/2018 15:32:52 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	105.5	.0721	1.263	.0054	21.62	-.0003	.0483	.1942	.2415
Stddev	.0010	.2	.0020	.004	.0004	.12	.0002	.0005	.0023	.0011
%RSD	70.27	.1710	2.736	.3385	6.621	.5769	53.06	1.016	1.207	.4377
#1	.0026	105.5	.0699	1.263	.0051	21.76	-.0005	.0479	.1917	.2424
#2	.0010	105.4	.0737	1.259	.0058	21.53	-.0002	.0488	.1963	.2403
#3	.0007	105.7	.0728	1.268	.0053	21.56	-.0004	.0481	.1946	.2416

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	174.2	3.613	5.610	1.726	.0113	.4187	.1264	1.858	.0059	.0135
Stddev	.3	.123	.076	.006	.0004	.0495	.0008	.007	.0019	.0044
%RSD	.1619	3.403	1.360	.3624	3.648	11.83	.6064	.3582	33.22	32.82
#1	174.5	3.588	5.663	1.729	.0118	.4033	.1256	1.862	.0076	.0086
#2	174.2	3.505	5.643	1.718	.0112	.3787	.1267	1.850	.0038	.0144
#3	173.9	3.747	5.522	1.730	.0110	.4741	.1271	1.862	.0062	.0173

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.941	.0364	.6987	2.161	.0028	.2012	.6759
Stddev	.007	.0007	.0011	.009	.0055	.0002	.0014
%RSD	.0740	1.807	.1615	.3967	196.2	.0917	.2040
#1	8.944	.0371	.7000	2.167	.0023	.2014	.6747
#2	8.945	.0358	.6981	2.151	-.0024	.2011	.6756
#3	8.933	.0363	.6980	2.164	.0086	.2012	.6774

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1177.6	3183.3	24704.	1607.5
Stddev	2.2	.6	28.	6.2
%RSD	.18996	.01940	.11337	.38747
#1	1175.4	3182.7	24700.	1603.7
#2	1179.9	3183.3	24734.	1604.1
#3	1177.6	3183.9	24678.	1614.7

Zoom In Zoom Out

Sample Name: FA54241-12 Acquired: 5/17/2018 15:37:03 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	233.4	.0388	2.077	.0055	15.42	-.0024	.0091	.2967	.0406
Stddev	.0022	1.1	.0013	.005	.0006	.12	.0001	.0007	.0033	.0006
%RSD	165.4	.4722	3.302	.2448	10.71	.8090	3.920	7.189	1.112	1.463
#1	.0016	232.7	.0401	2.080	.0050	15.28	-.0023	.0087	.2931	.0406
#2	-.0010	232.9	.0387	2.071	.0053	15.46	-.0024	.0088	.2996	.0412
#3	.0035	234.7	.0375	2.080	.0061	15.52	-.0025	.0099	.2974	.0400

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	141.4	4.731	6.926	.4633	.0010	-.1325	.0679	.2335	.0044	-.0003
Stddev	.4	.099	.456	.0044	.0004	.0604	.0008	.0057	.0037	.0040
%RSD	.3070	2.090	6.582	.9540	36.08	45.61	1.157	2.454	85.47	1232.
#1	140.9	4.816	6.467	.4583	.0014	-.1255	.0675	.2325	.0006	-.0046
#2	141.4	4.754	7.378	.4649	.0011	-.0759	.0675	.2284	.0044	.0032
#3	141.8	4.622	6.934	.4667	.0006	-.1961	.0688	.2397	.0081	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.321	.0327	1.679	1.329	-.0010	.3123	.1705
Stddev	.006	.0013	.006	.004	.0006	.0020	.0004
%RSD	.1852	4.065	.3342	.3344	67.63	.6363	.2094
#1	3.315	.0321	1.673	1.334	-.0009	.3101	.1704
#2	3.327	.0318	1.679	1.326	-.0017	.3140	.1702
#3	3.320	.0342	1.684	1.326	-.0004	.3127	.1708

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1176.8	3385.3	25826.	1687.6
Stddev	2.7	3.2	93.	6.4
%RSD	.23152	.09518	.35907	.38130
#1	1174.0	3383.4	25923.	1695.0
#2	1179.4	3383.4	25739.	1683.7
#3	1177.1	3389.0	25815.	1684.1

Zoom In Zoom Out

Sample Name: FA54241-13 Acquired: 5/17/2018 15:41:17 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	255.6	.0509	2.794	.0052	15.53	-.0032	.0061	.3572	.0361
Stddev	.0020	1.2	.0005	.004	.0006	.10	.0002	.0002	.0025	.0002
%RSD	444.8	.4582	1.035	.1334	10.86	.6293	6.913	3.185	.7055	.6427
#1	-.0018	256.9	.0506	2.791	.0046	15.64	-.0029	.0058	.3601	.0359
#2	.0013	255.0	.0516	2.798	.0057	15.46	-.0033	.0062	.3554	.0363
#3	.0019	254.8	.0507	2.795	.0052	15.49	-.0032	.0062	.3561	.0360

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	168.2	4.462	7.421	.1021	.0044	-.2383	.0567	.2997	-.0031	.0137
Stddev	.9	.030	.319	.0006	.0006	.0067	.0012	.0017	.0064	.0054
%RSD	.5158	.6700	4.299	.6362	14.93	2.806	2.100	.5774	207.8	39.33
#1	169.0	4.476	7.178	.1028	.0051	-.2310	.0575	.2978	.0025	.0137
#2	168.2	4.428	7.782	.1015	.0040	-.2399	.0572	.3010	-.0017	.0191
#3	167.3	4.482	7.304	.1019	.0039	-.2441	.0553	.3004	-.0100	.0083

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.985	.0309	2.453	1.281	-.0041	.3860	.0941
Stddev	.019	.0004	.008	.008	.0039	.0018	.0002
%RSD	.6427	1.444	.3387	.6557	95.14	.4717	.2355
#1	2.990	.0314	2.462	1.289	-.0052	.3850	.0943
#2	2.964	.0309	2.447	1.273	-.0074	.3881	.0939
#3	3.001	.0305	2.449	1.282	.0002	.3848	.0942

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1168.0	3534.2	27070.	1776.4
Stddev	3.4	1.4	69.	20.3
%RSD	.29443	.03937	.25499	1.1440
#1	1165.5	3534.2	26995.	1764.2
#2	1166.6	3532.7	27083.	1765.0
#3	1171.9	3535.5	27132.	1799.8

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54241-14 Acquired: 5/17/2018 15:45:31 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0016	230.4	.0440	3.523	.0049	5.547	-.0026	.0036	.2861	.0256
Stddev	.0016	.1	.0061	.012	.0005	.029	.0002	.0007	.0014	.0009
%RSD	99.63	.0442	13.96	.3447	9.488	.5220	7.481	18.37	.4756	3.400
#1	-.0025	230.3	.0510	3.529	.0052	5.579	-.0028	.0032	.2861	.0266
#2	-.0026	230.5	.0411	3.509	.0052	5.537	-.0024	.0033	.2847	.0251
#3	.0002	230.4	.0398	3.531	.0044	5.523	-.0026	.0044	.2874	.0252

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	120.0	3.301	4.337	.0519	.0007	-.3421	.0388	.3428	.0015	.0117
Stddev	.2	.110	.178	.0005	.0003	.0203	.0007	.0023	.0046	.0113
%RSD	.1622	3.326	4.116	.8985	38.33	5.943	1.693	.6798	306.8	97.05
#1	120.2	3.423	4.503	.0515	.0004	-.3559	.0392	.3406	-.0001	.0167
#2	119.8	3.272	4.148	.0524	.0007	-.3517	.0391	.3452	-.0021	-.0013
#3	119.9	3.209	4.361	.0519	.0009	-.3188	.0380	.3427	.0067	.0197

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.752	.0312	3.157	1.190	-.0067	.2202	.0595
Stddev	.039	.0017	.002	.005	.0047	.0018	.0000
%RSD	1.032	5.424	.0685	.4067	70.34	.8134	.0642
#1	3.788	.0319	3.159	1.184	-.0100	.2199	.0595
#2	3.756	.0324	3.155	1.191	-.0013	.2186	.0595
#3	3.711	.0292	3.157	1.193	-.0087	.2221	.0595

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1177.0	3744.0	28477.	1890.8
Stddev	2.0	4.0	92.	18.1
%RSD	.16905	.10603	.32461	.95606
#1	1176.1	3743.2	28544.	1871.6
#2	1179.3	3748.3	28516.	1893.5
#3	1175.6	3740.5	28372.	1907.4

Zoom In Zoom Out

Sample Name: MP33756-MB1 Acquired: 5/17/2018 15:49:48 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0032	-.0014	.0006	-.0002	.0140	-.0001	-.0002	.0004
Stddev	.0004	.0085	.0009	.0002	.0002	.0028	.0000	.0001	.0003
%RSD	129.0	261.8	66.57	33.21	73.44	19.98	32.90	72.22	79.70
#1	-.0008	.0001	-.0007	.0004	-.0003	.0110	-.0001	-.0001	.0001
#2	.0000	-.0032	-.0024	.0007	.0000	.0165	-.0001	-.0001	.0004
#3	-.0001	.0128	-.0011	.0008	-.0004	.0146	.0000	-.0003	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0230	.0082	.0022	.0631	.0001	-.0006	-.0974	-.0002	.0011
Stddev	.0003	.0014	.0415	.0083	.0000	.0000	.0036	.0001	.0004
%RSD	1.276	16.73	1911.	13.16	31.85	6.665	3.726	47.83	34.11
#1	.0233	.0070	-.0317	.0613	.0001	-.0005	-.1015	-.0002	.0015
#2	.0228	.0097	.0485	.0721	.0001	-.0006	-.0954	-.0002	.0008
#3	.0229	.0078	-.0103	.0558	.0001	-.0006	-.0951	-.0001	.0010
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0125								
Low Limit	-.0125								

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0003	.0207	.0000	.0000	-.0002	-.0012	-.0001	F.0154
Stddev	.0010	.0011	.0004	.000	.0001	.0001	.0001	.0001	.0001
%RSD	128.0	444.8	1.746	1924.	20660.	37.48	10.66	45.71	.5958
#1	.0011	-.0008	.0203	.0000	-.0001	-.0001	-.0012	-.0002	.0155
#2	-.0003	.0002	.0210	.0003	-.0001	-.0003	-.0011	-.0001	.0155
#3	.0015	.0014	.0208	-.0004	.0002	-.0002	-.0013	-.0001	.0153
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit									.0100
Low Limit									-.0100

Zoom In Zoom Out

Sample Name: MP33756-MB1 Acquired: 5/17/2018 15:49:48 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1208.0	2968.7	22908.	1474.1
Stddev	5.4	10.7	62.	6.4
%RSD	.45031	.35958	.27011	.43216
#1	1202.7	2957.7	22936.	1479.6
#2	1207.8	2969.2	22951.	1467.1
#3	1213.6	2979.0	22837.	1475.5

Zoom In Zoom Out

Sample Name: MP33756-B1 Acquired: 5/17/2018 15:54:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0501	28.13	1.878	2.081	.0536	26.69	.0499	.5043	.2199	.2596
Stddev	.0007	.20	.002	.028	.0004	.17	.0001	.0005	.0010	.0006
%RSD	1.395	.7252	.1197	1.343	.6669	.6328	.1863	.1045	.4356	.2174
#1	.0494	27.95	1.876	2.055	.0532	26.55	.0500	.5038	.2193	.2597
#2	.0508	28.35	1.878	2.111	.0537	26.88	.0499	.5048	.2210	.2602
#3	.0502	28.08	1.881	2.078	.0538	26.64	.0499	.5042	.2194	.2590
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.57	25.06	25.35	.5135	.4637	26.11	.5003	.4845	.4793	1.852
Stddev	.17	.24	.25	.0022	.0015	.15	.0004	.0017	.0019	.005
%RSD	.6227	.9744	.9934	.4209	.3198	.5744	.0835	.3528	.3954	.2809
#1	26.40	24.87	25.07	.5142	.4620	26.01	.4999	.4826	.4791	1.854
#2	26.73	25.33	25.54	.5153	.4644	26.28	.5007	.4855	.4812	1.846
#3	26.58	24.98	25.45	.5111	.4646	26.03	.5004	.4856	.4774	1.856
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3715	.4723	.5193	.5046	1.894	.4842	.5021
Stddev	.0016	.0014	.0050	.0019	.003	.0005	.0009
%RSD	.4210	.2904	.9638	.3747	.1727	.1020	.1700
#1	.3697	.4707	.5146	.5047	1.895	.4838	.5015
#2	.3721	.4731	.5245	.5064	1.890	.4841	.5031
#3	.3726	.4730	.5189	.5026	1.896	.4847	.5018
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33756-B1 Acquired: 5/17/2018 15:54:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1110.3	2891.2	22412.	1480.2
Stddev	1.2	.4	43.	5.9
%RSD	.10836	.01352	.19122	.39847
#1	1109.3	2891.6	22378.	1485.2
#2	1111.6	2890.8	22398.	1473.7
#3	1109.9	2891.1	22460.	1481.7

Zoom In Zoom Out

Sample Name: FA54229-1 Acquired: 5/17/2018 15:58:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2236	.0003	.0167	-.0002	63.11	-.0001	-.0003	.0010	-.0008
Stddev	.0006	.0096	.0009	.0003	.0001	.38	.0001	.0001	.0002	.0002
%RSD	956.8	4.301	344.8	2.074	32.44	.6030	67.71	57.39	17.68	19.33
#1	-.0005	.2196	.0007	.0169	-.0003	63.21	-.0001	-.0001	.0010	-.0010
#2	.0000	.2346	-.0008	.0163	-.0001	62.69	-.0001	-.0004	.0012	-.0007
#3	.0007	.2166	.0009	.0169	-.0002	63.42	.0000	-.0003	.0009	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0509	1.651	4.056	.0205	.0018	6.158	.0006	.0015	.0014	.0029
Stddev	.0025	.031	.031	.0001	.0001	.067	.0002	.0000	.0021	.0018
%RSD	4.952	1.897	.7571	.4802	7.387	1.088	29.48	2.391	147.2	60.78
#1	.0531	1.654	4.089	.0206	.0017	6.186	.0004	.0016	.0006	.0016
#2	.0482	1.618	4.028	.0205	.0019	6.082	.0007	.0016	.0038	.0050
#3	.0516	1.681	4.051	.0205	.0017	6.207	.0005	.0015	-.0002	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.422	-.0002	.2626	.0170	.0007	.0095	.0102
Stddev	.014	.0003	.0021	.0021	.0007	.0002	.0001
%RSD	.2629	151.5	.7909	12.49	113.8	2.144	1.005
#1	5.417	.0001	.2623	.0155	.0009	.0093	.0102
#2	5.412	-.0003	.2607	.0161	.0012	.0094	.0101
#3	5.438	-.0004	.2648	.0195	-.0002	.0097	.0103

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1155.8	2905.0	22637.	1491.6
Stddev	1.7	9.6	107.	11.5
%RSD	.14731	.33122	.47223	.77118
#1	1154.4	2900.4	22539.	1481.0
#2	1157.7	2916.0	22621.	1503.8
#3	1155.4	2898.5	22751.	1490.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:02:27 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2423	42.51	1.875	2.029	2.082	42.73	1.994	1.973	2.140	2.016
Stddev	.0013	.17	.002	.004	.005	.17	.003	.003	.009	.005
%RSD	.5542	.4078	.0780	.1998	.2601	.3911	.1443	.1260	.4224	.2527
#1	.2424	42.49	1.876	2.033	2.077	42.63	1.992	1.971	2.146	2.020
#2	.2435	42.35	1.874	2.025	2.080	42.63	1.997	1.976	2.145	2.016
#3	.2409	42.70	1.875	2.028	2.088	42.92	1.992	1.972	2.130	2.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.15	40.61	40.69	2.017	1.955	42.45	1.900	1.971	1.886	1.874
Stddev	.18	.03	.14	.015	.004	.26	.003	.005	.001	.002
%RSD	.4402	.0838	.3350	.7364	.1825	.6024	.1706	.2575	.0643	.0820
#1	41.01	40.60	40.68	2.023	1.951	42.28	1.899	1.972	1.886	1.874
#2	41.09	40.59	40.84	2.029	1.957	42.32	1.904	1.966	1.887	1.873
#3	41.35	40.65	40.56	2.001	1.957	42.74	1.897	1.976	1.885	1.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.427	1.891	2.102	2.045	1.958	2.015	1.994
Stddev	.002	.003	.006	.011	.007	.003	.006
%RSD	.0632	.1698	.2910	.5211	.3418	.1281	.3228
#1	2.429	1.890	2.097	2.048	1.959	2.017	1.989
#2	2.426	1.895	2.101	2.053	1.951	2.017	2.002
#3	2.426	1.889	2.109	2.033	1.964	2.012	1.992
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:02:27 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1078.2	2919.6	22536.	1513.3
Stddev	.8	7.7	131.	3.7
%RSD	.07586	.26237	.58012	.24633
#1	1078.1	2923.3	22473.	1509.0
#2	1079.1	2910.8	22448.	1515.0
#3	1077.4	2924.7	22686.	1515.9

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:06:25 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0006	.0000	.0006	.0001	.0022	.0000	.0001	.0002
Stddev	.0003	.0006	.0006	.0004	.0002	.0030	.000	.0002	.0005
%RSD	59.18	105.5	1381.	71.79	284.8	139.4	1241.	215.5	227.0
#1	-.0006	.0006	.0007	.0002	.0000	.0047	.0000	.0000	.0002
#2	-.0008	.0012	-.0005	.0011	.0003	.0030	-.0001	-.0001	-.0003
#3	-.0002	-.0001	.0000	.0005	-.0001	-.0012	.0001	.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0169	.0144	.0432	.0001	F .0028	-.0848	.0000	.0004
Stddev	.0001	.0054	.0246	.0353	.0001	.0009	.0144	.0001	.0006
%RSD	8.887	31.78	171.1	81.74	88.37	31.18	17.03	4389.	150.8
#1	-.0012	.0192	.0020	.0817	.0001	.0037	-.0690	-.0001	.0010
#2	-.0011	.0208	-.0015	.0122	.0000	.0027	-.0973	.0002	.0005
#3	-.0011	.0108	.0427	.0357	.0000	.0020	-.0882	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0007	-.0004	.0002	.0001	.0009	.0020	.0000	.0002
Stddev	.0005	.0011	.0002	.0005	.0000	.0001	.0003	.000	.0001
%RSD	132.8	159.7	43.30	222.0	50.62	7.541	13.93	587.2	36.40
#1	-.0001	.0013	-.0005	.0007	.0001	.0010	.0020	-.0002	.0001
#2	.0003	-.0006	-.0002	.0002	.0000	.0009	.0017	.0000	.0002
#3	.0009	.0013	-.0004	-.0003	.0001	.0008	.0023	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:06:25 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1233.4	3052.9	23390.	1508.4
Stddev	2.0	5.7	125.	4.9
%RSD	.15971	.18579	.53335	.32588
#1	1235.7	3050.2	23505.	1504.0
#2	1232.6	3049.1	23407.	1507.4
#3	1232.1	3059.5	23258.	1513.7

Zoom In Zoom Out

Sample Name: MP33756-D1 Acquired: 5/17/2018 16:10:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.2246	-.0004	.0163	.0000	63.39	-.0001	-.0001	.0012	-.0009
Stddev	.0007	.0110	.0002	.0002	.0001	.27	.0001	.0001	.0005	.0002
%RSD	160.0	4.903	40.04	.9732	296.8	.4272	145.4	111.4	43.79	24.38
#1	-.0012	.2121	-.0006	.0163	-.0001	63.20	.0000	-.0001	.0006	-.0006
#2	-.0004	.2286	-.0003	.0161	.0001	63.27	-.0001	.0000	.0017	-.0010
#3	.0003	.2330	-.0003	.0165	.0001	63.70	-.0001	.0000	.0014	-.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0519	1.640	4.011	.0203	.0023	6.190	.0004	.0014	.0022	.0016
Stddev	.0080	.010	.002	.0002	.0003	.023	.0001	.0003	.0004	.0007
%RSD	15.36	.6209	.0400	.8514	14.09	.3731	15.64	23.14	19.57	44.49
#1	.0610	1.648	4.013	.0201	.0026	6.189	.0004	.0011	.0019	.0020
#2	.0478	1.629	4.009	.0204	.0022	6.168	.0005	.0017	.0020	.0020
#3	.0468	1.644	4.010	.0204	.0020	6.214	.0003	.0013	.0027	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.379	-.0002	.2620	.0193	.0004	.0093	.0100
Stddev	.013	.0002	.0009	.0001	.0006	.0000	.0000
%RSD	.2408	104.0	.3283	.6681	150.8	.3968	.1427
#1	5.390	-.0005	.2621	.0194	.0003	.0094	.0100
#2	5.364	.0000	.2610	.0192	-.0002	.0093	.0100
#3	5.382	-.0002	.2627	.0194	.0010	.0093	.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1158.3	2937.7	22586.	1486.4
Stddev	2.9	7.1	148.	7.2
%RSD	.24618	.24171	.65664	.48120
#1	1155.5	2930.7	22666.	1490.5
#2	1158.3	2944.9	22415.	1490.7
#3	1161.2	2937.4	22677.	1478.2

Zoom In Zoom Out

Sample Name: MP33756-SD1 Acquired: 5/17/2018 16:15:00 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0009	.2107	-.0038	.0182	-.0004	65.32	-.0005	-.0002	.0020	-.0015
Stddev	.0006	.0249	.0043	.0012	.0003	.23	.0004	.0005	.0014	.0007
%RSD	66.24	11.79	112.6	6.387	80.76	.3488	82.06	322.1	69.43	48.10
#1	-.0002	.2252	-.0011	.0196	-.0006	65.50	-.0007	.0004	.0030	-.0023
#2	-.0013	.1820	-.0016	.0175	.0000	65.40	.0000	-.0006	.0004	-.0014
#3	-.0012	.2249	-.0088	.0176	-.0005	65.06	-.0006	-.0003	.0027	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0533	1.663	4.208	.0221	.0005	5.812	-.0008	.0015	.0004	-.0070
Stddev	.0208	.173	.137	.0002	.0004	.040	.0003	.0043	.0044	.0089
%RSD	38.95	10.44	3.264	.9666	93.17	.6949	37.83	294.0	990.5	127.0
#1	.0696	1.779	4.271	.0220	.0000	5.775	-.0007	-.0017	-.0007	.0032
#2	.0299	1.463	4.303	.0223	.0005	5.805	-.0006	.0064	.0053	-.0134
#3	.0604	1.745	4.051	.0220	.0008	5.855	-.0012	-.0003	-.0033	-.0107

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.457	-.0007	.2669	.0159	.0015	.0089	.0109
Stddev	.010	.0009	.0015	.0029	.0017	.0005	.0003
%RSD	.1808	130.4	.5656	17.94	114.7	5.540	2.531
#1	5.447	.0003	.2674	.0187	-.0005	.0094	.0106
#2	5.467	-.0011	.2681	.0160	.0024	.0086	.0108
#3	5.458	-.0013	.2652	.0130	.0026	.0086	.0111

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1208.5	2997.0	23130.	1516.7
Stddev	1.2	5.6	23.	9.0
%RSD	.10295	.18787	.10061	.59031
#1	1207.8	2996.1	23137.	1510.8
#2	1210.0	3003.1	23105.	1512.2
#3	1207.8	2991.9	23150.	1527.0

Zoom In Zoom Out

Sample Name: MP33756-PS1 Acquired: 5/17/2018 16:19:19 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0443	2.801	.0960	.2714	.0521	66.38	.0482	.0486	.0527	.1006
Stddev	.0005	.013	.0002	.0017	.0001	.23	.0001	.0002	.0005	.0003
%RSD	1.025	.4620	.2096	.6396	.2761	.3516	.1978	.3503	.9272	.2971
#1	.0446	2.809	.0960	.2733	.0521	66.58	.0483	.0488	.0532	.1003
#2	.0446	2.786	.0958	.2699	.0523	66.12	.0481	.0484	.0528	.1008
#3	.0438	2.808	.0962	.2711	.0520	66.43	.0481	.0487	.0522	.1008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.051	11.48	8.898	.0688	.0913	16.16	.0962	.0461	.0926	.0884
Stddev	.015	.08	.041	.0007	.0004	.07	.0001	.0005	.0005	.0003
%RSD	.4883	.6779	.4583	1.046	.4174	.4358	.1243	1.087	.5756	.2923
#1	3.053	11.56	8.917	.0693	.0917	16.22	.0962	.0465	.0927	.0887
#2	3.035	11.41	8.851	.0691	.0910	16.08	.0962	.0463	.0931	.0882
#3	3.065	11.46	8.925	.0680	.0911	16.17	.0960	.0455	.0921	.0885

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.334	.0451	.3061	.1170	.0906	.0566	.2500
Stddev	.016	.0006	.0008	.0017	.0005	.0002	.0005
%RSD	.2978	1.277	.2501	1.419	.5700	.3920	.1930
#1	5.349	.0450	.3069	.1187	.0909	.0565	.2505
#2	5.336	.0457	.3054	.1169	.0908	.0569	.2498
#3	5.317	.0445	.3059	.1154	.0900	.0565	.2496

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1136.7	2915.8	22723.	1511.0
Stddev	2.0	8.9	98.	10.5
%RSD	.17997	.30380	.43230	.69459
#1	1134.3	2906.9	22670.	1501.4
#2	1137.8	2915.8	22662.	1522.2
#3	1137.9	2924.7	22836.	1509.4

Zoom In Zoom Out

Sample Name: MP33756-S1 Acquired: 5/17/2018 16:23:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0488	28.22	1.838	2.050	.0527	87.93	.0482	.4861	.2157	.2541
Stddev	.0004	.09	.010	.014	.0004	.18	.0001	.0004	.0004	.0008
%RSD	.7235	.3251	.5480	.6824	.7444	.2090	.2904	.0914	.1942	.3309
#1	.0488	28.12	1.846	2.052	.0526	87.89	.0482	.4856	.2161	.2541
#2	.0484	28.24	1.827	2.063	.0531	88.13	.0481	.4861	.2158	.2533
#3	.0491	28.30	1.842	2.035	.0523	87.76	.0484	.4865	.2152	.2550

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.00	26.41	28.47	.5145	.4519	32.01	.4777	.4770	.4695	1.799
Stddev	.13	.10	.22	.0016	.0005	.03	.0011	.0012	.0023	.003
%RSD	.5042	.3686	.7604	.3016	.1188	.0853	.2207	.2588	.4856	.1634
#1	25.96	26.39	28.61	.5128	.4518	31.98	.4777	.4776	.4706	1.798
#2	26.14	26.51	28.58	.5158	.4514	32.04	.4766	.4756	.4669	1.796
#3	25.88	26.32	28.22	.5150	.4525	32.01	.4787	.4779	.4711	1.802

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.723	.4507	.7662	.5068	1.856	.4808	.4926
Stddev	.018	.0023	.0028	.0015	.004	.0010	.0011
%RSD	.3099	.5054	.3707	.3024	.2208	.2052	.2321
#1	5.739	.4517	.7651	.5058	1.853	.4817	.4918
#2	5.704	.4481	.7694	.5059	1.854	.4810	.4921
#3	5.727	.4523	.7641	.5085	1.861	.4797	.4939

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1088.9	2896.6	22337.	1506.3
Stddev	1.1	5.1	77.	10.9
%RSD	.10240	.17593	.34623	.72558
#1	1087.6	2891.4	22343.	1493.7
#2	1089.6	2901.6	22257.	1512.2
#3	1089.5	2896.9	22411.	1513.0

Zoom In Zoom Out

Sample Name: MP33756-S2 Acquired: 5/17/2018 16:27:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0501	29.42	1.872	2.130	.0550	90.51	.0492	.4982	.2236	.2621
Stddev	.0002	.19	.002	.006	.0003	.67	.0003	.0006	.0019	.0015
%RSD	.4542	.6592	.0834	.2832	.4814	.7366	.5093	.1246	.8716	.5843
#1	.0500	29.61	1.873	2.135	.0553	91.01	.0491	.4975	.2247	.2632
#2	.0504	29.23	1.870	2.131	.0547	89.75	.0491	.4987	.2248	.2628
#3	.0500	29.42	1.873	2.123	.0551	90.76	.0495	.4985	.2214	.2603

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.99	27.27	29.45	.5319	.4629	33.23	.4885	.4907	.4791	1.834
Stddev	.16	.08	.18	.0033	.0015	.28	.0012	.0011	.0015	.001
%RSD	.5944	.2841	.6206	.6154	.3146	.8477	.2489	.2140	.3163	.0750
#1	27.11	27.36	29.65	.5339	.4612	33.38	.4872	.4896	.4791	1.835
#2	26.81	27.21	29.29	.5335	.4638	32.90	.4886	.4916	.4807	1.834
#3	27.04	27.24	29.42	.5281	.4637	33.40	.4896	.4911	.4777	1.833

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.774	.4580	.7917	.5264	1.909	.4955	.5029
Stddev	.005	.0007	.0057	.0015	.009	.0017	.0010
%RSD	.0919	.1473	.7162	.2852	.4474	.3494	.1922
#1	5.768	.4588	.7960	.5256	1.900	.4970	.5019
#2	5.775	.4576	.7853	.5255	1.912	.4960	.5032
#3	5.778	.4576	.7938	.5282	1.916	.4936	.5037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1081.9	2894.9	21982.	1479.2
Stddev	3.9	5.3	110.	8.2
%RSD	.36414	.18406	.49989	.55577
#1	1086.5	2901.0	21948.	1470.3
#2	1079.4	2892.0	21892.	1481.0
#3	1079.9	2891.6	22104.	1486.4

Zoom In Zoom Out

Sample Name: FA54229-2 Acquired: 5/17/2018 16:31:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.2483	.0004	.0169	-.0002	72.33	-.0001	-.0001	.0010	-.0005
Stddev	.0001	.0235	.0014	.0001	.0001	.32	.0000	.0001	.0002	.0003
%RSD	14.11	9.464	356.3	.8687	44.19	.4377	24.72	90.68	25.13	51.94
#1	-.0006	.2438	-.0003	.0170	-.0003	72.65	-.0001	-.0002	.0012	-.0004
#2	-.0006	.2737	.0020	.0168	-.0001	72.02	.0000	.0000	.0009	-.0003
#3	-.0008	.2273	-.0005	.0167	-.0002	72.31	-.0001	-.0001	.0008	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1677	13.08	13.08	.0101	.0025	8.765	.0001	.0015	.0019	.0030
Stddev	.0062	.04	.01	.0000	.0001	.008	.0001	.0005	.0013	.0022
%RSD	3.705	.3026	.0889	.2185	2.547	.0914	184.3	29.51	68.68	72.83
#1	.1746	13.13	13.08	.0101	.0025	8.774	-.0001	.0018	.0016	.0047
#2	.1624	13.06	13.09	.0101	.0024	8.758	.0001	.0018	.0034	.0036
#3	.1662	13.06	13.07	.0102	.0025	8.763	.0001	.0010	.0008	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.688	-.0002	.9468	.0274	.0008	.0088	.0181
Stddev	.014	.0002	.0032	.0020	.0007	.0002	.0000
%RSD	.2435	112.7	.3337	7.165	92.66	2.453	.0773
#1	5.686	-.0003	.9504	.0296	.0000	.0088	.0181
#2	5.674	-.0002	.9453	.0259	.0013	.0086	.0181
#3	5.702	.0000	.9447	.0266	.0011	.0090	.0181

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1137.0	2916.4	22129.	1480.5
Stddev	1.3	6.1	113.	11.4
%RSD	.11614	.20821	.50940	.76678
#1	1135.8	2917.5	22126.	1470.0
#2	1138.4	2921.8	22017.	1492.5
#3	1136.8	2909.8	22243.	1479.0

Zoom In Zoom Out

Sample Name: FA54239-1 Acquired: 5/17/2018 16:35:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0034	.0022	.0969	.0000	83.03	-.0001	-.0003	.0147	-.0018
Stddev	.0006	.0068	.0013	.0007	.000	.40	.0000	.0002	.0001	.0002
%RSD	740.5	202.3	62.47	.6762	272.5	.4817	77.54	55.75	.8957	8.625
#1	.0001	.0080	.0006	.0962	-.0001	82.96	.0000	-.0001	.0146	-.0016
#2	-.0006	-.0044	.0027	.0973	.0000	82.66	-.0001	-.0004	.0148	-.0018
#3	.0007	.0065	.0032	.0973	.0000	83.45	.0000	-.0003	.0145	-.0020

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0064	2.437	16.24	.0059	.0240	49.69	-.0005	.0020	.0008	.0027
Stddev	.0017	.018	.14	.0001	.0002	.21	.0003	.0007	.0008	.0025
%RSD	26.32	.7458	.8785	.8862	.6332	.4196	50.30	32.74	105.6	91.43
#1	.0045	2.417	16.10	.0059	.0238	49.65	-.0005	.0013	.0000	.0012
#2	.0078	2.441	16.24	.0060	.0240	49.51	-.0007	.0027	.0006	.0013
#3	.0070	2.452	16.39	.0059	.0241	49.92	-.0002	.0022	.0016	.0055

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.816	.0001	1.063	.0014	-.0006	.0053	.0482
Stddev	.018	.0004	.005	.0002	.0003	.0001	.0001
%RSD	.1986	631.9	.4854	11.59	54.69	2.105	.1761
#1	8.805	-.0004	1.060	.0013	-.0002	.0054	.0483
#2	8.807	.0004	1.060	.0016	-.0006	.0052	.0481
#3	8.837	.0001	1.069	.0013	-.0008	.0053	.0481

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1114.5	2876.3	21968.	1479.9
Stddev	4.3	4.9	88.	13.4
%RSD	.38375	.16919	.40091	.90652
#1	1109.9	2870.7	21911.	1475.6
#2	1118.3	2879.5	21923.	1494.9
#3	1115.3	2878.6	22069.	1469.1

Zoom In Zoom Out

Sample Name: FA54239-2 Acquired: 5/17/2018 16:39:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0068	.0029	.1017	.0000	85.10	.0000	-.0003	.0162	-.0017
Stddev	.0004	.0026	.0013	.0004	.000	.20	.000	.0001	.0004	.0002
%RSD	99.27	37.49	44.17	.3796	884.4	.2314	45.69	23.00	2.716	10.31
#1	-.0009	.0039	.0043	.1017	-.0003	85.19	-.0001	-.0004	.0158	-.0019
#2	-.0003	.0083	.0019	.1021	.0002	85.24	-.0001	-.0003	.0166	-.0018
#3	-.0001	.0084	.0024	.1013	.0001	84.87	.0000	-.0003	.0162	-.0015

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0013	2.482	16.36	.0000	.0248	50.96	-.0003	.0018	.0008	.0028
Stddev	.0021	.024	.03	.000	.0002	.04	.0001	.0002	.0003	.0015
%RSD	158.0	.9516	.1796	108.8	.9751	.0720	50.39	10.49	32.64	52.26
#1	.0004	2.457	16.40	.0000	.0251	51.00	-.0001	.0020	.0011	.0045
#2	-.0007	2.504	16.35	.0000	.0247	50.97	-.0004	.0017	.0006	.0020
#3	-.0036	2.487	16.35	.0000	.0246	50.93	-.0003	.0016	.0008	.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.205	-.0006	1.090	.0013	.0001	.0057	.0113
Stddev	.016	.0003	.002	.0000	.0012	.0002	.0001
%RSD	.1715	50.50	.1455	2.144	1539.	4.085	.5616
#1	9.221	-.0007	1.091	.0013	-.0012	.0060	.0113
#2	9.189	-.0008	1.092	.0012	.0004	.0058	.0114
#3	9.205	-.0003	1.089	.0013	.0011	.0055	.0113

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1129.7	2908.4	22325.	1510.3
Stddev	2.8	6.2	32.	14.4
%RSD	.24561	.21168	.14360	.95406
#1	1127.8	2902.0	22298.	1496.6
#2	1128.5	2908.9	22360.	1509.1
#3	1132.9	2914.3	22317.	1525.4

Zoom In Zoom Out

Sample Name: FA54236-1 Acquired: 5/17/2018 16:44:15 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	4.961	.0018	.1500	.0000	66.77	.0030	.0052	.0272	.2090
Stddev	.0003	.026	.0010	.0006	.0000	.17	.0001	.0001	.0004	.0007
%RSD	2665.	.5296	51.94	.4271	183.5	.2609	2.628	1.914	1.584	.3411
#1	-.0004	4.991	.0016	.1508	.0000	66.92	.0030	.0051	.0267	.2097
#2	.0003	4.943	.0029	.1496	.0001	66.81	.0031	.0053	.0275	.2089
#3	.0001	4.948	.0010	.1498	.0000	66.58	.0029	.0052	.0274	.2083

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	9.124	11.42	4.676	.1707	.0274	21.30	.0226	.2044	.0125	.0026
Stddev	.041	.07	.028	.0013	.0001	.04	.0002	.0010	.0007	.0013
%RSD	.4540	.6387	.5969	.7811	.3308	.2001	.7991	.4684	5.603	48.72
#1	9.171	11.50	4.647	.1715	.0274	21.34	.0226	.2034	.0117	.0038
#2	9.104	11.38	4.703	.1691	.0274	21.26	.0228	.2052	.0126	.0027
#3	9.096	11.37	4.678	.1714	.0273	21.31	.0225	.2046	.0131	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.404	.0133	.2242	.0875	-.0005	.0116	1.389
Stddev	.055	.0004	.0012	.0015	.0012	.0002	.002
%RSD	2.305	3.237	.5140	1.667	213.6	2.049	.1178
#1	2.456	.0133	.2250	.0861	-.0019	.0116	1.389
#2	2.410	.0138	.2229	.0890	-.0002	.0113	1.387
#3	2.345	.0129	.2247	.0875	.0004	.0118	1.390

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1153.7	2972.0	22961.	1580.0
Stddev	.6	9.4	80.	10.7
%RSD	.05127	.31646	.34814	.67824
#1	1153.7	2961.6	22883.	1572.9
#2	1153.1	2974.5	23043.	1574.8
#3	1154.3	2979.9	22958.	1592.3

Zoom In Zoom Out

Sample Name: FA54236-2 Acquired: 5/17/2018 16:48:26 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	2.120	-.0001	.1147	-.0001	53.41	.0021	.0023	.0121	.0985
Stddev	.0002	.041	.0005	.0010	.0001	.15	.0000	.0001	.0003	.0003
%RSD	88.50	1.919	592.2	.8911	96.30	.2720	1.697	2.231	2.599	.3396
#1	-.0001	2.120	.0005	.1157	-.0001	53.35	.0020	.0023	.0118	.0982
#2	-.0003	2.162	-.0004	.1146	.0000	53.58	.0021	.0023	.0124	.0988
#3	-.0001	2.080	-.0004	.1137	-.0001	53.31	.0020	.0024	.0121	.0983

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.744	8.515	5.146	.0799	.0351	18.87	.0117	.0873	.0106	.0012
Stddev	.023	.056	.025	.0001	.0001	.06	.0002	.0001	.0010	.0013
%RSD	.6170	.6540	.4964	.1125	.2804	.2984	1.689	.1243	9.001	106.9
#1	3.736	8.558	5.121	.0798	.0352	18.87	.0115	.0872	.0097	.0025
#2	3.770	8.536	5.146	.0800	.0350	18.93	.0117	.0874	.0116	-.0001
#3	3.725	8.452	5.172	.0800	.0350	18.82	.0119	.0873	.0106	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.688	.0056	.1998	.0430	.0000	.0053	.6832
Stddev	.020	.0005	.0007	.0021	.0008	.0002	.0015
%RSD	1.182	9.507	.3615	4.988	1855.	2.952	.2184
#1	1.711	.0059	.2000	.0408	.0008	.0051	.6846
#2	1.678	.0059	.2004	.0431	-.0001	.0054	.6832
#3	1.674	.0050	.1990	.0450	-.0007	.0053	.6817

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1168.5	2985.9	23018.	1579.6
Stddev	1.2	11.1	30.	5.8
%RSD	.10079	.37119	.13034	.36834
#1	1167.4	2973.4	23052.	1575.0
#2	1168.3	2990.1	23001.	1586.1
#3	1169.8	2994.3	23000.	1577.5

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:52:40 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2437	43.42	1.866	2.063	2.119	43.34	1.982	1.973	2.166	2.068
Stddev	.0025	.34	.005	.005	.012	.32	.002	.004	.016	.010
%RSD	1.006	.7892	.2571	.2525	.5711	.7357	.1062	.1819	.7439	.4785
#1	.2410	43.74	1.865	2.066	2.127	43.56	1.980	1.972	2.164	2.060
#2	.2457	43.06	1.862	2.057	2.105	42.97	1.981	1.970	2.183	2.079
#3	.2446	43.47	1.871	2.067	2.125	43.47	1.984	1.977	2.151	2.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.38	40.91	40.21	2.019	1.956	43.22	1.870	1.961	1.903	1.875
Stddev	.26	.16	.26	.017	.008	.29	.007	.006	.004	.007
%RSD	.6387	.3844	.6485	.8404	.4042	.6741	.3835	.2914	.1925	.3542
#1	41.52	41.05	40.50	2.008	1.950	43.43	1.871	1.955	1.904	1.879
#2	41.07	40.74	40.01	2.038	1.953	42.89	1.863	1.966	1.899	1.867
#3	41.54	40.94	40.12	2.010	1.965	43.35	1.877	1.961	1.906	1.878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.454	1.846	2.155	2.074	1.964	2.008	1.948
Stddev	.006	.007	.012	.014	.005	.004	.003
%RSD	.2422	.3585	.5434	.6715	.2354	.2113	.1316
#1	2.457	1.848	2.161	2.066	1.959	2.005	1.946
#2	2.447	1.838	2.141	2.090	1.965	2.013	1.946
#3	2.458	1.851	2.162	2.066	1.968	2.007	1.950
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 16:52:40 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1104.0	2991.2	22949.	1620.3
Stddev	.6	7.5	147.	14.5
%RSD	.05813	.24916	.63880	.89551
#1	1103.7	2988.5	23059.	1605.2
#2	1104.7	2999.6	22782.	1634.2
#3	1103.6	2985.5	23006.	1621.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:56:38 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0105	.0002	.0000	.0001	.0047	.0000	.0001	.0003
Stddev	.0002	.0120	.0013	.0002	.0001	.0042	.0000	.0001	.0002
%RSD	164.0	114.4	684.4	3741.	63.35	91.18	88.19	98.55	53.89
#1	-.0001	-.0033	.0016	.0003	.0001	.0028	.0001	.0001	.0004
#2	-.0004	.0179	-.0008	-.0001	.0002	.0017	.0000	.0003	.0005
#3	.0001	.0168	-.0003	-.0002	.0001	.0095	.0000	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0176	.0289	.0316	.0001	F.0029	-.0780	-.0001	-.0008
Stddev	.0003	.0023	.0140	.0266	.0001	.0009	.0020	.0002	.0007
%RSD	23.60	13.17	48.28	84.26	109.0	30.33	2.504	318.9	93.42
#1	-.0012	.0202	.0195	.0489	.0002	.0038	-.0765	-.0002	-.0015
#2	-.0012	.0160	.0450	.0009	.0001	.0028	-.0772	.0002	-.0001
#3	-.0008	.0165	.0223	.0448	.0000	.0020	-.0802	-.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	F.0023	.0011	.0006	.0001	.0010	.0017	.0002	.0002
Stddev	.0007	.0009	.0004	.0002	.0000	.0001	.0003	.0002	.0000
%RSD	133.4	37.71	36.42	31.12	32.18	8.122	20.05	96.27	11.62
#1	.0011	.0033	.0015	.0007	.0002	.0011	.0019	.0003	.0002
#2	-.0002	.0016	.0008	.0004	.0001	.0010	.0019	.0002	.0002
#3	.0006	.0021	.0009	.0006	.0001	.0009	.0013	.0000	.0002
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 16:56:38 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1267.3	3111.5	24107.	1633.1
Stddev	1.5	4.6	43.	10.9
%RSD	.11570	.14705	.17815	.66872
#1	1266.7	3114.2	24057.	1635.5
#2	1266.3	3106.2	24130.	1621.1
#3	1269.0	3114.0	24133.	1642.6

Zoom In Zoom Out

Sample Name: MP33757-MB1 Acquired: 5/17/2018 17:00:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0002	-.0015	.0004	-.0001	.0131	-.0001	-.0002	.0003	-.0013
Stddev	.0001	.0120	.0006	.0000	.0002	.0043	.0000	.0001	.0004	.0000
%RSD	53.14	5452.	40.16	13.87	183.1	32.54	31.16	55.85	139.2	3.190
#1	-.0003	-.0092	-.0017	.0004	-.0001	.0103	-.0001	-.0003	.0007	-.0012
#2	-.0002	-.0039	-.0020	.0003	-.0003	.0110	-.0001	-.0001	.0003	-.0013
#3	-.0001	.0137	-.0008	.0003	.0001	.0180	-.0001	-.0001	-.0001	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156	.0114	.0339	.0003	.0004	-.0687	-.0001	.0006	.0003	.0028
Stddev	.0037	.0150	.0241	.0000	.0002	.0101	.0002	.0003	.0005	.0012
%RSD	23.53	131.7	71.19	6.128	37.80	14.67	425.3	52.32	151.7	41.01
#1	.0167	.0093	.0111	.0002	.0006	-.0702	.0002	.0007	-.0002	.0036
#2	.0186	.0274	.0592	.0003	.0003	-.0580	-.0001	.0002	.0004	.0034
#3	.0115	-.0025	.0315	.0003	.0004	-.0780	-.0003	.0008	.0007	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0221	.0000	.0000	.0000	-.0006	-.0001	.0013
Stddev	.0003	.0003	.0000	.0001	.0005	.0001	.0001
%RSD	1.299	596.6	107.5	6855.	74.87	100.9	4.701
#1	.0219	.0001	.0001	.0001	-.0012	-.0003	.0013
#2	.0224	.0003	.0000	.0000	-.0003	-.0001	.0014
#3	.0219	-.0003	.0001	-.0001	-.0004	.0000	.0013
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33757-MB1 Acquired: 5/17/2018 17:00:57 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1249.8	3066.0	24015.	1593.6
Stddev	1.8	5.0	60.	5.8
%RSD	.14621	.16456	.25131	.36094
#1	1247.7	3060.3	23959.	1587.1
#2	1250.9	3069.6	24007.	1595.3
#3	1250.9	3068.2	24079.	1598.2

Zoom In Zoom Out

Sample Name: MP33757-B1 Acquired: 5/17/2018 17:05:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0498	29.30	1.878	2.146	.0556	27.50	.0502	.5094	.2243	.2668
Stddev	.0006	.34	.007	.015	.0005	.28	.0003	.0018	.0016	.0015
%RSD	1.185	1.168	.3819	.6917	.9570	1.021	.5677	.3583	.6953	.5483
#1	.0502	29.27	1.876	2.155	.0555	27.40	.0501	.5082	.2258	.2678
#2	.0492	28.97	1.885	2.129	.0551	27.28	.0505	.5115	.2245	.2652
#3	.0502	29.65	1.871	2.154	.0561	27.81	.0499	.5084	.2227	.2675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.10	25.51	25.47	.5107	.4664	27.04	.4955	.4884	.4855	1.861
Stddev	.16	.21	.15	.0011	.0017	.28	.0011	.0018	.0012	.009
%RSD	.5924	.8157	.5775	.2182	.3698	1.035	.2185	.3642	.2423	.4802
#1	27.04	25.61	25.49	.5119	.4651	26.95	.4946	.4870	.4844	1.856
#2	26.98	25.27	25.31	.5103	.4684	26.82	.4967	.4904	.4854	1.872
#3	27.29	25.65	25.60	.5098	.4658	27.35	.4952	.4879	.4867	1.856
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3775	.4587	.5377	.5086	1.920	.4851	.4966
Stddev	.0016	.0010	.0036	.0015	.007	.0021	.0014
%RSD	.4152	.2082	.6752	.2889	.3866	.4410	.2820
#1	.3758	.4587	.5373	.5103	1.911	.4869	.4953
#2	.3789	.4597	.5342	.5075	1.924	.4856	.4981
#3	.3777	.4578	.5415	.5081	1.924	.4827	.4964
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33757-B1 Acquired: 5/17/2018 17:05:17 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1125.9	2943.6	22763.	1557.1
Stddev	1.5	9.4	170.	8.9
%RSD	.13096	.31874	.74881	.57225
#1	1127.2	2942.8	22635.	1567.2
#2	1124.3	2934.6	22697.	1553.9
#3	1126.0	2953.3	22956.	1550.3

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54160-1 Acquired: 5/17/2018 17:09:16 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.0107	-.0007	.0086	-.0002	7.343	.0000	.0006	.0012
Stddev	.0001	.0095	.0004	.0003	.0001	.029	.000	.0001	.0003
%RSD	20.27	88.34	52.03	3.846	74.23	.3921	155.0	17.77	23.76
#1	-.0007	.0016	-.0005	.0087	-.0002	7.336	-.0001	.0006	.0010
#2	-.0007	.0206	-.0005	.0083	.0000	7.375	.0000	.0006	.0016
#3	-.0005	.0100	-.0011	.0089	-.0002	7.318	.0000	.0008	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0027	.0697	7.086	1.818	.0260	.0005	F162.6	.0056	.0006
Stddev	.0006	.0069	.043	.043	.0001	.0003	.8	.0002	.0008
%RSD	23.63	9.933	.6039	2.365	.2938	62.29	.5169	2.833	138.6
#1	.0034	.0776	7.135	1.846	.0259	.0006	163.2	.0057	.0004
#2	.0021	.0664	7.058	1.840	.0260	.0006	163.0	.0056	-.0001
#3	.0026	.0650	7.065	1.769	.0260	.0001	161.7	.0054	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0036	.1640	.0010	.0077	.0005	.0001	-.0004	.0618
Stddev	.0006	.0007	.0095	.0003	.0001	.0000	.0007	.0000	.0001
%RSD	72.24	19.15	5.773	32.09	.9552	6.680	896.4	10.68	.1855
#1	.0004	.0028	.1576	.0012	.0077	.0005	.0008	-.0003	.0618
#2	.0006	.0040	.1595	.0013	.0076	.0005	-.0005	-.0003	.0617
#3	.0016	.0039	.1749	.0007	.0078	.0006	.0000	-.0004	.0620

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1128.8	2926.7	22566.	1587.4
Stddev	3.4	4.7	72.	2.4
%RSD	.30306	.16037	.31958	.15362
#1	1125.1	2921.3	22577.	1587.6
#2	1129.4	2929.8	22490.	1589.8
#3	1131.8	2929.1	22633.	1584.9

Zoom In Zoom Out

Sample Name: MP33757-D1 Acquired: 5/17/2018 17:13:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0229	-.0010	.0085	-.0001	7.335	-.0001	.0005	.0012
Stddev	.0005	.0127	.0001	.0003	.0000	.012	.0000	.0001	.0006
%RSD	121.5	55.61	13.33	3.017	40.27	.1656	26.82	13.12	44.82
#1	-.0004	.0188	-.0011	.0086	-.0001	7.346	-.0001	.0006	.0010
#2	.0001	.0371	-.0008	.0086	.0000	7.336	-.0001	.0005	.0019
#3	-.0009	.0127	-.0009	.0082	-.0001	7.322	-.0001	.0005	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0028	.0585	7.079	1.822	.0259	.0002	F160.7	.0054	.0001
Stddev	.0004	.0021	.032	.043	.0001	.0000	.7	.0002	.0004
%RSD	13.94	3.593	.4532	2.336	.1991	3.988	.4498	3.365	397.7
#1	.0033	.0605	7.062	1.792	.0259	.0002	161.5	.0052	-.0003
#2	.0025	.0563	7.059	1.871	.0259	.0002	160.7	.0055	.0000
#3	.0027	.0587	7.116	1.802	.0258	.0002	160.1	.0056	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0015	.1581	.0013	.0075	.0002	-.0001	.0001	.0614
Stddev	.0014	.0019	.0045	.0003	.0001	.0001	.0012	.0003	.0002
%RSD	160.6	129.7	2.815	23.89	1.084	39.73	1506.	208.4	.2529
#1	.0025	.0033	.1632	.0014	.0076	.0003	-.0001	.0004	.0614
#2	-.0002	-.0004	.1556	.0015	.0075	.0001	.0012	.0001	.0612
#3	.0003	.0015	.1555	.0009	.0074	.0002	-.0013	-.0001	.0615

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1125.9	2936.9	22605.	1576.7
Stddev	4.1	3.3	42.	10.0
%RSD	.36120	.11339	.18413	.63496
#1	1121.3	2936.6	22557.	1572.1
#2	1128.8	2933.8	22622.	1588.2
#3	1127.7	2940.4	22635.	1569.9

Zoom In Zoom Out

Sample Name: MP33757-SD1 Acquired: 5/17/2018 17:17:50 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0033	.0332	.0007	.0083	-.0011	7.803	-.0007	-.0001	.0009	.0029
Stddev	.0011	.0787	.0039	.0009	.0008	.068	.0002	.0002	.0021	.0006
%RSD	34.19	237.2	584.5	11.10	74.25	.8730	22.99	286.6	223.4	19.15
#1	-.0033	-.0577	-.0005	.0076	-.0009	7.749	-.0008	.0002	.0010	.0025
#2	-.0022	.0786	.0050	.0094	-.0020	7.781	-.0005	-.0002	.0029	.0027
#3	-.0045	.0785	-.0025	.0080	-.0004	7.880	-.0007	-.0003	-.0012	.0035

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0625	7.321	1.921	.0277	-.0024	171.3	.0050	-.0003	.0065	.0037
Stddev	.0108	.074	.226	.0000	.0007	.5	.0005	.0026	.0036	.0047
%RSD	17.27	1.013	11.75	.0913	27.86	.3199	10.08	850.7	54.64	128.2
#1	.0503	7.281	1.662	.0277	-.0018	171.0	.0048	.0027	.0029	.0063
#2	.0667	7.276	2.028	.0277	-.0024	170.9	.0046	-.0015	.0100	-.0018
#3	.0706	7.407	2.074	.0277	-.0031	171.9	.0056	-.0021	.0067	.0064

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1645	.0021	.0087	-.0011	.0005	-.0016	.0661
Stddev	.0046	.0011	.0002	.0005	.0050	.0003	.0005
%RSD	2.806	50.34	1.836	45.76	1081.	21.17	.7131
#1	.1636	.0016	.0088	-.0006	.0055	-.0013	.0666
#2	.1694	.0014	.0085	-.0016	.0003	-.0015	.0658
#3	.1603	.0033	.0088	-.0010	-.0045	-.0020	.0658

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1201.0	3059.5	23252.	1581.1
Stddev	4.0	4.5	93.	9.5
%RSD	.32984	.14553	.40187	.60077
#1	1197.0	3055.6	23186.	1587.2
#2	1204.9	3064.3	23211.	1570.2
#3	1201.1	3058.7	23359.	1585.9

Zoom In Zoom Out

Sample Name: MP33757-S1 Acquired: 5/17/2018 17:22:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0501	28.65	1.837	2.067	.0539	33.66	.0478	.4842	.2186
Stddev	.0009	.20	.005	.012	.0004	.31	.0002	.0009	.0003
%RSD	1.790	.7000	.2896	.5583	.6790	.9253	.3619	.1816	.1526
#1	.0493	28.58	1.843	2.056	.0542	33.63	.0480	.4850	.2185
#2	.0499	28.49	1.832	2.066	.0535	33.36	.0477	.4844	.2183
#3	.0511	28.87	1.835	2.079	.0540	33.98	.0477	.4833	.2189

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2664	26.44	31.85	26.03	.5183	.4463	F180.6	.4734	.4740
Stddev	.0007	.18	.16	.18	.0014	.0008	.8	.0011	.0028
%RSD	.2747	.6690	.5063	.6836	.2688	.1759	.4595	.2278	.5864
#1	.2655	26.35	31.77	25.85	.5170	.4471	181.1	.4746	.4723
#2	.2668	26.33	31.75	26.02	.5182	.4465	179.6	.4732	.4772
#3	.2668	26.65	32.04	26.20	.5197	.4455	181.0	.4724	.4725

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4718	1.851	.4983	.4318	.5292	.4959	1.847	.4672	.5320
Stddev	.0024	.002	.0012	.0012	.0025	.0020	.002	.0014	.0009
%RSD	.5045	.1261	.2358	.2887	.4802	.4075	.1234	.2957	.1622
#1	.4743	1.853	.4987	.4327	.5293	.4939	1.847	.4676	.5330
#2	.4695	1.851	.4970	.4323	.5266	.4960	1.844	.4656	.5314
#3	.4717	1.848	.4992	.4304	.5316	.4979	1.849	.4682	.5316

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1091.9	2964.3	22551.	1606.5
Stddev	1.4	8.8	105.	12.0
%RSD	.13047	.29557	.46466	.74724
#1	1092.0	2955.2	22539.	1604.5
#2	1090.4	2964.9	22662.	1619.4
#3	1093.2	2972.7	22454.	1595.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-S2 Acquired: 5/17/2018 17:26:10 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0497	28.84	1.858	2.096	.0547	34.18	.0485	.4916	.2215
Stddev	.0002	.17	.004	.005	.0001	.16	.0001	.0006	.0022
%RSD	.3278	.5773	.2088	.2631	.1909	.4551	.1258	.1246	1.015
#1	.0495	28.77	1.853	2.092	.0549	34.01	.0484	.4909	.2197
#2	.0499	29.04	1.859	2.093	.0547	34.32	.0485	.4921	.2240
#3	.0497	28.73	1.860	2.102	.0547	34.19	.0486	.4918	.2207

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2688	26.78	32.33	26.37	.5220	.4552	F184.9	.4788	.4842
Stddev	.0008	.09	.04	.22	.0027	.0014	1.0	.0009	.0017
%RSD	.3050	.3490	.1318	.8482	.5154	.2966	.5403	.1781	.3477
#1	.2679	26.69	32.30	26.13	.5193	.4537	184.7	.4778	.4842
#2	.2695	26.88	32.30	26.41	.5246	.4563	186.0	.4794	.4825
#3	.2691	26.77	32.38	26.57	.5221	.4556	184.1	.4792	.4859

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4774	1.868	.5111	.4388	.5396	.5033	1.873	.4741	.5418
Stddev	.0034	.004	.0024	.0012	.0023	.0031	.005	.0003	.0003
%RSD	.7204	.2374	.4615	.2690	.4207	.6062	.2739	.0725	.0600
#1	.4735	1.863	.5113	.4382	.5376	.5005	1.868	.4737	.5414
#2	.4799	1.872	.5087	.4380	.5420	.5066	1.874	.4743	.5420
#3	.4787	1.870	.5134	.4401	.5392	.5027	1.878	.4744	.5418

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1088.6	2964.3	22572.	1594.7
Stddev	1.2	3.0	69.	4.2
%RSD	.11124	.10007	.30412	.26079
#1	1088.8	2963.7	22604.	1599.3
#2	1089.7	2961.7	22493.	1593.5
#3	1087.3	2967.5	22619.	1591.3

Zoom In Zoom Out

Sample Name: FA54190-1L Acquired: 5/17/2018 17:30:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0177	-.0014	.0569	-.0001	53.77	.0003	.0006	.0006
Stddev	.0005	.0031	.0019	.0005	.0002	.16	.0000	.0000	.0001
%RSD	145.3	17.66	130.8	.8344	195.9	.2975	15.53	6.243	19.49
#1	.0000	.0153	-.0031	.0567	-.0001	53.78	.0003	.0006	.0006
#2	-.0001	.0165	.0005	.0574	.0001	53.92	.0003	.0007	.0008
#3	-.0009	.0212	-.0017	.0565	-.0002	53.61	.0004	.0006	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0005	.0089	.7200	.5418	.0880	-.0002	F168.7	.0002	.0012
Stddev	.0001	.0045	.0178	.0225	.0003	.0001	1.0	.0002	.0003
%RSD	30.30	50.63	2.476	4.151	.3094	39.10	.5932	86.89	26.57
#1	-.0003	.0140	.7405	.5465	.0878	-.0001	168.8	.0002	.0016
#2	-.0006	.0052	.7121	.5617	.0883	-.0003	169.7	.0001	.0009
#3	-.0005	.0076	.7076	.5174	.0879	-.0003	167.7	.0004	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0017	.1563	.0000	.2033	.0012	.0010	.0000	.0177
Stddev	.0007	.0007	.0005	.000	.0003	.0001	.0016	.000	.0002
%RSD	75.48	39.85	.3377	325.7	.1583	9.185	156.1	675.2	.9022
#1	.0018	.0025	.1558	-.0002	.2035	.0013	.0012	-.0002	.0175
#2	.0004	.0012	.1561	.0001	.2035	.0011	-.0007	.0003	.0178
#3	.0007	.0014	.1568	-.0001	.2030	.0013	.0026	-.0003	.0178

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1108.8	2921.9	22307.	1565.9
Stddev	1.7	5.2	86.	5.6
%RSD	.15285	.17785	.38520	.35849
#1	1107.0	2916.3	22401.	1559.7
#2	1108.9	2926.5	22232.	1570.7
#3	1110.4	2922.9	22289.	1567.2

Zoom In Zoom Out

Sample Name: FA54165-1 Acquired: 5/17/2018 17:34:26 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.3596	-.0006	.0129	.0000	.6942	-.0001	.0003	.0013
Stddev	.0005	.0212	.0005	.0001	.0001	.0092	.0001	.0000	.0004
%RSD	123.2	5.899	81.50	.8826	881.9	1.329	60.81	14.62	29.39
#1	.0001	.3358	-.0007	.0129	.0000	.6838	-.0001	.0003	.0009
#2	-.0010	.3766	-.0010	.0129	.0001	.7016	.0000	.0003	.0012
#3	-.0004	.3663	-.0001	.0127	.0000	.6970	-.0001	.0004	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	1.090	.3767	.0993	.0188	-.0004	F164.4	.0024	.0000
Stddev	.0002	.005	.0106	.0277	.0001	.0001	.8	.0000	.0004
%RSD	66.86	.4333	2.806	27.91	.7319	12.25	.4998	1.251	1375.
#1	-.0004	1.094	.3650	.0699	.0188	-.0004	164.7	.0023	.0000
#2	-.0002	1.091	.3798	.1249	.0187	-.0005	165.1	.0024	.0004
#3	-.0001	1.085	.3855	.1031	.0189	-.0004	163.5	.0024	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0010	.0037	.1717	.0003	.0036	.0004	-.0012	.0000	.0066
Stddev	.0009	.0007	.0018	.0003	.0001	.0001	.0007	.000	.0000
%RSD	93.32	20.25	1.036	110.1	3.340	17.37	54.12	140.6	.6962
#1	.0021	.0042	.1713	-.0001	.0035	.0004	-.0009	.0000	.0066
#2	.0005	.0028	.1737	.0006	.0037	.0004	-.0008	.0000	.0065
#3	.0004	.0040	.1702	.0004	.0035	.0005	-.0020	-.0001	.0066

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1131.4	2958.3	22767.	1605.7
Stddev	3.2	6.8	34.	7.2
%RSD	.27865	.22885	.15131	.45037
#1	1133.9	2965.7	22737.	1599.6
#2	1127.9	2957.0	22761.	1603.9
#3	1132.6	2952.3	22805.	1613.7

Zoom In Zoom Out

Sample Name: FA54166-1 Acquired: 5/17/2018 17:38:45 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.2068	-.0013	.0095	-.0002	.4966	-.0001	.0000	.0007
Stddev	.0000	.0062	.0001	.0001	.0000	.0091	.0000	.000	.0005
%RSD	2.297	2.975	11.25	1.252	10.95	1.834	25.93	1090.	65.93
#1	-.0007	.2001	-.0012	.0094	-.0002	.4923	-.0001	-.0001	.0012
#2	-.0007	.2080	-.0013	.0096	-.0002	.5071	-.0001	.0001	.0002
#3	-.0007	.2123	-.0015	.0096	-.0002	.4905	-.0001	-.0001	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0041	.7856	.3469	.0486	.0131	-.0005	F160.2	.0010	.0003
Stddev	.0002	.0103	.0239	.0380	.0002	.0001	.8	.0000	.0005
%RSD	5.209	1.310	6.881	78.11	1.313	14.01	.5015	3.998	156.1
#1	.0040	.7784	.3199	.0048	.0132	-.0005	160.5	.0010	-.0002
#2	.0043	.7974	.3553	.0705	.0131	-.0004	160.8	.0010	.0009
#3	.0039	.7811	.3654	.0706	.0129	-.0005	159.3	.0010	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	.0018	.1459	.0001	.0025	-.0003	-.0008	-.0004	.0087
Stddev	.0004	.0010	.0012	.0002	.0000	.0002	.0003	.0002	.0001
%RSD	27.52	55.17	.8399	285.9	1.828	51.92	38.65	53.29	1.049
#1	.0017	.0015	.1448	.0002	.0025	-.0001	-.0006	-.0006	.0086
#2	.0010	.0029	.1472	.0002	.0025	-.0003	-.0007	-.0002	.0088
#3	.0012	.0010	.1458	-.0002	.0024	-.0004	-.0012	-.0005	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1137.3	2970.1	22685.	1601.3
Stddev	2.4	9.7	40.	4.6
%RSD	.21510	.32810	.17443	.28759
#1	1135.8	2960.2	22655.	1606.6
#2	1136.1	2970.4	22730.	1598.6
#3	1140.2	2979.6	22670.	1598.7

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 17:43:05 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2441	43.59	1.852	2.035	2.114	43.46	1.977	1.966	2.178	2.065
Stddev	.0007	.22	.009	.016	.013	.18	.002	.003	.010	.001
%RSD	.2762	.4991	.5145	.7914	.6045	.4087	.1006	.1703	.4686	.0283
#1	.2435	43.44	1.841	2.027	2.108	43.35	1.974	1.962	2.188	2.065
#2	.2449	43.49	1.855	2.025	2.106	43.36	1.978	1.967	2.168	2.065
#3	.2441	43.84	1.860	2.054	2.129	43.66	1.978	1.968	2.177	2.064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.63	40.59	40.18	2.027	1.949	42.68	1.863	1.964	1.893	1.868
Stddev	.12	.22	.31	.003	.006	.26	.004	.008	.008	.009
%RSD	.2983	.5446	.7800	.1279	.2865	.6095	.2253	.3857	.4002	.4779
#1	41.60	40.45	40.03	2.024	1.942	42.66	1.859	1.969	1.885	1.859
#2	41.53	40.47	39.97	2.027	1.951	42.43	1.867	1.955	1.900	1.871
#3	41.77	40.85	40.54	2.029	1.952	42.95	1.864	1.968	1.894	1.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.423	1.829	2.155	2.080	1.962	2.007	1.947
Stddev	.006	.006	.013	.002	.006	.004	.001
%RSD	.2652	.3505	.5891	.0746	.2936	.2199	.0273
#1	2.416	1.822	2.153	2.080	1.964	2.005	1.947
#2	2.428	1.835	2.144	2.082	1.956	2.003	1.947
#3	2.426	1.830	2.169	2.079	1.967	2.011	1.948
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 17:43:05 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1109.0	3016.5	22904.	1610.6
Stddev	2.0	4.2	46.	10.0
%RSD	.17643	.13811	.20173	.62230
#1	1106.8	3021.1	22851.	1618.5
#2	1110.7	3012.9	22935.	1599.4
#3	1109.4	3015.5	22925.	1614.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 17:47:03 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0085	-.0003	.0004	.0001	.0045	.0001	.0001	.0006
Stddev	.0002	.0158	.0017	.0002	.0001	.0046	.0000	.0000	.0001
%RSD	292.7	185.2	495.4	50.99	219.4	101.5	17.92	58.40	22.17
#1	-.0001	.0015	-.0006	.0003	.0001	.0001	.0001	.0000	.0005
#2	.0002	.0266	.0015	.0006	.0002	.0042	.0001	.0001	.0007
#3	.0000	-.0025	-.0019	.0002	-.0001	.0093	.0001	.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	.0220	.0043	.0416	.0001	F.0031	-.0327	.0001	-.0003
Stddev	.0002	.0056	.0202	.0228	.0000	.0008	.0080	.0001	.0003
%RSD	19.51	25.34	474.4	54.83	30.81	27.39	24.37	156.2	101.8
#1	-.0012	.0284	.0244	.0666	.0001	.0039	-.0359	.0000	-.0001
#2	-.0009	.0196	.0043	.0364	.0001	.0030	-.0236	.0000	-.0006
#3	-.0009	.0181	-.0159	.0219	.0002	.0023	-.0386	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0007	.0000	.0003	.0003	.0013	F.0021	.0002	.0003
Stddev	.0003	.0005	.000	.0002	.0001	.0002	.0002	.0000	.0000
%RSD	242.1	71.31	774.0	55.94	35.12	13.31	7.453	22.40	10.91
#1	-.0001	.0002	-.0001	.0001	.0003	.0015	.0023	.0001	.0003
#2	.0000	.0012	.0001	.0005	.0004	.0013	.0021	.0001	.0003
#3	.0005	.0007	-.0001	.0004	.0002	.0012	.0020	.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 17:47:03 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1265.4	3140.3	23851.	1613.7
Stddev	1.5	4.1	79.	9.5
%RSD	.11481	.12993	.32982	.58728
#1	1264.0	3140.2	23897.	1605.2
#2	1266.9	3136.3	23896.	1624.0
#3	1265.3	3144.4	23761.	1611.9

Zoom In Zoom Out

Sample Name: FA54150-1L Acquired: 5/17/2018 17:51:21 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0072	-.0014	.0811	-.0001	81.68	.0000	-.0001	.0004
Stddev	.0004	.0132	.0010	.0003	.0002	.54	.000	.0001	.0004
%RSD	660.8	184.4	70.92	.3450	323.4	.6621	77.27	52.64	105.7
#1	-.0003	-.0068	-.0015	.0808	.0000	81.21	.0000	-.0001	.0003
#2	-.0003	.0087	-.0003	.0811	.0001	81.56	.0000	-.0002	.0008
#3	.0004	.0195	-.0023	.0813	-.0003	82.28	.0000	-.0001	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	.0021	.9168	3.410	.0707	.0003	F155.8	.0004	.0003
Stddev	.0002	.0033	.0263	.039	.0004	.0003	.7	.0002	.0007
%RSD	15.82	153.8	2.869	1.140	.5786	78.38	.4326	51.27	207.9
#1	-.0010	.0043	.8937	3.371	.0702	.0006	155.5	.0004	.0008
#2	-.0014	-.0016	.9112	3.410	.0711	.0003	155.3	.0006	.0008
#3	-.0012	.0036	.9454	3.448	.0707	.0001	156.6	.0002	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0027	.4578	.0000	.2223	.0017	.0000	.0009	.0028
Stddev	.0008	.0015	.0014	.0002	.0002	.0000	.001	.0002	.0001
%RSD	72.63	56.09	.3017	1025.	.0932	2.203	5070.	19.82	2.918
#1	.0005	.0045	.4574	.0002	.2221	.0018	-.0009	.0010	.0027
#2	.0019	.0015	.4566	.0001	.2222	.0017	-.0006	.0007	.0029
#3	.0008	.0022	.4593	-.0002	.2225	.0017	.0014	.0011	.0028

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1104.7	2915.3	22134.	1556.1
Stddev	4.4	1.9	32.	14.0
%RSD	.39403	.06600	.14435	.90279
#1	1101.1	2913.9	22164.	1568.7
#2	1103.5	2914.4	22137.	1558.7
#3	1109.5	2917.5	22100.	1541.0

Zoom In Zoom Out

Sample Name: FA54150-2L Acquired: 5/17/2018 17:55:37 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	-.0042	-.0019	.0881	-.0001	86.99	-.0001	-.0001	.0008
Stddev	.0004	.0079	.0004	.0003	.0001	.69	.0000	.0001	.0004
%RSD	89.91	188.9	19.99	.3065	89.03	.7883	14.24	228.9	47.20
#1	-.0009	-.0006	-.0018	.0878	-.0002	86.33	-.0001	-.0001	.0004
#2	-.0002	.0013	-.0022	.0884	-.0001	87.70	-.0001	-.0002	.0011
#3	-.0002	-.0133	-.0015	.0882	.0000	86.95	-.0001	.0001	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	-.0061	.8754	2.750	.0557	-.0002	F156.3	.0001	.0010
Stddev	.0004	.0037	.0203	.023	.0004	.0001	1.0	.0001	.0003
%RSD	29.22	59.99	2.324	.8426	.6757	54.74	.6540	107.1	33.42
#1	-.0009	-.0095	.8584	2.762	.0555	-.0001	155.5	.0000	.0013
#2	-.0016	-.0022	.8979	2.765	.0555	-.0002	157.5	.0002	.0011
#3	-.0012	-.0067	.8699	2.724	.0561	-.0003	156.1	.0002	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0025	.4699	-.0001	.1520	.0013	-.0013	.0005	.0013
Stddev	.0014	.0007	.0018	.0003	.0010	.0000	.0011	.0002	.0001
%RSD	137.1	28.64	.3879	314.3	.6792	2.036	84.20	43.01	7.714
#1	.0009	.0023	.4711	.0001	.1508	.0013	-.0011	.0008	.0012
#2	.0026	.0033	.4678	-.0004	.1527	.0013	-.0024	.0004	.0014
#3	-.0003	.0019	.4706	.0000	.1524	.0013	-.0003	.0004	.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1101.5	2918.4	22058.	1548.3
Stddev	2.2	7.6	62.	5.3
%RSD	.19764	.26177	.28117	.34051
#1	1101.8	2910.7	22115.	1550.8
#2	1099.2	2926.0	22066.	1542.3
#3	1103.5	2918.6	21992.	1551.9

Zoom In Zoom Out

Sample Name: FA54150-3L Acquired: 5/17/2018 17:59:53 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0027	-.0012	.0643	-.0001	83.30	-.0001	-.0002	.0038
Stddev	.0002	.0210	.0006	.0006	.0002	.70	.0000	.0001	.0003
%RSD	34.16	765.7	51.86	.9180	194.3	.8398	61.53	65.89	8.609
#1	-.0010	-.0170	-.0018	.0640	.0000	83.41	.0000	-.0002	.0041
#2	-.0005	.0248	-.0005	.0650	-.0004	83.94	-.0001	-.0001	.0035
#3	-.0006	.0004	-.0014	.0639	.0000	82.55	-.0001	-.0003	.0038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	-.0052	1.073	2.881	.0286	-.0002	F155.2	.0003	.0012
Stddev	.0003	.0032	.009	.062	.0002	.0001	1.5	.0000	.0006
%RSD	26.69	61.13	.8094	2.148	.6460	46.96	.9528	8.406	55.61
#1	-.0015	-.0068	1.077	2.931	.0284	-.0001	155.9	.0003	.0011
#2	-.0009	-.0073	1.063	2.900	.0286	-.0003	156.2	.0003	.0005
#3	-.0012	-.0015	1.079	2.812	.0287	-.0002	153.5	.0003	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0023	1.900	-.0001	.1969	.0012	-.0007	.0011	.0015
Stddev	.0003	.0007	.004	.0005	.0015	.0001	.0007	.0003	.0001
%RSD	33.96	32.15	.2040	329.8	.7760	10.74	105.1	29.40	4.314
#1	.0012	.0020	1.897	-.0003	.1973	.0012	-.0002	.0015	.0014
#2	.0010	.0031	1.899	.0004	.1981	.0014	-.0003	.0010	.0014
#3	.0006	.0017	1.904	-.0005	.1952	.0011	-.0015	.0008	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1103.8	2918.1	22145.	1578.3
Stddev	3.1	1.1	102.	11.6
%RSD	.28203	.03601	.46171	.73319
#1	1101.4	2918.7	22257.	1569.9
#2	1102.8	2916.9	22122.	1573.6
#3	1107.3	2918.7	22056.	1591.5

Zoom In Zoom Out

Sample Name: FA54150-4L Acquired: 5/17/2018 18:04:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.0000	-.0015	.0160	.0000	18.15	-.0001	.0000	.0036	-.0006
Stddev	.0004	.015	.0002	.0002	.0001	.05	.0001	.000	.0002	.0001
%RSD	73.03	50620.	13.04	1.558	658.1	.2964	68.15	667.6	4.302	22.33
#1	-.0009	.0033	-.0014	.0160	.0001	18.10	-.0001	.0001	.0035	-.0008
#2	-.0006	-.0159	-.0018	.0162	.0000	18.20	-.0001	.0000	.0038	-.0006
#3	-.0001	.0125	-.0015	.0157	.0000	18.16	.0000	-.0001	.0035	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0343	1.266	3.010	.0069	.0014	16.49	.0001	.0005	.0008	.0007
Stddev	.0035	.013	.047	.0001	.0001	.08	.0000	.0007	.0012	.0022
%RSD	10.19	1.055	1.565	1.600	9.664	.4770	7.351	149.2	138.4	327.7
#1	.0303	1.260	3.054	.0070	.0015	16.48	.0001	.0013	.0010	.0019
#2	.0368	1.257	2.961	.0068	.0013	16.57	.0001	.0000	-.0004	-.0018
#3	.0358	1.281	3.016	.0068	.0013	16.41	.0001	.0001	.0019	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7951	-.0001	.1644	.0006	-.0005	.0012	.0036
Stddev	.0026	.0000	.0003	.0001	.0009	.0001	.0001
%RSD	.3287	21.27	.1874	22.14	178.1	11.36	2.257
#1	.7922	-.0001	.1641	.0008	.0005	.0010	.0036
#2	.7960	-.0001	.1647	.0007	-.0013	.0013	.0037
#3	.7972	-.0001	.1644	.0005	-.0007	.0011	.0036

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1211.6	3032.5	23491.	1591.9
Stddev	4.9	7.7	188.	14.3
%RSD	.40827	.25381	.80237	.89632
#1	1206.0	3026.5	23289.	1575.6
#2	1213.6	3029.7	23662.	1598.7
#3	1215.2	3041.1	23521.	1601.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54150-5L Acquired: 5/17/2018 18:08:27 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0278	-.0011	.0170	-.0001	50.05	-.0001	-.0001	.0052	-.0007
Stddev	.0003	.0063	.0006	.0004	.0001	.30	.0001	.0001	.0004	.0002
%RSD	104.0	22.73	57.96	2.414	162.8	.6067	61.00	54.73	8.046	35.10
#1	-.0006	.0293	-.0013	.0168	-.0002	49.86	.0000	-.0001	.0056	-.0007
#2	-.0004	.0208	-.0004	.0175	.0000	50.40	-.0002	-.0001	.0053	-.0009
#3	.0000	.0332	-.0016	.0169	.0000	49.88	-.0001	-.0002	.0048	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0058	1.758	7.098	.0104	.0018	17.19	-.0001	.0009	.0008	.0031
Stddev	.0028	.019	.028	.0001	.0002	.09	.0001	.0009	.0012	.0012
%RSD	48.84	1.101	.3972	.8530	9.382	.5325	126.2	104.7	155.8	39.87
#1	.0033	1.737	7.102	.0105	.0017	17.12	-.0001	.0019	-.0006	.0019
#2	.0089	1.775	7.123	.0104	.0020	17.30	-.0001	.0006	.0017	.0029
#3	.0052	1.761	7.068	.0104	.0017	17.17	.0000	.0001	.0012	.0044

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7871	.0001	.3403	.0010	.0000	.0006	.0016
Stddev	.0005	.0003	.0022	.0001	.001	.0003	.0001
%RSD	.0661	494.6	.6421	7.767	1910.	49.01	4.759
#1	.7871	-.0002	.3399	.0010	.0008	.0008	.0015
#2	.7865	.0001	.3427	.0011	-.0005	.0008	.0017
#3	.7876	.0003	.3384	.0009	-.0005	.0003	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1185.9	3002.4	23234.	1605.8
Stddev	3.4	7.8	157.	8.2
%RSD	.28924	.26022	.67636	.51363
#1	1182.2	2994.1	23159.	1613.8
#2	1189.0	3009.6	23414.	1597.4
#3	1186.4	3003.5	23128.	1606.1

Zoom In Zoom Out

Sample Name: FA54199-1 Acquired: 5/17/2018 18:12:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.4129	-.0023	.7423	.0000	186.3	-.0001	-.0002	.0003	-.0014
Stddev	.0002	.0110	.0007	.0012	.000	.6	.0001	.0001	.0003	.0003
%RSD	48.68	2.658	28.58	.1582	268.2	.3248	75.47	56.53	107.8	18.14
#1	-.0007	.4013	-.0019	.7427	.0000	185.8	-.0002	-.0003	-.0001	-.0016
#2	-.0003	.4143	-.0031	.7410	.0000	187.0	-.0001	-.0001	.0005	-.0015
#3	-.0004	.4232	-.0020	.7432	-.0001	186.1	.0000	-.0004	.0004	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0025	16.77	.0166	.0001	-.0008	48.52	-.0003	.0010	.0010	.0025
Stddev	.0030	.05	.0414	.0001	.0002	.13	.0001	.0004	.0002	.0011
%RSD	122.7	.2865	249.8	74.98	22.02	.2778	23.98	42.82	22.39	44.12
#1	.0006	16.80	.0626	.0001	-.0010	48.49	-.0002	.0006	.0008	.0018
#2	-.0025	16.78	-.0179	.0000	-.0006	48.66	-.0003	.0009	.0012	.0019
#3	-.0055	16.71	.0051	.0001	-.0008	48.39	-.0003	.0015	.0009	.0038

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0811	.0001	.8257	.0013	-.0007	.0002	.0006
Stddev	.0008	.0003	.0015	.0001	.0003	.0003	.0000
%RSD	.9378	482.6	.1803	8.577	42.25	160.4	1.333
#1	.0820	.0001	.8245	.0013	-.0008	-.0001	.0006
#2	.0805	-.0002	.8252	.0014	-.0004	.0003	.0006
#3	.0809	.0003	.8273	.0012	-.0009	.0004	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1109.3	2892.7	22402.	1599.2
Stddev	1.1	6.9	57.	12.9
%RSD	.10344	.23708	.25530	.80497
#1	1108.1	2894.1	22374.	1607.6
#2	1109.4	2885.2	22467.	1584.4
#3	1110.4	2898.7	22363.	1605.6

Zoom In Zoom Out

Sample Name: FA54116-1 Acquired: 5/17/2018 18:17:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0506	-.0019	.5690	-.0001	257.1	-.0001	-.0002	.0009	-.0010
Stddev	.0003	.0311	.0008	.0018	.0000	1.1	.0000	.0001	.0003	.0002
%RSD	90.35	61.39	44.36	.3099	45.12	.4173	17.00	46.84	36.87	23.54
#1	-.0001	.0830	-.0012	.5705	-.0001	256.1	-.0001	-.0002	.0013	-.0009
#2	-.0002	.0211	-.0028	.5671	-.0001	257.1	-.0001	-.0001	.0008	-.0012
#3	-.0006	.0476	-.0017	.5695	-.0001	258.2	-.0001	-.0002	.0006	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0053	2.170	.0290	.0000	-.0003	9.361	-.0003	.0008	.0007	.0052
Stddev	.0044	.029	.0445	.0001	.0002	.043	.0001	.0005	.0011	.0009
%RSD	82.77	1.318	153.5	587.0	78.87	.4605	27.29	68.54	150.1	16.37
#1	-.0002	2.166	-.0206	.0001	-.0002	9.320	-.0004	.0013	.0006	.0052
#2	-.0079	2.144	.0655	-.0001	-.0001	9.356	-.0003	.0008	-.0003	.0044
#3	-.0078	2.200	.0421	.0000	-.0006	9.406	-.0002	.0002	.0019	.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0857	.0001	.3577	.0011	-.0007	-.0003	.0016
Stddev	.0040	.0001	.0008	.0000	.0011	.0002	.0000
%RSD	4.715	74.01	.2361	4.137	152.5	83.25	1.637
#1	.0844	.0000	.3569	.0012	-.0020	.0000	.0016
#2	.0824	.0001	.3576	.0011	.0002	-.0004	.0015
#3	.0902	.0001	.3586	.0011	-.0005	-.0003	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1109.3	2886.1	22279.	1569.4
Stddev	2.2	6.8	27.	8.6
%RSD	.19629	.23586	.11961	.54838
#1	1107.4	2882.7	22260.	1572.2
#2	1111.7	2881.7	22268.	1559.8
#3	1108.8	2894.0	22309.	1576.3

Zoom In Zoom Out

Sample Name: FA54233-1L Acquired: 5/17/2018 18:21:18 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0027	-.0018	.0612	-.0001	80.42	.0001	-.0001	.0006
Stddev	.0005	.0137	.0010	.0007	.0001	.57	.0000	.0000	.0002
%RSD	97.01	514.8	55.28	1.121	127.6	.7111	59.98	29.40	26.22
#1	.0000	-.0130	-.0028	.0604	-.0001	79.83	.0001	-.0001	.0005
#2	-.0006	.0121	-.0008	.0617	-.0002	80.45	.0001	-.0001	.0008
#3	-.0009	.0089	-.0018	.0615	.0000	80.97	.0000	-.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0011	-.0026	.3013	.3114	.0077	-.0009	F154.8	-.0003	.0004
Stddev	.0002	.0006	.0220	.0320	.0001	.0001	1.0	.0004	.0004
%RSD	15.18	23.18	7.301	10.27	.7915	15.47	.6527	141.6	93.90
#1	-.0011	-.0027	.2832	.2840	.0077	-.0007	153.7	-.0007	.0007
#2	-.0009	-.0032	.2950	.3037	.0078	-.0009	155.5	.0000	.0006
#3	-.0012	-.0020	.3258	.3465	.0077	-.0010	155.3	-.0001	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0026	.0837	.0001	.1712	.0013	-.0003	.0000	.0156
Stddev	.0008	.0011	.0034	.0003	.0014	.0000	.0007	.000	.0000
%RSD	215.2	40.41	4.014	529.5	.8203	1.722	260.5	1843.	.2095
#1	.0004	.0014	.0876	-.0001	.1696	.0013	-.0011	.0000	.0157
#2	-.0004	.0035	.0819	-.0001	.1717	.0013	.0002	.0002	.0156
#3	.0011	.0030	.0816	.0004	.1723	.0012	.0001	-.0002	.0157

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1106.8	2926.5	22199.	1567.4
Stddev	2.2	10.4	124.	15.3
%RSD	.20113	.35578	.55881	.97344
#1	1108.0	2918.5	22337.	1576.6
#2	1108.2	2938.3	22095.	1575.8
#3	1104.2	2922.6	22166.	1549.8

Zoom In Zoom Out

Sample Name: MP33757-D2 Acquired: 5/17/2018 18:25:36 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0060	-.0009	.0084	-.0001	7.298	-.0001	.0006	.0009
Stddev	.0001	.0152	.0006	.0001	.0003	.051	.0000	.0002	.0001
%RSD	16.27	252.1	66.24	.7078	287.9	.7049	26.21	28.92	17.42
#1	-.0004	-.0115	-.0016	.0084	-.0002	7.269	-.0001	.0006	.0007
#2	-.0005	.0149	-.0004	.0084	-.0002	7.358	-.0001	.0004	.0009
#3	-.0004	.0146	-.0007	.0083	.0002	7.268	-.0002	.0007	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0022	.0491	6.626	1.634	.0255	-.0002	F 158.6	.0051	-.0002
Stddev	.0001	.0029	.037	.013	.0003	.0002	.7	.0000	.0003
%RSD	5.031	5.825	.5613	.7636	1.164	122.0	.4395	.9429	142.8
#1	.0023	.0495	6.616	1.639	.0252	-.0002	158.8	.0051	-.0005
#2	.0022	.0518	6.667	1.644	.0258	-.0004	159.1	.0051	.0001
#3	.0021	.0461	6.595	1.620	.0254	.0001	157.8	.0052	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0031	.1484	.0009	.0076	.0001	-.0012	.0000	.0604
Stddev	.0005	.0007	.0006	.0003	.0001	.0001	.0003	.0005	.0002
%RSD	59.36	22.96	.3832	33.04	1.795	115.4	26.49	3779.	.3839
#1	.0013	.0024	.1480	.0012	.0074	.0002	-.0016	-.0002	.0606
#2	.0005	.0038	.1482	.0009	.0076	.0001	-.0009	-.0004	.0601
#3	.0005	.0029	.1491	.0006	.0077	.0000	-.0011	.0006	.0604

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1126.8	2949.4	22436.	1581.0
Stddev	1.7	6.0	109.	5.2
%RSD	.14813	.20321	.48511	.33084
#1	1125.7	2942.8	22537.	1578.5
#2	1126.0	2951.0	22321.	1577.4
#3	1128.7	2954.5	22451.	1587.0

Zoom In Zoom Out

Sample Name: MP33757-D3 Acquired: 5/17/2018 18:29:54 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.4022	-.0018	.7382	.0000	187.2	-.0001	-.0001	.0004	-.0014
Stddev	.0003	.0178	.0005	.0038	.000	.5	.0000	.0000	.0001	.0003
%RSD	124.6	4.417	25.31	.5083	66.61	.2429	15.07	33.49	29.86	19.80
#1	.0001	.4153	-.0023	.7416	.0000	187.5	-.0001	-.0002	.0005	-.0013
#2	-.0004	.3820	-.0014	.7387	.0000	187.5	-.0001	-.0001	.0004	-.0012
#3	-.0005	.4093	-.0017	.7342	-.0001	186.7	-.0001	-.0001	.0003	-.0017

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0011	16.70	.0196	.0000	-.0007	48.23	-.0003	.0005	.0016	.0005
Stddev	.0019	.06	.0108	.0000	.0001	.18	.0002	.0008	.0008	.0011
%RSD	173.1	.3713	54.87	226.3	7.903	.3789	74.62	167.2	52.73	212.2
#1	-.0024	16.74	.0280	.0000	-.0006	48.41	-.0002	.0013	.0020	-.0007
#2	-.0020	16.73	.0234	.0000	-.0007	48.23	-.0006	.0006	.0006	.0011
#3	.0011	16.63	.0075	.0001	-.0008	48.05	-.0002	-.0004	.0021	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0803	-.0002	.8248	.0011	-.0019	.0001	.0018
Stddev	.0011	.0002	.0014	.0001	.0004	.0002	.0000
%RSD	1.423	107.3	.1732	6.501	23.45	297.8	1.711
#1	.0795	-.0005	.8265	.0012	-.0019	.0002	.0018
#2	.0816	.0000	.8240	.0012	-.0023	-.0002	.0018
#3	.0798	-.0001	.8240	.0010	-.0014	.0002	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1108.2	2890.0	22226.	1580.0
Stddev	1.5	4.6	47.	5.4
%RSD	.13942	.16076	.21106	.34310
#1	1107.0	2886.9	22173.	1580.5
#2	1109.9	2887.9	22264.	1574.3
#3	1107.7	2895.4	22240.	1585.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 18:34:11 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2412	43.44	1.842	2.053	2.116	43.47	1.968	1.957	2.165	2.049
Stddev	.0013	.27	.004	.014	.013	.34	.003	.003	.009	.003
%RSD	.5362	.6143	.2455	.6999	.6275	.7856	.1572	.1488	.4353	.1386
#1	.2426	43.28	1.839	2.043	2.108	43.28	1.964	1.954	2.176	2.047
#2	.2410	43.75	1.847	2.070	2.132	43.87	1.970	1.959	2.160	2.052
#3	.2400	43.30	1.841	2.047	2.109	43.27	1.969	1.957	2.159	2.048

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.37	40.75	40.16	2.001	1.938	42.77	1.852	1.954	1.875	1.853
Stddev	.20	.33	.46	.014	.005	.28	.004	.005	.003	.010
%RSD	.4727	.7980	1.144	.7037	.2639	.6521	.2297	.2736	.1654	.5294
#1	41.24	40.64	39.89	2.017	1.932	42.74	1.848	1.951	1.874	1.849
#2	41.60	41.11	40.69	1.997	1.939	43.06	1.851	1.951	1.879	1.847
#3	41.28	40.49	39.90	1.990	1.942	42.51	1.857	1.960	1.873	1.865

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.405	1.820	2.151	2.056	1.949	1.994	1.942
Stddev	.004	.003	.011	.009	.007	.004	.004
%RSD	.1561	.1817	.5083	.4485	.3542	.2079	.1998
#1	2.401	1.817	2.145	2.064	1.948	1.998	1.938
#2	2.409	1.824	2.163	2.058	1.943	1.990	1.943
#3	2.404	1.820	2.144	2.046	1.957	1.993	1.946

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 18:34:11 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1108.9	3018.4	23025.	1615.8
Stddev	3.0	4.8	128.	24.0
%RSD	.27025	.15848	.55436	1.4836
#1	1109.6	3023.8	22879.	1627.8
#2	1111.6	3015.0	23085.	1588.2
#3	1105.7	3016.3	23112.	1631.4

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 18:38:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0138	.0001	.0006	.0001	.0075	.0001	.0000	.0006
Stddev	.0003	.0076	.0008	.0002	.0000	.0041	.0001	.0001	.0001
%RSD	48.91	54.89	578.5	41.03	34.00	55.26	56.79	314.4	14.03
#1	-.0006	.0054	.0004	.0008	.0001	.0115	.0002	.0000	.0006
#2	-.0009	.0200	.0007	.0003	.0001	.0032	.0001	.0001	.0006
#3	-.0003	.0160	-.0007	.0007	.0001	.0077	.0001	.0000	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0013	.0240	.0376	.0419	.0001	F.0032	-.0381	-.0002	.0001
Stddev	.0002	.0052	.0314	.0269	.0000	.0011	.0125	.0002	.0003
%RSD	15.31	21.69	83.61	64.13	33.59	34.58	32.69	139.3	272.5
#1	-.0011	.0299	.0413	.0594	.0002	.0044	-.0239	-.0004	.0003
#2	-.0014	.0215	.0045	.0555	.0002	.0032	-.0470	-.0001	.0002
#3	-.0015	.0204	.0670	.0110	.0001	.0021	-.0435	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0011	.0001	.0004	.0003	.0015	.0015	.0000	.0002
Stddev	.0006	.0009	.0004	.0002	.0001	.0001	.0002	.0001	.0000
%RSD	66.96	84.68	252.6	44.42	30.68	6.453	12.18	203.6	14.52
#1	.0003	.0021	.0005	.0005	.0003	.0015	.0017	.0000	.0002
#2	.0008	.0010	.0002	.0004	.0003	.0016	.0015	.0002	.0002
#3	.0014	.0002	-.0002	.0002	.0005	.0014	.0013	.0000	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 18:38:09 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1261.1	3139.4	23560.	1596.2
Stddev	1.2	6.1	100.	16.1
%RSD	.09617	.19451	.42595	1.0101
#1	1262.4	3146.0	23514.	1579.0
#2	1260.1	3138.1	23492.	1611.0
#3	1260.9	3134.0	23676.	1598.4

Zoom In Zoom Out

Sample Name: MP33757-D4 Acquired: 5/17/2018 18:42:28 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.0167	-.0009	.0817	.0000	81.59	.0000	-.0001	.0010
Stddev	.0005	.0016	.0002	.0008	.000	.29	.000	.0001	.0006
%RSD	84.37	9.286	17.72	.9791	766.6	.3561	70.30	61.91	56.74
#1	-.0001	.0151	-.0010	.0810	.0001	81.35	.0000	-.0001	.0004
#2	-.0012	.0168	-.0010	.0825	.0000	81.91	-.0001	-.0001	.0015
#3	-.0006	.0182	-.0007	.0815	-.0001	81.50	.0000	-.0002	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0008	.0018	.9138	3.370	.0714	.0004	F156.2	.0002	.0003
Stddev	.0002	.0039	.0208	.034	.0003	.0001	.2	.0001	.0001
%RSD	24.63	218.8	2.276	1.009	.3941	36.07	.1554	43.74	32.41
#1	-.0008	.0017	.8900	3.350	.0717	.0004	156.1	.0003	.0004
#2	-.0010	.0058	.9286	3.410	.0713	.0005	156.5	.0002	.0002
#3	-.0006	-.0021	.9228	3.351	.0712	.0002	156.0	.0001	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0000	.0025	.4646	-.0001	.2241	.0018	-.0001	.0009	.0025
Stddev	.0003	.0016	.0014	.0002	.0009	.0001	.0015	.0001	.0001
%RSD	760.4	65.00	.3099	128.7	.3847	3.135	1035.	12.55	3.827
#1	.0003	.0041	.4652	-.0003	.2237	.0017	-.0004	.0010	.0026
#2	.0002	.0010	.4656	.0000	.2251	.0018	-.0015	.0008	.0025
#3	-.0003	.0023	.4629	-.0001	.2235	.0018	.0015	.0008	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1099.6	2898.9	22177.	1571.5
Stddev	5.0	4.6	56.	14.9
%RSD	.45563	.15821	.25083	.94895
#1	1093.8	2893.9	22115.	1585.9
#2	1102.0	2900.0	22197.	1556.1
#3	1103.0	2902.9	22220.	1572.5

Zoom In Zoom Out

Sample Name: MP33757-MB2 Acquired: 5/17/2018 18:46:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	-.0011	-.0008	.0000	-.0002	.0128	-.0001	-.0001	.0002	-.0012
Stddev	.0001	.0193	.0013	.001	.0001	.0044	.0000	.0001	.0001	.0002
%RSD	9.523	1691.	162.0	2020.	38.78	34.00	23.57	103.9	35.42	17.88
#1	-.0007	.0212	.0007	.0005	-.0002	.0133	-.0001	-.0002	.0002	-.0010
#2	-.0008	-.0129	-.0017	-.0002	-.0002	.0169	-.0001	.0000	.0002	-.0011
#3	-.0009	-.0117	-.0014	-.0004	-.0001	.0082	-.0001	-.0001	.0003	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0048	.0182	.0383	.0000	-.0003	-.0044	-.0002	-.0005	.0005	.0012
Stddev	.0012	.0132	.0044	.000	.0001	.0060	.0002	.0005	.0005	.0003
%RSD	24.86	72.36	11.48	152.8	22.19	137.5	133.0	98.52	99.82	23.20
#1	-.0036	.0033	.0430	-.0001	-.0004	.0026	.0000	.0000	.0001	.0010
#2	-.0060	.0282	.0342	.0000	-.0003	-.0076	-.0004	-.0004	.0011	.0015
#3	-.0047	.0231	.0377	.0000	-.0004	-.0081	-.0001	-.0010	.0004	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0198	.0001	.0001	-.0003	-.0006	-.0002	.0012
Stddev	.0006	.0001	.0001	.0000	.0007	.0000	.0001
%RSD	2.940	92.19	108.4	19.03	118.3	17.08	8.636
#1	.0197	.0000	.0000	-.0002	-.0010	-.0002	.0011
#2	.0192	.0001	.0000	-.0002	.0002	-.0002	.0013
#3	.0204	.0003	.0003	-.0003	-.0011	-.0002	.0012
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP33757-MB2 Acquired: 5/17/2018 18:46:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1258.7	3122.3	23731.	1597.2
Stddev	5.4	12.9	98.	13.3
%RSD	.42727	.41249	.41468	.83227
#1	1253.0	3107.5	23800.	1583.2
#2	1263.7	3131.4	23774.	1609.7
#3	1259.4	3127.9	23618.	1598.8

Zoom In Zoom Out

Sample Name: MP33757-B2 Acquired: 5/17/2018 18:51:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0490	28.97	1.797	2.068	.0545	27.21	.0485	.4915	.2214	.2611
Stddev	.0001	.19	.003	.009	.0003	.18	.0001	.0002	.0010	.0008
%RSD	.1897	.6429	.1850	.4560	.4824	.6521	.2722	.0379	.4393	.3111
#1	.0489	28.96	1.795	2.059	.0547	27.22	.0485	.4914	.2223	.2620
#2	.0490	29.15	1.801	2.078	.0545	27.39	.0483	.4914	.2204	.2604
#3	.0491	28.78	1.796	2.068	.0542	27.03	.0486	.4917	.2215	.2607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.65	24.93	24.84	.5000	.4516	26.53	.4746	.4726	.4665	1.799
Stddev	.13	.12	.07	.0040	.0004	.14	.0003	.0026	.0012	.004
%RSD	.4977	.4679	.2793	.7960	.0869	.5196	.0528	.5458	.2472	.2165
#1	26.60	24.93	24.81	.5044	.4515	26.55	.4748	.4756	.4676	1.797
#2	26.80	25.04	24.79	.4968	.4512	26.65	.4743	.4717	.4667	1.796
#3	26.55	24.81	24.92	.4988	.4520	26.38	.4748	.4707	.4653	1.803
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3586	.4372	.5285	.5014	1.861	.4707	.4794
Stddev	.0015	.0009	.0023	.0019	.003	.0019	.0006
%RSD	.4125	.2065	.4412	.3788	.1679	.3992	.1334
#1	.3594	.4362	.5280	.5033	1.864	.4728	.4801
#2	.3569	.4380	.5310	.4995	1.858	.4696	.4791
#3	.3594	.4375	.5265	.5014	1.862	.4696	.4789
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33757-B2 Acquired: 5/17/2018 18:51:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1143.2	3010.7	22824.	1561.7
Stddev	3.6	4.4	117.	8.1
%RSD	.31878	.14752	.51274	.51582
#1	1139.7	3006.9	22689.	1565.4
#2	1143.0	3009.8	22889.	1552.4
#3	1146.9	3015.6	22894.	1567.2

Zoom In Zoom Out

Sample Name: MP33757-MB3 Acquired: 5/17/2018 18:55:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0044	-.0015	.0001	-.0001	.0046	-.0001	-.0002	.0002	-.0014
Stddev	.0001	.0169	.0003	.0001	.0001	.0056	.0000	.0001	.0003	.0003
%RSD	32.15	384.0	16.83	67.95	187.1	121.2	19.86	32.65	148.5	19.46
#1	-.0003	.0136	-.0016	.0001	.0001	.0108	-.0001	-.0002	.0002	-.0016
#2	-.0002	-.0199	-.0012	.0003	-.0001	-.0002	-.0001	-.0002	-.0001	-.0011
#3	-.0002	-.0069	-.0016	.0001	-.0002	.0033	-.0001	-.0001	.0006	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071	-.0045	.0362	.0000	-.0001	-.0444	-.0003	.0001	.0010	.0011
Stddev	.0011	.0137	.0294	.000	.0001	.0066	.0001	.0008	.0011	.0015
%RSD	15.61	306.1	81.25	336.4	223.4	14.94	23.10	1000.	103.6	136.0
#1	.0064	.0033	.0681	.0000	.0001	-.0368	-.0003	.0004	.0012	.0017
#2	.0084	.0036	.0303	.0000	-.0001	-.0484	-.0004	-.0008	.0020	.0023
#3	.0066	-.0203	.0102	.0000	-.0002	-.0481	-.0003	.0006	-.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0193	-.0003	.0000	-.0001	.0000	.0000	.0011
Stddev	.0003	.0002	.0000	.0001	.0009	.000	.0001
%RSD	1.354	71.52	35.54	83.60	17120.	1047.	9.286
#1	.0190	-.0001	.0000	.0000	.0004	.0001	.0009
#2	.0194	-.0002	.0001	-.0001	.0006	-.0005	.0011
#3	.0194	-.0005	.0000	-.0001	-.0010	.0003	.0011
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-MB3 Acquired: 5/17/2018 18:55:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1255.4	3094.6	23800.	1600.8
Stddev	1.1	3.9	37.	10.6
%RSD	.08745	.12501	.15364	.66072
#1	1255.4	3090.3	23793.	1611.9
#2	1254.3	3095.8	23840.	1599.9
#3	1256.5	3097.8	23768.	1590.8

Zoom In Zoom Out

Sample Name: MP33757-B3 Acquired: 5/17/2018 18:59:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0495	29.04	1.859	2.108	.0548	27.36	.0497	.5031	.2235	.2631
Stddev	.0001	.07	.004	.003	.0003	.06	.0001	.0010	.0010	.0009
%RSD	.1701	.2538	.1941	.1375	.5826	.2352	.2975	.1994	.4309	.3561
#1	.0494	29.07	1.855	2.110	.0548	27.33	.0495	.5020	.2225	.2621
#2	.0496	28.95	1.859	2.110	.0552	27.32	.0498	.5035	.2244	.2635
#3	.0495	29.09	1.862	2.105	.0546	27.43	.0498	.5039	.2236	.2638
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.87	25.24	25.28	.5063	.4631	26.63	.4895	.4836	.4797	1.839
Stddev	.07	.07	.06	.0035	.0014	.10	.0011	.0007	.0025	.005
%RSD	.2473	.2595	.2192	.6982	.3000	.3620	.2238	.1372	.5300	.2746
#1	26.80	25.30	25.23	.5023	.4615	26.71	.4883	.4843	.4796	1.835
#2	26.87	25.17	25.34	.5091	.4641	26.52	.4901	.4831	.4772	1.836
#3	26.93	25.24	25.27	.5073	.4636	26.66	.4902	.4833	.4823	1.845
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3711	.4566	.5338	.5075	1.904	.4795	.4931
Stddev	.0006	.0017	.0008	.0039	.007	.0012	.0017
%RSD	.1517	.3627	.1533	.7742	.3519	.2515	.3476
#1	.3705	.4547	.5329	.5030	1.904	.4784	.4912
#2	.3712	.4576	.5339	.5105	1.897	.4794	.4941
#3	.3716	.4576	.5345	.5088	1.910	.4808	.4941
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP33757-B3 Acquired: 5/17/2018 18:59:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1139.6	2987.8	22961.	1560.4
Stddev	.8	3.2	80.	2.6
%RSD	.07436	.10684	.34779	.16414
#1	1139.0	2989.2	23050.	1560.0
#2	1140.6	2990.0	22894.	1558.1
#3	1139.4	2984.1	22940.	1563.2

Zoom In Zoom Out

Sample Name: MP33757-MB4 Acquired: 5/17/2018 19:03:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0103	-.0011	.0014	-.0001	.0607	-.0001	-.0001	.0002
Stddev	.0003	.0031	.0002	.0002	.0001	.0027	.0001	.0000	.0003
%RSD	99.89	29.53	14.75	12.64	94.44	4.485	85.99	23.05	170.3
#1	-.0006	.0079	-.0013	.0012	-.0001	.0633	-.0002	-.0001	.0001
#2	-.0002	.0094	-.0012	.0013	-.0001	.0579	-.0001	-.0002	.0006
#3	-.0001	.0138	-.0010	.0015	.0000	.0610	.0000	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0179	.2527	.0237	.0006	-.0002	F155.2	-.0002	-.0001
Stddev	.0002	.0018	.0088	.0053	.0000	.0001	.3	.0000	.0007
%RSD	21.27	10.20	3.487	22.33	5.911	60.71	.1617	15.75	692.7
#1	-.0014	.0195	.2594	.0209	.0006	-.0001	154.9	-.0002	.0000
#2	-.0010	.0184	.2427	.0298	.0006	-.0003	155.4	-.0002	.0005
#3	-.0010	.0159	.2561	.0204	.0006	-.0002	155.2	-.0002	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0032	.0379	.0003	.0016	.0000	.0004	-.0001	.0032
Stddev	.0006	.0009	.0019	.0002	.0001	.000	.0007	.0002	.0001
%RSD	205.8	29.29	4.981	78.48	6.447	4742.	153.2	154.2	2.491
#1	.0004	.0027	.0391	.0001	.0016	.0000	.0003	.0000	.0031
#2	-.0009	.0026	.0389	.0002	.0017	.0001	-.0001	-.0003	.0033
#3	-.0004	.0042	.0357	.0006	.0015	-.0001	.0012	-.0001	.0032
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33757-MB4 Acquired: 5/17/2018 19:03:23 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1134.1	2947.8	22539.	1575.7
Stddev	1.5	6.3	204.	13.2
%RSD	.13510	.21326	.90398	.83882
#1	1133.2	2950.8	22732.	1587.8
#2	1133.3	2940.5	22326.	1561.6
#3	1135.9	2952.0	22559.	1577.6

Zoom In Zoom Out

Sample Name: MP33757-B4 Acquired: 5/17/2018 19:07:43 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0512	28.92	1.899	2.101	.0547	27.15	.0496	.4994	.2234
Stddev	.0006	.11	.001	.006	.0001	.03	.0002	.0006	.0014
%RSD	1.090	.3827	.0731	.2793	.2076	.1286	.3108	.1228	.6235
#1	.0518	28.88	1.900	2.108	.0546	27.13	.0497	.4999	.2220
#2	.0510	28.84	1.897	2.100	.0548	27.13	.0494	.4987	.2248
#3	.0508	29.05	1.898	2.096	.0548	27.19	.0496	.4995	.2235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2666	27.01	25.91	24.92	.5126	.4641	F180.5	.4877	.4883
Stddev	.0012	.09	.04	.20	.0025	.0008	.2	.0008	.0017
%RSD	.4528	.3347	.1711	.8142	.4897	.1734	.1369	.1539	.3448
#1	.2675	26.91	25.92	24.91	.5121	.4636	180.2	.4885	.4898
#2	.2671	27.07	25.96	24.71	.5153	.4650	180.5	.4870	.4865
#3	.2653	27.06	25.87	25.12	.5104	.4636	180.7	.4877	.4886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4866	1.910	.3924	.4519	.5352	.5149	1.893	.4831	.4961
Stddev	.0014	.009	.0014	.0006	.0018	.0017	.002	.0006	.0006
%RSD	.2826	.4994	.3673	.1392	.3277	.3311	.1070	.1273	.1295
#1	.4851	1.905	.3936	.4525	.5332	.5149	1.891	.4827	.4963
#2	.4871	1.921	.3908	.4520	.5366	.5166	1.895	.4838	.4966
#3	.4877	1.904	.3928	.4512	.5357	.5132	1.892	.4829	.4953
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP33757-B4 Acquired: 5/17/2018 19:07:43 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1089.6	2933.0	22361.	1582.9
Stddev	2.4	8.8	101.	8.6
%RSD	.21980	.30168	.45077	.54150
#1	1087.0	2923.7	22376.	1588.2
#2	1091.7	2933.9	22254.	1587.6
#3	1090.1	2941.3	22454.	1573.0

Zoom In Zoom Out

Sample Name: MP33739-MB1 Acquired: 5/17/2018 19:11:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0040	-.0014	.0001	-.0001	.0056	-.0001	-.0002	.0000	-.0016
Stddev	.0002	.0156	.0005	.0002	.0001	.0040	.0000	.0001	.0004	.0001
%RSD	34.65	385.3	38.51	316.7	109.6	71.16	23.90	70.41	873.7	7.295
#1	-.0008	-.0139	-.0017	-.0001	.0000	.0053	-.0001	-.0003	-.0002	-.0015
#2	-.0008	.0133	-.0008	.0003	-.0002	.0018	-.0001	.0000	-.0001	-.0016
#3	-.0004	.0128	-.0017	.0000	.0000	.0097	-.0001	-.0003	.0005	-.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075	.0208	.0410	.0000	-.0002	.0148	-.0001	-.0004	.0003	.0023
Stddev	.0008	.0386	.0123	.0000	.0000	.0059	.0002	.0005	.0012	.0007
%RSD	10.43	185.3	30.01	59.75	22.65	39.78	141.9	124.2	345.4	30.62
#1	.0071	-.0012	.0304	.0000	-.0002	.0209	.0000	-.0003	.0002	.0019
#2	.0084	.0654	.0545	.0000	-.0001	.0141	-.0001	.0000	-.0008	.0031
#3	.0069	-.0018	.0381	.0000	-.0002	.0092	-.0003	-.0010	.0016	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0196	.0002	.0000	-.0002	.0013	.0000	.0017
Stddev	.0005	.0001	.000	.0000	.0007	.0003	.0000
%RSD	2.310	45.26	131.7	10.41	52.93	1354.	1.292
#1	.0193	.0002	-.0001	-.0002	.0005	.0003	.0016
#2	.0201	.0001	.0000	-.0002	.0017	.0000	.0017
#3	.0194	.0003	.0000	-.0002	.0017	-.0002	.0016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33739-MB1 Acquired: 5/17/2018 19:11:42 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1279.1	3156.9	24429.	1632.2
Stddev	2.4	10.4	116.	9.0
%RSD	.18919	.32958	.47331	.55188
#1	1278.3	3156.6	24300.	1635.6
#2	1277.2	3146.7	24524.	1639.0
#3	1281.8	3167.5	24463.	1622.0

Zoom In Zoom Out

Sample Name: MP33739-B1 Acquired: 5/17/2018 19:16:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0502	28.99	1.857	2.136	.0556	27.14	.0501	.5077	.2275	.2683
Stddev	.0007	.10	.004	.005	.0001	.07	.0002	.0011	.0006	.0006
%RSD	1.477	.3524	.2279	.2363	.2254	.2763	.3988	.2096	.2813	.2107
#1	.0506	28.89	1.859	2.139	.0555	27.05	.0502	.5081	.2281	.2678
#2	.0493	28.99	1.852	2.130	.0557	27.18	.0499	.5065	.2277	.2683
#3	.0506	29.09	1.860	2.139	.0557	27.18	.0502	.5084	.2268	.2689
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.69	25.07	24.92	.5141	.4686	26.47	.4923	.4906	.4827	1.845
Stddev	.09	.02	.16	.0022	.0008	.06	.0016	.0005	.0015	.005
%RSD	.3372	.0823	.6405	.4298	.1761	.2395	.3239	.0943	.3045	.2703
#1	26.59	25.06	24.78	.5151	.4680	26.40	.4925	.4903	.4836	1.851
#2	26.74	25.06	25.09	.5116	.4683	26.53	.4906	.4912	.4810	1.841
#3	26.75	25.09	24.91	.5157	.4696	26.47	.4938	.4905	.4834	1.843
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3565	.4578	.5444	.5177	1.931	.4852	.4967
Stddev	.0011	.0017	.0014	.0006	.005	.0010	.0010
%RSD	.3079	.3750	.2603	.1111	.2714	.2055	.2091
#1	.3559	.4587	.5431	.5183	1.926	.4861	.4976
#2	.3559	.4558	.5441	.5171	1.933	.4841	.4956
#3	.3578	.4589	.5459	.5178	1.936	.4852	.4970
Check ? Value Range	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: MP33739-B1 Acquired: 5/17/2018 19:16:02 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1145.4	3015.1	22997.	1588.2
Stddev	2.2	4.8	96.	4.4
%RSD	.19291	.16082	.41817	.27753
#1	1145.9	3009.5	22926.	1589.1
#2	1143.0	3018.3	23106.	1583.4
#3	1147.3	3017.4	22959.	1592.1

Zoom In Zoom Out

Sample Name: FA54204-1 Acquired: 5/17/2018 19:20:01 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.0648	-.0015	.0139	-.0001	288.4	-.0002	.0001	.0009
Stddev	.0004	.0068	.0014	.0003	.0001	1.3	.0000	.0002	.0002
%RSD	20.39	10.49	88.49	1.841	95.14	.4568	12.64	169.9	17.74
#1	-.0018	.0582	-.0003	.0142	-.0002	287.6	-.0002	.0000	.0007
#2	-.0014	.0644	-.0030	.0137	.0000	287.6	-.0001	.0003	.0010
#3	-.0021	.0718	-.0013	.0138	-.0002	289.9	-.0002	.0000	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0537	.1505	F255.2	F802.1	.0014	.0071	F1309.	.0100	.0008
Stddev	.0002	.0024	1.3	4.5	.0001	.0002	101.	.0004	.0014
%RSD	.4334	1.577	.4948	.5655	4.909	3.269	7.686	3.722	165.0
#1	.0538	.1524	254.8	799.3	.0014	.0072	1425.	.0104	-.0007
#2	.0534	.1478	254.2	799.6	.0013	.0073	1262.	.0098	.0015
#3	.0538	.1514	256.6	807.3	.0014	.0068	1241.	.0097	.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0041	.0043	2.905	-.0003	F6.561	.0018	-.0027	.0416	.0196
Stddev	.0011	.0028	.006	.0001	.013	.0000	.0017	.0007	.0001
%RSD	26.77	65.82	.2107	41.99	.1999	1.114	63.72	1.766	.4890
#1	.0053	.0047	2.912	-.0003	6.548	.0018	-.0028	.0408	.0196
#2	.0038	.0013	2.905	-.0002	6.574	.0018	-.0009	.0422	.0195
#3	.0032	.0068	2.900	-.0005	6.560	.0018	-.0043	.0419	.0196

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	703.55	2064.6	16151.	1461.6
Stddev	1.34	4.1	61.	12.6
%RSD	.19102	.19961	.37813	.86450
#1	702.29	2061.0	16188.	1461.3
#2	704.97	2063.8	16184.	1474.4
#3	703.39	2069.1	16080.	1449.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 19:24:26 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2428	42.23	1.887	2.045	2.072	41.77	1.952	1.965	2.084	2.089
Stddev	.0016	.15	.004	.018	.016	.22	.002	.002	.012	.002
%RSD	.6425	.3548	.2372	.9012	.7706	.5310	.1138	.0835	.5818	.0880
#1	.2437	42.30	1.885	2.045	2.077	41.92	1.953	1.966	2.091	2.091
#2	.2437	42.06	1.892	2.026	2.054	41.52	1.949	1.963	2.091	2.089
#3	.2410	42.33	1.883	2.063	2.085	41.88	1.952	1.965	2.070	2.087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.59	39.59	38.76	1.967	1.965	36.86	1.868	1.921	1.951	1.915
Stddev	.14	.25	.24	.015	.004	.37	.003	.004	.001	.003
%RSD	.3373	.6428	.6232	.7821	.1978	.9985	.1473	.2148	.0621	.1722
#1	40.71	39.64	38.85	1.972	1.961	36.58	1.871	1.923	1.952	1.913
#2	40.44	39.32	38.49	1.980	1.965	36.73	1.866	1.916	1.950	1.919
#3	40.62	39.83	38.96	1.950	1.969	37.28	1.866	1.924	1.952	1.912
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.498	1.840	2.131	2.047	1.949	1.971	1.888
Stddev	.003	.003	.010	.012	.002	.006	.002
%RSD	.1040	.1697	.4844	.5640	.0931	.2900	.0951
#1	2.499	1.843	2.138	2.050	1.949	1.975	1.890
#2	2.499	1.842	2.119	2.056	1.951	1.974	1.886
#3	2.495	1.837	2.136	2.034	1.948	1.964	1.887
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 19:24:26 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1128.4	3022.4	24031.	1741.5
Stddev	1.7	2.6	173.	19.9
%RSD	.14814	.08492	.71821	1.1404
#1	1128.2	3019.8	23991.	1729.9
#2	1130.2	3022.4	23881.	1764.5
#3	1126.9	3024.9	24220.	1730.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 19:28:24 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0111	.0001	-.0002	.0001	.0062	.0002	.0000	.0001
Stddev	.0005	.0084	.0006	.0004	.0001	.0035	.0000	.0001	.0003
%RSD	92.22	75.60	842.4	179.8	62.66	57.27	13.72	110.7	246.2
#1	-.0003	.0184	.0007	-.0003	.0001	.0033	.0002	.0000	.0004
#2	-.0002	.0131	-.0001	-.0005	.0003	.0101	.0001	.0000	.0001
#3	-.0011	.0019	-.0004	.0002	.0001	.0051	.0002	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0252	.0642	.0424	.0002	F.0032	.2376	.0001	-.0007
Stddev	.0001	.0075	.0104	.0251	.0000	.0010	.0014	.0002	.0004
%RSD	11.74	29.61	16.26	59.21	14.57	30.01	.5837	182.9	52.21
#1	-.0009	.0268	.0721	.0186	.0002	.0042	.2372	.0003	-.0003
#2	-.0011	.0318	.0524	.0399	.0003	.0032	.2365	.0001	-.0010
#3	-.0012	.0171	.0681	.0686	.0002	.0023	.2392	-.0001	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	F.0021	.0003	.0004	.0003	.0014	F.0021	.0001	.0003
Stddev	.0009	.0007	.0003	.0003	.0000	.0002	.0003	.0001	.0000
%RSD	83.34	31.62	99.14	64.38	11.83	10.97	13.66	37.40	13.97
#1	.0020	.0018	.0002	.0006	.0004	.0015	.0018	.0001	.0003
#2	.0008	.0028	.0000	.0006	.0003	.0014	.0024	.0002	.0003
#3	.0003	.0017	.0006	.0001	.0003	.0012	.0020	.0001	.0003
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.0020					.0020		
Low Limit		-.0020					-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 19:28:24 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1305.9	3174.7	25012.	1758.3
Stddev	1.1	6.1	115.	6.3
%RSD	.08073	.19083	.45967	.35824
#1	1307.1	3171.3	24992.	1753.5
#2	1305.4	3181.7	24908.	1755.9
#3	1305.1	3171.1	25135.	1765.4

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33739-D1 Acquired: 5/17/2018 19:32:44 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0011	.0770	-.0017	.0145	.0000	290.1	-.0002	.0000	.0008
Stddev	.0009	.0107	.0010	.0004	.000	2.9	.0001	.0001	.0004
%RSD	84.92	13.91	62.86	2.928	1825.	1.017	29.64	738.7	45.77
#1	-.0020	.0684	-.0009	.0149	.0001	291.0	-.0001	.0000	.0005
#2	-.0010	.0735	-.0012	.0144	-.0001	292.5	-.0002	-.0001	.0008
#3	-.0002	.0890	-.0028	.0141	.0000	286.8	-.0002	.0001	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0549	.1518	F275.4	F807.9	.0014	.0078	F1158.	.0102	.0011
Stddev	.0001	.0068	2.2	7.9	.0001	.0001	104.	.0004	.0020
%RSD	.2247	4.468	.8143	.9820	9.533	1.023	8.966	3.688	185.8
#1	.0548	.1440	276.9	810.0	.0014	.0078	1261.	.0098	-.0011
#2	.0549	.1551	276.4	814.5	.0013	.0077	1159.	.0103	.0029
#3	.0551	.1563	272.8	799.1	.0016	.0078	1053.	.0106	.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0037	.0029	2.999	-.0002	F6.676	.0020	-.0035	.0421	.0195
Stddev	.0008	.0011	.008	.0005	.029	.0002	.0012	.0005	.0001
%RSD	20.87	37.48	.2779	250.1	.4279	8.042	34.85	1.188	.5625
#1	.0043	.0016	2.990	-.0007	6.679	.0021	-.0047	.0415	.0196
#2	.0028	.0037	3.006	.0002	6.703	.0019	-.0022	.0424	.0194
#3	.0040	.0034	3.000	-.0001	6.646	.0022	-.0038	.0423	.0195

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	692.75	2023.0	15955.	1464.2
Stddev	1.81	2.9	86.	23.7
%RSD	.26058	.14322	.53994	1.6163
#1	691.15	2022.8	16021.	1453.1
#2	692.39	2020.3	15986.	1448.1
#3	694.70	2026.0	15858.	1491.3

Zoom In Zoom Out

Sample Name: MP33739-SD1 Acquired: 5/17/2018 19:37:08 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.0607	-.0043	.0119	-.0002	303.8	-.0005	-.0007	.0052
Stddev	.0010	.0519	.0077	.0007	.0003	1.0	.0002	.0003	.0010
%RSD	57.16	85.39	180.3	5.972	135.6	.3373	30.52	46.71	18.65
#1	-.0018	.0626	-.0126	.0120	-.0001	303.1	-.0007	-.0005	.0058
#2	-.0028	.1116	-.0028	.0112	.0000	303.3	-.0005	-.0011	.0057
#3	-.0008	.0080	.0026	.0126	-.0006	305.0	-.0004	-.0006	.0041

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0511	.1466	280.2	819.8	.0021	.0045	F3569.	.0097	.0048
Stddev	.0016	.0045	.6	4.0	.0002	.0008	90.	.0005	.0046
%RSD	3.182	3.088	.2290	.4844	7.707	17.96	2.536	5.554	95.23
#1	.0528	.1490	280.9	816.5	.0020	.0038	3552.	.0098	.0094
#2	.0508	.1495	279.8	818.5	.0023	.0054	3666.	.0092	.0050
#3	.0496	.1414	279.9	824.2	.0020	.0043	3488.	.0103	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0026	2.706	-.0022	6.557	.0079	-.0052	.0432	.0214
Stddev	.0030	.0023	.005	.0018	.011	.0007	.0004	.0003	.0003
%RSD	133.8	88.45	.1787	81.61	.1744	8.564	7.909	.7235	1.466
#1	-.0004	.0007	2.702	-.0002	6.559	.0084	-.0049	.0436	.0217
#2	.0055	.0019	2.706	-.0029	6.545	.0071	-.0057	.0430	.0215
#3	.0017	.0052	2.711	-.0037	6.568	.0081	-.0051	.0431	.0211

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	935.74	2585.5	20108.	1648.7
Stddev	.83	2.7	77.	1.6
%RSD	.08835	.10587	.38448	.09962
#1	935.04	2582.9	20057.	1650.6
#2	935.52	2585.1	20197.	1648.0
#3	936.65	2588.3	20070.	1647.6

Zoom In Zoom Out

Sample Name: MP33739-PS1 Acquired: 5/17/2018 19:41:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0571	2.757	.1107	.2705	.0490	288.0	.0421	.0422	.0490
Stddev	.0009	.009	.0003	.0004	.0001	1.0	.0001	.0000	.0006
%RSD	1.661	.3291	.2349	.1376	.2815	.3510	.1640	.1152	1.306
#1	.0571	2.753	.1109	.2703	.0491	287.8	.0421	.0422	.0496
#2	.0581	2.768	.1104	.2709	.0488	287.1	.0422	.0422	.0491
#3	.0562	2.751	.1106	.2702	.0490	289.1	.0422	.0423	.0483

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1741	2.901	F283.5	F785.3	.0476	.0907	F1022.	.0892	.0446
Stddev	.0015	.016	.1	1.7	.0006	.0003	69.	.0003	.0015
%RSD	.8437	.5641	.0439	.2127	1.167	.2813	6.721	.3819	3.345
#1	.1724	2.920	283.6	785.9	.0481	.0905	1095.	.0888	.0436
#2	.1750	2.894	283.4	783.5	.0478	.0906	959.7	.0894	.0437
#3	.1748	2.890	283.5	786.6	.0470	.0910	1009.	.0893	.0463

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1130	.1094	2.852	.0362	F6.539	.0983	.0779	.0845	.2290
Stddev	.0019	.0034	.017	.0006	.010	.0007	.0010	.0005	.0011
%RSD	1.646	3.134	.5933	1.685	.1496	.7263	1.301	.6170	.4669
#1	.1143	.1133	2.866	.0356	6.550	.0984	.0770	.0849	.2278
#2	.1109	.1068	2.833	.0368	6.531	.0990	.0790	.0846	.2298
#3	.1138	.1081	2.857	.0364	6.535	.0975	.0778	.0839	.2294

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	701.27	2083.6	16319.	1471.3
Stddev	2.43	9.4	112.	9.0
%RSD	.34626	.44976	.68732	.60876
#1	700.19	2074.4	16262.	1463.6
#2	704.05	2093.1	16248.	1481.1
#3	699.58	2083.4	16449.	1469.2

Zoom In Zoom Out

Sample Name: MP33739-S1 Acquired: 5/17/2018 19:45:51 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0630	24.21	2.165	2.120	.0513	303.1	.0438	.4368	.2012
Stddev	.0003	.12	.005	.004	.0001	1.0	.0000	.0008	.0007
%RSD	.4936	.5056	.2538	.2112	.1364	.3322	.1115	.1910	.3529
#1	.0628	24.32	2.159	2.122	.0514	304.0	.0438	.4370	.2005
#2	.0634	24.08	2.168	2.115	.0513	302.0	.0438	.4358	.2019
#3	.0629	24.22	2.169	2.124	.0512	303.3	.0439	.4374	.2014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3577	19.93	F295.7	F793.6	.4667	.4407	F1015.	.4195	.4613
Stddev	.0010	.06	1.8	2.7	.0029	.0013	11.	.0010	.0020
%RSD	.2770	.2934	.6031	.3375	.6197	.2938	1.070	.2350	.4426
#1	.3566	19.96	296.9	791.1	.4637	.4394	1021.	.4186	.4612
#2	.3584	19.86	293.7	793.3	.4694	.4408	1021.	.4194	.4593
#3	.3582	19.96	296.6	796.4	.4670	.4419	1002.	.4205	.4634

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5625	2.188	3.218	.3795	F7.069	.4933	1.729	.4912	.4484
Stddev	.0037	.004	.009	.0011	.027	.0032	.012	.0022	.0020
%RSD	.6490	.1976	.2905	.3006	.3785	.6473	.6866	.4484	.4494
#1	.5584	2.183	3.208	.3807	7.092	.4897	1.718	.4887	.4488
#2	.5643	2.191	3.227	.3785	7.040	.4957	1.727	.4922	.4463
#3	.5650	2.191	3.218	.3792	7.076	.4946	1.741	.4927	.4503

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	698.71	2126.8	16537.	1502.1
Stddev	3.04	3.2	56.	5.7
%RSD	.43567	.15209	.33592	.37854
#1	701.45	2130.0	16601.	1495.6
#2	695.44	2123.5	16498.	1504.5
#3	699.24	2127.1	16513.	1506.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: MP33739-S2 Acquired: 5/17/2018 19:49:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0626	30.91	2.169	2.163	.0524	314.4	.0439	.4375	.2035
Stddev	.0004	.22	.006	.013	.0001	2.5	.0001	.0016	.0011
%RSD	.6816	.6956	.2858	.6051	.2719	.8012	.1941	.3597	.5496
#1	.0631	30.72	2.174	2.148	.0523	313.0	.0439	.4384	.2027
#2	.0625	30.87	2.170	2.170	.0523	313.0	.0439	.4384	.2030
#3	.0623	31.14	2.162	2.172	.0525	317.4	.0438	.4357	.2048

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3617	25.41	F309.5	F810.1	.4690	.4401	F1004.	.4204	.4656
Stddev	.0007	.17	1.9	7.6	.0029	.0013	32.	.0014	.0008
%RSD	.2026	.6829	.6236	.9439	.6214	.2904	3.211	.3354	.1677
#1	.3615	25.33	308.0	805.1	.4721	.4409	1040.	.4211	.4662
#2	.3611	25.29	308.8	806.3	.4687	.4409	977.0	.4212	.4648
#3	.3625	25.61	311.7	818.9	.4663	.4387	995.7	.4187	.4659

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5657	2.196	3.253	.3779	F7.215	.4949	1.736	.4933	.4477
Stddev	.0009	.005	.008	.0019	.035	.0023	.008	.0009	.0023
%RSD	.1666	.2371	.2323	.5126	.4879	.4558	.4379	.1846	.5102
#1	.5650	2.191	3.259	.3800	7.189	.4975	1.735	.4923	.4487
#2	.5668	2.195	3.254	.3775	7.201	.4939	1.744	.4941	.4493
#3	.5655	2.202	3.244	.3761	7.255	.4933	1.729	.4934	.4451

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	695.36	2122.9	16421.	1491.0
Stddev	2.57	7.5	47.	17.3
%RSD	.36922	.35533	.28673	1.1577
#1	693.92	2116.5	16373.	1495.3
#2	693.83	2121.0	16424.	1505.7
#3	698.32	2131.2	16467.	1472.0

Zoom In Zoom Out

Sample Name: FA54204-2 Acquired: 5/17/2018 19:54:09 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0010	.0574	-.0016	.0129	.0000	229.2	-.0001	.0000	.0008
Stddev	.0004	.0114	.0006	.0002	.000	1.0	.0001	.000	.0005
%RSD	46.40	19.93	34.76	1.932	961.2	.4203	55.33	72.13	59.71
#1	-.0008	.0561	-.0022	.0130	.0001	229.7	-.0001	.0000	.0003
#2	-.0006	.0467	-.0011	.0126	-.0002	229.8	-.0001	.0000	.0009
#3	-.0015	.0695	-.0015	.0131	.0000	228.1	-.0002	.0000	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1740	.1252	F223.6	F621.0	.0032	.0054	F962.6	.0088	-.0004
Stddev	.0006	.0037	1.7	1.7	.0001	.0003	42.0	.0001	.0008
%RSD	.3680	2.942	.7495	.2806	3.267	4.981	4.363	1.155	186.9
#1	.1735	.1222	224.8	622.1	.0032	.0057	1005.	.0087	-.0014
#2	.1747	.1241	224.2	621.9	.0033	.0051	921.3	.0088	.0000
#3	.1737	.1293	221.7	619.0	.0031	.0054	961.2	.0089	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0028	.0026	2.238	-.0007	F5.231	.0020	-.0023	.0488	.0238
Stddev	.0014	.0011	.005	.0004	.033	.0001	.0012	.0004	.0001
%RSD	50.76	41.14	.2444	58.06	.6236	5.942	51.39	.8853	.5556
#1	.0033	.0017	2.244	-.0002	5.237	.0021	-.0010	.0485	.0238
#2	.0012	.0038	2.233	-.0010	5.261	.0019	-.0034	.0493	.0239
#3	.0039	.0022	2.237	-.0009	5.197	.0019	-.0025	.0487	.0237

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	746.14	2184.1	16854.	1532.0
Stddev	2.26	7.7	68.	9.9
%RSD	.30263	.35408	.40409	.64765
#1	743.53	2175.4	16852.	1522.6
#2	747.37	2190.1	16788.	1531.0
#3	747.51	2186.7	16924.	1542.4

Zoom In Zoom Out

Sample Name: FA54204-3 Acquired: 5/17/2018 19:58:34 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0019	.1247	-.0010	.0130	-.0001	288.5	-.0001	.0001	.0012
Stddev	.0002	.0063	.0008	.0003	.0001	1.8	.0000	.0001	.0005
%RSD	8.243	5.063	78.18	2.524	85.84	.6158	26.43	102.3	43.48
#1	-.0018	.1236	-.0019	.0134	.0000	290.4	-.0001	.0002	.0017
#2	-.0018	.1315	-.0005	.0128	-.0001	286.8	-.0001	.0001	.0011
#3	-.0021	.1190	-.0006	.0128	-.0002	288.3	-.0001	.0000	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0676	.2342	F286.7	F790.6	.0037	.0070	F848.3	.0104	.0037
Stddev	.0006	.0042	1.7	3.8	.0002	.0002	24.4	.0001	.0009
%RSD	.8920	1.787	.5825	.4761	4.927	2.241	2.879	.8052	23.44
#1	.0678	.2369	288.6	793.6	.0035	.0071	859.0	.0104	.0044
#2	.0669	.2294	285.9	786.4	.0039	.0070	820.4	.0103	.0041
#3	.0681	.2363	285.5	792.0	.0036	.0068	865.6	.0105	.0027

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0014	3.133	-.0003	F6.648	.0028	-.0031	.0348	.0249
Stddev	.0016	.0040	.010	.0002	.027	.0001	.0009	.0005	.0001
%RSD	70.71	294.5	.3207	70.56	.4123	3.483	29.72	1.561	.6014
#1	.0005	-.0005	3.122	-.0001	6.679	.0029	-.0025	.0351	.0248
#2	.0028	-.0014	3.136	-.0004	6.637	.0028	-.0026	.0352	.0248
#3	.0035	.0060	3.142	-.0005	6.628	.0027	-.0041	.0342	.0250

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	702.91	2076.1	16253.	1506.7
Stddev	3.49	1.6	69.	11.5
%RSD	.49636	.07616	.42230	.76202
#1	706.23	2077.2	16294.	1495.1
#2	699.27	2074.3	16174.	1518.0
#3	703.24	2076.8	16292.	1507.1

Zoom In Zoom Out

Sample Name: FA54204-4 Acquired: 5/17/2018 20:02:59 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0017	.2681	-.0028	.0137	.0000	290.0	-.0002	.0003	.0020
Stddev	.0005	.0087	.0009	.0002	.000	.7	.0001	.0001	.0001
%RSD	28.23	3.255	32.37	1.790	688.4	.2549	37.40	44.15	4.854
#1	-.0019	.2592	-.0038	.0136	.0000	290.4	-.0001	.0003	.0020
#2	-.0022	.2766	-.0024	.0134	-.0002	289.1	-.0002	.0003	.0021
#3	-.0012	.2686	-.0021	.0139	.0001	290.4	-.0002	.0001	.0019

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0862	.4054	F292.9	F803.1	.0053	.0068	F857.5	.0157	.0062
Stddev	.0007	.0034	.6	1.7	.0001	.0001	16.0	.0002	.0008
%RSD	.8242	.8367	.1932	.2125	1.110	.9354	1.862	1.070	13.67
#1	.0861	.4087	293.5	804.6	.0052	.0068	859.8	.0159	.0063
#2	.0869	.4019	292.9	801.3	.0053	.0069	840.5	.0156	.0053
#3	.0855	.4056	292.4	803.4	.0052	.0068	872.2	.0157	.0070

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0046	3.458	-.0002	F6.813	.0061	-.0037	.0423	.0327
Stddev	.0008	.0028	.021	.0005	.014	.0001	.0014	.0004	.0001
%RSD	44.34	60.33	.5930	243.3	.2014	2.244	37.04	.8318	.3655
#1	.0013	.0071	3.478	-.0007	6.828	.0060	-.0053	.0419	.0326
#2	.0029	.0049	3.437	.0001	6.803	.0062	-.0032	.0425	.0328
#3	.0016	.0016	3.460	.0000	6.807	.0062	-.0027	.0426	.0326

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	691.51	2022.7	16163.	1503.9
Stddev	2.21	13.7	127.	5.4
%RSD	.31929	.67813	.78371	.35825
#1	689.13	2008.3	16166.	1498.7
#2	693.48	2035.6	16035.	1509.5
#3	691.93	2024.2	16288.	1503.6

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54204-5 Acquired: 5/17/2018 20:07:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.1865	-.0023	.0132	-.0001	289.0	-.0002	.0001	.0014
Stddev	.0004	.0041	.0006	.0001	.0001	.8	.0001	.0001	.0004
%RSD	23.02	2.218	25.85	1.127	107.7	.2930	34.11	140.4	26.70
#1	-.0013	.1893	-.0021	.0133	-.0001	289.9	-.0001	.0000	.0015
#2	-.0021	.1817	-.0029	.0130	-.0002	288.8	-.0002	.0001	.0010
#3	-.0020	.1884	-.0018	.0133	.0000	288.3	-.0001	.0001	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0799	.2914	F290.0	F803.8	.0044	.0069	F871.1	.0125	.0053
Stddev	.0006	.0055	1.5	.9	.0001	.0000	10.5	.0004	.0005
%RSD	.6961	1.893	.5323	.1107	1.290	.7011	1.211	3.582	9.300
#1	.0794	.2978	291.1	803.9	.0045	.0069	871.9	.0125	.0053
#2	.0798	.2886	288.2	804.7	.0044	.0068	860.1	.0120	.0048
#3	.0805	.2879	290.6	802.9	.0044	.0069	881.2	.0129	.0057

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0042	3.294	-.0003	F6.732	.0045	-.0038	.0360	.0286
Stddev	.0010	.0032	.006	.0007	.022	.0003	.0015	.0004	.0002
%RSD	44.96	75.50	.1933	224.6	.3322	7.572	39.38	1.010	.8681
#1	.0015	.0041	3.301	.0005	6.758	.0041	-.0054	.0359	.0284
#2	.0033	.0075	3.295	-.0005	6.717	.0045	-.0025	.0364	.0288
#3	.0017	.0011	3.288	-.0009	6.722	.0048	-.0034	.0357	.0287

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	695.75	2048.6	16123.	1502.3
Stddev	.97	3.8	22.	5.1
%RSD	.13947	.18666	.13447	.33816
#1	695.04	2045.0	16139.	1497.4
#2	695.36	2048.2	16098.	1501.9
#3	696.86	2052.6	16130.	1507.5

Zoom In Zoom Out

Sample Name: FA54204-6 Acquired: 5/17/2018 20:11:48 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0014	.0902	-.0025	.0125	-.0001	279.5	-.0001	.0002	.0011
Stddev	.0003	.0230	.0004	.0003	.0000	1.4	.0001	.0001	.0002
%RSD	21.29	25.49	16.67	2.176	45.86	.5081	65.87	76.03	20.01
#1	-.0017	.0999	-.0024	.0123	-.0001	280.5	-.0001	.0003	.0010
#2	-.0012	.0640	-.0022	.0125	.0000	280.1	-.0002	.0001	.0010
#3	-.0012	.1068	-.0030	.0128	-.0001	277.9	-.0001	.0000	.0014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0831	.2342	F281.7	F779.6	.0034	.0068	F881.0	.0094	.0070
Stddev	.0010	.0036	1.1	1.5	.0000	.0002	10.6	.0001	.0001
%RSD	1.194	1.526	.3951	.1987	1.026	2.709	1.207	1.184	1.313
#1	.0820	.2301	281.2	779.7	.0034	.0068	874.4	.0093	.0069
#2	.0832	.2362	280.9	781.1	.0034	.0071	893.3	.0095	.0069
#3	.0840	.2364	283.0	778.0	.0035	.0067	875.4	.0095	.0071

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0025	.0016	3.021	-.0004	F6.486	.0019	-.0018	.0355	.0249
Stddev	.0006	.0017	.007	.0001	.015	.0001	.0028	.0004	.0001
%RSD	23.42	104.2	.2245	33.58	.2373	7.182	155.8	1.085	.2035
#1	.0031	.0018	3.022	-.0005	6.470	.0018	-.0049	.0353	.0250
#2	.0023	-.0002	3.027	-.0003	6.487	.0020	-.0007	.0360	.0249
#3	.0020	.0033	3.014	-.0004	6.501	.0017	.0003	.0353	.0249

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	708.17	2074.2	16429.	1504.7
Stddev	1.29	3.7	100.	8.1
%RSD	.18271	.17810	.60768	.54108
#1	709.63	2073.1	16539.	1497.9
#2	707.73	2071.3	16345.	1502.4
#3	707.16	2078.4	16402.	1513.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:16:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2435	42.94	1.865	2.085	2.095	42.67	1.961	1.969	2.124
Stddev	.0018	.16	.002	.012	.009	.03	.004	.002	.002
%RSD	.7549	.3694	.0824	.5810	.4396	.0672	.2156	.0851	.0739
#1	.2456	42.78	1.864	2.073	2.085	42.65	1.956	1.967	2.123
#2	.2424	43.10	1.863	2.085	2.095	42.70	1.963	1.969	2.126
#3	.2425	42.95	1.866	2.097	2.104	42.65	1.964	1.970	2.124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.106	41.41	40.71	39.16	1.976	1.964	F35.01	1.855	1.938
Stddev	.008	.14	.15	.05	.012	.008	.40	.004	.002
%RSD	.3896	.3476	.3694	.1223	.6112	.4091	1.135	.2192	.1214
#1	2.115	41.28	40.54	39.14	1.990	1.954	34.55	1.851	1.936
#2	2.100	41.56	40.80	39.12	1.968	1.967	35.24	1.857	1.940
#3	2.102	41.40	40.80	39.21	1.970	1.969	35.24	1.858	1.938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							40.00		
Range							-10.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.934	1.894	2.473	1.813	2.171	2.064	1.959	1.980	1.898
Stddev	.002	.004	.002	.002	.003	.010	.003	.003	.006
%RSD	.0779	.2263	.0658	.1120	.1535	.4670	.1439	.1631	.3088
#1	1.935	1.889	2.471	1.811	2.168	2.075	1.958	1.983	1.892
#2	1.935	1.894	2.474	1.815	2.171	2.060	1.963	1.980	1.898
#3	1.932	1.898	2.474	1.814	2.174	2.058	1.957	1.976	1.904
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:16:13 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1123.6	3035.5	23843.	1714.9
Stddev	3.0	9.8	63.	6.5
%RSD	.26341	.32294	.26263	.37910
#1	1125.4	3046.6	23774.	1709.4
#2	1120.1	3028.2	23859.	1713.3
#3	1125.1	3031.5	23896.	1722.1

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 20:20:12 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0142	-.0013	.0000	.0000	.0040	-.0001	-.0001	.0005
Stddev	.0002	.0093	.0007	.0002	.000	.0029	.0000	.0001	.0003
%RSD	40.15	65.35	58.86	495.9	2960.	72.56	34.54	101.7	61.11
#1	-.0007	.0246	-.0013	.0002	.0001	.0050	.0000	.0000	.0007
#2	-.0003	.0108	-.0005	.0001	-.0001	.0007	-.0001	-.0002	.0001
#3	-.0004	.0071	-.0020	-.0002	.0000	.0064	-.0001	-.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0290	.1302	.0504	.0000	F.0029	.8274	-.0001	-.0007
Stddev	.0001	.0067	.0108	.0320	.0000	.0010	.0199	.0002	.0002
%RSD	39.06	23.13	8.335	63.55	195.1	35.36	2.410	343.2	35.62
#1	.0002	.0362	.1368	.0612	.0000	.0040	.8486	-.0001	-.0005
#2	.0003	.0277	.1176	.0756	.0000	.0028	.8245	-.0002	-.0006
#3	.0004	.0230	.1361	.0144	.0000	.0019	.8090	.0002	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0014	.0008	.0003	.0000	.0015	.0014	-.0003	.0000
Stddev	.0005	.0021	.0005	.0001	.0001	.0002	.0006	.0002	.000
%RSD	26.84	146.9	61.65	42.23	236.6	15.04	45.48	59.74	118.9
#1	.0013	.0038	.0003	.0002	.0000	.0017	.0017	-.0002	-.0001
#2	.0019	.0006	.0007	.0004	.0001	.0016	.0006	-.0004	.0000
#3	.0022	-.0001	.0013	.0003	.0000	.0013	.0018	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 20:20:12 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1271.6	3126.2	24393.	1667.6
Stddev	1.5	10.1	91.	16.7
%RSD	.11606	.32342	.37261	1.0013
#1	1269.9	3114.8	24448.	1654.9
#2	1272.4	3129.5	24288.	1661.4
#3	1272.5	3134.2	24444.	1686.5

Zoom In Zoom Out

Sample Name: FA54204-7 Acquired: 5/17/2018 20:24:33 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0012	.0557	-.0016	.0142	.0000	294.3	-.0001	-.0001	.0006
Stddev	.0003	.0184	.0005	.0003	.0001	2.1	.0001	.0003	.0006
%RSD	23.38	33.01	29.69	2.004	1874.	.7246	60.14	450.4	94.37
#1	-.0009	.0723	-.0014	.0139	-.0001	293.1	-.0002	.0000	.0007
#2	-.0014	.0588	-.0012	.0143	.0001	292.9	.0000	-.0004	.0000
#3	-.0011	.0359	-.0021	.0145	.0000	296.7	-.0002	.0002	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0449	.0942	F291.8	F803.6	.0010	.0072	F1123.	.0074	.0007
Stddev	.0007	.0061	2.0	6.8	.0000	.0002	48.	.0001	.0006
%RSD	1.645	6.510	.6984	.8476	.8680	3.180	4.280	1.866	84.30
#1	.0441	.0965	289.5	799.2	.0010	.0074	1177.	.0074	.0008
#2	.0452	.0988	292.4	800.1	.0011	.0073	1086.	.0076	.0001
#3	.0455	.0872	293.4	811.4	.0010	.0070	1105.	.0073	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0014	.0040	2.920	-.0006	F6.736	.0013	-.0023	.0352	.0156
Stddev	.0006	.0009	.014	.0003	.056	.0002	.0012	.0003	.0001
%RSD	40.69	21.12	.4662	47.32	.8297	16.14	53.67	.9497	.3315
#1	.0019	.0047	2.906	-.0003	6.677	.0015	-.0036	.0351	.0156
#2	.0016	.0031	2.933	-.0005	6.742	.0013	-.0023	.0356	.0157
#3	.0008	.0043	2.921	-.0008	6.788	.0011	-.0011	.0350	.0156

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	694.05	2046.4	15911.	1446.9
Stddev	.47	5.6	44.	14.5
%RSD	.06827	.27415	.27451	1.0019
#1	694.06	2048.9	15962.	1440.2
#2	694.53	2039.9	15887.	1463.5
#3	693.58	2050.3	15885.	1437.0

Zoom In Zoom Out

Sample Name: FA54204-8 Acquired: 5/17/2018 20:28:58 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0018	.0127	-.0021	.0146	-.0002	299.7	-.0001	-.0003	.0005
Stddev	.0003	.0198	.0004	.0001	.0001	.8	.0001	.0001	.0003
%RSD	15.33	155.8	18.41	.8873	72.21	.2706	53.96	41.13	69.72
#1	-.0021	.0038	-.0026	.0145	-.0001	300.1	-.0002	-.0004	.0008
#2	-.0016	-.0010	-.0021	.0146	-.0003	298.7	.0000	-.0003	.0002
#3	-.0017	.0354	-.0018	.0148	-.0001	300.1	-.0001	-.0002	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0022	.0256	F309.8	F844.4	.0019	.0071	F934.8	.0004	-.0003
Stddev	.0004	.0030	.2	.9	.0000	.0004	83.5	.0005	.0001
%RSD	18.93	11.61	.0696	.1063	1.584	5.192	8.931	129.1	22.46
#1	.0019	.0270	309.8	843.5	.0019	.0073	1031.	.0005	-.0004
#2	.0021	.0222	310.1	845.3	.0019	.0067	895.5	.0009	-.0004
#3	.0027	.0276	309.7	844.5	.0019	.0074	878.1	-.0002	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0026	.0032	3.607	-.0006	F7.688	-.0007	-.0035	.0028	.0127
Stddev	.0010	.0009	.007	.0004	.017	.0001	.0011	.0001	.0000
%RSD	38.84	27.35	.2063	59.42	.2161	15.95	30.98	3.140	.2523
#1	.0034	.0034	3.613	-.0011	7.699	-.0008	-.0022	.0029	.0127
#2	.0029	.0022	3.610	-.0005	7.669	-.0006	-.0042	.0027	.0127
#3	.0015	.0039	3.599	-.0004	7.696	-.0007	-.0039	.0027	.0127

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	680.57	1996.2	15913.	1476.6
Stddev	4.63	7.8	41.	5.4
%RSD	.68071	.39142	.25557	.36641
#1	675.41	1990.1	15959.	1471.5
#2	681.92	1993.4	15881.	1476.0
#3	684.37	2005.0	15899.	1482.2

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: FA54204-9 Acquired: 5/17/2018 20:33:24 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0016	.0083	.0021	.0149	-.0001	262.2	-.0002	-.0001	.0015
Stddev	.0008	.0123	.0013	.0003	.0000	1.0	.0001	.0001	.0004
%RSD	49.90	149.2	60.87	2.128	5.703	.3751	36.93	111.9	23.94
#1	-.0026	-.0043	.0007	.0146	-.0001	261.4	-.0002	-.0001	.0016
#2	-.0011	.0203	.0031	.0152	-.0001	263.3	-.0001	.0000	.0018
#3	-.0012	.0088	.0025	.0148	-.0001	262.0	-.0002	-.0001	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0009	.0712	F265.9	F725.7	.0043	.0081	F898.6	.0053	.0026
Stddev	.0000	.0053	2.5	5.1	.0001	.0001	26.4	.0003	.0007
%RSD	3.304	7.476	.9527	.7090	1.418	1.116	2.940	6.184	28.45
#1	-.0009	.0659	266.1	720.1	.0044	.0081	915.0	.0050	.0027
#2	-.0009	.0766	268.3	730.2	.0044	.0080	912.7	.0052	.0033
#3	-.0009	.0710	263.2	726.9	.0043	.0082	868.1	.0057	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0044	.0040	2.949	-.0003	F7.281	.0001	-.0035	.0021	.0936
Stddev	.0012	.0028	.013	.0002	.061	.0002	.0006	.0005	.0004
%RSD	26.21	71.05	.4491	64.42	.8371	177.8	17.35	22.51	.4300
#1	.0049	.0017	2.940	-.0003	7.314	.0002	-.0042	.0020	.0937
#2	.0052	.0071	2.943	-.0001	7.318	-.0001	-.0030	.0017	.0940
#3	.0031	.0030	2.964	-.0005	7.210	.0002	-.0033	.0026	.0932

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	714.46	2086.7	16348.	1505.5
Stddev	1.50	4.2	41.	16.6
%RSD	.20930	.20073	.25111	1.1012
#1	714.27	2087.7	16395.	1523.6
#2	713.07	2090.4	16329.	1501.8
#3	716.04	2082.2	16320.	1491.0

Zoom In Zoom Out

Sample Name: FA54204-10 Acquired: 5/17/2018 20:37:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.1639	.0075	.0326	-.0001	67.38	-.0001	.0005	.0019
Stddev	.0002	.0118	.0009	.0002	.0000	.38	.0000	.0001	.0008
%RSD	58.76	7.206	12.53	.5233	56.89	.5710	33.58	28.20	43.99
#1	.0001	.1705	.0065	.0327	.0000	67.07	-.0001	.0004	.0027
#2	.0004	.1708	.0082	.0327	.0000	67.81	-.0001	.0004	.0010
#3	.0004	.1502	.0080	.0324	-.0001	67.25	-.0001	.0006	.0021

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0051	.2060	28.69	54.82	.0412	.0118	F390.2	.0181	.0012
Stddev	.0004	.0032	.17	.15	.0004	.0001	18.8	.0003	.0006
%RSD	7.406	1.530	.5804	.2734	.9035	.5979	4.819	1.474	47.97
#1	.0053	.2079	28.66	54.70	.0416	.0118	368.8	.0184	.0006
#2	.0053	.2078	28.87	54.99	.0411	.0117	398.0	.0178	.0018
#3	.0047	.2024	28.54	54.78	.0409	.0117	403.9	.0180	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0675	.0026	2.201	.0003	.4760	.0020	-.0018	.1228	.0404
Stddev	.0010	.0016	.002	.0004	.0027	.0002	.0006	.0004	.0001
%RSD	1.436	61.73	.1083	138.7	.5773	11.98	35.48	.2939	.2653
#1	.0664	.0035	2.203	-.0001	.4771	.0022	-.0024	.1232	.0402
#2	.0678	.0035	2.201	.0007	.4780	.0021	-.0017	.1225	.0404
#3	.0682	.0007	2.198	.0003	.4728	.0017	-.0012	.1227	.0404

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1000.2	2745.5	21077.	1600.3
Stddev	1.5	5.4	160.	5.7
%RSD	.15041	.19613	.76089	.35735
#1	1000.7	2739.7	20935.	1602.9
#2	998.46	2746.4	21044.	1593.7
#3	1001.3	2750.4	21251.	1604.2

Zoom In Zoom Out

Sample Name: FA54150-4 Acquired: 5/17/2018 20:42:14 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.1737	.0001	.1481	.0000	178.7	.0000	.0007	.0321
Stddev	.0004	.0150	.0002	.0007	.000	1.3	.0000	.0001	.0003
%RSD	81.47	8.639	159.8	.4538	136.6	.7060	214.9	17.97	1.060
#1	-.0007	.1896	.0003	.1484	.0000	178.0	.0000	.0008	.0324
#2	-.0007	.1715	-.0001	.1487	.0000	180.2	.0000	.0006	.0322
#3	.0000	.1598	.0001	.1474	.0000	178.0	.0000	.0009	.0317

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0041	.0826	14.19	28.75	.0725	.0190	F127.9	.0020	.0010
Stddev	.0003	.0020	.07	.25	.0003	.0001	2.6	.0003	.0004
%RSD	8.146	2.421	.5180	.8584	.4638	.5507	2.066	12.26	35.40
#1	.0045	.0823	14.15	28.79	.0724	.0190	125.0	.0020	.0012
#2	.0039	.0808	14.27	28.98	.0729	.0189	130.2	.0023	.0006
#3	.0038	.0847	14.15	28.49	.0723	.0191	128.5	.0018	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0020	.0048	8.292	.0000	1.701	.0026	-.0006	.0098	.0216
Stddev	.0002	.0002	.002	.0002	.010	.0001	.0004	.0000	.0002
%RSD	9.024	4.332	.0208	843.0	.5704	4.909	75.90	.2805	.9188
#1	.0019	.0049	8.290	.0002	1.695	.0026	-.0011	.0098	.0215
#2	.0019	.0046	8.292	-.0001	1.713	.0028	-.0004	.0098	.0215
#3	.0022	.0049	8.294	.0000	1.697	.0025	-.0003	.0097	.0219

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1074.0	2816.1	21874.	1619.5
Stddev	2.2	3.4	70.	18.8
%RSD	.20927	.11898	.31825	1.1620
#1	1071.4	2812.3	21873.	1624.2
#2	1075.7	2818.2	21805.	1598.8
#3	1074.9	2818.0	21944.	1635.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2018 20:46:30 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0087	.2137	.0089	.2143	.0055	1.125	.0051	.0520	.0114	.0262
Stddev	.0004	.0014	.0005	.0010	.0001	.010	.0000	.0002	.0002	.0003
%RSD	4.430	.6316	5.299	.4773	2.697	.9110	.2094	.4611	1.444	1.167
#1	.0088	.2126	.0092	.2131	.0054	1.121	.0051	.0518	.0113	.0259
#2	.0083	.2152	.0091	.2147	.0053	1.118	.0051	.0522	.0115	.0263
#3	.0091	.2134	.0084	.2150	.0056	1.137	.0051	.0522	.0112	.0264

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3189	10.47	5.116	.0154	.0472	10.17	.0399	.0045	.0050	.0107
Stddev	.0029	.09	.032	.0001	.0001	.05	.0003	.0006	.0006	.0023
%RSD	.9163	.8667	.6264	.6516	.1344	.4748	.7060	14.21	12.41	21.90
#1	.3172	10.37	5.079	.0154	.0473	10.13	.0398	.0053	.0056	.0100
#2	.3173	10.49	5.136	.0154	.0472	10.15	.0397	.0043	.0044	.0133
#3	.3223	10.55	5.134	.0153	.0472	10.22	.0402	.0040	.0052	.0088

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0324	.0484	.0109	.0098	.0104	.0483	.0203
Stddev	.0003	.0003	.0000	.0001	.0016	.0002	.0002
%RSD	1.077	.5657	.3928	.7702	15.06	.4389	.7516
#1	.0326	.0487	.0109	.0097	.0105	.0484	.0204
#2	.0326	.0481	.0108	.0099	.0088	.0480	.0202
#3	.0320	.0485	.0109	.0098	.0119	.0484	.0202

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1226.9	3068.2	23969.	1660.8
Stddev	3.9	4.0	86.	22.8
%RSD	.31724	.13032	.35954	1.3710
#1	1223.8	3072.6	23979.	1670.6
#2	1231.3	3067.3	23877.	1677.0
#3	1225.6	3064.7	24049.	1634.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 20:50:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0005	F552.6	.0015	.0005	-.0002	495.9	-.0004	-.0002
Stddev	.0005	3.1	.0016	.0002	.0001	3.4	.0002	.0001
%RSD	113.3	.5624	105.7	34.70	55.84	.6783	49.78	23.75
#1	.0001	555.5	.0008	.0004	-.0003	498.9	-.0006	-.0003
#2	-.0010	553.1	.0004	.0005	-.0001	496.6	-.0003	-.0002
#3	-.0005	549.3	.0034	.0007	-.0002	492.3	-.0003	-.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	-.0004	-.0014	183.5	.2308	F505.1	-.0001	.0005	1.485
Stddev	.0002	.0003	1.0	.0175	2.7	.0000	.0001	.032
%RSD	57.07	20.68	.5292	7.589	.5272	46.60	22.11	2.172
#1	-.0002	-.0017	184.2	.2476	507.6	-.0001	.0006	1.454
#2	-.0006	-.0011	183.9	.2127	505.5	.0000	.0005	1.485
#3	-.0004	-.0014	182.4	.2322	502.3	-.0001	.0004	1.518

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0007	F-.0301	.0049	.0071	.0182	.0007	-.0003	.0006
Stddev	.0003	.0019	.0029	.0024	.0012	.0007	.0001	.0001
%RSD	48.73	6.398	59.57	34.47	6.630	91.85	20.83	13.42
#1	.0010	-.0306	.0080	.0091	.0172	.0014	-.0003	.0005
#2	.0005	-.0318	.0023	.0044	.0195	.0001	-.0003	.0007
#3	.0004	-.0280	.0043	.0078	.0180	.0007	-.0002	.0006

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	-.0002	-.0018
Stddev	.0035	.0002	.0001
%RSD	472.3	84.84	6.845
#1	.0005	-.0002	-.0018
#2	.0019	.0000	-.0020
#3	-.0046	-.0004	-.0018

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2018 20:50:49 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	963.27	2709.4	21178.	1617.3
Stddev	1.68	1.8	76.	13.3
%RSD	.17471	.06758	.35931	.82399
#1	961.37	2707.4	21101.	1603.9
#2	964.59	2710.9	21180.	1617.5
#3	963.84	2710.0	21253.	1630.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2018 20:55:02 Type: Unk
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.031	F555.6	1.040	.5398	.5259	498.6	.9211	.4719	.5152
Stddev	.002	3.4	.003	.0029	.0044	4.1	.0022	.0010	.0036
%RSD	.1495	.6065	.2802	.5318	.8401	.8171	.2351	.2179	.6985
#1	1.032	556.2	1.039	.5386	.5267	498.9	.9230	.4718	.5130
#2	1.029	552.0	1.038	.5377	.5212	494.5	.9188	.4709	.5133
#3	1.030	558.6	1.043	.5431	.5299	502.6	.9217	.4730	.5194

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5734	187.9	.1900	F512.3	.4884	.8819	1.297	.8994	.9178
Stddev	.0026	1.4	.0244	4.3	.0014	.0014	.020	.0012	.0034
%RSD	.4525	.7396	12.83	.8302	.2882	.1628	1.519	.1284	.3752
#1	.5764	187.7	.1965	511.7	.4883	.8827	1.316	.9004	.9207
#2	.5716	186.7	.2105	508.4	.4871	.8802	1.277	.8981	.9187
#3	.5723	189.4	.1630	516.9	.4899	.8828	1.297	.8995	.9140

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.007	.9494	.0215	.8481	1.081	.9882	.9314	.4682	.8939
Stddev	.001	.0061	.0004	.0013	.007	.0038	.0028	.0010	.0026
%RSD	.0998	.6409	1.995	.1540	.6455	.3879	.2956	.2144	.2948
#1	1.007	.9541	.0212	.8491	1.081	.9910	.9335	.4680	.8963
#2	1.008	.9425	.0220	.8466	1.073	.9839	.9324	.4673	.8911
#3	1.006	.9515	.0214	.8486	1.087	.9898	.9283	.4693	.8943

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	946.85	2698.6	21141.	1594.5
Stddev	.82	6.5	69.	16.2
%RSD	.08695	.23959	.32415	1.0134
#1	946.15	2692.6	21164.	1597.6
#2	946.64	2705.4	21195.	1608.8
#3	947.76	2697.9	21064.	1577.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:59:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2485	42.79	1.912	2.077	2.093	42.67	1.990	2.000	2.133	2.132
Stddev	.0003	.16	.000	.012	.011	.15	.001	.002	.006	.006
%RSD	.1254	.3730	.0167	.5968	.5441	.3594	.0523	.0832	.2798	.2753
#1	.2482	42.62	1.912	2.064	2.081	42.50	1.991	2.001	2.139	2.137
#2	.2488	42.83	1.913	2.077	2.094	42.70	1.989	1.998	2.130	2.126
#3	.2484	42.93	1.913	2.089	2.104	42.80	1.989	2.001	2.128	2.134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.74	40.86	39.47	2.014	2.003	39.93	1.907	1.964	1.978	1.943
Stddev	.15	.17	.28	.001	.002	.11	.002	.006	.003	.002
%RSD	.3481	.4218	.7130	.0508	.0883	.2760	.1205	.3099	.1301	.1027
#1	41.64	40.69	39.15	2.015	2.001	39.82	1.910	1.960	1.975	1.945
#2	41.68	40.86	39.61	2.014	2.003	39.91	1.905	1.961	1.981	1.943
#3	41.91	41.03	39.66	2.013	2.005	40.04	1.907	1.971	1.978	1.941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.529	1.878	2.173	2.094	1.991	2.015	1.935
Stddev	.001	.004	.008	.002	.002	.003	.003
%RSD	.0279	.1856	.3826	.1113	.0925	.1513	.1339
#1	2.529	1.882	2.166	2.096	1.992	2.015	1.938
#2	2.530	1.875	2.171	2.093	1.989	2.017	1.933
#3	2.528	1.877	2.182	2.091	1.991	2.011	1.935
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Inst QC: MA14907

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2018 20:59:01 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1105.8	2974.2	23471.	1670.5
Stddev	1.5	4.4	82.	3.0
%RSD	.14010	.14800	.35072	.18256
#1	1106.3	2969.3	23379.	1673.9
#2	1107.0	2975.4	23498.	1669.7
#3	1104.0	2977.8	23537.	1667.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 21:02:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0165	-.0005	-.0001	.0001	.0162	.0000	.0000
Stddev	.0003	.0070	.0006	.0001	.0000	.0068	.000	.000
%RSD	44.45	42.40	123.1	110.0	43.82	42.32	66.45	225.2
#1	-.0006	.0160	.0002	.0000	.0001	.0230	.0000	.0000
#2	-.0005	.0098	-.0006	.0000	.0002	.0093	.0000	.0000
#3	-.0011	.0238	-.0009	-.0001	.0001	.0162	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0004	.0458	.0311	.0210	.0001	F.0031	.3191
Stddev	.0003	.0002	.0097	.0203	.0253	.0000	.0010	.0050
%RSD	69.62	42.40	21.14	65.30	120.3	26.80	31.64	1.553
#1	.0009	.0006	.0547	.0219	.0493	.0001	.0040	.3242
#2	.0002	.0003	.0472	.0544	.0007	.0001	.0030	.3143
#3	.0004	.0004	.0355	.0170	.0130	.0001	.0021	.3188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F-.0012	.0013	.0007	.0010	.0004	.0003	.0015
Stddev	.000	.0004	.0007	.0011	.0001	.0002	.0000	.0002
%RSD	138.8	36.80	56.55	160.9	14.38	52.79	15.46	16.43
#1	-.0001	-.0012	.0021	.0017	.0012	.0006	.0004	.0017
#2	-.0001	-.0016	.0011	-.0005	.0009	.0004	.0003	.0015
#3	.0000	-.0007	.0007	.0008	.0009	.0002	.0003	.0012
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2018 21:02:59 Type: QC
Method: 60102007_041712(v216) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0012	.0001	-.0001
Stddev	.0005	.0001	.0001
%RSD	46.46	224.3	77.35
#1	.0016	.0002	.0000
#2	.0013	-.0001	-.0001
#3	.0006	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1270.1	3087.0	24405.	1652.0
Stddev	3.2	7.7	89.	22.1
%RSD	.25076	.24796	.36414	1.3359
#1	1268.9	3082.5	24447.	1642.2
#2	1267.7	3095.9	24466.	1636.6
#3	1273.7	3082.7	24303.	1677.3

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	V	-0.009834	0.000000	No
			Fe	0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.035224	0.000000	No
As 189.042 {478}	☒	5	Fe	-0.000108	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000003	0.000000	No
Be 313.042 {108}	☒	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000110	0.000000	No
			Ca	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Ti	0.000000	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000008	0.000000	No
Cr 267.716 {126}	☒	3	Al	0.000007	0.000000	No
			Fe	-0.000017	0.000000	No
			Ca	0.000004	0.000000	No
Cu 324.754 {104}	☒	10	Fe	-0.000144	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000006	0.000000	No
			Mg	0.000005	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000015	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000026	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	☒	9	Al	0.000292	0.000000	No
			Fe	-0.000093	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000016	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000002	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000018	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000033	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000058	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000008	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000008	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000016	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000024	0.000000	No
			As	0.001128	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000147	0.604393	0.000000	1.000000
Al 396.152 { 85}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.005795	0.184722	0.000000	1.000000
As 189.042 {478}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000799	0.227780	0.000000	1.000000
Ba 455.403 { 74}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.055079	12.983623	0.000000	1.000000
Be 313.042 {108}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000563	9.319704	0.000000	1.000000
Ca 317.933 {106}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.009238	0.283971	0.000000	1.000000
Cd 226.502 {449}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000041	5.098499	0.000000	1.000000
Co 228.616 {447}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000395	2.550486	0.000000	1.000000
Cr 267.716 {126}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000236	0.464133	0.000000	1.000000
Cu 324.754 {104}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002750	0.860648	0.000000	1.000000
Fe 259.940 {130}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.003063	0.228356	0.000000	1.000000
In 230.606 {446}*	5/17/2018 9:54:41	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.002601	0.331886	0.000000	1.000000
Mg 279.079 {121}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.001469	0.030205	0.000000	1.000000
Mn 257.610 {131}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000298	2.662660	0.000000	1.000000
Mo 202.030 {467}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.001656	1.336353	0.000000	1.000000
Na 589.592 { 57}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.020229	0.916647	0.000000	1.000000
Ni 231.604 {445}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000125	1.454289	0.000000	1.000000
Pb 220.353 {453}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002265	1.311182	0.000000	1.000000
Sb 206.833 {463}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000093	0.276434	0.000000	1.000000
Se 196.090 {472}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000661	0.164017	0.000000	1.000000
Si 212.412 {459}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.004325	0.489271	0.000000	1.000000
Sn 189.989 {477}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000518	0.512949	0.000000	1.000000
Sr 407.771 { 83}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.000803	20.045498	0.000000	1.000000
Ti 334.941 {101}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002144	2.130722	0.000000	1.000000
Tl 190.856 {477}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.003439	0.674963	0.000000	1.000000
V 292.402 {115}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	-0.000176	0.730827	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/17/2018 9:54:41	5/17/2018 8:44:41	Linear	1/Conc	0.002437	3.015344	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999812	0.000109	0.000525	0.001751	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999984	0.001662	0.015793	0.052643	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999899	0.000260	0.000942	0.003141	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999990	0.004564	0.000317	0.001057	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999989	0.003573	0.000139	0.000462	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999991	0.001982	0.005364	0.017880	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999986	0.002187	0.000061	0.000204	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999990	0.000928	0.000132	0.000440	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999992	0.000153	0.000391	0.001303	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999971	0.000522	0.000328	0.001093	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999905	0.005067	0.003868	0.012893	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999919	0.006825	0.025731	0.085771	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999977	0.000333	0.034685	0.115616	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999996	0.000626	0.000059	0.000196	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999901	0.001516	0.000159	0.000530	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999979	0.009603	0.008501	0.028336	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999986	0.000612	0.000226	0.000755	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999906	0.001452	0.000675	0.002249	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999925	0.000271	0.001212	0.004042	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999944	0.000139	0.001959	0.006531	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.983584	0.007368	0.000485	0.001617	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999960	0.000371	0.000354	0.001179	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999916	0.020976	0.000124	0.000412	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999916	0.002223	0.000137	0.000458	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999987	0.000270	0.000891	0.002969	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999926	0.000709	0.000329	0.001097	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999982	0.001478	0.000078	0.000258	OK.	1.000000	0.000000	1	0

MS
DOD

SGS Accutest - Orlando Metals Digestion Log Water

Method of digestion(circle one): (SW846-3010A) / SW846-3005A / EPA 200.7 / EPA 200.8 / SM3030C

MP #: 33699

Prep Date/Time (mm/dd/yy 24:00): 05/05/18 0740.

HotBlock I.D. 9

Thermometer I.D. 6071

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 92 / 91

pH paper lot# 230315

Volume

Spk. Sol. [A]	Used(ml)	Pipette #
ACC 1074	0.05	MU 45274
ACC 1051	0.2	METALS#19
MET 5963	1.0	METALS#19

Dig. Tube Lot#: MP3088

Added [B]:

Lot#: HNO_3 0000187388 HCL 0000189306

Sample #		Initial Volume(ml)	pH<2	Final Volume(ml)	Comments
Method Blank(MB)		50.0	N/A	50.0	
Spike Blank(SB)			N/A		
Matrix Spike(MS)			✓		
Matrix Spike Dup(MSD)			✓		
Duplicate(DUP)			✓		
1 QC [C] FA53625-18F	[D] 19		✓		
2 -10F	10		✓		
3 -11F			✓		
4 -12F			✓		
5 -13F			✓		
6 -14F			✓		
7 -15F			✓		
8 -16F			✓		
9 -17F			✓		
10 -24F	↓		✓		
11 SJ FA53627-1	1		✓		MS3
12 SA			✓		MSD
13 DL			✓		DUP
14 QC			✓		
15 FA53627-2			✓		
16 -3			✓		
17 FA53801-22			✓		
18 FA53896-13			✓		
19 -14	↓	↓	✓	↓	
20					
21 [E] 05-05-18 IP					
22 [E]					
23 [E]					
24 [E]					

Analyst: [signature] Date: 05-05-18

QC Review: [signature] Date: 5.9.18'

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 103, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional matrix QC

5g dry sieve DOD (MS)

SGS Accutest - Orlando Metals Digestion Log Soil

MP #: 33746 Method of Digestion: SW846-3050B

		Spk. Sol. [A]	Volume Used(ml)	Pipette #
Prep Date/Time (mm/dd/yy 24:00):	05/16/18 08:00	ACC18062	1.0	19
HotBlock I.D.	9	ACC1851	0.5	19
Thermometer I.D.	213	MET6815	0.5	19
Correction Factor (°C)	-1			
Temperature Observed/Corrected (°C)	94 / 93	Filter Lot#:	170112102	
Balance I.D.	ADVPRO3	Dig. Tube Lot#	MP3988	

Added [B]:	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	177290	000018738B	000018 9306	23430173

Sample #		Wt., g	Final Volume(ml)	Comments
Method Blank(MB)		5.0	100.0	① 5x reagents used
Spike Blank(SB)		↓	↓	↓
Matrix Spike(MS)		5.03		
Matrix Spike Dup(MSD)		5.02		
Duplicate(DUP)		5.08		
1 QC[C] D2-FA53725-34	1 [D]	5.02		
2 QC[C] FA53725-34 -68	1	5.00		
3 ↓ -68	1	5.01		
4 FA53801 -7		5.06		
5 -10		5.01		
6 -13		5.02		
7 -16		5.03		
8 -19		5.01		
9 ↓ -23	↓	5.00		
10 FA53896 -1	2	5.05		
11 ↓ -4	2	5.02	↓	↓
12				
13				
14				
15				
16				
17		JC		
18			05/16/18	
19				
20				
21 [E]				
22 [E]				
23 [E]				
24 [E]				

Analyst: [signature] Date: 05-16-18

QC Review: [signature] Date: 5.17.18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

* JC 05/16/18

This page was intentionally left blank

ATTACHMENT 3

LABORATORY CORRECTIVE ACTION SUMMARY REPORT

(PROVIDED ON CD)

Corrective Action Summary Form

Date: 8/27/2018 3:43:20 PM **Tracking No:** ASESM_8272018_1154

CA Title: Misplaced samples FA53725

Department: Sample Management & Login **Originator:** Jean Dent-Smith

Responsible Jean Dent-Smith **Date Completed:** 8/27/2018

Description:

Initial samples were received on 4/26/18 triaged and processed by our Receiving dept. A few of the sample bags were either missing ID labels or had their labels partially obscured due to moisture exposure. Receiving informed PM that they could not locate soil bags for FA53725-31/31-18SC0000 and FA54725-59/31-28SC0000. After their confirmation PM contacted Client to request additional sample volume. Fed Ex later the same day delivered a second cooler containing the missing samples. A second Technician added the missing sample bags to the job without notifying the PM or documenting the additional receipt. However, the Lab still had not received a second soil bag for FA54725-59/31-28SC0000. We analyzed Lead from the sample recollected on 4/26/18. The final Lead result of the duplicate collected 4/23 was reported at 5.4 mg/kg. Lead from the recollected parent sample was reported at 7.8 mg/kg.

Root Cause:

Human error in miscommunication between Receiving Department and Project management.

Immediate Fix:

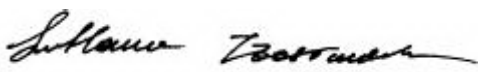
Receiving program was enhanced with Problem Notes (p-notes) program. It is mandatory that all documentation of sample receipt discrepancies be entered into this database. The database electronically distributes this notification to all PMs, CSM and the LCSM. The P-note system was in its early phase at the time these sample were received, it was not fully developed or properly utilized.

Corrective Action:

Receiving program was enhanced with Problem Notes (p-notes) program. It is mandatory that all documentation of sample receipt discrepancies be entered into this database. The database electronically distributes this notification to all Project Managers (PMs), Client Service Managers (CSMs) and the Laboratory Manager. The P-note system was in its early development phase; at the time these sample were received it was not fully developed or properly utilized. Sample Receipt Technicians and PM's have been receiving continued ongoing training in use of the program and its expanded capabilities. QA and the CSM will conduct a full review of the P-note program understanding and ability properly use it for all required staff. At the time of closure full documentation of the program review, content of additional training provided, and verification of required staff participation will be furnished to the client. Follow-up scheduled on or before 09/26/2018.

Close after 6 months w/o reoccurrence.

Sincerely,



Svetlana Izosimova, QA Officer

Comments:

Followup:

This page was intentionally left blank